



Environment Testing TestAmerica

ANALYTICAL REPORT

Job Number: 280-124912-1

Job Description: Cornhusker (CHAAP)

For:

Brice Environmental Services, Corp
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Attention: Scott Mann

Approved for release.
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7/31/2019 7:26 PM

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07/31/2019

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

The Lab Certification ID# is 4025.

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

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Definitions/Glossary

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

Job ID: 280-124912-1

Qualifiers

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
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
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
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.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-124912-1

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 6/6/2019 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 0.3° C, 0.3° C, 2.3° C, 2.9° C, 3.1° C and 4.4° C.

DISSOLVED GASES (GC)

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A (280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 06/11/2019 and 06/12/2019.

Sample G0023-19A (280-124912-8)[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.

NITROAROMATICS AND NITRAMINES (HPLC)

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A (280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 06/11/2019, 06/12/2019 and 07/10/2019 and analyzed on 06/14/2019, 06/15/2019, 06/18/2019 and 07/12/2019.

2-Nitrotoluene and 4-Nitrotoluene failed the recovery criteria low for LCS 280-461170/2-A. Due to laboratory error, the batch did not include MNX LCS. The client was notified and instructed the laboratory to re-extract the samples outside of the holding time and report both sets of results.

The CCV associated with preparation batch 280-461170 and analytical batch 280-461583 failed high for RDX at 60.5%, limits 15%D. This is due to samples with high concentrations of RDX in the samples run previous to this CCV. The closing CCV was in control. Samples were reported from both columns due to RPD being >40%. The following samples are impacted: G0044-19A (280-124912-2) and PZ015-19A (280-124912-3).

The following samples in preparation batch 280-461170 required filtration to reduce matrix interferences: PZ015-19A (280-124912-3) and G0023-19A (280-124912-8).

The %RPD between the primary and confirmation column exceeded 40% for RDX for the following samples: G0044-19A (280-124912-2) and PZ015-19A (280-124912-3). Both values have been reported and qualified in accordance with the DOD QSM.

2-Nitrotoluene failed the recovery criteria low for LCS 280-461286/2-A. Due to laboratory error, the batch did not include MNX LCS. Refer to the QC report for details. The client was notified and instructed the laboratory to re-extract the samples outside of the holding time and report both sets of results.

Surrogate recovery for the following samples were outside control limits: PZ005-19A (280-124912-9) and G0103-19A (280-124912-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. The chromatogram shows matrix interference. 124912:9 failed low on the primary column, sample 10 failed high on the primary, low on the confirmation.

The %RPD between the primary and confirmation column exceeded 40% for 3-Nitrotoluene for the following sample: G0103-19A (280-124912-10). Both values been reported and qualified in accordance with the DOD QSM.

The following sample in preparation batch 280-461286 required filtration to reduce matrix interferences: G0103-19A (280-124912-10).

Surrogate recovery for the following samples associated with preparation batch 280-464162 and analytical batch 280-464207 were outside control limits: G0102-19A (280-124912-4), G0023-19A (280-124912-8) and G0103-19A (280-124912-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. The chromatogram shows matrix interference.

The following samples associated with prep batch 280-464162 required filtration to reduce matrix interferences: PZ015-19A (280-124912-3), G0023-19A (280-124912-8) and G0103-19A (280-124912-10).

2-Nitrotoluene failed the recovery criteria low for the MS of sample PZ001-19AMSMS (280-124912-12) in batch 280-464537. 2-Nitrotoluene and MNX failed the recovery criteria low for the MSD of sample PZ001-19AMSDMSD (280-124912-12) in batch 280-464537. 2,4-Dinitrotoluene and MNX exceeded the RPD limit. Refer to the QC report for details.

2-Nitrotoluene, 3-Nitrotoluene and 4-Nitrotoluene failed the recovery criteria low for the MS of sample G0102-19AMSMS (280-124912-4) in batch 280-464207. Several analytes failed the recovery criteria low for the MSD of sample G0102-19AMSDMSD (280-124912-4) in batch 280-464207. 2-Nitrotoluene, 3-Nitrotoluene and 4-Nitrotoluene exceeded the RPD limit. Refer to the QC report for details.

2-Nitrotoluene and 3-Nitrotoluene failed the recovery criteria low for the MSD of sample PZ007-19AMSDMSD (280-124912-5) in batch 280-464207. 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.

ALKALINITY

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A (280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 06/15/2019.

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

AMMONIA

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A (280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/17/2019 and 06/20/2019.

Sample G0023-19A (280-124912-8)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL KJELDAHL NITROGEN

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A (280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 06/24/2019 and analyzed on 06/25/2019.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MS of sample PZ001-19AMSMS (280-124912-12) in batch 280-462702. Nitrogen, Total Kjeldahl failed the recovery criteria low for the MSD of sample PZ001-19AMSDMSD (280-124912-12) in batch 280-462702. Nitrogen, Total Kjeldahl exceeded the RPD limit. Refer to the QC report for details.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MS of sample G0102-19AMSMS (280-124912-4) in batch 280-462702. Refer to the QC report for details.

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

NITRATE-NITRITE AS NITROGEN

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A (280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 06/26/2019.

Samples G0044-19A (280-124912-2)[2X], PZ015-19A (280-124912-3)[2X] and G0048-19A (280-124912-7)[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.

SULFIDE

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A

(280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 06/11/2019 and 06/12/2019.

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

ANIONS (28 DAYS)

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A (280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for anions (28 days) in accordance with 9056A. The samples were analyzed on 07/01/2019 and 07/02/2019.

Samples PZ004-19A (280-124912-1)[10X], G0044-19A (280-124912-2)[10X], PZ015-19A (280-124912-3)[5X], G0102-19A (280-124912-4)[10X], PZ007-19A (280-124912-5)[10X], G0049-19A (280-124912-6)[5X], G0048-19A (280-124912-7)[5X], G0023-19A (280-124912-8)[5X], PZ005-19A (280-124912-9)[10X], G0103-19A (280-124912-10)[10X], G0104-19A (280-124912-11)[10X] and PZ001-19A (280-124912-12)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The instrument blank for analytical batch 280-463246 contained SO₄ greater than the reporting limit (RL), and were not reanalyzed because the sample result was >10x the CCB. The data have been qualified and reported.

The instrument blank for analytical batch 280-463246 contained SO₄ greater than the reporting limit (RL), and were not reanalyzed because analyst did not reject them to rerun them. The data have been qualified and reported.

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

DISSOLVED ORGANIC CARBON

Samples PZ004-19A (280-124912-1), G0044-19A (280-124912-2), PZ015-19A (280-124912-3), G0102-19A (280-124912-4), PZ007-19A (280-124912-5), G0049-19A (280-124912-6), G0048-19A (280-124912-7), G0023-19A (280-124912-8), PZ005-19A (280-124912-9), G0103-19A (280-124912-10), G0104-19A (280-124912-11) and PZ001-19A (280-124912-12) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 07/01/2019 and 07/02/2019.

Dissolved Organic Carbon - Quad was detected in method blank MB 280-463267/2-A at a level that was below half the LOQ. The value should be considered an estimate, and has been flagged J.

Dissolved Organic Carbon - Quad was detected in method blank MB 280-463396/2-A at a level that was below half the LOQ. The value should be considered an estimate, and has been flagged J.

Sample G0103-19A (280-124912-10)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Detection Summary

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

Job ID: 280-124912-1

Client Sample ID: PZ004-19A

Lab Sample ID: 280-124912-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.00084	J	0.0050	0.0020	0.00063	mg/L	1	RSK-175	Total/NA	
Ammonia	0.085	J	0.10	0.050	0.022	mg/L	1	350.1	Total/NA	
Nitrate Nitrite as N	0.94		0.10	0.050	0.019	mg/L	1	353.2	Total/NA	
Sulfate	1100	D B		50	30	10 mg/L	10	9056A	Total/NA	
Total Alkalinity as CaCO ₃	550			10	10	3.1 mg/L	1	SM 2320B	Total/NA	
Dissolved Organic Carbon - Quad	6.2		1.0	0.50	0.16	mg/L	1	9060A	Dissolved	

Client Sample ID: G0044-19A

Lab Sample ID: 280-124912-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
HMX	0.47	M	0.40	0.20	0.088	ug/L	1	8330A	Total/NA	
RDX	0.50	J1 M	0.40	0.40	0.16	ug/L	1	8330A	Total/NA	
RDX	0.79	Q J1 M	0.40	0.40	0.16	ug/L	1	8330A	Total/NA	
Nitrate Nitrite as N	9.4		0.20	0.10	0.038	mg/L	2	353.2	Total/NA	
Sulfate	650	D B		50	30	10 mg/L	10	9056A	Total/NA	
Total Alkalinity as CaCO ₃	590			10	10	3.1 mg/L	1	SM 2320B	Total/NA	
Dissolved Organic Carbon - Quad	5.1		1.0	0.50	0.16	mg/L	1	9060A	Dissolved	

Client Sample ID: PZ015-19A

Lab Sample ID: 280-124912-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	4.1		0.0050	0.0020	0.00063	mg/L	1	RSK-175	Total/NA	
2,6-Dinitrotoluene	0.74		0.22	0.22	0.070	ug/L	1	8330A	Total/NA	
RDX	0.85	J1 M	0.43	0.43	0.17	ug/L	1	8330A	Total/NA	
RDX	0.22	J Q J1	0.43	0.43	0.17	ug/L	1	8330A	Total/NA	
Ammonia	1.1		0.10	0.050	0.022	mg/L	1	350.1	Total/NA	
Nitrogen, Total Kjeldahl	0.69	J		1.0	0.69	mg/L	1	351.2	Total/NA	
Nitrate Nitrite as N	13		0.20	0.10	0.038	mg/L	2	353.2	Total/NA	
Sulfate	53	D B		25	15	5.2 mg/L	5	9056A	Total/NA	
Total Alkalinity as CaCO ₃	280			10	10	3.1 mg/L	1	SM 2320B	Total/NA	
Dissolved Organic Carbon - Quad	4.5		1.0	0.50	0.16	mg/L	1	9060A	Dissolved	

Client Sample ID: G0102-19A

Lab Sample ID: 280-124912-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0016	J	0.0050	0.0020	0.00063	mg/L	1	RSK-175	Total/NA	
RDX	1.1	M	0.42	0.42	0.17	ug/L	1	8330A	Total/NA	
Ammonia	0.072	J	0.10	0.050	0.022	mg/L	1	350.1	Total/NA	
Sulfate	1100	D B		50	30	10 mg/L	10	9056A	Total/NA	
Total Alkalinity as CaCO ₃	420			10	10	3.1 mg/L	1	SM 2320B	Total/NA	
Dissolved Organic Carbon - Quad	3.8		1.0	0.50	0.16	mg/L	1	9060A	Dissolved	

Client Sample ID: PZ007-19A

Lab Sample ID: 280-124912-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.00070	J	0.0050	0.0020	0.00063	mg/L	1	RSK-175	Total/NA	
Ammonia	0.077	J	0.10	0.050	0.022	mg/L	1	350.1	Total/NA	
Nitrate Nitrite as N	0.099	J	0.10	0.050	0.019	mg/L	1	353.2	Total/NA	
Sulfate	930	D B		50	30	10 mg/L	10	9056A	Total/NA	
Total Alkalinity as CaCO ₃	430			10	10	3.1 mg/L	1	SM 2320B	Total/NA	

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Detection Summary

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

Job ID: 280-124912-1

Client Sample ID: PZ007-19A (Continued)

Lab Sample ID: 280-124912-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	4.7		1.0	0.50	0.16	mg/L	1	9060A		Dissolved

Client Sample ID: G0049-19A

Lab Sample ID: 280-124912-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0036	J	0.0050	0.0020	0.00063	mg/L	1	RSK-175		Total/NA
Ammonia	1.5		0.10	0.050	0.022	mg/L	1	350.1		Total/NA
Nitrogen, Total Kjeldahl	1.3		1.0	1.0	0.69	mg/L	1	351.2		Total/NA
Sulfate	320	D B	25	15	5.2	mg/L	5	9056A		Total/NA
Total Alkalinity as CaCO ₃	300		10	10	3.1	mg/L	1	SM 2320B		Total/NA
Dissolved Organic Carbon - Quad	2.8		1.0	0.50	0.16	mg/L	1	9060A		Dissolved

Client Sample ID: G0048-19A

Lab Sample ID: 280-124912-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	1.4		0.0050	0.0020	0.00063	mg/L	1	RSK-175		Total/NA
Nitrate Nitrite as N	27		0.50	0.25	0.095	mg/L	5	353.2		Total/NA
Sulfate	56	D B	25	15	5.2	mg/L	5	9056A		Total/NA
Total Alkalinity as CaCO ₃	51		10	10	3.1	mg/L	1	SM 2320B		Total/NA
Dissolved Organic Carbon - Quad	1.8		1.0	0.50	0.16	mg/L	1	9060A		Dissolved

Client Sample ID: G0023-19A

Lab Sample ID: 280-124912-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	4.3	D	0.015	0.0060	0.0019	mg/L	3	RSK-175		Total/NA
Ammonia	5.1		0.20	0.10	0.044	mg/L	2	350.1		Total/NA
Nitrogen, Total Kjeldahl	7.1		1.0	1.0	0.69	mg/L	1	351.2		Total/NA
Sulfate	65	D B	25	15	5.2	mg/L	5	9056A		Total/NA
Total Alkalinity as CaCO ₃	330		10	10	3.1	mg/L	1	SM 2320B		Total/NA
Dissolved Organic Carbon - Quad	6.1		1.0	0.50	0.16	mg/L	1	9060A		Dissolved

Client Sample ID: PZ005-19A

Lab Sample ID: 280-124912-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.00088	J	0.0050	0.0020	0.00063	mg/L	1	RSK-175		Total/NA
Ammonia	0.050	J	0.10	0.050	0.022	mg/L	1	350.1		Total/NA
Nitrate Nitrite as N	0.44		0.10	0.050	0.019	mg/L	1	353.2		Total/NA
Sulfate	1300	D B	50	30	10	mg/L	10	9056A		Total/NA
Total Alkalinity as CaCO ₃	470		10	10	3.1	mg/L	1	SM 2320B		Total/NA
Dissolved Organic Carbon - Quad	5.5		1.0	0.50	0.16	mg/L	1	9060A		Dissolved

Client Sample ID: G0103-19A

Lab Sample ID: 280-124912-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.13		0.0050	0.0020	0.00063	mg/L	1	RSK-175		Total/NA
3-Nitrotoluene	3.7	Q J1	0.43	0.43	0.21	ug/L	1	8330A		Total/NA
3-Nitrotoluene	0.58	Q J1	0.43	0.43	0.21	ug/L	1	8330A		Total/NA
Nitrobenzene	0.60	M	0.43	0.22	0.099	ug/L	1	8330A		Total/NA
Ammonia	3.4		0.10	0.050	0.022	mg/L	1	350.1		Total/NA
Nitrogen, Total Kjeldahl	4.1	J	5.0	5.0	3.4	mg/L	1	351.2		Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Detection Summary

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

Job ID: 280-124912-1

Client Sample ID: G0103-19A (Continued)

Lab Sample ID: 280-124912-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Sulfide	31		4.0	1.9	0.79	mg/L		1	9034	Total/NA
Sulfate	490	D B		50	30	mg/L		10	9056A	Total/NA
Total Alkalinity as CaCO ₃	670			10	10	mg/L		1	SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	230			5.0	2.5	mg/L		5	9060A	Dissolved

Client Sample ID: G0104-19A

Lab Sample ID: 280-124912-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	2.0		0.0050	0.0020	0.00063	mg/L		1	RSK-175	Total/NA
Ammonia	0.83			0.10	0.050	mg/L		1	350.1	Total/NA
Nitrogen, Total Kjeldahl	0.94	J		1.0	1.0	mg/L		1	351.2	Total/NA
Sulfate	1000	D B		50	30	mg/L		10	9056A	Total/NA
Total Alkalinity as CaCO ₃	470			10	10	mg/L		1	SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.5			1.0	0.50	mg/L		1	9060A	Dissolved

Client Sample ID: PZ001-19A

Lab Sample ID: 280-124912-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0016	J	0.0050	0.0020	0.00063	mg/L		1	RSK-175	Total/NA
Ammonia	0.026	J		0.10	0.050	mg/L		1	350.1	Total/NA
Nitrate Nitrite as N	0.82			0.10	0.050	mg/L		1	353.2	Total/NA
Sulfate	1200	D B		50	30	mg/L		10	9056A	Total/NA
Total Alkalinity as CaCO ₃	550			10	10	mg/L		1	SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.2			1.0	0.50	mg/L		1	9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: PZ004-19A

Lab Sample ID: 280-124912-1

Matrix: Water

Date Collected: 06/04/19 12:30

Date Received: 06/06/19 08:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.00084	J	0.0050	0.0020	0.00063	mg/L		06/11/19 13:15	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		06/14/19 06:31	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		06/14/19 06:31	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		06/14/19 06:31	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.085	ug/L		06/14/19 06:31	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		06/14/19 06:31	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		06/14/19 06:31	1
2-Nitrotoluene	0.20	U Q	0.40	0.20	0.086	ug/L		06/14/19 06:31	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		06/14/19 06:31	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		06/14/19 06:31	1
4-Nitrotoluene	0.40	U Q M	1.0	0.40	0.20	ug/L		06/14/19 06:31	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		06/14/19 06:31	1
MNX	0.40	U	2.0	0.40	0.16	ug/L		06/14/19 06:31	1
Nitrobenzene	0.20	U	0.40	0.20	0.092	ug/L		06/15/19 12:10	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		06/14/19 06:31	1
Tetryl	0.20	U	0.24	0.20	0.080	ug/L		06/14/19 06:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	98	M	83 - 119				06/11/19 18:08	06/14/19 06:31	1
1,2-Dinitrobenzene	93		83 - 119				06/11/19 18:08	06/15/19 12:10	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U H	0.40	0.20	0.085	ug/L		07/12/19 02:19	1
4-Nitrotoluene	0.40	U H M	0.99	0.40	0.20	ug/L		07/12/19 02:19	1
MNX	0.40	U H	2.0	0.40	0.15	ug/L		07/12/19 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	91	M	83 - 119				07/10/19 16:51	07/12/19 02:19	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.085	J	0.10	0.050	0.022	mg/L		06/17/19 13:16	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:11	1
Nitrate Nitrite as N	0.94		0.10	0.050	0.019	mg/L		06/26/19 18:14	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	1100	D B	50	30	10	mg/L		07/01/19 18:39	10
Total Alkalinity as CaCO3	550		10	10	3.1	mg/L		06/15/19 02:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	6.2		1.0	0.50	0.16	mg/L		07/01/19 15:17	1

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: G0044-19A

Date Collected: 06/04/19 16:00

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-2

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/11/19 13:41	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		06/14/19 06:55	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		06/14/19 06:55	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		06/14/19 06:55	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		06/14/19 06:55	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		06/14/19 06:55	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		06/15/19 12:45	1
2-Nitrotoluene	0.20	U Q	0.40	0.20	0.086	ug/L		06/14/19 06:55	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		06/14/19 06:55	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		06/14/19 06:55	1
4-Nitrotoluene	0.40	U Q	1.0	0.40	0.20	ug/L		06/14/19 06:55	1
HMX	0.47 M		0.40	0.20	0.088	ug/L		06/14/19 06:55	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		06/14/19 06:55	1
Nitrobenzene	0.20	U M	0.40	0.20	0.091	ug/L		06/14/19 06:55	1
RDX	0.50 J1 M		0.40	0.40	0.16	ug/L		06/14/19 06:55	1
RDX	0.79 Q J1 M		0.40	0.40	0.16	ug/L		06/15/19 12:45	1
Tetryl	0.20	U M	0.24	0.20	0.079	ug/L		06/14/19 06:55	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	97	M	83 - 119		06/11/19 18:08	06/14/19 06:55
1,2-Dinitrobenzene	96		83 - 119		06/11/19 18:08	06/15/19 12:45

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U H	0.40	0.20	0.086	ug/L		07/12/19 02:42	1
4-Nitrotoluene	0.40	U H	1.0	0.40	0.20	ug/L		07/12/19 02:42	1
MNX	0.40	U H	2.0	0.40	0.16	ug/L		07/12/19 02:42	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	99	M	83 - 119		07/10/19 16:51	07/12/19 02:42

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/17/19 13:18	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:12	1
Nitrate Nitrite as N	9.4		0.20	0.10	0.038	mg/L		06/26/19 18:16	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	650 D B		50	30	10	mg/L		07/01/19 18:55	10
Total Alkalinity as CaCO3	590		10	10	3.1	mg/L		06/15/19 02:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	5.1		1.0	0.50	0.16	mg/L		07/01/19 16:03	1

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: PZ015-19A

Lab Sample ID: 280-124912-3

Matrix: Water

Date Collected: 06/04/19 16:25

Date Received: 06/06/19 08:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	4.1		0.0050	0.0020	0.00063	mg/L		06/11/19 13:55	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.43	U	1.1	0.43	0.22	ug/L		06/14/19 07:19	1
1,3-Dinitrobenzene	0.22	U	0.43	0.22	0.096	ug/L		06/14/19 07:19	1
2,4,6-Trinitrotoluene	0.43	U	0.43	0.43	0.17	ug/L		06/14/19 07:19	1
2,4-Dinitrotoluene	0.22	U	0.43	0.22	0.090	ug/L		06/14/19 07:19	1
2,6-Dinitrotoluene	0.74		0.22	0.22	0.070	ug/L		06/14/19 07:19	1
2-Amino-4,6-dinitrotoluene	0.13	U	0.22	0.13	0.055	ug/L		06/14/19 07:19	1
2-Nitrotoluene	0.22	U Q	0.43	0.22	0.092	ug/L		06/14/19 07:19	1
3-Nitrotoluene	0.43	U M	0.43	0.43	0.21	ug/L		06/14/19 07:19	1
4-Amino-2,6-dinitrotoluene	0.13	U M	0.22	0.13	0.062	ug/L		06/14/19 07:19	1
4-Nitrotoluene	0.43	U Q	1.1	0.43	0.22	ug/L		06/14/19 07:19	1
HMX	0.22	U	0.43	0.22	0.094	ug/L		06/14/19 07:19	1
MNX	0.43	U	2.2	0.43	0.17	ug/L		06/14/19 07:19	1
Nitrobenzene	0.22	U	0.43	0.22	0.098	ug/L		06/14/19 07:19	1
RDX	0.85 J1 M		0.43	0.43	0.17	ug/L		06/14/19 07:19	1
RDX	0.22 J Q J1		0.43	0.43	0.17	ug/L		06/15/19 13:20	1
Tetryl	0.22	U M	0.26	0.22	0.085	ug/L		06/14/19 07:19	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	107		83 - 119		06/11/19 18:08	06/14/19 07:19
1,2-Dinitrobenzene	100		83 - 119		06/11/19 18:08	06/15/19 13:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.45	0.22	0.095	ug/L		07/12/19 03:05	1
4-Nitrotoluene	0.45	U H	1.1	0.45	0.22	ug/L		07/12/19 03:05	1
MNX	0.45	U H	2.2	0.45	0.17	ug/L		07/12/19 03:05	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	111	M	83 - 119		07/10/19 16:51	07/12/19 03:05

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	1.1		0.10	0.050	0.022	mg/L		06/17/19 13:20	1
Nitrogen, Total Kjeldahl	0.69 J		1.0	1.0	0.69	mg/L		06/25/19 19:16	1
Nitrate Nitrite as N	13		0.20	0.10	0.038	mg/L		06/26/19 18:18	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	53 D B		25	15	5.2	mg/L		07/01/19 19:11	5
Total Alkalinity as CaCO3	280		10	10	3.1	mg/L		06/15/19 03:04	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	4.5		1.0	0.50	0.16	mg/L		07/01/19 16:20	1

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: G0102-19A

Date Collected: 06/05/19 11:25

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-4

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0016	J	0.0050	0.0020	0.00063	mg/L		06/11/19 14:08	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.42	U	1.0	0.42	0.21	ug/L		06/15/19 09:02	1
1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.093	ug/L		06/15/19 09:02	1
2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17	ug/L		06/15/19 09:02	1
2,4-Dinitrotoluene	0.21	U J1	0.42	0.21	0.088	ug/L		06/15/19 09:02	1
2,6-Dinitrotoluene	0.21	U M J1	0.21	0.21	0.067	ug/L		06/15/19 09:02	1
2-Amino-4,6-dinitrotoluene	0.13	U J1	0.21	0.13	0.053	ug/L		06/15/19 09:02	1
2-Nitrotoluene	0.21	U J1 Q	0.42	0.21	0.089	ug/L		06/15/19 09:02	1
3-Nitrotoluene	0.42	U J1	0.42	0.42	0.20	ug/L		06/15/19 09:02	1
4-Amino-2,6-dinitrotoluene	0.13	U J1	0.21	0.13	0.060	ug/L		06/15/19 09:02	1
4-Nitrotoluene	0.42	U J1	1.0	0.42	0.21	ug/L		06/15/19 09:02	1
HMX	0.21	U	0.42	0.21	0.092	ug/L		06/15/19 09:02	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/15/19 09:02	1
Nitrobenzene	0.21	U J1	0.42	0.21	0.095	ug/L		06/15/19 09:02	1
RDX	1.1	M	0.42	0.42	0.17	ug/L		06/15/19 09:02	1
Tetryl	0.21	U	0.25	0.21	0.083	ug/L		06/15/19 09:02	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
1,2-Dinitrobenzene	105	M	83 - 119		06/12/19 17:51	06/15/19 09:02	1
1,2-Dinitrobenzene	91		83 - 119		06/12/19 17:51	06/18/19 08:00	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.21	U H	0.41	0.21	0.088	ug/L		07/12/19 03:28	1
MNX	0.41	U H	2.1	0.41	0.16	ug/L		07/12/19 03:28	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
1,2-Dinitrobenzene	142	M Q	83 - 119		07/10/19 16:51	07/12/19 03:28	1

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		06/17/19 11:42	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		06/25/19 19:06	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 18:08	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	1100	D B	50	30	10	mg/L		07/01/19 19:28	10
Total Alkalinity as CaCO₃	420		10	10	3.1	mg/L		06/15/19 03:11	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	3.8		1.0	0.50	0.16	mg/L		07/02/19 16:11	1

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: PZ007-19A

Lab Sample ID: 280-124912-5

Matrix: Water

Date Collected: 06/05/19 10:15

Date Received: 06/06/19 08:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.00070	J	0.0050	0.0020	0.00063	mg/L		06/11/19 14:49	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.42	U	1.1	0.42	0.21	ug/L		06/15/19 10:13	1
1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.094	ug/L		06/15/19 10:13	1
2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17	ug/L		06/15/19 10:13	1
2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.089	ug/L		06/15/19 10:13	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.069	ug/L		06/15/19 10:13	1
2-Amino-4,6-dinitrotoluene	0.13	U	0.21	0.13	0.054	ug/L		06/15/19 10:13	1
2-Nitrotoluene	0.21	U Q J1	0.42	0.21	0.091	ug/L		06/15/19 10:13	1
3-Nitrotoluene	0.42	U J1	0.42	0.42	0.21	ug/L		06/15/19 10:13	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.21	0.13	0.061	ug/L		06/15/19 10:13	1
4-Nitrotoluene	0.42	U	1.1	0.42	0.21	ug/L		06/15/19 10:13	1
HMX	0.21	U	0.42	0.21	0.093	ug/L		06/15/19 10:13	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/15/19 10:13	1
Nitrobenzene	0.21	U	0.42	0.21	0.097	ug/L		06/15/19 10:13	1
RDX	0.42	U	0.42	0.42	0.17	ug/L		06/15/19 10:13	1
Tetryl	0.21	U	0.25	0.21	0.084	ug/L		06/15/19 10:13	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	91	M	83 - 119		06/12/19 17:51	06/15/19 10:13	1		

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.44	0.22	0.095	ug/L		07/12/19 05:46	1
MNX	0.44	U H	2.2	0.44	0.17	ug/L		07/12/19 05:46	1

Surrogate

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	89	M	83 - 119		07/10/19 16:51	07/12/19 05:46	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.077	J	0.10	0.050	0.022	mg/L		06/17/19 12:18	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:31	1
Nitrate Nitrite as N	0.099	J	0.10	0.050	0.019	mg/L		06/26/19 18:44	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/12/19 12:54	1
Sulfate	930	D B	50	30	10	mg/L		07/01/19 19:44	10
Total Alkalinity as CaCO₃	430		10	10	3.1	mg/L		06/15/19 03:19	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	4.7		1.0	0.50	0.16	mg/L		07/02/19 16:55	1

Client Sample ID: G0049-19A

Lab Sample ID: 280-124912-6

Matrix: Water

Date Collected: 06/04/19 12:30

Date Received: 06/06/19 08:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0036	J	0.0050	0.0020	0.00063	mg/L		06/11/19 15:29	1

Eurofins TestAmerica, Denver

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: G0049-19A

Date Collected: 06/04/19 12:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-6

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.43	U	1.1	0.43	0.22	ug/L		06/14/19 07:43	1
1,3-Dinitrobenzene	0.22	U	0.43	0.22	0.096	ug/L		06/14/19 07:43	1
2,4,6-Trinitrotoluene	0.43	U	0.43	0.43	0.17	ug/L		06/14/19 07:43	1
2,4-Dinitrotoluene	0.22	U	0.43	0.22	0.091	ug/L		06/14/19 07:43	1
2,6-Dinitrotoluene	0.22	U	0.22	0.22	0.070	ug/L		06/14/19 07:43	1
2-Amino-4,6-dinitrotoluene	0.13	U	0.22	0.13	0.055	ug/L		06/14/19 07:43	1
2-Nitrotoluene	0.22	U Q	0.43	0.22	0.093	ug/L		06/14/19 07:43	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		06/14/19 07:43	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.22	0.13	0.063	ug/L		06/14/19 07:43	1
4-Nitrotoluene	0.43	U Q	1.1	0.43	0.22	ug/L		06/14/19 07:43	1
HMX	0.22	U	0.43	0.22	0.095	ug/L		06/14/19 07:43	1
MNX	0.43	U	2.2	0.43	0.17	ug/L		06/14/19 07:43	1
Nitrobenzene	0.22	U	0.43	0.22	0.099	ug/L		06/14/19 07:43	1
RDX	0.43	U	0.43	0.43	0.17	ug/L		06/14/19 07:43	1
Tetryl	0.22	U	0.26	0.22	0.086	ug/L		06/14/19 07:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	92	M	83 - 119				06/11/19 18:08	06/14/19 07:43	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.23	U H	0.46	0.23	0.099	ug/L		07/12/19 06:55	1
4-Nitrotoluene	0.46	U H	1.2	0.46	0.23	ug/L		07/12/19 06:55	1
MNX	0.46	U H	2.3	0.46	0.18	ug/L		07/12/19 06:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	90	M	83 - 119				07/10/19 16:51	07/12/19 06:55	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	1.5		0.10	0.050	0.022	mg/L		06/17/19 13:22	1
Nitrogen, Total Kjeldahl	1.3		1.0	1.0	0.69	mg/L		06/25/19 19:17	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 18:42	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	320	D B	25	15	5.2	mg/L		07/01/19 20:00	5
Total Alkalinity as CaCO3	300		10	10	3.1	mg/L		06/15/19 03:47	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	2.8		1.0	0.50	0.16	mg/L		07/01/19 17:04	1

Client Sample ID: G0048-19A

Date Collected: 06/04/19 13:40

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-7

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	1.4		0.0050	0.0020	0.00063	mg/L		06/11/19 15:43	1

Eurofins TestAmerica, Denver

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: G0048-19A

Date Collected: 06/04/19 13:40

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-7

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.42	U	1.1	0.42	0.21	ug/L		06/14/19 08:07	1
1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.094	ug/L		06/14/19 08:07	1
2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17	ug/L		06/14/19 08:07	1
2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.089	ug/L		06/14/19 08:07	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068	ug/L		06/14/19 08:07	1
2-Amino-4,6-dinitrotoluene	0.13	U	0.21	0.13	0.054	ug/L		06/14/19 08:07	1
2-Nitrotoluene	0.21	U Q	0.42	0.21	0.091	ug/L		06/14/19 08:07	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		06/14/19 08:07	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.21	0.13	0.061	ug/L		06/14/19 08:07	1
4-Nitrotoluene	0.42	U Q	1.1	0.42	0.21	ug/L		06/14/19 08:07	1
HMX	0.21	U	0.42	0.21	0.093	ug/L		06/14/19 08:07	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/14/19 08:07	1
Nitrobenzene	0.21	U	0.42	0.21	0.097	ug/L		06/14/19 08:07	1
RDX	0.42	U	0.42	0.42	0.17	ug/L		06/14/19 08:07	1
Tetryl	0.21	U	0.25	0.21	0.084	ug/L		06/14/19 08:07	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	102	M	83 - 119		06/11/19 18:08	06/14/19 08:07	1		

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.44	0.22	0.094	ug/L		07/12/19 07:18	1
4-Nitrotoluene	0.44	U H	1.1	0.44	0.22	ug/L		07/12/19 07:18	1
MNX	0.44	U H	2.2	0.44	0.17	ug/L		07/12/19 07:18	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	94	M	83 - 119		07/10/19 16:51	07/12/19 07:18	1		

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/17/19 13:24	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:18	1
Nitrate Nitrite as N	27		0.50	0.25	0.095	mg/L		06/26/19 18:20	5
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	56	D B	25	15	5.2	mg/L		07/01/19 20:17	5
Total Alkalinity as CaCO₃	51		10	10	3.1	mg/L		06/15/19 03:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	1.8		1.0	0.50	0.16	mg/L		07/01/19 17:19	1

Client Sample ID: G0023-19A

Date Collected: 06/04/19 15:00

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-8

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	4.3	D	0.015	0.0060	0.0019	mg/L		06/12/19 08:45	3

Eurofins TestAmerica, Denver

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: G0023-19A

Date Collected: 06/04/19 15:00

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-8

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.46	U	1.2	0.46	0.23	ug/L		06/14/19 08:30	1
1,3-Dinitrobenzene	0.23	U	0.46	0.23	0.10	ug/L		06/14/19 08:30	1
2,4,6-Trinitrotoluene	0.46	U	0.46	0.46	0.19	ug/L		06/14/19 08:30	1
2,4-Dinitrotoluene	0.23	U	0.46	0.23	0.097	ug/L		06/14/19 08:30	1
2,6-Dinitrotoluene	0.23	U	0.23	0.23	0.075	ug/L		06/15/19 13:55	1
2-Amino-4,6-dinitrotoluene	0.14	U	0.23	0.14	0.059	ug/L		06/14/19 08:30	1
2-Nitrotoluene	0.23	U Q	0.46	0.23	0.099	ug/L		06/14/19 08:30	1
3-Nitrotoluene	0.46	U	0.46	0.46	0.23	ug/L		06/14/19 08:30	1
4-Amino-2,6-dinitrotoluene	0.14	U M	0.23	0.14	0.067	ug/L		06/14/19 08:30	1
4-Nitrotoluene	0.46	U Q	1.2	0.46	0.23	ug/L		06/14/19 08:30	1
HMX	0.23	U	0.46	0.23	0.10	ug/L		06/14/19 08:30	1
MNX	0.46	U	2.3	0.46	0.18	ug/L		06/14/19 08:30	1
Nitrobenzene	0.23	U	0.46	0.23	0.11	ug/L		06/14/19 08:30	1
RDX	0.46	U	0.46	0.46	0.18	ug/L		06/14/19 08:30	1
Tetryl	0.23	U M	0.28	0.23	0.092	ug/L		06/14/19 08:30	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	95	M	83 - 119		06/11/19 18:08	06/14/19 08:30			1
1,2-Dinitrobenzene	93		83 - 119		06/11/19 18:08	06/15/19 13:55			1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.44	0.22	0.094	ug/L		07/12/19 07:41	1
4-Nitrotoluene	0.44	U H	1.1	0.44	0.22	ug/L		07/12/19 07:41	1
MNX	0.44	U H	2.2	0.44	0.17	ug/L		07/12/19 07:41	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	123	M Q	83 - 119		07/10/19 16:51	07/12/19 07:41			1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	5.1		0.20	0.10	0.044	mg/L		06/20/19 13:21	2
Nitrogen, Total Kjeldahl	7.1		1.0	1.0	0.69	mg/L		06/25/19 19:20	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 18:22	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	65 D B		25	15	5.2	mg/L		07/01/19 20:33	5
Total Alkalinity as CaCO₃	330		10	10	3.1	mg/L		06/15/19 04:04	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	6.1		1.0	0.50	0.16	mg/L		07/01/19 17:33	1

Client Sample ID: PZ005-19A

Date Collected: 06/05/19 09:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-9

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.00088	J	0.0050	0.0020	0.00063	mg/L		06/11/19 16:09	1

Eurofins TestAmerica, Denver

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: PZ005-19A

Date Collected: 06/05/19 09:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-9

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.39	U Q	0.97	0.39	0.19	ug/L		06/15/19 12:36	1
1,3-Dinitrobenzene	0.19	U	0.39	0.19	0.086	ug/L		06/15/19 12:36	1
2,4,6-Trinitrotoluene	0.39	U Q	0.39	0.39	0.16	ug/L		06/15/19 12:36	1
2,4-Dinitrotoluene	0.19	U	0.39	0.19	0.082	ug/L		06/15/19 12:36	1
2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.063	ug/L		06/15/19 12:36	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.19	0.12	0.049	ug/L		06/15/19 12:36	1
2-Nitrotoluene	0.19	U Q	0.39	0.19	0.083	ug/L		06/15/19 12:36	1
3-Nitrotoluene	0.39	U Q	0.39	0.39	0.19	ug/L		06/15/19 12:36	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.19	0.12	0.056	ug/L		06/15/19 12:36	1
4-Nitrotoluene	0.39	U	0.97	0.39	0.19	ug/L		06/15/19 12:36	1
HMX	0.19	U	0.39	0.19	0.085	ug/L		06/15/19 12:36	1
MNX	0.39	U	1.9	0.39	0.15	ug/L		06/15/19 12:36	1
Nitrobenzene	0.19	U M	0.39	0.19	0.089	ug/L		06/15/19 12:36	1
RDX	0.39	U	0.39	0.39	0.15	ug/L		06/15/19 12:36	1
Tetryl	0.19	U	0.23	0.19	0.077	ug/L		06/15/19 12:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	81	Q M	83 - 119				06/12/19 17:51	06/15/19 12:36	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.21	U H	0.43	0.21	0.091	ug/L		07/12/19 08:04	1
MNX	0.43	U H	2.1	0.43	0.16	ug/L		07/12/19 08:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	86	M	83 - 119				07/10/19 16:51	07/12/19 08:04	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	J	0.10	0.050	0.022	mg/L		06/17/19 13:28	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:21	1
Nitrate Nitrite as N	0.44		0.10	0.050	0.019	mg/L		06/26/19 18:24	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/12/19 12:54	1
Sulfate	1300	D B	50	30	10	mg/L		07/01/19 20:49	10
Total Alkalinity as CaCO3	470		10	10	3.1	mg/L		06/15/19 04:12	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	5.5		1.0	0.50	0.16	mg/L		07/02/19 17:39	1

Client Sample ID: G0103-19A

Date Collected: 06/05/19 13:10

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-10

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.13		0.0050	0.0020	0.00063	mg/L		06/11/19 16:23	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.43	U	1.1	0.43	0.22	ug/L		06/15/19 13:00	1

Eurofins TestAmerica, Denver

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: G0103-19A

Date Collected: 06/05/19 13:10

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-10

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dinitrobenzene	0.22	U	0.43	0.22	0.096	ug/L		06/18/19 10:20	1
2,4,6-Trinitrotoluene	0.43	U Q	0.43	0.43	0.17	ug/L		06/18/19 10:20	1
2,4-Dinitrotoluene	0.22	U	0.43	0.22	0.091	ug/L		06/15/19 13:00	1
2,6-Dinitrotoluene	0.22	U	0.22	0.22	0.070	ug/L		06/18/19 10:20	1
2-Amino-4,6-dinitrotoluene	0.13	U	0.22	0.13	0.055	ug/L		06/15/19 13:00	1
2-Nitrotoluene	0.22	U Q	0.43	0.22	0.093	ug/L		06/18/19 10:20	1
3-Nitrotoluene	3.7	Q J1	0.43	0.43	0.21	ug/L		06/15/19 13:00	1
3-Nitrotoluene	0.58	Q J1	0.43	0.43	0.21	ug/L		06/18/19 10:20	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.22	0.13	0.063	ug/L		06/15/19 13:00	1
4-Nitrotoluene	0.43	U	1.1	0.43	0.22	ug/L		06/15/19 13:00	1
HMX	0.22	U	0.43	0.22	0.095	ug/L		06/15/19 13:00	1
MNX	0.43	U M	2.2	0.43	0.17	ug/L		06/15/19 13:00	1
Nitrobenzene	0.60	M	0.43	0.22	0.099	ug/L		06/15/19 13:00	1
RDX	0.43	U Q M	0.43	0.43	0.17	ug/L		06/18/19 10:20	1
Tetryl	0.22	U	0.26	0.22	0.086	ug/L		06/18/19 10:20	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	2535	M Q	83 - 119		06/12/19 17:51	06/15/19 13:00			1
1,2-Dinitrobenzene	42	Q M	83 - 119		06/12/19 17:51	06/18/19 10:20			1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H M	0.45	0.22	0.095	ug/L		07/12/19 08:27	1
MNX	0.45	U H M	2.2	0.45	0.17	ug/L		07/12/19 08:27	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	2016	M Q	83 - 119		07/10/19 16:51	07/12/19 08:27			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		06/17/19 13:42	1
Nitrogen, Total Kjeldahl	4.1	J	5.0	5.0	3.4	mg/L		06/25/19 19:26	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 18:26	1
Sulfide	31		4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	490	D B	50	30	10	mg/L		07/01/19 21:06	10
Total Alkalinity as CaCO₃	670		10	10	3.1	mg/L		06/15/19 04:21	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	230		5.0	2.5	0.78	mg/L		07/02/19 18:01	5

Client Sample ID: G0104-19A

Date Collected: 06/05/19 14:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-11

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	2.0		0.0050	0.0020	0.00063	mg/L		06/11/19 16:50	1

Eurofins TestAmerica, Denver

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: G0104-19A

Date Collected: 06/05/19 14:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-11

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.42	U	1.0	0.42	0.21	ug/L		06/15/19 13:24	1
1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.093	ug/L		06/15/19 13:24	1
2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17	ug/L		06/18/19 11:30	1
2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.088	ug/L		06/15/19 13:24	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068	ug/L		06/18/19 11:30	1
2-Amino-4,6-dinitrotoluene	0.13	U	0.21	0.13	0.053	ug/L		06/15/19 13:24	1
2-Nitrotoluene	0.21	U Q	0.42	0.21	0.090	ug/L		06/15/19 13:24	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		06/15/19 13:24	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.21	0.13	0.061	ug/L		06/15/19 13:24	1
4-Nitrotoluene	0.42	U	1.0	0.42	0.21	ug/L		06/15/19 13:24	1
HMX	0.21	U	0.42	0.21	0.092	ug/L		06/15/19 13:24	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/18/19 11:30	1
Nitrobenzene	0.21	U	0.42	0.21	0.095	ug/L		06/15/19 13:24	1
RDX	0.42	U M	0.42	0.42	0.17	ug/L		06/15/19 13:24	1
Tetryl	0.21	U M	0.25	0.21	0.083	ug/L		06/15/19 13:24	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	104	M	83 - 119		06/12/19 17:51	06/15/19 13:24			1
1,2-Dinitrobenzene	89		83 - 119		06/12/19 17:51	06/18/19 11:30			1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.45	0.22	0.096	ug/L		07/12/19 08:50	1
MNX	0.45	U H	2.2	0.45	0.17	ug/L		07/12/19 08:50	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	86	M	83 - 119		07/10/19 16:51	07/12/19 08:50			1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.83		0.10	0.050	0.022	mg/L		06/17/19 13:44	1
Nitrogen, Total Kjeldahl	0.94	J	1.0	1.0	0.69	mg/L		06/25/19 19:27	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 18:40	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	1000	D B	50	30	10	mg/L		07/02/19 02:22	10
Total Alkalinity as CaCO ₃	470		10	10	3.1	mg/L		06/15/19 04:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	4.5		1.0	0.50	0.16	mg/L		07/02/19 18:18	1

Client Sample ID: PZ001-19A

Date Collected: 06/04/19 14:05

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-12

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0016	J	0.0050	0.0020	0.00063	mg/L		06/11/19 17:16	1

Eurofins TestAmerica, Denver

Client Sample Results

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

Job ID: 280-124912-1

Client Sample ID: PZ001-19A

Date Collected: 06/04/19 14:05

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-12

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		06/14/19 08:54	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		06/14/19 08:54	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		06/14/19 08:54	1
2,4-Dinitrotoluene	0.20	U J1	0.40	0.20	0.084	ug/L		06/14/19 08:54	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		06/14/19 08:54	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		06/14/19 08:54	1
2-Nitrotoluene	0.20	U J1 Q	0.40	0.20	0.086	ug/L		06/14/19 08:54	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		06/14/19 08:54	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		06/14/19 08:54	1
4-Nitrotoluene	0.40	U M Q	1.0	0.40	0.20	ug/L		06/14/19 08:54	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		06/14/19 08:54	1
MNX	0.40	U	2.0	0.40	0.16	ug/L		06/14/19 08:54	1
Nitrobenzene	0.20	U M	0.40	0.20	0.092	ug/L		06/14/19 08:54	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		06/14/19 08:54	1
Tetryl	0.20	U M	0.24	0.20	0.080	ug/L		06/14/19 08:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	87	M	83 - 119				06/11/19 18:08	06/14/19 08:54	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U H	0.39	0.20	0.084	ug/L		07/12/19 09:13	1
4-Nitrotoluene	0.39	U H	0.99	0.39	0.20	ug/L		07/12/19 09:13	1
MNX	0.39	U H J1	2.0	0.39	0.15	ug/L		07/12/19 09:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	88	M	83 - 119				07/10/19 16:51	07/12/19 09:13	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.026	J	0.10	0.050	0.022	mg/L		06/17/19 13:10	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		06/25/19 19:57	1
Nitrate Nitrite as N	0.82		0.10	0.050	0.019	mg/L		06/26/19 19:24	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	1200	D B	50	30	10	mg/L		07/02/19 02:39	10
Total Alkalinity as CaCO3	550		10	10	3.1	mg/L		06/15/19 04:37	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	6.2		1.0	0.50	0.16	mg/L		07/02/19 19:02	1

Default Detection Limits

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

Job ID: 280-124912-1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	LOQ	DL	Units
Methane	0.0050	0.00063	mg/L

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Prep: 3535

Analyte	LOQ	DL	Units
1,3,5-Trinitrobenzene	1.0	0.20	ug/L
1,3-Dinitrobenzene	0.40	0.089	ug/L
2,4,6-Trinitrotoluene	0.40	0.16	ug/L
2,4-Dinitrotoluene	0.40	0.084	ug/L
2,6-Dinitrotoluene	0.20	0.065	ug/L
2-Amino-4,6-dinitrotoluene	0.20	0.051	ug/L
2-Nitrotoluene	0.40	0.086	ug/L
3-Nitrotoluene	0.40	0.20	ug/L
4-Amino-2,6-dinitrotoluene	0.20	0.058	ug/L
4-Nitrotoluene	1.0	0.20	ug/L
HMX	0.40	0.088	ug/L
MNX	2.0	0.15	ug/L
Nitrobenzene	0.40	0.091	ug/L
RDX	0.40	0.16	ug/L
Tetryl	0.24	0.079	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 CaCO ₃	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	0.16	mg/L

Surrogate Summary

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

Job ID: 280-124912-1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	12DNB1 (83-119)
280-124912-1	PZ004-19A	98 M
280-124912-1	PZ004-19A	93
280-124912-1 - RE	PZ004-19A	91 M
280-124912-2	G0044-19A	97 M
280-124912-2	G0044-19A	96
280-124912-2 - RE	G0044-19A	99 M
280-124912-3	PZ015-19A	107
280-124912-3	PZ015-19A	100
280-124912-3 - RE	PZ015-19A	111 M
280-124912-4	G0102-19A	105 M
280-124912-4	G0102-19A	91
280-124912-4 - RE	G0102-19A	142 M Q
280-124912-4 MS	G0102-19AMS	99 M
280-124912-4 MS	G0102-19AMS	91 M
280-124912-4 MSD	G0102-19AMSD	78 M Q
280-124912-5	PZ007-19A	91 M
280-124912-5 - RE	PZ007-19A	89 M
280-124912-5 MS	PZ007-19AMS	99 M
280-124912-5 MSD	PZ007-19AMSD	92 M
280-124912-6	G0049-19A	92 M
280-124912-6 - RE	G0049-19A	90 M
280-124912-7	G0048-19A	102 M
280-124912-7 - RE	G0048-19A	94 M
280-124912-8	G0023-19A	95 M
280-124912-8	G0023-19A	93
280-124912-8 - RE	G0023-19A	123 M Q
280-124912-9	PZ005-19A	81 Q M
280-124912-9 - RE	PZ005-19A	86 M
280-124912-10	G0103-19A	2535 M Q
280-124912-10	G0103-19A	42 Q M
280-124912-10 - RE	G0103-19A	2016 M Q
280-124912-11	G0104-19A	104 M
280-124912-11	G0104-19A	89
280-124912-11 - RE	G0104-19A	86 M
280-124912-12	PZ001-19A	87 M
280-124912-12 - RE	PZ001-19A	88 M
280-124912-12 MS	PZ001-19AMS	98 M
280-124912-12 MS	PZ001-19AMS	84 M
280-124912-12 MSD	PZ001-19AMSD	99 M
280-124912-12 MSD	PZ001-19AMSD	88 M
LCS 280-461170/2-A	Lab Control Sample	95
LCS 280-461286/2-A	Lab Control Sample	96
LCS 280-464162/2-A	Lab Control Sample	96
LCS 280-464162/4-A	Lab Control Sample	90
LCSD 280-464162/3-A	Lab Control Sample Dup	88
MB 280-461170/1-A	Method Blank	87
MB 280-461286/1-A	Method Blank	98
MB 280-464162/1-A	Method Blank	95

Surrogate Legend

Eurofins TestAmerica, Denver

Surrogate Summary

Client: Brice Environmental Services, Corp

Project/Site: Cornhusker (CHAAP)

12DNB = 1,2-Dinitrobenzene

Job ID: 280-124912-1

QC Sample Results

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

Job ID: 280-124912-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-461087/31

Matrix: Water

Analysis Batch: 461087

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		06/11/19 13:01	1

Lab Sample ID: LCS 280-461087/29

Matrix: Water

Analysis Batch: 461087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec. Limits	
Methane	0.0657	0.0757		mg/L		115	73 - 125

Lab Sample ID: LCSD 280-461087/30

Matrix: Water

Analysis Batch: 461087

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec. Limits	RPD	RPD Limit
Methane	0.0657	0.0803		mg/L		122	73 - 125	6

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 461087

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec. Limits	
Methane	0.0016	J	0.0657	0.0587		mg/L		87	73 - 125

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 461087

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec. Limits	RPD	RPD Limit
Methane	0.0016	J	0.0657	0.0609		mg/L		90	73 - 125	4

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 461087

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec. Limits	
Methane	0.00070	J	0.0657	0.0629		mg/L		95	73 - 125

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 461087

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec. Limits	RPD	RPD Limit
Methane	0.00070	J	0.0657	0.0563		mg/L		85	73 - 125	11

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 461087

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec. Limits	
Methane	0.0016	J	0.0657	0.0585		mg/L		87	73 - 125

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

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

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

Client Sample ID: G0102-19AMS
Prep Type: Total/NA

Client Sample ID: G0102-19AMSD
Prep Type: Total/NA

Client Sample ID: PZ007-19AMS
Prep Type: Total/NA

Client Sample ID: PZ007-19AMSD
Prep Type: Total/NA

Client Sample ID: PZ001-19AMS
Prep Type: Total/NA

QC Sample Results

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

Job ID: 280-124912-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 461087

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec			
Methane	0.0016	J	0.0657	0.0637		mg/L		94	73 - 125	8	20

Lab Sample ID: 280-124912-1 DU

Matrix: Water

Analysis Batch: 461087

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Methane	0.00084	J	0.000909	J	mg/L			8	20

Lab Sample ID: 280-124912-11 DU

Matrix: Water

Analysis Batch: 461087

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Methane	2.0		2.48		mg/L			19	20

Lab Sample ID: MB 280-461235/4

Matrix: Water

Analysis Batch: 461235

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/12/19 08:05	1

Lab Sample ID: LCS 280-461235/2

Matrix: Water

Analysis Batch: 461235

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Methane	0.0730	0.0756		mg/L		104	73 - 125

Lab Sample ID: LCSD 280-461235/3

Matrix: Water

Analysis Batch: 461235

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	RPD	Limit
	Added	Result	Qualifier							
Methane	0.0730	0.0748		mg/L		103	73 - 125	1	1	20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-461170/1-A

Matrix: Water

Analysis Batch: 461419

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		06/14/19 00:10	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		06/14/19 00:10	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		06/14/19 00:10	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		06/14/19 00:10	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		06/14/19 00:10	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		06/14/19 00:10	1

Eurofins TestAmerica, Denver

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: MB 280-461170/1-A

Matrix: Water

Analysis Batch: 461419

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 461170

Analyte	MB		LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
2-Nitrotoluene	0.20	U	0.40	0.20	0.086	ug/L		06/14/19 00:10	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.20	ug/L		06/14/19 00:10	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		06/14/19 00:10	1
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		06/14/19 00:10	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		06/14/19 00:10	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		06/14/19 00:10	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		06/14/19 00:10	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		06/14/19 00:10	1
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		06/14/19 00:10	1
Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1,2-Dinitrobenzene	87		83 - 119	06/11/19 18:08	06/14/19 00:10	1			

Lab Sample ID: LCS 280-461170/2-A

Matrix: Water

Analysis Batch: 461419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 461170

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits		
		Result	Qualifier						
1,3,5-Trinitrobenzene	2.00	2.13		ug/L		107	73 - 125		
1,3-Dinitrobenzene	2.00	2.05		ug/L		102	78 - 120		
2,4,6-Trinitrotoluene	2.00	1.89		ug/L		95	71 - 123		
2,4-Dinitrotoluene	2.00	1.97		ug/L		98	78 - 120		
2,6-Dinitrotoluene	2.00	1.91		ug/L		95	77 - 127		
2-Amino-4,6-dinitrotoluene	2.00	1.89		ug/L		94	79 - 120		
2-Nitrotoluene	2.00	1.25	Q	ug/L		63	70 - 127		
3-Nitrotoluene	2.00	1.51		ug/L		75	73 - 125		
4-Amino-2,6-dinitrotoluene	2.00	1.77		ug/L		88	76 - 125		
4-Nitrotoluene	2.00	1.41	Q	ug/L		70	71 - 127		
HMX	2.00	1.94	M	ug/L		97	65 - 135		
Nitrobenzene	2.00	1.51		ug/L		76	65 - 134		
RDX	2.00	2.03		ug/L		101	68 - 130		
Tetryl	2.00	2.00		ug/L		100	64 - 128		
Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1,2-Dinitrobenzene	95		83 - 119						

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 461580

Client Sample ID: PZ001-19AMS

Prep Type: Total/NA

Prep Batch: 461170

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
1,3,5-Trinitrobenzene	0.40	U	1.97	2.23	M	ug/L		113	73 - 125
1,3-Dinitrobenzene	0.20	U	1.97	2.15		ug/L		109	78 - 120
2,4,6-Trinitrotoluene	0.40	U	1.97	1.91		ug/L		97	71 - 123
2,4-Dinitrotoluene	0.20	U J1	1.97	1.94		ug/L		98	78 - 120
2,6-Dinitrotoluene	0.20	U	1.97	1.74	M	ug/L		88	77 - 127
2-Amino-4,6-dinitrotoluene	0.12	U	1.97	1.97	M	ug/L		100	79 - 120
2-Nitrotoluene	0.20	U J1 Q	1.97	1.35	J1	ug/L		69	70 - 127

Eurofins TestAmerica, Denver

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 461580

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
3-Nitrotoluene	0.40	U	1.97	1.46		ug/L		74	73 - 125
4-Amino-2,6-dinitrotoluene	0.12	U	1.97	1.67		ug/L		84	76 - 125
4-Nitrotoluene	0.40	U M Q	1.97	1.50		ug/L		76	71 - 127
HMX	0.20	U	1.97	1.92	M	ug/L		97	65 - 135
Nitrobenzene	0.20	U M	1.97	1.68		ug/L		85	65 - 134
RDX	0.40	U	1.97	1.97	M	ug/L		100	68 - 130
Tetryl	0.20	U M	1.97	2.26		ug/L		115	64 - 128
Surrogate									
1,2-Dinitrobenzene		%Recovery	Qualifier		Limits				
		98	M		83 - 119				

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 461419

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
1,3,5-Trinitrobenzene	0.40	U	1.97	2.14	M	ug/L		109	73 - 125	5
1,3-Dinitrobenzene	0.20	U	1.97	2.13		ug/L		108	78 - 120	1
2,4,6-Trinitrotoluene	0.40	U	1.97	1.89		ug/L		96	71 - 123	1
2,4-Dinitrotoluene	0.20	U J1	1.97	1.96	J1	ug/L		99	78 - 120	200
2,6-Dinitrotoluene	0.20	U	1.97	1.87		ug/L		95	77 - 127	8
2-Amino-4,6-dinitrotoluene	0.12	U	1.97	1.88		ug/L		96	79 - 120	4
2-Nitrotoluene	0.20	U J1 Q	1.97	1.36	J1	ug/L		69	70 - 127	0
3-Nitrotoluene	0.40	U	1.97	1.48		ug/L		75	73 - 125	1
4-Amino-2,6-dinitrotoluene	0.12	U	1.97	1.76		ug/L		89	76 - 125	5
4-Nitrotoluene	0.40	U M Q	1.97	1.56		ug/L		79	71 - 127	4
HMX	0.20	U	1.97	1.89	M	ug/L		96	65 - 135	2
Nitrobenzene	0.20	U M	1.97	1.72		ug/L		87	65 - 134	2
RDX	0.40	U	1.97	1.94	M	ug/L		99	68 - 130	1
Tetryl	0.20	U M	1.97	2.28		ug/L		116	64 - 128	1
Surrogate										
1,2-Dinitrobenzene		%Recovery	Qualifier		Limits					
		99	M		83 - 119					

Lab Sample ID: MB 280-461286/1-A

Matrix: Water

Analysis Batch: 461580

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		06/15/19 07:27	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		06/15/19 07:27	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		06/15/19 07:27	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		06/15/19 07:27	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		06/15/19 07:27	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		06/15/19 07:27	1
2-Nitrotoluene	0.20	U	0.40	0.20	0.086	ug/L		06/15/19 07:27	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.20	ug/L		06/15/19 07:27	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		06/15/19 07:27	1

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 461286

Eurofins TestAmerica, Denver

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: MB 280-461286/1-A

Matrix: Water

Analysis Batch: 461580

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 461286

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		06/15/19 07:27	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		06/15/19 07:27	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		06/15/19 07:27	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		06/15/19 07:27	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		06/15/19 07:27	1
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		06/15/19 07:27	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	98		83 - 119	06/12/19 17:51	06/15/19 07:27	1

Lab Sample ID: LCS 280-461286/2-A

Matrix: Water

Analysis Batch: 461580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 461286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
1,3,5-Trinitrobenzene	2.00	2.07		ug/L		104	73 - 125
1,3-Dinitrobenzene	2.00	1.99		ug/L		100	78 - 120
2,4,6-Trinitrotoluene	2.00	1.81		ug/L		91	71 - 123
2,4-Dinitrotoluene	2.00	1.89		ug/L		94	78 - 120
2,6-Dinitrotoluene	2.00	1.90	M	ug/L		95	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.78	M	ug/L		89	79 - 120
2-Nitrotoluene	2.00	1.28	Q	ug/L		64	70 - 127
3-Nitrotoluene	2.00	1.45		ug/L		73	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.66		ug/L		83	76 - 125
4-Nitrotoluene	2.00	1.42		ug/L		71	71 - 127
HMX	2.00	1.95		ug/L		97	65 - 135
Nitrobenzene	2.00	1.55		ug/L		78	65 - 134
RDX	2.00	1.99		ug/L		99	68 - 130
Tetryl	2.00	1.95		ug/L		97	64 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	96		83 - 119

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 461580

Client Sample ID: G0102-19AMS

Prep Type: Total/NA

Prep Batch: 461286

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
1,3,5-Trinitrobenzene	0.42	U	1.97	2.04	M	ug/L		103	73 - 125
1,3-Dinitrobenzene	0.21	U	1.97	1.99		ug/L		101	78 - 120
2,4,6-Trinitrotoluene	0.42	U	1.97	1.79		ug/L		91	71 - 123
2,4-Dinitrotoluene	0.21	U J1	1.97	1.81		ug/L		92	78 - 120
2,6-Dinitrotoluene	0.21	U M J1	1.97	1.76		ug/L		89	77 - 127
2-Amino-4,6-dinitrotoluene	0.13	U J1	1.97	1.75		ug/L		89	79 - 120
2-Nitrotoluene	0.21	U J1 Q	1.97	1.18	J1	ug/L		60	70 - 127
3-Nitrotoluene	0.42	U J1	1.97	1.25	J1	ug/L		63	73 - 125
4-Amino-2,6-dinitrotoluene	0.13	U J1	1.97	1.59		ug/L		81	76 - 125
4-Nitrotoluene	0.42	U J1	1.97	1.34	J1	ug/L		68	71 - 127

Eurofins TestAmerica, Denver

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 461580

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
HMX	0.21	U	1.97	1.90	M	ug/L		96	65 - 135
Nitrobenzene	0.21	U J1	1.97	1.45		ug/L		73	65 - 134
RDX	1.1	M	1.97	2.91	M	ug/L		93	68 - 130
Tetryl	0.21	U	1.97	1.96		ug/L		99	64 - 128
Surrogate									
1,2-Dinitrobenzene	99	M		83 - 119					

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 461580

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,3,5-Trinitrobenzene	0.42	U	1.95	1.73	M Q	ug/L		89	73 - 125
1,3-Dinitrobenzene	0.21	U	1.95	1.63	Q	ug/L		84	78 - 120
2,4,6-Trinitrotoluene	0.42	U	1.95	1.54	Q	ug/L		79	71 - 123
2,4-Dinitrotoluene	0.21	U J1	1.95	1.43	J1	ug/L		74	78 - 120
2,6-Dinitrotoluene	0.21	U M J1	1.95	1.40	J1	ug/L		72	77 - 127
2-Amino-4,6-dinitrotoluene	0.13	U J1	1.95	1.31	J1	ug/L		67	79 - 120
2-Nitrotoluene	0.21	U J1 Q	1.95	0.819	J1	ug/L		42	70 - 127
3-Nitrotoluene	0.42	U J1	1.95	0.859	J1	ug/L		44	73 - 125
4-Amino-2,6-dinitrotoluene	0.13	U J1	1.95	1.21	J1	ug/L		62	76 - 125
4-Nitrotoluene	0.42	U J1	1.95	0.966	J J1	ug/L		50	71 - 127
HMX	0.21	U	1.95	1.68	M Q	ug/L		86	65 - 135
Nitrobenzene	0.21	U J1	1.95	1.07	J1	ug/L		55	65 - 134
RDX	1.1	M	1.95	2.62	M Q	ug/L		79	68 - 130
Tetryl	0.21	U	1.95	1.77	Q	ug/L		91	64 - 128
Surrogate									
1,2-Dinitrobenzene	78	M Q		83 - 119					

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 461580

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,3,5-Trinitrobenzene	0.42	U	2.12	2.34	M	ug/L		110	73 - 125
1,3-Dinitrobenzene	0.21	U	2.12	2.19		ug/L		103	78 - 120
2,4,6-Trinitrotoluene	0.42	U	2.12	1.96		ug/L		92	71 - 123
2,4-Dinitrotoluene	0.21	U	2.12	1.97		ug/L		93	78 - 120
2,6-Dinitrotoluene	0.21	U	2.12	1.96	M	ug/L		92	77 - 127
2-Amino-4,6-dinitrotoluene	0.13	U	2.12	1.89	M	ug/L		89	79 - 120
2-Nitrotoluene	0.21	U Q J1	2.12	1.73		ug/L		82	70 - 127
3-Nitrotoluene	0.42	U J1	2.12	1.79		ug/L		84	73 - 125
4-Amino-2,6-dinitrotoluene	0.13	U	2.12	1.72		ug/L		81	76 - 125
4-Nitrotoluene	0.42	U	2.12	1.86		ug/L		87	71 - 127
HMX	0.21	U	2.12	2.02	M	ug/L		95	65 - 135
Nitrobenzene	0.21	U	2.12	2.00		ug/L		94	65 - 134

Client Sample ID: PZ007-19AMS

Prep Type: Total/NA

Prep Batch: 461286

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 461580

Client Sample ID: PZ007-19AMS

Prep Type: Total/NA

Prep Batch: 461286

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
RDX	0.42	U	2.12	2.07	M	ug/L	97	68 - 130	
Tetryl	0.21	U	2.12	2.11		ug/L	99	64 - 128	
Surrogate									
1,2-Dinitrobenzene	99	M		83 - 119					

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 461580

Client Sample ID: PZ007-19AMSD

Prep Type: Total/NA

Prep Batch: 461286

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
1,3,5-Trinitrobenzene	0.42	U	1.99	1.98	M	ug/L	99	73 - 125	17	30
1,3-Dinitrobenzene	0.21	U	1.99	1.90	M	ug/L	95	78 - 120	14	30
2,4,6-Trinitrotoluene	0.42	U	1.99	1.91		ug/L	96	71 - 123	2	30
2,4-Dinitrotoluene	0.21	U	1.99	1.78		ug/L	89	78 - 120	10	30
2,6-Dinitrotoluene	0.21	U	1.99	1.86	M	ug/L	93	77 - 127	5	30
2-Amino-4,6-dinitrotoluene	0.13	U	1.99	1.65	M	ug/L	83	79 - 120	14	30
2-Nitrotoluene	0.21	U Q J1	1.99	1.37	J1	ug/L	69	70 - 127	23	30
3-Nitrotoluene	0.42	U J1	1.99	1.41	J1	ug/L	71	73 - 125	24	30
4-Amino-2,6-dinitrotoluene	0.13	U	1.99	1.67		ug/L	84	76 - 125	3	30
4-Nitrotoluene	0.42	U	1.99	1.53		ug/L	77	71 - 127	19	30
HMX	0.21	U	1.99	1.80	M	ug/L	90	65 - 135	11	30
Nitrobenzene	0.21	U	1.99	1.72	M	ug/L	86	65 - 134	15	30
RDX	0.42	U	1.99	1.90	M	ug/L	96	68 - 130	8	30
Tetryl	0.21	U	1.99	1.99	M	ug/L	100	64 - 128	6	30
Surrogate										
1,2-Dinitrobenzene	92	M		83 - 119						

Lab Sample ID: MB 280-464162/1-A

Matrix: Water

Analysis Batch: 464207

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 464162

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		07/12/19 00:48	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		07/12/19 00:48	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		07/12/19 00:48	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		07/12/19 00:48	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		07/12/19 00:48	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		07/12/19 00:48	1
2-Nitrotoluene	0.20	U	0.40	0.20	0.086	ug/L		07/12/19 00:48	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		07/12/19 00:48	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		07/12/19 00:48	1
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		07/12/19 00:48	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		07/12/19 00:48	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		07/12/19 00:48	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		07/12/19 00:48	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		07/12/19 00:48	1

Eurofins TestAmerica, Denver

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: MB 280-464162/1-A

Matrix: Water

Analysis Batch: 464207

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 464162

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		07/12/19 00:48	1
<hr/>									
Surrogate	MB %Recovery	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac		
1,2-Dinitrobenzene	95		83 - 119		07/10/19 16:51	07/12/19 00:48	1		

Lab Sample ID: LCS 280-464162/2-A

Matrix: Water

Analysis Batch: 464207

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 464162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,3,5-Trinitrobenzene	2.00	2.14		ug/L		107	73 - 125
1,3-Dinitrobenzene	2.00	2.09		ug/L		105	78 - 120
2,4,6-Trinitrotoluene	2.00	1.97		ug/L		98	71 - 123
2,4-Dinitrotoluene	2.00	2.02		ug/L		101	78 - 120
2,6-Dinitrotoluene	2.00	2.01		ug/L		101	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.91		ug/L		95	79 - 120
2-Nitrotoluene	2.00	1.44		ug/L		72	70 - 127
3-Nitrotoluene	2.00	1.69		ug/L		84	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.82		ug/L		91	76 - 125
4-Nitrotoluene	2.00	1.64		ug/L		82	71 - 127
HMX	2.00	1.87	M	ug/L		93	65 - 135
Nitrobenzene	2.00	1.73		ug/L		86	65 - 134
RDX	2.00	2.03		ug/L		102	68 - 130
Tetryl	2.00	2.22		ug/L		111	64 - 128
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dinitrobenzene	96		83 - 119				

Lab Sample ID: LCS 280-464162/4-A

Matrix: Water

Analysis Batch: 464207

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 464162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
MNX	2.33	2.56		ug/L		110	57 - 132
<hr/>							
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dinitrobenzene	90		83 - 119				

Lab Sample ID: LCSD 280-464162/3-A

Matrix: Water

Analysis Batch: 464207

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 464162

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,3,5-Trinitrobenzene	2.00	1.99		ug/L		99	73 - 125	7	30
1,3-Dinitrobenzene	2.00	1.95		ug/L		98	78 - 120	7	30
2,4,6-Trinitrotoluene	2.00	1.85		ug/L		92	71 - 123	6	30
2,4-Dinitrotoluene	2.00	1.87		ug/L		94	78 - 120	8	30
2,6-Dinitrotoluene	2.00	1.88		ug/L		94	77 - 127	7	30

Eurofins TestAmerica, Denver

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: LCSD 280-464162/3-A

Matrix: Water

Analysis Batch: 464207

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 464162

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Amino-4,6-dinitrotoluene	2.00	1.75		ug/L		87	79 - 120	9	30
2-Nitrotoluene	2.00	1.41		ug/L		71	70 - 127	2	30
3-Nitrotoluene	2.00	1.59		ug/L		80	73 - 125	6	30
4-Amino-2,6-dinitrotoluene	2.00	1.68		ug/L		84	76 - 125	8	30
4-Nitrotoluene	2.00	1.53		ug/L		76	71 - 127	7	30
HMX	2.00	1.80	M	ug/L		90	65 - 135	3	30
Nitrobenzene	2.00	1.66		ug/L		83	65 - 134	4	30
RDX	2.00	1.92		ug/L		96	68 - 130	6	30
Tetryl	2.00	2.08		ug/L		104	64 - 128	6	30
Surrogate		LCSD %Recovery	LCSD Qualifier	Limits					
1,2-Dinitrobenzene		88		83 - 119					

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 464207

Client Sample ID: G0102-19AMS

Prep Type: Total/NA

Prep Batch: 464162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	0.41	U H	2.40	2.65	H M	ug/L		110	57 - 132
Surrogate		MS %Recovery	MS Qualifier	Limits					
1,2-Dinitrobenzene		91	M	83 - 119					

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 464207

Client Sample ID: G0102-19AMSD

Prep Type: Total/NA

Prep Batch: 464162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
MNX	0.41	U H	2.47	2.60	H M	ug/L		105	57 - 132
Surrogate		MSD %Recovery	MSD Qualifier	Limits					

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 464207

Client Sample ID: PZ007-19AMS

Prep Type: Total/NA

Prep Batch: 464162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD
MNX	0.44	U H	2.72	2.94	H M	ug/L		108	57 - 132
Surrogate		MS %Recovery	MS Qualifier	Limits					

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 464207

Client Sample ID: PZ007-19AMSD

Prep Type: Total/NA

Prep Batch: 464162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
MNX	0.44	U H	2.55	2.71	H M	ug/L		106	57 - 132
Surrogate		MSD %Recovery	MSD Qualifier	Limits					

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 464537

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
MNX	0.39	U H J1	2.31	2.37	H M	ug/L	103	57 - 132	
Surrogate									
1,2-Dinitrobenzene	84	M		83 - 119					

Client Sample ID: PZ001-19AMS

Prep Type: Total/NA

Prep Batch: 464162

%Rec.

Limits

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 464537

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier					
MNX	0.39	U H J1	2.33	1.02	J H M J1	ug/L	44	57 - 132	80	30
Surrogate										
1,2-Dinitrobenzene	88	M		83 - 119						

Client Sample ID: PZ001-19AMSD

Prep Type: Total/NA

Prep Batch: 464162

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-461846/19

Matrix: Water

Analysis Batch: 461846

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/17/19 11:40	1

Client Sample ID: Method Blank

Prep Type: Total/NA

Lab Sample ID: MB 280-461846/63

Matrix: Water

Analysis Batch: 461846

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/17/19 13:08	1

Client Sample ID: Method Blank

Prep Type: Total/NA

Lab Sample ID: LCS 280-461846/18

Matrix: Water

Analysis Batch: 461846

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Ammonia	2.50	2.53		mg/L	101	90 - 110	

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Lab Sample ID: LCS 280-461846/62

Matrix: Water

Analysis Batch: 461846

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Ammonia	2.50	2.46		mg/L	99	90 - 110	

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

QC Sample Results

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

Job ID: 280-124912-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 461846

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Ammonia	0.072	J	1.00	0.997		mg/L		93	90 - 110

Client Sample ID: G0102-19AMS

Prep Type: Total/NA

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 461846

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Ammonia	0.072	J	1.00	1.09		mg/L		102	90 - 110

Client Sample ID: G0102-19AMSD

Prep Type: Total/NA

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 461846

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Ammonia	0.077	J	1.00	1.05		mg/L		97	90 - 110

Client Sample ID: PZ007-19AMS

Prep Type: Total/NA

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 461846

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Ammonia	0.077	J	1.00	1.11		mg/L		103	90 - 110

Client Sample ID: PZ007-19AMSD

Prep Type: Total/NA

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 461846

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Ammonia	0.026	J	1.00	1.06		mg/L		104	90 - 110

Client Sample ID: PZ001-19AMS

Prep Type: Total/NA

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 461846

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Ammonia	0.026	J	1.00	1.06		mg/L		104	90 - 110

Client Sample ID: PZ001-19AMSD

Prep Type: Total/NA

Lab Sample ID: MB 280-462653/20

Matrix: Water

Analysis Batch: 462653

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/20/19 12:09	1

Client Sample ID: Method Blank

Prep Type: Total/NA

Lab Sample ID: LCS 280-462653/18

Matrix: Water

Analysis Batch: 462653

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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

QC Sample Results

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

Job ID: 280-124912-1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: LCSD 280-462653/19

Matrix: Water

Analysis Batch: 462653

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	2.50	2.40		mg/L		96	90 - 110	2	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-462534/28-A

Matrix: Water

Analysis Batch: 462702

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462534

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U		1.0	0.69	mg/L		06/25/19 19:56	1

Lab Sample ID: MB 280-462534/2-A

Matrix: Water

Analysis Batch: 462702

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 462534

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U		1.0	0.69	mg/L		06/25/19 19:05	1

Lab Sample ID: LCS 280-462534/1-A

Matrix: Water

Analysis Batch: 462702

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462534

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	6.00	5.59		mg/L		93	90 - 110

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 462702

Client Sample ID: G0102-19AMS
Prep Type: Total/NA
Prep Batch: 462534

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	2.59	J1	mg/L		86	90 - 110

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 462702

Client Sample ID: G0102-19AMSD
Prep Type: Total/NA
Prep Batch: 462534

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	2.83		mg/L		94	90 - 110	9

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 462702

Client Sample ID: PZ007-19AMS
Prep Type: Total/NA
Prep Batch: 462534

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	1.0	U	3.00	2.91		mg/L		97	90 - 110

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QC Sample Results

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

Job ID: 280-124912-1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 462702

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
Nitrogen, Total Kjeldahl	1.0	U	3.00	2.96		mg/L	99	90 - 110	2	25

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 462702

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier					
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	1.57	J1	mg/L	52	90 - 110		

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 462702

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier					
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	2.28	J1	mg/L	76	90 - 110	37	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-463103/22

Matrix: Water

Analysis Batch: 463103

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L	06/26/19 18:06		1

Lab Sample ID: MB 280-463103/60

Matrix: Water

Analysis Batch: 463103

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L	06/26/19 19:22		1

Lab Sample ID: LCS 280-463103/21

Matrix: Water

Analysis Batch: 463103

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added						
Nitrate Nitrite as N	5.00	4.98		mg/L	100	90 - 110	

Lab Sample ID: LCS 280-463103/59

Matrix: Water

Analysis Batch: 463103

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added						
Nitrate Nitrite as N	5.00	4.74		mg/L	95	90 - 110	

Client Sample ID: PZ007-19AMSD

Prep Type: Total/NA

Prep Batch: 462534

Client Sample ID: PZ001-19AMS

Prep Type: Total/NA

Prep Batch: 462534

Client Sample ID: PZ001-19AMSD

Prep Type: Total/NA

Prep Batch: 462534

Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 463103

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Nitrate Nitrite as N	0.050	U	4.00	4.12		mg/L		103	90 - 110

Client Sample ID: G0102-19AMS

Prep Type: Total/NA

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 463103

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Nitrate Nitrite as N	0.050	U	4.00	4.01		mg/L		100	90 - 110	3	10

Client Sample ID: G0102-19AMSD

Prep Type: Total/NA

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 463103

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Nitrate Nitrite as N	0.099	J	4.00	4.17		mg/L		102	90 - 110

Client Sample ID: PZ007-19AMS

Prep Type: Total/NA

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 463103

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Nitrate Nitrite as N	0.099	J	4.00	4.24		mg/L		104	90 - 110	2	10

Client Sample ID: PZ007-19AMSD

Prep Type: Total/NA

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 463103

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Nitrate Nitrite as N	0.82		4.00	4.73		mg/L		98	90 - 110

Client Sample ID: PZ001-19AMS

Prep Type: Total/NA

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 463103

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Nitrate Nitrite as N	0.82		4.00	4.73		mg/L		98	90 - 110	0	10

Client Sample ID: PZ001-19AMSD

Prep Type: Total/NA

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

Lab Sample ID: MB 280-461159/2-A

Matrix: Water

Analysis Batch: 461193

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 461159

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: LCS 280-461159/1-A

Matrix: Water

Analysis Batch: 461193

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Client Sample ID: Lab Control Sample
		Result	Qualifier				Limits
Sulfide	26.0	18.4		mg/L	71	44 - 110	

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 461193

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Client Sample ID: G0102-19AMS
	Result	Qualifier	Added	Result	Qualifier				
Sulfide	1.9	U	26.0	23.2		mg/L	89	44 - 110	

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 461193

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Client Sample ID: G0102-19AMSD
	Result	Qualifier	Added	Result	Qualifier				
Sulfide	1.9	U	26.0	20.0		mg/L	77	44 - 110	

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 461193

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Client Sample ID: PZ001-19AMS
	Result	Qualifier	Added	Result	Qualifier				
Sulfide	1.9	U	26.0	21.6		mg/L	83	44 - 110	

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 461193

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Client Sample ID: PZ001-19AMSD
	Result	Qualifier	Added	Result	Qualifier				
Sulfide	1.9	U	26.0	22.4		mg/L	86	44 - 110	

Lab Sample ID: MB 280-461272/2-A

Matrix: Water

Analysis Batch: 461300

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Sulfide	1.9	U	26.0	4.0	1.9	0.79	mg/L	06/12/19 12:54	1

Lab Sample ID: LCS 280-461272/1-A

Matrix: Water

Analysis Batch: 461300

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Client Sample ID: Lab Control Sample
	Added	Result	Qualifier				
Sulfide	26.0	20.0		mg/L	77	44 - 110	

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 461300

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Client Sample ID: PZ007-19AMS
	Result	Qualifier	Added	Result	Qualifier				
Sulfide	1.9	U	26.0	21.6		mg/L	83	44 - 110	

Eurofins TestAmerica, Denver

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 461300

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
Sulfide	1.9	U	26.0	18.4		mg/L	71	44 - 110	16	20

Client Sample ID: PZ007-19AMSD

Prep Type: Total/NA

Prep Batch: 461272

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-463246/6

Matrix: Water

Analysis Batch: 463246

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Sulfate	3.0	U	5.0	3.0	1.0	mg/L	07/01/19 12:42		1

Lab Sample ID: LCS 280-463246/4

Matrix: Water

Analysis Batch: 463246

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	%Rec.	
	Added	Result	Qualifier					
Sulfate	100	94.7		mg/L	95	87 - 112		

Lab Sample ID: LCSD 280-463246/5

Matrix: Water

Analysis Batch: 463246

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	%Rec.	RPD	Limit
	Added	Result	Qualifier						
Sulfate	100	94.6		mg/L	95	87 - 112		0	10

Lab Sample ID: MRL 280-463246/3

Matrix: Water

Analysis Batch: 463246

Analyte	Spike	MRL	MRL	Unit	D	%Rec.	%Rec.	
	Added	Result	Qualifier					
Sulfate	2.50	2.90	J	mg/L	116	50 - 150		

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier				
Sulfate	1100	D B	250	1340	D 4	mg/L	99	87 - 112	

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier				
Sulfate	1100	D B	250	1350	D 4	mg/L	100	87 - 112	0

Client Sample ID: G0102-19AMS

Prep Type: Total/NA

Client Sample ID: G0102-19AMSD

Prep Type: Total/NA

Eurofins TestAmerica, Denver

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Sulfate	930	D B	250	1190	D	mg/L		103	87 - 112

Client Sample ID: PZ007-19AMS

Prep Type: Total/NA

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Sulfate	930	D B	250	1200	D	mg/L		105	87 - 112

Client Sample ID: PZ007-19AMSD

Prep Type: Total/NA

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Sulfate	1200	D B	250	1410	D 4	mg/L		95	87 - 112

Client Sample ID: PZ001-19AMS

Prep Type: Total/NA

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Sulfate	1200	D B	250	1400	D 4	mg/L		92	87 - 112

Client Sample ID: PZ001-19AMSD

Prep Type: Total/NA

Lab Sample ID: 280-124912-4 DU

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limit
Sulfate	1100	D B		1090	D	mg/L		0.9	10

Client Sample ID: G0102-19A

Prep Type: Total/NA

Lab Sample ID: 280-124912-5 DU

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limit
Sulfate	930	D B		930	D	mg/L		0.6	10

Client Sample ID: PZ007-19A

Prep Type: Total/NA

Lab Sample ID: 280-124912-12 DU

Matrix: Water

Analysis Batch: 463246

Analyte	Sample	Sample	Spike	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limit
Sulfate	1200	D B		1160	D	mg/L		1	10

Client Sample ID: PZ001-19A

Prep Type: Total/NA

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: MB 280-463267/2-A

Matrix: Water

Analysis Batch: 463357

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	0.177	J	1.0	0.50	0.16	mg/L		07/01/19 14:47	1

Lab Sample ID: LCS 280-463267/1-A

Matrix: Water

Analysis Batch: 463357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Dissolved Organic Carbon - Quad	25.0	24.2		mg/L		97	88 - 112

Lab Sample ID: 280-124912-1 MS

Matrix: Water

Analysis Batch: 463357

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Dissolved Organic Carbon - Quad	6.2		25.0	30.6		mg/L		97	88 - 112

Lab Sample ID: 280-124912-1 MSD

Matrix: Water

Analysis Batch: 463357

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	Limit
Dissolved Organic Carbon - Quad	6.2		25.0	30.6		mg/L		98	88 - 112	0	15

Lab Sample ID: MB 280-463396/2-A

Matrix: Water

Analysis Batch: 463600

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	0.183	J	1.0	0.50	0.16	mg/L		07/02/19 15:41	1

Lab Sample ID: LCS 280-463396/1-A

Matrix: Water

Analysis Batch: 463600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Dissolved Organic Carbon - Quad	25.0	24.3		mg/L		97	88 - 112

Lab Sample ID: 280-124912-4 MS

Matrix: Water

Analysis Batch: 463600

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Dissolved Organic Carbon - Quad	3.8		25.0	28.2		mg/L		97	88 - 112

Client Sample ID: PZ004-19A

Prep Type: Dissolved

Client Sample ID: PZ004-19A

Prep Type: Dissolved

Client Sample ID: Method Blank

Prep Type: Dissolved

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Client Sample ID: G0102-19AMS

Prep Type: Dissolved

QC Sample Results

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

Job ID: 280-124912-1

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

Lab Sample ID: 280-124912-4 MSD

Matrix: Water

Analysis Batch: 463600

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier		Result	Qualifier						
Dissolved Organic Carbon - Quad	3.8		25.0	28.0		mg/L		97	88 - 112	1	15

Lab Sample ID: 280-124912-5 MS

Matrix: Water

Analysis Batch: 463600

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier		Result	Qualifier						
Dissolved Organic Carbon - Quad	4.7		25.0	28.8		mg/L		97	88 - 112		

Lab Sample ID: 280-124912-5 MSD

Matrix: Water

Analysis Batch: 463600

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier		Result	Qualifier						
Dissolved Organic Carbon - Quad	4.7		25.0	29.0		mg/L		97	88 - 112	1	15

Lab Sample ID: 280-124912-12 MS

Matrix: Water

Analysis Batch: 463600

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier		Result	Qualifier						
Dissolved Organic Carbon - Quad	6.2		25.0	30.6		mg/L		98	88 - 112		

Lab Sample ID: 280-124912-12 MSD

Matrix: Water

Analysis Batch: 463600

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier		Result	Qualifier						
Dissolved Organic Carbon - Quad	6.2		25.0	30.5		mg/L		97	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-461772/57

Matrix: Water

Analysis Batch: 461772

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity as CaCO ₃	10	U	10	10	3.1	mg/L		06/15/19 01:07	1

Lab Sample ID: MB 280-461772/83

Matrix: Water

Analysis Batch: 461772

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity as CaCO ₃	10	U	10	10	3.1	mg/L		06/15/19 03:40	1

Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: Method Blank

Prep Type: Total/NA

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QC Sample Results

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

Job ID: 280-124912-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-461772/56

Matrix: Water

Analysis Batch: 461772

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Total Alkalinity as CaCO ₃	200	209		mg/L		104		89 - 109

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

Lab Sample ID: LCS 280-461772/82

Matrix: Water

Analysis Batch: 461772

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Total Alkalinity as CaCO ₃	200	207		mg/L		104		89 - 109

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

Lab Sample ID: 280-124912-6 DU

Matrix: Water

Analysis Batch: 461772

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO ₃	300		304		mg/L		0	10

Client Sample ID: G0049-19A
Prep Type: Total/NA

QC Association Summary

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

Job ID: 280-124912-1

GC VOA

Analysis Batch: 461087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	RSK-175	
280-124912-2	G0044-19A	Total/NA	Water	RSK-175	
280-124912-3	PZ015-19A	Total/NA	Water	RSK-175	
280-124912-4	G0102-19A	Total/NA	Water	RSK-175	
280-124912-5	PZ007-19A	Total/NA	Water	RSK-175	
280-124912-6	G0049-19A	Total/NA	Water	RSK-175	
280-124912-7	G0048-19A	Total/NA	Water	RSK-175	
280-124912-9	PZ005-19A	Total/NA	Water	RSK-175	
280-124912-10	G0103-19A	Total/NA	Water	RSK-175	
280-124912-11	G0104-19A	Total/NA	Water	RSK-175	
280-124912-12	PZ001-19A	Total/NA	Water	RSK-175	
MB 280-461087/31	Method Blank	Total/NA	Water	RSK-175	
LCS 280-461087/29	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-461087/30	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-124912-4 MS	G0102-19AMS	Total/NA	Water	RSK-175	
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	RSK-175	
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	RSK-175	
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	RSK-175	
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	RSK-175	
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	RSK-175	
280-124912-1 DU	PZ004-19A	Total/NA	Water	RSK-175	
280-124912-11 DU	G0104-19A	Total/NA	Water	RSK-175	

Analysis Batch: 461235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-8	G0023-19A	Total/NA	Water	RSK-175	
MB 280-461235/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-461235/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-461235/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 461170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	3535	
280-124912-2	G0044-19A	Total/NA	Water	3535	
280-124912-3	PZ015-19A	Total/NA	Water	3535	
280-124912-6	G0049-19A	Total/NA	Water	3535	
280-124912-7	G0048-19A	Total/NA	Water	3535	
280-124912-8	G0023-19A	Total/NA	Water	3535	
280-124912-12	PZ001-19A	Total/NA	Water	3535	
MB 280-461170/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-461170/2-A	Lab Control Sample	Total/NA	Water	3535	
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	3535	
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	3535	

Prep Batch: 461286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-4	G0102-19A	Total/NA	Water	3535	
280-124912-5	PZ007-19A	Total/NA	Water	3535	
280-124912-9	PZ005-19A	Total/NA	Water	3535	

Eurofins TestAmerica, Denver

QC Association Summary

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

Job ID: 280-124912-1

HPLC/IC (Continued)

Prep Batch: 461286 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-10	G0103-19A	Total/NA	Water	3535	
280-124912-11	G0104-19A	Total/NA	Water	3535	
MB 280-461286/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-461286/2-A	Lab Control Sample	Total/NA	Water	3535	
280-124912-4 MS	G0102-19AMS	Total/NA	Water	3535	
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	3535	
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	3535	
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	3535	

Analysis Batch: 461419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	8330A	461170
280-124912-2	G0044-19A	Total/NA	Water	8330A	461170
280-124912-3	PZ015-19A	Total/NA	Water	8330A	461170
280-124912-6	G0049-19A	Total/NA	Water	8330A	461170
280-124912-7	G0048-19A	Total/NA	Water	8330A	461170
280-124912-8	G0023-19A	Total/NA	Water	8330A	461170
280-124912-12	PZ001-19A	Total/NA	Water	8330A	461170
MB 280-461170/1-A	Method Blank	Total/NA	Water	8330A	461170
LCS 280-461170/2-A	Lab Control Sample	Total/NA	Water	8330A	461170
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	8330A	461170

Analysis Batch: 461580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-4	G0102-19A	Total/NA	Water	8330A	461286
280-124912-5	PZ007-19A	Total/NA	Water	8330A	461286
280-124912-9	PZ005-19A	Total/NA	Water	8330A	461286
280-124912-10	G0103-19A	Total/NA	Water	8330A	461286
280-124912-11	G0104-19A	Total/NA	Water	8330A	461286
MB 280-461286/1-A	Method Blank	Total/NA	Water	8330A	461286
LCS 280-461286/2-A	Lab Control Sample	Total/NA	Water	8330A	461286
280-124912-4 MS	G0102-19AMS	Total/NA	Water	8330A	461286
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	8330A	461286
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	8330A	461286
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	8330A	461286
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	8330A	461170

Analysis Batch: 461583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	8330A	461170
280-124912-2	G0044-19A	Total/NA	Water	8330A	461170
280-124912-3	PZ015-19A	Total/NA	Water	8330A	461170
280-124912-8	G0023-19A	Total/NA	Water	8330A	461170

Analysis Batch: 461836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-4	G0102-19A	Total/NA	Water	8330A	461286
280-124912-10	G0103-19A	Total/NA	Water	8330A	461286
280-124912-11	G0104-19A	Total/NA	Water	8330A	461286

QC Association Summary

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

Job ID: 280-124912-1

HPLC/IC

Prep Batch: 464162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1 - RE	PZ004-19A	Total/NA	Water	3535	
280-124912-2 - RE	G0044-19A	Total/NA	Water	3535	
280-124912-3 - RE	PZ015-19A	Total/NA	Water	3535	
280-124912-4 - RE	G0102-19A	Total/NA	Water	3535	
280-124912-5 - RE	PZ007-19A	Total/NA	Water	3535	
280-124912-6 - RE	G0049-19A	Total/NA	Water	3535	
280-124912-7 - RE	G0048-19A	Total/NA	Water	3535	
280-124912-8 - RE	G0023-19A	Total/NA	Water	3535	
280-124912-9 - RE	PZ005-19A	Total/NA	Water	3535	
280-124912-10 - RE	G0103-19A	Total/NA	Water	3535	
280-124912-11 - RE	G0104-19A	Total/NA	Water	3535	
280-124912-12 - RE	PZ001-19A	Total/NA	Water	3535	
MB 280-464162/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-464162/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-464162/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-464162/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
280-124912-4 MS	G0102-19AMS	Total/NA	Water	3535	
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	3535	
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	3535	
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	3535	
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	3535	
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	3535	

Analysis Batch: 464207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1 - RE	PZ004-19A	Total/NA	Water	8330A	464162
280-124912-2 - RE	G0044-19A	Total/NA	Water	8330A	464162
280-124912-3 - RE	PZ015-19A	Total/NA	Water	8330A	464162
280-124912-4 - RE	G0102-19A	Total/NA	Water	8330A	464162
280-124912-5 - RE	PZ007-19A	Total/NA	Water	8330A	464162
280-124912-6 - RE	G0049-19A	Total/NA	Water	8330A	464162
280-124912-7 - RE	G0048-19A	Total/NA	Water	8330A	464162
280-124912-8 - RE	G0023-19A	Total/NA	Water	8330A	464162
280-124912-9 - RE	PZ005-19A	Total/NA	Water	8330A	464162
280-124912-10 - RE	G0103-19A	Total/NA	Water	8330A	464162
280-124912-11 - RE	G0104-19A	Total/NA	Water	8330A	464162
280-124912-12 - RE	PZ001-19A	Total/NA	Water	8330A	464162
MB 280-464162/1-A	Method Blank	Total/NA	Water	8330A	464162
LCS 280-464162/2-A	Lab Control Sample	Total/NA	Water	8330A	464162
LCS 280-464162/4-A	Lab Control Sample	Total/NA	Water	8330A	464162
LCSD 280-464162/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	464162
280-124912-4 MS	G0102-19AMS	Total/NA	Water	8330A	464162
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	8330A	464162
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	8330A	464162
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	8330A	464162

Analysis Batch: 464537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	8330A	464162
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	8330A	464162

Eurofins TestAmerica, Denver

QC Association Summary

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

Job ID: 280-124912-1

General Chemistry

Prep Batch: 461159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	9030B	
280-124912-2	G0044-19A	Total/NA	Water	9030B	
280-124912-3	PZ015-19A	Total/NA	Water	9030B	
280-124912-4	G0102-19A	Total/NA	Water	9030B	
280-124912-6	G0049-19A	Total/NA	Water	9030B	
280-124912-7	G0048-19A	Total/NA	Water	9030B	
280-124912-8	G0023-19A	Total/NA	Water	9030B	
280-124912-10	G0103-19A	Total/NA	Water	9030B	
280-124912-11	G0104-19A	Total/NA	Water	9030B	
280-124912-12	PZ001-19A	Total/NA	Water	9030B	
MB 280-461159/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-461159/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-124912-4 MS	G0102-19AMS	Total/NA	Water	9030B	
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	9030B	
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	9030B	
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	9030B	

Analysis Batch: 461159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	9034	461159
280-124912-2	G0044-19A	Total/NA	Water	9034	461159
280-124912-3	PZ015-19A	Total/NA	Water	9034	461159
280-124912-4	G0102-19A	Total/NA	Water	9034	461159
280-124912-6	G0049-19A	Total/NA	Water	9034	461159
280-124912-7	G0048-19A	Total/NA	Water	9034	461159
280-124912-8	G0023-19A	Total/NA	Water	9034	461159
280-124912-10	G0103-19A	Total/NA	Water	9034	461159
280-124912-11	G0104-19A	Total/NA	Water	9034	461159
280-124912-12	PZ001-19A	Total/NA	Water	9034	461159
MB 280-461159/2-A	Method Blank	Total/NA	Water	9034	461159
LCS 280-461159/1-A	Lab Control Sample	Total/NA	Water	9034	461159
280-124912-4 MS	G0102-19AMS	Total/NA	Water	9034	461159
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	9034	461159
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	9034	461159
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	9034	461159

Prep Batch: 461272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-5	PZ007-19A	Total/NA	Water	9030B	
280-124912-9	PZ005-19A	Total/NA	Water	9030B	
MB 280-461272/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-461272/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	9030B	
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	9030B	

Analysis Batch: 461300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-5	PZ007-19A	Total/NA	Water	9034	461272
280-124912-9	PZ005-19A	Total/NA	Water	9034	461272
MB 280-461272/2-A	Method Blank	Total/NA	Water	9034	461272
LCS 280-461272/1-A	Lab Control Sample	Total/NA	Water	9034	461272

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QC Association Summary

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

Job ID: 280-124912-1

General Chemistry (Continued)

Analysis Batch: 461300 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	9034	461272
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	9034	461272

Analysis Batch: 461772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	SM 2320B	
280-124912-2	G0044-19A	Total/NA	Water	SM 2320B	
280-124912-3	PZ015-19A	Total/NA	Water	SM 2320B	
280-124912-4	G0102-19A	Total/NA	Water	SM 2320B	
280-124912-5	PZ007-19A	Total/NA	Water	SM 2320B	
280-124912-6	G0049-19A	Total/NA	Water	SM 2320B	
280-124912-7	G0048-19A	Total/NA	Water	SM 2320B	
280-124912-8	G0023-19A	Total/NA	Water	SM 2320B	
280-124912-9	PZ005-19A	Total/NA	Water	SM 2320B	
280-124912-10	G0103-19A	Total/NA	Water	SM 2320B	
280-124912-11	G0104-19A	Total/NA	Water	SM 2320B	
280-124912-12	PZ001-19A	Total/NA	Water	SM 2320B	
MB 280-461772/57	Method Blank	Total/NA	Water	SM 2320B	
MB 280-461772/83	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-461772/56	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-461772/82	Lab Control Sample	Total/NA	Water	SM 2320B	
280-124912-6 DU	G0049-19A	Total/NA	Water	SM 2320B	

Analysis Batch: 461846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	350.1	
280-124912-2	G0044-19A	Total/NA	Water	350.1	
280-124912-3	PZ015-19A	Total/NA	Water	350.1	
280-124912-4	G0102-19A	Total/NA	Water	350.1	
280-124912-5	PZ007-19A	Total/NA	Water	350.1	
280-124912-6	G0049-19A	Total/NA	Water	350.1	
280-124912-7	G0048-19A	Total/NA	Water	350.1	
280-124912-9	PZ005-19A	Total/NA	Water	350.1	
280-124912-10	G0103-19A	Total/NA	Water	350.1	
280-124912-11	G0104-19A	Total/NA	Water	350.1	
280-124912-12	PZ001-19A	Total/NA	Water	350.1	
MB 280-461846/19	Method Blank	Total/NA	Water	350.1	
MB 280-461846/63	Method Blank	Total/NA	Water	350.1	
LCS 280-461846/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-461846/62	Lab Control Sample	Total/NA	Water	350.1	
280-124912-4 MS	G0102-19AMS	Total/NA	Water	350.1	
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	350.1	
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	350.1	
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	350.1	
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	350.1	
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	350.1	

Prep Batch: 462534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	351.2	
280-124912-2	G0044-19A	Total/NA	Water	351.2	

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QC Association Summary

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

Job ID: 280-124912-1

General Chemistry (Continued)

Prep Batch: 462534 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-3	PZ015-19A	Total/NA	Water	351.2	
280-124912-4	G0102-19A	Total/NA	Water	351.2	
280-124912-5	PZ007-19A	Total/NA	Water	351.2	
280-124912-6	G0049-19A	Total/NA	Water	351.2	
280-124912-7	G0048-19A	Total/NA	Water	351.2	
280-124912-8	G0023-19A	Total/NA	Water	351.2	
280-124912-9	PZ005-19A	Total/NA	Water	351.2	
280-124912-10	G0103-19A	Total/NA	Water	351.2	
280-124912-11	G0104-19A	Total/NA	Water	351.2	
280-124912-12	PZ001-19A	Total/NA	Water	351.2	
MB 280-462534/28-A	Method Blank	Total/NA	Water	351.2	
MB 280-462534/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-462534/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-124912-4 MS	G0102-19AMS	Total/NA	Water	351.2	
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	351.2	
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	351.2	
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	351.2	
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	351.2	
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	351.2	

Analysis Batch: 462653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-8	G0023-19A	Total/NA	Water	350.1	
MB 280-462653/20	Method Blank	Total/NA	Water	350.1	
LCS 280-462653/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-462653/19	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 462702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	351.2	462534
280-124912-2	G0044-19A	Total/NA	Water	351.2	462534
280-124912-3	PZ015-19A	Total/NA	Water	351.2	462534
280-124912-4	G0102-19A	Total/NA	Water	351.2	462534
280-124912-5	PZ007-19A	Total/NA	Water	351.2	462534
280-124912-6	G0049-19A	Total/NA	Water	351.2	462534
280-124912-7	G0048-19A	Total/NA	Water	351.2	462534
280-124912-8	G0023-19A	Total/NA	Water	351.2	462534
280-124912-9	PZ005-19A	Total/NA	Water	351.2	462534
280-124912-10	G0103-19A	Total/NA	Water	351.2	462534
280-124912-11	G0104-19A	Total/NA	Water	351.2	462534
280-124912-12	PZ001-19A	Total/NA	Water	351.2	462534
MB 280-462534/28-A	Method Blank	Total/NA	Water	351.2	462534
MB 280-462534/2-A	Method Blank	Total/NA	Water	351.2	462534
LCS 280-462534/1-A	Lab Control Sample	Total/NA	Water	351.2	462534
280-124912-4 MS	G0102-19AMS	Total/NA	Water	351.2	462534
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	351.2	462534
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	351.2	462534
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	351.2	462534
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	351.2	462534
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	351.2	462534

QC Association Summary

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

Job ID: 280-124912-1

General Chemistry

Analysis Batch: 463103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	353.2	
280-124912-2	G0044-19A	Total/NA	Water	353.2	
280-124912-3	PZ015-19A	Total/NA	Water	353.2	
280-124912-4	G0102-19A	Total/NA	Water	353.2	
280-124912-5	PZ007-19A	Total/NA	Water	353.2	
280-124912-6	G0049-19A	Total/NA	Water	353.2	
280-124912-7	G0048-19A	Total/NA	Water	353.2	
280-124912-8	G0023-19A	Total/NA	Water	353.2	
280-124912-9	PZ005-19A	Total/NA	Water	353.2	
280-124912-10	G0103-19A	Total/NA	Water	353.2	
280-124912-11	G0104-19A	Total/NA	Water	353.2	
280-124912-12	PZ001-19A	Total/NA	Water	353.2	
MB 280-463103/22	Method Blank	Total/NA	Water	353.2	
MB 280-463103/60	Method Blank	Total/NA	Water	353.2	
LCS 280-463103/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-463103/59	Lab Control Sample	Total/NA	Water	353.2	
280-124912-4 MS	G0102-19AMS	Total/NA	Water	353.2	
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	353.2	
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	353.2	
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	353.2	
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	353.2	
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	353.2	

Filtration Batch: 463241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Dissolved	Water	FILTRATION	
280-124912-1 MS	PZ004-19A	Dissolved	Water	FILTRATION	
280-124912-1 MSD	PZ004-19A	Dissolved	Water	FILTRATION	

Analysis Batch: 463246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Total/NA	Water	9056A	
280-124912-2	G0044-19A	Total/NA	Water	9056A	
280-124912-3	PZ015-19A	Total/NA	Water	9056A	
280-124912-4	G0102-19A	Total/NA	Water	9056A	
280-124912-5	PZ007-19A	Total/NA	Water	9056A	
280-124912-6	G0049-19A	Total/NA	Water	9056A	
280-124912-7	G0048-19A	Total/NA	Water	9056A	
280-124912-8	G0023-19A	Total/NA	Water	9056A	
280-124912-9	PZ005-19A	Total/NA	Water	9056A	
280-124912-10	G0103-19A	Total/NA	Water	9056A	
280-124912-11	G0104-19A	Total/NA	Water	9056A	
280-124912-12	PZ001-19A	Total/NA	Water	9056A	
MB 280-463246/6	Method Blank	Total/NA	Water	9056A	
LCS 280-463246/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-463246/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-463246/3	Lab Control Sample	Total/NA	Water	9056A	
280-124912-4 MS	G0102-19AMS	Total/NA	Water	9056A	
280-124912-4 MSD	G0102-19AMSD	Total/NA	Water	9056A	
280-124912-5 MS	PZ007-19AMS	Total/NA	Water	9056A	
280-124912-5 MSD	PZ007-19AMSD	Total/NA	Water	9056A	

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QC Association Summary

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

Job ID: 280-124912-1

General Chemistry (Continued)

Analysis Batch: 463246 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-12 MS	PZ001-19AMS	Total/NA	Water	9056A	
280-124912-12 MSD	PZ001-19AMSD	Total/NA	Water	9056A	
280-124912-4 DU	G0102-19A	Total/NA	Water	9056A	
280-124912-5 DU	PZ007-19A	Total/NA	Water	9056A	
280-124912-12 DU	PZ001-19A	Total/NA	Water	9056A	

Filtration Batch: 463267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-2	G0044-19A	Dissolved	Water	FILTRATION	
280-124912-3	PZ015-19A	Dissolved	Water	FILTRATION	
280-124912-6	G0049-19A	Dissolved	Water	FILTRATION	
280-124912-7	G0048-19A	Dissolved	Water	FILTRATION	
280-124912-8	G0023-19A	Dissolved	Water	FILTRATION	
MB 280-463267/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-463267/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	

Analysis Batch: 463357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-1	PZ004-19A	Dissolved	Water	9060A	463241
280-124912-2	G0044-19A	Dissolved	Water	9060A	463267
280-124912-3	PZ015-19A	Dissolved	Water	9060A	463267
280-124912-6	G0049-19A	Dissolved	Water	9060A	463267
280-124912-7	G0048-19A	Dissolved	Water	9060A	463267
280-124912-8	G0023-19A	Dissolved	Water	9060A	463267
MB 280-463267/2-A	Method Blank	Dissolved	Water	9060A	463267
LCS 280-463267/1-A	Lab Control Sample	Dissolved	Water	9060A	463267
280-124912-1 MS	PZ004-19A	Dissolved	Water	9060A	463241
280-124912-1 MSD	PZ004-19A	Dissolved	Water	9060A	463241

Filtration Batch: 463396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-4	G0102-19A	Dissolved	Water	FILTRATION	
280-124912-5	PZ007-19A	Dissolved	Water	FILTRATION	
280-124912-9	PZ005-19A	Dissolved	Water	FILTRATION	
280-124912-10	G0103-19A	Dissolved	Water	FILTRATION	
280-124912-11	G0104-19A	Dissolved	Water	FILTRATION	
280-124912-12	PZ001-19A	Dissolved	Water	FILTRATION	
MB 280-463396/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-463396/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-124912-4 MS	G0102-19AMS	Dissolved	Water	FILTRATION	
280-124912-4 MSD	G0102-19AMSD	Dissolved	Water	FILTRATION	
280-124912-5 MS	PZ007-19AMS	Dissolved	Water	FILTRATION	
280-124912-5 MSD	PZ007-19AMSD	Dissolved	Water	FILTRATION	
280-124912-12 MS	PZ001-19AMS	Dissolved	Water	FILTRATION	
280-124912-12 MSD	PZ001-19AMSD	Dissolved	Water	FILTRATION	

Analysis Batch: 463600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-4	G0102-19A	Dissolved	Water	9060A	463396
280-124912-5	PZ007-19A	Dissolved	Water	9060A	463396
280-124912-9	PZ005-19A	Dissolved	Water	9060A	463396

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QC Association Summary

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

Job ID: 280-124912-1

General Chemistry (Continued)

Analysis Batch: 463600 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124912-10	G0103-19A	Dissolved	Water	9060A	463396
280-124912-11	G0104-19A	Dissolved	Water	9060A	463396
280-124912-12	PZ001-19A	Dissolved	Water	9060A	463396
MB 280-463396/2-A	Method Blank	Dissolved	Water	9060A	463396
LCS 280-463396/1-A	Lab Control Sample	Dissolved	Water	9060A	463396
280-124912-4 MS	G0102-19AMS	Dissolved	Water	9060A	463396
280-124912-4 MSD	G0102-19AMSD	Dissolved	Water	9060A	463396
280-124912-5 MS	PZ007-19AMS	Dissolved	Water	9060A	463396
280-124912-5 MSD	PZ007-19AMSD	Dissolved	Water	9060A	463396
280-124912-12 MS	PZ001-19AMS	Dissolved	Water	9060A	463396
280-124912-12 MSD	PZ001-19AMSD	Dissolved	Water	9060A	463396

Lab Chronicle

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

Job ID: 280-124912-1

Client Sample ID: PZ004-19A

Date Collected: 06/04/19 12:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 13:15	MD	TAL DEN
Total/NA	Prep	3535			495.7 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461583	06/15/19 12:10	HKF	TAL DEN
Total/NA	Prep	3535			495.7 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461419	06/14/19 06:31	HKF	TAL DEN
Total/NA	Prep	3535	RE		505 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 02:19	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:16	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:11	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:14	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	463246	07/01/19 18:39	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463241	07/01/19 10:30	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463357	07/01/19 15:17	JAM	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 02:50	SGB	TAL DEN

Client Sample ID: G0044-19A

Date Collected: 06/04/19 16:00

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 13:41	MD	TAL DEN
Total/NA	Prep	3535			499.3 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461583	06/15/19 12:45	HKF	TAL DEN
Total/NA	Prep	3535			499.3 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461419	06/14/19 06:55	HKF	TAL DEN
Total/NA	Prep	3535	RE		496.3 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 02:42	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:18	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:12	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	463103	06/26/19 18:16	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	463246	07/01/19 18:55	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463267	07/01/19 11:47	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463357	07/01/19 16:03	JAM	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 02:58	SGB	TAL DEN

Eurofins TestAmerica, Denver

Lab Chronicle

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

Job ID: 280-124912-1

Client Sample ID: PZ015-19A

Date Collected: 06/04/19 16:25

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 13:55	MD	TAL DEN
Total/NA	Prep	3535			464 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461583	06/15/19 13:20	HKF	TAL DEN
Total/NA	Prep	3535			464 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461419	06/14/19 07:19	HKF	TAL DEN
Total/NA	Prep	3535	RE		448.2 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 03:05	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:20	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:16	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	463103	06/26/19 18:18	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	463246	07/01/19 19:11	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463267	07/01/19 11:47	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463357	07/01/19 16:20	JAM	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 03:04	SGB	TAL DEN

Client Sample ID: G0102-19A

Date Collected: 06/05/19 11:25

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 14:08	MD	TAL DEN
Total/NA	Prep	3535			478.4 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461836	06/18/19 08:00	HKF	TAL DEN
Total/NA	Prep	3535			478.4 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 09:02	HKF	TAL DEN
Total/NA	Prep	3535	RE		483.4 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 03:28	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 11:42	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:06	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:08	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	463246	07/01/19 19:28	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463396	07/02/19 11:53	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463600	07/02/19 16:11	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 03:11	SGB	TAL DEN

Eurofins TestAmerica, Denver

Lab Chronicle

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

Job ID: 280-124912-1

Client Sample ID: PZ007-19A

Date Collected: 06/05/19 10:15

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 14:49	MD	TAL DEN
Total/NA	Prep	3535			470.6 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 10:13	HKF	TAL DEN
Total/NA	Prep	3535	RE		452.2 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 05:46	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 12:18	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:31	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:44	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461272	06/12/19 09:51	JLA	TAL DEN
Total/NA	Analysis	9034		1			461300	06/12/19 12:54	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	463246	07/01/19 19:44	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463396	07/02/19 11:53	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463600	07/02/19 16:55	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 03:19	SGB	TAL DEN

Client Sample ID: G0049-19A

Date Collected: 06/04/19 12:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 15:29	MD	TAL DEN
Total/NA	Prep	3535			461.2 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461419	06/14/19 07:43	HKF	TAL DEN
Total/NA	Prep	3535	RE		431.6 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 06:55	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:22	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:17	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:42	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	463246	07/01/19 20:00	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463267	07/01/19 11:47	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463357	07/01/19 17:04	JAM	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 03:47	SGB	TAL DEN

Client Sample ID: G0048-19A

Date Collected: 06/04/19 13:40

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 15:43	MD	TAL DEN

Eurofins TestAmerica, Denver

Lab Chronicle

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

Job ID: 280-124912-1

Client Sample ID: G0048-19A

Date Collected: 06/04/19 13:40

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			470.9 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461419	06/14/19 08:07	HKF	TAL DEN
Total/NA	Prep	3535	RE		454.3 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 07:18	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:24	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:18	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	463103	06/26/19 18:20	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	463246	07/01/19 20:17	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463267	07/01/19 11:47	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463357	07/01/19 17:19	JAM	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 03:58	SGB	TAL DEN

Client Sample ID: G0023-19A

Date Collected: 06/04/19 15:00

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		3	18 mL	18 mL	461235	06/12/19 08:45	MD	TAL DEN
Total/NA	Prep	3535			432.3 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461583	06/15/19 13:55	HKF	TAL DEN
Total/NA	Prep	3535			432.3 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461419	06/14/19 08:30	HKF	TAL DEN
Total/NA	Prep	3535	RE		453.8 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 07:41	HKF	TAL DEN
Total/NA	Analysis	350.1		2	10 mL	10 mL	462653	06/20/19 13:21	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:20	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:22	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	463246	07/01/19 20:33	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463267	07/01/19 11:47	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463357	07/01/19 17:33	JAM	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 04:04	SGB	TAL DEN

Client Sample ID: PZ005-19A

Date Collected: 06/05/19 09:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 16:09	MD	TAL DEN

Eurofins TestAmerica, Denver

Lab Chronicle

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

Job ID: 280-124912-1

Client Sample ID: PZ005-19A

Date Collected: 06/05/19 09:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			513.3 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 12:36	HKF	TAL DEN
Total/NA	Prep	3535	RE		468.8 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 08:04	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:28	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:21	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:24	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461272	06/12/19 09:51	JLA	TAL DEN
Total/NA	Analysis	9034		1			461300	06/12/19 12:54	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	463246	07/01/19 20:49	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463396	07/02/19 11:53	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463600	07/02/19 17:39	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 04:12	SGB	TAL DEN

Client Sample ID: G0103-19A

Date Collected: 06/05/19 13:10

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 16:23	MD	TAL DEN
Total/NA	Prep	3535			459.8 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461836	06/18/19 10:20	HKF	TAL DEN
Total/NA	Prep	3535			459.8 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 13:00	HKF	TAL DEN
Total/NA	Prep	3535	RE		449.2 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 08:27	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:42	MJS	TAL DEN
Total/NA	Prep	351.2			5 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:26	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:26	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	463246	07/01/19 21:06	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463396	07/02/19 11:53	JAM	TAL DEN
Dissolved	Analysis	9060A		5	20 mL	20 mL	463600	07/02/19 18:01	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 04:21	SGB	TAL DEN

Client Sample ID: G0104-19A

Date Collected: 06/05/19 14:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 16:50	MD	TAL DEN

Eurofins TestAmerica, Denver

Lab Chronicle

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

Job ID: 280-124912-1

Client Sample ID: G0104-19A

Date Collected: 06/05/19 14:30

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			476.8 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	461836	06/18/19 11:30	HKF	TAL DEN
Total/NA	Prep	3535			476.8 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 13:24	HKF	TAL DEN
Total/NA	Prep	3535	RE		447 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 08:50	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:44	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:27	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:40	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	463246	07/02/19 02:22	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463396	07/02/19 11:53	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463600	07/02/19 18:18	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 04:29	SGB	TAL DEN

Client Sample ID: PZ001-19A

Date Collected: 06/04/19 14:05

Date Received: 06/06/19 08:45

Lab Sample ID: 280-124912-12

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	RSK-175		1	18 mL	18 mL	461087	06/11/19 17:16	MD	TAL DEN
Total/NA	Prep	3535			496.3 mL	5 mL	461170	06/11/19 18:08	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461419	06/14/19 08:54	HKF	TAL DEN
Total/NA	Prep	3535	RE		507.2 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464207	07/12/19 09:13	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	461846	06/17/19 13:10	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:57	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:24	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	463246	07/02/19 02:39	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463396	07/02/19 11:53	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463600	07/02/19 19:02	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 04:37	SGB	TAL DEN

Laboratory References:

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

Eurofins TestAmerica, Denver

Accreditation/Certification Summary

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

Job ID: 280-124912-1

Laboratory: Eurofins TestAmerica, Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD		2907.01	10-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8330A	3535	Water	MNX
9060A		Water	Dissolved Organic Carbon - Quad

Method Summary

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

Job ID: 280-124912-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

None = None

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

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

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

Laboratory References:

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

Sample Summary

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

Job ID: 280-124912-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-124912-1	PZ004-19A	Water	06/04/19 12:30	06/06/19 08:45	
280-124912-2	G0044-19A	Water	06/04/19 16:00	06/06/19 08:45	
280-124912-3	PZ015-19A	Water	06/04/19 16:25	06/06/19 08:45	
280-124912-4	G0102-19A	Water	06/05/19 11:25	06/06/19 08:45	
280-124912-5	PZ007-19A	Water	06/05/19 10:15	06/06/19 08:45	
280-124912-6	G0049-19A	Water	06/04/19 12:30	06/06/19 08:45	
280-124912-7	G0048-19A	Water	06/04/19 13:40	06/06/19 08:45	
280-124912-8	G0023-19A	Water	06/04/19 15:00	06/06/19 08:45	
280-124912-9	PZ005-19A	Water	06/05/19 09:30	06/06/19 08:45	
280-124912-10	G0103-19A	Water	06/05/19 13:10	06/06/19 08:45	
280-124912-11	G0104-19A	Water	06/05/19 14:30	06/06/19 08:45	
280-124912-12	PZ001-19A	Water	06/04/19 14:05	06/06/19 08:45	

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: VGC_J Analysis Batch Number: 454595Lab Sample ID: IC 280-454595/6 Client Sample ID: _____Date Analyzed: 04/15/19 11:30 Lab File ID: 04151906.D GC Column: Rt-Alumina KC ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.87	Incomplete Integration	meierg	04/15/19 13:21

Lab Sample ID: IC 280-454595/7 Client Sample ID: _____Date Analyzed: 04/15/19 11:44 Lab File ID: 04151907.D GC Column: Rt-Alumina KC ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.87	Split Peak	meierg	04/15/19 13:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 457315Lab Sample ID: IC 280-457315/7 Client Sample ID: _____Date Analyzed: 05/07/19 15:08 Lab File ID: 05070007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	5.64	Peak assignment corrected	fiedlerh	05/08/19 09:04

Lab Sample ID: IC 280-457315/13 Client Sample ID: _____Date Analyzed: 05/07/19 18:38 Lab File ID: 05070013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.15	Peak assignment corrected	fiedlerh	05/08/19 09:04

Lab Sample ID: IC 280-457315/14 Client Sample ID: _____Date Analyzed: 05/07/19 19:13 Lab File ID: 05070014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.21	Peak assignment corrected	fiedlerh	05/08/19 09:04
PETN	25.37	Baseline Smoothing	fiedlerh	05/08/19 09:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 461583

Lab Sample ID: CCV 280-461583/40 Client Sample ID: _____

Date Analyzed: 06/15/19 09:15 Lab File ID: 06140040.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl	23.75	Baseline Smoothing	fiedlerh	06/17/19 10:57

Lab Sample ID: 280-124912-1 Client Sample ID: PZ004-19A

Date Analyzed: 06/15/19 12:10 Lab File ID: 06140045.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.12	Baseline Smoothing	fiedlerh	06/17/19 11:00
4-Nitrotoluene	16.91	Baseline Smoothing	fiedlerh	06/17/19 11:00
3-Nitrotoluene	17.86	Baseline Smoothing	fiedlerh	06/17/19 11:00
2,4,6-Trinitrotoluene	24.80	Baseline Smoothing	fiedlerh	06/17/19 11:00

Lab Sample ID: 280-124912-2 Client Sample ID: G0044-19A

Date Analyzed: 06/15/19 12:45 Lab File ID: 06140046.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.15	Baseline Smoothing	fiedlerh	06/17/19 11:01
RDX	9.22	Baseline Smoothing	fiedlerh	06/17/19 11:01
4-Nitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 11:01
3-Nitrotoluene	17.86	Baseline Smoothing	fiedlerh	06/17/19 11:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 461583

Lab Sample ID: 280-124912-3 Client Sample ID: PZ015-19A

Date Analyzed: 06/15/19 13:20 Lab File ID: 06140047.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.16	Baseline Smoothing	fiedlerh	06/17/19 11:01
MNX	7.73	Baseline Smoothing	fiedlerh	06/17/19 11:02
2-Nitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 11:02
3-Nitrotoluene	17.88	Baseline Smoothing	fiedlerh	06/17/19 11:02

Lab Sample ID: 280-124912-8 Client Sample ID: G0023-19A

Date Analyzed: 06/15/19 13:55 Lab File ID: 06140048.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	fiedlerh	06/17/19 11:03
2-Nitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 11:03
3-Nitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 11:03
Tetryl	23.72	Baseline Smoothing	fiedlerh	06/17/19 11:03

Lab Sample ID: CCV 280-461583/49 Client Sample ID: _____

Date Analyzed: 06/15/19 14:30 Lab File ID: 06140049.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl	23.82	Baseline Smoothing	fiedlerh	06/17/19 11:03

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 461836

Lab Sample ID: MB 280-461286/1-A Client Sample ID:

Date Analyzed: 06/18/19 06:15 Lab File ID: 06170027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrotoluene		Invalid Compound ID	fiedlerh	06/18/19 11:44
3-Nitrotoluene	17.90	Baseline Smoothing	fiedlerh	06/18/19 11:44

Lab Sample ID: 280-124912-4 Client Sample ID: G0102-19A

Date Analyzed: 06/18/19 08:00 Lab File ID: 06170030.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.80	Baseline Smoothing	fiedlerh	06/18/19 11:44

Lab Sample ID: 280-124912-10 Client Sample ID: G0103-19A

Date Analyzed: 06/18/19 10:20 Lab File ID: 06170034.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	fiedlerh	06/18/19 11:48
HMX		Invalid Compound ID	fiedlerh	06/18/19 11:48
RDX		Invalid Compound ID	fiedlerh	06/18/19 11:48
1,2-Dinitrobenzene	13.25	Baseline Smoothing	fiedlerh	06/18/19 11:46

Lab Sample ID: 280-124912-11 Client Sample ID: G0104-19A

Date Analyzed: 06/18/19 11:30 Lab File ID: 06170036.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrotoluene		Invalid Compound ID	fiedlerh	07/16/19 14:00
MNX		Invalid Compound ID	fiedlerh	07/16/19 13:59
3-Nitrotoluene	17.88	Baseline Smoothing	fiedlerh	07/16/19 14:00

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 458150

Lab Sample ID: IC 280-458150/7 Client Sample ID: _____

Date Analyzed: 05/14/19 15:49 Lab File ID: 0514B007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene	11.24	Baseline Smoothing	fiedlerh	05/15/19 10:08

Lab Sample ID: IC 280-458150/8 Client Sample ID: _____

Date Analyzed: 05/14/19 16:13 Lab File ID: 0514B008.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene	13.93	Baseline Smoothing	fiedlerh	05/15/19 10:09

Lab Sample ID: IC 280-458150/13 Client Sample ID: _____

Date Analyzed: 05/14/19 18:11 Lab File ID: 0514B013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	11.72	Unspecified		
2,6-Dinitrotoluene	11.85	Unspecified		

Lab Sample ID: IC 280-458150/14 Client Sample ID: _____

Date Analyzed: 05/14/19 18:35 Lab File ID: 0514B014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	11.74	Baseline Smoothing	fiedlerh	05/15/19 10:11
2,6-Dinitrotoluene	11.87	Unspecified		

Lab Sample ID: IC 280-458150/31 Client Sample ID: _____

Date Analyzed: 05/15/19 01:18 Lab File ID: 0514B031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.56	Baseline Smoothing	fiedlerh	05/15/19 10:23

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 458150

Lab Sample ID: IC 280-458150/32 Client Sample ID: _____

Date Analyzed: 05/15/19 01:42 Lab File ID: 0514B032.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	05/15/19 10:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461419

Lab Sample ID: CCV 280-461419/36 Client Sample ID: _____

Date Analyzed: 06/13/19 22:59 Lab File ID: 06130036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	06/14/19 08:55

Lab Sample ID: MB 280-461170/1-A Client Sample ID: _____

Date Analyzed: 06/14/19 00:10 Lab File ID: 06130039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	fiedlerh	06/14/19 08:56
MNX		Invalid Compound ID	fiedlerh	06/14/19 08:56

Lab Sample ID: LCS 280-461170/2-A Client Sample ID: _____

Date Analyzed: 06/14/19 00:34 Lab File ID: 06130040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	06/14/19 08:56

Lab Sample ID: CCV 280-461419/51 Client Sample ID: _____

Date Analyzed: 06/14/19 04:56 Lab File ID: 06130051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	06/14/19 09:21

Lab Sample ID: 280-124912-1 Client Sample ID: PZ004-19A

Date Analyzed: 06/14/19 06:31 Lab File ID: 06130055.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/14/19 09:22
4-Nitrotoluene	13.28	Baseline Smoothing	fiedlerh	06/14/19 09:22

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461419

Lab Sample ID: 280-124912-2 Client Sample ID: G0044-19A

Date Analyzed: 06/14/19 06:55 Lab File ID: 06130056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	06/14/19 09:27
RDX	7.76	Baseline Smoothing	fiedlerh	06/14/19 09:27
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/14/19 09:27
Nitrobenzene	9.96	Baseline Smoothing	fiedlerh	06/14/19 09:28
Tetryl		Invalid Compound ID	fiedlerh	06/14/19 09:28

Lab Sample ID: 280-124912-3 Client Sample ID: PZ015-19A

Date Analyzed: 06/14/19 07:19 Lab File ID: 06130057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.74	Baseline Smoothing	fiedlerh	06/14/19 09:59
3-Nitrotoluene		Invalid Compound ID	fiedlerh	06/14/19 09:59
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	fiedlerh	06/14/19 09:59
Tetryl		Invalid Compound ID	fiedlerh	06/14/19 09:59

Lab Sample ID: 280-124912-6 Client Sample ID: G0049-19A

Date Analyzed: 06/14/19 07:43 Lab File ID: 06130058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/14/19 09:59

Lab Sample ID: 280-124912-7 Client Sample ID: G0048-19A

Date Analyzed: 06/14/19 08:07 Lab File ID: 06130059.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/14/19 10:00

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461419Lab Sample ID: 280-124912-8 Client Sample ID: G0023-19ADate Analyzed: 06/14/19 08:30 Lab File ID: 06130060.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/14/19 10:00
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	fiedlerh	06/14/19 10:00
Tetryl		Invalid Compound ID	fiedlerh	06/14/19 10:00

Lab Sample ID: 280-124912-12 Client Sample ID: PZ001-19ADate Analyzed: 06/14/19 08:54 Lab File ID: 06130061.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/14/19 10:00
Nitrobenzene	9.96	Baseline Smoothing	fiedlerh	06/14/19 10:00
4-Nitrotoluene		Invalid Compound ID	fiedlerh	06/14/19 10:00
Tetryl		Invalid Compound ID	fiedlerh	06/14/19 10:00

Lab Sample ID: CCV 280-461419/62 Client Sample ID: _____Date Analyzed: 06/14/19 09:18 Lab File ID: 06130062.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	11.71	Unspecified		
2,6-Dinitrotoluene	11.83	Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461419Lab Sample ID: 280-124912-12 MSD Client Sample ID: PZ001-19AMSD MSDDate Analyzed: 06/14/19 10:53 Lab File ID: 06130066.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	07/16/19 14:09
RDX	7.76	Baseline Smoothing	fiedlerh	07/16/19 14:09
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	07/16/19 14:09
1,3,5-Trinitrobenzene	8.89	Baseline Smoothing	fiedlerh	07/16/19 14:09

Lab Sample ID: CCV 280-461419/77 Client Sample ID: _____Date Analyzed: 06/14/19 14:22 Lab File ID: 007-7101.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	11.73	Unspecified		
2,6-Dinitrotoluene	11.86	Unspecified		

Lab Sample ID: CCV 280-461419/79 Client Sample ID: _____Date Analyzed: 06/14/19 15:10 Lab File ID: 038-7301.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	06/14/19 15:34

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461580

Lab Sample ID: MB 280-461286/1-A Client Sample ID: _____

Date Analyzed: 06/15/19 07:27 Lab File ID: 06140043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 10:12
MNX		Invalid Compound ID	fiedlerh	06/17/19 10:12

Lab Sample ID: LCS 280-461286/2-A Client Sample ID: _____

Date Analyzed: 06/15/19 07:51 Lab File ID: 06140044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	11.76	Unspecified		
2,6-Dinitrotoluene	11.88	Unspecified		

Lab Sample ID: 280-124912-4 Client Sample ID: G0102-19A

Date Analyzed: 06/15/19 09:02 Lab File ID: 06140047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.77	Baseline Smoothing	fiedlerh	06/17/19 10:13
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	06/17/19 10:14
2,6-Dinitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 10:14

Lab Sample ID: 280-124912-4 MS Client Sample ID: G0102-19AMS MS

Date Analyzed: 06/15/19 09:26 Lab File ID: 06140048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	06/17/19 10:14
RDX	7.77	Baseline Smoothing	fiedlerh	06/17/19 10:14
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	06/17/19 10:14
1,3,5-Trinitrobenzene	8.91	Baseline Smoothing	fiedlerh	06/17/19 10:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3

Analysis Batch Number: 461580

Lab Sample ID: 280-124912-4 MSD

Client Sample ID: G0102-19AMSD MSD

Date Analyzed: 06/15/19 09:50

Lab File ID: 06140049.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	06/17/19 10:14
RDX	7.77	Baseline Smoothing	fiedlerh	06/17/19 10:14
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	06/17/19 10:15
1,3,5-Trinitrobenzene	8.91	Baseline Smoothing	fiedlerh	06/17/19 10:15

Lab Sample ID: 280-124912-5

Client Sample ID: PZ007-19A

Date Analyzed: 06/15/19 10:13

Lab File ID: 06140050.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/17/19 10:16

Lab Sample ID: 280-124912-5 MS

Client Sample ID: PZ007-19AMS MS

Date Analyzed: 06/15/19 10:37

Lab File ID: 06140051.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	06/17/19 10:16
RDX	7.77	Baseline Smoothing	fiedlerh	06/17/19 10:16
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/17/19 10:16
1,3,5-Trinitrobenzene	8.90	Baseline Smoothing	fiedlerh	06/17/19 10:16
2-Amino-4,6-dinitrotoluene	11.73	Baseline Smoothing	fiedlerh	06/17/19 10:17
2,6-Dinitrotoluene	11.85	Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461580

Lab Sample ID: 280-124912-5 MSD Client Sample ID: PZ007-19AMSD MSD

Date Analyzed: 06/15/19 11:01 Lab File ID: 06140052.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.64	Baseline Smoothing	fiedlerh	06/17/19 10:19
RDX	7.76	Baseline Smoothing	fiedlerh	06/17/19 10:19
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/17/19 10:20
1,3,5-Trinitrobenzene	8.90	Baseline Smoothing	fiedlerh	06/17/19 10:20
1,3-Dinitrobenzene	9.56	Baseline Smoothing	fiedlerh	06/17/19 10:20
Nitrobenzene	9.94	Baseline Smoothing	fiedlerh	06/17/19 10:19
Tetryl	10.28	Baseline Smoothing	fiedlerh	06/17/19 10:19
2-Amino-4,6-dinitrotoluene	11.72	Unspecified		
2,6-Dinitrotoluene	11.85	Unspecified		

Lab Sample ID: CCV 280-461580/53 Client Sample ID: _____

Date Analyzed: 06/15/19 11:25 Lab File ID: 06140053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	11.73	Unspecified		
2,6-Dinitrotoluene	11.85	Unspecified		

Lab Sample ID: CCV 280-461580/55 Client Sample ID: _____

Date Analyzed: 06/15/19 12:12 Lab File ID: 06140055.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	06/17/19 10:21
DNX	6.89	Baseline Smoothing	fiedlerh	06/17/19 10:21

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461580

Lab Sample ID: 280-124912-9 Client Sample ID: PZ005-19A

Date Analyzed: 06/15/19 12:36 Lab File ID: 06140056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	06/17/19 10:21
Nitrobenzene	9.96	Baseline Smoothing	fiedlerh	06/17/19 10:21

Lab Sample ID: 280-124912-10 Client Sample ID: G0103-19A

Date Analyzed: 06/15/19 13:00 Lab File ID: 06140057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.62	Baseline Smoothing	fiedlerh	06/17/19 10:22
1,2-Dinitrobenzene	8.80	Baseline Smoothing	fiedlerh	06/17/19 10:22
1,3-Dinitrobenzene	9.53	Baseline Smoothing	fiedlerh	06/17/19 10:22
Nitrobenzene	9.94	Baseline Smoothing	fiedlerh	06/17/19 10:23
MNX		Invalid Compound ID	fiedlerh	06/17/19 10:22
Tetryl	10.16	Baseline Smoothing	fiedlerh	06/17/19 10:23
2,4,6-Trinitrotoluene	11.25	Baseline Smoothing	fiedlerh	06/17/19 10:23
2,6-Dinitrotoluene	11.80	Baseline Smoothing	fiedlerh	06/17/19 10:23
2-Nitrotoluene	12.98	Baseline Smoothing	fiedlerh	06/17/19 10:23

Lab Sample ID: 280-124912-11 Client Sample ID: G0104-19A

Date Analyzed: 06/15/19 13:24 Lab File ID: 06140058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.34	Baseline Smoothing	fiedlerh	06/17/19 10:24
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/17/19 10:25
RDX		Invalid Compound ID	fiedlerh	06/17/19 10:25
Tetryl		Invalid Compound ID	fiedlerh	06/17/19 10:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461580

Lab Sample ID: CCV 280-461580/66 Client Sample ID: _____

Date Analyzed: 06/15/19 16:34 Lab File ID: 06140066.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	11.72	Unspecified		
2,6-Dinitrotoluene	11.85	Unspecified		

Lab Sample ID: CCV 280-461580/68 Client Sample ID: _____

Date Analyzed: 06/15/19 17:22 Lab File ID: 06140068.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	06/17/19 10:33
DNX	6.88	Baseline Smoothing	fiedlerh	06/17/19 10:34

Lab Sample ID: 280-124912-12 MS Client Sample ID: PZ001-19AMS MS

Date Analyzed: 06/15/19 20:56 Lab File ID: 06140077.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.64	Baseline Smoothing	fiedlerh	06/17/19 10:40
RDX	7.77	Baseline Smoothing	fiedlerh	06/17/19 10:40
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/17/19 10:40
1,3,5-Trinitrobenzene	8.90	Baseline Smoothing	fiedlerh	06/17/19 10:40
2-Amino-4,6-dinitrotoluene	11.74	Baseline Smoothing	fiedlerh	06/17/19 10:40
2,6-Dinitrotoluene	11.86	Unspecified		

Lab Sample ID: CCV 280-461580/81 Client Sample ID: _____

Date Analyzed: 06/15/19 22:32 Lab File ID: 06140081.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	06/17/19 10:44

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 463276

Lab Sample ID: IC 280-463276/12 Client Sample ID: _____

Date Analyzed: 07/01/19 16:36 Lab File ID: 07010012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	07/01/19 18:30

Lab Sample ID: IC 280-463276/13 Client Sample ID: _____

Date Analyzed: 07/01/19 17:00 Lab File ID: 07010013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	07/01/19 18:30
2-Amino-4,6-dinitrotoluene	11.72	Unspecified		
2,6-Dinitrotoluene	11.85	Unspecified		

Lab Sample ID: IC 280-463276/14 Client Sample ID: _____

Date Analyzed: 07/01/19 17:23 Lab File ID: 07010014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.21	Baseline Smoothing	fiedlerh	07/01/19 18:33
2-Amino-4,6-dinitrotoluene	11.72	Unspecified		
2,6-Dinitrotoluene	11.84	Unspecified		

Lab Sample ID: ICV 280-463276/15 Client Sample ID: _____

Date Analyzed: 07/01/19 17:46 Lab File ID: 07010015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.64	Baseline Smoothing	fiedlerh	07/01/19 18:32

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 463276

Lab Sample ID: IC 280-463276/26 Client Sample ID: _____

Date Analyzed: 07/01/19 22:00 Lab File ID: 07010026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.56	Baseline Smoothing	fiedlerh	07/02/19 09:04
DNX	6.89	Baseline Smoothing	fiedlerh	07/02/19 09:04

Lab Sample ID: IC 280-463276/27 Client Sample ID: _____

Date Analyzed: 07/01/19 22:23 Lab File ID: 07010027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	07/02/19 09:03
DNX	6.89	Baseline Smoothing	fiedlerh	07/02/19 09:03

Lab Sample ID: IC 280-463276/28 Client Sample ID: _____

Date Analyzed: 07/01/19 22:46 Lab File ID: 07010028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	07/02/19 09:03
DNX	6.88	Baseline Smoothing	fiedlerh	07/02/19 09:03

Lab Sample ID: IC 280-463276/29 Client Sample ID: _____

Date Analyzed: 07/01/19 23:09 Lab File ID: 07010029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	07/02/19 09:03

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 463276Lab Sample ID: IC 280-463276/30 Client Sample ID: _____Date Analyzed: 07/01/19 23:32 Lab File ID: 07010030.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	07/02/19 09:04

Lab Sample ID: IC 280-463276/31 Client Sample ID: _____Date Analyzed: 07/01/19 23:55 Lab File ID: 07010031.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	07/02/19 09:04

Lab Sample ID: ICV 280-463276/33 Client Sample ID: _____Date Analyzed: 07/02/19 00:41 Lab File ID: 07010033.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.55	Baseline Smoothing	fiedlerh	07/02/19 09:05
DNX	6.88	Baseline Smoothing	fiedlerh	07/02/19 09:05

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464207

Lab Sample ID: CCV 280-464207/42 Client Sample ID: _____

Date Analyzed: 07/11/19 23:39 Lab File ID: 07110042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.70	Baseline Smoothing	fiedlerh	07/12/19 08:58
Tetryl	10.29	Baseline Smoothing	fiedlerh	07/12/19 08:58

Lab Sample ID: CCV 280-464207/44 Client Sample ID: _____

Date Analyzed: 07/12/19 00:25 Lab File ID: 07110044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.60	Baseline Smoothing	fiedlerh	07/12/19 08:59

Lab Sample ID: LCS 280-464162/2-A Client Sample ID: _____

Date Analyzed: 07/12/19 01:10 Lab File ID: 07110046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline Smoothing	fiedlerh	07/12/19 08:59

Lab Sample ID: LCSD 280-464162/3-A Client Sample ID: _____

Date Analyzed: 07/12/19 01:33 Lab File ID: 07110047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline Smoothing	fiedlerh	07/12/19 08:59

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464207

Lab Sample ID: 280-124912-1 RE Client Sample ID: PZ004-19A RE

Date Analyzed: 07/12/19 02:19 Lab File ID: 07110049.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:00
Nitrobenzene	9.97	Baseline Smoothing	fiedlerh	07/12/19 09:00
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:00
HMX		Invalid Compound ID	fiedlerh	07/12/19 09:00
Tetryl		Invalid Compound ID	fiedlerh	07/12/19 09:00
4-Nitrotoluene	13.34	Baseline Smoothing	fiedlerh	07/12/19 09:00

Lab Sample ID: 280-124912-2 RE Client Sample ID: G0044-19A RE

Date Analyzed: 07/12/19 02:42 Lab File ID: 07110050.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline Smoothing	fiedlerh	07/12/19 09:00
RDX	7.78	Baseline Smoothing	fiedlerh	07/12/19 09:00
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:00
Nitrobenzene	9.97	Baseline Smoothing	fiedlerh	07/12/19 09:00
Tetryl		Invalid Compound ID	fiedlerh	07/12/19 09:01

Lab Sample ID: 280-124912-3 RE Client Sample ID: PZ015-19A RE

Date Analyzed: 07/12/19 03:05 Lab File ID: 07110051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:01
2,4,6-Trinitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:01
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:01
HMX		Invalid Compound ID	fiedlerh	07/12/19 09:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464207

Lab Sample ID: 280-124912-4 RE Client Sample ID: G0102-19A RE

Date Analyzed: 07/12/19 03:28 Lab File ID: 07110052.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.79	Baseline Smoothing	fiedlerh	07/12/19 09:01
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	07/12/19 09:01
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:01

Lab Sample ID: 280-124912-4 MS Client Sample ID: G0102-19AMS MS

Date Analyzed: 07/12/19 03:51 Lab File ID: 07110053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.38	Baseline Smoothing	fiedlerh	07/12/19 09:02
RDX	7.79	Baseline Smoothing	fiedlerh	07/12/19 09:02
1,2-Dinitrobenzene	8.76	Baseline Smoothing	fiedlerh	07/12/19 09:02
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:02

Lab Sample ID: 280-124912-4 MSD Client Sample ID: G0102-19AMSD MSD

Date Analyzed: 07/12/19 04:14 Lab File ID: 07110054.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.38	Baseline Smoothing	fiedlerh	07/12/19 09:03
RDX	7.79	Baseline Smoothing	fiedlerh	07/12/19 09:03
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:03

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464207

Lab Sample ID: CCV 280-464207/55 Client Sample ID: _____

Date Analyzed: 07/12/19 04:37 Lab File ID: 07110055.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline Smoothing	fiedlerh	07/12/19 09:03
2-Amino-4,6-dinitrotoluene	11.76	Baseline Smoothing	fiedlerh	07/12/19 09:03
2,6-Dinitrotoluene	11.89	Unspecified		

Lab Sample ID: CCV 280-464207/57 Client Sample ID: _____

Date Analyzed: 07/12/19 05:23 Lab File ID: 07110057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.60	Baseline Smoothing	fiedlerh	07/12/19 09:10
DNX	6.93	Baseline Smoothing	fiedlerh	07/12/19 09:10

Lab Sample ID: 280-124912-5 RE Client Sample ID: PZ007-19A RE

Date Analyzed: 07/12/19 05:46 Lab File ID: 07110058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.76	Baseline Smoothing	fiedlerh	07/12/19 09:11
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:11
4-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:11

Lab Sample ID: 280-124912-5 MS Client Sample ID: PZ007-19AMS MS

Date Analyzed: 07/12/19 06:09 Lab File ID: 07110059.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.38	Baseline Smoothing	fiedlerh	07/12/19 09:12
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:12
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:12
4-Nitrotoluene	13.36	Baseline Smoothing	fiedlerh	07/12/19 09:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3

Analysis Batch Number: 464207

Lab Sample ID: 280-124912-5 MSD

Client Sample ID: PZ007-19AMSD MSD

Date Analyzed: 07/12/19 06:32

Lab File ID: 07110060.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.38	Baseline Smoothing	fiedlerh	07/12/19 09:12
1,2-Dinitrobenzene	8.76	Baseline Smoothing	fiedlerh	07/12/19 09:12
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:13
4-Nitrotoluene	13.35	Baseline Smoothing	fiedlerh	07/12/19 09:13

Lab Sample ID: 280-124912-6 RE

Client Sample ID: G0049-19A RE

Date Analyzed: 07/12/19 06:55

Lab File ID: 07110061.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:13
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:13
HMX		Invalid Compound ID	fiedlerh	07/12/19 09:13

Lab Sample ID: 280-124912-7 RE

Client Sample ID: G0048-19A RE

Date Analyzed: 07/12/19 07:18

Lab File ID: 07110062.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:14
HMX		Invalid Compound ID	fiedlerh	07/12/19 09:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3

Analysis Batch Number: 464207

Lab Sample ID: 280-124912-8 RE

Client Sample ID: G0023-19A RE

Date Analyzed: 07/12/19 07:41

Lab File ID: 07110063.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.76	Baseline Smoothing	fiedlerh	07/12/19 09:14
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:14
2,4,6-Trinitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:14
2,4-Dinitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:14
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:14
2,6-Dinitrotoluene	11.87	Baseline Smoothing	fiedlerh	07/12/19 09:14

Lab Sample ID: 280-124912-9 RE

Client Sample ID: PZ005-19A RE

Date Analyzed: 07/12/19 08:04

Lab File ID: 07110064.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:15
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:14
HMX		Invalid Compound ID	fiedlerh	07/12/19 09:15

Lab Sample ID: 280-124912-10 RE

Client Sample ID: G0103-19A RE

Date Analyzed: 07/12/19 08:27

Lab File ID: 07110065.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.80	Baseline Smoothing	fiedlerh	07/12/19 09:15
1,3-Dinitrobenzene	9.56	Baseline Smoothing	fiedlerh	07/12/19 09:16
Nitrobenzene	9.97	Baseline Smoothing	fiedlerh	07/12/19 09:16
2,4,6-Trinitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:16
2-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:16
MNX		Invalid Compound ID	fiedlerh	07/12/19 09:15
RDX		Invalid Compound ID	fiedlerh	07/12/19 09:16
Tetryl		Invalid Compound ID	fiedlerh	07/12/19 09:16
2,6-Dinitrotoluene	11.86	Baseline Smoothing	fiedlerh	07/12/19 09:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464207

Lab Sample ID: 280-124912-11 RE Client Sample ID: G0104-19A RE

Date Analyzed: 07/12/19 08:50 Lab File ID: 07110066.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/12/19 09:17
2,4,6-Trinitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:17
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:17
RDX		Invalid Compound ID	fiedlerh	07/12/19 09:17
2,6-Dinitrotoluene	11.87	Baseline Smoothing	fiedlerh	07/12/19 09:17

Lab Sample ID: 280-124912-12 RE Client Sample ID: PZ001-19A RE

Date Analyzed: 07/12/19 09:13 Lab File ID: 07110067.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	07/12/19 09:41
Nitrobenzene	9.96	Baseline Smoothing	fiedlerh	07/12/19 09:41
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/12/19 09:41
Tetryl		Invalid Compound ID	fiedlerh	07/12/19 09:41

Lab Sample ID: CCV 280-464207/68 Client Sample ID: _____

Date Analyzed: 07/12/19 09:36 Lab File ID: 07110068.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline Smoothing	fiedlerh	07/15/19 09:11

Lab Sample ID: CCV 280-464207/70 Client Sample ID: _____

Date Analyzed: 07/12/19 10:22 Lab File ID: 07110070.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	fiedlerh	07/15/19 09:12
DNX	6.92	Baseline Smoothing	fiedlerh	07/15/19 09:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464537

Lab Sample ID: CCV 280-464537/7 Client Sample ID: _____

Date Analyzed: 07/15/19 12:18 Lab File ID: 07150007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline Smoothing	fiedlerh	07/15/19 16:41

Lab Sample ID: CCV 280-464537/9 Client Sample ID: _____

Date Analyzed: 07/15/19 13:04 Lab File ID: 07150009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	fiedlerh	07/15/19 16:41
MNX	7.37	Baseline Smoothing	fiedlerh	07/15/19 18:43

Lab Sample ID: 280-124912-12 MS Client Sample ID: PZ001-19AMS MS

Date Analyzed: 07/15/19 13:27 Lab File ID: 07150010.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.37	Baseline Smoothing	fiedlerh	07/15/19 16:54
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	07/15/19 16:54
Nitrobenzene	9.96	Baseline Smoothing	fiedlerh	07/15/19 16:54
Tetryl		Invalid Compound ID	fiedlerh	07/15/19 16:54

Lab Sample ID: 280-124912-12 MSD Client Sample ID: PZ001-19AMSD MSD

Date Analyzed: 07/15/19 13:50 Lab File ID: 07150011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.37	Baseline Smoothing	fiedlerh	07/15/19 16:54
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	07/15/19 16:54
Nitrobenzene	9.95	Baseline Smoothing	fiedlerh	07/15/19 16:54
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:54
Tetryl		Invalid Compound ID	fiedlerh	07/15/19 16:54

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3Analysis Batch Number: 464537Lab Sample ID: CCV 280-464537/20

Client Sample ID: _____

Date Analyzed: 07/15/19 17:16Lab File ID: 07150020.DGC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline Smoothing	fiedlerh	07/15/19 17:53

Lab Sample ID: CCV 280-464537/22

Client Sample ID: _____

Date Analyzed: 07/15/19 18:02Lab File ID: 07150022.DGC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	fiedlerh	07/15/19 18:33

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal 00370	06/24/19	06/17/19	Di Water, Lot na	100 mL	NH3 CAL STD_00030	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00030	02/28/20		Ricca, Lot 1808L28		(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV 00353	06/24/19	06/17/19	na, Lot na	100 mL	NH3 ICV STD_00026	10 mL	Ammonia	99.6 mg/L
.NH3 ICV STD_00026	04/01/20		Inorganic Ventures, Lot M2-NH662533		(Purchased Reagent)		Ammonia	996 mg/L
8330 DMT_00002	12/31/19	03/13/19	Acetonitrile, Lot 184936	5 mL	MNX,TNX, DNX_00027	1 mL	DNX	20.02 ug/mL
.MNX, TNX, DNX_00027	12/31/19		ULTRA Scientific, Lot CS-5628		(Purchased Reagent)		MNX	23.34 ug/mL
							TNX	20.02 ug/mL
8330 LCS_00084	05/16/19	11/16/18	Acetonitrile, Lot ACN_00215	100 mL	8330 LCSMix2_00101	1 mL	2,6-Dinitrotoluene	10 ug/mL
.8330 LCSMix2_00101	11/16/19		Restek, Lot A0122699		(Purchased Reagent)		2-Amino-4,6-dinitrotoluene	10 ug/mL
.8330 LCSMix1_00104	11/16/19		Restek, Lot A0128688		(Purchased Reagent)		2-Nitrotoluene	10 ug/mL
8330 LCS_00089	11/08/19	05/08/19	Acetonitrile, Lot ACN_00030	100 mL	8330 NG_Stk_00071	1 mL	Nitroglycerin	100 ug/mL
					8330 NG_Stk_00073	1 mL	Nitroglycerin	100 ug/mL
					8330 PETN_Stk_00076	1 mL	PETN	100 ug/mL
					8330 PETN_Stk_00077	1 mL	PETN	100 ug/mL
					8330 LCSMix1_00109	1 mL	1,3,5-Trinitrobenzene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330LCSmix2_00008	1 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
							2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
.8330 NG Stk 00071	07/31/20	Restek, Lot A0129124			(Purchased Reagent)	1 mL	4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
							2,4,6-Trinitrophenol	10 ug/mL
							Nitroglycerin	5000 ug/mL
.8330 NG Stk 00073	07/31/20	Restek, Lot A0129124			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330 PETN Stk 00076	03/31/21	Restek, Lot A0136306			(Purchased Reagent)		PETN	5000 ug/mL
.8330 PETN Stk 00077	03/31/21	Restek, Lot A0136306			(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00109	10/31/22	Restek, Lot A0131772			(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_00008	08/31/23	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
.PicricARestek 00083	11/30/23	Restek, Lot A0143208			(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00002	12/31/19	03/12/19	Acetonitrile, Lot 00222	10 mL	MNX, TNX, DNX_00026	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX, TNX, DNX_00026	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
8330IntermStk_00058	07/19/19	05/07/19	Acetonitrile, Lot 200488	5 mL	8330_NG_Stk_00052	200 uL	Nitroglycerin	200 ug/mL
					8330_PETN_Stk_00056	200 uL	PETN	200 ug/mL
					8330ICALStock_00029	1 mL	1,3,5-Trinitrobenzene	20 ug/mL
							1,3-Dinitrobenzene	20.02 ug/mL
							2,4,6-Trinitrotoluene	20.08 ug/mL
							2,4-Dinitrotoluene	20.04 ug/mL
							2,6-Dinitrotoluene	20.06 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Amino-4,6-dinitrotoluene	20.06 ug/mL
							2-Nitrotoluene	20.06 ug/mL
							3-Nitrotoluene	20.08 ug/mL
							4-Amino-2,6-dinitrotoluene	20.06 ug/mL
							4-Nitrotoluene	20.08 ug/mL
							HMX	20 ug/mL
							Nitrobenzene	20.04 ug/mL
							RDX	20 ug/mL
							Tetryl	20 ug/mL
							1,2-Dinitrobenzene	20 ug/mL
					8330PASTkPS_00058	1 mL	2,4,6-Trinitrophenol	20 ug/mL
.8330_NG_Stk_00052	01/01/20	Restek, Lot A0124122			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00056	01/01/20	Restek, Lot A0124124			(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00029	11/30/19	11/30/18	Acetonitrile, Lot 200488	10 mL	8330 Stock_TS_00012	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100.1 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.2 ug/mL
							2,6-Dinitrotoluene	100.3 ug/mL
							2-Amino-4,6-dinitrotoluene	100.3 ug/mL
							2-Nitrotoluene	100.3 ug/mL
							3-Nitrotoluene	100.4 ug/mL
							4-Amino-2,6-dinitrotoluene	100.3 ug/mL
							4-Nitrotoluene	100.4 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.2 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00163	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330_Stock_TS_00012	04/30/20	Ultra Scientific, Lot CR-1002			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1001 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1002 ug/mL
							2,6-Dinitrotoluene	1003 ug/mL
							2-Amino-4,6-dinitrotoluene	1003 ug/mL
							2-Nitrotoluene	1003 ug/mL
							3-Nitrotoluene	1004 ug/mL
							4-Amino-2,6-dinitrotoluene	1003 ug/mL
							4-Nitrotoluene	1004 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1002 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00163	08/15/24	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PASTkPS_00058	07/19/19	AccuStandard, Lot 216061376-01			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00103	12/04/19	03/17/19	Acetonitrile, Lot ACN_00219	500 mL	8330SurrStkSS_00134	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00135	1.25 mL	1,2-Dinitrobenzene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
					8330SurrStkSS_00152	1.25 mL	1,2-Dinitrobenzene	10 ug/mL		
					8330SurrStkSS_00153	1.25 mL	1,2-Dinitrobenzene	10 ug/mL		
.8330SurrStkSS_00134	02/28/22	Restek, Lot A0124792			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL		
.8330SurrStkSS_00135	02/28/22	Restek, Lot A0124792			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL		
.8330SurrStkSS_00152	07/31/23	Restek, Lot A0139489			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL		
.8330SurrStkSS_00153	07/31/23	Restek, Lot A0139489			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL		
8330Surrogate_00105	11/28/19	05/28/19	Acetonitrile, Lot ACN_00033	500 mL	8330SurrStkSS_00142	1 mL	1,2-Dinitrobenzene	10 ug/mL		
					8330SurrStkSS_00145	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL		
					8330SurrStkSS_00146	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL		
					8330SurrStkSS_00149	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL		
					8330SurrStkSS_00150	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL		
					8330SurrStkSS_00150	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL		
.8330SurrStkSS_00142	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL		
.8330SurrStkSS_00145	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene (Surr)	1000 ug/mL		
.8330SurrStkSS_00146	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene (Surr)	1000 ug/mL		
.8330SurrStkSS_00149	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene (Surr)	1000 ug/mL		
.8330SurrStkSS_00150	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene (Surr)	1000 ug/mL		
Alk daily lcs_00825	06/18/19	06/12/19	Di Water, Lot na	1000 mL	Alk stk std_00016	4 mL	Total Alkalinity as CaCO3	200 mg/L		
.Alk stk std_00016	06/30/20	Fischer, Lot 182564			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L		
IC CAL cl/so4_00262	06/28/19	06/21/19	Di Water, Lot na	100 mL	IC CL cal_00055	25 mL	Chloride	250 mg/L		
					IC sulfatecal_00053	25 mL	Sulfate	250 mg/L		
.IC CL cal_00055	11/30/19	SPEX CertiPrep, Lot 4-101CL-2X			(Purchased Reagent)		Chloride	1000 mg/L		
.IC sulfatecal_00053	08/30/19	SPEX CertiPrep, Lot 4-131SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L		
IC CAL cl/so4_00263	07/05/19	06/28/19	Di Water, Lot na	100 mL	IC sulfatecal_00057	25 mL	Sulfate	250 mg/L		
					IC sulfatecal_00057	25 mL	Sulfate	1000 mg/L		
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L		
IC Cal low_00467	06/29/19	06/22/19	Di Water, Lot NA	100 mL	IC BR ICV_00012	5 mL	Bromide	50 mg/L		
					IC FL cal_00013	5 mL	Fluoride	50 mg/L		
.IC BR ICV_00012	09/30/19	ricca, Lot 1804F11			(Purchased Reagent)		Bromide	1000 mg/L		
.IC FL cal_00013	10/31/19	Ricca, Lot 4805C89			(Purchased Reagent)		Fluoride	1000 mg/L		
IC LCS_01620	07/02/19	07/01/19	Di Water, Lot 27	200 mL	IC sulfatecal_00057	20 mL	Sulfate	100 mg/L as N		
					IC sulfatecal_00057	20 mL	Sulfate	1000 mg/L		
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L		
IC SO4 ICV_00017	06/30/19	ERA, Lot 210617			(Purchased Reagent)		Sulfate	1000 mg/L		
ICMS/MSD WEEK_00601	07/02/19	06/25/19	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00021	5 mL	Sulfate	2500.26 mg/L		
.IC SPK 6 ANIO_00021	10/01/19	10/01/18	Di Water, Lot NA	1000 mL	IC MS/MSD SO4_00005	9.0704 g	Sulfate	5000.51 mg/L		
..IC MS/MSD SO4_00005	09/29/20	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g		

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
NXN CAL INT_00499	07/03/19	06/25/19	Di Water, Lot NA	100 mL	NOXT Cal STD_00022	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00022	08/31/19		RICCA, Lot 2803904		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00480	07/03/19	06/25/19	Di Water, Lot NA	100 mL	NOXT ICV STD_00022	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00022	12/31/19		ERA, Lot 031217		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
RSK175methane_00009	05/18/19		Supelco Analytical, Lot 403-191386		(Purchased Reagent)		Methane	650500 ug/L
RSK7gasMathes_00025	12/01/19		Matheson, Lot 9307628511		(Purchased Reagent)		Methane	6570.3 ug/L
RSK7gasMathes_00026	04/03/20		Matheson, Lot 9308630516		(Purchased Reagent)		Acetylene	10667 ug/L
							Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
RSK7gasMathes_00027	10/24/20		Matheson, Lot 9308634170		(Purchased Reagent)		Methane	6570.3 ug/L
SFD CAL INT_01659	08/28/19	05/28/19	Di Water, Lot NA	500 mL	50% NaOH 00017	2 mL	Sodium Hydroxide	2000 mg/L
.50% NaOH 00017	10/01/20		Fisher, Lot 186215		SFD CAL STK 00006	4.87 g	Sulfide	1300.29 mg/L
.SFD CAL STK 00006	10/01/23		ACROS, Lot A0390872		(Purchased Reagent)		Sodium Hydroxide	50 %
TKN 25ppm 00794	07/01/19	05/31/19	Di Water, Lot 1	100 mL	TKN 100PPM 00108	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM 00108	07/01/19	05/31/19	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_00078	07/01/19	05/31/19	DI water, Lot 1	100 mL	TKN ICV 100_00070	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00070	07/01/19	05/31/19	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_00037	01/31/20		Ricca, Lot 1807G06		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm
							DOC Result 1	1000 ppm
							DOC Result 2	1000 ppm
							DOC Result 3	1000 ppm
							DOC Result 4	1000 ppm
TOC LCS Std_00046	03/31/21		Ultra Scientific, Lot CT-0920		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm

Reagent

8330 LCSMx2_00101



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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.:	<u>31451</u>	Lot No.:	<u>A0122699</u>
Description :	8330 Calibration Mix #2		
8330 Calibration Std #2 1000 μ g/mL, Acetonitrile, 1mL/ampul			
Container Size :	<u>2 mL</u>	Pkg Amt:	<u>> 1 mL</u>
Expiration Date :	<u>November 30, 2021</u>	Storage:	<u>10°C or colder</u>

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	Tetryl CAS # 479-45-8 Purity 99%	1,000.0 μ g/mL	+/- 5.9397 μ g/mL	+/- 54.7830 μ g/mL	+/- 63.8824 μ g/mL
2	4-Amino-2,6-dinitrotoluene CAS # 19406-51-0 Purity 99%	1,002.0 μ g/mL	+/- 5.9516 μ g/mL	+/- 54.8926 μ g/mL	+/- 64.0101 μ g/mL
3	2-Amino-4,6-dinitrotoluene CAS # 35572-78-2 Purity 99%	1,001.0 μ g/mL	+/- 5.9456 μ g/mL	+/- 54.8378 μ g/mL	+/- 63.9463 μ g/mL
4	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	1,001.0 μ g/mL	+/- 5.9456 μ g/mL	+/- 54.8378 μ g/mL	+/- 63.9463 μ g/mL
5	2-Nitrotoluene CAS # 88-72-2 Purity 99%	1,001.0 μ g/mL	+/- 5.9456 μ g/mL	+/- 54.8378 μ g/mL	+/- 63.9463 μ g/mL
6	4-Nitrotoluene CAS # 99-99-0 Purity 97%	1,001.0 μ g/mL	+/- 5.9459 μ g/mL	+/- 54.8400 μ g/mL	+/- 63.9488 μ g/mL
7	3-Nitrotoluene CAS # 99-08-1 Purity 99%	1,001.0 μ g/mL	+/- 5.9456 μ g/mL	+/- 54.8378 μ g/mL	+/- 63.9463 μ g/mL

Reagent

8330 Stock_TS_00012



Certificate of Analysis

Combined Stock Solution

Product Number:	NAIM-833E	Page:	1 of 1
Lot Number:	CR-1002	Lot Issue Date:	10-Mar-2017
		Expiration Date:	30-Apr-2020

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA'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	1000 ± 5 µg/mL
m-dinitrobenzene	000099-65-0	RM04448	1001 ± 5 µg/mL
nitrobenzene	000098-95-3	RM11472	1002 ± 5 µg/mL
2,4,6-trinitrotoluene (TNT)	000118-96-7	RM11972	1004 ± 5 µg/mL
2,4-dinitrotoluene	000121-14-2	RM01209	1002 ± 5 µg/mL
tetryl	000479-45-8	RM12295	1000 ± 5 µg/mL
2,6-dinitrotoluene	000606-20-2	RM10763	1003 ± 5 µg/mL
2-nitrotoluene	000088-72-2	NT01996	1003 ± 5 µg/mL
3-nitrotoluene	000099-08-1	NT02212	1004 ± 5 µg/mL
4-nitrotoluene	000099-99-0	NT02096	1004 ± 5 µg/mL
2-amino-4,6-dinitrotoluene	035572-78-2	RM04229	1003 ± 5 µg/mL
4-amino-2,6-dinitrotoluene	019406-51-0	RM04226	1003 ± 5 µg/mL

Matrix: acetonitrile

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

ULTRA 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.

John Russo
President

Monica Bourgeois
Director of QA/RA



ISO 9001
Registered
TUV USA, Inc.

Reagent

8330_NG_Stk_00052

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Composition



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871

Lot No.: A0124122

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000 μ g/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : January 31, 2020

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin CAS # 55-63-0 Purity 99%	5,016.0 μ g/mL	+/- 46.6461 μ g/mL	+/- 277.1256 μ g/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:**Mobile Phase B:**

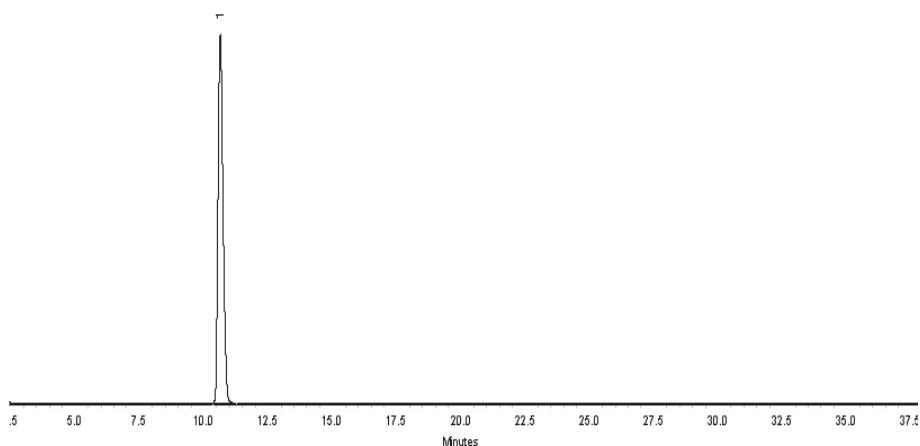
water:methanol (44:56 V/V)

Mobile Phase Composition:

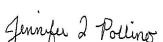
100% B

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.


Kendra Jozefick - Mix Technician**Date Mixed:** 12-Jan-2017 **Balance:** B442140311
Jennifer Pollino - Operations Tech-ARM QC**Date Passed:** 17-Jan-2017 REVIEWED
An electronic signature is displayed here.

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/ μ ECD, 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:

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

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 [| 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 |](http://www.restek.com>Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
• Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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- 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 [### **Manufacturing Notes:**](http://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.

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- 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.

Reagent

8330_NG_Stk_00071



CERTIFIED REFERENCE MATERIAL

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

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Certificate of Composition



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0129124

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000 μ g/mL, Acetonitrile, 1mL/ampul

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

Expiration Date : July 31, 2020 **Storage:** 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin CAS # 55-63-0 Purity 99%	5,008.0 μ g/mL	+/- 46.5717 μ g/mL	+/- 276.6836 μ g/mL	+/- 321.9236 μ g/mL

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

Reagent

8330_NG_Stk_00073



CERTIFIED REFERENCE MATERIAL

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Certificate of Composition



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 Lot No.: A0129124

Description : Custom Nitroglycerin Standard
Custom Nitroglycerin Standard 5,000 μ g/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : July 31, 2020 Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin CAS # 55-63-0 Purity 99%	5,008.0 μ g/mL	+/- 46.5717 μ g/mL	+/- 276.6836 μ g/mL	+/- 321.9236 μ g/mL

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

Reagent

8330_OP_DMT_00002



Reagent ID: 8330_OP_DMT_00002

Description:	Use for MNX, DNX, TNX spike	Expiration Date:	12/31/2019
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	_Pick Storage Location	Prepared By:	Becker, Chad B
Reagent Volume:	10.000 mL	Solvent:	Acetonitrile
Creation Date:	03/12/2019	Solvent Lot:	00222
Open Date:			
Container(s):	5580180		
Comment:	Add 1 mL of MNX_TNX_DNX to 5 mL of acetonitrile. quantitative fill to 10 mL with ACN.		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
DNX	MNX,TNX,DXN_00026	12/31/2019	100.10000	ug/mL	10.01000	ug/mL
MNX	MNX,TNX,DXN_00026	12/31/2019	116.70000	ug/mL	11.67000	ug/mL
TNX	MNX,TNX,DXN_00026	12/31/2019	100.10000	ug/mL	10.01000	ug/mL

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
6	MNX,TNX,DXN_00026 Custom MNX,TNX,DXN 8321 exp ULTRA	ASTD	12/31/19	ULTRA Scientific	CS-5628	CUS-23984	1.00000	mL

This section to be completed by the analyst creating the standard:

Standard Name	8330 - OPA - DNT		
Analyst name (and trainer if applicable)	<i>JB</i>		
Creation Date			
Initials each item	<input checked="" type="checkbox"/> Stock standard catalog # on the vendor label. <input checked="" type="checkbox"/> All stock standards have a correct open date in TALS. <input checked="" type="checkbox"/> All stock standards have a correct expiration date in TALS.		
Initials one of the following:	<input type="checkbox"/> Requires MeCi2 exchange prior to verification. Paperwork submitted to concentrations. Date/time submitted to concentrations: <input type="checkbox"/> Requires esterification prior to verification. Paperwork submitted to concentrations. Date/time submitted to concentrations: <input type="checkbox"/> No exchange needed; aliquot submitted to analytical group for analysis. Date/time submitted to analytical group for analysis:		
Verification status	<input checked="" type="checkbox"/> No verification required. Submit to group leader. <input type="checkbox"/> Other (specify and submit to group leader):		

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

Sample Path: \\chromna\Denver\ChromData\G2_LUNA\20190317-79923.b\03170039.D

Lims ID: LCS 280-450627/4-A Inj. Date: 18-Mar-2019 12:13:51

Worklist ID: 280-0079923-039 Instrument: CHHPLC_G2_LUNA

Method: G2_8330_Luna

Compound	Amount Added	Amount Recovered	% Rec	Limits 1 3535	Limits 2 3535
3 TNX	0.2002	0.2314	115.6	50-150	
4 DNX	0.2002	0.2029	101.4	66-119	50-150
7 MNX	0.2334	0.2434	104.3	57-132	68-123
\$ 10 1,2-Dinitrobenzene	0.2000	0.2190	109.5	83-119	63-127

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

280-120959-B-1-A	280-120959-A-2-A	280-120959-A-3-A
280-120959-B-4-A	280-120959-B-5-A	280-120959-A-6-A
280-120959-A-7-A	280-120959-A-8-A	280-120959-A-9-A
280-121028-A-1-A	280-121028-B-2-A	280-121028-A-7-A
280-121028-A-8-A	280-121028-B-9-A	280-121028-A-10-A
280-121028-A-11-A	280-121068-A-1-A	280-121068-B-2-A
280-121068-A-3-A	280-121068-B-5-A	280-121068-A-6-A
280-121068-A-7-A	280-121068-A-9-A	280-121068-B-10-A
280-121068-B-13-A		

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

680-165694-D-7-A	680-165694-E-8-A	680-165755-D-1-A
680-165755-E-2-A	680-165755-D-3-A	680-165755-E-4-A

Reagent

8330_PETN_Stk_00056

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Certificate of Composition



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872

Lot No.: A0124124

Description : Custom PETN Standard

Custom PETN Standard 5000 µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : January 31, 2020

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN	5,024.0 µg/mL	+/-	46.7205 µg/mL	Gravimetric
	CAS # 78-11-5		+/-	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:**Mobile Phase B:**

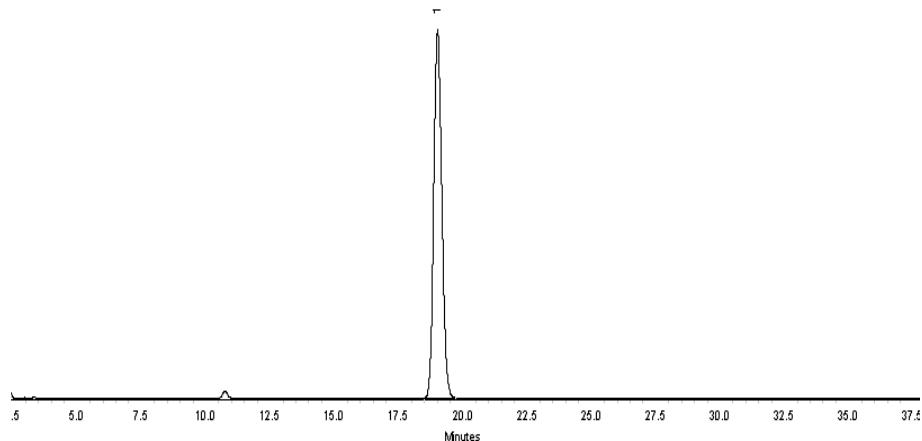
water:methanol (44:56 V/V)

Mobile Phase Composition:

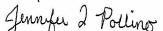
100% B

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.


Kendra Jozefick - Mix Technician**Date Mixed:** 12-Jan-2017 **Balance:** B442140311
Jennifer Pollino - Operations Tech-ARM QC**Date Passed:** 17-Jan-2017 REVIEWED
By Amanda Miller at 3:54 pm, Jan 17, 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/ μ ECD, 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:

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

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 [| 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 |](http://www.restek.com>Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
• Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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- 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 [### **Manufacturing Notes:**](http://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.

</div>
<div data-bbox=)

- 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.

Reagent

8330_PETN_Stk_00076



CERTIFIED REFERENCE MATERIAL

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

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Certificate of Composition

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 568872

Lot No.: A0136306

Description : Custom PETN Standard

Custom PETN Standard 5,000 μ g/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : March 31, 2021

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN CAS # 78-11-5 Purity 99%	5,028.0 μ g/mL (Lot 051108JLM)	+/- 46.7577 μ g/mL	+/- 277.7886 μ g/mL	Gravimetric Unstressed Stressed

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

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

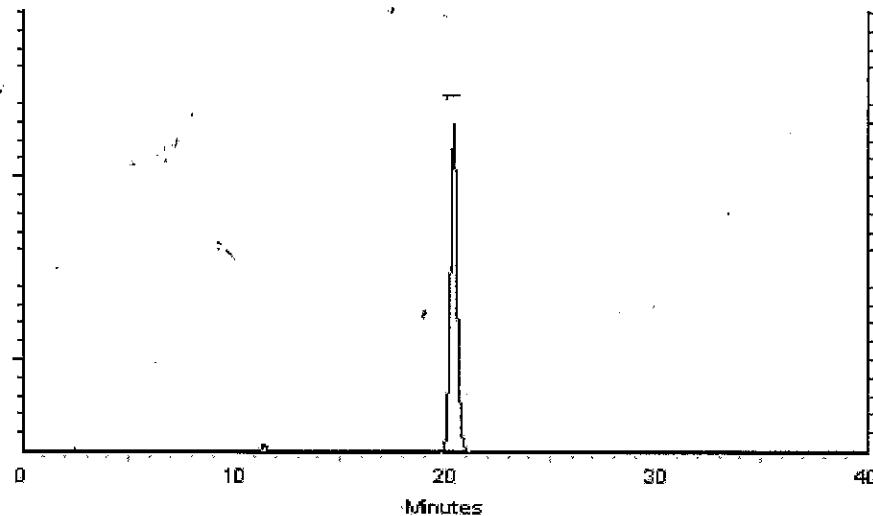
Flow Rate:
1.0 ml/min.

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.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 19-Mar-2018 Balance: 1128360905

Jennifer J. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-Mar-2018

REVIEWED: [Signature]

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:

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

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 [| 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 |](http://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.</div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://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.</div><div data-bbox=)

- 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

8330_PETN_Stk_00077



CERTIFIED REFERENCE MATERIAL

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

www.restek.com



Certificate of Composition

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 568872

Lot No.: A0136306

Description : Custom PETN Standard

Custom PETN Standard 5,000 μ g/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : March 31, 2021

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN CAS # 78-11-5 Purity 99%	5,028.0 μ g/mL (Lot 051108JLM)	+/- 46.7577 μ g/mL	+/- 277.7886 μ g/mL	Gravimetric Unstressed Stressed

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

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

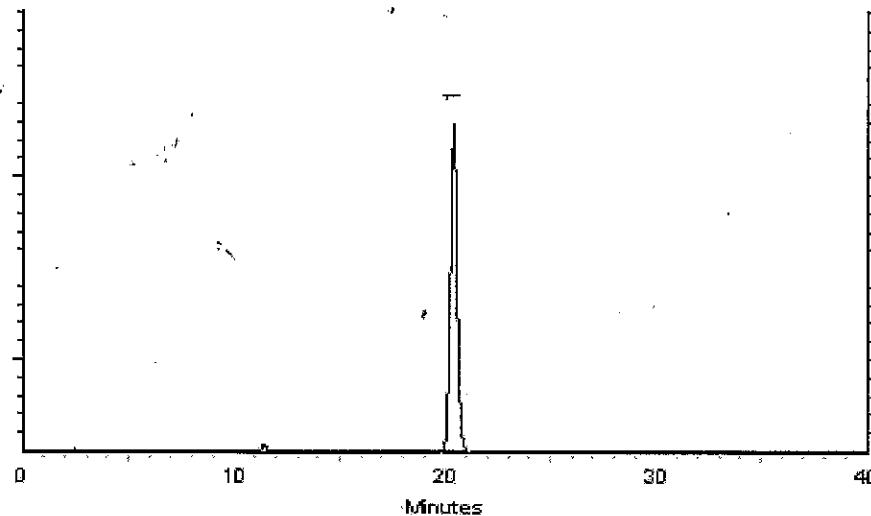
Flow Rate:
1.0 ml/min.

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.

Cyndee L. Crust
Cyndee L. Crust - Mix Technician

Date Mixed: 19-Mar-2018 Balance: 1128360905

Jennifer J. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-Mar-2018

REVIEWED: [Signature]

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:

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

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 [| Label Conditions | Standard Conditions | Non-Standard Conditions |
|---------------------------------|---------------------|-------------------------|
| 25°C Nominal \(Room Temperature\) | < 60°C | ≥ 60°C up to 7 days |
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| 0°C or colder \(Freezer\) | < 25°C | ≥ 25°C up to 7 days |](http://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.</div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://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.</div><div data-bbox=)

- 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

8330LCSMix1_00104****



CERTIFIED REFERENCE MATERIAL

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

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450

Lot No.: A0128688

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000 μ g/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : June 30, 2022

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX CAS # 2691-41-0 Purity 98%	1,002.5 μ g/mL (Lot 111005JLM)	+/- 5.9548 +/- 54.9222 +/- 64.0446	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
2	RDX CAS # 121-82-4 Purity 99%	1,008.0 μ g/mL (Lot 080220JLM)	+/- 5.9872 +/- 55.2213 +/- 64.3934	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene CAS # 99-35-4 Purity 97%	1,004.9 μ g/mL (Lot DJ5QO)	+/- 5.9689 +/- 55.0525 +/- 64.1967	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	1,007.0 μ g/mL (Lot BCBN4329V)	+/- 5.9813 +/- 55.1665 +/- 64.3295	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene CAS # 98-95-3 Purity 99%	1,007.0 μ g/mL (Lot SHBG5577V)	+/- 5.9813 +/- 55.1665 +/- 64.3295	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene CAS # 118-96-7 Purity 99%	1,004.0 μ g/mL (Lot 2554100)	+/- 5.9635 +/- 55.0021 +/- 64.1379	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	1,007.0 μ g/mL (Lot MKAA0690V)	+/- 5.9813 +/- 55.1665 +/- 64.3295	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed

Reagent

8330LCSMix1_00109****



CERTIFIED REFERENCE MATERIAL

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

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450

Lot No.: A0131772

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000 μ g/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : October 31, 2022

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX CAS # 2691-41-0 Purity 98%	1,009.4 μ g/mL (Lot 111005JLM)	+/- 5.9955 +/- 55.2980 +/- 64.4829	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
2	RDX CAS # 121-82-4 Purity 99%	1,005.0 μ g/mL (Lot 080220JLM)	+/- 5.9694 +/- 55.0569 +/- 64.2018	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene CAS # 99-35-4 Purity 97%	1,009.8 μ g/mL (Lot DJ5QO)	+/- 5.9977 +/- 55.3182 +/- 64.5065	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	1,008.0 μ g/mL (Lot BCBB1436V)	+/- 5.9872 +/- 55.2213 +/- 64.3934	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene CAS # 98-95-3 Purity 99%	1,002.0 μ g/mL (Lot SHBF2348V)	+/- 5.9516 +/- 54.8926 +/- 64.0101	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene CAS # 118-96-7 Purity 99%	1,008.0 μ g/mL (Lot 2554100)	+/- 5.9872 +/- 55.2213 +/- 64.3934	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	1,005.0 μ g/mL (Lot MKAA0690V)	+/- 5.9694 +/- 55.0569 +/- 64.2018	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed

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

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

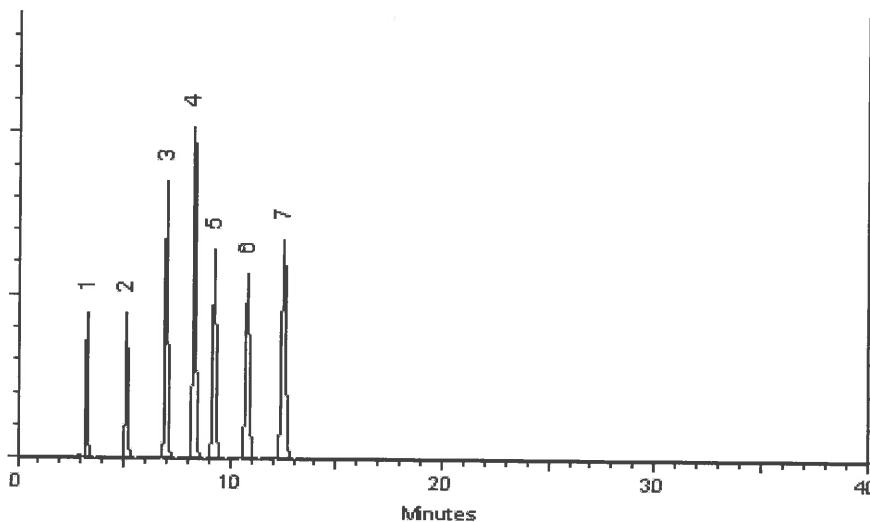
Flow Rate:
1.0 ml/min.

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.

Dawn Brownson
Dawn Brownson - Mix Technician

Date Mixed: 19-Oct-2017 Balance: B707717271

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-Oct-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

8330LCSmix2_00008



CERTIFIED REFERENCE MATERIAL

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

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451

Lot No.: A0141002

Description : 8330 Calibration Mix #2

8330 Calibration Std #2 1000 μ g/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : August 31, 2023

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl CAS # 479-45-8 Purity 99%	1,000.0 μ g/mL	+/- 5.9397 μ g/mL	+/- 54.7830 μ g/mL	+/- 63.8824 μ g/mL
	(Lot 091120JLM)				
2	4-Amino-2,6-dinitrotoluene CAS # 19406-51-0 Purity 99%	1,002.0 μ g/mL	+/- 5.9516 μ g/mL	+/- 54.8926 μ g/mL	+/- 64.0101 μ g/mL
	(Lot ER070908-01)				
3	2-Amino-4,6-dinitrotoluene CAS # 35572-78-2 Purity 98%	1,007.4 μ g/mL	+/- 5.9839 μ g/mL	+/- 55.1906 μ g/mL	+/- 64.3577 μ g/mL
	(Lot 29550-55)				
4	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	1,000.0 μ g/mL	+/- 5.9397 μ g/mL	+/- 54.7830 μ g/mL	+/- 63.8824 μ g/mL
	(Lot BCBB8606V)				
5	2-Nitrotoluene CAS # 88-72-2 Purity 99%	1,004.0 μ g/mL	+/- 5.9635 μ g/mL	+/- 55.0021 μ g/mL	+/- 64.1379 μ g/mL
	(Lot GA01)				
6	4-Nitrotoluene CAS # 99-99-0 Purity 99%	1,002.0 μ g/mL	+/- 5.9516 μ g/mL	+/- 54.8926 μ g/mL	+/- 64.0101 μ g/mL
	(Lot FAU01)				
7	3-Nitrotoluene CAS # 99-08-1 Purity 98%	1,003.5 μ g/mL	+/- 5.9606 μ g/mL	+/- 54.9758 μ g/mL	+/- 64.1072 μ g/mL
	(Lot FBO01)				

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

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

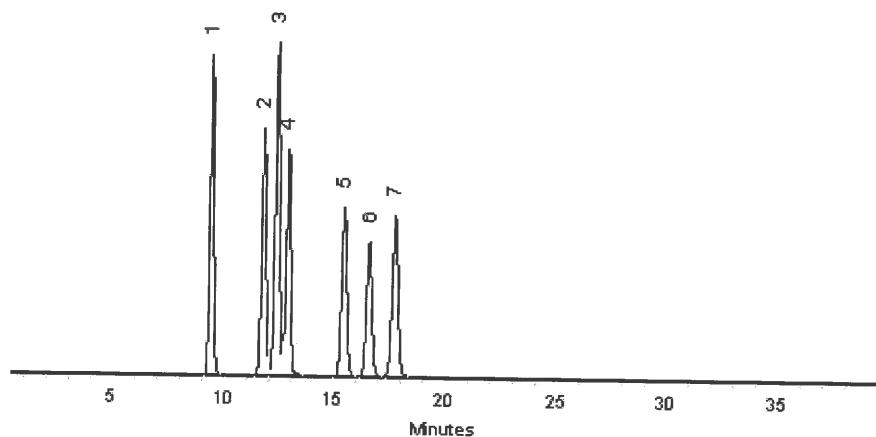
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

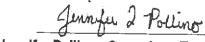
Det. Type:
Wavelength: 210 nm



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

8330PASTkPS_00058



CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3

Description: Picric acid

Lot: 216061376-01

Solvent: Acetonitrile (50%)

Methanol (50%)

Hazards: Refer to SDS for complete safety information



Signal Word: Danger

Date Certified: Jun 19, 2017

Expiration: Jul 19, 2019

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 %	Prepared Concentration ¹ (HPLC) (µg/mL)	Certified Analyte Concentration ² (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.

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%. This value is the 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.

See reverse side for additional information

Certified By:


Larry Decker, Organic QC Manager

Reagent

8330SurrStkSS_00134



CERTIFIED REFERENCE MATERIAL

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

www.restek.com



Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453

Lot No.: A0124792

Description : 8330 Surrogate Mix

8330 Surrogate Std 1, 2-Dinitrobenzene 1000 μ g/mL, Methanol,
1mL/Ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : February 28, 2022

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,006.0 μ g/mL	+/- 5.9753 μ g/mL	+/- 56.4187 μ g/mL	+/- 57.7382 μ g/mL

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

Reagent

8330SurrStkSS_00135



CERTIFIED REFERENCE MATERIAL

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

www.restek.com



Certificate of Analysis



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Catalog No. : 31453

Lot No.: A0124792

Description : 8330 Surrogate Mix

8330 Surrogate Std 1, 2-Dinitrobenzene 1000 μ g/mL, Methanol,
1mL/Ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : February 28, 2022

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,006.0 μ g/mL	+/- 5.9753 μ g/mL	+/- 56.4187 μ g/mL	+/- 57.7382 μ g/mL

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

Reagent

8330SurrStkSS_00142



CERTIFIED REFERENCE MATERIAL

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



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31453

Lot No.: 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

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	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,000.0 µg/mL (Lot MKBW2921V)	+/- 5.9397 µg/mL	+/- 56.0822 µg/mL	Gravimetric Unstressed Stressed

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

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

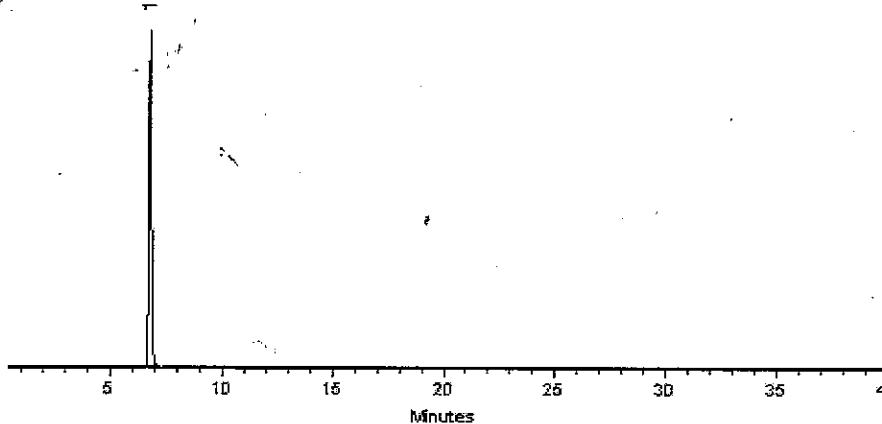
Flow Rate:
1.0 ml/min.

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.

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/ μ ECD, 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:

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

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 [| 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 |](http://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.</div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://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.</div><div data-bbox=)

- 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_00145



CERTIFIED REFERENCE MATERIAL

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



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31453

Lot No.: 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

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	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,000.0 µg/mL (Lot MKBW2921V)	+/- 5.9397 µg/mL	+/- 56.0822 µg/mL	Gravimetric Unstressed Stressed

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

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

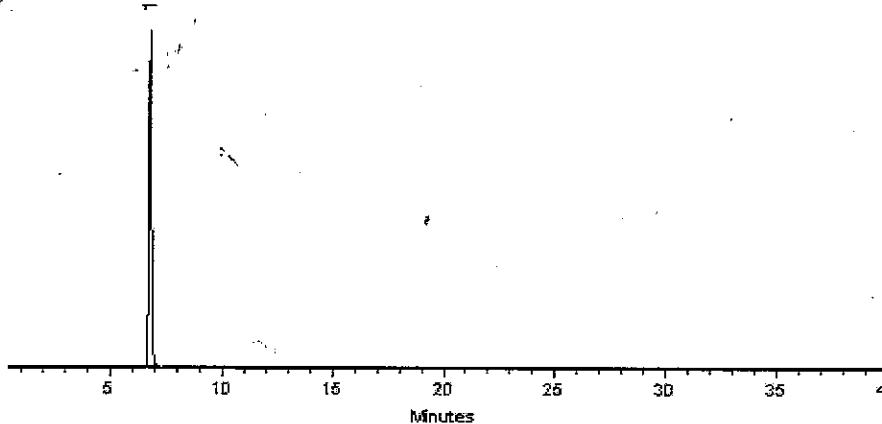
Flow Rate:
1.0 ml/min.

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.

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/ μ ECD, 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:

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

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 [| 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 |](http://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.</div><div data-bbox=)

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- 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_00146



CERTIFIED REFERENCE MATERIAL

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



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31453

Lot No.: 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

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	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,000.0 µg/mL (Lot MKBW2921V)	+/- 5.9397 µg/mL	+/- 56.0822 µg/mL	Gravimetric Unstressed Stressed

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

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

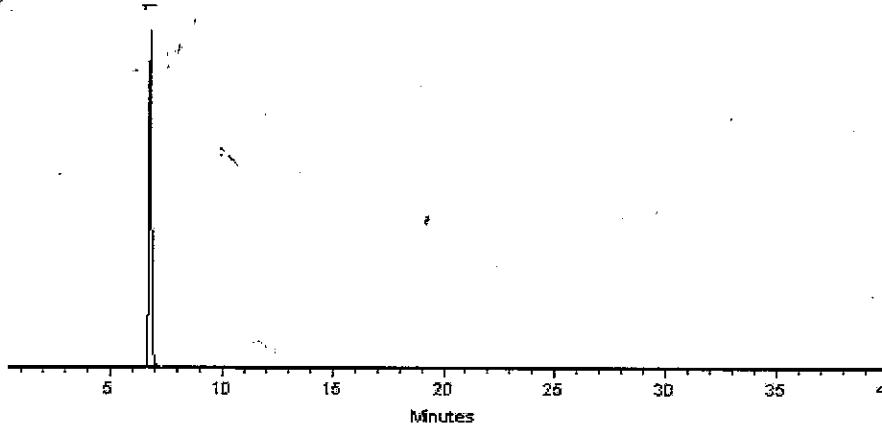
Flow Rate:
1.0 ml/min.

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.

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/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

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| 0°C or colder \(Freezer\) | < 25°C | ≥ 25°C up to 7 days |](http://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.</div><div data-bbox=)

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

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely

Reagent

8330SurrStkSS_00149



CERTIFIED REFERENCE MATERIAL

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



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31453

Lot No.: 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

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	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,000.0 µg/mL (Lot MKBW2921V)	+/- 5.9397 µg/mL	+/- 56.0822 µg/mL	Gravimetric Unstressed Stressed

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

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

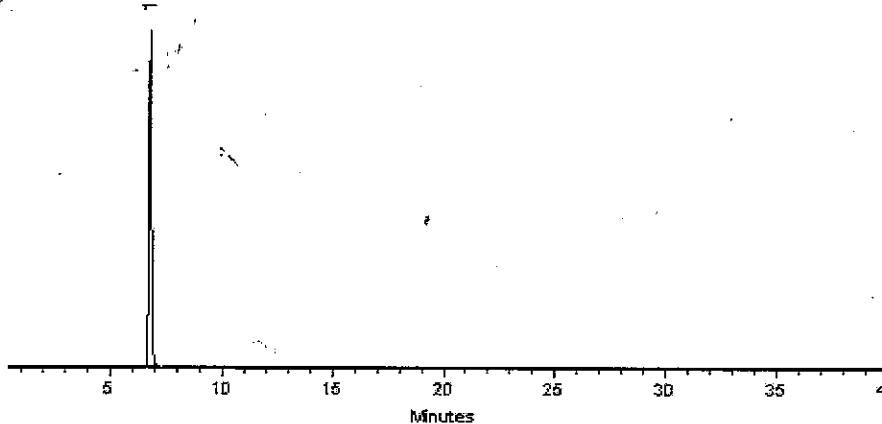
Flow Rate:
1.0 ml/min.

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.

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/ μ ECD, 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:

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

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 [| 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 |](http://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.</div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://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.</div><div data-bbox=)

- 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_00150



CERTIFIED REFERENCE MATERIAL

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



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31453

Lot No.: 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

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	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,000.0 µg/mL (Lot MKBW2921V)	+/- 5.9397 µg/mL	+/- 56.0822 µg/mL	Gravimetric Unstressed Stressed

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

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

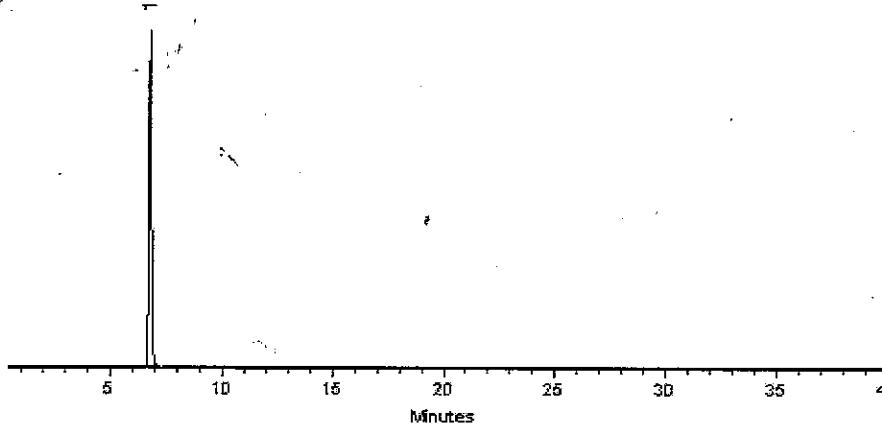
Flow Rate:
1.0 ml/min.

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.

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/ μ ECD, 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:

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

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 [| Label Conditions | Standard Conditions | Non-Standard Conditions |
|---------------------------------|---------------------|-------------------------|
| 25°C Nominal \(Room Temperature\) | < 60°C | ≥ 60°C up to 7 days |
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| 0°C or colder \(Freezer\) | < 25°C | ≥ 25°C up to 7 days |](http://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.</div><div data-bbox=)

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- 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_00152



CERTIFIED REFERENCE MATERIAL

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

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31453

Lot No.: A0139489

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, 2023

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,001.0 µg/mL (Lot MKBW2921V)	+/- 5.9456	µg/mL	Gravimetric
			+/- 56.1383	µg/mL	Unstressed
			+/- 57.4512	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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- 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:

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

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Column:

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

Flow Rate:

1.0 ml/min.

Mobile Phase A:

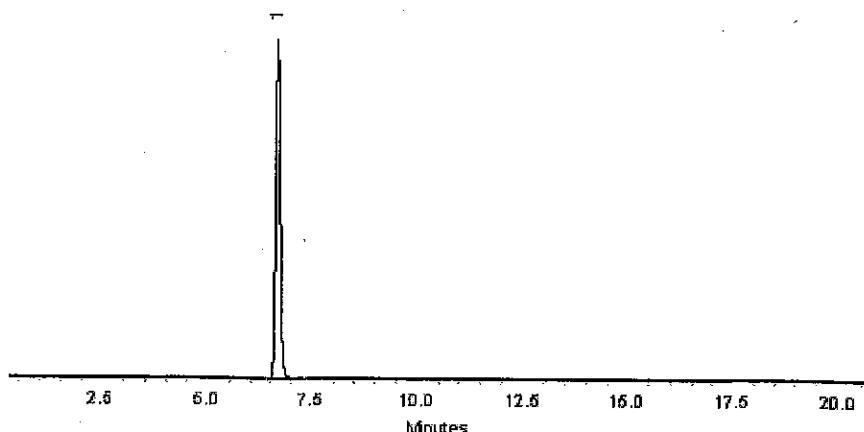
water:methanol (44:56 V/V)

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 R. Jaglowski
Joseph Jaglowski - Mix Technician

Date Mixed: 10-Jul-2018 Balance: B707717271

Jennifer L. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 17-Jul-2018

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

Reagent

8330SurrStkSS_00153



CERTIFIED REFERENCE MATERIAL

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

www.restek.com



Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31453

Lot No.: A0139489

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, 2023

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	1,001.0 µg/mL (Lot MKBW2921V)	+/- 5.9456	µg/mL	Gravimetric
			+/- 56.1383	µg/mL	Unstressed
			+/- 57.4512	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, 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:

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

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 [| 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 |](http://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.</div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://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.</div><div data-bbox=)

- 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.

Column:

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

Flow Rate:

1.0 ml/min.

Mobile Phase A:

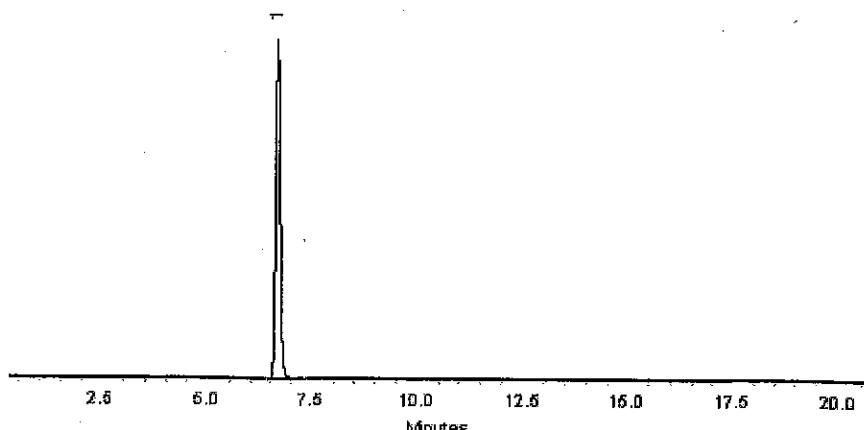
water:methanol (44:56 V/V)

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 R. Jaglowski
Joseph Jaglowski - Mix Technician

Date Mixed: 10-Jul-2018 Balance: B707717271

Jennifer L. Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 17-Jul-2018

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

Reagent

8330SurrStock_00163



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 %	Prepared Concentration ¹ (GC/FID) (μ g/mL)	Certified Analyte Concentration ² (μ g/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

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

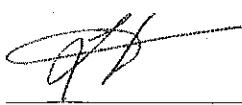
¹ All weights are traceable through NIST, Test No. 822-275872-11

² Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is $\pm 0.24\%$. The CRM Uncertainty calculated for this product is $\pm 5\%$. 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

Reagent

Alk stk std_00016



Certificate of Analysis

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

ThermoFisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

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. ThermoFisher 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. ThermoFisher does not maintain DMFs with the FDA. The following are the actual analytical results obtained:

Catalog Number	SS148	Quality Test / Release Date	06/05/2018
Lot Number	182564	Expiration Date	Jun/2020
Description	SODIUM CARBONATE SOLUTION, 1N		
Country of Origin	United States		
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

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

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

*Based on suggested storage condition.

Reagent

IC BR ICV_00012



Certificate of Analysis

Bromide Standard, 1000 ppm Br

Lot Number: 1804F11

Product Number: 1180

Manufacture Date: APR 06, 2018

Expiration Date: SEP 2019

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Bromide	7647-15-6	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Bromide (Br)	995-1005 ppm	1000 ppm

Specification	Reference
Bromide Solution, Standard (1 mL = 1 mg Br ⁻)	ASTM (D 3869 D)
Standard Bromide Solution, 1000 mg/L	APHA (4110 B)
Bromide Stock Solution (1.00 mL = 1.00 mg Br ⁻)	EPA (SW-846) (9056)
Sodium Bromide Standard Solution, 1000 mg/L	ASTM (D 1246)
Bromide Stock Solution (1.00 mL = 1.00 mg Br ⁻)	ASTM (D 4327)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1180-16	500 mL natural poly	18 months
1180-4	120 mL natural poly	18 months

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

Israel Alamudun (04/06/2018)

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

IC CL cal_00055



Reference Materials Producer
Cert #2495.01



Chemical Testing
Cert #2495.02

SPEXertificate®

Certificate of Reference Material

Catalog Number: AS-CL9-2X

Lot No. 4-101CL-2X

Description: 1000 µg/mL Chloride

Matrix: H₂O

This Ion Chromatography Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 998 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3182*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Sodium Chloride, Lot# 07131A. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 998 µg/mL

Method: Precipitation using Silver Nitrate. Filter, dry and weigh as AgCl.

Instrumental Analysis by Ion Chromatography: 997 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br ⁻	<0.05	NO ₃ ⁻	<0.04
F ⁻	<0.006	PO ₄ ³⁻	<0.06
NO ₂ ⁻	<0.03	SO ₄ ²⁻	<0.05

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 unopened and stored under ambient laboratory conditions.

Date of Certification:

NOV -- 2018

Certifying Officer:

Kathleen Cull

Reagent

IC FL cal_00013



Certificate of Analysis

Fluoride Standard, 1000 ppm F

Lot Number: 4805C89

Product Number: 3173

Manufacture Date: MAY 07, 2018

Expiration Date: OCT 2019

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

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

IC MS/MSD S04_00005



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

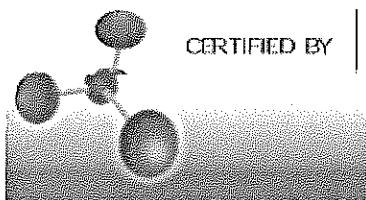
Certificate of Analysis

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



Edgar E. Haas

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_00017

Certificate of Analysis

PRODUCT:	1000 mg/L Sulfate (SO ₄)
CATALOG NUMBER:	062 -125 mL; 995 - 500 mL
LOT NUMBER:	210617
ISSUE DATE:	June 27, 2017
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Sulfate (K ₂ SO ₄)
CERTIFIED CONCENTRATION ¹ :	1000 mg/L
UNCERTAINTY ² :	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	0.9987 ± 0.0008 g/mL at 22.5°C and 757 mm Hg
TRACEABILITY ³ :	99.5%
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 6/2019**. 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



ISO/IEC 17025:2005



Reagent

IC sulfatecal_00053



Reference Materials Producer
Cert #2495.01

SPExertificate®

Certificate of Reference Material



Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X

Lot No. 4-131SO4-2X

Description: 1000 µg/mL Sulfate

Matrix: H₂O

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: 1003 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# 0713D. 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: 1004 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br ⁻	<0.04	NO ₂ ⁻	<0.03
Cl ⁻	<0.5	NO ₃ ⁻	<0.03
F ⁻	<0.006	PO ₄ ³⁻	<0.06

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.

AUG -- 2018

Date of Certification:

Certifying Officer:

Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

Reagent

IC sulfatecal_00057



Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material



Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X

Lot No. 4-197SO4-2X

Description: 1000 µg/mL Sulfate

EXPIRES JUN. 30, 2020

Matrix: H₂O

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	PO ₄ 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.

JUN -- 2019

Date of Certification: _____

Certifying Officer:

Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

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: Quantifying 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
- $U = k u_c$ 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 $u_c = \sqrt{\sum u_i^2}$

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

MNX , TNX , DNX _00026



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.

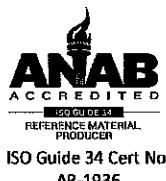
Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

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
Monica Bourgeois
QMS Representative



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



ORG ver 1.1

Reagent

MNX , TNX , DNX _00027



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.

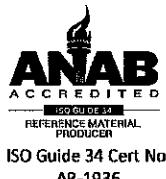
Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	$100.3 \pm 0.5 \mu\text{g/mL}$
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	$100.1 \pm 0.5 \mu\text{g/mL}$
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	$116.7 \pm 0.6 \mu\text{g/mL}$

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
Monica Bourgeois
QMS Representative



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



ORG ver 1.1

Reagent

NH3 CAL STD_00030



Certificate of Analysis

Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH₃)

Lot Number: 1808L28

Product Number: 5455

Manufacture Date: AUG 29, 2018

Expiration Date: FEB 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 NH ₃ -N	EPA (351.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH ₃ -N	EPA (350.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH ₃ -N	EPA (350.3)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH ₃ -N	EPA (351.4)
Stock Solution, 1.0 mL = 1.0 mg NH ₃ -N	EPA (350.1)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH ₃ -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

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



Israel Alamudun (08/29/2018)

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_00026



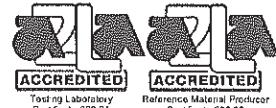
41 Front Valley Drive
Charlottesville, VA 22903 USA
www.inorgventures.com

CERTIFICATE OF ANALYSIS

Lot # 401896/99 - NIST SRM 194a
Test Date: 07/31/2019
Institute: Inorganic Ventures LLC

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).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Ion Chromatography Solution
Catalog Number: ICNNH41
Lot Number: M2-NH662533
Matrix: H₂O
Value / Analyte(s): 1 000 µg/mL ea:
Ammonium as N
Starting Material: Ammonium Chloride
Starting Material Lot#: 1736
Starting Material Purity: 99.8500%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 996 ± 3 µg/mL
Density: 0.999 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 993 ± 3 µg/mL
Fajans NIST SRM 999c Lot Number: 999c

Assay Method #2 997 ± 2 µg/mL
IC Assay NIST SRM 194a Lot Number: 194a

- 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 by two independent methods Characterization of CRM by one method

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 (\pm) = $U_{CRM/RM} = k(u^2_{char\ a\&b} + u^2_{bb} + u^2_{ts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = \{(w_a)^2(u_{char\ a})^2 + (w_b)^2(u_{char\ b})^2\}^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = 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:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$

CRM/RM Expanded Uncertainty (\pm) = $U_{CRM/RM} = k(u^2_{char\ a} + u^2_{bb} + u^2_{ts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = 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.

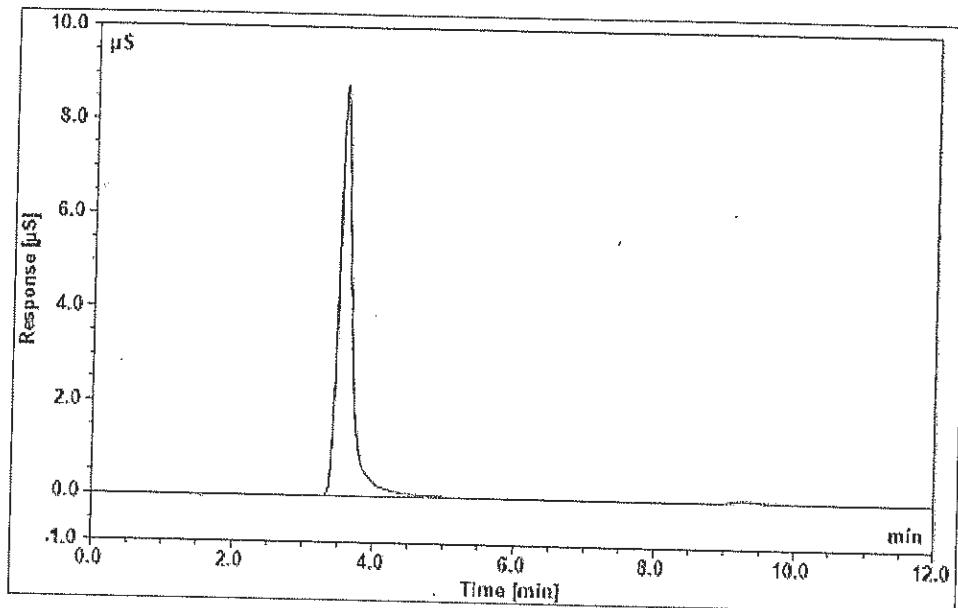
4.2 Balance Calibration

- 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 CS12A-5µm 3x150mm	Eluent:	20 mM MSA
Guard Column:	IonPac CG12A-5µm 3x30mm	Eluent Flow Rate:	0.50 mL/min
Anion Self Regen		Column Temp:	35° C
Suppressor/	N/A	Cell Temp:	35° C
Chemical		Scale X-Axis:	minutes
Suppression:		Scale Y-Axis:	10 µS/cm
Cation Self Regen		Concentration:	10 µg/g
Suppressor/	CERS 500 2mm		
Chemical			
Suppression:			
Suppressor			
Current/ Chemical	30 mA		
Suppressant:			

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 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 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: 800.699.6799; 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

November 03, 2017

- 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

- November 03, 2021

- 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

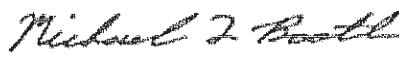
Certificate Prepared By:

Joseph Burns
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



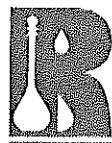
Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

NOXT Cal STD_00022



Certificate of Analysis

Nitrate Nitrogen Standard, 1000 ppm N (4427 ppm NO₃)

Lot Number: 2803904

Product Number: 5459

Manufacture Date: MAR 13, 2018

Expiration Date: AUG 2019

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrate	7757-79-1	High Purity
Chloroform	67-66-3	

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO ₃ -N)	ASTM (D 3867 A)
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO ₃ -N)	ASTM (D 3867 B)
Stock Nitrate Solution: 1 mL = 1.0 mg NO ₃ -N	EPA (353.2)
Stock Nitrate Solution: 1.0 mL = 1.00 mg NO ₃ -N	EPA (353.3)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5459-16	500 mL natural poly	18 months

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

Andy Baumgartner

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

NOXT ICV STD_00022

Certificate of Analysis

PRODUCT:	1000 mg/L Nitrate as N (NO ₃ -N)
CATALOG NUMBER:	052 -125 mL; 991 - 500 mL
LOT NUMBER:	031217
ISSUE DATE:	January 8, 2018
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Nitrate (KNO ₃)
CERTIFIED CONCENTRATION¹:	1000 mg/L
UNCERTAINTY²:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	1.0028 ± 0.0008 g/mL at 21.5°C and 627 mm Hg
TRACEABILITY³:	102%
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 12/2019**. 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

ISO/IEC 17025:2005



Reagent

PicricARestek_00083



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

www.restek.com

CERTIFIED REFERENCE MATERIAL



Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499

Lot No.: A0143208

Description : Picric Acid Standard

Picric Acid Standard 1000 μ g/mL, Methanol, 1mL/1000 μ g/mL *PGI BOX
REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : November 30, 2023

Storage: 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid CAS # 88-89-1 Purity 97%	1,003.0 μ g/mL	+/- 5.9574 μ g/mL	+/- 54.9463 μ g/mL	+/- 64.0727 μ g/mL

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)

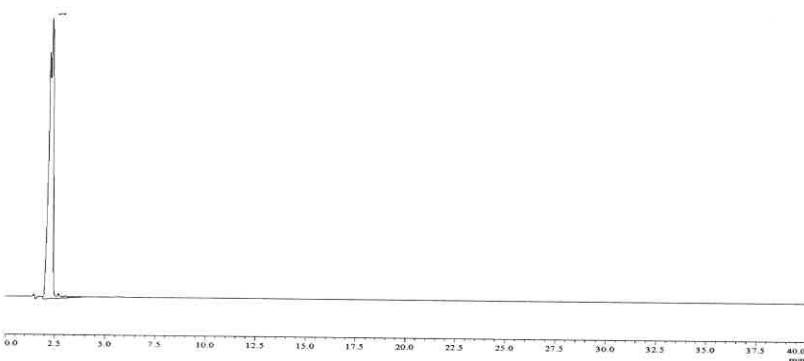
Flow Rate:
1.0 ml/min.

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.

Michael J. Maye

Date Mixed: 13-Nov-2018 Balance: 1127510105

John Lidgett
John Lidgett - AD Chemist

Date Passed: 16-Nov-2018

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

Reagent

RSK7gasMatthes_00025

Reagent

SFD CAL STK_00006

ACROS

ORGANICS

Version	02
Molecular weight	240.18
Quality Test / Release Date	09/06/2018
Molecular Formula	Na ₂ S . 9 H ₂ O
CAS No	1313-84-4
Linear Formula	Na ₂ S.9H ₂ O
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 % (Na ₂ S)	35.9 % (Na ₂ S)
Total nitrogen (as N)		=<0.005 %	=<0.005 %
Sulfite (as SO ₂)		=<2000 ppm	=<2000 ppm
Thiosulphate (S ₂ O ₃)		=<5000 ppm	=<5000 ppm



L. Van den Broek, QA Manager

Issued: 09-06-2018

Acros Organics
ENA23, zone1, nr 1350, Janssen Pharmaceuticalalaan 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

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)

<u>Bulk Number</u>	<u>Analyte</u>	<u>CAS #</u>	<u>Purity</u>	<u>Certified Concentration</u> (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.



ISO Guide 34:2009
Certificate AR-1571

ISO 9001:2008 UL Registered Firm - Certificate # 10002343 QM08

Page 1 of 2

Page 233 of 1678



ISO/IEC 17025:2005
Certificate AT-1690

07/31/2019



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 \pm 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



ISO Guide 34:2009
Certificate AR-1571

ISO 9001:2008 UL Registered Firm - Certificate # 10002343 QM08

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ISO/IEC 17025:2005
Certificate AT-1690

07/31/2019

Reagent

TKN ICV_00011



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 ($\text{NH}_2\text{CH}_2\text{COOH}$)
CERTIFIED CONCENTRATION¹:	1000 mg/L
UNCERTAINTY²:	0.6%
MATRIX:	18 megohm deionized water and 1% (v/v) HCl
DENSITY:	$1.0055 \pm 0.0010 \text{ g/mL}$ at 16.6°C and 754 mm Hg
TRACEABILITY³:	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

ISO/IEC 17025:2005



REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03



CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

Reagent

TOC ICV Std_00037



Certificate of Analysis

Organic Carbon Standard, 1000 ppm C

Lot Number: 4901G09

Product Number: 1847

Manufacture Date: JAN 22, 2019

Expiration Date: JAN 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
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months

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

Jim Gibbs (01/22/2019)

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

TOC LCS Std_00046



Certificate of Analysis

ISO Guide 34

Product Number: IQC-106
Lot Number: CT-0920

Lot Issue Date: 28 -Feb 2019
Expiration Date: 31-Mar 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	1000 ± 5 µg/mL	NAA00089; 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.



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

Certificate of Analysis

ISO Guide 34

Product Number: IQC-106
Lot Number: CT-0920

Lot Issue Date: 28 -Feb 2019
Expiration Date: 31-Mar 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

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ISO17025 Cert No.
AT-1937

RSK 175 DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06111929.D

Lab ID: LCS 280-461087/29 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0757	115	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06121902.D
Lab ID: LCS 280-461235/2 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0756	104	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06111930.D

Lab ID: LCSD 280-461087/30 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD REC	%	QC LIMITS		#
					RPD	REC	
Methane	0.0657	0.0803	122	6	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06121903.D

Lab ID: LCSD 280-461235/3 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD REC	%	QC LIMITS		#
					RPD	REC	
Methane	0.0730	0.0748	103	1	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06111937.D
Lab ID: 280-124912-4 MS Client ID: G0102-19AMS MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0657	0.0016 J	0.0587	87	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06111940.D
Lab ID: 280-124912-5 MS Client ID: PZ007-19AMS MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0657	0.00070 J	0.0629	95	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06111951.D
Lab ID: 280-124912-12 MS Client ID: PZ001-19AMS MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0657	0.0016 J	0.0585	87	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.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06111938.D

Lab ID: 280-124912-4 MSD Client ID: G0102-19AMSD MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD %	%	QC LIMITS		#
					REC	RPD	
Methane	0.0657	0.0609	90	4	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.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06111941.D

Lab ID: 280-124912-5 MSD Client ID: PZ007-19AMSD MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD %	%	QC LIMITS		#
					REC	RPD	
Methane	0.0657	0.0563	85	11	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.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06111952.D

Lab ID: 280-124912-12 MSD Client ID: PZ001-19AMSD MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD %	%	QC LIMITS		#
					REC	RPD	
Methane	0.0657	0.0637	94	8	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: MB 280-461087/31
Matrix: Water Date Extracted: _____
Lab File ID: (1) 06111931.D Lab File ID: (2) 06111931.D
Date Analyzed: (1) 06/11/2019 13:01 Date Analyzed: (2) 06/11/2019 13:01
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
PZ004-19A	280-124912-1	06/11/2019 13:15	06/11/2019 13:15
PZ004-19A DU	280-124912-1 DU	06/11/2019 13:28	06/11/2019 13:28
G0044-19A	280-124912-2	06/11/2019 13:41	06/11/2019 13:41
PZ015-19A	280-124912-3	06/11/2019 13:55	06/11/2019 13:55
G0102-19A	280-124912-4	06/11/2019 14:08	06/11/2019 14:08
G0102-19AMS MS	280-124912-4 MS	06/11/2019 14:22	06/11/2019 14:22
G0102-19AMSD MSD	280-124912-4 MSD	06/11/2019 14:35	06/11/2019 14:35
PZ007-19A	280-124912-5	06/11/2019 14:49	06/11/2019 14:49
PZ007-19AMS MS	280-124912-5 MS	06/11/2019 15:02	06/11/2019 15:02
PZ007-19AMSD MSD	280-124912-5 MSD	06/11/2019 15:16	06/11/2019 15:16
G0049-19A	280-124912-6	06/11/2019 15:29	06/11/2019 15:29
G0048-19A	280-124912-7	06/11/2019 15:43	06/11/2019 15:43
PZ005-19A	280-124912-9	06/11/2019 16:09	06/11/2019 16:09
G0103-19A	280-124912-10	06/11/2019 16:23	06/11/2019 16:23
G0104-19A	280-124912-11	06/11/2019 16:50	06/11/2019 16:50
G0104-19A DU	280-124912-11 DU	06/11/2019 17:03	06/11/2019 17:03
PZ001-19A	280-124912-12	06/11/2019 17:16	06/11/2019 17:16
PZ001-19AMS MS	280-124912-12 MS	06/11/2019 17:30	06/11/2019 17:30
PZ001-19AMSD MSD	280-124912-12 MSD	06/11/2019 17:43	06/11/2019 17:43

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: MB 280-461235/4
Matrix: Water Date Extracted: _____
Lab File ID: (1) 06121904.D Lab File ID: (2) 06121904.D
Date Analyzed: (1) 06/12/2019 08:05 Date Analyzed: (2) 06/12/2019 08:05
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 280-461235/2	06/12/2019 07:39	06/12/2019 07:39
	LCSD 280-461235/3	06/12/2019 07:52	06/12/2019 07:52
G0023-19A	280-124912-8	06/12/2019 08:45	06/12/2019 08:45

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ004-19A Lab Sample ID: 280-124912-1

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

Date Analyzed (1): 06/11/2019 13:15 Date Analyzed (2): 06/11/2019 13:15

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	0.00084		0.7
	2		1.26	1.25	1.33	0.00084		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ004-19A DU Lab Sample ID: 280-124912-1 DU

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

Date Analyzed (1): 06/11/2019 13:28 Date Analyzed (2): 06/11/2019 13:28

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.000909		5.0
	2		1.26	1.25	1.33	0.000864		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ015-19A Lab Sample ID: 280-124912-3

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

Date Analyzed (1): 06/11/2019 13:55 Date Analyzed (2): 06/11/2019 13:55

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	4.1		1.8
	2		1.26	1.25	1.33	4.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0102-19A Lab Sample ID: 280-124912-4

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

Date Analyzed (1): 06/11/2019 14:08 Date Analyzed (2): 06/11/2019 14:08

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		1.68	1.66	1.74	0.0016		2.9
	2		1.26	1.25	1.33	0.0017		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0102-19AMS MS Lab Sample ID: 280-124912-4 MS

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

Date Analyzed (1): 06/11/2019 14:22 Date Analyzed (2): 06/11/2019 14:22

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0587		2.3
	2		1.26	1.25	1.33	0.0601		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0102-19AMSD MSD Lab Sample ID: 280-124912-4 MSD

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

Date Analyzed (1): 06/11/2019 14:35 Date Analyzed (2): 06/11/2019 14:35

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	0.0609		2.5
	2		1.26	1.25	1.33	0.0624		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ007-19A Lab Sample ID: 280-124912-5

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

Date Analyzed (1): 06/11/2019 14:49 Date Analyzed (2): 06/11/2019 14:49

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.00070		4.2
	2		1.26	1.25	1.33	0.00073		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ007-19AMS MS Lab Sample ID: 280-124912-5 MS

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

Date Analyzed (1): 06/11/2019 15:02 Date Analyzed (2): 06/11/2019 15:02

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0629		1.8
	2		1.26	1.25	1.33	0.0640		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ007-19AMSD MSD Lab Sample ID: 280-124912-5 MSD

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

Date Analyzed (1): 06/11/2019 15:16 Date Analyzed (2): 06/11/2019 15:16

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0563		2.1
	2		1.26	1.25	1.33	0.0575		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0049-19A Lab Sample ID: 280-124912-6

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

Date Analyzed (1): 06/11/2019 15:29 Date Analyzed (2): 06/11/2019 15:29

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0036		1.7
	2		1.26	1.25	1.33	0.0037		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0048-19A Lab Sample ID: 280-124912-7

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

Date Analyzed (1): 06/11/2019 15:43 Date Analyzed (2): 06/11/2019 15:43

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	1.4		0.6
	2		1.26	1.25	1.33	1.4		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0023-19A Lab Sample ID: 280-124912-8

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

Date Analyzed (1): 06/12/2019 08:45 Date Analyzed (2): 06/12/2019 08:45

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.69	1.66	1.74	4.3		0.3
	2		1.27	1.24	1.32	4.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ005-19A Lab Sample ID: 280-124912-9

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

Date Analyzed (1): 06/11/2019 16:09 Date Analyzed (2): 06/11/2019 16:09

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	0.00088		1.2
	2		1.26	1.25	1.33	0.00089		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0103-19A Lab Sample ID: 280-124912-10

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

Date Analyzed (1): 06/11/2019 16:23 Date Analyzed (2): 06/11/2019 16:23

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.13		2.4
	2		1.26	1.25	1.33	0.13		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0104-19A Lab Sample ID: 280-124912-11

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

Date Analyzed (1): 06/11/2019 16:50 Date Analyzed (2): 06/11/2019 16:50

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	2.0		1.8
	2		1.27	1.25	1.33	2.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0104-19A DU Lab Sample ID: 280-124912-11 DU

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

Date Analyzed (1): 06/11/2019 17:03 Date Analyzed (2): 06/11/2019 17:03

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	2.48		2.1
	2		1.26	1.25	1.33	2.53		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ001-19A Lab Sample ID: 280-124912-12

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

Date Analyzed (1): 06/11/2019 17:16 Date Analyzed (2): 06/11/2019 17:16

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0016		2.9
	2		1.27	1.25	1.33	0.0017		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ001-19AMS MS Lab Sample ID: 280-124912-12 MS

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

Date Analyzed (1): 06/11/2019 17:30 Date Analyzed (2): 06/11/2019 17:30

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	0.0585		2.4
	2		1.26	1.25	1.33	0.0600		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ001-19AMSD MSD Lab Sample ID: 280-124912-12 MSD

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

Date Analyzed (1): 06/11/2019 17:43 Date Analyzed (2): 06/11/2019 17:43

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0637		2.6
	2		1.26	1.25	1.33	0.0653		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 280-461087/29

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

Date Analyzed (1): 06/11/2019 12:34 Date Analyzed (2): 06/11/2019 12:34

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0757		0.3
	2		1.26	1.25	1.33	0.0755		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 280-461087/30

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

Date Analyzed (1): 06/11/2019 12:48 Date Analyzed (2): 06/11/2019 12:48

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0803		0.4
	2		1.26	1.25	1.33	0.0800		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 280-461235/2

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

Date Analyzed (1): 06/12/2019 07:39 Date Analyzed (2): 06/12/2019 07:39

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.70	1.66	1.74	0.0756		0.1
	2		1.28	1.24	1.32	0.0755		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 280-461235/3

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

Date Analyzed (1): 06/12/2019 07:52 Date Analyzed (2): 06/12/2019 07:52

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		1.70	1.66	1.74	0.0748		0.2
	2		1.28	1.24	1.32	0.0747		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ004-19A Lab Sample ID: 280-124912-1
Matrix: Water Lab File ID: 06111932.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 12:30
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 13:15
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.00084	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111932.D
 Lims ID: 280-124912-H-1
 Client ID: PZ004-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 13:15:05 ALS Bottle#: 32 Worklist Smp#: 32
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-1
 Misc. Info.: 280-0082723-032
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 11-Jun-2019 13:58:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.256	1.285	-0.029	148719	0.8441	
2	1.669	1.703	-0.034	122144	0.8385	
					RPD = 0.67	

2 Ethane

1	1.568	ND
2	2.907	

3 Ethylene

1	1.888	ND
2	2.530	

4 Propane

1	2.640	ND
2	4.694	

5 Acetylene

1	4.064	ND
2	2.675	

6 Butane

1	4.379	ND
2	6.152	

7 isobutylene

1	5.303	ND
2	6.002	

Report Date: 12-Jun-2019 11:59:32

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111932.D

Injection Date: 11-Jun-2019 13:15:05

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-1

Lab Sample ID: 280-124912-1

Worklist Smp#: 32

Client ID: PZ004-19A

Dil. Factor: 1.0000

ALS Bottle#: 32

Purge Vol: 18.000 mL

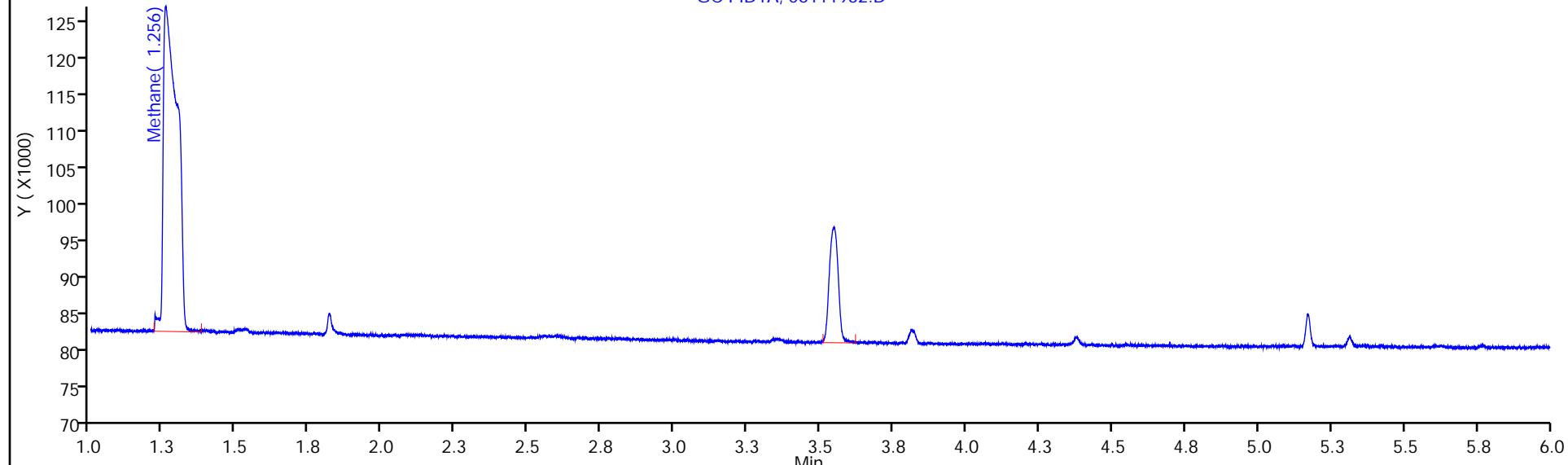
Limit Group: GCV - RSK 175

Method: RSK_J

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

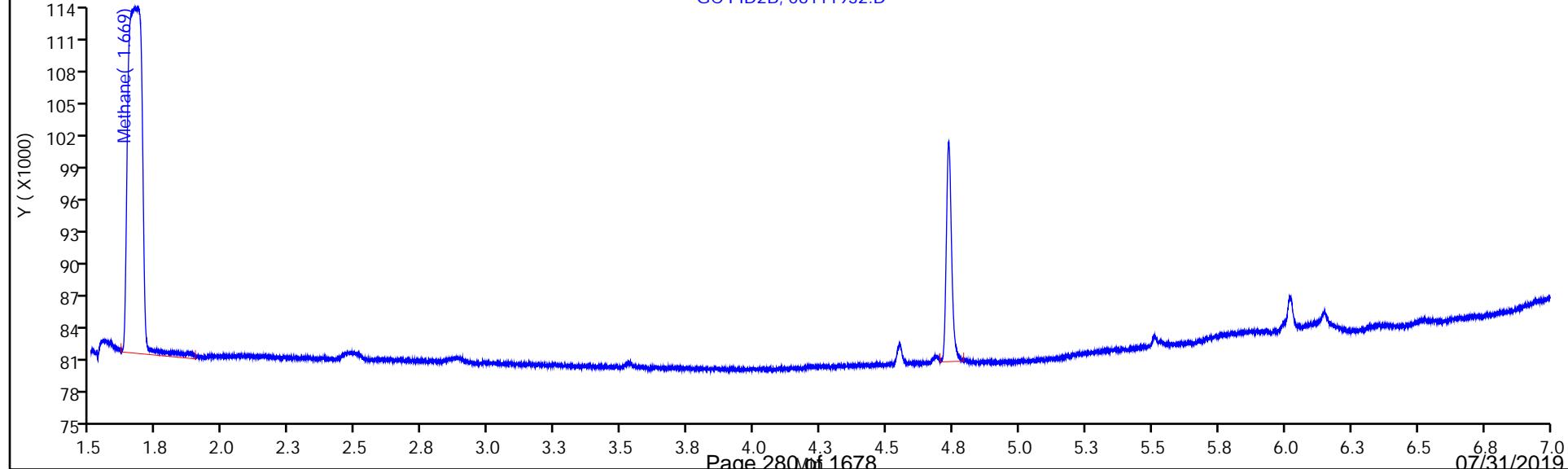
GC FID1A, 06111932.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111932.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: G0044-19A Lab Sample ID: 280-124912-2
Matrix: Water Lab File ID: 06111934.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 16:00
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 13:41
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.: 461087 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: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111934.D
 Lims ID: 280-124912-H-2
 Client ID: G0044-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 13:41:55 ALS Bottle#: 34 Worklist Smp#: 34
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-2
 Misc. Info.: 280-0082723-034
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 11-Jun-2019 13:58:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane						
1	1.285				ND	
2	1.703					
2 Ethane						
1	1.568				ND	
2	2.907					
3 Ethylene						
1	1.888				ND	
2	2.530					
4 Propane						
1	2.640				ND	
2	4.694					
5 Acetylene						
1	4.064				ND	
2	2.675					
6 Butane						
1	4.379				ND	
2	6.152					
7 isobutylene						
1	5.303				ND	
2	6.002					

Report Date: 12-Jun-2019 11:59:35

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111934.D

Injection Date: 11-Jun-2019 13:41:55

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-2

Lab Sample ID: 280-124912-2

Worklist Smp#: 34

Client ID: G0044-19A

Dil. Factor: 1.0000

ALS Bottle#: 34

Purge Vol: 18.000 mL

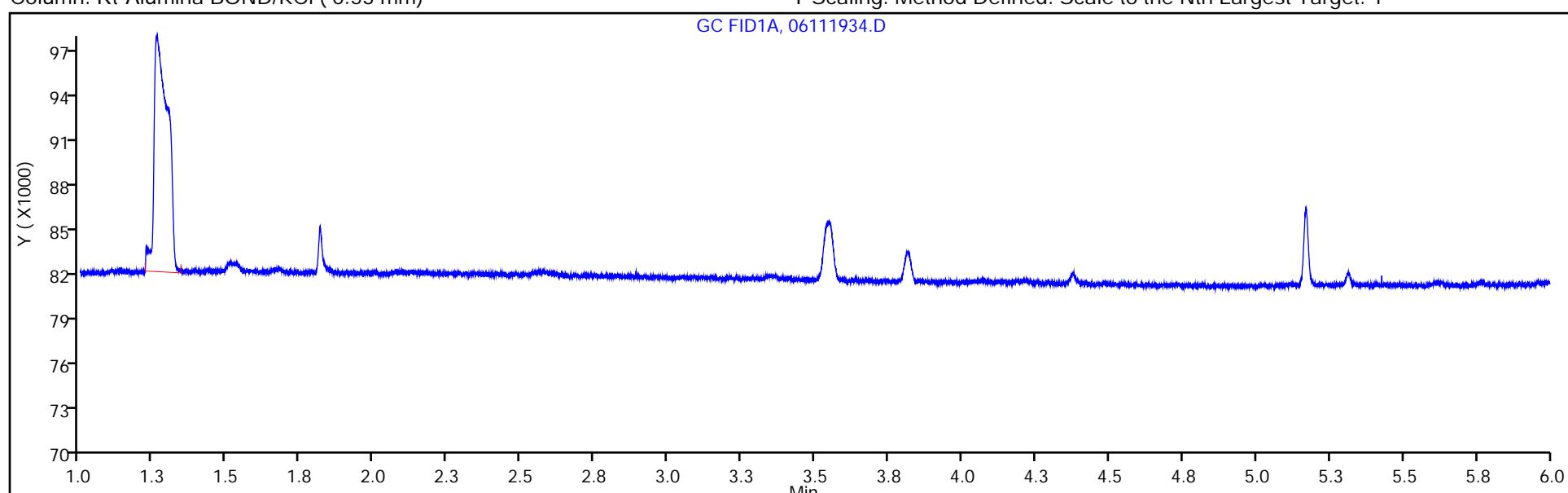
Limit Group: GCV - RSK 175

Method: RSK_J

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

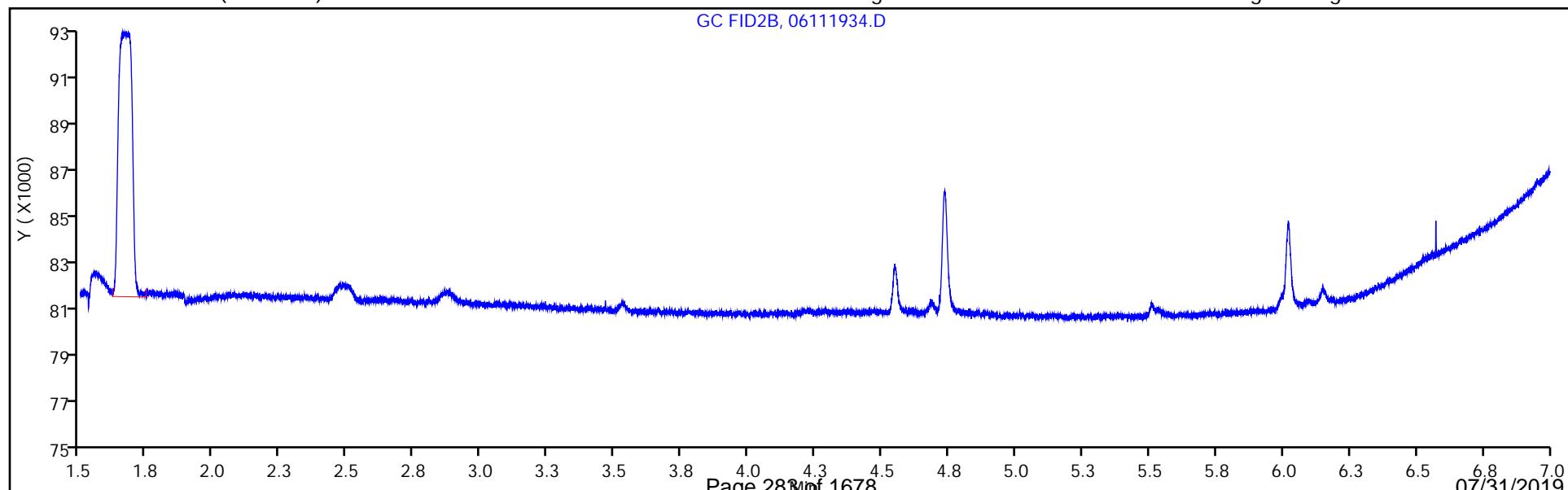
GC FID1A, 06111934.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111934.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ015-19A Lab Sample ID: 280-124912-3
Matrix: Water Lab File ID: 06111935.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 16:25
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 13:55
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	4.1		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111935.D
 Lims ID: 280-124912-H-3
 Client ID: PZ015-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 13:55:26 ALS Bottle#: 35 Worklist Smp#: 35
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-3
 Misc. Info.: 280-0082723-035
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:38:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.258	1.285	-0.027	561709761	4193.5	
2	1.677	1.703	-0.026	471872502	4119.1	
					RPD = 1.79	

2 Ethane

1	1.568	ND
2	2.907	

3 Ethylene

1	1.888	ND
2	2.530	

4 Propane

1	2.640	ND
2	4.694	

5 Acetylene

1	4.064	ND
2	2.675	

6 Butane

1	4.379	ND
2	6.152	

7 isobutylene

1	5.303	ND
2	6.002	

Report Date: 12-Jun-2019 11:59:36

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111935.D

Injection Date: 11-Jun-2019 13:55:26

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-3

Lab Sample ID: 280-124912-3

Worklist Smp#: 35

Client ID: PZ015-19A

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 35

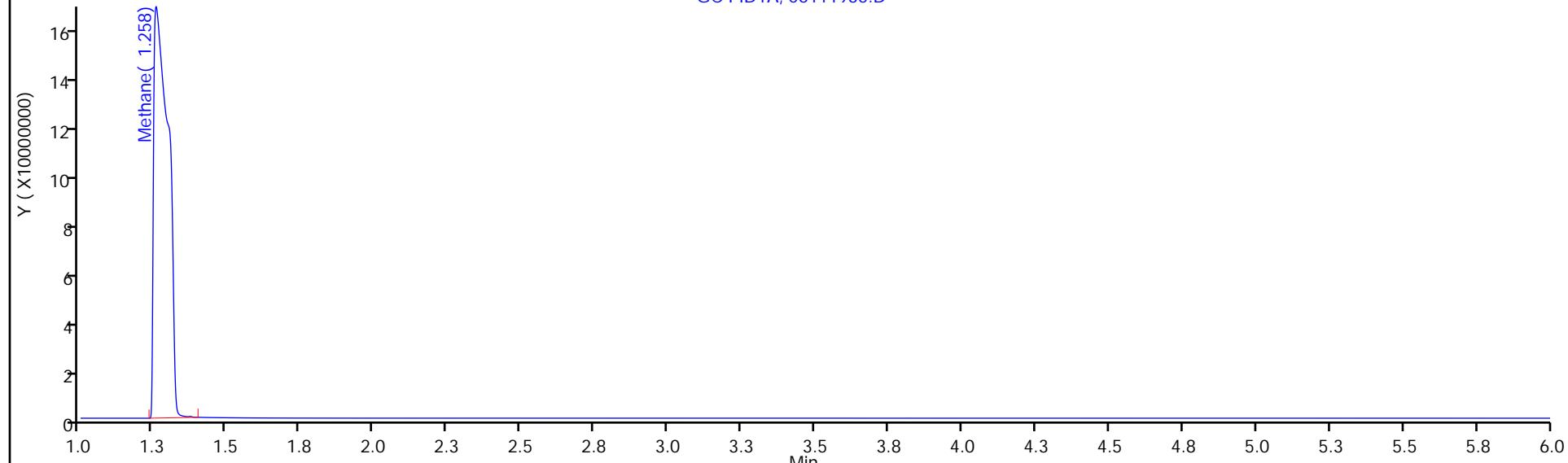
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

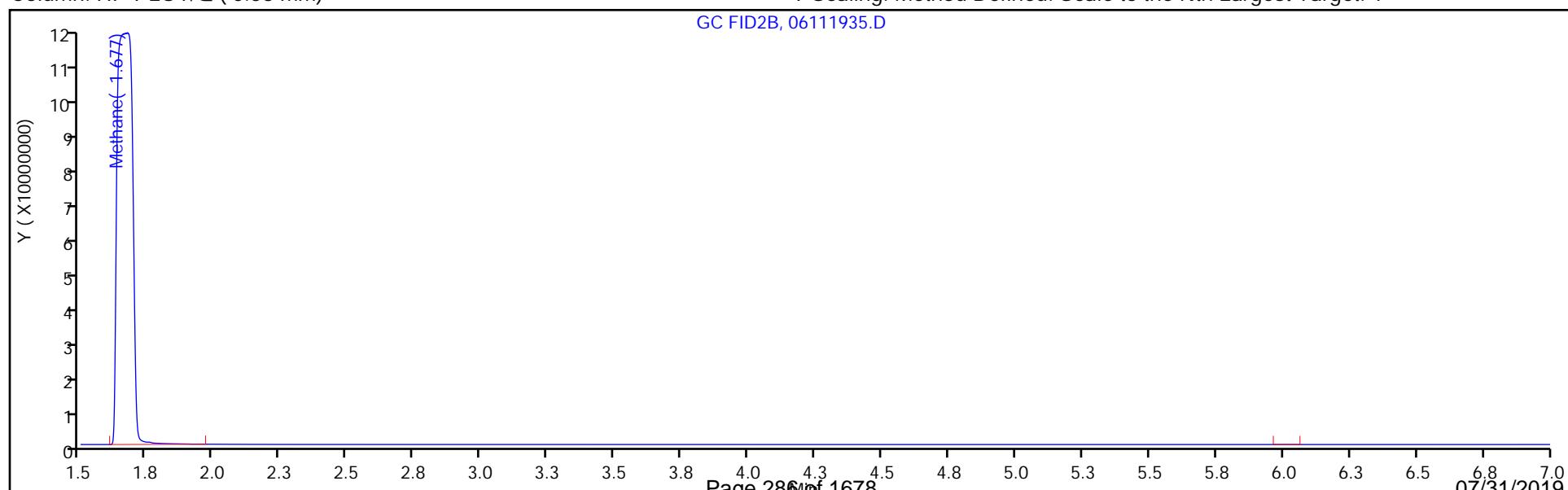
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID1A, 06111935.D



Column: HP-PLOT/Q (0.53 mm)

GC FID2B, 06111935.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: G0102-19A Lab Sample ID: 280-124912-4
Matrix: Water Lab File ID: 06111936.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 11:25
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 14:08
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0016	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111936.D
 Lims ID: 280-124912-H-4
 Client ID: G0102-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 14:08:47 ALS Bottle#: 36 Worklist Smp#: 36
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-4
 Misc. Info.: 280-0082723-036
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:38:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.260	1.285	-0.025	261645	1.69	
2	1.681	1.703	-0.022	213800	1.64	
					RPD = 2.92	

2 Ethane

1	1.568	ND
2	2.907	

3 Ethylene

1	1.888	ND
2	2.530	

4 Propane

1	2.640	ND
2	4.694	

5 Acetylene

1	4.064	ND
2	2.675	

6 Butane

1	4.379	ND
2	6.152	

7 isobutylene

1	5.303	ND
2	6.002	

Report Date: 12-Jun-2019 11:59:37

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111936.D

Injection Date: 11-Jun-2019 14:08:47

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-4

Lab Sample ID: 280-124912-4

Worklist Smp#: 36

Client ID: G0102-19A

Dil. Factor: 1.0000

ALS Bottle#: 36

Purge Vol: 18.000 mL

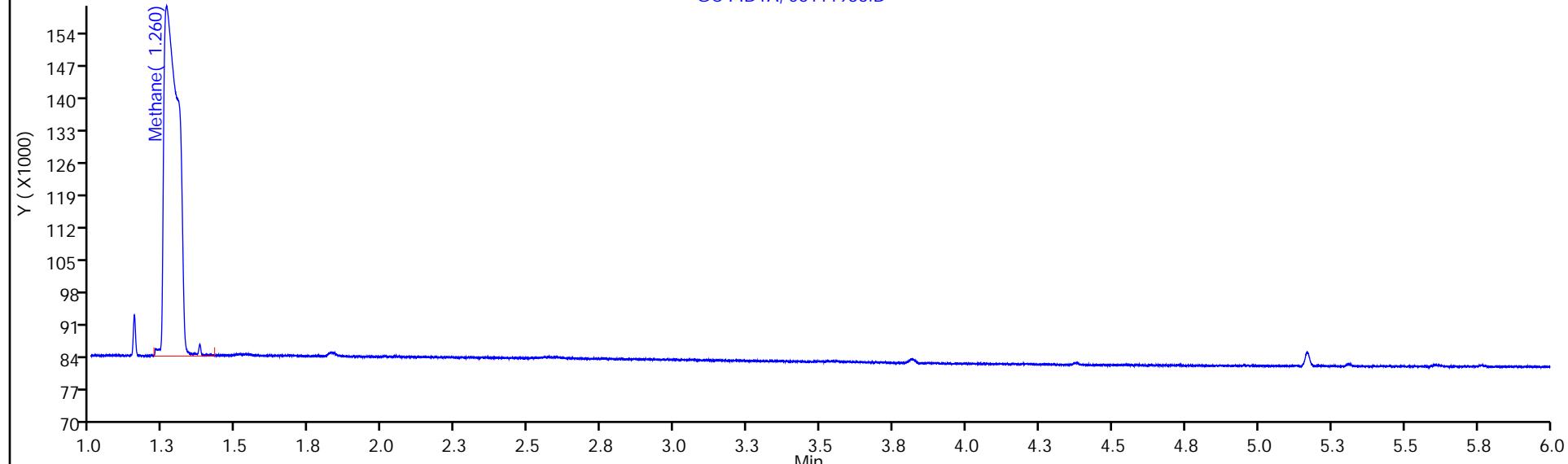
Limit Group: GCV - RSK 175

Method: RSK_J

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

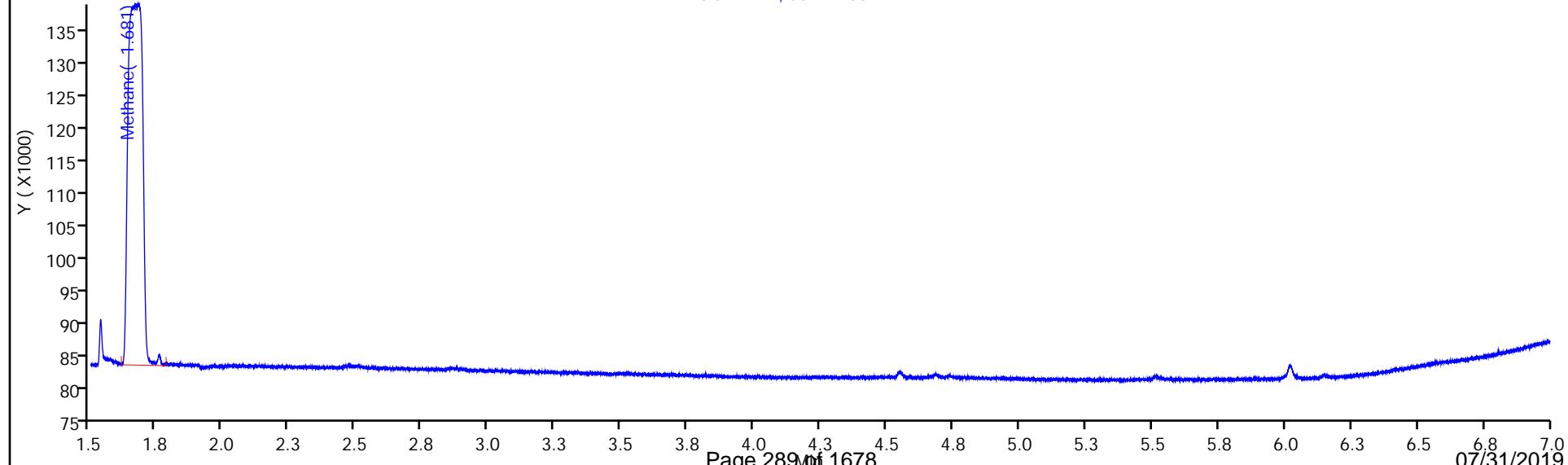
GC FID1A, 06111936.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111936.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ007-19A Lab Sample ID: 280-124912-5
Matrix: Water Lab File ID: 06111939.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 10:15
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 14:49
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.00070	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111939.D
 Lims ID: 280-124912-H-5
 Client ID: PZ007-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 14:49:07 ALS Bottle#: 39 Worklist Smp#: 39
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-5
 Misc. Info.: 280-0082723-039
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:39:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.260	1.285	-0.025	133112	0.7276
2	1.677	1.703	-0.026	105981	0.6974

RPD = 4.24

2 Ethane

1		1.568			ND
2		2.907			

3 Ethylene

1		1.888			ND
2		2.530			

4 Propane

1		2.640			ND
2		4.694			

5 Acetylene

1		4.064			ND
2		2.675			

6 Butane

1		4.379			ND
2		6.152			

7 isobutylene

1		5.303			ND
2		6.002			

Report Date: 12-Jun-2019 11:59:41

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111939.D

Injection Date: 11-Jun-2019 14:49:07

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-5

Lab Sample ID: 280-124912-5

Worklist Smp#: 39

Client ID: PZ007-19A

Dil. Factor: 1.0000

ALS Bottle#: 39

Purge Vol: 18.000 mL

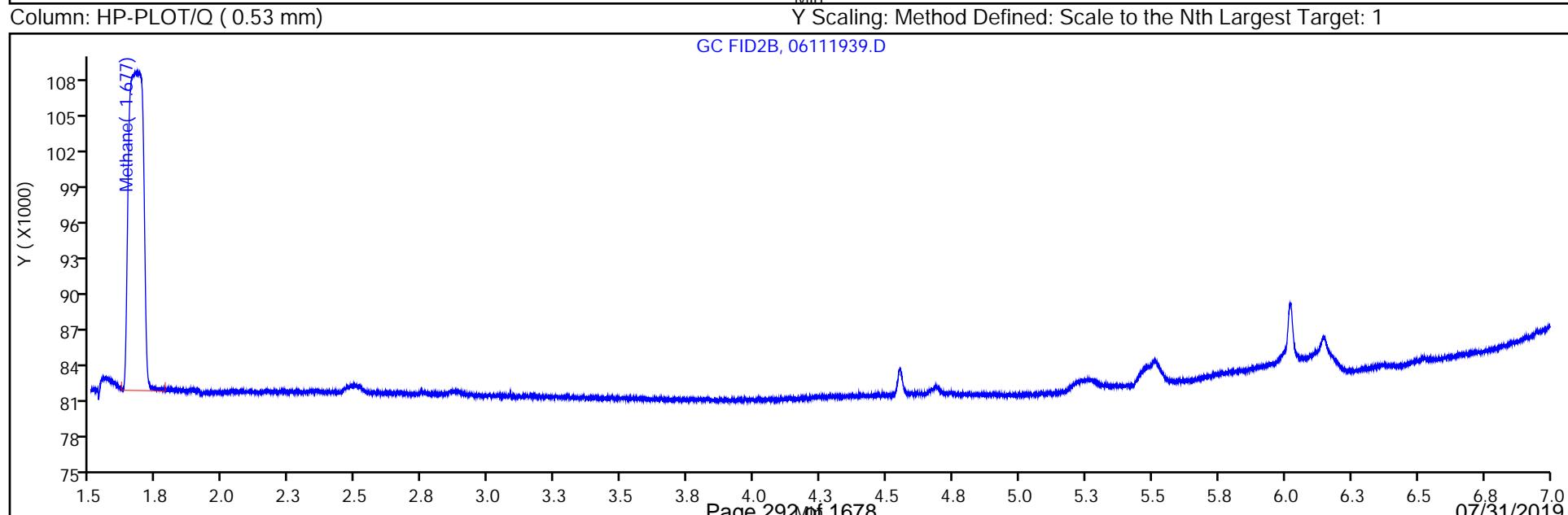
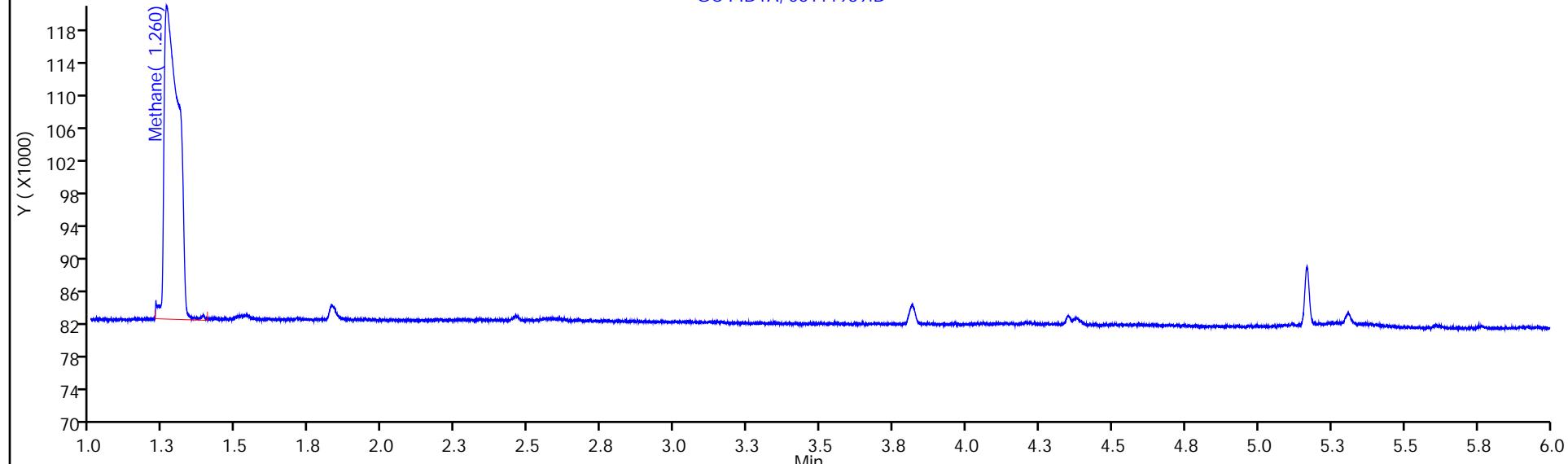
Limit Group: GCV - RSK 175

Method: RSK_J

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID1A, 06111939.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: G0049-19A Lab Sample ID: 280-124912-6
Matrix: Water Lab File ID: 06111942.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 12:30
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 15:29
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0036	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111942.D
 Lims ID: 280-124912-H-6
 Client ID: G0049-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 15:29:29 ALS Bottle#: 42 Worklist Smp#: 42
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-6
 Misc. Info.: 280-0082723-042
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:45:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.261	1.285	-0.024	528677	3.68
2	1.682	1.703	-0.021	440760	3.62

RPD = 1.67

2 Ethane

1	1.568	ND
2	2.907	

3 Ethylene

1	1.888	ND
2	2.530	

4 Propane

1	2.640	ND
2	4.694	

5 Acetylene

1	4.064	ND
2	2.675	

6 Butane

1	4.379	ND
2	6.152	

7 isobutylene

1	5.303	ND
2	6.002	

Report Date: 12-Jun-2019 11:59:45

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111942.D

Injection Date: 11-Jun-2019 15:29:29

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-6

Lab Sample ID: 280-124912-6

Worklist Smp#: 42

Client ID: G0049-19A

Dil. Factor: 1.0000

ALS Bottle#: 42

Purge Vol: 18.000 mL

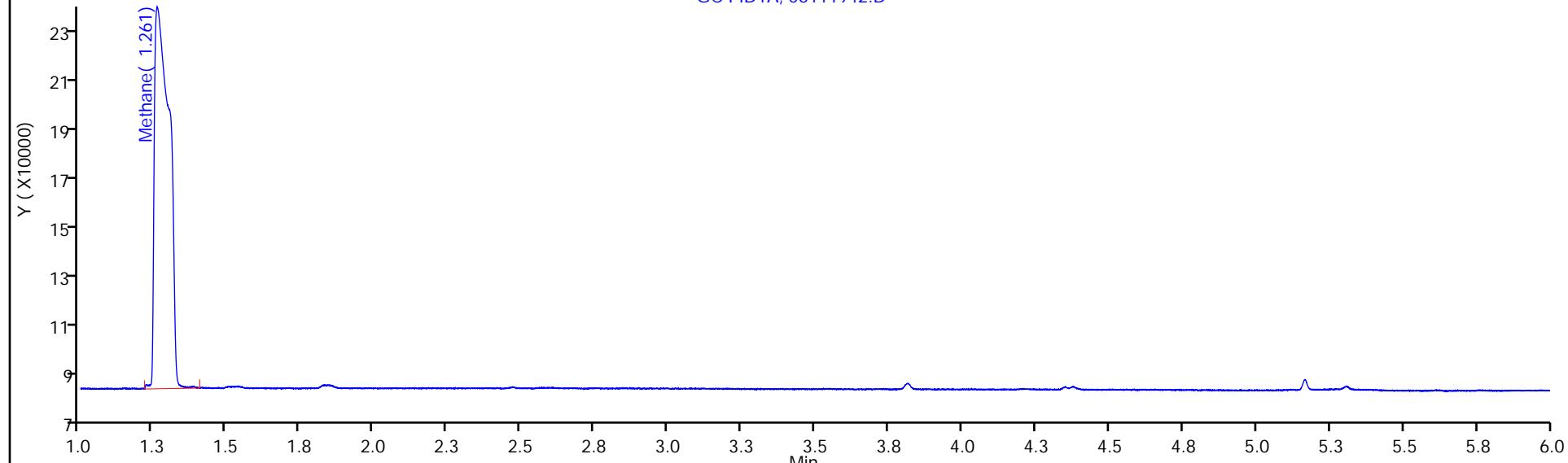
Limit Group: GCV - RSK 175

Method: RSK_J

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

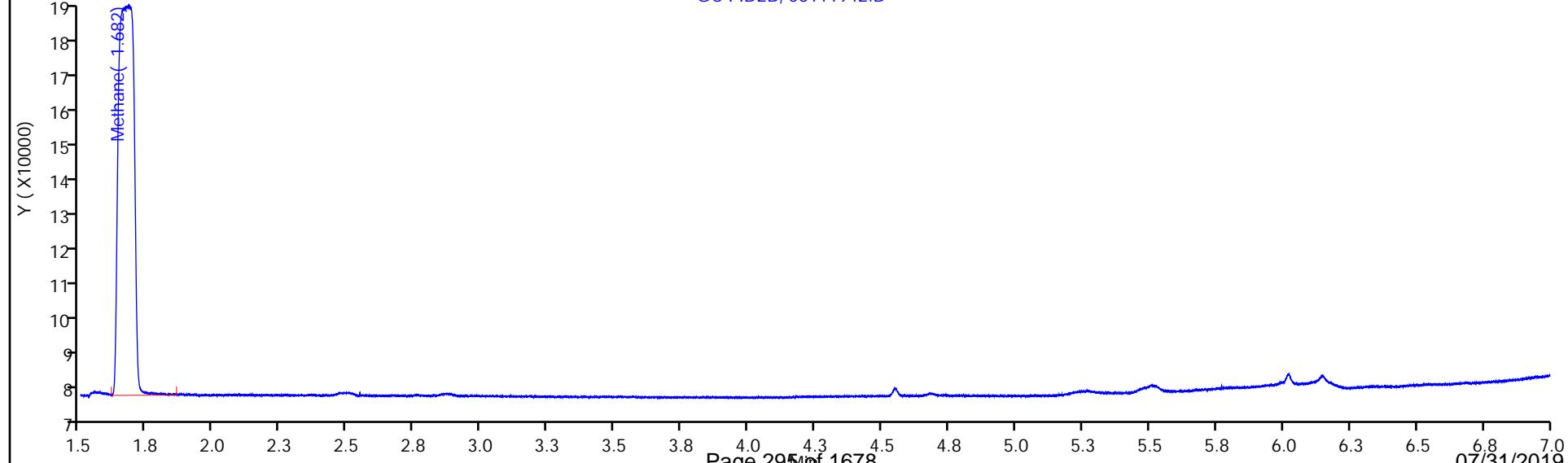
GC FID1A, 06111942.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111942.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: G0048-19A Lab Sample ID: 280-124912-7
Matrix: Water Lab File ID: 06111943.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 13:40
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 15:43
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	1.4		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111943.D
 Lims ID: 280-124912-H-7
 Client ID: G0048-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 15:43:00 ALS Bottle#: 43 Worklist Smp#: 43
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-7
 Misc. Info.: 280-0082723-043
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:45:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.262	1.285	-0.023	188204319	1404.9	
2	1.682	1.703	-0.021	159952769	1396.1	
					RPD = 0.63	

2 Ethane

1	1.568	ND
2	2.907	

3 Ethylene

1	1.888	ND
2	2.530	

4 Propane

1	2.640	ND
2	4.694	

5 Acetylene

1	4.064	ND
2	2.675	

6 Butane

1	4.379	ND
2	6.152	

7 isobutylene

1	5.303	ND
2	6.002	

Report Date: 12-Jun-2019 11:59:46

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111943.D

Injection Date: 11-Jun-2019 15:43:00

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-7

Lab Sample ID: 280-124912-7

Worklist Smp#: 43

Client ID: G0048-19A

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

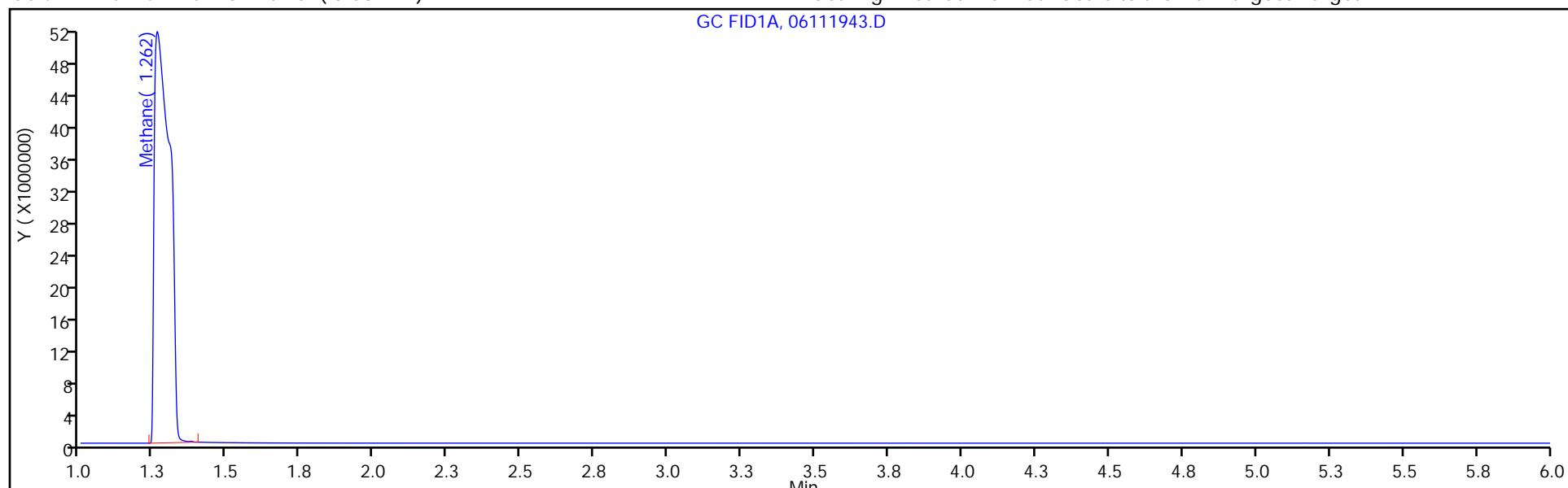
ALS Bottle#: 43

Method: RSK_J

Limit Group: GCV - RSK 175

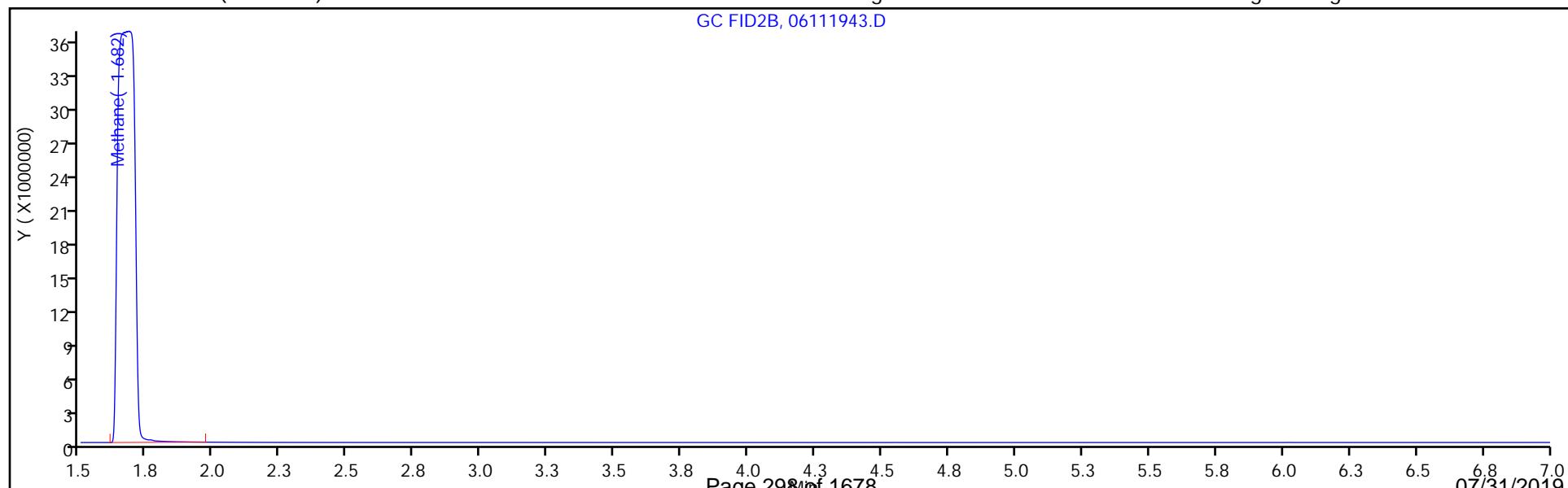
Column: Rt-Alumina BOND/KCl (0.53 mm)

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.: 280-124912-1
SDG No.:
Client Sample ID: G0023-19A Lab Sample ID: 280-124912-8
Matrix: Water Lab File ID: 06121907.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 15:00
Sample wt/vol: 18 (mL) Date Analyzed: 06/12/2019 08:45
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.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	4.3	D	0.015	0.0060	0.0019

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121907.D
 Lims ID: 280-124912-G-8
 Client ID: G0023-19A
 Sample Type: Client
 Inject. Date: 12-Jun-2019 08:45:28 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 18.000 mL Dil. Factor: 3.0000
 Sample Info: 280-124912-G-8
 Misc. Info.: 280-0082760-007
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0315

First Level Reviewer: dobransky Date: 12-Jun-2019 09:15:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.266	1.280	-0.014	190784119	1424.2	
2	1.688	1.703	-0.015	162621252	1419.4	
					RPD = 0.33	

2 Ethane

1	1.562	ND
2	2.896	

3 Ethylene

1	1.885	ND
2	2.524	

4 Propane

1	2.633	ND
2	4.690	

5 Acetylene

1	4.064	ND
2	2.669	

6 Butane

1	4.377	ND
2	6.149	

7 isobutylene

1	5.303	ND
2	6.000	

Report Date: 13-Jun-2019 10:15:43

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190612-82760.b\\06121907.D

Injection Date: 12-Jun-2019 08:45:28

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-G-8

Lab Sample ID: 280-124912-8

Worklist Smp#: 7

Client ID: G0023-19A

Purge Vol: 18.000 mL

Dil. Factor: 3.0000

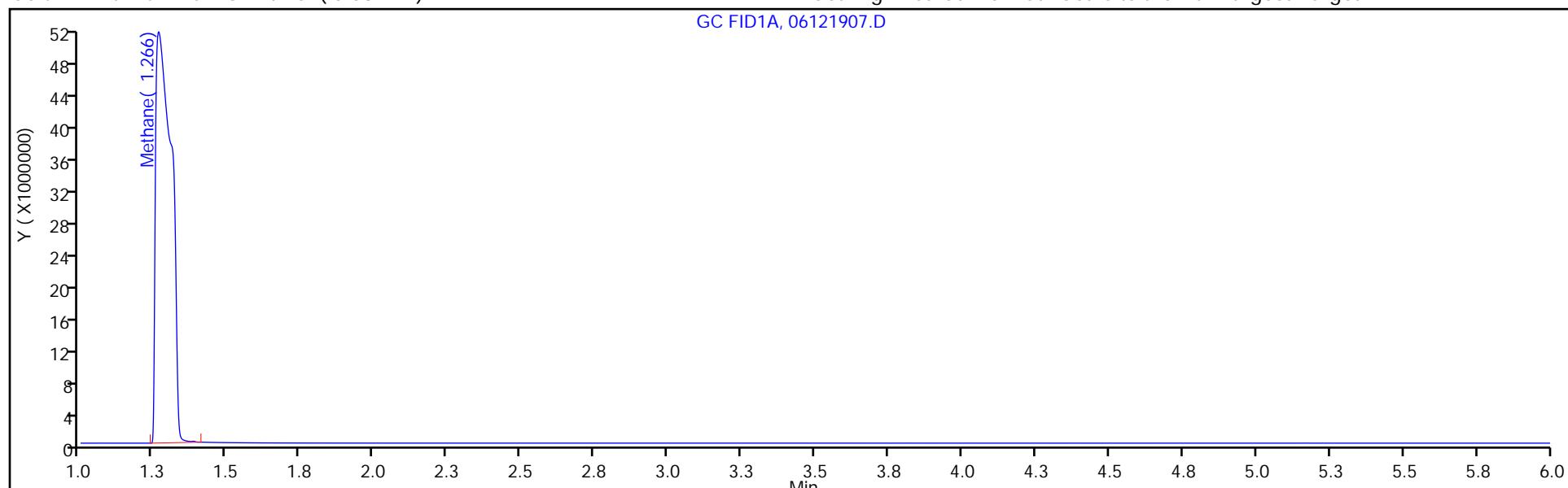
ALS Bottle#: 7

Method: RSK_J

Limit Group: GCV - RSK 175

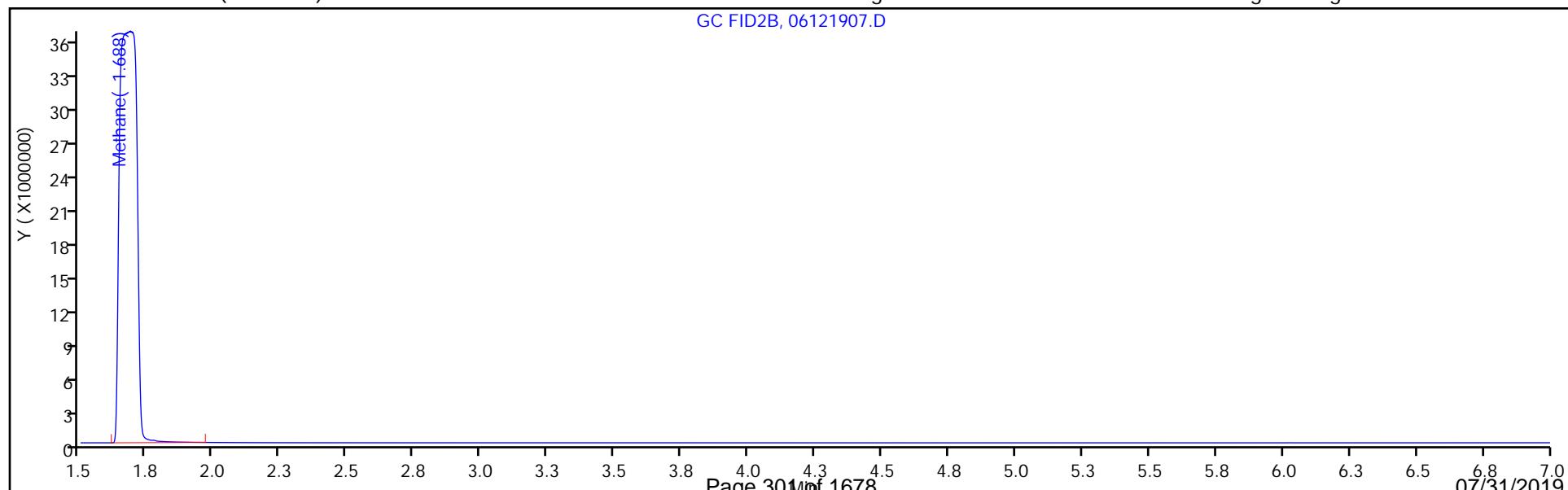
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ005-19A Lab Sample ID: 280-124912-9
Matrix: Water Lab File ID: 06111945.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 09:30
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 16:09
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.00088	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111945.D
 Lims ID: 280-124912-G-9
 Client ID: PZ005-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 16:09:49 ALS Bottle#: 45 Worklist Smp#: 45
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-G-9
 Misc. Info.: 280-0082723-045
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:46:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.261	1.285	-0.024	154635	0.8883	
2	1.674	1.703	-0.029	126638	0.8777	
					RPD = 1.20	

2 Ethane

1	1.568	ND
2	2.907	

3 Ethylene

1	1.888	ND
2	2.530	

4 Propane

1	2.640	ND
2	4.694	

5 Acetylene

1	4.064	ND
2	2.675	

6 Butane

1	4.379	ND
2	6.152	

7 isobutylene

1	5.303	ND
2	6.002	

Report Date: 12-Jun-2019 11:59:49

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111945.D

Injection Date: 11-Jun-2019 16:09:49

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-G-9

Lab Sample ID: 280-124912-9

Worklist Smp#: 45

Client ID: PZ005-19A

Dil. Factor: 1.0000

ALS Bottle#: 45

Purge Vol: 18.000 mL

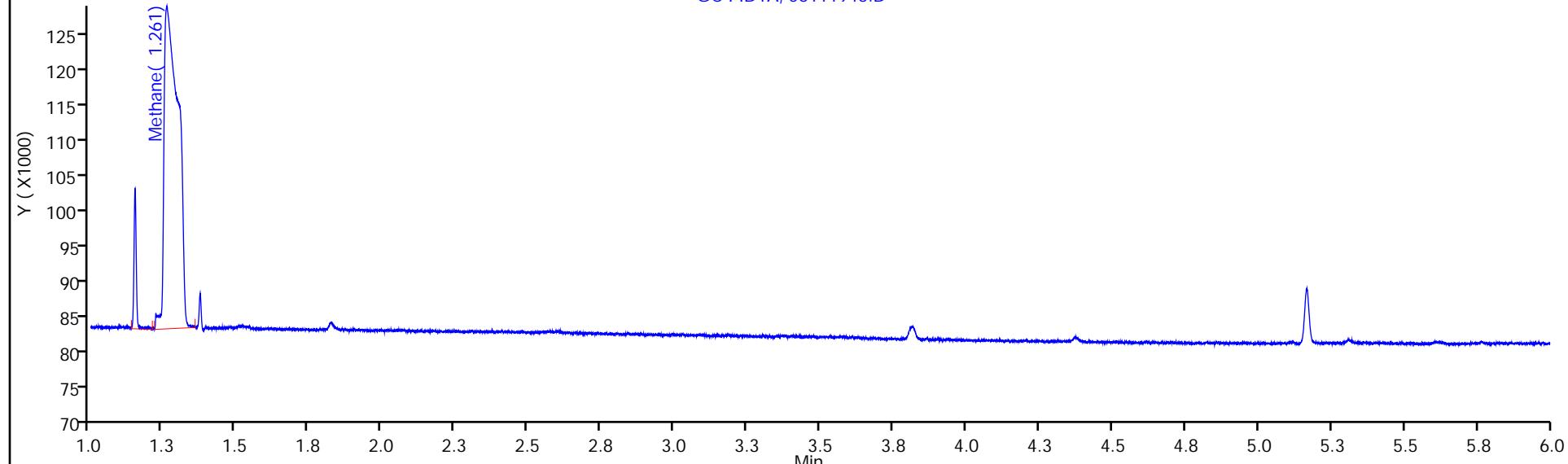
Limit Group: GCV - RSK 175

Method: RSK_J

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

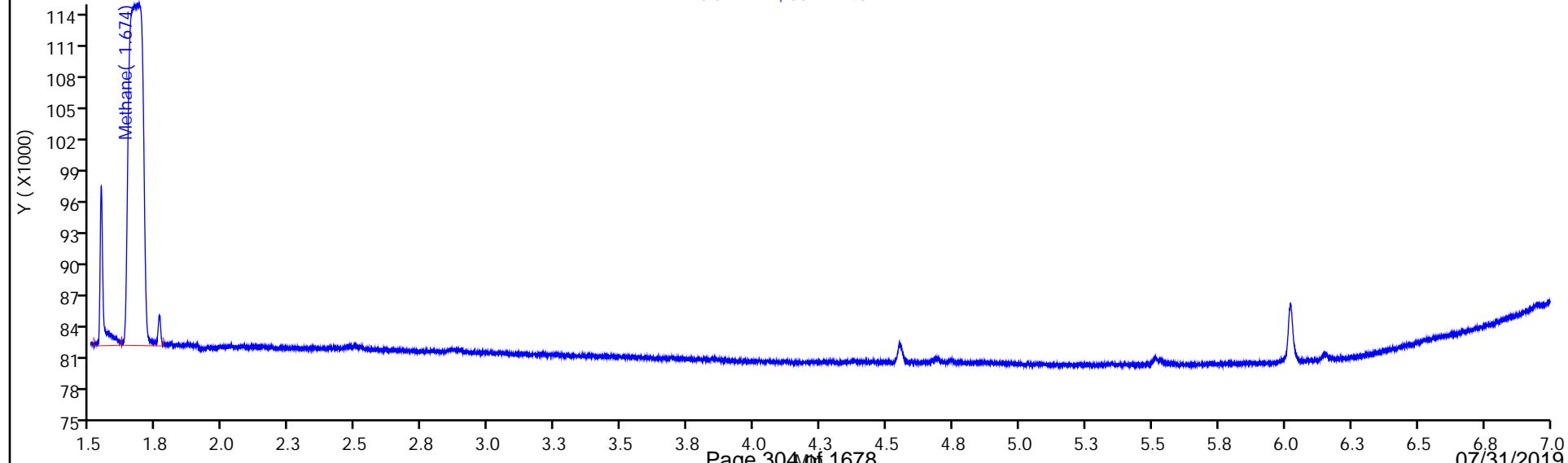
GC FID1A, 06111945.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111945.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: G0103-19A Lab Sample ID: 280-124912-10
Matrix: Water Lab File ID: 06111946.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 13:10
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 16:23
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.13		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111946.D
 Lims ID: 280-124912-H-10
 Client ID: G0103-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 16:23:11 ALS Bottle#: 46 Worklist Smp#: 46
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-10
 Misc. Info.: 280-0082723-046
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:46:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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1 Methane

1	1.261	1.285	-0.024	17871027	133.2	
2	1.681	1.703	-0.022	14921290	130.0	
					RPD = 2.38	

2 Ethane

1	1.568	ND
2	2.907	

3 Ethylene

1	1.888	ND
2	2.530	

4 Propane

1	2.640	ND
2	4.694	

5 Acetylene

1	4.064	ND
2	2.675	

6 Butane

1	4.379	ND
2	6.152	

7 isobutylene

1	5.303	ND
2	6.002	

Report Date: 12-Jun-2019 11:59:50

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111946.D

Injection Date: 11-Jun-2019 16:23:11

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-10

Lab Sample ID: 280-124912-10

Worklist Smp#: 46

Client ID: G0103-19A

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 46

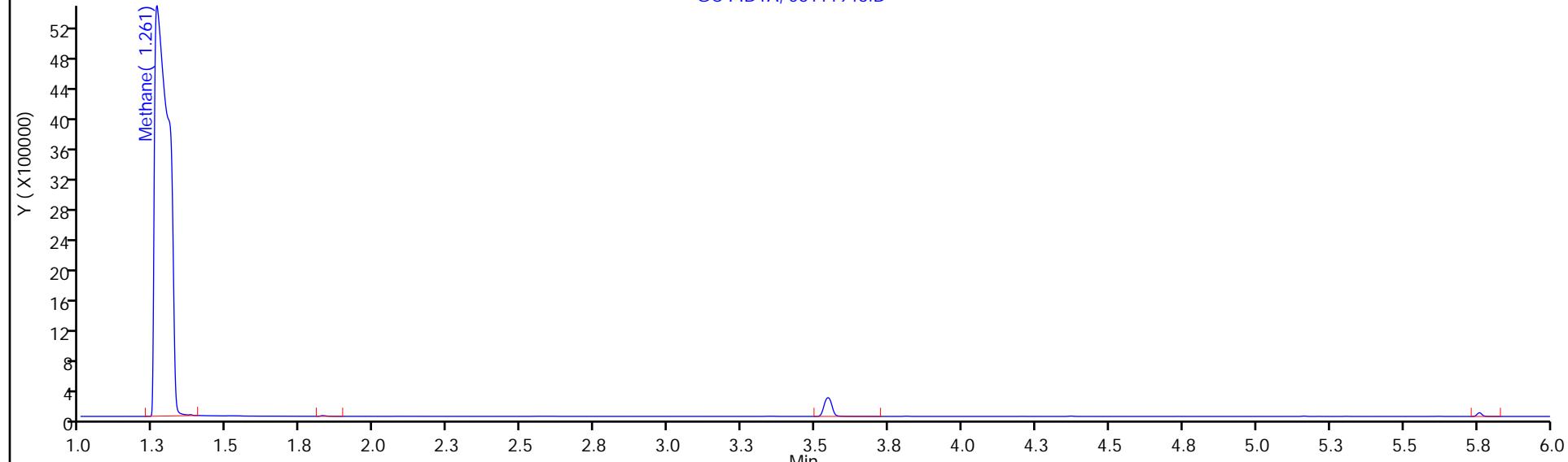
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

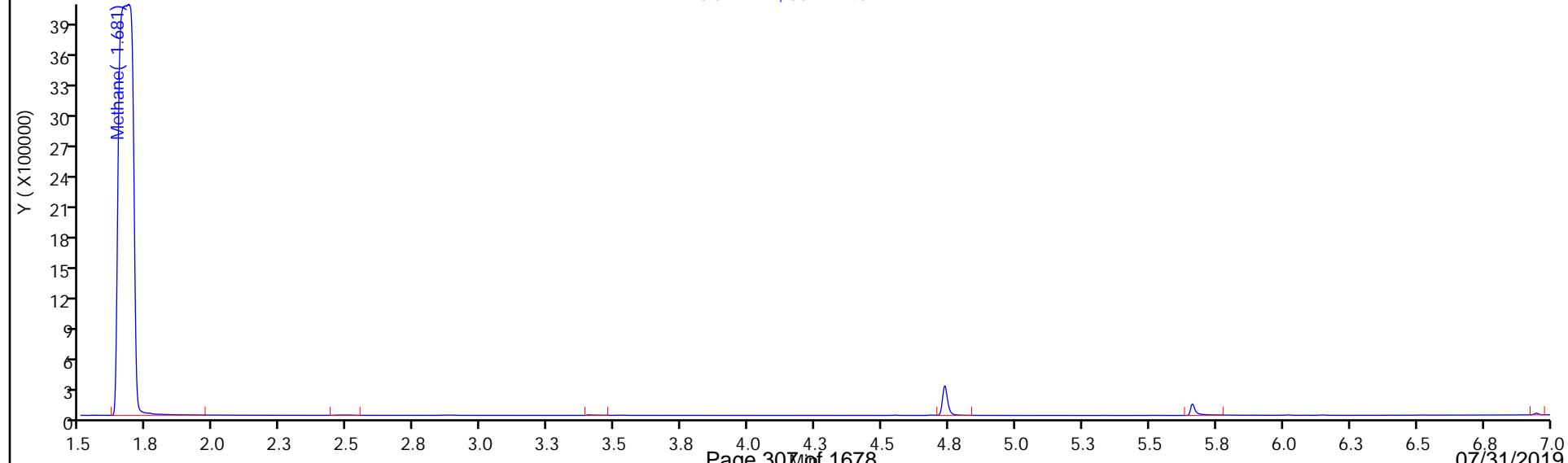
GC FID1A, 06111946.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111946.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: G0104-19A Lab Sample ID: 280-124912-11
Matrix: Water Lab File ID: 06111948.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 14:30
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 16:50
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	2.0		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111948.D
 Lims ID: 280-124912-H-11
 Client ID: G0104-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 16:50:00 ALS Bottle#: 48 Worklist Smp#: 48
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-11
 Misc. Info.: 280-0082723-048
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:46:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	----------------	-------

1 Methane						
1	1.265	1.285	-0.020	279177995	2084.1	
2	1.679	1.703	-0.024	234570861	2047.5	
RPD = 1.77						
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

Report Date: 12-Jun-2019 11:59:53

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111948.D

Injection Date: 11-Jun-2019 16:50:00

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-11

Lab Sample ID: 280-124912-11

Worklist Smp#: 48

Client ID: G0104-19A

Dil. Factor: 1.0000

ALS Bottle#: 48

Purge Vol: 18.000 mL

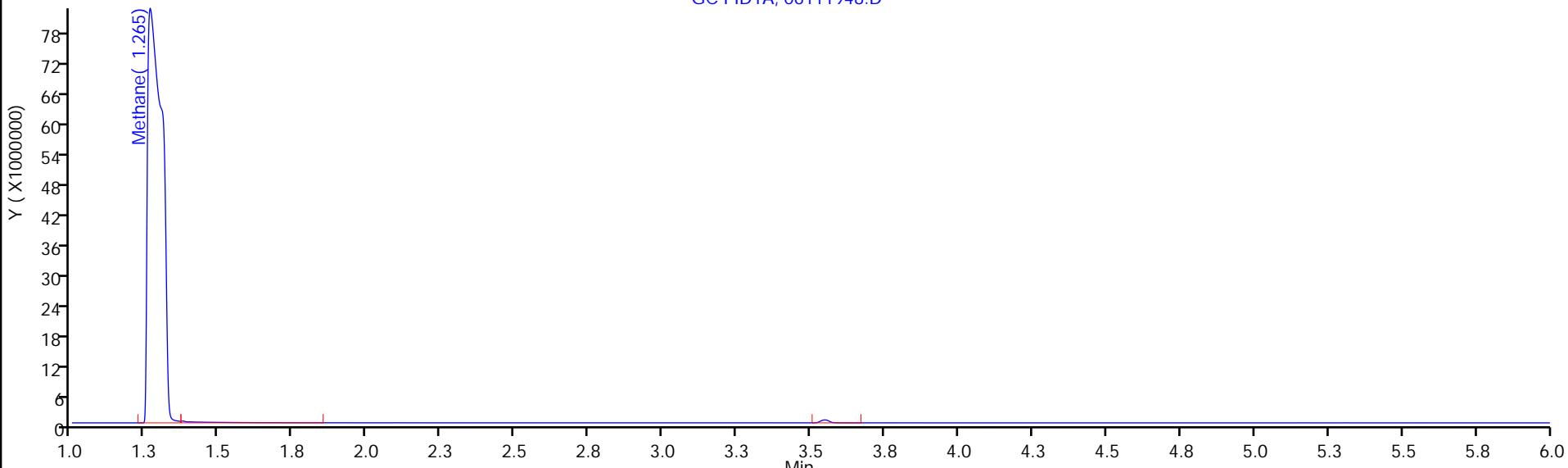
Limit Group: GCV - RSK 175

Method: RSK_J

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

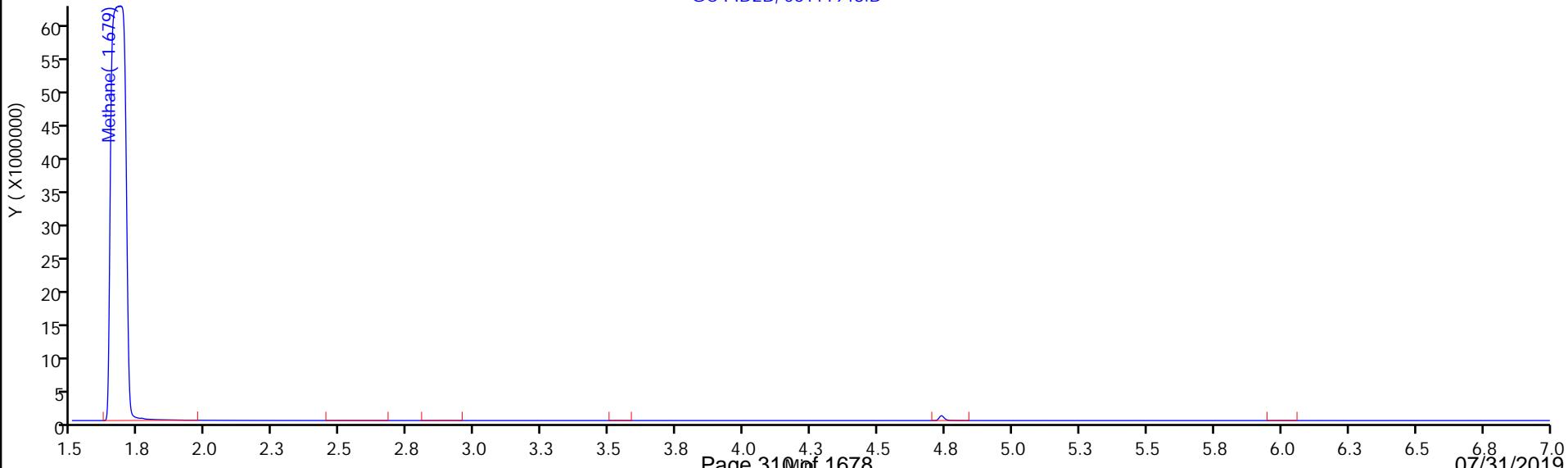
GC FID1A, 06111948.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111948.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ001-19A Lab Sample ID: 280-124912-12
Matrix: Water Lab File ID: 06111950.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 14:05
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 17:16
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0016	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111950.D
 Lims ID: 280-124912-H-12
 Client ID: PZ001-19A
 Sample Type: Client
 Inject. Date: 11-Jun-2019 17:16:39 ALS Bottle#: 50 Worklist Smp#: 50
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-12
 Misc. Info.: 280-0082723-050
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:47:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	----------------	-------

1 Methane						
1	1.265	1.285	-0.020	258794	1.67	
2	1.679	1.703	-0.024	211533	1.62	
RPD = 2.87						
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

Report Date: 12-Jun-2019 11:59:56

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111950.D

Injection Date: 11-Jun-2019 17:16:39

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-12

Lab Sample ID: 280-124912-12

Worklist Smp#: 50

Client ID: PZ001-19A

Dil. Factor: 1.0000

ALS Bottle#: 50

Purge Vol: 18.000 mL

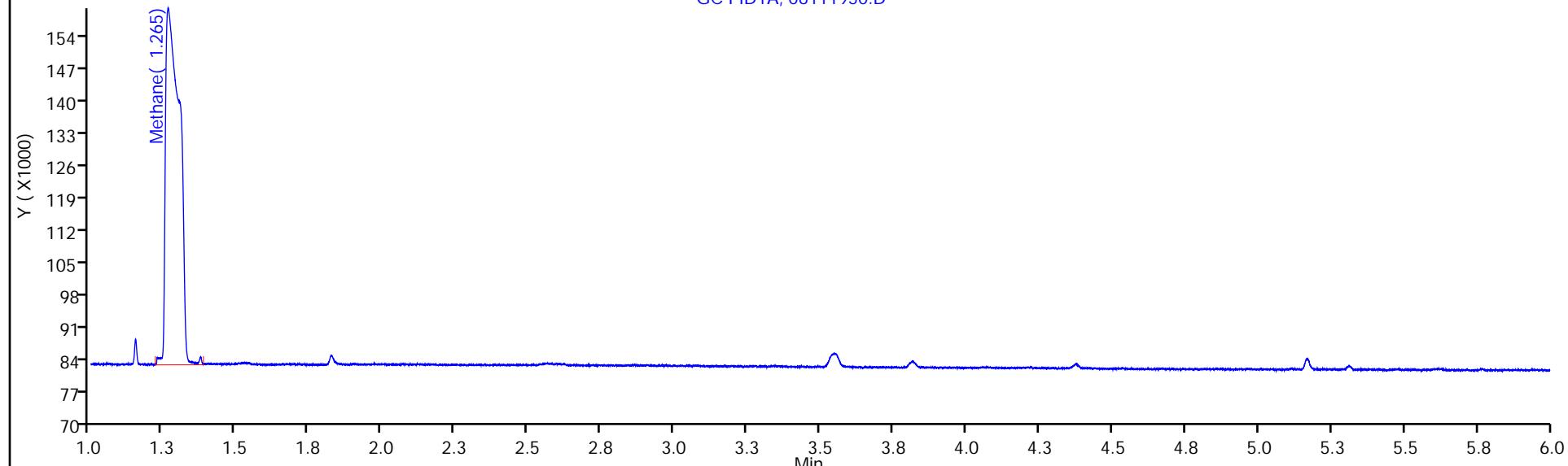
Limit Group: GCV - RSK 175

Method: RSK_J

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

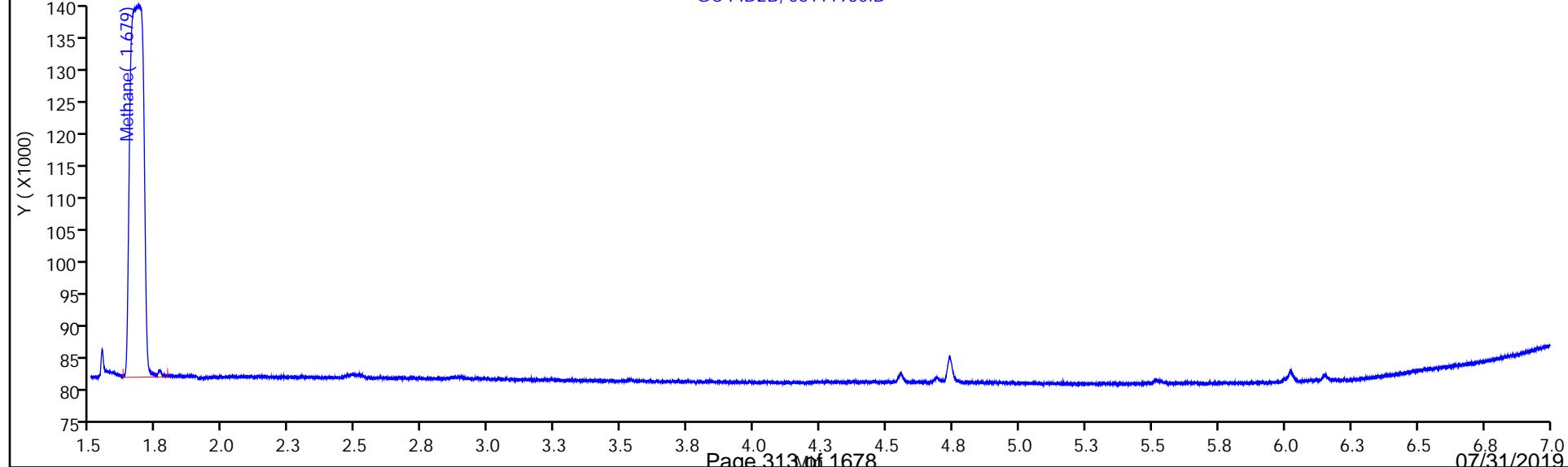
GC FID1A, 06111950.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111950.D



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 454595

SDG No.: _____

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36051

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.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	1.278	1.279	1.278	1.275	1.271	1.267	1.263	1.265	1.263	1.231 - 1.311	1.271
Ethane	1.543	1.556	1.563	1.544	1.556	1.549	1.549			1.506 - 1.606	1.551
Ethylene	1.877	1.890	1.889	1.885	1.880	1.866	1.870			1.830 - 1.930	1.880
Acetylene	4.091	4.095	4.094	4.089	4.078	4.070	4.057			3.998 - 4.158	4.082

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 454595

SDG No.: _____

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36051

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.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	204398 131881 131842	184432 123000	160460 138803	145282 125426	Lin2	35657.0530	133937.900							0.9950		0.9900
Ethane	106648 126474	133252 117971	131481 131045	137677	Ave		126364.118				8.4		20.0			
Ethylene	92446 106296	109949 99762	109227 107387	115582	Ave		105806.995				7.1		20.0			
Acetylene	26743 33864	32134 32487	32468 33051	34153	Ave		32128.5566				7.8		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.: 280-124912-1 Analy Batch No.: 454595

SDG No.: _____

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36051

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.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	93261 17958876	168302 40532226	292852 226637342	2121207 952923785	9627756	0.456 146	0.913 292	1.83 1807	14.6 7228	73.0
Ethane	Ave	91221 32290083	227953 71736807	449849	3768385	17308693	0.855 274	1.71 547	3.42	27.4	137
Ethylene	Ave	73764 25472652	175461 54838846	348615	2951189	13570482	0.798 255	1.60 511	3.19	25.5	128
Acetylene	Ave	19810 7700889	47607 15668916	96205	809586	4013672	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: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-Apr-2019 10:23:57 ALS Bottle#: 1 Worklist Smp#: 1
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L1
 Misc. Info.: 280-0080933-001
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:50 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.278	1.271	0.007	93261	0.4563	0.4301	
2	1.692	1.692	0.000	75515	0.4563	0.4314	
RPD = 0.31							
2 Ethane							
1	1.543	1.556	-0.013	91221	0.8553	0.7219	
2	2.890	2.889	0.001	77042	0.8553	0.7173	
RPD = 0.64							
3 Ethylene							
1	1.877	1.880	-0.003	73764	0.7979	0.6972	
2	2.514	2.512	0.002	61480	0.7979	0.6831	
RPD = 2.04							
4 Propane							
1	2.651	2.632	0.019	147932	1.25	1.09	
2	4.691	4.687	0.004	125161	1.25	1.09	
RPD = 0.25							
5 Acetylene							
1	4.091	4.078	0.013	19810	0.7408	0.6166	
2	2.667	2.652	0.015	18179	0.7408	0.6418	
RPD = 4.01							
6 Butane							
1	4.410	4.381	0.029	211953	1.65	1.51	M
2	6.155	6.146	0.009	195662	1.65	1.63	M
RPD = 7.68							
7 isobutylene							
1	5.333	5.311	0.022	147116	1.60	1.52	
2	6.003	5.998	0.005	121709	1.60	1.50	
RPD = 1.22							

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026

Amount Added: 1.25

Units: uL

Report Date: 15-May-2019 11:57:50

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D

Injection Date: 15-Apr-2019 10:23:57

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L1

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

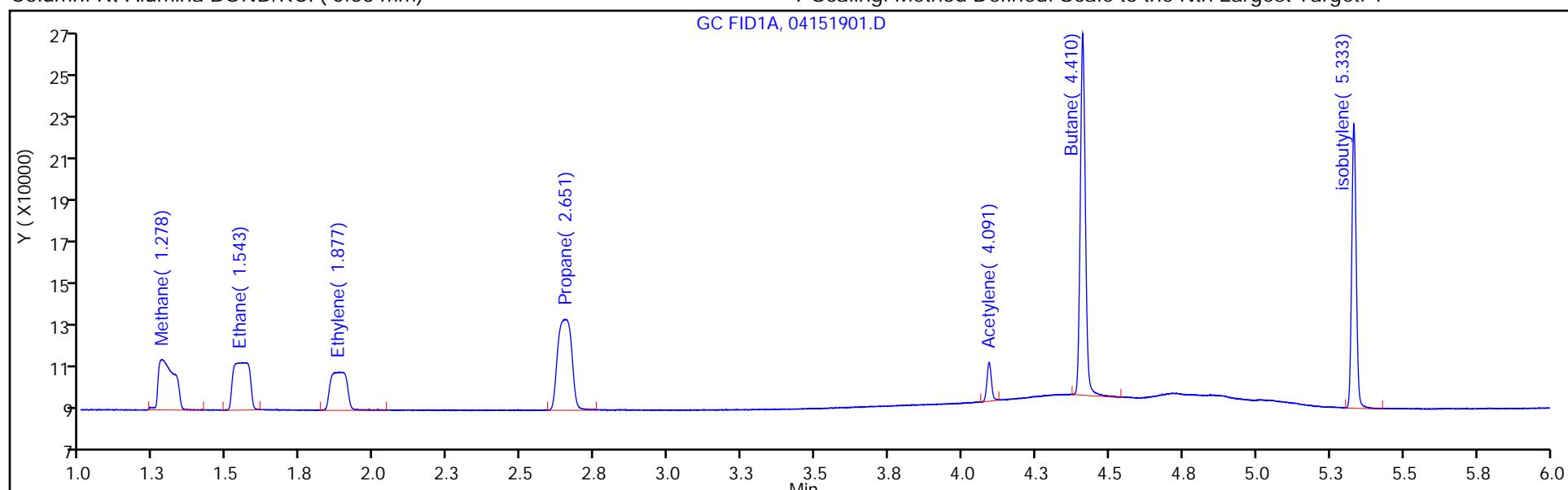
ALS Bottle#: 1

Method: RSK_J

Limit Group: GCV - RSK 175

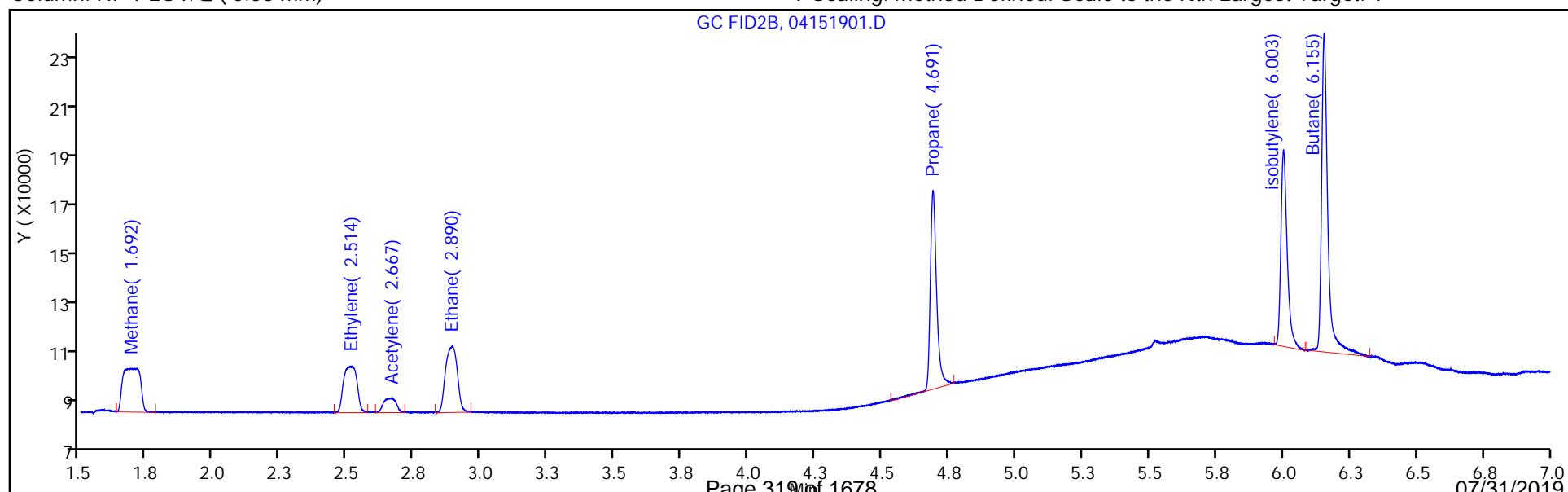
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Apr-2019 10:37:05 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L2
 Misc. Info.: 280-0080933-002
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.279	1.271	0.008	168302	0.9125	0.99	
2	1.699	1.692	0.007	139116	0.9125	0.9867	
						RPD = 0.37	

2 Ethane

1	1.556	1.556	0.000	227953	1.71	1.80	
2	2.899	2.889	0.010	191594	1.71	1.78	
						RPD = 1.12	

3 Ethylene

1	1.890	1.880	0.010	175461	1.60	1.66	
2	2.524	2.512	0.012	149728	1.60	1.66	
						RPD = 0.31	

4 Propane

1	2.645	2.632	0.013	363474	2.51	2.69	
2	4.696	4.687	0.009	306879	2.51	2.67	
						RPD = 0.46	

5 Acetylene

1	4.095	4.078	0.017	47607	1.48	1.48	
2	2.667	2.652	0.015	41972	1.48	1.48	
						RPD = 0.00	

6 Butane

1	4.401	4.381	0.020	519750	3.31	3.69	
2	6.158	6.146	0.012	435009	3.31	3.61	
						RPD = 2.11	

7 isobutylene

1	5.327	5.311	0.016	344778	3.19	3.56	
2	6.006	5.998	0.008	288028	3.19	3.55	
						RPD = 0.25	

Report Date: 15-May-2019 11:57:51

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00026

Amount Added: 2.50

Units: uL

Report Date: 15-May-2019 11:57:51

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D

Injection Date: 15-Apr-2019 10:37:05

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L2

Worklist Smp#: 2

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

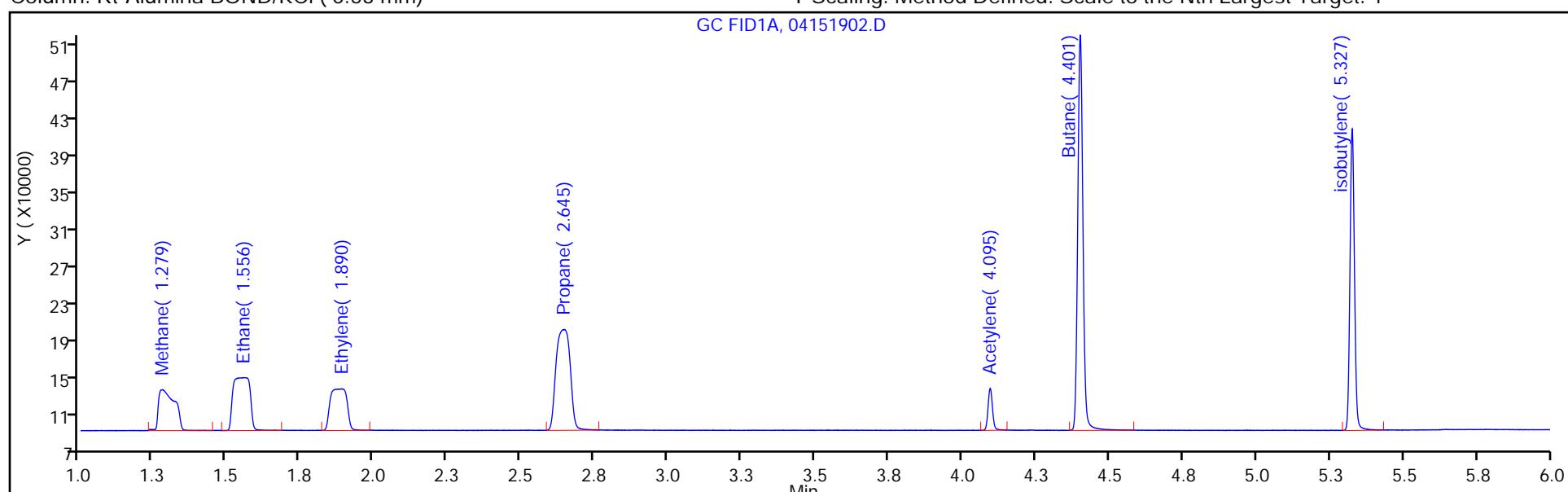
ALS Bottle#: 2

Method: RSK_J

Limit Group: GCV - RSK 175

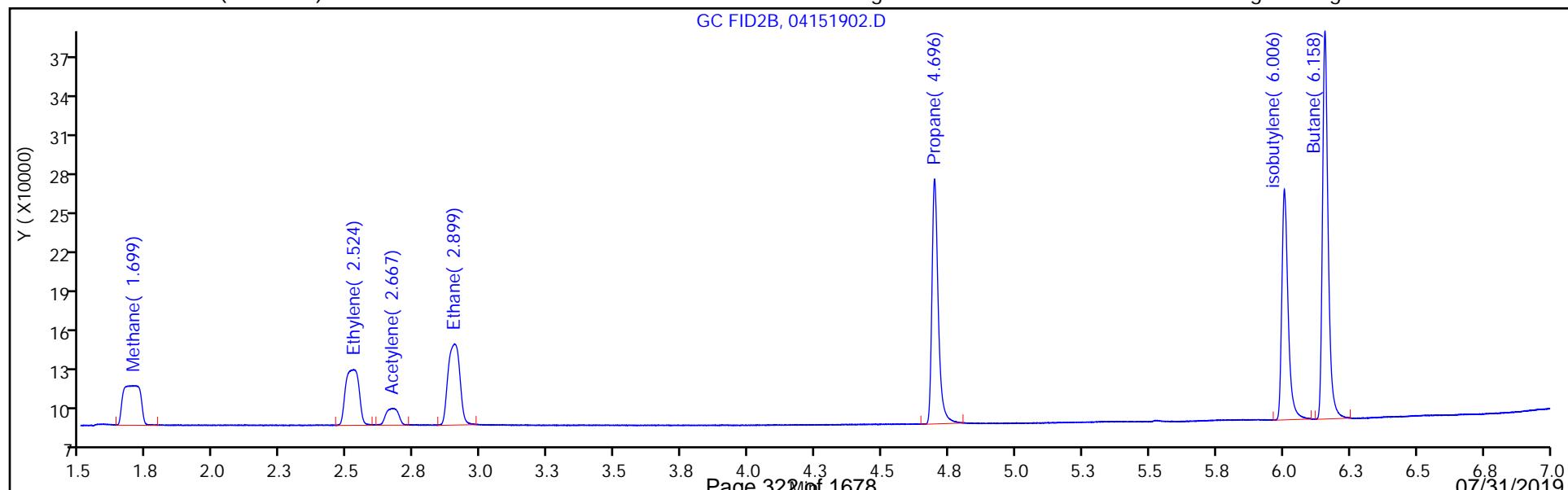
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151903.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Apr-2019 10:50:22 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L3
 Misc. Info.: 280-0080933-003
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:52 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane

1	1.278	1.271	0.007	292852	1.83	1.92
2	1.688	1.692	-0.004	245139	1.83	1.91
RPD = 0.42						

2 Ethane

1	1.563	1.556	0.007	449849	3.42	3.56
2	2.900	2.889	0.011	380840	3.42	3.55
RPD = 0.40						

3 Ethylene

1	1.889	1.880	0.009	348615	3.19	3.29
2	2.516	2.512	0.004	297902	3.19	3.31
RPD = 0.45						

4 Propane

1	2.645	2.632	0.013	706582	5.02	5.22
2	4.696	4.687	0.009	601744	5.02	5.24
RPD = 0.40						

5 Acetylene

1	4.094	4.078	0.016	96205	2.96	2.99
2	2.674	2.652	0.022	82868	2.96	2.93
RPD = 2.32						

6 Butane

1	4.400	4.381	0.019	993917	6.61	7.06
2	6.157	6.146	0.011	836646	6.61	6.95
RPD = 1.54						

7 isobutylene

1	5.326	5.311	0.015	655607	6.38	6.78
2	6.005	5.998	0.007	552886	6.38	6.82
RPD = 0.70						

Report Date: 15-May-2019 11:57:53

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00026

Amount Added: 5.00

Units: uL

Report Date: 15-May-2019 11:57:53

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151903.D

Injection Date: 15-Apr-2019 10:50:22

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L3

Worklist Smp#: 3

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 3

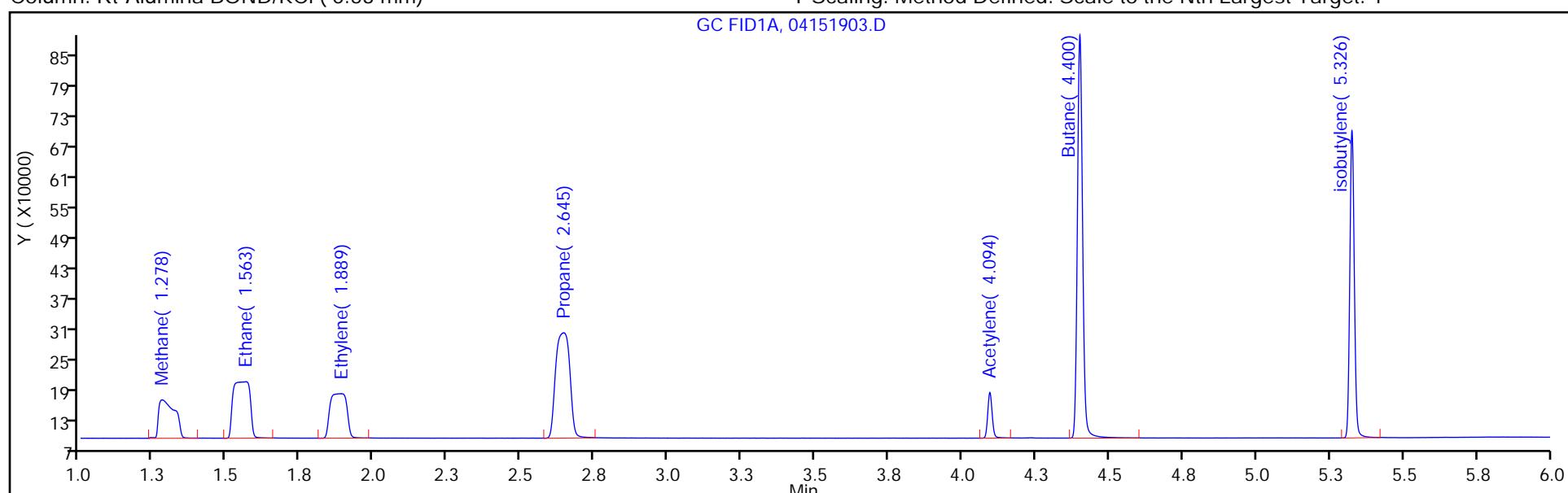
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

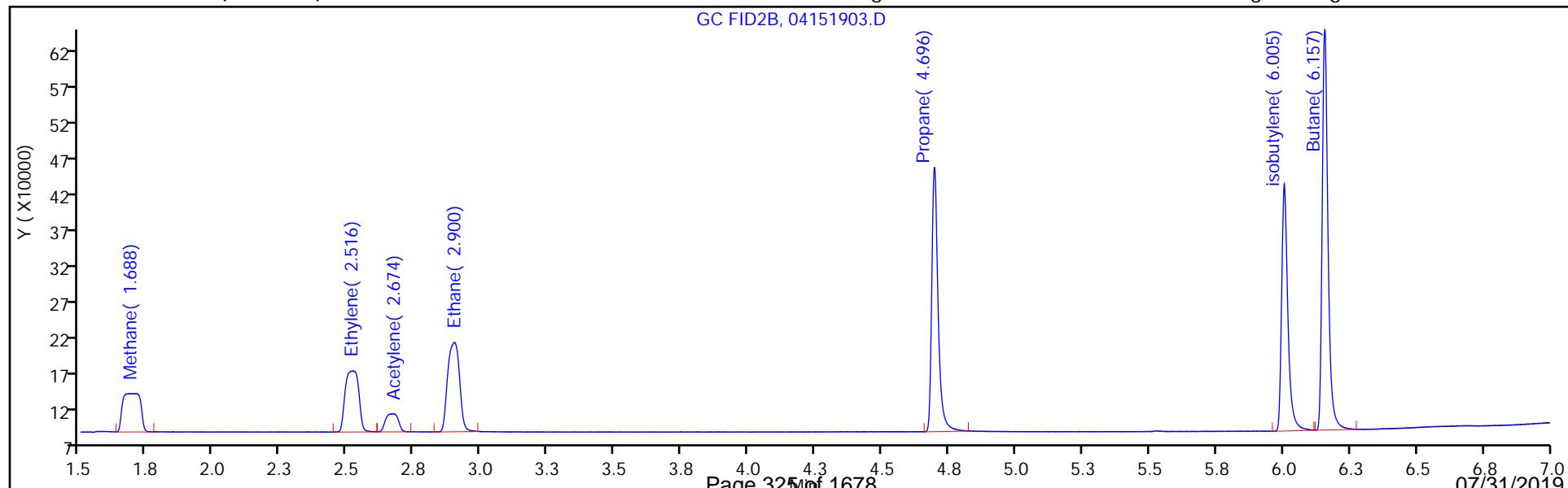
GC FID1A, 04151903.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151903.D



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 15-Apr-2019 11:03:41 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L4
 Misc. Info.: 280-0080933-004
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:54 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane

1	1.275	1.271	0.004	2121207	14.6	15.6	
2	1.701	1.692	0.009	1817240	14.6	15.6	
					RPD =	0.42	

2 Ethane

1	1.544	1.556	-0.012	3768385	27.4	29.8	
2	2.896	2.889	0.007	3198231	27.4	29.8	
					RPD =	0.15	

3 Ethylene

1	1.885	1.880	0.005	2951189	25.5	27.9	
2	2.516	2.512	0.004	2513192	25.5	27.9	
					RPD =	0.11	

4 Propane

1	2.641	2.632	0.009	5812465	40.1	43.0	
2	4.694	4.687	0.007	4940027	40.1	43.1	
					RPD =	0.20	

5 Acetylene

1	4.089	4.078	0.011	809586	23.7	25.2	
2	2.668	2.652	0.016	709490	23.7	25.0	
					RPD =	0.60	

6 Butane

1	4.395	4.381	0.014	7767068	52.9	55.2	
2	6.155	6.146	0.009	6590566	52.9	54.7	
					RPD =	0.74	

7 isobutylene

1	5.322	5.311	0.011	5189017	51.1	53.6	
2	6.004	5.998	0.006	4363220	51.1	53.8	
					RPD =	0.40	

Report Date: 15-May-2019 11:57:55

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00026

Amount Added: 40.00

Units: uL

Report Date: 15-May-2019 11:57:55

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D

Injection Date: 15-Apr-2019 11:03:41

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L4

Worklist Smp#: 4

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

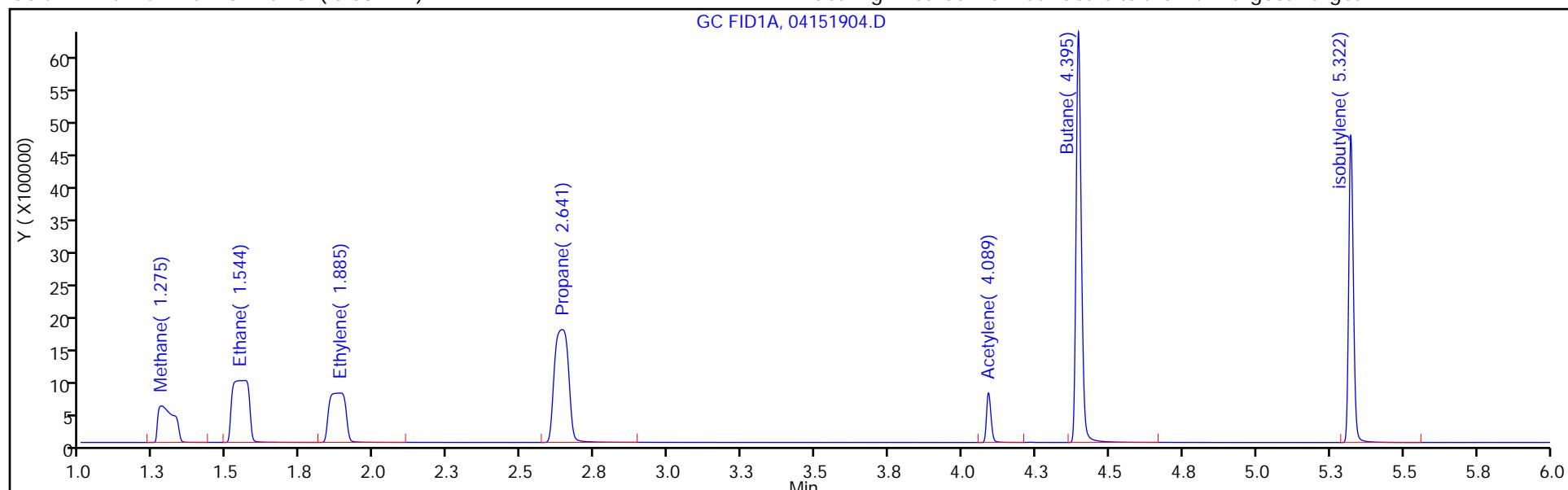
ALS Bottle#: 4

Method: RSK_J

Limit Group: GCV - RSK 175

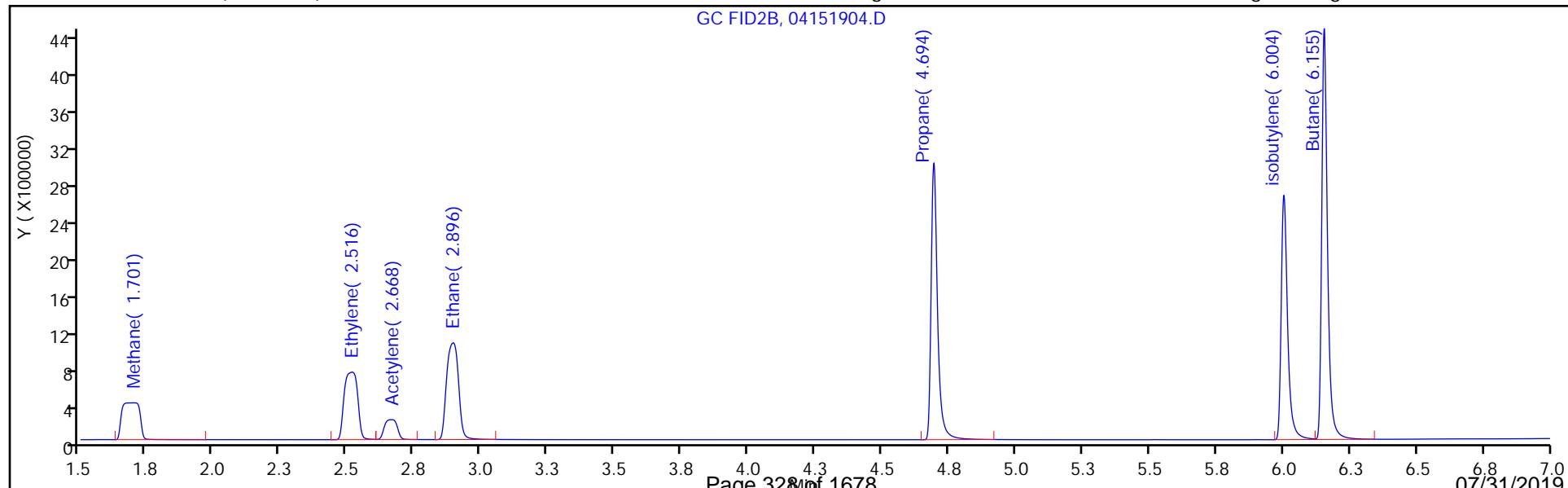
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D
 Lims ID: ICRT L5
 Client ID:
 Sample Type: ICRT Calib Level: 5
 Inject. Date: 15-Apr-2019 11:17:11 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: ICRT L5
 Misc. Info.: 280-0080933-005
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:56 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane

1	1.271	1.271	0.000	9627756	73.0	71.6	
2	1.692	1.692	0.000	8233442	73.0	71.6	
RPD = 0.05							

2 Ethane

1	1.556	1.556	0.000	17308693	136.9	137.0	
2	2.889	2.889	0.000	14756883	136.9	137.4	
RPD = 0.30							

3 Ethylene

1	1.880	1.880	0.000	13570482	127.7	128.3	
2	2.512	2.512	0.000	11530864	127.7	128.1	
RPD = 0.11							

4 Propane

1	2.632	2.632	0.000	26866377	200.7	198.6	
2	4.687	4.687	0.000	22779443	200.7	198.5	
RPD = 0.04							

5 Acetylene

1	4.078	4.078	0.000	4013672	118.5	124.9	
2	2.652	2.652	0.000	3536969	118.5	124.9	
RPD = 0.04							

6 Butane

1	4.381	4.381	0.000	35922157	264.5	255.1	
2	6.146	6.146	0.000	30367524	264.5	252.3	
RPD = 1.11							

7 isobutylene

1	5.311	5.311	0.000	23677727	255.4	244.7	
2	5.998	5.998	0.000	19852679	255.4	245.0	
RPD = 0.12							

Report Date: 15-May-2019 11:57:56

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00026

Amount Added: 200.00

Units: uL

Report Date: 15-May-2019 11:57:56

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D

Injection Date: 15-Apr-2019 11:17:11

Instrument ID: VGC_J

Operator ID: ms

Lims ID: ICRT L5

Worklist Smp#: 5

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 5

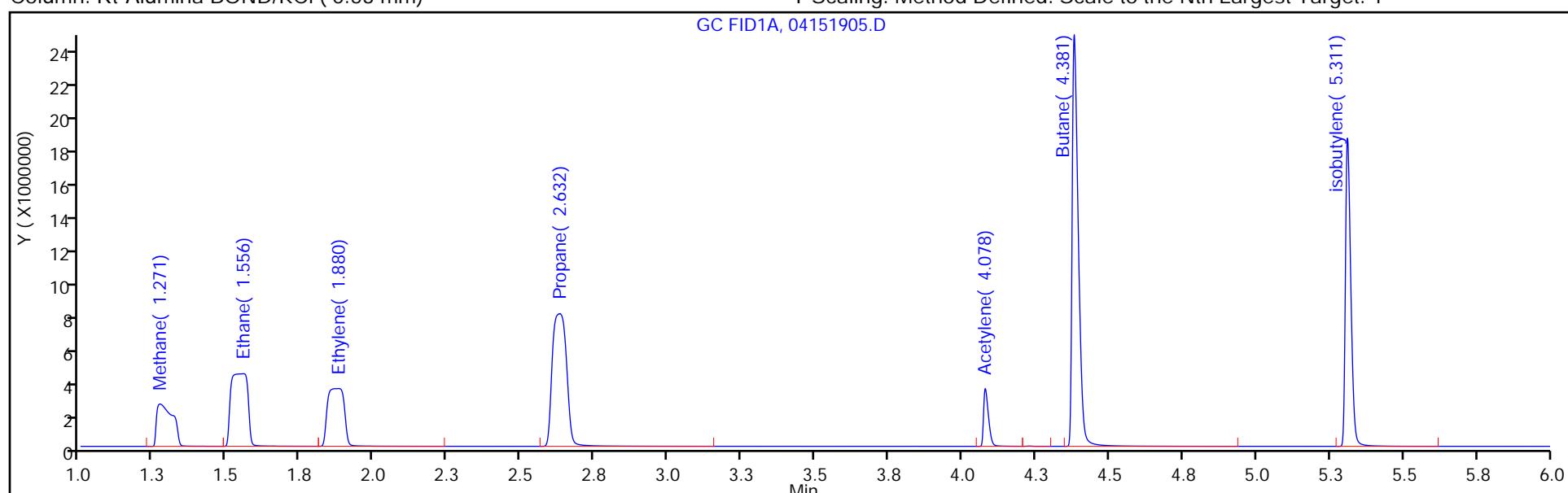
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

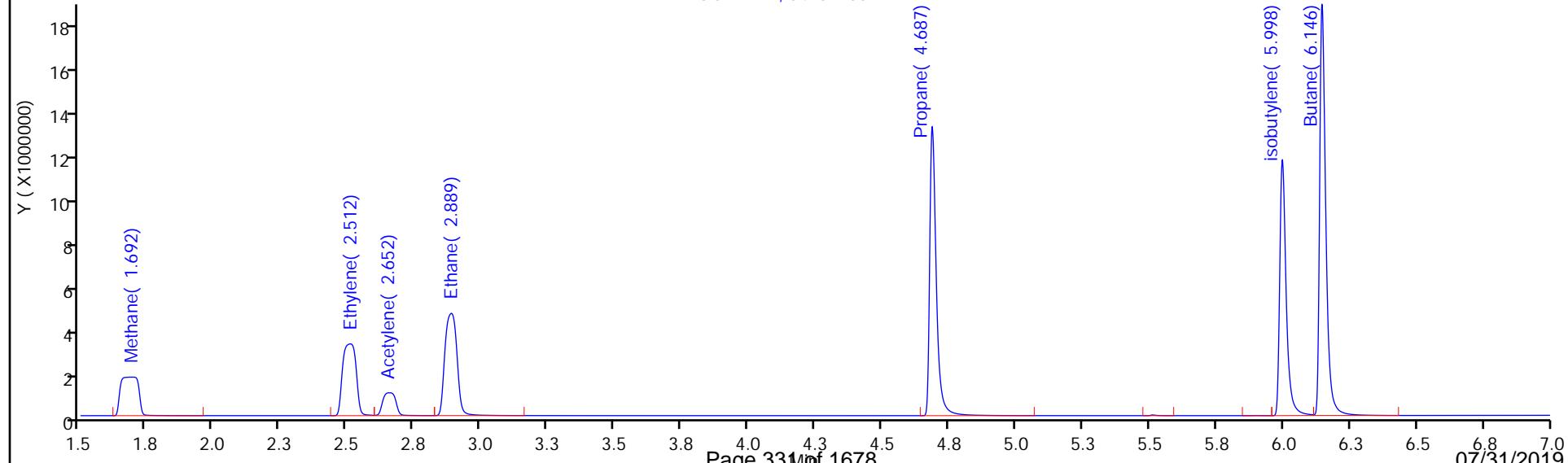
GC FID1A, 04151905.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151905.D



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D
 Lims ID: IC L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 15-Apr-2019 11:30:32 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L6
 Misc. Info.: 280-0080933-006
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:57 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane

1	1.267	1.271	-0.004	17958876	146.0	133.8	
2	1.681	1.692	-0.011	15386436	146.0	134.1	
					RPD =	0.21	

2 Ethane

1	1.549	1.556	-0.007	32290083	273.7	255.5	
2	2.882	2.889	-0.007	27708010	273.7	258.0	
					RPD =	0.95	

3 Ethylene

1	1.866	1.880	-0.014	25472652	255.3	240.7	M
2	2.503	2.512	-0.009	21746052	255.3	241.6	
					RPD =	0.36	

4 Propane

1	2.625	2.632	-0.007	50278684	401.4	371.7	
2	4.683	4.687	-0.004	42698075	401.4	372.2	
					RPD =	0.12	

5 Acetylene

1	4.070	4.078	-0.008	7700889	237.0	239.7	
2	2.656	2.652	0.004	6771875	237.0	239.1	
					RPD =	0.25	

6 Butane

1	4.370	4.381	-0.011	67375523	529.0	478.5	
2	6.140	6.146	-0.006	57174968	529.0	475.0	
					RPD =	0.73	

7 isobutylene

1	5.302	5.311	-0.009	44689590	510.8	461.9	
2	5.992	5.998	-0.006	37488004	510.8	462.6	
					RPD =	0.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026

Amount Added: 400.00

Units: uL

Report Date: 15-May-2019 11:57:57

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D

Injection Date: 15-Apr-2019 11:30:32

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L6

Worklist Smp#: 6

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

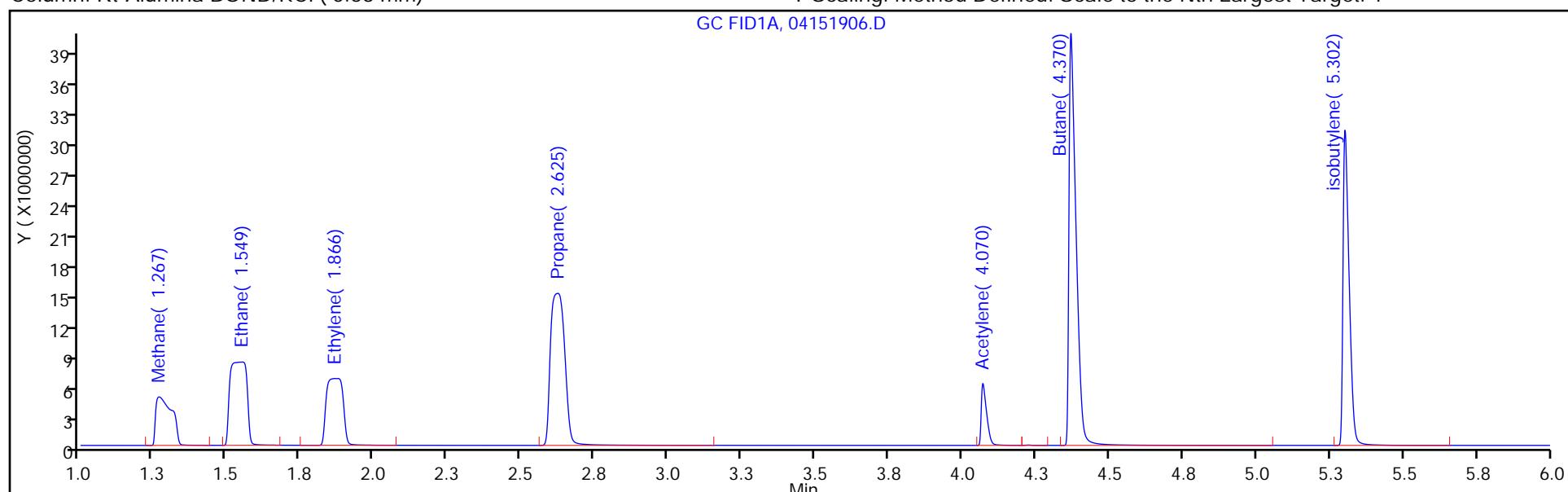
ALS Bottle#: 6

Method: RSK_J

Limit Group: GCV - RSK 175

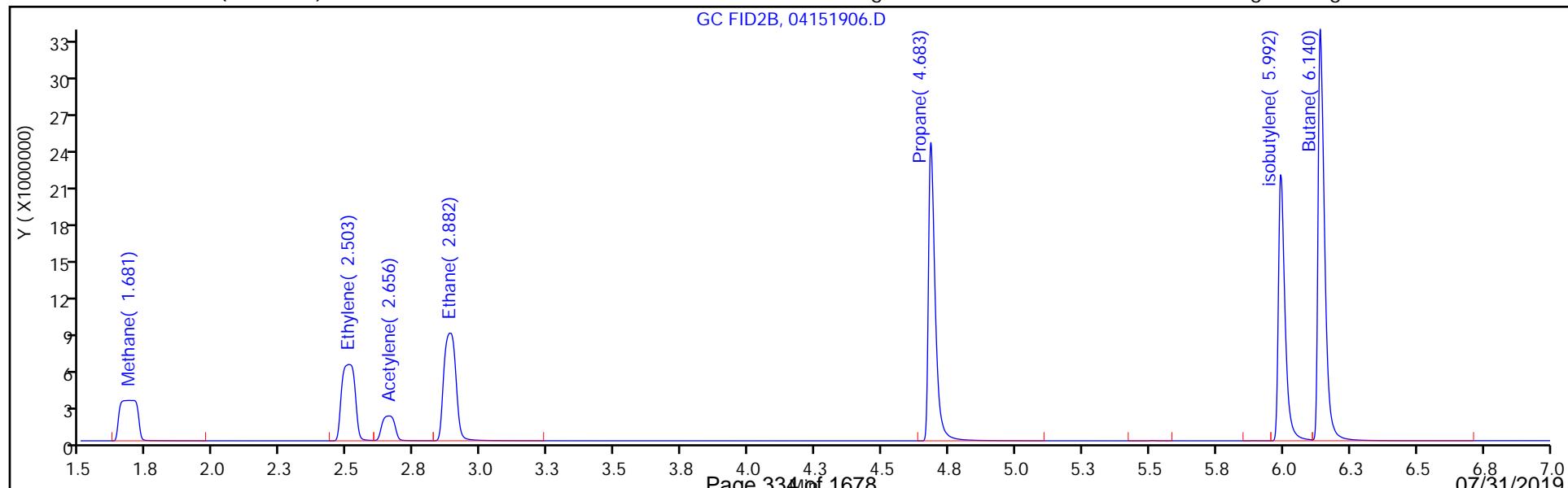
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

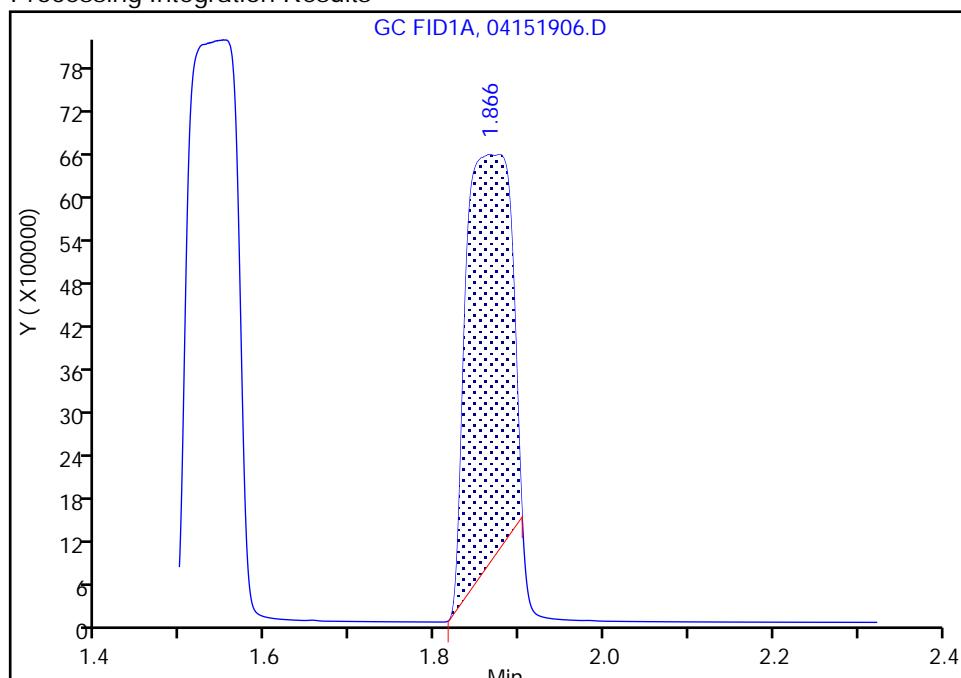
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D
 Injection Date: 15-Apr-2019 11:30:32 Instrument ID: VGC_J
 Lims ID: IC L6
 Client ID:
 Operator ID: ms ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Method: RSK_J Limit Group: GCV - RSK 175
 Column: Rt-Alumina BOND/KCl (0.53 mm) Detector: GC FID1A

3 Ethylene, CAS: 74-85-1

Signal: 1

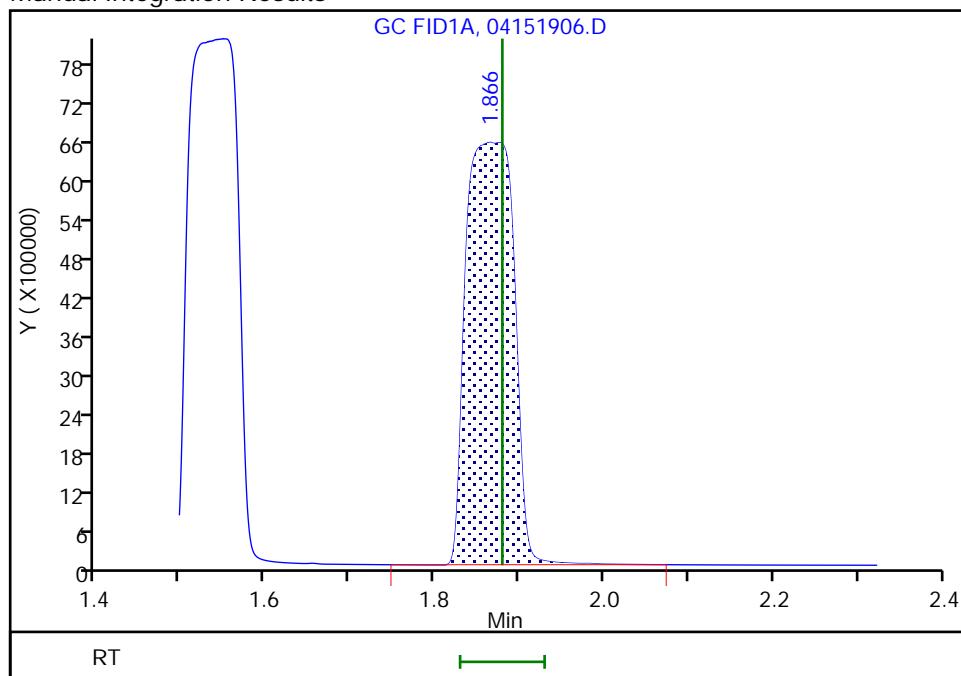
RT: 1.87
 Area: 21017489
 Amount: 203.4324
 Amount Units: ug/l

Processing Integration Results



RT: 1.87
 Area: 25472652
 Amount: 240.7464
 Amount Units: ug/l

Manual Integration Results



Reviewer: meierg, 15-Apr-2019 13:21:06

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Apr-2019 11:44:06 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L7
 Misc. Info.: 280-0080933-007
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:58 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane							
1	1.263	1.271	-0.008	40532226	292.0	302.4	
2	1.686	1.692	-0.006	34652624	292.0	302.3	RPD = 0.02
2 Ethane							
1	1.549	1.556	-0.007	71736807	547.4	567.7	
2	2.876	2.889	-0.013	61621639	547.4	573.7	RPD = 1.05
3 Ethylene							
1	1.870	1.880	-0.010	54838846	510.7	518.3	M
2	2.503	2.512	-0.009	46940879	510.7	521.5	
4 Propane							
1	2.611	2.632	-0.021	111846125	802.8	826.9	
2	4.672	4.687	-0.015	94884692	802.8	827.0	RPD = 0.02
5 Acetylene							
1	4.057	4.078	-0.021	15668916	474.1	487.7	
2	2.651	2.652	-0.001	13791861	474.1	486.9	RPD = 0.16
6 Butane							
1	4.350	4.381	-0.031	148225690	1058.1	1052.6	
2	6.128	6.146	-0.018	125686225	1058.1	1044.1	RPD = 0.81
7 isobutylene							
1	5.288	5.311	-0.023	94615791	1021.5	977.9	
2	5.984	5.998	-0.014	79245111	1021.5	978.0	RPD = 0.01

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026

Amount Added: 800.00

Units: uL

Report Date: 15-May-2019 11:57:59

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D

Injection Date: 15-Apr-2019 11:44:06

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L7

Worklist Smp#: 7

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 7

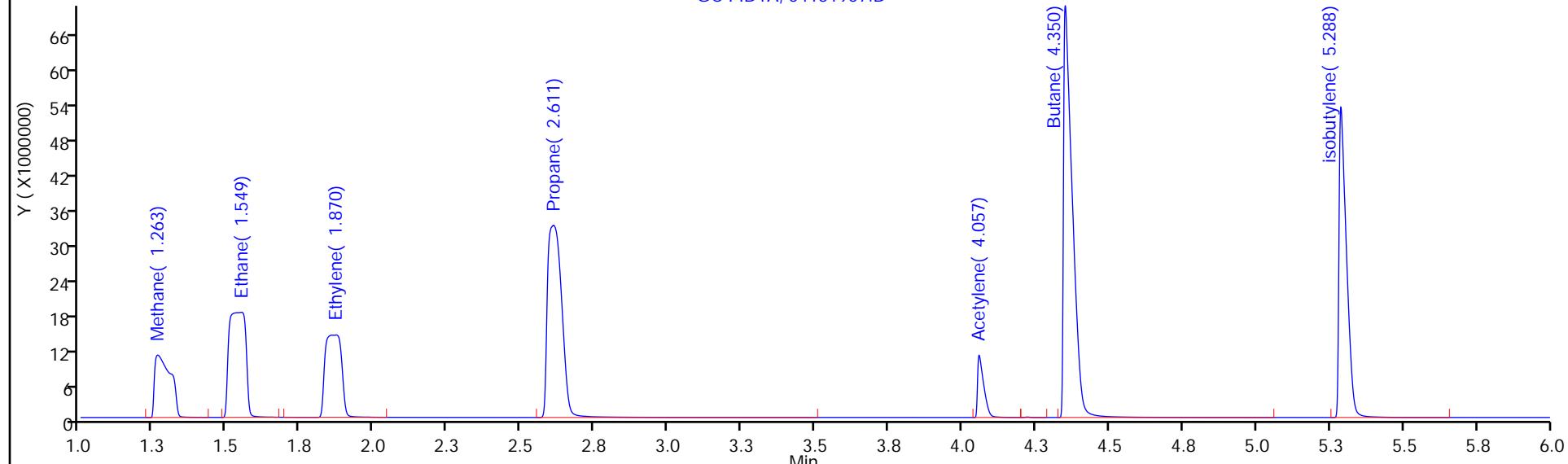
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

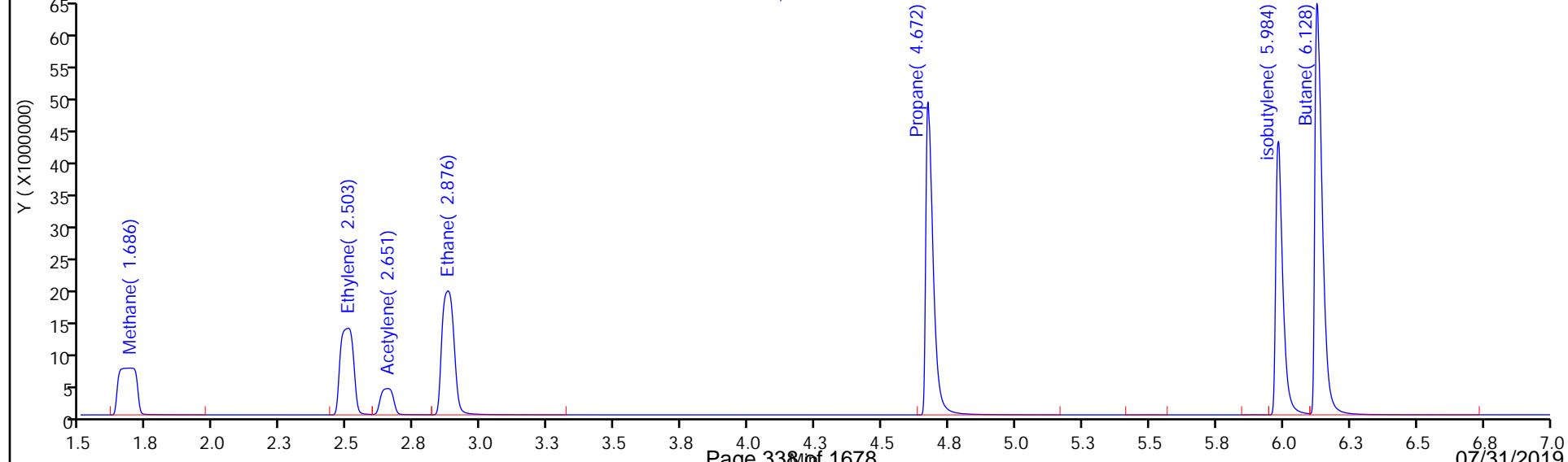
GC FID1A, 04151907.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151907.D



Eurofins TestAmerica, Denver

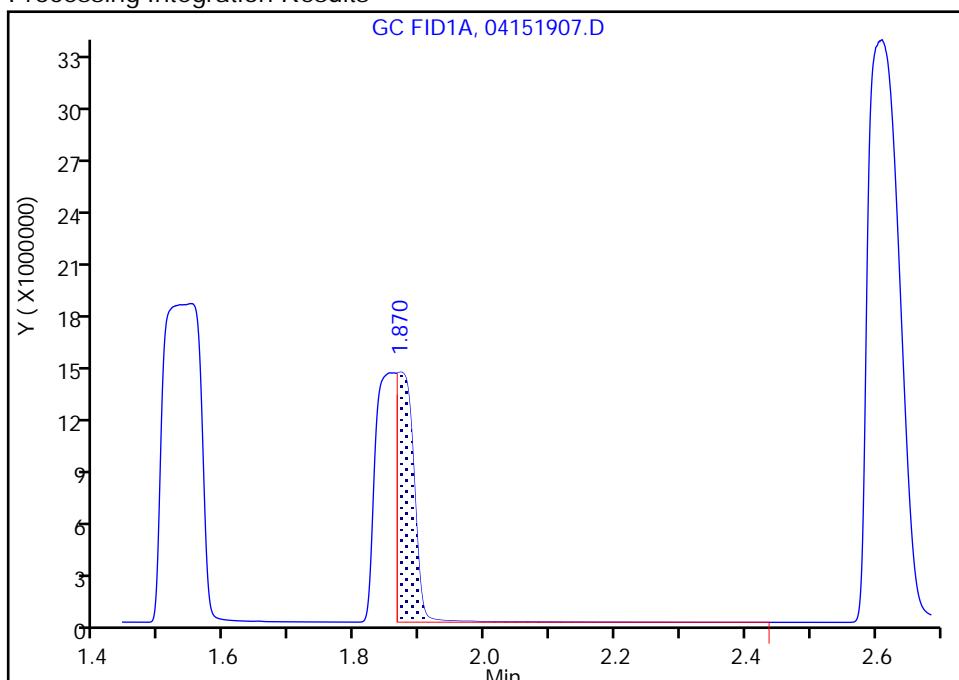
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D
 Injection Date: 15-Apr-2019 11:44:06 Instrument ID: VGC_J
 Lims ID: IC L7
 Client ID:
 Operator ID: ms ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Method: RSK_J Limit Group: GCV - RSK 175
 Column: Rt-Alumina BOND/KCl (0.53 mm) Detector: GC FID1A

3 Ethylene, CAS: 74-85-1

Signal: 1

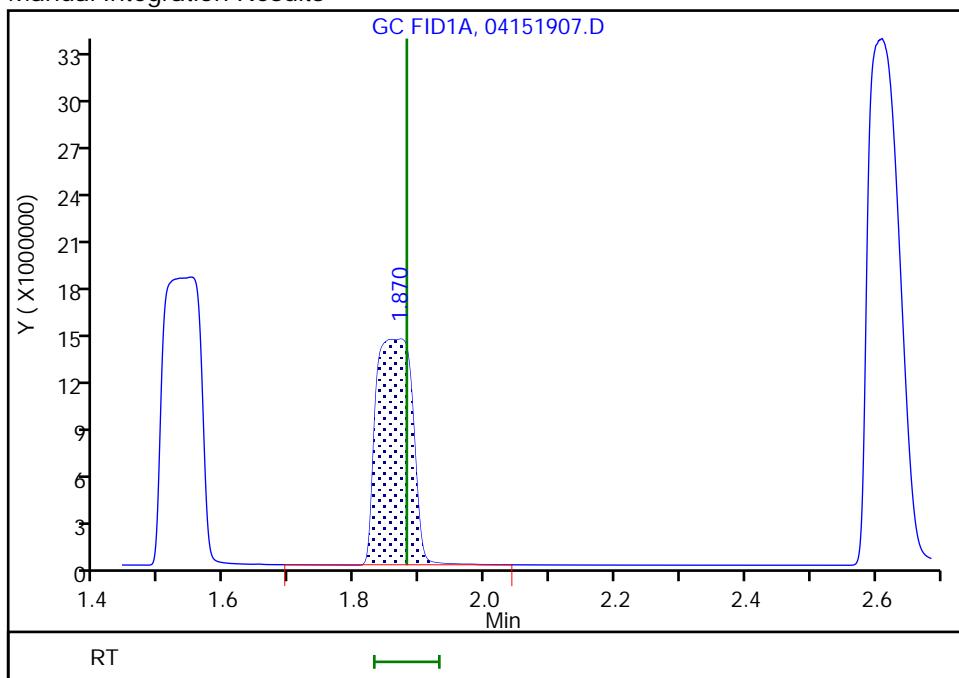
RT: 1.87
 Area: 24366908
 Amount: 337.8607
 Amount Units: ug/l

Processing Integration Results



RT: 1.87
 Area: 54838846
 Amount: 518.2913
 Amount Units: ug/l

Manual Integration Results



Reviewer: meierg, 15-Apr-2019 13:20:30

Audit Action: Manually Integrated

Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 15-Apr-2019 11:57:32 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L8
 Misc. Info.: 280-0080933-008
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:58:00 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.265	1.271	-0.006	226637342	1806.9	1691.8	
2	1.692	1.692	0.000	193042781	1806.9	1685.0	

RPD = 0.41

Reagents:

RSK175methane_00009 Amount Added: 50.00 Units: uL

Report Date: 15-May-2019 11:58:00

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D

Injection Date: 15-Apr-2019 11:57:32

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L8

Worklist Smp#: 8

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 8

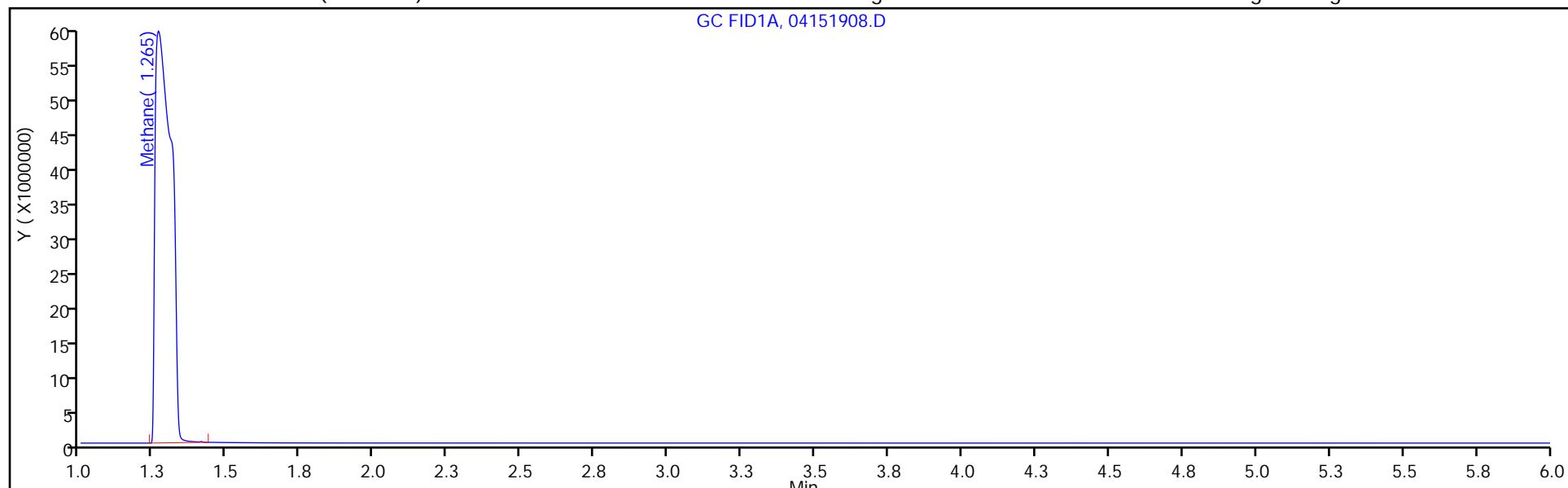
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

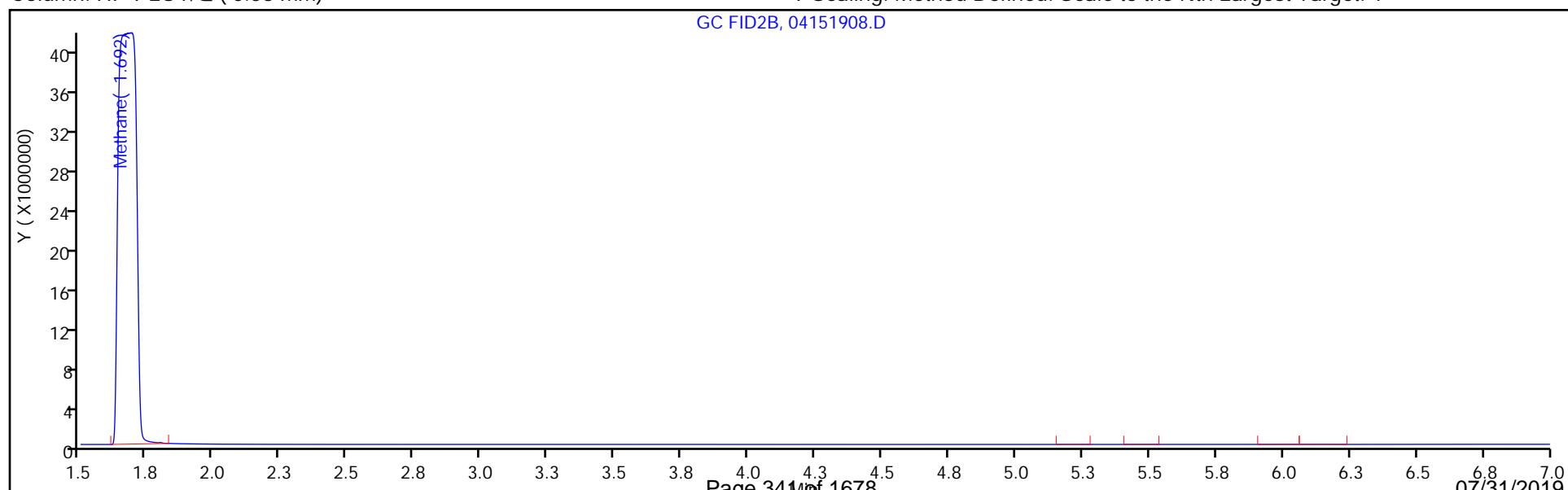
GC FID1A, 04151908.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151908.D



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 15-Apr-2019 12:11:08 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L9
 Misc. Info.: 280-0080933-009
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:58:02 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane
 1 1.263 1.271 -0.008 952923785 7227.8 7114.4
 2 1.668 1.692 -0.024 817202335 7227.8 7133.8
 RPD = 0.27

Reagents:

RSK175methane_00009 Amount Added: 200.00 Units: uL

Report Date: 15-May-2019 11:58:02

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Injection Date: 15-Apr-2019 12:11:08

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L9

Worklist Smp#: 9

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

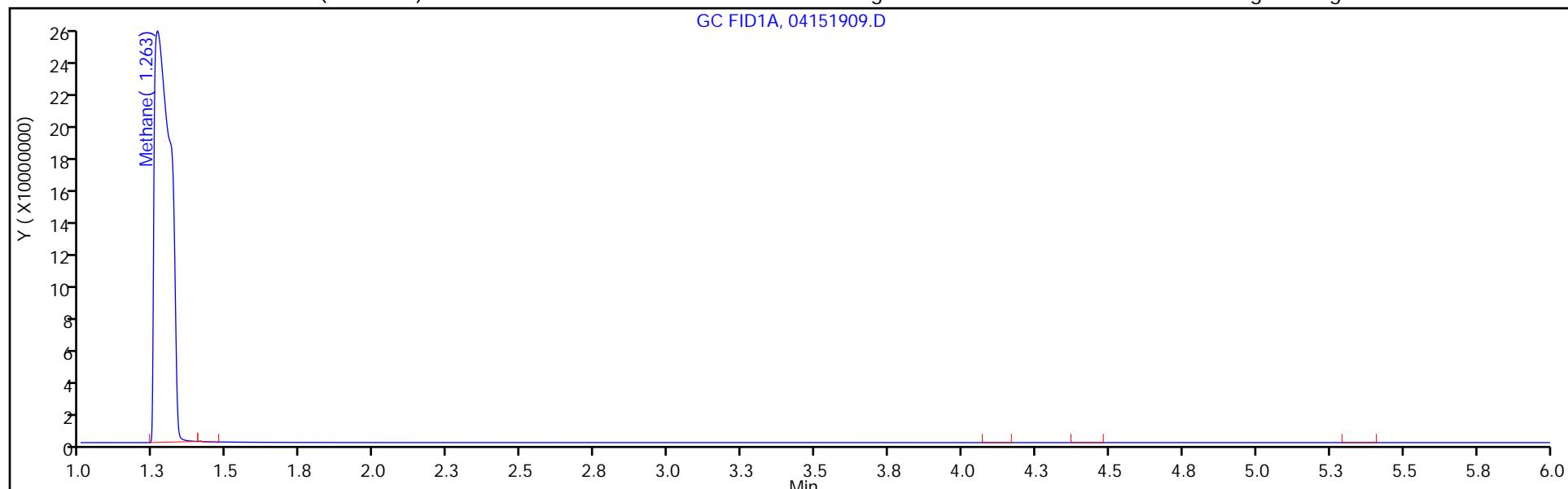
ALS Bottle#: 9

Method: RSK_J

Limit Group: GCV - RSK 175

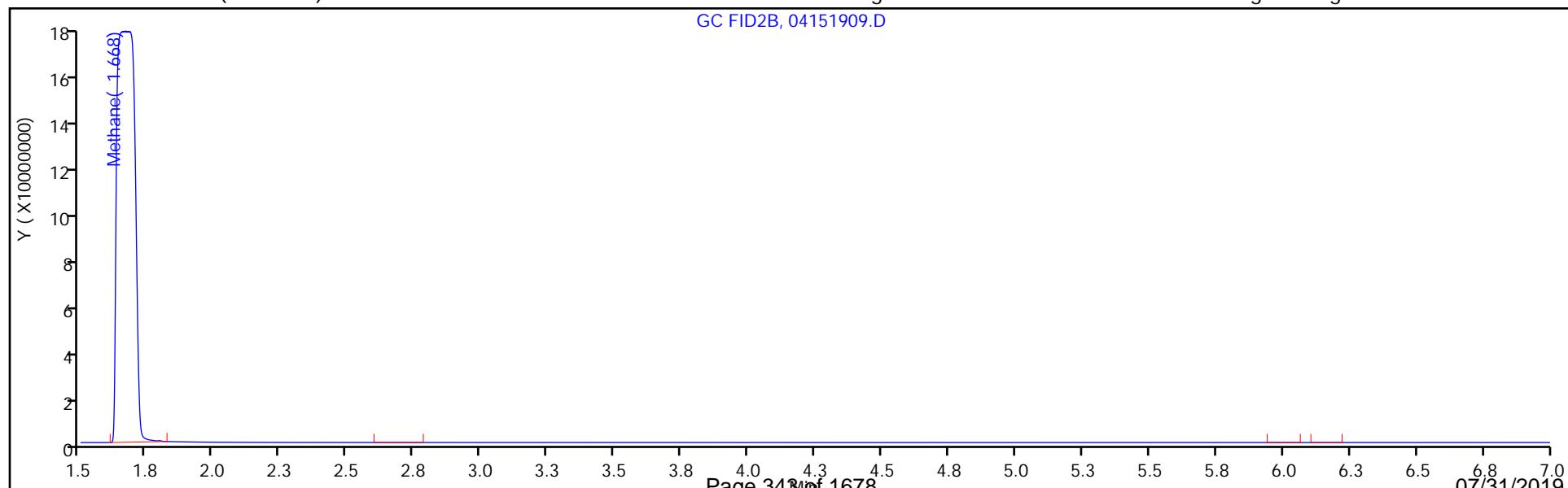
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 454595

SDG No.: _____

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36052

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.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	1.692	1.699	1.688	1.701	1.692	1.681	1.686	1.692	1.668	1.652 - 1.732	1.689
Ethylene	2.514	2.524	2.516	2.516	2.512	2.503	2.503			2.462 - 2.562	2.513
Acetylene	2.667	2.667	2.674	2.668	2.652	2.656	2.651			2.572 - 2.732	2.662
Ethane	2.890	2.899	2.900	2.896	2.889	2.882	2.876			2.839 - 2.939	2.890

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 454595

SDG No.: _____

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36052

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.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	165505 112782 113064	152449 105382	134317 118668	124463 106834	Lin2	26094.0563	114549.945							0.9950		0.9900
Ethylene	77051 90320	93824 85167	93337 91921	98428	Ave		90006.9262				7.7		20.0			
Acetylene	24541 29842	28330 28568	27967 29091	29931	Ave		28324.3348				6.4		20.0			
Ethane	90071 107828	111998 101231	111312 112567	116847	Ave		107407.606				8.4		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 454595

SDG No.: _____

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36052

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.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	75515 15386436	139116 34652624	245139 193042781	1817240 817202335	8233442	0.456 146	0.913 292	1.83 1807	14.6 7228	73.0
Ethylene	Ave	61480 21746052	149728 46940879	297902	2513192	11530864	0.798 255	1.60 511	3.19	25.5	128
Acetylene	Ave	18179 6771875	41972 13791861	82868	709490	3536969	0.741 237	1.48 474	2.96	23.7	119
Ethane	Ave	77042 27708010	191594 61621639	380840	3198231	14756883	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: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-Apr-2019 10:23:57 ALS Bottle#: 1 Worklist Smp#: 1
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L1
 Misc. Info.: 280-0080933-001
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:50 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.278	1.271	0.007	93261	0.4563	0.4301	
2	1.692	1.692	0.000	75515	0.4563	0.4314	
RPD = 0.31							
2 Ethane							
1	1.543	1.556	-0.013	91221	0.8553	0.7219	
2	2.890	2.889	0.001	77042	0.8553	0.7173	
RPD = 0.64							
3 Ethylene							
1	1.877	1.880	-0.003	73764	0.7979	0.6972	
2	2.514	2.512	0.002	61480	0.7979	0.6831	
RPD = 2.04							
4 Propane							
1	2.651	2.632	0.019	147932	1.25	1.09	
2	4.691	4.687	0.004	125161	1.25	1.09	
RPD = 0.25							
5 Acetylene							
1	4.091	4.078	0.013	19810	0.7408	0.6166	
2	2.667	2.652	0.015	18179	0.7408	0.6418	
RPD = 4.01							
6 Butane							
1	4.410	4.381	0.029	211953	1.65	1.51	M
2	6.155	6.146	0.009	195662	1.65	1.63	M
RPD = 7.68							
7 isobutylene							
1	5.333	5.311	0.022	147116	1.60	1.52	
2	6.003	5.998	0.005	121709	1.60	1.50	
RPD = 1.22							

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026

Amount Added: 1.25

Units: uL

Report Date: 15-May-2019 11:57:50

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D

Injection Date: 15-Apr-2019 10:23:57

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L1

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

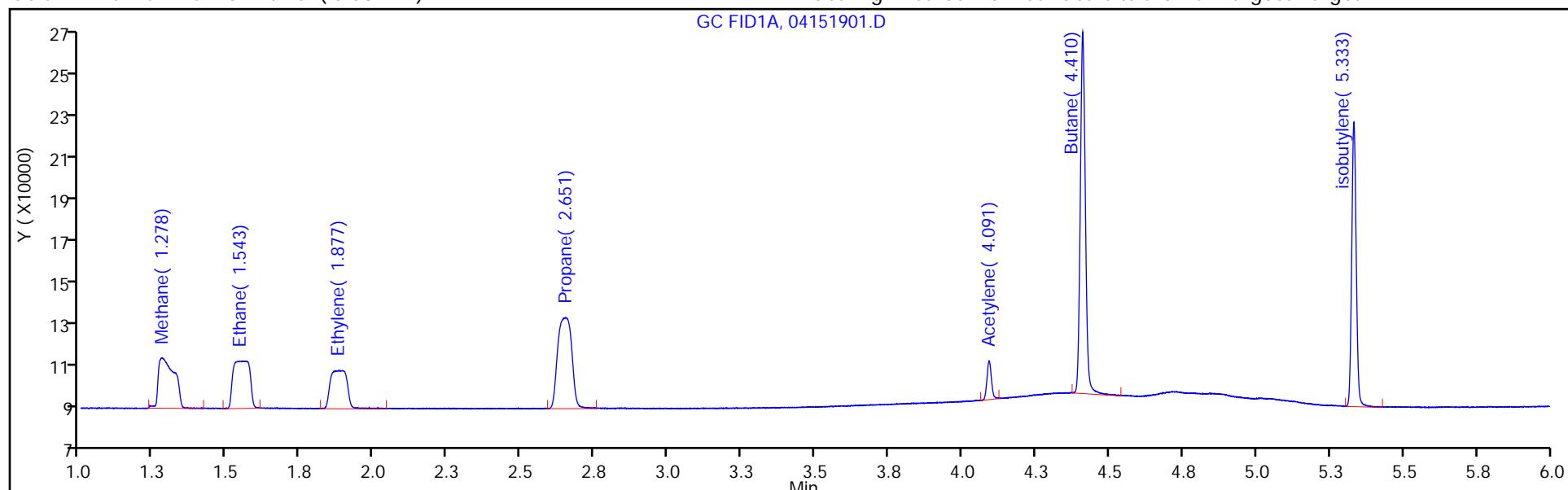
ALS Bottle#: 1

Method: RSK_J

Limit Group: GCV - RSK 175

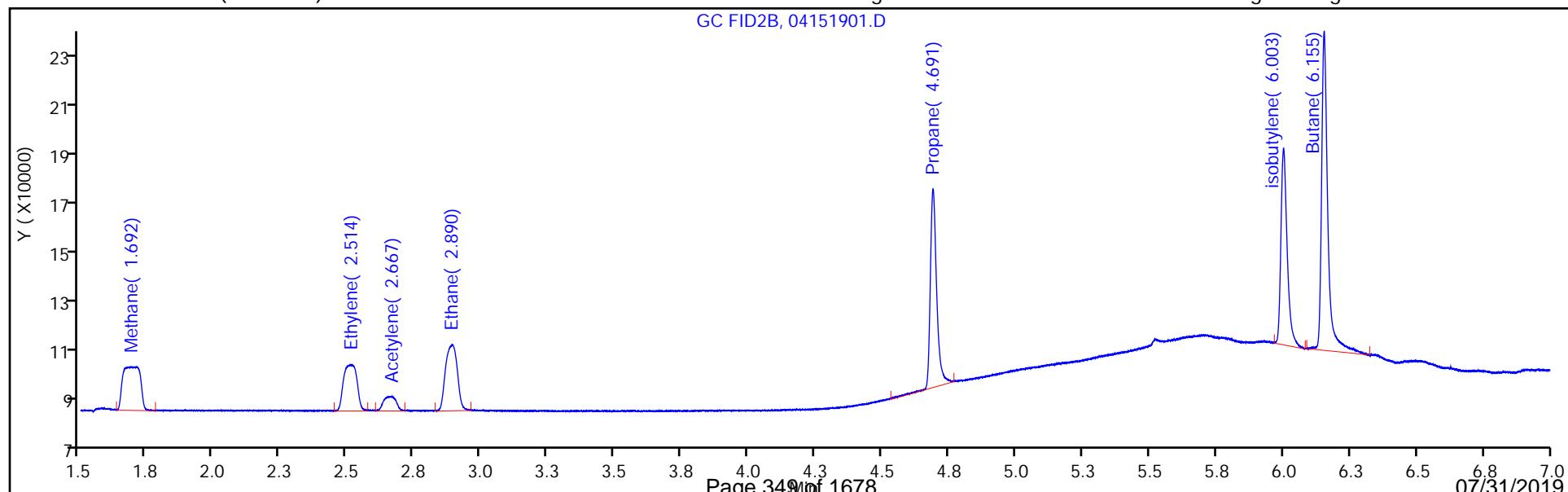
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Apr-2019 10:37:05 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L2
 Misc. Info.: 280-0080933-002
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.279	1.271	0.008	168302	0.9125	0.99	
2	1.699	1.692	0.007	139116	0.9125	0.9867	
						RPD = 0.37	

2 Ethane

1	1.556	1.556	0.000	227953	1.71	1.80	
2	2.899	2.889	0.010	191594	1.71	1.78	
						RPD = 1.12	

3 Ethylene

1	1.890	1.880	0.010	175461	1.60	1.66	
2	2.524	2.512	0.012	149728	1.60	1.66	
						RPD = 0.31	

4 Propane

1	2.645	2.632	0.013	363474	2.51	2.69	
2	4.696	4.687	0.009	306879	2.51	2.67	
						RPD = 0.46	

5 Acetylene

1	4.095	4.078	0.017	47607	1.48	1.48	
2	2.667	2.652	0.015	41972	1.48	1.48	
						RPD = 0.00	

6 Butane

1	4.401	4.381	0.020	519750	3.31	3.69	
2	6.158	6.146	0.012	435009	3.31	3.61	
						RPD = 2.11	

7 isobutylene

1	5.327	5.311	0.016	344778	3.19	3.56	
2	6.006	5.998	0.008	288028	3.19	3.55	
						RPD = 0.25	

Report Date: 15-May-2019 11:57:52

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00026

Amount Added: 2.50

Units: uL

Report Date: 15-May-2019 11:57:52

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D

Injection Date: 15-Apr-2019 10:37:05

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L2

Worklist Smp#: 2

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 2

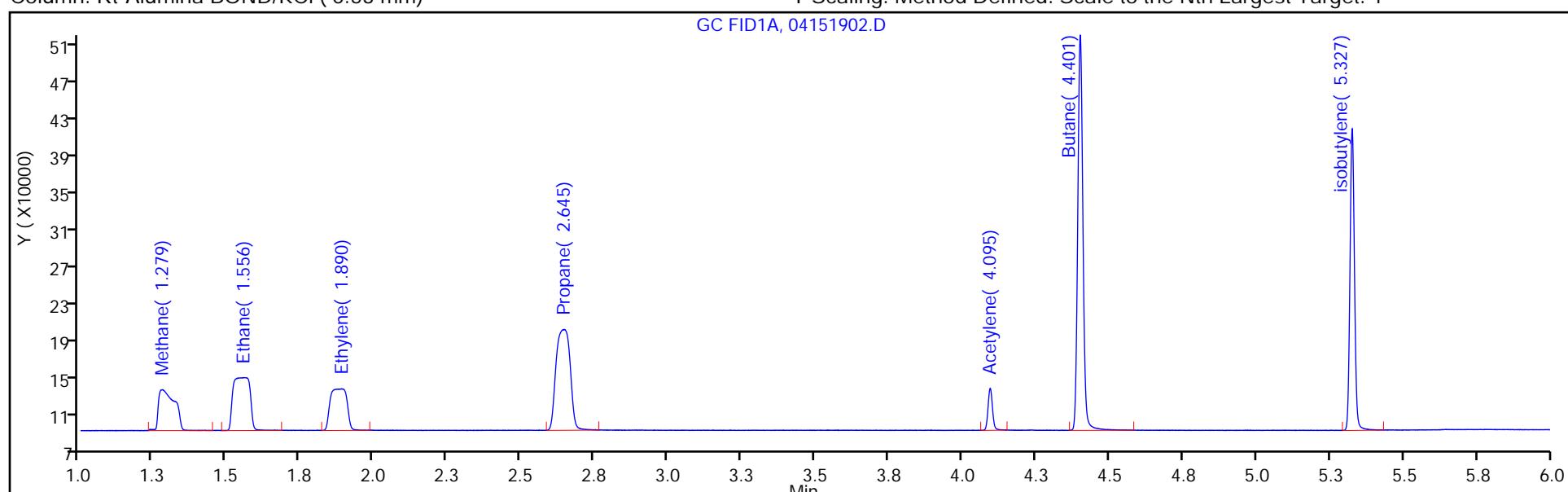
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

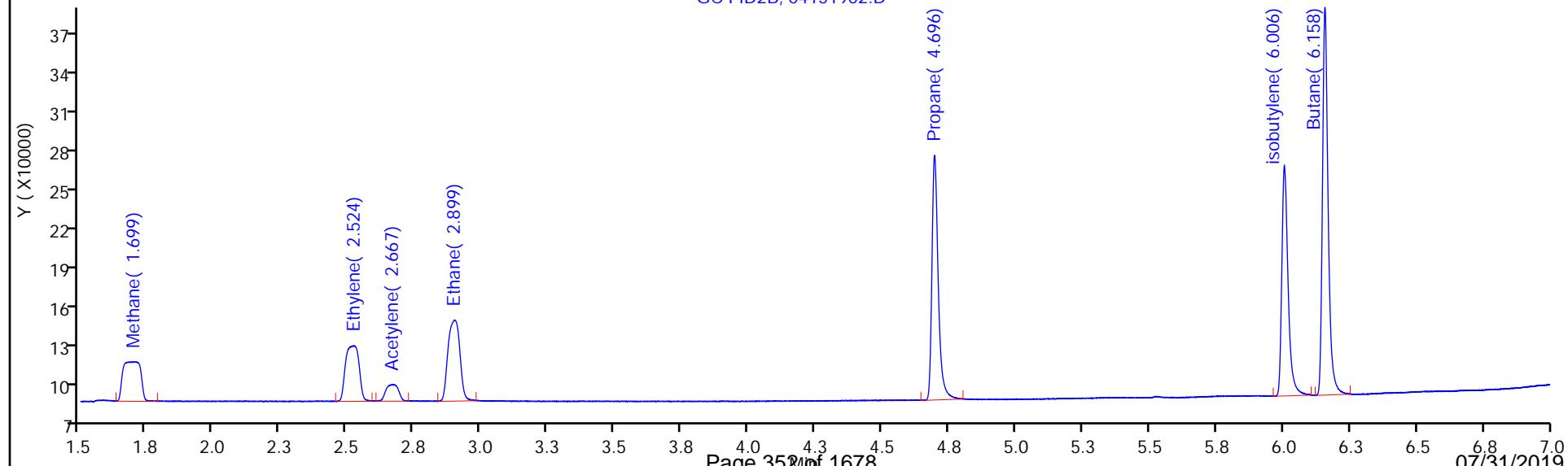
GC FID1A, 04151902.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151902.D



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151903.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Apr-2019 10:50:22 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L3
 Misc. Info.: 280-0080933-003
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:52 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.278	1.271	0.007	292852	1.83	1.92	
2	1.688	1.692	-0.004	245139	1.83	1.91	
					RPD =	0.42	

2 Ethane

1	1.563	1.556	0.007	449849	3.42	3.56	
2	2.900	2.889	0.011	380840	3.42	3.55	
					RPD =	0.40	

3 Ethylene

1	1.889	1.880	0.009	348615	3.19	3.29	
2	2.516	2.512	0.004	297902	3.19	3.31	
					RPD =	0.45	

4 Propane

1	2.645	2.632	0.013	706582	5.02	5.22	
2	4.696	4.687	0.009	601744	5.02	5.24	
					RPD =	0.40	

5 Acetylene

1	4.094	4.078	0.016	96205	2.96	2.99	
2	2.674	2.652	0.022	82868	2.96	2.93	
					RPD =	2.32	

6 Butane

1	4.400	4.381	0.019	993917	6.61	7.06	
2	6.157	6.146	0.011	836646	6.61	6.95	
					RPD =	1.54	

7 isobutylene

1	5.326	5.311	0.015	655607	6.38	6.78	
2	6.005	5.998	0.007	552886	6.38	6.82	
					RPD =	0.70	

Report Date: 15-May-2019 11:57:53

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00026

Amount Added: 5.00

Units: uL

Report Date: 15-May-2019 11:57:53

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151903.D

Injection Date: 15-Apr-2019 10:50:22

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L3

Worklist Smp#: 3

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

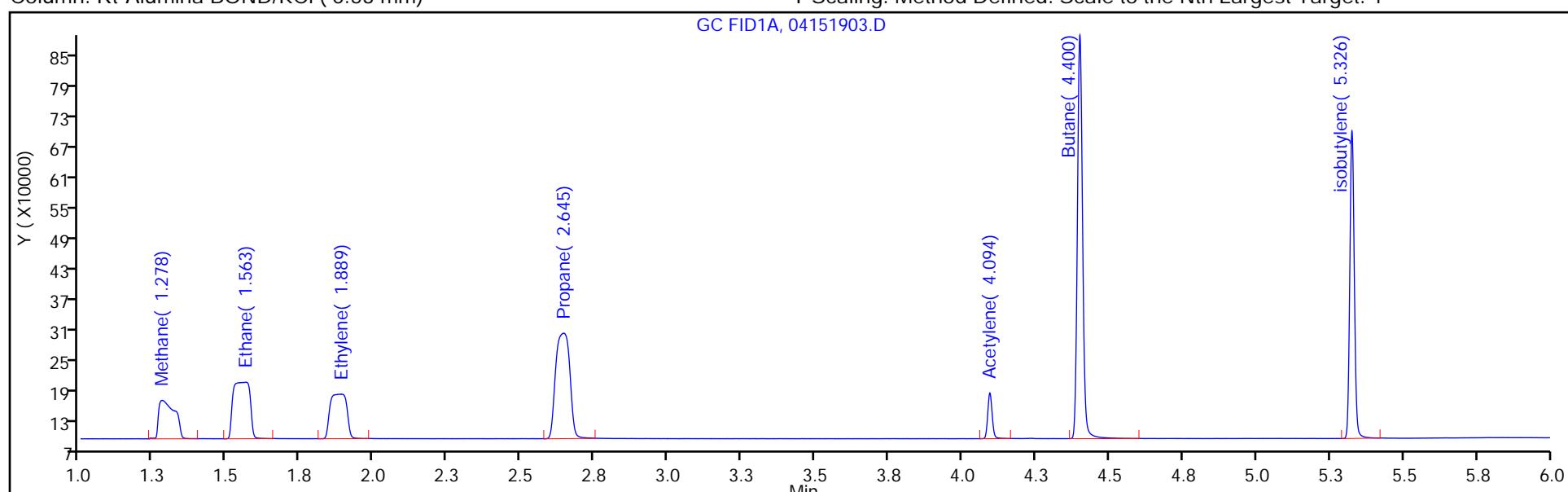
ALS Bottle#: 3

Method: RSK_J

Limit Group: GCV - RSK 175

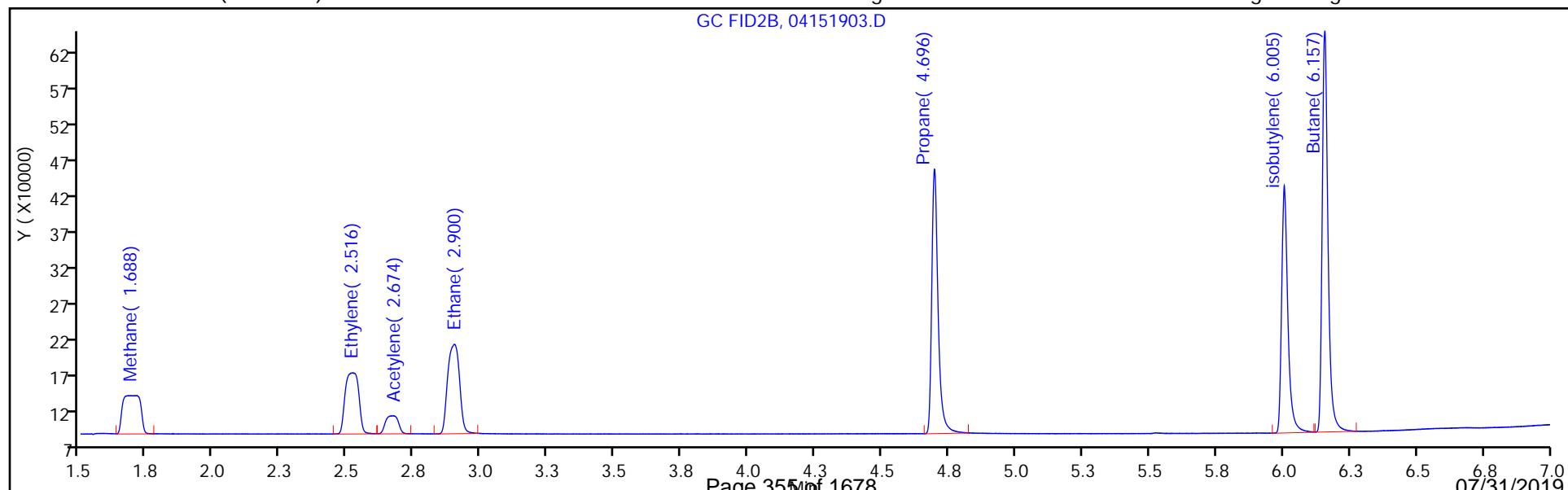
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 15-Apr-2019 11:03:41 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L4
 Misc. Info.: 280-0080933-004
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:54 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.275	1.271	0.004	2121207	14.6	15.6	
2	1.701	1.692	0.009	1817240	14.6	15.6	
RPD = 0.42							
2 Ethane							
1	1.544	1.556	-0.012	3768385	27.4	29.8	
2	2.896	2.889	0.007	3198231	27.4	29.8	
RPD = 0.15							
3 Ethylene							
1	1.885	1.880	0.005	2951189	25.5	27.9	
2	2.516	2.512	0.004	2513192	25.5	27.9	
RPD = 0.11							
4 Propane							
1	2.641	2.632	0.009	5812465	40.1	43.0	
2	4.694	4.687	0.007	4940027	40.1	43.1	
RPD = 0.20							
5 Acetylene							
1	4.089	4.078	0.011	809586	23.7	25.2	
2	2.668	2.652	0.016	709490	23.7	25.0	
RPD = 0.60							
6 Butane							
1	4.395	4.381	0.014	7767068	52.9	55.2	
2	6.155	6.146	0.009	6590566	52.9	54.7	
RPD = 0.74							
7 isobutylene							
1	5.322	5.311	0.011	5189017	51.1	53.6	
2	6.004	5.998	0.006	4363220	51.1	53.8	
RPD = 0.40							

Report Date: 15-May-2019 11:57:55

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00026

Amount Added: 40.00

Units: uL

Report Date: 15-May-2019 11:57:55

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D

Injection Date: 15-Apr-2019 11:03:41

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L4

Worklist Smp#: 4

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

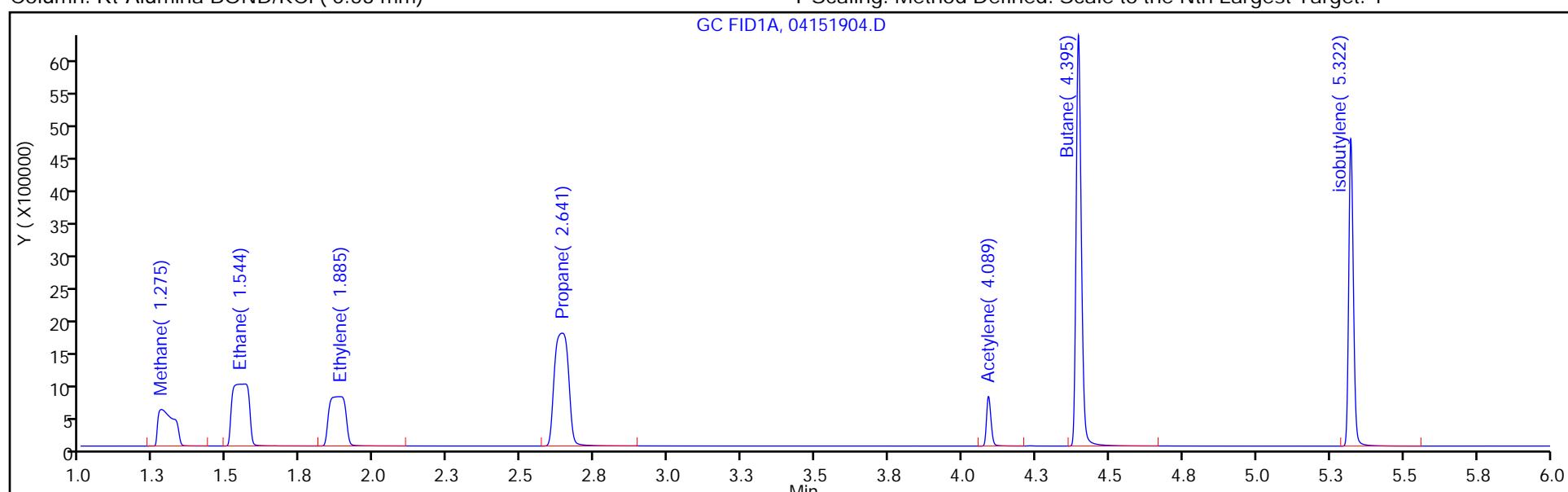
ALS Bottle#: 4

Method: RSK_J

Limit Group: GCV - RSK 175

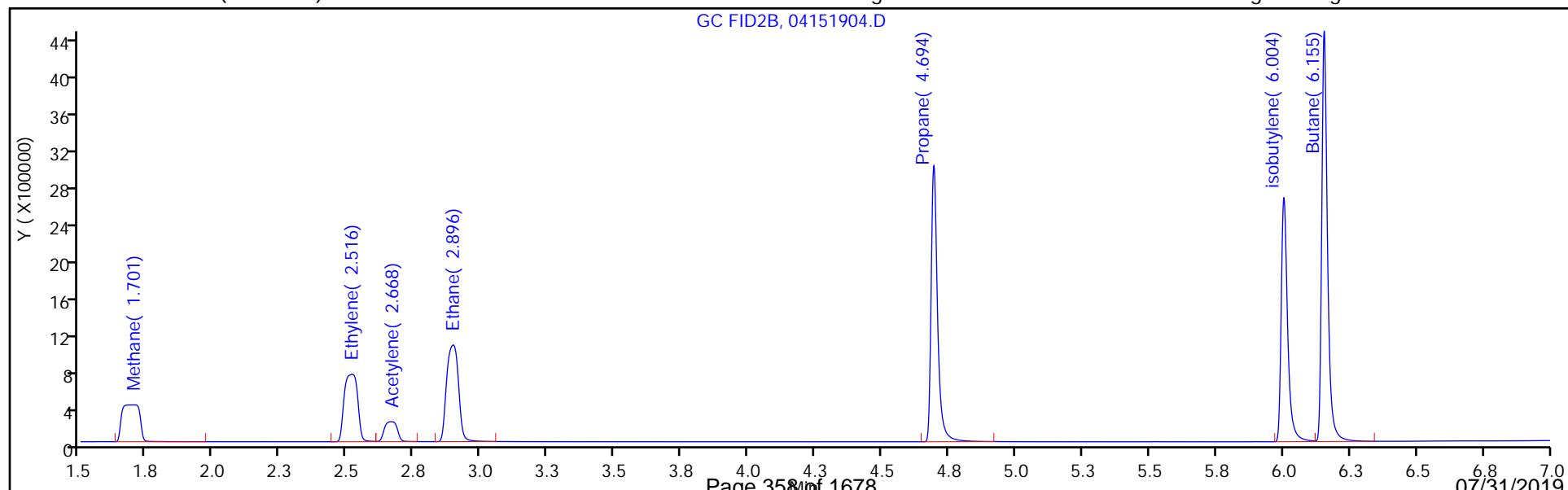
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D
 Lims ID: ICRT L5
 Client ID:
 Sample Type: ICRT Calib Level: 5
 Inject. Date: 15-Apr-2019 11:17:11 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: ICRT L5
 Misc. Info.: 280-0080933-005
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:56 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.271	1.271	0.000	9627756	73.0	71.6	
2	1.692	1.692	0.000	8233442	73.0	71.6	
RPD = 0.05							

2 Ethane

1	1.556	1.556	0.000	17308693	136.9	137.0	
2	2.889	2.889	0.000	14756883	136.9	137.4	
RPD = 0.30							

3 Ethylene

1	1.880	1.880	0.000	13570482	127.7	128.3	
2	2.512	2.512	0.000	11530864	127.7	128.1	
RPD = 0.11							

4 Propane

1	2.632	2.632	0.000	26866377	200.7	198.6	
2	4.687	4.687	0.000	22779443	200.7	198.5	
RPD = 0.04							

5 Acetylene

1	4.078	4.078	0.000	4013672	118.5	124.9	
2	2.652	2.652	0.000	3536969	118.5	124.9	
RPD = 0.04							

6 Butane

1	4.381	4.381	0.000	35922157	264.5	255.1	
2	6.146	6.146	0.000	30367524	264.5	252.3	
RPD = 1.11							

7 isobutylene

1	5.311	5.311	0.000	23677727	255.4	244.7	
2	5.998	5.998	0.000	19852679	255.4	245.0	
RPD = 0.12							

Report Date: 15-May-2019 11:57:56

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00026

Amount Added: 200.00

Units: uL

Report Date: 15-May-2019 11:57:56

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D

Injection Date: 15-Apr-2019 11:17:11

Instrument ID: VGC_J

Operator ID: ms

Lims ID: ICRT L5

Worklist Smp#: 5

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 5

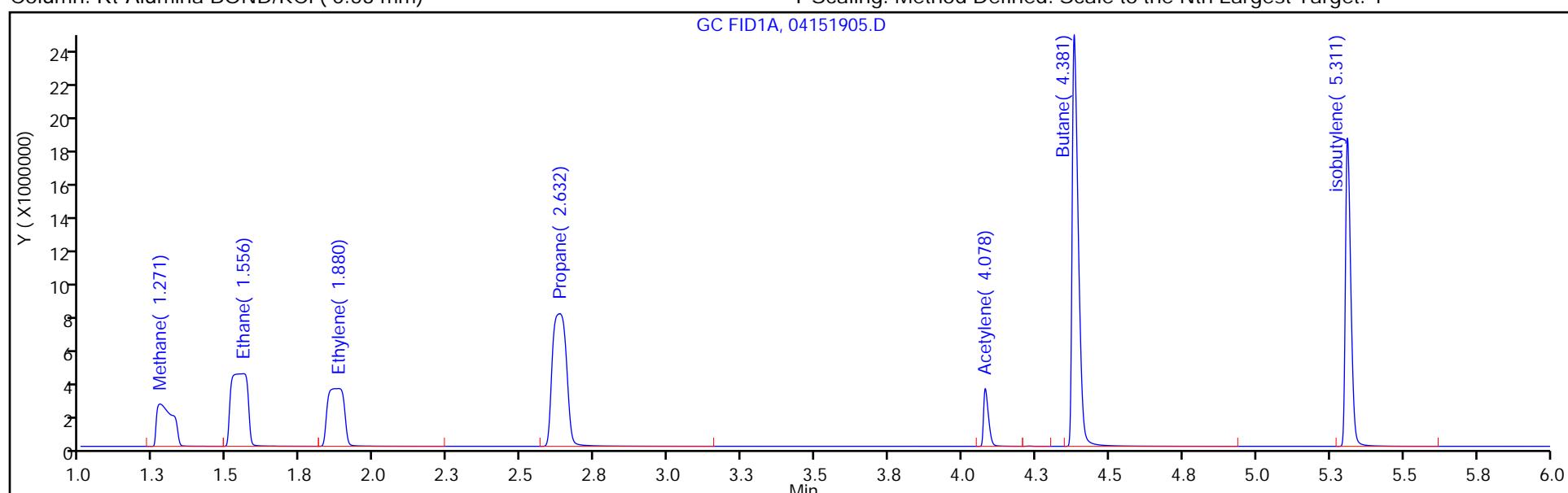
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

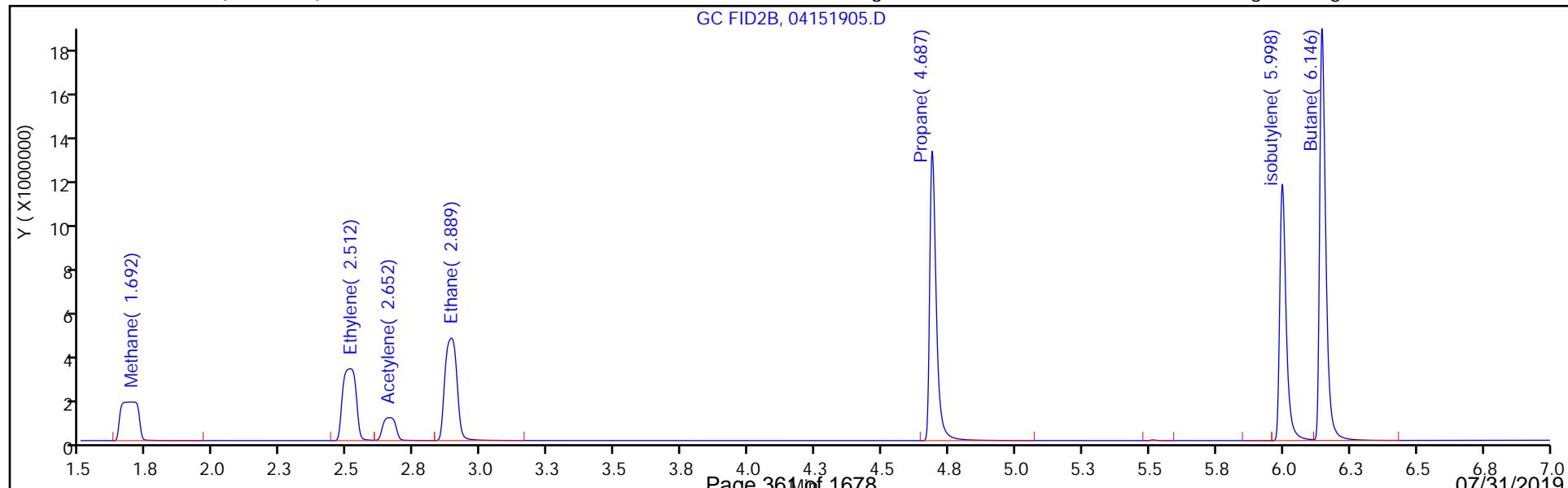
GC FID1A, 04151905.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151905.D



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D
 Lims ID: IC L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 15-Apr-2019 11:30:32 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L6
 Misc. Info.: 280-0080933-006
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:57 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane

1	1.267	1.271	-0.004	17958876	146.0	133.8	
2	1.681	1.692	-0.011	15386436	146.0	134.1	
					RPD =	0.21	

2 Ethane

1	1.549	1.556	-0.007	32290083	273.7	255.5	
2	2.882	2.889	-0.007	27708010	273.7	258.0	
					RPD =	0.95	

3 Ethylene

1	1.866	1.880	-0.014	25472652	255.3	240.7	M
2	2.503	2.512	-0.009	21746052	255.3	241.6	
					RPD =	0.36	

4 Propane

1	2.625	2.632	-0.007	50278684	401.4	371.7	
2	4.683	4.687	-0.004	42698075	401.4	372.2	
					RPD =	0.12	

5 Acetylene

1	4.070	4.078	-0.008	7700889	237.0	239.7	
2	2.656	2.652	0.004	6771875	237.0	239.1	
					RPD =	0.25	

6 Butane

1	4.370	4.381	-0.011	67375523	529.0	478.5	
2	6.140	6.146	-0.006	57174968	529.0	475.0	
					RPD =	0.73	

7 isobutylene

1	5.302	5.311	-0.009	44689590	510.8	461.9	
2	5.992	5.998	-0.006	37488004	510.8	462.6	
					RPD =	0.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026

Amount Added: 400.00

Units: uL

Report Date: 15-May-2019 11:57:58

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D

Injection Date: 15-Apr-2019 11:30:32

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L6

Worklist Smp#: 6

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

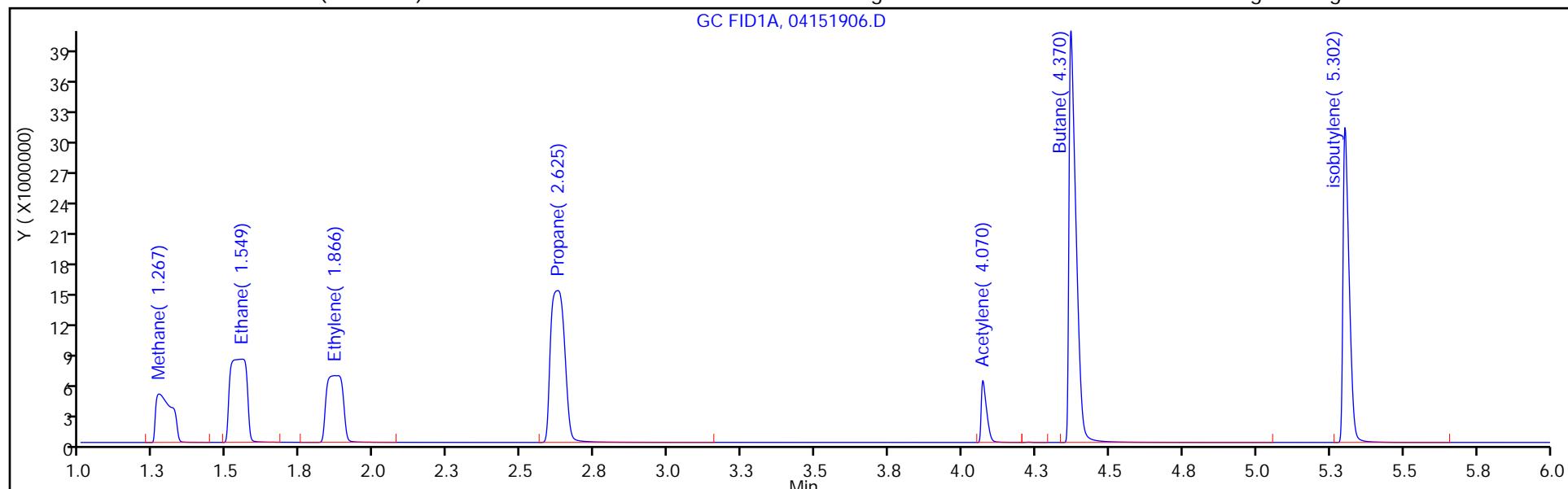
ALS Bottle#: 6

Method: RSK_J

Limit Group: GCV - RSK 175

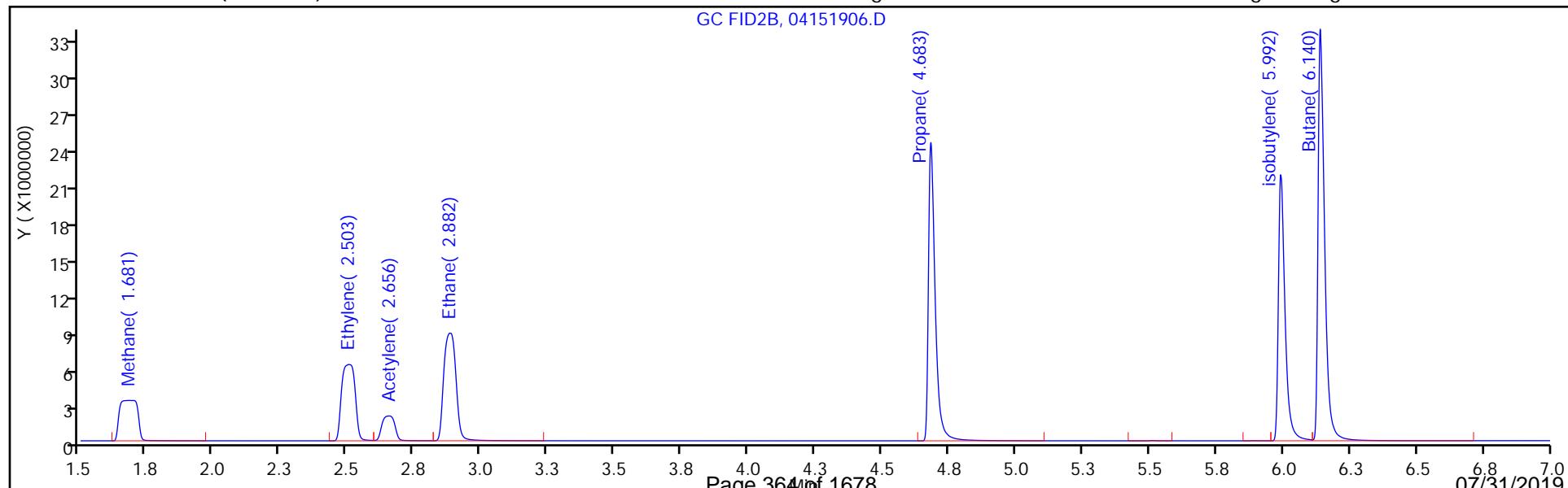
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Apr-2019 11:44:06 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L7
 Misc. Info.: 280-0080933-007
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:57:58 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane							
1	1.263	1.271	-0.008	40532226	292.0	302.4	
2	1.686	1.692	-0.006	34652624	292.0	302.3	RPD = 0.02
2 Ethane							
1	1.549	1.556	-0.007	71736807	547.4	567.7	
2	2.876	2.889	-0.013	61621639	547.4	573.7	RPD = 1.05
3 Ethylene							
1	1.870	1.880	-0.010	54838846	510.7	518.3	M
2	2.503	2.512	-0.009	46940879	510.7	521.5	
4 Propane							
1	2.611	2.632	-0.021	111846125	802.8	826.9	
2	4.672	4.687	-0.015	94884692	802.8	827.0	RPD = 0.02
5 Acetylene							
1	4.057	4.078	-0.021	15668916	474.1	487.7	
2	2.651	2.652	-0.001	13791861	474.1	486.9	RPD = 0.16
6 Butane							
1	4.350	4.381	-0.031	148225690	1058.1	1052.6	
2	6.128	6.146	-0.018	125686225	1058.1	1044.1	RPD = 0.81
7 isobutylene							
1	5.288	5.311	-0.023	94615791	1021.5	977.9	
2	5.984	5.998	-0.014	79245111	1021.5	978.0	RPD = 0.01

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026

Amount Added: 800.00

Units: uL

Report Date: 15-May-2019 11:57:59

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D

Injection Date: 15-Apr-2019 11:44:06

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L7

Worklist Smp#: 7

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 7

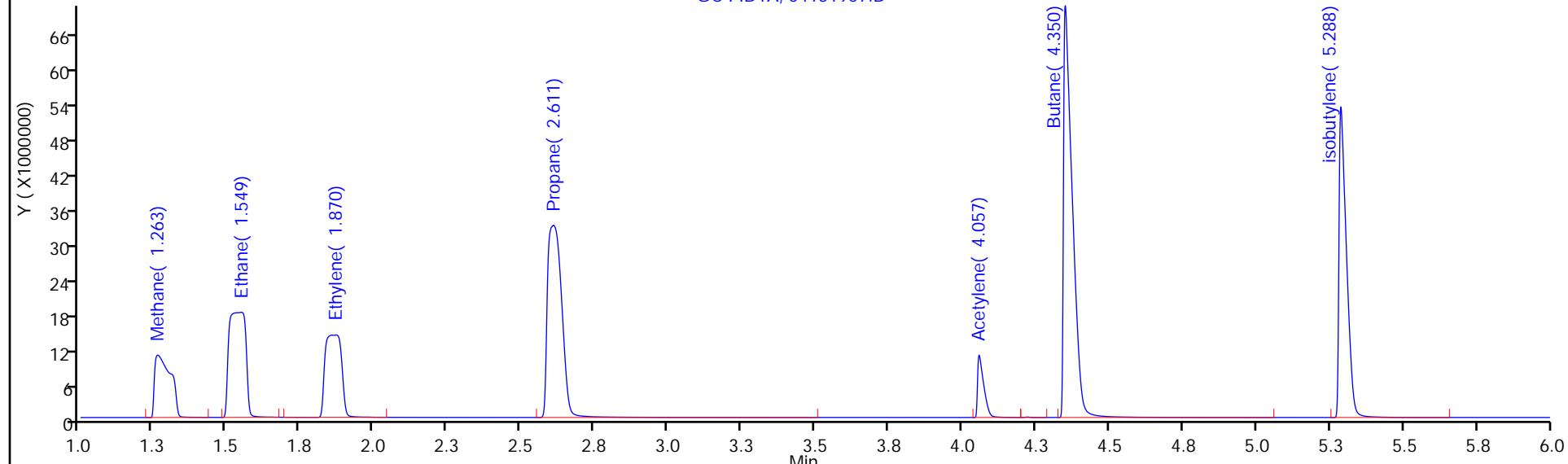
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

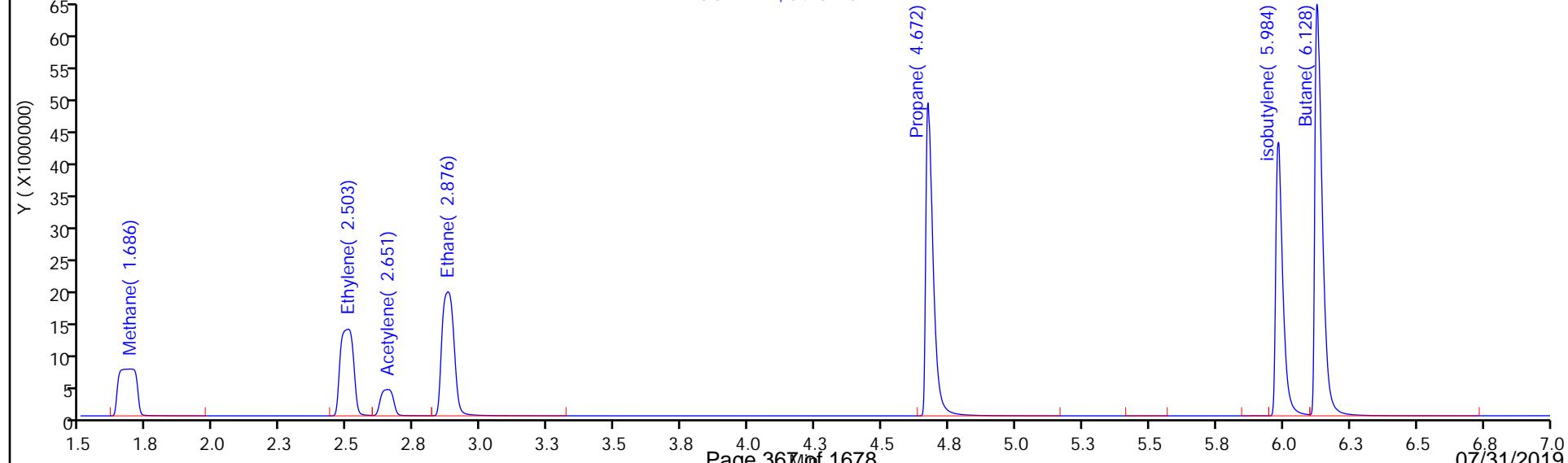
GC FID1A, 04151907.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151907.D



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 15-Apr-2019 11:57:32 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L8
 Misc. Info.: 280-0080933-008
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:58:00 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane

1	1.265	1.271	-0.006	226637342	1806.9	1691.8	
2	1.692	1.692	0.000	193042781	1806.9	1685.0	

RPD = 0.41

Reagents:

RSK175methane_00009 Amount Added: 50.00 Units: uL

Report Date: 15-May-2019 11:58:01

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D

Injection Date: 15-Apr-2019 11:57:32

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L8

Worklist Smp#: 8

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 8

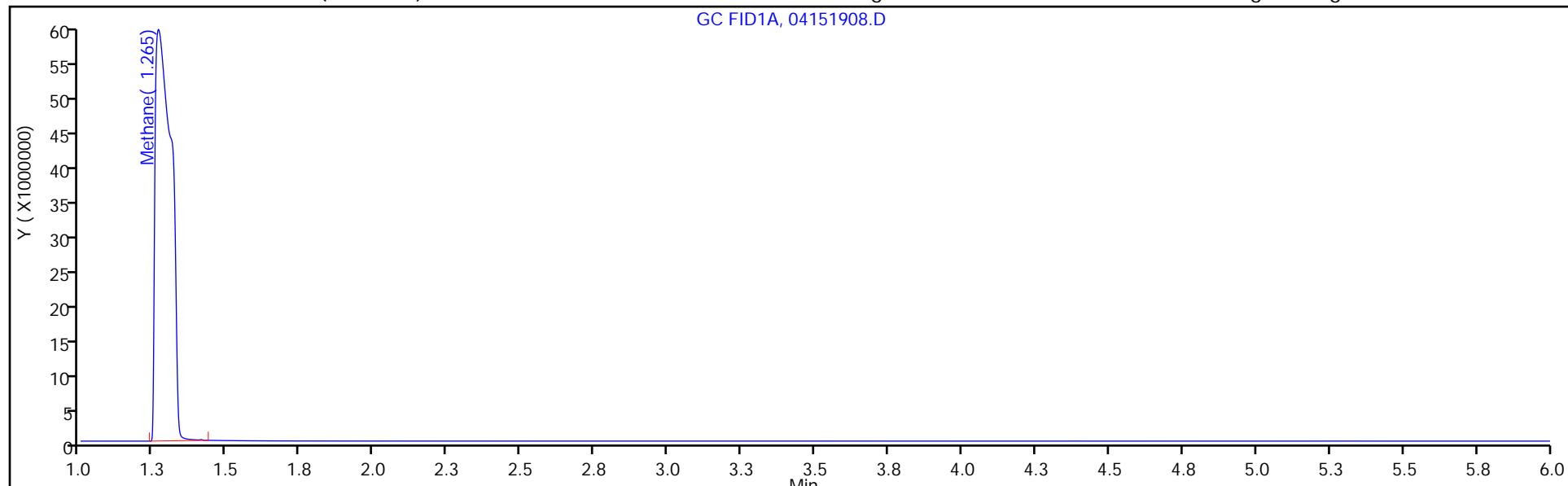
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

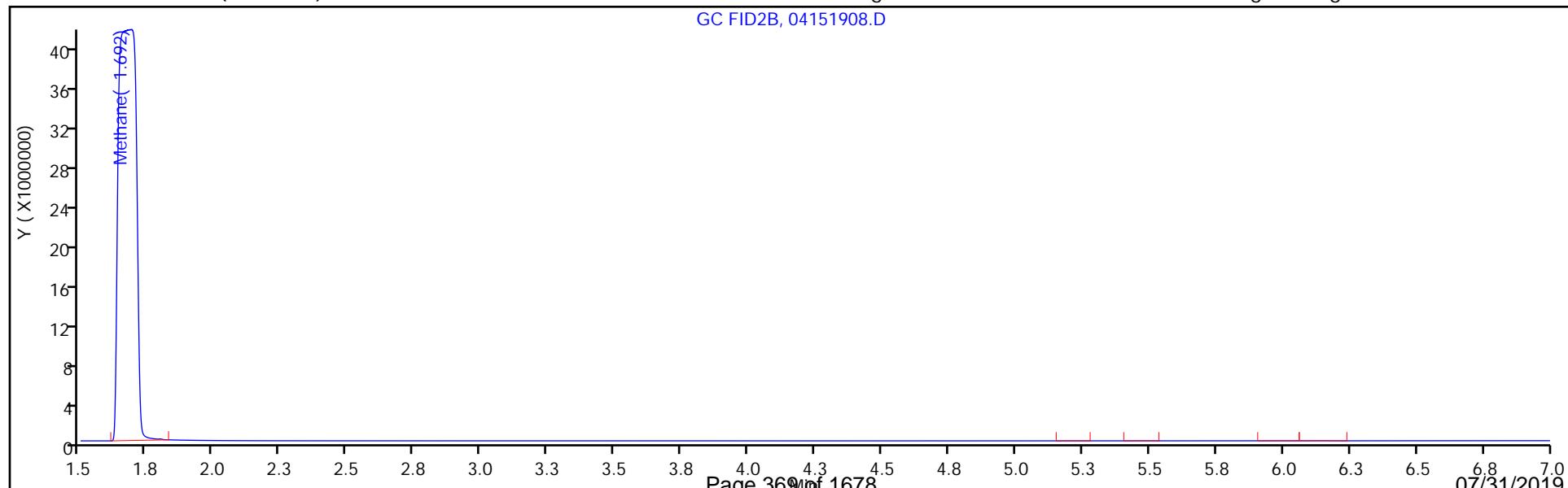
GC FID1A, 04151908.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151908.D



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 15-Apr-2019 12:11:08 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: IC L9
 Misc. Info.: 280-0080933-009
 Operator ID: ms Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:58:02 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane
 1 1.263 1.271 -0.008 952923785 7227.8 7114.4
 2 1.668 1.692 -0.024 817202335 7227.8 7133.8
 RPD = 0.27

Reagents:

RSK175methane_00009 Amount Added: 200.00 Units: uL

Report Date: 15-May-2019 11:58:02

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Injection Date: 15-Apr-2019 12:11:08

Instrument ID: VGC_J

Operator ID: ms

Lims ID: IC L9

Worklist Smp#: 9

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

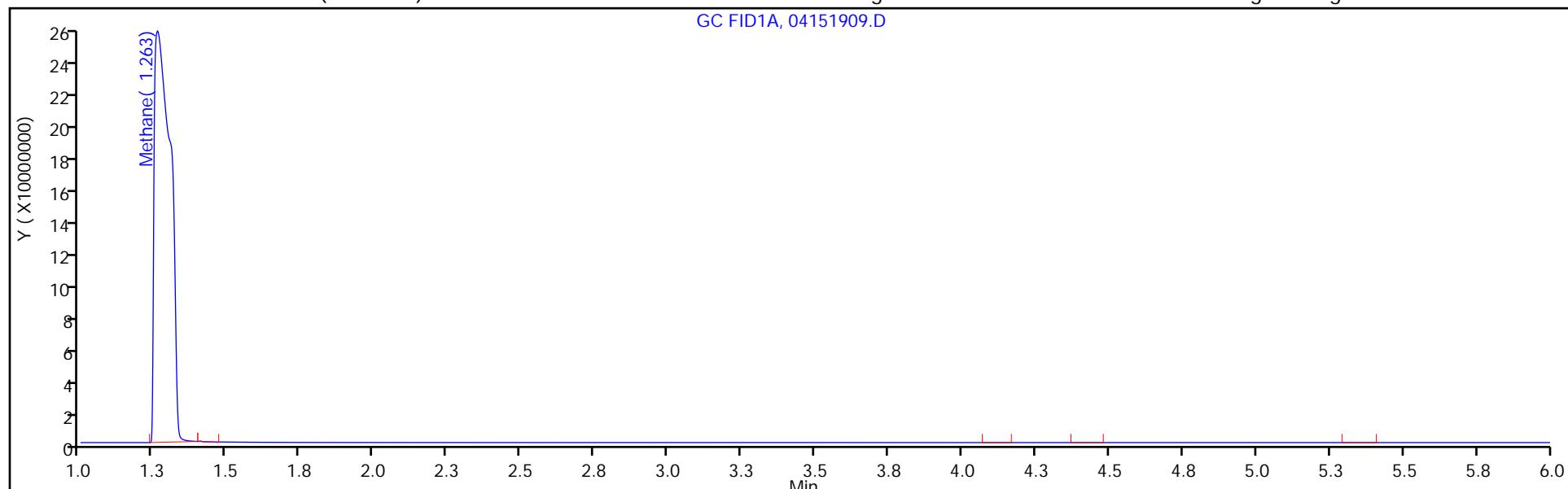
ALS Bottle#: 9

Method: RSK_J

Limit Group: GCV - RSK 175

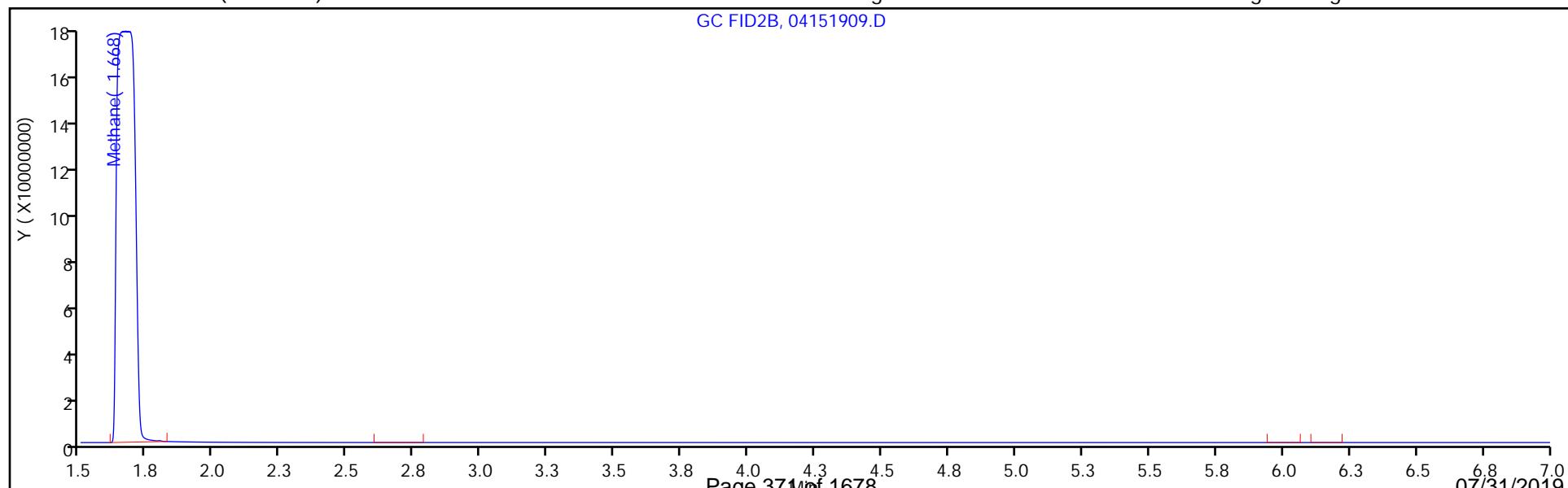
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-454595/11 Calibration Date: 04/15/2019 12:38
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 04151911.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		128138		139	146	-4.5	20.0
Ethane	Ave	126364	121882		264	274	-3.5	20.0
Ethylene	Ave	105807	101365		245	255	-4.2	20.0
Acetylene	Ave	32129	31404		232	237	-2.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-454595/11 Calibration Date: 04/15/2019 12:38
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 04151911.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.55	1.51	1.61
Ethylene	1.86	1.83	1.93
Acetylene	4.07	4.00	4.16

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-Apr-2019 12:38:15 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 280-0080933-011
 Operator ID: ms Instrument ID: VGC_J
 Sublist:
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:58:03 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.264	1.271	-0.007	18709056	146.0	139.4	
2	1.678	1.692	-0.014	16025653	146.0	139.7	
					RPD =	0.18	

2 Ethane

1	1.546	1.556	-0.010	33360415	273.7	264.0	
2	2.873	2.889	-0.016	28632577	273.7	266.6	
					RPD =	0.97	

3 Ethylene

1	1.857	1.880	-0.023	25881738	255.3	244.6	
2	2.496	2.512	-0.016	21995109	255.3	244.4	
					RPD =	0.10	

4 Propane

1	2.616	2.632	-0.016	51982286	401.4	384.3	
2	4.678	4.687	-0.009	44136454	401.4	384.7	
					RPD =	0.10	

5 Acetylene

1	4.068	4.078	-0.010	7444173	237.0	231.7	
2	2.646	2.652	-0.006	6535820	237.0	230.7	
					RPD =	0.41	

6 Butane

1	4.367	4.381	-0.014	69174084	529.0	491.2	
2	6.136	6.146	-0.010	58709409	529.0	487.7	
					RPD =	0.72	

7 isobutylene

1	5.301	5.311	-0.010	44288925	510.8	457.7	
2	5.989	5.998	-0.009	37131909	510.8	458.2	
					RPD =	0.11	

Report Date: 15-May-2019 11:58:04

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00025

Amount Added: 400.00

Units: uL

Report Date: 15-May-2019 11:58:04

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D

Injection Date: 15-Apr-2019 12:38:15

Instrument ID: VGC_J

Operator ID: ms

Lims ID: ICV

Worklist Smp#: 11

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 11

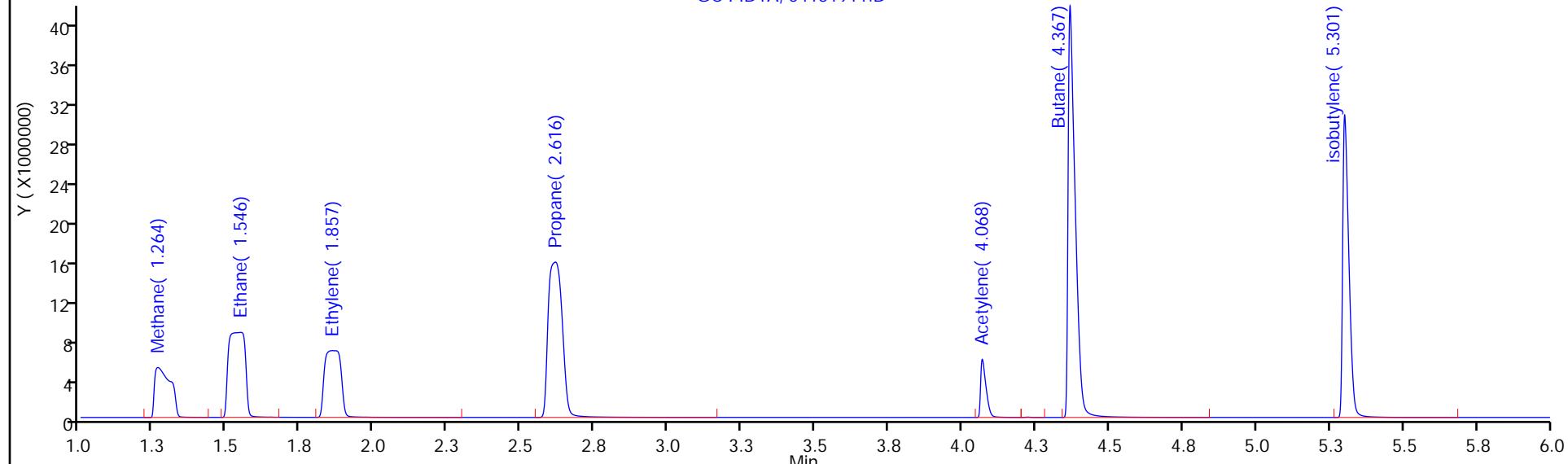
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

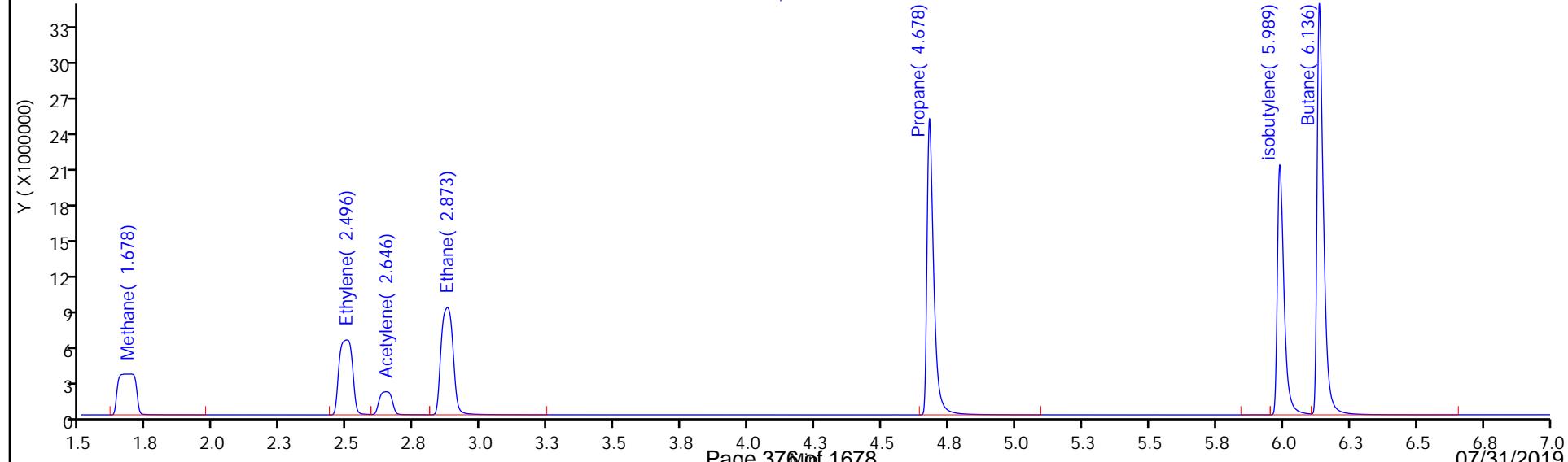
GC FID1A, 04151911.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 04151911.D



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: ICV 280-454595/11 Calibration Date: 04/15/2019 12:38

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 04151911.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		109760		140	146	-4.3	20.0
Ethylene	Ave	90007	86143		244	255	-4.3	20.0
Acetylene	Ave	28324	27572		231	237	-2.7	20.0
Ethane	Ave	107408	104609		267	274	-2.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-454595/11 Calibration Date: 04/15/2019 12:38
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 04151911.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.65	1.73
Ethylene	2.50	2.46	2.56
Acetylene	2.65	2.57	2.73
Ethane	2.87	2.84	2.94

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-Apr-2019 12:38:15 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 280-0080933-011
 Operator ID: ms Instrument ID: VGC_J
 Sublist:
 Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 15-May-2019 11:58:03 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.264	1.271	-0.007	18709056	146.0	139.4	
2	1.678	1.692	-0.014	16025653	146.0	139.7	
RPD = 0.18							

2 Ethane

1	1.546	1.556	-0.010	33360415	273.7	264.0	
2	2.873	2.889	-0.016	28632577	273.7	266.6	
RPD = 0.97							

3 Ethylene

1	1.857	1.880	-0.023	25881738	255.3	244.6	
2	2.496	2.512	-0.016	21995109	255.3	244.4	
RPD = 0.10							

4 Propane

1	2.616	2.632	-0.016	51982286	401.4	384.3	
2	4.678	4.687	-0.009	44136454	401.4	384.7	
RPD = 0.10							

5 Acetylene

1	4.068	4.078	-0.010	7444173	237.0	231.7	
2	2.646	2.652	-0.006	6535820	237.0	230.7	
RPD = 0.41							

6 Butane

1	4.367	4.381	-0.014	69174084	529.0	491.2	
2	6.136	6.146	-0.010	58709409	529.0	487.7	
RPD = 0.72							

7 isobutylene

1	5.301	5.311	-0.010	44288925	510.8	457.7	
2	5.989	5.998	-0.009	37131909	510.8	458.2	
RPD = 0.11							

Report Date: 15-May-2019 11:58:04

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00025

Amount Added: 400.00

Units: uL

Report Date: 15-May-2019 11:58:04

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D

Injection Date: 15-Apr-2019 12:38:15

Instrument ID: VGC_J

Operator ID: ms

Lims ID: ICV

Worklist Smp#: 11

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

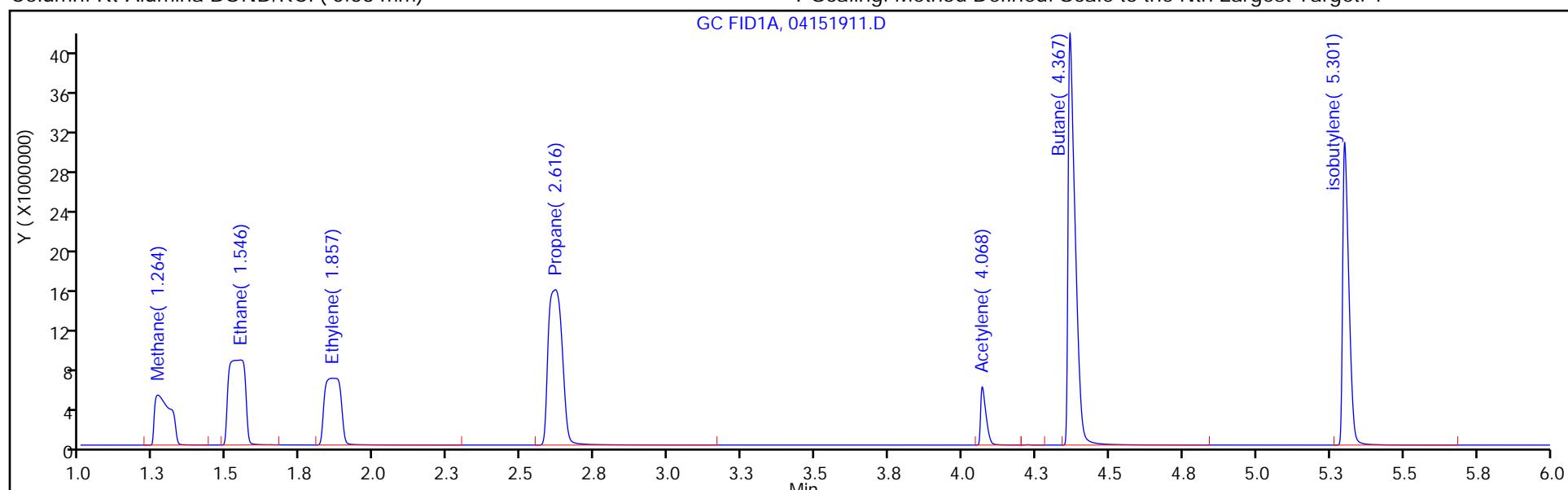
ALS Bottle#: 11

Method: RSK_J

Limit Group: GCV - RSK 175

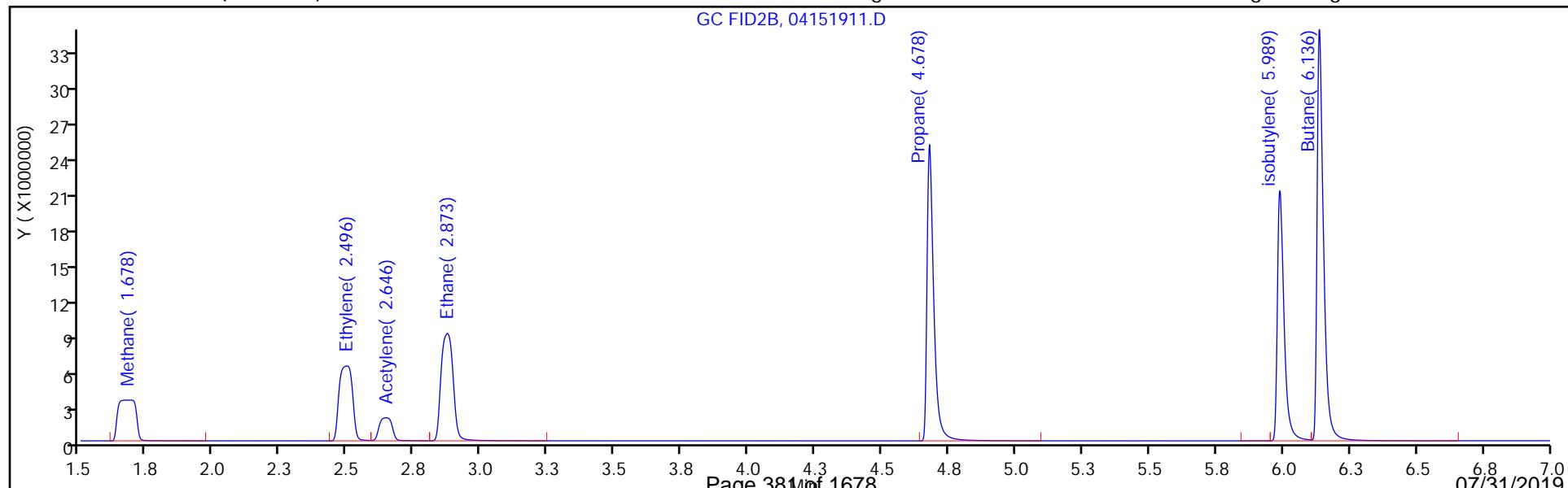
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCVRT 280-461087/1 Calibration Date: 06/11/2019 05:41
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111901.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		107919		58.6	73.0	-19.8	20.0
Ethane	Ave	126364	107166		116	137	-15.2	20.0
Ethylene	Ave	105807	96569		117	128	-8.7	20.0
Acetylene	Ave	32129	29390		108	119	-8.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCVRT 280-461087/1 Calibration Date: 06/11/2019 05:41
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.25	1.33
Ethane	1.57	1.52	1.62
Ethylene	1.89	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111901.D
 Lims ID: CCVRT
 Client ID:
 Sample Type: CCVRT
 Inject. Date: 11-Jun-2019 05:41:22 ALS Bottle#: 1 Worklist Smp#: 1
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCVRT
 Misc. Info.: 280-0082723-001
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 11-Jun-2019 12:57:35 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0340

First Level Reviewer: dobranskym Date: 11-Jun-2019 07:21:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.285	1.285	0.000	7878418	73.0	58.6	
2	1.703	1.703	0.000	6733578	73.0	58.6	RPD = 0.00
2 Ethane							
1	1.568	1.568	0.000	14666207	136.9	116.1	
2	2.907	2.907	0.000	12498112	136.9	116.4	RPD = 0.26
3 Ethylene							
1	1.888	1.888	0.000	12328579	127.7	116.5	
2	2.530	2.530	0.000	10462577	127.7	116.2	RPD = 0.24
4 Propane							
1	2.640	2.640	0.000	22937893	200.7	169.6	
2	4.694	4.694	0.000	19444384	200.7	169.5	RPD = 0.06
5 Acetylene							
1	4.064	4.064	0.000	3483398	118.5	108.4	
2	2.675	2.675	0.000	3081626	118.5	108.8	RPD = 0.35
6 Butane							
1	4.379	4.379	0.000	31340151	264.5	222.6	
2	6.152	6.152	0.000	26565733	264.5	220.7	RPD = 0.84
7 isobutylene							
1	5.303	5.303	0.000	22930681	255.4	237.0	
2	6.002	6.002	0.000	19224066	255.4	237.2	

Report Date: 11-Jun-2019 12:57:35

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 11-Jun-2019 12:57:35

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111901.D

Injection Date: 11-Jun-2019 05:41:22

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCVRT

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 1

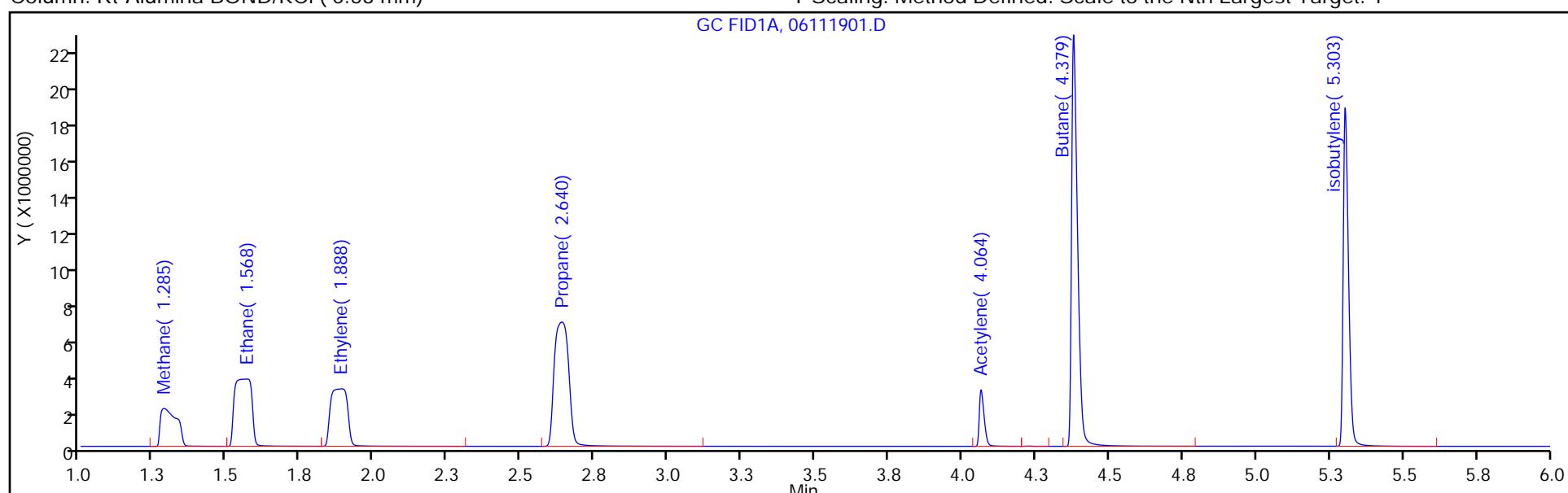
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

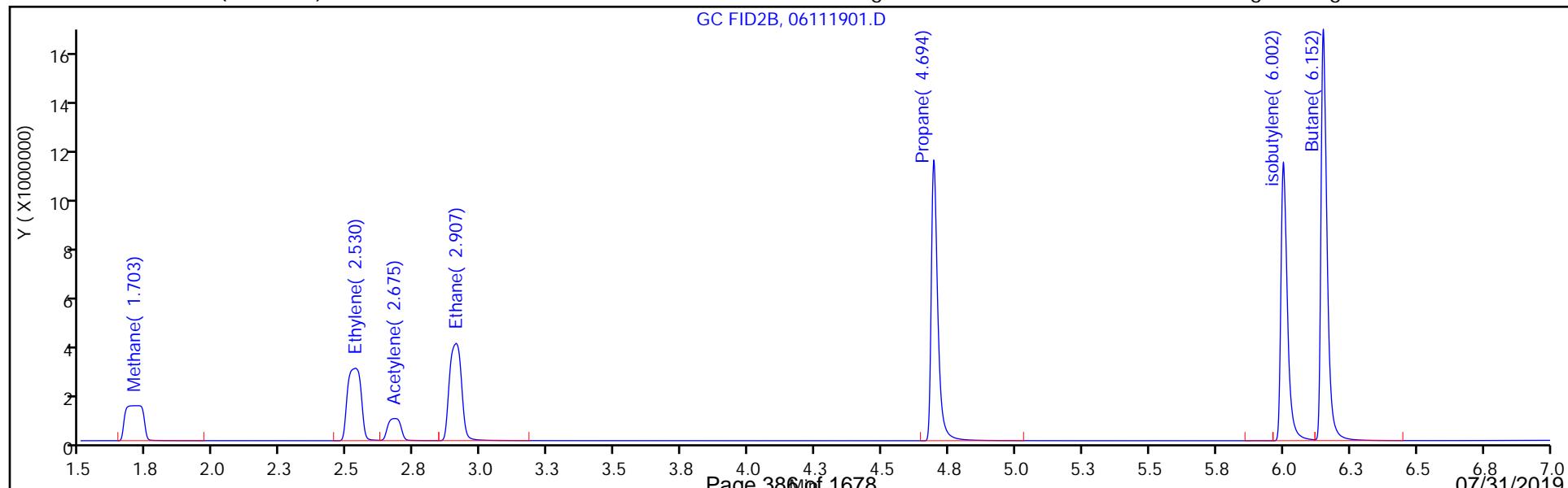
GC FID1A, 06111901.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111901.D



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCVRT 280-461087/1 Calibration Date: 06/11/2019 05:41
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111901.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		92237		58.6	73.0	-19.8	20.0
Ethylene	Ave	90007	81952		116	128	-8.9	20.0
Acetylene	Ave	28324	26000		109	119	-8.2	20.0
Ethane	Ave	107408	91323		116	137	-15.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCVRT 280-461087/1 Calibration Date: 06/11/2019 05:41

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.70	1.66	1.74
Ethylene	2.53	2.48	2.58
Acetylene	2.68	2.60	2.76
Ethane	2.91	2.86	2.96

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111901.D
 Lims ID: CCVRT
 Client ID:
 Sample Type: CCVRT
 Inject. Date: 11-Jun-2019 05:41:22 ALS Bottle#: 1 Worklist Smp#: 1
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCVRT
 Misc. Info.: 280-0082723-001
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 11-Jun-2019 12:57:35 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0340

First Level Reviewer: dobranskym Date: 11-Jun-2019 07:21:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.285	1.285	0.000	7878418	73.0	58.6	
2	1.703	1.703	0.000	6733578	73.0	58.6	RPD = 0.00
2 Ethane							
1	1.568	1.568	0.000	14666207	136.9	116.1	
2	2.907	2.907	0.000	12498112	136.9	116.4	RPD = 0.26
3 Ethylene							
1	1.888	1.888	0.000	12328579	127.7	116.5	
2	2.530	2.530	0.000	10462577	127.7	116.2	RPD = 0.24
4 Propane							
1	2.640	2.640	0.000	22937893	200.7	169.6	
2	4.694	4.694	0.000	19444384	200.7	169.5	RPD = 0.06
5 Acetylene							
1	4.064	4.064	0.000	3483398	118.5	108.4	
2	2.675	2.675	0.000	3081626	118.5	108.8	RPD = 0.35
6 Butane							
1	4.379	4.379	0.000	31340151	264.5	222.6	
2	6.152	6.152	0.000	26565733	264.5	220.7	RPD = 0.84
7 isobutylene							
1	5.303	5.303	0.000	22930681	255.4	237.0	
2	6.002	6.002	0.000	19224066	255.4	237.2	

Report Date: 11-Jun-2019 12:57:35

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 11-Jun-2019 12:57:35

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111901.D

Injection Date: 11-Jun-2019 05:41:22

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCVRT

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 1

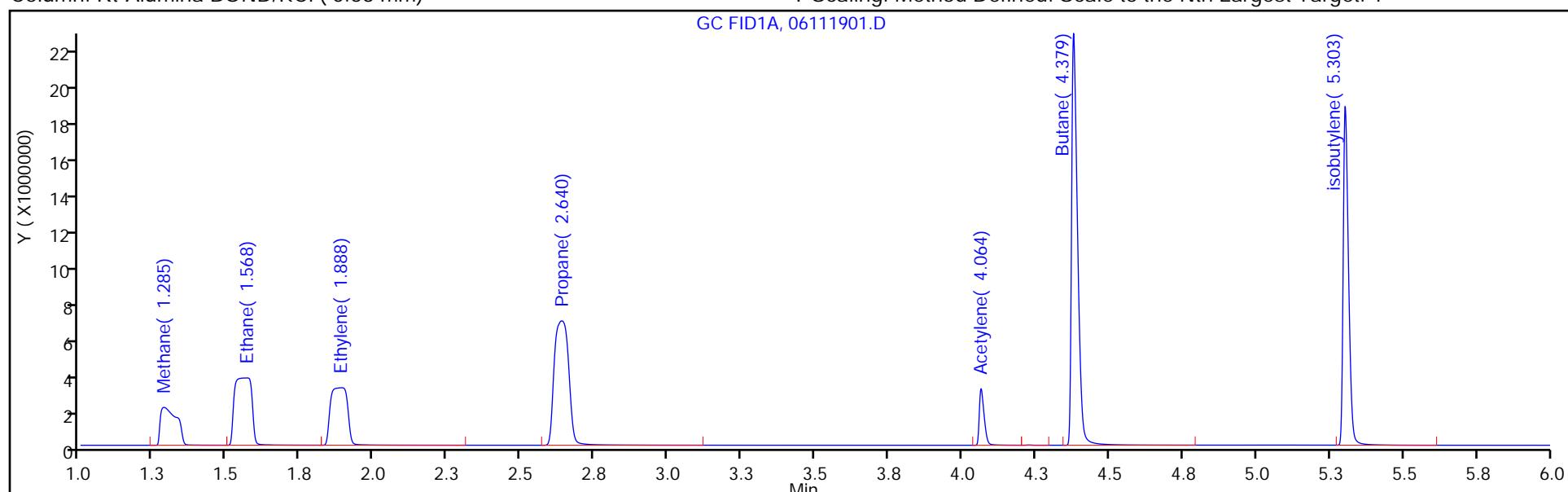
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

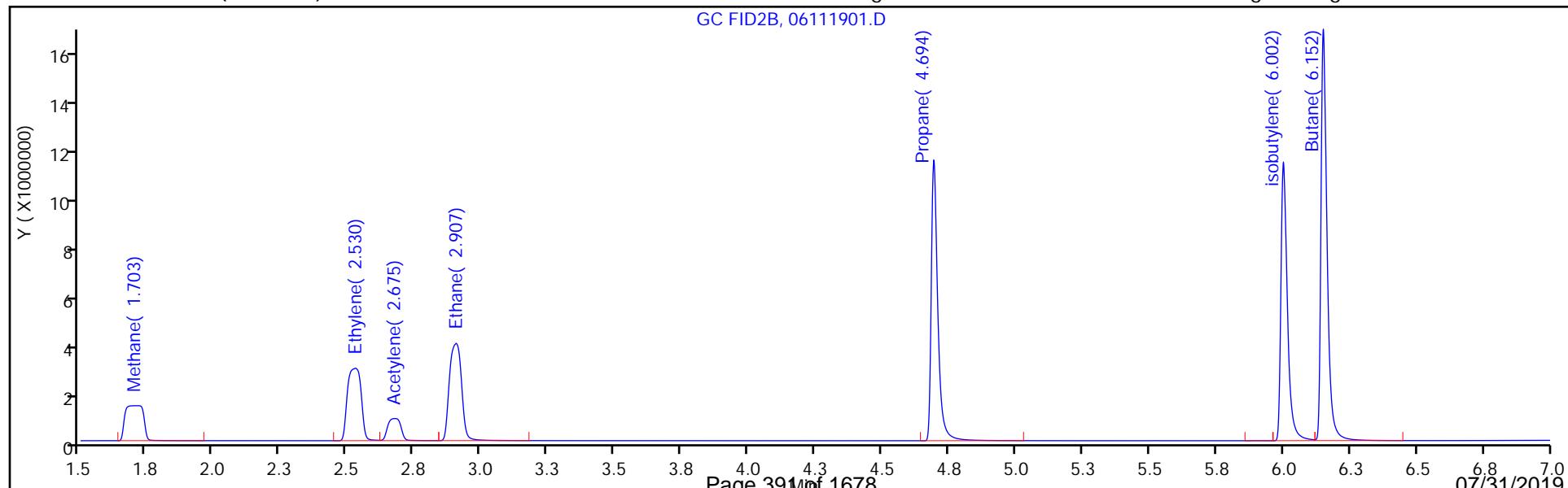
GC FID1A, 06111901.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111901.D



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461087/28 Calibration Date: 06/11/2019 12:21
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111928.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		132049		71.7	73.0	-1.8	20.0
Ethane	Ave	126364	131808		143	137	4.3	20.0
Ethylene	Ave	105807	108779		131	128	2.8	20.0
Acetylene	Ave	32129	30904		114	119	-3.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461087/28 Calibration Date: 06/11/2019 12:21
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111928.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.25	1.33
Ethane	1.54	1.52	1.62
Ethylene	1.85	1.84	1.94
Acetylene	4.05	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111928.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jun-2019 12:21:22 ALS Bottle#: 28 Worklist Smp#: 28
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Misc. Info.: 280-0082723-028
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 11-Jun-2019 12:58:07 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0340

First Level Reviewer: dobranskym Date: 11-Jun-2019 12:32:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.259	1.285	-0.026	9640034	73.0	71.7	
2	1.685	1.703	-0.018	8252855	73.0	71.8	
RPD = 0.15							
2 Ethane							
1	1.536	1.568	-0.032	18038718	136.9	142.8	
2	2.870	2.907	-0.037	15409455	136.9	143.5	
RPD = 0.50							
3 Ethylene							
1	1.850	1.888	-0.038	13887473	127.7	131.3	
2	2.490	2.530	-0.040	11816586	127.7	131.3	
RPD = 0.02							
4 Propane							
1	2.594	2.640	-0.046	29956311	200.7	221.5	
2	4.679	4.694	-0.015	25494743	200.7	222.2	
RPD = 0.33							
5 Acetylene							
1	4.054	4.064	-0.010	3662859	118.5	114.0	
2	2.640	2.675	-0.035	3192174	118.5	112.7	
RPD = 1.15							
6 Butane							
1	4.353	4.379	-0.026	45961508	264.5	326.4	
2	6.137	6.152	-0.015	39073253	264.5	324.6	
RPD = 0.55							
7 isobutylene							
1	5.288	5.303	-0.015	29779662	255.4	307.8	
2	5.990	6.002	-0.012	25015424	255.4	308.7	

Report Date: 11-Jun-2019 12:58:07

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 11-Jun-2019 12:58:07

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111928.D

Injection Date: 11-Jun-2019 12:21:22

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCV

Worklist Smp#: 28

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

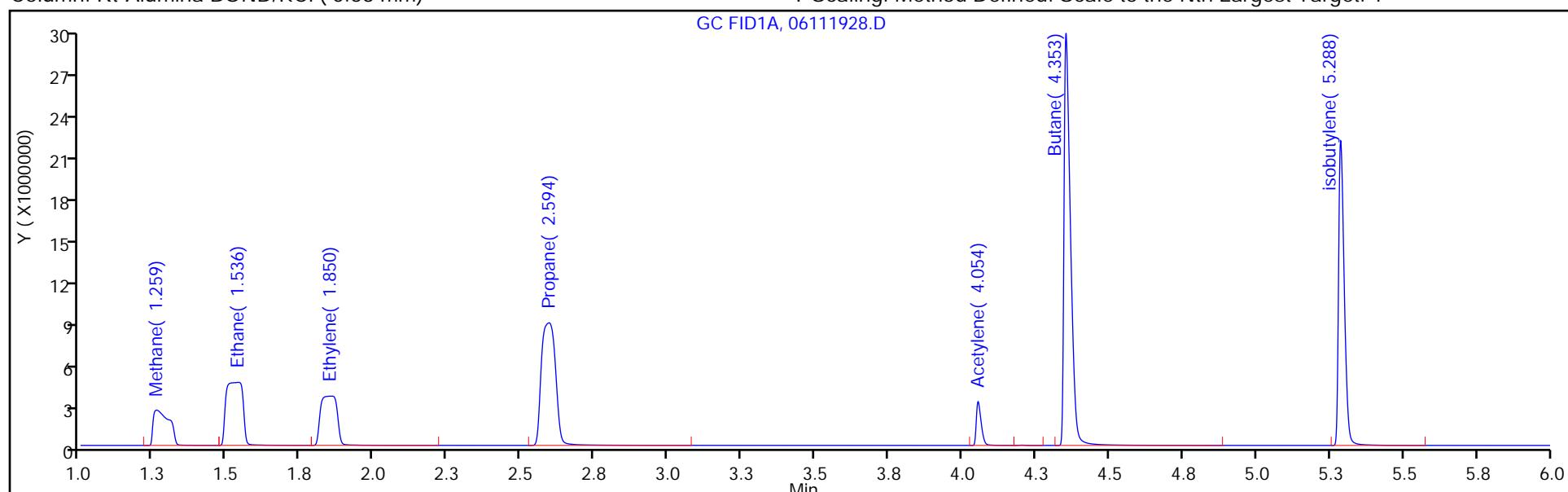
ALS Bottle#: 28

Method: RSK_J

Limit Group: GCV - RSK 175

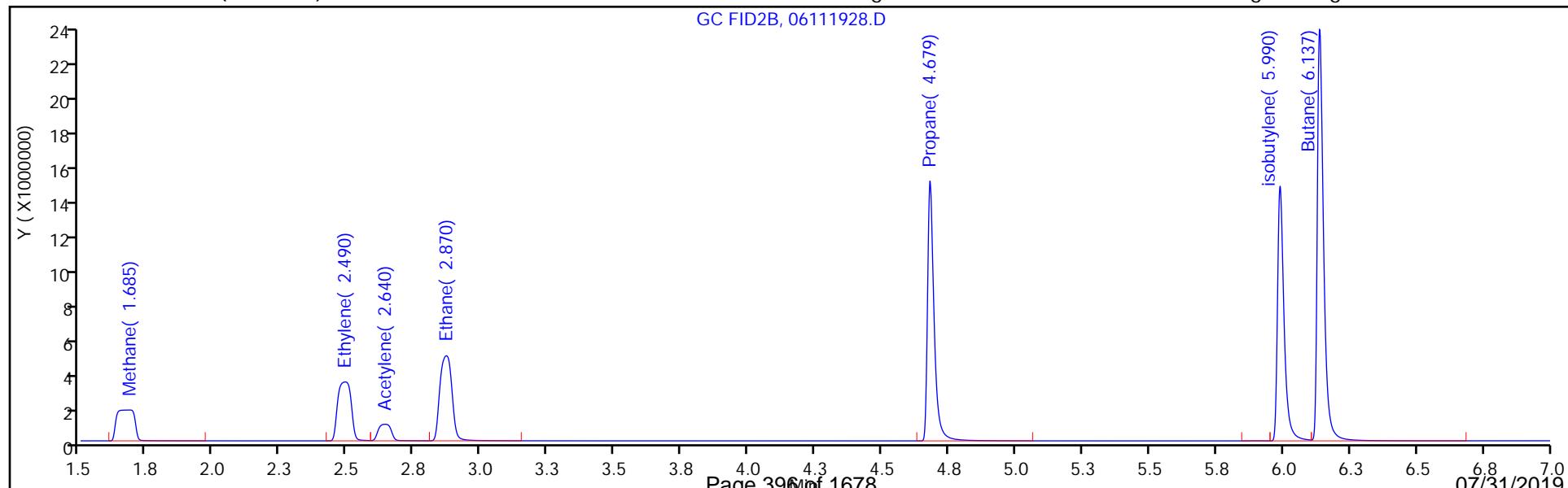
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461087/28 Calibration Date: 06/11/2019 12:21
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111928.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		113048		71.8	73.0	-1.6	20.0
Ethylene	Ave	90007	92558		131	128	2.8	20.0
Acetylene	Ave	28324	26933		113	119	-4.9	20.0
Ethane	Ave	107408	112596		143	137	4.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461087/28 Calibration Date: 06/11/2019 12:21
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111928.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.66	1.74
Ethylene	2.49	2.48	2.58
Acetylene	2.64	2.60	2.76
Ethane	2.87	2.86	2.96

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111928.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jun-2019 12:21:22 ALS Bottle#: 28 Worklist Smp#: 28
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Misc. Info.: 280-0082723-028
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 11-Jun-2019 12:58:07 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0340

First Level Reviewer: dobransky Date: 11-Jun-2019 12:32:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.259	1.285	-0.026	9640034	73.0	71.7	
2	1.685	1.703	-0.018	8252855	73.0	71.8	
RPD = 0.15							
2 Ethane							
1	1.536	1.568	-0.032	18038718	136.9	142.8	
2	2.870	2.907	-0.037	15409455	136.9	143.5	
RPD = 0.50							
3 Ethylene							
1	1.850	1.888	-0.038	13887473	127.7	131.3	
2	2.490	2.530	-0.040	11816586	127.7	131.3	
RPD = 0.02							
4 Propane							
1	2.594	2.640	-0.046	29956311	200.7	221.5	
2	4.679	4.694	-0.015	25494743	200.7	222.2	
RPD = 0.33							
5 Acetylene							
1	4.054	4.064	-0.010	3662859	118.5	114.0	
2	2.640	2.675	-0.035	3192174	118.5	112.7	
RPD = 1.15							
6 Butane							
1	4.353	4.379	-0.026	45961508	264.5	326.4	
2	6.137	6.152	-0.015	39073253	264.5	324.6	
RPD = 0.55							
7 isobutylene							
1	5.288	5.303	-0.015	29779662	255.4	307.8	
2	5.990	6.002	-0.012	25015424	255.4	308.7	

Report Date: 11-Jun-2019 12:58:08

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 11-Jun-2019 12:58:08

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111928.D

Injection Date: 11-Jun-2019 12:21:22

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCV

Worklist Smp#: 28

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

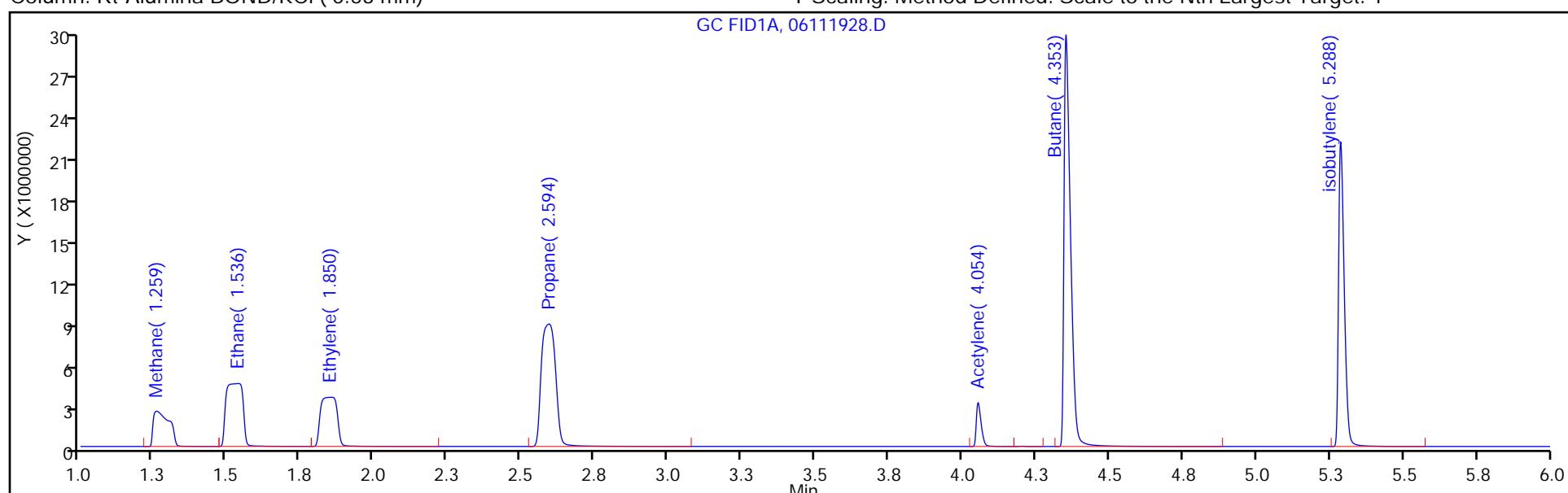
ALS Bottle#: 28

Method: RSK_J

Limit Group: GCV - RSK 175

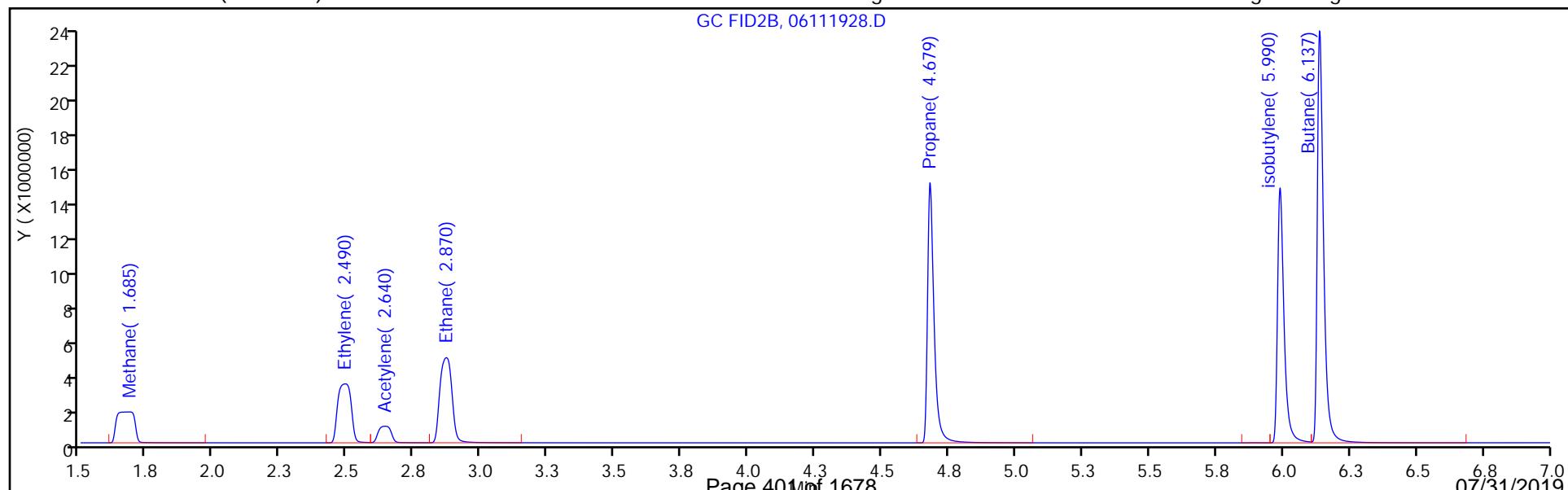
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461087/47 Calibration Date: 06/11/2019 16:36
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111947.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		146884		71.8	65.7	9.3	20.0
Ethane	Ave	126364	146829		143	123	16.2	20.0
Ethylene	Ave	105807	118019		128	115	11.5	20.0
Acetylene	Ave	32129	35071		116	107	9.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461087/47 Calibration Date: 06/11/2019 16:36
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111947.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.25	1.33
Ethane	1.54	1.52	1.62
Ethylene	1.85	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111947.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jun-2019 16:36:34 ALS Bottle#: 47 Worklist Smp#: 47
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Misc. Info.: 280-0082723-047
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:46:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.262	1.285	-0.023	9650726	65.7	71.8	
2	1.671	1.703	-0.032	8258935	65.7	71.9	
RPD = 0.12							
2 Ethane							
1	1.541	1.568	-0.027	18084892	123.2	143.1	
2	2.876	2.907	-0.031	15453270	123.2	143.9	
RPD = 0.53							
3 Ethylene							
1	1.852	1.888	-0.036	13560401	114.9	128.2	
2	2.500	2.530	-0.030	11548953	114.9	128.3	
RPD = 0.12							
4 Propane							
1	2.601	2.640	-0.039	30583970	180.6	226.1	
2	4.683	4.694	-0.011	25985546	180.6	226.5	
RPD = 0.17							
5 Acetylene							
1	4.055	4.064	-0.009	3740982	106.7	116.4	
2	2.651	2.675	-0.024	3307581	106.7	116.8	
RPD = 0.29							
6 Butane							
1	4.355	4.379	-0.024	47869597	238.1	339.9	
2	6.139	6.152	-0.013	40647405	238.1	337.7	
RPD = 0.67							
7 Isobutylene							
1	5.289	5.303	-0.014	29741622	229.8	307.4	
2	5.992	6.002	-0.010	25011941	229.8	308.7	

Report Date: 12-Jun-2019 11:59:51

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:52

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111947.D

Injection Date: 11-Jun-2019 16:36:34

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCV

Worklist Smp#: 47

Client ID:

Purge Vol: 18.000 mL

Method: RSK_J

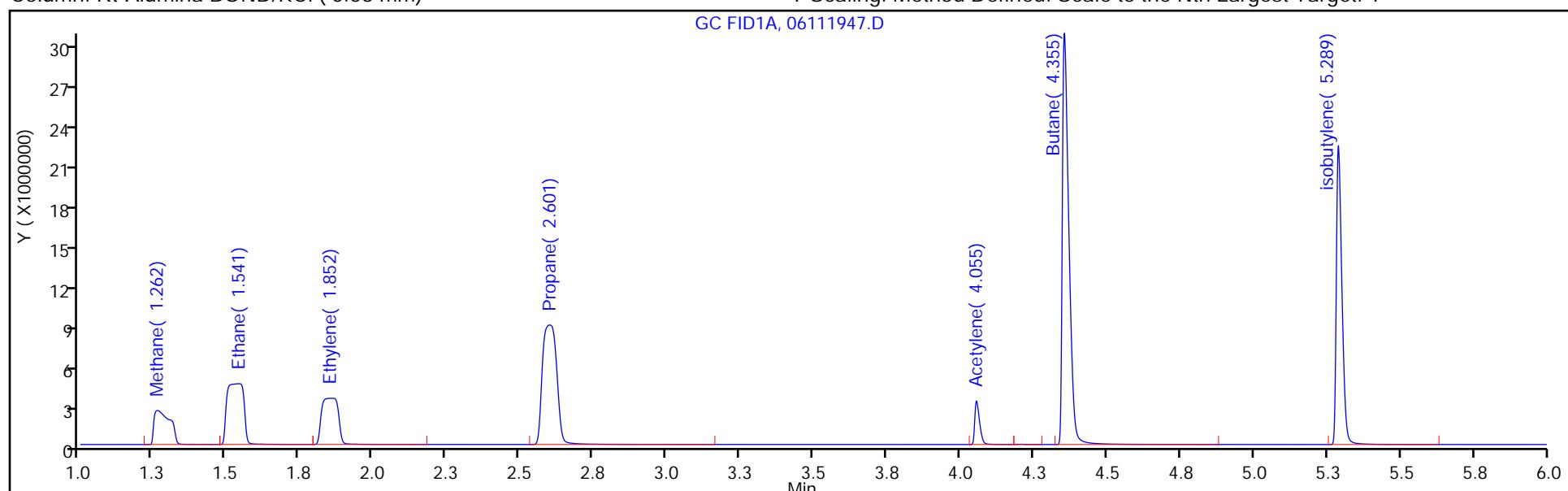
Column: Rt-Alumina BOND/KCl (0.53 mm)

Dil. Factor: 1.0000

Limit Group: GCV - RSK 175

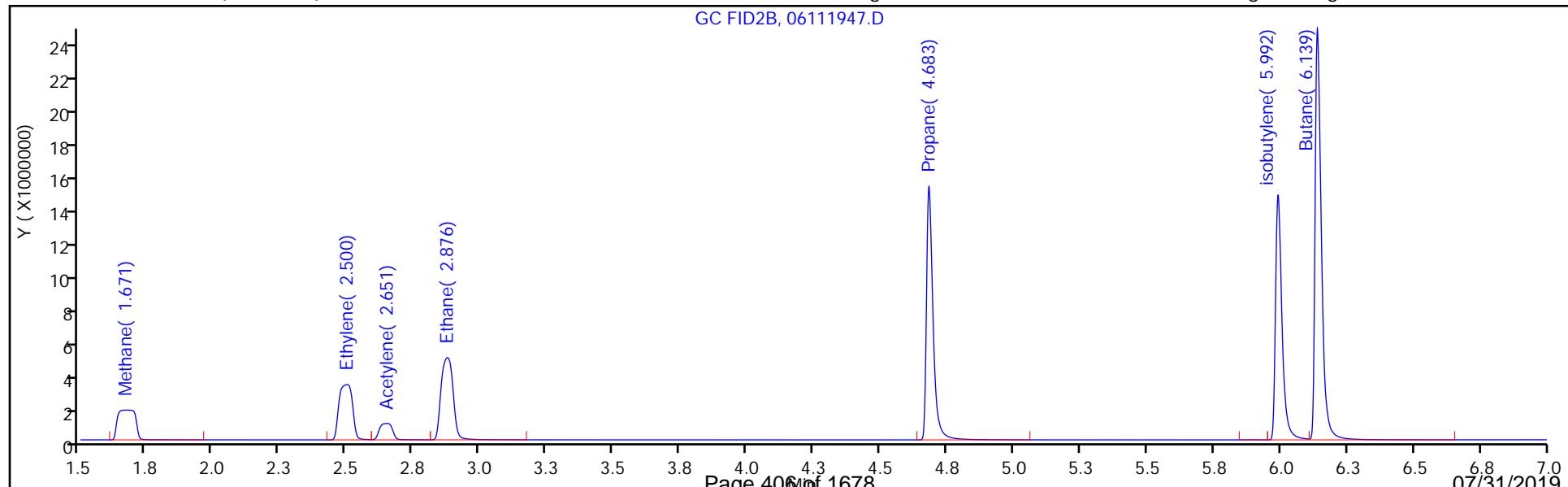
ALS Bottle#: 47

Y Scaling: Method Defined: Scale 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.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461087/47 Calibration Date: 06/11/2019 16:36
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111947.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		125701		71.9	65.7	9.4	20.0
Ethylene	Ave	90007	100513		128	115	11.7	20.0
Acetylene	Ave	28324	31008		117	107	9.5	20.0
Ethane	Ave	107408	125463		144	123	16.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461087/47 Calibration Date: 06/11/2019 16:36

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111947.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.66	1.74
Ethylene	2.50	2.48	2.58
Acetylene	2.65	2.60	2.76
Ethane	2.88	2.86	2.96

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111947.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jun-2019 16:36:34 ALS Bottle#: 47 Worklist Smp#: 47
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Misc. Info.: 280-0082723-047
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:46:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.262	1.285	-0.023	9650726	65.7	71.8	
2	1.671	1.703	-0.032	8258935	65.7	71.9	
RPD = 0.12							
2 Ethane							
1	1.541	1.568	-0.027	18084892	123.2	143.1	
2	2.876	2.907	-0.031	15453270	123.2	143.9	
RPD = 0.53							
3 Ethylene							
1	1.852	1.888	-0.036	13560401	114.9	128.2	
2	2.500	2.530	-0.030	11548953	114.9	128.3	
RPD = 0.12							
4 Propane							
1	2.601	2.640	-0.039	30583970	180.6	226.1	
2	4.683	4.694	-0.011	25985546	180.6	226.5	
RPD = 0.17							
5 Acetylene							
1	4.055	4.064	-0.009	3740982	106.7	116.4	
2	2.651	2.675	-0.024	3307581	106.7	116.8	
RPD = 0.29							
6 Butane							
1	4.355	4.379	-0.024	47869597	238.1	339.9	
2	6.139	6.152	-0.013	40647405	238.1	337.7	
RPD = 0.67							
7 isobutylene							
1	5.289	5.303	-0.014	29741622	229.8	307.4	
2	5.992	6.002	-0.010	25011941	229.8	308.7	

Report Date: 12-Jun-2019 11:59:52

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:52

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111947.D

Injection Date: 11-Jun-2019 16:36:34

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCV

Worklist Smp#: 47

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 47

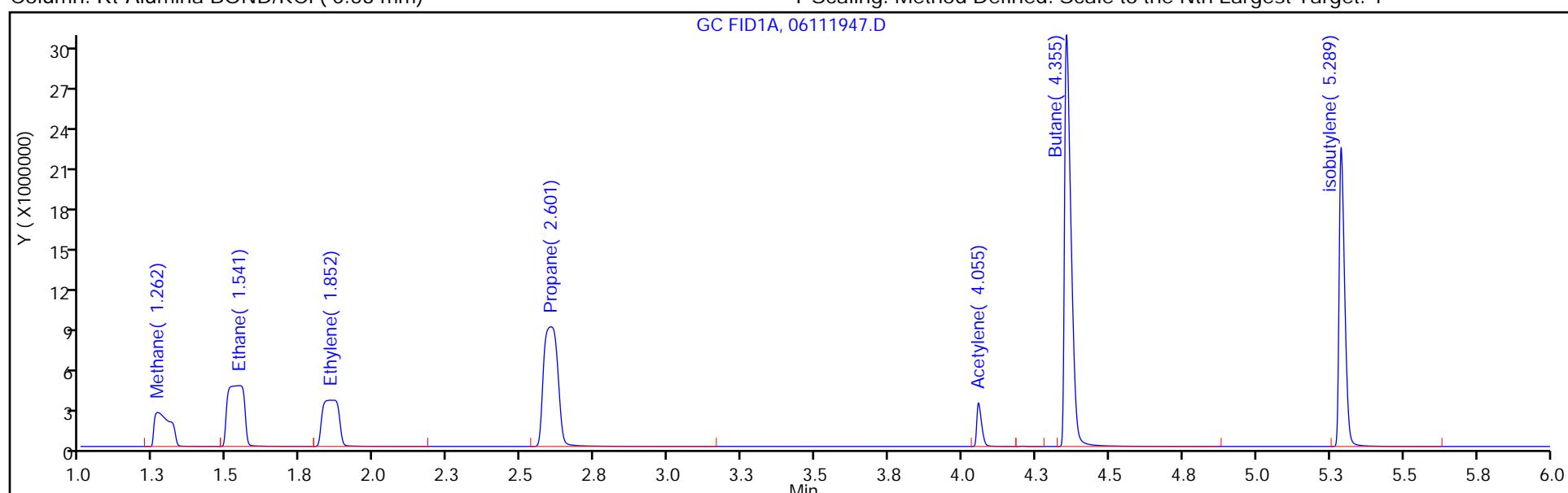
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

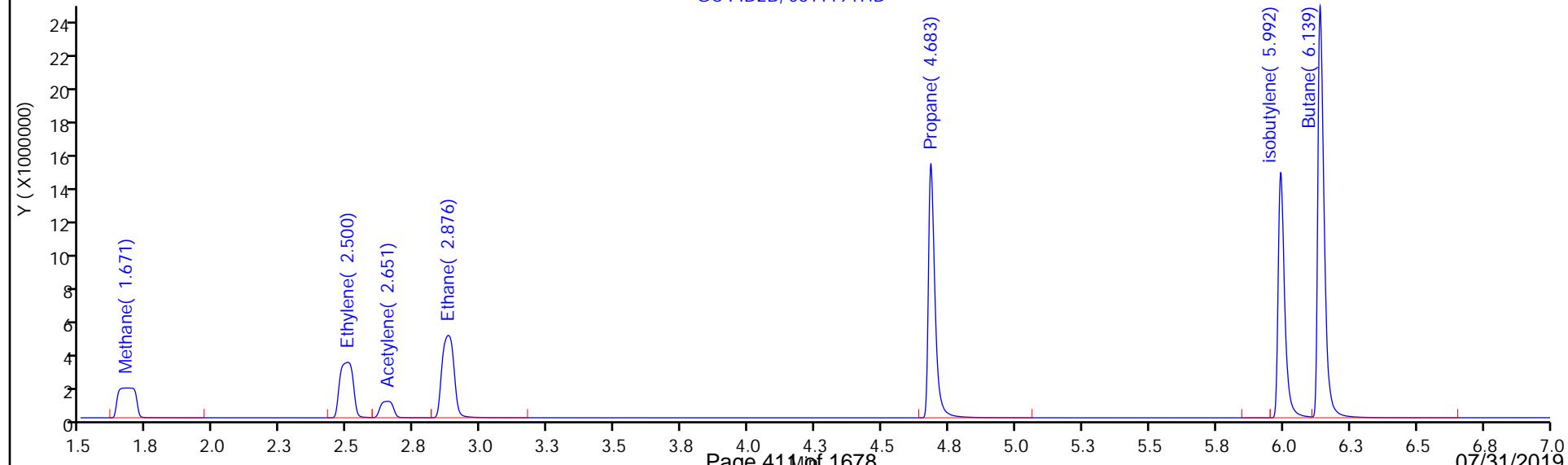
GC FID1A, 06111947.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111947.D



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461087/61 Calibration Date: 06/11/2019 19:43
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06111961.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		149112		72.9	65.7	10.9	20.0
Ethane	Ave	126364	146776		143	123	16.2	20.0
Ethylene	Ave	105807	116884		127	115	10.5	20.0
Acetylene	Ave	32129	34788		115	107	8.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461087/61 Calibration Date: 06/11/2019 19:43

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111961.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.25	1.33
Ethane	1.54	1.52	1.62
Ethylene	1.86	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111961.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jun-2019 19:43:22 ALS Bottle#: 61 Worklist Smp#: 61
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Misc. Info.: 280-0082723-061
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 12:00:28 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:48:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.264	1.285	-0.021	9797085	65.7	72.9	
2	1.669	1.703	-0.034	8391412	65.7	73.0	
RPD = 0.20							
2 Ethane							
1	1.542	1.568	-0.026	18078359	123.2	143.1	
2	2.879	2.907	-0.028	15454351	123.2	143.9	
RPD = 0.57							
3 Ethylene							
1	1.862	1.888	-0.026	13429917	114.9	126.9	
2	2.503	2.530	-0.027	11440172	114.9	127.1	
RPD = 0.14							
4 Propane							
1	2.600	2.640	-0.040	30324645	180.6	224.2	
2	4.684	4.694	-0.010	25766577	180.6	224.6	
RPD = 0.17							
5 Acetylene							
1	4.055	4.064	-0.009	3710812	106.7	115.5	
2	2.653	2.675	-0.022	3271715	106.7	115.5	
RPD = 0.01							
6 Butane							
1	4.356	4.379	-0.023	46566728	238.1	330.7	
2	6.141	6.152	-0.011	39581141	238.1	328.8	
RPD = 0.57							
7 isobutylene							
1	5.290	5.303	-0.013	28382173	229.8	293.3	
2	5.994	6.002	-0.008	23850866	229.8	294.3	

Report Date: 12-Jun-2019 12:00:28

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 12:00:28

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111961.D

Injection Date: 11-Jun-2019 19:43:22

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCV

Worklist Smp#: 61

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 61

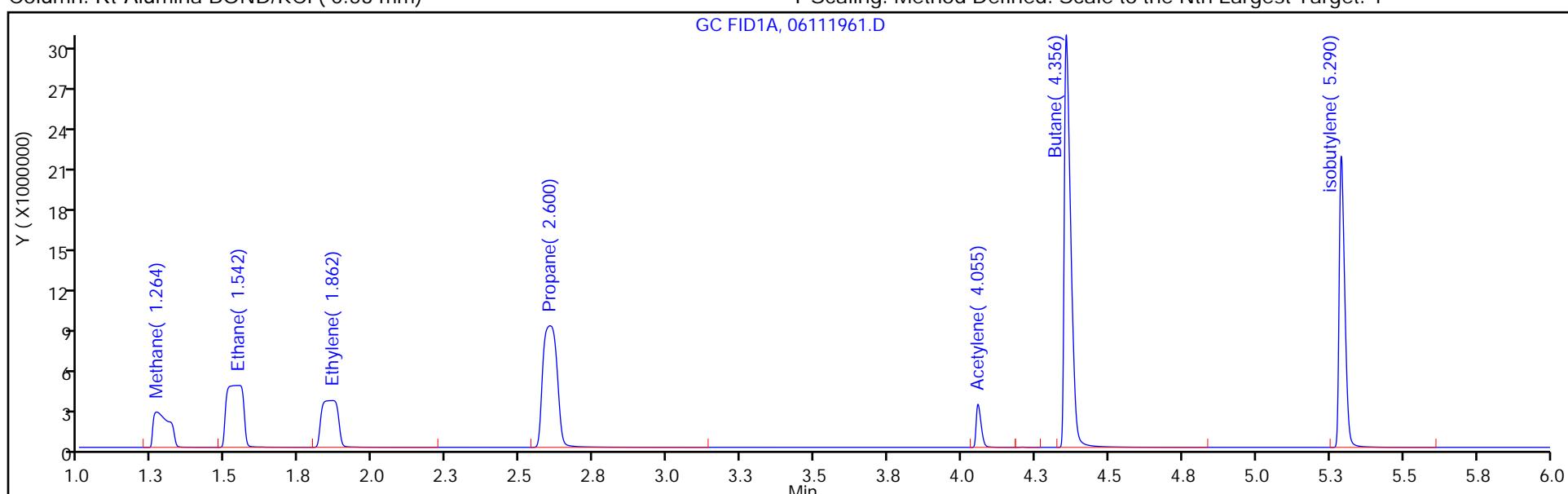
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

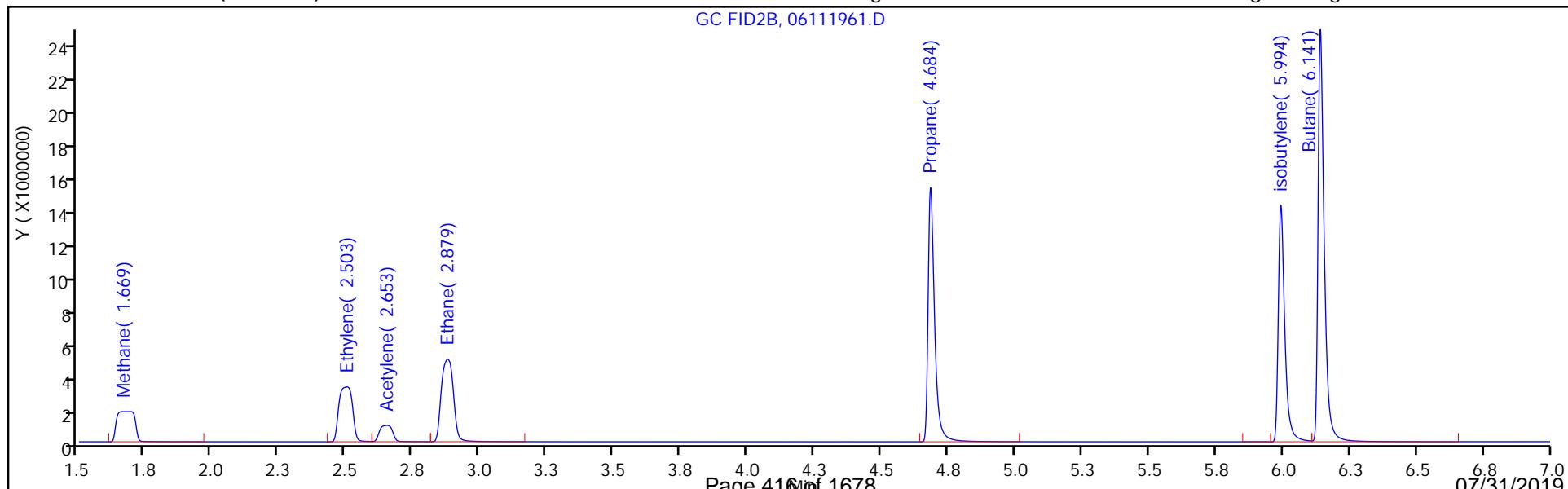
GC FID1A, 06111961.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111961.D



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461087/61 Calibration Date: 06/11/2019 19:43

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111961.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		127717		73.0	65.7	11.1	20.0
Ethylene	Ave	90007	99566		127	115	10.6	20.0
Acetylene	Ave	28324	30671		116	107	8.3	20.0
Ethane	Ave	107408	125472		144	123	16.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461087/61 Calibration Date: 06/11/2019 19:43

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111961.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.66	1.74
Ethylene	2.50	2.48	2.58
Acetylene	2.65	2.60	2.76
Ethane	2.88	2.86	2.96

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111961.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jun-2019 19:43:22 ALS Bottle#: 61 Worklist Smp#: 61
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Misc. Info.: 280-0082723-061
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 12:00:28 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:48:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.264	1.285	-0.021	9797085	65.7	72.9	
2	1.669	1.703	-0.034	8391412	65.7	73.0	
RPD = 0.20							
2 Ethane							
1	1.542	1.568	-0.026	18078359	123.2	143.1	
2	2.879	2.907	-0.028	15454351	123.2	143.9	
RPD = 0.57							
3 Ethylene							
1	1.862	1.888	-0.026	13429917	114.9	126.9	
2	2.503	2.530	-0.027	11440172	114.9	127.1	
RPD = 0.14							
4 Propane							
1	2.600	2.640	-0.040	30324645	180.6	224.2	
2	4.684	4.694	-0.010	25766577	180.6	224.6	
RPD = 0.17							
5 Acetylene							
1	4.055	4.064	-0.009	3710812	106.7	115.5	
2	2.653	2.675	-0.022	3271715	106.7	115.5	
RPD = 0.01							
6 Butane							
1	4.356	4.379	-0.023	46566728	238.1	330.7	
2	6.141	6.152	-0.011	39581141	238.1	328.8	
RPD = 0.57							
7 isobutylene							
1	5.290	5.303	-0.013	28382173	229.8	293.3	
2	5.994	6.002	-0.008	23850866	229.8	294.3	

Report Date: 12-Jun-2019 12:00:29

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 12:00:29

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111961.D

Injection Date: 11-Jun-2019 19:43:22

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCV

Worklist Smp#: 61

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 61

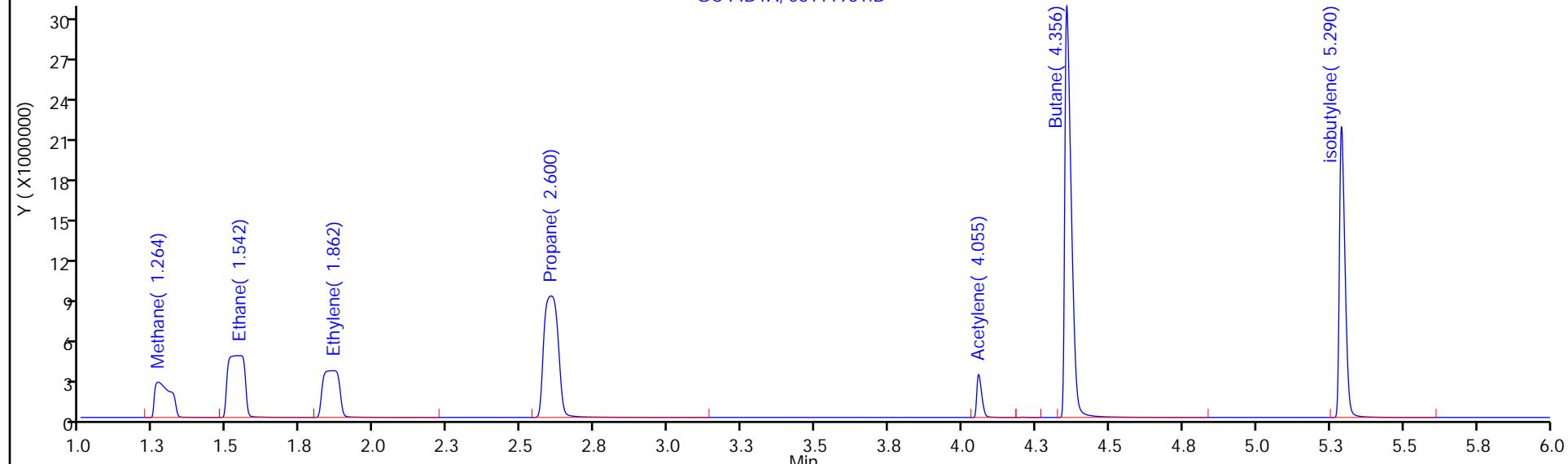
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

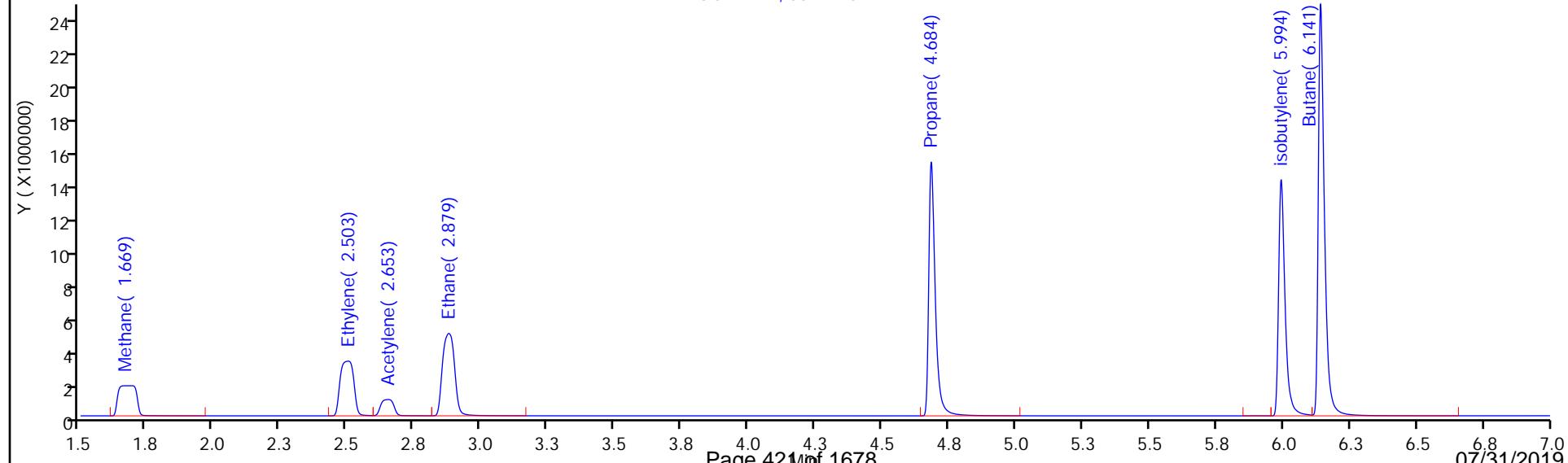
GC FID1A, 06111961.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111961.D



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCVRT 280-461235/1 Calibration Date: 06/12/2019 07:14
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06121901.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		117905		64.0	73.0	-12.3	20.0
Ethane	Ave	126364	116692		126	137	-7.7	20.0
Ethylene	Ave	105807	103839		125	128	-1.9	20.0
Acetylene	Ave	32129	29980		111	119	-6.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Lab Sample ID: CCVRT 280-461235/1

Calibration Date: 06/12/2019 07:14

Instrument ID: VGC_J

Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53 (mm)

Calib End Date: 04/15/2019 12:11

Lab File ID: 06121901.D

Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.28	1.24	1.32
Ethane	1.56	1.51	1.61
Ethylene	1.89	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121901.D
 Lims ID: CCVRT
 Client ID:
 Sample Type: CCVRT
 Inject. Date: 12-Jun-2019 07:14:26 ALS Bottle#: 1 Worklist Smp#: 1
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCVRT
 Misc. Info.: 280-0082760-001
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 07:26:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.280	1.280	0.000	8607436	73.0	64.0	
2	1.703	1.703	0.000	7368227	73.0	64.1	
RPD = 0.15							
2 Ethane							
1	1.562	1.562	0.000	15969985	136.9	126.4	
2	2.896	2.896	0.000	13648440	136.9	127.1	
RPD = 0.55							
3 Ethylene							
1	1.885	1.885	0.000	13256832	127.7	125.3	
2	2.524	2.524	0.000	11266883	127.7	125.2	
RPD = 0.09							
4 Propane							
1	2.633	2.633	0.000	25026807	200.7	185.0	
2	4.690	4.690	0.000	21227348	200.7	185.0	
RPD = 0.00							
5 Acetylene							
1	4.064	4.064	0.000	3553265	118.5	110.6	
2	2.669	2.669	0.000	3147259	118.5	111.1	
RPD = 0.47							
6 Butane							
1	4.377	4.377	0.000	34726503	264.5	246.6	
2	6.149	6.149	0.000	29500740	264.5	245.1	
RPD = 0.63							
7 isobutylene							
1	5.303	5.303	0.000	24935737	255.4	257.7	
2	6.000	6.000	0.000	20928596	255.4	258.3	

Report Date: 13-Jun-2019 10:15:25

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 13-Jun-2019 10:15:25

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190612-82760.b\\06121901.D

Injection Date: 12-Jun-2019 07:14:26

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCVRT

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

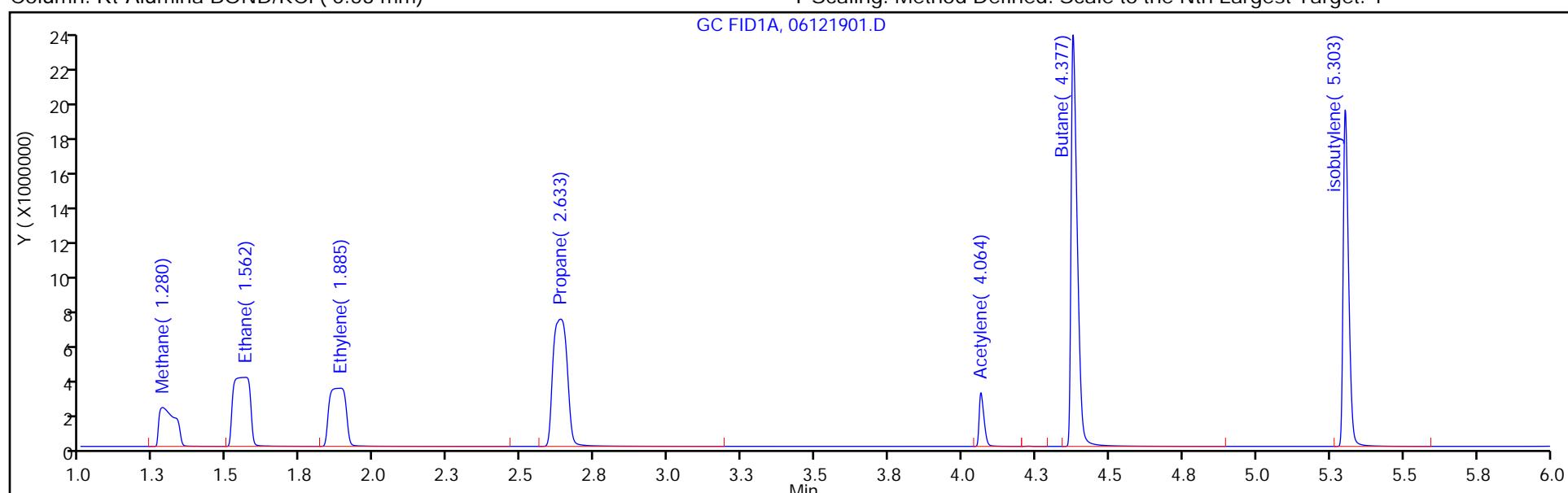
ALS Bottle#: 1

Method: RSK_J

Limit Group: GCV - RSK 175

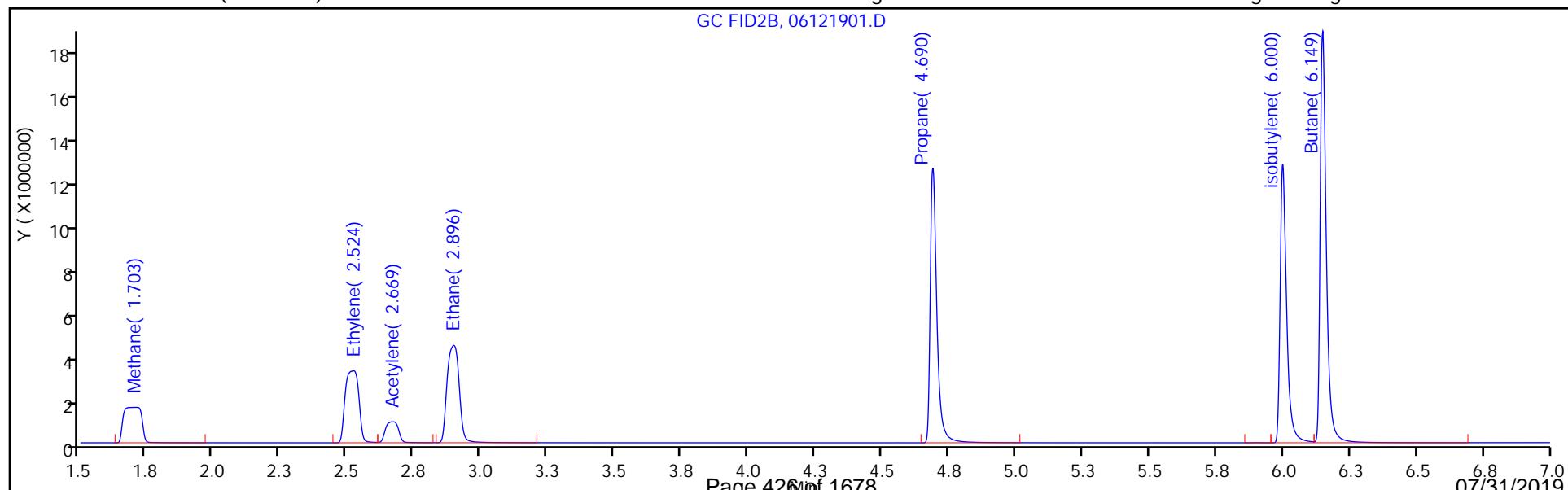
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCVRT 280-461235/1 Calibration Date: 06/12/2019 07:14

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121901.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		100930		64.1	73.0	-12.2	20.0
Ethylene	Ave	90007	88252		125	128	-1.9	20.0
Acetylene	Ave	28324	26554		111	119	-6.2	20.0
Ethane	Ave	107408	99729		127	137	-7.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCVRT 280-461235/1 Calibration Date: 06/12/2019 07:14

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.70	1.66	1.74
Ethylene	2.52	2.47	2.57
Acetylene	2.67	2.59	2.75
Ethane	2.90	2.85	2.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121901.D
 Lims ID: CCVRT
 Client ID:
 Sample Type: CCVRT
 Inject. Date: 12-Jun-2019 07:14:26 ALS Bottle#: 1 Worklist Smp#: 1
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCVRT
 Misc. Info.: 280-0082760-001
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 07:26:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.280	1.280	0.000	8607436	73.0	64.0	
2	1.703	1.703	0.000	7368227	73.0	64.1	
RPD = 0.15							
2 Ethane							
1	1.562	1.562	0.000	15969985	136.9	126.4	
2	2.896	2.896	0.000	13648440	136.9	127.1	
RPD = 0.55							
3 Ethylene							
1	1.885	1.885	0.000	13256832	127.7	125.3	
2	2.524	2.524	0.000	11266883	127.7	125.2	
RPD = 0.09							
4 Propane							
1	2.633	2.633	0.000	25026807	200.7	185.0	
2	4.690	4.690	0.000	21227348	200.7	185.0	
RPD = 0.00							
5 Acetylene							
1	4.064	4.064	0.000	3553265	118.5	110.6	
2	2.669	2.669	0.000	3147259	118.5	111.1	
RPD = 0.47							
6 Butane							
1	4.377	4.377	0.000	34726503	264.5	246.6	
2	6.149	6.149	0.000	29500740	264.5	245.1	
RPD = 0.63							
7 isobutylene							
1	5.303	5.303	0.000	24935737	255.4	257.7	
2	6.000	6.000	0.000	20928596	255.4	258.3	

Report Date: 13-Jun-2019 10:15:25

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 13-Jun-2019 10:15:25

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190612-82760.b\\06121901.D

Injection Date: 12-Jun-2019 07:14:26

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCVRT

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

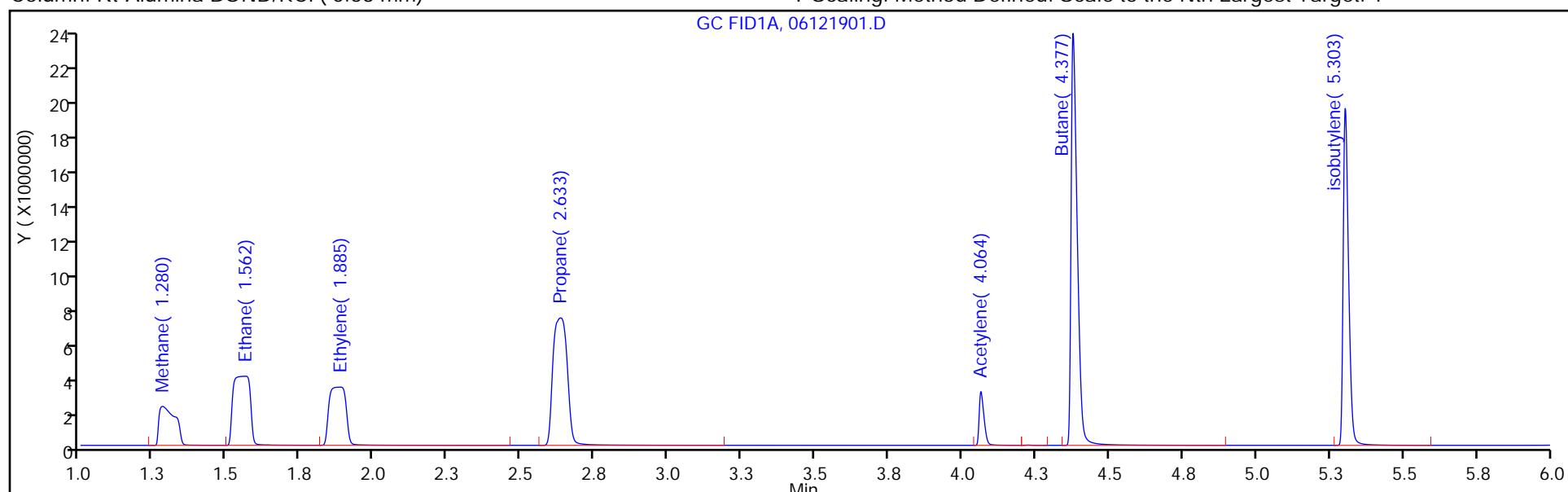
ALS Bottle#: 1

Method: RSK_J

Limit Group: GCV - RSK 175

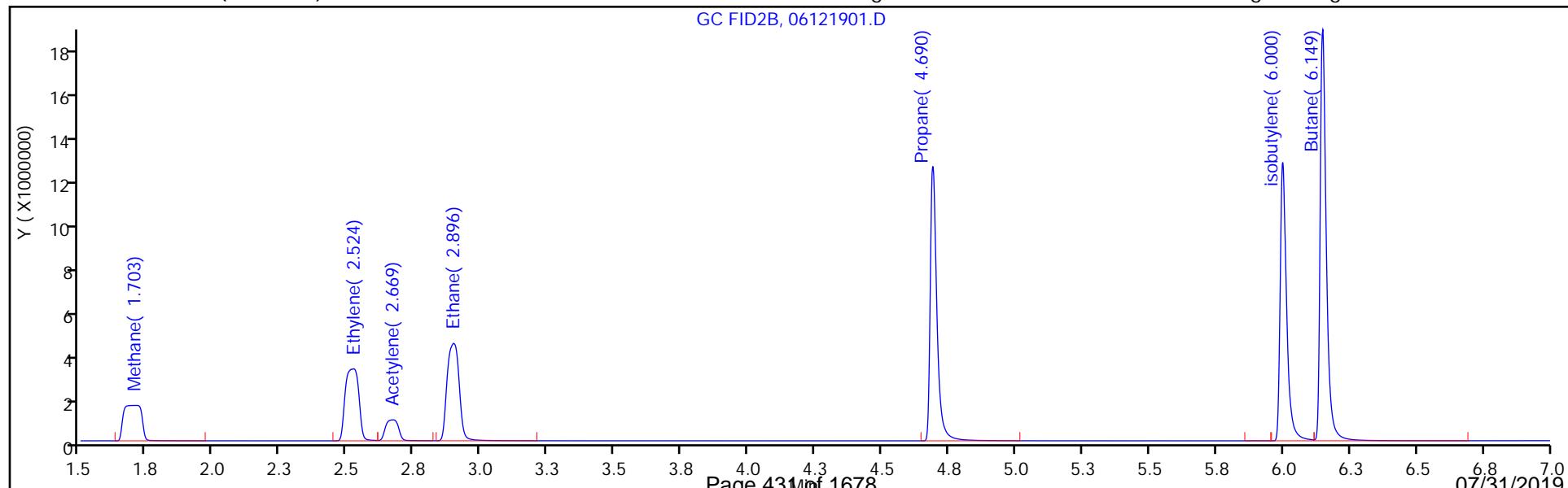
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461235/16 Calibration Date: 06/12/2019 10:45
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06121916.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		133139		72.3	73.0	-1.0	20.0
Ethane	Ave	126364	132406		143	137	4.8	20.0
Ethylene	Ave	105807	112194		135	128	6.0	20.0
Acetylene	Ave	32129	30693		113	119	-4.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461235/16 Calibration Date: 06/12/2019 10:45
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: Rt-Alumina KCl ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06121916.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.24	1.32
Ethane	1.54	1.51	1.61
Ethylene	1.86	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121916.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-Jun-2019 10:45:14 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Misc. Info.: 280-0082760-016
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 13-Jun-2019 10:16:00 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 10:55:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.265	1.280	-0.015	9719602	73.0	72.3	
2	1.688	1.703	-0.015	8351495	73.0	72.7	
RPD = 0.52							
2 Ethane							
1	1.543	1.562	-0.019	18120499	136.9	143.4	
2	2.881	2.896	-0.015	15503365	136.9	144.3	
RPD = 0.65							
3 Ethylene							
1	1.862	1.885	-0.023	14323376	127.7	135.4	
2	2.503	2.524	-0.021	12204011	127.7	135.6	
RPD = 0.16							
4 Propane							
1	2.601	2.633	-0.032	29059122	200.7	214.8	
2	4.684	4.690	-0.006	24735462	200.7	215.6	
RPD = 0.35							
5 Acetylene							
1	4.055	4.064	-0.009	3637834	118.5	113.2	
2	2.653	2.669	-0.016	3202930	118.5	113.1	
RPD = 0.13							
6 Butane							
1	4.356	4.377	-0.021	42623299	264.5	302.7	
2	6.141	6.149	-0.008	36244828	264.5	301.1	
RPD = 0.53							
7 isobutylene							
1	5.289	5.303	-0.014	28657229	255.4	296.2	
2	5.993	6.000	-0.007	24067401	255.4	297.0	

Report Date: 13-Jun-2019 10:16:00

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 13-Jun-2019 10:16:00

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190612-82760.b\\06121916.D

Injection Date: 12-Jun-2019 10:45:14

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCV

Worklist Smp#: 16

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

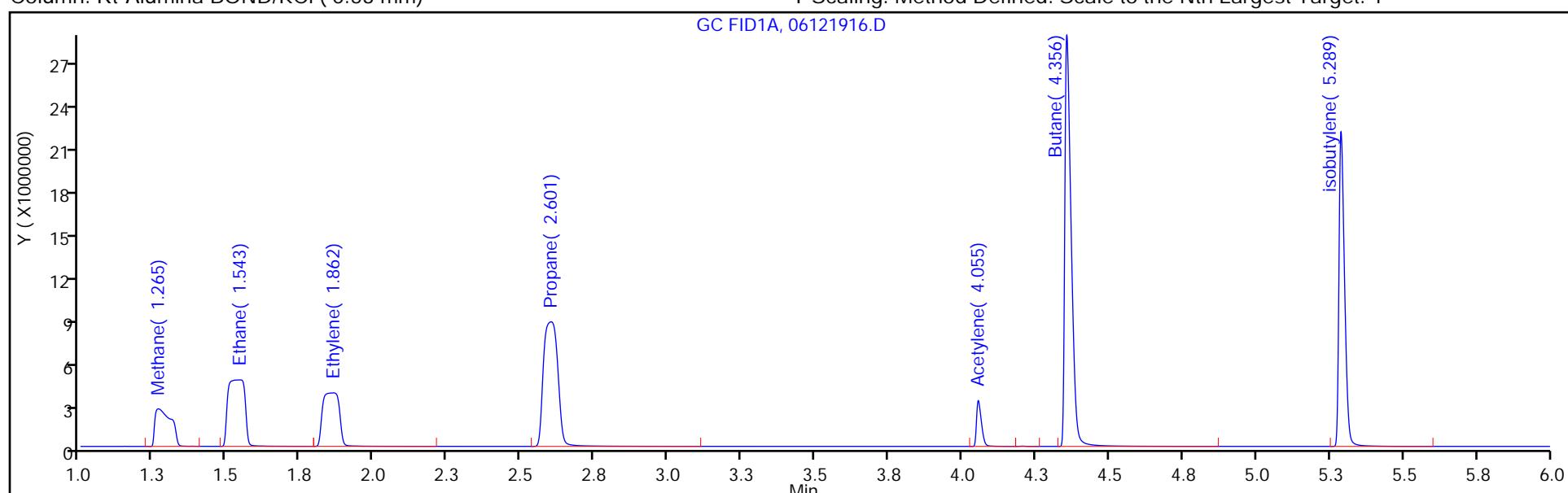
ALS Bottle#: 16

Method: RSK_J

Limit Group: GCV - RSK 175

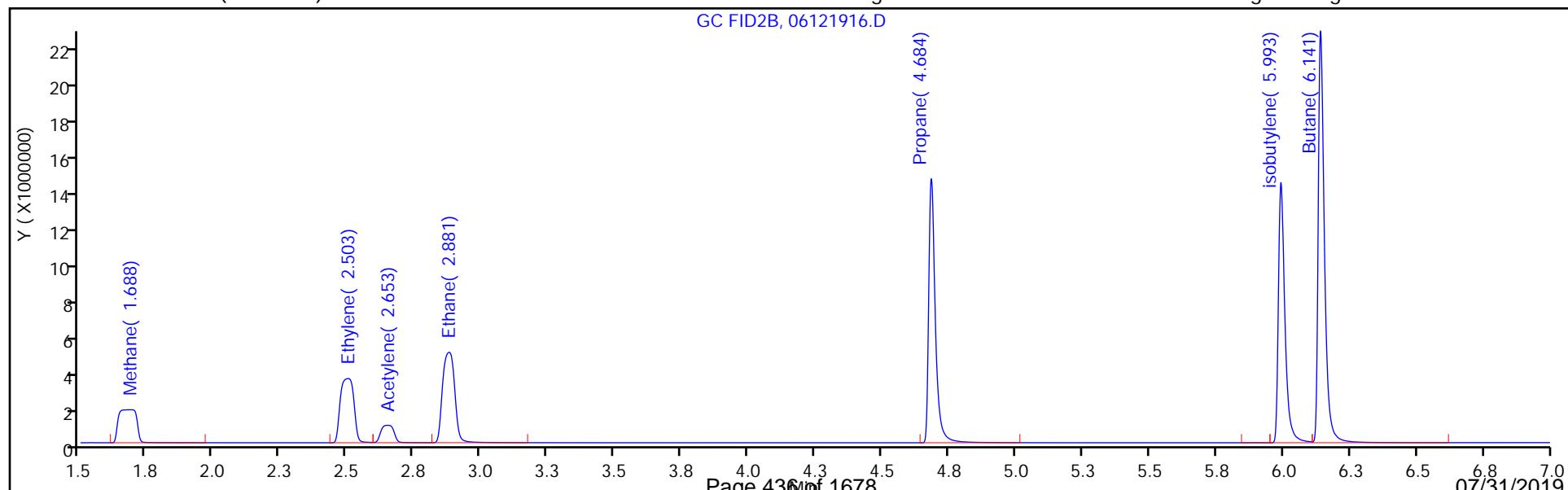
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461235/16 Calibration Date: 06/12/2019 10:45

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121916.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		114399		72.7	73.0	-0.4	20.0
Ethylene	Ave	90007	95593		136	128	6.2	20.0
Acetylene	Ave	28324	27024		113	119	-4.6	20.0
Ethane	Ave	107408	113283		144	137	5.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461235/16 Calibration Date: 06/12/2019 10:45
Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23
GC Column: HP-Plot Q ID: 0.53 (mm) Calib End Date: 04/15/2019 12:11
Lab File ID: 06121916.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.66	1.74
Ethylene	2.50	2.47	2.57
Acetylene	2.65	2.59	2.75
Ethane	2.88	2.85	2.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121916.D
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-Jun-2019 10:45:14 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: CCV
 Misc. Info.: 280-0082760-016
 Operator ID: MD Instrument ID: VGC_J
 Sublist: chrom-RSK_J*sub5
 Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 13-Jun-2019 10:16:00 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 10:55:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.265	1.280	-0.015	9719602	73.0	72.3	
2	1.688	1.703	-0.015	8351495	73.0	72.7	
RPD = 0.52							
2 Ethane							
1	1.543	1.562	-0.019	18120499	136.9	143.4	
2	2.881	2.896	-0.015	15503365	136.9	144.3	
RPD = 0.65							
3 Ethylene							
1	1.862	1.885	-0.023	14323376	127.7	135.4	
2	2.503	2.524	-0.021	12204011	127.7	135.6	
RPD = 0.16							
4 Propane							
1	2.601	2.633	-0.032	29059122	200.7	214.8	
2	4.684	4.690	-0.006	24735462	200.7	215.6	
RPD = 0.35							
5 Acetylene							
1	4.055	4.064	-0.009	3637834	118.5	113.2	
2	2.653	2.669	-0.016	3202930	118.5	113.1	
RPD = 0.13							
6 Butane							
1	4.356	4.377	-0.021	42623299	264.5	302.7	
2	6.141	6.149	-0.008	36244828	264.5	301.1	
RPD = 0.53							
7 isobutylene							
1	5.289	5.303	-0.014	28657229	255.4	296.2	
2	5.993	6.000	-0.007	24067401	255.4	297.0	

Report Date: 13-Jun-2019 10:16:00

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 13-Jun-2019 10:16:00

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190612-82760.b\\06121916.D

Injection Date: 12-Jun-2019 10:45:14

Instrument ID: VGC_J

Operator ID: MD

Lims ID: CCV

Worklist Smp#: 16

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

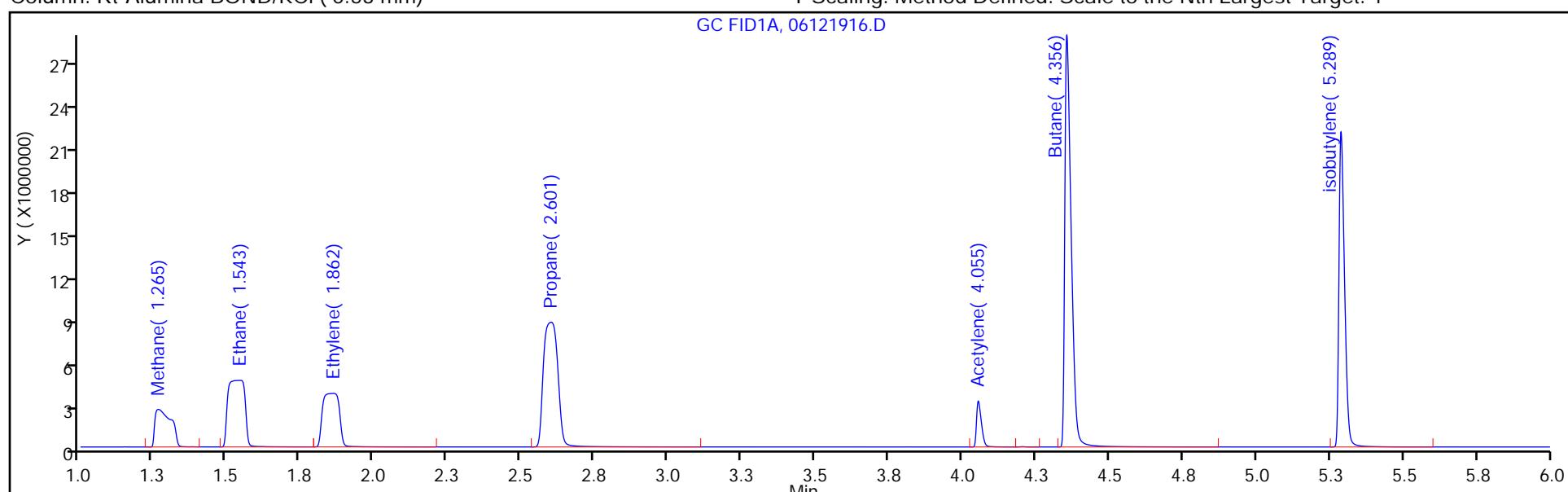
ALS Bottle#: 16

Method: RSK_J

Limit Group: GCV - RSK 175

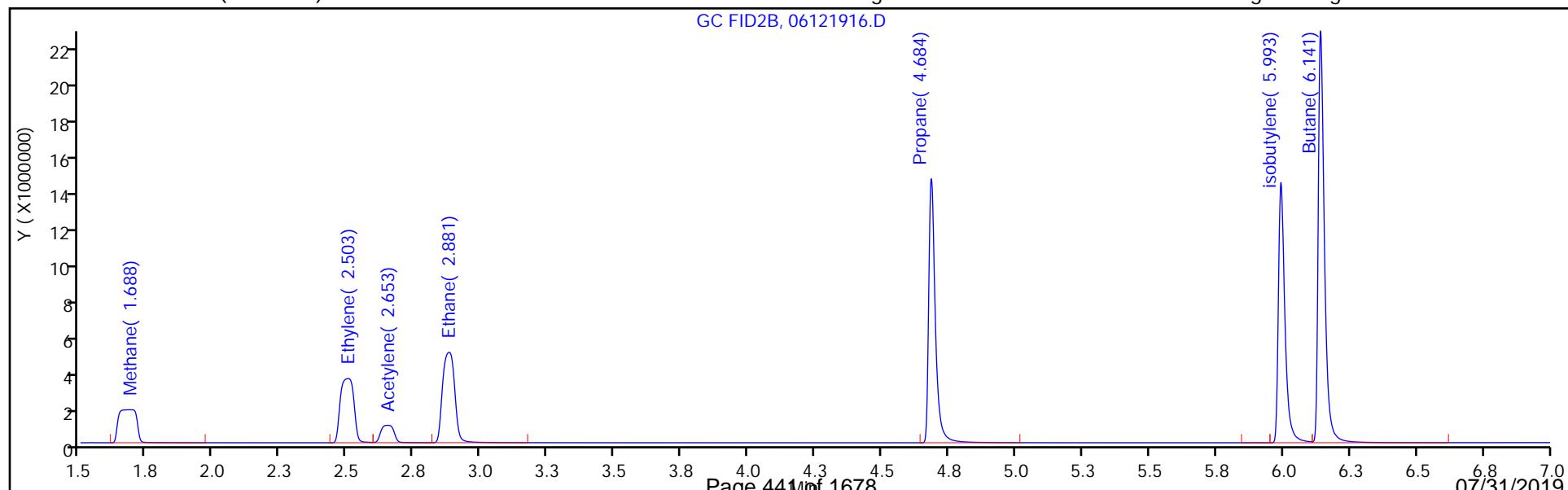
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 280-461087/31
Matrix: Water Lab File ID: 06111931.D
Analysis Method: RSK-175 Date Collected: _____
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 13:01
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 461087 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: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111931.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 11-Jun-2019 13:01:34 ALS Bottle#: 31 Worklist Smp#: 31
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 280-0082723-031
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 11-Jun-2019 13:54:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.285				ND		
2	1.703						
2 Ethane							
1	1.568				ND		
2	2.907						
3 Ethylene							
1	1.888				ND		
2	2.530						
4 Propane							
1	2.640				ND		
2	4.694						
5 Acetylene							
1	4.064				ND		
2	2.675						
6 Butane							
1	4.379				ND		
2	6.152						
7 isobutylene							
1	5.303				ND		
2	6.002						

Report Date: 12-Jun-2019 11:59:31

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111931.D

Injection Date: 11-Jun-2019 13:01:34

Instrument ID: VGC_J

Operator ID: MD

Lims ID: MB

Worklist Smp#: 31

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 31

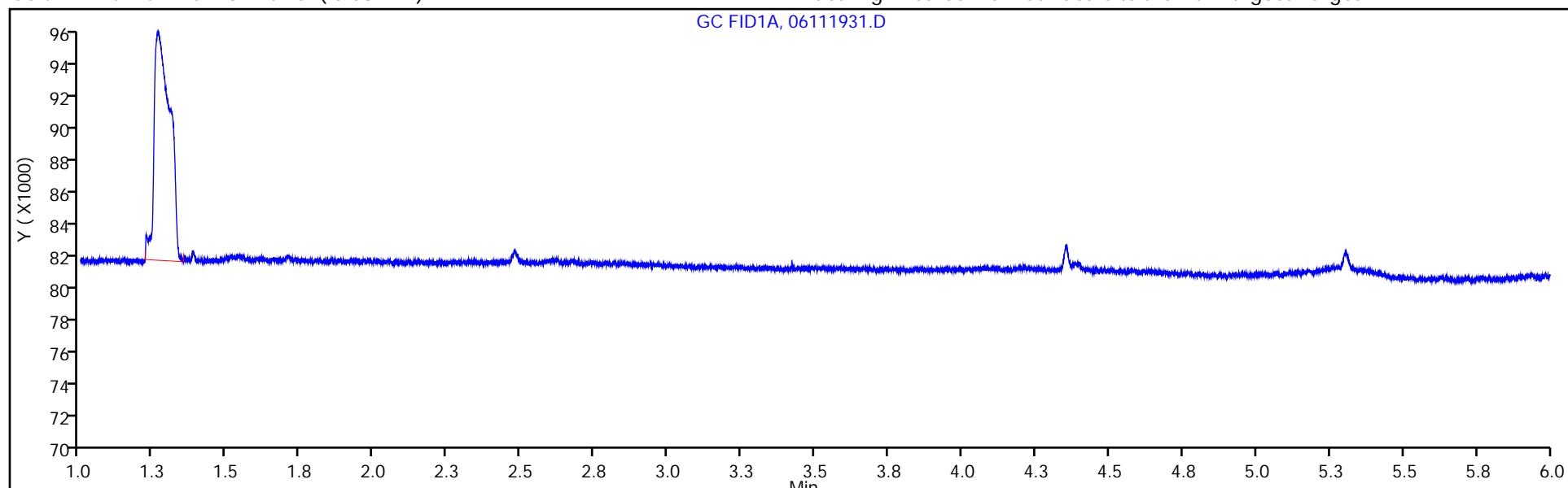
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

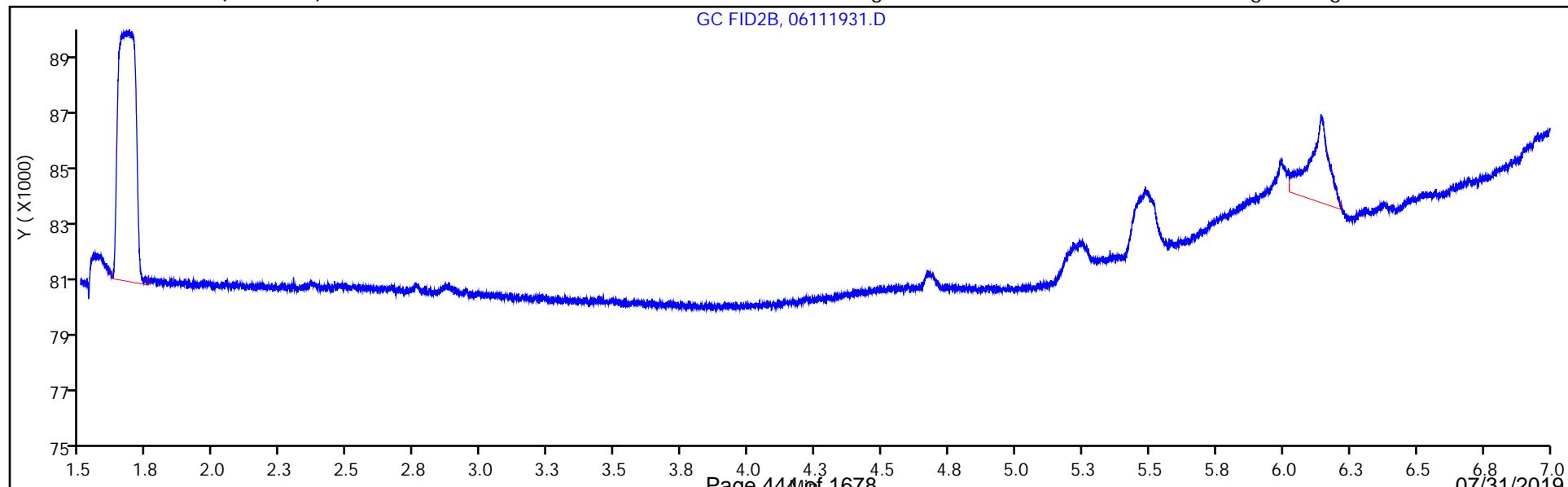
GC FID1A, 06111931.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111931.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 280-461235/4
Matrix: Water Lab File ID: 06121904.D
Analysis Method: RSK-175 Date Collected: _____
Sample wt/vol: 18 (mL) Date Analyzed: 06/12/2019 08:05
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.: 461235 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: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121904.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 12-Jun-2019 08:05:37 ALS Bottle#: 4 Worklist Smp#: 4
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 280-0082760-004
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0315

First Level Reviewer: dobransky Date: 12-Jun-2019 09:14:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.280						ND
2	1.703						
2 Ethane							
1	1.562						ND
2	2.896						
3 Ethylene							
1	1.885						ND
2	2.524						
4 Propane							
1	2.633						ND
2	4.690						
5 Acetylene							
1	4.064						ND
2	2.669						
6 Butane							
1	4.377						ND
2	6.149						
7 isobutylene							
1	5.303						ND
2	6.000						

Report Date: 13-Jun-2019 10:15:36

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190612-82760.b\\06121904.D

Injection Date: 12-Jun-2019 08:05:37

Instrument ID: VGC_J

Operator ID: MD

Lims ID: MB

Worklist Smp#: 4

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 4

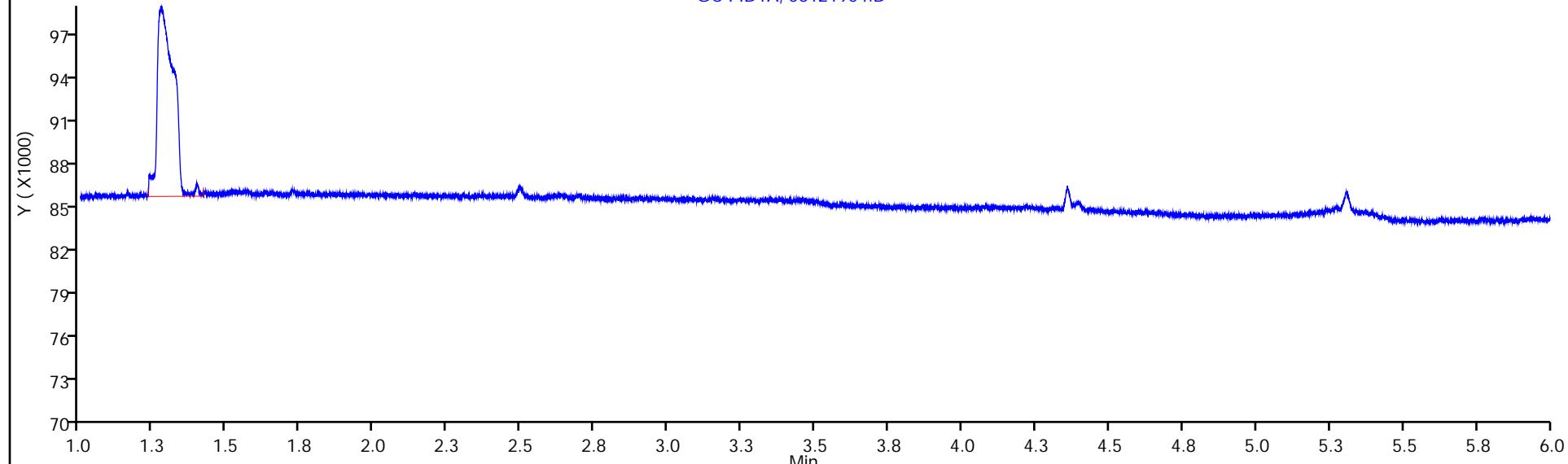
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

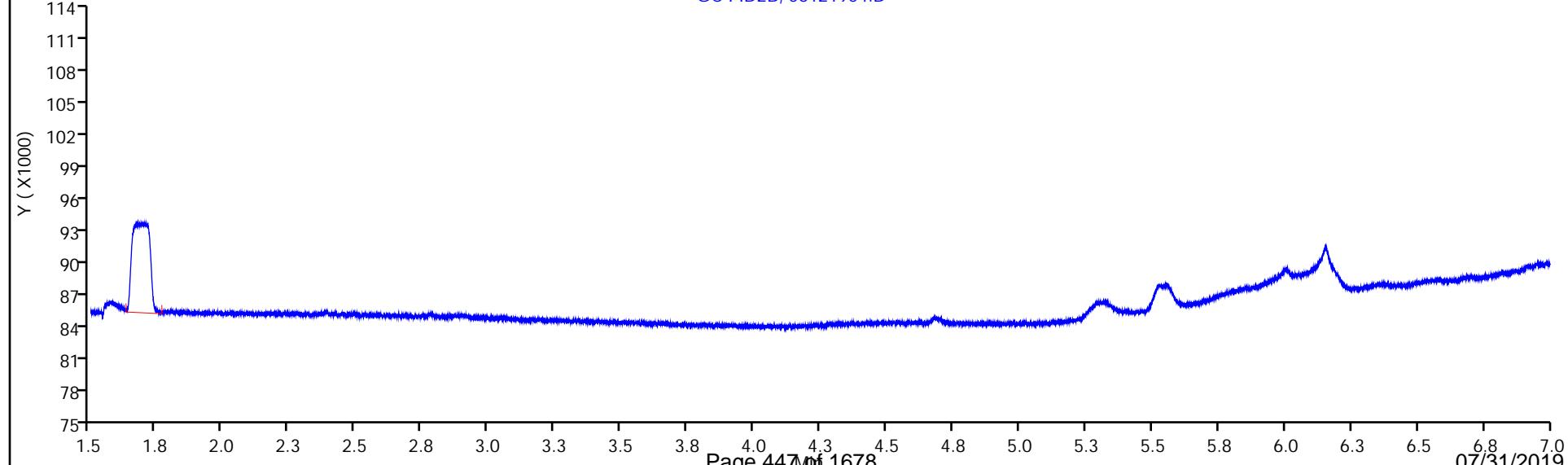
GC FID1A, 06121904.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06121904.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 280-461087/29
Matrix: Water Lab File ID: 06111929.D
Analysis Method: RSK-175 Date Collected: _____
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 12:34
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0757		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111929.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 11-Jun-2019 12:34:43 ALS Bottle#: 29 Worklist Smp#: 29
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 280-0082723-029
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobranskym Date: 11-Jun-2019 13:53:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.262	1.285	-0.023	10146272	65.7	75.5	
2	1.676	1.703	-0.027	8701221	65.7	75.7	
RPD = 0.32							
2 Ethane							
1	1.533	1.568	-0.035	19017160	123.2	150.5	
2	2.874	2.907	-0.033	16301276	123.2	151.8	
RPD = 0.84							
3 Ethylene							
1	1.855	1.888	-0.033	14695165	114.9	138.9	
2	2.495	2.530	-0.035	12537014	114.9	139.3	
RPD = 0.29							
4 Propane							
1	2.593	2.640	-0.047	31494679	180.6	232.8	
2	4.681	4.694	-0.013	26748420	180.6	233.1	
RPD = 0.13							
5 Acetylene							
1	4.055	4.064	-0.009	3767360	106.7	117.3	
2	2.647	2.675	-0.028	3303162	106.7	116.6	
RPD = 0.55							
6 Butane							
1	4.354	4.379	-0.025	47431418	238.1	336.8	
2	6.139	6.152	-0.013	40383374	238.1	335.5	
RPD = 0.40							
7 isobutylene							
1	5.288	5.303	-0.015	31228115	229.8	322.7	
2	5.990	6.002	-0.012	26258775	229.8	324.1	
RPD = 0.40							

Report Date: 12-Jun-2019 11:59:28

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:28

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111929.D

Injection Date: 11-Jun-2019 12:34:43

Instrument ID: VGC_J

Operator ID: MD

Lims ID: LCS

Worklist Smp#: 29

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

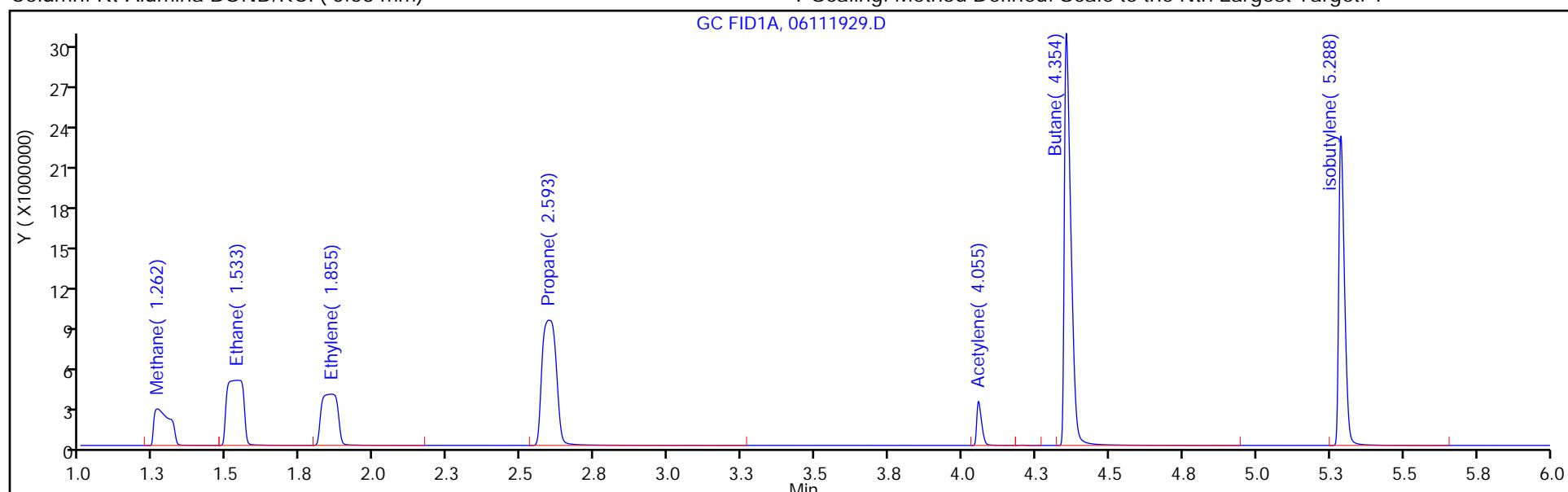
ALS Bottle#: 29

Method: RSK_J

Limit Group: GCV - RSK 175

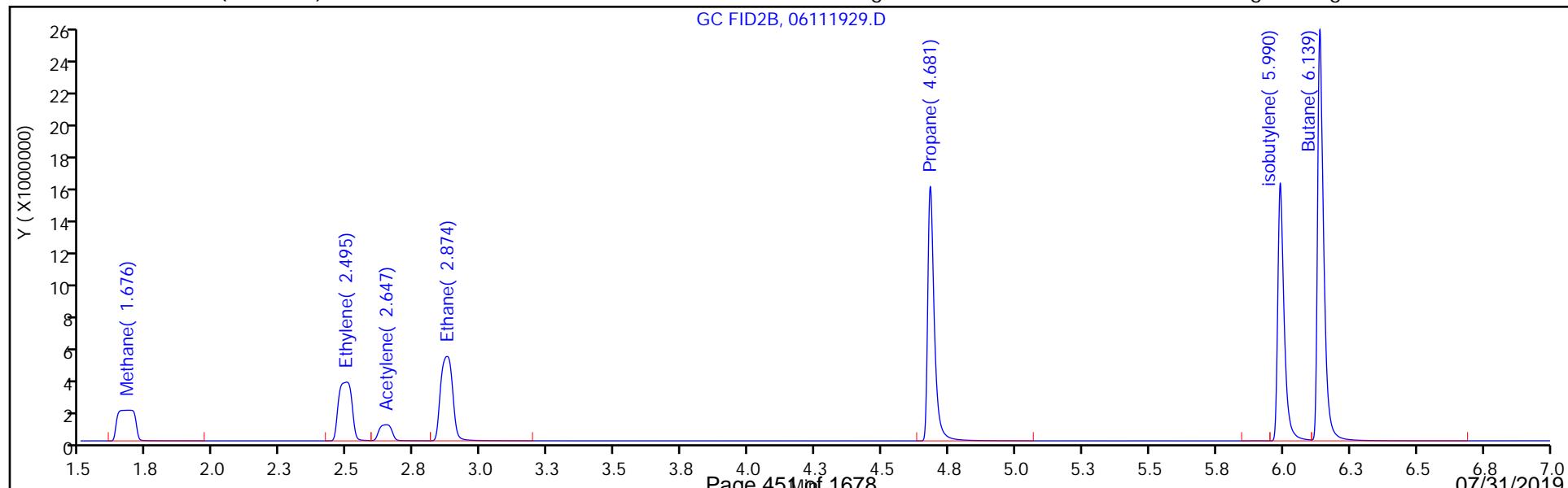
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 280-461235/2
Matrix: Water Lab File ID: 06121902.D
Analysis Method: RSK-175 Date Collected: _____
Sample wt/vol: 18 (mL) Date Analyzed: 06/12/2019 07:39
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.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0756		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121902.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 12-Jun-2019 07:39:26 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 280-0082760-002
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 09:12:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.276	1.280	-0.004	10146419	73.0	75.5	
2	1.702	1.703	-0.001	8685978	73.0	75.6	RPD = 0.15
2 Ethane							
1	1.561	1.562	-0.001	19320106	136.9	152.9	
2	2.895	2.896	-0.001	16521635	136.9	153.8	RPD = 0.61
3 Ethylene							
1	1.878	1.885	-0.007	16636905	127.7	157.2	
2	2.519	2.524	-0.005	14156340	127.7	157.3	RPD = 0.03
4 Propane							
1	2.625	2.633	-0.008	31228308	200.7	230.9	
2	4.689	4.690	-0.001	26494702	200.7	230.9	RPD = 0.02
5 Acetylene							
1	4.065	4.064	0.001	4267945	118.5	132.8	
2	2.667	2.669	-0.002	3766795	118.5	133.0	RPD = 0.11
6 Butane							
1	4.368	4.377	-0.009	47348294	264.5	336.2	
2	6.146	6.149	-0.003	40215354	264.5	334.1	RPD = 0.64
7 isobutylene							
1	5.296	5.303	-0.007	35946712	255.4	371.5	
2	5.997	6.000	-0.003	30149101	255.4	372.1	RPD = 0.15

Report Date: 13-Jun-2019 10:15:29

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 13-Jun-2019 10:15:29

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190612-82760.b\\06121902.D

Injection Date: 12-Jun-2019 07:39:26

Instrument ID: VGC_J

Operator ID: MD

Lims ID: LCS

Worklist Smp#: 2

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 2

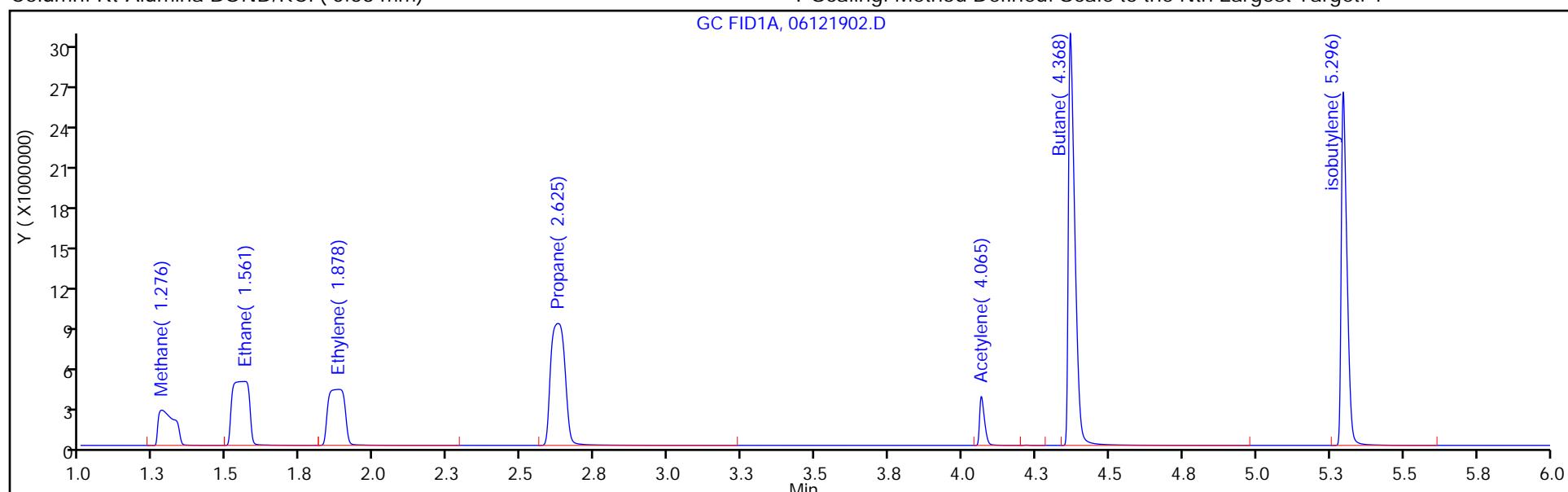
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

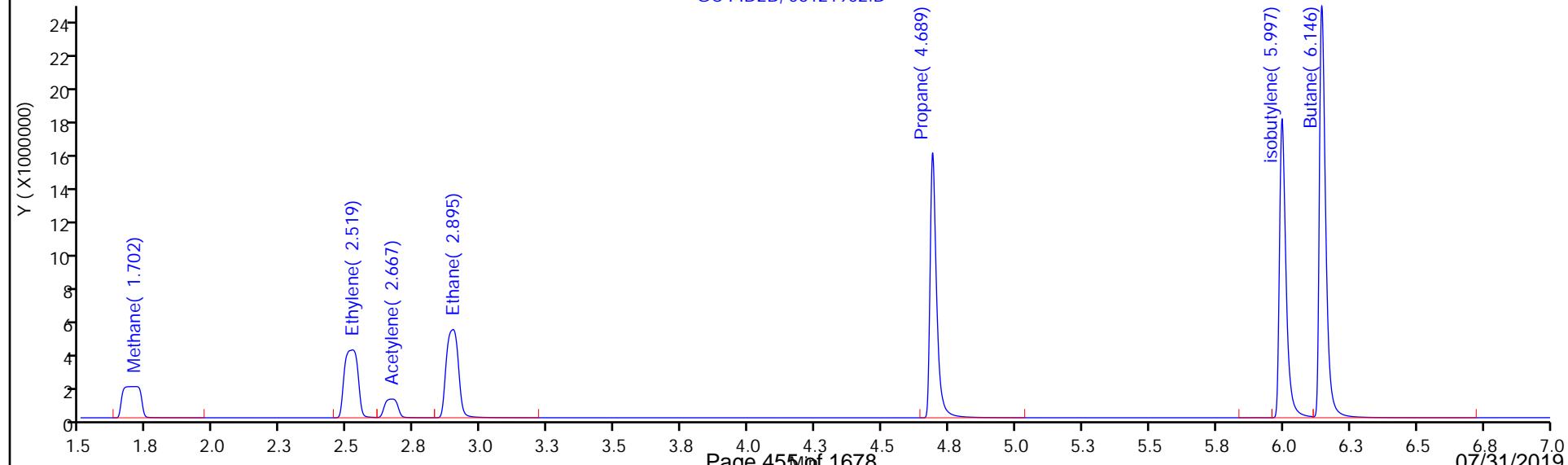
GC FID1A, 06121902.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06121902.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCSD 280-461087/30
Matrix: Water Lab File ID: 06111930.D
Analysis Method: RSK-175 Date Collected: _____
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 12:48
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0803		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111930.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 11-Jun-2019 12:48:05 ALS Bottle#: 30 Worklist Smp#: 30
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Misc. Info.: 280-0082723-030
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobranskym Date: 11-Jun-2019 13:54:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.260	1.285	-0.025	10746537	65.7	80.0	
2	1.678	1.703	-0.025	9225778	65.7	80.3	
						RPD = 0.43	

2 Ethane

1	1.542	1.568	-0.026	20259177	123.2	160.3	
2	2.873	2.907	-0.034	17332344	123.2	161.4	
						RPD = 0.65	

3 Ethylene

1	1.844	1.888	-0.044	12684716	114.9	119.9	
2	2.495	2.530	-0.035	13064692	114.9	145.2	
						RPD = 19.07	

4 Propane

1	2.596	2.640	-0.044	34032206	180.6	251.6	
2	4.681	4.694	-0.013	28969381	180.6	252.5	
						RPD = 0.35	

5 Acetylene

1	4.057	4.064	-0.007	3770102	106.7	117.3	
2	2.643	2.675	-0.032	3296003	106.7	116.4	
						RPD = 0.84	

6 Butane

1	4.354	4.379	-0.025	52643106	238.1	373.8	
2	6.138	6.152	-0.014	44804172	238.1	372.2	
						RPD = 0.44	

7 isobutylene

1	5.289	5.303	-0.014	33735111	229.8	348.7	
2	5.991	6.002	-0.011	28330826	229.8	349.6	
						RPD = 0.28	

Report Date: 12-Jun-2019 11:59:30

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:30

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111930.D

Injection Date: 11-Jun-2019 12:48:05

Instrument ID: VGC_J

Operator ID: MD

Lims ID: LCSD

Worklist Smp#: 30

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

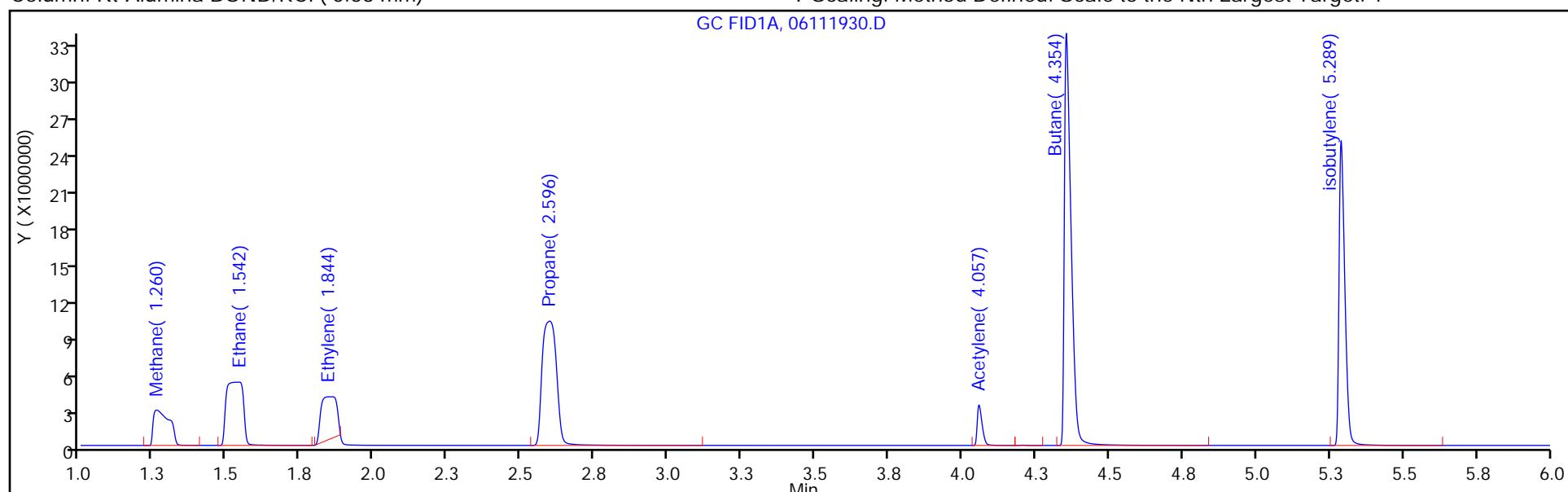
ALS Bottle#: 30

Method: RSK_J

Limit Group: GCV - RSK 175

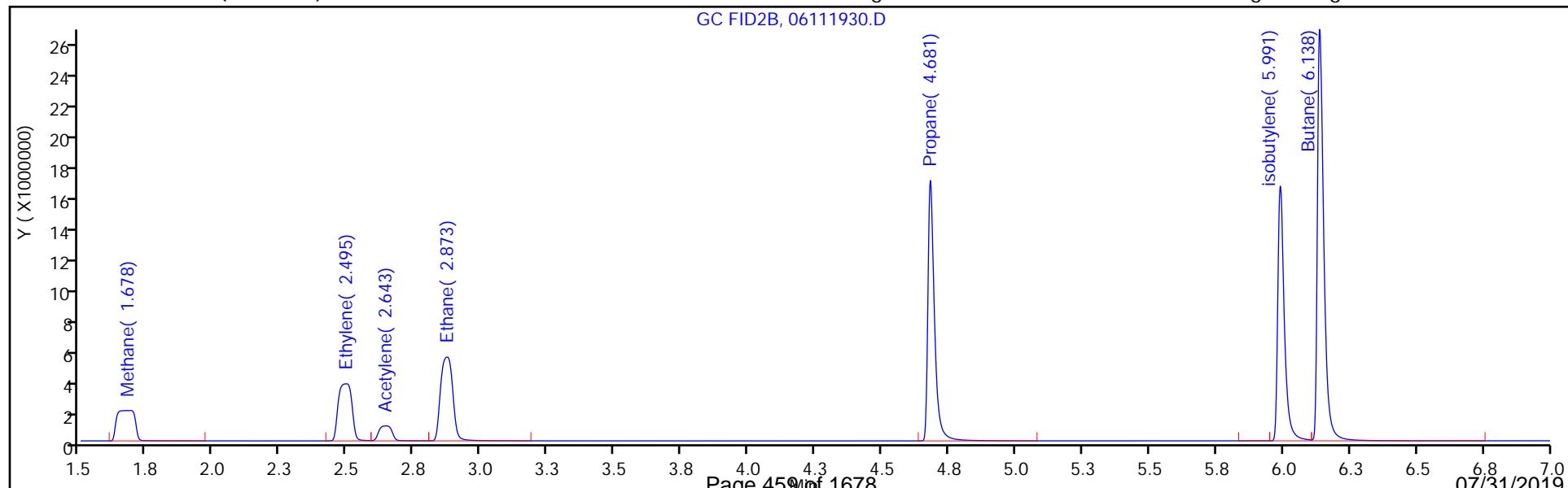
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCSD 280-461235/3
Matrix: Water Lab File ID: 06121903.D
Analysis Method: RSK-175 Date Collected: _____
Sample wt/vol: 18 (mL) Date Analyzed: 06/12/2019 07:52
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.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0748		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121903.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 12-Jun-2019 07:52:31 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Misc. Info.: 280-0082760-003
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 09:14:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane

1	1.278	1.280	-0.002	10042835	73.0	74.7	
2	1.697	1.703	-0.006	8599160	73.0	74.8	
						RPD = 0.17	

2 Ethane

1	1.558	1.562	-0.004	19073390	136.9	150.9	
2	2.902	2.896	0.006	16310566	136.9	151.9	
						RPD = 0.61	

3 Ethylene

1	1.880	1.885	-0.005	15853419	127.7	149.8	
2	2.524	2.524	0.000	13495367	127.7	149.9	
						RPD = 0.07	

4 Propane

1	2.624	2.633	-0.009	31337952	200.7	231.7	
2	4.693	4.690	0.003	26640266	200.7	232.2	
						RPD = 0.22	

5 Acetylene

1	4.064	4.064	0.000	3854253	118.5	120.0	
2	2.673	2.669	0.004	3399806	118.5	120.0	
						RPD = 0.06	

6 Butane

1	4.364	4.377	-0.013	48263840	264.5	342.7	
2	6.148	6.149	-0.001	41044154	264.5	341.0	
						RPD = 0.52	

7 isobutylene

1	5.294	5.303	-0.009	34987676	255.4	361.6	
2	5.999	6.000	-0.001	29386891	255.4	362.7	
						RPD = 0.29	

Report Date: 13-Jun-2019 10:15:32

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 13-Jun-2019 10:15:32

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190612-82760.b\\06121903.D

Injection Date: 12-Jun-2019 07:52:31

Instrument ID: VGC_J

Operator ID: MD

Lims ID: LCSD

Worklist Smp#: 3

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

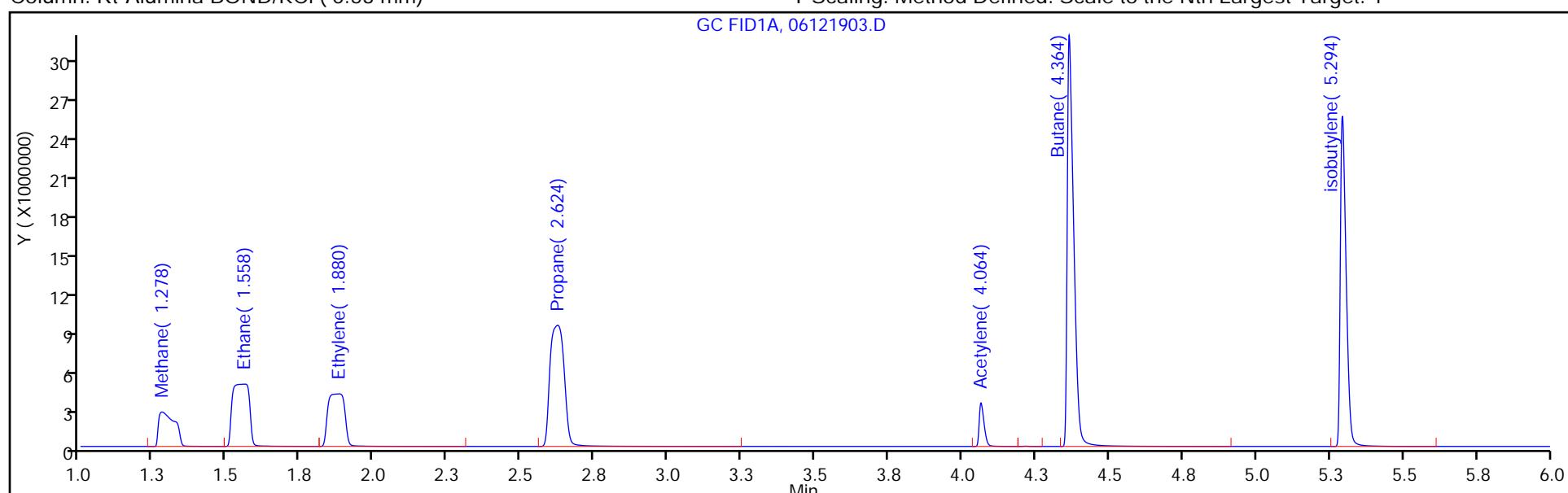
ALS Bottle#: 3

Method: RSK_J

Limit Group: GCV - RSK 175

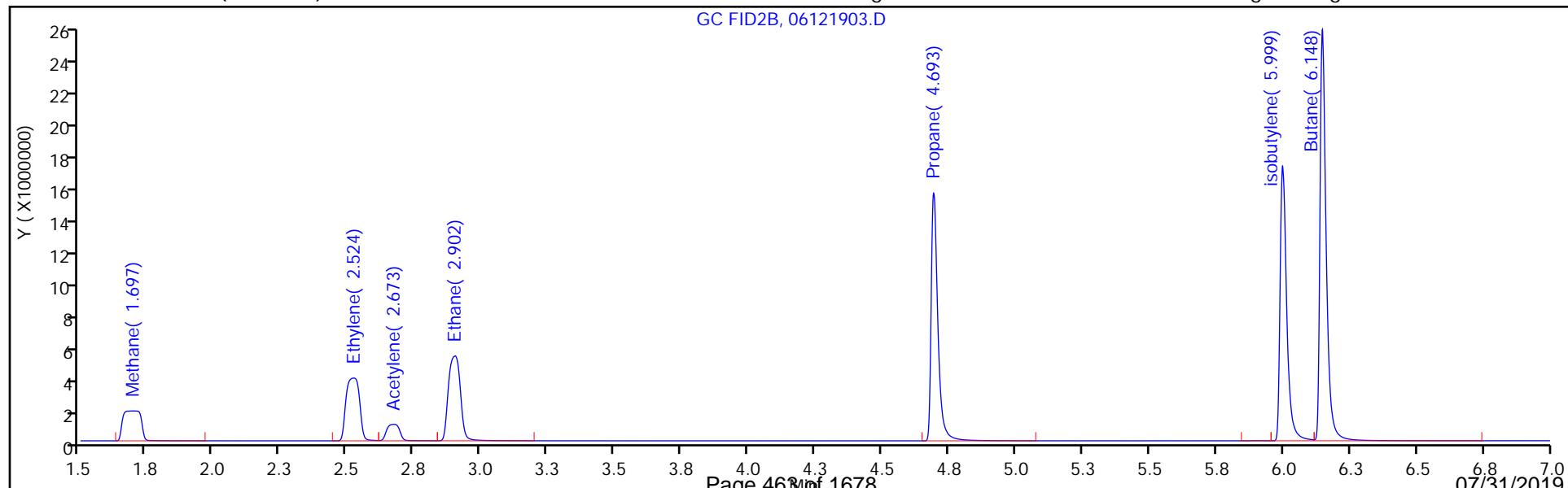
Column: Rt-Alumina BOND/KCl (0.53 mm)

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.: 280-124912-1
SDG No.:
Client Sample ID: G0102-19AMS MS Lab Sample ID: 280-124912-4 MS
Matrix: Water Lab File ID: 06111937.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 11:25
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 14:22
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0587		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111937.D
 Lims ID: 280-124912-H-4 MS
 Client ID: G0102-19AMS
 Sample Type: MS
 Inject. Date: 11-Jun-2019 14:22:16 ALS Bottle#: 37 Worklist Smp#: 37
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-4 M
 Misc. Info.: 280-0082723-037
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:39:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.259	1.285	-0.026	8080484	65.7	60.1	
2	1.682	1.703	-0.021	6751824	65.7	58.7	
RPD = 2.27							
2 Ethane							
1	1.515	1.568	-0.053	14745381	123.2	116.7	
2	2.873	2.907	-0.034	12337918	123.2	114.9	
RPD = 1.57							
3 Ethylene							
1	1.823	1.888	-0.065	11871851	114.9	112.2	
2	2.496	2.530	-0.034	9915849	114.9	110.2	
RPD = 1.83							
4 Propane							
1	2.580	2.640	-0.060	24420668	180.6	180.5	
2	4.681	4.694	-0.013	20240592	180.6	176.4	
RPD = 2.31							
5 Acetylene							
1	4.055	4.064	-0.009	3617832	106.7	112.6	
2	2.644	2.675	-0.031	3061301	106.7	108.1	
RPD = 4.10							
6 Butane							
1	4.359	4.379	-0.020	37136393	238.1	263.7	
2	6.140	6.152	-0.012	30810471	238.1	255.9	
RPD = 2.99							
7 isobutylene							
1	5.296	5.303	-0.007	25216283	229.8	260.6	
2	5.991	6.002	-0.011	20692231	229.8	255.4	
RPD = 2.04							

Report Date: 12-Jun-2019 11:59:39

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:39

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111937.D

Injection Date: 11-Jun-2019 14:22:16

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-4 MS

Worklist Smp#: 37

Client ID: G0102-19AMS

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

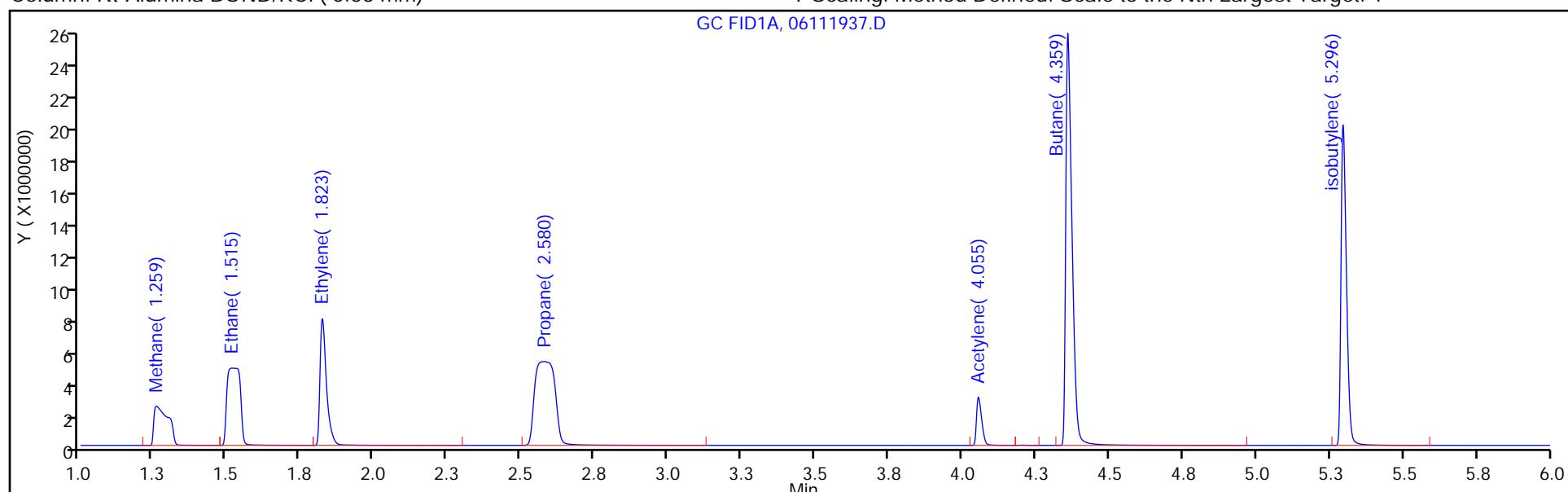
ALS Bottle#: 37

Method: RSK_J

Limit Group: GCV - RSK 175

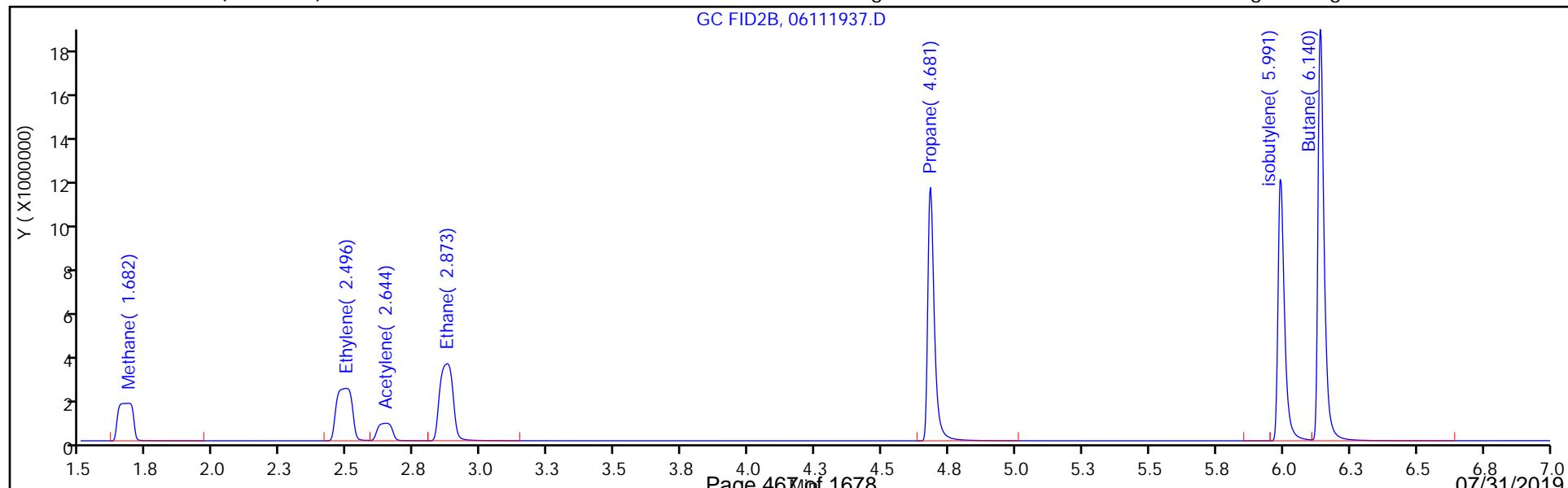
Column: Rt-Alumina BOND/KCl (0.53 mm)

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.: 280-124912-1
SDG No.:
Client Sample ID: PZ007-19AMS MS Lab Sample ID: 280-124912-5 MS
Matrix: Water Lab File ID: 06111940.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 10:15
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 15:02
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0629		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111940.D
 Lims ID: 280-124912-H-5 MS
 Client ID: PZ007-19AMS
 Sample Type: MS
 Inject. Date: 11-Jun-2019 15:02:36 ALS Bottle#: 40 Worklist Smp#: 40
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-5 M
 Misc. Info.: 280-0082723-040
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:40:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.258	1.285	-0.027	8611253	65.7	64.0	
2	1.682	1.703	-0.021	7226588	65.7	62.9	
						RPD = 1.84	

2 Ethane

1	1.525	1.568	-0.043	16039190	123.2	126.9	
2	2.873	2.907	-0.034	13391537	123.2	124.7	
						RPD = 1.79	

3 Ethylene

1	1.824	1.888	-0.064	12648029	114.9	119.5	
2	2.496	2.530	-0.034	10542325	114.9	117.1	
						RPD = 2.04	

4 Propane

1	2.582	2.640	-0.058	26484304	180.6	195.8	M
2	4.681	4.694	-0.013	21947975	180.6	191.3	
						RPD = 2.33	

5 Acetylene

1	4.054	4.064	-0.010	3702921	106.7	115.3	
2	2.643	2.675	-0.032	3138341	106.7	110.8	
						RPD = 3.94	

6 Butane

1	4.357	4.379	-0.022	40375570	238.1	286.7	
2	6.139	6.152	-0.013	33485389	238.1	278.2	
						RPD = 3.03	

7 isobutylene

1	5.294	5.303	-0.009	26499558	229.8	273.9	
2	5.991	6.002	-0.011	21730455	229.8	268.2	
						RPD = 2.10	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:42

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111940.D

Injection Date: 11-Jun-2019 15:02:36

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-5 MS

Worklist Smp#: 40

Client ID: PZ007-19AMS

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 40

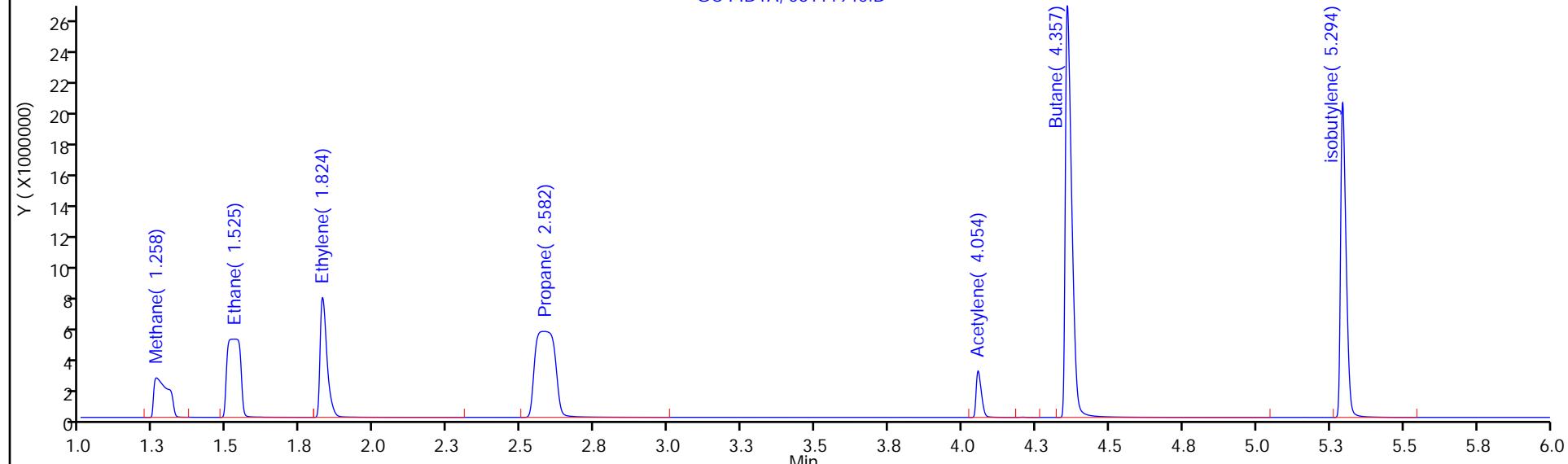
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

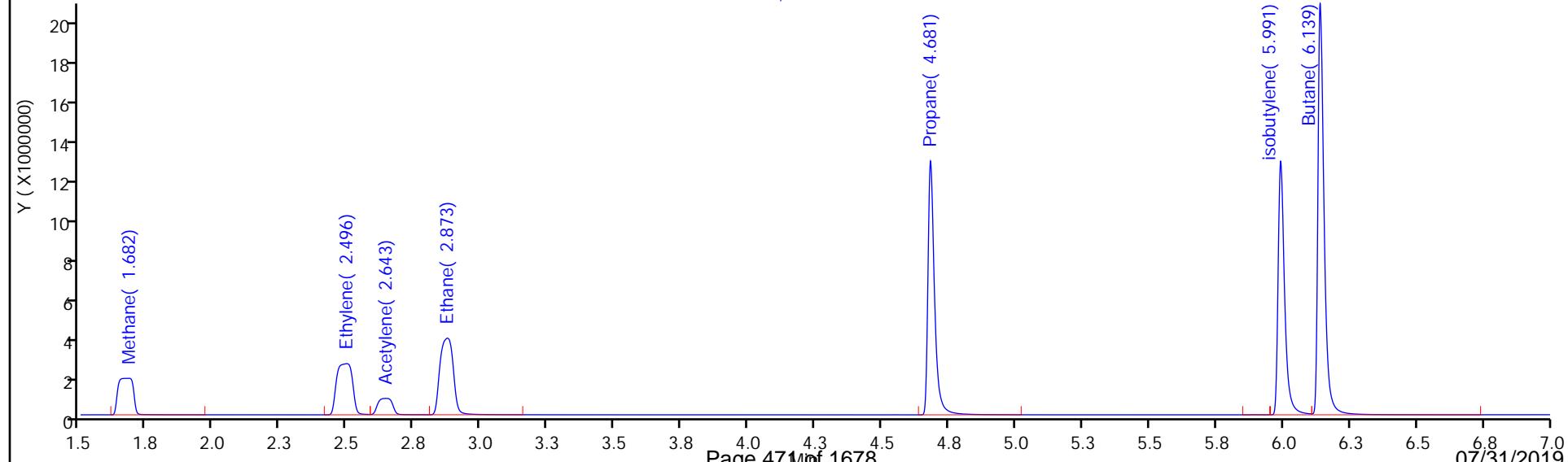
GC FID1A, 06111940.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111940.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ001-19AMS MS Lab Sample ID: 280-124912-12 MS
Matrix: Water Lab File ID: 06111951.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 14:05
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 17:30
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0585		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111951.D
 Lims ID: 280-124912-H-12 MS
 Client ID: PZ001-19AMS
 Sample Type: MS
 Inject. Date: 11-Jun-2019 17:30:03 ALS Bottle#: 51 Worklist Smp#: 51
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-12
 Misc. Info.: 280-0082723-051
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:47:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.259	1.285	-0.026	8067845	65.7	60.0	
2	1.670	1.703	-0.033	6732515	65.7	58.5	
RPD = 2.40							

2 Ethane

1	1.526	1.568	-0.042	14565245	123.2	115.3	
2	2.877	2.907	-0.030	12141695	123.2	113.0	
RPD = 1.95							

3 Ethylene

1	1.822	1.888	-0.066	11443389	114.9	108.2	
2	2.501	2.530	-0.029	9569031	114.9	106.3	
RPD = 1.71							

4 Propane

1	2.578	2.640	-0.062	24005989	180.6	177.5	
2	4.684	4.694	-0.010	19873566	180.6	173.2	
RPD = 2.43							

5 Acetylene

1	4.054	4.064	-0.010	3492342	106.7	108.7	
2	2.649	2.675	-0.026	2992349	106.7	105.6	
RPD = 2.85							

6 Butane

1	4.359	4.379	-0.020	36641659	238.1	260.2	
2	6.142	6.152	-0.010	30413554	238.1	252.6	
RPD = 2.95							

7 isobutylene

1	5.297	5.303	-0.006	23510165	229.8	243.0	
2	5.994	6.002	-0.008	19270925	229.8	237.8	
RPD = 2.15							

Report Date: 12-Jun-2019 11:59:58

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:58

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111951.D

Injection Date: 11-Jun-2019 17:30:03

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-12 MS

Worklist Smp#: 51

Client ID: PZ001-19AMS

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 51

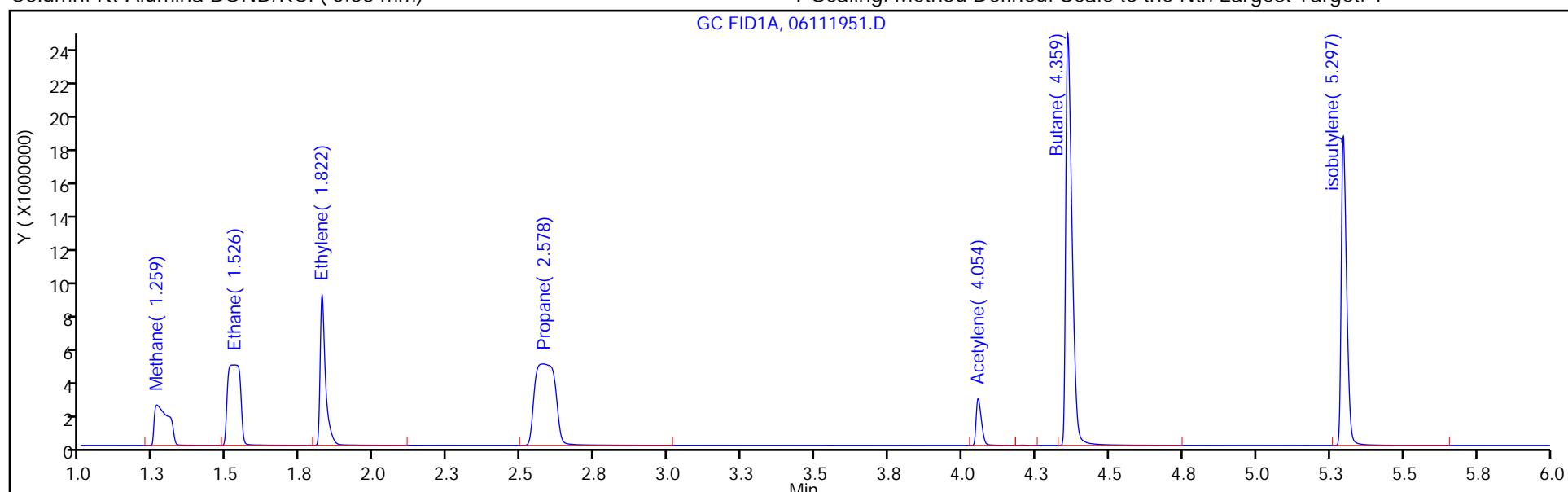
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

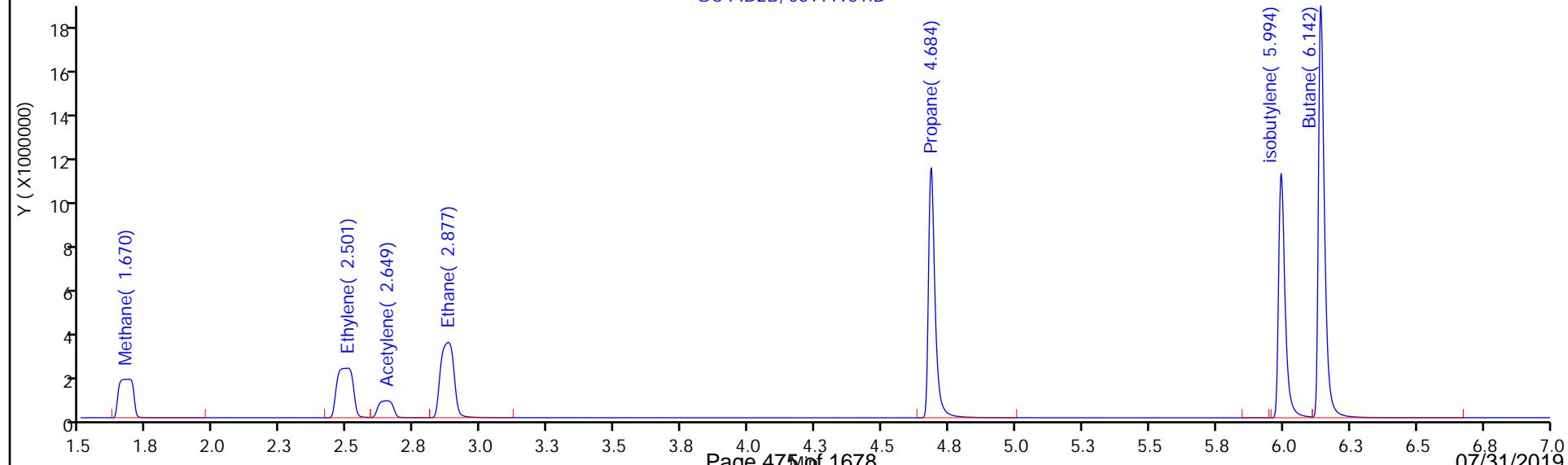
GC FID1A, 06111951.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111951.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: G0102-19AMSD MSD Lab Sample ID: 280-124912-4 MSD
Matrix: Water Lab File ID: 06111938.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 11:25
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 14:35
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0609		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111938.D
 Lims ID: 280-124912-H-4 MSD
 Client ID: G0102-19AMSD
 Sample Type: MSD
 Inject. Date: 11-Jun-2019 14:35:45 ALS Bottle#: 38 Worklist Smp#: 38
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-4 M
 Misc. Info.: 280-0082723-038
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:39:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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1 Methane							
1	1.256	1.285	-0.029	8395999	65.7	62.4	
2	1.668	1.703	-0.035	7001187	65.7	60.9	
RPD = 2.48							
2 Ethane							
1	1.520	1.568	-0.048	15347532	123.2	121.5	
2	2.869	2.907	-0.038	12815907	123.2	119.3	
RPD = 1.77							
3 Ethylene							
1	1.820	1.888	-0.068	12322868	114.9	116.5	
2	2.489	2.530	-0.041	10275536	114.9	114.2	
RPD = 2.00							
4 Propane							
1	2.572	2.640	-0.068	25241155	180.6	186.6	
2	4.680	4.694	-0.014	20892648	180.6	182.1	
RPD = 2.45							
5 Acetylene							
1	4.054	4.064	-0.010	3754334	106.7	116.9	
2	2.642	2.675	-0.033	3176766	106.7	112.2	
RPD = 4.10							
6 Butane							
1	4.358	4.379	-0.021	37665089	238.1	267.5	
2	6.141	6.152	-0.011	31215104	238.1	259.3	
RPD = 3.10							
7 isobutylene							
1	5.295	5.303	-0.008	25441930	229.8	262.9	
2	5.991	6.002	-0.011	20837579	229.8	257.2	
RPD = 2.23							

Report Date: 12-Jun-2019 11:59:40

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:40

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111938.D

Injection Date: 11-Jun-2019 14:35:45

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-4 MSD

Worklist Smp#: 38

Client ID: G0102-19AMSD

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

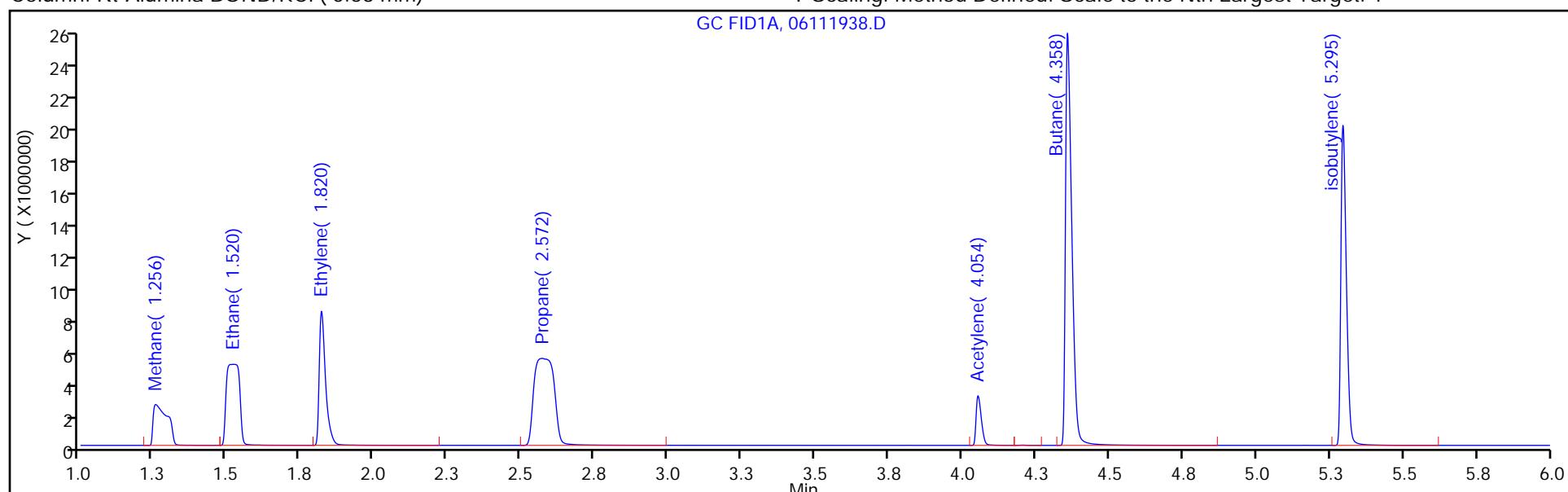
ALS Bottle#: 38

Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

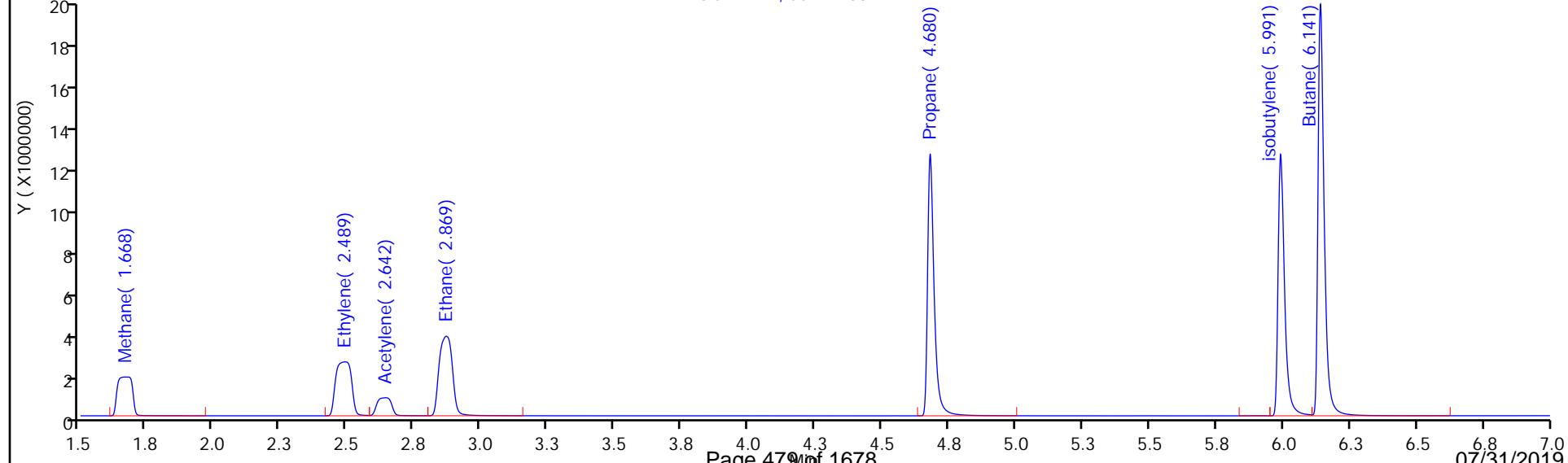
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111938.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ007-19AMSD MSD Lab Sample ID: 280-124912-5 MSD
Matrix: Water Lab File ID: 06111941.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 10:15
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 15:16
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0563		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111941.D
 Lims ID: 280-124912-H-5 MSD
 Client ID: PZ007-19AMSD
 Sample Type: MSD
 Inject. Date: 11-Jun-2019 15:16:06 ALS Bottle#: 41 Worklist Smp#: 41
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-5 M
 Misc. Info.: 280-0082723-041
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:44:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane

1	1.260	1.285	-0.025	7735350	65.7	57.5	
2	1.681	1.703	-0.022	6474211	65.7	56.3	
						RPD = 2.10	

2 Ethane

1	1.516	1.568	-0.052	12550425	123.2	99.3	
2	2.873	2.907	-0.034	12047021	123.2	112.2	
						RPD = 12.14	

3 Ethylene

1	1.825	1.888	-0.063	11532220	114.9	109.0	
2	2.499	2.530	-0.031	9651717	114.9	107.2	
						RPD = 1.63	

4 Propane

1	2.569	2.640	-0.071	23757633	180.6	175.6	M
2	4.681	4.694	-0.013	19766702	180.6	172.3	
						RPD = 1.93	

5 Acetylene

1	4.054	4.064	-0.010	3600585	106.7	112.1	
2	2.644	2.675	-0.031	3050524	106.7	107.7	
						RPD = 3.98	

6 Butane

1	4.359	4.379	-0.020	36616208	238.1	260.0	
2	6.141	6.152	-0.011	30453485	238.1	253.0	
						RPD = 2.75	

7 isobutylene

1	5.295	5.303	-0.008	24740275	229.8	255.7	
2	5.993	6.002	-0.009	20332192	229.8	250.9	
						RPD = 1.89	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:44

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111941.D

Injection Date: 11-Jun-2019 15:16:06

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-5 MSD

Worklist Smp#: 41

Client ID: PZ007-19AMSD

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 41

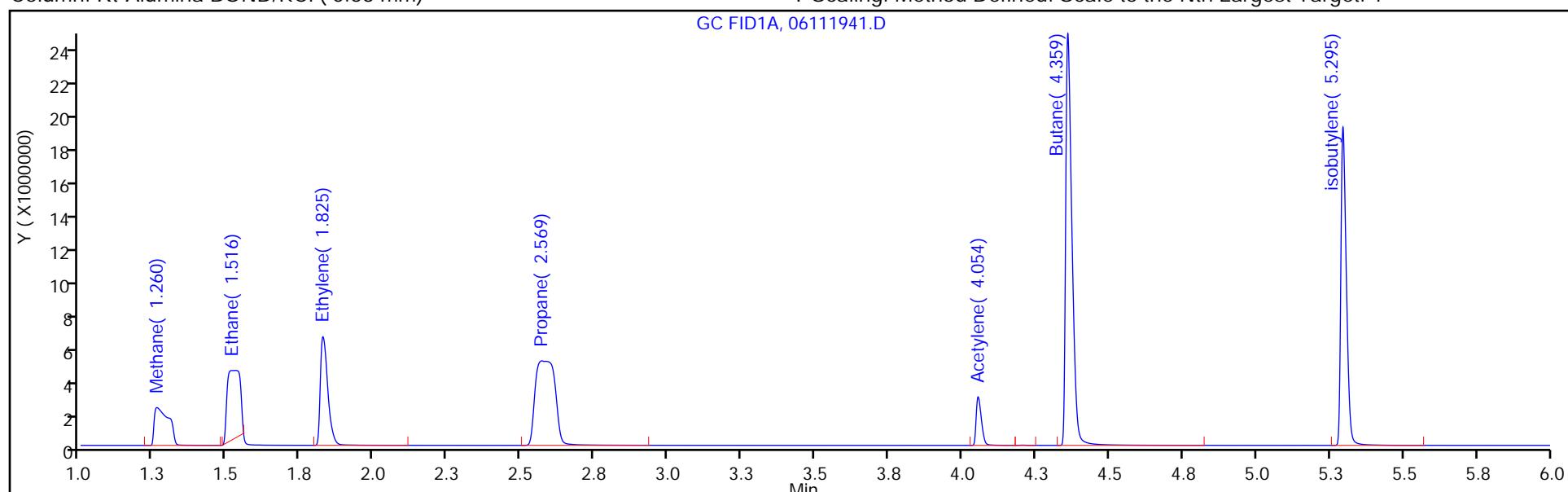
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

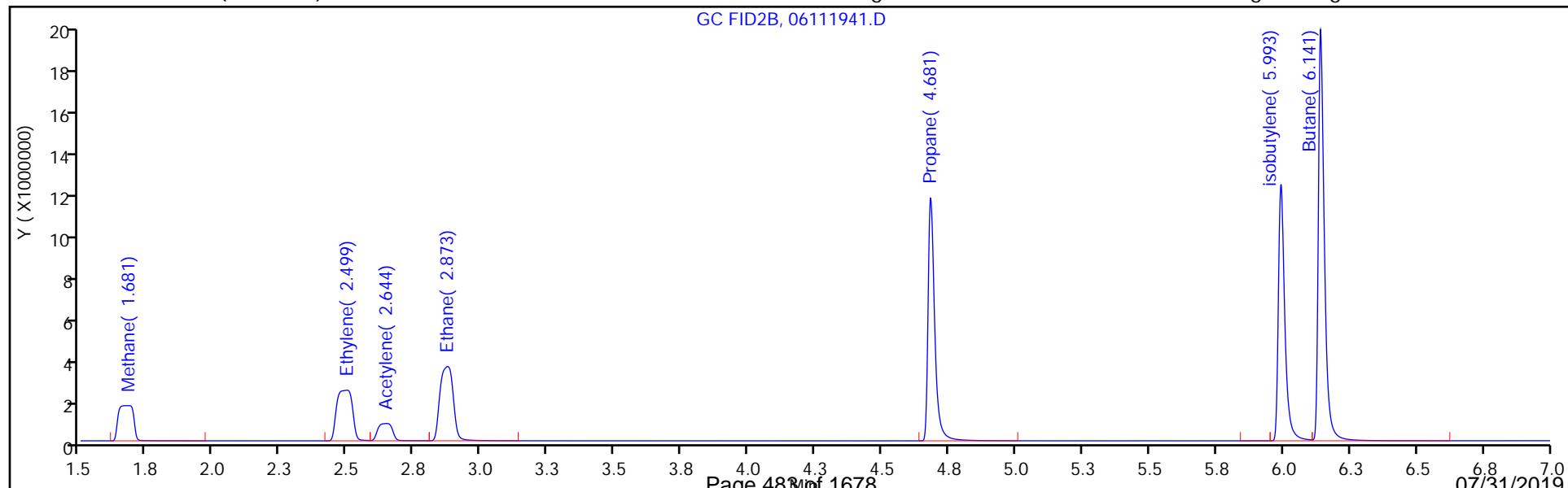
GC FID1A, 06111941.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111941.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ001-19AMSD MSD Lab Sample ID: 280-124912-12 MSD
Matrix: Water Lab File ID: 06111952.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 14:05
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 17:43
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0637		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111952.D
 Lims ID: 280-124912-H-12 MSD
 Client ID: PZ001-19AMSD
 Sample Type: MSD
 Inject. Date: 11-Jun-2019 17:43:25 ALS Bottle#: 52 Worklist Smp#: 52
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-12
 Misc. Info.: 280-0082723-052
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:47:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.260	1.285	-0.025	8784722	65.7	65.3	
2	1.681	1.703	-0.022	7317258	65.7	63.7	
RPD = 2.59							
2 Ethane							
1	1.518	1.568	-0.050	15802295	123.2	125.1	
2	2.877	2.907	-0.030	13185843	123.2	122.8	
RPD = 1.85							
3 Ethylene							
1	1.821	1.888	-0.067	12191993	114.9	115.2	
2	2.498	2.530	-0.032	10172087	114.9	113.0	
RPD = 1.94							
4 Propane							
1	2.572	2.640	-0.068	25876648	180.6	191.3	
2	4.684	4.694	-0.010	21406345	180.6	186.6	
RPD = 2.50							
5 Acetylene							
1	4.053	4.064	-0.011	3621681	106.7	112.7	
2	2.648	2.675	-0.027	3105322	106.7	109.6	
RPD = 2.78							
6 Butane							
1	4.359	4.379	-0.020	38200198	238.1	271.3	
2	6.142	6.152	-0.010	31641163	238.1	262.8	
RPD = 3.15							
7 isobutylene							
1	5.297	5.303	-0.006	24071204	229.8	248.8	
2	5.996	6.002	-0.006	19701452	229.8	243.1	
RPD = 2.30							

Report Date: 12-Jun-2019 11:59:59

Chrom Revision: 2.3 03-May-2019 15:52:00

Reagents:

RSK7gasMathes_00027

Amount Added: 200.00

Units: uL

Report Date: 12-Jun-2019 11:59:59

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\VGC_J\\20190611-82723.b\\06111952.D

Injection Date: 11-Jun-2019 17:43:25

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-12 MSD

Worklist Smp#: 52

Client ID: PZ001-19AMSD

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

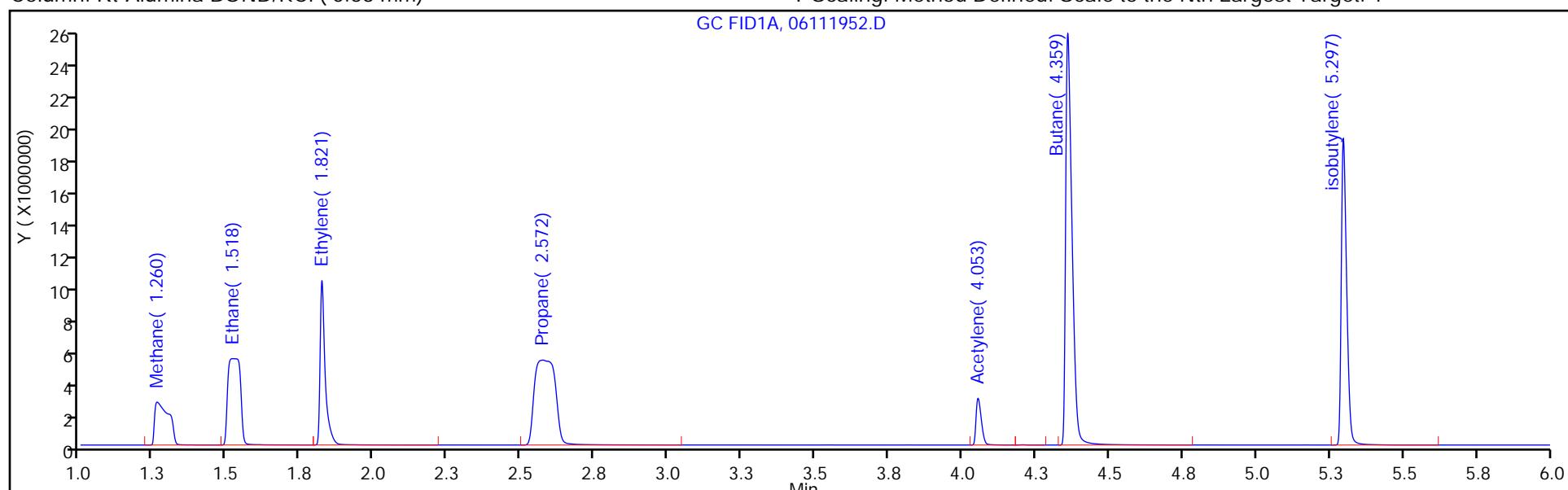
ALS Bottle#: 52

Method: RSK_J

Limit Group: GCV - RSK 175

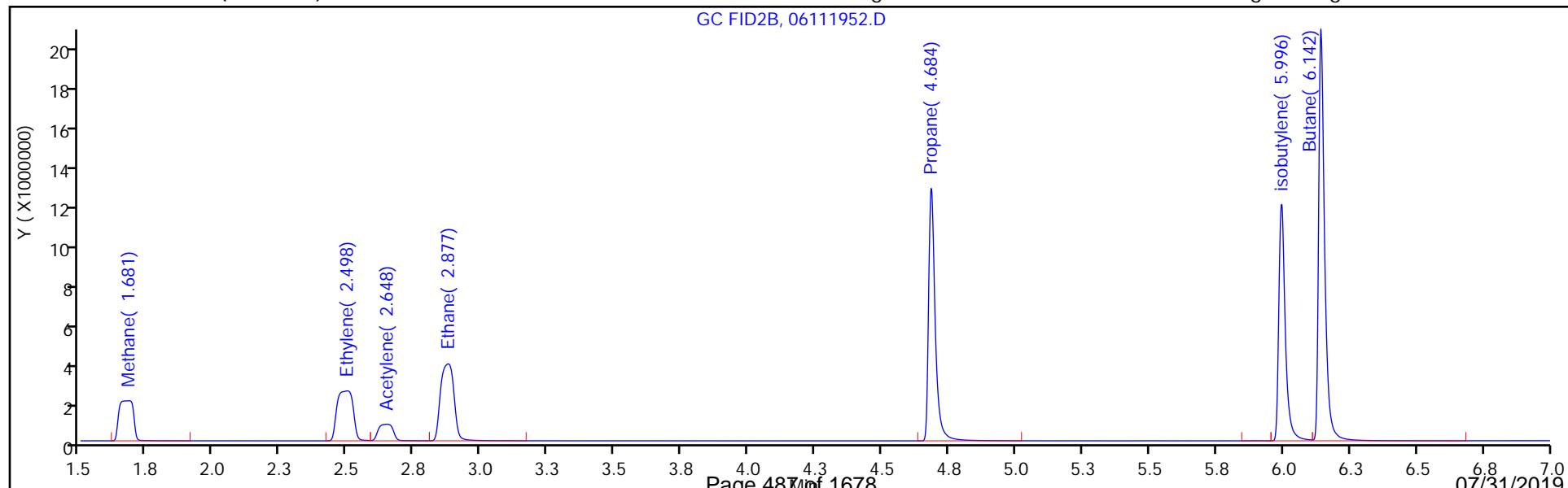
Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale 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.: 280-124912-1
SDG No.:
Client Sample ID: PZ004-19A DU Lab Sample ID: 280-124912-1 DU
Matrix: Water Lab File ID: 06111933.D
Analysis Method: RSK-175 Date Collected: 06/04/2019 12:30
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 13:28
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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.000909	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111933.D
 Lims ID: 280-124912-H-1 DU
 Client ID:
 Sample Type: DU
 Inject. Date: 11-Jun-2019 13:28:26 ALS Bottle#: 33 Worklist Smp#: 33
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-1 D
 Misc. Info.: 280-0082723-033
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 11-Jun-2019 13:58:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.259	1.285	-0.026	151441	0.8645		
2	1.679	1.703	-0.024	130231	0.9091		
							RPD = 5.03
2 Ethane							
1		1.568			ND		
2		2.907					
3 Ethylene							
1		1.888			ND		
2		2.530					
4 Propane							
1		2.640			ND		
2		4.694					
5 Acetylene							
1		4.064			ND		
2		2.675					
6 Butane							
1		4.379			ND		
2		6.152					
7 isobutylene							
1		5.303			ND		
2		6.002					

Report Date: 12-Jun-2019 11:59:34

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111933.D

Injection Date: 11-Jun-2019 13:28:26

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-1 DU

Worklist Smp#: 33

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 33

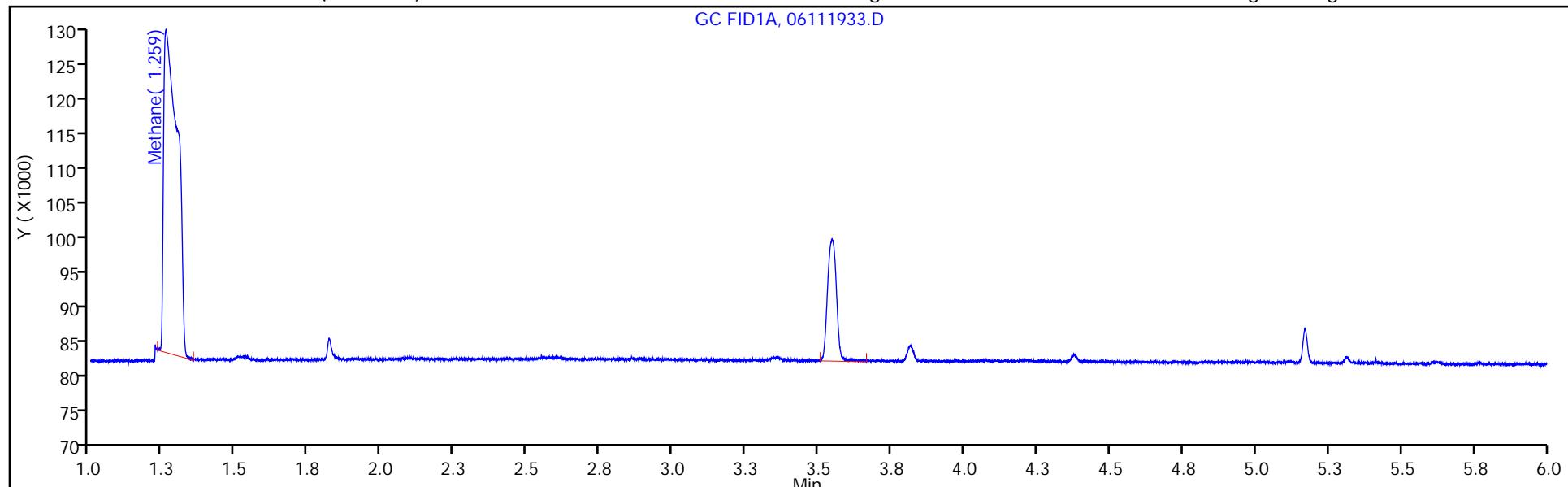
Method: RSK_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

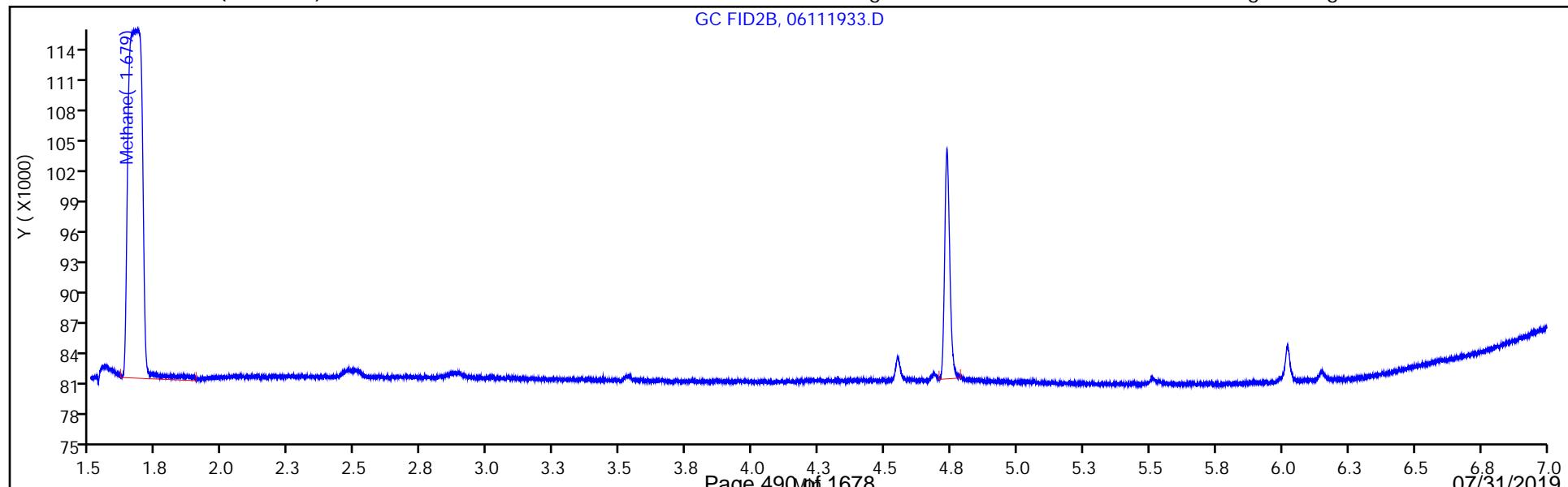
GC FID1A, 06111933.D



Column: HP-PLOT/Q (0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 06111933.D



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: G0104-19A DU Lab Sample ID: 280-124912-11 DU
Matrix: Water Lab File ID: 06111949.D
Analysis Method: RSK-175 Date Collected: 06/05/2019 14:30
Sample wt/vol: 18 (mL) Date Analyzed: 06/11/2019 17:03
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	2.48		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111949.D
 Lims ID: 280-124912-H-11 DU
 Client ID:
 Sample Type: DU
 Inject. Date: 11-Jun-2019 17:03:19 ALS Bottle#: 49 Worklist Smp#: 49
 Purge Vol: 18.000 mL Dil. Factor: 1.0000
 Sample Info: 280-124912-H-11
 Misc. Info.: 280-0082723-049
 Operator ID: MD Instrument ID: VGC_J
 Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
 Limit Group: GCV - RSK 175
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
 Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
 Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
 Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
 Process Host: CTX0334

First Level Reviewer: dobransky Date: 12-Jun-2019 05:46:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

1 Methane							
1	1.259	1.285	-0.026	339060153		2531.2	
2	1.668	1.703	-0.035	283897565		2478.1	
RPD = 2.12							
2 Ethane							
1		1.568				ND	
2		2.907					
3 Ethylene							
1		1.888				ND	
2		2.530					
4 Propane							
1		2.640				ND	
2		4.694					
5 Acetylene							
1		4.064				ND	
2		2.675					
6 Butane							
1		4.379				ND	
2		6.152					
7 isobutylene							
1		5.303				ND	
2		6.002					

Report Date: 12-Jun-2019 11:59:55

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111949.D

Injection Date: 11-Jun-2019 17:03:19

Instrument ID: VGC_J

Operator ID: MD

Lims ID: 280-124912-H-11 DU

Worklist Smp#: 49

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

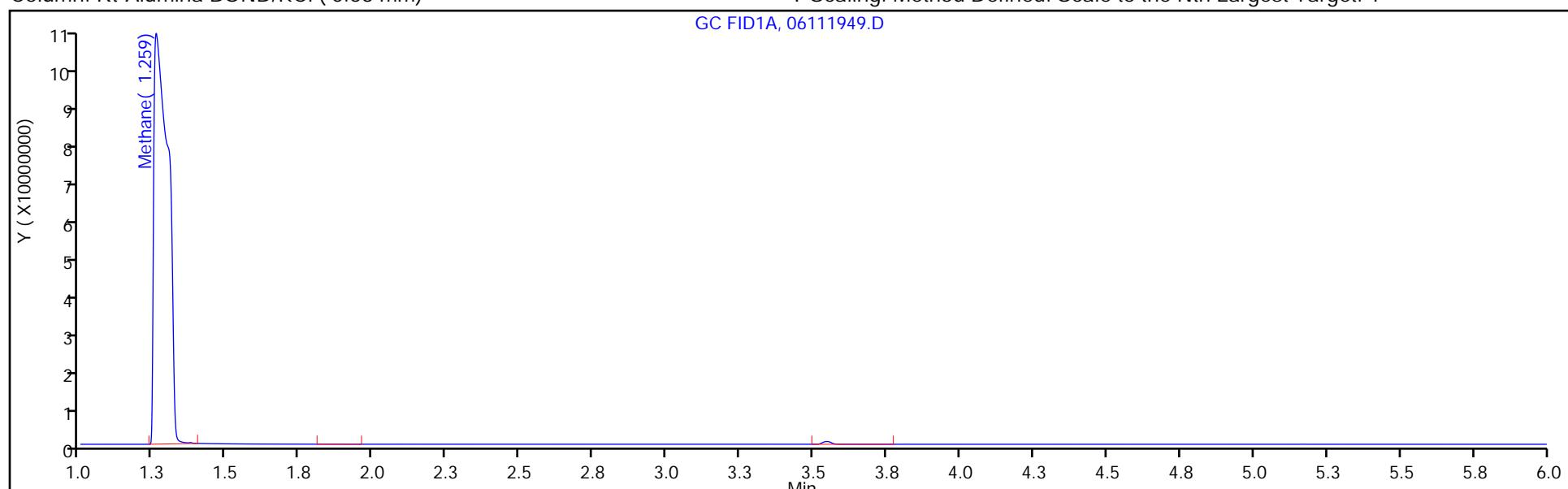
ALS Bottle#: 49

Method: RSK_J

Limit Group: GCV - RSK 175

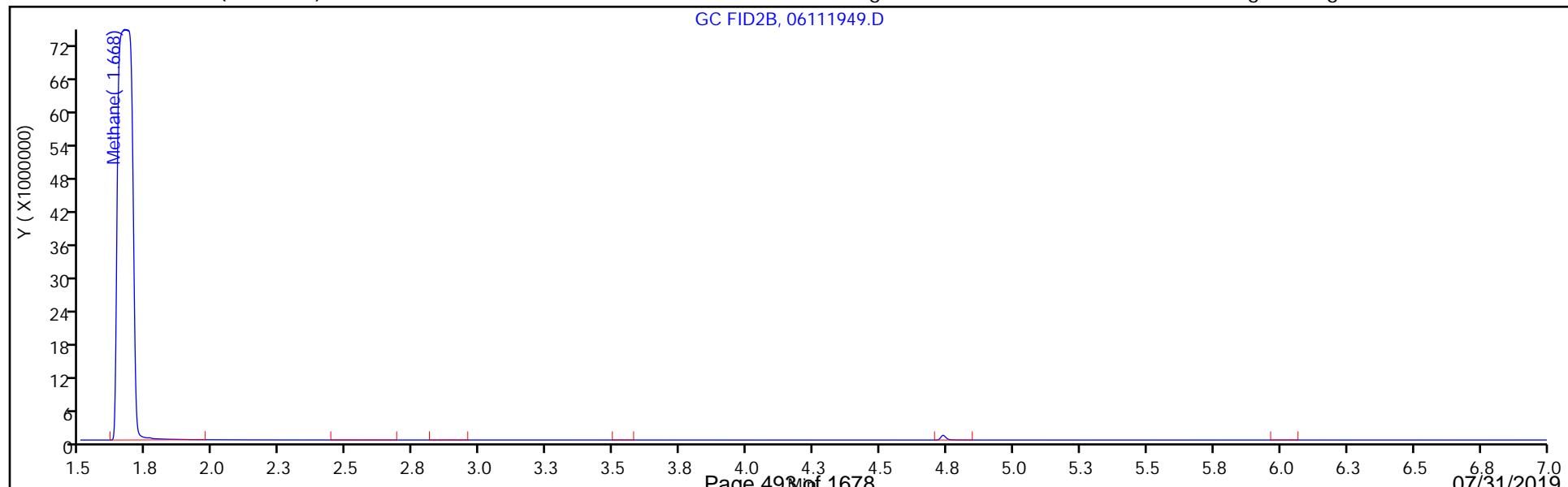
Column: Rt-Alumina BOND/KCl (0.53 mm)

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



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: VGC_J

Start Date: 04/15/2019 10:23

Analysis Batch Number: 454595

End Date: 04/15/2019 22:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-454595/1		04/15/2019 10:23	1	04151901.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/1		04/15/2019 10:23	1	04151901.D	HP-Plot Q 0.53(mm)
IC 280-454595/2		04/15/2019 10:37	1	04151902.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/2		04/15/2019 10:37	1	04151902.D	HP-Plot Q 0.53(mm)
IC 280-454595/3		04/15/2019 10:50	1	04151903.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/3		04/15/2019 10:50	1	04151903.D	HP-Plot Q 0.53(mm)
IC 280-454595/4		04/15/2019 11:03	1	04151904.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/4		04/15/2019 11:03	1	04151904.D	HP-Plot Q 0.53(mm)
ICRT 280-454595/5		04/15/2019 11:17	1	04151905.D	Rt-Alumina KCl 0.53(mm)
ICRT 280-454595/5		04/15/2019 11:17	1	04151905.D	HP-Plot Q 0.53(mm)
IC 280-454595/6		04/15/2019 11:30	1	04151906.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/6		04/15/2019 11:30	1	04151906.D	HP-Plot Q 0.53(mm)
IC 280-454595/7		04/15/2019 11:44	1	04151907.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/7		04/15/2019 11:44	1	04151907.D	HP-Plot Q 0.53(mm)
IC 280-454595/8		04/15/2019 11:57	1	04151908.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/8		04/15/2019 11:57	1	04151908.D	HP-Plot Q 0.53(mm)
IC 280-454595/9		04/15/2019 12:11	1	04151909.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/9		04/15/2019 12:11	1	04151909.D	HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 12:24	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 12:24	1		HP-Plot Q 0.53(mm)
ICV 280-454595/11		04/15/2019 12:38	1	04151911.D	Rt-Alumina KCl 0.53(mm)
ICV 280-454595/11		04/15/2019 12:38	1	04151911.D	HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 15:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 15:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 16:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 16:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 16:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 16:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 16:38	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 16:38	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 16:51	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 16:51	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:05	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:05	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:18	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:18	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:32	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:32	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 18:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 18:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 18:26	1		Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: VGC_J

Start Date: 04/15/2019 10:23

Analysis Batch Number: 454595

End Date: 04/15/2019 22:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/15/2019 18:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 18:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 18:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 18:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 18:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 19:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 19:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 19:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 19:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 19:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 19:32	1		HP-Plot Q 0.53(mm)
CCV 280-454595/29		04/15/2019 19:46	1		Rt-Alumina KCl 0.53(mm)
CCV 280-454595/29		04/15/2019 19:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 19:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 19:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 20:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 20:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 21:04	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 21:04	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 21:17	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 21:17	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 21:58	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 21:58	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 22:12	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 22:12	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 22:25	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 22:25	3		HP-Plot Q 0.53(mm)
CCV 280-454595/37		04/15/2019 22:38	1		Rt-Alumina KCl 0.53(mm)
CCV 280-454595/37		04/15/2019 22:38	1		HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: VGC_J

Start Date: 06/11/2019 05:41

Analysis Batch Number: 461087

End Date: 06/11/2019 19:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-461087/1		06/11/2019 05:41	1	06111901.D	Rt-Alumina KCl 0.53 (mm)
CCVRT 280-461087/1		06/11/2019 05:41	1	06111901.D	HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 06:32	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 06:32	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 06:45	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 06:45	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 06:59	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 06:59	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 07:12	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 07:12	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 07:25	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 07:25	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 07:39	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 07:39	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 07:52	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 07:52	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 08:05	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 08:05	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 08:19	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 08:19	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 08:32	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 08:32	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 08:45	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 08:45	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 08:59	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 08:59	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 09:12	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 09:12	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 09:26	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 09:26	1		HP-Plot Q 0.53 (mm)
CCV 280-461087/16		06/11/2019 09:39	1		Rt-Alumina KCl 0.53 (mm)
CCV 280-461087/16		06/11/2019 09:39	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 09:53	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 09:53	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 10:06	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 10:06	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 10:20	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 10:20	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 10:33	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 10:33	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 10:46	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 10:46	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 11:00	1		Rt-Alumina KCl 0.53 (mm)
ZZZZZ		06/11/2019 11:00	1		HP-Plot Q 0.53 (mm)
ZZZZZ		06/11/2019 11:13	1		Rt-Alumina KCl 0.53 (mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: VGC_J

Start Date: 06/11/2019 05:41

Analysis Batch Number: 461087

End Date: 06/11/2019 19:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/11/2019 11:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 11:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 11:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 11:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 11:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 11:54	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 11:54	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 12:07	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 12:07	1		HP-Plot Q 0.53(mm)
CCV 280-461087/28		06/11/2019 12:21	1	06111928.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461087/28		06/11/2019 12:21	1	06111928.D	HP-Plot Q 0.53(mm)
LCS 280-461087/29		06/11/2019 12:34	1	06111929.D	Rt-Alumina KCl 0.53(mm)
LCS 280-461087/29		06/11/2019 12:34	1	06111929.D	HP-Plot Q 0.53(mm)
LCSD 280-461087/30		06/11/2019 12:48	1	06111930.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-461087/30		06/11/2019 12:48	1	06111930.D	HP-Plot Q 0.53(mm)
MB 280-461087/31		06/11/2019 13:01	1	06111931.D	Rt-Alumina KCl 0.53(mm)
MB 280-461087/31		06/11/2019 13:01	1	06111931.D	HP-Plot Q 0.53(mm)
280-124912-1		06/11/2019 13:15	1	06111932.D	Rt-Alumina KCl 0.53(mm)
280-124912-1		06/11/2019 13:15	1	06111932.D	HP-Plot Q 0.53(mm)
280-124912-1 DU		06/11/2019 13:28	1	06111933.D	Rt-Alumina KCl 0.53(mm)
280-124912-1 DU		06/11/2019 13:28	1	06111933.D	HP-Plot Q 0.53(mm)
280-124912-2		06/11/2019 13:41	1	06111934.D	Rt-Alumina KCl 0.53(mm)
280-124912-2		06/11/2019 13:41	1	06111934.D	HP-Plot Q 0.53(mm)
280-124912-3		06/11/2019 13:55	1	06111935.D	Rt-Alumina KCl 0.53(mm)
280-124912-3		06/11/2019 13:55	1	06111935.D	HP-Plot Q 0.53(mm)
280-124912-4		06/11/2019 14:08	1	06111936.D	Rt-Alumina KCl 0.53(mm)
280-124912-4		06/11/2019 14:08	1	06111936.D	HP-Plot Q 0.53(mm)
280-124912-4 MS		06/11/2019 14:22	1	06111937.D	Rt-Alumina KCl 0.53(mm)
280-124912-4 MS		06/11/2019 14:22	1	06111937.D	HP-Plot Q 0.53(mm)
280-124912-4 MSD		06/11/2019 14:35	1	06111938.D	Rt-Alumina KCl 0.53(mm)
280-124912-4 MSD		06/11/2019 14:35	1	06111938.D	HP-Plot Q 0.53(mm)
280-124912-5		06/11/2019 14:49	1	06111939.D	Rt-Alumina KCl 0.53(mm)
280-124912-5		06/11/2019 14:49	1	06111939.D	HP-Plot Q 0.53(mm)
280-124912-5 MS		06/11/2019 15:02	1	06111940.D	Rt-Alumina KCl 0.53(mm)
280-124912-5 MS		06/11/2019 15:02	1	06111940.D	HP-Plot Q 0.53(mm)
280-124912-5 MSD		06/11/2019 15:16	1	06111941.D	Rt-Alumina KCl 0.53(mm)
280-124912-5 MSD		06/11/2019 15:16	1	06111941.D	HP-Plot Q 0.53(mm)
280-124912-6		06/11/2019 15:29	1	06111942.D	Rt-Alumina KCl 0.53(mm)
280-124912-6		06/11/2019 15:29	1	06111942.D	HP-Plot Q 0.53(mm)
280-124912-7		06/11/2019 15:43	1	06111943.D	Rt-Alumina KCl 0.53(mm)
280-124912-7		06/11/2019 15:43	1	06111943.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 15:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 15:56	1		HP-Plot Q 0.53(mm)
280-124912-9		06/11/2019 16:09	1	06111945.D	Rt-Alumina KCl 0.53(mm)
280-124912-9		06/11/2019 16:09	1	06111945.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: VGC_J

Start Date: 06/11/2019 05:41

Analysis Batch Number: 461087

End Date: 06/11/2019 19:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-124912-10		06/11/2019 16:23	1	06111946.D	Rt-Alumina KCl 0.53(mm)
280-124912-10		06/11/2019 16:23	1	06111946.D	HP-Plot Q 0.53(mm)
CCV 280-461087/47		06/11/2019 16:36	1	06111947.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461087/47		06/11/2019 16:36	1	06111947.D	HP-Plot Q 0.53(mm)
280-124912-11		06/11/2019 16:50	1	06111948.D	Rt-Alumina KCl 0.53(mm)
280-124912-11		06/11/2019 16:50	1	06111948.D	HP-Plot Q 0.53(mm)
280-124912-11 DU		06/11/2019 17:03	1	06111949.D	Rt-Alumina KCl 0.53(mm)
280-124912-11 DU		06/11/2019 17:03	1	06111949.D	HP-Plot Q 0.53(mm)
280-124912-12		06/11/2019 17:16	1	06111950.D	Rt-Alumina KCl 0.53(mm)
280-124912-12		06/11/2019 17:16	1	06111950.D	HP-Plot Q 0.53(mm)
280-124912-12 MS		06/11/2019 17:30	1	06111951.D	Rt-Alumina KCl 0.53(mm)
280-124912-12 MS		06/11/2019 17:30	1	06111951.D	HP-Plot Q 0.53(mm)
280-124912-12 MSD		06/11/2019 17:43	1	06111952.D	Rt-Alumina KCl 0.53(mm)
280-124912-12 MSD		06/11/2019 17:43	1	06111952.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 17:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 17:56	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 18:10	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 18:10	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 18:23	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 18:23	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 18:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 18:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 18:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 18:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 19:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 19:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 19:16	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 19:16	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 19:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 19:30	1		HP-Plot Q 0.53(mm)
CCV 280-461087/61		06/11/2019 19:43	1	06111961.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461087/61		06/11/2019 19:43	1	06111961.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: VGC_J

Start Date: 06/12/2019 07:14

Analysis Batch Number: 461235

End Date: 06/13/2019 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-461235/1		06/12/2019 07:14	1	06121901.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-461235/1		06/12/2019 07:14	1	06121901.D	HP-Plot Q 0.53(mm)
LCS 280-461235/2		06/12/2019 07:39	1	06121902.D	Rt-Alumina KCl 0.53(mm)
LCS 280-461235/2		06/12/2019 07:39	1	06121902.D	HP-Plot Q 0.53(mm)
LCSD 280-461235/3		06/12/2019 07:52	1	06121903.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-461235/3		06/12/2019 07:52	1	06121903.D	HP-Plot Q 0.53(mm)
MB 280-461235/4		06/12/2019 08:05	1	06121904.D	Rt-Alumina KCl 0.53(mm)
MB 280-461235/4		06/12/2019 08:05	1	06121904.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 08:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 08:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 08:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 08:32	1		HP-Plot Q 0.53(mm)
280-124912-8		06/12/2019 08:45	3	06121907.D	Rt-Alumina KCl 0.53(mm)
280-124912-8		06/12/2019 08:45	3	06121907.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 08:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 08:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 09:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 09:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 09:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 09:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 09:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 09:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 09:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 09:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 10:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 10:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 10:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 10:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 10:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 10:32	1		HP-Plot Q 0.53(mm)
CCV 280-461235/16		06/12/2019 10:45	1	06121916.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461235/16		06/12/2019 10:45	1	06121916.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 10:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 10:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 11:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 11:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 11:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 11:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 11:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 11:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 11:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 11:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 12:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 12:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 12:19	1		Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: VGC_J

Start Date: 06/12/2019 07:14

Analysis Batch Number: 461235

End Date: 06/13/2019 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/12/2019 12:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 12:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 12:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 12:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 12:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 12:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 12:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 13:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 13:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 13:25	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 13:25	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 13:39	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 13:39	3		HP-Plot Q 0.53(mm)
CCV 280-461235/28		06/12/2019 13:52	1		Rt-Alumina KCl 0.53(mm)
CCV 280-461235/28		06/12/2019 13:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 14:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 14:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 15:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 15:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 15:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 15:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 15:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 15:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 15:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 15:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:59	1		HP-Plot Q 0.53(mm)
CCV 280-461235/43		06/12/2019 17:13	1		Rt-Alumina KCl 0.53(mm)
CCV 280-461235/43		06/12/2019 17:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 17:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 17:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 17:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 17:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 17:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 17:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 18:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:05	1		HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: VGC_J

Start Date: 06/12/2019 07:14

Analysis Batch Number: 461235

End Date: 06/13/2019 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/12/2019 18:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 18:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 18:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 18:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 19:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 19:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 19:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 19:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 19:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 19:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 19:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 19:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 20:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 20:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 20:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 20:18	1		HP-Plot Q 0.53(mm)
CCV 280-461235/58		06/12/2019 20:31	1		Rt-Alumina KCl 0.53(mm)
CCV 280-461235/58		06/12/2019 20:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/13/2019 05:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/13/2019 05:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/13/2019 05:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/13/2019 05:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/13/2019 06:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/13/2019 06:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/13/2019 06:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/13/2019 06:17	1		HP-Plot Q 0.53(mm)
CCV 280-461235/65		06/13/2019 06:30	1		Rt-Alumina KCl 0.53(mm)
CCV 280-461235/65		06/13/2019 06:30	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461087

Batch Start Date: 06/11/19 05:41

Batch Analyst: Dobranksy, Michael E

Batch Method: RSK-175

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00027		
CCVRT 280-461087/1		RSK-175		18 mL	18 mL	5 SU	200 uL		
CCV 280-461087/28		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-461087/29		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-461087/30		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-461087/31		RSK-175		18 mL	18 mL	5 SU			
280-124912-H-1	PZ004-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-1 DU	PZ004-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-2	G0044-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-3	PZ015-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-4	G0102-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-4 MS	G0102-19AMS	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
280-124912-H-4 MSD	G0102-19AMSD	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
280-124912-H-5	PZ007-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-5 MS	PZ007-19AMS	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
280-124912-H-5 MSD	PZ007-19AMSD	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
280-124912-H-6	G0049-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-7	G0048-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-G-9	PZ005-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-10	G0103-19A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-461087/47		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-124912-H-11	G0104-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-11 DU	G0104-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-12	PZ001-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124912-H-12 MS	PZ001-19AMS	RSK-175	T	18 mL	18 mL	<2 SU	200 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 VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461087

Batch Start Date: 06/11/19 05:41

Batch Analyst: Dobranksy, Michael E

Batch Method: RSK-175

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00027		
280-124912-H-12	PZ001-19AMSD	RSK-175	T	18 mL	18 mL	<2 SU	200 uL		
CCV 280-461087/61		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.: 280-124912-1

SDG No.:

Batch Number: 461235

Batch Start Date: 06/12/19 07:14

Batch Analyst: Dobranksy, Michael E

Batch Method: RSK-175

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00027		
CCVRT 280-461235/1		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-461235/2		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-461235/3		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-461235/4		RSK-175		18 mL	18 mL	5 SU			
280-124912-G-8	G0023-19A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-461235/16		RSK-175		18 mL	18 mL	5 SU	200 uL		

Batch Notes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8330A DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
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 #
PZ004-19A	280-124912-1		93
PZ004-19A	280-124912-1	98	M
PZ004-19A RE	280-124912-1 RE	91	M
G0044-19A	280-124912-2		96
G0044-19A	280-124912-2	97	M
G0044-19A RE	280-124912-2 RE	99	M
PZ015-19A	280-124912-3		100
PZ015-19A	280-124912-3	107	
PZ015-19A RE	280-124912-3 RE	111	M
G0102-19A	280-124912-4		91
G0102-19A	280-124912-4	105	M
G0102-19A RE	280-124912-4 RE	142	M Q
PZ007-19A	280-124912-5	91	M
PZ007-19A RE	280-124912-5 RE	89	M
G0049-19A	280-124912-6	92	M
G0049-19A RE	280-124912-6 RE	90	M
G0048-19A	280-124912-7	102	M
G0048-19A RE	280-124912-7 RE	94	M
G0023-19A	280-124912-8		93
G0023-19A	280-124912-8	95	M
G0023-19A RE	280-124912-8 RE	123	M Q
PZ005-19A	280-124912-9	81	Q M
PZ005-19A RE	280-124912-9 RE	86	M
G0103-19A	280-124912-10		42 Q M
G0103-19A	280-124912-10	2535	M Q
G0103-19A RE	280-124912-10 RE	2016	M Q
G0104-19A	280-124912-11		89
G0104-19A	280-124912-11	104	M
G0104-19A RE	280-124912-11 RE	86	M
PZ001-19A	280-124912-12	87	M
PZ001-19A RE	280-124912-12 RE	88	M
	MB 280-461170/1-A	87	
	MB 280-461286/1-A	98	

QC LIMITS

83-119

12DNB = 1,2-Dinitrobenzene

Column to be used to flag recovery values

FORM II 8330A

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): UltraCarb5u ID: 4.6 (mm) GC Column (2): _____

Client Sample ID	Lab Sample ID	12DNB1 #	12DNB2 #
	MB 280-464162/1-A	95	
	LCS 280-461170/2-A	95	
	LCS 280-461286/2-A	96	
	LCS 280-464162/2-A	96	
	LCS 280-464162/4-A	90	
	LCSD 280-464162/3-A	88	
G0102-19AMS MS	280-124912-4 MS	99 M	
G0102-19AMS MS	280-124912-4 MS	91 M	
PZ007-19AMS MS	280-124912-5 MS	99 M	
PZ001-19AMS MS	280-124912-12 MS	98 M	
PZ001-19AMS MS	280-124912-12 MS	84 M	
G0102-19AMSD MSD	280-124912-4 MSD	78 M Q	
PZ007-19AMSD MSD	280-124912-5 MSD	92 M	
PZ001-19AMSD MSD	280-124912-12 MSD	99 M	
PZ001-19AMSD MSD	280-124912-12 MSD	88 M	

12DNB = 1,2-Dinitrobenzene

QC LIMITS
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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06130040.D
Lab ID: LCS 280-461170/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.13	107	73-125	
1,3-Dinitrobenzene	2.00	2.05	102	78-120	
2,4,6-Trinitrotoluene	2.00	1.89	95	71-123	
2,4-Dinitrotoluene	2.00	1.97	98	78-120	
2,6-Dinitrotoluene	2.00	1.91	95	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.89	94	79-120	
2-Nitrotoluene	2.00	1.25	63	70-127	Q
3-Nitrotoluene	2.00	1.51	75	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.77	88	76-125	
4-Nitrotoluene	2.00	1.41	70	71-127	Q
HMX	2.00	1.94	97	65-135	M
Nitrobenzene	2.00	1.51	76	65-134	
RDX	2.00	2.03	101	68-130	
Tetryl	2.00	2.00	100	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06140044.D
Lab ID: LCS 280-461286/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.07	104	73-125	
1,3-Dinitrobenzene	2.00	1.99	100	78-120	
2,4,6-Trinitrotoluene	2.00	1.81	91	71-123	
2,4-Dinitrotoluene	2.00	1.89	94	78-120	
2,6-Dinitrotoluene	2.00	1.90	95	77-127	M
2-Amino-4,6-dinitrotoluene	2.00	1.78	89	79-120	M
2-Nitrotoluene	2.00	1.28	64	70-127	Q
3-Nitrotoluene	2.00	1.45	73	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.66	83	76-125	
4-Nitrotoluene	2.00	1.42	71	71-127	
HMX	2.00	1.95	97	65-135	
Nitrobenzene	2.00	1.55	78	65-134	
RDX	2.00	1.99	99	68-130	
Tetryl	2.00	1.95	97	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 07110046.D
Lab ID: LCS 280-464162/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.14	107	73-125	
1,3-Dinitrobenzene	2.00	2.09	105	78-120	
2,4,6-Trinitrotoluene	2.00	1.97	98	71-123	
2,4-Dinitrotoluene	2.00	2.02	101	78-120	
2,6-Dinitrotoluene	2.00	2.01	101	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.91	95	79-120	
2-Nitrotoluene	2.00	1.44	72	70-127	
3-Nitrotoluene	2.00	1.69	84	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.82	91	76-125	
4-Nitrotoluene	2.00	1.64	82	71-127	
HMX	2.00	1.87	93	65-135	M
Nitrobenzene	2.00	1.73	86	65-134	
RDX	2.00	2.03	102	68-130	
Tetryl	2.00	2.22	111	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.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 07110048.D

Lab ID: LCS 280-464162/4-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.56	110	57-132	

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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 07110047.D
Lab ID: LCSD 280-464162/3-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,3,5-Trinitrobenzene	2.00	1.99	99	7	30	73-125	
1,3-Dinitrobenzene	2.00	1.95	98	7	30	78-120	
2,4,6-Trinitrotoluene	2.00	1.85	92	6	30	71-123	
2,4-Dinitrotoluene	2.00	1.87	94	8	30	78-120	
2,6-Dinitrotoluene	2.00	1.88	94	7	30	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.75	87	9	30	79-120	
2-Nitrotoluene	2.00	1.41	71	2	30	70-127	
3-Nitrotoluene	2.00	1.59	80	6	30	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.68	84	8	30	76-125	
4-Nitrotoluene	2.00	1.53	76	7	30	71-127	
HMX	2.00	1.80	90	3	30	65-135	M
Nitrobenzene	2.00	1.66	83	4	30	65-134	
RDX	2.00	1.92	96	6	30	68-130	
Tetryl	2.00	2.08	104	6	30	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06140048.D
Lab ID: 280-124912-4 MS Client ID: G0102-19AMS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	1.97	0.42 U	2.04	103	73-125	M
1,3-Dinitrobenzene	1.97	0.21 U	1.99	101	78-120	
2,4,6-Trinitrotoluene	1.97	0.42 U	1.79	91	71-123	
2,4-Dinitrotoluene	1.97	0.21 U	1.81	92	78-120	
2,6-Dinitrotoluene	1.97	0.21 U	1.76	89	77-127	
2-Amino-4,6-dinitrotoluene	1.97	0.13 U	1.75	89	79-120	
2-Nitrotoluene	1.97	0.21 U	1.18	60	70-127	J1
3-Nitrotoluene	1.97	0.42 U	1.25	63	73-125	J1
4-Amino-2,6-dinitrotoluene	1.97	0.13 U	1.59	81	76-125	
4-Nitrotoluene	1.97	0.42 U	1.34	68	71-127	J1
HMX	1.97	0.21 U	1.90	96	65-135	M
Nitrobenzene	1.97	0.21 U	1.45	73	65-134	
RDX	1.97	1.1	2.91	93	68-130	M
Tetryl	1.97	0.21 U	1.96	99	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 07110053.D
Lab ID: 280-124912-4 MS Client ID: G0102-19AMS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.40	0.41 U	2.65	110	57-132	H 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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06140051.D
Lab ID: 280-124912-5 MS Client ID: PZ007-19AMS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.12	0.42 U	2.34	110	73-125	M
1,3-Dinitrobenzene	2.12	0.21 U	2.19	103	78-120	
2,4,6-Trinitrotoluene	2.12	0.42 U	1.96	92	71-123	
2,4-Dinitrotoluene	2.12	0.21 U	1.97	93	78-120	
2,6-Dinitrotoluene	2.12	0.21 U	1.96	92	77-127	M
2-Amino-4,6-dinitrotoluene	2.12	0.13 U	1.89	89	79-120	M
2-Nitrotoluene	2.12	0.21 U	1.73	82	70-127	
3-Nitrotoluene	2.12	0.42 U	1.79	84	73-125	
4-Amino-2,6-dinitrotoluene	2.12	0.13 U	1.72	81	76-125	
4-Nitrotoluene	2.12	0.42 U	1.86	87	71-127	
HMX	2.12	0.21 U	2.02	95	65-135	M
Nitrobenzene	2.12	0.21 U	2.00	94	65-134	
RDX	2.12	0.42 U	2.07	97	68-130	M
Tetryl	2.12	0.21 U	2.11	99	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 07110059.D
Lab ID: 280-124912-5 MS Client ID: PZ007-19AMS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.72	0.44 U	2.94	108	57-132	H 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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 06140077.D
Lab ID: 280-124912-12 MS Client ID: PZ001-19AMS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	1.97	0.40 U	2.23	113	73-125	M
1,3-Dinitrobenzene	1.97	0.20 U	2.15	109	78-120	
2,4,6-Trinitrotoluene	1.97	0.40 U	1.91	97	71-123	
2,4-Dinitrotoluene	1.97	0.20 U	1.94	98	78-120	
2,6-Dinitrotoluene	1.97	0.20 U	1.74	88	77-127	M
2-Amino-4,6-dinitrotoluene	1.97	0.12 U	1.97	100	79-120	M
2-Nitrotoluene	1.97	0.20 U	1.35	69	70-127	J1
3-Nitrotoluene	1.97	0.40 U	1.46	74	73-125	
4-Amino-2,6-dinitrotoluene	1.97	0.12 U	1.67	84	76-125	
4-Nitrotoluene	1.97	0.40 U	1.50	76	71-127	
HMX	1.97	0.20 U	1.92	97	65-135	M
Nitrobenzene	1.97	0.20 U	1.68	85	65-134	
RDX	1.97	0.40 U	1.97	100	68-130	M
Tetryl	1.97	0.20 U	2.26	115	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 07150010.D
Lab ID: 280-124912-12 MS Client ID: PZ001-19AMS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.31	0.39 U	2.37	103	57-132	H 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.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06140049.D

Lab ID: 280-124912-4 MSD Client ID: G0102-19AMSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,3,5-Trinitrobenzene	1.95	1.73	89	16	30	73-125	M Q
1,3-Dinitrobenzene	1.95	1.63	84	20	30	78-120	Q
2,4,6-Trinitrotoluene	1.95	1.54	79	15	30	71-123	Q
2,4-Dinitrotoluene	1.95	1.43	74	23	30	78-120	J1
2,6-Dinitrotoluene	1.95	1.40	72	23	30	77-127	J1
2-Amino-4,6-dinitrotoluene	1.95	1.31	67	28	30	79-120	J1
2-Nitrotoluene	1.95	0.819	42	36	30	70-127	J1
3-Nitrotoluene	1.95	0.859	44	37	30	73-125	J1
4-Amino-2,6-dinitrotoluene	1.95	1.21	62	28	30	76-125	J1
4-Nitrotoluene	1.95	0.966 J	50	33	30	71-127	J1
HMX	1.95	1.68	86	12	30	65-135	M Q
Nitrobenzene	1.95	1.07	55	30	30	65-134	J1
RDX	1.95	2.62	79	10	30	68-130	M Q
Tetryl	1.95	1.77	91	11	30	64-128	Q

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.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 07110054.D

Lab ID: 280-124912-4 MSD Client ID: G0102-19AMSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %	%	QC LIMITS		#
					RPD	REC	
MNX	2.47	2.60	105	2	30	57-132	H 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.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06140052.D

Lab ID: 280-124912-5 MSD Client ID: PZ007-19AMSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,3,5-Trinitrobenzene	1.99	1.98	99	17	30	73-125	M
1,3-Dinitrobenzene	1.99	1.90	95	14	30	78-120	M
2,4,6-Trinitrotoluene	1.99	1.91	96	2	30	71-123	
2,4-Dinitrotoluene	1.99	1.78	89	10	30	78-120	
2,6-Dinitrotoluene	1.99	1.86	93	5	30	77-127	M
2-Amino-4,6-dinitrotoluene	1.99	1.65	83	14	30	79-120	M
2-Nitrotoluene	1.99	1.37	69	23	30	70-127	J1
3-Nitrotoluene	1.99	1.41	71	24	30	73-125	J1
4-Amino-2,6-dinitrotoluene	1.99	1.67	84	3	30	76-125	
4-Nitrotoluene	1.99	1.53	77	19	30	71-127	
HMX	1.99	1.80	90	11	30	65-135	M
Nitrobenzene	1.99	1.72	86	15	30	65-134	M
RDX	1.99	1.90	96	8	30	68-130	M
Tetryl	1.99	1.99	100	6	30	64-128	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 07110060.D
Lab ID: 280-124912-5 MSD Client ID: PZ007-19AMSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %	%	QC LIMITS		#
					RPD	REC	
MNX	2.55	2.71	106	8	30	57-132	H 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.: 280-124912-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 06130066.D

Lab ID: 280-124912-12 MSD Client ID: PZ001-19AMSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,3,5-Trinitrobenzene	1.97	2.14	109	5	30	73-125	M
1,3-Dinitrobenzene	1.97	2.13	108	1	30	78-120	
2,4,6-Trinitrotoluene	1.97	1.89	96	1	30	71-123	
2,4-Dinitrotoluene	1.97	1.96	99	200	30	78-120	J1
2,6-Dinitrotoluene	1.97	1.87	95	8	30	77-127	
2-Amino-4,6-dinitrotoluene	1.97	1.88	96	4	30	79-120	
2-Nitrotoluene	1.97	1.36	69	0	30	70-127	J1
3-Nitrotoluene	1.97	1.48	75	1	30	73-125	
4-Amino-2,6-dinitrotoluene	1.97	1.76	89	5	30	76-125	
4-Nitrotoluene	1.97	1.56	79	4	30	71-127	
HMX	1.97	1.89	96	2	30	65-135	M
Nitrobenzene	1.97	1.72	87	2	30	65-134	
RDX	1.97	1.94	99	1	30	68-130	M
Tetryl	1.97	2.28	116	1	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.: 280-124912-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: 07150011.D
Lab ID: 280-124912-12 MSD Client ID: PZ001-19AMSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %	%	QC LIMITS		#
					REC	RPD	
MNX	2.33	1.02 J	44	80	30	57-132 H M J1	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: MB 280-461170/1-A
Matrix: Water Date Extracted: 06/11/2019 18:08
Lab File ID: (1) 06130039.D Lab File ID: (2) _____
Date Analyzed: (1) 06/14/2019 00:10 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 280-461170/2-A	06/14/2019 00:34	
PZ004-19A	280-124912-1	06/14/2019 06:31	06/15/2019 12:10
G0044-19A	280-124912-2	06/14/2019 06:55	06/15/2019 12:45
PZ015-19A	280-124912-3	06/14/2019 07:19	06/15/2019 13:20
G0049-19A	280-124912-6	06/14/2019 07:43	
G0048-19A	280-124912-7	06/14/2019 08:07	
G0023-19A	280-124912-8	06/14/2019 08:30	06/15/2019 13:55
PZ001-19A	280-124912-12	06/14/2019 08:54	
PZ001-19AMSD MSD	280-124912-12 MSD	06/14/2019 10:53	
PZ001-19AMS MS	280-124912-12 MS	06/15/2019 20:56	

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: MB 280-461286/1-A
Matrix: Water Date Extracted: 06/12/2019 17:51
Lab File ID: (1) 06140043.D Lab File ID: (2) 06170027.D
Date Analyzed: (1) 06/15/2019 07:27 Date Analyzed: (2) 06/18/2019 06:15
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 280-461286/2-A	06/15/2019 07:51	06/18/2019 06:50
G0102-19A	280-124912-4	06/15/2019 09:02	06/18/2019 08:00
G0102-19AMS MS	280-124912-4 MS	06/15/2019 09:26	
G0102-19AMSD MSD	280-124912-4 MSD	06/15/2019 09:50	
PZ007-19A	280-124912-5	06/15/2019 10:13	
PZ007-19AMS MS	280-124912-5 MS	06/15/2019 10:37	
PZ007-19AMSD MSD	280-124912-5 MSD	06/15/2019 11:01	
PZ005-19A	280-124912-9	06/15/2019 12:36	
G0103-19A	280-124912-10	06/15/2019 13:00	06/18/2019 10:20
G0104-19A	280-124912-11	06/15/2019 13:24	06/18/2019 11:30

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: MB 280-464162/1-A
Matrix: Water Date Extracted: 07/10/2019 16:51
Lab File ID: (1) 07110045.D Lab File ID: (2) _____
Date Analyzed: (1) 07/12/2019 00:48 Date Analyzed: (2) _____
Instrument ID: (1) CHHPLC_X3 Instrument ID: (2) _____
GC Column: (1) UltraCarb5uO ID: 4.6 (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 280-464162/2-A	07/12/2019 01:10	
	LCSD 280-464162/3-A	07/12/2019 01:33	
	LCS 280-464162/4-A	07/12/2019 01:56	
PZ004-19A RE	280-124912-1 RE	07/12/2019 02:19	
G0044-19A RE	280-124912-2 RE	07/12/2019 02:42	
PZ015-19A RE	280-124912-3 RE	07/12/2019 03:05	
G0102-19A RE	280-124912-4 RE	07/12/2019 03:28	
G0102-19AMS MS	280-124912-4 MS	07/12/2019 03:51	
G0102-19AMSD MSD	280-124912-4 MSD	07/12/2019 04:14	
PZ007-19A RE	280-124912-5 RE	07/12/2019 05:46	
PZ007-19AMS MS	280-124912-5 MS	07/12/2019 06:09	
PZ007-19AMSD MSD	280-124912-5 MSD	07/12/2019 06:32	
G0049-19A RE	280-124912-6 RE	07/12/2019 06:55	
G0048-19A RE	280-124912-7 RE	07/12/2019 07:18	
G0023-19A RE	280-124912-8 RE	07/12/2019 07:41	
PZ005-19A RE	280-124912-9 RE	07/12/2019 08:04	
G0103-19A RE	280-124912-10 RE	07/12/2019 08:27	
G0104-19A RE	280-124912-11 RE	07/12/2019 08:50	
PZ001-19A RE	280-124912-12 RE	07/12/2019 09:13	
PZ001-19AMS MS	280-124912-12 MS	07/15/2019 13:27	
PZ001-19AMSD MSD	280-124912-12 MSD	07/15/2019 13:50	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0044-19A Lab Sample ID: 280-124912-2

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/14/2019 06:55 Date Analyzed (2): 06/15/2019 12:45

GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.65	6.50	6.80	0.47		27.4
	2		7.15	7.00	7.30	0.61		
RDX	1		7.76	7.61	7.91	0.50		44.8
	2		9.22	9.08	9.38	0.79		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: PZ015-19A Lab Sample ID: 280-124912-3

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/14/2019 07:19 Date Analyzed (2): 06/15/2019 13:20

GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.74	7.61	7.91	0.85		117.4
	2		9.22	9.08	9.38	0.22		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0102-19A Lab Sample ID: 280-124912-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/15/2019 09:02 Date Analyzed (2): 06/18/2019 08:00

GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.77	7.61	7.91	1.1		8.8
	2		9.23	9.12	9.42	1.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Client Sample ID: G0103-19A Lab Sample ID: 280-124912-10

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/15/2019 13:00 Date Analyzed (2): 06/18/2019 10:20

GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Nitrobenzene	1		9.94	9.80	10.10	0.60		5.5
	2		12.28	12.10	12.40	0.57		
3-Nitrotoluene	1		13.96	13.77	14.07	3.7		145.7
	2		17.82	17.70	18.00	0.58		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 280-461286/2-A
Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA
Date Analyzed (1): 06/15/2019 07:51 Date Analyzed (2): 06/18/2019 06:50
GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.65	6.49	6.79	1.95		4.4
	2		7.17	7.04	7.34	1.87		
RDX	1		7.77	7.61	7.91	1.99		0.8
	2		9.24	9.12	9.42	1.97		
1,3,5-Trinitrobenzene	1		8.91	8.75	9.05	2.07		5.2
	2		19.10	18.96	19.26	1.97		
1,3-Dinitrobenzene	1		9.58	9.41	9.71	1.99		4.0
	2		15.79	15.65	15.95	1.91		
Nitrobenzene	1		9.97	9.80	10.10	1.55		4.4
	2		12.23	12.10	12.40	1.48		
Tetryl	1		10.30	10.13	10.43	1.95		16.2
	2		23.84	23.70	24.00	2.29		
2,4,6-Trinitrotoluene	1		11.26	11.13	11.33	1.81		0.4
	2		24.82	24.67	24.97	1.82		
4-Amino-2,6-dinitrotoluene	1		11.47	11.33	11.53	1.66		3.0
	2		17.34	17.21	17.51	1.71		
2-Amino-4,6-dinitrotoluene	1		11.76	11.62	11.82	1.78		2.5
	2		18.38	18.24	18.54	1.83		
2,6-Dinitrotoluene	1		11.88	11.74	11.94	1.90		3.6
	2		19.95	19.80	20.10	1.83		
2,4-Dinitrotoluene	1		12.09	11.94	12.14	1.89		0.9
	2		20.50	20.36	20.66	1.87		
2-Nitrotoluene	1		12.93	12.73	13.03	1.28		7.2
	2		16.60	16.46	16.76	1.37		
4-Nitrotoluene	1		13.37	13.17	13.47	1.42		9.2
	2		16.94	16.80	17.10	1.55		
3-Nitrotoluene	1		13.97	13.77	14.07	1.45		5.2
	2		17.85	17.70	18.00	1.53		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
 SDG No.: _____
 Client Sample ID: PZ004-19A Lab Sample ID: 280-124912-1
 Matrix: Water Lab File ID: 06130055.D
 Analysis Method: 8330A Date Collected: 06/04/2019 12:30
 Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
 Sample wt/vol: 495.7 (mL) Date Analyzed: 06/14/2019 06:31
 Con. Extract Vol.: 5 (mL) Dilution Factor: 1
 Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
 % Moisture: GPC Cleanup: (Y/N) N
 Analysis Batch No.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.085
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U Q	0.40	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	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U Q M	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.16
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.080

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: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130055.D
 Lims ID: 280-124912-A-1-A
 Client ID: PZ004-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 06:31:46 ALS Bottle#: 55 Worklist Smp#: 55
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-1-A
 Misc. Info.: 280-0082810-055
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:27:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.645				ND	
6 MNX	1	7.359				ND	
7 RDX	1	7.758				ND	
\$ 9 1,2-Dinitrobenzene	1	8.739	8.738	0.001	25474	0.1958	M
10 1,3,5-Trinitrobenzene	1	8.898				ND	
11 1,3-Dinitrobenzene	1	9.558				ND	
12 Nitrobenzene	1	9.959	9.945	0.014	2024	0.0103	
14 Tetryl	1	10.265				ND	
16 2,4,6-Trinitrotoluene	1	11.218				ND	
17 4-Amino-2,6-dinitrotoluene	1	11.405				ND	
18 2-Amino-4,6-dinitrotoluene	1	11.698				ND	
19 2,6-Dinitrotoluene	1	11.832				ND	
20 2,4-Dinitrotoluene	1	12.032				ND	
21 o-Nitrotoluene	1	12.865				ND	
22 p-Nitrotoluene	1	13.279	13.305	-0.026	1796	0.0159	M
23 m-Nitrotoluene	1	13.898				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-Jun-2019 10:04:08

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130055.D

Injection Date: 14-Jun-2019 06:31:46

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-1-A

Lab Sample ID: 280-124912-1

Worklist Smp#: 55

Client ID: PZ004-19A

Dil. Factor: 1.0000

ALS Bottle#: 55

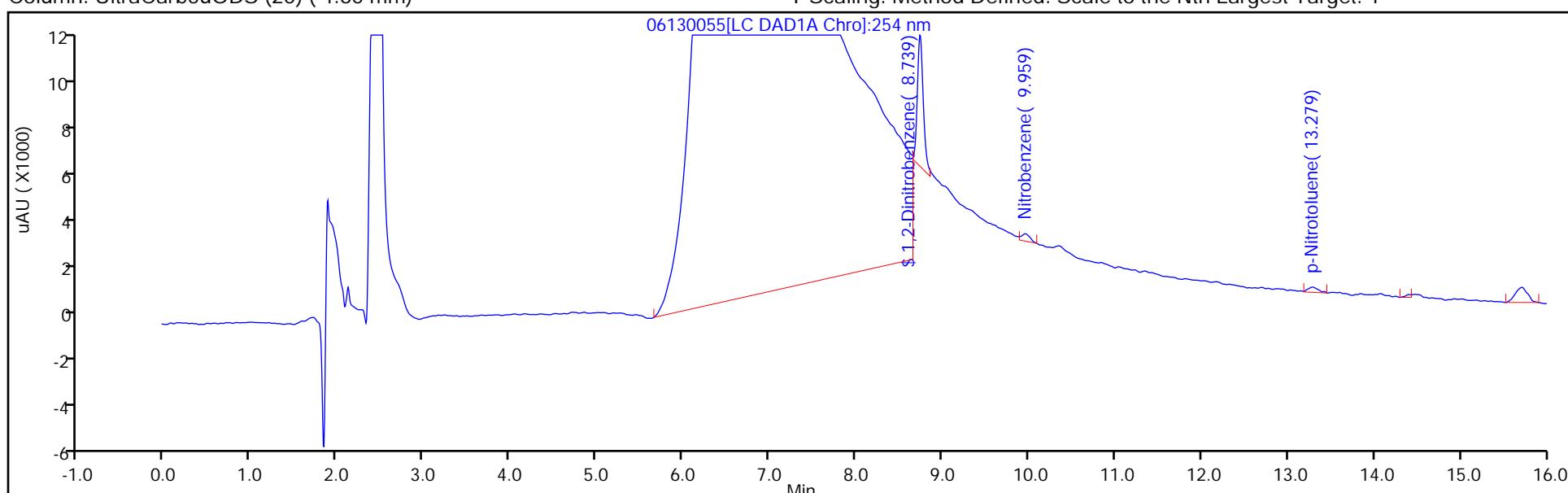
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

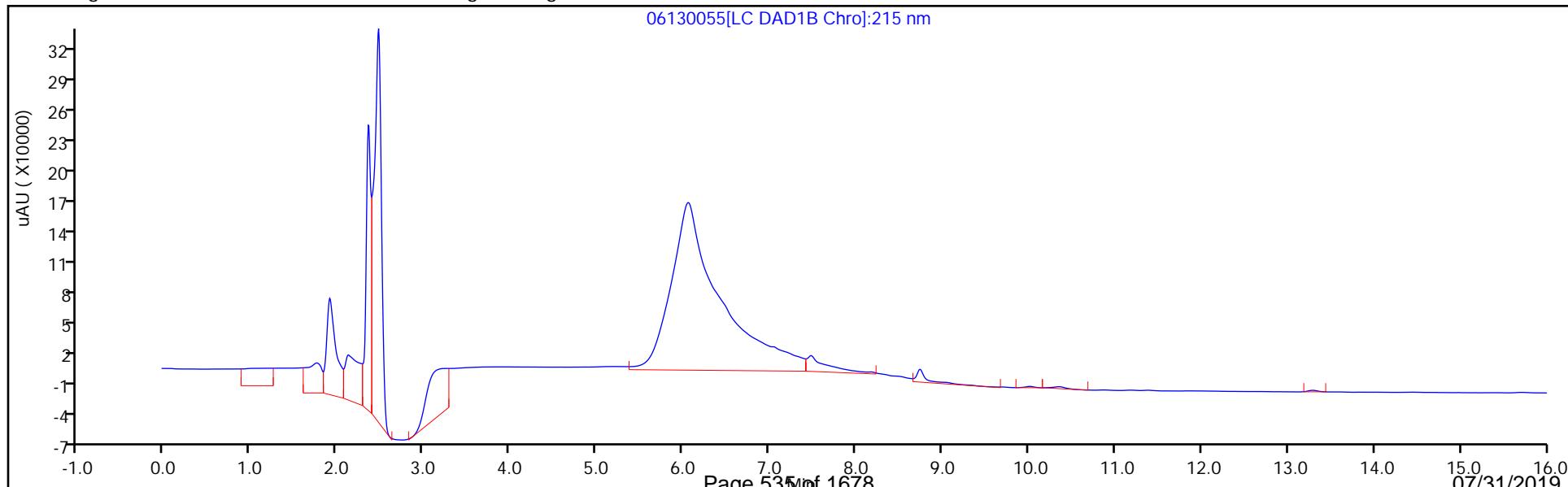
Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130055.D
 Lims ID: 280-124912-A-1-A
 Client ID: PZ004-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 06:31:46 ALS Bottle#: 55 Worklist Smp#: 55
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-1-A
 Misc. Info.: 280-0082810-055
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:27:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1958	97.89

Eurofins TestAmerica, Denver

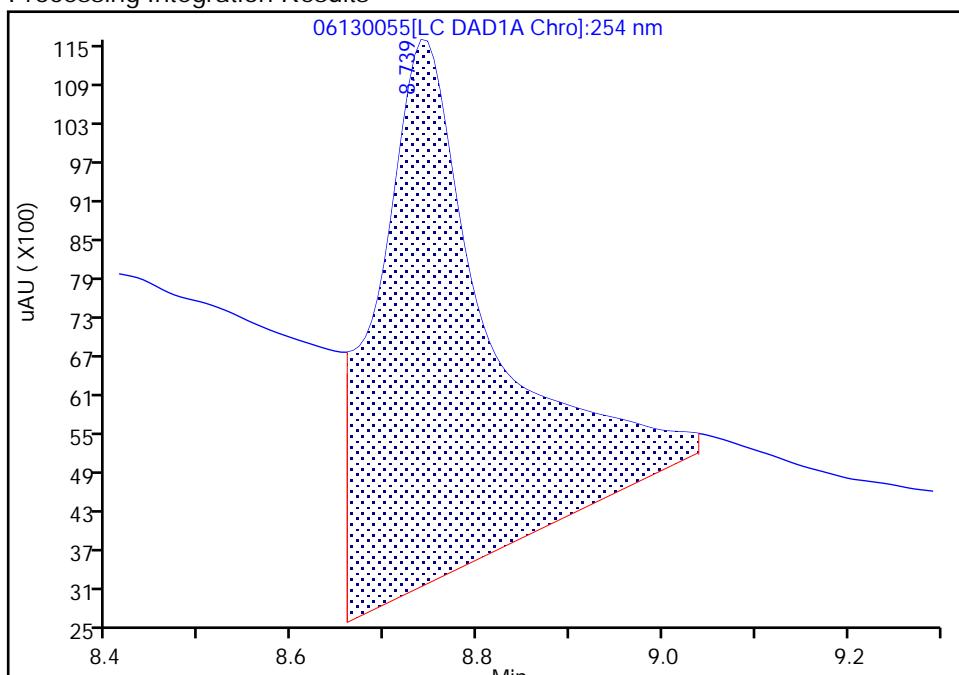
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130055.D
 Injection Date: 14-Jun-2019 06:31:46 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: hkf ALS Bottle#: 55 Worklist Smp#: 55
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

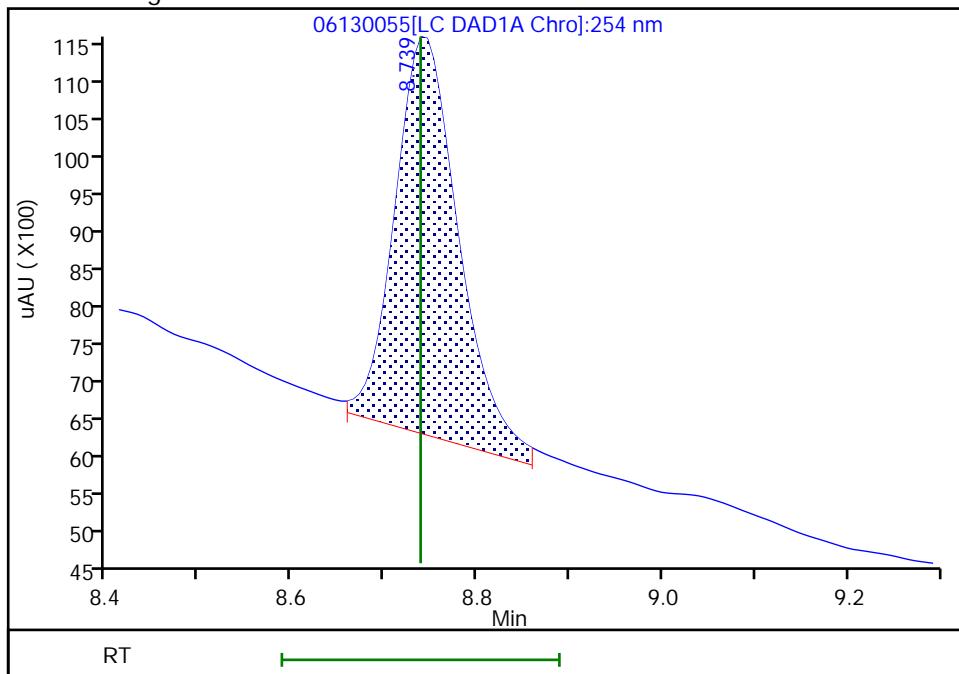
RT: 8.74
 Area: 74211
 Amount: 0.570369
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 25474
 Amount: 0.195787
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 09:22:23

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

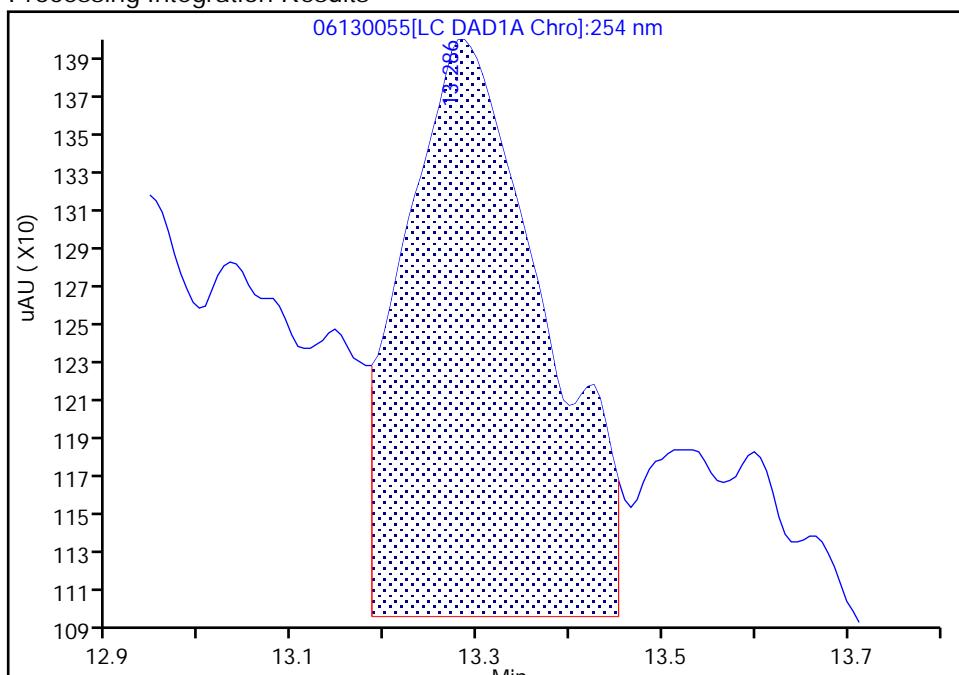
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130055.D
 Injection Date: 14-Jun-2019 06:31:46 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: hkf ALS Bottle#: 55 Worklist Smp#: 55
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0
Signal: 1

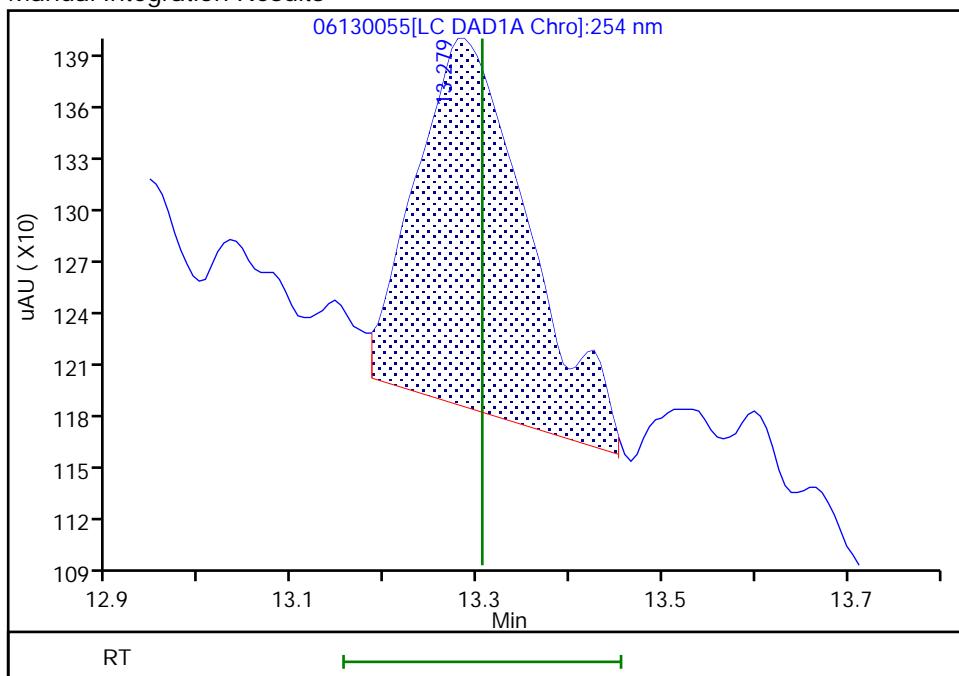
RT: 13.29
 Area: 3124
 Amount: 0.027716
 Amount Units: ug/mL

Processing Integration Results



RT: 13.28
 Area: 1796
 Amount: 0.015934
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 09:22:39

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ004-19A Lab Sample ID: 280-124912-1
Matrix: Water Lab File ID: 06140045.D
Analysis Method: 8330A Date Collected: 06/04/2019 12:30
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 495.7 (mL) Date Analyzed: 06/15/2019 12:10
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.: 461583 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
98-95-3	Nitrobenzene	0.20	U	0.40	0.20	0.092

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140045.D
 Lims ID: 280-124912-A-1-A
 Client ID: PZ004-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 12:10:16 ALS Bottle#: 45 Worklist Smp#: 45
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-1-A
 Misc. Info.: 280-0082871-045
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 11:00:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.119	7.151	-0.032	2562	0.0150	M
7 MNX	1		7.778			ND	
8 RDX	1	9.206	9.231	-0.025	13255	0.0636	
9 Nitrobenzene	1		12.198			ND	
\$ 10 1,2-Dinitrobenzene	1	13.226	13.204	0.022	51715	0.1868	
12 1,3-Dinitrobenzene	1		15.731			ND	
14 o-Nitrotoluene	1		16.531			ND	
15 p-Nitrotoluene	1	16.913	16.858	0.055	4911	0.0217	M
16 4-Amino-2,6-dinitrotoluene	1		17.251			ND	
17 m-Nitrotoluene	1	17.859	17.764	0.095	10217	0.0349	M
18 2-Amino-4,6-dinitrotoluene	1		18.271			ND	
19 1,3,5-Trinitrobenzene	1		19.024			ND	
20 2,6-Dinitrotoluene	1		19.851			ND	
21 2,4-Dinitrotoluene	1		20.404			ND	
22 Tetryl	1	23.733	23.698	0.035	3001	0.009543	
23 2,4,6-Trinitrotoluene	1	24.799	24.711	0.088	12069	0.0296	M

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-Jun-2019 11:07:42

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140045.D

Injection Date: 15-Jun-2019 12:10:16

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: 280-124912-A-1-A

Lab Sample ID: 280-124912-1

Worklist Smp#: 45

Client ID: PZ004-19A

Dil. Factor: 1.0000

ALS Bottle#: 45

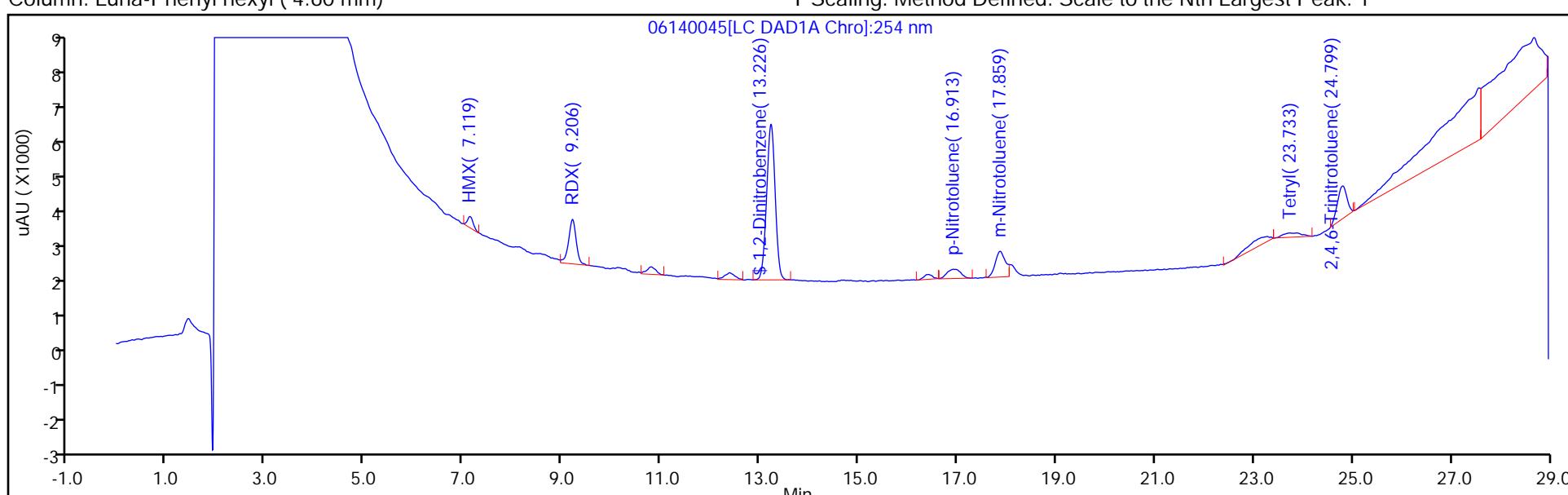
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

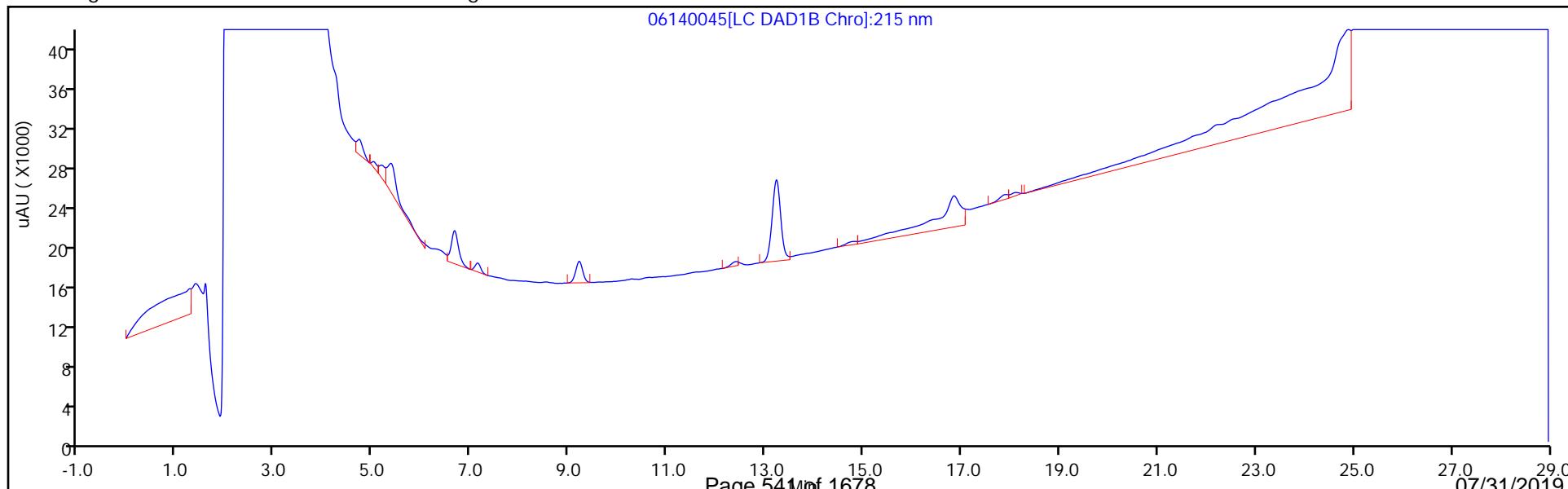
Method: G2_8330_Luna

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: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140045.D
 Lims ID: 280-124912-A-1-A
 Client ID: PZ004-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 12:10:16 ALS Bottle#: 45 Worklist Smp#: 45
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-1-A
 Misc. Info.: 280-0082871-045
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 11:00:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1868	93.40

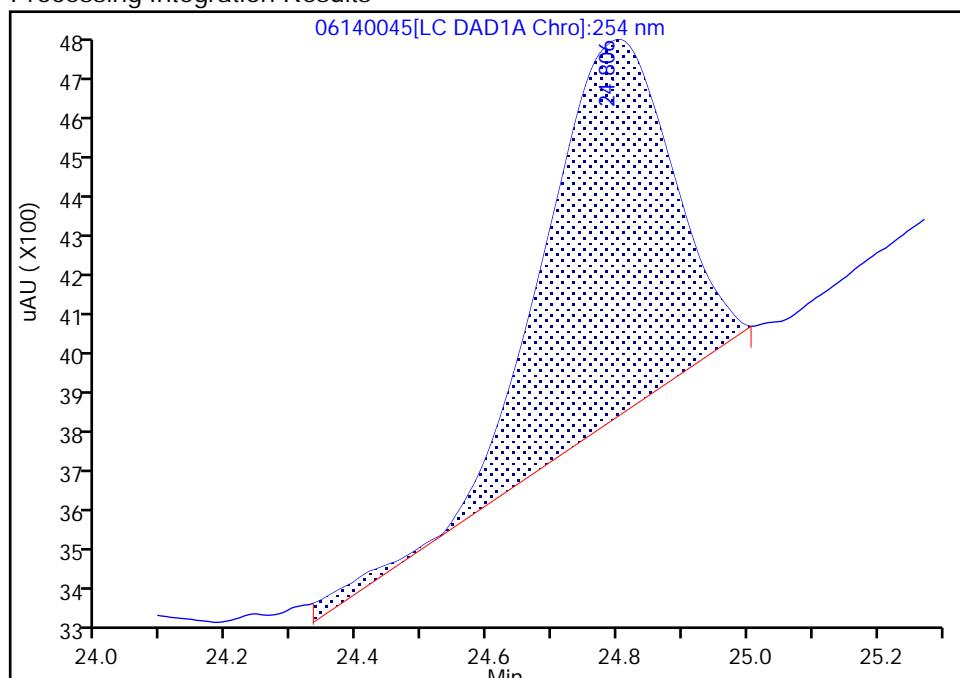
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140045.D
 Injection Date: 15-Jun-2019 12:10:16 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: HKF ALS Bottle#: 45 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

23 2,4,6-Trinitrotoluene, CAS: 118-96-7
 Signal: 1

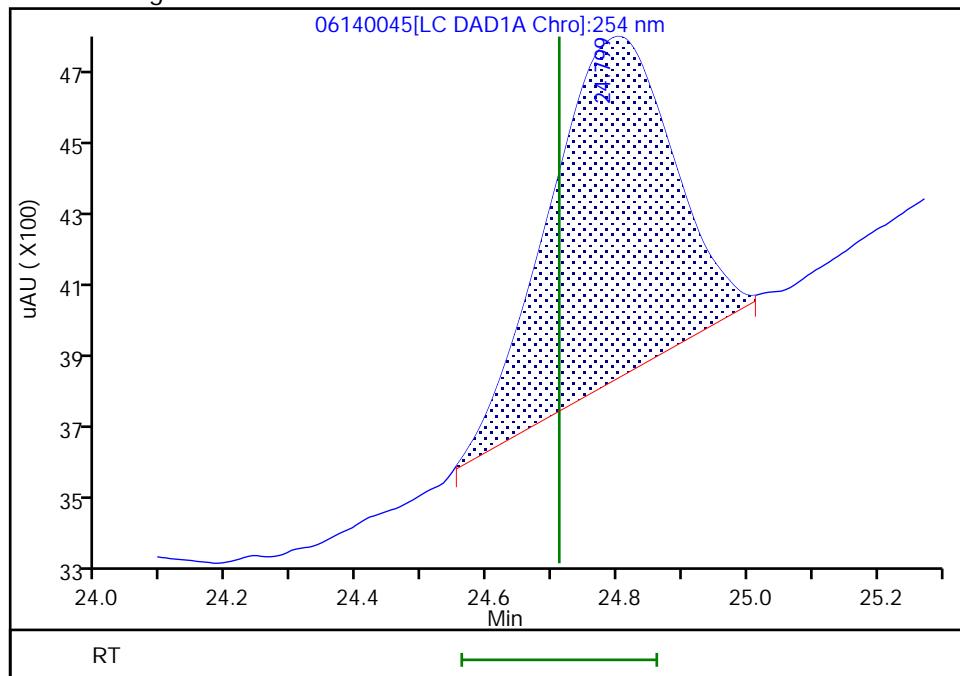
RT: 24.81
 Area: 12307
 Amount: 0.030217
 Amount Units: ug/ml

Processing Integration Results



RT: 24.80
 Area: 12069
 Amount: 0.029633
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:00:55

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

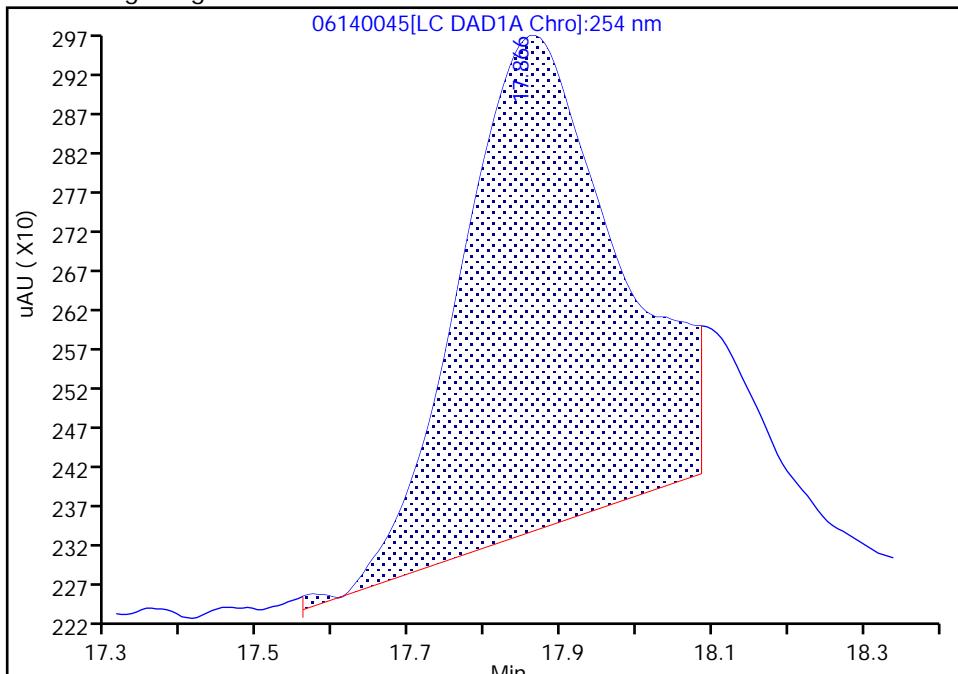
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140045.D
 Injection Date: 15-Jun-2019 12:10:16 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: HKF ALS Bottle#: 45 Worklist Smp#: 45
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

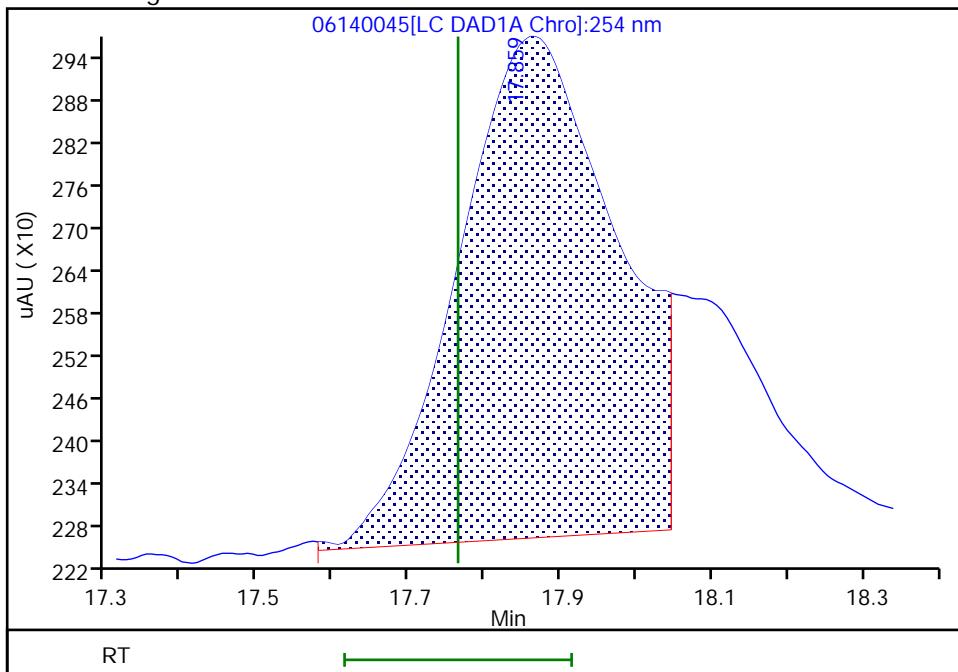
Processing Integration Results

RT: 17.87
 Area: 8983
 Amount: 0.030691
 Amount Units: ug/ml



Manual Integration Results

RT: 17.86
 Area: 10217
 Amount: 0.034907
 Amount Units: ug/ml



Reviewer: fiedlerh, 17-Jun-2019 11:00:44

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

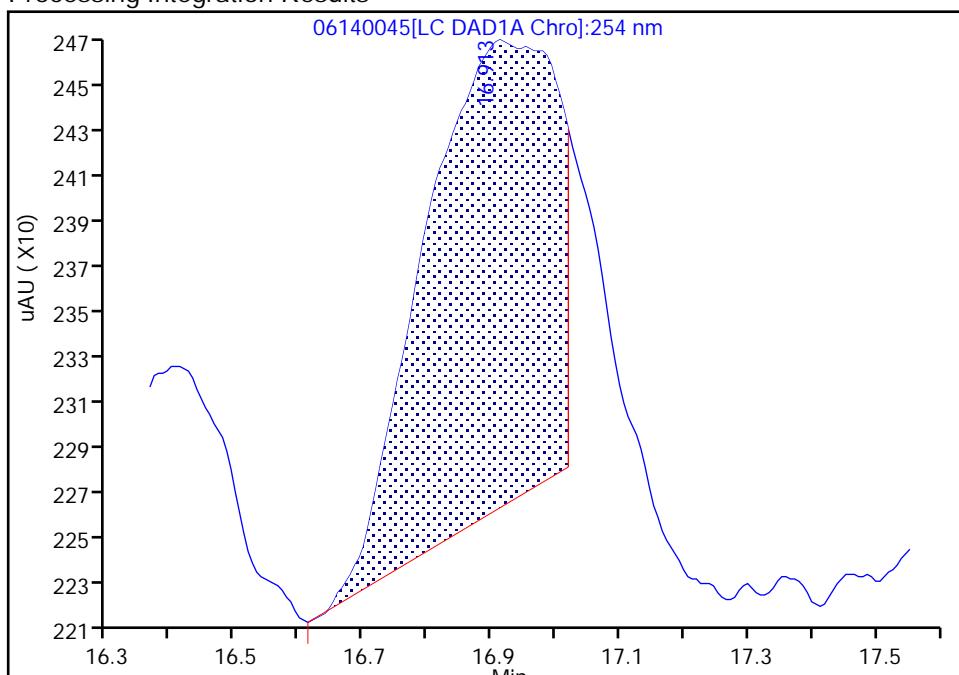
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140045.D
 Injection Date: 15-Jun-2019 12:10:16 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: HKF ALS Bottle#: 45 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

15 p-Nitrotoluene, CAS: 99-99-0
 Signal: 1

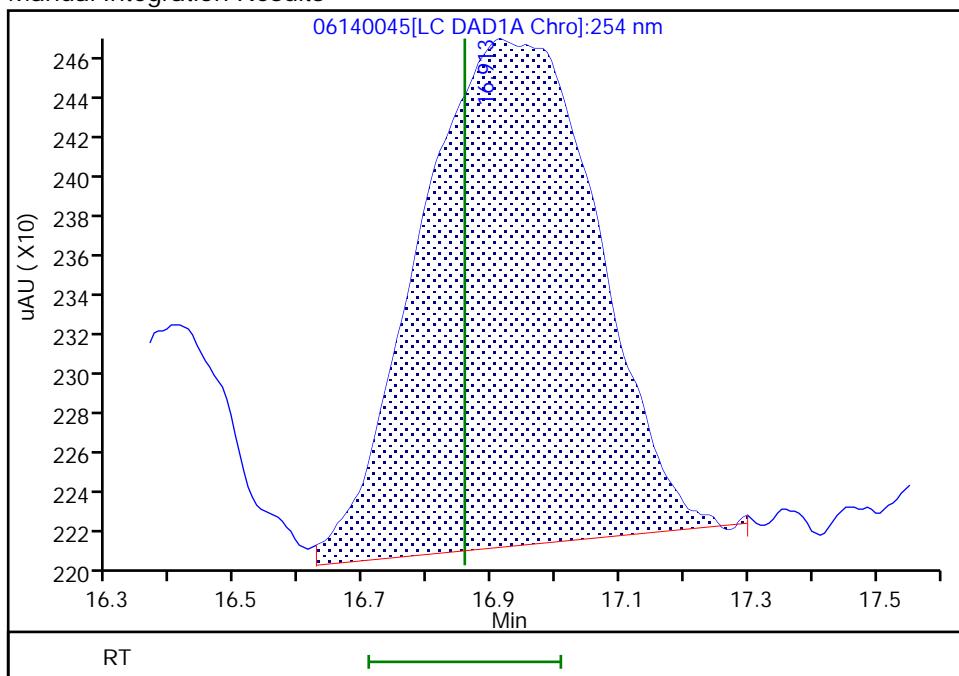
RT: 16.91
 Area: 2940
 Amount: 0.012972
 Amount Units: ug/ml

Processing Integration Results



RT: 16.91
 Area: 4911
 Amount: 0.021668
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:00:39

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

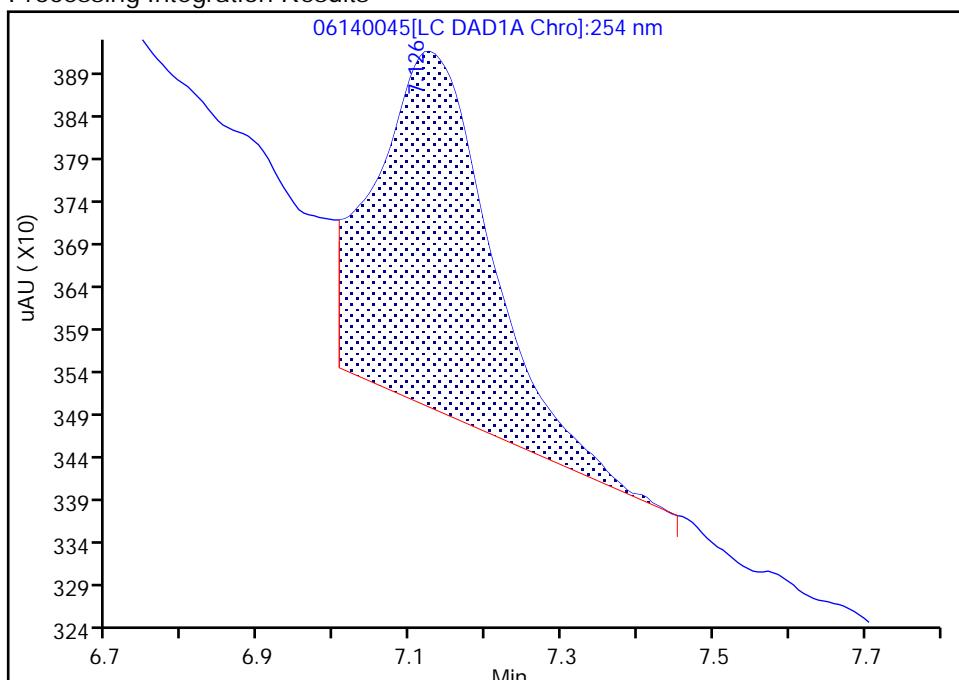
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140045.D
 Injection Date: 15-Jun-2019 12:10:16 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: HKF ALS Bottle#: 45 Worklist Smp#: 45
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

6 HMX, CAS: 2691-41-0

Signal: 1

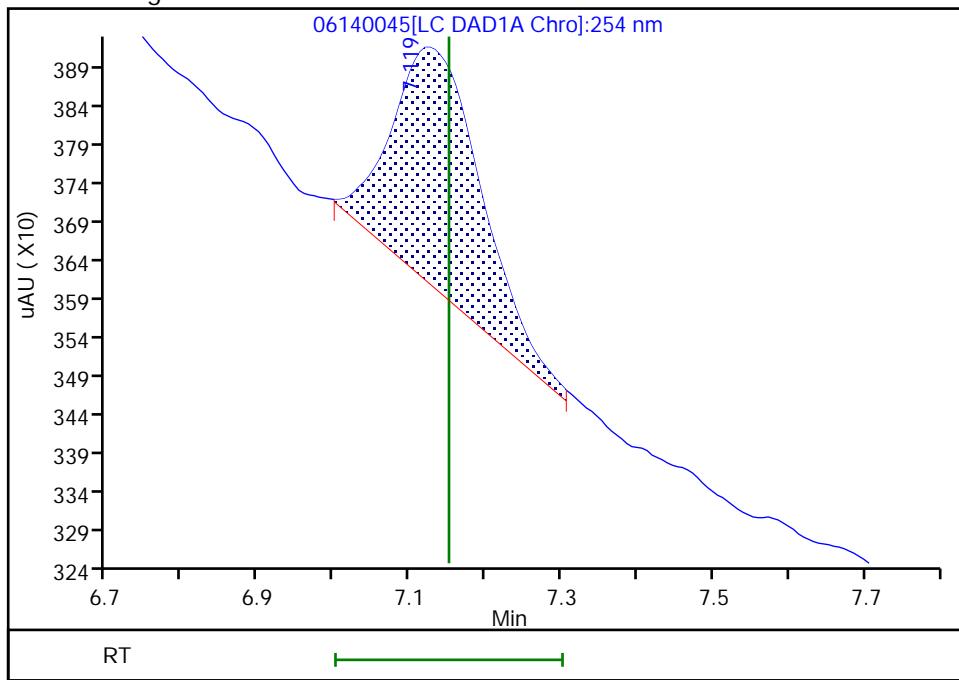
RT: 7.13
 Area: 4416
 Amount: 0.025795
 Amount Units: ug/ml

Processing Integration Results



RT: 7.12
 Area: 2562
 Amount: 0.014965
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:00:33

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ004-19A RE Lab Sample ID: 280-124912-1 RE
Matrix: Water Lab File ID: 07110049.D
Analysis Method: 8330A Date Collected: 06/04/2019 12:30
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 505 (mL) Date Analyzed: 07/12/2019 02:19
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.20	U H	0.40	0.20	0.085
99-99-0	<i>4-Nitrotoluene</i>	0.40	U H M	0.99	0.40	0.20
5755-27-1	MNX	0.40	U H	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110049.D
 Lims ID: 280-124912-B-1-A
 Client ID: PZ004-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 02:19:50 ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-1-A
 Misc. Info.: 280-0083617-049
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:00:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.692			ND		U
6 MNX	1	7.378			ND		
7 RDX	1	7.799			ND		
\$ 9 1,2-Dinitrobenzene	1	8.747	8.759	-0.012	25292	0.1815	M
10 1,3,5-Trinitrobenzene	1	8.919			ND		
11 1,3-Dinitrobenzene	1	9.578			ND		
12 Nitrobenzene	1	9.974	9.965	0.009	1422	0.007149	M
14 Tetryl	1	10.285			ND		U
16 2,4,6-Trinitrotoluene	1	11.258			ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738			ND		
19 2,6-Dinitrotoluene	1	11.878			ND		
20 2,4-Dinitrotoluene	1	12.078			ND		
21 o-Nitrotoluene	1	12.925			ND		
22 p-Nitrotoluene	1	13.340	13.372	-0.032	1385	0.0126	M
23 m-Nitrotoluene	1	13.978			ND		U

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:38

Chrom Revision: 2.3 20-Jun-2019 20:50:56

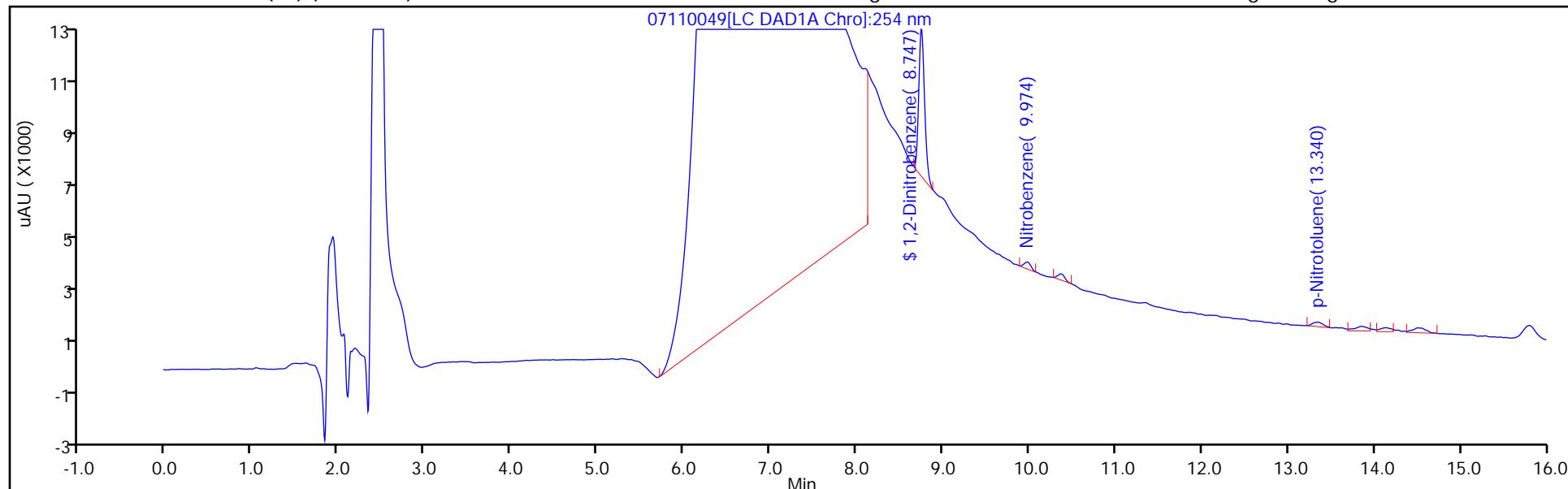
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110049.D
Injection Date: 12-Jul-2019 02:19:50 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-1-A Lab Sample ID: 280-124912-1
Client ID: PZ004-19A
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm)

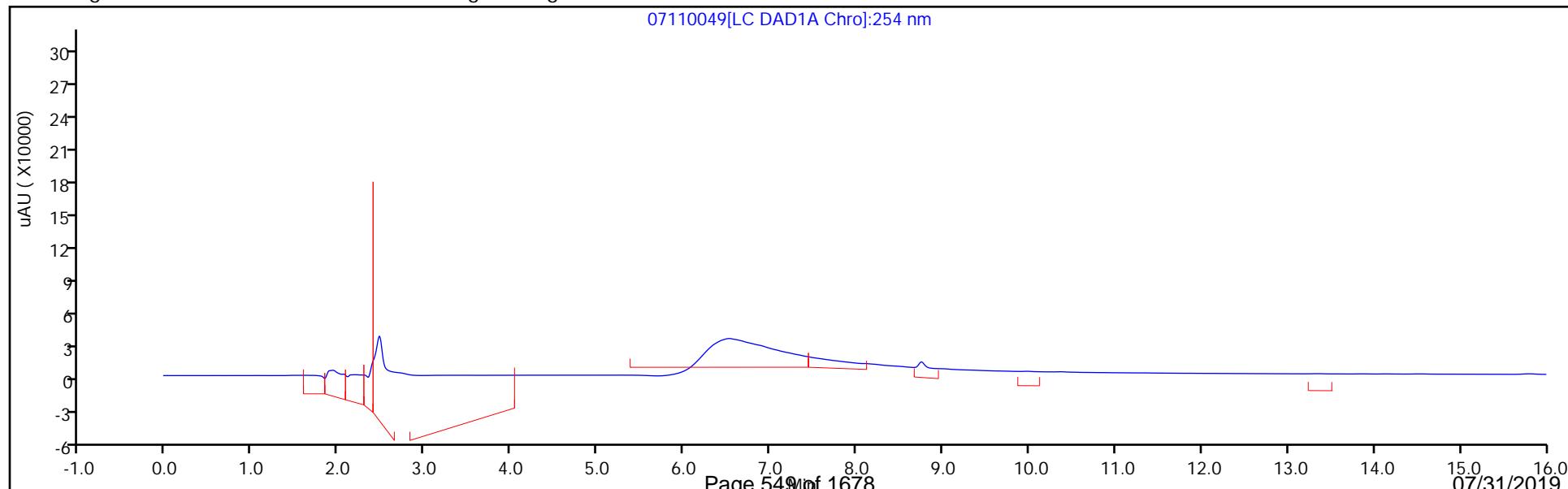
Operator ID: hkf
Worklist Smp#: 49

ALS Bottle#: 49

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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110049.D
 Lims ID: 280-124912-B-1-A
 Client ID: PZ004-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 02:19:50 ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-1-A
 Misc. Info.: 280-0083617-049
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:00:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1815	90.76

Eurofins TestAmerica, Denver

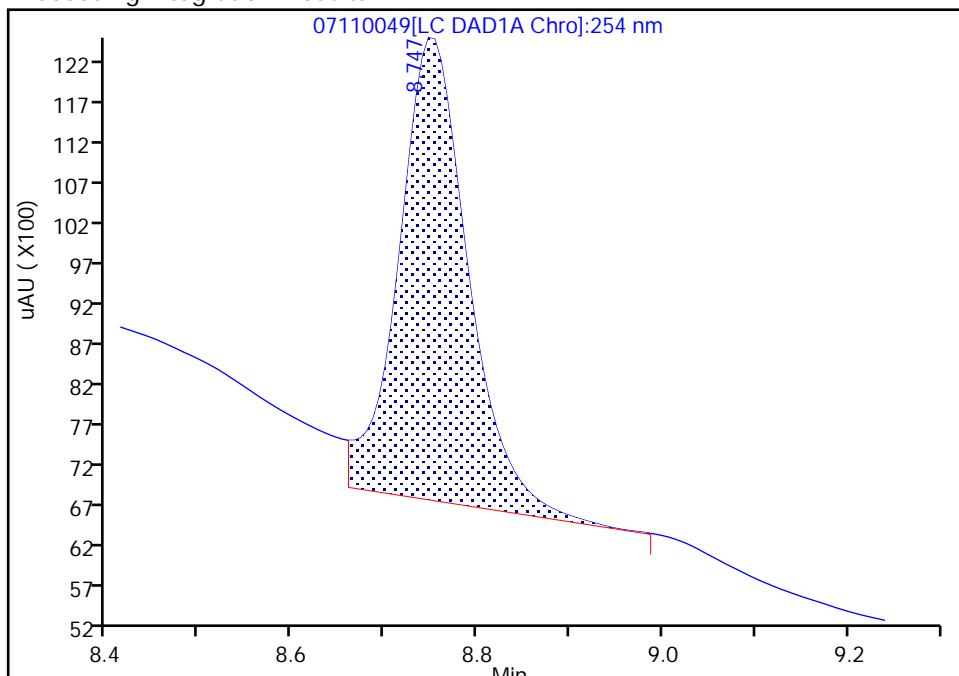
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110049.D
 Injection Date: 12-Jul-2019 02:19:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: hkf ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 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

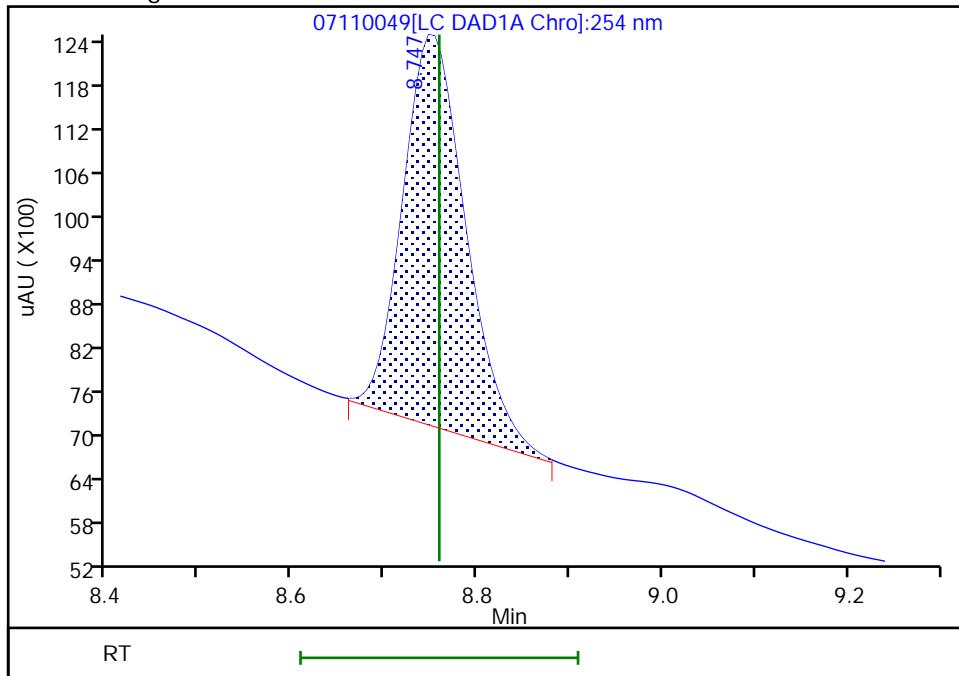
RT: 8.75
 Area: 29820
 Amount: 0.214027
 Amount Units: ug/mL

Processing Integration Results



RT: 8.75
 Area: 25292
 Amount: 0.181528
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:00:15

Audit Action: Manually Integrated

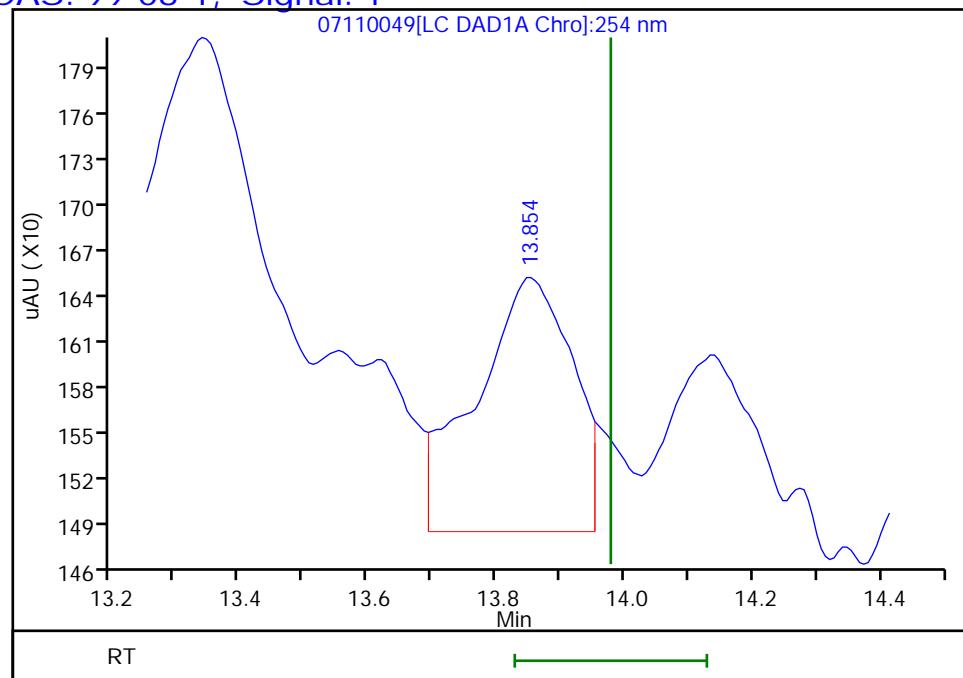
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110049.D
Injection Date: 12-Jul-2019 02:19:50 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-1-A Lab Sample ID: 280-124912-1
Client ID: PZ004-19A
Operator ID: hkf 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

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.85
Response: 1711
Amount: 0.011790



Reviewer: fiedlerh, 12-Jul-2019 09:00:32

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

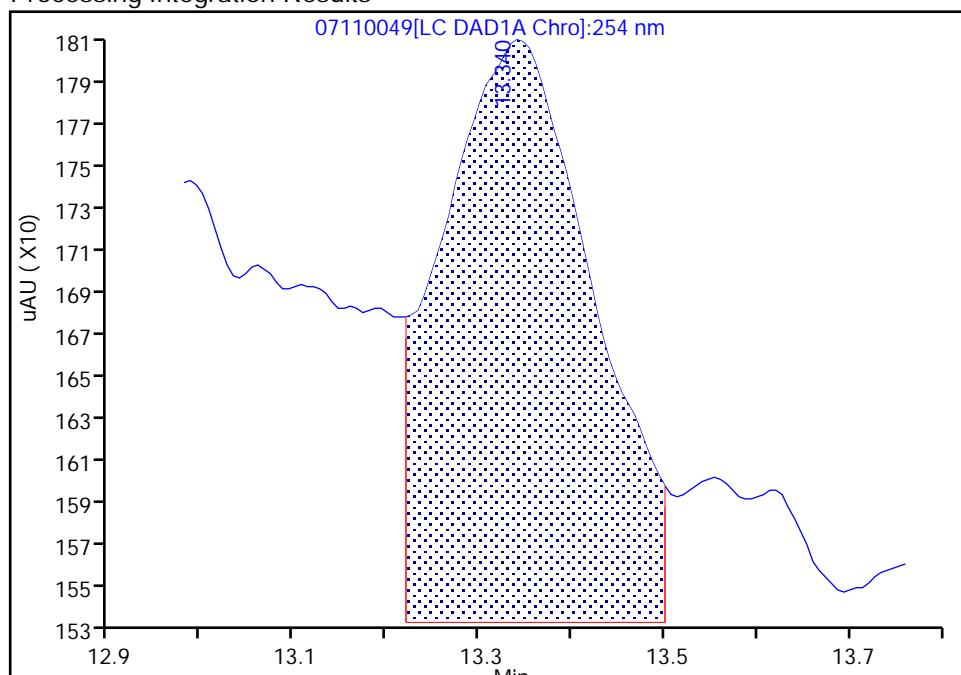
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110049.D
 Injection Date: 12-Jul-2019 02:19:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: hkf 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

22 p-Nitrotoluene, CAS: 99-99-0
 Signal: 1

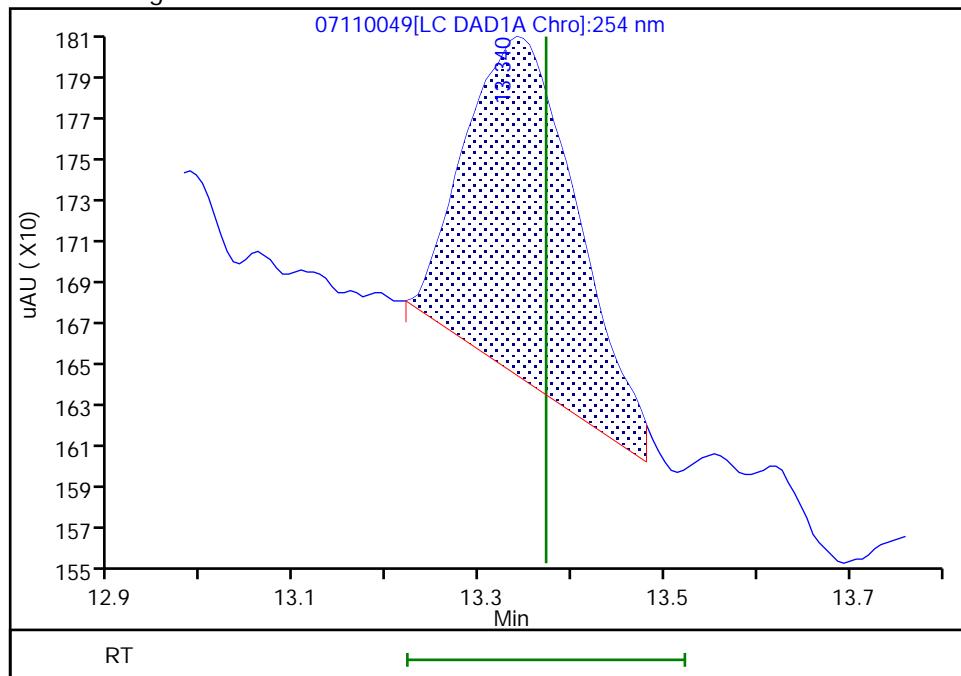
RT: 13.34
 Area: 3062
 Amount: 0.027772
 Amount Units: ug/mL

Processing Integration Results



RT: 13.34
 Area: 1385
 Amount: 0.012562
 Amount Units: ug/mL

Manual Integration Results



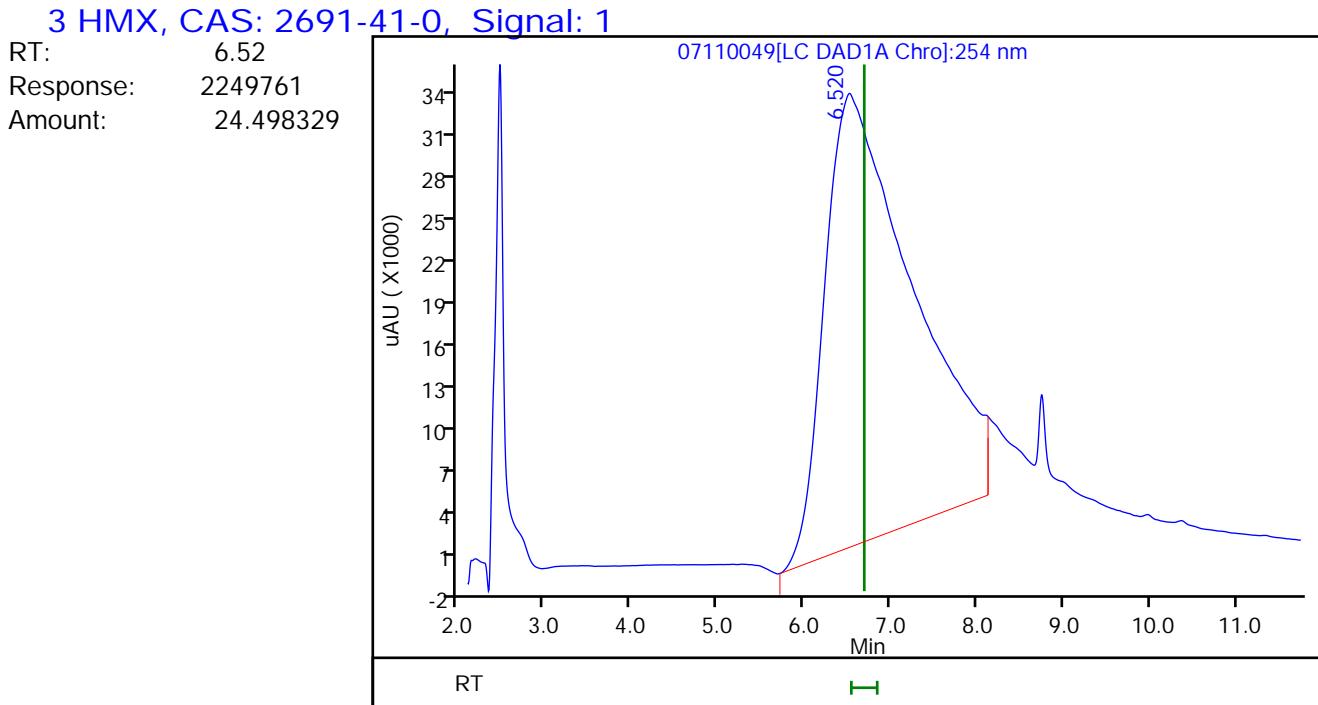
Reviewer: fiedlerh, 12-Jul-2019 09:00:28

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110049.D
Injection Date: 12-Jul-2019 02:19:50 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-1-A Lab Sample ID: 280-124912-1
Client ID: PZ004-19A
Operator ID: hkf 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



Reviewer: fiedlerh, 12-Jul-2019 09:00:32

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

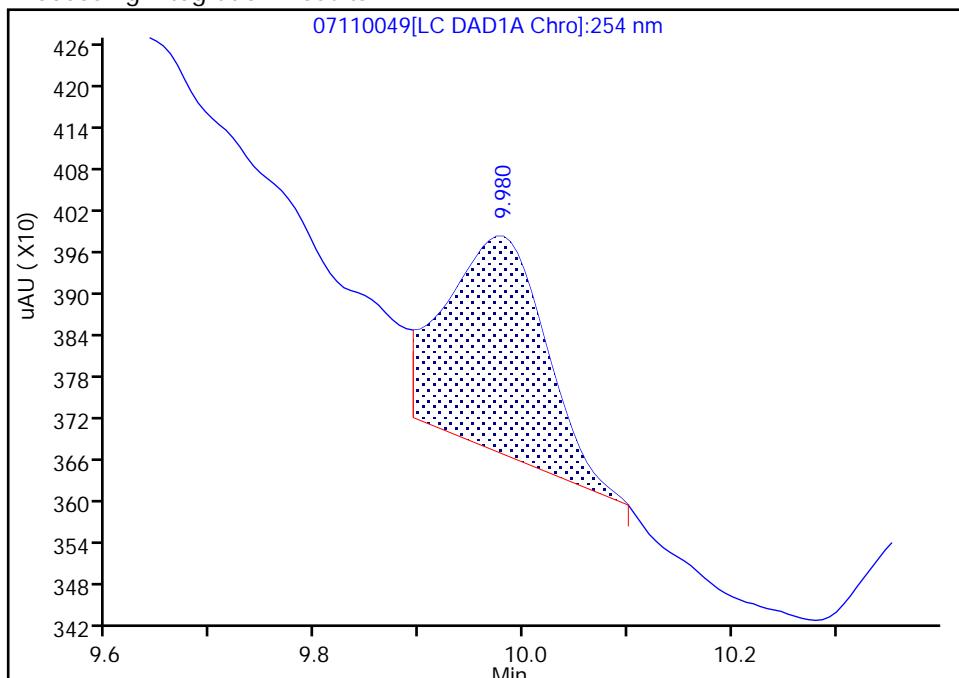
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 Injection Date: 12-Jul-2019 02:19:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-1-A Lab Sample ID: 280-124912-1
 Client ID: PZ004-19A
 Operator ID: hkf ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

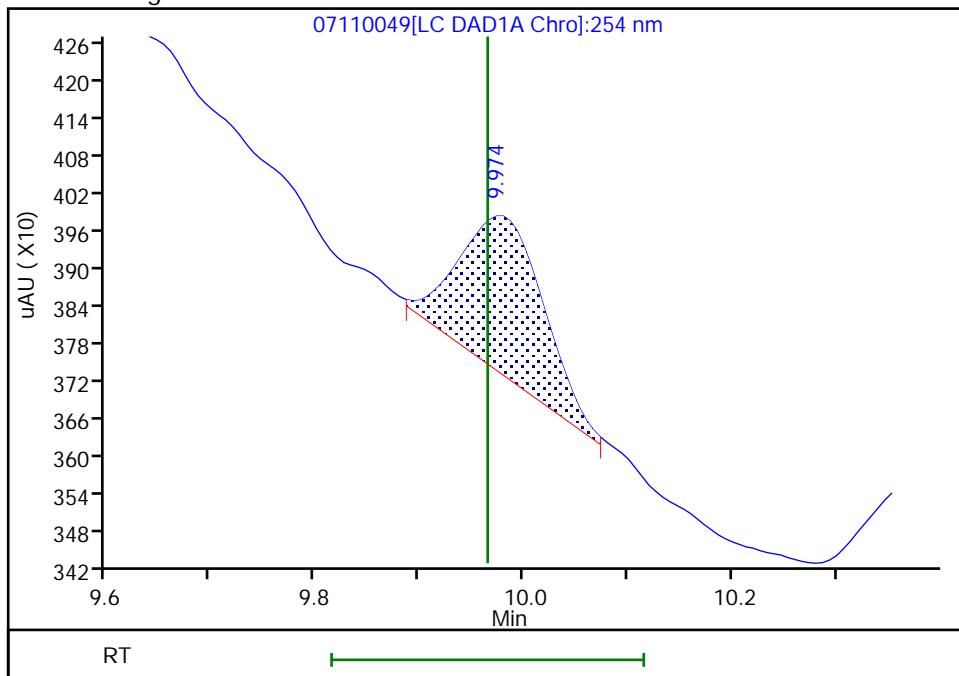
RT: 9.98
 Area: 2064
 Amount: 0.010377
 Amount Units: ug/mL

Processing Integration Results



RT: 9.97
 Area: 1422
 Amount: 0.007149
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:00:20

Audit Action: Manually Integrated

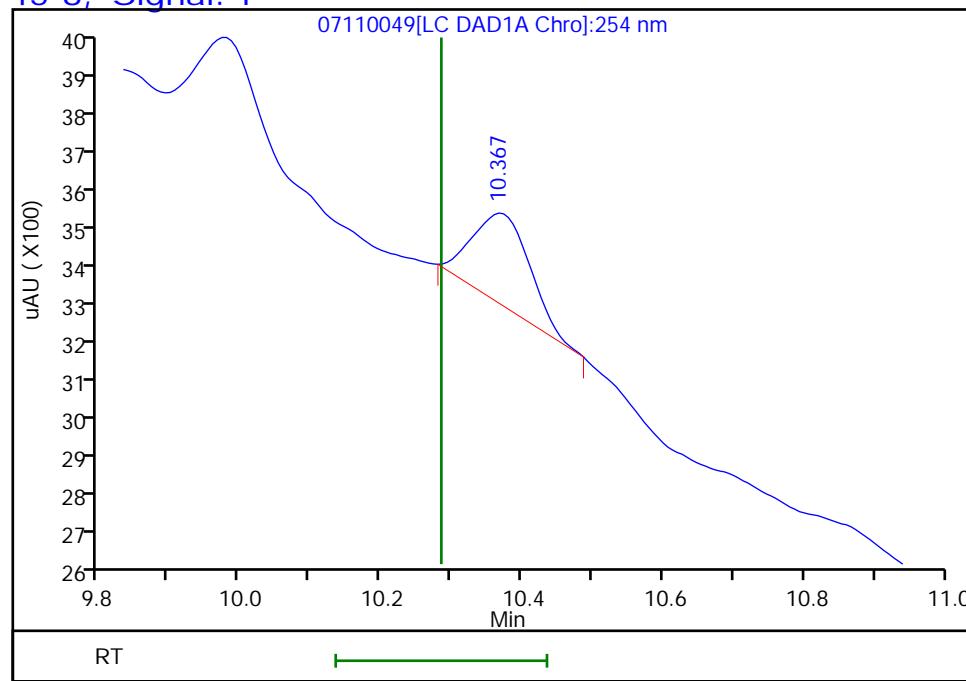
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110049.D
Injection Date: 12-Jul-2019 02:19:50 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-1-A Lab Sample ID: 280-124912-1
Client ID: PZ004-19A
Operator ID: hkf 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

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.37
Response: 1251
Amount: 0.007724



Reviewer: fiedlerh, 12-Jul-2019 09:00:32

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0044-19A Lab Sample ID: 280-124912-2
Matrix: Water Lab File ID: 06130056.D
Analysis Method: 8330A Date Collected: 06/04/2019 16:00
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 499.3 (mL) Date Analyzed: 06/14/2019 06:55
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.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
88-72-2	2-Nitrotoluene	0.20	U Q	0.40	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	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U Q	1.0	0.40	0.20
2691-41-0	HMX	0.47	M	0.40	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U M	0.40	0.20	0.091
121-82-4	RDX	0.50	J1 M	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U M	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130056.D
 Lims ID: 280-124912-A-2-A
 Client ID: G0044-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 06:55:35 ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-2-A
 Misc. Info.: 280-0082810-056
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:28:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.647	6.645	0.002	4146	0.0465	M
6 MNX	1		7.359			ND	
7 RDX	1	7.760	7.758	0.002	5320	0.0499	M
\$ 9 1,2-Dinitrobenzene	1	8.740	8.738	0.002	25319	0.1946	M
10 1,3,5-Trinitrobenzene	1		8.898			ND	
11 1,3-Dinitrobenzene	1		9.558			ND	
12 Nitrobenzene	1	9.960	9.945	0.015	1447	0.007352	M
14 Tetryl	1		10.265			ND	U
16 2,4,6-Trinitrotoluene	1		11.218			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.405			ND	
18 2-Amino-4,6-dinitrotoluene	1	11.733	11.698	0.035	1163	0.005888	
19 2,6-Dinitrotoluene	1		11.832			ND	
20 2,4-Dinitrotoluene	1	12.060	12.032	0.028	2065	0.006943	
21 o-Nitrotoluene	1		12.865			ND	
22 p-Nitrotoluene	1		13.305			ND	
23 m-Nitrotoluene	1		13.898			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 14-Jun-2019 10:04:10

Chrom Revision: 2.3 03-May-2019 15:52:00

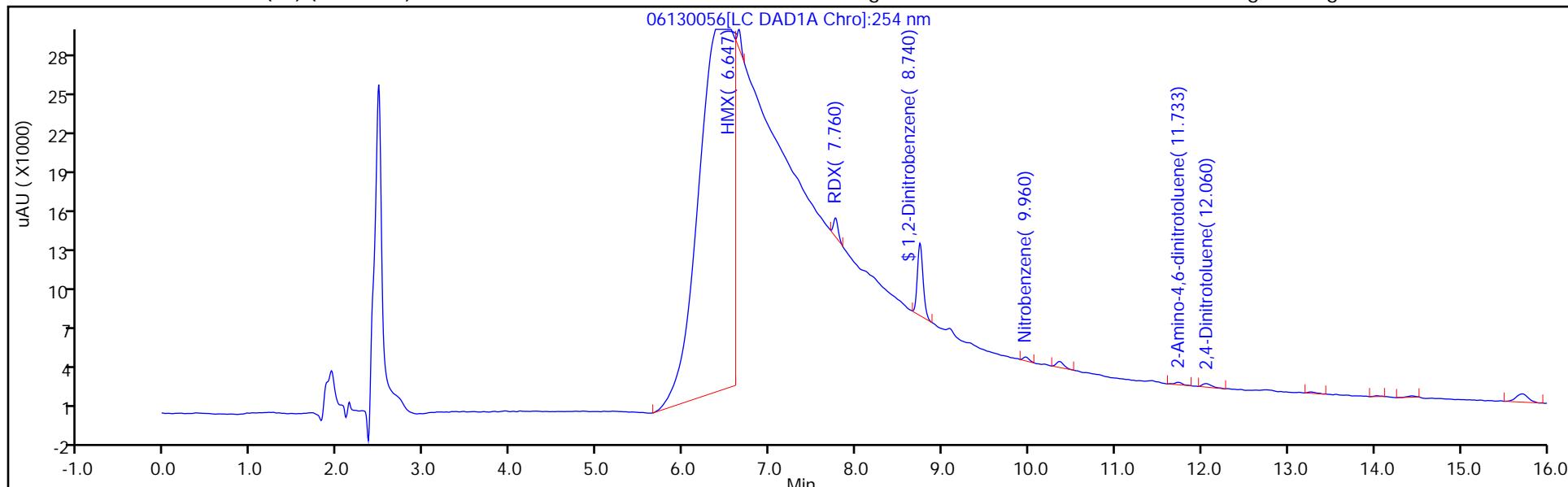
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130056.D
Injection Date: 14-Jun-2019 06:55:35 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
Client ID: G0044-19A
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm)

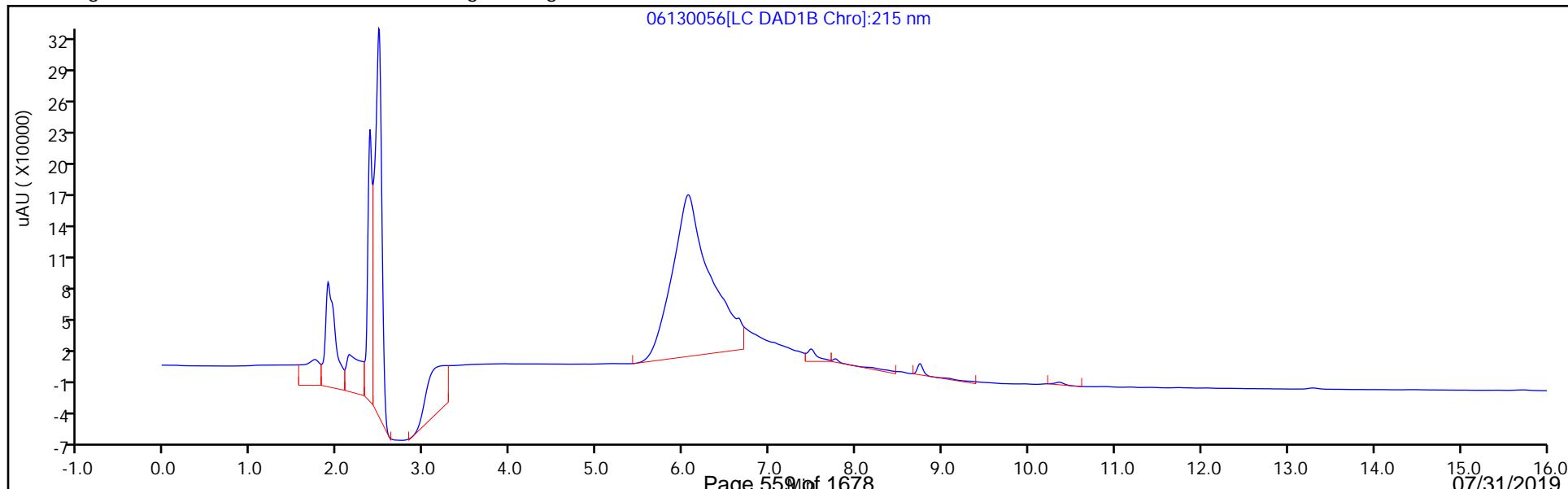
Operator ID: hkf
Worklist Smp#: 56

ALS Bottle#: 56

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: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130056.D
 Lims ID: 280-124912-A-2-A
 Client ID: G0044-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 06:55:35 ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-2-A
 Misc. Info.: 280-0082810-056
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:28:17

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1946	97.30

Eurofins TestAmerica, Denver

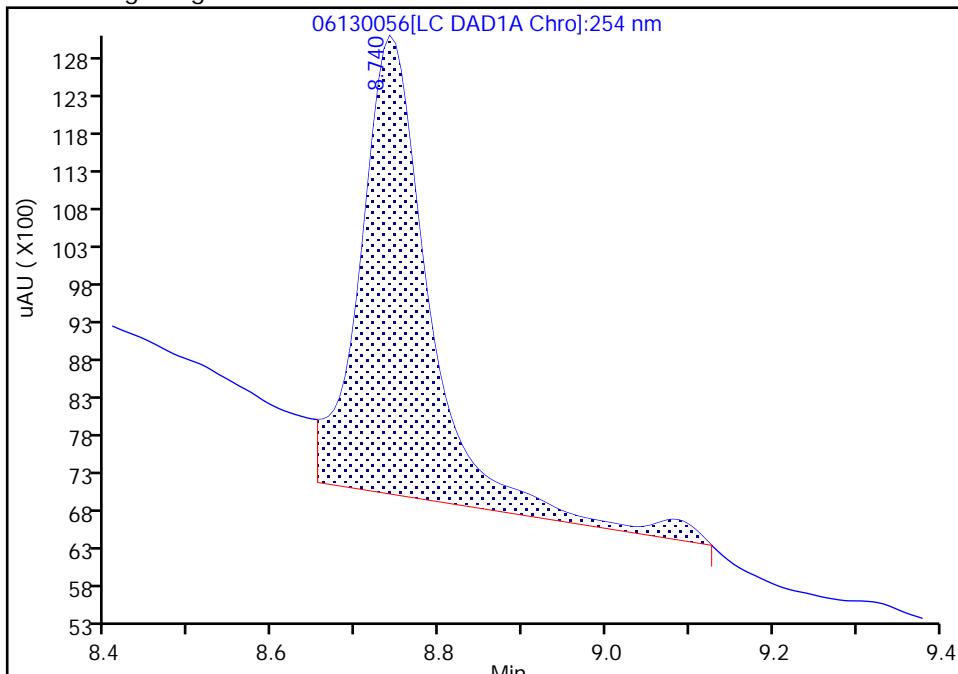
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 Injection Date: 14-Jun-2019 06:55:35 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: hkf ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

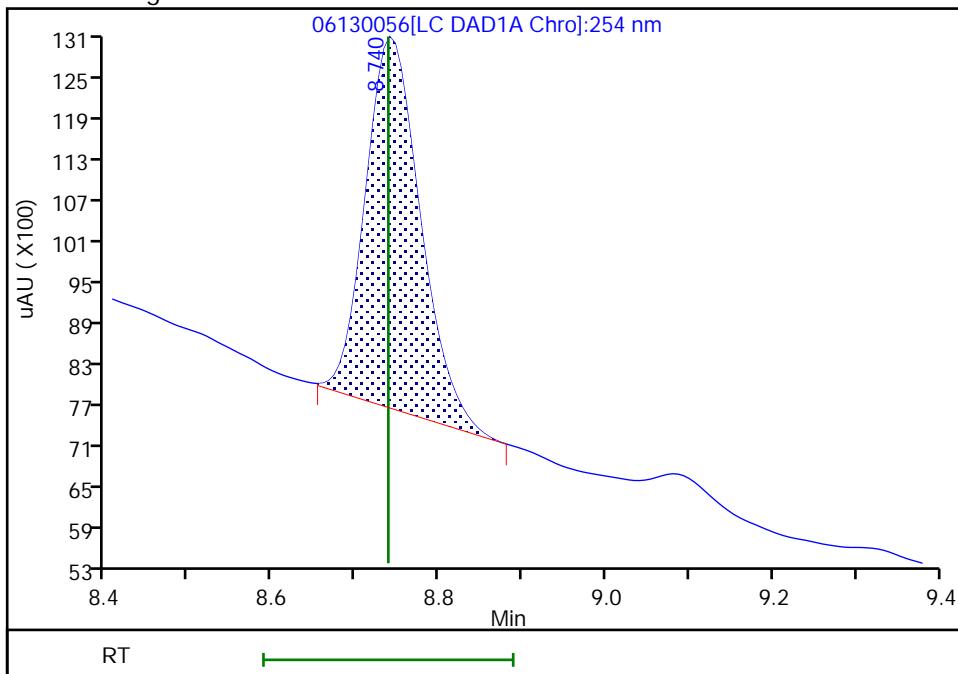
Processing Integration Results

RT: 8.74
 Area: 35697
 Amount: 0.274359
 Amount Units: ug/mL



Manual Integration Results

RT: 8.74
 Area: 25319
 Amount: 0.194596
 Amount Units: ug/mL



Reviewer: fiedlerh, 14-Jun-2019 09:27:30

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

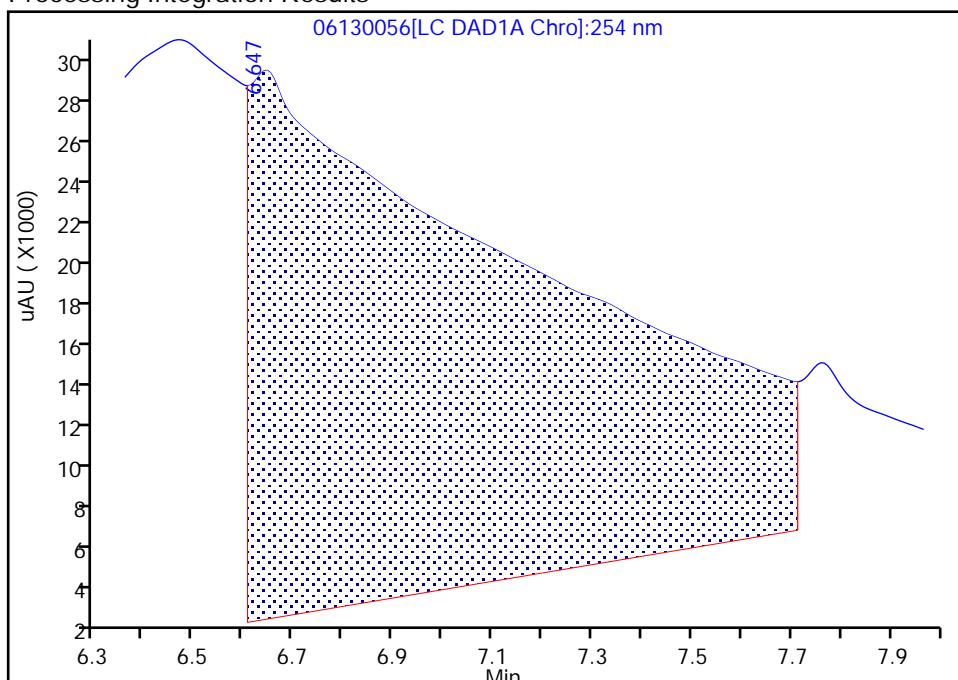
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130056.D
 Injection Date: 14-Jun-2019 06:55:35 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: hkf ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

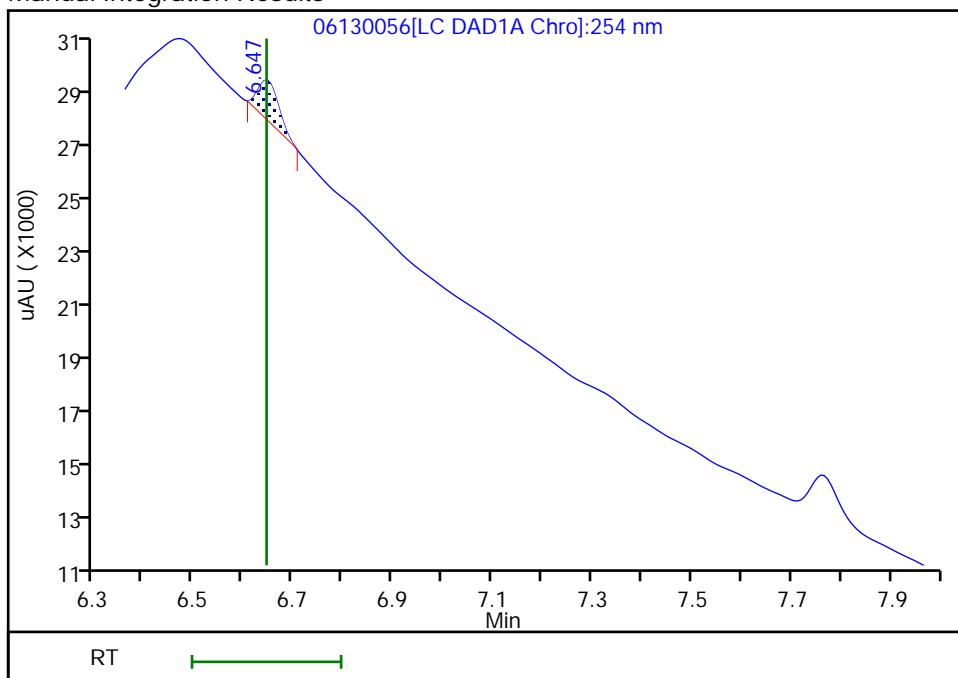
RT: 6.65
 Area: 1049509
 Amount: 11.764984
 Amount Units: ug/mL

Processing Integration Results



RT: 6.65
 Area: 4146
 Amount: 0.046477
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 09:27:17

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

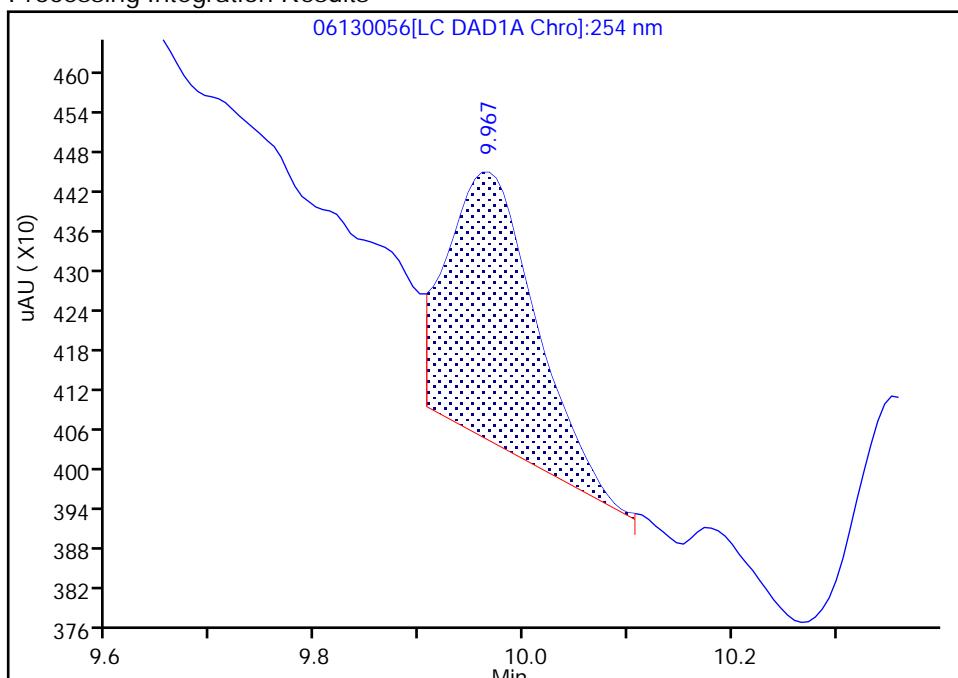
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 Injection Date: 14-Jun-2019 06:55:35 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: hkf ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

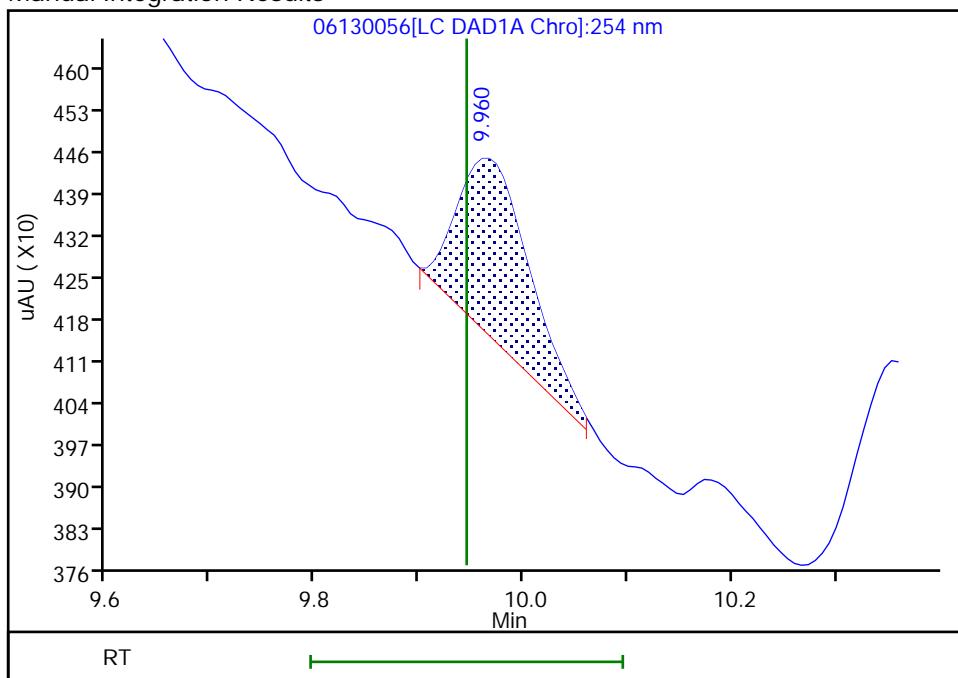
RT: 9.97
 Area: 2368
 Amount: 0.012031
 Amount Units: ug/mL

Processing Integration Results



RT: 9.96
 Area: 1447
 Amount: 0.007352
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 09:28:04

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

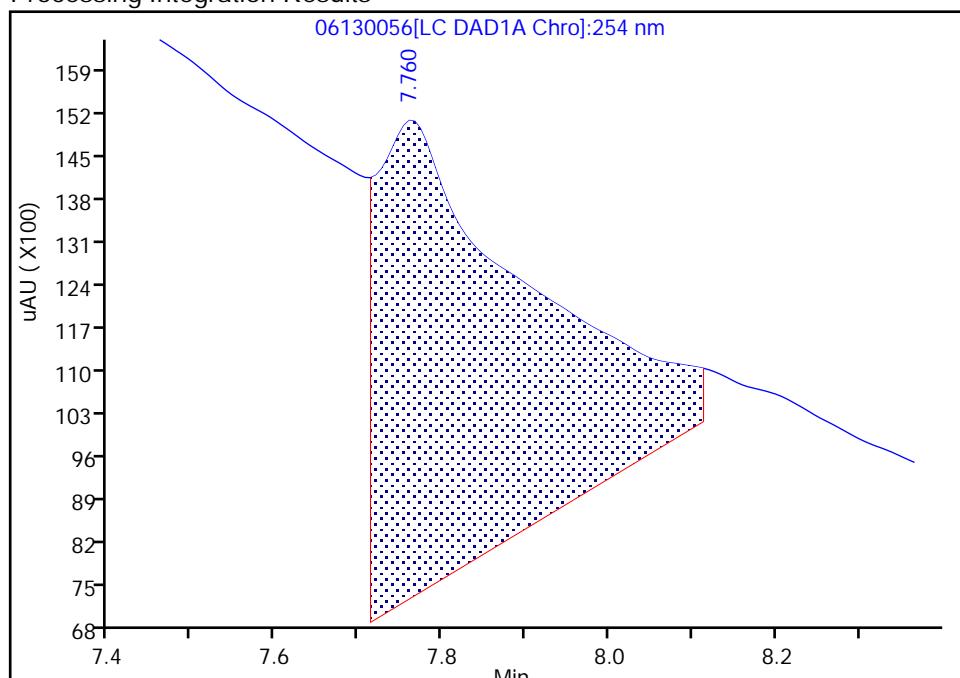
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 Injection Date: 14-Jun-2019 06:55:35 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: hkf ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

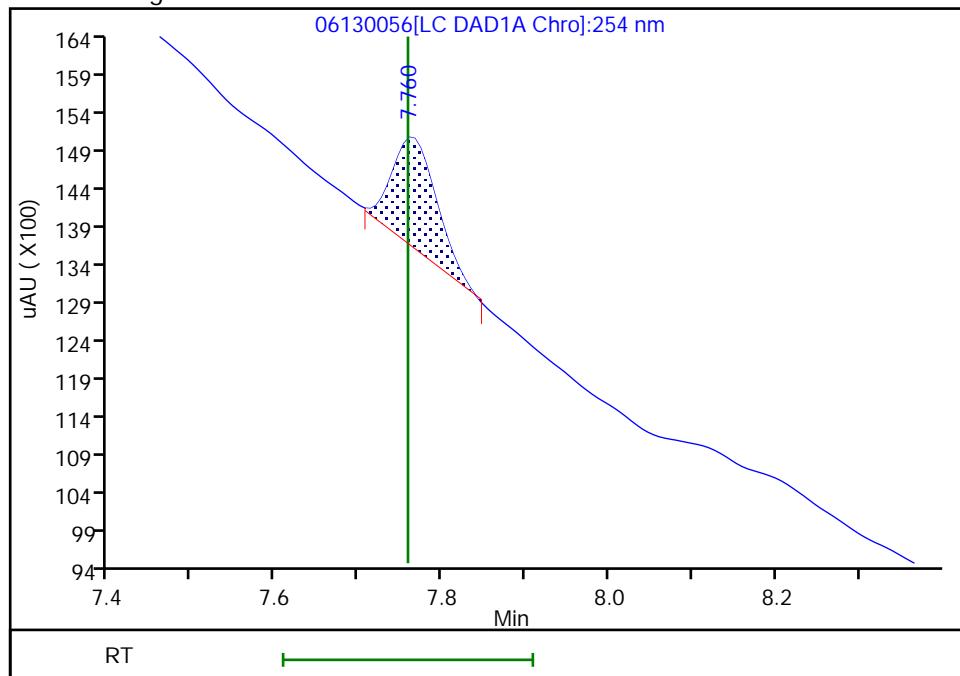
RT: 7.76
 Area: 97605
 Amount: 0.915281
 Amount Units: ug/mL

Processing Integration Results



RT: 7.76
 Area: 5320
 Amount: 0.049888
 Amount Units: ug/mL

Manual Integration Results



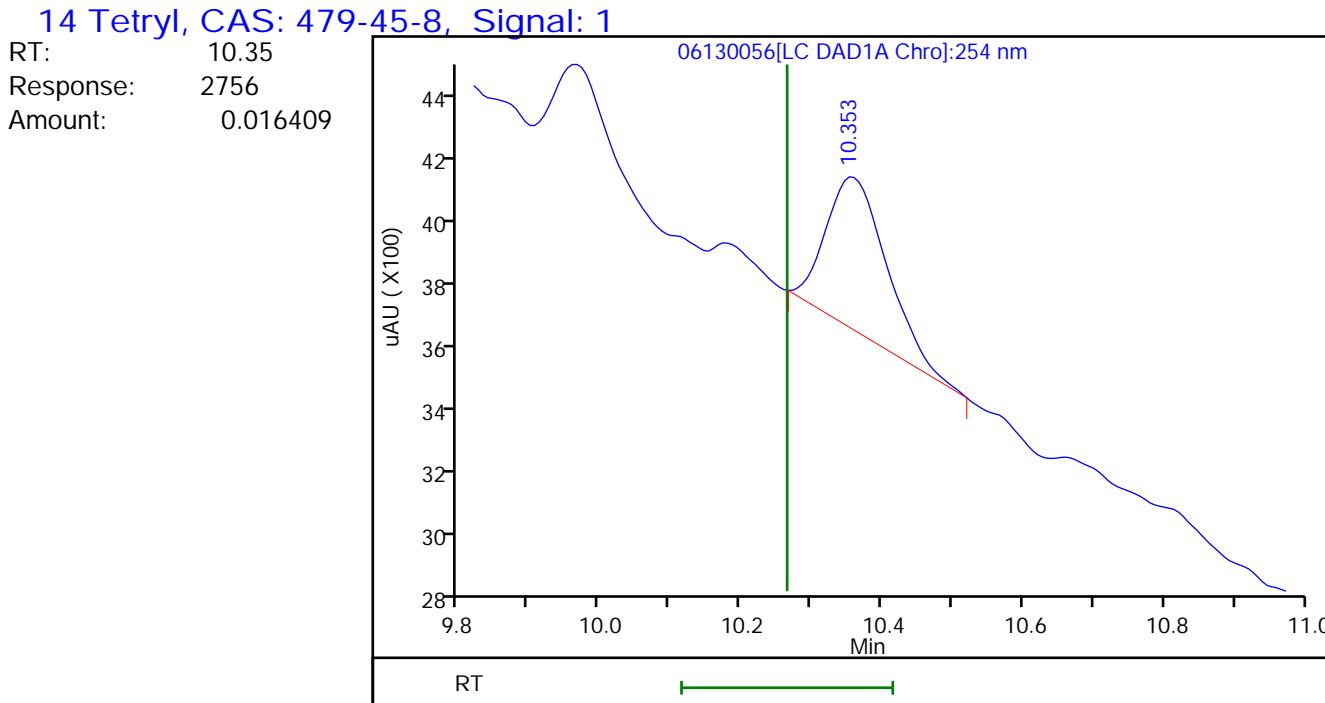
Reviewer: fiedlerh, 14-Jun-2019 09:27:25

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130056.D
Injection Date: 14-Jun-2019 06:55:35 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
Client ID: G0044-19A
Operator ID: hkf ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 14-Jun-2019 09:28:17

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.: 280-124912-1
SDG No.: _____
Client Sample ID: G0044-19A Lab Sample ID: 280-124912-2
Matrix: Water Lab File ID: 06140046.D
Analysis Method: 8330A Date Collected: 06/04/2019 16:00
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 499.3 (mL) Date Analyzed: 06/15/2019 12:45
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: Luna-phenylhex ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461583 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
121-82-4	RDX	0.79	Q J1 M	0.40	0.40	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140046.D
 Lims ID: 280-124912-A-2-A
 Client ID: G0044-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 12:45:14 ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-2-A
 Misc. Info.: 280-0082871-046
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 11:01:40

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.151	7.151	0.000	10484	0.0612	M
7 MNX	1		7.778			ND	
8 RDX	1	9.224	9.231	-0.007	16395	0.0787	M
9 Nitrobenzene	1		12.198			ND	
\$ 10 1,2-Dinitrobenzene	1	13.244	13.204	0.040	52893	0.1910	
12 1,3-Dinitrobenzene	1		15.731			ND	
14 o-Nitrotoluene	1		16.531			ND	
15 p-Nitrotoluene	1		16.858			ND	U
16 4-Amino-2,6-dinitrotoluene	1		17.251			ND	
17 m-Nitrotoluene	1	17.864	17.764	0.100	10617	0.0363	M
18 2-Amino-4,6-dinitrotoluene	1		18.271			ND	
19 1,3,5-Trinitrobenzene	1		19.024			ND	
20 2,6-Dinitrotoluene	1		19.851			ND	
21 2,4-Dinitrotoluene	1	20.484	20.404	0.080	4958	0.008706	
22 Tetryl	1		23.698			ND	
23 2,4,6-Trinitrotoluene	1		24.711			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 17-Jun-2019 11:07:43

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140046.D

Injection Date: 15-Jun-2019 12:45:14

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: 280-124912-A-2-A

Lab Sample ID: 280-124912-2

Worklist Smp#: 46

Client ID: G0044-19A

Dil. Factor: 1.0000

ALS Bottle#: 46

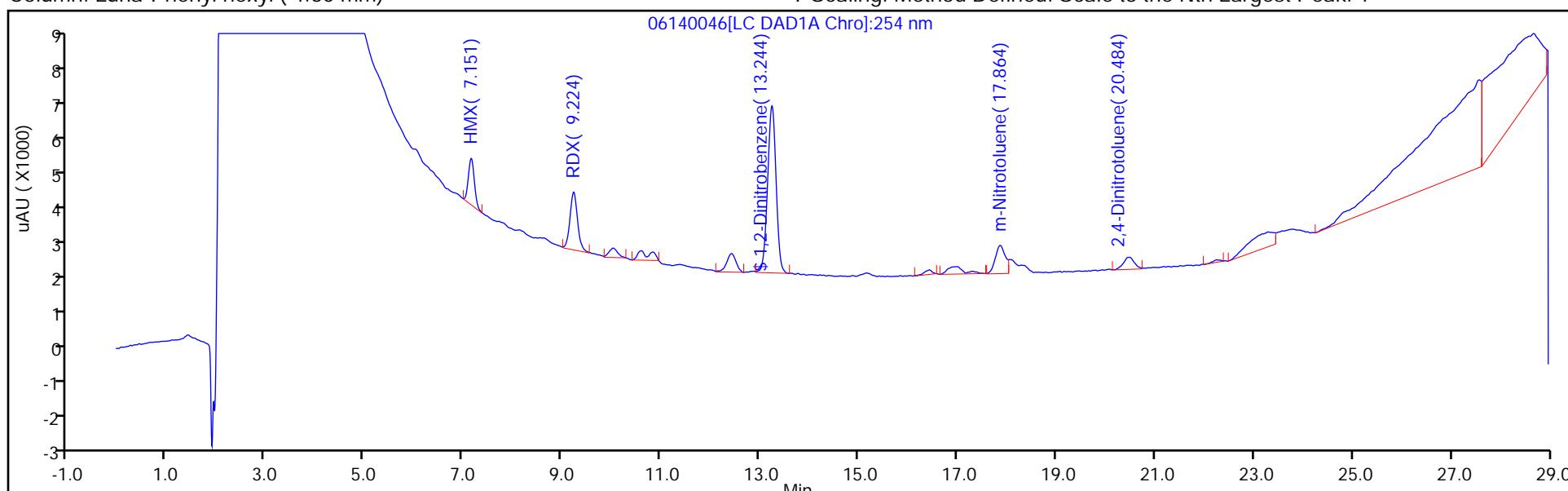
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

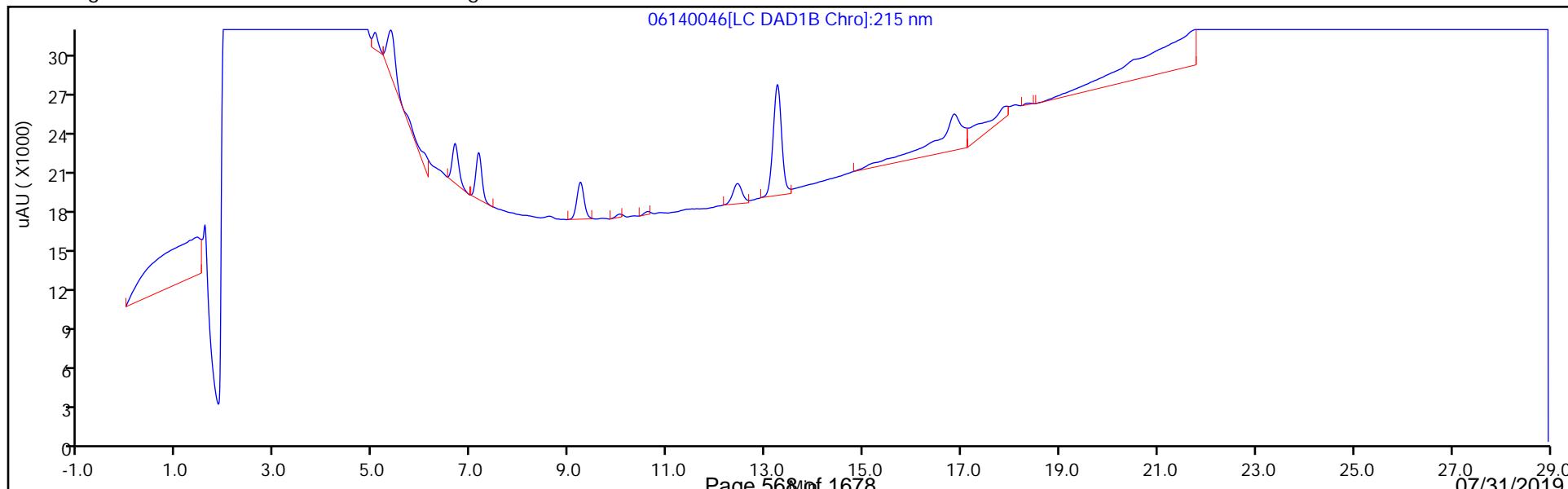
Method: G2_8330_Luna

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1

Column: Luna-Phenyl hexyl (4.60 mm)



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140046.D
 Lims ID: 280-124912-A-2-A
 Client ID: G0044-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 12:45:14 ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-2-A
 Misc. Info.: 280-0082871-046
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 11:01:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1910	95.52

Eurofins TestAmerica, Denver

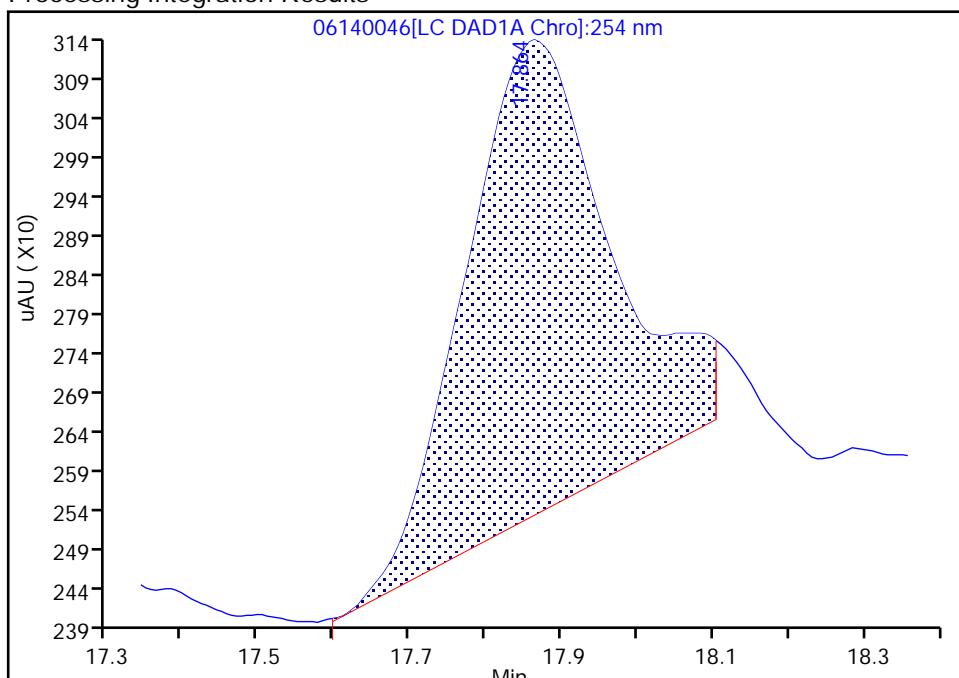
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140046.D
 Injection Date: 15-Jun-2019 12:45:14 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: HKF ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul Dil. 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

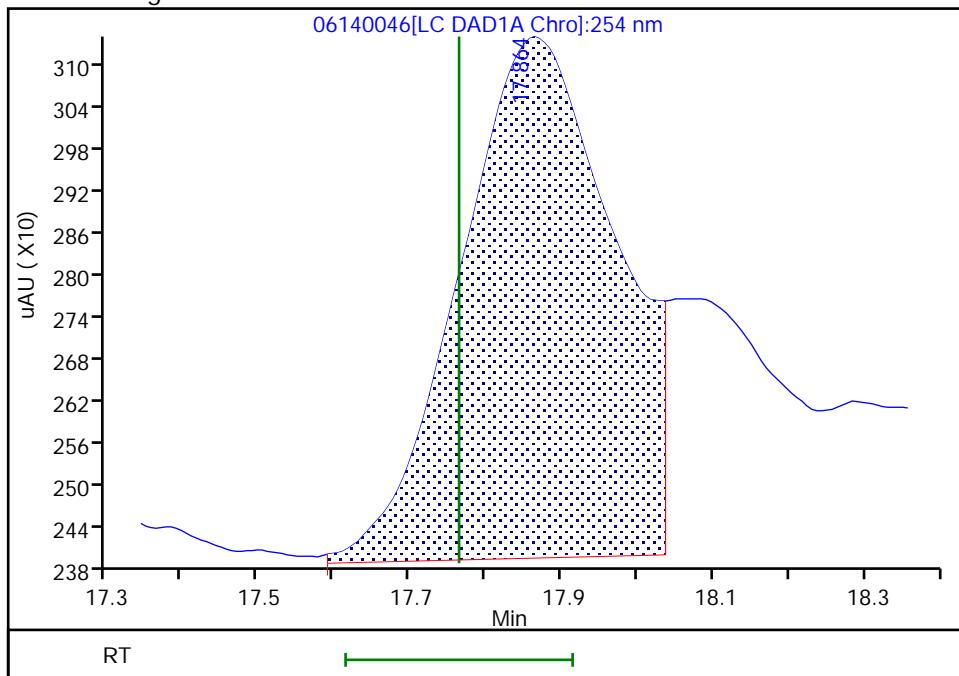
RT: 17.86
 Area: 8053
 Amount: 0.027514
 Amount Units: ug/ml

Processing Integration Results



RT: 17.86
 Area: 10617
 Amount: 0.036274
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:01:34

Audit Action: Manually Integrated

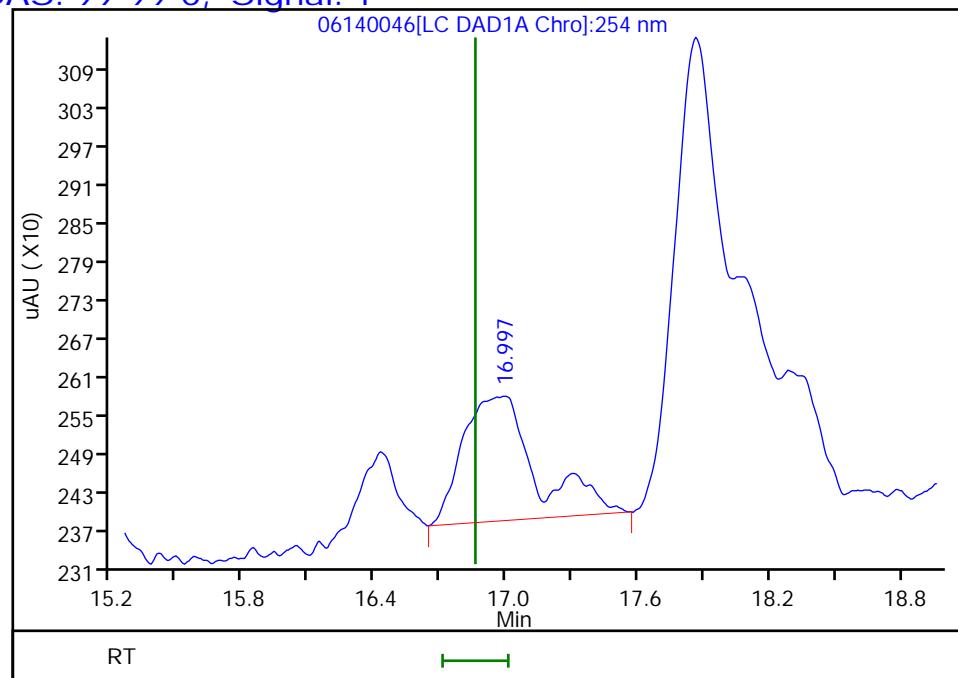
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140046.D
 Injection Date: 15-Jun-2019 12:45:14 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: HKF ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul 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: 17.00
 Response: 4519
 Amount: 0.019939



Reviewer: fiedlerh, 17-Jun-2019 11:01:40

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

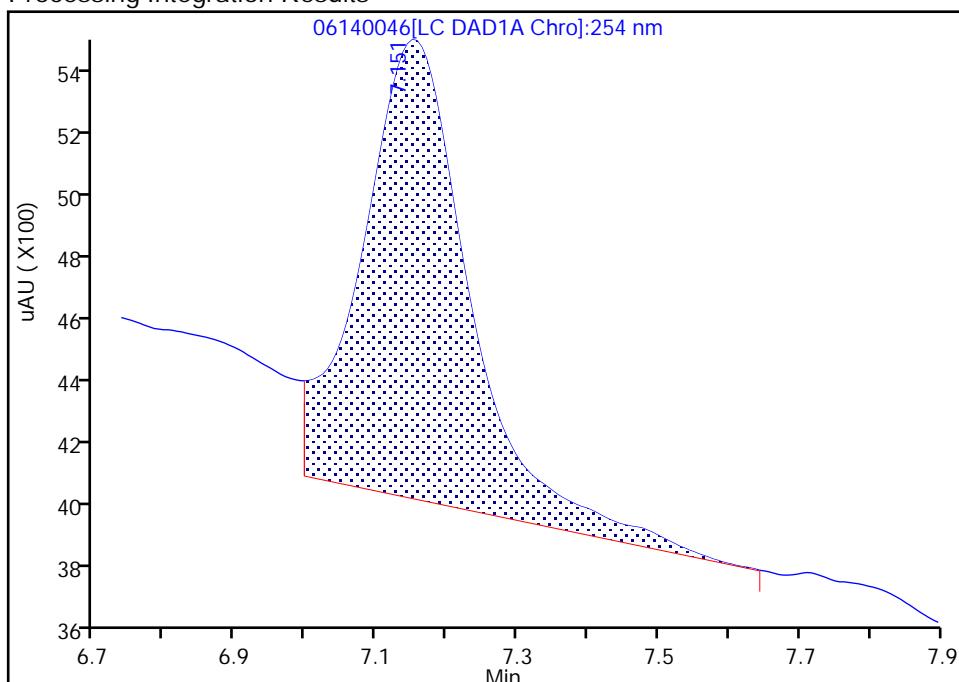
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 Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: HKF ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

6 HMX, CAS: 2691-41-0

Signal: 1

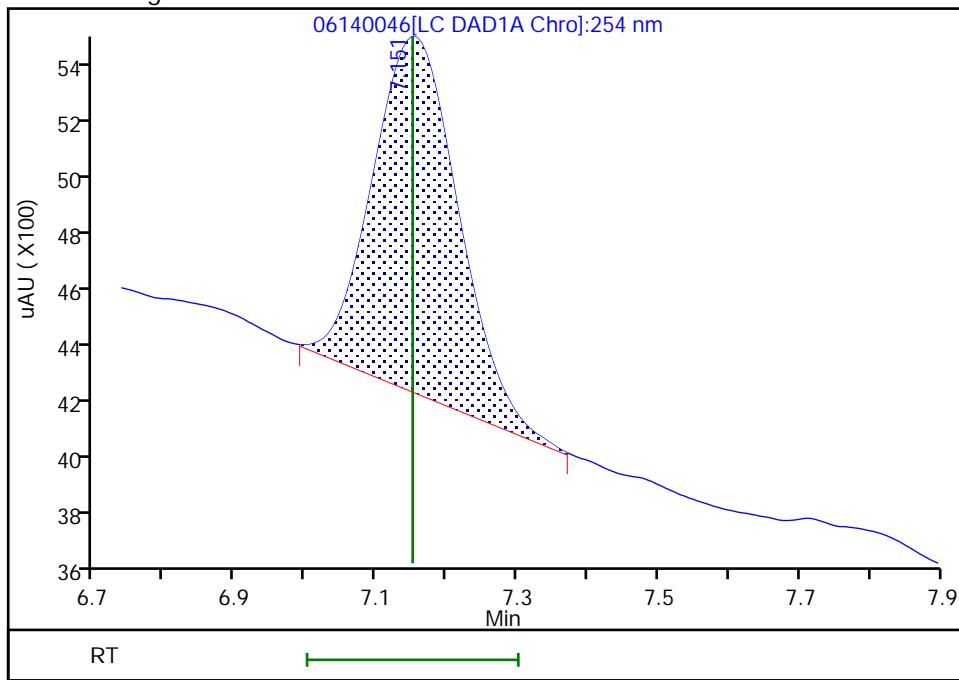
RT: 7.15
 Area: 15293
 Amount: 0.089329
 Amount Units: ug/ml

Processing Integration Results



RT: 7.15
 Area: 10484
 Amount: 0.061239
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:01:19

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

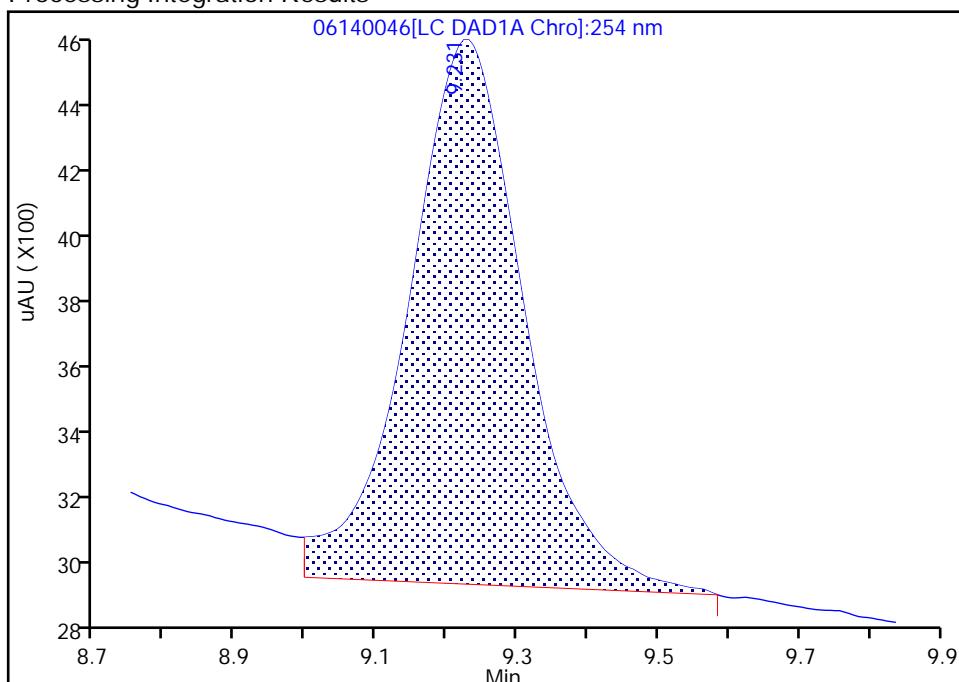
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140046.D
 Injection Date: 15-Jun-2019 12:45:14 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: HKF ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

8 RDX, CAS: 121-82-4

Signal: 1

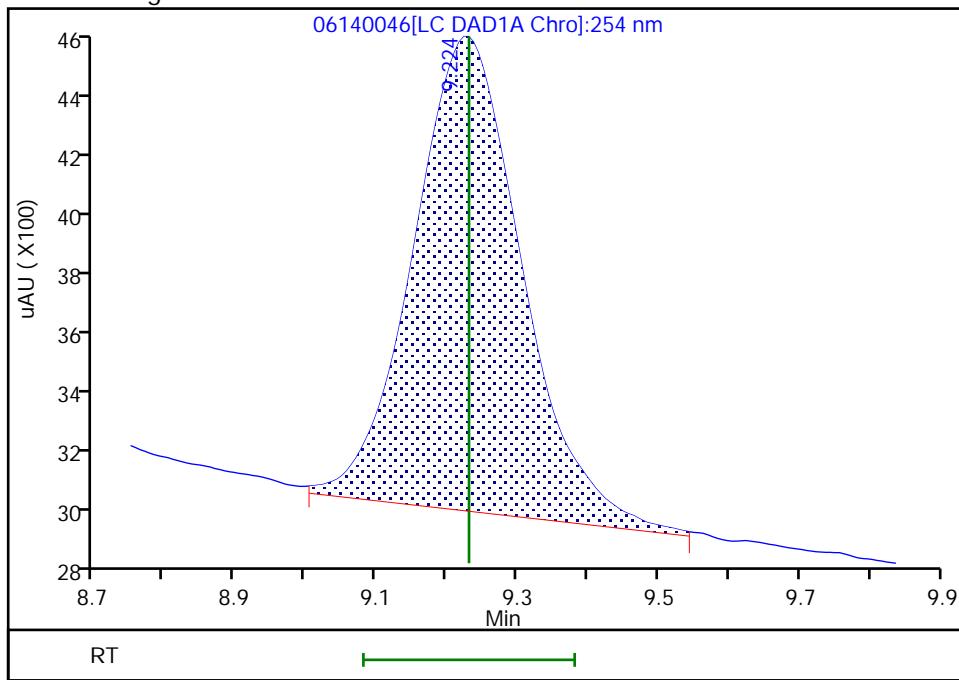
RT: 9.23
 Area: 18058
 Amount: 0.086632
 Amount Units: ug/ml

Processing Integration Results



RT: 9.22
 Area: 16395
 Amount: 0.078654
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:01:24

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0044-19A RE Lab Sample ID: 280-124912-2 RE
Matrix: Water Lab File ID: 07110050.D
Analysis Method: 8330A Date Collected: 06/04/2019 16:00
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 496.3 (mL) Date Analyzed: 07/12/2019 02:42
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.20	U H	0.40	0.20	0.086
99-99-0	<i>4-Nitrotoluene</i>	0.40	U H	1.0	0.40	0.20
5755-27-1	MNX	0.40	U H	2.0	0.40	0.16

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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110050.D
 Lims ID: 280-124912-B-2-A
 Client ID: G0044-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 02:42:49 ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-2-A
 Misc. Info.: 280-0083617-050
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:01:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.682	6.692	-0.010	3854	0.0420	M
6 MNX	1		7.378			ND	
7 RDX	1	7.782	7.799	-0.017	5788	0.0521	M
\$ 9 1,2-Dinitrobenzene	1	8.748	8.759	-0.011	27491	0.1973	M
10 1,3,5-Trinitrobenzene	1		8.919			ND	
11 1,3-Dinitrobenzene	1		9.578			ND	
12 Nitrobenzene	1	9.968	9.965	0.003	1972	0.0099	M
14 Tetryl	1		10.285			ND	U
16 2,4,6-Trinitrotoluene	1		11.258			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.445			ND	
18 2-Amino-4,6-dinitrotoluene	1	11.755	11.738	0.017	1489	0.007255	
19 2,6-Dinitrotoluene	1		11.878			ND	
20 2,4-Dinitrotoluene	1	12.088	12.078	0.010	3029	0.0101	
21 o-Nitrotoluene	1		12.925			ND	
22 p-Nitrotoluene	1		13.372			ND	
23 m-Nitrotoluene	1		13.978			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:40

Chrom Revision: 2.3 20-Jun-2019 20:50:56

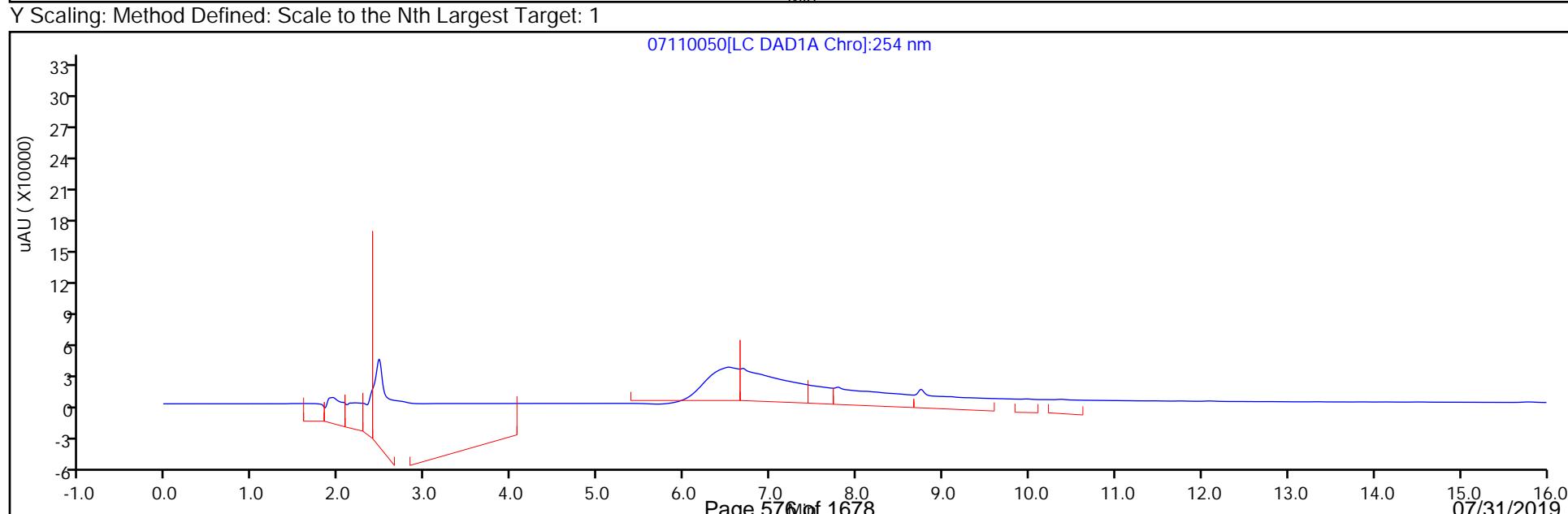
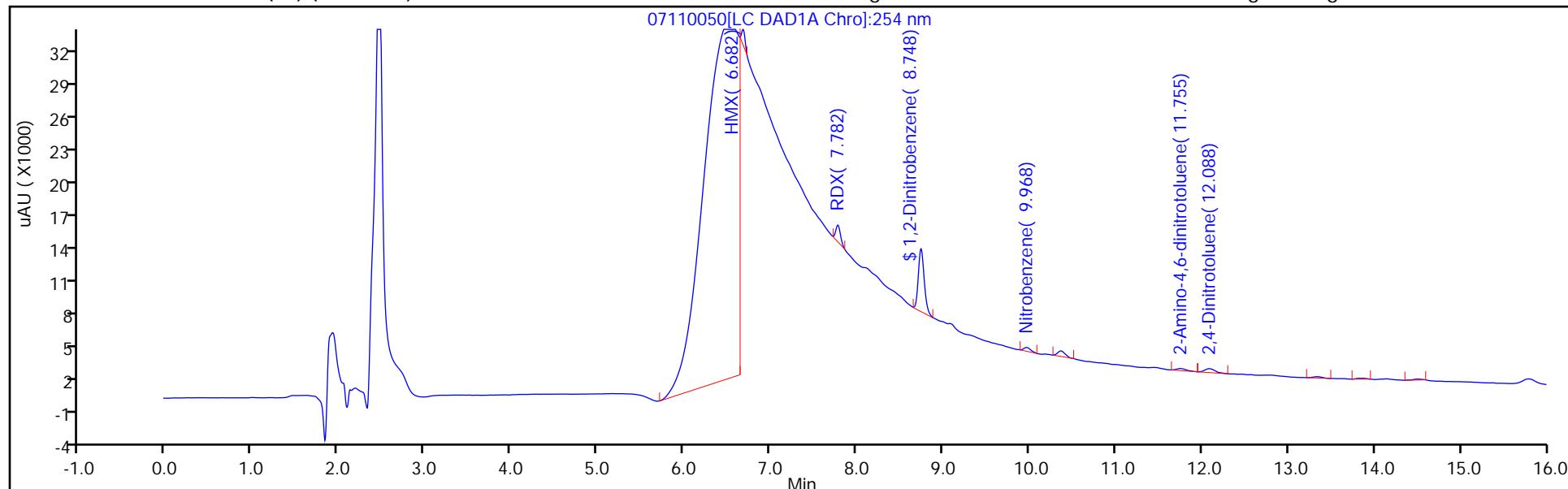
Eurofins TestAmerica, Denver

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 Injection Date: 12-Jul-2019 02:42:49
 Lims ID: 280-124912-B-2-A
 Client ID: G0044-19A
 Injection Vol: 100.0 ul
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Instrument ID: CHHPLC_X3
 Lab Sample ID: 280-124912-2
 Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

Operator ID: hkf
 Worklist Smp#: 50
 ALS Bottle#: 50

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110050.D
 Lims ID: 280-124912-B-2-A
 Client ID: G0044-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 02:42:49 ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-2-A
 Misc. Info.: 280-0083617-050
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:01:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1973	98.66

Eurofins TestAmerica, Denver

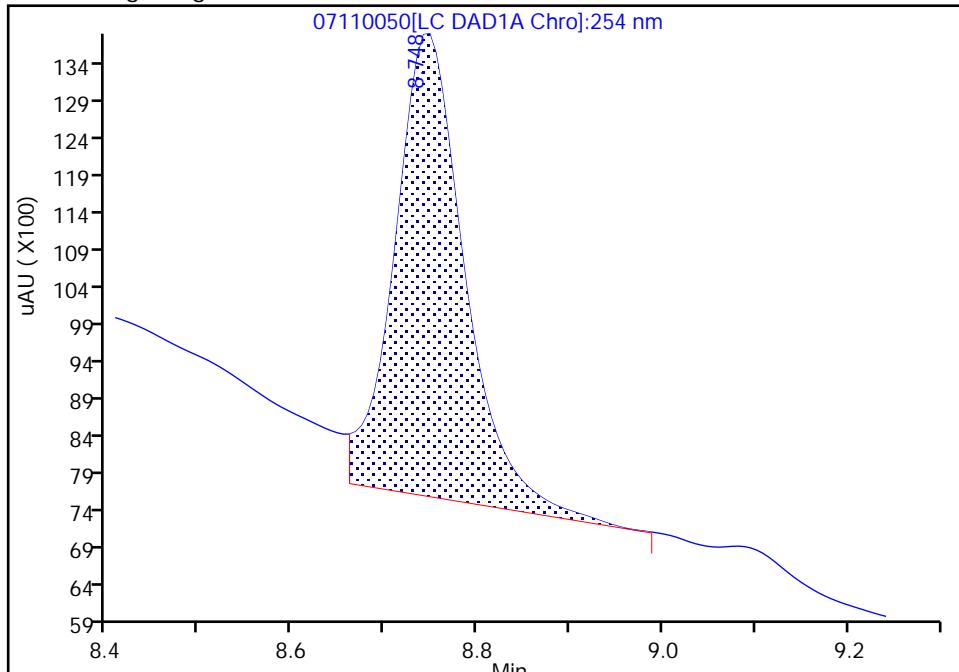
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 Injection Date: 12-Jul-2019 02:42:49 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: hkf ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 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

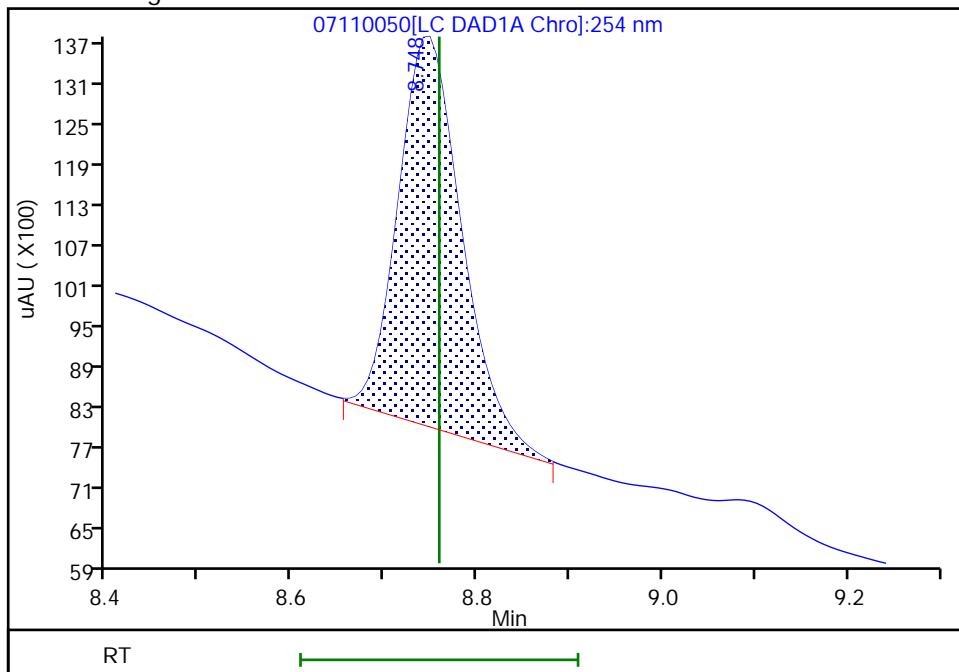
Processing Integration Results

RT: 8.75
 Area: 32686
 Amount: 0.234597
 Amount Units: ug/mL



Manual Integration Results

RT: 8.75
 Area: 27491
 Amount: 0.197311
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:00:54

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

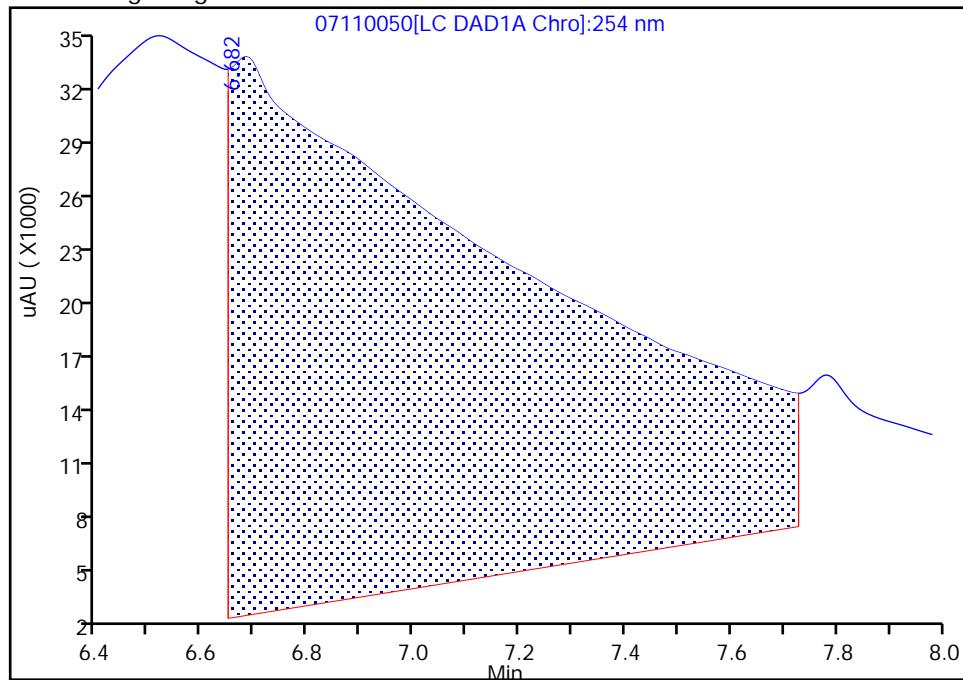
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 Injection Date: 12-Jul-2019 02:42:49 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: hkf ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

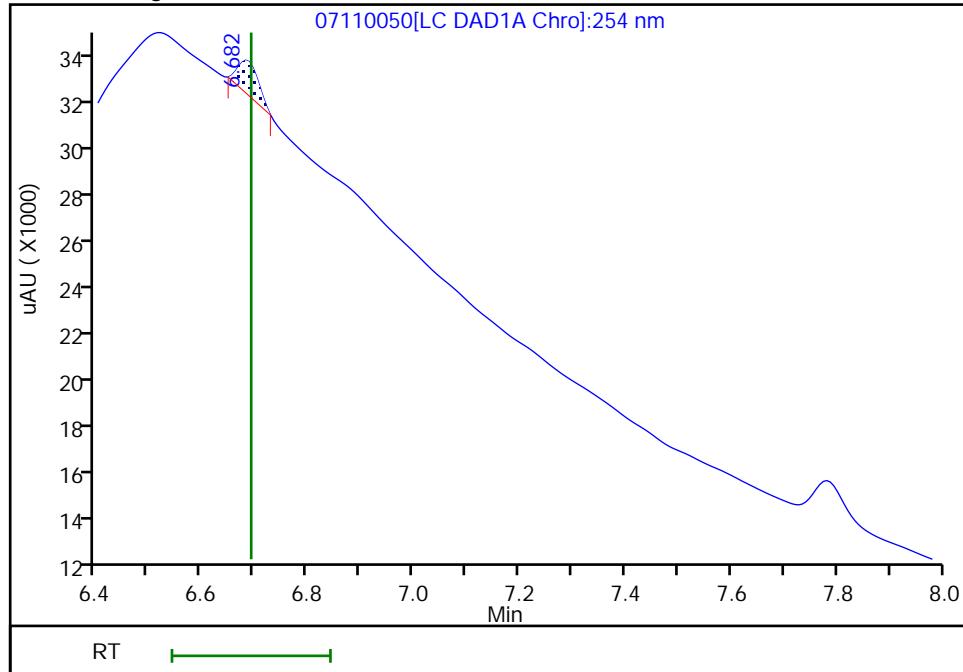
RT: 6.68
 Area: 1162314
 Amount: 12.656789
 Amount Units: ug/mL

Processing Integration Results



RT: 6.68
 Area: 3854
 Amount: 0.041967
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:00:46

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

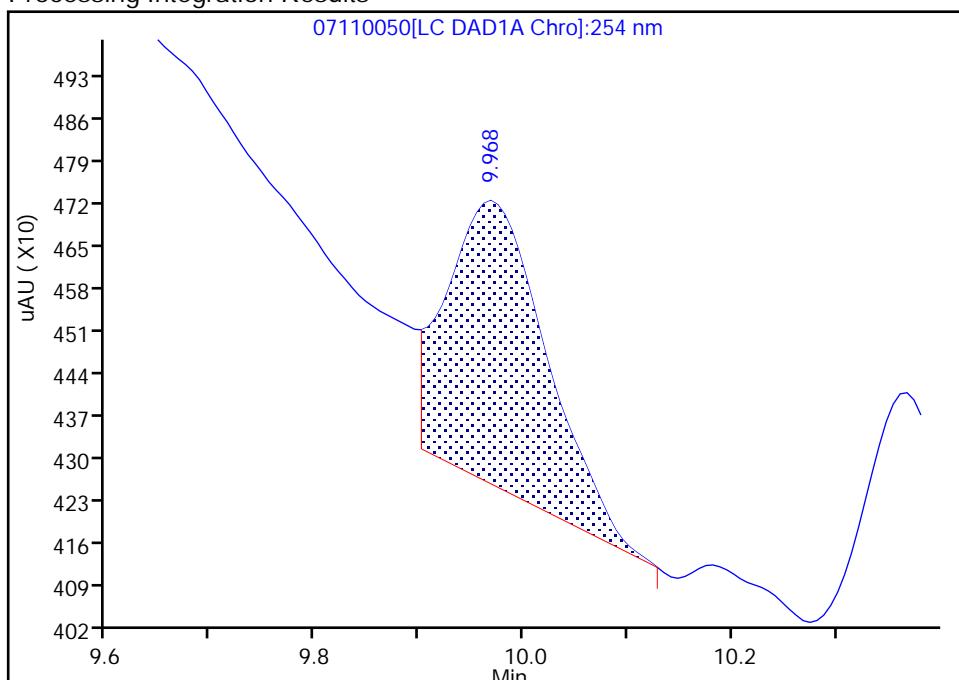
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 Injection Date: 12-Jul-2019 02:42:49 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: hkf ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

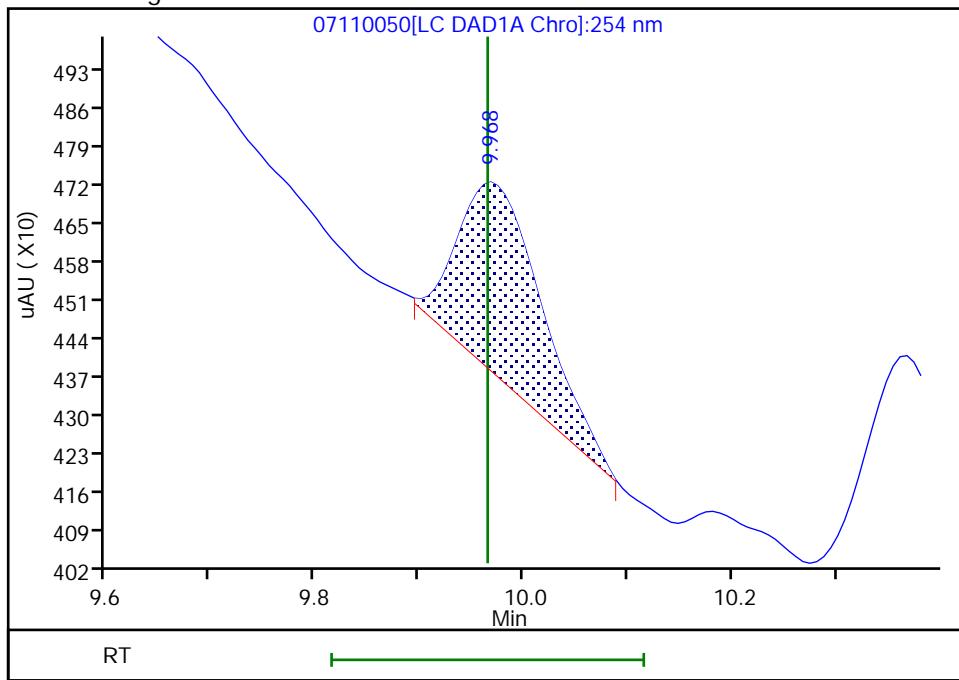
RT: 9.97
 Area: 3122
 Amount: 0.015696
 Amount Units: ug/mL

Processing Integration Results



RT: 9.97
 Area: 1972
 Amount: 0.009914
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:00:59

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

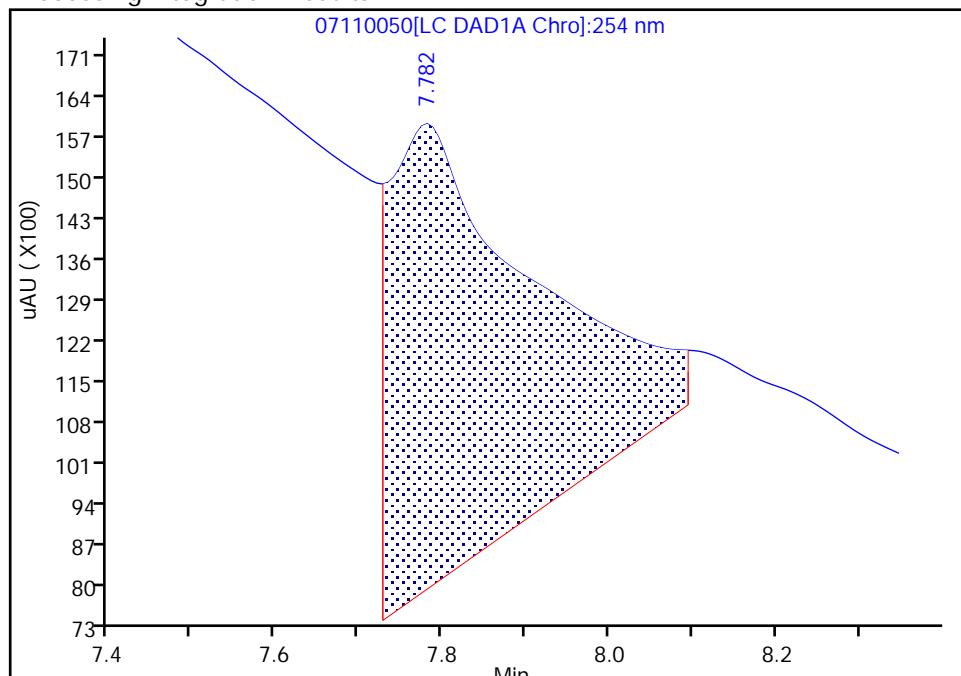
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 Injection Date: 12-Jul-2019 02:42:49 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-2-A Lab Sample ID: 280-124912-2
 Client ID: G0044-19A
 Operator ID: hkf ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

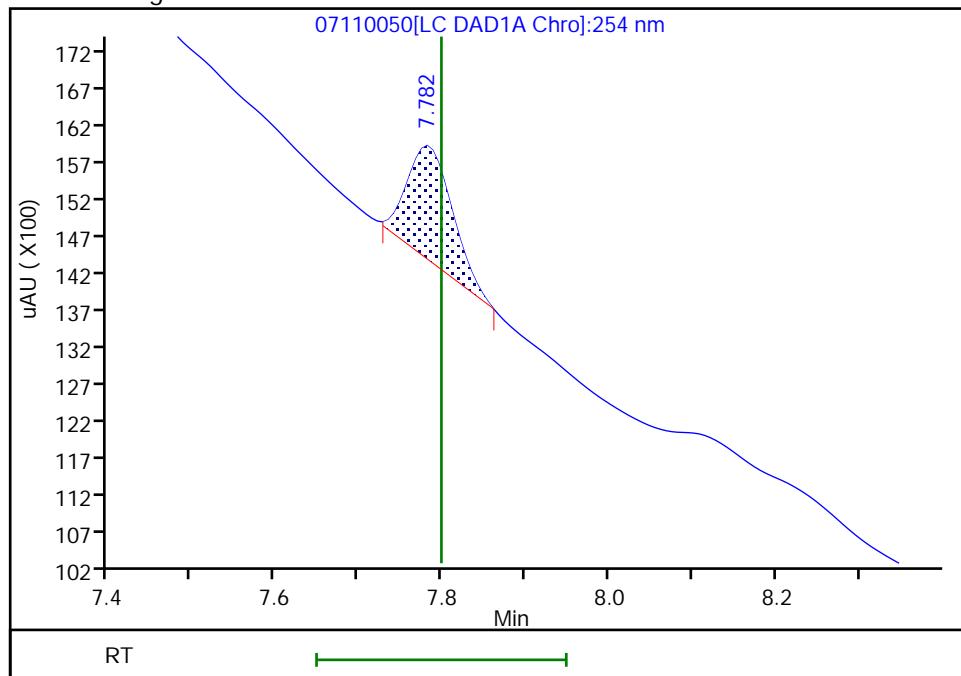
RT: 7.78
 Area: 93943
 Amount: 0.845416
 Amount Units: ug/mL

Processing Integration Results



RT: 7.78
 Area: 5788
 Amount: 0.052088
 Amount Units: ug/mL

Manual Integration Results



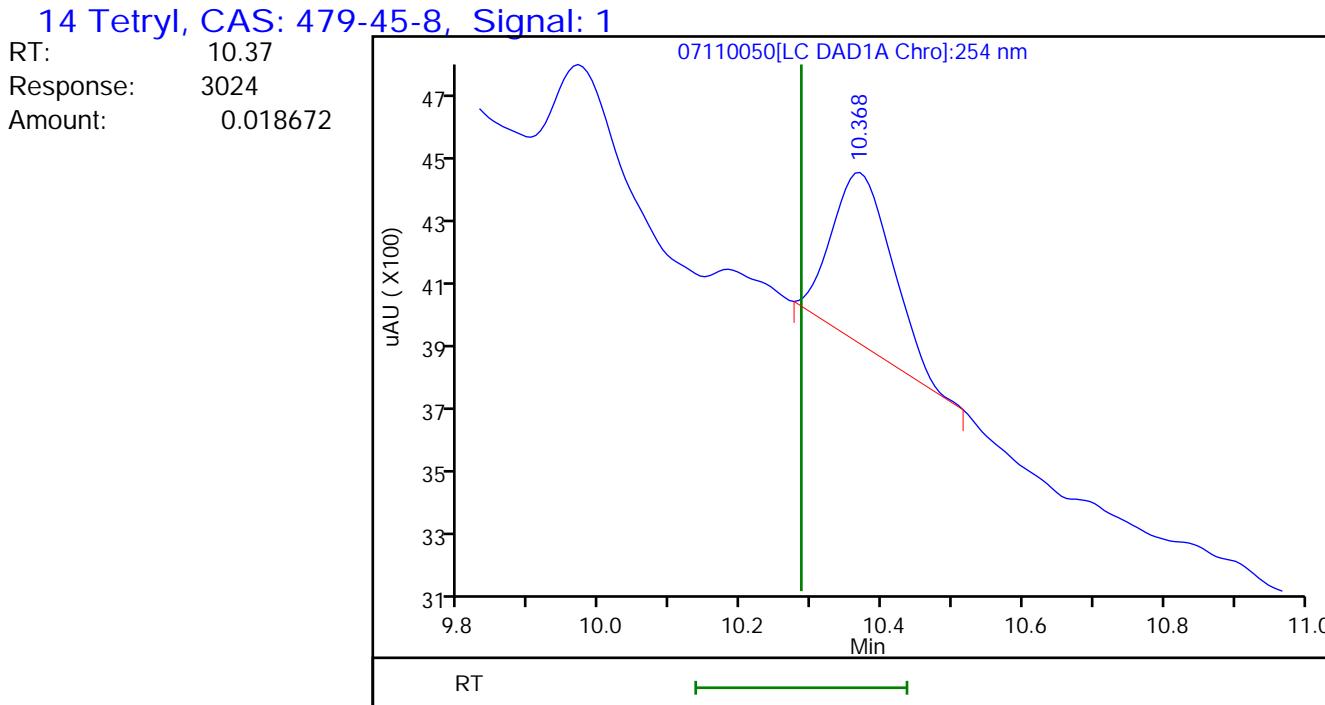
Reviewer: fiedlerh, 12-Jul-2019 09:00:49

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110050.D
Injection Date: 12-Jul-2019 02:42:49 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-2-A Lab Sample ID: 280-124912-2
Client ID: G0044-19A
Operator ID: hkf 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



Reviewer: fiedlerh, 12-Jul-2019 09:01:06

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.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ015-19A Lab Sample ID: 280-124912-3
Matrix: Water Lab File ID: 06130057.D
Analysis Method: 8330A Date Collected: 06/04/2019 16:25
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 464 (mL) Date Analyzed: 06/14/2019 07:19
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.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.43	U	1.1	0.43	0.22
99-65-0	1,3-Dinitrobenzene	0.22	U	0.43	0.22	0.096
118-96-7	2,4,6-Trinitrotoluene	0.43	U	0.43	0.43	0.17
121-14-2	2,4-Dinitrotoluene	0.22	U	0.43	0.22	0.090
606-20-2	2,6-Dinitrotoluene	0.74		0.22	0.22	0.070
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	U	0.22	0.13	0.055
88-72-2	2-Nitrotoluene	0.22	U Q	0.43	0.22	0.092
99-08-1	3-Nitrotoluene	0.43	U M	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U M	0.22	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U Q	1.1	0.43	0.22
2691-41-0	HMX	0.22	U	0.43	0.22	0.094
5755-27-1	MNX	0.43	U	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U	0.43	0.22	0.098
121-82-4	RDX	0.85	J1 M	0.43	0.43	0.17
479-45-8	Tetryl	0.22	U M	0.26	0.22	0.085

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	107		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130057.D
 Lims ID: 280-124912-A-3-A
 Client ID: PZ015-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 07:19:22 ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-3-A
 Misc. Info.: 280-0082810-057
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:59:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.645				ND	
6 MNX	1	7.359				ND	
7 RDX	1	7.742	7.758	-0.016	8388	0.0787	M
\$ 9 1,2-Dinitrobenzene	1	8.742	8.738	0.004	27887	0.2143	
10 1,3,5-Trinitrobenzene	1	8.898				ND	
11 1,3-Dinitrobenzene	1	9.558				ND	
12 Nitrobenzene	1	9.945				ND	
14 Tetryl	1	10.265				ND	U
16 2,4,6-Trinitrotoluene	1	11.218				ND	
17 4-Amino-2,6-dinitrotoluene	1	11.405				ND	U
18 2-Amino-4,6-dinitrotoluene	1	11.698				ND	
19 2,6-Dinitrotoluene	1	11.868	11.832	0.036	10816	0.0691	
20 2,4-Dinitrotoluene	1	12.032				ND	
21 o-Nitrotoluene	1	12.865				ND	
22 p-Nitrotoluene	1	13.305				ND	
23 m-Nitrotoluene	1	13.898				ND	U

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 14-Jun-2019 10:04:12

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130057.D

Injection Date: 14-Jun-2019 07:19:22

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-3-A

Lab Sample ID: 280-124912-3

Worklist Smp#: 57

Client ID: PZ015-19A

Dil. Factor: 1.0000

ALS Bottle#: 57

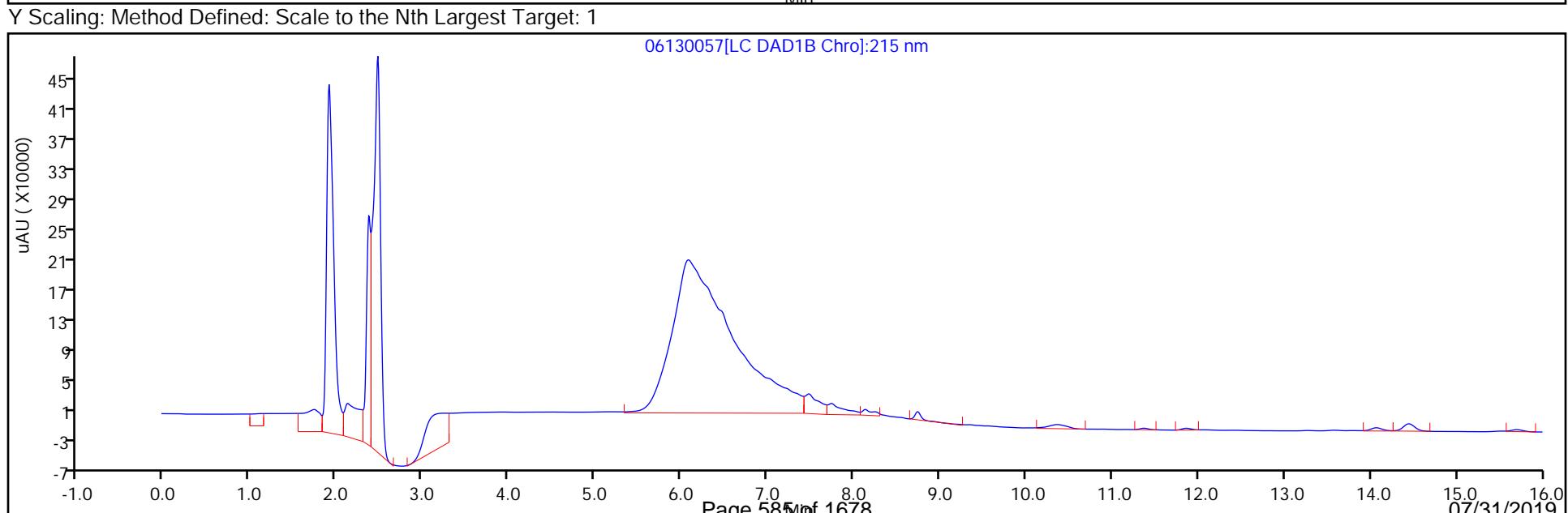
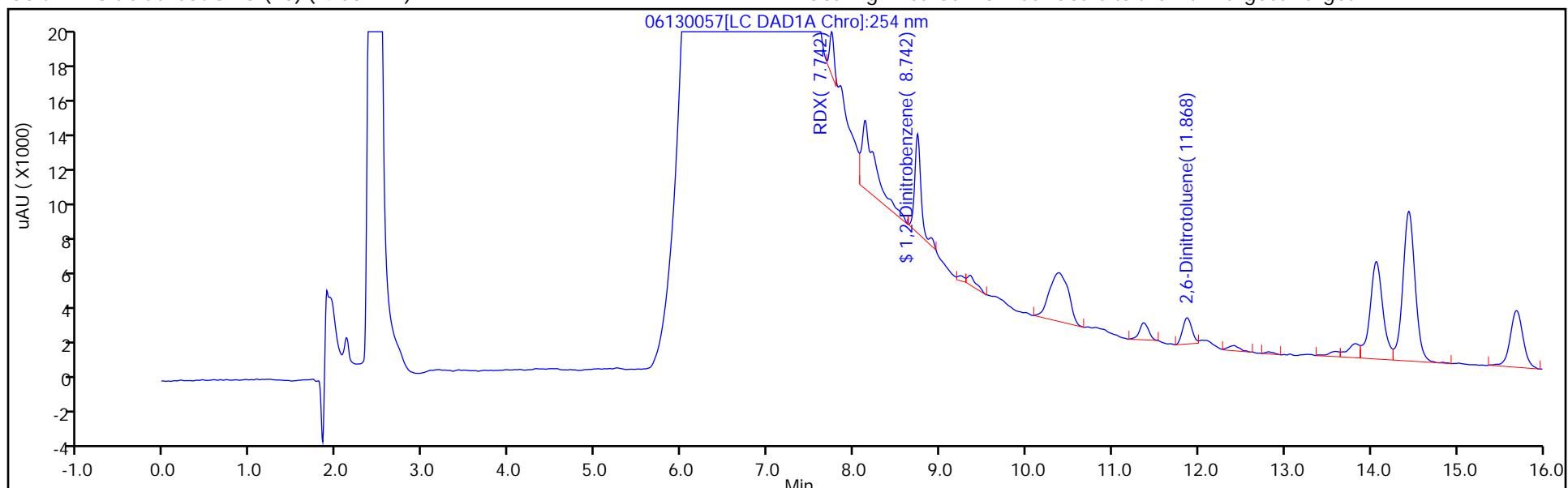
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130057.D
 Lims ID: 280-124912-A-3-A
 Client ID: PZ015-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 07:19:22 ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-3-A
 Misc. Info.: 280-0082810-057
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:59:21

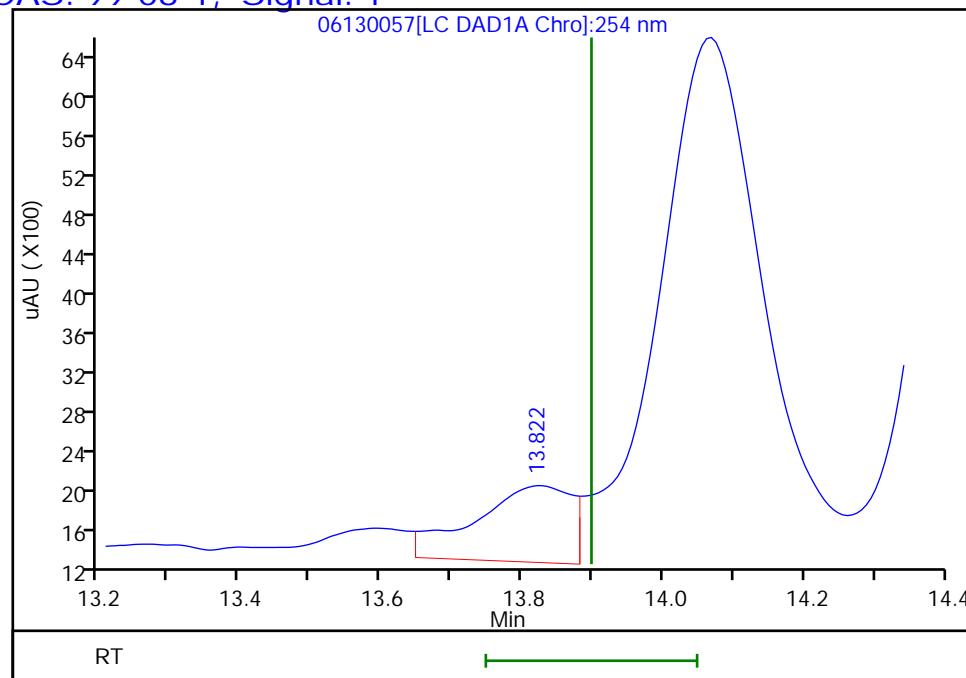
Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.2143	107.17

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130057.D
Injection Date: 14-Jun-2019 07:19:22 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-3-A Lab Sample ID: 280-124912-3
Client ID: PZ015-19A
Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.82
Response: 7367
Amount: 0.049674



Reviewer: fiedlerh, 14-Jun-2019 09:59:21

Audit Action: Marked Compound Undetected

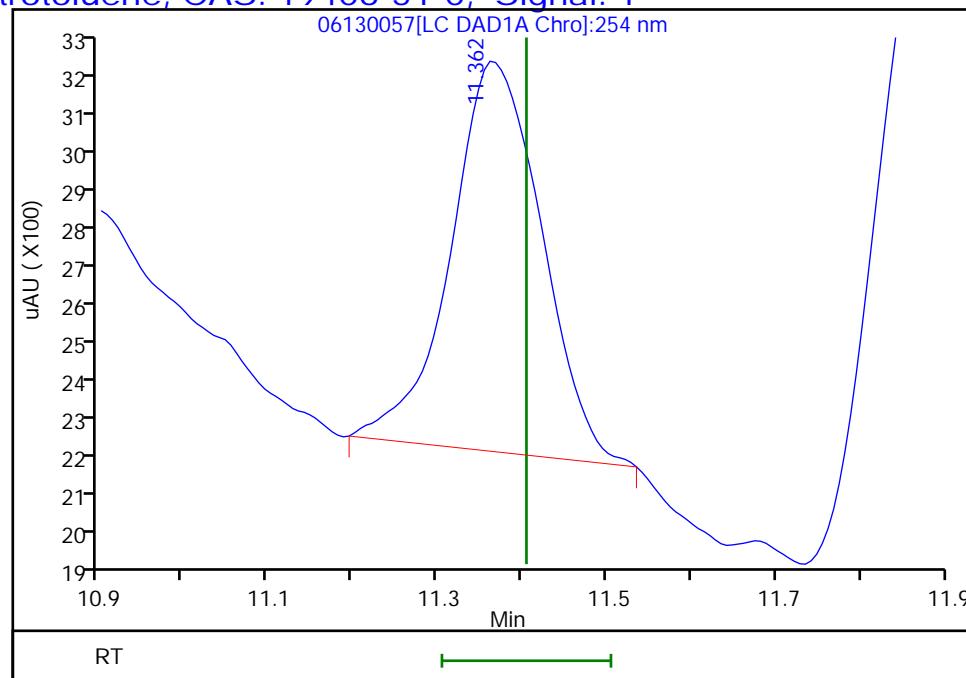
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130057.D
 Injection Date: 14-Jun-2019 07:19:22 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-3-A Lab Sample ID: 280-124912-3
 Client ID: PZ015-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.36
 Response: 7015
 Amount: 0.043188



Reviewer: fiedlerh, 14-Jun-2019 09:59:21

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

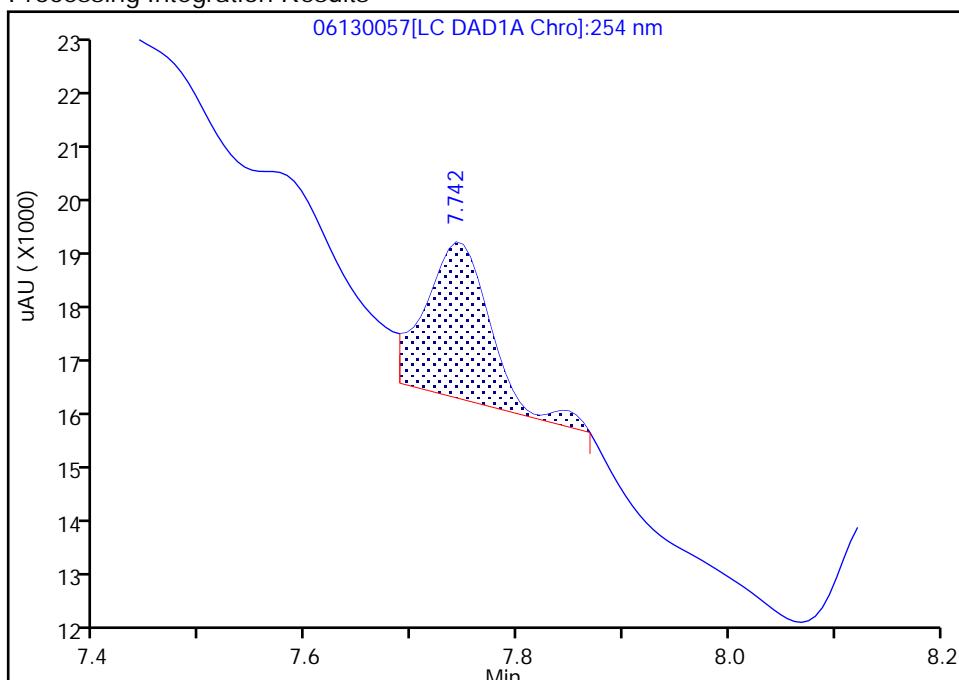
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 Injection Date: 14-Jun-2019 07:19:22 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-3-A Lab Sample ID: 280-124912-3
 Client ID: PZ015-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

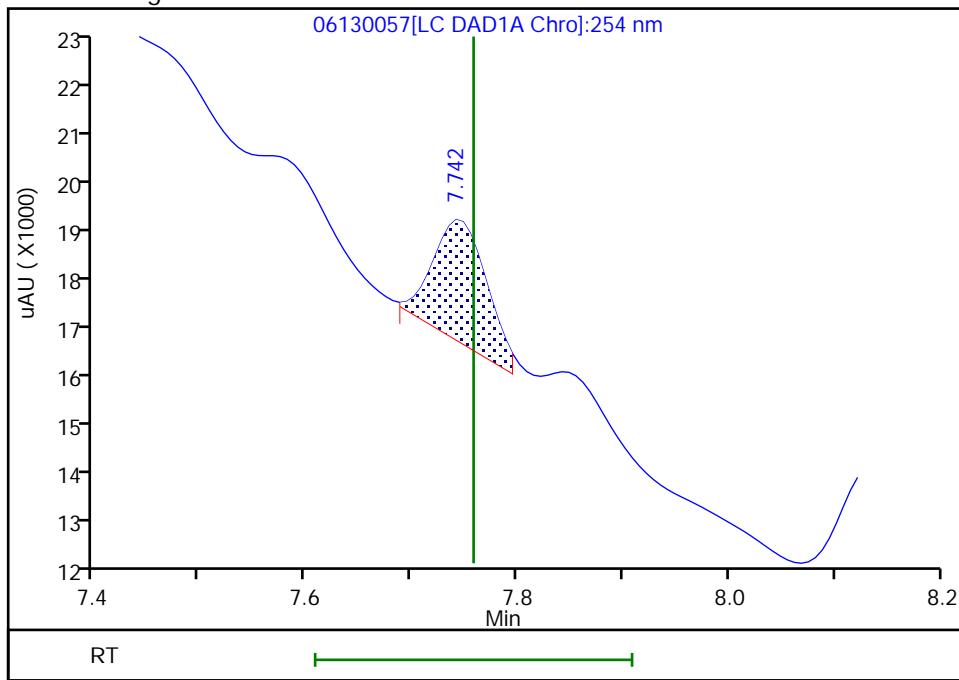
RT: 7.74
 Area: 11642
 Amount: 0.109172
 Amount Units: ug/mL

Processing Integration Results



RT: 7.74
 Area: 8388
 Amount: 0.078658
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 09:59:06

Audit Action: Manually Integrated

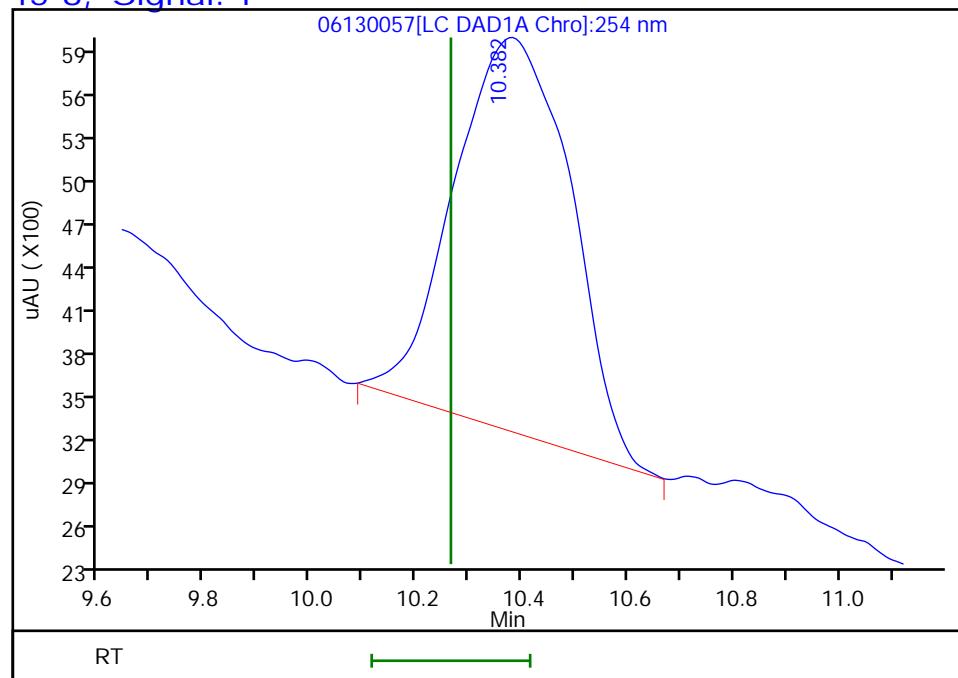
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130057.D
Injection Date: 14-Jun-2019 07:19:22 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-3-A Lab Sample ID: 280-124912-3
Client ID: PZ015-19A
Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.38
Response: 41338
Amount: 0.246125



Reviewer: fiedlerh, 14-Jun-2019 09:59:21

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ015-19A Lab Sample ID: 280-124912-3
Matrix: Water Lab File ID: 06140047.D
Analysis Method: 8330A Date Collected: 06/04/2019 16:25
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 464 (mL) Date Analyzed: 06/15/2019 13:20
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: Luna-phenylhex ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461583 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	RDX	0.22	J Q J1	0.43	0.43	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140047.D
 Lims ID: 280-124912-A-3-A
 Client ID: PZ015-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 13:20:13 ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-3-A
 Misc. Info.: 280-0082871-047
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 11:02:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.157	7.151	0.006	2858	0.0167	M
7 MNX	1	7.730	7.778	-0.048	12160	0.0451	M
8 RDX	1	9.223	9.231	-0.008	4267	0.0205	
9 Nitrobenzene	1		12.198			ND	
\$ 10 1,2-Dinitrobenzene	1	13.237	13.204	0.033	55135	0.1991	
12 1,3-Dinitrobenzene	1	15.783	15.731	0.052	4229	0.006654	
14 o-Nitrotoluene	1		16.531			ND	U
15 p-Nitrotoluene	1		16.858			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.251			ND	
17 m-Nitrotoluene	1	17.877	17.764	0.113	38992	0.1332	M
18 2-Amino-4,6-dinitrotoluene	1		18.271			ND	
19 1,3,5-Trinitrobenzene	1		19.024			ND	
20 2,6-Dinitrotoluene	1		19.851			ND	
21 2,4-Dinitrotoluene	1	20.410	20.404	0.006	4431	0.007781	
22 Tetryl	1	23.663	23.698	-0.035	19474	0.0619	
23 2,4,6-Trinitrotoluene	1		24.711			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 17-Jun-2019 11:07:44

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190614-82871.b\\06140047.D

Injection Date: 15-Jun-2019 13:20:13

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: 280-124912-A-3-A

Lab Sample ID: 280-124912-3

Worklist Smp#: 47

Client ID: PZ015-19A

Dil. Factor: 1.0000

ALS Bottle#: 47

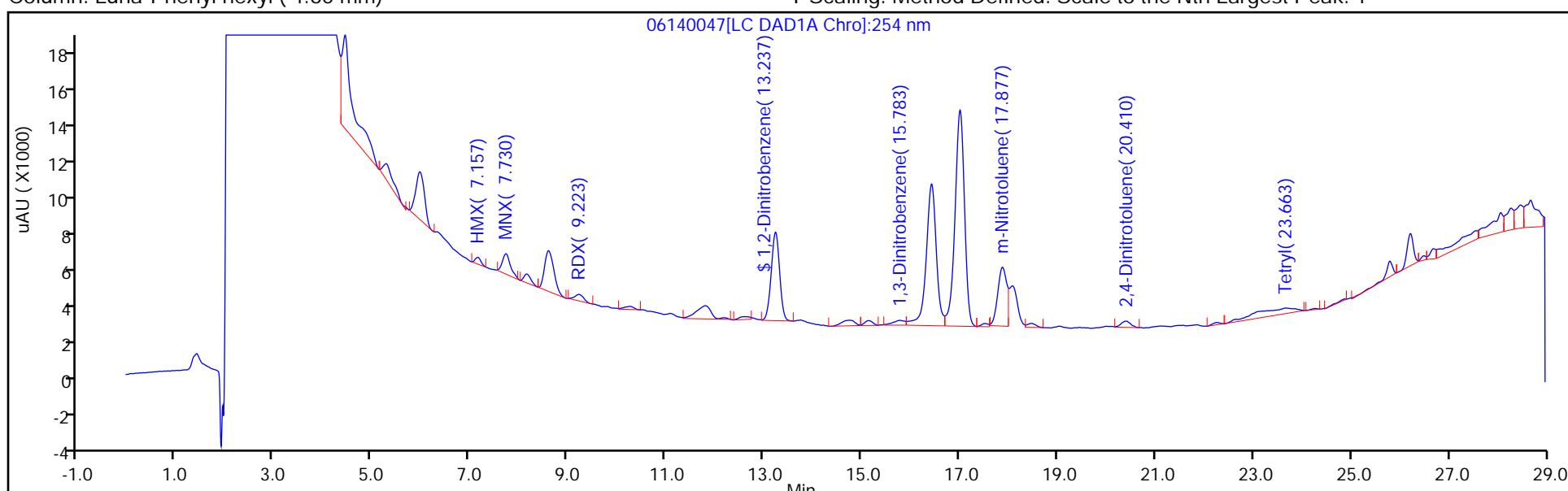
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

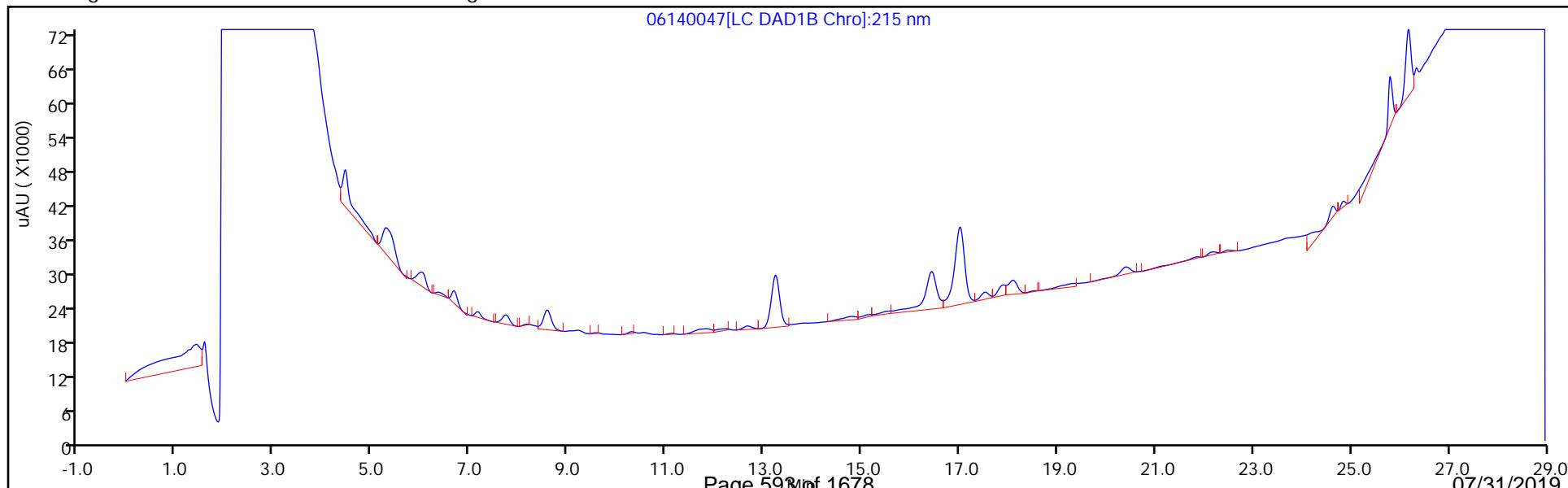
Method: G2_8330_Luna

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: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140047.D
 Lims ID: 280-124912-A-3-A
 Client ID: PZ015-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 13:20:13 ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-3-A
 Misc. Info.: 280-0082871-047
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 11:02:53

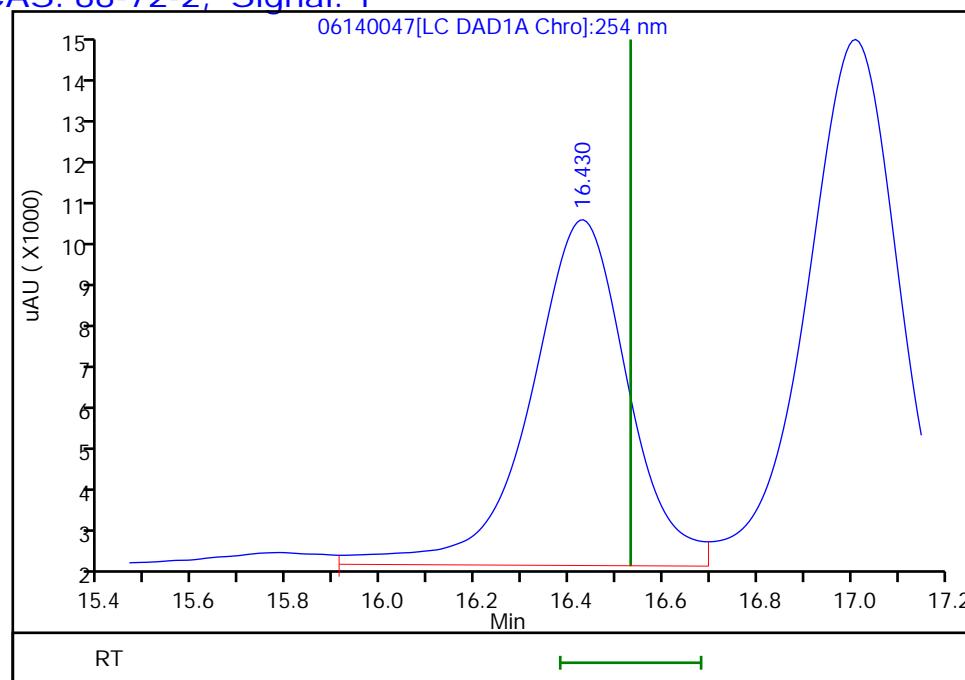
Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1991	99.57

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140047.D
 Injection Date: 15-Jun-2019 13:20:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-3-A Lab Sample ID: 280-124912-3
 Client ID: PZ015-19A
 Operator ID: HKF ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul 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: 16.43
 Response: 106267
 Amount: 0.405809



Reviewer: fiedlerh, 17-Jun-2019 11:02:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

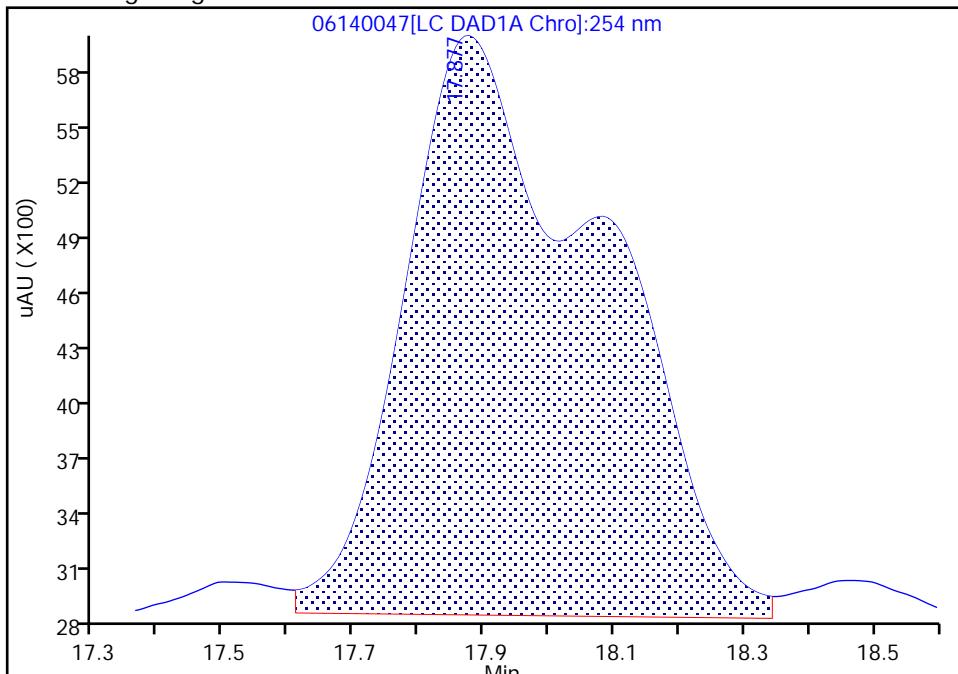
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 Injection Date: 15-Jun-2019 13:20:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-3-A Lab Sample ID: 280-124912-3
 Client ID: PZ015-19A
 Operator ID: HKF ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 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

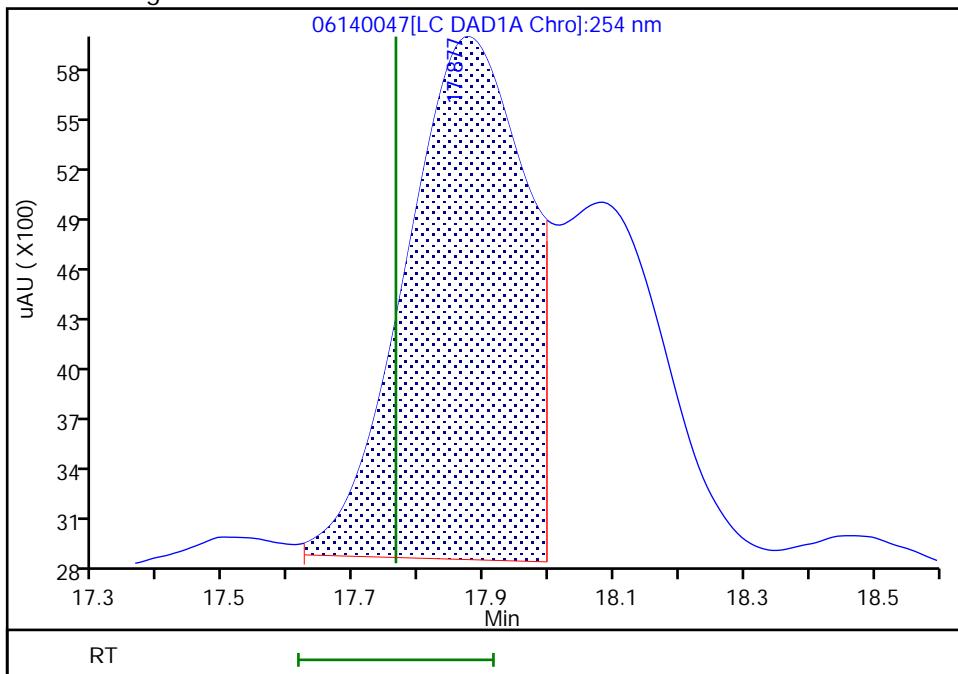
Processing Integration Results

RT: 17.88
 Area: 66101
 Amount: 0.225839
 Amount Units: ug/ml



Manual Integration Results

RT: 17.88
 Area: 38992
 Amount: 0.133219
 Amount Units: ug/ml



Reviewer: fiedlerh, 17-Jun-2019 11:02:44

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

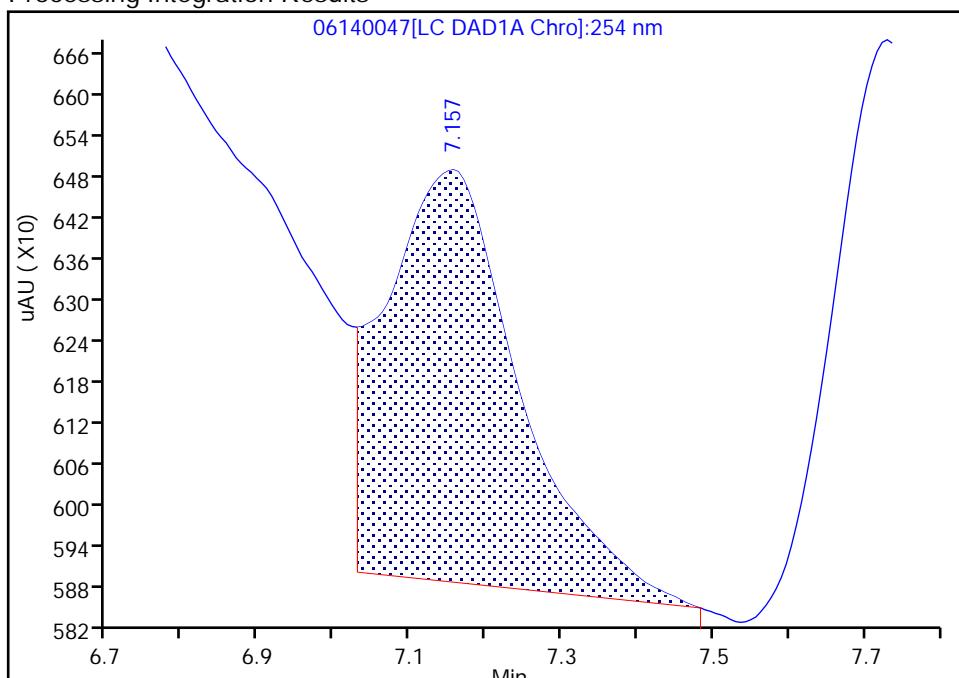
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140047.D
 Injection Date: 15-Jun-2019 13:20:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-3-A Lab Sample ID: 280-124912-3
 Client ID: PZ015-19A
 Operator ID: HKF ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. 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

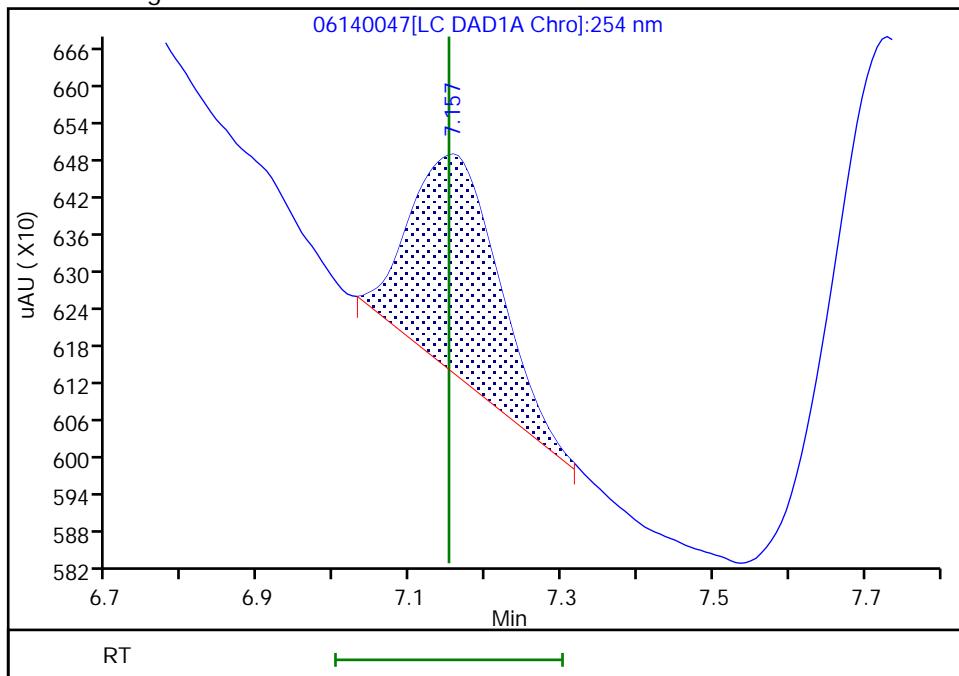
RT: 7.16
 Area: 7330
 Amount: 0.042816
 Amount Units: ug/ml

Processing Integration Results



RT: 7.16
 Area: 2858
 Amount: 0.016694
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:01:55

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

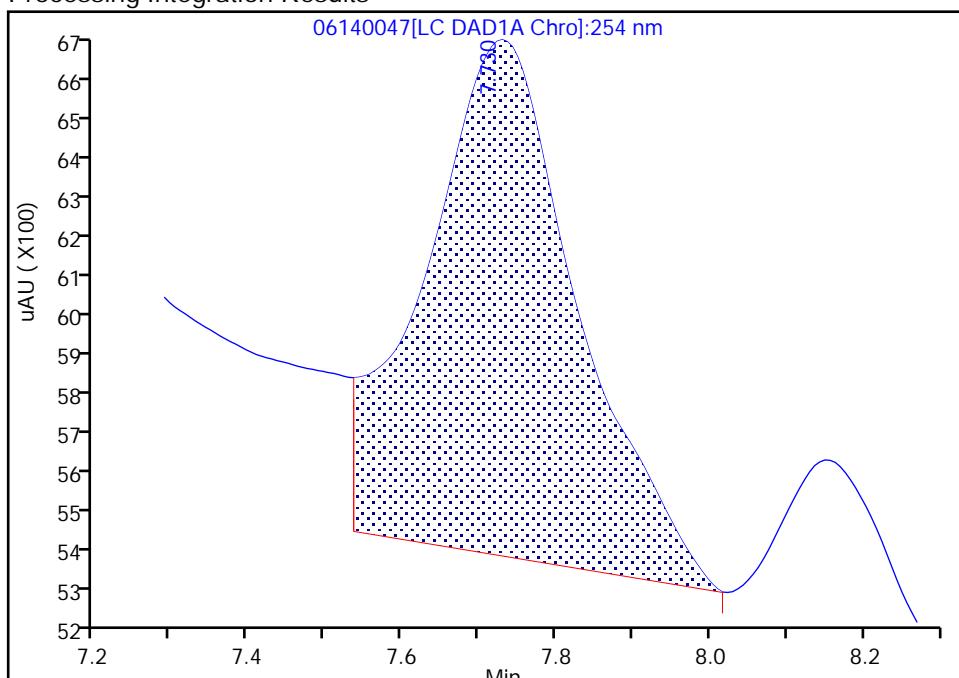
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140047.D
 Injection Date: 15-Jun-2019 13:20:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-3-A Lab Sample ID: 280-124912-3
 Client ID: PZ015-19A
 Operator ID: HKF ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. 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

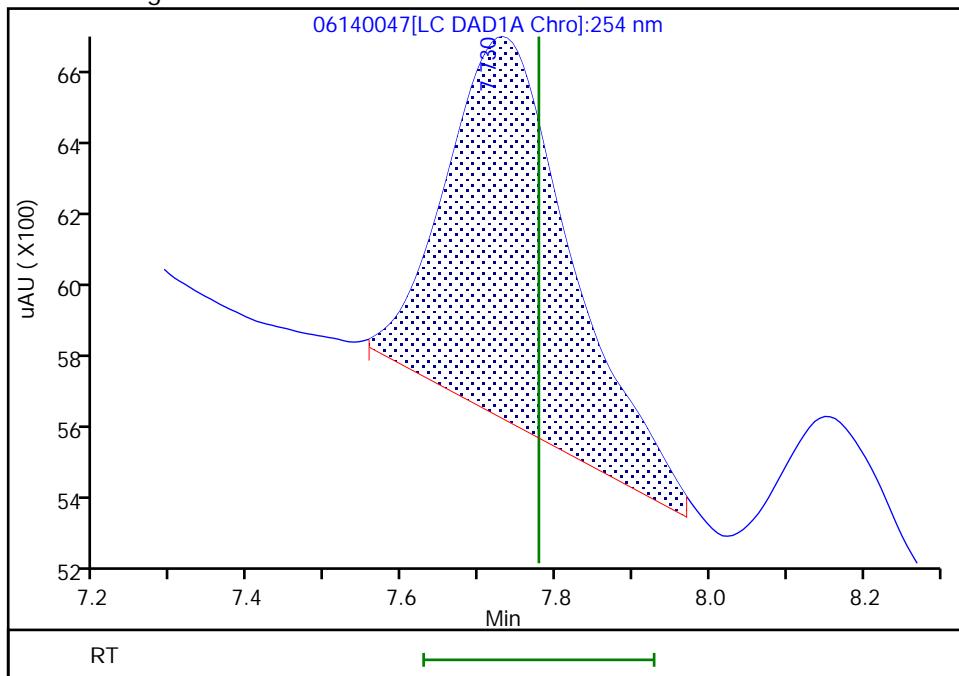
RT: 7.73
 Area: 17895
 Amount: 0.066395
 Amount Units: ug/ml

Processing Integration Results



RT: 7.73
 Area: 12160
 Amount: 0.045116
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:02:00

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ015-19A RE Lab Sample ID: 280-124912-3 RE
Matrix: Water Lab File ID: 07110051.D
Analysis Method: 8330A Date Collected: 06/04/2019 16:25
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 448.2 (mL) Date Analyzed: 07/12/2019 03:05
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.22	U H	0.45	0.22	0.095
99-99-0	<i>4-Nitrotoluene</i>	0.45	U H	1.1	0.45	0.22
5755-27-1	MNX	0.45	U H	2.2	0.45	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	111	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110051.D
 Lims ID: 280-124912-B-3-A
 Client ID: PZ015-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 03:05:49 ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-3-A
 Misc. Info.: 280-0083617-051
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:01:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.692			ND		U
6 MNX	1	7.378			ND		
7 RDX	1	7.799			ND		
\$ 9 1,2-Dinitrobenzene	1	8.748	8.759	-0.011	30862	0.2215	M
10 1,3,5-Trinitrobenzene	1	8.919			ND		
11 1,3-Dinitrobenzene	1	9.578			ND		
12 Nitrobenzene	1	9.965			ND		
14 Tetryl	1	10.295	10.285	0.010	41860	0.2585	
16 2,4,6-Trinitrotoluene	1	11.258			ND		U
17 4-Amino-2,6-dinitrotoluene	1	11.445			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738			ND		
19 2,6-Dinitrotoluene	1	11.875	11.878	-0.003	14142	0.0888	
20 2,4-Dinitrotoluene	1	12.078			ND		
21 o-Nitrotoluene	1	12.925			ND		
22 p-Nitrotoluene	1	13.372			ND		
23 m-Nitrotoluene	1	13.978			ND		U

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:42

Chrom Revision: 2.3 20-Jun-2019 20:50:56

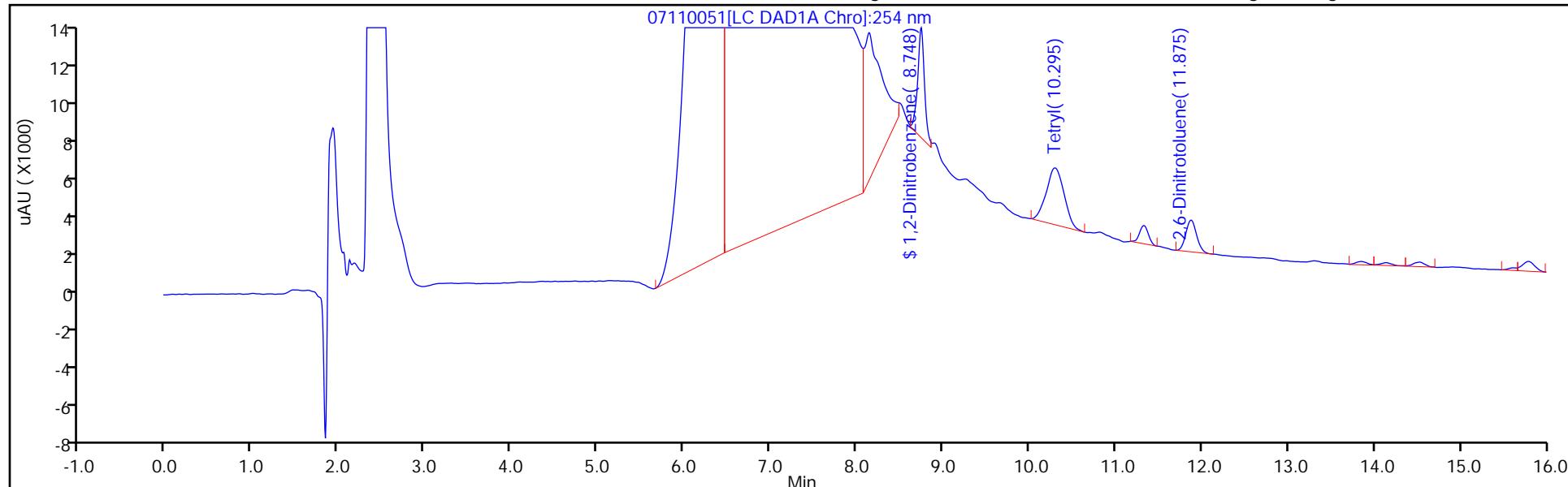
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110051.D
Injection Date: 12-Jul-2019 03:05:49
Lims ID: 280-124912-B-3-A
Client ID: PZ015-19A
Injection Vol: 100.0 ul
Method: 8330_X3
Column: UltraCarb5uODS (20) (4.60 mm)

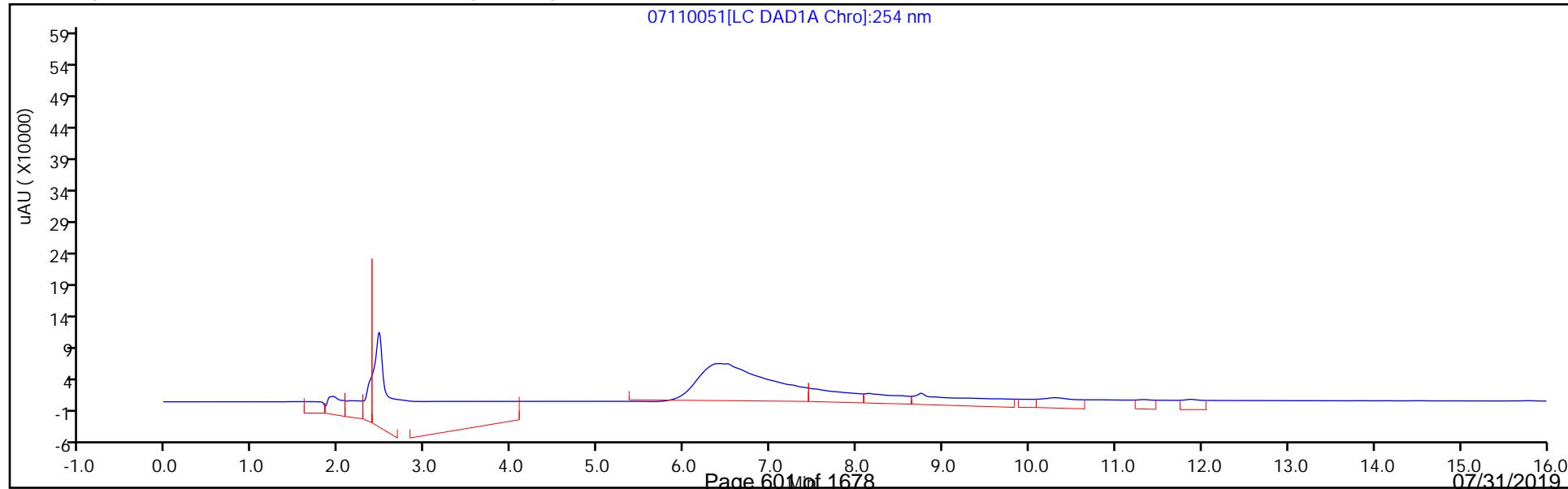
Instrument ID: CHHPLC_X3
Lab Sample ID: 280-124912-3
Dil. Factor: 1.0000
Limit Group: GCSV - 8330

Operator ID: hkf
Worklist Smp#: 51
ALS Bottle#: 51

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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110051.D
 Lims ID: 280-124912-B-3-A
 Client ID: PZ015-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 03:05:49 ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-3-A
 Misc. Info.: 280-0083617-051
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:01:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.2215	110.75

Eurofins TestAmerica, Denver

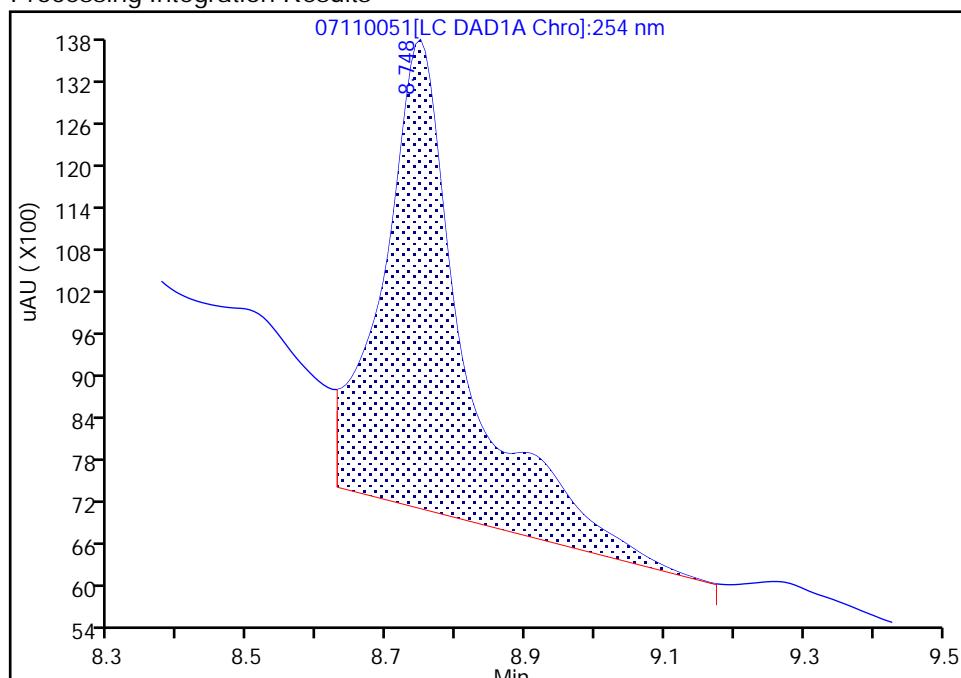
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110051.D
 Injection Date: 12-Jul-2019 03:05:49 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-3-A Lab Sample ID: 280-124912-3
 Client ID: PZ015-19A
 Operator ID: hkf ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 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

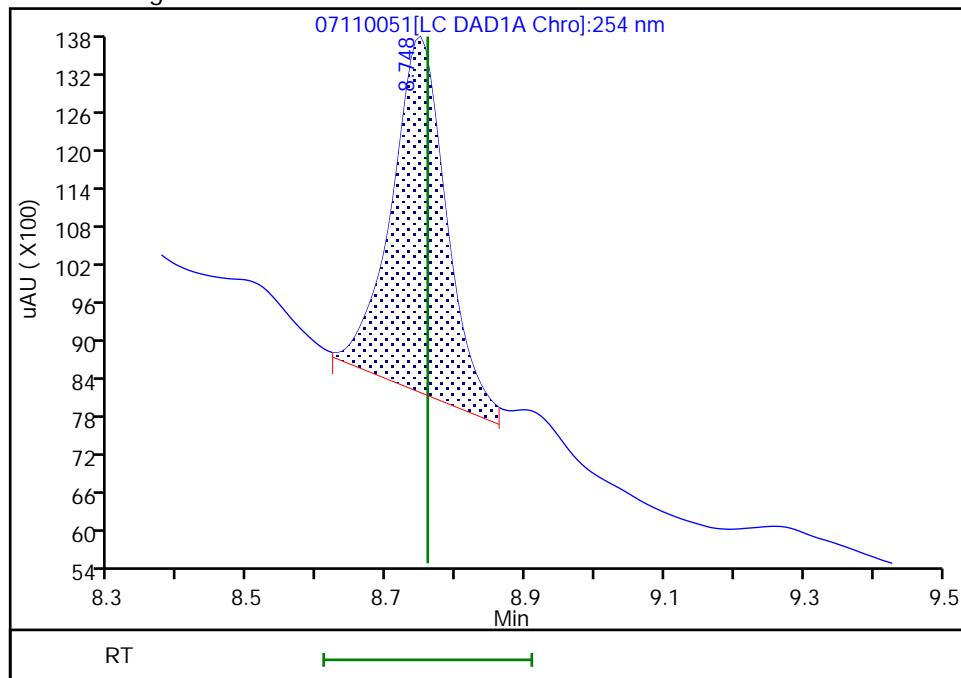
RT: 8.75
 Area: 55083
 Amount: 0.395346
 Amount Units: ug/mL

Processing Integration Results



RT: 8.75
 Area: 30862
 Amount: 0.221505
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:01:20

Audit Action: Manually Integrated

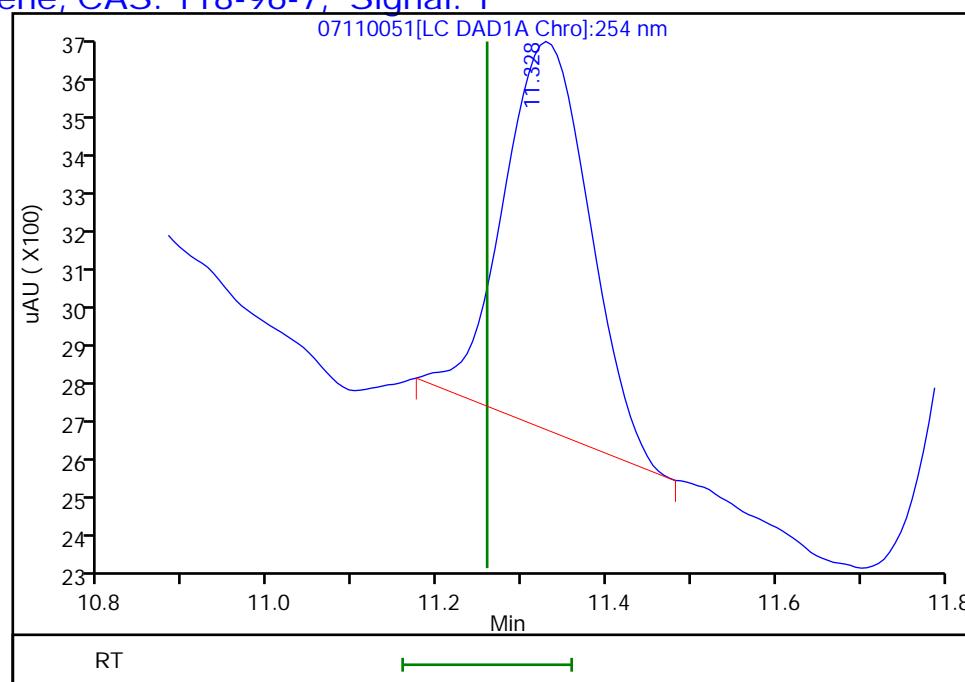
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110051.D
Injection Date: 12-Jul-2019 03:05:49 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-3-A Lab Sample ID: 280-124912-3
Client ID: PZ015-19A
Operator ID: hkf 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

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.33
Response: 6625
Amount: 0.029149



Reviewer: fiedlerh, 12-Jul-2019 09:01:29

Audit Action: Marked Compound Undetected

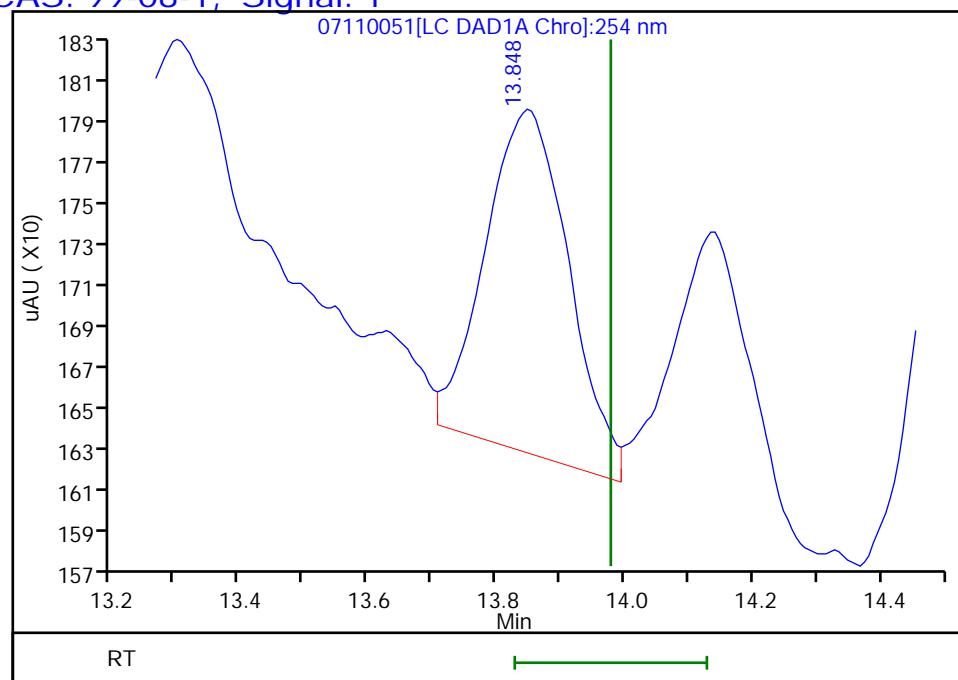
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110051.D
Injection Date: 12-Jul-2019 03:05:49 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-3-A Lab Sample ID: 280-124912-3
Client ID: PZ015-19A
Operator ID: hkf 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

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.85
Response: 1518
Amount: 0.010460



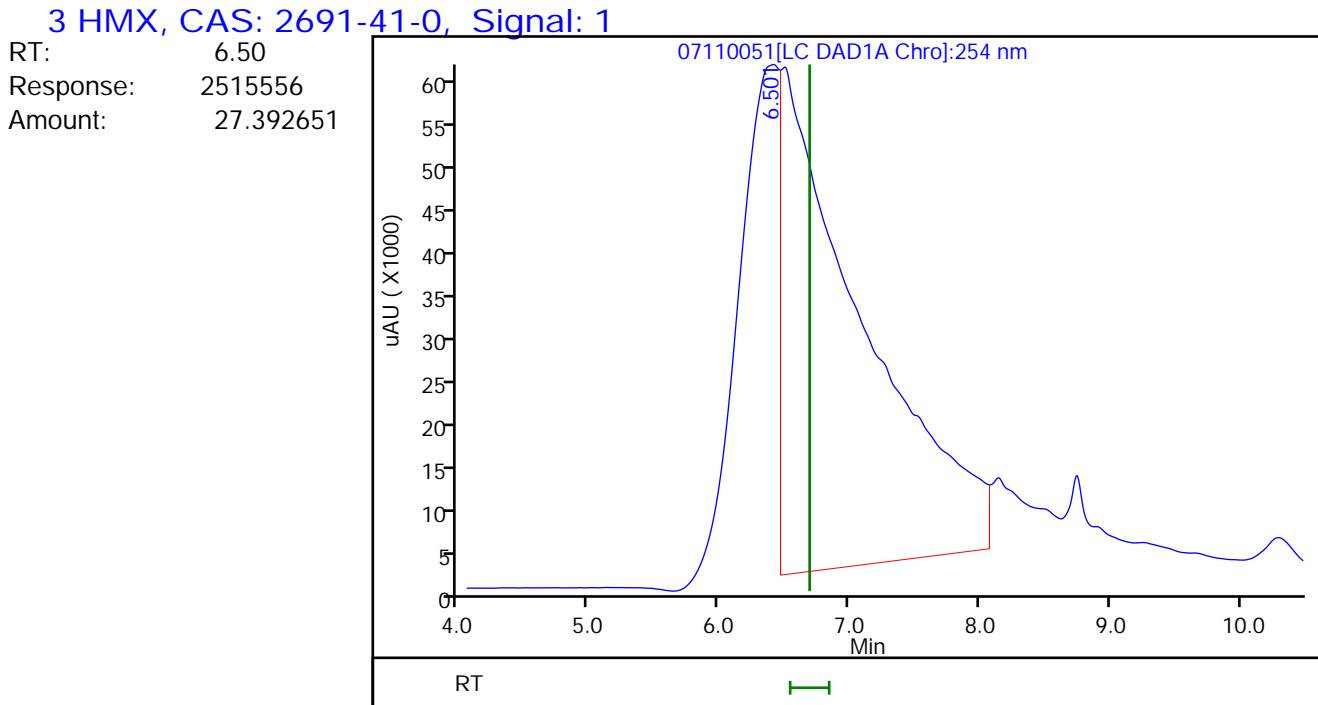
Reviewer: fiedlerh, 12-Jul-2019 09:01:29

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110051.D
Injection Date: 12-Jul-2019 03:05:49 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-3-A Lab Sample ID: 280-124912-3
Client ID: PZ015-19A
Operator ID: hkf 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



Reviewer: fiedlerh, 12-Jul-2019 09:01:29

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
 SDG No.: _____
 Client Sample ID: G0102-19A Lab Sample ID: 280-124912-4
 Matrix: Water Lab File ID: 06140047.D
 Analysis Method: 8330A Date Collected: 06/05/2019 11:25
 Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
 Sample wt/vol: 478.4 (mL) Date Analyzed: 06/15/2019 09:02
 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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.42	U	1.0	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.093
118-96-7	2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.21	U J1	0.42	0.21	0.088
606-20-2	2,6-Dinitrotoluene	0.21	U M J1	0.21	0.21	0.067
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	U J1	0.21	0.13	0.053
88-72-2	2-Nitrotoluene	0.21	U J1 Q	0.42	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U J1	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U J1	0.21	0.13	0.060
99-99-0	4-Nitrotoluene	0.42	U J1	1.0	0.42	0.21
2691-41-0	HMX	0.21	U	0.42	0.21	0.092
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U J1	0.42	0.21	0.095
121-82-4	RDX	1.1	M	0.42	0.42	0.17
479-45-8	Tetryl	0.21	U	0.25	0.21	0.083

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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140047.D
 Lims ID: 280-124912-A-4-A
 Client ID: G0102-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 09:02:31 ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-4-A
 Misc. Info.: 280-0082867-047
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:14:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.500			ND		U
2 TNX	1	6.566			ND		
3 HMX	1	6.643			ND		
4 2,4-diamino-6-nitrotoluene	1	6.687			ND		
5 DNX	1	6.893			ND		
6 MNX	1	7.359			ND		
7 RDX	1	7.768	7.763	0.005	11010	0.1032	M
8 2,4,6-Trinitrophenol	1	8.196			ND		
\$ 9 1,2-Dinitrobenzene	1	8.748	8.743	0.005	27255	0.2095	M
10 1,3,5-Trinitrobenzene	1	8.896			ND		
11 1,3-Dinitrobenzene	1	9.563			ND		
12 Nitrobenzene	1	9.949			ND		
13 3,5-Dinitroaniline	1	10.213			ND		
14 Tetryl	1	10.276			ND		
15 Nitroglycerin	2	10.776			ND		
16 2,4,6-Trinitrotoluene	1	11.229			ND		
17 4-Amino-2,6-dinitrotoluene	1	11.429			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.716			ND		
19 2,6-Dinitrotoluene	1	11.843			ND		U
20 2,4-Dinitrotoluene	1	12.043			ND		
21 o-Nitrotoluene	1	12.883			ND		
22 p-Nitrotoluene	1	13.323			ND		
23 m-Nitrotoluene	1	13.923			ND		
24 PETN	2	15.016			ND		
25 Ammonium Picrate	1	0.000			ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 17-Jun-2019 10:45:29

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190614-82867.b\\06140047.D

Injection Date: 15-Jun-2019 09:02:31

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-4-A

Lab Sample ID: 280-124912-4

Worklist Smp#: 47

Client ID: G0102-19A

Dil. Factor: 1.0000

ALS Bottle#: 47

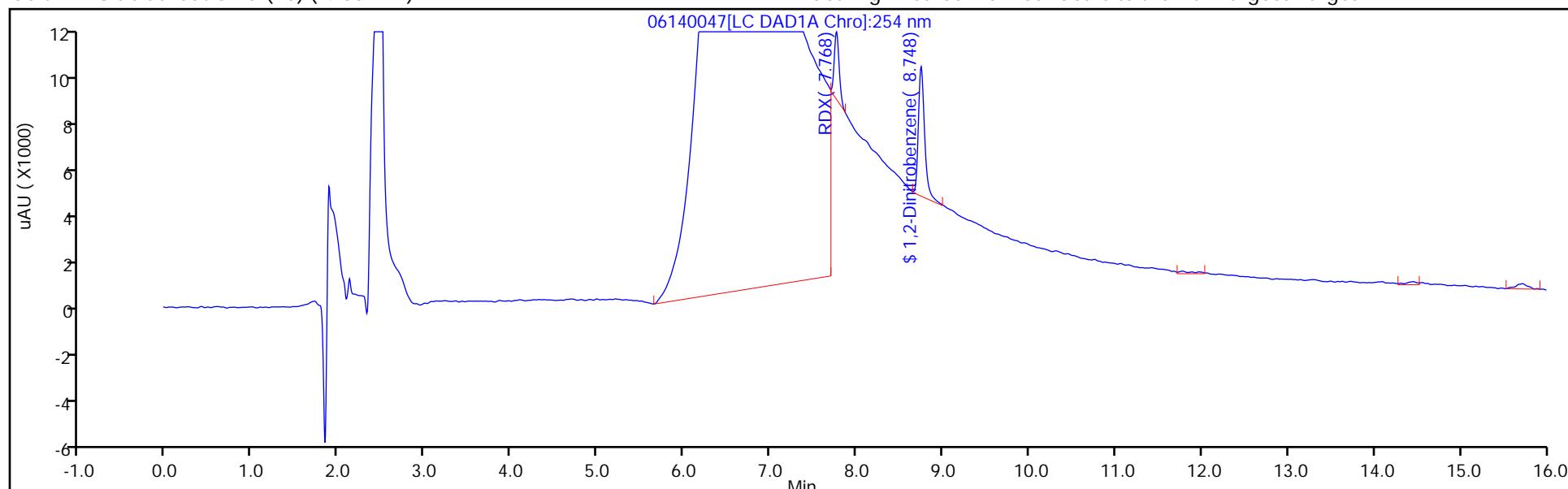
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

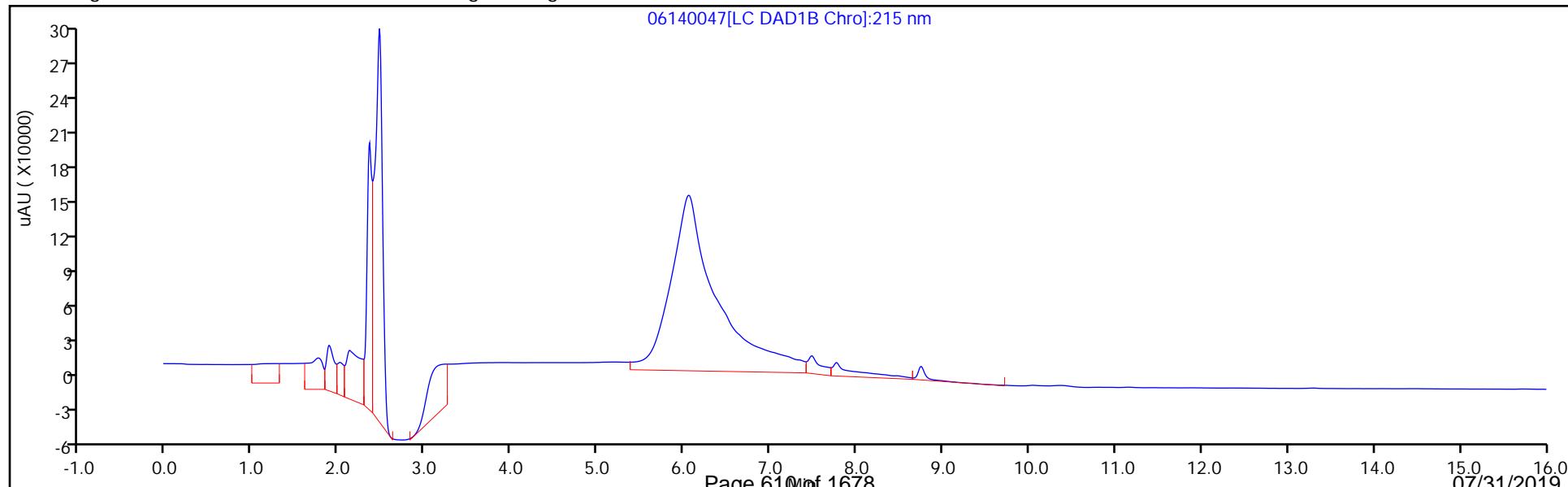
Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140047.D
 Lims ID: 280-124912-A-4-A
 Client ID: G0102-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 09:02:31 ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-4-A
 Misc. Info.: 280-0082867-047
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:14:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.2095	104.74

Eurofins TestAmerica, Denver

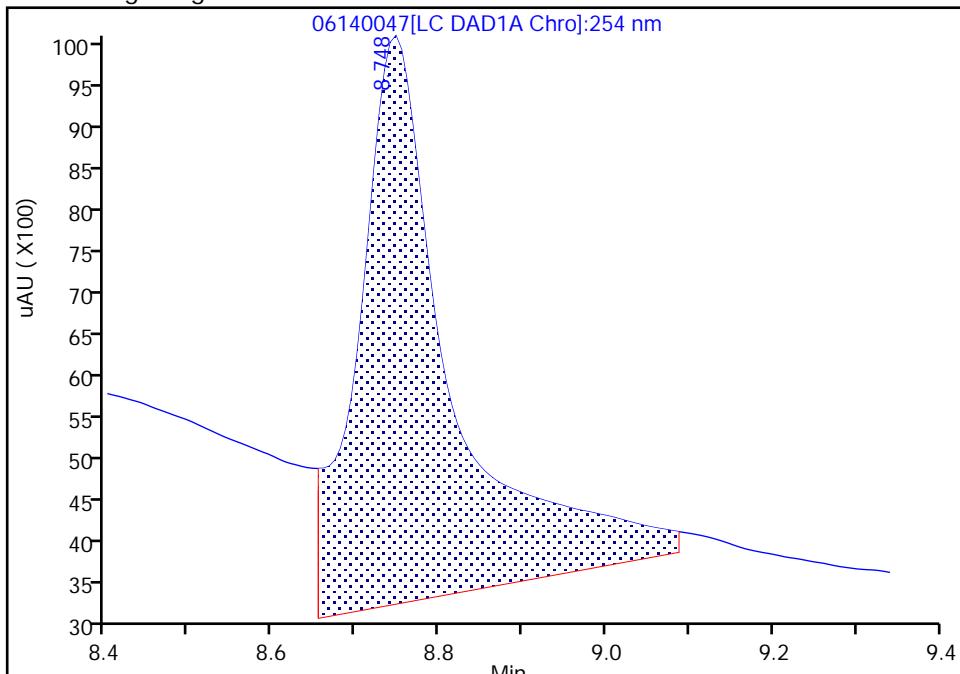
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140047.D
 Injection Date: 15-Jun-2019 09:02:31 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-A Lab Sample ID: 280-124912-4
 Client ID: G0102-19A
 Operator ID: hkf ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

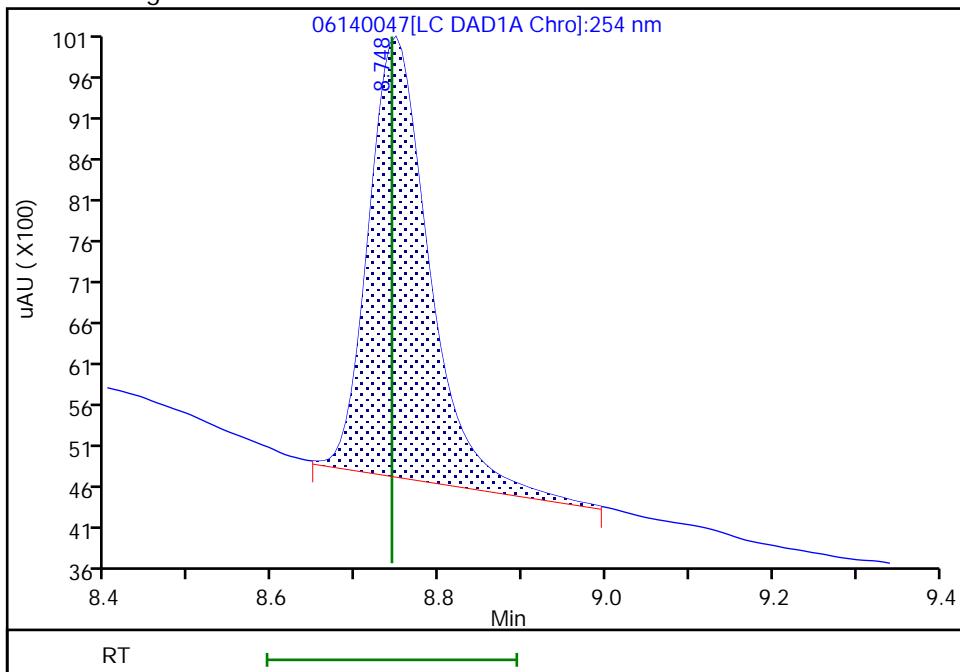
Processing Integration Results

RT: 8.75
 Area: 53330
 Amount: 0.409882
 Amount Units: ug/mL



Manual Integration Results

RT: 8.75
 Area: 27255
 Amount: 0.209476
 Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:14:00

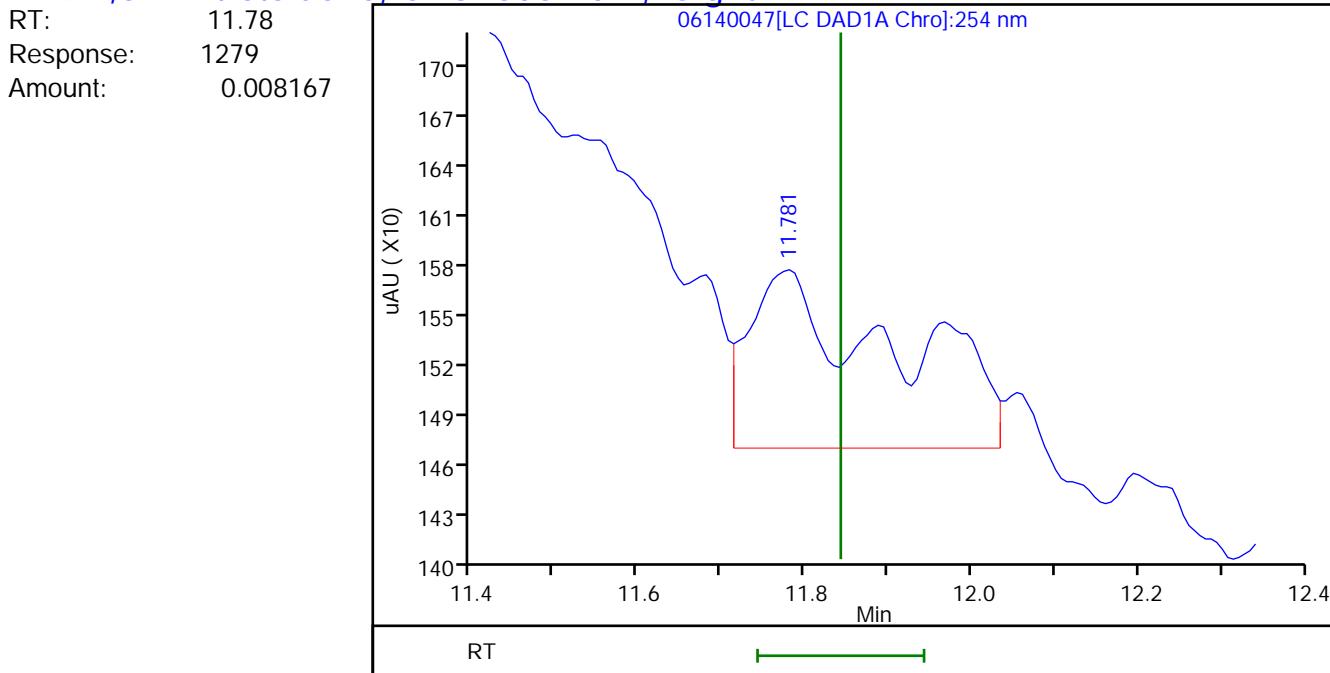
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140047.D
Injection Date: 15-Jun-2019 09:02:31 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-4-A Lab Sample ID: 280-124912-4
Client ID: G0102-19A
Operator ID: hkf ALS Bottle#: 47 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

19 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1



Reviewer: fiedlerh, 17-Jun-2019 10:14:04

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

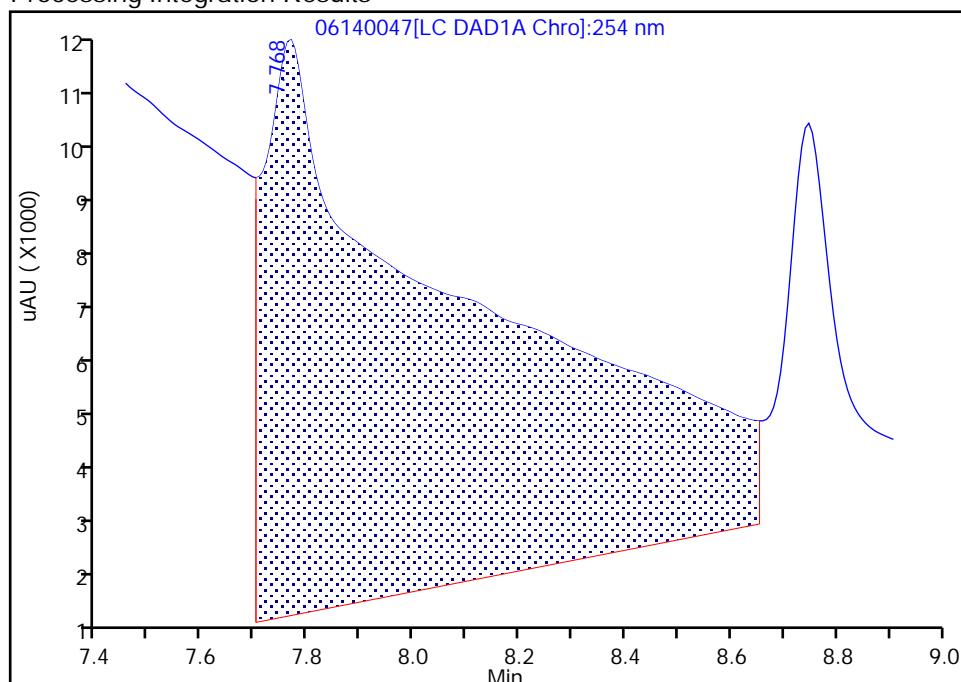
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 Injection Date: 15-Jun-2019 09:02:31 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-A Lab Sample ID: 280-124912-4
 Client ID: G0102-19A
 Operator ID: hkf ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

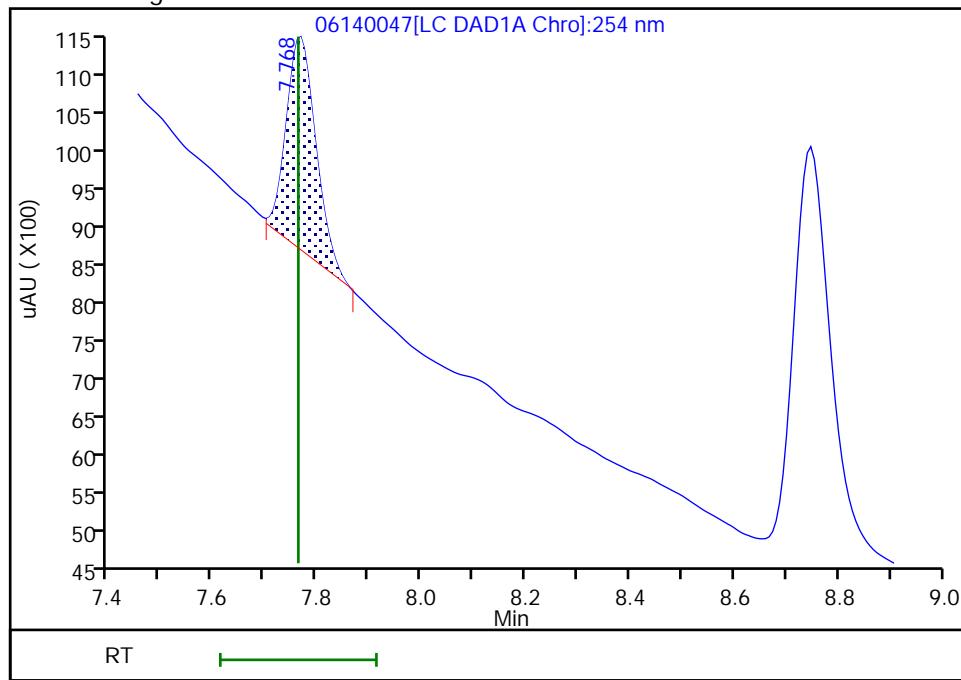
RT: 7.77
 Area: 268491
 Amount: 2.517746
 Amount Units: ug/mL

Processing Integration Results



RT: 7.77
 Area: 11010
 Amount: 0.103245
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:13:56

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0102-19A Lab Sample ID: 280-124912-4
Matrix: Water Lab File ID: 06170030.D
Analysis Method: 8330A Date Collected: 06/05/2019 11:25
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 478.4 (mL) Date Analyzed: 06/18/2019 08:00
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: Luna-phenylhex ID: 4.6 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 461836 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170030.D
 Lims ID: 280-124912-A-4-A
 Client ID: G0102-19A
 Sample Type: Client
 Inject. Date: 18-Jun-2019 08:00:15 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-4-A
 Misc. Info.: 280-0082939-030
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 19-Jun-2019 11:10:34 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0312

First Level Reviewer: fiedlerh Date: 18-Jun-2019 11:45:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.187				ND	
7 MNX	1	7.799	7.848	-0.049	1615	0.005992	M
8 RDX	1	9.232	9.267	-0.035	23498	0.1127	
9 Nitrobenzene	1		12.247			ND	
\$ 10 1,2-Dinitrobenzene	1	13.245	13.281	-0.036	50236	0.1815	
12 1,3-Dinitrobenzene	1		15.801			ND	
14 o-Nitrotoluene	1		16.614			ND	
15 p-Nitrotoluene	1		16.947			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.361			ND	
17 m-Nitrotoluene	1	17.845	17.854	-0.009	3034	0.0104	
18 2-Amino-4,6-dinitrotoluene	1		18.394			ND	
19 1,3,5-Trinitrobenzene	1		19.107			ND	
20 2,6-Dinitrotoluene	1		19.954			ND	
21 2,4-Dinitrotoluene	1		20.514			ND	
22 Tetryl	1		23.847			ND	
23 2,4,6-Trinitrotoluene	1		24.821			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 19-Jun-2019 11:10:38

Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

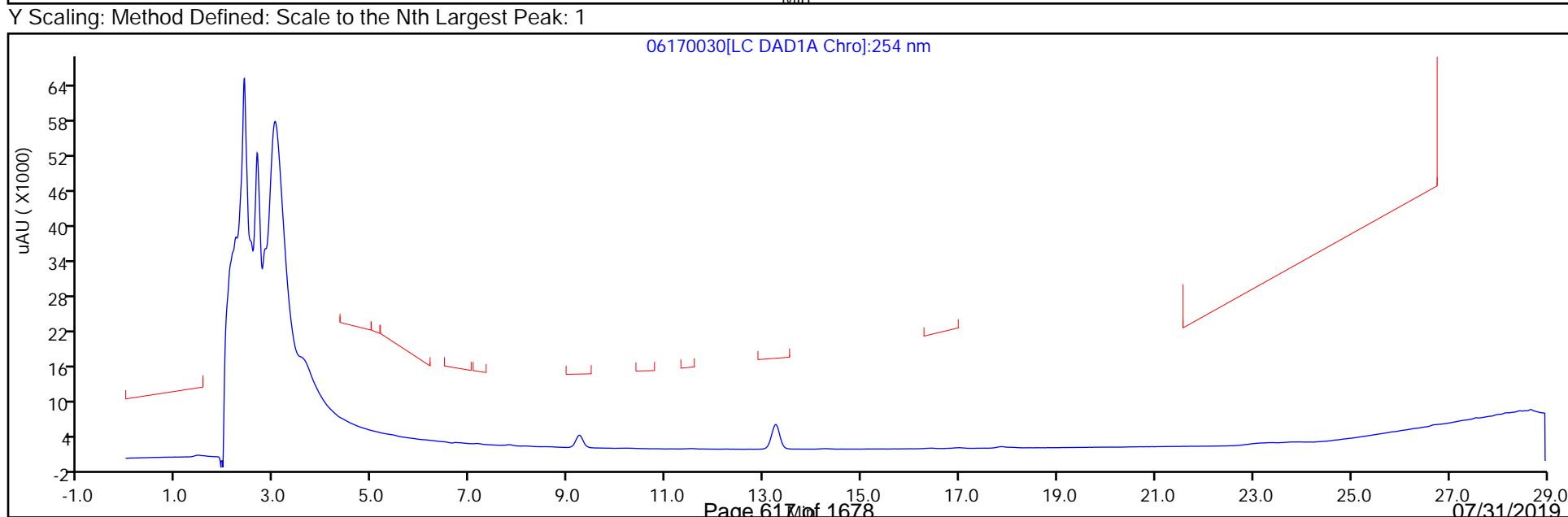
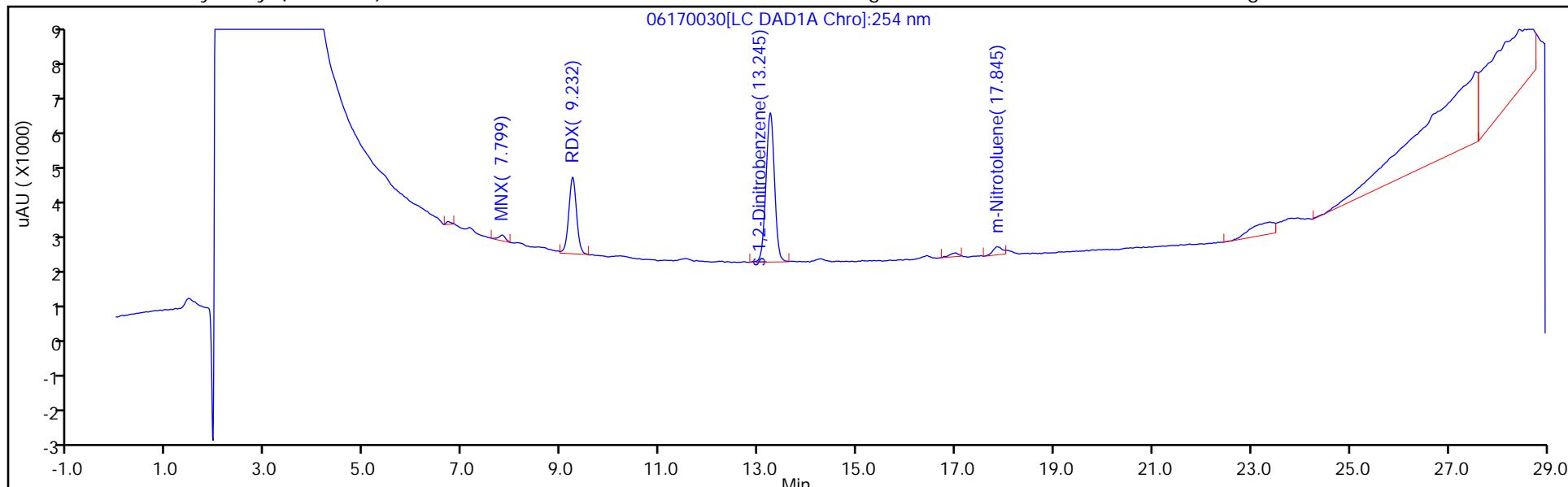
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Injection Date: 18-Jun-2019 08:00:15
Lims ID: 280-124912-A-4-A
Client ID: G0102-19A
Injection Vol: 100.0 ul
Method: G2_8330_Luna
Column: Luna-Phenyl hexyl (4.60 mm)

Instrument ID: CHHPLC_G2_LUNA
Lab Sample ID: 280-124912-4
Dil. Factor: 1.0000
Limit Group: GCSV - 8330

Operator ID: HKF
Worklist Smp#: 30

ALS Bottle#: 30

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170030.D
 Lims ID: 280-124912-A-4-A
 Client ID: G0102-19A
 Sample Type: Client
 Inject. Date: 18-Jun-2019 08:00:15 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-4-A
 Misc. Info.: 280-0082939-030
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 19-Jun-2019 11:10:34 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0312

First Level Reviewer: fiedlerh Date: 18-Jun-2019 11:45:01

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1815	90.73

Eurofins TestAmerica, Denver

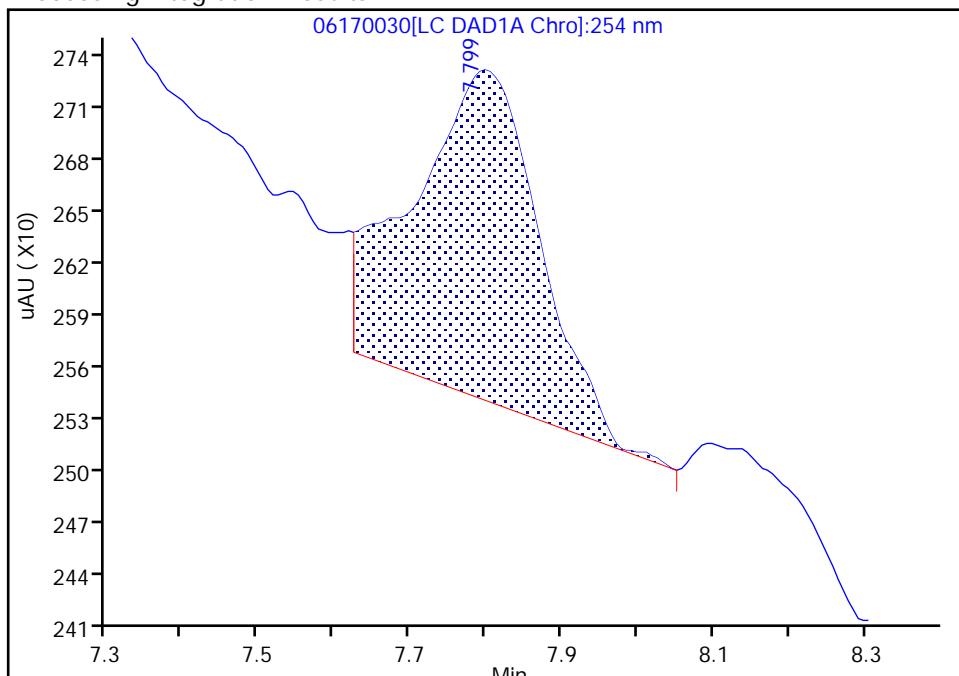
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170030.D
 Injection Date: 18-Jun-2019 08:00:15 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-4-A Lab Sample ID: 280-124912-4
 Client ID: G0102-19A
 Operator ID: HKF ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 100.0 ul Dil. 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

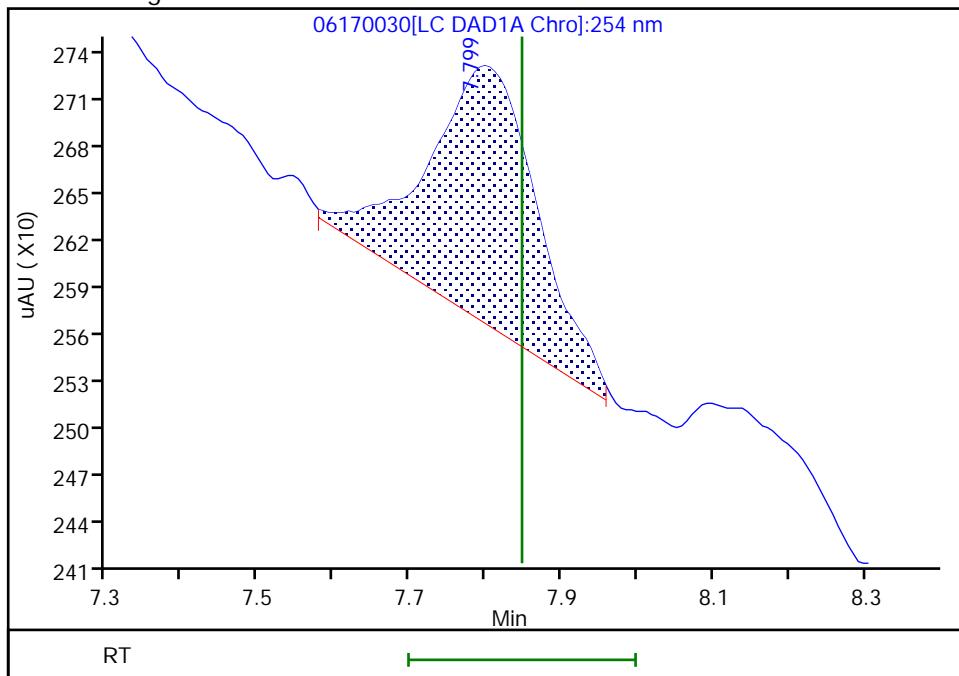
RT: 7.80
 Area: 2127
 Amount: 0.007892
 Amount Units: ug/ml

Processing Integration Results



RT: 7.80
 Area: 1615
 Amount: 0.005992
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 18-Jun-2019 11:44:59

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0102-19A RE Lab Sample ID: 280-124912-4 RE
Matrix: Water Lab File ID: 07110052.D
Analysis Method: 8330A Date Collected: 06/05/2019 11:25
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 483.4 (mL) Date Analyzed: 07/12/2019 03:28
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.21	U H	0.41	0.21	0.088
5755-27-1	MNX	0.41	U H	2.1	0.41	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	142	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110052.D
 Lims ID: 280-124912-B-4-A
 Client ID: G0102-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 03:28:47 ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-4-A
 Misc. Info.: 280-0083617-052
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:02:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.539			ND		
2 TNX	1	6.598			ND		U
3 HMX	1	6.692			ND		
4 2,4-diamino-6-nitrotoluene	1	6.719			ND		
5 DNX	1	6.924			ND		
6 MNX	1	7.378			ND		
7 RDX	1	7.786	7.799	-0.013	13056	0.1175	M
8 2,4,6-Trinitrophenol	1	8.146	8.199	-0.053	5096	0.0562	M
\$ 9 1,2-Dinitrobenzene	1	8.740	8.759	-0.019	39619	0.2844	M
10 1,3,5-Trinitrobenzene	1	8.919			ND		
11 1,3-Dinitrobenzene	1	9.578			ND		
12 Nitrobenzene	1	9.965			ND		
13 3,5-Dinitroaniline	1	10.206			ND		
14 Tetryl	1	10.285			ND		
15 Nitroglycerin	2	10.792			ND		
16 2,4,6-Trinitrotoluene	1	11.258			ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738			ND		
19 2,6-Dinitrotoluene	1	11.878			ND		
20 2,4-Dinitrotoluene	1	12.078			ND		
21 o-Nitrotoluene	1	12.925			ND		
22 p-Nitrotoluene	1	13.372			ND		
23 m-Nitrotoluene	1	13.978			ND		U
24 PETN	2	15.098			ND		
25 Ammonium Picrate	1	0.000			ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:43

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110052.D

Injection Date: 12-Jul-2019 03:28:47

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-B-4-A

Lab Sample ID: 280-124912-4

Worklist Smp#: 52

Client ID: G0102-19A

Dil. Factor: 1.0000

ALS Bottle#: 52

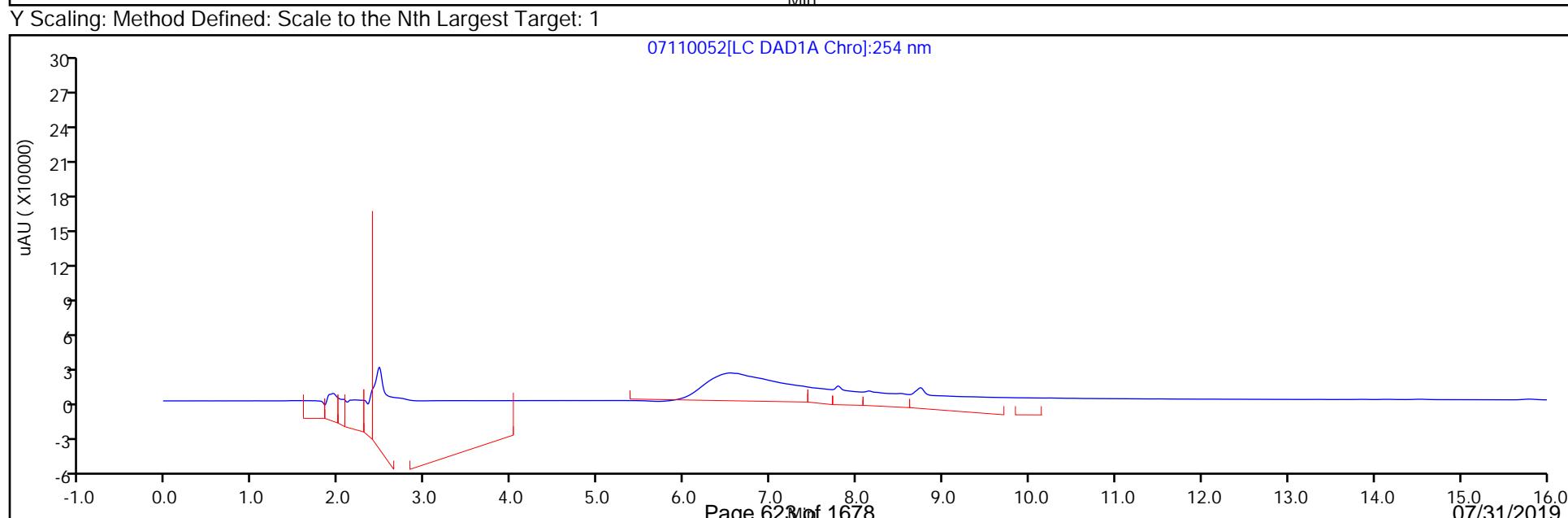
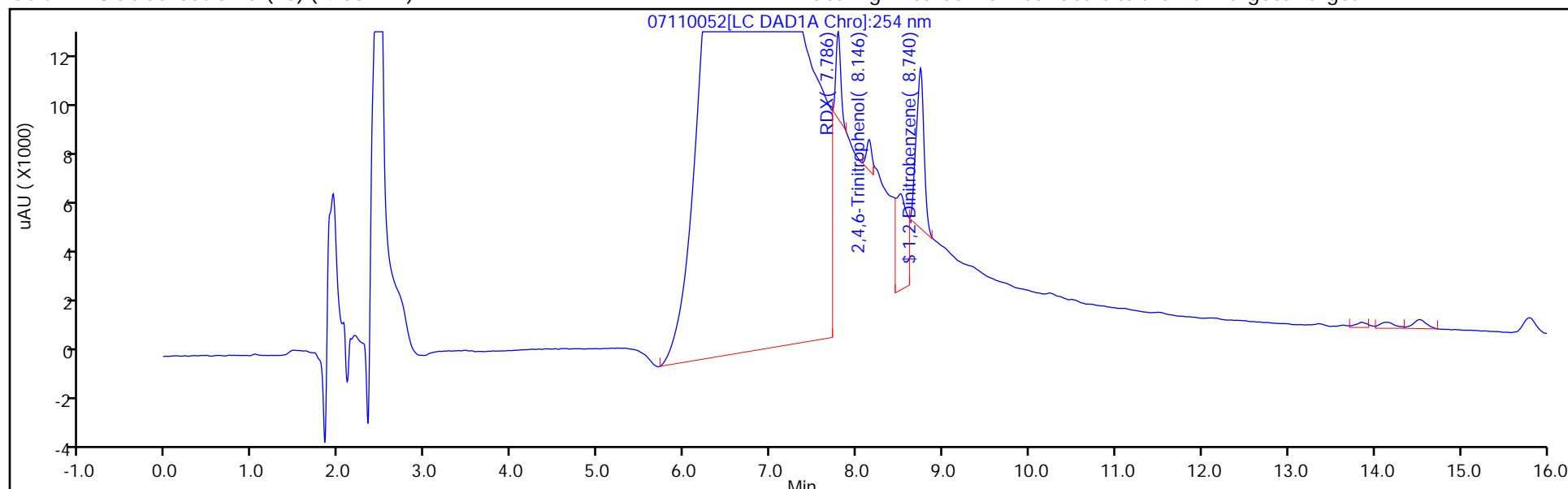
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110052.D
 Lims ID: 280-124912-B-4-A
 Client ID: G0102-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 03:28:47 ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-4-A
 Misc. Info.: 280-0083617-052
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:02:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.2844	142.18

Eurofins TestAmerica, Denver

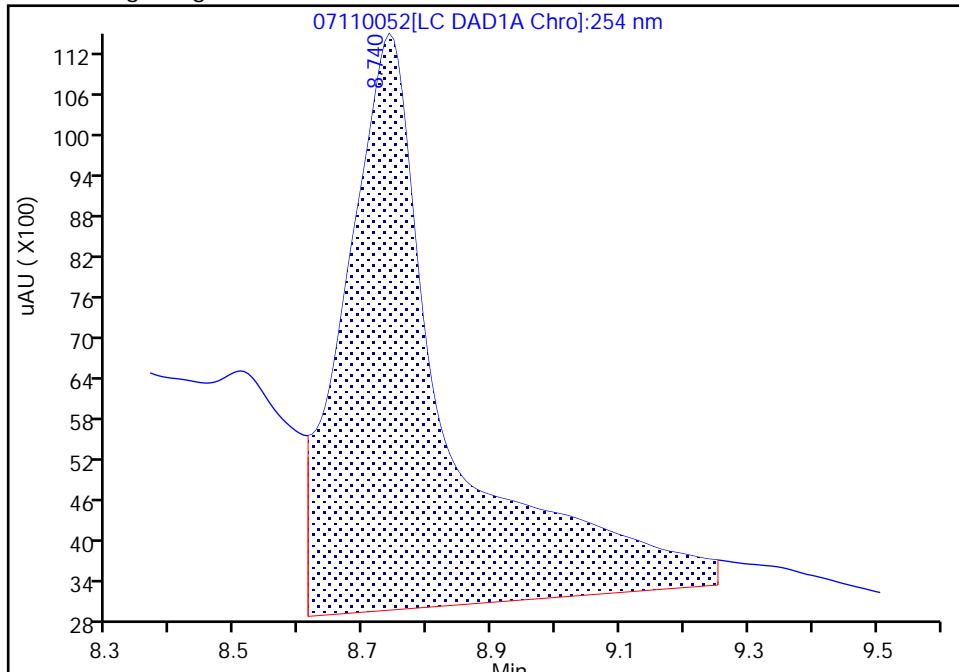
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110052.D
 Injection Date: 12-Jul-2019 03:28:47 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-4-A Lab Sample ID: 280-124912-4
 Client ID: G0102-19A
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 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

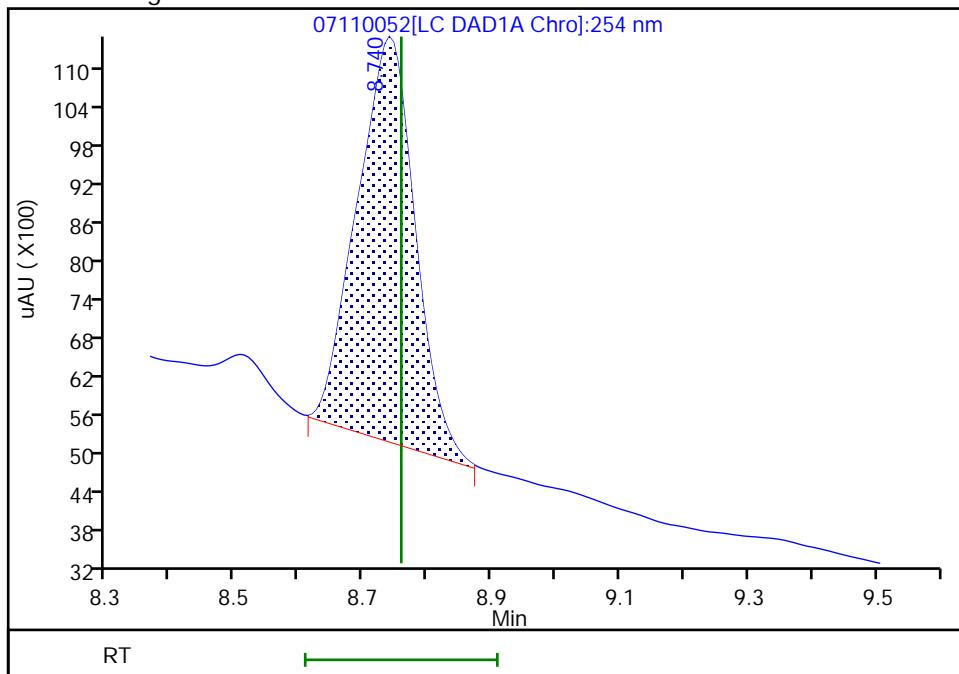
Processing Integration Results

RT: 8.74
 Area: 95358
 Amount: 0.684411
 Amount Units: ug/mL



Manual Integration Results

RT: 8.74
 Area: 39619
 Amount: 0.284357
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:01:44

Audit Action: Manually Integrated

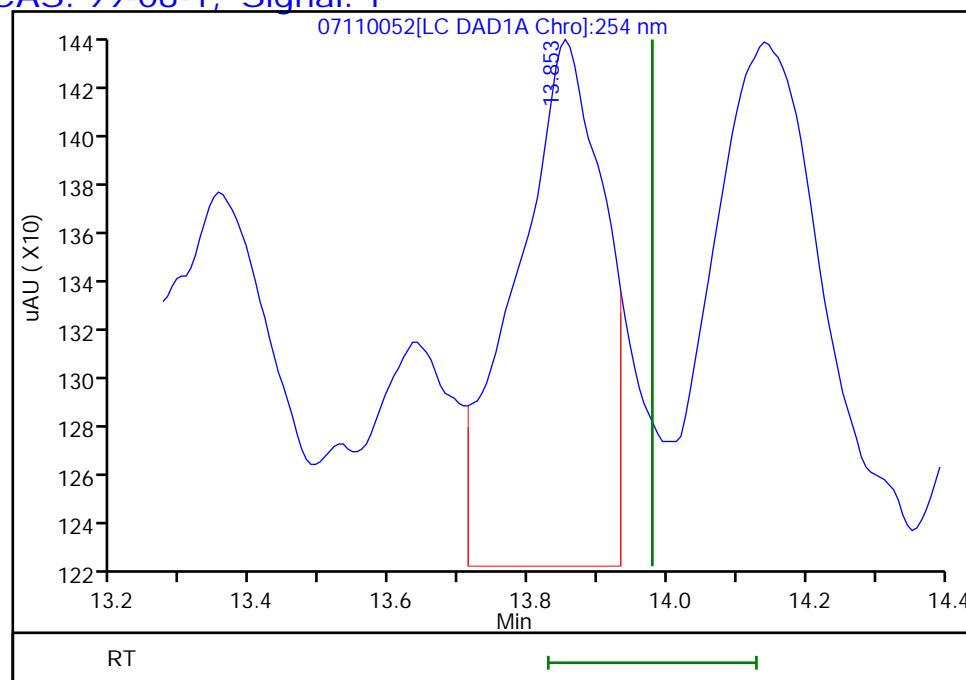
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110052.D
Injection Date: 12-Jul-2019 03:28:47 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-4-A Lab Sample ID: 280-124912-4
Client ID: G0102-19A
Operator ID: hkf 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

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.85
Response: 1799
Amount: 0.012396



Reviewer: fiedlerh, 12-Jul-2019 09:02:00

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

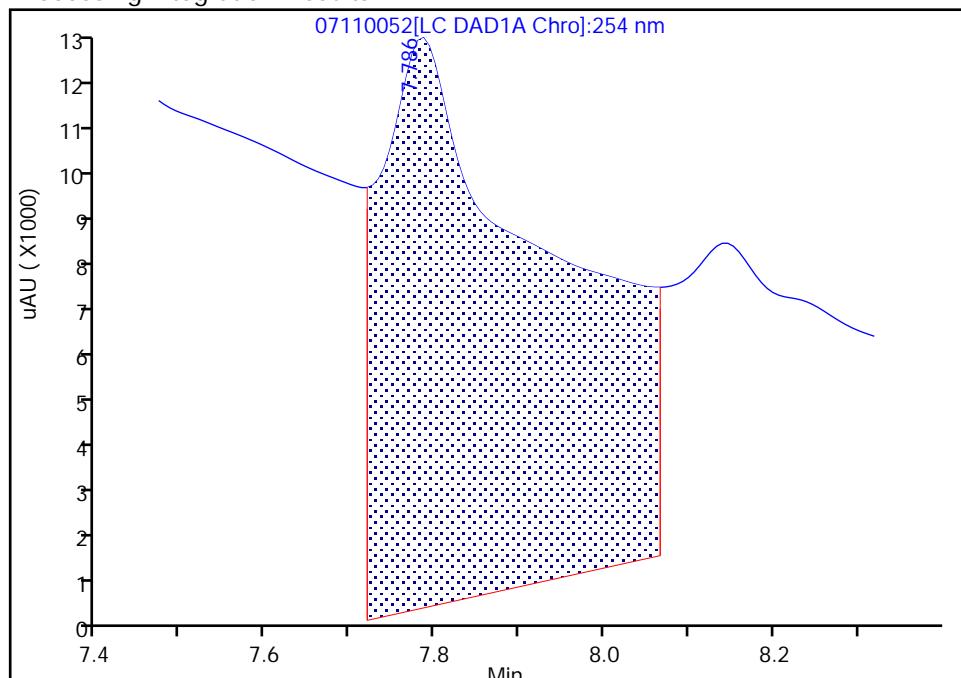
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110052.D
 Injection Date: 12-Jul-2019 03:28:47 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-4-A Lab Sample ID: 280-124912-4
 Client ID: G0102-19A
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 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

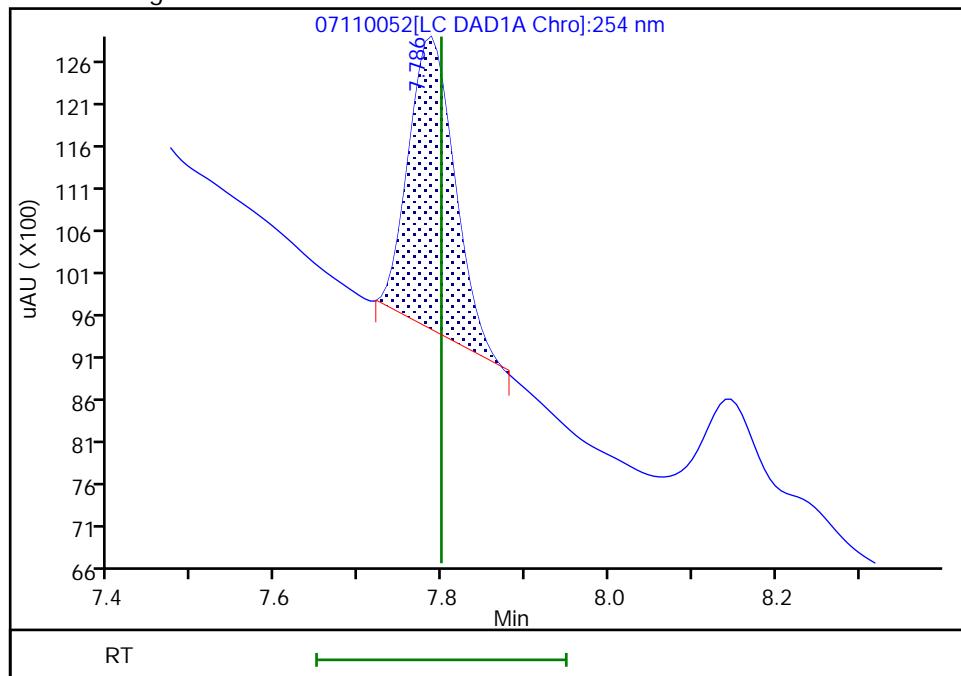
RT: 7.79
 Area: 163341
 Amount: 1.469946
 Amount Units: ug/mL

Processing Integration Results



RT: 7.79
 Area: 13056
 Amount: 0.117494
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:01:58

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ007-19A Lab Sample ID: 280-124912-5
Matrix: Water Lab File ID: 06140050.D
Analysis Method: 8330A Date Collected: 06/05/2019 10:15
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 470.6 (mL) Date Analyzed: 06/15/2019 10:13
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.42	U	1.1	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.094
118-96-7	2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.089
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.069
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	U	0.21	0.13	0.054
88-72-2	2-Nitrotoluene	0.21	U Q J1	0.42	0.21	0.091
99-08-1	3-Nitrotoluene	0.42	U J1	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.21	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	1.1	0.42	0.21
2691-41-0	HMX	0.21	U	0.42	0.21	0.093
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.42	0.21	0.097
121-82-4	RDX	0.42	U	0.42	0.42	0.17
479-45-8	Tetryl	0.21	U	0.25	0.21	0.084

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140050.D
 Lims ID: 280-124912-A-5-A
 Client ID: PZ007-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 10:13:52 ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-5-A
 Misc. Info.: 280-0082867-050
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:16:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.500			ND		U
2 TNX	1	6.566			ND		
3 HMX	1	6.643			ND		
4 2,4-diamino-6-nitrotoluene	1	6.687			ND		
5 DNX	1	6.893			ND		
6 MNX	1	7.359			ND		
7 RDX	1	7.763			ND		
8 2,4,6-Trinitrophenol	1	8.196			ND		U
\$ 9 1,2-Dinitrobenzene	1	8.740	8.743	-0.003	23722	0.1823	M
10 1,3,5-Trinitrobenzene	1	8.896			ND		
11 1,3-Dinitrobenzene	1	9.563			ND		
12 Nitrobenzene	1	9.949			ND		
13 3,5-Dinitroaniline	1	10.213			ND		
14 Tetryl	1	10.276			ND		
15 Nitroglycerin	2	10.776			ND		
16 2,4,6-Trinitrotoluene	1	11.229			ND		
17 4-Amino-2,6-dinitrotoluene	1	11.429			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.716			ND		
19 2,6-Dinitrotoluene	1	11.843			ND		
20 2,4-Dinitrotoluene	1	12.043			ND		
21 o-Nitrotoluene	1	12.883			ND		
22 p-Nitrotoluene	1	13.323			ND		
23 m-Nitrotoluene	1	13.923			ND		
24 PETN	2	15.016			ND		
25 Ammonium Picrate	1	0.000			ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 17-Jun-2019 10:45:36

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190614-82867.b\\06140050.D

Injection Date: 15-Jun-2019 10:13:52

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-5-A

Lab Sample ID: 280-124912-5

Worklist Smp#: 50

Client ID: PZ007-19A

Dil. Factor: 1.0000

ALS Bottle#: 50

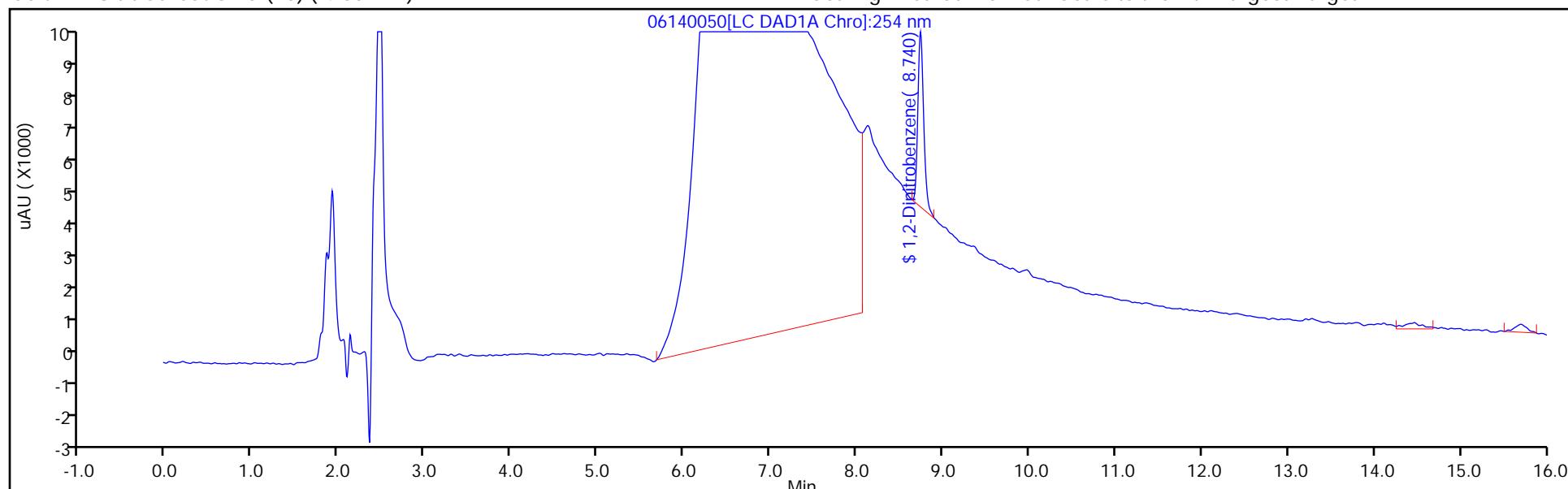
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

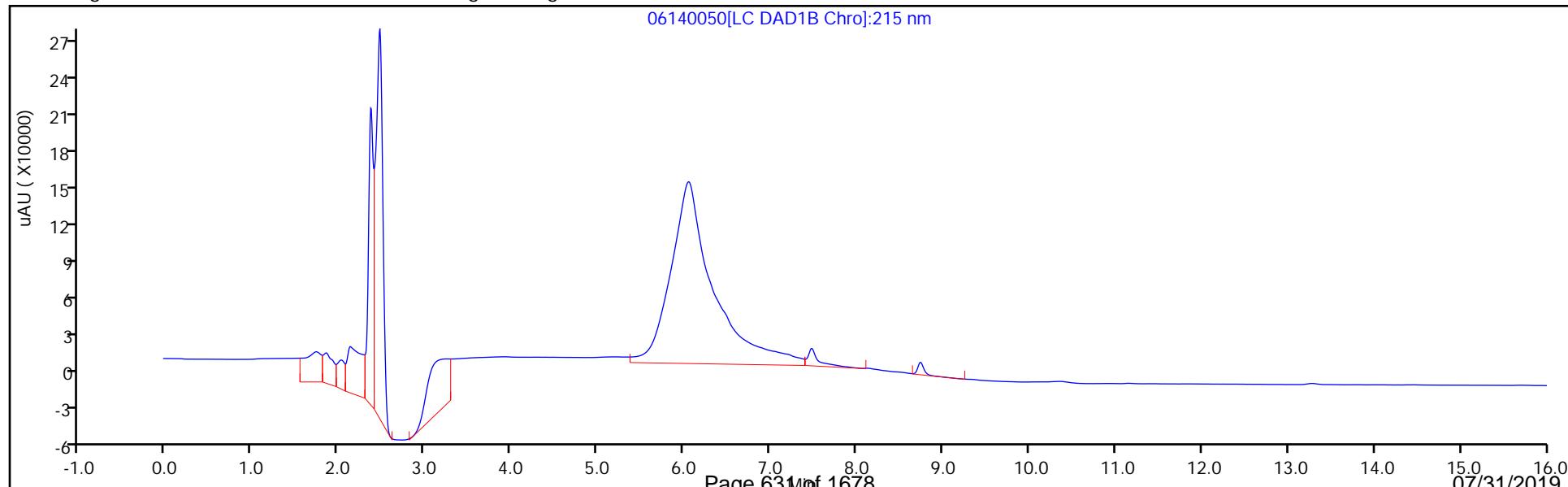
Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140050.D
 Lims ID: 280-124912-A-5-A
 Client ID: PZ007-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 10:13:52 ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-5-A
 Misc. Info.: 280-0082867-050
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:16:12

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1823	91.16

Eurofins TestAmerica, Denver

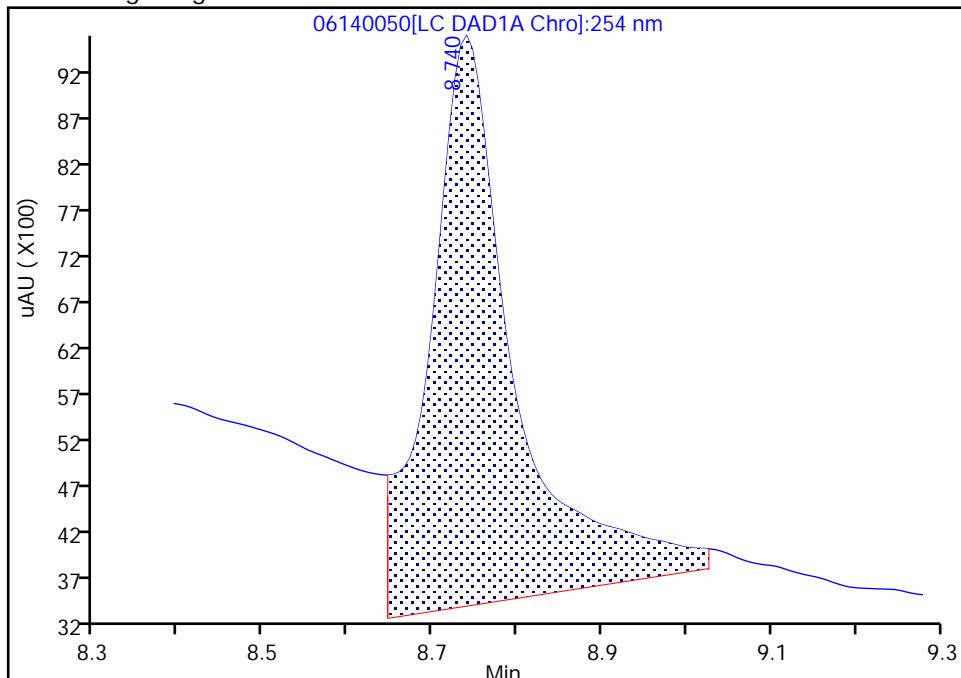
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140050.D
 Injection Date: 15-Jun-2019 10:13:52 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-A Lab Sample ID: 280-124912-5
 Client ID: PZ007-19A
 Operator ID: hkf ALS Bottle#: 50 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 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

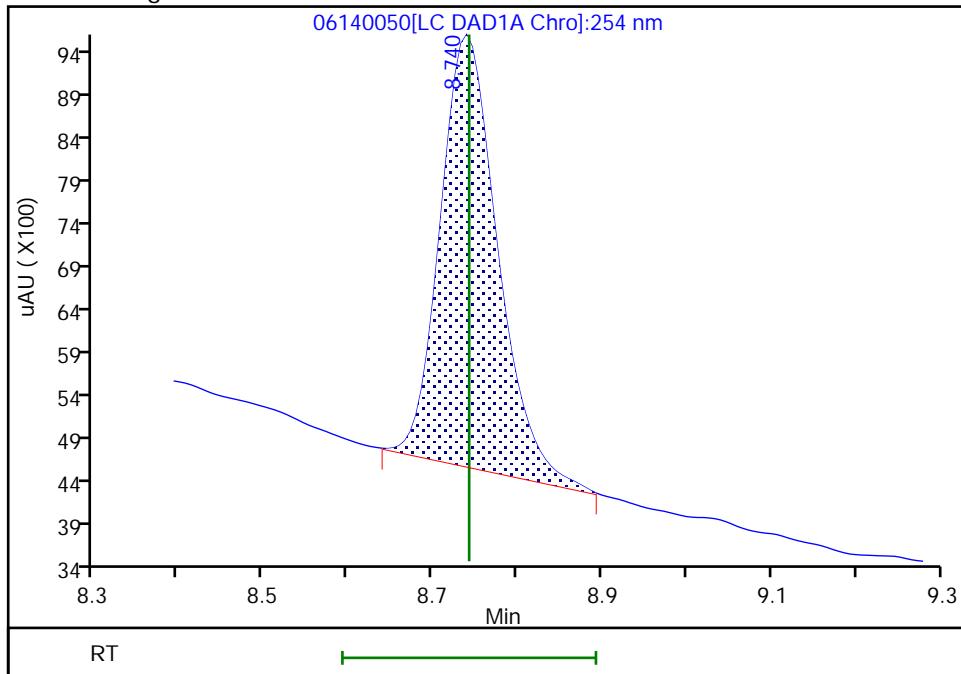
Processing Integration Results

RT: 8.74
 Area: 43561
 Amount: 0.334800
 Amount Units: ug/mL



Manual Integration Results

RT: 8.74
 Area: 23722
 Amount: 0.182322
 Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:16:11

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ007-19A RE Lab Sample ID: 280-124912-5 RE
Matrix: Water Lab File ID: 07110058.D
Analysis Method: 8330A Date Collected: 06/05/2019 10:15
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 452.2 (mL) Date Analyzed: 07/12/2019 05:46
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.22	U H	0.44	0.22	0.095
5755-27-1	MNX	0.44	U H	2.2	0.44	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110058.D
 Lims ID: 280-124912-B-5-A
 Client ID: PZ007-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 05:46:34 ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-5-A
 Misc. Info.: 280-0083617-058
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:11:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.539			ND		
2 TNX	1	6.598			ND		U
3 HMX	1	6.692			ND		
4 2,4-diamino-6-nitrotoluene	1	6.719			ND		
5 DNX	1	6.924			ND		
6 MNX	1	7.378			ND		
7 RDX	1	7.799			ND		
8 2,4,6-Trinitrophenol	1	8.199			ND		U
\$ 9 1,2-Dinitrobenzene	1	8.761	8.759	0.002	24934	0.1790	M
10 1,3,5-Trinitrobenzene	1	8.919			ND		
11 1,3-Dinitrobenzene	1	9.578			ND		
12 Nitrobenzene	1	9.965			ND		
13 3,5-Dinitroaniline	1	10.206			ND		
14 Tetryl	1	10.285			ND		
15 Nitroglycerin	2	10.792			ND		
16 2,4,6-Trinitrotoluene	1	11.258			ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738			ND		
19 2,6-Dinitrotoluene	1	11.878			ND		
20 2,4-Dinitrotoluene	1	12.078			ND		
21 o-Nitrotoluene	1	12.925			ND		
22 p-Nitrotoluene	1	13.372			ND		MU
23 m-Nitrotoluene	1	13.978			ND		U
24 PETN	2	15.098			ND		
25 Ammonium Picrate	1	0.000			ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:52

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110058.D

Injection Date: 12-Jul-2019 05:46:34

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-B-5-A

Lab Sample ID: 280-124912-5

Worklist Smp#: 58

Client ID: PZ007-19A

Dil. Factor: 1.0000

ALS Bottle#: 58

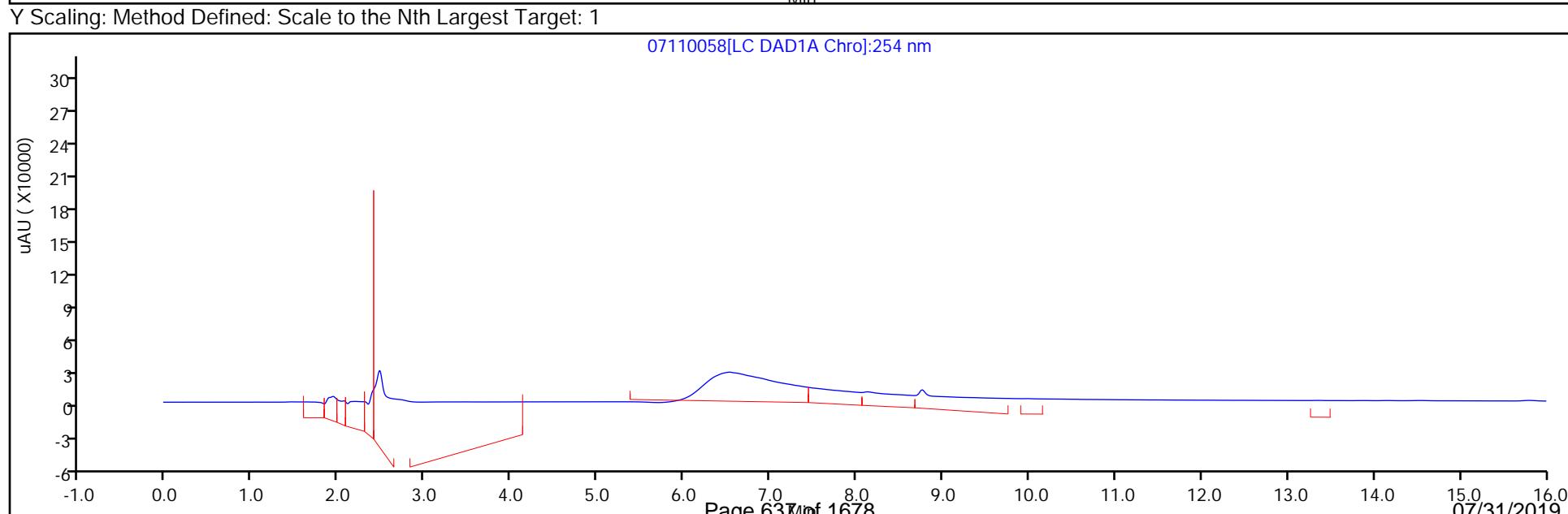
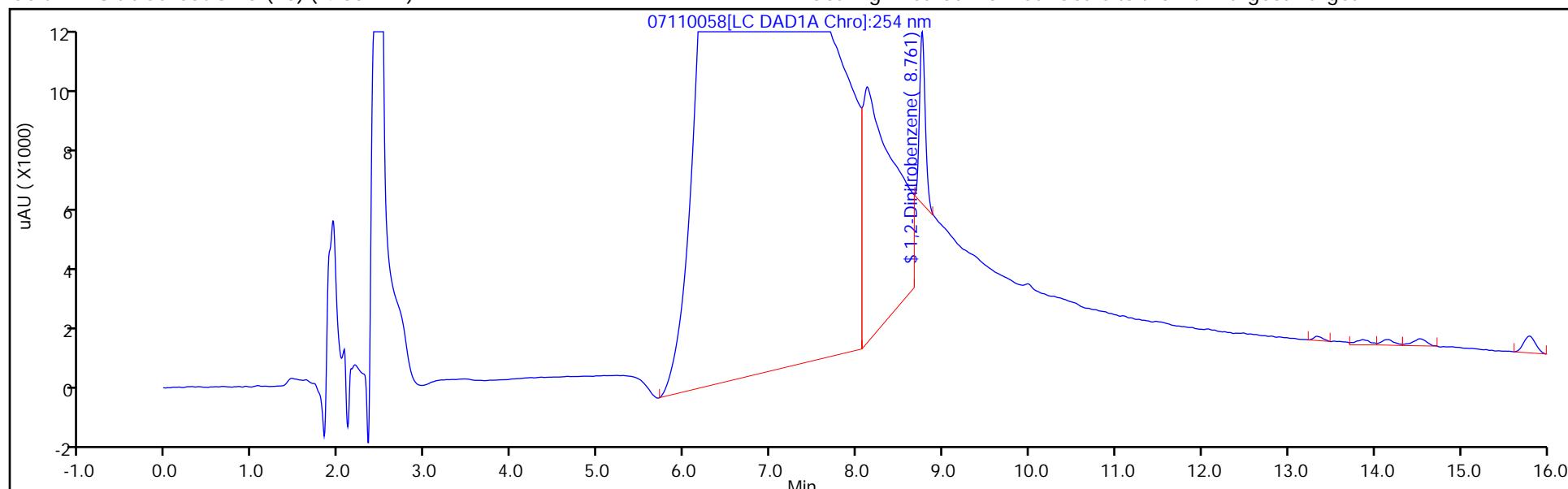
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110058.D
 Lims ID: 280-124912-B-5-A
 Client ID: PZ007-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 05:46:34 ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-5-A
 Misc. Info.: 280-0083617-058
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:11:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1790	89.48

Eurofins TestAmerica, Denver

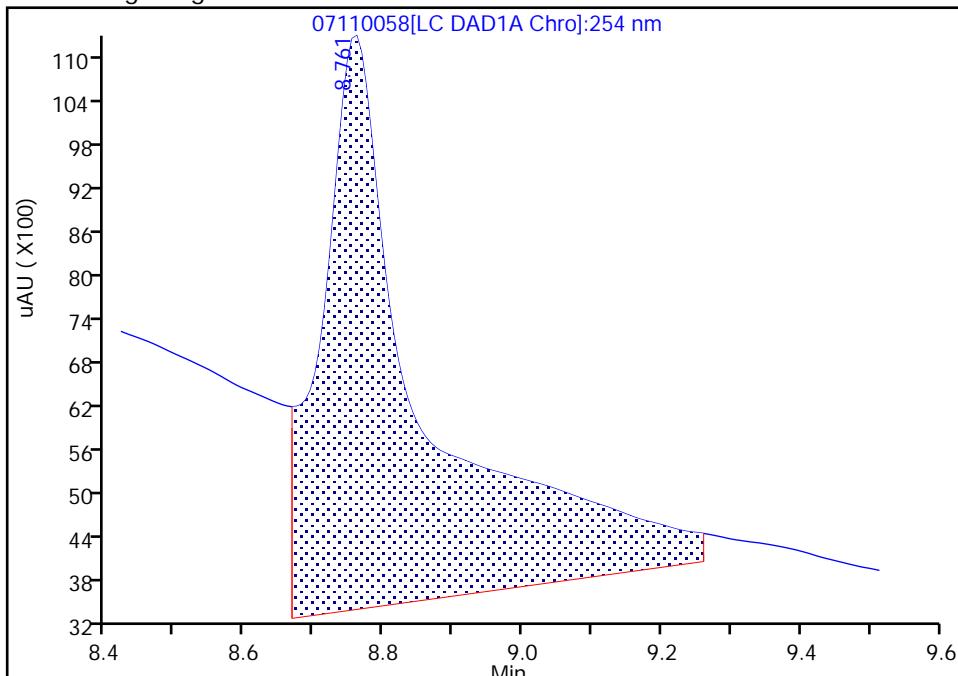
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110058.D
 Injection Date: 12-Jul-2019 05:46:34 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-5-A Lab Sample ID: 280-124912-5
 Client ID: PZ007-19A
 Operator ID: hkf ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

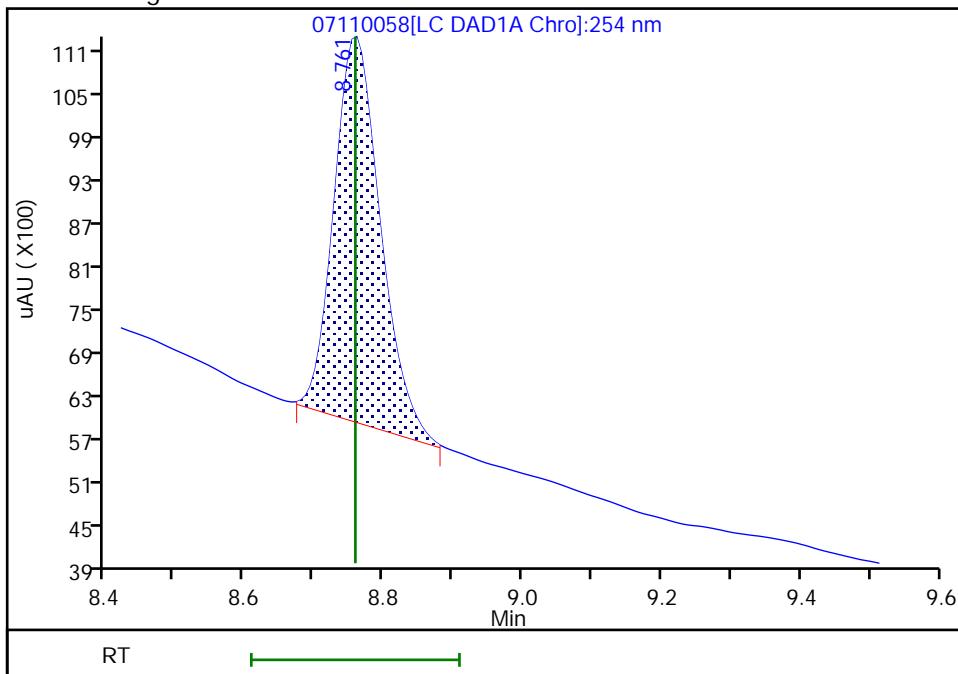
Processing Integration Results

RT: 8.76
 Area: 82529
 Amount: 0.592334
 Amount Units: ug/mL



Manual Integration Results

RT: 8.76
 Area: 24934
 Amount: 0.178958
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:11:45

Audit Action: Manually Integrated

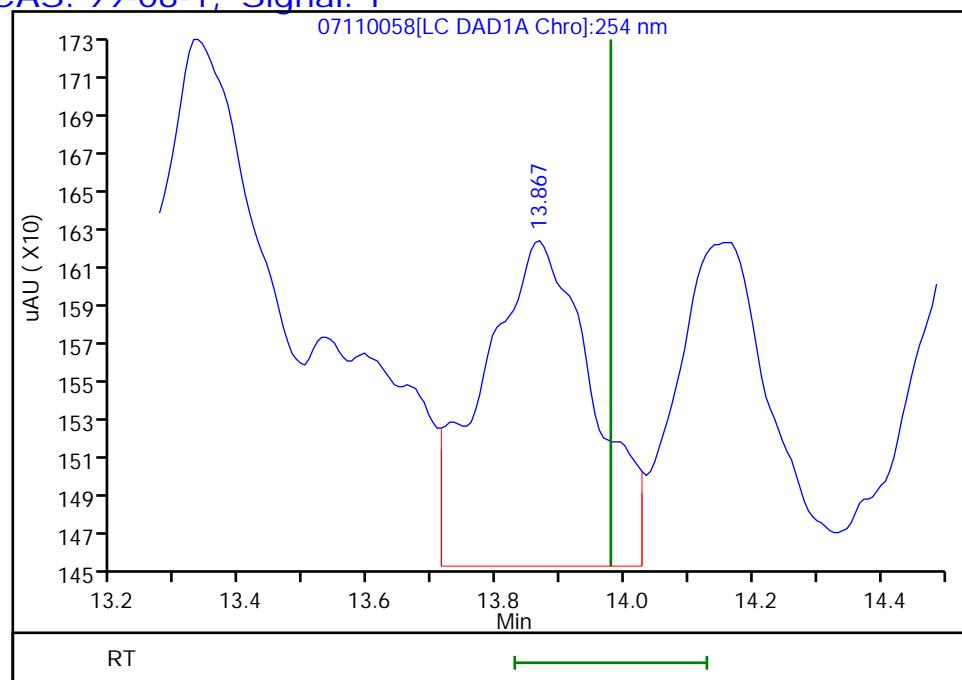
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110058.D
Injection Date: 12-Jul-2019 05:46:34 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-5-A Lab Sample ID: 280-124912-5
Client ID: PZ007-19A
Operator ID: hkf ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.87
Response: 1953
Amount: 0.013458



Reviewer: fiedlerh, 12-Jul-2019 09:11:56

Audit Action: Marked Compound Undetected

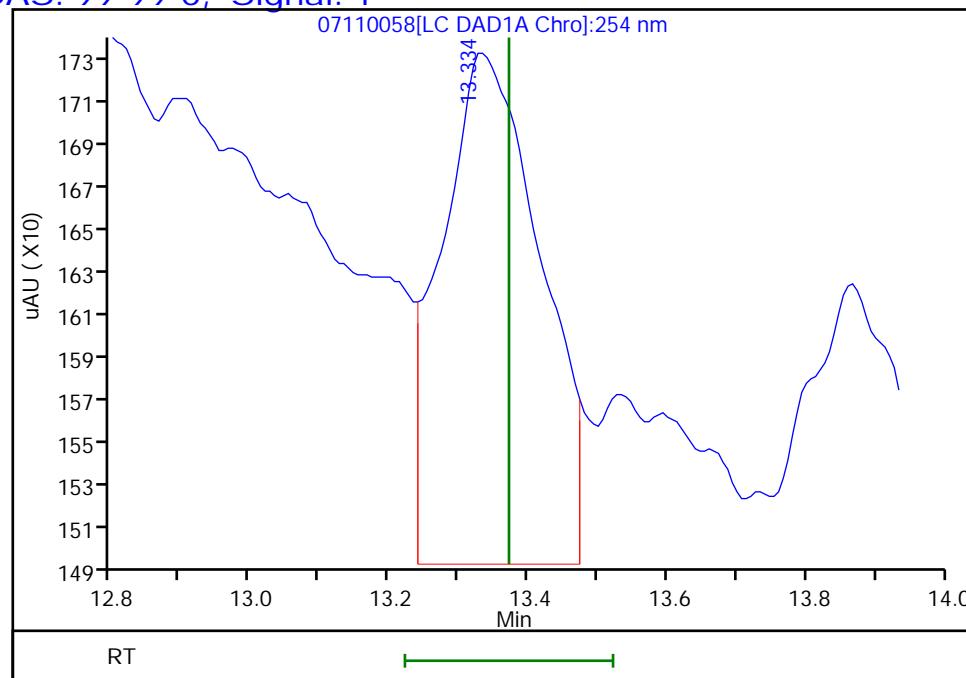
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110058.D
Injection Date: 12-Jul-2019 05:46:34 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-5-A Lab Sample ID: 280-124912-5
Client ID: PZ007-19A
Operator ID: hkf ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.33
Response: 2230
Amount: 0.020226



Reviewer: fiedlerh, 12-Jul-2019 09:11:56

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0049-19A Lab Sample ID: 280-124912-6
Matrix: Water Lab File ID: 06130058.D
Analysis Method: 8330A Date Collected: 06/04/2019 12:30
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 461.2 (mL) Date Analyzed: 06/14/2019 07:43
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.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.43	U	1.1	0.43	0.22
99-65-0	1,3-Dinitrobenzene	0.22	U	0.43	0.22	0.096
118-96-7	2,4,6-Trinitrotoluene	0.43	U	0.43	0.43	0.17
121-14-2	2,4-Dinitrotoluene	0.22	U	0.43	0.22	0.091
606-20-2	2,6-Dinitrotoluene	0.22	U	0.22	0.22	0.070
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	U	0.22	0.13	0.055
88-72-2	2-Nitrotoluene	0.22	U Q	0.43	0.22	0.093
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	0.22	0.13	0.063
99-99-0	4-Nitrotoluene	0.43	U Q	1.1	0.43	0.22
2691-41-0	HMX	0.22	U	0.43	0.22	0.095
5755-27-1	MNX	0.43	U	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U	0.43	0.22	0.099
121-82-4	RDX	0.43	U	0.43	0.43	0.17
479-45-8	Tetryl	0.22	U	0.26	0.22	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130058.D
 Lims ID: 280-124912-A-6-A
 Client ID: G0049-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 07:43:09 ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-6-A
 Misc. Info.: 280-0082810-058
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:59:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.645				ND	
6 MNX	1	7.359				ND	
7 RDX	1	7.758				ND	
\$ 9 1,2-Dinitrobenzene	1	8.737	8.738	-0.001	24020	0.1846	M
10 1,3,5-Trinitrobenzene	1	8.898				ND	
11 1,3-Dinitrobenzene	1	9.558				ND	
12 Nitrobenzene	1	9.945				ND	
14 Tetryl	1	10.265				ND	
16 2,4,6-Trinitrotoluene	1	11.218				ND	
17 4-Amino-2,6-dinitrotoluene	1	11.405				ND	
18 2-Amino-4,6-dinitrotoluene	1	11.698				ND	
19 2,6-Dinitrotoluene	1	11.832				ND	
20 2,4-Dinitrotoluene	1	12.032				ND	
21 o-Nitrotoluene	1	12.865				ND	
22 p-Nitrotoluene	1	13.305				ND	
23 m-Nitrotoluene	1	13.898				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-Jun-2019 10:04:13

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130058.D

Injection Date: 14-Jun-2019 07:43:09

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-6-A

Lab Sample ID: 280-124912-6

Worklist Smp#: 58

Client ID: G0049-19A

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

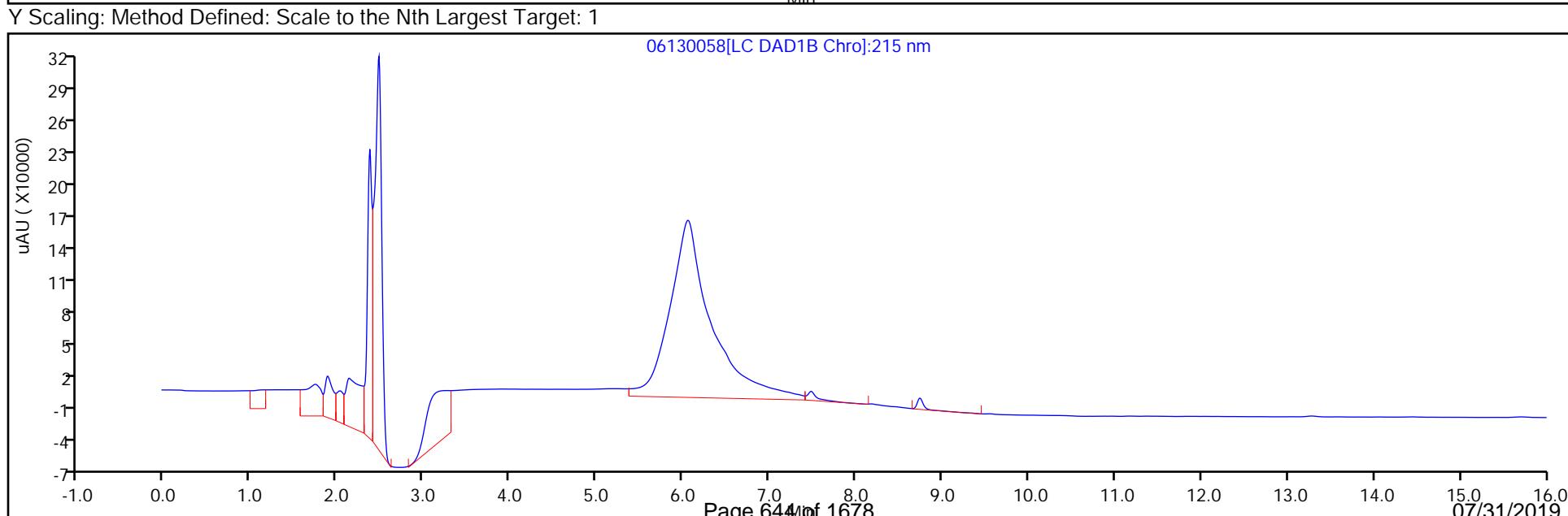
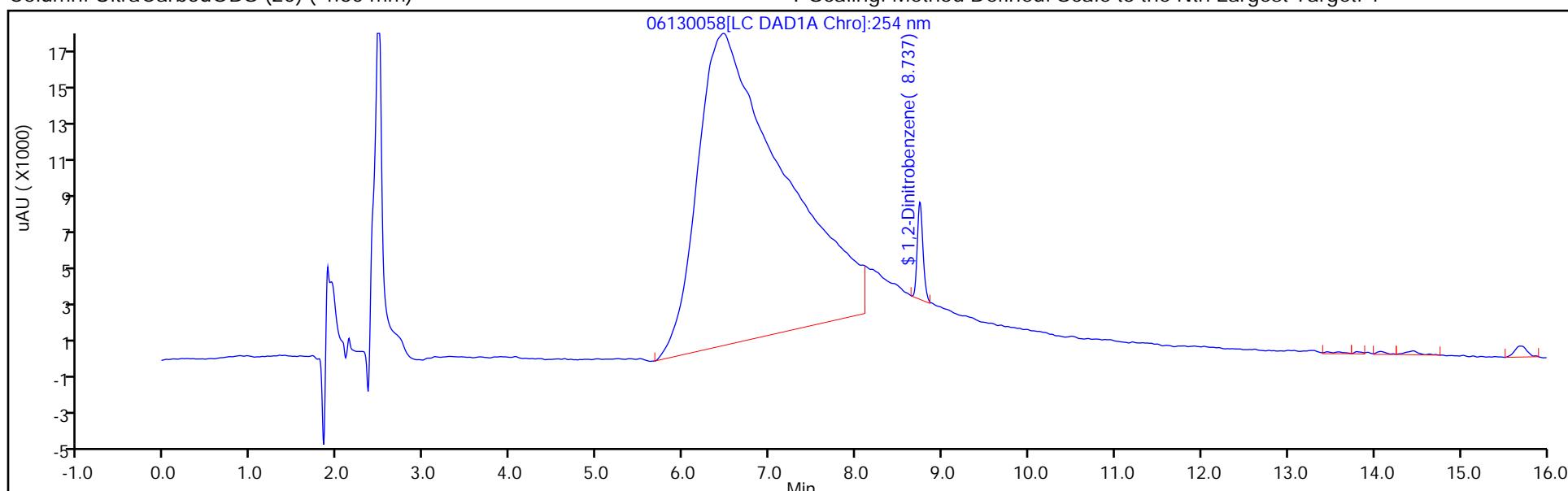
ALS Bottle#: 58

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130058.D
 Lims ID: 280-124912-A-6-A
 Client ID: G0049-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 07:43:09 ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-6-A
 Misc. Info.: 280-0082810-058
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:59:51

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1846	92.31

Eurofins TestAmerica, Denver

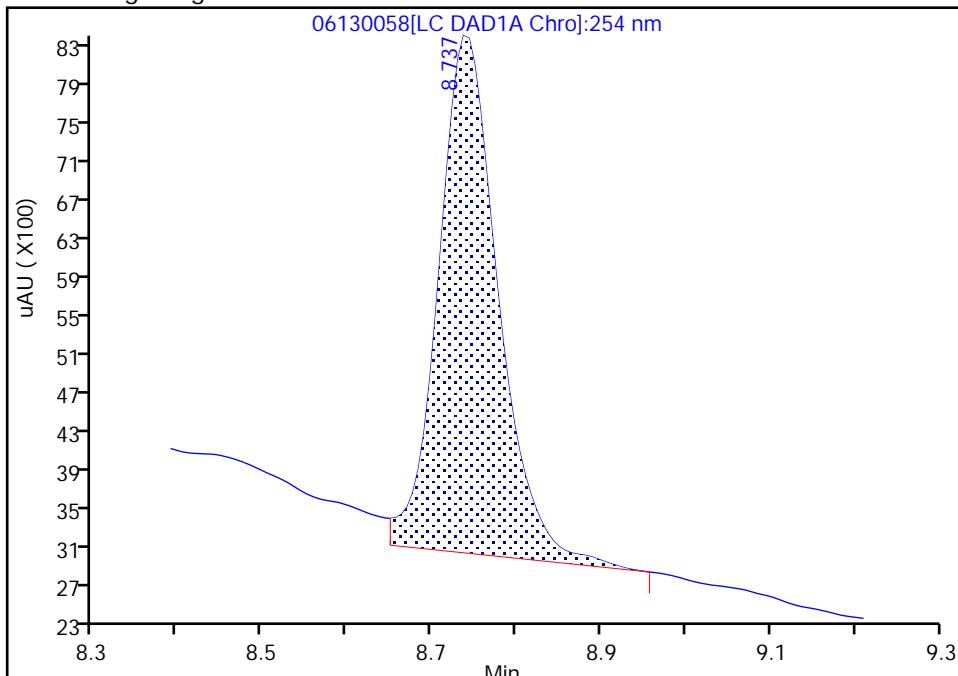
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130058.D
 Injection Date: 14-Jun-2019 07:43:09 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-6-A Lab Sample ID: 280-124912-6
 Client ID: G0049-19A
 Operator ID: hkf ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

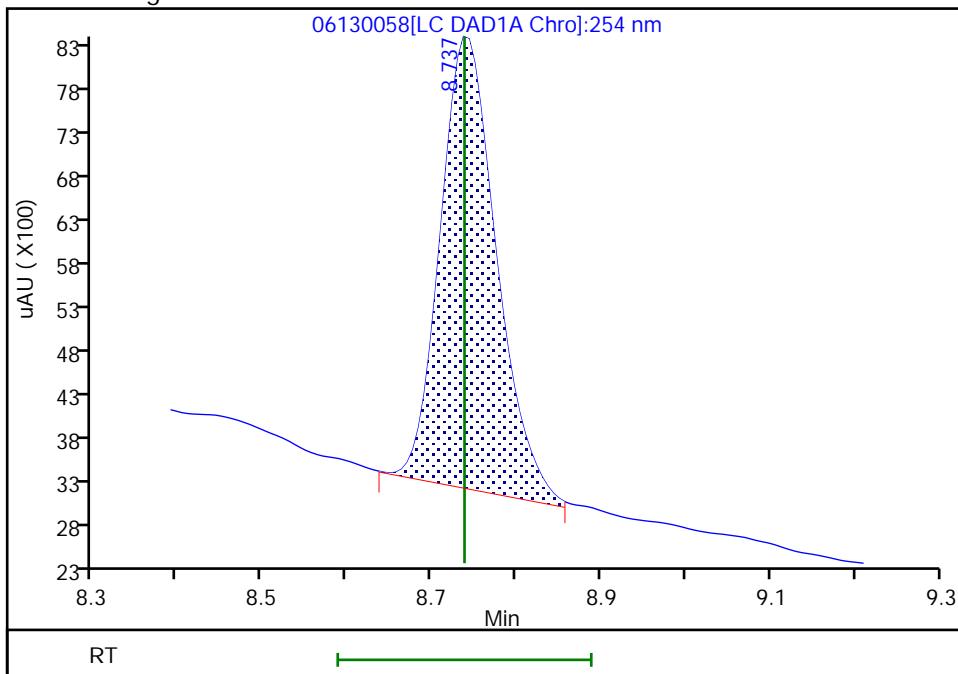
Processing Integration Results

RT: 8.74
 Area: 26421
 Amount: 0.203066
 Amount Units: ug/mL



Manual Integration Results

RT: 8.74
 Area: 24020
 Amount: 0.184612
 Amount Units: ug/mL



Reviewer: fiedlerh, 14-Jun-2019 09:59:31

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0049-19A RE Lab Sample ID: 280-124912-6 RE
Matrix: Water Lab File ID: 07110061.D
Analysis Method: 8330A Date Collected: 06/04/2019 12:30
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 431.6 (mL) Date Analyzed: 07/12/2019 06:55
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.23	U H	0.46	0.23	0.099
99-99-0	<i>4-Nitrotoluene</i>	0.46	U H	1.2	0.46	0.23
5755-27-1	MNX	0.46	U H	2.3	0.46	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110061.D
 Lims ID: 280-124912-B-6-A
 Client ID: G0049-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 06:55:26 ALS Bottle#: 61 Worklist Smp#: 61
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-6-A
 Misc. Info.: 280-0083617-061
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:13:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.692			ND		U
6 MNX	1	7.378			ND		
7 RDX	1	7.799			ND		
\$ 9 1,2-Dinitrobenzene	1	8.751	8.759	-0.008	25181	0.1807	M
10 1,3,5-Trinitrobenzene	1	8.919			ND		
11 1,3-Dinitrobenzene	1	9.578			ND		
12 Nitrobenzene	1	9.965			ND		
14 Tetryl	1	10.285			ND		
16 2,4,6-Trinitrotoluene	1	11.258			ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738			ND		
19 2,6-Dinitrotoluene	1	11.878			ND		
20 2,4-Dinitrotoluene	1	12.078			ND		
21 o-Nitrotoluene	1	12.925			ND		
22 p-Nitrotoluene	1	13.372			ND		
23 m-Nitrotoluene	1	13.978			ND		U

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:56

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110061.D

Injection Date: 12-Jul-2019 06:55:26

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-B-6-A

Lab Sample ID: 280-124912-6

Worklist Smp#: 61

Client ID: G0049-19A

Dil. Factor: 1.0000

ALS Bottle#: 61

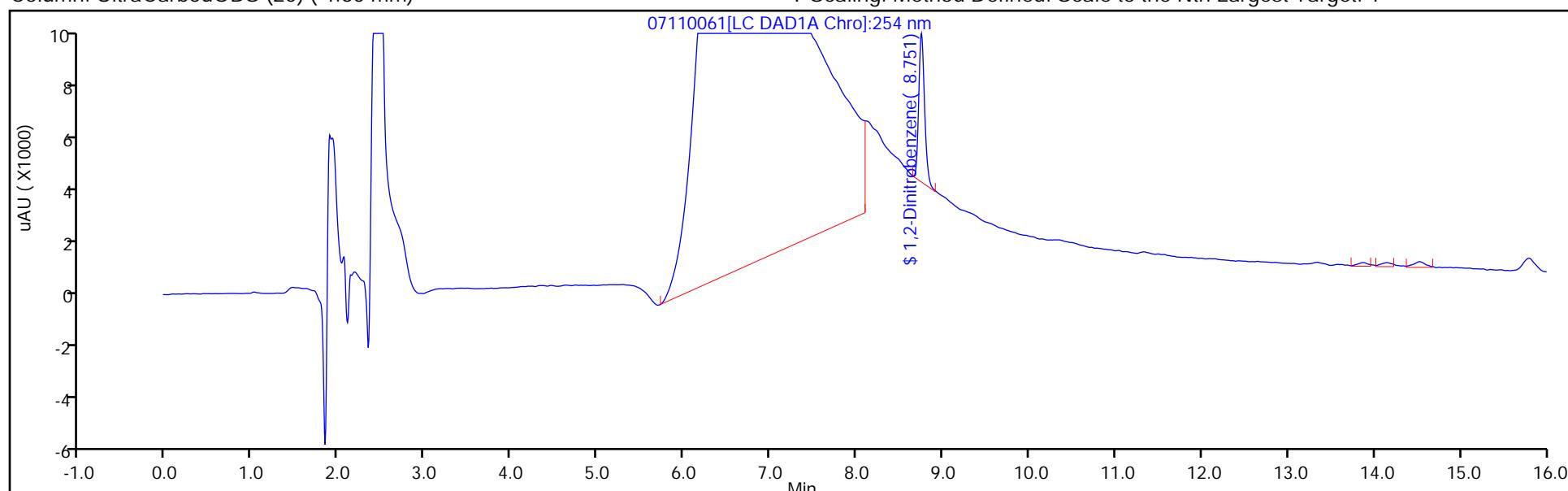
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

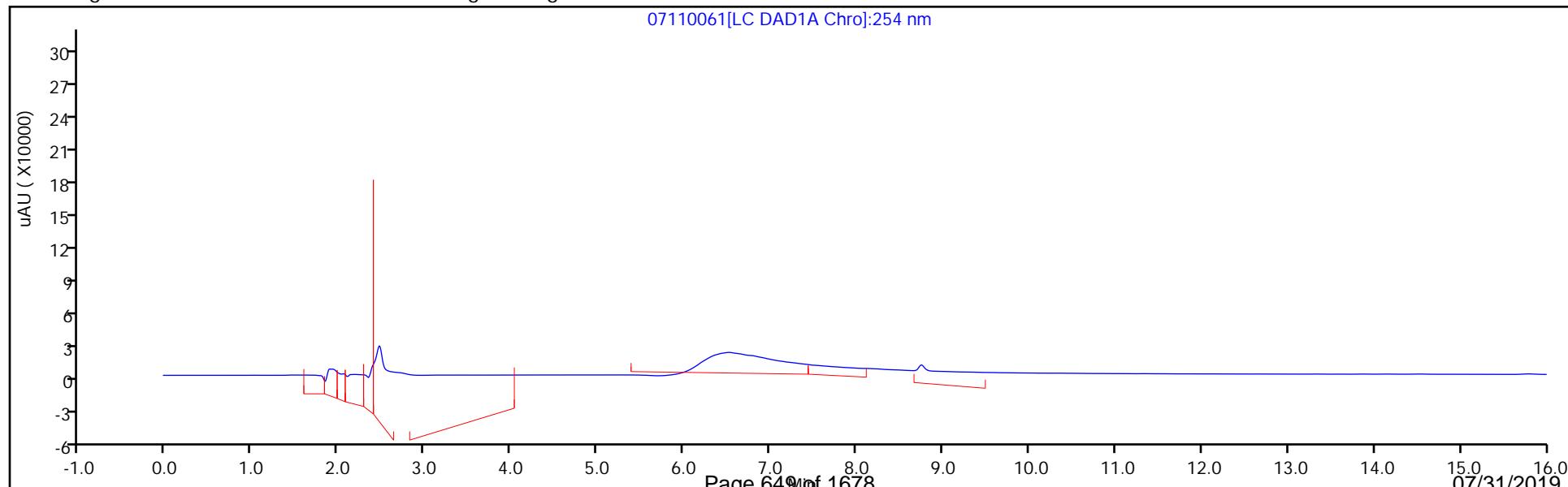
Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110061.D
 Lims ID: 280-124912-B-6-A
 Client ID: G0049-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 06:55:26 ALS Bottle#: 61 Worklist Smp#: 61
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-6-A
 Misc. Info.: 280-0083617-061
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:13:30

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1807	90.37

Eurofins TestAmerica, Denver

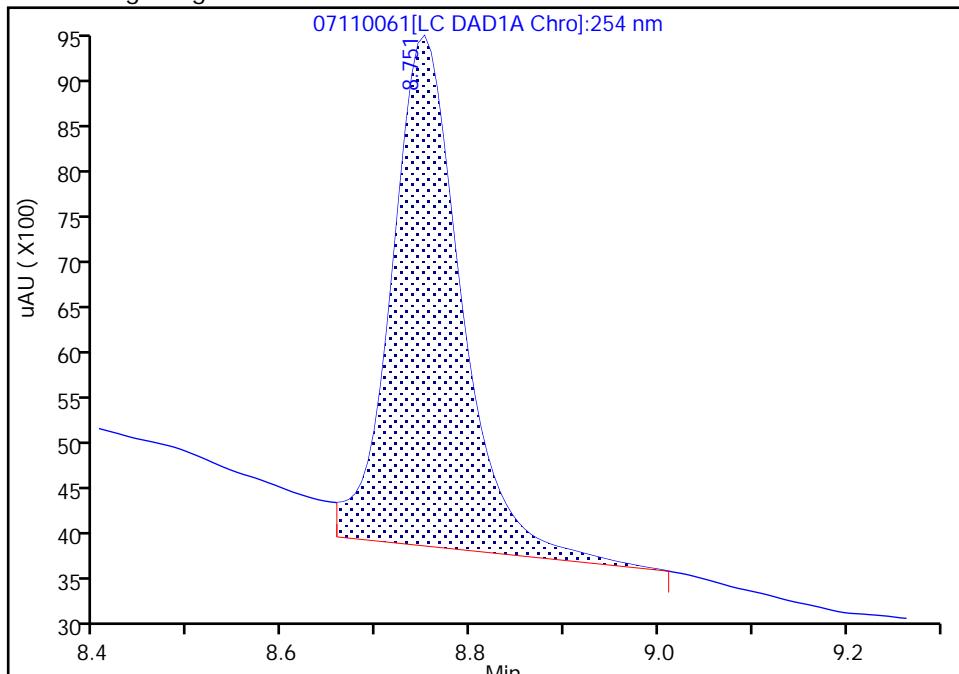
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110061.D
 Injection Date: 12-Jul-2019 06:55:26 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-6-A Lab Sample ID: 280-124912-6
 Client ID: G0049-19A
 Operator ID: hkf ALS Bottle#: 61 Worklist Smp#: 61
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

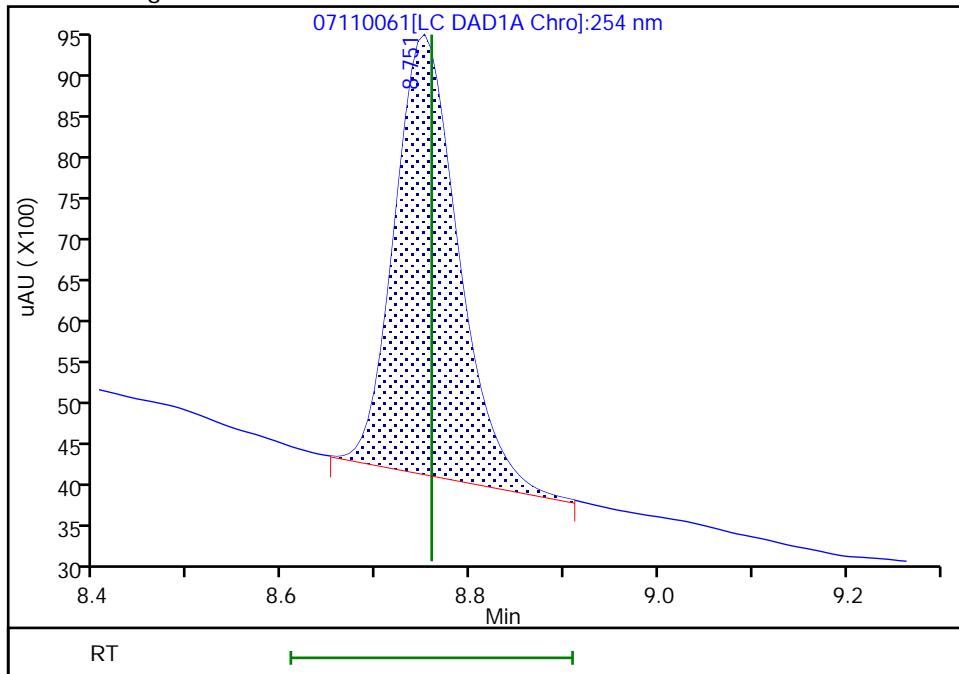
RT: 8.75
 Area: 28764
 Amount: 0.206447
 Amount Units: ug/mL

Processing Integration Results



RT: 8.75
 Area: 25181
 Amount: 0.180731
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:13:25

Audit Action: Manually Integrated

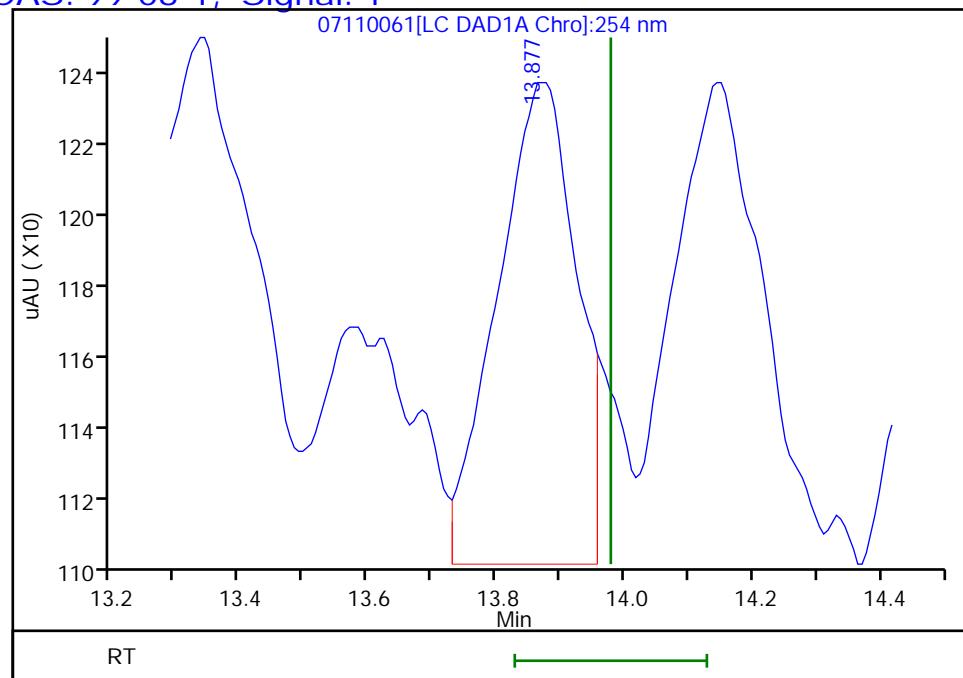
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110061.D
Injection Date: 12-Jul-2019 06:55:26 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-6-A Lab Sample ID: 280-124912-6
Client ID: G0049-19A
Operator ID: hkf ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.88
Response: 1094
Amount: 0.007538



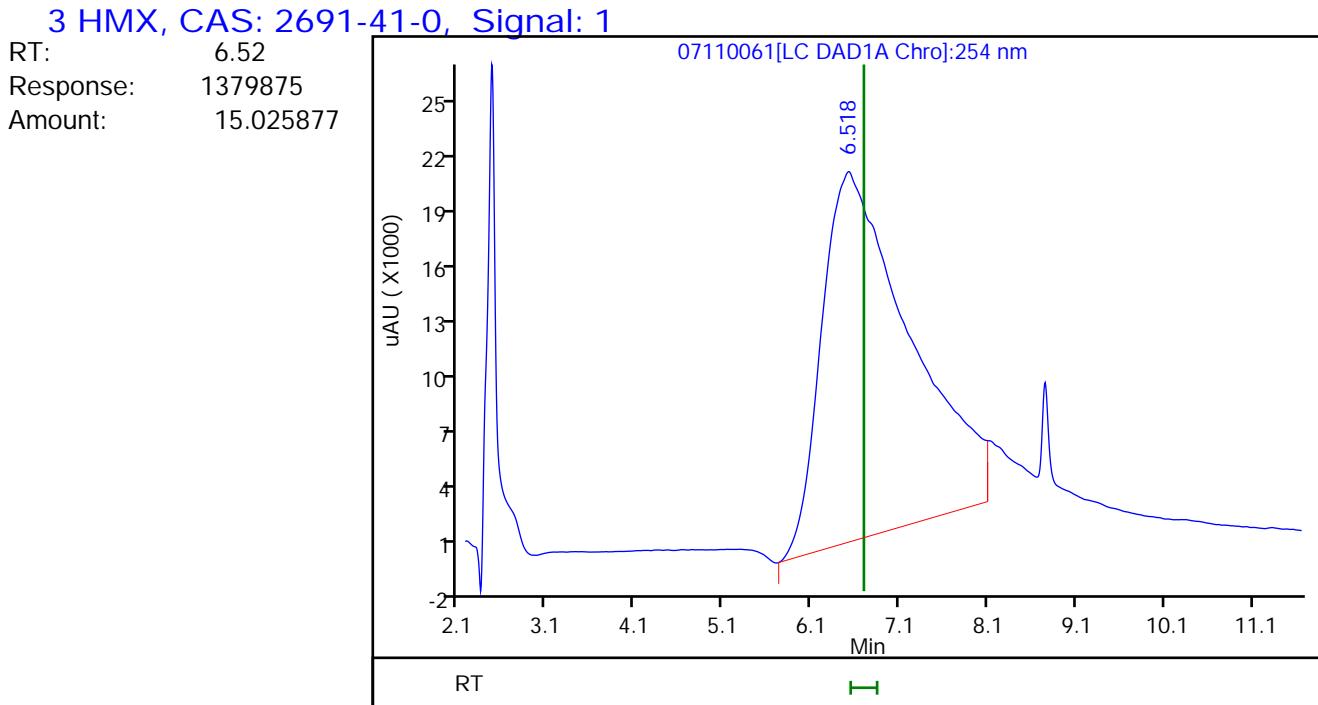
Reviewer: fiedlerh, 12-Jul-2019 09:13:30

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110061.D
Injection Date: 12-Jul-2019 06:55:26 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-6-A Lab Sample ID: 280-124912-6
Client ID: G0049-19A
Operator ID: hkf ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 12-Jul-2019 09:13:30

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.: 280-124912-1
SDG No.: _____
Client Sample ID: G0048-19A Lab Sample ID: 280-124912-7
Matrix: Water Lab File ID: 06130059.D
Analysis Method: 8330A Date Collected: 06/04/2019 13:40
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 470.9 (mL) Date Analyzed: 06/14/2019 08:07
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.42	U	1.1	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.094
118-96-7	2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.089
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	U	0.21	0.13	0.054
88-72-2	2-Nitrotoluene	0.21	U Q	0.42	0.21	0.091
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	0.21	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U Q	1.1	0.42	0.21
2691-41-0	HMX	0.21	U	0.42	0.21	0.093
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.42	0.21	0.097
121-82-4	RDX	0.42	U	0.42	0.42	0.17
479-45-8	Tetryl	0.21	U	0.25	0.21	0.084

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130059.D
 Lims ID: 280-124912-A-7-A
 Client ID: G0048-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 08:07:01 ALS Bottle#: 59 Worklist Smp#: 59
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-7-A
 Misc. Info.: 280-0082810-059
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 10:00:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.645				ND	
6 MNX	1	7.359				ND	
7 RDX	1	7.758				ND	
\$ 9 1,2-Dinitrobenzene	1	8.739	8.738	0.001	26648	0.2048	M
10 1,3,5-Trinitrobenzene	1	8.898				ND	
11 1,3-Dinitrobenzene	1	9.558				ND	
12 Nitrobenzene	1	9.945				ND	
14 Tetryl	1	10.265				ND	
16 2,4,6-Trinitrotoluene	1	11.218				ND	
17 4-Amino-2,6-dinitrotoluene	1	11.405				ND	
18 2-Amino-4,6-dinitrotoluene	1	11.698				ND	
19 2,6-Dinitrotoluene	1	11.832				ND	
20 2,4-Dinitrotoluene	1	12.032				ND	
21 o-Nitrotoluene	1	12.865				ND	
22 p-Nitrotoluene	1	13.305				ND	
23 m-Nitrotoluene	1	13.898				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-Jun-2019 10:04:15

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130059.D

Injection Date: 14-Jun-2019 08:07:01

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-7-A

Lab Sample ID: 280-124912-7

Worklist Smp#: 59

Client ID: G0048-19A

Dil. Factor: 1.0000

ALS Bottle#: 59

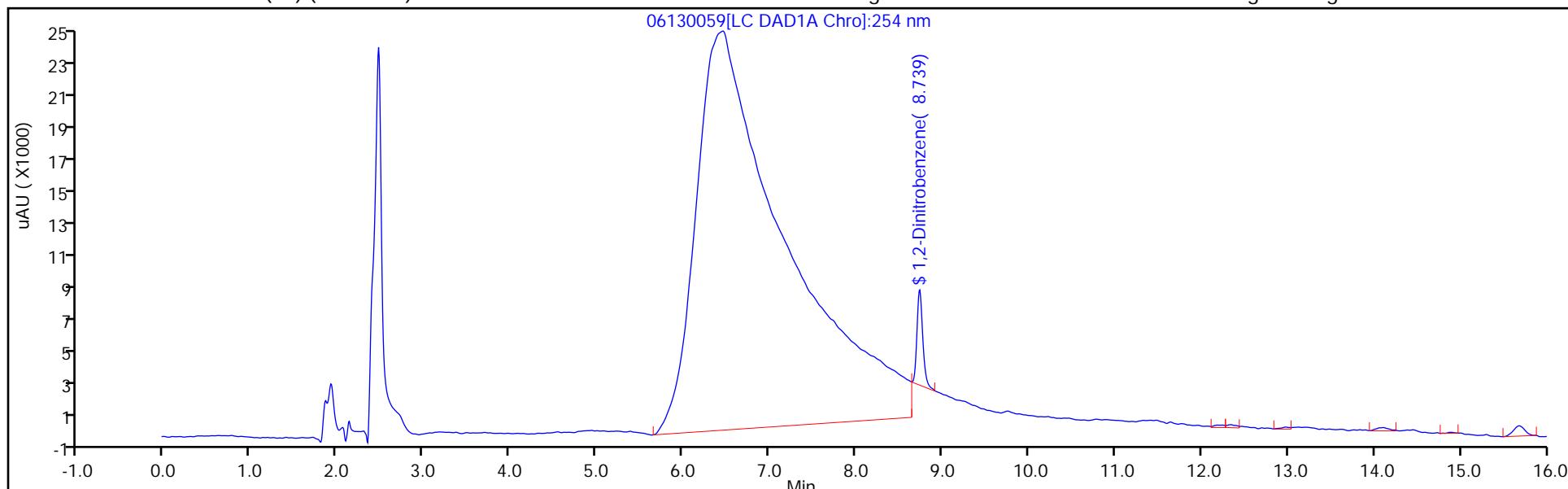
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

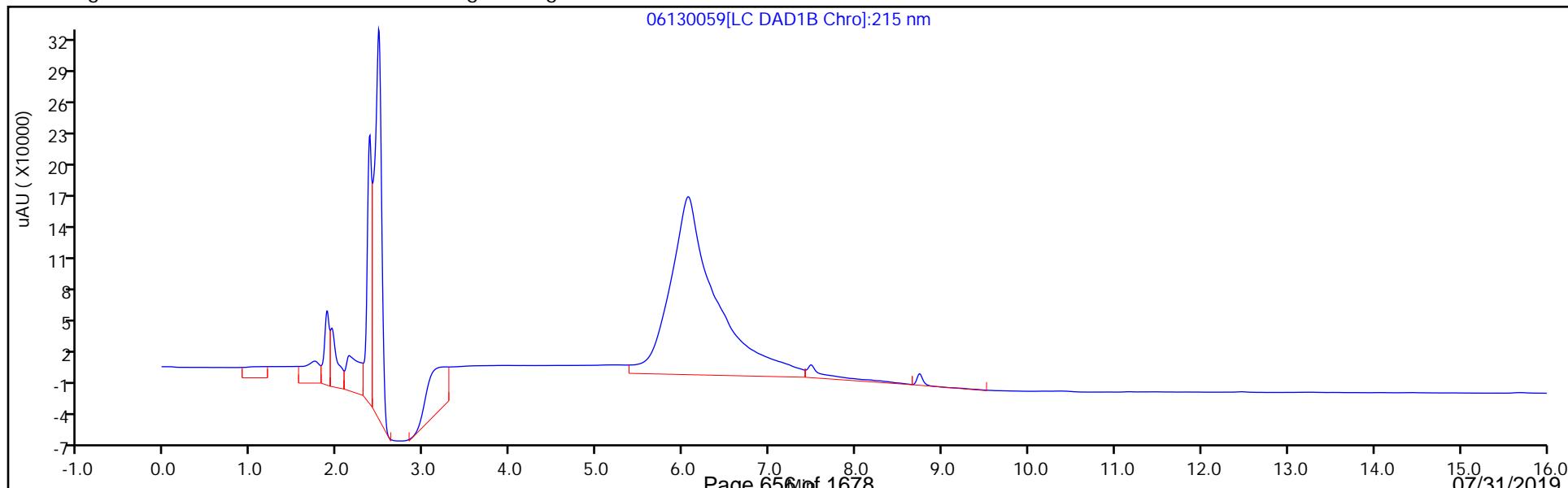
Method: 8330_X3

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Column: UltraCarb5uODS (20) (4.60 mm)



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130059.D
 Lims ID: 280-124912-A-7-A
 Client ID: G0048-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 08:07:01 ALS Bottle#: 59 Worklist Smp#: 59
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-7-A
 Misc. Info.: 280-0082810-059
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 10:00:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.2048	102.41

Eurofins TestAmerica, Denver

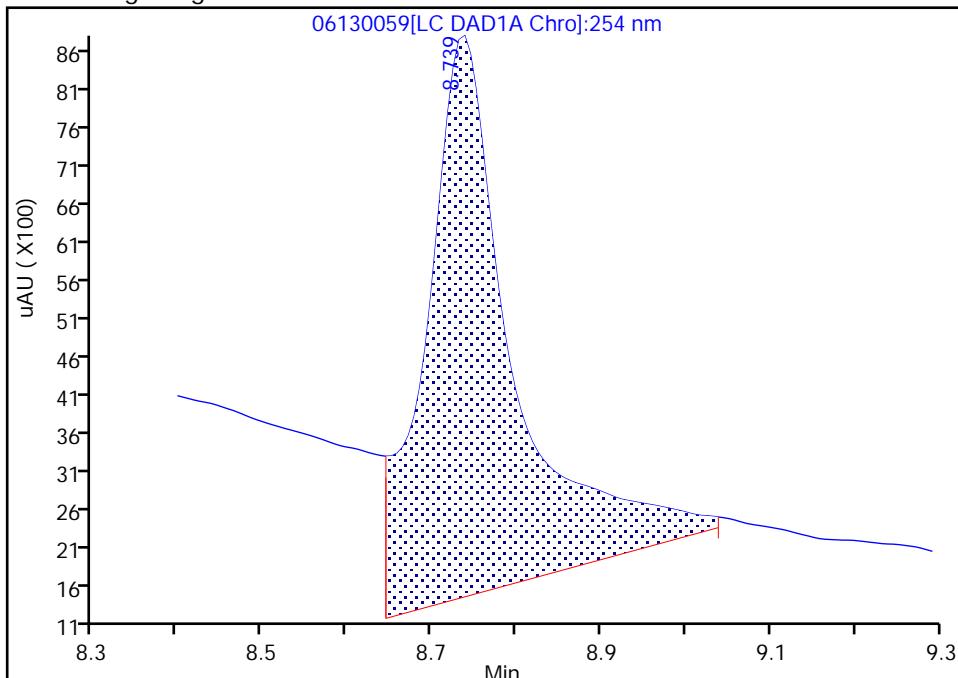
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130059.D
 Injection Date: 14-Jun-2019 08:07:01 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-7-A Lab Sample ID: 280-124912-7
 Client ID: G0048-19A
 Operator ID: hkf ALS Bottle#: 59 Worklist Smp#: 59
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

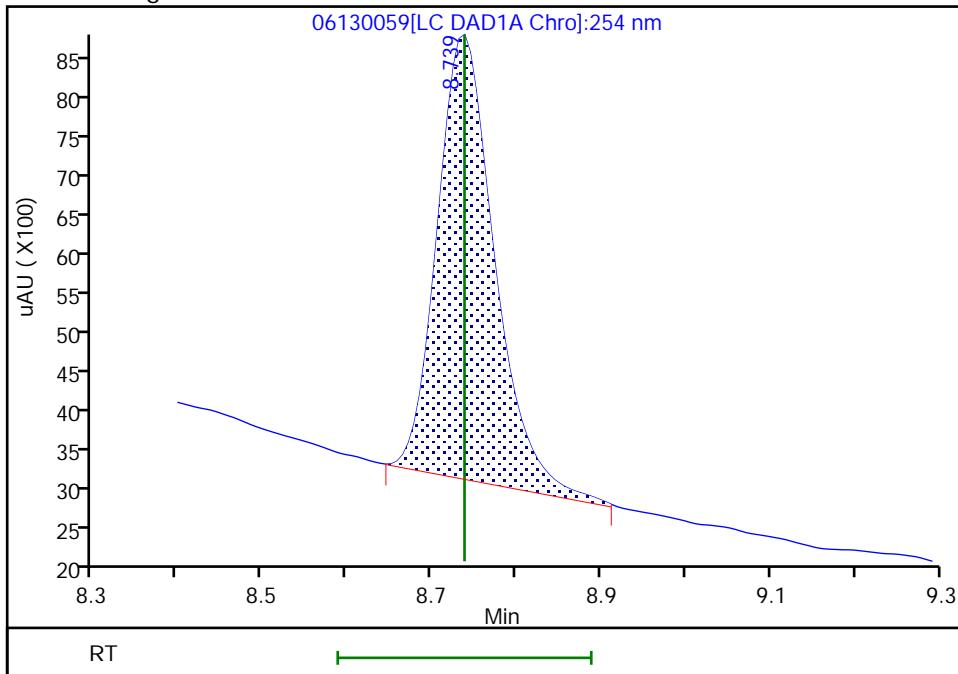
Processing Integration Results

RT: 8.74
 Area: 52877
 Amount: 0.406400
 Amount Units: ug/mL



Manual Integration Results

RT: 8.74
 Area: 26648
 Amount: 0.204810
 Amount Units: ug/mL



Reviewer: fiedlerh, 14-Jun-2019 10:00:01

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0048-19A RE Lab Sample ID: 280-124912-7 RE
Matrix: Water Lab File ID: 07110062.D
Analysis Method: 8330A Date Collected: 06/04/2019 13:40
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 454.3 (mL) Date Analyzed: 07/12/2019 07:18
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.22	U H	0.44	0.22	0.094
99-99-0	<i>4-Nitrotoluene</i>	0.44	U H	1.1	0.44	0.22
5755-27-1	MNX	0.44	U H	2.2	0.44	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110062.D
 Lims ID: 280-124912-B-7-A
 Client ID: G0048-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 07:18:22 ALS Bottle#: 62 Worklist Smp#: 62
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-7-A
 Misc. Info.: 280-0083617-062
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:14:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.692			ND		U
6 MNX	1	7.378			ND		
7 RDX	1	7.799			ND		
\$ 9 1,2-Dinitrobenzene	1	8.747	8.759	-0.012	26177	0.1879	M
10 1,3,5-Trinitrobenzene	1	8.919			ND		
11 1,3-Dinitrobenzene	1	9.578			ND		
12 Nitrobenzene	1	9.965			ND		
14 Tetryl	1	10.285			ND		
16 2,4,6-Trinitrotoluene	1	11.258			ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738			ND		
19 2,6-Dinitrotoluene	1	11.878			ND		
20 2,4-Dinitrotoluene	1	12.078			ND		
21 o-Nitrotoluene	1	12.925			ND		
22 p-Nitrotoluene	1	13.372			ND		
23 m-Nitrotoluene	1	13.978			ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:57

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110062.D

Injection Date: 12-Jul-2019 07:18:22

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-B-7-A

Lab Sample ID: 280-124912-7

Worklist Smp#: 62

Client ID: G0048-19A

Dil. Factor: 1.0000

ALS Bottle#: 62

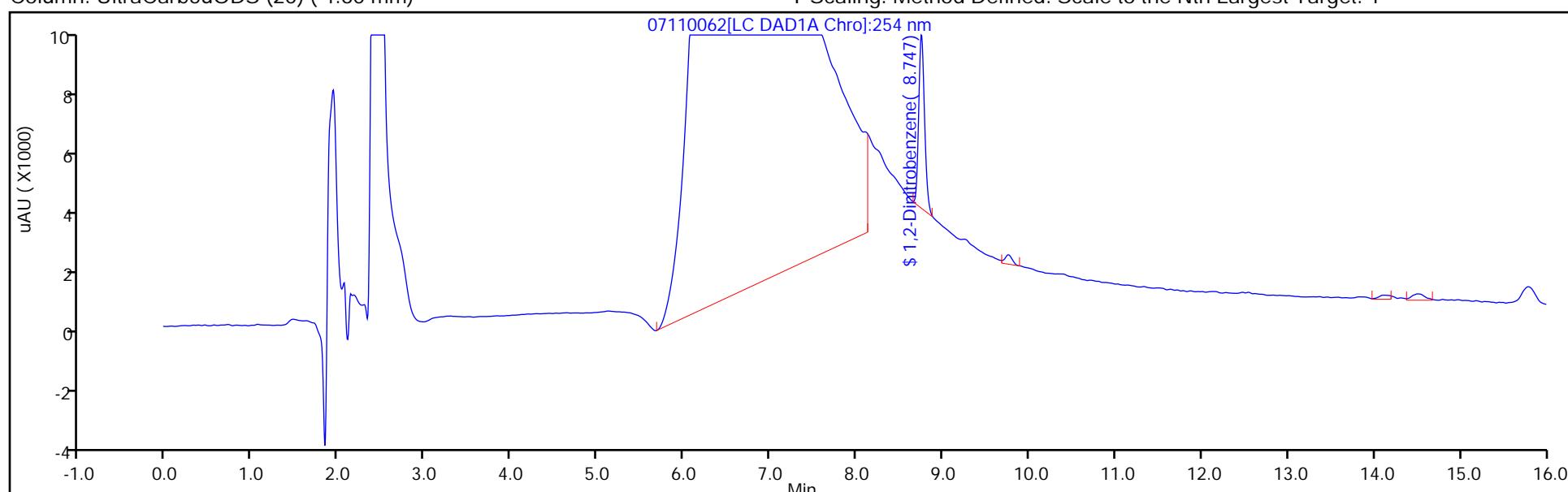
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

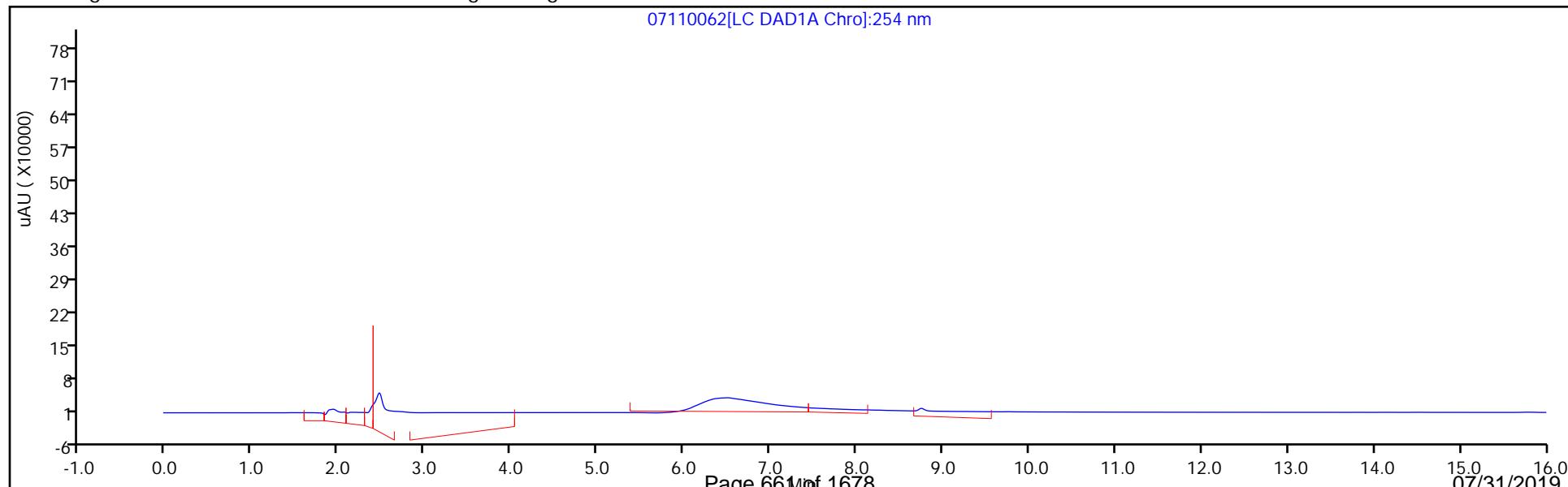
Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110062.D
 Lims ID: 280-124912-B-7-A
 Client ID: G0048-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 07:18:22 ALS Bottle#: 62 Worklist Smp#: 62
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-7-A
 Misc. Info.: 280-0083617-062
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:14:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1879	93.94

Eurofins TestAmerica, Denver

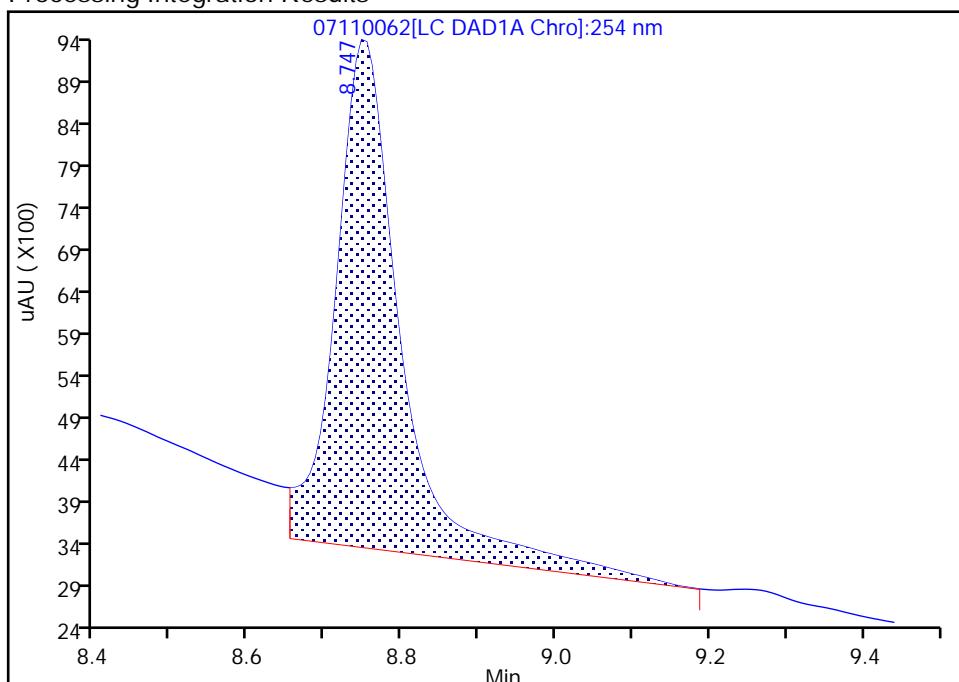
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110062.D
 Injection Date: 12-Jul-2019 07:18:22 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-7-A Lab Sample ID: 280-124912-7
 Client ID: G0048-19A
 Operator ID: hkf ALS Bottle#: 62 Worklist Smp#: 62
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

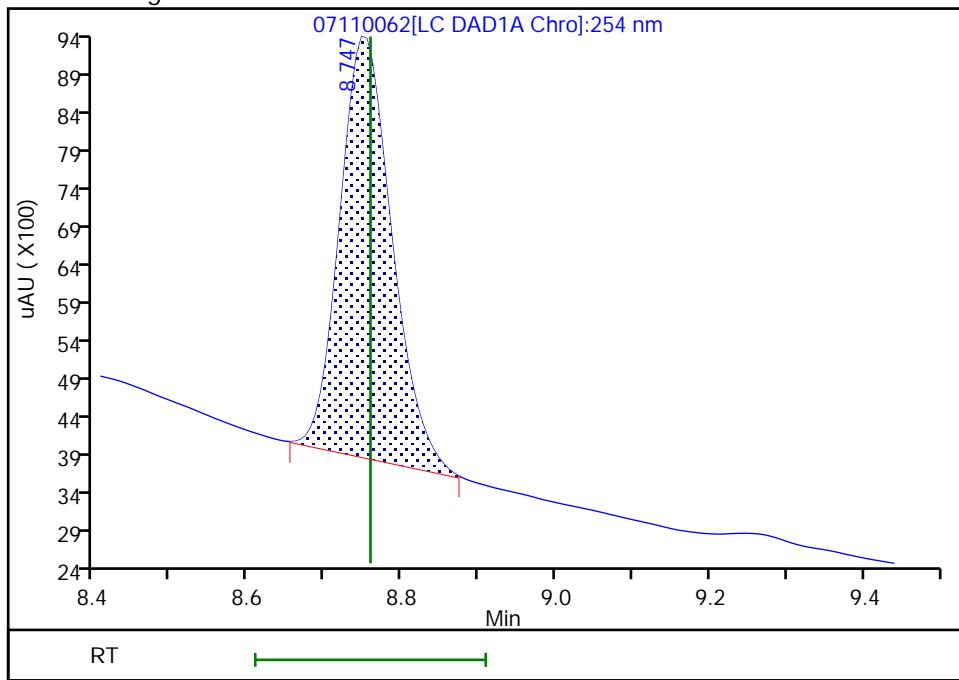
RT: 8.75
 Area: 35674
 Amount: 0.256042
 Amount Units: ug/mL

Processing Integration Results



RT: 8.75
 Area: 26177
 Amount: 0.187880
 Amount Units: ug/mL

Manual Integration Results



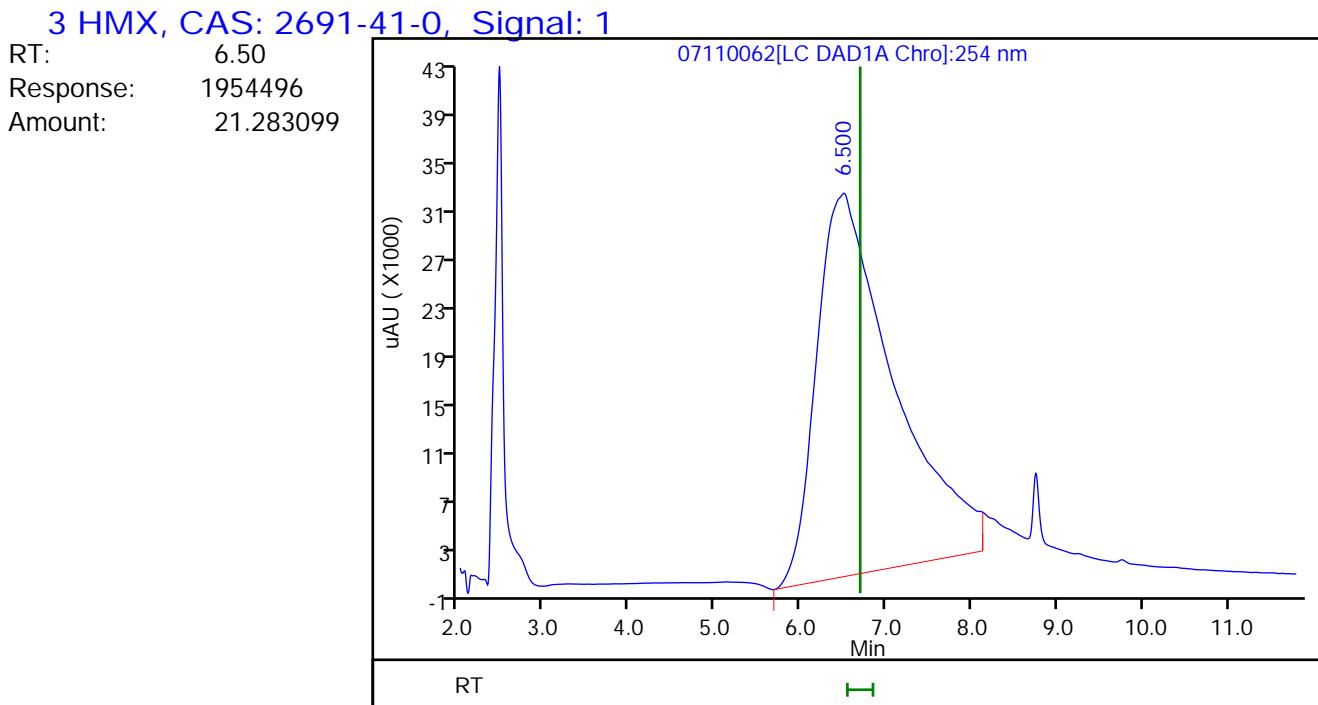
Reviewer: fiedlerh, 12-Jul-2019 09:14:12

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110062.D
Injection Date: 12-Jul-2019 07:18:22 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-7-A Lab Sample ID: 280-124912-7
Client ID: G0048-19A
Operator ID: hkf ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 12-Jul-2019 09:14:13

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0023-19A Lab Sample ID: 280-124912-8
Matrix: Water Lab File ID: 06130060.D
Analysis Method: 8330A Date Collected: 06/04/2019 15:00
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 432.3 (mL) Date Analyzed: 06/14/2019 08:30
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.46	U	1.2	0.46	0.23
99-65-0	1,3-Dinitrobenzene	0.23	U	0.46	0.23	0.10
118-96-7	2,4,6-Trinitrotoluene	0.46	U	0.46	0.46	0.19
121-14-2	2,4-Dinitrotoluene	0.23	U	0.46	0.23	0.097
35572-78-2	2-Amino-4,6-dinitrotoluene	0.14	U	0.23	0.14	0.059
88-72-2	2-Nitrotoluene	0.23	U Q	0.46	0.23	0.099
99-08-1	3-Nitrotoluene	0.46	U	0.46	0.46	0.23
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U M	0.23	0.14	0.067
99-99-0	4-Nitrotoluene	0.46	U Q	1.2	0.46	0.23
2691-41-0	HMX	0.23	U	0.46	0.23	0.10
5755-27-1	MNX	0.46	U	2.3	0.46	0.18
98-95-3	Nitrobenzene	0.23	U	0.46	0.23	0.11
121-82-4	RDX	0.46	U	0.46	0.46	0.18
479-45-8	Tetryl	0.23	U M	0.28	0.23	0.092

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: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130060.D
 Lims ID: 280-124912-A-8-A
 Client ID: G0023-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 08:30:47 ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-8-A
 Misc. Info.: 280-0082810-060
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 10:00:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.645				ND	
6 MNX	1	7.359				ND	
7 RDX	1	7.758				ND	
\$ 9 1,2-Dinitrobenzene	1	8.735	8.738	-0.003	24630	0.1893	M
10 1,3,5-Trinitrobenzene	1	8.898				ND	
11 1,3-Dinitrobenzene	1	9.558				ND	
12 Nitrobenzene	1	9.945				ND	
14 Tetryl	1	10.265				ND	MU
16 2,4,6-Trinitrotoluene	1	11.218				ND	
17 4-Amino-2,6-dinitrotoluene	1	11.405				ND	MU
18 2-Amino-4,6-dinitrotoluene	1	11.698				ND	
19 2,6-Dinitrotoluene	1	11.835	11.832	0.003	4845	0.0309	
20 2,4-Dinitrotoluene	1	12.032				ND	
21 o-Nitrotoluene	1	12.865				ND	
22 p-Nitrotoluene	1	13.305				ND	
23 m-Nitrotoluene	1	13.898				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 14-Jun-2019 10:04:16

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130060.D

Injection Date: 14-Jun-2019 08:30:47

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-8-A

Lab Sample ID: 280-124912-8

Worklist Smp#: 60

Client ID: G0023-19A

Dil. Factor: 1.0000

ALS Bottle#: 60

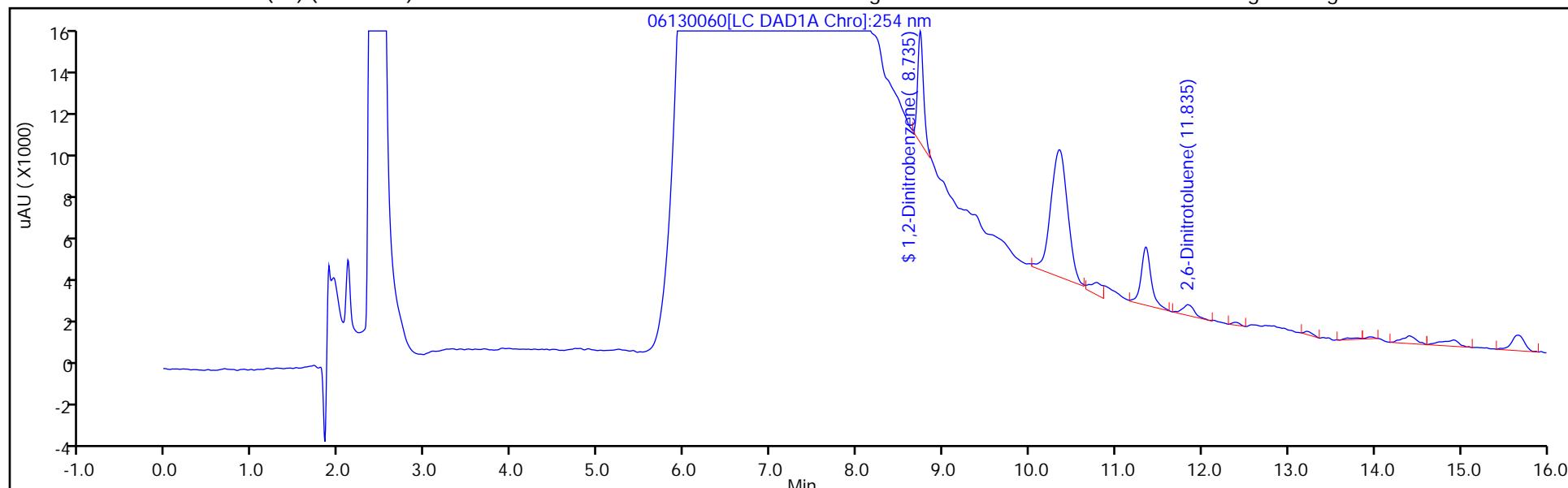
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

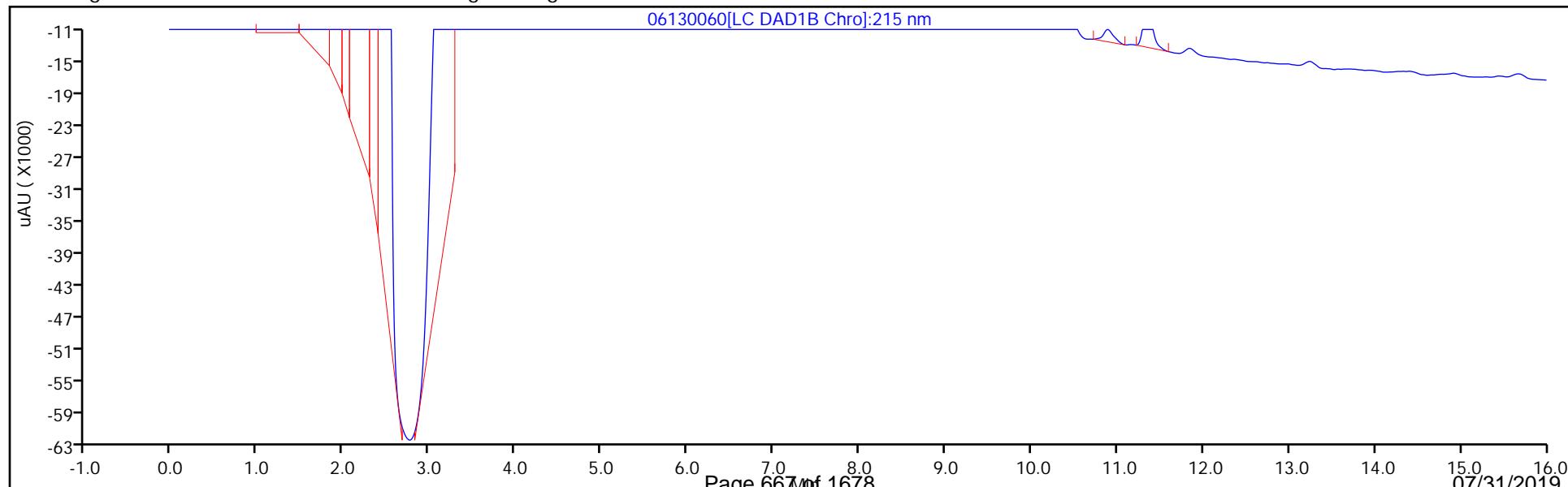
Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130060.D
 Lims ID: 280-124912-A-8-A
 Client ID: G0023-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 08:30:47 ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-8-A
 Misc. Info.: 280-0082810-060
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 10:00:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1893	94.65

Eurofins TestAmerica, Denver

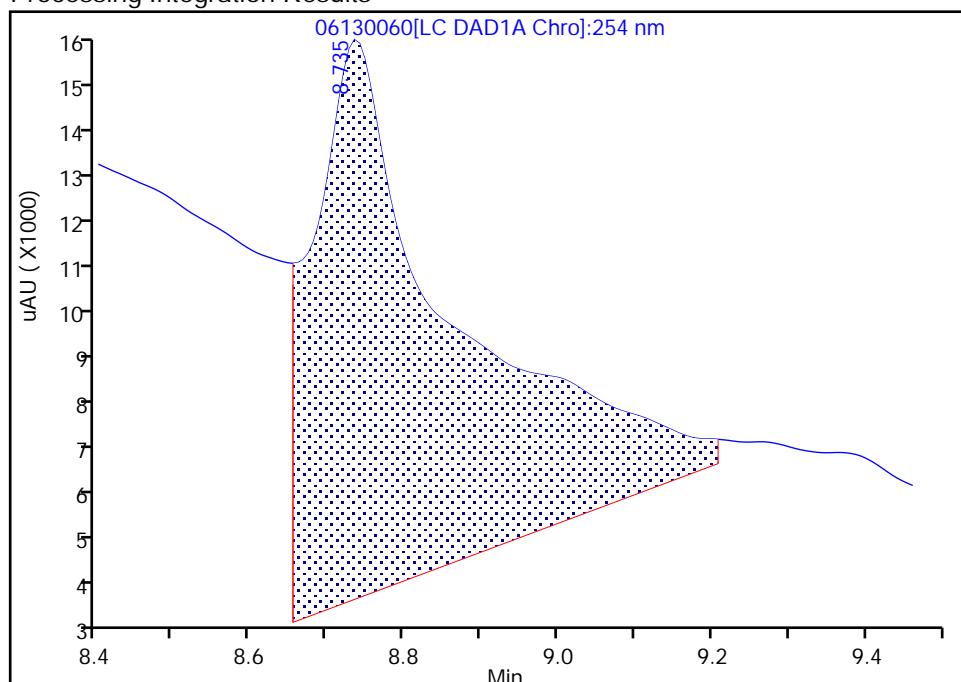
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130060.D
 Injection Date: 14-Jun-2019 08:30:47 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: hkf ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

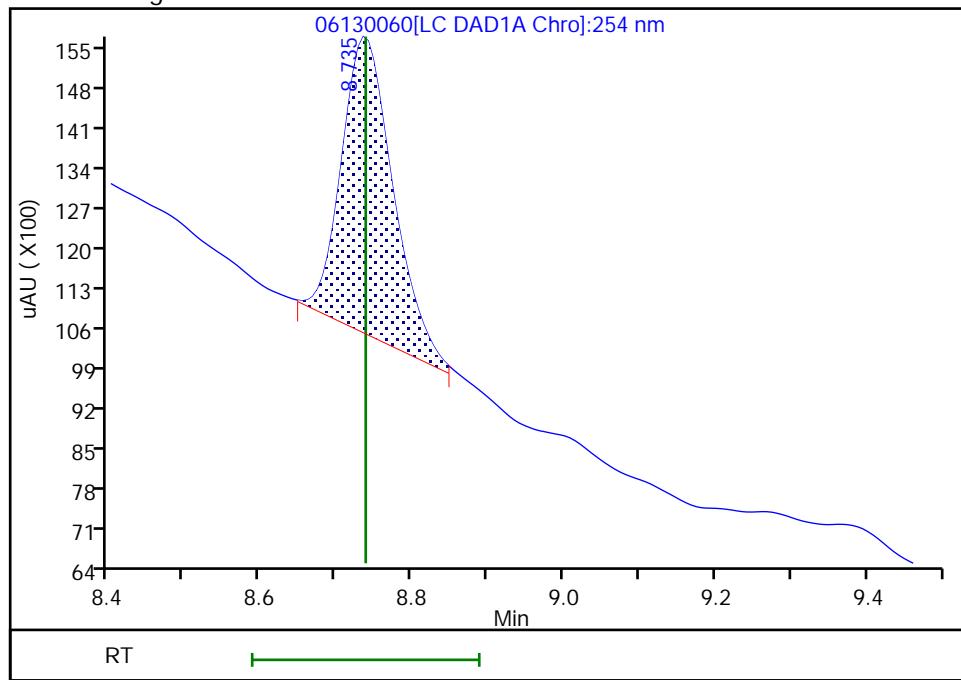
RT: 8.74
 Area: 152847
 Amount: 1.174747
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 24630
 Amount: 0.189301
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 10:00:11

Audit Action: Manually Integrated

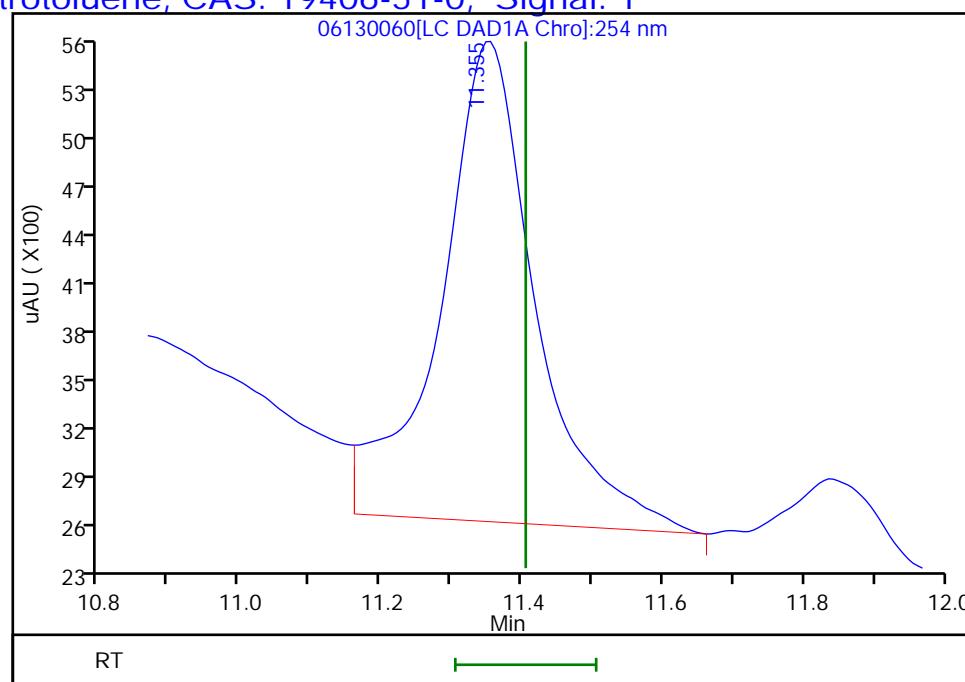
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130060.D
 Injection Date: 14-Jun-2019 08:30:47 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: hkf ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.35
 Response: 27654
 Amount: 0.170252



Reviewer: fiedlerh, 14-Jun-2019 10:00:27

Audit Action: Marked Compound Undetected

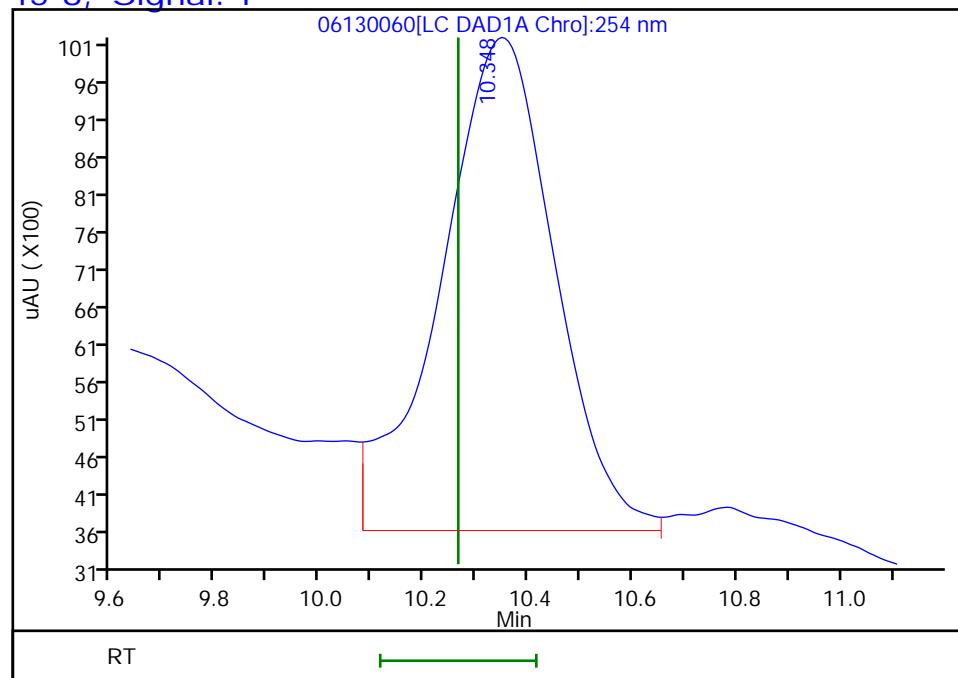
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130060.D
Injection Date: 14-Jun-2019 08:30:47 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-8-A Lab Sample ID: 280-124912-8
Client ID: G0023-19A
Operator ID: hkf ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.35
Response: 98421
Amount: 0.585994



Reviewer: fiedlerh, 14-Jun-2019 10:00:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0023-19A Lab Sample ID: 280-124912-8
Matrix: Water Lab File ID: 06140048.D
Analysis Method: 8330A Date Collected: 06/04/2019 15:00
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 432.3 (mL) Date Analyzed: 06/15/2019 13:55
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: Luna-phenylhex ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461583 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
606-20-2	2,6-Dinitrotoluene	0.23	U	0.23	0.23	0.075

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140048.D
 Lims ID: 280-124912-A-8-A
 Client ID: G0023-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 13:55:13 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-8-A
 Misc. Info.: 280-0082871-048
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 11:03:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.151				ND	
7 MNX	1	7.778				ND	
8 RDX	1	9.217	9.231	-0.014	3871	0.0186	
9 Nitrobenzene	1	12.184	12.198	-0.014	3455	0.008521	
\$ 10 1,2-Dinitrobenzene	1	13.244	13.204	0.040	51227	0.1850	
12 1,3-Dinitrobenzene	1	15.731				ND	U
14 o-Nitrotoluene	1	16.531				ND	U
15 p-Nitrotoluene	1	16.858				ND	
16 4-Amino-2,6-dinitrotoluene	1	17.251				ND	
17 m-Nitrotoluene	1	17.764				ND	U
18 2-Amino-4,6-dinitrotoluene	1	18.271				ND	
19 1,3,5-Trinitrobenzene	1	19.024				ND	
20 2,6-Dinitrotoluene	1	19.851				ND	
21 2,4-Dinitrotoluene	1	20.437	20.404	0.033	5964	0.0105	
22 Tetryl	1	23.717	23.698	0.019	2660	0.008458	M
23 2,4,6-Trinitrotoluene	1	24.711				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 17-Jun-2019 11:07:45

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190614-82871.b\\06140048.D

Injection Date: 15-Jun-2019 13:55:13

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: 280-124912-A-8-A

Lab Sample ID: 280-124912-8

Worklist Smp#: 48

Client ID: G0023-19A

Dil. Factor: 1.0000

ALS Bottle#: 48

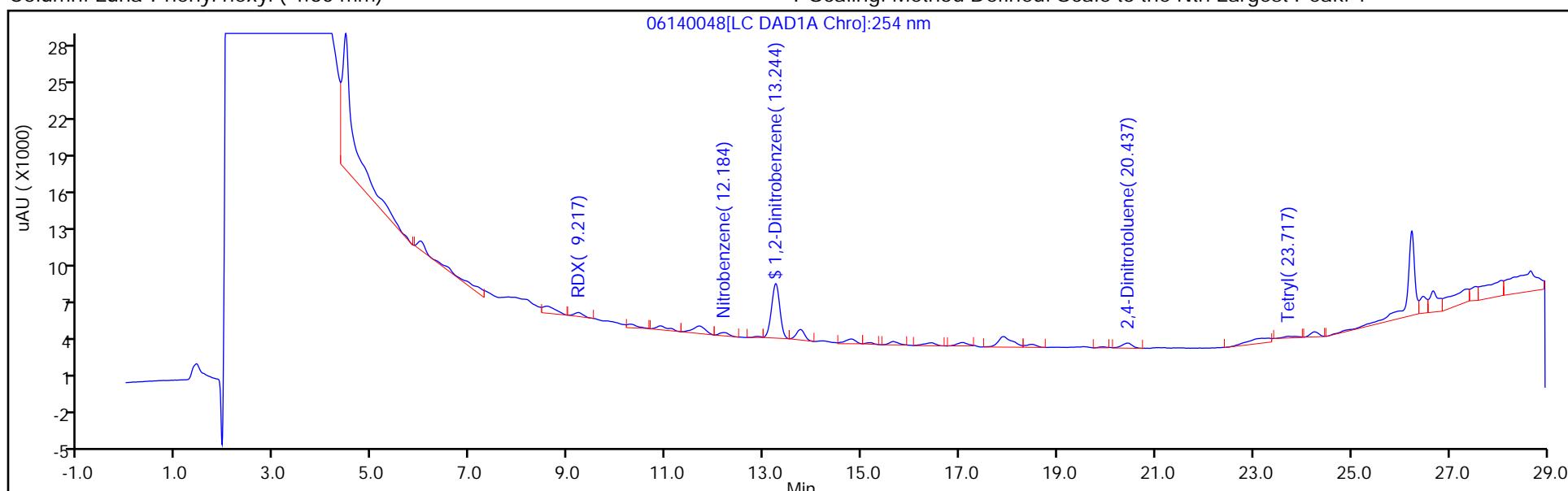
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

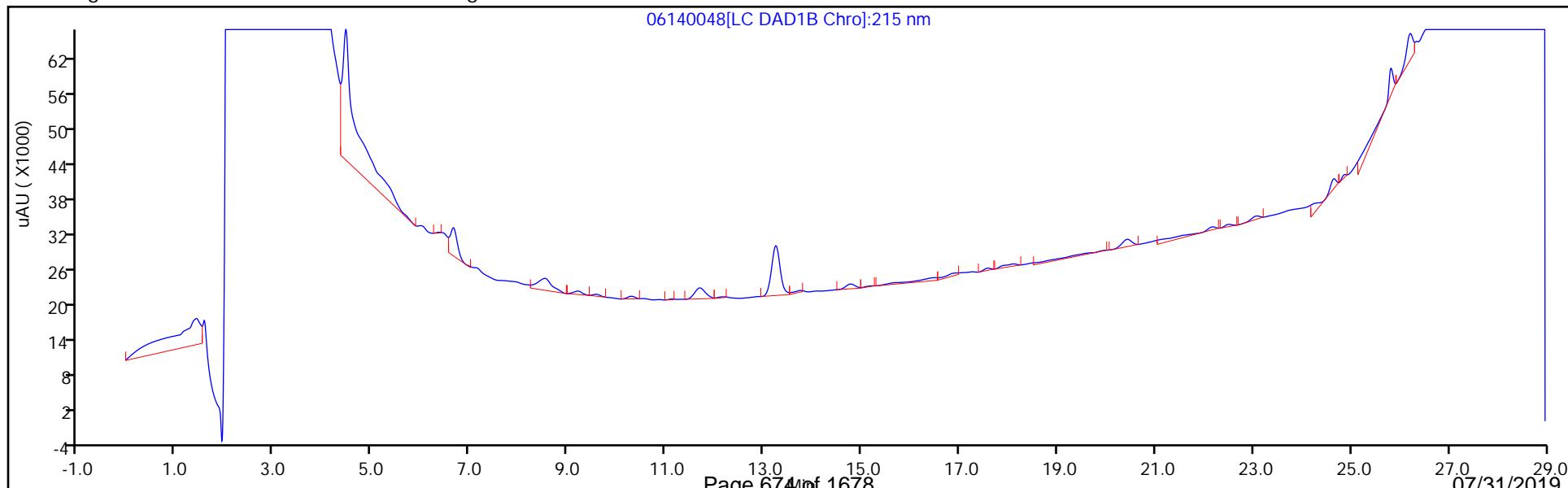
Method: G2_8330_Luna

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: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140048.D
 Lims ID: 280-124912-A-8-A
 Client ID: G0023-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 13:55:13 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-8-A
 Misc. Info.: 280-0082871-048
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 11:03:33

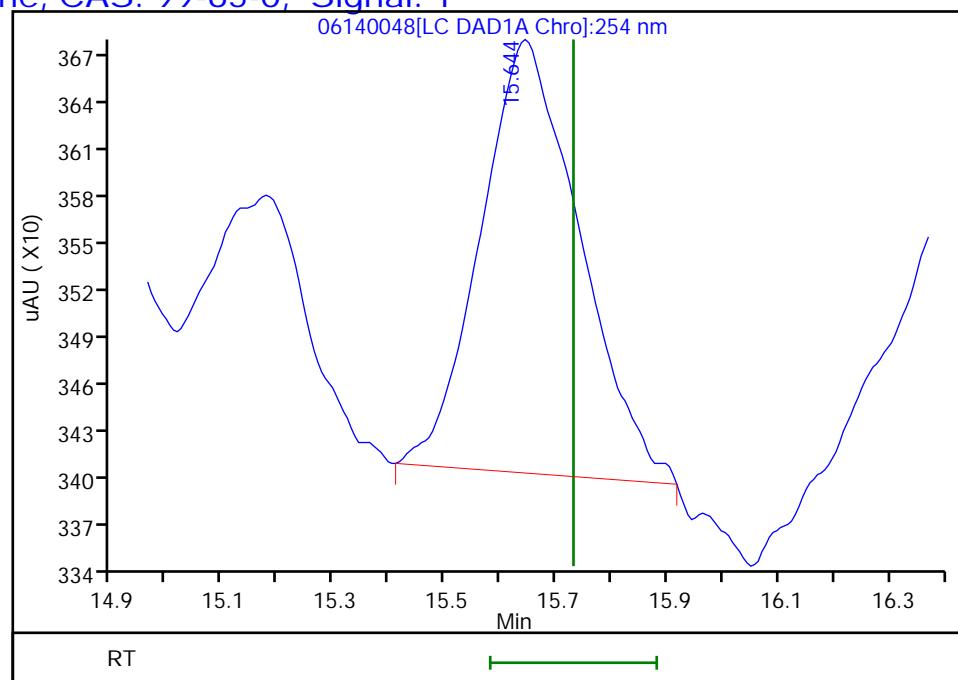
Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1850	92.52

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140048.D
 Injection Date: 15-Jun-2019 13:55:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: HKF ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul 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: 15.64
 Response: 3357
 Amount: 0.005282



Reviewer: fiedlerh, 17-Jun-2019 11:03:33

Audit Action: Marked Compound Undetected

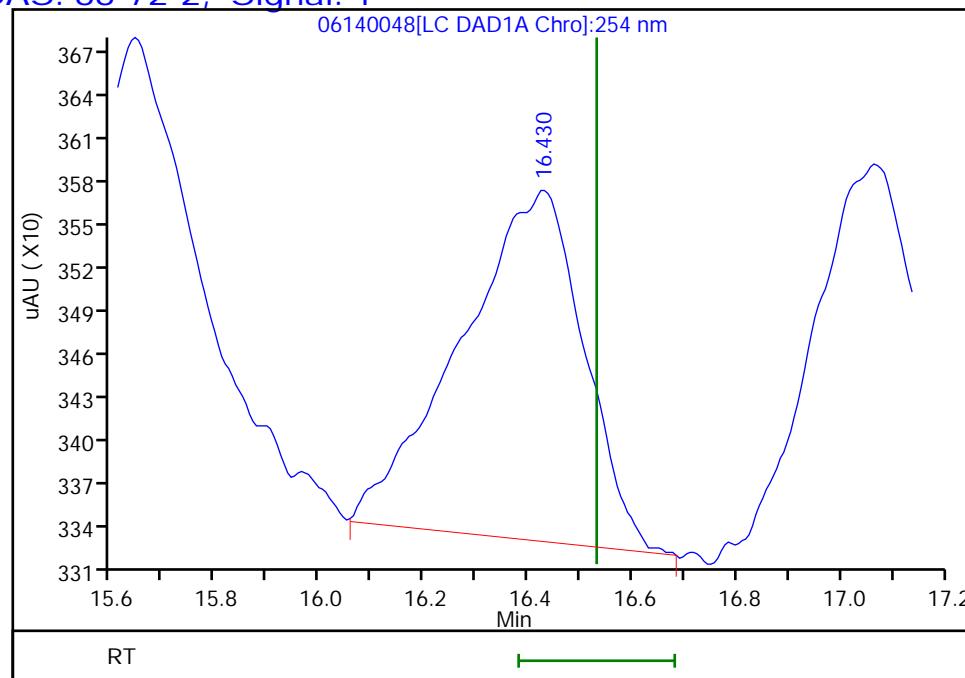
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140048.D
 Injection Date: 15-Jun-2019 13:55:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: HKF ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul 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: 16.43
 Response: 3926
 Amount: 0.014992



Reviewer: fiedlerh, 17-Jun-2019 11:03:33

Audit Action: Marked Compound Undetected

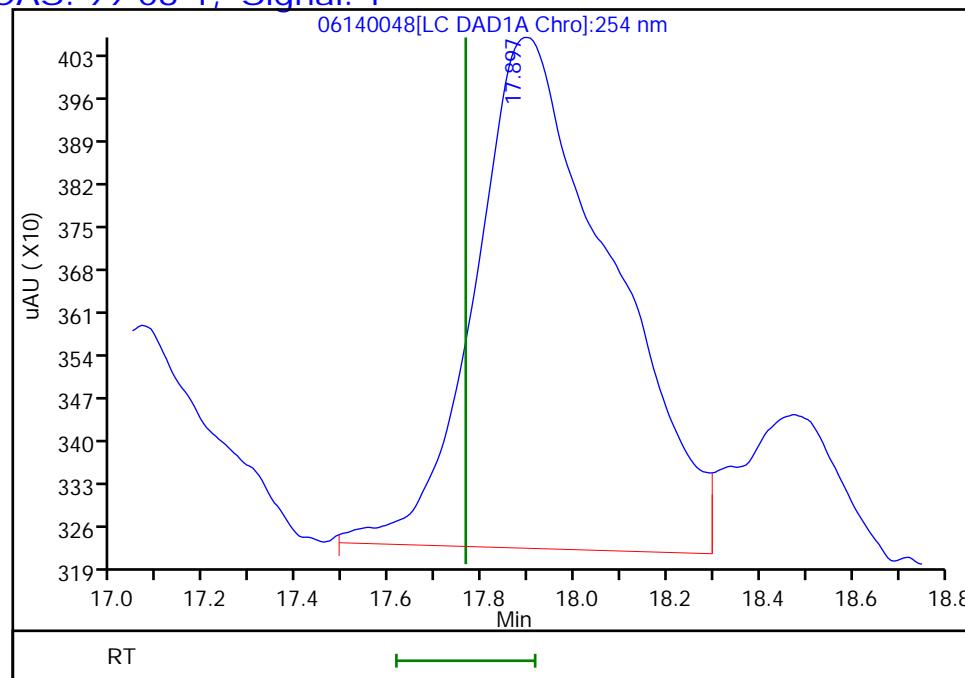
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140048.D
 Injection Date: 15-Jun-2019 13:55:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: HKF ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul 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: 17.90
 Response: 17148
 Amount: 0.058587



Reviewer: fiedlerh, 17-Jun-2019 11:03:33

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

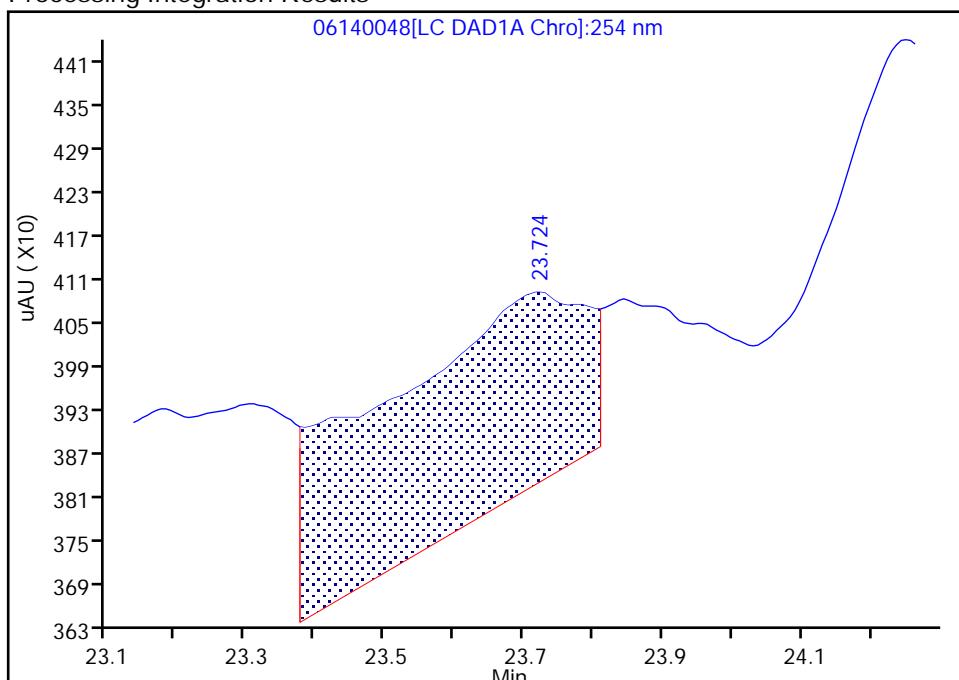
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 Injection Date: 15-Jun-2019 13:55:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: HKF ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 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

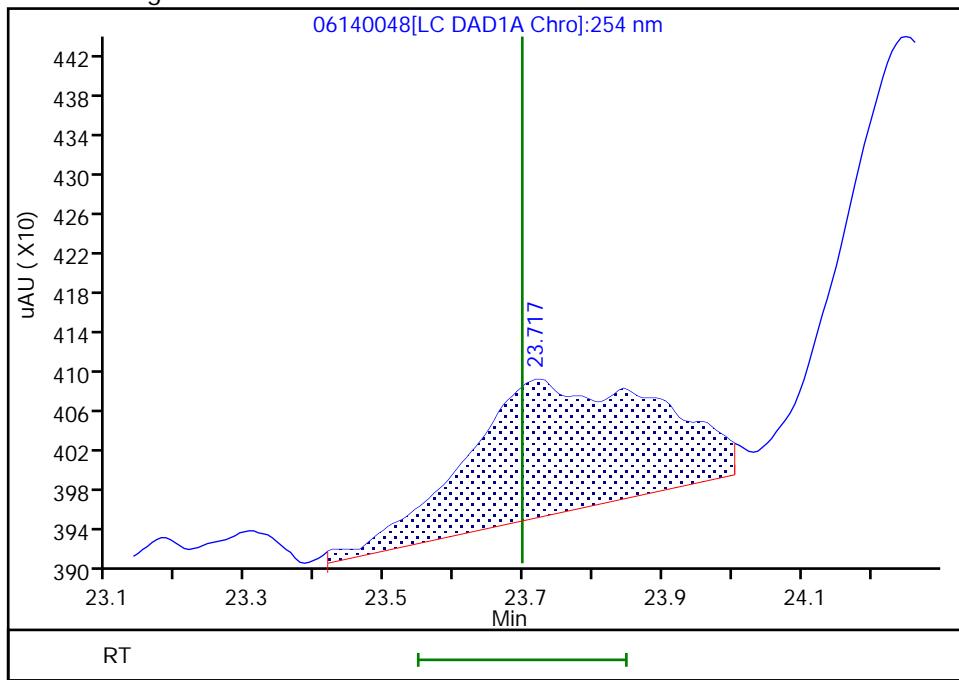
RT: 23.72
 Area: 6283
 Amount: 0.019979
 Amount Units: ug/ml

Processing Integration Results



RT: 23.72
 Area: 2660
 Amount: 0.008458
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:03:31

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0023-19A RE Lab Sample ID: 280-124912-8 RE
Matrix: Water Lab File ID: 07110063.D
Analysis Method: 8330A Date Collected: 06/04/2019 15:00
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 453.8 (mL) Date Analyzed: 07/12/2019 07:41
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.22	U H	0.44	0.22	0.094
99-99-0	<i>4-Nitrotoluene</i>	0.44	U H	1.1	0.44	0.22
5755-27-1	MNX	0.44	U H	2.2	0.44	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	123	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110063.D
 Lims ID: 280-124912-B-8-A
 Client ID: G0023-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 07:41:21 ALS Bottle#: 63 Worklist Smp#: 63
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-8-A
 Misc. Info.: 280-0083617-063
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:14:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.692				ND	
6 MNX	1	7.378				ND	
7 RDX	1	7.761	7.799	-0.038	7343	0.0661	M
\$ 9 1,2-Dinitrobenzene	1	8.747	8.759	-0.012	34177	0.2453	M
10 1,3,5-Trinitrobenzene	1	8.919				ND	
11 1,3-Dinitrobenzene	1	9.578				ND	
12 Nitrobenzene	1	9.965				ND	
14 Tetryl	1	10.301	10.285	0.016	71344	0.4405	
16 2,4,6-Trinitrotoluene	1	11.258				ND	MU
17 4-Amino-2,6-dinitrotoluene	1	11.445				ND	
18 2-Amino-4,6-dinitrotoluene	1	11.738				ND	
19 2,6-Dinitrotoluene	1	11.867	11.878	-0.011	3135	0.0197	M
20 2,4-Dinitrotoluene	1	12.078				ND	U
21 o-Nitrotoluene	1	12.925				ND	
22 p-Nitrotoluene	1	13.372				ND	
23 m-Nitrotoluene	1	13.978				ND	U

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:58

Chrom Revision: 2.3 20-Jun-2019 20:50:56

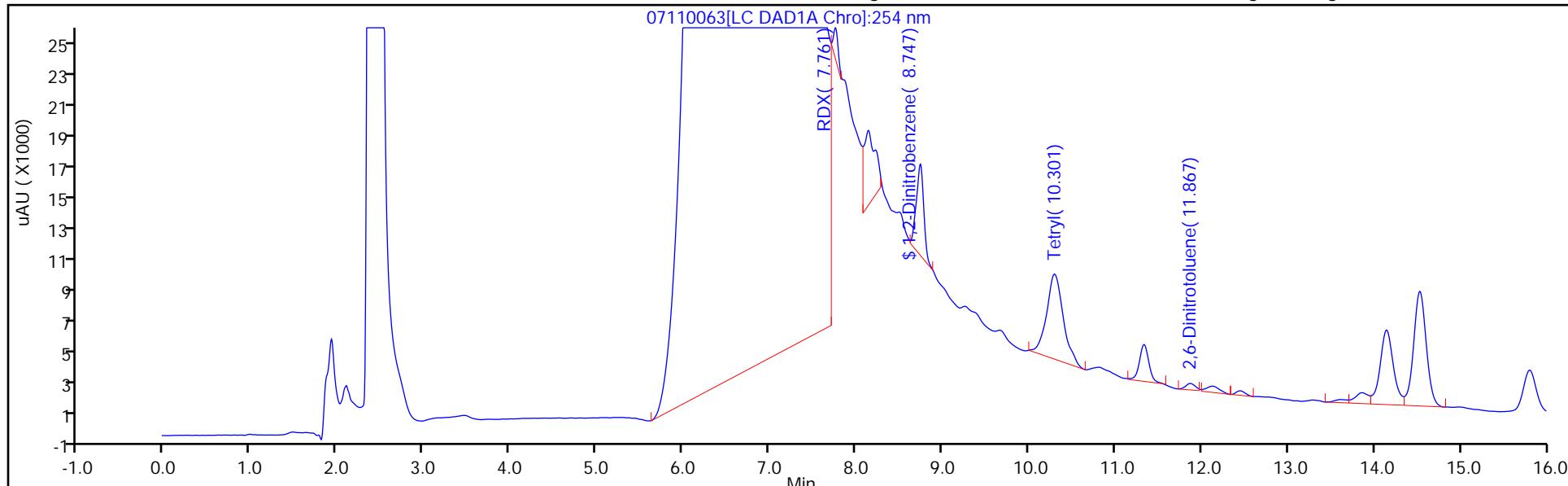
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110063.D
Injection Date: 12-Jul-2019 07:41:21
Lims ID: 280-124912-B-8-A
Client ID: G0023-19A
Injection Vol: 100.0 ul
Method: 8330_X3
Column: UltraCarb5uODS (20) (4.60 mm)

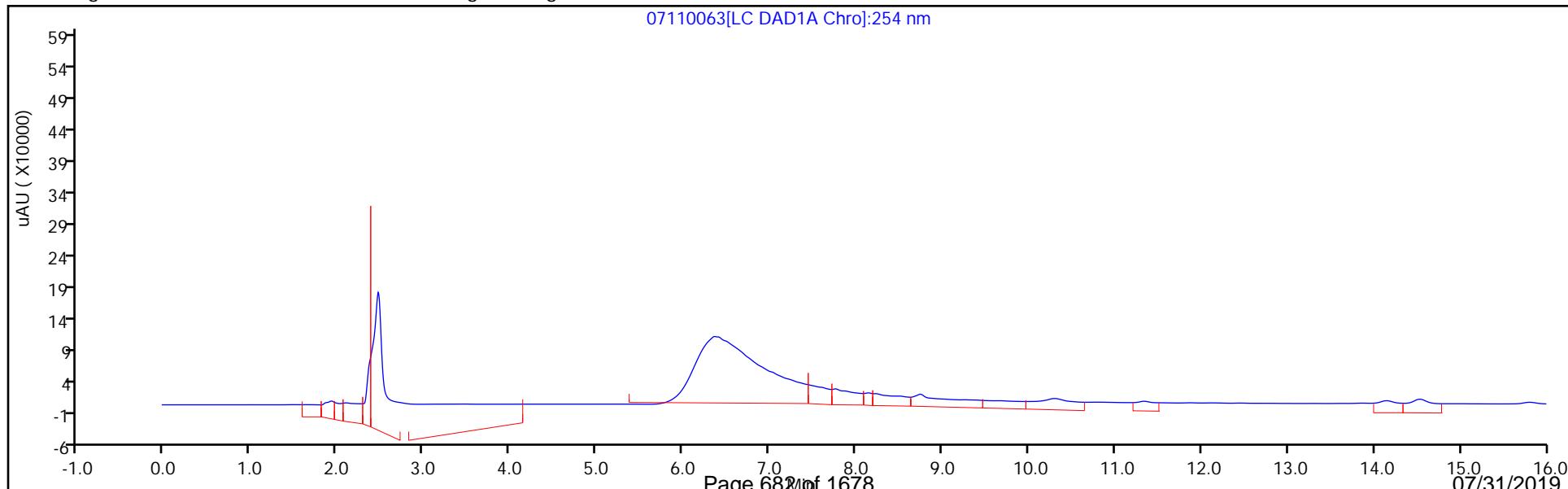
Instrument ID: CHHPLC_X3
Lab Sample ID: 280-124912-8
Dil. Factor: 1.0000
Limit Group: GCSV - 8330

Operator ID: hkf
Worklist Smp#: 63
ALS Bottle#: 63

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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110063.D
 Lims ID: 280-124912-B-8-A
 Client ID: G0023-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 07:41:21 ALS Bottle#: 63 Worklist Smp#: 63
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-8-A
 Misc. Info.: 280-0083617-063
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:14:53

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.2453	122.65

Eurofins TestAmerica, Denver

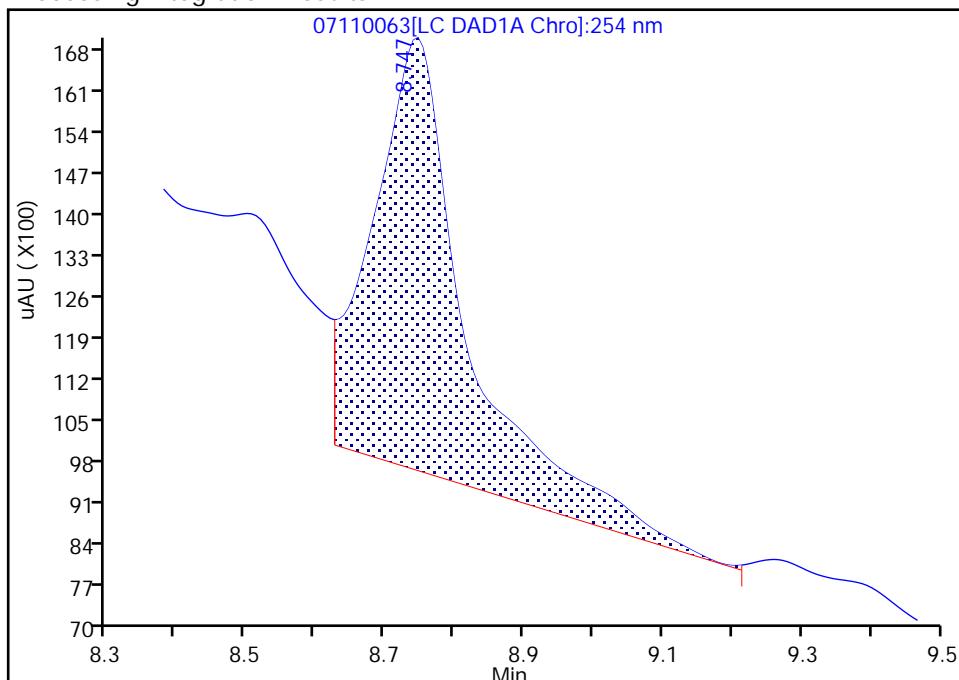
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 Injection Date: 12-Jul-2019 07:41:21 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: hkf ALS Bottle#: 63 Worklist Smp#: 63
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

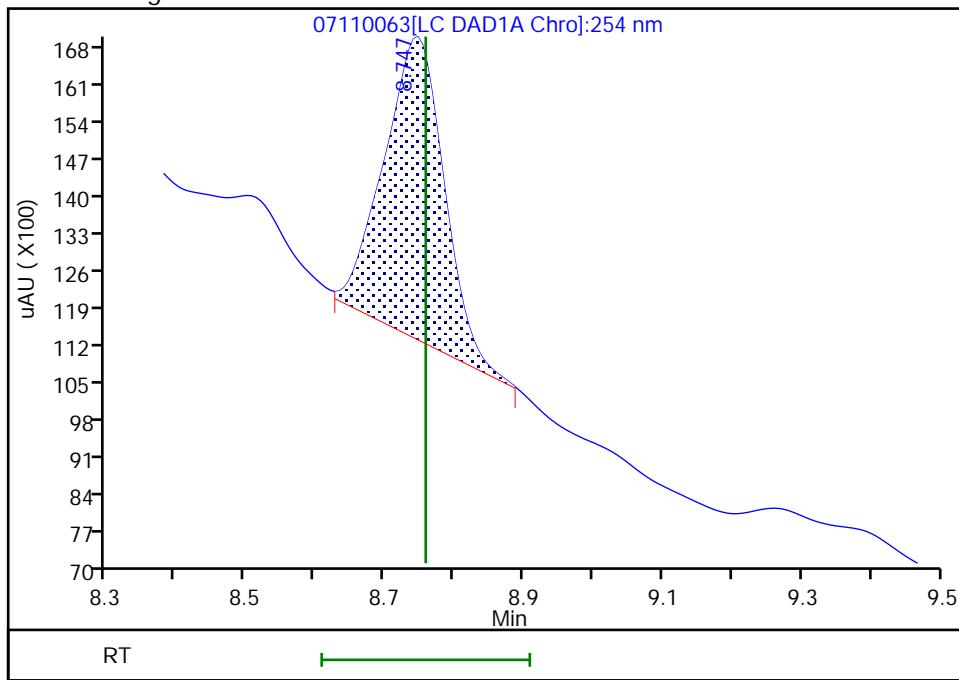
RT: 8.75
 Area: 68429
 Amount: 0.491134
 Amount Units: ug/mL

Processing Integration Results



RT: 8.75
 Area: 34177
 Amount: 0.245298
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:14:30

Audit Action: Manually Integrated

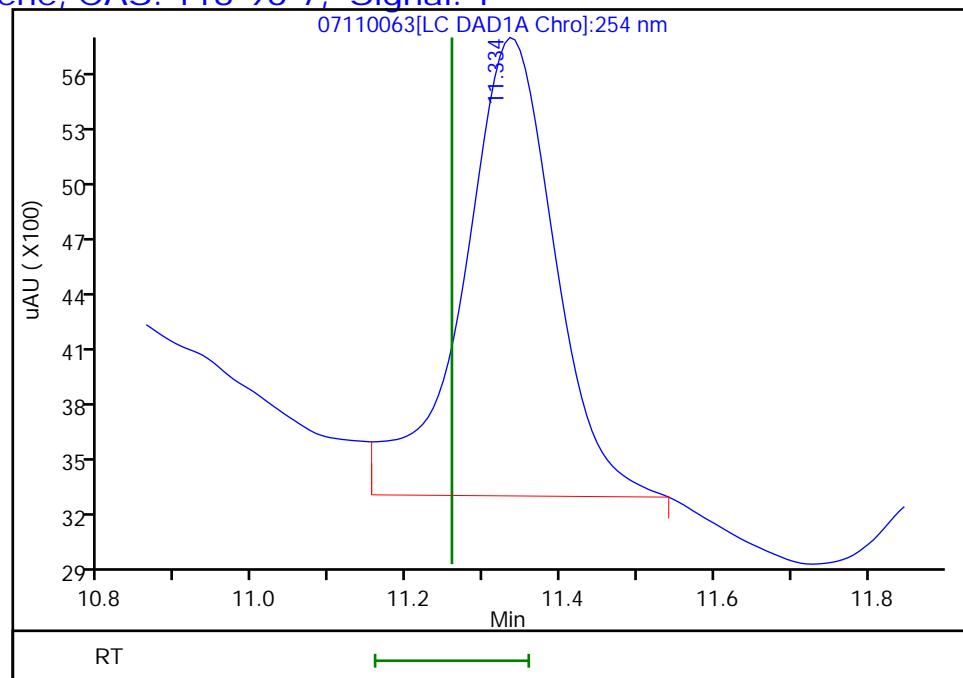
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110063.D
 Injection Date: 12-Jul-2019 07:41:21 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: hkf ALS Bottle#: 63 Worklist Smp#: 63
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.33
 Response: 19871
 Amount: 0.087431



Reviewer: fiedlerh, 12-Jul-2019 09:14:53

Audit Action: Marked Compound Undetected

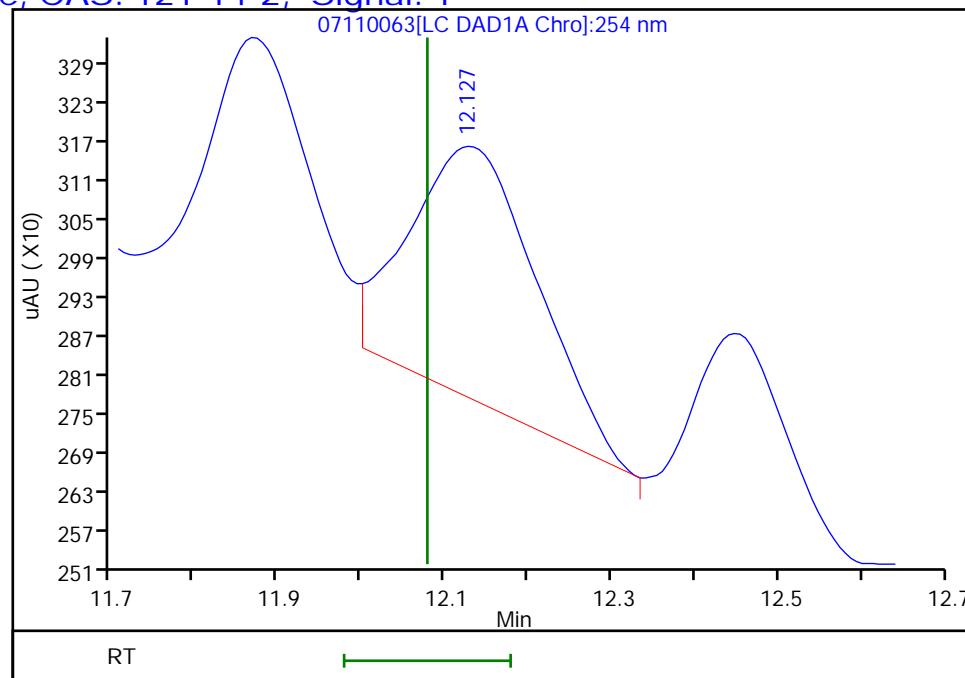
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110063.D
 Injection Date: 12-Jul-2019 07:41:21 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: hkf ALS Bottle#: 63 Worklist Smp#: 63
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

20 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 12.13
 Response: 4134
 Amount: 0.013759



Reviewer: fiedlerh, 12-Jul-2019 09:14:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

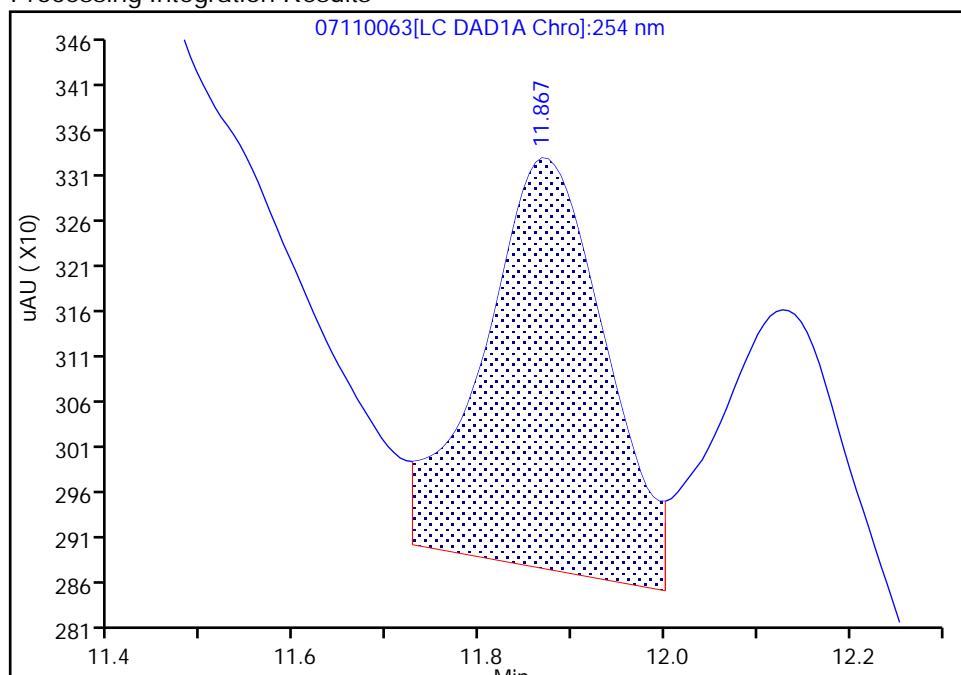
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110063.D
 Injection Date: 12-Jul-2019 07:41:21 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: hkf ALS Bottle#: 63 Worklist Smp#: 63
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

19 2,6-Dinitrotoluene, CAS: 606-20-2
Signal: 1

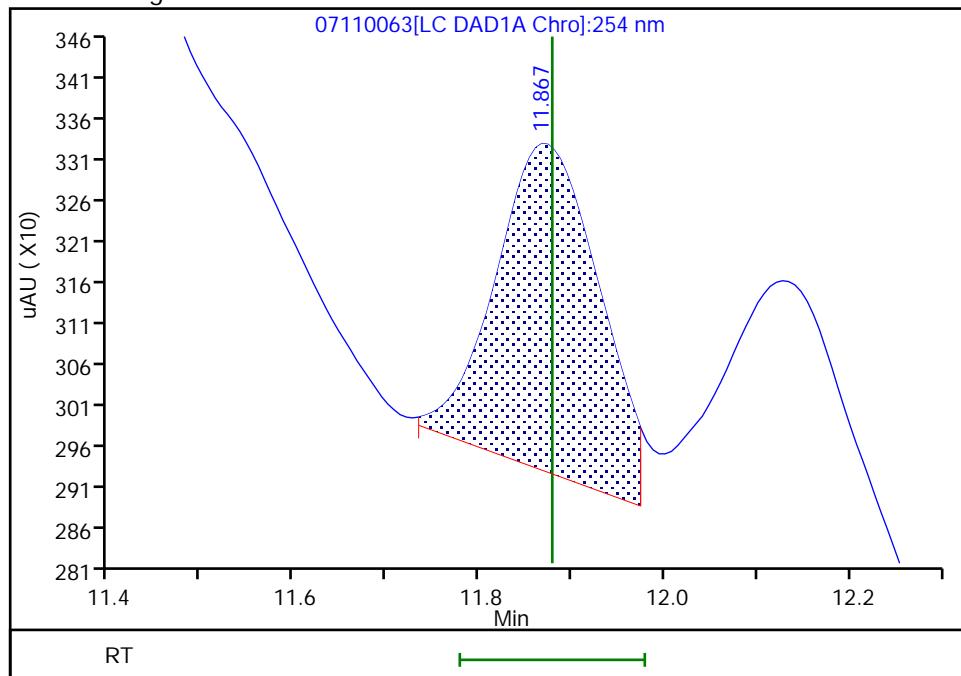
RT: 11.87
 Area: 4164
 Amount: 0.026142
 Amount Units: ug/mL

Processing Integration Results



RT: 11.87
 Area: 3135
 Amount: 0.019682
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:14:47

Audit Action: Manually Integrated

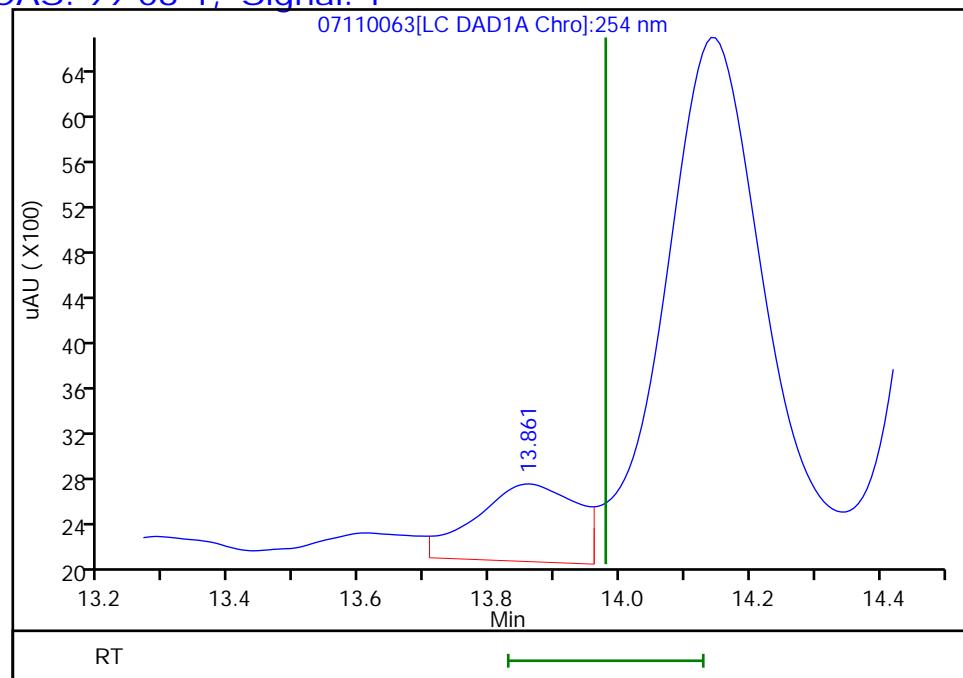
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110063.D
Injection Date: 12-Jul-2019 07:41:21 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-8-A Lab Sample ID: 280-124912-8
Client ID: G0023-19A
Operator ID: hkf ALS Bottle#: 63 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.86
Response: 7312
Amount: 0.050385



Reviewer: fiedlerh, 12-Jul-2019 09:14:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

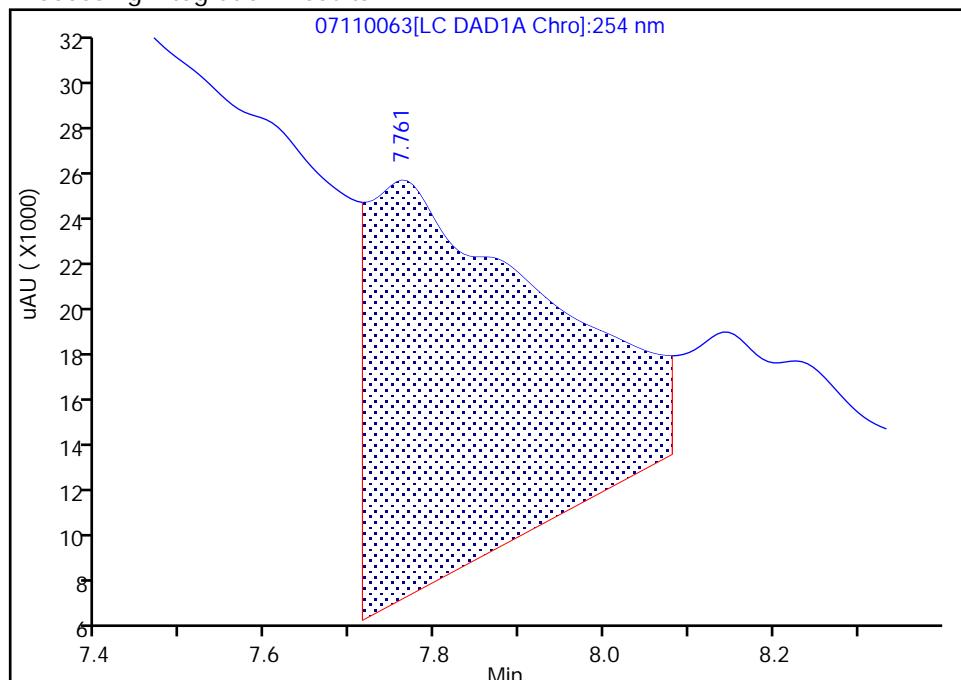
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 Injection Date: 12-Jul-2019 07:41:21 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-8-A Lab Sample ID: 280-124912-8
 Client ID: G0023-19A
 Operator ID: hkf ALS Bottle#: 63 Worklist Smp#: 63
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

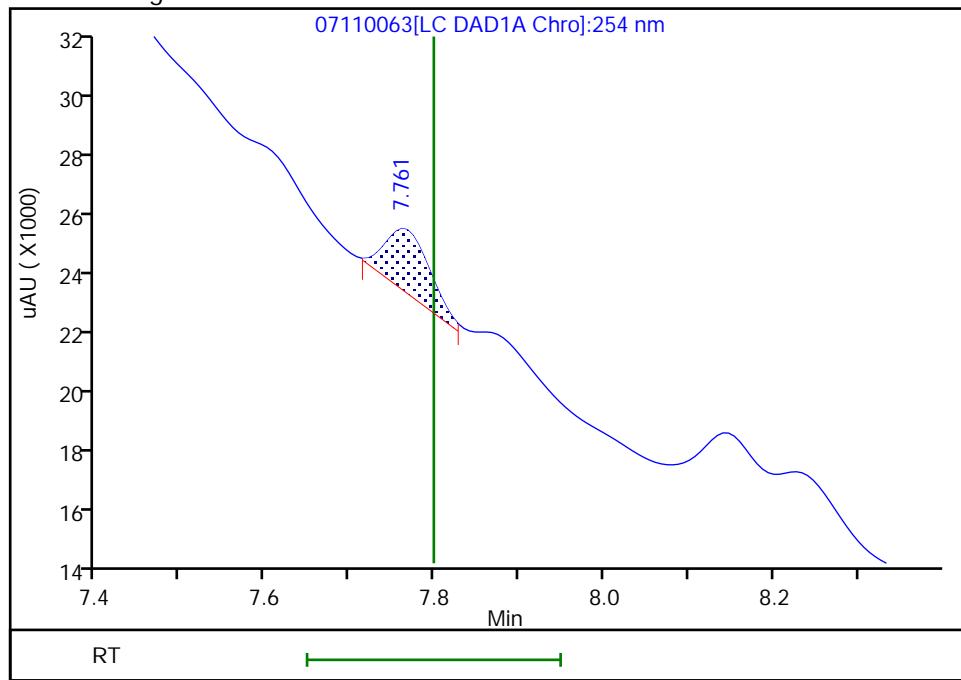
RT: 7.76
 Area: 242907
 Amount: 2.185980
 Amount Units: ug/mL

Processing Integration Results



RT: 7.76
 Area: 7343
 Amount: 0.066081
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:14:26

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ005-19A Lab Sample ID: 280-124912-9
Matrix: Water Lab File ID: 06140056.D
Analysis Method: 8330A Date Collected: 06/05/2019 09:30
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 513.3 (mL) Date Analyzed: 06/15/2019 12:36
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.39	U Q	0.97	0.39	0.19
99-65-0	1,3-Dinitrobenzene	0.19	U	0.39	0.19	0.086
118-96-7	2,4,6-Trinitrotoluene	0.39	U Q	0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	0.19	U	0.39	0.19	0.082
606-20-2	2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.19	0.12	0.049
88-72-2	2-Nitrotoluene	0.19	U Q	0.39	0.19	0.083
99-08-1	3-Nitrotoluene	0.39	U Q	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.19	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U	0.97	0.39	0.19
2691-41-0	HMX	0.19	U	0.39	0.19	0.085
5755-27-1	MNX	0.39	U	1.9	0.39	0.15
98-95-3	Nitrobenzene	0.19	U M	0.39	0.19	0.089
121-82-4	RDX	0.39	U	0.39	0.39	0.15
479-45-8	Tetryl	0.19	U	0.23	0.19	0.077

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	81	Q M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140056.D
 Lims ID: 280-124912-A-9-A
 Client ID: PZ005-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 12:36:35 ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-9-A
 Misc. Info.: 280-0082867-056
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:21:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.643				ND	
6 MNX	1	7.359				ND	
7 RDX	1	7.763				ND	
\$ 9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	21127	0.1624	M
10 1,3,5-Trinitrobenzene	1	8.896				ND	
11 1,3-Dinitrobenzene	1	9.563				ND	
12 Nitrobenzene	1	9.958	9.949	0.009	947	0.004811	7M
14 Tetryl	1	10.276				ND	
16 2,4,6-Trinitrotoluene	1	11.229				ND	
17 4-Amino-2,6-dinitrotoluene	1	11.429				ND	
18 2-Amino-4,6-dinitrotoluene	1	11.716				ND	
19 2,6-Dinitrotoluene	1	11.843				ND	
20 2,4-Dinitrotoluene	1	12.043				ND	
21 o-Nitrotoluene	1	12.883				ND	
22 p-Nitrotoluene	1	13.323				ND	
23 m-Nitrotoluene	1	13.923				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Report Date: 17-Jun-2019 10:45:50

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190614-82867.b\\06140056.D

Injection Date: 15-Jun-2019 12:36:35

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-9-A

Lab Sample ID: 280-124912-9

Worklist Smp#: 56

Client ID: PZ005-19A

Dil. Factor: 1.0000

ALS Bottle#: 56

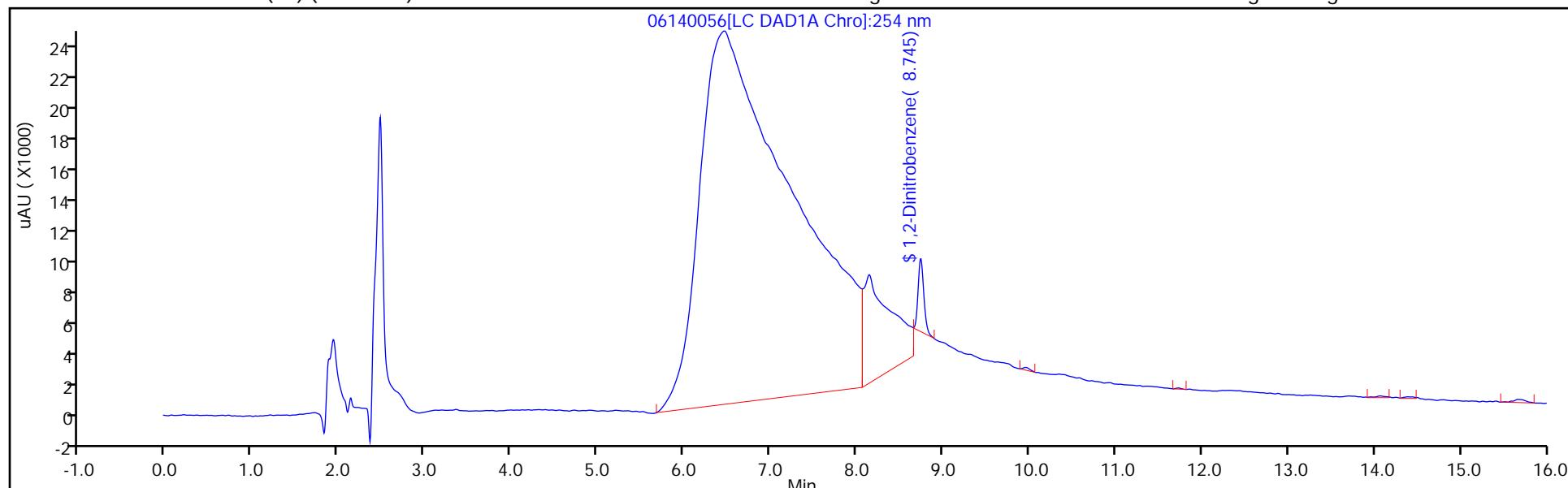
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

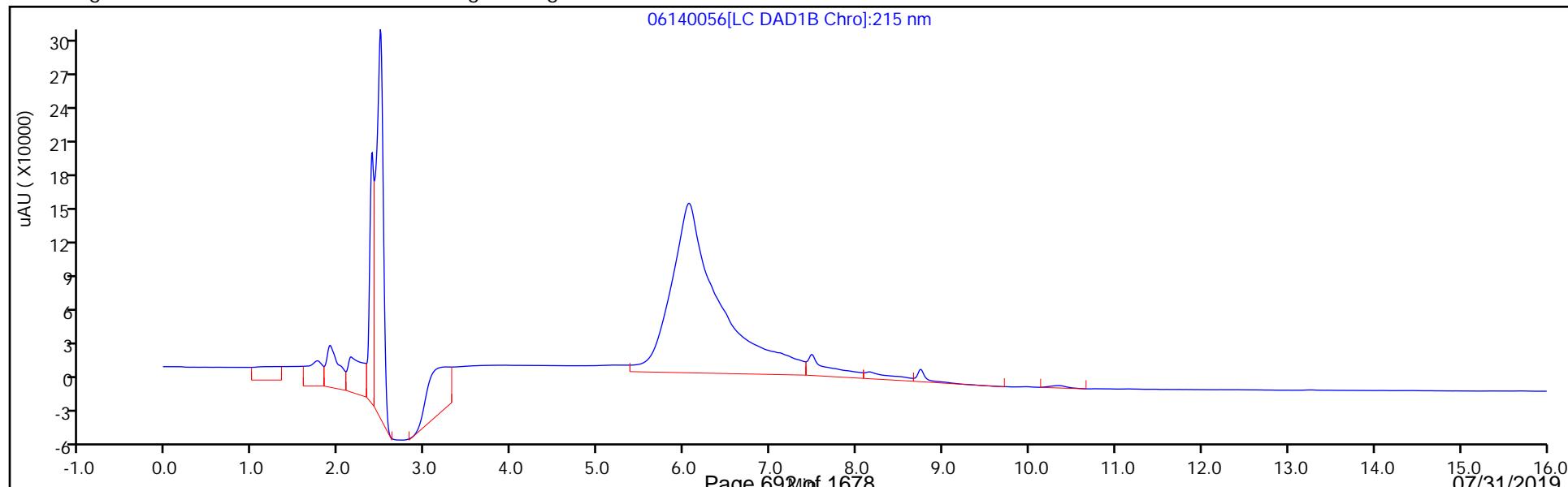
Method: 8330_X3

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

Column: UltraCarb5uODS (20) (4.60 mm)



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140056.D
 Lims ID: 280-124912-A-9-A
 Client ID: PZ005-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 12:36:35 ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-9-A
 Misc. Info.: 280-0082867-056
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:21:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1624	81.19

Eurofins TestAmerica, Denver

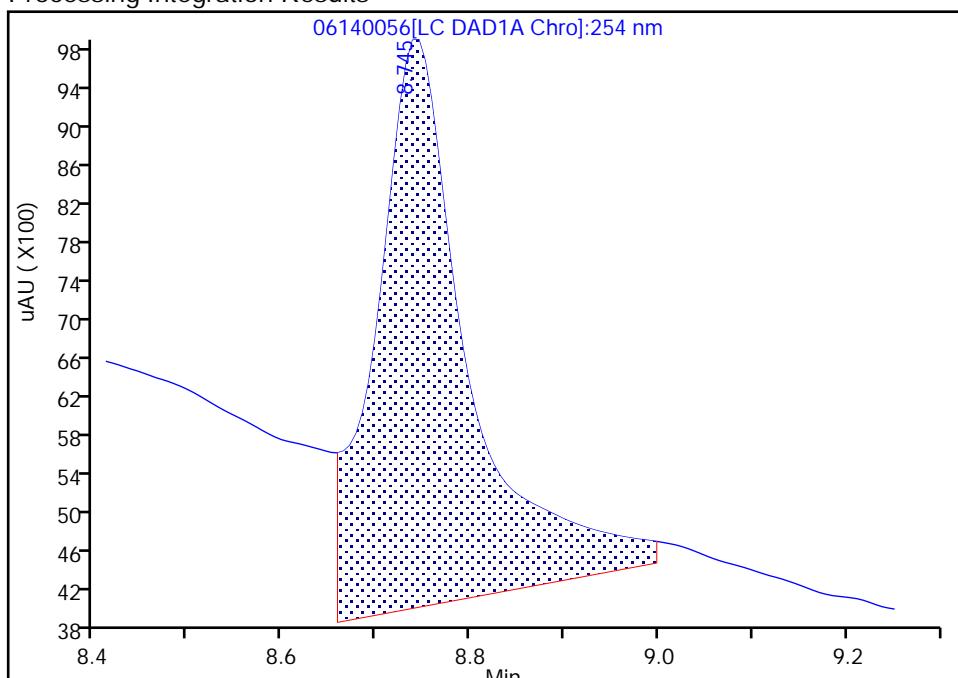
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140056.D
 Injection Date: 15-Jun-2019 12:36:35 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-9-A Lab Sample ID: 280-124912-9
 Client ID: PZ005-19A
 Operator ID: hkf ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

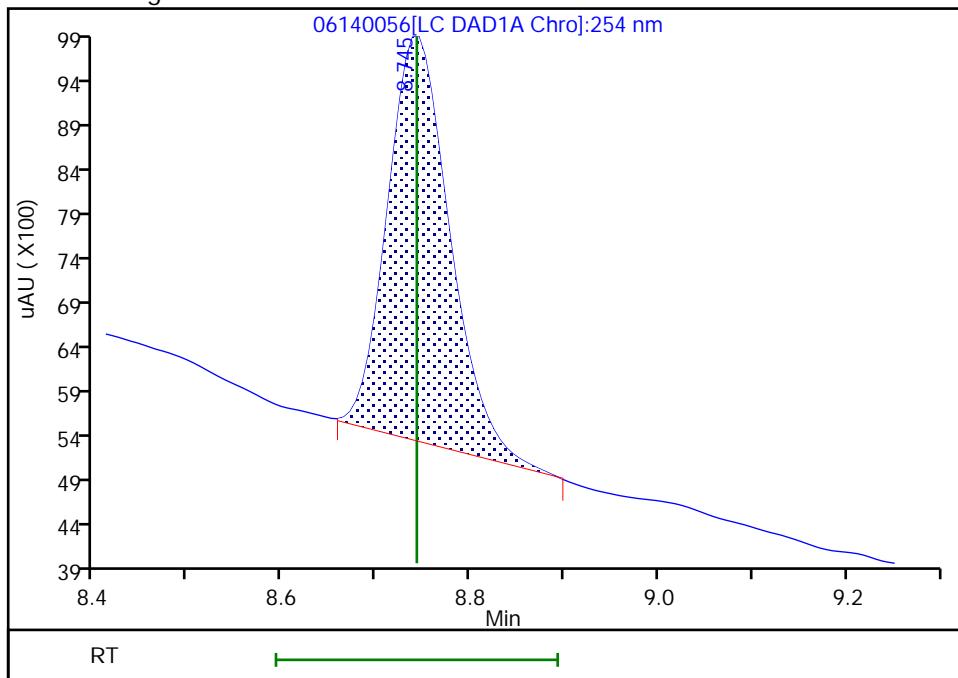
RT: 8.74
 Area: 40849
 Amount: 0.313956
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 21127
 Amount: 0.162377
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:21:43

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

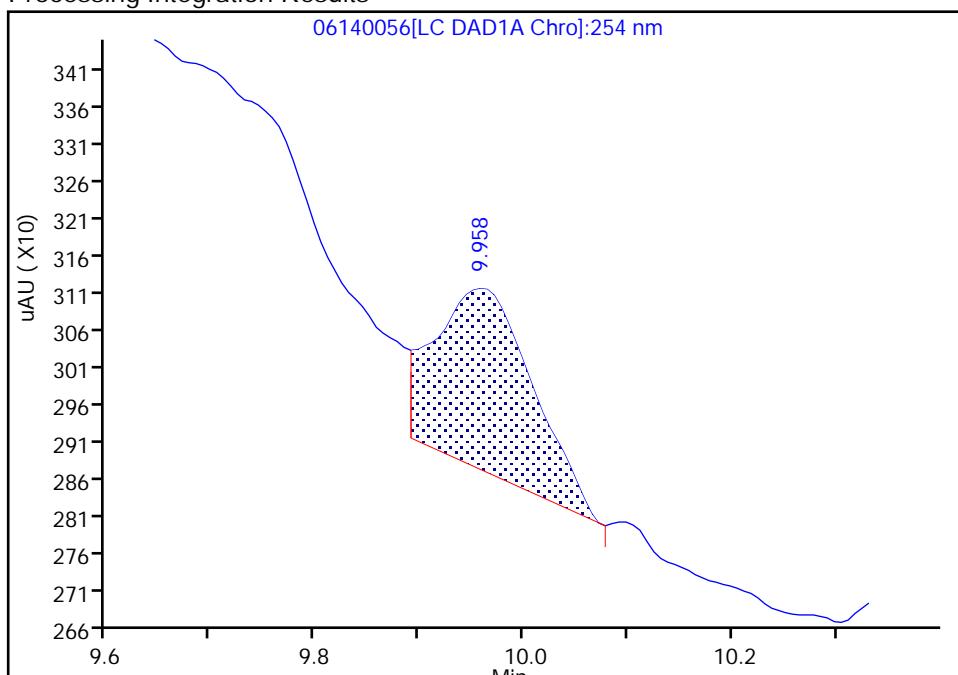
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140056.D
 Injection Date: 15-Jun-2019 12:36:35 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-9-A Lab Sample ID: 280-124912-9
 Client ID: PZ005-19A
 Operator ID: hkf ALS Bottle#: 56 Worklist Smp#: 56
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

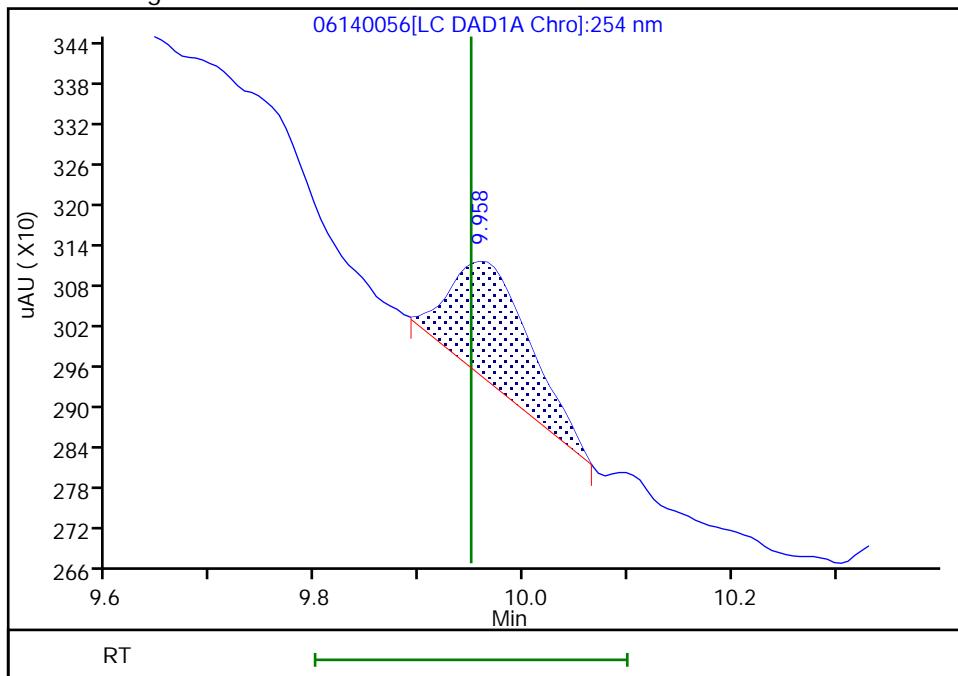
RT: 9.96
 Area: 1591
 Amount: 0.008083
 Amount Units: ug/mL

Processing Integration Results



RT: 9.96
 Area: 947
 Amount: 0.004811
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:21:47

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ005-19A RE Lab Sample ID: 280-124912-9 RE
Matrix: Water Lab File ID: 07110064.D
Analysis Method: 8330A Date Collected: 06/05/2019 09:30
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 468.8 (mL) Date Analyzed: 07/12/2019 08:04
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.21	U H	0.43	0.21	0.091
5755-27-1	MNX	0.43	U H	2.1	0.43	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110064.D
 Lims ID: 280-124912-B-9-A
 Client ID: PZ005-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 08:04:20 ALS Bottle#: 64 Worklist Smp#: 64
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-9-A
 Misc. Info.: 280-0083617-064
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:15:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.692			ND		U
6 MNX	1	7.378			ND		
7 RDX	1	7.799			ND		
\$ 9 1,2-Dinitrobenzene	1	8.747	8.759	-0.012	24009	0.1723	M
10 1,3,5-Trinitrobenzene	1	8.919			ND		
11 1,3-Dinitrobenzene	1	9.578			ND		
12 Nitrobenzene	1	9.967	9.965	0.002	1625	0.008170	
14 Tetryl	1	10.285			ND		
16 2,4,6-Trinitrotoluene	1	11.258			ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445			ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738			ND		
19 2,6-Dinitrotoluene	1	11.878			ND		
20 2,4-Dinitrotoluene	1	12.078			ND		
21 o-Nitrotoluene	1	12.925			ND		
22 p-Nitrotoluene	1	13.372			ND		
23 m-Nitrotoluene	1	13.978			ND		U

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:21:00

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110064.D

Injection Date: 12-Jul-2019 08:04:20

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-B-9-A

Lab Sample ID: 280-124912-9

Worklist Smp#: 64

Client ID: PZ005-19A

Dil. Factor: 1.0000

ALS Bottle#: 64

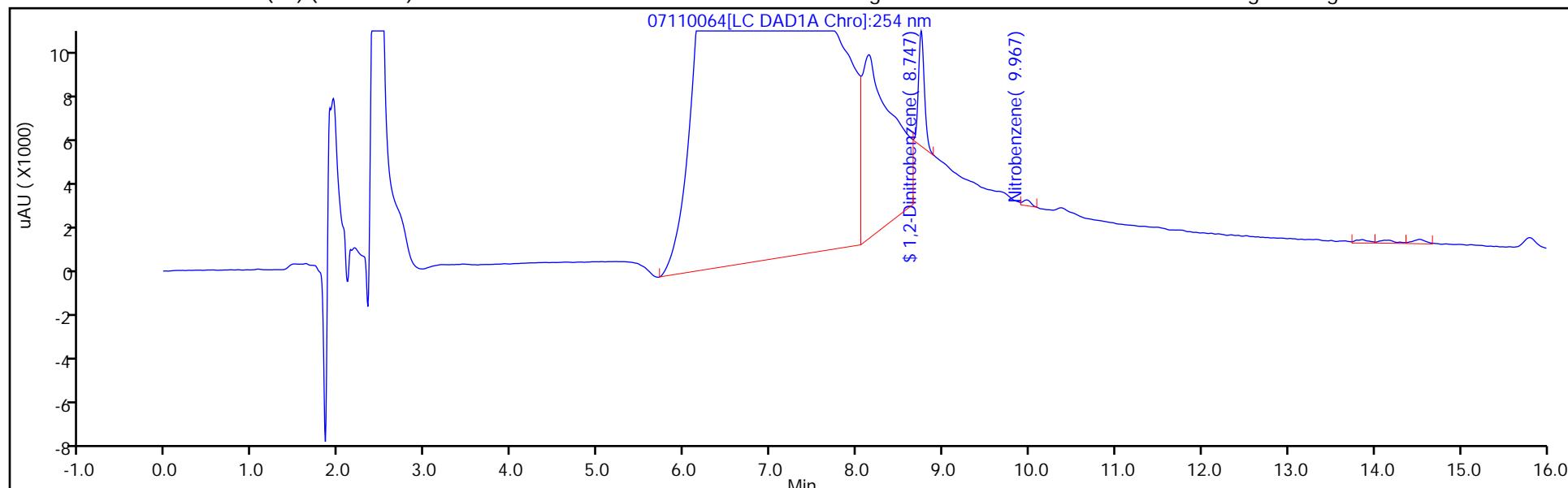
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

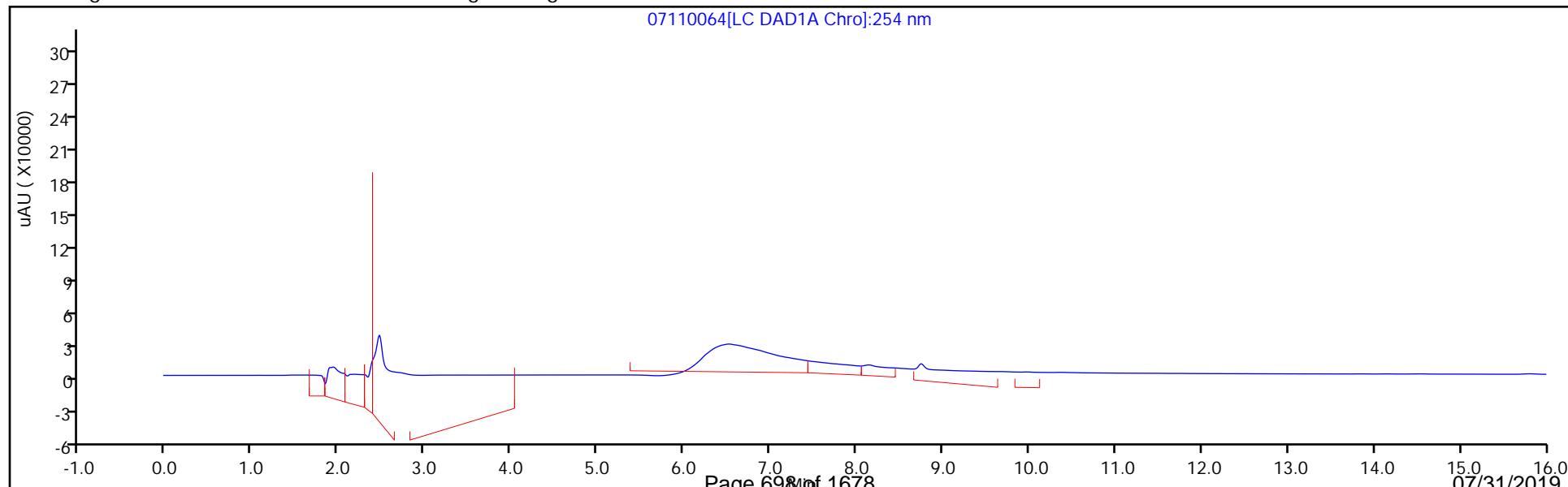
Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110064.D
 Lims ID: 280-124912-B-9-A
 Client ID: PZ005-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 08:04:20 ALS Bottle#: 64 Worklist Smp#: 64
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-9-A
 Misc. Info.: 280-0083617-064
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:15:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1723	86.16

Eurofins TestAmerica, Denver

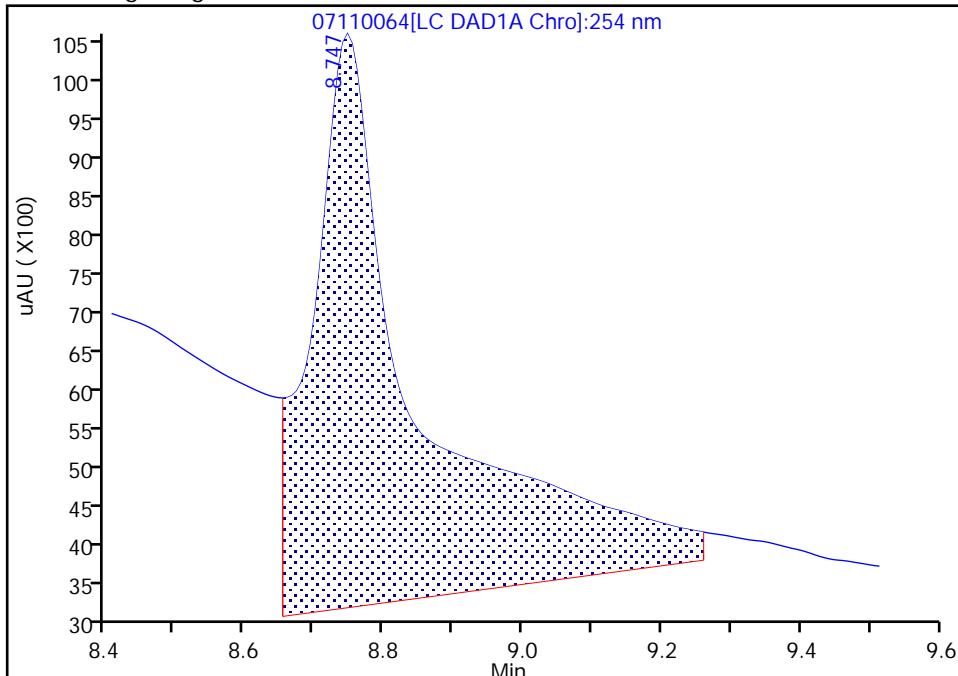
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110064.D
 Injection Date: 12-Jul-2019 08:04:20 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-9-A Lab Sample ID: 280-124912-9
 Client ID: PZ005-19A
 Operator ID: hkf ALS Bottle#: 64 Worklist Smp#: 64
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

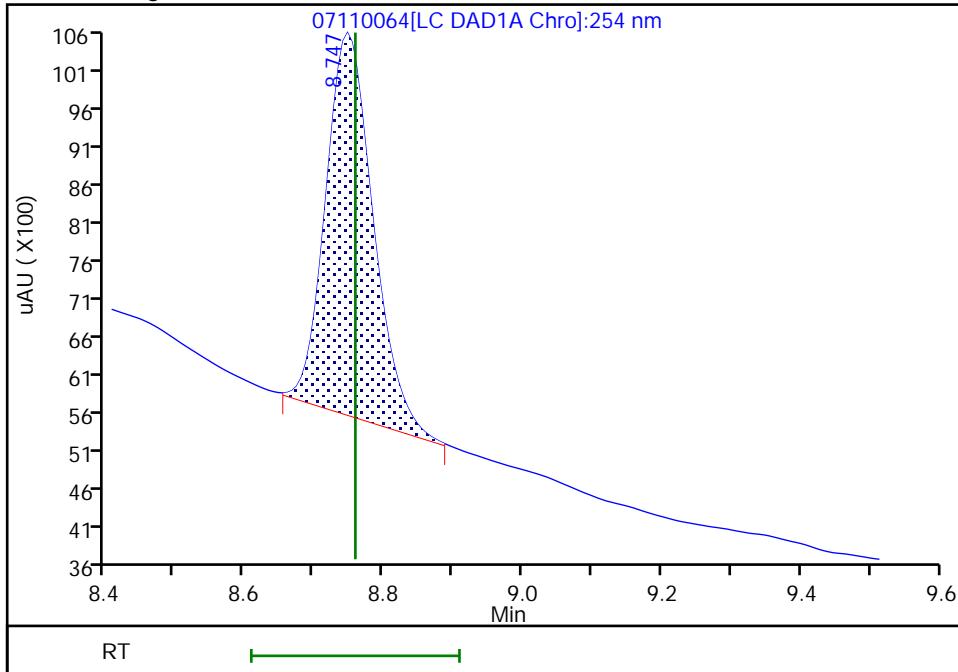
Processing Integration Results

RT: 8.75
 Area: 81239
 Amount: 0.583075
 Amount Units: ug/mL



Manual Integration Results

RT: 8.75
 Area: 24009
 Amount: 0.172319
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:15:06

Audit Action: Manually Integrated

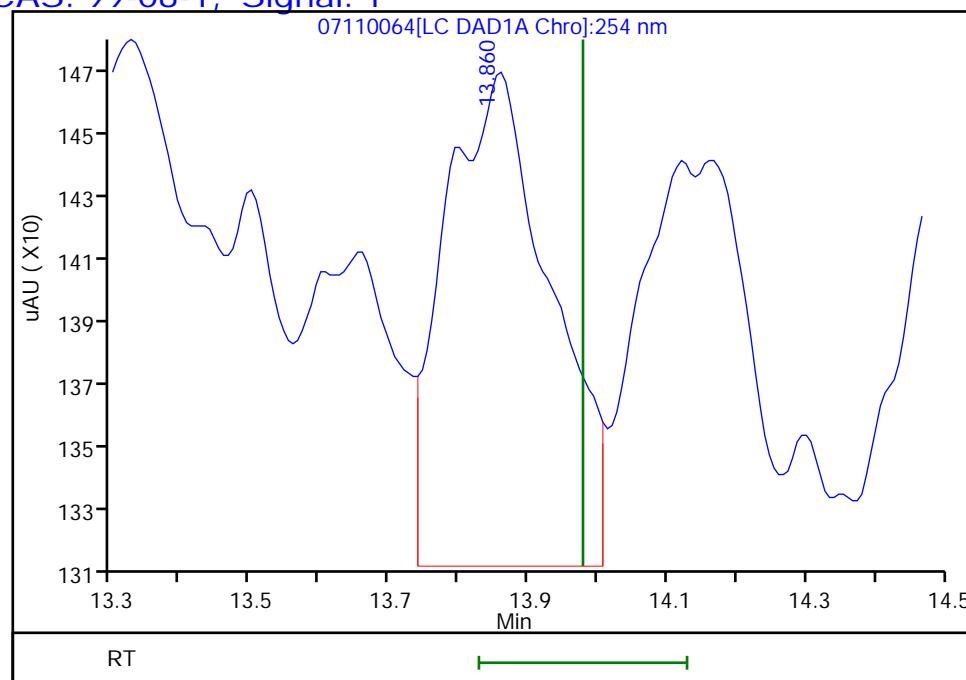
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110064.D
Injection Date: 12-Jul-2019 08:04:20 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-9-A Lab Sample ID: 280-124912-9
Client ID: PZ005-19A
Operator ID: hkf ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.86
Response: 1600
Amount: 0.011025



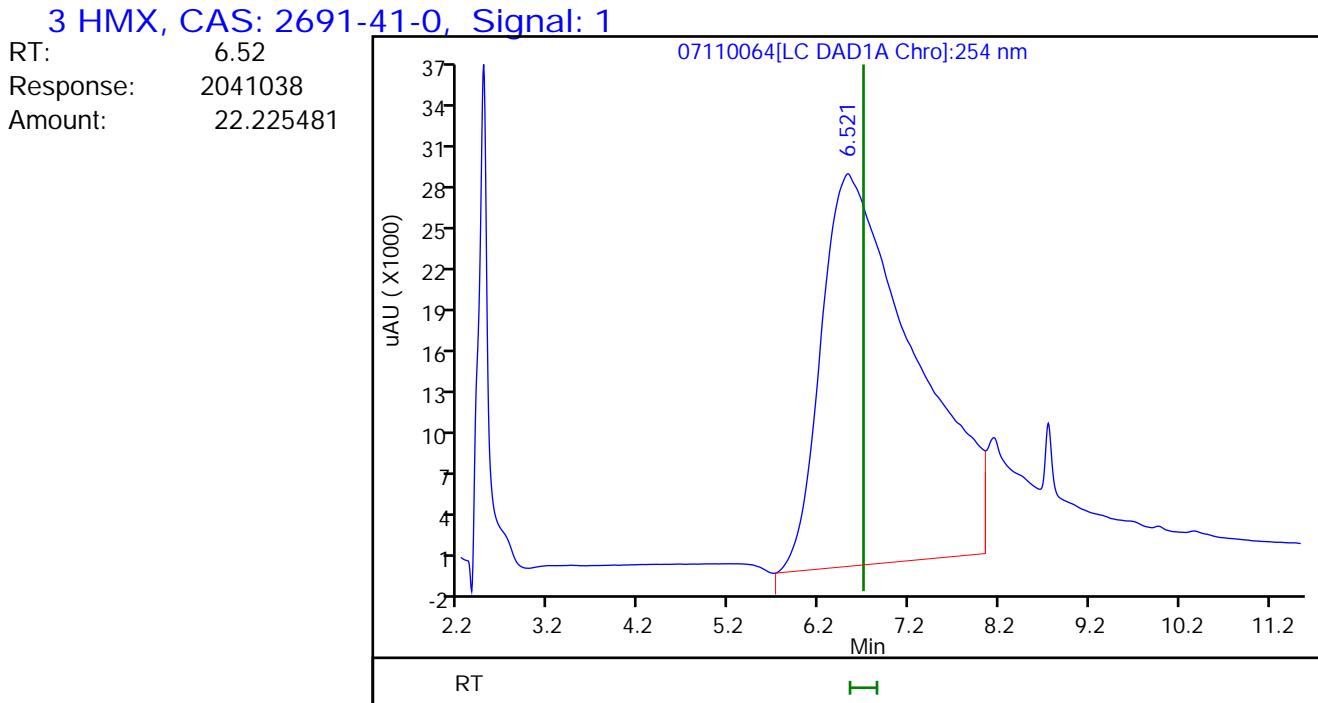
Reviewer: fiedlerh, 12-Jul-2019 09:15:22

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110064.D
Injection Date: 12-Jul-2019 08:04:20 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-9-A Lab Sample ID: 280-124912-9
Client ID: PZ005-19A
Operator ID: hkf ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 12-Jul-2019 09:15:22

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.: 280-124912-1
SDG No.: _____
Client Sample ID: G0103-19A Lab Sample ID: 280-124912-10
Matrix: Water Lab File ID: 06140057.D
Analysis Method: 8330A Date Collected: 06/05/2019 13:10
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 459.8 (mL) Date Analyzed: 06/15/2019 13:00
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.43	U	1.1	0.43	0.22
121-14-2	2,4-Dinitrotoluene	0.22	U	0.43	0.22	0.091
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	U	0.22	0.13	0.055
99-08-1	3-Nitrotoluene	3.7	Q J1	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.22	0.13	0.063
99-99-0	4-Nitrotoluene	0.43	U	1.1	0.43	0.22
2691-41-0	HMX	0.22	U	0.43	0.22	0.095
5755-27-1	MNX	0.43	U M	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.60	M	0.43	0.22	0.099

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	2535	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Lims ID: 280-124912-A-10-A
 Client ID: G0103-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 13:00:29 ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-10-
 Misc. Info.: 280-0082867-057
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICAL File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:24:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.643				ND	
6 MNX	1	7.359				ND	U
7 RDX	1	7.615	7.763	-0.148	2024884	19.0	EM
\$ 9 1,2-Dinitrobenzene	1	8.795	8.743	0.052	659676	5.07	M
10 1,3,5-Trinitrobenzene	1		8.896			ND	
11 1,3-Dinitrobenzene	1	9.529	9.563	-0.034	28266	0.0940	M
12 Nitrobenzene	1	9.935	9.949	-0.014	10849	0.0551	M
14 Tetryl	1	10.155	10.276	-0.121	34886	0.2077	M
16 2,4,6-Trinitrotoluene	1	11.249	11.229	0.020	146493	0.6552	M
17 4-Amino-2,6-dinitrotoluene	1		11.429			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.716			ND	
19 2,6-Dinitrotoluene	1	11.802	11.843	-0.041	294063	1.88	M
20 2,4-Dinitrotoluene	1		12.043			ND	
21 o-Nitrotoluene	1	12.982	12.883	0.099	15262	0.1162	M
22 p-Nitrotoluene	1		13.323			ND	
23 m-Nitrotoluene	1	13.962	13.923	0.039	50201	0.3385	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 17-Jun-2019 10:45:53

Chrom Revision: 2.3 03-May-2019 15:52:00

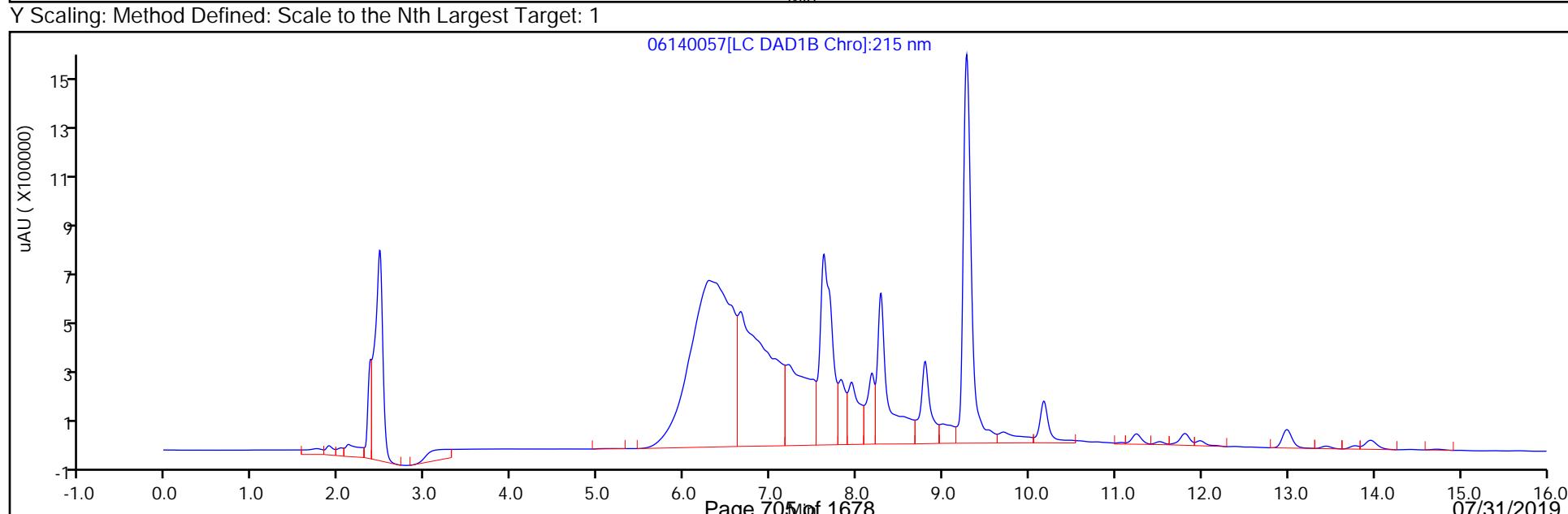
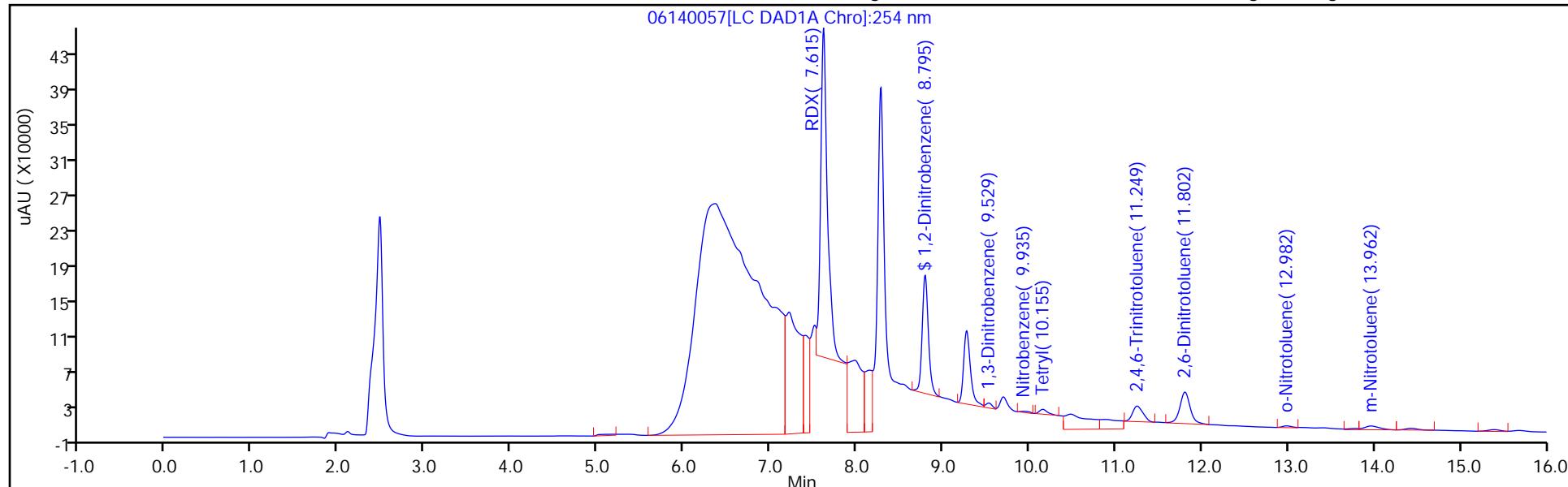
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29
 Lims ID: 280-124912-A-10-A
 Client ID: G0103-19A
 Injection Vol: 100.0 ul
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Instrument ID: CHHPLC_X3
 Lab Sample ID: 280-124912-10
 Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

Operator ID: hkf
 Worklist Smp#: 57
 ALS Bottle#: 57

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Lims ID: 280-124912-A-10-A
 Client ID: G0103-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 13:00:29 ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-10-
 Misc. Info.: 280-0082867-057
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:24:47

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	5.07	2535.06

Eurofins TestAmerica, Denver

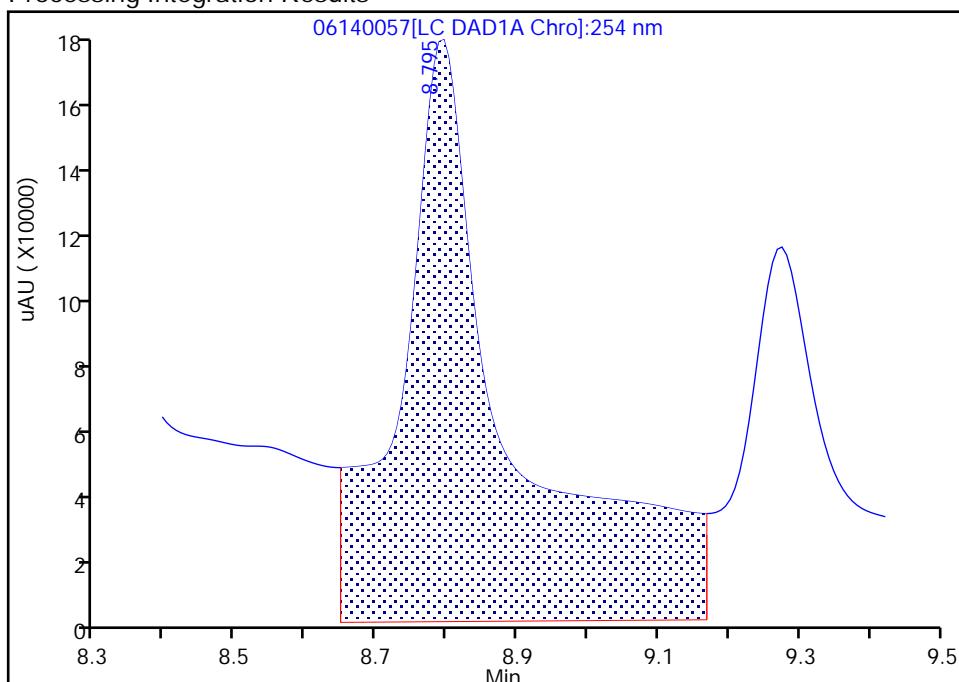
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

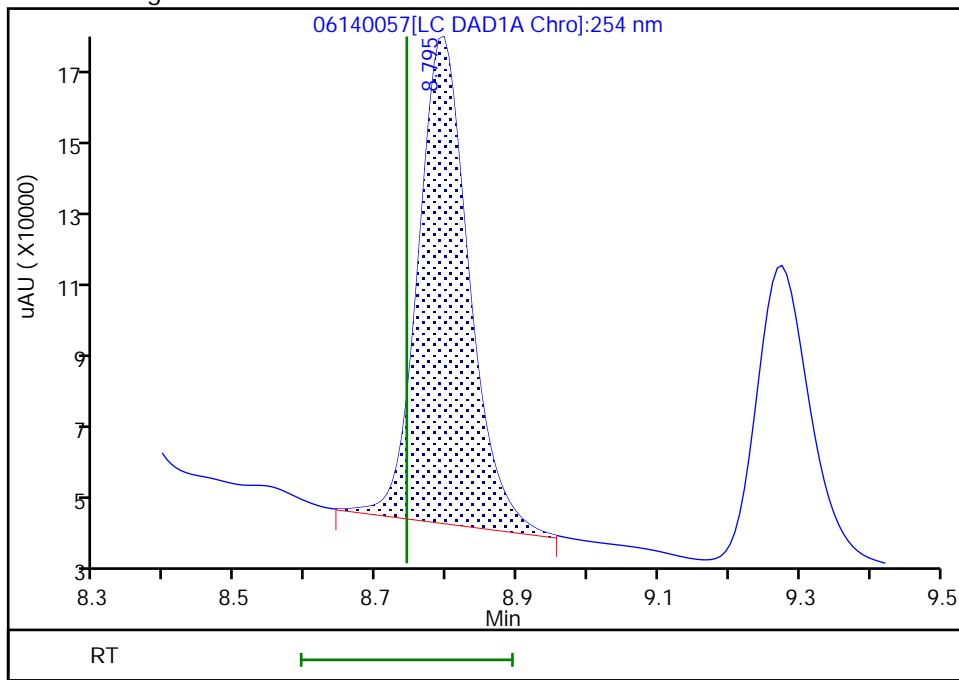
RT: 8.80
 Area: 1873411
 Amount: 14.398606
 Amount Units: ug/mL

Processing Integration Results



RT: 8.80
 Area: 659676
 Amount: 5.070118
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:22:28

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

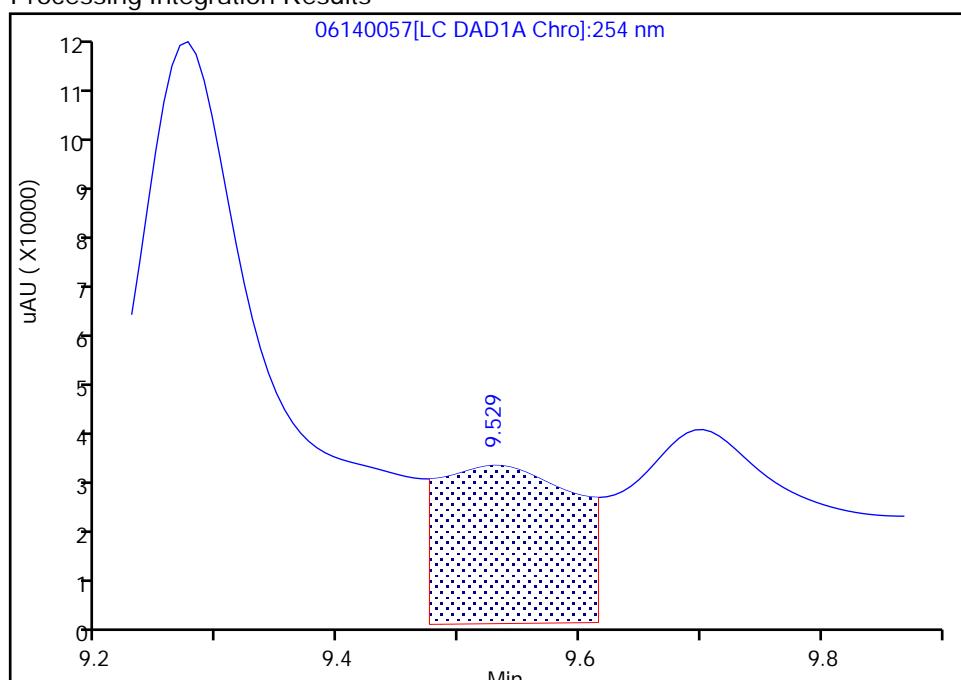
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

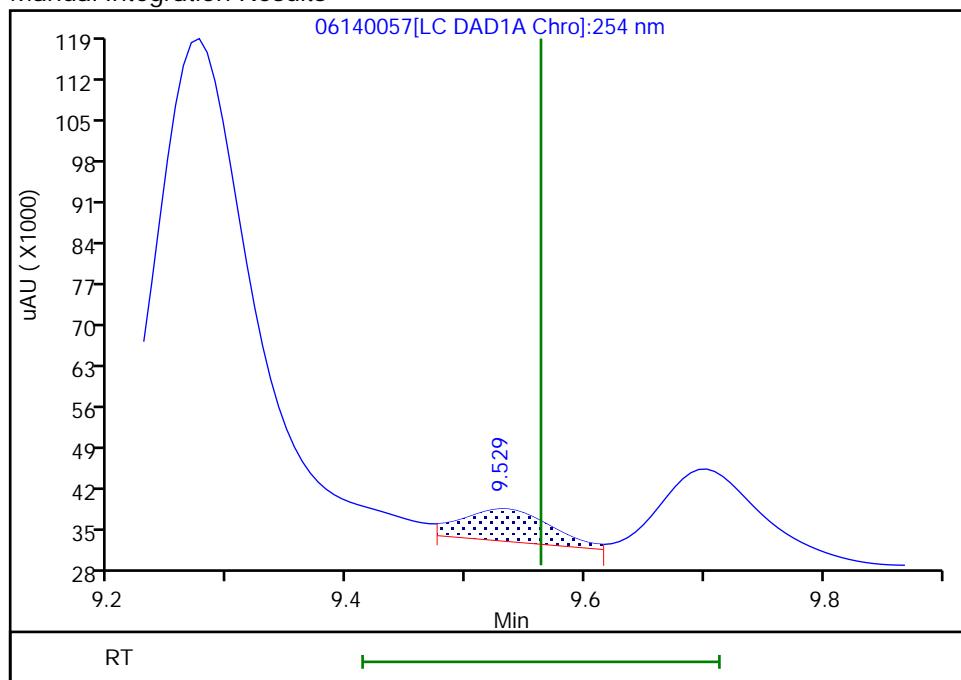
RT: 9.53
 Area: 230886
 Amount: 0.767511
 Amount Units: ug/mL

Processing Integration Results



RT: 9.53
 Area: 28266
 Amount: 0.093962
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:22:57

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

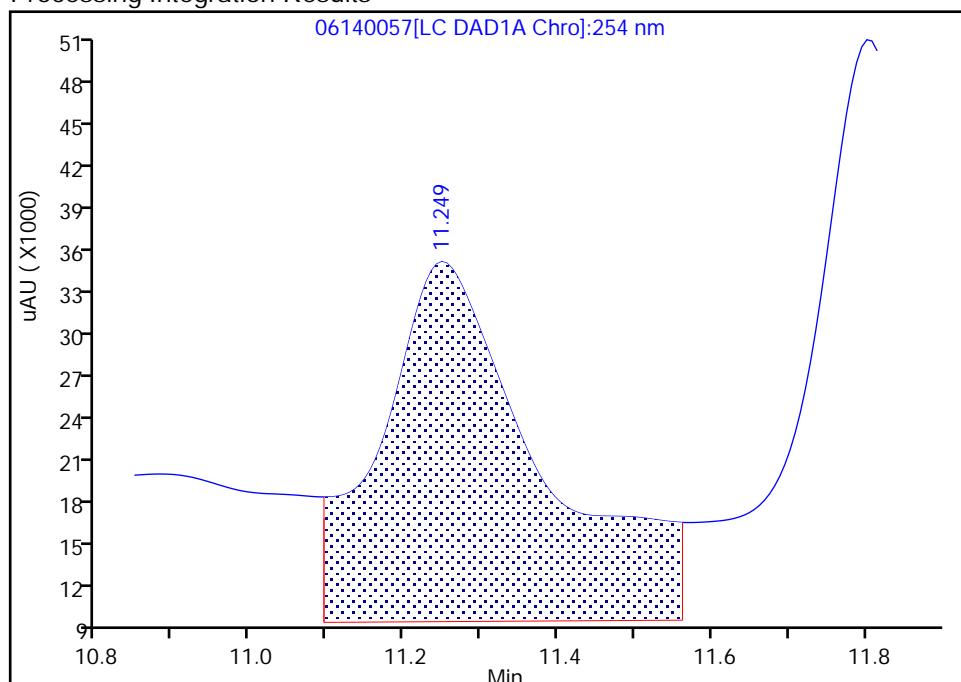
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

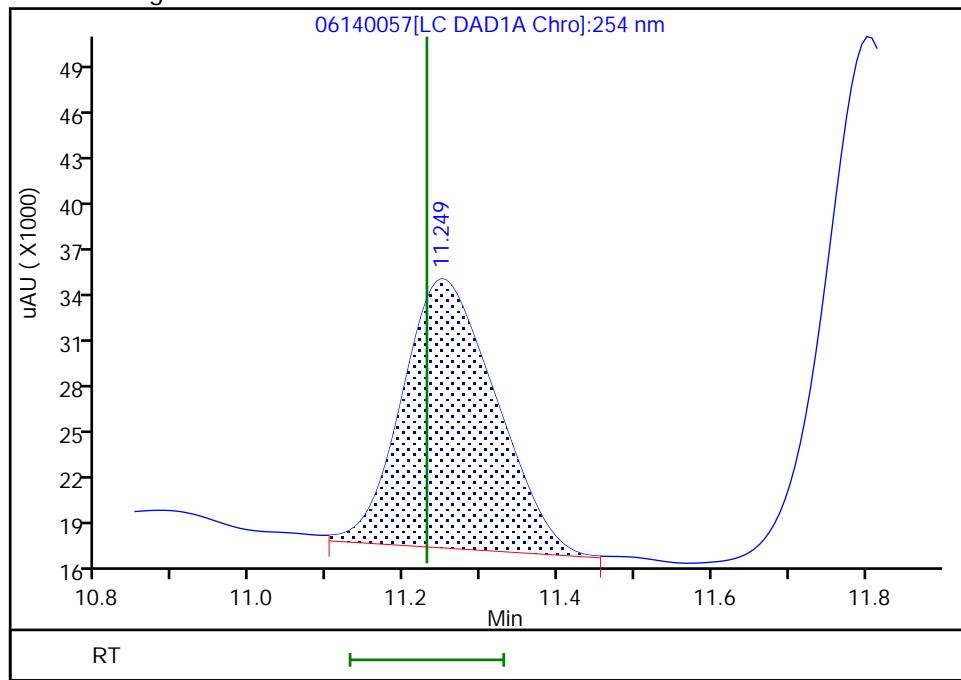
RT: 11.25
 Area: 361238
 Amount: 1.615605
 Amount Units: ug/mL

Processing Integration Results



RT: 11.25
 Area: 146493
 Amount: 0.655177
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:23:18

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

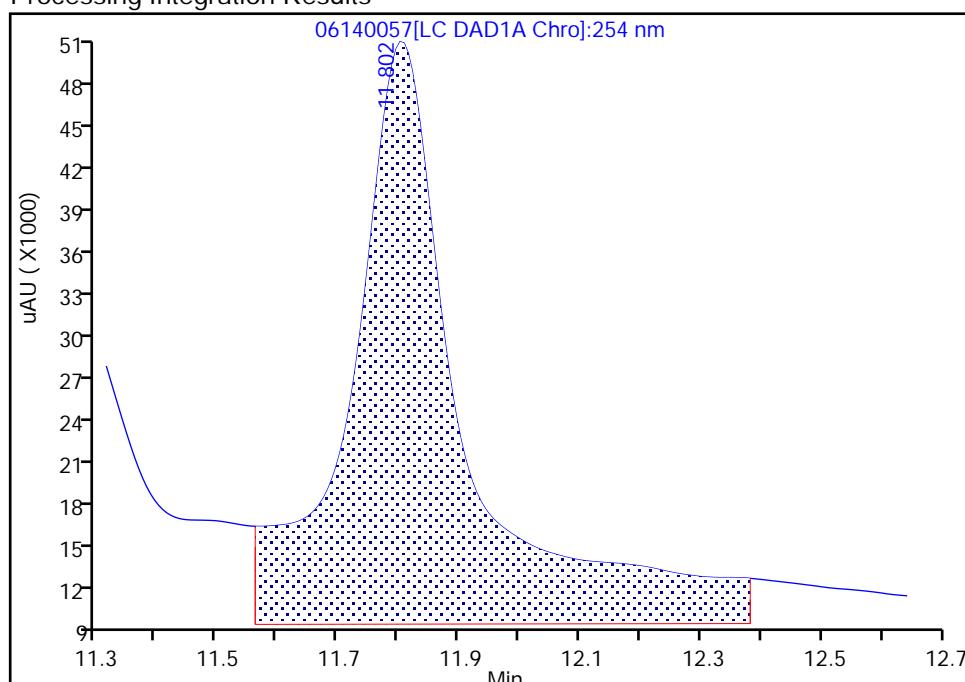
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

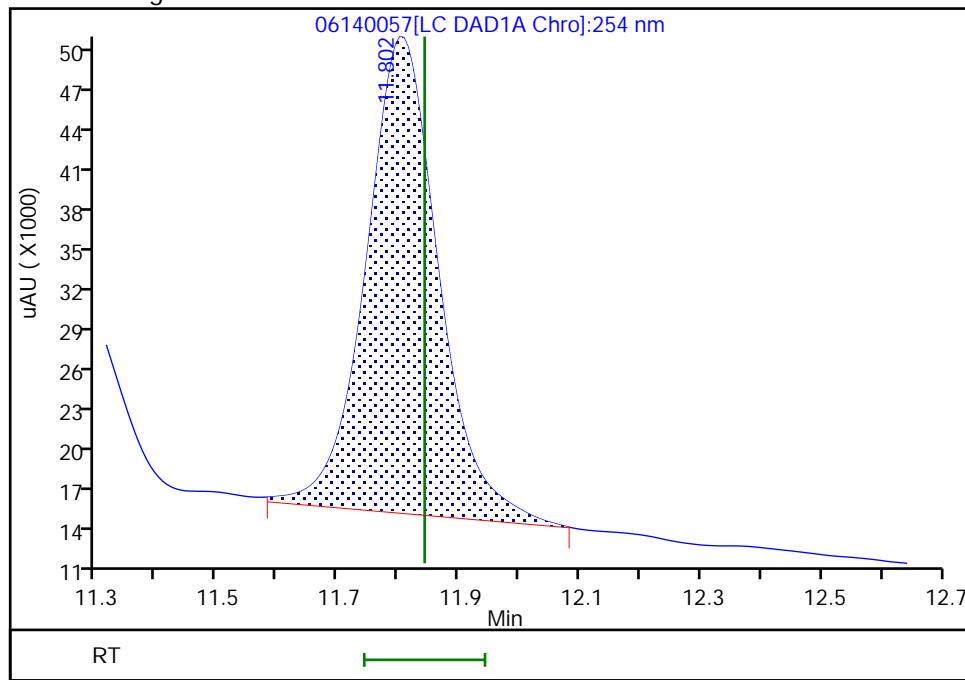
RT: 11.80
 Area: 535691
 Amount: 3.420818
 Amount Units: ug/mL

Processing Integration Results



RT: 11.80
 Area: 294063
 Amount: 1.877829
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:23:24

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

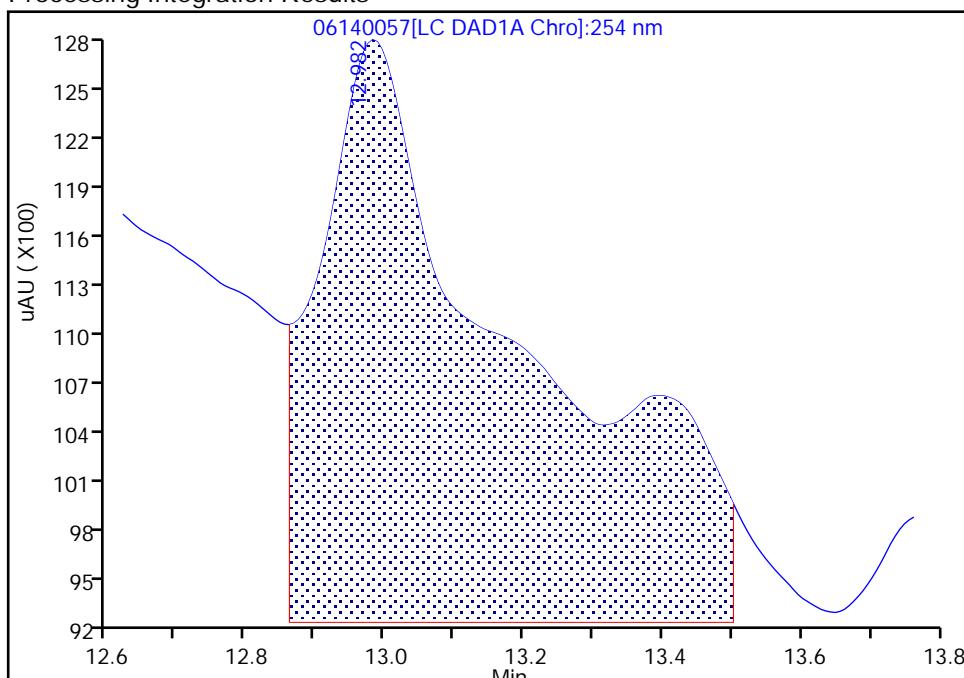
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

21 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

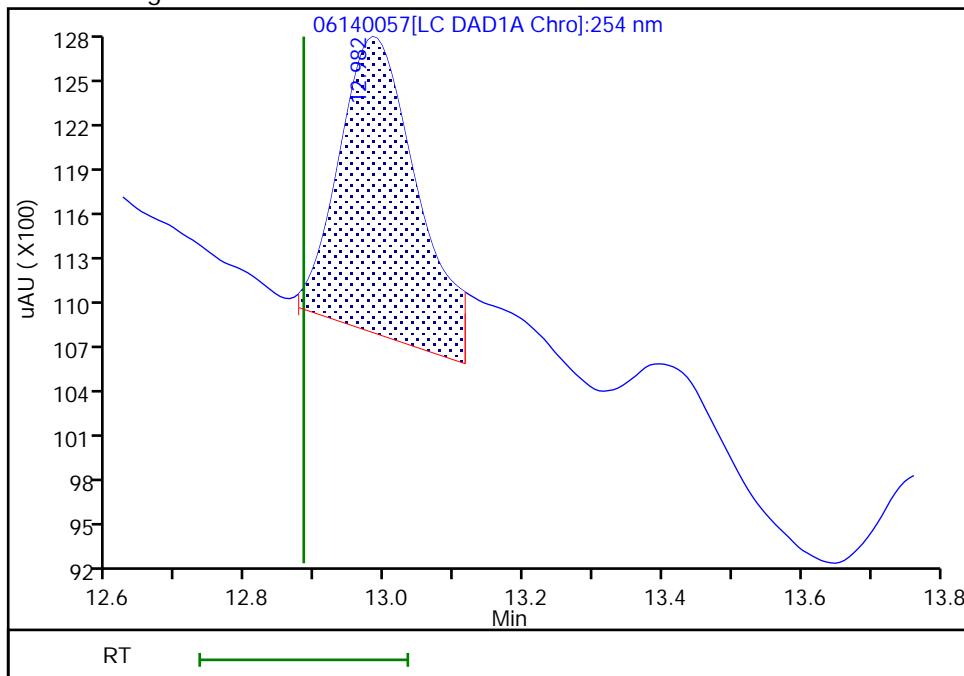
RT: 12.98
 Area: 71203
 Amount: 0.542089
 Amount Units: ug/mL

Processing Integration Results



RT: 12.98
 Area: 15262
 Amount: 0.116194
 Amount Units: ug/mL

Manual Integration Results



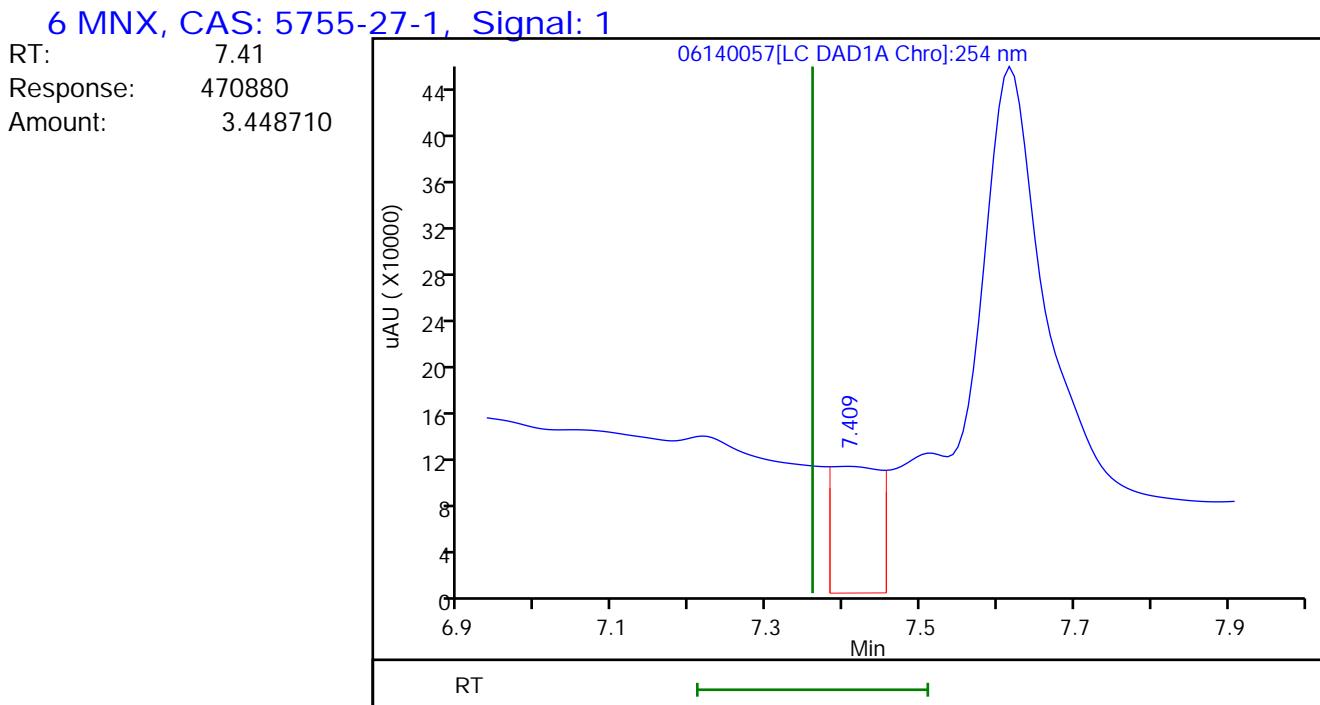
Reviewer: fiedlerh, 17-Jun-2019 10:23:43

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
Client ID: G0103-19A
Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 17-Jun-2019 10:24:47

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

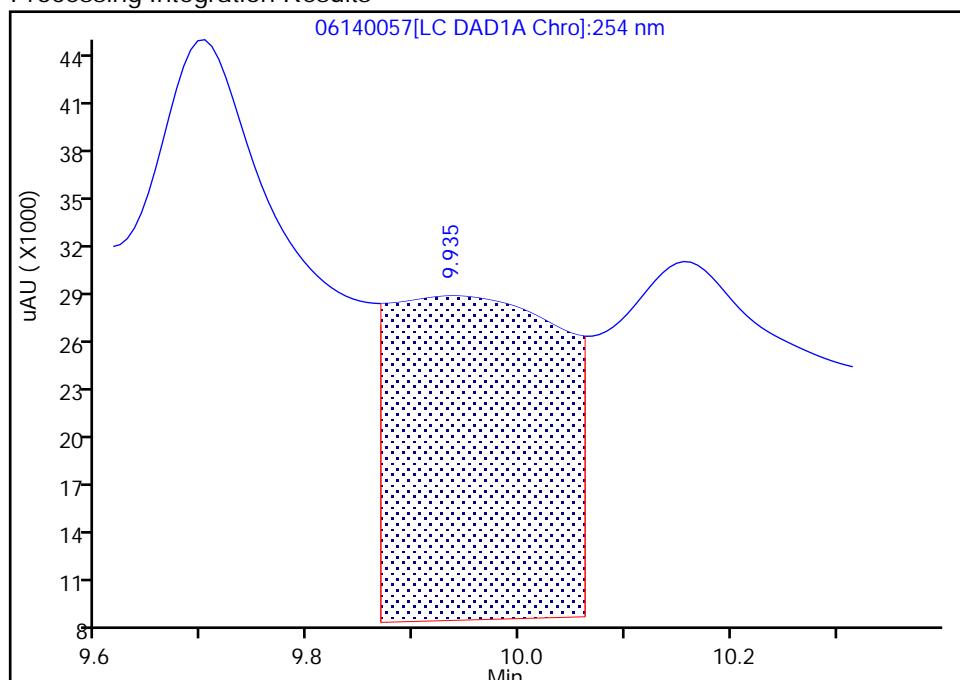
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

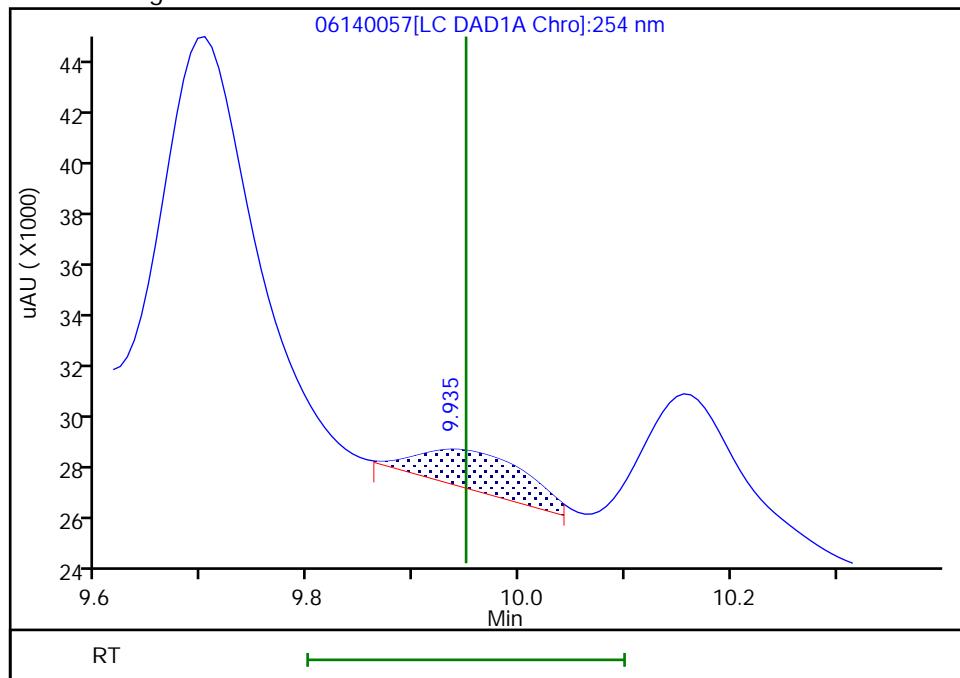
RT: 9.94
 Area: 224649
 Amount: 1.141353
 Amount Units: ug/mL

Processing Integration Results



RT: 9.94
 Area: 10849
 Amount: 0.055119
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:23:07

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

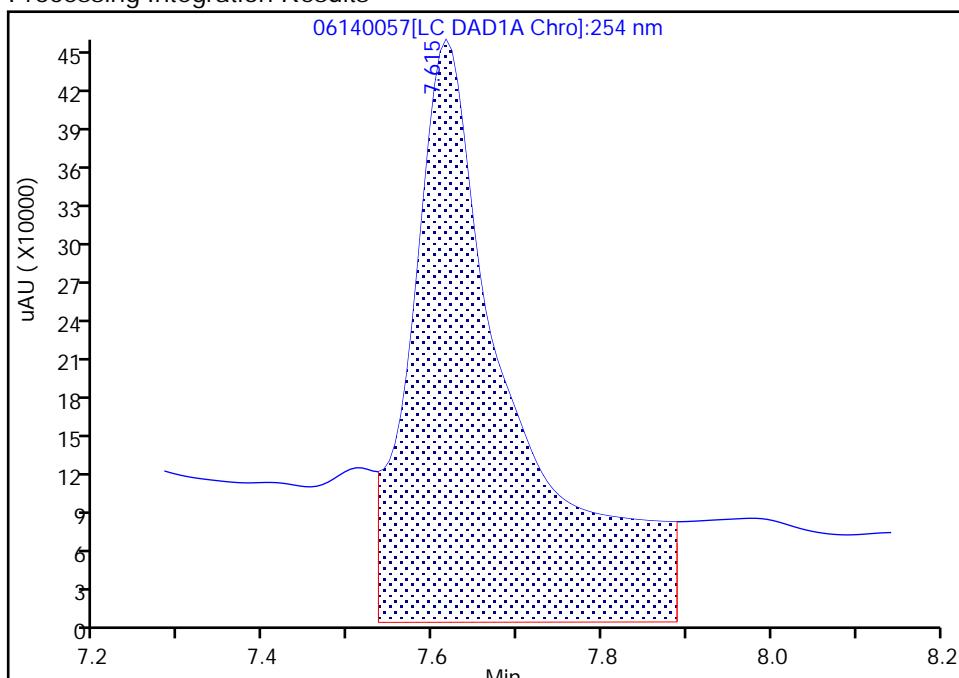
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

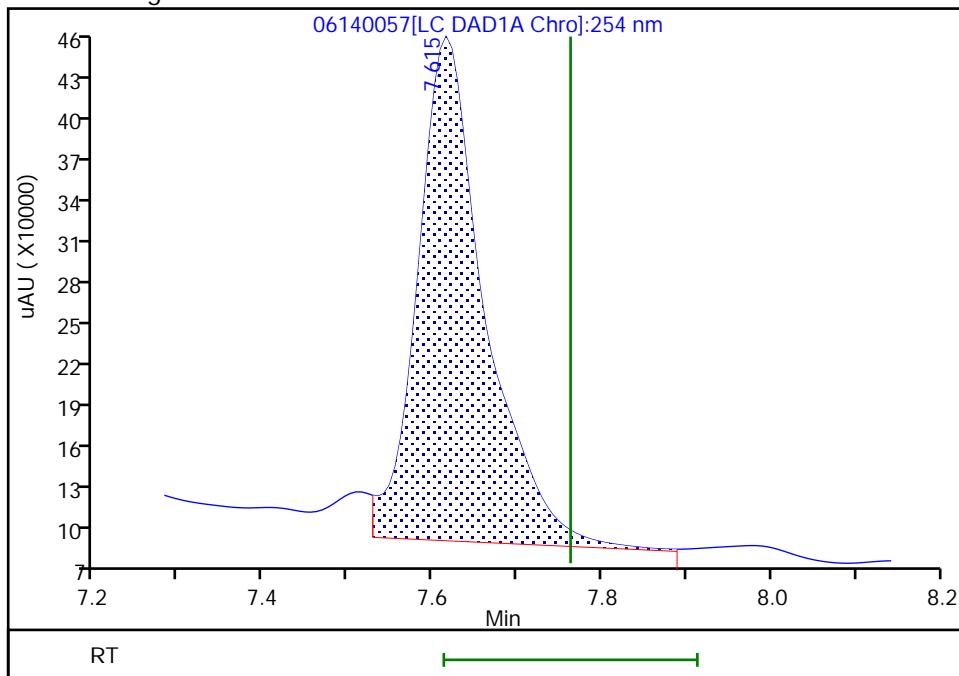
RT: 7.62
 Area: 3727310
 Amount: 34.952460
 Amount Units: ug/mL

Processing Integration Results



RT: 7.62
 Area: 2024884
 Amount: 18.988138
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:22:15

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

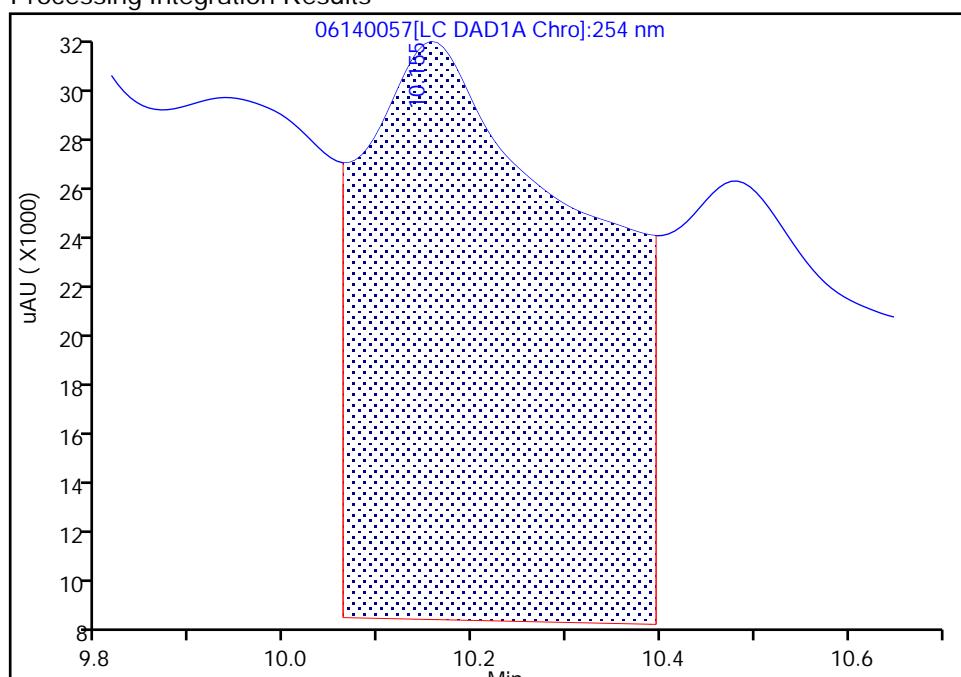
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140057.D
 Injection Date: 15-Jun-2019 13:00:29 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 57 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8

Signal: 1

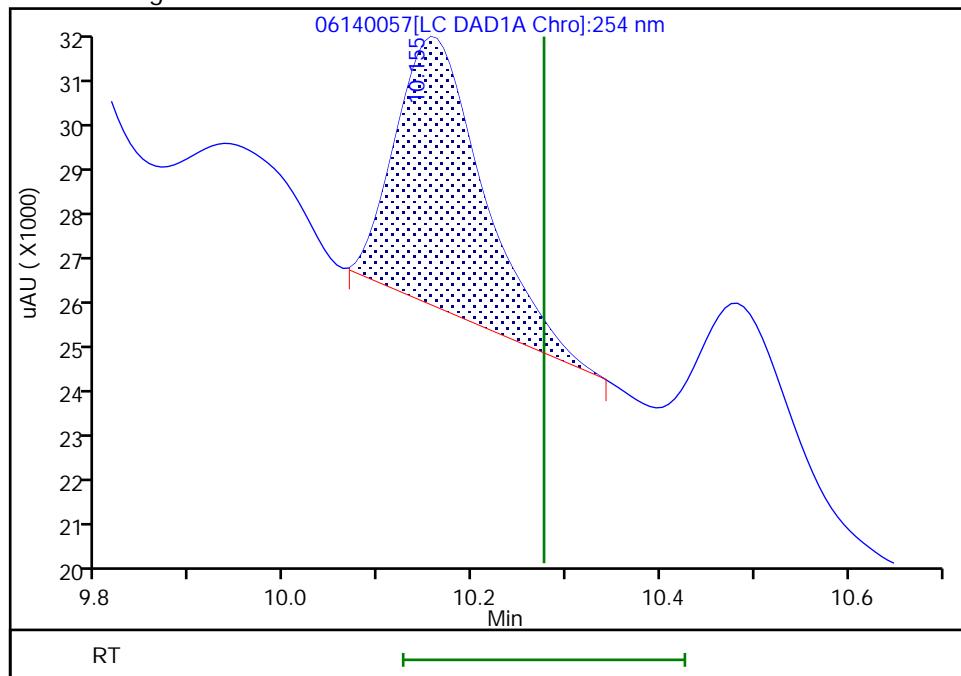
RT: 10.16
 Area: 359031
 Amount: 2.137654
 Amount Units: ug/mL

Processing Integration Results



RT: 10.16
 Area: 34886
 Amount: 0.207710
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:23:14

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0103-19A Lab Sample ID: 280-124912-10
Matrix: Water Lab File ID: 06170034.D
Analysis Method: 8330A Date Collected: 06/05/2019 13:10
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 459.8 (mL) Date Analyzed: 06/18/2019 10:20
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: Luna-phenylhex ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461836 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.22	U	0.43	0.22	0.096
118-96-7	2,4,6-Trinitrotoluene	0.43	U Q	0.43	0.43	0.17
606-20-2	2,6-Dinitrotoluene	0.22	U	0.22	0.22	0.070
88-72-2	2-Nitrotoluene	0.22	U Q	0.43	0.22	0.093
99-08-1	3-Nitrotoluene	0.58	Q J1	0.43	0.43	0.21
121-82-4	RDX	0.43	U Q M	0.43	0.43	0.17
479-45-8	Tetryl	0.22	U	0.26	0.22	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	42	Q M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170034.D
 Lims ID: 280-124912-A-10-A
 Client ID: G0103-19A
 Sample Type: Client
 Inject. Date: 18-Jun-2019 10:20:12 ALS Bottle#: 34 Worklist Smp#: 34
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-10-
 Misc. Info.: 280-0082939-034
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 19-Jun-2019 11:10:34 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0312

First Level Reviewer: fiedlerh Date: 18-Jun-2019 11:46:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.187			ND	MU	
7 MNX	1	7.848			ND		
8 RDX	1	9.267			ND	U	
9 Nitrobenzene	1	12.279	12.247	0.032	21147	0.0522	
\$ 10 1,2-Dinitrobenzene	1	13.253	13.281	-0.028	23253	0.0840	M
12 1,3-Dinitrobenzene	1	15.801			ND		
14 o-Nitrotoluene	1	16.614			ND		
15 p-Nitrotoluene	1	16.947	16.947	-0.081	69858	0.3082	
16 4-Amino-2,6-dinitrotoluene	1	17.361			ND		
17 m-Nitrotoluene	1	17.819	17.854	-0.035	15569	0.0532	
18 2-Amino-4,6-dinitrotoluene	1	18.394			ND		
19 1,3,5-Trinitrobenzene	1	19.107			ND		
20 2,6-Dinitrotoluene	1	19.954			ND		
21 2,4-Dinitrotoluene	1	20.514			ND	U	
22 Tetryl	1	23.847			ND		
23 2,4,6-Trinitrotoluene	1	24.821			ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 19-Jun-2019 11:10:43

Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170034.D

Injection Date: 18-Jun-2019 10:20:12

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: 280-124912-A-10-A

Lab Sample ID: 280-124912-10

Worklist Smp#: 34

Client ID: G0103-19A

Dil. Factor: 1.0000

ALS Bottle#: 34

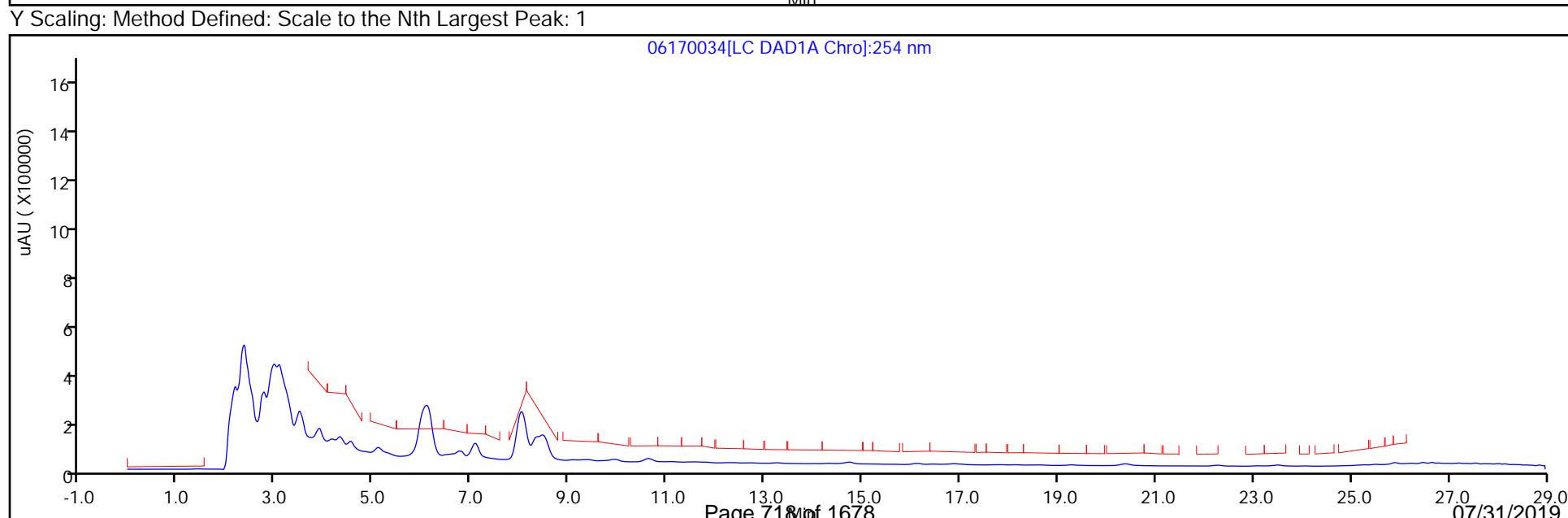
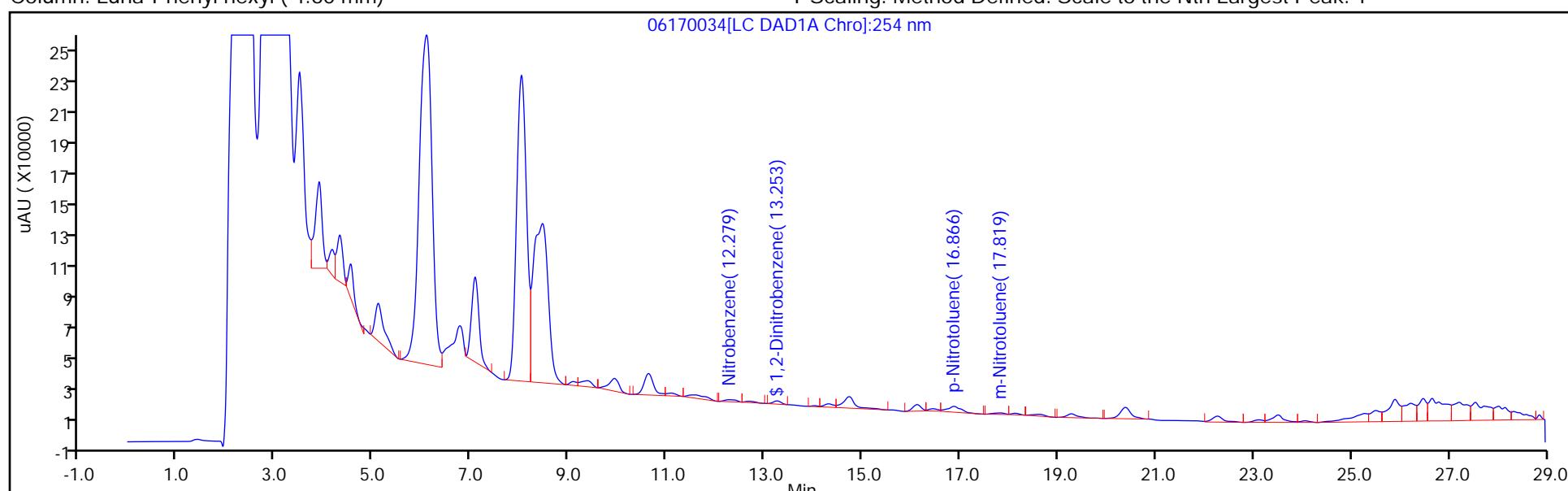
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

Method: G2_8330_Luna

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170034.D
 Lims ID: 280-124912-A-10-A
 Client ID: G0103-19A
 Sample Type: Client
 Inject. Date: 18-Jun-2019 10:20:12 ALS Bottle#: 34 Worklist Smp#: 34
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-10-
 Misc. Info.: 280-0082939-034
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 19-Jun-2019 11:10:34 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0312

First Level Reviewer: fiedlerh Date: 18-Jun-2019 11:46:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.0840	41.99

Eurofins TestAmerica, Denver

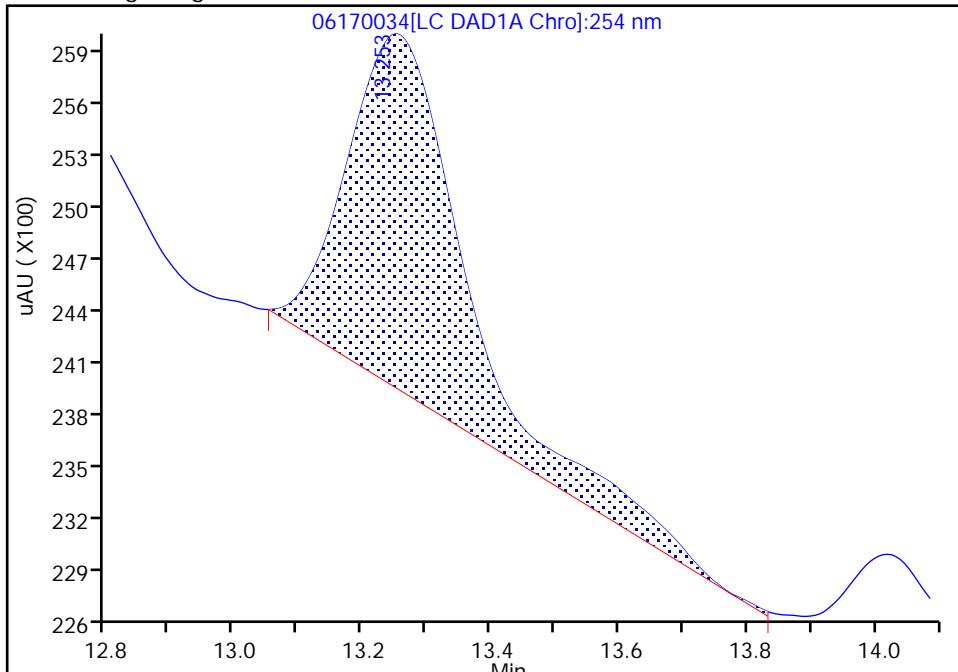
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170034.D
 Injection Date: 18-Jun-2019 10:20:12 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: HKF ALS Bottle#: 34 Worklist Smp#: 34
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

\$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

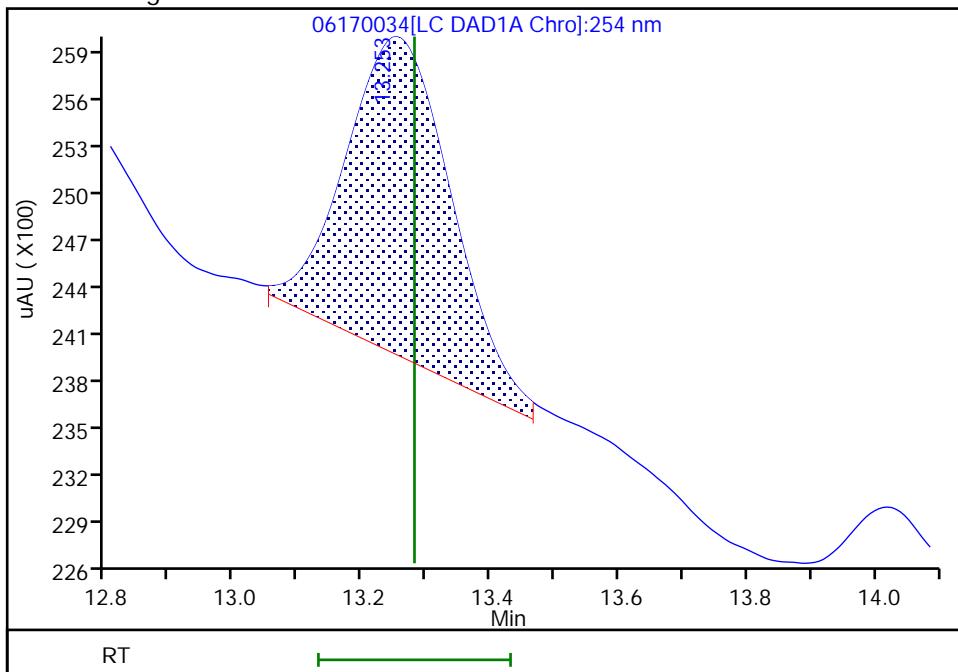
Processing Integration Results

RT: 13.25
 Area: 26426
 Amount: 0.095450
 Amount Units: ug/ml



Manual Integration Results

RT: 13.25
 Area: 23253
 Amount: 0.083990
 Amount Units: ug/ml



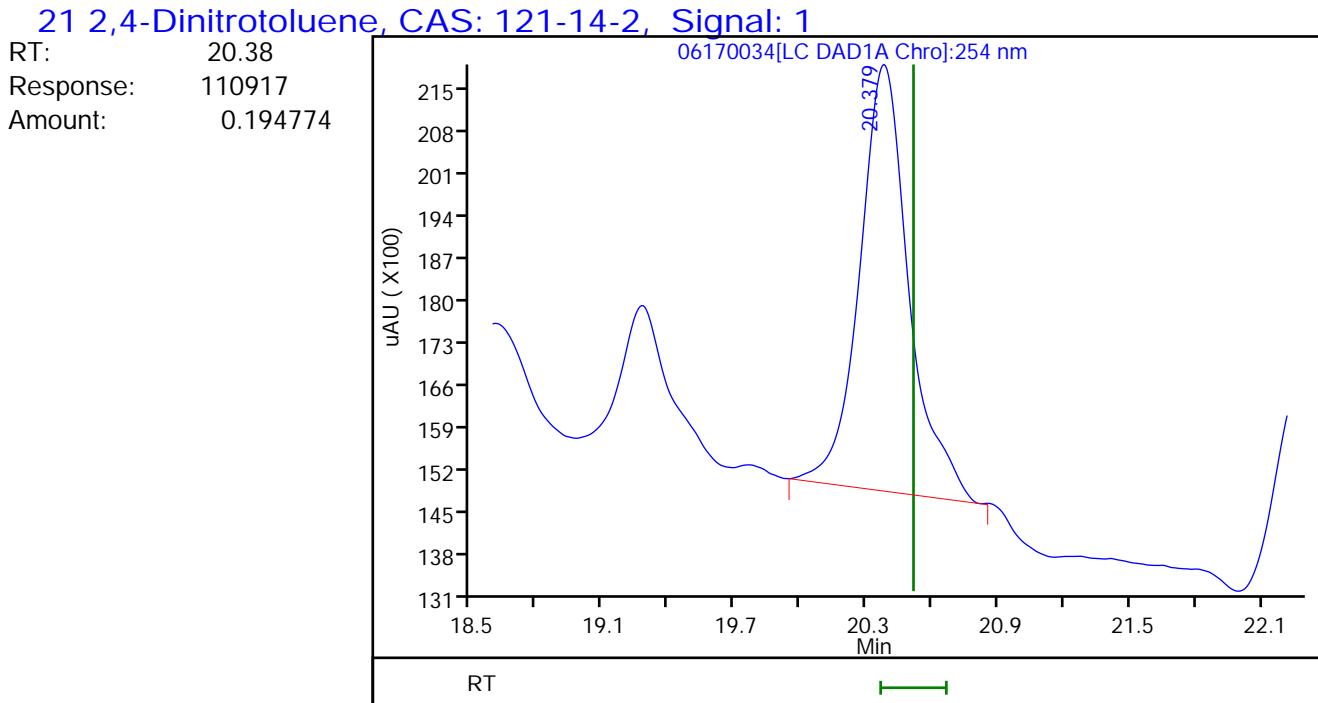
Reviewer: fiedlerh, 18-Jun-2019 11:46:29

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170034.D
 Injection Date: 18-Jun-2019 10:20:12 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: HKF ALS Bottle#: 34 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



Reviewer: fiedlerh, 18-Jun-2019 11:48:35

Audit Action: Marked Compound Undetected

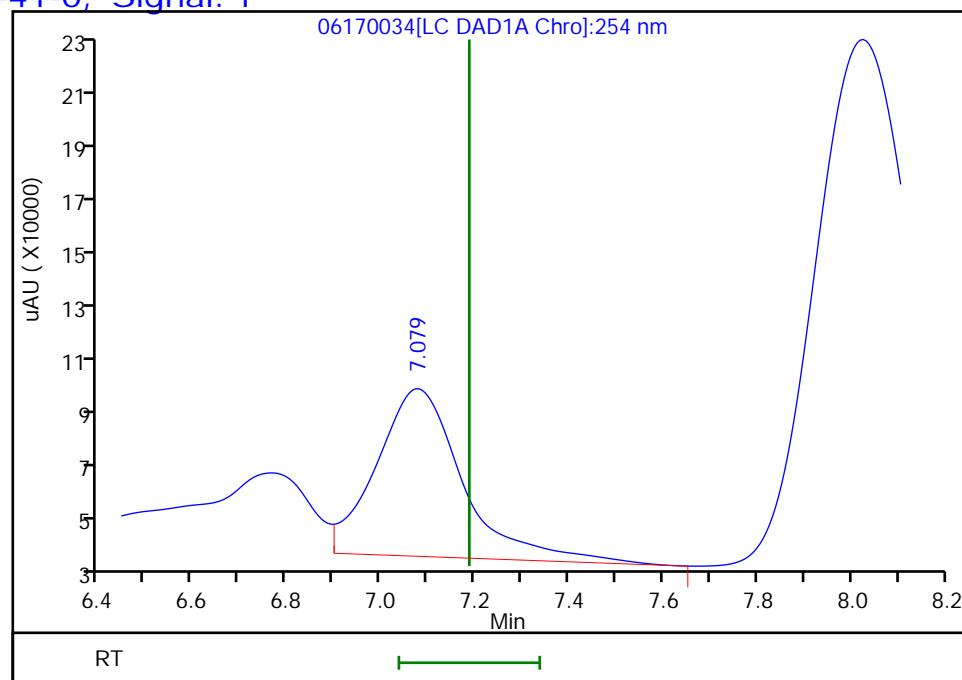
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170034.D
Injection Date: 18-Jun-2019 10:20:12 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
Client ID: G0103-19A
Operator ID: HKF ALS Bottle#: 34 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

6 HMX, CAS: 2691-41-0, Signal: 1

RT: 7.08
Response: 776091
Amount: 4.533283



Reviewer: fiedlerh, 18-Jun-2019 11:48:35

Audit Action: Marked Compound Undetected

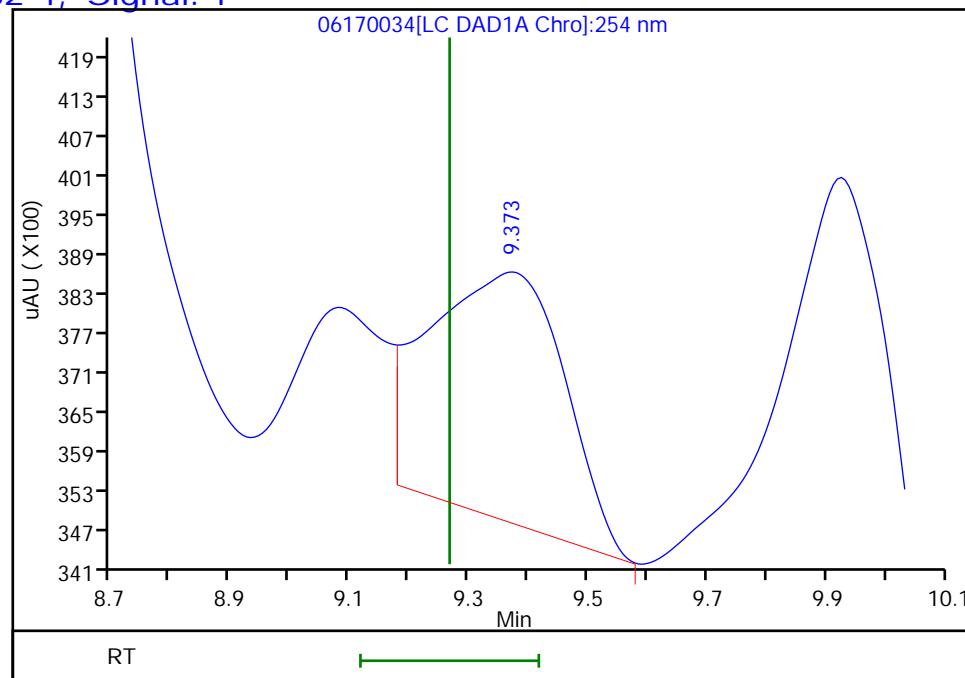
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170034.D
 Injection Date: 18-Jun-2019 10:20:12 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: HKF ALS Bottle#: 34 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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 9.37
 Response: 58592
 Amount: 0.281093



Reviewer: fiedlerh, 18-Jun-2019 11:48:35

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0103-19A RE Lab Sample ID: 280-124912-10 RE
Matrix: Water Lab File ID: 07110065.D
Analysis Method: 8330A Date Collected: 06/05/2019 13:10
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 449.2 (mL) Date Analyzed: 07/12/2019 08:27
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.22	U H M	0.45	0.22	0.095
5755-27-1	MNX	0.45	U H M	2.2	0.45	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	2016	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
 Lims ID: 280-124912-B-10-A
 Client ID: G0103-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 08:27:16 ALS Bottle#: 65 Worklist Smp#: 65
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-10-
 Misc. Info.: 280-0083617-065
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICAL File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:16:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.692				ND	
6 MNX	1	7.378				ND	U
7 RDX	1	7.799				ND	MU
\$ 9 1,2-Dinitrobenzene	1	8.797	8.759	0.038	561758	4.03	M
10 1,3,5-Trinitrobenzene	1	8.919				ND	
11 1,3-Dinitrobenzene	1	9.564	9.578	-0.014	30192	0.0970	M
12 Nitrobenzene	1	9.970	9.965	0.005	12669	0.0637	M
14 Tetryl	1	10.285				ND	U
16 2,4,6-Trinitrotoluene	1	11.258				ND	U
17 4-Amino-2,6-dinitrotoluene	1	11.445				ND	
18 2-Amino-4,6-dinitrotoluene	1	11.738				ND	
19 2,6-Dinitrotoluene	1	11.864	11.878	-0.014	151123	0.9488	M
20 2,4-Dinitrotoluene	1	12.078				ND	
21 o-Nitrotoluene	1	12.925				ND	U
22 p-Nitrotoluene	1	13.430	13.372	0.058	10030	0.0910	
23 m-Nitrotoluene	1	14.050	13.978	0.072	63850	0.4400	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:21:01

Chrom Revision: 2.3 20-Jun-2019 20:50:56

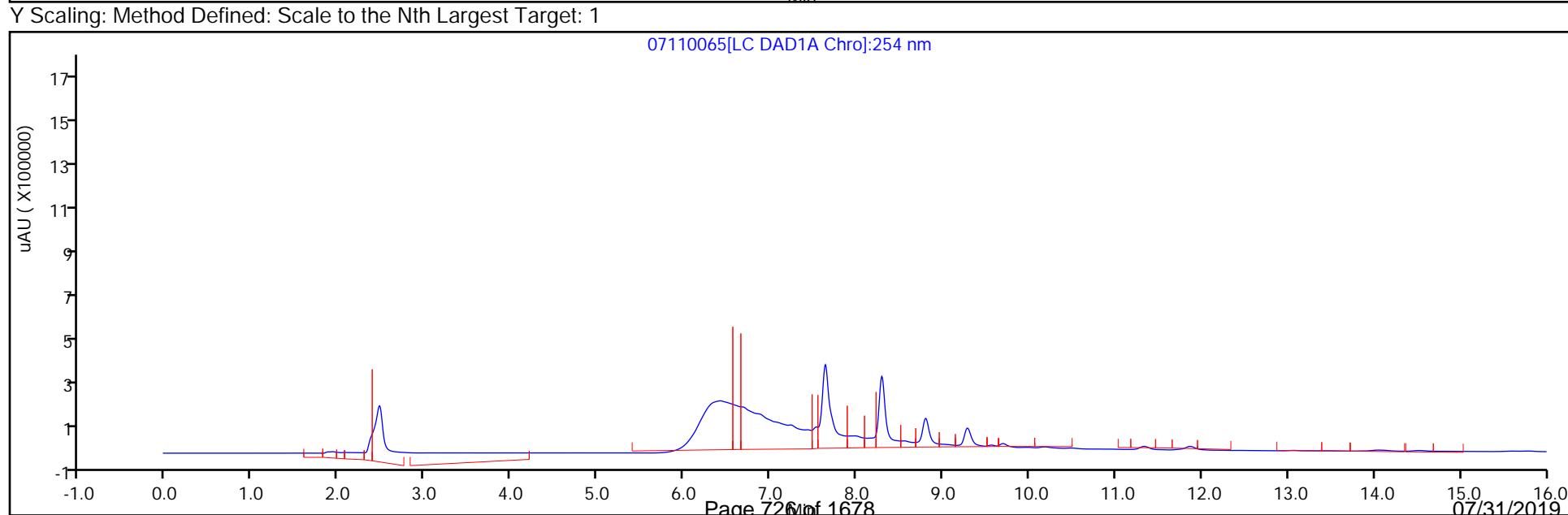
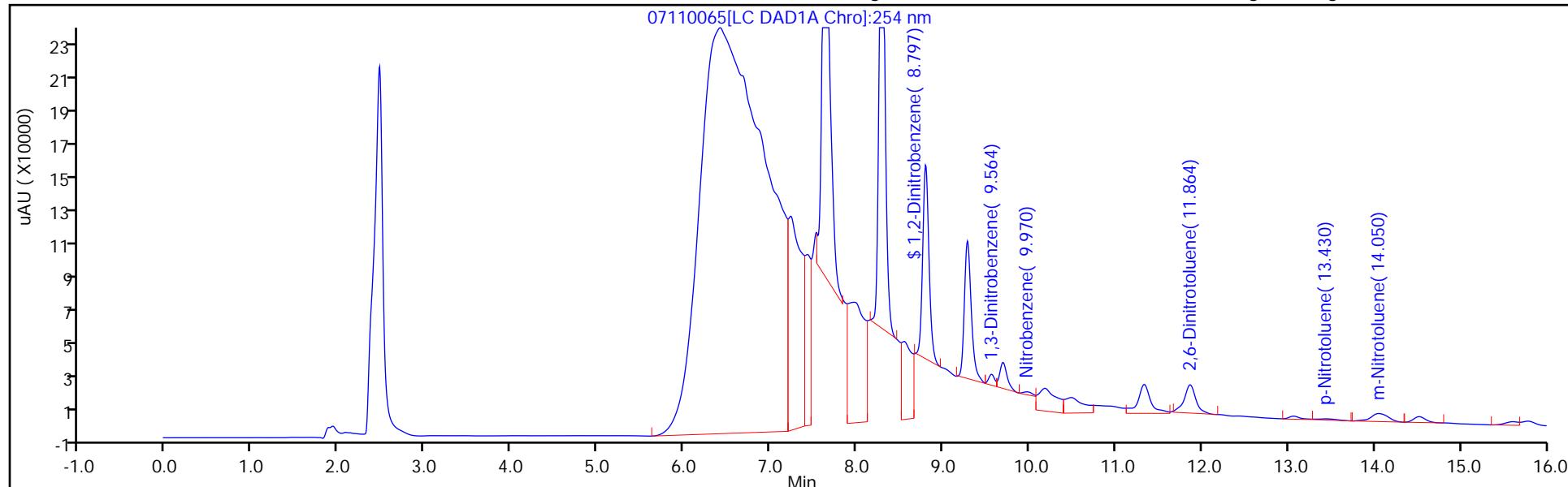
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
 Injection Date: 12-Jul-2019 08:27:16
 Lims ID: 280-124912-B-10-A
 Client ID: G0103-19A
 Injection Vol: 100.0 ul
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Instrument ID: CHHPLC_X3
 Lab Sample ID: 280-124912-10
 Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

Operator ID: hkf
 Worklist Smp#: 65
 ALS Bottle#: 65

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
 Lims ID: 280-124912-B-10-A
 Client ID: G0103-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 08:27:16 ALS Bottle#: 65 Worklist Smp#: 65
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-10-
 Misc. Info.: 280-0083617-065
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:16:53

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	4.03	2015.95

Eurofins TestAmerica, Denver

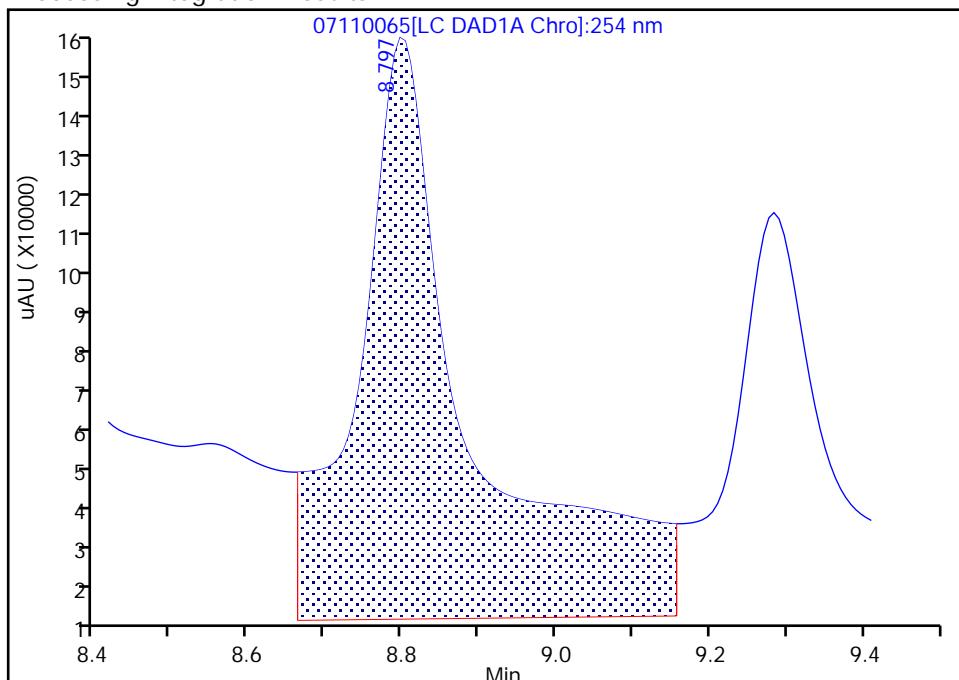
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
 Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

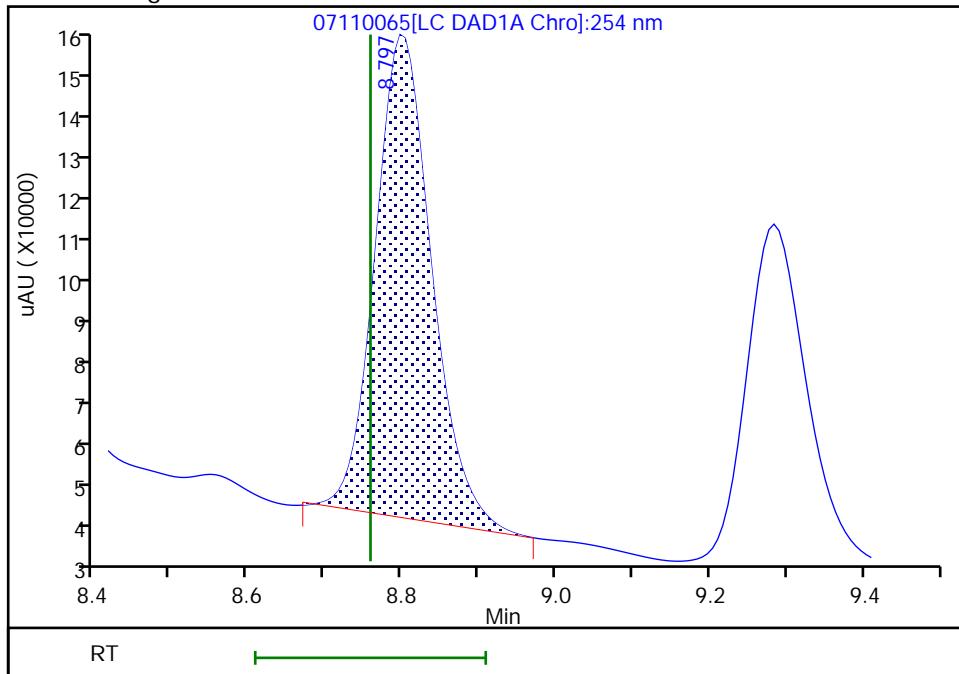
RT: 8.80
 Area: 1455145
 Amount: 10.443989
 Amount Units: ug/mL

Processing Integration Results



RT: 8.80
 Area: 561758
 Amount: 4.031897
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:15:45

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

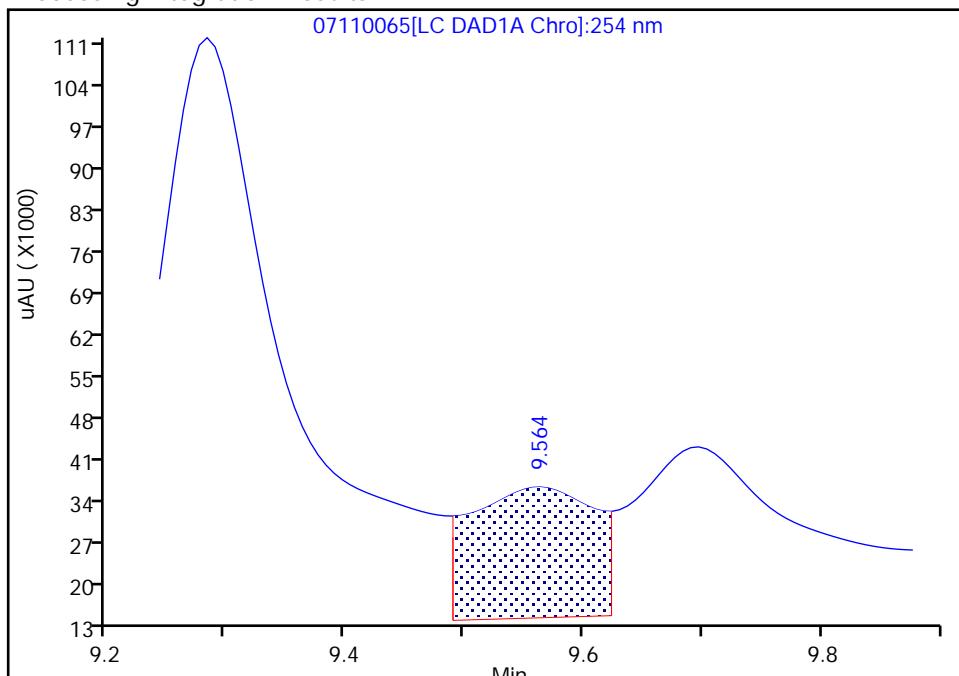
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
 Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

11 1,3-Dinitrobenzene, CAS: 99-65-0
Signal: 1

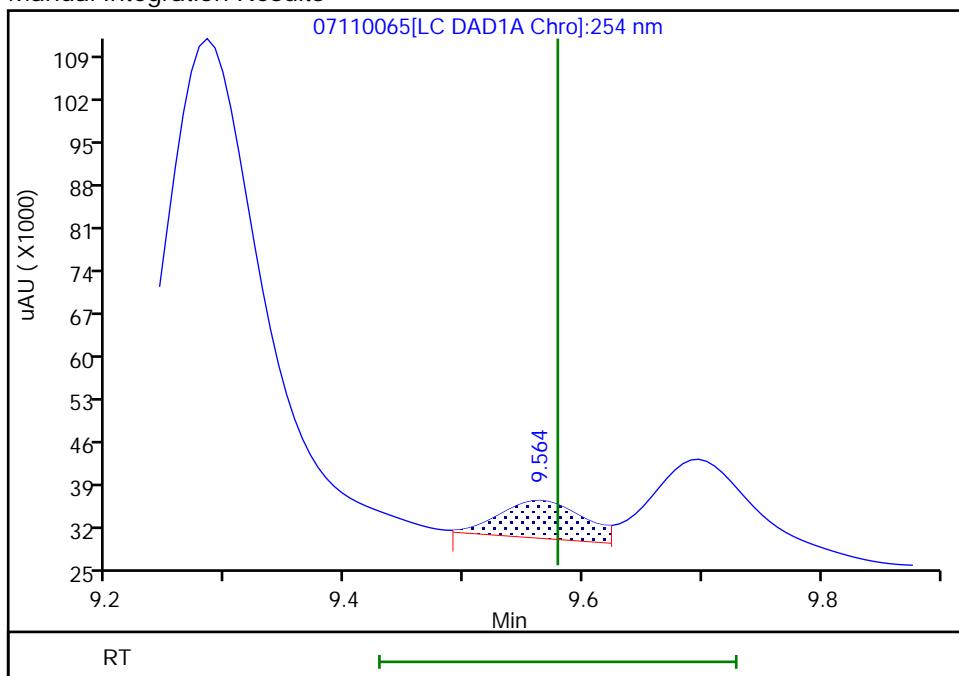
RT: 9.56
 Area: 157608
 Amount: 0.506492
 Amount Units: ug/mL

Processing Integration Results



RT: 9.56
 Area: 30192
 Amount: 0.097026
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:16:18

Audit Action: Assigned New Baseline

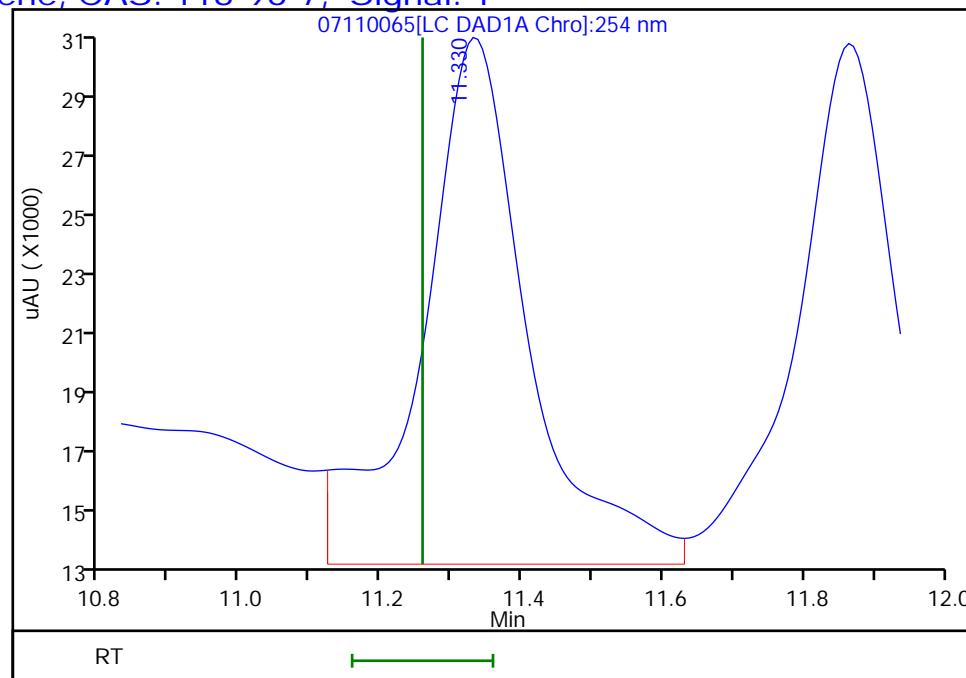
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
Client ID: G0103-19A
Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.33
Response: 171113
Amount: 0.752884



Reviewer: fiedlerh, 12-Jul-2019 09:16:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

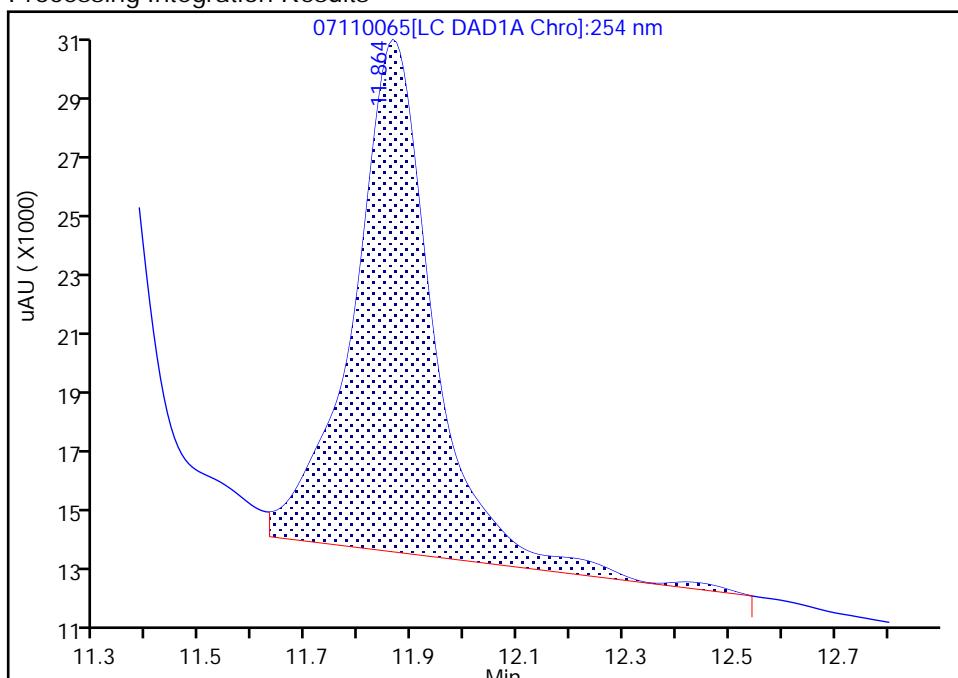
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
 Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

19 2,6-Dinitrotoluene, CAS: 606-20-2
Signal: 1

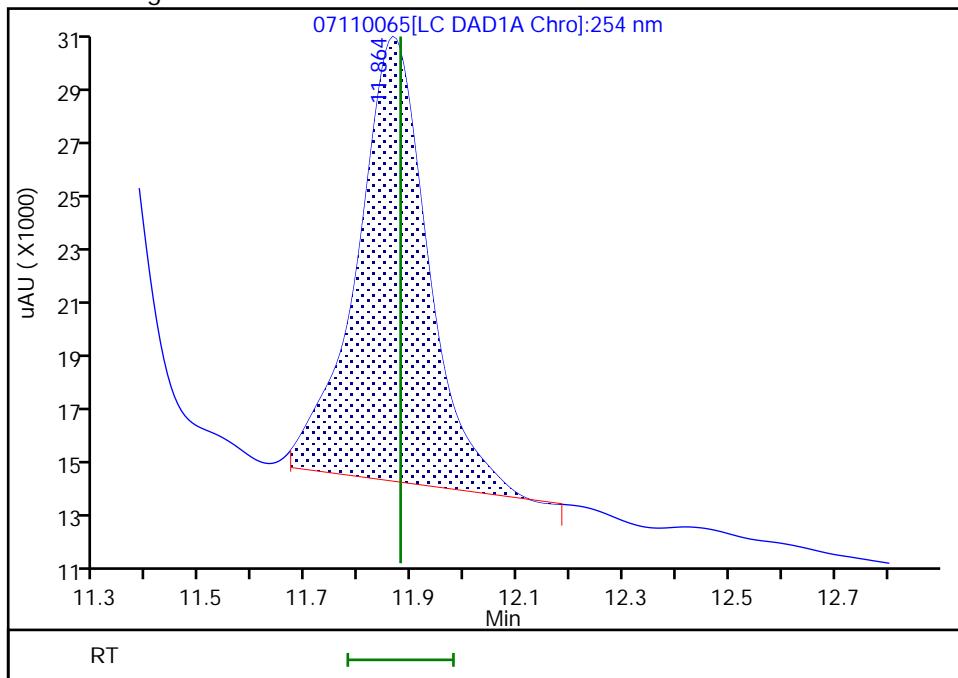
RT: 11.86
 Area: 177438
 Amount: 1.113970
 Amount Units: ug/mL

Processing Integration Results



RT: 11.86
 Area: 151123
 Amount: 0.948762
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:16:39

Audit Action: Manually Integrated

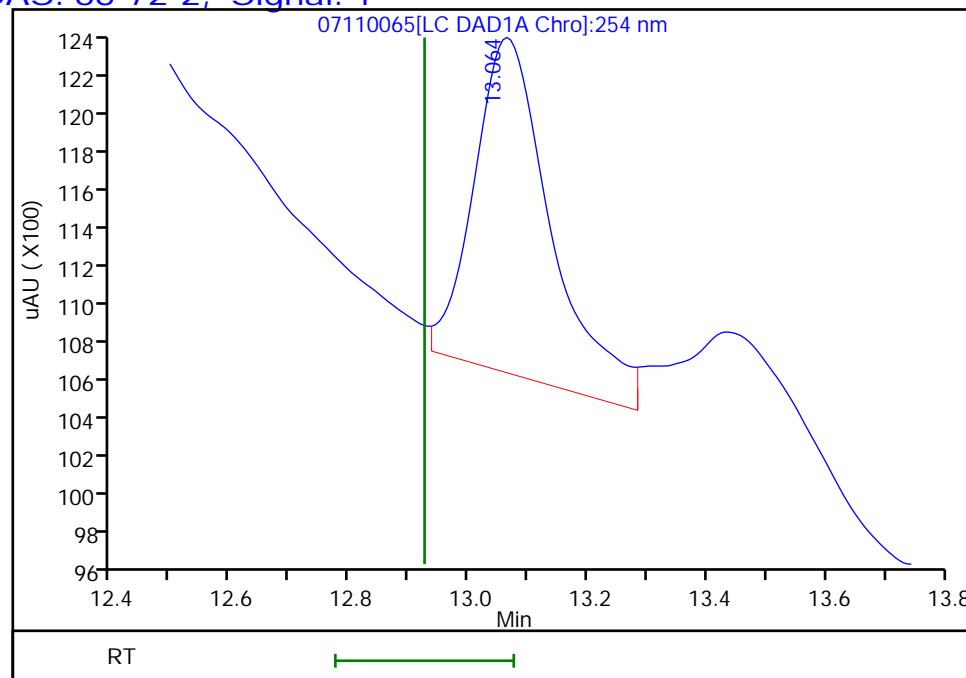
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
Client ID: G0103-19A
Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 13.06
Response: 15578
Amount: 0.120031



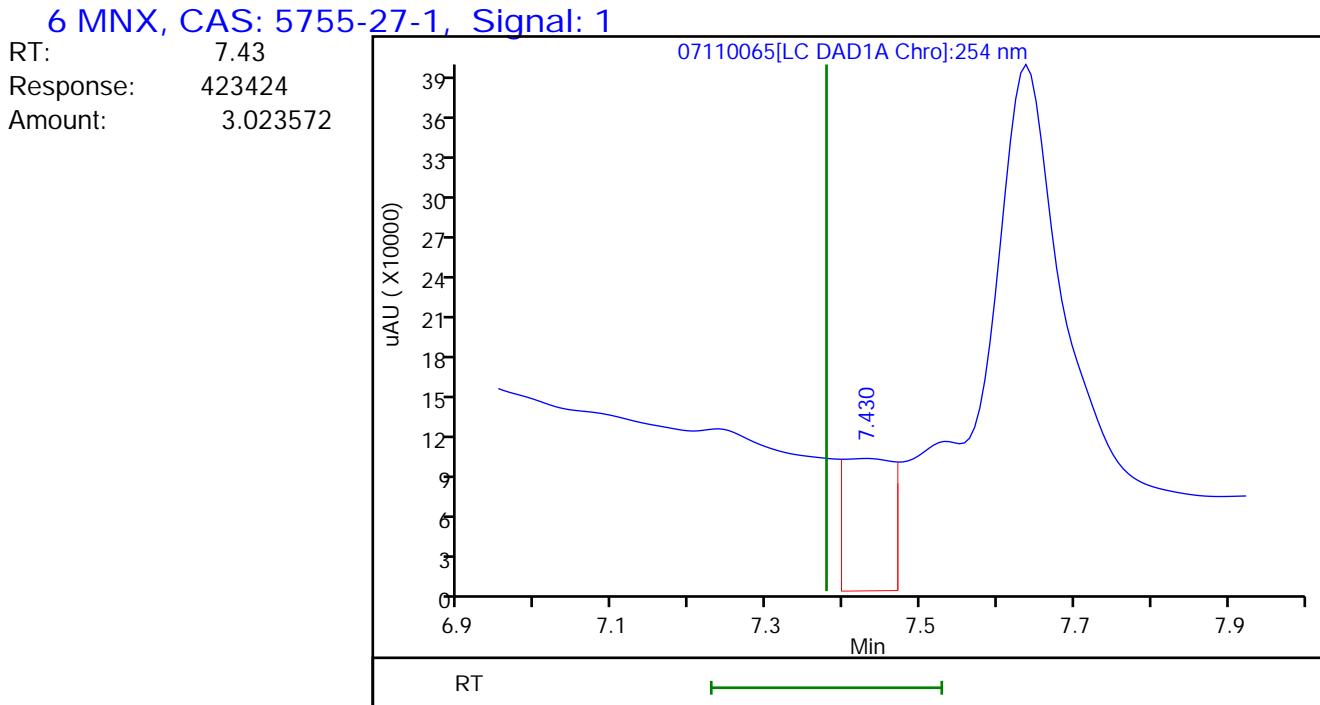
Reviewer: fiedlerh, 12-Jul-2019 09:16:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
Client ID: G0103-19A
Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 12-Jul-2019 09:16:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

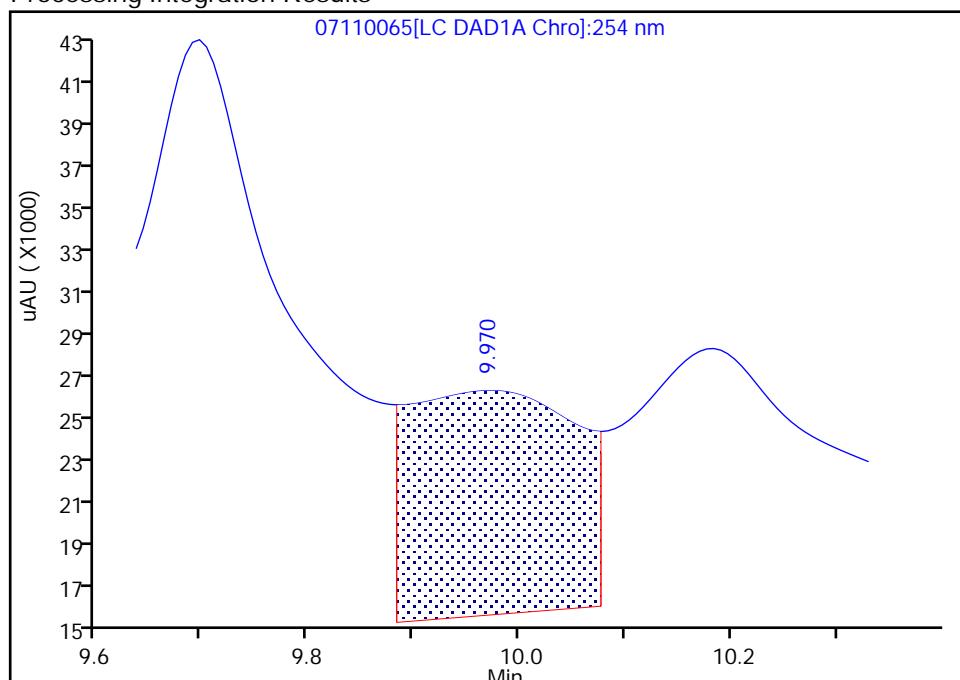
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
 Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
 Client ID: G0103-19A
 Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

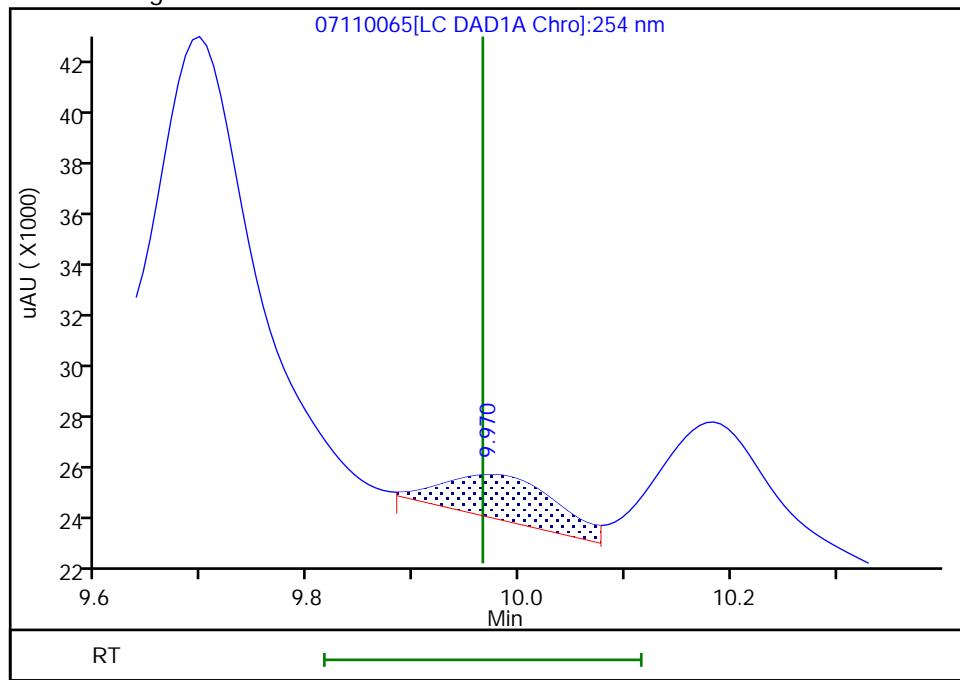
RT: 9.97
 Area: 116159
 Amount: 0.583998
 Amount Units: ug/mL

Processing Integration Results



RT: 9.97
 Area: 12669
 Amount: 0.063694
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:16:27

Audit Action: Manually Integrated

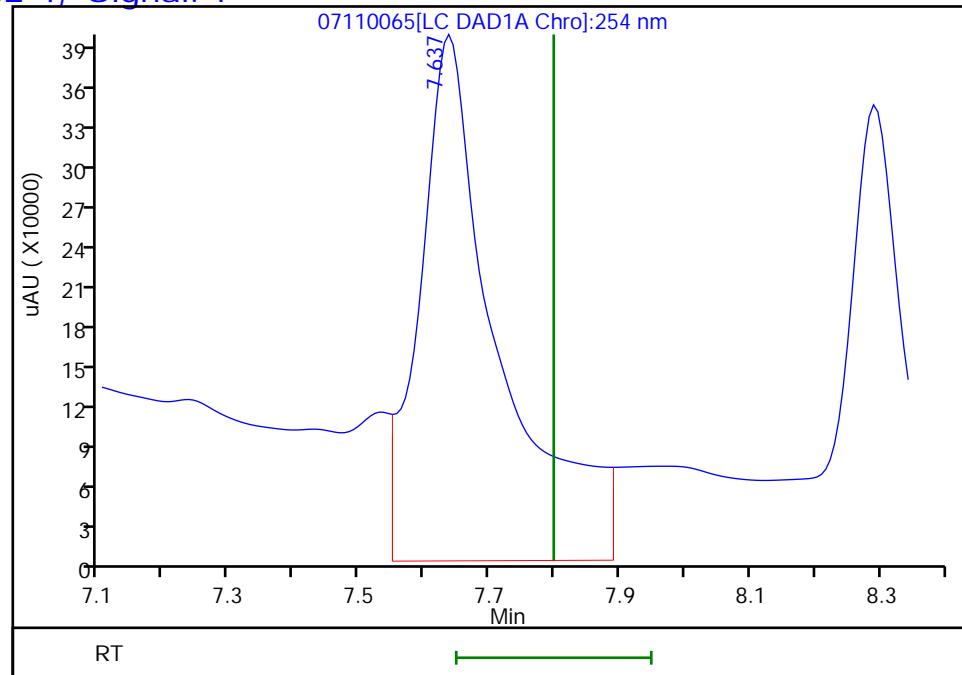
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
Client ID: G0103-19A
Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.64
Response: 3241746
Amount: 29.173269



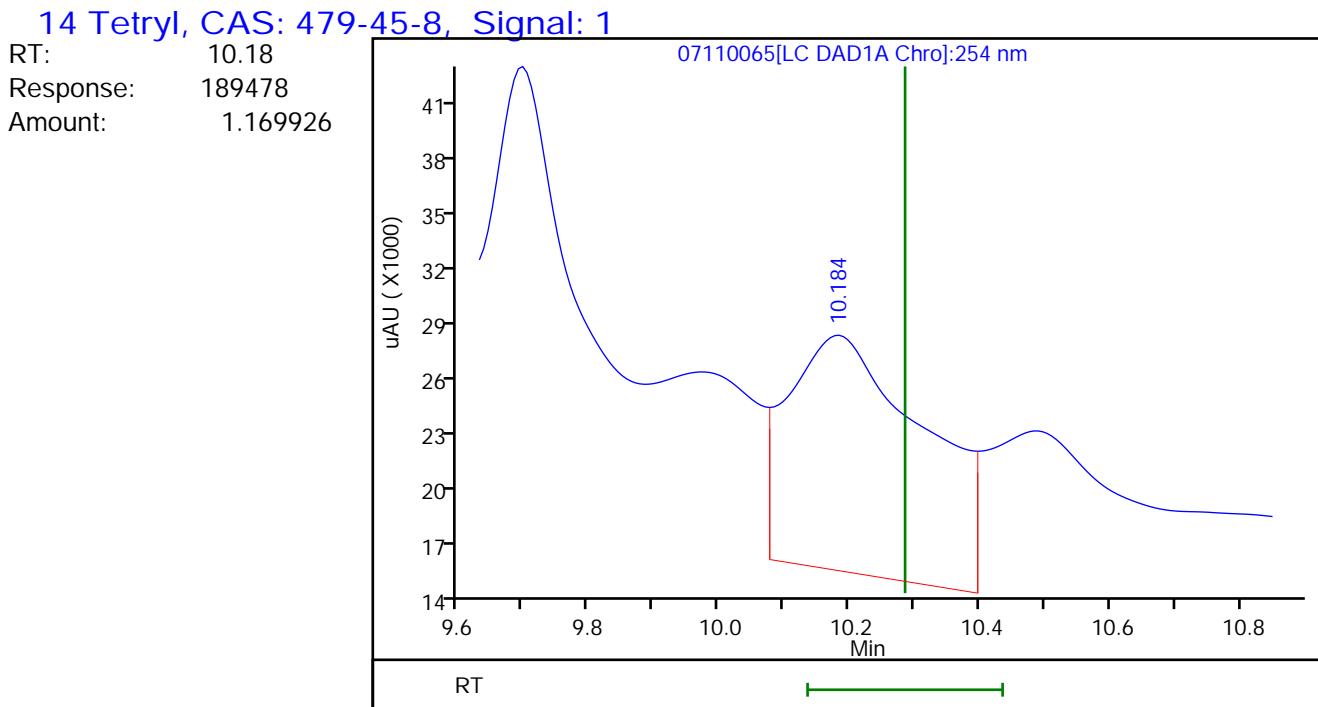
Reviewer: fiedlerh, 12-Jul-2019 09:16:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110065.D
Injection Date: 12-Jul-2019 08:27:16 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-10-A Lab Sample ID: 280-124912-10
Client ID: G0103-19A
Operator ID: hkf ALS Bottle#: 65 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 12-Jul-2019 09:16:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0104-19A Lab Sample ID: 280-124912-11
Matrix: Water Lab File ID: 06140058.D
Analysis Method: 8330A Date Collected: 06/05/2019 14:30
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 476.8 (mL) Date Analyzed: 06/15/2019 13:24
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.42	U	1.0	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.093
121-14-2	2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.088
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	U	0.21	0.13	0.053
88-72-2	2-Nitrotoluene	0.21	U Q	0.42	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	0.21	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	1.0	0.42	0.21
2691-41-0	HMX	0.21	U	0.42	0.21	0.092
98-95-3	Nitrobenzene	0.21	U	0.42	0.21	0.095
121-82-4	RDX	0.42	U M	0.42	0.42	0.17
479-45-8	Tetryl	0.21	U M	0.25	0.21	0.083

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	104	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140058.D
 Lims ID: 280-124912-A-11-A
 Client ID: G0104-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 13:24:22 ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-11-
 Misc. Info.: 280-0082867-058
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:25:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.643				ND	
6 MNX	1	7.340	7.359	-0.019	4008	0.0294	M
7 RDX	1		7.763			ND	MU
\$ 9 1,2-Dinitrobenzene	1	8.740	8.743	-0.003	26982	0.2074	M
10 1,3,5-Trinitrobenzene	1		8.896			ND	
11 1,3-Dinitrobenzene	1		9.563			ND	
12 Nitrobenzene	1		9.949			ND	
14 Tetryl	1		10.276			ND	U
16 2,4,6-Trinitrotoluene	1	11.247	11.229	0.018	6728	0.0301	
17 4-Amino-2,6-dinitrotoluene	1		11.429			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.716			ND	
19 2,6-Dinitrotoluene	1	11.807	11.843	-0.036	4499	0.0287	
20 2,4-Dinitrotoluene	1		12.043			ND	
21 o-Nitrotoluene	1		12.883			ND	
22 p-Nitrotoluene	1		13.323			ND	
23 m-Nitrotoluene	1		13.923			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 17-Jun-2019 10:45:56

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190614-82867.b\\06140058.D

Injection Date: 15-Jun-2019 13:24:22

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-11-A

Lab Sample ID: 280-124912-11

Worklist Smp#: 58

Client ID: G0104-19A

Dil. Factor: 1.0000

ALS Bottle#: 58

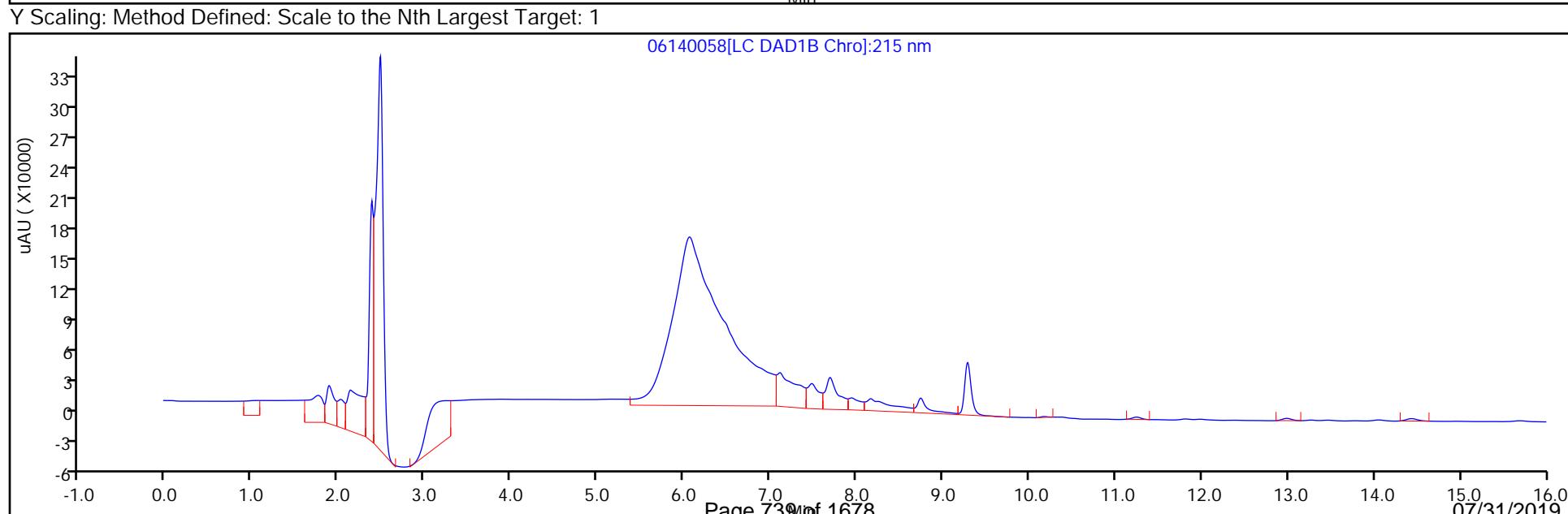
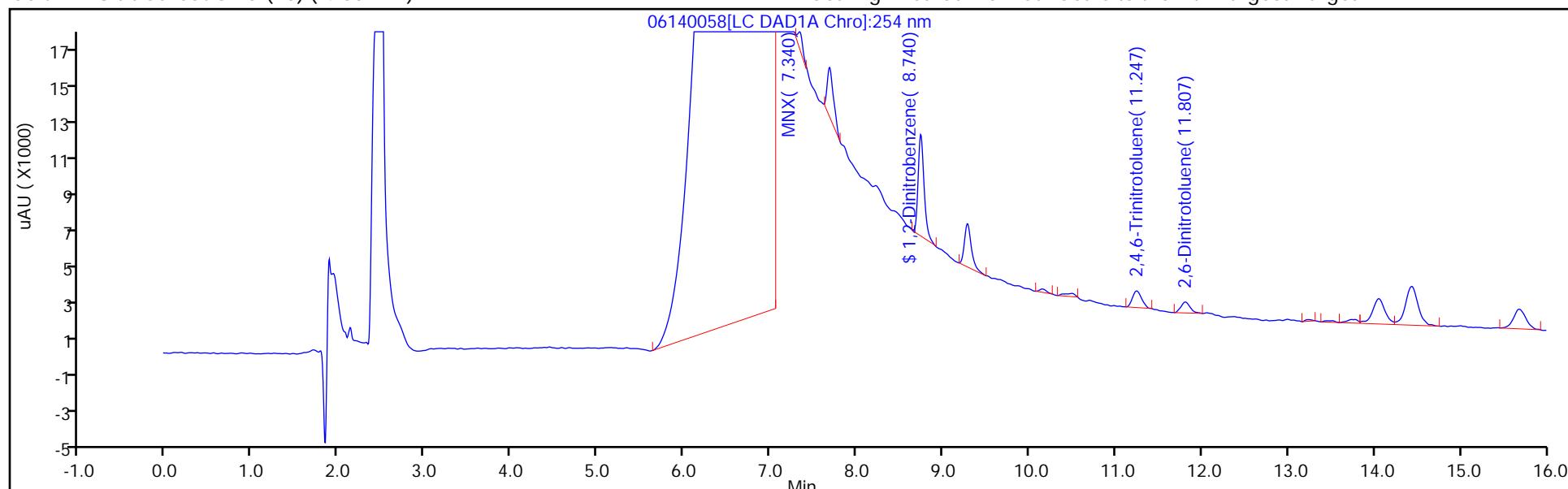
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140058.D
 Lims ID: 280-124912-A-11-A
 Client ID: G0104-19A
 Sample Type: Client
 Inject. Date: 15-Jun-2019 13:24:22 ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-11-
 Misc. Info.: 280-0082867-058
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:25:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.2074	103.69

Eurofins TestAmerica, Denver

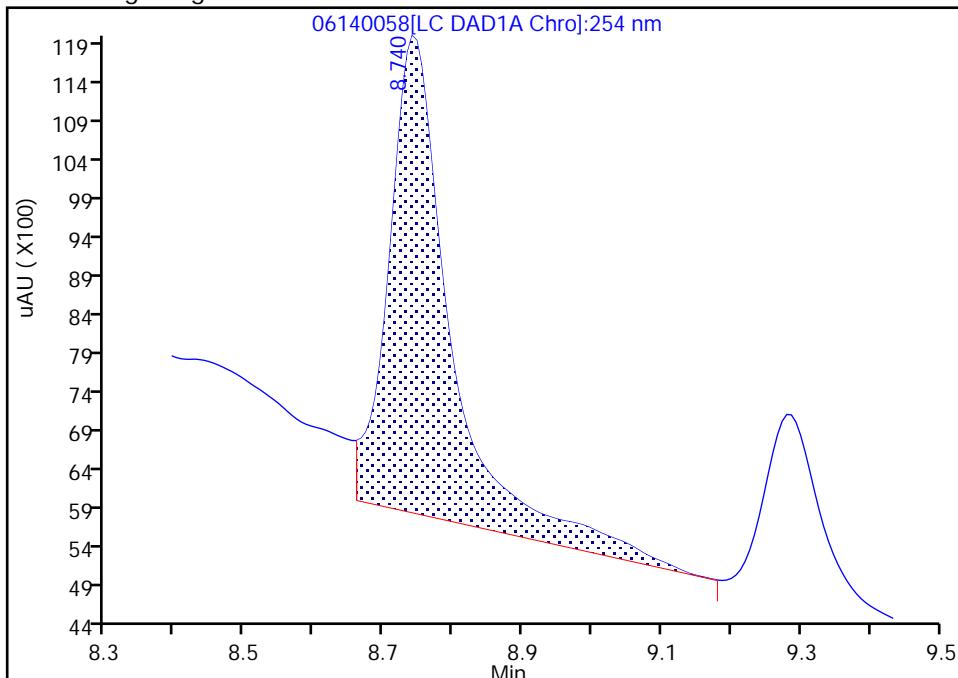
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140058.D
 Injection Date: 15-Jun-2019 13:24:22 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-11-A Lab Sample ID: 280-124912-11
 Client ID: G0104-19A
 Operator ID: hkf ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

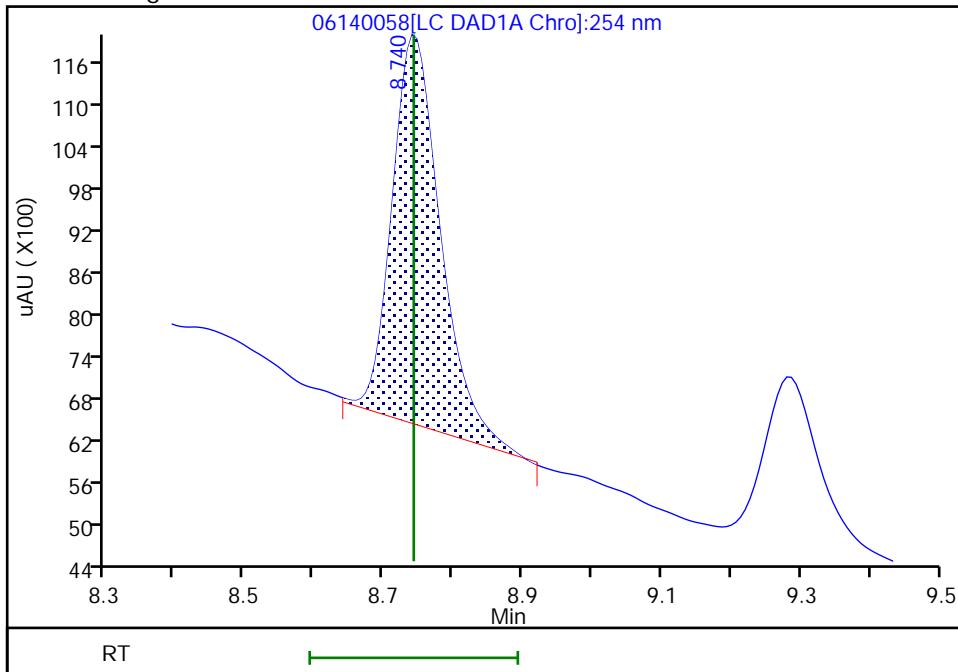
Processing Integration Results

RT: 8.74
 Area: 38507
 Amount: 0.295956
 Amount Units: ug/mL



Manual Integration Results

RT: 8.74
 Area: 26982
 Amount: 0.207377
 Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:25:04

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

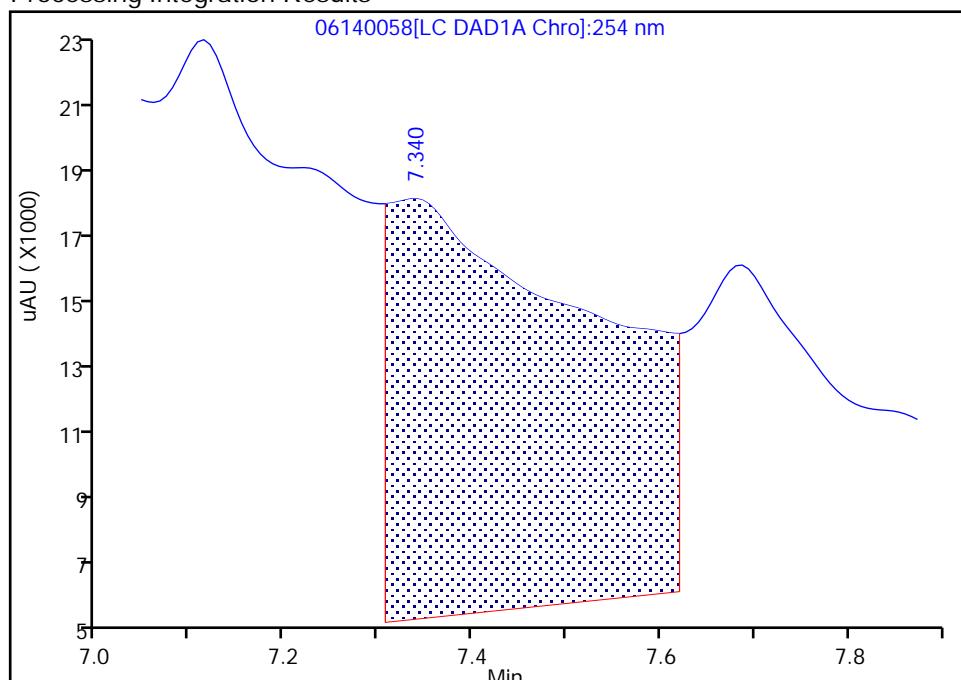
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140058.D
 Injection Date: 15-Jun-2019 13:24:22 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-11-A Lab Sample ID: 280-124912-11
 Client ID: G0104-19A
 Operator ID: hkf ALS Bottle#: 58 Worklist Smp#: 58
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

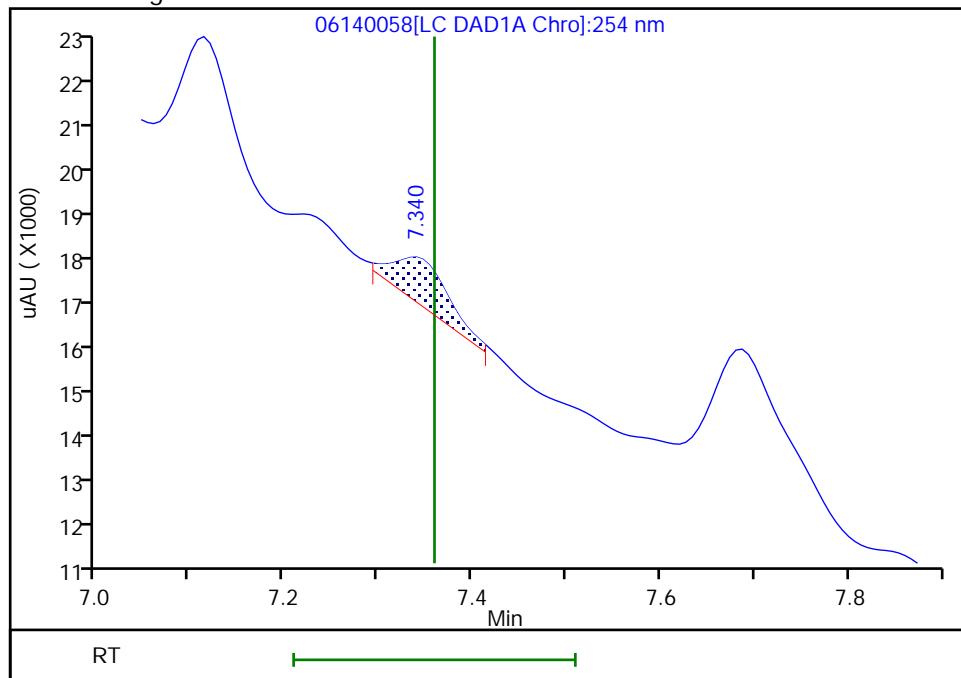
RT: 7.34
 Area: 182163
 Amount: 1.334156
 Amount Units: ug/mL

Processing Integration Results



RT: 7.34
 Area: 4008
 Amount: 0.029354
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:24:59

Audit Action: Manually Integrated

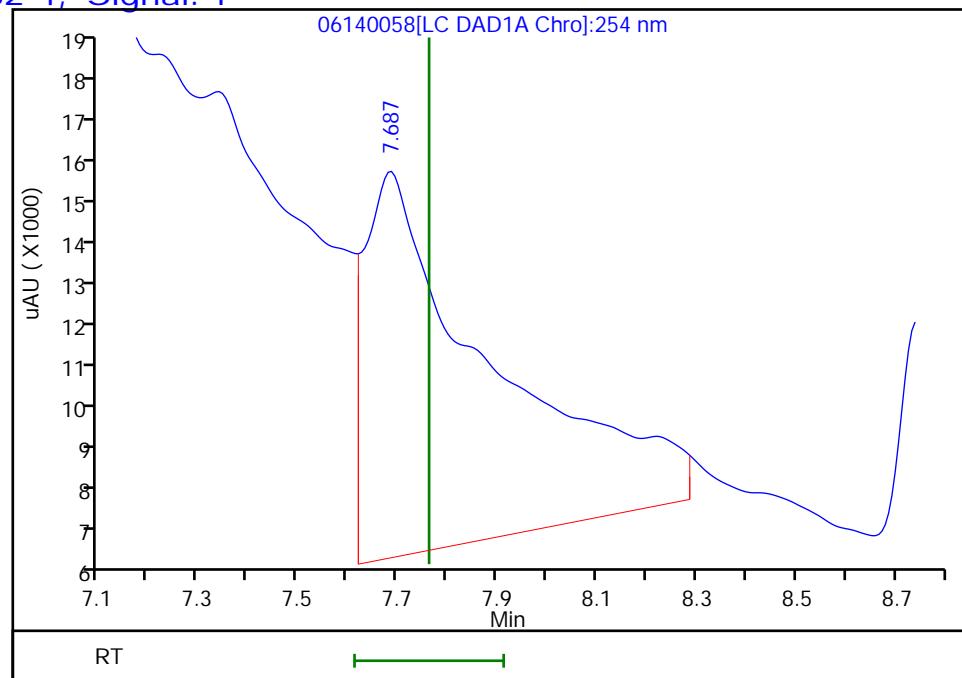
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140058.D
Injection Date: 15-Jun-2019 13:24:22 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-11-A Lab Sample ID: 280-124912-11
Client ID: G0104-19A
Operator ID: hkf ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.69
Response: 167820
Amount: 1.573715



Reviewer: fiedlerh, 17-Jun-2019 10:25:20

Audit Action: Marked Compound Undetected

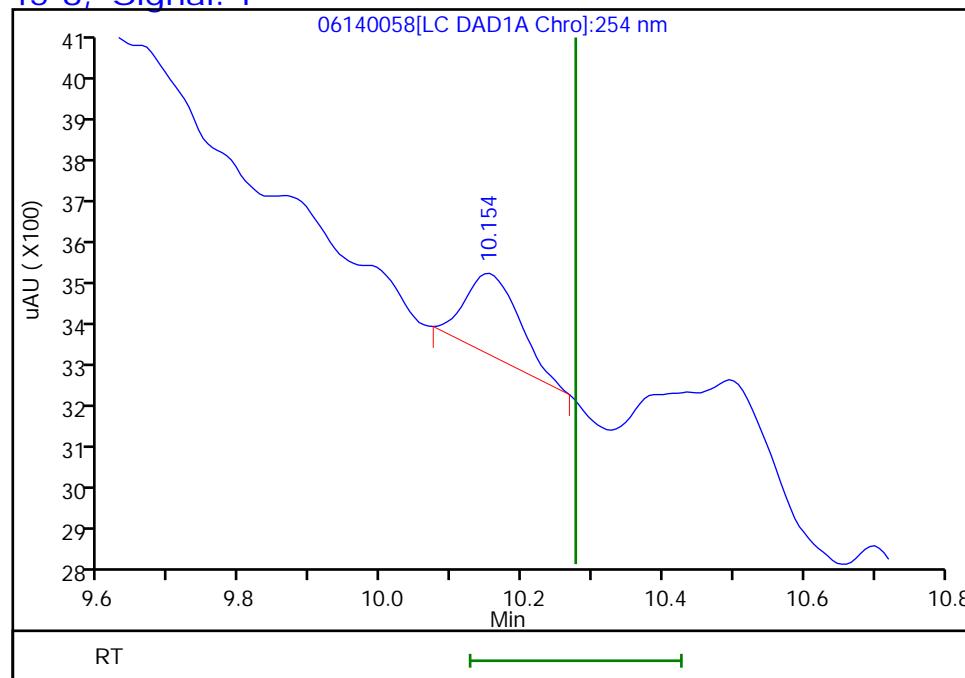
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140058.D
Injection Date: 15-Jun-2019 13:24:22 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-11-A Lab Sample ID: 280-124912-11
Client ID: G0104-19A
Operator ID: hkf ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.15
Response: 992
Amount: 0.005906



Reviewer: fiedlerh, 17-Jun-2019 10:25:20

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.: 280-124912-1
SDG No.: _____
Client Sample ID: G0104-19A Lab Sample ID: 280-124912-11
Matrix: Water Lab File ID: 06170036.D
Analysis Method: 8330A Date Collected: 06/05/2019 14:30
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 476.8 (mL) Date Analyzed: 06/18/2019 11:30
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: Luna-phenylhex ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461836 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068
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	89		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170036.D
 Lims ID: 280-124912-A-11-A
 Client ID: G0104-19A
 Sample Type: Client
 Inject. Date: 18-Jun-2019 11:30:13 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-11-
 Misc. Info.: 280-0082939-036
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 16-Jul-2019 14:00:13 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0317

First Level Reviewer: fiedlerh Date: 16-Jul-2019 14:00:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.187			ND		
7 MNX	1	7.848			ND		U
8 RDX	1	9.267			ND		
9 Nitrobenzene	1	12.247			ND		
\$ 10 1,2-Dinitrobenzene	1	13.269	13.281	-0.012	49363	0.1783	
12 1,3-Dinitrobenzene	1	15.801			ND		
14 o-Nitrotoluene	1	16.614			ND		
15 p-Nitrotoluene	1	16.947			ND		U
16 4-Amino-2,6-dinitrotoluene	1	17.361			ND		
17 m-Nitrotoluene	1	17.882	17.854	0.028	13304	0.0455	M
18 2-Amino-4,6-dinitrotoluene	1	18.394			ND		
19 1,3,5-Trinitrobenzene	1	19.107			ND		
20 2,6-Dinitrotoluene	1	19.954			ND		
21 2,4-Dinitrotoluene	1	20.514			ND		
22 Tetryl	1	23.809	23.847	-0.038	2109	0.006706	
23 2,4,6-Trinitrotoluene	1	24.821			ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 16-Jul-2019 14:00:24

Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190617-82939.b\\06170036.D

Injection Date: 18-Jun-2019 11:30:13

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: 280-124912-A-11-A

Lab Sample ID: 280-124912-11

Worklist Smp#: 36

Client ID: G0104-19A

Dil. Factor: 1.0000

ALS Bottle#: 36

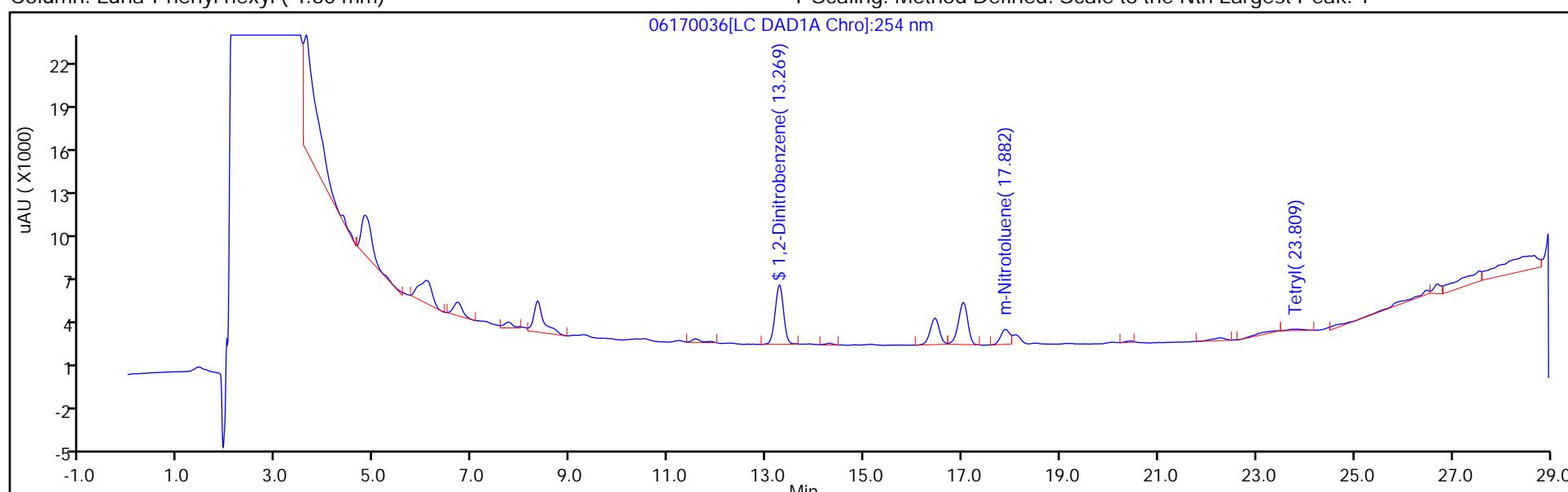
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

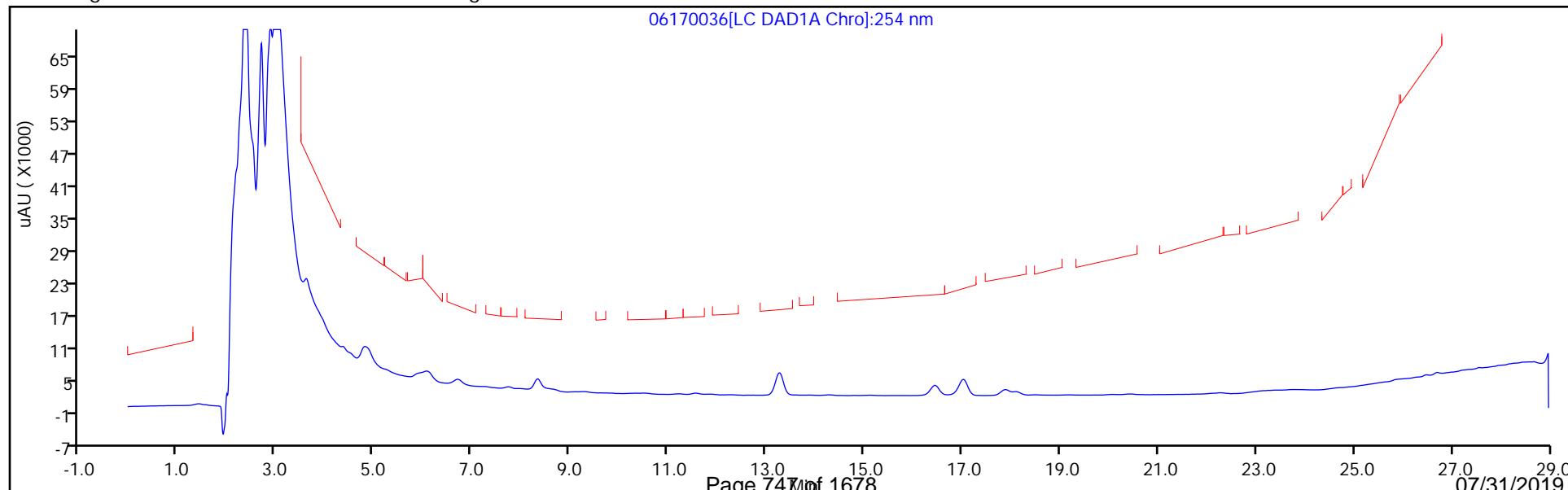
Method: G2_8330_Luna

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: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170036.D
 Lims ID: 280-124912-A-11-A
 Client ID: G0104-19A
 Sample Type: Client
 Inject. Date: 18-Jun-2019 11:30:13 ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-11-
 Misc. Info.: 280-0082939-036
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 16-Jul-2019 14:00:13 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0317

First Level Reviewer: fiedlerh Date: 16-Jul-2019 14:00:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1783	89.15

Eurofins TestAmerica, Denver

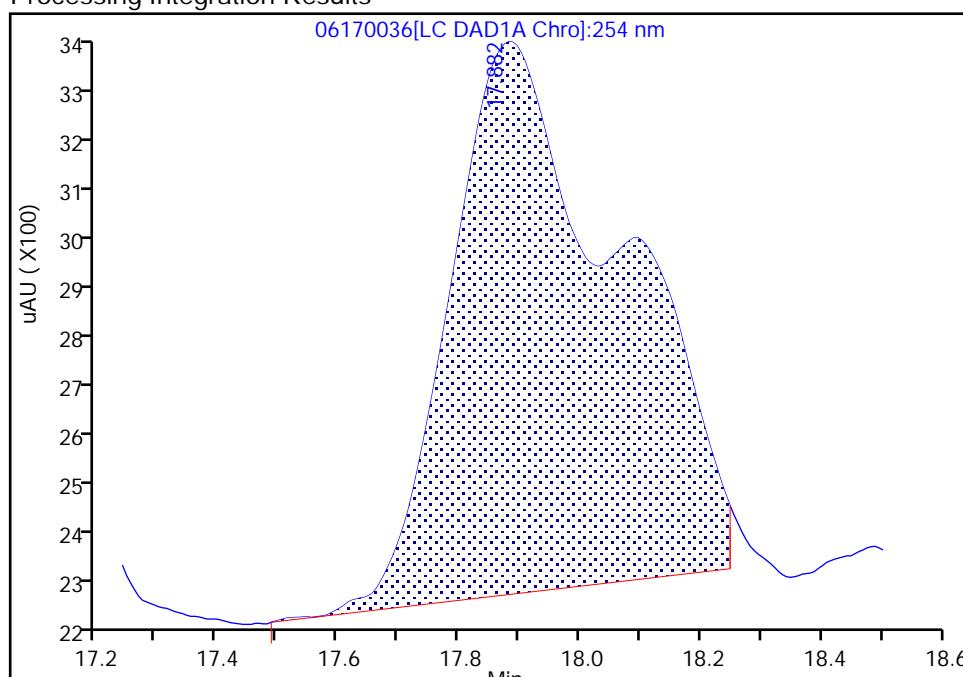
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170036.D
 Injection Date: 18-Jun-2019 11:30:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-11-A Lab Sample ID: 280-124912-11
 Client ID: G0104-19A
 Operator ID: HKF ALS Bottle#: 36 Worklist Smp#: 36
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

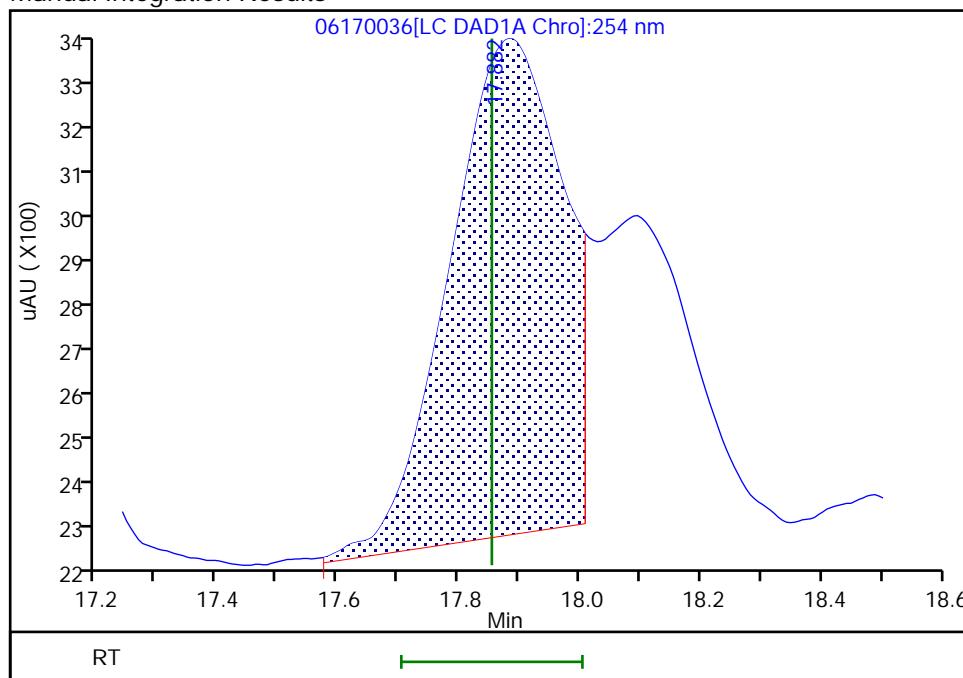
RT: 17.88
 Area: 20314
 Amount: 0.069404
 Amount Units: ug/ml

Processing Integration Results



RT: 17.88
 Area: 13304
 Amount: 0.045454
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 16-Jul-2019 14:00:11

Audit Action: Manually Integrated

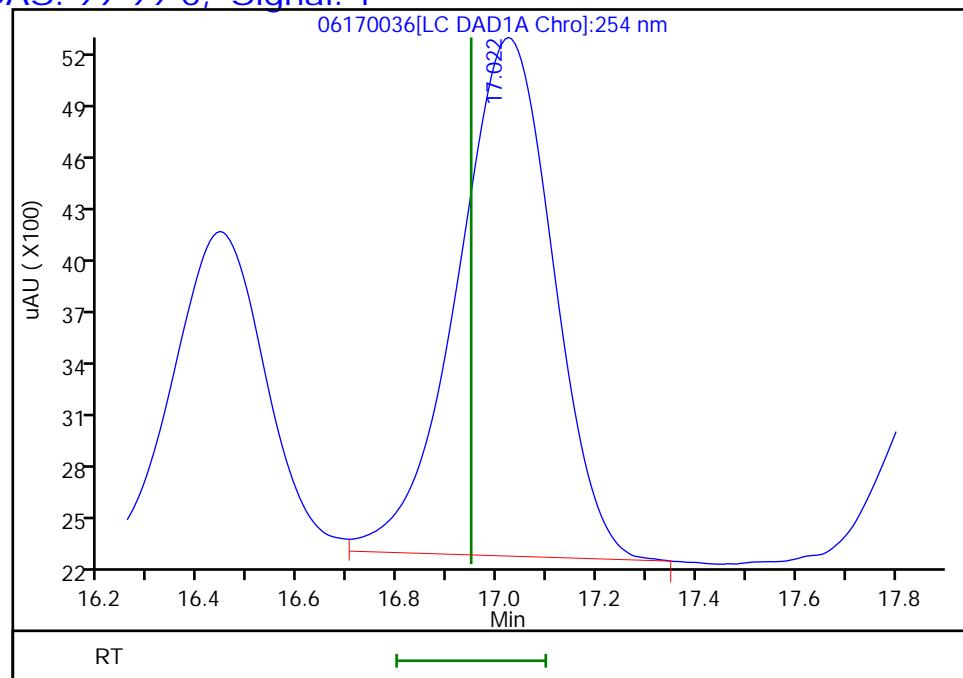
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170036.D
Injection Date: 18-Jun-2019 11:30:13 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-124912-A-11-A Lab Sample ID: 280-124912-11
Client ID: G0104-19A
Operator ID: HKF 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

RT: 17.02
Response: 38924
Amount: 0.171739



Reviewer: fiedlerh, 16-Jul-2019 14:00:13

Audit Action: Marked Compound Undetected

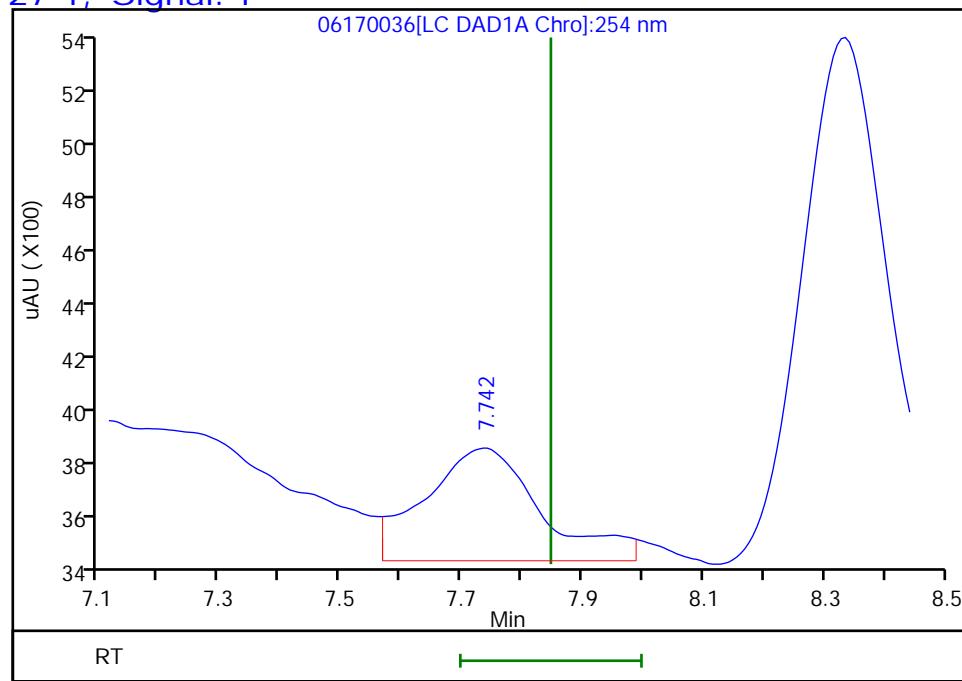
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170036.D
 Injection Date: 18-Jun-2019 11:30:13 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: 280-124912-A-11-A Lab Sample ID: 280-124912-11
 Client ID: G0104-19A
 Operator ID: HKF 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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.74
 Response: 5276
 Amount: 0.019575



Reviewer: fiedlerh, 16-Jul-2019 14:00:13

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0104-19A RE Lab Sample ID: 280-124912-11 RE
Matrix: Water Lab File ID: 07110066.D
Analysis Method: 8330A Date Collected: 06/05/2019 14:30
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 447 (mL) Date Analyzed: 07/12/2019 08:50
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.22	<i>U H</i>	0.45	0.22	0.096
5755-27-1	MNX	0.45	<i>U H</i>	2.2	0.45	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86	<i>M</i>	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110066.D
 Lims ID: 280-124912-B-11-A
 Client ID: G0104-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 08:50:12 ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-11-
 Misc. Info.: 280-0083617-066
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:18:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.692				ND	
6 MNX	1	7.378				ND	
7 RDX	1	7.799				ND	U
\$ 9 1,2-Dinitrobenzene	1	8.745	8.759	-0.014	24046	0.1726	M
10 1,3,5-Trinitrobenzene	1	8.919				ND	
11 1,3-Dinitrobenzene	1	9.578				ND	
12 Nitrobenzene	1	9.965				ND	
14 Tetryl	1	10.285				ND	
16 2,4,6-Trinitrotoluene	1	11.258				ND	U
17 4-Amino-2,6-dinitrotoluene	1	11.445				ND	
18 2-Amino-4,6-dinitrotoluene	1	11.738				ND	
19 2,6-Dinitrotoluene	1	11.865	11.878	-0.013	5738	0.0360	M
20 2,4-Dinitrotoluene	1	12.078				ND	
21 o-Nitrotoluene	1	12.925				ND	
22 p-Nitrotoluene	1	13.372				ND	
23 m-Nitrotoluene	1	13.978				ND	U

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:21:03

Chrom Revision: 2.3 20-Jun-2019 20:50:56

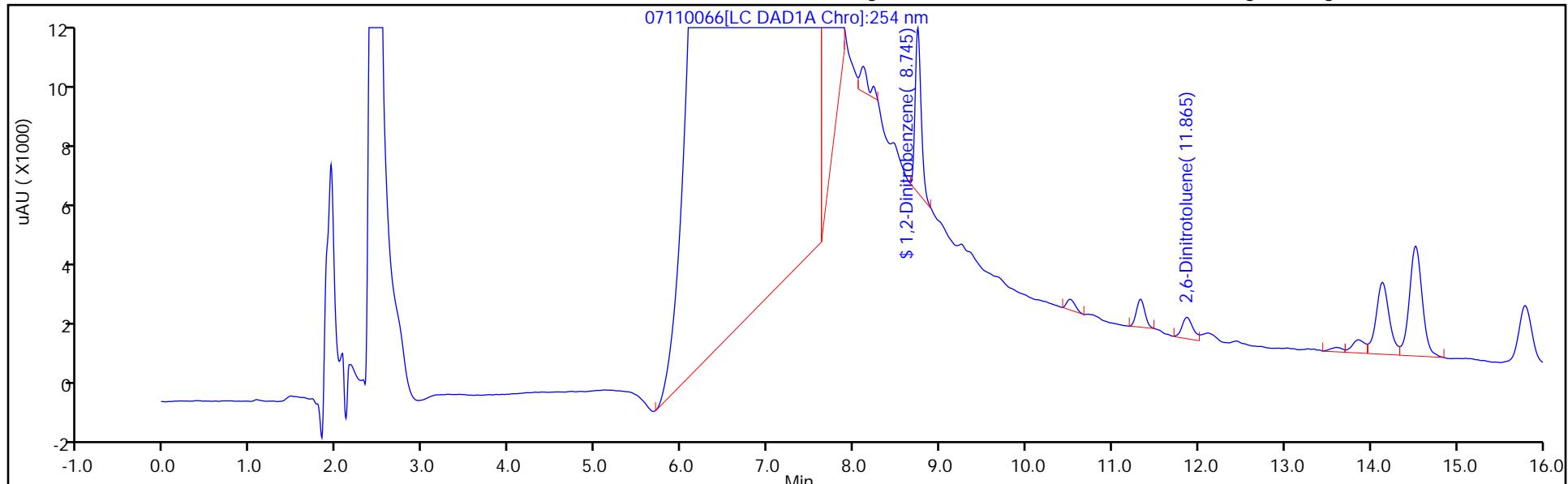
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110066.D
Injection Date: 12-Jul-2019 08:50:12
Lims ID: 280-124912-B-11-A
Client ID: G0104-19A
Injection Vol: 100.0 ul
Method: 8330_X3
Column: UltraCarb5uODS (20) (4.60 mm)

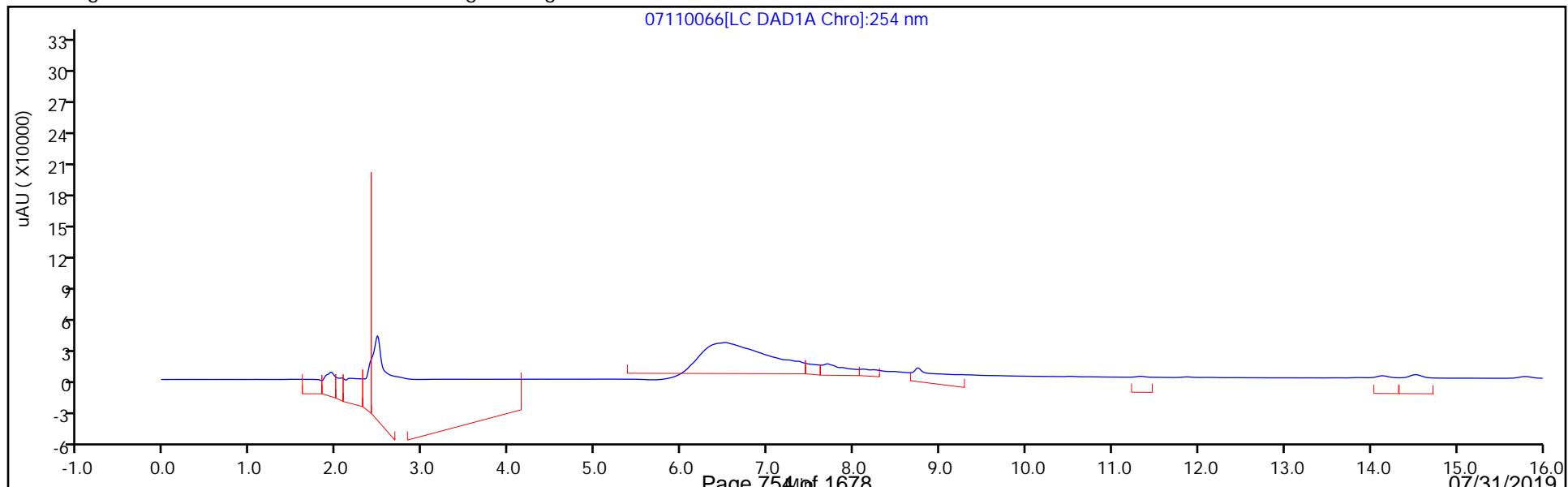
Instrument ID: CHHPLC_X3
Lab Sample ID: 280-124912-11
Dil. Factor: 1.0000
Limit Group: GCSV - 8330

Operator ID: hkf
Worklist Smp#: 66
ALS Bottle#: 66

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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110066.D
 Lims ID: 280-124912-B-11-A
 Client ID: G0104-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 08:50:12 ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-11-
 Misc. Info.: 280-0083617-066
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:18:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1726	86.29

Eurofins TestAmerica, Denver

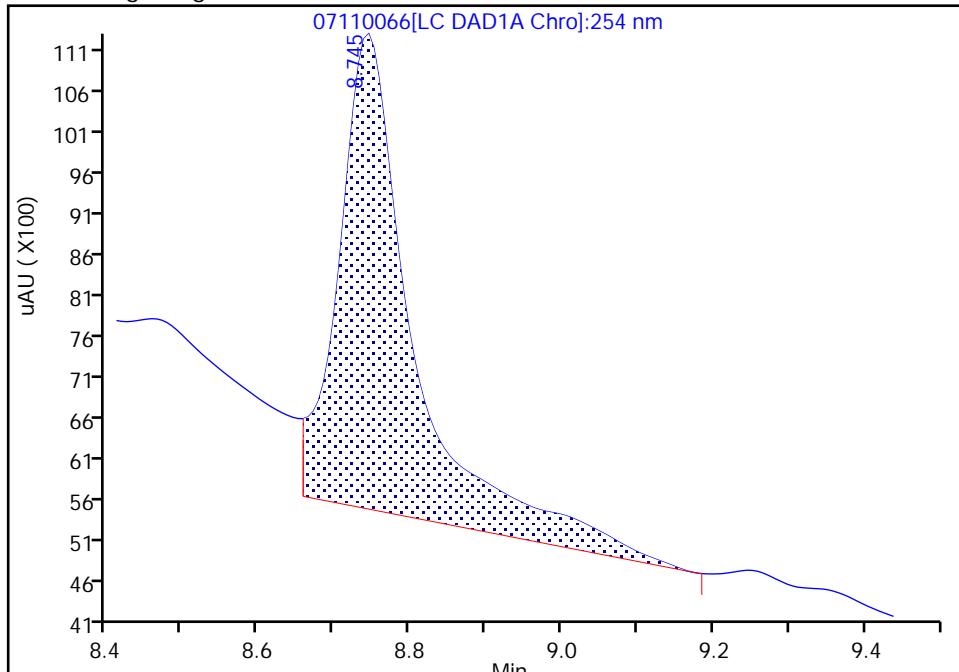
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110066.D
 Injection Date: 12-Jul-2019 08:50:12 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-11-A Lab Sample ID: 280-124912-11
 Client ID: G0104-19A
 Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

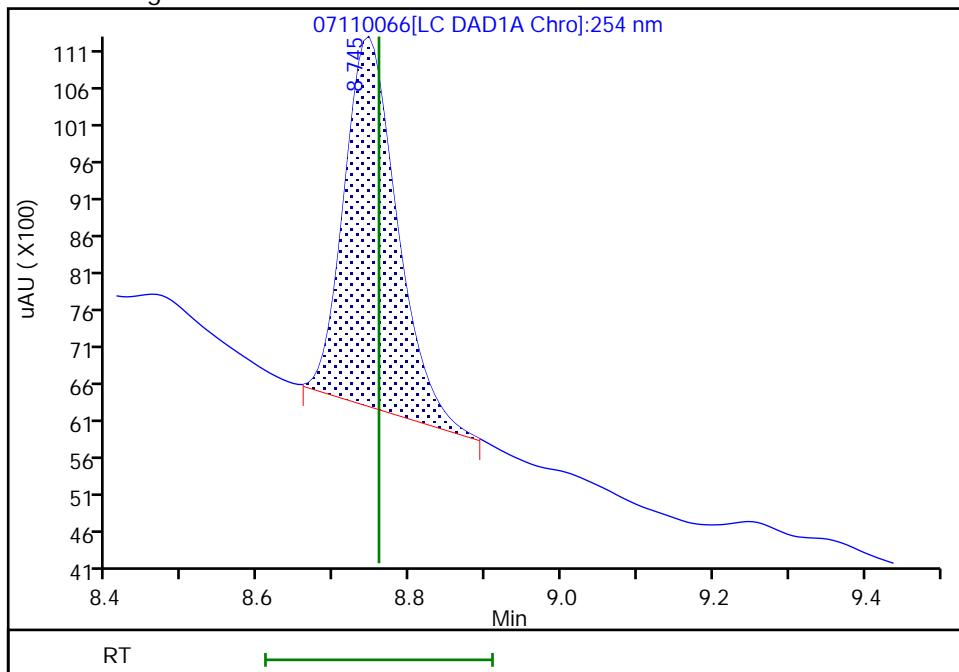
Processing Integration Results

RT: 8.75
 Area: 39517
 Amount: 0.283625
 Amount Units: ug/mL



Manual Integration Results

RT: 8.75
 Area: 24046
 Amount: 0.172585
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:17:08

Audit Action: Manually Integrated

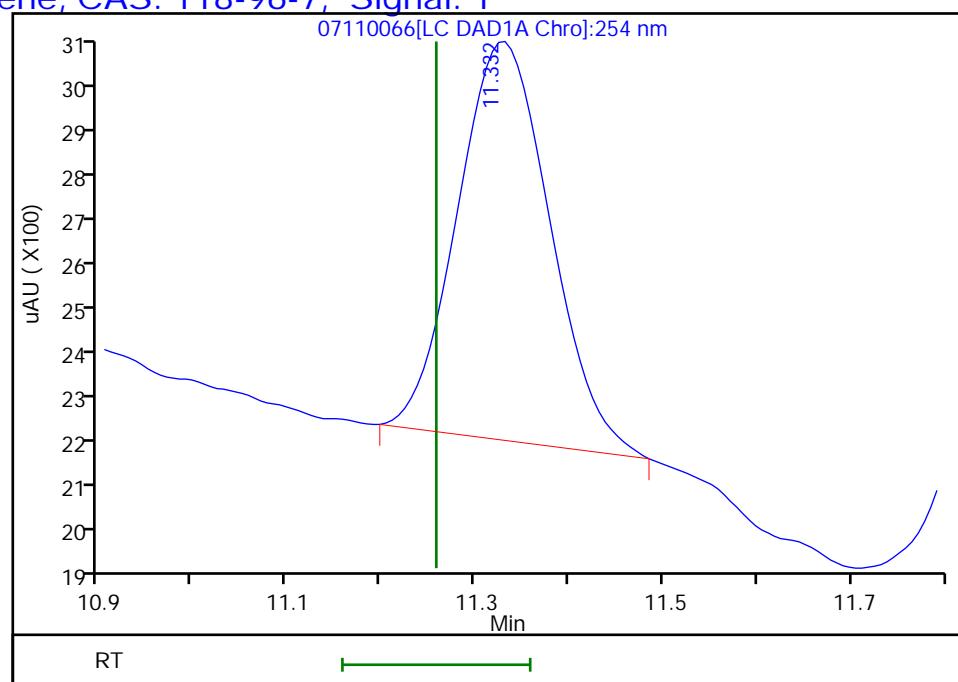
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110066.D
Injection Date: 12-Jul-2019 08:50:12 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-11-A Lab Sample ID: 280-124912-11
Client ID: G0104-19A
Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.33
Response: 5735
Amount: 0.025234



Reviewer: fiedlerh, 12-Jul-2019 09:18:32

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

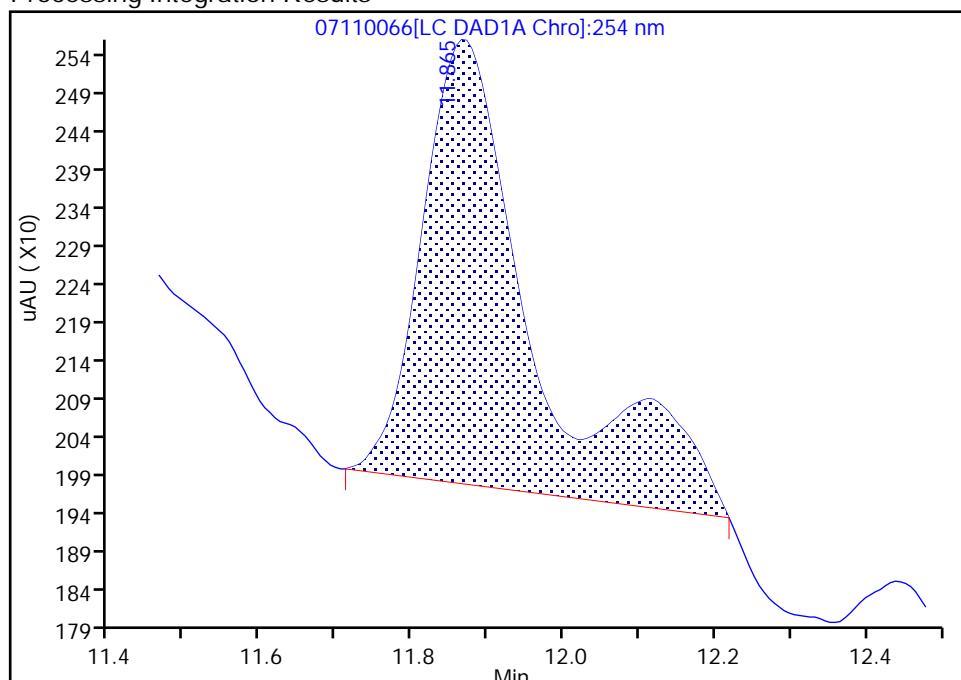
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110066.D
 Injection Date: 12-Jul-2019 08:50:12 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-11-A Lab Sample ID: 280-124912-11
 Client ID: G0104-19A
 Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

19 2,6-Dinitrotoluene, CAS: 606-20-2
Signal: 1

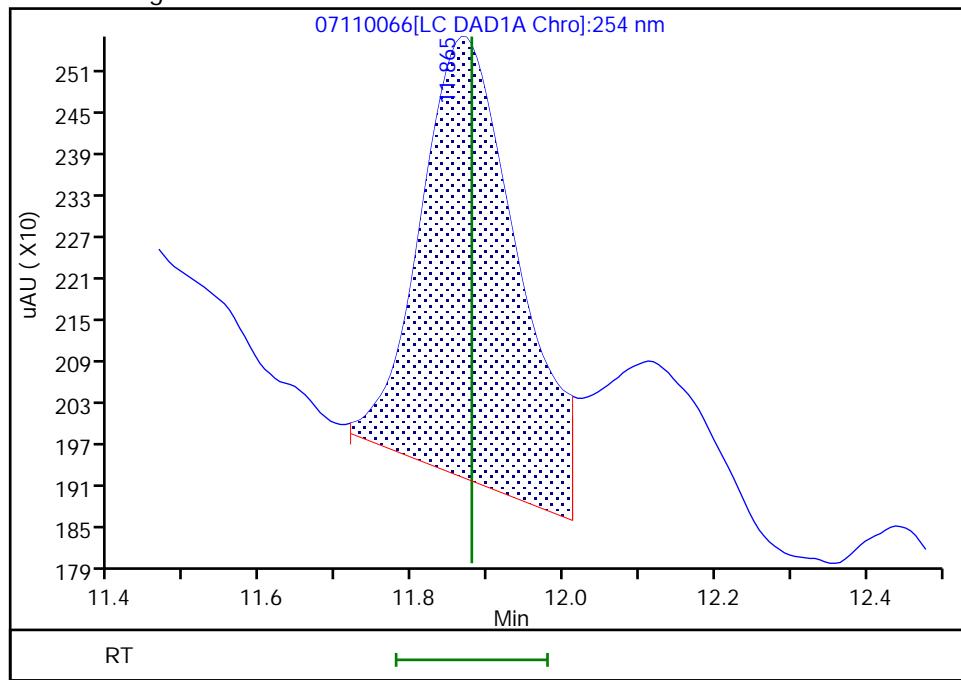
RT: 11.86
 Area: 5950
 Amount: 0.037355
 Amount Units: ug/mL

Processing Integration Results



RT: 11.86
 Area: 5738
 Amount: 0.036024
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:17:16

Audit Action: Manually Integrated

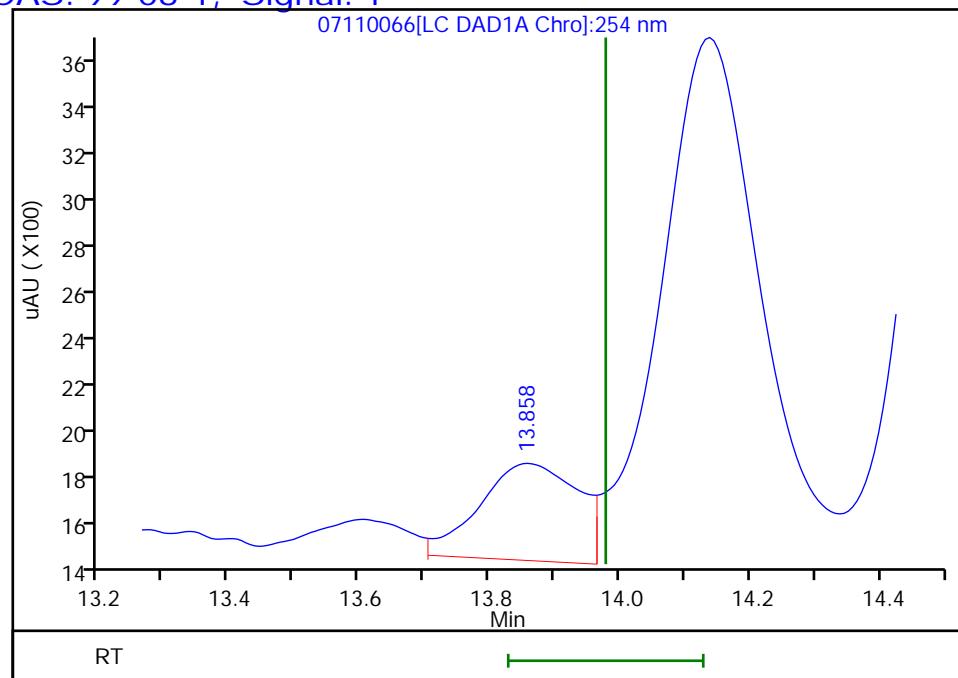
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110066.D
Injection Date: 12-Jul-2019 08:50:12 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-11-A Lab Sample ID: 280-124912-11
Client ID: G0104-19A
Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.86
Response: 4127
Amount: 0.028438



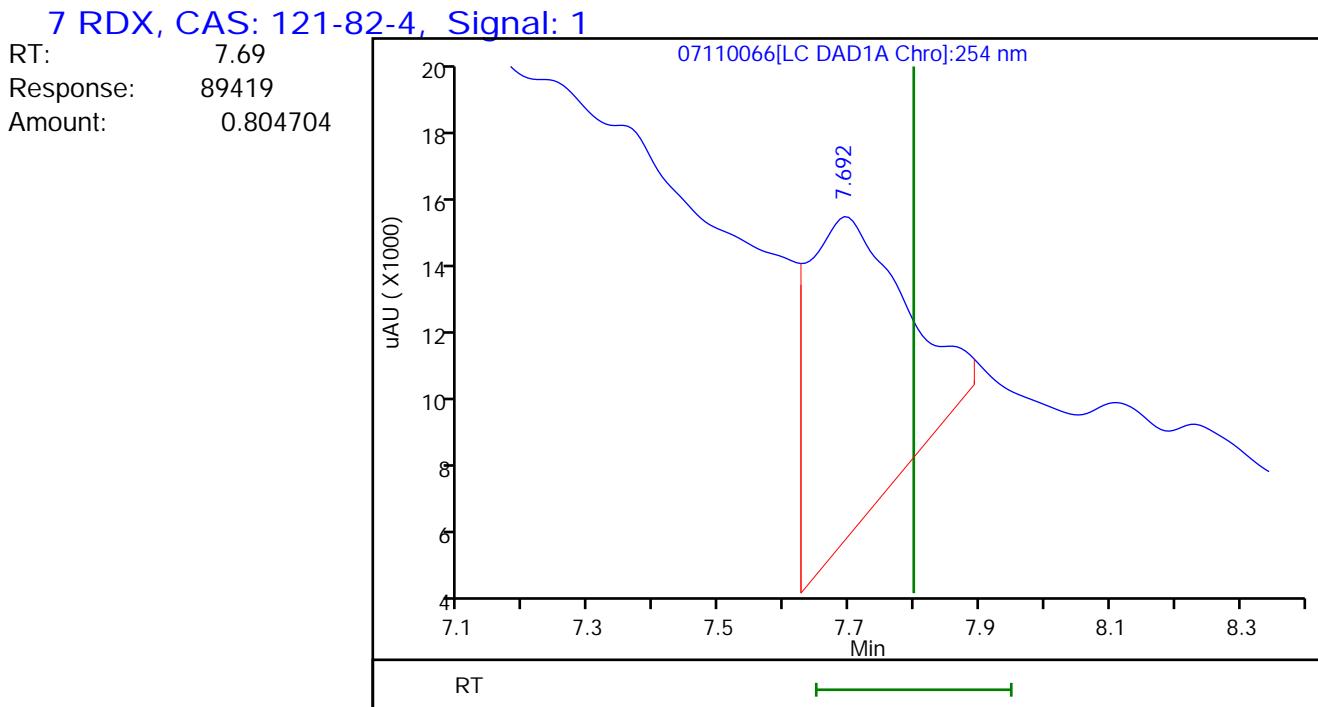
Reviewer: fiedlerh, 12-Jul-2019 09:18:32

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110066.D
Injection Date: 12-Jul-2019 08:50:12 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-11-A Lab Sample ID: 280-124912-11
Client ID: G0104-19A
Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 12-Jul-2019 09:18:32

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ001-19A Lab Sample ID: 280-124912-12
Matrix: Water Lab File ID: 06130061.D
Analysis Method: 8330A Date Collected: 06/04/2019 14:05
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 496.3 (mL) Date Analyzed: 06/14/2019 08:54
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U J1	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U J1 Q	0.40	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	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U M Q	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.16
98-95-3	Nitrobenzene	0.20	U M	0.40	0.20	0.092
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U M	0.24	0.20	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	87	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130061.D
 Lims ID: 280-124912-A-12-A
 Client ID: PZ001-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 08:54:34 ALS Bottle#: 61 Worklist Smp#: 61
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-12-
 Misc. Info.: 280-0082810-061
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 10:00:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.496			ND		U
2 TNX	1	6.566			ND		
3 HMX	1	6.645			ND		
4 2,4-diamino-6-nitrotoluene	1	6.683			ND		
5 DNX	1	6.893			ND		
6 MNX	1	7.359			ND		
7 RDX	1	7.758			ND		
8 2,4,6-Trinitrophenol	1	8.165			ND		
\$ 9 1,2-Dinitrobenzene	1	8.743	8.738	0.005	22712	0.1746	M
10 1,3,5-Trinitrobenzene	1		8.898			ND	
11 1,3-Dinitrobenzene	1		9.558			ND	
12 Nitrobenzene	1	9.963	9.945	0.018	1770	0.008993	M
13 3,5-Dinitroaniline	1		10.189			ND	
14 Tetryl	1		10.265			ND	U
15 Nitroglycerin	2		10.765			ND	
16 2,4,6-Trinitrotoluene	1		11.218			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.405			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.698			ND	
19 2,6-Dinitrotoluene	1		11.832			ND	
20 2,4-Dinitrotoluene	1		12.032			ND	
21 o-Nitrotoluene	1		12.865			ND	
22 p-Nitrotoluene	1		13.305			ND	U
23 m-Nitrotoluene	1		13.898			ND	
24 PETN	2		14.978			ND	
25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 14-Jun-2019 10:04:18

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130061.D

Injection Date: 14-Jun-2019 08:54:34

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-12-A

Lab Sample ID: 280-124912-12

Worklist Smp#: 61

Client ID: PZ001-19A

Dil. Factor: 1.0000

ALS Bottle#: 61

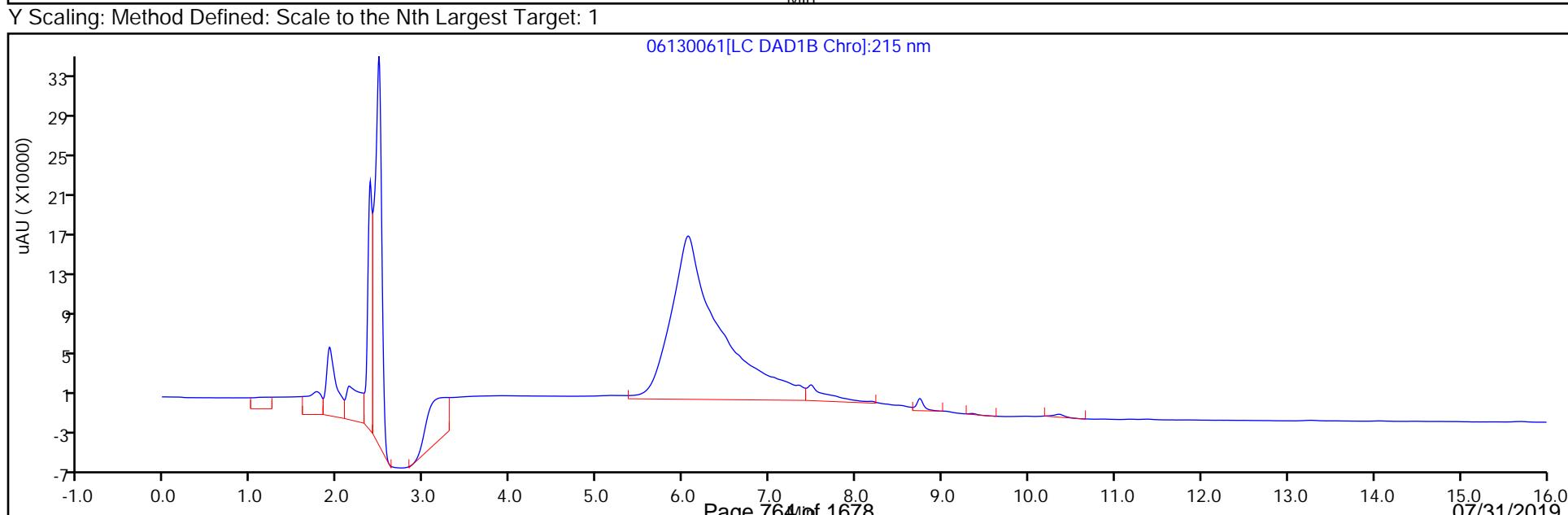
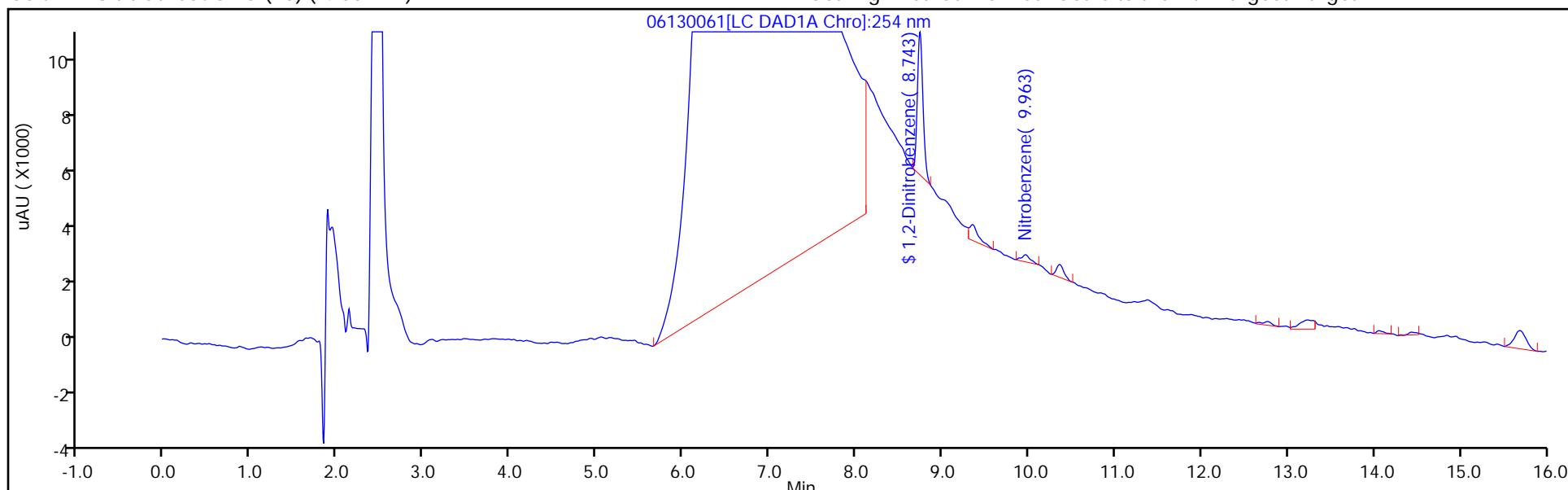
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130061.D
 Lims ID: 280-124912-A-12-A
 Client ID: PZ001-19A
 Sample Type: Client
 Inject. Date: 14-Jun-2019 08:54:34 ALS Bottle#: 61 Worklist Smp#: 61
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-12-
 Misc. Info.: 280-0082810-061
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 10:00:53

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1746	87.28

Eurofins TestAmerica, Denver

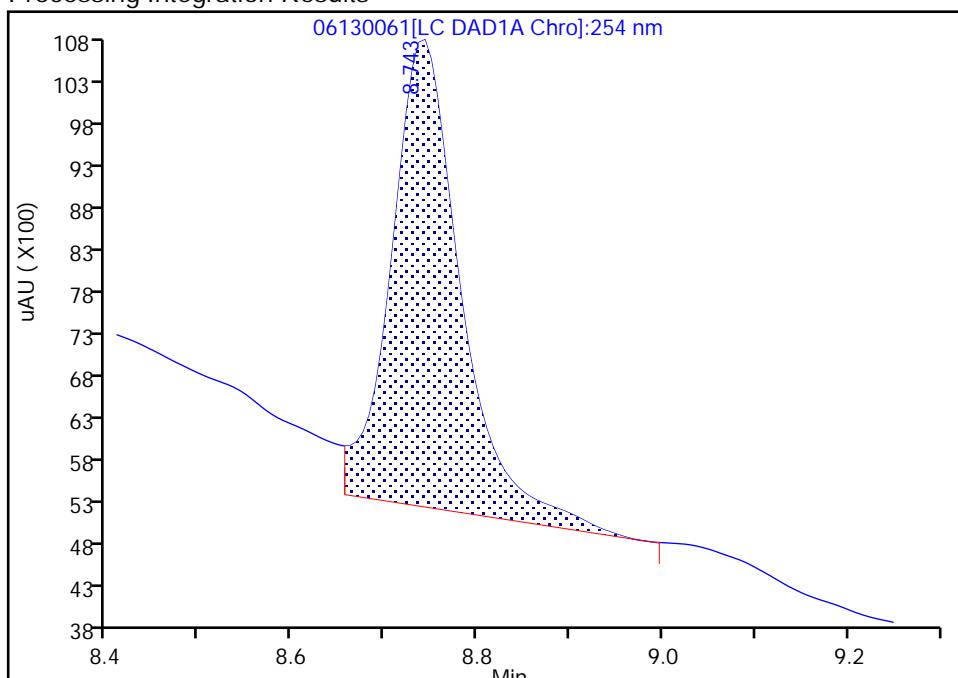
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130061.D
 Injection Date: 14-Jun-2019 08:54:34 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-A Lab Sample ID: 280-124912-12
 Client ID: PZ001-19A
 Operator ID: hkf ALS Bottle#: 61 Worklist Smp#: 61
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

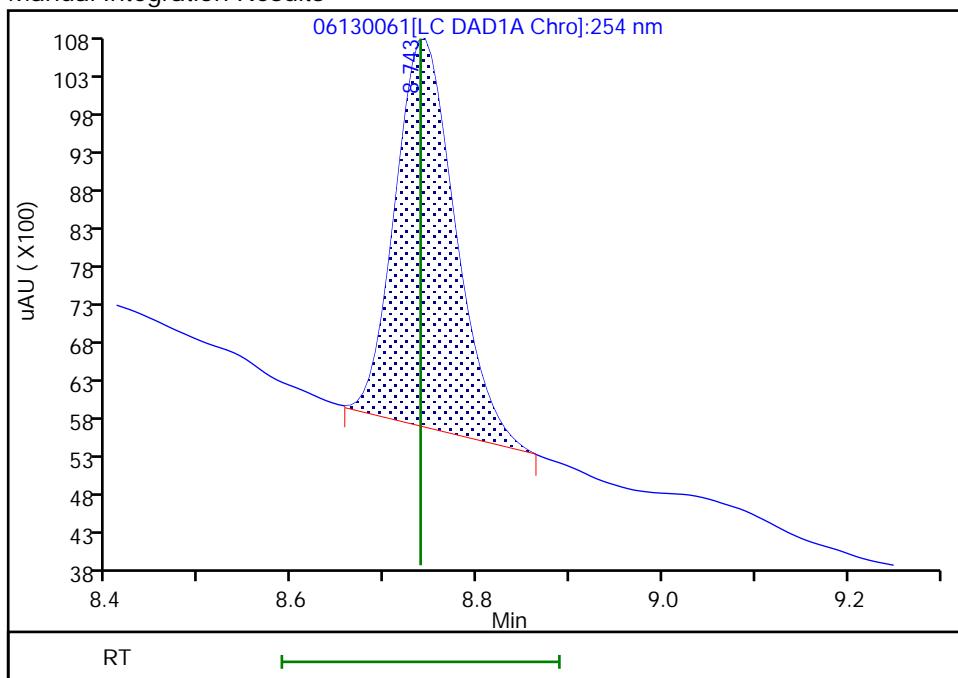
RT: 8.74
 Area: 28732
 Amount: 0.220828
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 22712
 Amount: 0.174559
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 10:00:40

Audit Action: Manually Integrated

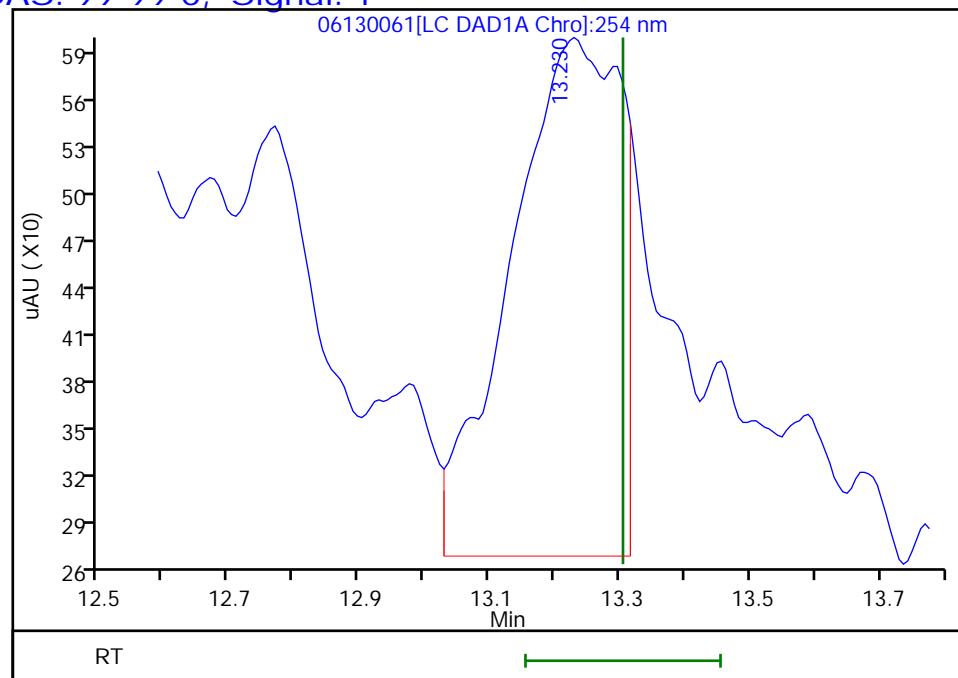
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130061.D
Injection Date: 14-Jun-2019 08:54:34 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-12-A Lab Sample ID: 280-124912-12
Client ID: PZ001-19A
Operator ID: hkf ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.23
Response: 3746
Amount: 0.033234



Reviewer: fiedlerh, 14-Jun-2019 10:00:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

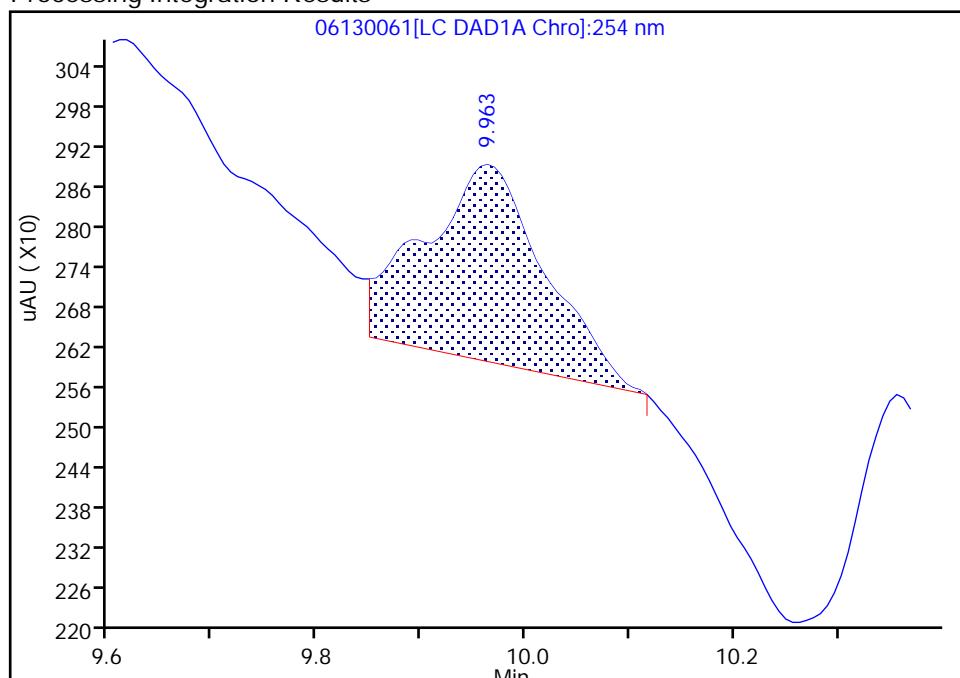
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130061.D
 Injection Date: 14-Jun-2019 08:54:34 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-A Lab Sample ID: 280-124912-12
 Client ID: PZ001-19A
 Operator ID: hkf ALS Bottle#: 61 Worklist Smp#: 61
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

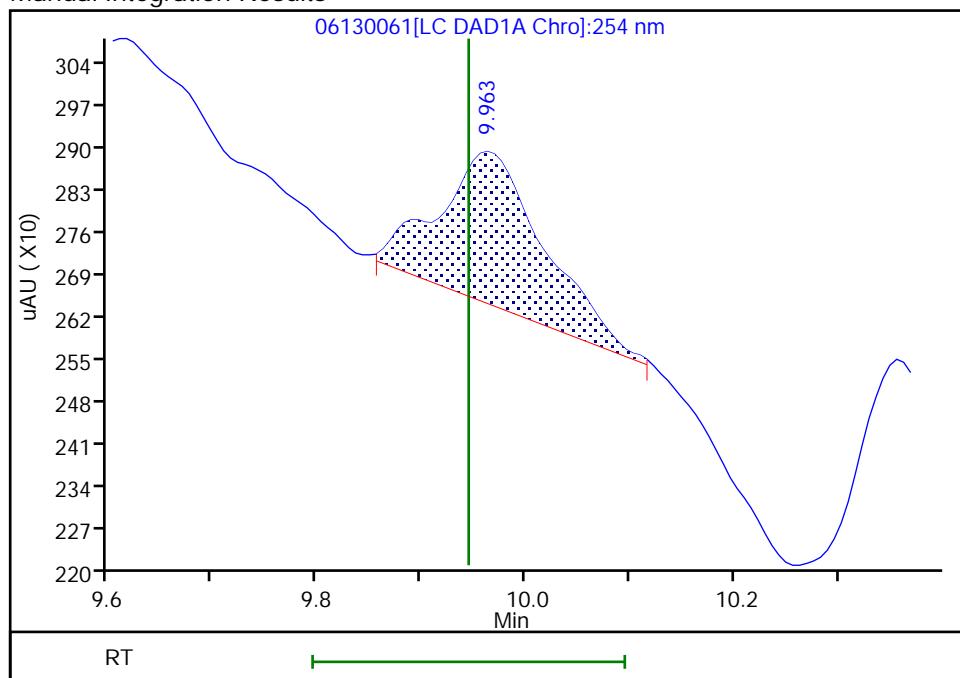
RT: 9.96
 Area: 2352
 Amount: 0.011950
 Amount Units: ug/mL

Processing Integration Results



RT: 9.96
 Area: 1770
 Amount: 0.008993
 Amount Units: ug/mL

Manual Integration Results



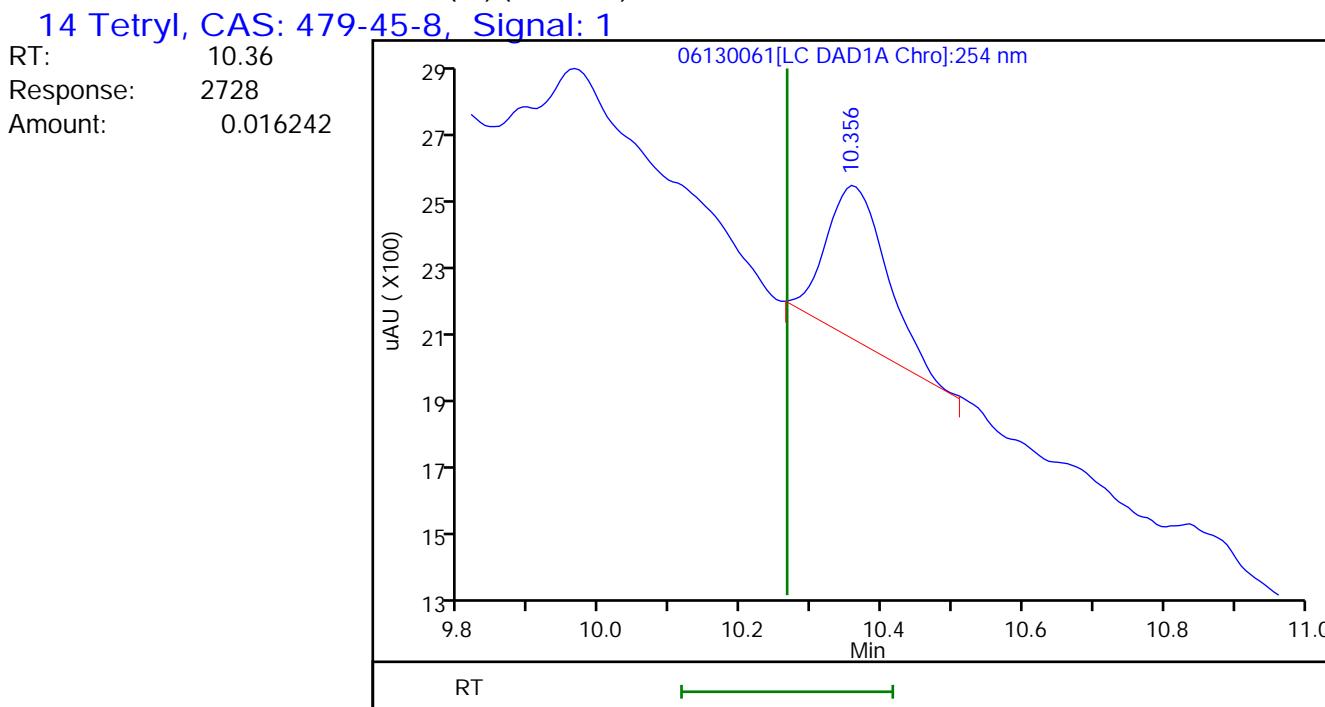
Reviewer: fiedlerh, 14-Jun-2019 10:00:49

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130061.D
Injection Date: 14-Jun-2019 08:54:34 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-A-12-A Lab Sample ID: 280-124912-12
Client ID: PZ001-19A
Operator ID: hkf ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 14-Jun-2019 10:00:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ001-19A RE Lab Sample ID: 280-124912-12 RE
Matrix: Water Lab File ID: 07110067.D
Analysis Method: 8330A Date Collected: 06/04/2019 14:05
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 507.2 (mL) Date Analyzed: 07/12/2019 09:13
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	<i>2-Nitrotoluene</i>	0.20	<i>U H</i>	0.39	0.20	0.084
99-99-0	<i>4-Nitrotoluene</i>	0.39	<i>U H</i>	0.99	0.39	0.20
5755-27-1	MNX	0.39	<i>U H</i> <i>J1</i>	2.0	0.39	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88	<i>M</i>	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110067.D
 Lims ID: 280-124912-B-12-A
 Client ID: PZ001-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 09:13:10 ALS Bottle#: 67 Worklist Smp#: 67
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-12-
 Misc. Info.: 280-0083617-067
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:41:19 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:44:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.539			ND		U
2 TNX	1	6.598			ND		
3 HMX	1	6.692			ND		
4 2,4-diamino-6-nitrotoluene	1	6.719			ND		
5 DNX	1	6.924			ND		
6 MNX	1	7.378			ND		
7 RDX	1	7.799			ND		
8 2,4,6-Trinitrophenol	1	8.199			ND		U
\$ 9 1,2-Dinitrobenzene	1	8.743	8.759	-0.016	24455	0.1755	M
10 1,3,5-Trinitrobenzene	1		8.919			ND	
11 1,3-Dinitrobenzene	1		9.578			ND	
12 Nitrobenzene	1	9.963	9.965	-0.002	1085	0.005455	7M
13 3,5-Dinitroaniline	1		10.206			ND	
14 Tetryl	1		10.285			ND	U
15 Nitroglycerin	2		10.792			ND	
16 2,4,6-Trinitrotoluene	1		11.258			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.445			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.738			ND	
19 2,6-Dinitrotoluene	1		11.878			ND	
20 2,4-Dinitrotoluene	1		12.078			ND	
21 o-Nitrotoluene	1		12.925			ND	
22 p-Nitrotoluene	1		13.372			ND	
23 m-Nitrotoluene	1		13.978			ND	U
24 PETN	2		15.098			ND	
25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Report Date: 12-Jul-2019 09:44:29

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 12-Jul-2019 09:44:29

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110067.D

Injection Date: 12-Jul-2019 09:13:10

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-B-12-A

Lab Sample ID: 280-124912-12

Worklist Smp#: 67

Client ID: PZ001-19A

Dil. Factor: 1.0000

ALS Bottle#: 67

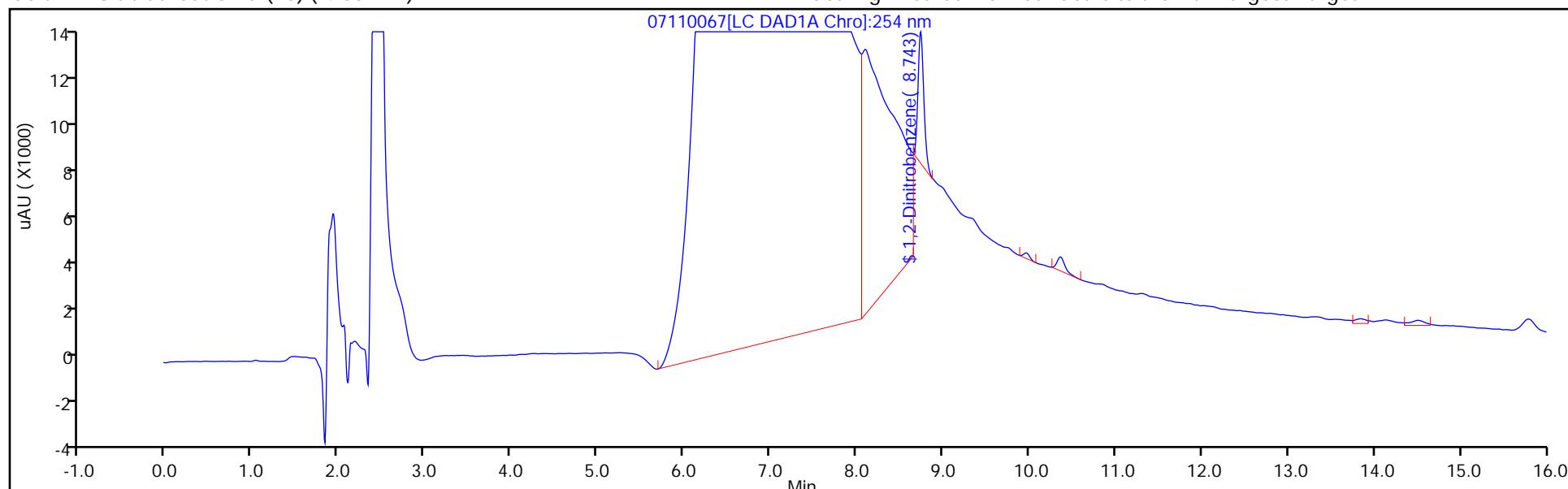
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

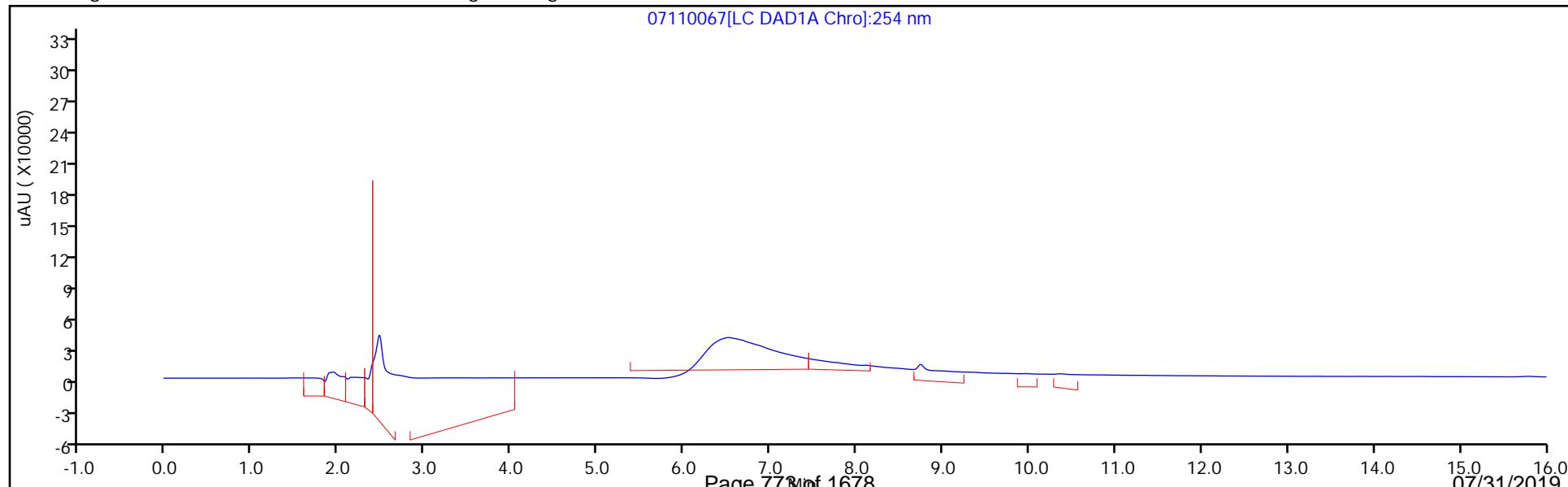
Method: 8330_X3

Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110067.D
 Lims ID: 280-124912-B-12-A
 Client ID: PZ001-19A
 Sample Type: Client
 Inject. Date: 12-Jul-2019 09:13:10 ALS Bottle#: 67 Worklist Smp#: 67
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-12-
 Misc. Info.: 280-0083617-067
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:41:19 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:44:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1755	87.76

Eurofins TestAmerica, Denver

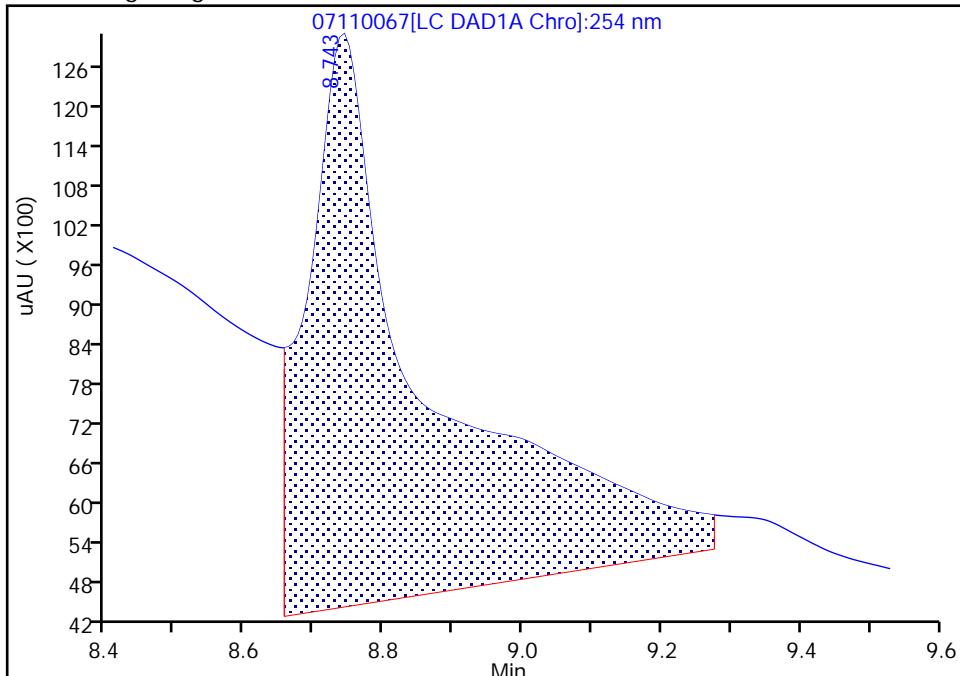
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110067.D
 Injection Date: 12-Jul-2019 09:13:10 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-A Lab Sample ID: 280-124912-12
 Client ID: PZ001-19A
 Operator ID: hkf ALS Bottle#: 67 Worklist Smp#: 67
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

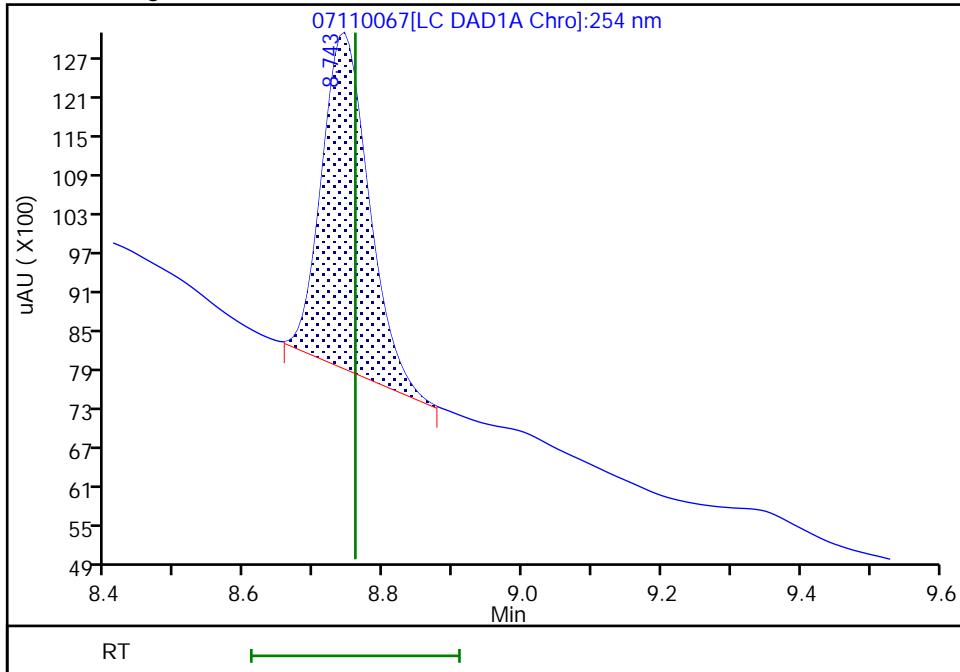
Processing Integration Results

RT: 8.74
 Area: 107088
 Amount: 0.768601
 Amount Units: ug/mL



Manual Integration Results

RT: 8.74
 Area: 24455
 Amount: 0.175520
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:41:07

Audit Action: Manually Integrated

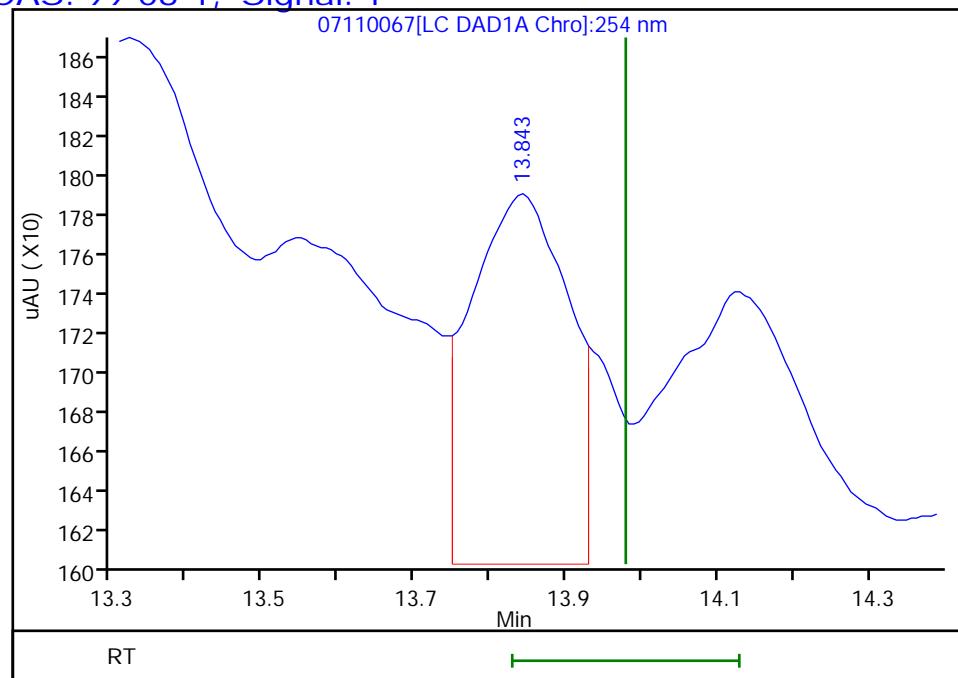
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110067.D
Injection Date: 12-Jul-2019 09:13:10 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-12-A Lab Sample ID: 280-124912-12
Client ID: PZ001-19A
Operator ID: hkf ALS Bottle#: 67 Worklist Smp#: 67
Injection Vol: 100.0 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: 13.84
Response: 1632
Amount: 0.011246



Reviewer: fiedlerh, 12-Jul-2019 09:44:25

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

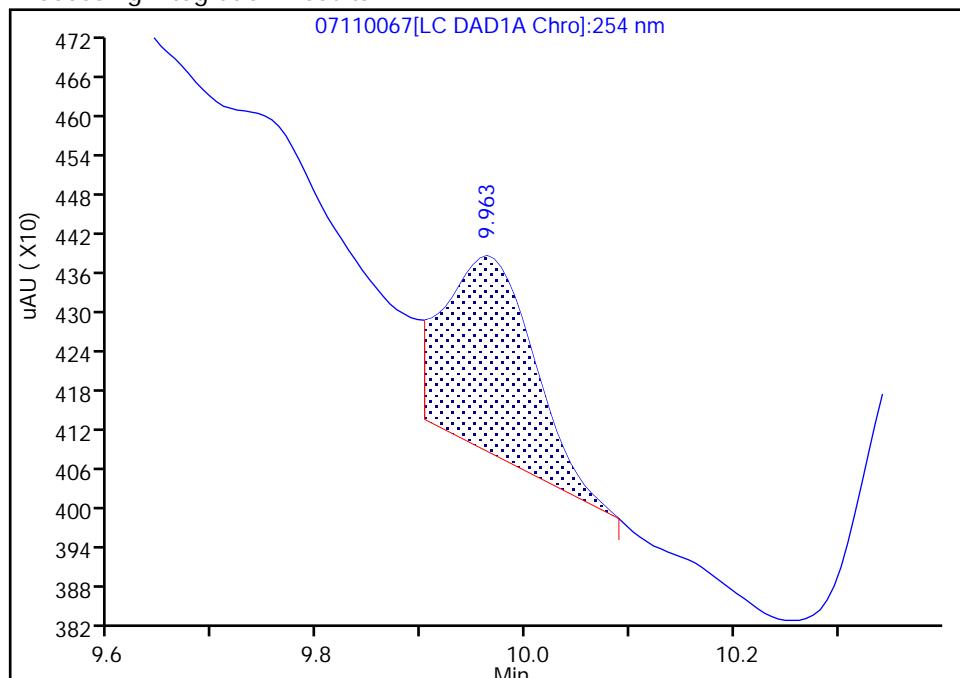
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110067.D
 Injection Date: 12-Jul-2019 09:13:10 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-A Lab Sample ID: 280-124912-12
 Client ID: PZ001-19A
 Operator ID: hkf ALS Bottle#: 67 Worklist Smp#: 67
 Injection Vol: 100.0 ul Dil. Factor: 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

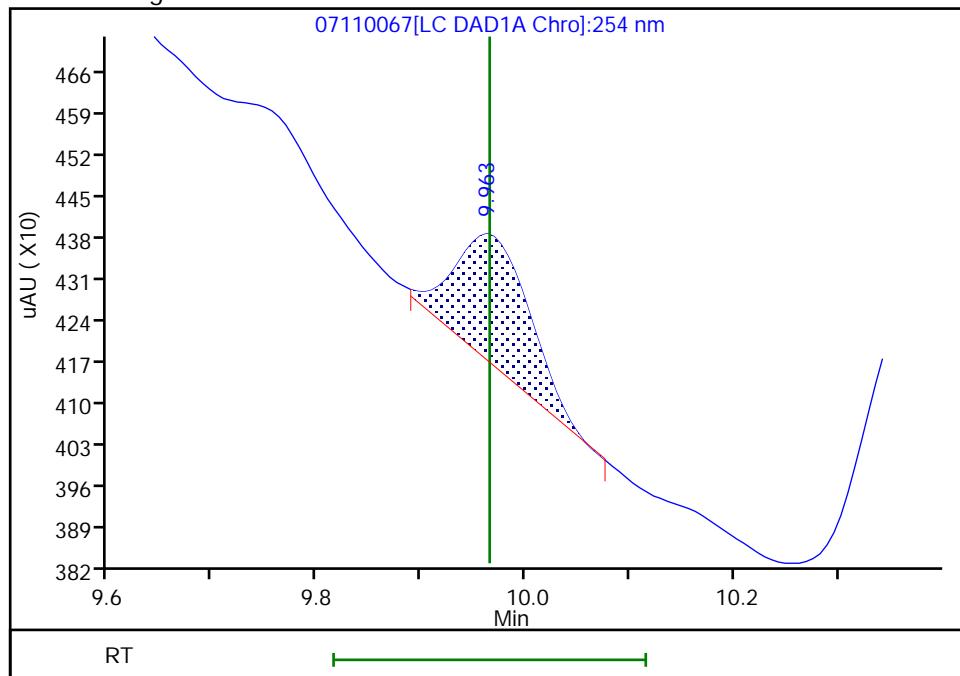
RT: 9.96
 Area: 1777
 Amount: 0.008934
 Amount Units: ug/mL

Processing Integration Results



RT: 9.96
 Area: 1085
 Amount: 0.005455
 Amount Units: ug/mL

Manual Integration Results



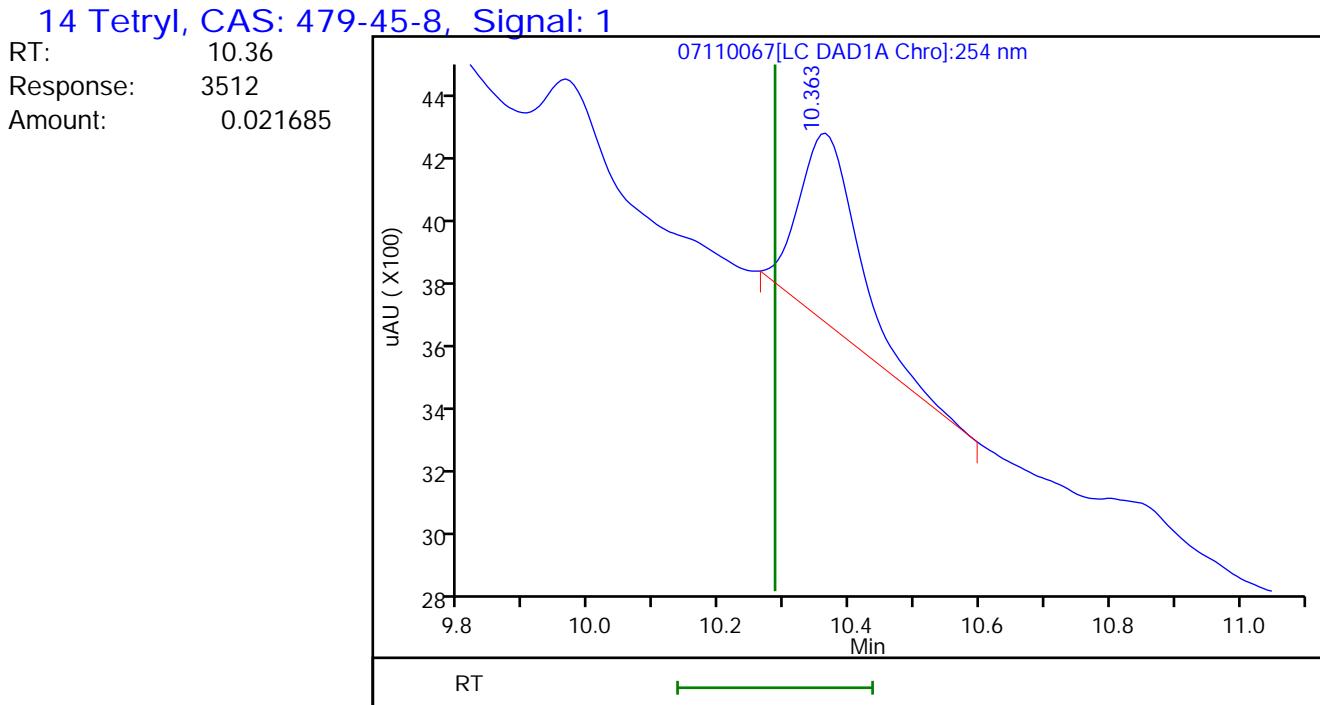
Reviewer: fiedlerh, 12-Jul-2019 09:41:12

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110067.D
Injection Date: 12-Jul-2019 09:13:10 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-12-A Lab Sample ID: 280-124912-12
Client ID: PZ001-19A
Operator ID: hkf ALS Bottle#: 67 Worklist Smp#: 67
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 12-Jul-2019 09:44:25

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.: 280-124912-1 Analy Batch No.: 457315

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/14	05070014.D
Level 2	IC 280-457315/13	05070013.D
Level 3	IC 280-457315/12	05070012.D
Level 4	IC 280-457315/11	05070011.D
Level 5	IC 280-457315/10	05070010.D
Level 6	IC 280-457315/9	05070009.D
Level 7	IC 280-457315/8	05070008.D
Level 8	IC 280-457315/7	05070007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Picric acid	6.206	6.147	6.091	6.007	5.940	5.877	5.793	5.636			5.790 - 6.090	5.962
HMX	7.232	7.220	7.224	7.207	7.200	7.197	7.186	7.169			7.050 - 7.350	7.204
RDX	9.326	9.314	9.324	9.300	9.300	9.291	9.273	9.242			9.150 - 9.450	9.296
Nitrobenzene	12.332	12.334	12.344	12.320	12.326	12.324	12.293	12.269			12.176 - 12.476	12.318
Nitroglycerin	15.892	15.900	15.904	15.880	15.873	15.877	15.853	15.822			15.723 - 16.023	15.875
1,3-Dinitrobenzene	15.899	15.907	15.911	15.887	15.880	15.884	15.860	15.822			15.730 - 16.030	15.881
2-Nitrotoluene	16.732	16.740	16.751	16.727	16.720	16.731	16.713	16.682			16.570 - 16.870	16.725
4-Nitrotoluene	17.066	17.067	17.078	17.054	17.053	17.057	17.040	17.002			16.903 - 17.203	17.052
4-Amino-2,6-dinitrotoluene	17.459	17.467	17.478	17.447	17.440	17.444	17.420	17.382			17.290 - 17.590	17.442
3-Nitrotoluene	17.979	17.980	17.991	17.967	17.966	17.977	17.960	17.922			17.816 - 18.116	17.968
2-Amino-4,6-dinitrotoluene	18.479	18.480	18.484	18.454	18.446	18.451	18.426	18.382			18.296 - 18.596	18.450
1,3,5-Trinitrobenzene	19.226	19.227	19.238	19.214	19.213	19.217	19.200	19.169			19.063 - 19.363	19.213
2,6-Dinitrotoluene	20.086	20.087	20.091	20.074	20.073	20.084	20.060	20.029			19.923 - 20.223	20.073
2,4-Dinitrotoluene	20.632	20.634	20.638	20.621	20.620	20.624	20.606	20.569			20.470 - 20.770	20.618
Tetryl	23.972	23.974	23.964	23.954	23.966	23.957	23.946	23.916			23.816 - 24.116	23.956
2,4,6-Trinitrotoluene	24.952	24.960	24.951	24.947	24.953	24.951	24.946	24.923			24.803 - 25.103	24.948
PETN	25.366	25.360	25.351	25.347	25.353	25.351	25.346	25.329			25.203 - 25.503	25.350
1,2-Dinitrobenzene	13.359	13.360	13.378	13.347	13.346	13.344	13.313	13.289			13.196 - 13.496	13.342

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 457315

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/14	05070014.D
Level 2	IC 280-457315/13	05070013.D
Level 3	IC 280-457315/12	05070012.D
Level 4	IC 280-457315/11	05070011.D
Level 5	IC 280-457315/10	05070010.D
Level 6	IC 280-457315/9	05070009.D
Level 7	IC 280-457315/8	05070008.D
Level 8	IC 280-457315/7	05070007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
Picric acid	143200 158295	152000 154761	148660 160018	147288 175135	Ave		154919.654				6.4		20.0			
HMX	186700 170538	170160 166396	163480 167514	162388 182412	Ave		171198.452				5.1		20.0			
RDX	208850 209973	214300 203474	204000 205258	199228 222468	Ave		208443.798				3.5		20.0			
Nitrobenzene	397355 410773	411317 399424	395868 400807	389110 438928	Ave		405447.961				3.8		20.0			
Nitroglycerin	230695 182930	206262 178504	190583 179150	179764 195591	Ave		192934.972				9.4		20.0			
1,3-Dinitrobenzene	675275 635292	633007 617101	624346 620589	607960 670941	Ave		635563.995				3.9		20.0			
2-Nitrotoluene	258724 264803	258624 258557	258684 257667	254022 283836	Ave		261864.701				3.6		20.0			
4-Nitrotoluene	226594 230254	224761 224437	220080 225659	217853 243537	Ave		226646.674				3.5		20.0			
4-Amino-2,6-dinitrotoluene	299153 300965	294955 291538	293200 294109	285815 319270	Ave		297375.493				3.4		20.0			
3-Nitrotoluene	297012 294945	290857 287782	288088 288231	280554 314057	Ave		292690.570				3.4		20.0			
2-Amino-4,6-dinitrotoluene	466899 430032	425503 416844	419412 419959	407159 456077	Ave		430235.716				4.8		20.0			
1,3,5-Trinitrobenzene	509350 452540	454000 437647	455080 441599	432684 477467	Ave		457545.868				5.5		20.0			
2,6-Dinitrotoluene	331406 289240	293280 280508	287368 282894	276275 306747	Ave		293464.768				6.1		20.0			
2,4-Dinitrotoluene	603892 566425	582874 550905	553952 555029	540878 601773	Ave		569466.073				4.2		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.: 280-124912-1 Analy Batch No.: 457315

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

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									
Tetryl	267700 327900	305600 320959	307270 324996	308636 352779	Ave		314479.971				7.7		20.0				
2,4,6-Trinitrotoluene	401444 417263	397052 400117	394731 407163	389534 450941	Ave		407280.633				4.8		20.0				
PETN	118365 133438	144766 129380	134056 128638	128655 141615	Ave		132364.136				6.2		20.0				
1,2-Dinitrobenzene	290800 275953	279400 269164	272150 270248	264504 292628	Ave		276855.798				3.7		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.: 280-124912-1

Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA

GC Column: Luna-phenyl ID: 4.6 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08

Calibration End Date: 05/07/2019 19:13

Calibration ID: 36292

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/14	05070014.D
Level 2	IC 280-457315/13	05070013.D
Level 3	IC 280-457315/12	05070012.D
Level 4	IC 280-457315/11	05070011.D
Level 5	IC 280-457315/10	05070010.D
Level 6	IC 280-457315/9	05070009.D
Level 7	IC 280-457315/8	05070008.D
Level 8	IC 280-457315/7	05070007.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
Picric acid	Ave	2864 108333	7600 160018	14866 437837	36822	63318	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
HMX	Ave	3734 116477	8508 167514	16348 456031	40597	68215	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	4177 142432	10715 205258	20400 556169	49807	83989	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Ave	7963 280156	20607 401609	39666 1099515	97472	164638	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Nitroglycerin	Ave	46139 1249529	103131 1791502	190583 4889782	449411	731719	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,3-Dinitrobenzene	Ave	13519 432403	31682 621210	62497 1679031	152142	254371	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
2-Nitrotoluene	Ave	5190 181533	12970 258440	25946 711720	63696	106239	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
4-Nitrotoluene	Ave	4550 157734	11283 226562	22096 611277	54681	92470	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	6001 204689	14792 294991	29408 800569	71668	120747	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
3-Nitrotoluene	Ave	5964 202253	14601 289384	28924 788282	70419	118450	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2-Amino-4,6-dinitrotoluene	Ave	9366 292666	21339 421219	42067 1143614	102095	172529	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
1,3,5-Trinitrobenzene	Ave	10187 306353	22700 441599	45508 1193667	108171	181016	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
2,6-Dinitrotoluene	Ave	6648 196945	14708 283743	28823 769167	69276	116043	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,4-Dinitrotoluene	Ave	12102 386405	29202 556139	55506 1507441	135490	227023	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Tetryl	Ave	5354 224671	15280 324996	30727 881948	77159	131160	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 457315

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

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
2,4,6-Trinitrotoluene	Ave	8061 281202	19932 408792	39631 1131861	97773	167573	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Ave	23673 905663	72383 1286384	134056 3540364	321638	533750	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	5816 188415	13970 270248	27215 731569	66126	110381	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\G2_LUNA\20190507-81649.b\05070007.D
 Lims ID: IC FULL LV 8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 07-May-2019 15:08:19 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC FULL LV 8
 Misc. Info.: 280-0081649-007
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:13:33 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:04:24

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	4.403	4.446	-0.043	676801	2.50	1.72	
2 2,4-diamino-6-nitrotoluene	1	4.996	4.993	0.003	406734	2.50	1.59	
5 2,4,6-Trinitrophenol	1	5.636	5.940	-0.304	437837	2.50	2.83	a
6 HMX	1	7.169	7.200	-0.031	456031	2.50	2.66	
8 RDX	1	9.242	9.300	-0.058	556169	2.50	2.67	
9 Nitrobenzene	1	12.269	12.326	-0.057	1099515	2.51	2.71	
\$ 10 1,2-Dinitrobenzene	1	13.289	13.346	-0.057	731569	2.50	2.64	
11 3,5-Dinitroaniline	1	15.196	15.266	-0.070	789313	2.50	1.68	
13 Nitroglycerin	2	15.822	15.873	-0.051	4889782	25.0	25.3	
12 1,3-Dinitrobenzene	1	15.822	15.880	-0.058	1679031	2.50	2.64	
14 o-Nitrotoluene	1	16.682	16.720	-0.038	711720	2.51	2.72	
15 p-Nitrotoluene	1	17.002	17.053	-0.051	611277	2.51	2.70	
16 4-Amino-2,6-dinitrotoluene	1	17.382	17.440	-0.058	800569	2.51	2.69	
17 m-Nitrotoluene	1	17.922	17.966	-0.044	788282	2.51	2.69	
18 2-Amino-4,6-dinitrotoluene	1	18.382	18.446	-0.064	1143614	2.51	2.66	
19 1,3,5-Trinitrobenzene	1	19.169	19.213	-0.044	1193667	2.50	2.61	
20 2,6-Dinitrotoluene	1	20.029	20.073	-0.044	769167	2.51	2.62	
21 2,4-Dinitrotoluene	1	20.569	20.620	-0.051	1507441	2.51	2.65	
22 Tetryl	1	23.916	23.966	-0.050	881948	2.50	2.80	
23 2,4,6-Trinitrotoluene	1	24.923	24.953	-0.030	1131861	2.51	2.78	
24 PETN	2	25.329	25.353	-0.024	3540364	25.0	26.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8330IntermStk_00058

Amount Added: 125.00 Units: uL

8330_ADDs_00021

Amount Added: 125.00 Units: uL

Report Date: 09-May-2019 08:13:33

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070007.D

Injection Date: 07-May-2019 15:08:19

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC FULL LV 8

Worklist Smp#: 7

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

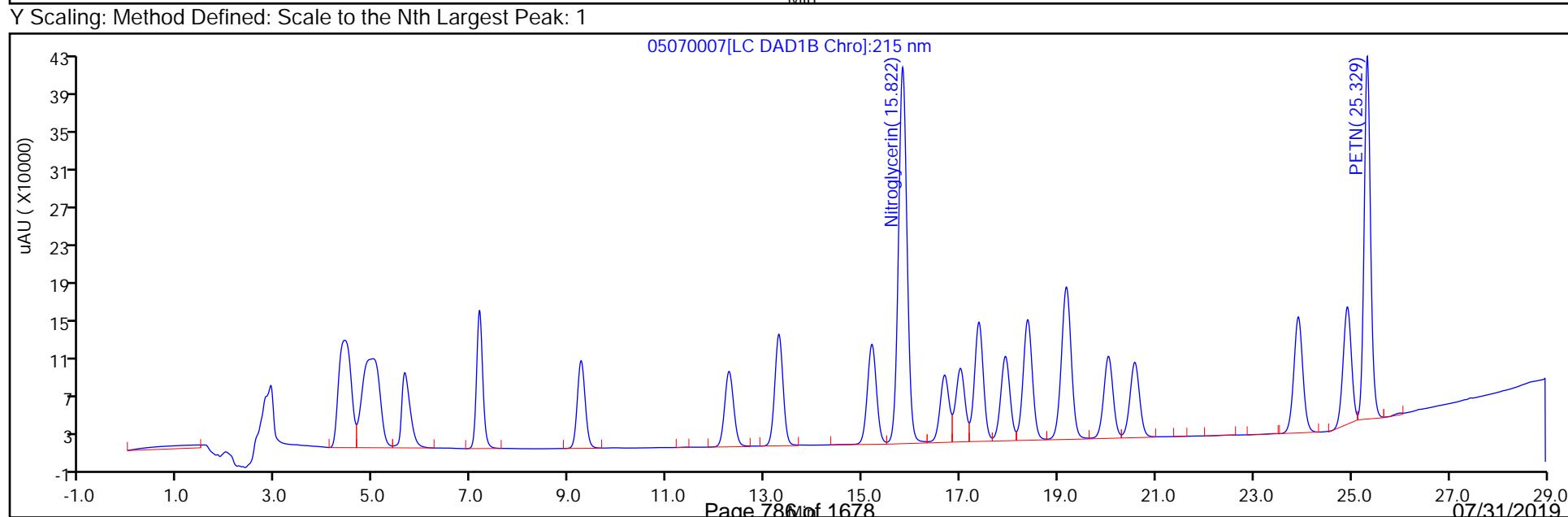
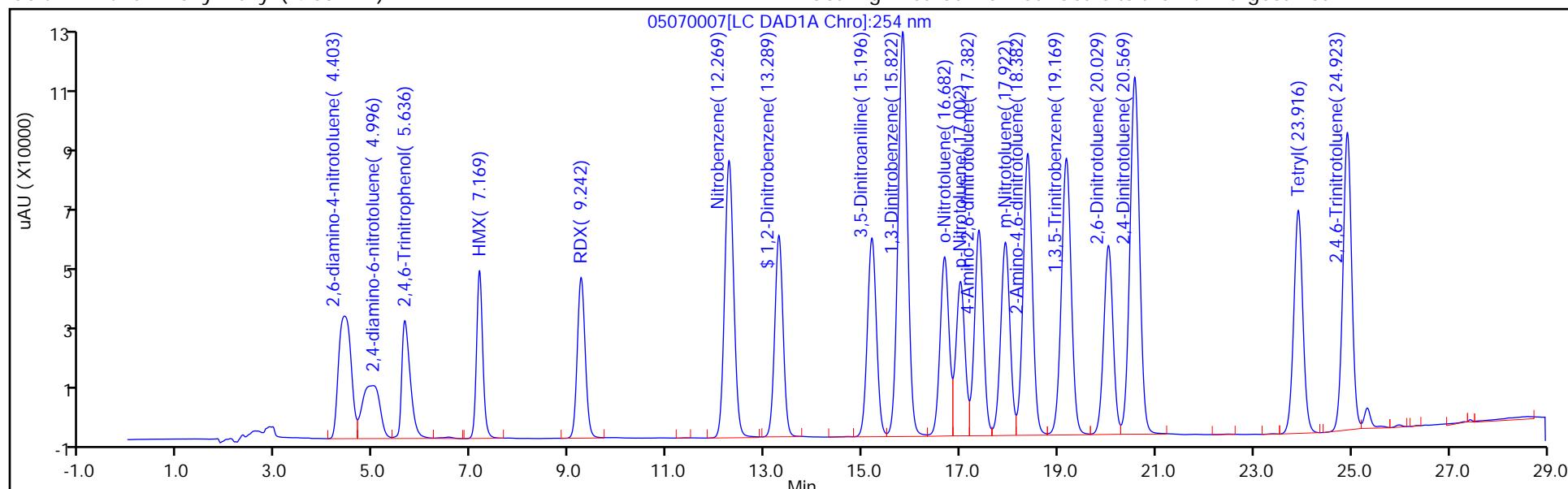
ALS Bottle#: 7

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



Eurofins TestAmerica, Denver

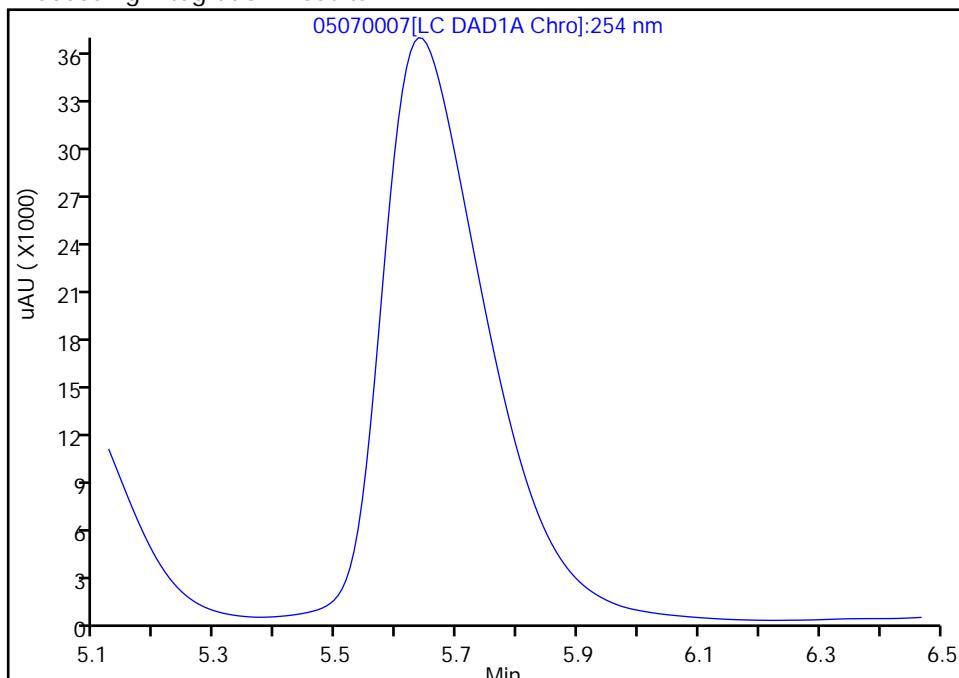
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070007.D
 Injection Date: 07-May-2019 15:08:19 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: IC FULL LV 8
 Client ID:
 Operator ID: HKF ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

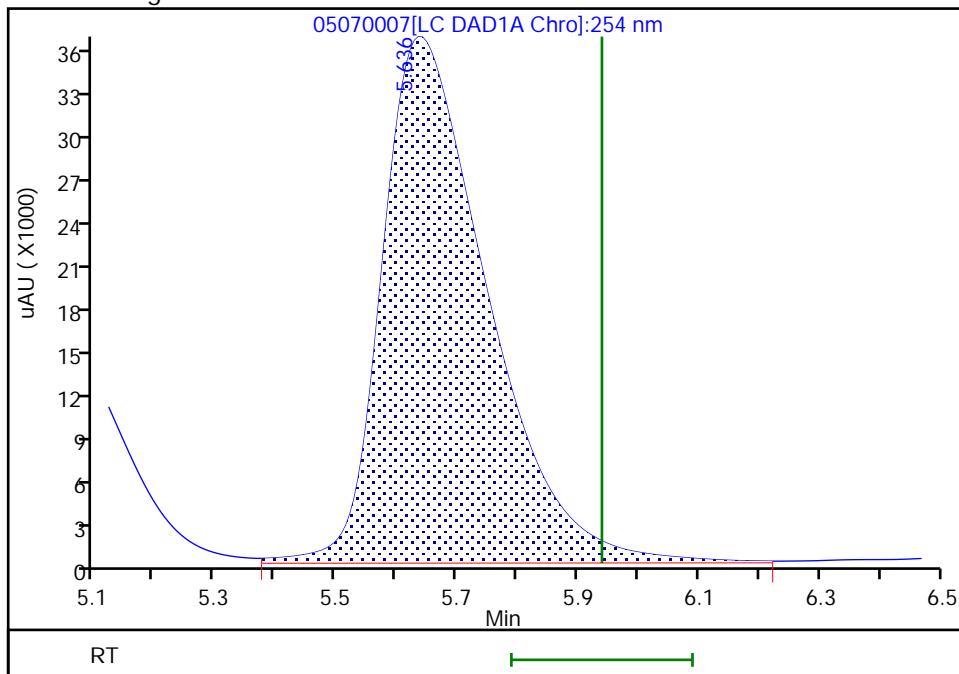
Not Detected
 Expected RT: 5.94

Processing Integration Results



Manual Integration Results

RT: 5.64
 Area: 437837
 Amount: 2.826220
 Amount Units: ug/ml



Reviewer: fiedlerh, 08-May-2019 09:04:18

Audit Action: Assigned Compound ID

Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070008.D
 Lims ID: IC FULL LV 7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 07-May-2019 15:43:22 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC FULL LV 7
 Misc. Info.: 280-0081649-008
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:13:33 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:01:15

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	4.426	4.446	-0.020	403610	1.00	1.02	
2 2,4-diamino-6-nitrotoluene	1	4.953	4.993	-0.040	242342	1.00	0.9472	
5 2,4,6-Trinitrophenol	1	5.793	5.940	-0.147	160018	1.00	1.03	
6 HMX	1	7.186	7.200	-0.014	167514	1.00	0.9785	
8 RDX	1	9.273	9.300	-0.027	205258	1.00	0.9847	
9 Nitrobenzene	1	12.293	12.326	-0.033	401609	1.00	0.99	
\$ 10 1,2-Dinitrobenzene	1	13.313	13.346	-0.033	270248	1.00	0.9761	
11 3,5-Dinitroaniline	1	15.233	15.266	-0.033	471598	1.00	1.01	
13 Nitroglycerin	2	15.853	15.873	-0.020	1791502	10.0	9.29	
12 1,3-Dinitrobenzene	1	15.860	15.880	-0.020	621210	1.00	0.9774	
14 o-Nitrotoluene	1	16.713	16.720	-0.007	258440	1.00	0.9869	
15 p-Nitrotoluene	1	17.040	17.053	-0.013	226562	1.00	1.00	
16 4-Amino-2,6-dinitrotoluene	1	17.420	17.440	-0.020	294991	1.00	0.99	
17 m-Nitrotoluene	1	17.960	17.966	-0.006	289384	1.00	0.9887	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.446	-0.020	421219	1.00	0.9790	
19 1,3,5-Trinitrobenzene	1	19.200	19.213	-0.013	441599	1.00	0.9651	
20 2,6-Dinitrotoluene	1	20.060	20.073	-0.013	283743	1.00	0.9669	
21 2,4-Dinitrotoluene	1	20.606	20.620	-0.014	556139	1.00	0.9766	
22 Tetryl	1	23.946	23.966	-0.020	324996	1.00	1.03	
23 2,4,6-Trinitrotoluene	1	24.946	24.953	-0.007	408792	1.00	1.00	
24 PETN	2	25.346	25.353	-0.007	1286384	10.0	9.72	

Reagents:

8330IntermStk_00058	Amount Added: 50.00	Units: uL
8330_ADDs_00021	Amount Added: 50.00	Units: uL

Report Date: 09-May-2019 08:13:33

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070008.D

Injection Date: 07-May-2019 15:43:22

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC FULL LV 7

Worklist Smp#: 8

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

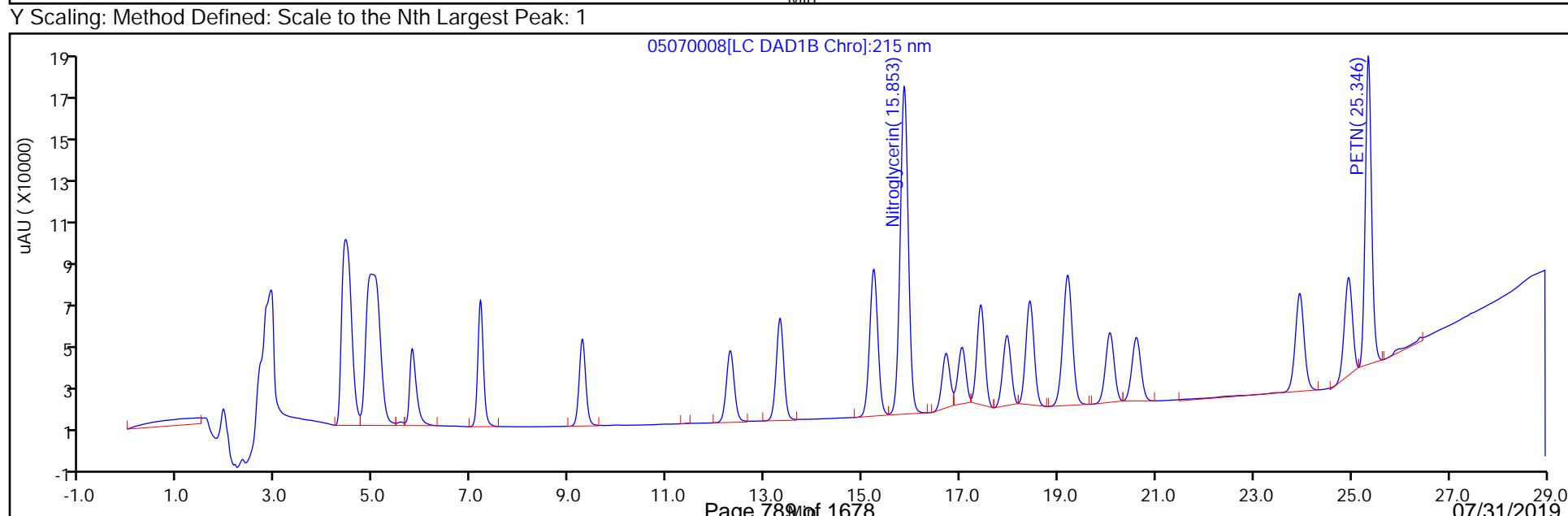
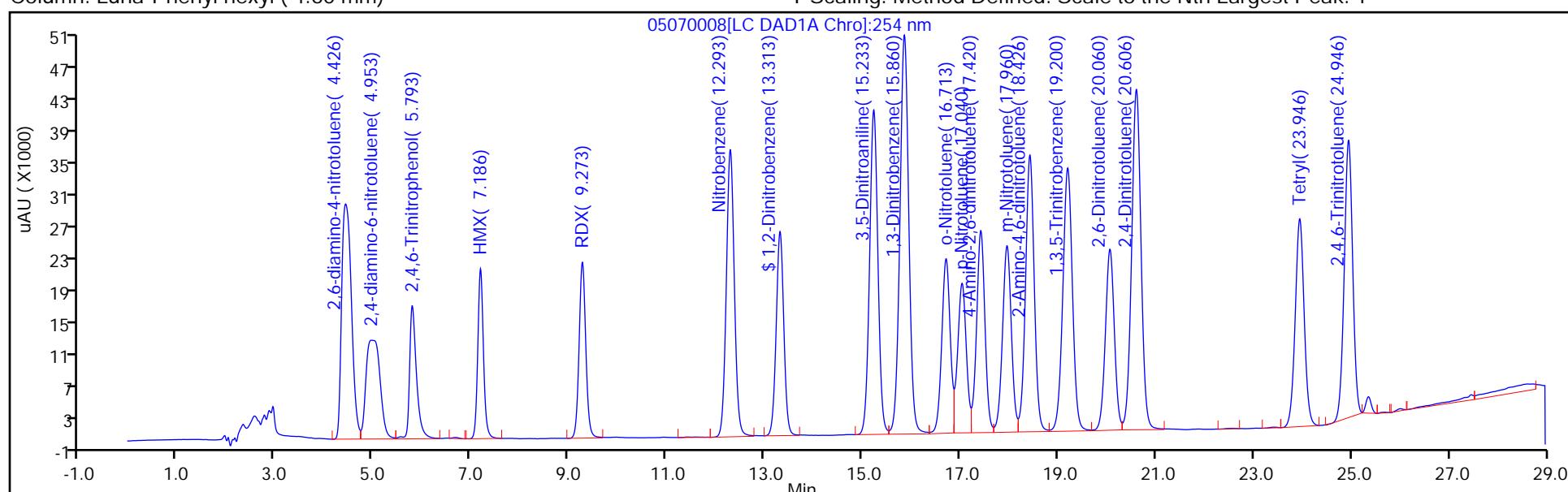
ALS Bottle#: 8

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070009.D
 Lims ID: IC FULL LV 6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 07-May-2019 16:18:20 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC FULL LV 6
 Misc. Info.: 280-0081649-009
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:13:34 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:00:45

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	4.437	4.446	-0.009	282422	0.7000	0.7157	
2 2,4-diamino-6-nitrotoluene	1	5.004	4.993	0.011	170308	0.7000	0.6657	
5 2,4,6-Trinitrophenol	1	5.877	5.940	-0.063	108333	0.7000	0.6993	
6 HMX	1	7.197	7.200	-0.003	116477	0.7000	0.6804	
8 RDX	1	9.291	9.300	-0.009	142432	0.7000	0.6833	
9 Nitrobenzene	1	12.324	12.326	-0.002	280156	0.7014	0.6910	
\$ 10 1,2-Dinitrobenzene	1	13.344	13.346	-0.002	188415	0.7000	0.6806	
11 3,5-Dinitroaniline	1	15.264	15.266	-0.002	330264	0.7000	0.7039	
13 Nitroglycerin	2	15.877	15.873	0.004	1249529	7.00	6.48	
12 1,3-Dinitrobenzene	1	15.884	15.880	0.004	432403	0.7007	0.6803	
14 o-Nitrotoluene	1	16.731	16.720	0.011	181533	0.7021	0.6932	
15 p-Nitrotoluene	1	17.057	17.053	0.004	157734	0.7028	0.6959	
16 4-Amino-2,6-dinitrotoluene	1	17.444	17.440	0.004	204689	0.7021	0.6883	
17 m-Nitrotoluene	1	17.977	17.966	0.011	202253	0.7028	0.6910	
18 2-Amino-4,6-dinitrotoluene	1	18.451	18.446	0.005	292666	0.7021	0.6802	
19 1,3,5-Trinitrobenzene	1	19.217	19.213	0.004	306353	0.7000	0.6696	
20 2,6-Dinitrotoluene	1	20.084	20.073	0.011	196945	0.7021	0.6711	
21 2,4-Dinitrotoluene	1	20.624	20.620	0.004	386405	0.7014	0.6785	
22 Tetryl	1	23.957	23.966	-0.009	224671	0.7000	0.7144	
23 2,4,6-Trinitrotoluene	1	24.951	24.953	-0.002	281202	0.7028	0.6904	
24 PETN	2	25.351	25.353	-0.002	905663	7.00	6.84	

Reagents:

8330IntermStk_00058	Amount Added: 35.00	Units: uL
8330_ADDs_00021	Amount Added: 35.00	Units: uL

Report Date: 09-May-2019 08:13:34

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070009.D

Injection Date: 07-May-2019 16:18:20

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC FULL LV 6

Worklist Smp#: 9

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

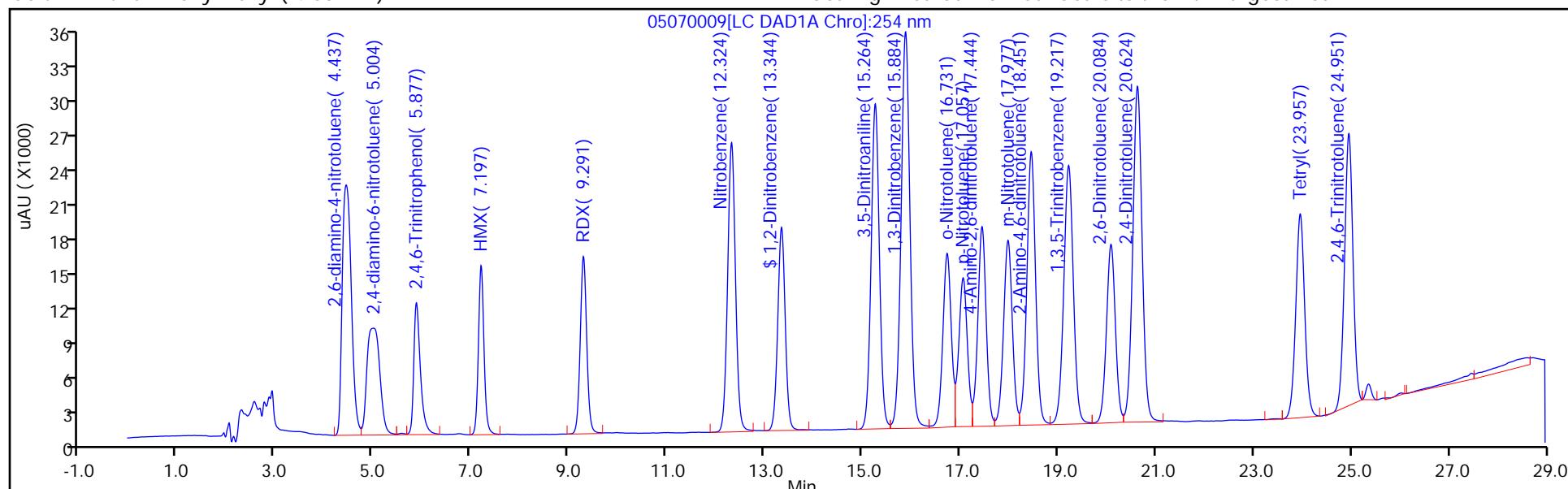
ALS Bottle#: 9

Method: G2_8330_Luna

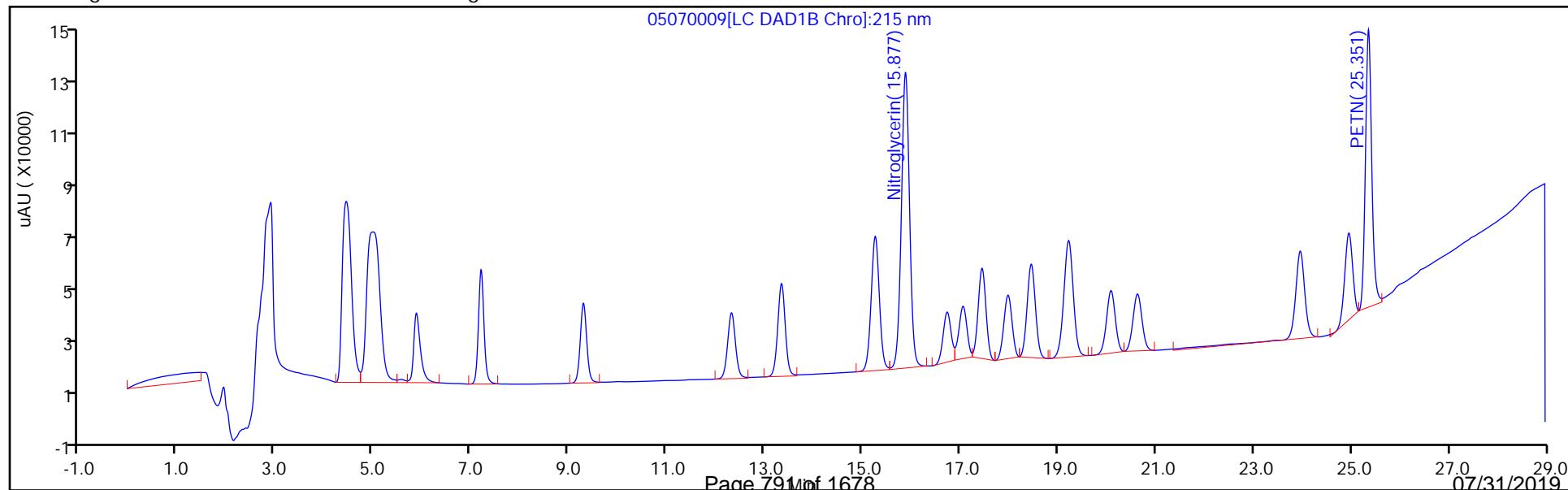
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070010.D
 Lims ID: IC FULL LV 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 07-May-2019 16:53:23 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC FULL LV 5
 Misc. Info.: 280-0081649-010
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:13:35 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:00:38

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	4.446	4.446	0.000	154442	0.4000	0.3914	
2 2,4-diamino-6-nitrotoluene	1	4.993	4.993	0.000	92869	0.4000	0.3630	
5 2,4,6-Trinitrophenol	1	5.940	5.940	0.000	63318	0.4000	0.4087	
6 HMX	1	7.200	7.200	0.000	68215	0.4000	0.3985	
8 RDX	1	9.300	9.300	0.000	83989	0.4000	0.4029	
9 Nitrobenzene	1	12.326	12.326	0.000	164638	0.4008	0.4061	
\$ 10 1,2-Dinitrobenzene	1	13.346	13.346	0.000	110381	0.4000	0.3987	
11 3,5-Dinitroaniline	1	15.266	15.266	0.000	181912	0.4000	0.3873	
13 Nitroglycerin	2	15.873	15.873	0.000	731719	4.00	3.79	
12 1,3-Dinitrobenzene	1	15.880	15.880	0.000	254371	0.4004	0.4002	
14 o-Nitrotoluene	1	16.720	16.720	0.000	106239	0.4012	0.4057	
15 p-Nitrotoluene	1	17.053	17.053	0.000	92470	0.4016	0.4080	
16 4-Amino-2,6-dinitrotoluene	1	17.440	17.440	0.000	120747	0.4012	0.4060	
17 m-Nitrotoluene	1	17.966	17.966	0.000	118450	0.4016	0.4047	
18 2-Amino-4,6-dinitrotoluene	1	18.446	18.446	0.000	172529	0.4012	0.4010	
19 1,3,5-Trinitrobenzene	1	19.213	19.213	0.000	181016	0.4000	0.3956	
20 2,6-Dinitrotoluene	1	20.073	20.073	0.000	116043	0.4012	0.3954	
21 2,4-Dinitrotoluene	1	20.620	20.620	0.000	227023	0.4008	0.3987	
22 Tetryl	1	23.966	23.966	0.000	131160	0.4000	0.4171	
23 2,4,6-Trinitrotoluene	1	24.953	24.953	0.000	167573	0.4016	0.4114	
24 PETN	2	25.353	25.353	0.000	533750	4.00	4.03	

Reagents:

8330IntermStk_00058	Amount Added: 20.00	Units: uL
8330_ADDs_00021	Amount Added: 20.00	Units: uL

Report Date: 09-May-2019 08:13:35

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070010.D

Injection Date: 07-May-2019 16:53:23

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC FULL LV 5

Worklist Smp#: 10

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

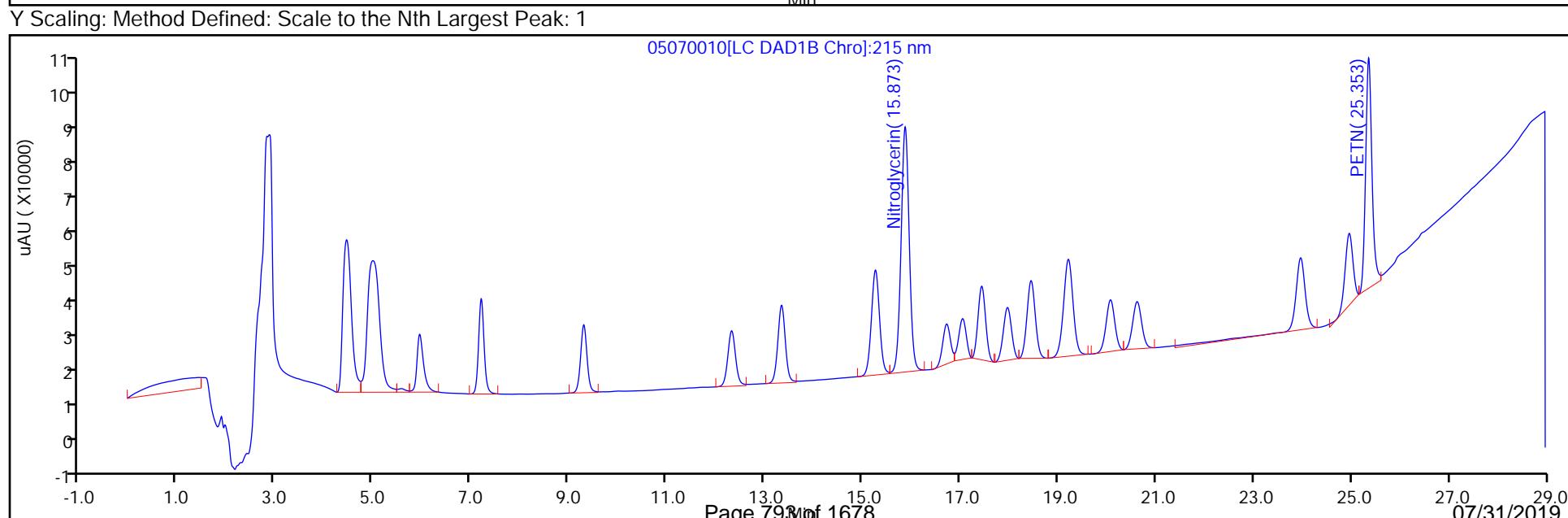
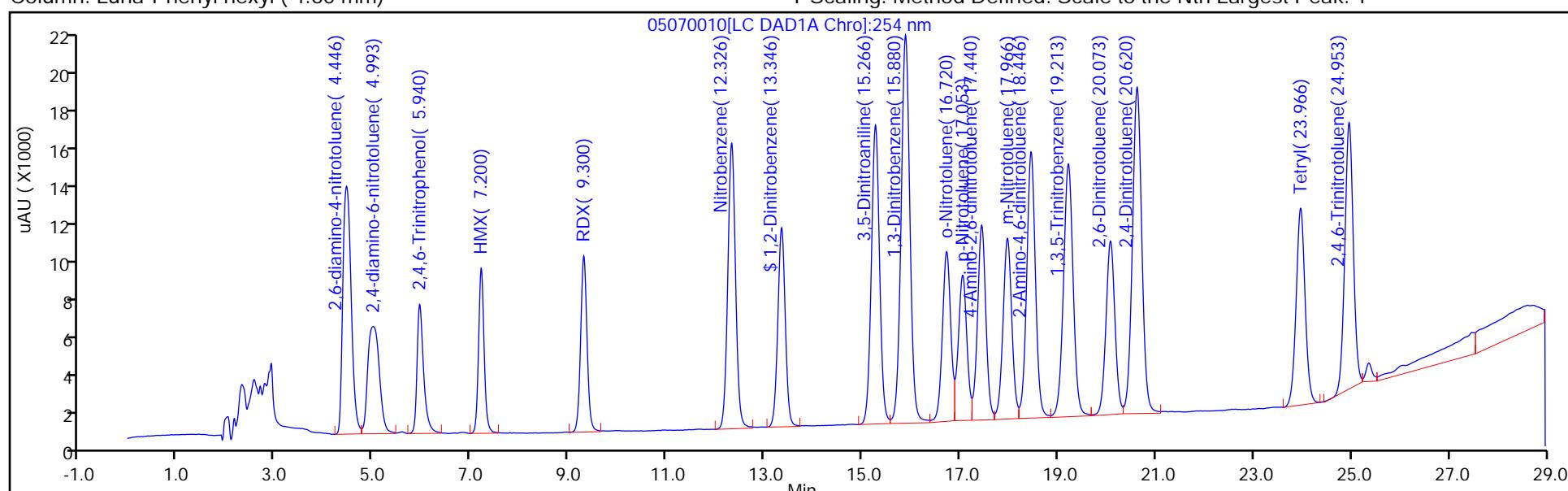
ALS Bottle#: 10

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070011.D
 Lims ID: IC FULL LV 4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 07-May-2019 17:28:26 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC FULL LV 4
 Misc. Info.: 280-0081649-011
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:13:35 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:00:21

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	4.447	4.446	0.001	100901	0.2500	0.2557	
2 2,4-diamino-6-nitrotoluene	1	5.001	4.993	0.008	60668	0.2500	0.2371	
5 2,4,6-Trinitrophenol	1	6.007	5.940	0.067	36822	0.2500	0.2377	
6 HMX	1	7.207	7.200	0.007	40597	0.2500	0.2371	
8 RDX	1	9.300	9.300	0.000	49807	0.2500	0.2389	
9 Nitrobenzene	1	12.320	12.326	-0.006	97472	0.2505	0.2404	
\$ 10 1,2-Dinitrobenzene	1	13.347	13.346	0.001	66126	0.2500	0.2388	
11 3,5-Dinitroaniline	1	15.274	15.266	0.008	119322	0.2500	0.2538	
13 Nitroglycerin	2	15.880	15.873	0.007	449411	2.50	2.33	
12 1,3-Dinitrobenzene	1	15.887	15.880	0.007	152142	0.2503	0.2394	
14 o-Nitrotoluene	1	16.727	16.720	0.007	63696	0.2508	0.2432	
15 p-Nitrotoluene	1	17.054	17.053	0.001	54681	0.2510	0.2413	
16 4-Amino-2,6-dinitrotoluene	1	17.447	17.440	0.007	71668	0.2508	0.2410	
17 m-Nitrotoluene	1	17.967	17.966	0.001	70419	0.2510	0.2406	
18 2-Amino-4,6-dinitrotoluene	1	18.454	18.446	0.008	102095	0.2508	0.2373	
19 1,3,5-Trinitrobenzene	1	19.214	19.213	0.001	108171	0.2500	0.2364	
20 2,6-Dinitrotoluene	1	20.074	20.073	0.001	69276	0.2508	0.2361	
21 2,4-Dinitrotoluene	1	20.621	20.620	0.000	135490	0.2505	0.2379	
22 Tetryl	1	23.954	23.966	-0.012	77159	0.2500	0.2454	
23 2,4,6-Trinitrotoluene	1	24.947	24.953	-0.006	97773	0.2510	0.2401	
24 PETN	2	25.347	25.353	-0.006	321638	2.50	2.43	

Reagents:

8330IntermStk_00058	Amount Added: 12.50	Units: uL
8330_ADDs_00021	Amount Added: 12.50	Units: uL

Report Date: 09-May-2019 08:13:36

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070011.D

Injection Date: 07-May-2019 17:28:26

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC FULL LV 4

Worklist Smp#: 11

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

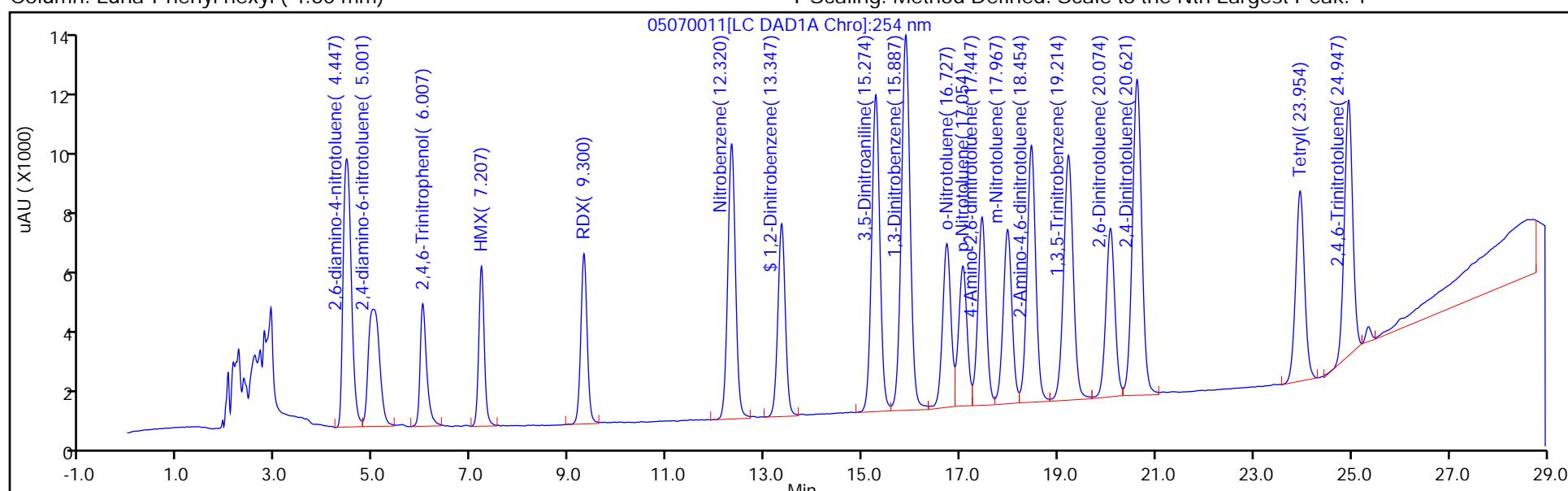
ALS Bottle#: 11

Method: G2_8330_Luna

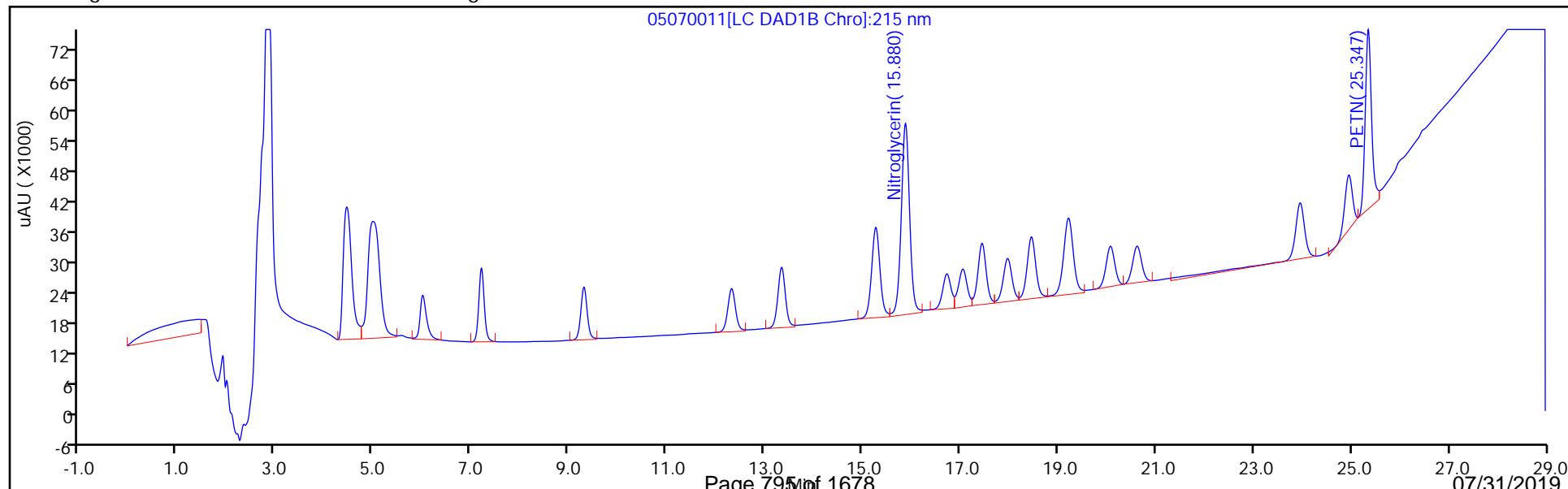
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070012.D
 Lims ID: IC FULL LV 3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 07-May-2019 18:03:28 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC FULL LV 3
 Misc. Info.: 280-0081649-012
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:13:36 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:00:31

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	4.458	4.446	0.012	39527	0.1000	0.1002	
2 2,4-diamino-6-nitrotoluene	1	4.998	4.993	0.005	24748	0.1000	0.0967	
5 2,4,6-Trinitrophenol	1	6.091	5.940	0.151	14866	0.1000	0.0960	
6 HMX	1	7.224	7.200	0.024	16348	0.1000	0.0955	
8 RDX	1	9.324	9.300	0.024	20400	0.1000	0.0979	
9 Nitrobenzene	1	12.344	12.326	0.018	39666	0.1002	0.0978	
\$ 10 1,2-Dinitrobenzene	1	13.378	13.346	0.032	27215	0.1000	0.0983	
11 3,5-Dinitroaniline	1	15.304	15.266	0.038	46736	0.1000	0.0989	
13 Nitroglycerin	2	15.904	15.873	0.031	190583	1.00	0.9878	
12 1,3-Dinitrobenzene	1	15.911	15.880	0.031	62497	0.1001	0.0983	
14 o-Nitrotoluene	1	16.751	16.720	0.031	25946	0.1003	0.0991	
15 p-Nitrotoluene	1	17.078	17.053	0.025	22096	0.1004	0.0975	
16 4-Amino-2,6-dinitrotoluene	1	17.478	17.440	0.038	29408	0.1003	0.0989	
17 m-Nitrotoluene	1	17.991	17.966	0.025	28924	0.1004	0.0988	
18 2-Amino-4,6-dinitrotoluene	1	18.484	18.446	0.038	42067	0.1003	0.0978	
19 1,3,5-Trinitrobenzene	1	19.238	19.213	0.025	45508	0.1000	0.0995	
20 2,6-Dinitrotoluene	1	20.091	20.073	0.018	28823	0.1003	0.0982	
21 2,4-Dinitrotoluene	1	20.638	20.620	0.018	55506	0.1002	0.0975	
22 Tetryl	1	23.964	23.966	-0.002	30727	0.1000	0.0977	
23 2,4,6-Trinitrotoluene	1	24.951	24.953	-0.002	39631	0.1004	0.0973	
24 PETN	2	25.351	25.353	-0.002	134056	1.00	1.01	

Reagents:

8330IntermStk_00058	Amount Added: 5.00	Units: uL
8330_ADDs_00021	Amount Added: 5.00	Units: uL

Report Date: 09-May-2019 08:13:36

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070012.D

Injection Date: 07-May-2019 18:03:28

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC FULL LV 3

Worklist Smp#: 12

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

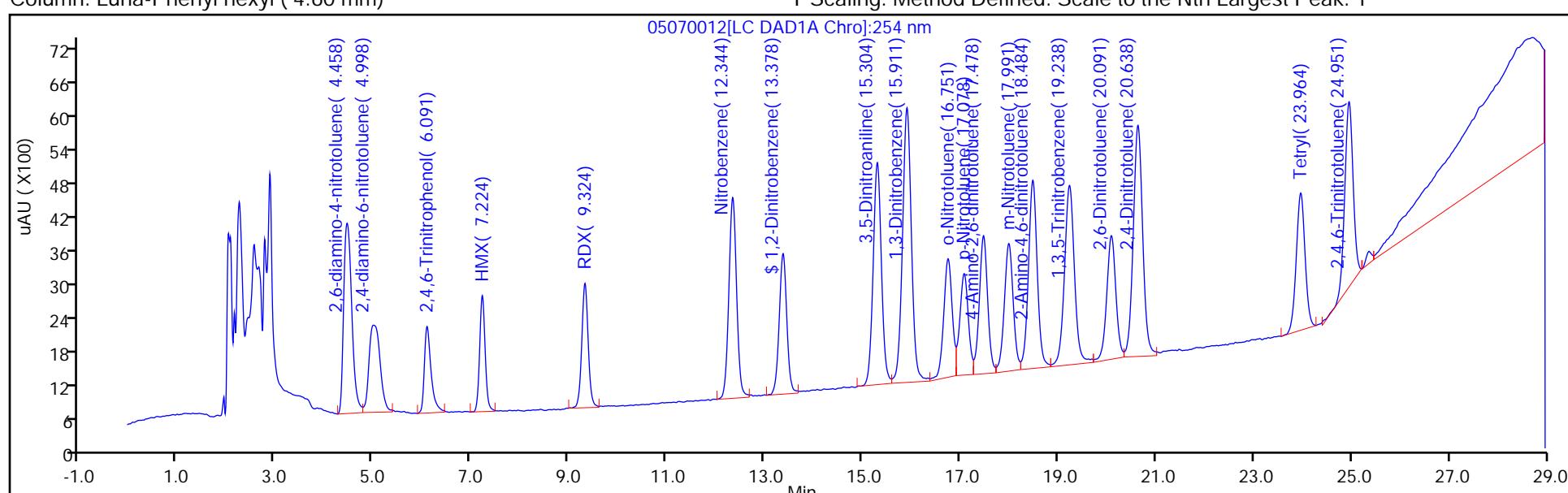
ALS Bottle#: 12

Method: G2_8330_Luna

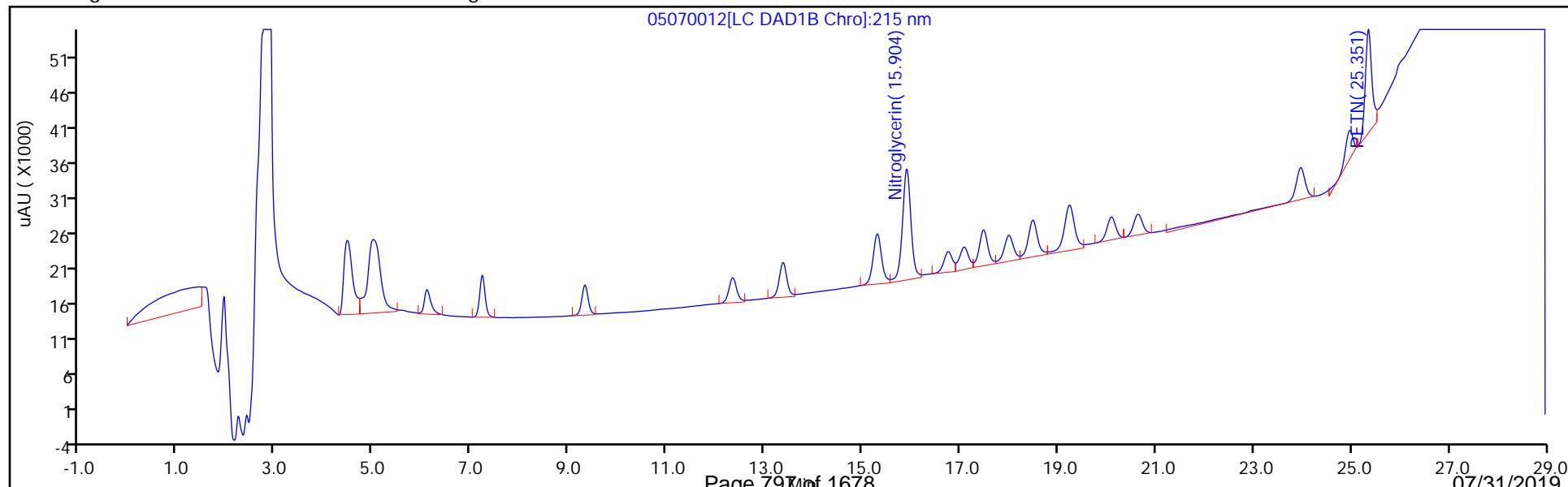
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070013.D
 Lims ID: IC FULL LV 2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 07-May-2019 18:38:27 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC FULL LV 2
 Misc. Info.: 280-0081649-013
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:13:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:04:39

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	4.460	4.446	0.014	20307	0.0500	0.0515	
2 2,4-diamino-6-nitrotoluene	1	5.007	4.993	0.014	13871	0.0500	0.0542	
5 2,4,6-Trinitrophenol	1	6.147	5.940	0.207	7600	0.0500	0.0491	a
6 HMX	1	7.220	7.200	0.020	8508	0.0500	0.0497	
8 RDX	1	9.314	9.300	0.014	10715	0.0500	0.0514	
9 Nitrobenzene	1	12.334	12.326	0.008	20607	0.0501	0.0508	
\$ 10 1,2-Dinitrobenzene	1	13.360	13.346	0.014	13970	0.0500	0.0505	
11 3,5-Dinitroaniline	1	15.300	15.266	0.034	24136	0.0500	0.0507	
13 Nitroglycerin	2	15.900	15.873	0.027	103131	0.5000	0.5345	
12 1,3-Dinitrobenzene	1	15.907	15.880	0.027	31682	0.0501	0.0498	
14 o-Nitrotoluene	1	16.740	16.720	0.020	12970	0.0502	0.0495	
15 p-Nitrotoluene	1	17.067	17.053	0.014	11283	0.0502	0.0498	
16 4-Amino-2,6-dinitrotoluene	1	17.467	17.440	0.027	14792	0.0502	0.0497	
17 m-Nitrotoluene	1	17.980	17.966	0.014	14601	0.0502	0.0499	
18 2-Amino-4,6-dinitrotoluene	1	18.480	18.446	0.034	21339	0.0502	0.0496	
19 1,3,5-Trinitrobenzene	1	19.227	19.213	0.014	22700	0.0500	0.0496	
20 2,6-Dinitrotoluene	1	20.087	20.073	0.014	14708	0.0502	0.0501	
21 2,4-Dinitrotoluene	1	20.634	20.620	0.014	29202	0.0501	0.0513	
22 Tetryl	1	23.974	23.966	0.008	15280	0.0500	0.0486	
23 2,4,6-Trinitrotoluene	1	24.960	24.953	0.007	19932	0.0502	0.0489	
24 PETN	2	25.360	25.353	0.007	72383	0.5000	0.5468	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

8330IntermStk_00058

Amount Added: 2.50 Units: uL

8330_ADDs_00021

Amount Added: 2.50 Units: uL

Report Date: 09-May-2019 08:13:37

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070013.D

Injection Date: 07-May-2019 18:38:27

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC FULL LV 2

Worklist Smp#: 13

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

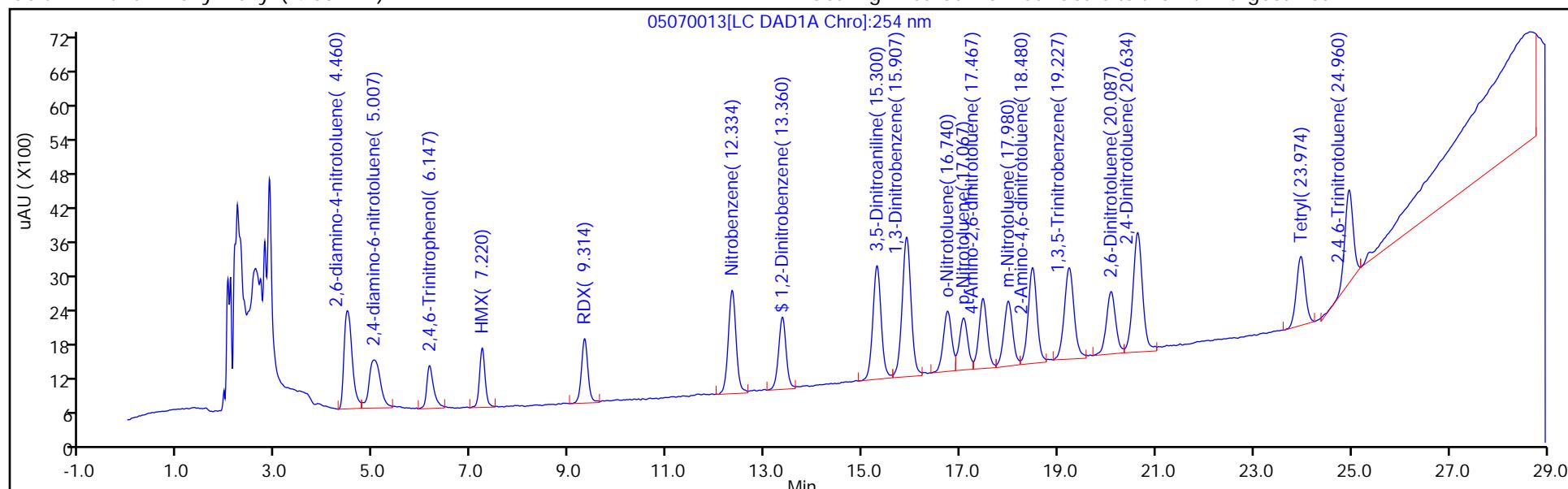
ALS Bottle#: 13

Method: G2_8330_Luna

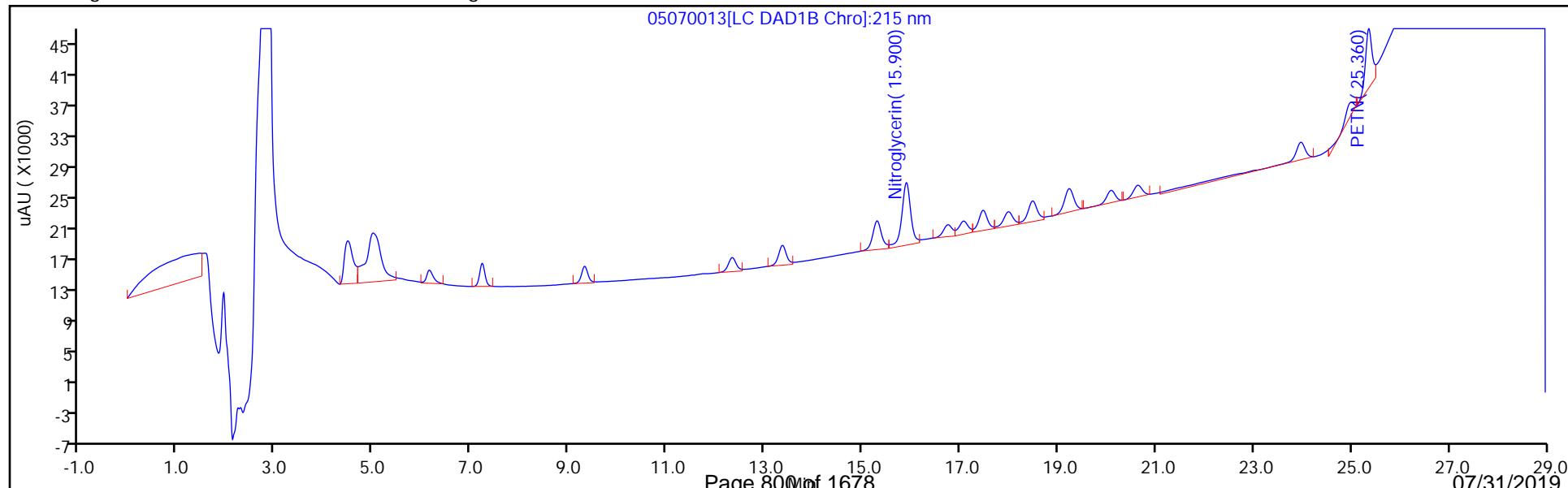
Limit Group: GCSV - 8330

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

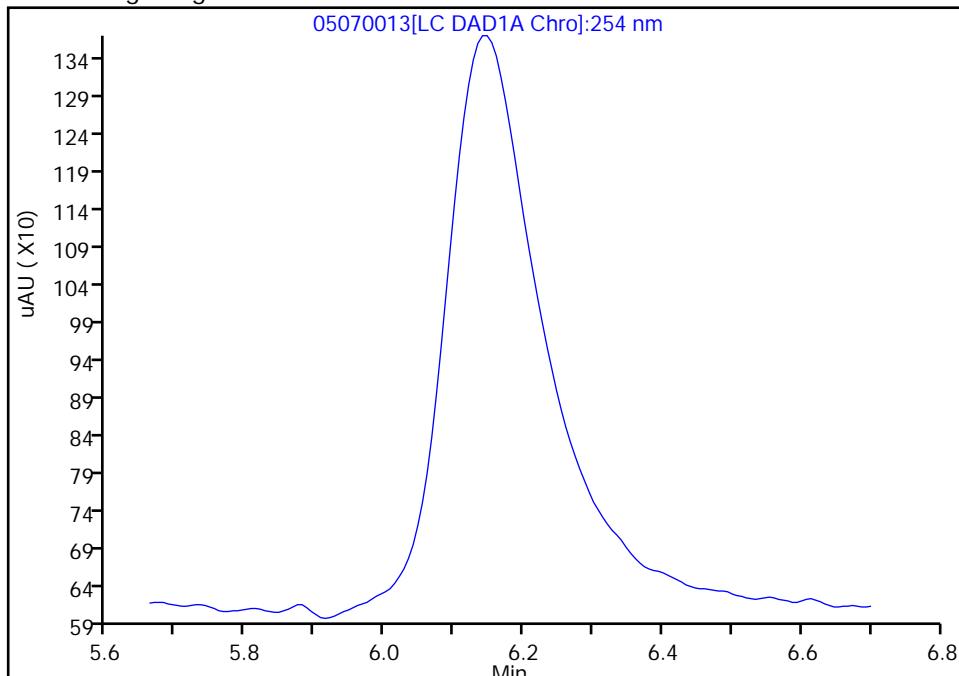
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070013.D
 Injection Date: 07-May-2019 18:38:27 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: IC FULL LV 2
 Client ID:
 Operator ID: HKF ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit 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

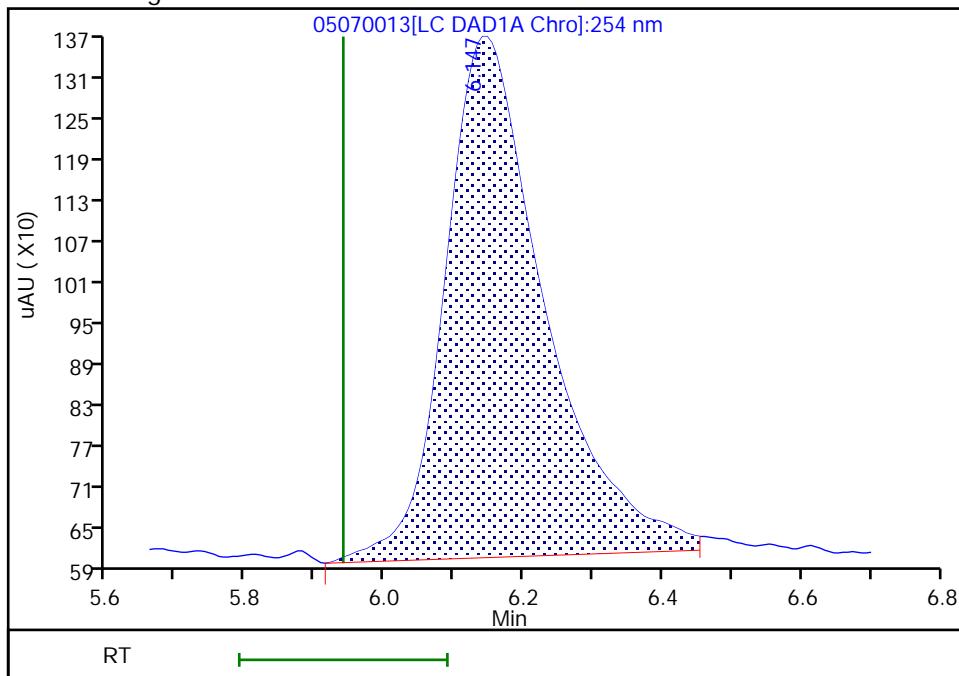
Not Detected
 Expected RT: 5.94

Processing Integration Results



Manual Integration Results

RT: 6.15
 Area: 7600
 Amount: 0.049058
 Amount Units: ug/ml



Reviewer: fiedlerh, 08-May-2019 09:04:38

Audit Action: Assigned Compound ID

Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D
 Lims ID: IC FULL LV 1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 07-May-2019 19:13:24 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC FULL LV 1
 Misc. Info.: 280-0081649-014
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:13:38 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:04:56

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	4.466	4.446	0.020	9763	0.0200	0.0247	
2 2,4-diamino-6-nitrotoluene	1	5.006	4.993	0.013	6110	0.0200	0.0239	
5 2,4,6-Trinitrophenol	1	6.206	5.940	0.266	2864	0.0200	0.0185	a
6 HMX	1	7.232	7.200	0.032	3734	0.0200	0.0218	
8 RDX	1	9.326	9.300	0.026	4177	0.0200	0.0200	
9 Nitrobenzene	1	12.332	12.326	0.006	7963	0.0200	0.0196	
\$ 10 1,2-Dinitrobenzene	1	13.359	13.346	0.013	5816	0.0200	0.0210	
11 3,5-Dinitroaniline	1	15.292	15.266	0.026	9783	0.0200	0.0201	
13 Nitroglycerin	2	15.892	15.873	0.019	46139	0.2000	0.2391	
12 1,3-Dinitrobenzene	1	15.899	15.880	0.019	13519	0.0200	0.0213	
14 o-Nitrotoluene	1	16.732	16.720	0.012	5190	0.0201	0.0198	
15 p-Nitrotoluene	1	17.066	17.053	0.013	4550	0.0201	0.0201	
16 4-Amino-2,6-dinitrotoluene	1	17.459	17.440	0.019	6001	0.0201	0.0202	
17 m-Nitrotoluene	1	17.979	17.966	0.013	5964	0.0201	0.0204	
18 2-Amino-4,6-dinitrotoluene	1	18.479	18.446	0.033	9366	0.0201	0.0218	
19 1,3,5-Trinitrobenzene	1	19.226	19.213	0.013	10187	0.0200	0.0223	
20 2,6-Dinitrotoluene	1	20.086	20.073	0.013	6648	0.0201	0.0227	
21 2,4-Dinitrotoluene	1	20.632	20.620	0.012	12102	0.0200	0.0213	
22 Tetryl	1	23.972	23.966	0.006	5354	0.0200	0.0170	
23 2,4,6-Trinitrotoluene	1	24.952	24.953	-0.001	8061	0.0201	0.0198	
24 PETN	2	25.366	25.353	0.013	23673	0.2000	0.1788	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00058

Amount Added: 1.00 Units: uL

8330_ADDs_00021

Amount Added: 1.00 Units: uL

Report Date: 09-May-2019 08:13:38

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070014.D

Injection Date: 07-May-2019 19:13:24

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC FULL LV 1

Worklist Smp#: 14

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

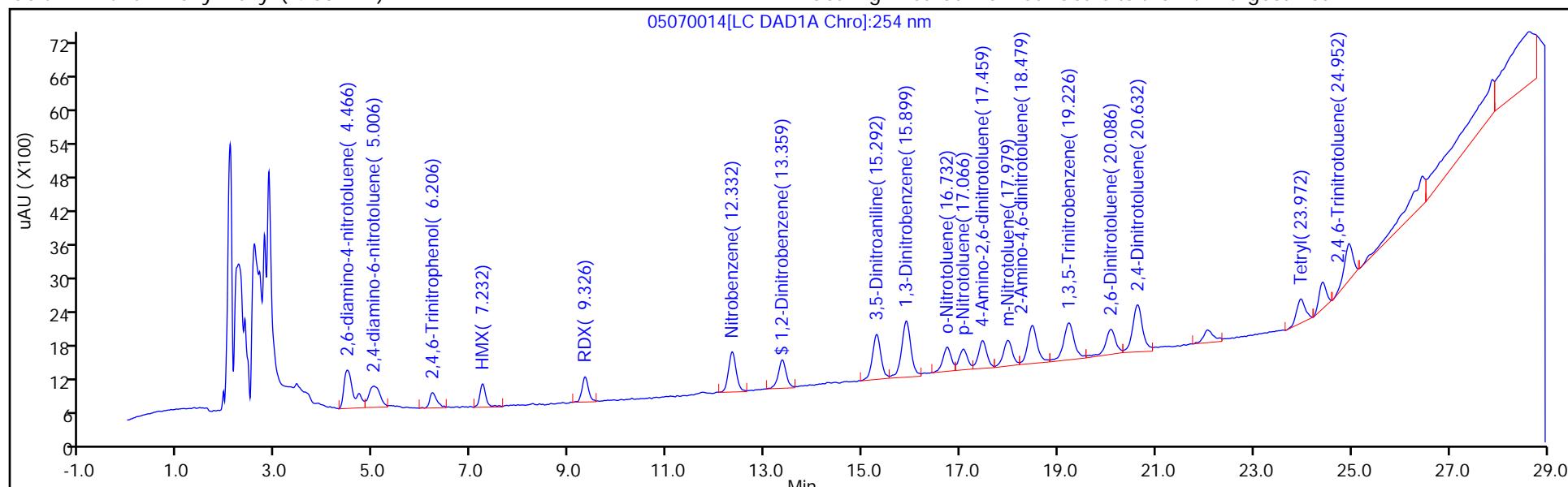
ALS Bottle#: 14

Method: G2_8330_Luna

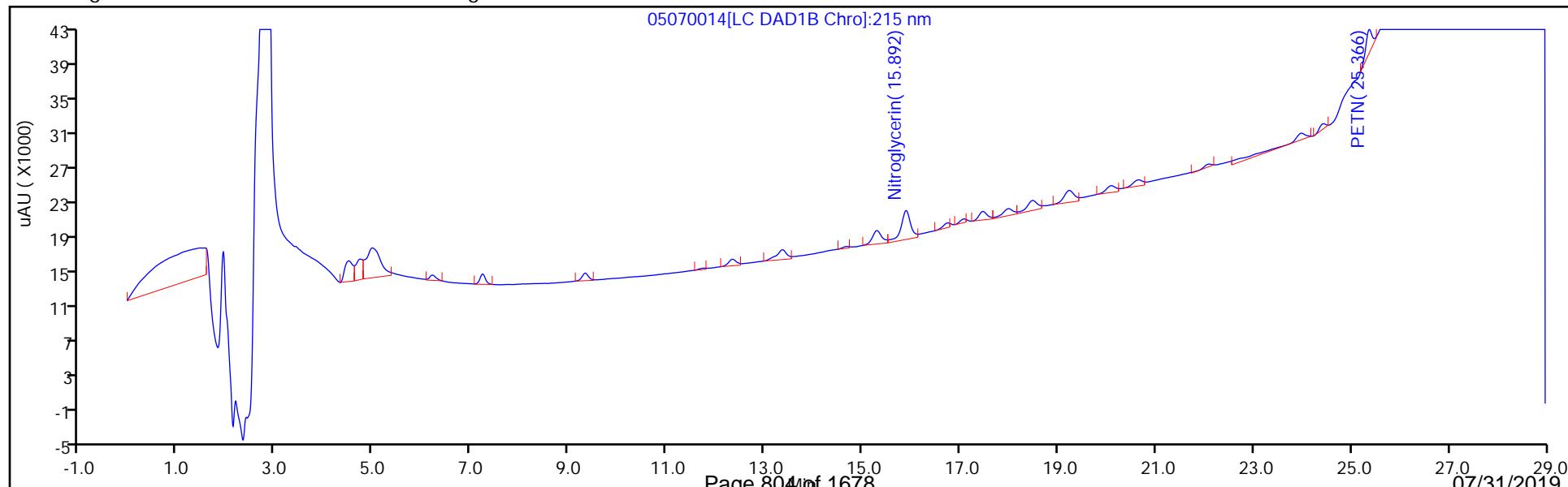
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver

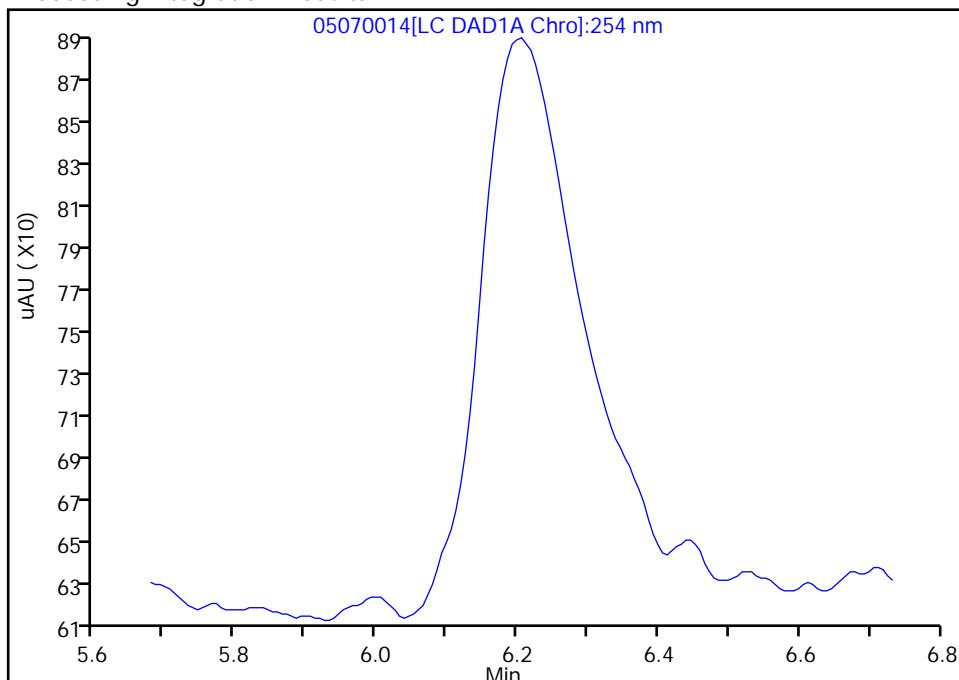
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D
 Injection Date: 07-May-2019 19:13:24 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: IC FULL LV 1
 Client ID:
 Operator ID: HKF ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit 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

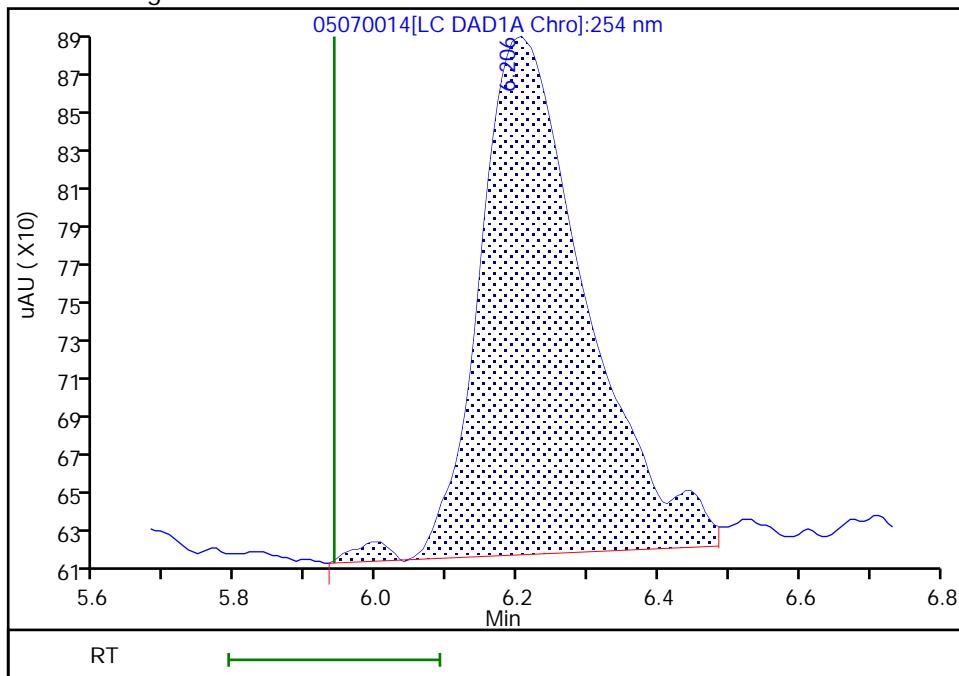
Not Detected
 Expected RT: 5.94

Processing Integration Results



Manual Integration Results

RT: 6.21
 Area: 2864
 Amount: 0.018487
 Amount Units: ug/ml



Reviewer: fiedlerh, 08-May-2019 09:04:54

Audit Action: Assigned Compound ID

Audit Reason:

Eurofins TestAmerica, Denver

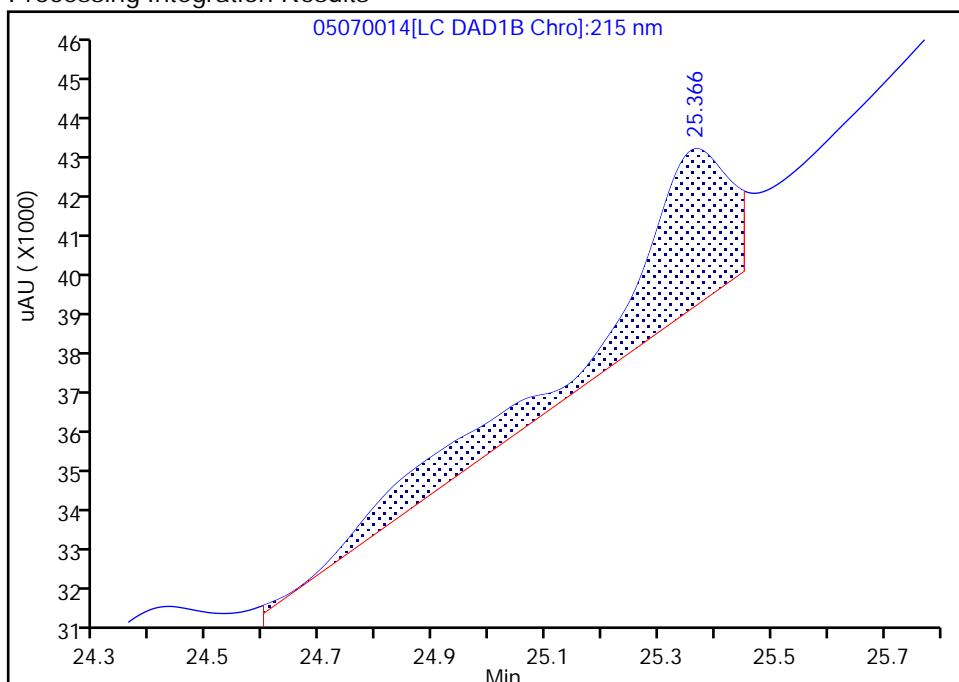
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D
 Injection Date: 07-May-2019 19:13:24 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: IC FULL LV 1
 Client ID:
 Operator ID: HKF ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

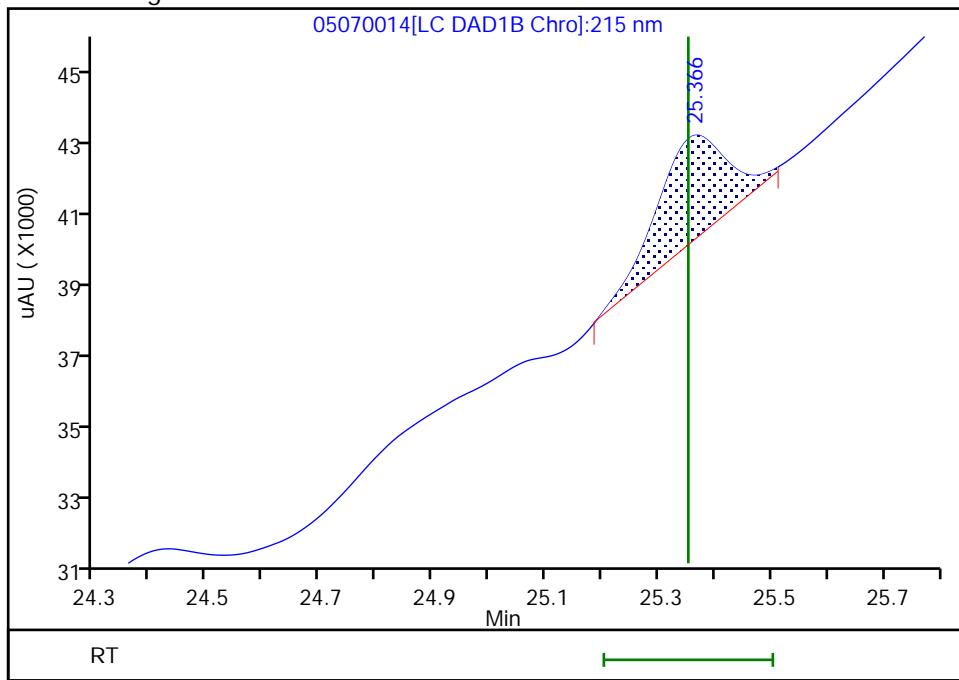
RT: 25.37
 Area: 54813
 Amount: 0.289335
 Amount Units: ug/ml

Processing Integration Results



RT: 25.37
 Area: 23673
 Amount: 0.178848
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 08-May-2019 09:10:18

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 457315

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 20:23 Calibration End Date: 05/08/2019 00:28 Calibration ID: 36293

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/23	05070023.D
Level 2	IC 280-457315/22	05070022.D
Level 3	IC 280-457315/21	05070021.D
Level 4	IC 280-457315/20	05070020.D
Level 5	IC 280-457315/19	05070019.D
Level 6	IC 280-457315/18	05070018.D
Level 7	IC 280-457315/17	05070017.D
Level 8	IC 280-457315/16	05070016.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.515	5.513	5.515	5.509	5.512	5.508	5.504	5.487			5.362 - 5.662	5.508
DNX	6.342	6.340	6.342	6.336	6.338	6.335	6.331	6.307			6.188 - 6.488	6.334
MNX	7.895	7.893	7.895	7.889	7.892	7.888	7.878	7.854			7.742 - 8.042	7.886

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 457315

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 20:23 Calibration End Date: 05/08/2019 00:28 Calibration ID: 36293

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/23	05070023.D
Level 2	IC 280-457315/22	05070022.D
Level 3	IC 280-457315/21	05070021.D
Level 4	IC 280-457315/20	05070020.D
Level 5	IC 280-457315/19	05070019.D
Level 6	IC 280-457315/18	05070018.D
Level 7	IC 280-457315/17	05070017.D
Level 8	IC 280-457315/16	05070016.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	422128 395292	396723 399087	396094 407781	387469 422841	Ave		403426.800				3.2		20.0			
DNX	298701 284323	290450 286481	286064 291186	280803 301043	Ave		289881.274				2.4		20.0			
MNX	284961 262230	268672 264920	268115 269398	261049 276853	Ave		269524.800				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 457315

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 20:23 Calibration End Date: 05/08/2019 00:28 Calibration ID: 36293

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/23	05070023.D
Level 2	IC 280-457315/22	05070022.D
Level 3	IC 280-457315/21	05070021.D
Level 4	IC 280-457315/20	05070020.D
Level 5	IC 280-457315/19	05070019.D
Level 6	IC 280-457315/18	05070018.D
Level 7	IC 280-457315/17	05070017.D
Level 8	IC 280-457315/16	05070016.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	8451 279640	19856 408189	39649 1058159	96964	158275	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	5980 200737	14537 291477	28635 753359	70271	113843	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	6651 216413	15677 314388	31289 807719	76161	122409	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\G2_LUNA\20190507-81649.b\05070016.D
 Lims ID: IC DMT L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 07-May-2019 20:23:21 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L8
 Misc. Info.: 280-0081649-016
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:13:55 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.487	5.512	-0.025	1058159	2.50	2.62	
4 DNX	1	6.307	6.338	-0.031	753359	2.50	2.60	
7 MNX	1	7.854	7.892	-0.038	807719	2.92	3.00	

Reagents:

8330 DMT_00002 Amount Added: 125.00 Units: uL

Report Date: 08-May-2019 09:13:56

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070016.D

Injection Date: 07-May-2019 20:23:21

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC DMT L8

Worklist Smp#: 16

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

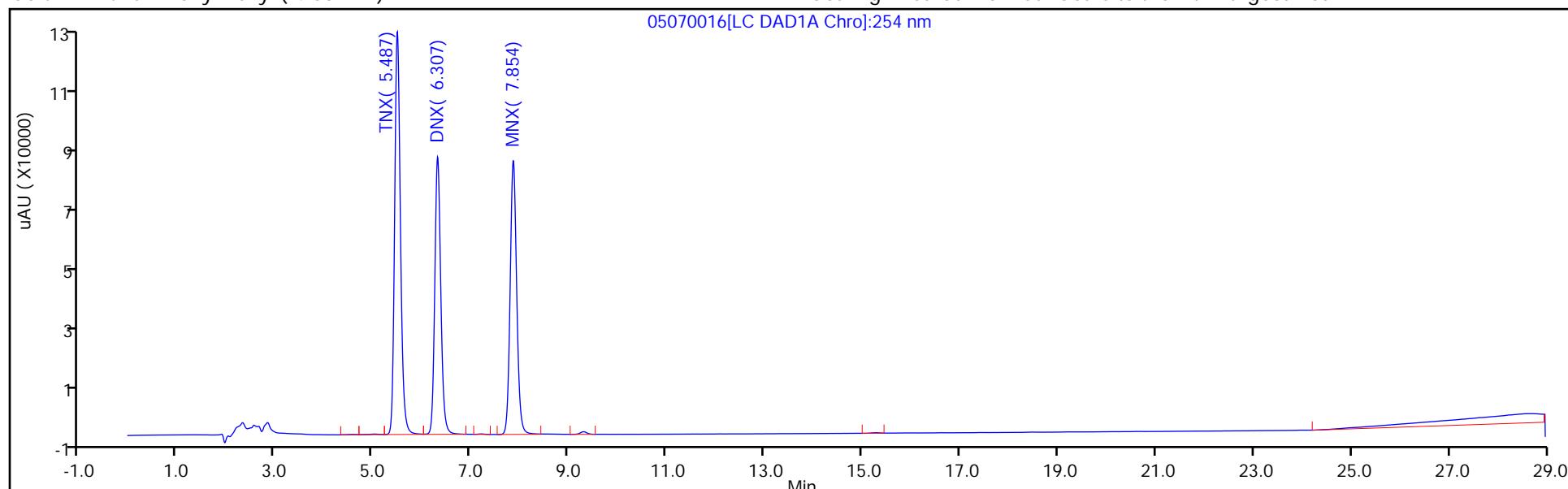
ALS Bottle#: 16

Method: G2_8330_Luna

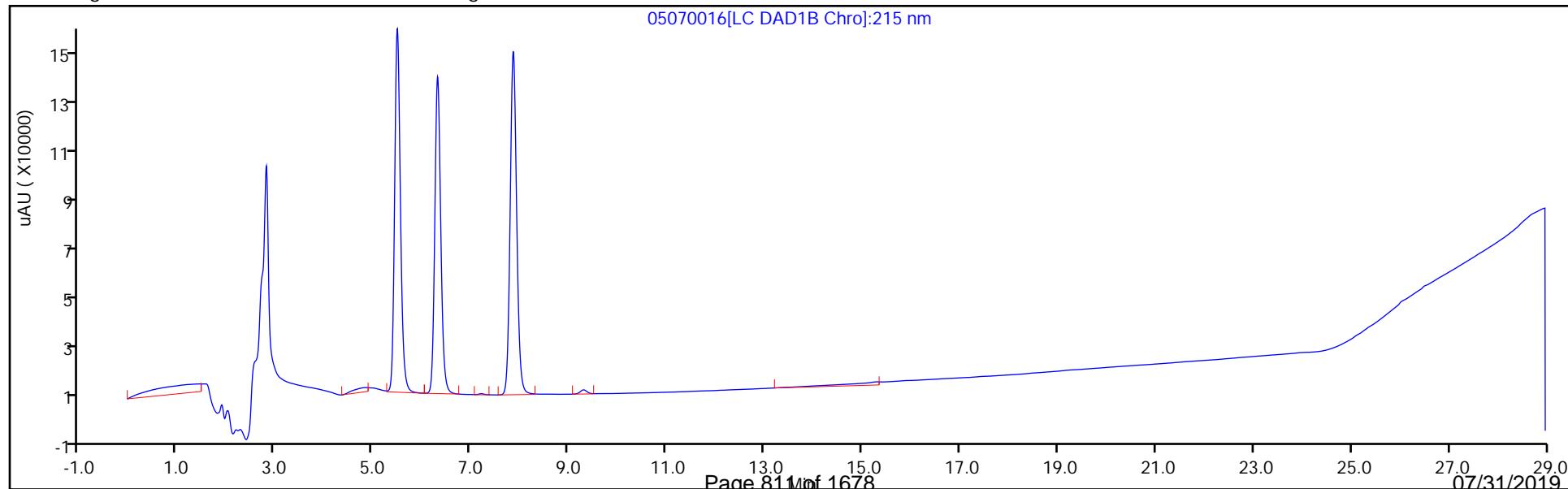
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070017.D
 Lims ID: IC DMT L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 07-May-2019 20:58:21 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L7
 Misc. Info.: 280-0081649-017
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:13:56 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.504	5.512	-0.008	408189	1.00	1.01	
4 DNX	1	6.331	6.338	-0.007	291477	1.00	1.01	
7 MNX	1	7.878	7.892	-0.014	314388	1.17	1.17	

Reagents:

8330 DMT_00002 Amount Added: 50.00 Units: uL

Report Date: 08-May-2019 09:13:57

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070017.D

Injection Date: 07-May-2019 20:58:21

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC DMT L7

Worklist Smp#: 17

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

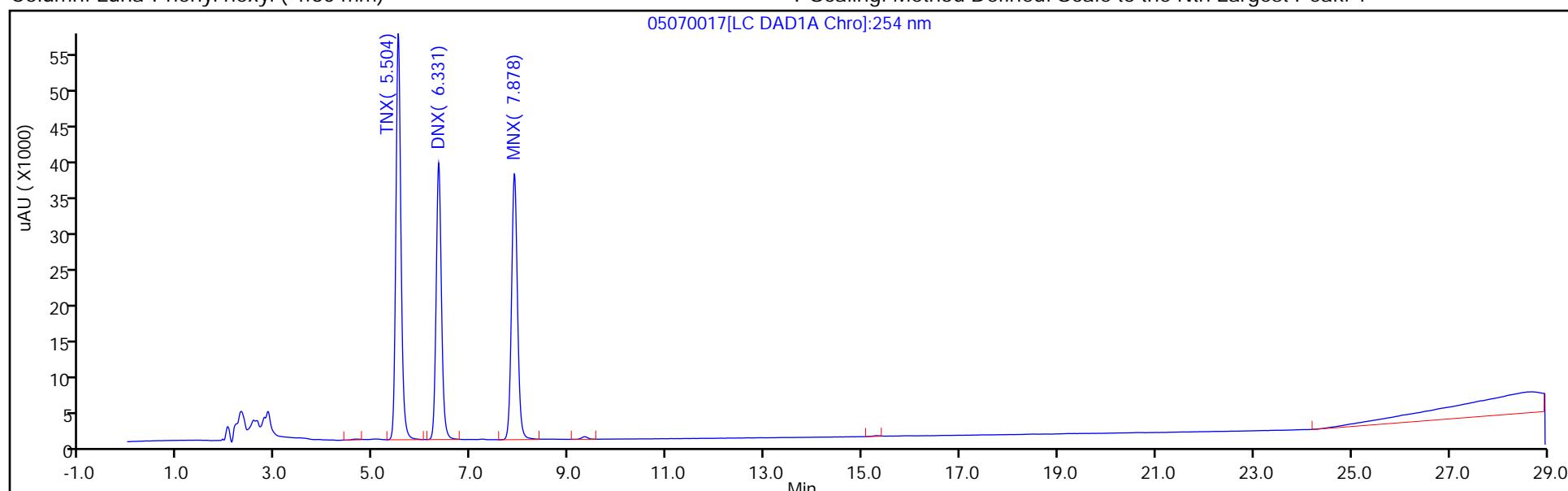
ALS Bottle#: 17

Method: G2_8330_Luna

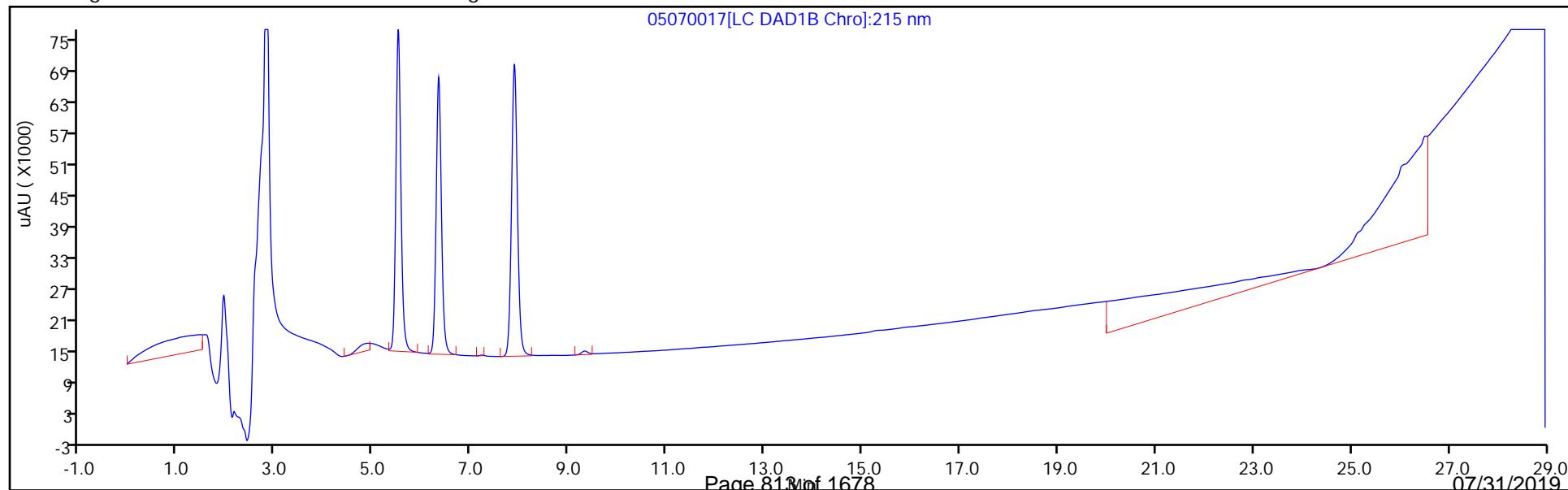
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070018.D
 Lims ID: IC DMT L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 07-May-2019 21:33:21 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L6
 Misc. Info.: 280-0081649-018
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:13:58 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

First Level Reviewer: fiedlerh Date: 08-May-2019 09:07:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.508	5.512	-0.004	279640	0.7007	0.6932	
4 DNX	1	6.335	6.338	-0.003	200737	0.7007	0.6925	
7 MNX	1	7.888	7.892	-0.004	216413	0.8169	0.8029	

Reagents:

8330 DMT_00002 Amount Added: 35.00 Units: uL

Report Date: 08-May-2019 09:13:58

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070018.D

Injection Date: 07-May-2019 21:33:21

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC DMT L6

Worklist Smp#: 18

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

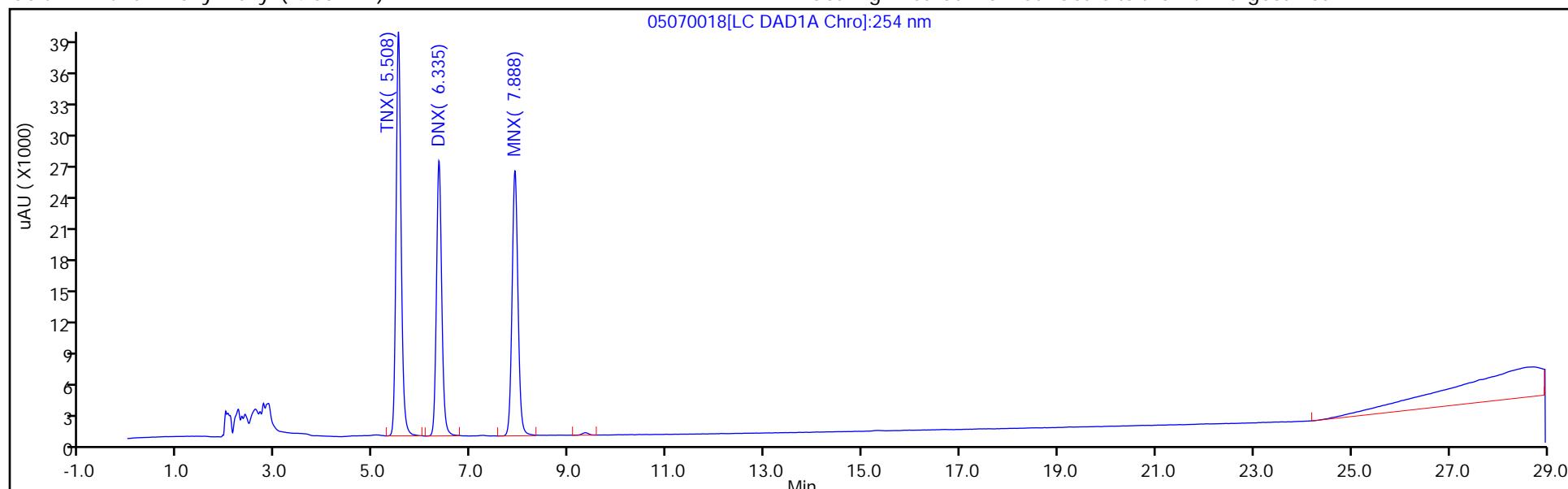
ALS Bottle#: 18

Method: G2_8330_Luna

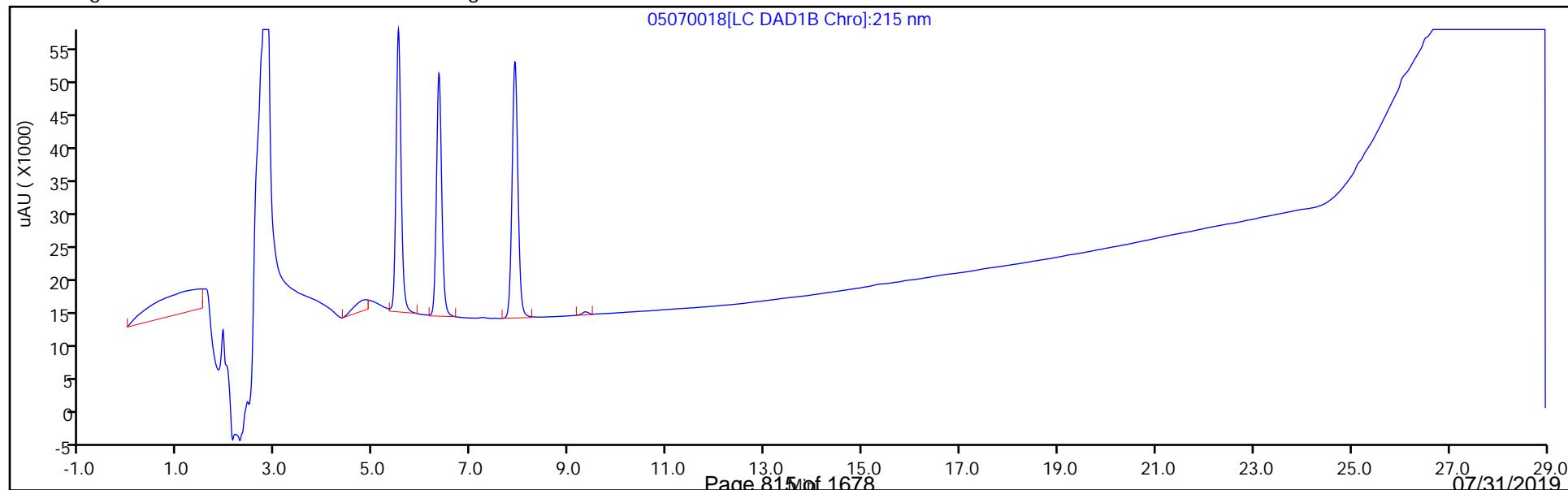
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070019.D
 Lims ID: IC DMT L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 07-May-2019 22:08:20 ALS Bottle#: 19 Worklist Smp#: 19
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L5
 Misc. Info.: 280-0081649-019
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:13:59 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:07:14

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	5.512	0.000	158275	0.4004	0.3923	
4 DNX	1	6.338	6.338	0.000	113843	0.4004	0.3927	
7 MNX	1	7.892	7.892	0.000	122409	0.4668	0.4542	

Reagents:

8330 DMT_00002

Amount Added: 20.00

Units: uL

Report Date: 08-May-2019 09:13:59

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070019.D

Injection Date: 07-May-2019 22:08:20

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC DMT L5

Worklist Smp#: 19

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

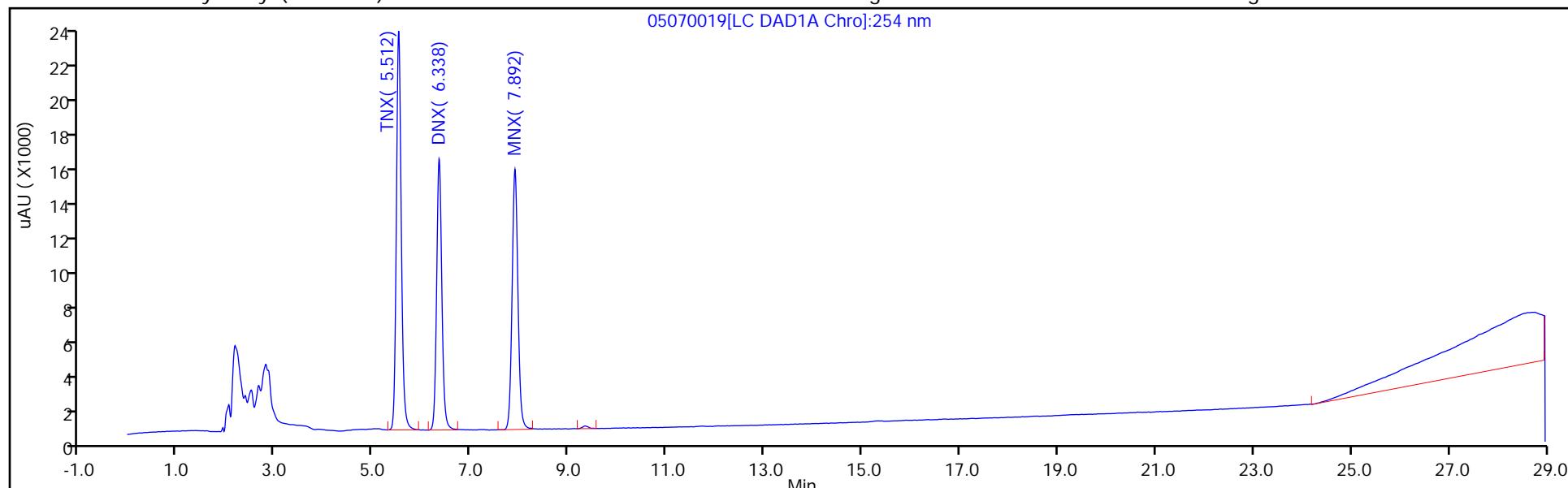
ALS Bottle#: 19

Method: G2_8330_Luna

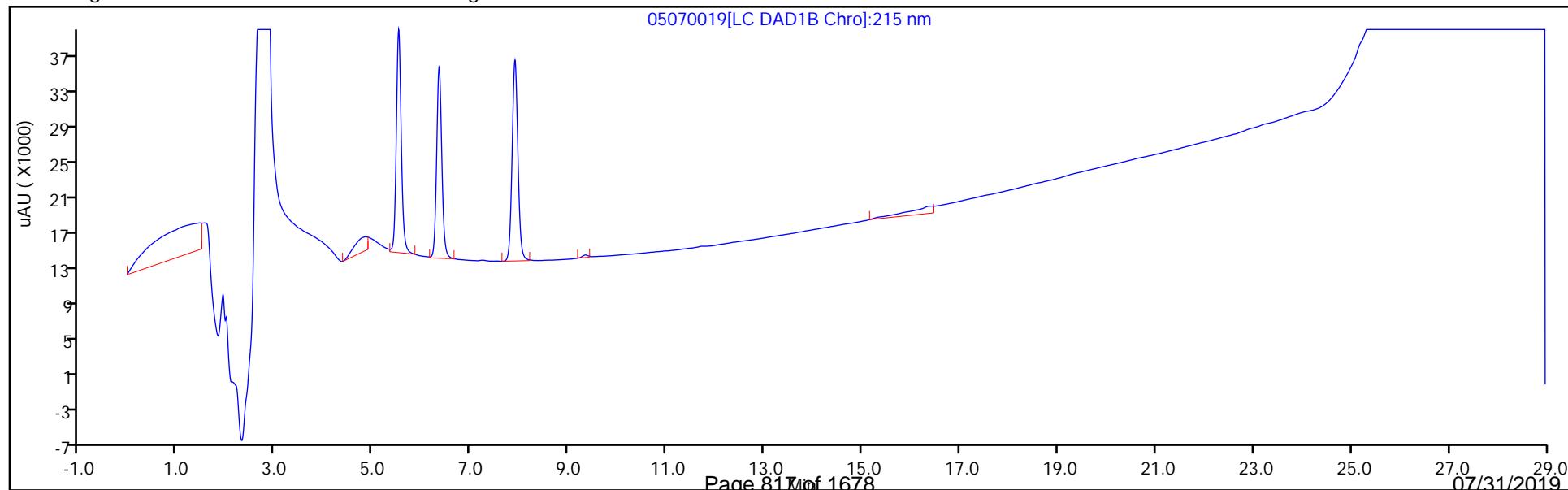
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070020.D
 Lims ID: IC DMT L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 07-May-2019 22:43:18 ALS Bottle#: 20 Worklist Smp#: 20
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L4
 Misc. Info.: 280-0081649-020
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:14:00 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:07:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.509	5.512	-0.003	96964	0.2503	0.2404	
4 DNX	1	6.336	6.338	-0.002	70271	0.2503	0.2424	
7 MNX	1	7.889	7.892	-0.003	76161	0.2918	0.2826	

Reagents:

8330 DMT_00002

Amount Added: 12.50

Units: uL

Report Date: 08-May-2019 09:14:00

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070020.D

Injection Date: 07-May-2019 22:43:18

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC DMT L4

Worklist Smp#: 20

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

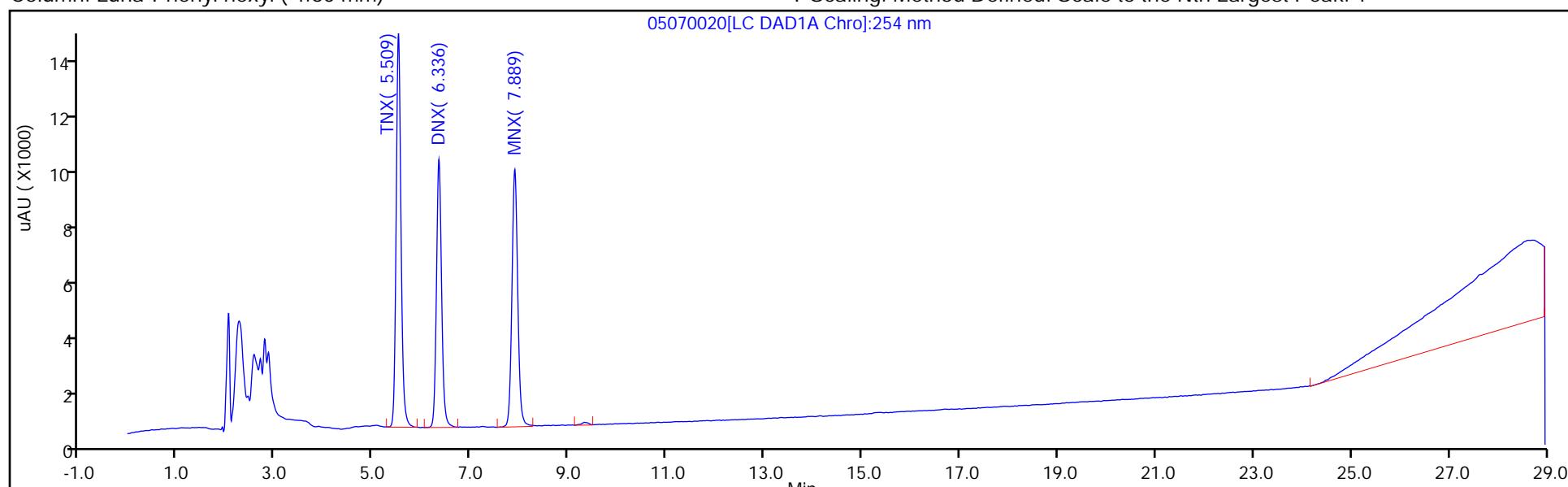
ALS Bottle#: 20

Method: G2_8330_Luna

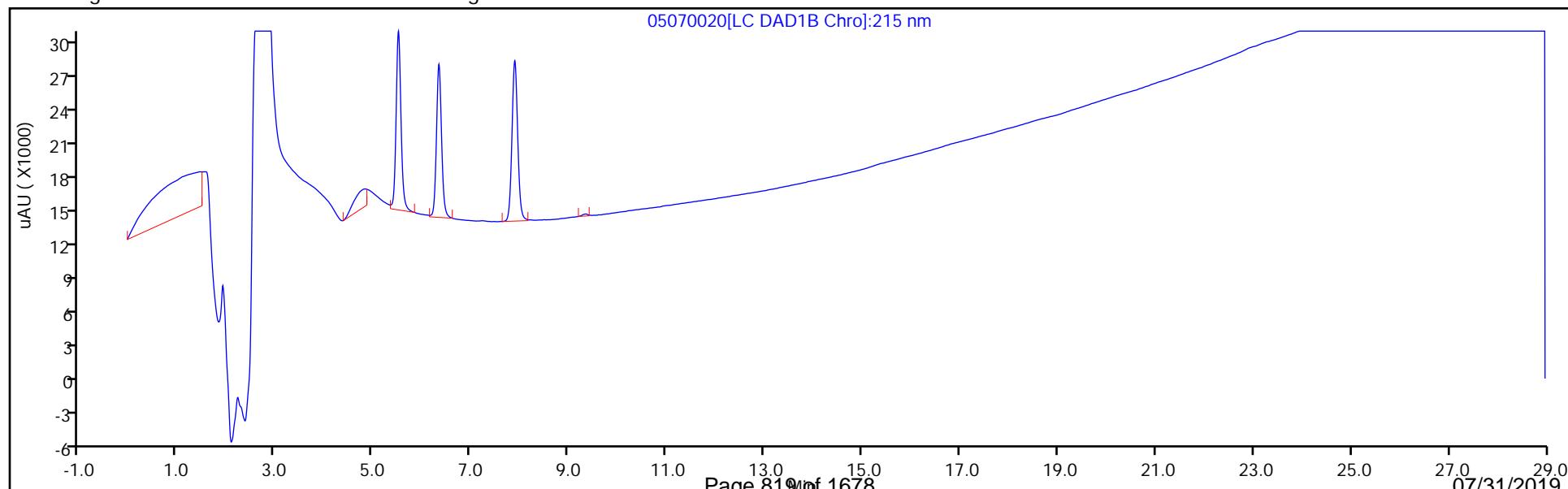
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070021.D
 Lims ID: IC DMT L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 07-May-2019 23:18:20 ALS Bottle#: 21 Worklist Smp#: 21
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L3
 Misc. Info.: 280-0081649-021
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:14:01 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.515	5.512	0.003	39649	0.1001	0.0983	
4 DNX	1	6.342	6.338	0.004	28635	0.1001	0.0988	
7 MNX	1	7.895	7.892	0.003	31289	0.1167	0.1161	

Reagents:

8330 DMT_00002 Amount Added: 5.00 Units: uL

Report Date: 08-May-2019 09:14:02

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070021.D

Injection Date: 07-May-2019 23:18:20

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC DMT L3

Worklist Smp#: 21

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

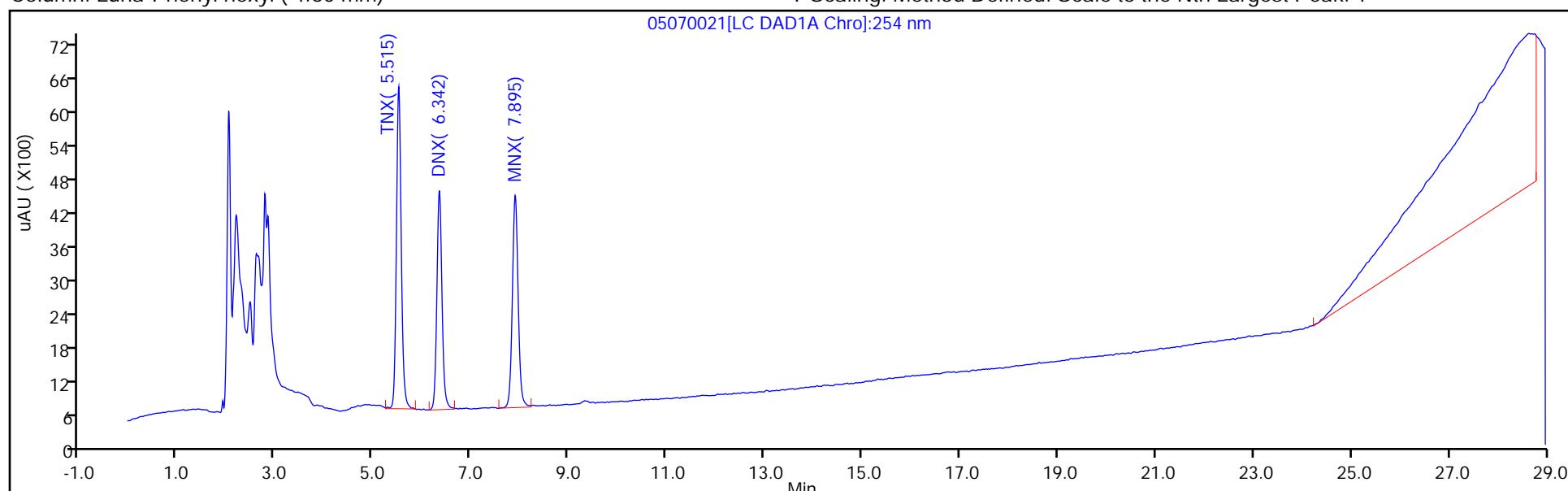
ALS Bottle#: 21

Method: G2_8330_Luna

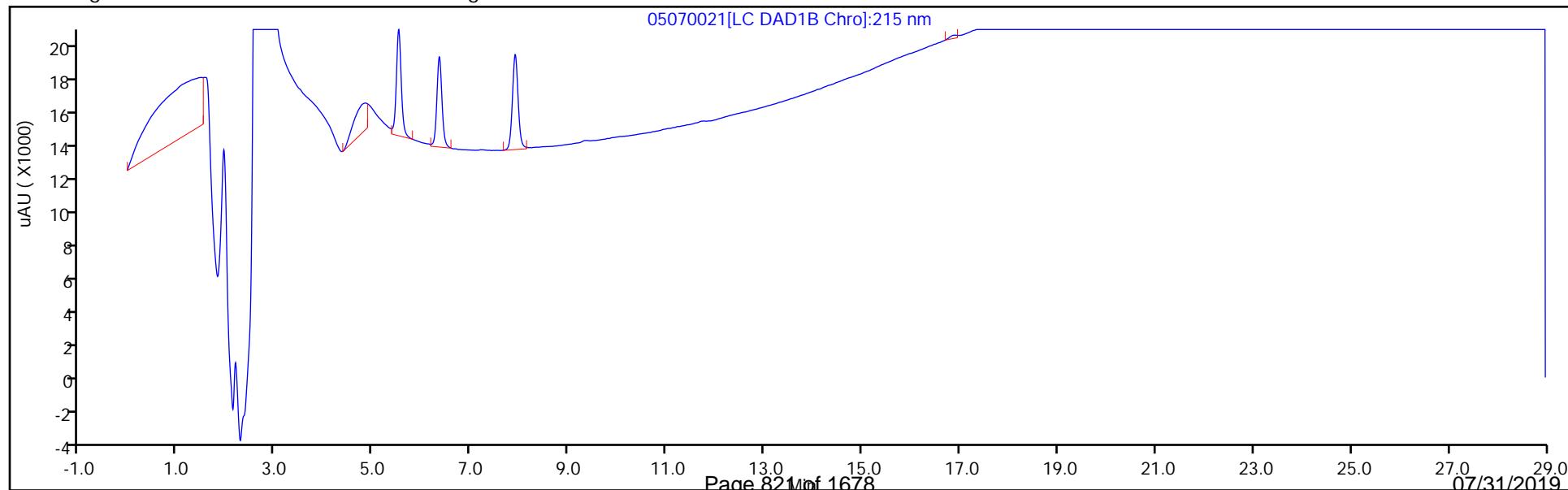
Limit Group: GCSV - 8330

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: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070022.D
 Lims ID: IC DMT L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 07-May-2019 23:53:26 ALS Bottle#: 22 Worklist Smp#: 22
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L2
 Misc. Info.: 280-0081649-022
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:14:03 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.513	5.512	0.001	19856	0.0501	0.0492	
4 DNX	1	6.340	6.338	0.002	14537	0.0501	0.0501	
7 MNX	1	7.893	7.892	0.001	15677	0.0584	0.0582	

Reagents:

8330 DMT_00002 Amount Added: 2.50 Units: uL

Report Date: 08-May-2019 09:14:03

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070022.D

Injection Date: 07-May-2019 23:53:26

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC DMT L2

Worklist Smp#: 22

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

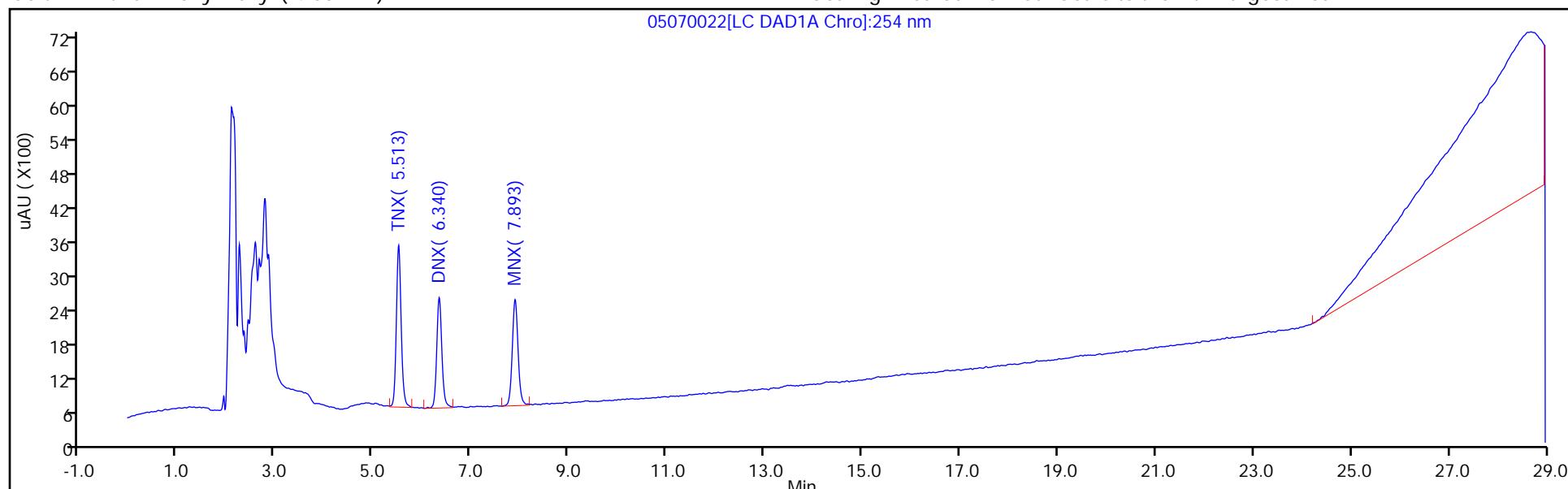
ALS Bottle#: 22

Method: G2_8330_Luna

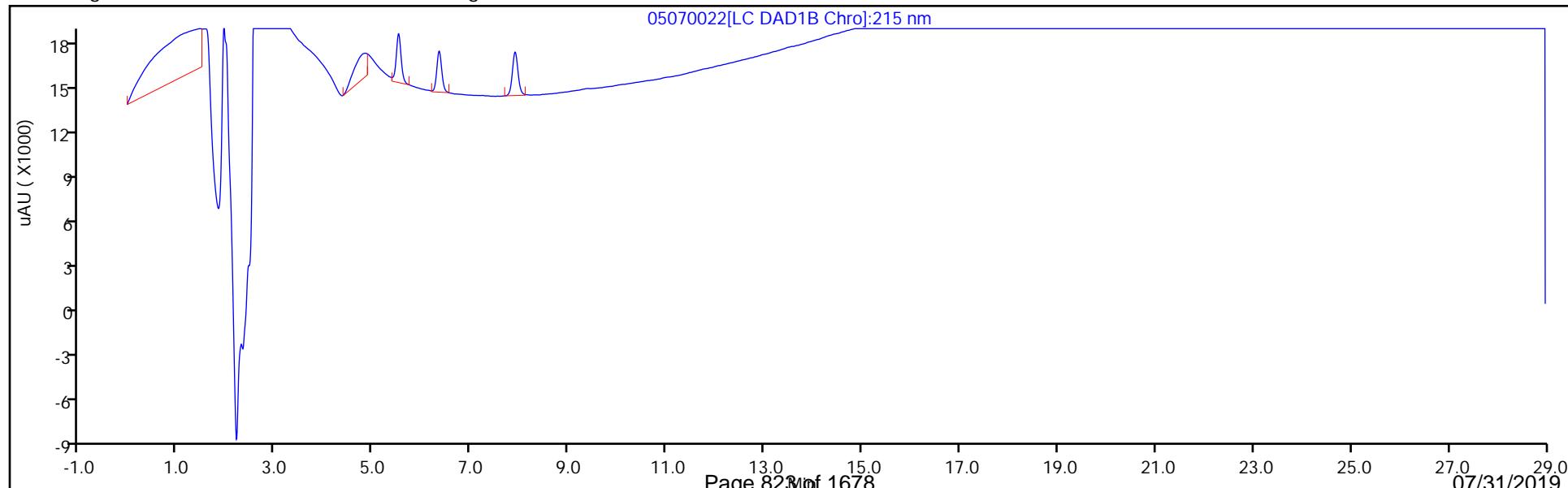
Limit Group: GCSV - 8330

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: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Lims ID: IC DMT L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-May-2019 00:28:23 ALS Bottle#: 23 Worklist Smp#: 23
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L1
 Misc. Info.: 280-0081649-023
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:14:04 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

First Level Reviewer: fiedlerh Date: 08-May-2019 09:08:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.515	5.512	0.003	8451	0.0200	0.0209	
4 DNX	1	6.342	6.338	0.004	5980	0.0200	0.0206	
7 MNX	1	7.895	7.892	0.003	6651	0.0233	0.0247	

Reagents:

8330 DMT_00002 Amount Added: 1.00 Units: uL

Report Date: 08-May-2019 09:14:04

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Injection Date: 08-May-2019 00:28:23

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: IC DMT L1

Worklist Smp#: 23

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

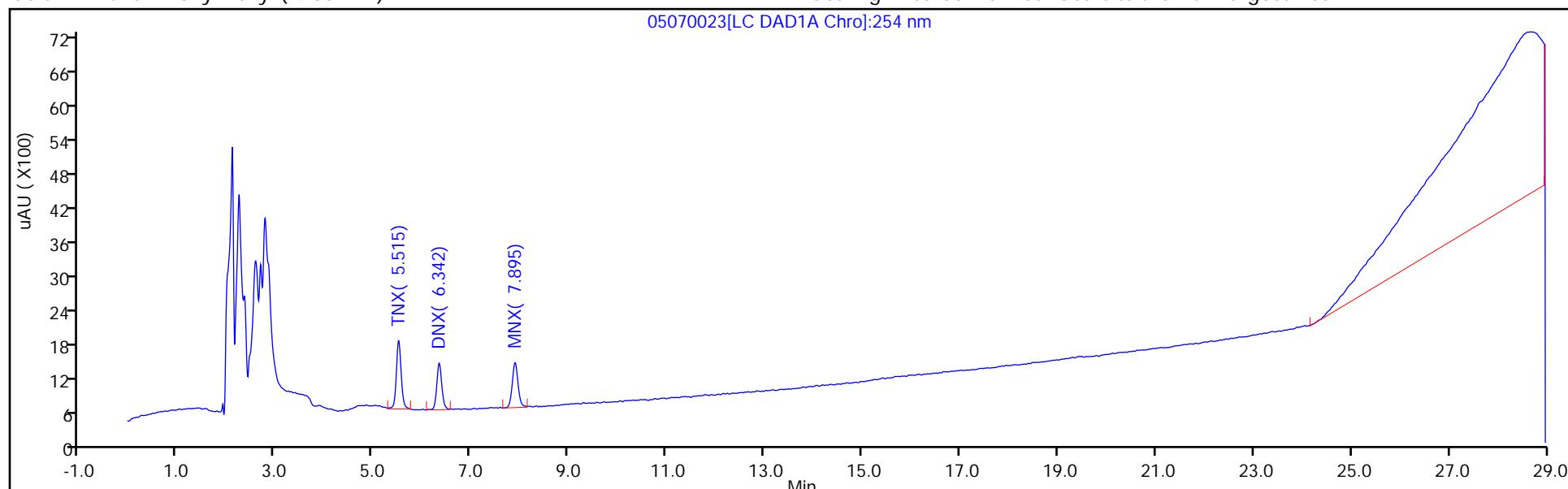
ALS Bottle#: 23

Method: G2_8330_Luna

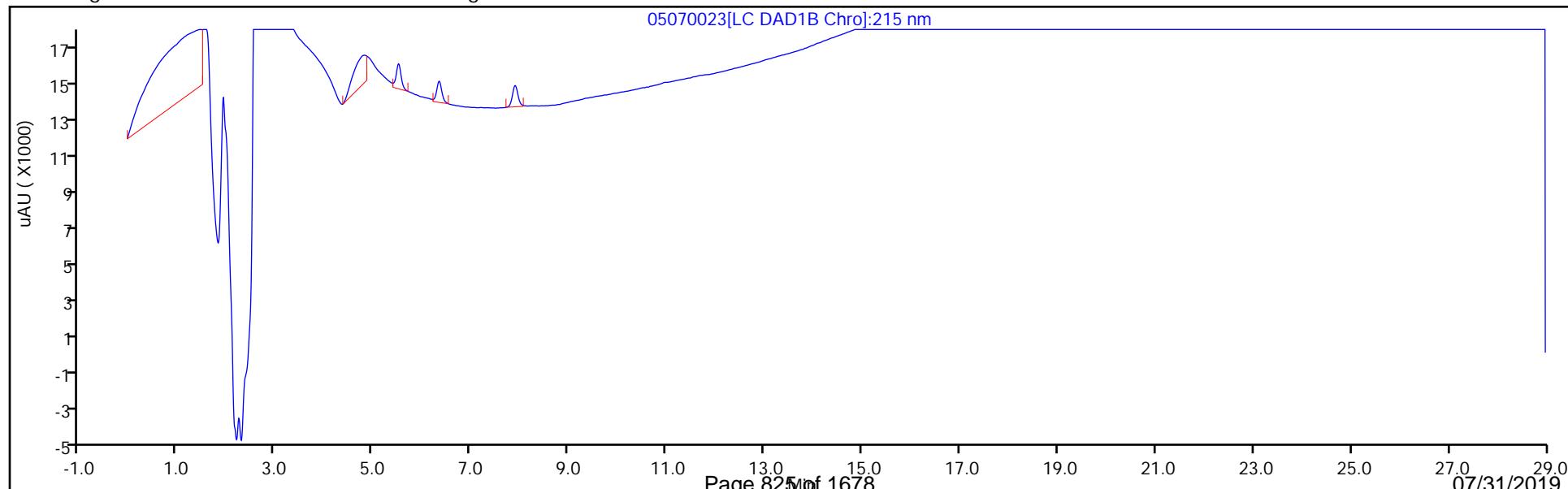
Limit Group: GCSV - 8330

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



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 458150

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/14	0514B014.D
Level 2	IC 280-458150/13	0514B013.D
Level 3	IC 280-458150/12	0514B012.D
Level 4	IC 280-458150/11	0514B011.D
Level 5	IC 280-458150/10	0514B010.D
Level 6	IC 280-458150/9	0514B009.D
Level 7	IC 280-458150/8	0514B008.D
Level 8	IC 280-458150/7	0514B007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
HMX	6.657	6.655	6.656	6.661	6.658	6.653	6.654	6.654			6.500 - 6.800	6.656
RDX	7.763	7.768	7.769	7.774	7.771	7.767	7.767	7.761			7.614 - 7.914	7.768
Picric acid	8.157	8.155	8.149	8.147	8.138	8.120	8.107	8.054			7.980 - 8.280	8.128
1,3,5-Trinitrobenzene	8.910	8.908	8.909	8.914	8.911	8.907	8.901	8.901			8.754 - 9.054	8.908
1,3-Dinitrobenzene	9.576	9.568	9.569	9.581	9.577	9.567	9.567	9.567			9.414 - 9.714	9.572
Nitrobenzene	9.963	9.955	9.956	9.967	9.964	9.953	9.954	9.954			9.800 - 10.100	9.958
Tetryl	10.296	10.281	10.283	10.301	10.291	10.280	10.280	10.287			10.134 - 10.434	10.287
Nitroglycerin	10.803	10.788	10.789	10.807	10.797	10.780	10.780	10.781			10.634 - 10.934	10.791
2,4,6-Trinitrotoluene	11.256	11.241	11.243	11.261	11.251	11.240	11.240	11.241			11.137 - 11.337	11.247
4-Amino-2,6-dinitrotoluene	11.443	11.435	11.429	11.454	11.444	11.427	11.427	11.434			11.330 - 11.530	11.437
2-Amino-4,6-dinitrotoluene	11.736	11.721	11.723	11.747	11.737	11.720	11.720	11.721			11.617 - 11.817	11.728
2,6-Dinitrotoluene	11.870	11.848	11.856	11.874	11.864	11.853	11.854	11.854			11.750 - 11.950	11.859
2,4-Dinitrotoluene	12.070	12.055	12.056	12.081	12.064	12.047	12.054	12.054			11.950 - 12.150	12.060
2-Nitrotoluene	12.916	12.895	12.889	12.921	12.904	12.887	12.894	12.887			12.740 - 13.040	12.899
4-Nitrotoluene	13.330	13.341	13.329	13.361	13.344	13.327	13.334	13.327			13.180 - 13.480	13.337
3-Nitrotoluene	13.943	13.935	13.929	13.961	13.944	13.920	13.934	13.927			13.780 - 14.080	13.937
PETN	15.036	15.021	15.016	15.061	15.037	15.007	15.027	15.021			14.874 - 15.174	15.028
1,2-Dinitrobenzene	8.750	8.748	8.749	8.754	8.751	8.747	8.741	8.741			8.594 - 8.894	8.748

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 458150

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/14	0514B014.D
Level 2	IC 280-458150/13	0514B013.D
Level 3	IC 280-458150/12	0514B012.D
Level 4	IC 280-458150/11	0514B011.D
Level 5	IC 280-458150/10	0514B010.D
Level 6	IC 280-458150/9	0514B009.D
Level 7	IC 280-458150/8	0514B008.D
Level 8	IC 280-458150/7	0514B007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD	
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2									
HMX	101150 87813	91100 86537	85040 87520	89540 84950	Ave		89206.1554				5.9		20.0				
RDX	114450 106500	109200 104197	101900 106825	108632 101411	Ave		106639.418				4.0		20.0				
Picric acid	95550 81538	84360 80240	81330 83745	84012 79571	Ave		83793.1625				6.1		20.0				
1,3,5-Trinitrobenzene	225250 240935	213340 236247	217640 235773	241580 223445	Ave		229276.293				4.7		20.0				
1,3-Dinitrobenzene	300799 304296	297682 301636	297453 303625	309858 291245	Ave		300824.194				1.8		20.0				
Nitrobenzene	192515 195881	194032 195955	194052 202210	203876 196095	Ave		196826.951				2.1		20.0				
Tetryl	161150 171098	160480 167927	168380 175552	172804 166254	Ave		167955.580				3.2		20.0				
Nitroglycerin	76640 70756	66784 69235	68189 69251	73513 65450	Ave		69977.1309				5.2		20.0				
2,4,6-Trinitrotoluene	235508 224482	230199 219408	223247 219991	226602 209307	Ave		223592.967				3.5		20.0				
4-Amino-2,6-dinitrotoluene	171236 161304	170688 159365	161555 159595	164650 151045	Ave		162429.755				4.0		20.0				
2-Amino-4,6-dinitrotoluene	195763 202094	198385 199393	197338 198295	201212 187801	Ave		197535.173				2.2		20.0				
2,6-Dinitrotoluene	162512 156633	159182 153450	157737 154332	160160 148773	Ave		156597.345				2.8		20.0				
2,4-Dinitrotoluene	295559 298897	301437 296449	297056 297932	305066 286981	Ave		297422.109				1.8		20.0				
2-Nitrotoluene	144467 129100	131625 127144	134088 127658	133109 123603	Ave		131349.229				4.8		20.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 458150

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

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									
4-Nitrotoluene	115837 111566	120697 109078	113406 110796	113076 107275	Ave		112716.408				3.7		20.0				
3-Nitrotoluene	172958 144086	152131 142446	146673 138729	151183 138243	Ave		148306.351				7.6		20.0				
PETN	67805 76433	70610 75180	73478 75418	76547 70058	Ave		73191.2127				4.5		20.0				
1,2-Dinitrobenzene	121600 135710	122220 134553	124840 135315	137172 129475	Ave		130110.582				5.0		20.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 458150

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/14	0514B014.D
Level 2	IC 280-458150/13	0514B013.D
Level 3	IC 280-458150/12	0514B012.D
Level 4	IC 280-458150/11	0514B011.D
Level 5	IC 280-458150/10	0514B010.D
Level 6	IC 280-458150/9	0514B009.D
Level 7	IC 280-458150/8	0514B008.D
Level 8	IC 280-458150/7	0514B007.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	2023 60576	4555 87520	8504 212374	22385	35125	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	2289 72938	5460 106825	10190 253528	27158	42600	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Picric acid	Ave	1911 56168	4218 83745	8133 198927	21003	32615	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3,5-Trinitrobenzene	Ave	4505 165373	10667 235773	21764 558613	60395	96374	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3-Dinitrobenzene	Ave	6022 211356	14899 303929	29775 728840	77542	121840	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Ave	3858 137443	9721 202614	19444 491218	51071	78509	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Tetryl	Ave	3223 117549	8024 175552	16838 415635	43201	68439	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitroglycerin	Ave	15328 484644	33392 692505	68189 1636241	183782	283025	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2,4,6-Trinitrotoluene	Ave	4729 154200	11556 220871	22414 525360	56877	90152	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	3435 111890	8560 160074	16204 378745	41286	64715	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2-Amino-4,6-dinitrotoluene	Ave	3927 139994	9949 198890	19793 470912	50454	81080	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,6-Dinitrotoluene	Ave	3260 107737	7983 154795	15821 373049	40160	62841	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,4-Dinitrotoluene	Ave	5923 207929	15102 298528	29765 718888	76419	119798	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
2-Nitrotoluene	Ave	2898 89268	6601 128041	13449 309935	33377	51795	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
4-Nitrotoluene	Ave	2326 76660	6059 111239	11386 269261	28382	44805	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 458150

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

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
3-Nitrotoluene	Ave	3473 100111	7637 139284	14726 346991	37947	57865	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Ave	13561 526257	35305 754182	73478 1751462	191368	305733	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	2432 94187	6111 135315	12484 323687	34293	54284	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\20190514-81869.b\0514B007.D
 Lims ID: IC MAIN L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 14-May-2019 15:49:27 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L8
 Misc. Info.: 280-0081869-007
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:03 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh

Date:

15-May-2019 10:09:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.654	6.650	0.004	212374	2.50	2.38	
7 RDX	1	7.761	7.764	-0.003	253528	2.50	2.38	
8 2,4,6-Trinitrophenol	1	8.054	8.130	-0.076	198927	2.50	2.37	
\$ 9 1,2-Dinitrobenzene	1	8.741	8.744	-0.003	323687	2.50	2.49	
10 1,3,5-Trinitrobenzene	1	8.901	8.904	-0.003	558613	2.50	2.44	
11 1,3-Dinitrobenzene	1	9.567	9.564	0.003	728840	2.50	2.42	
12 Nitrobenzene	1	9.954	9.950	0.004	491218	2.51	2.50	
14 Tetryl	1	10.287	10.284	0.003	415635	2.50	2.47	
15 Nitroglycerin	2	10.781	10.784	-0.003	1636241	25.0	23.4	
16 2,4,6-Trinitrotoluene	1	11.241	11.237	0.004	525360	2.51	2.35	M
17 4-Amino-2,6-dinitrotoluene	1	11.434	11.430	0.004	378745	2.51	2.33	
18 2-Amino-4,6-dinitrotoluene	1	11.721	11.717	0.004	470912	2.51	2.38	
19 2,6-Dinitrotoluene	1	11.854	11.850	0.004	373049	2.51	2.38	
20 2,4-Dinitrotoluene	1	12.054	12.050	0.004	718888	2.51	2.42	
21 o-Nitrotoluene	1	12.887	12.890	-0.003	309935	2.51	2.36	
22 p-Nitrotoluene	1	13.327	13.330	-0.003	269261	2.51	2.39	
23 m-Nitrotoluene	1	13.927	13.930	-0.003	346991	2.51	2.34	
24 PETN	2	15.021	15.024	-0.003	1751462	25.0	23.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 125.00

Units: uL

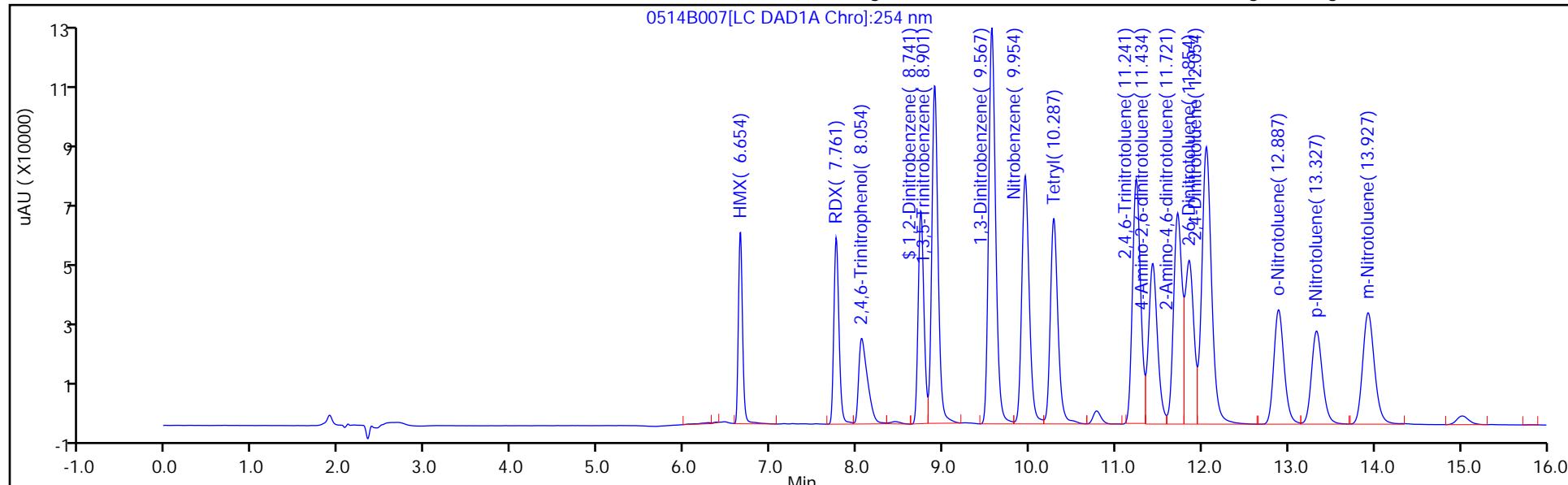
Report Date: 15-May-2019 10:58:03

Chrom Revision: 2.3 03-May-2019 15:52:00

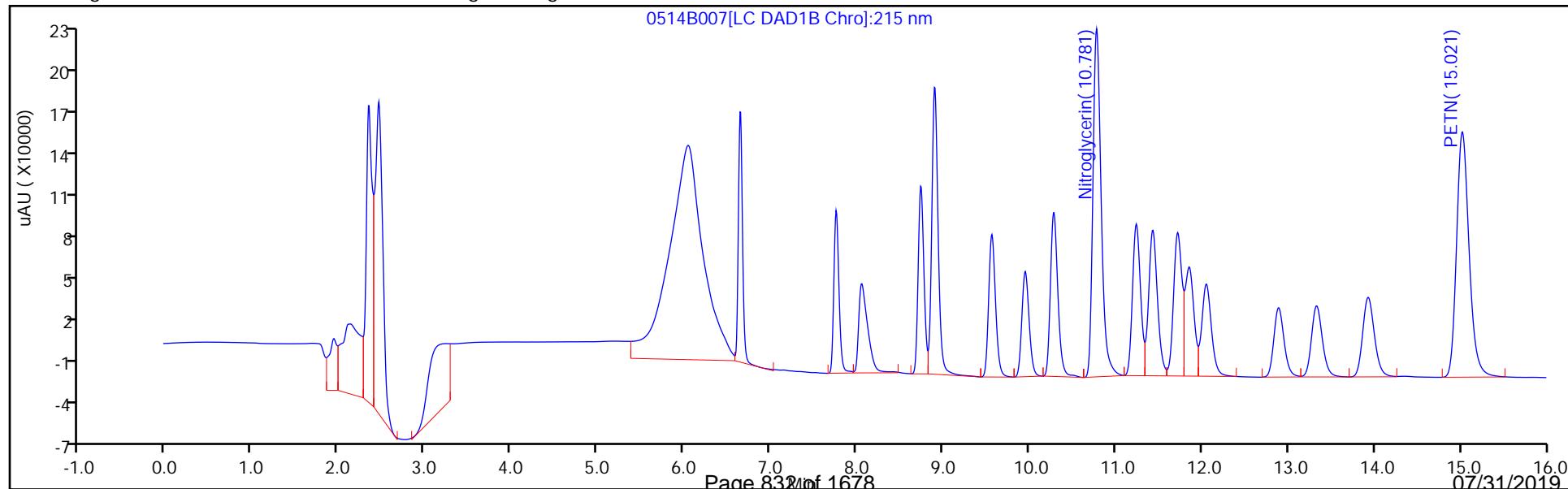
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B007.D
 Injection Date: 14-May-2019 15:49:27 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L8 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 7
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 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

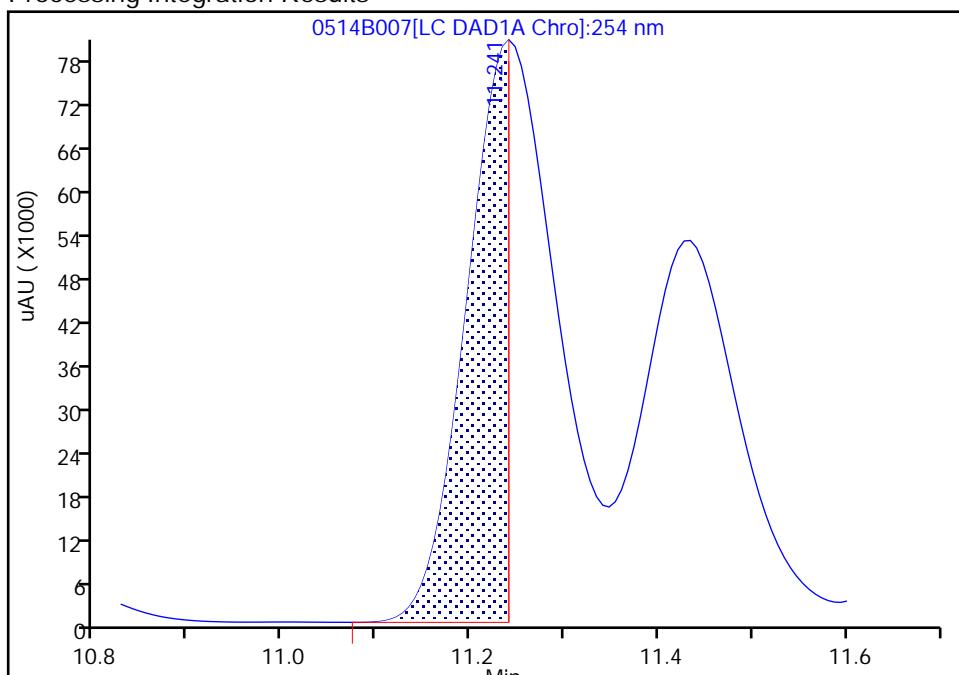
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 Injection Date: 14-May-2019 15:49:27 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L8
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

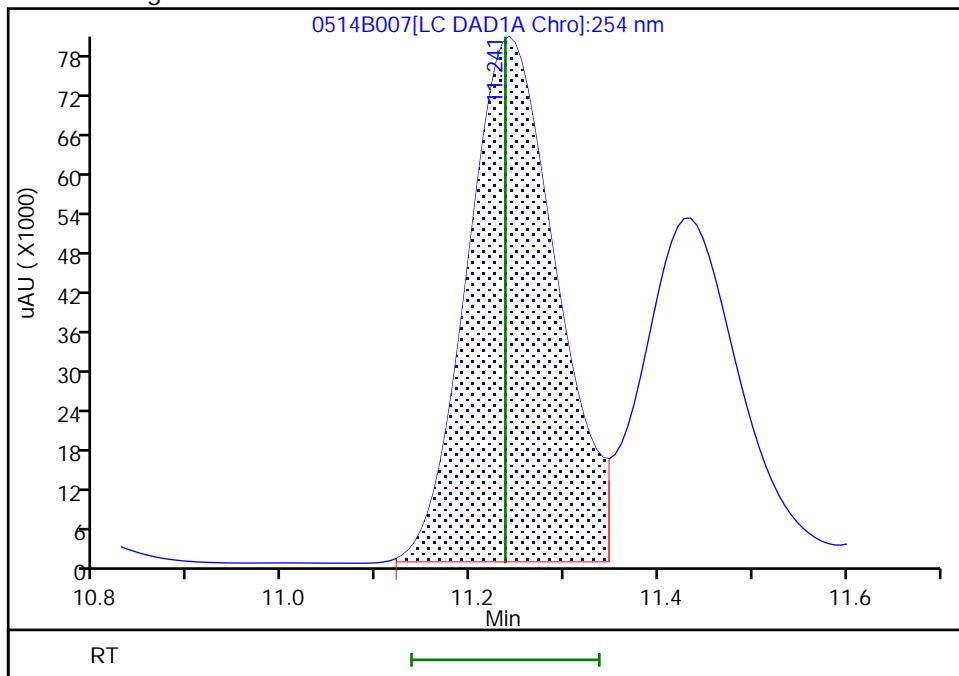
RT: 11.24
 Area: 243340
 Amount: 1.296794
 Amount Units: ug/mL

Processing Integration Results



RT: 11.24
 Area: 525360
 Amount: 2.349627
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-May-2019 10:08:56

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B008.D
 Lims ID: IC MAIN L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 14-May-2019 16:13:10 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L7
 Misc. Info.: 280-0081869-008
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:04 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh

Date:

15-May-2019 10:09:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.654	6.650	0.004	87520	1.00	0.9811	
7 RDX	1	7.767	7.764	0.003	106825	1.00	1.00	
8 2,4,6-Trinitrophenol	1	8.107	8.130	-0.023	83745	1.00	1.00	
\$ 9 1,2-Dinitrobenzene	1	8.741	8.744	-0.003	135315	1.00	1.04	
10 1,3,5-Trinitrobenzene	1	8.901	8.904	-0.003	235773	1.00	1.03	
11 1,3-Dinitrobenzene	1	9.567	9.564	0.003	303929	1.00	1.01	
12 Nitrobenzene	1	9.954	9.950	0.004	202614	1.00	1.03	
14 Tetryl	1	10.280	10.284	-0.004	175552	1.00	1.05	
15 Nitroglycerin	2	10.780	10.784	-0.004	692505	10.0	9.90	
16 2,4,6-Trinitrotoluene	1	11.240	11.237	0.003	220871	1.00	0.9878	
17 4-Amino-2,6-dinitrotoluene	1	11.427	11.430	-0.003	160074	1.00	0.9855	
18 2-Amino-4,6-dinitrotoluene	1	11.720	11.717	0.003	198890	1.00	1.01	
19 2,6-Dinitrotoluene	1	11.854	11.850	0.004	154795	1.00	0.9885	
20 2,4-Dinitrotoluene	1	12.054	12.050	0.004	298528	1.00	1.00	
21 o-Nitrotoluene	1	12.894	12.890	0.004	128041	1.00	0.9748	
22 p-Nitrotoluene	1	13.334	13.330	0.004	111239	1.00	0.9869	
23 m-Nitrotoluene	1	13.934	13.930	0.004	139284	1.00	0.9392	M
24 PETN	2	15.027	15.024	0.003	754182	10.0	10.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 50.00

Units: uL

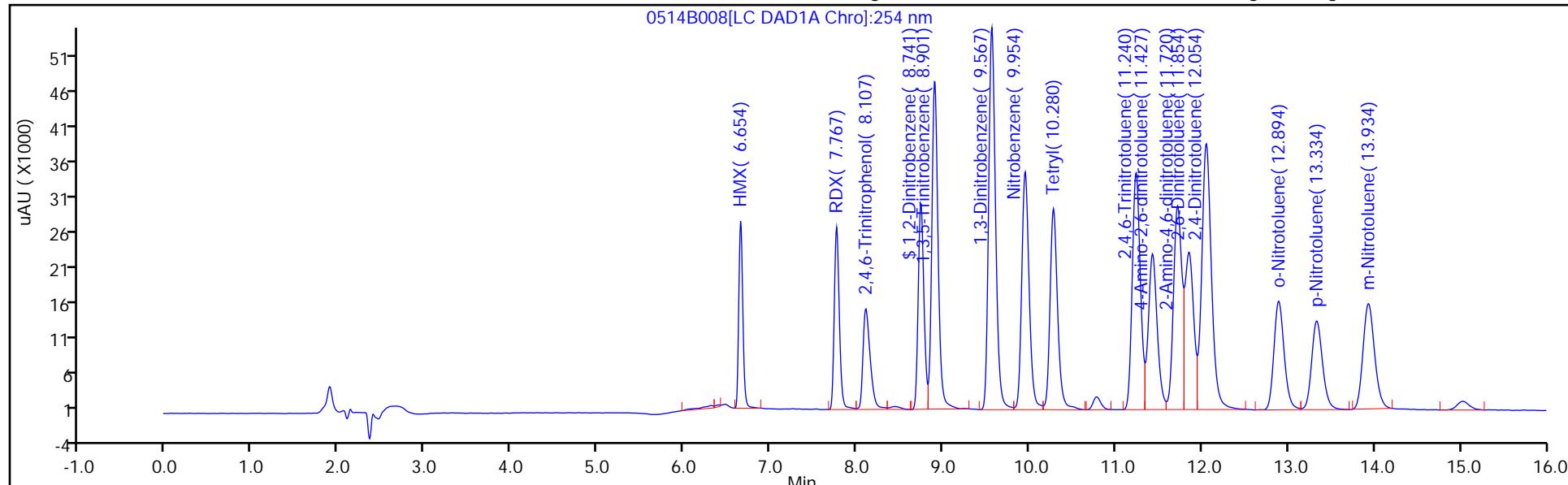
Report Date: 15-May-2019 10:58:05

Chrom Revision: 2.3 03-May-2019 15:52:00

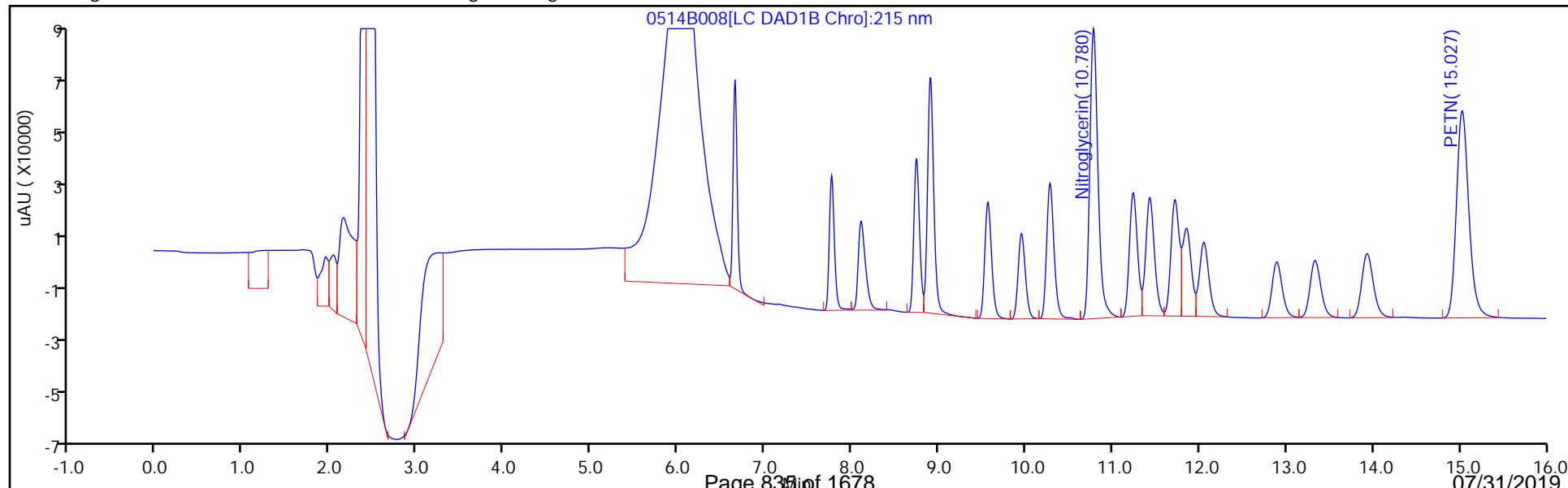
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B008.D
 Injection Date: 14-May-2019 16:13:10 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L7 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 8
 Method: 8330_X3 Dil. Factor: 1.0000 ALS Bottle#: 8
 Column: UltraCarb5uODS (20) (4.60 mm) Limit Group: GCSV - 8330

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

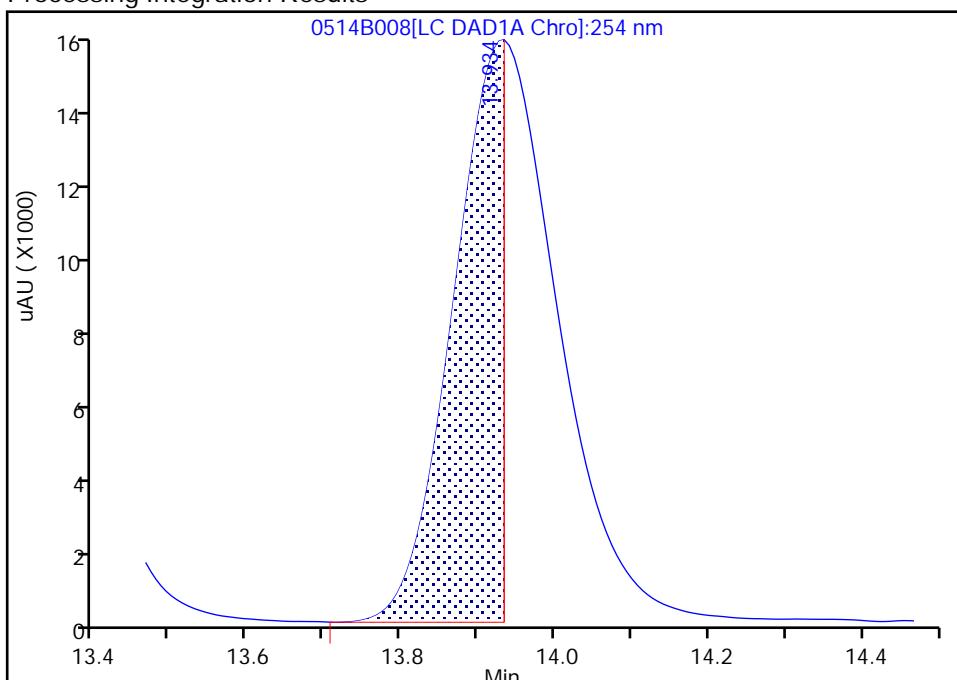
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 Injection Date: 14-May-2019 16:13:10 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L7
 Client ID:
 Operator ID: hkf ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

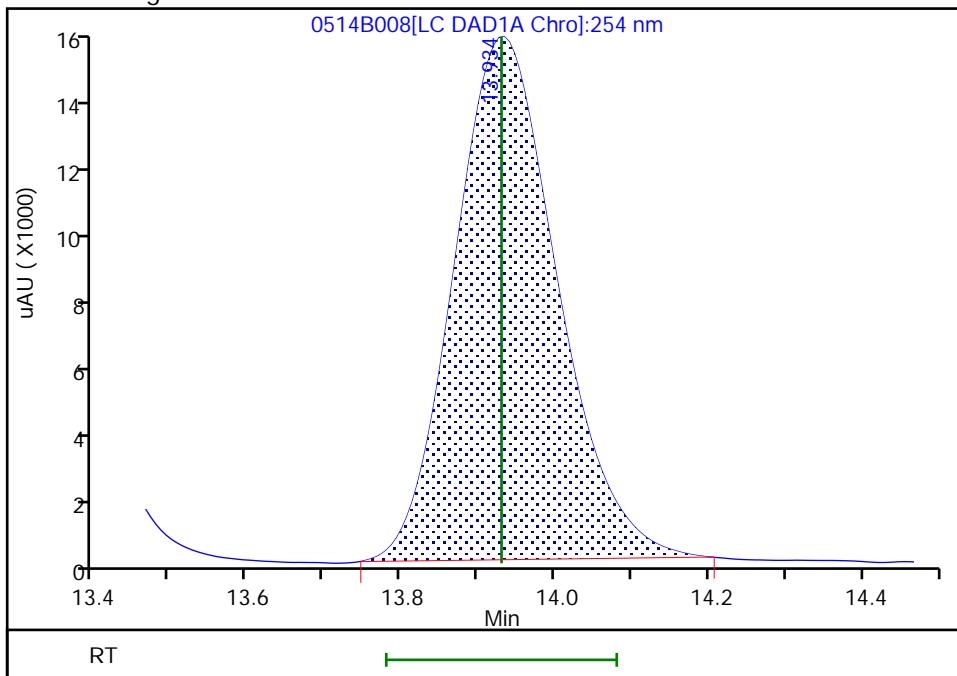
RT: 13.93
 Area: 67128
 Amount: 0.481816
 Amount Units: ug/mL

Processing Integration Results



RT: 13.93
 Area: 139284
 Amount: 0.939164
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-May-2019 10:09:22

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B009.D
 Lims ID: IC MAIN L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 14-May-2019 16:36:52 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L6
 Misc. Info.: 280-0081869-009
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:05 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.653	6.650	0.003	60576	0.7000	0.6791	
7 RDX	1	7.767	7.764	0.003	72938	0.7000	0.6840	
8 2,4,6-Trinitrophenol	1	8.120	8.130	-0.010	56168	0.7000	0.6703	
\$ 9 1,2-Dinitrobenzene	1	8.747	8.744	0.003	94187	0.7000	0.7239	
10 1,3,5-Trinitrobenzene	1	8.907	8.904	0.003	165373	0.7000	0.7213	
11 1,3-Dinitrobenzene	1	9.567	9.564	0.003	211356	0.7007	0.7026	
12 Nitrobenzene	1	9.953	9.950	0.003	137443	0.7014	0.6983	
14 Tetryl	1	10.280	10.284	-0.004	117549	0.7000	0.6999	
15 Nitroglycerin	2	10.780	10.784	-0.004	484644	7.00	6.93	
16 2,4,6-Trinitrotoluene	1	11.240	11.237	0.003	154200	0.7028	0.6896	
17 4-Amino-2,6-dinitrotoluene	1	11.427	11.430	-0.003	111890	0.7021	0.6889	
18 2-Amino-4,6-dinitrotoluene	1	11.720	11.717	0.003	139994	0.7021	0.7087	
19 2,6-Dinitrotoluene	1	11.853	11.850	0.003	107737	0.7021	0.6880	
20 2,4-Dinitrotoluene	1	12.047	12.050	-0.003	207929	0.7014	0.6991	
21 o-Nitrotoluene	1	12.887	12.890	-0.003	89268	0.7021	0.6796	
22 p-Nitrotoluene	1	13.327	13.330	-0.003	76660	0.7028	0.6801	
23 m-Nitrotoluene	1	13.920	13.930	-0.010	100111	0.7028	0.6750	
24 PETN	2	15.007	15.024	-0.017	526257	7.00	7.19	

Reagents:

8330\TermStk_00058 Amount Added: 35.00 Units: uL

Report Date: 15-May-2019 10:58:06

Chrom Revision: 2.3 03-May-2019 15:52:00

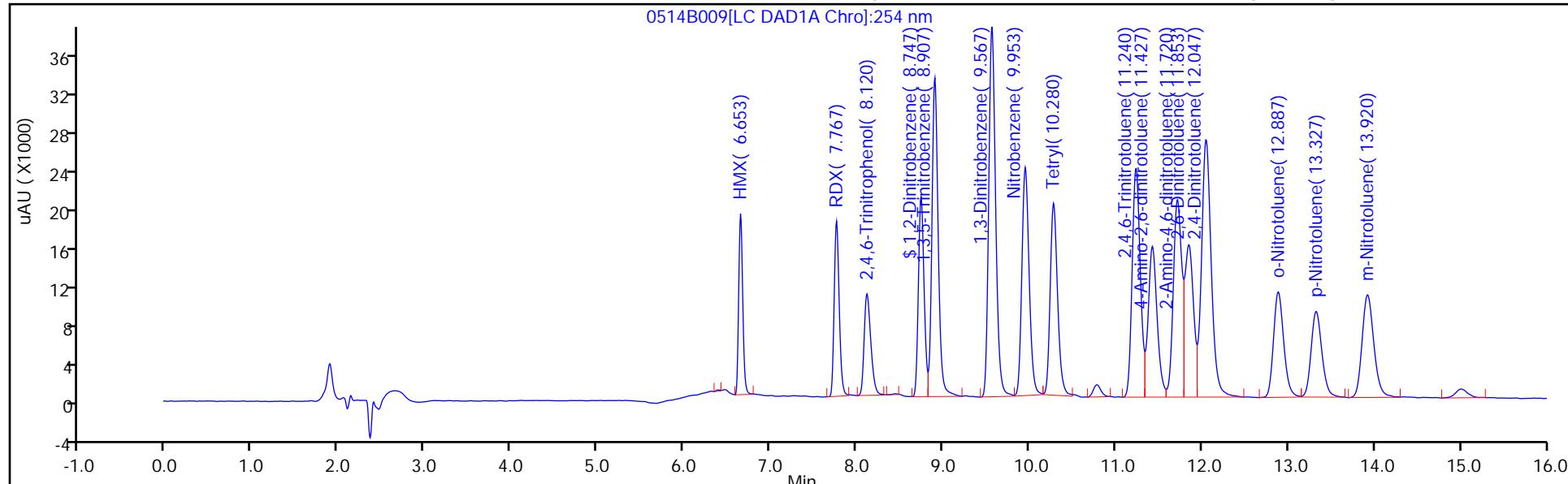
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B009.D
 Injection Date: 14-May-2019 16:36:52 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L6 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 9
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000
Limit Group: GCSV - 8330

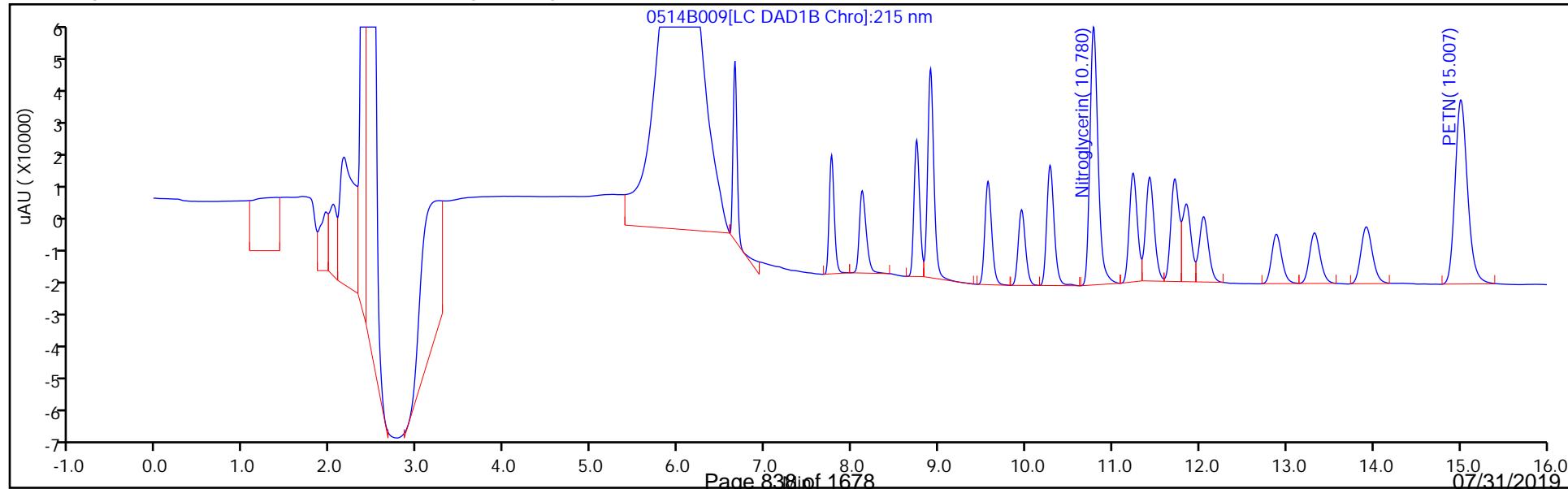
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

0514B009[LC DAD1A Chro]:254 nm



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

0514B009[LC DAD1B Chro]:215 nm



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B010.D
 Lims ID: IC MAIN L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 14-May-2019 17:00:38 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC MAIN L5
 Misc. Info.: 280-0081869-010
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:07 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.658	6.650	0.008	35125	0.4000	0.3938	
7 RDX	1	7.771	7.764	0.007	42600	0.4000	0.3995	
8 2,4,6-Trinitrophenol	1	8.138	8.130	0.008	32615	0.4000	0.3892	
\$ 9 1,2-Dinitrobenzene	1	8.751	8.744	0.007	54284	0.4000	0.4172	
10 1,3,5-Trinitrobenzene	1	8.911	8.904	0.007	96374	0.4000	0.4203	
11 1,3-Dinitrobenzene	1	9.577	9.564	0.013	121840	0.4004	0.4050	
12 Nitrobenzene	1	9.964	9.950	0.014	78509	0.4008	0.3989	
14 Tetryl	1	10.291	10.284	0.007	68439	0.4000	0.4075	
15 Nitroglycerin	2	10.797	10.784	0.013	283025	4.00	4.04	
16 2,4,6-Trinitrotoluene	1	11.251	11.237	0.014	90152	0.4016	0.4032	
17 4-Amino-2,6-dinitrotoluene	1	11.444	11.430	0.014	64715	0.4012	0.3984	
18 2-Amino-4,6-dinitrotoluene	1	11.737	11.717	0.020	81080	0.4012	0.4105	
19 2,6-Dinitrotoluene	1	11.864	11.850	0.014	62841	0.4012	0.4013	
20 2,4-Dinitrotoluene	1	12.064	12.050	0.014	119798	0.4008	0.4028	
21 o-Nitrotoluene	1	12.904	12.890	0.014	51795	0.4012	0.3943	
22 p-Nitrotoluene	1	13.344	13.330	0.014	44805	0.4016	0.3975	
23 m-Nitrotoluene	1	13.944	13.930	0.014	57865	0.4016	0.3902	
24 PETN	2	15.037	15.024	0.013	305733	4.00	4.18	

Reagents:

8330\TermStk_00058 Amount Added: 20.00 Units: uL

Report Date: 15-May-2019 10:58:07

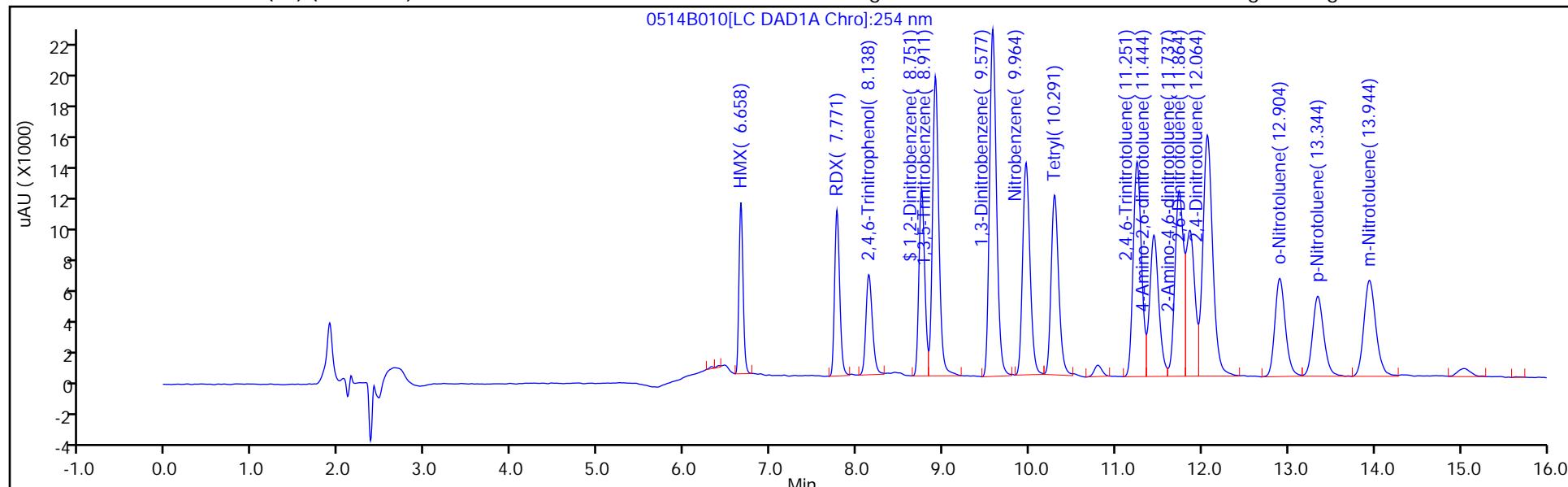
Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

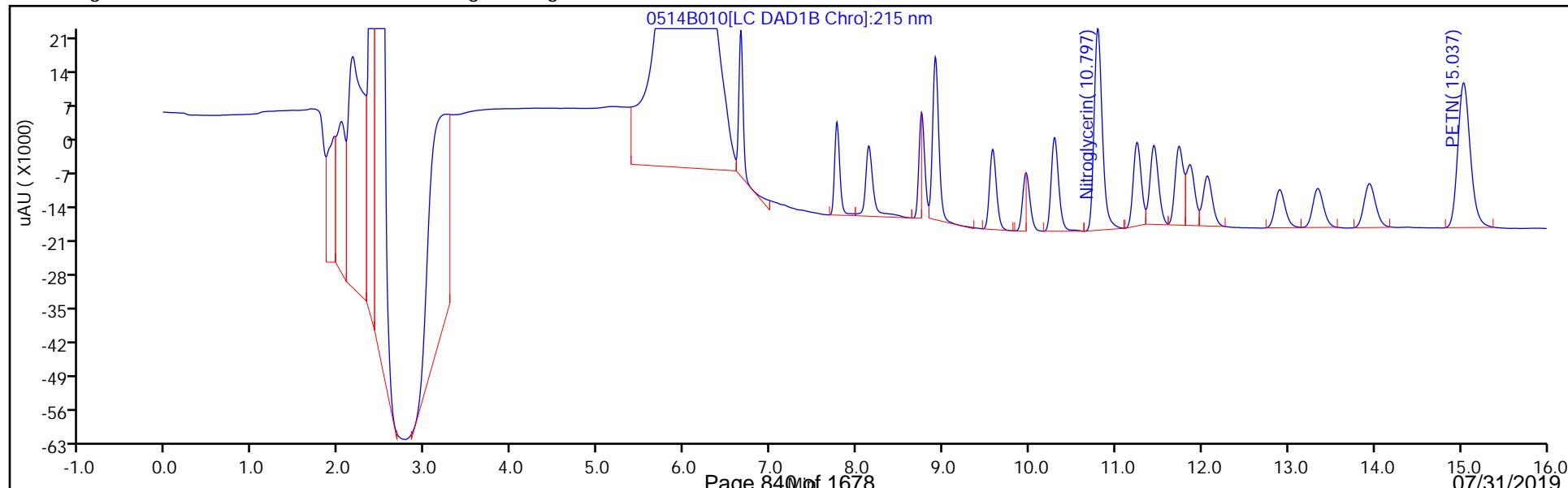
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B010.D
 Injection Date: 14-May-2019 17:00:38 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L5 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 10
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000 ALS Bottle#: 10
 Limit Group: GCSV - 8330

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
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B011.D
 Lims ID: IC MAIN L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 14-May-2019 17:24:22 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L4
 Misc. Info.: 280-0081869-011
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:08 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh

Date:

15-May-2019 08:51:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.661	6.650	0.011	22385	0.2500	0.2509	
7 RDX	1	7.774	7.764	0.010	27158	0.2500	0.2547	
8 2,4,6-Trinitrophenol	1	8.147	8.130	0.017	21003	0.2500	0.2507	
\$ 9 1,2-Dinitrobenzene	1	8.754	8.744	0.010	34293	0.2500	0.2636	
10 1,3,5-Trinitrobenzene	1	8.914	8.904	0.010	60395	0.2500	0.2634	
11 1,3-Dinitrobenzene	1	9.581	9.564	0.017	77542	0.2503	0.2578	
12 Nitrobenzene	1	9.967	9.950	0.017	51071	0.2505	0.2595	
14 Tetryl	1	10.301	10.284	0.017	43201	0.2500	0.2572	
15 Nitroglycerin	2	10.807	10.784	0.023	183782	2.50	2.63	
16 2,4,6-Trinitrotoluene	1	11.261	11.237	0.024	56877	0.2510	0.2544	
17 4-Amino-2,6-dinitrotoluene	1	11.454	11.430	0.024	41286	0.2508	0.2542	
18 2-Amino-4,6-dinitrotoluene	1	11.747	11.717	0.030	50454	0.2508	0.2554	
19 2,6-Dinitrotoluene	1	11.874	11.850	0.024	40160	0.2508	0.2565	
20 2,4-Dinitrotoluene	1	12.081	12.050	0.031	76419	0.2505	0.2569	
21 o-Nitrotoluene	1	12.921	12.890	0.031	33377	0.2508	0.2541	
22 p-Nitrotoluene	1	13.361	13.330	0.031	28382	0.2510	0.2518	
23 m-Nitrotoluene	1	13.961	13.930	0.031	37947	0.2510	0.2559	
24 PETN	2	15.061	15.024	0.037	191368	2.50	2.61	

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 15-May-2019 10:58:08

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190514-81869.b\\0514B011.D

Injection Date: 14-May-2019 17:24:22

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC MAIN L4

Worklist Smp#: 11

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

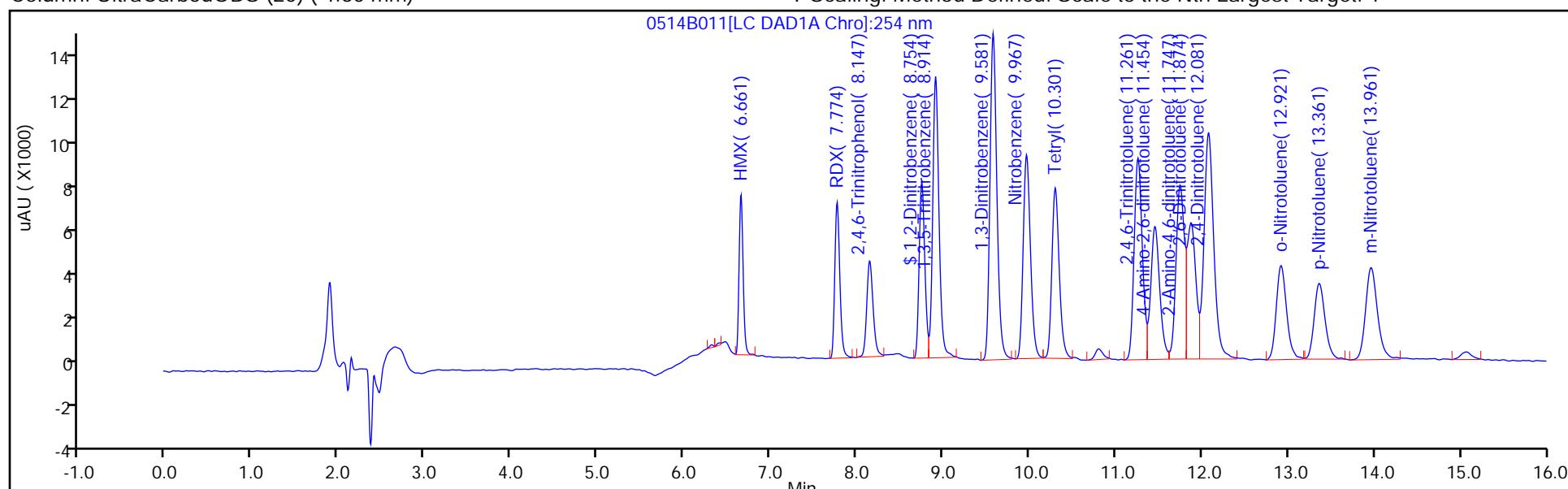
ALS Bottle#: 11

Method: 8330_X3

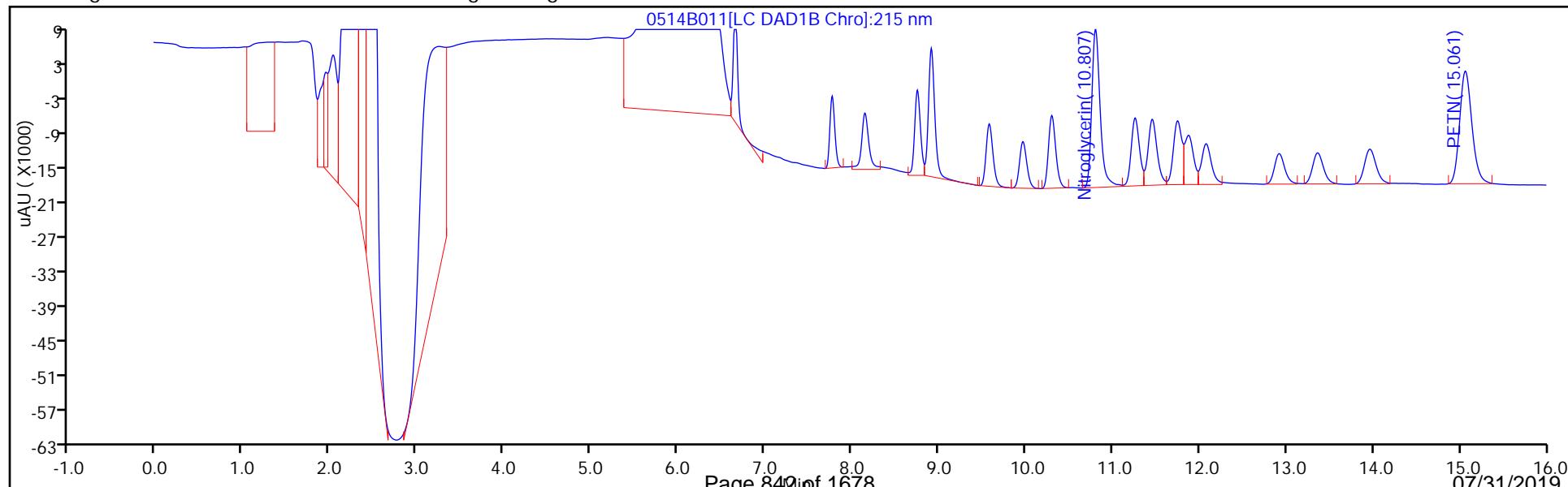
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B012.D
 Lims ID: IC MAIN L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 14-May-2019 17:48:04 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC MAIN L3
 Misc. Info.: 280-0081869-012
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:09 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.656	6.650	0.006	8504	0.1000	0.0953	
7 RDX	1	7.769	7.764	0.005	10190	0.1000	0.0956	
8 2,4,6-Trinitrophenol	1	8.149	8.130	0.019	8133	0.1000	0.0971	
\$ 9 1,2-Dinitrobenzene	1	8.749	8.744	0.005	12484	0.1000	0.0959	
10 1,3,5-Trinitrobenzene	1	8.909	8.904	0.005	21764	0.1000	0.0949	
11 1,3-Dinitrobenzene	1	9.569	9.564	0.005	29775	0.1001	0.0990	
12 Nitrobenzene	1	9.956	9.950	0.006	19444	0.1002	0.0988	
14 Tetryl	1	10.283	10.284	-0.001	16838	0.1000	0.1003	
15 Nitroglycerin	2	10.789	10.784	0.005	68189	1.00	0.9744	
16 2,4,6-Trinitrotoluene	1	11.243	11.237	0.006	22414	0.1004	0.1002	
17 4-Amino-2,6-dinitrotoluene	1	11.429	11.430	-0.001	16204	0.1003	0.0998	
18 2-Amino-4,6-dinitrotoluene	1	11.723	11.717	0.006	19793	0.1003	0.1002	
19 2,6-Dinitrotoluene	1	11.856	11.850	0.006	15821	0.1003	0.1010	
20 2,4-Dinitrotoluene	1	12.056	12.050	0.006	29765	0.1002	0.1001	
21 o-Nitrotoluene	1	12.889	12.890	-0.001	13449	0.1003	0.1024	
22 p-Nitrotoluene	1	13.329	13.330	-0.001	11386	0.1004	0.1010	
23 m-Nitrotoluene	1	13.929	13.930	-0.001	14726	0.1004	0.0993	
24 PETN	2	15.016	15.024	-0.008	73478	1.00	1.00	

Reagents:

8330\TermStk_00058 Amount Added: 5.00 Units: uL

Report Date: 15-May-2019 10:58:09

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B012.D

Injection Date: 14-May-2019 17:48:04

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC MAIN L3

Worklist Smp#: 12

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

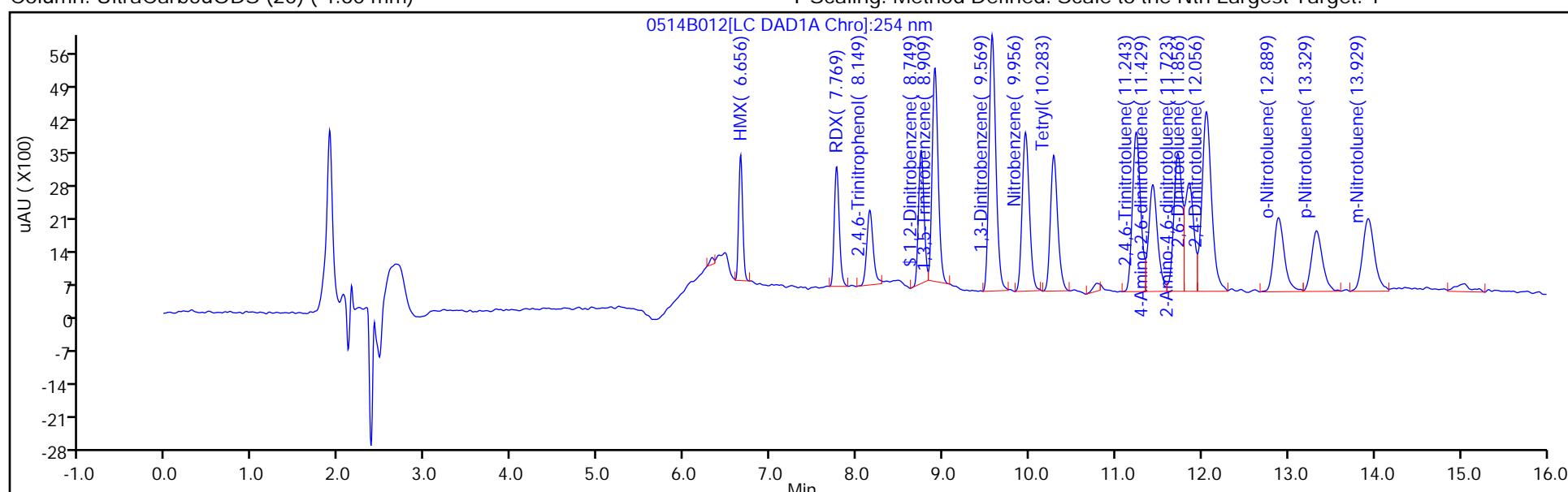
ALS Bottle#: 12

Method: 8330_X3

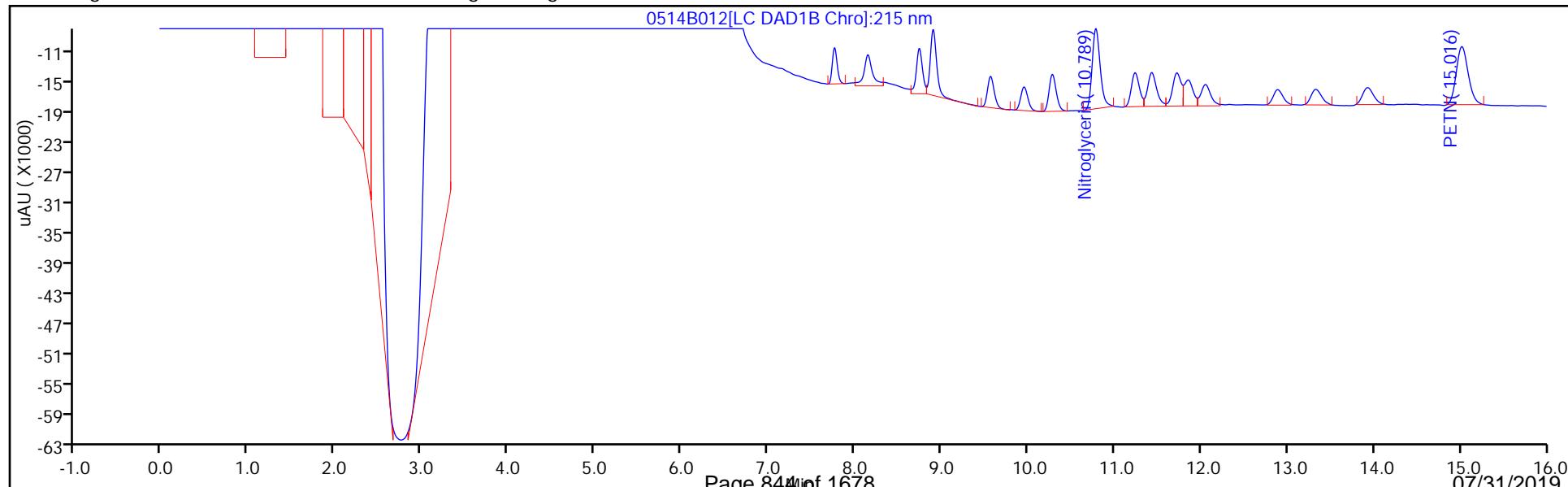
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B013.D
 Lims ID: IC MAIN L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 14-May-2019 18:11:46 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L2
 Misc. Info.: 280-0081869-013
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:10 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh

Date:

15-May-2019 10:11:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.655	6.650	0.005	4555	0.0500	0.0511	
7 RDX	1	7.768	7.764	0.004	5460	0.0500	0.0512	
8 2,4,6-Trinitrophenol	1	8.155	8.130	0.025	4218	0.0500	0.0503	
\$ 9 1,2-Dinitrobenzene	1	8.748	8.744	0.004	6111	0.0500	0.0470	
10 1,3,5-Trinitrobenzene	1	8.908	8.904	0.004	10667	0.0500	0.0465	
11 1,3-Dinitrobenzene	1	9.568	9.564	0.004	14899	0.0501	0.0495	
12 Nitrobenzene	1	9.955	9.950	0.005	9721	0.0501	0.0494	
14 Tetryl	1	10.281	10.284	-0.003	8024	0.0500	0.0478	
15 Nitroglycerin	2	10.788	10.784	0.004	33392	0.5000	0.4772	
16 2,4,6-Trinitrotoluene	1	11.241	11.237	0.004	11556	0.0502	0.0517	
17 4-Amino-2,6-dinitrotoluene	1	11.435	11.430	0.005	8560	0.0502	0.0527	
18 2-Amino-4,6-dinitrotoluene	1	11.721	11.717	0.004	9949	0.0502	0.0504	M
19 2,6-Dinitrotoluene	1	11.848	11.850	-0.002	7983	0.0502	0.0510	M
20 2,4-Dinitrotoluene	1	12.055	12.050	0.005	15102	0.0501	0.0508	
21 o-Nitrotoluene	1	12.895	12.890	0.005	6601	0.0502	0.0503	
22 p-Nitrotoluene	1	13.341	13.330	0.011	6059	0.0502	0.0538	
23 m-Nitrotoluene	1	13.935	13.930	0.005	7637	0.0502	0.0515	
24 PETN	2	15.021	15.024	-0.003	35305	0.5000	0.4824	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 2.50

Units: uL

Report Date: 15-May-2019 10:58:10

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190514-81869.b\\0514B013.D

Injection Date: 14-May-2019 18:11:46

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC MAIN L2

Worklist Smp#: 13

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

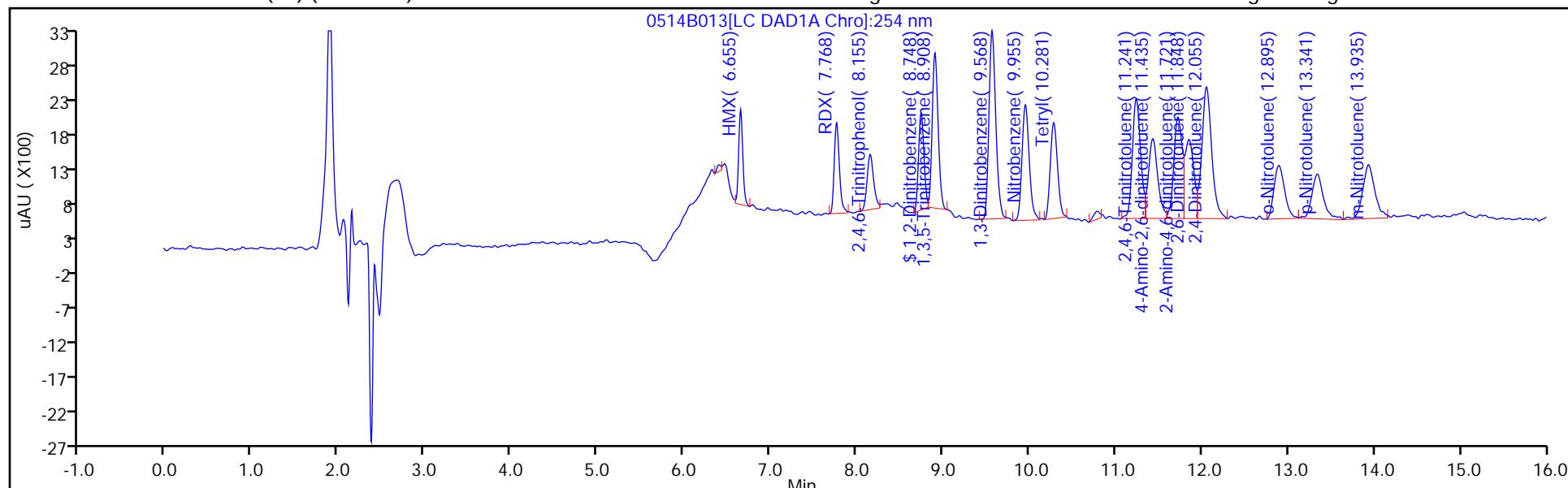
ALS Bottle#: 13

Method: 8330_X3

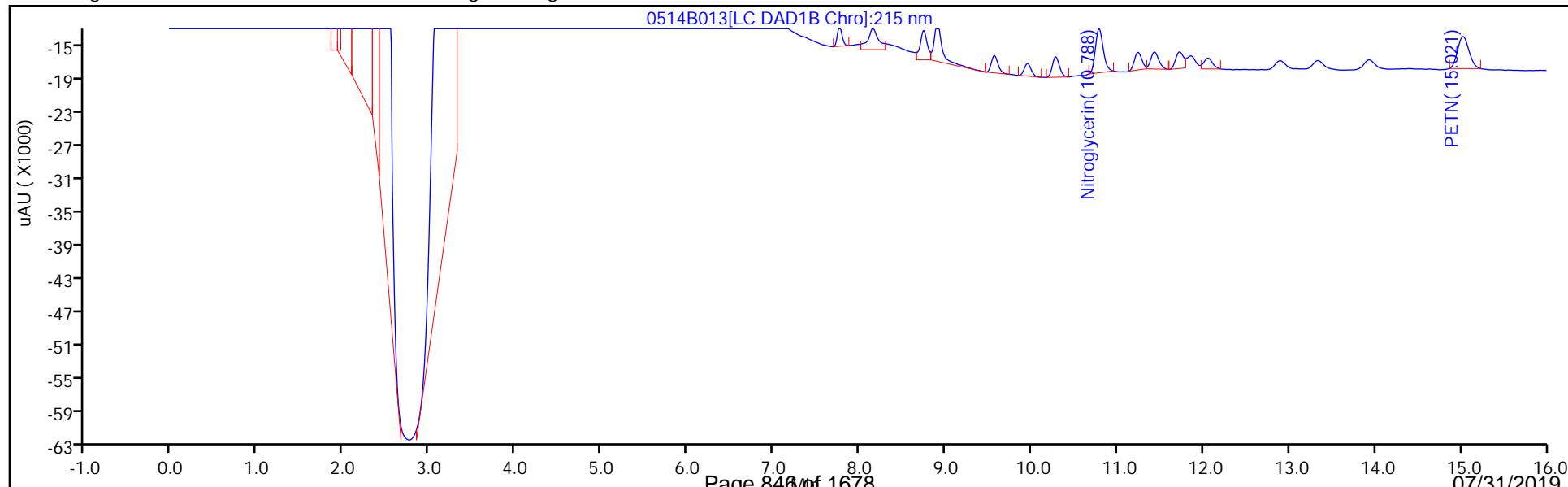
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B014.D
 Lims ID: IC MAIN L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 14-May-2019 18:35:34 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L1
 Misc. Info.: 280-0081869-014
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:11 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh

Date:

15-May-2019 10:12:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.657	6.650	0.007	2023	0.0200	0.0227	
7 RDX	1	7.763	7.764	-0.001	2289	0.0200	0.0215	
8 2,4,6-Trinitrophenol	1	8.157	8.130	0.027	1911	0.0200	0.0228	
\$ 9 1,2-Dinitrobenzene	1	8.750	8.744	0.006	2432	0.0200	0.0187	
10 1,3,5-Trinitrobenzene	1	8.910	8.904	0.006	4505	0.0200	0.0196	
11 1,3-Dinitrobenzene	1	9.576	9.564	0.012	6022	0.0200	0.0200	
12 Nitrobenzene	1	9.963	9.950	0.013	3858	0.0200	0.0196	
14 Tetryl	1	10.296	10.284	0.012	3223	0.0200	0.0192	
15 Nitroglycerin	2	10.803	10.784	0.019	15328	0.2000	0.2190	
16 2,4,6-Trinitrotoluene	1	11.256	11.237	0.019	4729	0.0201	0.0212	
17 4-Amino-2,6-dinitrotoluene	1	11.443	11.430	0.013	3435	0.0201	0.0211	
18 2-Amino-4,6-dinitrotoluene	1	11.736	11.717	0.019	3927	0.0201	0.0199	M
19 2,6-Dinitrotoluene	1	11.870	11.850	0.020	3260	0.0201	0.0208	M
20 2,4-Dinitrotoluene	1	12.070	12.050	0.020	5923	0.0200	0.0199	
21 o-Nitrotoluene	1	12.916	12.890	0.026	2898	0.0201	0.0221	
22 p-Nitrotoluene	1	13.330	13.330	0.000	2326	0.0201	0.0206	
23 m-Nitrotoluene	1	13.943	13.930	0.013	3473	0.0201	0.0234	
24 PETN	2	15.036	15.024	0.012	13561	0.2000	0.1853	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 1.00

Units: uL

Report Date: 15-May-2019 10:58:11

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190514-81869.b\\0514B014.D

Injection Date: 14-May-2019 18:35:34

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC MAIN L1

Worklist Smp#: 14

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

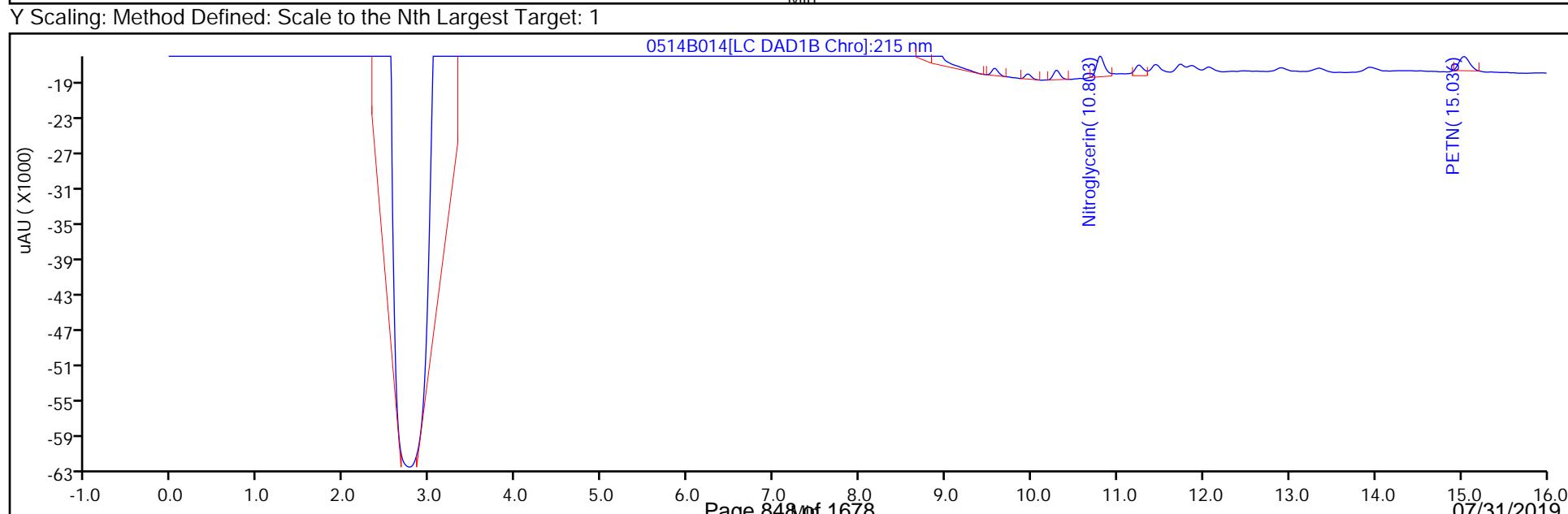
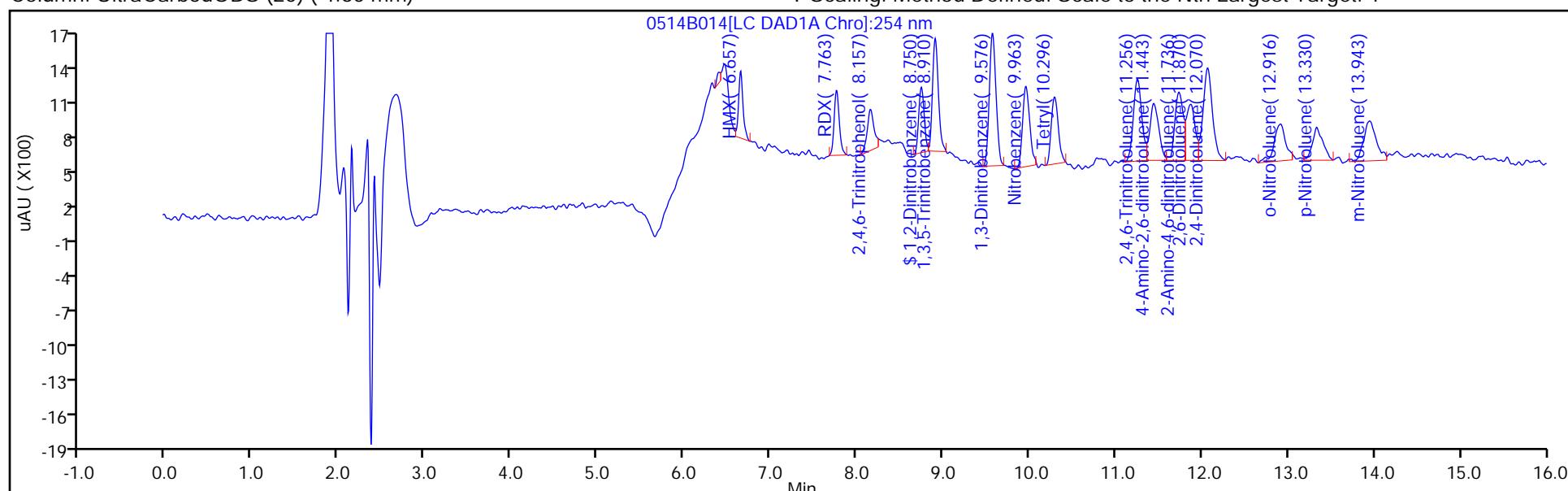
ALS Bottle#: 14

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

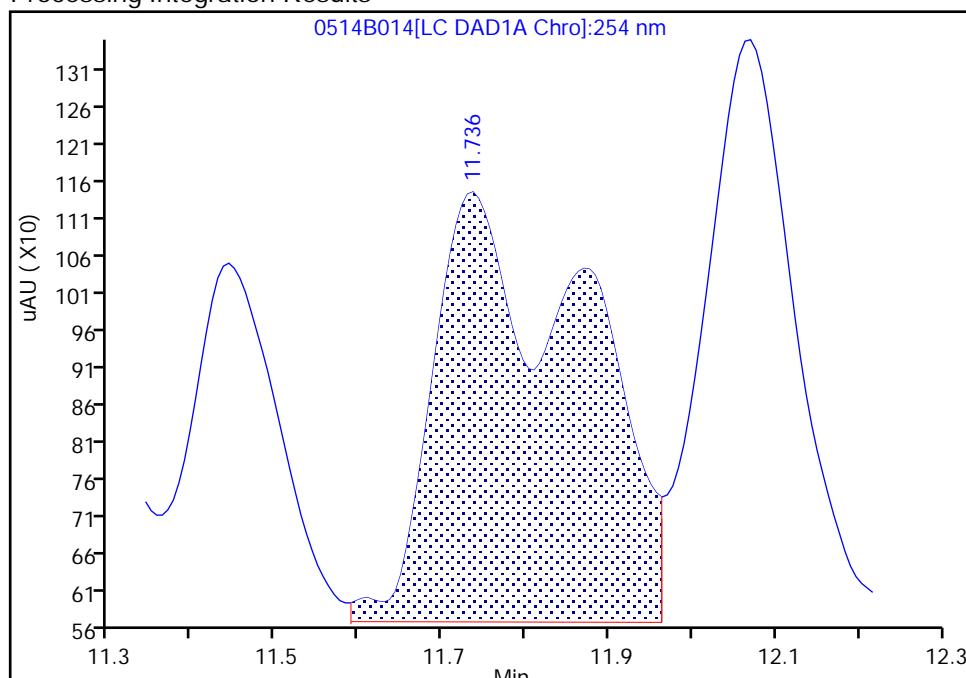
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B014.D
 Injection Date: 14-May-2019 18:35:34 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L1
 Client ID:
 Operator ID: hkf ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

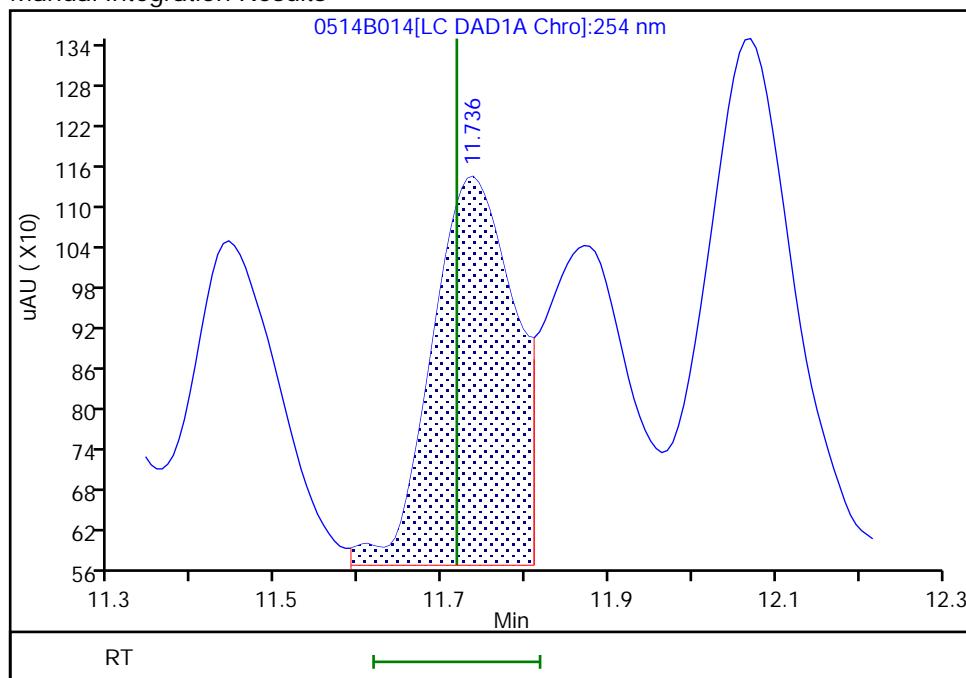
RT: 11.74
 Area: 7194
 Amount: 0.024800
 Amount Units: ug/mL

Processing Integration Results



RT: 11.74
 Area: 3927
 Amount: 0.019880
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-May-2019 10:11:49

Audit Action: Split an Integrated Peak

Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 458150

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 22:56 Calibration End Date: 05/15/2019 01:42 Calibration ID: 36356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/32	0514B032.D
Level 2	IC 280-458150/31	0514B031.D
Level 3	IC 280-458150/30	0514B030.D
Level 4	IC 280-458150/29	0514B029.D
Level 5	IC 280-458150/28	0514B028.D
Level 6	IC 280-458150/27	0514B027.D
Level 7	IC 280-458150/26	0514B026.D
Level 8	IC 280-458150/25	0514B025.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.554	6.555	6.559	6.556	6.556	6.556	6.556	6.557			6.456 - 6.656	6.556
DNX	6.894	6.888	6.893	6.889	6.889	6.889	6.890	6.884			6.789 - 6.989	6.890
MNX	7.354	7.355	7.353	7.356	7.349	7.349	7.350	7.344			7.206 - 7.506	7.351

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 458150

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 22:56 Calibration End Date: 05/15/2019 01:42 Calibration ID: 36356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/32	0514B032.D
Level 2	IC 280-458150/31	0514B031.D
Level 3	IC 280-458150/30	0514B030.D
Level 4	IC 280-458150/29	0514B029.D
Level 5	IC 280-458150/28	0514B028.D
Level 6	IC 280-458150/27	0514B027.D
Level 7	IC 280-458150/26	0514B026.D
Level 8	IC 280-458150/25	0514B025.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
TNX	154545 212972	183816 205213	207013 212865	204416 213938	Ave		199347.299				10.3		20.0			
DNX	144406 148329	148032 146825	156114 149647	143688 150054	Ave		148386.904				2.6		20.0			
MNX	132005 138565	138440 135687	136264 137584	135685 138073	Ave		136537.997				1.6		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.: 280-124912-1 Analy Batch No.: 458150

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 22:56 Calibration End Date: 05/15/2019 01:42 Calibration ID: 36356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/32	0514B032.D
Level 2	IC 280-458150/31	0514B031.D
Level 3	IC 280-458150/30	0514B030.D
Level 4	IC 280-458150/29	0514B029.D
Level 5	IC 280-458150/28	0514B028.D
Level 6	IC 280-458150/27	0514B027.D
Level 7	IC 280-458150/26	0514B026.D
Level 8	IC 280-458150/25	0514B025.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	3094 143793	9200 213078	20722 535379	51155	85274	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2891 102880	7409 149797	15627 375511	35958	59391	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3081 110843	8078 160561	15902 402829	39586	64682	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\20190514-81869.b\0514B025.D
 Lims ID: IC DMT L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 14-May-2019 22:56:27 ALS Bottle#: 25 Worklist Smp#: 25
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L8
 Misc. Info.: 280-0081869-025
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:22 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.557	6.556	0.001	535379	2.50	2.69	
5 DNX	1	6.884	6.889	-0.005	375511	2.50	2.53	
6 MNX	1	7.344	7.356	-0.012	402829	2.92	2.95	

Reagents:

8330 DMT_00002 Amount Added: 125.00 Units: uL

Report Date: 15-May-2019 10:58:23

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B025.D

Injection Date: 14-May-2019 22:56:27

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L8

Worklist Smp#: 25

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

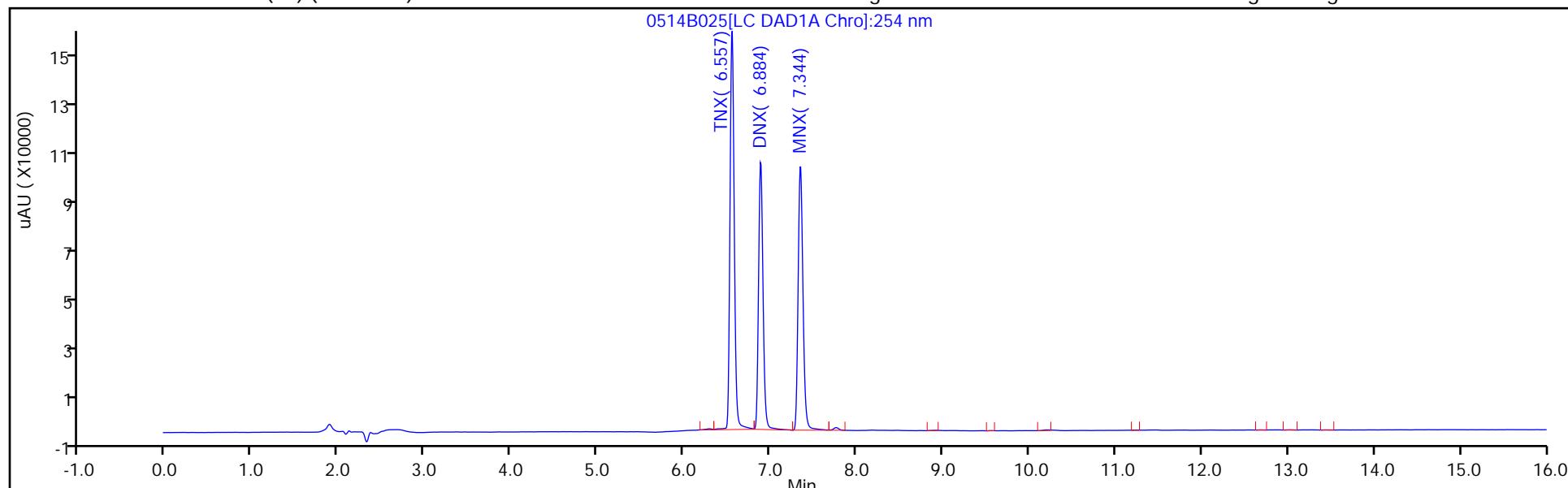
ALS Bottle#: 25

Method: 8330_X3

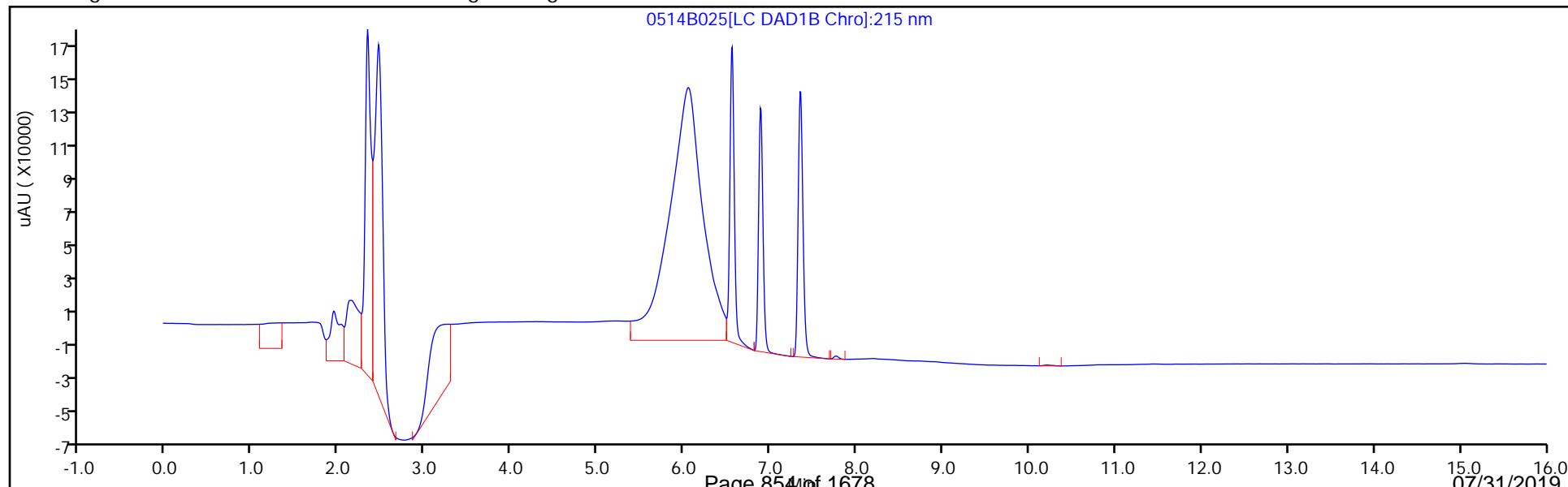
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B026.D
 Lims ID: IC DMT L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 14-May-2019 23:20:08 ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L7
 Misc. Info.: 280-0081869-026
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:24 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.556	0.000	213078	1.00	1.07	
5 DNX	1	6.890	6.889	0.001	149797	1.00	1.01	
6 MNX	1	7.350	7.356	-0.006	160561	1.17	1.18	

Reagents:

8330 DMT_00002 Amount Added: 50.00 Units: uL

Report Date: 15-May-2019 10:58:24

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B026.D

Injection Date: 14-May-2019 23:20:08

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L7

Worklist Smp#: 26

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

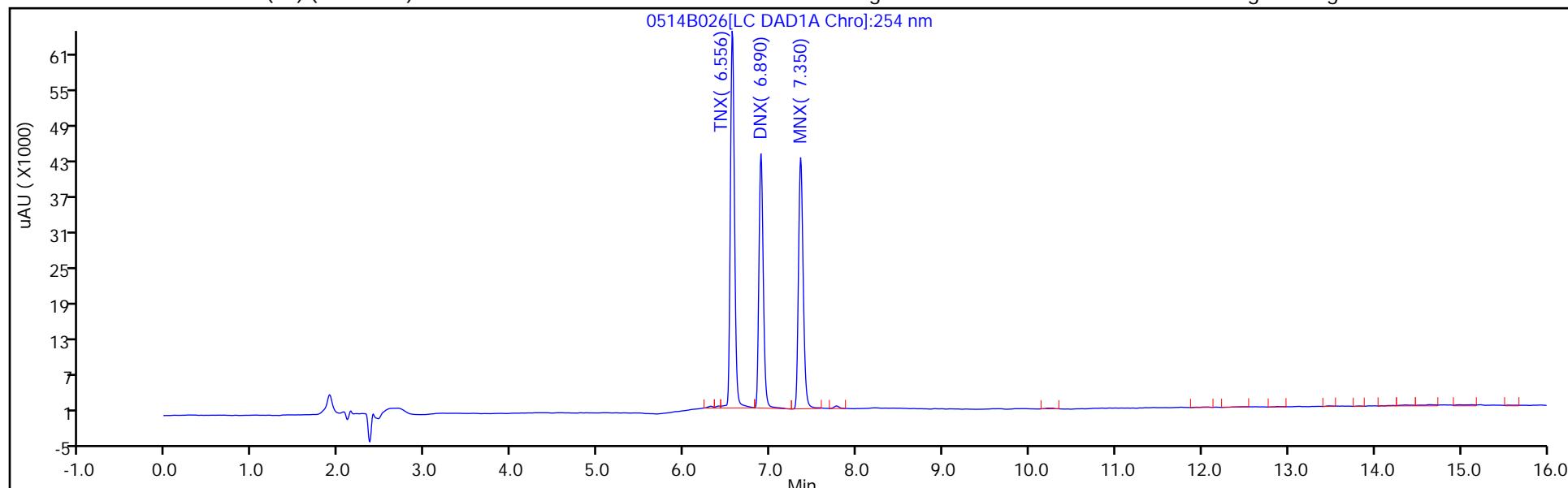
ALS Bottle#: 26

Method: 8330_X3

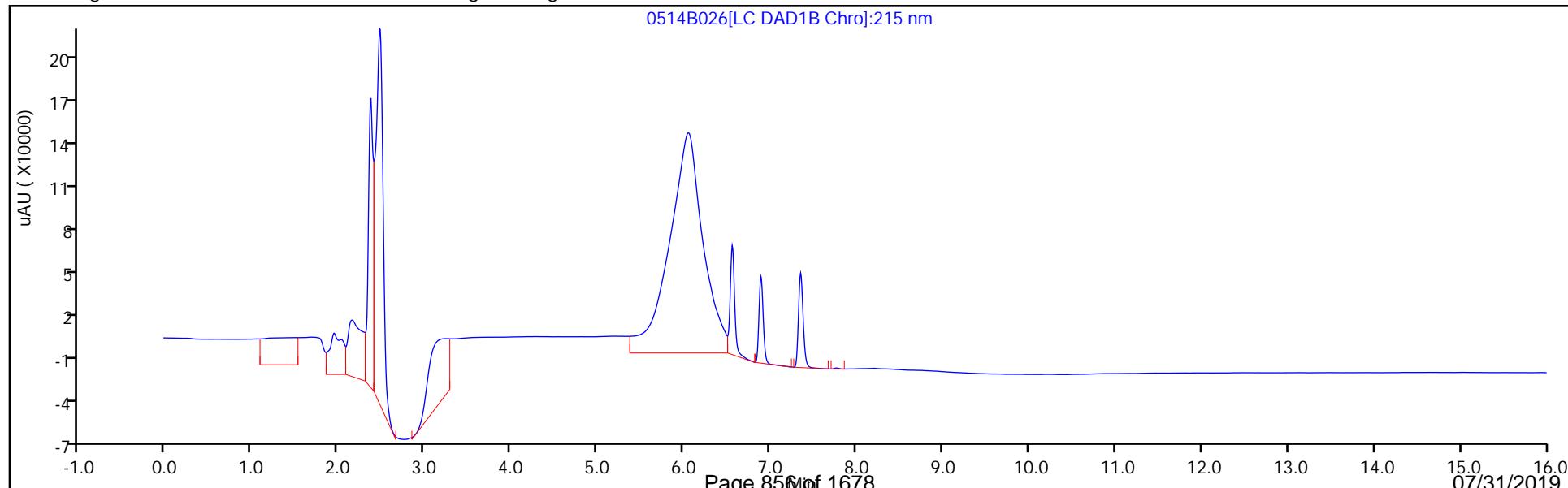
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B027.D
 Lims ID: IC DMT L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 14-May-2019 23:43:50 ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L6
 Misc. Info.: 280-0081869-027
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:25 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.556	0.000	143793	0.7007	0.7213	
5 DNX	1	6.889	6.889	0.000	102880	0.7007	0.6933	
6 MNX	1	7.349	7.356	-0.007	110843	0.8169	0.8118	

Reagents:

8330 DMT_00002 Amount Added: 35.00 Units: uL

Report Date: 15-May-2019 10:58:26

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B027.D

Injection Date: 14-May-2019 23:43:50

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L6

Worklist Smp#: 27

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

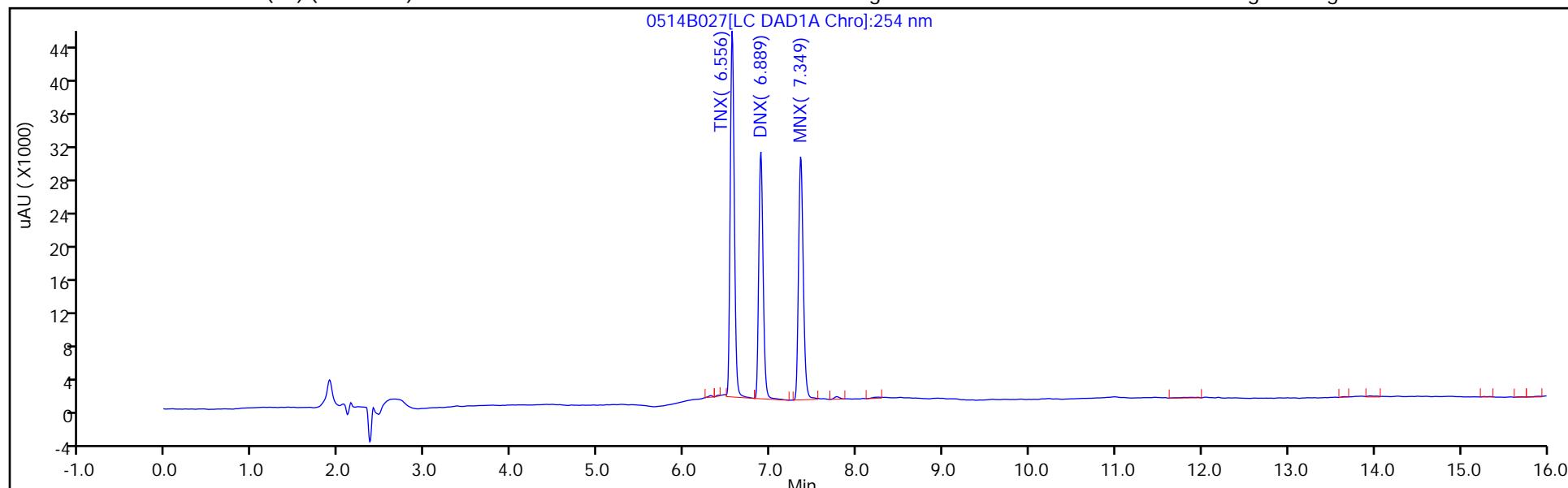
ALS Bottle#: 27

Method: 8330_X3

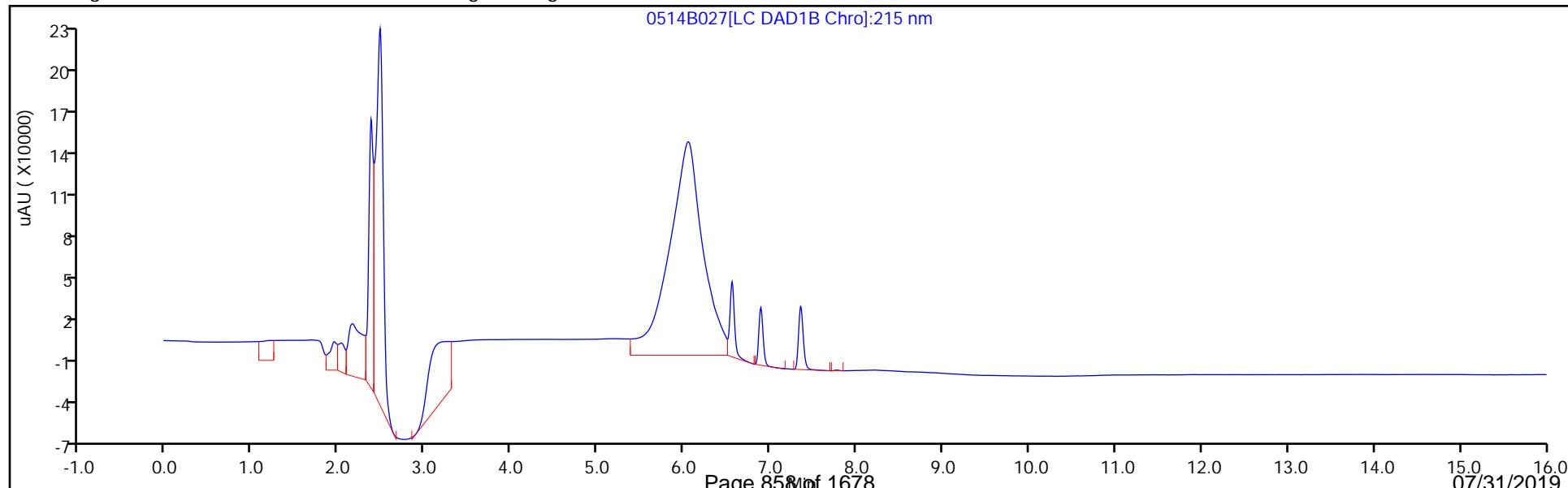
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B028.D
 Lims ID: IC DMT L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 15-May-2019 00:07:31 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L5
 Misc. Info.: 280-0081869-028
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:26 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.556	0.000	85274	0.4004	0.4278	
5 DNX	1	6.889	6.889	0.000	59391	0.4004	0.4002	
6 MNX	1	7.349	7.356	-0.007	64682	0.4668	0.4737	

Reagents:

8330 DMT_00002 Amount Added: 20.00 Units: uL

Report Date: 15-May-2019 10:58:27

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190514-81869.b\\0514B028.D

Injection Date: 15-May-2019 00:07:31

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L5

Worklist Smp#: 28

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

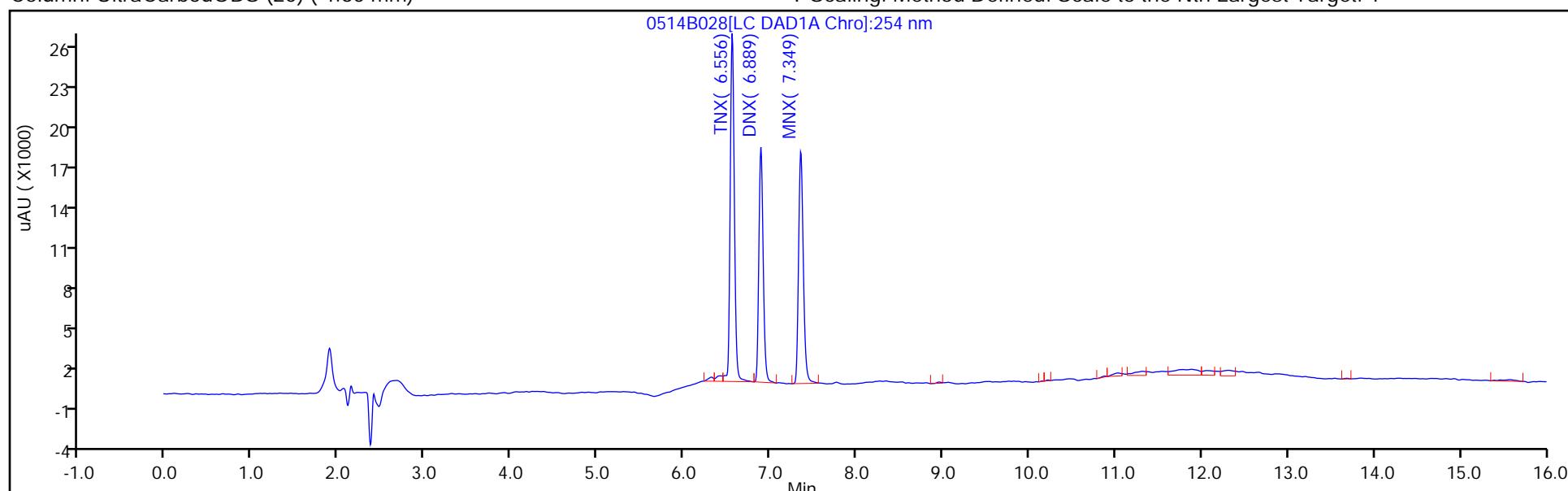
ALS Bottle#: 28

Method: 8330_X3

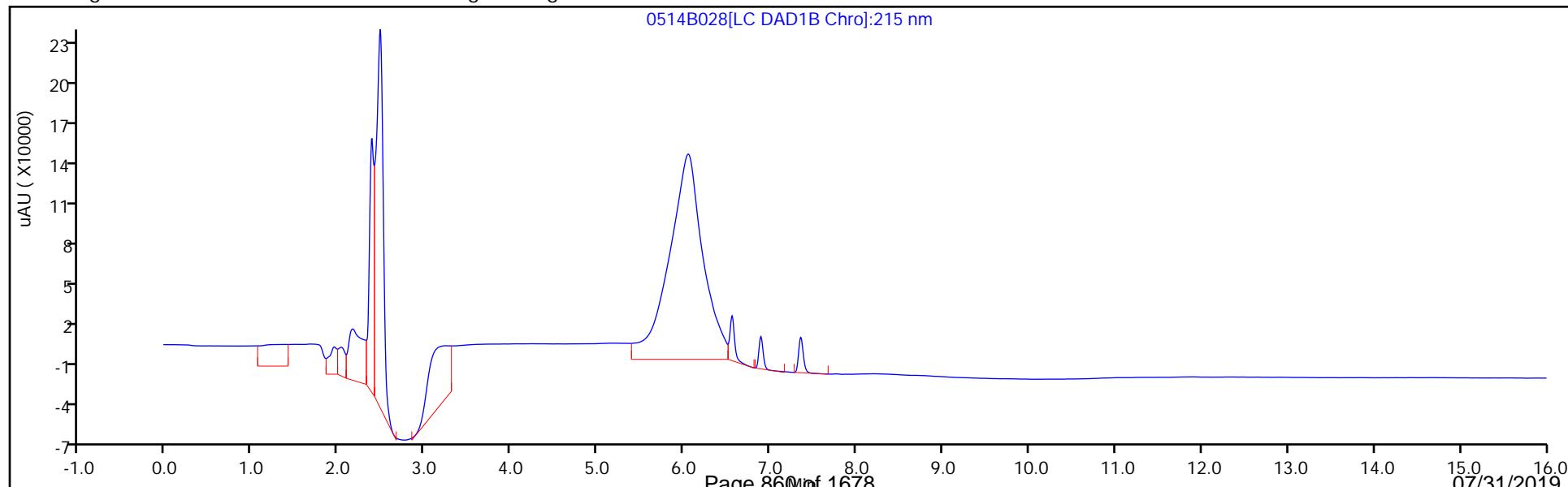
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B029.D
 Lims ID: IC DMT L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 15-May-2019 00:31:14 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L4
 Misc. Info.: 280-0081869-029
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:27 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh

Date:

15-May-2019 10:08:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.556	0.000	51155	0.2503	0.2566	
5 DNX	1	6.889	6.889	0.000	35958	0.2503	0.2423	
6 MNX	1	7.356	7.356	0.000	39586	0.2918	0.2899	

Reagents:

8330 DMT_00002

Amount Added: 12.50

Units: uL

Report Date: 15-May-2019 10:58:28

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B029.D

Injection Date: 15-May-2019 00:31:14

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L4

Worklist Smp#: 29

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

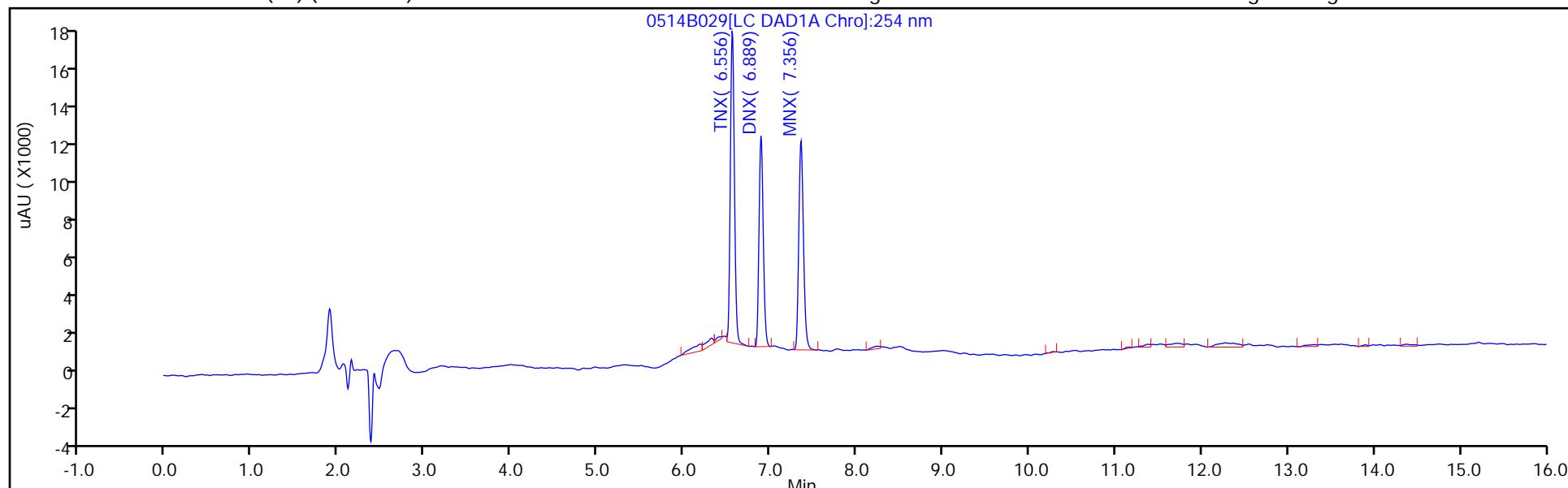
ALS Bottle#: 29

Method: 8330_X3

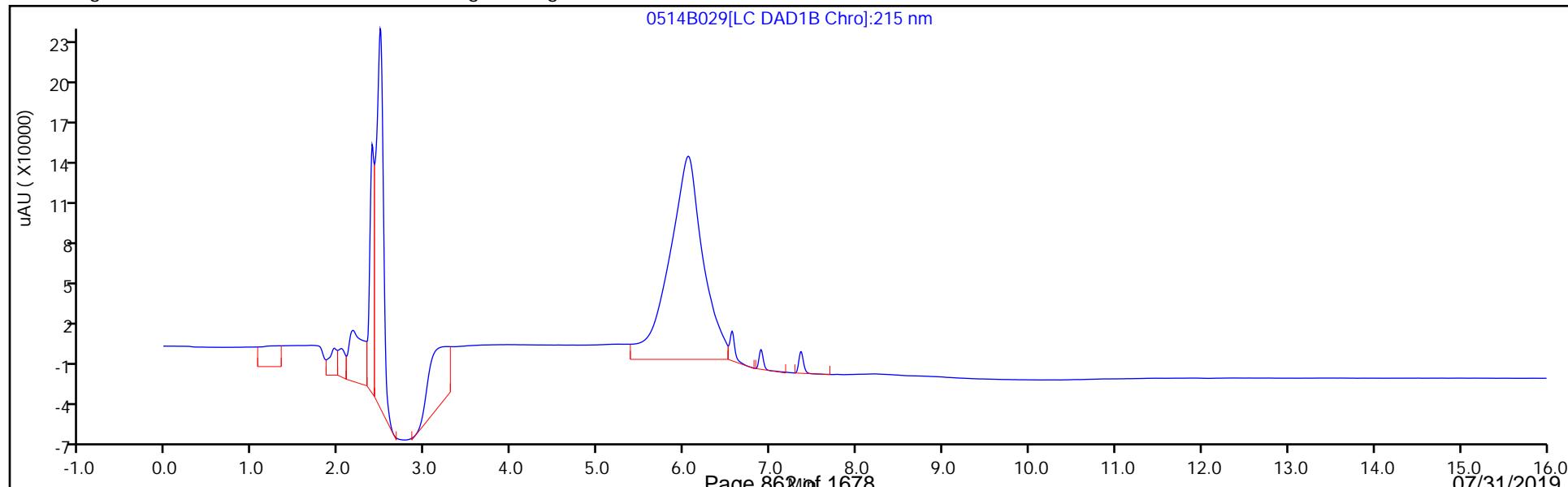
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B030.D
 Lims ID: IC DMT L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-May-2019 00:54:58 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L3
 Misc. Info.: 280-0081869-030
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:28 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.559	6.556	0.003	20722	0.1001	0.1039	
5 DNX	1	6.893	6.889	0.004	15627	0.1001	0.1053	
6 MNX	1	7.353	7.356	-0.003	15902	0.1167	0.1165	

Reagents:

8330 DMT_00002 Amount Added: 5.00 Units: uL

Report Date: 15-May-2019 10:58:29

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B030.D

Injection Date: 15-May-2019 00:54:58

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L3

Worklist Smp#: 30

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

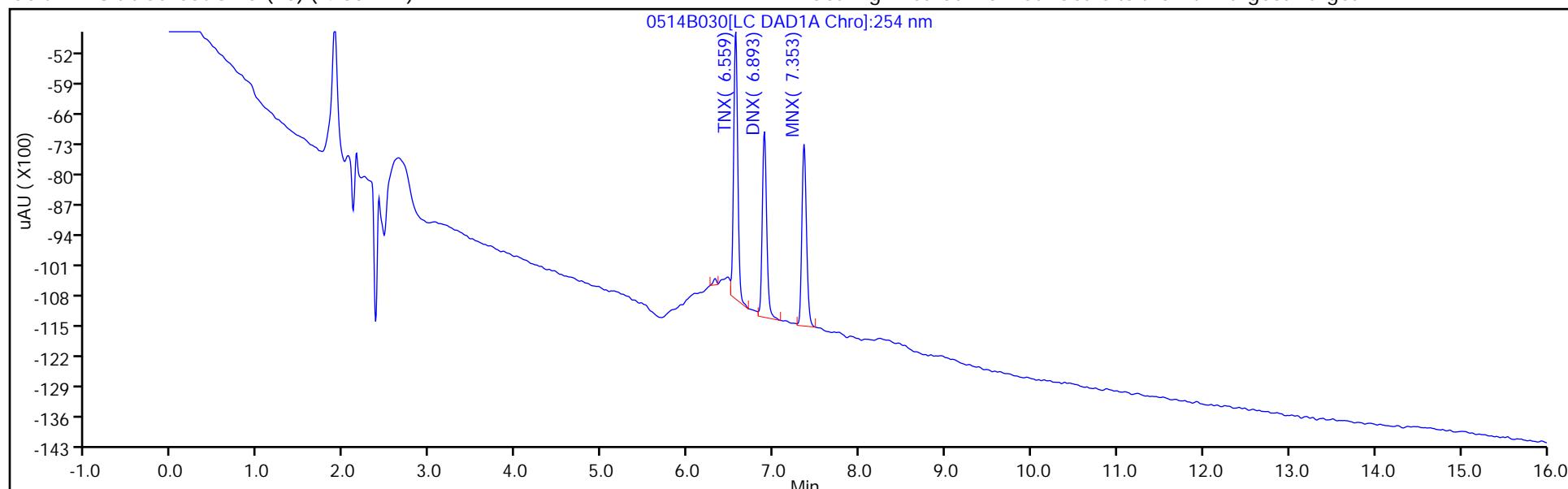
ALS Bottle#: 30

Method: 8330_X3

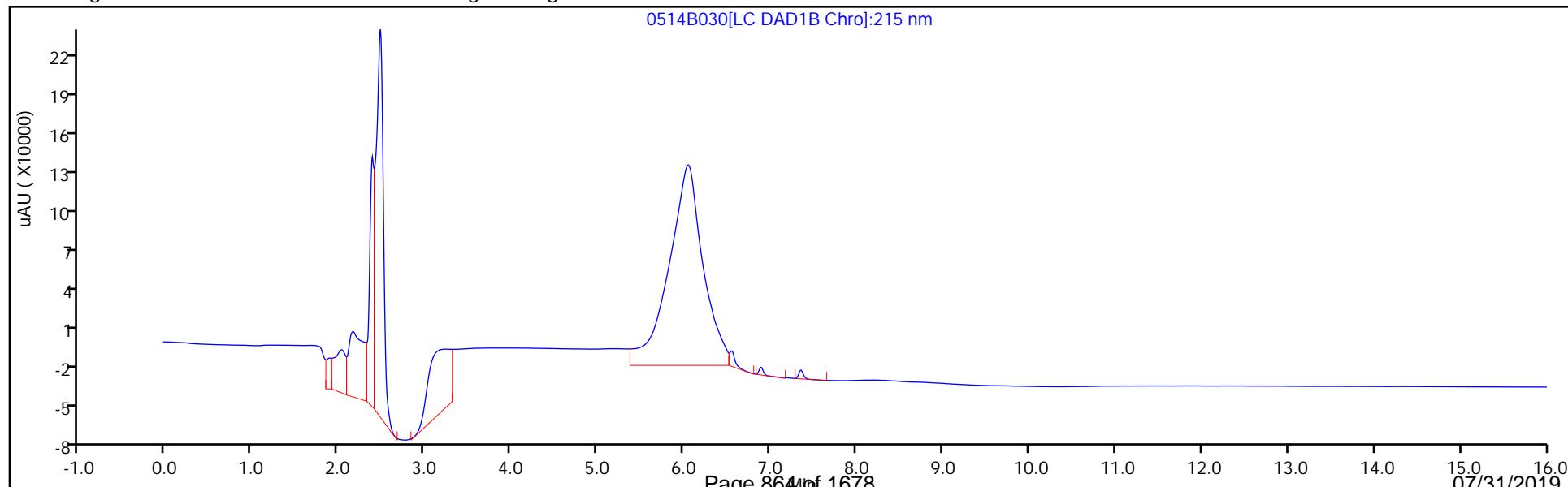
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B031.D
 Lims ID: IC DMT L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-May-2019 01:18:42 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L2
 Misc. Info.: 280-0081869-031
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:29 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:23:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.555	6.556	-0.001	9200	0.0501	0.0462	M
5 DNX	1	6.888	6.889	-0.001	7409	0.0501	0.0499	
6 MNX	1	7.355	7.356	-0.001	8078	0.0584	0.0592	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 2.50 Units: uL

Report Date: 15-May-2019 10:58:30

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B031.D

Injection Date: 15-May-2019 01:18:42

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L2

Worklist Smp#: 31

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

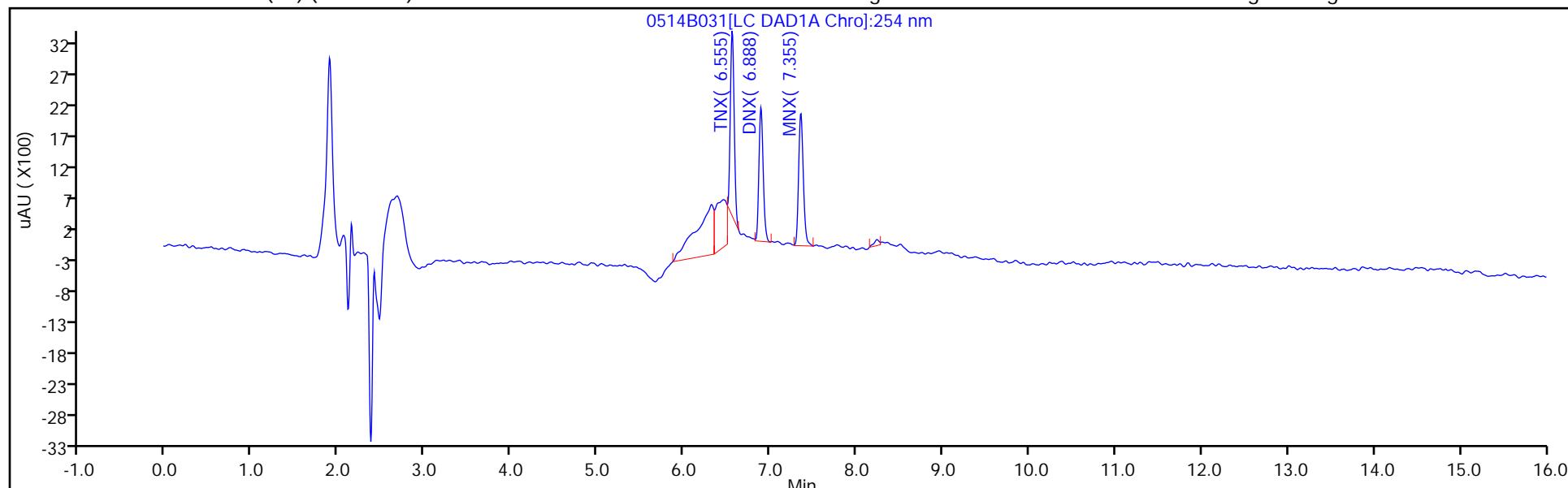
ALS Bottle#: 31

Method: 8330_X3

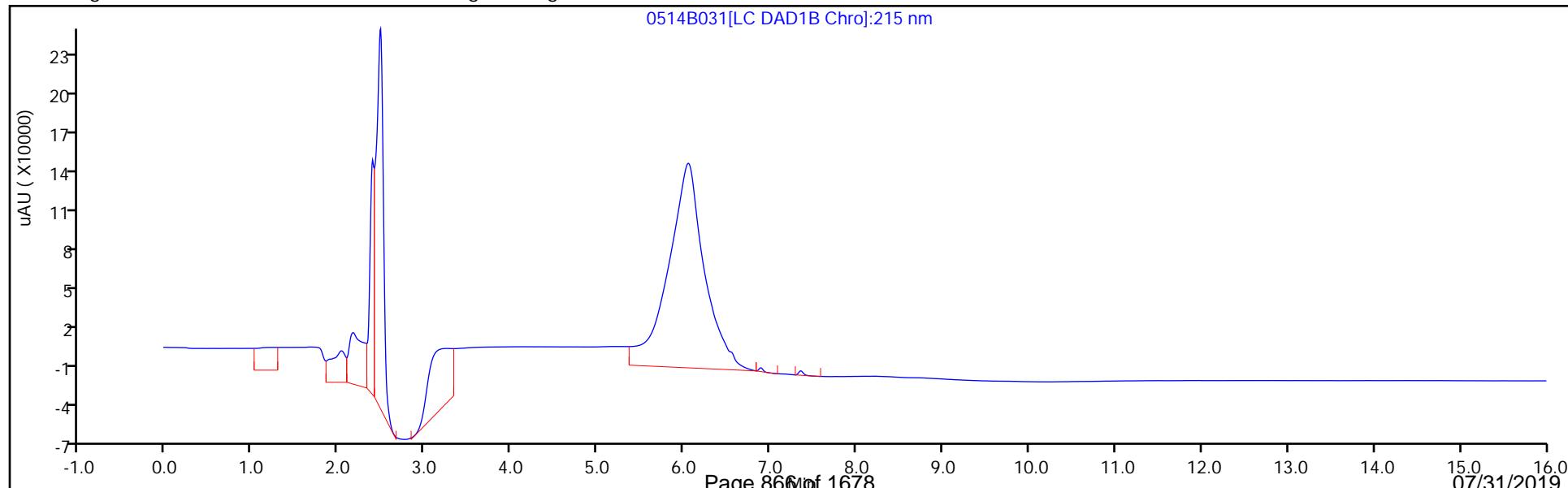
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver

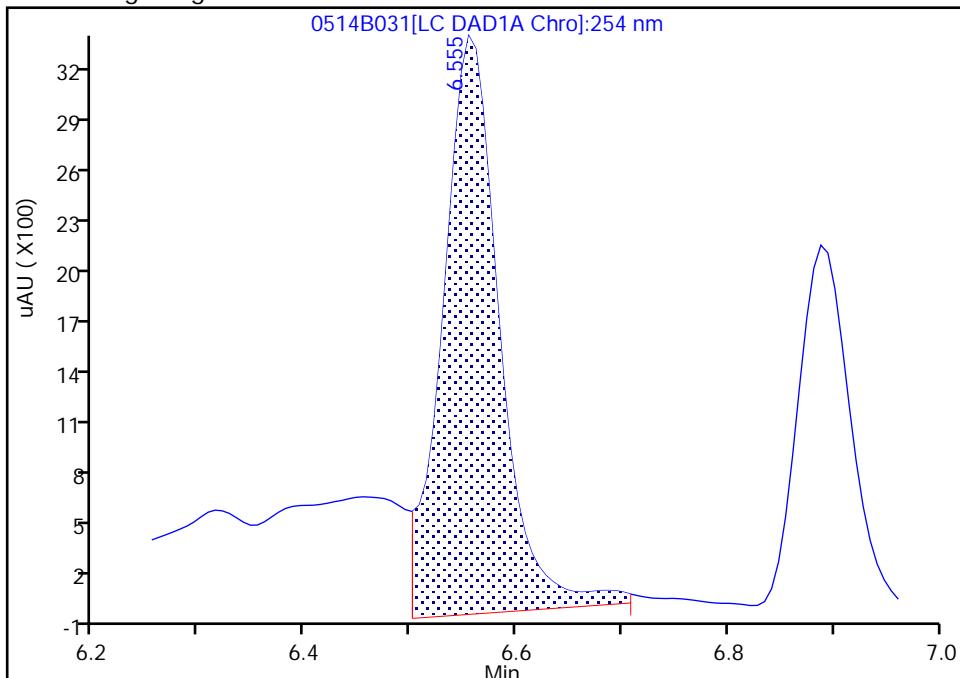
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B031.D
 Injection Date: 15-May-2019 01:18:42 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L2
 Client ID:
 Operator ID: hkf ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

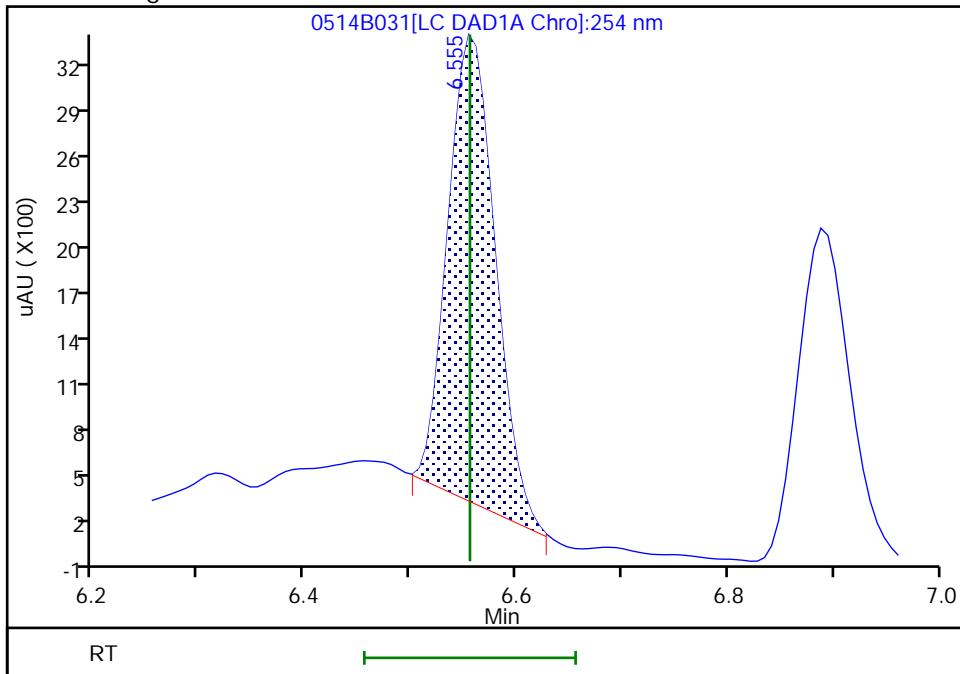
Processing Integration Results

RT: 6.55
 Area: 12685
 Amount: 0.059795
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 9200
 Amount: 0.046151
 Amount Units: ug/mL



Reviewer: fiedlerh, 15-May-2019 10:23:41

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Lims ID: IC DMT L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-May-2019 01:42:24 ALS Bottle#: 32 Worklist Smp#: 32
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L1
 Misc. Info.: 280-0081869-032
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:30 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:24:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.554	6.556	-0.002	3094	0.0200	0.0155	M
5 DNX	1	6.894	6.889	0.005	2891	0.0200	0.0195	
6 MNX	1	7.354	7.356	-0.002	3081	0.0233	0.0226	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 1.00 Units: uL

Report Date: 15-May-2019 10:58:31

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Injection Date: 15-May-2019 01:42:24

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L1

Worklist Smp#: 32

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

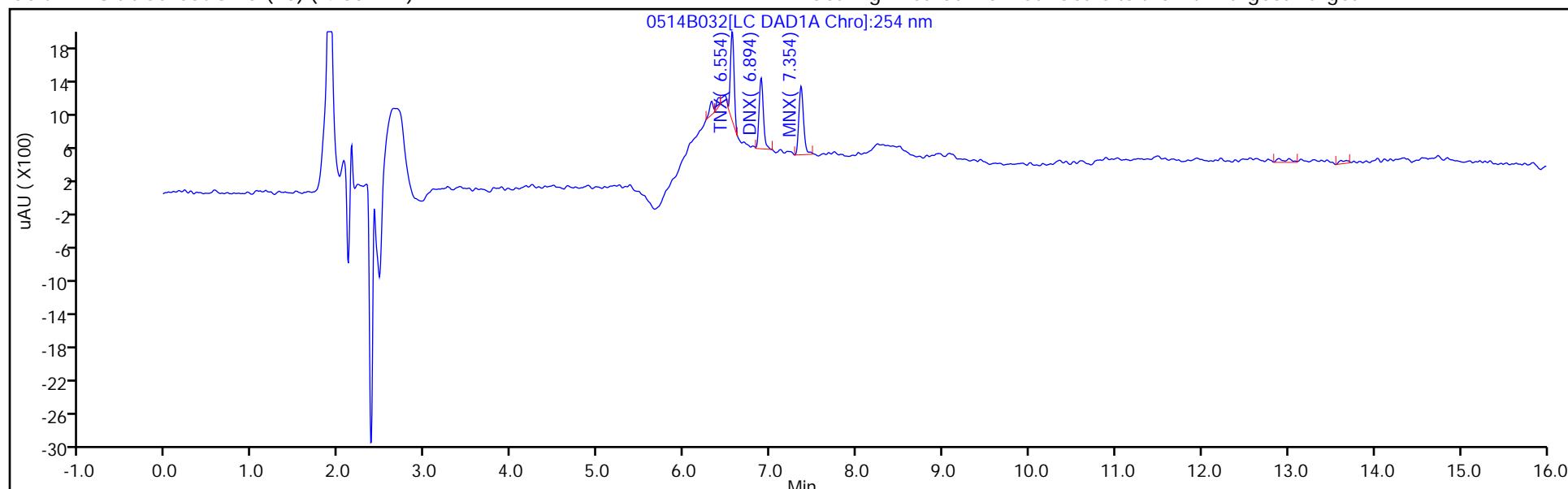
ALS Bottle#: 32

Method: 8330_X3

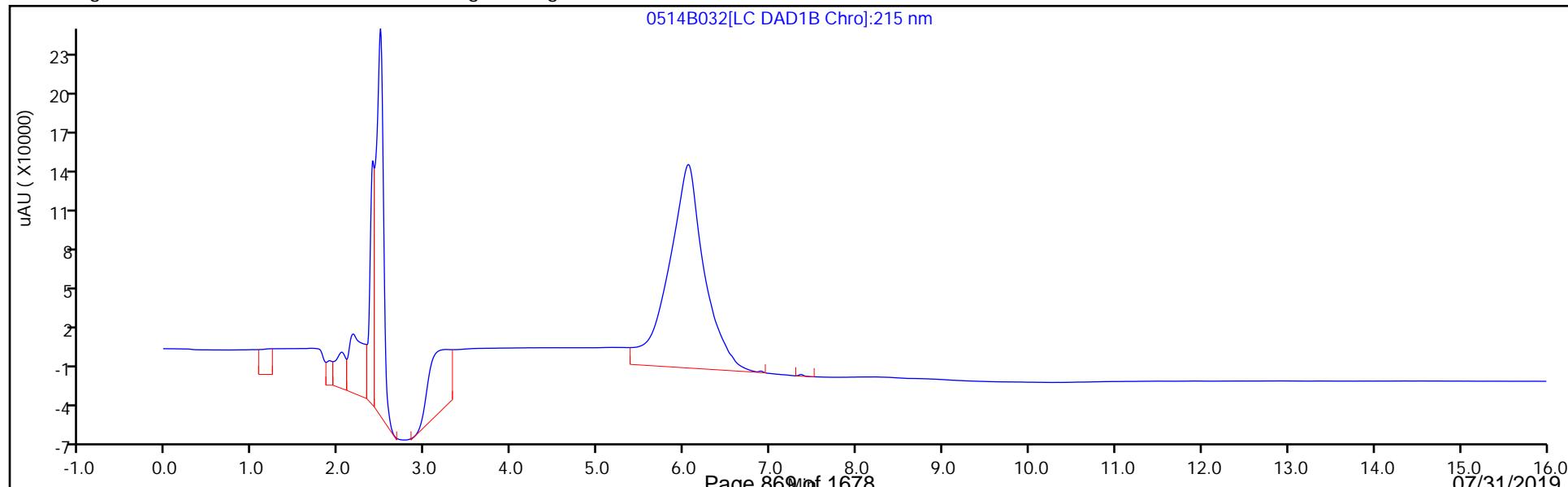
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver

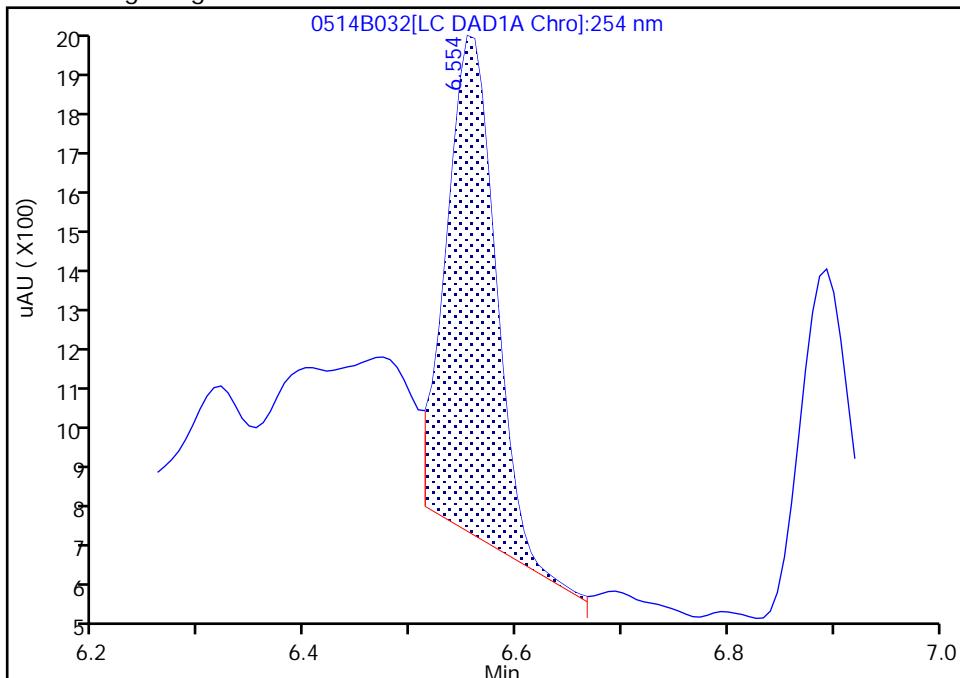
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Injection Date: 15-May-2019 01:42:24 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L1
 Client ID:
 Operator ID: hkf ALS Bottle#: 32 Worklist Smp#: 32
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

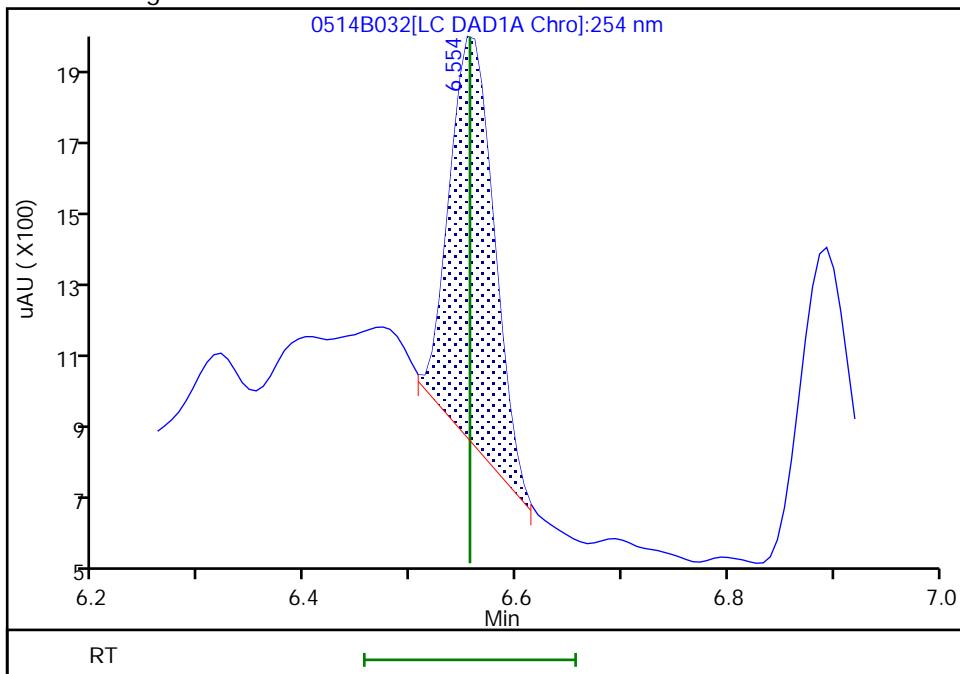
Processing Integration Results

RT: 6.55
 Area: 3749
 Amount: 0.018428
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 3094
 Amount: 0.015521
 Amount Units: ug/mL



Reviewer: fiedlerh, 15-May-2019 10:24:03

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 463276

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
HMX	6.642	6.648	6.645	6.638	6.646	6.644	6.645	6.639			6.493 - 6.793	6.643
RDX	7.762	7.768	7.759	7.758	7.759	7.764	7.772	7.759			7.607 - 7.907	7.763
Picric acid	8.209	8.215	8.199	8.191	8.179	8.171	8.158	8.085			8.027 - 8.327	8.176
1,3,5-Trinitrobenzene	8.902	8.908	8.899	8.898	8.899	8.904	8.912	8.899			8.747 - 9.047	8.903
1,3-Dinitrobenzene	9.562	9.568	9.565	9.565	9.559	9.571	9.578	9.565			9.407 - 9.707	9.567
Nitrobenzene	9.949	9.954	9.952	9.951	9.945	9.957	9.965	9.952			9.793 - 10.093	9.953
Tetryl	10.275	10.288	10.279	10.278	10.272	10.291	10.298	10.285			10.120 - 10.420	10.283
Nitroglycerin	10.775	10.788	10.779	10.785	10.779	10.791	10.798	10.778			10.620 - 10.920	10.784
2,4,6-Trinitrotoluene	11.229	11.241	11.232	11.238	11.232	11.244	11.252	11.238			11.123 - 11.323	11.238
4-Amino-2,6-dinitrotoluene	11.422	11.434	11.425	11.425	11.419	11.437	11.452	11.432			11.317 - 11.517	11.431
2-Amino-4,6-dinitrotoluene	11.715	11.721	11.712	11.718	11.705	11.731	11.738	11.718			11.603 - 11.803	11.720
2,6-Dinitrotoluene	11.842	11.854	11.852	11.851	11.845	11.864	11.872	11.858			11.737 - 11.937	11.855
2,4-Dinitrotoluene	12.042	12.054	12.045	12.051	12.039	12.064	12.072	12.052			11.937 - 12.137	12.052
2-Nitrotoluene	12.882	12.894	12.892	12.891	12.879	12.904	12.912	12.898			12.727 - 13.027	12.894
4-Nitrotoluene	13.329	13.334	13.332	13.331	13.325	13.344	13.358	13.338			13.167 - 13.467	13.336
3-Nitrotoluene	13.915	13.934	13.932	13.925	13.919	13.944	13.958	13.938			13.767 - 14.067	13.933
PETN	15.015	15.041	15.032	15.025	15.019	15.051	15.058	15.045			14.860 - 15.160	15.036
1,2-Dinitrobenzene	8.742	8.748	8.739	8.745	8.739	8.751	8.752	8.745			8.587 - 8.887	8.745

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 463276

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD	
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2									
HMX	89750 95318	89840 97413	85950 97946	87784 90666	Ave		91833.2446				4.9		20.0				
RDX	116900 107183	113880 113994	106270 115333	106608 108796	Ave		111120.423				3.9		20.0				
Picric acid	115100 83438	96140 88936	86330 89601	83168 83162	Ave		90734.2268				11.9		20.0				
1,3,5-Trinitrobenzene	231900 245955	252720 254053	234380 258481	241100 242023	Ave		245076.507				3.9		20.0				
1,3-Dinitrobenzene	296204 306151	323277 320835	303966 325162	304951 308858	Ave		311175.451				3.4		20.0				
Nitrobenzene	186976 193580	206567 204311	194850 209370	195944 199625	Ave		198903.056				3.8		20.0				
Tetryl	140150 162025	164180 169667	159520 173034	159276 167806	Ave		161957.218				6.2		20.0				
Nitroglycerin	63150 71560	71662 74671	69583 75926	70987 71328	Ave		71108.3505				5.4		20.0				
2,4,6-Trinitrotoluene	226295 222398	236315 231917	222122 235332	219442 224394	Ave		227276.691				2.8		20.0				
4-Amino-2,6-dinitrotoluene	176471 161515	171785 167985	161715 170409	160291 160853	Ave		166377.838				3.7		20.0				
2-Amino-4,6-dinitrotoluene	191476 204177	207458 212138	203998 213209	201440 207996	Ave		205236.402				3.3		20.0				
2,6-Dinitrotoluene	168594 153719	165942 161295	152672 165239	153236 153578	Ave		159284.393				4.2		20.0				
2,4-Dinitrotoluene	290669 296722	305549 310537	292715 315315	293844 298227	Ave		300447.252				3.0		20.0				
2-Nitrotoluene	127617 124990	135872 132549	127368 134538	127386 127948	Ave		129783.617				3.1		20.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 463276

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

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									
4-Nitrotoluene	107669 107174	111693 114057	107371 115455	108558 110063	Ave		110254.875				2.9		20.0				
3-Nitrotoluene	144721 139472	152410 147486	142161 150123	141510 143094	Ave		145122.200				3.1		20.0				
PETN	55530 76267	76864 79871	73030 80847	75248 76653	Ave		74288.8082				10.7		20.0				
1,2-Dinitrobenzene	130450 137375	142700 144760	136320 145938	137532 139553	Ave		139328.475				3.6		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.: 280-124912-1 Analy Batch No.: 463276

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.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	1795 68189	4492 97946	8595 226664	21946	38127	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	2338 79796	5694 115333	10627 271989	26652	42873	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Picric acid	Ave	2302 62255	4807 89601	8633 207904	20792	33375	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3,5-Trinitrobenzene	Ave	4638 177837	12636 258481	23438 605058	60275	98382	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3-Dinitrobenzene	Ave	5930 224809	16180 325487	30427 772917	76314	122583	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Ave	3747 143304	10349 209789	19524 500061	49084	77587	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Tetryl	Ave	2803 118767	8209 173034	15952 419514	39819	64810	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitroglycerin	Ave	12630 522695	35831 759263	69583 1783196	177468	286239	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2,4,6-Trinitrotoluene	Ave	4544 162991	11863 236273	22301 563229	55080	89315	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	3540 117942	8615 170920	16220 403338	40193	64800	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2-Amino-4,6-dinitrotoluene	Ave	3841 148942	10404 213849	20461 521549	50511	81916	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,6-Dinitrotoluene	Ave	3382 113245	8322 165735	15313 385096	38424	61672	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,4-Dinitrotoluene	Ave	5825 217811	15308 315946	29330 747059	73608	118926	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
2-Nitrotoluene	Ave	2560 93063	6814 134942	12775 320829	31942	50146	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
4-Nitrotoluene	Ave	2162 80159	5607 115917	10780 276257	27248	43041	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 463276

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

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
3-Nitrotoluene	Ave	2906 103653	7651 150723	14273 359167	35519	56012	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Ave	11106 559099	38432 808473	73030 1916332	188119	305068	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	2609 101332	7135 145938	13632 348882	34383	54950	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\20190701-83376.b\07010007.D
 Lims ID: IC MAIN L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 01-Jul-2019 14:40:42 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L8
 Misc. Info.: 280-0083376-007
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:43 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.639	6.643	-0.004	226664	2.50	2.47	
7 RDX	1	7.759	7.757	0.002	271989	2.50	2.45	
8 2,4,6-Trinitrophenol	1	8.085	8.177	-0.092	207904	2.50	2.29	
\$ 9 1,2-Dinitrobenzene	1	8.745	8.737	0.008	348882	2.50	2.50	
10 1,3,5-Trinitrobenzene	1	8.899	8.897	0.002	605058	2.50	2.47	
11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	772917	2.50	2.48	
12 Nitrobenzene	1	9.952	9.943	0.009	500061	2.51	2.51	
14 Tetryl	1	10.285	10.270	0.015	419514	2.50	2.59	
15 Nitroglycerin	2	10.778	10.770	0.008	1783196	25.0	25.1	
16 2,4,6-Trinitrotoluene	1	11.238	11.223	0.015	563229	2.51	2.48	
17 4-Amino-2,6-dinitrotoluene	1	11.432	11.417	0.015	403338	2.51	2.42	
18 2-Amino-4,6-dinitrotoluene	1	11.718	11.703	0.015	521549	2.51	2.54	
19 2,6-Dinitrotoluene	1	11.858	11.837	0.021	385096	2.51	2.42	
20 2,4-Dinitrotoluene	1	12.052	12.037	0.015	747059	2.51	2.49	
21 o-Nitrotoluene	1	12.898	12.877	0.021	320829	2.51	2.47	
22 p-Nitrotoluene	1	13.338	13.317	0.021	276257	2.51	2.51	
23 m-Nitrotoluene	1	13.938	13.917	0.021	359167	2.51	2.47	
24 PETN	2	15.045	15.010	0.035	1916332	25.0	25.8	

Reagents:

8330\TermStk_00058 Amount Added: 125.00 Units: uL

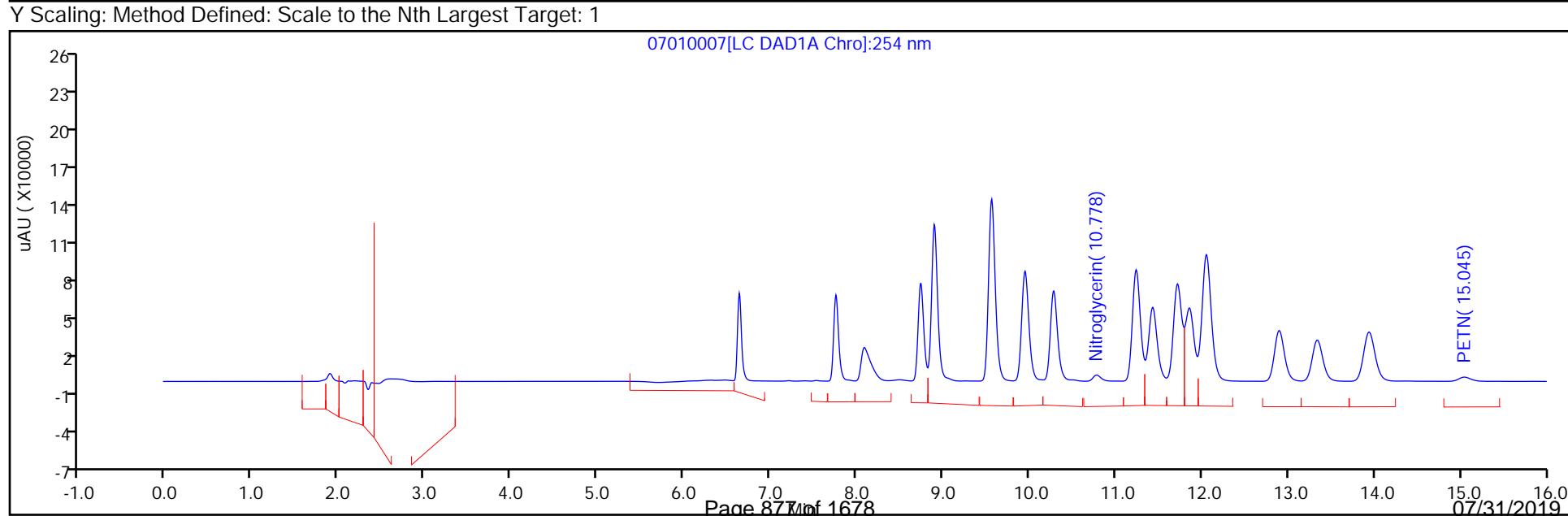
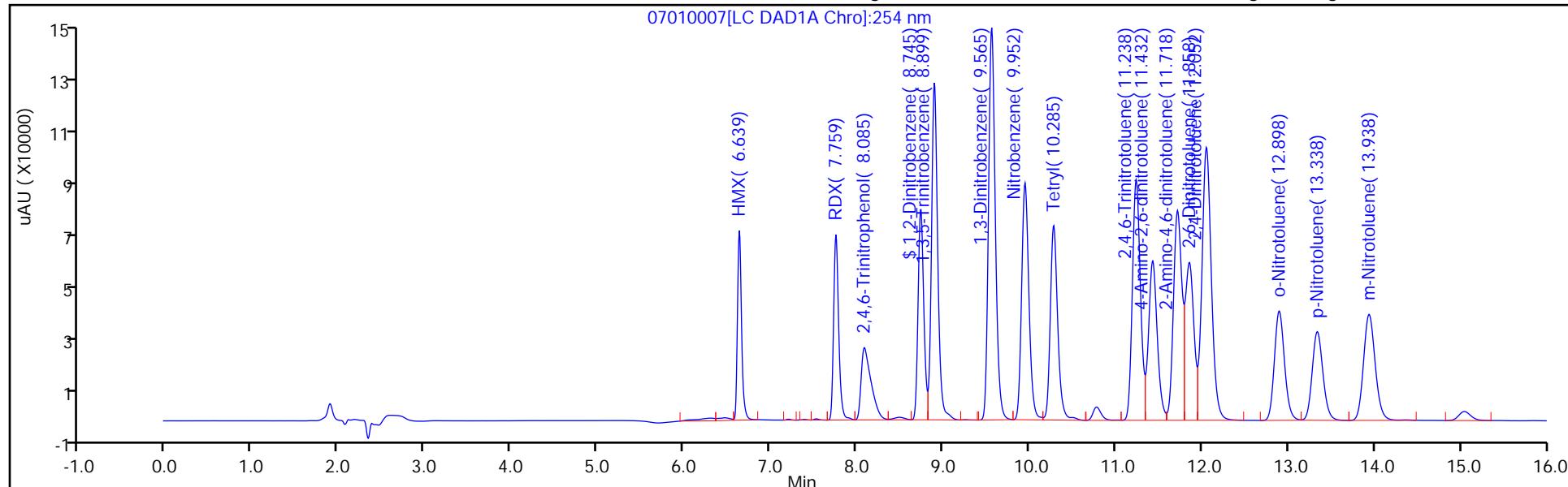
Report Date: 02-Jul-2019 11:34:44

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010007.D
 Injection Date: 01-Jul-2019 14:40:42 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L8 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 7
 Method: 8330_X3 Dil. Factor: 1.0000 ALS Bottle#: 7
 Column: UltraCarb5uODS (20) (4.60 mm) Limit Group: GCSV - 8330

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010008.D
 Lims ID: IC MAIN L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 01-Jul-2019 15:04:44 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L7
 Misc. Info.: 280-0083376-008
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:46 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.645	6.638	0.007	97946	1.00	1.07	
7 RDX	1	7.772	7.758	0.014	115333	1.00	1.04	
8 2,4,6-Trinitrophenol	1	8.158	8.191	-0.033	89601	1.00	0.9875	
\$ 9 1,2-Dinitrobenzene	1	8.752	8.745	0.007	145938	1.00	1.05	
10 1,3,5-Trinitrobenzene	1	8.912	8.898	0.014	258481	1.00	1.05	
11 1,3-Dinitrobenzene	1	9.578	9.565	0.013	325487	1.00	1.05	
12 Nitrobenzene	1	9.965	9.951	0.014	209789	1.00	1.05	
14 Tetryl	1	10.298	10.278	0.020	173034	1.00	1.07	
15 Nitroglycerin	2	10.798	10.785	0.013	759263	10.0	10.7	
16 2,4,6-Trinitrotoluene	1	11.252	11.238	0.014	236273	1.00	1.04	
17 4-Amino-2,6-dinitrotoluene	1	11.452	11.425	0.027	170920	1.00	1.03	
18 2-Amino-4,6-dinitrotoluene	1	11.738	11.718	0.020	213849	1.00	1.04	
19 2,6-Dinitrotoluene	1	11.872	11.851	0.021	165735	1.00	1.04	
20 2,4-Dinitrotoluene	1	12.072	12.051	0.021	315946	1.00	1.05	
21 o-Nitrotoluene	1	12.912	12.891	0.021	134942	1.00	1.04	
22 p-Nitrotoluene	1	13.358	13.331	0.027	115917	1.00	1.05	
23 m-Nitrotoluene	1	13.958	13.925	0.033	150723	1.00	1.04	
24 PETN	2	15.058	15.025	0.033	808473	10.0	10.9	

Reagents:

8330\TermStk_00058 Amount Added: 50.00 Units: uL

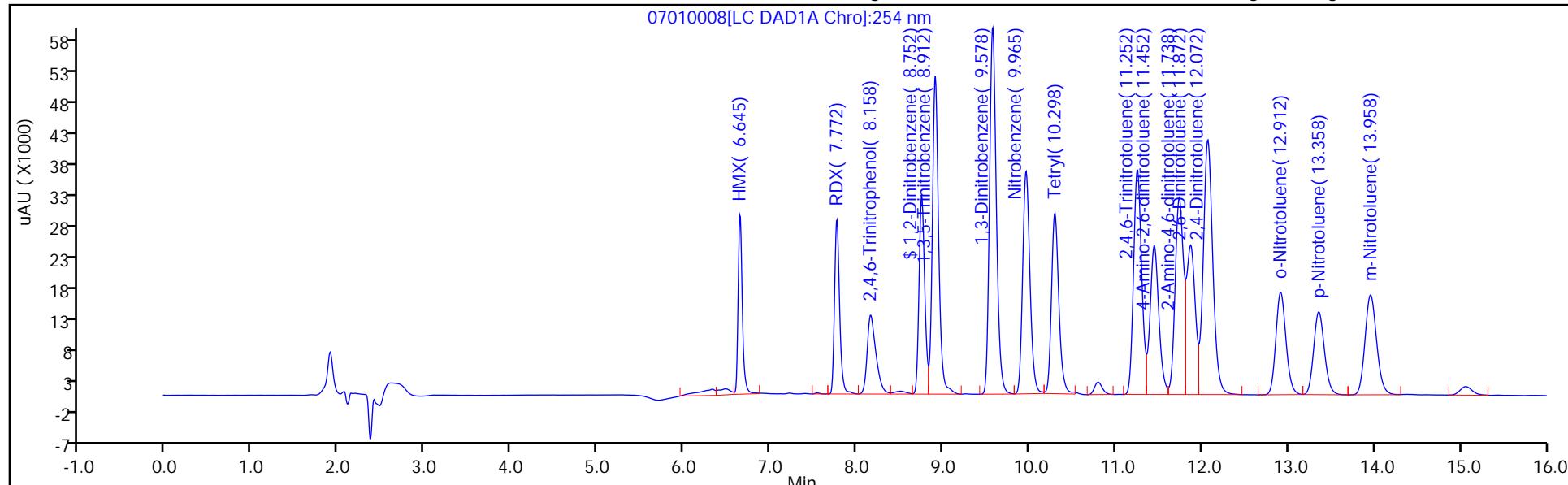
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

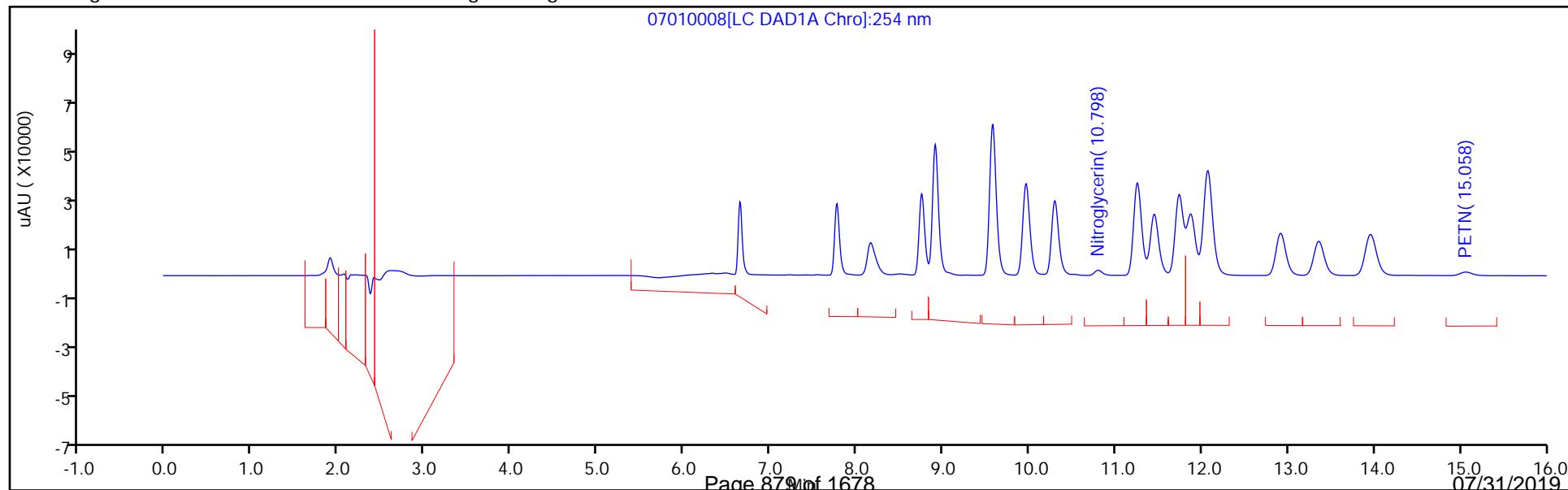
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010008.D
 Injection Date: 01-Jul-2019 15:04:44 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L7 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 8
 Method: 8330_X3 Dil. Factor: 1.0000 ALS Bottle#: 8
 Column: UltraCarb5uODS (20) (4.60 mm) Limit Group: GCSV - 8330

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
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010009.D
 Lims ID: IC MAIN L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 01-Jul-2019 15:27:41 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L6
 Misc. Info.: 280-0083376-009
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:47 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.644	6.643	0.001	68189	0.7000	0.7425	
7 RDX	1	7.764	7.757	0.007	79796	0.7000	0.7181	
8 2,4,6-Trinitrophenol	1	8.171	8.177	-0.006	62255	0.7000	0.6861	
\$ 9 1,2-Dinitrobenzene	1	8.751	8.737	0.014	101332	0.7000	0.7273	
10 1,3,5-Trinitrobenzene	1	8.904	8.897	0.007	177837	0.7000	0.7256	
11 1,3-Dinitrobenzene	1	9.571	9.557	0.014	224809	0.7007	0.7225	
12 Nitrobenzene	1	9.957	9.943	0.014	143304	0.7014	0.7205	
14 Tetryl	1	10.291	10.270	0.021	118767	0.7000	0.7333	
15 Nitroglycerin	2	10.791	10.770	0.021	522695	7.00	7.35	
16 2,4,6-Trinitrotoluene	1	11.244	11.223	0.021	162991	0.7028	0.7171	
17 4-Amino-2,6-dinitrotoluene	1	11.437	11.417	0.020	117942	0.7021	0.7089	
18 2-Amino-4,6-dinitrotoluene	1	11.731	11.703	0.028	148942	0.7021	0.7257	
19 2,6-Dinitrotoluene	1	11.864	11.837	0.027	113245	0.7021	0.7110	
20 2,4-Dinitrotoluene	1	12.064	12.037	0.027	217811	0.7014	0.7250	
21 o-Nitrotoluene	1	12.904	12.877	0.027	93063	0.7021	0.7171	
22 p-Nitrotoluene	1	13.344	13.317	0.027	80159	0.7028	0.7270	
23 m-Nitrotoluene	1	13.944	13.917	0.027	103653	0.7028	0.7142	
24 PETN	2	15.051	15.010	0.041	559099	7.00	7.53	

Reagents:

8330\TermStk_00058 Amount Added: 35.00 Units: uL

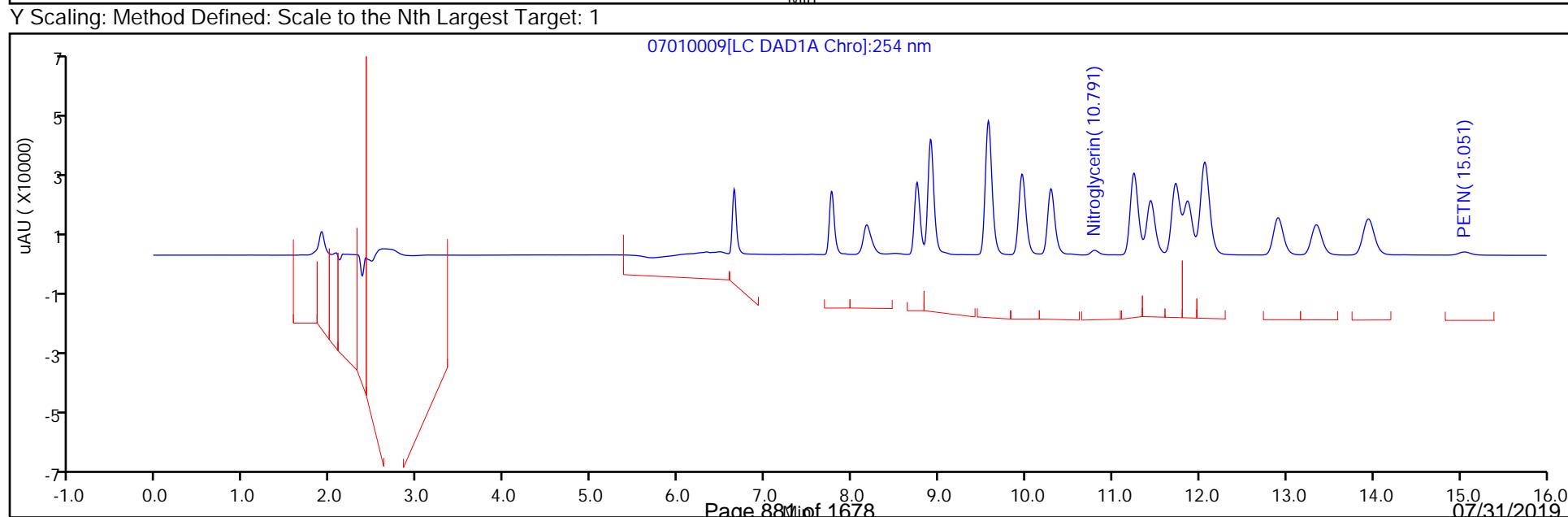
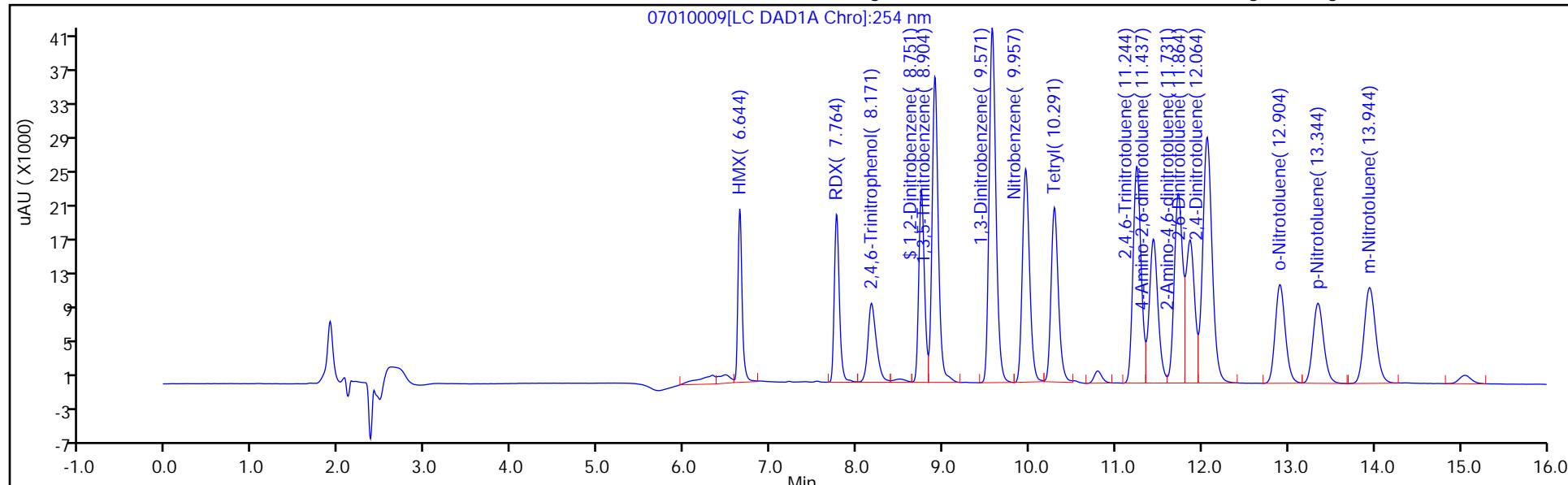
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010009.D
 Injection Date: 01-Jul-2019 15:27:41 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L6 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 9
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000 ALS Bottle#: 9
 Limit Group: GCSV - 8330
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010010.D
 Lims ID: IC MAIN L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 01-Jul-2019 15:50:38 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L5
 Misc. Info.: 280-0083376-010
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:49 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.646	6.638	0.008	38127	0.4000	0.4152	
7 RDX	1	7.759	7.758	0.001	42873	0.4000	0.3858	
8 2,4,6-Trinitrophenol	1	8.179	8.191	-0.012	33375	0.4000	0.3678	
\$ 9 1,2-Dinitrobenzene	1	8.739	8.745	-0.006	54950	0.4000	0.3944	
10 1,3,5-Trinitrobenzene	1	8.899	8.898	0.001	98382	0.4000	0.4014	
11 1,3-Dinitrobenzene	1	9.559	9.565	-0.006	122583	0.4004	0.3939	
12 Nitrobenzene	1	9.945	9.951	-0.006	77587	0.4008	0.3901	
14 Tetryl	1	10.272	10.278	-0.006	64810	0.4000	0.4002	
15 Nitroglycerin	2	10.779	10.785	-0.006	286239	4.00	4.03	
16 2,4,6-Trinitrotoluene	1	11.232	11.238	-0.006	89315	0.4016	0.3930	
17 4-Amino-2,6-dinitrotoluene	1	11.419	11.425	-0.006	64800	0.4012	0.3895	
18 2-Amino-4,6-dinitrotoluene	1	11.705	11.718	-0.013	81916	0.4012	0.3991	
19 2,6-Dinitrotoluene	1	11.845	11.851	-0.006	61672	0.4012	0.3872	
20 2,4-Dinitrotoluene	1	12.039	12.051	-0.012	118926	0.4008	0.3958	
21 o-Nitrotoluene	1	12.879	12.891	-0.012	50146	0.4012	0.3864	
22 p-Nitrotoluene	1	13.325	13.331	-0.006	43041	0.4016	0.3904	
23 m-Nitrotoluene	1	13.919	13.925	-0.006	56012	0.4016	0.3860	
24 PETN	2	15.019	15.025	-0.006	305068	4.00	4.11	

Reagents:

8330\TermStk_00058 Amount Added: 20.00 Units: uL

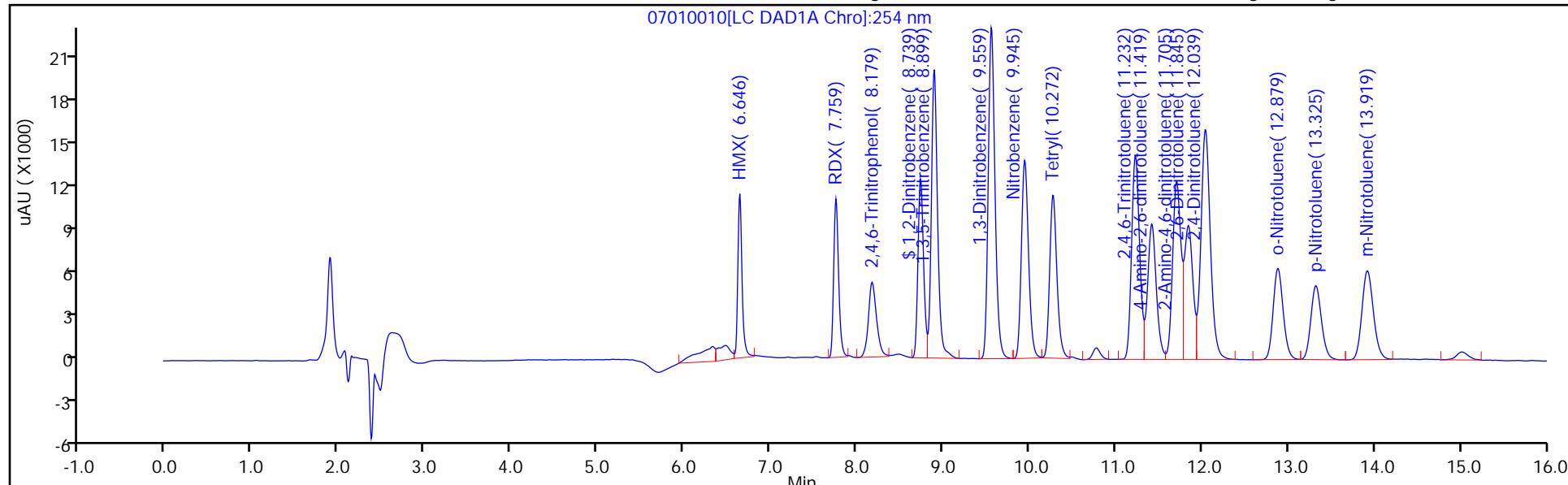
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

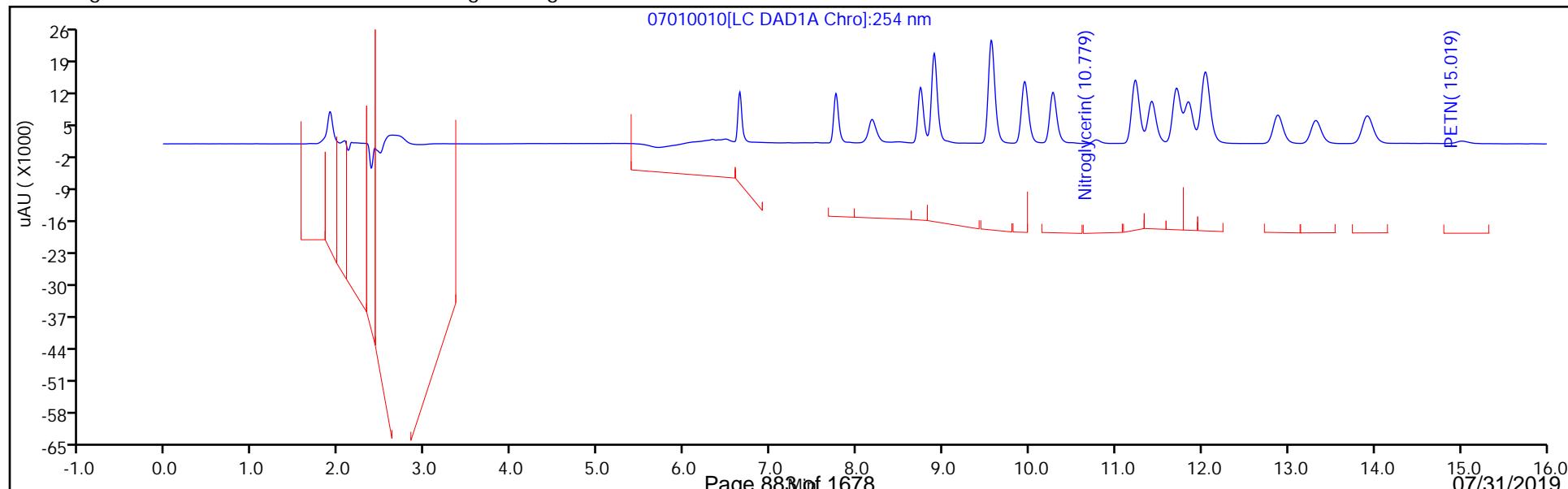
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010010.D
 Injection Date: 01-Jul-2019 15:50:38 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L5 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 10
 Method: 8330_X3 Dil. Factor: 1.0000 ALS Bottle#: 10
 Column: UltraCarb5uODS (20) (4.60 mm) Limit Group: GCSV - 8330

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
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010011.D
 Lims ID: IC MAIN L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 01-Jul-2019 16:13:37 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L4
 Misc. Info.: 280-0083376-011
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:51 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh

Date: 01-Jul-2019 16:40:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.638	6.643	-0.005	21946	0.2500	0.2390	
7 RDX	1	7.758	7.757	0.001	26652	0.2500	0.2398	
8 2,4,6-Trinitrophenol	1	8.191	8.177	0.014	20792	0.2500	0.2292	
\$ 9 1,2-Dinitrobenzene	1	8.745	8.737	0.008	34383	0.2500	0.2468	
10 1,3,5-Trinitrobenzene	1	8.898	8.897	0.001	60275	0.2500	0.2459	
11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	76314	0.2503	0.2452	
12 Nitrobenzene	1	9.951	9.943	0.008	49084	0.2505	0.2468	
14 Tetryl	1	10.278	10.270	0.008	39819	0.2500	0.2459	
15 Nitroglycerin	2	10.785	10.770	0.015	177468	2.50	2.50	
16 2,4,6-Trinitrotoluene	1	11.238	11.223	0.015	55080	0.2510	0.2423	
17 4-Amino-2,6-dinitrotoluene	1	11.425	11.417	0.008	40193	0.2508	0.2416	
18 2-Amino-4,6-dinitrotoluene	1	11.718	11.703	0.015	50511	0.2508	0.2461	
19 2,6-Dinitrotoluene	1	11.851	11.837	0.014	38424	0.2508	0.2412	
20 2,4-Dinitrotoluene	1	12.051	12.037	0.014	73608	0.2505	0.2450	
21 o-Nitrotoluene	1	12.891	12.877	0.014	31942	0.2508	0.2461	
22 p-Nitrotoluene	1	13.331	13.317	0.014	27248	0.2510	0.2471	
23 m-Nitrotoluene	1	13.925	13.917	0.008	35519	0.2510	0.2448	
24 PETN	2	15.025	15.010	0.015	188119	2.50	2.53	

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 02-Jul-2019 11:34:51

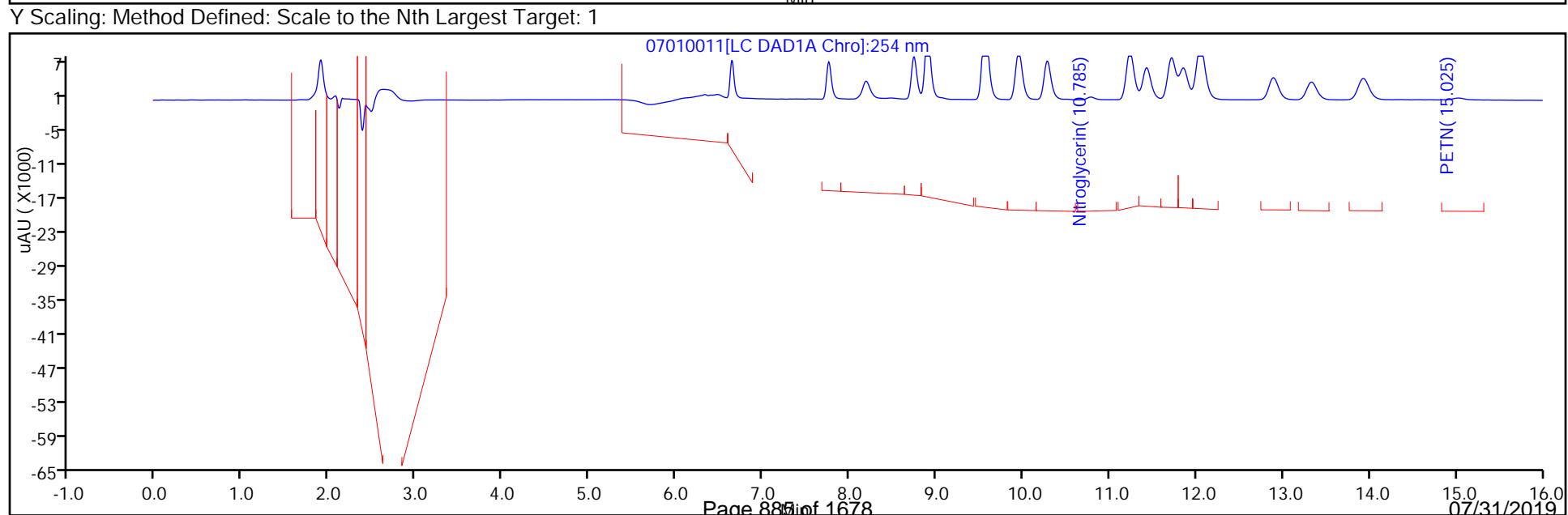
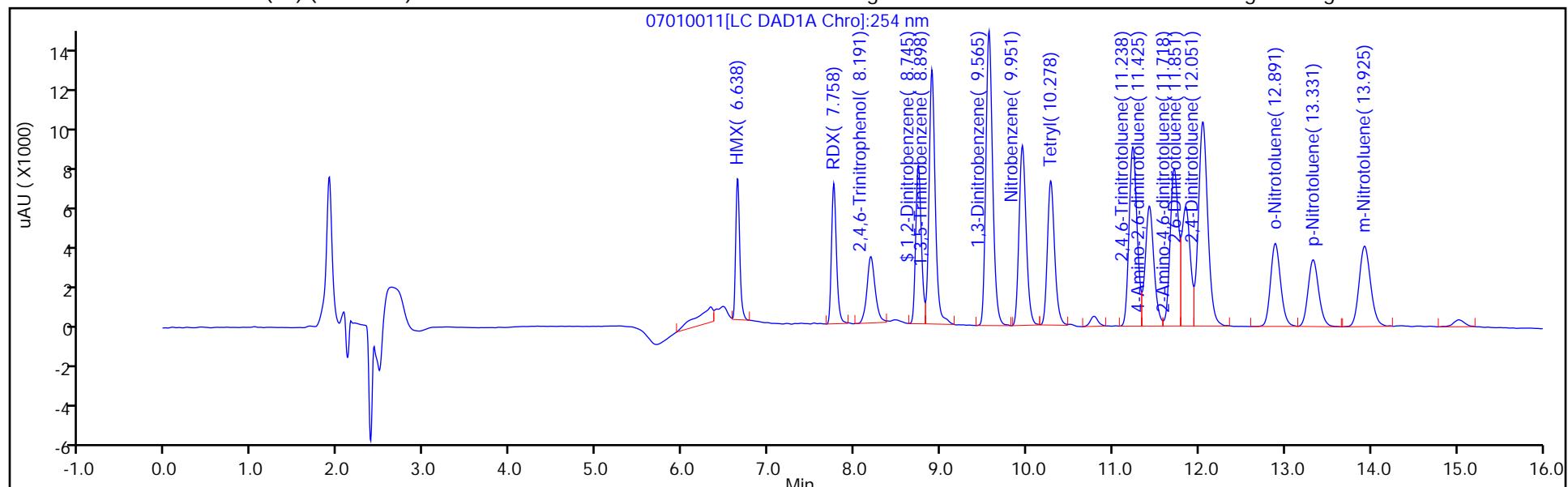
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010011.D
 Injection Date: 01-Jul-2019 16:13:37 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L4 Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 11
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D
 Lims ID: IC MAIN L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 01-Jul-2019 16:36:33 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L3
 Misc. Info.: 280-0083376-012
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:53 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh

Date: 01-Jul-2019 18:30:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.645	6.643	0.002	8595	0.1000	0.0936	M
7 RDX	1	7.759	7.757	0.002	10627	0.1000	0.0956	
8 2,4,6-Trinitrophenol	1	8.199	8.177	0.022	8633	0.1000	0.0951	
\$ 9 1,2-Dinitrobenzene	1	8.739	8.737	0.002	13632	0.1000	0.0978	
10 1,3,5-Trinitrobenzene	1	8.899	8.897	0.002	23438	0.1000	0.0956	
11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	30427	0.1001	0.0978	
12 Nitrobenzene	1	9.952	9.943	0.009	19524	0.1002	0.0982	
14 Tetryl	1	10.279	10.270	0.009	15952	0.1000	0.0985	
15 Nitroglycerin	2	10.779	10.770	0.009	69583	1.00	0.9785	
16 2,4,6-Trinitrotoluene	1	11.232	11.223	0.009	22301	0.1004	0.0981	
17 4-Amino-2,6-dinitrotoluene	1	11.425	11.417	0.008	16220	0.1003	0.0975	
18 2-Amino-4,6-dinitrotoluene	1	11.712	11.703	0.009	20461	0.1003	0.0997	
19 2,6-Dinitrotoluene	1	11.852	11.837	0.015	15313	0.1003	0.0961	
20 2,4-Dinitrotoluene	1	12.045	12.037	0.008	29330	0.1002	0.0976	
21 o-Nitrotoluene	1	12.892	12.877	0.015	12775	0.1003	0.0984	
22 p-Nitrotoluene	1	13.332	13.317	0.015	10780	0.1004	0.0978	
23 m-Nitrotoluene	1	13.932	13.917	0.015	14273	0.1004	0.0984	
24 PETN	2	15.032	15.010	0.022	73030	1.00	0.9831	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 5.00

Units: uL

Report Date: 02-Jul-2019 11:34:53

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190701-83376.b\\07010012.D

Injection Date: 01-Jul-2019 16:36:33

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC MAIN L3

Worklist Smp#: 12

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

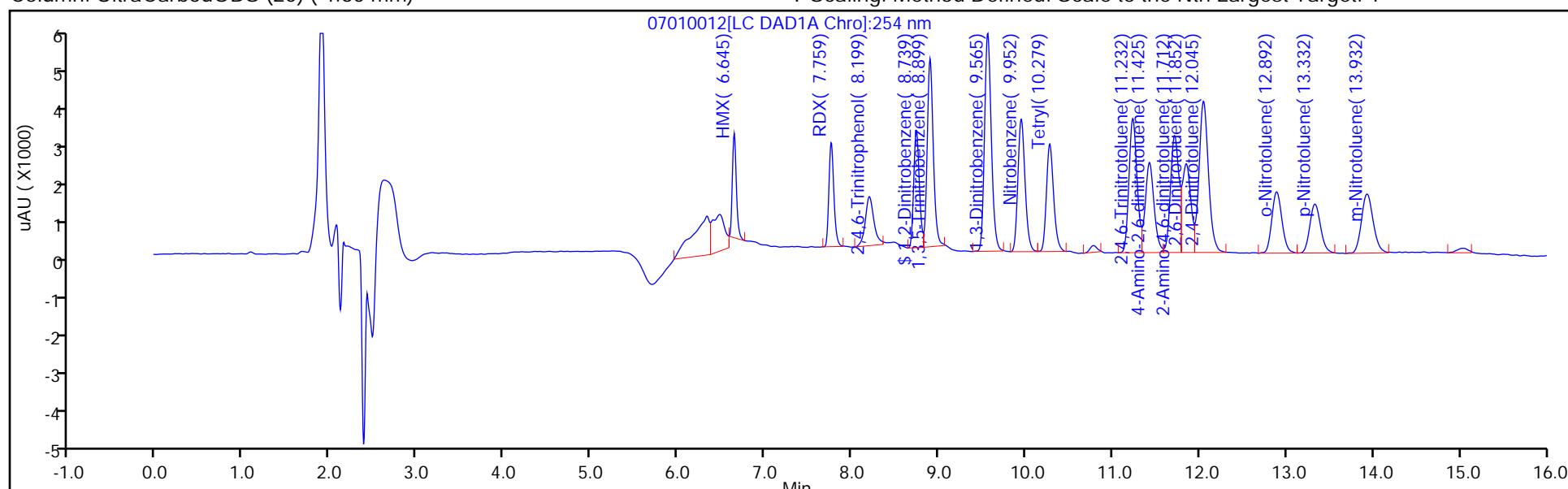
ALS Bottle#: 12

Method: 8330_X3

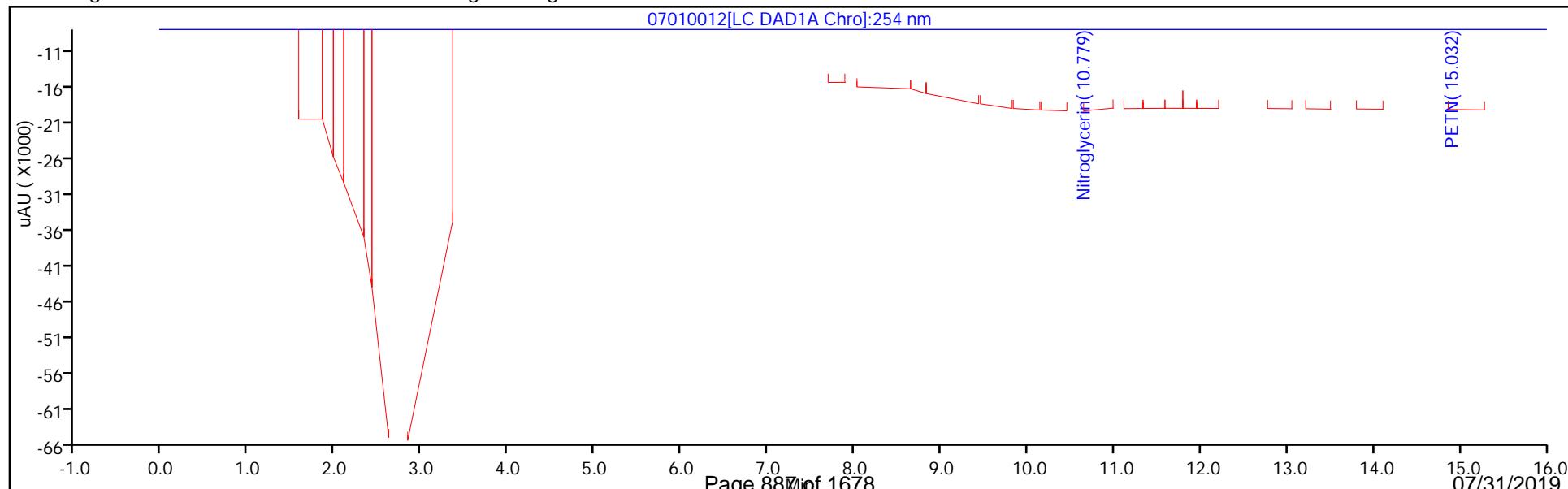
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver

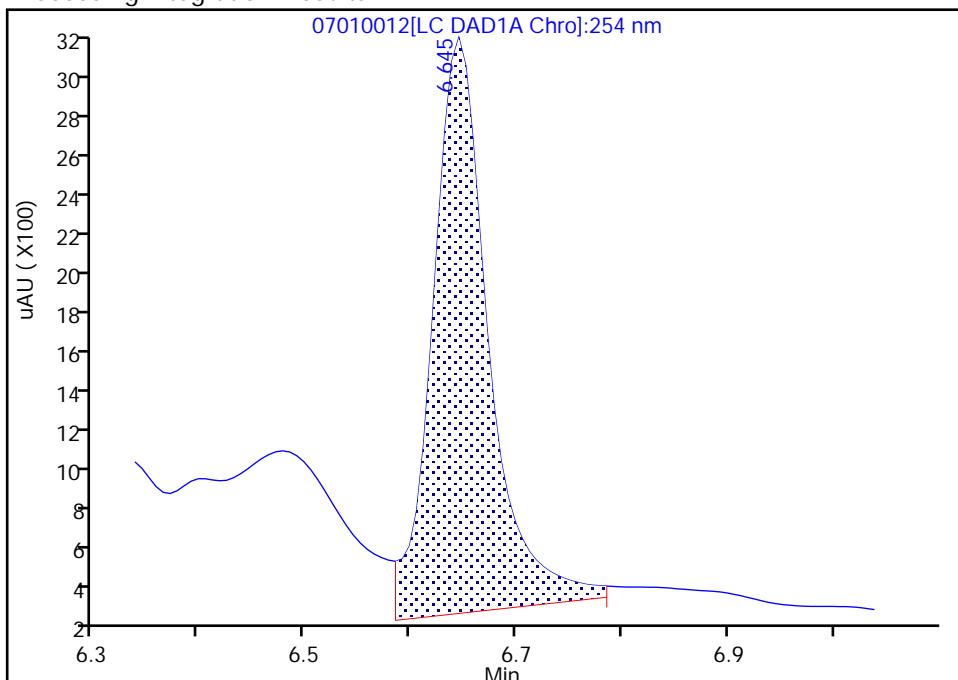
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 Injection Date: 01-Jul-2019 16:36:33 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L3
 Client ID:
 Operator ID: hkf ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

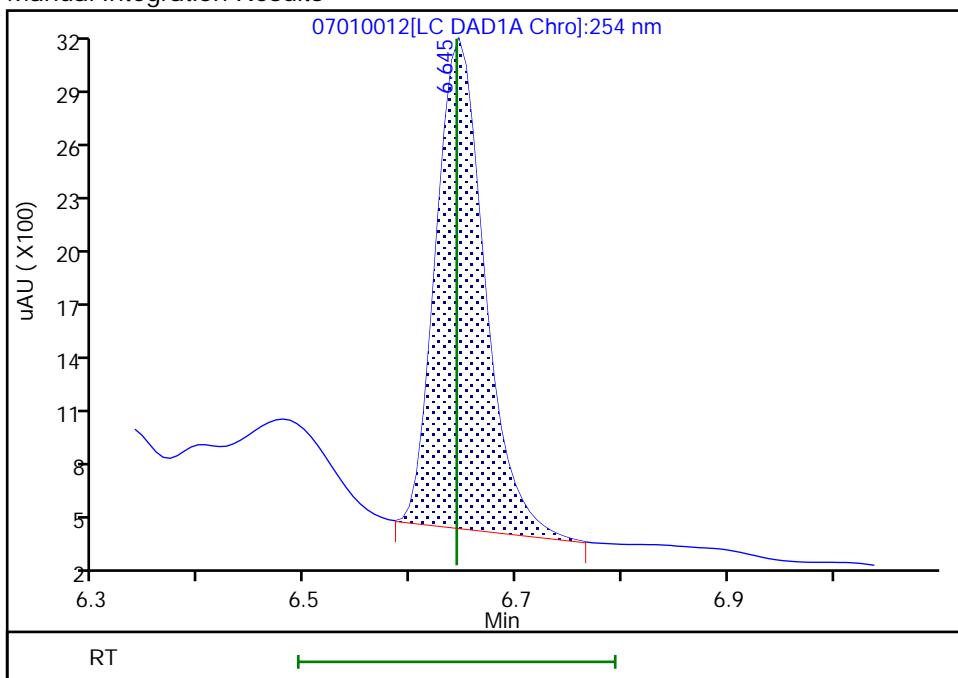
Processing Integration Results

RT: 6.65
 Area: 10637
 Amount: 0.107460
 Amount Units: ug/mL



Manual Integration Results

RT: 6.65
 Area: 8595
 Amount: 0.093594
 Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:30:35

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D
 Lims ID: IC MAIN L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 01-Jul-2019 17:00:38 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L2
 Misc. Info.: 280-0083376-013
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:55 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh

Date:

01-Jul-2019 18:30:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.648	6.643	0.005	4492	0.0500	0.0489	M
7 RDX	1	7.768	7.757	0.011	5694	0.0500	0.0512	
8 2,4,6-Trinitrophenol	1	8.215	8.177	0.038	4807	0.0500	0.0530	
\$ 9 1,2-Dinitrobenzene	1	8.748	8.737	0.011	7135	0.0500	0.0512	
10 1,3,5-Trinitrobenzene	1	8.908	8.897	0.011	12636	0.0500	0.0516	
11 1,3-Dinitrobenzene	1	9.568	9.557	0.011	16180	0.0501	0.0520	
12 Nitrobenzene	1	9.954	9.943	0.011	10349	0.0501	0.0520	
14 Tetryl	1	10.288	10.270	0.018	8209	0.0500	0.0507	
15 Nitroglycerin	2	10.788	10.770	0.018	35831	0.5000	0.5039	
16 2,4,6-Trinitrotoluene	1	11.241	11.223	0.018	11863	0.0502	0.0522	
17 4-Amino-2,6-dinitrotoluene	1	11.434	11.417	0.017	8615	0.0502	0.0518	
18 2-Amino-4,6-dinitrotoluene	1	11.721	11.703	0.018	10404	0.0502	0.0507	M
19 2,6-Dinitrotoluene	1	11.854	11.837	0.017	8322	0.0502	0.0522	M
20 2,4-Dinitrotoluene	1	12.054	12.037	0.017	15308	0.0501	0.0510	
21 o-Nitrotoluene	1	12.894	12.877	0.017	6814	0.0502	0.0525	
22 p-Nitrotoluene	1	13.334	13.317	0.017	5607	0.0502	0.0509	
23 m-Nitrotoluene	1	13.934	13.917	0.017	7651	0.0502	0.0527	
24 PETN	2	15.041	15.010	0.031	38432	0.5000	0.5173	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 2.50

Units: uL

Report Date: 02-Jul-2019 11:34:55

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D

Injection Date: 01-Jul-2019 17:00:38

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC MAIN L2

Worklist Smp#: 13

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

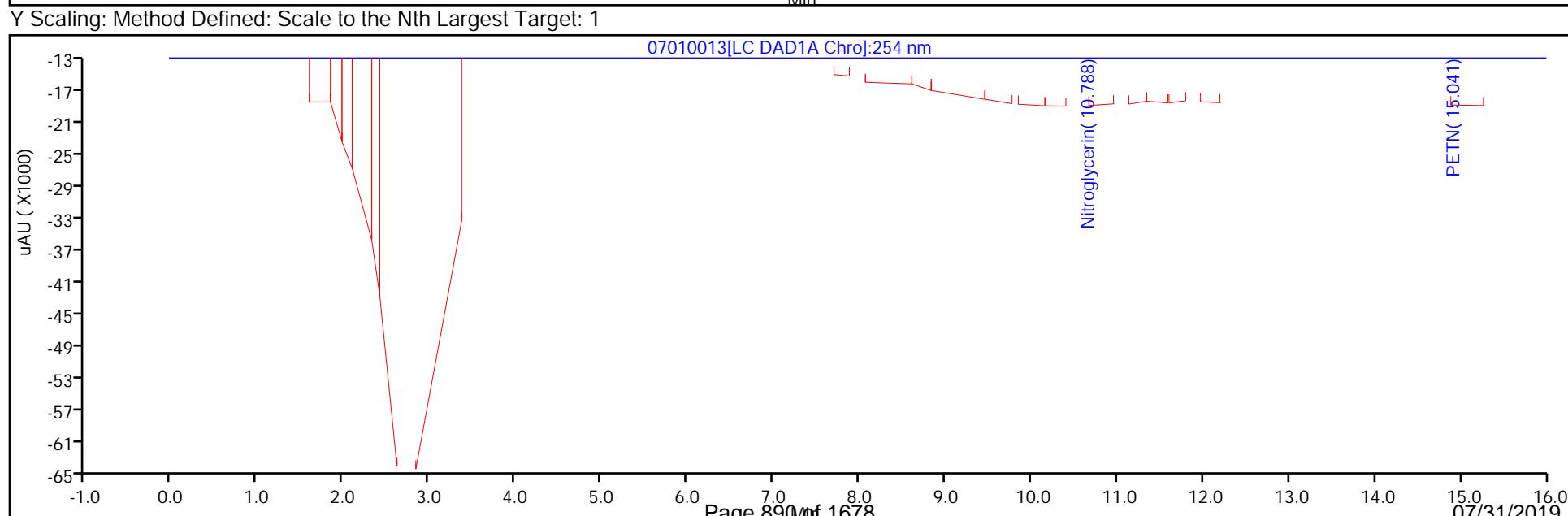
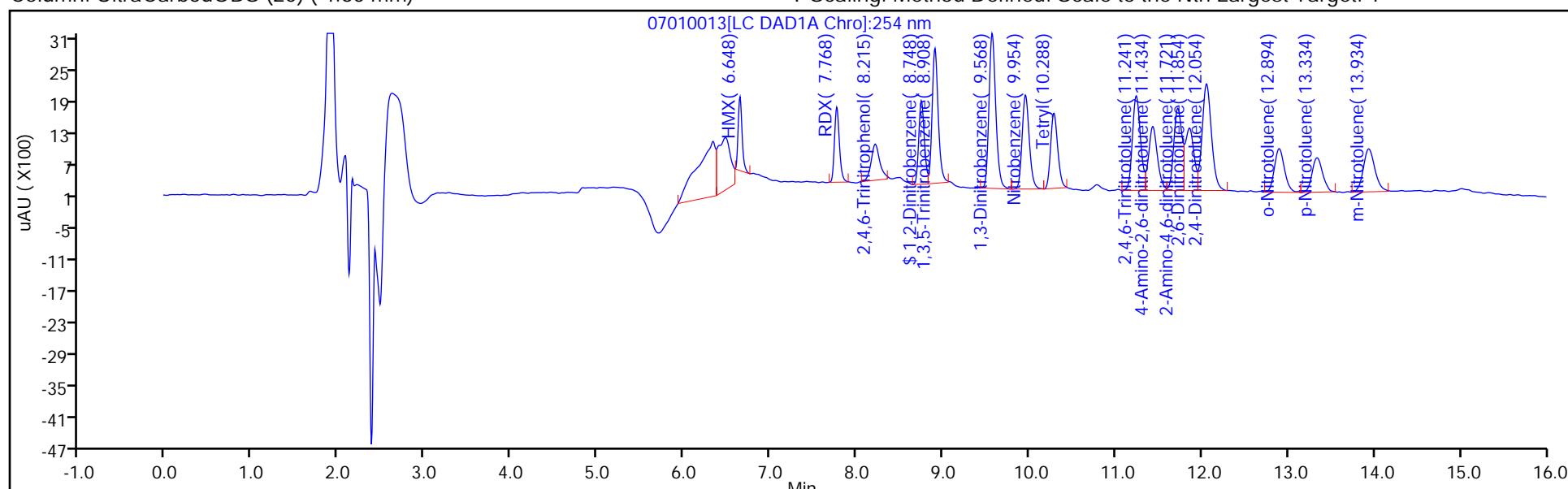
ALS Bottle#: 13

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

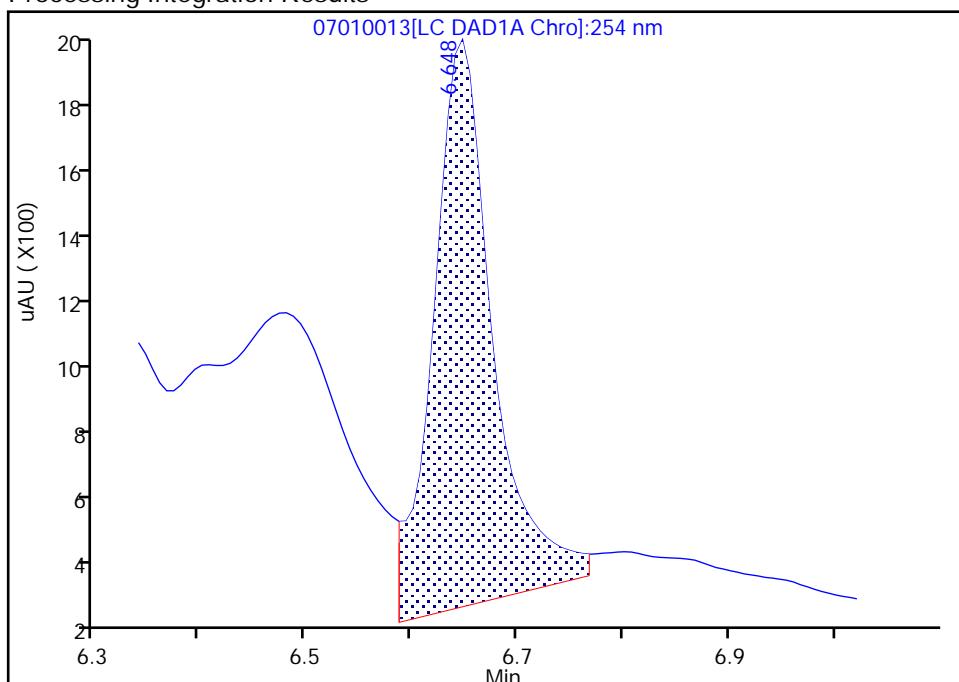
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 Lims ID: IC MAIN L2
 Client ID:
 Operator ID: hkf ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

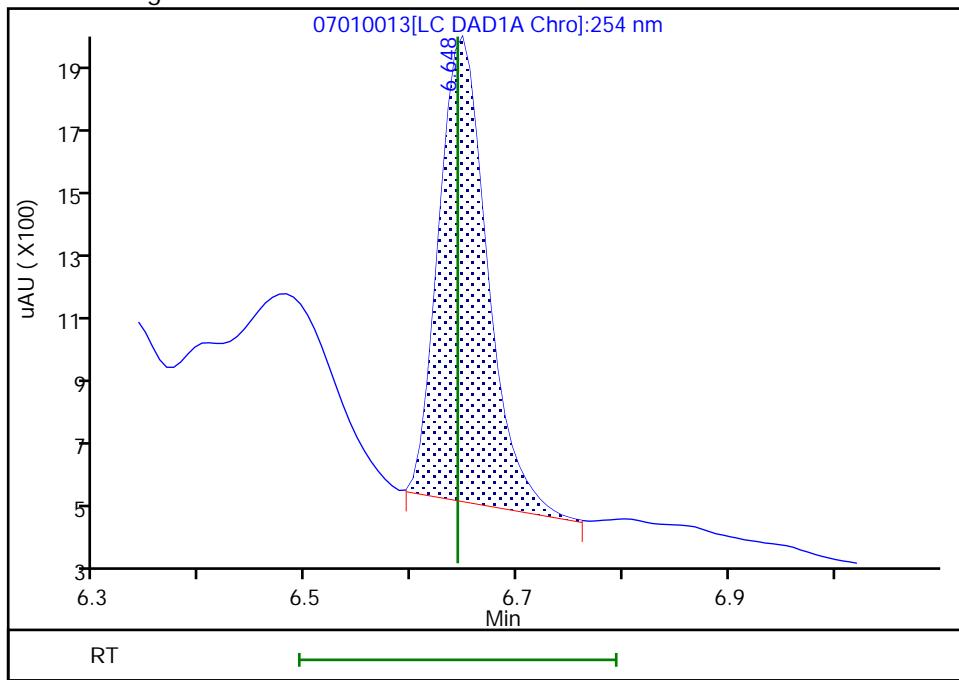
RT: 6.65
 Area: 6332
 Amount: 0.065662
 Amount Units: ug/mL

Processing Integration Results



RT: 6.65
 Area: 4492
 Amount: 0.048915
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 01-Jul-2019 18:30:57

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D
 Lims ID: IC MAIN L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 01-Jul-2019 17:23:38 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC MAIN L1
 Misc. Info.: 280-0083376-014
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:57 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh

Date: 01-Jul-2019 18:31:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.642	6.643	-0.001	1795	0.0200	0.0195	
7 RDX	1	7.762	7.757	0.005	2338	0.0200	0.0210	
8 2,4,6-Trinitrophenol	1	8.209	8.177	0.032	2302	0.0200	0.0254	M
\$ 9 1,2-Dinitrobenzene	1	8.742	8.737	0.005	2609	0.0200	0.0187	
10 1,3,5-Trinitrobenzene	1	8.902	8.897	0.005	4638	0.0200	0.0189	
11 1,3-Dinitrobenzene	1	9.562	9.557	0.005	5930	0.0200	0.0191	
12 Nitrobenzene	1	9.949	9.943	0.006	3747	0.0200	0.0188	
14 Tetryl	1	10.275	10.270	0.005	2803	0.0200	0.0173	
15 Nitroglycerin	2	10.775	10.770	0.005	12630	0.2000	0.1776	
16 2,4,6-Trinitrotoluene	1	11.229	11.223	0.006	4544	0.0201	0.0200	
17 4-Amino-2,6-dinitrotoluene	1	11.422	11.417	0.005	3540	0.0201	0.0213	
18 2-Amino-4,6-dinitrotoluene	1	11.715	11.703	0.012	3841	0.0201	0.0187	M
19 2,6-Dinitrotoluene	1	11.842	11.837	0.005	3382	0.0201	0.0212	M
20 2,4-Dinitrotoluene	1	12.042	12.037	0.005	5825	0.0200	0.0194	
21 o-Nitrotoluene	1	12.882	12.877	0.005	2560	0.0201	0.0197	
22 p-Nitrotoluene	1	13.329	13.317	0.012	2162	0.0201	0.0196	
23 m-Nitrotoluene	1	13.915	13.917	-0.002	2906	0.0201	0.0200	
24 PETN	2	15.015	15.010	0.005	11106	0.2000	0.1495	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 1.00

Units: uL

Report Date: 02-Jul-2019 11:34:58

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D

Injection Date: 01-Jul-2019 17:23:38

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC MAIN L1

Worklist Smp#: 14

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

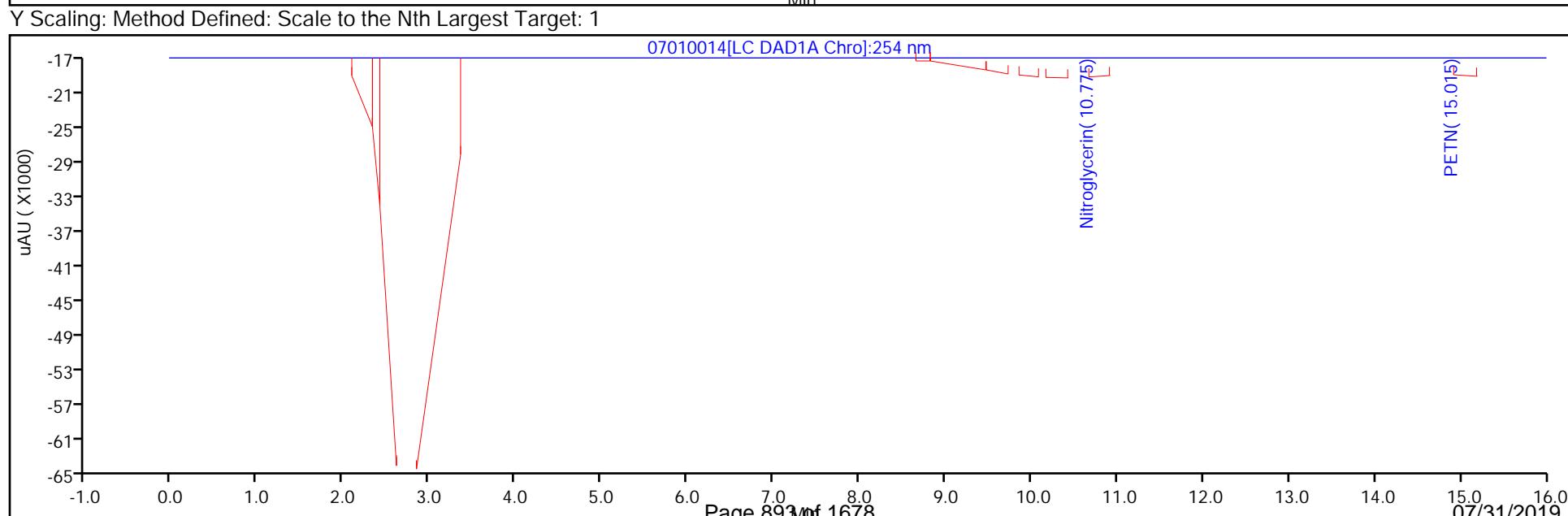
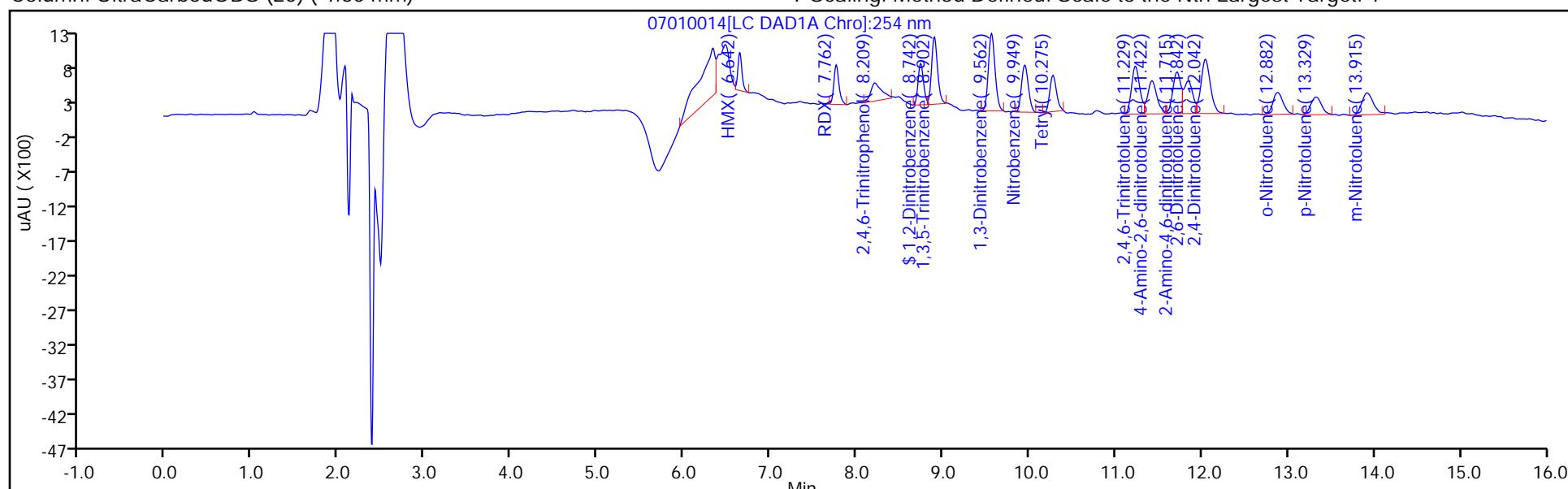
ALS Bottle#: 14

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

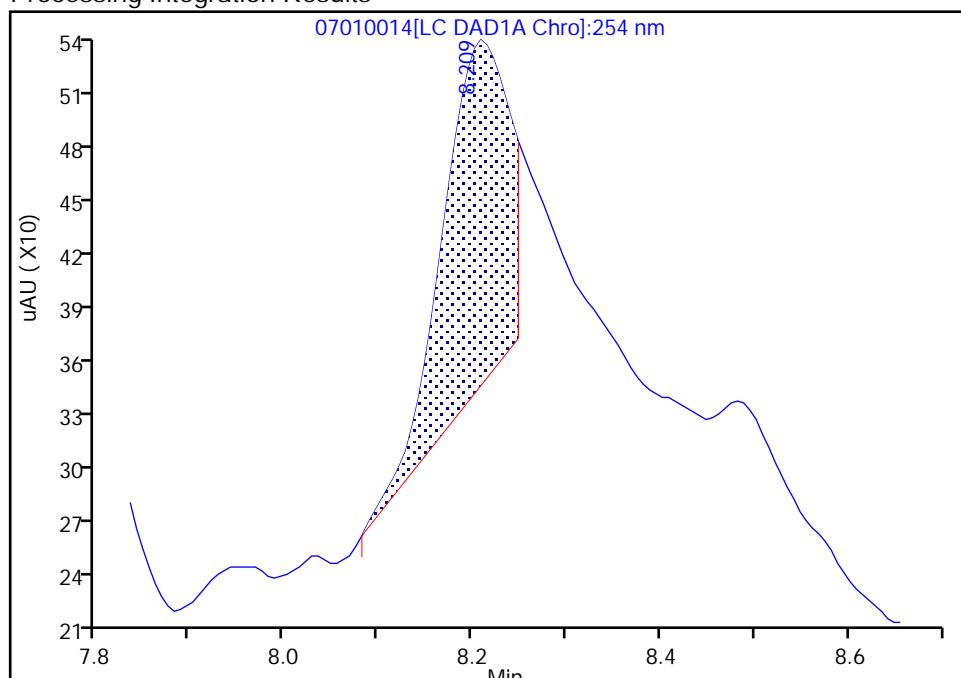
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D
 Injection Date: 01-Jul-2019 17:23:38 Instrument ID: CHHPLC_X3
 Lims ID: IC MAIN L1
 Client ID:
 Operator ID: hkf ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

8 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

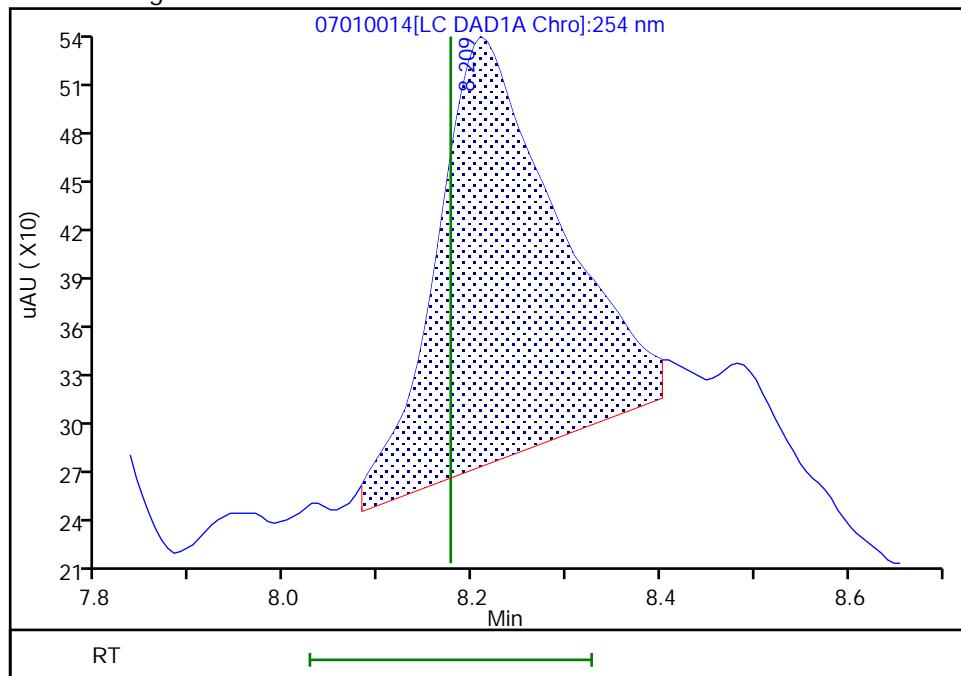
RT: 8.21
 Area: 906
 Amount: 0.011048
 Amount Units: ug/mL

Processing Integration Results



RT: 8.21
 Area: 2302
 Amount: 0.025371
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 01-Jul-2019 18:33:21

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 463276

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 21:36 Calibration End Date: 07/02/2019 00:18 Calibration ID: 37013

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/32	07010032.D
Level 2	IC 280-463276/31	07010031.D
Level 3	IC 280-463276/30	07010030.D
Level 4	IC 280-463276/29	07010029.D
Level 5	IC 280-463276/28	07010028.D
Level 6	IC 280-463276/27	07010027.D
Level 7	IC 280-463276/26	07010026.D
Level 8	IC 280-463276/25	07010025.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.550	6.545	6.549	6.550	6.548	6.552	6.556	6.547			6.450 - 6.650	6.550
DNX	6.883	6.878	6.882	6.883	6.882	6.885	6.890	6.880			6.783 - 6.983	6.883
MNX	7.350	7.345	7.342	7.343	7.348	7.352	7.356	7.340			7.193 - 7.493	7.347

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 463276

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 21:36 Calibration End Date: 07/02/2019 00:18 Calibration ID: 37013

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/32	07010032.D
Level 2	IC 280-463276/31	07010031.D
Level 3	IC 280-463276/30	07010030.D
Level 4	IC 280-463276/29	07010029.D
Level 5	IC 280-463276/28	07010028.D
Level 6	IC 280-463276/27	07010027.D
Level 7	IC 280-463276/26	07010026.D
Level 8	IC 280-463276/25	07010025.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	210589 222797	208352 218948	210300 221984	212915 213827	Ave		214964.079				2.6		20.0			
DNX	170629 158132	155125 156499	151928 157632	151201 147859	Ave		156125.739				4.4		20.0			
MNX	140231 145495	137018 144045	134996 144473	138841 135229	Ave		140040.970				3.0		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1 Analy Batch No.: 463276

SDG No.: _____

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 21:36 Calibration End Date: 07/02/2019 00:18 Calibration ID: 37013

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/32	07010032.D
Level 2	IC 280-463276/31	07010031.D
Level 3	IC 280-463276/30	07010030.D
Level 4	IC 280-463276/29	07010029.D
Level 5	IC 280-463276/28	07010028.D
Level 6	IC 280-463276/27	07010027.D
Level 7	IC 280-463276/26	07010026.D
Level 8	IC 280-463276/25	07010025.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	4216 153417	10428 222206	21051 535103	53282	89208	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	3416 109659	7764 157790	15208 370018	37838	63316	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3273 117670	7995 168600	15754 394530	40507	67917	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\20190701-83376.b\07010025.D
 Lims ID: IC DMT L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 01-Jul-2019 21:36:10 ALS Bottle#: 25 Worklist Smp#: 25
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L8
 Misc. Info.: 280-0083376-025
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:19 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.547	6.550	-0.003	535103	2.50	2.49	
5 DNX	1	6.880	6.883	-0.003	370018	2.50	2.37	
6 MNX	1	7.340	7.343	-0.003	394530	2.92	2.82	

Reagents:

8330 DMT_00002 Amount Added: 125.00 Units: uL

Report Date: 02-Jul-2019 11:35:19

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010025.D

Injection Date: 01-Jul-2019 21:36:10

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L8

Worklist Smp#: 25

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

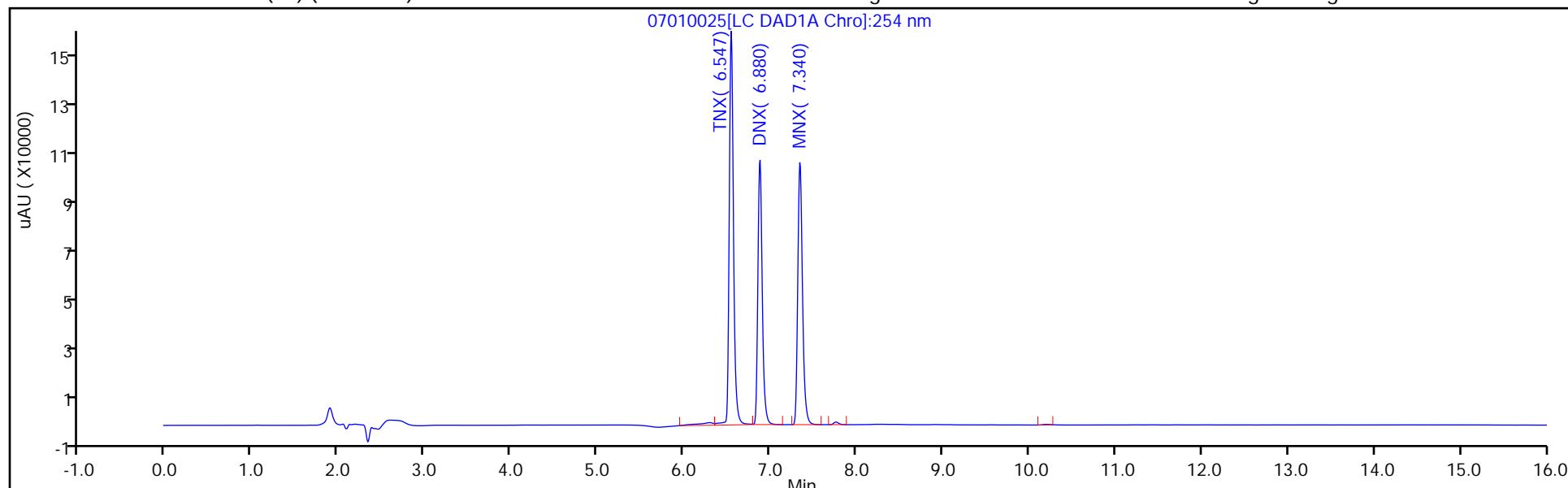
ALS Bottle#: 25

Method: 8330_X3

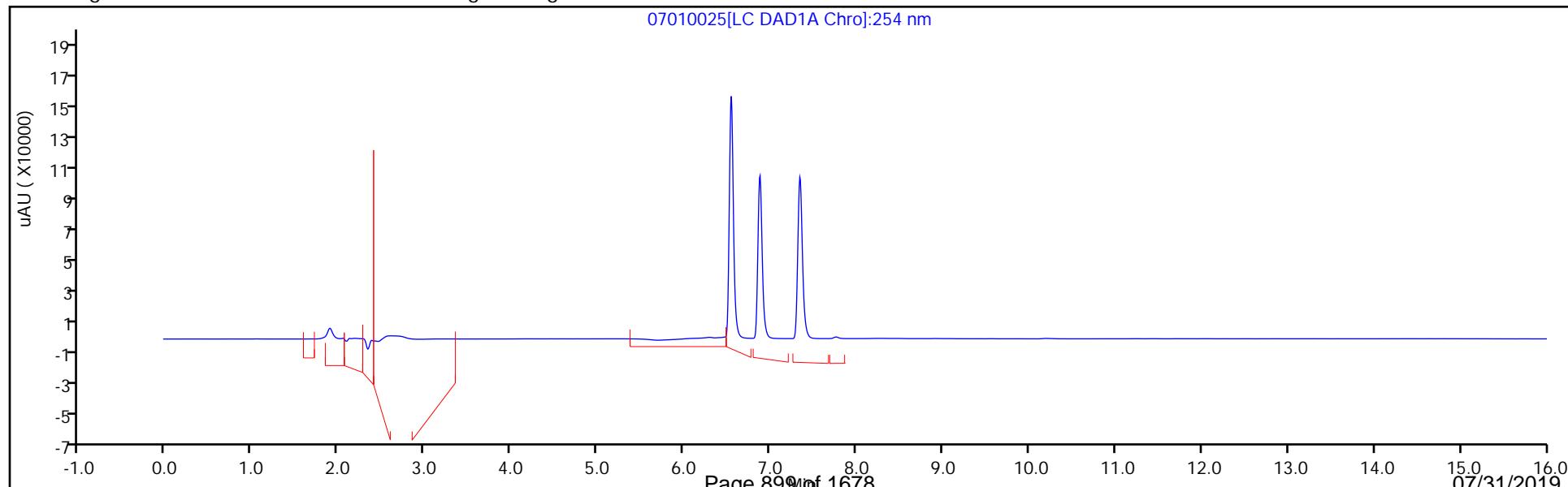
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D
 Lims ID: IC DMT L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 01-Jul-2019 22:00:21 ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L7
 Misc. Info.: 280-0083376-026
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:21 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:04:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.550	0.006	222206	1.00	1.03	M
5 DNX	1	6.890	6.883	0.007	157790	1.00	1.01	M
6 MNX	1	7.356	7.343	0.013	168600	1.17	1.20	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 50.00 Units: uL

Report Date: 02-Jul-2019 11:35:21

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D

Injection Date: 01-Jul-2019 22:00:21

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L7

Worklist Smp#: 26

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

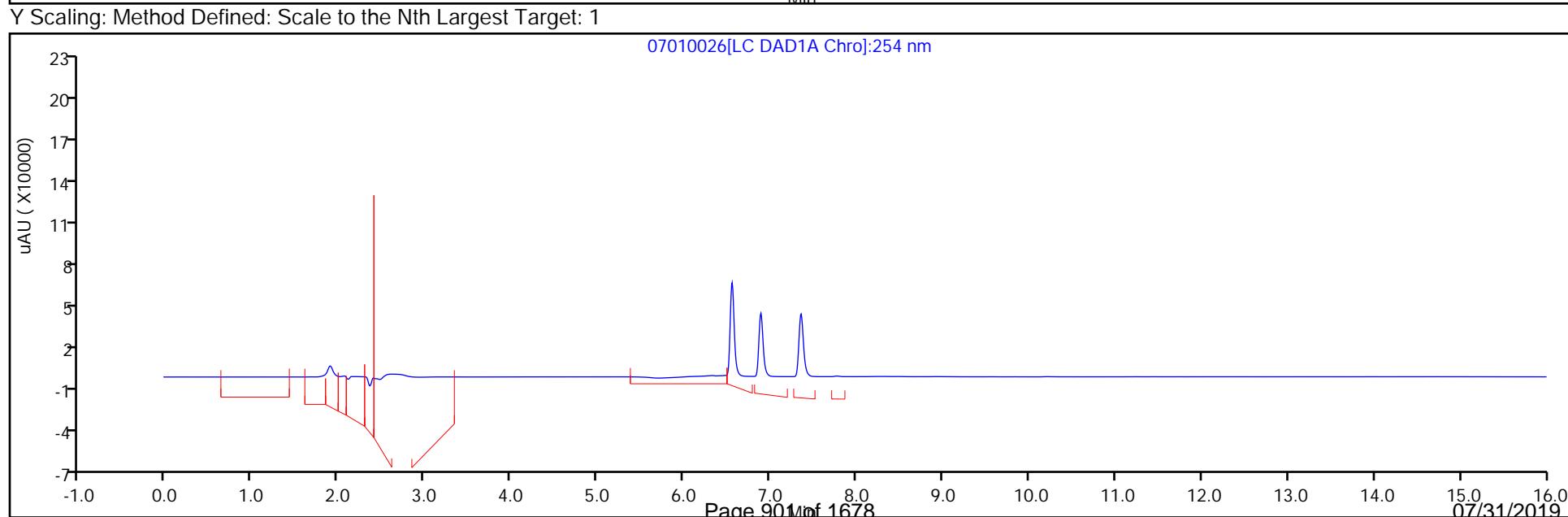
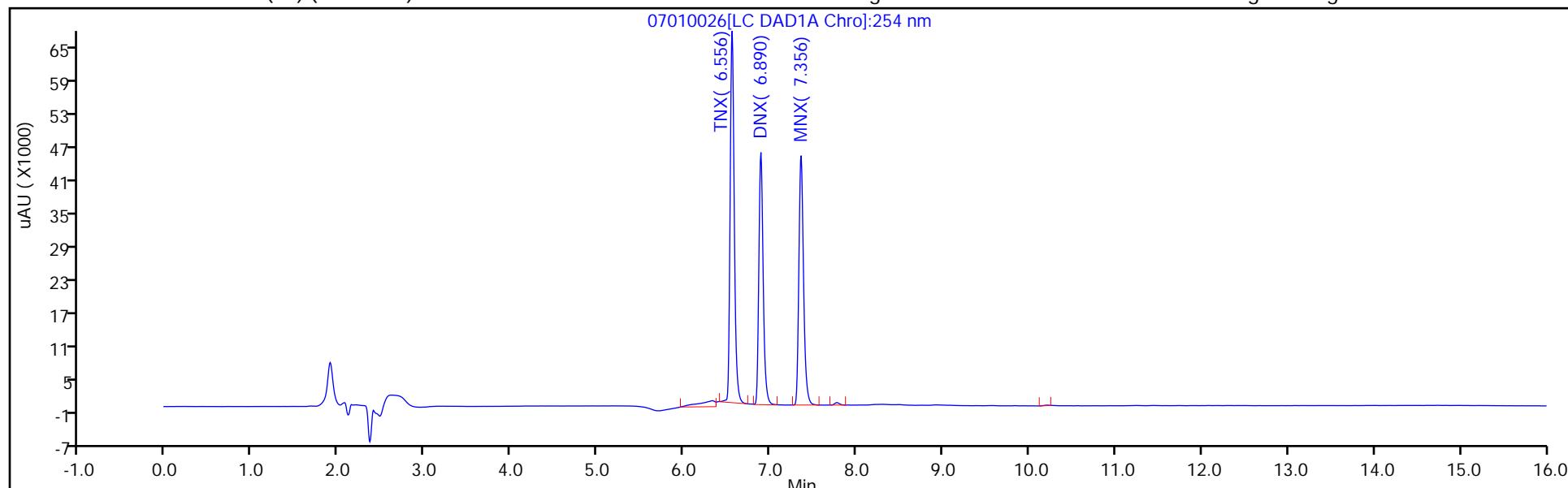
ALS Bottle#: 26

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

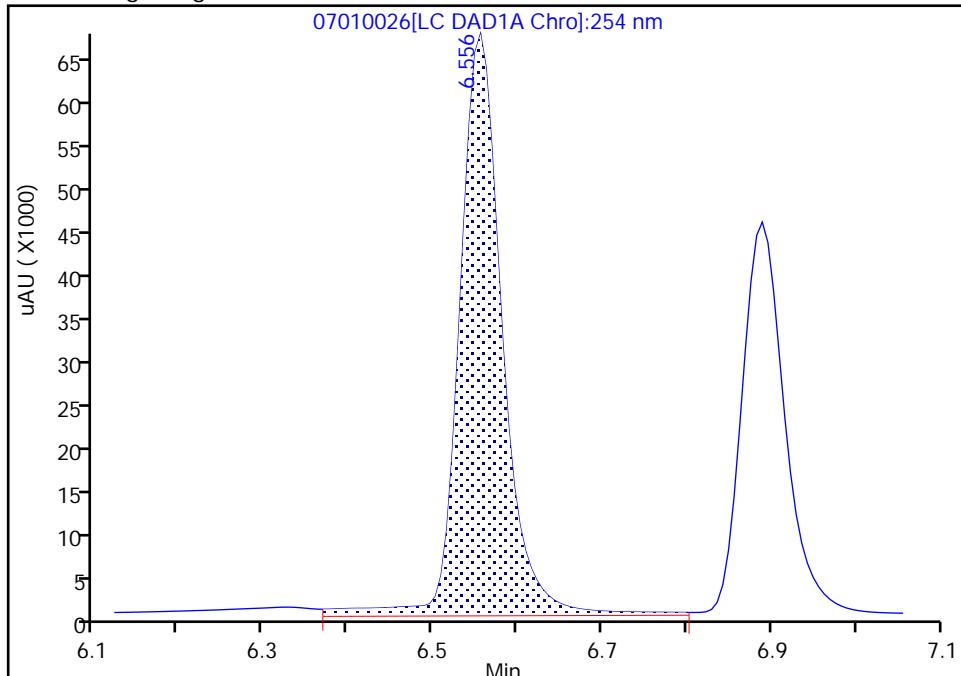
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D
 Injection Date: 01-Jul-2019 22:00:21 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L7
 Client ID:
 Operator ID: hkf ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

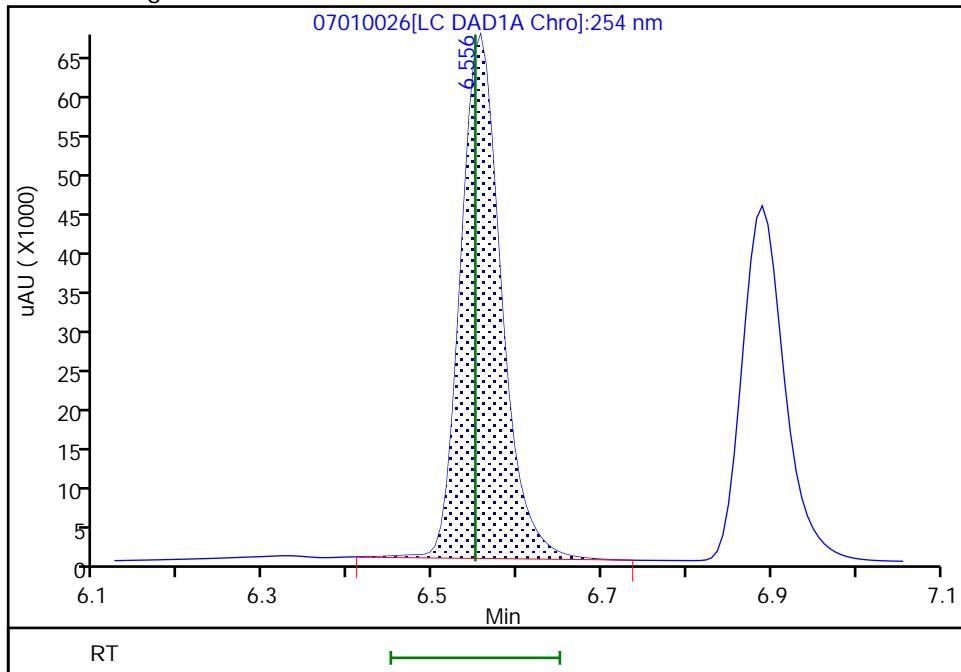
Processing Integration Results

RT: 6.56
 Area: 238054
 Amount: 0.989410
 Amount Units: ug/mL



Manual Integration Results

RT: 6.56
 Area: 222206
 Amount: 1.033689
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:04:11

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

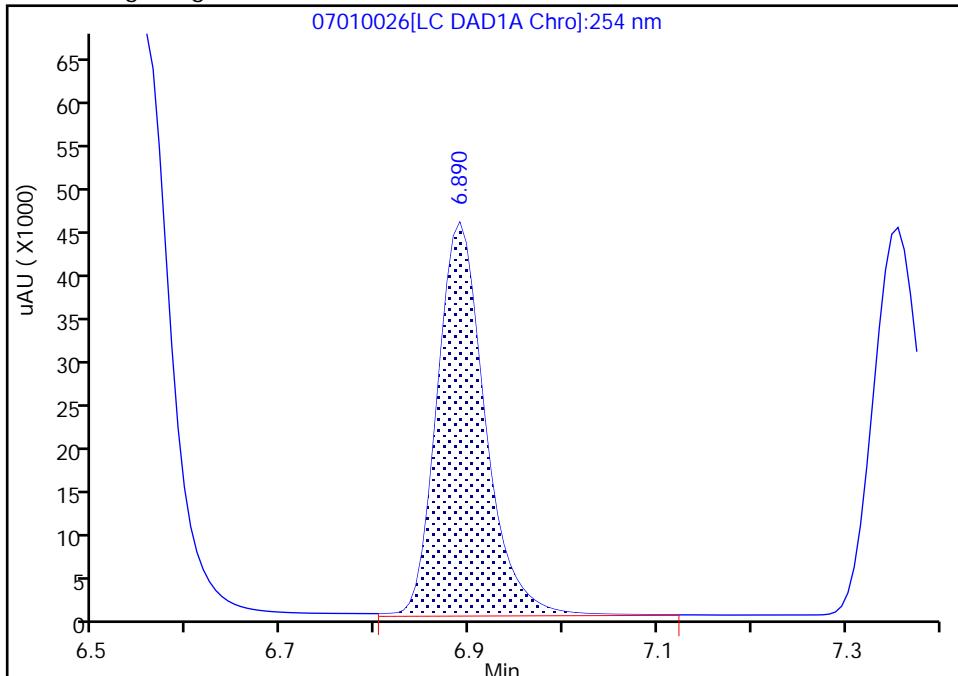
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D
 Injection Date: 01-Jul-2019 22:00:21 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L7
 Client ID:
 Operator ID: hkf ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

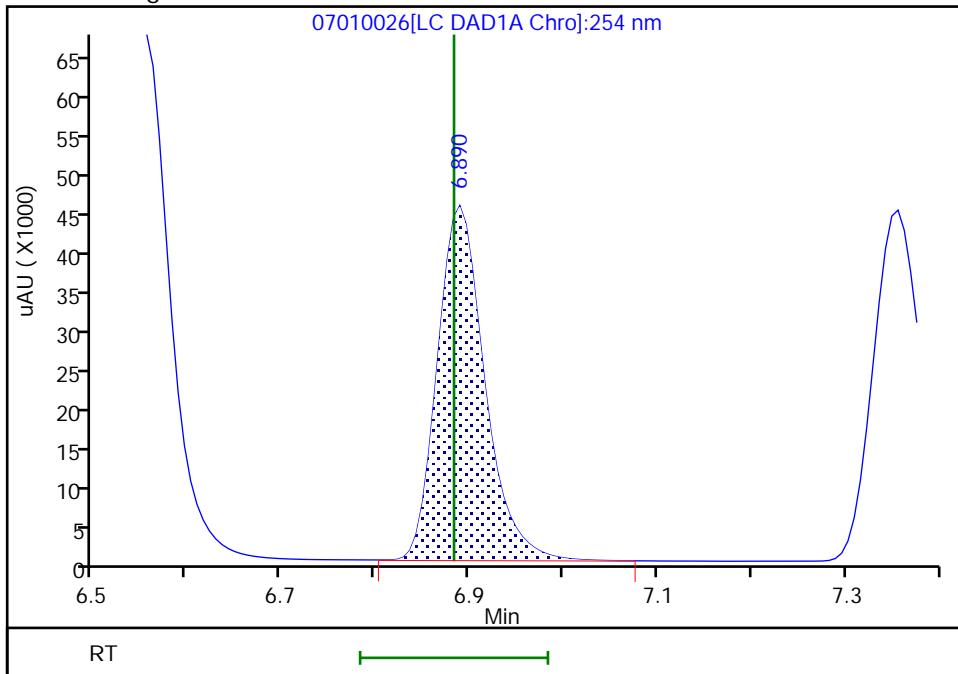
Processing Integration Results

RT: 6.89
 Area: 160640
 Amount: 1.026574
 Amount Units: ug/mL



Manual Integration Results

RT: 6.89
 Area: 157790
 Amount: 1.010660
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:04:15

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D
 Lims ID: IC DMT L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 01-Jul-2019 22:23:20 ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L6
 Misc. Info.: 280-0083376-027
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:22 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:03:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.552	6.550	0.002	153417	0.7007	0.7137	M
5 DNX	1	6.885	6.883	0.002	109659	0.7007	0.7024	M
6 MNX	1	7.352	7.343	0.009	117670	0.8169	0.8403	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 35.00 Units: uL

Report Date: 02-Jul-2019 11:35:23

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D

Injection Date: 01-Jul-2019 22:23:20

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L6

Worklist Smp#: 27

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

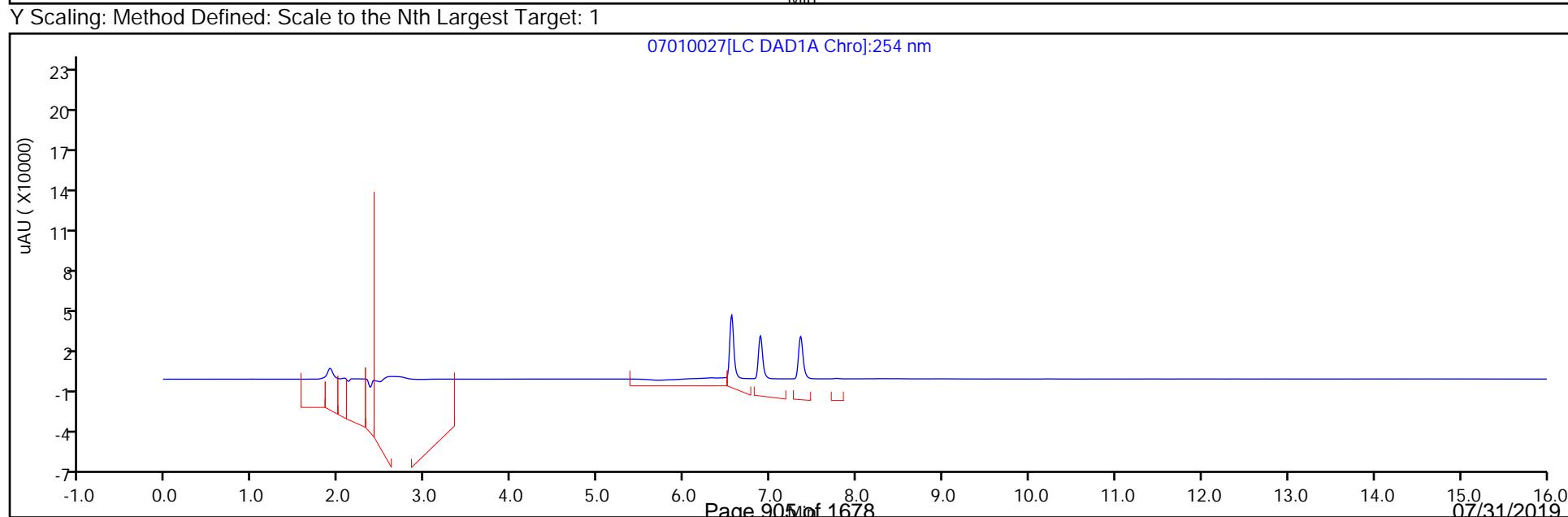
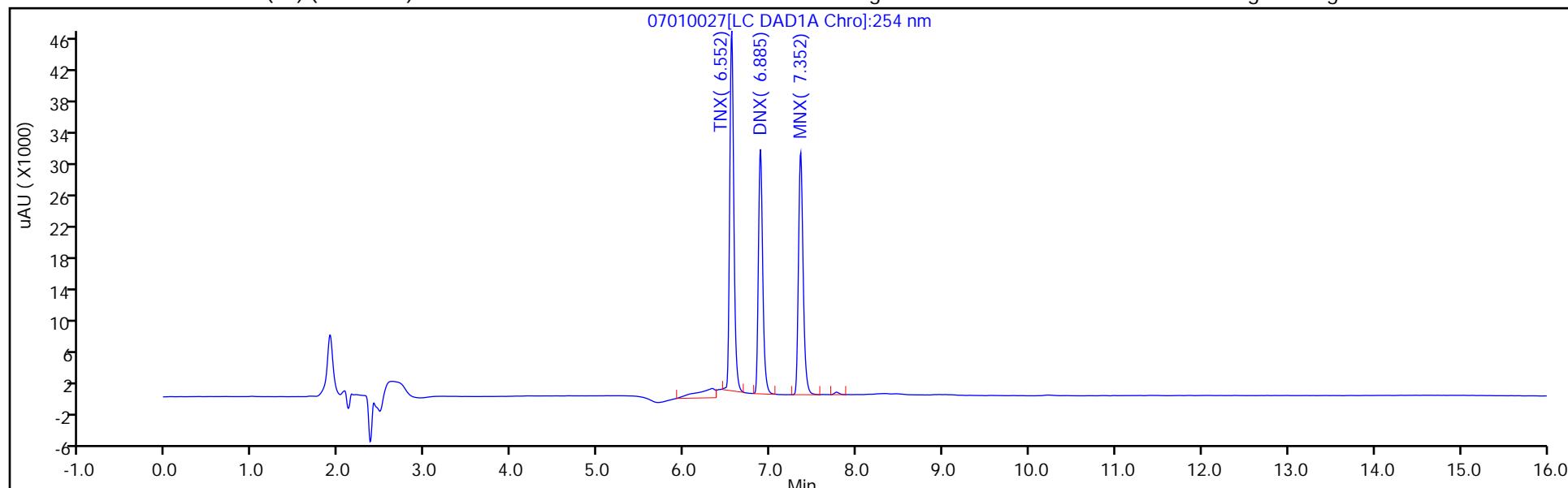
ALS Bottle#: 27

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

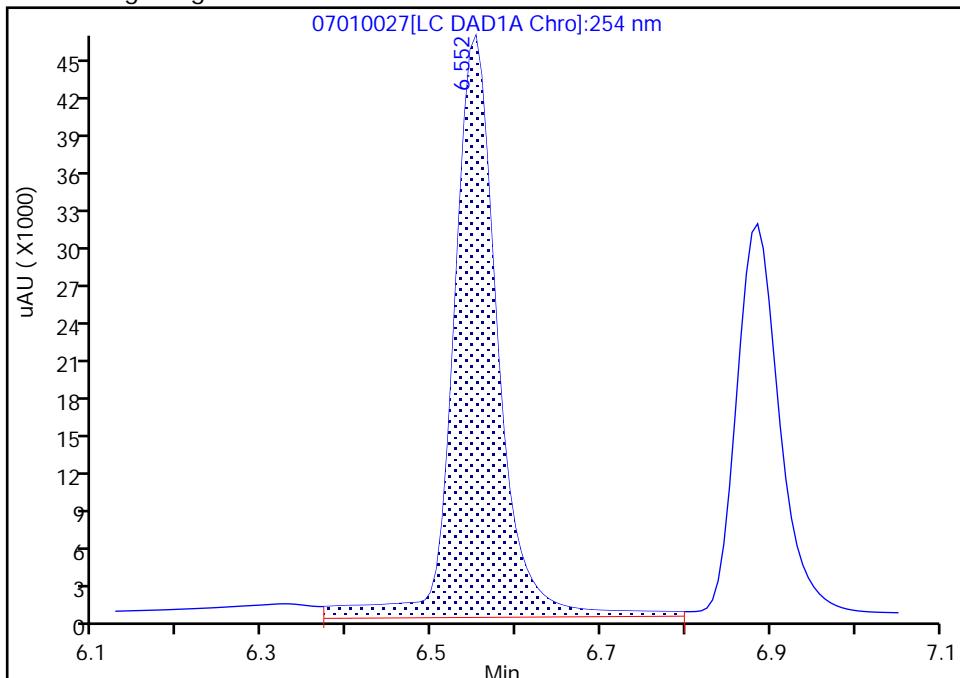
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D
 Injection Date: 01-Jul-2019 22:23:20 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L6
 Client ID:
 Operator ID: hkf ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

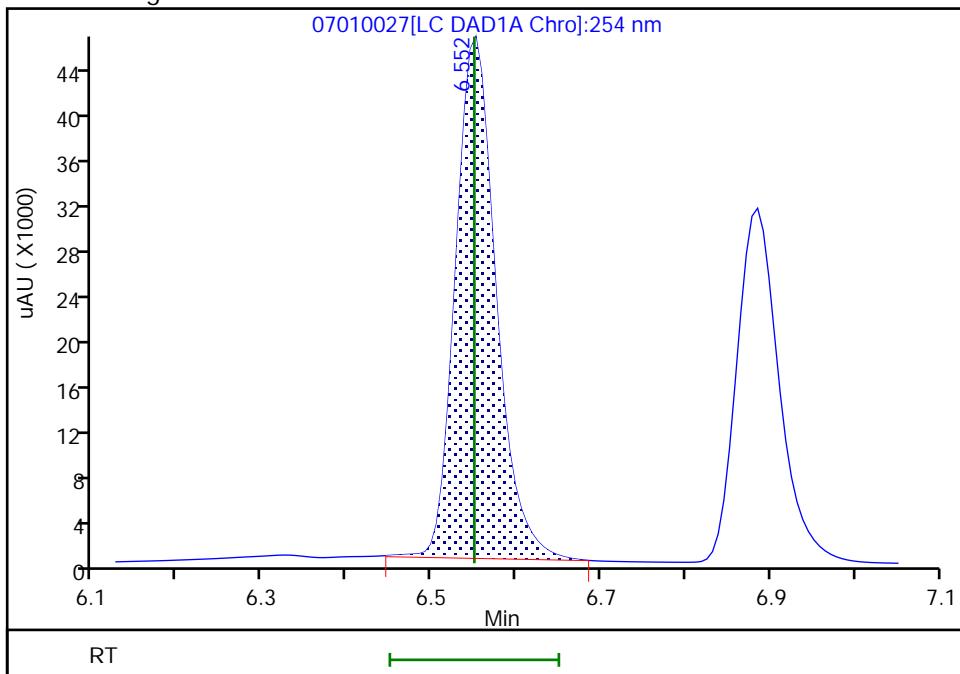
Processing Integration Results

RT: 6.55
 Area: 172073
 Amount: 0.705419
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 153417
 Amount: 0.713687
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:43

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

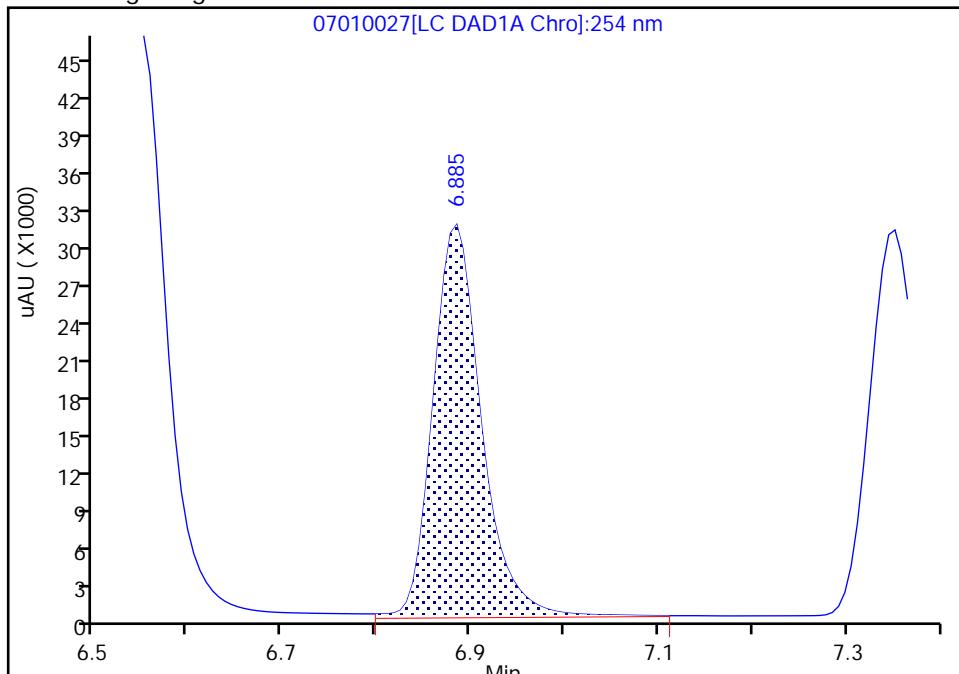
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D
 Injection Date: 01-Jul-2019 22:23:20 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L6
 Client ID:
 Operator ID: hkf ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

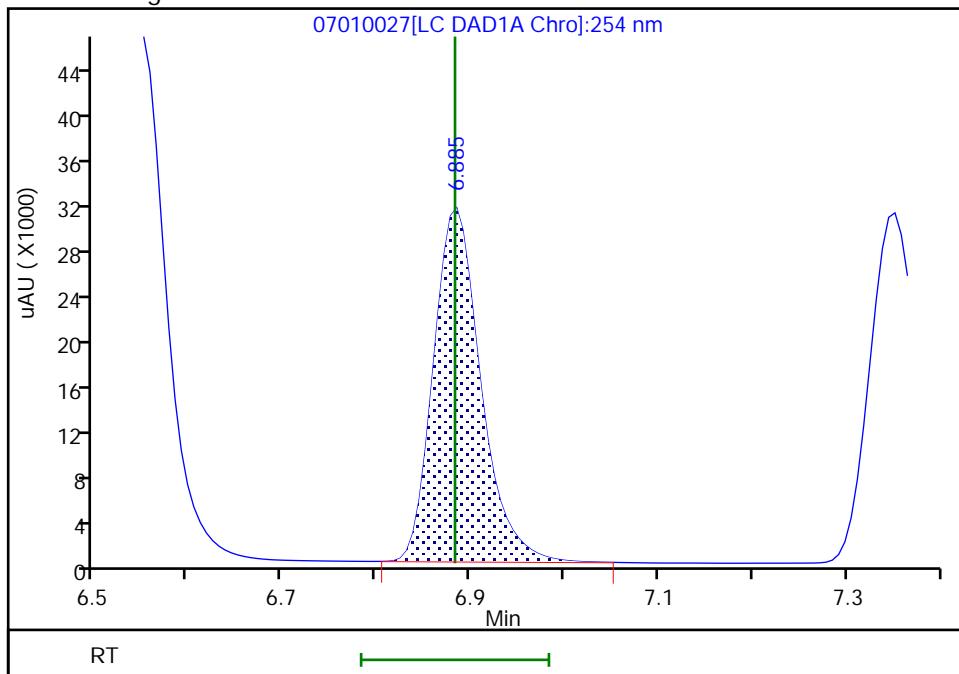
Processing Integration Results

RT: 6.89
 Area: 113520
 Amount: 0.722273
 Amount Units: ug/mL



Manual Integration Results

RT: 6.89
 Area: 109659
 Amount: 0.702376
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:57

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D
 Lims ID: IC DMT L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 01-Jul-2019 22:46:18 ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L5
 Misc. Info.: 280-0083376-028
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:24 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:03:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.548	6.550	-0.002	89208	0.4004	0.4150	M
5 DNX	1	6.882	6.883	-0.001	63316	0.4004	0.4055	M
6 MNX	1	7.348	7.343	0.005	67917	0.4668	0.4850	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 20.00 Units: uL

Report Date: 02-Jul-2019 11:35:24

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D

Injection Date: 01-Jul-2019 22:46:18

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L5

Worklist Smp#: 28

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

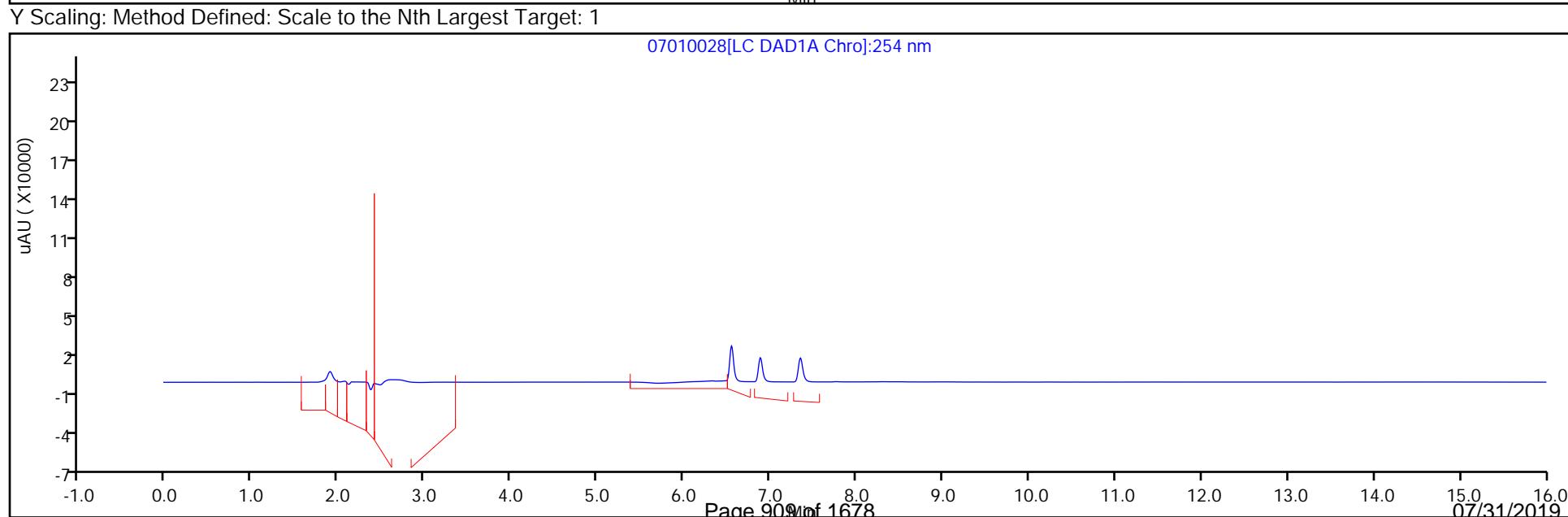
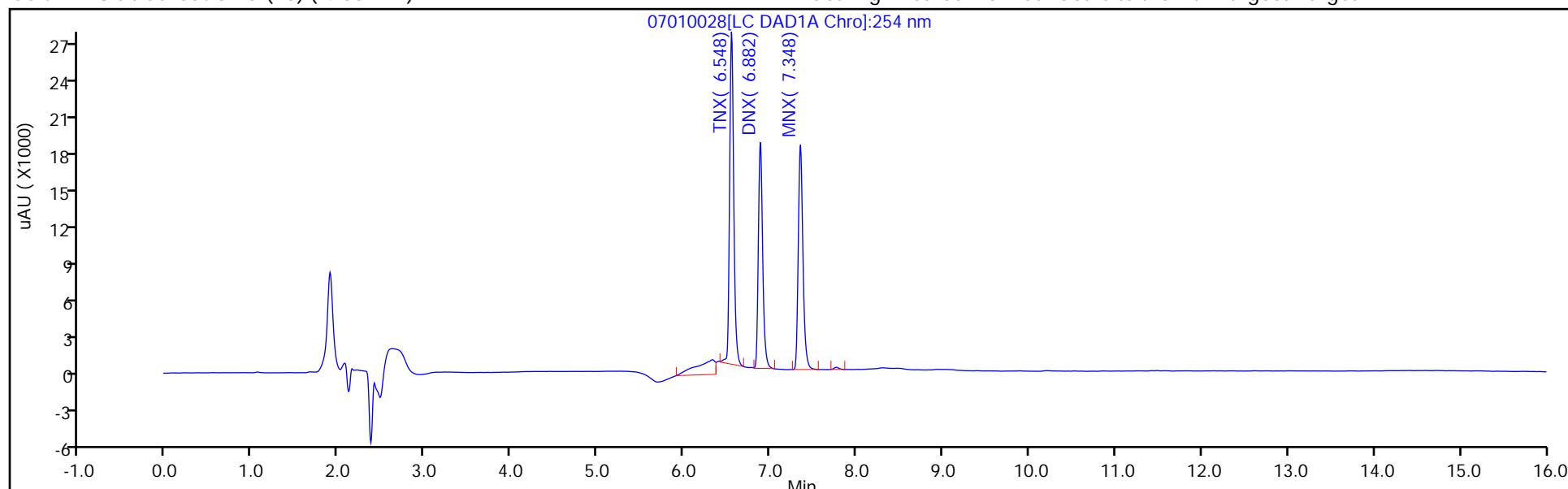
ALS Bottle#: 28

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

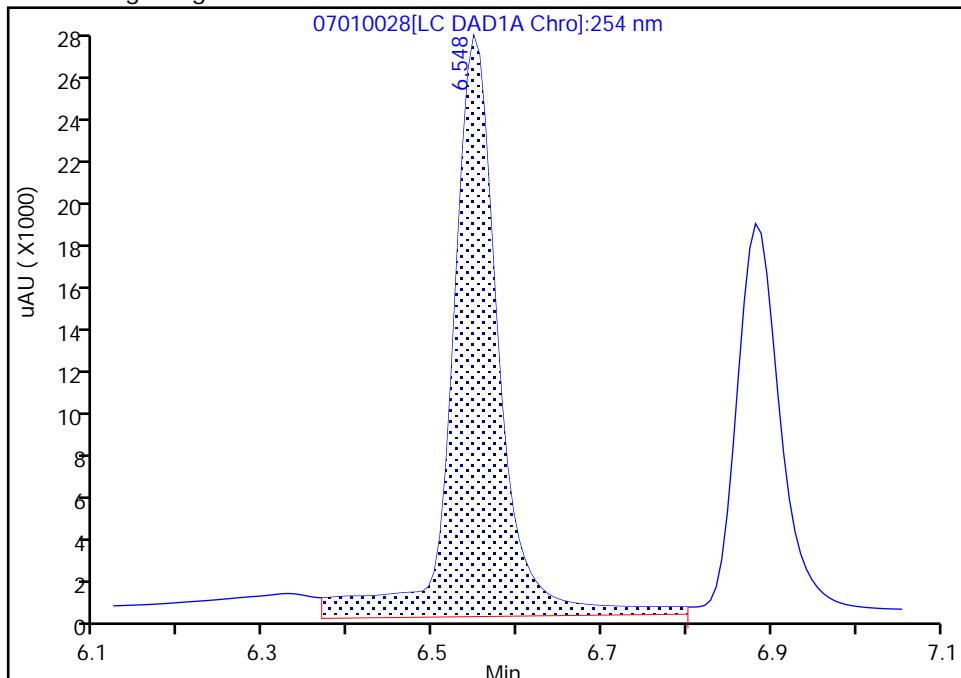
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D
 Injection Date: 01-Jul-2019 22:46:18 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L5
 Client ID:
 Operator ID: hkf ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

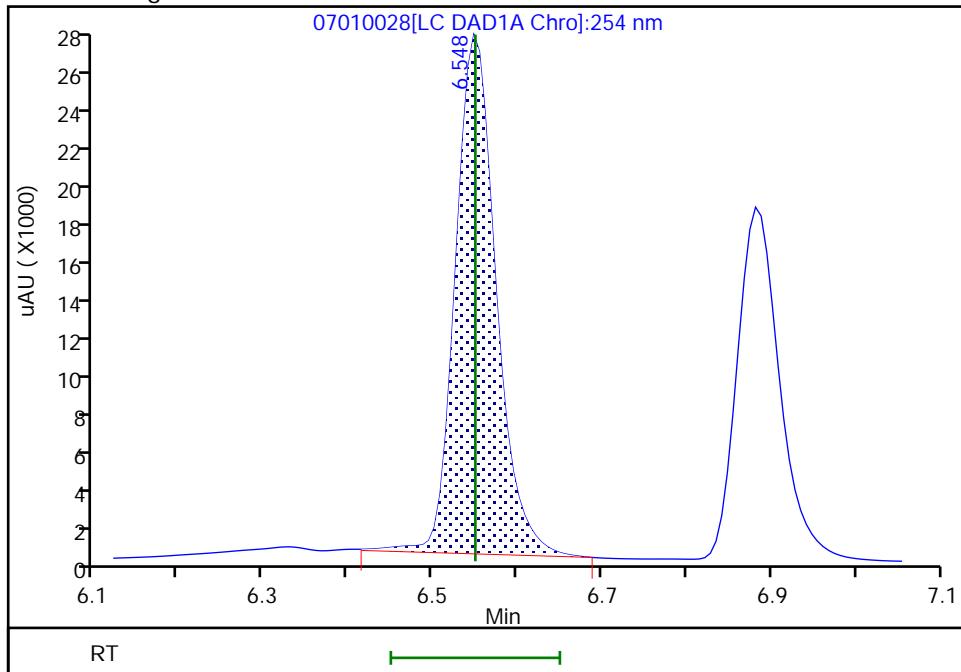
Processing Integration Results

RT: 6.55
 Area: 106504
 Amount: 0.427161
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 89208
 Amount: 0.414990
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:27

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

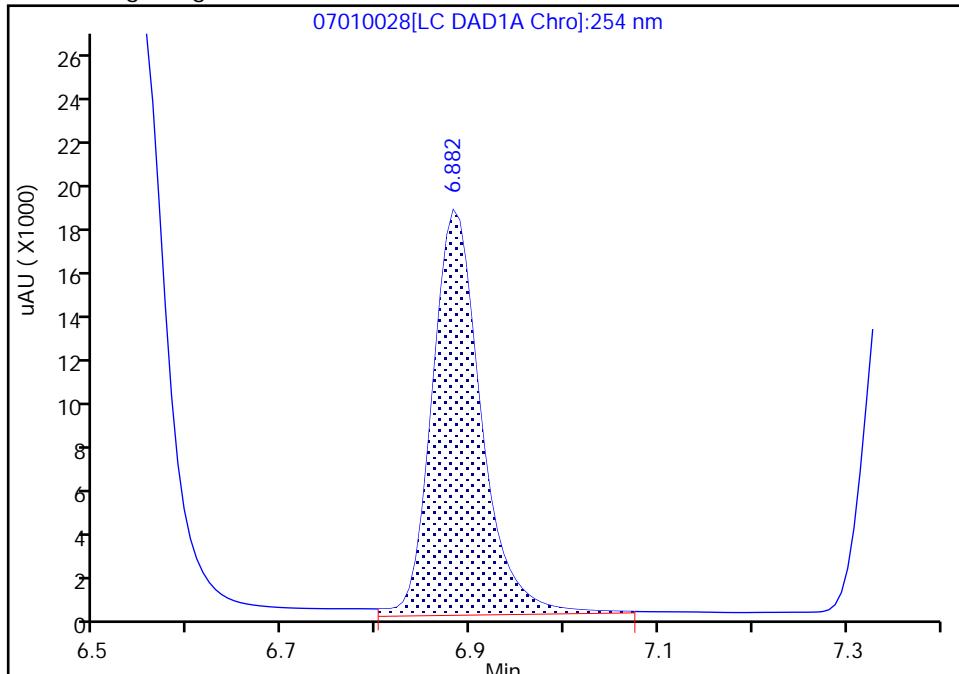
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D
 Injection Date: 01-Jul-2019 22:46:18 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L5
 Client ID:
 Operator ID: hkf ALS Bottle#: 28 Worklist Smp#: 28
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

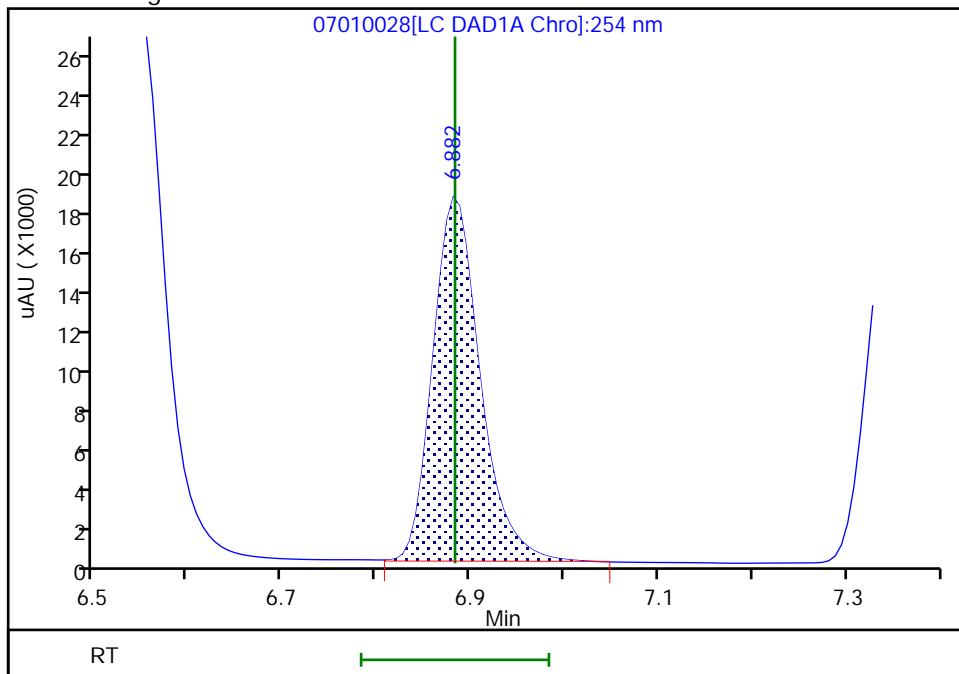
Processing Integration Results

RT: 6.88
 Area: 66458
 Amount: 0.420218
 Amount Units: ug/mL



Manual Integration Results

RT: 6.88
 Area: 63316
 Amount: 0.405545
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:30

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010029.D
 Lims ID: IC DMT L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 01-Jul-2019 23:09:14 ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L4
 Misc. Info.: 280-0083376-029
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:26 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:03:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.550	6.550	0.000	53282	0.2503	0.2479	M
5 DNX	1	6.883	6.883	0.000	37838	0.2503	0.2424	
6 MNX	1	7.343	7.343	0.000	40507	0.2918	0.2893	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 02-Jul-2019 11:35:26

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010029.D

Injection Date: 01-Jul-2019 23:09:14

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L4

Worklist Smp#: 29

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

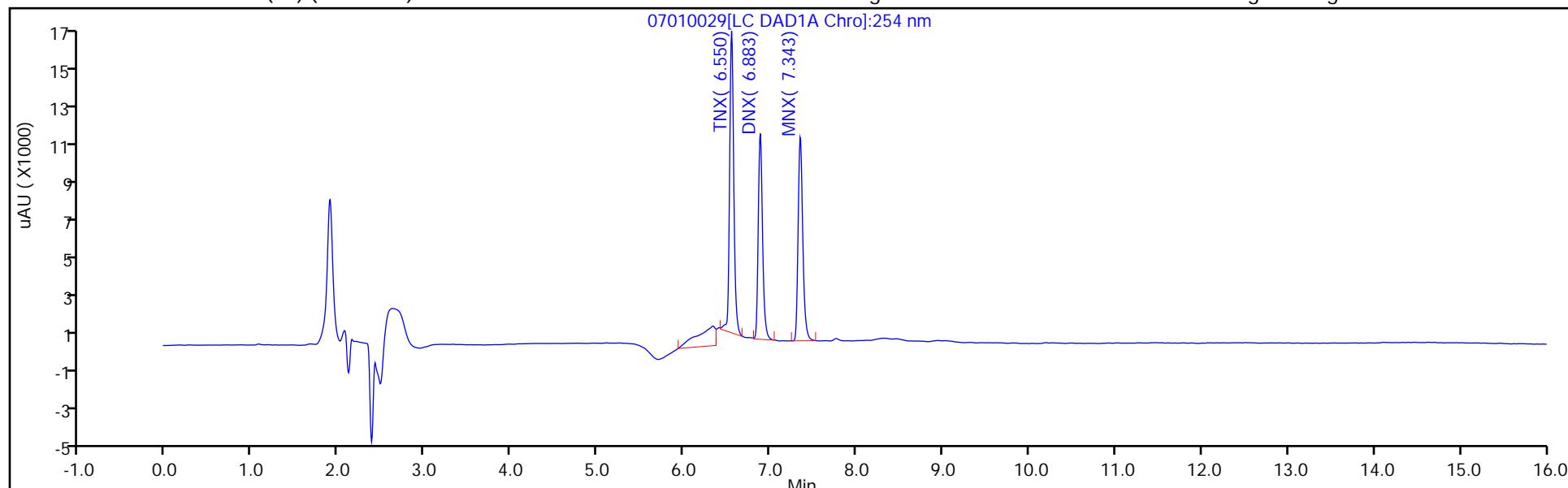
ALS Bottle#: 29

Method: 8330_X3

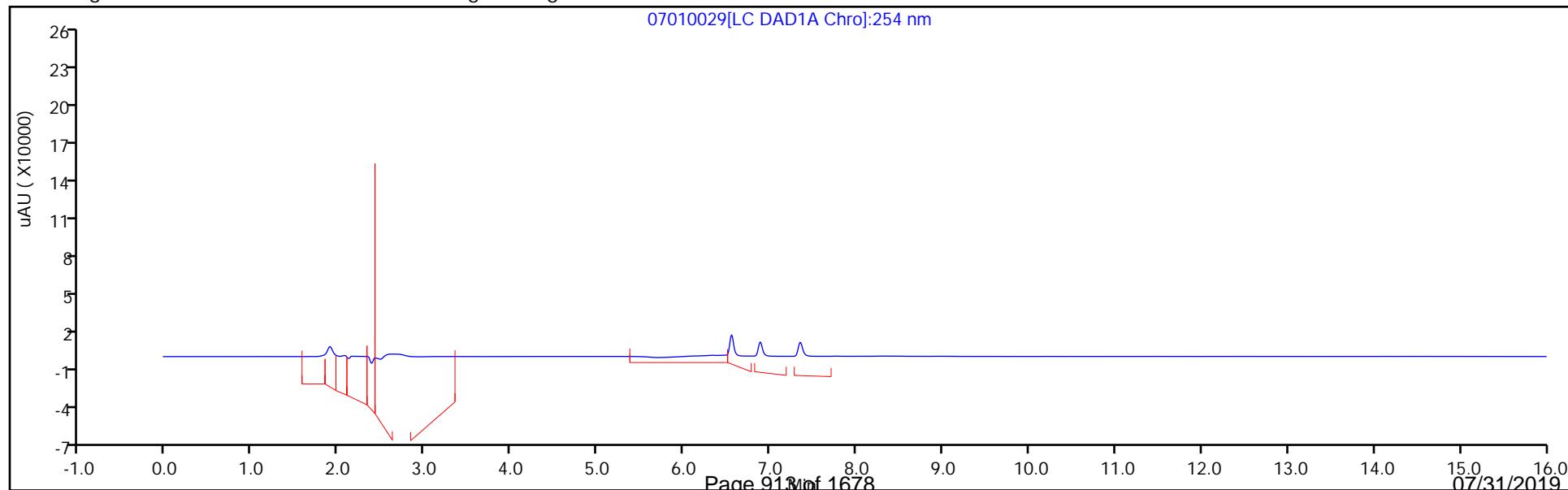
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver

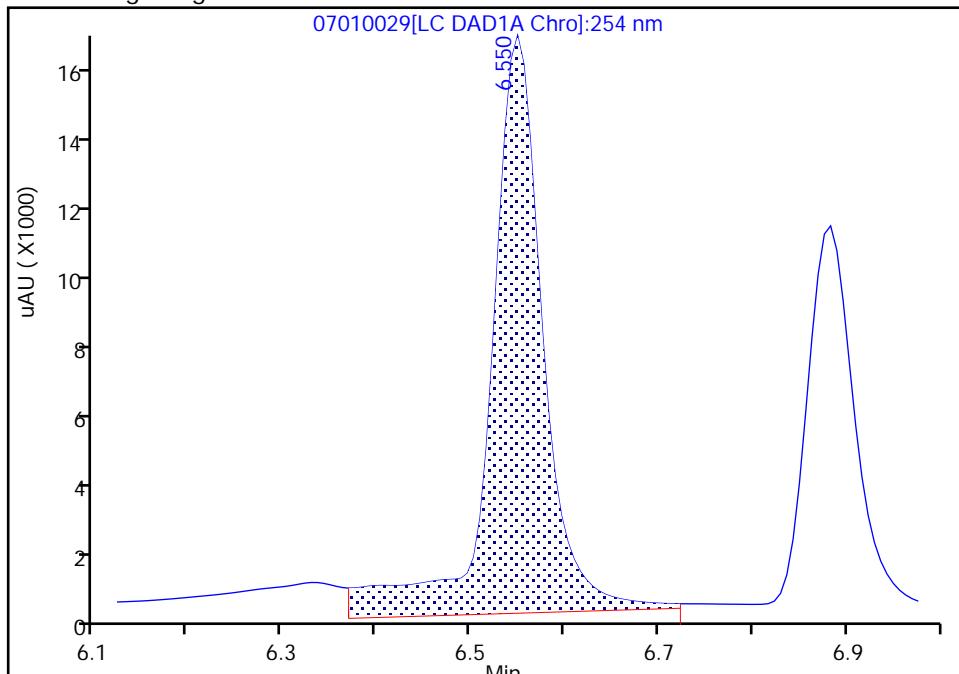
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010029.D
 Injection Date: 01-Jul-2019 23:09:14 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L4
 Client ID:
 Operator ID: hkf ALS Bottle#: 29 Worklist Smp#: 29
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

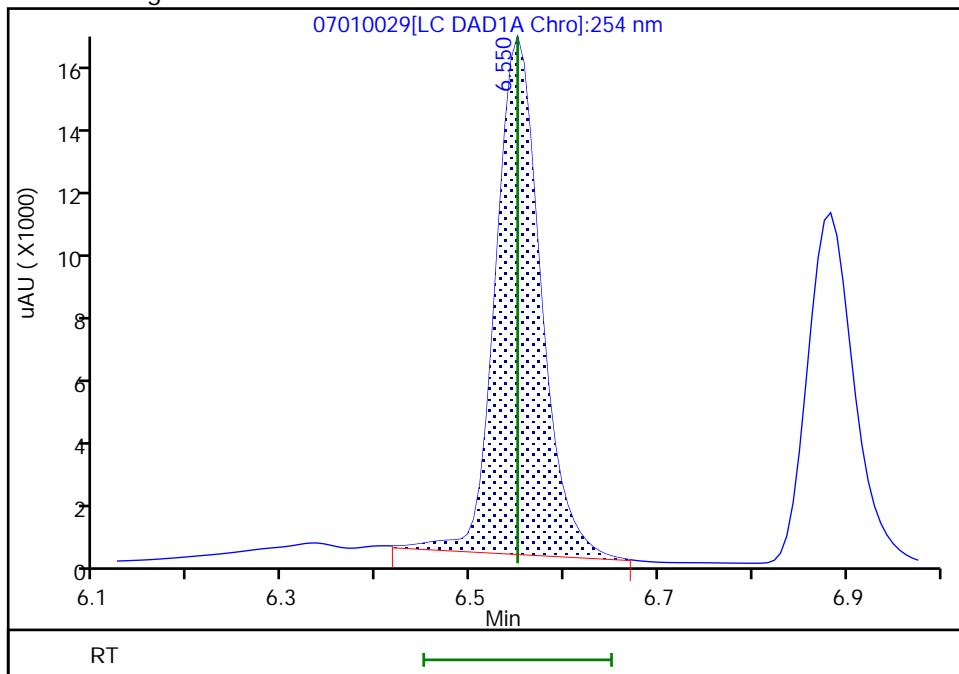
Processing Integration Results

RT: 6.55
 Area: 64440
 Amount: 0.252802
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 53282
 Amount: 0.247865
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:09

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010030.D
 Lims ID: IC DMT L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 01-Jul-2019 23:32:12 ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L3
 Misc. Info.: 280-0083376-030
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:27 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:04:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.549	6.550	-0.001	21051	0.1001	0.0979	M
5 DNX	1	6.882	6.883	-0.001	15208	0.1001	0.0974	
6 MNX	1	7.342	7.343	-0.001	15754	0.1167	0.1125	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 5.00 Units: uL

Report Date: 02-Jul-2019 11:35:28

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010030.D

Injection Date: 01-Jul-2019 23:32:12

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L3

Worklist Smp#: 30

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

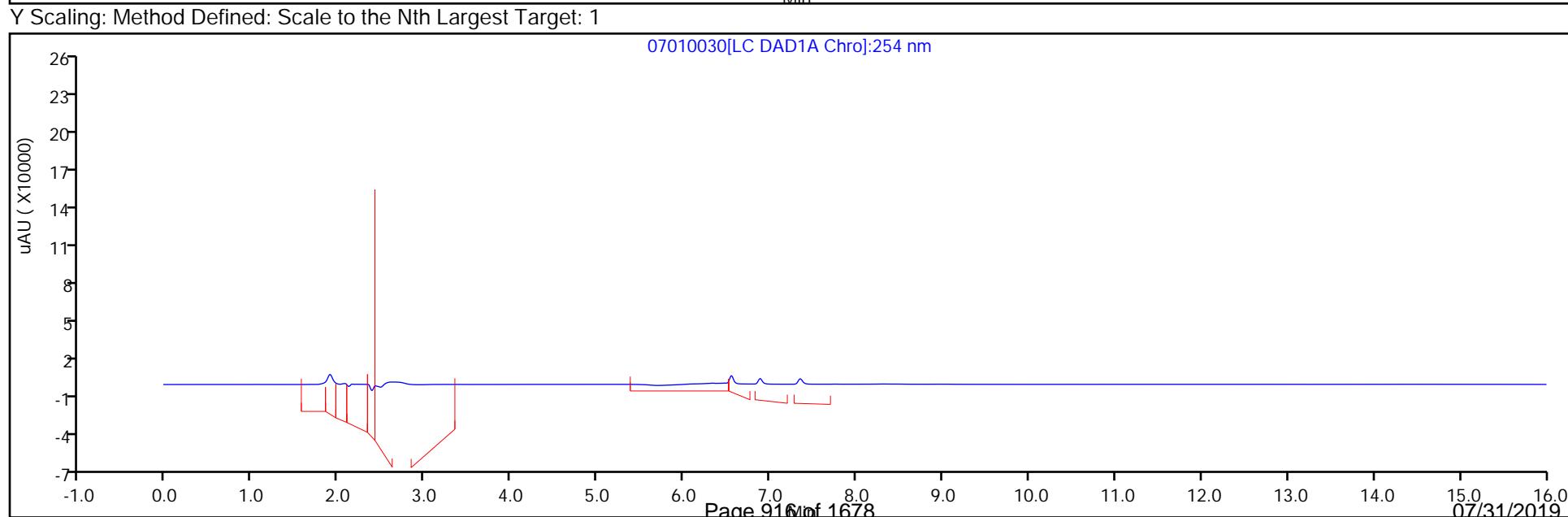
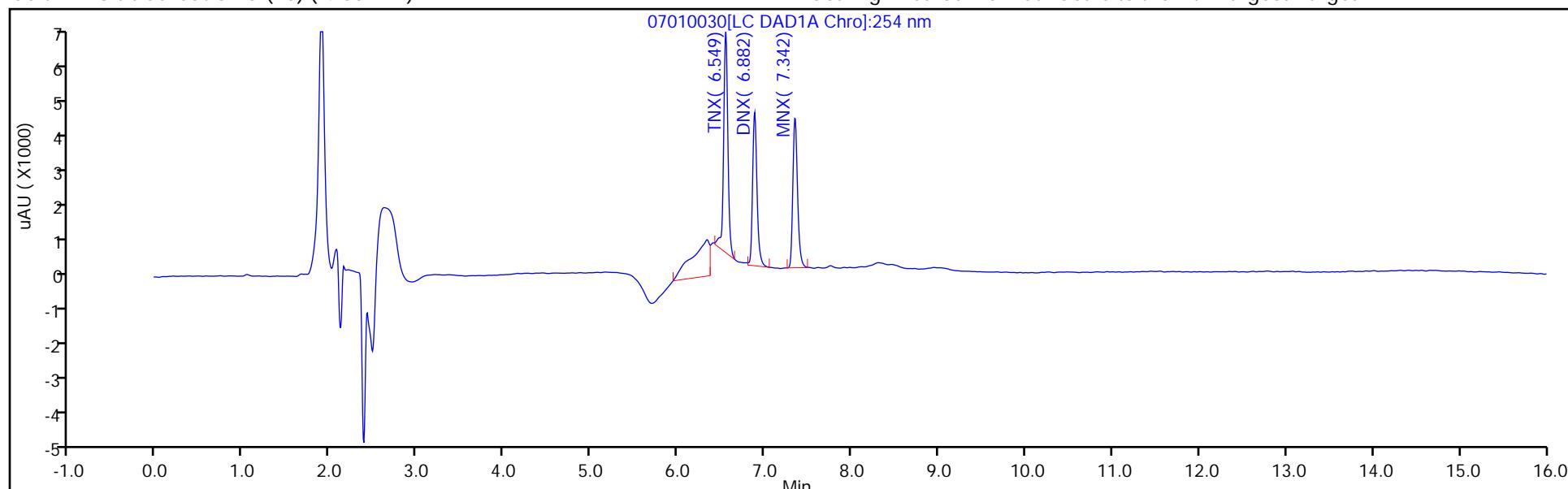
ALS Bottle#: 30

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

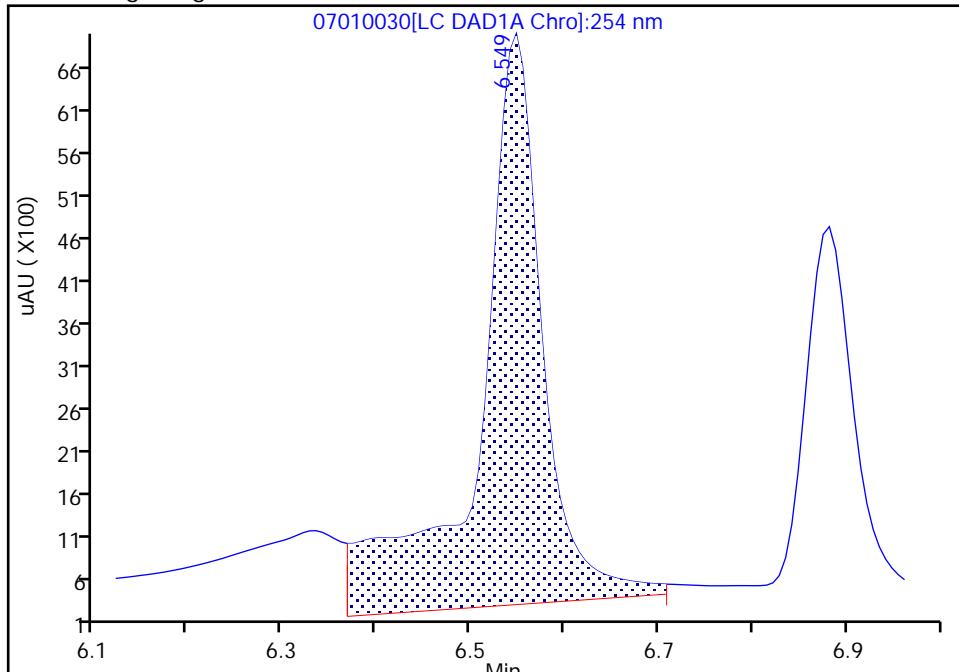
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010030.D
 Injection Date: 01-Jul-2019 23:32:12 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L3
 Client ID:
 Operator ID: hkf ALS Bottle#: 30 Worklist Smp#: 30
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

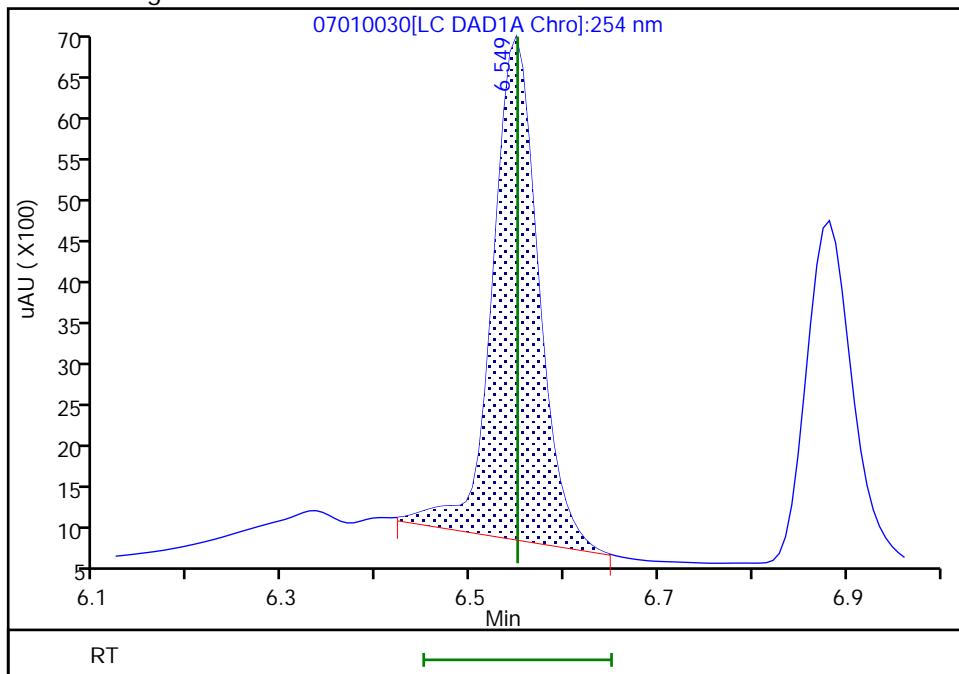
Processing Integration Results

RT: 6.55
 Area: 31755
 Amount: 0.133076
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 21051
 Amount: 0.097928
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:04:34

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010031.D
 Lims ID: IC DMT L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 01-Jul-2019 23:55:10 ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: IC DMT L2
 Misc. Info.: 280-0083376-031
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:29 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:04:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.545	6.550	-0.005	10428	0.0501	0.0485	M
5 DNX	1	6.878	6.883	-0.005	7764	0.0501	0.0497	
6 MNX	1	7.345	7.343	0.002	7995	0.0584	0.0571	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 2.50 Units: uL

Report Date: 02-Jul-2019 11:35:29

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010031.D

Injection Date: 01-Jul-2019 23:55:10

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L2

Worklist Smp#: 31

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

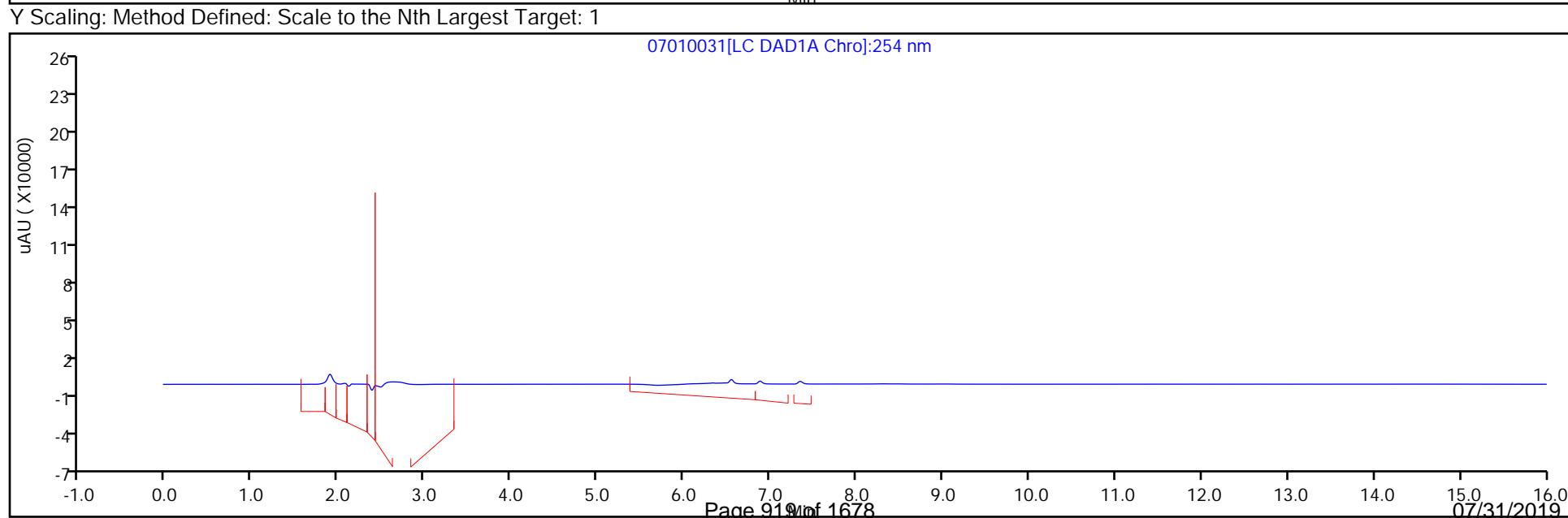
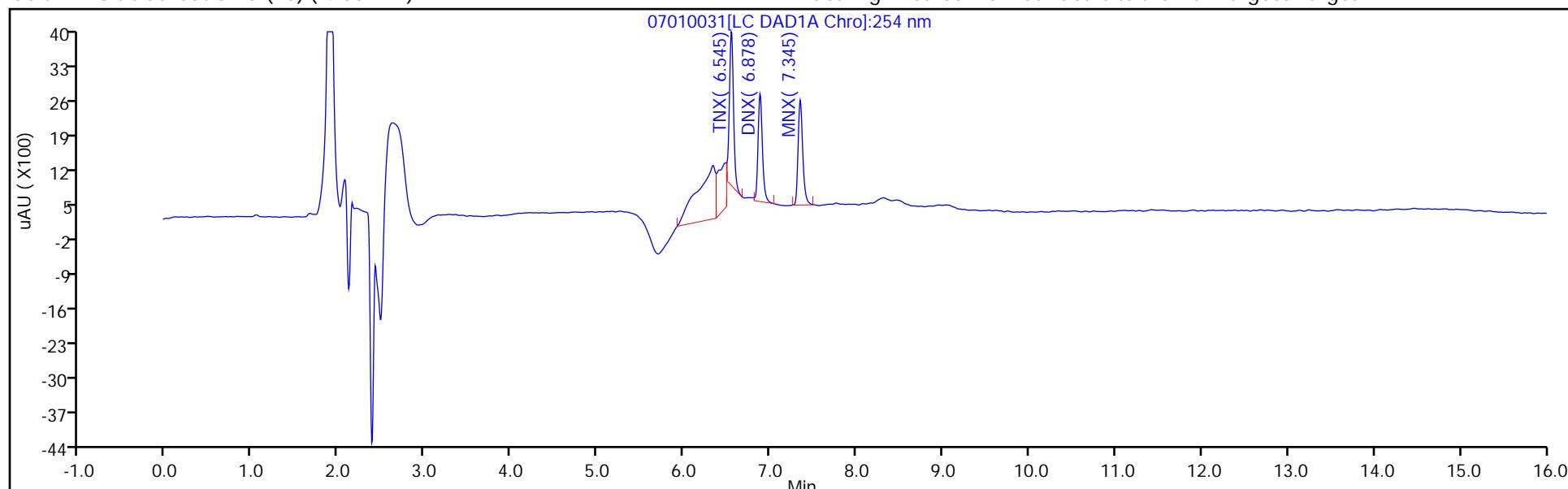
ALS Bottle#: 31

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

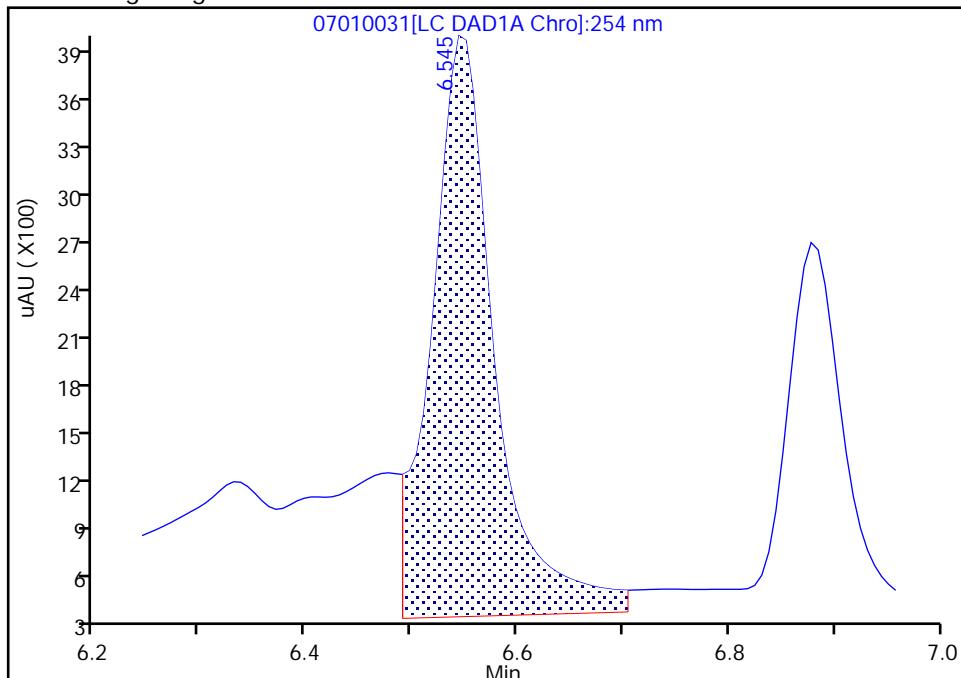
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010031.D
 Injection Date: 01-Jul-2019 23:55:10 Instrument ID: CHHPLC_X3
 Lims ID: IC DMT L2
 Client ID:
 Operator ID: hkf ALS Bottle#: 31 Worklist Smp#: 31
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

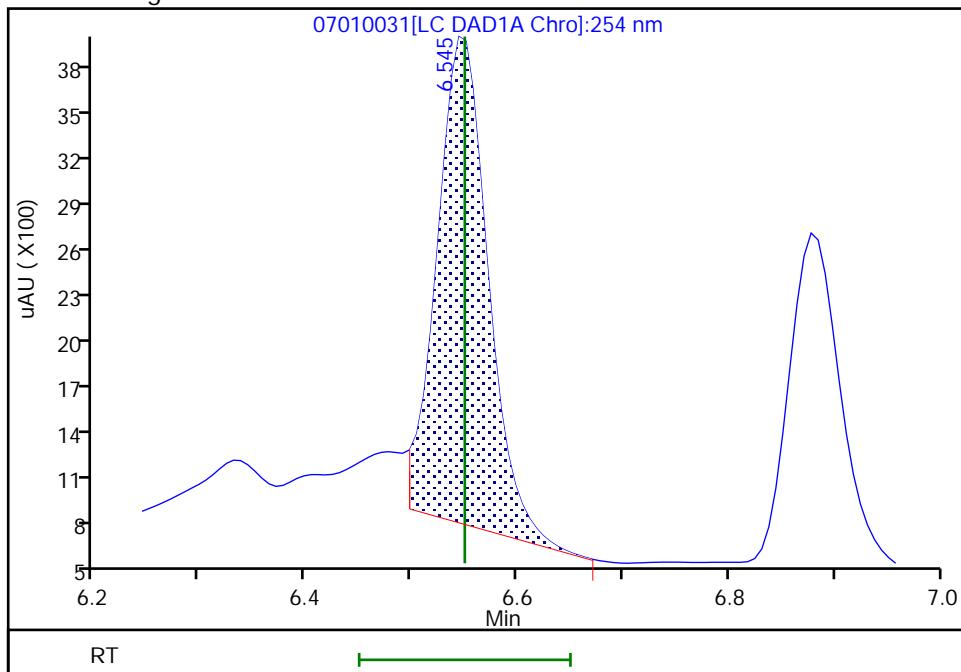
Processing Integration Results

RT: 6.54
 Area: 14549
 Amount: 0.064589
 Amount Units: ug/mL



Manual Integration Results

RT: 6.54
 Area: 10428
 Amount: 0.048510
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:04:49

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Lims ID: IC DMT L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 02-Jul-2019 00:18:07 ALS Bottle#: 32 Worklist Smp#: 32
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: IC DMT L1
 Misc. Info.: 280-0083376-032
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.550	6.550	0.000	4216	0.0200	0.0196	
5 DNX	1	6.883	6.883	0.000	3416	0.0200	0.0219	
6 MNX	1	7.350	7.343	0.007	3273	0.0233	0.0234	

Reagents:

8330 DMT_00002 Amount Added: 1.00 Units: uL

Report Date: 02-Jul-2019 11:35:30

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Injection Date: 02-Jul-2019 00:18:07

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: IC DMT L1

Worklist Smp#: 32

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

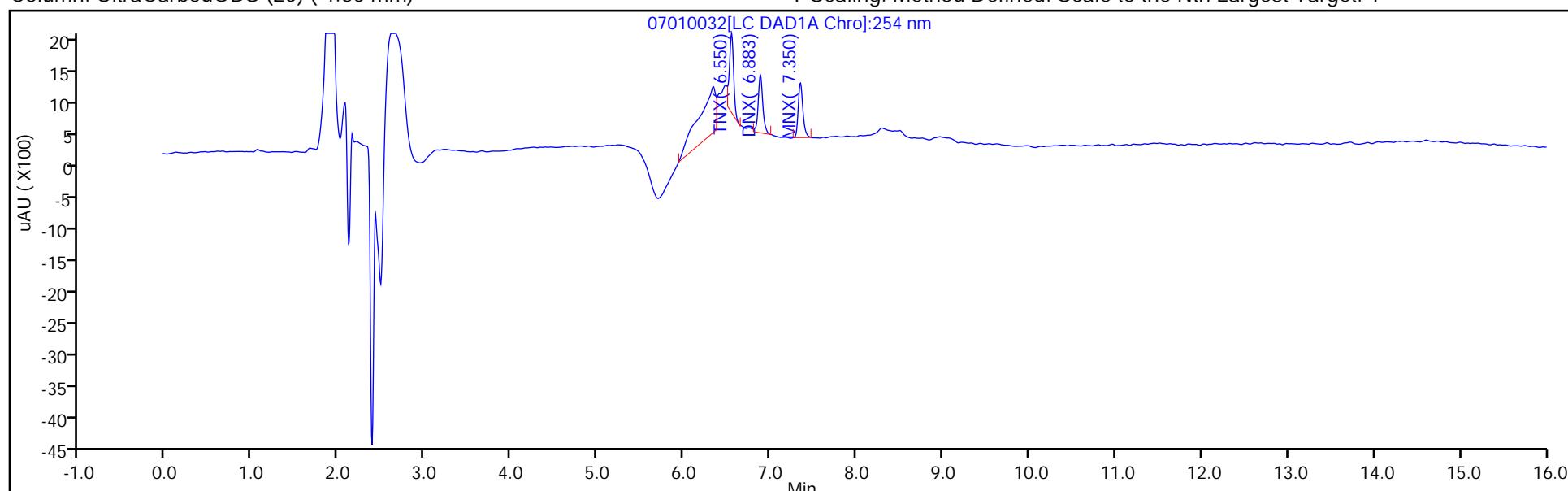
ALS Bottle#: 32

Method: 8330_X3

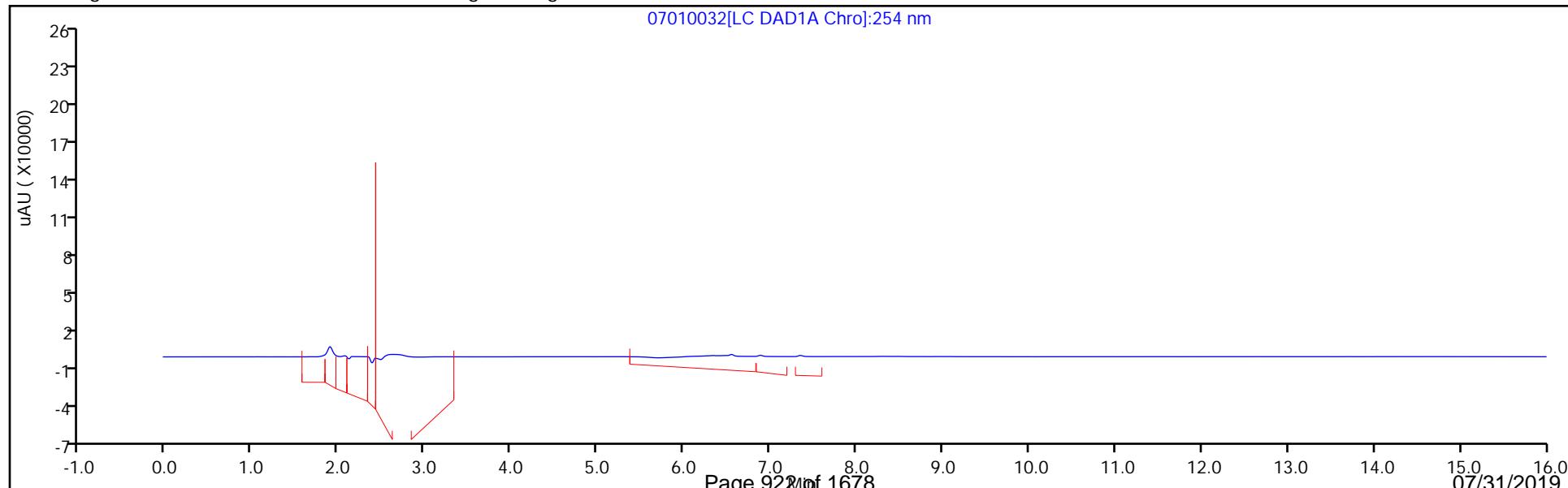
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-457315/15 Calibration Date: 05/07/2019 19:48
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 05070015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	167918		434	400	8.4	15.0
HMX	Ave	171198	162118		379	400	-5.3	15.0
RDX	Ave	208444	201700		387	400	-3.2	15.0
Nitrobenzene	Ave	405448	399908		395	400	-1.4	15.0
1,3-Dinitrobenzene	Ave	635564	627893		395	400	-1.2	15.0
Nitroglycerin	Ave	192935	175353		3640	4000	-9.1	15.0
2-Nitrotoluene	Ave	261865	254708		389	400	-2.7	15.0
4-Nitrotoluene	Ave	226647	225693		398	400	-0.4	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	294185		396	400	-1.1	15.0
3-Nitrotoluene	Ave	292691	283468		387	400	-3.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	422210		393	400	-1.9	15.0
1,3,5-Trinitrobenzene	Ave	457546	454625		397	400	-0.6	15.0
2,6-Dinitrotoluene	Ave	293465	278643		380	400	-5.1	15.0
2,4-Dinitrotoluene	Ave	569466	552483		388	400	-3.0	15.0
Tetryl	Ave	314480	326443		415	400	3.8	15.0
2,4,6-Trinitrotoluene	Ave	407281	373723		367	400	-8.2	15.0
PETN	Ave	132364	127215		3840	4000	-3.9	15.0
1,2-Dinitrobenzene	Ave	276856	252750		365	400	-8.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-457315/15 Calibration Date: 05/07/2019 19:48
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 05070015.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.08	5.79	6.09
HMX	7.20	7.05	7.35
RDX	9.28	9.15	9.45
Nitrobenzene	12.30	12.18	12.48
1,3-Dinitrobenzene	15.88	15.73	16.03
Nitroglycerin	15.88	15.72	16.02
2-Nitrotoluene	16.71	16.57	16.87
4-Nitrotoluene	17.04	16.90	17.20
4-Amino-2,6-dinitrotoluene	17.44	17.29	17.59
3-Nitrotoluene	17.96	17.82	18.12
2-Amino-4,6-dinitrotoluene	18.46	18.30	18.60
1,3,5-Trinitrobenzene	19.22	19.06	19.36
2,6-Dinitrotoluene	20.08	19.92	20.22
2,4-Dinitrotoluene	20.62	20.47	20.77
Tetryl	23.98	23.82	24.12
2,4,6-Trinitrotoluene	24.96	24.80	25.10
PETN	25.36	25.20	25.50
1,2-Dinitrobenzene	13.34	13.20	13.50

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070015.D
 Lims ID: ICV FULL 8330
 Client ID:
 Sample Type: ICV
 Inject. Date: 07-May-2019 19:48:22 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: ICV FULL 8330
 Misc. Info.: 280-0081649-015
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist:
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:13:52 Calib Date: 07-May-2019 19:13:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:05:17

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	4.430	4.446	-0.016	161383	0.4000	0.4089	
2 2,4-diamino-6-nitrotoluene	1	5.030	4.993	0.037	94666	0.4000	0.3700	
5 2,4,6-Trinitrophenol	1	6.077	5.940	0.137	67167	0.4000	0.4336	
6 HMX	1	7.203	7.200	0.003	64847	0.4000	0.3788	
8 RDX	1	9.283	9.300	-0.017	80680	0.4000	0.3871	
9 Nitrobenzene	1	12.296	12.326	-0.030	159963	0.4000	0.3945	
\$ 10 1,2-Dinitrobenzene	1	13.336	13.346	-0.010	101100	0.4000	0.3652	
11 3,5-Dinitroaniline	1	15.263	15.266	-0.003	190443	0.4000	0.4055	
13 Nitroglycerin	2	15.883	15.873	0.010	701412	4.00	3.64	
12 1,3-Dinitrobenzene	1	15.876	15.880	-0.004	251157	0.4000	0.3952	
14 o-Nitrotoluene	1	16.710	16.720	-0.010	101883	0.4000	0.3891	
15 p-Nitrotoluene	1	17.043	17.053	-0.010	90277	0.4000	0.3983	
16 4-Amino-2,6-dinitrotoluene	1	17.443	17.440	0.003	117674	0.4000	0.3957	
17 m-Nitrotoluene	1	17.956	17.966	-0.010	113387	0.4000	0.3874	
18 2-Amino-4,6-dinitrotoluene	1	18.463	18.446	0.017	168884	0.4000	0.3925	
19 1,3,5-Trinitrobenzene	1	19.216	19.213	0.003	181850	0.4000	0.3974	
20 2,6-Dinitrotoluene	1	20.076	20.073	0.003	111457	0.4000	0.3798	
21 2,4-Dinitrotoluene	1	20.623	20.620	0.003	220993	0.4000	0.3881	
22 Tetryl	1	23.977	23.966	0.011	130577	0.4000	0.4152	
23 2,4,6-Trinitrotoluene	1	24.957	24.953	0.004	149489	0.4000	0.3670	
24 PETN	2	25.363	25.353	0.010	508858	4.00	3.84	

Reagents:

3,5-DNA LCS_00033	Amount Added: 40.00	Units: uL
8330Surrogate_00103	Amount Added: 40.00	Units: uL
8330DiaminLCS_00032	Amount Added: 40.00	Units: uL
8330 LCS_00084	Amount Added: 40.00	Units: uL

Report Date: 08-May-2019 09:13:54

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070015.D

Injection Date: 07-May-2019 19:48:22

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: ICV FULL 8330

Worklist Smp#: 15

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

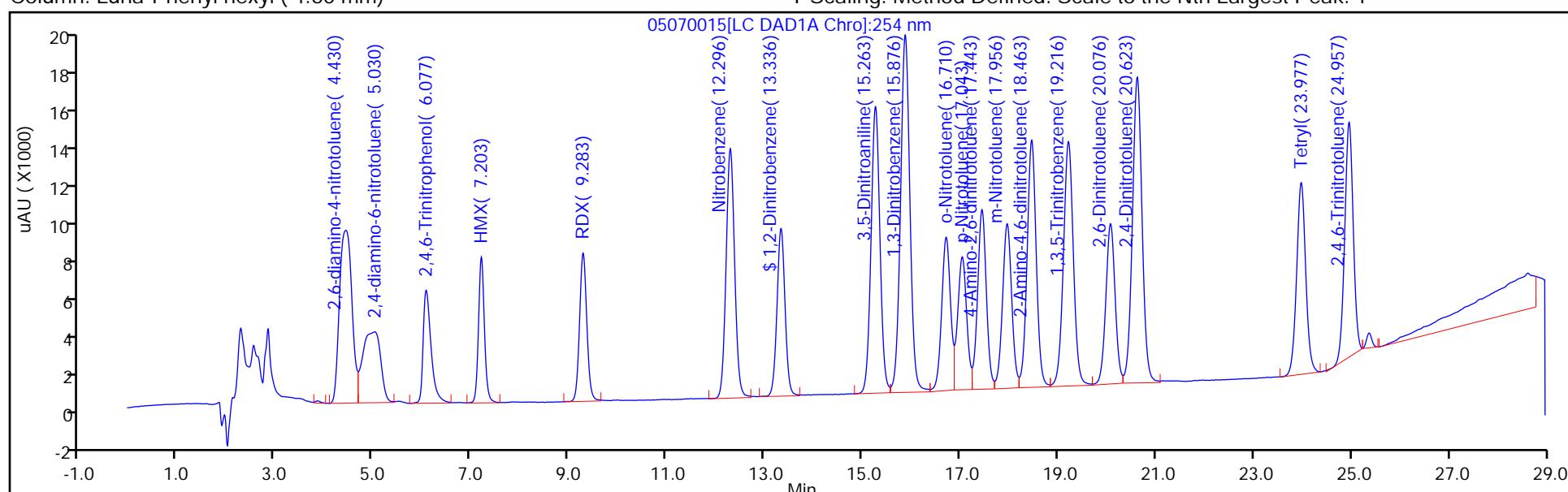
ALS Bottle#: 15

Method: G2_8330_Luna

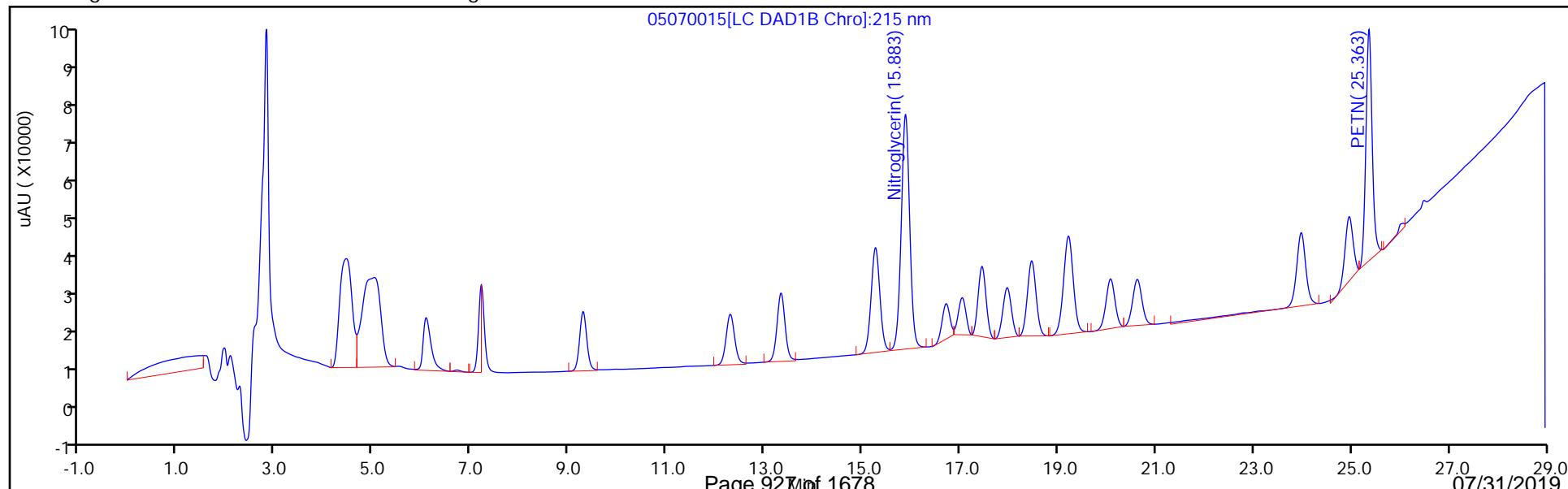
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: ICV 280-457315/24 Calibration Date: 05/08/2019 01:03

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 05070024.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	320604		318	400	-20.5*	15.0
DNX	Ave	289881	231993		320	400	-20.0*	15.0
MNX	Ave	269525	215047		372	467	-20.2*	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-457315/24 Calibration Date: 05/08/2019 01:03
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28
Lab File ID: 05070024.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.52	5.36	5.66
DNX	6.34	6.19	6.49
MNX	7.90	7.74	8.04

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070024.D
 Lims ID: ICV DMT
 Client ID:
 Sample Type: ICV
 Inject. Date: 08-May-2019 01:03:25 ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: ICV DMT
 Misc. Info.: 280-0081649-024
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist:
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 08-May-2019 09:14:04 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0325

First Level Reviewer: fiedlerh

Date:

08-May-2019 09:07:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.516	5.512	0.004	128370	0.4004	0.3182	
4 DNX	1	6.343	6.338	0.005	92890	0.4004	0.3204	
7 MNX	1	7.896	7.892	0.004	100384	0.4668	0.3724	

Reagents:

8330_OP_DMT_00002

Amount Added: 40.00

Units: uL

Report Date: 08-May-2019 09:14:06

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190507-81649.b\\05070024.D

Injection Date: 08-May-2019 01:03:25

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: ICV DMT

Worklist Smp#: 24

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

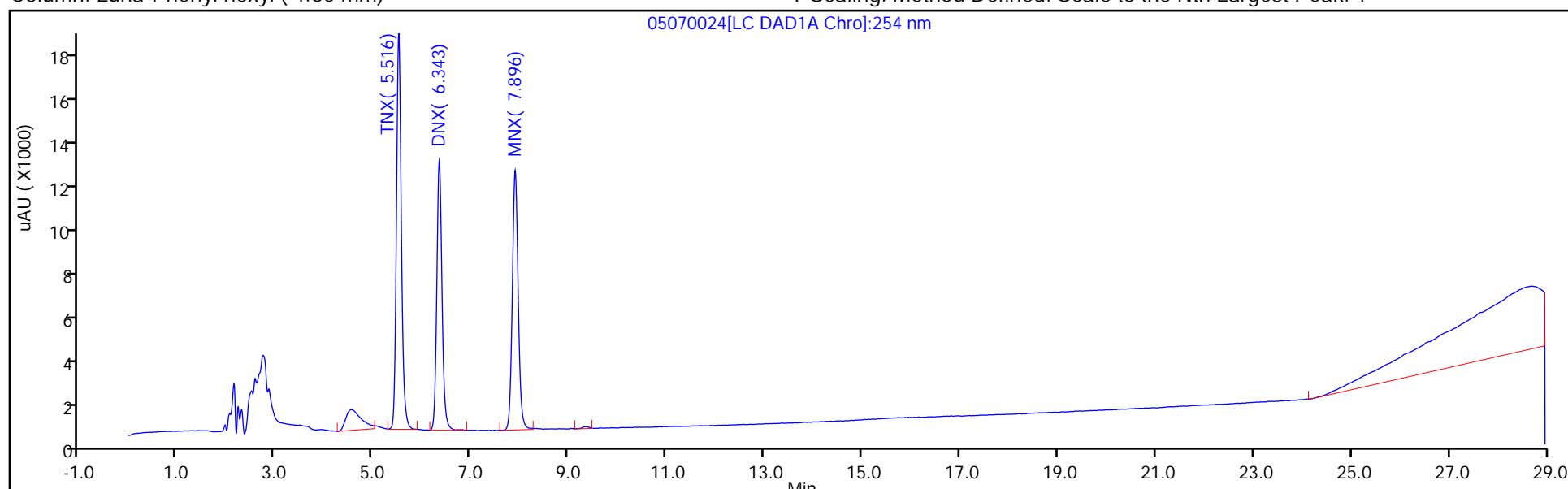
ALS Bottle#: 24

Method: G2_8330_Luna

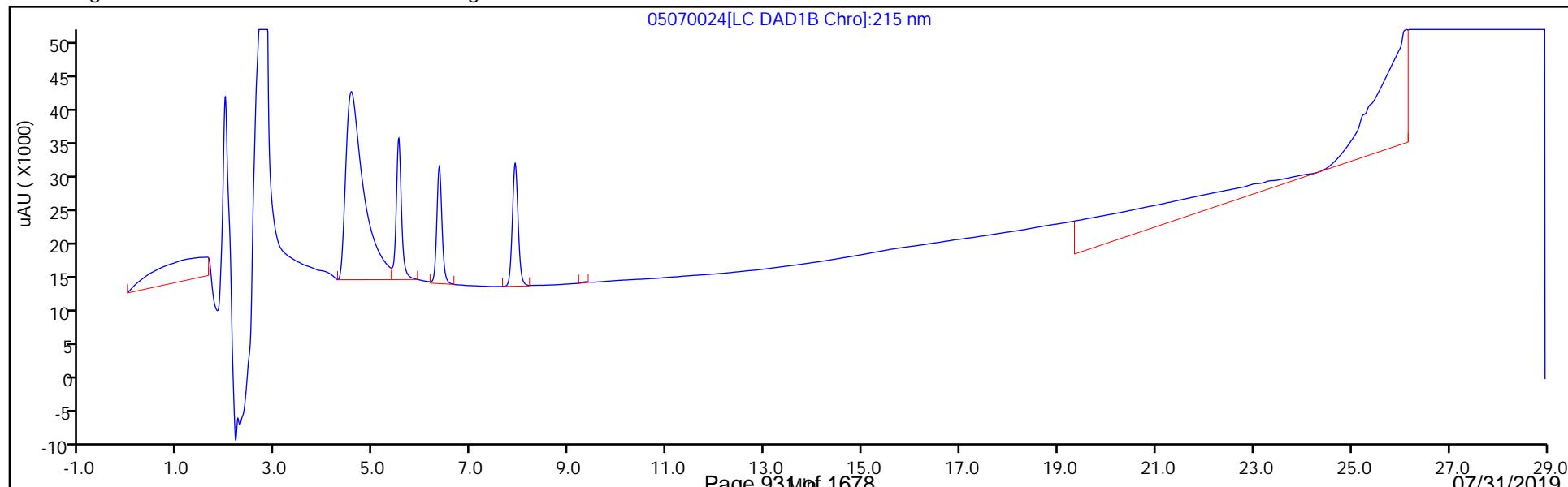
Limit Group: GCSV - 8330

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 VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: ICV 280-457456/7 Calibration Date: 05/08/2019 12:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 05080007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	391751		389	400	-2.9	15.0
DNX	Ave	289881	287488		397	400	-0.8	15.0
MNX	Ave	269525	267778		464	467	-0.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-457456/7 Calibration Date: 05/08/2019 12:21
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28
Lab File ID: 05080007.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.52	5.36	5.66
DNX	6.35	6.19	6.49
MNX	7.91	7.74	8.04

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190508-81686.b\05080007.D
 Lims ID: ICV DMT
 Client ID:
 Sample Type: ICV
 Inject. Date: 08-May-2019 12:21:28 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: ICV DMT
 Misc. Info.: 280-0081686-007
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist:
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190508-81686.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 09-May-2019 08:52:46 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0337

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	5.512	0.004	156857	0.4004	0.3888	
4 DNX	1	6.349	6.338	0.011	115110	0.4004	0.3971	
7 MNX	1	7.909	7.892	0.017	124999	0.4668	0.4638	

Reagents:

8330_OP_DMT_00002 Amount Added: 40.00 Units: uL

Report Date: 09-May-2019 08:53:02

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190508-81686.b\05080007.D

Injection Date: 08-May-2019 12:21:28

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: ICV DMT

Worklist Smp#: 7

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

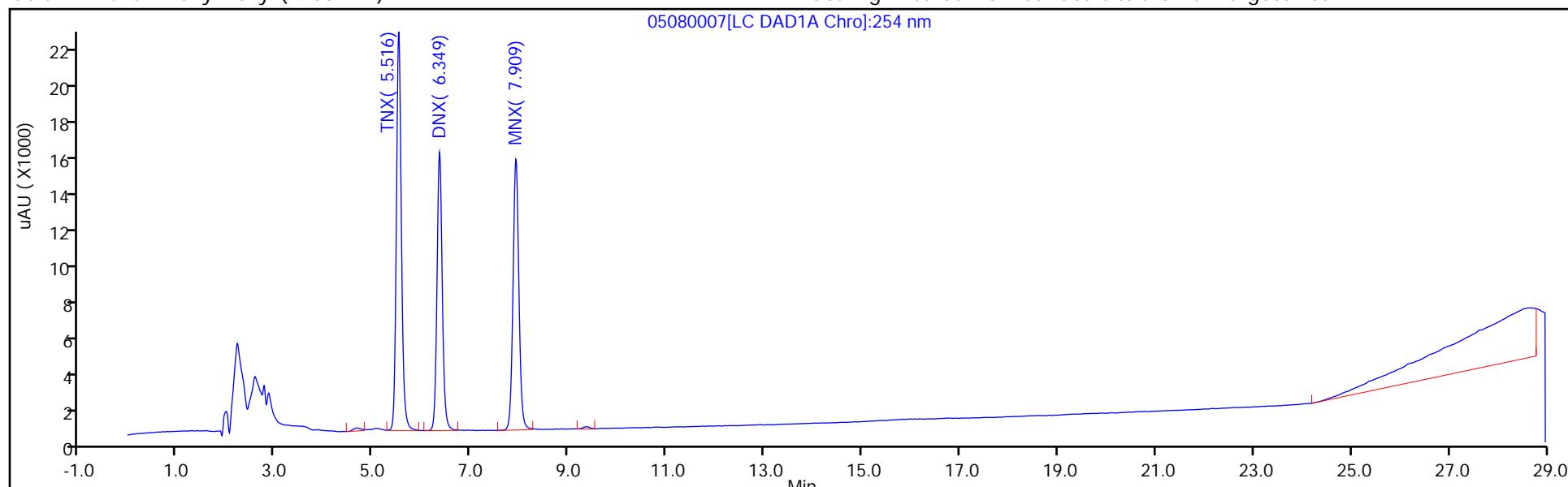
ALS Bottle#: 7

Method: G2_8330_Luna

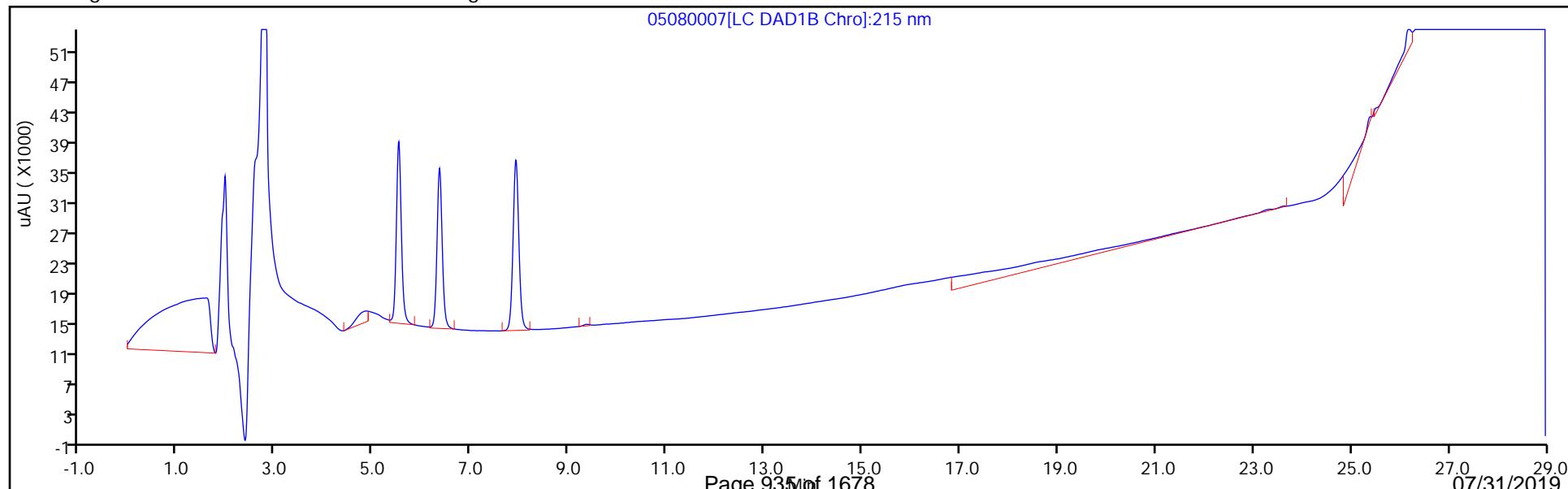
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461583/40 Calibration Date: 06/15/2019 09:15
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 06140040.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	166320		268	250	7.4	15.0
HMX	Ave	171198	184968		270	250	8.0	15.0
RDX	Ave	208444	334536		401	250	60.5*	15.0
Nitrobenzene	Ave	405448	379924		235	251	-6.3	15.0
Nitroglycerin	Ave	192935	189529		2460	2500	-1.8	15.0
1,3-Dinitrobenzene	Ave	635564	653754		257	250	2.9	15.0
2-Nitrotoluene	Ave	261865	247829		237	251	-5.4	15.0
4-Nitrotoluene	Ave	226647	215749		239	251	-4.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	310684		262	251	4.5	15.0
3-Nitrotoluene	Ave	292691	279319		240	251	-4.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	445188		259	251	3.5	15.0
1,3,5-Trinitrobenzene	Ave	457546	471188		257	250	3.0	15.0
2,6-Dinitrotoluene	Ave	293465	297101		254	251	1.2	15.0
2,4-Dinitrotoluene	Ave	569466	584128		257	251	2.6	15.0
Tetryl	Ave	314480	350304		278	250	11.4	15.0
2,4,6-Trinitrotoluene	Ave	407281	418315		258	251	2.7	15.0
PETN	Ave	132364	137058		2590	2500	3.5	15.0
1,2-Dinitrobenzene	Ave	276856	286056		258	250	3.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461583/40 Calibration Date: 06/15/2019 09:15
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 06140040.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.92	5.89	6.19
HMX	7.13	7.00	7.30
RDX	9.19	9.08	9.38
Nitrobenzene	12.18	12.05	12.35
Nitroglycerin	15.71	15.57	15.87
1,3-Dinitrobenzene	15.73	15.58	15.88
2-Nitrotoluene	16.54	16.38	16.68
4-Nitrotoluene	16.87	16.71	17.01
4-Amino-2,6-dinitrotoluene	17.27	17.10	17.40
3-Nitrotoluene	17.78	17.61	17.91
2-Amino-4,6-dinitrotoluene	18.29	18.12	18.42
1,3,5-Trinitrobenzene	19.03	18.87	19.17
2,6-Dinitrotoluene	19.87	19.70	20.00
2,4-Dinitrotoluene	20.43	20.25	20.55
Tetryl	23.75	23.55	23.85
2,4,6-Trinitrotoluene	24.75	24.56	24.86
PETN	25.20	25.01	25.31
1,2-Dinitrobenzene	13.20	13.05	13.35

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140040.D
 Lims ID: CCV 8330
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 09:15:20 ALS Bottle#: 7 Worklist Smp#: 40
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: CCV 8330
 Misc. Info.: 280-0082871-040
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:36 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:58:03

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	4.431	0.002	103991	0.2500	0.2635	
2 2,4-diamino-6-nitrotoluene	1	4.980	4.971	0.009	65414	0.2500	0.2557	
5 2,4,6-Trinitrophenol	1	5.920	6.038	-0.118	41580	0.2500	0.2684	
6 HMX	1	7.133	7.151	-0.018	46242	0.2500	0.2701	
8 RDX	1	9.193	9.231	-0.038	83634	0.2500	0.4012	
9 Nitrobenzene	1	12.180	12.198	-0.018	95171	0.2505	0.2347	
\$ 10 1,2-Dinitrobenzene	1	13.200	13.204	-0.004	71514	0.2500	0.2583	
11 3,5-Dinitroaniline	1	15.127	15.124	0.003	124974	0.2500	0.2658	
13 Nitroglycerin	2	15.707	15.718	-0.011	473823	2.50	2.46	
12 1,3-Dinitrobenzene	1	15.727	15.731	-0.004	163602	0.2503	0.2574	
14 o-Nitrotoluene	1	16.540	16.531	0.009	62143	0.2508	0.2373	
15 p-Nitrotoluene	1	16.867	16.858	0.009	54153	0.2510	0.2389	
16 4-Amino-2,6-dinitrotoluene	1	17.267	17.251	0.016	77904	0.2508	0.2620	
17 m-Nitrotoluene	1	17.780	17.764	0.016	70109	0.2510	0.2395	
18 2-Amino-4,6-dinitrotoluene	1	18.293	18.271	0.022	111631	0.2508	0.2595	
19 1,3,5-Trinitrobenzene	1	19.027	19.024	0.003	117797	0.2500	0.2575	
20 2,6-Dinitrotoluene	1	19.873	19.851	0.022	74498	0.2508	0.2539	
21 2,4-Dinitrotoluene	1	20.427	20.404	0.023	146324	0.2505	0.2569	
22 Tetryl	1	23.747	23.698	0.049	87576	0.2500	0.2785	M
23 2,4,6-Trinitrotoluene	1	24.753	24.711	0.042	104997	0.2510	0.2578	
24 PETN	2	25.200	25.158	0.042	342645	2.50	2.59	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50 Units: uL

8330_ADDs_00022

Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 11:07:36

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140040.D

Injection Date: 15-Jun-2019 09:15:20

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: CCV 8330

Worklist Smp#: 40

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

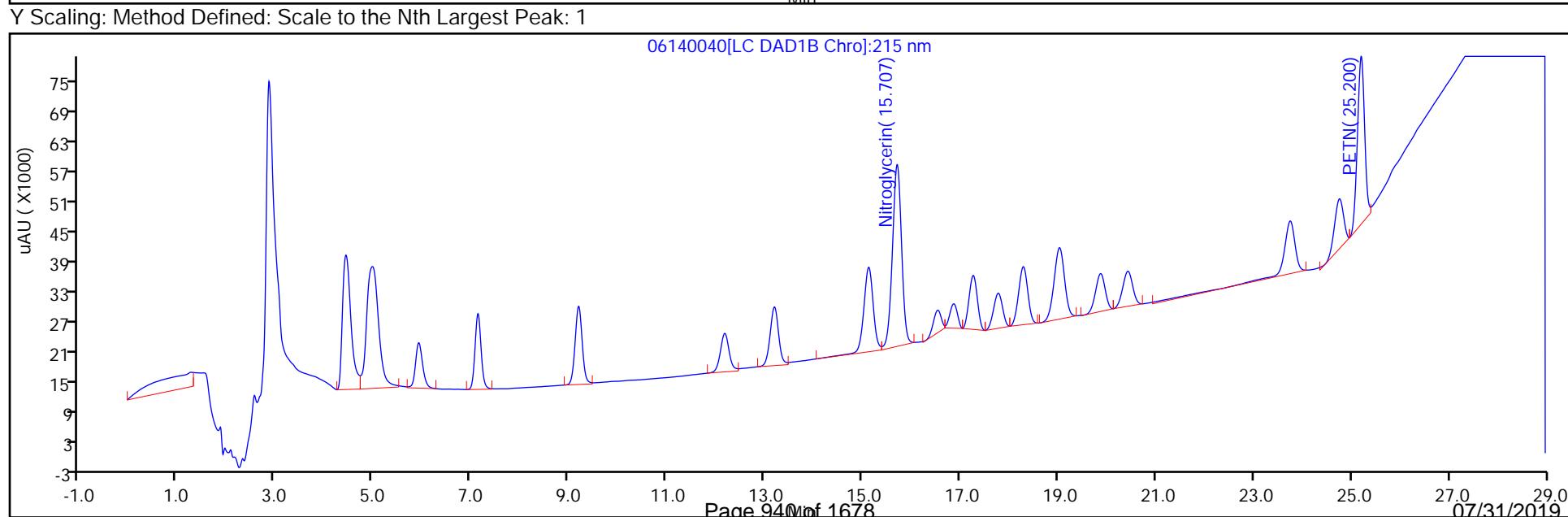
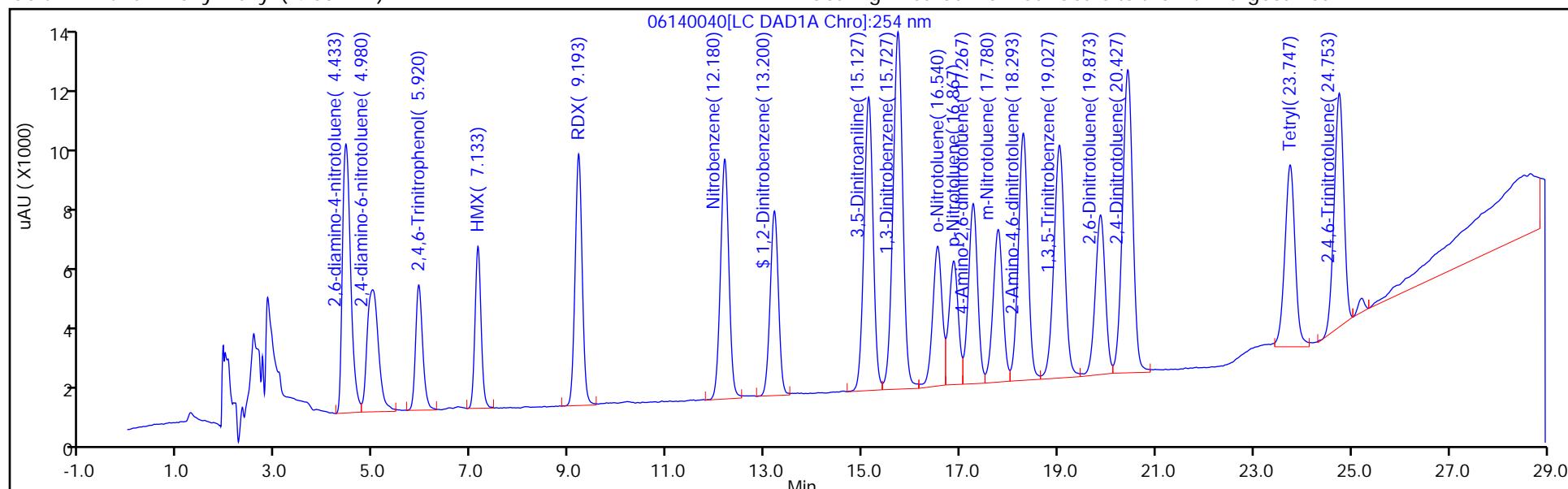
ALS Bottle#: 7

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



Eurofins TestAmerica, Denver

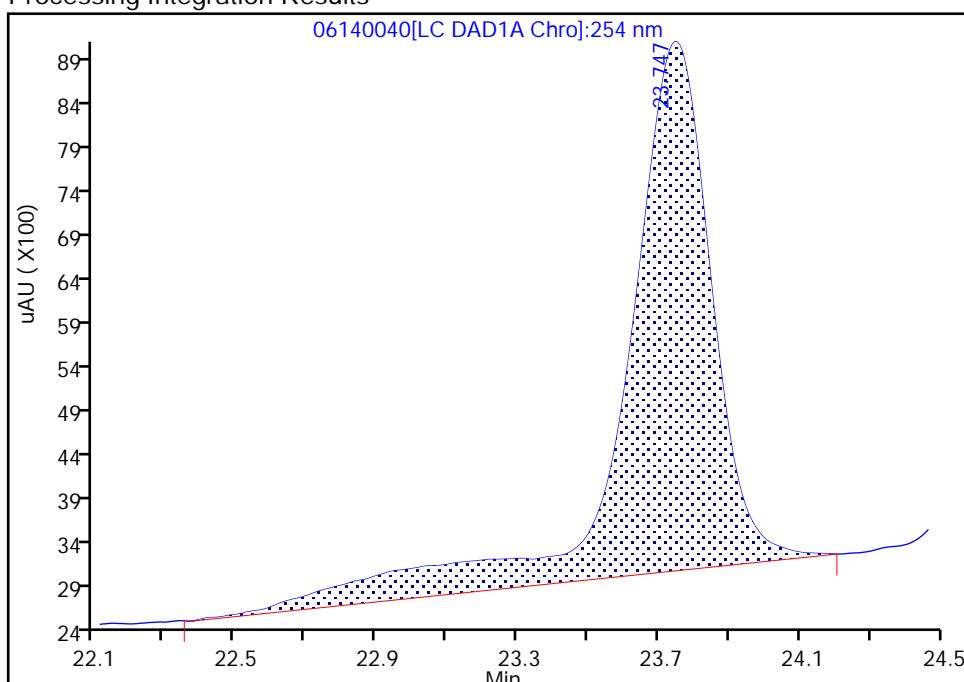
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 Injection Date: 15-Jun-2019 09:15:20 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: CCV 8330
 Client ID:
 Operator ID: HKF ALS Bottle#: 7 Worklist Smp#: 40
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

22 Tetryl, CAS: 479-45-8

Signal: 1

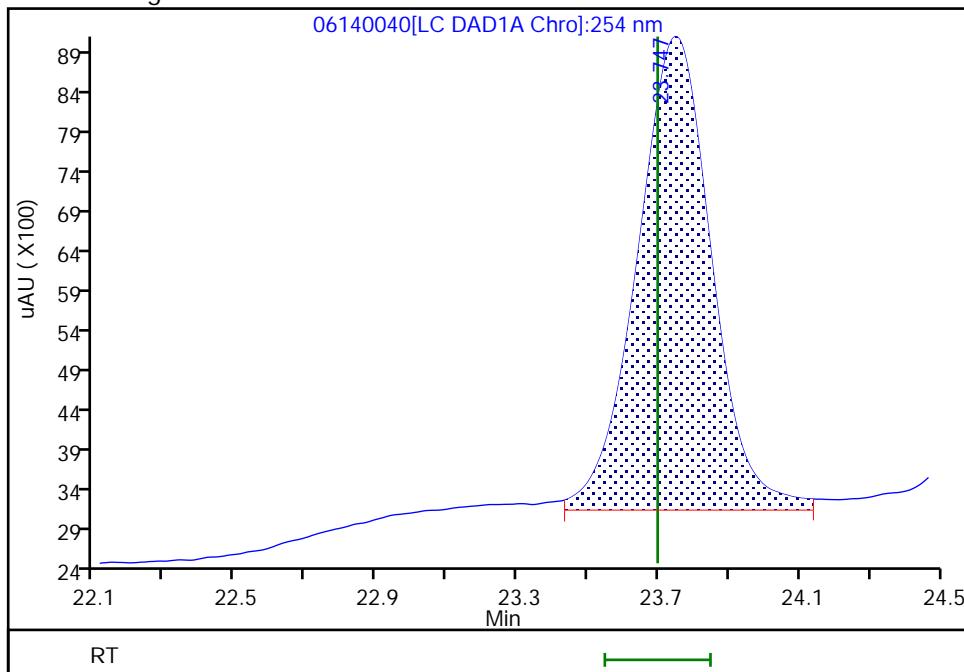
RT: 23.75
 Area: 103926
 Amount: 0.330469
 Amount Units: ug/ml

Processing Integration Results



RT: 23.75
 Area: 87576
 Amount: 0.278479
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:57:52

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461583/41 Calibration Date: 06/15/2019 09:50

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06140041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	425031		264	250	5.4	15.0
DNX	Ave	289881	316220		273	250	9.1	15.0
MNX	Ave	269525	296000		320	292	9.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461583/41 Calibration Date: 06/15/2019 09:50
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28
Lab File ID: 06140041.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.47	5.29	5.59
DNX	6.28	6.10	6.40
MNX	7.82	7.63	7.93

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140041.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 09:50:25 ALS Bottle#: 30 Worklist Smp#: 41
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082871-041
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:37 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.468	5.444	0.024	106364	0.2503	0.2637	
4 DNX	1	6.282	6.251	0.031	79134	0.2503	0.2730	
7 MNX	1	7.815	7.778	0.037	86358	0.2918	0.3204	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 11:07:37

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140041.D

Injection Date: 15-Jun-2019 09:50:25

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: CCV DMT

Worklist Smp#: 41

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

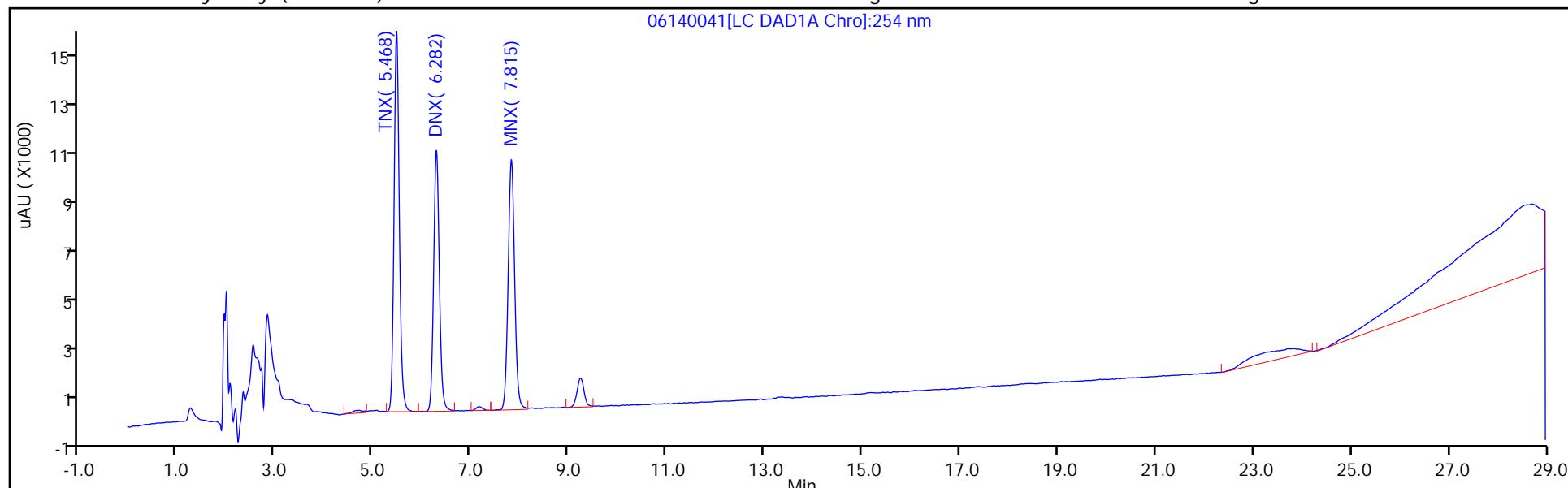
ALS Bottle#: 30

Method: G2_8330_Luna

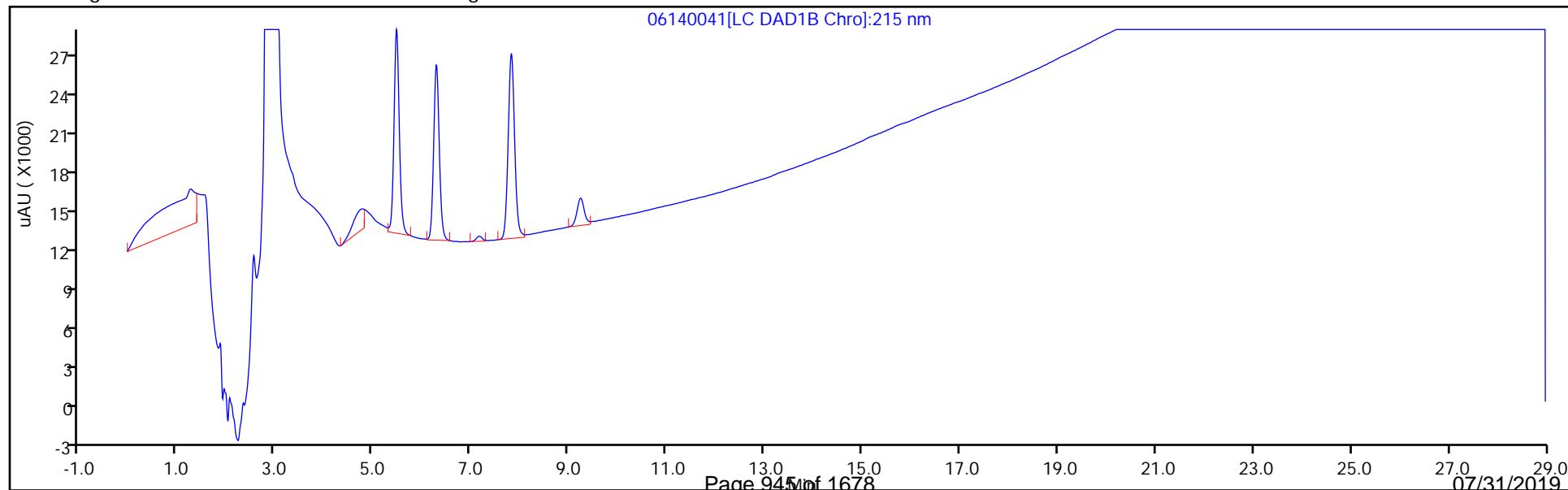
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461583/49 Calibration Date: 06/15/2019 14:30
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 06140049.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	167008		270	250	7.8	15.0
HMX	Ave	171198	177332		259	250	3.6	15.0
RDX	Ave	208444	225488		270	250	8.2	15.0
Nitrobenzene	Ave	405448	372986		230	251	-8.0	15.0
Nitroglycerin	Ave	192935	189230		2450	2500	-1.9	15.0
1,3-Dinitrobenzene	Ave	635564	654709		258	250	3.0	15.0
2-Nitrotoluene	Ave	261865	241364		231	251	-7.8	15.0
4-Nitrotoluene	Ave	226647	211470		234	251	-6.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	311091		262	251	4.6	15.0
3-Nitrotoluene	Ave	292691	274757		236	251	-6.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	447840		261	251	4.1	15.0
1,3,5-Trinitrobenzene	Ave	457546	477736		261	250	4.4	15.0
2,6-Dinitrotoluene	Ave	293465	301539		258	251	2.8	15.0
2,4-Dinitrotoluene	Ave	569466	585717		258	251	2.9	15.0
Tetryl	Ave	314480	336508		268	250	7.0	15.0
2,4,6-Trinitrotoluene	Ave	407281	421155		260	251	3.4	15.0
PETN	Ave	132364	138513		2620	2500	4.6	15.0
1,2-Dinitrobenzene	Ave	276856	288544		261	250	4.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461583/49 Calibration Date: 06/15/2019 14:30
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 06140049.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.93	5.89	6.19
HMX	7.17	7.00	7.30
RDX	9.24	9.08	9.38
Nitrobenzene	12.24	12.05	12.35
Nitroglycerin	15.77	15.57	15.87
1,3-Dinitrobenzene	15.78	15.58	15.88
2-Nitrotoluene	16.60	16.38	16.68
4-Nitrotoluene	16.94	16.71	17.01
4-Amino-2,6-dinitrotoluene	17.33	17.10	17.40
3-Nitrotoluene	17.85	17.61	17.91
2-Amino-4,6-dinitrotoluene	18.36	18.12	18.42
1,3,5-Trinitrobenzene	19.09	18.87	19.17
2,6-Dinitrotoluene	19.94	19.70	20.00
2,4-Dinitrotoluene	20.50	20.25	20.55
Tetryl	23.82	23.55	23.85
2,4,6-Trinitrotoluene	24.81	24.56	24.86
PETN	25.25	25.01	25.31
1,2-Dinitrobenzene	13.26	13.05	13.35

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140049.D
 Lims ID: CCV 8330
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 14:30:10 ALS Bottle#: 7 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: CCV 8330
 Misc. Info.: 280-0082871-049
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:46 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh

Date:

17-Jun-2019 11:03:49

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	4.444	4.431	0.013	104346	0.2500	0.2644	
2 2,4-diamino-6-nitrotoluene	1	4.991	4.971	0.020	64739	0.2500	0.2530	
5 2,4,6-Trinitrophenol	1	5.931	6.038	-0.107	41752	0.2500	0.2695	
6 HMX	1	7.171	7.151	0.020	44333	0.2500	0.2590	
8 RDX	1	9.244	9.231	0.013	56372	0.2500	0.2704	
9 Nitrobenzene	1	12.237	12.198	0.039	93433	0.2505	0.2304	
\$ 10 1,2-Dinitrobenzene	1	13.257	13.204	0.053	72136	0.2500	0.2606	
11 3,5-Dinitroaniline	1	15.184	15.124	0.060	124868	0.2500	0.2656	
13 Nitroglycerin	2	15.770	15.718	0.052	473075	2.50	2.45	
12 1,3-Dinitrobenzene	1	15.784	15.731	0.053	163841	0.2503	0.2578	
14 o-Nitrotoluene	1	16.604	16.531	0.073	60522	0.2508	0.2311	
15 p-Nitrotoluene	1	16.937	16.858	0.079	53079	0.2510	0.2342	
16 4-Amino-2,6-dinitrotoluene	1	17.330	17.251	0.079	78006	0.2508	0.2623	
17 m-Nitrotoluene	1	17.850	17.764	0.086	68964	0.2510	0.2356	
18 2-Amino-4,6-dinitrotoluene	1	18.357	18.271	0.086	112296	0.2508	0.2610	
19 1,3,5-Trinitrobenzene	1	19.090	19.024	0.066	119434	0.2500	0.2610	
20 2,6-Dinitrotoluene	1	19.937	19.851	0.086	75611	0.2508	0.2576	
21 2,4-Dinitrotoluene	1	20.497	20.404	0.093	146722	0.2505	0.2576	
22 Tetryl	1	23.817	23.698	0.119	84127	0.2500	0.2675	M
23 2,4,6-Trinitrotoluene	1	24.811	24.711	0.100	105710	0.2510	0.2596	
24 PETN	2	25.251	25.158	0.093	346283	2.50	2.62	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50 Units: uL

8330_ADDs_00022

Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 11:07:46

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140049.D

Injection Date: 15-Jun-2019 14:30:10

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: CCV 8330

Worklist Smp#: 49

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

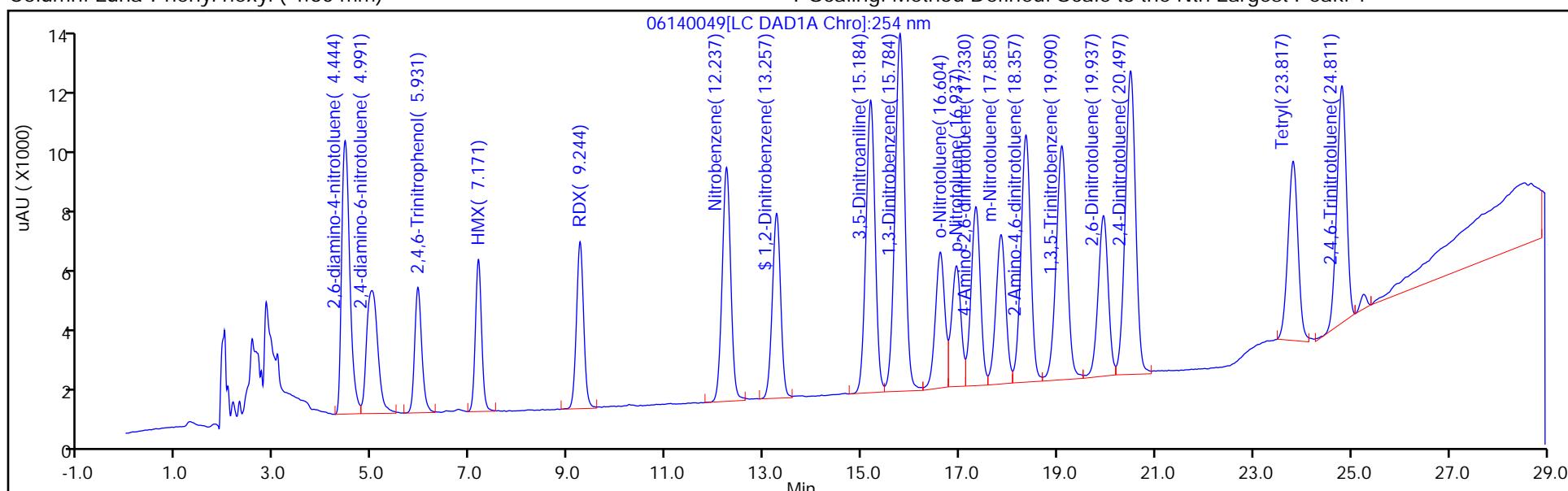
ALS Bottle#: 7

Method: G2_8330_Luna

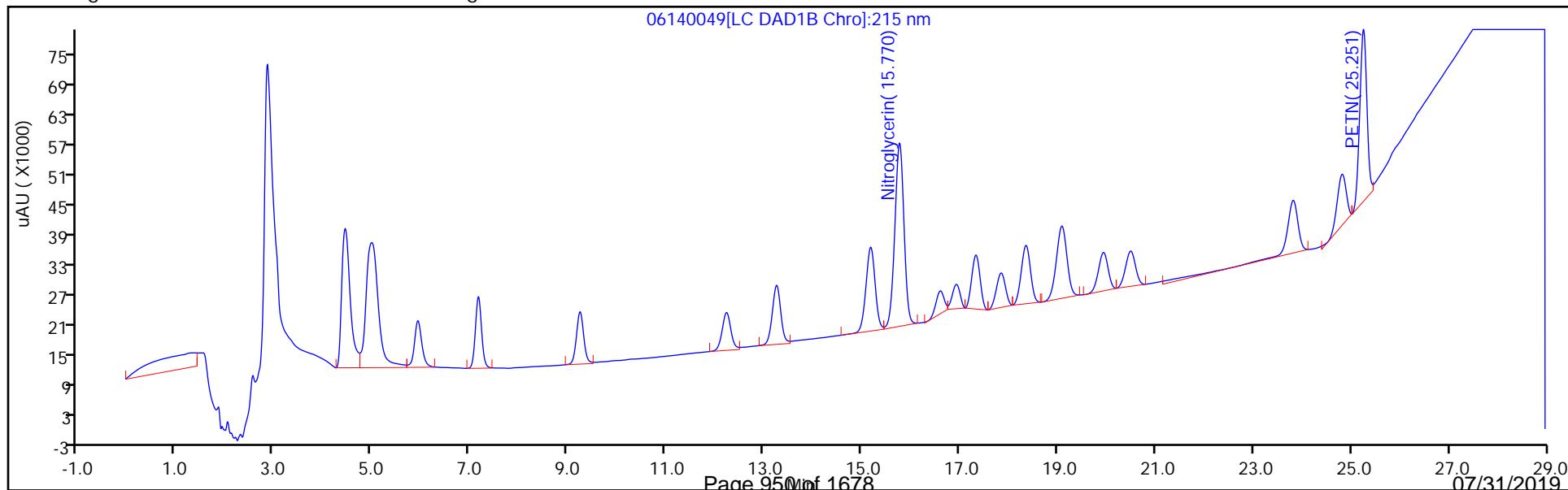
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver

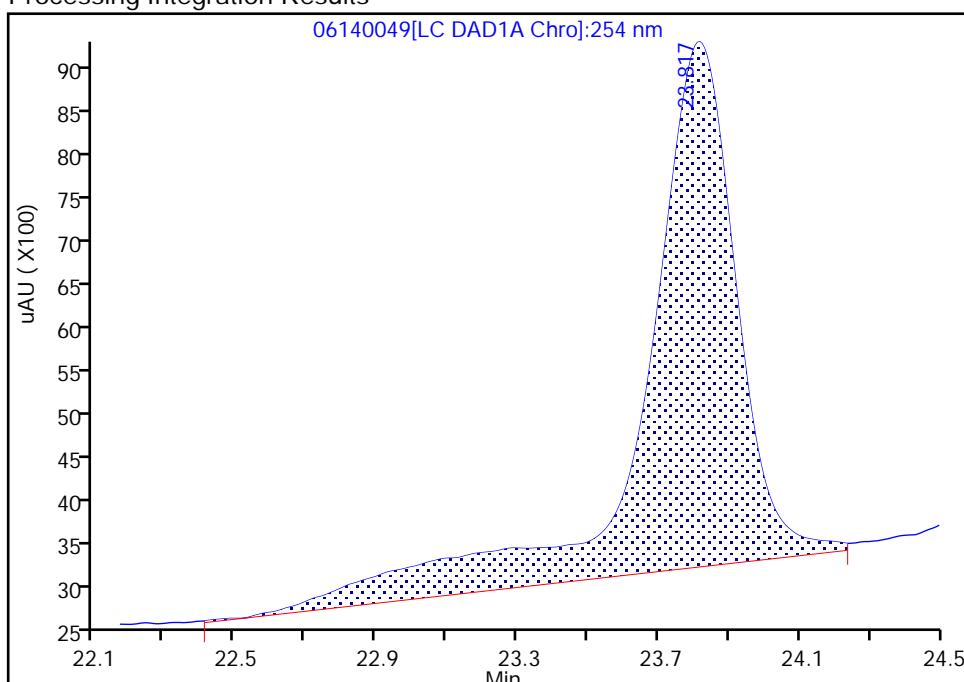
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 Injection Date: 15-Jun-2019 14:30:10 Instrument ID: CHHPLC_G2_LUNA
 Lims ID: CCV 8330
 Client ID:
 Operator ID: HKF ALS Bottle#: 7 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: G2_8330_Luna Limit Group: GCSV - 8330
 Column: Luna-Phenyl hexyl (4.60 mm) Detector: LC DAD1A, 254 nm

22 Tetryl, CAS: 479-45-8

Signal: 1

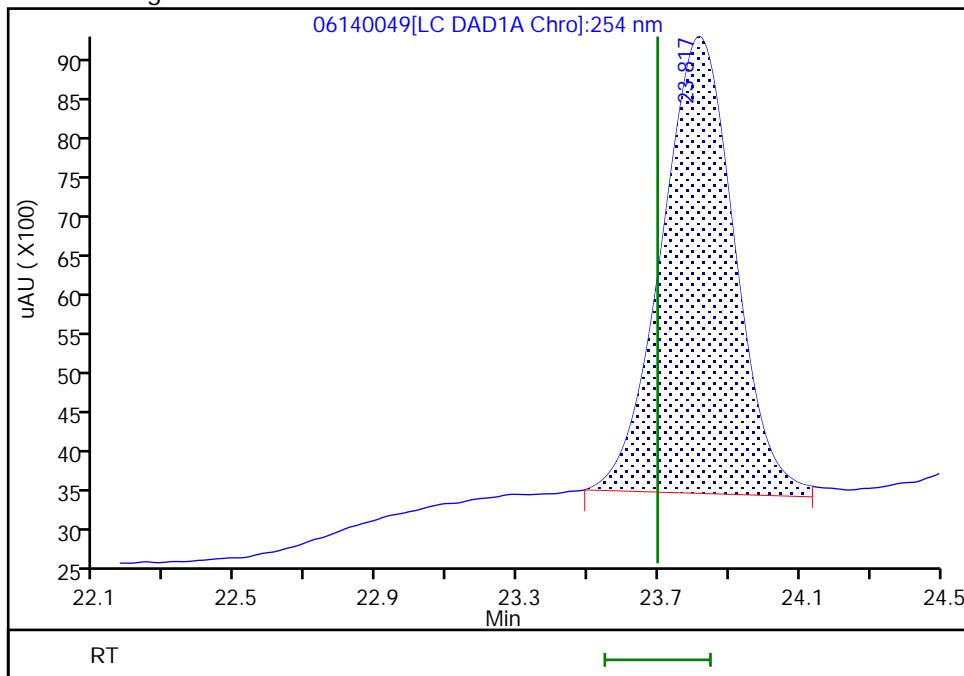
RT: 23.82
 Area: 111831
 Amount: 0.355606
 Amount Units: ug/ml

Processing Integration Results



RT: 23.82
 Area: 84127
 Amount: 0.267511
 Amount Units: ug/ml

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 11:03:47

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461583/50 Calibration Date: 06/15/2019 15:05

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06140050.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	422098		262	250	4.6	15.0
DNX	Ave	289881	315728		273	250	8.9	15.0
MNX	Ave	269525	295822		320	292	9.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461583/50 Calibration Date: 06/15/2019 15:05
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28
Lab File ID: 06140050.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.47	5.29	5.59
DNX	6.29	6.10	6.40
MNX	7.83	7.63	7.93

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140050.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 15:05:09 ALS Bottle#: 30 Worklist Smp#: 50
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082871-050
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 11:07:47 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0334

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.473	5.444	0.029	105630	0.2503	0.2618	
4 DNX	1	6.293	6.251	0.042	79011	0.2503	0.2726	
7 MNX	1	7.826	7.778	0.048	86306	0.2918	0.3202	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 11:07:47

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190614-82871.b\06140050.D

Injection Date: 15-Jun-2019 15:05:09

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: CCV DMT

Worklist Smp#: 50

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

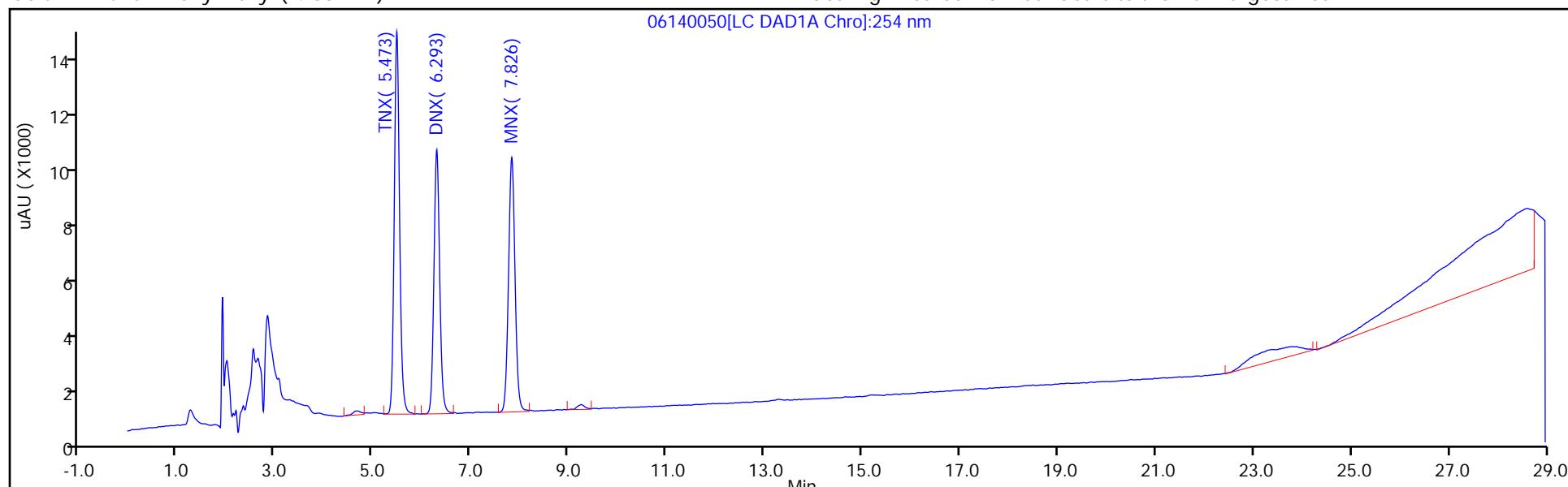
ALS Bottle#: 30

Method: G2_8330_Luna

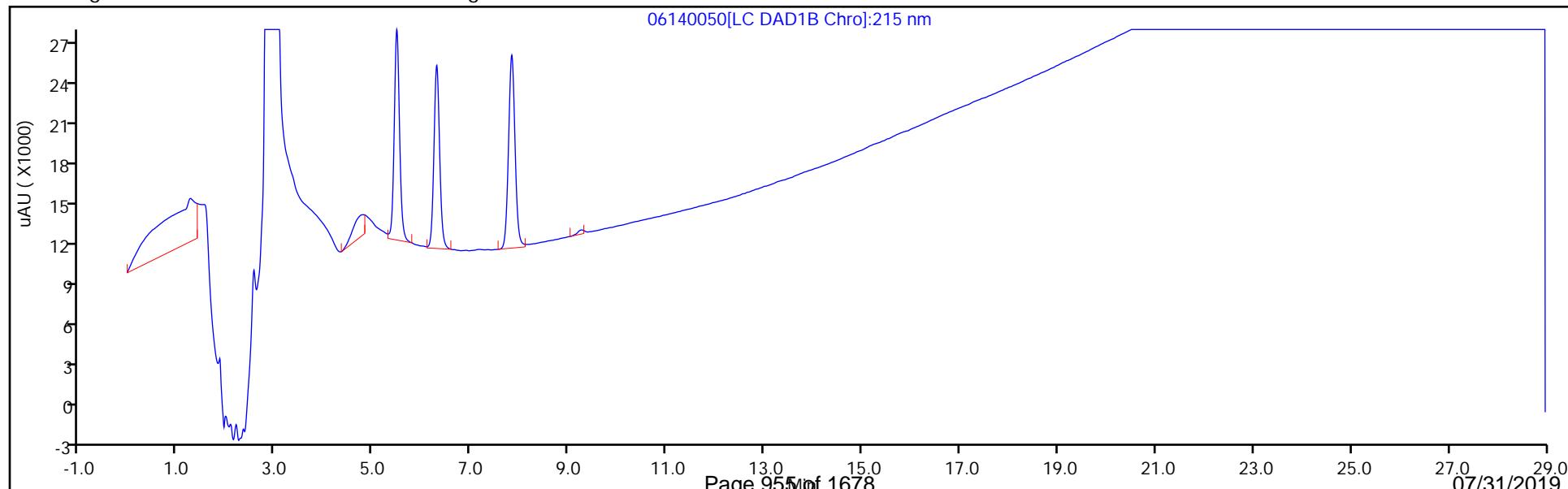
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461836/25 Calibration Date: 06/18/2019 05:05
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 06170025.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	174004		281	250	12.3	15.0
HMX	Ave	171198	183328		268	250	7.1	15.0
RDX	Ave	208444	227852		273	250	9.3	15.0
Nitrobenzene	Ave	405448	415042		256	251	2.4	15.0
Nitroglycerin	Ave	192935	198510		2570	2500	2.9	15.0
1,3-Dinitrobenzene	Ave	635564	678134		267	250	6.7	15.0
2-Nitrotoluene	Ave	261865	266847		256	251	1.9	15.0
4-Nitrotoluene	Ave	226647	231610		256	251	2.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	321878		271	251	8.2	15.0
3-Nitrotoluene	Ave	292691	303088		260	251	3.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	464550		271	251	8.0	15.0
1,3,5-Trinitrobenzene	Ave	457546	489552		267	250	7.0	15.0
2,6-Dinitrotoluene	Ave	293465	311406		266	251	6.1	15.0
2,4-Dinitrotoluene	Ave	569466	608136		268	251	6.8	15.0
Tetryl	Ave	314480	340780		271	250	8.4	15.0
2,4,6-Trinitrotoluene	Ave	407281	435466		268	251	6.9	15.0
PETN	Ave	132364	144367		2730	2500	9.1	15.0
1,2-Dinitrobenzene	Ave	276856	298940		270	250	8.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461836/25 Calibration Date: 06/18/2019 05:05
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 06170025.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.95	5.91	6.21
HMX	7.15	7.04	7.34
RDX	9.23	9.12	9.42
Nitrobenzene	12.19	12.10	12.40
Nitroglycerin	15.71	15.64	15.94
1,3-Dinitrobenzene	15.74	15.65	15.95
2-Nitrotoluene	16.53	16.46	16.76
4-Nitrotoluene	16.86	16.80	17.10
4-Amino-2,6-dinitrotoluene	17.26	17.21	17.51
3-Nitrotoluene	17.77	17.70	18.00
2-Amino-4,6-dinitrotoluene	18.29	18.24	18.54
1,3,5-Trinitrobenzene	19.03	18.96	19.26
2,6-Dinitrotoluene	19.86	19.80	20.10
2,4-Dinitrotoluene	20.42	20.36	20.66
Tetryl	23.72	23.70	24.00
2,4,6-Trinitrotoluene	24.73	24.67	24.97
PETN	25.17	25.11	25.41
1,2-Dinitrobenzene	13.21	13.13	13.43

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170025.D
 Lims ID: CCV 8330
 Client ID:
 Sample Type: CCV
 Inject. Date: 18-Jun-2019 05:05:15 ALS Bottle#: 7 Worklist Smp#: 25
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV 8330
 Misc. Info.: 280-0082939-025
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 18-Jun-2019 11:49:33 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0304

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	4.441	-0.008	108751	0.2500	0.2756	
2 2,4-diamino-6-nitrotoluene	1	4.973	4.987	-0.014	68733	0.2500	0.2687	
5 2,4,6-Trinitrophenol	1	5.947	6.061	-0.114	43501	0.2500	0.2808	
6 HMX	1	7.153	7.187	-0.034	45832	0.2500	0.2677	
8 RDX	1	9.227	9.267	-0.041	56963	0.2500	0.2733	
9 Nitrobenzene	1	12.193	12.247	-0.054	103968	0.2505	0.2564	
\$ 10 1,2-Dinitrobenzene	1	13.213	13.281	-0.068	74735	0.2500	0.2699	
11 3,5-Dinitroaniline	1	15.140	15.221	-0.081	131221	0.2500	0.2792	
13 Nitroglycerin	2	15.713	15.794	-0.081	496274	2.50	2.57	
12 1,3-Dinitrobenzene	1	15.740	15.801	-0.061	169703	0.2503	0.2670	
14 o-Nitrotoluene	1	16.533	16.614	-0.081	66912	0.2508	0.2555	
15 p-Nitrotoluene	1	16.860	16.947	-0.087	58134	0.2510	0.2565	
16 4-Amino-2,6-dinitrotoluene	1	17.260	17.361	-0.101	80711	0.2508	0.2714	
17 m-Nitrotoluene	1	17.766	17.854	-0.088	76075	0.2510	0.2599	
18 2-Amino-4,6-dinitrotoluene	1	18.293	18.394	-0.101	116486	0.2508	0.2707	
19 1,3,5-Trinitrobenzene	1	19.033	19.107	-0.074	122388	0.2500	0.2675	
20 2,6-Dinitrotoluene	1	19.860	19.954	-0.094	78085	0.2508	0.2661	
21 2,4-Dinitrotoluene	1	20.420	20.514	-0.094	152338	0.2505	0.2675	
22 Tetryl	1	23.720	23.847	-0.127	85195	0.2500	0.2709	
23 2,4,6-Trinitrotoluene	1	24.727	24.821	-0.094	109302	0.2510	0.2684	
24 PETN	2	25.167	25.261	-0.094	360918	2.50	2.73	

Reagents:

8330IntermStk_00058	Amount Added: 12.50	Units: uL
8330_ADDs_00022	Amount Added: 12.50	Units: uL

Report Date: 18-Jun-2019 11:49:34

Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170025.D

Injection Date: 18-Jun-2019 05:05:15

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: CCV 8330

Worklist Smp#: 25

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

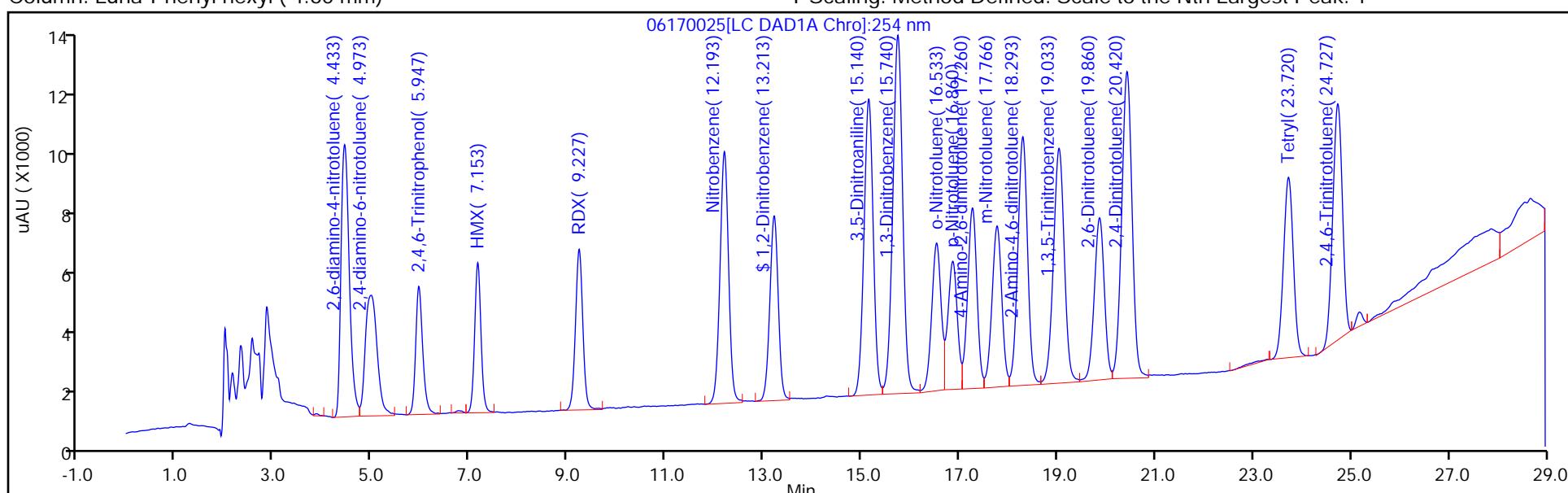
ALS Bottle#: 7

Method: G2_8330_Luna

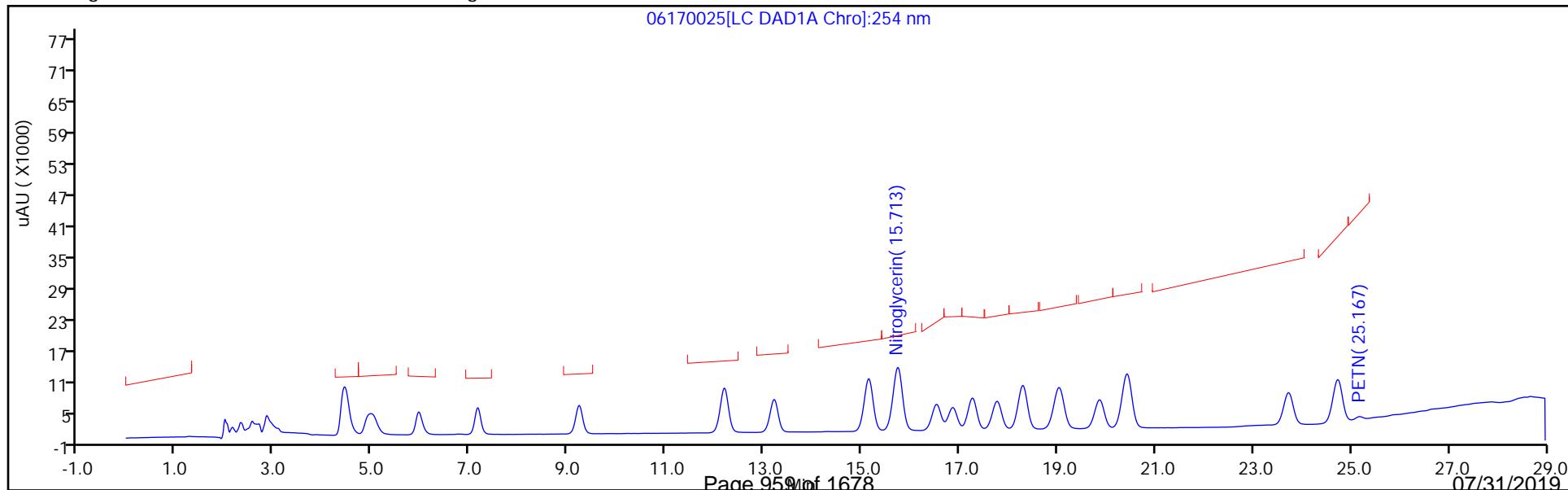
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461836/26 Calibration Date: 06/18/2019 05:40

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06170026.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	427588		265	250	6.0	15.0
DNX	Ave	289881	309526		267	250	6.8	15.0
MNX	Ave	269525	288428		312	292	7.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461836/26 Calibration Date: 06/18/2019 05:40
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28
Lab File ID: 06170026.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.48	5.34	5.64
DNX	6.30	6.16	6.46
MNX	7.84	7.70	8.00

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170026.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 18-Jun-2019 05:40:16 ALS Bottle#: 8 Worklist Smp#: 26
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082939-026
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 18-Jun-2019 11:49:35 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0304

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.484	5.488	-0.004	107004	0.2503	0.2652	
4 DNX	1	6.304	6.308	-0.004	77459	0.2503	0.2672	
7 MNX	1	7.837	7.848	-0.011	84149	0.2918	0.3122	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 18-Jun-2019 11:49:35

Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\G2_LUNA\\20190617-82939.b\\06170026.D

Injection Date: 18-Jun-2019 05:40:16

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: CCV DMT

Worklist Smp#: 26

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

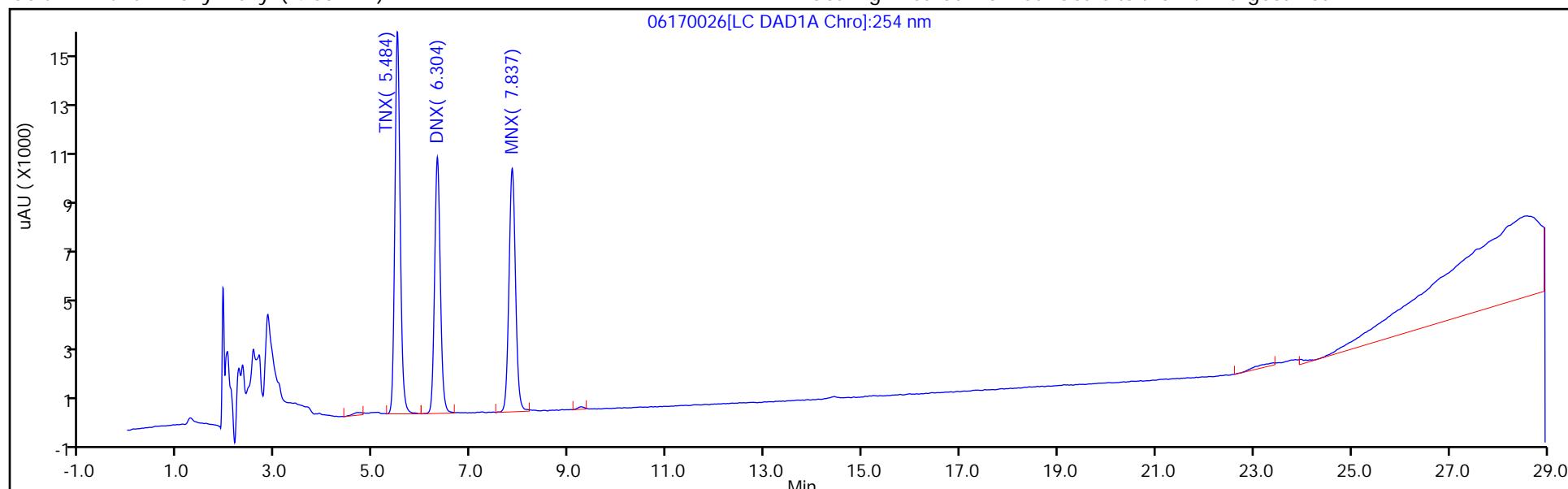
ALS Bottle#: 8

Method: G2_8330_Luna

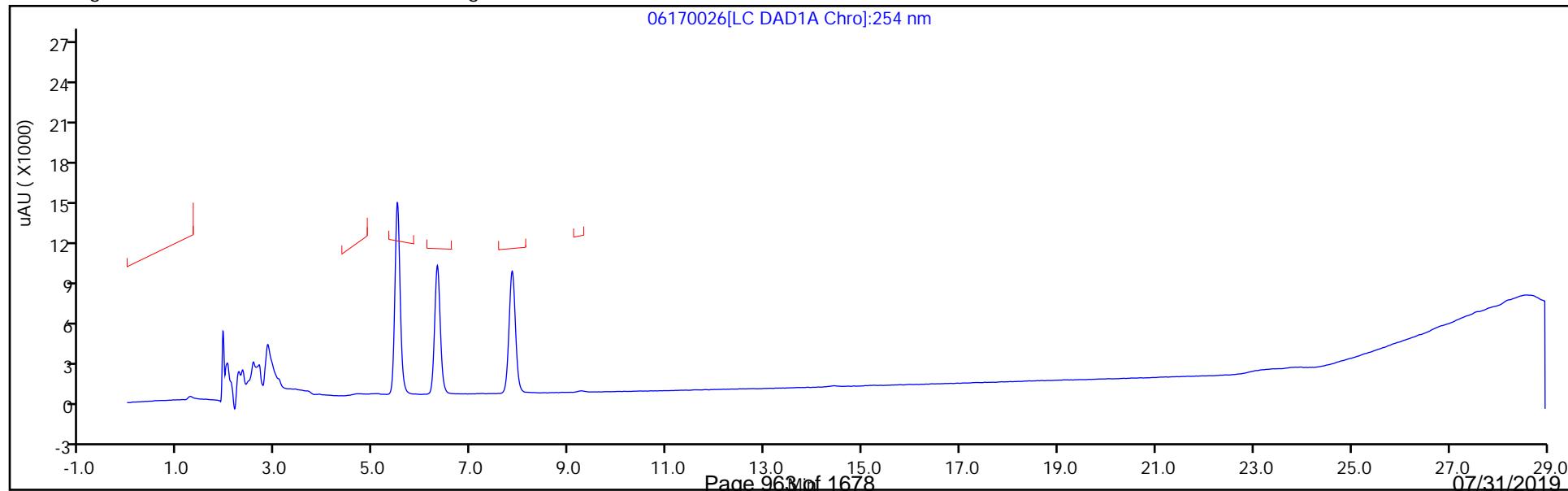
Limit Group: GCSV - 8330

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.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461836/38 Calibration Date: 06/18/2019 12:05

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06170038.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	416392		258	250	3.2	15.0
DNX	Ave	289881	306426		265	250	5.7	15.0
MNX	Ave	269525	286482		310	292	6.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461836/38 Calibration Date: 06/18/2019 12:05
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/08/2019 00:28
Lab File ID: 06170038.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.49	5.34	5.64
DNX	6.30	6.16	6.46
MNX	7.84	7.70	8.00

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170038.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 18-Jun-2019 12:05:54 ALS Bottle#: 8 Worklist Smp#: 38
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082939-038
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub13
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 19-Jun-2019 11:10:47 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0312

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.487	5.488	-0.001	104202	0.2503	0.2583	
4 DNX	1	6.300	6.308	-0.008	76683	0.2503	0.2645	
7 MNX	1	7.840	7.848	-0.008	83581	0.2918	0.3101	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 19-Jun-2019 11:10:47

Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170038.D

Injection Date: 18-Jun-2019 12:05:54

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: CCV DMT

Worklist Smp#: 38

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

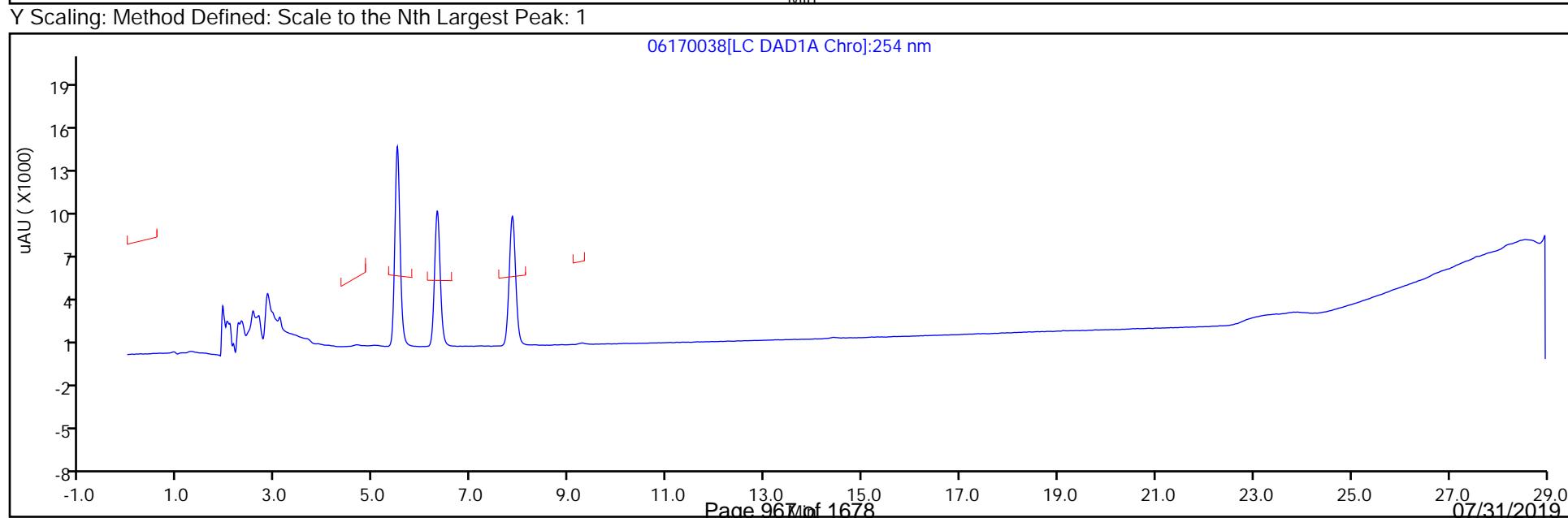
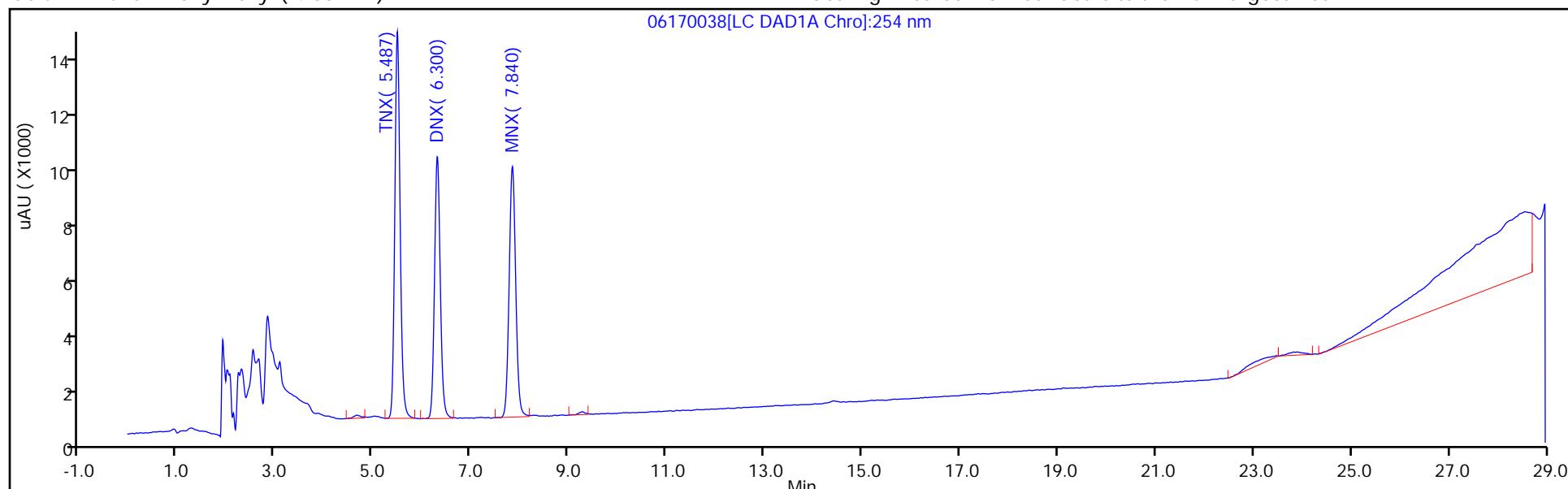
ALS Bottle#: 8

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461836/37 Calibration Date: 06/18/2019 13:24
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 007-3801.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	174460		282	250	12.6	15.0
HMX	Ave	171198	182060		266	250	6.3	15.0
RDX	Ave	208444	226592		272	250	8.7	15.0
Nitrobenzene	Ave	405448	402040		248	251	-0.8	15.0
Nitroglycerin	Ave	192935	196648		2550	2500	1.9	15.0
1,3-Dinitrobenzene	Ave	635564	672655		265	250	5.8	15.0
2-Nitrotoluene	Ave	261865	247270		237	251	-5.6	15.0
4-Nitrotoluene	Ave	226647	213259		236	251	-5.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	305531		258	251	2.7	15.0
3-Nitrotoluene	Ave	292691	268988		231	251	-8.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	440219		257	251	2.3	15.0
1,3,5-Trinitrobenzene	Ave	457546	473044		258	250	3.4	15.0
2,6-Dinitrotoluene	Ave	293465	290209		248	251	-1.1	15.0
2,4-Dinitrotoluene	Ave	569466	583996		257	251	2.6	15.0
Tetryl	Ave	314480	346968		276	250	10.3	15.0
2,4,6-Trinitrotoluene	Ave	407281	437434		270	251	7.4	15.0
PETN	Ave	132364	145601		2750	2500	10.0	15.0
1,2-Dinitrobenzene	Ave	276856	298220		269	250	7.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461836/37 Calibration Date: 06/18/2019 13:24
Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/07/2019 19:13
Lab File ID: 007-3801.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.99	5.91	6.21
HMX	7.20	7.04	7.34
RDX	9.27	9.12	9.42
Nitrobenzene	12.26	12.10	12.40
Nitroglycerin	15.79	15.64	15.94
1,3-Dinitrobenzene	15.80	15.65	15.95
2-Nitrotoluene	16.62	16.46	16.76
4-Nitrotoluene	16.94	16.80	17.10
4-Amino-2,6-dinitrotoluene	17.35	17.21	17.51
3-Nitrotoluene	17.86	17.70	18.00
2-Amino-4,6-dinitrotoluene	18.38	18.24	18.54
1,3,5-Trinitrobenzene	19.10	18.96	19.26
2,6-Dinitrotoluene	19.95	19.80	20.10
2,4-Dinitrotoluene	20.51	20.36	20.66
Tetryl	23.82	23.70	24.00
2,4,6-Trinitrotoluene	24.82	24.67	24.97
PETN	25.25	25.11	25.41
1,2-Dinitrobenzene	13.28	13.13	13.43

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\007-3801.D
 Lims ID: CCV 8330
 Client ID:
 Sample Type: CCV
 Inject. Date: 18-Jun-2019 13:24:17 ALS Bottle#: 7 Worklist Smp#: 37
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: BufferStk_00002
 Misc. Info.: 280-0082939-037
 Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
 Sublist: chrom-G2_8330_Luna*sub6
 Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
 Limit Group: GCSV - 8330
 Last Update: 19-Jun-2019 11:10:46 Calib Date: 08-May-2019 00:28:23
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D
 Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
 Process Host: CTX0312

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	4.456	4.441	0.015	108545	0.2500	0.2751	
2 2,4-diamino-6-nitrotoluene	1	5.010	4.987	0.023	67043	0.2500	0.2620	
5 2,4,6-Trinitrophenol	1	5.990	6.061	-0.071	43615	0.2500	0.2815	
6 HMX	1	7.196	7.187	0.009	45515	0.2500	0.2659	
8 RDX	1	9.270	9.267	0.003	56648	0.2500	0.2718	
9 Nitrobenzene	1	12.256	12.247	0.009	100711	0.2505	0.2484	
\$ 10 1,2-Dinitrobenzene	1	13.283	13.281	0.002	74555	0.2500	0.2693	
11 3,5-Dinitroaniline	1	15.210	15.221	-0.011	130479	0.2500	0.2776	
13 Nitroglycerin	2	15.790	15.794	-0.004	491619	2.50	2.55	
12 1,3-Dinitrobenzene	1	15.803	15.801	0.002	168332	0.2503	0.2649	
14 o-Nitrotoluene	1	16.616	16.614	0.002	62003	0.2508	0.2368	
15 p-Nitrotoluene	1	16.943	16.947	-0.004	53528	0.2510	0.2362	
16 4-Amino-2,6-dinitrotoluene	1	17.350	17.361	-0.011	76612	0.2508	0.2576	
17 m-Nitrotoluene	1	17.856	17.854	0.002	67516	0.2510	0.2307	
18 2-Amino-4,6-dinitrotoluene	1	18.376	18.394	-0.018	110385	0.2508	0.2566	
19 1,3,5-Trinitrobenzene	1	19.103	19.107	-0.004	118261	0.2500	0.2585	
20 2,6-Dinitrotoluene	1	19.950	19.954	-0.004	72770	0.2508	0.2480	
21 2,4-Dinitrotoluene	1	20.510	20.514	-0.004	146291	0.2505	0.2569	
22 Tetryl	1	23.823	23.847	-0.024	86742	0.2500	0.2758	
23 2,4,6-Trinitrotoluene	1	24.816	24.821	-0.005	109796	0.2510	0.2696	
24 PETN	2	25.250	25.261	-0.011	364002	2.50	2.75	

Reagents:

8330IntermStk_00058	Amount Added: 12.50	Units: uL
8330_ADDs_00022	Amount Added: 12.50	Units: uL

Report Date: 19-Jun-2019 11:10:46

Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\007-3801.D

Injection Date: 18-Jun-2019 13:24:17

Instrument ID: CHHPLC_G2_LUNA

Operator ID: HKF

Lims ID: CCV 8330

Worklist Smp#: 37

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

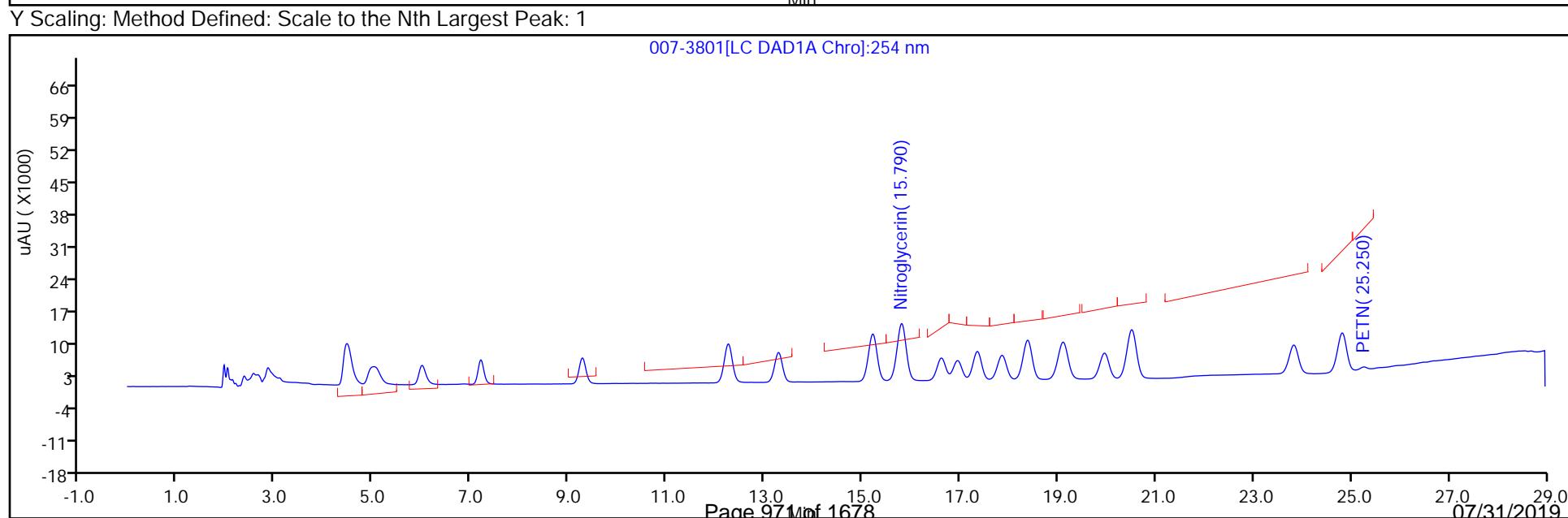
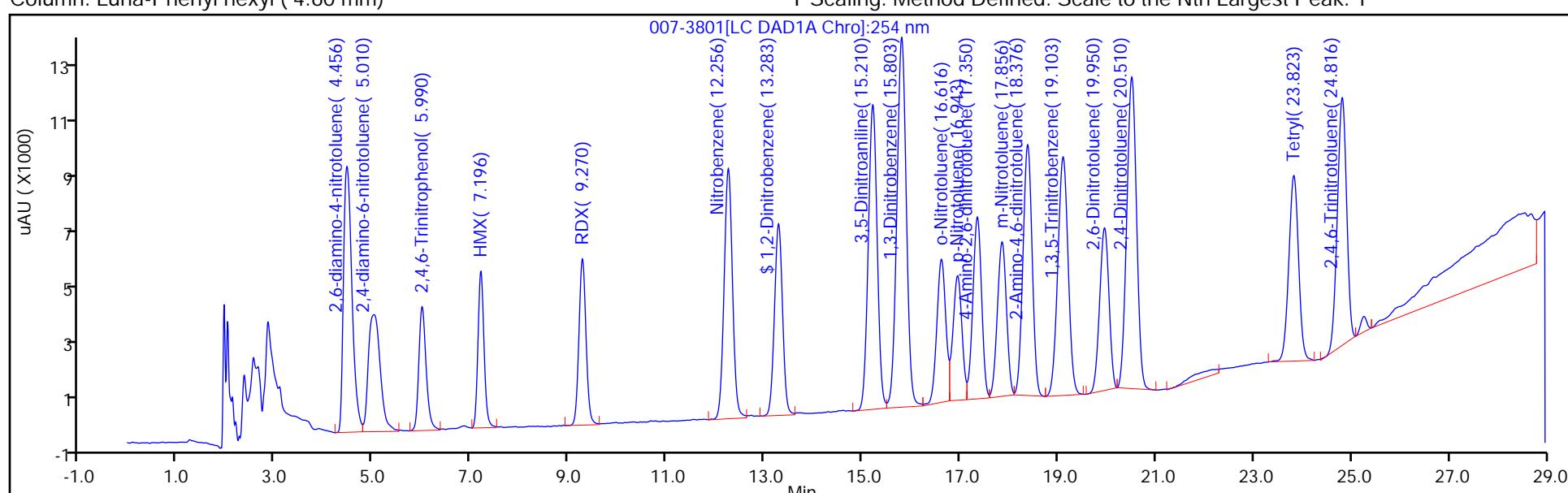
ALS Bottle#: 7

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-458150/15 Calibration Date: 05/14/2019 18:59
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 0514B015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	82900		372	400	-7.1	15.0
RDX	Ave	106639	100395		377	400	-5.9	15.0
Picric acid	Ave	83793	85338		407	400	1.8	15.0
1,3,5-Trinitrobenzene	Ave	229276	235903		412	400	2.9	15.0
1,3-Dinitrobenzene	Ave	300824	300148		399	400	-0.2	15.0
Nitrobenzene	Ave	196827	189253		385	400	-3.8	15.0
Tetryl	Ave	167956	169570		404	400	1.0	15.0
Nitroglycerin	Ave	69977	65675		3750	4000	-6.1	15.0
2,4,6-Trinitrotoluene	Ave	223593	202438		362	400	-9.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	150340		370	400	-7.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	194685		394	400	-1.4	15.0
2,6-Dinitrotoluene	Ave	156597	144423		369	400	-7.8	15.0
2,4-Dinitrotoluene	Ave	297422	286083		385	400	-3.8	15.0
2-Nitrotoluene	Ave	131349	117393		357	400	-10.6	15.0
4-Nitrotoluene	Ave	112716	102238		363	400	-9.3	15.0
3-Nitrotoluene	Ave	148306	132263		357	400	-10.8	15.0
PETN	Ave	73191	73321		4010	4000	0.2	15.0
1,2-Dinitrobenzene	Ave	130111	125963		387	400	-3.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-458150/15 Calibration Date: 05/14/2019 18:59
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 0514B015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.50	6.80
RDX	7.76	7.61	7.91
Picric acid	8.13	7.98	8.28
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.28	10.13	10.43
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.14	11.34
4-Amino-2,6-dinitrotoluene	11.43	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.72	11.62	11.82
2,6-Dinitrotoluene	11.85	11.75	11.95
2,4-Dinitrotoluene	12.05	11.95	12.15
2-Nitrotoluene	12.89	12.74	13.04
4-Nitrotoluene	13.33	13.18	13.48
3-Nitrotoluene	13.93	13.78	14.08
PETN	15.02	14.87	15.17
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B015.D
 Lims ID: ICV MAIN
 Client ID:
 Sample Type: ICV
 Inject. Date: 14-May-2019 18:59:15 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: ICV MAIN
 Misc. Info.: 280-0081869-015
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist:
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:12 Calib Date: 14-May-2019 18:35:34
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B014.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.650	6.650	0.000	33160	0.4000	0.3717	
7 RDX	1	7.764	7.764	0.000	40158	0.4000	0.3766	
8 2,4,6-Trinitrophenol	1	8.130	8.130	0.000	34135	0.4000	0.4074	
\$ 9 1,2-Dinitrobenzene	1	8.744	8.744	0.000	50385	0.4000	0.3872	
10 1,3,5-Trinitrobenzene	1	8.904	8.904	0.000	94361	0.4000	0.4116	
11 1,3-Dinitrobenzene	1	9.564	9.564	0.000	120059	0.4000	0.3991	
12 Nitrobenzene	1	9.950	9.950	0.000	75701	0.4000	0.3846	
14 Tetryl	1	10.284	10.284	0.000	67828	0.4000	0.4038	
15 Nitroglycerin	2	10.784	10.784	0.000	262700	4.00	3.75	
16 2,4,6-Trinitrotoluene	1	11.237	11.237	0.000	80975	0.4000	0.3622	
17 4-Amino-2,6-dinitrotoluene	1	11.430	11.430	0.000	60136	0.4000	0.3702	
18 2-Amino-4,6-dinitrotoluene	1	11.717	11.717	0.000	77874	0.4000	0.3942	
19 2,6-Dinitrotoluene	1	11.850	11.850	0.000	57769	0.4000	0.3689	
20 2,4-Dinitrotoluene	1	12.050	12.050	0.000	114433	0.4000	0.3847	
21 o-Nitrotoluene	1	12.890	12.890	0.000	46957	0.4000	0.3575	
22 p-Nitrotoluene	1	13.330	13.330	0.000	40895	0.4000	0.3628	
23 m-Nitrotoluene	1	13.930	13.930	0.000	52905	0.4000	0.3567	
24 PETN	2	15.024	15.024	0.000	293284	4.00	4.01	

Reagents:

8330Surrogate_00103	Amount Added: 40.00	Units: uL
8330 LCS_00089	Amount Added: 40.00	Units: uL

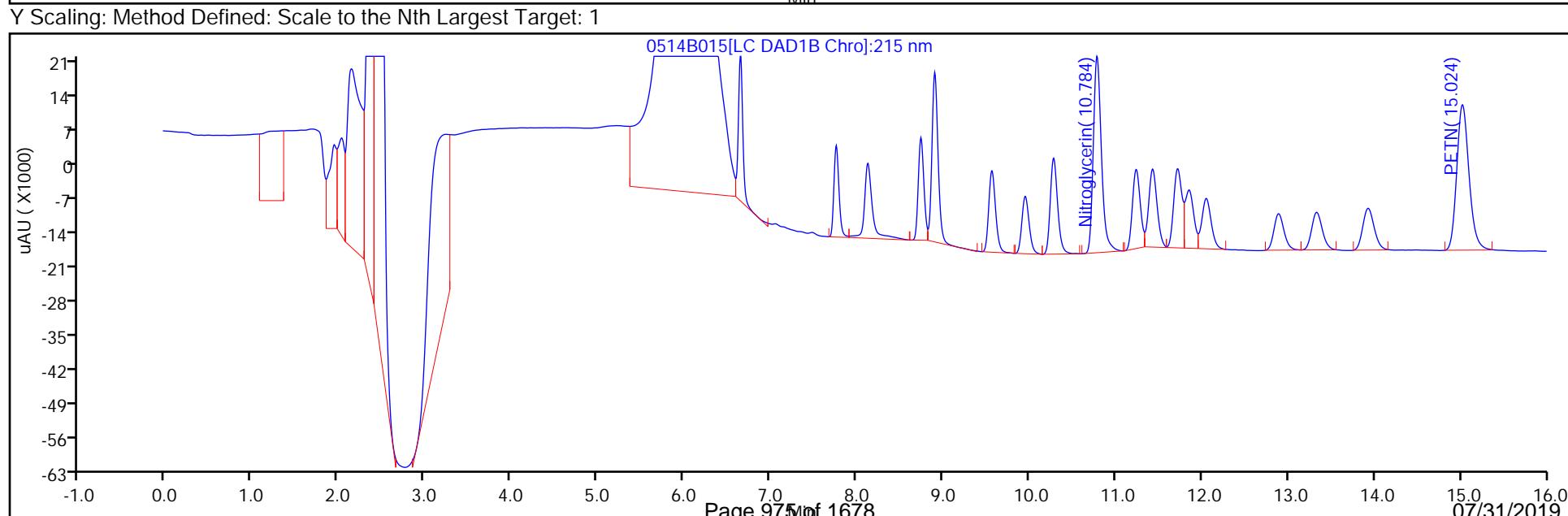
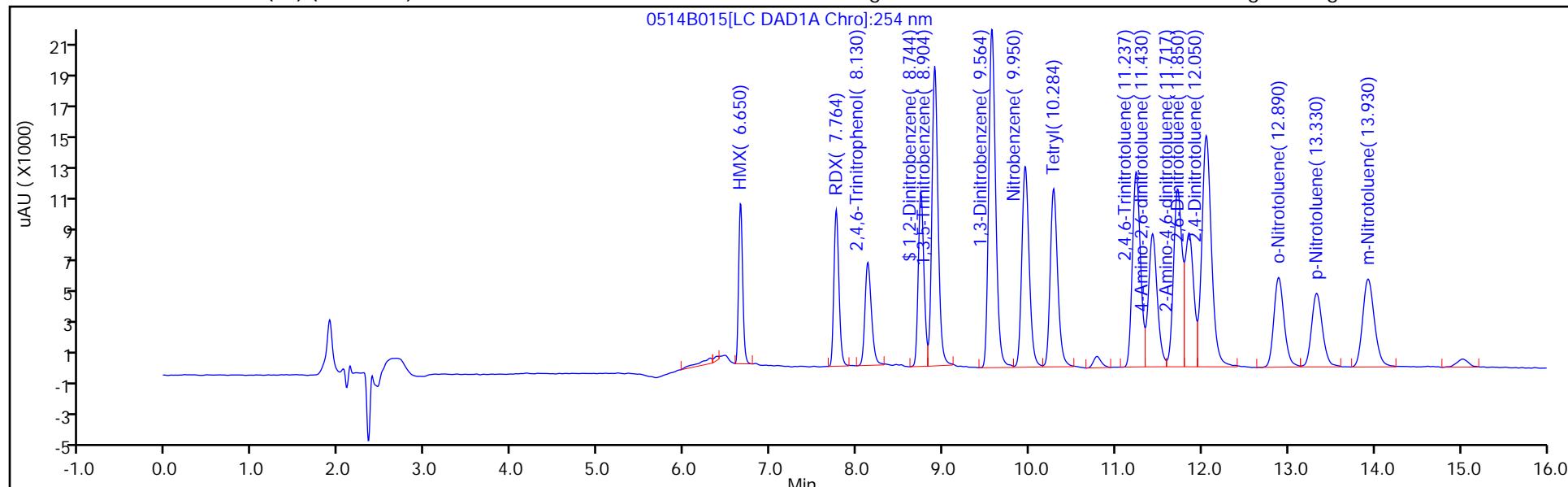
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Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B015.D
 Injection Date: 14-May-2019 18:59:15 Instrument ID: CHHPLC_X3
 Lims ID: ICV MAIN Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 15
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000 ALS Bottle#: 15
 Limit Group: GCSV - 8330
 Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: ICV 280-458150/33 Calibration Date: 05/15/2019 02:06

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 0514B033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	210297		422	400	5.5	15.0
DNX	Ave	148387	148357		400	400	-0.0	15.0
MNX	Ave	136538	137961		472	467	1.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-458150/33 Calibration Date: 05/15/2019 02:06
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 0514B033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.56	6.46	6.66
DNX	6.89	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B033.D
 Lims ID: ICV DMT
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-May-2019 02:06:16 ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: ICV DMT
 Misc. Info.: 280-0081869-033
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist:
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-May-2019 10:58:30 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.557	6.556	0.001	84203	0.4004	0.4224	
5 DNX	1	6.891	6.889	0.002	59402	0.4004	0.4003	
6 MNX	1	7.351	7.356	-0.005	64400	0.4668	0.4717	

Reagents:

8330_OP_DMT_00002 Amount Added: 40.00 Units: uL

Report Date: 15-May-2019 10:58:32

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B033.D

Injection Date: 15-May-2019 02:06:16

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: ICV DMT

Worklist Smp#: 33

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

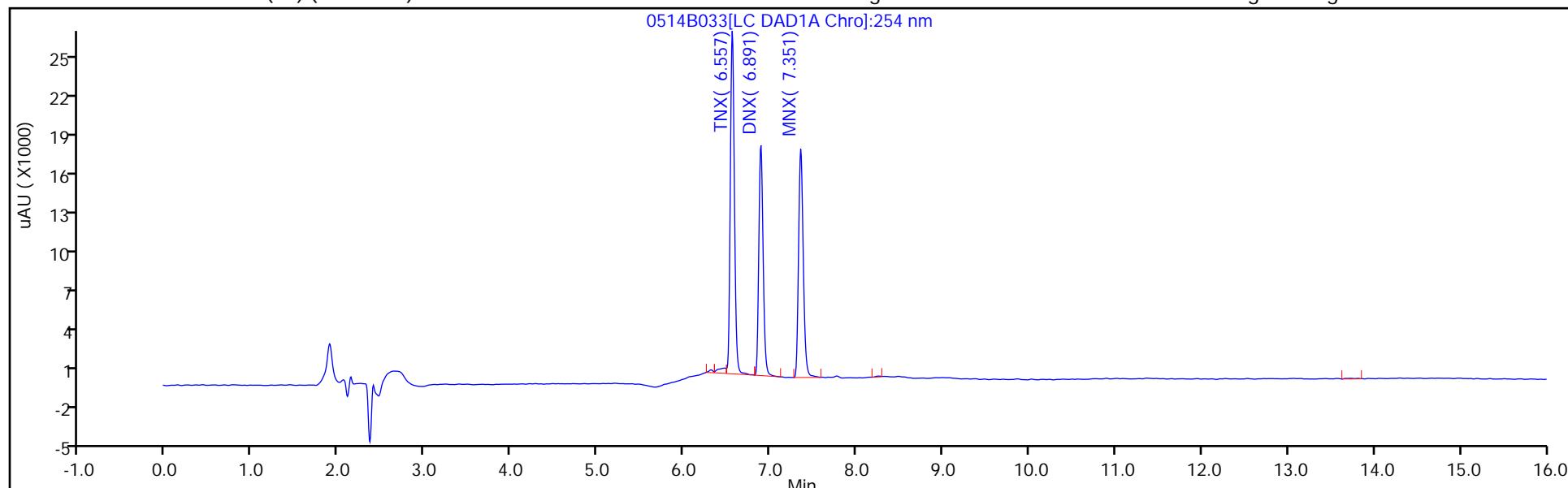
ALS Bottle#: 33

Method: 8330_X3

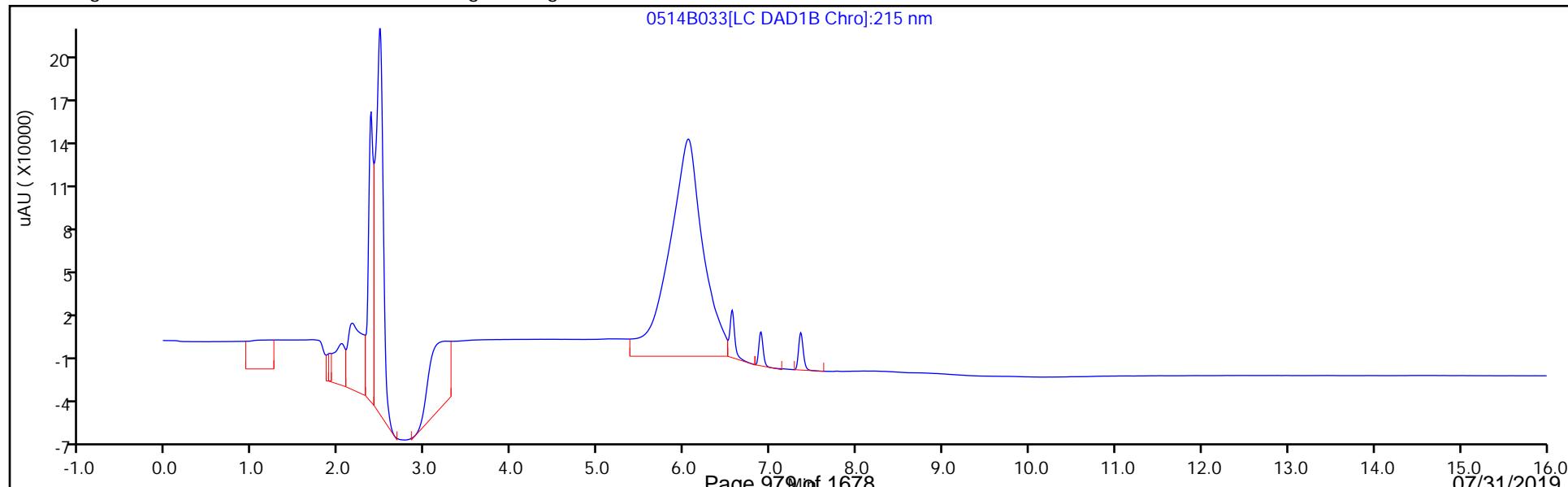
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/36 Calibration Date: 06/13/2019 22:59
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06130036.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	96168		270	250	7.8	15.0
RDX	Ave	106639	114764		269	250	7.6	15.0
Picric acid	Ave	83793	89296		266	250	6.6	15.0
1,3,5-Trinitrobenzene	Ave	229276	254664		278	250	11.1	15.0
1,3-Dinitrobenzene	Ave	300824	325574		271	250	8.2	15.0
Nitrobenzene	Ave	196827	197238		251	251	0.2	15.0
Tetryl	Ave	167956	174220		259	250	3.7	15.0
Nitroglycerin	Ave	69977	74821		2670	2500	6.9	15.0
2,4,6-Trinitrotoluene	Ave	223593	236104		265	251	5.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	171027		264	251	5.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	210935		268	251	6.8	15.0
2,6-Dinitrotoluene	Ave	156597	166632		267	251	6.4	15.0
2,4-Dinitrotoluene	Ave	297422	315301		266	251	6.0	15.0
2-Nitrotoluene	Ave	131349	126457		241	251	-3.7	15.0
4-Nitrotoluene	Ave	112716	110673		246	251	-1.8	15.0
3-Nitrotoluene	Ave	148306	144402		244	251	-2.6	15.0
PETN	Ave	73191	81826		2790	2500	11.8	15.0
1,2-Dinitrobenzene	Ave	130111	145604		280	250	11.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/36 Calibration Date: 06/13/2019 22:59
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06130036.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.50	6.80
RDX	7.76	7.61	7.91
Picric acid	8.18	8.02	8.32
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.94	9.80	10.10
Tetryl	10.26	10.12	10.42
Nitroglycerin	10.76	10.62	10.92
2,4,6-Trinitrotoluene	11.22	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.41	11.31	11.51
2-Amino-4,6-dinitrotoluene	11.70	11.60	11.80
2,6-Dinitrotoluene	11.83	11.73	11.93
2,4-Dinitrotoluene	12.03	11.93	12.13
2-Nitrotoluene	12.86	12.72	13.02
4-Nitrotoluene	13.30	13.16	13.46
3-Nitrotoluene	13.90	13.75	14.05
PETN	14.98	14.83	15.13
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130036.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 13-Jun-2019 22:59:22 ALS Bottle#: 7 Worklist Smp#: 36
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0082810-036
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:18 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh

Date: 14-Jun-2019 08:56:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.648	6.645	0.003	24042	0.2500	0.2695	M
7 RDX	1	7.761	7.758	0.003	28691	0.2500	0.2690	
8 2,4,6-Trinitrophenol	1	8.181	8.165	0.016	22324	0.2500	0.2664	
\$ 9 1,2-Dinitrobenzene	1	8.735	8.738	-0.003	36401	0.2500	0.2798	
10 1,3,5-Trinitrobenzene	1	8.895	8.898	-0.003	63666	0.2500	0.2777	
11 1,3-Dinitrobenzene	1	9.555	9.558	-0.003	81475	0.2503	0.2708	
12 Nitrobenzene	1	9.941	9.945	-0.004	49408	0.2505	0.2510	
14 Tetryl	1	10.261	10.265	-0.004	43555	0.2500	0.2593	
15 Nitroglycerin	2	10.761	10.765	-0.004	187052	2.50	2.67	
16 2,4,6-Trinitrotoluene	1	11.215	11.218	-0.003	59262	0.2510	0.2650	
17 4-Amino-2,6-dinitrotoluene	1	11.408	11.405	0.003	42885	0.2508	0.2640	
18 2-Amino-4,6-dinitrotoluene	1	11.695	11.698	-0.003	52892	0.2508	0.2678	
19 2,6-Dinitrotoluene	1	11.828	11.832	-0.004	41783	0.2508	0.2668	
20 2,4-Dinitrotoluene	1	12.028	12.032	-0.004	78983	0.2505	0.2656	
21 o-Nitrotoluene	1	12.861	12.865	-0.004	31709	0.2508	0.2414	
22 p-Nitrotoluene	1	13.295	13.305	-0.010	27779	0.2510	0.2465	
23 m-Nitrotoluene	1	13.895	13.898	-0.003	36245	0.2510	0.2444	
24 PETN	2	14.975	14.978	-0.003	204565	2.50	2.79	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 14-Jun-2019 10:03:19

Chrom Revision: 2.3 03-May-2019 15:52:00

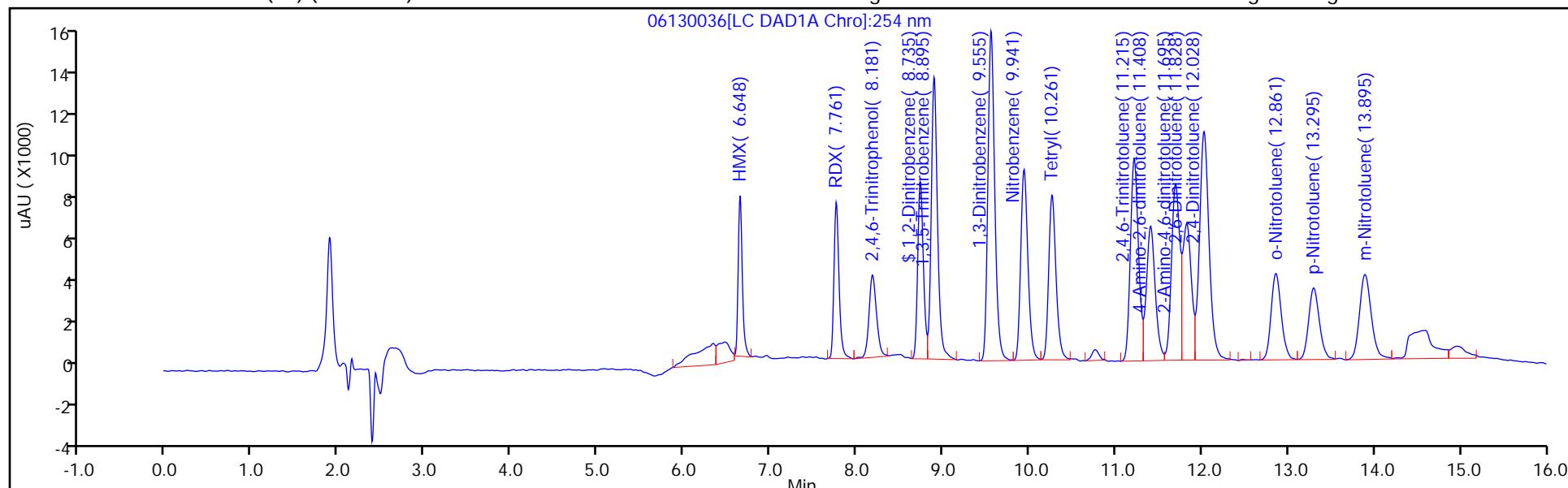
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130036.D
 Injection Date: 13-Jun-2019 22:59:22 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 36
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

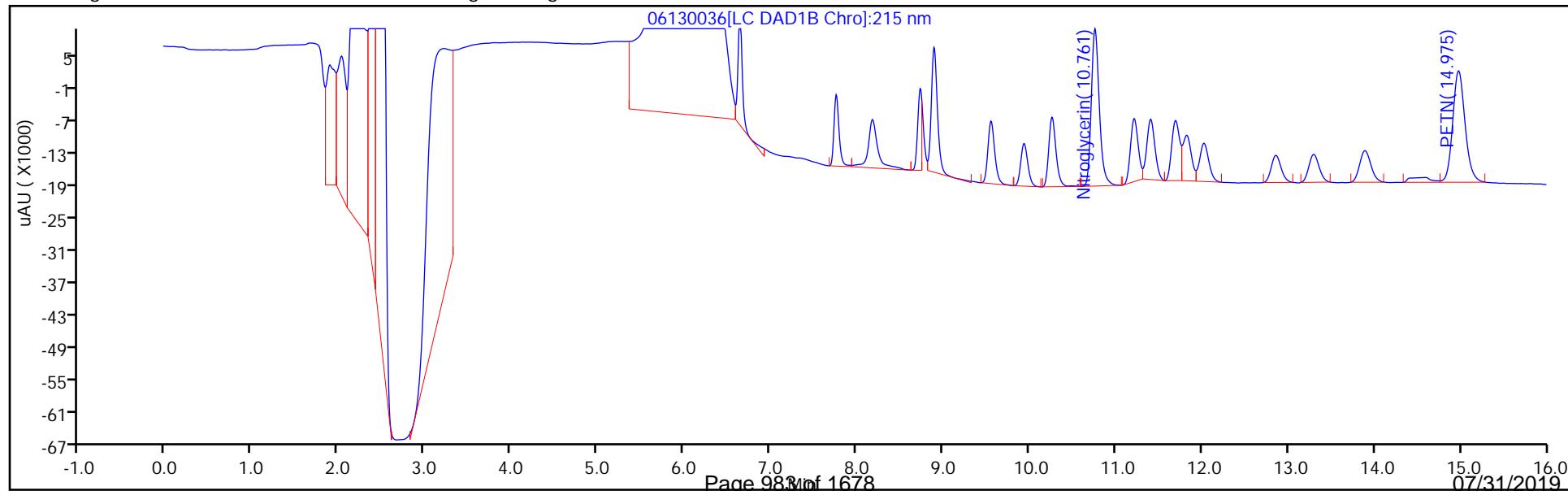
Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

ALS Bottle#: 7

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

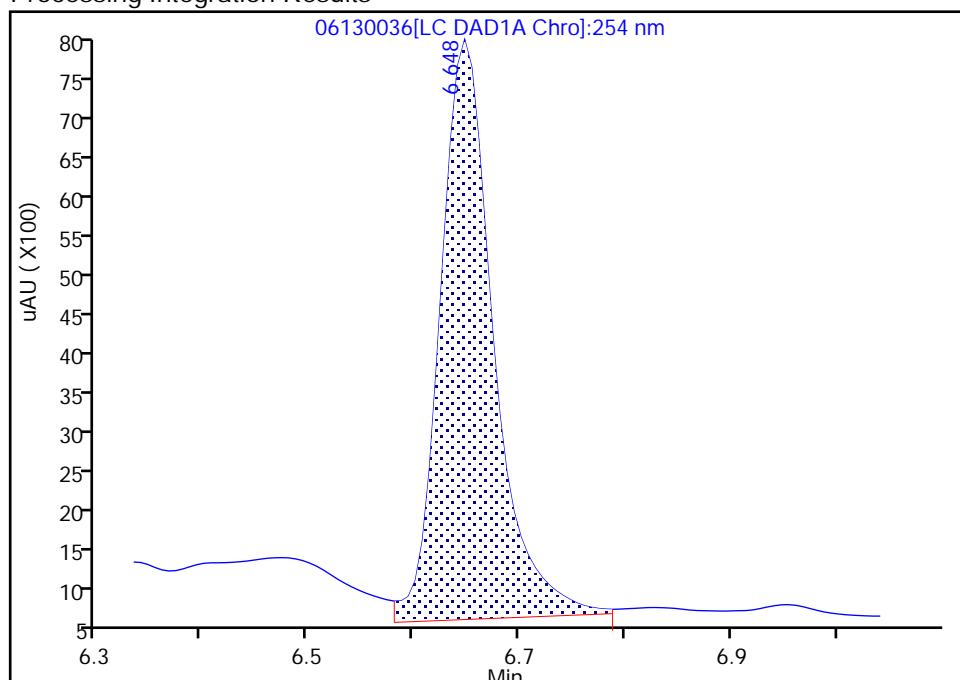
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 Injection Date: 13-Jun-2019 22:59:22 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 36
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

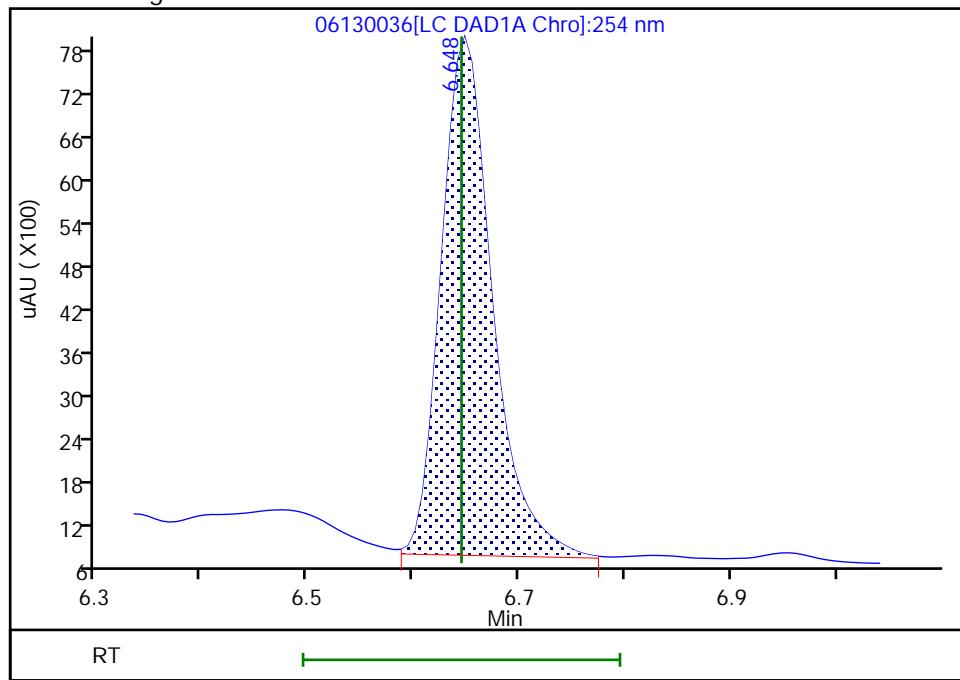
RT: 6.65
 Area: 25596
 Amount: 0.286931
 Amount Units: ug/mL

Processing Integration Results



RT: 6.65
 Area: 24042
 Amount: 0.269511
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 08:55:47

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461419/38 Calibration Date: 06/13/2019 23:47

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06130038.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	217910		274	250	9.3	15.0
DNX	Ave	148387	154893		261	250	4.4	15.0
MNX	Ave	136538	144130		308	292	5.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/38 Calibration Date: 06/13/2019 23:47
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06130038.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.88	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130038.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 13-Jun-2019 23:47:00 ALS Bottle#: 38 Worklist Smp#: 38
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082810-038
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:23 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.550	6.566	-0.016	54532	0.2503	0.2736	
5 DNX	1	6.883	6.893	-0.010	38762	0.2503	0.2612	
6 MNX	1	7.350	7.359	-0.009	42050	0.2918	0.3080	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 14-Jun-2019 10:03:24

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130038.D

Injection Date: 13-Jun-2019 23:47:00

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 38

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

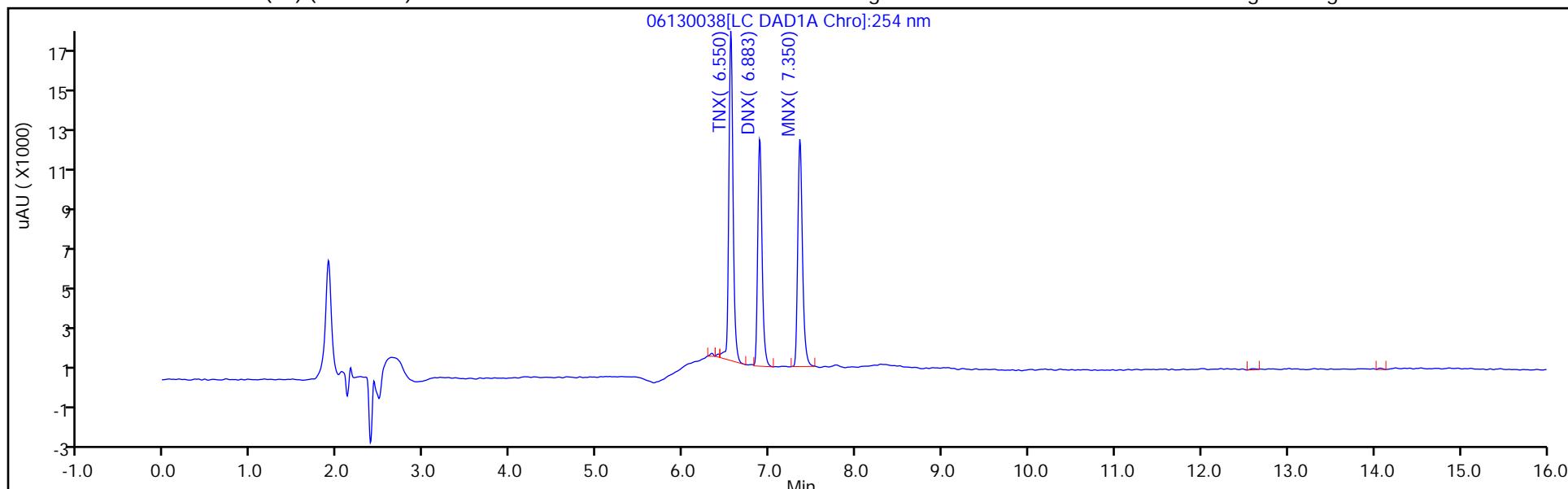
ALS Bottle#: 38

Method: 8330_X3

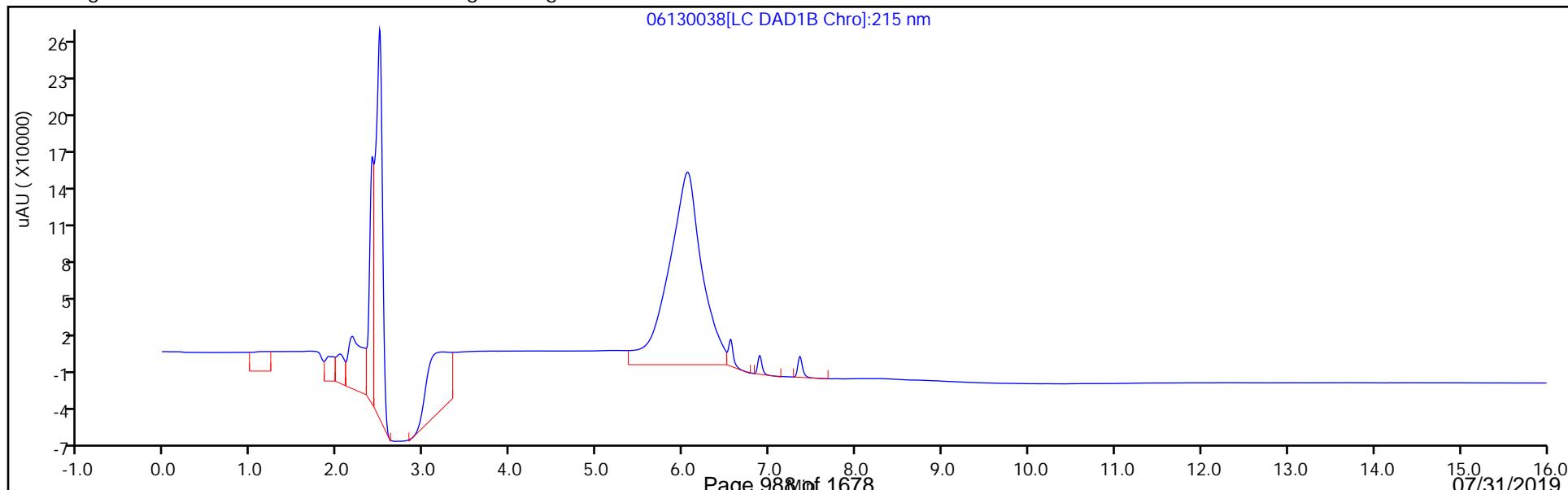
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/49 Calibration Date: 06/14/2019 04:08
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06130049.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	96028		269	250	7.6	15.0
RDX	Ave	106639	115736		271	250	8.5	15.0
Picric acid	Ave	83793	88208		263	250	5.3	15.0
1,3,5-Trinitrobenzene	Ave	229276	257260		281	250	12.2	15.0
1,3-Dinitrobenzene	Ave	300824	325706		271	250	8.3	15.0
Nitrobenzene	Ave	196827	193210		246	251	-1.8	15.0
Tetryl	Ave	167956	174952		260	250	4.2	15.0
Nitroglycerin	Ave	69977	75386		2690	2500	7.7	15.0
2,4,6-Trinitrotoluene	Ave	223593	237382		266	251	6.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	168674		260	251	3.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	210592		267	251	6.6	15.0
2,6-Dinitrotoluene	Ave	156597	168423		270	251	7.6	15.0
2,4-Dinitrotoluene	Ave	297422	315309		266	251	6.0	15.0
2-Nitrotoluene	Ave	131349	124566		238	251	-5.2	15.0
4-Nitrotoluene	Ave	112716	108550		242	251	-3.7	15.0
3-Nitrotoluene	Ave	148306	141323		239	251	-4.7	15.0
PETN	Ave	73191	79631		2720	2500	8.8	15.0
1,2-Dinitrobenzene	Ave	130111	146624		282	250	12.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/49 Calibration Date: 06/14/2019 04:08
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06130049.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.50	6.80
RDX	7.77	7.61	7.91
Picric acid	8.20	8.02	8.32
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.57	9.41	9.71
Nitrobenzene	9.96	9.80	10.10
Tetryl	10.28	10.12	10.42
Nitroglycerin	10.78	10.62	10.92
2,4,6-Trinitrotoluene	11.24	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.44	11.31	11.51
2-Amino-4,6-dinitrotoluene	11.72	11.60	11.80
2,6-Dinitrotoluene	11.85	11.73	11.93
2,4-Dinitrotoluene	12.06	11.93	12.13
2-Nitrotoluene	12.89	12.72	13.02
4-Nitrotoluene	13.33	13.16	13.46
3-Nitrotoluene	13.93	13.75	14.05
PETN	15.02	14.83	15.13
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130049.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2019 04:08:46 ALS Bottle#: 7 Worklist Smp#: 49
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0082810-049
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:53 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.649	6.645	0.004	24007	0.2500	0.2691	
7 RDX	1	7.769	7.758	0.011	28934	0.2500	0.2713	
8 2,4,6-Trinitrophenol	1	8.196	8.165	0.031	22052	0.2500	0.2632	
\$ 9 1,2-Dinitrobenzene	1	8.742	8.738	0.004	36656	0.2500	0.2817	
10 1,3,5-Trinitrobenzene	1	8.902	8.898	0.004	64315	0.2500	0.2805	
11 1,3-Dinitrobenzene	1	9.569	9.558	0.011	81508	0.2503	0.2709	
12 Nitrobenzene	1	9.955	9.945	0.010	48399	0.2505	0.2459	
14 Tetryl	1	10.282	10.265	0.017	43738	0.2500	0.2604	
15 Nitroglycerin	2	10.782	10.765	0.017	188464	2.50	2.69	
16 2,4,6-Trinitrotoluene	1	11.235	11.218	0.017	59583	0.2510	0.2665	
17 4-Amino-2,6-dinitrotoluene	1	11.435	11.405	0.030	42295	0.2508	0.2604	
18 2-Amino-4,6-dinitrotoluene	1	11.722	11.698	0.024	52806	0.2508	0.2673	
19 2,6-Dinitrotoluene	1	11.849	11.832	0.017	42232	0.2508	0.2697	
20 2,4-Dinitrotoluene	1	12.055	12.032	0.023	78985	0.2505	0.2656	
21 o-Nitrotoluene	1	12.889	12.865	0.024	31235	0.2508	0.2378	
22 p-Nitrotoluene	1	13.329	13.305	0.024	27246	0.2510	0.2417	
23 m-Nitrotoluene	1	13.929	13.898	0.031	35472	0.2510	0.2392	
24 PETN	2	15.015	14.978	0.037	199077	2.50	2.72	

Reagents:

8330\TermStk_00058 Amount Added: 12.50 Units: uL

Report Date: 14-Jun-2019 10:03:54

Chrom Revision: 2.3 03-May-2019 15:52:00

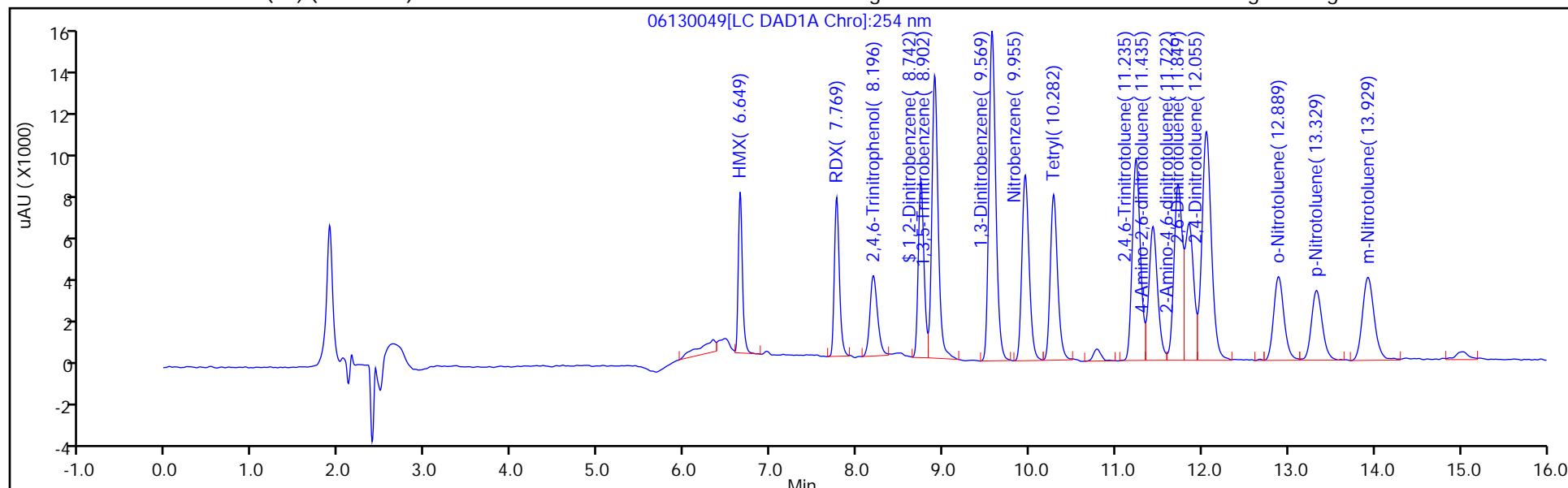
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130049.D
 Injection Date: 14-Jun-2019 04:08:46 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 49
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

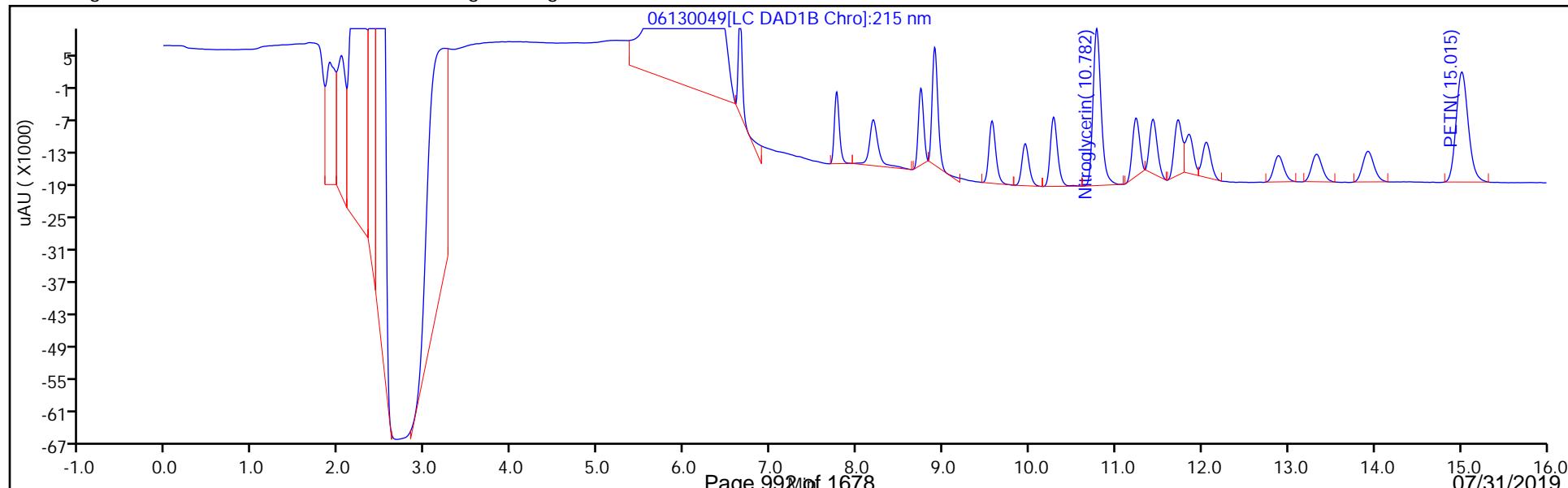
Dil. Factor: 1.0000 ALS Bottle#: 7

Limit Group: GCSV - 8330

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461419/51 Calibration Date: 06/14/2019 04:56

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06130051.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	211293		265	250	6.0	15.0
DNX	Ave	148387	154230		260	250	3.9	15.0
MNX	Ave	136538	144034		308	292	5.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/51 Calibration Date: 06/14/2019 04:56
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06130051.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.89	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130051.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2019 04:56:23 ALS Bottle#: 38 Worklist Smp#: 51
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082810-051
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:58 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 09:21:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.553	6.566	-0.013	52876	0.2503	0.2652	M
5 DNX	1	6.887	6.893	-0.006	38596	0.2503	0.2601	
6 MNX	1	7.353	7.359	-0.006	42022	0.2918	0.3078	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 14-Jun-2019 10:03:59

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130051.D

Injection Date: 14-Jun-2019 04:56:23

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 51

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

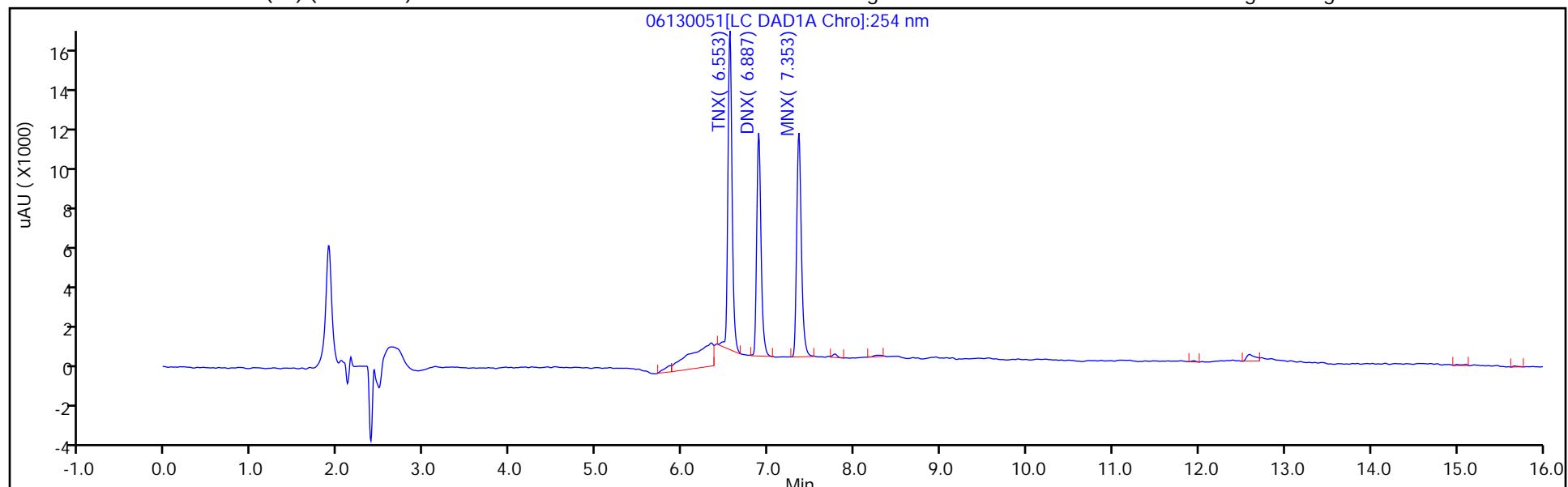
ALS Bottle#: 38

Method: 8330_X3

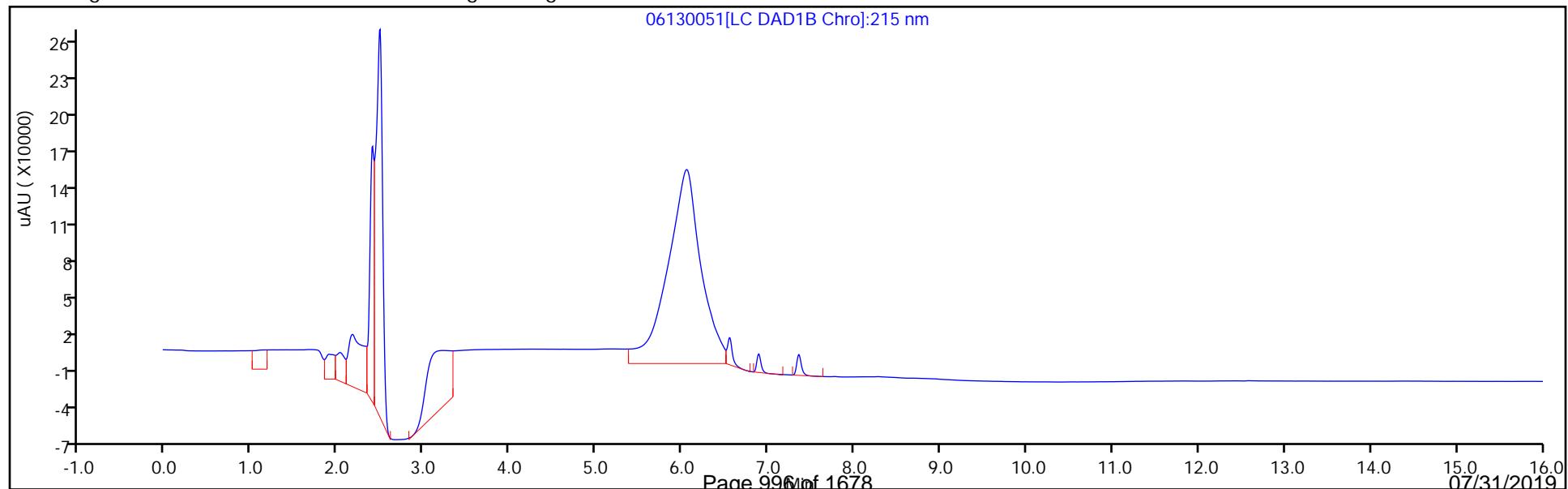
Limit Group: GCSV - 8330

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

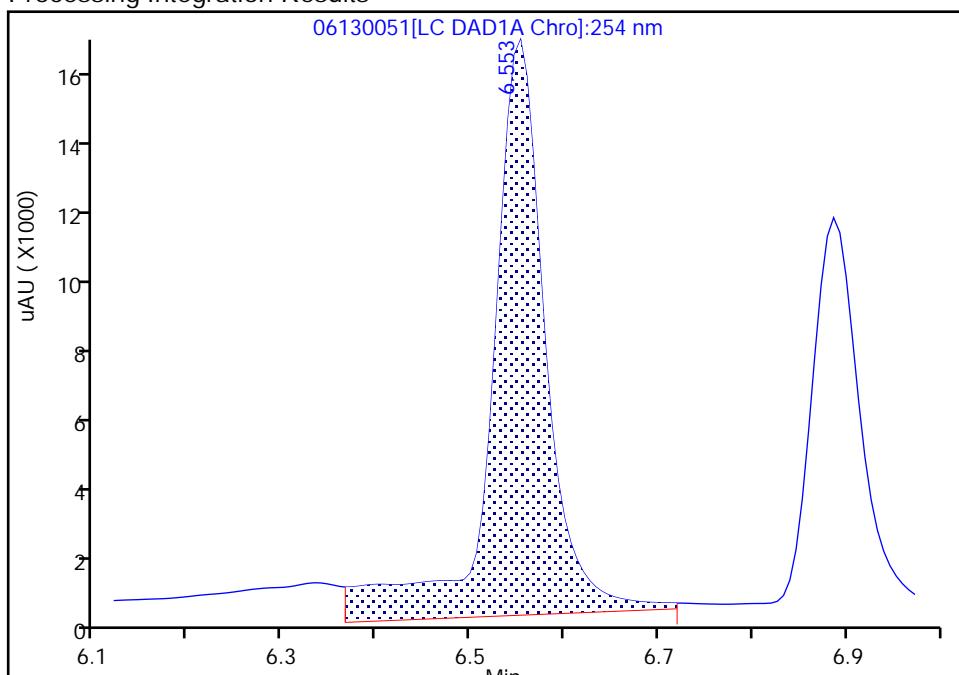
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 Injection Date: 14-Jun-2019 04:56:23 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 38 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

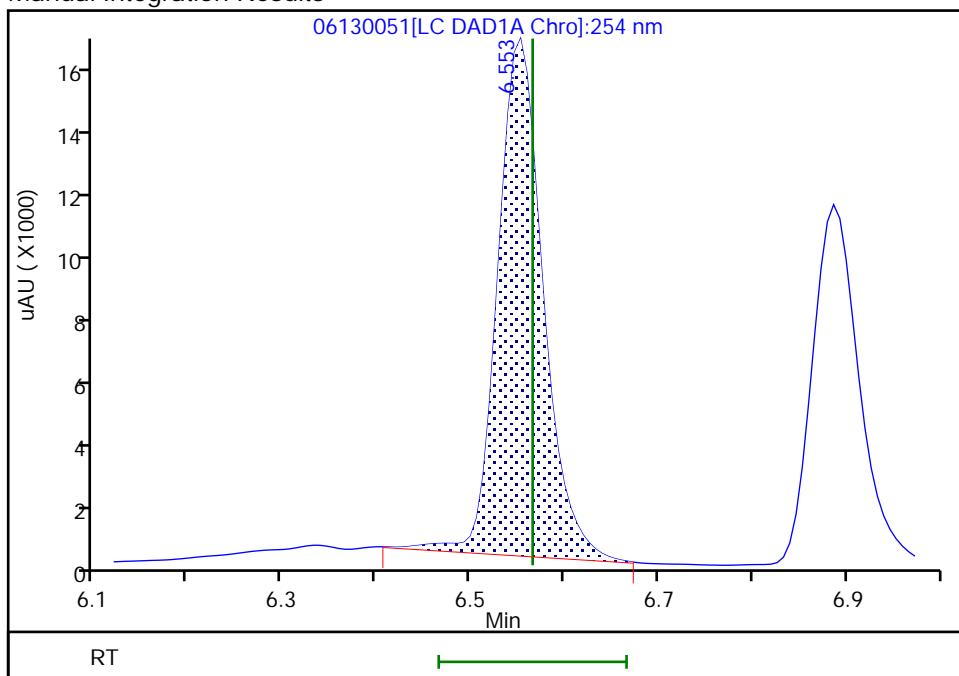
RT: 6.55
 Area: 65887
 Amount: 0.330514
 Amount Units: ug/mL

Processing Integration Results



RT: 6.55
 Area: 52876
 Amount: 0.265246
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 09:21:47

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/62 Calibration Date: 06/14/2019 09:18
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06130062.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	95488		268	250	7.0	15.0
RDX	Ave	106639	113708		267	250	6.6	15.0
Picric acid	Ave	83793	91824		274	250	9.6	15.0
1,3,5-Trinitrobenzene	Ave	229276	256752		280	250	12.0	15.0
1,3-Dinitrobenzene	Ave	300824	327588		273	250	8.9	15.0
Nitrobenzene	Ave	196827	188148		239	251	-4.4	15.0
Tetryl	Ave	167956	172788		257	250	2.9	15.0
Nitroglycerin	Ave	69977	74382		2660	2500	6.3	15.0
2,4,6-Trinitrotoluene	Ave	223593	238916		268	251	6.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	172379		266	251	6.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	207494		263	251	5.0	15.0
2,6-Dinitrotoluene	Ave	156597	169428		271	251	8.2	15.0
2,4-Dinitrotoluene	Ave	297422	311118		262	251	4.6	15.0
2-Nitrotoluene	Ave	131349	119302		228	251	-9.2	15.0
4-Nitrotoluene	Ave	112716	109566		244	251	-2.8	15.0
3-Nitrotoluene	Ave	148306	141482		239	251	-4.6	15.0
PETN	Ave	73191	79774		2720	2500	9.0	15.0
1,2-Dinitrobenzene	Ave	130111	145864		280	250	12.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/62 Calibration Date: 06/14/2019 09:18
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06130062.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.50	6.80
RDX	7.77	7.61	7.91
Picric acid	8.19	8.02	8.32
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.94	9.80	10.10
Tetryl	10.26	10.12	10.42
Nitroglycerin	10.76	10.62	10.92
2,4,6-Trinitrotoluene	11.22	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.41	11.31	11.51
2-Amino-4,6-dinitrotoluene	11.71	11.60	11.80
2,6-Dinitrotoluene	11.83	11.73	11.93
2,4-Dinitrotoluene	12.04	11.93	12.13
2-Nitrotoluene	12.87	12.72	13.02
4-Nitrotoluene	13.32	13.16	13.46
3-Nitrotoluene	13.91	13.75	14.05
PETN	15.01	14.83	15.13
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130062.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2019 09:18:30 ALS Bottle#: 7 Worklist Smp#: 62
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0082810-062
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:04:19 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh

Date:

14-Jun-2019 10:02:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.652	6.645	0.007	23872	0.2500	0.2676	
7 RDX	1	7.766	7.758	0.008	28427	0.2500	0.2666	
8 2,4,6-Trinitrophenol	1	8.192	8.165	0.027	22956	0.2500	0.2740	
\$ 9 1,2-Dinitrobenzene	1	8.739	8.738	0.001	36466	0.2500	0.2803	
10 1,3,5-Trinitrobenzene	1	8.899	8.898	0.001	64188	0.2500	0.2800	
11 1,3-Dinitrobenzene	1	9.559	9.558	0.001	81979	0.2503	0.2725	
12 Nitrobenzene	1	9.939	9.945	-0.006	47131	0.2505	0.2395	
14 Tetryl	1	10.259	10.265	-0.006	43197	0.2500	0.2572	
15 Nitroglycerin	2	10.759	10.765	-0.006	185956	2.50	2.66	
16 2,4,6-Trinitrotoluene	1	11.219	11.218	0.001	59968	0.2510	0.2682	
17 4-Amino-2,6-dinitrotoluene	1	11.412	11.405	0.007	43224	0.2508	0.2661	
18 2-Amino-4,6-dinitrotoluene	1	11.705	11.698	0.007	52029	0.2508	0.2634	M
19 2,6-Dinitrotoluene	1	11.832	11.832	0.000	42484	0.2508	0.2713	M
20 2,4-Dinitrotoluene	1	12.039	12.032	0.007	77935	0.2505	0.2620	
21 o-Nitrotoluene	1	12.872	12.865	0.007	29915	0.2508	0.2278	
22 p-Nitrotoluene	1	13.319	13.305	0.014	27501	0.2510	0.2440	
23 m-Nitrotoluene	1	13.912	13.898	0.014	35512	0.2510	0.2395	
24 PETN	2	15.012	14.978	0.034	199436	2.50	2.72	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 14-Jun-2019 10:04:20

Chrom Revision: 2.3 03-May-2019 15:52:00

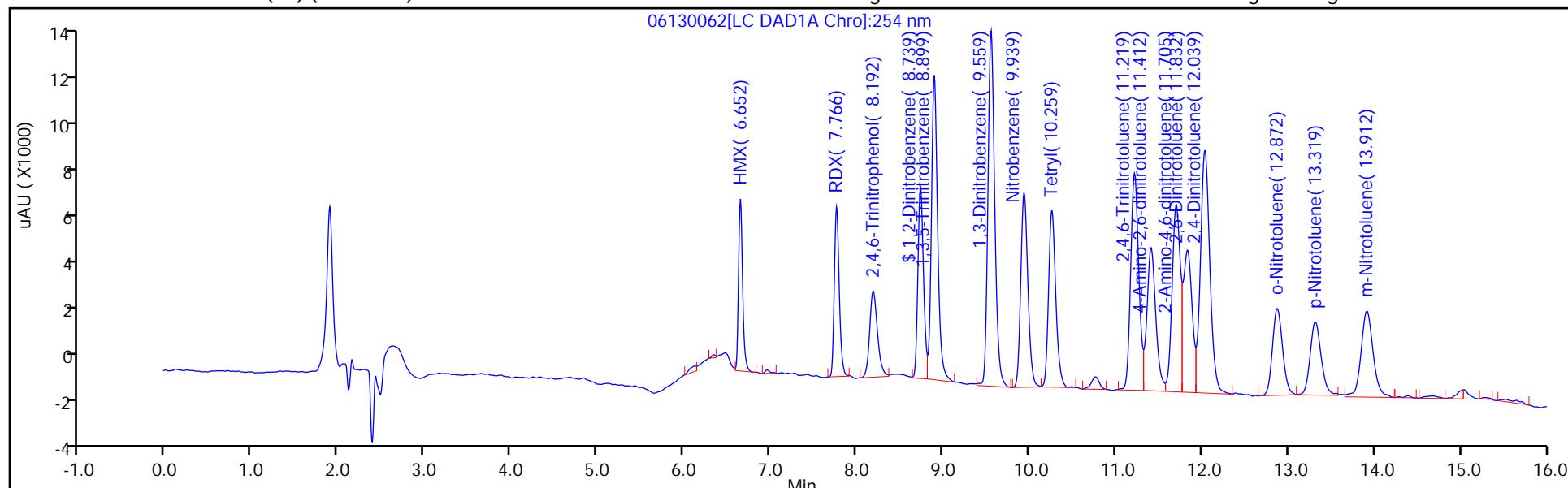
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130062.D
 Injection Date: 14-Jun-2019 09:18:30 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 62
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

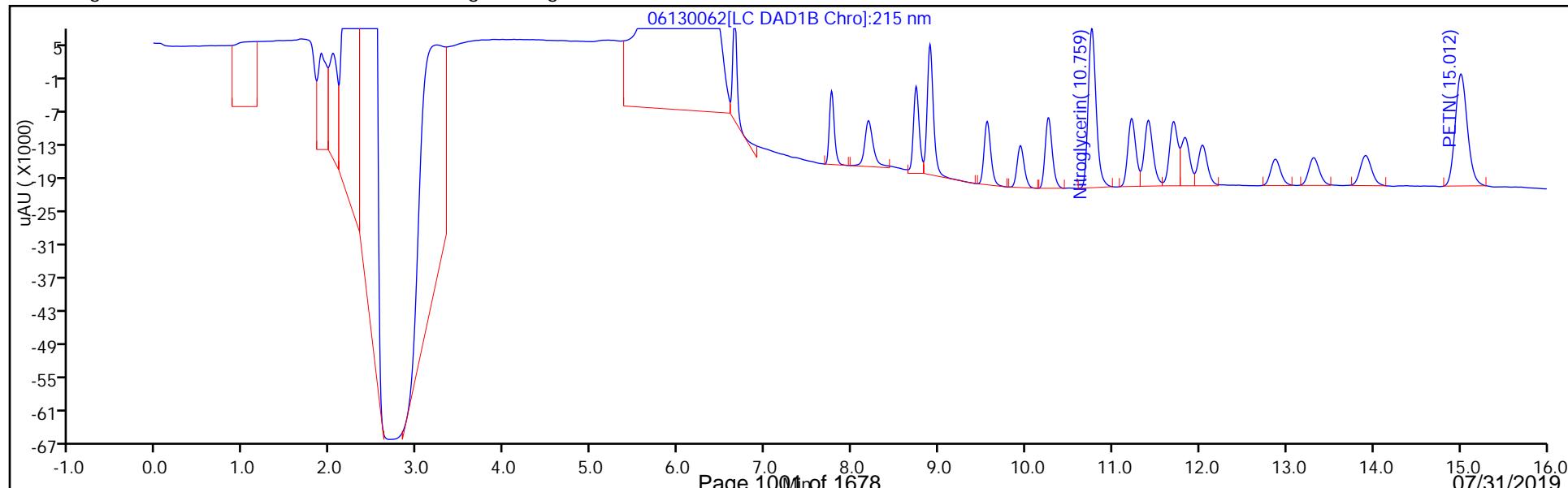
Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

ALS Bottle#: 7

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461419/64 Calibration Date: 06/14/2019 10:06

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06130064.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	213435		268	250	7.1	15.0
DNX	Ave	148387	154905		261	250	4.4	15.0
MNX	Ave	136538	144446		309	292	5.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/64 Calibration Date: 06/14/2019 10:06
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06130064.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.89	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130064.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2019 10:06:04 ALS Bottle#: 38 Worklist Smp#: 64
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082810-064
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 14:25:45 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh

Date: 14-Jun-2019 14:19:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.550	6.566	-0.016	53412	0.2503	0.2679	
5 DNX	1	6.890	6.893	-0.003	38765	0.2503	0.2612	
6 MNX	1	7.350	7.359	-0.009	42142	0.2918	0.3086	

Reagents:

8330 DMT_00002

Amount Added: 12.50

Units: uL

Report Date: 14-Jun-2019 14:25:45

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130064.D

Injection Date: 14-Jun-2019 10:06:04

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 64

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

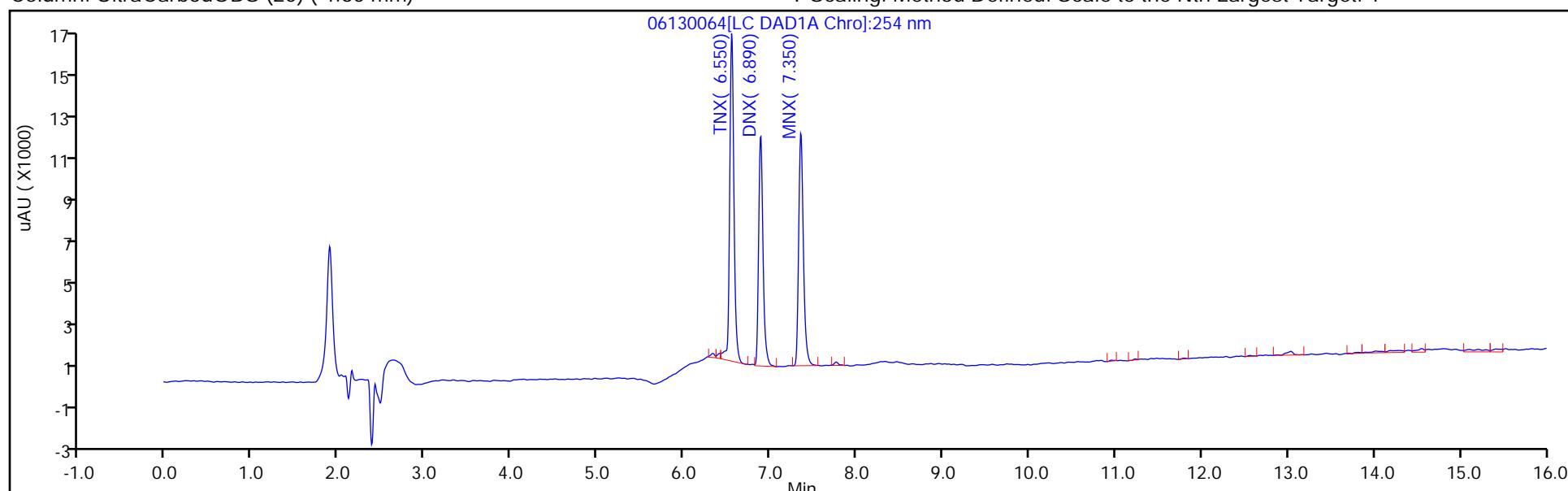
ALS Bottle#: 38

Method: 8330_X3

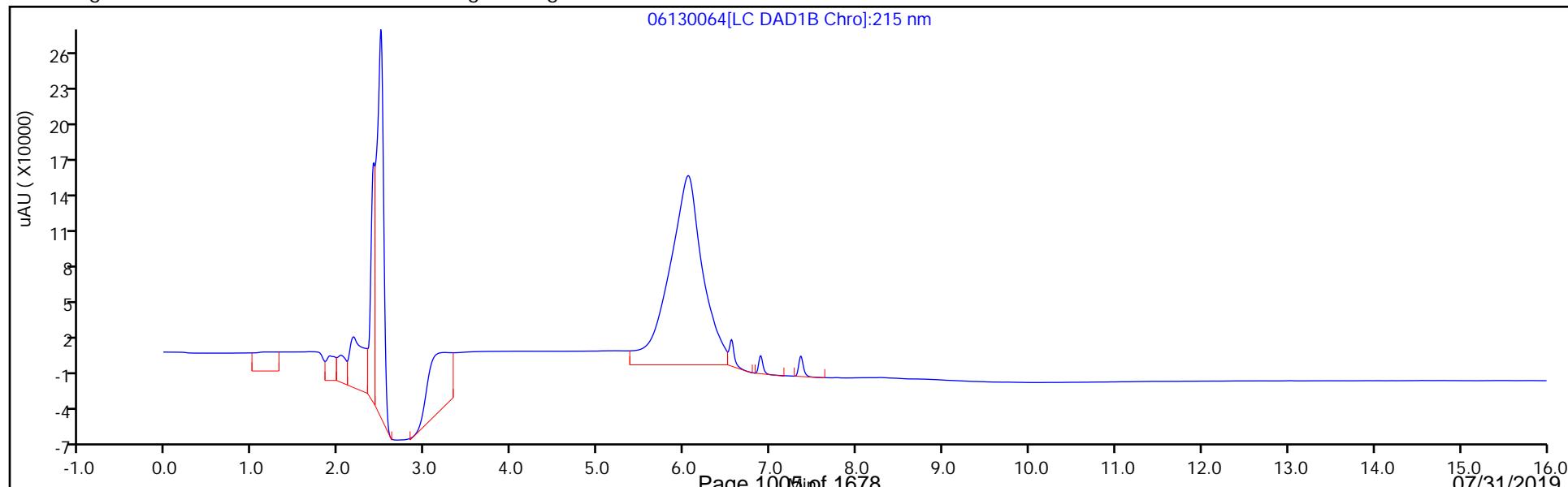
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/77 Calibration Date: 06/14/2019 14:22
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 007-7101.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	95432		267	250	7.0	15.0
RDX	Ave	106639	114684		269	250	7.5	15.0
Picric acid	Ave	83793	89340		267	250	6.6	15.0
1,3,5-Trinitrobenzene	Ave	229276	250740		273	250	9.4	15.0
1,3-Dinitrobenzene	Ave	300824	326897		272	250	8.7	15.0
Nitrobenzene	Ave	196827	182974		233	251	-7.0	15.0
Tetryl	Ave	167956	175796		262	250	4.7	15.0
Nitroglycerin	Ave	69977	75240		2690	2500	7.5	15.0
2,4,6-Trinitrotoluene	Ave	223593	238861		268	251	6.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	169811		262	251	4.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	208546		265	251	5.6	15.0
2,6-Dinitrotoluene	Ave	156597	168678		270	251	7.7	15.0
2,4-Dinitrotoluene	Ave	297422	317030		267	251	6.6	15.0
2-Nitrotoluene	Ave	131349	113527		217	251	-13.6	15.0
4-Nitrotoluene	Ave	112716	104167		232	251	-7.6	15.0
3-Nitrotoluene	Ave	148306	130713		221	251	-11.9	15.0
PETN	Ave	73191	79469		2710	2500	8.6	15.0
1,2-Dinitrobenzene	Ave	130111	144848		278	250	11.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/77 Calibration Date: 06/14/2019 14:22
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 007-7101.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.50	6.80
RDX	7.77	7.61	7.91
Picric acid	8.20	8.02	8.32
1,3,5-Trinitrobenzene	8.91	8.75	9.05
1,3-Dinitrobenzene	9.57	9.41	9.71
Nitrobenzene	9.96	9.80	10.10
Tetryl	10.28	10.12	10.42
Nitroglycerin	10.78	10.62	10.92
2,4,6-Trinitrotoluene	11.24	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.44	11.31	11.51
2-Amino-4,6-dinitrotoluene	11.73	11.60	11.80
2,6-Dinitrotoluene	11.86	11.73	11.93
2,4-Dinitrotoluene	12.06	11.93	12.13
2-Nitrotoluene	12.90	12.72	13.02
4-Nitrotoluene	13.34	13.16	13.46
3-Nitrotoluene	13.94	13.75	14.05
PETN	15.03	14.83	15.13
1,2-Dinitrobenzene	8.75	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\007-7101.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2019 14:22:42 ALS Bottle#: 7 Worklist Smp#: 77
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0082810-070
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 15:34:33 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh

Date: 14-Jun-2019 14:48:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.650	6.645	0.005	23858	0.2500	0.2674	
7 RDX	1	7.770	7.758	0.012	28671	0.2500	0.2689	
8 2,4,6-Trinitrophenol	1	8.203	8.165	0.038	22335	0.2500	0.2665	
\$ 9 1,2-Dinitrobenzene	1	8.750	8.738	0.012	36212	0.2500	0.2783	
10 1,3,5-Trinitrobenzene	1	8.910	8.898	0.012	62685	0.2500	0.2734	
11 1,3-Dinitrobenzene	1	9.570	9.558	0.012	81806	0.2503	0.2719	
12 Nitrobenzene	1	9.956	9.945	0.011	45835	0.2505	0.2329	
14 Tetryl	1	10.283	10.265	0.018	43949	0.2500	0.2617	
15 Nitroglycerin	2	10.783	10.765	0.018	188099	2.50	2.69	
16 2,4,6-Trinitrotoluene	1	11.236	11.218	0.018	59954	0.2510	0.2681	
17 4-Amino-2,6-dinitrotoluene	1	11.436	11.405	0.031	42580	0.2508	0.2621	
18 2-Amino-4,6-dinitrotoluene	1	11.730	11.698	0.032	52293	0.2508	0.2647	M
19 2,6-Dinitrotoluene	1	11.856	11.832	0.024	42296	0.2508	0.2701	M
20 2,4-Dinitrotoluene	1	12.056	12.032	0.024	79416	0.2505	0.2670	
21 o-Nitrotoluene	1	12.896	12.865	0.031	28467	0.2508	0.2167	
22 p-Nitrotoluene	1	13.336	13.305	0.031	26146	0.2510	0.2320	
23 m-Nitrotoluene	1	13.936	13.898	0.038	32809	0.2510	0.2212	
24 PETN	2	15.030	14.978	0.052	198672	2.50	2.71	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330\TermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 14-Jun-2019 15:34:33

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\007-7101.D

Injection Date: 14-Jun-2019 14:22:42

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV INT

Worklist Smp#: 77

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

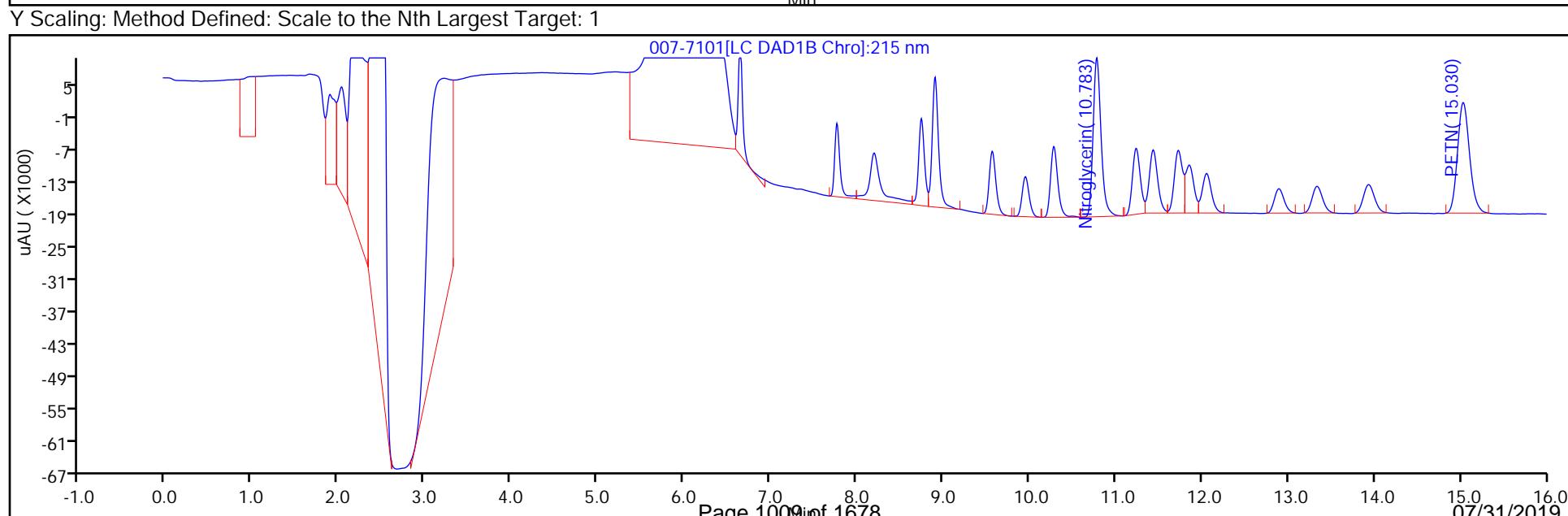
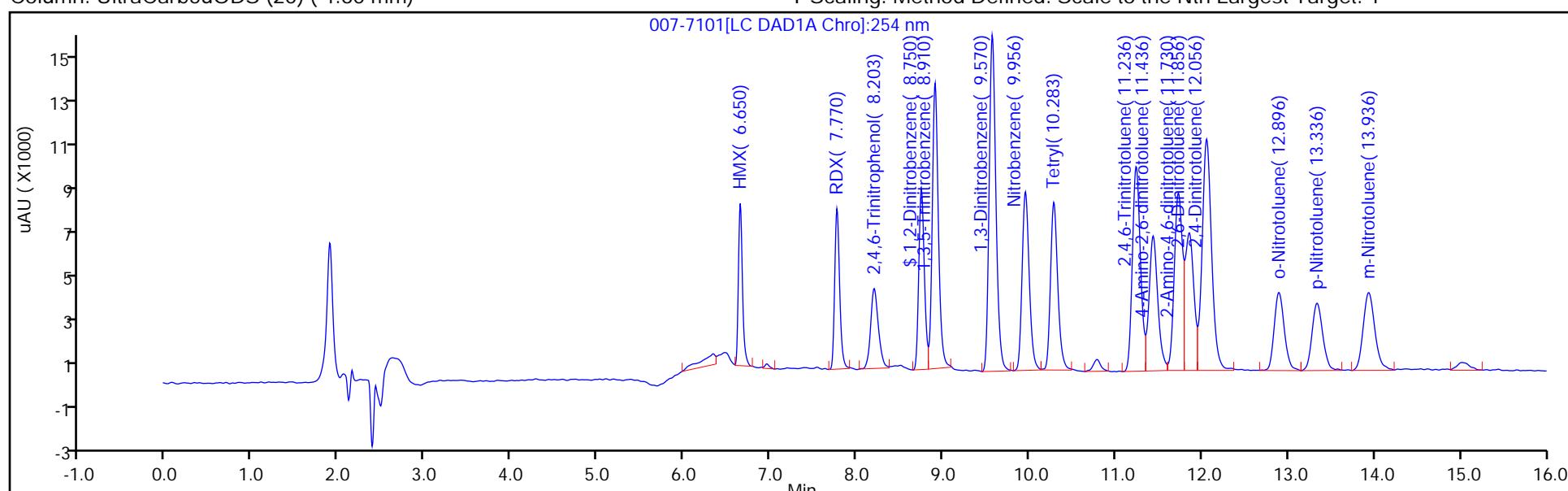
ALS Bottle#: 7

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461419/79 Calibration Date: 06/14/2019 15:10

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 038-7301.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	206442		259	250	3.6	15.0
DNX	Ave	148387	156543		264	250	5.5	15.0
MNX	Ave	136538	143236		306	292	4.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461419/79 Calibration Date: 06/14/2019 15:10
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 038-7301.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.89	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\038-7301.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 14-Jun-2019 15:10:15 ALS Bottle#: 38 Worklist Smp#: 79
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082810-070
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 15:34:35 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh

Date:

14-Jun-2019 15:34:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.553	6.566	-0.013	51662	0.2503	0.2592	M
5 DNX	1	6.886	6.893	-0.007	39175	0.2503	0.2640	
6 MNX	1	7.353	7.359	-0.006	41789	0.2918	0.3061	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 14-Jun-2019 15:34:35

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\038-7301.D

Injection Date: 14-Jun-2019 15:10:15

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 79

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

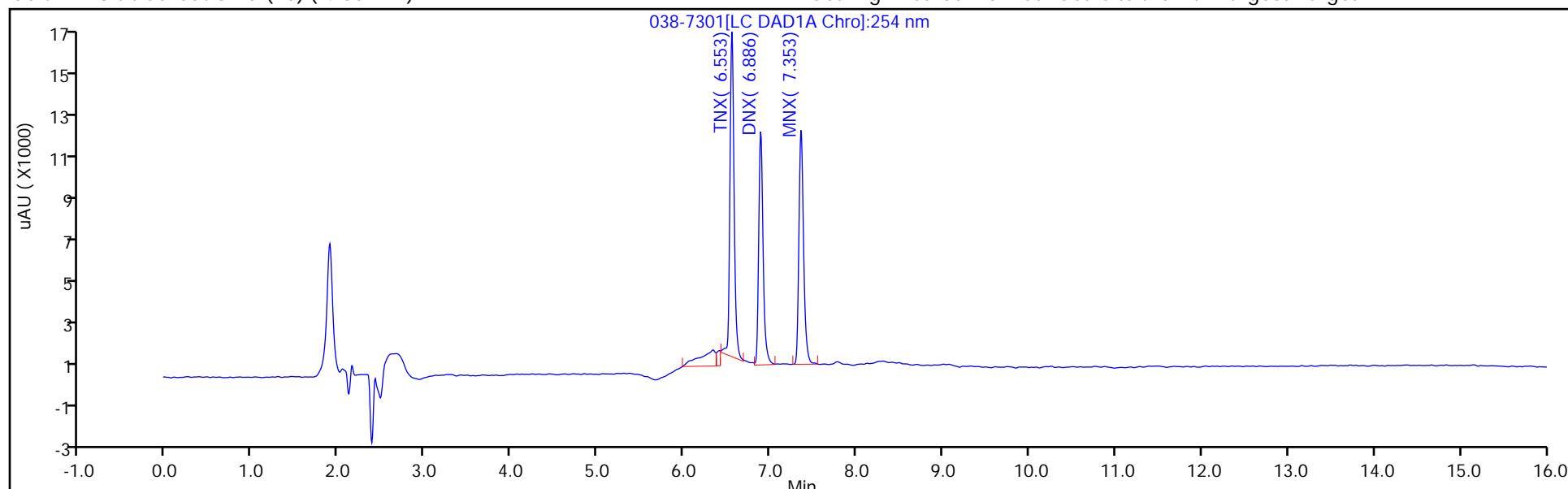
ALS Bottle#: 38

Method: 8330_X3

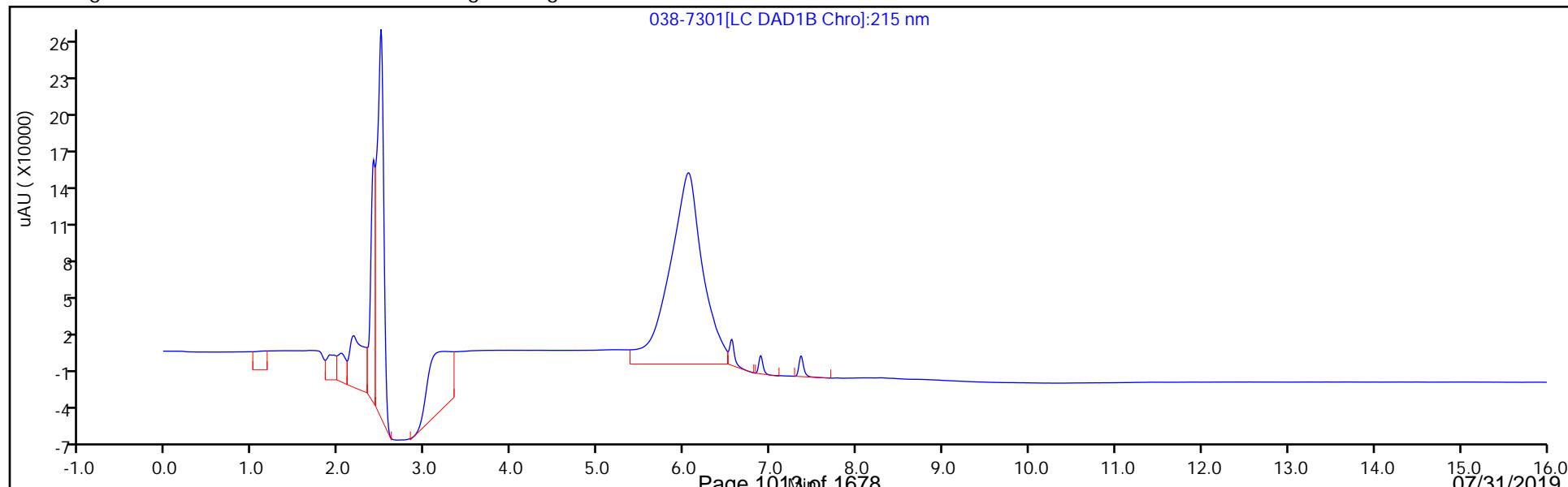
Limit Group: GCSV - 8330

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

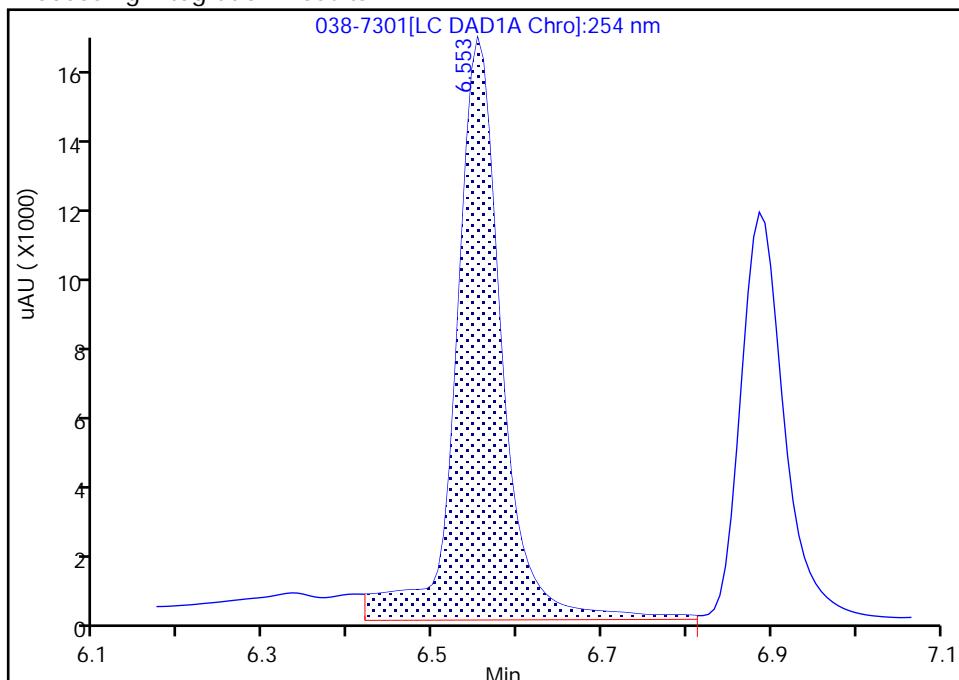
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 Injection Date: 14-Jun-2019 15:10:15 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 38 Worklist Smp#: 79
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

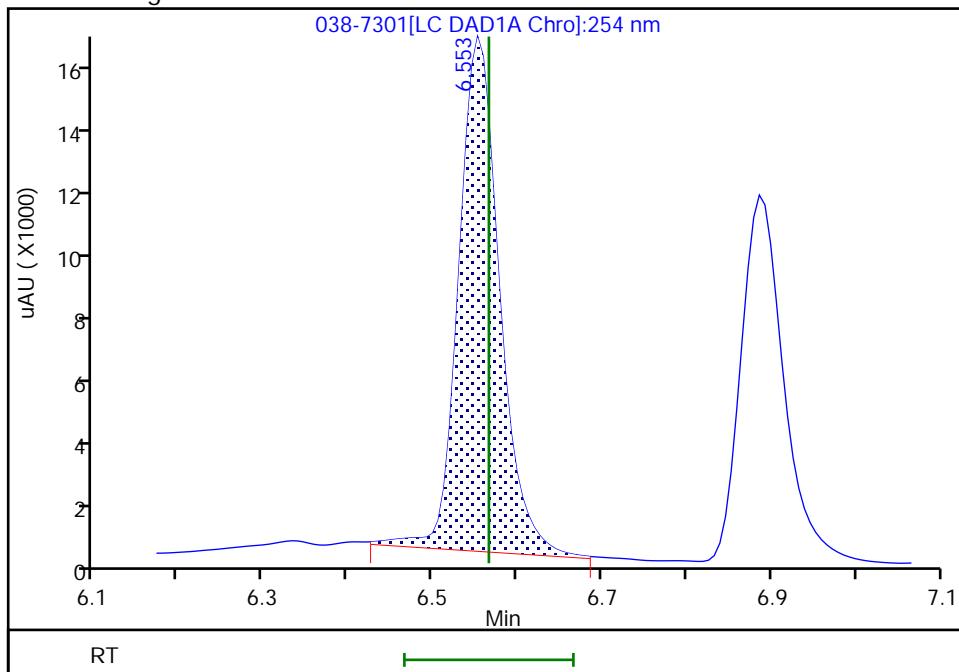
Processing Integration Results

RT: 6.55
 Area: 59601
 Amount: 0.298981
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 51662
 Amount: 0.259156
 Amount Units: ug/mL



Reviewer: fiedlerh, 14-Jun-2019 15:34:23

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/40 Calibration Date: 06/15/2019 06:15
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06140040.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	93548		262	250	4.9	15.0
RDX	Ave	106639	113708		267	250	6.6	15.0
Picric acid	Ave	83793	87956		262	250	5.0	15.0
1,3,5-Trinitrobenzene	Ave	229276	250124		273	250	9.1	15.0
1,3-Dinitrobenzene	Ave	300824	320671		267	250	6.6	15.0
Nitrobenzene	Ave	196827	197876		252	251	0.5	15.0
Tetryl	Ave	167956	170148		253	250	1.3	15.0
Nitroglycerin	Ave	69977	74840		2670	2500	6.9	15.0
2,4,6-Trinitrotoluene	Ave	223593	234359		263	251	4.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	165603		256	251	2.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	208040		264	251	5.3	15.0
2,6-Dinitrotoluene	Ave	156597	166696		267	251	6.4	15.0
2,4-Dinitrotoluene	Ave	297422	310794		262	251	4.5	15.0
2-Nitrotoluene	Ave	131349	138046		264	251	5.1	15.0
4-Nitrotoluene	Ave	112716	119709		267	251	6.2	15.0
3-Nitrotoluene	Ave	148306	151367		256	251	2.1	15.0
PETN	Ave	73191	78203		2670	2500	6.8	15.0
1,2-Dinitrobenzene	Ave	130111	142832		274	250	9.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/40 Calibration Date: 06/15/2019 06:15
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06140040.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.49	6.79
RDX	7.77	7.61	7.91
Picric acid	8.20	8.05	8.35
1,3,5-Trinitrobenzene	8.91	8.75	9.05
1,3-Dinitrobenzene	9.58	9.41	9.71
Nitrobenzene	9.97	9.80	10.10
Tetryl	10.30	10.13	10.43
Nitroglycerin	10.80	10.63	10.93
2,4,6-Trinitrotoluene	11.26	11.13	11.33
4-Amino-2,6-dinitrotoluene	11.47	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.77	11.62	11.82
2,6-Dinitrotoluene	11.89	11.74	11.94
2,4-Dinitrotoluene	12.09	11.94	12.14
2-Nitrotoluene	12.93	12.73	13.03
4-Nitrotoluene	13.38	13.17	13.47
3-Nitrotoluene	13.98	13.77	14.07
PETN	15.07	14.87	15.17
1,2-Dinitrobenzene	8.75	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140040.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 06:15:52 ALS Bottle#: 7 Worklist Smp#: 40
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0082867-040
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:12 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.647	6.643	0.004	23387	0.2500	0.2622	
7 RDX	1	7.774	7.763	0.011	28427	0.2500	0.2666	
8 2,4,6-Trinitrophenol	1	8.200	8.196	0.004	21989	0.2500	0.2624	
\$ 9 1,2-Dinitrobenzene	1	8.747	8.743	0.004	35708	0.2500	0.2744	
10 1,3,5-Trinitrobenzene	1	8.907	8.896	0.011	62531	0.2500	0.2727	
11 1,3-Dinitrobenzene	1	9.580	9.563	0.017	80248	0.2503	0.2668	
12 Nitrobenzene	1	9.967	9.949	0.018	49568	0.2505	0.2518	
14 Tetryl	1	10.300	10.276	0.024	42537	0.2500	0.2533	
15 Nitroglycerin	2	10.800	10.776	0.024	187101	2.50	2.67	
16 2,4,6-Trinitrotoluene	1	11.260	11.229	0.031	58824	0.2510	0.2631	
17 4-Amino-2,6-dinitrotoluene	1	11.467	11.429	0.038	41525	0.2508	0.2556	
18 2-Amino-4,6-dinitrotoluene	1	11.767	11.716	0.051	52166	0.2508	0.2641	
19 2,6-Dinitrotoluene	1	11.887	11.843	0.044	41799	0.2508	0.2669	
20 2,4-Dinitrotoluene	1	12.087	12.043	0.044	77854	0.2505	0.2618	
21 o-Nitrotoluene	1	12.933	12.883	0.050	34615	0.2508	0.2635	
22 p-Nitrotoluene	1	13.380	13.323	0.057	30047	0.2510	0.2666	
23 m-Nitrotoluene	1	13.980	13.923	0.057	37993	0.2510	0.2562	
24 PETN	2	15.073	15.016	0.057	195508	2.50	2.67	

Reagents:

8330\TermStk_00058 Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 10:45:13

Chrom Revision: 2.3 03-May-2019 15:52:00

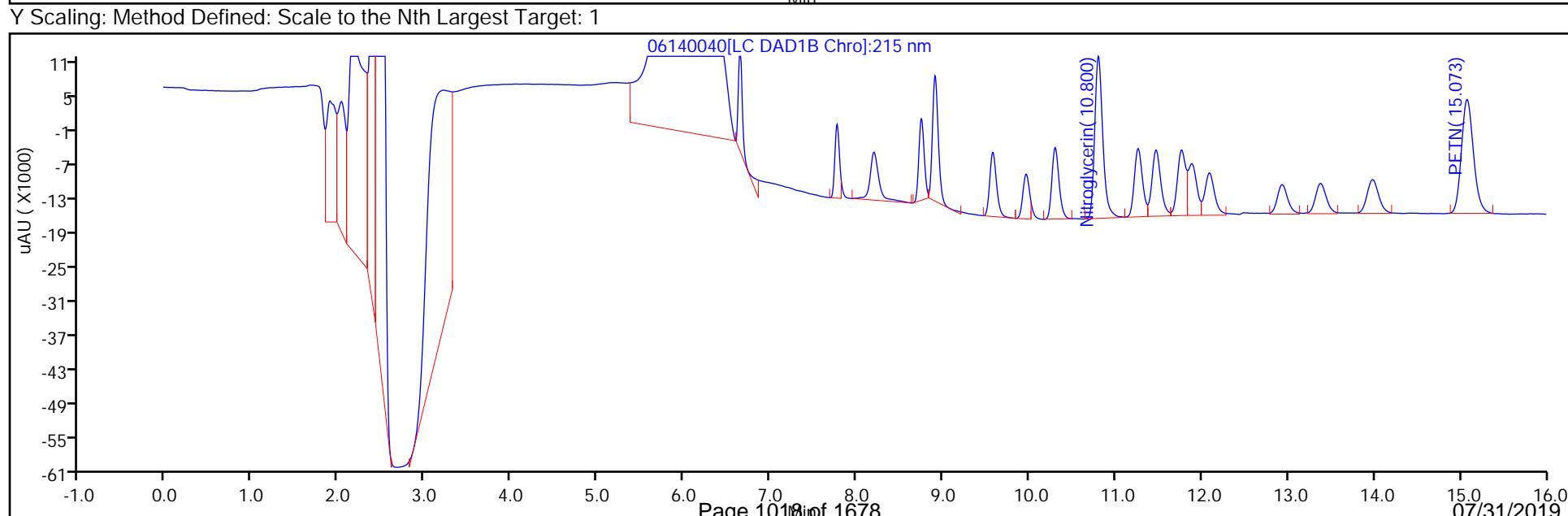
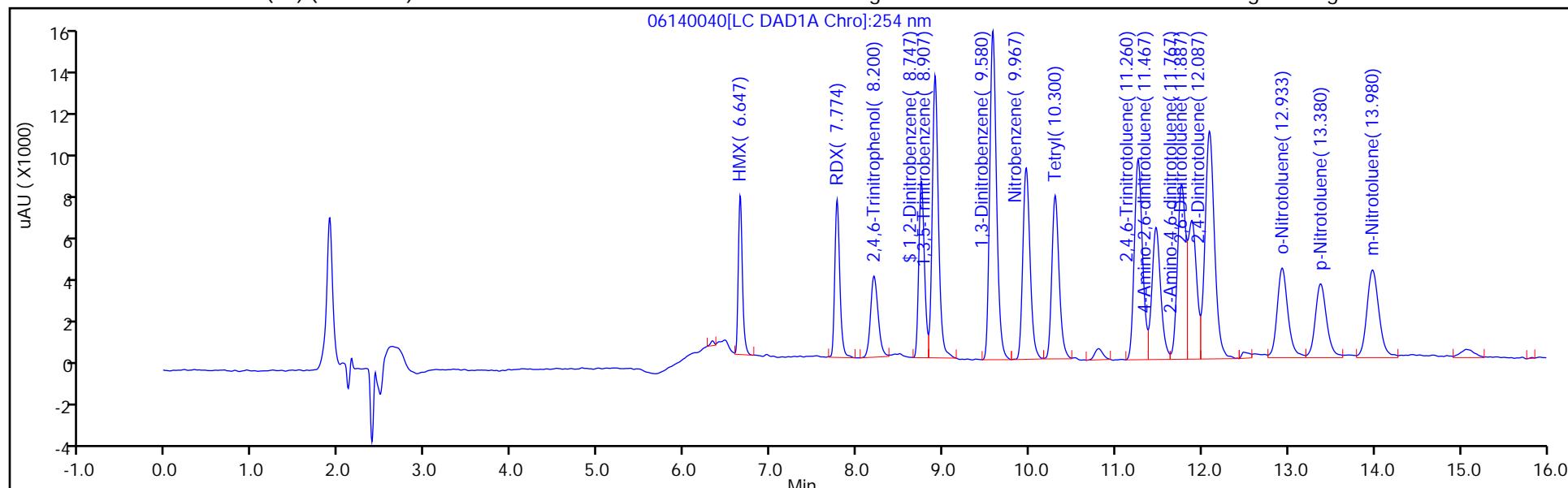
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140040.D
 Injection Date: 15-Jun-2019 06:15:52 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 40
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

ALS Bottle#: 7

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/42 Calibration Date: 06/15/2019 07:03
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06140042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	216667		272	250	8.7	15.0
DNX	Ave	148387	155692		263	250	4.9	15.0
MNX	Ave	136538	145042		310	292	6.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/42 Calibration Date: 06/15/2019 07:03
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06140042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.56	6.47	6.67
DNX	6.89	6.79	6.99
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140042.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 07:03:30 ALS Bottle#: 42 Worklist Smp#: 42
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082867-042
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.555	6.566	-0.011	54221	0.2503	0.2720	
5 DNX	1	6.888	6.893	-0.005	38962	0.2503	0.2626	
6 MNX	1	7.361	7.359	0.002	42316	0.2918	0.3099	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 10:45:18

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140042.D

Injection Date: 15-Jun-2019 07:03:30

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 42

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

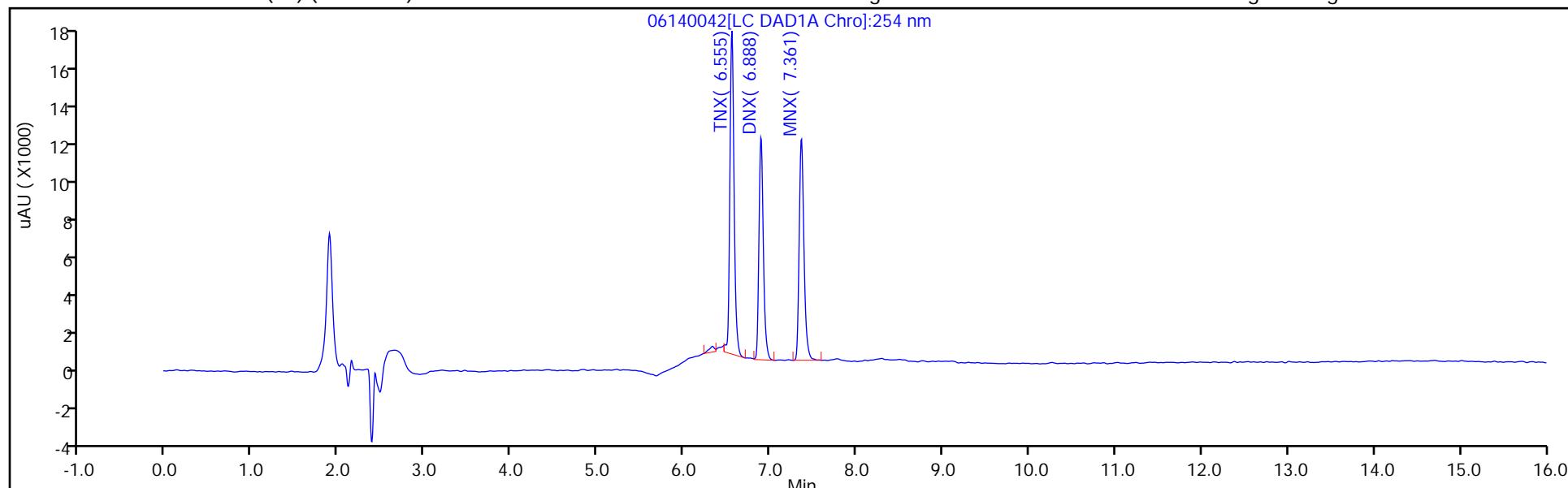
ALS Bottle#: 42

Method: 8330_X3

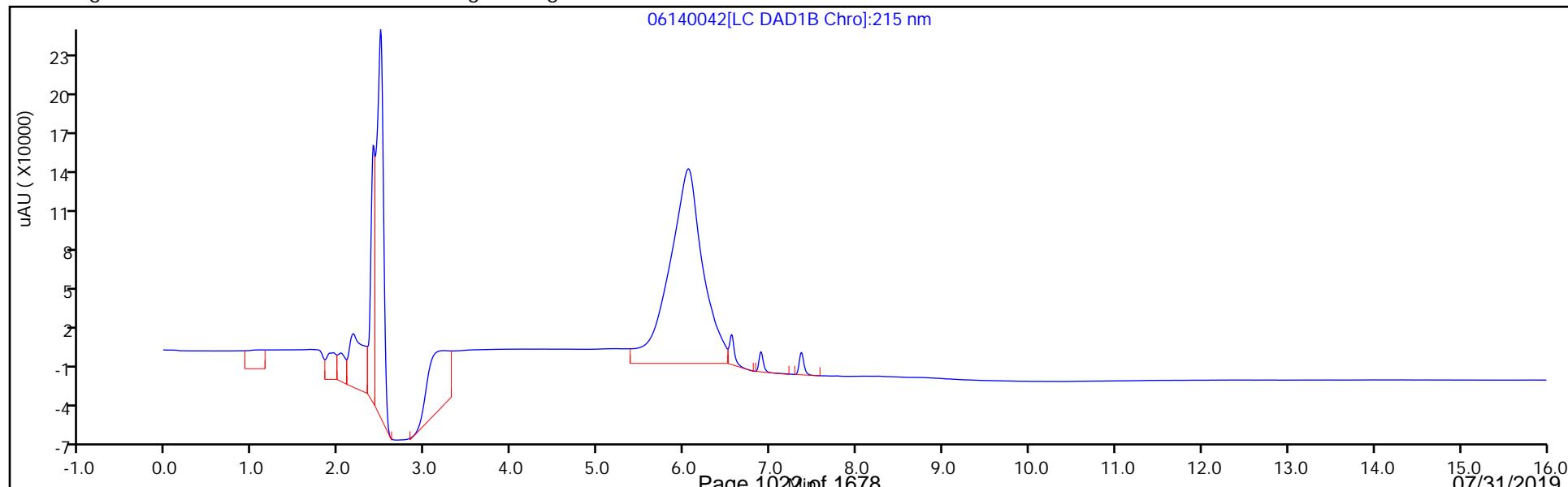
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/53 Calibration Date: 06/15/2019 11:25
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06140053.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	93008		261	250	4.3	15.0
RDX	Ave	106639	112712		264	250	5.7	15.0
Picric acid	Ave	83793	86036		257	250	2.7	15.0
1,3,5-Trinitrobenzene	Ave	229276	249920		273	250	9.0	15.0
1,3-Dinitrobenzene	Ave	300824	321598		268	250	6.9	15.0
Nitrobenzene	Ave	196827	194818		248	251	-1.0	15.0
Tetryl	Ave	167956	173824		259	250	3.5	15.0
Nitroglycerin	Ave	69977	75038		2680	2500	7.2	15.0
2,4,6-Trinitrotoluene	Ave	223593	233155		262	251	4.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	169172		261	251	4.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	214385		272	251	8.5	15.0
2,6-Dinitrotoluene	Ave	156597	159486		255	251	1.8	15.0
2,4-Dinitrotoluene	Ave	297422	312084		263	251	4.9	15.0
2-Nitrotoluene	Ave	131349	125304		239	251	-4.6	15.0
4-Nitrotoluene	Ave	112716	110685		246	251	-1.8	15.0
3-Nitrotoluene	Ave	148306	140865		238	251	-5.0	15.0
PETN	Ave	73191	78611		2690	2500	7.4	15.0
1,2-Dinitrobenzene	Ave	130111	143340		275	250	10.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/53 Calibration Date: 06/15/2019 11:25
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06140053.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.49	6.79
RDX	7.77	7.61	7.91
Picric acid	8.19	8.05	8.35
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.57	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.29	10.13	10.43
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.13	11.33
4-Amino-2,6-dinitrotoluene	11.44	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.73	11.62	11.82
2,6-Dinitrotoluene	11.85	11.74	11.94
2,4-Dinitrotoluene	12.06	11.94	12.14
2-Nitrotoluene	12.90	12.73	13.03
4-Nitrotoluene	13.34	13.17	13.47
3-Nitrotoluene	13.94	13.77	14.07
PETN	15.03	14.87	15.17
1,2-Dinitrobenzene	8.75	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140053.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 11:25:12 ALS Bottle#: 7 Worklist Smp#: 53
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0082867-053
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:42 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh

Date:

17-Jun-2019 10:21:07

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.645	6.643	0.002	23252	0.2500	0.2607	
7 RDX	1	7.765	7.763	0.002	28178	0.2500	0.2642	
8 2,4,6-Trinitrophenol	1	8.192	8.196	-0.004	21509	0.2500	0.2567	
\$ 9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	35835	0.2500	0.2754	
10 1,3,5-Trinitrobenzene	1	8.899	8.896	0.003	62480	0.2500	0.2725	
11 1,3-Dinitrobenzene	1	9.565	9.563	0.002	80480	0.2503	0.2675	
12 Nitrobenzene	1	9.952	9.949	0.003	48802	0.2505	0.2479	
14 Tetryl	1	10.285	10.276	0.009	43456	0.2500	0.2587	
15 Nitroglycerin	2	10.779	10.776	0.003	187595	2.50	2.68	
16 2,4,6-Trinitrotoluene	1	11.239	11.229	0.010	58522	0.2510	0.2617	
17 4-Amino-2,6-dinitrotoluene	1	11.439	11.429	0.010	42420	0.2508	0.2612	
18 2-Amino-4,6-dinitrotoluene	1	11.732	11.716	0.016	53757	0.2508	0.2721	M
19 2,6-Dinitrotoluene	1	11.852	11.843	0.009	39991	0.2508	0.2554	M
20 2,4-Dinitrotoluene	1	12.059	12.043	0.016	78177	0.2505	0.2628	
21 o-Nitrotoluene	1	12.899	12.883	0.016	31420	0.2508	0.2392	
22 p-Nitrotoluene	1	13.339	13.323	0.016	27782	0.2510	0.2465	
23 m-Nitrotoluene	1	13.939	13.923	0.016	35357	0.2510	0.2384	
24 PETN	2	15.032	15.016	0.016	196528	2.50	2.69	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 17-Jun-2019 10:45:43

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140053.D

Injection Date: 15-Jun-2019 11:25:12

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV INT

Worklist Smp#: 53

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

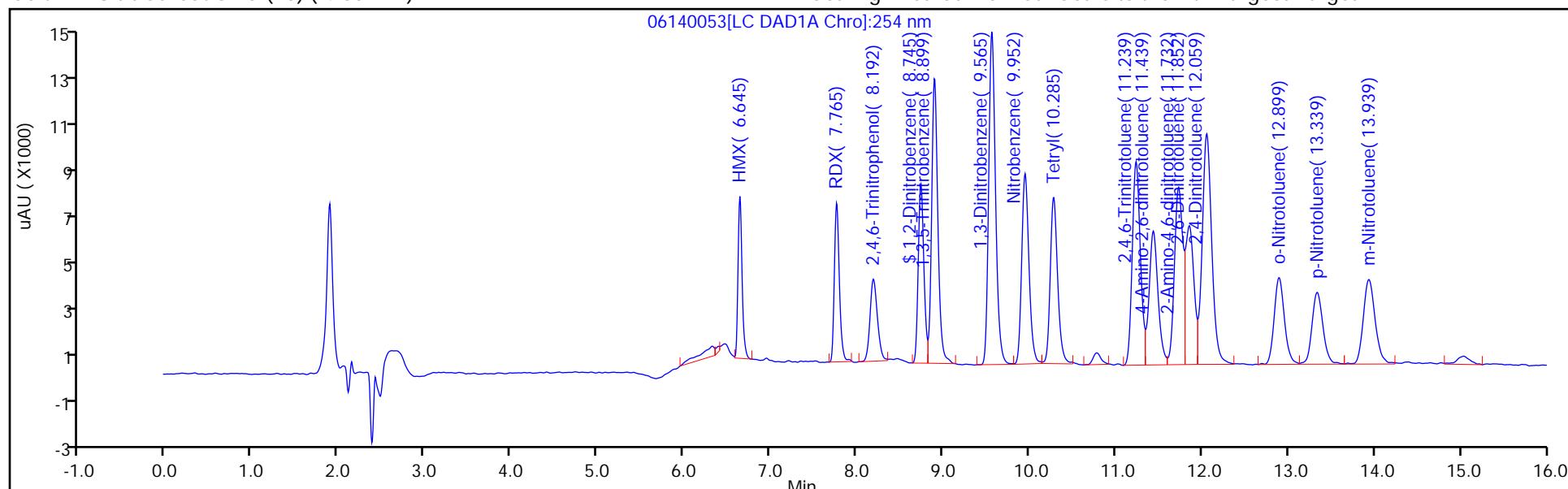
ALS Bottle#: 7

Method: 8330_X3

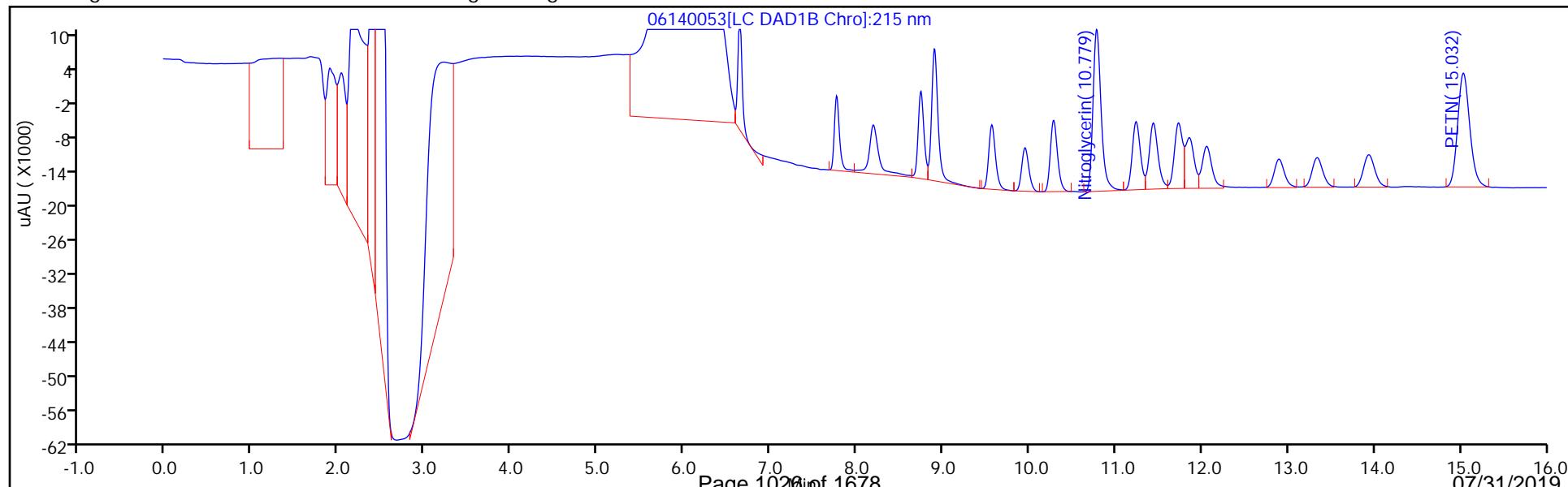
Limit Group: GCSV - 8330

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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/55 Calibration Date: 06/15/2019 12:12
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06140055.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	207253		260	250	4.0	15.0
DNX	Ave	148387	155445		262	250	4.8	15.0
MNX	Ave	136538	144192		308	292	5.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/55 Calibration Date: 06/15/2019 12:12
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06140055.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.89	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140055.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 12:12:49 ALS Bottle#: 42 Worklist Smp#: 55
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082867-055
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:21:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.547	6.566	-0.019	51865	0.2503	0.2602	M
5 DNX	1	6.887	6.893	-0.006	38900	0.2503	0.2622	M
6 MNX	1	7.353	7.359	-0.006	42068	0.2918	0.3081	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 10:45:47

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140055.D

Injection Date: 15-Jun-2019 12:12:49

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 55

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

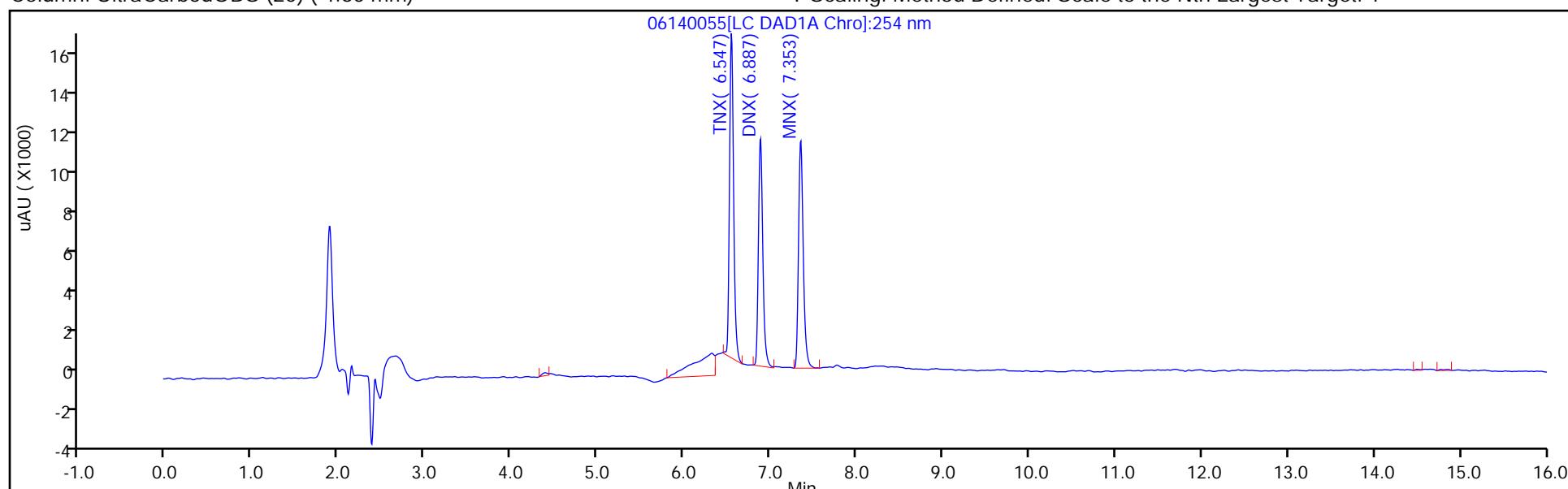
ALS Bottle#: 42

Method: 8330_X3

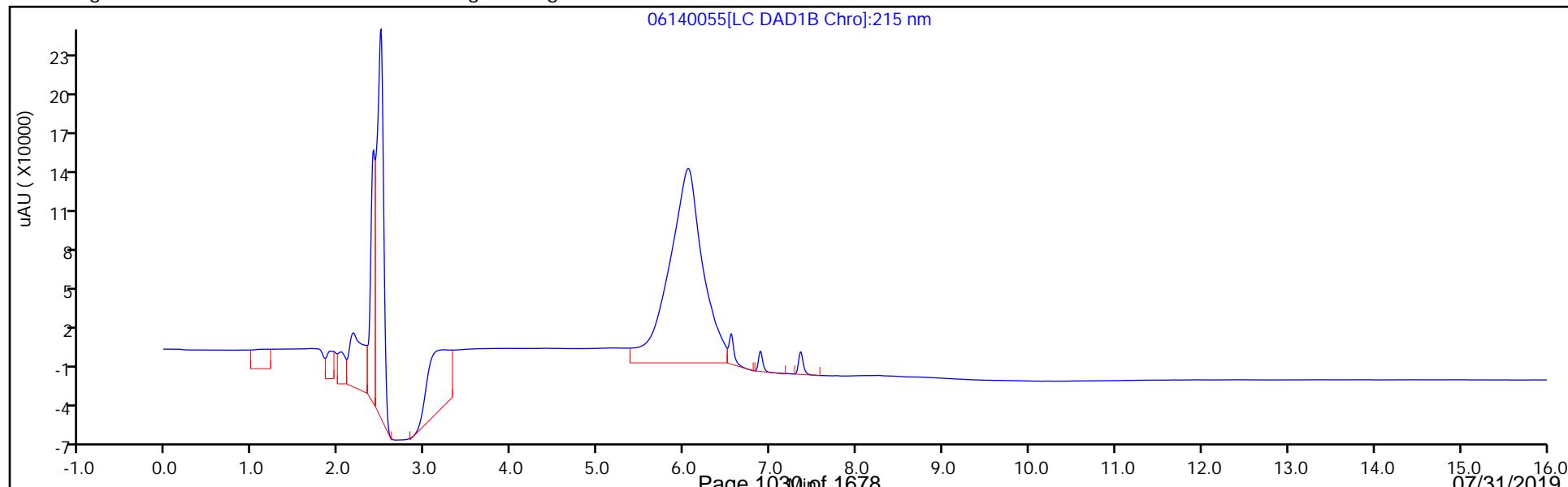
Limit Group: GCSV - 8330

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

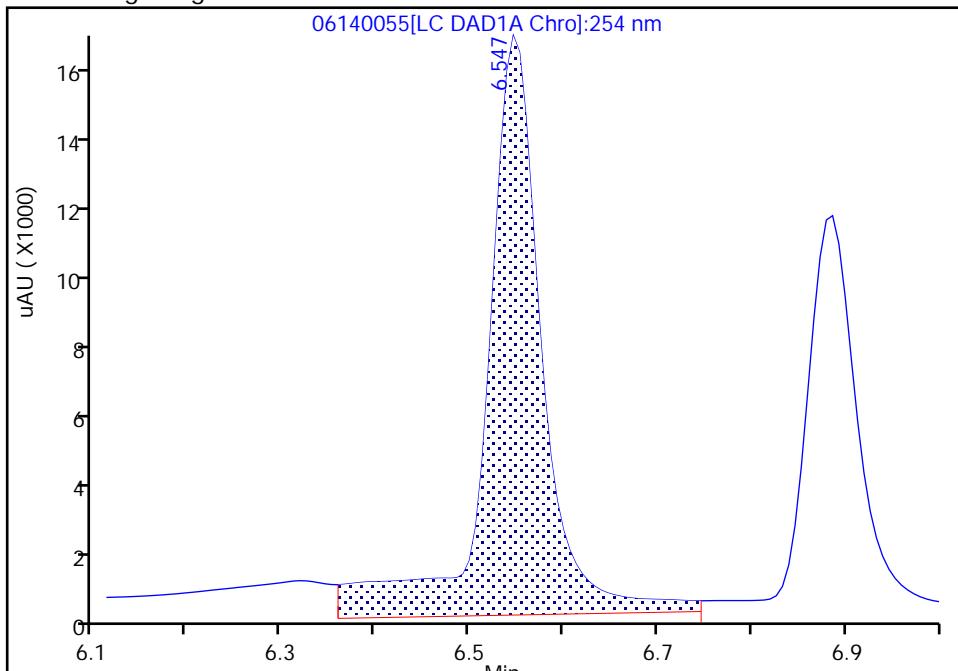
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140055.D
 Injection Date: 15-Jun-2019 12:12:49 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 42 Worklist Smp#: 55
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

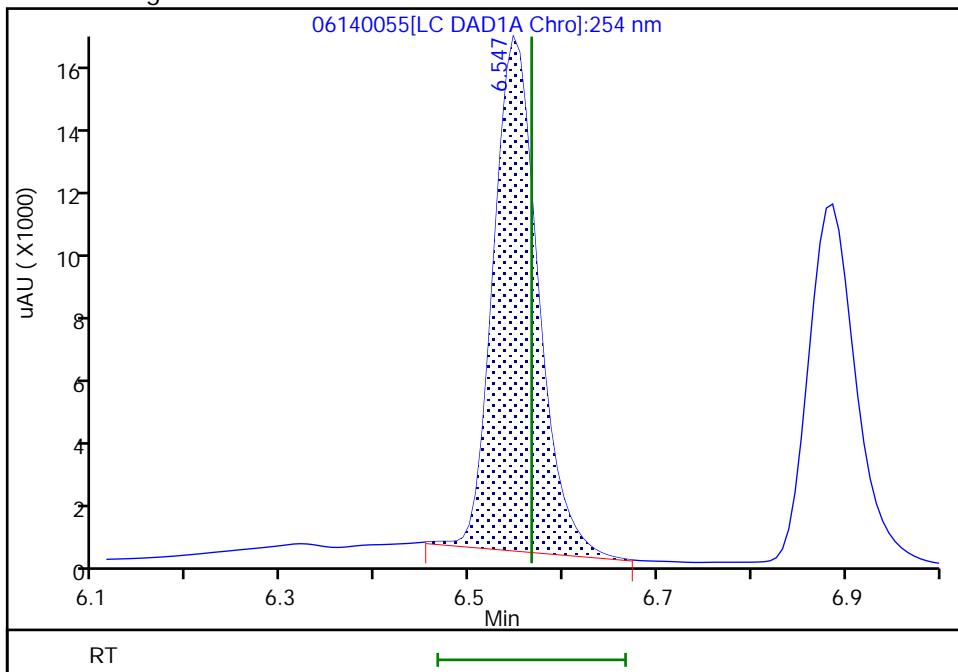
Processing Integration Results

RT: 6.55
 Area: 68350
 Amount: 0.342869
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 51865
 Amount: 0.260174
 Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:21:21

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

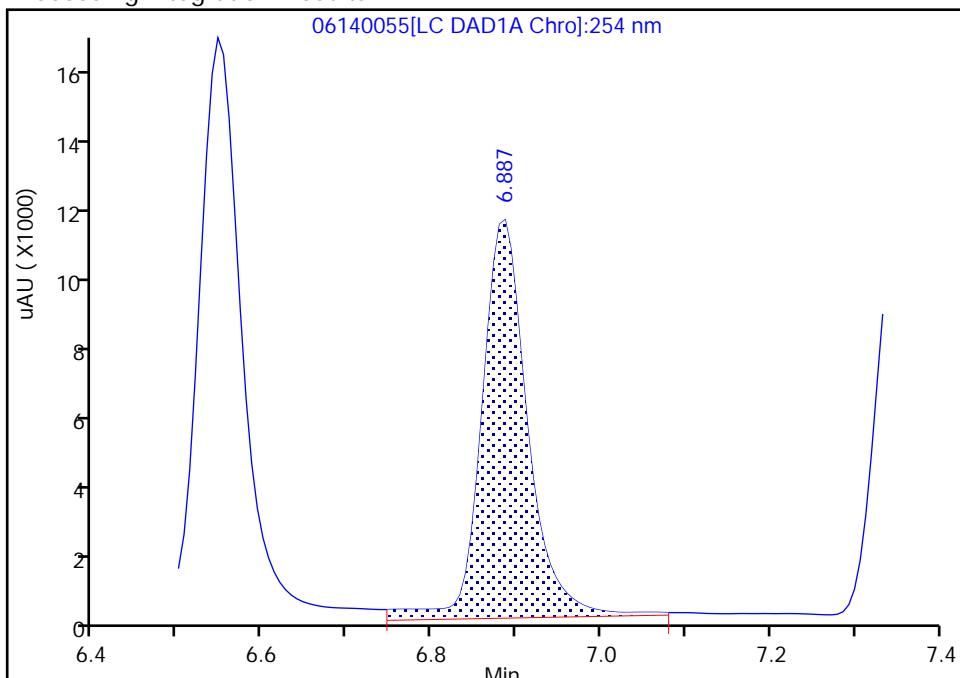
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140055.D
 Injection Date: 15-Jun-2019 12:12:49 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 42 Worklist Smp#: 55
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

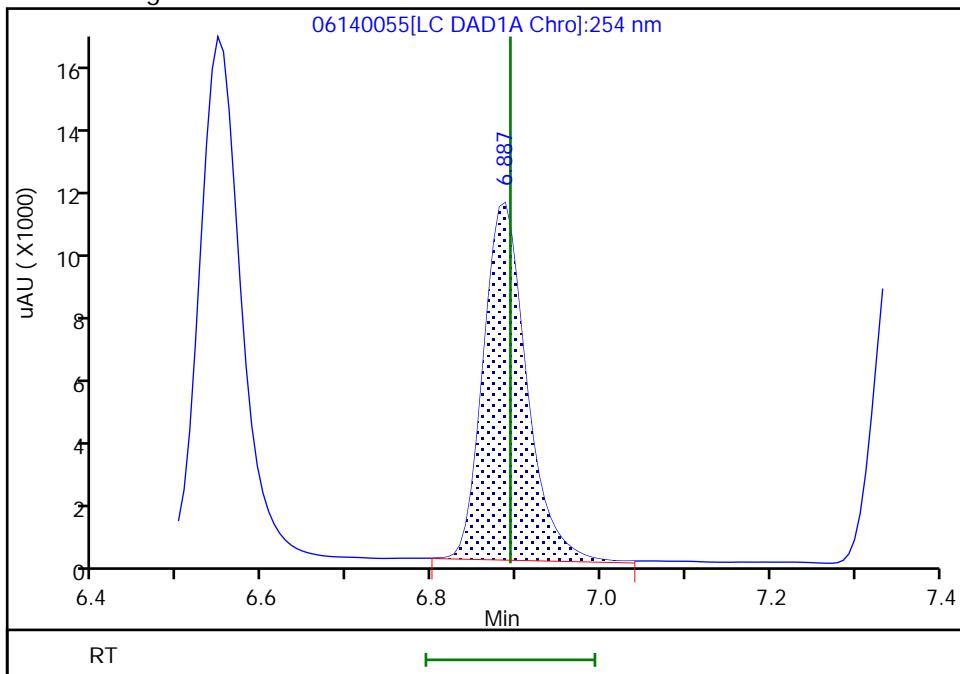
Processing Integration Results

RT: 6.89
 Area: 42267
 Amount: 0.284843
 Amount Units: ug/mL



Manual Integration Results

RT: 6.89
 Area: 38900
 Amount: 0.262153
 Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:21:25

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/66 Calibration Date: 06/15/2019 16:34
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06140066.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	93820		263	250	5.2	15.0
RDX	Ave	106639	113652		266	250	6.6	15.0
Picric acid	Ave	83793	86596		258	250	3.3	15.0
1,3,5-Trinitrobenzene	Ave	229276	253112		276	250	10.4	15.0
1,3-Dinitrobenzene	Ave	300824	320396		267	250	6.5	15.0
Nitrobenzene	Ave	196827	189361		241	251	-3.8	15.0
Tetryl	Ave	167956	174908		260	250	4.1	15.0
Nitroglycerin	Ave	69977	74507		2660	2500	6.5	15.0
2,4,6-Trinitrotoluene	Ave	223593	234514		263	251	4.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	166576		257	251	2.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	207757		264	251	5.2	15.0
2,6-Dinitrotoluene	Ave	156597	166265		266	251	6.2	15.0
2,4-Dinitrotoluene	Ave	297422	312020		263	251	4.9	15.0
2-Nitrotoluene	Ave	131349	119721		229	251	-8.9	15.0
4-Nitrotoluene	Ave	112716	107606		240	251	-4.5	15.0
3-Nitrotoluene	Ave	148306	144135		244	251	-2.8	15.0
PETN	Ave	73191	79171		2700	2500	8.2	15.0
1,2-Dinitrobenzene	Ave	130111	143824		276	250	10.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/66 Calibration Date: 06/15/2019 16:34
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06140066.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.49	6.79
RDX	7.77	7.61	7.91
Picric acid	8.19	8.05	8.35
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.28	10.13	10.43
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.23	11.13	11.33
4-Amino-2,6-dinitrotoluene	11.43	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.72	11.62	11.82
2,6-Dinitrotoluene	11.85	11.74	11.94
2,4-Dinitrotoluene	12.05	11.94	12.14
2-Nitrotoluene	12.88	12.73	13.03
4-Nitrotoluene	13.32	13.17	13.47
3-Nitrotoluene	13.92	13.77	14.07
PETN	15.02	14.87	15.17
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140066.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 16:34:39 ALS Bottle#: 7 Worklist Smp#: 66
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0082867-066
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:46:18 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh

Date:

17-Jun-2019 10:33:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.649	6.643	0.006	23455	0.2500	0.2629	
7 RDX	1	7.769	7.763	0.006	28413	0.2500	0.2664	
8 2,4,6-Trinitrophenol	1	8.189	8.196	-0.007	21649	0.2500	0.2584	
\$ 9 1,2-Dinitrobenzene	1	8.742	8.743	-0.001	35956	0.2500	0.2763	
10 1,3,5-Trinitrobenzene	1	8.902	8.896	0.006	63278	0.2500	0.2760	
11 1,3-Dinitrobenzene	1	9.562	9.563	-0.001	80179	0.2503	0.2665	
12 Nitrobenzene	1	9.949	9.949	0.000	47435	0.2505	0.2410	
14 Tetryl	1	10.275	10.276	-0.001	43727	0.2500	0.2603	
15 Nitroglycerin	2	10.775	10.776	-0.001	186267	2.50	2.66	
16 2,4,6-Trinitrotoluene	1	11.229	11.229	0.000	58863	0.2510	0.2633	
17 4-Amino-2,6-dinitrotoluene	1	11.429	11.429	0.000	41769	0.2508	0.2572	
18 2-Amino-4,6-dinitrotoluene	1	11.722	11.716	0.006	52095	0.2508	0.2637	M
19 2,6-Dinitrotoluene	1	11.849	11.843	0.006	41691	0.2508	0.2662	M
20 2,4-Dinitrotoluene	1	12.049	12.043	0.006	78161	0.2505	0.2628	
21 o-Nitrotoluene	1	12.882	12.883	-0.001	30020	0.2508	0.2286	
22 p-Nitrotoluene	1	13.322	13.323	-0.001	27009	0.2510	0.2396	
23 m-Nitrotoluene	1	13.922	13.923	-0.001	36178	0.2510	0.2439	
24 PETN	2	15.015	15.016	-0.001	197928	2.50	2.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 17-Jun-2019 10:46:19

Chrom Revision: 2.3 03-May-2019 15:52:00

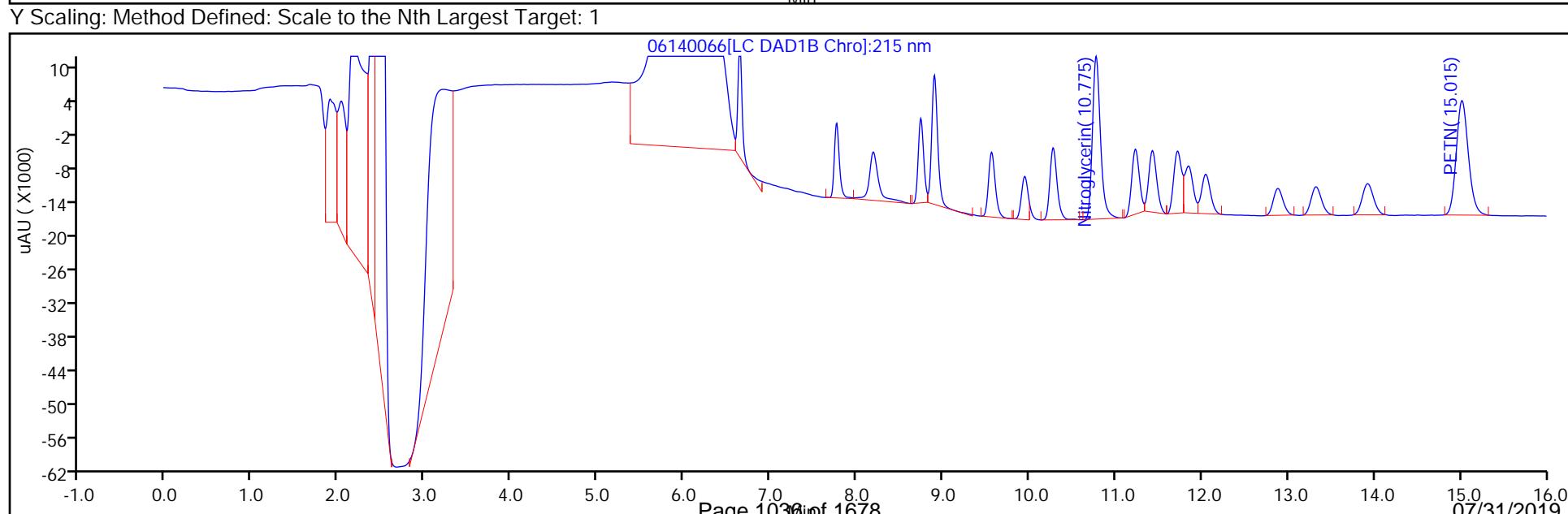
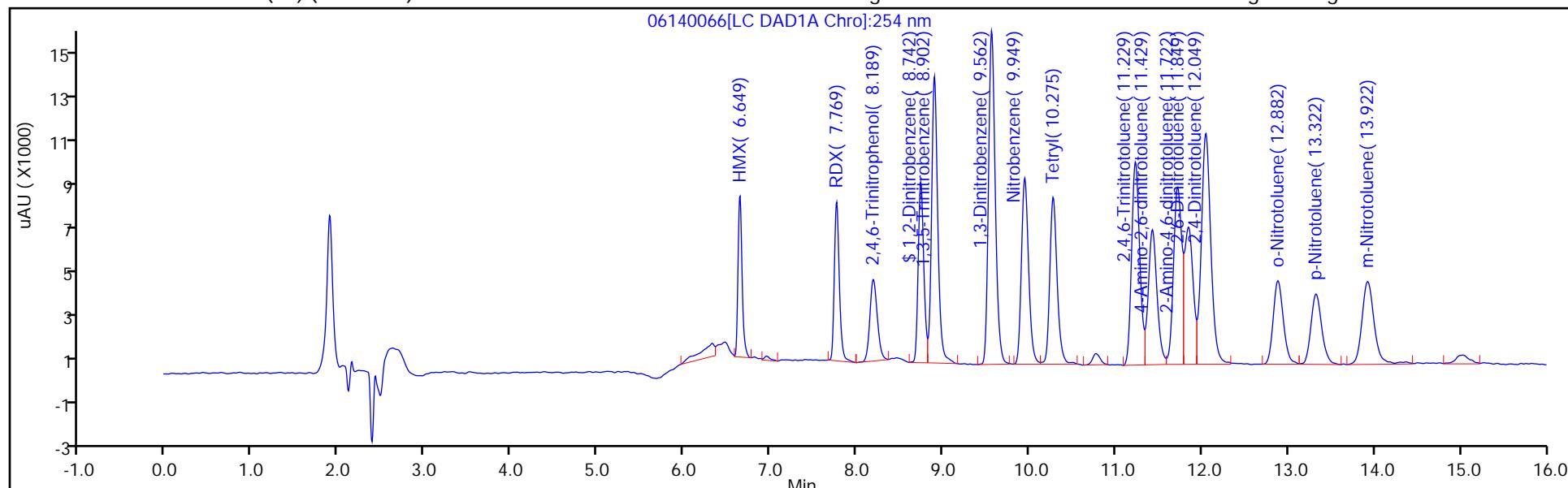
Eurofins TestAmerica, Denver

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 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 66
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

ALS Bottle#: 7

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/68 Calibration Date: 06/15/2019 17:22
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06140068.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	203145		255	250	1.9	15.0
DNX	Ave	148387	154693		261	250	4.2	15.0
MNX	Ave	136538	146245		312	292	7.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/68 Calibration Date: 06/15/2019 17:22
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06140068.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.88	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140068.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 17:22:20 ALS Bottle#: 42 Worklist Smp#: 68
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082867-068
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:46:23 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:34:05

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.550	6.566	-0.016	50837	0.2503	0.2550	M
5 DNX	1	6.884	6.893	-0.009	38712	0.2503	0.2609	M
6 MNX	1	7.350	7.359	-0.009	42667	0.2918	0.3125	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 10:46:24

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140068.D

Injection Date: 15-Jun-2019 17:22:20

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 68

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

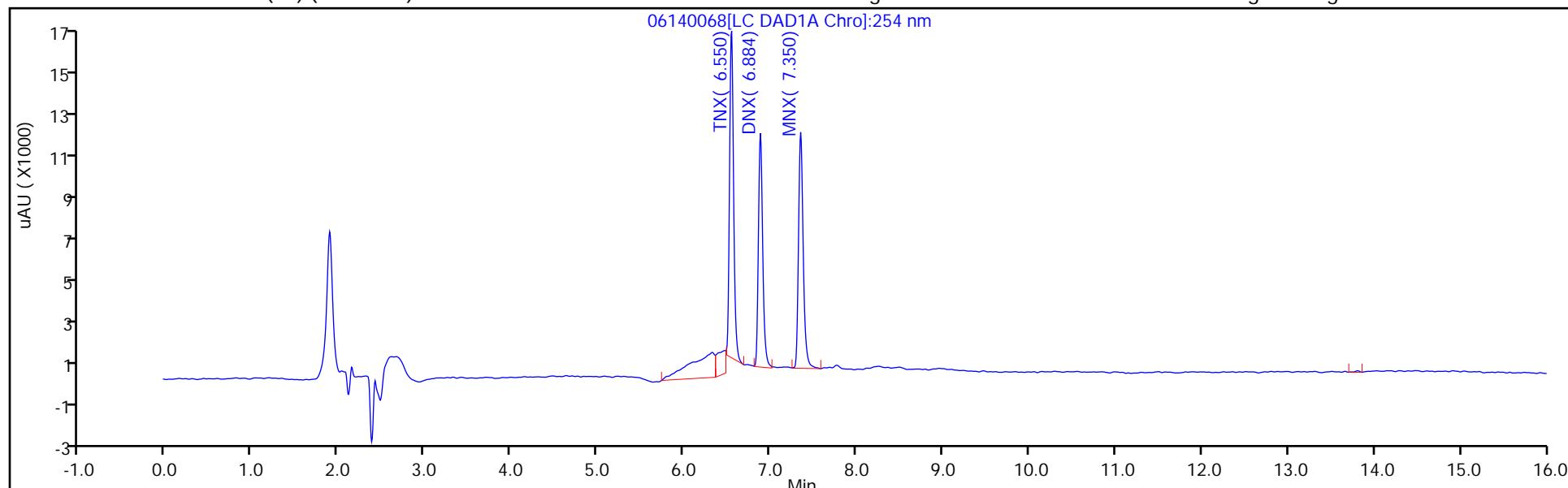
ALS Bottle#: 42

Method: 8330_X3

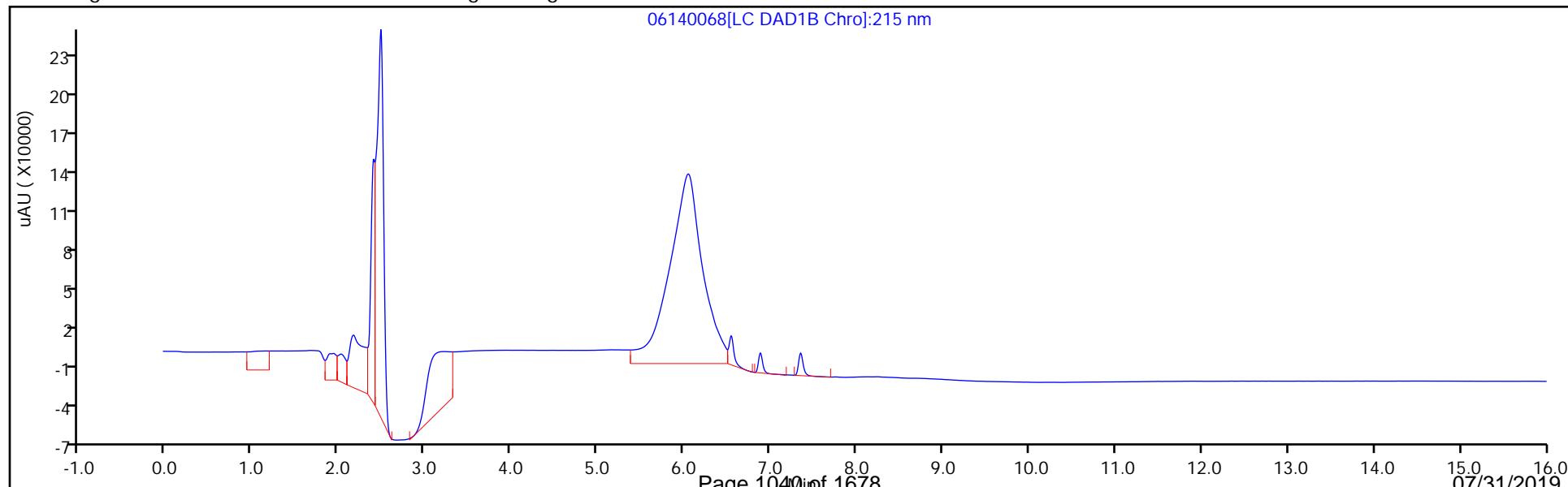
Limit Group: GCSV - 8330

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

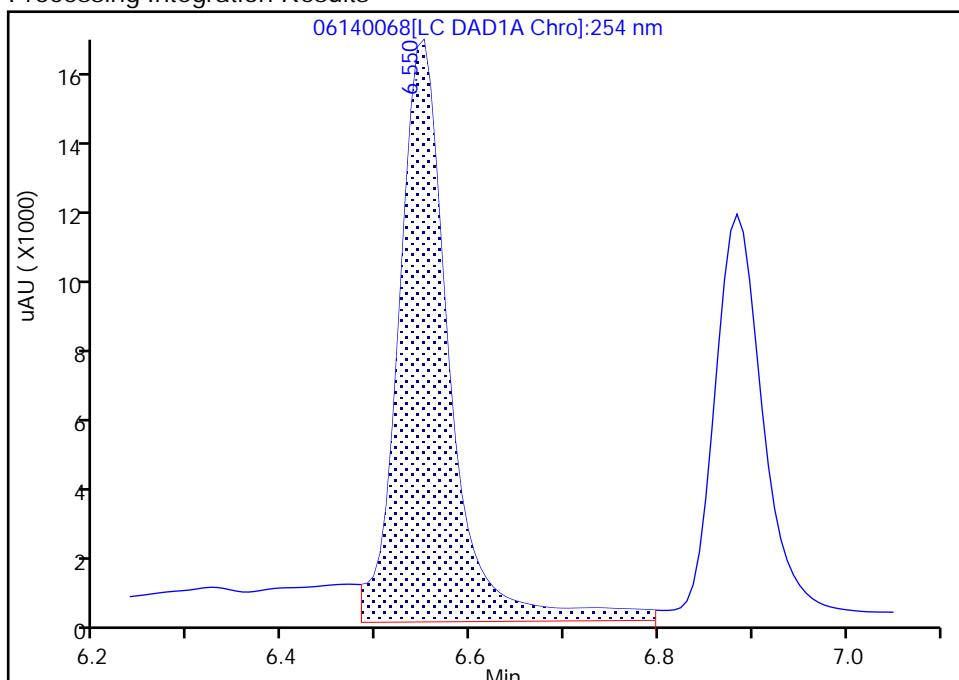
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 Injection Date: 15-Jun-2019 17:22:20 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 42 Worklist Smp#: 68
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

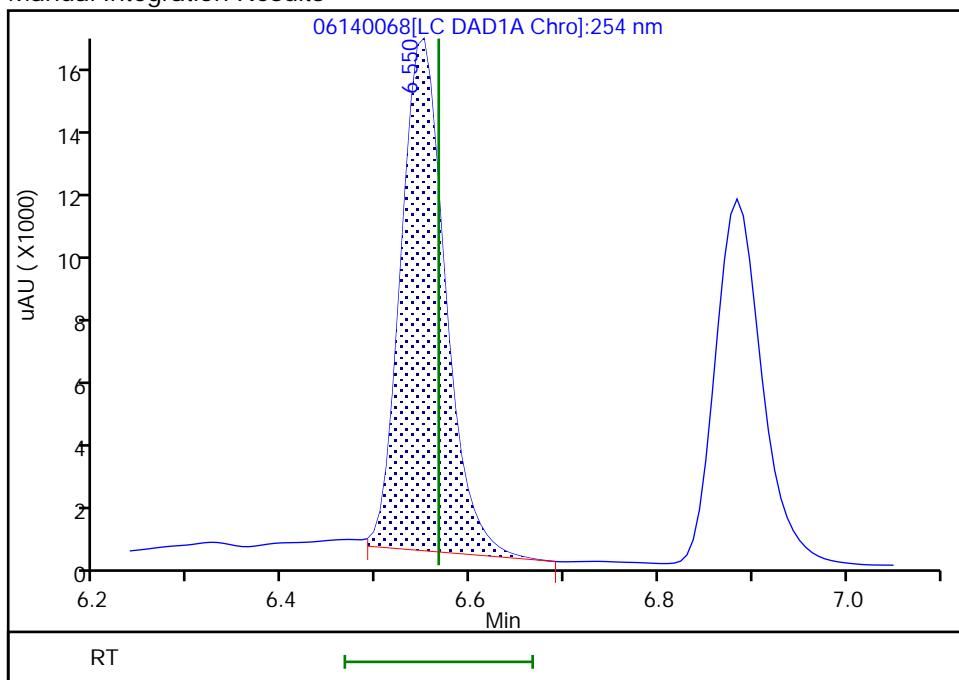
RT: 6.55
 Area: 60684
 Amount: 0.304413
 Amount Units: ug/mL

Processing Integration Results



RT: 6.55
 Area: 50837
 Amount: 0.255017
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:33:59

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

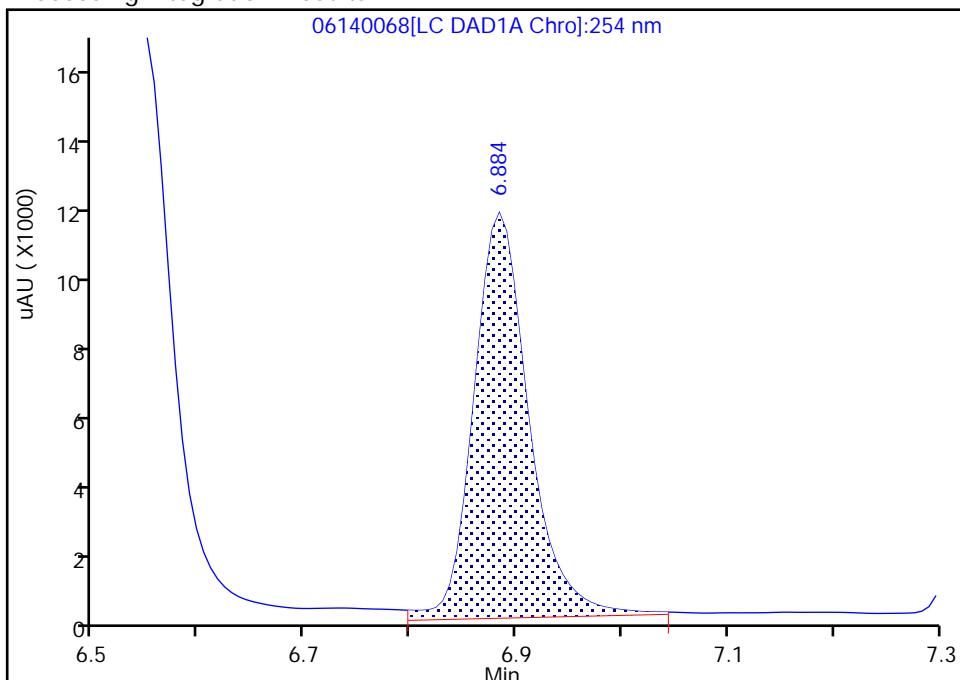
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 Injection Date: 15-Jun-2019 17:22:20 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 42 Worklist Smp#: 68
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

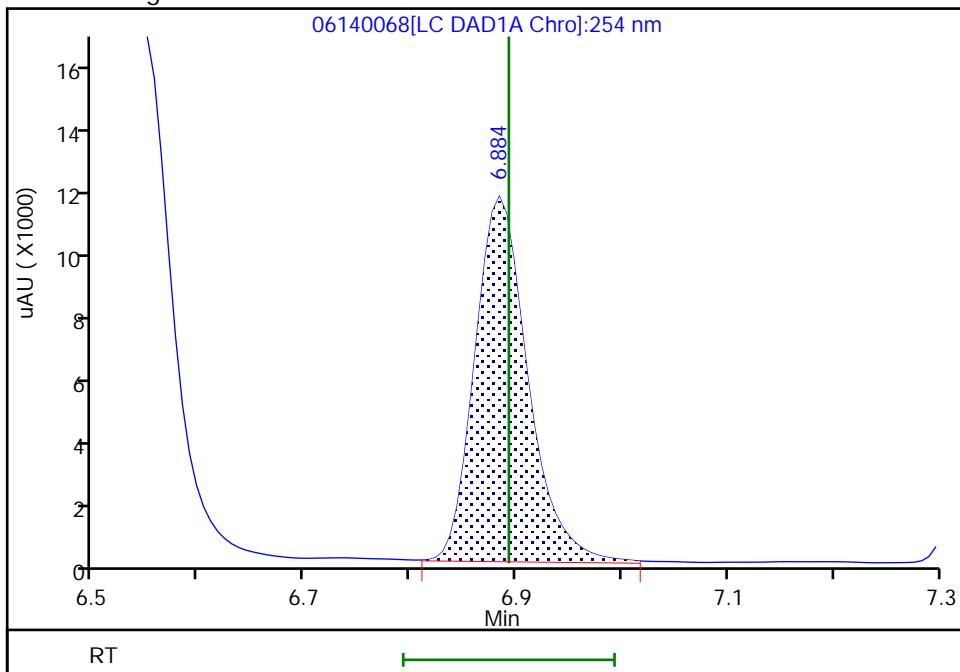
Processing Integration Results

RT: 6.88
 Area: 40725
 Amount: 0.274451
 Amount Units: ug/mL



Manual Integration Results

RT: 6.88
 Area: 38712
 Amount: 0.260886
 Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:34:02

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/79 Calibration Date: 06/15/2019 21:44
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06140079.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	93332		262	250	4.6	15.0
RDX	Ave	106639	113116		265	250	6.1	15.0
Picric acid	Ave	83793	90200		269	250	7.6	15.0
1,3,5-Trinitrobenzene	Ave	229276	256268		279	250	11.8	15.0
1,3-Dinitrobenzene	Ave	300824	324088		270	250	7.7	15.0
Nitrobenzene	Ave	196827	188715		240	251	-4.1	15.0
Tetryl	Ave	167956	176992		263	250	5.4	15.0
Nitroglycerin	Ave	69977	74706		2670	2500	6.8	15.0
2,4,6-Trinitrotoluene	Ave	223593	236147		265	251	5.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	168857		261	251	4.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	213711		271	251	8.2	15.0
2,6-Dinitrotoluene	Ave	156597	162927		261	251	4.0	15.0
2,4-Dinitrotoluene	Ave	297422	319912		269	251	7.6	15.0
2-Nitrotoluene	Ave	131349	125631		240	251	-4.4	15.0
4-Nitrotoluene	Ave	112716	118578		264	251	5.2	15.0
3-Nitrotoluene	Ave	148306	152785		259	251	3.0	15.0
PETN	Ave	73191	79856		2730	2500	9.1	15.0
1,2-Dinitrobenzene	Ave	130111	144852		278	250	11.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/79 Calibration Date: 06/15/2019 21:44
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/14/2019 18:35
Lab File ID: 06140079.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.49	6.79
RDX	7.77	7.61	7.91
Picric acid	8.20	8.05	8.35
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.57	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.29	10.13	10.43
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.13	11.33
4-Amino-2,6-dinitrotoluene	11.44	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.73	11.62	11.82
2,6-Dinitrotoluene	11.86	11.74	11.94
2,4-Dinitrotoluene	12.06	11.94	12.14
2-Nitrotoluene	12.90	12.73	13.03
4-Nitrotoluene	13.34	13.17	13.47
3-Nitrotoluene	13.94	13.77	14.07
PETN	15.03	14.87	15.17
1,2-Dinitrobenzene	8.75	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140079.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 21:44:27 ALS Bottle#: 7 Worklist Smp#: 79
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0082867-079
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:46:46 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.648	6.643	0.005	23333	0.2500	0.2616	
7 RDX	1	7.774	7.763	0.011	28279	0.2500	0.2652	
8 2,4,6-Trinitrophenol	1	8.201	8.196	0.005	22550	0.2500	0.2691	
\$ 9 1,2-Dinitrobenzene	1	8.748	8.743	0.005	36213	0.2500	0.2783	
10 1,3,5-Trinitrobenzene	1	8.901	8.896	0.005	64067	0.2500	0.2794	
11 1,3-Dinitrobenzene	1	9.568	9.563	0.005	81103	0.2503	0.2696	
12 Nitrobenzene	1	9.954	9.949	0.005	47273	0.2505	0.2402	
14 Tetryl	1	10.288	10.276	0.012	44248	0.2500	0.2635	
15 Nitroglycerin	2	10.781	10.776	0.005	186765	2.50	2.67	
16 2,4,6-Trinitrotoluene	1	11.241	11.229	0.012	59273	0.2510	0.2651	
17 4-Amino-2,6-dinitrotoluene	1	11.441	11.429	0.012	42341	0.2508	0.2607	
18 2-Amino-4,6-dinitrotoluene	1	11.734	11.716	0.018	53588	0.2508	0.2713	
19 2,6-Dinitrotoluene	1	11.861	11.843	0.018	40854	0.2508	0.2609	
20 2,4-Dinitrotoluene	1	12.061	12.043	0.018	80138	0.2505	0.2694	
21 o-Nitrotoluene	1	12.901	12.883	0.018	31502	0.2508	0.2398	
22 p-Nitrotoluene	1	13.341	13.323	0.018	29763	0.2510	0.2641	
23 m-Nitrotoluene	1	13.941	13.923	0.018	38349	0.2510	0.2586	
24 PETN	2	15.034	15.016	0.018	199639	2.50	2.73	

Reagents:

8330\TermStk_00058 Amount Added: 12.50 Units: uL

Report Date: 17-Jun-2019 10:46:47

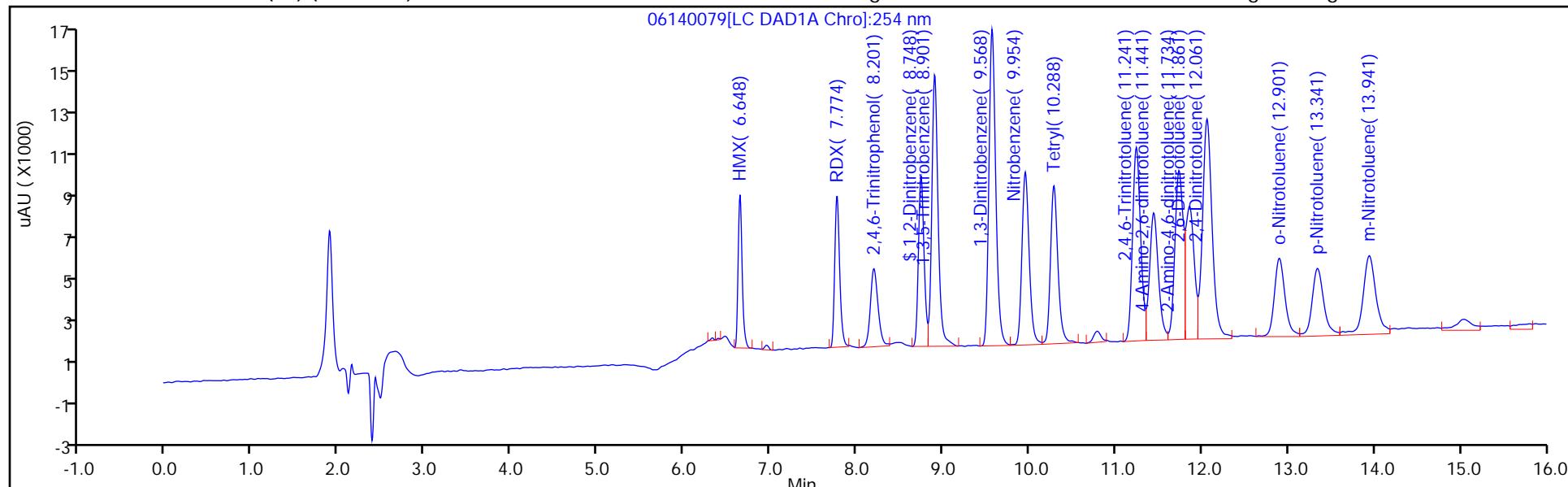
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Eurofins TestAmerica, Denver

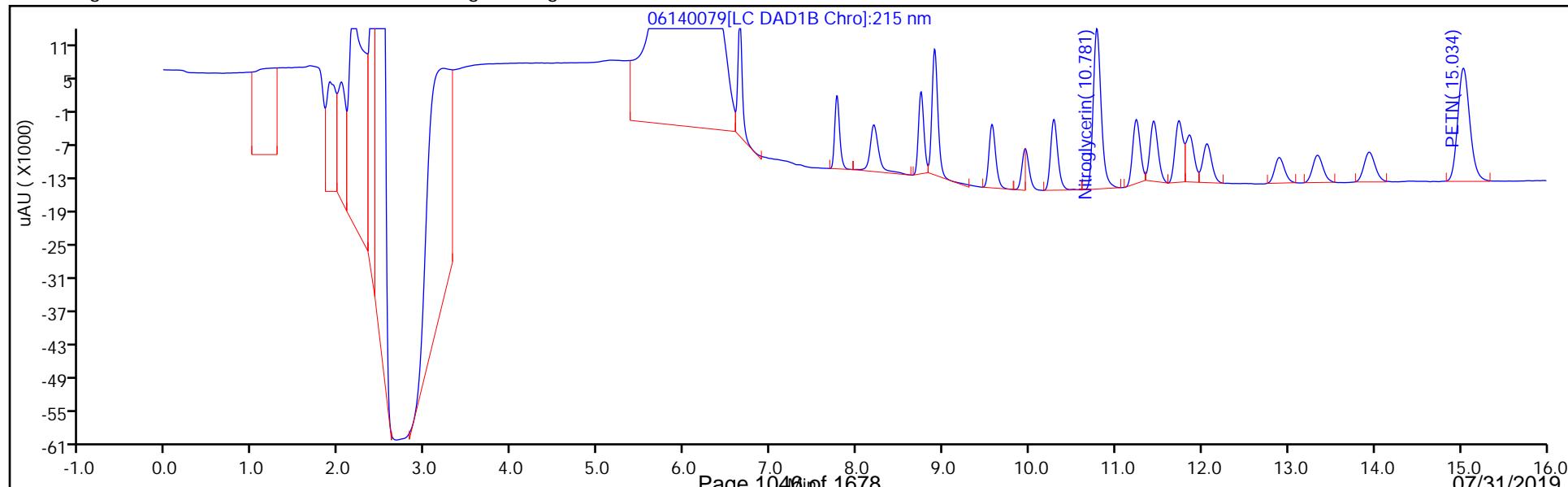
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 Injection Date: 15-Jun-2019 21:44:27 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 79
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-461580/81 Calibration Date: 06/15/2019 22:32

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06140081.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	205307		258	250	3.0	15.0
DNX	Ave	148387	152955		258	250	3.1	15.0
MNX	Ave	136538	144953		310	292	6.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-461580/81 Calibration Date: 06/15/2019 22:32
Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/15/2019 01:42
Lab File ID: 06140081.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.89	6.79	6.99
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140081.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jun-2019 22:32:06 ALS Bottle#: 42 Worklist Smp#: 81
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0082867-081
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:46:50 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh

Date:

17-Jun-2019 10:44:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.548	6.566	-0.018	51378	0.2503	0.2577	M
5 DNX	1	6.888	6.893	-0.005	38277	0.2503	0.2580	
6 MNX	1	7.355	7.359	-0.004	42290	0.2918	0.3097	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002

Amount Added: 12.50

Units: uL

Report Date: 17-Jun-2019 10:46:50

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140081.D

Injection Date: 15-Jun-2019 22:32:06

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 81

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

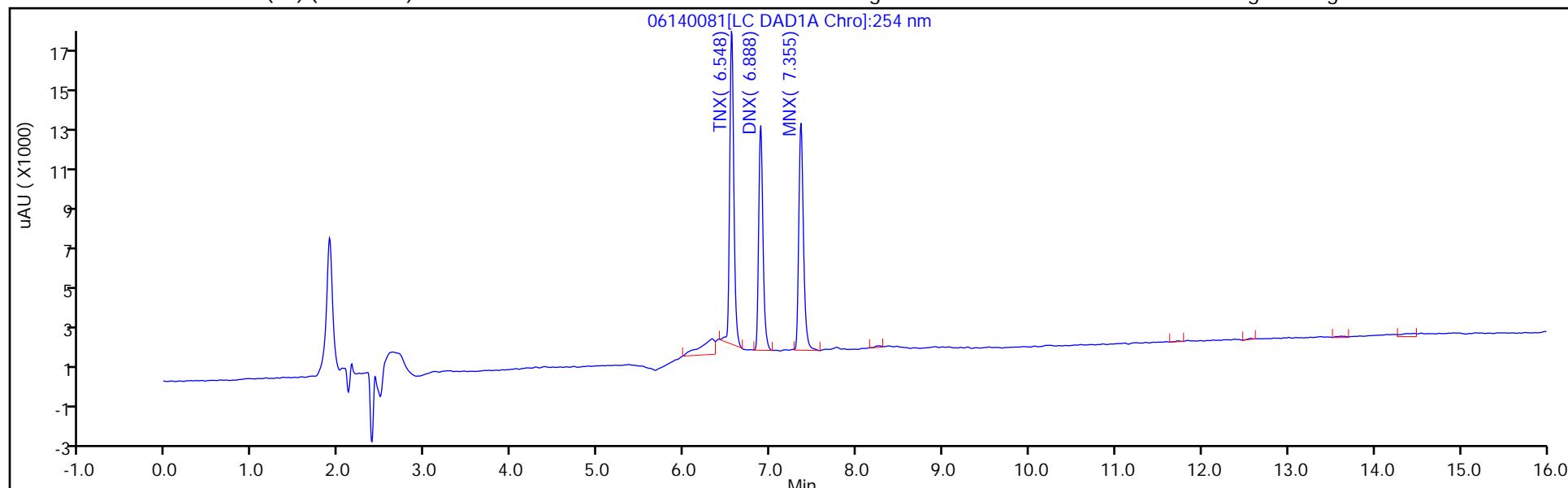
ALS Bottle#: 42

Method: 8330_X3

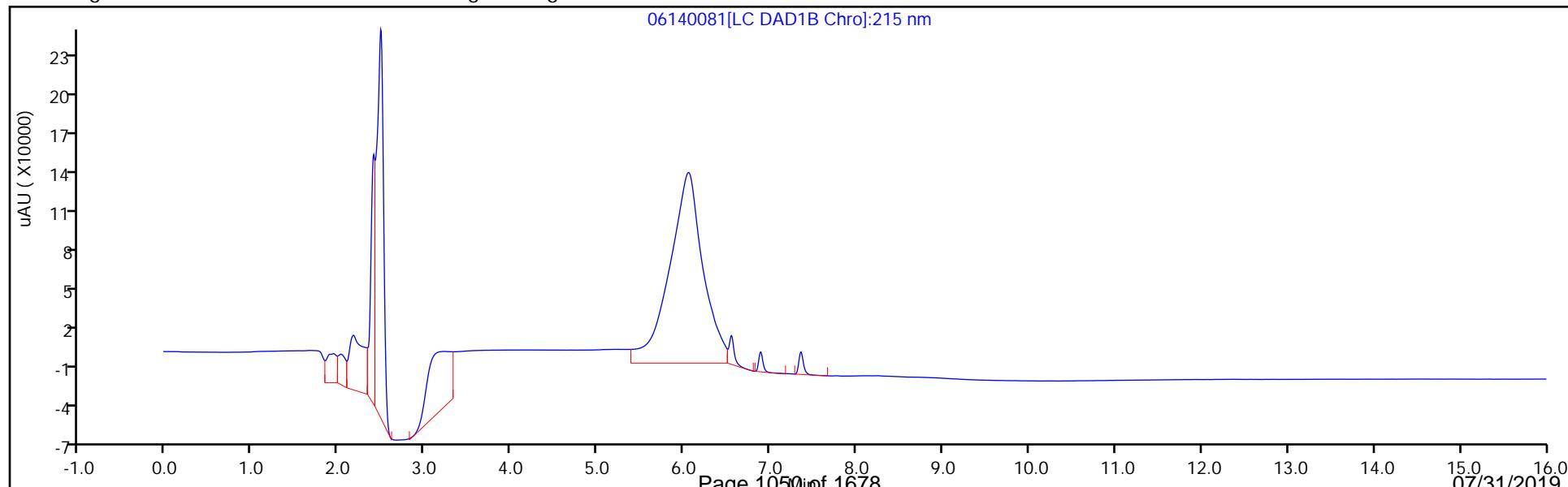
Limit Group: GCSV - 8330

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

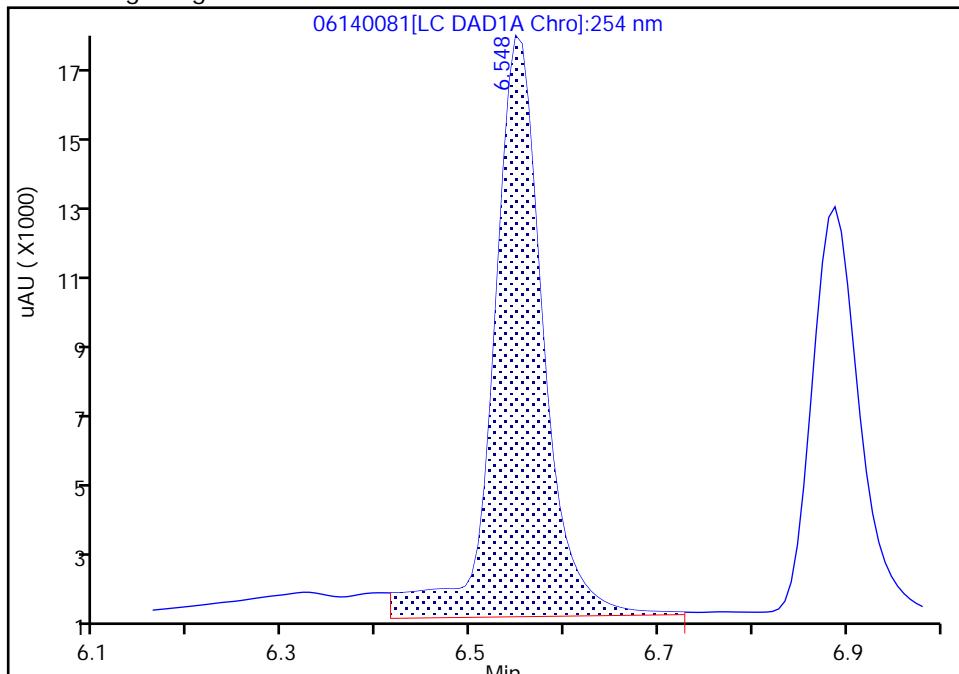
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140081.D
 Injection Date: 15-Jun-2019 22:32:06 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 42 Worklist Smp#: 81
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

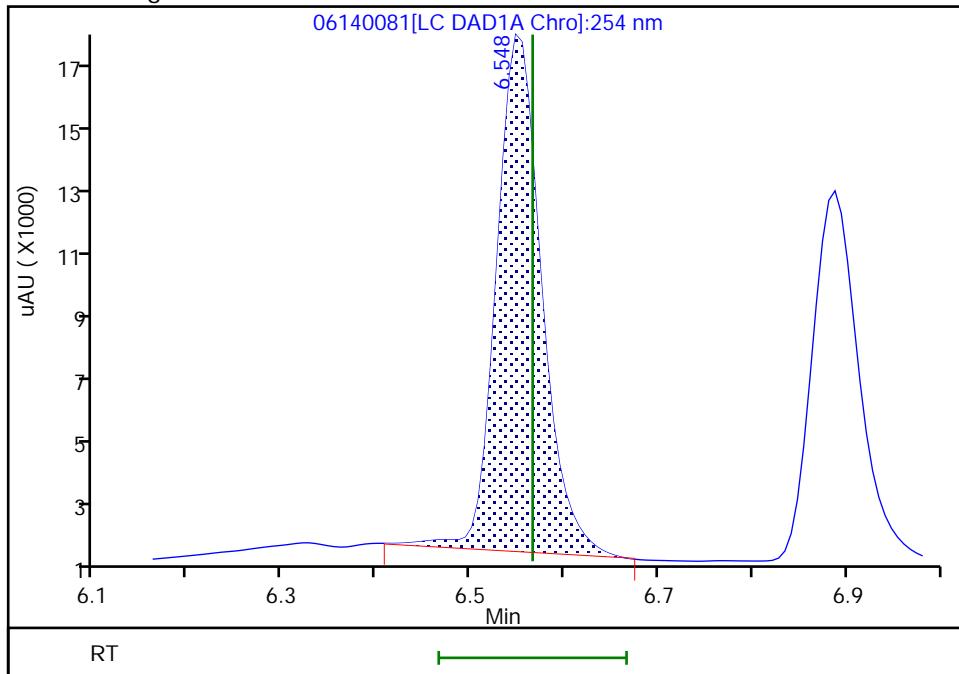
Processing Integration Results

RT: 6.55
 Area: 58100
 Amount: 0.291451
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 51378
 Amount: 0.257731
 Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:44:05

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-463276/15 Calibration Date: 07/01/2019 17:46
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07010015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	83503		364	400	-9.1	15.0
RDX	Ave	111120	100688		362	400	-9.4	15.0
Picric acid	Ave	90734	85358		376	400	-5.9	15.0
1,3,5-Trinitrobenzene	Ave	245077	234935		383	400	-4.1	15.0
1,3-Dinitrobenzene	Ave	311175	300153		386	400	-3.5	15.0
Nitrobenzene	Ave	198903	196135		394	400	-1.4	15.0
Tetryl	Ave	161957	167540		414	400	3.4	15.0
Nitroglycerin	Ave	71108	66318		3730	4000	-6.7	15.0
2,4,6-Trinitrotoluene	Ave	227277	202738		357	400	-10.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	148768		358	400	-10.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	194233		379	400	-5.4	15.0
2,6-Dinitrotoluene	Ave	159284	144348		362	400	-9.4	15.0
2,4-Dinitrotoluene	Ave	300447	282300		376	400	-6.0	15.0
2-Nitrotoluene	Ave	129784	121650		375	400	-6.3	15.0
4-Nitrotoluene	Ave	110255	105768		384	400	-4.1	15.0
3-Nitrotoluene	Ave	145122	136635		377	400	-5.8	15.0
PETN	Ave	74289	73091		3940	4000	-1.6	15.0
1,2-Dinitrobenzene	Ave	139328	123173		354	400	-11.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-463276/15 Calibration Date: 07/01/2019 17:46
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07010015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.64	6.49	6.79
RDX	7.76	7.61	7.91
Picric acid	8.18	8.03	8.33
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.94	9.79	10.09
Tetryl	10.27	10.12	10.42
Nitroglycerin	10.77	10.62	10.92
2,4,6-Trinitrotoluene	11.22	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.42	11.32	11.52
2-Amino-4,6-dinitrotoluene	11.70	11.60	11.80
2,6-Dinitrotoluene	11.84	11.74	11.94
2,4-Dinitrotoluene	12.04	11.94	12.14
2-Nitrotoluene	12.88	12.73	13.03
4-Nitrotoluene	13.32	13.17	13.47
3-Nitrotoluene	13.92	13.77	14.07
PETN	15.01	14.86	15.16
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D
 Lims ID: ICV MAIN
 Client ID:
 Sample Type: ICV
 Inject. Date: 01-Jul-2019 17:46:34 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: ICV MAIN
 Misc. Info.: 280-0083376-015
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist:
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:34:59 Calib Date: 01-Jul-2019 17:23:38
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh

Date: 01-Jul-2019 18:32:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.643	6.643	0.000	33401	0.4000	0.3637	M
7 RDX	1	7.757	7.757	0.000	40275	0.4000	0.3624	
8 2,4,6-Trinitrophenol	1	8.177	8.177	0.000	34143	0.4000	0.3763	
\$ 9 1,2-Dinitrobenzene	1	8.737	8.737	0.000	49269	0.4000	0.3536	
10 1,3,5-Trinitrobenzene	1	8.897	8.897	0.000	93974	0.4000	0.3834	
11 1,3-Dinitrobenzene	1	9.557	9.557	0.000	120061	0.4000	0.3858	
12 Nitrobenzene	1	9.943	9.943	0.000	78454	0.4000	0.3944	
14 Tetryl	1	10.270	10.270	0.000	67016	0.4000	0.4138	
15 Nitroglycerin	2	10.770	10.770	0.000	265271	4.00	3.73	
16 2,4,6-Trinitrotoluene	1	11.223	11.223	0.000	81095	0.4000	0.3568	
17 4-Amino-2,6-dinitrotoluene	1	11.417	11.417	0.000	59507	0.4000	0.3577	
18 2-Amino-4,6-dinitrotoluene	1	11.703	11.703	0.000	77693	0.4000	0.3786	
19 2,6-Dinitrotoluene	1	11.837	11.837	0.000	57739	0.4000	0.3625	
20 2,4-Dinitrotoluene	1	12.037	12.037	0.000	112920	0.4000	0.3758	
21 o-Nitrotoluene	1	12.877	12.877	0.000	48660	0.4000	0.3749	
22 p-Nitrotoluene	1	13.317	13.317	0.000	42307	0.4000	0.3837	
23 m-Nitrotoluene	1	13.917	13.917	0.000	54654	0.4000	0.3766	
24 PETN	2	15.010	15.010	0.000	292363	4.00	3.94	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330Surrogate_00103	Amount Added: 40.00	Units: uL
8330 LCS_00089	Amount Added: 40.00	Units: uL

Report Date: 02-Jul-2019 11:34:59

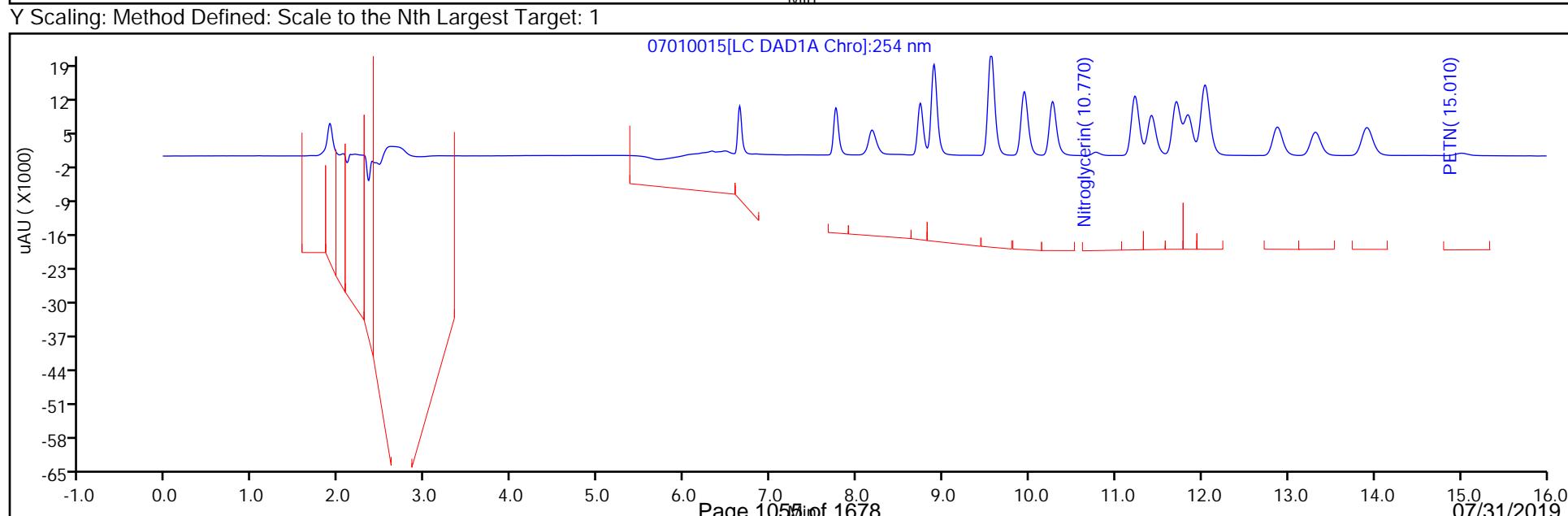
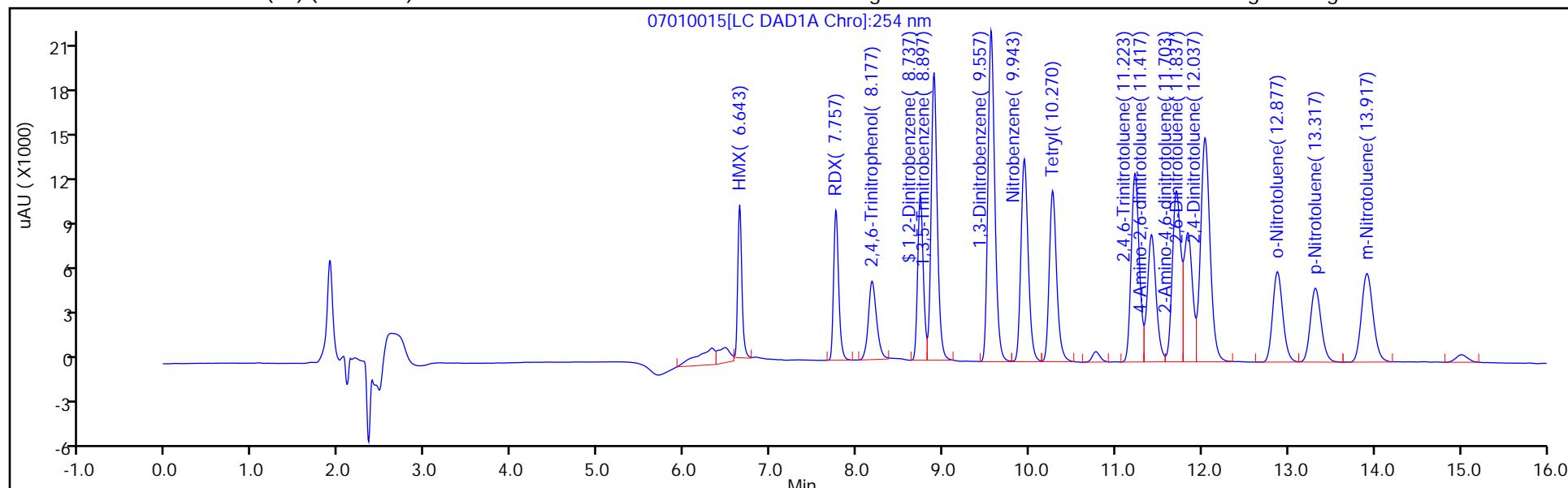
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

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 Injection Date: 01-Jul-2019 17:46:34 Instrument ID: CHHPLC_X3
 Lims ID: ICV MAIN Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 15
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

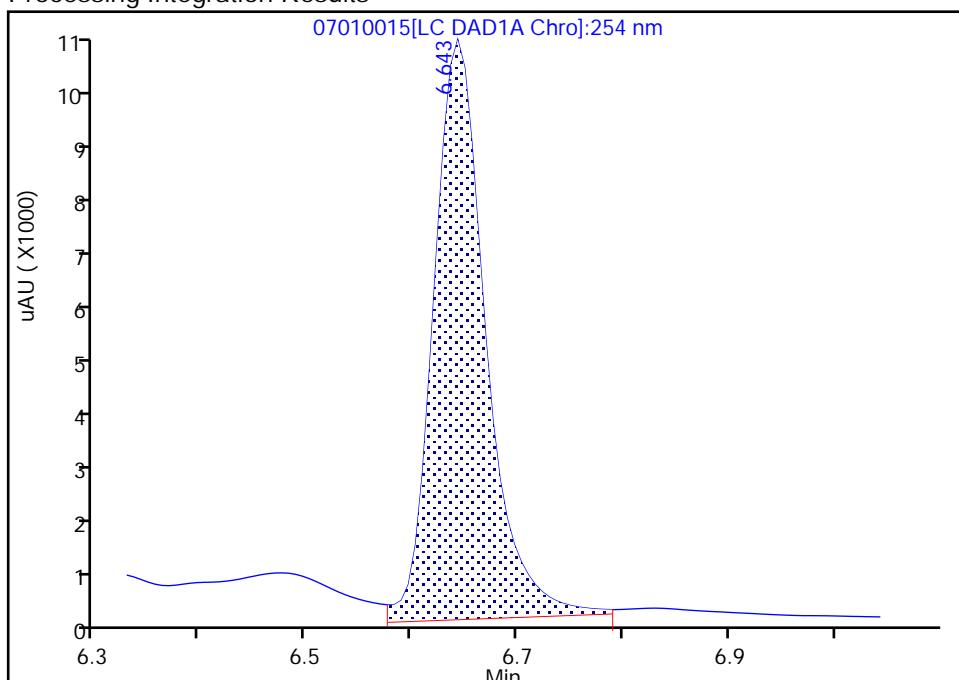
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 Injection Date: 01-Jul-2019 17:46:34 Instrument ID: CHHPLC_X3
 Lims ID: ICV MAIN
 Client ID:
 Operator ID: hkf ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

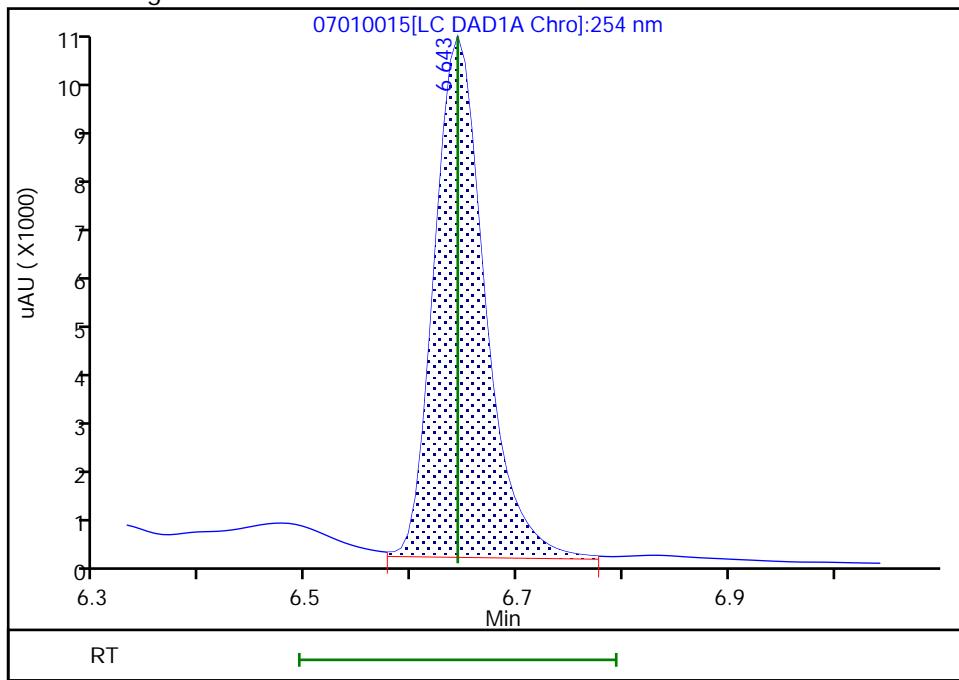
RT: 6.64
 Area: 35035
 Amount: 0.381507
 Amount Units: ug/mL

Processing Integration Results



RT: 6.64
 Area: 33401
 Amount: 0.363714
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 01-Jul-2019 18:32:36

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-463276/33 Calibration Date: 07/02/2019 00:41
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07010033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	214136		399	400	-0.4	15.0
DNX	Ave	156126	152123		390	400	-2.6	15.0
MNX	Ave	140041	139925		466	467	-0.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: ICV 280-463276/33 Calibration Date: 07/02/2019 00:41
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07010033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.45	6.65
DNX	6.88	6.78	6.98
MNX	7.35	7.19	7.49

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D
 Lims ID: ICV DMT
 Client ID:
 Sample Type: ICV
 Inject. Date: 02-Jul-2019 00:41:04 ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: ICV DMT
 Misc. Info.: 280-0083376-033
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist:
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 02-Jul-2019 11:35:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:05:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.547	6.550	-0.003	85740	0.4004	0.3989	M
5 DNX	1	6.881	6.883	-0.002	60910	0.4004	0.3901	M
6 MNX	1	7.347	7.343	0.004	65317	0.4668	0.4664	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330_OP_DMT_00002 Amount Added: 40.00 Units: uL

Report Date: 02-Jul-2019 11:35:32

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D

Injection Date: 02-Jul-2019 00:41:04

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: ICV DMT

Worklist Smp#: 33

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

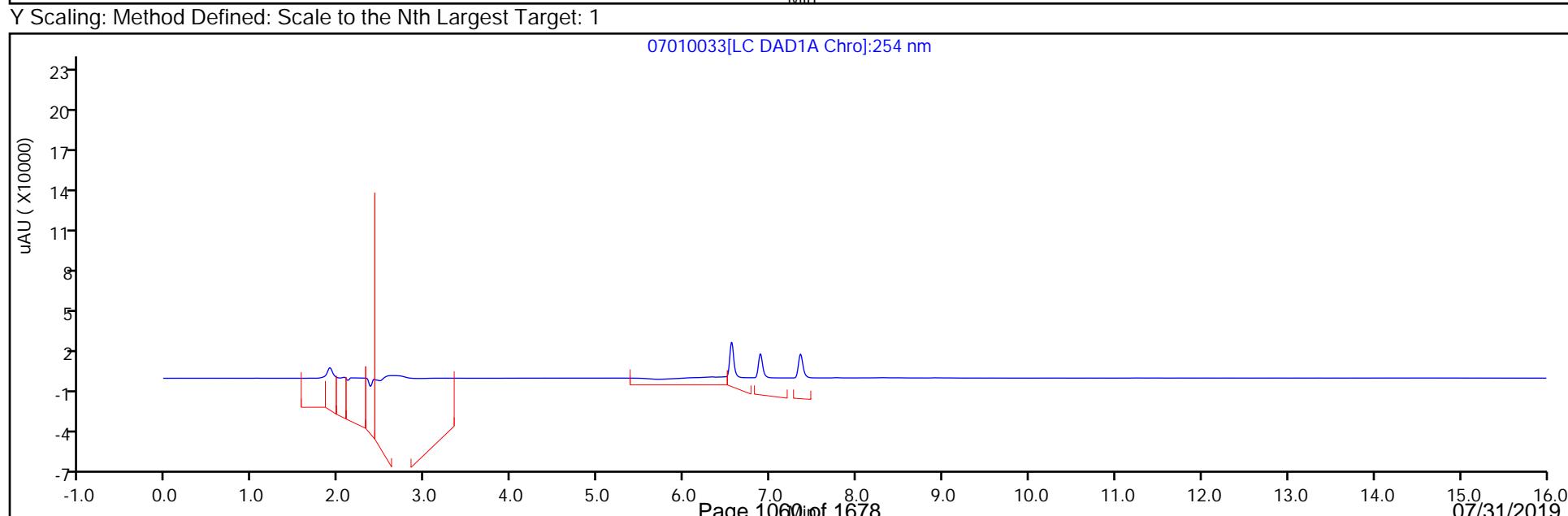
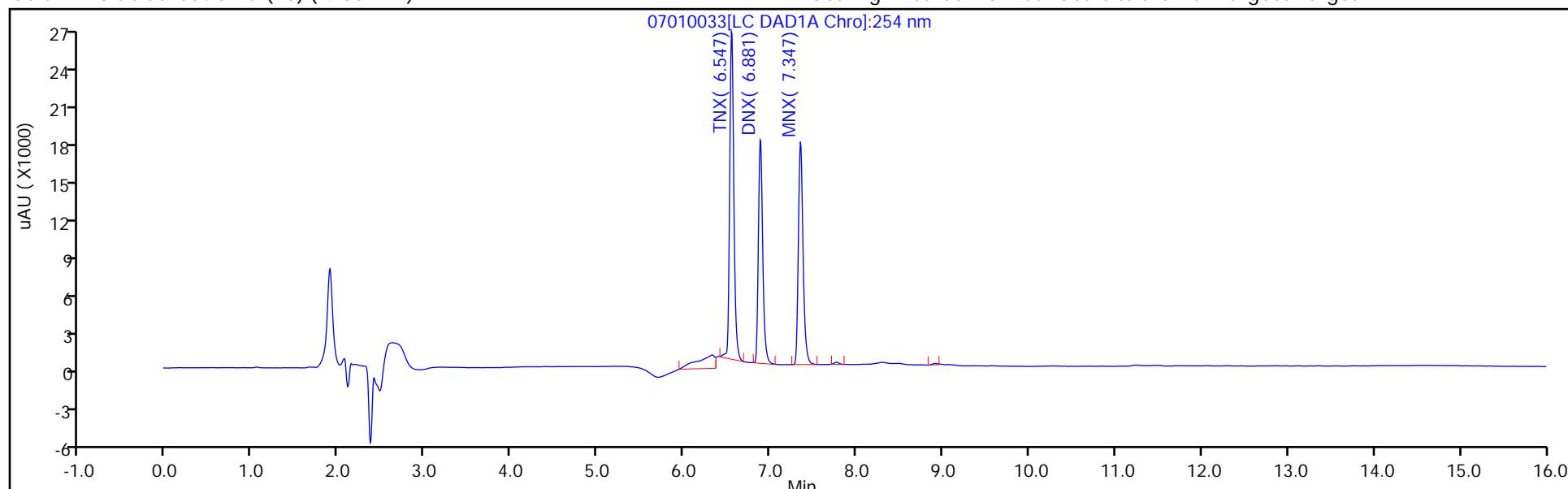
ALS Bottle#: 33

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

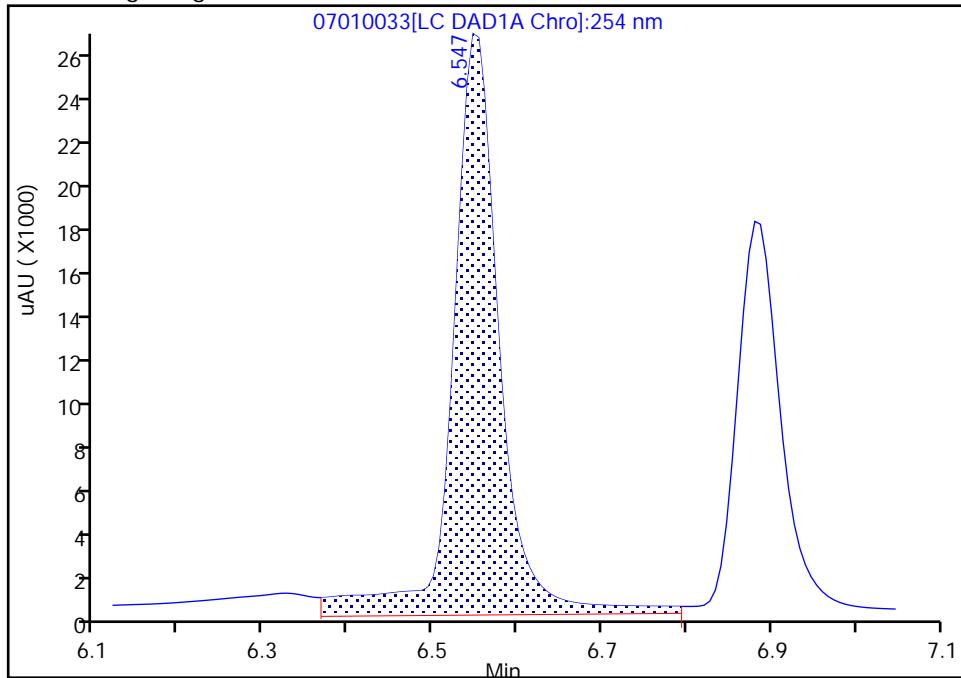
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 Injection Date: 02-Jul-2019 00:41:04 Instrument ID: CHHPLC_X3
 Lims ID: ICV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

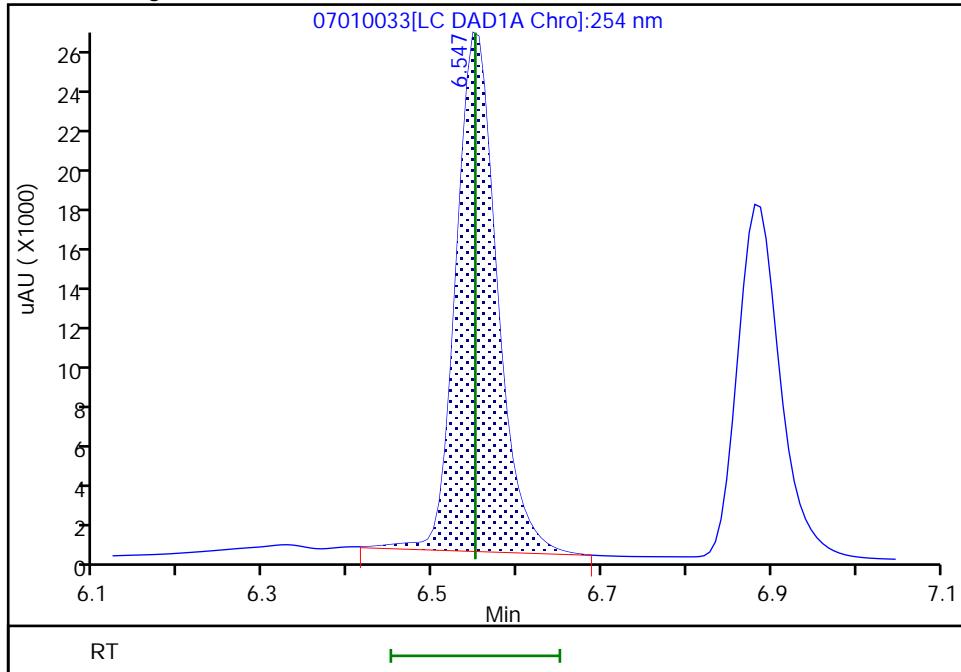
Processing Integration Results

RT: 6.55
 Area: 101055
 Amount: 0.470102
 Amount Units: ug/mL



Manual Integration Results

RT: 6.55
 Area: 85740
 Amount: 0.398857
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:05:27

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

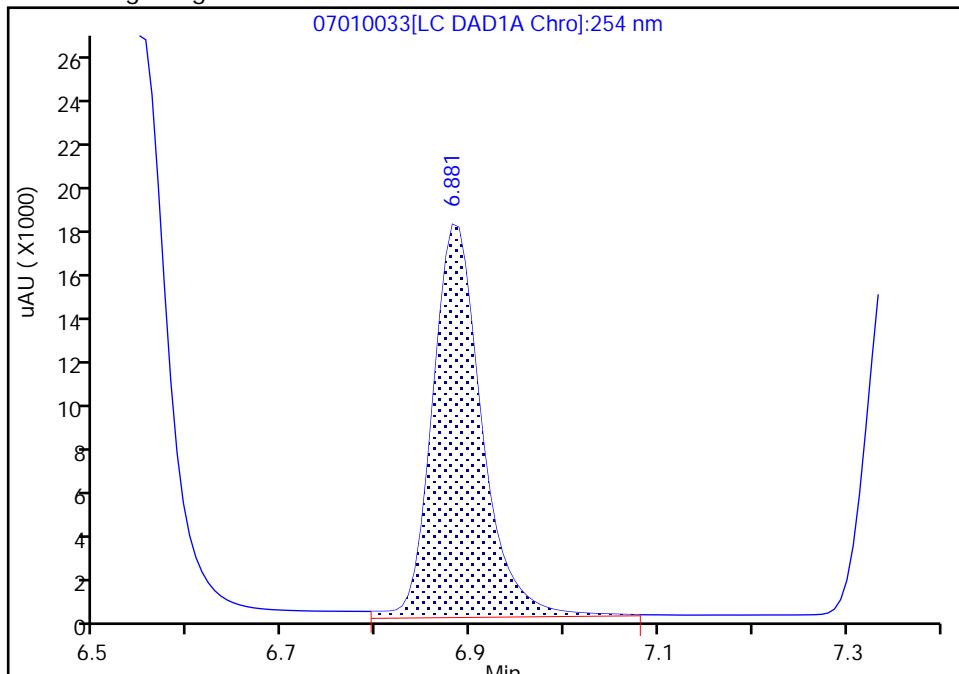
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 Injection Date: 02-Jul-2019 00:41:04 Instrument ID: CHHPLC_X3
 Lims ID: ICV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 33 Worklist Smp#: 33
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

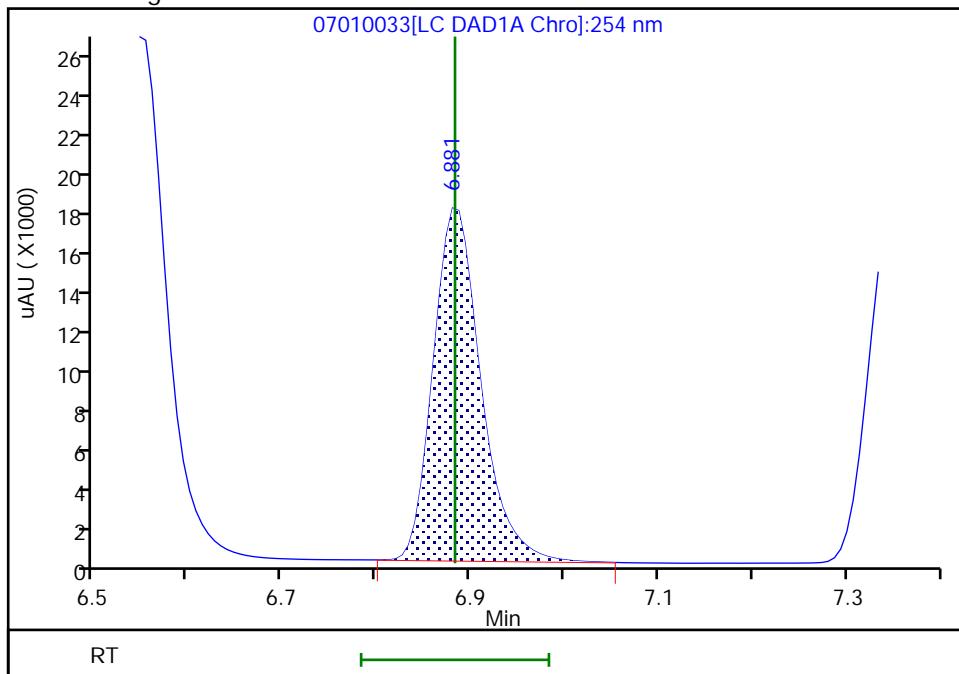
Processing Integration Results

RT: 6.88
 Area: 63769
 Amount: 0.408446
 Amount Units: ug/mL



Manual Integration Results

RT: 6.88
 Area: 60910
 Amount: 0.390134
 Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:05:30

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/42 Calibration Date: 07/11/2019 23:39
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07110042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	94776		258	250	3.2	15.0
RDX	Ave	111120	118572		267	250	6.7	15.0
Picric acid	Ave	90734	93308		257	250	2.8	15.0
1,3,5-Trinitrobenzene	Ave	245077	267424		273	250	9.1	15.0
1,3-Dinitrobenzene	Ave	311175	337075		271	250	8.3	15.0
Nitrobenzene	Ave	198903	208463		263	251	4.8	15.0
Tetryl	Ave	161957	170620		263	250	5.3	15.0
Nitroglycerin	Ave	71108	78829		2770	2500	10.9	15.0
2,4,6-Trinitrotoluene	Ave	227277	243382		269	251	7.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	177464		267	251	6.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	220881		270	251	7.6	15.0
2,6-Dinitrotoluene	Ave	159284	171350		270	251	7.6	15.0
2,4-Dinitrotoluene	Ave	300447	328275		274	251	9.3	15.0
2-Nitrotoluene	Ave	129784	135852		262	251	4.7	15.0
4-Nitrotoluene	Ave	110255	117625		268	251	6.7	15.0
3-Nitrotoluene	Ave	145122	153916		266	251	6.1	15.0
PETN	Ave	74289	83500		2810	2500	12.4	15.0
1,2-Dinitrobenzene	Ave	139328	152688		274	250	9.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/42 Calibration Date: 07/11/2019 23:39
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07110042.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.70	6.54	6.84
RDX	7.79	7.65	7.95
Picric acid	8.19	8.05	8.35
1,3,5-Trinitrobenzene	8.92	8.77	9.07
1,3-Dinitrobenzene	9.57	9.43	9.73
Nitrobenzene	9.96	9.82	10.12
Tetryl	10.29	10.14	10.44
Nitroglycerin	10.79	10.64	10.94
2,4,6-Trinitrotoluene	11.25	11.16	11.36
4-Amino-2,6-dinitrotoluene	11.45	11.35	11.55
2-Amino-4,6-dinitrotoluene	11.75	11.64	11.84
2,6-Dinitrotoluene	11.88	11.78	11.98
2,4-Dinitrotoluene	12.08	11.98	12.18
2-Nitrotoluene	12.93	12.78	13.08
4-Nitrotoluene	13.38	13.22	13.52
3-Nitrotoluene	13.99	13.83	14.13
PETN	15.10	14.95	15.25
1,2-Dinitrobenzene	8.75	8.61	8.91

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110042.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 11-Jul-2019 23:39:06 ALS Bottle#: 7 Worklist Smp#: 42
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0083617-042
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:26 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh

Date: 12-Jul-2019 08:58:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.695	6.692	0.003	23694	0.2500	0.2580	M
7 RDX	1	7.788	7.799	-0.011	29643	0.2500	0.2668	
8 2,4,6-Trinitrophenol	1	8.188	8.199	-0.011	23327	0.2500	0.2571	
\$ 9 1,2-Dinitrobenzene	1	8.748	8.759	-0.011	38172	0.2500	0.2740	
10 1,3,5-Trinitrobenzene	1	8.915	8.919	-0.004	66856	0.2500	0.2728	
11 1,3-Dinitrobenzene	1	9.574	9.578	-0.004	84353	0.2503	0.2711	
12 Nitrobenzene	1	9.961	9.965	-0.004	52220	0.2505	0.2625	
14 Tetryl	1	10.288	10.285	0.003	42655	0.2500	0.2634	M
15 Nitroglycerin	2	10.794	10.792	0.002	197073	2.50	2.77	
16 2,4,6-Trinitrotoluene	1	11.254	11.258	-0.004	61089	0.2510	0.2688	
17 4-Amino-2,6-dinitrotoluene	1	11.454	11.445	0.009	44499	0.2508	0.2675	
18 2-Amino-4,6-dinitrotoluene	1	11.748	11.738	0.010	55386	0.2508	0.2699	
19 2,6-Dinitrotoluene	1	11.881	11.878	0.003	42966	0.2508	0.2697	
20 2,4-Dinitrotoluene	1	12.081	12.078	0.003	82233	0.2505	0.2737	
21 o-Nitrotoluene	1	12.928	12.925	0.003	34065	0.2508	0.2625	
22 p-Nitrotoluene	1	13.381	13.372	0.009	29524	0.2510	0.2678	
23 m-Nitrotoluene	1	13.988	13.978	0.010	38633	0.2510	0.2662	
24 PETN	2	15.101	15.098	0.003	208750	2.50	2.81	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330\TermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 12-Jul-2019 09:20:27

Chrom Revision: 2.3 20-Jun-2019 20:50:56

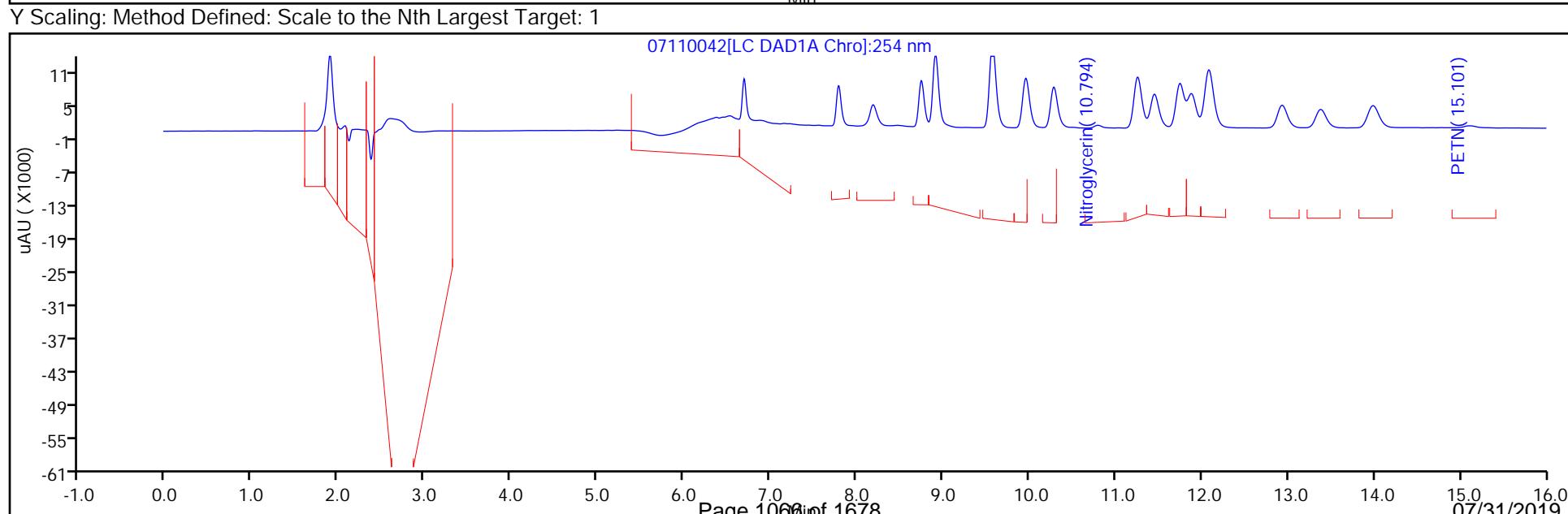
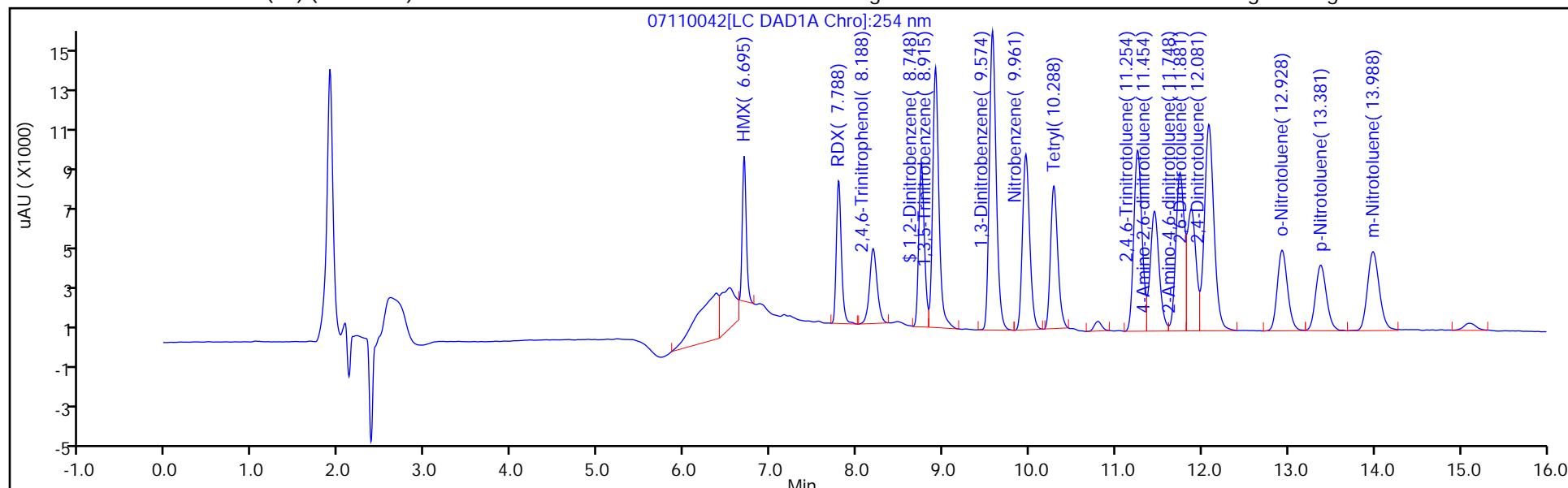
Eurofins TestAmerica, Denver

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 Injection Date: 11-Jul-2019 23:39:06 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 42
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

ALS Bottle#: 7

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

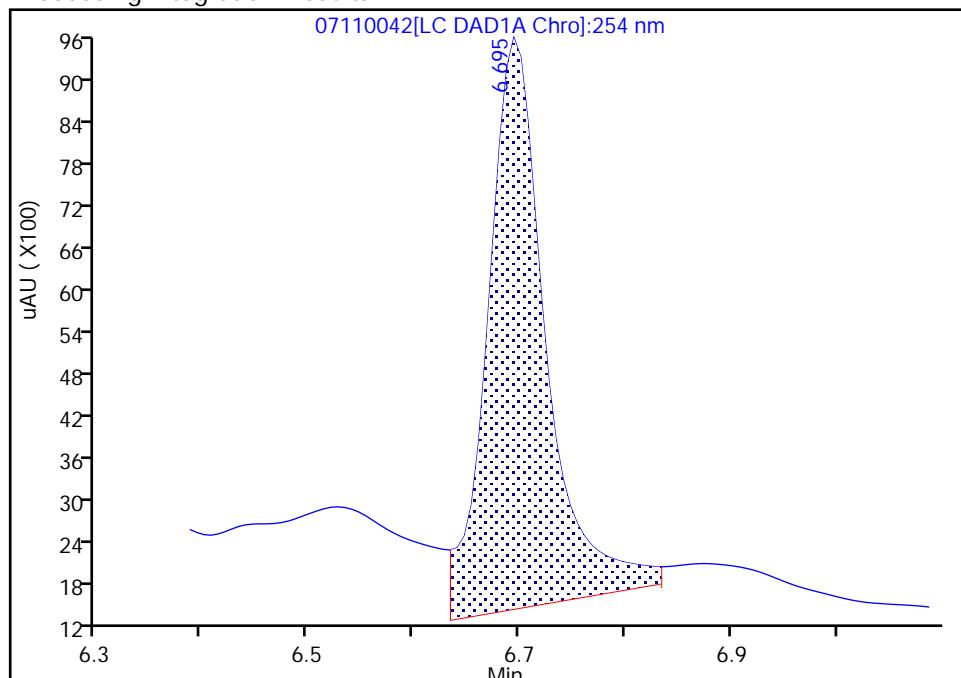
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 Injection Date: 11-Jul-2019 23:39:06 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 42
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

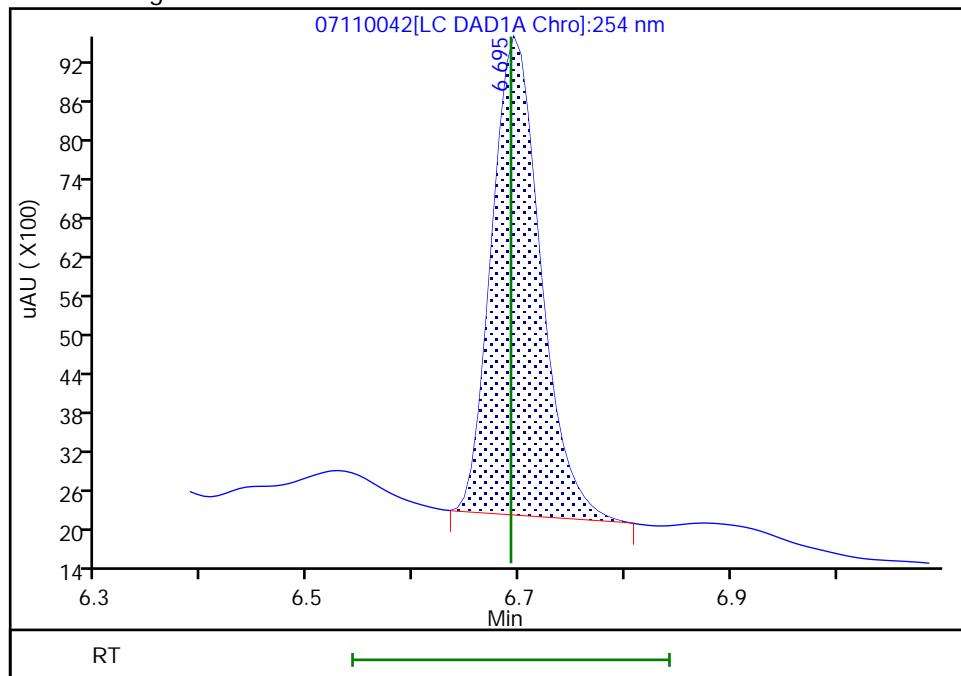
RT: 6.69
 Area: 31226
 Amount: 0.340029
 Amount Units: ug/mL

Processing Integration Results



RT: 6.69
 Area: 23694
 Amount: 0.258011
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 08:58:14

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

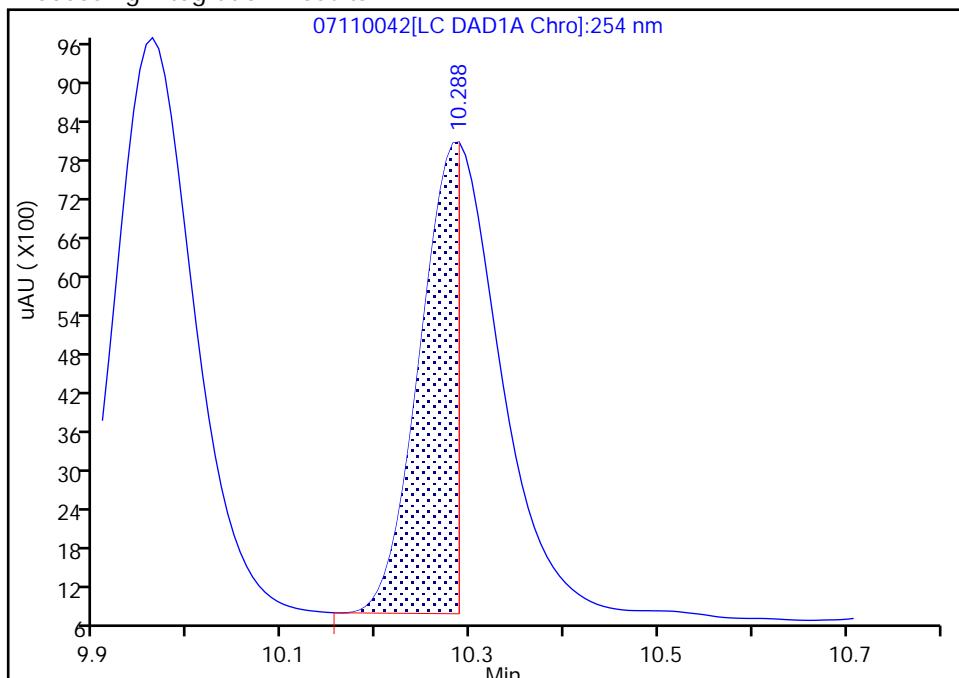
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 Injection Date: 11-Jul-2019 23:39:06 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 42
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8

Signal: 1

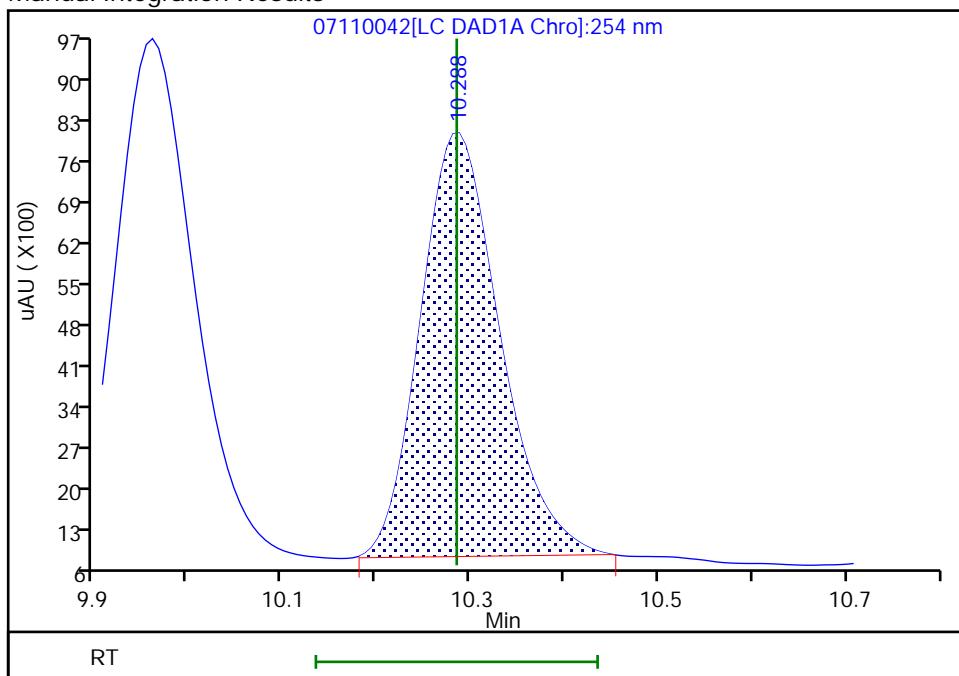
Processing Integration Results

RT: 10.29
 Area: 20559
 Amount: 0.126941
 Amount Units: ug/mL



Manual Integration Results

RT: 10.29
 Area: 42655
 Amount: 0.263372
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 08:58:07

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/44 Calibration Date: 07/12/2019 00:25
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07110044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	218745		255	250	1.8	15.0
DNX	Ave	156126	164759		264	250	5.5	15.0
MNX	Ave	140041	143726		299	292	2.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/44 Calibration Date: 07/12/2019 00:25
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07110044.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.60	6.50	6.70
DNX	6.92	6.82	7.02
MNX	7.38	7.23	7.53

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110044.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-Jul-2019 00:25:05 ALS Bottle#: 44 Worklist Smp#: 44
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0083617-044
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.598	6.598	0.000	54741	0.2503	0.2547	M
5 DNX	1	6.924	6.924	0.000	41231	0.2503	0.2641	
6 MNX	1	7.378	7.378	0.000	41932	0.2918	0.2994	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 12-Jul-2019 09:20:31

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110044.D

Injection Date: 12-Jul-2019 00:25:05

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 44

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

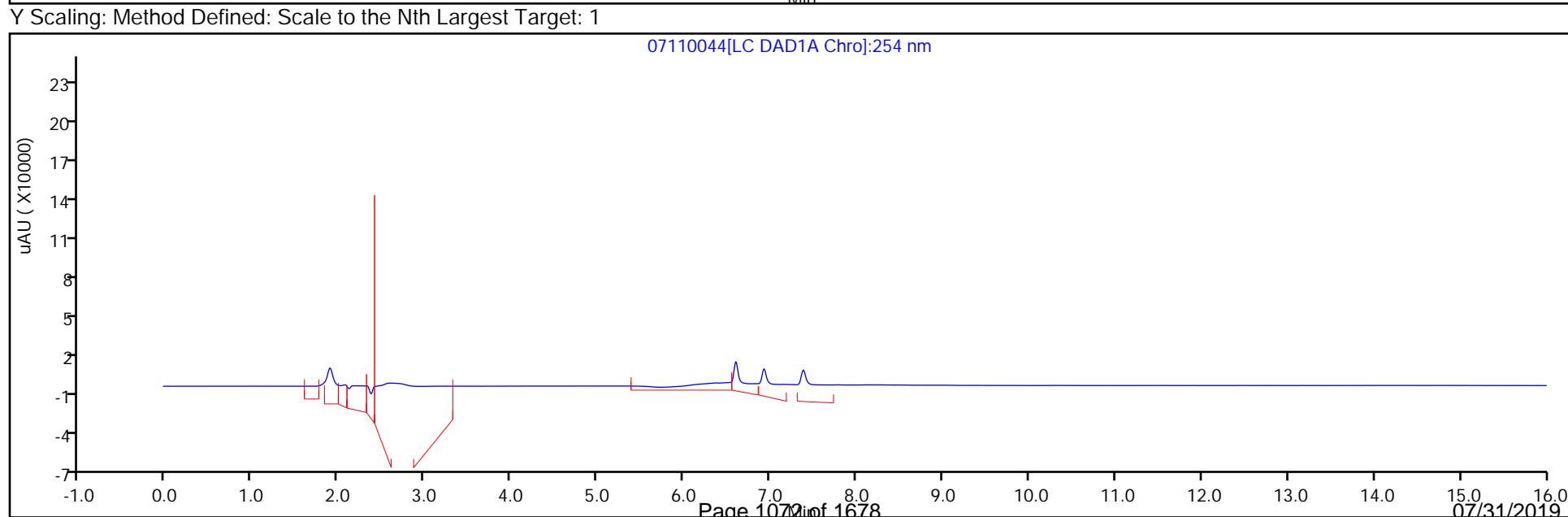
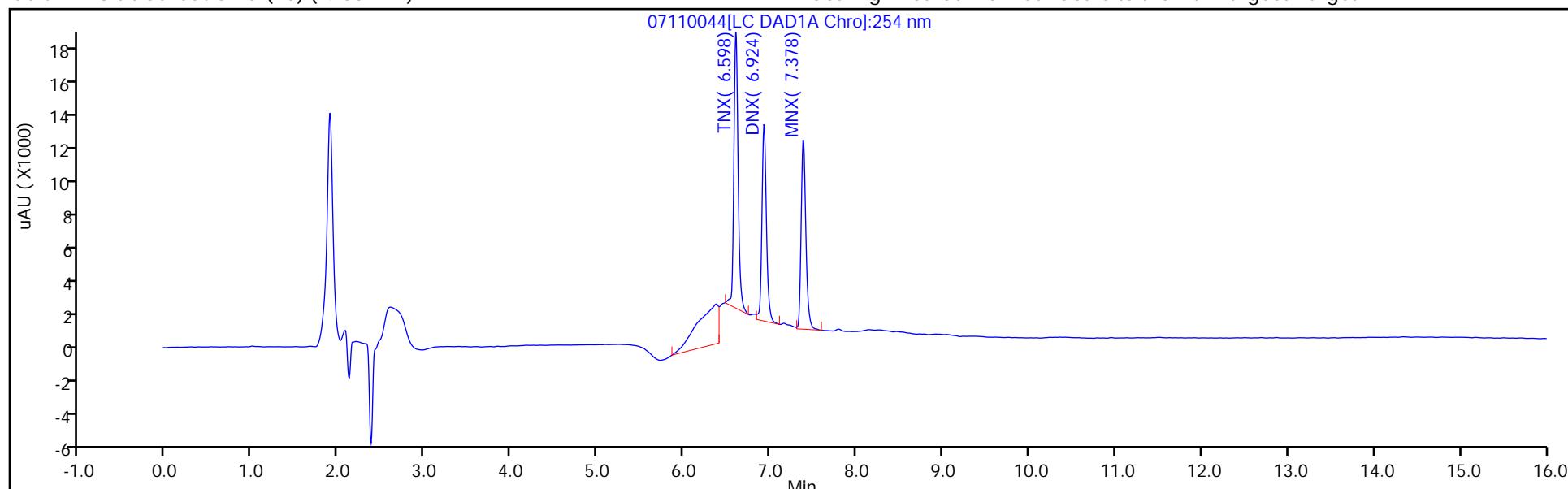
ALS Bottle#: 44

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

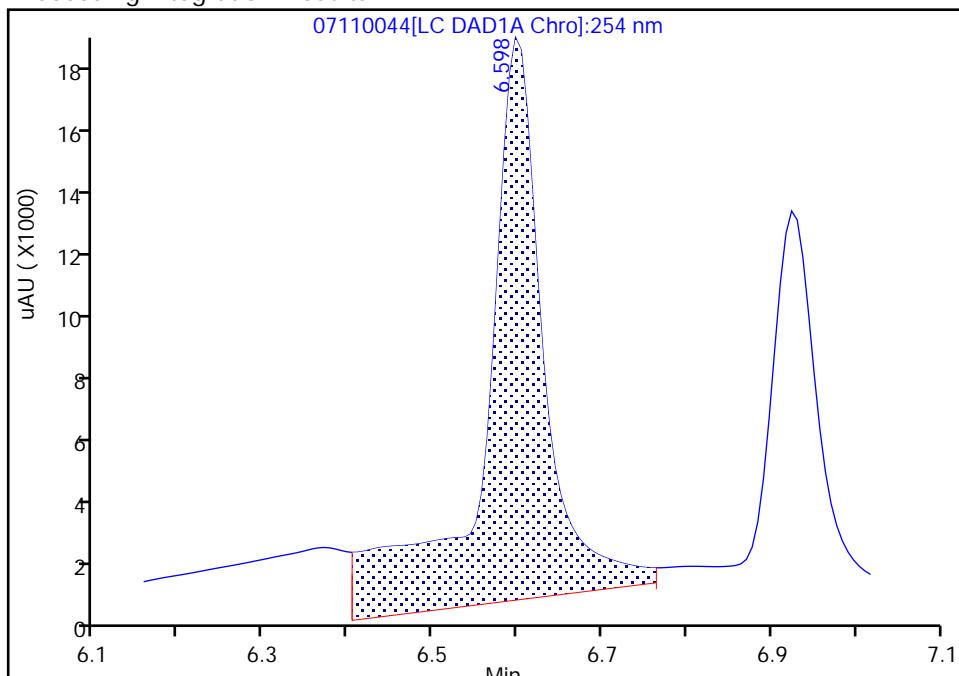
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110044.D
 Injection Date: 12-Jul-2019 00:25:05 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 44 Worklist Smp#: 44
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

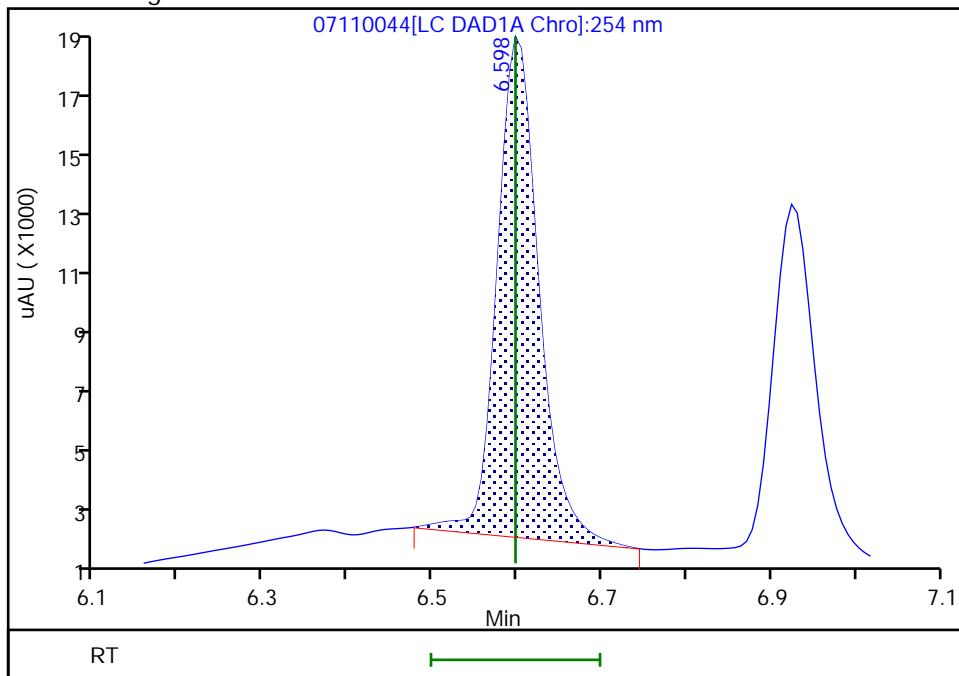
RT: 6.60
 Area: 85624
 Amount: 0.398318
 Amount Units: ug/mL

Processing Integration Results



RT: 6.60
 Area: 54741
 Amount: 0.254652
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 08:59:16

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/55 Calibration Date: 07/12/2019 04:37
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07110055.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	95108		259	250	3.6	15.0
RDX	Ave	111120	118092		266	250	6.3	15.0
Picric acid	Ave	90734	92368		255	250	1.8	15.0
1,3,5-Trinitrobenzene	Ave	245077	267204		273	250	9.0	15.0
1,3-Dinitrobenzene	Ave	311175	338010		272	250	8.6	15.0
Nitrobenzene	Ave	198903	207749		262	251	4.4	15.0
Tetryl	Ave	161957	175436		271	250	8.3	15.0
Nitroglycerin	Ave	71108	79299		2790	2500	11.5	15.0
2,4,6-Trinitrotoluene	Ave	227277	245466		271	251	8.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	176283		266	251	6.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	220175		269	251	7.3	15.0
2,6-Dinitrotoluene	Ave	159284	171537		270	251	7.7	15.0
2,4-Dinitrotoluene	Ave	300447	327980		273	251	9.2	15.0
2-Nitrotoluene	Ave	129784	134213		259	251	3.4	15.0
4-Nitrotoluene	Ave	110255	115514		263	251	4.8	15.0
3-Nitrotoluene	Ave	145122	151649		262	251	4.5	15.0
PETN	Ave	74289	83204		2800	2500	12.0	15.0
1,2-Dinitrobenzene	Ave	139328	152908		274	250	9.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/55 Calibration Date: 07/12/2019 04:37
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07110055.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.54	6.84
RDX	7.79	7.65	7.95
Picric acid	8.19	8.05	8.35
1,3,5-Trinitrobenzene	8.91	8.77	9.07
1,3-Dinitrobenzene	9.58	9.43	9.73
Nitrobenzene	9.97	9.82	10.12
Tetryl	10.29	10.14	10.44
Nitroglycerin	10.80	10.64	10.94
2,4,6-Trinitrotoluene	11.27	11.16	11.36
4-Amino-2,6-dinitrotoluene	11.46	11.35	11.55
2-Amino-4,6-dinitrotoluene	11.76	11.64	11.84
2,6-Dinitrotoluene	11.89	11.78	11.98
2,4-Dinitrotoluene	12.09	11.98	12.18
2-Nitrotoluene	12.95	12.78	13.08
4-Nitrotoluene	13.39	13.22	13.52
3-Nitrotoluene	14.00	13.83	14.13
PETN	15.11	14.95	15.25
1,2-Dinitrobenzene	8.75	8.61	8.91

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110055.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-Jul-2019 04:37:41 ALS Bottle#: 7 Worklist Smp#: 55
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0083617-055
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:47 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:03:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.693	6.692	0.001	23777	0.2500	0.2589	M
7 RDX	1	7.786	7.799	-0.013	29523	0.2500	0.2657	
8 2,4,6-Trinitrophenol	1	8.193	8.199	-0.006	23092	0.2500	0.2545	
\$ 9 1,2-Dinitrobenzene	1	8.753	8.759	-0.006	38227	0.2500	0.2744	
10 1,3,5-Trinitrobenzene	1	8.913	8.919	-0.006	66801	0.2500	0.2726	
11 1,3-Dinitrobenzene	1	9.579	9.578	0.001	84587	0.2503	0.2718	
12 Nitrobenzene	1	9.966	9.965	0.001	52041	0.2505	0.2616	
14 Tetryl	1	10.293	10.285	0.008	43859	0.2500	0.2708	
15 Nitroglycerin	2	10.799	10.792	0.007	198247	2.50	2.79	
16 2,4,6-Trinitrotoluene	1	11.266	11.258	0.008	61612	0.2510	0.2711	
17 4-Amino-2,6-dinitrotoluene	1	11.459	11.445	0.014	44203	0.2508	0.2657	
18 2-Amino-4,6-dinitrotoluene	1	11.759	11.738	0.021	55209	0.2508	0.2690	M
19 2,6-Dinitrotoluene	1	11.886	11.878	0.008	43013	0.2508	0.2700	M
20 2,4-Dinitrotoluene	1	12.093	12.078	0.015	82159	0.2505	0.2735	
21 o-Nitrotoluene	1	12.946	12.925	0.021	33654	0.2508	0.2593	
22 p-Nitrotoluene	1	13.393	13.372	0.021	28994	0.2510	0.2630	
23 m-Nitrotoluene	1	13.999	13.978	0.021	38064	0.2510	0.2623	
24 PETN	2	15.113	15.098	0.015	208009	2.50	2.80	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

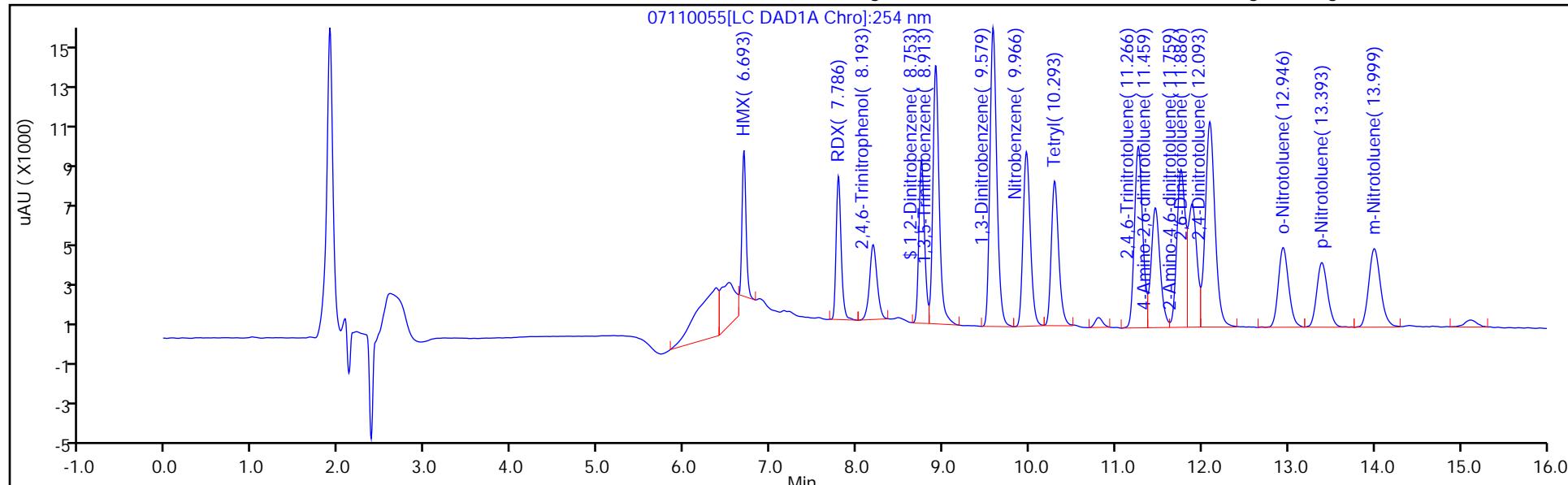
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

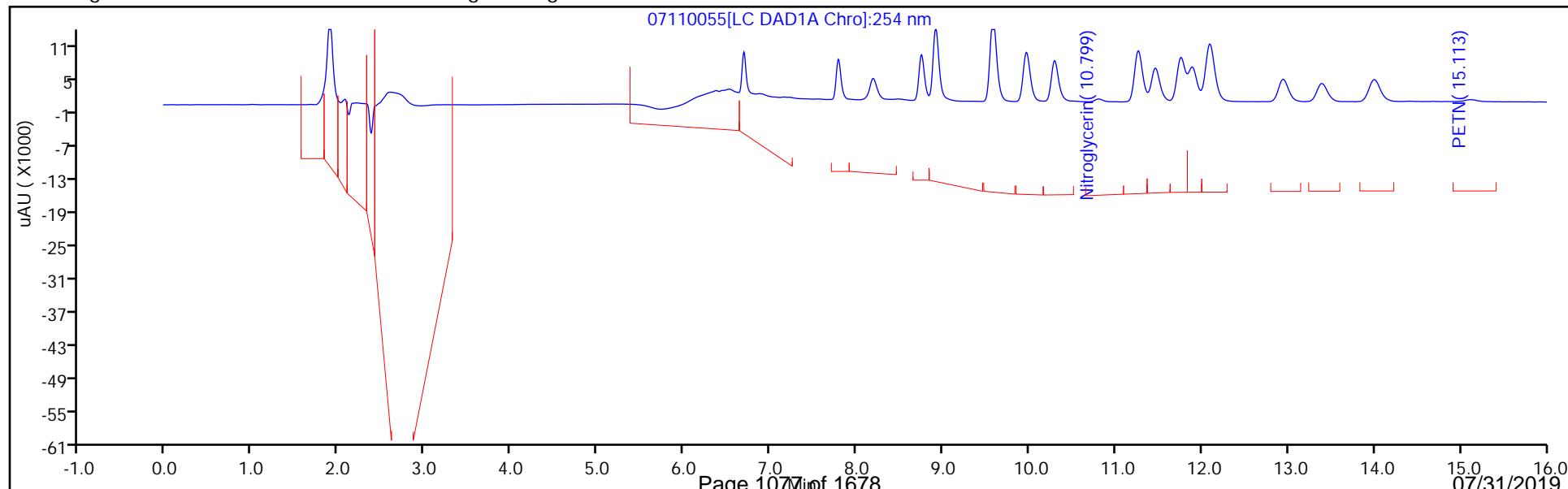
Eurofins TestAmerica, Denver

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 Injection Date: 12-Jul-2019 04:37:41 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 55
 Method: 8330_X3 Dil. Factor: 1.0000 ALS Bottle#: 7
 Column: UltraCarb5uODS (20) (4.60 mm) Limit Group: GCSV - 8330

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

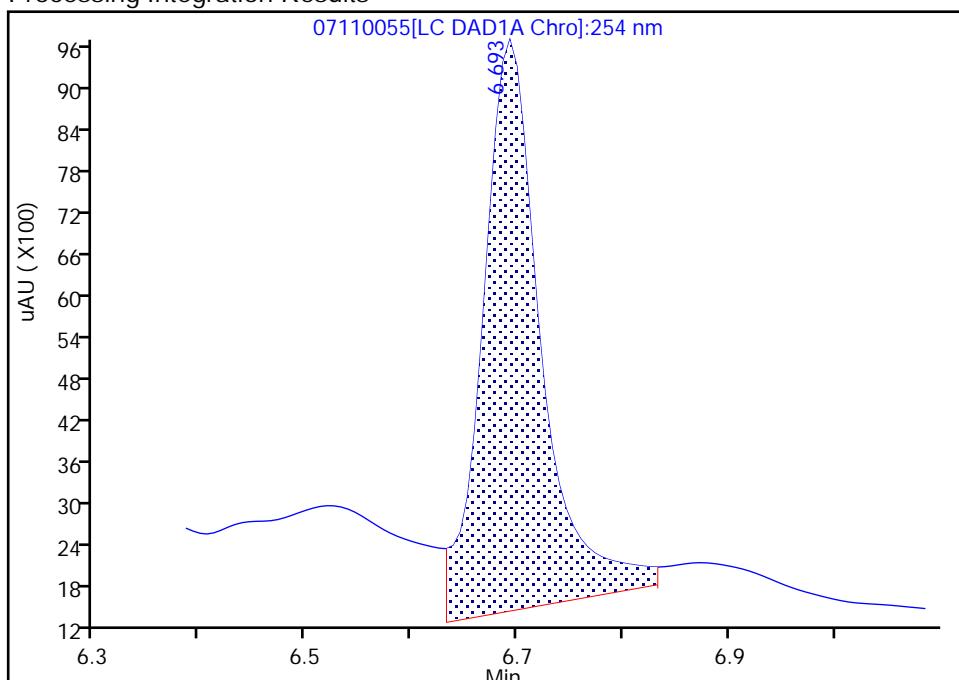
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110055.D
 Injection Date: 12-Jul-2019 04:37:41 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 55
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

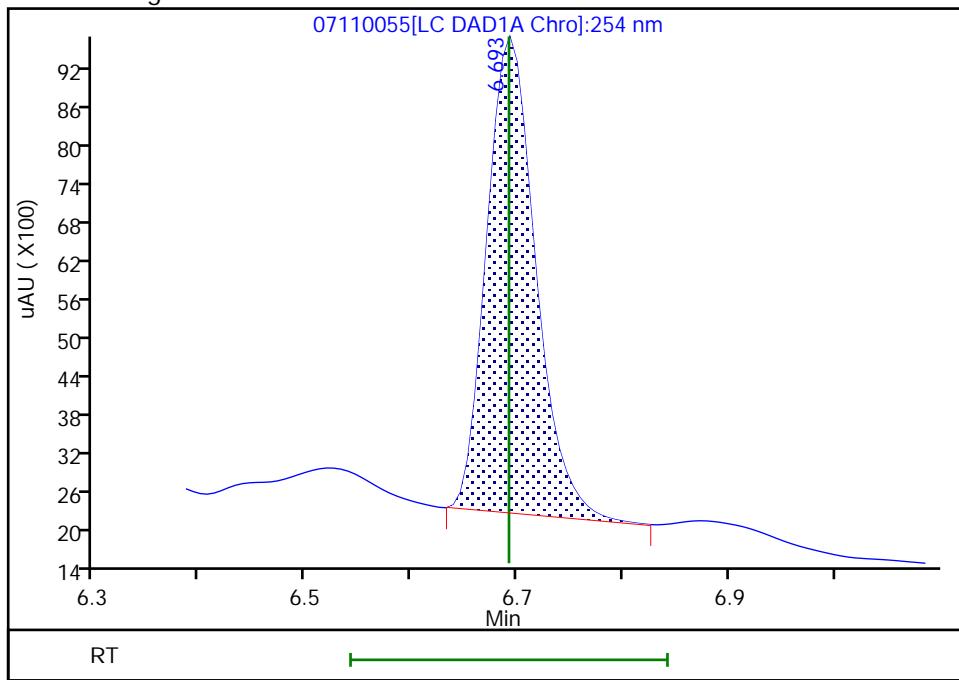
RT: 6.69
 Area: 31574
 Amount: 0.343819
 Amount Units: ug/mL

Processing Integration Results



RT: 6.69
 Area: 23777
 Amount: 0.258915
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:03:23

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

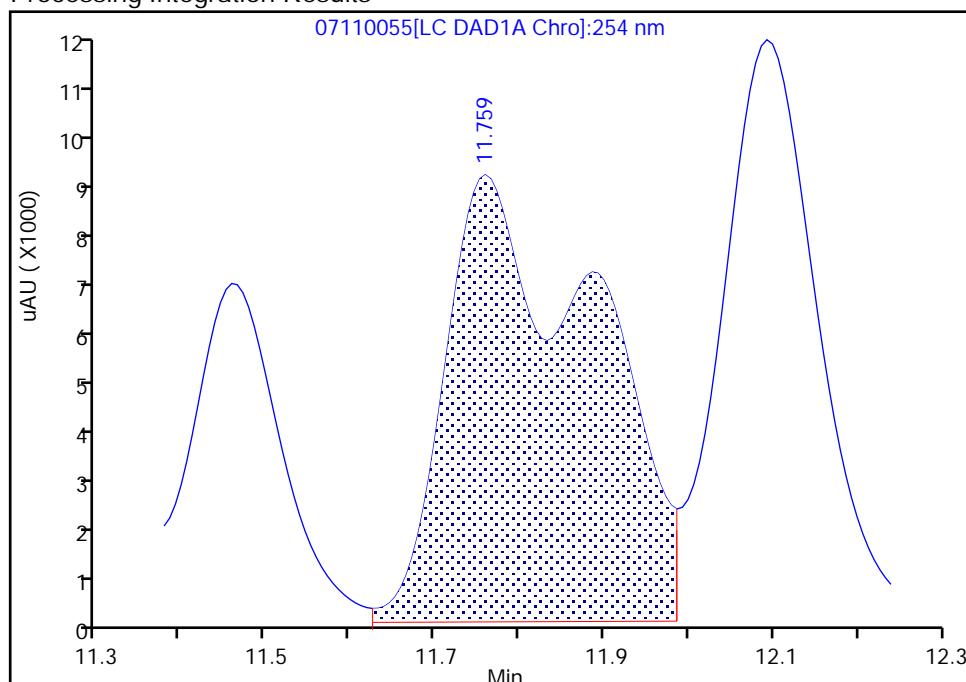
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110055.D
 Injection Date: 12-Jul-2019 04:37:41 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 55
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

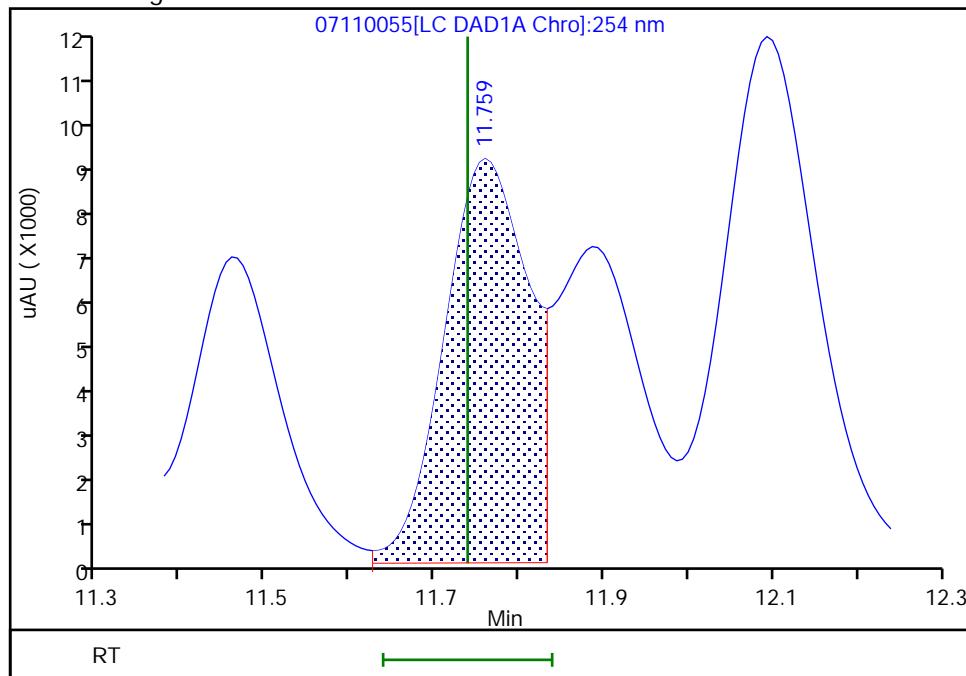
RT: 11.76
 Area: 98216
 Amount: 0.478551
 Amount Units: ug/mL

Processing Integration Results



RT: 11.76
 Area: 55209
 Amount: 0.269002
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:03:29

Audit Action: Split an Integrated Peak

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-464207/57 Calibration Date: 07/12/2019 05:23

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07110057.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	219269		255	250	2.0	15.0
DNX	Ave	156126	154885		248	250	-0.8	15.0
MNX	Ave	140041	143222		298	292	2.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/57 Calibration Date: 07/12/2019 05:23
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07110057.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.60	6.50	6.70
DNX	6.93	6.82	7.02
MNX	7.38	7.23	7.53

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110057.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-Jul-2019 05:23:38 ALS Bottle#: 44 Worklist Smp#: 57
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0083617-057
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh

Date:

12-Jul-2019 09:11:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.598	6.598	0.000	54872	0.2503	0.2553	M
5 DNX	1	6.925	6.924	0.001	38760	0.2503	0.2483	M
6 MNX	1	7.378	7.378	0.000	41785	0.2918	0.2984	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002

Amount Added: 12.50

Units: uL

Report Date: 12-Jul-2019 09:20:50

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110057.D

Injection Date: 12-Jul-2019 05:23:38

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 57

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

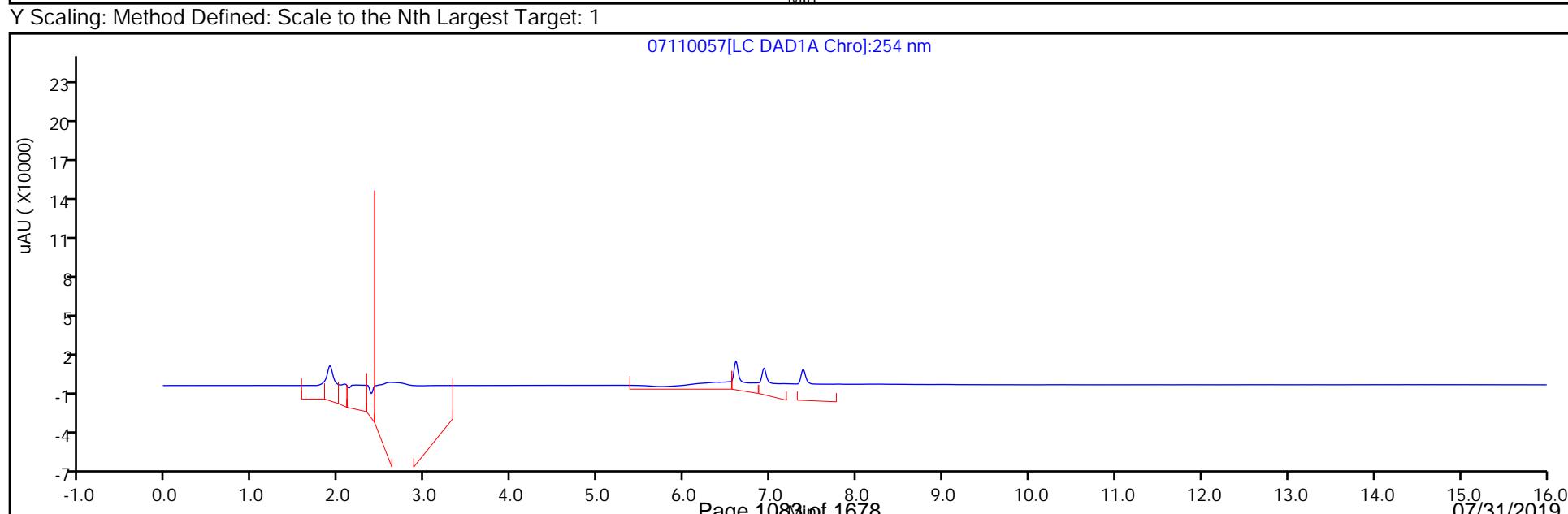
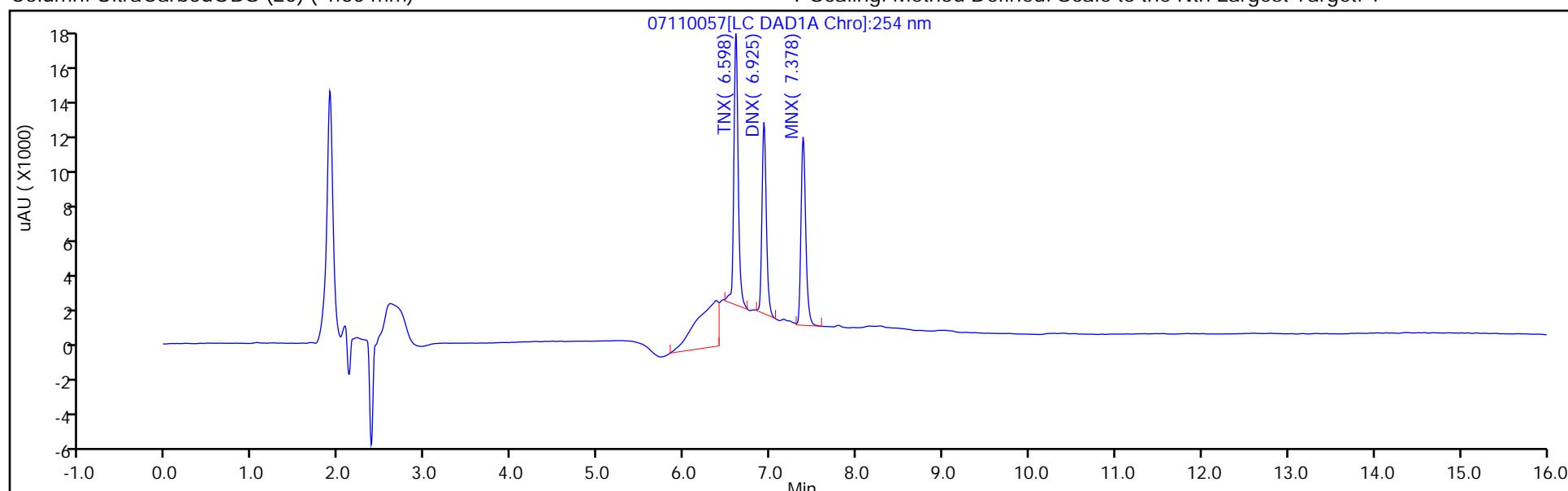
ALS Bottle#: 44

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

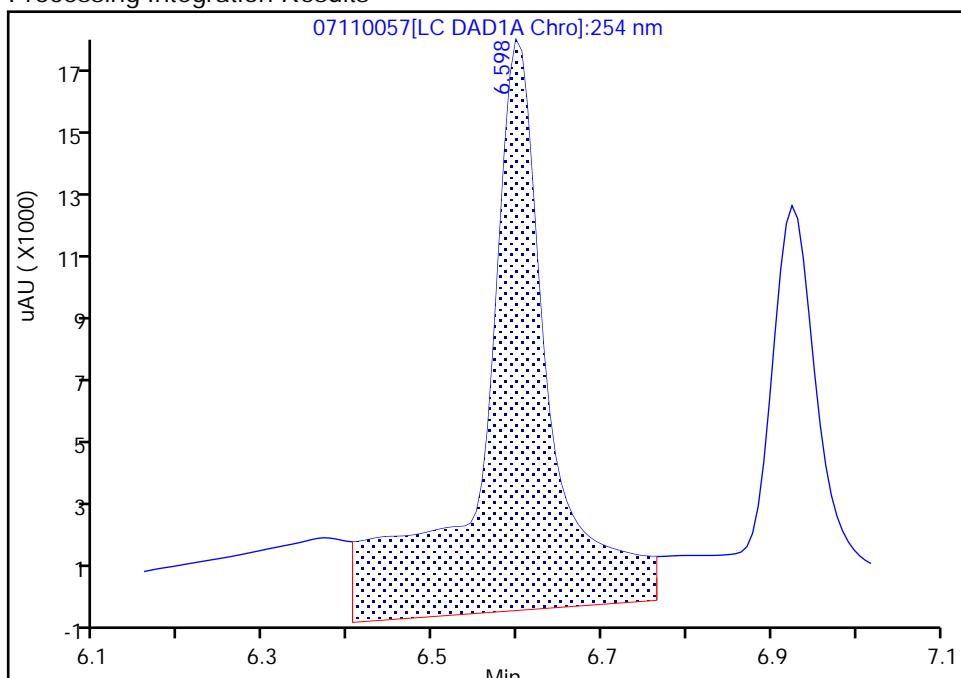
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110057.D
 Injection Date: 12-Jul-2019 05:23:38 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 44 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

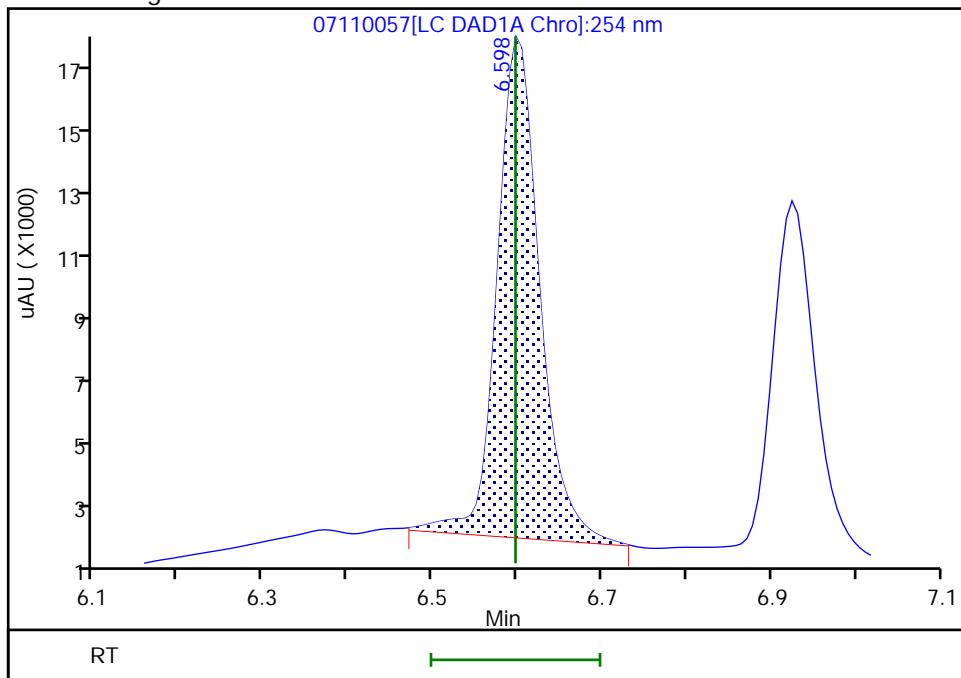
RT: 6.60
 Area: 98808
 Amount: 0.459649
 Amount Units: ug/mL

Processing Integration Results



RT: 6.60
 Area: 54872
 Amount: 0.255261
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:10:55

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

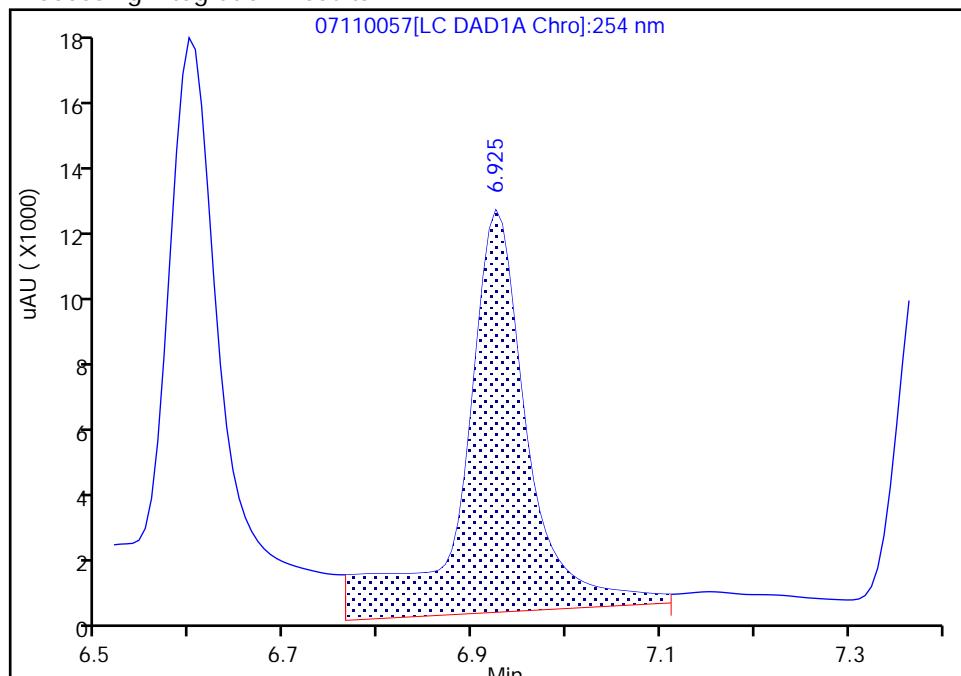
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 Injection Date: 12-Jul-2019 05:23:38 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 44 Worklist Smp#: 57
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

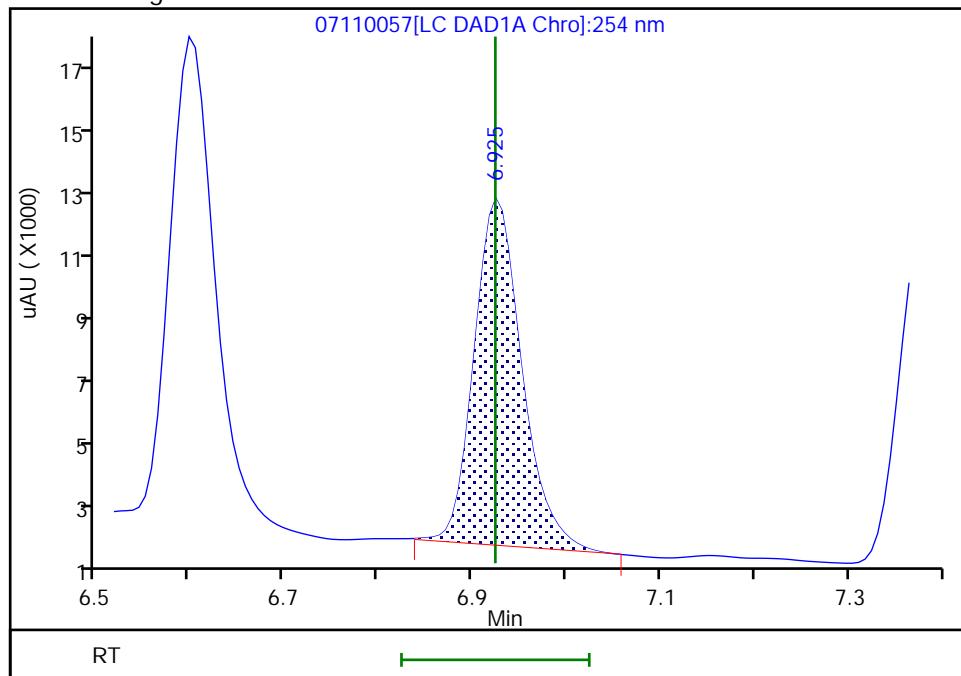
RT: 6.92
 Area: 56958
 Amount: 0.364821
 Amount Units: ug/mL

Processing Integration Results



RT: 6.92
 Area: 38760
 Amount: 0.248261
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:10:59

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/68 Calibration Date: 07/12/2019 09:36
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07110068.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	94916		258	250	3.4	15.0
RDX	Ave	111120	116284		262	250	4.6	15.0
Picric acid	Ave	90734	94544		260	250	4.2	15.0
1,3,5-Trinitrobenzene	Ave	245077	267880		273	250	9.3	15.0
1,3-Dinitrobenzene	Ave	311175	337239		271	250	8.4	15.0
Nitrobenzene	Ave	198903	204679		258	251	2.9	15.0
Tetryl	Ave	161957	175012		270	250	8.1	15.0
Nitroglycerin	Ave	71108	78758		2770	2500	10.8	15.0
2,4,6-Trinitrotoluene	Ave	227277	241713		267	251	6.4	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	176762		266	251	6.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	220076		269	251	7.2	15.0
2,6-Dinitrotoluene	Ave	159284	170584		269	251	7.1	15.0
2,4-Dinitrotoluene	Ave	300447	329521		275	251	9.7	15.0
2-Nitrotoluene	Ave	129784	133308		258	251	2.7	15.0
4-Nitrotoluene	Ave	110255	116135		264	251	5.3	15.0
3-Nitrotoluene	Ave	145122	149287		258	251	2.9	15.0
PETN	Ave	74289	83630		2810	2500	12.6	15.0
1,2-Dinitrobenzene	Ave	139328	152960		274	250	9.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/68 Calibration Date: 07/12/2019 09:36
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07110068.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.54	6.84
RDX	7.78	7.65	7.95
Picric acid	8.18	8.05	8.35
1,3,5-Trinitrobenzene	8.91	8.77	9.07
1,3-Dinitrobenzene	9.57	9.43	9.73
Nitrobenzene	9.96	9.82	10.12
Tetryl	10.28	10.14	10.44
Nitroglycerin	10.79	10.64	10.94
2,4,6-Trinitrotoluene	11.25	11.16	11.36
4-Amino-2,6-dinitrotoluene	11.44	11.35	11.55
2-Amino-4,6-dinitrotoluene	11.74	11.64	11.84
2,6-Dinitrotoluene	11.88	11.78	11.98
2,4-Dinitrotoluene	12.08	11.98	12.18
2-Nitrotoluene	12.92	12.78	13.08
4-Nitrotoluene	13.37	13.22	13.52
3-Nitrotoluene	13.98	13.83	14.13
PETN	15.10	14.95	15.25
1,2-Dinitrobenzene	8.74	8.61	8.91

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110068.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-Jul-2019 09:36:06 ALS Bottle#: 7 Worklist Smp#: 68
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0083617-068
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 09:20:47 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 09:11:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.690	6.692	-0.002	23729	0.2500	0.2584	M
7 RDX	1	7.776	7.799	-0.023	29071	0.2500	0.2616	
8 2,4,6-Trinitrophenol	1	8.176	8.199	-0.023	23636	0.2500	0.2605	
\$ 9 1,2-Dinitrobenzene	1	8.743	8.759	-0.016	38240	0.2500	0.2745	
10 1,3,5-Trinitrobenzene	1	8.910	8.919	-0.009	66970	0.2500	0.2733	
11 1,3-Dinitrobenzene	1	9.569	9.578	-0.009	84394	0.2503	0.2712	
12 Nitrobenzene	1	9.956	9.965	-0.009	51272	0.2505	0.2578	
14 Tetryl	1	10.283	10.285	-0.002	43753	0.2500	0.2702	
15 Nitroglycerin	2	10.789	10.792	-0.003	196896	2.50	2.77	
16 2,4,6-Trinitrotoluene	1	11.249	11.258	-0.009	60670	0.2510	0.2669	
17 4-Amino-2,6-dinitrotoluene	1	11.443	11.445	-0.002	44323	0.2508	0.2664	
18 2-Amino-4,6-dinitrotoluene	1	11.743	11.738	0.005	55184	0.2508	0.2689	
19 2,6-Dinitrotoluene	1	11.876	11.878	-0.002	42774	0.2508	0.2685	
20 2,4-Dinitrotoluene	1	12.076	12.078	-0.002	82545	0.2505	0.2747	
21 o-Nitrotoluene	1	12.923	12.925	-0.002	33427	0.2508	0.2576	
22 p-Nitrotoluene	1	13.369	13.372	-0.003	29150	0.2510	0.2644	
23 m-Nitrotoluene	1	13.976	13.978	-0.002	37471	0.2510	0.2582	
24 PETN	2	15.096	15.098	-0.002	209076	2.50	2.81	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

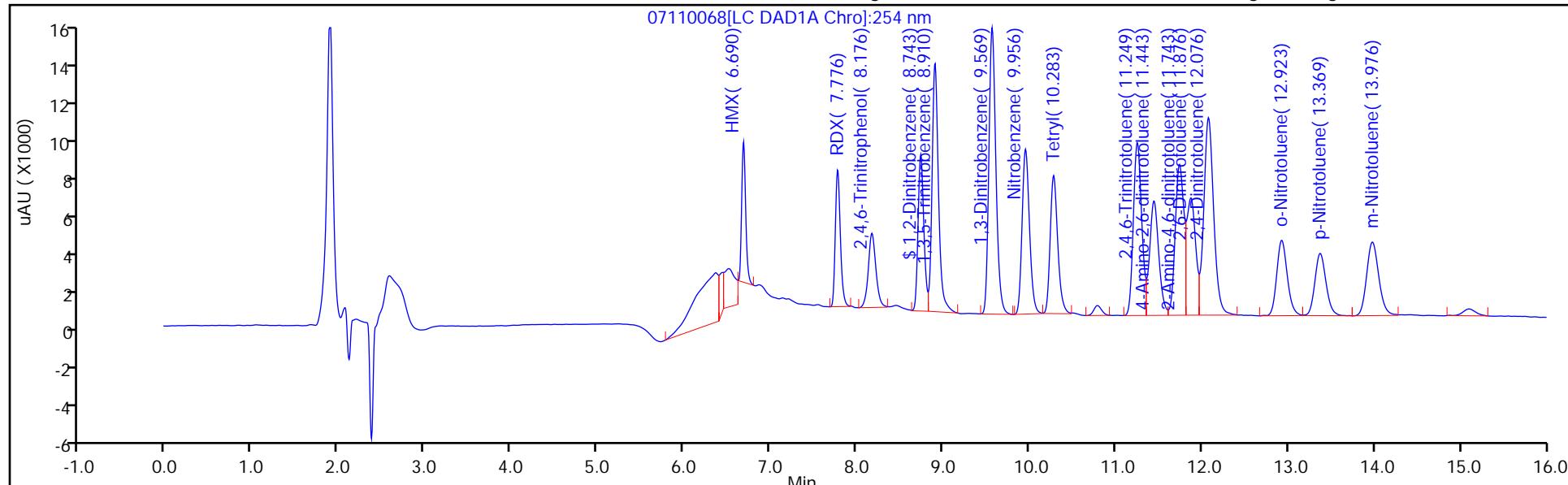
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

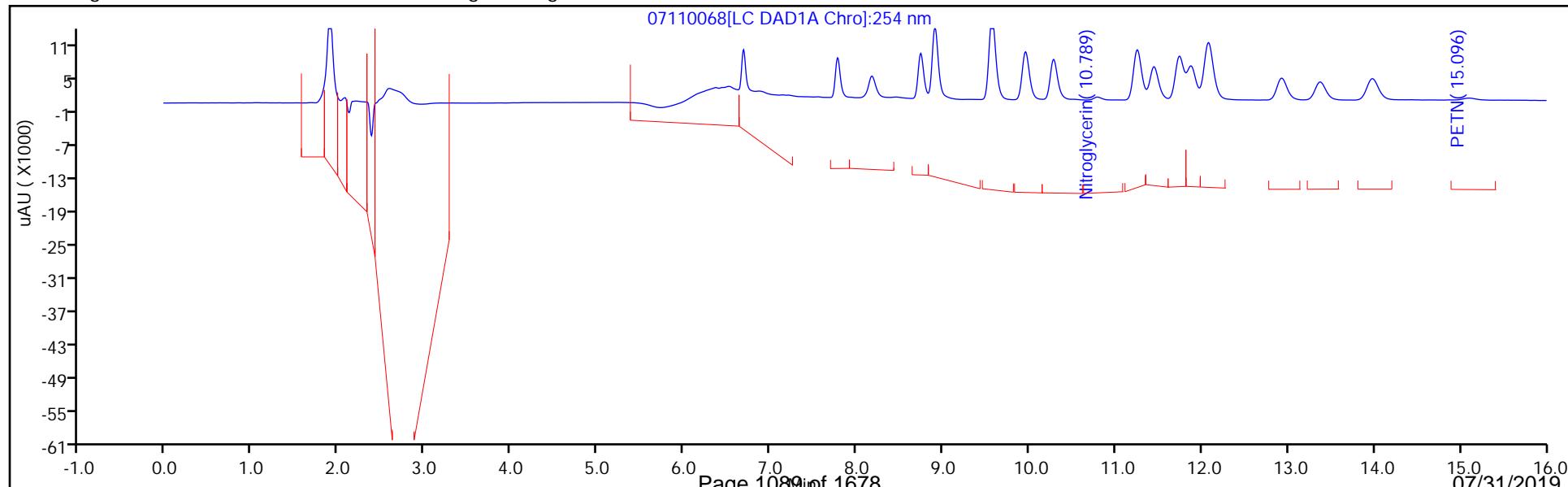
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110068.D
 Injection Date: 12-Jul-2019 09:36:06 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 68
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 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

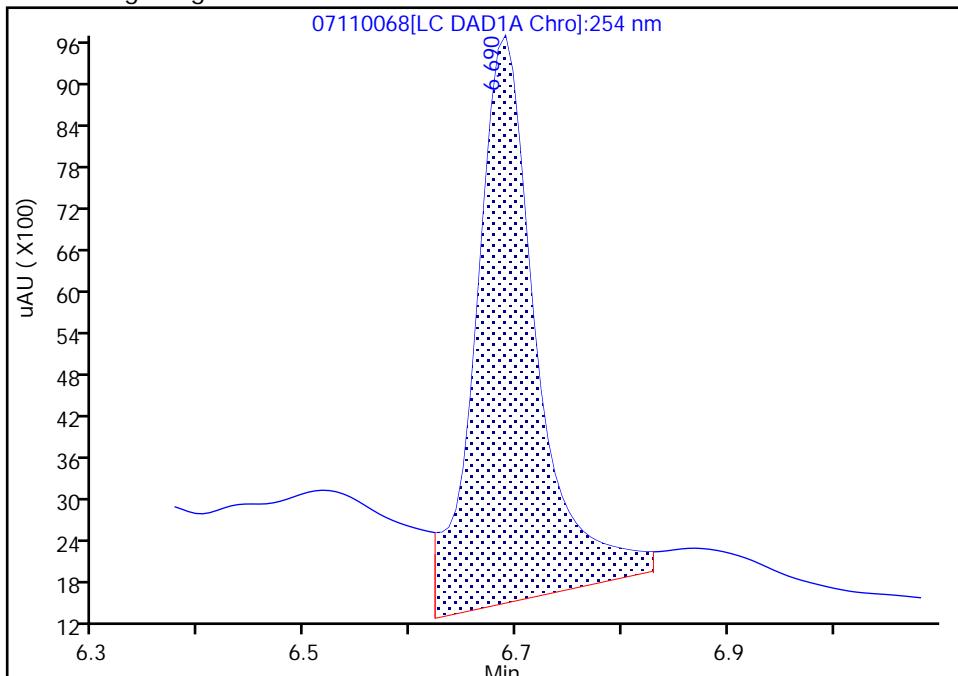
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 Injection Date: 12-Jul-2019 09:36:06 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 68
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

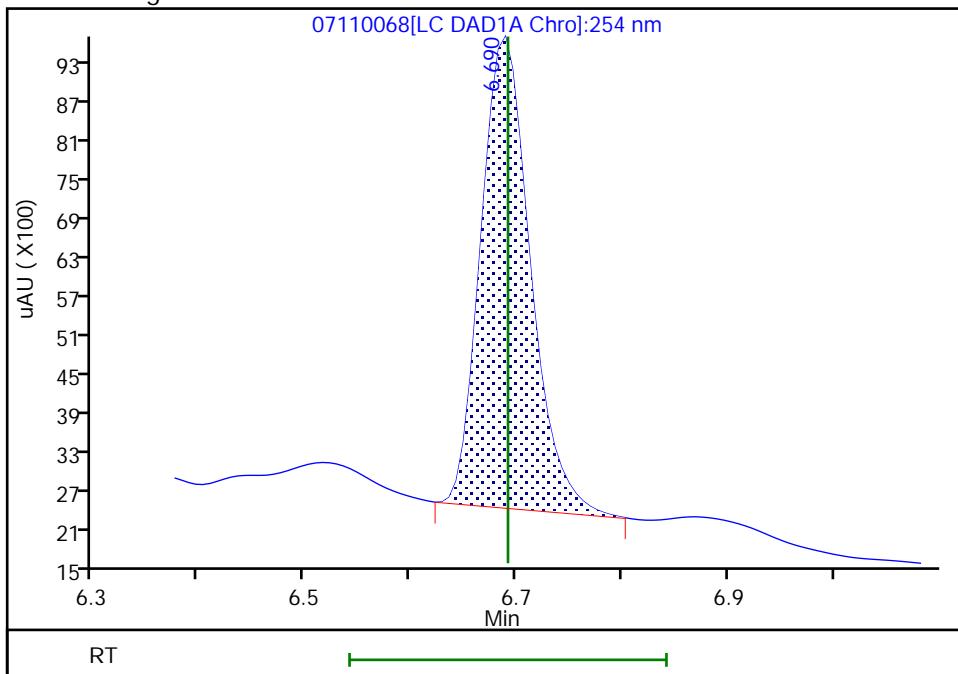
Processing Integration Results

RT: 6.69
 Area: 33089
 Amount: 0.360316
 Amount Units: ug/mL



Manual Integration Results

RT: 6.69
 Area: 23729
 Amount: 0.258392
 Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 09:11:49

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/70 Calibration Date: 07/12/2019 10:22
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07110070.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	203385		237	250	-5.4	15.0
DNX	Ave	156126	153958		247	250	-1.4	15.0
MNX	Ave	140041	141278		294	292	0.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464207/70 Calibration Date: 07/12/2019 10:22
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07110070.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.50	6.70
DNX	6.92	6.82	7.02
MNX	7.36	7.23	7.53

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110070.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 12-Jul-2019 10:22:04 ALS Bottle#: 44 Worklist Smp#: 70
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0083617-070
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 09:20:51 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 09:12:40

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	6.598	-0.009	50897	0.2503	0.2368	M
5 DNX	1	6.915	6.924	-0.009	38528	0.2503	0.2468	M
6 MNX	1	7.362	7.378	-0.016	41218	0.2918	0.2943	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 15-Jul-2019 09:20:51

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110070.D

Injection Date: 12-Jul-2019 10:22:04

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 70

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

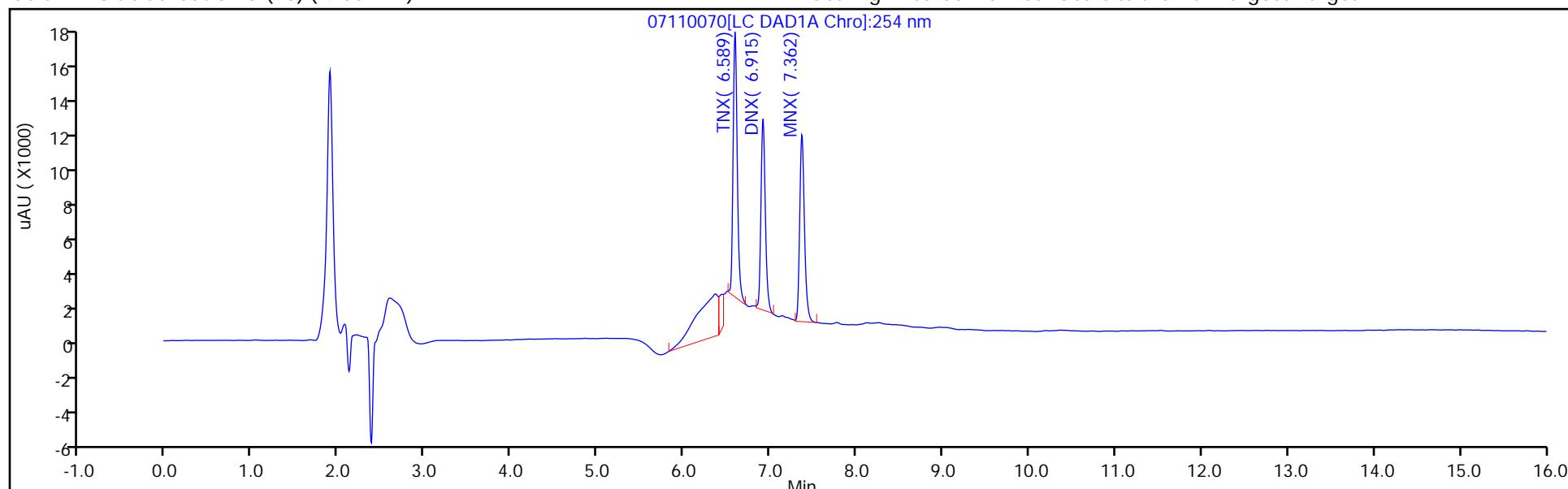
ALS Bottle#: 44

Method: 8330_X3

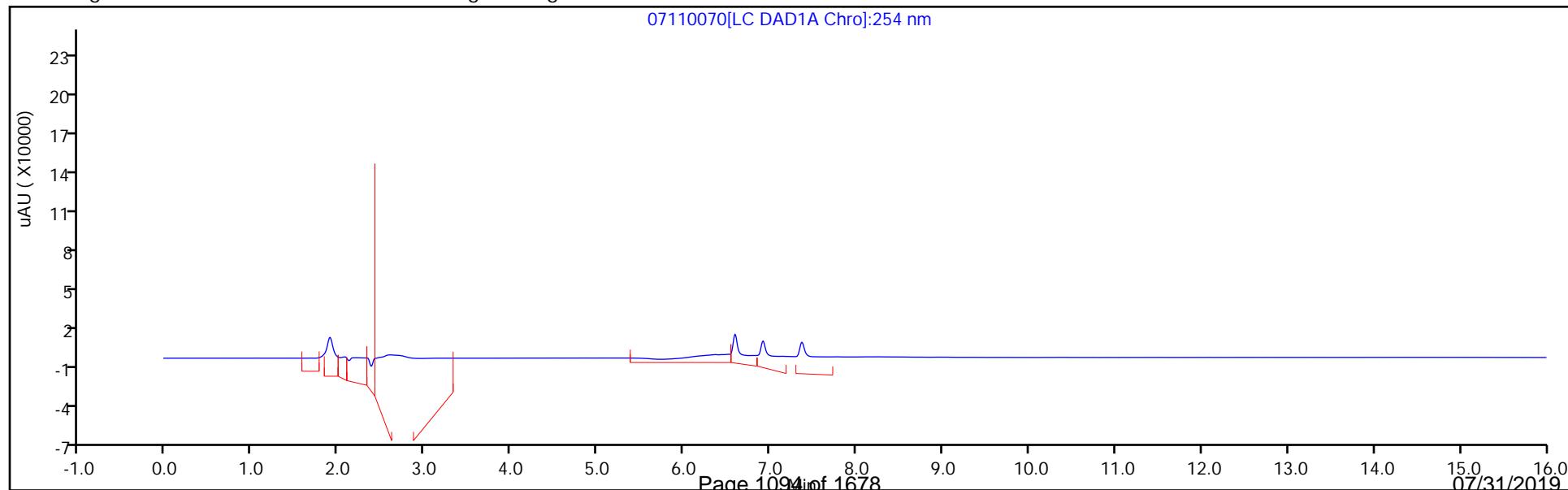
Limit Group: GCSV - 8330

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

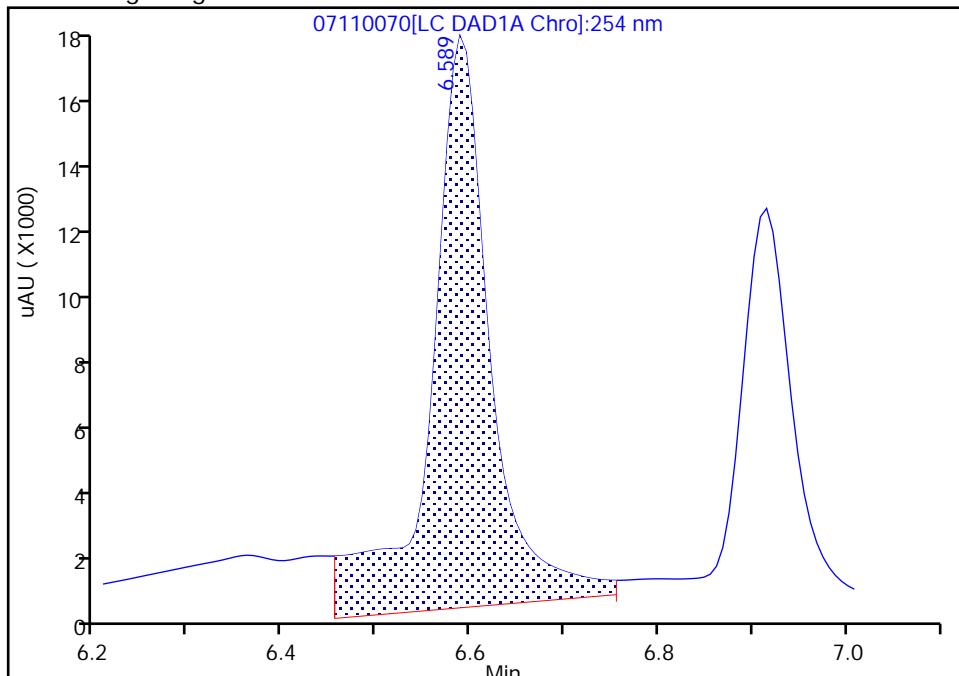
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 Injection Date: 12-Jul-2019 10:22:04 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 44 Worklist Smp#: 70
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

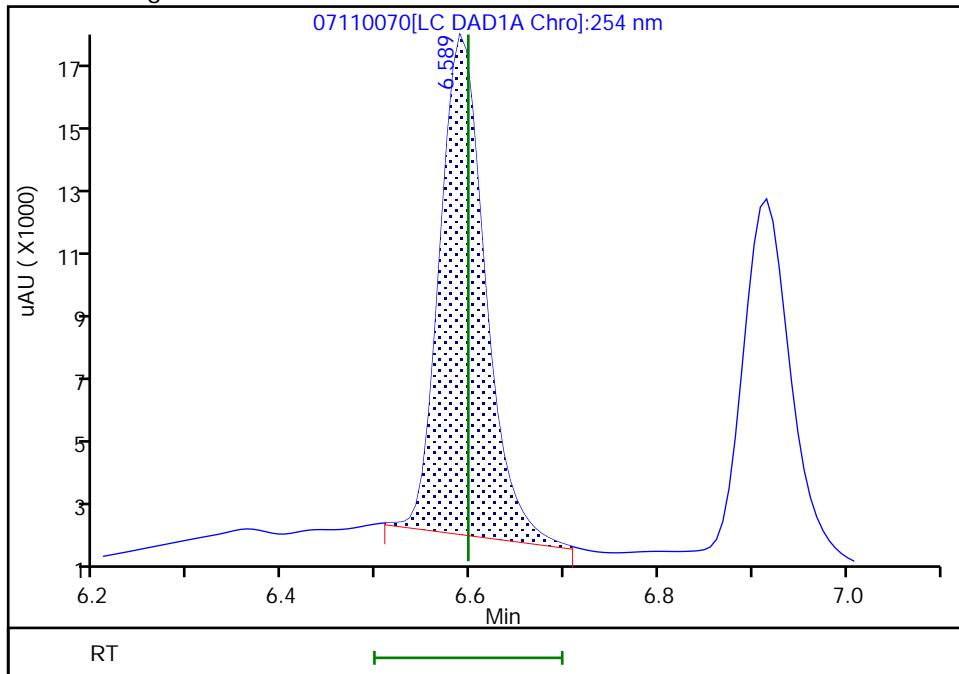
RT: 6.59
 Area: 72844
 Amount: 0.338866
 Amount Units: ug/mL

Processing Integration Results



RT: 6.59
 Area: 50897
 Amount: 0.236770
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 09:12:21

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

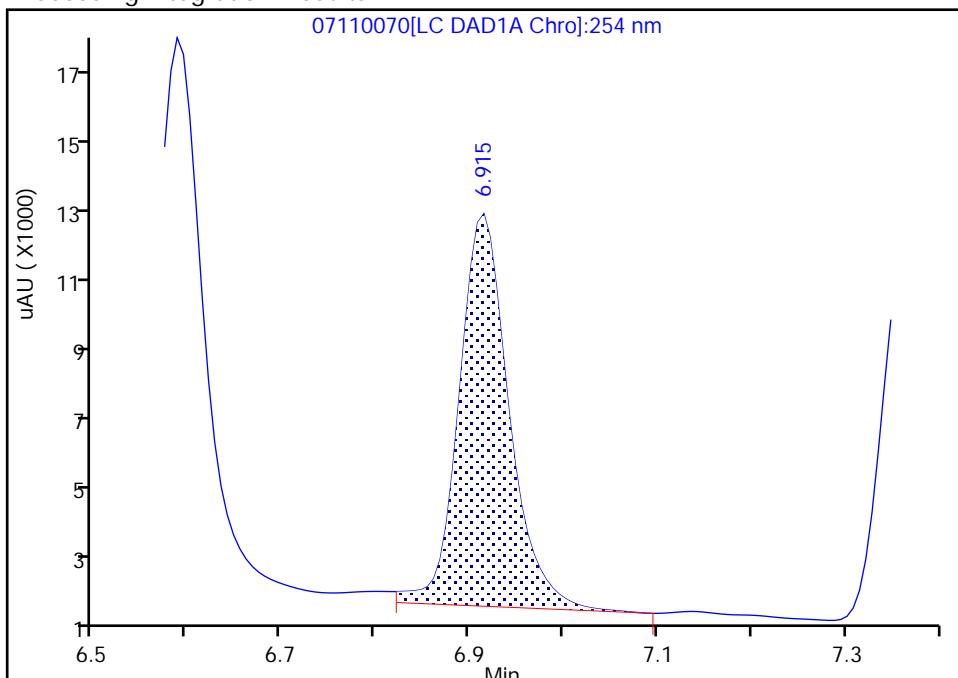
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 Injection Date: 12-Jul-2019 10:22:04 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 44 Worklist Smp#: 70
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

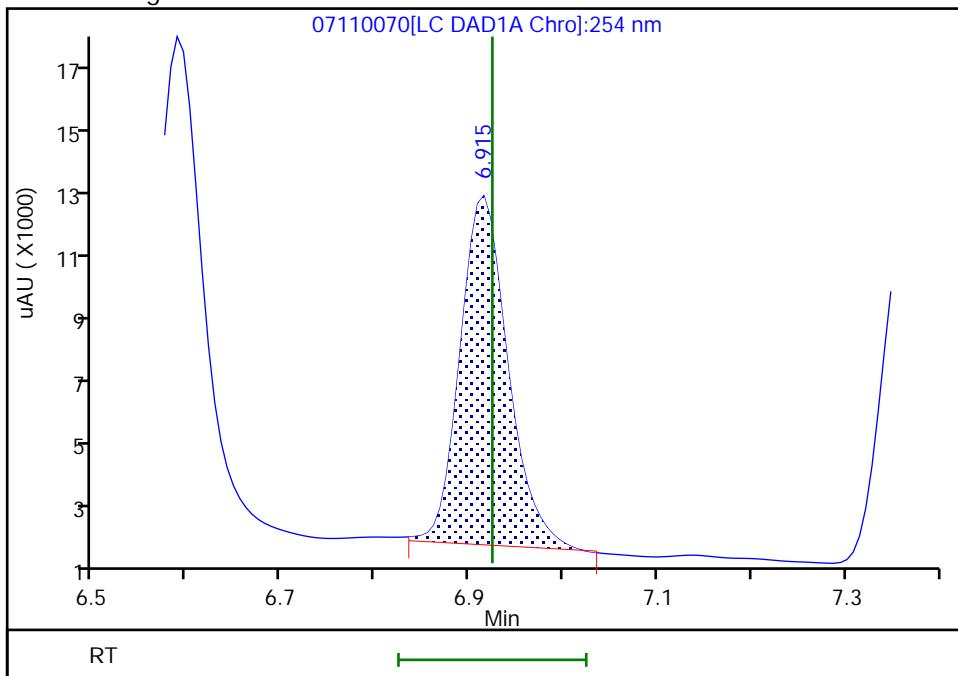
RT: 6.92
 Area: 40855
 Amount: 0.261680
 Amount Units: ug/mL

Processing Integration Results



RT: 6.92
 Area: 38528
 Amount: 0.246775
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 09:12:23

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464537/7 Calibration Date: 07/15/2019 12:18
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07150007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	93032		253	250	1.3	15.0
RDX	Ave	111120	111840		252	250	0.6	15.0
Picric acid	Ave	90734	88836		245	250	-2.1	15.0
1,3,5-Trinitrobenzene	Ave	245077	257928		263	250	5.2	15.0
1,3-Dinitrobenzene	Ave	311175	321287		258	250	3.2	15.0
Nitrobenzene	Ave	198903	195609		246	251	-1.7	15.0
Tetryl	Ave	161957	167172		258	250	3.2	15.0
Nitroglycerin	Ave	71108	75437		2650	2500	6.1	15.0
2,4,6-Trinitrotoluene	Ave	227277	231096		255	251	1.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	171486		258	251	3.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	215143		263	251	4.8	15.0
2,6-Dinitrotoluene	Ave	159284	159314		251	251	0.0	15.0
2,4-Dinitrotoluene	Ave	300447	312279		260	251	3.9	15.0
2-Nitrotoluene	Ave	129784	127155		246	251	-2.0	15.0
4-Nitrotoluene	Ave	110255	109247		249	251	-0.9	15.0
3-Nitrotoluene	Ave	145122	143048		247	251	-1.4	15.0
PETN	Ave	74289	79890		2690	2500	7.5	15.0
1,2-Dinitrobenzene	Ave	139328	146352		263	250	5.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464537/7 Calibration Date: 07/15/2019 12:18
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07150007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.77	7.62	7.92
Picric acid	8.15	8.00	8.30
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.27	10.12	10.42
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.14	11.34
4-Amino-2,6-dinitrotoluene	11.43	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.72	11.62	11.82
2,6-Dinitrotoluene	11.86	11.76	11.96
2,4-Dinitrotoluene	12.06	11.96	12.16
2-Nitrotoluene	12.91	12.76	13.06
4-Nitrotoluene	13.35	13.20	13.50
3-Nitrotoluene	13.96	13.81	14.11
PETN	15.08	14.93	15.23
1,2-Dinitrobenzene	8.73	8.58	8.88

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150007.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jul-2019 12:18:20 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0083692-007
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 17:53:54 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh

Date: 15-Jul-2019 16:41:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.680	6.680	0.000	23258	0.2500	0.2533	M
7 RDX	1	7.774	7.774	0.000	27960	0.2500	0.2516	
8 2,4,6-Trinitrophenol	1	8.147	8.147	0.000	22209	0.2500	0.2448	
\$ 9 1,2-Dinitrobenzene	1	8.734	8.734	0.000	36588	0.2500	0.2626	
10 1,3,5-Trinitrobenzene	1	8.900	8.900	0.000	64482	0.2500	0.2631	
11 1,3-Dinitrobenzene	1	9.560	9.560	0.000	80402	0.2503	0.2584	
12 Nitrobenzene	1	9.947	9.947	0.000	49000	0.2505	0.2464	
14 Tetryl	1	10.267	10.267	0.000	41793	0.2500	0.2580	
15 Nitroglycerin	2	10.780	10.780	0.000	188592	2.50	2.65	
16 2,4,6-Trinitrotoluene	1	11.240	11.240	0.000	58005	0.2510	0.2552	
17 4-Amino-2,6-dinitrotoluene	1	11.427	11.427	0.000	43000	0.2508	0.2584	
18 2-Amino-4,6-dinitrotoluene	1	11.720	11.720	0.000	53947	0.2508	0.2629	
19 2,6-Dinitrotoluene	1	11.860	11.860	0.000	39948	0.2508	0.2508	
20 2,4-Dinitrotoluene	1	12.060	12.060	0.000	78226	0.2505	0.2604	
21 o-Nitrotoluene	1	12.907	12.907	0.000	31884	0.2508	0.2457	
22 p-Nitrotoluene	1	13.354	13.354	0.000	27421	0.2510	0.2487	
23 m-Nitrotoluene	1	13.960	13.960	0.000	35905	0.2510	0.2474	
24 PETN	2	15.080	15.080	0.000	199724	2.50	2.69	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 15-Jul-2019 17:53:55

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150007.D

Injection Date: 15-Jul-2019 12:18:20

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV INT

Worklist Smp#: 7

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

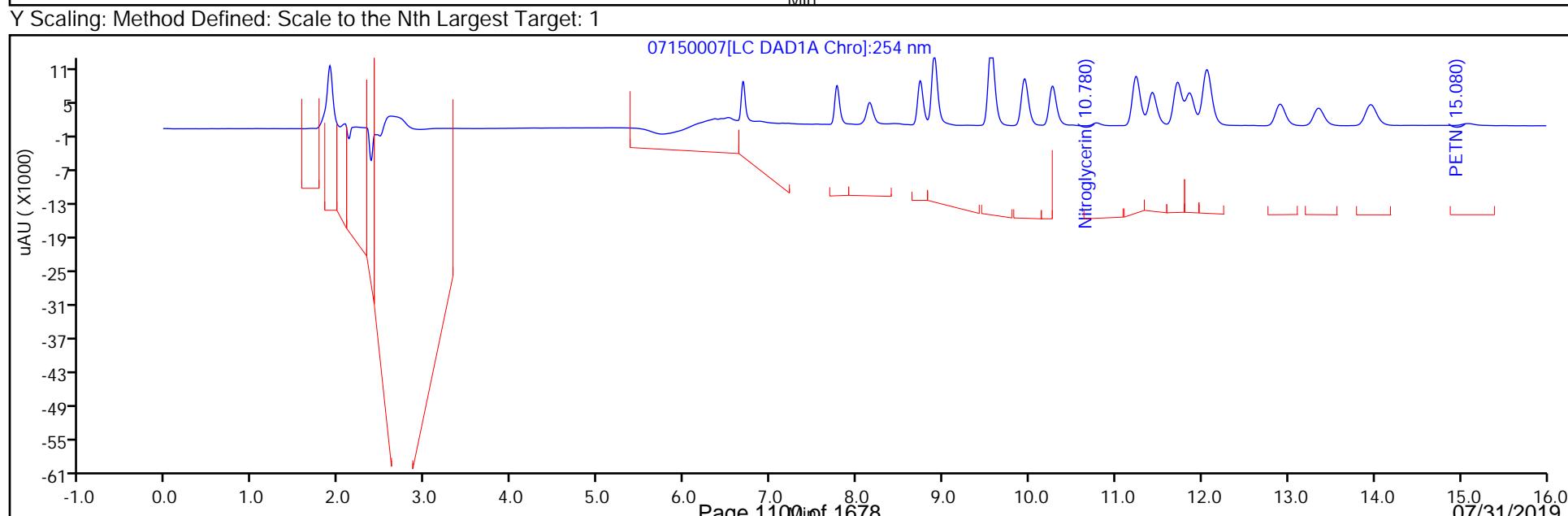
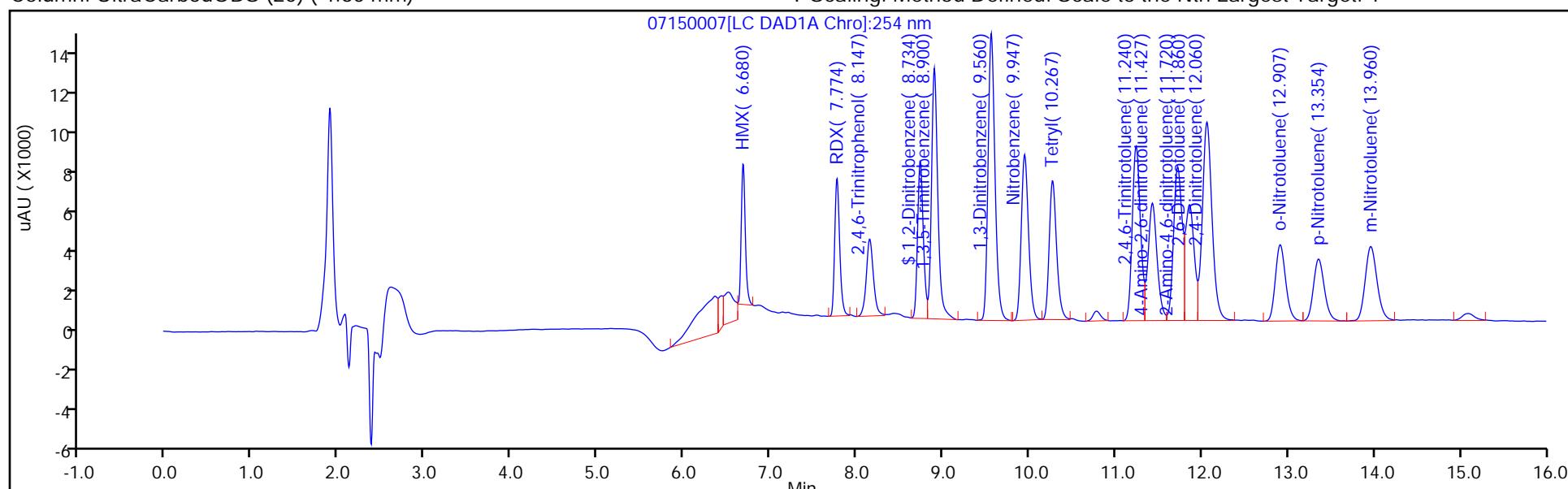
ALS Bottle#: 7

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

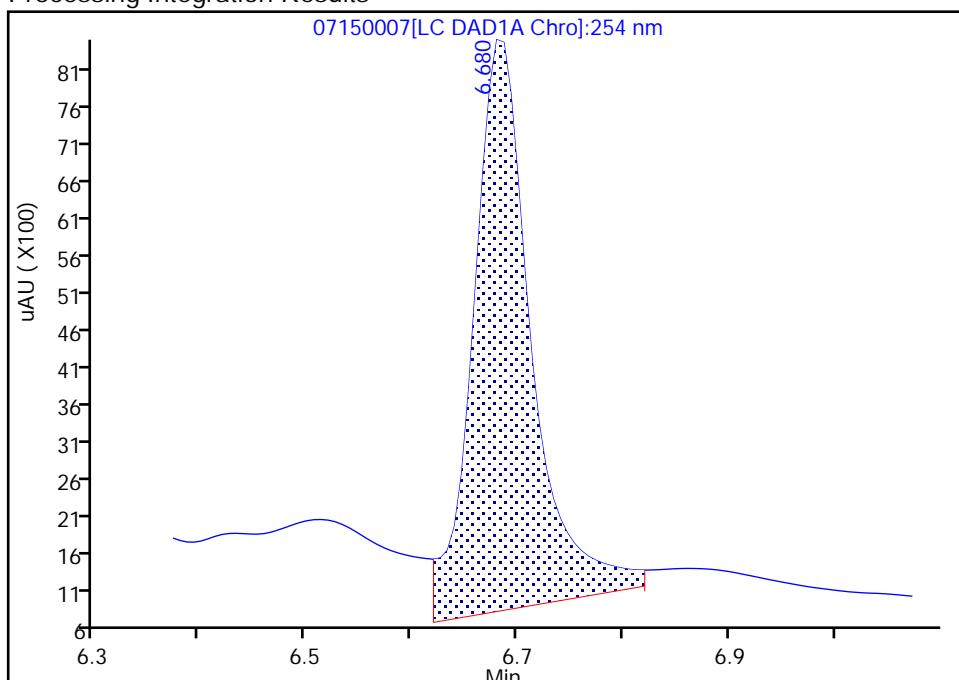
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 Injection Date: 15-Jul-2019 12:18:20 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

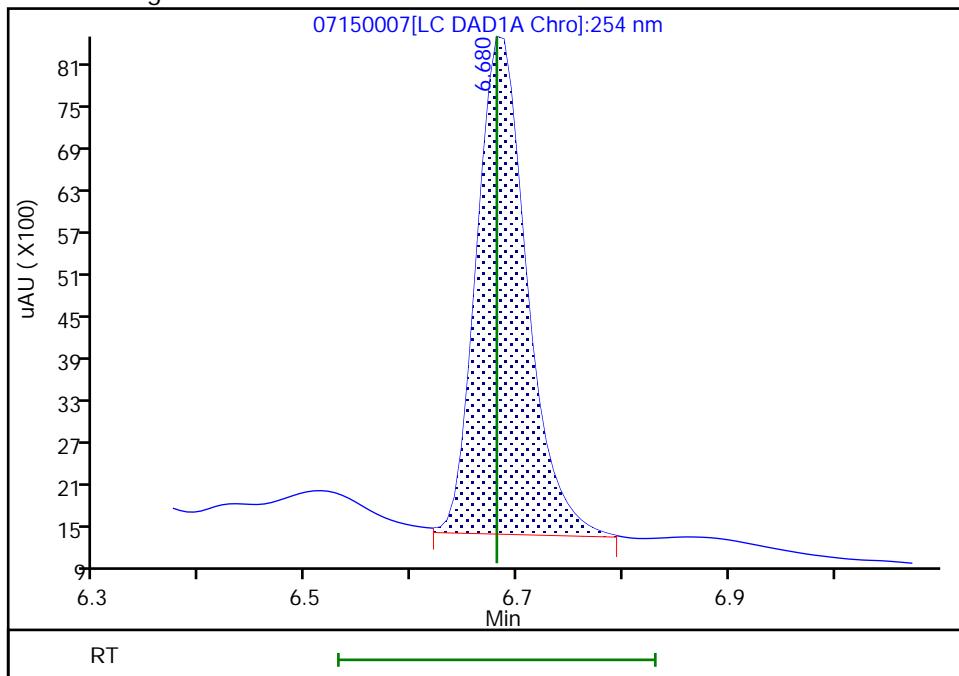
RT: 6.68
 Area: 29303
 Amount: 0.319089
 Amount Units: ug/mL

Processing Integration Results



RT: 6.68
 Area: 23258
 Amount: 0.253263
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 16:41:02

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Lab Sample ID: CCV 280-464537/9 Calibration Date: 07/15/2019 13:04

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07150009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	231640		270	250	7.8	15.0
DNX	Ave	156126	174230		279	250	11.6	15.0
MNX	Ave	140041	159304		332	292	13.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464537/9 Calibration Date: 07/15/2019 13:04
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07150009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.37	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150009.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jul-2019 13:04:15 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0083692-009
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 18:44:00 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 18:43:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.587	6.587	0.000	57968	0.2503	0.2697	M
5 DNX	1	6.907	6.907	0.000	43601	0.2503	0.2793	
6 MNX	1	7.367	7.367	0.000	46477	0.2918	0.3319	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 15-Jul-2019 18:44:01

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150009.D

Injection Date: 15-Jul-2019 13:04:15

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 9

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

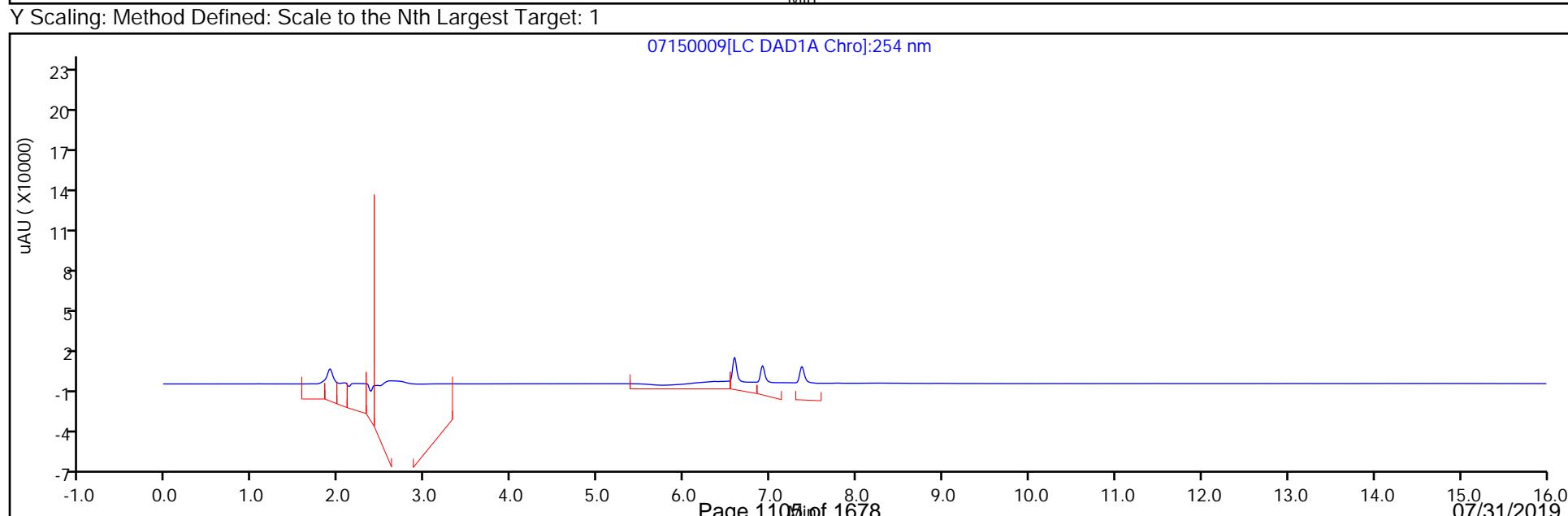
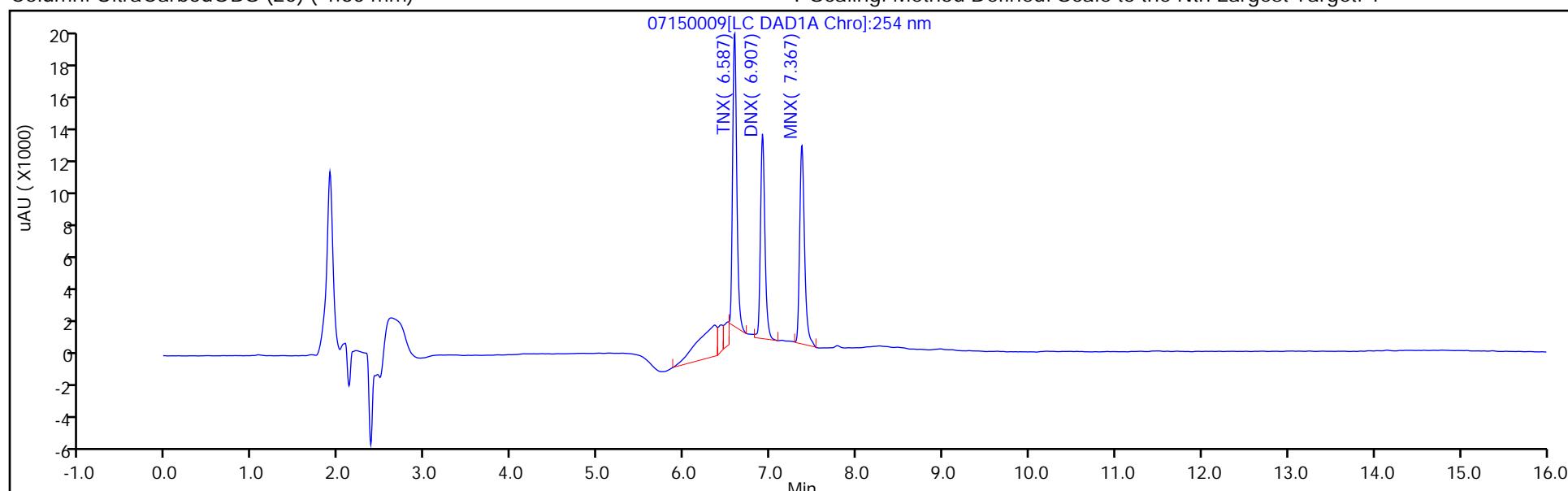
ALS Bottle#: 9

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

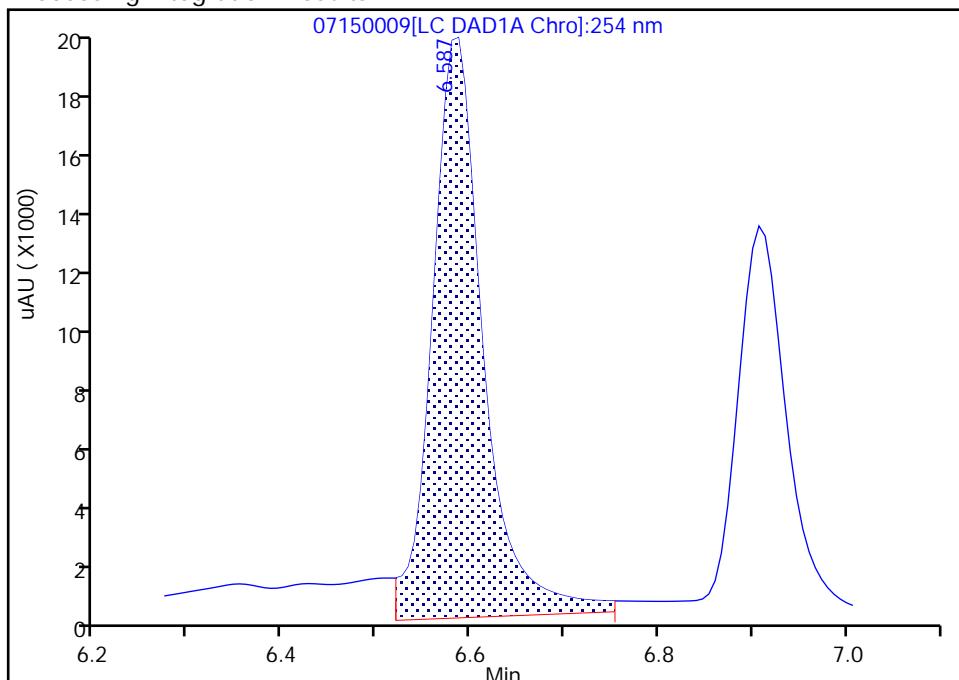
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150009.D
 Injection Date: 15-Jul-2019 13:04:15 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

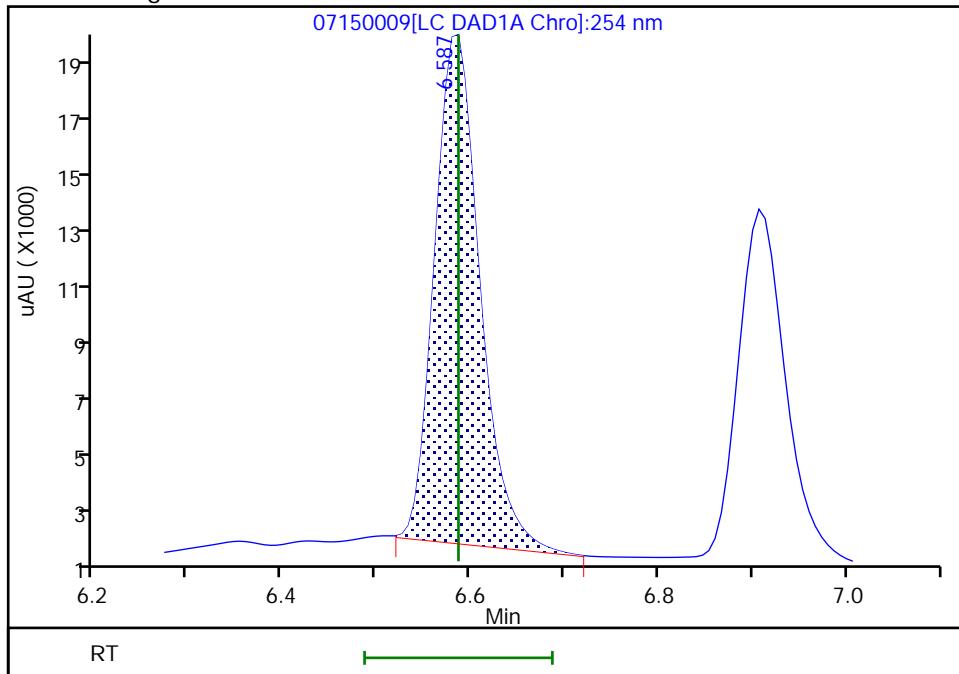
RT: 6.59
 Area: 68722
 Amount: 0.319691
 Amount Units: ug/mL

Processing Integration Results



RT: 6.59
 Area: 57968
 Amount: 0.269664
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 16:41:34

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

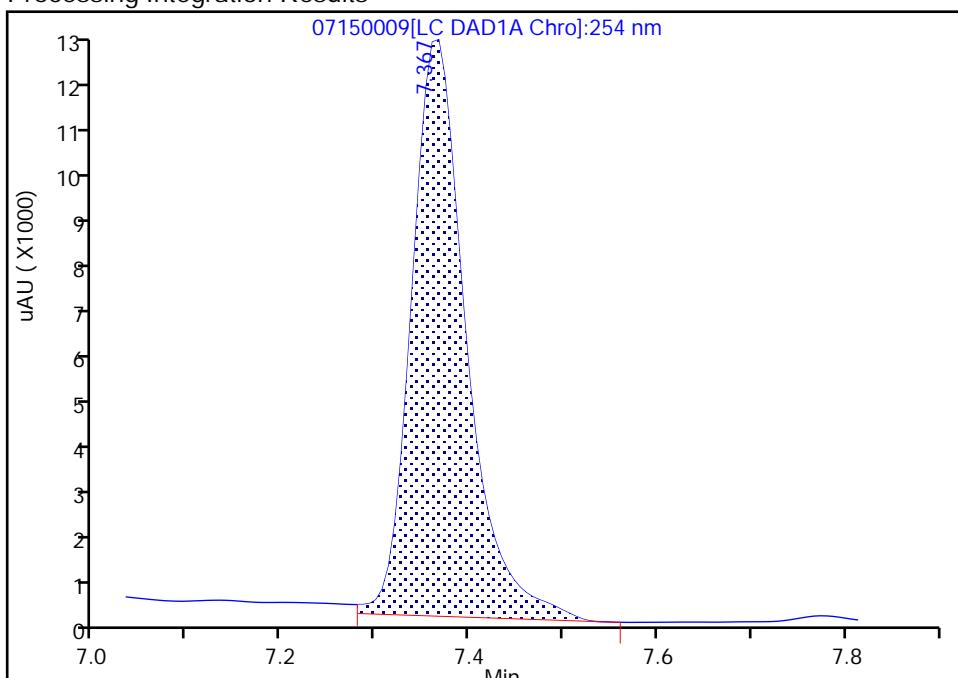
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 Injection Date: 15-Jul-2019 13:04:15 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

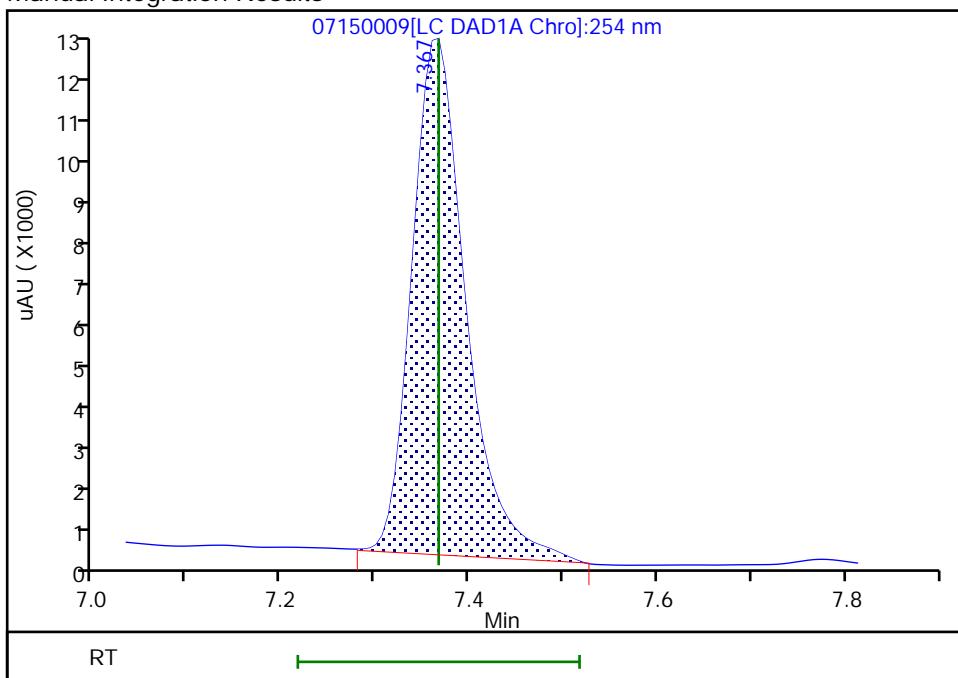
RT: 7.37
 Area: 47830
 Amount: 0.341543
 Amount Units: ug/mL

Processing Integration Results



RT: 7.37
 Area: 46477
 Amount: 0.331881
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 18:43:45

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464537/20 Calibration Date: 07/15/2019 17:16
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07150020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	93152		254	250	1.4	15.0
RDX	Ave	111120	112596		253	250	1.3	15.0
Picric acid	Ave	90734	89268		246	250	-1.6	15.0
1,3,5-Trinitrobenzene	Ave	245077	257404		263	250	5.0	15.0
1,3-Dinitrobenzene	Ave	311175	321678		259	250	3.4	15.0
Nitrobenzene	Ave	198903	194012		244	251	-2.5	15.0
Tetryl	Ave	161957	167384		258	250	3.4	15.0
Nitroglycerin	Ave	71108	75824		2670	2500	6.6	15.0
2,4,6-Trinitrotoluene	Ave	227277	232044		256	251	2.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	170636		257	251	2.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	215825		264	251	5.2	15.0
2,6-Dinitrotoluene	Ave	159284	160179		252	251	0.6	15.0
2,4-Dinitrotoluene	Ave	300447	311749		260	251	3.8	15.0
2-Nitrotoluene	Ave	129784	126935		245	251	-2.2	15.0
4-Nitrotoluene	Ave	110255	110231		251	251	-0.0	15.0
3-Nitrotoluene	Ave	145122	142821		247	251	-1.6	15.0
PETN	Ave	74289	80214		2700	2500	8.0	15.0
1,2-Dinitrobenzene	Ave	139328	145544		261	250	4.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464537/20 Calibration Date: 07/15/2019 17:16
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/01/2019 17:23
Lab File ID: 07150020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.53	6.83
RDX	7.78	7.62	7.92
Picric acid	8.17	8.00	8.30
1,3,5-Trinitrobenzene	8.91	8.75	9.05
1,3-Dinitrobenzene	9.57	9.41	9.71
Nitrobenzene	9.96	9.80	10.10
Tetryl	10.28	10.12	10.42
Nitroglycerin	10.79	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.14	11.34
4-Amino-2,6-dinitrotoluene	11.44	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.73	11.62	11.82
2,6-Dinitrotoluene	11.86	11.76	11.96
2,4-Dinitrotoluene	12.07	11.96	12.16
2-Nitrotoluene	12.92	12.76	13.06
4-Nitrotoluene	13.36	13.20	13.50
3-Nitrotoluene	13.96	13.81	14.11
PETN	15.09	14.93	15.23
1,2-Dinitrobenzene	8.75	8.58	8.88

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150020.D
 Lims ID: CCV INT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jul-2019 17:16:36 ALS Bottle#: 7 Worklist Smp#: 20
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV INT
 Misc. Info.: 280-0083692-020
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub9
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 17:54:08 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh

Date: 15-Jul-2019 17:53:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.690	6.680	0.010	23288	0.2500	0.2536	M
7 RDX	1	7.783	7.774	0.009	28149	0.2500	0.2533	
8 2,4,6-Trinitrophenol	1	8.170	8.147	0.023	22317	0.2500	0.2460	
\$ 9 1,2-Dinitrobenzene	1	8.750	8.734	0.016	36386	0.2500	0.2612	
10 1,3,5-Trinitrobenzene	1	8.910	8.900	0.010	64351	0.2500	0.2626	
11 1,3-Dinitrobenzene	1	9.570	9.560	0.010	80500	0.2503	0.2587	
12 Nitrobenzene	1	9.956	9.947	0.009	48600	0.2505	0.2443	
14 Tetryl	1	10.276	10.267	0.009	41846	0.2500	0.2584	
15 Nitroglycerin	2	10.790	10.780	0.010	189559	2.50	2.67	
16 2,4,6-Trinitrotoluene	1	11.243	11.240	0.003	58243	0.2510	0.2563	
17 4-Amino-2,6-dinitrotoluene	1	11.436	11.427	0.009	42787	0.2508	0.2572	
18 2-Amino-4,6-dinitrotoluene	1	11.730	11.720	0.010	54118	0.2508	0.2637	
19 2,6-Dinitrotoluene	1	11.863	11.860	0.003	40165	0.2508	0.2522	
20 2,4-Dinitrotoluene	1	12.070	12.060	0.010	78093	0.2505	0.2599	
21 o-Nitrotoluene	1	12.916	12.907	0.009	31829	0.2508	0.2452	
22 p-Nitrotoluene	1	13.363	13.354	0.009	27668	0.2510	0.2509	
23 m-Nitrotoluene	1	13.963	13.960	0.003	35848	0.2510	0.2470	
24 PETN	2	15.090	15.080	0.010	200534	2.50	2.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330\TermStk_00058

Amount Added: 12.50

Units: uL

Report Date: 15-Jul-2019 17:54:08

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150020.D

Injection Date: 15-Jul-2019 17:16:36

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV INT

Worklist Smp#: 20

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

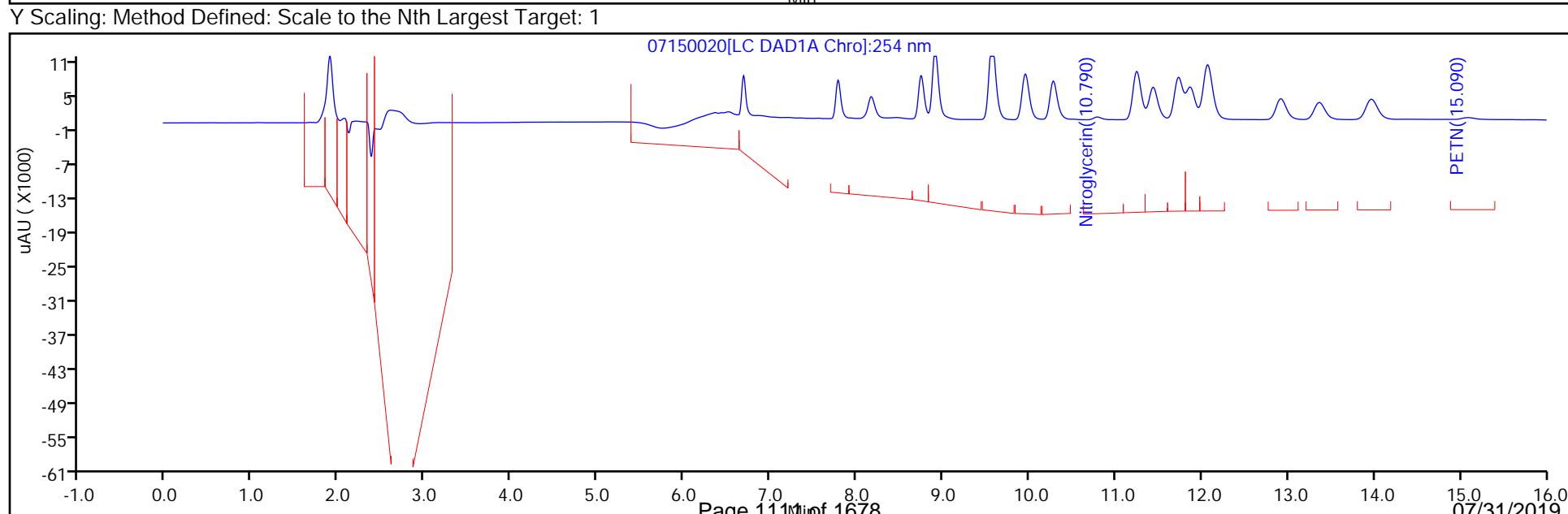
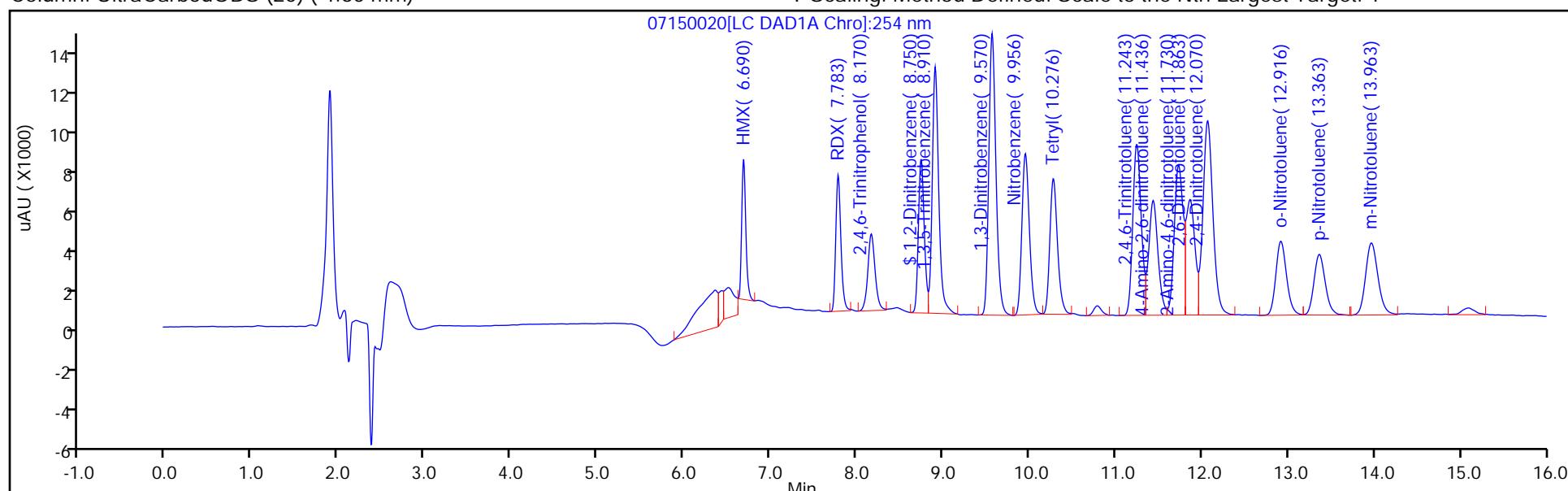
ALS Bottle#: 7

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

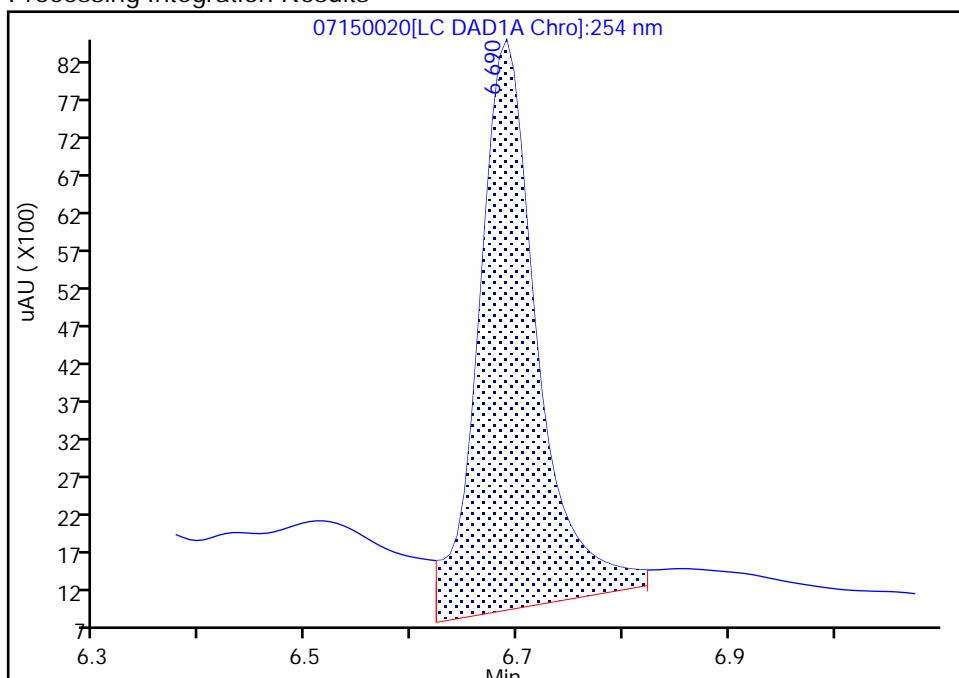
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150020.D
 Injection Date: 15-Jul-2019 17:16:36 Instrument ID: CHHPLC_X3
 Lims ID: CCV INT
 Client ID:
 Operator ID: hkf ALS Bottle#: 7 Worklist Smp#: 20
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

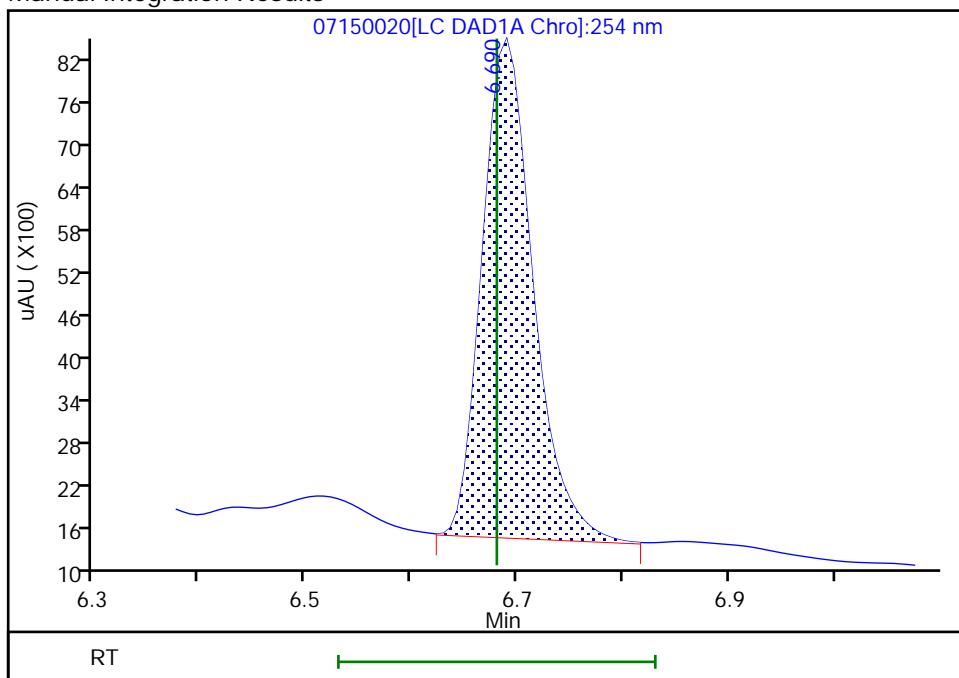
RT: 6.69
 Area: 29205
 Amount: 0.318022
 Amount Units: ug/mL

Processing Integration Results



RT: 6.69
 Area: 23288
 Amount: 0.253590
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 17:53:43

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464537/22 Calibration Date: 07/15/2019 18:02
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07150022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	225495		263	250	4.9	15.0
DNX	Ave	156126	171612		275	250	9.9	15.0
MNX	Ave	140041	153008		319	292	9.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Lab Sample ID: CCV 280-464537/22 Calibration Date: 07/15/2019 18:02
Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 07/02/2019 00:18
Lab File ID: 07150022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.92	6.81	7.01
MNX	7.37	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150022.D
 Lims ID: CCV DMT
 Client ID:
 Sample Type: CCV
 Inject. Date: 15-Jul-2019 18:02:36 ALS Bottle#: 9 Worklist Smp#: 22
 Injection Vol: 100.0 uL Dil. Factor: 1.0000
 Sample Info: CCV DMT
 Misc. Info.: 280-0083692-022
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Sublist: chrom-8330_X3*sub17
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 18:34:24 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 18:34:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.594	6.587	0.007	56430	0.2503	0.2625	M
5 DNX	1	6.920	6.907	0.013	42946	0.2503	0.2751	
6 MNX	1	7.374	7.367	0.007	44640	0.2918	0.3188	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 15-Jul-2019 18:34:25

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150022.D

Injection Date: 15-Jul-2019 18:02:36

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: CCV DMT

Worklist Smp#: 22

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

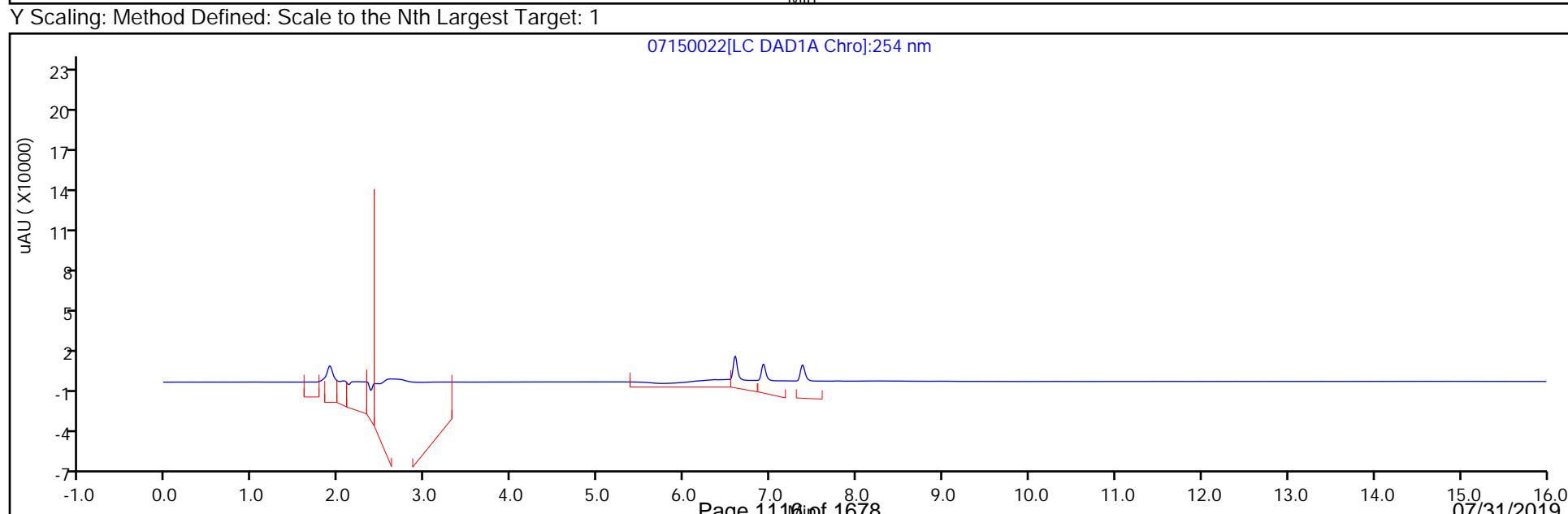
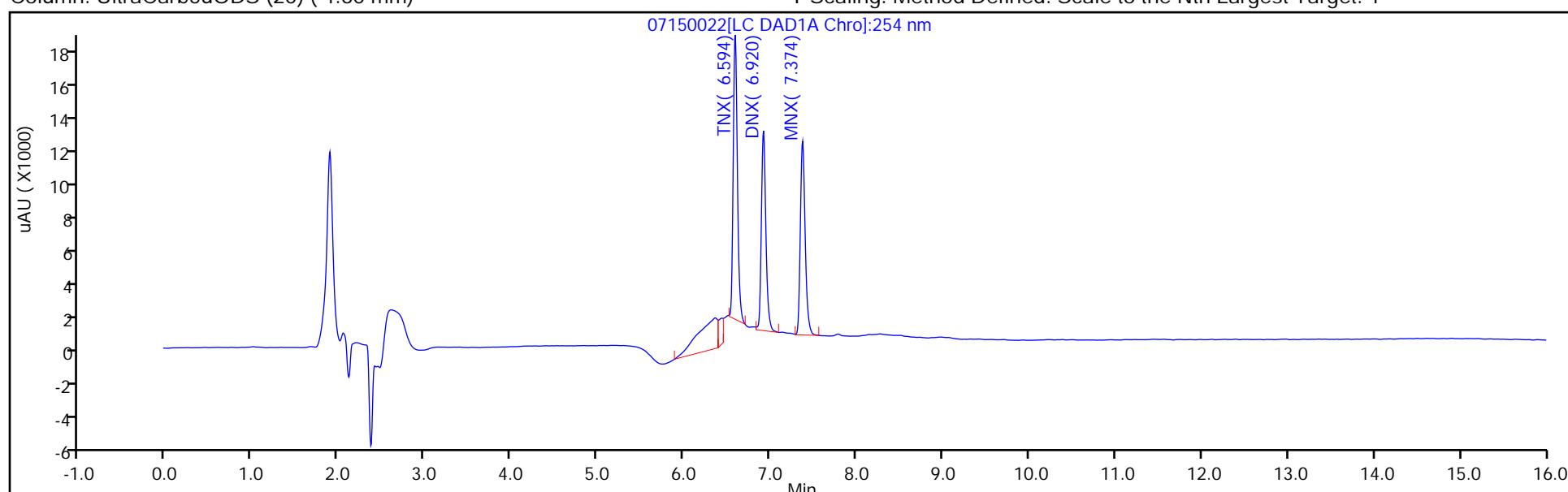
ALS Bottle#: 9

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

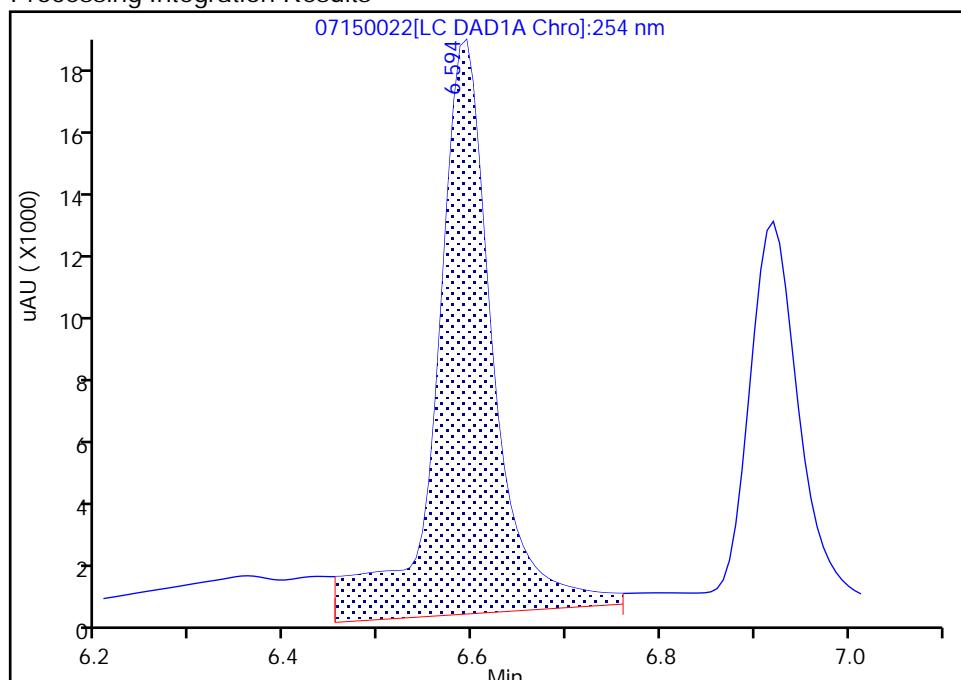
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150022.D
 Injection Date: 15-Jul-2019 18:02:36 Instrument ID: CHHPLC_X3
 Lims ID: CCV DMT
 Client ID:
 Operator ID: hkf ALS Bottle#: 9 Worklist Smp#: 22
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

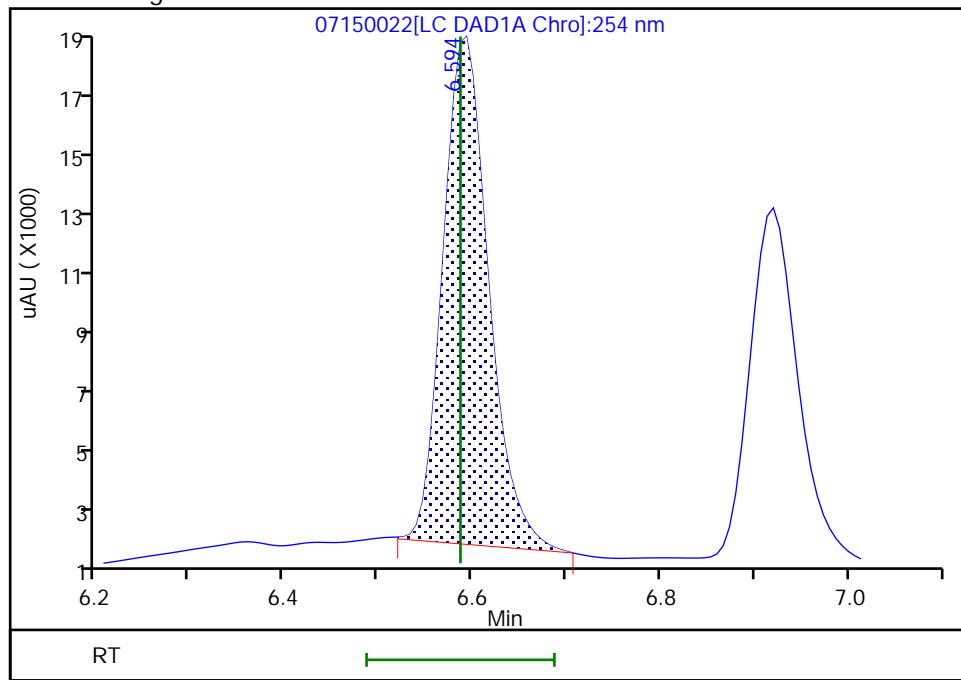
RT: 6.59
 Area: 74952
 Amount: 0.348672
 Amount Units: ug/mL

Processing Integration Results



RT: 6.59
 Area: 56430
 Amount: 0.262509
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 18:33:49

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 280-461170/1-A
Matrix: Water Lab File ID: 06130039.D
Analysis Method: 8330A Date Collected: _____
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 500 (mL) Date Analyzed: 06/14/2019 00:10
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.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.40	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	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	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	0.40	0.20	0.091
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	87		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130039.D
 Lims ID: MB 280-461170/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 14-Jun-2019 00:10:47 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: MB 280-461170/1-
 Misc. Info.: 280-0082810-039
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:23 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 08:56:27

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	6.496				ND		U
2 TNX	1	6.566				ND		
3 HMX	1	6.645				ND		
4 2,4-diamino-6-nitrotoluene	1	6.683				ND		
5 DNX	1	6.893				ND		
6 MNX	1	7.359				ND		U
7 RDX	1	7.758				ND		
8 2,4,6-Trinitrophenol	1	8.165				ND		U
\$ 9 1,2-Dinitrobenzene	1	8.735	8.738	-0.003	22618	0.2000	0.1738	
10 1,3,5-Trinitrobenzene	1	8.898				ND		
11 1,3-Dinitrobenzene	1	9.558				ND		
12 Nitrobenzene	1	9.945				ND		
13 3,5-Dinitroaniline	1	10.189				ND		
14 Tetryl	1	10.265				ND		
15 Nitroglycerin	2	10.765				ND		
16 2,4,6-Trinitrotoluene	1	11.218				ND		
17 4-Amino-2,6-dinitrotoluene	1	11.405				ND		
18 2-Amino-4,6-dinitrotoluene	1	11.698				ND		
19 2,6-Dinitrotoluene	1	11.832				ND		
20 2,4-Dinitrotoluene	1	12.032				ND		
21 o-Nitrotoluene	1	12.865				ND		
22 p-Nitrotoluene	1	13.305				ND		
23 m-Nitrotoluene	1	13.898				ND		U
24 PETN	2	14.978				ND		
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

U - Marked Undetected

Report Date: 14-Jun-2019 10:03:28

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130039.D

Injection Date: 14-Jun-2019 00:10:47

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: MB 280-461170/1-A

Worklist Smp#: 39

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

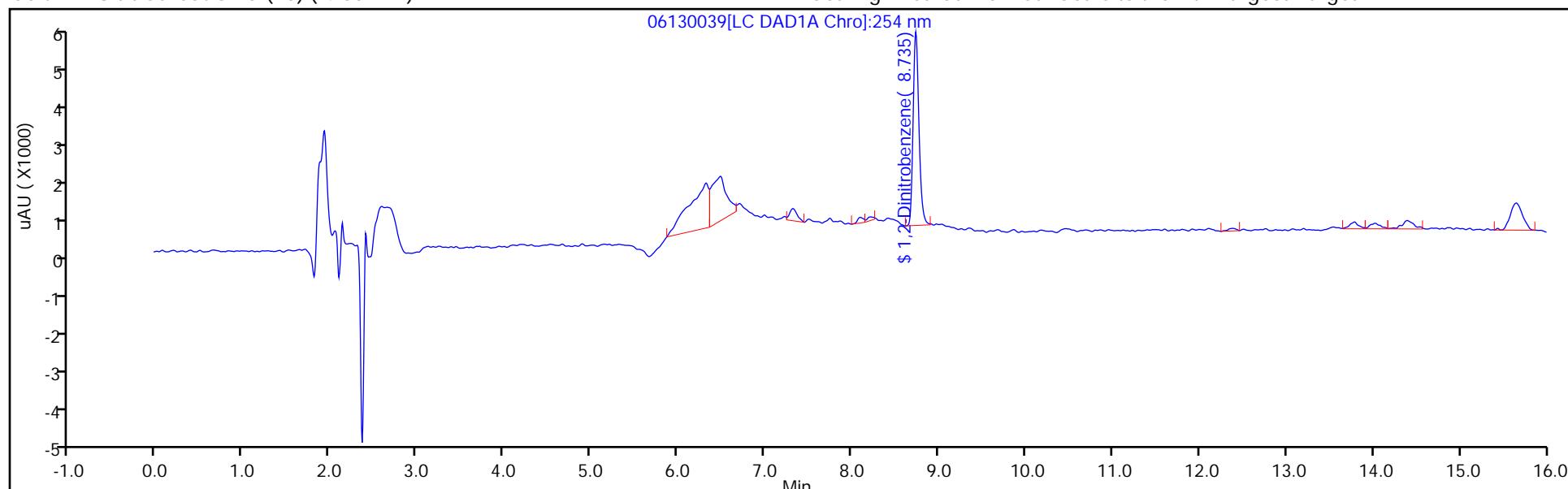
ALS Bottle#: 39

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130039.D
 Lims ID: MB 280-461170/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 14-Jun-2019 00:10:47 ALS Bottle#: 39 Worklist Smp#: 39
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: MB 280-461170/1-
 Misc. Info.: 280-0082810-039
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:23 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 08:56:27

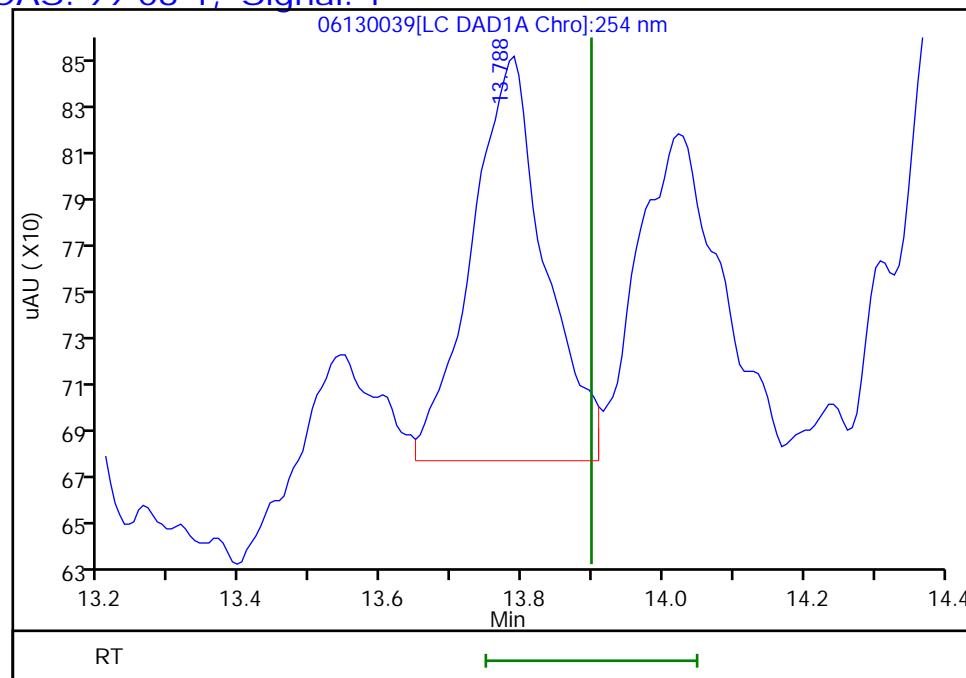
Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1738	86.92

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130039.D
Injection Date: 14-Jun-2019 00:10:47 Instrument ID: CHHPLC_X3
Lims ID: MB 280-461170/1-A
Client ID:
Operator ID: hkf ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.79
Response: 1240
Amount: 0.008361



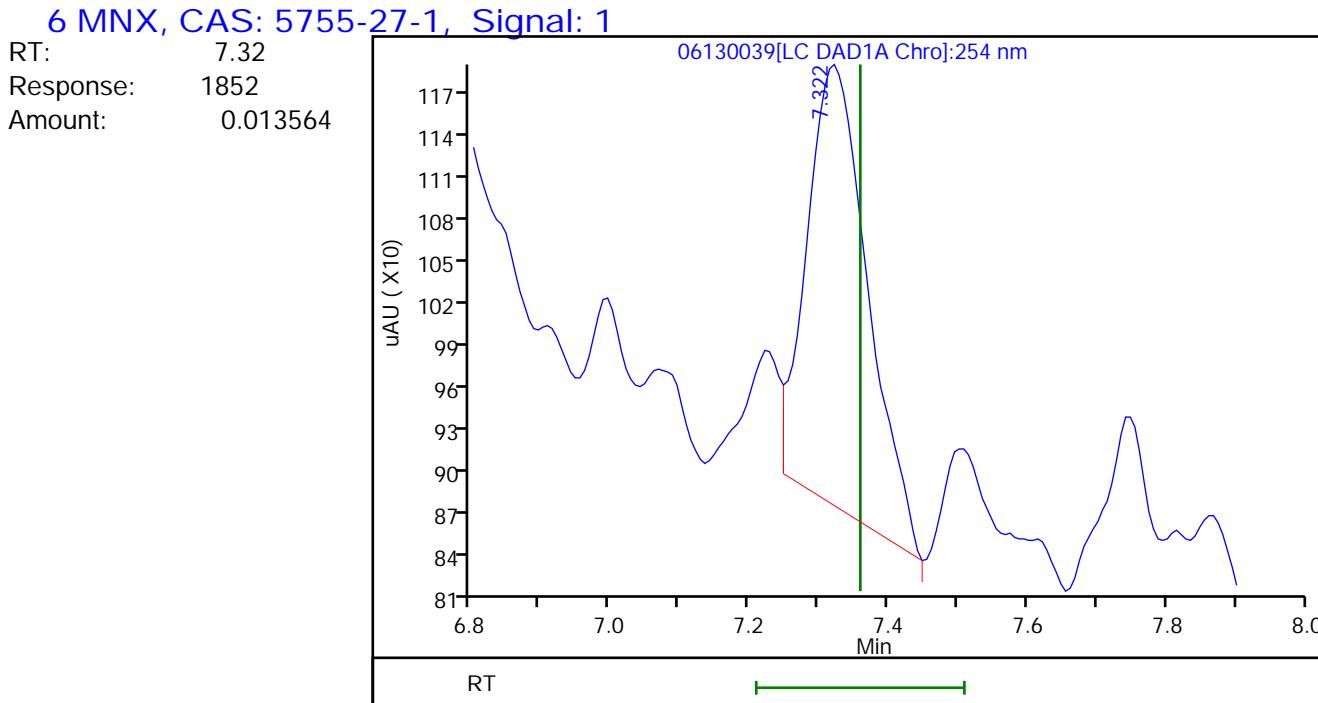
Reviewer: fiedlerh, 14-Jun-2019 08:56:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130039.D
Injection Date: 14-Jun-2019 00:10:47 Instrument ID: CHHPLC_X3
Lims ID: MB 280-461170/1-A
Client ID:
Operator ID: hkf ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm



Reviewer: fiedlerh, 14-Jun-2019 08:56:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 280-461286/1-A
Matrix: Water Lab File ID: 06140043.D
Analysis Method: 8330A Date Collected: _____
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 500 (mL) Date Analyzed: 06/15/2019 07:27
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.40	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	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	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	0.40	0.20	0.091
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D
 Lims ID: MB 280-461286/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 15-Jun-2019 07:27:19 ALS Bottle#: 43 Worklist Smp#: 43
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: MB 280-461286/1-
 Misc. Info.: 280-0082867-043
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:12:55

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	6.479	6.500	-0.021	3508	0.0158	7M	
2 TNX	1		6.566			ND		
3 HMX	1		6.643			ND		
4 2,4-diamino-6-nitrotoluene	1		6.687			ND		
5 DNX	1		6.893			ND		
6 MNX	1		7.359			ND		U
7 RDX	1		7.763			ND		
8 2,4,6-Trinitrophenol	1		8.196			ND		
\$ 9 1,2-Dinitrobenzene	1	8.753	8.743	0.010	25626	0.2000	0.1970	
10 1,3,5-Trinitrobenzene	1		8.896			ND		
11 1,3-Dinitrobenzene	1		9.563			ND		
12 Nitrobenzene	1		9.949			ND		
13 3,5-Dinitroaniline	1		10.213			ND		
14 Tetryl	1		10.276			ND		
15 Nitroglycerin	2		10.776			ND		
16 2,4,6-Trinitrotoluene	1		11.229			ND		
17 4-Amino-2,6-dinitrotoluene	1		11.429			ND		
18 2-Amino-4,6-dinitrotoluene	1		11.716			ND		
19 2,6-Dinitrotoluene	1		11.843			ND		
20 2,4-Dinitrotoluene	1		12.043			ND		
21 o-Nitrotoluene	1		12.883			ND		
22 p-Nitrotoluene	1		13.323			ND		
23 m-Nitrotoluene	1		13.923			ND		U
24 PETN	2		15.016			ND		
25 Ammonium Picrate	1		0.000			ND		

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 17-Jun-2019 10:45:21

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D

Injection Date: 15-Jun-2019 07:27:19

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: MB 280-461286/1-A

Worklist Smp#: 43

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

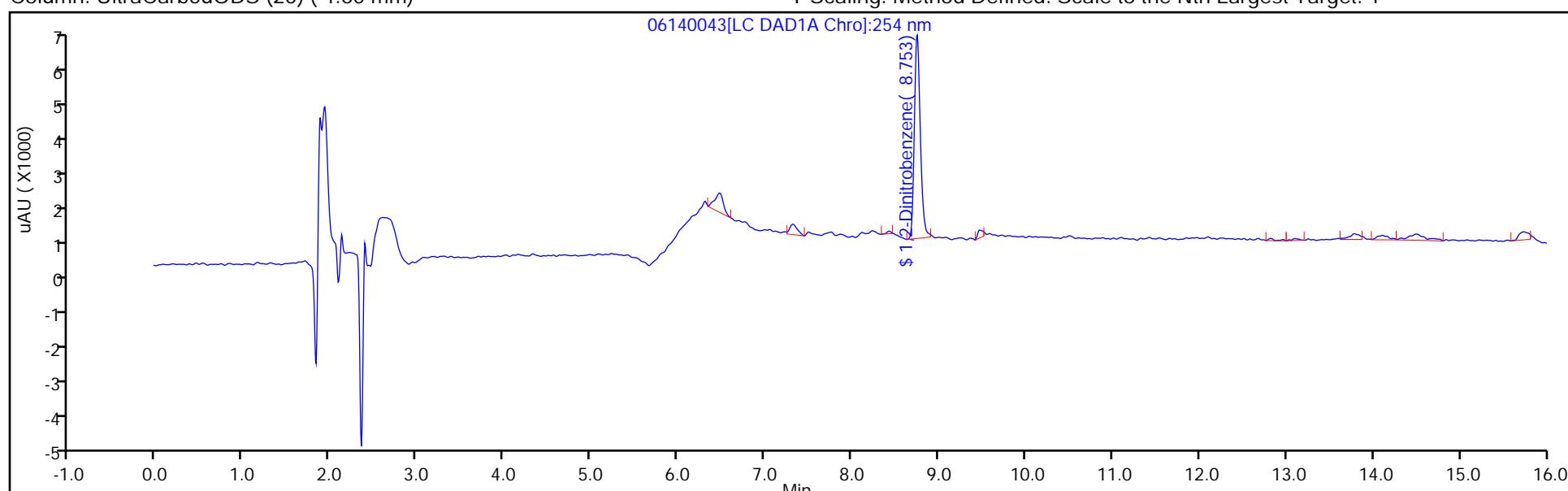
ALS Bottle#: 43

Method: 8330_X3

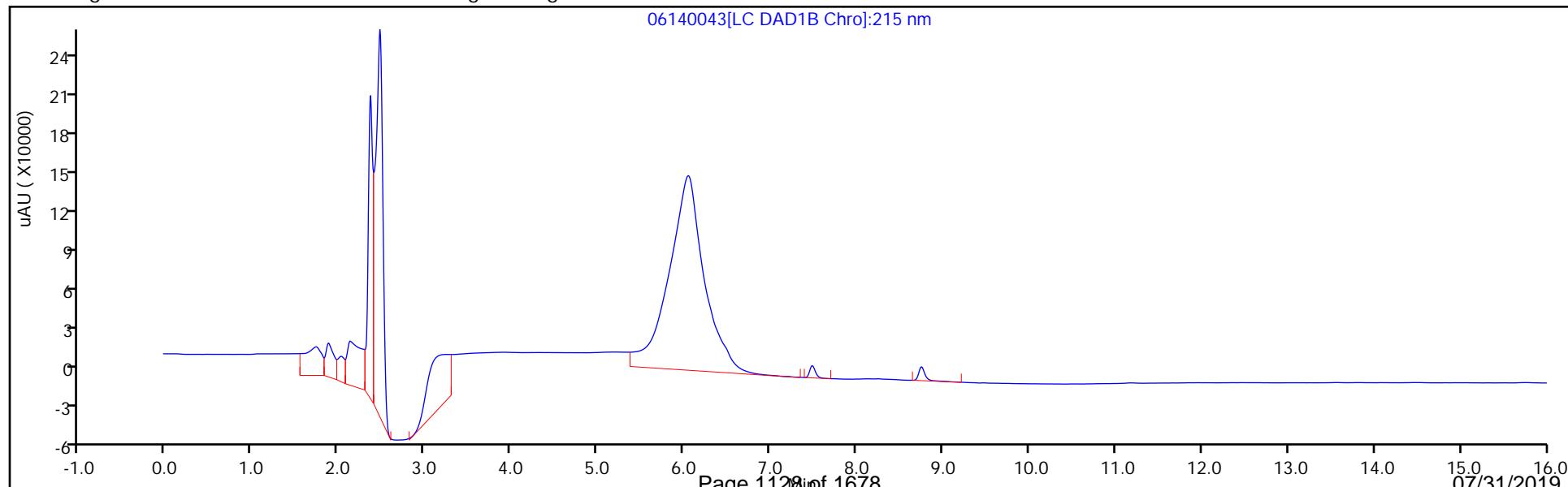
Limit Group: GCSV - 8330

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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D
 Lims ID: MB 280-461286/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 15-Jun-2019 07:27:19 ALS Bottle#: 43 Worklist Smp#: 43
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: MB 280-461286/1-
 Misc. Info.: 280-0082867-043
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:12:55

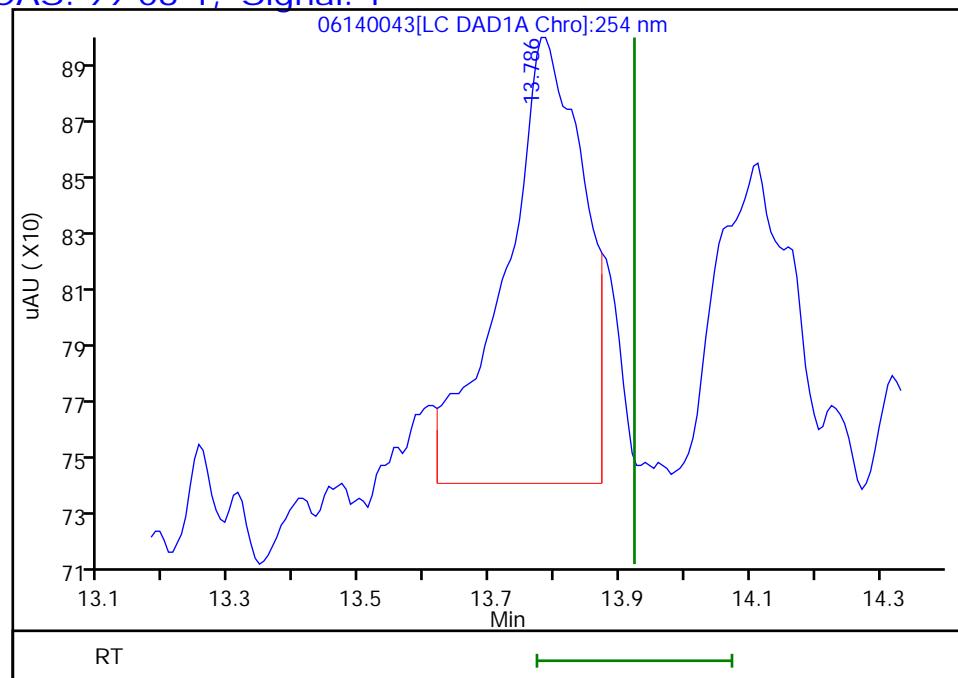
Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1970	98.48

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D
Injection Date: 15-Jun-2019 07:27:19 Instrument ID: CHHPLC_X3
Lims ID: MB 280-461286/1-A
Client ID:
Operator ID: hkf 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

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.79
Response: 1253
Amount: 0.008449



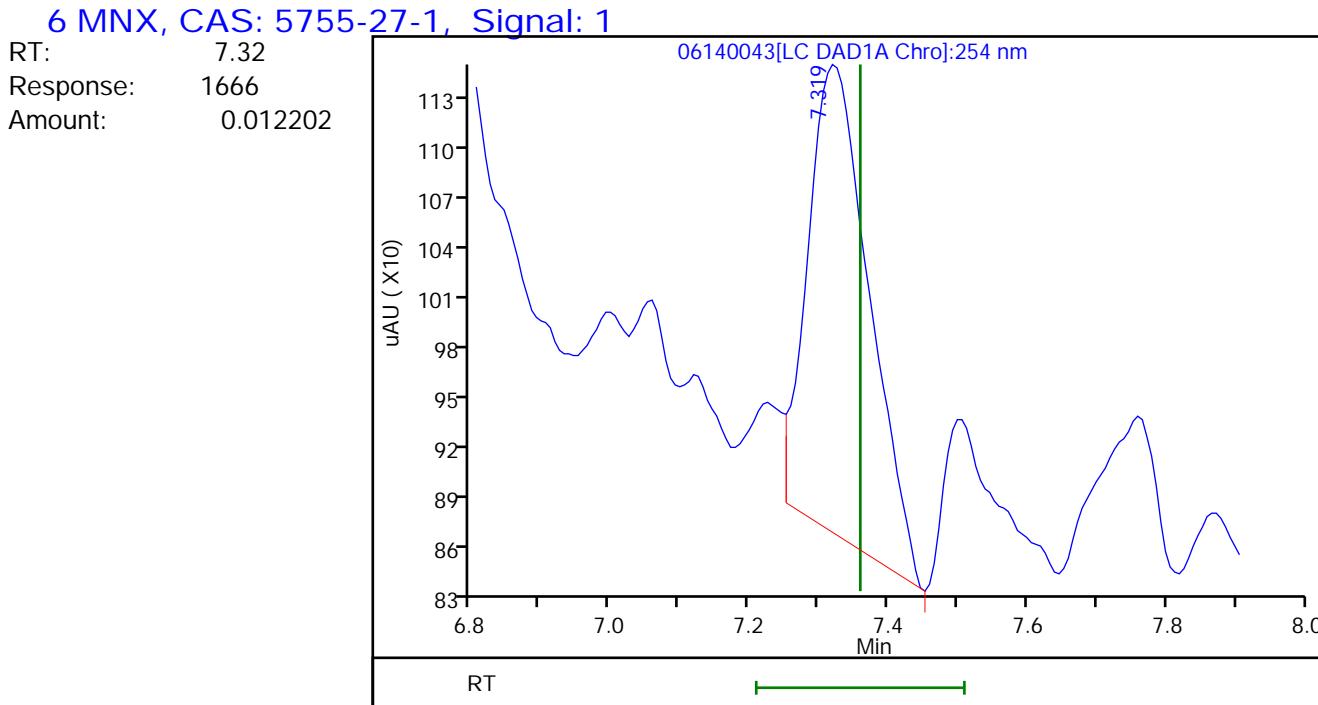
Reviewer: fiedlerh, 17-Jun-2019 10:12:55

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D
 Injection Date: 15-Jun-2019 07:27:19 Instrument ID: CHHPLC_X3
 Lims ID: MB 280-461286/1-A
 Client ID:
 Operator ID: hkf 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



Reviewer: fiedlerh, 17-Jun-2019 10:12:55

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.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 280-464162/1-A
Matrix: Water Lab File ID: 07110045.D
Analysis Method: 8330A Date Collected: _____
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 500 (mL) Date Analyzed: 07/12/2019 00:48
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.40	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	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.40	0.20	0.091
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110045.D
 Lims ID: MB 280-464162/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 12-Jul-2019 00:48:01 ALS Bottle#: 45 Worklist Smp#: 45
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: MB 280-464162/1-
 Misc. Info.: 280-0083617-045
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:34

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	6.539				ND		U
2 TNX	1	6.598				ND		U
3 HMX	1	6.692				ND		
4 2,4-diamino-6-nitrotoluene	1	6.719				ND		
5 DNX	1	6.924				ND		
6 MNX	1	7.378				ND		
7 RDX	1	7.799				ND		
8 2,4,6-Trinitrophenol	1	8.199				ND		U
\$ 9 1,2-Dinitrobenzene	1	8.746	8.759	-0.013	26462	0.2000	0.1899	
10 1,3,5-Trinitrobenzene	1	8.919				ND		
11 1,3-Dinitrobenzene	1	9.578				ND		
12 Nitrobenzene	1	9.965				ND		
13 3,5-Dinitroaniline	1	10.206				ND		
14 Tetryl	1	10.285				ND		
15 Nitroglycerin	2	10.792				ND		
16 2,4,6-Trinitrotoluene	1	11.258				ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445				ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738				ND		
19 2,6-Dinitrotoluene	1	11.878				ND		
20 2,4-Dinitrotoluene	1	12.078				ND		
21 o-Nitrotoluene	1	12.925				ND		
22 p-Nitrotoluene	1	13.372				ND		
23 m-Nitrotoluene	1	13.978				ND		
24 PETN	2	15.098				ND		
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

U - Marked Undetected

Report Date: 12-Jul-2019 09:20:32

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110045.D

Injection Date: 12-Jul-2019 00:48:01

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: MB 280-464162/1-A

Worklist Smp#: 45

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

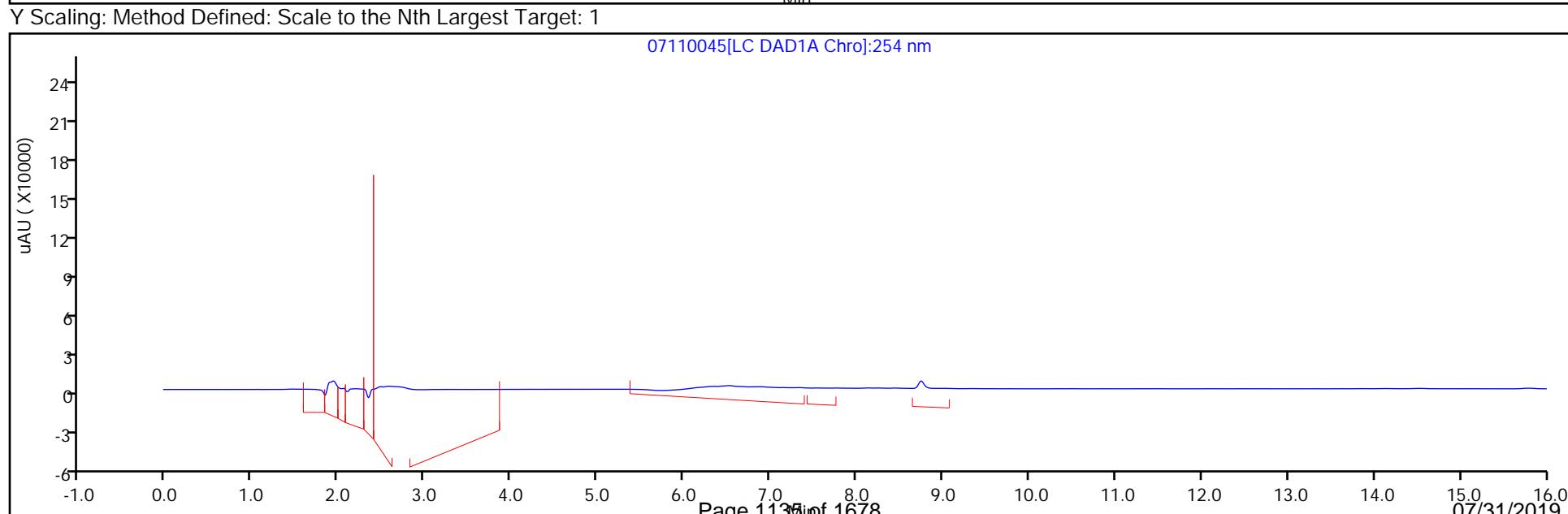
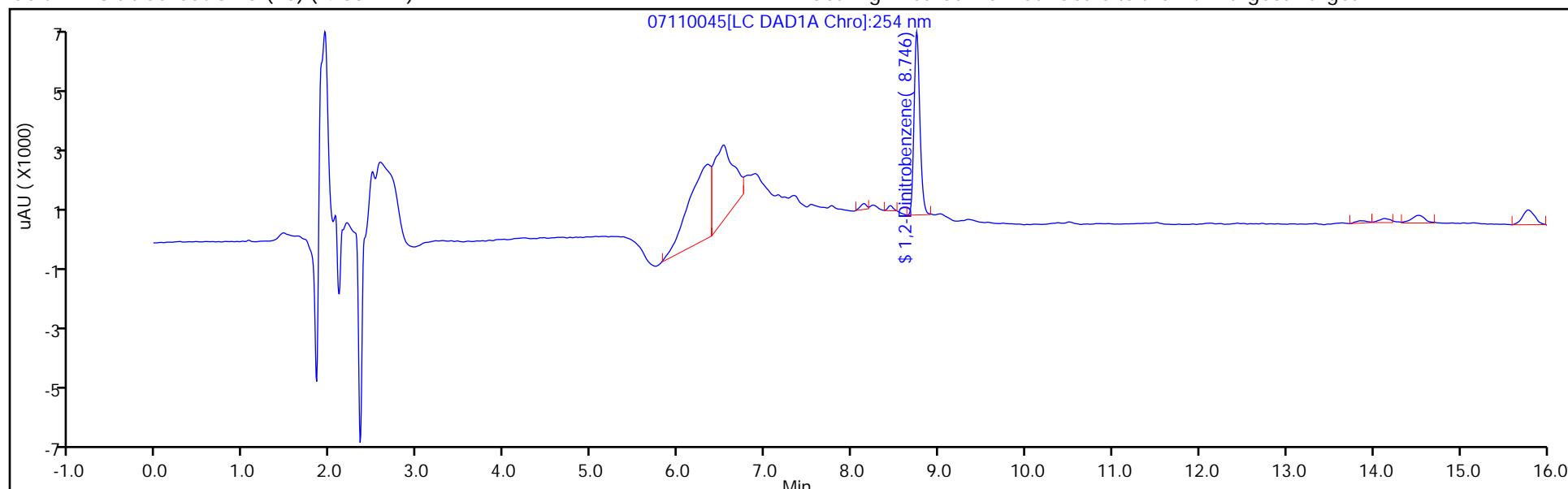
ALS Bottle#: 45

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110045.D
 Lims ID: MB 280-464162/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 12-Jul-2019 00:48:01 ALS Bottle#: 45 Worklist Smp#: 45
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: MB 280-464162/1-
 Misc. Info.: 280-0083617-045
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1899	94.96

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 280-461170/2-A
Matrix: Water Lab File ID: 06130040.D
Analysis Method: 8330A Date Collected: _____
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 500 (mL) Date Analyzed: 06/14/2019 00:34
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.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.13		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	2.05		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.89		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.97		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	1.91		0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.89		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.25	Q	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.51		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.77		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.41	Q	1.0	0.40	0.20
2691-41-0	HMX	1.94	M	0.40	0.20	0.088
98-95-3	Nitrobenzene	1.51		0.40	0.20	0.091
121-82-4	RDX	2.03		0.40	0.40	0.16
479-45-8	Tetryl	2.00		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130040.D
 Lims ID: LCS 280-461170/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 14-Jun-2019 00:34:35 ALS Bottle#: 40 Worklist Smp#: 40
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 280-461170/2
 Misc. Info.: 280-0082810-040
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:23 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 08:56:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.649	6.645	0.004	17280	0.2000	0.1937	M
7 RDX	1	7.763	7.758	0.005	21639	0.2000	0.2029	
8 2,4,6-Trinitrophenol	1	8.163	8.165	-0.002	18668	0.2000	0.2228	
\$ 9 1,2-Dinitrobenzene	1	8.736	8.738	-0.002	24630	0.2000	0.1893	
10 1,3,5-Trinitrobenzene	1	8.896	8.898	-0.002	48902	0.2000	0.2133	
11 1,3-Dinitrobenzene	1	9.556	9.558	-0.002	61519	0.2000	0.2045	
12 Nitrobenzene	1	9.936	9.945	-0.009	29802	0.2000	0.1514	
14 Tetryl	1	10.263	10.265	-0.002	33651	0.2000	0.2004	
15 Nitroglycerin	2	10.763	10.765	-0.002	134969	2.00	1.93	
16 2,4,6-Trinitrotoluene	1	11.216	11.218	-0.002	42331	0.2000	0.1893	
17 4-Amino-2,6-dinitrotoluene	1	11.409	11.405	0.004	28719	0.2000	0.1768	
18 2-Amino-4,6-dinitrotoluene	1	11.696	11.698	-0.002	37316	0.2000	0.1889	
19 2,6-Dinitrotoluene	1	11.829	11.832	-0.003	29888	0.2000	0.1909	
20 2,4-Dinitrotoluene	1	12.029	12.032	-0.003	58516	0.2000	0.1967	
21 o-Nitrotoluene	1	12.863	12.865	-0.002	16426	0.2000	0.1251	
22 p-Nitrotoluene	1	13.303	13.305	-0.002	15850	0.2000	0.1406	
23 m-Nitrotoluene	1	13.896	13.898	-0.002	22391	0.2000	0.1510	
24 PETN	2	14.983	14.978	0.005	150330	2.00	2.05	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 14-Jun-2019 10:03:29

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190613-82810.b\\06130040.D

Injection Date: 14-Jun-2019 00:34:35

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: LCS 280-461170/2-A

Worklist Smp#: 40

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

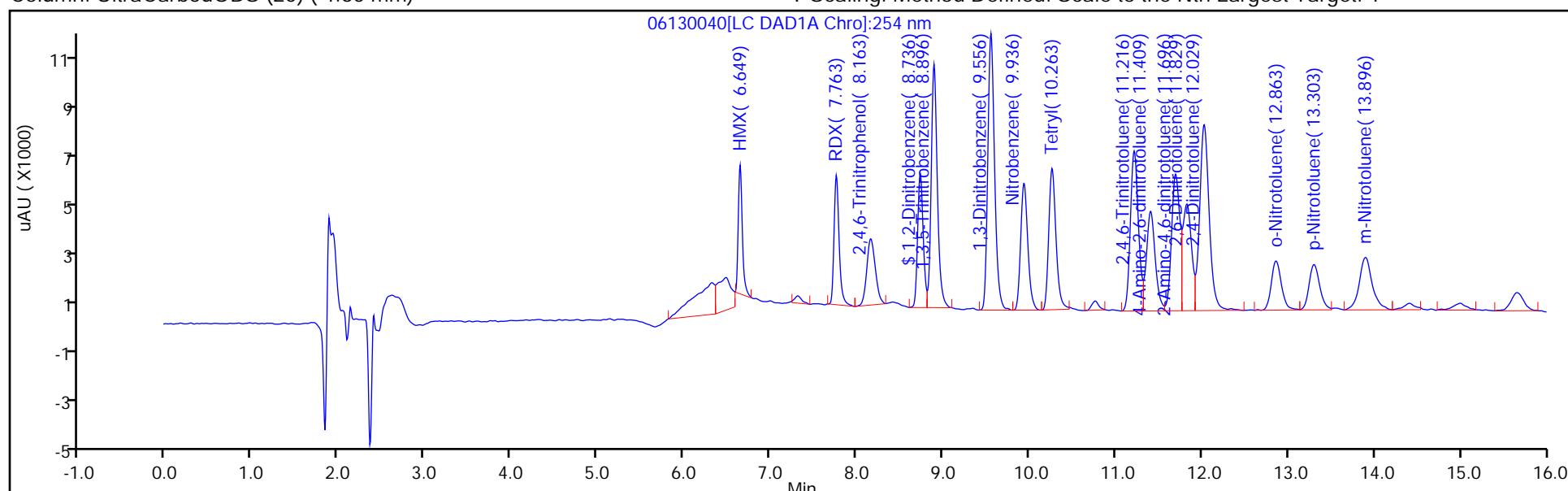
ALS Bottle#: 40

Method: 8330_X3

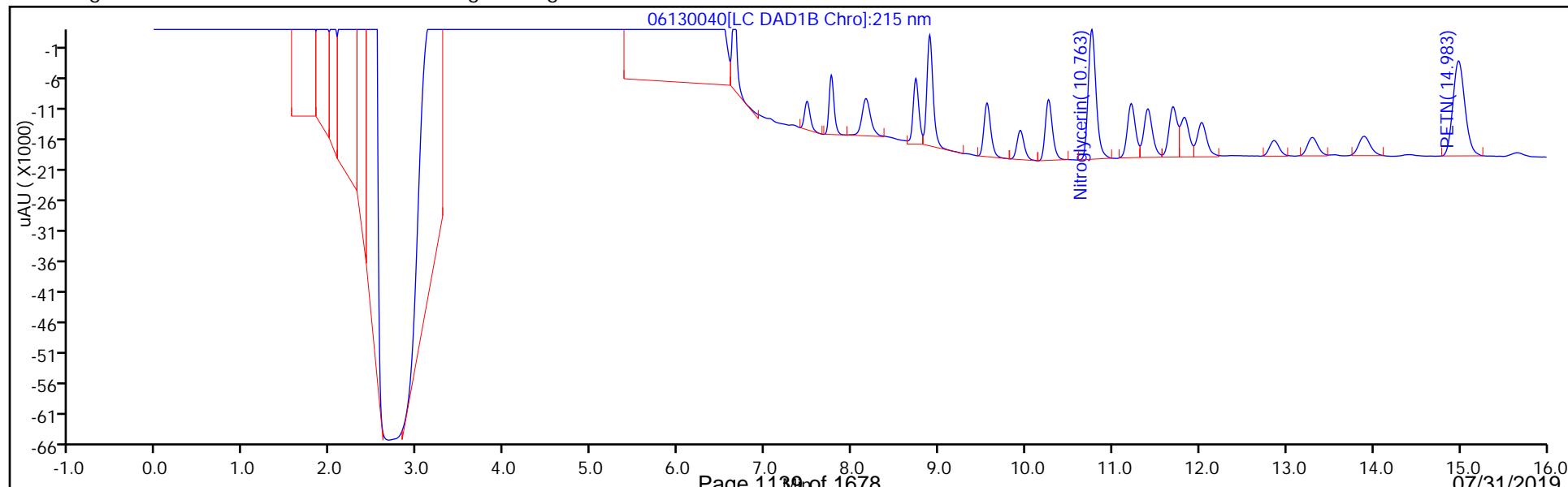
Limit Group: GCSV - 8330

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: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130040.D
 Lims ID: LCS 280-461170/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 14-Jun-2019 00:34:35 ALS Bottle#: 40 Worklist Smp#: 40
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 280-461170/2
 Misc. Info.: 280-0082810-040
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 14-Jun-2019 10:03:23 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0303

First Level Reviewer: fiedlerh Date: 14-Jun-2019 08:56:38

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1893	94.65

Eurofins TestAmerica, Denver

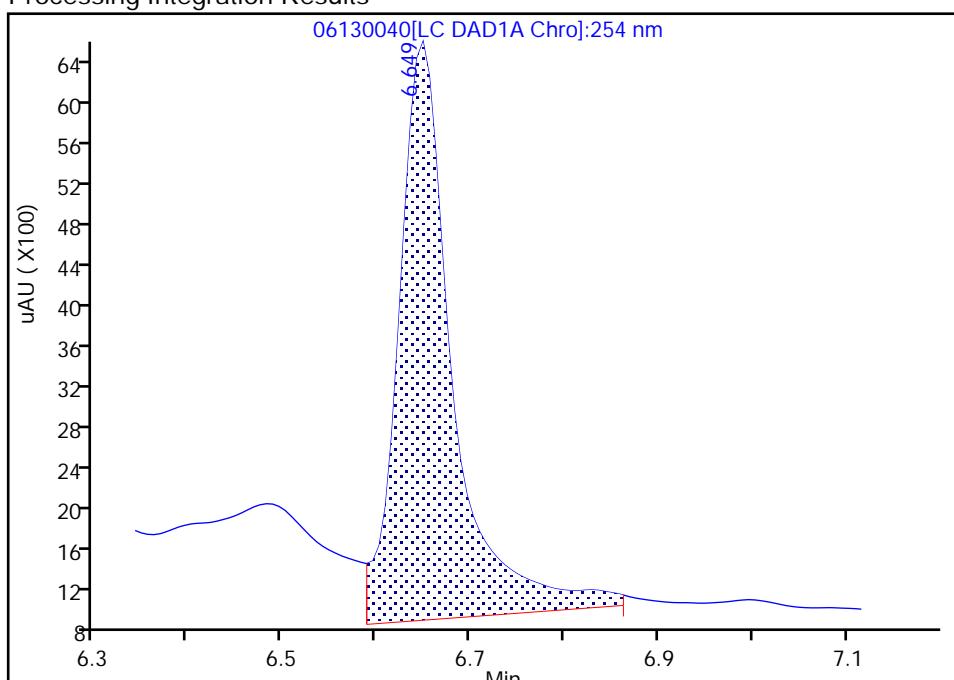
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130040.D
 Injection Date: 14-Jun-2019 00:34:35 Instrument ID: CHHPLC_X3
 Lims ID: LCS 280-461170/2-A
 Client ID:
 Operator ID: hkf ALS Bottle#: 40 Worklist Smp#: 40
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

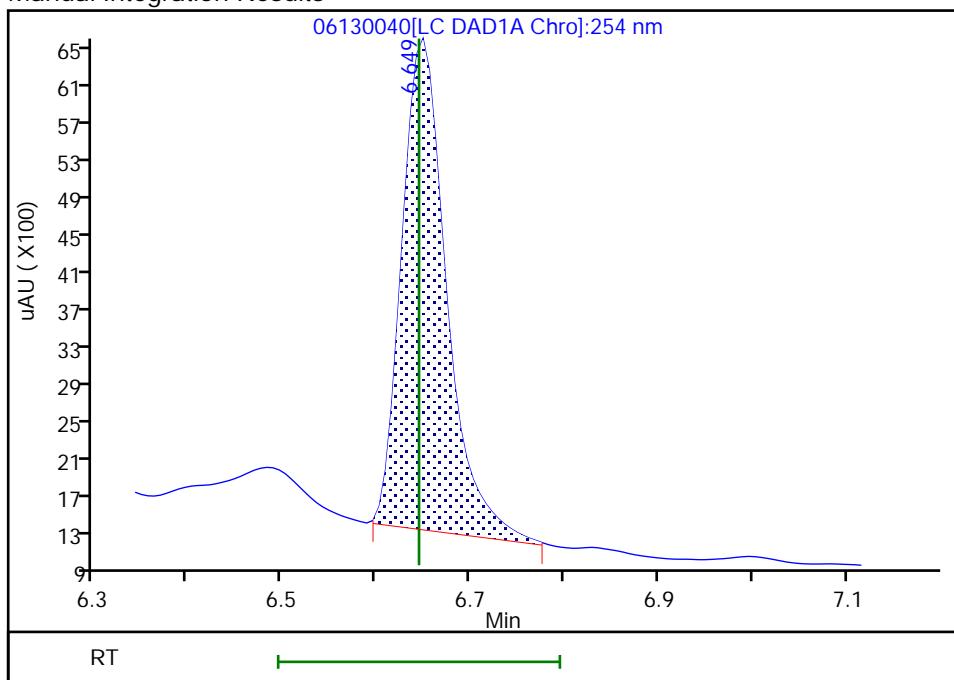
RT: 6.65
 Area: 22906
 Amount: 0.256776
 Amount Units: ug/mL

Processing Integration Results



RT: 6.65
 Area: 17280
 Amount: 0.193709
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 14-Jun-2019 08:56:37

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 280-461286/2-A
Matrix: Water Lab File ID: 06140044.D
Analysis Method: 8330A Date Collected: _____
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 500 (mL) Date Analyzed: 06/15/2019 07:51
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.07		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	1.99		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.81		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.89		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	1.90	M	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.78	M	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.28	Q	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.45		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.66		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.42		1.0	0.40	0.20
2691-41-0	HMX	1.95		0.40	0.20	0.088
98-95-3	Nitrobenzene	1.55		0.40	0.20	0.091
121-82-4	RDX	1.99		0.40	0.40	0.16
479-45-8	Tetryl	1.95		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140044.D
 Lims ID: LCS 280-461286/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 15-Jun-2019 07:51:07 ALS Bottle#: 44 Worklist Smp#: 44
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 280-461286/2
 Misc. Info.: 280-0082867-044
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:13:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.645	6.643	0.002	17390	0.2000	0.1949	
7 RDX	1	7.765	7.763	0.002	21187	0.2000	0.1987	
8 2,4,6-Trinitrophenol	1	8.172	8.196	-0.024	19216	0.2000	0.2293	
\$ 9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	25047	0.2000	0.1925	
10 1,3,5-Trinitrobenzene	1	8.905	8.896	0.009	47528	0.2000	0.2073	
11 1,3-Dinitrobenzene	1	9.578	9.563	0.015	59909	0.2000	0.1991	
12 Nitrobenzene	1	9.965	9.949	0.016	30540	0.2000	0.1552	
14 Tetryl	1	10.298	10.276	0.022	32692	0.2000	0.1946	
15 Nitroglycerin	2	10.798	10.776	0.022	131290	2.00	1.88	
16 2,4,6-Trinitrotoluene	1	11.258	11.229	0.029	40561	0.2000	0.1814	
17 4-Amino-2,6-dinitrotoluene	1	11.465	11.429	0.036	27006	0.2000	0.1663	
18 2-Amino-4,6-dinitrotoluene	1	11.758	11.716	0.042	35230	0.2000	0.1783	M
19 2,6-Dinitrotoluene	1	11.878	11.843	0.035	29750	0.2000	0.1900	M
20 2,4-Dinitrotoluene	1	12.085	12.043	0.042	56194	0.2000	0.1889	
21 o-Nitrotoluene	1	12.925	12.883	0.042	16783	0.2000	0.1278	
22 p-Nitrotoluene	1	13.371	13.323	0.048	15953	0.2000	0.1415	
23 m-Nitrotoluene	1	13.971	13.923	0.048	21568	0.2000	0.1454	
24 PETN	2	15.065	15.016	0.049	145283	2.00	1.98	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-Jun-2019 10:45:23

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190614-82867.b\\06140044.D

Injection Date: 15-Jun-2019 07:51:07

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: LCS 280-461286/2-A

Worklist Smp#: 44

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

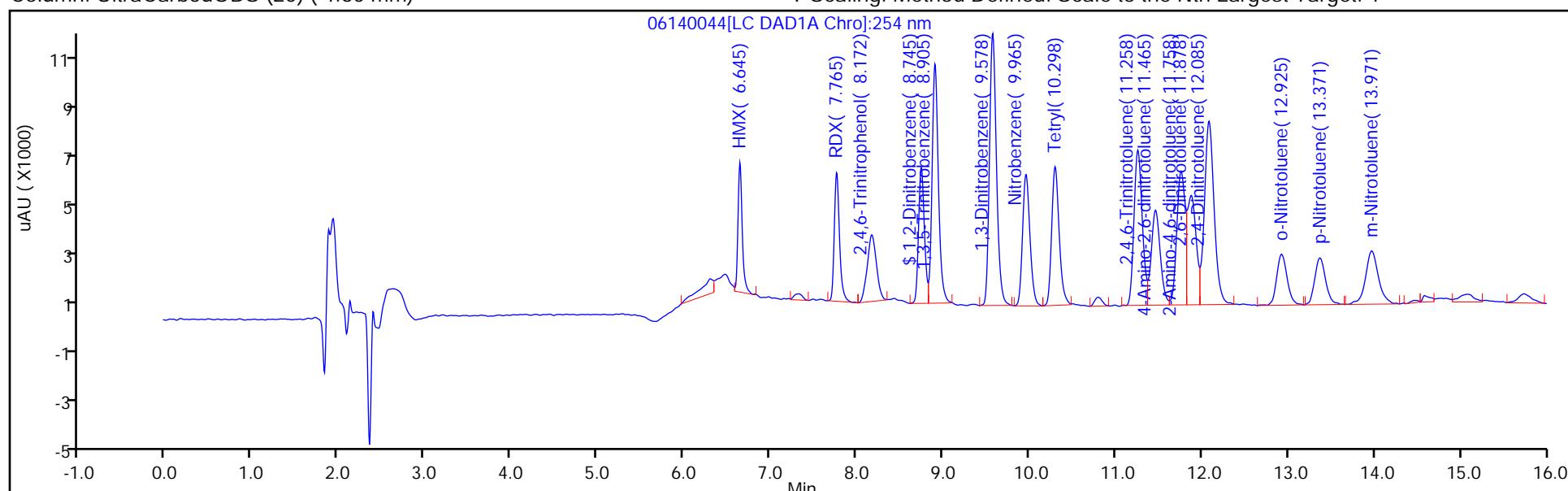
ALS Bottle#: 44

Method: 8330_X3

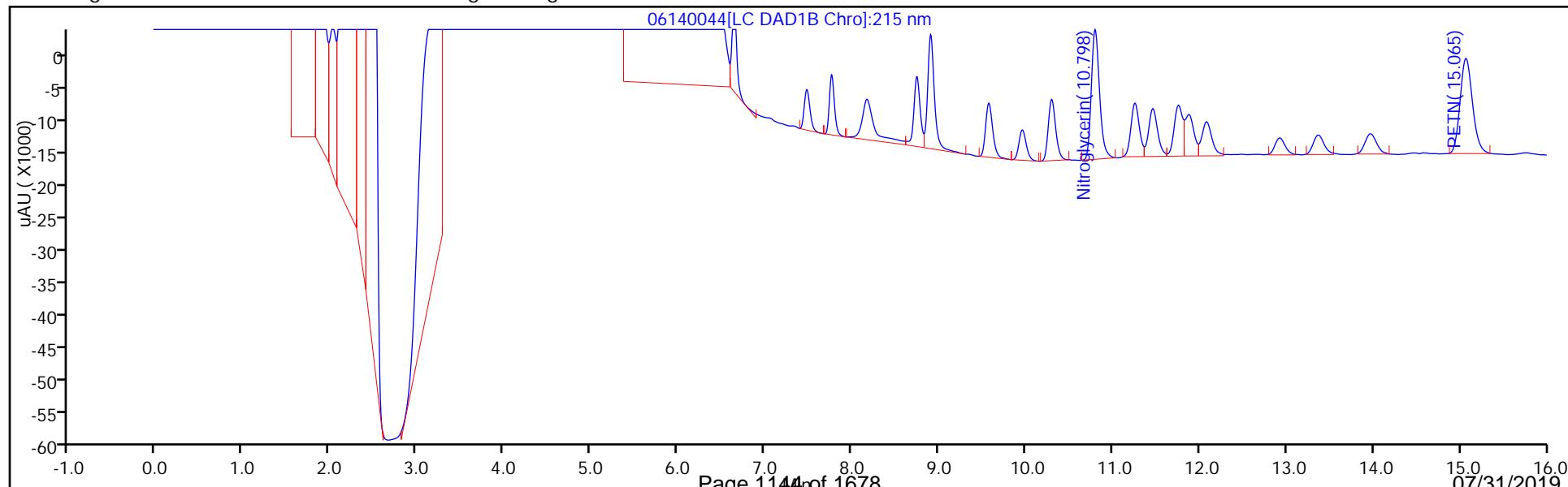
Limit Group: GCSV - 8330

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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140044.D
 Lims ID: LCS 280-461286/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 15-Jun-2019 07:51:07 ALS Bottle#: 44 Worklist Smp#: 44
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 280-461286/2
 Misc. Info.: 280-0082867-044
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:13:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1925	96.25

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 280-464162/2-A
Matrix: Water Lab File ID: 07110046.D
Analysis Method: 8330A Date Collected: _____
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 500 (mL) Date Analyzed: 07/12/2019 01:10
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.14		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	2.09		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.97		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	2.02		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	2.01		0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.91		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.44		0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.69		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.82		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.64		1.0	0.40	0.20
2691-41-0	HMX	1.87	M	0.40	0.20	0.088
98-95-3	Nitrobenzene	1.73		0.40	0.20	0.091
121-82-4	RDX	2.03		0.40	0.40	0.16
479-45-8	Tetryl	2.22		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110046.D
 Lims ID: LCS 280-464162/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 12-Jul-2019 01:10:56 ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 280-464162/2
 Misc. Info.: 280-0083617-046
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.689	6.692	-0.003	17129	0.2000	0.1865	M
7 RDX	1	7.789	7.799	-0.010	22584	0.2000	0.2032	
8 2,4,6-Trinitrophenol	1	8.169	8.199	-0.030	20973	0.2000	0.2311	
\$ 9 1,2-Dinitrobenzene	1	8.749	8.759	-0.010	26706	0.2000	0.1917	
10 1,3,5-Trinitrobenzene	1	8.916	8.919	-0.003	52438	0.2000	0.2140	
11 1,3-Dinitrobenzene	1	9.576	9.578	-0.002	65146	0.2000	0.2094	
12 Nitrobenzene	1	9.962	9.965	-0.003	34377	0.2000	0.1728	
14 Tetryl	1	10.296	10.285	0.011	35918	0.2000	0.2218	
15 Nitroglycerin	2	10.802	10.792	0.010	144724	2.00	2.04	
16 2,4,6-Trinitrotoluene	1	11.262	11.258	0.004	44737	0.2000	0.1968	
17 4-Amino-2,6-dinitrotoluene	1	11.462	11.445	0.017	30356	0.2000	0.1825	
18 2-Amino-4,6-dinitrotoluene	1	11.756	11.738	0.018	39162	0.2000	0.1908	
19 2,6-Dinitrotoluene	1	11.889	11.878	0.011	32085	0.2000	0.2014	
20 2,4-Dinitrotoluene	1	12.096	12.078	0.018	60753	0.2000	0.2022	
21 o-Nitrotoluene	1	12.942	12.925	0.017	18664	0.2000	0.1438	
22 p-Nitrotoluene	1	13.396	13.372	0.024	18091	0.2000	0.1641	
23 m-Nitrotoluene	1	14.002	13.978	0.024	24475	0.2000	0.1687	
24 PETN	2	15.122	15.098	0.024	159984	2.00	2.15	

QC Flag Legend

Review Flags

M - Manually Integrated

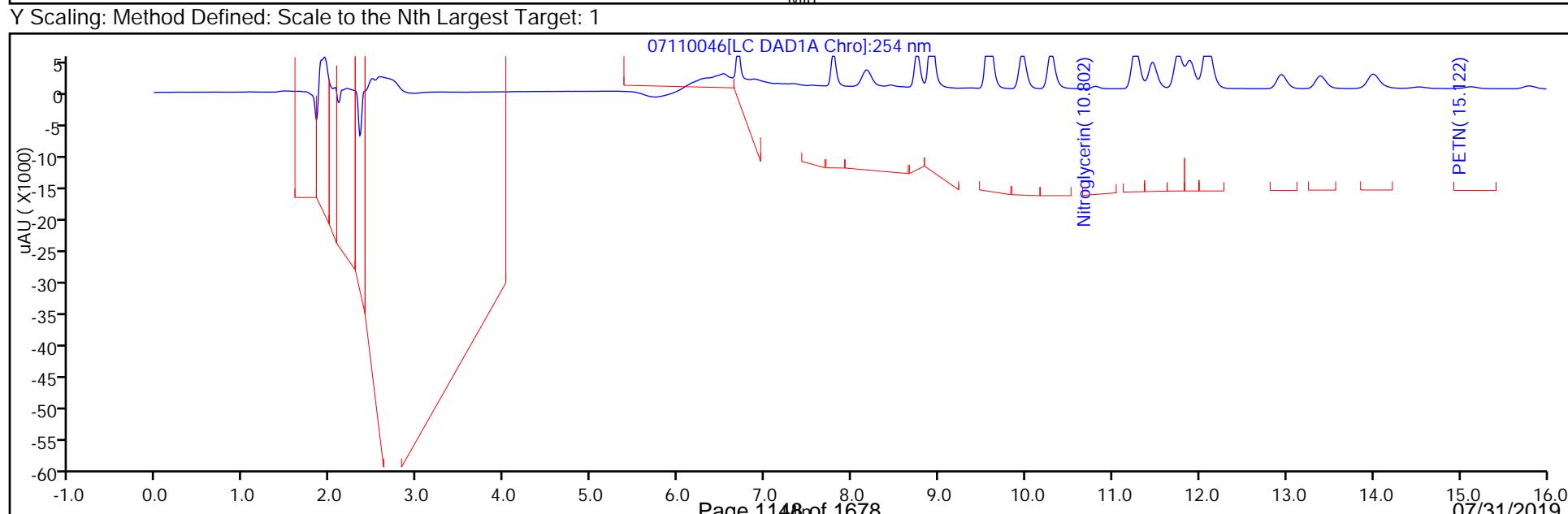
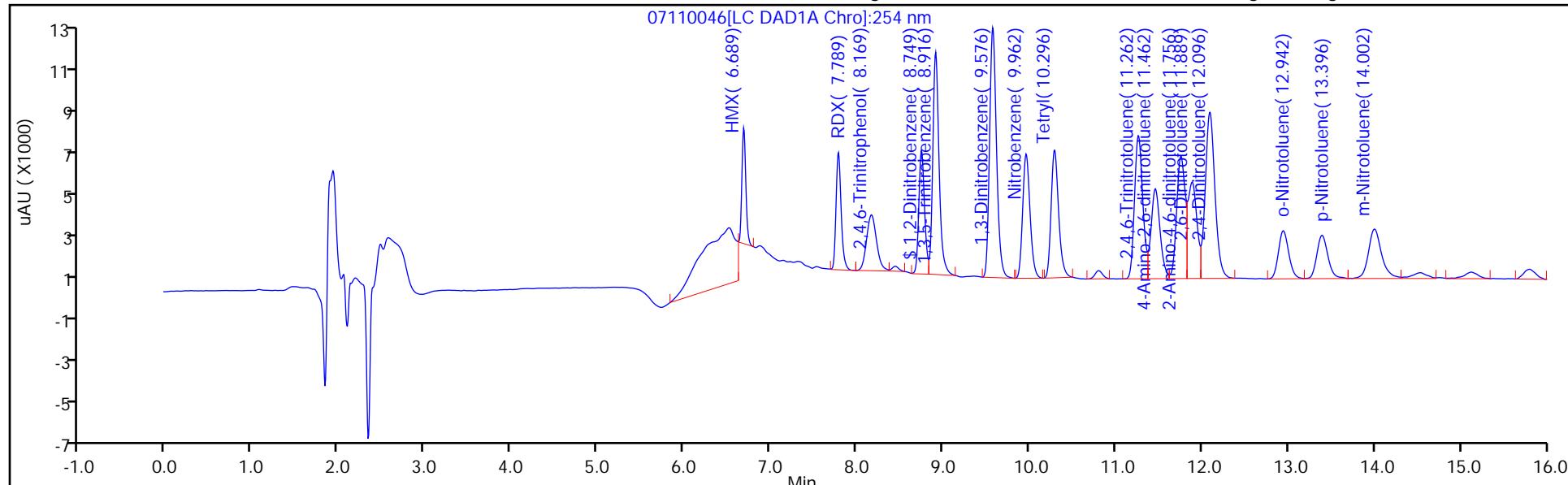
Report Date: 12-Jul-2019 09:20:34

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110046.D
 Injection Date: 12-Jul-2019 01:10:56 Instrument ID: CHHPLC_X3
 Lims ID: LCS 280-464162/2-A Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 46
 Method: 8330_X3 Dil. Factor: 1.0000 ALS Bottle#: 46
 Column: UltraCarb5uODS (20) (4.60 mm) Limit Group: GCSV - 8330

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110046.D
 Lims ID: LCS 280-464162/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 12-Jul-2019 01:10:56 ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 280-464162/2
 Misc. Info.: 280-0083617-046
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1917	95.84

Eurofins TestAmerica, Denver

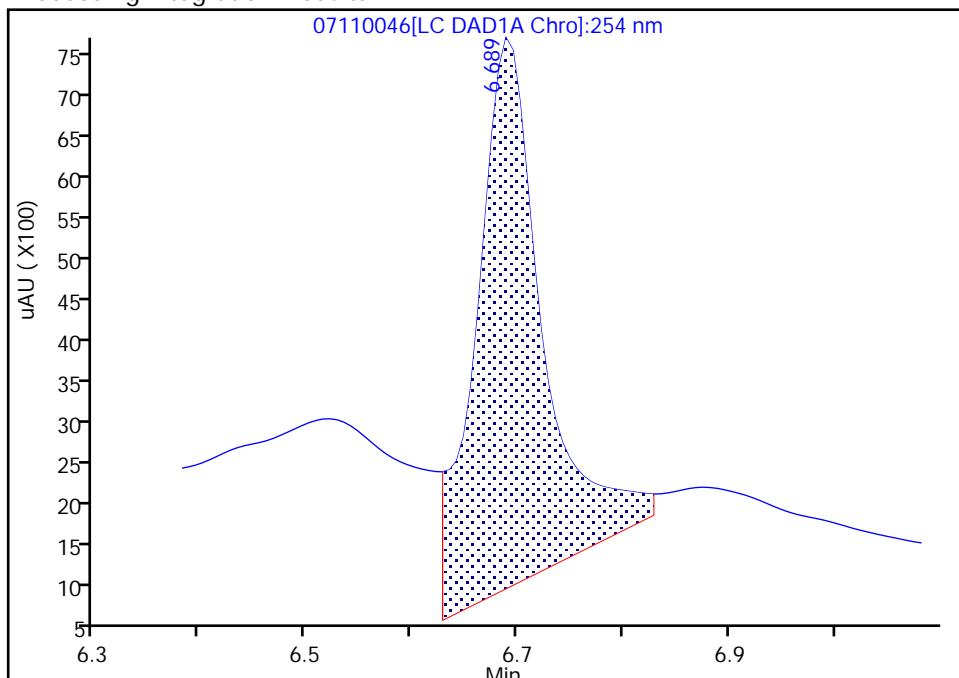
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110046.D
 Injection Date: 12-Jul-2019 01:10:56 Instrument ID: CHHPLC_X3
 Lims ID: LCS 280-464162/2-A
 Client ID:
 Operator ID: hkf ALS Bottle#: 46 Worklist Smp#: 46
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

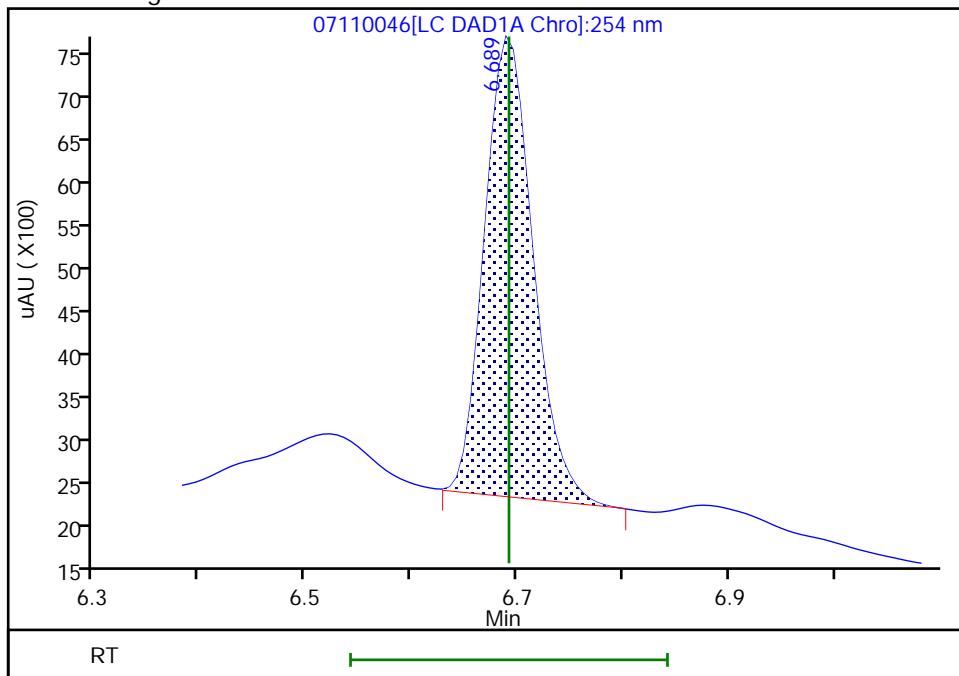
RT: 6.69
 Area: 29497
 Amount: 0.321202
 Amount Units: ug/mL

Processing Integration Results



RT: 6.69
 Area: 17129
 Amount: 0.186523
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 08:59:42

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 280-464162/4-A
Matrix: Water Lab File ID: 07110048.D
Analysis Method: 8330A Date Collected: _____
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 500 (mL) Date Analyzed: 07/12/2019 01:56
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.56		2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110048.D
 Lims ID: LCS 280-464162/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 12-Jul-2019 01:56:52 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 280-464162/4
 Misc. Info.: 280-0083617-048
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:00:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.598	-0.008	42145	0.2002	0.1961	M
5 DNX	1	6.924	6.924	0.000	36055	0.2002	0.2309	
6 MNX	1	7.377	7.378	-0.001	35855	0.2334	0.2560	
\$ 9 1,2-Dinitrobenzene	1	8.750	8.759	-0.009	25166	0.2000	0.1806	

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 12-Jul-2019 09:20:37

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110048.D

Injection Date: 12-Jul-2019 01:56:52

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: LCS 280-464162/4-A

Worklist Smp#: 48

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

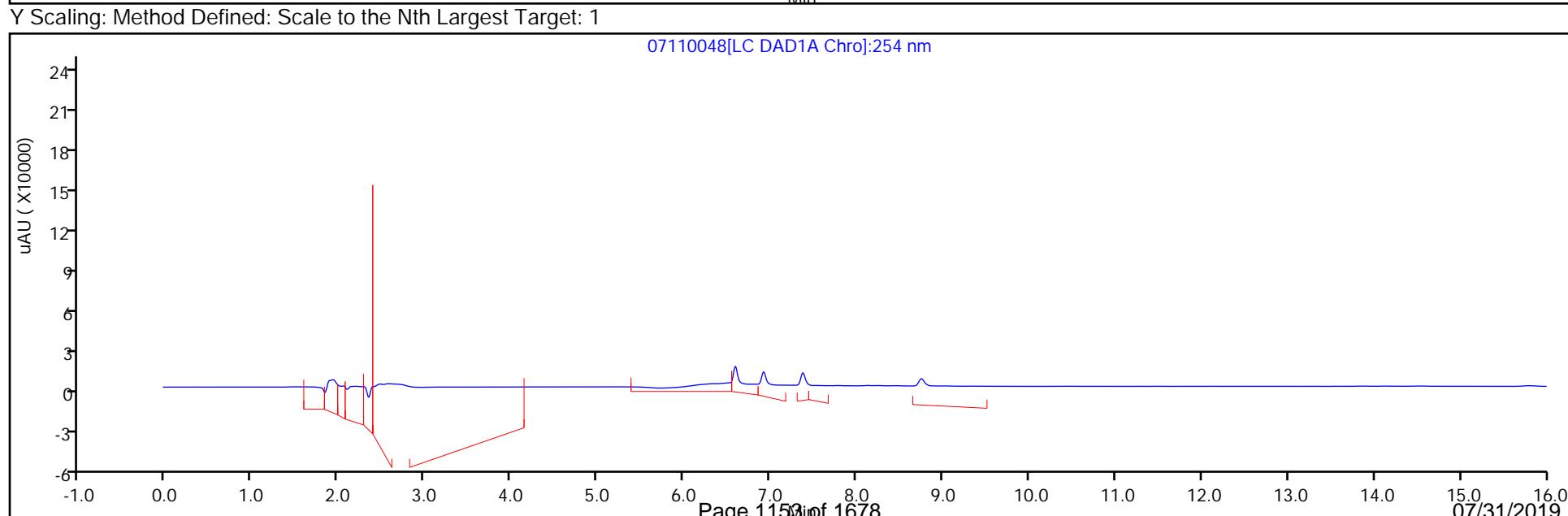
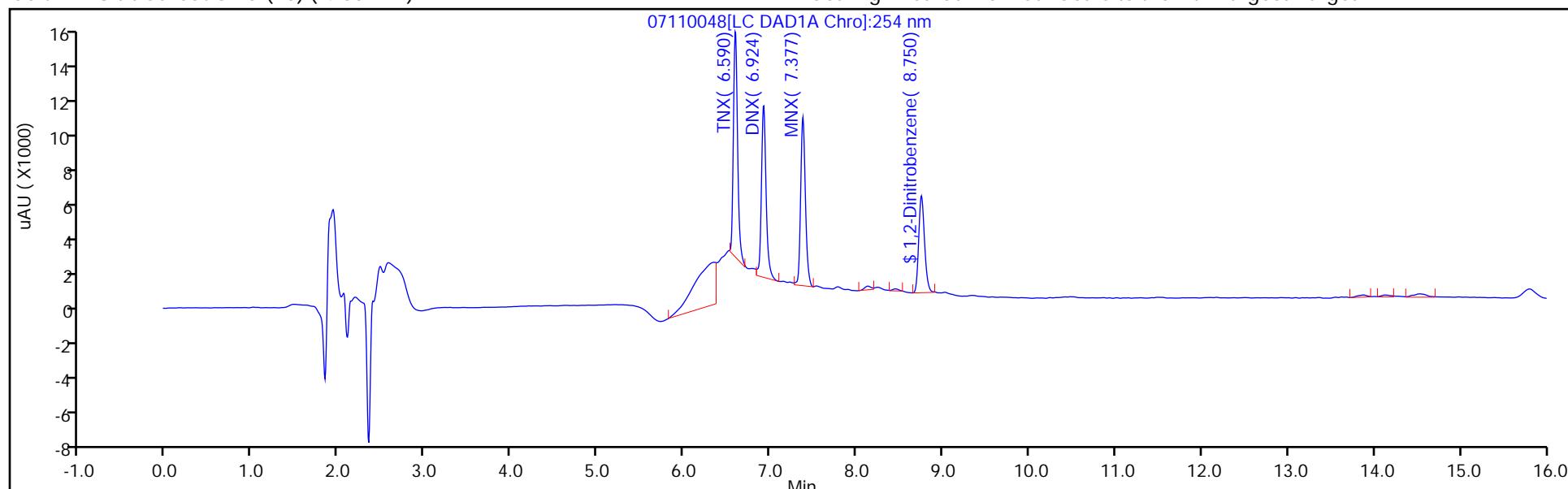
ALS Bottle#: 48

Method: 8330_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110048.D
 Lims ID: LCS 280-464162/4-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 12-Jul-2019 01:56:52 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 280-464162/4
 Misc. Info.: 280-0083617-048
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:00:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1806	90.31

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCSD 280-464162/3-A
Matrix: Water Lab File ID: 07110047.D
Analysis Method: 8330A Date Collected: _____
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 500 (mL) Date Analyzed: 07/12/2019 01:33
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.99		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	1.95		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.85		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.87		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	1.88		0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.75		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.41		0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.59		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.68		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.53		1.0	0.40	0.20
2691-41-0	HMX	1.80	M	0.40	0.20	0.088
98-95-3	Nitrobenzene	1.66		0.40	0.20	0.091
121-82-4	RDX	1.92		0.40	0.40	0.16
479-45-8	Tetryl	2.08		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110047.D
 Lims ID: LCSD 280-464162/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 12-Jul-2019 01:33:51 ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD 280-464162/
 Misc. Info.: 280-0083617-047
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.692	6.692	0.000	16560	0.2000	0.1803	M
7 RDX	1	7.785	7.799	-0.014	21374	0.2000	0.1923	
8 2,4,6-Trinitrophenol	1	8.172	8.199	-0.027	19889	0.2000	0.2192	
\$ 9 1,2-Dinitrobenzene	1	8.752	8.759	-0.007	24517	0.2000	0.1760	
10 1,3,5-Trinitrobenzene	1	8.918	8.919	-0.001	48766	0.2000	0.1990	
11 1,3-Dinitrobenzene	1	9.578	9.578	0.000	60799	0.2000	0.1954	
12 Nitrobenzene	1	9.965	9.965	0.000	33002	0.2000	0.1659	
14 Tetryl	1	10.298	10.285	0.013	33761	0.2000	0.2085	
15 Nitroglycerin	2	10.805	10.792	0.013	136679	2.00	1.92	
16 2,4,6-Trinitrotoluene	1	11.265	11.258	0.007	42006	0.2000	0.1848	
17 4-Amino-2,6-dinitrotoluene	1	11.465	11.445	0.020	28021	0.2000	0.1684	
18 2-Amino-4,6-dinitrotoluene	1	11.765	11.738	0.027	35897	0.2000	0.1749	
19 2,6-Dinitrotoluene	1	11.891	11.878	0.013	29903	0.2000	0.1877	
20 2,4-Dinitrotoluene	1	12.098	12.078	0.020	56303	0.2000	0.1874	
21 o-Nitrotoluene	1	12.945	12.925	0.020	18342	0.2000	0.1413	
22 p-Nitrotoluene	1	13.391	13.372	0.019	16852	0.2000	0.1528	
23 m-Nitrotoluene	1	13.998	13.978	0.020	23086	0.2000	0.1591	
24 PETN	2	15.118	15.098	0.020	150753	2.00	2.03	

QC Flag Legend

Review Flags

M - Manually Integrated

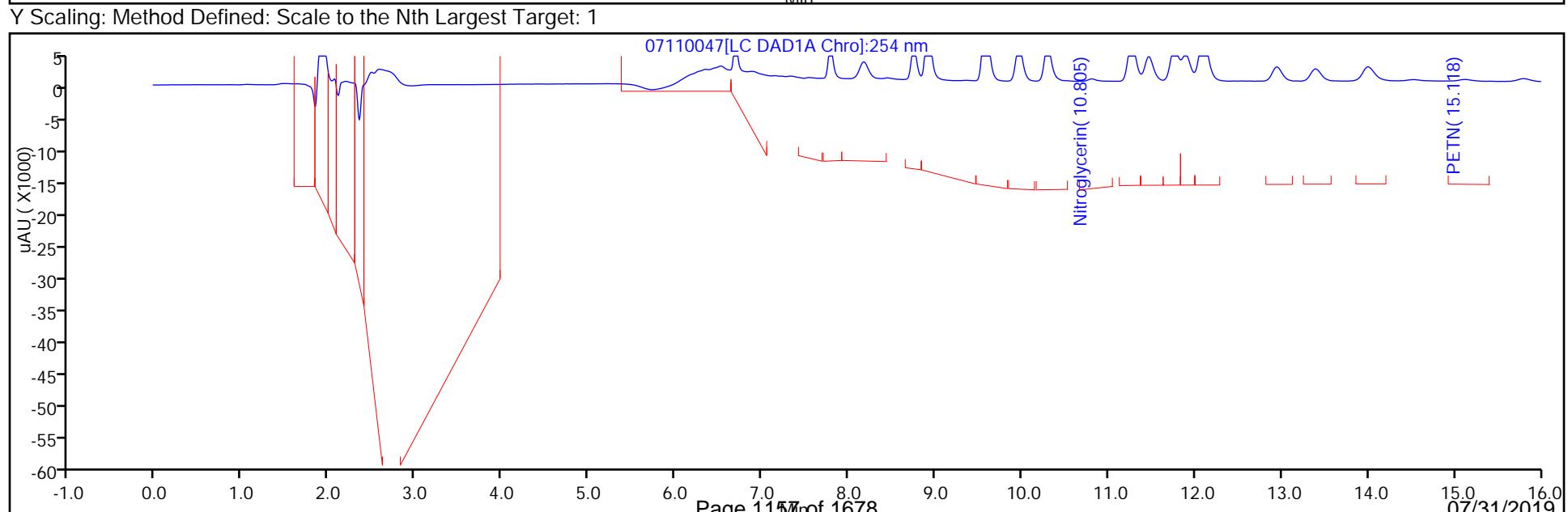
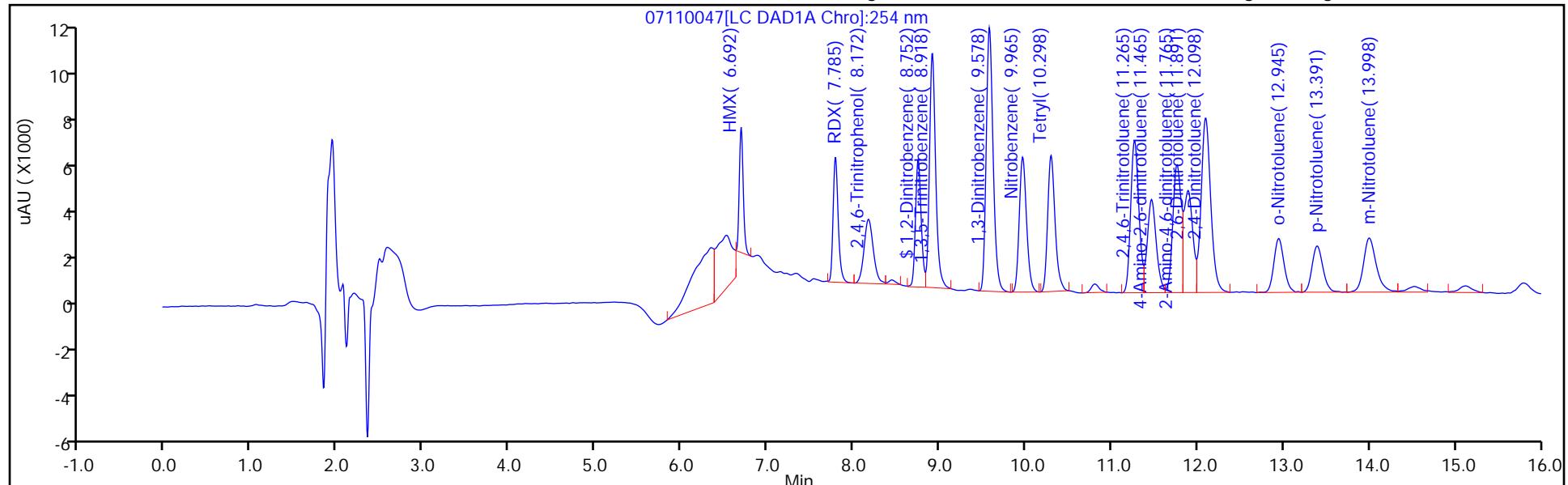
Report Date: 12-Jul-2019 09:20:35

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110047.D
 Injection Date: 12-Jul-2019 01:33:51 Instrument ID: CHHPLC_X3
 Lims ID: LCSD 280-464162/3-A Operator ID: hkf
 Client ID:
 Injection Vol: 100.0 ul Worklist Smp#: 47
 Method: 8330_X3 Dil. Factor: 1.0000 ALS Bottle#: 47
 Column: UltraCarb5uODS (20) (4.60 mm) Limit Group: GCSV - 8330

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110047.D
 Lims ID: LCSD 280-464162/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 12-Jul-2019 01:33:51 ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: LCSD 280-464162/
 Misc. Info.: 280-0083617-047
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:52

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1760	87.98

Eurofins TestAmerica, Denver

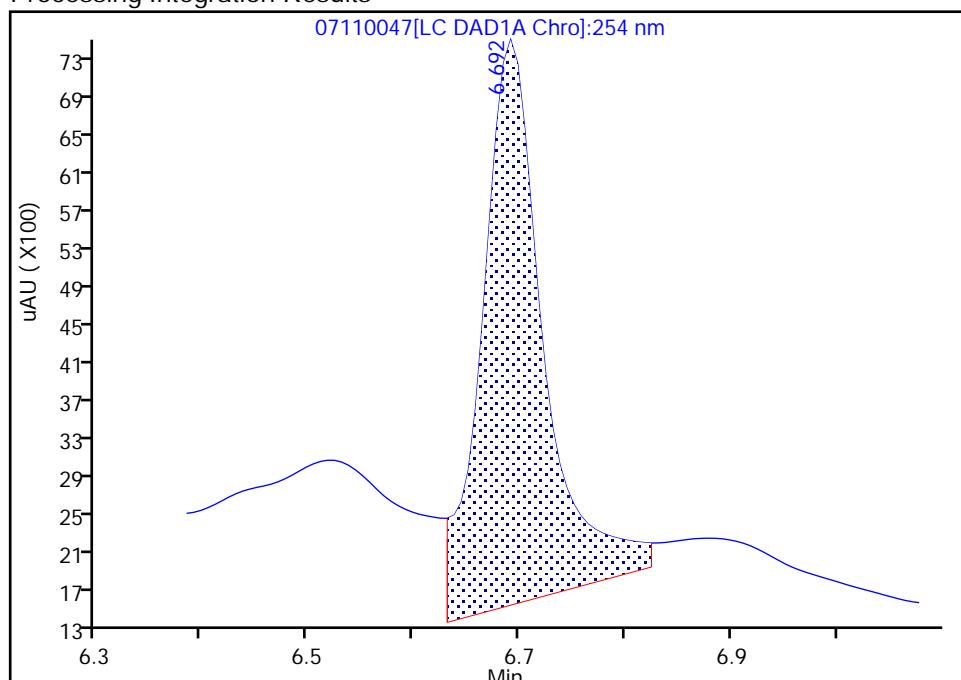
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110047.D
 Injection Date: 12-Jul-2019 01:33:51 Instrument ID: CHHPLC_X3
 Lims ID: LCSD 280-464162/3-A
 Client ID:
 Operator ID: hkf ALS Bottle#: 47 Worklist Smp#: 47
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

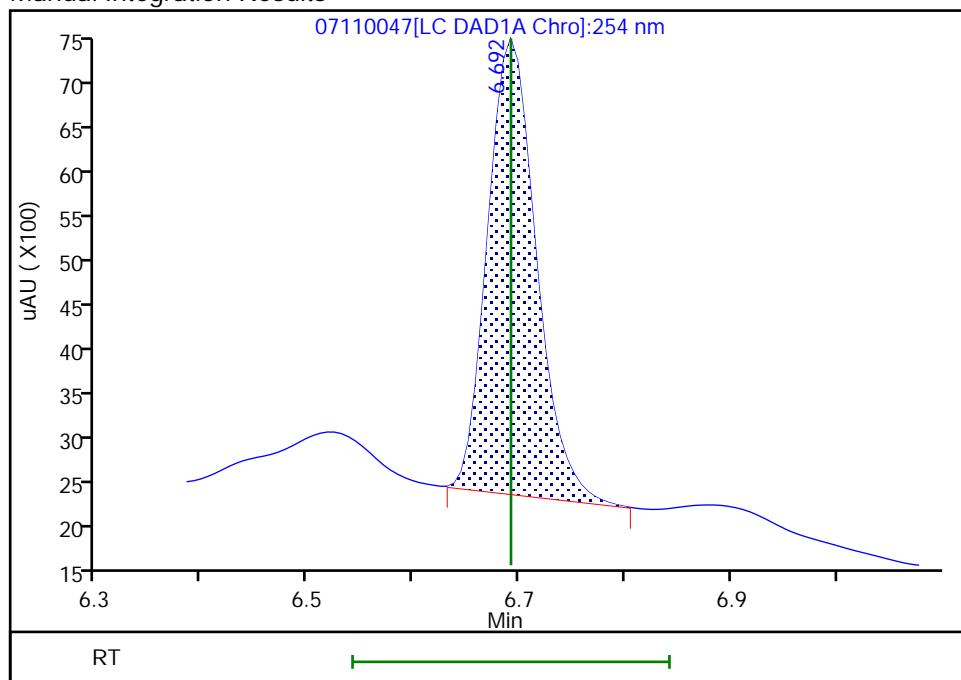
RT: 6.69
 Area: 24295
 Amount: 0.264556
 Amount Units: ug/mL

Processing Integration Results



RT: 6.69
 Area: 16560
 Amount: 0.180327
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 08:59:52

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0102-19AMS MS Lab Sample ID: 280-124912-4 MS
Matrix: Water Lab File ID: 06140048.D
Analysis Method: 8330A Date Collected: 06/05/2019 11:25
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 506.6 (mL) Date Analyzed: 06/15/2019 09:26
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.04	M	0.99	0.39	0.20
99-65-0	1,3-Dinitrobenzene	1.99		0.39	0.20	0.088
118-96-7	2,4,6-Trinitrotoluene	1.79		0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	1.81		0.39	0.20	0.083
606-20-2	2,6-Dinitrotoluene	1.76		0.20	0.20	0.064
35572-78-2	2-Amino-4,6-dinitrotoluene	1.75		0.20	0.12	0.050
88-72-2	2-Nitrotoluene	1.18	J1	0.39	0.20	0.084
99-08-1	3-Nitrotoluene	1.25	J1	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.59		0.20	0.12	0.057
99-99-0	4-Nitrotoluene	1.34	J1	0.99	0.39	0.20
2691-41-0	HMX	1.90	M	0.39	0.20	0.086
98-95-3	Nitrobenzene	1.45		0.39	0.20	0.090
121-82-4	RDX	2.91	M	0.39	0.39	0.16
479-45-8	Tetryl	1.96		0.24	0.20	0.078

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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140048.D
 Lims ID: 280-124912-A-4-B MS
 Client ID: G0102-19AMS
 Sample Type: MS
 Inject. Date: 15-Jun-2019 09:26:16 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-4-B
 Misc. Info.: 280-0082867-048
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:14:39

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	6.500				ND		M
2 TNX	1	6.566				ND		
3 HMX	1	6.648	6.643	0.005	17133	0.2000	0.1921	M
4 2,4-diamino-6-nitrotoluene	1	6.687				ND		
5 DNX	1	6.893				ND		
6 MNX	1	7.359				ND		
7 RDX	1	7.768	7.763	0.005	31413	0.2000	0.2946	M
8 2,4,6-Trinitrophenol	1	8.155	8.196	-0.041	17022	0.2000	0.2031	M
\$ 9 1,2-Dinitrobenzene	1	8.748	8.743	0.005	25718	0.2000	0.1977	M
10 1,3,5-Trinitrobenzene	1	8.908	8.896	0.012	47372	0.2000	0.2066	M
11 1,3-Dinitrobenzene	1	9.575	9.563	0.012	60762	0.2000	0.2020	
12 Nitrobenzene	1	9.961	9.949	0.012	28872	0.2000	0.1467	
13 3,5-Dinitroaniline	1	10.213				ND		
14 Tetryl	1	10.295	10.276	0.019	33417	0.2000	0.1990	
15 Nitroglycerin	2	10.795	10.776	0.019	136293	2.00	1.95	
16 2,4,6-Trinitrotoluene	1	11.248	11.229	0.019	40476	0.2000	0.1810	
17 4-Amino-2,6-dinitrotoluene	1	11.448	11.429	0.019	26241	0.2000	0.1616	
18 2-Amino-4,6-dinitrotoluene	1	11.741	11.716	0.025	34982	0.2000	0.1771	
19 2,6-Dinitrotoluene	1	11.868	11.843	0.025	27946	0.2000	0.1785	
20 2,4-Dinitrotoluene	1	12.068	12.043	0.025	54531	0.2000	0.1833	
21 o-Nitrotoluene	1	12.908	12.883	0.025	15647	0.2000	0.1191	
22 p-Nitrotoluene	1	13.348	13.323	0.025	15335	0.2000	0.1360	
23 m-Nitrotoluene	1	13.955	13.923	0.032	18719	0.2000	0.1262	
24 PETN	2	15.055	15.016	0.039	148069	2.00	2.02	
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-Jun-2019 10:45:30

Chrom Revision: 2.3 03-May-2019 15:52:00

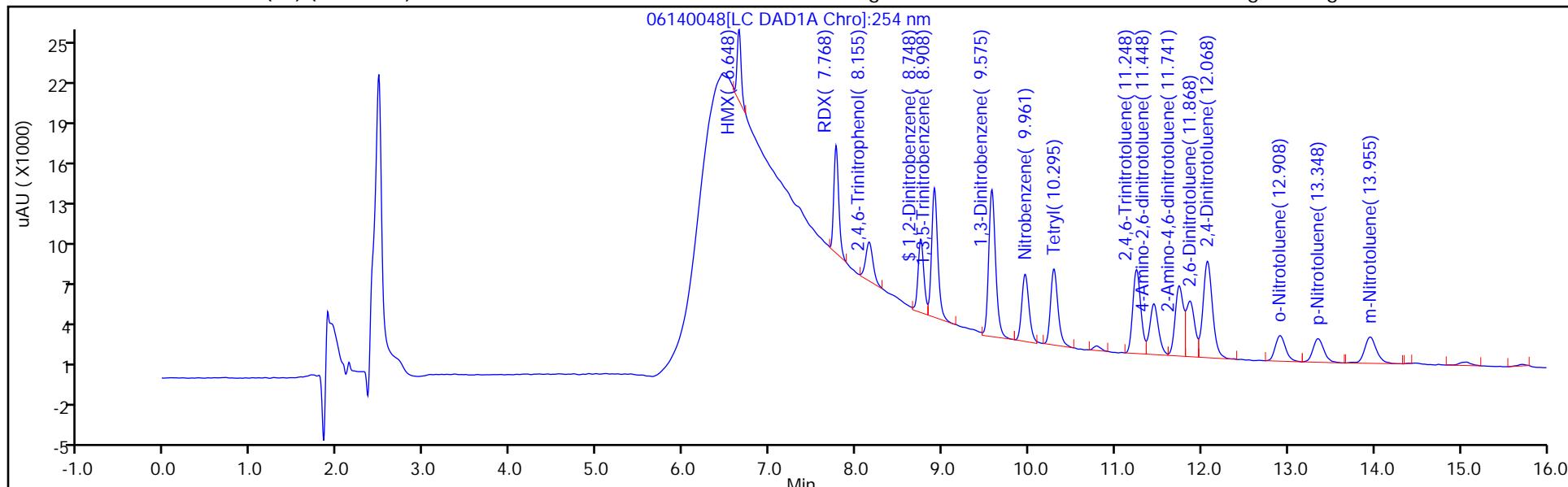
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140048.D
 Injection Date: 15-Jun-2019 09:26:16
 Lims ID: 280-124912-A-4-B MS
 Client ID: G0102-19AMS
 Injection Vol: 100.0 ul
 Method: 8330_X3
 Column: UltraCarb5uODS (20) (4.60 mm)

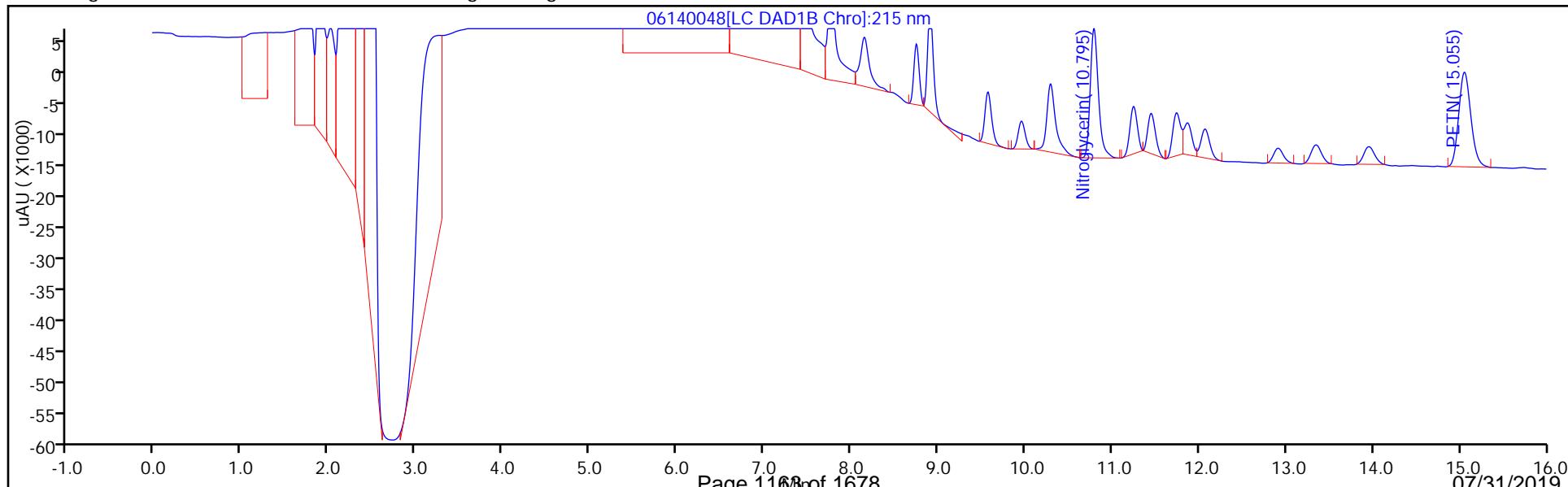
Instrument ID: CHHPLC_X3
 Dil. Factor: 1.0000
 Limit Group: GCSV - 8330

Operator ID: hkf
 Worklist Smp#: 48
 ALS Bottle#: 48

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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140048.D
 Lims ID: 280-124912-A-4-B MS
 Client ID: G0102-19AMS
 Sample Type: MS
 Inject. Date: 15-Jun-2019 09:26:16 ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-4-B
 Misc. Info.: 280-0082867-048
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:14:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1977	98.83

Eurofins TestAmerica, Denver

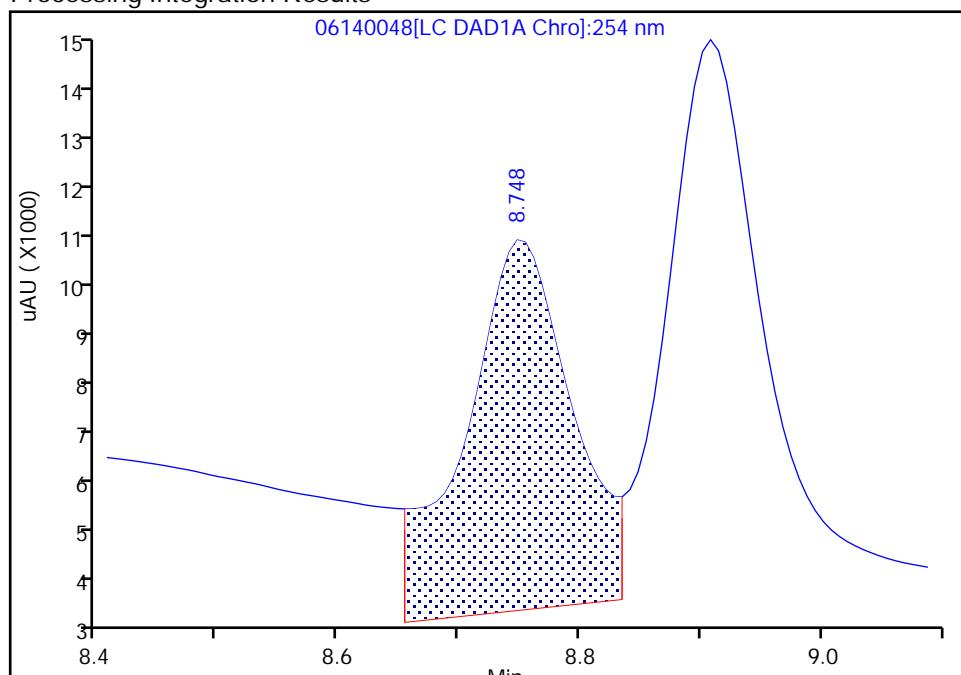
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 Injection Date: 15-Jun-2019 09:26:16 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-B MS
 Client ID: G0102-19AMS
 Operator ID: hkf ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

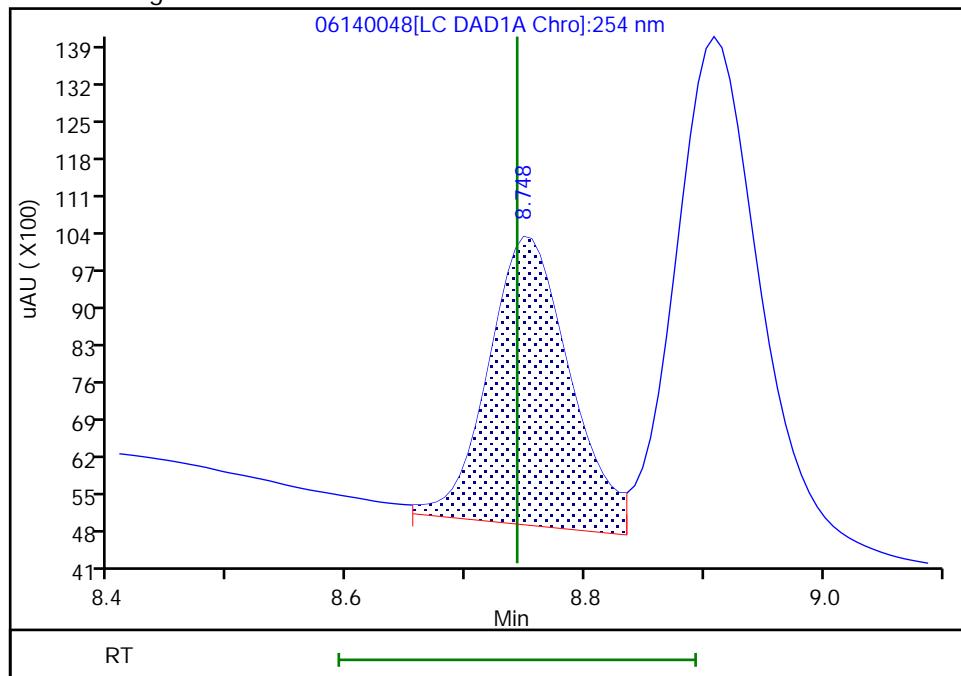
RT: 8.75
 Area: 42410
 Amount: 0.325954
 Amount Units: ug/mL

Processing Integration Results



RT: 8.75
 Area: 25718
 Amount: 0.197663
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:14:37

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

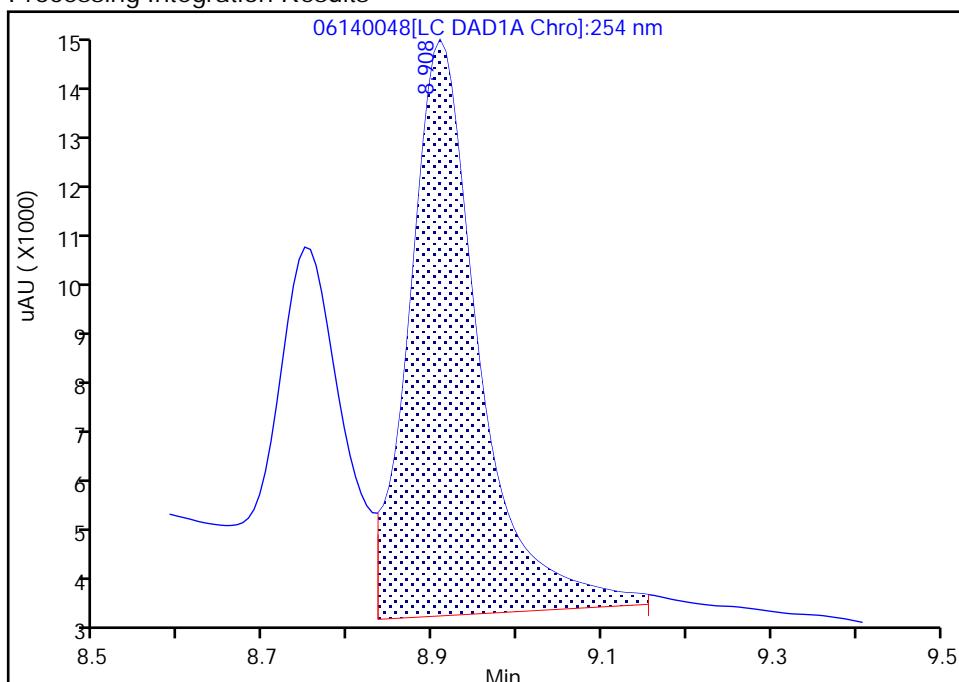
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140048.D
 Injection Date: 15-Jun-2019 09:26:16 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-B MS
 Client ID: G0102-19AMS
 Operator ID: hkf 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

10 1,3,5-Trinitrobenzene, CAS: 99-35-4
 Signal: 1

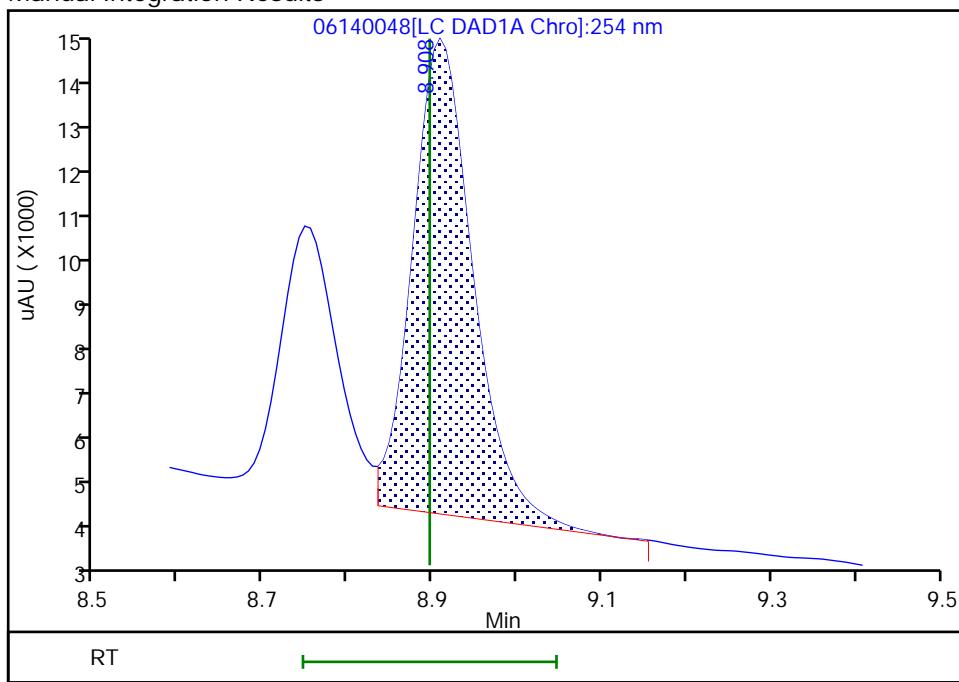
RT: 8.91
 Area: 59708
 Amount: 0.260419
 Amount Units: ug/mL

Processing Integration Results



RT: 8.91
 Area: 47372
 Amount: 0.206615
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:14:37

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

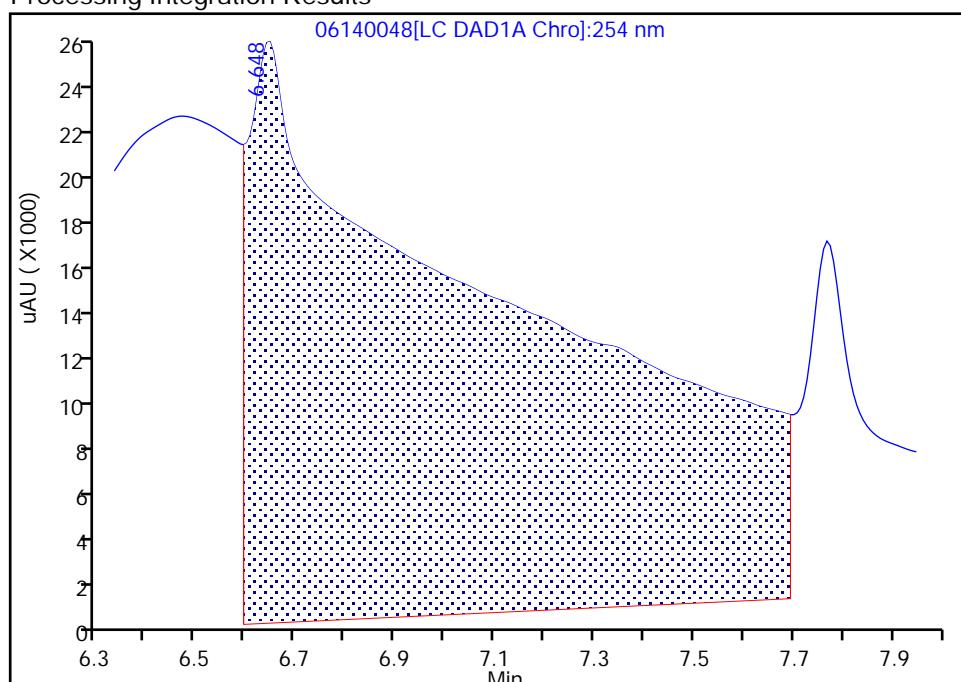
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 Lims ID: 280-124912-A-4-B MS
 Client ID: G0102-19AMS
 Operator ID: hkf ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

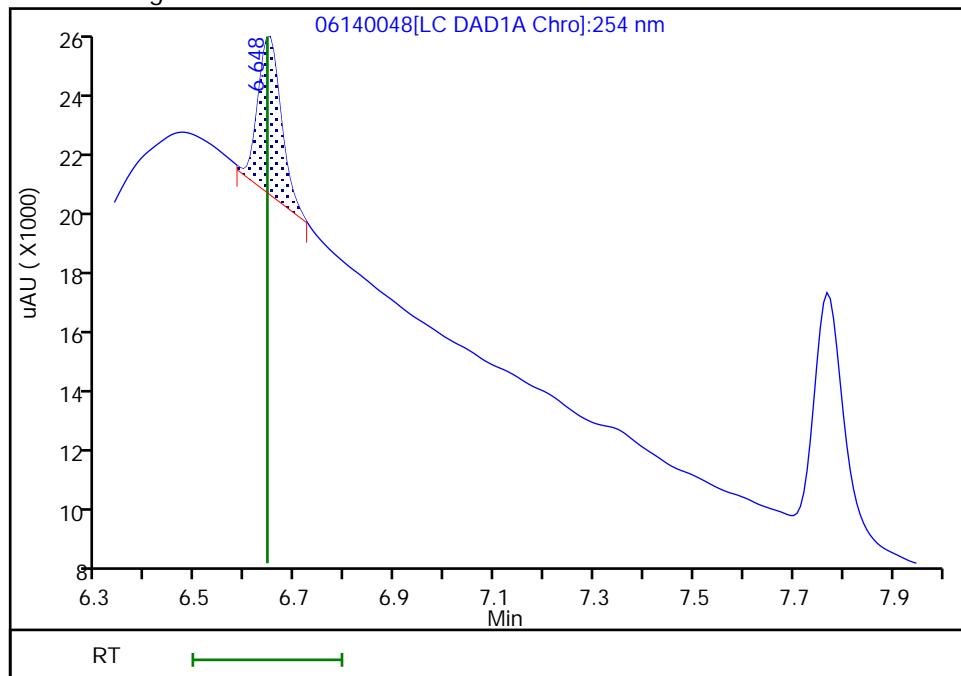
RT: 6.65
 Area: 898926
 Amount: 10.076950
 Amount Units: ug/mL

Processing Integration Results



RT: 6.65
 Area: 17133
 Amount: 0.192061
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:14:17

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

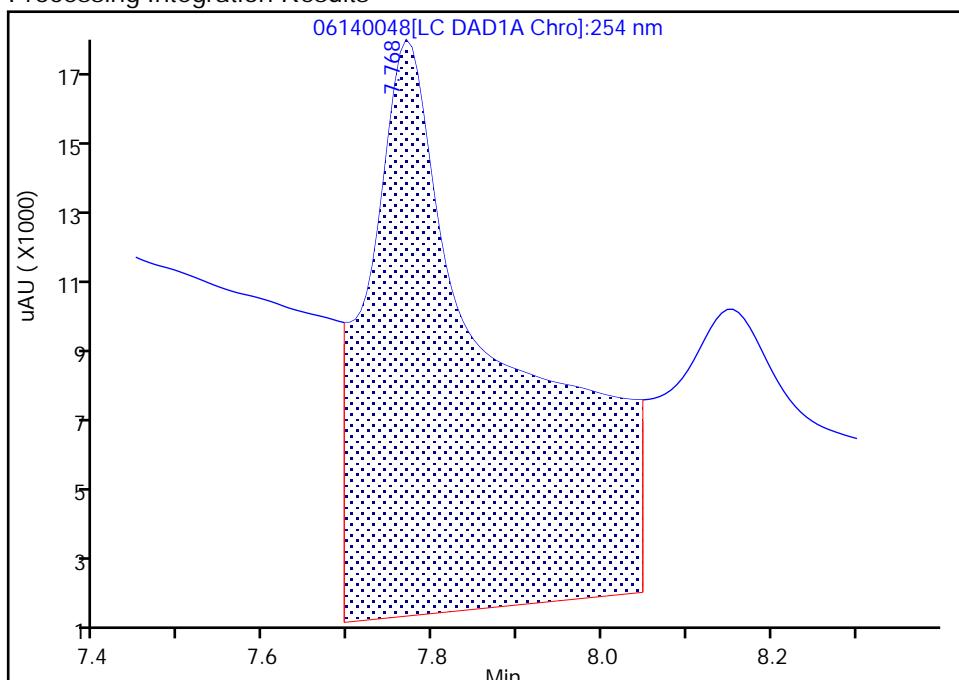
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 Injection Date: 15-Jun-2019 09:26:16 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-B MS
 Client ID: G0102-19AMS
 Operator ID: hkf ALS Bottle#: 48 Worklist Smp#: 48
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

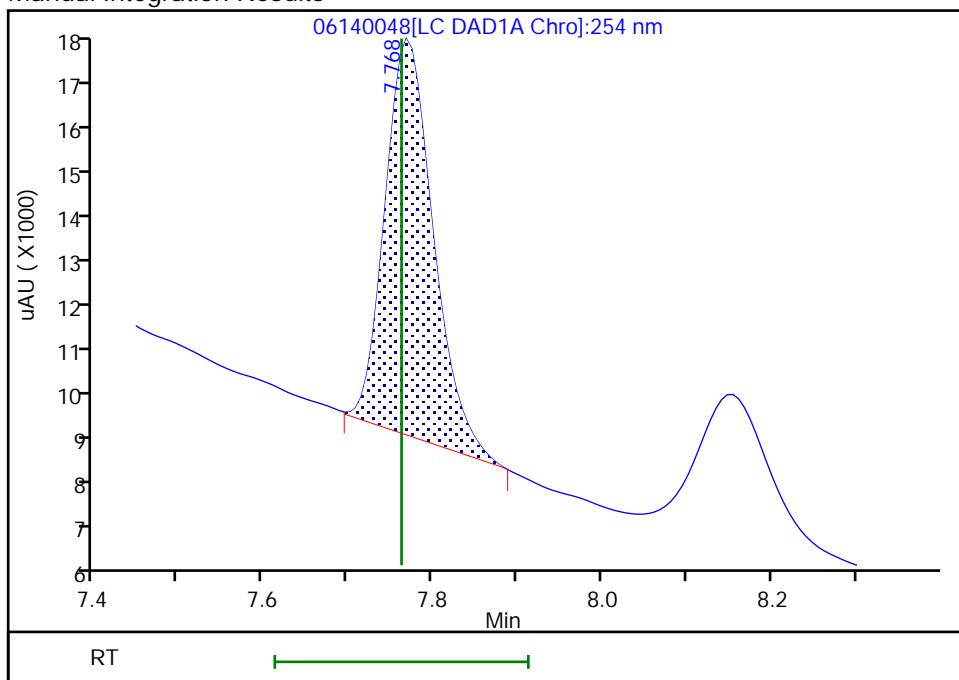
RT: 7.77
 Area: 167413
 Amount: 1.569898
 Amount Units: ug/mL

Processing Integration Results



RT: 7.77
 Area: 31413
 Amount: 0.294572
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:14:22

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0102-19AMS MS Lab Sample ID: 280-124912-4 MS
Matrix: Water Lab File ID: 07110053.D
Analysis Method: 8330A Date Collected: 06/05/2019 11:25
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 487.2 (mL) Date Analyzed: 07/12/2019 03:51
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.65	H M	2.1	0.41	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110053.D
 Lims ID: 280-124912-B-4-B MS
 Client ID: G0102-19AMS
 Sample Type: MS
 Inject. Date: 12-Jul-2019 03:51:45 ALS Bottle#: 53 Worklist Smp#: 53
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-4-B
 Misc. Info.: 280-0083617-053
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:02:43

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	6.539				ND		
2 TNX	1	6.596	6.598	-0.002	45260	0.2002	0.2105	M
3 HMX	1	6.692				ND		
4 2,4-diamino-6-nitrotoluene	1	6.719				ND		
5 DNX	1	6.923	6.924	-0.001	32254	0.2002	0.2066	M
6 MNX	1	7.376	7.378	-0.002	36095	0.2334	0.2577	M
7 RDX	1	7.789	7.799	-0.010	14683		0.1321	M
8 2,4,6-Trinitrophenol	1	8.199				ND		
\$ 9 1,2-Dinitrobenzene	1	8.756	8.759	-0.003	25446	0.2000	0.1826	M
10 1,3,5-Trinitrobenzene	1	8.919				ND		
11 1,3-Dinitrobenzene	1	9.578				ND		
12 Nitrobenzene	1	9.965				ND		
13 3,5-Dinitroaniline	1	10.206				ND		
14 Tetryl	1	10.285				ND		
15 Nitroglycerin	2	10.792				ND		
16 2,4,6-Trinitrotoluene	1	11.258				ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445				ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738				ND		
19 2,6-Dinitrotoluene	1	11.878				ND		
20 2,4-Dinitrotoluene	1	12.078				ND		
21 o-Nitrotoluene	1	12.925				ND		
22 p-Nitrotoluene	1	13.372				ND		
23 m-Nitrotoluene	1	13.978				ND		
24 PETN	2	15.098				ND		
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

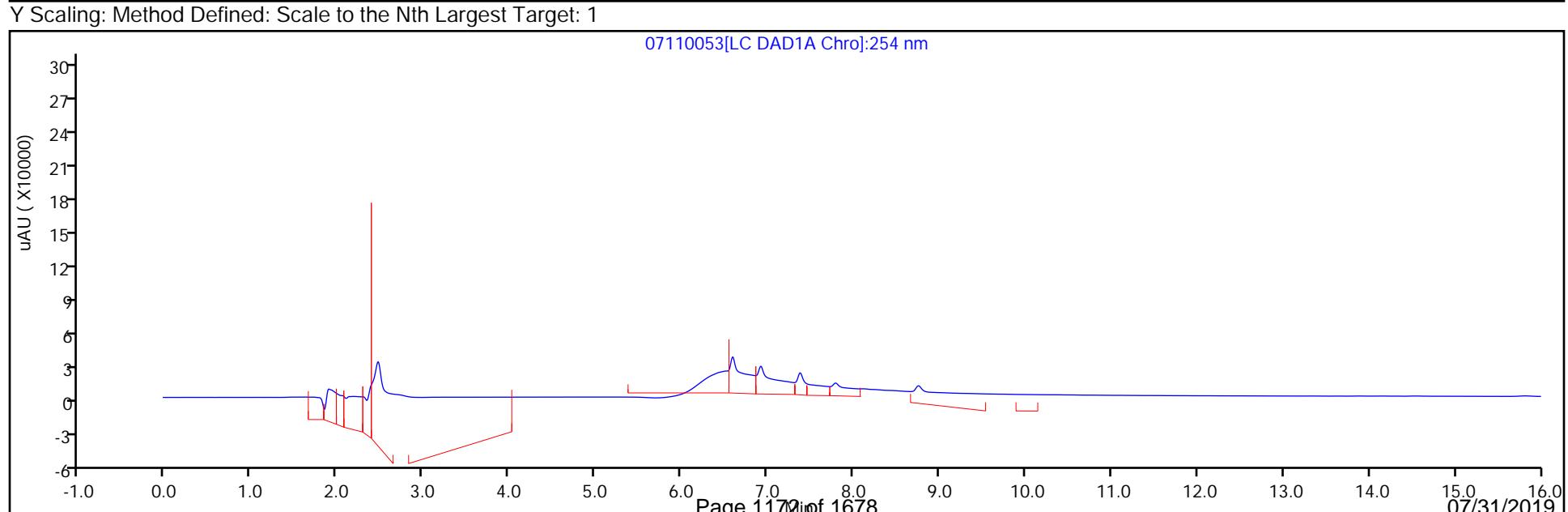
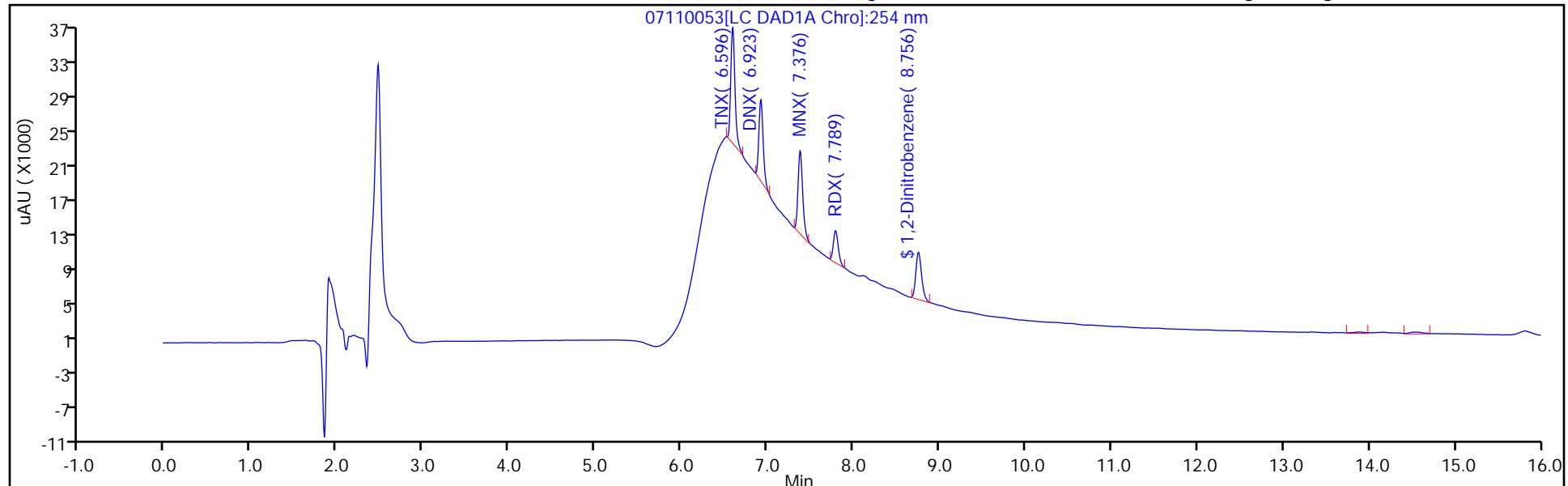
Report Date: 12-Jul-2019 09:20:44

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110053.D
Injection Date: 12-Jul-2019 03:51:45 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-4-B MS Operator ID: hkf
Client ID: G0102-19AMS Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 53
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110053.D
 Lims ID: 280-124912-B-4-B MS
 Client ID: G0102-19AMS
 Sample Type: MS
 Inject. Date: 12-Jul-2019 03:51:45 ALS Bottle#: 53 Worklist Smp#: 53
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-4-B
 Misc. Info.: 280-0083617-053
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:02:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1826	91.32

Eurofins TestAmerica, Denver

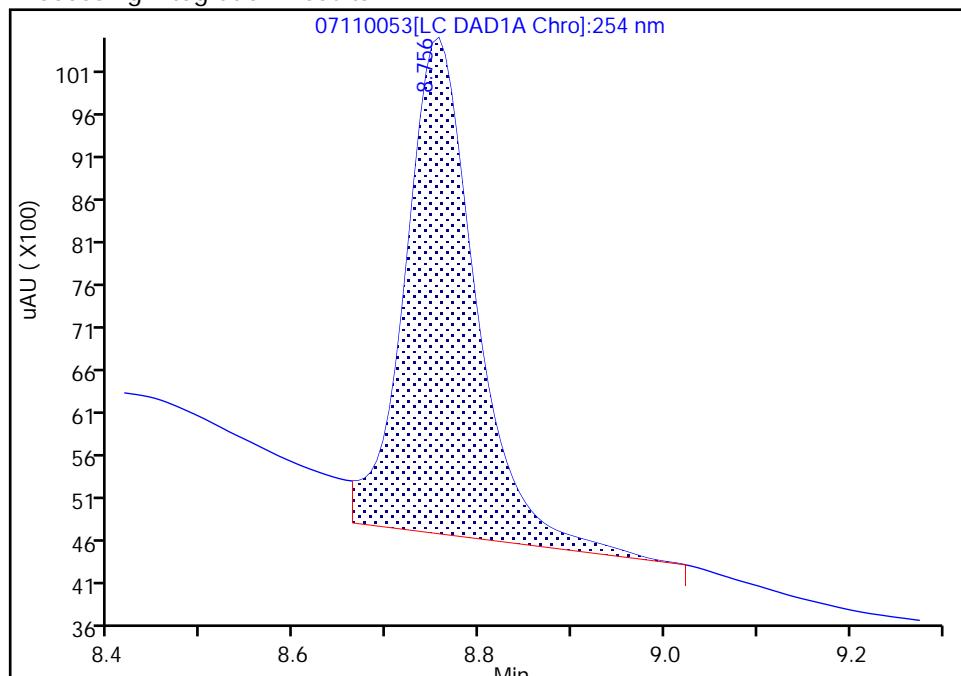
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110053.D
 Injection Date: 12-Jul-2019 03:51:45 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-4-B MS
 Client ID: G0102-19AMS
 Operator ID: hkf ALS Bottle#: 53 Worklist Smp#: 53
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

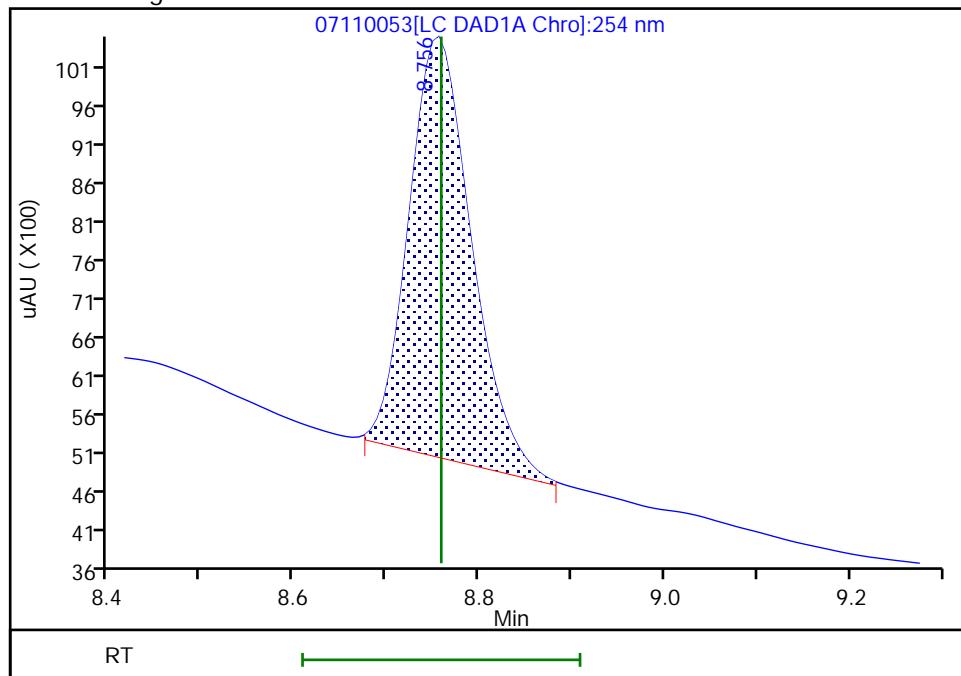
RT: 8.76
 Area: 30495
 Amount: 0.218871
 Amount Units: ug/mL

Processing Integration Results



RT: 8.76
 Area: 25446
 Amount: 0.182633
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:02:40

Audit Action: Manually Integrated

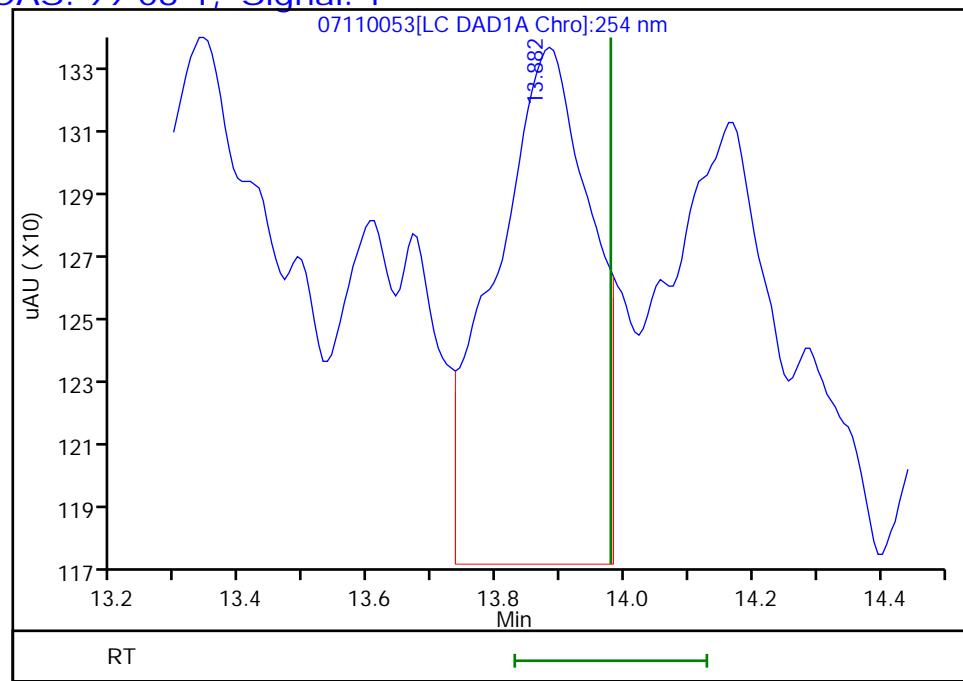
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110053.D
Injection Date: 12-Jul-2019 03:51:45 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-4-B MS
Client ID: G0102-19AMS
Operator ID: hkf ALS Bottle#: 53 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

RT: 13.88
Response: 1642
Amount: 0.011315



Reviewer: fiedlerh, 12-Jul-2019 09:02:43

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

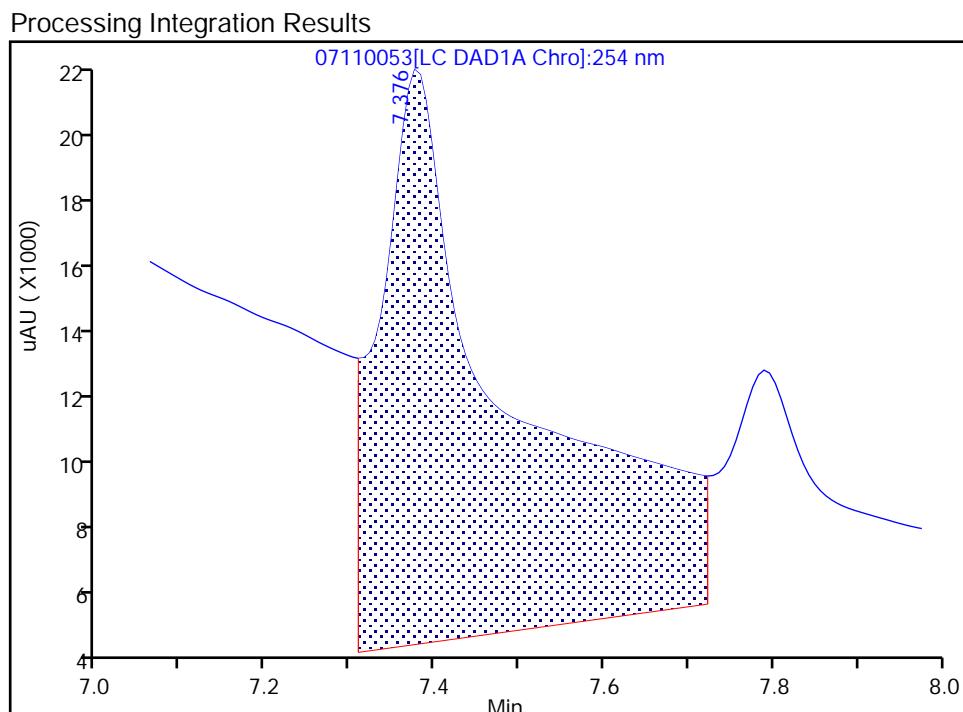
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110053.D
 Injection Date: 12-Jul-2019 03:51:45 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-4-B MS
 Client ID: G0102-19AMS
 Operator ID: hkf ALS Bottle#: 53 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

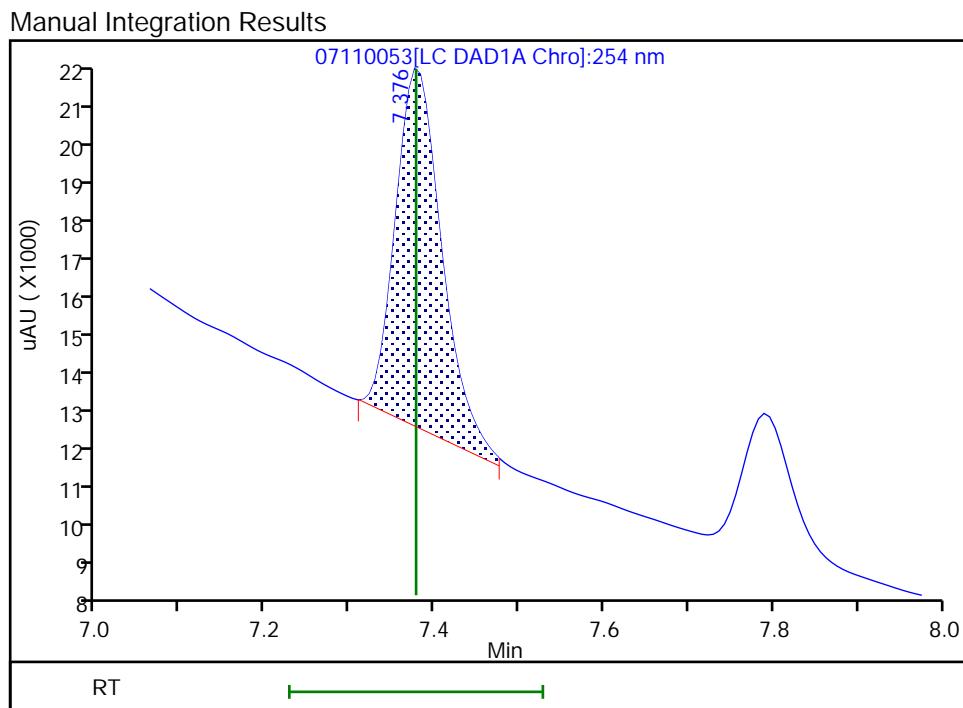
6 MNX, CAS: 5755-27-1

Signal: 1

RT: 7.38
 Area: 190480
 Amount: 1.360173
 Amount Units: ug/mL



RT: 7.38
 Area: 36095
 Amount: 0.257746
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:02:29

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

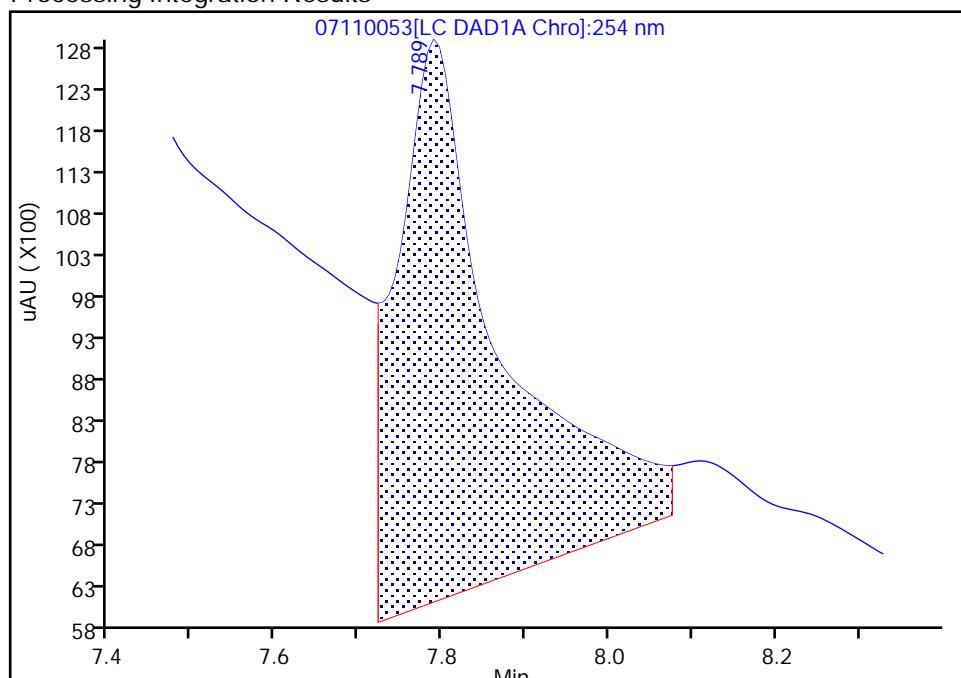
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 Injection Date: 12-Jul-2019 03:51:45 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-4-B MS
 Client ID: G0102-19AMS
 Operator ID: hkf ALS Bottle#: 53 Worklist Smp#: 53
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

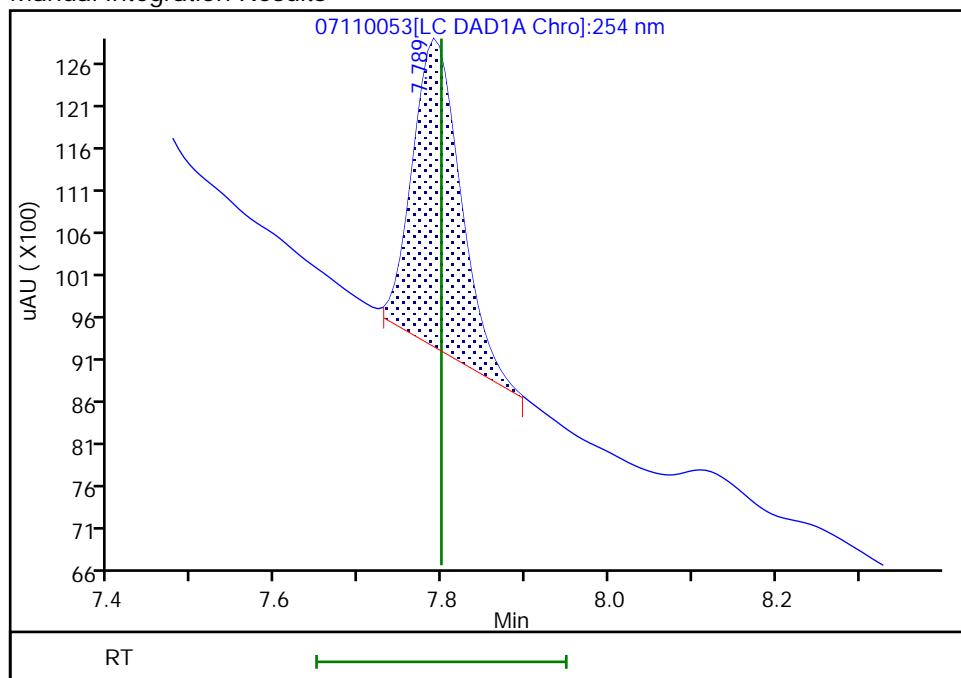
RT: 7.79
 Area: 59970
 Amount: 0.539685
 Amount Units: ug/mL

Processing Integration Results



RT: 7.79
 Area: 14683
 Amount: 0.132136
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:02:35

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ007-19AMS MS Lab Sample ID: 280-124912-5 MS
Matrix: Water Lab File ID: 06140051.D
Analysis Method: 8330A Date Collected: 06/05/2019 10:15
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 470.9 (mL) Date Analyzed: 06/15/2019 10:37
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.34	M	1.1	0.42	0.21
99-65-0	1,3-Dinitrobenzene	2.19		0.42	0.21	0.094
118-96-7	2,4,6-Trinitrotoluene	1.96		0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	1.97		0.42	0.21	0.089
606-20-2	2,6-Dinitrotoluene	1.96	M	0.21	0.21	0.068
35572-78-2	2-Amino-4,6-dinitrotoluene	1.89	M	0.21	0.13	0.054
88-72-2	2-Nitrotoluene	1.73		0.42	0.21	0.091
99-08-1	3-Nitrotoluene	1.79		0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.72		0.21	0.13	0.061
99-99-0	4-Nitrotoluene	1.86		1.1	0.42	0.21
2691-41-0	HMX	2.02	M	0.42	0.21	0.093
98-95-3	Nitrobenzene	2.00		0.42	0.21	0.097
121-82-4	RDX	2.07	M	0.42	0.42	0.17
479-45-8	Tetryl	2.11		0.25	0.21	0.084

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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140051.D
 Lims ID: 280-124912-A-5-B MS
 Client ID: PZ007-19AMS
 Sample Type: MS
 Inject. Date: 15-Jun-2019 10:37:38 ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-5-B
 Misc. Info.: 280-0082867-051
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:17:09

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	6.500				ND		M
2 TNX	1	6.566				ND		
3 HMX	1	6.647	6.643	0.004	16949	0.2000	0.1900	M
4 2,4-diamino-6-nitrotoluene	1	6.687				ND		
5 DNX	1	6.893				ND		
6 MNX	1	7.359				ND		
7 RDX	1	7.767	7.763	0.004	20775	0.2000	0.1948	M
8 2,4,6-Trinitrophenol	1	8.147	8.196	-0.049	20047	0.2000	0.2392	M
\$ 9 1,2-Dinitrobenzene	1	8.741	8.743	-0.002	25727	0.2000	0.1977	M
10 1,3,5-Trinitrobenzene	1	8.901	8.896	0.005	50462	0.2000	0.2201	M
11 1,3-Dinitrobenzene	1	9.567	9.563	0.004	61933	0.2000	0.2059	
12 Nitrobenzene	1	9.947	9.949	-0.002	37085	0.2000	0.1884	
13 3,5-Dinitroaniline	1	10.213				ND		
14 Tetryl	1	10.281	10.276	0.005	33395	0.2000	0.1988	
15 Nitroglycerin	2	10.781	10.776	0.005	60317	2.00	0.8620	
16 2,4,6-Trinitrotoluene	1	11.241	11.229	0.012	41174	0.2000	0.1841	
17 4-Amino-2,6-dinitrotoluene	1	11.434	11.429	0.005	26307	0.2000	0.1620	
18 2-Amino-4,6-dinitrotoluene	1	11.727	11.716	0.011	35097	0.2000	0.1777	M
19 2,6-Dinitrotoluene	1	11.854	11.843	0.011	28887	0.2000	0.1845	M
20 2,4-Dinitrotoluene	1	12.054	12.043	0.011	55230	0.2000	0.1857	
21 o-Nitrotoluene	1	12.894	12.883	0.011	21429	0.2000	0.1631	
22 p-Nitrotoluene	1	13.334	13.323	0.011	19703	0.2000	0.1748	
23 m-Nitrotoluene	1	13.934	13.923	0.011	24943	0.2000	0.1682	
24 PETN	2	15.027	15.016	0.011	149707	2.00	2.05	
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

M - Manually Integrated

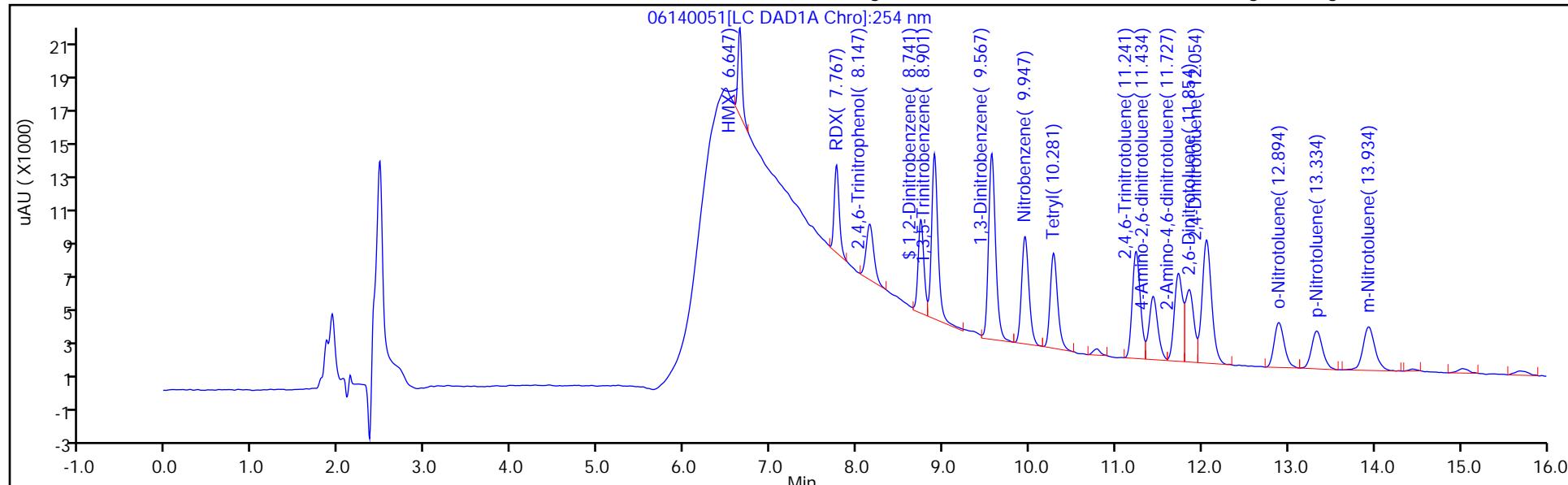
Report Date: 17-Jun-2019 10:45:37

Chrom Revision: 2.3 03-May-2019 15:52:00

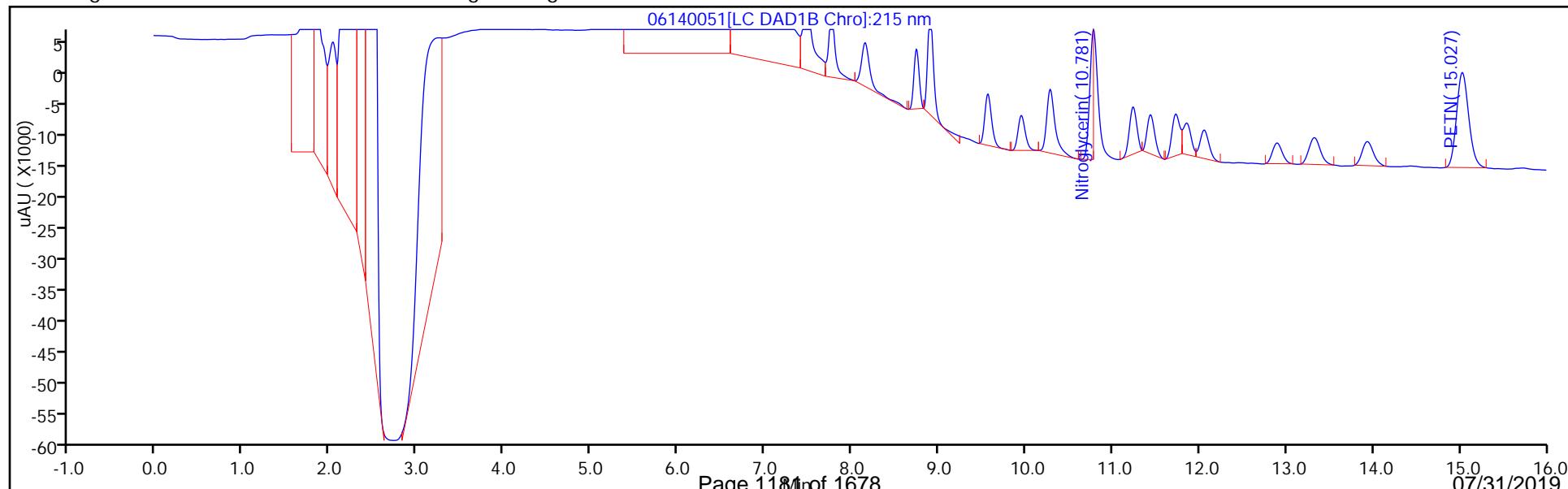
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140051.D
 Injection Date: 15-Jun-2019 10:37:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-B MS Operator ID: hkf
 Client ID: PZ007-19AMS Worklist Smp#: 51
 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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140051.D
 Lims ID: 280-124912-A-5-B MS
 Client ID: PZ007-19AMS
 Sample Type: MS
 Inject. Date: 15-Jun-2019 10:37:38 ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-5-B
 Misc. Info.: 280-0082867-051
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:17:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1977	98.87

Eurofins TestAmerica, Denver

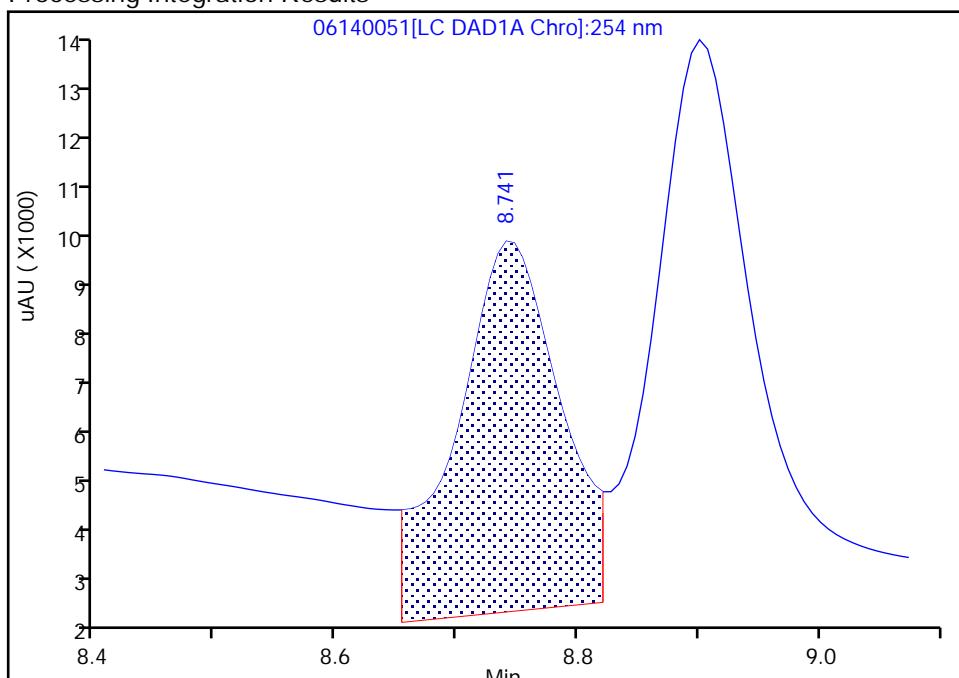
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140051.D
 Injection Date: 15-Jun-2019 10:37:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-B MS
 Client ID: PZ007-19AMS
 Operator ID: hkf ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 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

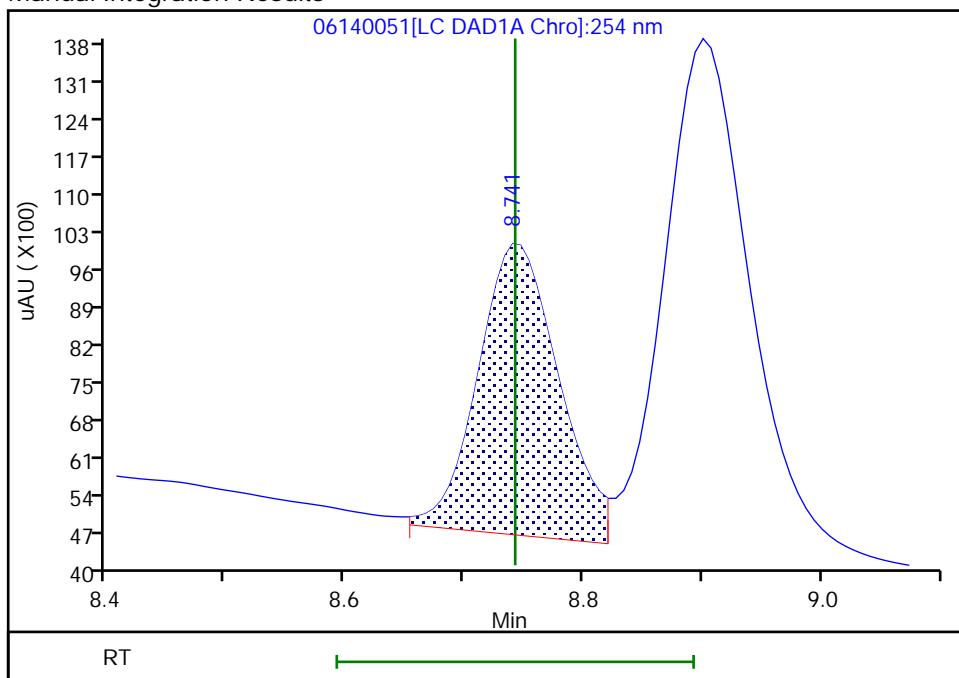
RT: 8.74
 Area: 41967
 Amount: 0.322549
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 25727
 Amount: 0.197732
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:16:49

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

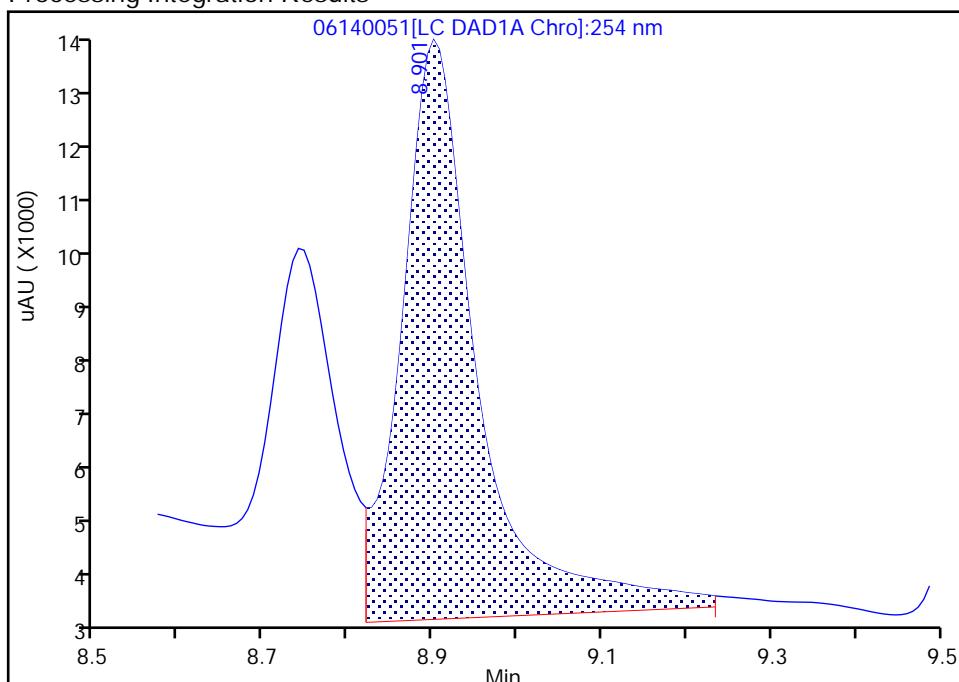
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140051.D
 Injection Date: 15-Jun-2019 10:37:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-B MS
 Client ID: PZ007-19AMS
 Operator ID: hkf ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

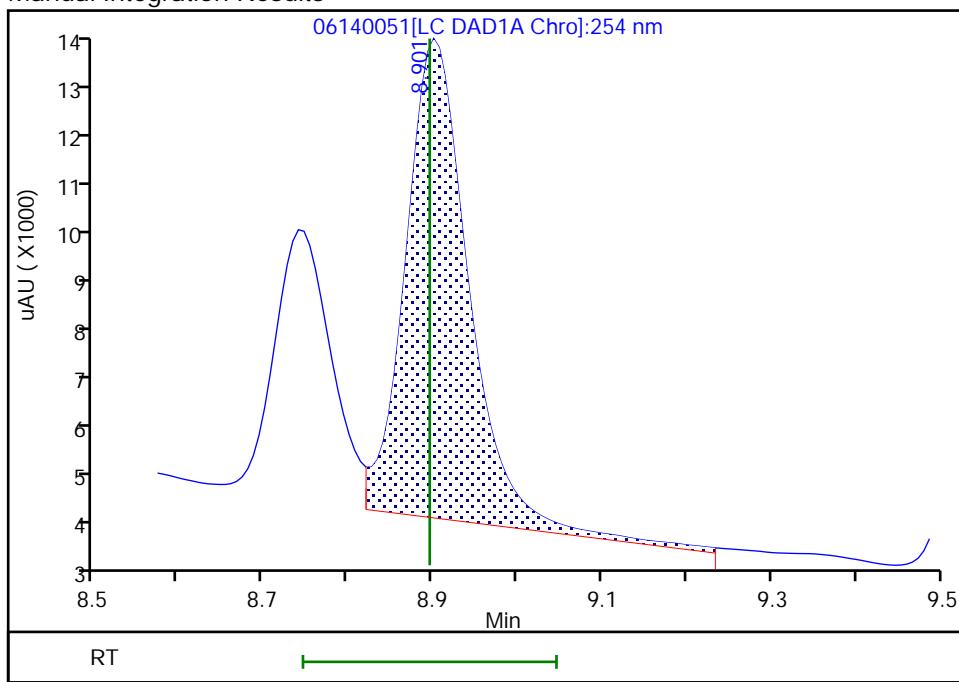
RT: 8.90
 Area: 67252
 Amount: 0.293323
 Amount Units: ug/mL

Processing Integration Results



RT: 8.90
 Area: 50462
 Amount: 0.220093
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:16:49

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

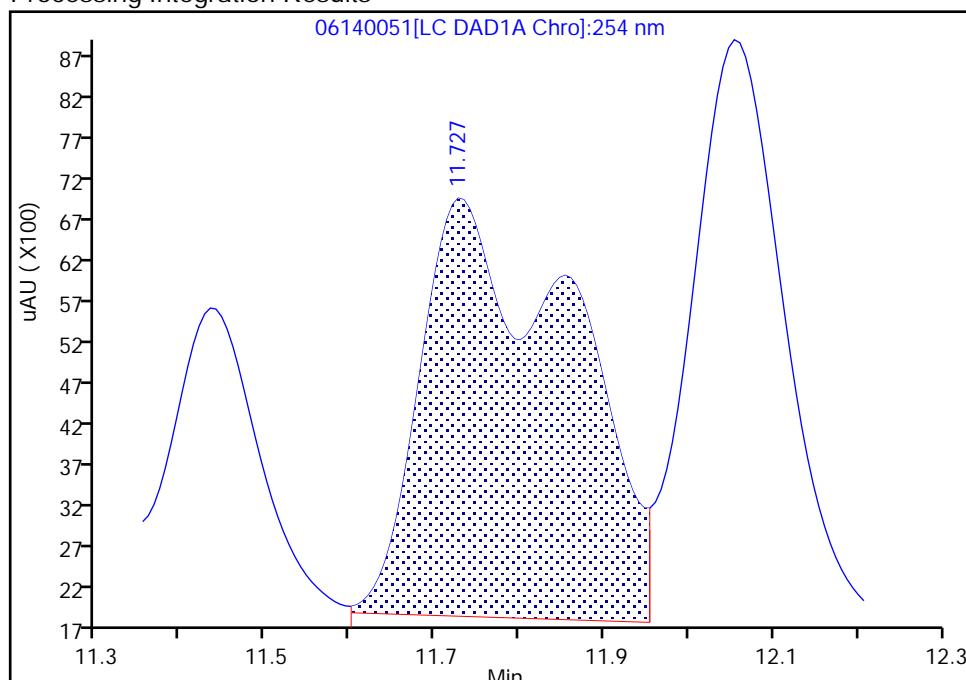
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 Injection Date: 15-Jun-2019 10:37:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-B MS
 Client ID: PZ007-19AMS
 Operator ID: hkf ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

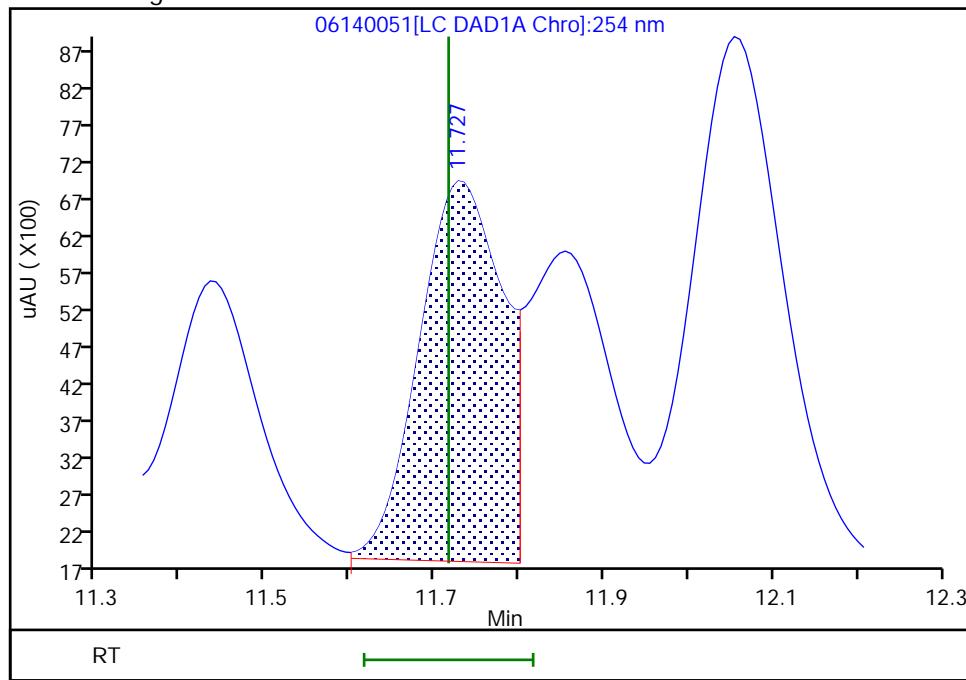
RT: 11.73
 Area: 63993
 Amount: 0.323957
 Amount Units: ug/mL

Processing Integration Results



RT: 11.73
 Area: 35097
 Amount: 0.177675
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:17:05

Audit Action: Split an Integrated Peak

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

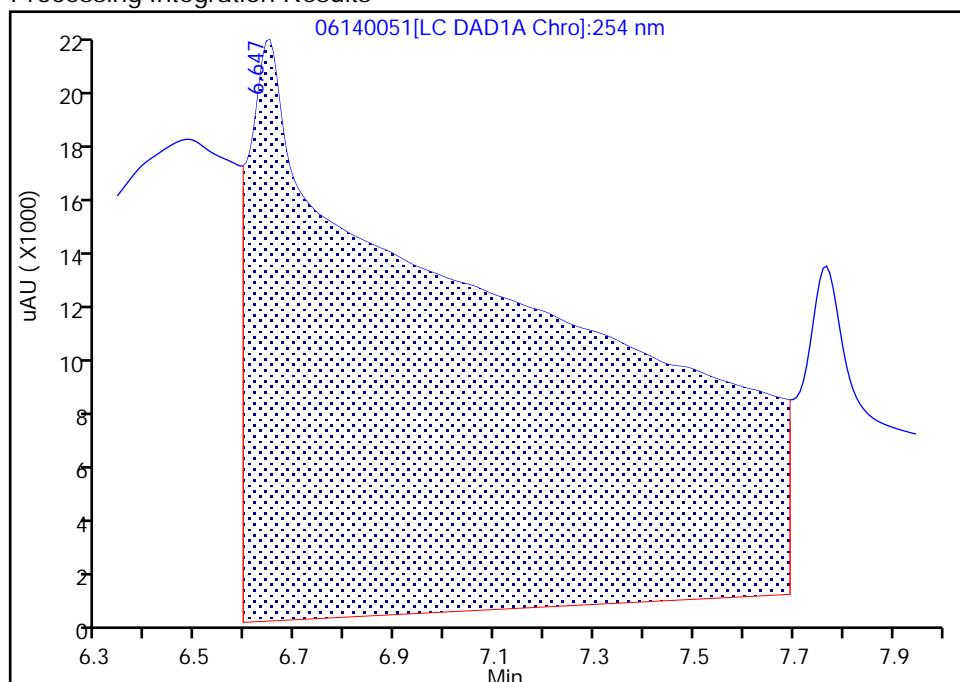
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140051.D
 Injection Date: 15-Jun-2019 10:37:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-B MS
 Client ID: PZ007-19AMS
 Operator ID: hkf ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

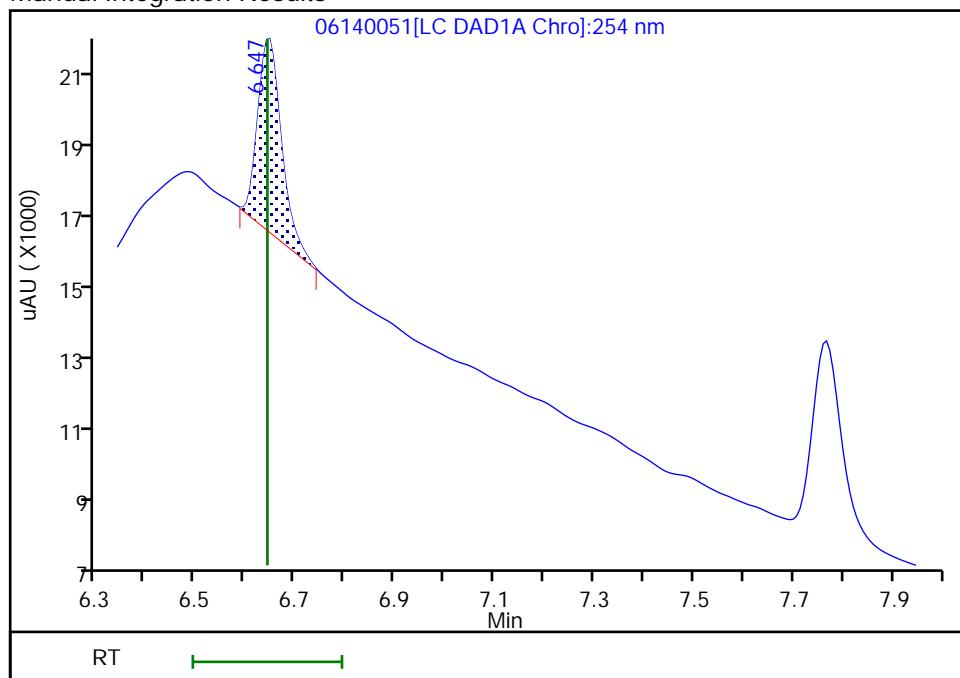
RT: 6.65
 Area: 739244
 Amount: 8.286917
 Amount Units: ug/mL

Processing Integration Results



Manual Integration Results

RT: 6.65
 Area: 16949
 Amount: 0.189998
 Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:16:27

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

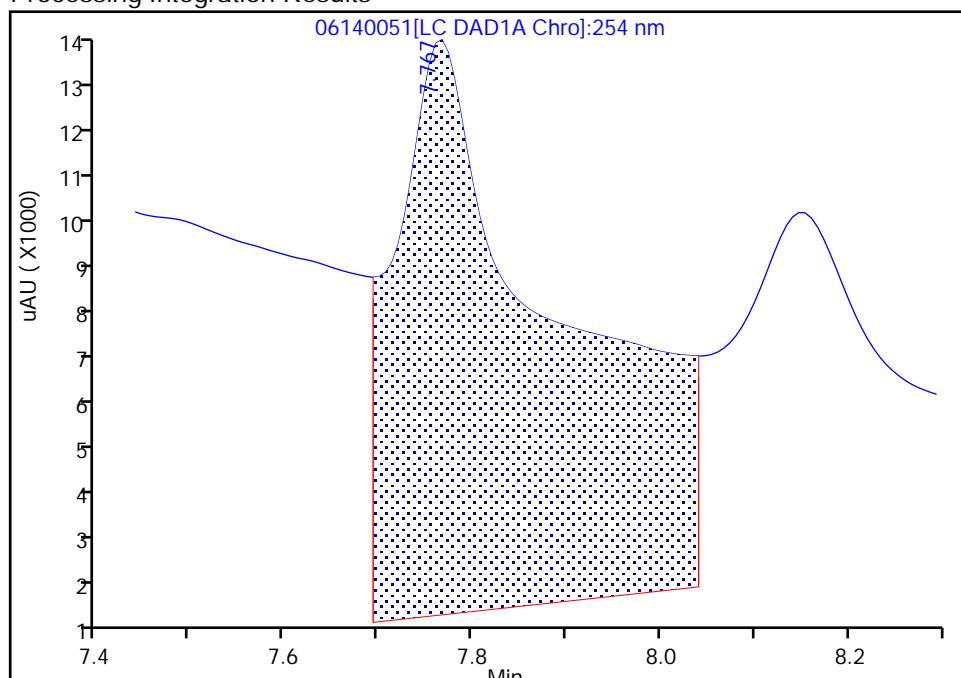
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 Injection Date: 15-Jun-2019 10:37:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-B MS
 Client ID: PZ007-19AMS
 Operator ID: hkf ALS Bottle#: 51 Worklist Smp#: 51
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

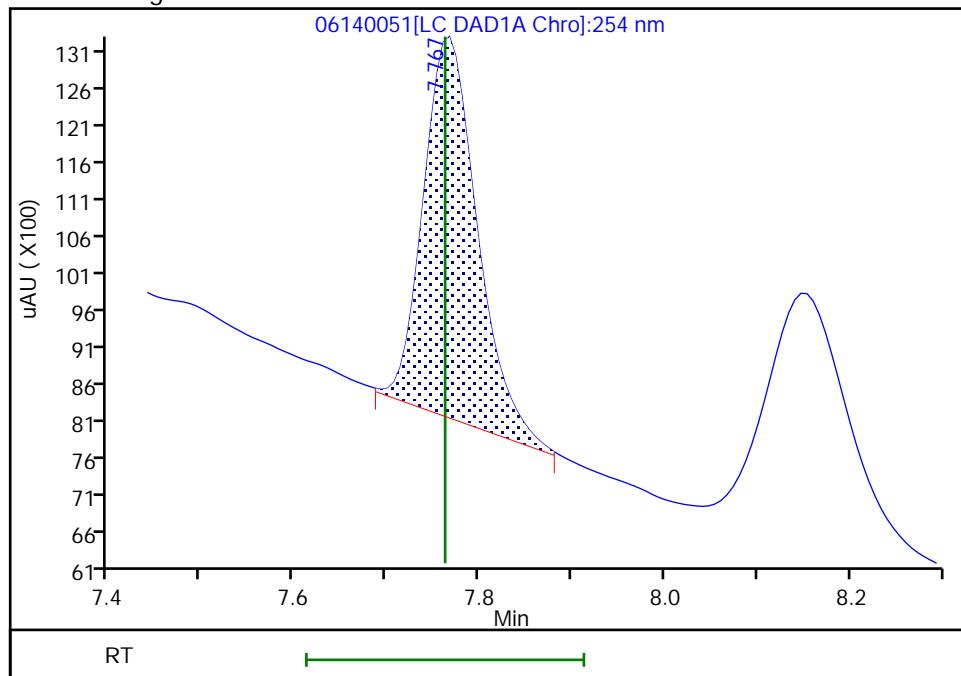
RT: 7.77
 Area: 139028
 Amount: 1.303721
 Amount Units: ug/mL

Processing Integration Results



RT: 7.77
 Area: 20775
 Amount: 0.194815
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:16:33

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ007-19AMS MS Lab Sample ID: 280-124912-5 MS
Matrix: Water Lab File ID: 07110059.D
Analysis Method: 8330A Date Collected: 06/05/2019 10:15
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 429.7 (mL) Date Analyzed: 07/12/2019 06:09
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture:
Analysis Batch No.: 464207 GPC Cleanup: (Y/N) N
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.94	H M	2.3	0.47	0.18

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110059.D
 Lims ID: 280-124912-B-5-B MS
 Client ID: PZ007-19AMS
 Sample Type: MS
 Inject. Date: 12-Jul-2019 06:09:31 ALS Bottle#: 59 Worklist Smp#: 59
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-5-B
 Misc. Info.: 280-0083617-059
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:12:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.539				ND		U
2 TNX	1	6.592	6.598	-0.006	44184	0.2002	0.2055	M
3 HMX	1	6.692				ND		
4 2,4-diamino-6-nitrotoluene	1	6.719				ND		
5 DNX	1	6.925	6.924	0.001	32753	0.2002	0.2098	M
6 MNX	1	7.379	7.378	0.001	35362	0.2334	0.2525	M
7 RDX	1	7.799				ND		
8 2,4,6-Trinitrophenol	1	8.199				ND		U
\$ 9 1,2-Dinitrobenzene	1	8.752	8.759	-0.007	25700	0.2000	0.1845	M
10 1,3,5-Trinitrobenzene	1	8.919				ND		
11 1,3-Dinitrobenzene	1	9.578				ND		
12 Nitrobenzene	1	9.965				ND		
13 3,5-Dinitroaniline	1	10.206				ND		
14 Tetryl	1	10.285				ND		
15 Nitroglycerin	2	10.792				ND		
16 2,4,6-Trinitrotoluene	1	11.258				ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445				ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738				ND		
19 2,6-Dinitrotoluene	1	11.878				ND		
20 2,4-Dinitrotoluene	1	12.078				ND		
21 o-Nitrotoluene	1	12.925				ND		
22 p-Nitrotoluene	1	13.358	13.372	-0.014	988		0.008961	7M
23 m-Nitrotoluene	1	13.978				ND		U
24 PETN	2	15.098				ND		
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Report Date: 12-Jul-2019 09:20:53

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Review Flags

M - Manually Integrated

U - Marked Undetected

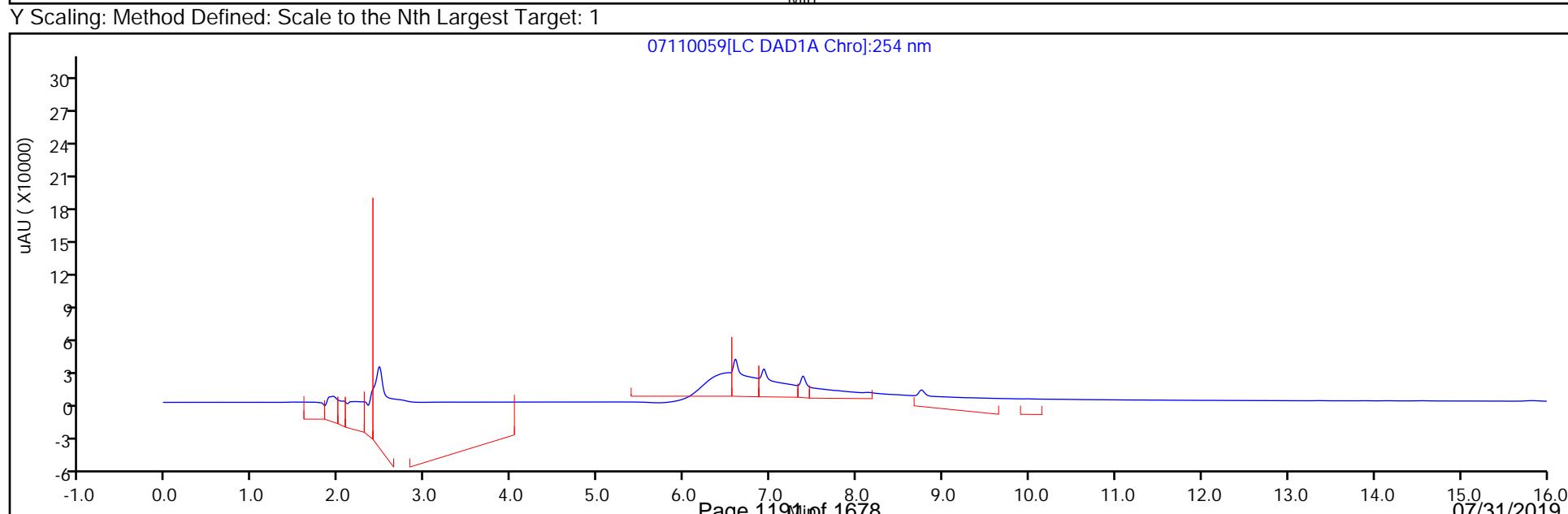
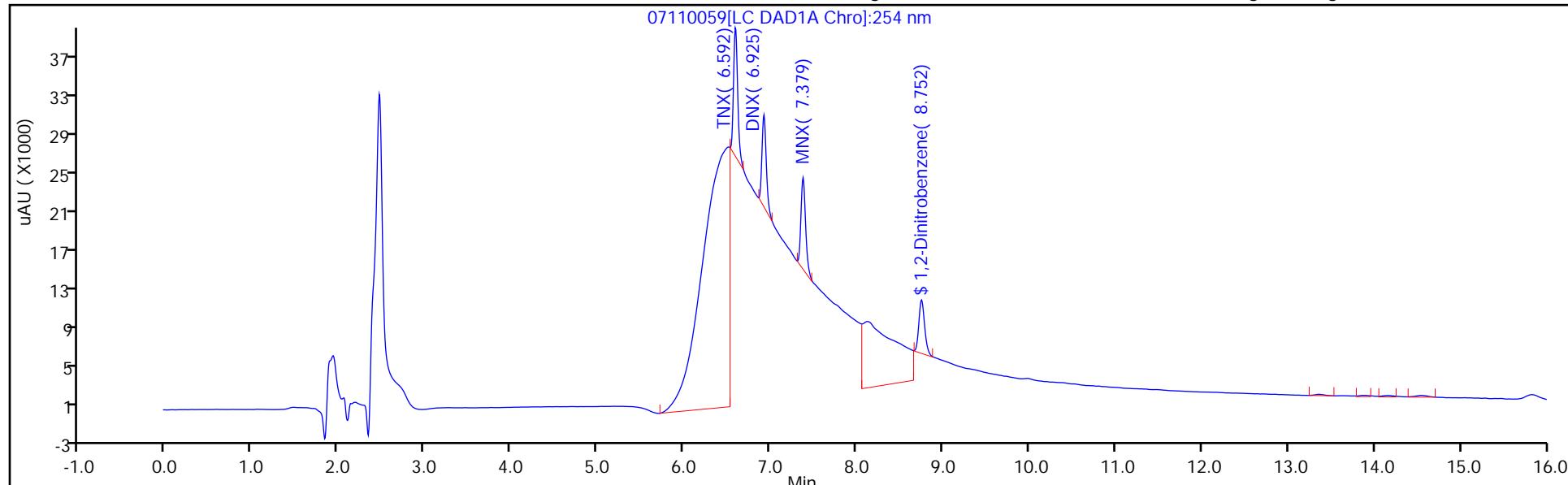
Report Date: 12-Jul-2019 09:20:53

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110059.D
Injection Date: 12-Jul-2019 06:09:31 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-5-B MS Operator ID: hkf
Client ID: PZ007-19AMS Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 59
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110059.D
 Lims ID: 280-124912-B-5-B MS
 Client ID: PZ007-19AMS
 Sample Type: MS
 Inject. Date: 12-Jul-2019 06:09:31 ALS Bottle#: 59 Worklist Smp#: 59
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-5-B
 Misc. Info.: 280-0083617-059
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:12:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1845	92.23

Eurofins TestAmerica, Denver

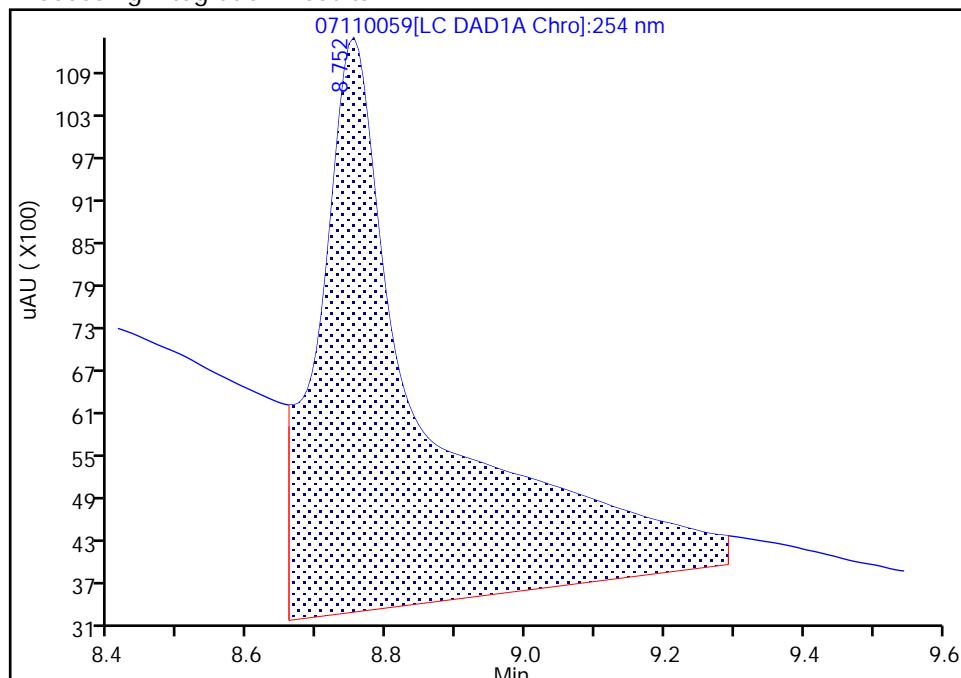
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 Injection Date: 12-Jul-2019 06:09:31 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-5-B MS
 Client ID: PZ007-19AMS
 Operator ID: hkf ALS Bottle#: 59 Worklist Smp#: 59
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

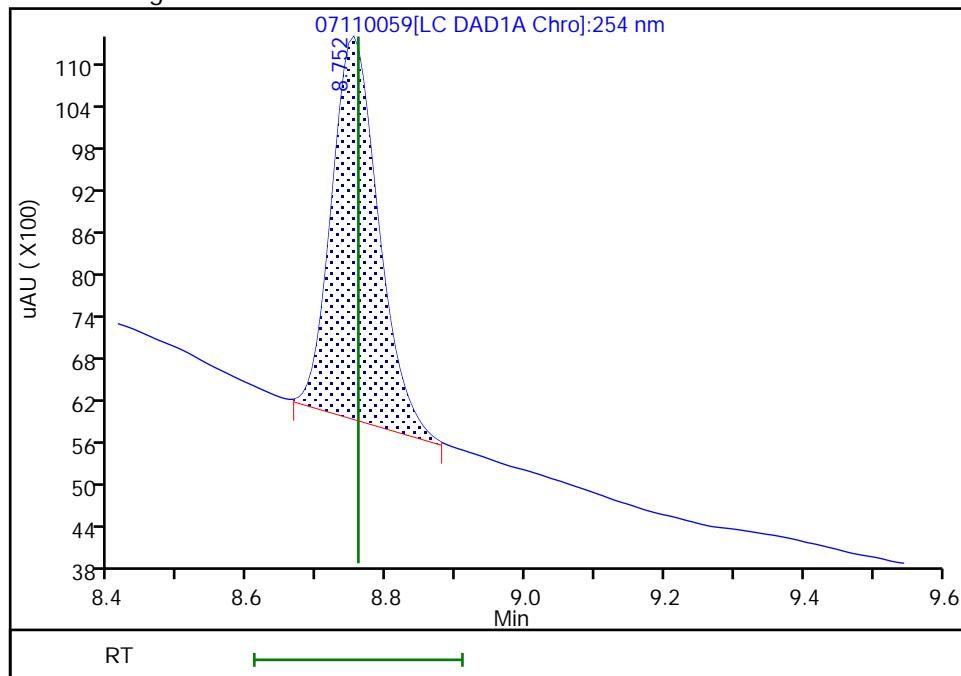
RT: 8.75
 Area: 89895
 Amount: 0.645202
 Amount Units: ug/mL

Processing Integration Results



RT: 8.75
 Area: 25700
 Amount: 0.184456
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:12:26

Audit Action: Manually Integrated

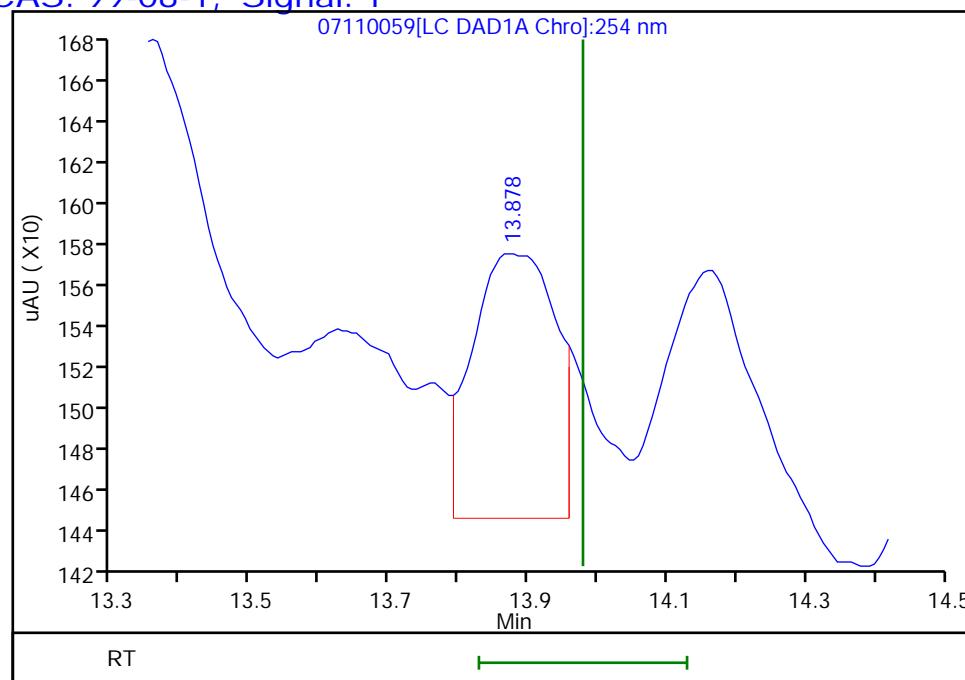
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110059.D
Injection Date: 12-Jul-2019 06:09:31 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-5-B MS
Client ID: PZ007-19AMS
Operator ID: hkf ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.88
Response: 1046
Amount: 0.007208



Reviewer: fiedlerh, 12-Jul-2019 09:12:33

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

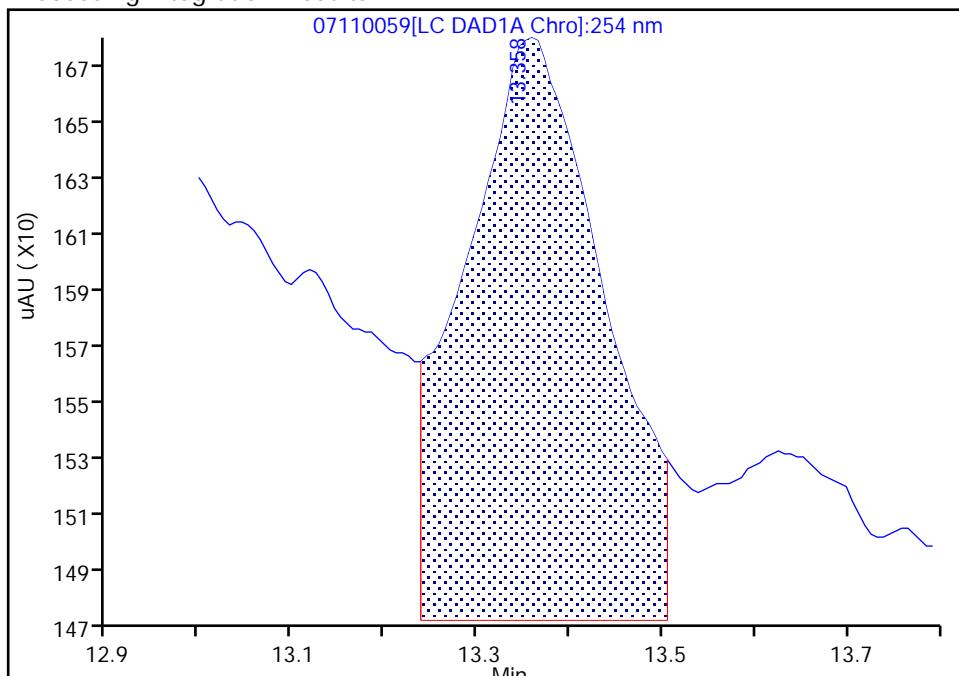
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 Injection Date: 12-Jul-2019 06:09:31 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-5-B MS
 Client ID: PZ007-19AMS
 Operator ID: hkf ALS Bottle#: 59 Worklist Smp#: 59
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

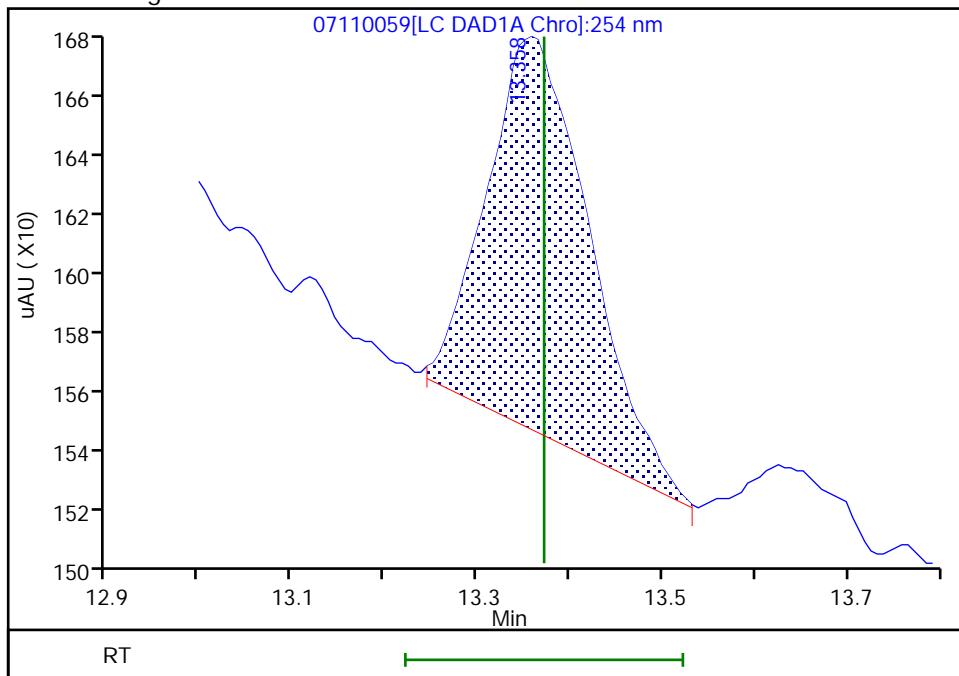
RT: 13.36
 Area: 2046
 Amount: 0.018557
 Amount Units: ug/mL

Processing Integration Results



RT: 13.36
 Area: 988
 Amount: 0.008961
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:12:30

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

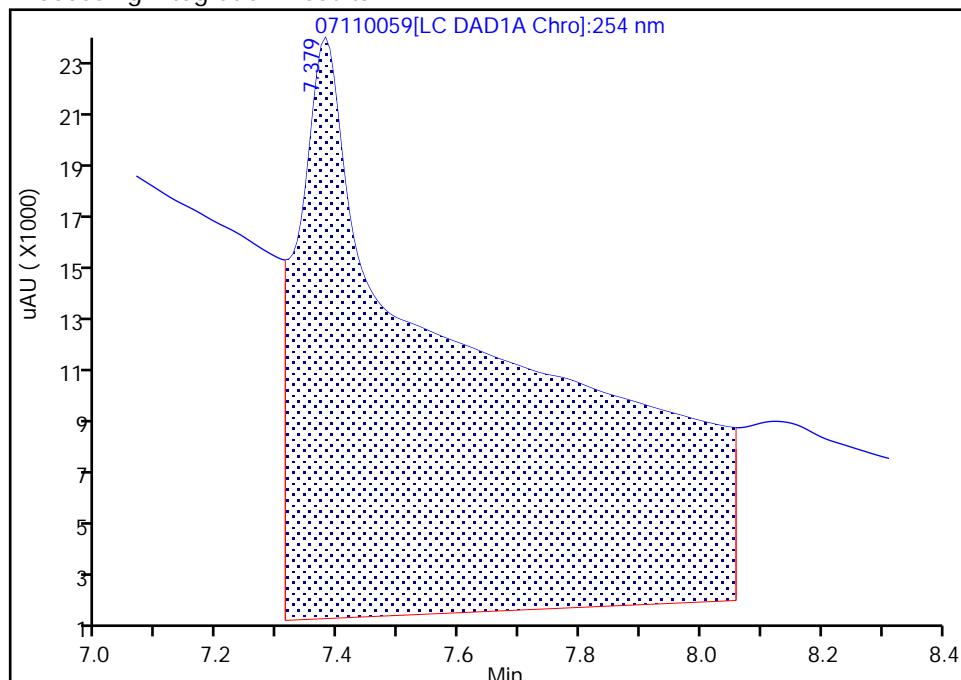
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110059.D
 Injection Date: 12-Jul-2019 06:09:31 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-5-B MS
 Client ID: PZ007-19AMS
 Operator ID: hkf ALS Bottle#: 59 Worklist Smp#: 59
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

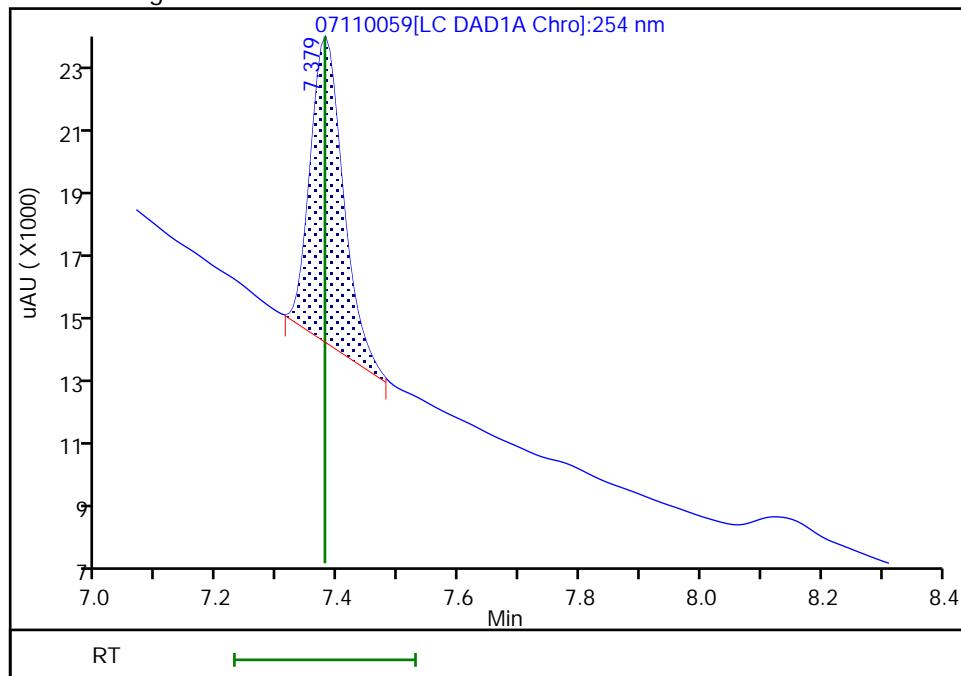
RT: 7.38
 Area: 471317
 Amount: 3.365565
 Amount Units: ug/mL

Processing Integration Results



RT: 7.38
 Area: 35362
 Amount: 0.252512
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:12:17

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ001-19AMS MS Lab Sample ID: 280-124912-12 MS
Matrix: Water Lab File ID: 06140077.D
Analysis Method: 8330A Date Collected: 06/04/2019 14:05
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 506.7 (mL) Date Analyzed: 06/15/2019 20:56
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.23	M	0.99	0.39	0.20
99-65-0	1,3-Dinitrobenzene	2.15		0.39	0.20	0.088
118-96-7	2,4,6-Trinitrotoluene	1.91		0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	1.94		0.39	0.20	0.083
606-20-2	2,6-Dinitrotoluene	1.74	M	0.20	0.20	0.064
35572-78-2	2-Amino-4,6-dinitrotoluene	1.97	M	0.20	0.12	0.050
88-72-2	2-Nitrotoluene	1.35	J1	0.39	0.20	0.084
99-08-1	3-Nitrotoluene	1.46		0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.67		0.20	0.12	0.057
99-99-0	4-Nitrotoluene	1.50		0.99	0.39	0.20
2691-41-0	HMX	1.92	M	0.39	0.20	0.086
98-95-3	Nitrobenzene	1.68		0.39	0.20	0.090
121-82-4	RDX	1.97	M	0.39	0.39	0.16
479-45-8	Tetryl	2.26		0.24	0.20	0.078

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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140077.D
 Lims ID: 280-124912-A-12-B MS
 Client ID: PZ001-19AMS
 Sample Type: MS
 Inject. Date: 15-Jun-2019 20:56:50 ALS Bottle#: 77 Worklist Smp#: 77
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-12-B MS
 Misc. Info.: 280-0082867-077
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:46:23 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:40:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.500				ND		
2 TNX	1	6.477	6.566	-0.089	559502		2.81	E
3 HMX	1	6.644	6.643	0.001	17379	0.2000	0.1948	M
4 2,4-diamino-6-nitrotoluene	1	6.687				ND		
5 DNX	1	6.893				ND		
6 MNX	1	7.359				ND		
7 RDX	1	7.771	7.763	0.008	21296	0.2000	0.1997	M
8 2,4,6-Trinitrophenol	1	8.137	8.196	-0.059	20464	0.2000	0.2442	M
\$ 9 1,2-Dinitrobenzene	1	8.744	8.743	0.001	25460	0.2000	0.1957	M
10 1,3,5-Trinitrobenzene	1	8.904	8.896	0.008	51928	0.2000	0.2265	M
11 1,3-Dinitrobenzene	1	9.570	9.563	0.007	65655	0.2000	0.2183	
12 Nitrobenzene	1	9.950	9.949	0.001	33457	0.2000	0.1700	
13 3,5-Dinitroaniline	1	10.213				ND		
14 Tetryl	1	10.284	10.276	0.008	38512	0.2000	0.2293	
15 Nitroglycerin	2	10.784	10.776	0.008	140512	2.00	2.01	
16 2,4,6-Trinitrotoluene	1	11.244	11.229	0.015	43175	0.2000	0.1931	
17 4-Amino-2,6-dinitrotoluene	1	11.444	11.429	0.015	27449	0.2000	0.1690	
18 2-Amino-4,6-dinitrotoluene	1	11.737	11.716	0.021	39435	0.2000	0.1996	M
19 2,6-Dinitrotoluene	1	11.857	11.843	0.014	27536	0.2000	0.1758	M
20 2,4-Dinitrotoluene	1	12.064	12.043	0.021	58367	0.2000	0.1962	
21 o-Nitrotoluene	1	12.897	12.883	0.014	18024	0.2000	0.1372	
22 p-Nitrotoluene	1	13.337	13.323	0.014	17158	0.2000	0.1522	
23 m-Nitrotoluene	1	13.937	13.923	0.014	21958	0.2000	0.1481	
24 PETN	2	15.030	15.016	0.014	152899	2.00	2.09	
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 17-Jun-2019 10:46:44

Chrom Revision: 2.3 03-May-2019 15:52:00

Review Flags

M - Manually Integrated

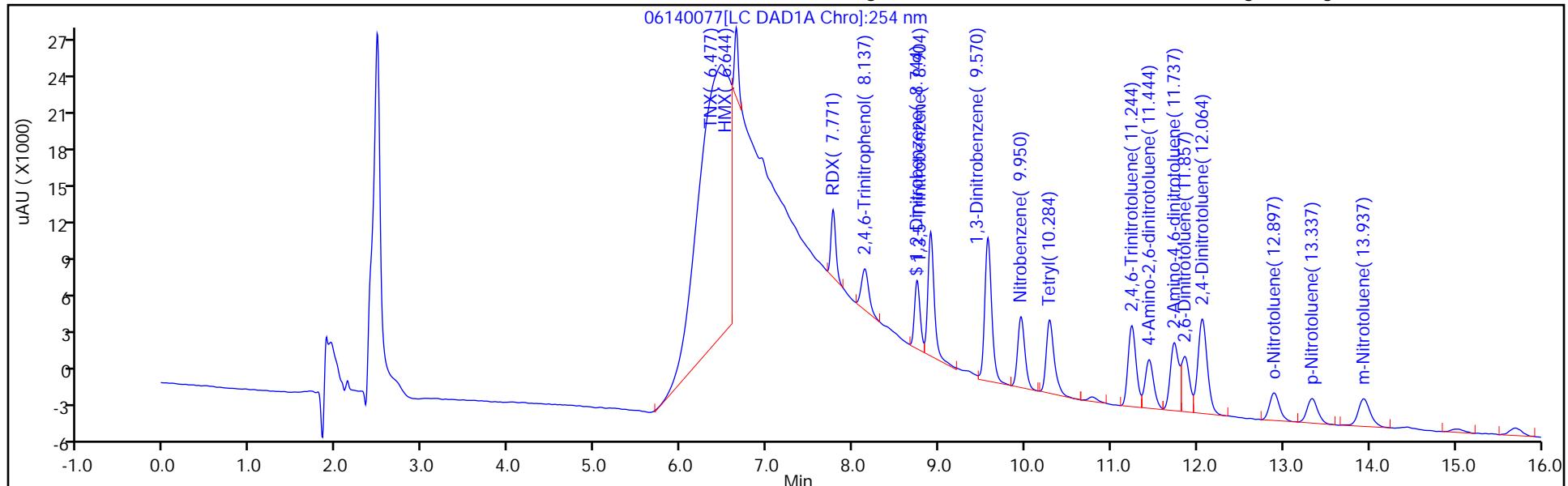
Report Date: 17-Jun-2019 10:46:44

Chrom Revision: 2.3 03-May-2019 15:52:00

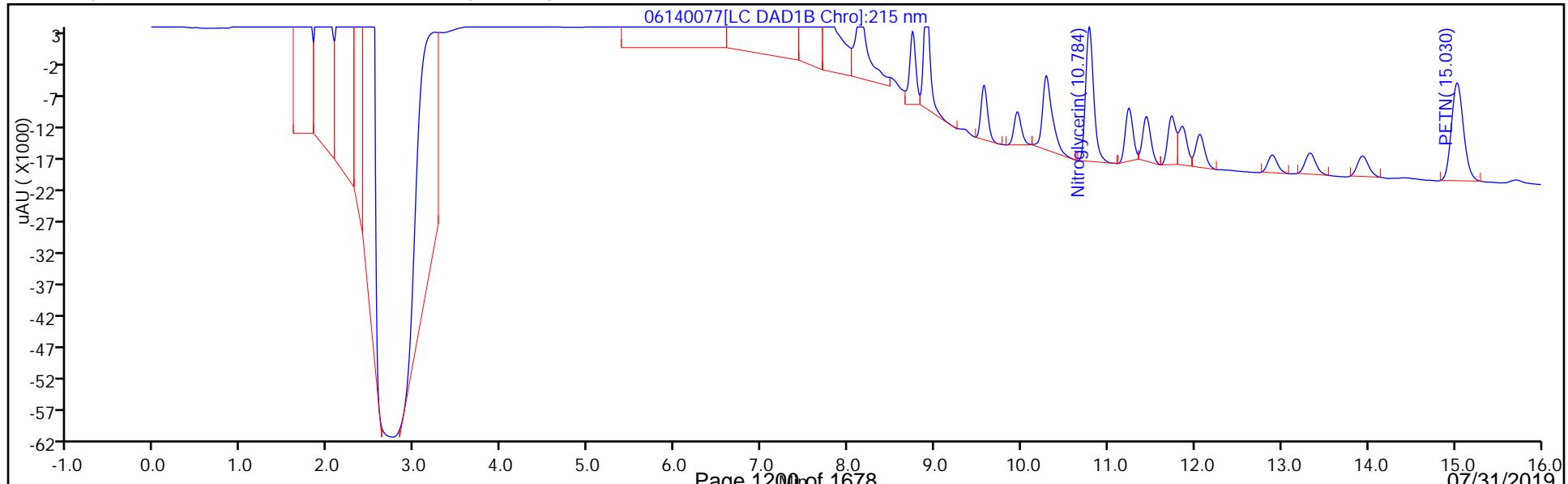
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140077.D
 Injection Date: 15-Jun-2019 20:56:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-B MS Operator ID: hkf
 Client ID: PZ001-19AMS Worklist Smp#: 77
 Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 77
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140077.D
 Lims ID: 280-124912-A-12-B MS
 Client ID: PZ001-19AMS
 Sample Type: MS
 Inject. Date: 15-Jun-2019 20:56:50 ALS Bottle#: 77 Worklist Smp#: 77
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-12-B MS
 Misc. Info.: 280-0082867-077
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:46:23 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:40:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1957	97.84

Eurofins TestAmerica, Denver

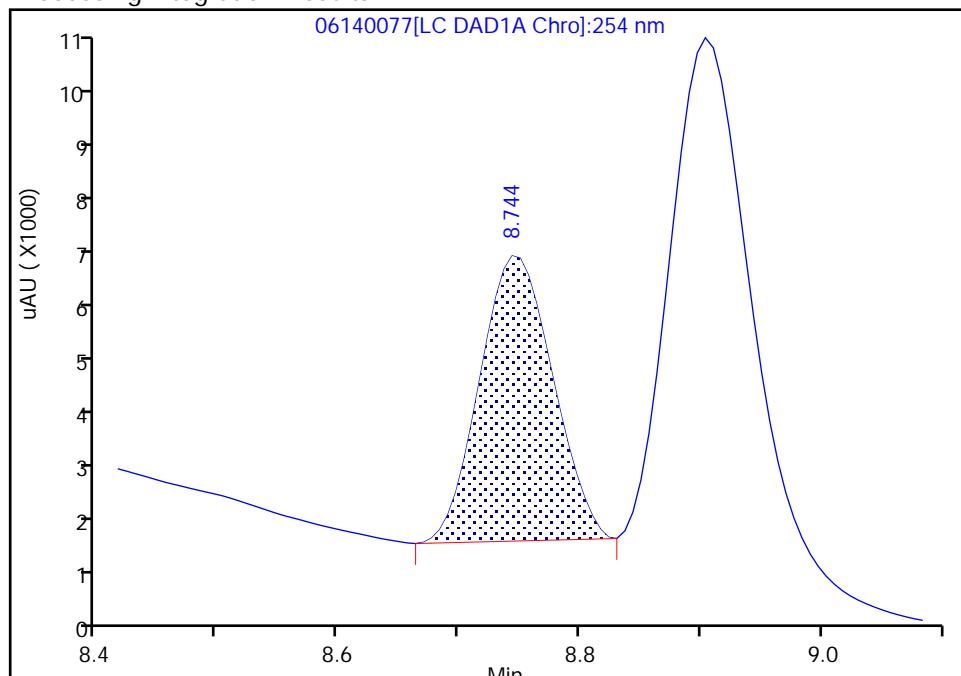
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140077.D
 Injection Date: 15-Jun-2019 20:56:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-B MS
 Client ID: PZ001-19AMS
 Operator ID: hkf ALS Bottle#: 77 Worklist Smp#: 77
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 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

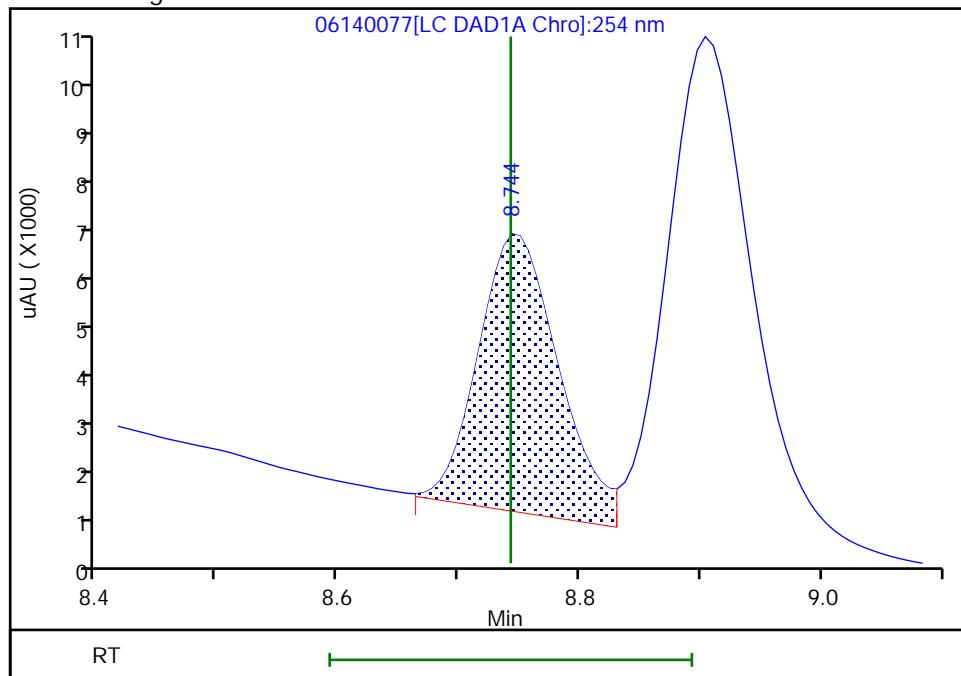
RT: 8.74
 Area: 21430
 Amount: 0.164706
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 25460
 Amount: 0.195680
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:40:48

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

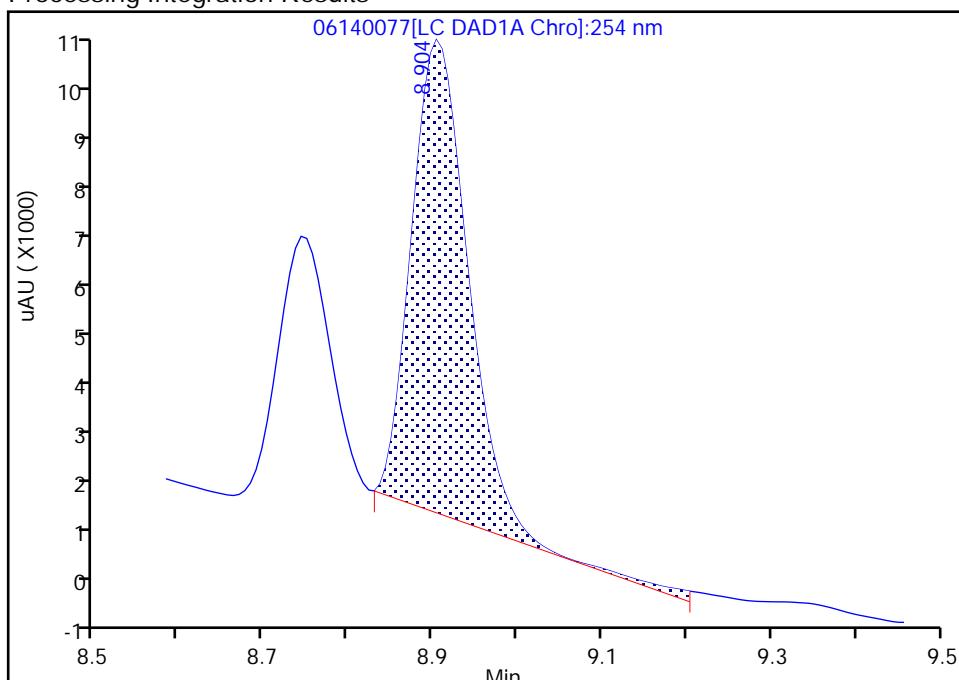
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140077.D
 Injection Date: 15-Jun-2019 20:56:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-B MS
 Client ID: PZ001-19AMS
 Operator ID: hkf ALS Bottle#: 77 Worklist Smp#: 77
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 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

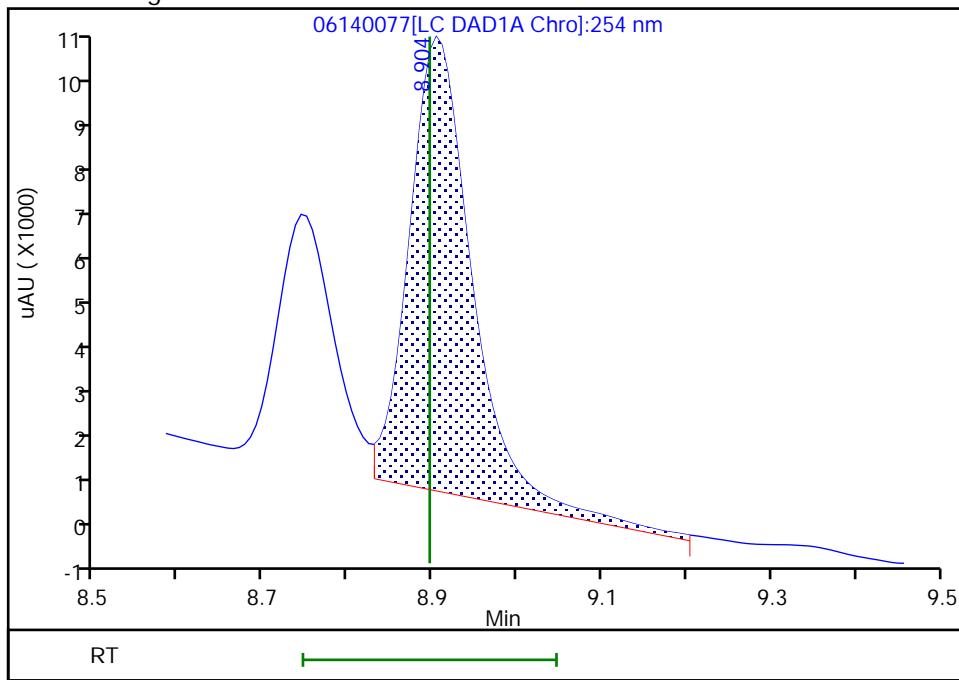
RT: 8.90
 Area: 44447
 Amount: 0.193858
 Amount Units: ug/mL

Processing Integration Results



RT: 8.90
 Area: 51928
 Amount: 0.226487
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:40:48

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

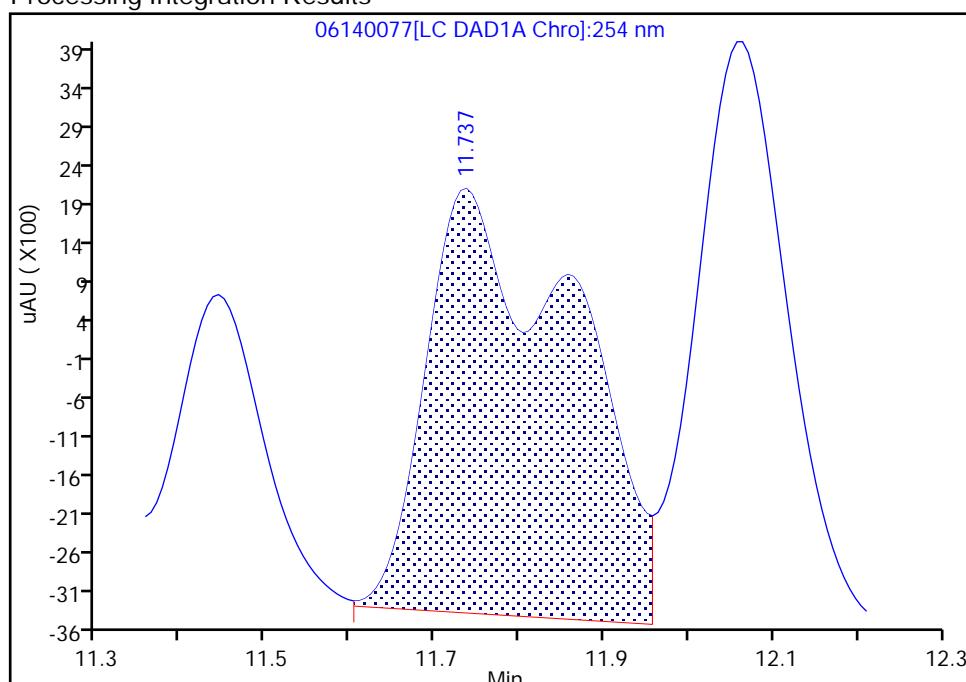
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 Injection Date: 15-Jun-2019 20:56:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-B MS
 Client ID: PZ001-19AMS
 Operator ID: hkf ALS Bottle#: 77 Worklist Smp#: 77
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

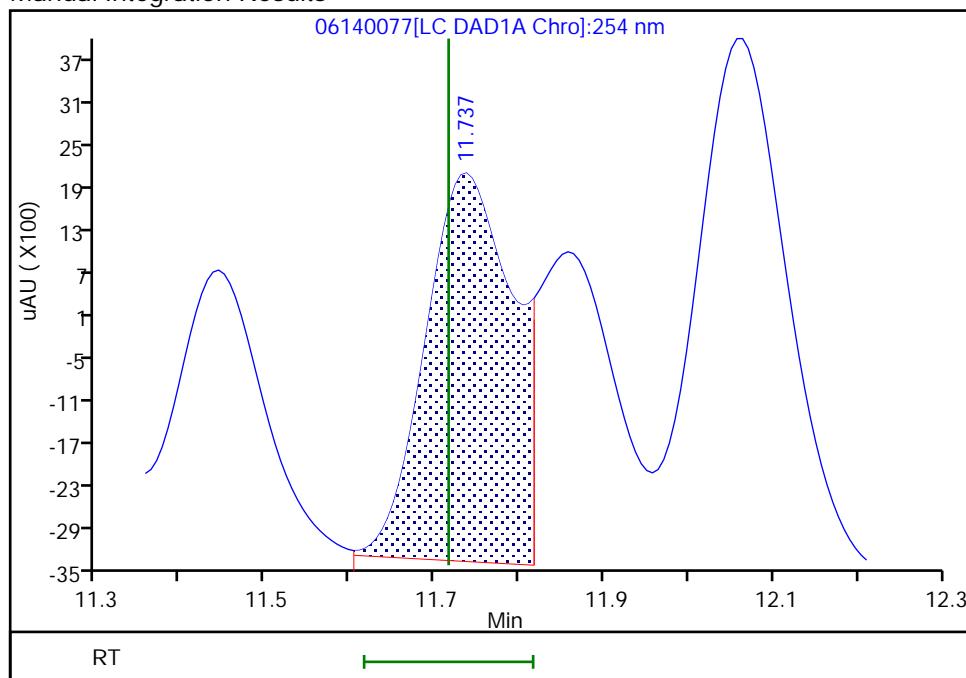
RT: 11.74
 Area: 66998
 Amount: 0.339170
 Amount Units: ug/mL

Processing Integration Results



RT: 11.74
 Area: 39435
 Amount: 0.199635
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:40:15

Audit Action: Split an Integrated Peak

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

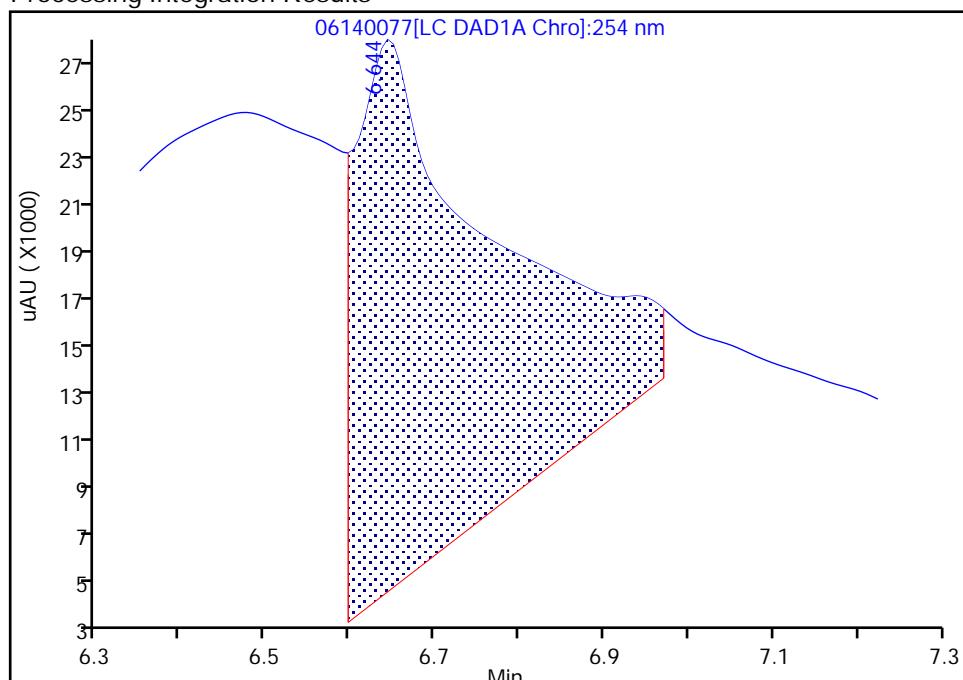
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140077.D
 Injection Date: 15-Jun-2019 20:56:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-B MS
 Client ID: PZ001-19AMS
 Operator ID: hkf ALS Bottle#: 77 Worklist Smp#: 77
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

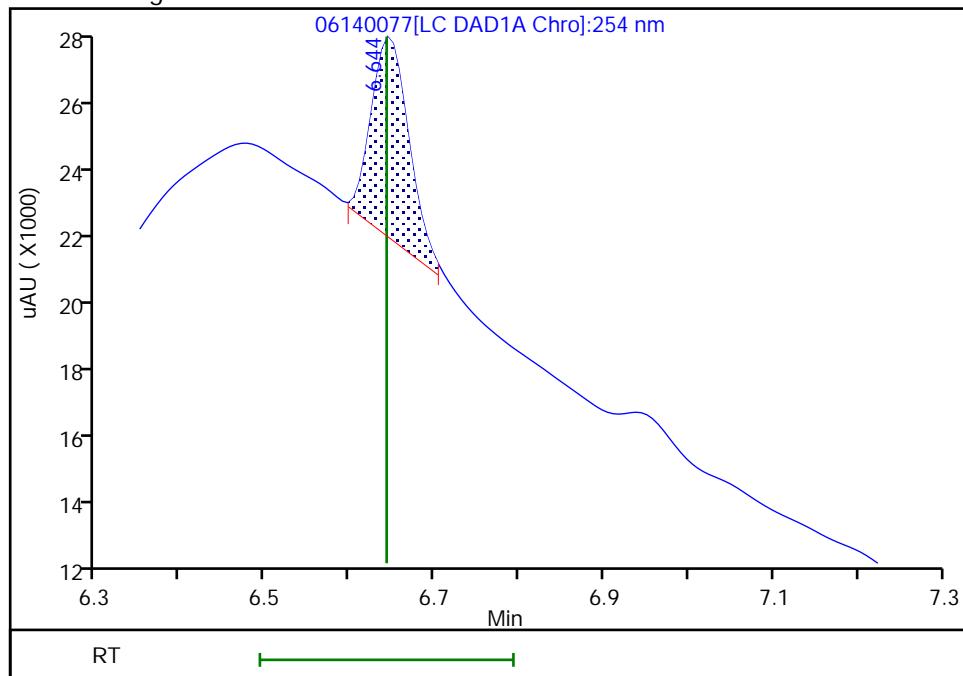
RT: 6.64
 Area: 255337
 Amount: 2.862325
 Amount Units: ug/mL

Processing Integration Results



RT: 6.64
 Area: 17379
 Amount: 0.194818
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:40:28

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

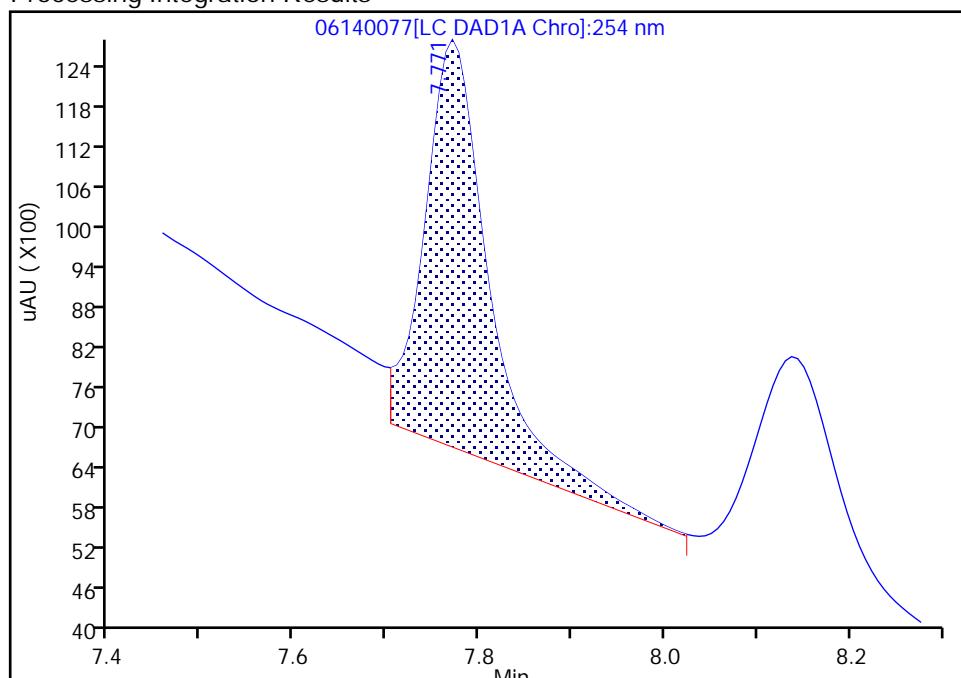
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 Injection Date: 15-Jun-2019 20:56:50 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-B MS
 Client ID: PZ001-19AMS
 Operator ID: hkf ALS Bottle#: 77 Worklist Smp#: 77
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

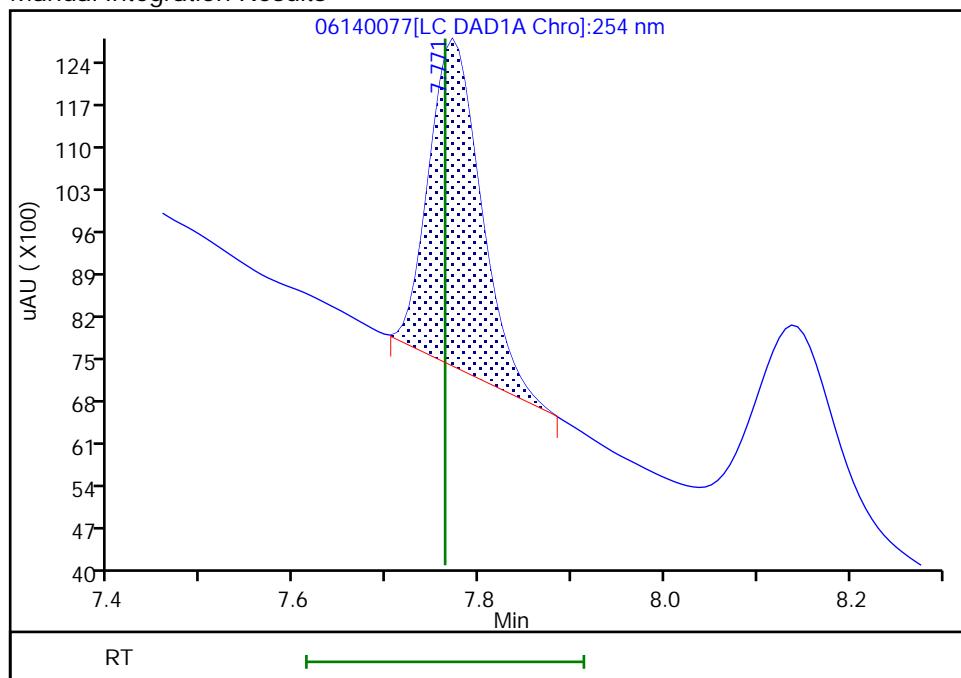
RT: 7.77
 Area: 29572
 Amount: 0.277308
 Amount Units: ug/mL

Processing Integration Results



RT: 7.77
 Area: 21296
 Amount: 0.199701
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:40:34

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ001-19AMS MS Lab Sample ID: 280-124912-12 MS
Matrix: Water Lab File ID: 07150010.D
Analysis Method: 8330A Date Collected: 06/04/2019 14:05
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 506.2 (mL) Date Analyzed: 07/15/2019 13:27
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.37	H M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	84	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150010.D
 Lims ID: 280-124912-B-12-B MS
 Client ID: PZ001-19AMS
 Sample Type: MS
 Inject. Date: 15-Jul-2019 13:27:11 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-12-
 Misc. Info.: 280-0083692-010
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:54:23

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	6.533				ND		
2 TNX	1	6.592	6.587	0.005	40945	0.2002	0.1905	M
3 HMX	1	6.680				ND		
4 2,4-diamino-6-nitrotoluene	1	6.719				ND		
5 DNX	1	6.912	6.907	0.005	29880	0.2002	0.1914	M
6 MNX	1	7.366	7.367	-0.001	33655	0.2334	0.2403	M
7 RDX	1	7.774				ND		
8 2,4,6-Trinitrophenol	1	8.147				ND		
\$ 9 1,2-Dinitrobenzene	1	8.739	8.734	0.005	23374	0.2000	0.1678	M
10 1,3,5-Trinitrobenzene	1		8.900			ND		
11 1,3-Dinitrobenzene	1		9.560			ND		
12 Nitrobenzene	1	9.959	9.947	0.012	1487		0.007476	M
13 3,5-Dinitroaniline	1		10.193			ND		
14 Tetryl	1		10.267			ND		U
15 Nitroglycerin	2		10.780			ND		
16 2,4,6-Trinitrotoluene	1		11.240			ND		
17 4-Amino-2,6-dinitrotoluene	1		11.427			ND		
18 2-Amino-4,6-dinitrotoluene	1		11.720			ND		
19 2,6-Dinitrotoluene	1		11.860			ND		
20 2,4-Dinitrotoluene	1		12.060			ND		
21 o-Nitrotoluene	1		12.907			ND		
22 p-Nitrotoluene	1		13.354			ND		
23 m-Nitrotoluene	1		13.960			ND		
24 PETN	2		15.080			ND		
25 Ammonium Picrate	1		0.000			ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

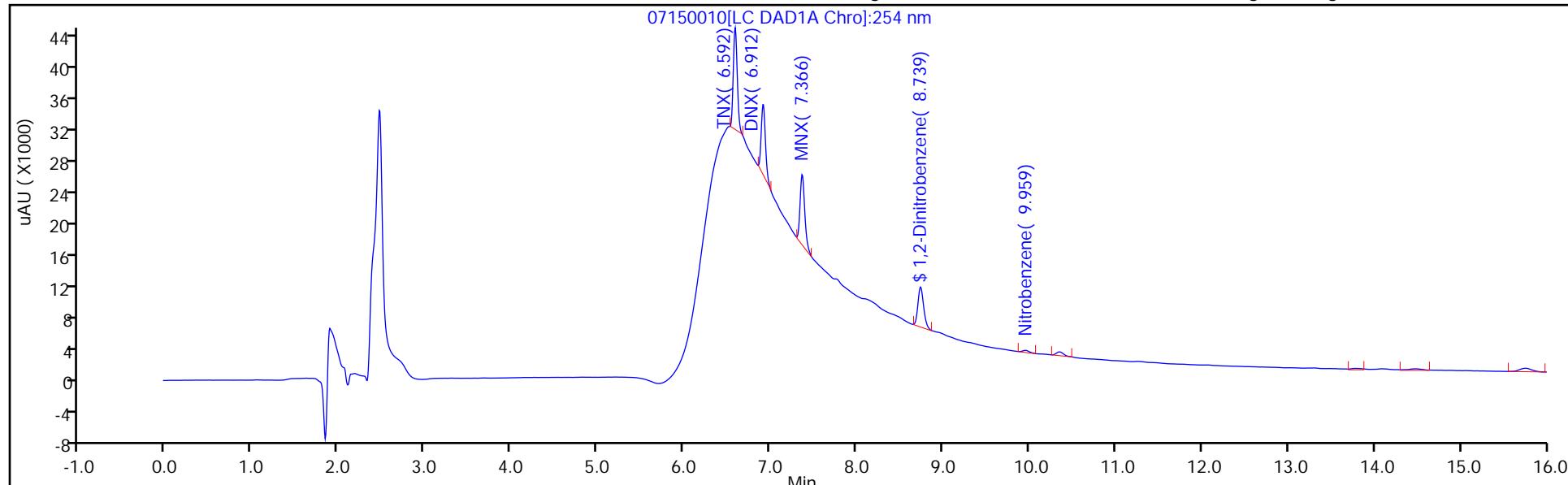
Report Date: 15-Jul-2019 17:53:58

Chrom Revision: 2.3 20-Jun-2019 20:50:56

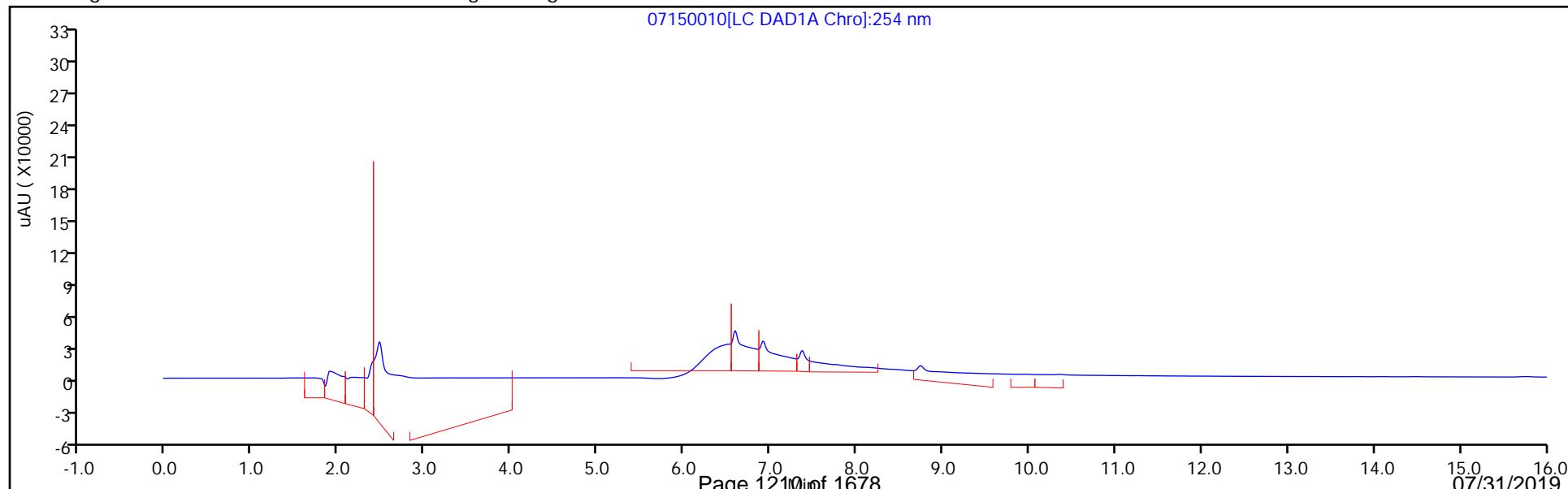
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190715-83692.b\\07150010.D
Injection Date: 15-Jul-2019 13:27:11 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-12-B MS Operator ID: hkf
Client ID: PZ001-19AMS Worklist Smp#: 10
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: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150010.D
 Lims ID: 280-124912-B-12-B MS
 Client ID: PZ001-19AMS
 Sample Type: MS
 Inject. Date: 15-Jul-2019 13:27:11 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-12-
 Misc. Info.: 280-0083692-010
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:54:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1678	83.88

Eurofins TestAmerica, Denver

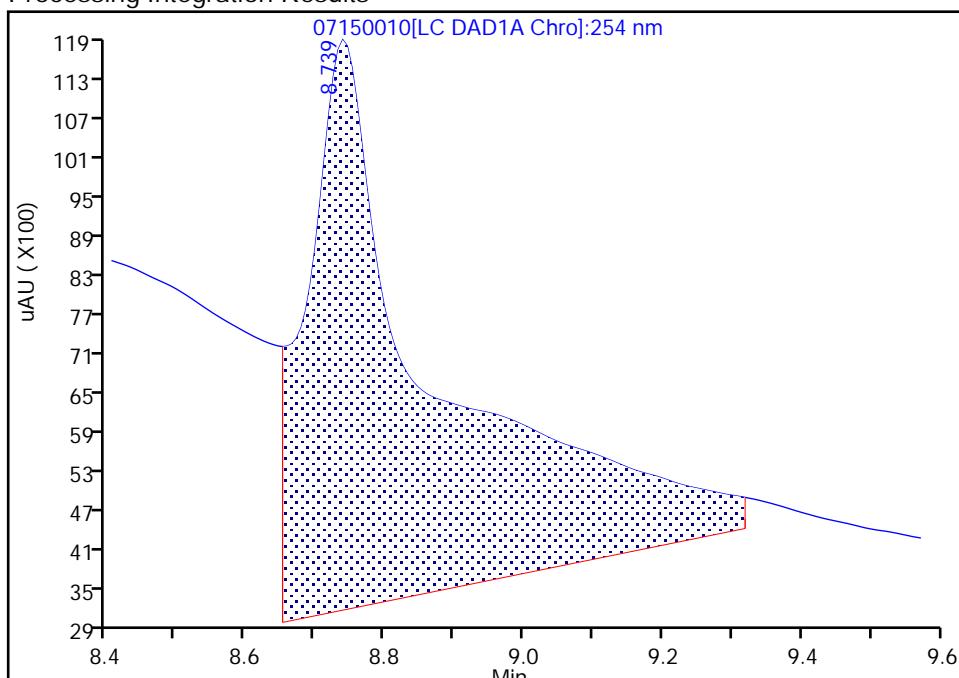
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 Injection Date: 15-Jul-2019 13:27:11 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-B MS
 Client ID: PZ001-19AMS
 Operator ID: hkf ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

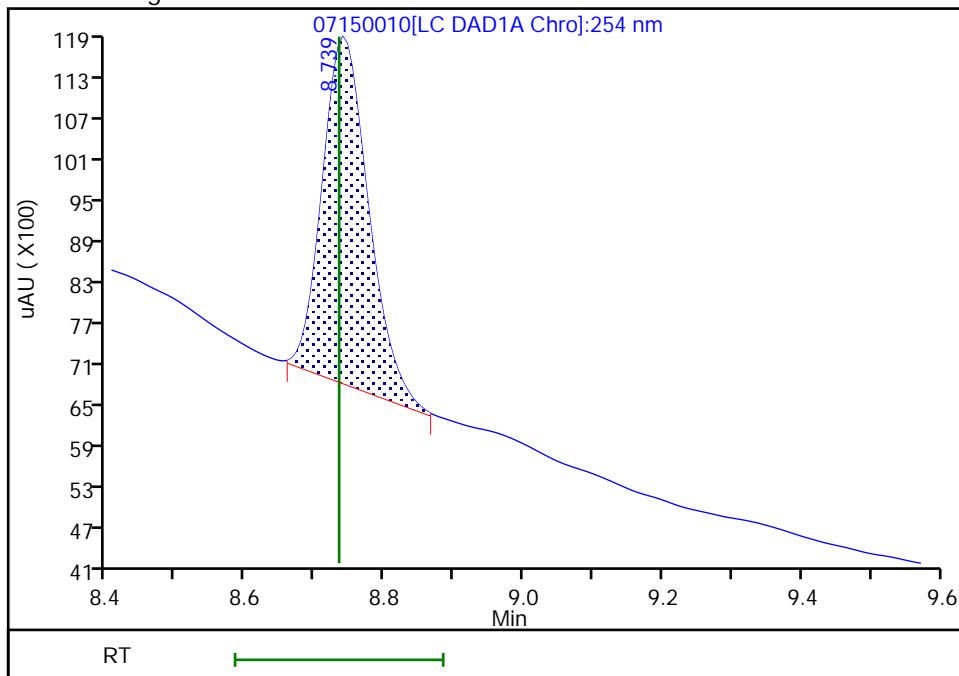
RT: 8.74
 Area: 115200
 Amount: 0.826823
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 23374
 Amount: 0.167762
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 16:54:13

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

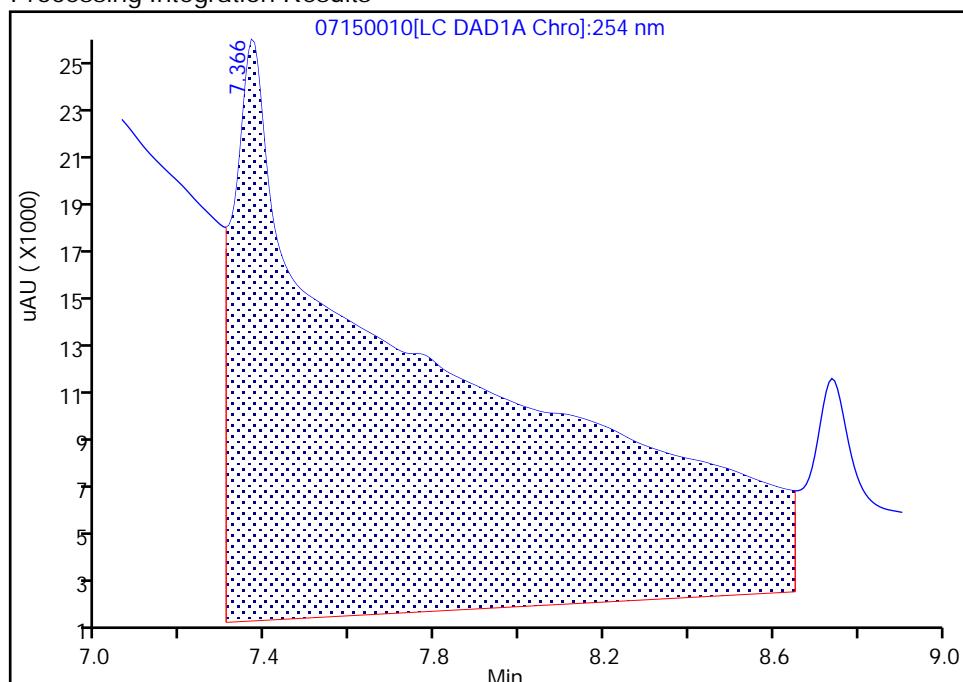
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150010.D
 Injection Date: 15-Jul-2019 13:27:11 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-B MS
 Client ID: PZ001-19AMS
 Operator ID: hkf ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

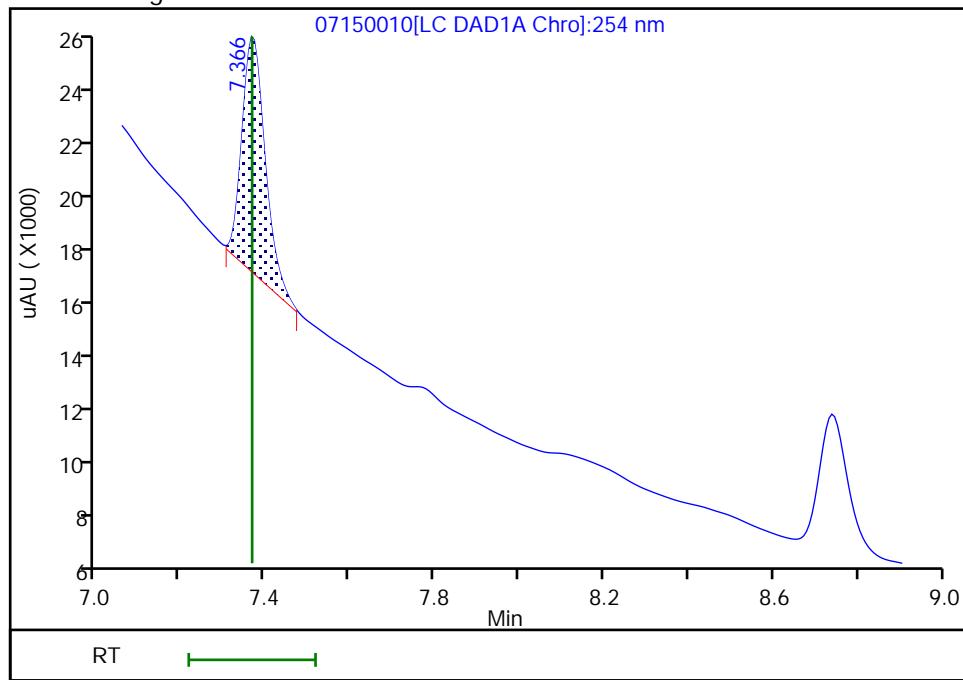
RT: 7.37
 Area: 780710
 Amount: 5.574869
 Amount Units: ug/mL

Processing Integration Results



RT: 7.37
 Area: 33655
 Amount: 0.240323
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 16:54:08

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

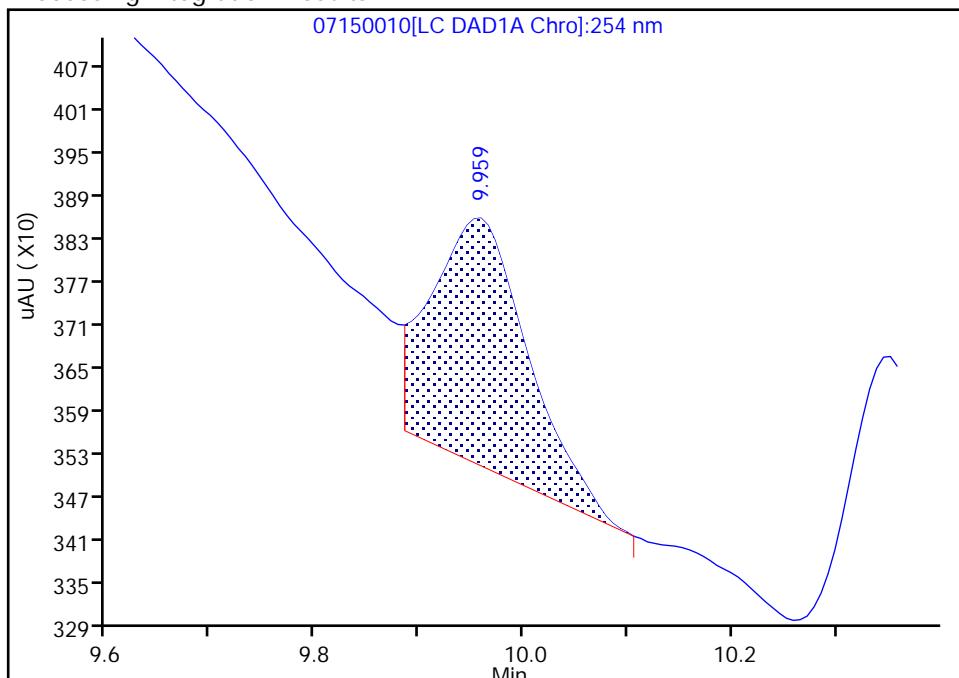
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 Injection Date: 15-Jul-2019 13:27:11 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-B MS
 Client ID: PZ001-19AMS
 Operator ID: hkf ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

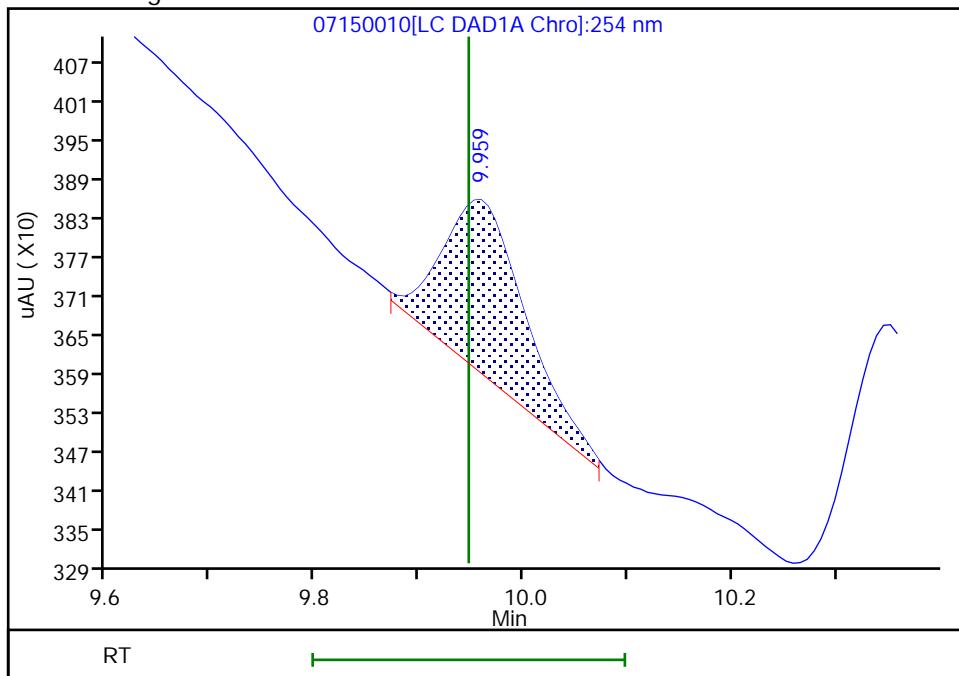
RT: 9.96
 Area: 2219
 Amount: 0.011156
 Amount Units: ug/mL

Processing Integration Results



RT: 9.96
 Area: 1487
 Amount: 0.007476
 Amount Units: ug/mL

Manual Integration Results



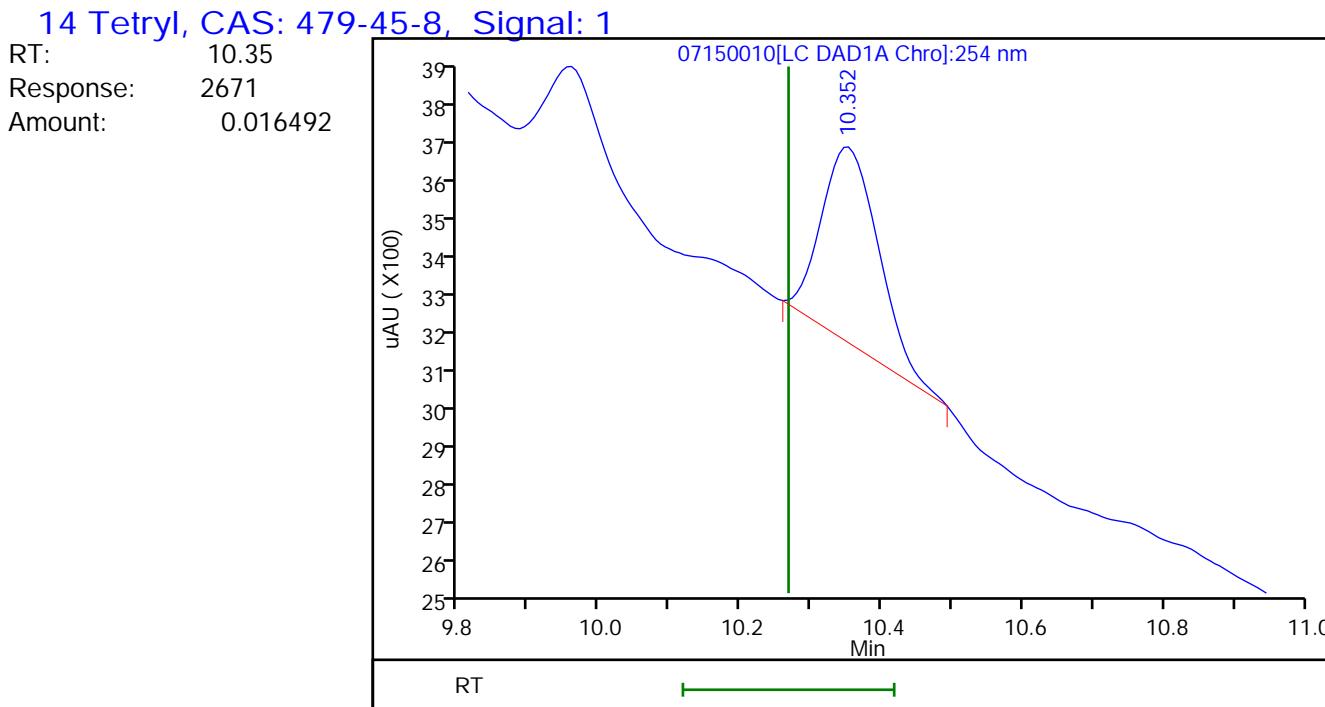
Reviewer: fiedlerh, 15-Jul-2019 16:54:19

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150010.D
Injection Date: 15-Jul-2019 13:27:11 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-12-B MS
Client ID: PZ001-19AMS
Operator ID: hkf 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



Reviewer: fiedlerh, 15-Jul-2019 16:54:23

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0102-19AMSD MSD Lab Sample ID: 280-124912-4 MSD
Matrix: Water Lab File ID: 06140049.D
Analysis Method: 8330A Date Collected: 06/05/2019 11:25
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 514.1 (mL) Date Analyzed: 06/15/2019 09:50
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.73	M Q	0.97	0.39	0.19
99-65-0	1,3-Dinitrobenzene	1.63	Q	0.39	0.19	0.086
118-96-7	2,4,6-Trinitrotoluene	1.54	Q	0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	1.43	J1	0.39	0.19	0.082
606-20-2	2,6-Dinitrotoluene	1.40	J1	0.19	0.19	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	1.31	J1	0.19	0.12	0.049
88-72-2	2-Nitrotoluene	0.819	J1	0.39	0.19	0.083
99-08-1	3-Nitrotoluene	0.859	J1	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.21	J1	0.19	0.12	0.056
99-99-0	4-Nitrotoluene	0.966	J J1	0.97	0.39	0.19
2691-41-0	HMX	1.68	M Q	0.39	0.19	0.085
98-95-3	Nitrobenzene	1.07	J1	0.39	0.19	0.089
121-82-4	RDX	2.62	M Q	0.39	0.39	0.15
479-45-8	Tetryl	1.77	Q	0.23	0.19	0.077

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	78	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140049.D
 Lims ID: 280-124912-A-4-C MSD
 Client ID: G0102-19AMSD
 Sample Type: MSD
 Inject. Date: 15-Jun-2019 09:50:03 ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-4-C
 Misc. Info.: 280-0082867-049
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:15:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.500				ND		U
2 TNX	1	6.566				ND		
3 HMX	1	6.645	6.643	0.002	15423	0.2000	0.1729	M
4 2,4-diamino-6-nitrotoluene	1	6.687				ND		
5 DNX	1	6.893				ND		
6 MNX	1	7.359				ND		
7 RDX	1	7.765	7.763	0.002	28769	0.2000	0.2698	M
8 2,4,6-Trinitrophenol	1	8.158	8.196	-0.038	15314	0.2000	0.1828	M
\$ 9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	20393	0.2000	0.1567	M
10 1,3,5-Trinitrobenzene	1	8.905	8.896	0.009	40894	0.2000	0.1784	M
11 1,3-Dinitrobenzene	1	9.571	9.563	0.008	50467	0.2000	0.1678	
12 Nitrobenzene	1	9.951	9.949	0.002	21678	0.2000	0.1101	
13 3,5-Dinitroaniline	1	10.213				ND		
14 Tetryl	1	10.285	10.276	0.009	30502	0.2000	0.1816	
15 Nitroglycerin	2	10.791	10.776	0.015	124997	2.00	1.79	
16 2,4,6-Trinitrotoluene	1	11.245	11.229	0.016	35291	0.2000	0.1578	
17 4-Amino-2,6-dinitrotoluene	1	11.445	11.429	0.016	20161	0.2000	0.1241	
18 2-Amino-4,6-dinitrotoluene	1	11.745	11.716	0.029	26646	0.2000	0.1349	
19 2,6-Dinitrotoluene	1	11.865	11.843	0.022	22545	0.2000	0.1440	
20 2,4-Dinitrotoluene	1	12.065	12.043	0.022	43833	0.2000	0.1474	
21 o-Nitrotoluene	1	12.911	12.883	0.028	11063	0.2000	0.0842	
22 p-Nitrotoluene	1	13.351	13.323	0.028	11200	0.2000	0.0994	
23 m-Nitrotoluene	1	13.951	13.923	0.028	13097	0.2000	0.0883	
24 PETN	2	15.051	15.016	0.035	137671	2.00	1.88	
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

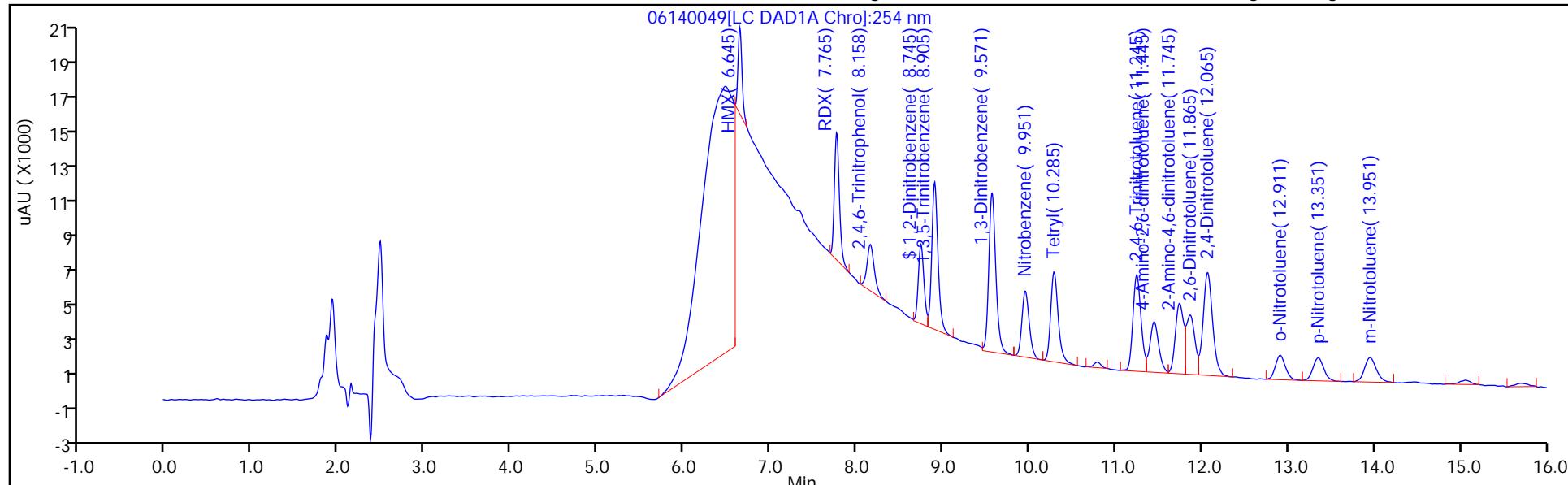
Report Date: 17-Jun-2019 10:45:33

Chrom Revision: 2.3 03-May-2019 15:52:00

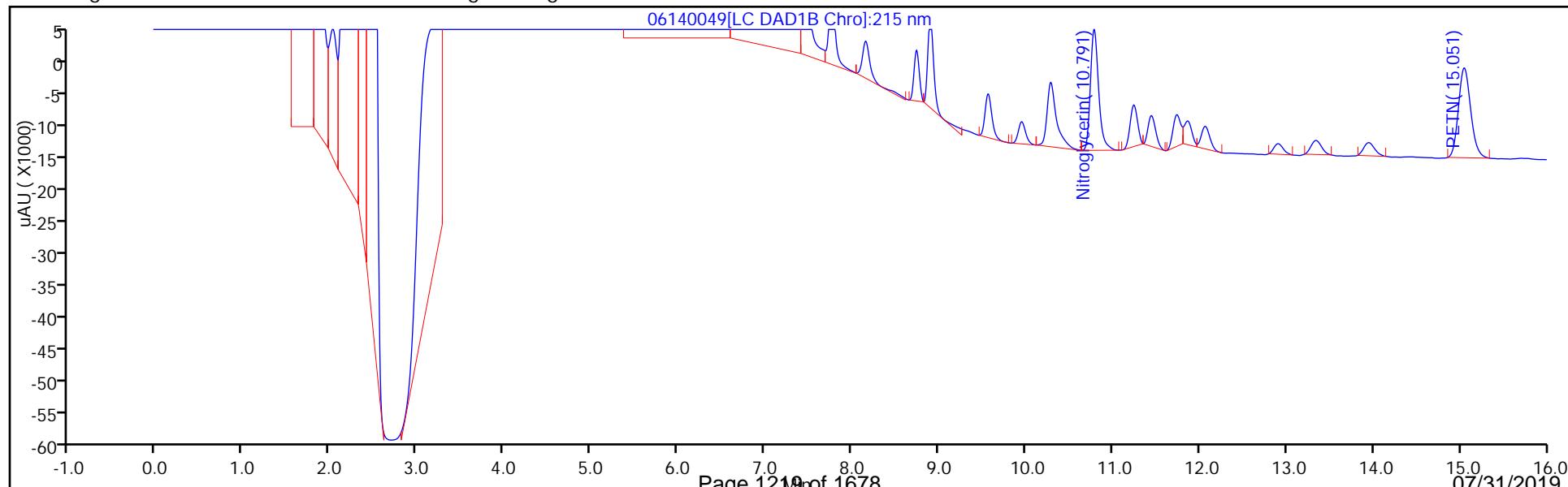
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140049.D
 Injection Date: 15-Jun-2019 09:50:03 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-C MSD Operator ID: hkf
 Client ID: G0102-19AMSD Worklist Smp#: 49
 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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140049.D
 Lims ID: 280-124912-A-4-C MSD
 Client ID: G0102-19AMSD
 Sample Type: MSD
 Inject. Date: 15-Jun-2019 09:50:03 ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-4-C
 Misc. Info.: 280-0082867-049
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:15:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1567	78.37

Eurofins TestAmerica, Denver

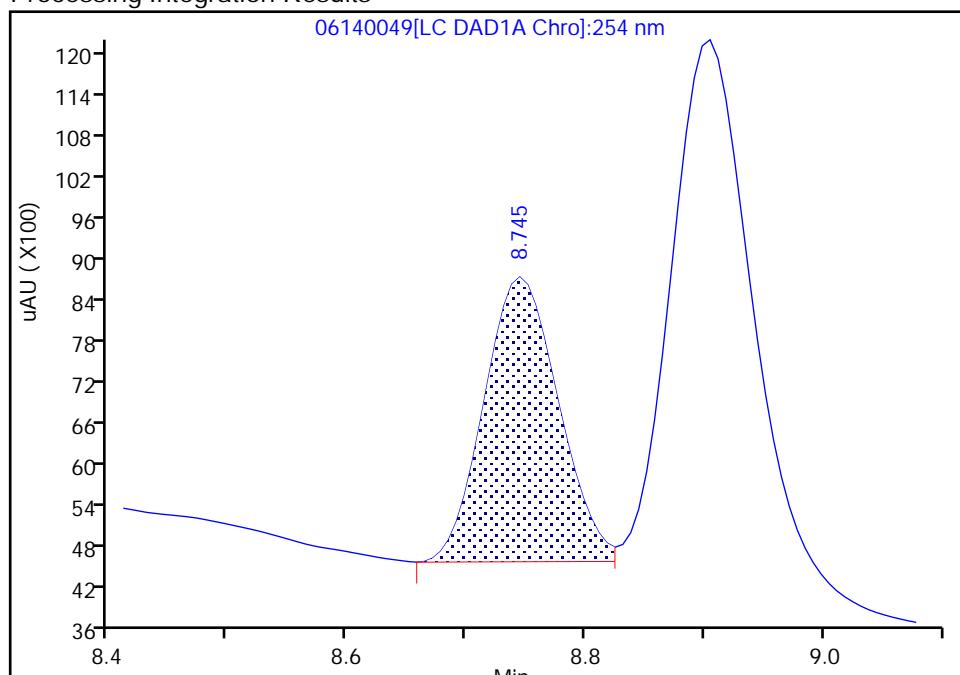
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 Injection Date: 15-Jun-2019 09:50:03 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-C MSD
 Client ID: G0102-19AMSD
 Operator ID: hkf ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

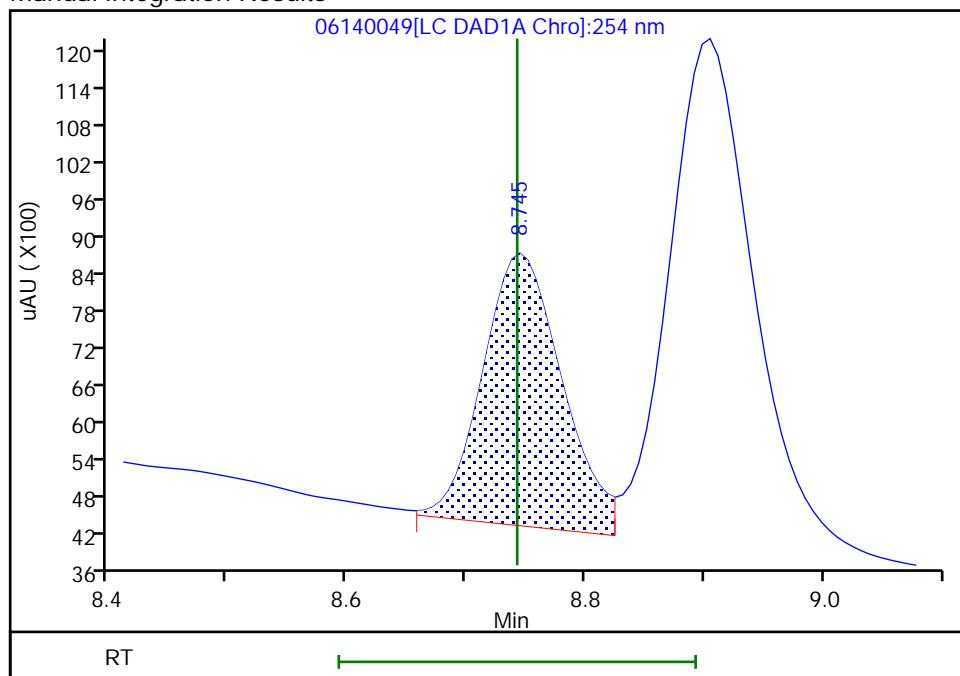
RT: 8.74
 Area: 17998
 Amount: 0.138328
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 20393
 Amount: 0.156736
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:15:11

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

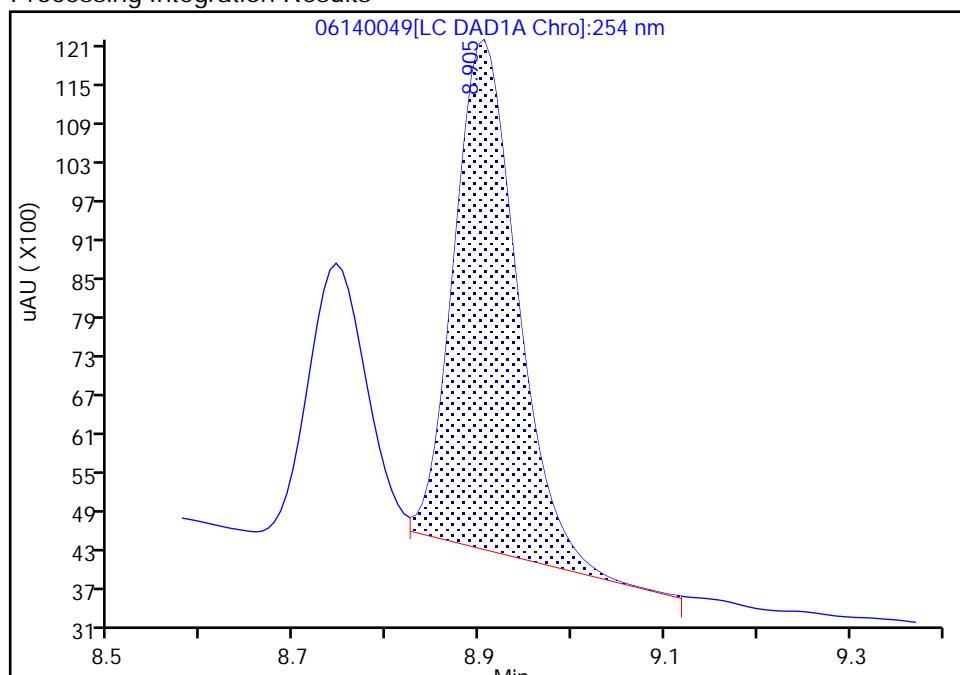
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140049.D
 Injection Date: 15-Jun-2019 09:50:03 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-C MSD
 Client ID: G0102-19AMSD
 Operator ID: hkf 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

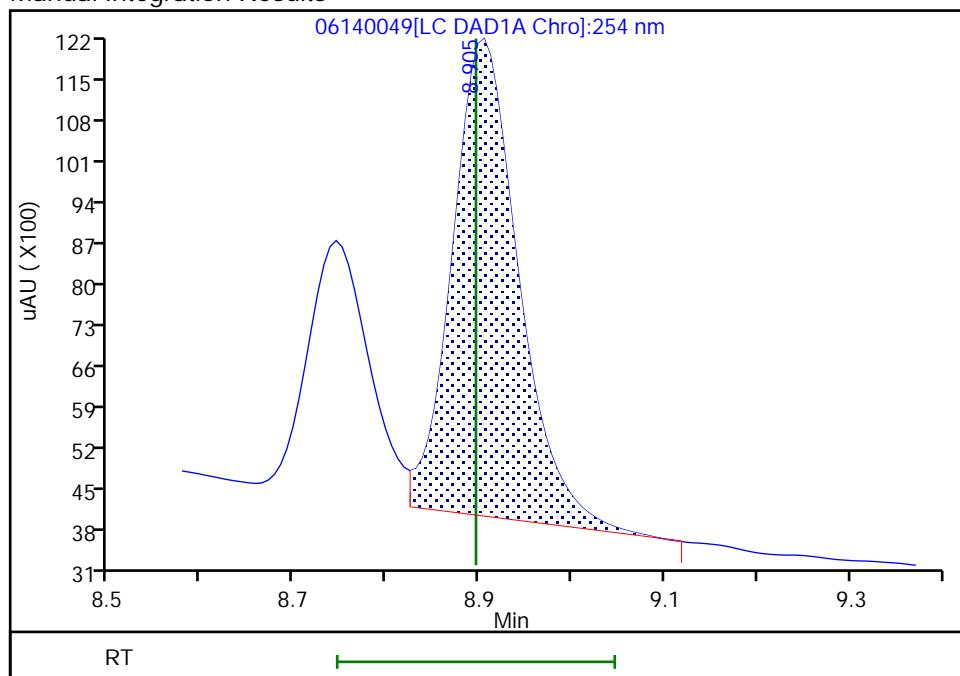
RT: 8.90
 Area: 37691
 Amount: 0.164391
 Amount Units: ug/mL

Processing Integration Results



RT: 8.90
 Area: 40894
 Amount: 0.178361
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:15:11

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

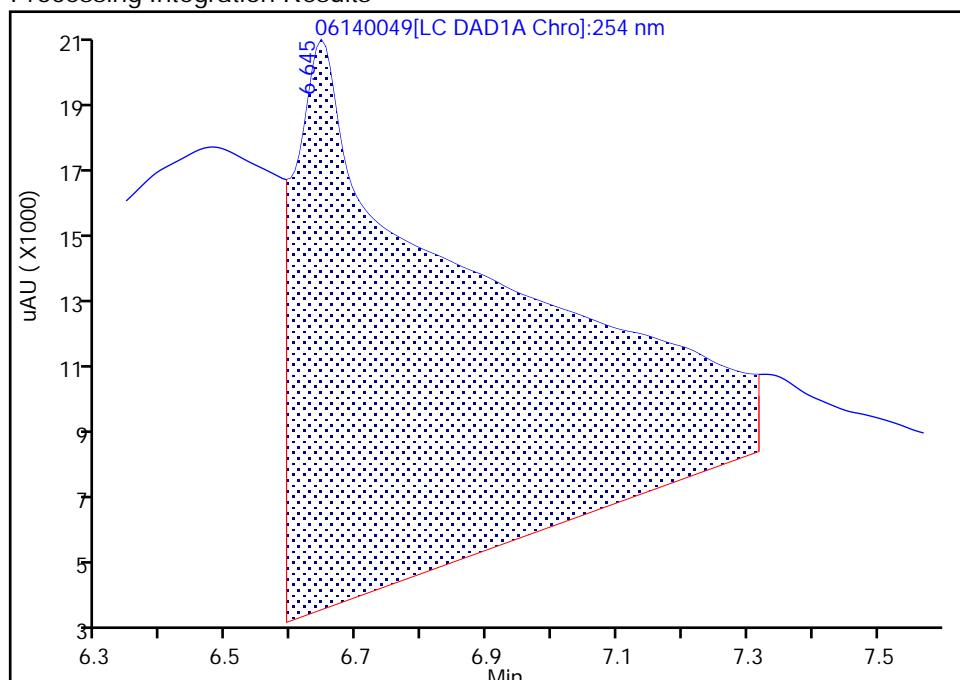
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 Injection Date: 15-Jun-2019 09:50:03 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-C MSD
 Client ID: G0102-19AMSD
 Operator ID: hkf ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

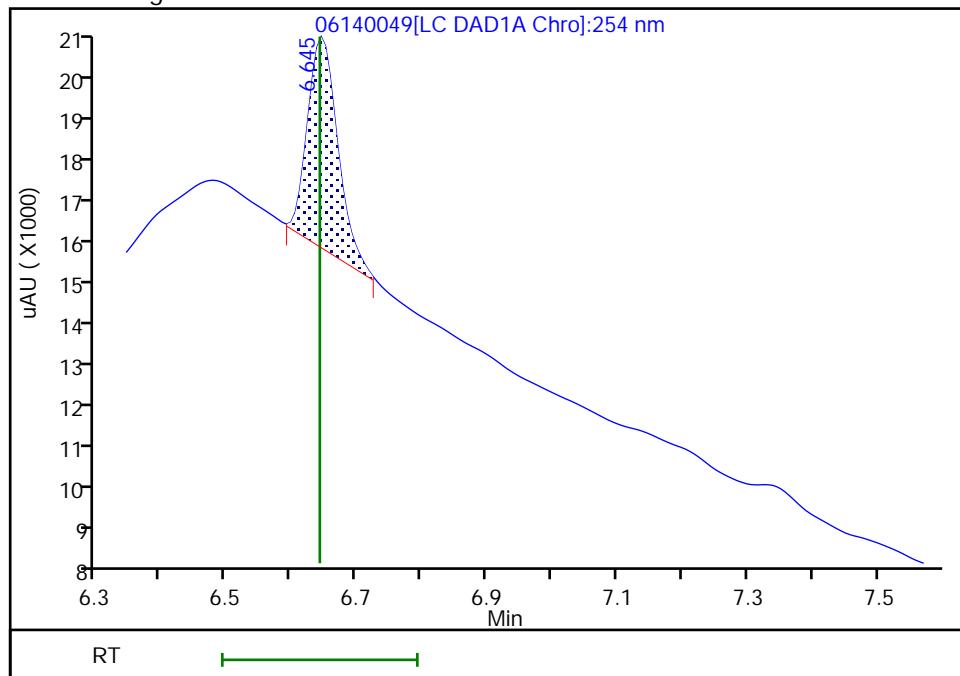
RT: 6.64
 Area: 346011
 Amount: 3.878779
 Amount Units: ug/mL

Processing Integration Results



RT: 6.64
 Area: 15423
 Amount: 0.172892
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:14:52

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

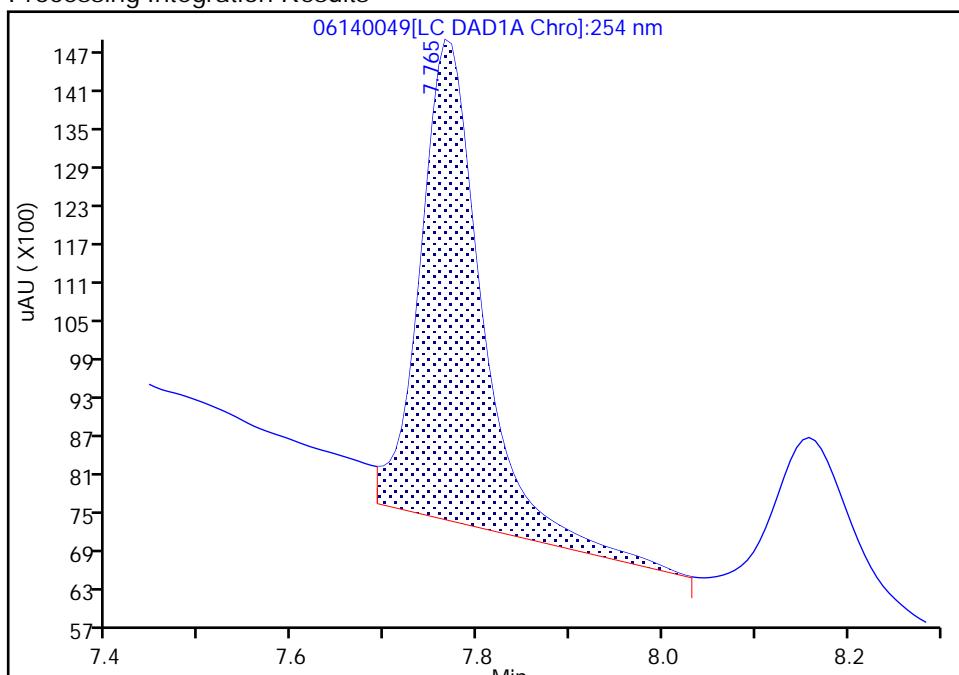
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140049.D
 Injection Date: 15-Jun-2019 09:50:03 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-4-C MSD
 Client ID: G0102-19AMSD
 Operator ID: hkf ALS Bottle#: 49 Worklist Smp#: 49
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

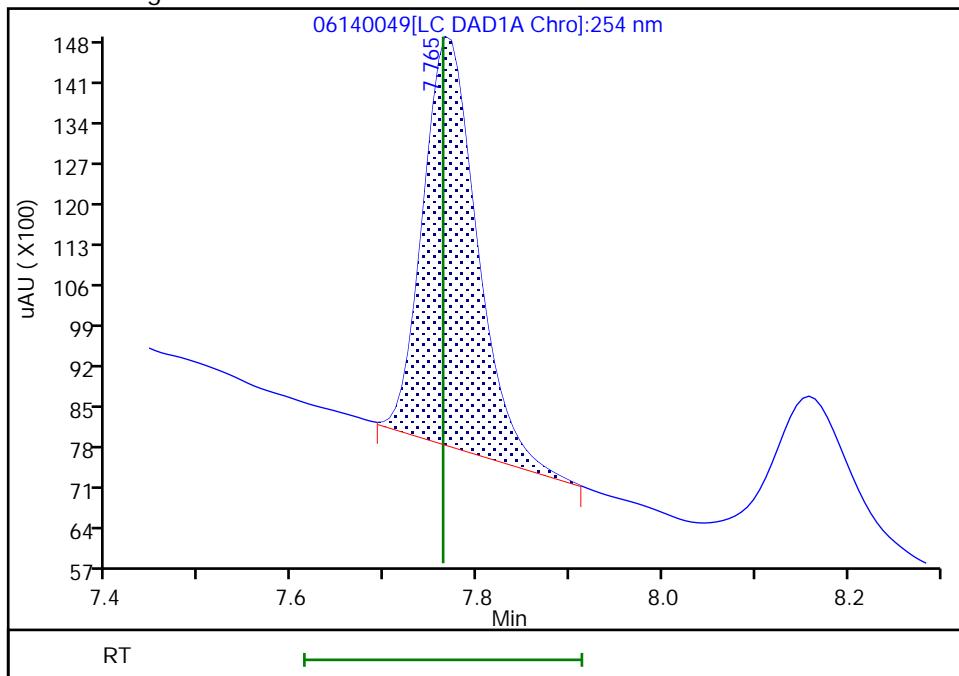
RT: 7.76
 Area: 34678
 Amount: 0.325189
 Amount Units: ug/mL

Processing Integration Results



RT: 7.76
 Area: 28769
 Amount: 0.269778
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:14:56

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: G0102-19AMSD MSD Lab Sample ID: 280-124912-4 MSD
Matrix: Water Lab File ID: 07110054.D
Analysis Method: 8330A Date Collected: 06/05/2019 11:25
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 472.4 (mL) Date Analyzed: 07/12/2019 04:14
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.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.60	H M	2.1	0.42	0.16

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110054.D
 Lims ID: 280-124912-B-4-C MSD
 Client ID: G0102-19AMSD
 Sample Type: MSD
 Inject. Date: 12-Jul-2019 04:14:41 ALS Bottle#: 54 Worklist Smp#: 54
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-4-C
 Misc. Info.: 280-0083617-054
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:03:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 2,6-diamino-4-nitrotoluene	1	6.539				ND		
2 TNX	1	6.597	6.598	-0.001	42878	0.2002	0.1995	M
3 HMX	1	6.692				ND		
4 2,4-diamino-6-nitrotoluene	1	6.719				ND		
5 DNX	1	6.924	6.924	0.000	31921	0.2002	0.2045	M
6 MNX	1	7.377	7.378	-0.001	34336	0.2334	0.2452	M
7 RDX	1	7.790	7.799	-0.009	14369		0.1293	M
8 2,4,6-Trinitrophenol	1	8.199				ND		
\$ 9 1,2-Dinitrobenzene	1	8.750	8.759	-0.009	25526	0.2000	0.1832	M
10 1,3,5-Trinitrobenzene	1	8.919				ND		
11 1,3-Dinitrobenzene	1	9.578				ND		
12 Nitrobenzene	1	9.965				ND		
13 3,5-Dinitroaniline	1	10.206				ND		
14 Tetryl	1	10.285				ND		
15 Nitroglycerin	2	10.792				ND		
16 2,4,6-Trinitrotoluene	1	11.258				ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445				ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738				ND		
19 2,6-Dinitrotoluene	1	11.878				ND		
20 2,4-Dinitrotoluene	1	12.078				ND		
21 o-Nitrotoluene	1	12.925				ND		
22 p-Nitrotoluene	1	13.372				ND		
23 m-Nitrotoluene	1	13.978				ND		
24 PETN	2	15.098				ND		
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

M - Manually Integrated

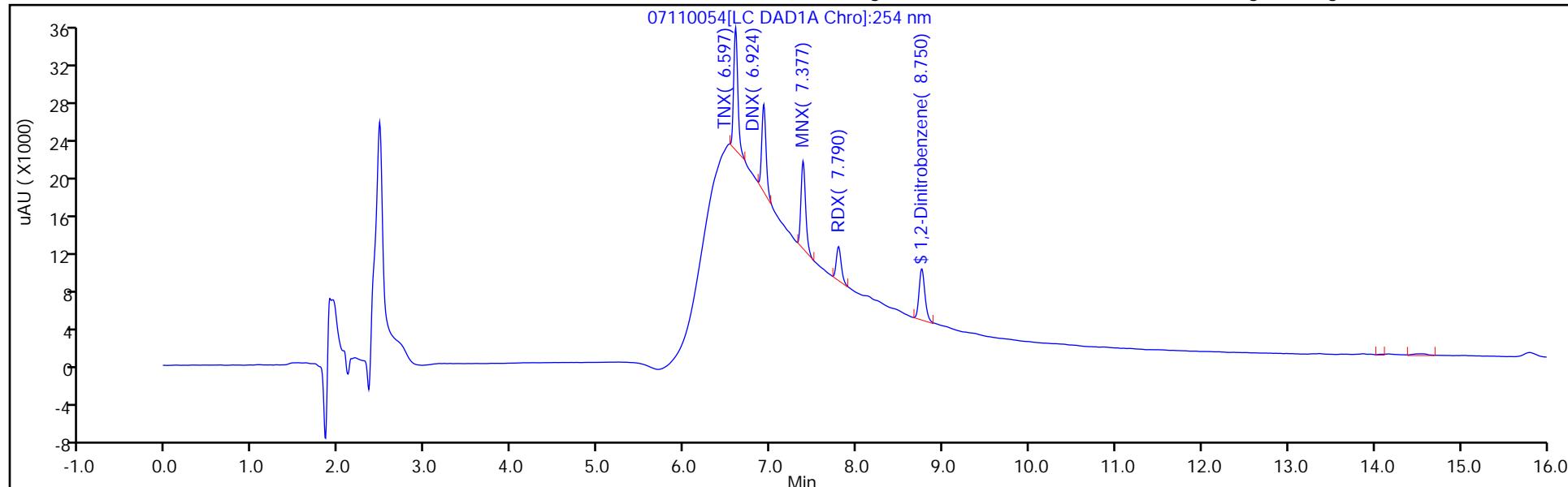
Report Date: 12-Jul-2019 09:20:46

Chrom Revision: 2.3 20-Jun-2019 20:50:56

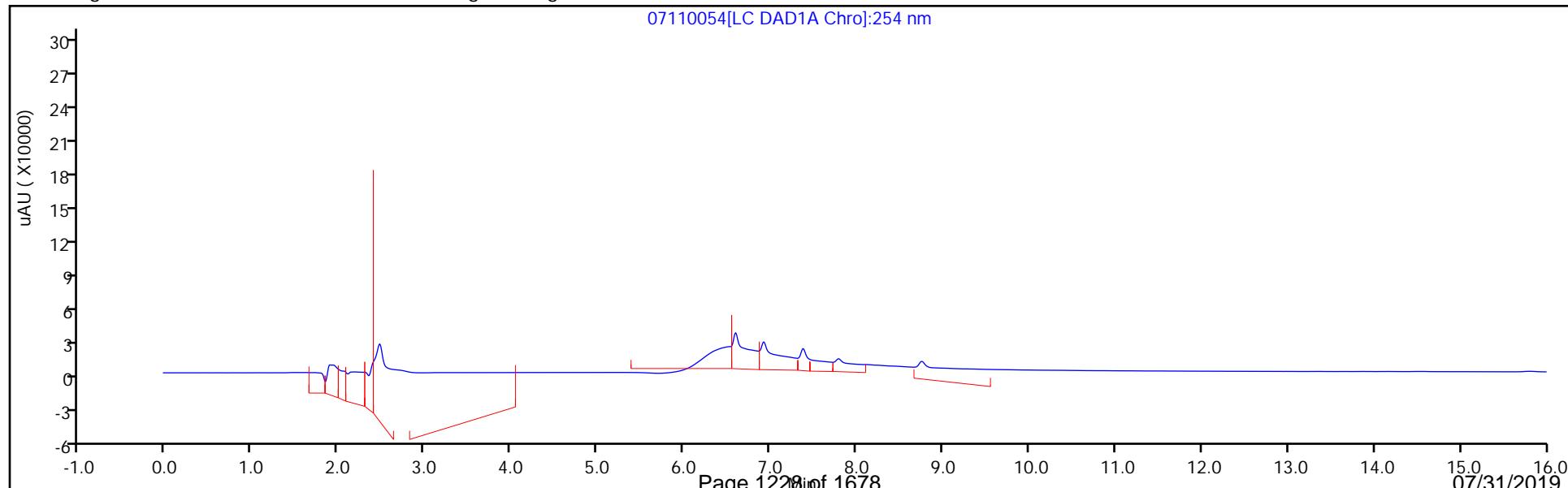
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110054.D
Injection Date: 12-Jul-2019 04:14:41 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-4-C MSD Operator ID: hkf
Client ID: G0102-19AMSD Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 54
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 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: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110054.D
 Lims ID: 280-124912-B-4-C MSD
 Client ID: G0102-19AMSD
 Sample Type: MSD
 Inject. Date: 12-Jul-2019 04:14:41 ALS Bottle#: 54 Worklist Smp#: 54
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-4-C
 Misc. Info.: 280-0083617-054
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:03:12

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1832	91.60

Eurofins TestAmerica, Denver

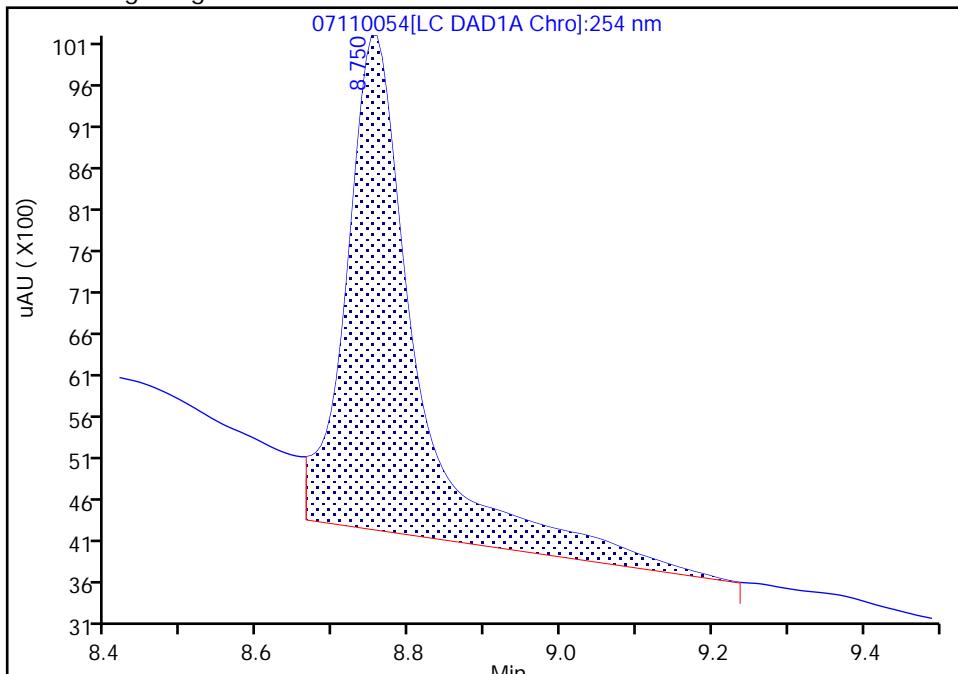
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110054.D
 Injection Date: 12-Jul-2019 04:14:41 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-4-C MSD
 Client ID: G0102-19AMSD
 Operator ID: hkf ALS Bottle#: 54 Worklist Smp#: 54
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

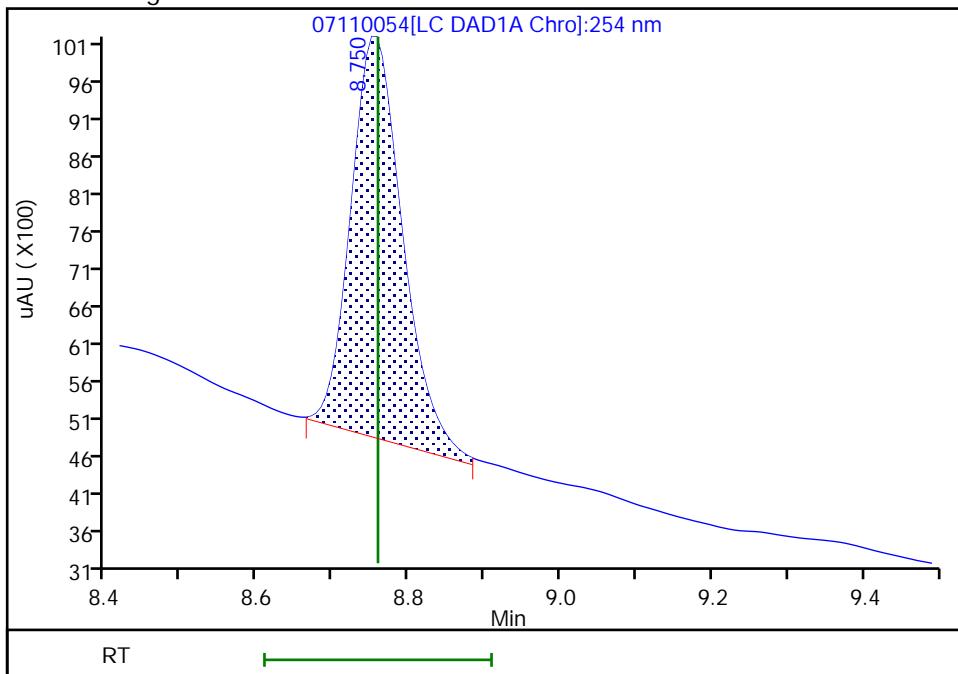
Processing Integration Results

RT: 8.75
 Area: 38322
 Amount: 0.275048
 Amount Units: ug/mL



Manual Integration Results

RT: 8.75
 Area: 25526
 Amount: 0.183207
 Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:03:11

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

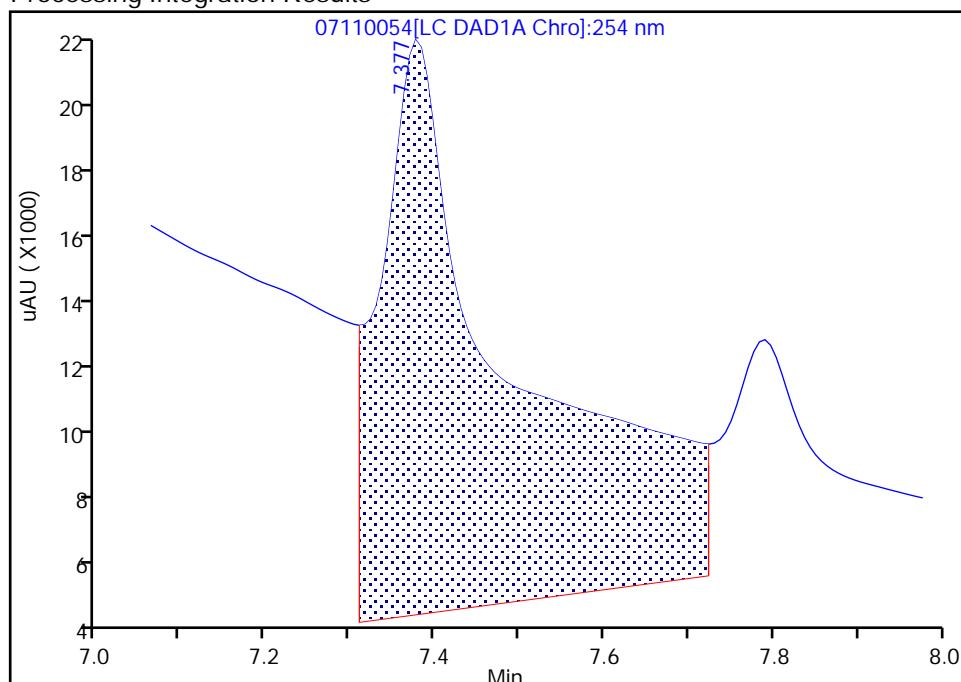
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110054.D
 Injection Date: 12-Jul-2019 04:14:41 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-4-C MSD
 Client ID: G0102-19AMSD
 Operator ID: hkf ALS Bottle#: 54 Worklist Smp#: 54
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

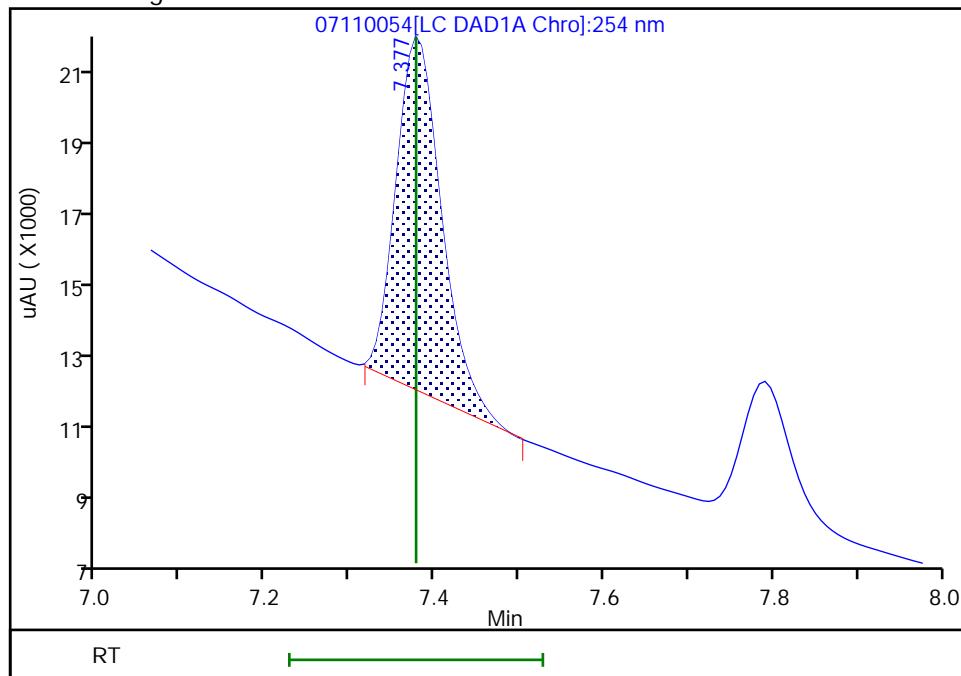
RT: 7.38
 Area: 189004
 Amount: 1.349634
 Amount Units: ug/mL

Processing Integration Results



RT: 7.38
 Area: 34336
 Amount: 0.245185
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:03:02

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

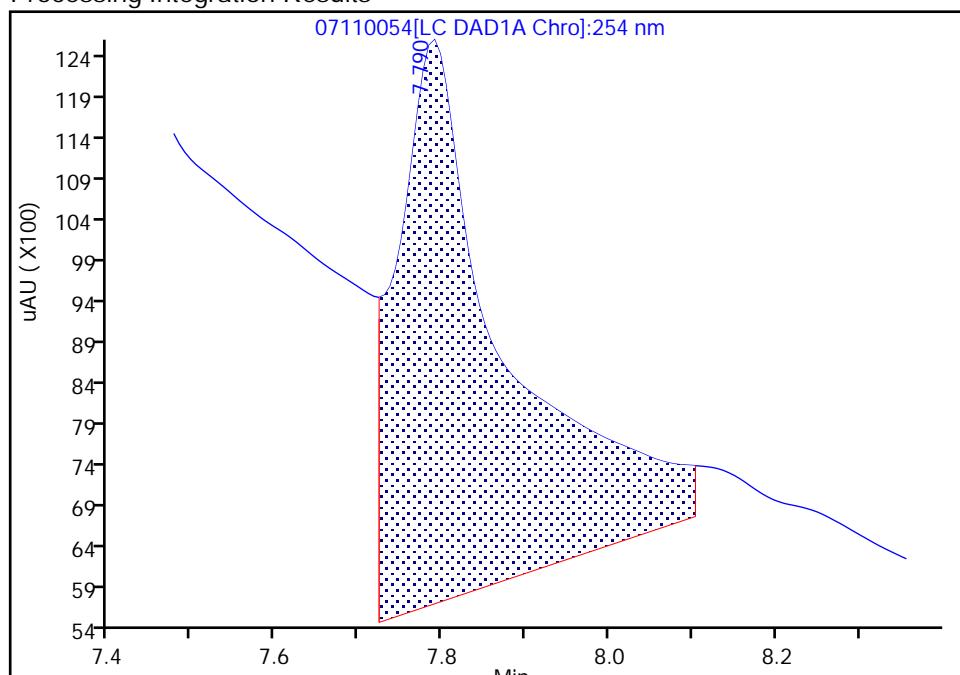
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110054.D
 Injection Date: 12-Jul-2019 04:14:41 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-4-C MSD
 Client ID: G0102-19AMSD
 Operator ID: hkf ALS Bottle#: 54 Worklist Smp#: 54
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

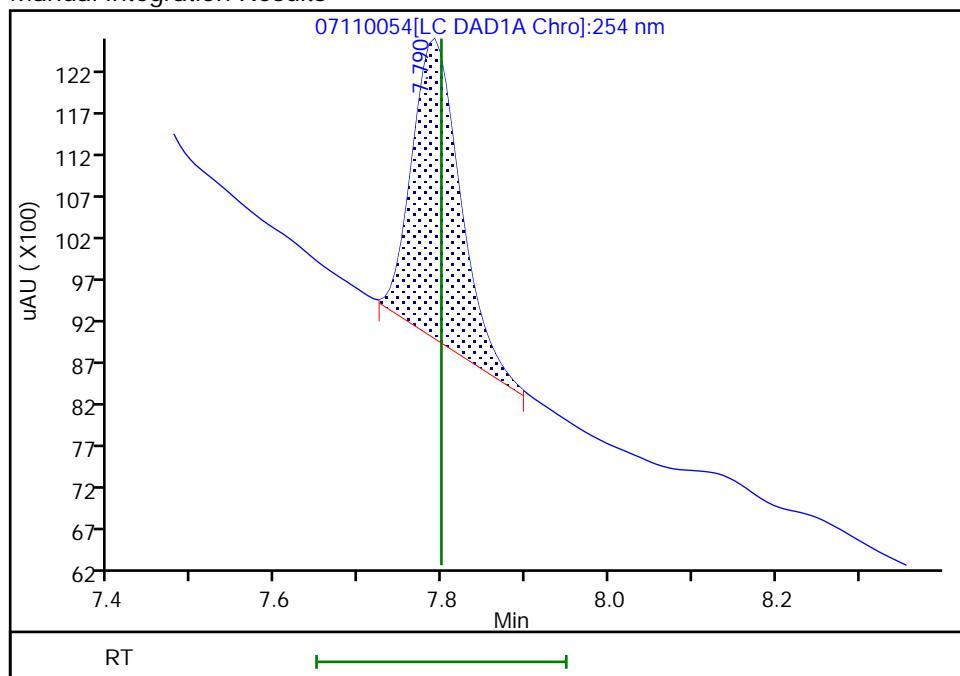
RT: 7.79
 Area: 62519
 Amount: 0.562624
 Amount Units: ug/mL

Processing Integration Results



RT: 7.79
 Area: 14369
 Amount: 0.129310
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:03:07

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ007-19AMSD MSD Lab Sample ID: 280-124912-5 MSD
Matrix: Water Lab File ID: 06140052.D
Analysis Method: 8330A Date Collected: 06/05/2019 10:15
Extraction Method: 3535 Date Extracted: 06/12/2019 17:51
Sample wt/vol: 502 (mL) Date Analyzed: 06/15/2019 11:01
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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.98	M	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	1.90	M	0.40	0.20	0.088
118-96-7	2,4,6-Trinitrotoluene	1.91		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.78		0.40	0.20	0.083
606-20-2	2,6-Dinitrotoluene	1.86	M	0.20	0.20	0.064
35572-78-2	2-Amino-4,6-dinitrotoluene	1.65	M	0.20	0.12	0.050
88-72-2	2-Nitrotoluene	1.37	J1	0.40	0.20	0.085
99-08-1	3-Nitrotoluene	1.41	J1	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.67		0.20	0.12	0.057
99-99-0	4-Nitrotoluene	1.53		1.0	0.40	0.20
2691-41-0	HMX	1.80	M	0.40	0.20	0.087
98-95-3	Nitrobenzene	1.72	M	0.40	0.20	0.091
121-82-4	RDX	1.90	M	0.40	0.40	0.16
479-45-8	Tetryl	1.99	M	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Sample Type: MSD
 Inject. Date: 15-Jun-2019 11:01:23 ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-5-C
 Misc. Info.: 280-0082867-052
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:20:23

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	6.500				ND		M
2 TNX	1	6.566				ND		
3 HMX	1	6.644	6.643	0.001	16110	0.2000	0.1806	M
4 2,4-diamino-6-nitrotoluene	1	6.687				ND		
5 DNX	1	6.893				ND		
6 MNX	1	7.359				ND		
7 RDX	1	7.764	7.763	0.001	20385	0.2000	0.1912	M
8 2,4,6-Trinitrophenol	1	8.144	8.196	-0.052	18781	0.2000	0.2241	M
\$ 9 1,2-Dinitrobenzene	1	8.744	8.743	0.001	24025	0.2000	0.1847	M
10 1,3,5-Trinitrobenzene	1	8.897	8.896	0.001	45534	0.2000	0.1986	M
11 1,3-Dinitrobenzene	1	9.564	9.563	0.001	57301	0.2000	0.1905	M
12 Nitrobenzene	1	9.944	9.949	-0.005	33960	0.2000	0.1725	M
13 3,5-Dinitroaniline	1	10.213				ND		
14 Tetryl	1	10.277	10.276	0.001	33527	0.2000	0.1996	M
15 Nitroglycerin	2	10.777	10.776	0.001	137065	2.00	1.96	
16 2,4,6-Trinitrotoluene	1	11.237	11.229	0.008	42989	0.2000	0.1923	
17 4-Amino-2,6-dinitrotoluene	1	11.437	11.429	0.008	27210	0.2000	0.1675	
18 2-Amino-4,6-dinitrotoluene	1	11.724	11.716	0.008	32664	0.2000	0.1654	M
19 2,6-Dinitrotoluene	1	11.850	11.843	0.007	29229	0.2000	0.1867	M
20 2,4-Dinitrotoluene	1	12.050	12.043	0.007	53193	0.2000	0.1788	
21 o-Nitrotoluene	1	12.890	12.883	0.007	18061	0.2000	0.1375	
22 p-Nitrotoluene	1	13.330	13.323	0.007	17358	0.2000	0.1540	
23 m-Nitrotoluene	1	13.930	13.923	0.007	20987	0.2000	0.1415	
24 PETN	2	15.030	15.016	0.014	148850	2.00	2.03	
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

M - Manually Integrated

Report Date: 17-Jun-2019 10:45:40

Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190614-82867.b\\06140052.D

Injection Date: 15-Jun-2019 11:01:23

Instrument ID: CHHPLC_X3

Operator ID: hkf

Lims ID: 280-124912-A-5-C MSD

Worklist Smp#: 52

Client ID: PZ007-19AMSD

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

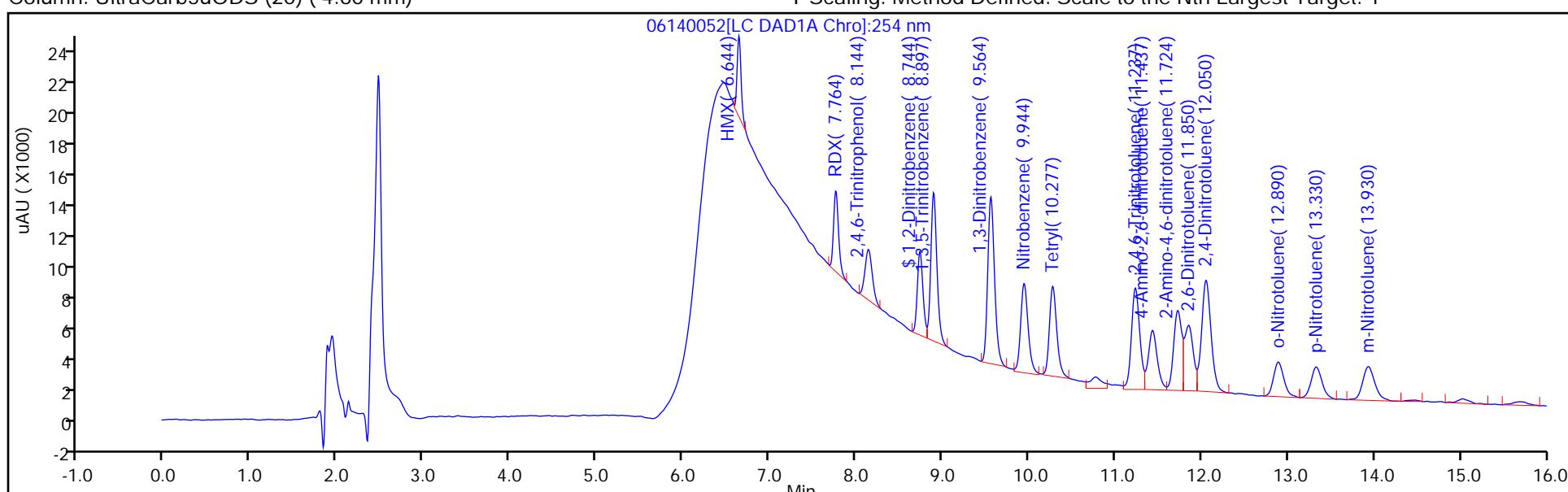
ALS Bottle#: 52

Method: 8330_X3

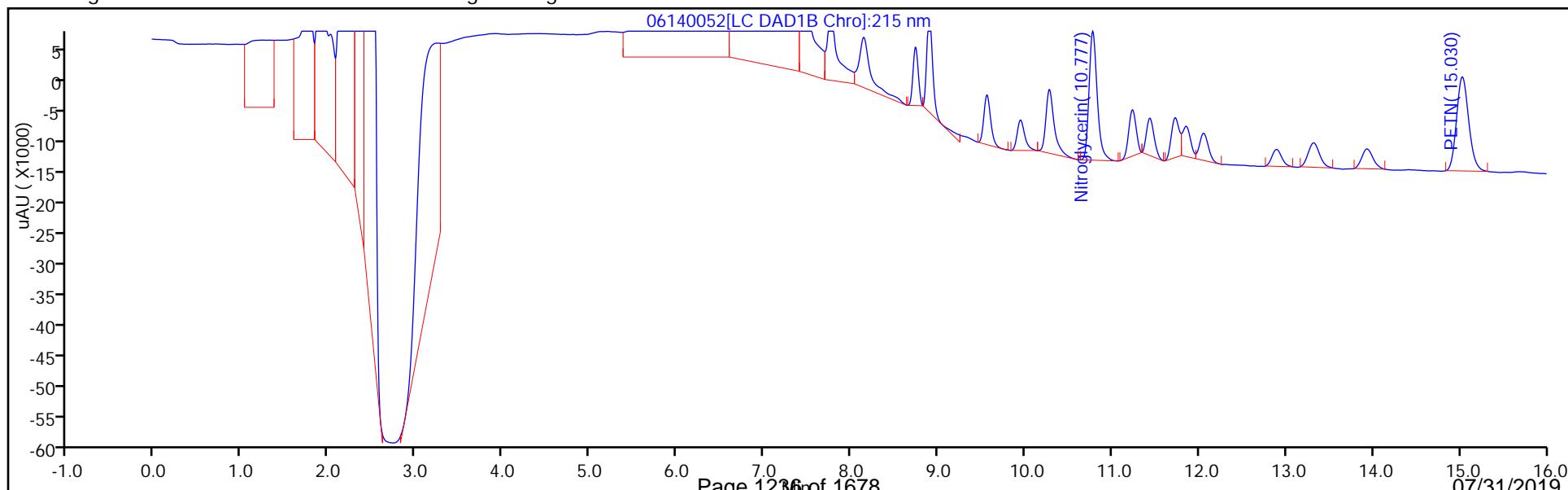
Limit Group: GCSV - 8330

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: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Sample Type: MSD
 Inject. Date: 15-Jun-2019 11:01:23 ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-5-C
 Misc. Info.: 280-0082867-052
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:20:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1847	92.33

Eurofins TestAmerica, Denver

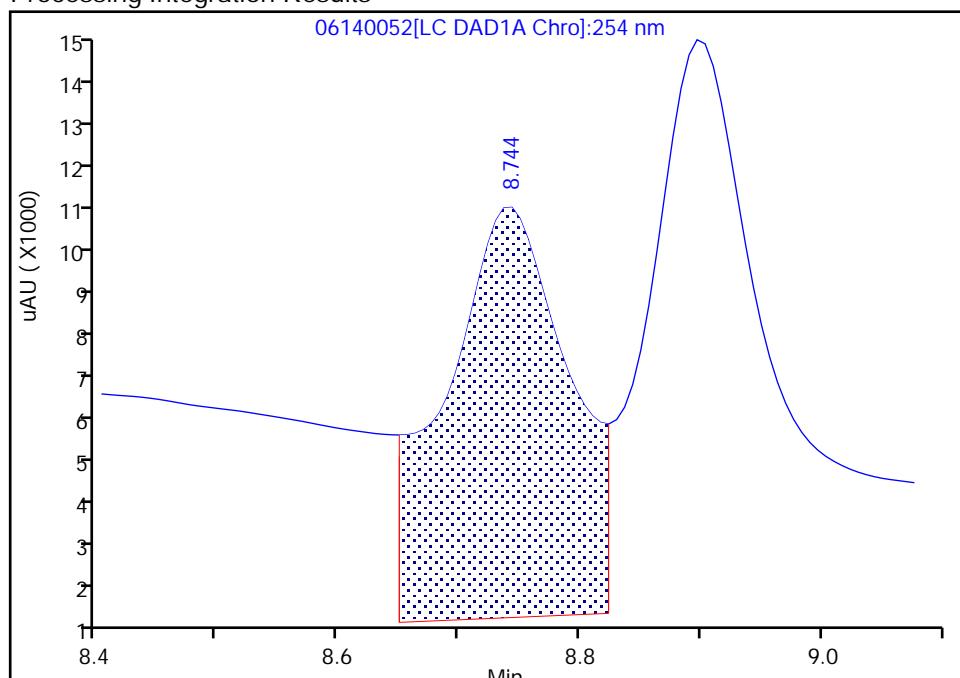
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Injection Date: 15-Jun-2019 11:01:23 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 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

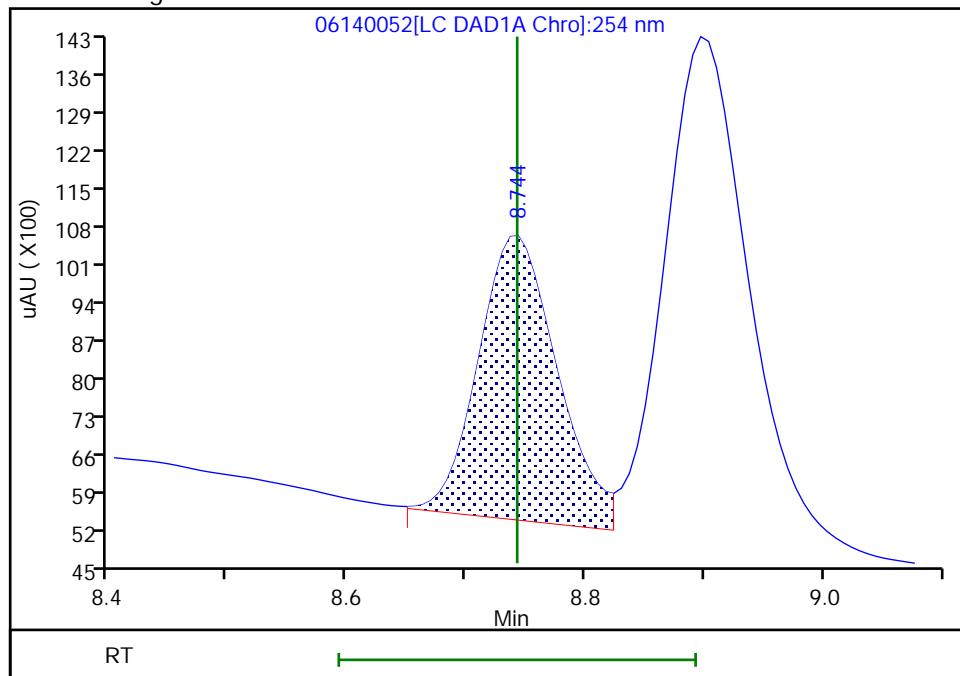
RT: 8.74
 Area: 63072
 Amount: 0.484757
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 24025
 Amount: 0.184651
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:20:12

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

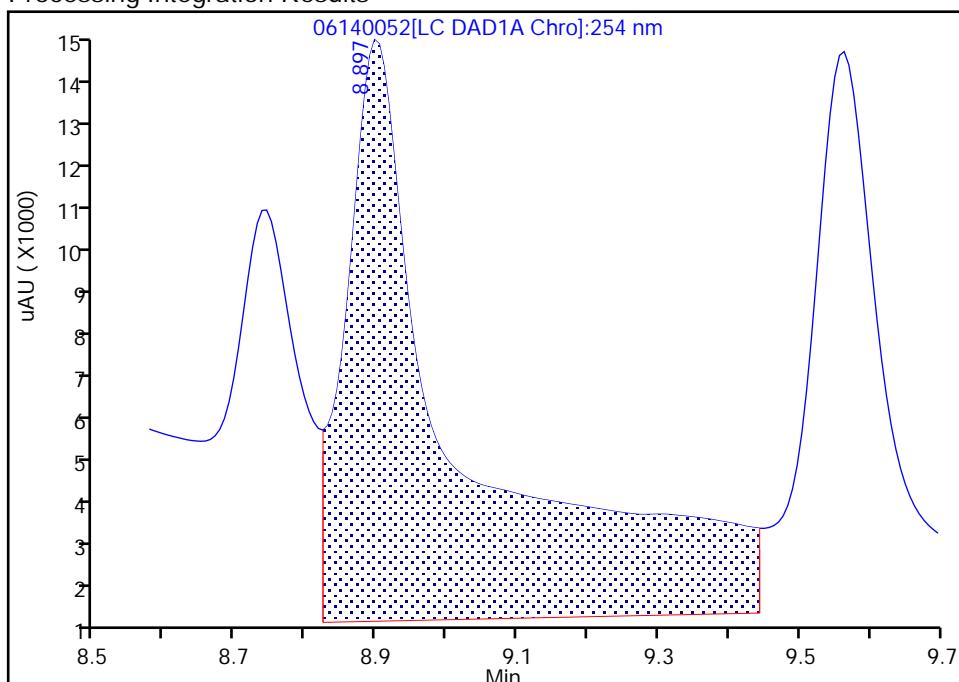
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Injection Date: 15-Jun-2019 11:01:23 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

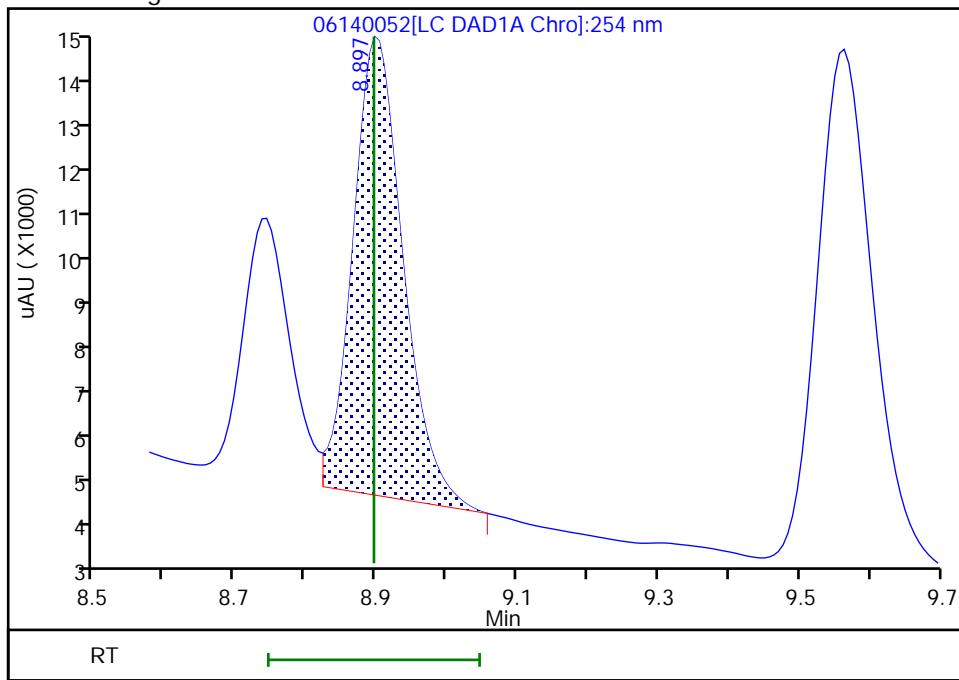
RT: 8.90
 Area: 142587
 Amount: 0.621900
 Amount Units: ug/mL

Processing Integration Results



RT: 8.90
 Area: 45534
 Amount: 0.198599
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:20:12

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

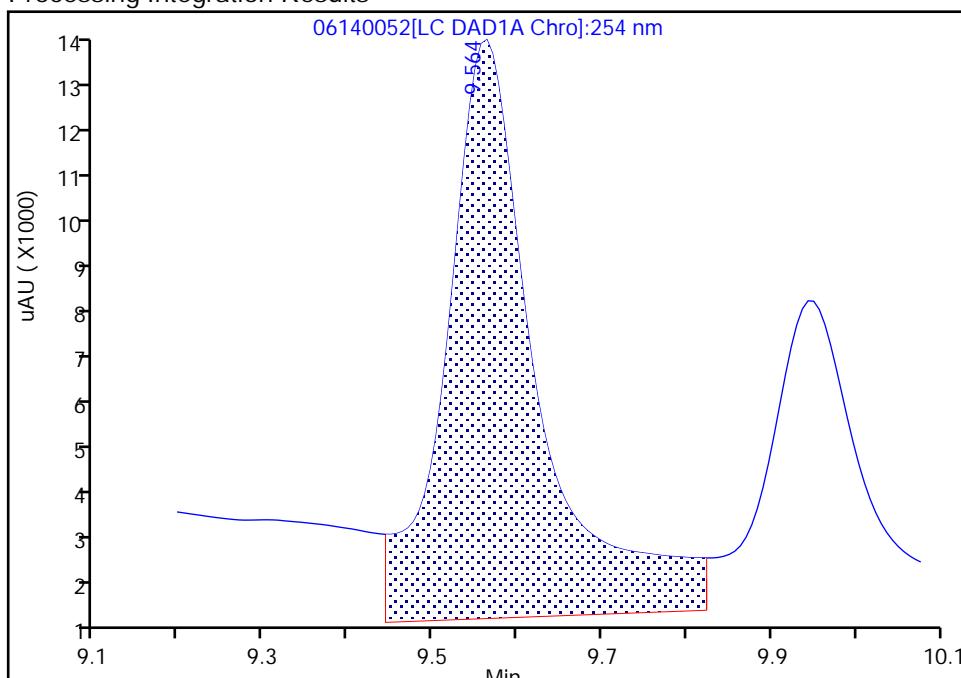
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Injection Date: 15-Jun-2019 11:01:23 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

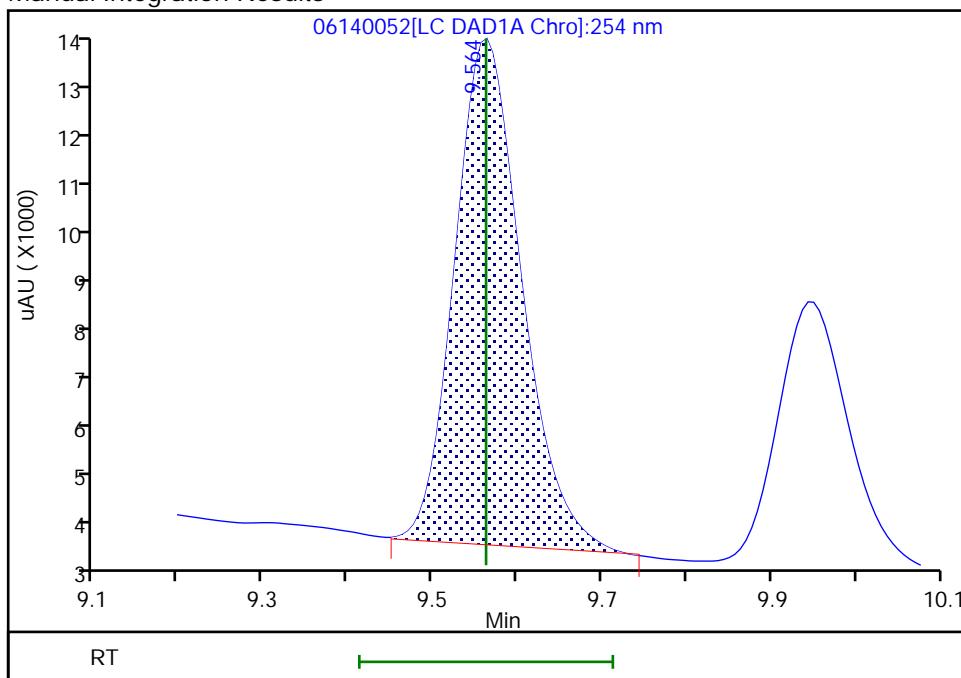
RT: 9.56
 Area: 90488
 Amount: 0.300800
 Amount Units: ug/mL

Processing Integration Results



RT: 9.56
 Area: 57301
 Amount: 0.190480
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:20:00

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

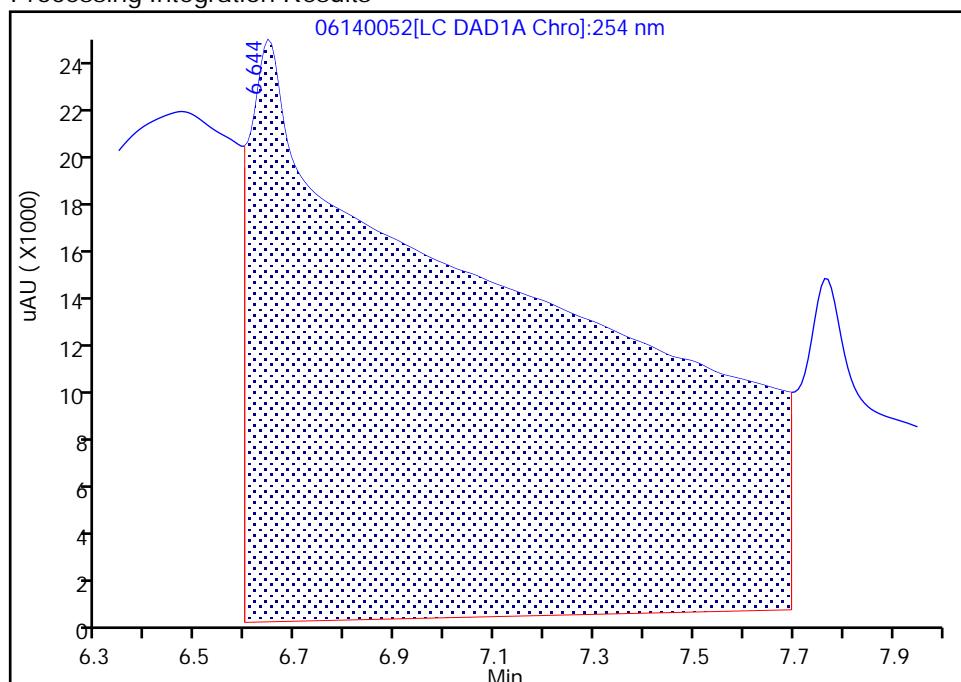
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Injection Date: 15-Jun-2019 11:01:23 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

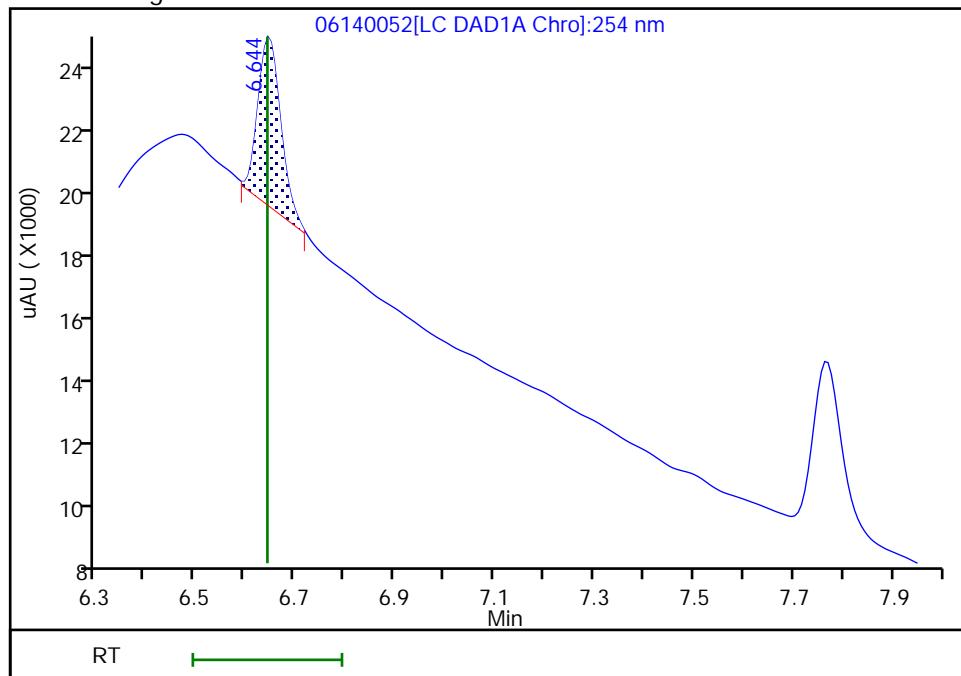
RT: 6.64
 Area: 895718
 Amount: 10.040989
 Amount Units: ug/mL

Processing Integration Results



RT: 6.64
 Area: 16110
 Amount: 0.180593
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:19:26

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

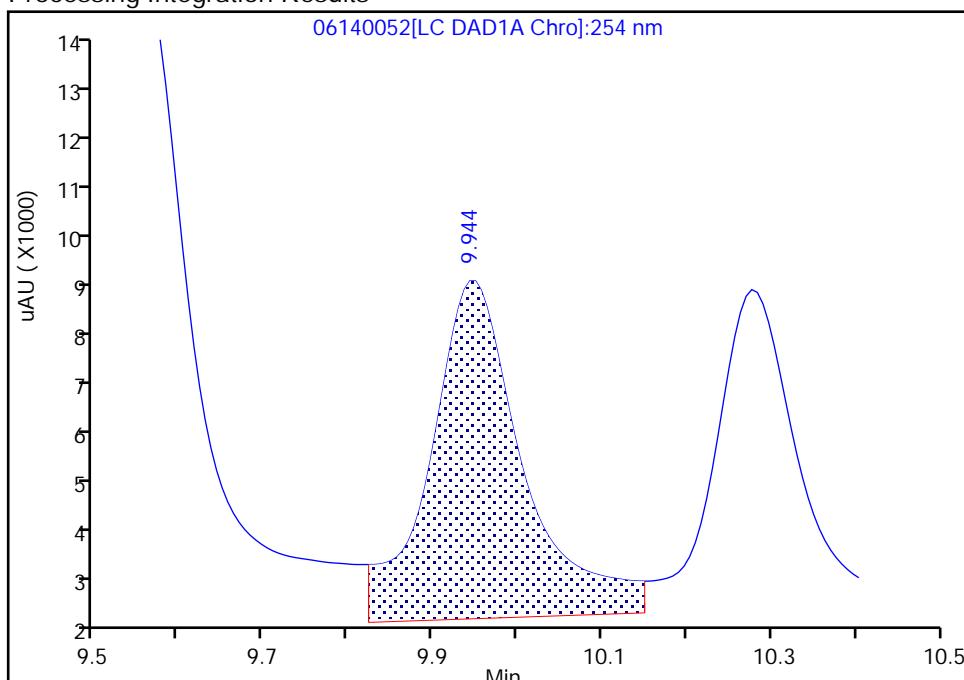
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Injection Date: 15-Jun-2019 11:01:23 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

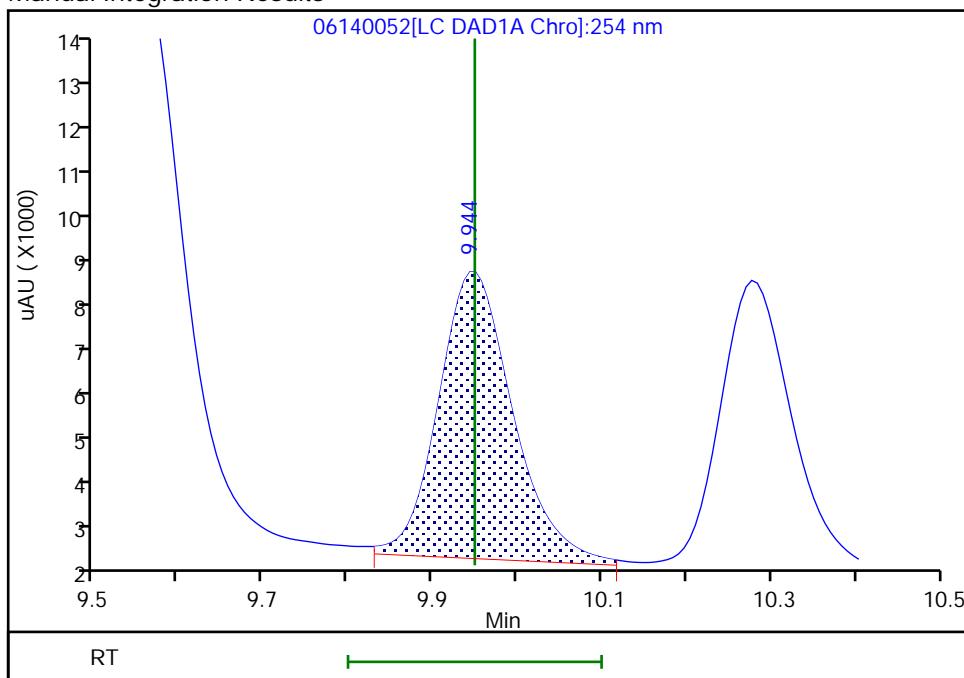
RT: 9.94
 Area: 48502
 Amount: 0.246420
 Amount Units: ug/mL

Processing Integration Results



RT: 9.94
 Area: 33960
 Amount: 0.172537
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:19:57

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

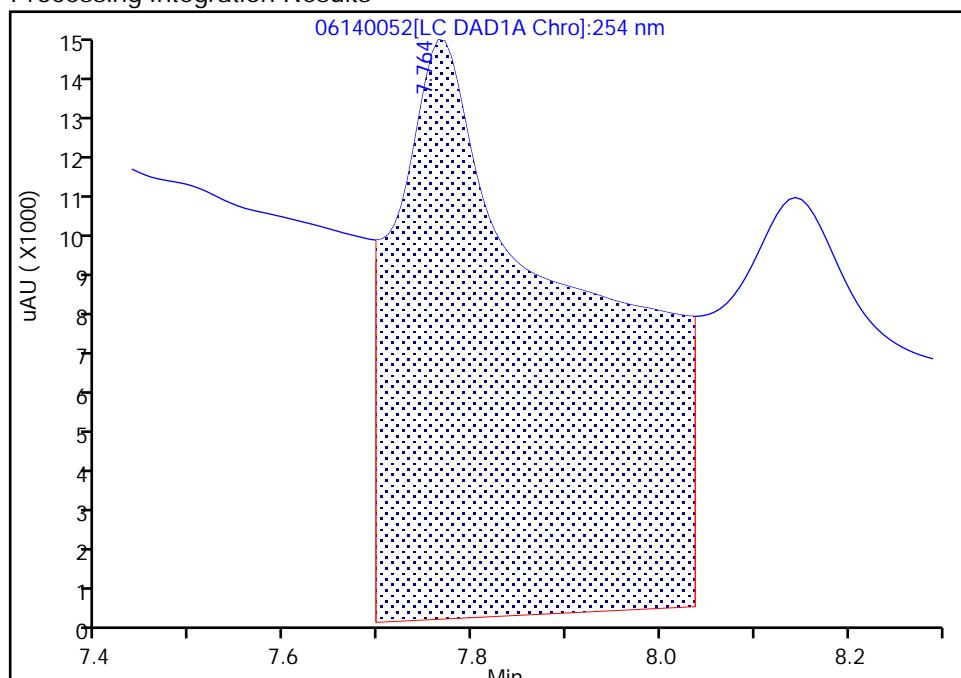
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Injection Date: 15-Jun-2019 11:01:23 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

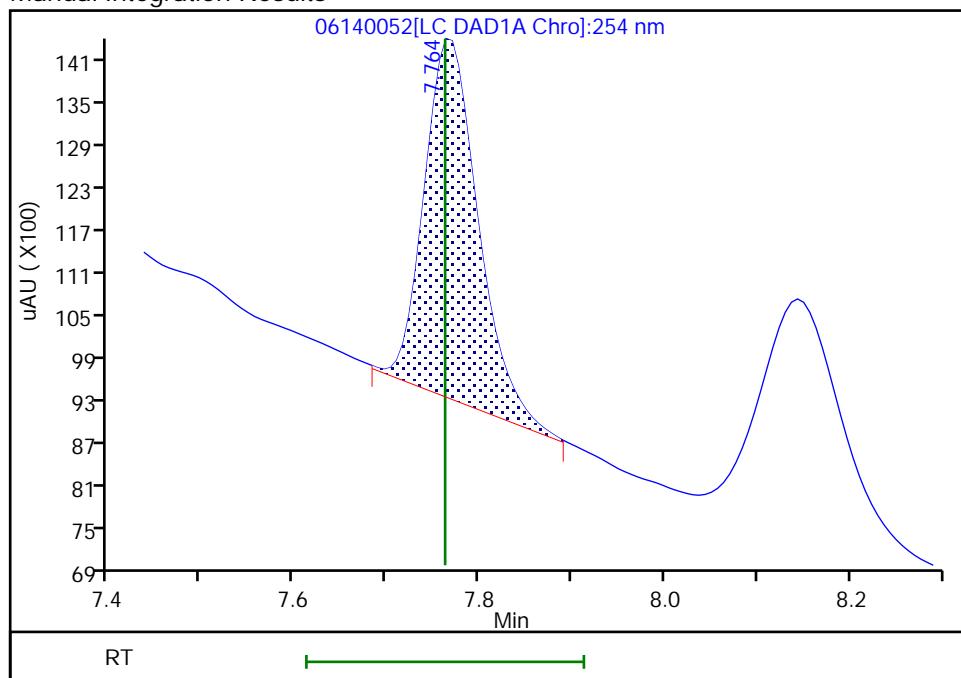
RT: 7.76
 Area: 177465
 Amount: 1.664159
 Amount Units: ug/mL

Processing Integration Results



RT: 7.76
 Area: 20385
 Amount: 0.191158
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:19:31

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

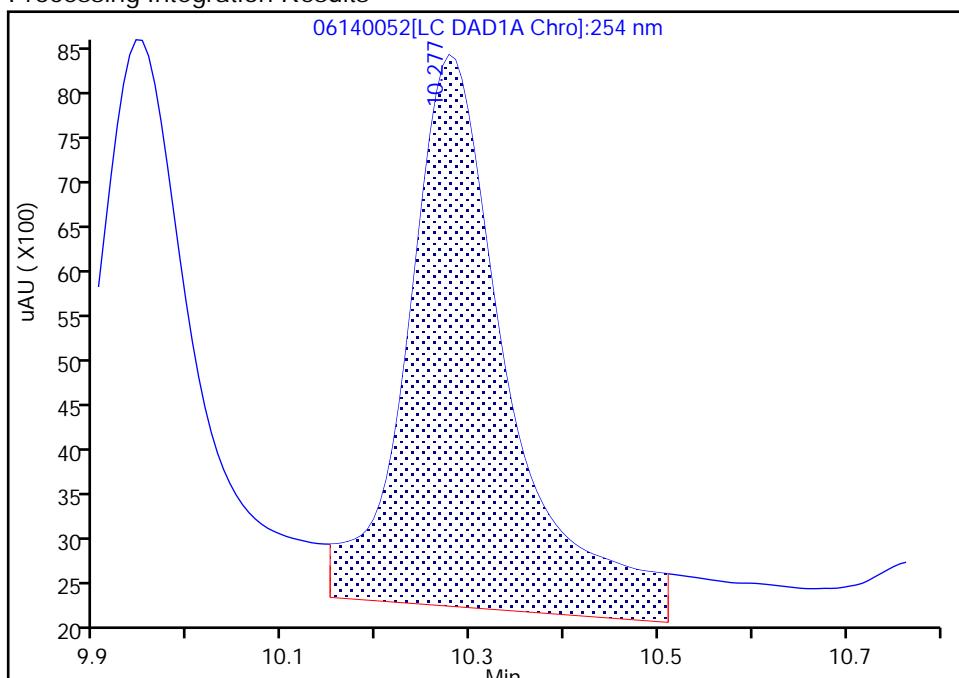
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140052.D
 Injection Date: 15-Jun-2019 11:01:23 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 52 Worklist Smp#: 52
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8

Signal: 1

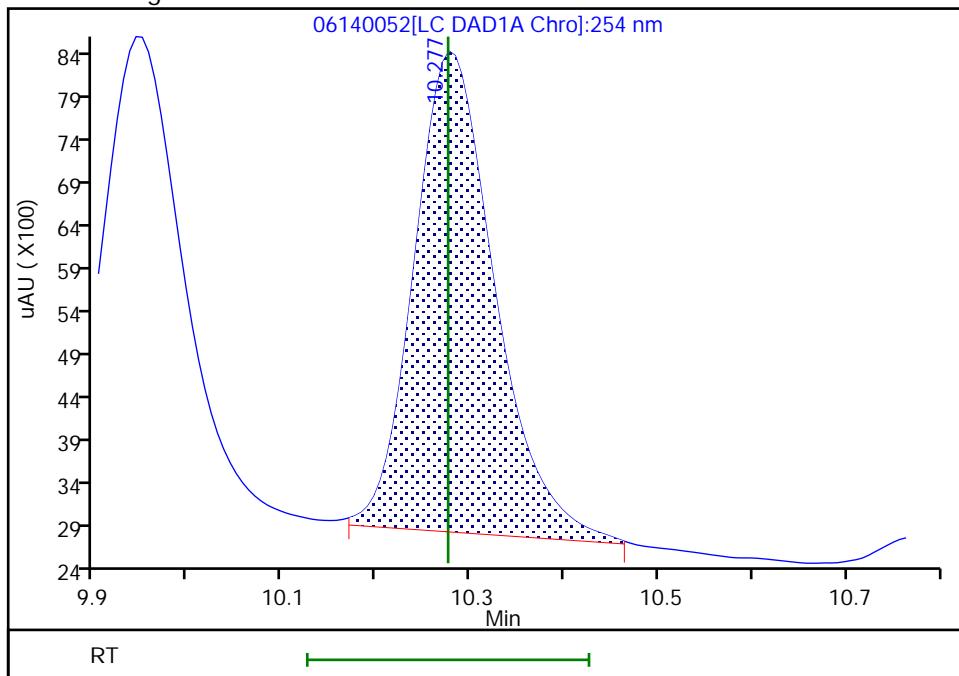
RT: 10.28
 Area: 45692
 Amount: 0.272048
 Amount Units: ug/mL

Processing Integration Results



RT: 10.28
 Area: 33527
 Amount: 0.199618
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 17-Jun-2019 10:19:51

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.:
Client Sample ID: PZ007-19AMSD MSD Lab Sample ID: 280-124912-5 MSD
Matrix: Water Lab File ID: 07110060.D
Analysis Method: 8330A Date Collected: 06/05/2019 10:15
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 456.9 (mL) Date Analyzed: 07/12/2019 06:32
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture:
Analysis Batch No.: 464207 GPC Cleanup: (Y/N) N
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.71	H M	2.2	0.44	0.17

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110060.D
 Lims ID: 280-124912-B-5-C MSD
 Client ID: PZ007-19AMSD
 Sample Type: MSD
 Inject. Date: 12-Jul-2019 06:32:26 ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-5-C
 Misc. Info.: 280-0083617-060
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:13:06

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	6.539				ND		U
2 TNX	1	6.590	6.598	-0.008	45822	0.2002	0.2132	M
3 HMX	1	6.692				ND		
4 2,4-diamino-6-nitrotoluene	1	6.719				ND		
5 DNX	1	6.917	6.924	-0.007	32177	0.2002	0.2061	M
6 MNX	1	7.377	7.378	-0.001	34685	0.2334	0.2477	M
7 RDX	1	7.799				ND		
8 2,4,6-Trinitrophenol	1	8.199				ND		U
\$ 9 1,2-Dinitrobenzene	1	8.757	8.759	-0.002	25212	0.2000	0.1810	M
10 1,3,5-Trinitrobenzene	1	8.919				ND		
11 1,3-Dinitrobenzene	1	9.578				ND		
12 Nitrobenzene	1	9.965				ND		
13 3,5-Dinitroaniline	1	10.206				ND		
14 Tetryl	1	10.285				ND		
15 Nitroglycerin	2	10.792				ND		
16 2,4,6-Trinitrotoluene	1	11.258				ND		
17 4-Amino-2,6-dinitrotoluene	1	11.445				ND		
18 2-Amino-4,6-dinitrotoluene	1	11.738				ND		
19 2,6-Dinitrotoluene	1	11.878				ND		
20 2,4-Dinitrotoluene	1	12.078				ND		
21 o-Nitrotoluene	1	12.925				ND		
22 p-Nitrotoluene	1	13.350	13.372	-0.022	1148		0.0104	M
23 m-Nitrotoluene	1	13.978				ND		U
24 PETN	2	15.098				ND		
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

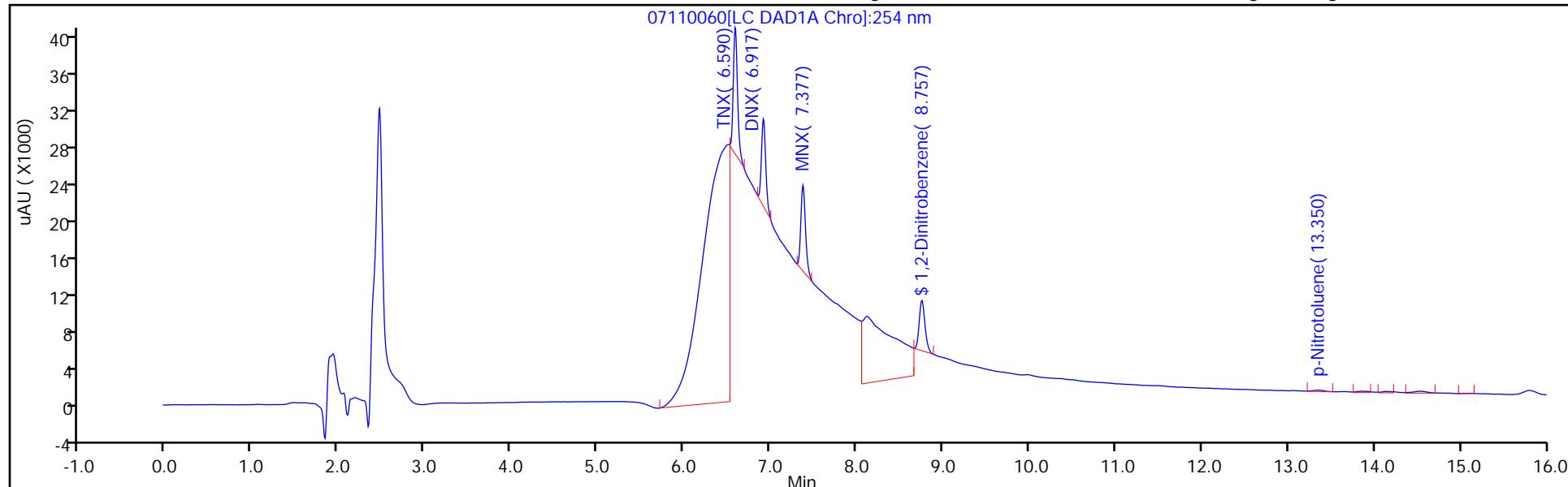
Report Date: 12-Jul-2019 09:20:55

Chrom Revision: 2.3 20-Jun-2019 20:50:56

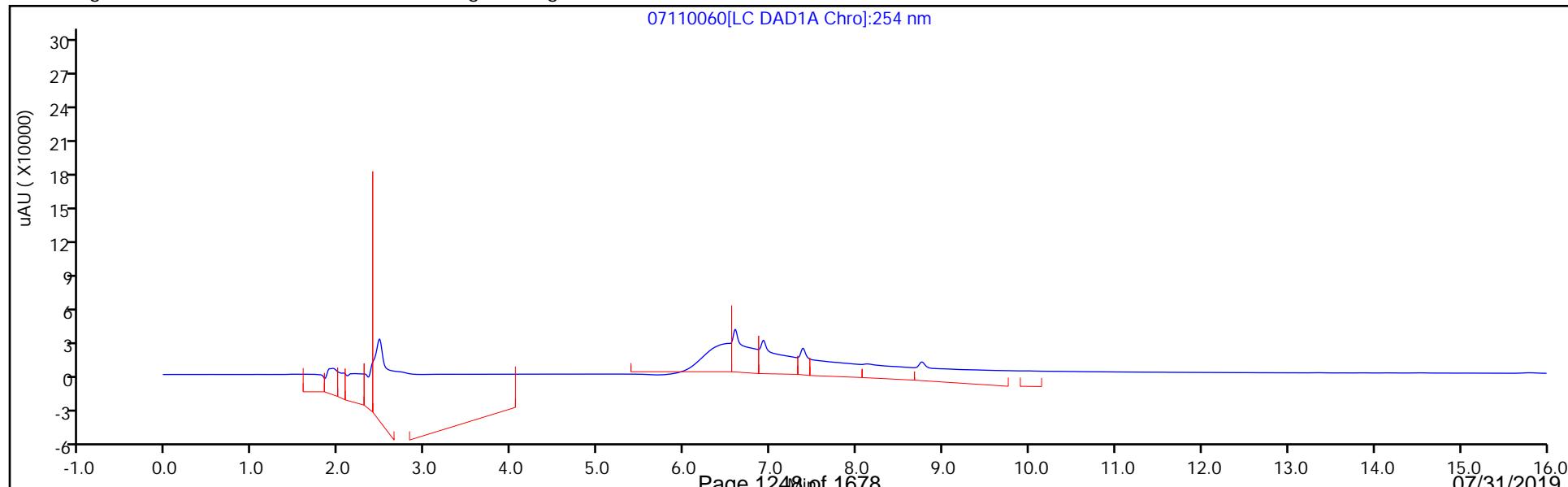
Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\CHHPLC_X\\20190711-83617.b\\07110060.D
Injection Date: 12-Jul-2019 06:32:26 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-5-C MSD Operator ID: hkf
Client ID: PZ007-19AMSD Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 60
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110060.D
 Lims ID: 280-124912-B-5-C MSD
 Client ID: PZ007-19AMSD
 Sample Type: MSD
 Inject. Date: 12-Jul-2019 06:32:26 ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-5-C
 Misc. Info.: 280-0083617-060
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:13:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1810	90.48

Eurofins TestAmerica, Denver

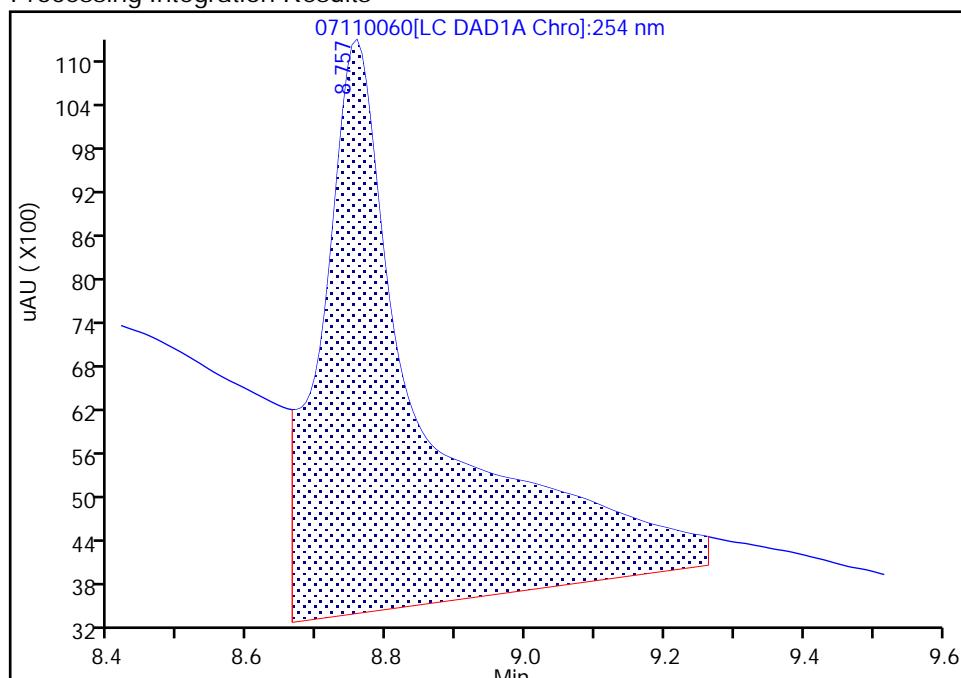
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110060.D
 Injection Date: 12-Jul-2019 06:32:26 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

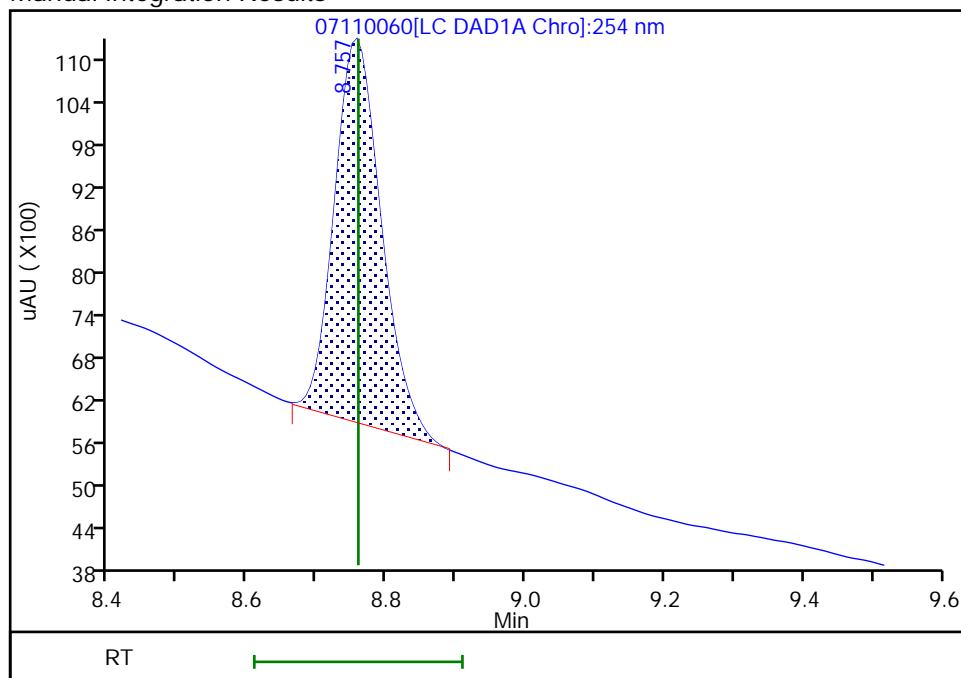
RT: 8.76
 Area: 84385
 Amount: 0.605655
 Amount Units: ug/mL

Processing Integration Results



RT: 8.76
 Area: 25212
 Amount: 0.180954
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:12:59

Audit Action: Manually Integrated

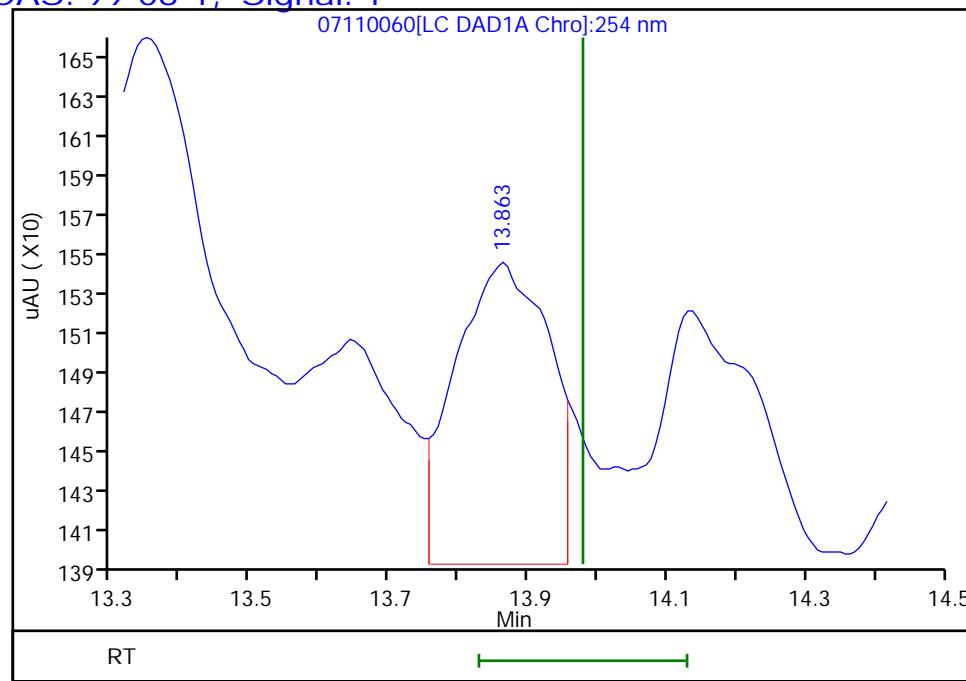
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110060.D
Injection Date: 12-Jul-2019 06:32:26 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-5-C MSD
Client ID: PZ007-19AMSD
Operator ID: hkf ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.86
Response: 1389
Amount: 0.009571



Reviewer: fiedlerh, 12-Jul-2019 09:13:06

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

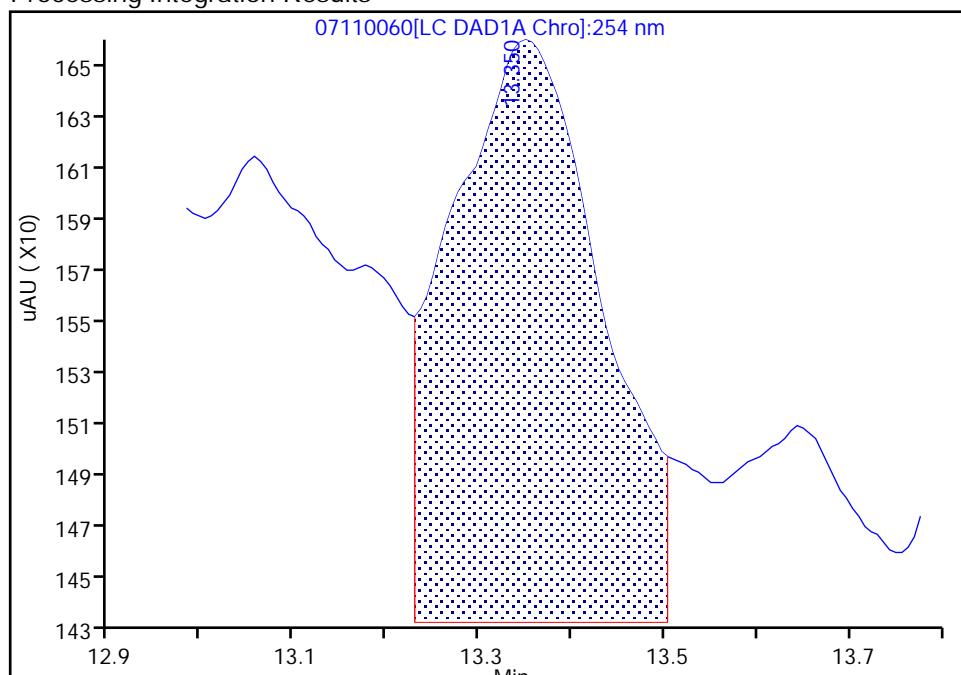
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110060.D
 Injection Date: 12-Jul-2019 06:32:26 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

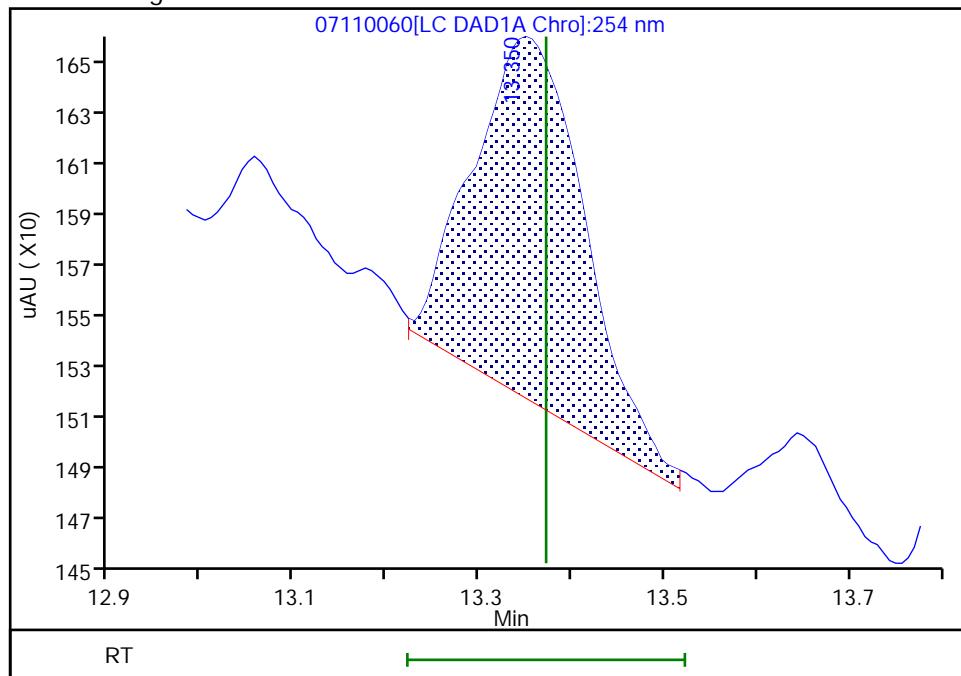
RT: 13.35
 Area: 2547
 Amount: 0.023101
 Amount Units: ug/mL

Processing Integration Results



RT: 13.35
 Area: 1148
 Amount: 0.010412
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:13:03

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

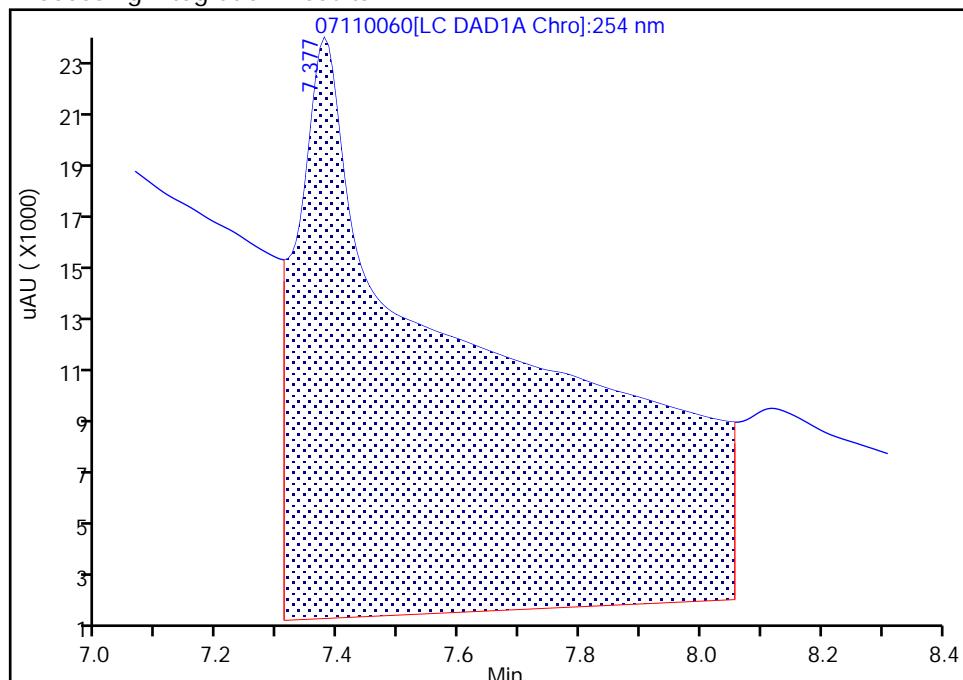
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110060.D
 Injection Date: 12-Jul-2019 06:32:26 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-5-C MSD
 Client ID: PZ007-19AMSD
 Operator ID: hkf ALS Bottle#: 60 Worklist Smp#: 60
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

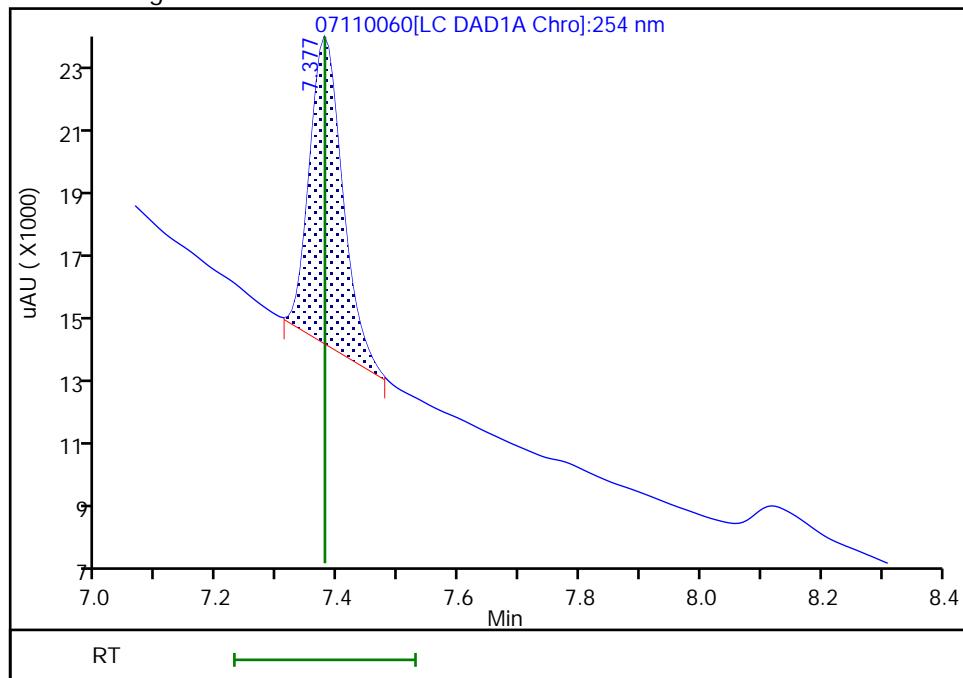
RT: 7.38
 Area: 469736
 Amount: 3.354276
 Amount Units: ug/mL

Processing Integration Results



RT: 7.38
 Area: 34685
 Amount: 0.247678
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 12-Jul-2019 09:12:52

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ001-19AMSD MSD Lab Sample ID: 280-124912-12 MSD
Matrix: Water Lab File ID: 06130066.D
Analysis Method: 8330A Date Collected: 06/04/2019 14:05
Extraction Method: 3535 Date Extracted: 06/11/2019 18:08
Sample wt/vol: 508 (mL) Date Analyzed: 06/14/2019 10:53
Con. Extract Vol.: 5 (mL) Dilution Factor: 1
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)
% Moisture: GPC Cleanup: (Y/N) N
Analysis Batch No.: 461419 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.14	M	0.98	0.39	0.20
99-65-0	1,3-Dinitrobenzene	2.13		0.39	0.20	0.087
118-96-7	2,4,6-Trinitrotoluene	1.89		0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	1.96	J1	0.39	0.20	0.082
606-20-2	2,6-Dinitrotoluene	1.87		0.20	0.20	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	1.88		0.20	0.12	0.050
88-72-2	2-Nitrotoluene	1.36	J1	0.39	0.20	0.084
99-08-1	3-Nitrotoluene	1.48		0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.76		0.20	0.12	0.057
99-99-0	4-Nitrotoluene	1.56		0.98	0.39	0.20
2691-41-0	HMX	1.89	M	0.39	0.20	0.086
98-95-3	Nitrobenzene	1.72		0.39	0.20	0.090
121-82-4	RDX	1.94	M	0.39	0.39	0.16
479-45-8	Tetryl	2.28		0.24	0.20	0.078

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: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130066.D
 Lims ID: 280-124912-A-12-C MSD
 Client ID: PZ001-19AMSD
 Sample Type: MSD
 Inject. Date: 14-Jun-2019 10:53:38 ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-12-
 Misc. Info.: 280-0082810-066
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 16-Jul-2019 14:09:19 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0317

First Level Reviewer: fiedlerh Date: 16-Jul-2019 14:09:19

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	6.480	6.496	-0.016	773701		3.48	E
2 TNX	1		6.566				ND	
3 HMX	1	6.646	6.645	0.001	17090	0.2000	0.1916	M
4 2,4-diamino-6-nitrotoluene	1		6.683				ND	
5 DNX	1		6.893				ND	
6 MNX	1		7.359				ND	
7 RDX	1	7.760	7.758	0.002	21052	0.2000	0.1974	M
8 2,4,6-Trinitrophenol	1	8.126	8.165	-0.039	18830	0.2000	0.2247	M
\$ 9 1,2-Dinitrobenzene	1	8.740	8.738	0.002	25816	0.2000	0.1984	M
10 1,3,5-Trinitrobenzene	1	8.893	8.898	-0.005	49761	0.2000	0.2170	M
11 1,3-Dinitrobenzene	1	9.559	9.558	0.001	65105	0.2000	0.2164	
12 Nitrobenzene	1	9.946	9.945	0.001	34314	0.2000	0.1743	
13 3,5-Dinitroaniline	1		10.189				ND	
14 Tetryl	1	10.273	10.265	0.008	38969	0.2000	0.2320	
15 Nitroglycerin	2	10.773	10.765	0.008	141358	2.00	2.02	
16 2,4,6-Trinitrotoluene	1	11.226	11.218	0.008	42906	0.2000	0.1919	
17 4-Amino-2,6-dinitrotoluene	1	11.419	11.405	0.014	29014	0.2000	0.1786	
18 2-Amino-4,6-dinitrotoluene	1	11.713	11.698	0.015	37815	0.2000	0.1914	
19 2,6-Dinitrotoluene	1	11.846	11.832	0.014	29802	0.2000	0.1903	
20 2,4-Dinitrotoluene	1	12.039	12.032	0.007	59136	0.2000	0.1988	
21 o-Nitrotoluene	1	12.879	12.865	0.014	18139	0.2000	0.1381	
22 p-Nitrotoluene	1	13.319	13.305	0.014	17866	0.2000	0.1585	
23 m-Nitrotoluene	1	13.919	13.898	0.021	22295	0.2000	0.1503	
24 PETN	2	15.019	14.978	0.041	154757	2.00	2.11	
25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Report Date: 16-Jul-2019 14:10:10
Review Flags
M - Manually Integrated

Chrom Revision: 2.3 15-Jul-2019 06:58:08

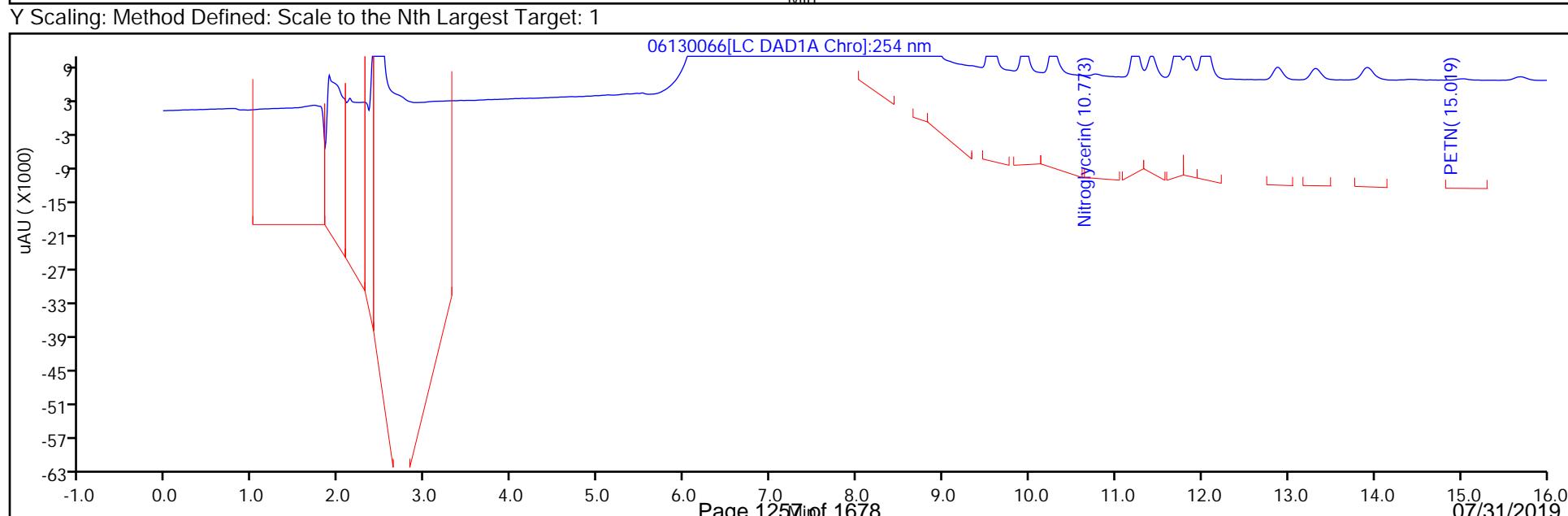
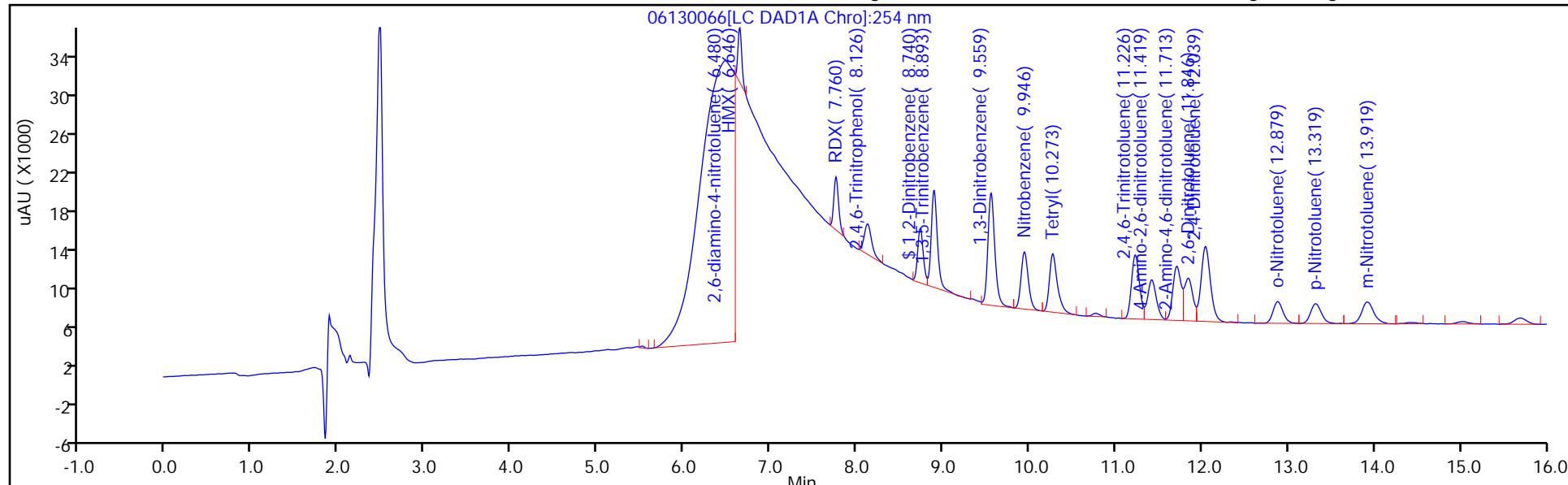
Report Date: 16-Jul-2019 14:10:10

Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130066.D
 Injection Date: 14-Jun-2019 10:53:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-C MSD Operator ID: hkf
 Client ID: PZ001-19AMSD Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 66
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\06130066.D
 Lims ID: 280-124912-A-12-C MSD
 Client ID: PZ001-19AMSD
 Sample Type: MSD
 Inject. Date: 14-Jun-2019 10:53:38 ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-A-12-
 Misc. Info.: 280-0082810-066
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190613-82810.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 16-Jul-2019 14:09:19 Calib Date: 15-May-2019 01:42:24
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0317

First Level Reviewer: fiedlerh Date: 16-Jul-2019 14:09:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1984	99.21

Eurofins TestAmerica, Denver

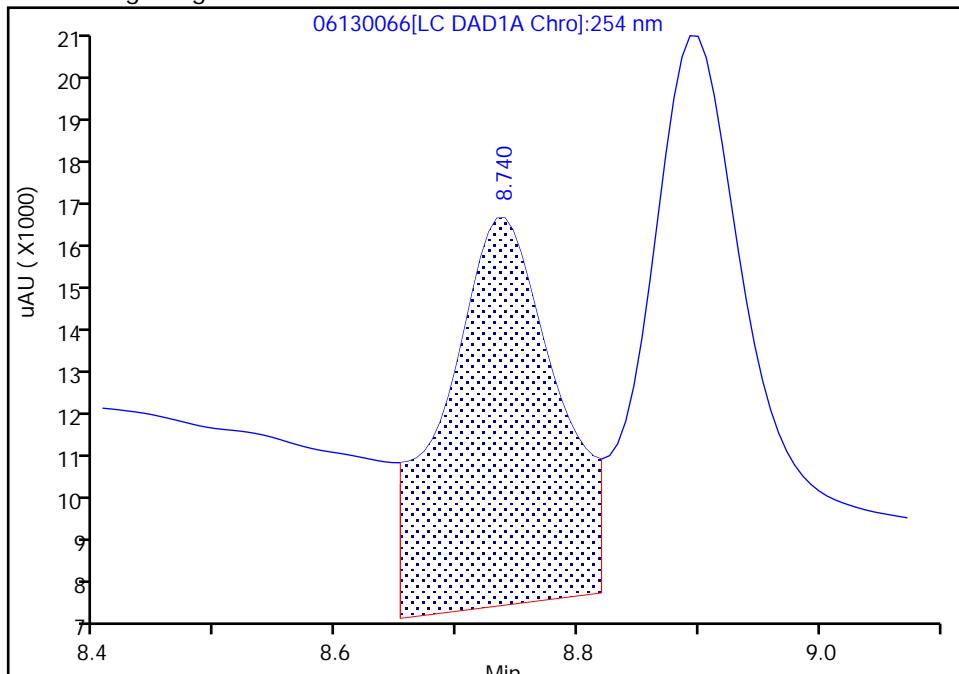
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 Injection Date: 14-Jun-2019 10:53:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-C MSD
 Client ID: PZ001-19AMSD
 Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

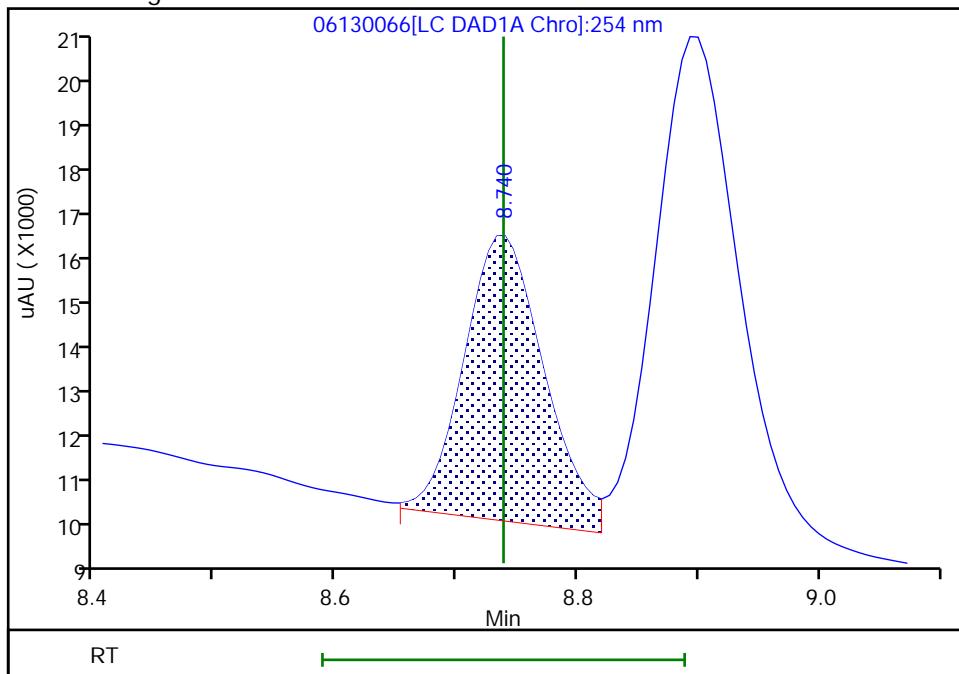
Processing Integration Results

RT: 8.74
 Area: 53011
 Amount: 0.407430
 Amount Units: ug/mL



Manual Integration Results

RT: 8.74
 Area: 25816
 Amount: 0.198416
 Amount Units: ug/mL



Reviewer: fiedlerh, 16-Jul-2019 14:09:14

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

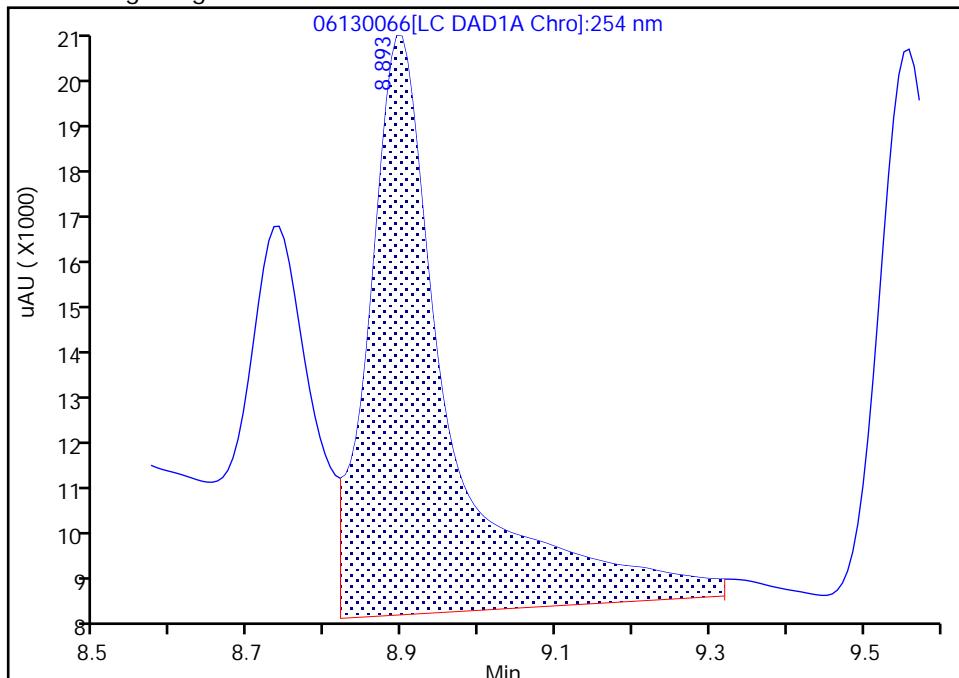
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 Injection Date: 14-Jun-2019 10:53:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-C MSD
 Client ID: PZ001-19AMSD
 Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

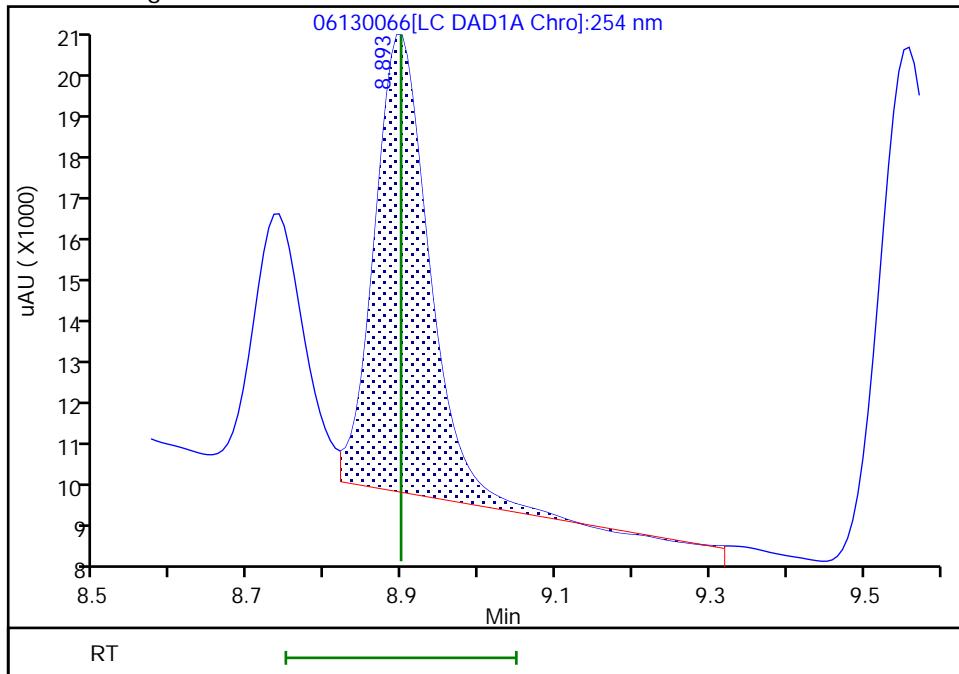
Processing Integration Results

RT: 8.89
 Area: 87156
 Amount: 0.380135
 Amount Units: ug/mL



Manual Integration Results

RT: 8.89
 Area: 49761
 Amount: 0.217035
 Amount Units: ug/mL



Reviewer: fiedlerh, 16-Jul-2019 14:09:14

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

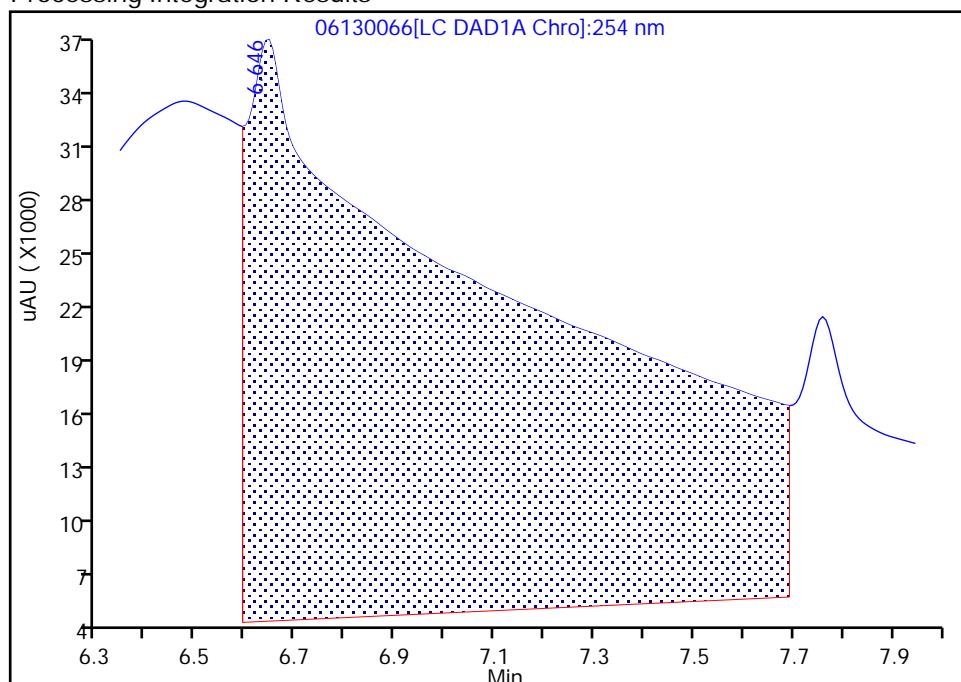
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 Lims ID: 280-124912-A-12-C MSD
 Client ID: PZ001-19AMSD
 Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

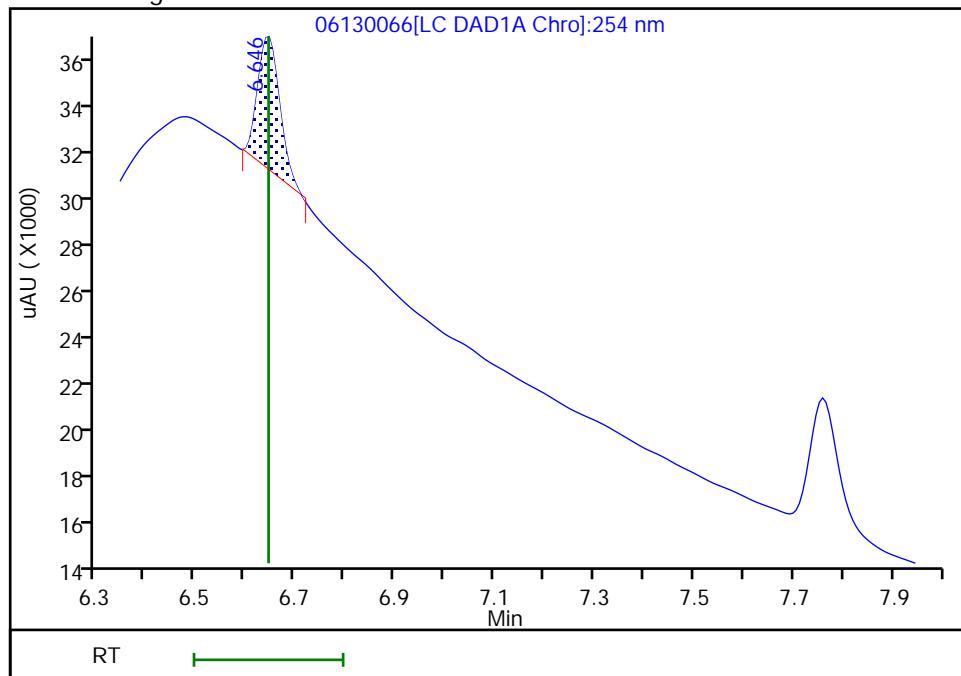
RT: 6.65
 Area: 1191399
 Amount: 13.355569
 Amount Units: ug/mL

Processing Integration Results



RT: 6.65
 Area: 17090
 Amount: 0.191579
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 16-Jul-2019 14:09:00

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

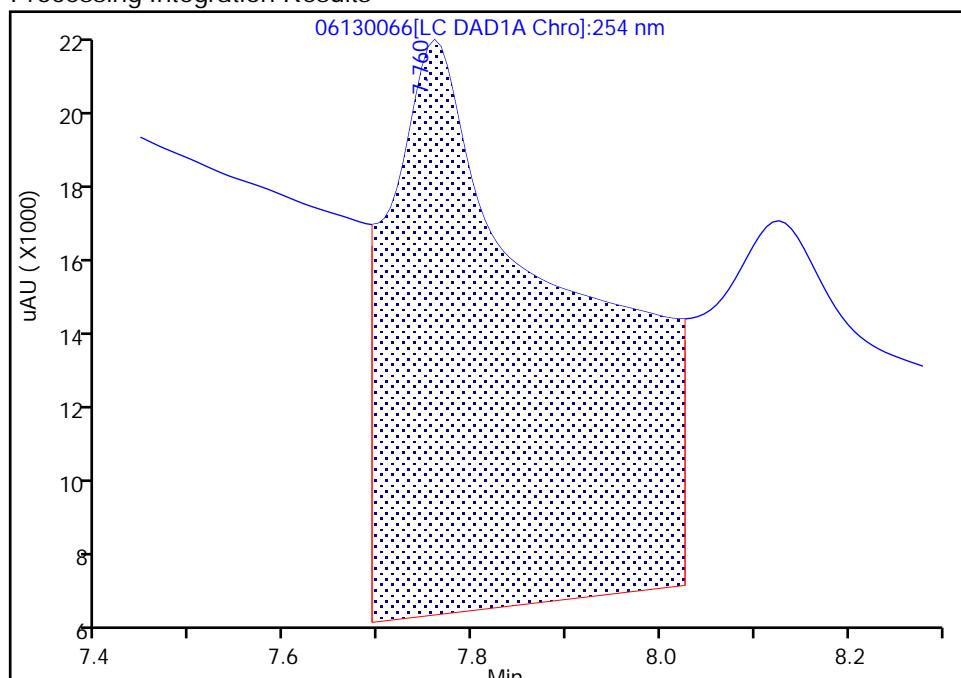
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 Injection Date: 14-Jun-2019 10:53:38 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-A-12-C MSD
 Client ID: PZ001-19AMSD
 Operator ID: hkf ALS Bottle#: 66 Worklist Smp#: 66
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 RDX, CAS: 121-82-4

Signal: 1

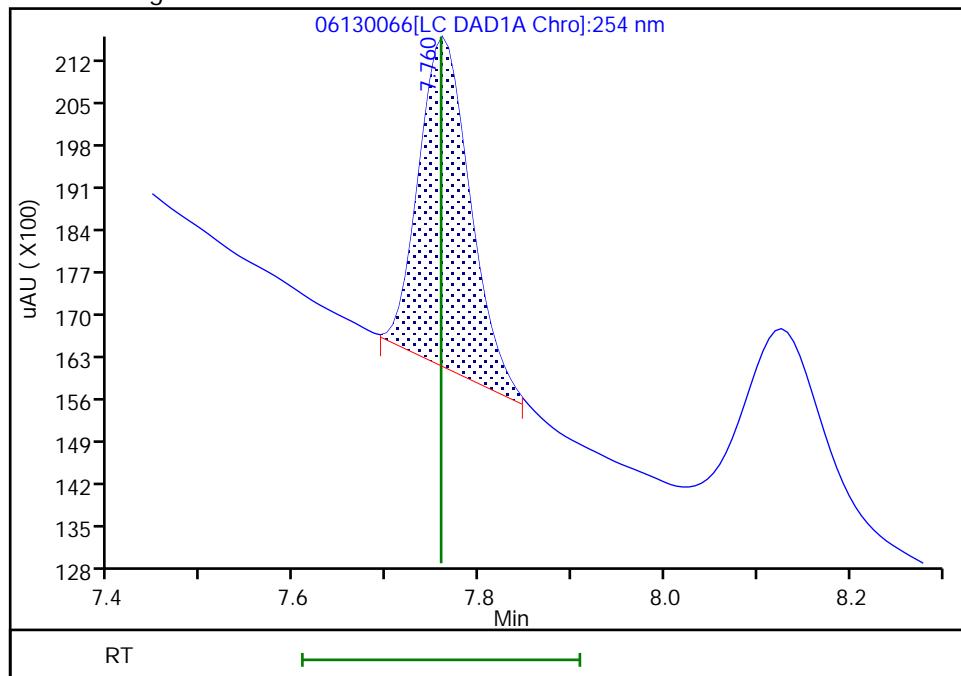
RT: 7.76
 Area: 196553
 Amount: 1.843155
 Amount Units: ug/mL

Processing Integration Results



RT: 7.76
 Area: 21052
 Amount: 0.197413
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 16-Jul-2019 14:09:04

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Client Sample ID: PZ001-19AMSD MSD Lab Sample ID: 280-124912-12 MSD
Matrix: Water Lab File ID: 07150011.D
Analysis Method: 8330A Date Collected: 06/04/2019 14:05
Extraction Method: 3535 Date Extracted: 07/10/2019 16:51
Sample wt/vol: 500.1 (mL) Date Analyzed: 07/15/2019 13:50
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.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	1.02	J H M J1	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150011.D
 Lims ID: 280-124912-B-12-C MSD
 Client ID: PZ001-19AMSD
 Sample Type: MSD
 Inject. Date: 15-Jul-2019 13:50:11 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-12-
 Misc. Info.: 280-0083692-011
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:54:58

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	6.533				ND		U
2 TNX	1	6.588	6.587	0.001	17901	0.2002	0.0833	M
3 HMX	1	6.680				ND		
4 2,4-diamino-6-nitrotoluene	1	6.719				ND		
5 DNX	1	6.914	6.907	0.007	12946	0.2002	0.0829	M
6 MNX	1	7.368	7.367	0.001	14230	0.2334	0.1016	M
7 RDX	1	7.774				ND		
8 2,4,6-Trinitrophenol	1	8.147				ND		
\$ 9 1,2-Dinitrobenzene	1	8.741	8.734	0.007	24533	0.2000	0.1761	M
10 1,3,5-Trinitrobenzene	1	8.900				ND		
11 1,3-Dinitrobenzene	1	9.560				ND		
12 Nitrobenzene	1	9.954	9.947	0.007	1324		0.006657	M
13 3,5-Dinitroaniline	1	10.193				ND		
14 Tetryl	1	10.267				ND		U
15 Nitroglycerin	2	10.780				ND		
16 2,4,6-Trinitrotoluene	1	11.240				ND		
17 4-Amino-2,6-dinitrotoluene	1	11.427				ND		
18 2-Amino-4,6-dinitrotoluene	1	11.720				ND		
19 2,6-Dinitrotoluene	1	11.860				ND		
20 2,4-Dinitrotoluene	1	12.060				ND		
21 o-Nitrotoluene	1	12.907				ND		
22 p-Nitrotoluene	1	13.354				ND		
23 m-Nitrotoluene	1	13.960				ND		U
24 PETN	2	15.080				ND		
25 Ammonium Picrate	1	0.000				ND		

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

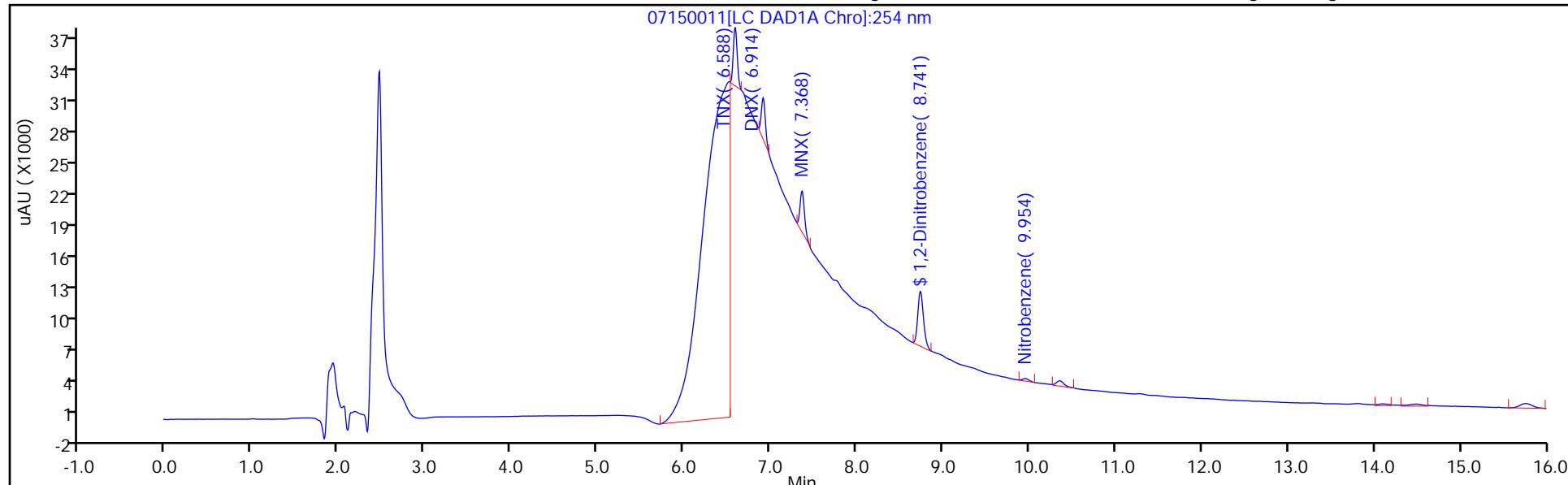
Report Date: 15-Jul-2019 17:53:58

Chrom Revision: 2.3 20-Jun-2019 20:50:56

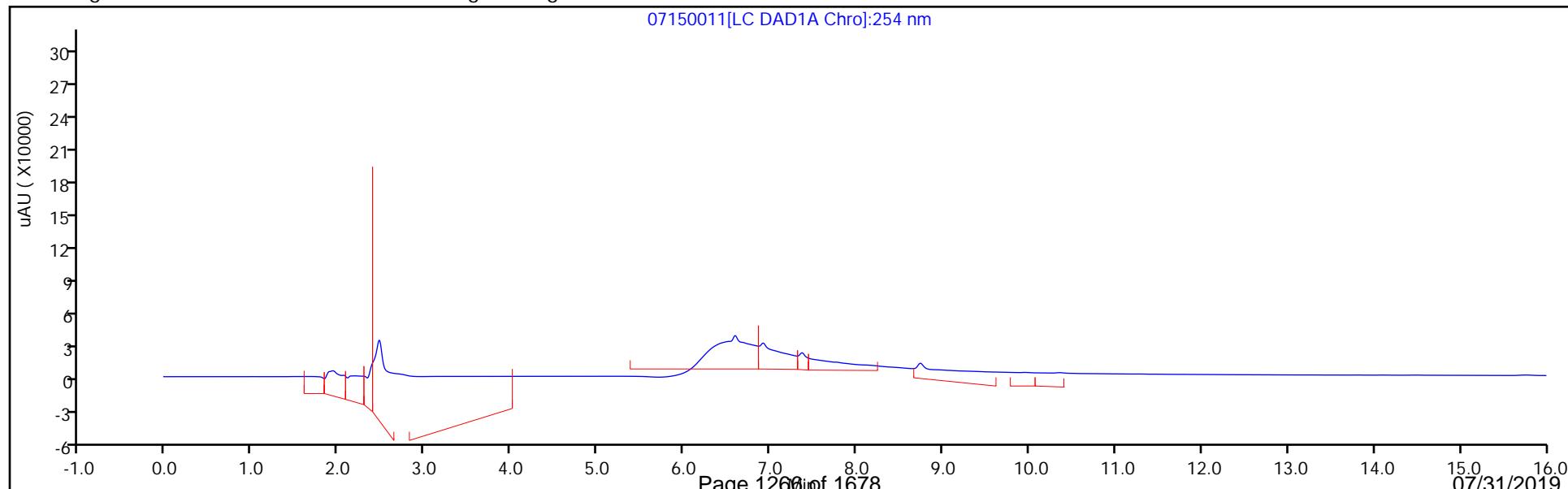
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150011.D
 Injection Date: 15-Jul-2019 13:50:11 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-C MSD Operator ID: hkf
 Client ID: PZ001-19AMSD Worklist Smp#: 11
 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: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150011.D
 Lims ID: 280-124912-B-12-C MSD
 Client ID: PZ001-19AMSD
 Sample Type: MSD
 Inject. Date: 15-Jul-2019 13:50:11 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Sample Info: 280-124912-B-12-
 Misc. Info.: 280-0083692-011
 Operator ID: hkf Instrument ID: CHHPLC_X3
 Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
 Limit Group: GCSV - 8330
 Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D
 Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
 Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:54:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 9 1,2-Dinitrobenzene	0.2000	0.1761	88.04

Eurofins TestAmerica, Denver

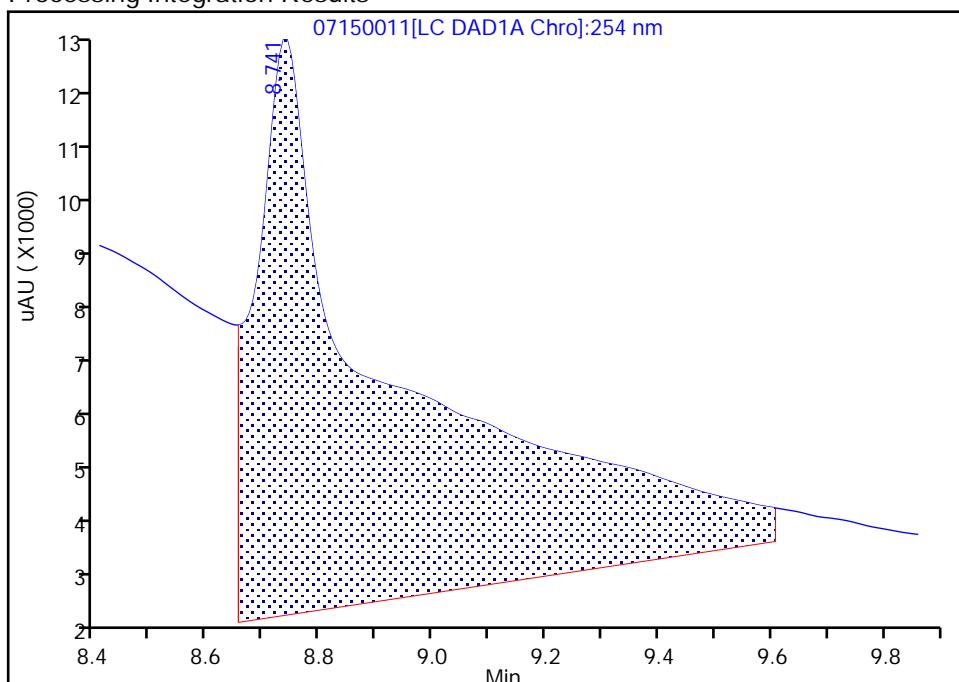
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 Injection Date: 15-Jul-2019 13:50:11 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-C MSD
 Client ID: PZ001-19AMSD
 Operator ID: hkf ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector: LC DAD1B, 254 nm

\$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

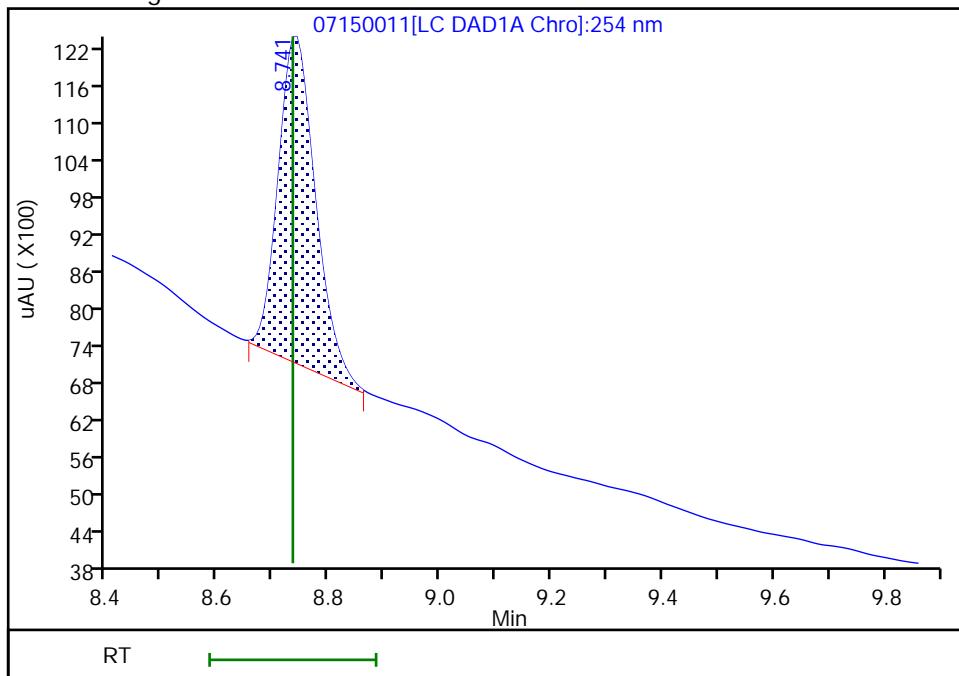
RT: 8.74
 Area: 177460
 Amount: 1.273681
 Amount Units: ug/mL

Processing Integration Results



RT: 8.74
 Area: 24533
 Amount: 0.176080
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 16:54:47

Audit Action: Manually Integrated

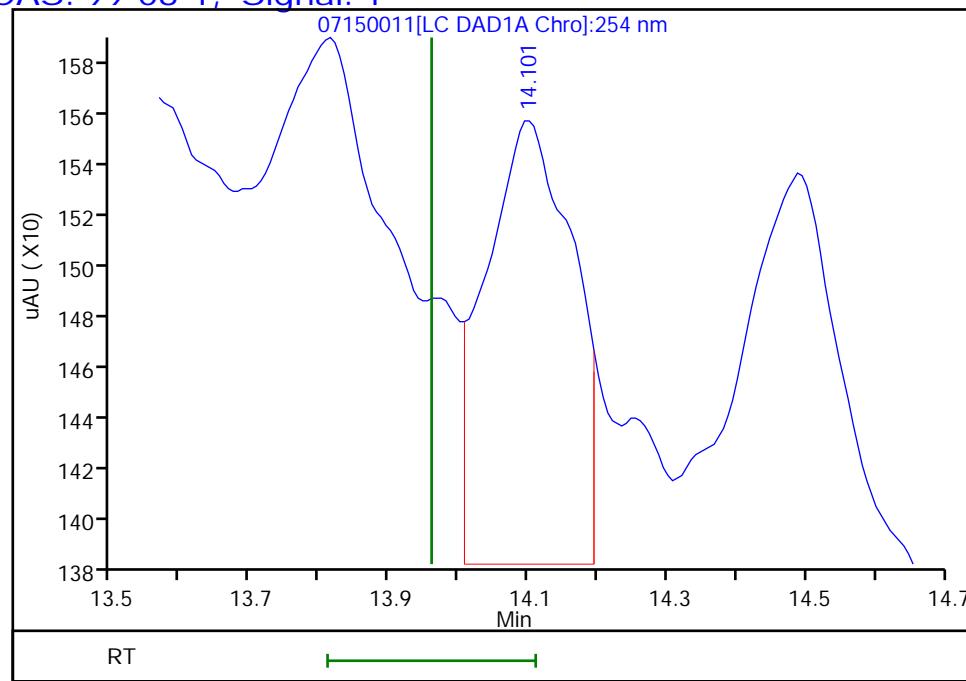
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150011.D
Injection Date: 15-Jul-2019 13:50:11 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-12-C MSD
Client ID: PZ001-19AMSD
Operator ID: hkf 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

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.10
Response: 1471
Amount: 0.010136



Reviewer: fiedlerh, 15-Jul-2019 16:54:58

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

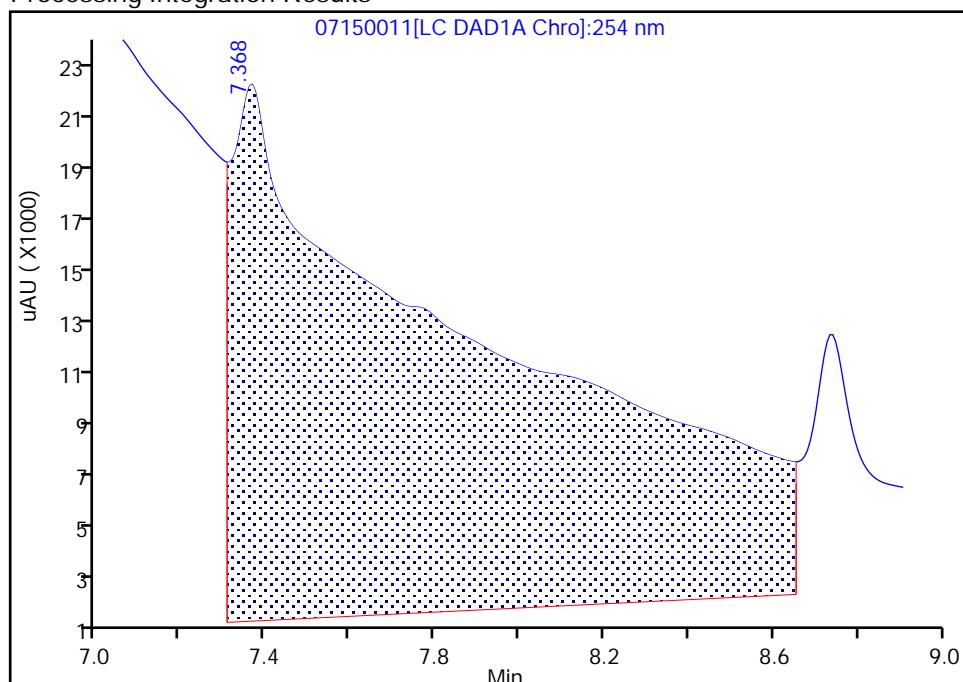
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 Injection Date: 15-Jul-2019 13:50:11 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-C MSD
 Client ID: PZ001-19AMSD
 Operator ID: hkf ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

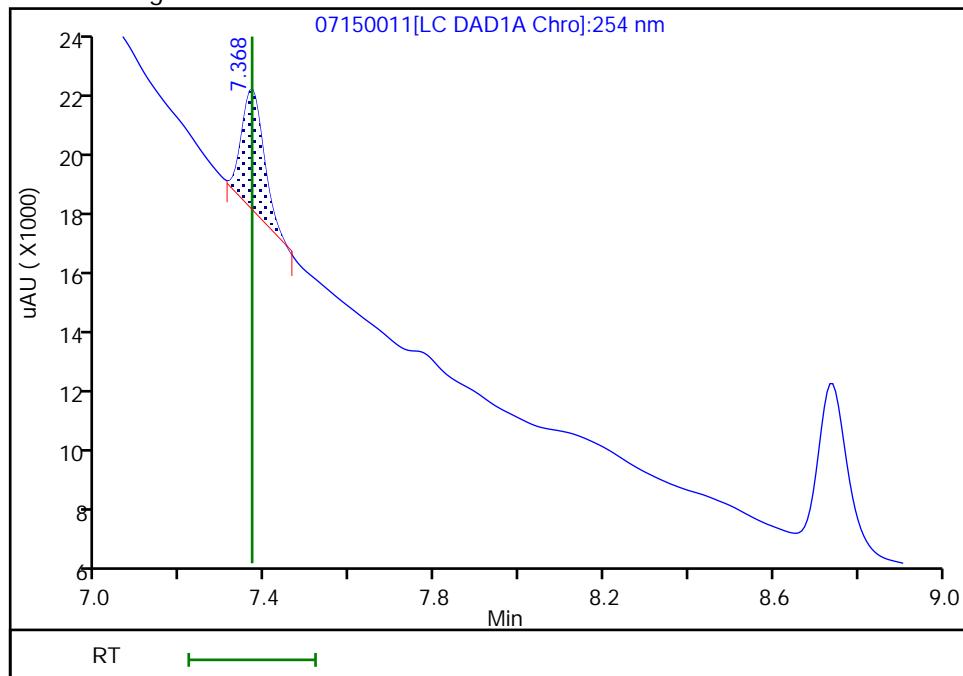
RT: 7.37
 Area: 840364
 Amount: 6.000844
 Amount Units: ug/mL

Processing Integration Results



RT: 7.37
 Area: 14230
 Amount: 0.101613
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 16:54:43

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

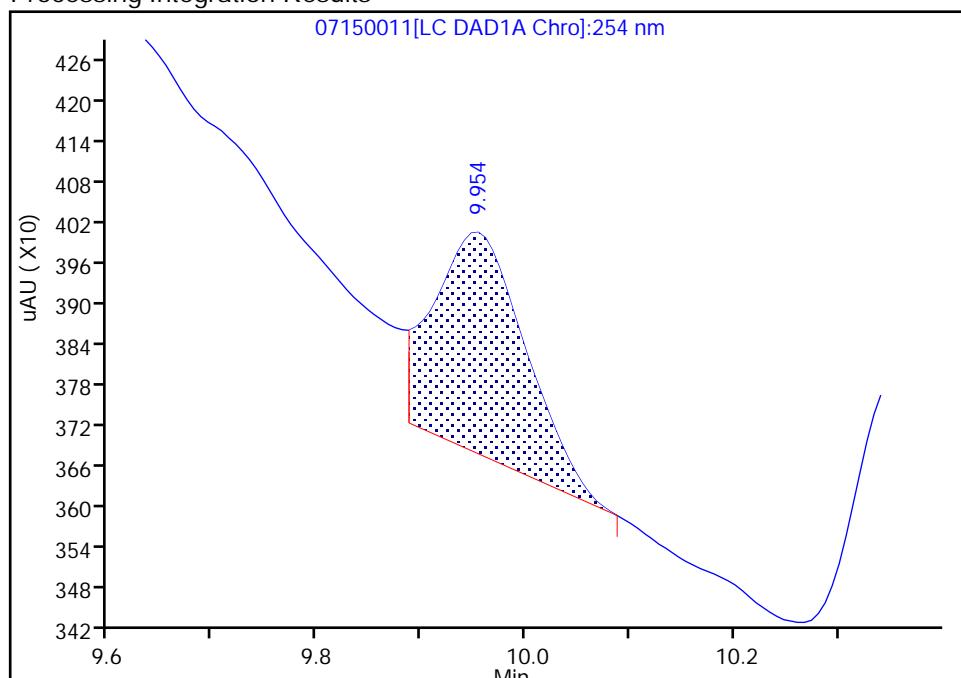
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150011.D
 Injection Date: 15-Jul-2019 13:50:11 Instrument ID: CHHPLC_X3
 Lims ID: 280-124912-B-12-C MSD
 Client ID: PZ001-19AMSD
 Operator ID: hkf ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 100.0 ul Dil. Factor: 1.0000
 Method: 8330_X3 Limit Group: GCSV - 8330
 Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

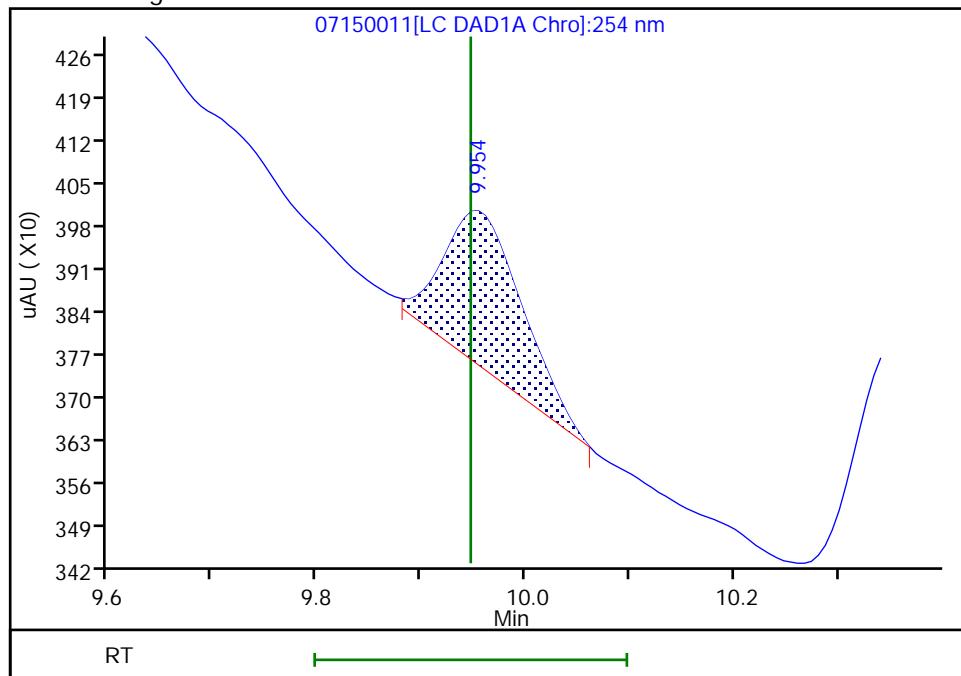
RT: 9.95
 Area: 1982
 Amount: 0.009965
 Amount Units: ug/mL

Processing Integration Results



RT: 9.95
 Area: 1324
 Amount: 0.006657
 Amount Units: ug/mL

Manual Integration Results



Reviewer: fiedlerh, 15-Jul-2019 16:54:52

Audit Action: Manually Integrated

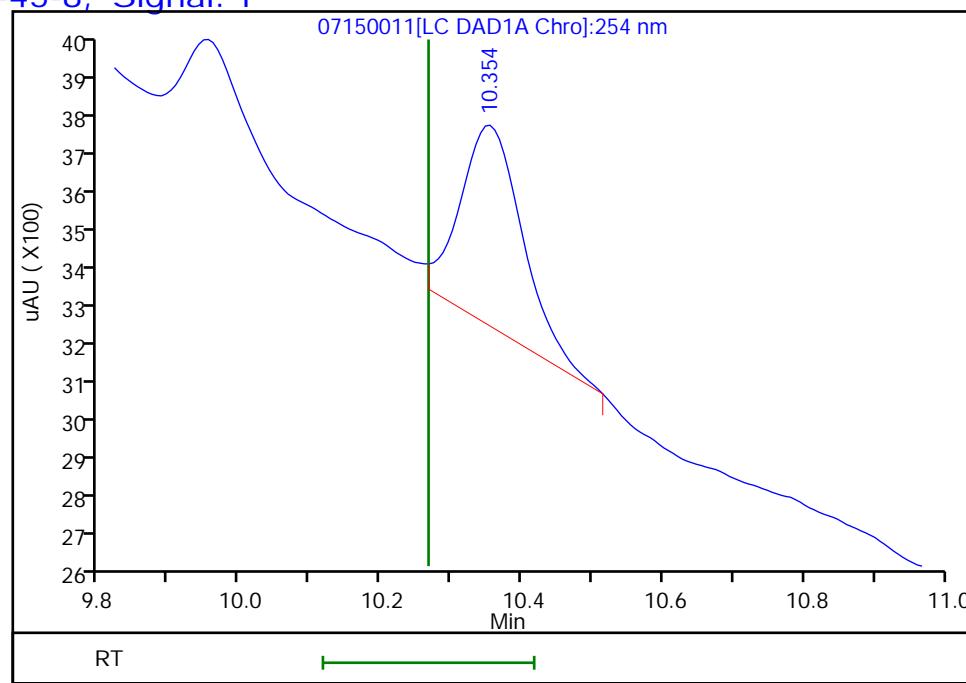
Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150011.D
Injection Date: 15-Jul-2019 13:50:11 Instrument ID: CHHPLC_X3
Lims ID: 280-124912-B-12-C MSD
Client ID: PZ001-19AMSD
Operator ID: hkf 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

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.35
Response: 3155
Amount: 0.019480



Reviewer: fiedlerh, 15-Jul-2019 16:54:58

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/07/2019 15:08Analysis Batch Number: 457315 End Date: 05/08/2019 01:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-457315/7		05/07/2019 15:08	1	05070007.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/8		05/07/2019 15:43	1	05070008.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/9		05/07/2019 16:18	1	05070009.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/10		05/07/2019 16:53	1	05070010.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/11		05/07/2019 17:28	1	05070011.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/12		05/07/2019 18:03	1	05070012.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/13		05/07/2019 18:38	1	05070013.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/14		05/07/2019 19:13	1	05070014.D	Luna-phenylhex 4.6 (mm)
ICV 280-457315/15		05/07/2019 19:48	1	05070015.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/16		05/07/2019 20:23	1	05070016.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/17		05/07/2019 20:58	1	05070017.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/18		05/07/2019 21:33	1	05070018.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/19		05/07/2019 22:08	1	05070019.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/20		05/07/2019 22:43	1	05070020.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/21		05/07/2019 23:18	1	05070021.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/22		05/07/2019 23:53	1	05070022.D	Luna-phenylhex 4.6 (mm)
IC 280-457315/23		05/08/2019 00:28	1	05070023.D	Luna-phenylhex 4.6 (mm)
ICV 280-457315/24		05/08/2019 01:03	1	05070024.D	Luna-phenylhex 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/08/2019 12:21Analysis Batch Number: 457456 End Date: 05/08/2019 16:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICV 280-457456/7		05/08/2019 12:21	1	05080007.D	Luna-phenylhex 4.6 (mm)
CCV 280-457456/8		05/08/2019 12:56	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		05/08/2019 13:31	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		05/08/2019 14:06	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		05/08/2019 14:41	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		05/08/2019 15:16	1		Luna-phenylhex 4.6 (mm)
CCV 280-457456/13		05/08/2019 15:51	1		Luna-phenylhex 4.6 (mm)
CCV 280-457456/14		05/08/2019 16:26	1		Luna-phenylhex 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3Start Date: 05/14/2019 15:49Analysis Batch Number: 458150End Date: 05/15/2019 02:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-458150/7		05/14/2019 15:49	1	0514B007.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/8		05/14/2019 16:13	1	0514B008.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/9		05/14/2019 16:36	1	0514B009.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/10		05/14/2019 17:00	1	0514B010.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/11		05/14/2019 17:24	1	0514B011.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/12		05/14/2019 17:48	1	0514B012.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/13		05/14/2019 18:11	1	0514B013.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/14		05/14/2019 18:35	1	0514B014.D	UltraCarb5uODS 4.6 (mm)
ICV 280-458150/15		05/14/2019 18:59	1	0514B015.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/16		05/14/2019 19:22	1		UltraCarb5uODS 4.6 (mm)
IC 280-458150/17		05/14/2019 19:46	1		UltraCarb5uODS 4.6 (mm)
IC 280-458150/18		05/14/2019 20:10	1		UltraCarb5uODS 4.6 (mm)
IC 280-458150/19		05/14/2019 20:34	1		UltraCarb5uODS 4.6 (mm)
IC 280-458150/20		05/14/2019 20:57	1		UltraCarb5uODS 4.6 (mm)
IC 280-458150/21		05/14/2019 21:21	1		UltraCarb5uODS 4.6 (mm)
IC 280-458150/22		05/14/2019 21:45	1		UltraCarb5uODS 4.6 (mm)
IC 280-458150/23		05/14/2019 22:09	1		UltraCarb5uODS 4.6 (mm)
ICV 280-458150/24		05/14/2019 22:32	1		UltraCarb5uODS 4.6 (mm)
IC 280-458150/25		05/14/2019 22:56	1	0514B025.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/26		05/14/2019 23:20	1	0514B026.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/27		05/14/2019 23:43	1	0514B027.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/28		05/15/2019 00:07	1	0514B028.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/29		05/15/2019 00:31	1	0514B029.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/30		05/15/2019 00:54	1	0514B030.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/31		05/15/2019 01:18	1	0514B031.D	UltraCarb5uODS 4.6 (mm)
IC 280-458150/32		05/15/2019 01:42	1	0514B032.D	UltraCarb5uODS 4.6 (mm)
ICV 280-458150/33		05/15/2019 02:06	1	0514B033.D	UltraCarb5uODS 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3

Start Date: 06/13/2019 22:59

Analysis Batch Number: 461419

End Date: 06/14/2019 15:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-461419/36		06/13/2019 22:59	1	06130036.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461419/37		06/13/2019 23:23	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461419/38		06/13/2019 23:47	1	06130038.D	UltraCarb5uODS 4.6 (mm)
MB 280-461170/1-A		06/14/2019 00:10	1	06130039.D	UltraCarb5uODS 4.6 (mm)
LCS 280-461170/2-A		06/14/2019 00:34	1	06130040.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 00:58	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 01:22	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 01:45	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 02:09	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 02:33	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 02:57	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 03:21	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 03:45	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461419/49		06/14/2019 04:08	1	06130049.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461419/50		06/14/2019 04:32	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461419/51		06/14/2019 04:56	1	06130051.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 05:20	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 05:44	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 06:07	1		UltraCarb5uODS 4.6 (mm)
280-124912-1		06/14/2019 06:31	1	06130055.D	UltraCarb5uODS 4.6 (mm)
280-124912-2		06/14/2019 06:55	1	06130056.D	UltraCarb5uODS 4.6 (mm)
280-124912-3		06/14/2019 07:19	1	06130057.D	UltraCarb5uODS 4.6 (mm)
280-124912-6		06/14/2019 07:43	1	06130058.D	UltraCarb5uODS 4.6 (mm)
280-124912-7		06/14/2019 08:07	1	06130059.D	UltraCarb5uODS 4.6 (mm)
280-124912-8		06/14/2019 08:30	1	06130060.D	UltraCarb5uODS 4.6 (mm)
280-124912-12		06/14/2019 08:54	1	06130061.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461419/62		06/14/2019 09:18	1	06130062.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461419/63		06/14/2019 09:42	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461419/64		06/14/2019 10:06	1	06130064.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 10:29	1		UltraCarb5uODS 4.6 (mm)
280-124912-12 MSD		06/14/2019 10:53	1	06130066.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 11:35	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 11:59	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 12:23	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 12:47	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 13:11	100		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 13:34	100		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/14/2019 13:58	100		UltraCarb5uODS 4.6 (mm)
CCV 280-461419/77		06/14/2019 14:22	1	007-7101.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461419/78		06/14/2019 14:46	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461419/79		06/14/2019 15:10	1	038-7301.D	UltraCarb5uODS 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3

Start Date: 06/15/2019 06:15

Analysis Batch Number: 461580

End Date: 06/15/2019 22:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-461580/40		06/15/2019 06:15	1	06140040.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461580/41		06/15/2019 06:39	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461580/42		06/15/2019 07:03	1	06140042.D	UltraCarb5uODS 4.6 (mm)
MB 280-461286/1-A		06/15/2019 07:27	1	06140043.D	UltraCarb5uODS 4.6 (mm)
LCS 280-461286/2-A		06/15/2019 07:51	1	06140044.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 08:14	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 08:38	1		UltraCarb5uODS 4.6 (mm)
280-124912-4		06/15/2019 09:02	1	06140047.D	UltraCarb5uODS 4.6 (mm)
280-124912-4 MS		06/15/2019 09:26	1	06140048.D	UltraCarb5uODS 4.6 (mm)
280-124912-4 MSD		06/15/2019 09:50	1	06140049.D	UltraCarb5uODS 4.6 (mm)
280-124912-5		06/15/2019 10:13	1	06140050.D	UltraCarb5uODS 4.6 (mm)
280-124912-5 MS		06/15/2019 10:37	1	06140051.D	UltraCarb5uODS 4.6 (mm)
280-124912-5 MSD		06/15/2019 11:01	1	06140052.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461580/53		06/15/2019 11:25	1	06140053.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461580/54		06/15/2019 11:49	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461580/55		06/15/2019 12:12	1	06140055.D	UltraCarb5uODS 4.6 (mm)
280-124912-9		06/15/2019 12:36	1	06140056.D	UltraCarb5uODS 4.6 (mm)
280-124912-10		06/15/2019 13:00	1	06140057.D	UltraCarb5uODS 4.6 (mm)
280-124912-11		06/15/2019 13:24	1	06140058.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 13:48	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 14:11	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 14:35	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 14:59	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 15:23	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 15:47	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 16:10	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461580/66		06/15/2019 16:34	1	06140066.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461580/67		06/15/2019 16:58	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461580/68		06/15/2019 17:22	1	06140068.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 17:46	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 18:09	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 18:33	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 18:57	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 19:21	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 19:45	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 20:09	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 20:32	1		UltraCarb5uODS 4.6 (mm)
280-124912-12 MS		06/15/2019 20:56	1	06140077.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		06/15/2019 21:20	1000		UltraCarb5uODS 4.6 (mm)
CCV 280-461580/79		06/15/2019 21:44	1	06140079.D	UltraCarb5uODS 4.6 (mm)
CCV 280-461580/80		06/15/2019 22:08	1		UltraCarb5uODS 4.6 (mm)
CCV 280-461580/81		06/15/2019 22:32	1	06140081.D	UltraCarb5uODS 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____

Instrument ID: CHHPLC_G2_LUNA Start Date: 06/15/2019 02:50
Analysis Batch Number: 461583 End Date: 06/15/2019 18:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-461583/29		06/15/2019 02:50	1		Luna-phenylhex 4.6 (mm)
CCV 280-461583/30		06/15/2019 03:25	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 04:00	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 04:35	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 05:10	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 05:45	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 06:20	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 06:55	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 07:30	100		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 08:05	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 08:40	100		Luna-phenylhex 4.6 (mm)
CCV 280-461583/40		06/15/2019 09:15	1	06140040.D	Luna-phenylhex 4.6 (mm)
CCV 280-461583/41		06/15/2019 09:50	1	06140041.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 10:25	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 11:00	100		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 11:35	1		Luna-phenylhex 4.6 (mm)
280-124912-1		06/15/2019 12:10	1	06140045.D	Luna-phenylhex 4.6 (mm)
280-124912-2		06/15/2019 12:45	1	06140046.D	Luna-phenylhex 4.6 (mm)
280-124912-3		06/15/2019 13:20	1	06140047.D	Luna-phenylhex 4.6 (mm)
280-124912-8		06/15/2019 13:55	1	06140048.D	Luna-phenylhex 4.6 (mm)
CCV 280-461583/49		06/15/2019 14:30	1	06140049.D	Luna-phenylhex 4.6 (mm)
CCV 280-461583/50		06/15/2019 15:05	1	06140050.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 15:40	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 16:15	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/15/2019 16:50	1000		Luna-phenylhex 4.6 (mm)
CCV 280-461583/55		06/15/2019 17:25	1000		Luna-phenylhex 4.6 (mm)
CCV 280-461583/56		06/15/2019 18:00	1		Luna-phenylhex 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA

Start Date: 06/18/2019 05:05

Analysis Batch Number: 461836

End Date: 06/18/2019 23:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-461836/25		06/18/2019 05:05	1	06170025.D	Luna-phenylhex 4.6 (mm)
CCV 280-461836/26		06/18/2019 05:40	1	06170026.D	Luna-phenylhex 4.6 (mm)
MB 280-461286/1-A		06/18/2019 06:15	1	06170027.D	Luna-phenylhex 4.6 (mm)
LCS 280-461286/2-A		06/18/2019 06:50	1	06170028.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 07:25	1		Luna-phenylhex 4.6 (mm)
280-124912-4		06/18/2019 08:00	1	06170030.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 08:35	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 09:10	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 09:45	1		Luna-phenylhex 4.6 (mm)
280-124912-10		06/18/2019 10:20	1	06170034.D	Luna-phenylhex 4.6 (mm)
280-124912-10		06/18/2019 10:55	20	06170035.D	Luna-phenylhex 4.6 (mm)
280-124912-11		06/18/2019 11:30	1	06170036.D	Luna-phenylhex 4.6 (mm)
CCV 280-461836/38		06/18/2019 12:05	1	06170038.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 12:40	1		Luna-phenylhex 4.6 (mm)
CCV 280-461836/37		06/18/2019 13:24	1	007-3801.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 14:34	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 15:09	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 15:44	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 16:19	100		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 16:54	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 17:29	100		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 18:04	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 18:39	100		Luna-phenylhex 4.6 (mm)
CCV 280-461836/49		06/18/2019 19:14	1		Luna-phenylhex 4.6 (mm)
CCV 280-461836/50		06/18/2019 19:49	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 20:24	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 20:59	100		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 21:34	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		06/18/2019 22:09	1		Luna-phenylhex 4.6 (mm)
CCV 280-461836/55		06/18/2019 22:44	1		Luna-phenylhex 4.6 (mm)
CCV 280-461836/56		06/18/2019 23:19	1		Luna-phenylhex 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3Start Date: 07/01/2019 14:40Analysis Batch Number: 463276End Date: 07/02/2019 00:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-463276/7		07/01/2019 14:40	1	07010007.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/8		07/01/2019 15:04	1	07010008.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/9		07/01/2019 15:27	1	07010009.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/10		07/01/2019 15:50	1	07010010.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/11		07/01/2019 16:13	1	07010011.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/12		07/01/2019 16:36	1	07010012.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/13		07/01/2019 17:00	1	07010013.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/14		07/01/2019 17:23	1	07010014.D	UltraCarb5uODS 4.6 (mm)
ICV 280-463276/15		07/01/2019 17:46	1	07010015.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/16		07/01/2019 18:09	1		UltraCarb5uODS 4.6 (mm)
IC 280-463276/17		07/01/2019 18:32	1		UltraCarb5uODS 4.6 (mm)
IC 280-463276/18		07/01/2019 18:55	1		UltraCarb5uODS 4.6 (mm)
IC 280-463276/19		07/01/2019 19:18	1		UltraCarb5uODS 4.6 (mm)
IC 280-463276/20		07/01/2019 19:41	1		UltraCarb5uODS 4.6 (mm)
IC 280-463276/21		07/01/2019 20:04	1		UltraCarb5uODS 4.6 (mm)
IC 280-463276/22		07/01/2019 20:27	1		UltraCarb5uODS 4.6 (mm)
IC 280-463276/23		07/01/2019 20:50	1		UltraCarb5uODS 4.6 (mm)
ICV 280-463276/24		07/01/2019 21:13	1		UltraCarb5uODS 4.6 (mm)
IC 280-463276/25		07/01/2019 21:36	1	07010025.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/26		07/01/2019 22:00	1	07010026.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/27		07/01/2019 22:23	1	07010027.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/28		07/01/2019 22:46	1	07010028.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/29		07/01/2019 23:09	1	07010029.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/30		07/01/2019 23:32	1	07010030.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/31		07/01/2019 23:55	1	07010031.D	UltraCarb5uODS 4.6 (mm)
IC 280-463276/32		07/02/2019 00:18	1	07010032.D	UltraCarb5uODS 4.6 (mm)
ICV 280-463276/33		07/02/2019 00:41	1	07010033.D	UltraCarb5uODS 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-124912-1

SDG No.:

Instrument ID: CHHPLC_X3Start Date: 07/11/2019 23:39Analysis Batch Number: 464207End Date: 07/12/2019 10:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-464207/42		07/11/2019 23:39	1	07110042.D	UltraCarb5uODS 4.6 (mm)
CCV 280-464207/43		07/12/2019 00:02	1		UltraCarb5uODS 4.6 (mm)
CCV 280-464207/44		07/12/2019 00:25	1	07110044.D	UltraCarb5uODS 4.6 (mm)
MB 280-464162/1-A		07/12/2019 00:48	1	07110045.D	UltraCarb5uODS 4.6 (mm)
LCS 280-464162/2-A		07/12/2019 01:10	1	07110046.D	UltraCarb5uODS 4.6 (mm)
LCSD 280-464162/3-A		07/12/2019 01:33	1	07110047.D	UltraCarb5uODS 4.6 (mm)
LCS 280-464162/4-A		07/12/2019 01:56	1	07110048.D	UltraCarb5uODS 4.6 (mm)
280-124912-1 RE		07/12/2019 02:19	1	07110049.D	UltraCarb5uODS 4.6 (mm)
280-124912-2 RE		07/12/2019 02:42	1	07110050.D	UltraCarb5uODS 4.6 (mm)
280-124912-3 RE		07/12/2019 03:05	1	07110051.D	UltraCarb5uODS 4.6 (mm)
280-124912-4 RE		07/12/2019 03:28	1	07110052.D	UltraCarb5uODS 4.6 (mm)
280-124912-4 MS		07/12/2019 03:51	1	07110053.D	UltraCarb5uODS 4.6 (mm)
280-124912-4 MSD		07/12/2019 04:14	1	07110054.D	UltraCarb5uODS 4.6 (mm)
CCV 280-464207/55		07/12/2019 04:37	1	07110055.D	UltraCarb5uODS 4.6 (mm)
CCV 280-464207/56		07/12/2019 05:00	1		UltraCarb5uODS 4.6 (mm)
CCV 280-464207/57		07/12/2019 05:23	1	07110057.D	UltraCarb5uODS 4.6 (mm)
280-124912-5 RE		07/12/2019 05:46	1	07110058.D	UltraCarb5uODS 4.6 (mm)
280-124912-5 MS		07/12/2019 06:09	1	07110059.D	UltraCarb5uODS 4.6 (mm)
280-124912-5 MSD		07/12/2019 06:32	1	07110060.D	UltraCarb5uODS 4.6 (mm)
280-124912-6 RE		07/12/2019 06:55	1	07110061.D	UltraCarb5uODS 4.6 (mm)
280-124912-7 RE		07/12/2019 07:18	1	07110062.D	UltraCarb5uODS 4.6 (mm)
280-124912-8 RE		07/12/2019 07:41	1	07110063.D	UltraCarb5uODS 4.6 (mm)
280-124912-9 RE		07/12/2019 08:04	1	07110064.D	UltraCarb5uODS 4.6 (mm)
280-124912-10 RE		07/12/2019 08:27	1	07110065.D	UltraCarb5uODS 4.6 (mm)
280-124912-11 RE		07/12/2019 08:50	1	07110066.D	UltraCarb5uODS 4.6 (mm)
280-124912-12 RE		07/12/2019 09:13	1	07110067.D	UltraCarb5uODS 4.6 (mm)
CCV 280-464207/68		07/12/2019 09:36	1	07110068.D	UltraCarb5uODS 4.6 (mm)
CCV 280-464207/69		07/12/2019 09:59	1		UltraCarb5uODS 4.6 (mm)
CCV 280-464207/70		07/12/2019 10:22	1	07110070.D	UltraCarb5uODS 4.6 (mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-124912-1

SDG No.: _____

Instrument ID: CHHPLC_X3Start Date: 07/15/2019 12:18Analysis Batch Number: 464537End Date: 07/15/2019 18:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-464537/7		07/15/2019 12:18	1	07150007.D	UltraCarb5uODS 4.6 (mm)
CCV 280-464537/8		07/15/2019 12:41	1		UltraCarb5uODS 4.6 (mm)
CCV 280-464537/9		07/15/2019 13:04	1	07150009.D	UltraCarb5uODS 4.6 (mm)
280-124912-12 MS		07/15/2019 13:27	1	07150010.D	UltraCarb5uODS 4.6 (mm)
280-124912-12 MSD		07/15/2019 13:50	1	07150011.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		07/15/2019 14:13	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		07/15/2019 14:36	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		07/15/2019 14:59	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		07/15/2019 15:21	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		07/15/2019 15:44	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		07/15/2019 16:07	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		07/15/2019 16:30	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		07/15/2019 16:53	1000		UltraCarb5uODS 4.6 (mm)
CCV 280-464537/20		07/15/2019 17:16	1	07150020.D	UltraCarb5uODS 4.6 (mm)
CCV 280-464537/21		07/15/2019 17:39	1		UltraCarb5uODS 4.6 (mm)
CCV 280-464537/22		07/15/2019 18:02	1	07150022.D	UltraCarb5uODS 4.6 (mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461170

Batch Start Date: 06/11/19 18:08

Batch Analyst: Anders, Kayla S

Batch Method: 3535

Batch End Date: 06/11/19 20:38

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00089	8330Surrogate 00105
MB 280-461170/1		3535, 8330A				500 mL	5 mL		0.1 mL
LCS 280-461170/2		3535, 8330A				500 mL	5 mL	0.1 mL	0.1 mL
280-124912-A-1	PZ004-19A	3535, 8330A	T	782.2 g	286.5 g	495.7 mL	5 mL		0.1 mL
280-124912-A-2	G0044-19A	3535, 8330A	T	785.6 g	286.3 g	499.3 mL	5 mL		0.1 mL
280-124912-A-3	PZ015-19A	3535, 8330A	T	724.1 g	260.1 g	464 mL	5 mL		0.1 mL
280-124912-A-6	G0049-19A	3535, 8330A	T	719.4 g	258.2 g	461.2 mL	5 mL		0.1 mL
280-124912-A-7	G0048-19A	3535, 8330A	T	729.3 g	258.4 g	470.9 mL	5 mL		0.1 mL
280-124912-A-8	G0023-19A	3535, 8330A	T	692.8 g	260.5 g	432.3 mL	5 mL		0.1 mL
280-124912-A-12	PZ001-19A	3535, 8330A	T	781.8 g	285.5 g	496.3 mL	5 mL		0.1 mL
280-124912-A-12 MS	PZ001-19AMS	3535, 8330A	T	790.7 g	284.0 g	506.7 mL	5 mL	0.1 mL	0.1 mL
280-124912-A-12 MSD	PZ001-19AMSD	3535, 8330A	T	793.0 g	285.0 g	508 mL	5 mL	0.1 mL	0.1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
MB 280-461170/1		3535, 8330A							
LCS 280-461170/2		3535, 8330A							
280-124912-A-1	PZ004-19A	3535, 8330A	T						
280-124912-A-2	G0044-19A	3535, 8330A	T						
280-124912-A-3	PZ015-19A	3535, 8330A	T	filtered					
280-124912-A-6	G0049-19A	3535, 8330A	T						
280-124912-A-7	G0048-19A	3535, 8330A	T						
280-124912-A-8	G0023-19A	3535, 8330A	T	filtered					
280-124912-A-12	PZ001-19A	3535, 8330A	T						
280-124912-A-12 MS	PZ001-19AMS	3535, 8330A	T						
280-124912-A-12 MSD	PZ001-19AMSD	3535, 8330A	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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461170

Batch Start Date: 06/11/19 18:08

Batch Analyst: Anders, Kayla S

Batch Method: 3535

Batch End Date: 06/11/19 20:38

Batch Notes	
Acid ID	.1AAinACN_00127
Acid Name	.1AAinACN
Balance ID	24350888
Batch Comment	DV-OP-0017
First End time	06/11/2019 20:13
Pipette/Syringe/Dispenser ID	Jiji, Soot
Rinse Solvent Lot	Acetonitrile_00034
Rinse Solvent Name	Acetonitrile
Solvent Lot #	CaCl2_Sol_00066
Solvent Name	Calcium Chloride
SPE Cartridge Lot ID	004938274A
SPE Cartridge Type	Proapak RDX Cartridges
Analyst ID - Spike Analyst	KA
Analyst ID - Spike Witness Analyst	Reviewer:CR
First Start time	06/11/2019 18:33

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.: 280-124912-1

SDG No.:

Batch Number: 461286

Batch Start Date: 06/12/19 17:51

Batch Analyst: Anders, Kayla S

Batch Method: 3535

Batch End Date: 06/12/19 20:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00089	8330Surrogate 00105
MB 280-461286/1		3535, 8330A				500 mL	5 mL		0.1 mL
LCS 280-461286/2		3535, 8330A				500 mL	5 mL	0.1 mL	0.1 mL
280-124912-A-4	G0102-19A	3535, 8330A	T	764.4 g	286.0 g	478.4 mL	5 mL		0.1 mL
280-124912-A-4 MS	G0102-19AMS	3535, 8330A	T	791.6 g	285.0 g	506.6 mL	5 mL	0.1 mL	0.1 mL
280-124912-A-4 MSD	G0102-19AMSD	3535, 8330A	T	798.1 g	284.0 g	514.1 mL	5 mL	0.1 mL	0.1 mL
280-124912-A-5	PZ007-19A	3535, 8330A	T	732.8 g	262.2 g	470.6 mL	5 mL		0.1 mL
280-124912-A-5 MS	PZ007-19AMS	3535, 8330A	T	733.9 g	263.0 g	470.9 mL	5 mL	0.1 mL	0.1 mL
280-124912-A-5 MSD	PZ007-19AMSD	3535, 8330A	T	787.6 g	285.6 g	502 mL	5 mL	0.1 mL	0.1 mL
280-124912-A-9	PZ005-19A	3535, 8330A	T	798.9 g	285.6 g	513.3 mL	5 mL		0.1 mL
280-124912-A-10	G0103-19A	3535, 8330A	T	721.8 g	262.0 g	459.8 mL	5 mL		0.1 mL
280-124912-A-11	G0104-19A	3535, 8330A	T	737.8 g	261.0 g	476.8 mL	5 mL		0.1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
MB 280-461286/1		3535, 8330A							
LCS 280-461286/2		3535, 8330A							
280-124912-A-4	G0102-19A	3535, 8330A	T						
280-124912-A-4 MS	G0102-19AMS	3535, 8330A	T						
280-124912-A-4 MSD	G0102-19AMSD	3535, 8330A	T						
280-124912-A-5	PZ007-19A	3535, 8330A	T						
280-124912-A-5 MS	PZ007-19AMS	3535, 8330A	T						
280-124912-A-5 MSD	PZ007-19AMSD	3535, 8330A	T						
280-124912-A-9	PZ005-19A	3535, 8330A	T	filtered					
280-124912-A-10	G0103-19A	3535, 8330A	T	filtered					
280-124912-A-11	G0104-19A	3535, 8330A	T	filtered					

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.: 280-124912-1

SDG No.:

Batch Number: 461286

Batch Start Date: 06/12/19 17:51

Batch Analyst: Anders, Kayla S

Batch Method: 3535

Batch End Date: 06/12/19 20:05

Batch Notes	
Acid ID	.1AAinACN_00127
Acid Name	.1AAinACN
Balance ID	24350888
Batch Comment	DV-OP-0017
First End time	06/12/2019 19:46
Pipette/Syringe/Dispenser ID	Jiji, Soot
Rinse Solvent Lot	Acetonitrile_00034
Rinse Solvent Name	Acetonitrile
Solvent Lot #	CaCl2_Sol_00066
Solvent Name	Calcium Chloride
SPE Cartridge Lot ID	004938274A
SPE Cartridge Type	Proapak RDX Cartridges
Analyst ID - Spike Analyst	KA
Analyst ID - Spike Witness Analyst	Reviewer:CR
First Start time	06/12/2019 18:17

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.: 280-124912-1

SDG No.:

Batch Number: 464162

Batch Start Date: 07/10/19 20:21

Batch Analyst: Exstrum, Adam J

Batch Method: 3535

Batch End Date: 07/11/19 01:07

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00089	8330 OP DMT 00002
MB 280-464162/1		3535, 8330A				500 mL	5 mL		
LCS 280-464162/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCSD 280-464162/3		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-464162/4		3535, 8330A				500 mL	5 mL		0.1 mL
280-124912-B-1	PZ004-19A	3535, 8330A	T	789.9 g	284.9 g	505 mL	5 mL		
280-124912-B-2	G0044-19A	3535, 8330A	T	779.9 g	283.6 g	496.3 mL	5 mL		
280-124912-B-3	PZ015-19A	3535, 8330A	T	706.2 g	258.0 g	448.2 mL	5 mL		
280-124912-B-4	G0102-19A	3535, 8330A	T	767.2 g	283.8 g	483.4 mL	5 mL		
280-124912-B-4 MS	G0102-19AMS	3535, 8330A	T	770.7 g	283.5 g	487.2 mL	5 mL		0.1 mL
280-124912-B-4 MSD	G0102-19AMSD	3535, 8330A	T	756.0 g	283.6 g	472.4 mL	5 mL		0.1 mL
280-124912-B-5	PZ007-19A	3535, 8330A	T	712.8 g	260.6 g	452.2 mL	5 mL		
280-124912-B-5 MS	PZ007-19AMS	3535, 8330A	T	691.5 g	261.8 g	429.7 mL	5 mL		0.1 mL
280-124912-B-5 MSD	PZ007-19AMSD	3535, 8330A	T	739.8 g	282.9 g	456.9 mL	5 mL		0.1 mL
280-124912-B-6	G0049-19A	3535, 8330A	T	691.5 g	259.9 g	431.6 mL	5 mL		
280-124912-B-7	G0048-19A	3535, 8330A	T	710.9 g	256.6 g	454.3 mL	5 mL		
280-124912-B-8	G0023-19A	3535, 8330A	T	713.3 g	259.5 g	453.8 mL	5 mL		
280-124912-B-9	PZ005-19A	3535, 8330A	T	752.7 g	283.9 g	468.8 mL	5 mL		
280-124912-B-10	G0103-19A	3535, 8330A	T	708.5 g	259.3 g	449.2 mL	5 mL		
280-124912-B-11	G0104-19A	3535, 8330A	T	708.2 g	261.2 g	447 mL	5 mL		
280-124912-B-12	PZ001-19A	3535, 8330A	T	790.8 g	283.6 g	507.2 mL	5 mL		
280-124912-B-12 MS	PZ001-19AMS	3535, 8330A	T	790.2 g	284.0 g	506.2 mL	5 mL		0.1 mL
280-124912-B-12 MSD	PZ001-19AMSD	3535, 8330A	T	783.9 g	283.8 g	500.1 mL	5 mL		0.1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330 Surrogate 00105	AnalysisComment				
MB 280-464162/1		3535, 8330A		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.: 280-124912-1

SDG No.:

Batch Number: 464162

Batch Start Date: 07/10/19 20:21

Batch Analyst: Exstrum, Adam J

Batch Method: 3535

Batch End Date: 07/11/19 01:07

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330 Surrogate 00105	Analysis Comment				
LCS 280-464162/2		3535, 8330A		0.1 mL	8330				
LCSD 280-464162/3		3535, 8330A		0.1 mL	8330				
LCS 280-464162/4		3535, 8330A		0.1 mL	DMT				
280-124912-B-1	PZ004-19A	3535, 8330A	T	0.1 mL					
280-124912-B-2	G0044-19A	3535, 8330A	T	0.1 mL					
280-124912-B-3	PZ015-19A	3535, 8330A	T	0.1 mL					
280-124912-B-4	G0102-19A	3535, 8330A	T	0.1 mL					
280-124912-B-4 MS	G0102-19AMS	3535, 8330A	T	0.1 mL	DMT				
280-124912-B-4 MSD	G0102-19AMSD	3535, 8330A	T	0.1 mL	DMT				
280-124912-B-5	PZ007-19A	3535, 8330A	T	0.1 mL					
280-124912-B-5 MS	PZ007-19AMS	3535, 8330A	T	0.1 mL	DMT				
280-124912-B-5 MSD	PZ007-19AMSD	3535, 8330A	T	0.1 mL	DMT				
280-124912-B-6	G0049-19A	3535, 8330A	T	0.1 mL					
280-124912-B-7	G0048-19A	3535, 8330A	T	0.1 mL					
280-124912-B-8	G0023-19A	3535, 8330A	T	0.1 mL					
280-124912-B-9	PZ005-19A	3535, 8330A	T	0.1 mL					
280-124912-B-10	G0103-19A	3535, 8330A	T	0.1 mL					
280-124912-B-11	G0104-19A	3535, 8330A	T	0.1 mL					
280-124912-B-12	PZ001-19A	3535, 8330A	T	0.1 mL					
280-124912-B-12 MS	PZ001-19AMS	3535, 8330A	T	0.1 mL	DMT				
280-124912-B-12 MSD	PZ001-19AMSD	3535, 8330A	T	0.1 mL	DMT				

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.: 280-124912-1

SDG No.:

Batch Number: 464162

Batch Start Date: 07/10/19 20:21

Batch Analyst: Exstrum, Adam J

Batch Method: 3535

Batch End Date: 07/11/19 01:07

Batch Notes	
Acid ID	.1AAinACN_00131
Acid Name	.1AAinACN
Batch Comment	DV-OP-0017
First End time	07/10/2019 23:46
Pipette/Syringe/Dispenser ID	Jiji, Soot
Rinse Solvent Lot	Acetonitrile_00034
Rinse Solvent Name	Acetonitrile
Solvent Lot #	CaCl2_Sol_00066
Solvent Name	Calcium Chloride
SPE Cartridge Lot ID	004939008A
SPE Cartridge Type	Porapak RDX Cartridges
Analyst ID - Spike Analyst	AE
Analyst ID - Spike Witness Analyst	Reviewer: DC
First Start time	07/10/2019 20:55

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: 280-124912-1

SDG No.: _____

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
PZ004-19A	280-124912-1
G0044-19A	280-124912-2
PZ015-19A	280-124912-3
G0102-19A	280-124912-4
PZ007-19A	280-124912-5
G0049-19A	280-124912-6
G0048-19A	280-124912-7
G0023-19A	280-124912-8
PZ005-19A	280-124912-9
G0103-19A	280-124912-10
G0104-19A	280-124912-11
PZ001-19A	280-124912-12

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ004-19A

Lab Sample ID: 280-124912-1

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 12:30

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.085	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	0.94	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	1100	50	30	10	mg/L		D B	10	9056A
Total Alkalinity as CaCO ₃	550	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ004-19A

Lab Sample ID: 280-124912-1

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 12:30

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.2	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0044-19A

Lab Sample ID: 280-124912-2

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 16:00

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	9.4	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	650	50	30	10	mg/L		D B	10	9056A
Total Alkalinity as CaCO ₃	590	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0044-19A

Lab Sample ID: 280-124912-2

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 16:00

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.1	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ015-19A

Lab Sample ID: 280-124912-3

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 16:25

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.1	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.69	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	13	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	53	25	15	5.2	mg/L		D B	5	9056A
Total Alkalinity as CaCO ₃	280	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ015-19A

Lab Sample ID: 280-124912-3

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 16:25

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.5	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0102-19A

Lab Sample ID: 280-124912-4

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 11:25

Reporting Basis: WET

Date Received: 06/06/2019 08:45

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	J1	1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	1100	50	30	10	mg/L		D B	10	9056A
Total Alkalinity as CaCO ₃	420	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0102-19A

Lab Sample ID: 280-124912-4

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 11:25

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.8	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ007-19A

Lab Sample ID: 280-124912-5

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 10:15

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.077	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	0.099	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	930	50	30	10	mg/L		D B	10	9056A
Total Alkalinity as CaCO ₃	430	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ007-19A

Lab Sample ID: 280-124912-5

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 10:15

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.7	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0049-19A

Lab Sample ID: 280-124912-6

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 12:30

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.5	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.3	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	320	25	15	5.2	mg/L		D B	5	9056A
Total Alkalinity as CaCO ₃	300	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0049-19A

Lab Sample ID: 280-124912-6

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 12:30

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.8	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0048-19A

Lab Sample ID: 280-124912-7

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 13:40

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	27	0.50	0.25	0.095	mg/L			5	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	56	25	15	5.2	mg/L		D B	5	9056A
Total Alkalinity as CaCO ₃	51	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0048-19A

Lab Sample ID: 280-124912-7

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 13:40

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	1.8	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0023-19A

Lab Sample ID: 280-124912-8

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 15:00

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	5.1	0.20	0.10	0.044	mg/L			2	350.1
Nitrogen, Total Kjeldahl	7.1	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	65	25	15	5.2	mg/L		D B	5	9056A
Total Alkalinity as CaCO ₃	330	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0023-19A

Lab Sample ID: 280-124912-8

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 15:00

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.1	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ005-19A

Lab Sample ID: 280-124912-9

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 09:30

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	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	0.44	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	1300	50	30	10	mg/L		D B	10	9056A
Total Alkalinity as CaCO ₃	470	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ005-19A

Lab Sample ID: 280-124912-9

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 09:30

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.5	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0103-19A

Lab Sample ID: 280-124912-10

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 13:10

Reporting Basis: WET

Date Received: 06/06/2019 08:45

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	4.1	5.0	5.0	3.4	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	31	4.0	1.9	0.79	mg/L			1	9034
Sulfate	490	50	30	10	mg/L		D B	10	9056A
Total Alkalinity as CaCO ₃	670	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0103-19A

Lab Sample ID: 280-124912-10

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 13:10

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	230	5.0	2.5	0.78	mg/L			5	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0104-19A

Lab Sample ID: 280-124912-11

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 14:30

Reporting Basis: WET

Date Received: 06/06/2019 08:45

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	0.94	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	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	1000	50	30	10	mg/L		D B	10	9056A
Total Alkalinity as CaCO ₃	470	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0104-19A

Lab Sample ID: 280-124912-11

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/05/2019 14:30

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.5	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ001-19A

Lab Sample ID: 280-124912-12

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 14:05

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.026	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U	J1	1	351.2
Nitrate Nitrite as N	0.82	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	1200	50	30	10	mg/L		D B	10	9056A
Total Alkalinity as CaCO ₃	550	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ001-19A

Lab Sample ID: 280-124912-12

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG ID.:

Matrix: Water

Date Sampled: 06/04/2019 14:05

Reporting Basis: WET

Date Received: 06/06/2019 08:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.2	1.0	0.50	0.16	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Analyst: MJS Batch Start Date: 06/17/2019
Reporting Units: mg/L Analytical Batch No.: 461846

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	11:30	Ammonia	0.505	0.498	101	90-110	350.1	ICV_00353
15	ICV	11:32	Ammonia	2.52	2.49	101	90-110	350.1	ICV_00353
16	ICB	11:34	Ammonia	0.050				U	
32	CCVL	12:06	Ammonia	0.463	0.500	93	90-110	350.1	cal_00370
33	CCV	12:08	Ammonia	2.48	2.50	99	90-110	350.1	cal_00370
34	CCB	12:10	Ammonia	0.050				U	
48	CCVL	12:38	Ammonia	0.496	0.500	99	90-110	350.1	cal_00370
49	CCV	12:40	Ammonia	2.46	2.50	99	90-110	350.1	cal_00370
50	CCB	12:42	Ammonia	0.050				U	
58	CCVL	12:58	Ammonia	0.494	0.500	99	90-110	350.1	cal_00370
59	CCV	13:00	Ammonia	2.52	2.50	101	90-110	350.1	cal_00370
60	CCB	13:02	Ammonia	0.050				U	
76	CCVL	13:34	Ammonia	0.503	0.500	101	90-110	350.1	cal_00370
77	CCV	13:36	Ammonia	2.56	2.50	102	90-110	350.1	cal_00370
78	CCB	13:38	Ammonia	0.050				U	
92	CCVL	14:06	Ammonia	0.498	0.500	100	90-110	350.1	cal_00370
93	CCV	14:08	Ammonia	2.55	2.50	102	90-110	350.1	cal_00370
94	CCB	14:10	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.: 280-124912-1

SDG No.: _____

Analyst: MJS Batch Start Date: 06/20/2019

Reporting Units: mg/L Analytical Batch No.: 462653

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	11:57	Ammonia	0.511	0.498	103	90-110	350.1	ICV_00353
15	ICV	11:59	Ammonia	2.49	2.49	100	90-110	350.1	ICV_00353
16	ICB	12:01	Ammonia	0.050				U	
33	CCVL	12:35	Ammonia	0.479	0.500	96	90-110	350.1	cal_00370
34	CCV	12:37	Ammonia	2.53	2.50	101	90-110	350.1	cal_00370
35	CCB	12:39	Ammonia	0.050				U	
49	CCVL	13:07	Ammonia	0.475	0.500	95	90-110	350.1	cal_00370
50	CCV	13:09	Ammonia	2.47	2.50	99	90-110	350.1	cal_00370
51	CCB	13:11	Ammonia	0.050				U	
74	CCVL	14:03	Ammonia	0.461	0.500	92	90-110	350.1	cal_00370
76	CCV	14:07	Ammonia	2.44	2.50	98	90-110	350.1	cal_00370
77	CCB	14:09	Ammonia	0.050				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Analyst: SVC Batch Start Date: 06/25/2019

Reporting Units: mg/L Analytical Batch No.: 462702

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	ICV	19:01	Nitrogen, Total Kjeldahl	4.86	5.00	97	90-110		TKN ICV 25_00078
14	ICB	19:02	Nitrogen, Total Kjeldahl	1.0				U	
31	CCV	19:23	Nitrogen, Total Kjeldahl	4.97	5.00	99	90-110		TKN 25ppm_00794
32	CCB	19:25	Nitrogen, Total Kjeldahl	1.0				U	
49	CCV	19:46	Nitrogen, Total Kjeldahl	4.94	5.00	99	90-110		TKN 25ppm_00794
50	CCB	19:47	Nitrogen, Total Kjeldahl	1.0				U	
65	CCV	20:06	Nitrogen, Total Kjeldahl	4.98	5.00	100	90-110		TKN 25ppm_00794
66	CCB	20:07	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.: 280-124912-1
SDG No.: _____
Analyst: SVC Batch Start Date: 06/26/2019
Reporting Units: mg/L Analytical Batch No.: 463103

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	17:56	Nitrate Nitrite as N	5.19	5.00	104	90-110	NXN	ICV INT_00480
18	ICVL	17:58	Nitrate Nitrite as N	2.07	2.00	103	90-110	NXN	ICV INT_00480
19	ICB	18:00	Nitrate Nitrite as N	0.050				U	
35	CCV	18:32	Nitrate Nitrite as N	4.93	5.00	99	90-110	NXN	CAL INT_00499
36	CCVL	18:34	Nitrate Nitrite as N	1.03	1.00	103	90-110	NXN	CAL INT_00499
37	CCB	18:36	Nitrate Nitrite as N	0.050				U	
51	CCV	19:04	Nitrate Nitrite as N	4.98	5.00	100	90-110	NXN	CAL INT_00499
52	CCVL	19:06	Nitrate Nitrite as N	1.03	1.00	103	90-110	NXN	CAL INT_00499
53	CCB	19:08	Nitrate Nitrite as N	0.050				U	
67	CCV	19:36	Nitrate Nitrite as N	4.78	5.00	96	90-110	NXN	CAL INT_00499
68	CCVL	19:38	Nitrate Nitrite as N	0.986	1.00	99	90-110	NXN	CAL INT_00499
69	CCB	19:40	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.: 280-124912-1

SDG No.: _____

Analyst: TLP Batch Start Date: 06/26/2019

Reporting Units: mg/L Analytical Batch No.: 462752

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	12:40	Sulfate	79.1	80.0	99	90-110		IC SO4 ICV_00017
9	ICB	12:56	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.: 280-124912-1

SDG No.: _____

Analyst: JAP Batch Start Date: 07/01/2019

Reporting Units: mg/L Analytical Batch No.: 463246

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	11:21	Sulfate	95.3	100	95	90-110	IC LCS_01620	
2	CCB	11:37	Sulfate	2.5			U		
17	CCV	21:22	Sulfate	94.3	100	94	90-110	IC LCS_01620	
18	CCB	02:06	Sulfate	16.0					
29	CCV	05:06	Sulfate	94.8	100	95	90-110	IC LCS_01620	
30	CCB	05:23	Sulfate	1.10			J		
39	CCV	07:51	Sulfate	95.1	100	95	90-110	IC LCS_01620	
40	CCB	08:07	Sulfate	1.07			J		

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Analyst: JAM Batch Start Date: 07/01/2019

Reporting Units: mg/L Analytical Batch No.: 463357

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	14:01	Dissolved Organic Carbon - Quad	19.9	20.0	100	90-110	TOC	ICV Std_00037
2	ICB	14:18	Dissolved Organic Carbon - Quad	0.50			U		
11	CCV	16:34	Dissolved Organic Carbon - Quad	25.1	25.0	100	90-110	TOC	ICV Std_00037
12	CCB	16:49	Dissolved Organic Carbon - Quad	0.50			U		
23	CCV	19:31	Dissolved Organic Carbon - Quad	25.1	25.0	100	90-110	TOC	ICV Std_00037
24	CCB	19:46	Dissolved Organic Carbon - Quad	0.50			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.: 280-124912-1

SDG No.: _____

Analyst: CCJ Batch Start Date: 07/02/2019

Reporting Units: mg/L Analytical Batch No.: 463600

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	14:55	Dissolved Organic Carbon - Quad	19.9	20.0	99	90-110	TOC	ICV Std_00037
2	ICB	15:10	Dissolved Organic Carbon - Quad	0.50			U		
15	CCV	18:33	Dissolved Organic Carbon - Quad	25.3	25.0	101	90-110	TOC	ICV Std_00037
16	CCB	18:48	Dissolved Organic Carbon - Quad	0.50			U		
26	CCV	21:15	Dissolved Organic Carbon - Quad	24.9	25.0	100	90-110	TOC	ICV Std_00037
27	CCB	21:30	Dissolved Organic Carbon - Quad	0.50			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.: 280-124912-1

SDG No.: _____

Analyst: SGB Batch Start Date: 06/15/2019

Reporting Units: mg/L Analytical Batch No.: 461772

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
54	CCV	00:51	Total Alkalinity as CaCO ₃	183	200	91	90-110	U	Alk daily lcs 00825
55	CCB	00:56	Total Alkalinity as CaCO ₃	10				U	
68	CCV	02:04	Total Alkalinity as CaCO ₃	206	200	103	90-110	U	Alk daily lcs 00825
69	CCB	02:09	Total Alkalinity as CaCO ₃	10				U	
80	CCV	03:25	Total Alkalinity as CaCO ₃	207	200	103	90-110	U	Alk daily lcs 00825
81	CCB	03:30	Total Alkalinity as CaCO ₃	10				U	
94	CCV	04:57	Total Alkalinity as CaCO ₃	208	200	104	90-110	U	Alk daily lcs 00825
95	CCB	05:01	Total Alkalinity as CaCO ₃	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.: 280-124912-1
SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 461846	Date: 06/17/2019 11:40						
350.1	MB 280-461846/19	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 461846	Date: 06/17/2019 13:08						
350.1	MB 280-461846/63	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 462653	Date: 06/20/2019 12:09						
350.1	MB 280-462653/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 462702	Date: 06/25/2019 19:05	Prep Batch:	462534	Date:	06/24/2019 16:14		
351.2	MB 280-462534/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 462702	Date: 06/25/2019 19:56	Prep Batch:	462534	Date:	06/24/2019 16:14		
351.2	MB 280-462534/28-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 463103	Date: 06/26/2019 18:06						
353.2	MB 280-463103/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 463103	Date: 06/26/2019 19:22						
353.2	MB 280-463103/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 461193	Date: 06/11/2019 15:04	Prep Batch:	461159	Date:	06/11/2019 12:16		
9034	MB 280-461159/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 461300	Date: 06/12/2019 12:54	Prep Batch:	461272	Date:	06/12/2019 09:51		
9034	MB 280-461272/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 463246	Date: 07/01/2019 12:42						
9056A	MB 280-463246/6	Sulfate	3.0	U	mg/L	5.0	1
Batch ID: 463357	Date: 07/01/2019 14:47						
9060A	MB 280-463267/2-A	Dissolved Organic Carbon - Quad	0.177	J	mg/L	1.0	1
Batch ID: 463600	Date: 07/02/2019 15:41						
9060A	MB 280-463396/2-A	Dissolved Organic Carbon - Quad	0.183	J	mg/L	1.0	1
Batch ID: 461772	Date: 06/15/2019 01:07						
SM 2320B	MB 280-461772/57	Total Alkalinity as CaCO ₃	10	U	mg/L	10	1
Batch ID: 461772	Date: 06/15/2019 03:40						
SM 2320B	MB 280-461772/83	Total Alkalinity as CaCO ₃	10	U	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 461846 Date: 06/17/2019 11:44											
350.1	280-124912-4	Ammonia	0.072	J	mg/L						
350.1	280-124912-4	Ammonia MS	0.997		mg/L	1.00	93	90-110			
Batch ID: 461846 Date: 06/17/2019 12:20											
350.1	280-124912-5	Ammonia	0.077	J	mg/L						
350.1	280-124912-5	Ammonia MS	1.05		mg/L	1.00	97	90-110			
Batch ID: 461846 Date: 06/17/2019 13:12											
350.1	280-124912-12	Ammonia	0.026	J	mg/L						
350.1	280-124912-12	Ammonia MS	1.06		mg/L	1.00	104	90-110			
Batch ID: 462702 Date: 06/25/2019 19:07 Prep Batch: 462534 Date: 06/24/2019 16:14											
351.2	280-124912-4	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-124912-4	Nitrogen, Total MS Kjeldahl	2.59		mg/L	3.00	86	90-110			J1
Batch ID: 462702 Date: 06/25/2019 19:32 Prep Batch: 462534 Date: 06/24/2019 16:14											
351.2	280-124912-5	Nitrogen, Total Kjeldahl	1.0	U	mg/L						
351.2	280-124912-5	Nitrogen, Total MS Kjeldahl	2.91		mg/L	3.00	97	90-110			
Batch ID: 462702 Date: 06/25/2019 20:01 Prep Batch: 462534 Date: 06/24/2019 16:14											
351.2	280-124912-12	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-124912-12	Nitrogen, Total MS Kjeldahl	1.57		mg/L	3.00	52	90-110			J1
Batch ID: 463103 Date: 06/26/2019 18:10											
353.2	280-124912-4	Nitrate Nitrite as N	0.050	U	mg/L						
353.2	280-124912-4	Nitrate Nitrite as N MS	4.12		mg/L	4.00	103	90-110			
Batch ID: 463103 Date: 06/26/2019 18:46											
353.2	280-124912-5	Nitrate Nitrite as N	0.099	J	mg/L						
353.2	280-124912-5	Nitrate Nitrite as N MS	4.17		mg/L	4.00	102	90-110			
Batch ID: 463103 Date: 06/26/2019 19:26											
353.2	280-124912-12	Nitrate Nitrite as N	0.82		mg/L						
353.2	280-124912-12	Nitrate Nitrite as N MS	4.73		mg/L	4.00	98	90-110			
Batch ID: 461193 Date: 06/11/2019 15:04 Prep Batch: 461159 Date: 06/11/2019 12:16											
9034	280-124912-12	Sulfide	1.9	U	mg/L						
9034	280-124912-12	Sulfide MS	21.6		mg/L	26.0	83	44-110			
Batch ID: 461193 Date: 06/11/2019 15:04 Prep Batch: 461159 Date: 06/11/2019 12:16											
9034	280-124912-4	Sulfide	1.9	U	mg/L						
9034	280-124912-4	Sulfide MS	23.2		mg/L	26.0	89	44-110			
Batch ID: 461300 Date: 06/12/2019 12:54 Prep Batch: 461272 Date: 06/12/2019 09:51											
9034	280-124912-5	Sulfide	1.9	U	mg/L						

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

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
9034	280-124912-5	Sulfide	21.6		mg/L	26.0	83	44-110			
MS											
Batch ID: 463246 Date: 07/02/2019 03:12											
9056A	280-124912-4	Sulfate		1100	mg/L						D B
9056A	280-124912-4	Sulfate		1340	mg/L	250	99	87-112			D 4
MS											
Batch ID: 463246 Date: 07/02/2019 04:01											
9056A	280-124912-5	Sulfate		930	mg/L						D B
9056A	280-124912-5	Sulfate		1190	mg/L	250	103	87-112			D
MS											
Batch ID: 463246 Date: 07/02/2019 04:50											
9056A	280-124912-12	Sulfate		1200	mg/L						D B
9056A	280-124912-12	Sulfate		1410	mg/L	250	95	87-112			D 4
MS											
Batch ID: 463357 Date: 07/01/2019 15:31											
9060A	280-124912-1	Dissolved Organic Carbon - Quad		6.2	mg/L						
9060A	280-124912-1	Dissolved Organic Carbon - Quad		30.6	mg/L	25.0	97	88-112			
MS											
Batch ID: 463600 Date: 07/02/2019 16:25											
9060A	280-124912-4	Dissolved Organic Carbon - Quad		3.8	mg/L						
9060A	280-124912-4	Dissolved Organic Carbon - Quad		28.2	mg/L	25.0	97	88-112			
MS											
Batch ID: 463600 Date: 07/02/2019 17:10											
9060A	280-124912-5	Dissolved Organic Carbon - Quad		4.7	mg/L						
9060A	280-124912-5	Dissolved Organic Carbon - Quad		28.8	mg/L	25.0	97	88-112			
MS											
Batch ID: 463600 Date: 07/02/2019 19:17											
9060A	280-124912-12	Dissolved Organic Carbon - Quad		6.2	mg/L						
9060A	280-124912-12	Dissolved Organic Carbon - Quad		30.6	mg/L	25.0	98	88-112			
MS											

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

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1
SDG No.: _____
Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 461846	Date: 06/17/2019 11:46										
350.1	280-124912-4	Ammonia	1.09		mg/L	1.00	102	90-110	9	10	
MSD											
Batch ID: 461846	Date: 06/17/2019 12:22										
350.1	280-124912-5	Ammonia	1.11		mg/L	1.00	103	90-110	5	10	
MSD											
Batch ID: 461846	Date: 06/17/2019 13:14										
350.1	280-124912-12	Ammonia	1.06		mg/L	1.00	104	90-110	0	10	
MSD											
Batch ID: 462702	Date: 06/25/2019 19:08			Prep	Batch: 462534	Date: 06/24/2019 16:14					
351.2	280-124912-4	Nitrogen, Total	2.83		mg/L	3.00	94	90-110	9	25	
MSD		Kjeldahl									
Batch ID: 462702	Date: 06/25/2019 19:33			Prep	Batch: 462534	Date: 06/24/2019 16:14					
351.2	280-124912-5	Nitrogen, Total	2.96		mg/L	3.00	99	90-110	2	25	
MSD		Kjeldahl									
Batch ID: 462702	Date: 06/25/2019 20:02			Prep	Batch: 462534	Date: 06/24/2019 16:14					
351.2	280-124912-12	Nitrogen, Total	2.28		mg/L	3.00	76	90-110	37	25	J1
MSD		Kjeldahl									
Batch ID: 463103	Date: 06/26/2019 18:12										
353.2	280-124912-4	Nitrate Nitrite as N	4.01		mg/L	4.00	100	90-110	3	10	
MSD											
Batch ID: 463103	Date: 06/26/2019 18:48										
353.2	280-124912-5	Nitrate Nitrite as N	4.24		mg/L	4.00	104	90-110	2	10	
MSD											
Batch ID: 463103	Date: 06/26/2019 19:28										
353.2	280-124912-12	Nitrate Nitrite as N	4.73		mg/L	4.00	98	90-110	0	10	
MSD											
Batch ID: 461193	Date: 06/11/2019 15:04			Prep	Batch: 461159	Date: 06/11/2019 12:16					
9034	280-124912-12	Sulfide	22.4		mg/L	26.0	86	44-110	4	20	
MSD											
Batch ID: 461193	Date: 06/11/2019 15:04			Prep	Batch: 461159	Date: 06/11/2019 12:16					
9034	280-124912-4	Sulfide	20.0		mg/L	26.0	77	44-110	15	20	
MSD											
Batch ID: 461300	Date: 06/12/2019 12:54			Prep	Batch: 461272	Date: 06/12/2019 09:51					
9034	280-124912-5	Sulfide	18.4		mg/L	26.0	71	44-110	16	20	
MSD											
Batch ID: 463246	Date: 07/02/2019 03:28										
9056A	280-124912-4	Sulfate	1350		mg/L	250	100	87-112	0	10	D 4
MSD											
Batch ID: 463246	Date: 07/02/2019 04:17										
9056A	280-124912-5	Sulfate	1200		mg/L	250	105	87-112	1	10	D
MSD											
Batch ID: 463246	Date: 07/02/2019 05:39										
9056A	280-124912-12	Sulfate	1400		mg/L	250	92	87-112	1	10	D 4
MSD											
Batch ID: 463357	Date: 07/01/2019 15:46										
9060A	280-124912-1	Dissolved Organic Carbon - Quad	30.6		mg/L	25.0	98	88-112	0	15	
MSD											
Batch ID: 463600	Date: 07/02/2019 16:40										
9060A	280-124912-4	Dissolved Organic Carbon - Quad	28.0		mg/L	25.0	97	88-112	1	15	
MSD											

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

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 463600 Date: 07/02/2019 17:24											
9060A	280-124912-5	Dissolved Organic Carbon - Quad	29.0		mg/L	25.0	97	88-112	1	15	
Batch ID: 463600 Date: 07/02/2019 19:32											
9060A	280-124912-12	Dissolved Organic Carbon - Quad	30.5		mg/L	25.0	97	88-112	0	15	

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

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water _____

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
<hr/>								
Batch ID: 463246	Date: 07/02/2019 02:55							
9056A	G0102-19A	280-124912-4	Sulfate	1100	mg/L			
9056A	G0102-19A	280-124912-4 DU	Sulfate	1090	mg/L	0.9	10	D
<hr/>								
Batch ID: 463246	Date: 07/02/2019 03:44							
9056A	PZ007-19A	280-124912-5	Sulfate	930	mg/L			
9056A	PZ007-19A	280-124912-5 DU	Sulfate	930	mg/L	0.6	10	D
<hr/>								
Batch ID: 463246	Date: 07/02/2019 04:34							
9056A	PZ001-19A	280-124912-12	Sulfate	1200	mg/L			
9056A	PZ001-19A	280-124912-12 DU	Sulfate	1160	mg/L	1	10	D
<hr/>								
Batch ID: 461772	Date: 06/15/2019 03:53							
SM 2320B	G0049-19A	280-124912-6	Total Alkalinity as CaCO ₃	300	mg/L			
SM 2320B	G0049-19A	280-124912-6 DU	Total Alkalinity as CaCO ₃	304	mg/L	0	10	

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 461846 Date: 06/17/2019 11:38											
350.1	LCS 280-461846/18	Ammonia	2.53		mg/L	2.50	101	90-110			
LCS Source: 350.1 cal_00370											
350.1	LCS 280-461846/62	Ammonia	2.46		mg/L	2.50	99	90-110			
Batch ID: 462653 Date: 06/20/2019 12:05											
350.1	LCS 280-462653/18	Ammonia	2.45		mg/L	2.50	98	90-110	2	10	
LCS Source: 350.1 cal_00370											
351.2	LCS 280-462534/1- A	Nitrogen, Total Kjeldahl	5.59		mg/L	6.00	93	90-110			
Batch ID: 463103 Date: 06/26/2019 18:04											
353.2	LCS 280-463103/21	Nitrate Nitrite as N	4.98		mg/L	5.00	100	90-110			
LCS Source: NXN CAL INT_00499											
353.2	LCS 280-463103/59	Nitrate Nitrite as N	4.74		mg/L	5.00	95	90-110			
Batch ID: 461193 Date: 06/11/2019 15:04											
9034	LCS 280-461159/1- A	Sulfide	18.4		mg/L	26.0	71	44-110			
Prep Batch: 461159 Date: 06/11/2019 12:16											
9034	LCS 280-461272/1- A	Sulfide	20.0		mg/L	26.0	77	44-110			
LCS Source: SFD CAL INT_01659											
Batch ID: 461300 Date: 06/12/2019 12:54											
9034	LCS 280-461272/1- A	Sulfide	94.7		mg/L	100	95	87-112	0	10	
Prep Batch: 461272 Date: 06/12/2019 09:51											
LCS Source: SFD CAL INT_01659											
Batch ID: 463246 Date: 07/01/2019 12:09											
9056A	LCS 280-463246/4	Sulfate	24.2		mg/L	25.0	97	88-112			
LCS Source: IC LCS_01620											
Batch ID: 463357 Date: 07/01/2019 14:32											
9060A	LCS 280-463267/1- A	Dissolved Organic Carbon - Quad	24.3		mg/L	25.0	97	88-112			
LCS Source: TOC LCS Std_00046											
9060A	LCS 280-463396/1- A	Dissolved Organic Carbon - Quad	24.3		mg/L	25.0	97	88-112			
LCS Source: TOC LCS Std_00046											

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.: 280-124912-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 461772 Date: 06/15/2019 01:03											
SM 2320B	LCS 280-461772/56	Total Alkalinity as CaCO ₃	209		mg/L	200	104	89-109			
Batch ID: 461772 Date: 06/15/2019 03:36											
SM 2320B	LCS 280-461772/82	Total Alkalinity as CaCO ₃	207		mg/L	200	104	89-109			

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Matrix: Water

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.: 280-124912-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 463246 Date: 07/01/2019 11:53											
9056A	MRL 280-463246/3	Sulfate	2.90	J	mg/L	2.50	116	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: 280-124912-1

SDG Number: _____

Matrix: Water

Instrument ID: WC_Alp 3

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: 280-124912-1

SDG Number: _____

Matrix: Water

Instrument ID: WC_Alp 3

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: 280-124912-1

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: 280-124912-1

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: 280-124912-1

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: 280-124912-1

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: 280-124912-1

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: 280-124912-1

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: 280-124912-1

SDG Number: _____

Matrix: Water

Instrument ID: WC_IonChrom11

Method: 9056A

DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-124912-1

SDG Number: _____

Matrix: Water

Instrument ID: WC_IonChrom11

Method: 9056A

XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-124912-1

SDG Number: _____

Matrix: Water

Instrument ID: WC_SHI3

Method: 9060A

DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-124912-1

SDG Number: _____

Matrix: Water

Instrument ID: WC_SHI3

Method: 9060A

XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-124912-1

SDG Number: _____

Matrix: Water

Instrument ID: WC-AT3

Method: SM 2320B

DL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Alkalinity as CaCO ₃		10	3.08

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-124912-1

SDG Number: _____

Matrix: Water

Instrument ID: WC-AT3

Method: SM 2320B

XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Alkalinity as CaCO ₃		10	3.08

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-462534/1-A	06/24/2019 16:14	462534		25	25
MB 280-462534/2-A	06/24/2019 16:14	462534		25	25
280-124912-4	06/24/2019 16:14	462534		25	25
280-124912-4 MS	06/24/2019 16:14	462534		25	25
280-124912-4 MSD	06/24/2019 16:14	462534		25	25
280-124912-1	06/24/2019 16:14	462534		25	25
280-124912-2	06/24/2019 16:14	462534		25	25
280-124912-3	06/24/2019 16:14	462534		25	25
280-124912-6	06/24/2019 16:14	462534		25	25
280-124912-7	06/24/2019 16:14	462534		25	25
280-124912-8	06/24/2019 16:14	462534		25	25
280-124912-9	06/24/2019 16:14	462534		25	25
280-124912-10	06/24/2019 16:14	462534		5	25
280-124912-11	06/24/2019 16:14	462534		25	25
280-124912-5	06/24/2019 16:14	462534		25	25
280-124912-5 MS	06/24/2019 16:14	462534		25	25
280-124912-5 MSD	06/24/2019 16:14	462534		25	25
MB 280-462534/28-A	06/24/2019 16:14	462534		25	25
280-124912-12	06/24/2019 16:14	462534		25	25
280-124912-12 MS	06/24/2019 16:14	462534		25	25
280-124912-12 MSD	06/24/2019 16:14	462534		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-461159/1-A	06/11/2019 12:16	461159		50	50
MB 280-461159/2-A	06/11/2019 12:16	461159		50	50
280-124912-1	06/11/2019 12:16	461159		50	50
280-124912-2	06/11/2019 12:16	461159		50	50
280-124912-3	06/11/2019 12:16	461159		50	50
280-124912-12	06/11/2019 12:16	461159		50	50
280-124912-12 MS	06/11/2019 12:16	461159		50	50
280-124912-12 MSD	06/11/2019 12:16	461159		50	50
280-124912-6	06/11/2019 12:16	461159		50	50
280-124912-7	06/11/2019 12:16	461159		50	50
280-124912-8	06/11/2019 12:16	461159		50	50
280-124912-10	06/11/2019 12:16	461159		50	50
280-124912-11	06/11/2019 12:16	461159		50	50
280-124912-4	06/11/2019 12:16	461159		50	50
280-124912-4 MS	06/11/2019 12:16	461159		50	50
280-124912-4 MSD	06/11/2019 12:16	461159		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-461272/1-A	06/12/2019 09:51	461272		50	50
MB 280-461272/2-A	06/12/2019 09:51	461272		50	50
280-124912-5	06/12/2019 09:51	461272		50	50
280-124912-5 MS	06/12/2019 09:51	461272		50	50
280-124912-5 MSD	06/12/2019 09:51	461272		50	50
280-124912-9	06/12/2019 09:51	461272		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/17/2019 11:04 End Date: 06/17/2019 14:56

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			11:04																
ZZZZZZ			11:06																
ZZZZZZ			11:08																
IC 280-461846/4			11:10	X															
IC 280-461846/5			11:12	X															
IC 280-461846/6			11:14	X															
IC 280-461846/7			11:16	X															
IC 280-461846/8			11:18	X															
IC 280-461846/9			11:20	X															
IC 280-461846/10			11:22	X															
IC 280-461846/11			11:24	X															
ZZZZZZ			11:26																
ZZZZZZ			11:28																
ICVL 280-461846/14	1		11:30	X															
ICV 280-461846/15	1		11:32	X															
ICB 280-461846/16	1		11:34	X															
ZZZZZZ			11:36																
LCS 280-461846/18	1	T	11:38	X															
MB 280-461846/19	1	T	11:40	X															
280-124912-4	1	T	11:42	X															
280-124912-4 MS	1	T	11:44	X															
280-124912-4 MSD	1	T	11:46	X															
ZZZZZZ			11:48																
ZZZZZZ			11:50																
ZZZZZZ			11:52																
ZZZZZZ			11:54																
ZZZZZZ			11:56																
ZZZZZZ			11:58																
ZZZZZZ			12:00																
RINSE 280-461846/30			12:02																
ZZZZZZ			12:04																
CCVL 280-461846/32	1		12:06	X															
CCV 280-461846/33	1		12:08	X															
CCB 280-461846/34	1		12:10	X															
ZZZZZZ			12:12																
ZZZZZZ			12:14																
ZZZZZZ			12:16																
280-124912-5	1	T	12:18	X															
280-124912-5 MS	1	T	12:20	X															
280-124912-5 MSD	1	T	12:22	X															
ZZZZZZ			12:24																

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_Alp 3

Analysis Method: 350.1

Start Date: 06/17/2019 11:04

End Date: 06/17/2019 14:56

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			12:26																
ZZZZZZ			12:28																
ZZZZZZ			12:30																
ZZZZZZ			12:32																
RINSE 280-461846/46			12:34																
ZZZZZZ			12:36																
CCVL 280-461846/48	1		12:38	X															
CCV 280-461846/49	1		12:40	X															
CCB 280-461846/50	1		12:42	X															
ZZZZZZ			12:44																
ZZZZZZ			12:46																
ZZZZZZ			12:48																
ZZZZZZ			12:50																
ZZZZZZ			12:52																
RINSE 280-461846/56			12:54																
ZZZZZZ			12:56																
CCVL 280-461846/58	1		12:58	X															
CCV 280-461846/59	1		13:00	X															
CCB 280-461846/60	1		13:02	X															
ZZZZZZ			13:04																
LCS 280-461846/62	1	T	13:06	X															
MB 280-461846/63	1	T	13:08	X															
280-124912-12	1	T	13:10	X															
280-124912-12 MS	1	T	13:12	X															
280-124912-12 MSD	1	T	13:14	X															
280-124912-1	1	T	13:16	X															
280-124912-2	1	T	13:18	X															
280-124912-3	1	T	13:20	X															
280-124912-6	1	T	13:22	X															
280-124912-7	1	T	13:24	X															
ZZZZZZ			13:26																
280-124912-9	1	T	13:28	X															
RINSE 280-461846/74			13:30																
ZZZZZZ			13:32																
CCVL 280-461846/76	1		13:34	X															
CCV 280-461846/77	1		13:36	X															
CCB 280-461846/78	1		13:38	X															
ZZZZZZ			13:40																
280-124912-10	1	T	13:42	X															
280-124912-11	1	T	13:44	X															
ZZZZZZ			13:46																

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/17/2019 11:04 End Date: 06/17/2019 14:56

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			13:48																
ZZZZZZ			13:50																
ZZZZZZ			13:52																
ZZZZZZ			13:54																
ZZZZZZ			13:56																
ZZZZZZ			13:58																
ZZZZZZ			14:00																
RINSE 280-461846/90			14:02																
ZZZZZZ			14:04																
CCVL 280-461846/92	1		14:06	X															
CCV 280-461846/93	1		14:08	X															
CCB 280-461846/94	1		14:10	X															
ZZZZZZ			14:12																
ZZZZZZ			14:14																
ZZZZZZ			14:16																
ZZZZZZ			14:18																
ZZZZZZ			14:20																
RINSE 280-461846/100			14:22																
ZZZZZZ			14:24																
CCVL 280-461846/102			14:26																
CCV 280-461846/103			14:28																
CCB 280-461846/104			14:30																
ZZZZZZ			14:32																
ZZZZZZ			14:38																
ZZZZZZ			14:40																
ZZZZZZ			14:42																
ZZZZZZ			14:44																
RINSE 280-461846/110			14:46																
ZZZZZZ			14:48																
CCVL 280-461846/112			14:50																
CCV 280-461846/113			14:52																
CCB 280-461846/114			14:54																
ZZZZZZ			14:56																

Prep Types:

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/20/2019 11:31 End Date: 06/20/2019 15:47

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			11:31																
ZZZZZZ			11:33																
ZZZZZZ			11:35																
IC 280-462653/4			11:37	X															
IC 280-462653/5			11:39	X															
IC 280-462653/6			11:41	X															
IC 280-462653/7			11:43	X															
IC 280-462653/8			11:45	X															
IC 280-462653/9			11:47	X															
IC 280-462653/10			11:49	X															
IC 280-462653/11			11:51	X															
ZZZZZZ			11:53																
ZZZZZZ			11:55																
ICVL 280-462653/14	1		11:57	X															
ICV 280-462653/15	1		11:59	X															
ICB 280-462653/16	1		12:01	X															
ZZZZZZ			12:03																
LCS 280-462653/18	1	T	12:05	X															
LCSD 280-462653/19	1	T	12:07	X															
MB 280-462653/20	1	T	12:09	X															
ZZZZZZ			12:11																
ZZZZZZ			12:13																
ZZZZZZ			12:15																
ZZZZZZ			12:17																
ZZZZZZ			12:19																
ZZZZZZ			12:21																
ZZZZZZ			12:23																
ZZZZZZ			12:25																
ZZZZZZ			12:27																
ZZZZZZ			12:29																
RINSE 280-462653/31			12:31																
ZZZZZZ			12:33																
CCVL 280-462653/33	1		12:35	X															
CCV 280-462653/34	1		12:37	X															
CCB 280-462653/35	1		12:39	X															
ZZZZZZ			12:41																
ZZZZZZ			12:43																
ZZZZZZ			12:45																
ZZZZZZ			12:47																
ZZZZZZ			12:49																
ZZZZZZ			12:51																

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/20/2019 11:31 End Date: 06/20/2019 15:47

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			12:53																
ZZZZZZ			12:55																
ZZZZZZ			12:57																
ZZZZZZ			12:59																
ZZZZZZ			13:01																
RINSE 280-462653/47			13:03																
ZZZZZZ			13:05																
CCVL 280-462653/49	1		13:07	X															
CCV 280-462653/50	1		13:09	X															
CCB 280-462653/51	1		13:11	X															
ZZZZZZ			13:13																
ZZZZZZ			13:15																
ZZZZZZ			13:17																
ZZZZZZ			13:19																
280-124912-8	2	T	13:21	X															
RINSE 280-462653/57			13:23																
ZZZZZZ			13:25																
CCVL 280-462653/59			13:27																
CCV 280-462653/60			13:29																
CCB 280-462653/61			13:31																
ZZZZZZ			13:33																
ZZZZZZ			13:35																
ZZZZZZ			13:37																
ZZZZZZ			13:39																
ZZZZZZ			13:41																
ZZZZZZ			13:43																
ZZZZZZ			13:45																
ZZZZZZ			13:47																
ZZZZZZ			13:49																
ZZZZZZ			13:51																
RINSE 280-462653/72			13:59																
ZZZZZZ			14:01																
CCVL 280-462653/74	1		14:03	X															
CCV 280-462653/75			14:05																
CCV 280-462653/76	1		14:07	X															
CCB 280-462653/77	1		14:09	X															
ZZZZZZ			14:11																
ZZZZZZ			14:13																
ZZZZZZ			14:15																
ZZZZZZ			14:17																
ZZZZZZ			14:19																

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_Alp 3

Analysis Method: 350.1

Start Date: 06/20/2019 11:31

End Date: 06/20/2019 15:47

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			14:21																
ZZZZZZ			14:23																
ZZZZZZ			14:25																
ZZZZZZ			14:27																
ZZZZZZ			14:29																
ZZZZZZ			14:31																
ZZZZZZ			14:33																
ZZZZZZ			14:35																
ZZZZZZ			14:37																
RINSE 280-462653/92			14:39																
ZZZZZZ			14:41																
CCVL 280-462653/94			14:43																
CCV 280-462653/95			14:45																
CCB 280-462653/96			14:47																
ZZZZZZ			14:49																
ZZZZZZ			14:51																
ZZZZZZ			14:53																
ZZZZZZ			14:55																
ZZZZZZ			14:57																
ZZZZZZ			14:59																
ZZZZZZ			15:01																
ZZZZZZ			15:03																
ZZZZZZ			15:05																
ZZZZZZ			15:07																
ZZZZZZ			15:09																
RINSE 280-462653/108			15:11																
ZZZZZZ			15:13																
CCVL 280-462653/110			15:15																
CCV 280-462653/111			15:17																
CCB 280-462653/112			15:19																
ZZZZZZ			15:21																
ZZZZZZ			15:23																
ZZZZZZ			15:25																
ZZZZZZ			15:27																
ZZZZZZ			15:29																
RINSE 280-462653/118			15:31																
ZZZZZZ			15:33																
CCVL 280-462653/120			15:35																
CCV 280-462653/121			15:37																
CCB 280-462653/122			15:39																
ZZZZZZ			15:41																

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: WC_AlP_3 Analysis Method: 350.1

Start Date: 06/20/2019 11:31 End Date: 06/20/2019 15:47

Prep Types:

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_Astoria

Analysis Method: 351.2

Start Date: 06/25/2019 18:47

End Date: 06/25/2019 21:00

Lab Sample Id	D/F	T Y P E	Time	Analytes														
				T K N														
ZZZZZZ			18:47															
ZZZZZZ			18:47															
ZZZZZZ			18:48															
ZZZZZZ			18:50															
IC 280-460066/36-A			18:51	X														
IC 280-460066/37-A			18:52	X														
IC 280-460066/38-A			18:53	X														
IC 280-460066/39-A			18:55	X														
IC 280-460066/40-A			18:56	X														
IC 280-460066/41-A			18:57	X														
ZZZZZZ			18:58															
ZZZZZZ			19:00															
ICV 280-460066/42-A	1		19:01	X														
ICB 280-460066/43-A	1		19:02	X														
ZZZZZZ			19:03															
MB 280-462534/2-A	1	T	19:05	X														
280-124912-4	1	T	19:06	X														
280-124912-4 MS	1	T	19:07	X														
280-124912-4 MSD	1	T	19:08	X														
ZZZZZZ			19:10															
280-124912-1	1	T	19:11	X														
280-124912-2	1	T	19:12	X														
ZZZZZZ			19:13															
ZZZZZZ			19:15															
280-124912-3	1	T	19:16	X														
280-124912-6	1	T	19:17	X														
280-124912-7	1	T	19:18	X														
280-124912-8	1	T	19:20	X														
280-124912-9	1	T	19:21	X														
LCS 280-462534/1-A	1	T	19:22	X														
CCV 280-460066/44-A	1		19:23	X														
CCB 280-460066/45-A	1		19:25	X														
280-124912-10	1	T	19:26	X														
280-124912-11	1	T	19:27	X														
ZZZZZZ			19:28															
ZZZZZZ			19:30															
280-124912-5	1	T	19:31	X														
280-124912-5 MS	1	T	19:32	X														
280-124912-5 MSD	1	T	19:33	X														
ZZZZZZ			19:35															
ZZZZZZ			19:36															

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_Astoria

Analysis Method: 351.2

Start Date: 06/25/2019 18:47

End Date: 06/25/2019 21:00

Lab Sample Id	D/F	T Y p e	Time	Analytes														
				T K N														
ZZZZZZ			19:37															
ZZZZZZ			19:38															
ZZZZZZ			19:40															
ZZZZZZ			19:41															
ZZZZZZ			19:42															
ZZZZZZ			19:43															
ZZZZZZ			19:45															
CCV 280-460066/44-A	1		19:46	X														
CCB 280-460066/45-A	1		19:47	X														
ZZZZZZ			19:48															
ZZZZZZ			19:50															
ZZZZZZ			19:51															
ZZZZZZ			19:52															
ZZZZZZ			19:53															
ZZZZZZ			19:55															
MB 280-462534/28-A	1	T	19:56	X														
280-124912-12	1	T	19:57	X														
ZZZZZZ			19:58															
ZZZZZZ			20:00															
280-124912-12 MS	1	T	20:01	X														
280-124912-12 MSD	1	T	20:02	X														
ZZZZZZ			20:03															
ZZZZZZ			20:05															
CCV 280-460066/44-A	1		20:06	X														
CCB 280-460066/45-A	1		20:07	X														
ZZZZZZ			20:08															
ZZZZZZ			20:10															
ZZZZZZ			20:11															
ZZZZZZ			20:12															
ZZZZZZ			20:13															
ZZZZZZ			20:15															
ZZZZZZ			20:16															
ZZZZZZ			20:17															
ZZZZZZ			20:18															
ZZZZZZ			20:20															
ZZZZZZ			20:21															
ZZZZZZ			20:22															
ZZZZZZ			20:23															
CCV 280-460066/44-A			20:25															
CCB 280-460066/45-A			20:26															
ZZZZZZ			20:27															

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: WC_Astoria

Analysis Method: 351.2

Start Date: 06/25/2019 18:47

End Date: 06/25/2019 21:00

Prep Types:

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: WC_AlP_2

Analysis Method: 353.2

Start Date: 06/26/2019 17:24

End Date: 06/26/2019 20:46

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: WC_AlP 2

Analysis Method: 353.2

Start Date: 06/26/2019 17:24

End Date: 06/26/2019 20:46

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: WC_AlP 2

Analysis Method: 353.2

Start Date: 06/26/2019 17:24

End Date: 06/26/2019 20:46

Prep Types:

$$\overline{T} = \text{Total/NA}$$

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.: _____

Instrument ID: NOEQUIP

Analysis Method: 9034

Start Date: 06/11/2019 15:04

End Date: 06/11/2019 15:04

Lab Sample Id	D/F	T Y p e	Time	Analytes																
				S 2																
LCS 280-461159/1-A	1	T	15:04	X																
MB 280-461159/2-A	1	T	15:04	X																
280-124912-1	1	T	15:04	X																
280-124912-2	1	T	15:04	X																
280-124912-3	1	T	15:04	X																
280-124912-12	1	T	15:04	X																
280-124912-12 MS	1	T	15:04	X																
280-124912-12 MSD	1	T	15:04	X																
280-124912-6	1	T	15:04	X																
280-124912-7	1	T	15:04	X																
280-124912-8	1	T	15:04	X																
280-124912-10	1	T	15:04	X																
280-124912-11	1	T	15:04	X																
280-124912-4	1	T	15:04	X																
280-124912-4 MS	1	T	15:04	X																
280-124912-4 MSD	1	T	15:04	X																
ZZZZZZ			15:04																	
ZZZZZZ			15:04																	

Prep Types:

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: NOEQUIP

Analysis Method: 9034

Start Date: 06/12/2019 12:54

End Date: 06/12/2019 12:54

Prep Types:

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 06/26/2019 10:45 End Date: 06/27/2019 07:49

Lab Sample Id	D/F	T Y P E	Time	Analytes											
				S	O	O	O	O	O	O	O	O	O	O	O
RTC 280-462752/1			10:45												
STD 280-462752/2 IC	1		11:01	X											
STD 280-462752/3 IC	1		11:18	X											
STD 280-462752/4 IC	1		11:34	X											
STD 280-462752/5 IC	1		11:51	X											
STD 280-462752/6 IC	1		12:07	X											
STD 280-462752/7 IC	1		12:23	X											
ICV 280-462752/8	1		12:40	X											
ICB 280-462752/9	1		12:56	X											
ZZZZZZ			13:13												
ZZZZZZ			13:29												
ZZZZZZ			13:45												
ZZZZZZ			15:26												
ZZZZZZ			19:31												
ZZZZZZ			19:47												
ZZZZZZ			20:04												
ZZZZZZ			20:20												
ZZZZZZ			20:36												
ZZZZZZ			20:53												
ZZZZZZ			21:09												
ZZZZZZ			21:26												
ZZZZZZ			21:42												
ZZZZZZ			21:59												
CCV 280-462752/24			22:15												
CCB 280-462752/25			22:31												
ZZZZZZ			22:48												
ZZZZZZ			23:04												
ZZZZZZ			23:21												
ZZZZZZ			23:37												
ZZZZZZ			23:53												
ZZZZZZ			00:10												
ZZZZZZ			00:26												
ZZZZZZ			00:43												
ZZZZZZ			00:59												
CCV 280-462752/35			01:15												
CCB 280-462752/36			01:32												
ZZZZZZ			01:48												
ZZZZZZ			02:05												
ZZZZZZ			02:21												
ZZZZZZ			02:38												
ZZZZZZ			02:54												

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 06/26/2019 10:45 End Date: 06/27/2019 07:49

Prep Types:

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC IonChrom11 Analysis Method: 9056A

Start Date: 07/01/2019 11:21 End Date: 07/02/2019 08:07

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				S O 4															
CCV 280-463246/1	1		11:21	X															
CCB 280-463246/2	1		11:37	X															
MRL 280-463246/3	1	T	11:53	X															
LCS 280-463246/4	1	T	12:09	X															
LCSD 280-463246/5	1	T	12:26	X															
MB 280-463246/6	1	T	12:42	X															
280-124912-1	10	T	18:39	X															
280-124912-2	10	T	18:55	X															
280-124912-3	5	T	19:11	X															
280-124912-4	10	T	19:28	X															
280-124912-5	10	T	19:44	X															
280-124912-6	5	T	20:00	X															
280-124912-7	5	T	20:17	X															
280-124912-8	5	T	20:33	X															
280-124912-9	10	T	20:49	X															
280-124912-10	10	T	21:06	X															
CCV 280-463246/17	1		21:22	X															
CCB 280-463246/18	1		02:06	X															
280-124912-11	10	T	02:22	X															
280-124912-12	10	T	02:39	X															
280-124912-4 DU	10	T	02:55	X															
280-124912-4 MS	10	T	03:12	X															
280-124912-4 MSD	10	T	03:28	X															
280-124912-5 DU	10	T	03:44	X															
280-124912-5 MS	10	T	04:01	X															
280-124912-5 MSD	10	T	04:17	X															
280-124912-12 DU	10	T	04:34	X															
280-124912-12 MS	10	T	04:50	X															
CCV 280-463246/29	1		05:06	X															
CCB 280-463246/30	1		05:23	X															
280-124912-12 MSD	10	T	05:39	X															
ZZZZZZ			05:56																
ZZZZZZ			06:12																
ZZZZZZ			06:28																
ZZZZZZ			06:45																
ZZZZZZ			07:01																
ZZZZZZ			07:18																
ZZZZZZ			07:34																
CCV 280-463246/39	1		07:51	X															
CCB 280-463246/40	1		08:07	X															

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 07/01/2019 11:21 End Date: 07/02/2019 08:07

Lab Sample Id	D/F	T Y p e	Time	Analytes															
				S	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

Prep Types: _____

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/01/2019 14:01 End Date: 07/02/2019 08:20

Lab Sample Id	D/F	T Y P E	Time	Analytes														
				D	O	C	Q											
ICV 280-463357/1	1		14:01	X														
ICB 280-463357/2	1		14:18	X														
LCS 280-463267/1-A	1	D	14:32	X														
MB 280-463267/2-A	1	D	14:47	X														
ZZZZZZ			15:02															
280-124912-1	1	D	15:17	X														
280-124912-1 MS	1	D	15:31	X														
280-124912-1 MSD	1	D	15:46	X														
280-124912-2	1	D	16:03	X														
280-124912-3	1	D	16:20	X														
CCV 280-463357/11	1		16:34	X														
CCB 280-463357/12	1		16:49	X														
280-124912-6	1	D	17:04	X														
280-124912-7	1	D	17:19	X														
280-124912-8	1	D	17:33	X														
ZZZZZZ			17:48															
ZZZZZZ			18:03															
ZZZZZZ			18:18															
ZZZZZZ			18:32															
ZZZZZZ			18:47															
ZZZZZZ			19:02															
ZZZZZZ			19:16															
CCV 280-463357/23	1		19:31	X														
CCB 280-463357/24	1		19:46	X														
ZZZZZZ			20:01															
ZZZZZZ			20:15															
ZZZZZZ			20:30															
ZZZZZZ			20:45															
ZZZZZZ			20:59															
ZZZZZZ			21:14															
ZZZZZZ			21:29															
ZZZZZZ			21:44															
ZZZZZZ			21:58															
ZZZZZZ			22:13															
CCV 280-463357/35			22:28															
CCB 280-463357/36			22:43															
ZZZZZZ			22:57															
ZZZZZZ			23:12															
ZZZZZZ			23:27															
ZZZZZZ			23:44															

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/01/2019 14:01 End Date: 07/02/2019 08:20

Lab Sample Id	D/F	T Y P E	Time	Analytes			
				D	O	C	Q
ZZZZZZ			23:58				
ZZZZZZ			00:13				
ZZZZZZ			00:28				
ZZZZZZ			00:43				
ZZZZZZ			00:57				
ZZZZZZ			01:12				
CCV 280-463357/47			01:27				
CCB 280-463357/48			01:42				
ZZZZZZ			01:56				
ZZZZZZ			02:11				
ZZZZZZ			02:26				
ZZZZZZ			02:40				
ZZZZZZ			02:55				
ZZZZZZ			03:10				
ZZZZZZ			03:25				
ZZZZZZ			03:39				
ZZZZZZ			03:54				
ZZZZZZ			04:09				
CCV 280-463357/59			04:24				
CCB 280-463357/60			04:38				
ZZZZZZ			04:53				
ZZZZZZ			05:08				
ZZZZZZ			05:23				
ZZZZZZ			05:37				
ZZZZZZ			05:52				
ZZZZZZ			06:07				
ZZZZZZ			06:22				
ZZZZZZ			06:36				
ZZZZZZ			06:51				
ZZZZZZ			07:06				
CCV 280-463357/71			07:21				
CCB 280-463357/72			07:35				
ZZZZZZ			07:50				
CCV 280-463357/74			08:05				
CCB 280-463357/75			08:20				

Prep Types:
D = Dissolved

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC_SHI3

Analysis Method: 9060A

Start Date: 07/02/2019 14:55

End Date: 07/03/2019 13:51

Lab Sample Id	D/F	T Y P E	Time	Analytes								
				D	O	C	Q					
ICV 280-463600/1	1		14:55	X								
ICB 280-463600/2	1		15:10	X								
LCS 280-463396/1-A	1	D	15:24	X								
MB 280-463396/2-A	1	D	15:41	X								
ZZZZZZ			15:56									
280-124912-4	1	D	16:11	X								
280-124912-4 MS	1	D	16:25	X								
280-124912-4 MSD	1	D	16:40	X								
280-124912-5	1	D	16:55	X								
280-124912-5 MS	1	D	17:10	X								
280-124912-5 MSD	1	D	17:24	X								
280-124912-9	1	D	17:39	X								
280-124912-10	5	D	18:01	X								
280-124912-11	1	D	18:18	X								
CCV 280-463600/15	1		18:33	X								
CCB 280-463600/16	1		18:48	X								
280-124912-12	1	D	19:02	X								
280-124912-12 MS	1	D	19:17	X								
280-124912-12 MSD	1	D	19:32	X								
ZZZZZZ			19:46									
ZZZZZZ			20:01									
ZZZZZZ			20:16									
ZZZZZZ			20:31									
ZZZZZZ			20:45									
ZZZZZZ			21:00									
CCV 280-463600/26	1		21:15	X								
CCB 280-463600/27	1		21:30	X								
ZZZZZZ			21:44									
ZZZZZZ			21:59									
ZZZZZZ			22:14									
ZZZZZZ			22:28									
ZZZZZZ			22:43									
ZZZZZZ			22:58									
ZZZZZZ			23:13									
ZZZZZZ			23:28									
ZZZZZZ			23:42									
ZZZZZZ			23:57									
CCV 280-463600/38			00:12									
CCB 280-463600/39			00:27									
ZZZZZZ			00:41									

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: WC_SHI3

Analysis Method: 9060A

Start Date: 07/02/2019 14:55

End Date: 07/03/2019 13:51

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/02/2019 14:55 End Date: 07/03/2019 13:51

Prep Types:

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Instrument ID: WC-AT3

Analysis Method: SM 2320B

Start Date: 06/14/2019 17:54

End Date: 06/15/2019 07:56

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 06/14/2019 17:54 End Date: 06/15/2019 07:56

Lab Sample Id	D/F	T Y P E	Time	Analytes												
				A l k												
CCV 280-461772/42			23:28													
CCB 280-461772/43			23:33													
ZZZZZZ			23:38													
ZZZZZZ			23:47													
ZZZZZZ			23:57													
ZZZZZZ			00:06													
ZZZZZZ			00:12													
ZZZZZZ			00:19													
ZZZZZZ			00:26													
ZZZZZZ			00:33													
ZZZZZZ			00:40													
ZZZZZZ			00:45													
CCV 280-461772/54	1		00:51	X												
CCB 280-461772/55	1		00:56	X												
LCS 280-461772/56	1	T	01:03	X												
MB 280-461772/57	1	T	01:07	X												
ZZZZZZ			01:12													
ZZZZZZ			01:16													
ZZZZZZ			01:22													
ZZZZZZ			01:27													
ZZZZZZ			01:32													
ZZZZZZ			01:37													
ZZZZZZ			01:43													
ZZZZZZ			01:48													
ZZZZZZ			01:52													
ZZZZZZ			01:57													
CCV 280-461772/68	1		02:04	X												
CCB 280-461772/69	1		02:09	X												
ZZZZZZ			02:15													
ZZZZZZ			02:23													
ZZZZZZ			02:28													
ZZZZZZ			02:34													
ZZZZZZ			02:43													
280-124912-1	1	T	02:50	X												
280-124912-2	1	T	02:58	X												
280-124912-3	1	T	03:04	X												
280-124912-4	1	T	03:11	X												
280-124912-5	1	T	03:19	X												
CCV 280-461772/80	1		03:25	X												
CCB 280-461772/81	1		03:30	X												
LCS 280-461772/82	1	T	03:36	X												

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.: _____

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 06/14/2019 17:54 End Date: 06/15/2019 07:56

Lab Sample Id	D/F	T Y P E	Time	Analytes											
				A l k											
MB 280-461772/83	1	T	03:40	X											
280-124912-6	1	T	03:47	X											
280-124912-6 DU	1	T	03:53	X											
280-124912-7	1	T	03:58	X											
280-124912-8	1	T	04:04	X											
280-124912-9	1	T	04:12	X											
280-124912-10	1	T	04:21	X											
280-124912-11	1	T	04:29	X											
280-124912-12	1	T	04:37	X											
ZZZZZZ			04:46												
ZZZZZZ			04:50												
CCV 280-461772/94	1		04:57	X											
CCB 280-461772/95	1		05:01	X											
ZZZZZZ			05:06												
ZZZZZZ			05:11												
ZZZZZZ			05:16												
ZZZZZZ			05:24												
ZZZZZZ			05:31												
ZZZZZZ			05:38												
ZZZZZZ			05:44												
ZZZZZZ			05:49												
ZZZZZZ			05:54												
ZZZZZZ			06:03												
CCV 280-461772/106			06:09												
CCB 280-461772/107			06:13												
ZZZZZZ			06:19												
ZZZZZZ			06:24												
ZZZZZZ			06:32												
ZZZZZZ			06:39												
ZZZZZZ			06:46												
ZZZZZZ			06:52												
ZZZZZZ			06:57												
ZZZZZZ			07:03												
ZZZZZZ			07:07												
ZZZZZZ			07:13												
ZZZZZZ			07:18												
ZZZZZZ			07:24												
CCV 280-461772/120			07:30												
CCB 280-461772/121			07:35												
ZZZZZZ			07:40												
ZZZZZZ			07:45												

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124912-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 06/14/2019 17:54 End Date: 06/15/2019 07:56

Prep Types:

$$\overline{T} = \text{Total/NA}$$

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461846

Batch Start Date: 06/17/19 11:04

Batch Analyst: Setjoadi, Mayori J

Batch Method: 350.1

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00370	350.1 ICV 00353
ICVL 280-461846/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-461846/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-461846/16		350.1			10 mL	10 mL			
LCS 280-461846/18		350.1			100 mL	100 mL		2.5 mL	
MB 280-461846/19		350.1			10 mL	10 mL			
280-124912-C-4	G0102-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-4	G0102-19AMS	350.1	T	N	10 mL	10 mL	<2 SU	0.1 mL	
280-124912-C-4	G0102-19AMSD	350.1	T	N	10 mL	10 mL	<2 SU	0.1 mL	
CCVL 280-461846/32		350.1			100 mL	100 mL		0.5 mL	
CCV 280-461846/33		350.1			100 mL	100 mL		2.5 mL	
CCB 280-461846/34		350.1			10 mL	10 mL			
280-124912-C-5	PZ007-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-5	PZ007-19AMS	350.1	T	N	10 mL	10 mL	<2 SU	0.1 mL	
280-124912-C-5	PZ007-19AMSD	350.1	T	N	10 mL	10 mL	<2 SU	0.1 mL	
CCVL 280-461846/48		350.1			100 mL	100 mL		0.5 mL	
CCV 280-461846/49		350.1			100 mL	100 mL		2.5 mL	
CCB 280-461846/50		350.1			10 mL	10 mL			
CCVL 280-461846/58		350.1			100 mL	100 mL		0.5 mL	
CCV 280-461846/59		350.1			100 mL	100 mL		2.5 mL	
CCB 280-461846/60		350.1			10 mL	10 mL			
LCS 280-461846/62		350.1			100 mL	100 mL		2.5 mL	
MB 280-461846/63		350.1			10 mL	10 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461846

Batch Start Date: 06/17/19 11:04

Batch Analyst: Setjoadi, Mayori J

Batch Method: 350.1

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00370	350.1 ICV 00353
280-124912-C-12	PZ001-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-12	PZ001-19AMS	350.1	T	N	10 mL	10 mL	<2 SU	0.1 mL	
280-124912-C-12	PZ001-19AMSD	350.1	T	N	10 mL	10 mL	<2 SU	0.1 mL	
280-124912-C-1	PZ004-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-2	G0044-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-3	PZ015-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-6	G0049-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-7	G0048-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-9	PZ005-19A	350.1	T	N	10 mL	10 mL	<2 SU		
CCVL 280-461846/76		350.1			100 mL	100 mL		0.5 mL	
CCV 280-461846/77		350.1			100 mL	100 mL		2.5 mL	
CCB 280-461846/78		350.1			10 mL	10 mL			
280-124912-C-10	G0103-19A	350.1	T	N	10 mL	10 mL	<2 SU		
280-124912-C-11	G0104-19A	350.1	T	N	10 mL	10 mL	<2 SU		
CCVL 280-461846/92		350.1			100 mL	100 mL		0.5 mL	
CCV 280-461846/93		350.1			100 mL	100 mL		2.5 mL	
CCB 280-461846/94		350.1			10 mL	10 mL			

Batch Notes

Carrier Identification	350.1 complex_00154
Hypochlorite ID	350.1 bleach_01078
Sodium Nitroprusside ID	350.1 color_00154
Pipette/Syringe/Dispenser ID	JPX100, JPX1000, JPX5000

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.: 280-124912-1

SDG No.:

Batch Number: 462653

Batch Start Date: 06/20/19 11:31

Batch Analyst: Setjoadi, Mayori J

Batch Method: 350.1

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00370	350.1 ICV 00353
ICVL 280-462653/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-462653/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-462653/16		350.1			10 mL	10 mL			
LCS 280-462653/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-462653/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-462653/20		350.1			10 mL	10 mL			
CCVL 280-462653/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-462653/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-462653/35		350.1			10 mL	10 mL			
CCVL 280-462653/49		350.1			100 mL	100 mL		0.5 mL	
CCV 280-462653/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-462653/51		350.1			10 mL	10 mL			
280-124912-D-8	G0023-19A	350.1	T	N	10 mL	10 mL	<2 SU		
CCVL 280-462653/74		350.1			100 mL	100 mL		0.5 mL	
CCV 280-462653/76		350.1			100 mL	100 mL		2.5 mL	
CCB 280-462653/77		350.1			10 mL	10 mL			

Batch Notes

Carrier Identification	350.1 complex_00430
Hypochlorite ID	350.1 bleach_01078
Sodium Nitroprusside ID	350.1 color_00155
Pipette/Syringe/Dispenser ID	JPX100, JPX1000, JPX5000

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, DenverJob No.: 280-124912-1

SDG No.: _____

Batch Number: 462653Batch Start Date: 06/20/19 11:31Batch Analyst: Setjoadi, Mayori JBatch Method: 350.1

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.

350.1

Page 2 of 2

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 460066

Batch Start Date: 05/31/19 16:12

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 00794	TKN ICV 25 00078		
ICV 280-460066/42		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-460066/43		351.2, 351.2		25 mL	25 mL				
CCV 280-460066/44		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-460066/45		351.2, 351.2		25 mL	25 mL				

Batch Notes

Block Digestion End time	06/01/19 0400
Block Digestion Start time	05/31/19 2100
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00126
Oven, Bath or Block Temperature 1	185 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.: 280-124912-1

SDG No.:

Batch Number: 462534

Batch Start Date: 06/24/19 16:13

Batch Analyst: Ryan, Jonathan D

Batch Method: 351.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00794		
LCS 280-462534/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-462534/2		351.2, 351.2			25 mL	25 mL			
280-124912-C-4	G0102-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-4 MS	G0102-19AMS	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-124912-C-4 MSD	G0102-19AMSD	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-124912-C-1	PZ004-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-2	G0044-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-3	PZ015-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-6	G0049-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-7	G0048-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-8	G0023-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-9	PZ005-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-10	G0103-19A	351.2, 351.2	T	<2	5 mL	25 mL			
280-124912-C-11	G0104-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-5 MS	PZ007-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-5 MSD	PZ007-19AMS	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
MB 280-462534/28		351.2, 351.2			25 mL	25 mL			
280-124912-C-12	PZ001-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124912-C-12 MS	PZ001-19AMS	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-124912-C-12 MSD	PZ001-19AMSD	351.2, 351.2	T	<2	25 mL	25 mL	3 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.: 280-124912-1

SDG No.:

Batch Number: 462534

Batch Start Date: 06/24/19 16:13

Batch Analyst: Ryan, Jonathan D

Batch Method: 351.2

Batch End Date:

Batch Notes	
Block Digestion End time	06/20/19 2340
Block Digestion Start time	06/24/19 1740
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00127
Oven, Bath or Block Temperature 1	185 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

351.2

Page 2 of 2

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 462702

Batch Start Date: 06/25/19 18:47

Batch Analyst: Cherry, Scott V

Batch Method: 351.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount					
ICV 280-460066/42-A		351.2		4 mL					
ICB 280-460066/43-A		351.2		4 mL					
MB 280-462534/2-A		351.2		4 mL					
280-124912-C-4-A	G0102-19A	351.2	T	4 mL					
280-124912-C-4-C MS	G0102-19AMS	351.2	T	4 mL					
280-124912-C-4-B MSD	G0102-19AMSD	351.2	T	4 mL					
280-124912-C-1-A	PZ004-19A	351.2	T	4 mL					
280-124912-C-2-A	G0044-19A	351.2	T	4 mL					
280-124912-C-3-A	PZ015-19A	351.2	T	4 mL					
280-124912-C-6-A	G0049-19A	351.2	T	4 mL					
280-124912-C-7-A	G0048-19A	351.2	T	4 mL					
280-124912-C-8-A	G0023-19A	351.2	T	4 mL					
280-124912-C-9-A	PZ005-19A	351.2	T	4 mL					
LCS 280-462534/1-A		351.2		4 mL					
CCV 280-460066/44-A		351.2		4 mL					
CCB 280-460066/45-A		351.2		4 mL					
280-124912-C-10-A	G0103-19A	351.2	T	4 mL					
280-124912-C-11-A	G0104-19A	351.2	T	4 mL					
280-124912-C-5-A	PZ007-19A	351.2	T	4 mL					
280-124912-C-5-B MS	PZ007-19AMS	351.2	T	4 mL					
280-124912-C-5-C MSD	PZ007-19AMSD	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.: 280-124912-1

SDG No.:

Batch Number: 462702

Batch Start Date: 06/25/19 18:47

Batch Analyst: Cherry, Scott V

Batch Method: 351.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount					
CCV 280-460066/44-A		351.2		4 mL					
CCB 280-460066/45-A		351.2		4 mL					
MB 280-462534/28-A		351.2		4 mL					
280-124912-C-12 -A	PZ001-19A	351.2	T	4 mL					
280-124912-C-12 -B MS	PZ001-19AMS	351.2	T	4 mL					
280-124912-C-12 -C MSD	PZ001-19AMSD	351.2	T	4 mL					
CCV 280-460066/44-A		351.2		4 mL					
CCB 280-460066/45-A		351.2		4 mL					

Batch Notes

Buffer Reagent ID	TKN buffer_00118
Hypochlorite ID	TKN hypo_00665
Sodium Nitroprusside ID	Sodium Nitro_00095
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.: 280-124912-1

SDG No.:

Batch Number: 463103

Batch Start Date: 06/26/19 17:24

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 00499	NXN ICV INT 00480		
ICV 280-463103/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-463103/18		353.2		100 mL	100 mL		2 mL		
ICB 280-463103/19		353.2		100 mL	100 mL				
LCS 280-463103/21		353.2		100 mL	100 mL	5 mL			
MB 280-463103/22		353.2		100 mL	100 mL				
280-124912-B-4	G0102-19A	353.2	T	100 mL	100 mL				
280-124912-B-4 MS	G0102-19AMS	353.2	T	5 mL	5 mL	0.2 mL			
280-124912-B-4 MSD	G0102-19AMSD	353.2	T	5 mL	5 mL	0.2 mL			
280-124912-B-1	PZ004-19A	353.2	T	100 mL	100 mL				
280-124912-B-2	G0044-19A	353.2	T	100 mL	100 mL				
280-124912-B-3	PZ015-19A	353.2	T	100 mL	100 mL				
280-124912-B-7	G0048-19A	353.2	T	100 mL	100 mL				
280-124912-B-8	G0023-19A	353.2	T	100 mL	100 mL				
280-124912-B-9	PZ005-19A	353.2	T	100 mL	100 mL				
280-124912-B-10	G0103-19A	353.2	T	100 mL	100 mL				
CCV 280-463103/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-463103/36		353.2		100 mL	100 mL	1 mL			
CCB 280-463103/37		353.2		100 mL	100 mL				
280-124912-B-11	G0104-19A	353.2	T	100 mL	100 mL				
280-124912-B-6	G0049-19A	353.2	T	100 mL	100 mL				
280-124912-B-5	PZ007-19A	353.2	T	100 mL	100 mL				
280-124912-B-5 MS	PZ007-19AMS	353.2	T	5 mL	5 mL	0.2 mL			
280-124912-B-5 MSD	PZ007-19AMSD	353.2	T	5 mL	5 mL	0.2 mL			
CCV 280-463103/51		353.2		100 mL	100 mL	5 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 463103

Batch Start Date: 06/26/19 17:24

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 00499	NXN ICV INT 00480		
CCVL 280-463103/52		353.2		100 mL	100 mL	1 mL			
CCB 280-463103/53		353.2		100 mL	100 mL				
LCS 280-463103/59		353.2		100 mL	100 mL	5 mL			
MB 280-463103/60		353.2		100 mL	100 mL				
280-124912-B-12	PZ001-19A	353.2	T	100 mL	100 mL				
280-124912-B-12	PZ001-19AMS	353.2	T	5 mL	5 mL	0.2 mL			
280-124912-B-12	PZ001-19AMSD	353.2	T	5 mL	5 mL	0.2 mL			
CCV 280-463103/67		353.2		100 mL	100 mL	5 mL			
CCVL 280-463103/68		353.2		100 mL	100 mL	1 mL			
CCB 280-463103/69		353.2		100 mL	100 mL				

Batch Notes

Acid used for pH adjustment	SulfuricAcid_00223
Base used for pH adjustment	50%NaOH_00016
Buffer Reagent ID	NOXT Buffer_00203
Color Reagent ID	NOXT CR_00103
Copper Sulfate ID	CuSO4 NOXT_0006
Hydrochloric Acid ID	0.5N HCl_0074
pH Indicator ID	hc869997
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.: 280-124912-1

SDG No.:

Batch Number: 461159

Batch Start Date: 06/11/19 12:16

Batch Analyst: Abeyta, Joseph L

Batch Method: 9030B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-461159/1		9030B, 9034		50 mL	50 mL	1			5 mL
MB 280-461159/2		9030B, 9034		50 mL	50 mL	4			5 mL
280-124912-E-1	PZ004-19A	9030B, 9034	T	50 mL	50 mL	5	14 SU	<2 SU	5 mL
280-124912-E-2	G0044-19A	9030B, 9034	T	50 mL	50 mL	6	14 SU	<2 SU	5 mL
280-124912-E-3	PZ015-19A	9030B, 9034	T	50 mL	50 mL	7	14 SU	<2 SU	5 mL
280-124912-E-12	PZ001-19A	9030B, 9034	T	50 mL	50 mL	8	14 SU	<2 SU	5 mL
280-124912-E-12	PZ001-19AMS	9030B, 9034	T	50 mL	50 mL	9	14 SU	<2 SU	5 mL
MS									
280-124912-E-12	PZ001-19AMSD	9030B, 9034	T	50 mL	50 mL	10	14 SU	<2 SU	5 mL
MSD									
280-124912-E-6	G0049-19A	9030B, 9034	T	50 mL	50 mL	11	14 SU	<2 SU	5 mL
280-124912-E-7	G0048-19A	9030B, 9034	T	50 mL	50 mL	12	14 SU	<2 SU	5 mL
280-124912-E-8	G0023-19A	9030B, 9034	T	50 mL	50 mL	13	14 SU	<2 SU	5 mL
280-124912-E-10	G0103-19A	9030B, 9034	T	50 mL	50 mL	14	14 SU	<2 SU	5 mL
280-124912-E-11	G0104-19A	9030B, 9034	T	50 mL	50 mL	15	14 SU	<2 SU	5 mL
280-124912-E-4	G0102-19A	9030B, 9034	T	50 mL	50 mL	16	14 SU	<2 SU	5 mL
280-124912-E-4	G0102-19AMS	9030B, 9034	T	50 mL	50 mL	17	14 SU	<2 SU	5 mL
MS									
280-124912-E-4	G0102-19AMSD	9030B, 9034	T	50 mL	50 mL	18	14 SU	<2 SU	5 mL
MSD									

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01659					
LCS 280-461159/1		9030B, 9034		1 mL					
MB 280-461159/2		9030B, 9034							
280-124912-E-1	PZ004-19A	9030B, 9034	T						
280-124912-E-2	G0044-19A	9030B, 9034	T						
280-124912-E-3	PZ015-19A	9030B, 9034	T						
280-124912-E-12	PZ001-19A	9030B, 9034	T						
280-124912-E-12	PZ001-19AMS	9030B, 9034	T	1 mL					
MS									
280-124912-E-12	PZ001-19AMSD	9030B, 9034	T	1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461159

Batch Start Date: 06/11/19 12:16

Batch Analyst: Abeyta, Joseph L

Batch Method: 9030B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01659					
280-124912-E-6	G0049-19A	9030B, 9034	T						
280-124912-E-7	G0048-19A	9030B, 9034	T						
280-124912-E-8	G0023-19A	9030B, 9034	T						
280-124912-E-10	G0103-19A	9030B, 9034	T						
280-124912-E-11	G0104-19A	9030B, 9034	T						
280-124912-E-4	G0102-19A	9030B, 9034	T						
280-124912-E-4 MS	G0102-19AMS	9030B, 9034	T	1 mL					
280-124912-E-4 MSD	G0102-19AMSD	9030B, 9034	T	1 mL					

Batch Notes

Batch Comment	JA
Distillation End Time	06/11/2019 14:22
Distillation Start Time	06/11/2019 13:15
Formaldehyde ID	Form_00112
pH Indicator ID	HC987808 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00197
Zinc Acetate Buffer ID	Znac_00108

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.: 280-124912-1

SDG No.:

Batch Number: 461193

Batch Start Date: 06/11/19 15:04

Batch Analyst: Abeyta, Joseph L

Batch Method: 9034

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-461159/1-A		9034		0.00 mL	2.70 mL	5 mL	2.7 mL	50 mL	
MB 280-461159/2-A		9034		2.70 mL	3.80 mL	1 mL	1.1 mL	50 mL	
280-124912-E-1- A	PZ004-19A	9034	T	3.80 mL	4.80 mL	1 mL	1 mL	50 mL	
280-124912-E-2- A	G0044-19A	9034	T	4.80 mL	6.00 mL	1 mL	1.2 mL	50 mL	
280-124912-E-3- A	PZ015-19A	9034	T	6.00 mL	7.10 mL	1 mL	1.1 mL	50 mL	
280-124912-E-12- -A	PZ001-19A	9034	T	7.10 mL	8.20 mL	1 mL	1.1 mL	50 mL	
280-124912-E-12- -B MS	PZ001-19AMS	9034	T	8.20 mL	10.50 mL	5 mL	2.3 mL	50 mL	
280-124912-E-12- -C MSD	PZ001-19AMSD	9034	T	10.50 mL	12.70 mL	5 mL	2.2 mL	50 mL	
280-124912-E-6- A	G0049-19A	9034	T	12.70 mL	13.70 mL	1 mL	1 mL	50 mL	
280-124912-E-7- A	G0048-19A	9034	T	13.70 mL	14.80 mL	1 mL	1.1 mL	50 mL	
280-124912-E-8- A	G0023-19A	9034	T	14.80 mL	16.00 mL	1 mL	1.2 mL	50 mL	
280-124912-E-10- -A	G0103-19A	9034	T	16.00 mL	17.10 mL	5 mL	1.1 mL	50 mL	
280-124912-E-11- -A	G0104-19A	9034	T	17.10 mL	18.20 mL	1 mL	1.1 mL	50 mL	
280-124912-E-4- A	G0102-19A	9034	T	18.20 mL	19.30 mL	1 mL	1.1 mL	50 mL	
280-124912-E-4- B MS	G0102-19AMS	9034	T	19.30 mL	21.40 mL	5 mL	2.1 mL	50 mL	
280-124912-E-4- C MSD	G0102-19AMSD	9034	T	0.00 mL	2.50 mL	5 mL	2.5 mL	50 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461193

Batch Start Date: 06/11/19 15:04

Batch Analyst: Abeyta, Joseph L

Batch Method: 9034

Batch End Date:

Batch Notes	
Batch Comment	JA
Hydrochloric Acid ID	HCL Sol_00168
Iodine ID	Iod_00229
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00152
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Starch Reagent ID	Starch Ind_00057
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.: 280-124912-1

SDG No.:

Batch Number: 461272

Batch Start Date: 06/12/19 09:51

Batch Analyst: Abeyta, Joseph L

Batch Method: 9030B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-461272/1		9030B, 9034		50 mL	50 mL	1		<2 SU	5 mL
MB 280-461272/2		9030B, 9034		50 mL	50 mL	4		<2 SU	5 mL
280-124912-E-5	PZ007-19A	9030B, 9034	T	50 mL	50 mL	5	14 SU	<2 SU	5 mL
280-124912-E-5 MS	PZ007-19AMS	9030B, 9034	T	50 mL	50 mL	6	14 SU	<2 SU	5 mL
280-124912-E-5 MSD	PZ007-19AMSD	9030B, 9034	T	50 mL	50 mL	7	14 SU	<2 SU	5 mL
280-124912-E-9	PZ005-19A	9030B, 9034	T	50 mL	50 mL	9	14 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01659					
LCS 280-461272/1		9030B, 9034		1 mL					
MB 280-461272/2		9030B, 9034							
280-124912-E-5	PZ007-19A	9030B, 9034	T						
280-124912-E-5 MS	PZ007-19AMS	9030B, 9034	T	1 mL					
280-124912-E-5 MSD	PZ007-19AMSD	9030B, 9034	T	1 mL					
280-124912-E-9	PZ005-19A	9030B, 9034	T						

Batch Notes

Batch Comment	JA
Distillation End Time	06/11/2019 12:38
Distillation Start Time	06/12/2019 11:32
Formaldehyde ID	Form_00112
pH Indicator ID	HC987808 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00197
Zinc Acetate Buffer ID	Znac_00108

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.: 280-124912-1

SDG No.:

Batch Number: 461300

Batch Start Date: 06/12/19 12:54

Batch Analyst: Abeyta, Joseph L

Batch Method: 9034

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-461272/1-A		9034		0.00 mL	2.50 mL	5 mL	2.5 mL	50 mL	
MB 280-461272/2-A		9034		2.50 mL	3.80 mL	1 mL	1.3 mL	50 mL	
280-124912-E-5- A	PZ007-19A	9034	T	3.80 mL	4.90 mL	1 mL	1.1 mL	50 mL	
280-124912-E-5- B MS	PZ007-19AMS	9034	T	4.90 mL	7.20 mL	5 mL	2.3 mL	50 mL	
280-124912-E-5- C MSD	PZ007-19AMSD	9034	T	7.20 mL	9.90 mL	5 mL	2.7 mL	50 mL	
280-124912-E-9- A	PZ005-19A	9034	T	11.10 mL	12.20 mL	1 mL	1.1 mL	50 mL	

Batch Notes

Batch Comment	JA
Hydrochloric Acid ID	HCL_Sol_00168
Iodine ID	Iod_00229
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na_Thio_00152
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Starch Reagent ID	Starch_Ind_00057
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.: 280-124912-1

SDG No.:

Batch Number: 462752

Batch Start Date: 06/26/19 10:45

Batch Analyst: Phan, Thu L

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00262	IC Cal low 00467	IC CL ICV 00016	IC ICV 5 00238
STD 280-462752/2 IC		9056A		5 mL	5 mL	0.02 mL	0.02 mL		
STD 280-462752/3 IC		9056A		5 mL	5 mL	0.05 mL	0.05 mL		
STD 280-462752/4 IC		9056A		5 mL	5 mL	0.1 mL	0.1 mL		
STD 280-462752/5 IC		9056A		5 mL	5 mL	1.2 mL	0.4 mL		
STD 280-462752/6 IC		9056A		5 mL	5 mL	2.4 mL	0.8 mL		
STD 280-462752/7 IC		9056A		5 mL	5 mL	4 mL	1 mL		
ICV 280-462752/8		9056A		5 mL	5 mL			0.4 mL	0.4 mL
ICB 280-462752/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00017					
STD 280-462752/2 IC		9056A							
STD 280-462752/3 IC		9056A							
STD 280-462752/4 IC		9056A							
STD 280-462752/5 IC		9056A							
STD 280-462752/6 IC		9056A							
STD 280-462752/7 IC		9056A							
ICV 280-462752/8		9056A		0.4 mL					
ICB 280-462752/9		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.: 280-124912-1

SDG No.:

Batch Number: 462752

Batch Start Date: 06/26/19 10:45

Batch Analyst: Phan, Thu L

Batch Method: 9056A

Batch End Date:

Batch Notes	
Eluent 1 ID	ic11 eluent_00579
Filter ID	r7ma61819
Pipette/Syringe/Dispenser ID	5000ics, 1000d, ic100
Sufficient Volume for Batch QC	yes

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

9056A

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 463246

Batch Start Date: 07/01/19 11:21

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 00263	IC Cal low 00468	IC LCS 01620	ICMS/MSD WEEK 00601
CCV 280-463246/1		9056A		5 mL	5 mL			5 mL	
CCB 280-463246/2		9056A		5 mL	5 mL				
MRL 280-463246/3		9056A		5 mL	5 mL	0.05 mL	0.02 mL		
LCS 280-463246/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-463246/5		9056A		5 mL	5 mL			5 mL	
MB 280-463246/6		9056A		5 mL	5 mL				
280-124912-F-1	PZ004-19A	9056A	T	5 mL	5 mL				
280-124912-F-2	G0044-19A	9056A	T	5 mL	5 mL				
280-124912-F-3	PZ015-19A	9056A	T	5 mL	5 mL				
280-124912-F-4	G0102-19A	9056A	T	5 mL	5 mL				
280-124912-F-5	PZ007-19A	9056A	T	5 mL	5 mL				
280-124912-F-6	G0049-19A	9056A	T	5 mL	5 mL				
280-124912-F-7	G0048-19A	9056A	T	5 mL	5 mL				
280-124912-F-8	G0023-19A	9056A	T	5 mL	5 mL				
280-124912-F-9	PZ005-19A	9056A	T	5 mL	5 mL				
280-124912-F-10	G0103-19A	9056A	T	5 mL	5 mL				
CCV 280-463246/17		9056A		5 mL	5 mL			5 mL	
CCB 280-463246/18		9056A		5 mL	5 mL				
280-124912-F-11	G0104-19A	9056A	T	5 mL	5 mL				
280-124912-F-12	PZ001-19A	9056A	T	5 mL	5 mL				
280-124912-F-4 DU	G0102-19A	9056A	T	5 mL	5 mL				
280-124912-F-4 MS	G0102-19AMS	9056A	T	5 mL	5 mL				0.05 mL
280-124912-F-4 MSD	G0102-19AMSD	9056A	T	5 mL	5 mL				0.05 mL
280-124912-F-5 DU	PZ007-19A	9056A	T	5 mL	5 mL				
280-124912-F-5 MS	PZ007-19AMS	9056A	T	5 mL	5 mL				0.05 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.: 280-124912-1

SDG No.:

Batch Number: 463246

Batch Start Date: 07/01/19 11:21

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 00263	IC Cal low 00468	IC LCS 01620	ICMS/MSD WEEK 00601
280-124912-F-5 MSD	PZ007-19AMSD	9056A	T	5 mL	5 mL				0.05 mL
280-124912-F-12 DU	PZ001-19A	9056A	T	5 mL	5 mL				
280-124912-F-12 MS	PZ001-19AMS	9056A	T	5 mL	5 mL				0.05 mL
CCV 280-463246/29		9056A		5 mL	5 mL			5 mL	
CCB 280-463246/30		9056A		5 mL	5 mL				
280-124912-F-12 MSD	PZ001-19AMSD	9056A	T	5 mL	5 mL				0.05 mL
CCV 280-463246/39		9056A		5 mL	5 mL			5 mL	
CCB 280-463246/40		9056A		5 mL	5 mL				

Batch Notes

Eluent 1 ID	ic11 eluent_0580
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.: 280-124912-1

SDG No.:

Batch Number: 463241

Batch Start Date: 07/01/19 10:30

Batch Analyst: Martinez, Joslyn A

Batch Method: FILTRATION

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
280-124912-F-1	PZ004-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-1 MS	PZ004-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-1 MSD	PZ004-19A	FILTRATION, 9060A	D	20 mL	20 mL				

Batch Notes

Filter ID | 9743727

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.

9060A

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 463267

Batch Start Date: 07/01/19 11:47

Batch Analyst: Martinez, Joslyn A

Batch Method: FILTRATION

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
LCS 280-463267/1		FILTRATION, 9060A		200 mL	200 mL				
MB 280-463267/2		FILTRATION, 9060A		20 mL	20 mL				
280-124912-F-2	G0044-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-3	PZ015-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-6	G0049-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-7	G0048-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-8	G0023-19A	FILTRATION, 9060A	D	20 mL	20 mL				

Batch Notes

Filter ID | 9743727

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.

9060A

Page 1 of 1

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 463357

Batch Start Date: 07/01/19 14:01

Batch Analyst: Martinez, Joslyn A

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TOC ICV Std 00037	TOC LCS Std 00046		
ICV 280-463357/1		9060A		50 mL	50 mL	1 mL			
ICB 280-463357/2		9060A		20 mL	20 mL				
LCS 280-463267/1-A		9060A		200 mL	200 mL		5 mL		
MB 280-463267/2-A		9060A		20 mL	20 mL				
280-124912-F-1- A	PZ004-19A	9060A	D	20 mL	20 mL				
280-124912-F-1- B_MS	PZ004-19A	9060A	D	50 mL	50 mL		1.25 mL		
280-124912-F-1- C_MSD	PZ004-19A	9060A	D	50 mL	50 mL		1.25 mL		
280-124912-F-2- B	G0044-19A	9060A	D	20 mL	20 mL				
280-124912-F-3- B	PZ015-19A	9060A	D	20 mL	20 mL				
CCV 280-463357/11		9060A		200 mL	200 mL	5 mL			
CCB 280-463357/12		9060A		20 mL	20 mL				
280-124912-F-6- B	G0049-19A	9060A	D	20 mL	20 mL				
280-124912-F-7- B	G0048-19A	9060A	D	20 mL	20 mL				
280-124912-F-8- B	G0023-19A	9060A	D	20 mL	20 mL				
CCV 280-463357/23		9060A		200 mL	200 mL	5 mL			
CCB 280-463357/24		9060A		20 mL	20 mL				

Batch Notes

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.

9060A

Page 1 of 1

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 463396

Batch Start Date: 07/02/19 11:53

Batch Analyst: Martinez, Joslyn A

Batch Method: FILTRATION

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
LCS 280-463396/1		FILTRATION, 9060A		200 mL	200 mL				
MB 280-463396/2		FILTRATION, 9060A		20 mL	20 mL				
280-124912-F-4	G0102-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-4 MS	G0102-19AMS	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-4 MSD	G0102-19AMSD	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-5	PZ007-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-5 MS	PZ007-19AMS	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-5 MSD	PZ007-19AMSD	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-9	PZ005-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-10	G0103-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-11	G0104-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-12	PZ001-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-12 MS	PZ001-19AMS	FILTRATION, 9060A	D	20 mL	20 mL				
280-124912-F-12 MSD	PZ001-19AMSD	FILTRATION, 9060A	D	20 mL	20 mL				

Batch Notes

Filter ID

9743727

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.

9060A

Page 1 of 1

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 463599

Batch Start Date: 07/02/19 14:55

Batch Analyst: Jewell, Connie C

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TOC LCS Std 00046	AnalysisComment		
LCS 280-463396/1-A		9060A		200 mL	200 mL	5 mL			
MB 280-463396/2-A		9060A		20 mL	20 mL				
280-124912-F-4- A	G0102-19A	9060A	D	20 mL	20 mL				
280-124912-F-4- B MS	G0102-19AMS	9060A	D	50 mL	50 mL	1.25 mL			
280-124912-F-4- C MSD	G0102-19AMSD	9060A	D	50 mL	50 mL	1.25 mL			
280-124912-F-5- A	PZ007-19A	9060A	D	20 mL	20 mL				
280-124912-F-5- B MS	PZ007-19AMS	9060A	D	50 mL	50 mL	1.25 mL			
280-124912-F-5- C MSD	PZ007-19AMSD	9060A	D	50 mL	50 mL	1.25 mL			
280-124912-F-9- A	PZ005-19A	9060A	D	20 mL	20 mL				
280-124912-F-10 -A	G0103-19A	9060A	D	20 mL	20 mL		instrument dilution		
280-124912-F-11 -A	G0104-19A	9060A	D	20 mL	20 mL				
280-124912-F-12 -C	PZ001-19A	9060A	D	20 mL	20 mL				
280-124912-F-12 -D MS	PZ001-19AMS	9060A	D	50 mL	50 mL	1.25 mL			
280-124912-F-12 -E MSD	PZ001-19AMSD	9060A	D	50 mL	50 mL	1.25 mL			

Batch Notes

Acid ID	0.2%H2SO4_00319, H2SO4_00199
Combustion Catalyst ID	18003D-05
Pipette/Syringe/Dispenser ID	wc5000ccj, wc1000cj

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.

9060A

Page 1 of 1

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 463600

Batch Start Date: 07/02/19 14:55

Batch Analyst: Jewell, Connie C

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TOC ICV Std 00037	TOC LCS Std 00046		
ICV 280-463600/1		9060A		50 mL	50 mL	1 mL			
ICB 280-463600/2		9060A		20 mL	20 mL				
LCS 280-463396/1-A		9060A		200 mL	200 mL		5 mL		
MB 280-463396/2-A		9060A		20 mL	20 mL				
280-124912-F-4- A	G0102-19A	9060A	D	20 mL	20 mL				
280-124912-F-4- B_MS	G0102-19AMS	9060A	D	50 mL	50 mL		1.25 mL		
280-124912-F-4- C_MSD	G0102-19AMSD	9060A	D	50 mL	50 mL		1.25 mL		
280-124912-F-5- A	PZ007-19A	9060A	D	20 mL	20 mL				
280-124912-F-5- B_MS	PZ007-19AMS	9060A	D	50 mL	50 mL		1.25 mL		
280-124912-F-5- C_MSD	PZ007-19AMSD	9060A	D	50 mL	50 mL		1.25 mL		
280-124912-F-9- A	PZ005-19A	9060A	D	20 mL	20 mL				
280-124912-F-10 -A	G0103-19A	9060A	D	20 mL	20 mL				
280-124912-F-11 -A	G0104-19A	9060A	D	20 mL	20 mL				
CCV 280-463600/15		9060A		200 mL	200 mL	5 mL			
CCB 280-463600/16		9060A		20 mL	20 mL				
280-124912-F-12 -C	PZ001-19A	9060A	D	20 mL	20 mL				
280-124912-F-12 -D_MS	PZ001-19AMS	9060A	D	50 mL	50 mL		1.25 mL		
280-124912-F-12 -E_MSD	PZ001-19AMSD	9060A	D	50 mL	50 mL		1.25 mL		
CCV 280-463600/26		9060A		200 mL	200 mL	5 mL			
CCB 280-463600/27		9060A		20 mL	20 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.

9060A

Page 1 of 2

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-124912-1

SDG No.: _____

Batch Number: 463600 Batch Start Date: 07/02/19 14:55 Batch Analyst: Jewell, Connie CBatch Method: 9060A Batch End Date: _____Batch Notes

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.

9060A

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461772

Batch Start Date: 06/14/19 17:54

Batch Analyst: Barker, Scott G

Batch Method: SM 2320B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00825				
CCV 280-461772/54		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-461772/55		SM 2320B		InitialAmount is blank					
LCS 280-461772/56		SM 2320B		InitialAmount is blank	10 mL				
MB 280-461772/57		SM 2320B		InitialAmount is blank					
CCV 280-461772/68		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-461772/69		SM 2320B		InitialAmount is blank					
280-124912-F-1	PZ004-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-2	G0044-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-3	PZ015-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-4	G0102-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-5	PZ007-19A	SM 2320B	T	InitialAmount is blank					
CCV 280-461772/80		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-461772/81		SM 2320B		InitialAmount is blank					
LCS 280-461772/82		SM 2320B		InitialAmount is blank	10 mL				
MB 280-461772/83		SM 2320B		InitialAmount is blank					
280-124912-F-6	G0049-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-6 DU	G0049-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-7	G0048-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-8	G0023-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-9	PZ005-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-10	G0103-19A	SM 2320B	T	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.

SM 2320B

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-124912-1

SDG No.:

Batch Number: 461772

Batch Start Date: 06/14/19 17:54

Batch Analyst: Barker, Scott G

Batch Method: SM 2320B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00825				
280-124912-F-11	G0104-19A	SM 2320B	T	InitialAmount is blank					
280-124912-F-12	PZ001-19A	SM 2320B	T	InitialAmount is blank					
CCV 280-461772/94		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-461772/95		SM 2320B		InitialAmount is blank					

Batch Notes

Acid ID	0.02 H2SO4_00258
pH Buffer 1 ID	pH 2.0 buffer_00079
pH Buffer 2 ID	pH 4.0 buffer_00179
pH Buffer 3 ID	pH 7.0 buffer_00258
pH Buffer 4 ID	pH 10 buffer_00142
pH Buffer 5 ID	pH 12 buffer_00149
pH Buffer 6 ID	pH 7.0 buffer_00257
Sodium Carbonate ID	Alk Stk Std_00016
Nominal Amount Used	10 mL
Pipette/Syringe/Dispenser ID	5000 ADI
Probe ID	PCE 86 pH 1105 sep14
Normality of First Titrant	0.02 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Sample Table - 061719.tbl

File name: C:\FLOW_4\061719.TBL

Date: 17-Jun-19

Cup	Name	Type	R	Dil	Wt	Comment
5	Sync	SYNC	1		1	
0	blk	CO	1		1	
0	Read Baseline	RB	1		1	
1	Cal 0.0 PPB	C	1		1	
3	Cal 25.0 ppb	C	1		1	
4	Cal 50.0 ppb	C	1		1	
5	Cal 100.0 ppb	C	1		1	
6	Cal 500.0 ppb	C	1		1	
7	Cal 1000.0 ppb	C	1		1	
8	Cal 2500.0 ppb	C	1		1	
9	Cal 5000.0 ppb	C	1		1	
0	blank	BLNK	1		1	
0	read baseline	RB	1		1	
10	ICVL 500.0 ppb	U	1		1	
11	ICV 2500.0 ppb	U	1		1	
1	ICB	U	1		1	
0	read baseline	RB	1		1	
8	LCS	U	1		1	
12	MB	U	1		1	
13	280-124912-C-4	U	1		1	L2
14	ms 280-124912-c-4	U	1		1	1
15	MSD 280-124912-c-4	U	1		1	1
16	280-124672-b-2	U	1		10	1 L2
17	280-124672-b-4	U	1		1	1 L2
18	280-124672-b-5	U	1		1	1 L2
19	280-124672-b-6	U	1		20	1 L2
20	280-124672-b-7	U	1		1	1 L2
21	280-124672-b-8	U	1		10	1 L2
22	280-124672-b-9	U	1		20	1 L2
0	Rinse	U	1		1	
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	
23	280-124672-b-10	U	1		50	1 L2
24	280-124672-b-11	U	1		50	1 L2
25	280-124912-c-5	U	1		1	1 L2
26	MS 280-124912-c-5	U	1		1	1
27	MSD 280-124912-c-5	U	1		1	1
28	280-124680-e-1	U	1		500	1 T
29	280-124680-g-2	U	1		500	1 T
30	280-124680-f-3	U	1		500	1 T
31	280-124680-f-4	U	1		500	1 T
32	280-124680-g-5	U	1		500	1 T
0	Rinse	U	1		1	
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	
33	280-124718-f-1	U	1		100	1 MSW
34	280-124718-g-2	U	1		100	1 MSW
35	280-124718-g-3	U	1		100	1 MSW
36	280-124727-e-1	U	1		1	1 L2
0	Rinse	U	1		1	

Cup	Name	Type	R	Dil	Wt	Comment
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	
8	LCS	U	1		1	
12	MB	U	1		1	
37	280-124912-c-12	U	1		1	L2 N
38	MS 280-124912-c-12	U	1		1	1
39	MSD 280-124912-c-12	U	1		1	1
40	280-124912-c-1	U	1		1	1 L2 N
41	280-124912-c-2	U	1		1	1 L2 N
42	280-124912-c-3	U	1		1	1 L2 N
43	280-124912-c-6	U	1		1	1 L2 N
44	280-124912-c-7	U	1		1	1 L2 N
45	280-124912-c-8	U	1		1	1 L2 N
46	280-124912-c-9	U	1		1	1 L2 N
0	Rinse	U	1		1	1
0	Read Baseline	RB	1		1	1
6	CCVL 500 ppb	U	1		1	1
8	CCV 2500 ppb	U	1		1	1
12	CCB	U	1		1	1
0	Read Baseline	RB	1		1	1
47	280-124912-c-10	U	1		1	1 L2 N
48	280-124912-c-11	U	1		1	1 L2 N
49	280-125022-c-3	U	1		1	1 L2 N
50	MS 280-125022-c-3	U	1		1	1
51	MSD 280-125022-c-3	U	1		1	1
52	280-124531-m-1	U	1		1	1 L2 N
53	280-125007-c-1	U	1		1	1 L2 N
54	280-125007-c-2	U	1		1	1 L2 N
55	280-125007-c-3	U	1		1	1 L2 N
56	280-125007-c-4	U	1		1	1 L2 N
0	Rinse	U	1		1	1
0	Read Baseline	RB	1		1	1
6	CCVL 500 ppb	U	1		1	1
8	CCV 2500 ppb	U	1		1	1
12	CCB	U	1		1	1
0	Read Baseline	RB	1		1	1
57	280-125022-d-1	U	1		1	1 7 N
58	280-125022-c-2	U	1		1	1 L2 N
59	280-125022-c-5	U	1		1	1 L2 N
60	D	U	1		1	1
0	Rinse	U	1		1	1
0	Read Baseline	RB	1		1	1
6	CCVL 500 ppb	U	1		1	1
8	CCV 2500 ppb	U	1		1	1
12	CCB	U	1		1	1
0	Read Baseline	RB	1		1	1

61 124718 - 1 1000x
 62 124718 - 2 1000y
 63 124718 - 3 1000x

Run Results Report

Facility Name
 Facility Location
 Department
 Operator Name MJS
 Operator ID MJS
 Platform FS 3000
 Software Rev Code 222
 Data system ID 57

Result path C:\FLOW_4\061719.RST
 Sample table path C:\FLOW_4\061719.tbl
 Method path C:\FLOW_4\nh3.mth
 Date acquired 17-Jun-19
 Time acquired 15:02

						----- Ammonia -----
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
17-Jun-19	11:04	5	Sync	12733	98.386	
17-Jun-19	11:06	0	blk	-69	5.041	
17-Jun-19	11:08	0	Read Baseline	0	5.547	BL
17-Jun-19	11:10	1	Cal 0.0 PPB	-291	3.424	
17-Jun-19	11:12	3	Cal 25.0 ppb	3094	28.105	
17-Jun-19	11:14	4	Cal 50.0 ppb	6407	52.259	
17-Jun-19	11:16	5	Cal 100.0 ppb	13140	101.355	
17-Jun-19	11:18	6	Cal 500.0 ppb	67562	498.390	
17-Jun-19	11:20	7	Cal 1000.0 ppb	132288	971.053	
17-Jun-19	11:22	8	Cal 2500.0 ppb	343723	2518.470	
17-Jun-19	11:24	9	Cal 5000.0 ppb	680816	4996.408	
17-Jun-19	11:26	0	blank	353	8.118	
17-Jun-19	11:28	0	read baseline	0	5.547	BL
17-Jun-19	11:30	10	ICVL 500.0 ppb	68460	504.943	
17-Jun-19	11:32	11	ICV 2500.0 ppb	343839	2519.322	
17-Jun-19	11:34	1	ICB	-211	4.007	
17-Jun-19	11:36	0	read baseline	0	5.547	BL
17-Jun-19	11:38	8	LCS	345199	2529.294	
17-Jun-19	11:40	12	MB	-213	3.994	
17-Jun-19	11:42	13	280-124912-C-4	9142	72.203	
17-Jun-19	11:44	14	ms 280-124912-c-4	135889	997.358	
17-Jun-19	11:46	15	MSD 280-124912-c-4	149154	1094.295	
17-Jun-19	11:48	16	280-124672-b-2	245969	18023.873	
17-Jun-19	11:50	17	280-124672-b-4	-525	1.717	
17-Jun-19	11:52	18	280-124672-b-5	1040	13.126	
17-Jun-19	11:54	19	280-124672-b-6	330250	48394.242	
17-Jun-19	11:56	20	280-124672-b-7	-385	2.739	
17-Jun-19	11:58	21	280-124672-b-8	43581	3233.977	
17-Jun-19	12:00	22	280-124672-b-9	457357	67045.914	
17-Jun-19	12:02	0	Rinse	135	6.529	
17-Jun-19	12:04	0	Read Baseline	0	5.547	BL
17-Jun-19	12:06	6	CCVL 500 ppb	62767	463.396	
17-Jun-19	12:08	8	CCV 2500 ppb	338993	2483.796	
17-Jun-19	12:10	12	CCB	29	5.757	
17-Jun-19	12:12	0	Read Baseline	0	5.547	BL
17-Jun-19	12:14	23	280-124672-b-10	198235	72656.375	
17-Jun-19	12:16	24	280-124672-b-11	146811	53858.594	
17-Jun-19	12:18	25	280-124912-c-5	9815	77.109	
17-Jun-19	12:20	26	MS 280-124912-c-5	142641	1046.699	
17-Jun-19	12:22	27	MSD 280-124912-c-5	150677	1105.427	
17-Jun-19	12:24	28	280-124680-e-1	376315	1378735.625	
17-Jun-19	12:26	29	280-124680-g-2	88751	326534.719	
17-Jun-19	12:28	30	280-124680-f-3	146060	535842.188	
17-Jun-19	12:30	31	280-124680-f-4	136302	500190.188	
17-Jun-19	12:32	32	280-124680-g-5	293308	1074512.750	
17-Jun-19	12:34	0	Rinse	30	5.766	07/31/2019

Result path C:\FLOW_4\061719.RST
 Sample table path C:\FLOW_4\061719.tbl
 Method path C:\FLOW_4\nh3.mth
 Date acquired 17-Jun-19
 Time acquired 15:02

| ----- Ammonia ----- |

Date	Time	Cup	Name	Response	Calc [ppb]	Flags
17-Jun-19	12:36	0	Read Baseline	0	5.547	
17-Jun-19	12:38	6	CCVL 500 ppb	67173	495.555	
17-Jun-19	12:40	8	CCV 2500 ppb	336333	2464.297	
17-Jun-19	12:42	12	CCB	-133	4.579	
17-Jun-19	12:44	0	Read Baseline	0	5.547	BL
17-Jun-19	12:46	33	280-124718-f-1	2327923	17296.104	HI
17-Jun-19	12:48	34	280-124718-g-2	1780935	13176.145	HI
17-Jun-19	12:50	35	280-124718-g-3	1627360	12025.726	HI
17-Jun-19	12:52	36	280-124727-e-1	-370	2.853	FL
17-Jun-19	12:54	0	Rinse	21	5.701	
17-Jun-19	12:56	0	Read Baseline	0	5.547	BL
17-Jun-19	12:58	6	CCVL 500 ppb	66983	494.162	
17-Jun-19	13:00	8	CCV 2500 ppb	343906	2519.816	
17-Jun-19	13:02	12	CCB	-305	3.324	
17-Jun-19	13:04	0	Read Baseline	0	5.547	BL
17-Jun-19	13:06	8	LCS	336286	2463.956	
17-Jun-19	13:08	12	MB	-48	5.201	
17-Jun-19	13:10	37	280-124912-c-12	2743	25.548	
17-Jun-19	13:12	38	MS 280-124912-c-12	144933	1063.448	
17-Jun-19	13:14	39	MSD 280-124912-c-12	144600	1061.012	
17-Jun-19	13:16	40	280-124912-c-1	10915	85.133	
17-Jun-19	13:18	41	280-124912-c-2	-136	4.555	
17-Jun-19	13:20	42	280-124912-c-3	153534	1126.307	
17-Jun-19	13:22	43	280-124912-c-6	210051	1539.557	
17-Jun-19	13:24	44	280-124912-c-7	1352	15.406	
17-Jun-19	13:26	45	280-124912-c-8	747918	5491.264	
17-Jun-19	13:28	46	280-124912-c-9	6065	49.768	
17-Jun-19	13:30	0	Rinse	204	7.033	
17-Jun-19	13:32	0	Read Baseline	0	5.547	BL
17-Jun-19	13:34	6	CCVL 500 ppb	68245	503.375	
17-Jun-19	13:36	8	CCV 2500 ppb	348832	2555.926	
17-Jun-19	13:38	12	CCB	-113	4.726	
17-Jun-19	13:40	0	Read Baseline	0	5.547	BL
17-Jun-19	13:42	47	280-124912-c-10	467397	3426.037	
17-Jun-19	13:44	48	280-124912-c-11	113271	832.130	
17-Jun-19	13:46	49	280-125022-c-3	2918	26.820	
17-Jun-19	13:48	50	MS 280-125022-c-3	148233	1087.565	
17-Jun-19	13:50	51	MSD 280-125022-c-3	148573	1090.047	
17-Jun-19	13:52	52	280-124531-m-1	96953	712.959	
17-Jun-19	13:54	53	280-125007-c-1	126848	931.305	
17-Jun-19	13:56	54	280-125007-c-2	1105	13.607	
17-Jun-19	13:58	55	280-125007-c-3	96596	710.350	
17-Jun-19	14:00	56	280-125007-c-4	8237	65.605	
17-Jun-19	14:02	0	Rinse	258	7.430	
17-Jun-19	14:04	0	Read Baseline	0	5.547	BL
17-Jun-19	14:06	6	CCVL 500 ppb	67534	498.185	
17-Jun-19	14:08	8	CCV 2500 ppb	347826	2548.555	
17-Jun-19	14:10	12	CCB	-174	4.276	
17-Jun-19	14:12	0	Read Baseline	0	5.547	BL
17-Jun-19	14:14	57	280-125022-d-1	6842	55.430	
17-Jun-19	14:16	58	280-125022-c-2	9242	72.931	
17-Jun-19	14:18	59	280-125022-c-5	8	5.602	
17-Jun-19	14:20	60	D	-245	3.760	
17-Jun-19	14:22	0	Rinse	-70	5.040	
17-Jun-19	14:24	0	Read Baseline	0	5.547	BL
17-Jun-19	14:26	6	CCVL 500 ppb	63936	471.924	
17-Jun-19	14:28	8	CCV 2500 ppb	348781	2555.553	

07/31/2019

Result path C:\FLOW_4\061719.RST
 Sample table path C:\FLOW_4\061719.tbl
 Method path C:\FLOW_4\nh3.mth
 Date acquired 17-Jun-19
 Time acquired 15:02

| ----- Ammonia ----- |

Date	Time	Cup	Name	Response	Calc [ppb]	Flags
17-Jun-19	14:30	12	CCB	-130	4.598	
17-Jun-19	14:32	0	Read Baseline	0	5.547	BL
17-Jun-19	14:38	61	280-124718-f-1	260598	1909480.125	
17-Jun-19	14:40	62	280-124718-g-2	179696	1317556.500	
17-Jun-19	14:42	63	280-124718-g-3	181937	1333941.125	
17-Jun-19	14:44	52	280-124531-m-1	89967	661.946	
17-Jun-19	14:46	0	Rinse	169	6.782	
17-Jun-19	14:48	0	Read Baseline	0	5.547	BL
17-Jun-19	14:50	6	CCVL 500 ppb	67792	500.070	
17-Jun-19	14:52	8	CCV 2500 ppb	347631	2547.125	
17-Jun-19	14:54	12	CCB	-241	3.791	
17-Jun-19	14:56	0	Read Baseline	0	5.547	BL

Peak Table:Ammonia

File name: C:\FLOW_4\061719.RST

Date: 17-Jun-19

Operator: MJS

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	5	Sync	1	SYNC	1	1	12733	98.386398	
2	0	blk	1	CO	1	1	-69	5.041238	
B	0	Read Baseline	1	RB	1	1	0	5.547244	BL
4	1	Cal 0.0 PPB	1	C	1	1	-291	3.424083	
5	3	Cal 25.0 ppb	1	C	1	1	3094	28.105436	
6	4	Cal 50.0 ppb	1	C	1	1	6407	52.258560	
7	5	Cal 100.0 ppb	1	C	1	1	13140	101.354950	
8	6	Cal 500.0 ppb	1	C	1	1	67562	498.390106	
9	7	Cal 1000.0 ppb	1	C	1	1	132288	971.052551	
10	8	Cal 2500.0 ppb	1	C	1	1	343723	2518.470215	
11	9	Cal 5000.0 ppb	1	C	1	1	680816	4996.408203	
12	0	blank	1	BLNK	1	1	353	8.117579	
B	0	read baseline	1	RB	1	1	0	5.547244	BL
14	10	ICVL 500.0 ppb	1	U	1	1	68460	504.943115	
15	11	ICV 2500.0 ppb	1	U	1	1	343839	2519.321533	
16	1	ICB	1	U	1	1	-211	4.007102	
B	0	read baseline	1	RB	1	1	0	5.547244	BL
18	8	LCS	1	U	1	1	345199	2529.293701	
19	12	MB	1	U	1	1	-213	3.993981	
20	13	280-124912-C-4	1	U	1	1	9142	72.202827	
21	14	ms 280-124912-c-4	1	U	1	1	135889	997.357605	
22	15	MSD 280-124912-c-4	1	U	1	1	149154	1094.294922	
23	16	280-124672-b-2	1	U	10	1	245969	18023.873047	
24	17	280-124672-b-4	1	U	1	1	-525	1.716579	
25	18	280-124672-b-5	1	U	1	1	1040	13.126282	
26	19	280-124672-b-6	1	U	20	1	330250	48394.242188	
27	20	280-124672-b-7	1	U	1	1	-385	2.739002	
28	21	280-124672-b-8	1	U	10	1	43581	3233.977051	
29	22	280-124672-b-9	1	U	20	1	457357	67045.914062	
30	0	Rinse	1	U	1	1	135	6.529483	
B	0	Read Baseline	1	RB	1	1	0	5.547244	BL
32	6	CCVL 500 ppb	1	U	1	1	62767	463.396149	
33	8	CCV 2500 ppb	1	U	1	1	338993	2483.796143	
34	12	CCB	1	U	1	1	29	5.756918	
B	0	Read Baseline	1	RB	1	1	0	5.547244	BL
36	23	280-124672-b-10	1	U	50	1	198235	72656.375000	
37	24	280-124672-b-11	1	U	50	1	146811	53858.593750	
38	25	280-124912-c-5	1	U	1	1	9815	77.109322	
39	26	MS 280-124912-c-5	1	U	1	1	142641	1046.699219	
40	27	MSD 280-124912-c-5	1	U	1	1	150677	1105.426880	
41	28	280-124680-e-1	1	U	500	1	376315	1378735.625000	
42	29	280-124680-g-2	1	U	500	1	88751	326534.718750	
43	30	280-124680-f-3	1	U	500	1	146060	535842.187500	
44	31	280-124680-f-4	1	U	500	1	136302	500190.187500	
45	32	280-124680-g-5	1	U	500	1	293308	1074512.750000	
46	0	Rinse	1	U	1	1	30	5.765553	
B	0	Read Baseline	1	RB	1	1	0	5.547244	BL
48	6	CCVL 500 ppb	1	U	1	1	67173	495.554932	
49	8	CCV 2500 ppb	1	U	1	1	336333	2464.296631	
50	12	CCB	1	U	1	1	-133	4.579490	
B	0	Read Baseline	1	RB	1	1	0	5.547244	BL
52	33	280-124718-f-1	1	U	1	1	2327923	17296.103516	HI
53	34	280-124718-g-2	1	U	1	1	1780935	13176.144531	HI
54	35	280-124718-g-3	1	U	1	1	1627360	12025.725586	HI
55	36	280-124727-e-1	1	U	1	1	-370	2.852919	FL
56	0	Rinse	1	U	1	1	21	5.701148	
B	0	Read Baseline	1	RB	1	1	0	5.547244	BL
58	6	CCVL 500 ppb	1	U	1	1	66983	494.162018	
59	8	CCV 2500 ppb	1	U	1	1	343906	2519.816406	
60	12	CCB	1	U	1	1	-305	3.324311	
B	0	Read Baseline	1	RB	1	1	0	5.547244	BL
62	8	LCS	1	U	1	1	336286	2463.955566	
63	12	MB	1	U	1	1	-48	5.200727	
64	37	280-124912-c-12	1	U	1	1	2743	25.548273	
65	38	MS 280-124912-c-12	1	U	1	1	144933	1063.448364	
66	39	MSD 280-124912-c-12	1	U	1	1	144600	1061.012329	
67	40	280-124912-c-1	1	U	1	1	10915	85.133400	
68	41	280-124912-c-2	1	U	1	1	-136	4.554667	
69	42	280-124912-c-3	1	U	1	1	153534	1126.306519	
70	43	280-124912-c-6	1	U	1	1	210051	1539.556885	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	44	280-124912-c-7	1	U		1	1352	15.406181	
72	45	280-124912-c-8	1	U		1	747918	5491.264160	
73	46	280-124912-c-9	1	U		1	6065	49.767918	
74	0	Rinse	1	U		1	204	7.033128	
B	0	Read Baseline	1	RB		1	0	5.547244	BL
76	6	CCVL 500 ppb	1	U		1	68245	503.374969	
77	8	CCV 2500 ppb	1	U		1	348832	2555.925537	
78	12	CCB	1	U		1	-113	4.725644	
B	0	Read Baseline	1	RB		1	0	5.547244	BL
80	47	280-124912-c-10	1	U		1	467397	3426.036621	
81	48	280-124912-c-11	1	U		1	113271	832.130493	
82	49	280-125022-c-3	1	U		1	2918	26.819714	
83	50	MS 280-125022-c-3	1	U		1	148233	1087.564941	
84	51	MSD 280-125022-c-3	1	U		1	148573	1090.046631	
85	52	280-124531-m-1	1	U		1	96953	712.958801	
86	53	280-125007-c-1	1	U		1	126848	931.304993	
87	54	280-125007-c-2	1	U		1	1105	13.606807	
88	55	280-125007-c-3	1	U		1	96596	710.349548	
89	56	280-125007-c-4	1	U		1	8237	65.605461	
90	0	Rinse	1	U		1	258	7.430334	
B	0	Read Baseline	1	RB		1	0	5.547244	BL
92	6	CCVL 500 ppb	1	U		1	67534	498.185211	
93	8	CCV 2500 ppb	1	U		1	347826	2548.554688	
94	12	CCB	1	U		1	-174	4.275731	
B	0	Read Baseline	1	RB		1	0	5.547244	BL
96	57	280-125022-d-1	1	U		1	6842	55.430305	
97	58	280-125022-c-2	1	U		1	9242	72.930931	
98	59	280-125022-c-5	1	U		1	8	5.602031	
99	60	D	1	U		1	-245	3.759651	
100	0	Rinse	1	U		1	-70	5.039588	
B	0	Read Baseline	1	RB		1	0	5.547244	BL
102	6	CCVL 500 ppb	1	U		1	63936	471.924103	
103	8	CCV 2500 ppb	1	U		1	348781	2555.553467	
104	12	CCB	1	U		1	-130	4.598035	
B	0	Read Baseline	1	RB		1	0	5.547244	BL
106	61	280-124718-f-1	1	U	1000	1	260598	1909480.125000	
107	62	280-124718-g-2	1	U	1000	1	179696	1317556.500000	
108	63	280-124718-g-3	1	U	1000	1	181937	1333941.125000	
109	52	280-124531-m-1	1	U	1	1	89967	661.945679	
110	0	Rinse	1	U	1	1	169	6.781524	
B	0	Read Baseline	1	RB		1	0	5.547244	BL
112	6	CCVL 500 ppb	1	U	1	1	67792	500.070038	
113	8	CCV 2500 ppb	1	U	1	1	347631	2547.125488	
114	12	CCB	1	U	1	1	-241	3.791467	
B	0	Read Baseline	1	RB		1	0	5.547244	BL

Ammonia:Calibration 1: Peak 4-115

File name: C:\FLOW_4\061719.RST

Date: 17-Jun-19

Operator: MJS

* Name	Conc	Height
* Cal 0.0 PPB	0.000000	-291.215088
* Cal 25.0 ppb	25.000000	3094.022949
* Cal 50.0 ppb	50.000000	6406.630859
* Cal 100.0 ppb	100.000000	13139.670898
* Cal 500.0 ppb	500.000000	67561.945312
* Cal 1000.0 ppb	1000.000000	132288.484375
* Cal 2500.0 ppb	2500.000000	343722.656250
* Cal 5000.0 ppb	5000.000000	680815.937500

Calib Coef:

x=cyy+by+a

a: (intercept) 5.5472e+00

b: 7.2907e-03

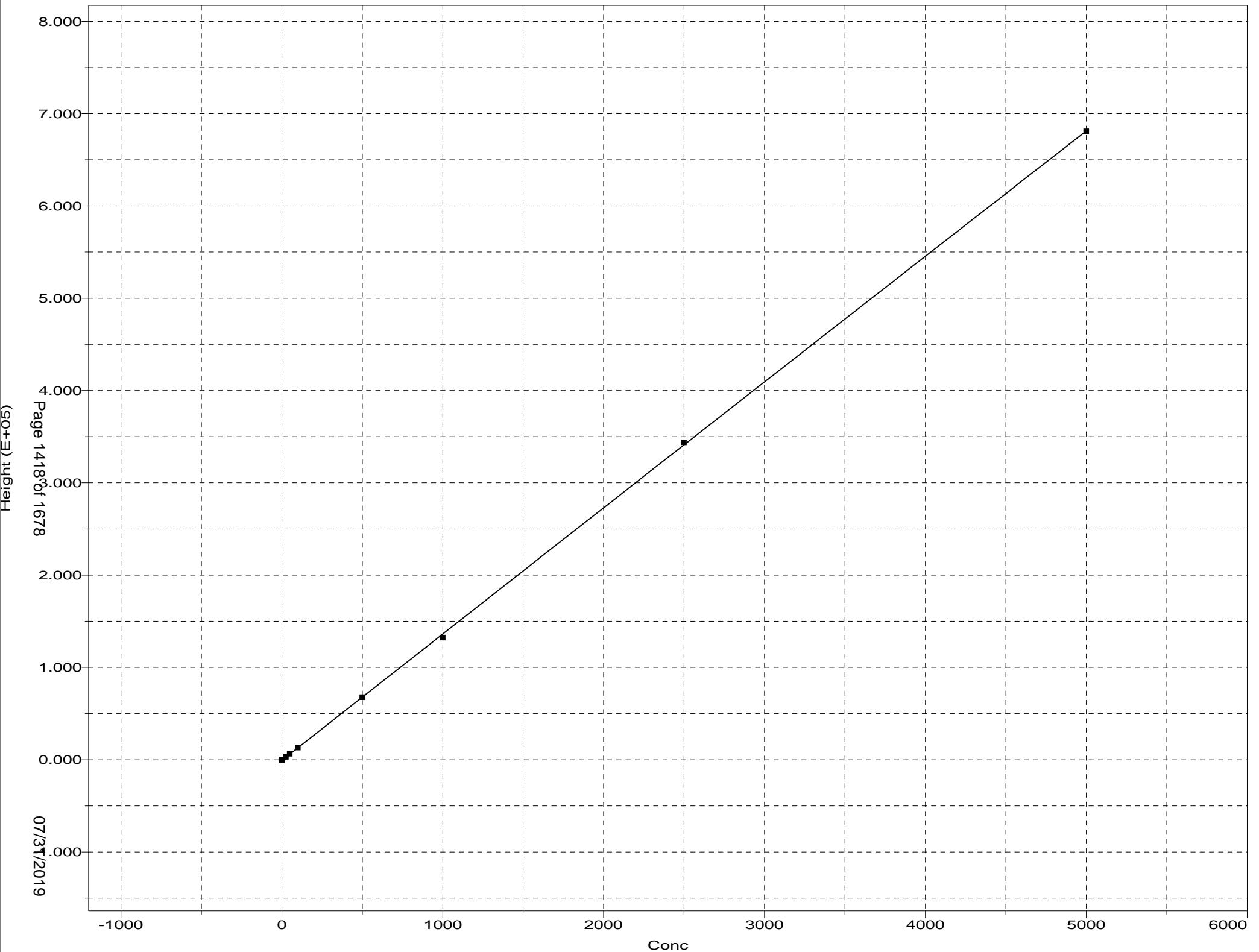
c: 5.8742e-11

Corr Coef: 0.999973

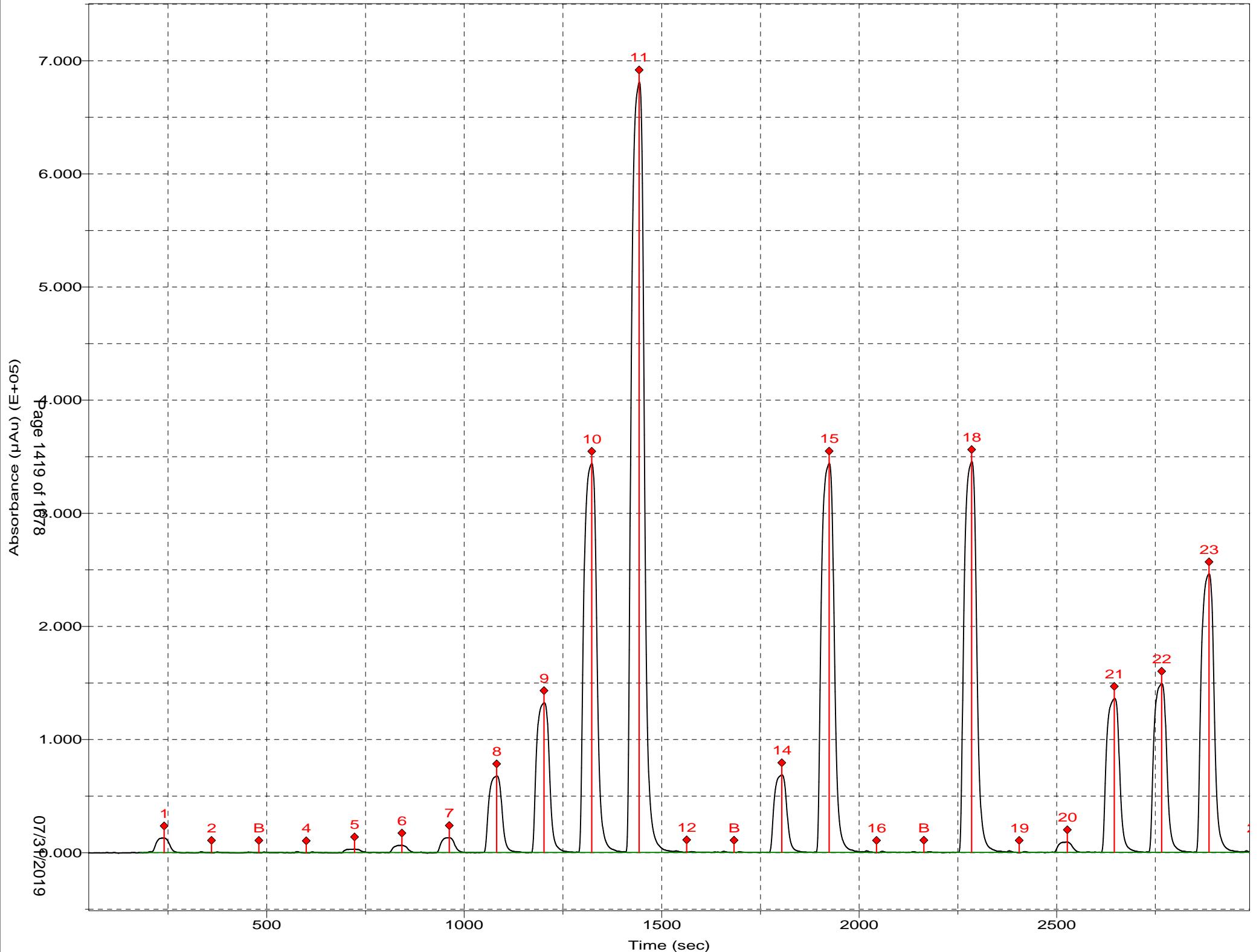
Carryover: 0%

No Drift Peaks

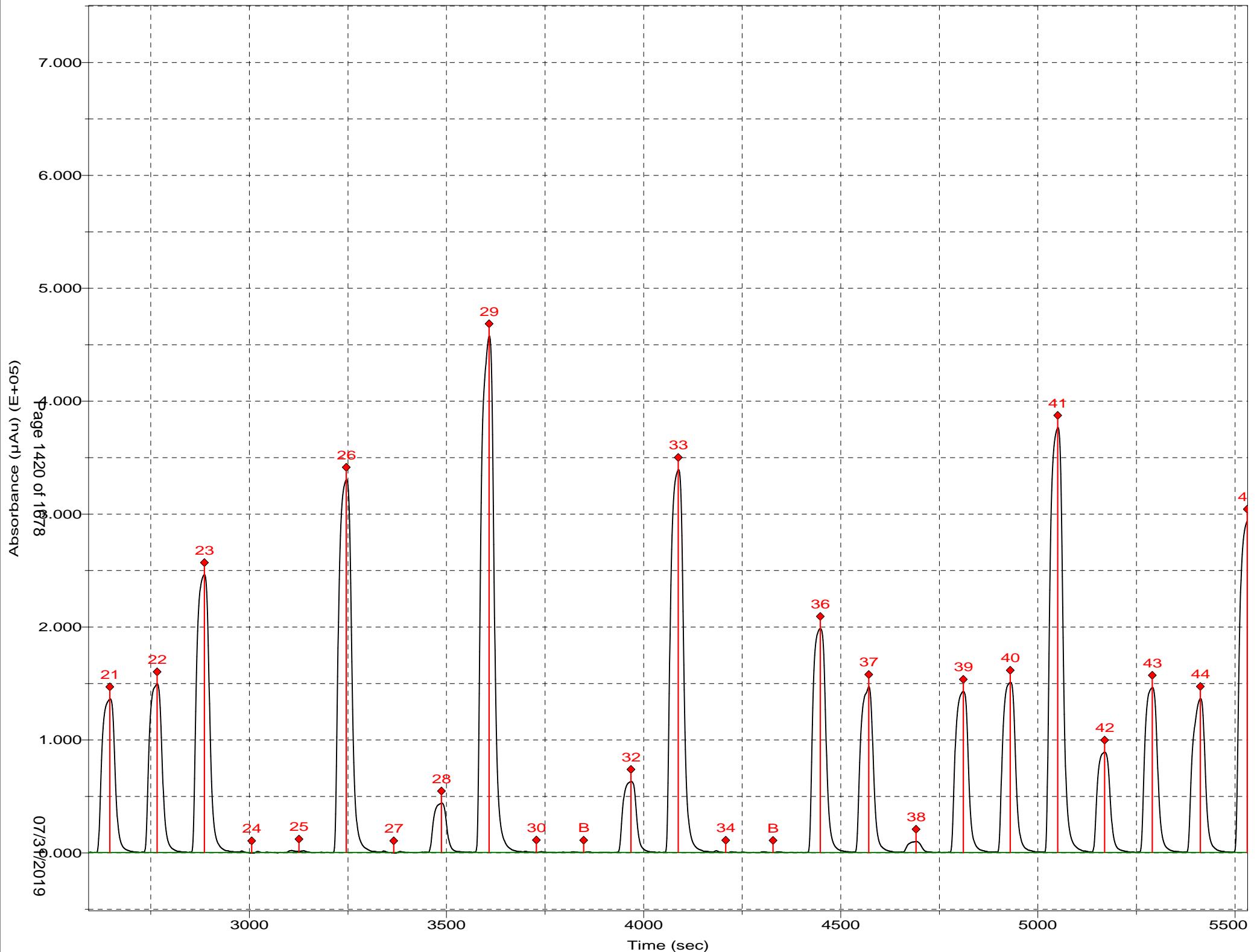
Ammonia:Calibration 1: Peak 4-115



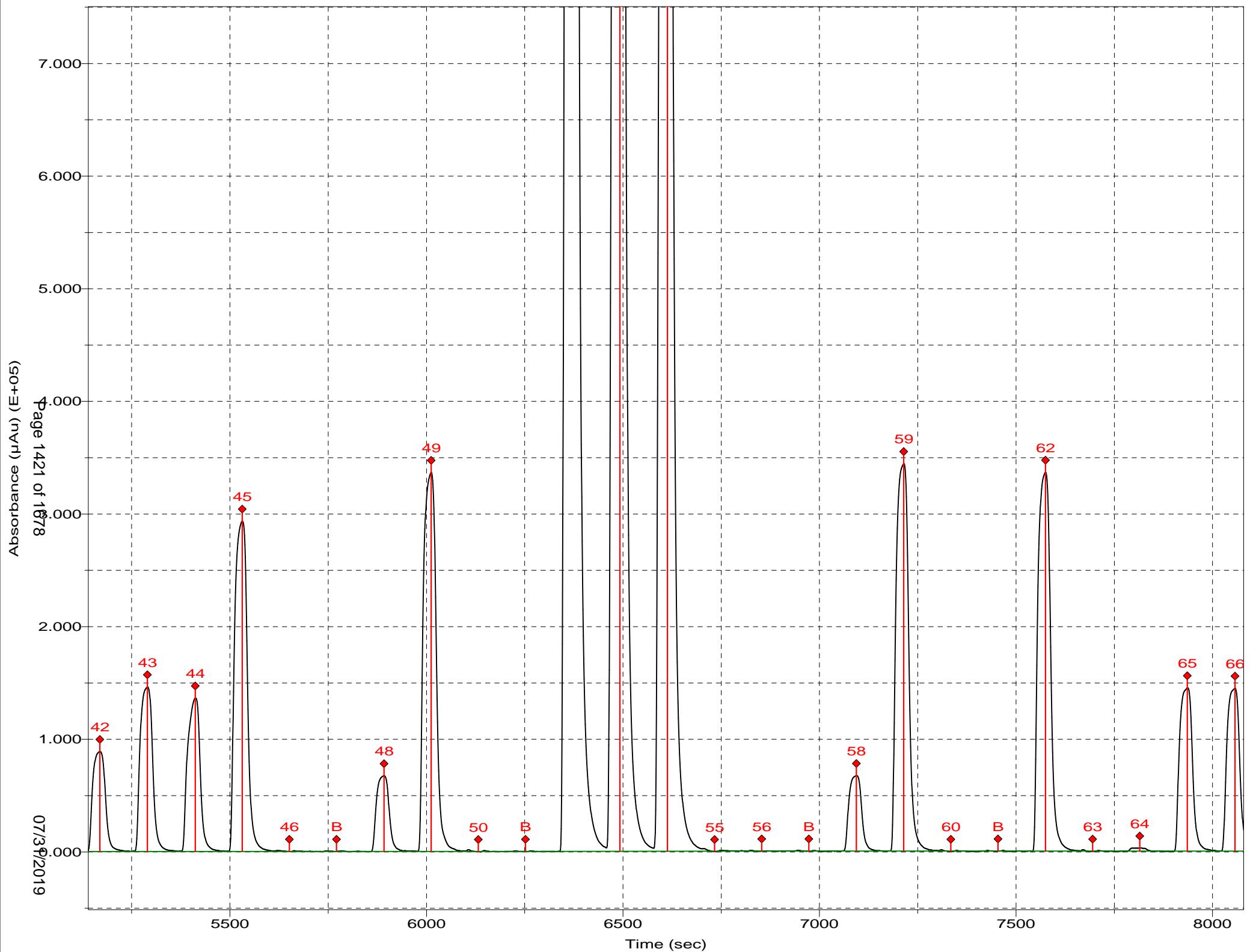
Channel 1: Ammonia



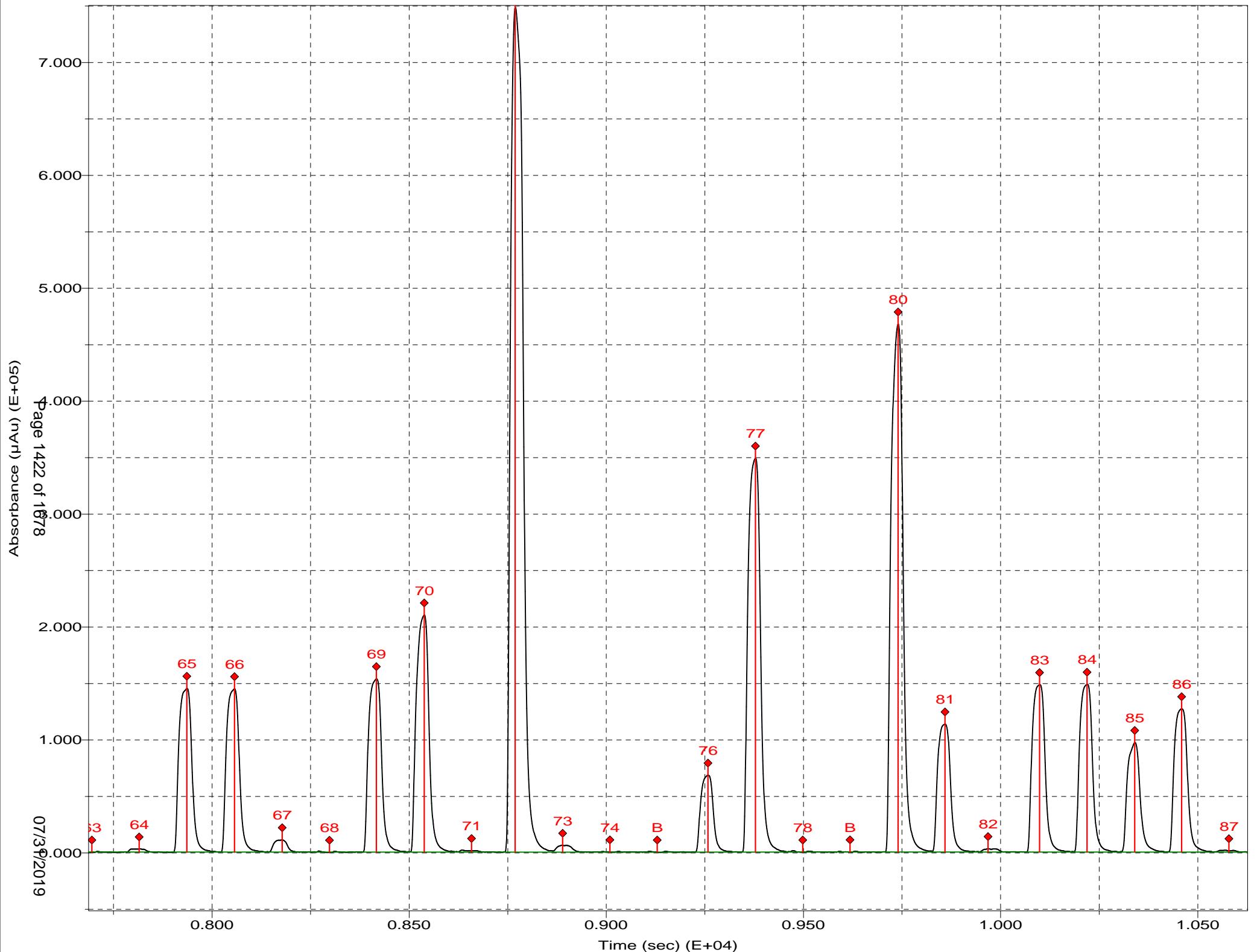
Channel 1: Ammonia



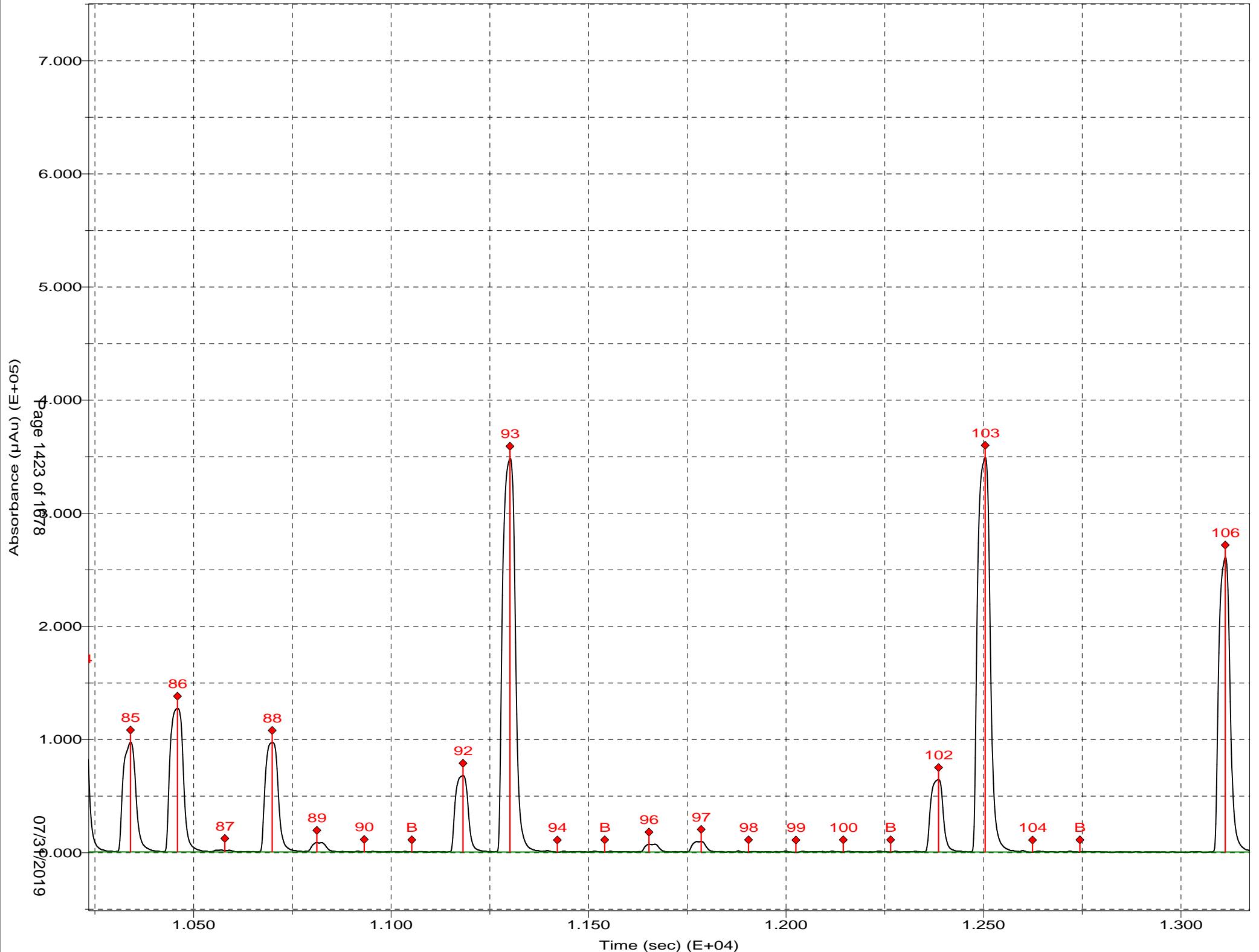
Channel 1: Ammonia



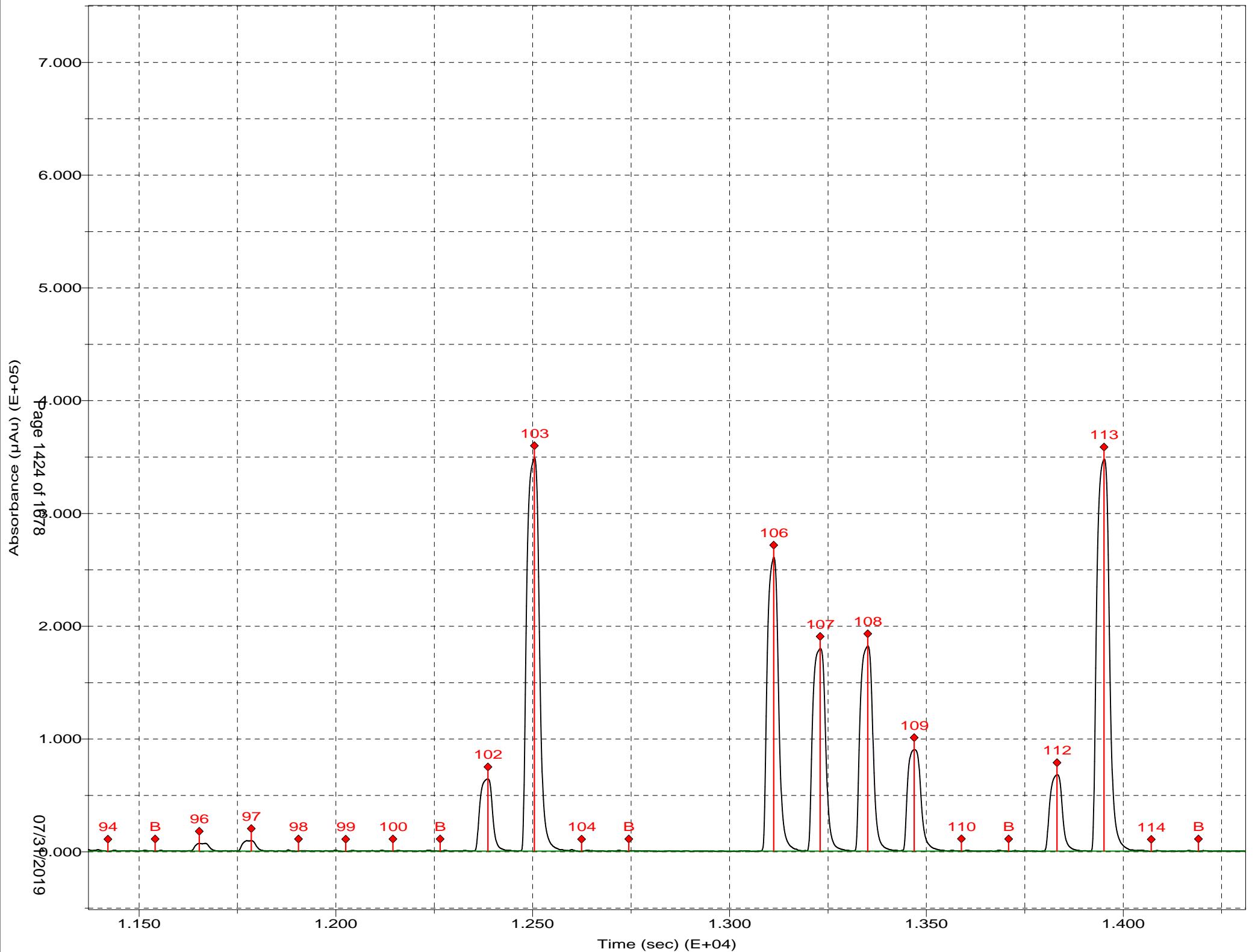
Channel 1: Ammonia



Channel 1: Ammonia



Channel 1: Ammonia



*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***

Date: 26-Jun-19

Cup	Name	Type	R	Dil	Wt	Comment
5	Sync	SYNC	1		1	
0	blk	CO	1		1	
0	Read Baseline	RB	1		1	
1	Cal 0.0 PPB	C	1		1	
3	Cal 25.0 ppb	C	1		1	
4	Cal 50.0 ppb	C	1		1	
5	Cal 100.0 ppb	C	1		1	
6	Cal 500.0 ppb	C	1		1	
7	Cal 1000.0 ppb	C	1		1	
8	Cal 2500.0 ppb	C	1		1	
9	Cal 5000.0 ppb	C	1		1	
0	blank	BLNK	1		1	
0	read baseline	RB	1		1	
10	ICVL 500.0 ppb	U	1		1	
11	ICV 2500.0 ppb	U	1		1	
1	ICB	U	1		1	
0	read baseline	RB	1		1	
8	LCS	U	1		1	
8	LCSD	U	1		1	
12	MB	U	1		1	
13	280-124817-c-1	U	1		1	1 2
14	MS 280-124817-c-1	U	1		1	1
15	MSD 280-124817-c-1	U	1		1	1
16	280-124817-a-2	U	1		1	1 2
17	280-124830-m-1	U	1		50	1 2
18	280-124830-m-2	U	1		100	1 2
19	280-124830-m-3	U	1		200	1 2
20	280-124830-n-4	U	1		50	1 2
21	280-124830-m-5	U	1		20	1 2
22	280-124820-c-1	U	1		1	1 2
0	Rinse	U	1		1	1
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	1
0	Read Baseline	RB	1		1	
23	280-124820-c-2	U	1		1	1 2
24	280-124820-c-3	U	1		1	1 2
25	280-124817-d-3	U	1		1	1 2
26	MS 280-124817-d-3	U	1		1	1
27	MSD 280-124817-d-3	U	1		1	1
28	280-125121-b-1	U	1		1	1 2
29	280-125121-b-2	U	1		1	1 2
30	280-125121-b-3	U	1		1	1 2
31	280-125163-c-5	U	1		1	1 2
32	280-124902-e-4	U	1		10	1
0	Rinse	U	1		1	1
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	1
0	Read Baseline	RB	1		1	
33	280-125164-a-2	U	1		1	1 2
34	280-125164-a-3	U	1		1	1 2
35	280-125164-a-4	U	1		1	1 2
36	280-124912-d-8	U	1		2	1 2

Cup	Name	Type	R	Dil	Wt	Comment
0	Rinse	U	1		1	
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	
8	LCS	U	1		1	
8	LCSD	U	1		1	
12	MB	U	1		1	
37	280-124817-f-4	U	1		1	1 C2
38	MS 280-124817-f-4	U	1		1	1
39	MSD 280-124817-f-4	U	1		1	1
40	280-124819-d-1	U	1		20	1 C2
41	280-125172-f-1	U	1		1	1 C2
42	280-125249-a-1	U	1		1	1 C2
0	Rinse	U	1		1	
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	
8	LCS	U	1		1	
8	LCSD	U	1		1	
12	MB	U	1		1	
37	280-124817-f-4	U	1		1	1 C2
38	MS 280-124817-f-4	U	1		1	1
39	MSD 280-124817-f-4	U	1		1	1
40	280-124819-d-1	U	1		20	1 C2
41	280-125172-f-1	U	1		1	1 C2
42	280-125249-a-1	U	1		1	1 C2
43	280-125249-a-2	U	1		1	1 C2
44	280-125249-a-3	U	1		1	1 C2
45	280-125249-a-4	U	1		1	1 C2
46	280-125249-a-5	U	1		1	1 C2
0	Rinse	U	1		1	
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	
47	280-124800-b-3	U	1		10	1 C2
48	280-125007-c-1	U	1		1	1 C2
49	280-124817-d-5	U	1		1	1 C2
50	MS 280-124817-d-5	U	1		1	1
51	MSD 280-124817-d-5	U	1		1	1
52	280-124800-b-40	U	1		200	1 C2
53	280-124800-b-41	U	1		200	1 C2
54	280-124800-b-39	U	1		200	1 C2
55	280-124800-b-37	U	1		500	1 C2
56	280-124800-b-32	U	1		1	1
0	Rinse	U	1		1	
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	
57	280-124800-b-31	U	1		1	1 C2
58	280-124800-b-30	U	1		100	1 C2
59	280-124800-b-8	U	1		100	1 C2

Cup	Name	Type	R	Dil	Wt	Comment
60	280-124672-b-7	U	1		1	1 C2 N
0	Rinse	U	1		1	
0	Read Baseline	RB	1		1	
6	CCVL 500 ppb	U	1		1	
8	CCV 2500 ppb	U	1		1	
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	
8	LCS	U	1		1	
8	LCSD	U	1		1	
12	MB	U	1		1	
61	280-125181-b-1	U	1		1	1 C2 N
62	MS 280-125181-b-1	U	1		1	1
63	MSD 280-125181-b-1	U	1		1	1
64	280-124946-c-1	U	1		1	1
65	280-124946-c-2	U	1		1	1
66	280-124946-c-3	U	1		1	1
67	280-124946-c-4	U	1		1	1
68	280-124946-c-5	U	1		1	1
69	280-124946-c-6	U	1		1	1
70	280-124946-c-7	U	1		1	1
0	Rinse	U	1		1	1
0	Read Baseline	RB	1		1	1
6	CCVL 500 ppb	U	1		1	1
8	CCV 2500 ppb	U	1		1	1
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	1
71	280-124946-c-8	U	1		1	1
72	280-124946-c-9	U	1		1	1
73	280-125181-b-2	U	1		1	1
74	MS 280-125181-b-2	U	1		1	1
75	MSD 280-125181-b-2	U	1		1	1
76	280-124946-c-10	U	1		1	1
77	280-124946-c-11	U	1		1	1
78	280-124946-c-12	U	1		1	1
79	280-124946-c-13	U	1		1	1
80	280-124946-c-14	U	1		1	1
0	Rinse	U	1		1	1
0	Read Baseline	RB	1		1	1
6	CCVL 500 ppb	U	1		1	1
8	CCV 2500 ppb	U	1		1	1
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	1
81	280-124946-c-15	U	1		1	1
82	280-124946-c-16	U	1		1	1
83	280-124946-c-17	U	1		1	1
84	280-124946-c-18	U	1		1	1
0	Rinse	U	1		1	1
0	Read Baseline	RB	1		1	1
6	CCVL 500 ppb	U	1		1	1
8	CCV 2500 ppb	U	1		1	1
12	CCB	U	1		1	
0	Read Baseline	RB	1		1	1

Run Results Report

Facility Name
 Facility Location
 Department
 Operator Name MJS
 Operator ID MJS
 Platform FS 3000
 Software Rev Code 222
 Data system ID 57

Result path C:\FLOW_4\062019A.RST
 Sample table path C:\FLOW_4\062019.tbl
 Method path C:\FLOW_4\nh3.mth
 Date acquired 20-Jun-19
 Time acquired 15:47

						----- Ammonia -----
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
20-Jun-19	11:31	5	Sync	14009	98.342	
20-Jun-19	11:33	0	blk	11	0.083	LO
20-Jun-19	11:35	0	Read Baseline	0	0.009	BL
20-Jun-19	11:37	1	Cal 0.0 PPB	-126	-0.878	LO UM
20-Jun-19	11:39	3	Cal 25.0 ppb	3725	26.160	
20-Jun-19	11:41	4	Cal 50.0 ppb	7254	50.934	
20-Jun-19	11:43	5	Cal 100.0 ppb	14298	100.373	
20-Jun-19	11:45	6	Cal 500.0 ppb	70221	492.593	
20-Jun-19	11:47	7	Cal 1000.0 ppb	143822	1008.034	
20-Jun-19	11:49	8	Cal 2500.0 ppb	357186	2497.378	
20-Jun-19	11:51	9	Cal 5000.0 ppb	718148	5000.402	
20-Jun-19	11:53	0	blank	-240	-1.676	LO
20-Jun-19	11:55	0	read baseline	0	0.009	BL
20-Jun-19	11:57	10	ICVL 500.0 ppb	72836	510.920	
20-Jun-19	11:59	11	ICV 2500.0 ppb	355531	2485.853	
20-Jun-19	12:01	1	ICB	-138	-0.963	LO
20-Jun-19	12:03	0	read baseline	0	0.009	BL
20-Jun-19	12:05	8	LCS	349935	2446.885	
20-Jun-19	12:07	8	LCSD	343424	2401.536	
20-Jun-19	12:09	12	MB	168	1.186	
20-Jun-19	12:11	13	280-124817-c-1	215	1.521	
20-Jun-19	12:13	14	MS 280-124817-c-1	136739	958.471	
20-Jun-19	12:15	15	MSD 280-124817-c-1	145529	1019.982	
20-Jun-19	12:17	16	280-124817-a-2	1165	8.190	
20-Jun-19	12:19	17	280-124830-m-1	189259	66290.531	
20-Jun-19	12:21	18	280-124830-m-2	347174	242765.438	
20-Jun-19	12:23	19	280-124830-m-3	189201	265081.312	
20-Jun-19	12:25	20	280-124830-n-4	345178	120687.430	
20-Jun-19	12:27	21	280-124830-m-5	272319	38117.023	
20-Jun-19	12:29	22	280-124820-c-1	41034	287.948	
20-Jun-19	12:31	0	Rinse	-75	-0.518	LO
20-Jun-19	12:33	0	Read Baseline	0	0.009	BL
20-Jun-19	12:35	6	CCVL 500 ppb	68326	479.309	
20-Jun-19	12:37	8	CCV 2500 ppb	361531	2527.631	
20-Jun-19	12:39	12	CCB	-19	-0.126	LO
20-Jun-19	12:41	0	Read Baseline	0	0.009	BL
20-Jun-19	12:43	23	280-124820-c-2	2268	15.933	
20-Jun-19	12:45	24	280-124820-c-3	13137	92.222	
20-Jun-19	12:47	25	280-124817-d-3	21699	152.305	
20-Jun-19	12:49	26	MS 280-124817-d-3	155211	1087.718	
20-Jun-19	12:51	27	MSD 280-124817-d-3	165664	1160.838	
20-Jun-19	12:53	28	280-125121-b-1	5068	35.588	
20-Jun-19	12:55	29	280-125121-b-2	5959	41.844	
20-Jun-19	12:57	30	280-125121-b-3	4193	29.441	
20-Jun-19	12:59	31	280-125163-c-5	68458	480.232	
20-Jun-19	13:01	32	280-124902-e	3225011	218085.922	07/31/2019

Result path C:\FLOW_4\062019A.RST
 Sample table path C:\FLOW_4\062019.tbl
 Method path C:\FLOW_4\nh3.mth
 Date acquired 20-Jun-19
 Time acquired 15:47

Date	Time	Cup	Name	Response	Ammonia	
					Calc [ppb]	Flags
20-Jun-19	13:03	0	Rinse	1502	10.553	FL
20-Jun-19	13:05	0	Read Baseline	0	0.009	BL
20-Jun-19	13:07	6	CCVL 500 ppb	67714	475.022	
20-Jun-19	13:09	8	CCV 2500 ppb	353830	2474.008	
20-Jun-19	13:11	12	CCB	-400	-2.801	LO
20-Jun-19	13:13	0	Read Baseline	0	0.009	BL
20-Jun-19	13:15	33	280-125164-a-2	24622	172.816	
20-Jun-19	13:17	34	280-125164-a-3	17171	120.534	
20-Jun-19	13:19	35	280-125164-a-4	5520	38.762	
20-Jun-19	13:21	36	280-124912-d-8	365413	5109.309	
20-Jun-19	13:23	0	Rinse	-259	-1.812	LO
20-Jun-19	13:25	0	Read Baseline	0	0.009	BL
20-Jun-19	13:27	6	CCVL 500 ppb	71878	504.206	
20-Jun-19	13:29	8	CCV 2500 ppb	301367	2108.447	
20-Jun-19	13:31	12	CCB	-142	-0.985	LO
20-Jun-19	13:33	0	Read Baseline	0	0.009	BL
20-Jun-19	13:35	8	LCS	359260	2511.815	
20-Jun-19	13:37	8	LCSD	354251	2476.937	
20-Jun-19	13:39	12	MB	-220	-1.537	LO
20-Jun-19	13:41	37	280-124817-f-4	2801	19.670	
20-Jun-19	13:43	38	MS 280-124817-f-4	147154	1031.350	
20-Jun-19	13:45	39	MSD 280-124817-f-4	152787	1070.764	
20-Jun-19	13:47	40	280-124819-d-1	66930	9390.463	
20-Jun-19	13:49	41	280-125172-f-1	-176	-1.229	LO
20-Jun-19	13:51	42	280-125249-a-1	-433	-3.033	LO
20-Jun-19	13:59	0	Rinse	-15	-0.095	LO
20-Jun-19	14:01	0	Read Baseline	0	0.009	BL
20-Jun-19	14:03	6	CCVL 500 ppb	65774	461.420	
20-Jun-19	14:05	8	CCV 2500 ppb	342589	2395.718	
20-Jun-19	14:07	8	CCV 2500 ppb	348893	2439.628	
20-Jun-19	14:09	12	CCB	-122	-0.847	LO
20-Jun-19	14:11	0	Read Baseline	0	0.009	BL
20-Jun-19	14:13	8	LCS	322523	2255.916	
20-Jun-19	14:15	8	LCSD	362174	2532.110	
20-Jun-19	14:17	12	MB	-120	-0.836	LO
20-Jun-19	14:19	37	280-124817-f-4	3336	23.430	
20-Jun-19	14:21	38	MS 280-124817-f-4	149915	1050.667	
20-Jun-19	14:23	39	MSD 280-124817-f-4	151727	1063.347	
20-Jun-19	14:25	40	280-124819-d-1	67629	9488.404	
20-Jun-19	14:27	41	280-125172-f-1	-96	-0.667	LO
20-Jun-19	14:29	42	280-125249-a-1	-177	-1.236	LO
20-Jun-19	14:31	43	280-125249-a-2	-84	-0.583	LO
20-Jun-19	14:33	44	280-125249-a-3	-158	-1.097	LO
20-Jun-19	14:35	45	280-125249-a-4	-329	-2.301	LO
20-Jun-19	14:37	46	280-125249-a-5	-481	-3.365	LO
20-Jun-19	14:39	0	Rinse	200	1.413	
20-Jun-19	14:41	0	Read Baseline	0	0.009	BL
20-Jun-19	14:43	6	CCVL 500 ppb	70189	492.366	
20-Jun-19	14:45	8	CCV 2500 ppb	349500	2443.854	
20-Jun-19	14:47	12	CCB	-341	-2.385	LO
20-Jun-19	14:49	0	Read Baseline	0	0.009	BL
20-Jun-19	14:51	47	280-124800-b-3	183881	12882.167	
20-Jun-19	14:53	48	280-125007-c-1	142023	995.446	
20-Jun-19	14:55	49	280-124817-d-5	2629	18.464	
20-Jun-19	14:57	50	MS 280-124817-d-5	150594	1055.419	
20-Jun-19	14:59	51	MSD 280-124817-d-5	142267	997.155	
20-Jun-19	15:01	52	280-124800-b-3	444907	621515.938	07/31/2019

Result path C:\FLOW_4\062019A.RST
 Sample table path C:\FLOW_4\062019.tbl
 Method path C:\FLOW_4\nh3.mth
 Date acquired 20-Jun-19
 Time acquired 15:47

| ----- Ammonia ----- |

Date	Time	Cup	Name	Response	Calc [ppb]	Flags
20-Jun-19	15:03	53	280-124800-b-41	438088	612038.125	
20-Jun-19	15:05	54	280-124800-b-39	752216	1047113.250	
20-Jun-19	15:07	55	280-124800-b-37	48293	169427.125	
20-Jun-19	15:09	56	280-124800-b-32	1053	7.400	
20-Jun-19	15:11	0	Rinse	-116	-0.808	LO
20-Jun-19	15:13	0	Read Baseline	0	0.009	BL
20-Jun-19	15:15	6	CCVL 500 ppb	66695	467.879	
20-Jun-19	15:17	8	CCV 2500 ppb	356858	2495.096	
20-Jun-19	15:19	12	CCB	-9	-0.056	LO
20-Jun-19	15:21	0	Read Baseline	0	0.009	BL
20-Jun-19	15:23	57	280-124800-b-31	8079	56.719	
20-Jun-19	15:25	58	280-124800-b-30	6290	44.165	
20-Jun-19	15:27	59	.280-124800-b-8	2927889	19868.963	HI
20-Jun-19	15:29	60	280-124672-b-7	-930	-6.521	LO FL
20-Jun-19	15:31	0	Rinse	217	1.534	
20-Jun-19	15:33	0	Read Baseline	0	0.009	BL
20-Jun-19	15:35	6	CCVL 500 ppb	72550	508.917	
20-Jun-19	15:37	8	CCV 2500 ppb	343894	2404.807	
20-Jun-19	15:39	12	CCB	-347	-2.430	LO
20-Jun-19	15:41	0	Read Baseline	0	0.009	BL
20-Jun-19	15:43	8	LCS	n/m	n/m	n/m
20-Jun-19	15:45	8	LCSD	n/m	n/m	n/m
20-Jun-19	15:47	12	MB	n/m	n/m	n/m

Peak Table:Ammonia

File name: C:\FLOW_4\062019A.RST

Date: 20-Jun-19

Operator: MJS

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	5	Sync	1	SYNC	1	1	14009	98.341919	
2	0	blk	1	CO	1	1	11	0.083067	LO
B	0	Read Baseline	1	RB	1	1	0	0.009171	BL
4	1	Cal 0.0 PPB	1	C	1	1	-126	-0.877846	LO UM
5	3	Cal 25.0 ppb	1	C	1	1	3725	26.160025	
6	4	Cal 50.0 ppb	1	C	1	1	7254	50.934143	
7	5	Cal 100.0 ppb	1	C	1	1	14298	100.373299	
8	6	Cal 500.0 ppb	1	C	1	1	70221	492.592773	
9	7	Cal 1000.0 ppb	1	C	1	1	143822	1008.034302	
10	8	Cal 2500.0 ppb	1	C	1	1	357186	2497.378174	
11	9	Cal 5000.0 ppb	1	C	1	1	718148	5000.401855	
12	0	blank	1	BLNK	1	1	-240	-1.676305	LO
B	0	read baseline	1	RB	1	1	0	0.009171	BL
14	10	ICVL 500.0 ppb	1	U	1	1	72836	510.919830	
15	11	ICV 2500.0 ppb	1	U	1	1	355531	2485.853027	
16	1	ICB	1	U	1	1	-138	-0.962987	LO
B	0	read baseline	1	RB	1	1	0	0.009171	BL
18	8	LCS	1	U	1	1	349935	2446.885254	
19	8	LCSD	1	U	1	1	343424	2401.535889	
20	12	MB	1	U	1	1	168	1.185689	
21	13	280-124817-c-1	1	U	1	1	215	1.521244	
22	14	MS 280-124817-c-1	1	U	1	1	136739	958.471313	
23	15	MSD 280-124817-c-1	1	U	1	1	145529	1019.981934	
24	16	280-124817-a-2	1	U	1	1	1165	8.189575	
25	17	280-124830-m-1	1	U	50	1	189259	66290.531250	
26	18	280-124830-m-2	1	U	100	1	347174	242765.437500	
27	19	280-124830-m-3	1	U	200	1	189201	265081.312500	
28	20	280-124830-n-4	1	U	50	1	345178	120687.429688	
29	21	280-124830-m-5	1	U	20	1	272319	38117.023438	
30	22	280-124820-c-1	1	U	1	1	41034	287.948486	
31	0	Rinse	1	U	1	1	-75	-0.518419	LO
B	0	Read Baseline	1	RB	1	1	0	0.009171	BL
33	6	CCVL 500 ppb	1	U	1	1	68326	479.308716	
34	8	CCV 2500 ppb	1	U	1	1	361531	2527.630859	
35	12	CCB	1	U	1	1	-19	-0.125806	LO
B	0	Read Baseline	1	RB	1	1	0	0.009171	BL
37	23	280-124820-c-2	1	U	1	1	2268	15.932638	
38	24	280-124820-c-3	1	U	1	1	13137	92.221504	
39	25	280-124817-d-3	1	U	1	1	21699	152.305222	
40	26	MS 280-124817-d-3	1	U	1	1	155211	1087.718018	
41	27	MSD 280-124817-d-3	1	U	1	1	165664	1160.837524	
42	28	280-125121-b-1	1	U	1	1	5068	35.587650	
43	29	280-125121-b-2	1	U	1	1	5959	41.843914	
44	30	280-125121-b-3	1	U	1	1	4193	29.440897	
45	31	280-125163-c-5	1	U	1	1	68458	480.231873	
46	32	280-124902-e-4	1	U	10	1	3225011	218085.921875	HI
47	0	Rinse	1	U	1	1	1502	10.553412	FL
B	0	Read Baseline	1	RB	1	1	0	0.009171	BL
49	6	CCVL 500 ppb	1	U	1	1	67714	475.021912	
50	8	CCV 2500 ppb	1	U	1	1	353830	2474.008057	
51	12	CCB	1	U	1	1	-400	-2.800749	LO
B	0	Read Baseline	1	RB	1	1	0	0.009171	BL
53	33	280-125164-a-2	1	U	1	1	24622	172.815979	
54	34	280-125164-a-3	1	U	1	1	17171	120.534363	
55	35	280-125164-a-4	1	U	1	1	5520	38.762230	
56	36	280-124912-d-8	1	U	2	1	365413	5109.309082	
57	0	Rinse	1	U	1	1	-259	-1.811600	LO
B	0	Read Baseline	1	RB	1	1	0	0.009171	BL
59	6	CCVL 500 ppb	1	U	1	1	71878	504.205872	
60	8	CCV 2500 ppb	1	U	1	1	301367	2108.446533	
61	12	CCB	1	U	1	1	-142	-0.985256	LO
B	0	Read Baseline	1	RB	1	1	0	0.009171	BL
63	8	LCS	1	U	1	1	359260	2511.814697	
64	8	LCSD	1	U	1	1	354251	2476.936768	
65	12	MB	1	U	1	1	-220	-1.537414	LO
66	37	280-124817-f-4	1	U	1	1	2801	19.670092	
67	38	MS 280-124817-f-4	1	U	1	1	147154	1031.349976	
68	39	MSD 280-124817-f-4	1	U	1	1	152787	1070.764404	
69	40	280-124819-d-1	1	U	20	1	66930	9390.462891	
70	41	280-125172-f-1	1	U	1	1	-176	-1.229086	LO

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	42	280-125249-a-1	1	U		1	-433	-3.033412	LO
72	0	Rinse		U		1	-15	-0.094745	LO
B	0	Read Baseline	1	RB		1	0	0.009171	BL
74	6	CCVL 500 ppb	1	U		1	65774	461.420319	
75	8	CCV 2500 ppb	1	U		1	342589	2395.717529	
76	8	CCV 2500 ppb	2	U		1	348893	2439.628174	
77	12	CCB	1	U		1	-122	-0.847230	LO
B	0	Read Baseline	1	RB		1	0	0.009171	BL
79	8	LCS	1	U		1	322523	2255.915771	
80	8	LCSD	1	U		1	362174	2532.110352	
81	12	MB	1	U		1	-120	-0.835633	LO
82	37	280-124817-f-4	1	U		1	3336	23.430231	
83	38	MS 280-124817-f-4	1	U		1	149915	1050.666992	
84	39	MSD 280-124817-f-4	1	U		1	151727	1063.347290	
85	40	280-124819-d-1	1	U		20	67629	9488.404297	
86	41	280-125172-f-1	1	U		1	-96	-0.667284	LO
87	42	280-125249-a-1	1	U		1	-177	-1.236361	LO
88	43	280-125249-a-2	1	U		1	-84	-0.582846	LO
89	44	280-125249-a-3	1	U		1	-158	-1.096777	LO
90	45	280-125249-a-4	1	U		1	-329	-2.300503	LO
91	46	280-125249-a-5	1	U		1	-481	-3.364987	LO
92	0	Rinse	1	U		1	200	1.413402	
B	0	Read Baseline	1	RB		1	0	0.009171	BL
94	6	CCVL 500 ppb	1	U		1	70189	492.366455	
95	8	CCV 2500 ppb	1	U		1	349500	2443.854492	
96	12	CCB	1	U		1	-341	-2.384769	LO
B	0	Read Baseline	1	RB		1	0	0.009171	BL
98	47	280-124800-b-3	1	U		10	183881	12882.166992	
99	48	280-125007-c-1	1	U		1	142023	995.446289	
100	49	280-124817-d-5	1	U		1	2629	18.464222	
101	50	MS 280-124817-d-5	1	U		1	150594	1055.419434	
102	51	MSD 280-124817-d-5	1	U		1	142267	997.155212	
103	52	280-124800-b-40	1	U		200	444907	621515.937500	
104	53	280-124800-b-41	1	U		200	438088	612038.125000	
105	54	280-124800-b-39	1	U		200	752216	1047113.250000	
106	55	280-124800-b-37	1	U		500	48293	169427.125000	
107	56	280-124800-b-32	1	U		1	1053	7.400419	
108	0	Rinse	1	U		1	-116	-0.807809	LO
B	0	Read Baseline	1	RB		1	0	0.009171	BL
110	6	CCVL 500 ppb	1	U		1	66695	467.878571	
111	8	CCV 2500 ppb	1	U		1	356858	2495.095947	
112	12	CCB	1	U		1	-9	-0.055576	LO
B	0	Read Baseline	1	RB		1	0	0.009171	BL
114	57	280-124800-b-31	1	U		1	8079	56.719109	
115	58	280-124800-b-30	1	U		1	6290	44.164848	
116	59	.280-124800-b-8	1	U		1	2927889	19868.962891	HI
117	60	280-124672-b-7	1	U		1	-930	-6.521176	LO FL
118	0	Rinse	1	U		1	217	1.534447	
B	0	Read Baseline	1	RB		1	0	0.009171	BL
120	6	CCVL 500 ppb	1	U		1	72550	508.916931	
121	8	CCV 2500 ppb	1	U		1	343894	2404.806885	
122	12	CCB	1	U		1	-347	-2.429803	LO
B	0	Read Baseline	1	RB		1	0	0.009171	BL

Ammonia:Calibration 1: Peak 4-126

File name: C:\FLOW_4\062019A.RST

Date: 20-Jun-19

Operator: MJS

* Name	Conc	Height
* Cal 0.0 PPB	0.000000	-126.348999
* Cal 25.0 ppb	25.000000	3725.158447
* Cal 50.0 ppb	50.000000	7254.494629
* Cal 100.0 ppb	100.000000	14298.475586
* Cal 500.0 ppb	500.000000	70221.179688
* Cal 1000.0 ppb	1000.000000	143821.640625
* Cal 2500.0 ppb	2500.000000	357186.218750
* Cal 5000.0 ppb	5000.000000	718147.625000

Calib Coef:

x=cyy+by+a

a: (intercept) 9.1706e-03

b: 7.0204e-03

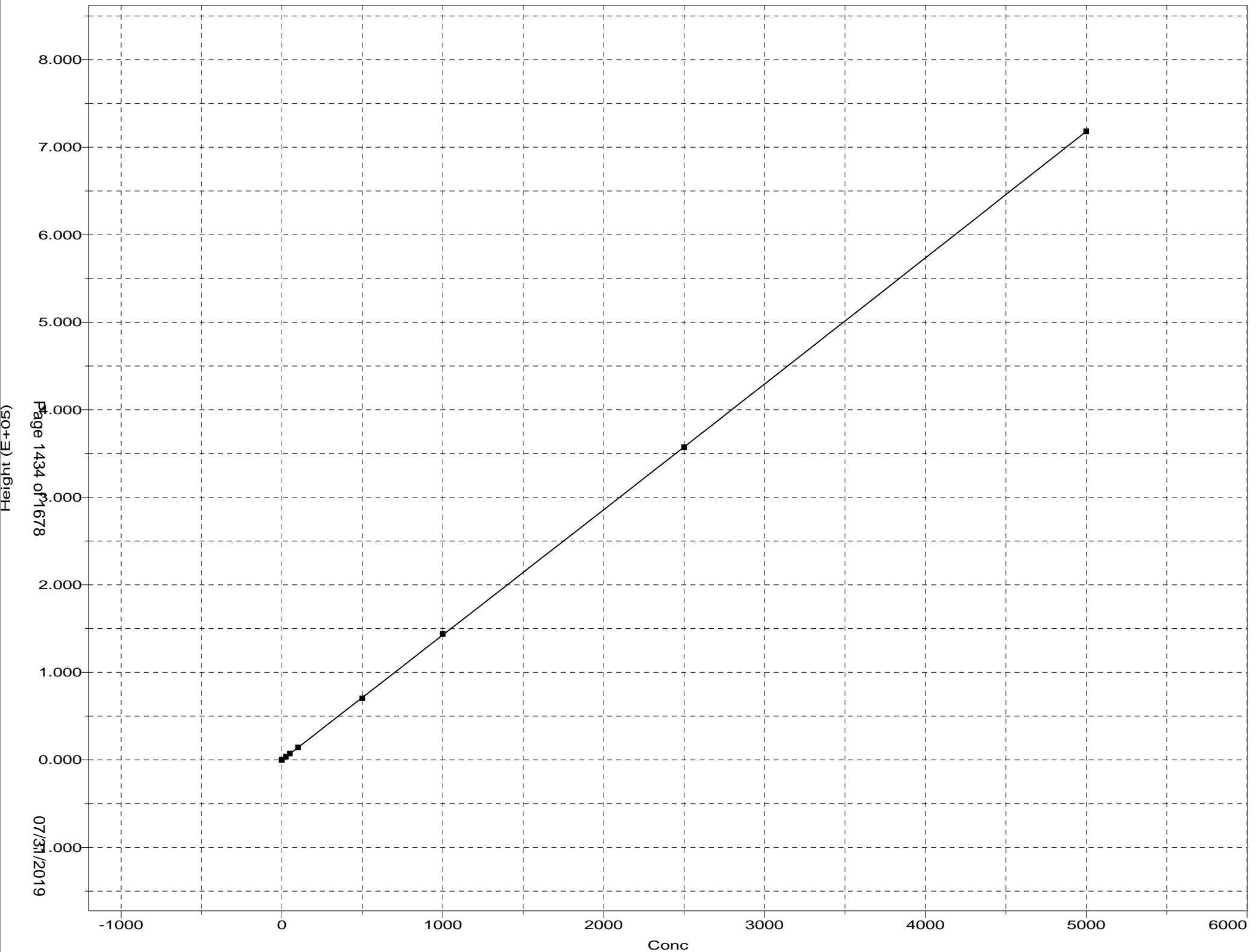
c: -8.0010e-11

Corr Coef: 0.999997

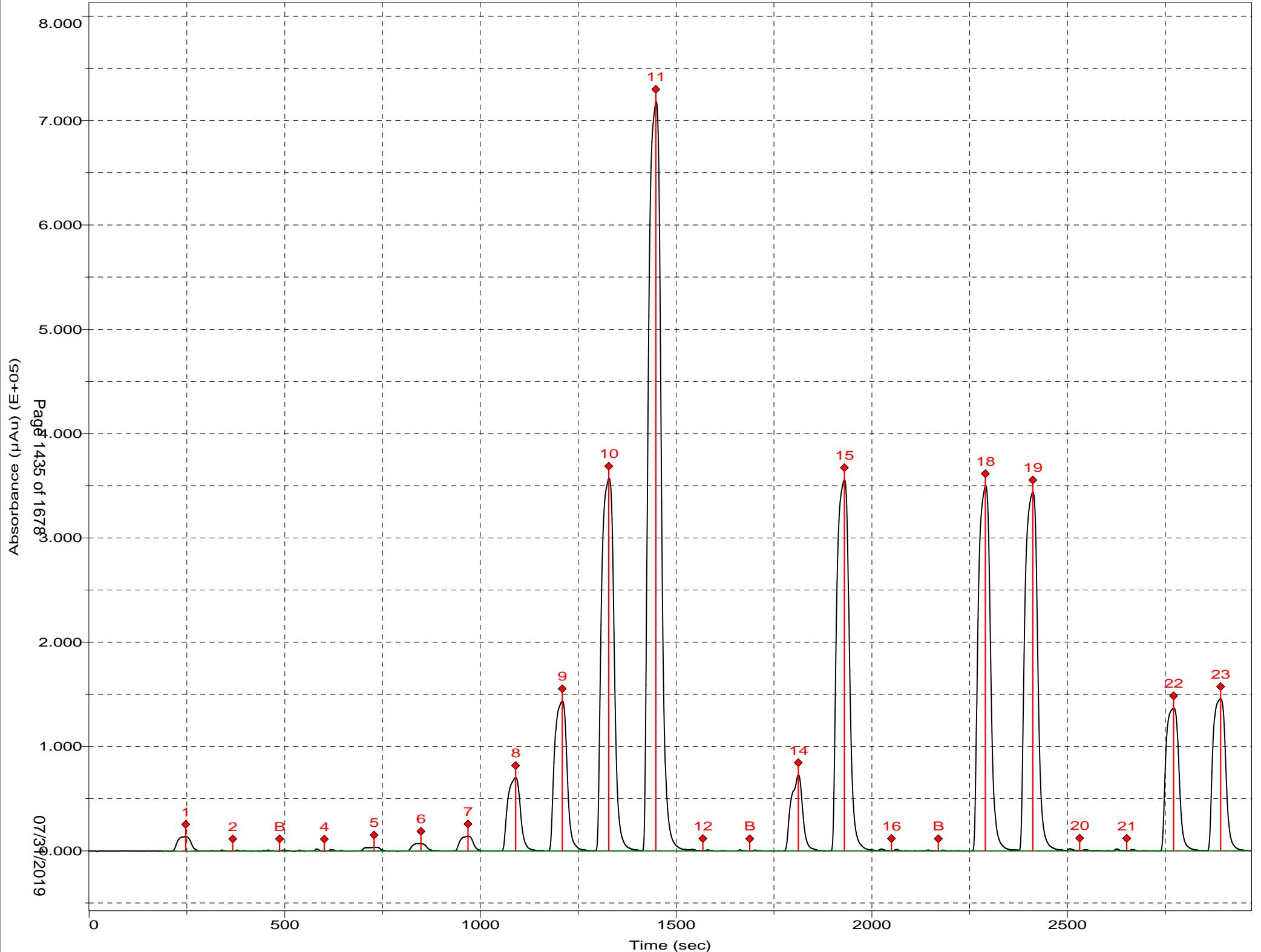
Carryover: 0.0751%

No Drift Peaks

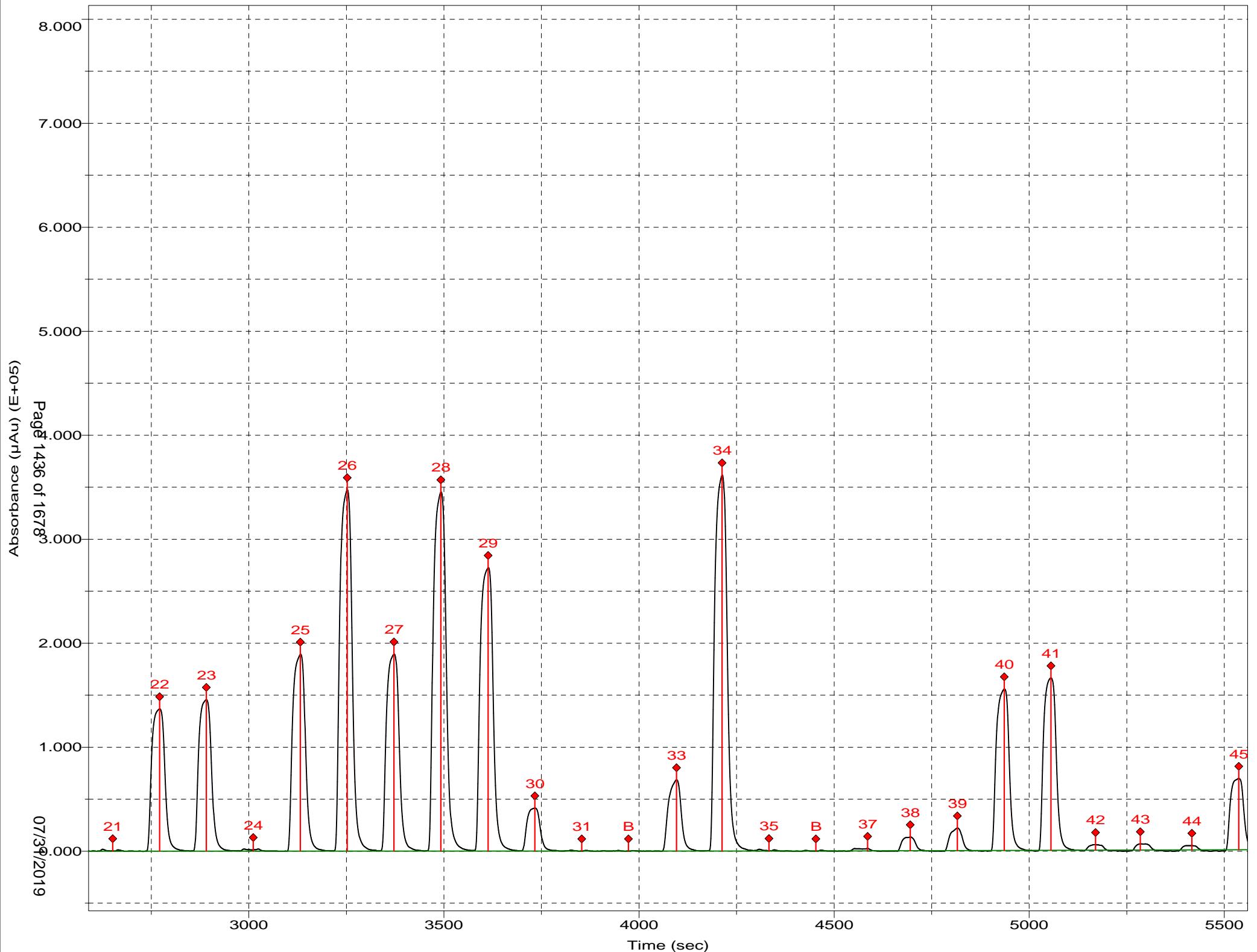
Ammonia:Calibration 1: Peak 4-126



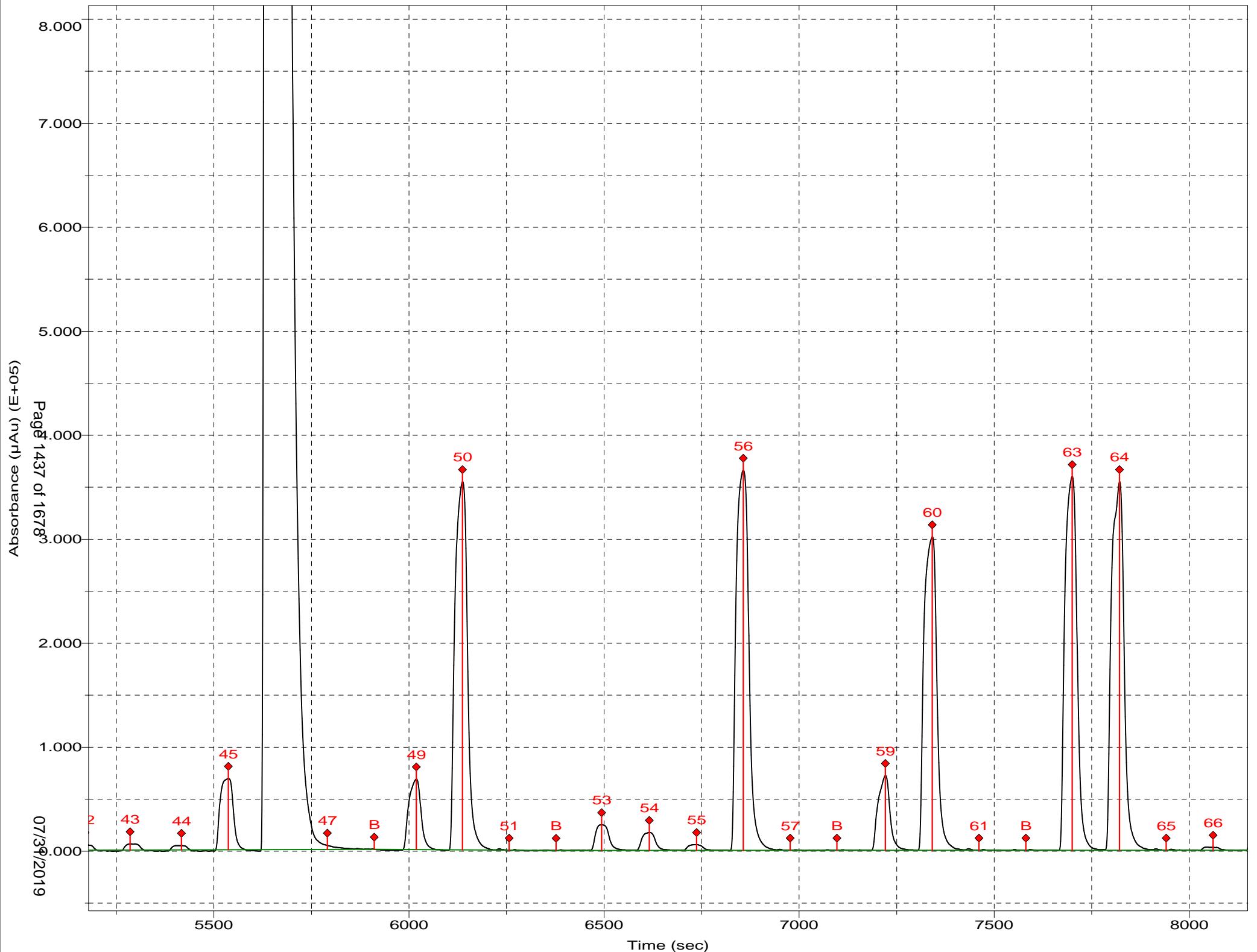
Channel 1: Ammonia



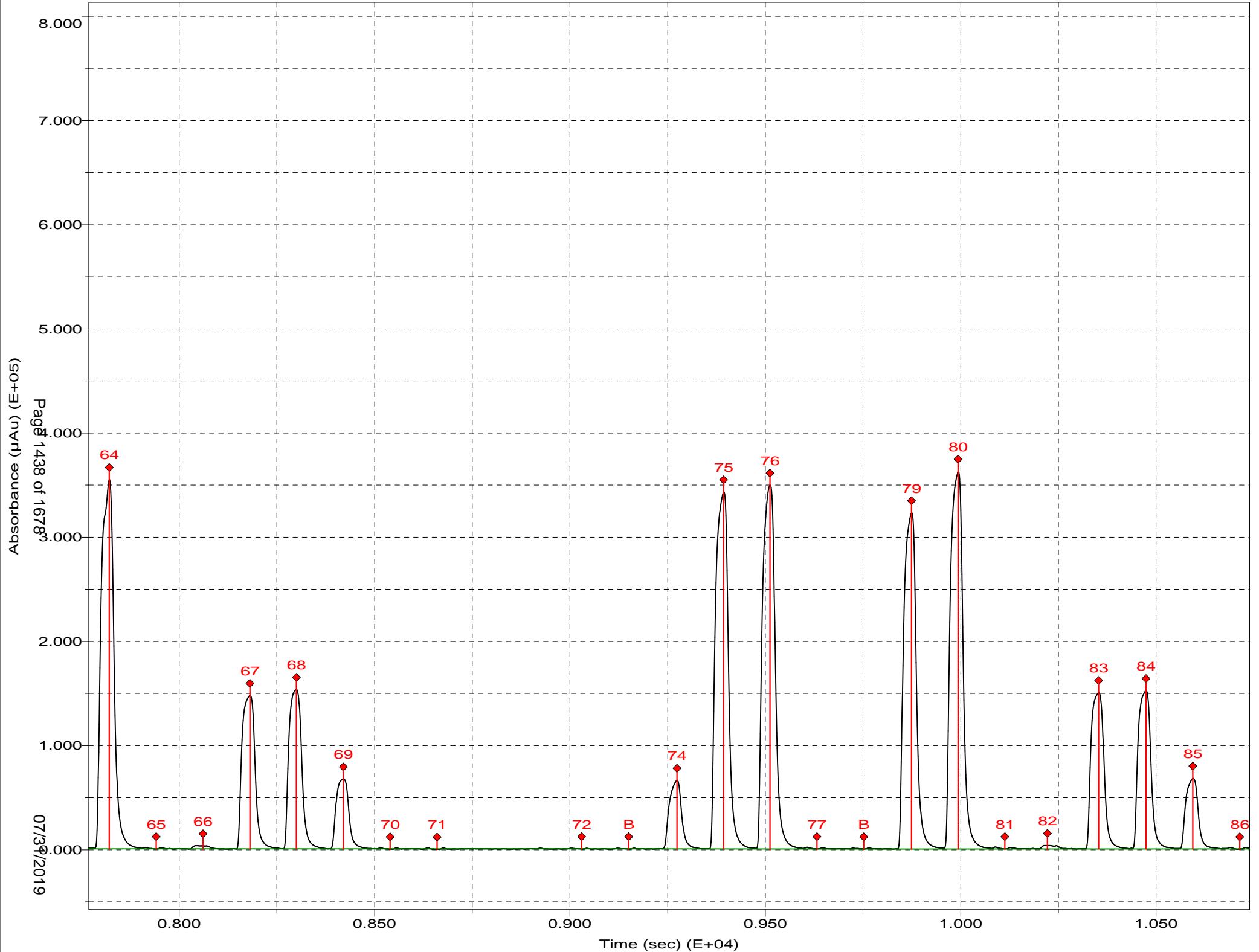
Channel 1: Ammonia



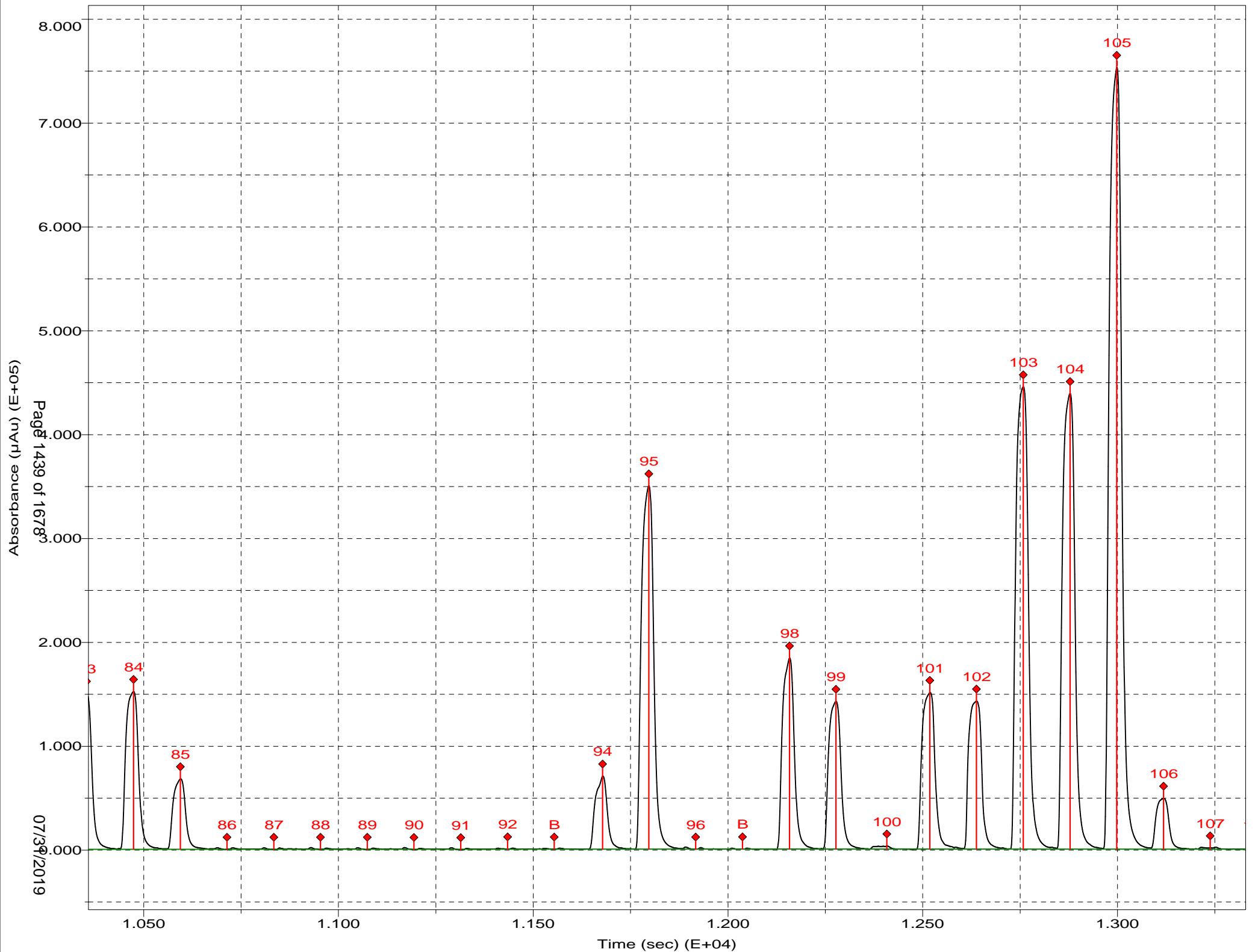
Channel 1: Ammonia



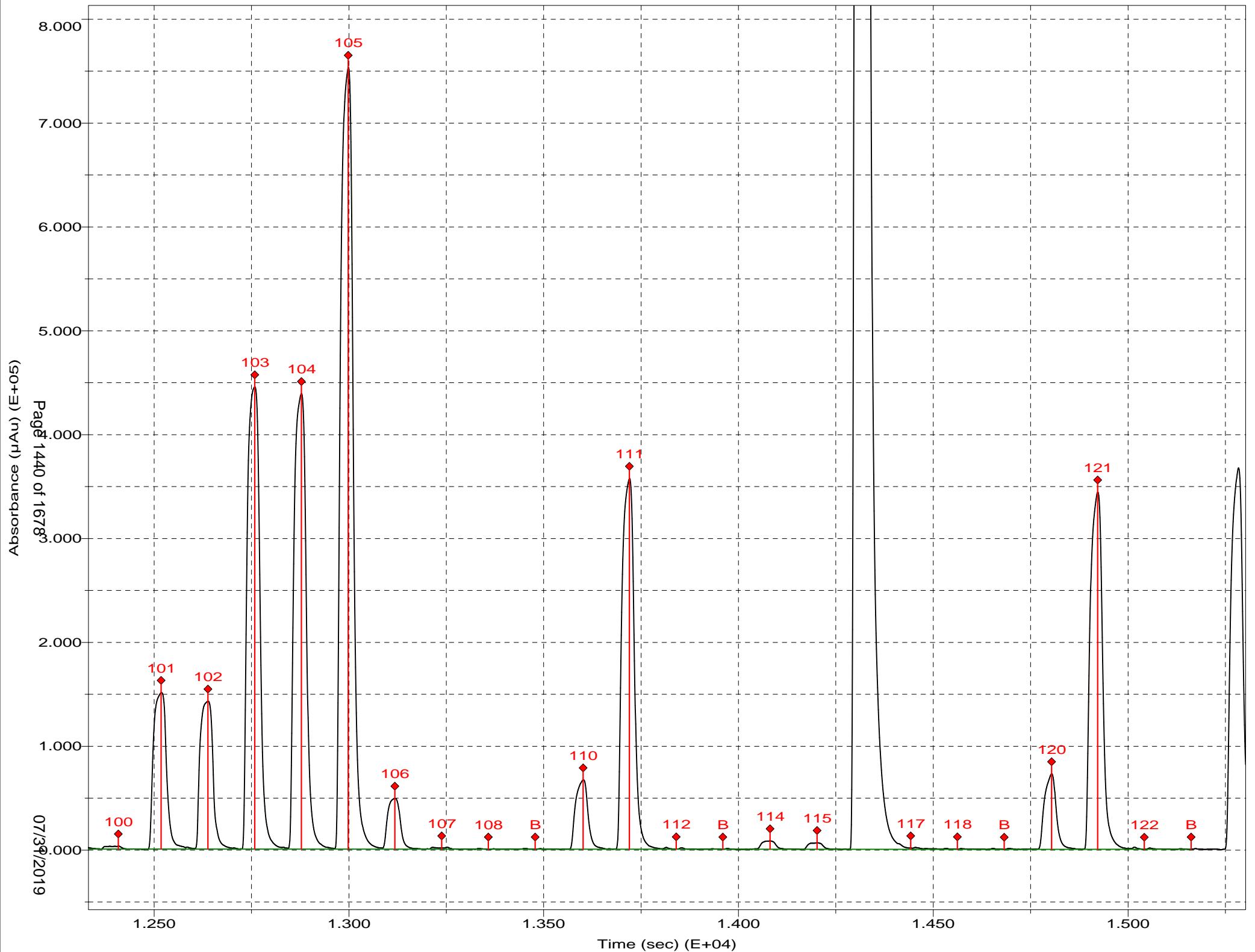
Channel 1: Ammonia



Channel 1: Ammonia



Channel 1: Ammonia



Sample Table for 062519

	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 280-460066/42-A	Unknown	4 ml
14	1:16	ICB 280-460066/43-A	Unknown	4 ml
15	1:17	xLCS 280-462534/1-A	Unknown	4 ml
16	1:18	MB 280-462534/2-A	Unknown	4 ml
17	1:19	280-124912-C-4-A	Unknown	4 ml
18	1:20	280-124912-C-4-C MS	Unknown	4 ml
19	1:21	280-124912-C-4-B MS	Unknown	4 ml
20	1:22	w	Blank	4 ml
21	1:23	280-124912-C-1-A	Unknown	4 ml
22	1:24	280-124912-C-2-A	Unknown	4 ml
23	1:25	280-124912-C-3-A	Unknown	4 ml
24	1:26	280-124912-C-6-A	Unknown	4 ml
25	1:27	280-124912-C-7-A	Unknown	4 ml
26	1:28	280-124912-C-8-A	Unknown	4 ml
27	1:29	280-124912-C-9-A	Unknown	4 ml
28	1:30	LCS 280-462534/1-A	Unknown	4 ml
29	1:31	CCV 280-460066/44-A	Unknown	4 ml
30	1:32	CCB 280-460066/45-A	Unknown	4 ml
31	1:33	280-124912-C-10-A	Unknown	4 ml
32	1:34	280-124912-C-11-A	Unknown	4 ml
33	1:35	280-124912-C-5-A	Unknown	4 ml
34	1:36	280-124912-C-5-B MS	Unknown	4 ml
35	1:37	280-124912-C-5-C MS	Unknown	4 ml
36	1:38	w	Blank	4 ml
37	1:39	280-124928-C-7-A	Unknown	4 ml
38	1:40	280-124928-C-8-A	Unknown	4 ml
39	1:41	280-124928-C-9-A	Unknown	4 ml
40	1:42	280-124928-C-14-A	Unknown	4 ml
41	1:43	280-124928-C-15-A	Unknown	4 ml
42	1:44	w	Blank	4 ml
43	1:45	CCV 280-460066/44-A	Unknown	4 ml
44	1:46	CCB 280-460066/45-A	Unknown	4 ml

Sample Table for 062519

	Position Identifier	Type	Cup Type	
45	1:47	280-124928-C-16-A	Unknown	4 ml
46	1:48	280-124718-F-1-A	Unknown	4 ml
47	1:49	280-124718-F-2-A	Unknown	4 ml
48	1:50	280-124718-G-3-A	Unknown	4 ml
49	1:51	w	Blank	4 ml
50	1:52	xLCS 280-462534/27-A	Unknown	4 ml
51	1:53	MB 280-462534/28-A	Unknown	4 ml
52	1:54	280-124912-C-12-A	Unknown	4 ml
53	1:55	280-124912-C-12-B M:	Unknown	4 ml
54	1:56	280-124912-C-12-C M	Unknown	4 ml
55	1:57	280-124718-F-1-A	Unknown	4 ml
56	1:58	w	Blank	4 ml
57	1:59	CCV 280-460066/44-A	Unknown	4 ml
58	1:60	CCB 280-460066/45-A	Unknown	4 ml
59	2:1	280-124738-J-1-A	Unknown	4 ml
60	2:2	280-124738-J-2-A	Unknown	4 ml
61	2:3	280-125145-A-1-A	Unknown	4 ml
62	2:4	280-125147-A-1-A	Unknown	4 ml
63	2:5	280-125109-C-4-A	Unknown	4 ml
64	2:6	280-124724-B-2-A	Unknown	4 ml
65	2:7	280-124902-D-1-A	Unknown	4 ml
66	2:8	280-124819-E-1-A	Unknown	4 ml
67	2:9	280-124718-F-2-A	Unknown	4 ml
68	2:10	280-124718-G-3-A	Unknown	4 ml
69	2:11	w	Blank	4 ml
70	2:12	CCV 280-460066/44-A	Unknown	4 ml
71	2:13	CCB 280-460066/45-A	Unknown	4 ml
72	2:14	LCS 280-462534/40-A	Unknown	4 ml
73	2:15	MB 280-462534/41-A	Unknown	4 ml
74	2:16	280-124659-A-1-A	Unknown	4 ml
75	2:17	280-124659-A-1-A	Unknown	4 ml
76	2:18	280-124659-A-1-A	Unknown	4 ml
77	2:19	280-124659-A-1-B	Unknown	4 ml
78	2:20	280-124659-A-1-B	Unknown	4 ml
79	2:21	LCS 280-462534/27-A	Unknown	4 ml
80	2:22	w	Blank	4 ml
81	2:23	CCV 280-460066/44-A	Unknown	4 ml
82	2:24	CCB 280-460066/45-A	Unknown	4 ml
83	2:25	280-124718-F-1-A	Unknown	4 ml
84	2:26	280-124738-J-1-A	Unknown	4 ml
85	2:27	280-125147-A-1-A	Unknown	4 ml
86	2:28	280-124902-D-1-A	Unknown	4 ml
87	2:29	280-124819-E-1-A	Unknown	4 ml
88	2:30	280-124659-A-1-B	Unknown	4 ml

Sample Table for 062519

		Position Identifier	Type	Cup Type
89	2:31	280-124659-A-1-B	Unknown	4 ml
90	2:32	w	Blank	4 ml
91	2:33	CCV 280-460066/44-A	Unknown	4 ml
92	2:34	CCB 280-460066/45-A	Unknown	4 ml

Run Name: 062519

Configuration: TKN

Run date: 6/25/2019

TKN

Position	Identifier	Type	Comme	Date	Time	total	Cor Ht	mg/l
1	1:1	SYNC	SYNC	50;351.2	6/25/2019 6:47:09 PM	1	0.89789	9.993
2	1:2	CO	Carry over		6/25/2019 6:47:40 PM	1	0.00155	-0.772
3	1:3	w	Blank		6/25/2019 6:48:55 PM	1	0.00105	-0.778
4	1:4	W	Wash		6/25/2019 6:50:10 PM	1	0.00000	-0.790
5	1:5	C1	Calibrant		6/25/2019 6:51:25 PM	1	0.08677	0.252
6	1:6	C2	Calibrant		6/25/2019 6:52:40 PM	1	0.13931	0.883
7	1:7	C3	Calibrant		6/25/2019 6:53:55 PM	1	0.24681	2.174
8	1:8	C4	Calibrant		6/25/2019 6:55:09 PM	1	0.51168	5.355
9	1:9	C5	Calibrant		6/25/2019 6:56:24 PM	1	0.69845	7.598
10	1:10	C6	Calibrant		6/25/2019 6:57:39 PM	1	0.87668	9.738
		Curve #:						1
		Curve Type:						Linear
		Correlation:						0.99791
		Intercept:						0.065796
		Linear coef:						0.083266
11	1:13	w	Blank		6/25/2019 6:58:54 PM	1	0.00079	-0.781
12	1:14	W	Wash		6/25/2019 7:00:09 PM	1	0.00000	-0.790
13	1:15	ICV 280-460066/42-A	Unknown		6/25/2019 7:01:24 PM	1	0.47046	4.860
14	1:16	ICB 280-460066/43-A	Unknown		6/25/2019 7:02:39 PM	1	0.03615	-0.356
15	1:17	xLCS 280-462534/1-A	Unknown		6/25/2019 7:03:54 PM	1	0.04156	-0.291
16	1:18	MB 280-462534/2-A	Unknown		6/25/2019 7:05:09 PM	1	0.03090	-0.419
17	1:19	280-124912-C-4-A	Unknown		6/25/2019 7:06:24 PM	1	0.04102	-0.298
18	1:20	280-124912-C-4-C MS	Unknown		6/25/2019 7:07:39 PM	1	0.28113	2.586
19	1:21	280-124912-C-4-B MSD	Unknown		6/25/2019 7:08:54 PM	1	0.30110	2.826
20	1:22	w	Blank		6/25/2019 7:10:09 PM	1	0.00135	-0.774
21	1:23	280-124912-C-1-A	Unknown		6/25/2019 7:11:24 PM	1	0.12250	0.681
22	1:24	280-124912-C-2-A	Unknown		6/25/2019 7:12:39 PM	1	0.02816	-0.452
23	0	AutoWash	AutoWash		6/25/2019 7:13:54 PM	1	-0.00004	-0.791
24	0	AutoWash	AutoWash		6/25/2019 7:15:09 PM	1	0.00000	-0.790
25	1:25	280-124912-C-3-A	Unknown		6/25/2019 7:16:25 PM	1	0.12294	0.686
26	1:26	280-124912-C-6-A	Unknown		6/25/2019 7:17:40 PM	1	0.17266	1.283
27	1:27	280-124912-C-7-A	Unknown		6/25/2019 7:18:55 PM	1	0.02901	-0.442
28	1:28	280-124912-C-8-A	Unknown		6/25/2019 7:20:10 PM	1	0.65461	7.071
29	1:29	280-124912-C-9-A	Unknown		6/25/2019 7:21:25 PM	1	0.10053	0.417
30	1:30	LCS 280-462534/1-A	Unknown		6/25/2019 7:22:40 PM	1	0.53162	5.594
31	1:31	CCV 280-460066/44-A	Unknown		6/25/2019 7:23:55 PM	1	0.47942	4.968
32	1:32	CCB 280-460066/45-A	Unknown		6/25/2019 7:25:10 PM	1	0.03685	-0.348
33	1:33	280-124912-C-10-A	Unknown		6/25/2019 7:26:25 PM	1	0.13452	0.825
34	1:34	280-124912-C-11-A	Unknown		6/25/2019 7:27:40 PM	1	0.14361	0.935
35	0	AutoWash	AutoWash		6/25/2019 7:28:55 PM	1	0.00011	-0.789
36	0	AutoWash	AutoWash		6/25/2019 7:30:09 PM	1	0.00000	-0.790
37	1:35	280-124912-C-5-A	Unknown		6/25/2019 7:31:24 PM	1	0.07513	0.112
38	1:36	280-124912-C-5-B MS	Unknown	Page 144 of 1678	6/25/2019 7:32:39 PM	1	0.30794	2.908

TKN

Position	Identifier	Type	Comme	Date	Time	total	Cor Ht	mg/l
39	1:37	280-124912-C-5-C MSD	Unknown		6/25/2019 7:33:54 PM	1	0.31211	2.958
40	1:38	w	Blank		6/25/2019 7:35:09 PM	1	0.00063	-0.783
41	1:39	280-124928-C-7-A	Unknown		6/25/2019 7:36:24 PM	1	0.22036	1.856
42	1:40	280-124928-C-8-A	Unknown		6/25/2019 7:37:39 PM	1	0.10772	0.503
43	1:41	280-124928-C-9-A	Unknown		6/25/2019 7:38:54 PM	1	0.06521	-0.007
44	1:42	280-124928-C-14-A	Unknown		6/25/2019 7:40:09 PM	1	0.07108	0.063
45	1:43	280-124928-C-15-A	Unknown		6/25/2019 7:41:24 PM	1	0.05658	-0.111
46	1:44	w	Blank		6/25/2019 7:42:39 PM	1	0.00107	-0.777
47	0	AutoWash	AutoWash		6/25/2019 7:43:54 PM	1	0.00025	-0.787
48	0	AutoWash	AutoWash		6/25/2019 7:45:09 PM	1	0.00000	-0.790
49	1:45	CCV 280-460066/44-A	Unknown		6/25/2019 7:46:24 PM	1	0.47718	4.941
50	1:46	CCB 280-460066/45-A	Unknown		6/25/2019 7:47:39 PM	1	0.03675	-0.349
51	1:47	280-124928-C-16-A	Unknown		6/25/2019 7:48:54 PM	1	0.40245	4.043
52	1:48	280-124718-F-1-A	Unknown		6/25/2019 7:50:09 PM	1	2.98677	35.080
53	1:49	280-124718-F-2-A	Unknown		6/25/2019 7:51:25 PM	1	2.55224	29.861
54	1:50	280-124718-G-3-A	Unknown		6/25/2019 7:52:40 PM	1	2.51538	29.419
55	1:51	w	Blank		6/25/2019 7:53:55 PM	1	0.00370	-0.746
56	1:52	xLCS 280-462534/27-A	Unknown		6/25/2019 7:55:10 PM	1	0.04134	-0.294
57	1:53	MB 280-462534/28-A	Unknown		6/25/2019 7:56:25 PM	1	0.03786	-0.335
58	1:54	280-124912-C-12-A	Unknown		6/25/2019 7:57:40 PM	1	0.09723	0.377
59	0	AutoWash	AutoWash		6/25/2019 7:58:55 PM	1	-0.00039	-0.795
60	0	AutoWash	AutoWash		6/25/2019 8:00:10 PM	1	0.00000	-0.790
61	1:55	280-124912-C-12-B MS	Unknown		6/25/2019 8:01:25 PM	1	0.19628	1.567
62	1:56	280-124912-C-12-C MSD	Unknown		6/25/2019 8:02:40 PM	1	0.25547	2.278
63	1:57	280-124718-F-1-A	Unknown		6/25/2019 8:03:54 PM	5	0.98325	55.092
64	1:58	w	Blank		6/25/2019 8:05:09 PM	1	0.00360	-0.747
65	1:59	CCV 280-460066/44-A	Unknown		6/25/2019 8:06:24 PM	1	0.48081	4.984
66	1:60	CCB 280-460066/45-A	Unknown		6/25/2019 8:07:39 PM	1	0.03840	-0.329
67	2:1	280-124738-J-1-A	Unknown		6/25/2019 8:08:54 PM	1	1.94930	22.620
68	2:2	280-124738-J-2-A	Unknown		6/25/2019 8:10:09 PM	1	0.14626	0.966
69	2:3	280-125145-A-1-A	Unknown		6/25/2019 8:11:24 PM	1	0.03918	-0.320
70	2:4	280-125147-A-1-A	Unknown		6/25/2019 8:12:39 PM	1	2.00303	23.266
71	0	AutoWash	AutoWash		6/25/2019 8:13:54 PM	1	0.00276	-0.757
72	0	AutoWash	AutoWash		6/25/2019 8:15:09 PM	1	0.00000	-0.790
73	2:5	280-125109-C-4-A	Unknown		6/25/2019 8:16:24 PM	1	0.16945	1.245
74	2:6	280-124724-B-2-A	Unknown		6/25/2019 8:17:39 PM	1	0.05469	-0.133
75	2:7	280-124902-D-1-A	Unknown		6/25/2019 8:18:54 PM	1	2.99403	35.167
76	2:8	280-124819-E-1-A	Unknown		6/25/2019 8:20:09 PM	1	1.62218	18.692
77	2:9	280-124718-F-2-A	Unknown		6/25/2019 8:21:24 PM	10	0.31216	29.587
78	2:10	280-124718-G-3-A	Unknown		6/25/2019 8:22:39 PM	10	0.29606	27.654
79	2:11	w	Blank		6/25/2019 8:23:54 PM	1	0.00107	-0.777
80	2:12	CCV 280-460066/44-A	Unknown		6/25/2019 8:25:09 PM	1	0.49121	5.109
81	2:13	CCB 280-460066/45-A	Unknown		6/25/2019 8:26:25 PM	1	0.03825	-0.331
82	2:14	LCS 280-462534/40-A	Unknown		6/25/2019 8:27:40 PM	1	0.54805	5.792
83	0	AutoWash	AutoWash		6/25/2019 8:28:55 PM	1	0.00077	-0.781
84	0	AutoWash	AutoWash		6/25/2019 8:30:09 PM	1	0.00000	-0.790
85	2:15	MB 280-462534/41-A	Unknown		6/25/2019 8:31:25 PM	1	0.03659	-0.351
86	2:16	280-124659-A-1-A	Unknown		6/25/2019 8:32:40 PM	5	3.10898	182.738

TKN

Position	Identifier	Type	Commei	Date	Time	total	Cor Ht	mg/l
87	2:17	280-124659-A-1-A	Unknown		6/25/2019 8:33:55 PM	10	3.10554	365.062
88	2:18	280-124659-A-1-A	Unknown		6/25/2019 8:35:10 PM	20	2.93026	688.025
89	2:19	280-124659-A-1-B	Unknown		6/25/2019 8:36:25 PM	1	3.08924	36.311
90	2:20	280-124659-A-1-B	Unknown		6/25/2019 8:37:40 PM	5	3.06770	180.259
91	2:21	LCS 280-462534/27-A	Unknown		6/25/2019 8:38:54 PM	1	0.56333	5.975
92	2:22	w	Blank		6/25/2019 8:40:09 PM	1	0.00451	-0.736
93	2:23	CCV 280-460066/44-A	Unknown		6/25/2019 8:41:24 PM	1	0.48245	5.004
94	2:24	CCB 280-460066/45-A	Unknown		6/25/2019 8:42:39 PM	1	0.03813	-0.332
95	0	AutoWash	AutoWash		6/25/2019 8:43:54 PM	1	0.00073	-0.781
96	0	AutoWash	AutoWash		6/25/2019 8:45:09 PM	1	0.00000	-0.790
97	2:25	280-124718-F-1-A	Unknown		6/25/2019 8:46:24 PM	10	0.50179	52.362
98	2:26	280-124738-J-1-A	Unknown		6/25/2019 8:47:39 PM	5	0.40129	20.146
99	2:27	280-125147-A-1-A	Unknown		6/25/2019 8:48:54 PM	5	0.42834	21.770
100	2:28	280-124902-D-1-A	Unknown		6/25/2019 8:50:09 PM	10	0.70703	77.010
101	2:29	280-124819-E-1-A	Unknown		6/25/2019 8:51:24 PM	5	0.32250	15.415
102	2:30	280-124659-A-1-B	Unknown		6/25/2019 8:52:39 PM	20	1.62119	373.594
103	2:31	280-124659-A-1-B	Unknown		6/25/2019 8:53:54 PM	50	0.36023	176.803
104	2:32	w	Blank		6/25/2019 8:55:09 PM	1	0.00155	-0.772
105	2:33	CCV 280-460066/44-A	Unknown		6/25/2019 8:56:24 PM	1	0.48298	5.010
106	2:34	CCB 280-460066/45-A	Unknown		6/25/2019 8:57:39 PM	1	0.03978	-0.312
107	0	AutoWash	AutoWash		6/25/2019 8:58:54 PM	1	-0.00056	-0.797
108	0	AutoWash	AutoWash		6/25/2019 9:00:09 PM	1	0.00000	-0.790

062519, 6/25/2019 - TKN

-0.15072	0.19195	0.53463	0.87730	1.21997	A B S 1.56264	1.90531	2.24798	2.59065	2.93332	3.27599	3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 24:00 25:00 26:00 27:00 28:00 29:00 30:00 31:00 32:00
S:1	SYNC	9.993									
S:2	CO	-0.772									
S:3	w	-0.778									
S:4	W	-0.790									
S:5	C1	0.252									
S:6	C2	0.883									
S:7	C3	2.174									
S:8	C4	5.355									
S:9	C5	7.598									
S:10	C6	9.738									
S:11	w	-0.781									
S:12	W	-0.790									
S:13	ICV	280-460066/42-A	4.860								
S:14	ICB	280-460066/43-A	-0.356								
S:15	xLCS	280-462534/1-A	-0.291								
S:16	MB	280-462534/2-A	-0.419								
S:17	280-124912-C-4-A	-0.298									
S:18	280-124912-C-4-C	MS	2.586								
S:19	280-124912-C-4-B	MSD	2.826								
S:20	w	-0.774									
S:21	280-124912-C-1-A	0.681									
S:22	280-124912-C-2-A	-0.452									
S:23	AutoWash	-0.791									
S:24	AutoWash	-0.790									

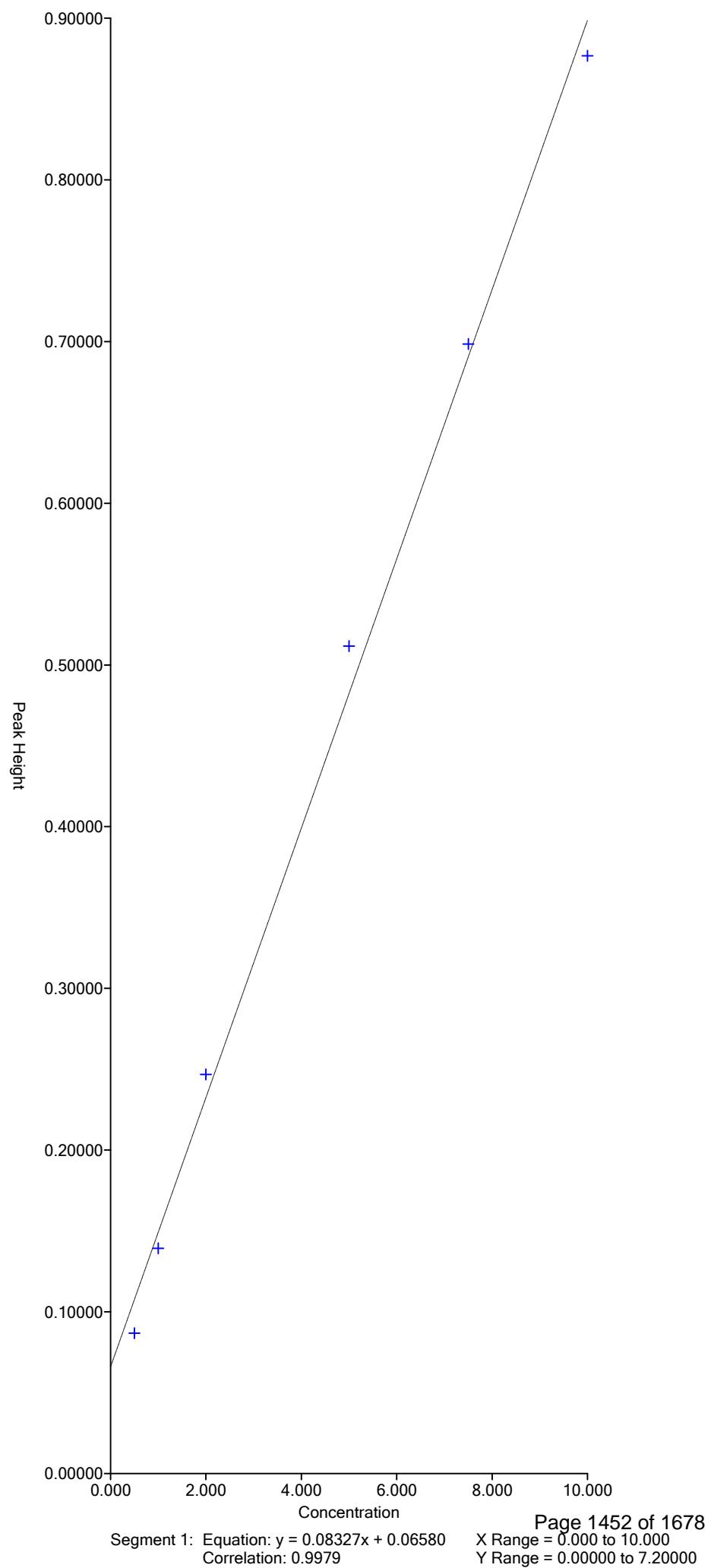
-0.15072						062519, 6/25/2019 - TKN
0.19195						3.27599
0.53463						2.93332
0.87730						2.59065
1.21997			A B S 1.56264			
1.90531						
2.24798						
S:25	280-124912-C-3-A	0.686				33:00
S:26	280-124912-C-6-A	1.283				34:00
S:27	280-124912-C-7-A	-0.442				35:00
S:28	280-124912-C-8-A	7.071				36:00
S:29	280-124912-C-9-A	0.417				37:00
S:30	LCS 280-462534/1-A	5.594				38:00
S:31	CCV 280-460066/44-A	4.968				39:00
S:32	CCB 280-460066/45-A	-0.348				40:00
S:33	280-124912-C-10-A	0.825				41:00
S:34	280-124912-C-11-A	0.935				42:00
S:35	AutoWash	-0.789				43:00
S:36	AutoWash	-0.790				44:00
S:37	280-124912-C-5-A	0.112				45:00
S:38	280-124912-C-5-B MS	2.908				46:00
S:39	280-124912-C-5-C MSD	2.958				47:00
S:40	w	-0.783				48:00
S:41	280-124928-C-7-A	1.856				49:00
S:42	280-124928-C-8-A	0.503				50:00
S:43	280-124928-C-9-A	-0.007				51:00
S:44	280-124928-C-14-A	0.063				52:00
S:45	280-124928-C-15-A	-0.111				53:00
S:46	w	-0.777				54:00
S:47	AutoWash	-0.787				55:00
S:48	AutoWash	-0.790				56:00

-0.15072							
0.19195							
0.53463							
0.87730							
1.21997							
1.56264	A	B	S				
1.90531							
2.24798							
2.59065							
2.93332							
3.27599							
6/25/2019 - TKN							
S:49 CCV 280-460066/44-A 4.941						1:03:00	
S:50 CCB 280-460066/45-A -0.349						1:04:00	
S:51 280-124928-C-16-A 4.043						1:05:00	
S:52 280-124718-F-1-A 35.080						1:06:00	
S:53 280-124718-F-2-A 29.861						1:07:00	
S:54 280-124718-G-3-A 29.419						1:08:00	
S:55 w -0.746						1:09:00	
S:56 xLCS 280-462534/27-A -0.294						1:10:00	
S:57 MB 280-462534/28-A -0.335						1:11:00	
S:58 280-124912-C-12-A 0.377						1:12:00	
S:59 AutoWash -0.795						1:13:00	
S:60 AutoWash -0.790						1:14:00	
S:61 280-124912-C-12-B MS 1.567						1:15:00	
S:62 280-124912-C-12-C MSD 2.278						1:16:00	
S:63 280-124718-F-1-A 55.092						1:17:00	
S:64 w -0.747						1:18:00	
S:65 CCV 280-460066/44-A 4.984						1:19:00	
S:66 CCB 280-460066/45-A -0.329						1:20:00	
S:67 280-124738-J-1-A 22.620						1:21:00	
S:68 280-124738-J-2-A 0.966						1:22:00	
S:69 280-125145-A-1-A -0.320						1:23:00	
S:70 280-125147-A-1-A 23.266						1:24:00	
S:71 AutoWash -0.757						1:25:00	
S:72 AutoWash -0.790						1:26:00	
						1:27:00	
						1:28:00	
						1:29:00	
						1:30:00	
						1:31:00	
						1:32:00	
						1:33:00	

-0.15072							3.27/599
0.19195							6/25/2019 - TKN
0.53463							
0.87730							
1.21997							
	A	B	S	1.56264			
	1.90531						
	2.24798						
	2.59065						
	2.93332						
S:73	280-125109-C-4-A	1.245				1:34:00	
S:74	280-124724-B-2-A	-0.133				1:35:00	
S:75	280-124902-D-1-A	35.167				1:36:00	
S:76	280-124819-E-1-A	18.692				1:37:00	
S:77	280-124718-F-2-A	29.587				1:38:00	
S:78	280-124718-G-3-A	27.654				1:39:00	
S:79	w	-0.777				1:40:00	
S:80	CCV 280-460066/44-A	5.109				1:41:00	
S:81	CCB 280-460066/45-A	-0.331				1:42:00	
S:82	LCS 280-462534/40-A	5.792				1:43:00	
S:83	AutoWash	-0.781				1:44:00	
S:84	AutoWash	-0.790				1:45:00	
S:85	MB 280-462534/41-A	-0.351				1:46:00	
S:86	280-124659-A-1-A	182.738				1:47:00	
S:87	280-124659-A-1-A	365.062				1:48:00	
S:88	280-124659-A-1-A	688.025				1:49:00	
S:89	280-124659-A-1-B	36.311				1:50:00	
S:90	280-124659-A-1-B	180.259				1:51:00	
S:91	LCS 280-462534/27-A	5.975				1:52:00	
S:92	w	-0.736				1:53:00	
S:93	CCV 280-460066/44-A	5.004				1:54:00	
S:94	CCB 280-460066/45-A	-0.332				1:55:00	
S:95	AutoWash	-0.781				1:56:00	
S:96	AutoWash	-0.790				1:57:00	
S:97	280-124718-F-1-A	52.362				1:58:00	
						1:59:00	
						2:00:00	
						2:01:00	
						2:02:00	
						2:03:00	

			062519, 6/25/2019 - TKN
-0.15072			
0.19195			
0.53463			
0.87730			
1.21997			
1.90531			
A B S 1.56264			
2.24798			
2.59065			
2.93332			
3.27599			
		2:04:00	
S:98	280-124738-J-1-A	20.146	
S:99	280-125147-A-1-A	21.770	
S:100	280-124902-D-1-A	77.010	
S:101	280-124819-E-1-A	15.415	
S:102	280-124659-A-1-B	373.594	
S:103	280-124659-A-1-B	176.803	
S:104	w	-0.772	
S:105	CCV 280-460066/44-A	5.010	
S:106	CCB 280-460066/45-A	-0.312	
S:107	Autowash	-0.797	
S:108	Autowash	-0.790	
		2:13:00	
		2:14:00	
		2:15:00	
		2:16:00	
		2:17:00	
		2:18:00	
		2:19:00	
		2:20:00	
		2:21:00	
		2:22:00	
		2:23:00	
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		2:25:00	
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		2:27:00	
		2:28:00	
		2:29:00	
		2:30:00	
		2:31:00	
		2:32:00	
		2:33:00	

Calibration for TKN



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\062619.RST
Sample table path C:\FLOW_4\062619.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 26-Jun-19
Time acquired 20:55

Time Cup Name

17:24	109	SYNC
17:26	0	Carryover
17:28	0	Carryover
		(Statistics)
17:30	0	read baseline
17:32	101	Cal 0.00 ppb
17:34	102	Cal 50.0 ppb
17:36	103	Cal 100 ppb
17:38	104	Cal 500 ppb
17:40	105	Cal 1000 ppb
17:42	106	Cal 2500 ppb
17:44	107	Cal 5000 ppb
17:46	108	Cal 7500 ppb
17:48	109	Cal 10000 ppb
17:50	0	Blank
17:52	0	Read Baseline
17:54	110	5000 PPB NO2
17:56	111	ICV 5000 PPB
17:58	112	ICV 2000 PPB
18:00	0	ICB
18:02	0	Read Baseline
18:04	107	LCS
18:06	0	MB
18:08	113	280-124912-B-4
18:10	114	ms 280-124912-B-4
18:12	115	msd 280-124912-B-4
18:14	116	280-124912-B-1
18:16	117	280-124912-B-2
18:18	118	280-124912-B-3
18:20	119	280-124912-B-7
18:22	120	280-124912-B-8
18:24	121	280-124912-B-9
18:26	122	280-124912-B-10
18:28	0	Rinse
18:30	0	Read Baseline
18:32	107	CCV 5000 ppb
18:34	105	CCVL 1000 ppb
18:36	0	CCB
18:38	0	Read Baseline
18:40	123	280-124912-B-11
18:42	124	280-124912-B-6
18:44	125	280-124912-B-5
18:46	126	ms 280-124912-B-5
18:48	127	msd 280-124912-B-5
18:50	128	280-124912-B-1

Result path C:\FLOW_4\062619.RST
 Sample table path C:\FLOW_4\062619.tbl
 Method path C:\FLOW_4\nox.mth
 Date acquired 26-Jun-19
 Time acquired 20:55

Time	Cup	Name
18:52	129	280-124887-A-2
18:54	130	280-124887-A-3
18:56	131	280-124928-A-3
18:58	132	280-124928-A-4
19:00	0	Rinse
19:02	0	Read Baseline
19:04	107	CCV 5000 ppb
19:06	105	CCVL 1000 ppb
19:08	0	CCB
19:10	0	Read Baseline
19:12	133	280-124928-A-5
19:14	134	280-124928-A-6
19:16	135	280-124928-C-7
19:18	136	280-124928-C-8
19:20	107	LCS
19:22	0	MB
19:24	137	280-124912-B-12
19:26	138	ms 280-124912-B-12
19:28	139	msd 280-124912-B-12
19:30	140	280-124928-C-9
19:32	0	Rinse
19:34	0	Read Baseline
19:36	107	CCV 5000 ppb
19:38	105	CCVL 1000 ppb
19:40	0	CCB
19:42	0	Read Baseline
19:44	141	280-124928-C-10
19:46	142	280-124928-C-11
19:48	143	280-124928-C-12
19:50	144	280-124928-C-14
19:52	145	280-124928-C-15
19:54	146	280-124928-C-16
19:56	147	280-124724-B-2
19:58	148	280-124681-A-1
20:00	149	280-124936-C-1
20:02	150	ms 280-124936-C-1
20:04	0	Rinse
20:06	0	Read Baseline
20:08	107	CCV 5000 ppb
20:10	105	CCVL 1000 ppb
20:12	0	CCB
20:14	0	Read Baseline
20:16	151	msd 280-124936-C-1
20:18	152	280-124827-B-1
20:20	153	280-124827-B-2
20:22	154	280-124827-B-3
20:24	155	280-124827-B-4
20:26	156	280-124827-B-5
20:28	157	280-124827-B-6
20:30	158	280-124827-B-7
20:32	159	280-124827-B-8
20:34	160	d
20:36	0	Rinse
20:38	0	Read Baseline
20:40	107	CCV 5000 ppb
20:42	105	CCVL 1000 ppb
20:44	0	CCB

Result path C:\FLOW_4\062619.RST
Sample table path C:\FLOW_4\062619.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 26-Jun-19
Time acquired 20:55

Time	Cup	Name
20:46	0	Read Baseline

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\062619.RST
 Sample table path C:\FLOW_4\062619.tbl
 Method path C:\FLOW_4\nox.mth
 Date acquired 26-Jun-19
 Time acquired 20:55

Name	Response	Nitrate as N			Mean Response	Mean Calc [ppb]
		Calc [ppb]	Flags			
SYNC	1619818	10365.893	HI			
Carryover	969	-9.264	LO			
Carryover (Statistics)	252	-13.428	LO		610	-11.346
read baseline	0	-14.890	BL			
Cal 0.00 ppb	-40	-15.120	LO			
Cal 50.0 ppb	8829	36.418				
Cal 100 ppb	17328	85.867				
Cal 500 ppb	85638	485.230				
Cal 1000 ppb	181944	1054.143				
Cal 2500 ppb	428300	2540.741				
Cal 5000 ppb	816023	4971.541				
Cal 7500 ppb	1197137	7469.524				
Cal 10000 ppb	1570587	10021.728	HI			
Blank	-200	-16.054	LO			
Read Baseline	0	-14.890	BL			
5000 PPB NO2	856230	5229.997				
ICV 5000 PPB	850724	5194.528				
ICV 2000 PPB	350621	2067.143				
ICB	-102	-15.480	LO			
Read Baseline	0	-14.890	BL			
LCS	817704	4982.323				
MB	-307	-16.674	LO			
280-124912-B-4	1254	-7.606	LO			
ms 280-124912-B-4	681771	4117.245				
msd 280-124912-B-4	664364	4007.458				
280-124912-B-1	162045	936.025				
280-124912-B-2	776744	9440.416				
280-124912-B-3	1035640	12795.716				
280-124912-B-7	868317	26539.609				
280-124912-B-8	2996	2.514				
280-124912-B-9	78531	443.517				
280-124912-B-10	3386	4.780				
Rinse	131	-14.128	LO			
Read Baseline	0	-14.890	BL			
CCV 5000 ppb	810198	4934.199				
CCVL 1000 ppb	177720	1029.043				
CCB	-51	-15.187	LO			
Read Baseline	0	-14.890	BL			
280-124912-B-11	251	-13.434	LO			
280-124912-B-6	1775	-4.578	LO			
280-124912-B-5	19547	98.781				
ms 280-124912-B-5	690339	4171.367				
msd 280-124912-B-5	701010	4238.847				
280-124887-A-1	671169	4039.349	Page 1456 of 1678			

Result path C:\FLOW_4\062619.RST
 Sample table path C:\FLOW_4\062619.tbl
 Method path C:\FLOW_4\nox.mth
 Date acquired 26-Jun-19
 Time acquired 20:55

Name	Response	Nitrate as N			Mean Response	Mean Calc [ppb]
		Calc [ppb]	Flags			
280-124887-A-2	331735	3905.345				
280-124887-A-3	567270	16995.945				
280-124928-A-3	8265	33.139				
280-124928-A-4	7987	31.524				
Rinse	25	-14.743	LO			
Read Baseline	0	-14.890	BL			
CCV 5000 ppb	817283	4979.620				
CCVL 1000 ppb	177597	1028.311				
CCB	-24	-15.027	LO			
Read Baseline	0	-14.890	BL			
280-124928-A-5	695325	8405.776				
280-124928-A-6	1296755	16280.421				
280-124928-C-7	575	-11.551	LO			
280-124928-C-8	568	-11.588	LO			
LCS	780403	4743.576				
MB	-193	-16.012	LO			
280-124912-B-12	143198	824.428				
ms 280-124912-B-12	777564	4725.444				
msd 280-124912-B-12	777618	4725.794				
280-124928-C-9	926	-9.510	LO			
Rinse	119	-14.200	LO			
Read Baseline	0	-14.890	BL			
CCV 5000 ppb	786768	4784.243				
CCVL 1000 ppb	170485	986.087				
CCB	123	-14.177	LO			
Read Baseline	0	-14.890	BL			
280-124928-C-10	83581	473.153				
280-124928-C-11	276483	1619.302				
280-124928-C-12	7987	31.523				
280-124928-C-14	311	-13.084	LO			
280-124928-C-15	688648	4160.680				
280-124928-C-16	2170	-2.284	LO			
280-124724-B-2	185	-13.813	LO			
280-124681-A-1	2870	1.784				
280-124936-C-1	596216	17898.969				
ms 280-124936-C-1	1209900	37775.188				
Rinse	-192	-16.005	LO			
Read Baseline	0	-14.890	BL			
CCV 5000 ppb	764700	4643.378				
CCVL 1000 ppb	168911	976.749				
CCB	165	-13.934	LO			
Read Baseline	0	-14.890	BL			
msd 280-124936-C-1	1212101	37848.996				
280-124827-B-1	498589	2973.141				
280-124827-B-2	533204	3187.433				
280-124827-B-3	550391	3294.162				
280-124827-B-4	414171	2454.270				
280-124827-B-5	559412	3350.269				
280-124827-B-6	441433	2621.253				
280-124827-B-7	494022	2944.936				
280-124827-B-8	18121	90.483				
d	272	-13.308	LO			
Rinse	55	-14.572	LO			
Read Baseline	0	-14.890	BL			
CCV 5000 ppb	757512	4597.567				
CCVL 1000 ppb	170711	987.426				
CCB	-55	Page 1457 of 1678	LO			

Result path C:\FLOW_4\062619.RST
Sample table path C:\FLOW_4\062619.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 26-Jun-19
Time acquired 20:55

Name	Nitrate as N			Mean Response	Mean Calc [ppb]
	Response	Calc [ppb]	Flags		
Read Baseline	0	-14.890	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\062619.RST

Date: 26-Jun-19

Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	1619818	10365.892578	HI
2	0	Carryover	1	CO	1	1	969	-9.264330	LO
3	0	Carryover	2	CO	1	1	252	-13.428156	LO
B	0	read baseline	1	RB	1	1	0	-14.889925	BL
5	101	Cal 0.00 ppb	1	C	1	1	-40	-15.119634	LO
6	102	Cal 50.0 ppb	1	C	1	1	8829	36.417973	
7	103	Cal 100 ppb	1	C	1	1	17328	85.866585	
8	104	Cal 500 ppb	1	C	1	1	85638	485.229706	
9	105	Cal 1000 ppb	1	C	1	1	181944	1054.143311	
10	106	Cal 2500 ppb	1	C	1	1	428300	2540.740967	
11	107	Cal 5000 ppb	1	C	1	1	816023	4971.540527	
12	108	Cal 7500 ppb	1	C	1	1	1197137	7469.524414	
13	109	Cal 10000 ppb	1	C	1	1	1570587	10021.727539	HI
14	0	Blank	1	BLNK	1	1	-200	-16.054163	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
16	110	5000 PPB NO2	1	U	1	1	856230	5229.996582	
17	111	ICV 5000 PPB	1	CCV	1	1	850724	5194.528320	
18	112	ICV 2000 PPB	1	CCV	1	1	350621	2067.142578	
19	0	ICB	1	U	1	1	-102	-15.479785	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
21	107	LCS	1	U	1	1	817704	4982.323242	
22	0	MB	1	U	1	1	-307	-16.674063	LO
23	113	280-124912-B-4	1	U	1	1	1254	-7.606014	LO
24	114	ms 280-124912-B-4	1	U	1	1	681771	4117.244629	
25	115	msd 280-124912-B-4	1	U	1	1	664364	4007.458496	
26	116	280-124912-B-1	1	U	1	1	162045	936.024841	
27	117	280-124912-B-2	1	U	2	1	776744	9440.416016	
28	118	280-124912-B-3	1	U	2	1	1035640	12795.715820	
29	119	280-124912-B-7	1	U	5	1	868317	26539.609375	
30	120	280-124912-B-8	1	U	1	1	2996	2.514340	
31	121	280-124912-B-9	1	U	1	1	78531	443.517456	
32	122	280-124912-B-10	1	U	1	1	3386	4.780234	
33	0	Rinse	1	U	1	1	131	-14.127595	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
35	107	CCV 5000 ppb	1	CCV	1	1	810198	4934.198730	
36	105	CCVL 1000 ppb	1	CCV	1	1	177720	1029.043335	
37	0	CCB	1	U	1	1	-51	-15.187373	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
39	123	280-124912-B-11	1	U	1	1	251	-13.434275	LO
40	124	280-124912-B-6	1	U	1	1	1775	-4.578269	LO
41	125	280-124912-B-5	1	U	1	1	19547	98.781174	
42	126	ms 280-124912-B-5	1	U	1	1	690339	4171.367188	
43	127	msd 280-124912-B-5	1	U	1	1	701010	4238.846680	
44	128	280-124887-A-1	1	U	1	1	671169	4050.349121	
45	129	280-124887-A-2	1	U	2	1	331735	3905.344727	
46	130	280-124887-A-3	1	U	5	1	567270	16995.945312	
47	131	280-124928-A-3	1	U	1	1	8265	33.138645	
48	132	280-124928-A-4	1	U	1	1	7987	31.523993	
49	0	Rinse	1	U	1	1	25	-14.743288	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
51	107	CCV 5000 ppb	1	CCV	1	1	817283	4979.620117	
52	105	CCVL 1000 ppb	1	CCV	1	1	177597	1028.311035	
53	0	CCB	1	U	1	1	-24	-15.027138	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
55	133	280-124928-A-5	1	U	2	1	695325	8405.776367	
56	134	280-124928-A-6	1	U	2	1	1296755	16280.420898	
57	135	280-124928-C-7	1	U	1	1	575	-11.550909	LO
58	136	280-124928-C-8	1	U	1	1	568	-11.588126	LO
59	107	LCS	1	U	1	1	780403	4743.576172	
60	0	MB	1	U	1	1	-193	-16.011723	LO
61	137	280-124912-B-12	1	U	1	1	143198	824.428040	
62	138	ms 280-124912-B-12	1	U	1	1	777564	4725.443848	
63	139	msd 280-124912-B-12	1	U	1	1	777618	4725.794434	
64	140	280-124928-C-9	1	U	1	1	926	-9.510403	LO
65	0	Rinse	1	U	1	1	119	-14.200494	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
67	107	CCV 5000 ppb	1	CCV	1	1	786768	4784.242676	
68	105	CCVL 1000 ppb	1	CCV	1	1	170485	986.087036	
69	0	CCB	1	U	1	1	123	-14.176649	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	141	280-124928-C-10	1	U		1	83581	473.152771	
72	142	280-124928-C-11	1	U		1	276483	1619.302246	
73	143	280-124928-C-12	1	U		1	7987	31.523083	
74	144	280-124928-C-14	1	U		1	311	-13.083802	LO
75	145	280-124928-C-15	1	U		1	688648	4160.679688	
76	146	280-124928-C-16	1	U		1	2170	-2.284314	LO
77	147	280-124724-B-2	1	U		1	185	-13.813395	LO
78	148	280-124681-A-1	1	U		1	2870	1.784475	
79	149	280-124936-C-1	1	U	5	1	596216	17898.968750	
80	150	msd 280-124936-C-1	1	U	5	1	1209900	37775.187500	
81	0	Rinse	1	U		1	-192	-16.005053	LO
B	0	Read Baseline	1	RB		1	0	-14.889925	BL
83	107	CCV 5000 ppb	1	CCV		1	764700	4643.377930	
84	105	CCVL 1000 ppb	1	CCV		1	168911	976.749023	
85	0	CCB	1	U		1	165	-13.934418	LO
B	0	Read Baseline	1	RB		1	0	-14.889925	BL
87	151	msd 280-124936-C-1	1	U	5	1	1212101	37848.996094	
88	152	280-124827-B-1	1	U		1	498589	2973.140869	
89	153	280-124827-B-2	1	U		1	533204	3187.432861	
90	154	280-124827-B-3	1	U		1	550391	3294.162354	
91	155	280-124827-B-4	1	U		1	414171	2454.270020	
92	156	280-124827-B-5	1	U		1	559412	3350.268555	
93	157	280-124827-B-6	1	U		1	441433	2621.253174	
94	158	280-124827-B-7	1	U		1	494022	2944.936035	
95	159	280-124827-B-8	1	U		1	18121	90.483467	
96	160	d	1	U		1	272	-13.307947	LO
97	0	Rinse	1	U		1	55	-14.571710	LO
B	0	Read Baseline	1	RB		1	0	-14.889925	BL
99	107	CCV 5000 ppb	1	CCV		1	757512	4597.567383	
100	105	CCVL 1000 ppb	1	CCV		1	170711	987.426147	
101	0	CCB	1	U		1	-55	-15.207439	LO
B	0	Read Baseline	1	RB		1	0	-14.889925	BL

Nitrate as N:Calibration 1: Peak 5-102

File name: C:\FLOW_4\062619.RST

Date: 26-Jun-19

Operator: svc

* Name	Conc	Height
* Cal 0.00 ppb	0.000000	-39.549393
* Cal 50.0 ppb	50.000000	8828.793945
* Cal 100 ppb	100.000000	17328.257812
* Cal 500 ppb	500.000000	85638.382812
* Cal 1000 ppb	1000.000000	181944.500000
* Cal 2500 ppb	2500.000000	428299.625000
* Cal 5000 ppb	5000.000000	816023.000000
* Cal 7500 ppb	7500.000000	1197137.375000
* Cal 10000 ppb	10000.000000	1570586.750000

Calib Coef:

x=cyy+by+a

a: (intercept) -1.4890e+01

b: 5.8082e-03

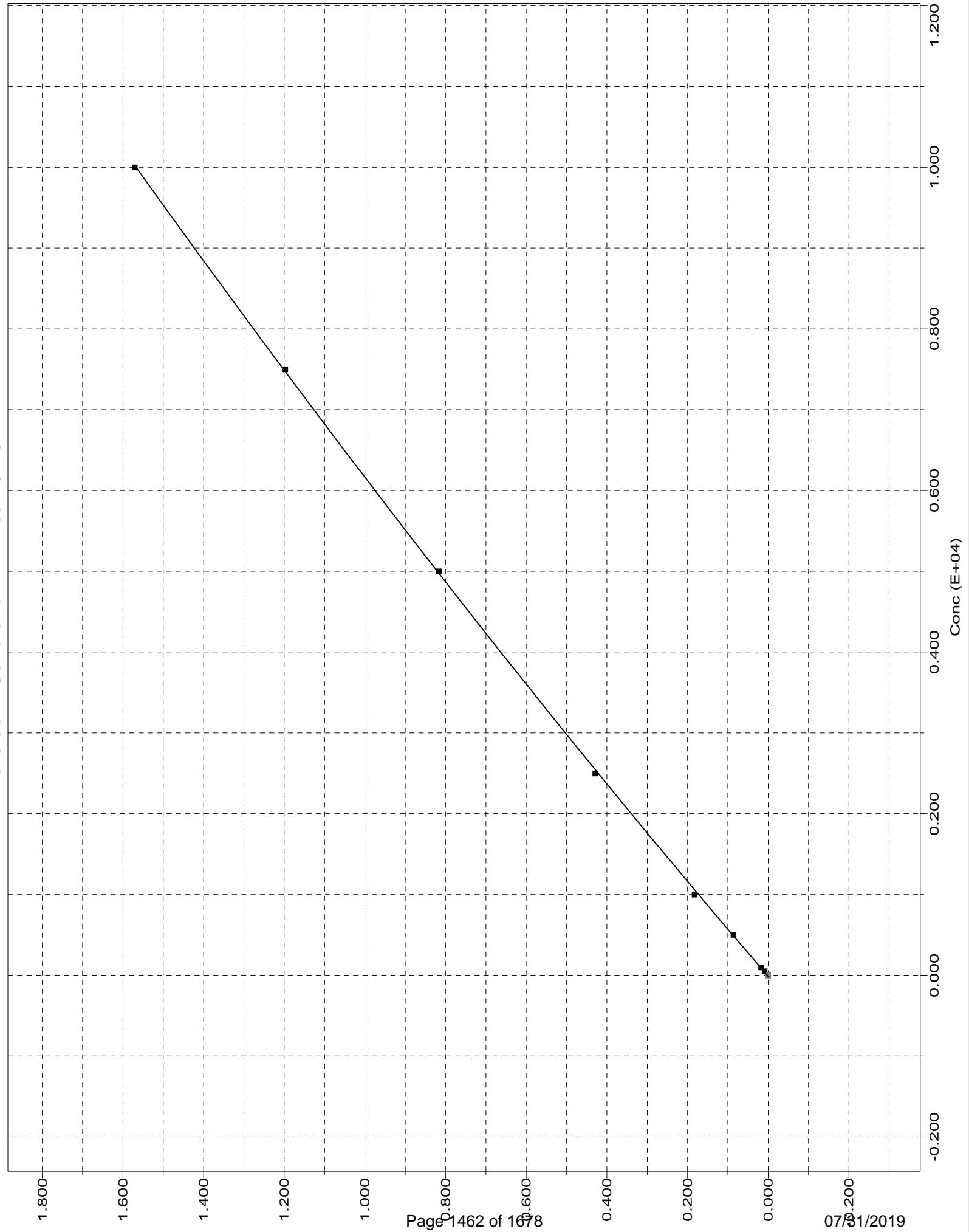
c: 3.7069e-10

Corr Coef: 0.999965

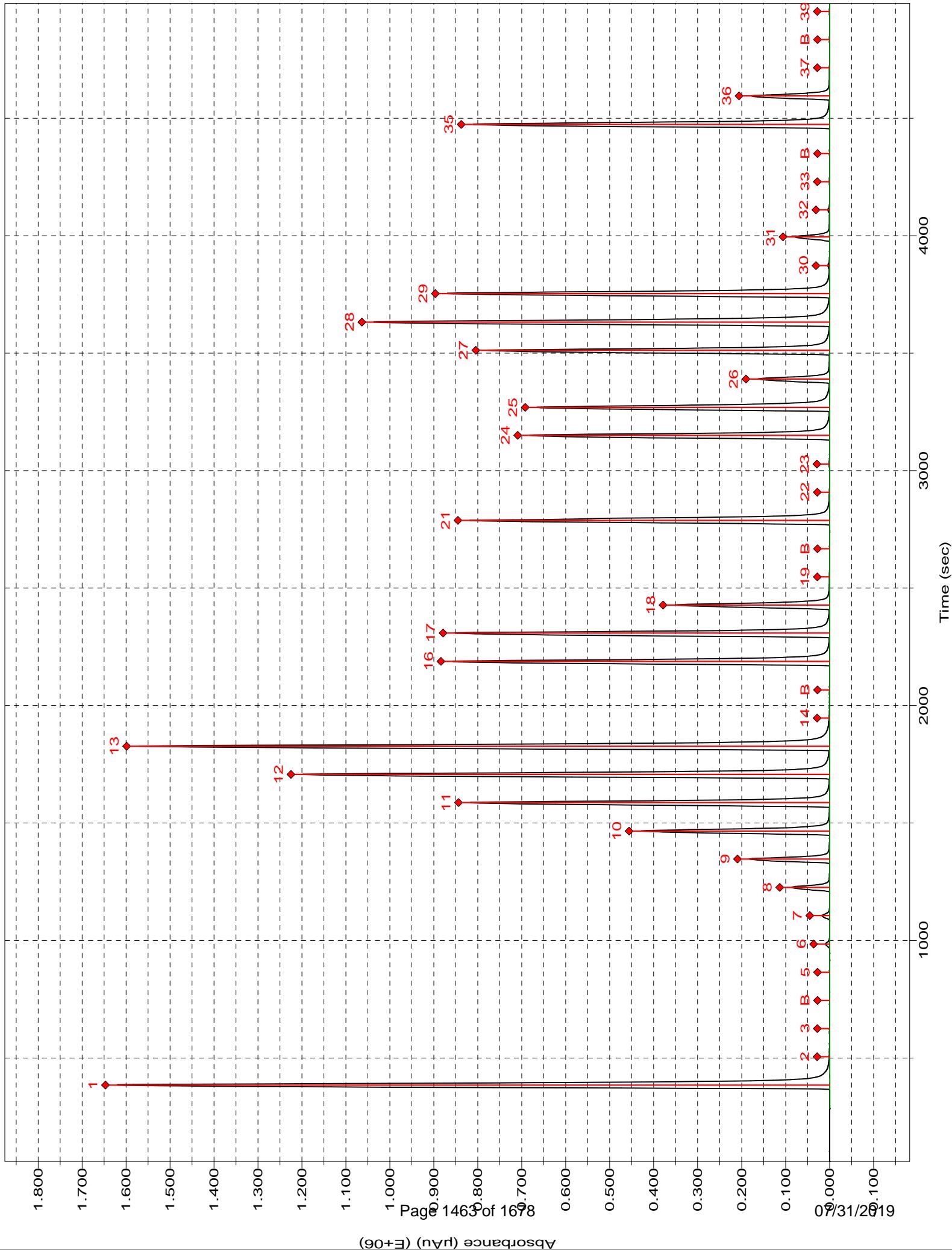
Carryover: 0.0598%

No Drift Peaks

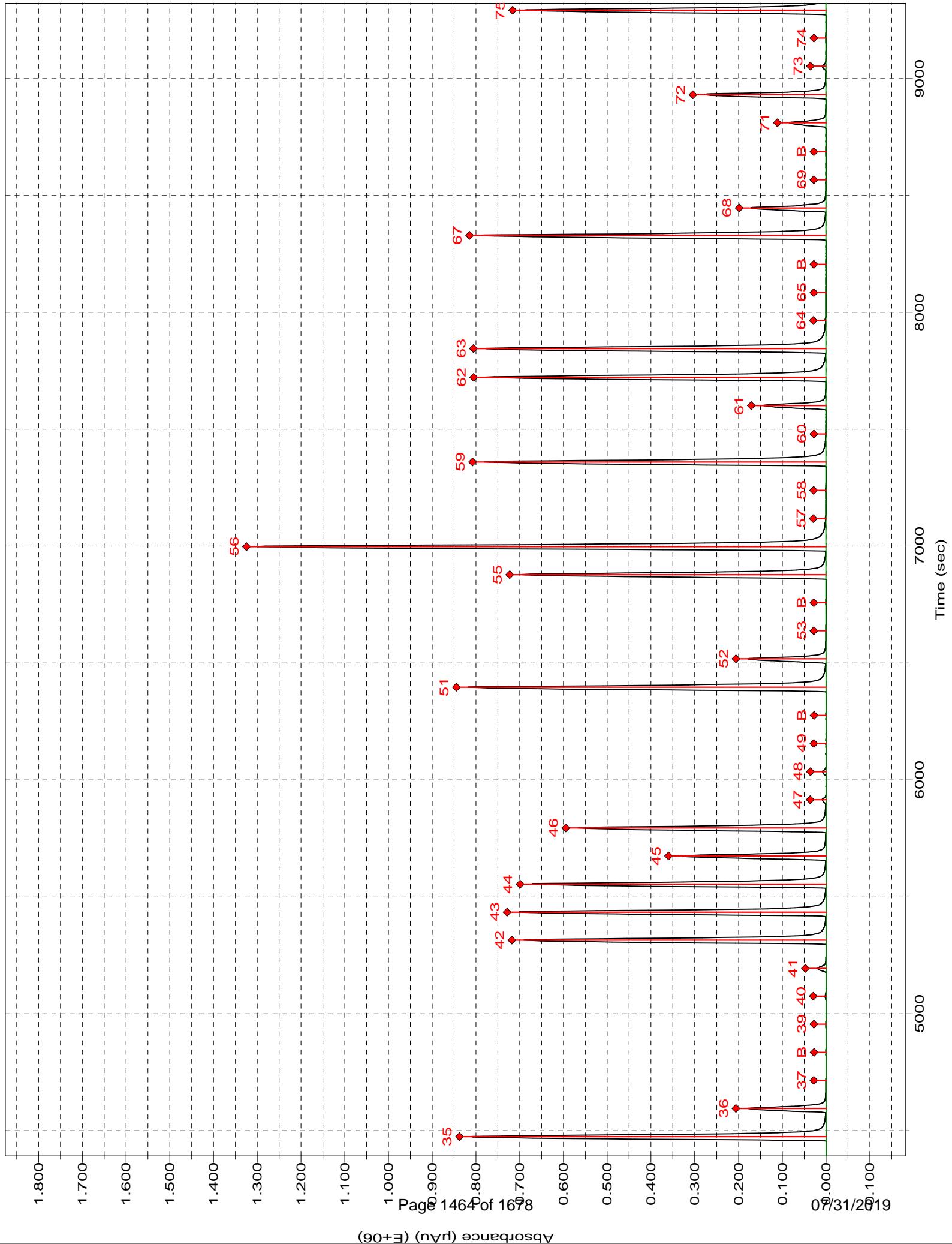
Nitrate as N:Calibration 1: Peak 5-102



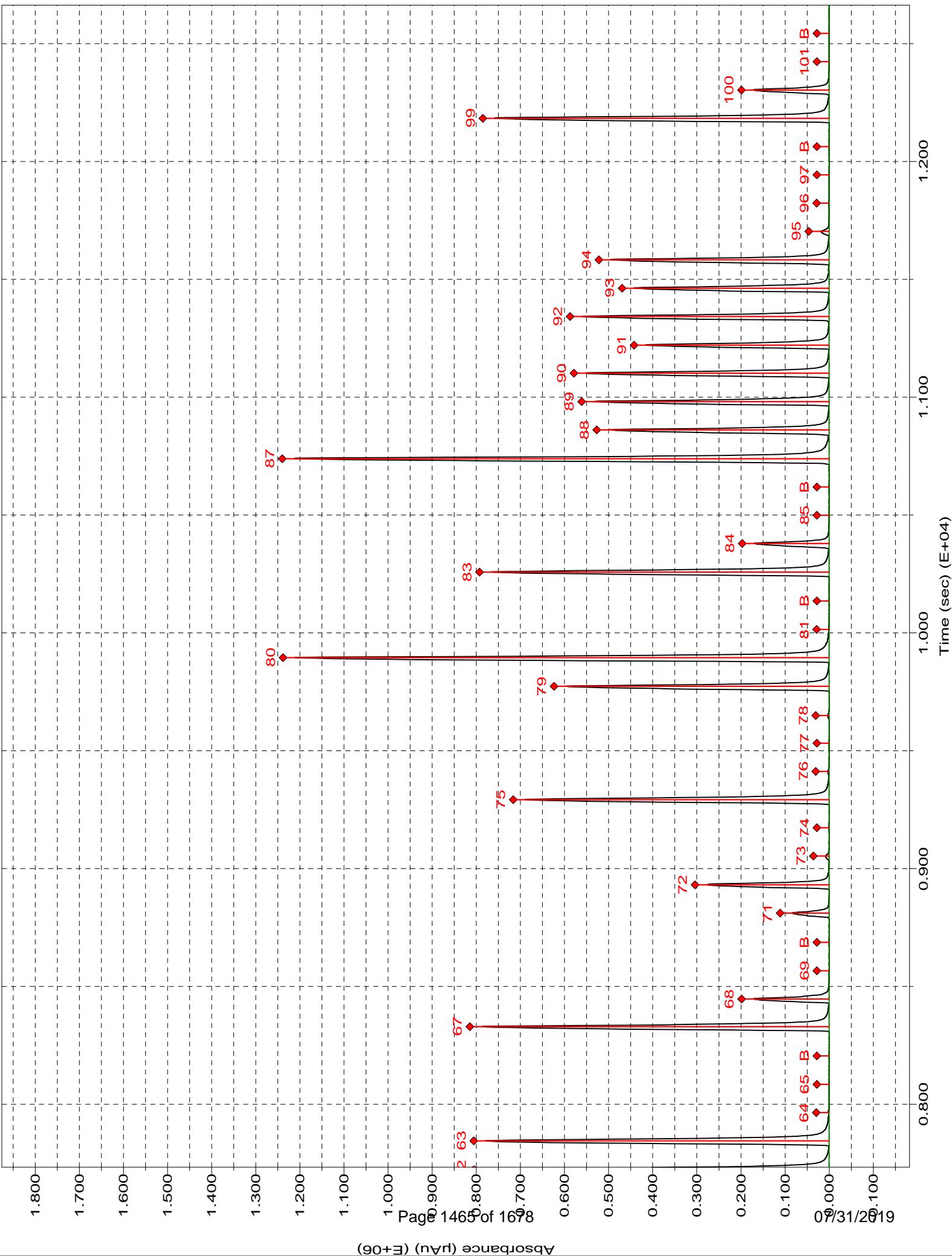
Channel 3: Nitrate as N



Channel 3: Nitrate as N



Channel 3: Nitrate as N



Sample Table - 062619.tbl

File name: C:\FLOW_4\062619.TBL

Date: 26-Jun-19

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1		1		
0	Carryover	CO	1		1		
0	Carryover	CO	1		1		
0	read baseline	RB	1		1		
101	Cal 0.00 ppb	C	1		1		
102	Cal 50.0 ppb	C	1		1		
103	Cal 100 ppb	C	1		1		
104	Cal 500 ppb	C	1		1		
105	Cal 1000 ppb	C	1		1		
106	Cal 2500 ppb	C	1		1		
107	Cal 5000 ppb	C	1		1		
108	Cal 7500 ppb	C	1		1		
109	Cal 10000 ppb	C	1		1		
0	Blank	BLNK	1		1		
0	Read Baseline	RB	1		1		
110	5000 PPB NO2	U	1		1		
111	ICV 5000 PPB	CCV	1		1		
112	ICV 2000 PPB	CCV	1		1		
0	ICB	U	1		1		
0	Read Baseline	RB	1		1		
107	LCS	U	1		1		
0	MB	U	1		1		
113	280-124912-B-4	U	1		1		
114	ms 280-124912-B-4	U	1		1		
115	msd 280-124912-B-4	U	1		1		
116	280-124912-B-1	U	1		1		
117	280-124912-B-2	U	1		2		
118	280-124912-B-3	U	1		2		
119	280-124912-B-7	U	1		5		
120	280-124912-B-8	U	1		1		
121	280-124912-B-9	U	1		1		
122	280-124912-B-10	U	1		1		
0	Rinse	U	1		1		
0	Read Baseline	RB	1		1		
107	CCV 5000 ppb	CCV	1		1		
105	CCVL 1000 ppb	CCV	1		1		
0	CCB	U	1		1		
0	Read Baseline	RB	1		1		
123	280-124912-B-11	U	1		1		
124	280-124912-B-6	U	1		1		
125	280-124912-B-5	U	1		1		
126	ms 280-124912-B-5	U	1		1		
127	msd 280-124912-B-5	U	1		1		
128	280-124887-A-1	U	1		1		
129	280-124887-A-2	U	1		2		
130	280-124887-A-3	U	1		5		
131	280-124928-A-3	U	1		1		
132	280-124928-A-4	U	1		1		
0	Rinse	U	1		1		
0	Read Baseline	RB	1		1		
107	CCV 5000 ppb	CCV	1		1		
105	CCVL 1000 ppb	CCV	1		1		
0	CCB	U	1		1		
0	Read Baseline	RB	1		1		
133	280-124928-A-5	U	1		2		
134	280-124928-A-6	U	1		2		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-124928-C-7	U	1		1	1	✓✓
136	280-124928-C-8	U	1		1	1	✓✓
107	LCS	U	1		1	1	
0	MB	U	1		1	1	
137	280-124912-B-12	U	1		1	1	✓✓
138	ms 280-124912-B-12	U	1		1	1	✓✓
139	msd 280-124912-B-12	U	1		1	1	✓✓
140	280-124928-C-9	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	280-124928-C-10	U	1		1	1	✓✓
142	280-124928-C-11	U	1		1	1	✓✓
143	280-124928-C-12	U	1		1	1	✓✓
144	280-124928-C-14	U	1		1	1	✓✓
145	280-124928-C-15	U	1		1	1	✓✓
146	280-124928-C-16	U	1		1	1	✓✓
147	280-124724-B-2	U	1		1	1	✓✓
148	280-124681-A-1	U	1		1	1	✓✓
149	280-124936-C-1	U	1		5	1	✓✓
150	ms 280-124936-C-1	U	1		5	1	✓✓
0	Rinse	U	1		1	1	
0	Read Baseline	RB	1		1	1	
107	CCV 5000 ppb	CCV	1		1	1	
105	CCVL 1000 ppb	CCV	1		1	1	
0	CCB	U	1		1	1	
0	Read Baseline	RB	1		1	1	
151	msd 280-124936-C-1	U	1		5	1	✓✓
152	280-124827-B-1	U	1		1	1	✓✓
153	280-124827-B-2	U	1		1	1	✓✓
154	280-124827-B-3	U	1		1	1	✓✓
155	280-124827-B-4	U	1		1	1	✓✓
156	280-124827-B-5	U	1		1	1	✓✓
157	280-124827-B-6	U	1		1	1	✓✓
158	280-124827-B-7	U	1		1	1	✓✓
159	280-124827-B-8	U	1		1	1	✓✓
160	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	
0	Read Baseline	RB	1		1	1	

Sulfide by Titration

Analyst:	JLA	SOP Information:	
Date:	6/11/2019	Number: 91	
Titration Solutions		Calibration Information	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_01659
TALS ID	Iod_00229	Prep Date:	5/28/2019
Normality:	0.025	Made By:	JLA
Solution 2:	sodium thiosulfate	Concentration:	1224
TALS ID	Na Thio_00152	Expiration Date:	8/28/2019
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00057		

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
CAL	5	0.00	4.70	20	4.70	1224.000
CAL	5	4.70	9.40	20	4.70	1224.000

For SM4500 S2 D colorimetric

ICV Information						
Source/Ver-Lot#:	INT_01607					
Prep Date:	5/28/2019					
Made By:	JLA					
Concentration:	1188					
Expiration Date:	8/28/2019					

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
ICV	5	9.40	14.30	20	4.90	1208.000
ICV	5	14.30	19.70	20	5.40	1168.000

TALS Raw Data Report

Job Number: 280-124912-1
 LIMS Batch: 461193
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1	Lab ID: LCS 280-461159/1-A	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		18.4 mg/L	mg/L	71
Sulfide as H2S		19.55 mg/L	mg/L	
RS# 2	Lab ID: MB 280-461159/2-A	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-0.8 mg/L	1.9 U mg/L	
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L	
RS# 3	Lab ID: 280-124912-E-1-A	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		0 mg/L	1.9 U mg/L	
Sulfide as H2S		0 mg/L	2.0 U mg/L	
RS# 4	Lab ID: 280-124912-E-2-A	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-1.6 mg/L	1.9 U mg/L	
Sulfide as H2S		-1.7 mg/L	2.0 U mg/L	
RS# 5	Lab ID: 280-124912-E-3-A	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-0.8 mg/L	1.9 U mg/L	
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L	
RS# 6	Lab ID: 280-124912-E-12-A	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-0.8 mg/L	1.9 U mg/L	
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L	
RS# 7	Lab ID: 280-124912-E-12-B MS	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		21.6 mg/L	mg/L	83
Sulfide as H2S		22.95 mg/L	mg/L	
RS# 8	Lab ID: 280-124912-E-12-C MSD	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		22.4 mg/L	mg/L	86
Sulfide as H2S		23.8 mg/L	mg/L	4 20
RS# 9	Lab ID: 280-124912-E-6-A	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		0 mg/L	1.9 U mg/L	
Sulfide as H2S		0 mg/L	2.0 U mg/L	
RS# 10	Lab ID: 280-124912-E-7-A	Inj Date: 6/11/2019 3:04:48PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-0.8 mg/L	1.9 U mg/L	
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L	

TALS Raw Data Report

RS# 11 Lab ID: **280-124912-E-8-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	1.9 U mg/L				
Sulfide as H ₂ S		-1.7 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-124912-E-10-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		31.2 mg/L	mg/L				
Sulfide as H ₂ S		33.15 mg/L	mg/L				

RS# 13 Lab ID: **280-124912-E-11-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H ₂ S		-0.85 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-124912-E-4-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H ₂ S		-0.85 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-124912-E-4-B MS** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		23.2 mg/L	mg/L	89	44	110	
Sulfide as H ₂ S		24.65 mg/L	mg/L				

RS# 16 Lab ID: **280-124912-E-4-C MSD** Inj Date: 6/11/2019 3:04:48PM 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	77	44	110	15 20
Sulfide as H ₂ S		21.25 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-124928-1
 LIMS Batch: 461193
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461159/1-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44	110	
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461159/2-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-124912-E-4-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-124912-E-4-B MS** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		23.2 mg/L	mg/L	89	44	110	
Sulfide as H2S		24.65 mg/L	mg/L				

RS# 16 Lab ID: **280-124912-E-4-C MSD** Inj Date: 6/11/2019 3:04:48PM 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	77	44	110	15 20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 18 Lab ID: **280-124928-E-7-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	1.9 U mg/L				
Sulfide as H2S		-1.7 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-86670-1
 LIMS Batch: 461193
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461159/1-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44	110	
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461159/2-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-124912-E-4-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-124912-E-4-B MS** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		23.2 mg/L	mg/L	89	44	110	
Sulfide as H2S		24.65 mg/L	mg/L				

RS# 16 Lab ID: **280-124912-E-4-C MSD** Inj Date: 6/11/2019 3:04:48PM 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	77	44	110	15 20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 17 Lab ID: **580-86670-A-2-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

TALS Raw Data Report

Sulfide by Titration

Analyst:	JLA	SOP Information:	
Date:	5/12/2019	Number:	
Titration Solutions		Calibration Information	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_01659
TALS ID	Iod_00229	Prep Date:	5/28/2019
Normality:	0.025	Made By:	JLA
Solution 2:	sodium thiosulfate	Concentration:	1204
TALS ID	Na Thio_00152	Expiration Date:	8/28/2019
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00057		

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
CAL	5	0.00	4.70	20	4.70	1224.000
CAL	5	4.70	9.90	20	5.20	1184.000

For SM4500 S2 D colorimetric

ICV Information						
Source/Ver-Lot#:	INT_01607					
Prep Date:	5/28/2019					
Made By:	JLA					
Concentration:	1180					
Expiration Date:	8/28/2019					

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
ICV	5	9.90	15.20	20	5.30	1176.000
ICV	5	15.20	20.40	20	5.20	1184.000

TALS Raw Data Report

Job Number: 280-124794-1
 LIMS Batch: 461300
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1	Lab ID: LCS 280-461272/1-A	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		20 mg/L	mg/L	77
Sulfide as H2S		21.25 mg/L	mg/L	
RS# 2	Lab ID: MB 280-461272/2-A	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-2.4 mg/L	mg/L	
Sulfide as H2S		-2.55 mg/L	mg/L	
RS# 3	Lab ID: 280-124912-E-5-A	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-0.8 mg/L	mg/L	
Sulfide as H2S		-0.85 mg/L	mg/L	
RS# 4	Lab ID: 280-124912-E-5-B MS	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		21.6 mg/L	mg/L	83
Sulfide as H2S		22.95 mg/L	mg/L	
RS# 5	Lab ID: 280-124912-E-5-C MSD	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		18.4 mg/L	mg/L	71
Sulfide as H2S		19.55 mg/L	mg/L	16 20
RS# 12	Lab ID: 280-124794-M-1-A	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-0.8 mg/L	mg/L	
Sulfide as H2S		-0.85 mg/L	mg/L	
RS# 13	Lab ID: 280-124794-M-2-A	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		0 mg/L	mg/L	
Sulfide as H2S		0 mg/L	mg/L	
RS# 14	Lab ID: 280-124794-M-4-A	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-0.8 mg/L	mg/L	
Sulfide as H2S		-0.85 mg/L	mg/L	
RS# 15	Lab ID: 280-124794-M-5-A	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		-0.8 mg/L	mg/L	
Sulfide as H2S		-0.85 mg/L	mg/L	
RS# 16	Lab ID: 280-124794-M-5-B MS	Inj Date: 6/12/2019 12:54:29PM	Dil: 1.0	Meth: 9034
Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec
Sulfide		21.6 mg/L	mg/L	83
Sulfide as H2S		22.95 mg/L	mg/L	44 110

TALS Raw Data Report

RS# 17 Lab ID: **280-124794-M-5-C MSD** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20.8 mg/L	mg/L	80	44 110	4	20
Sulfide as H ₂ S		22.1 mg/L	mg/L				

RS# 18 Lab ID: **280-124794-M-6-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	mg/L				
Sulfide as H ₂ S		-1.7 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-124912-1
 LIMS Batch: 461300
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461272/1-A** Inj Date: 6/12/2019 12:54:29PM 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	77	44	110	
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461272/2-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-2.4 mg/L	1.9 U mg/L				
Sulfide as H2S		-2.55 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-124912-E-5-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-124912-E-5-B MS** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	83	44	110	
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-124912-E-5-C MSD** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44	110	16
Sulfide as H2S		19.55 mg/L	mg/L				20

RS# 7 Lab ID: **280-124912-E-9-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-124928-1
 LIMS Batch: 461300
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461272/1-A** Inj Date: 6/12/2019 12:54:29PM 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	77	44	110	
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461272/2-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-2.4 mg/L	1.9 U mg/L				
Sulfide as H2S		-2.55 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-124912-E-5-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-124912-E-5-B MS** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	83	44	110	
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-124912-E-5-C MSD** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44	110	16
Sulfide as H2S		19.55 mg/L	mg/L				20

RS# 6 Lab ID: **280-124928-E-8-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-124928-E-9-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-2.4 mg/L	1.9 U mg/L				
Sulfide as H2S		-2.55 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-124928-E-15-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 10 Lab ID: **280-124928-E-14-A** Inj Date: 6/12/2019 12:54:29PM 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# 11 Lab ID: **280-124928-E-16-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	1.9 U mg/L				
Sulfide as H2S		-1.7 mg/L	2.0 U mg/L				

TALS Raw Data Report

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0002.d
 Lims ID: std L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 26-Jun-2019 11:01:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083211-002
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 27-Jun-2019 08:20:04 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0308

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.375	2.375	0.000	1416358	0.2000	0.2134	
2 Chloride	3.400	3.425	-0.025	5066774	1.00	1.30	
3 Nitrite as N	4.100	4.109	-0.009	2267051	NC	NC	
4 Bromide	4.909	4.909	0.000	444110	0.2000	0.2034	
5 Nitrate as N	5.525	5.517	0.008	2467108	NC	NC	
7 Orthophosphate as P	7.167	7.142	0.025	1389634	NC	NC	
6 Sulfate	7.984	8.042	-0.058	3746109	1.00	1.23	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC CAL cl/so4_00262	Amount Added: 0.02	Units: mL
IC Cal low_00467	Amount Added: 0.02	Units: mL

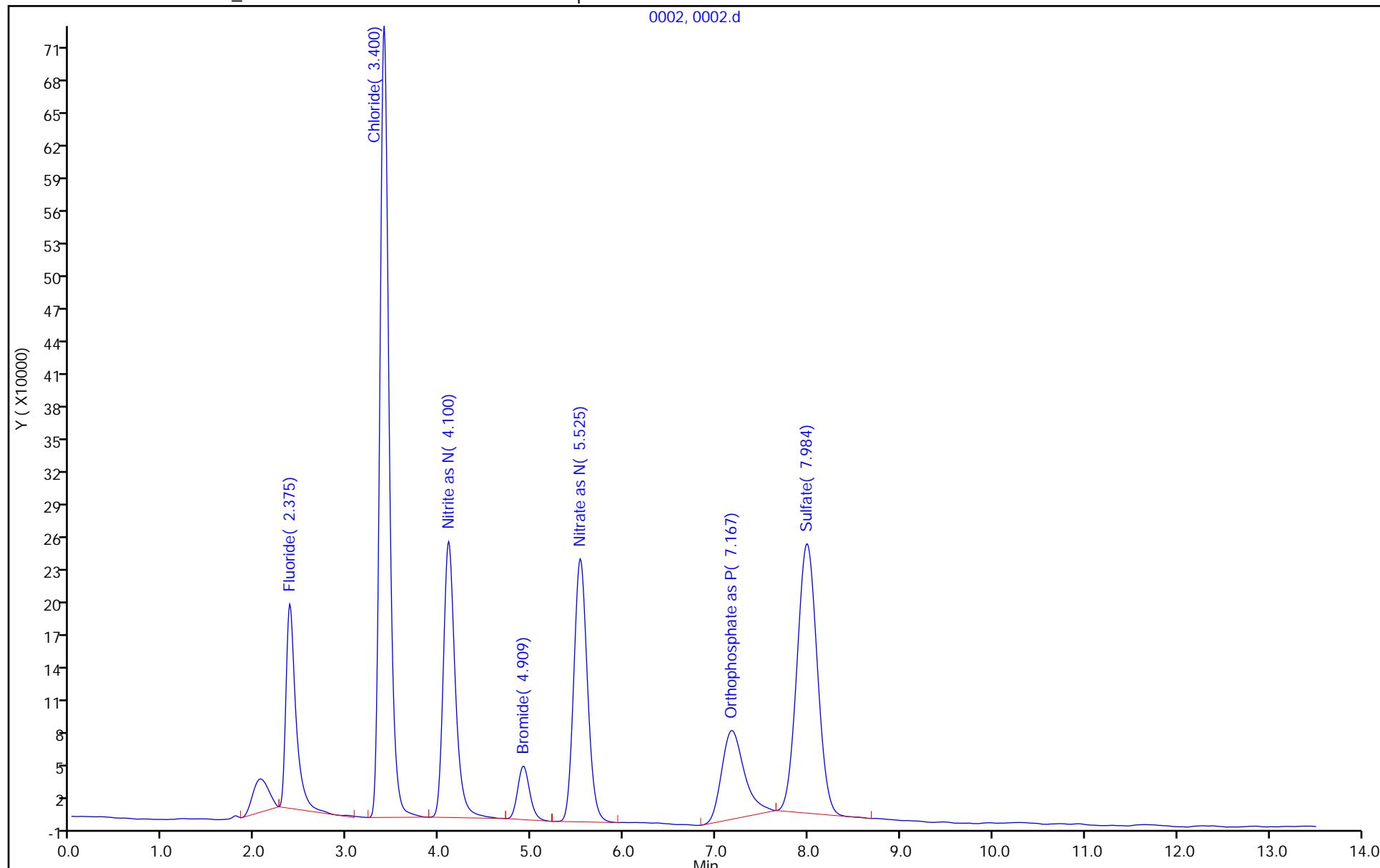
Report Date: 27-Jun-2019 08:20:04

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0002.d
Injection Date: 26-Jun-2019 11:01:00 Instrument ID: WC_IonChrom11
Lims ID: std L1 Operator ID:
Client ID:
Injection Vol: 10.0 ul Dil. Factor: 1.0000 Worklist Smp#: 2
Method: Anions_IC11 Limit Group: Wet - Anions 28D

0002, 0002.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0003.d
 Lims ID: std L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 26-Jun-2019 11:18:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083211-003
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 27-Jun-2019 08:20:04 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0308

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.375	2.375	0.000	3656440	0.5000	0.4911	
2 Chloride	3.400	3.425	-0.025	12710387	2.50	2.35	
3 Nitrite as N	4.100	4.109	-0.009	5679419	NC	NC	
4 Bromide	4.909	4.909	0.000	1127163	0.5000	0.5033	
5 Nitrate as N	5.525	5.517	0.008	6272611	NC	NC	
7 Orthophosphate as P	7.167	7.142	0.025	2788961	NC	NC	
6 Sulfate	7.992	8.042	-0.050	9336106	2.50	2.42	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC CAL cl/so4_00262	Amount Added: 0.05	Units: mL
IC Cal low_00467	Amount Added: 0.05	Units: mL

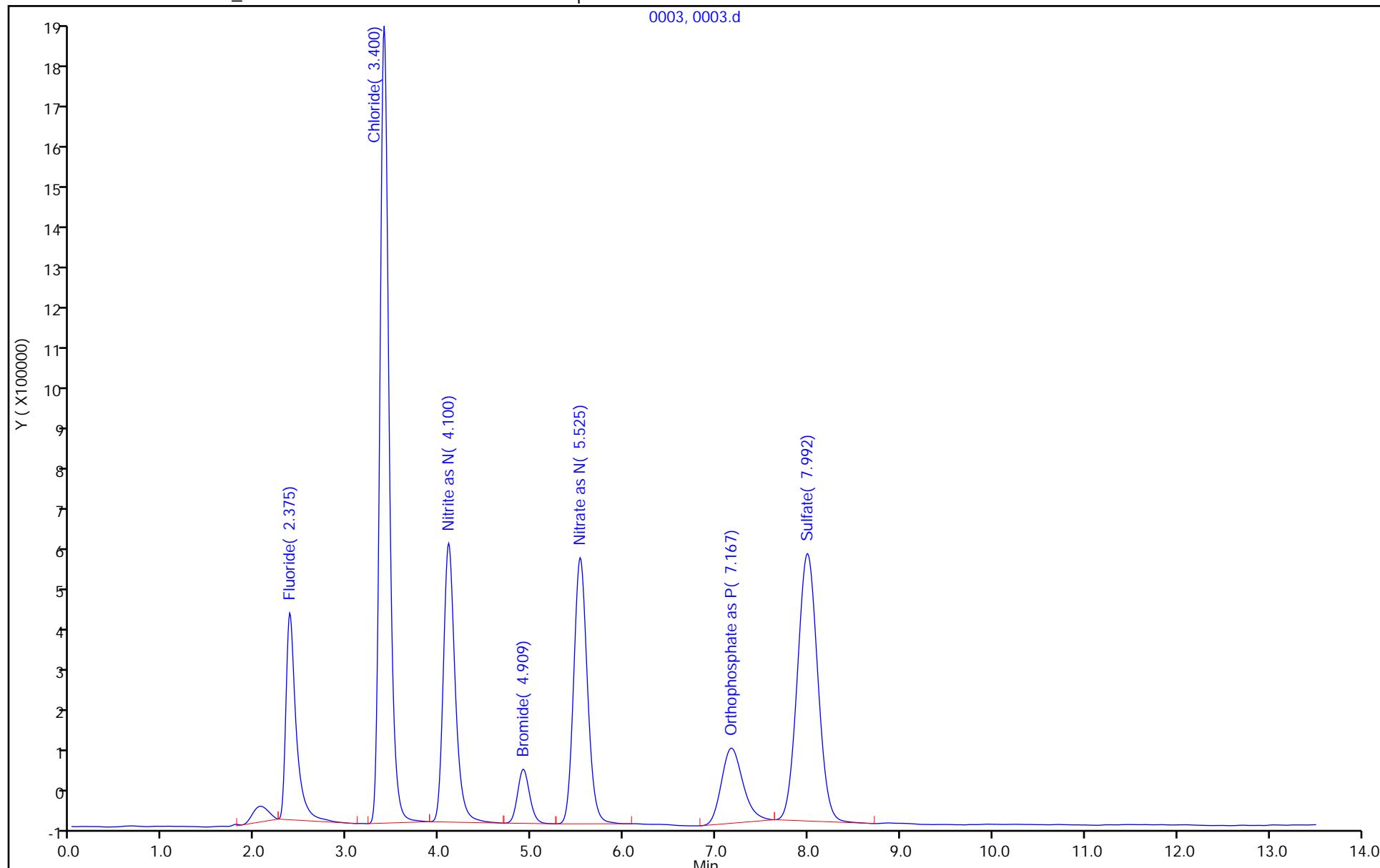
Report Date: 27-Jun-2019 08:20:05

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0003.d
Injection Date: 26-Jun-2019 11:18:00 Instrument ID: WC_IonChrom11
Lims ID: std L2 Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 3



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0004.d
 Lims ID: std L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 26-Jun-2019 11:34:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083211-004
 Misc. Info.: 4 F
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 27-Jun-2019 08:20:05 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0308

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.376	2.375	0.001	7463850	1.00	0.9631	
2 Chloride	3.401	3.425	-0.024	25365071	5.00	4.08	
3 Nitrite as N	4.101	4.109	-0.008	11249349	NC	NC	
4 Bromide	4.909	4.909	0.000	2214514	1.00	0.9808	
5 Nitrate as N	5.526	5.517	0.009	12795979	NC	NC	
7 Orthophosphate as P	7.159	7.142	0.017	5516182	NC	NC	
6 Sulfate	7.992	8.042	-0.050	18388571	5.00	4.35	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC CAL cl/so4_00262	Amount Added: 0.10	Units: mL
IC Cal low_00467	Amount Added: 0.10	Units: mL

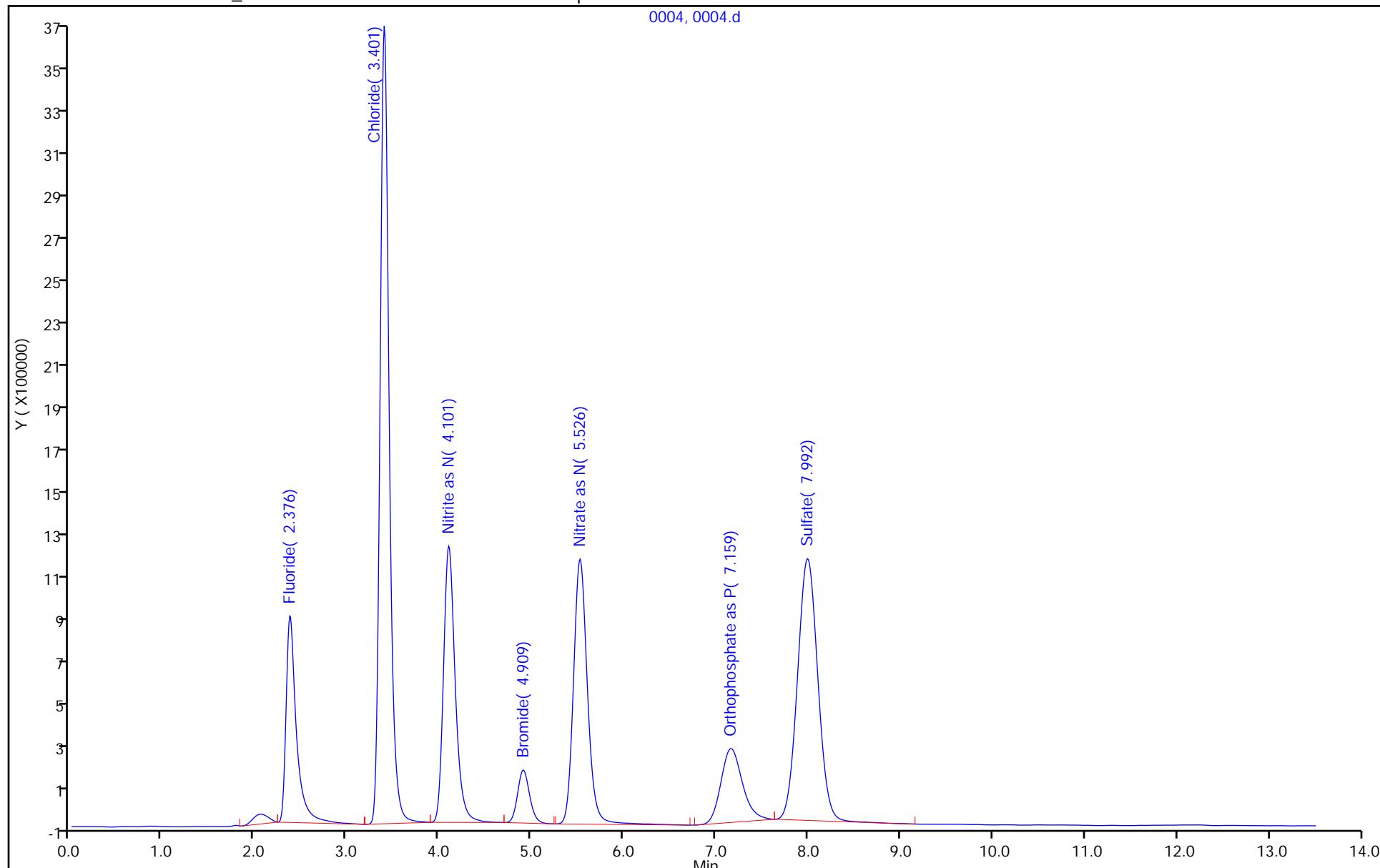
Report Date: 27-Jun-2019 08:20:05

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0004.d
Injection Date: 26-Jun-2019 11:34:00 Instrument ID: WC_IonChrom11
Lims ID: std L3 Operator ID:
Client ID:
Injection Vol: 10.0 ul Dil. Factor: 1.0000 Worklist Smp#: 4
Method: Anions_IC11 Limit Group: Wet - Anions 28D

0004, 0004.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0005.d
 Lims ID: std L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 26-Jun-2019 11:51:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083211-005
 Misc. Info.: 5 F
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 27-Jun-2019 08:20:06 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0308

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.375	2.375	0.000	31062960	4.00	3.89	
2 Chloride	3.409	3.409	0.000	394982582	60.0	54.7	
3 Nitrite as N	4.100	4.100	0.000	47030028	NC	NC	
4 Bromide	4.900	4.900	0.000	9006491	4.00	3.96	
5 Nitrate as N	5.517	5.517	0.000	53542567	NC	NC	
7 Orthophosphate as P	7.150	7.150	0.000	21703271	NC	NC	
6 Sulfate	8.025	8.025	0.000	253251436	60.0	54.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC CAL cl/so4_00262	Amount Added: 1.20	Units: mL
IC Cal low_00467	Amount Added: 0.40	Units: mL

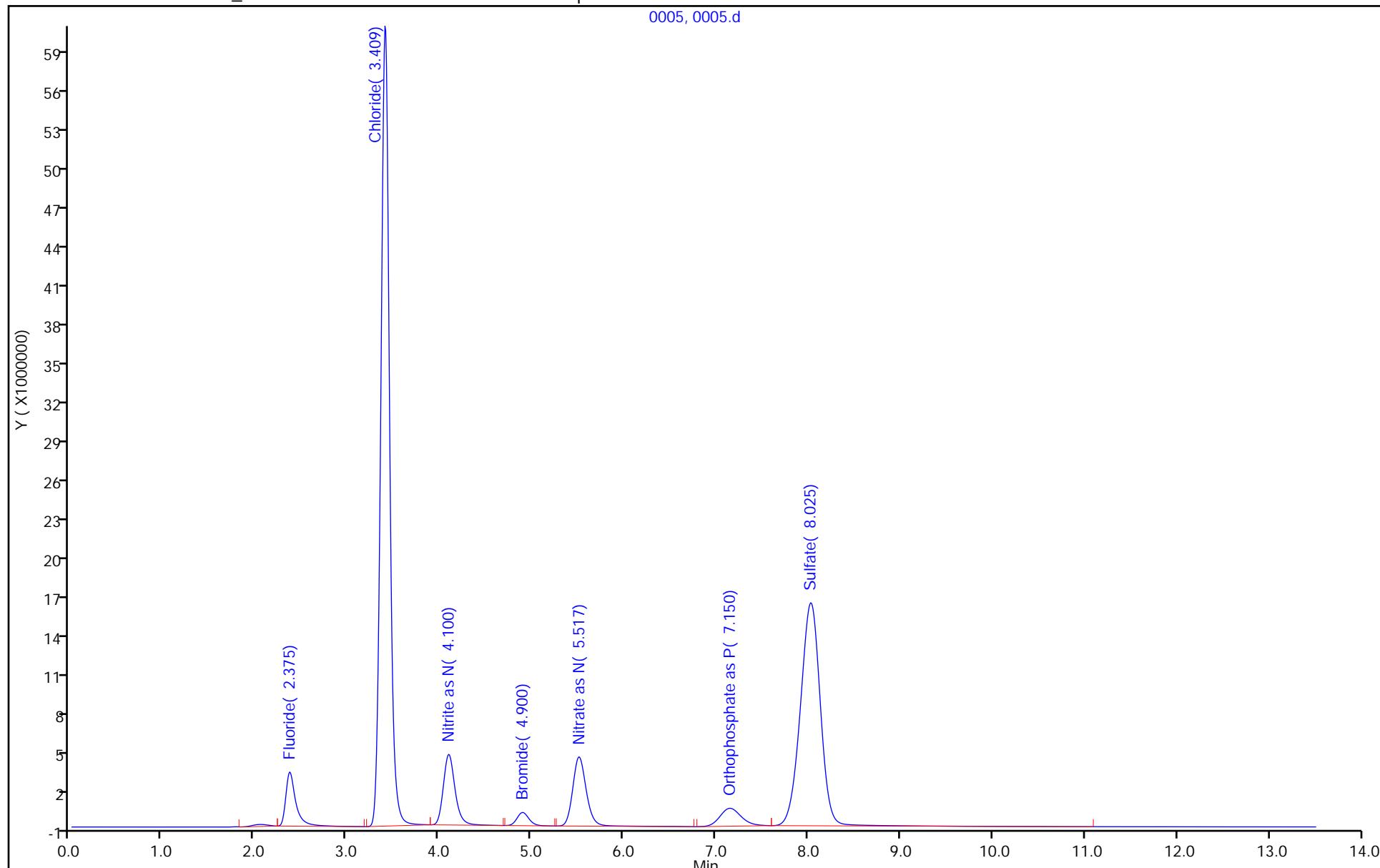
Report Date: 27-Jun-2019 08:20:06

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0005.d
Injection Date: 26-Jun-2019 11:51:00 Instrument ID: WC_IonChrom11
Lims ID: std L4 Operator ID:
Client ID:
Injection Vol: 10.0 ul Dil. Factor: 1.0000 Worklist Smp#: 5
Method: Anions_IC11 Limit Group: Wet - Anions 28D

0005, 0005.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0006.d
 Lims ID: std L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 26-Jun-2019 12:07:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083211-006
 Misc. Info.: 6 F
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 27-Jun-2019 08:20:07 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0308

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.384	2.375	0.009	64643303	8.00	8.05	
2 Chloride	3.434	3.409	0.025	861720759	120.0	118.6	
3 Nitrite as N	4.109	4.100	0.009	97611742	NC	NC	
4 Bromide	4.900	4.900	0.000	18177462	8.00	7.99	
5 Nitrate as N	5.509	5.517	-0.008	112643758	NC	NC	
7 Orthophosphate as P	7.142	7.150	-0.008	43434398	NC	NC	
6 Sulfate	8.059	8.025	0.034	550187288	120.0	117.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC CAL cl/so4_00262	Amount Added: 2.40	Units: mL
IC Cal low_00467	Amount Added: 0.80	Units: mL

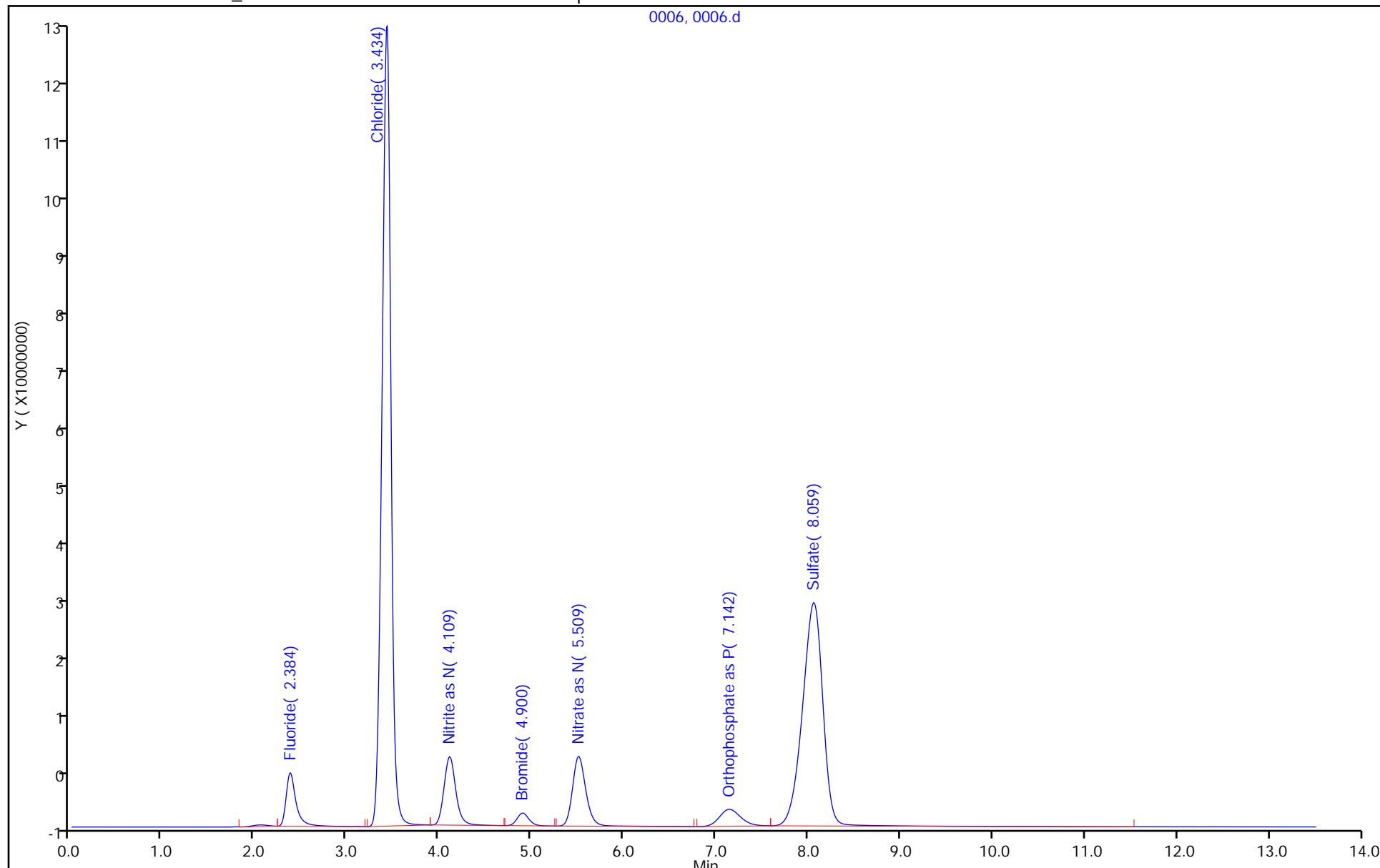
Report Date: 27-Jun-2019 08:20:07

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0006.d
Injection Date: 26-Jun-2019 12:07:00 Instrument ID: WC_IonChrom11
Lims ID: std L5 Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 6



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Lims ID: std L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 26-Jun-2019 12:23:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083211-007
 Misc. Info.: 7 3290
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 27-Jun-2019 08:20:08 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d

Column 1 : Det: 0005
 Process Host: CTX0308

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.384	2.375	0.009	81093542	10.0	10.1	
2 Chloride	3.450	3.409	0.041	1510237912	200.0	207.4	
3 Nitrite as N	4.117	4.100	0.017	123884933	NC	NC	
4 Bromide	4.900	4.900	0.000	22887816	10.0	10.1	
5 Nitrate as N	5.509	5.517	-0.008	144003825	NC	NC	
7 Orthophosphate as P	7.142	7.150	-0.008	54412815	NC	NC	
6 Sulfate	8.092	8.025	0.067	978570061	200.0	208.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC CAL cl/so4_00262	Amount Added: 4.00	Units: mL
IC Cal low_00467	Amount Added: 1.00	Units: mL

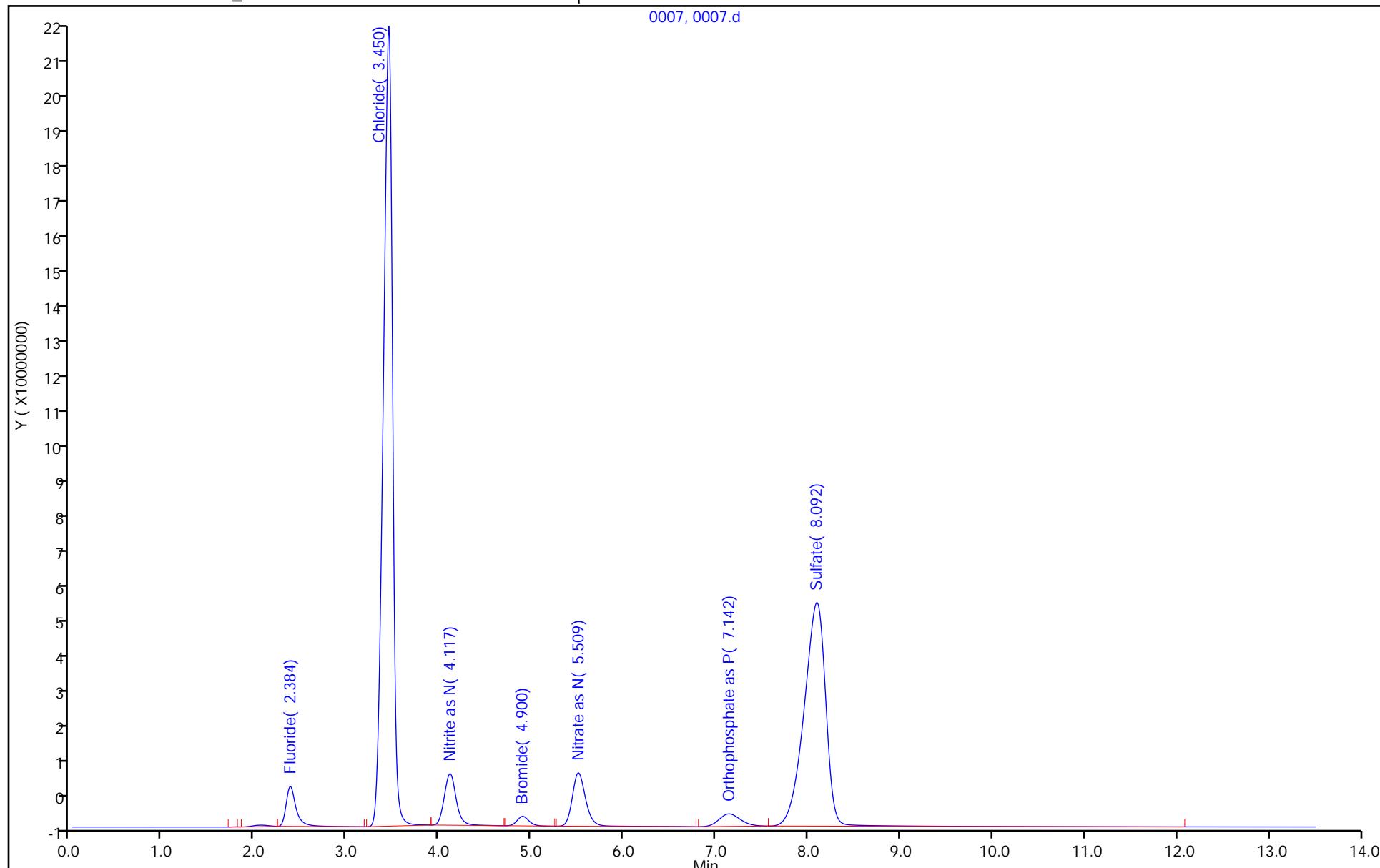
Report Date: 27-Jun-2019 08:20:08

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
Injection Date: 26-Jun-2019 12:23:00 Instrument ID: WC_IonChrom11
Lims ID: std L6 Operator ID:
Client ID:
Injection Vol: 10.0 ul Worklist Smp#: 7
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

0007, 0007.d



IC Instrument Information

WL: 83211 Inst ID: 11 Analysis Date: 06/26/19 Analyst: TP

Rush	Job No.	Samples	Anions	QC Req	HT Exp
<input checked="" type="checkbox"/>	<u>125598</u>	<u>3</u>	F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	183
<input checked="" type="checkbox"/>	<u>125606</u>	<u>5</u>	F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input checked="" type="checkbox"/>	<u>125620</u>	<u>5</u>	F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input checked="" type="checkbox"/>	<u>124621</u>	<u>3</u>	F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input checked="" type="checkbox"/>	<u>124548</u>	<u>1</u>	F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	
<input type="checkbox"/>			F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
<u>125620</u>	<u>1-5</u>	F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	2x, 10x, 20x	Cond.
<u>124621</u>	<u>2,3,4</u>	F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	20x, 200x	Dist.
<u>124548</u>	<u>1</u>	F Cl NO ₂ Br NO ₃ PO ₄ SO ₄	20x	Cond.
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		
		F Cl NO ₂ Br NO ₃ PO ₄ SO ₄		

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
Instrument: WC_IonChrom11 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 27-Jun-2019 15:18:27
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b
Inj Date : 26-Jun-2019 11:01:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

Compound	Wet - Anions				Wet - Anions 28D			
	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-304665	806601C		1.000
2 Chloride					-446212	7302075		0.997
3 Nitrite as N	-366623	122330C		0.999				
4 Bromide					-19098	2277306		1.000
5 Nitrate as N	-638008	141583E		0.999				
7 Orthophosphate as P	232655	539448E		1.000				
6 Sulfate					-204935	4699551		0.997

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Instrument: WC_IonChrom11 Lims Location: 280
 Lock State: Unlocked Cpnd Order: Retention Time
 Integrator: Falcon Last Modified: 27-Jun-2019 15:18:27
 No.Compounds:7
 Sublist: chrom-Anions_IC11*sub1
 Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
 Data Type: ic Spec Type: none
 Supports Extracted Chromatograms: False
 Run Time: 0.001-13.501 No. Points: 1561

Calibration File Names

Level: 1	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0002.d
	Inj Date: 26-Jun-2019 11:01:00 Worklist: 83211 Sample#: 2
Level: 2	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0003.d
	Inj Date: 26-Jun-2019 11:18:00 Worklist: 83211 Sample#: 3
Level: 3	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0004.d
	Inj Date: 26-Jun-2019 11:34:00 Worklist: 83211 Sample#: 4
Level: 4	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0005.d
	Inj Date: 26-Jun-2019 11:51:00 Worklist: 83211 Sample#: 5
Level: 5	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0006.d
	Inj Date: 26-Jun-2019 12:07:00 Worklist: 83211 Sample#: 6
Level: 6	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
	Inj Date: 26-Jun-2019 12:23:00 Worklist: 83211 Sample#: 7

Start Cal Date: 26-Jun-2019 11:01:00 End Cal Date: 26-Jun-2019 12:23:00

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									
11335255 0.200000(1)	11358838 0.500000(2)	11249349 1.0000 (3)	11757507 4.0000 (4)	12201468 8.0000 (5)	12388493 10.0 (6)	-366623			0.999
2267051 83211(2)	5679419 83211(3)	11249349 83211(4)	47030028 83211(5)	97611742 83211(6)	123884933 83211(7)				12233007
5 Nitrate as N									
12335540 0.200000(1)	12545222 0.500000(2)	12795979 1.0000 (3)	13385642 4.0000 (4)	14080470 8.0000 (5)	14400383 10.0 (6)	-638008			0.999
2467108 83211(2)	6272611 83211(3)	12795979 83211(4)	53542567 83211(5)	112643758 83211(6)	144003825 83211(7)				14158392
7 Orthophosphate as P									
6948170 0.200000(1)	5577922 0.500000(2)	5516182 1.0000 (3)	5425818 4.0000 (4)	5429300 8.0000 (5)	5441282 10.0 (6)	232655			1.000
1389634 83211(2)	2788961 83211(3)	5516182 83211(4)	21703271 83211(5)	43434398 83211(6)	54412815 83211(7)				5394486

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0008.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 26-Jun-2019 12:40:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083211-008
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist:
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 27-Jun-2019 08:20:09 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0308

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.376	2.376	0.000	31812977	4.00	3.98	
2 Chloride	3.417	3.417	0.000	574878765	80.0	79.3	
3 Nitrite as N	4.101	4.101	0.000	48690571	NC	NC	
4 Bromide	4.901	4.901	0.000	9435272	4.00	4.15	
5 Nitrate as N	5.509	5.509	0.000	57472028	NC	NC	
7 Orthophosphate as P	7.151	7.151	0.000	22828911	NC	NC	
6 Sulfate	8.042	8.042	0.000	369750025	80.0	79.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC SO4 ICV_00017	Amount Added: 0.40	Units: mL
IC ICV 5_00238	Amount Added: 0.40	Units: mL
IC CL ICV_00016	Amount Added: 0.40	Units: mL

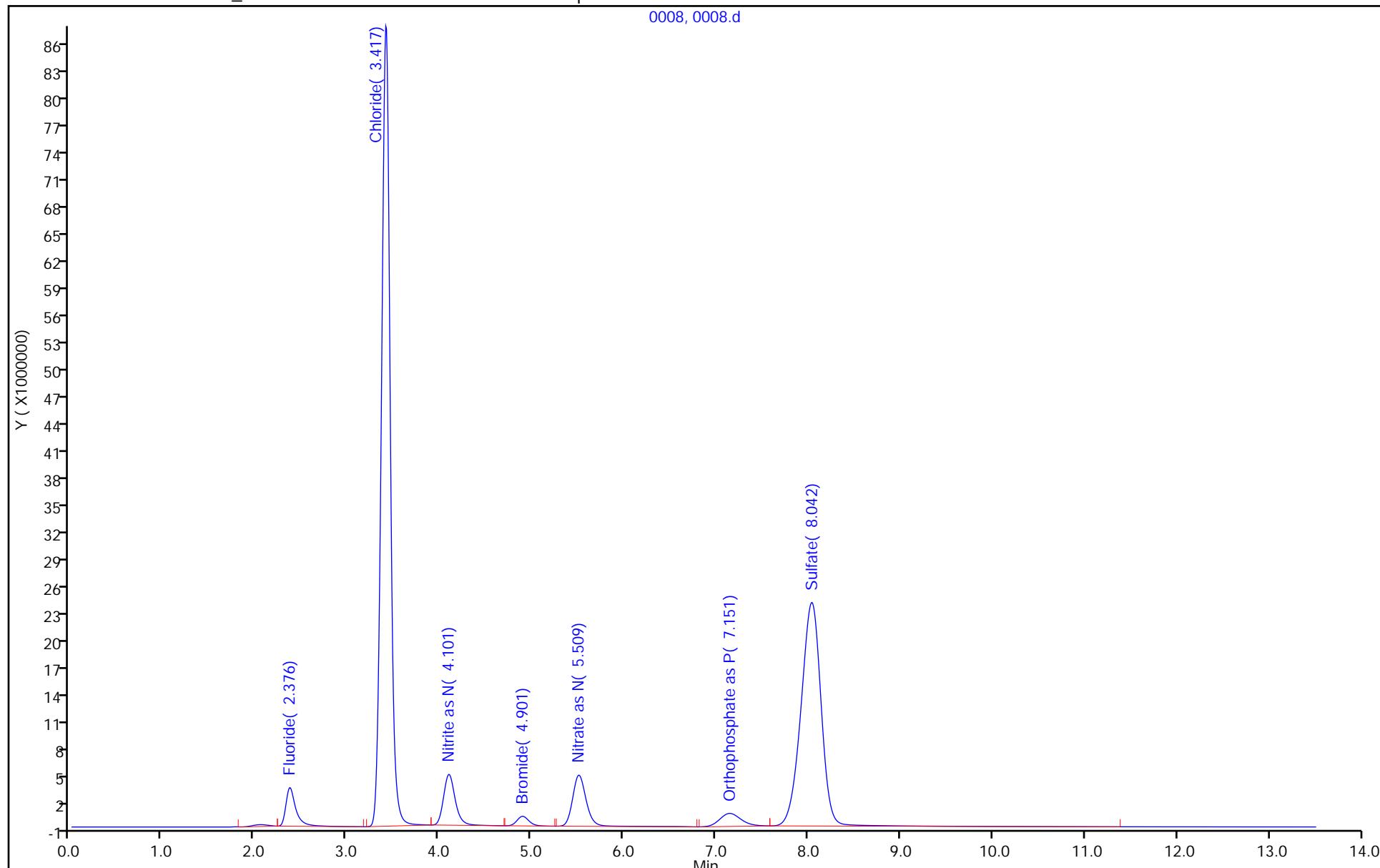
Report Date: 27-Jun-2019 08:20:09

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0008.d
Injection Date: 26-Jun-2019 12:40:00 Instrument ID: WC_IonChrom11
Lims ID: ICV Operator ID:
Client ID:
Injection Vol: 10.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Worklist Smp#: 8



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0009.d
 Lims ID: ICB
 Client ID:
 Sample Type: ICB
 Inject. Date: 26-Jun-2019 12:56:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083211-009
 Misc. Info.: 9 1427
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 27-Jun-2019 08:20:09 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0308

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.059	2.375	-0.316	639759	0.1171		
2 Chloride	3.401	3.409	-0.008	178059	0.6355		
3 Nitrite as N	4.151	4.100	0.051	102949		NC	
4 Bromide		4.900			ND		
5 Nitrate as N		5.517			ND		
7 Orthophosphate as P	7.209	7.150	0.059	502341		NC	
6 Sulfate	8.009	8.025	-0.016	188417	0.4762		

QC Flag Legend

Processing Flags

NC - Not Calibrated

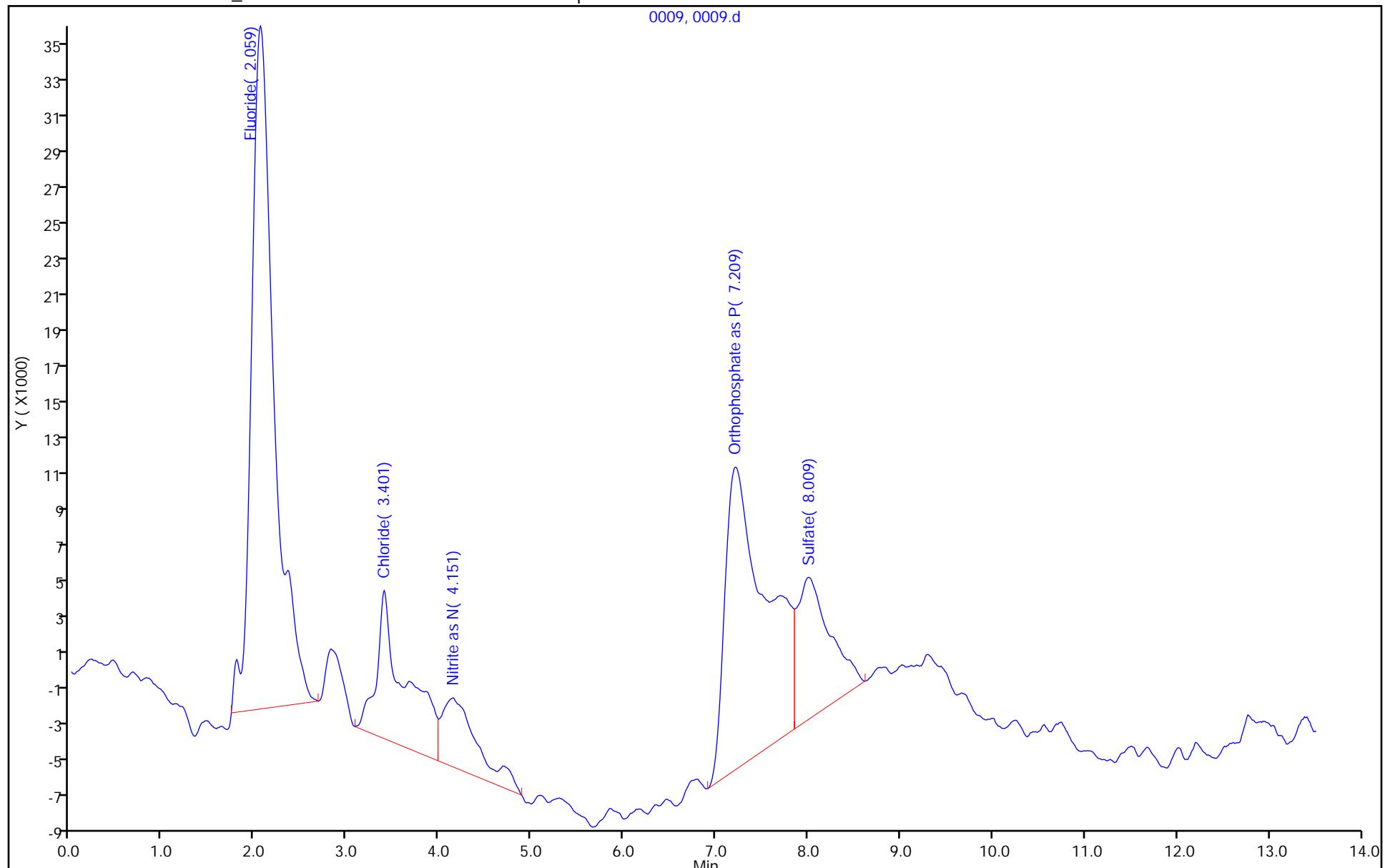
Report Date: 27-Jun-2019 08:20:10

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0009.d
Injection Date: 26-Jun-2019 12:56:00 Instrument ID: WC_IonChrom11
Lims ID: ICB Operator ID:
Client ID:
Injection Vol: 10.0 ul Dil. Factor: 1.0000 Worklist Smp#: 9
Method: Anions_IC11 Limit Group: Wet - Anions 28D ALS Bottle#: 0

0009, 0009.d



IC Instrument Information

WL: 83366 Inst ID: 11 Analysis Date: 07/01/19 Analyst: TP

Dilutions

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m

Instrument: WC_IonChrom11

Lims Location: 280

Lock State: Unlocked

Cpnd Order: Retention Time

Integrator: Falcon

Last Modified: 27-Jun-2019 15:18:27

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b

Inj Date : 26-Jun-2019 11:01:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

Compound	Wet - Anions				Wet - Anions 28D			
	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-304665	806601C		1.000
2 Chloride					-446212	7302075		0.997
3 Nitrite as N	-366623	122330C		0.999				
4 Bromide					-19098	2277306		1.000
5 Nitrate as N	-638008	1415839		0.999				
7 Orthophosphate as P	232655	5394486		1.000				
6 Sulfate					-204935	4699551		0.997

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\Anions_IC11.m
 Instrument: WC_IonChrom11 Lims Location: 280
 Lock State: Unlocked Cpnd Order: Retention Time
 Integrator: Falcon Last Modified: 27-Jun-2019 15:18:27
 No.Compounds:7
 Sublist: chrom-Anions_IC11*sub1
 Limit Group: Wet - Anions

Detectors

Detector: 1,0005
 Data Type: ic Spec Type: none
 Supports Extracted Chromatograms: False
 Run Time: 0.001-13.501 No. Points: 1561

Calibration File Names

Level: 1	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0002.d
	Inj Date: 26-Jun-2019 11:01:00 Worklist: 83211 Sample#: 2
Level: 2	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0003.d
	Inj Date: 26-Jun-2019 11:18:00 Worklist: 83211 Sample#: 3
Level: 3	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0004.d
	Inj Date: 26-Jun-2019 11:34:00 Worklist: 83211 Sample#: 4
Level: 4	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0005.d
	Inj Date: 26-Jun-2019 11:51:00 Worklist: 83211 Sample#: 5
Level: 5	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0006.d
	Inj Date: 26-Jun-2019 12:07:00 Worklist: 83211 Sample#: 6
Level: 6	\\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
	Inj Date: 26-Jun-2019 12:23:00 Worklist: 83211 Sample#: 7

Start Cal Date: 26-Jun-2019 11:01:00 End Cal Date: 26-Jun-2019 12:23:00

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									
11335255 0.200000(1)	11358838 0.500000(2)	11249349 1.0000 (3)	11757507 4.0000 (4)	12201468 8.0000 (5)	12388493 10.0 (6)	-366623			0.999
2267051 83211(2)	5679419 83211(3)	11249349 83211(4)	47030028 83211(5)	97611742 83211(6)	123884933 83211(7)		12233007		
5 Nitrate as N									
12335540 0.200000(1)	12545222 0.500000(2)	12795979 1.0000 (3)	13385642 4.0000 (4)	14080470 8.0000 (5)	14400383 10.0 (6)	-638008			0.999
2467108 83211(2)	6272611 83211(3)	12795979 83211(4)	53542567 83211(5)	112643758 83211(6)	144003825 83211(7)		14158392		
7 Orthophosphate as P									
6948170 0.200000(1)	5577922 0.500000(2)	5516182 1.0000 (3)	5425818 4.0000 (4)	5429300 8.0000 (5)	5441282 10.0 (6)	232655			1.000
1389634 83211(2)	2788961 83211(3)	5516182 83211(4)	21703271 83211(5)	43434398 83211(6)	54412815 83211(7)		5394486		

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0001.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 01-Jul-2019 11:21:00 ALS Bottle#: 0 Worklist Smp#: 1
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-001
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:52:05 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.392	2.376	0.016	37581692	5.00	4.70	
2 Chloride	3.467	3.417	0.050	694209525	100.0	95.7	
3 Nitrite as N	4.167	4.101	0.066	57303681	NC	NC	
4 Bromide	4.984	4.901	0.083	10806817	5.00	4.75	
5 Nitrate as N	5.609	5.509	0.100	64299253	NC	NC	
7 Orthophosphate as P	7.350	7.151	0.199	27500271	NC	NC	
6 Sulfate	8.392	8.042	0.350	445804777	100.0	95.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC LCS_01620

Amount Added: 5.00

Units: mL

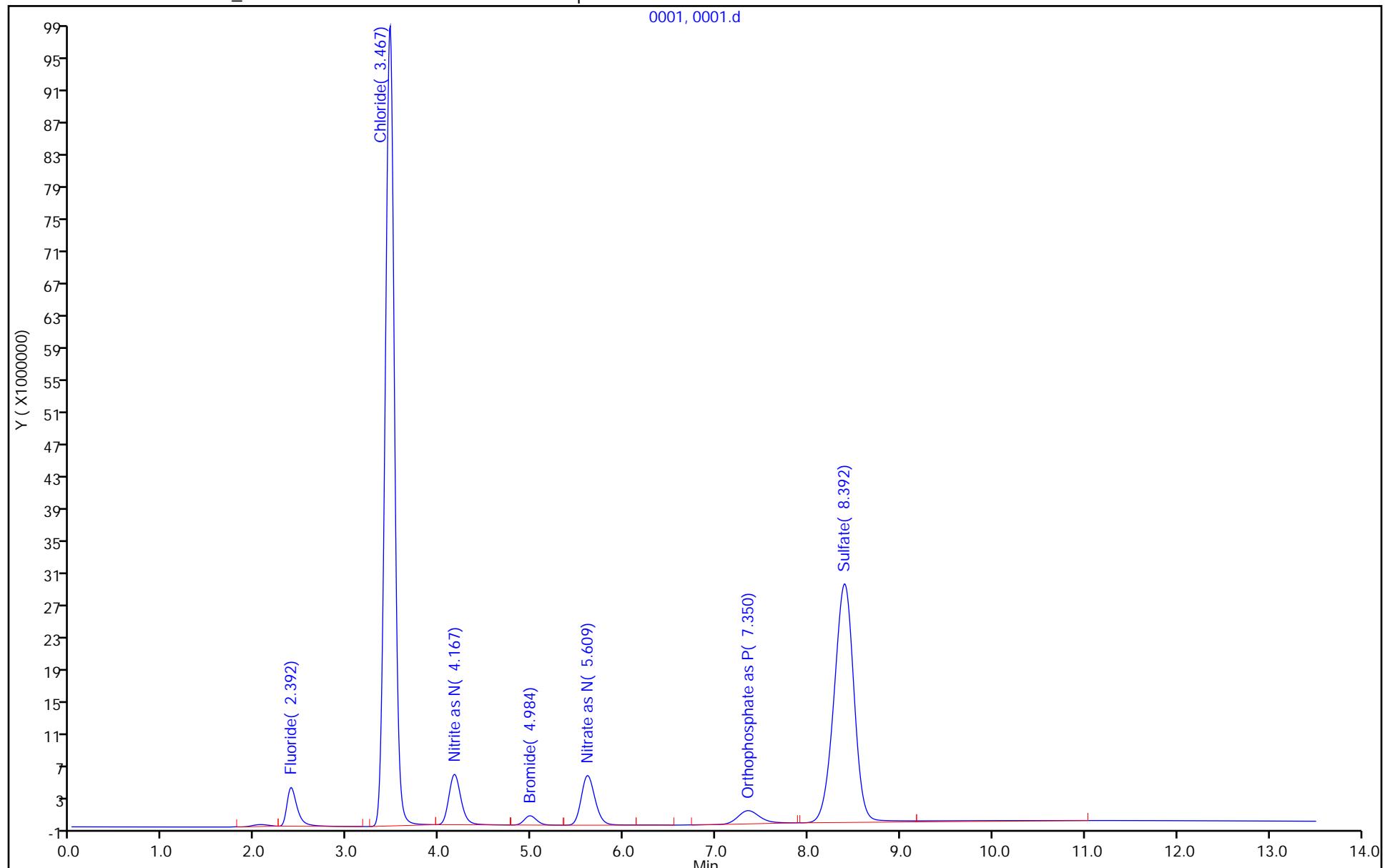
Report Date: 02-Jul-2019 07:52:10

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0001.d
Injection Date: 01-Jul-2019 11:21:00 Instrument ID: WC_IonChrom11
Lims ID: CCV Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0002.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 01-Jul-2019 11:37:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-002
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.067	2.376	-0.309	271425	0.0714		
2 Chloride	3.359	3.417	-0.058	1145870	0.7680		
3 Nitrite as N		4.101			ND		
4 Bromide		4.901			ND		
5 Nitrate as N	5.434	5.509	-0.075	236718	NC		
7 Orthophosphate as P	6.950	7.151	-0.201	277568	NC		
6 Sulfate	7.717	8.042	-0.325	2396154	0.9459		

QC Flag Legend

Processing Flags

NC - Not Calibrated

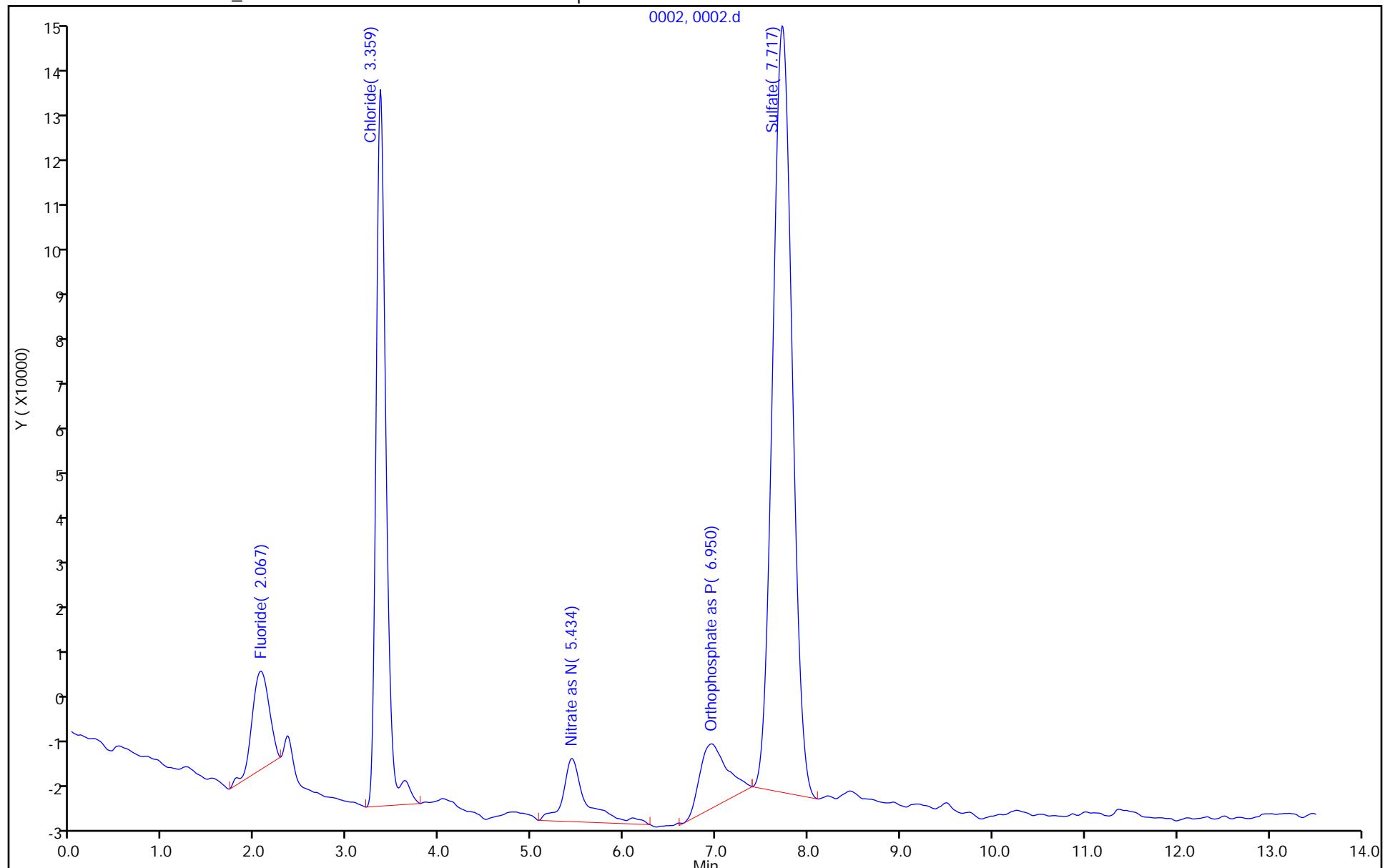
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 11:37:00 Instrument ID: WC_IonChrom11
Lims ID: CCB Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 2



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0003.d
 Lims ID: MRL
 Client ID:
 Sample Type: MRL
 Inject. Date: 01-Jul-2019 11:53:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-003
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	1438706	0.2000	0.2161	
2 Chloride	3.359	3.417	-0.058	13096919	2.50	2.40	
3 Nitrite as N	4.042	4.101	-0.059	2164071	NC	NC	
4 Bromide	4.834	4.901	-0.067	435213	0.2000	0.1995	
5 Nitrate as N	5.434	5.509	-0.075	2629323	NC	NC	
7 Orthophosphate as P	6.925	7.151	-0.226	1318226	NC	NC	
6 Sulfate	7.734	8.042	-0.308	11561498	2.50	2.90	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC CAL cl/so4_00263	Amount Added: 0.05	Units: mL
IC Cal low_00468	Amount Added: 0.02	Units: mL

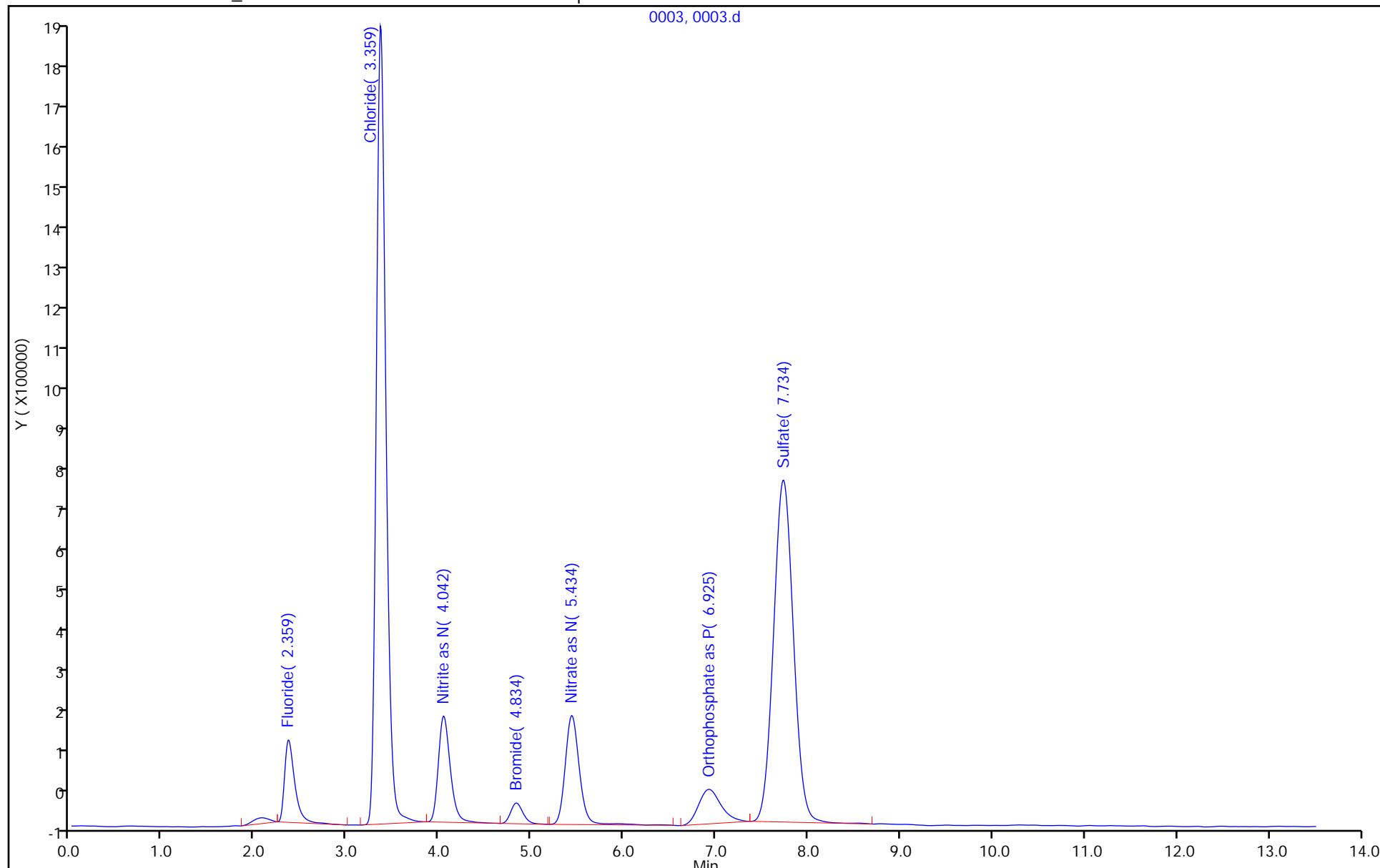
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0003.d
Injection Date: 01-Jul-2019 11:53:00 Instrument ID: WC_IonChrom11
Lims ID: MRL Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 3



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0004.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 01-Jul-2019 12:09:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-004
 Misc. Info.: 4 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	37729444	5.00	4.72	
2 Chloride	3.384	3.417	-0.033	693059631	100.0	95.5	
3 Nitrite as N	4.050	4.101	-0.051	57090354	NC	NC	
4 Bromide	4.825	4.901	-0.076	10802650	5.00	4.75	
5 Nitrate as N	5.417	5.509	-0.092	65238034	NC	NC	
7 Orthophosphate as P	6.892	7.151	-0.259	27164989	NC	NC	
6 Sulfate	7.784	8.042	-0.258	442765614	100.0	94.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC LCS_01620

Amount Added: 5.00

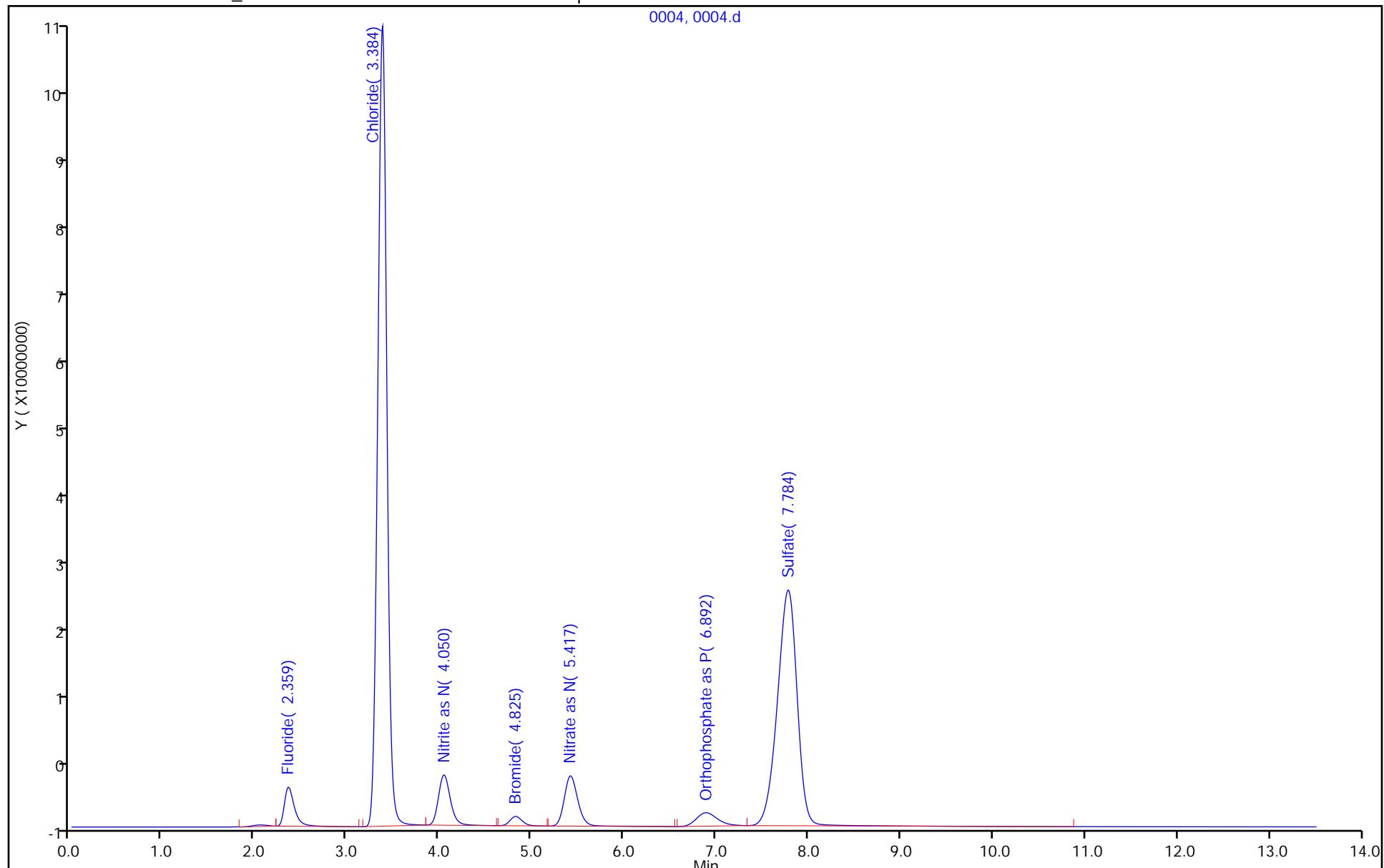
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 12:09:00 Instrument ID: WC_IonChrom11
Lims ID: LCS Operator ID:
Client ID:
Injection Vol: 10.0 ul Worklist Smp#: 4
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0005.d
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 01-Jul-2019 12:26:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-005
 Misc. Info.: 5 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	37764265	5.00	4.72	
2 Chloride	3.384	3.417	-0.033	693501913	100.0	95.6	
3 Nitrite as N	4.050	4.101	-0.051	57211373	NC	NC	
4 Bromide	4.825	4.901	-0.076	10824087	5.00	4.76	
5 Nitrate as N	5.425	5.509	-0.084	65276041	NC	NC	
7 Orthophosphate as P	6.892	7.151	-0.259	27333603	NC	NC	
6 Sulfate	7.784	8.042	-0.258	442559426	100.0	94.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC LCS_01620

Amount Added: 5.00

Units: mL

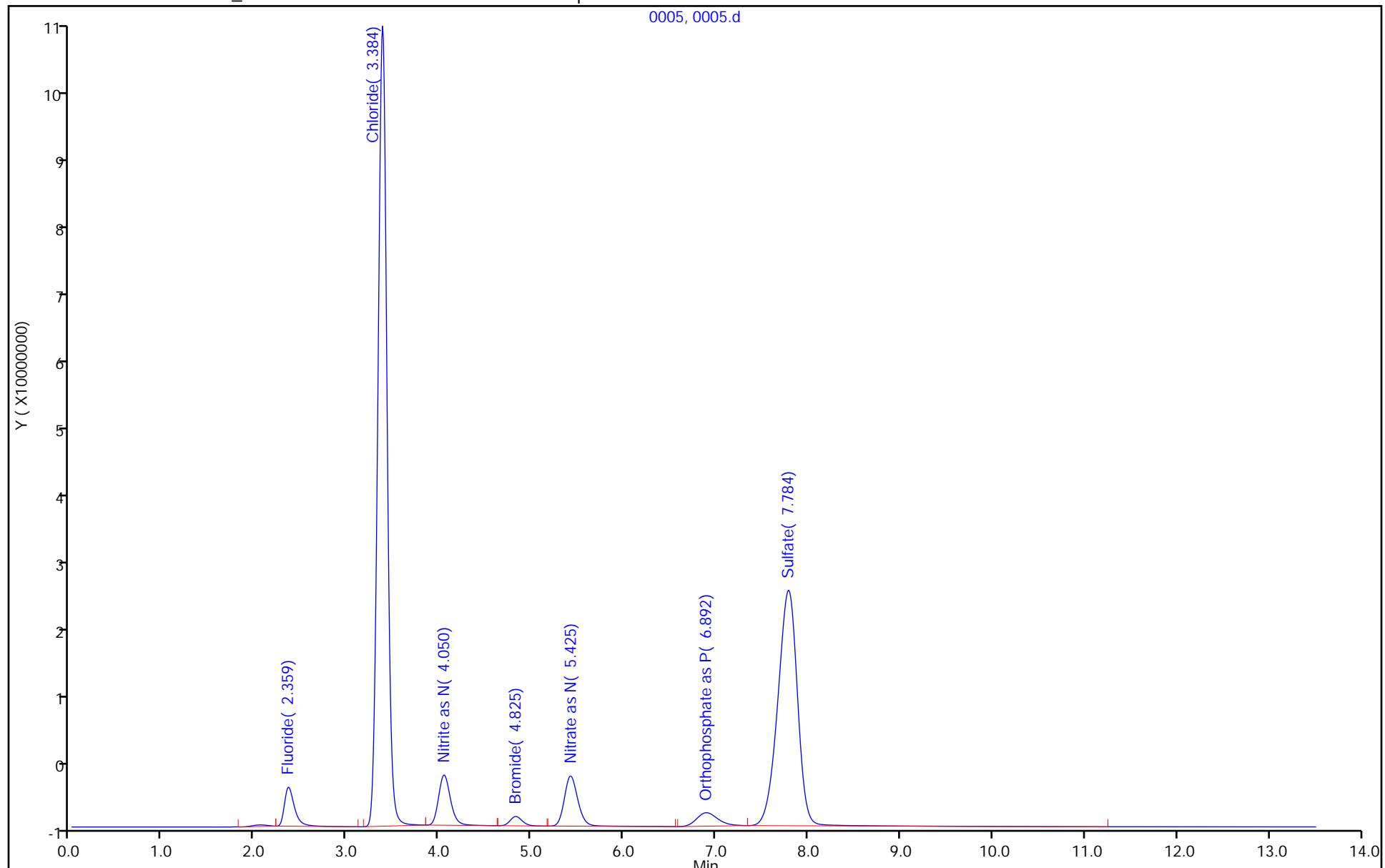
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Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 12:26:00 Instrument ID: WC_IonChrom11
Lims ID: LCSD Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 5



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0006.d
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 01-Jul-2019 12:42:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-006
 Misc. Info.: 6 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.067	2.376	-0.309	265478	0.0707		
2 Chloride	3.359	3.417	-0.058	1142723		0.7676	
3 Nitrite as N		4.101				ND	
4 Bromide		4.901				ND	
5 Nitrate as N	5.426	5.509	-0.083	101631		NC	
7 Orthophosphate as P	6.959	7.151	-0.192	361080		NC	
6 Sulfate	7.734	8.042	-0.308	2490157		0.9659	

QC Flag Legend

Processing Flags

NC - Not Calibrated

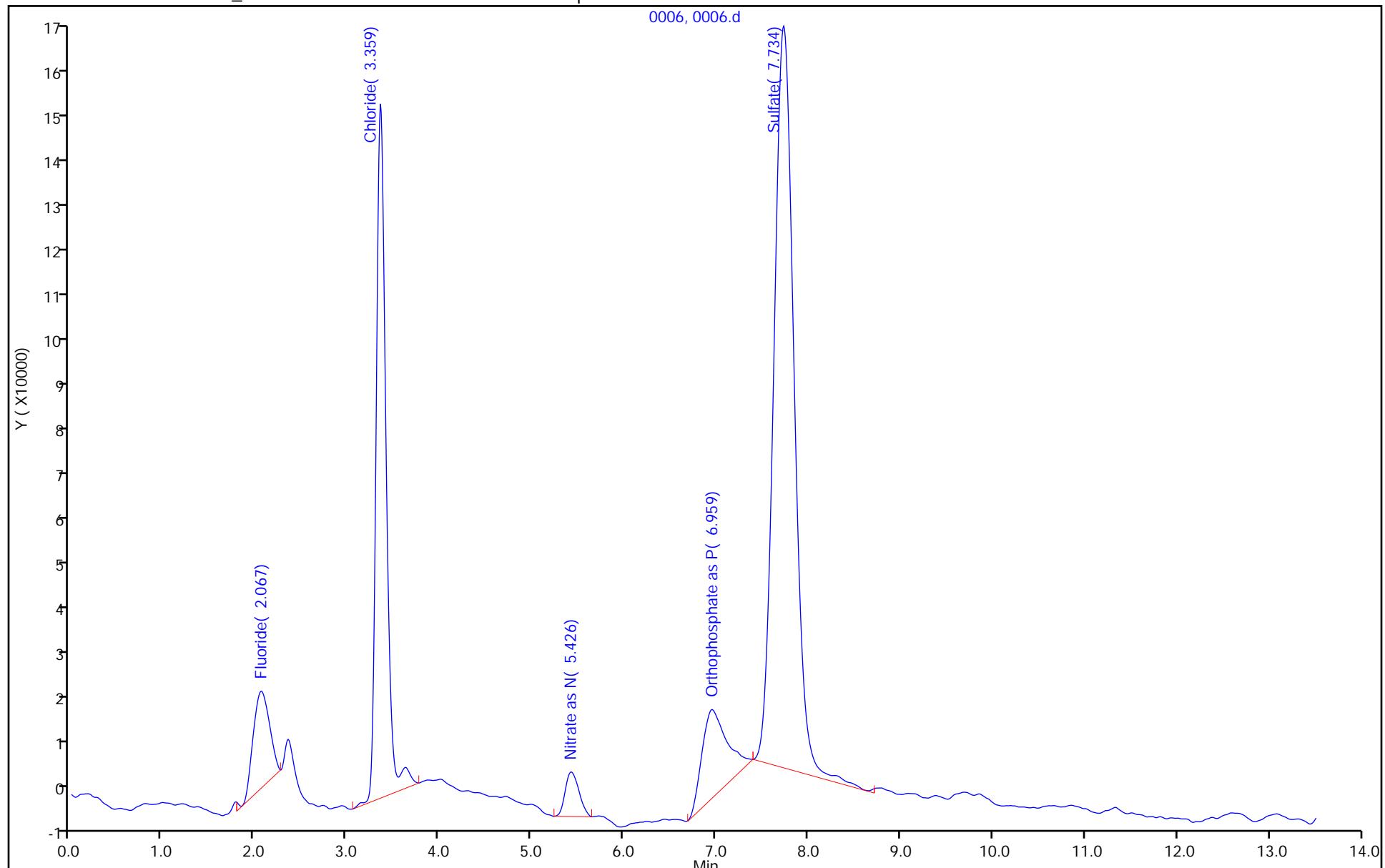
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Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 12:42:00 Instrument ID: WC_IonChrom11
Lims ID: MB Operator ID:
Client ID:
Injection Vol: 10.0 ul Dil. Factor: 1.0000 Worklist Smp#: 6
Method: Anions_IC11 Limit Group: Wet - Anions 28D

0006, 0006.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0007.d
 Lims ID: 280-124912-F-1
 Client ID: PZ004-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 18:39:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-007
 Misc. Info.: 9365 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.351	2.376	-0.025	795944	0.1365	
2 Chloride	3.367	3.417	-0.050	61334632	9.01	
3 Nitrite as N		4.101			ND	
4 Bromide	4.834	4.901	-0.067	127559	0.0644	
5 Nitrate as N	5.442	5.509	-0.067	1370271	NC	
7 Orthophosphate as P	6.834	7.151	-0.317	457114	NC	
6 Sulfate	7.792	8.042	-0.250	506882366	108.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:53

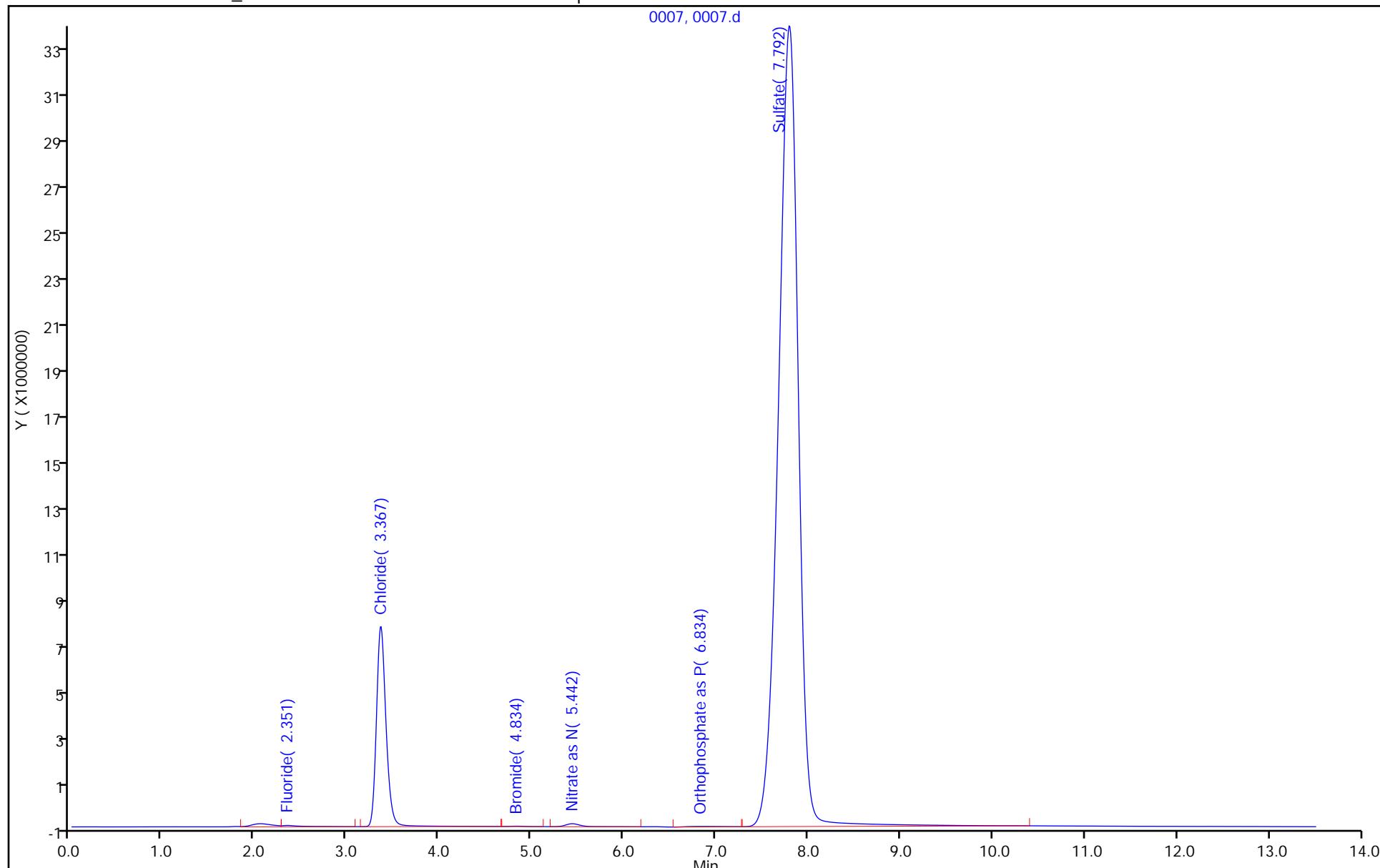
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 18:39:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-1 Lab Sample ID: 280-124912-1
Client ID: PZ004-19A
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 7

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0008.d
 Lims ID: 280-124912-F-2
 Client ID: G0044-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 18:55:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-008
 Misc. Info.: 20751 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	133957	0.0544	
2 Chloride	3.367	3.417	-0.050	34895194	5.39	
3 Nitrite as N		4.101			ND	
4 Bromide		4.901			ND	
5 Nitrate as N	5.442	5.509	-0.067	11257465	NC	
7 Orthophosphate as P	6.750	7.151	-0.401	640769	NC	
6 Sulfate	7.784	8.042	-0.258	302741015	64.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:49

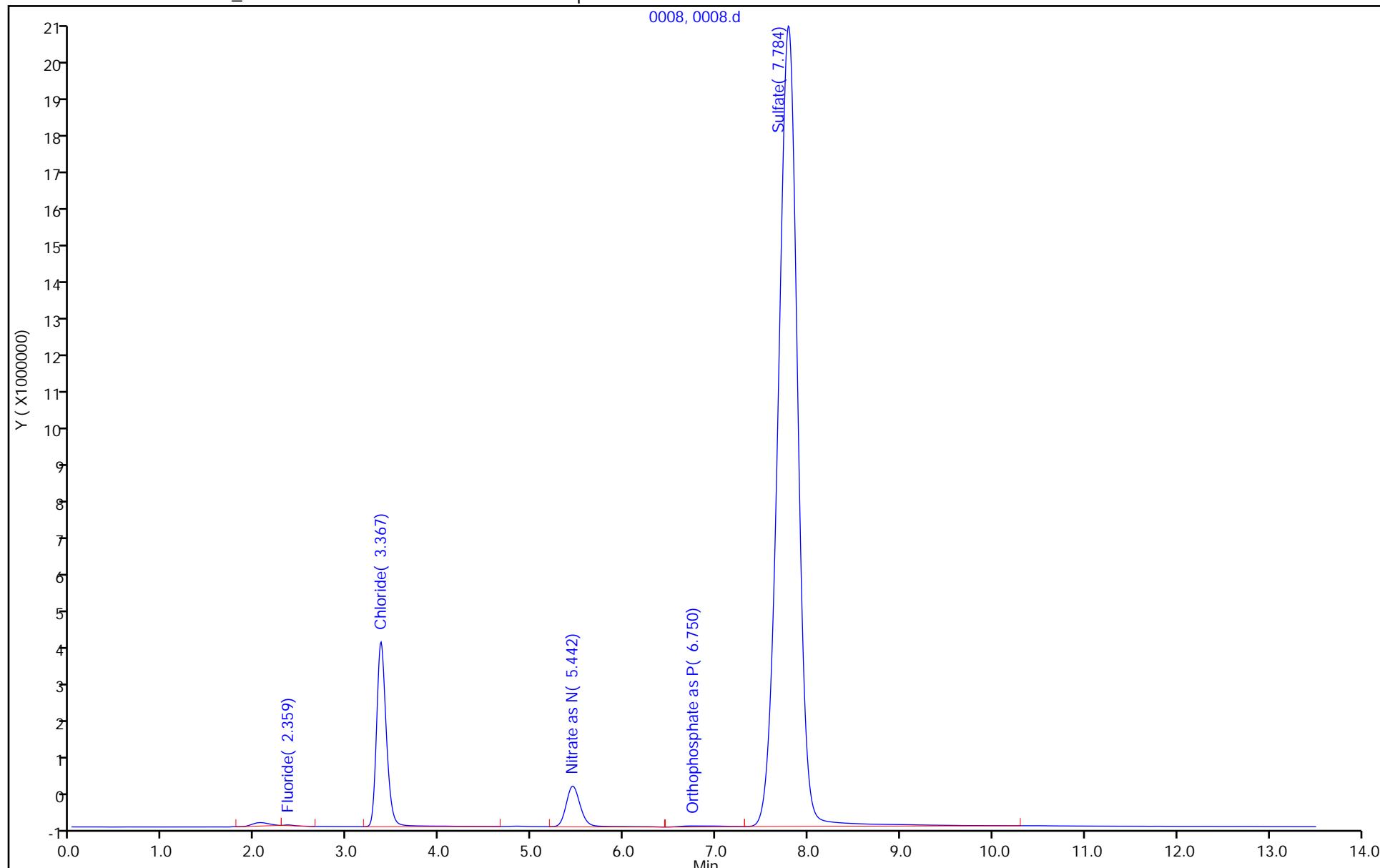
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0008.d
Injection Date: 01-Jul-2019 18:55:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-2 Lab Sample ID: 280-124912-2 Operator ID:
Client ID: G0044-19A Dil. Factor: 10.0000 Worklist Smp#: 8
Injection Vol: 10.0 ul Limit Group: Wet - Anions 28D
Method: Anions_IC11

ALS Bottle#: 0

0008, 0008.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0009.d
 Lims ID: 280-124912-F-3
 Client ID: PZ015-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 19:11:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 10.0 ul Dil. Factor: 5.0000
 Sample Info: 280-0083366-009
 Misc. Info.: 8014 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	323092	0.0778	
2 Chloride	3.367	3.417	-0.050	27193757	4.34	
3 Nitrite as N		4.101			ND	
4 Bromide		4.901			ND	
5 Nitrate as N	5.442	5.509	-0.067	35919346	NC	
7 Orthophosphate as P		7.151			ND	
6 Sulfate	7.759	8.042	-0.283	48173790	10.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:47

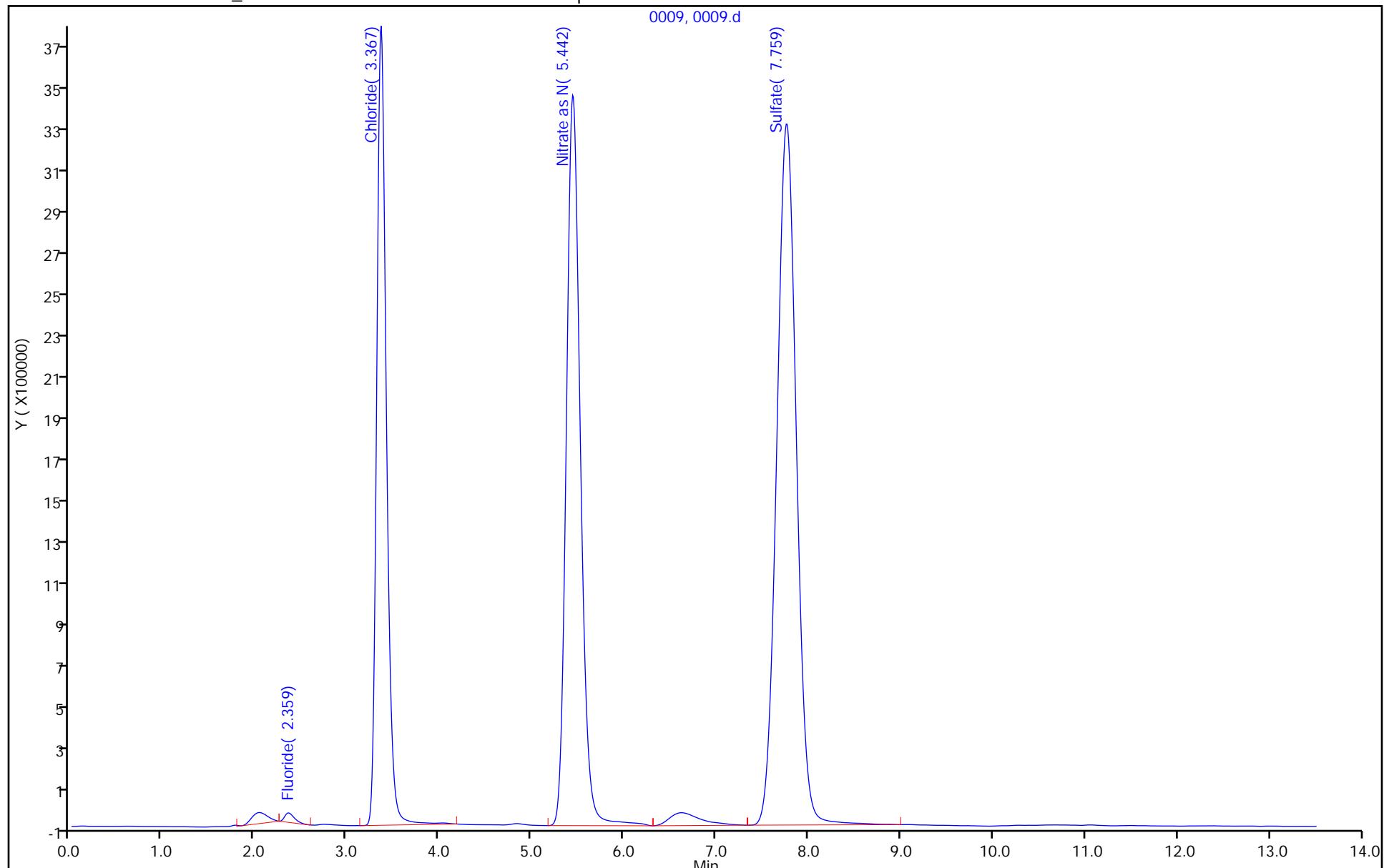
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Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0009.d
Injection Date: 01-Jul-2019 19:11:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-3 Lab Sample ID: 280-124912-3
Client ID: PZ015-19A
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 9

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0010.d
 Lims ID: 280-124912-F-4
 Client ID: G0102-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 19:28:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-010
 Misc. Info.: 25663 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.351	2.376	-0.025	120837	0.0528	
2 Chloride	3.367	3.417	-0.050	36348339	5.59	
3 Nitrite as N		4.101			ND	
4 Bromide	4.842	4.901	-0.059	107048	0.0554	
5 Nitrate as N	5.442	5.509	-0.067	115364	NC	
7 Orthophosphate as P	6.817	7.151	-0.334	320070	NC	
6 Sulfate	7.792	8.042	-0.250	513229373	109.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:44

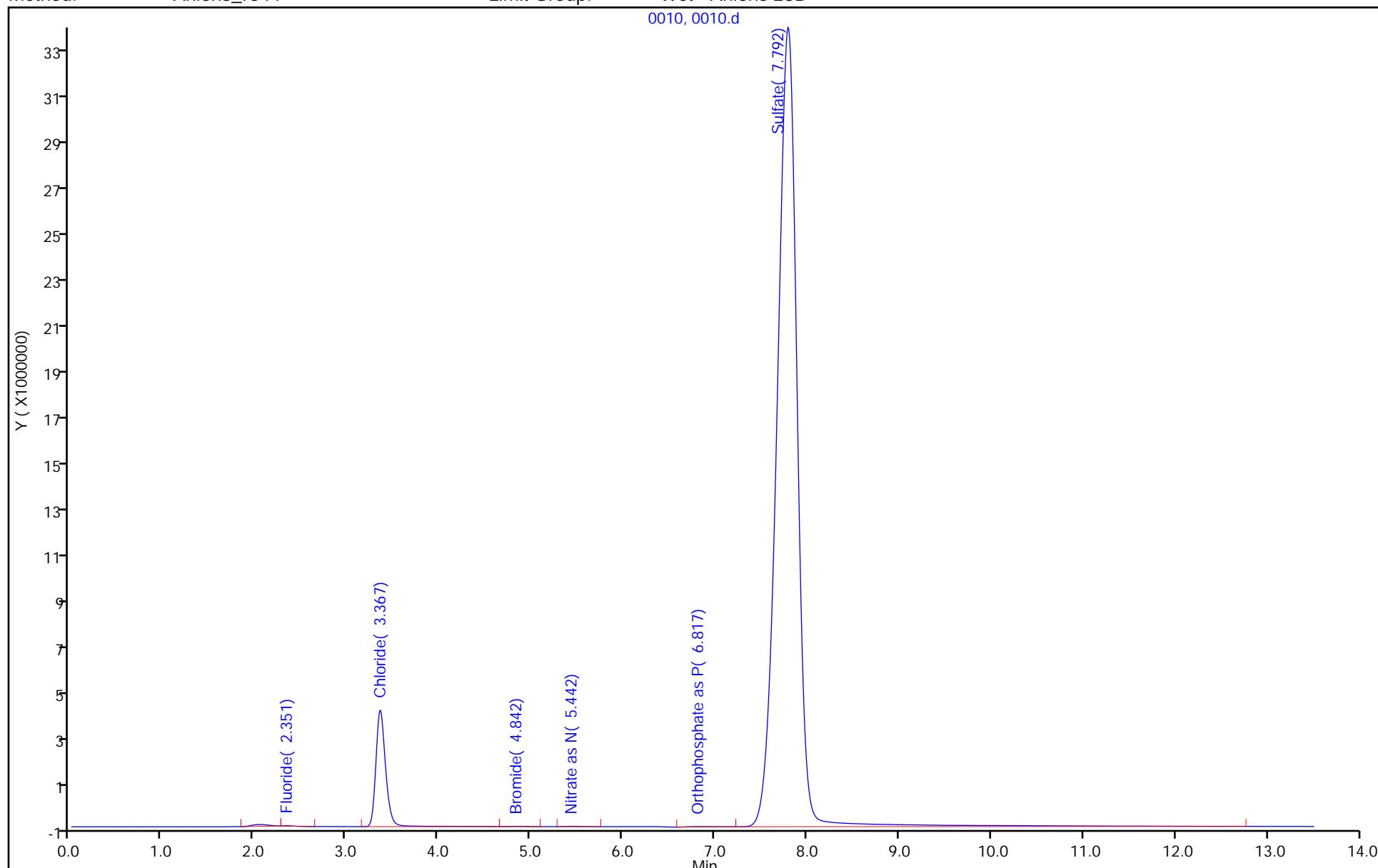
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0010.d
Injection Date: 01-Jul-2019 19:28:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-4 Lab Sample ID: 280-124912-4
Client ID: G0102-19A
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 10

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0011.d
 Lims ID: 280-124912-F-5
 Client ID: PZ007-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 19:44:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-011
 Misc. Info.: 17998 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.350	2.376	-0.026	111123	0.0515	
2 Chloride	3.367	3.417	-0.050	42332631	6.41	
3 Nitrite as N		4.101			ND	
4 Bromide	4.850	4.901	-0.051	100359	0.0525	
5 Nitrate as N	5.450	5.509	-0.059	297244	NC	
7 Orthophosphate as P	6.809	7.151	-0.342	360703	NC	
6 Sulfate	7.792	8.042	-0.250	437237388	93.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:42

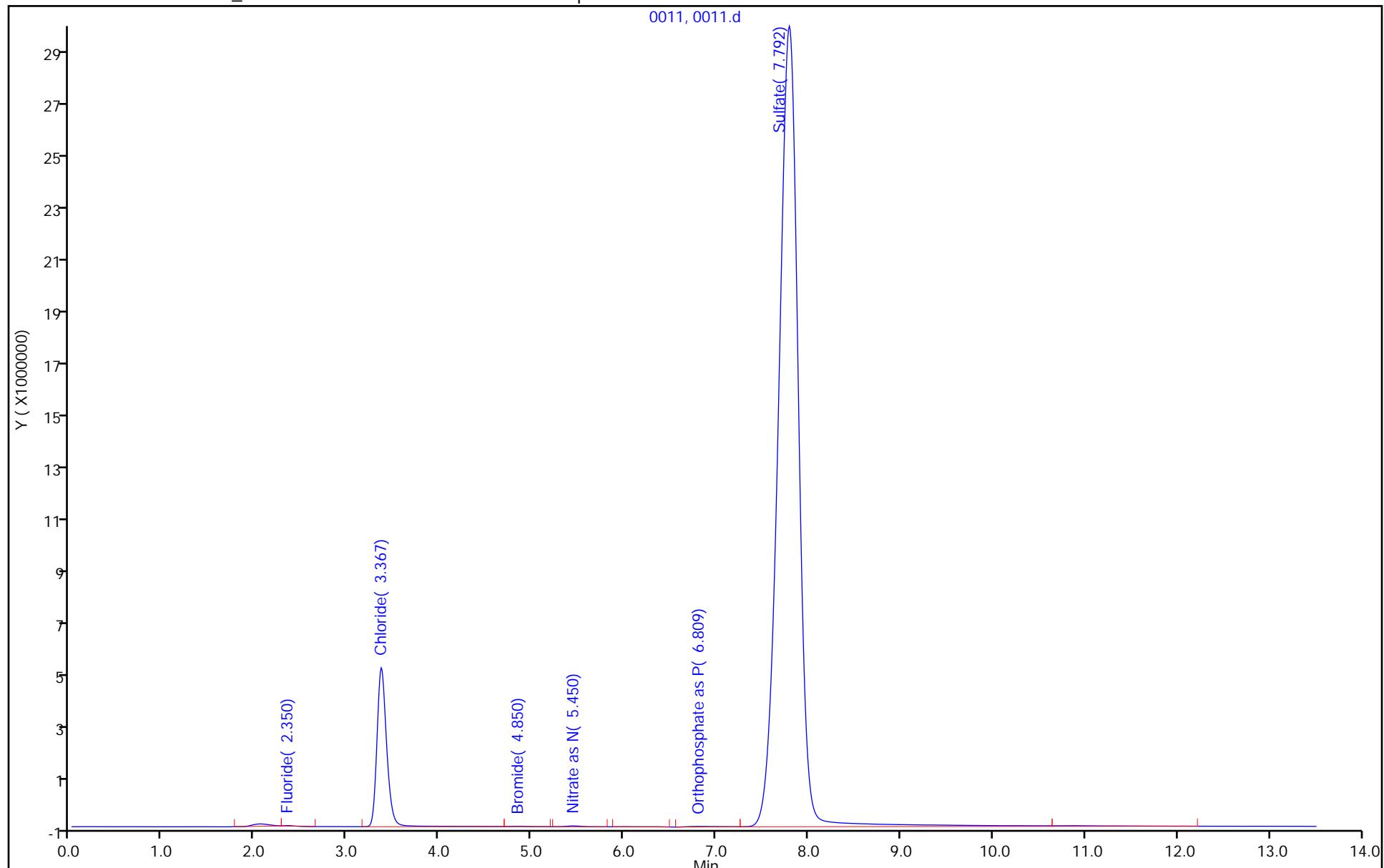
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 19:44:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-5 Lab Sample ID: 280-124912-5
Client ID: PZ007-19A
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 11

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0012.d
 Lims ID: 280-124912-F-6
 Client ID: G0049-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 20:00:00 ALS Bottle#: 0 Worklist Smp#: 12
 Injection Vol: 10.0 ul Dil. Factor: 5.0000
 Sample Info: 280-0083366-012
 Misc. Info.: 3500 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	258281	0.0698	
2 Chloride	3.367	3.417	-0.050	68111466	9.94	
3 Nitrite as N		4.101			ND	
4 Bromide	4.842	4.901	-0.059	132905	0.0667	
5 Nitrate as N	5.450	5.509	-0.059	126064	NC	
7 Orthophosphate as P	6.992	7.151	-0.159	1116359	NC	
6 Sulfate	7.784	8.042	-0.258	294888113	63.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:41

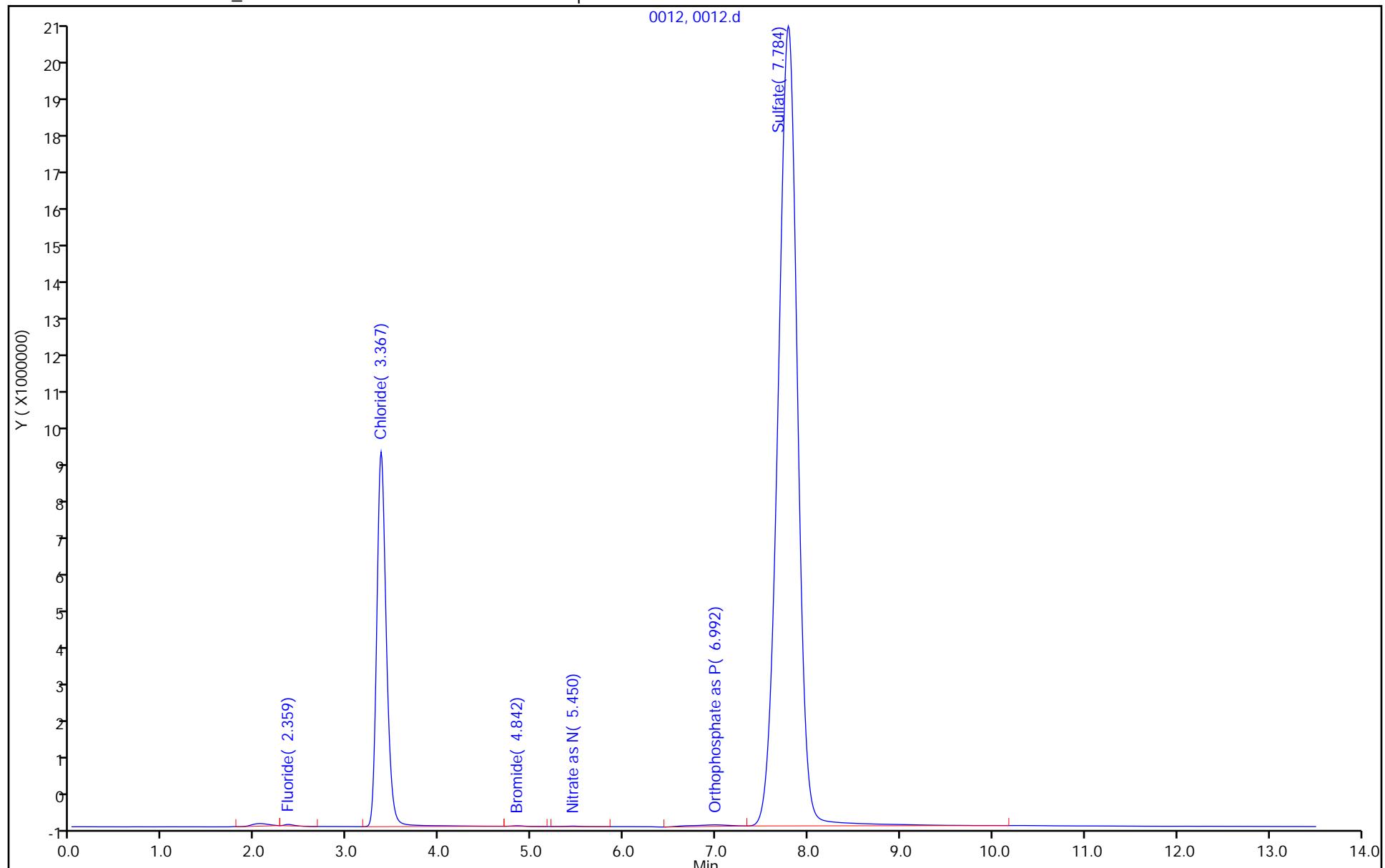
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Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 20:00:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-6 Lab Sample ID: 280-124912-6
Client ID: G0049-19A
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 12

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0013.d
 Lims ID: 280-124912-F-7
 Client ID: G0048-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 20:17:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 10.0 ul Dil. Factor: 5.0000
 Sample Info: 280-0083366-013
 Misc. Info.: 11877 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	160101	0.0576	
2 Chloride	3.367	3.417	-0.050	16102339	2.82	
3 Nitrite as N	4.050	4.101	-0.051	142073	NC	
4 Bromide		4.901			ND	
5 Nitrate as N	5.442	5.509	-0.067	69354857	NC	
7 Orthophosphate as P	6.675	7.151	-0.476	475517	NC	
6 Sulfate	7.742	8.042	-0.300	50716908	11.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:39

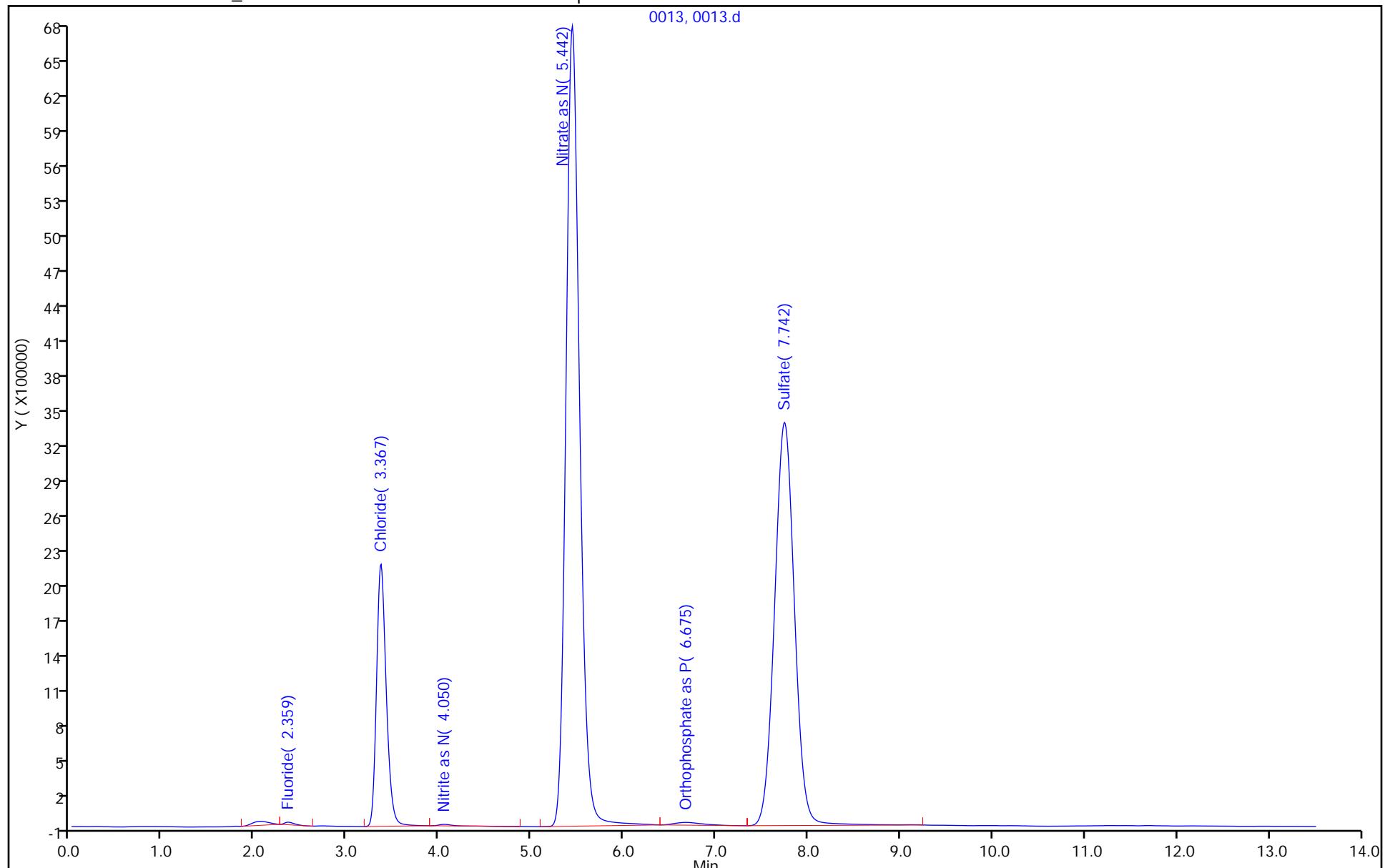
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Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0013.d
Injection Date: 01-Jul-2019 20:17:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-7 Lab Sample ID: 280-124912-7
Client ID: G0048-19A
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 13

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0014.d
 Lims ID: 280-124912-F-8
 Client ID: G0023-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 20:33:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 10.0 ul Dil. Factor: 5.0000
 Sample Info: 280-0083366-014
 Misc. Info.: 26987 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.367	2.376	-0.009	485608	0.0980	
2 Chloride	3.367	3.417	-0.050	36210118	5.57	
3 Nitrite as N		4.101			ND	
4 Bromide		4.901			ND	
5 Nitrate as N	5.459	5.509	-0.050	287935	NC	
7 Orthophosphate as P		7.151			ND	
6 Sulfate	7.767	8.042	-0.275	58955632	13.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:37

Chrom Revision: 2.3 20-Jun-2019 20:50:56

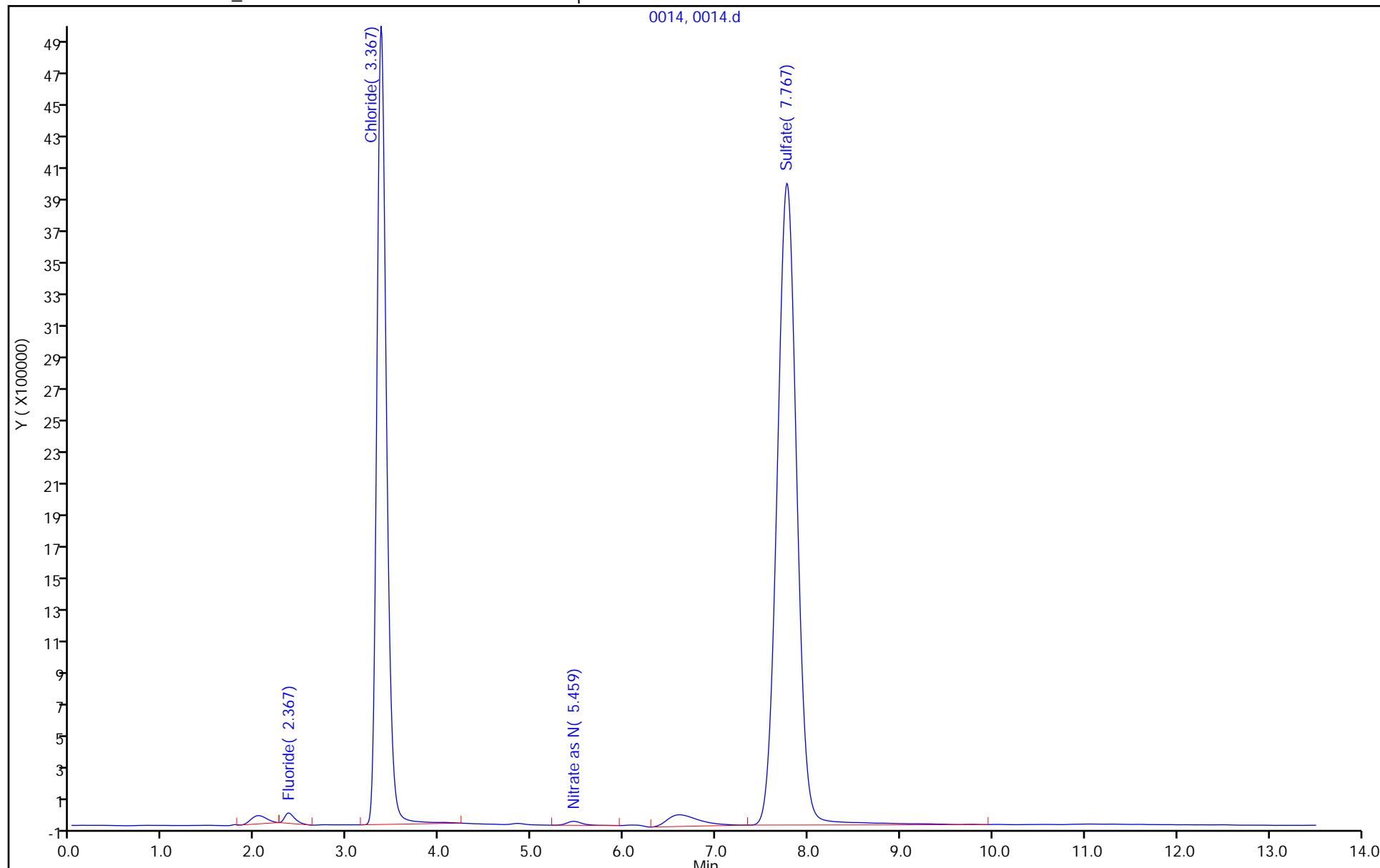
Eurofins TestAmerica, Denver

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Lims ID: 280-124912-F-8 Lab Sample ID: 280-124912-8
Client ID: G0023-19A
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 14

ALS Bottle#: 0

0014, 0014.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0015.d
 Lims ID: 280-124912-F-9
 Client ID: PZ005-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 20:49:00 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-015
 Misc. Info.: 7091 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.351	2.376	-0.025	133848	0.0544	
2 Chloride	3.367	3.417	-0.050	51804273	7.71	
3 Nitrite as N		4.101			ND	
4 Bromide	4.842	4.901	-0.059	113585	0.0583	
5 Nitrate as N	5.442	5.509	-0.067	655093	NC	
7 Orthophosphate as P	6.876	7.151	-0.275	365740	NC	
6 Sulfate	7.809	8.042	-0.233	611841024	130.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

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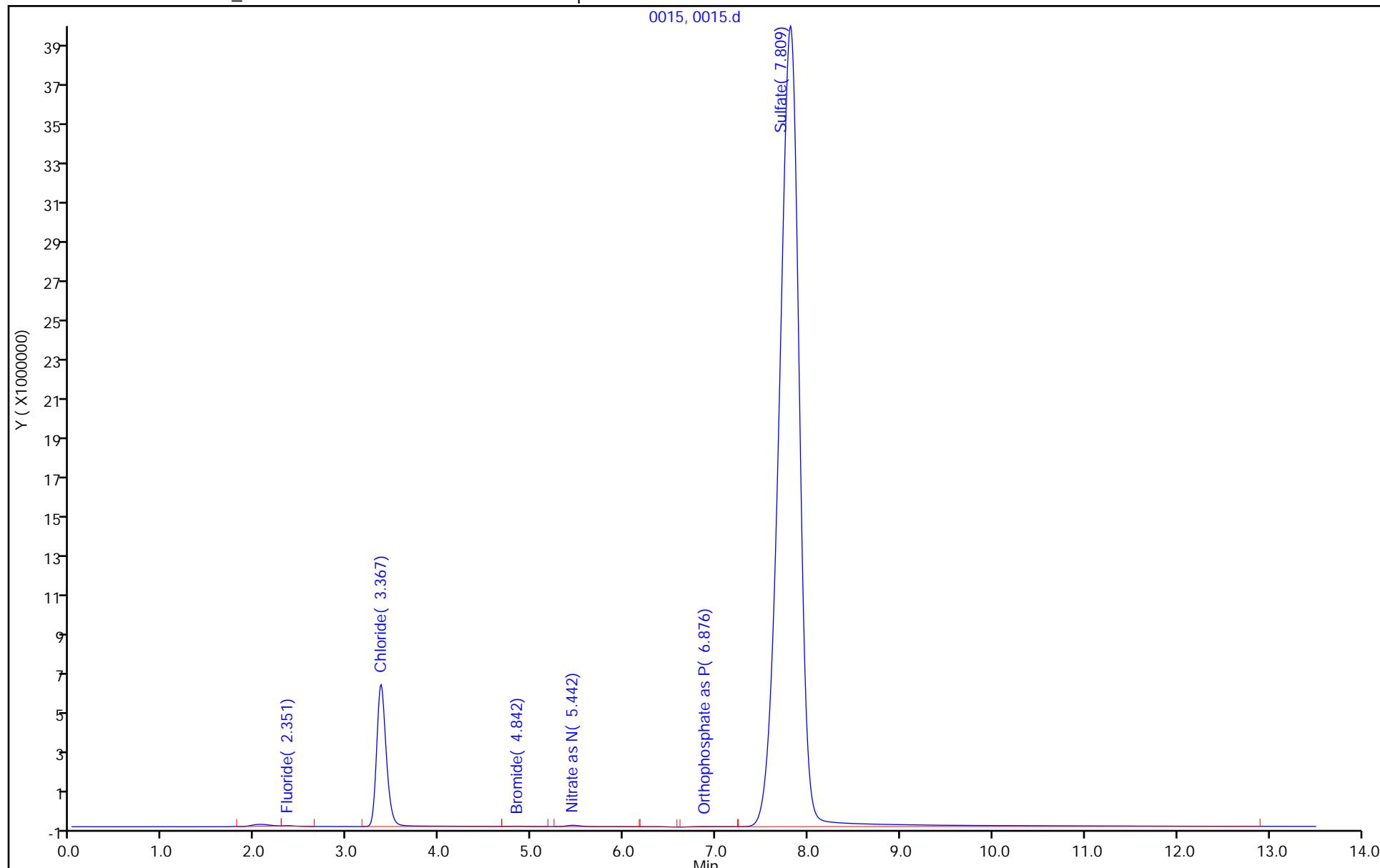
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Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 20:49:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-9 Lab Sample ID: 280-124912-9
Client ID: PZ005-19A
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 15

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0016.d
 Lims ID: 280-124912-F-10
 Client ID: G0103-19A
 Sample Type: Client
 Inject. Date: 01-Jul-2019 21:06:00 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-016
 Misc. Info.: 27134 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.601	2.376	0.225	30340531	3.80	
2 Chloride	3.367	3.417	-0.050	32224752	5.02	
3 Nitrite as N		4.101			ND	
4 Bromide		4.901			ND	
5 Nitrate as N	5.442	5.509	-0.067	230039	NC	
7 Orthophosphate as P	6.992	7.151	-0.159	1187982	NC	
6 Sulfate	7.776	8.042	-0.266	227788666	48.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Report Date: 02-Jul-2019 07:51:33

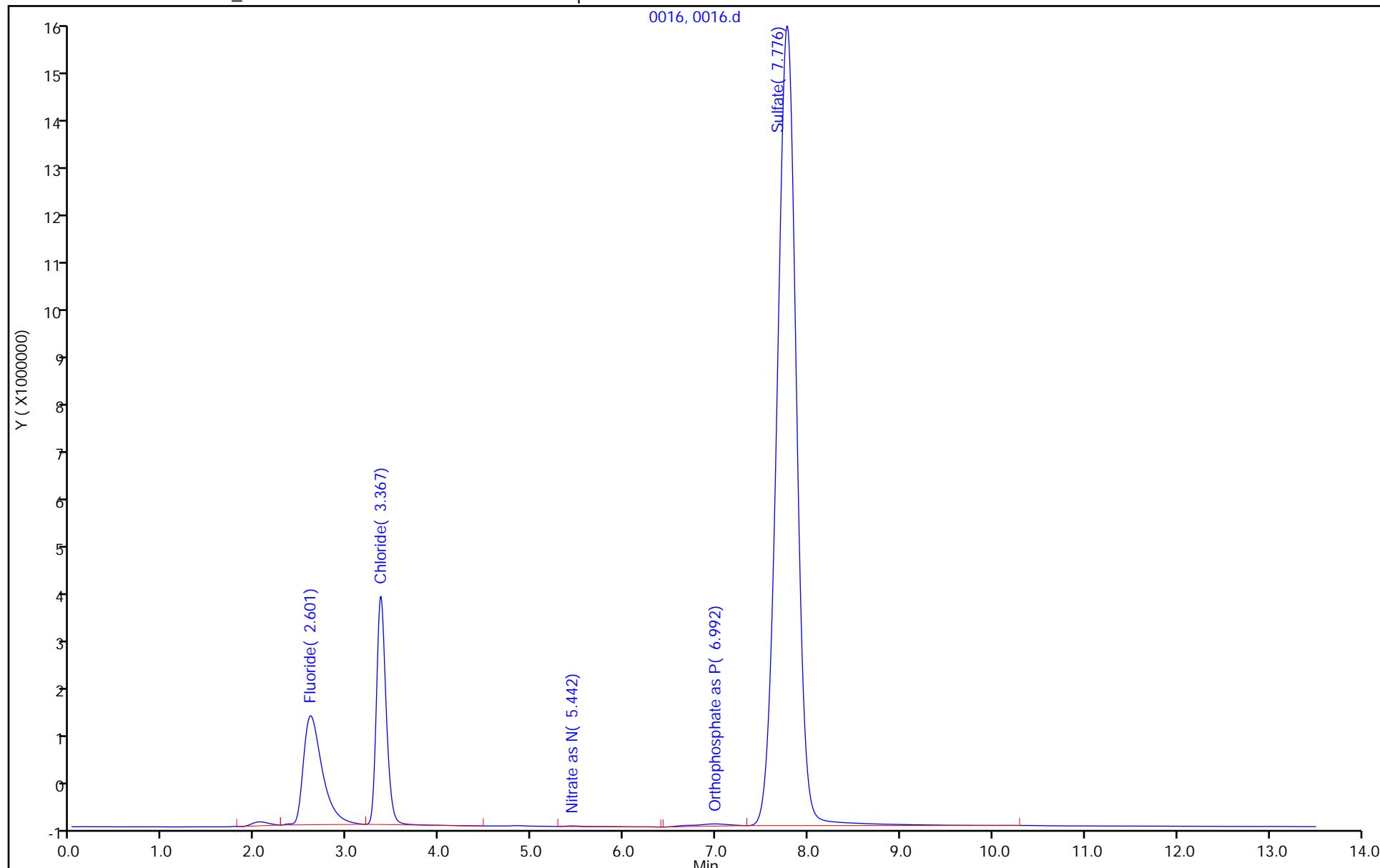
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Eurofins TestAmerica, Denver

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Injection Date: 01-Jul-2019 21:06:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-10 Lab Sample ID: 280-124912-10
Client ID: G0103-19A
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 16

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0017.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 01-Jul-2019 21:22:00 ALS Bottle#: 0 Worklist Smp#: 17
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-017
 Misc. Info.: 25129
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:51:31 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d

Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	37281566	5.00	4.66	
2 Chloride	3.384	3.417	-0.033	690996360	100.0	95.2	
3 Nitrite as N	4.059	4.101	-0.042	56705300	NC	NC	
4 Bromide	4.842	4.901	-0.059	10814981	5.00	4.76	
5 Nitrate as N	5.434	5.509	-0.075	64955466	NC	NC	
7 Orthophosphate as P	6.892	7.151	-0.259	28416175	NC	NC	
6 Sulfate	7.784	8.042	-0.258	440974893	100.0	94.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC LCS_01620

Amount Added: 5.00

Units: mL

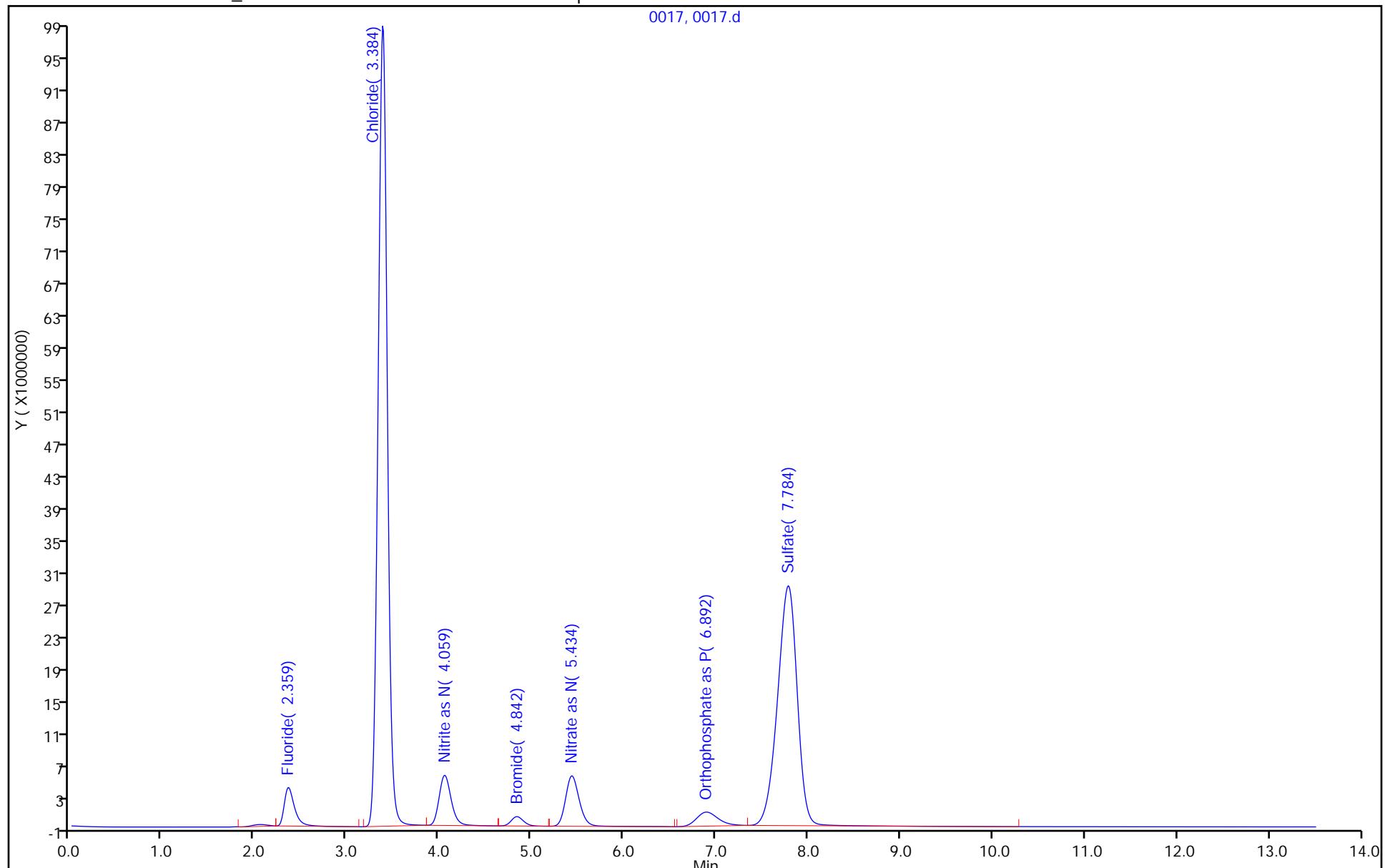
Report Date: 02-Jul-2019 07:51:31

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0017.d
Injection Date: 01-Jul-2019 21:22:00 Instrument ID: WC_IonChrom11
Lims ID: ccv Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 17



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0018.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 02-Jul-2019 02:06:00 ALS Bottle#: 0 Worklist Smp#: 18
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-018
 Misc. Info.: 22841
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.067	2.376	-0.309	1640635	0.2412		
2 Chloride	3.367	3.417	-0.050	1326792	0.7928		
3 Nitrite as N		4.101			ND		
4 Bromide		4.901			ND		
5 Nitrate as N	5.459	5.509	-0.050	105367	NC		
7 Orthophosphate as P		7.151			ND		
6 Sulfate	7.726	8.042	-0.316	73328412	16.0		

QC Flag Legend

Processing Flags

NC - Not Calibrated

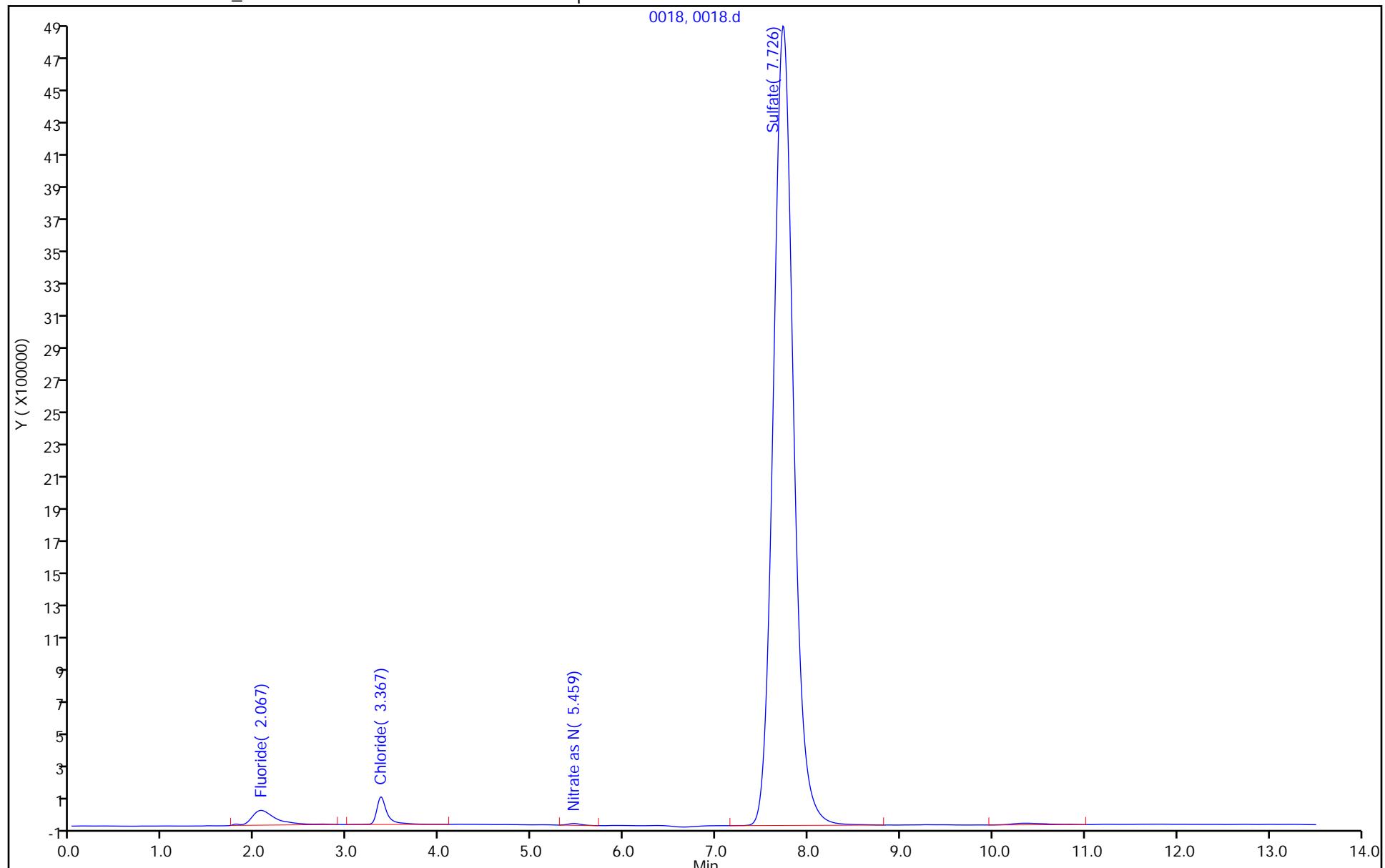
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0018.d
Injection Date: 02-Jul-2019 02:06:00 Instrument ID: WC_IonChrom11
Lims ID: ccb Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 18



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0019.d
 Lims ID: 280-124912-F-11
 Client ID: G0104-19A
 Sample Type: Client
 Inject. Date: 02-Jul-2019 02:22:00 ALS Bottle#: 0 Worklist Smp#: 19
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-019
 Misc. Info.: 31558 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	130443	0.0539	
2 Chloride	3.367	3.417	-0.050	35128410	5.42	
3 Nitrite as N		4.101			ND	
4 Bromide		4.901			ND	
5 Nitrate as N	5.467	5.509	-0.042	130535	NC	
7 Orthophosphate as P	6.792	7.151	-0.359	484097	NC	
6 Sulfate	7.800	8.042	-0.242	482093683	103.0	

QC Flag Legend

Processing Flags

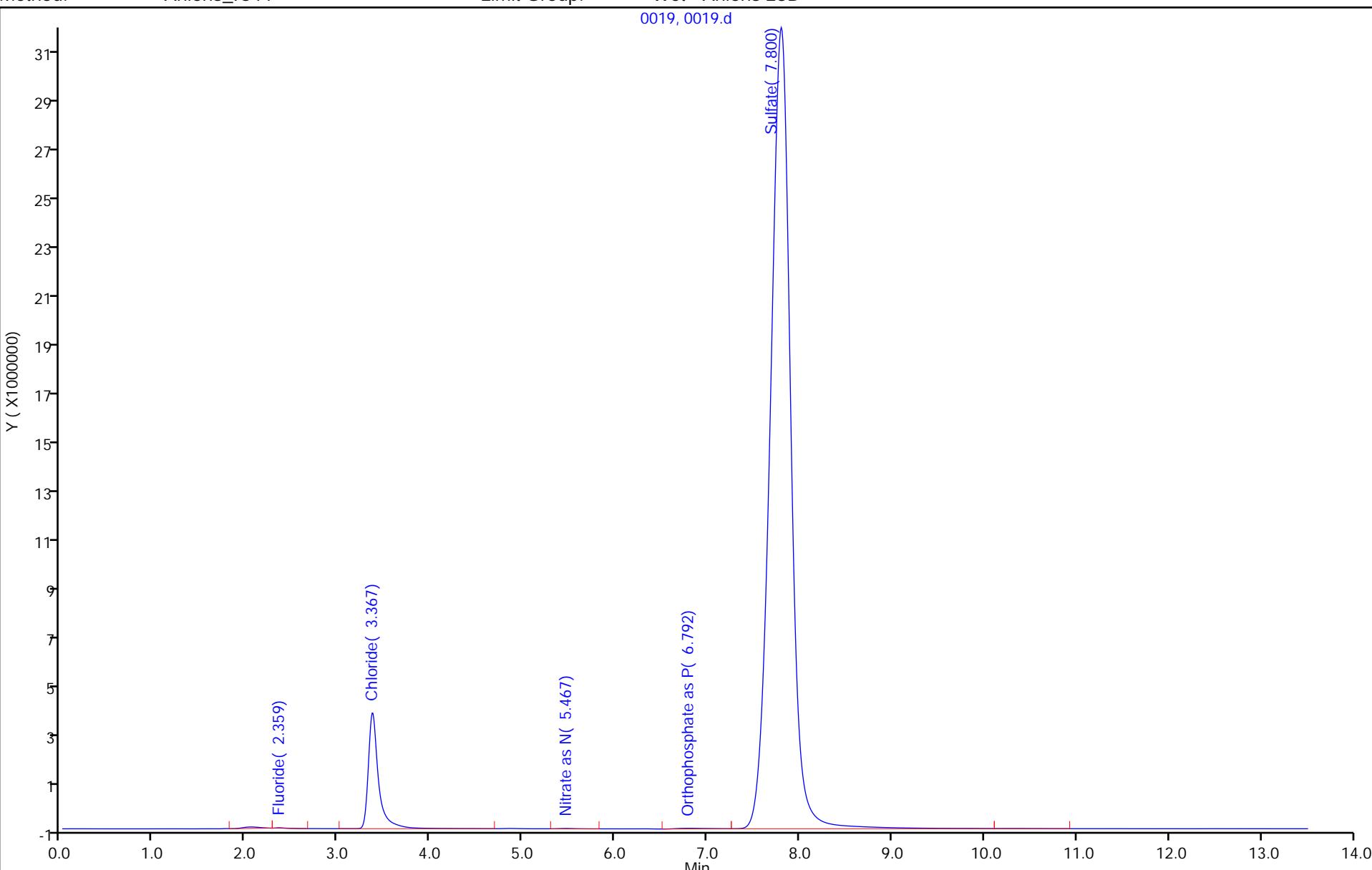
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Report Date: 02-Jul-2019 07:51:26

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0019.d
Injection Date: 02-Jul-2019 02:22:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-11 Lab Sample ID: 280-124912-11 Operator ID:
Client ID: G0104-19A Dil. Factor: 10.0000 Worklist Smp#: 19
Injection Vol: 10.0 ul Limit Group: Wet - Anions 28D
Method: Anions_IC11



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0020.d
 Lims ID: 280-124912-F-12
 Client ID: PZ001-19A
 Sample Type: Client
 Inject. Date: 02-Jul-2019 02:39:00 ALS Bottle#: 0 Worklist Smp#: 20
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-020
 Misc. Info.: 19861 F
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.350	2.376	-0.026	473732	0.0965	
2 Chloride	3.367	3.417	-0.050	56837371	8.39	
3 Nitrite as N		4.101			ND	
4 Bromide	4.859	4.901	-0.042	113730	0.0583	
5 Nitrate as N	5.467	5.509	-0.042	1228833	NC	
7 Orthophosphate as P	6.809	7.151	-0.342	434461	NC	
6 Sulfate	7.800	8.042	-0.242	547452299	116.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

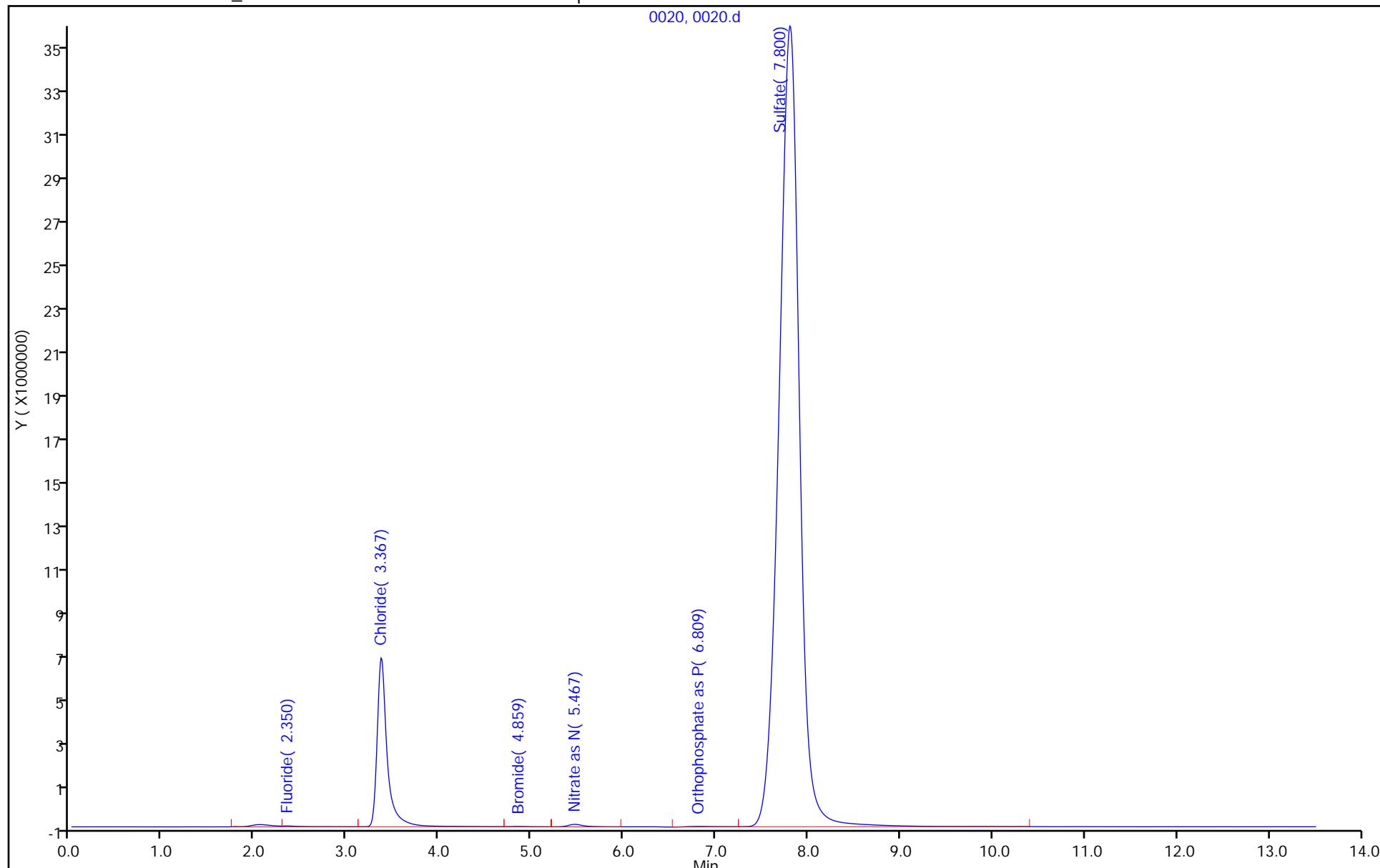
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0020.d
Injection Date: 02-Jul-2019 02:39:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-12 Lab Sample ID: 280-124912-12 Operator ID:
Client ID: PZ001-19A
Injection Vol: 10.0 ul Dil. Factor: 10.0000 Worklist Smp#: 20
Method: Anions_IC11 Limit Group: Wet - Anions 28D

0020, 0020.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0021.d
 Lims ID: 280-124912-F-4 DU
 Client ID:
 Sample Type: DU
 Inject. Date: 02-Jul-2019 02:55:00 ALS Bottle#: 0 Worklist Smp#: 21
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-021
 Misc. Info.: 691
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.050	2.376	-0.326	846716	0.1427		
2 Chloride	3.367	3.417	-0.050	36521535	5.61		
3 Nitrite as N		4.101			ND		
4 Bromide		4.901			ND		
5 Nitrate as N	5.459	5.509	-0.050	111424	NC		
7 Orthophosphate as P	6.825	7.151	-0.326	375285	NC		
6 Sulfate	7.792	8.042	-0.250	508780209	108.7		

QC Flag Legend

Processing Flags

NC - Not Calibrated

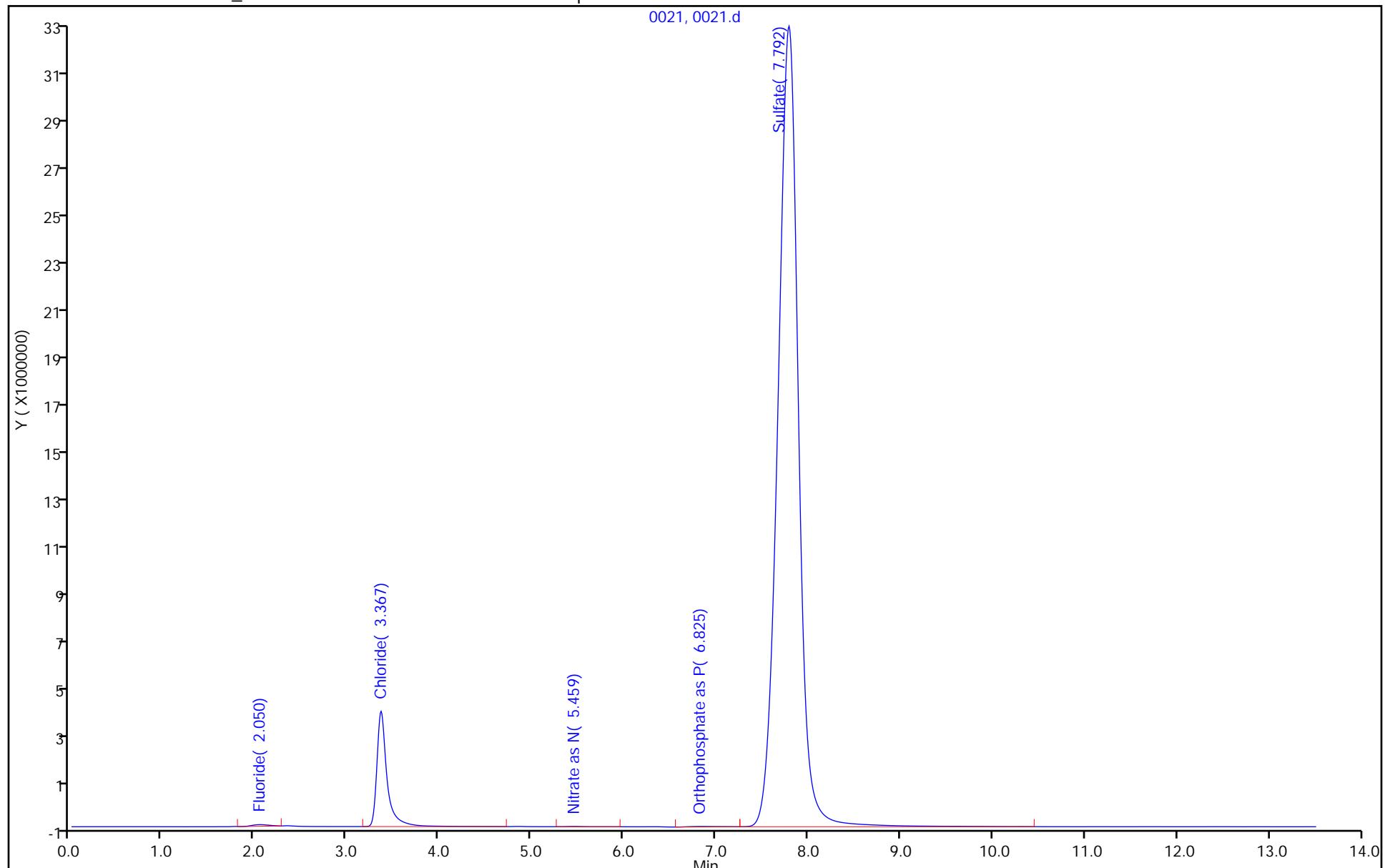
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0021.d
Injection Date: 02-Jul-2019 02:55:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-4 DU Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 10.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 21



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0022.d
 Lims ID: 280-124912-F-4 MS
 Client ID: G0102-19AMS
 Sample Type: MS
 Inject. Date: 02-Jul-2019 03:12:00 ALS Bottle#: 0 Worklist Smp#: 22
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-022
 Misc. Info.: 7909
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	39809248	0.5000	4.97	
2 Chloride	3.375	3.417	-0.042	200771070	2.50	28.1	
3 Nitrite as N	4.067	4.101	-0.034	57290492	NC	NC	
4 Bromide	4.859	4.901	-0.042	11175011	0.4999	4.92	
5 Nitrate as N	5.459	5.509	-0.050	69834150	NC	NC	
7 Orthophosphate as P	7.100	7.151	-0.051	55464990	NC	NC	
6 Sulfate	7.809	8.042	-0.233	629005488	2.50	134.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ICMS/MSD WEEK_00601

Amount Added: 0.05

Units: mL

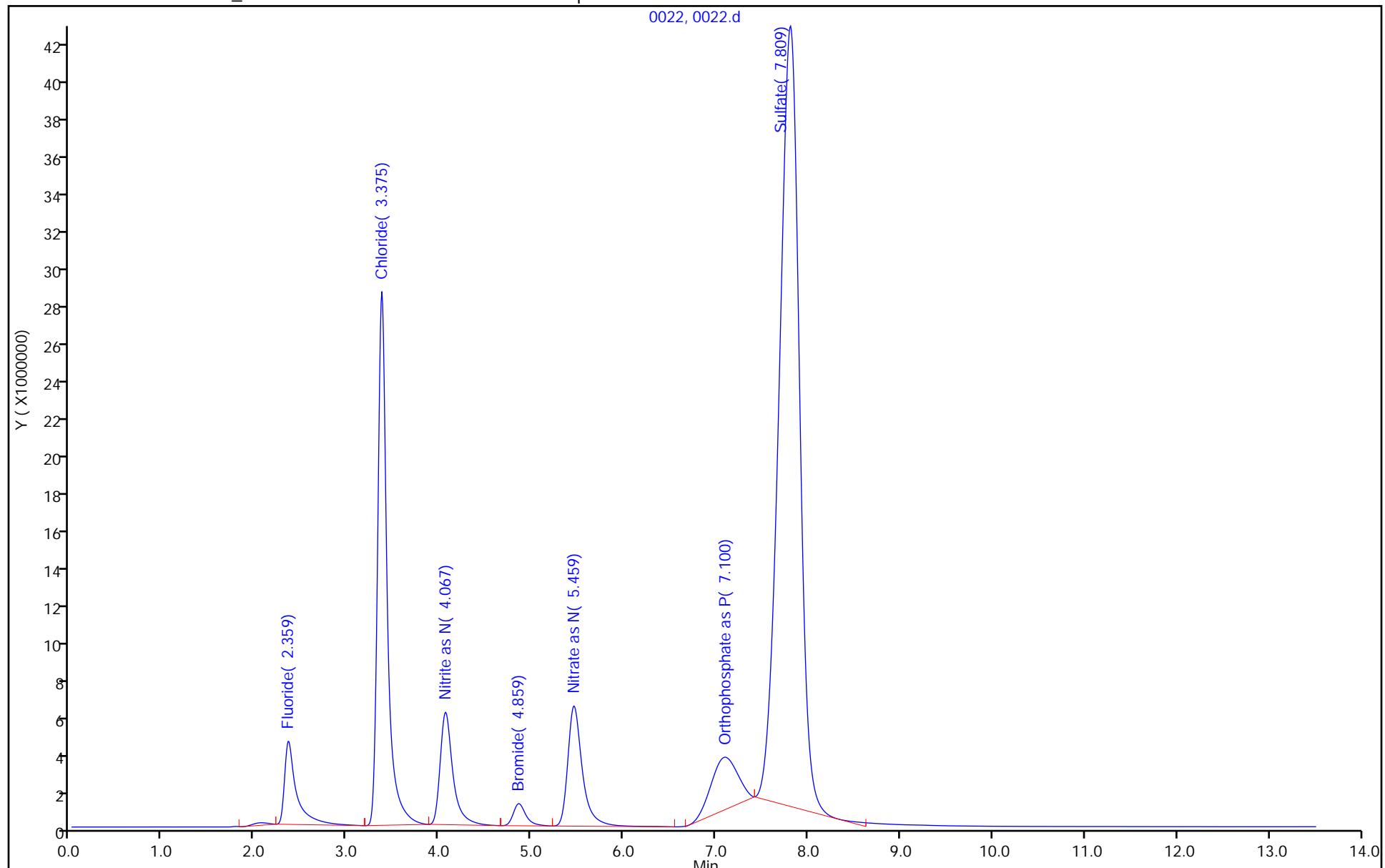
Report Date: 02-Jul-2019 07:51:17

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0022.d
Injection Date: 02-Jul-2019 03:12:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-4 MS Operator ID:
Client ID: G0102-19AMS Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

0022, 0022.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0023.d
 Lims ID: 280-124912-F-4 MSD
 Client ID: G0102-19AMSD
 Sample Type: MSD
 Inject. Date: 02-Jul-2019 03:28:00 ALS Bottle#: 0 Worklist Smp#: 23
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-023
 Misc. Info.: 6302
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICAL File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	40476227	0.5000	5.06	
2 Chloride	3.375	3.417	-0.042	201577450	2.50	28.2	
3 Nitrite as N	4.067	4.101	-0.034	57602317	NC	NC	
4 Bromide	4.859	4.901	-0.042	11185813	0.4999	4.92	
5 Nitrate as N	5.459	5.509	-0.050	70261460	NC	NC	
7 Orthophosphate as P	7.092	7.151	-0.059	51532506	NC	NC	
6 Sulfate	7.809	8.042	-0.233	630684550	2.50	134.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ICMS/MSD WEEK_00601

Amount Added: 0.05

Units: mL

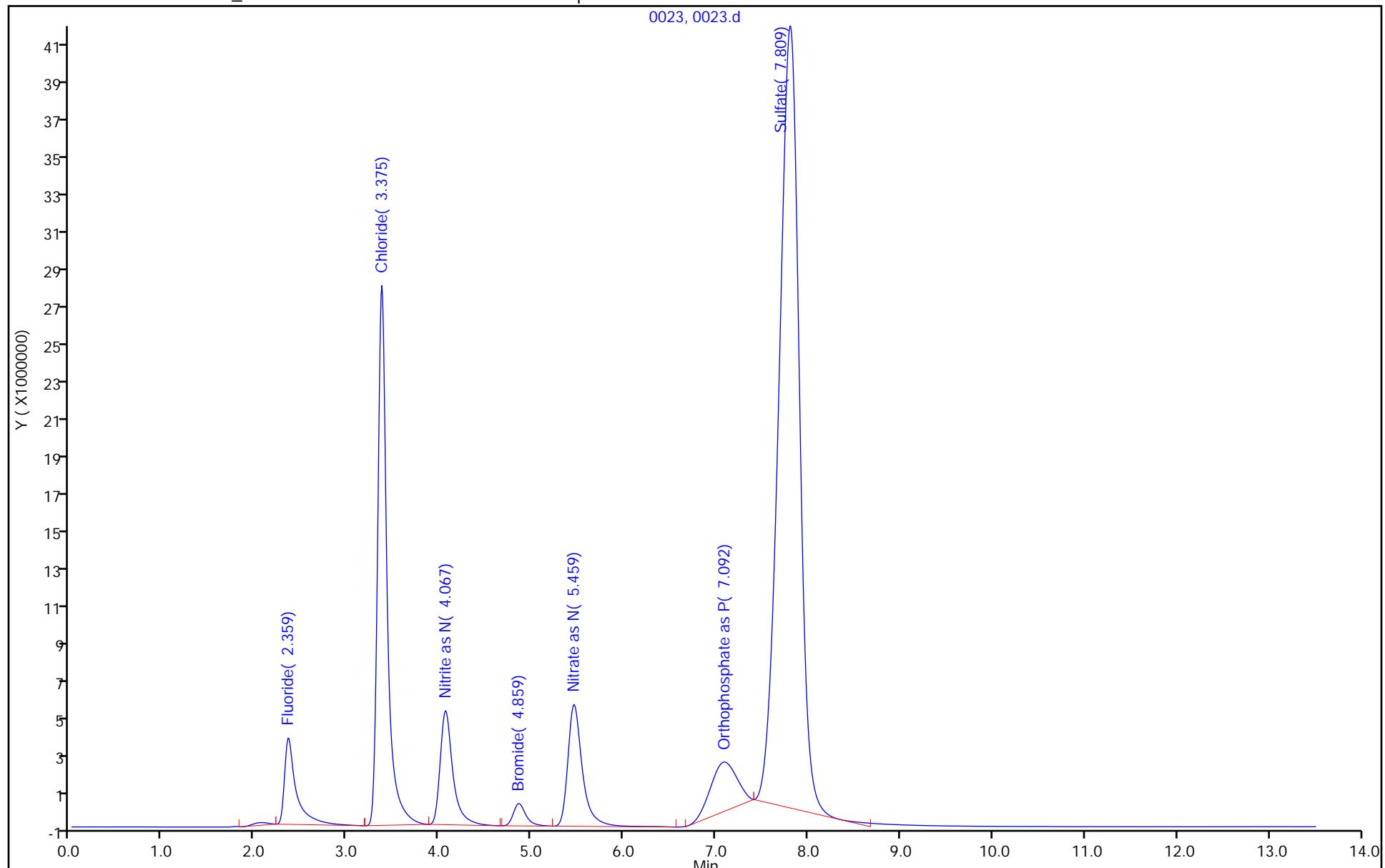
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0023.d
Injection Date: 02-Jul-2019 03:28:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-4 MSD Operator ID:
Client ID: G0102-19AMSD Worklist Smp#: 23
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

0023, 0023.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0024.d
 Lims ID: 280-124912-F-5 DU
 Client ID:
 Sample Type: DU
 Inject. Date: 02-Jul-2019 03:44:00 ALS Bottle#: 0 Worklist Smp#: 24
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-024
 Misc. Info.: 32184
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.350	2.376	-0.026	116196	0.0522		
2 Chloride	3.367	3.417	-0.050	42565012	6.44		
3 Nitrite as N		4.101			ND		
4 Bromide		4.901			ND		
5 Nitrate as N	5.467	5.509	-0.042	309899	NC		
7 Orthophosphate as P	7.017	7.151	-0.134	491310	NC		
6 Sulfate	7.784	8.042	-0.258	434779469	93.0		

QC Flag Legend

Processing Flags

NC - Not Calibrated

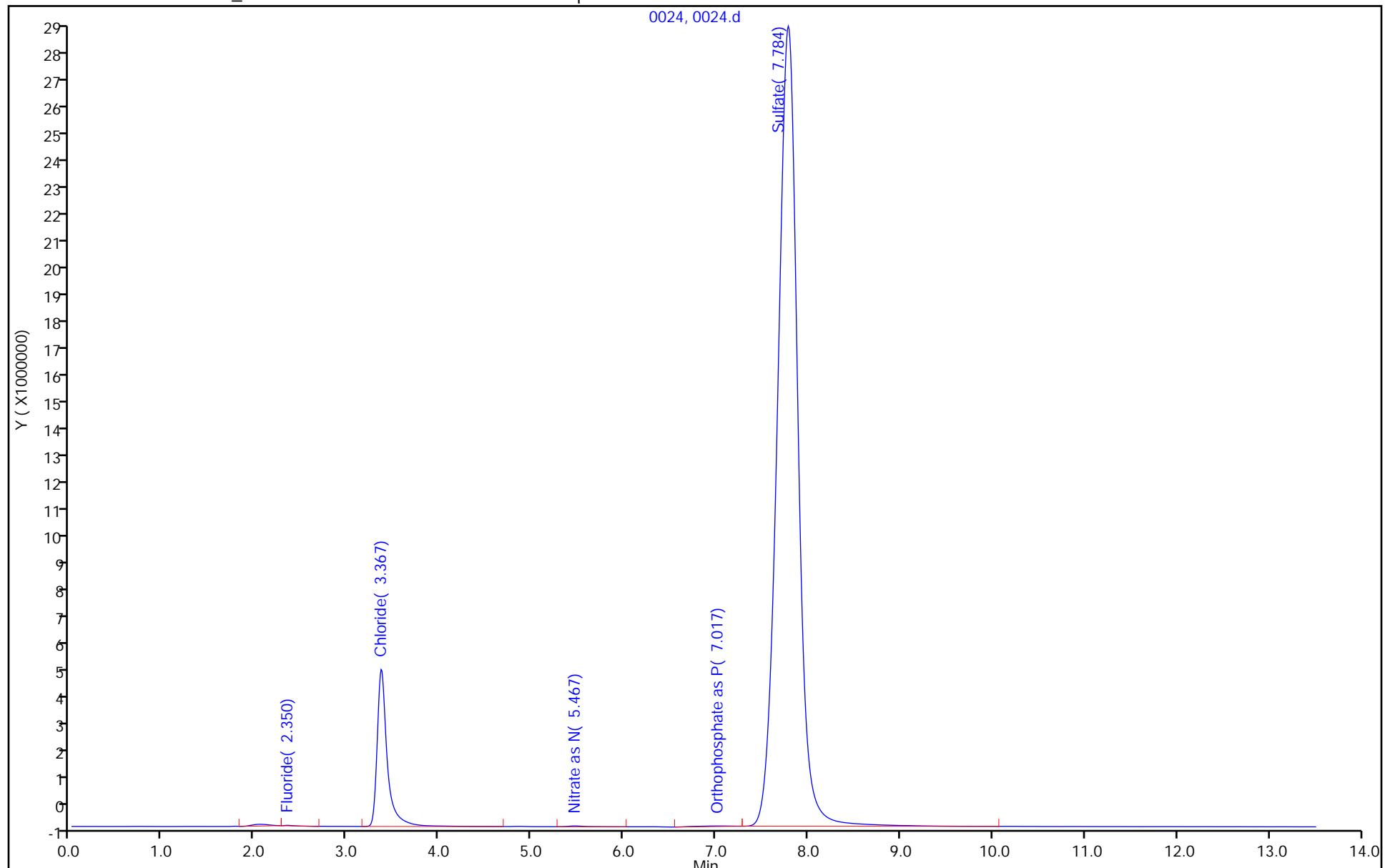
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Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0024.d
Injection Date: 02-Jul-2019 03:44:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-5 DU Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 10.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 24



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0025.d
 Lims ID: 280-124912-F-5 MS
 Client ID: PZ007-19AMS
 Sample Type: MS
 Inject. Date: 02-Jul-2019 04:01:00 ALS Bottle#: 0 Worklist Smp#: 25
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-025
 Misc. Info.: 24580
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	39546215	0.5000	4.94	
2 Chloride	3.376	3.417	-0.041	208479216	2.50	29.2	
3 Nitrite as N	4.067	4.101	-0.034	57645219	NC	NC	
4 Bromide	4.867	4.901	-0.034	11147515	0.4999	4.90	
5 Nitrate as N	5.467	5.509	-0.042	70055366	NC	NC	
7 Orthophosphate as P	7.184	7.151	0.033	38238583	NC	NC	
6 Sulfate	7.792	8.042	-0.250	557955728	2.50	119.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ICMS/MSD WEEK_00601

Amount Added: 0.05

Units: mL

Report Date: 02-Jul-2019 07:51:09

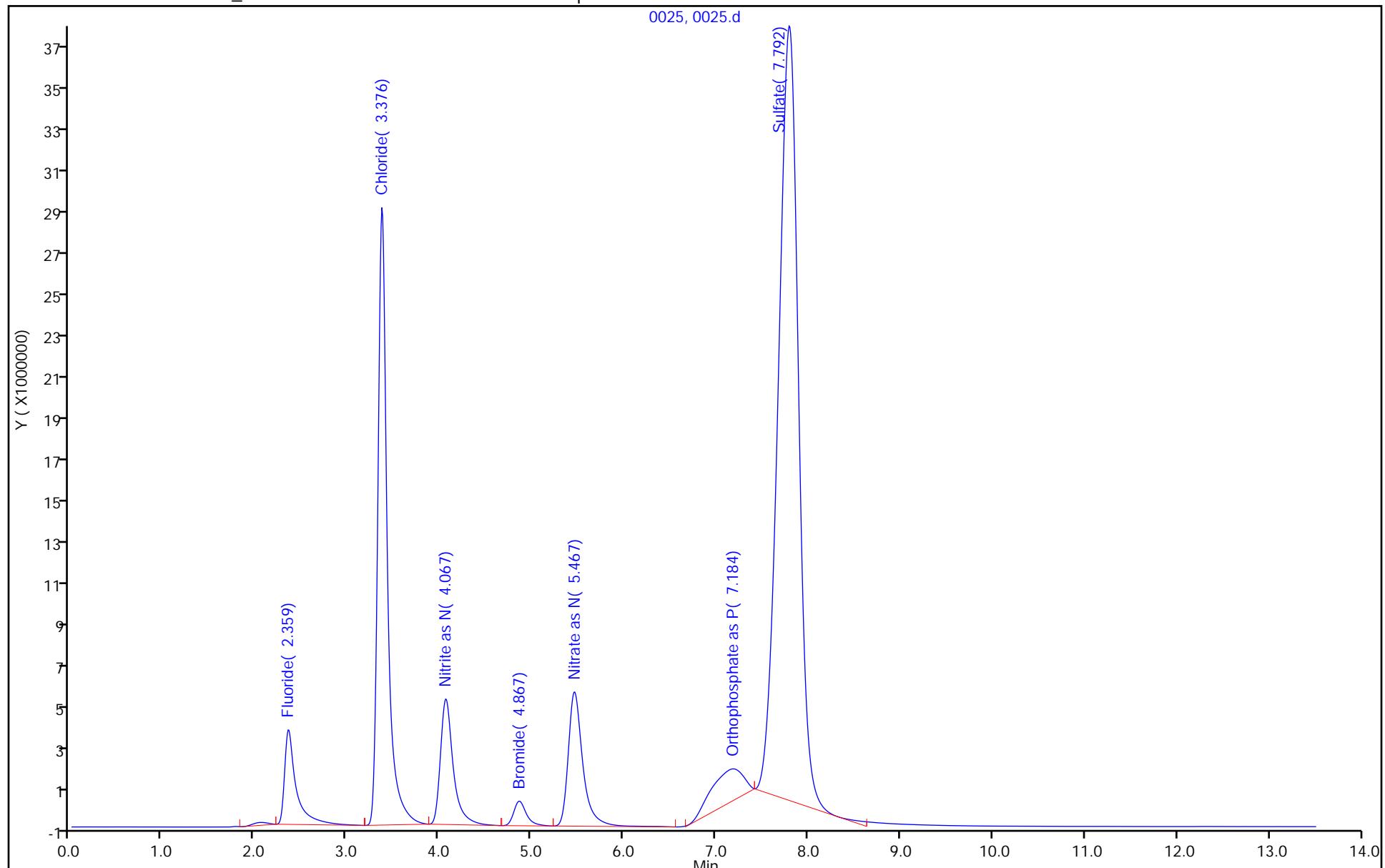
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0025.d
Injection Date: 02-Jul-2019 04:01:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-5 MS Operator ID:
Client ID: PZ007-19AMS Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 25

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0026.d
 Lims ID: 280-124912-F-5 MSD
 Client ID: PZ007-19AMSD
 Sample Type: MSD
 Inject. Date: 02-Jul-2019 04:17:00 ALS Bottle#: 0 Worklist Smp#: 26
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-026
 Misc. Info.: 11010
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.367	2.376	-0.009	39146574	0.5000	4.89	
2 Chloride	3.375	3.417	-0.042	207876241	2.50	29.1	
3 Nitrite as N	4.075	4.101	-0.026	57316568	NC	NC	
4 Bromide	4.867	4.901	-0.034	11127316	0.4999	4.89	
5 Nitrate as N	5.467	5.509	-0.042	69725742	NC	NC	
7 Orthophosphate as P	7.159	7.151	0.008	42609077	NC	NC	
6 Sulfate	7.800	8.042	-0.242	560810811	2.50	119.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ICMS/MSD WEEK_00601

Amount Added: 0.05

Units: mL

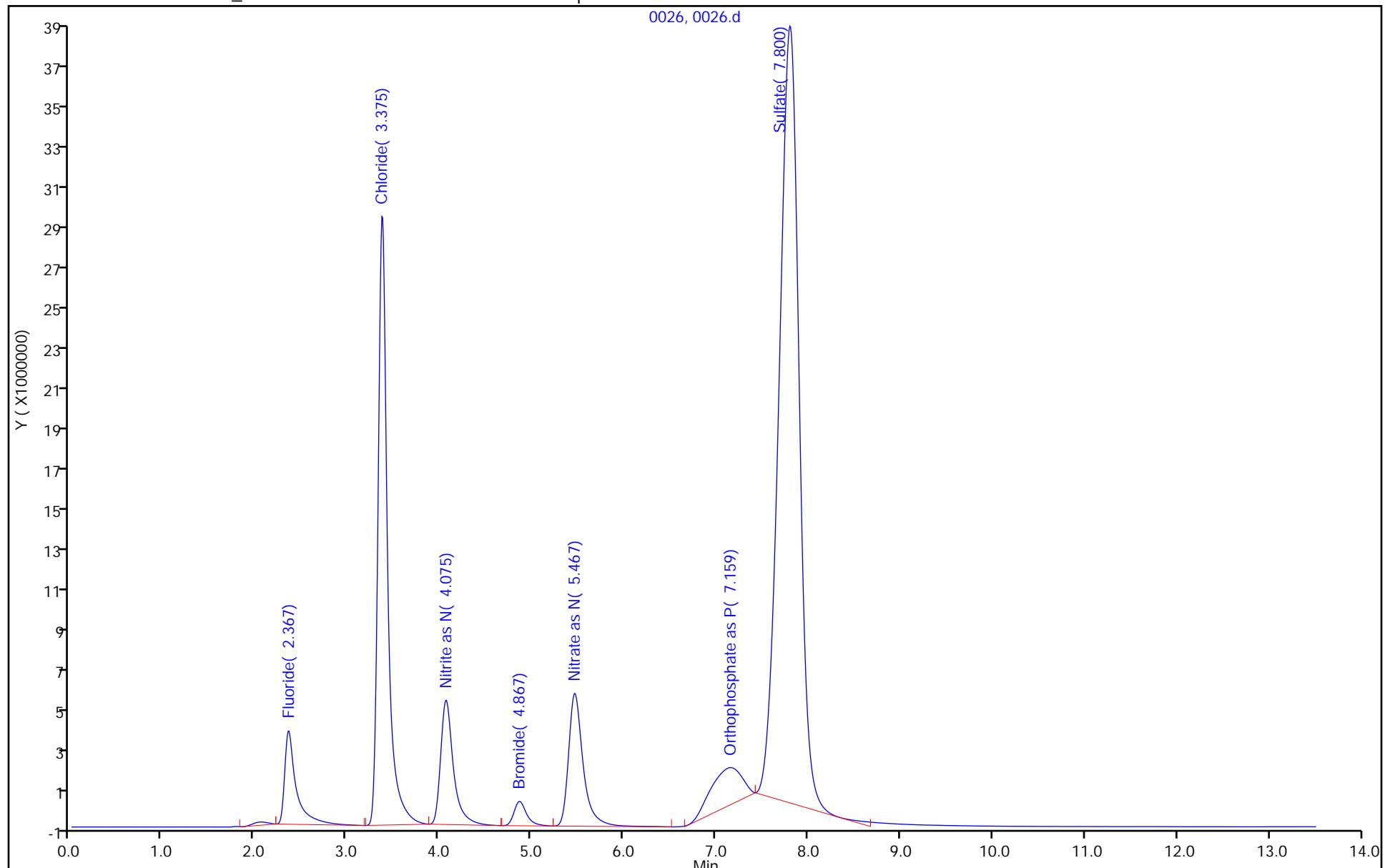
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0026.d
Injection Date: 02-Jul-2019 04:17:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-5 MSD Operator ID:
Client ID: PZ007-19AMSD Worklist Smp#: 26
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

0026, 0026.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0027.d
 Lims ID: 280-124912-F-12 DU
 Client ID:
 Sample Type: DU
 Inject. Date: 02-Jul-2019 04:34:00 ALS Bottle#: 0 Worklist Smp#: 27
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-027
 Misc. Info.: 16467
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.350	2.376	-0.026	105976	0.0509		
2 Chloride	3.375	3.417	-0.042	56660522		8.37	
3 Nitrite as N		4.101				ND	
4 Bromide	4.859	4.901	-0.042	101694	0.0530		
5 Nitrate as N	5.475	5.509	-0.034	1220488		NC	
7 Orthophosphate as P	7.009	7.151	-0.142	697032		NC	
6 Sulfate	7.800	8.042	-0.242	541759698		115.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

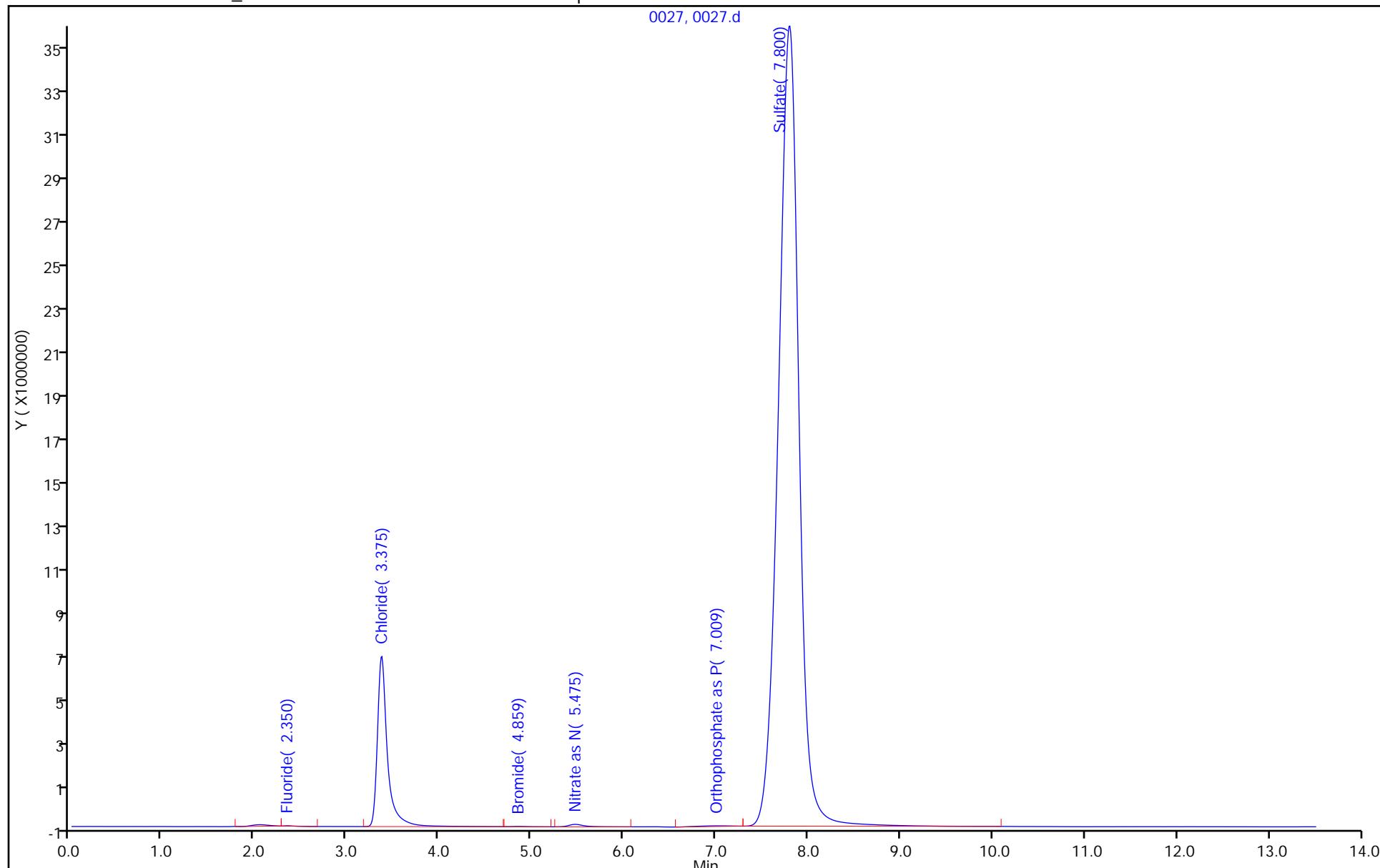
Report Date: 02-Jul-2019 07:51:05

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0027.d
Injection Date: 02-Jul-2019 04:34:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-12 DU Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 10.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 27



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0028.d
 Lims ID: 280-124912-F-12 MS
 Client ID: PZ001-19AMS
 Sample Type: MS
 Inject. Date: 02-Jul-2019 04:50:00 ALS Bottle#: 0 Worklist Smp#: 28
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-028
 Misc. Info.: 31157
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	39512475	0.5000	4.94	
2 Chloride	3.375	3.417	-0.042	224981537	2.50	31.4	
3 Nitrite as N	4.067	4.101	-0.034	57276014	NC	NC	
4 Bromide	4.859	4.901	-0.042	11153777	0.4999	4.91	
5 Nitrate as N	5.459	5.509	-0.050	70562510	NC	NC	
7 Orthophosphate as P	7.150	7.151	-0.001	52396716	NC	NC	
6 Sulfate	7.809	8.042	-0.233	659163995	2.50	140.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ICMS/MSD WEEK_00601

Amount Added: 0.05

Units: mL

Report Date: 02-Jul-2019 07:51:04

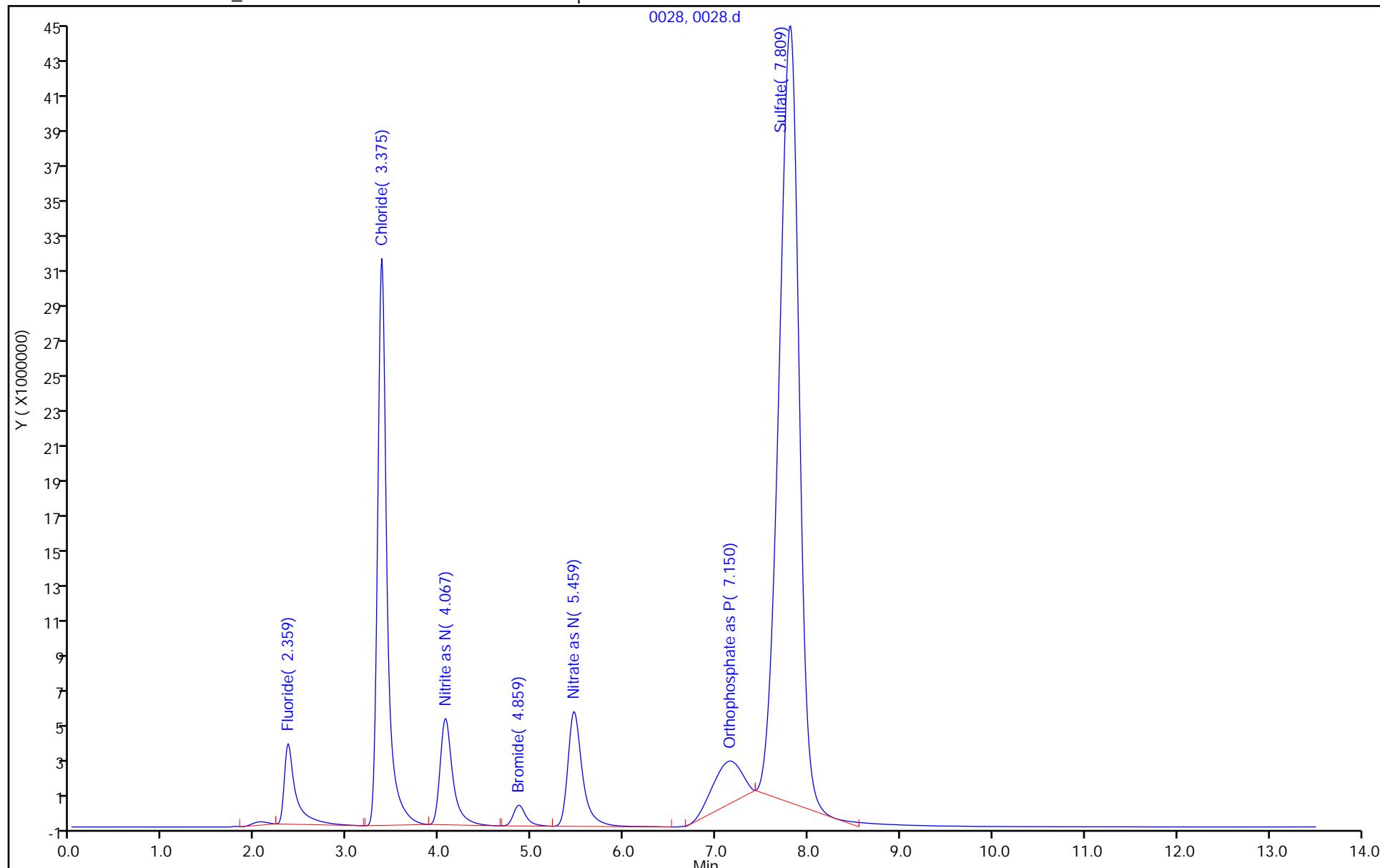
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0028.d
Injection Date: 02-Jul-2019 04:50:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-12 MS Operator ID:
Client ID: PZ001-19AMS Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 28

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0029.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 02-Jul-2019 05:06:00 ALS Bottle#: 0 Worklist Smp#: 29
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-029
 Misc. Info.: 3330
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:50:57 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d

Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	36913537	5.00	4.61	
2 Chloride	3.392	3.417	-0.025	676696529	100.0	93.3	
3 Nitrite as N	4.067	4.101	-0.034	54969406	NC	NC	
4 Bromide	4.867	4.901	-0.034	10296800	5.00	4.53	
5 Nitrate as N	5.467	5.509	-0.042	64363842	NC	NC	
7 Orthophosphate as P	6.900	7.151	-0.251	28256953	NC	NC	
6 Sulfate	7.792	8.042	-0.250	443585164	100.0	94.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC LCS_01620

Amount Added: 5.00

Units: mL

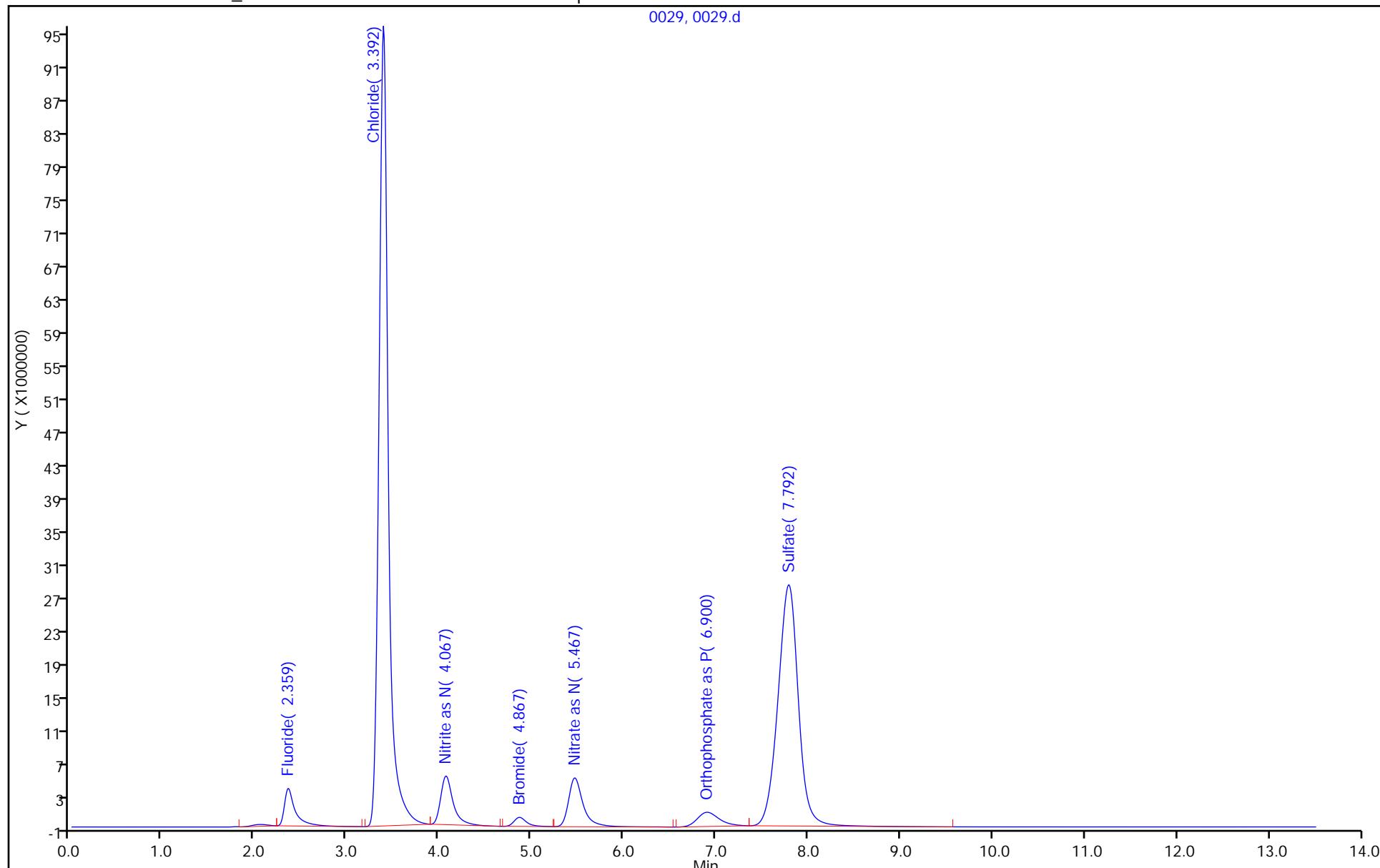
Report Date: 02-Jul-2019 07:50:58

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0029.d
Injection Date: 02-Jul-2019 05:06:00 Instrument ID: WC_IonChrom11
Lims ID: ccv Operator ID:
Client ID:
Injection Vol: 10.0 ul Worklist Smp#: 29
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

0029, 0029.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0030.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 02-Jul-2019 05:23:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-030
 Misc. Info.: 21103
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:36:41 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.050	2.376	-0.326	1807420	0.2619		
2 Chloride	3.367	3.417	-0.050	1441721		0.8085	
3 Nitrite as N		4.101			ND		
4 Bromide		4.901			ND		
5 Nitrate as N	5.475	5.509	-0.034	153333		NC	
7 Orthophosphate as P	6.942	7.151	-0.209	398102		NC	
6 Sulfate	7.734	8.042	-0.308	3133107	1.10		

QC Flag Legend

Processing Flags

NC - Not Calibrated

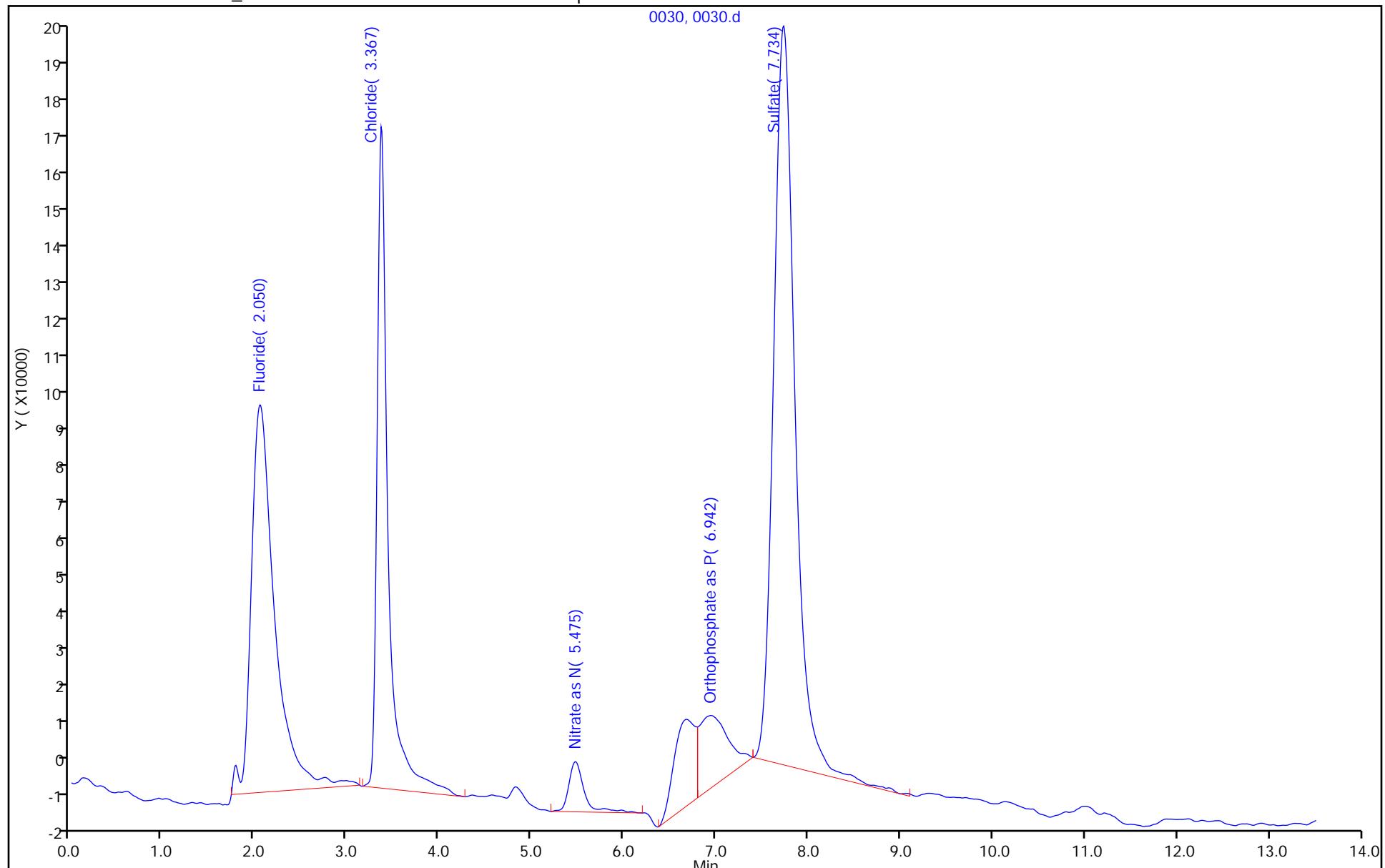
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Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0030.d
Injection Date: 02-Jul-2019 05:23:00 Instrument ID: WC_IonChrom11
Lims ID: ccb Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 30



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0031.d
 Lims ID: 280-124912-F-12 MSD
 Client ID: PZ001-19AMSD
 Sample Type: MSD
 Inject. Date: 02-Jul-2019 05:39:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 10.0 ul Dil. Factor: 10.0000
 Sample Info: 280-0083366-031
 Misc. Info.: 2842
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 07:36:41 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	38664888	0.5000	4.83	
2 Chloride	3.375	3.417	-0.042	218986988	2.50	30.6	
3 Nitrite as N	4.067	4.101	-0.034	55445733	NC	NC	
4 Bromide	4.867	4.901	-0.034	10835971	0.4999	4.77	
5 Nitrate as N	5.467	5.509	-0.042	68146459	NC	NC	
7 Orthophosphate as P	7.192	7.151	0.041	42602206	NC	NC	
6 Sulfate	7.809	8.042	-0.233	655828860	2.50	140.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

ICMS/MSD WEEK_00601

Amount Added: 0.05

Units: mL

Report Date: 02-Jul-2019 07:50:54

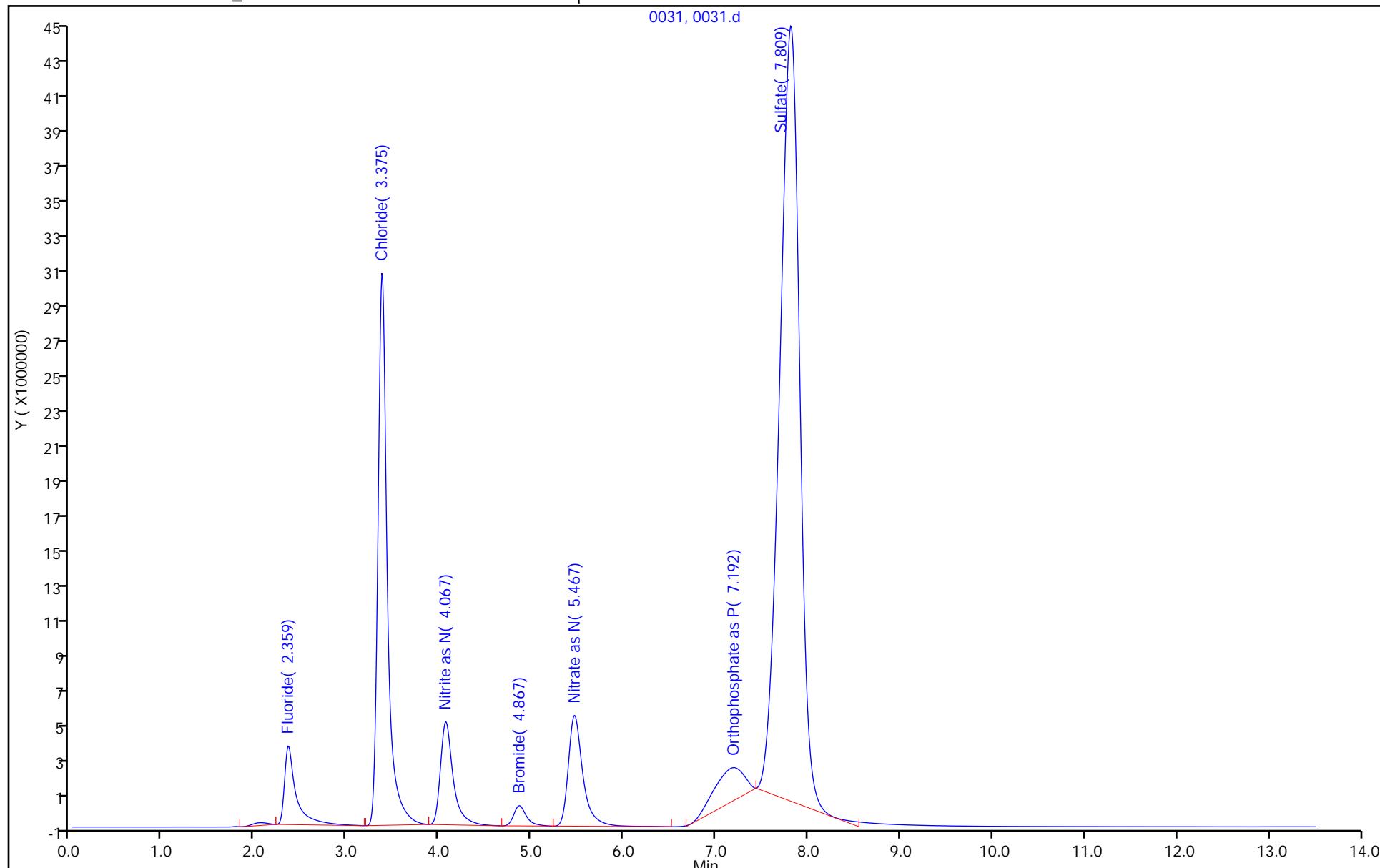
Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\\Denver\\ChromData\\WC_IonChrom11\\20190701-83366.b\\0031.d
Injection Date: 02-Jul-2019 05:39:00 Instrument ID: WC_IonChrom11
Lims ID: 280-124912-F-12 MSD Operator ID:
Client ID: PZ001-19AMSD Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 10.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D

Operator ID:
Worklist Smp#: 31

ALS Bottle#: 0



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0039.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 02-Jul-2019 07:51:00 ALS Bottle#: 0 Worklist Smp#: 39
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-039
 Misc. Info.: 16126
 Operator ID: Instrument ID: WC_IonChrom11
 Sublist: chrom-Anions_IC11*sub1
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 08:28:26 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d

Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.359	2.376	-0.017	37461087	5.00	4.68	
2 Chloride	3.392	3.417	-0.025	679693990	100.0	93.7	
3 Nitrite as N	4.067	4.101	-0.034	55059359	NC	NC	
4 Bromide	4.859	4.901	-0.042	10378283	5.00	4.57	
5 Nitrate as N	5.459	5.509	-0.050	64809925	NC	NC	
7 Orthophosphate as P	6.892	7.151	-0.259	26567976	NC	NC	
6 Sulfate	7.784	8.042	-0.258	445015219	100.0	95.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

IC LCS_01620

Amount Added: 5.00

Units: mL

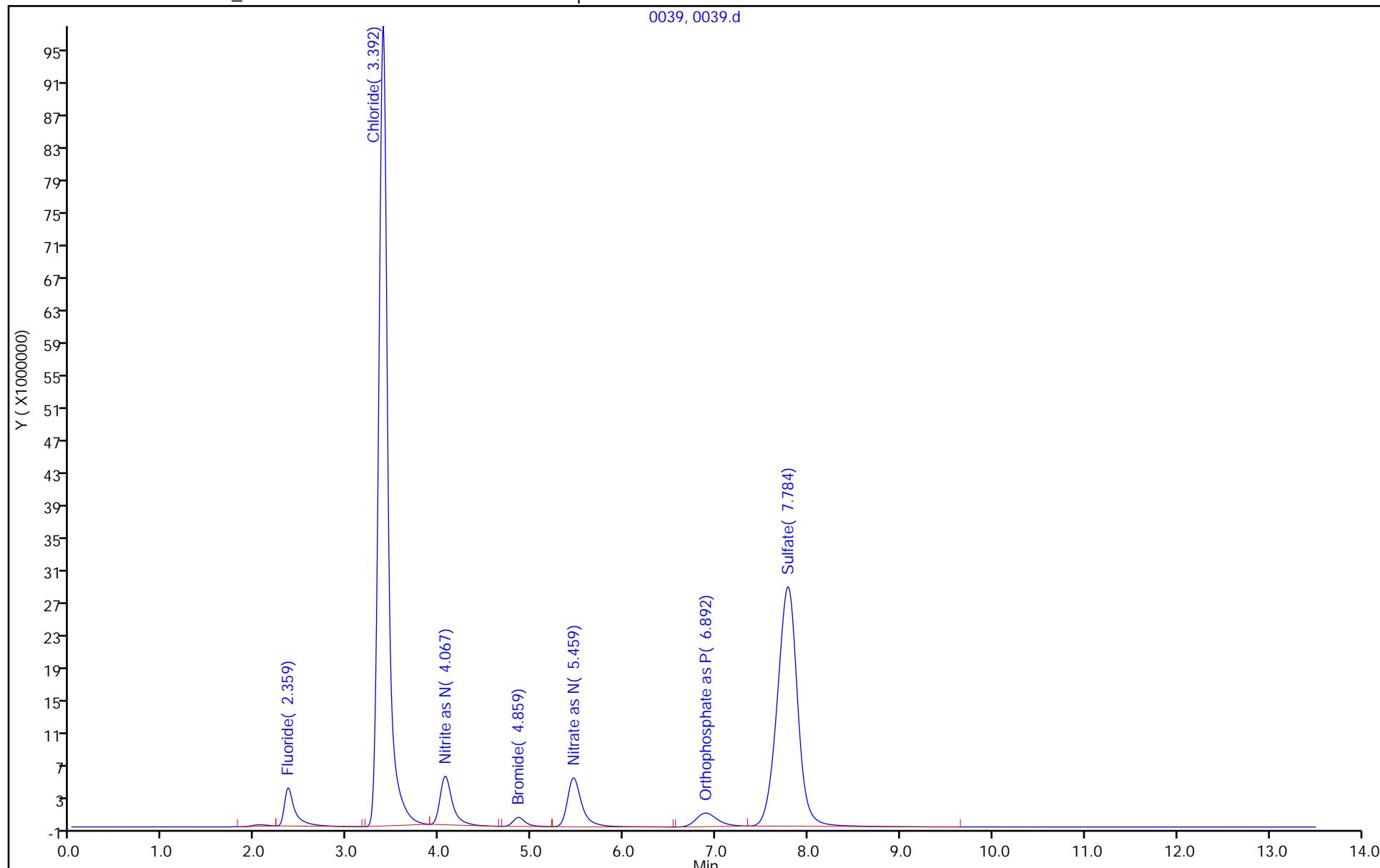
Report Date: 02-Jul-2019 08:28:26

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0039.d
Injection Date: 02-Jul-2019 07:51:00 Instrument ID: WC_IonChrom11
Lims ID: ccv Operator ID:
Client ID:
Injection Vol: 10.0 ul Worklist Smp#: 39
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

0039, 0039.d



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0040.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 02-Jul-2019 08:07:00 ALS Bottle#: 0 Worklist Smp#: 40
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 280-0083366-040
 Misc. Info.: 26158
 Operator ID: Instrument ID: WC_IonChrom11
 Method: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\Anions_IC11.m
 Limit Group: Wet - Anions 28D
 Last Update: 02-Jul-2019 08:28:26 Calib Date: 26-Jun-2019 12:23:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom11\20190626-83211.b\0007.d
 Column 1 : Det: 0005
 Process Host: CTX0340

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.059	2.376	-0.317	1358750	0.2062		
2 Chloride	3.367	3.417	-0.050	1281833		0.7866	
3 Nitrite as N		4.101				ND	
4 Bromide		4.901				ND	
5 Nitrate as N	5.475	5.509	-0.034	129289		NC	
7 Orthophosphate as P	6.934	7.151	-0.217	347781		NC	
6 Sulfate	7.734	8.042	-0.308	2981507		1.07	

QC Flag Legend

Processing Flags

NC - Not Calibrated

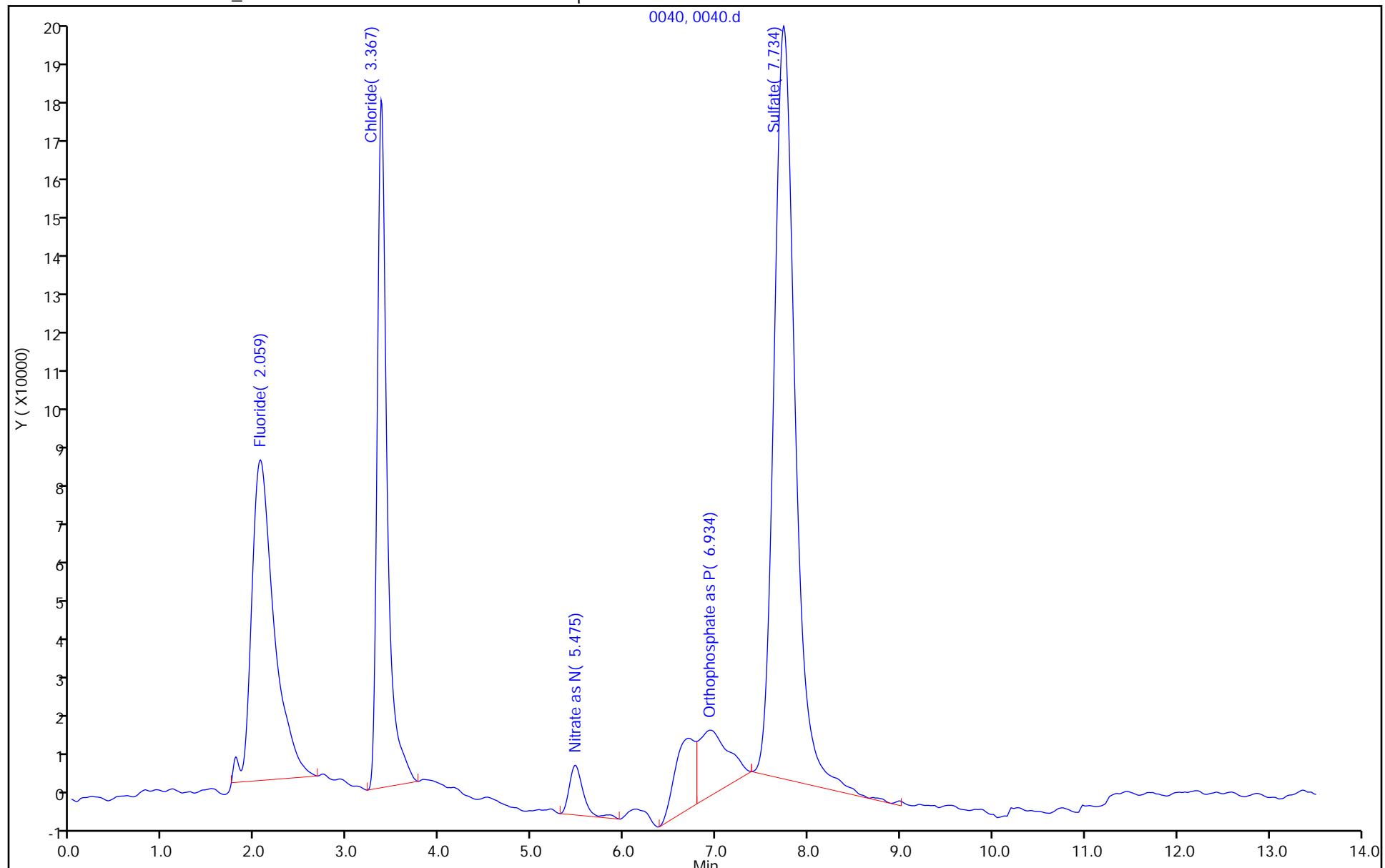
Report Date: 02-Jul-2019 08:28:27

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom11\20190701-83366.b\0040.d
Injection Date: 02-Jul-2019 08:07:00 Instrument ID: WC_IonChrom11
Lims ID: ccb Operator ID:
Client ID:
Injection Vol: 10.0 ul ALS Bottle#: 0
Method: Anions_IC11 Dil. Factor: 1.0000
Limit Group: Wet - Anions 28D

Worklist Smp#: 40



Jm 7/1/19
PH

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
1*	NPOC	ICV		1.000	<2			1
2*	NPOC	ICB		1.000	<2			2
3*	NPOC	Ics 280-463267/1-a		1.000	<2			3
4*	NPOC	mb 280-463267/2-a		1.000	<2			4
5*	NPOC	TIC		1.000	<2			5
6*	NPOC	280-124912-f-1-d		1.000	8			6
7*	NPOC	280-124912-f-1-e ms		1.000	8			7
8*	NPOC	280-124912-f-1-f msd		1.000	8			8
9*	NPOC	280-124912-f-2-b		1.000	8			9
10*	NPOC	280-124912-f-3-b		1.000	8			10
11*	NPOC	CCV		1.000	<2			11
12*	NPOC	CCB		1.000	<2			12
13*	NPOC	280-124912-f-6-b		1.000	8			13
14*	NPOC	280-124912-f-7-b		1.000	8			14
15*	NPOC	280-124912-f-8-b		1.000	7			15
16*	NPOC	280-124912-f-12-b		1.000	8			16
17*	NPOC	LCS		1.000	<2			17
18*	NPOC	MB		1.000	<2			18
19*	NPOC	TIC		1.000	<2			19
20*	NPOC	280-124711-e-1		1.000	<2			20
21*	NPOC	280-124711-c-2		1.000	<2			21
22*	NPOC	280-124711-d-3		1.000	<2			22
23*	NPOC	CCV		1.000	<2			23
24*	NPOC	CCB		1.000	<2			24
25*	NPOC	280-124711-e-4		1.000	<2			25
26*	NPOC	280-124711-e-4 MS		1.000	5			26
27*	NPOC	280-124711-e-4 MSD		1.000	<2			27
28*	NPOC	280-124717-b-1		1.000	<2			28
29*	NPOC	280-124717-b-2		1.000	<2			29
30*	NPOC	280-124717-b-3		1.000	<2			30
31*	NPOC	490-175605-d-1		1.000	<2			31
32*	NPOC	490-175605-d-2		1.000	<2			32
33*	NPOC	490-175605-d-2 MS		1.000	<2			33
34*	NPOC	490-175605-d-2 MSD		1.000	<2			34
35*	NPOC	CCV		1.000	<2			35
36*	NPOC	CCB		1.000	<2			36
37*	NPOC	490-175605-d-3		1.000	<2			37
38*	NPOC	490-175605-d-4		1.000	<2			38
39*	NPOC	490-175605-d-5		1.000	<2			39
40*	NPOC	490-175605-e-9		1.000	<2			40
41*	NPOC	LCS		1.000	<2			41
42*	NPOC	MB		1.000	<2			42
43*	NPOC	TIC		1.000	<2			43
44*	NPOC	280-124678-c-2		1.000	<2			44
45*	NPOC	280-124678-c-2 MS		1.000	<2			45
46*	NPOC	280-124678-c-2 MSD		1.000	<2			46
47*	NPOC	CCV		1.000	<2			47
48*	NPOC	CCB		1.000	<2			48
49*	NPOC	280-124728-a-5		1.000	<2			49
50*	NPOC	280-124728-a-6		1.000	<2			50
51*	NPOC	280-124728-a-7		1.000	<2			51

JUN 7/1/19
PH

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
52*	NPOC	280-124728-a-8		1.000	<2			52
53*	NPOC	280-124728-a-9		1.000	<2			53
54*	NPOC	280-124728-a-10		1.000	<2			54
55*	NPOC	280-124728-a-11		1.000	<2			55
56*	NPOC	280-124728-a-12		1.000	<2			56
57*	NPOC	280-124728-a-13		1.000	<2			57
58*	NPOC	280-124728-a-14		1.000	<2			58
59*	NPOC	CCV		1.000	<2			59
60*	NPOC	CCB		1.000	<2			60
61*	NPOC	280-124728-a-15		1.000	<2			61
62*	NPOC	280-124728-a-16		1.000	<2			62
63*	NPOC	280-124740-c-2		1.000	<2			63
64*	NPOC	280-124740-c-2 MS		1.000	<2			64
65*	NPOC	280-124740-c-2 MSD		1.000	<2			65
66*	NPOC	280-124740-c-3		1.000	<2			66
67*	NPOC	280-124740-c-4		1.000	<2			67
68*	NPOC	280-124740-c-5		1.000	<2			68
69*	NPOC	280-124740-c-6		1.000	<2			69
70*	NPOC	280-124740-c-7		1.000	<2			70
71*	NPOC	CCV		1.000	<2			71
72*	NPOC	CCB		1.000	<2			72
73*	NPOC	280-124740-c-8		1.000	<2			73
74*	NPOC	CCV		1.000	<2			74
75*	NPOC	CCB		1.000	<2			75

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-463267

Analyst: Martinez, Joslyn A

Batch Open: 7/1/2019 11:47:00AM
Batch End:

Sample Filtration

Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Div Rank	Comments	Output Sample Lab ID
LCS~280-463267/1 N/A	N/A		200 mL	200 mL	N/A	N/A	N/A		
MB~280-463267/2 N/A	N/A		20 mL	20 mL	N/A	N/A	N/A		
280-124912-F-1 (9060A_Diss)	N/A	(280-124912-1)	Water	20 mL	20 mL	6/22/19	16_Days	4	
280-124912-F-1~MSD (9060A_Diss)	N/A	(280-124912-1)	Water	20 mL	20 mL	6/22/19	16_Days	4	
280-124912-F-2 (9060A_Diss)	N/A	(280-124912-1)	Water	20 mL	20 mL	6/22/19	16_Days	4	
280-124912-F-3 (9060A_Diss)	N/A	(280-124912-1)	Water	20 mL	20 mL	6/22/19	16_Days	4	
280-124912-F-6 (9060A_Diss)	N/A	(280-124912-1)	Water	20 mL	20 mL	6/22/19	16_Days	4	
280-124912-F-7 (9060A_Diss)	N/A	(280-124912-1)	Water	20 mL	20 mL	6/22/19	16_Days	4	
280-124912-F-8 (9060A_Diss)	N/A	(280-124912-1)	Water	20 mL	20 mL	6/22/19	16_Days	4	
280-124912-F-12 (9060A_Diss)	N/A	(280-124912-1)	Water	20 mL	20 mL	6/22/19	16_Days	4	

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-463267

Analyst: Martinez, Joslyn A

Batch Open: 7/1/2019 11:47:00AM

Batch End:

07/31/2019

Batch Notes

Pipette/Syringe/Dispenser ID na

Filter ID 9743727

Nitric Acid ID na

Batch Comment na

Comments

280-124912-F-1

Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-124912-F-1~MS
280-124912-F-1~MS

Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-124912-F-2

Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-124912-F-3

Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-124912-F-6

Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-124912-F-7

Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-124912-F-12

Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
1	NPOC	ICV		1.000	NPOC:19.9		7/1/2019 2:07:3	1
2	NPOC	ICB		1.000	NPOC:0.01		7/1/2019 2:24:2	2
3	NPOC	Ics 280-463267/1-a		1.000	NPOC:24.1		7/1/2019 2:39:0	3
4	NPOC	mb 280-463267/2-a		1.000	NPOC:0.17		7/1/2019 2:53:5	4
5	NPOC	TIC		1.000	NPOC:0.06		7/1/2019 3:08:3	5
6	NPOC	280-124912-f-1-d		1.000	NPOC:6.24		7/1/2019 3:23:1	6
7	NPOC	280-124912-f-1-e ms		1.000	NPOC:30.5		7/1/2019 3:38:0	7
8	NPOC	280-124912-f-1-f msd		1.000	NPOC:30.6		7/1/2019 3:52:4	8
9	NPOC	280-124912-f-2-b		1.000	NPOC:5.13		7/1/2019 4:09:3	9
10	NPOC	280-124912-f-3-b		1.000	NPOC:4.54		7/1/2019 4:26:1	10
11	NPOC	CCV		1.000	NPOC:25.1		7/1/2019 4:41:0	11
12	NPOC	CCB		1.000	NPOC:0.04		7/1/2019 4:55:5	12
13	NPOC	280-124912-f-6-b		1.000	NPOC:2.82		7/1/2019 5:10:3	13
14	NPOC	280-124912-f-7-b		1.000	NPOC:1.79		7/1/2019 5:25:1	14
15	NPOC	280-124912-f-8-b		1.000	NPOC:6.13		7/1/2019 5:40:0	15
16	NPOC	280-124912-f-12-b		1.000	NPOC:6.23		7/1/2019 5:54:4	16
17	NPOC	LCS		1.000	NPOC:24.2		7/1/2019 6:09:2	17
18	NPOC	MB		1.000	NPOC:0.04		7/1/2019 6:24:1	18
19	NPOC	TIC		1.000	NPOC:0.08		7/1/2019 6:38:5	19
20	NPOC	280-124711-e-1		1.000	NPOC:3.82		7/1/2019 6:53:3	20
21	NPOC	280-124711-c-2		1.000	NPOC:0.51		7/1/2019 7:08:2	21
22	NPOC	280-124711-d-3		1.000	NPOC:0.43		7/1/2019 7:23:0	22
23	NPOC	CCV		1.000	NPOC:25.0		7/1/2019 7:37:4	23
24	NPOC	CCB		1.000	NPOC:0.03		7/1/2019 7:52:3	24
25	NPOC	280-124711-e-4		1.000	NPOC:0.36		7/1/2019 8:07:1	25
26	NPOC	280-124711-e-4 MS		1.000	NPOC:24.9		7/1/2019 8:21:5	26
27	NPOC	280-124711-e-4 MSD		1.000	NPOC:24.9		7/1/2019 8:36:4	27
28	NPOC	280-124717-b-1		1.000	NPOC:1.10		7/1/2019 8:51:2	28
29	NPOC	280-124717-b-2		1.000	NPOC:0.13		7/1/2019 9:06:0	29
30	NPOC	280-124717-b-3		1.000	NPOC:0.41		7/1/2019 9:20:5	30
31	NPOC	490-175605-d-1		1.000	NPOC:4.42		7/1/2019 9:35:3	31
32	NPOC	490-175605-d-2		1.000	NPOC:5.56		7/1/2019 9:50:2	32
33	NPOC	490-175605-d-2 MS		1.000	NPOC:30.2		7/1/2019 10:05:	33
34	NPOC	490-175605-d-2 MSD		1.000	NPOC:30.2		7/1/2019 10:19:	34
35	NPOC	CCV		1.000	NPOC:25.0		7/1/2019 10:34:	35
36	NPOC	CCB		1.000	NPOC:0.05		7/1/2019 10:49:	36
37	NPOC	490-175605-d-3		1.000	NPOC:4.56		7/1/2019 11:04:	37
38	NPOC	490-175605-d-4		1.000	NPOC:3.40		7/1/2019 11:18:	38
39	NPOC	490-175605-d-5		1.000	NPOC:63.0		7/1/2019 11:33:	39
40	NPOC	490-175605-e-9		1.000	NPOC:4.69		7/1/2019 11:50:	40
41	NPOC	LCS		1.000	NPOC:25.2		7/2/2019 12:04:	41
42	NPOC	MB		1.000	NPOC:0.06		7/2/2019 12:19:	42
43	NPOC	TIC		1.000	NPOC:0.07		7/2/2019 12:34:	43
44	NPOC	280-124678-c-2		1.000	NPOC:6.63		7/2/2019 12:49:	44
45	NPOC	280-124678-c-2 MS		1.000	NPOC:31.6		7/2/2019 1:03:5	45
46	NPOC	280-124678-c-2 MSD		1.000	NPOC:31.9		7/2/2019 1:18:4	46
47	NPOC	CCV		1.000	NPOC:25.1		7/2/2019 1:33:3	47
48	NPOC	CCB		1.000	NPOC:0.05		7/2/2019 1:48:1	48
49	NPOC	280-124728-a-5		1.000	NPOC:2.44		7/2/2019 2:02:5	49
50	NPOC	280-124728-a-6		1.000	NPOC:2.65		7/2/2019 2:17:4	50
51	NPOC	280-124728-a-7		1.000	NPOC:3.83		7/2/2019 2:32:2	51
52	NPOC	280-124728-a-8		1.000	NPOC:2.61		7/2/2019 2:47:1	52
53	NPOC	280-124728-a-9		1.000	NPOC:3.02		7/2/2019 3:01:5	53

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
54	NPOC	280-124728-a-10		1.000	NPOC:2.57		7/2/2019 3:16:3	54
55	NPOC	280-124728-a-11		1.000	NPOC:3.52		7/2/2019 3:31:2	55
56	NPOC	280-124728-a-12		1.000	NPOC:3.09		7/2/2019 3:46:0	56
57	NPOC	280-124728-a-13		1.000	NPOC:3.98		7/2/2019 4:00:5	57
58	NPOC	280-124728-a-14		1.000	NPOC:2.58		7/2/2019 4:15:3	58
59	NPOC	CCV		1.000	NPOC:25.1		7/2/2019 4:30:2	59
60	NPOC	CCB		1.000	NPOC:0.06		7/2/2019 4:45:0	60
61	NPOC	280-124728-a-15		1.000	NPOC:8.33		7/2/2019 4:59:5	61
62	NPOC	280-124728-a-16		1.000	NPOC:9.36		7/2/2019 5:14:3	62
63	NPOC	280-124740-c-2		1.000	NPOC:0.24		7/2/2019 5:29:2	63
64	NPOC	280-124740-c-2 MS		1.000	NPOC:25.2		7/2/2019 5:44:0	64
65	NPOC	280-124740-c-2 MSD		1.000	NPOC:25.3		7/2/2019 5:58:5	65
66	NPOC	280-124740-c-3		1.000	NPOC:0.64		7/2/2019 6:13:3	66
67	NPOC	280-124740-c-4		1.000	NPOC:0.63		7/2/2019 6:28:2	67
68	NPOC	280-124740-c-5		1.000	NPOC:14.1		7/2/2019 6:43:0	68
69	NPOC	280-124740-c-6		1.000	NPOC:3.56		7/2/2019 6:57:5	69
70	NPOC	280-124740-c-7		1.000	NPOC:0.48		7/2/2019 7:12:3	70
71	NPOC	CCV		1.000	NPOC:25.4		7/2/2019 7:27:2	71
72	NPOC	CCB		1.000	NPOC:0.06		7/2/2019 7:42:0	72
73	NPOC	280-124740-c-8		1.000	NPOC:-0.03		7/2/2019 7:56:5	73
74	NPOC	CCV		1.000	NPOC:24.3		7/2/2019 8:11:4	74
75	NPOC	CCB		1.000	NPOC:0.04		7/2/2019 8:26:2	75

Instr.Information

System
Instrument Options
Catalyst

TOC-V cpn 3
TOC/ASI/
Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin:
Status
Chk. Result

NPOC.met
Completed

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.93mg/L

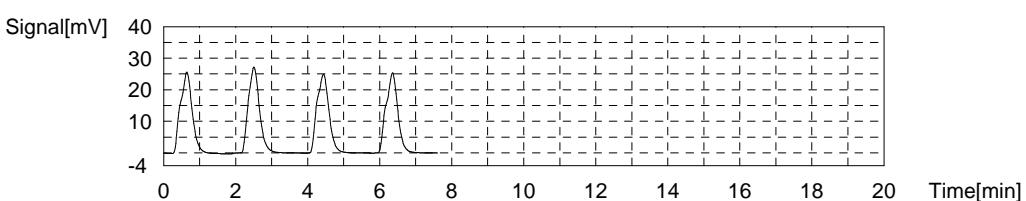
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.86	20.20mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:01:25 PM
2	59.24	19.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:03:29 PM
3	58.73	19.82mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:05:33 PM
4	58.41	19.71mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:07:37 PM

Mean Area
Mean Conc.

59.06
19.93mg/L



Sample

Sample Name: ICB
Sample ID:
Origin:
Status
Chk. Result

NPOC.met
Completed

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.01021mg/L

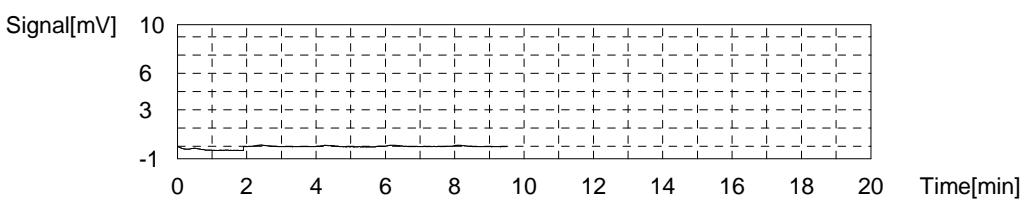
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03558mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:16:08 PM
2	0.2017	0.03261mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:18:12 PM
3	0.1815	0.02578mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:20:16 PM
4	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:22:20 PM
5	0.1586	0.01804mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:24:24 PM

Mean Area
Mean Conc.

0.1355
0.01021mg/L



Sample

Sample Name: lcs 280-463267/1-a
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

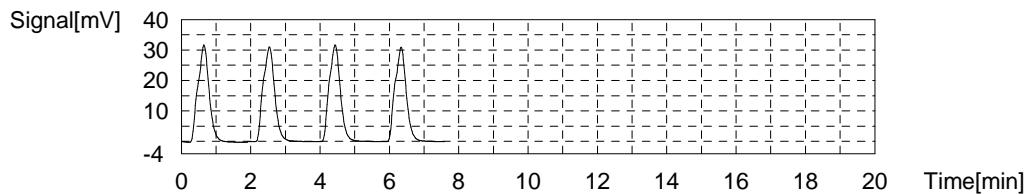
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.19mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.69	24.54mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:32:54 PM
2	71.96	24.29mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:34:58 PM
3	71.41	24.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:37:02 PM
4	70.64	23.84mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:39:06 PM

Mean Area 71.67
 Mean Conc. 24.19mg/L



Sample

Sample Name: mb 280-463267/2-a
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

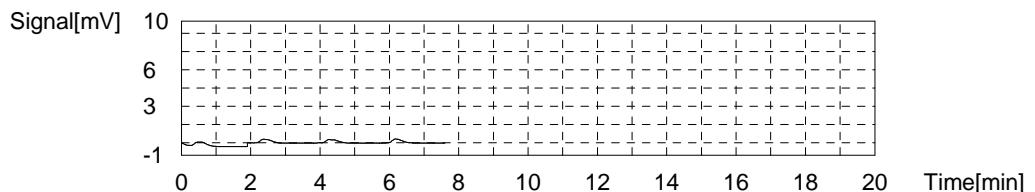
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1773mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6681	0.1903mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:47:38 PM
2	0.6196	0.1739mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:49:42 PM
3	0.5949	0.1655mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:51:46 PM
4	0.6361	0.1794mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 2:53:50 PM

Mean Area 0.6297
 Mean Conc. 0.1773mg/L



Sample

Sample Name: TIC
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

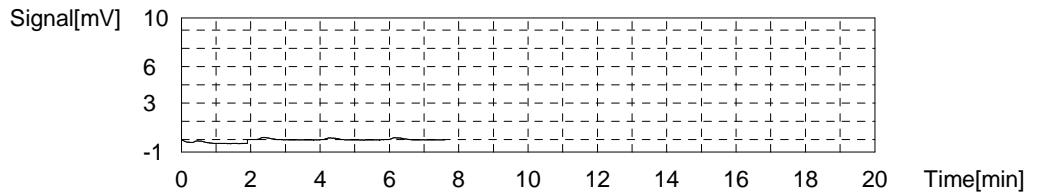
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06699mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2291	0.04187mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:02:22 PM
2	0.3374	0.07848mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:04:26 PM
3	0.3100	0.06921mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:06:30 PM
4	0.3372	0.07841mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:08:34 PM

Mean Area 0.3034
 Mean Conc. 0.06699mg/L



Sample

Sample Name: 280-124912-f-1-d
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

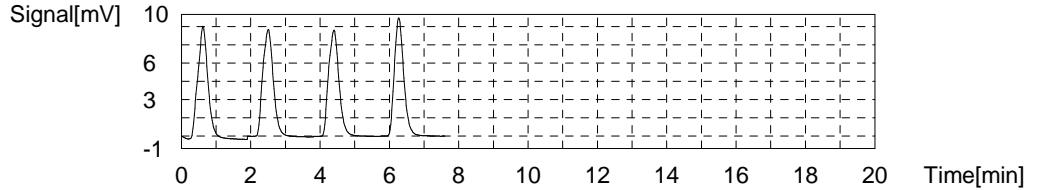
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.243mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.03	6.397mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:17:05 PM
2	18.60	6.252mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:19:09 PM
3	18.29	6.147mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:21:13 PM
4	18.38	6.177mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:23:17 PM

Mean Area 18.58
 Mean Conc. 6.243mg/L



Sample

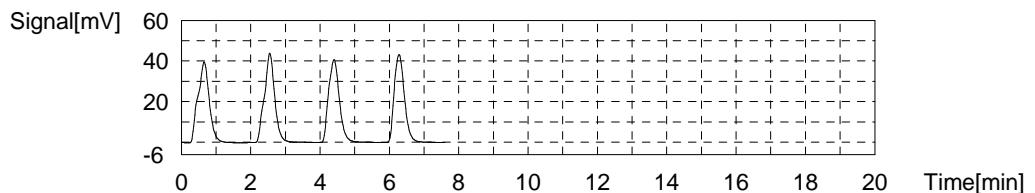
Sample Name: 280-124912-f-1-e ms
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.55mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.01	31.07mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:31:48 PM	
2	91.16	30.78mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:33:52 PM	
3	89.23	30.13mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:35:56 PM	
4	89.53	30.23mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:38:00 PM	

Mean Area 90.48
Mean Conc. 30.55mg/L

Sample

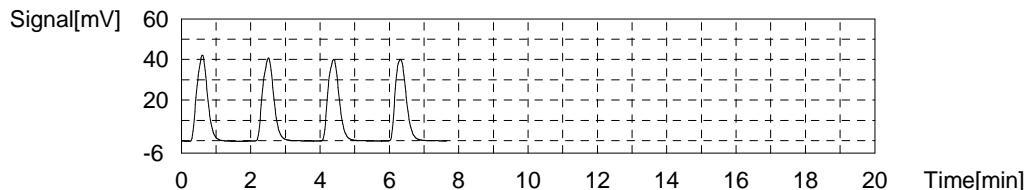
Sample Name: 280-124912-f-1-f msd
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.93	31.04mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:46:31 PM	
2	91.33	30.84mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:48:35 PM	
3	90.26	30.48mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:50:42 PM	
4	89.39	30.18mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/1/2019 3:52:46 PM	

Mean Area 90.73
Mean Conc. 30.63mg/L

Sample

Sample Name: 280-124912-f-2-b
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

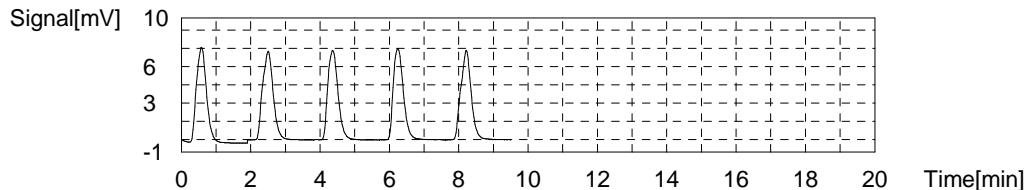
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.131mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.84	5.319mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:01:17 PM
2	15.52	5.211mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:03:21 PM
3	15.15	5.086mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:05:25 PM
4	15.19	5.099mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:07:29 PM
5	15.28	5.130mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:09:33 PM

Mean Area 15.29
 Mean Conc. 5.131mg/L



Sample

Sample Name: 280-124912-f-3-b
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

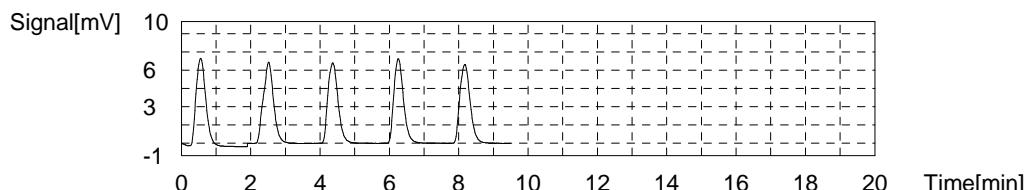
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.546mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.16	4.751mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:18:03 PM
2	13.74	4.609mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:20:07 PM
3	13.49	4.524mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:22:11 PM
4	13.51	4.531mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:24:14 PM
5	13.47	4.518mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:26:18 PM

Mean Area 13.55
 Mean Conc. 4.546mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

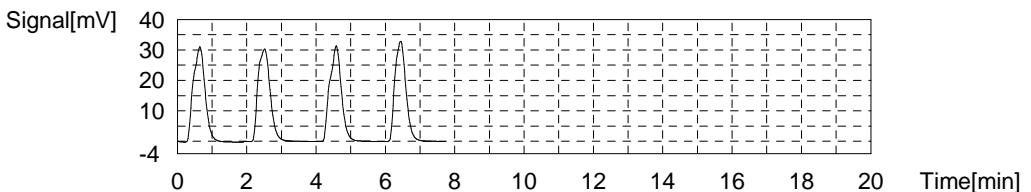
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.10mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.03	25.33mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:34:49 PM
2	74.73	25.23mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:37:01 PM
3	74.01	24.98mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:39:05 PM
4	73.64	24.86mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:41:09 PM

Mean Area 74.35
Mean Conc. 25.10mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

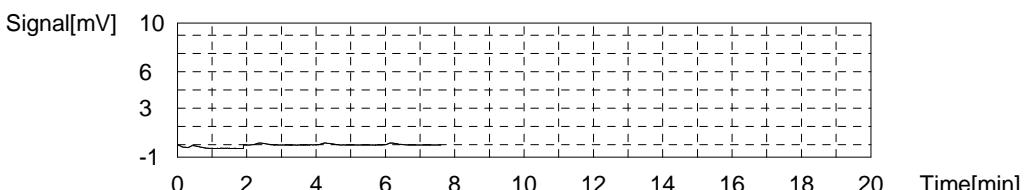
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04739mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2240	0.04014mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:49:40 PM
2	0.2586	0.05184mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:51:44 PM
3	0.2368	0.04447mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:53:48 PM
4	0.2623	0.05309mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 4:55:52 PM

Mean Area 0.2454
Mean Conc. 0.04739mg/L



Sample

Sample Name: 280-124912-f-6-b
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

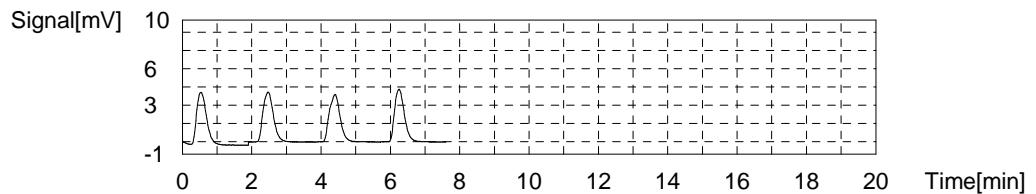
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.824mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.401	2.804mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:04:23 PM
2	8.545	2.853mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:06:27 PM
3	8.422	2.811mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:08:31 PM
4	8.468	2.827mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:10:35 PM

Mean Area 8.459
Mean Conc. 2.824mg/L



Sample

Sample Name: 280-124912-f-7-b
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

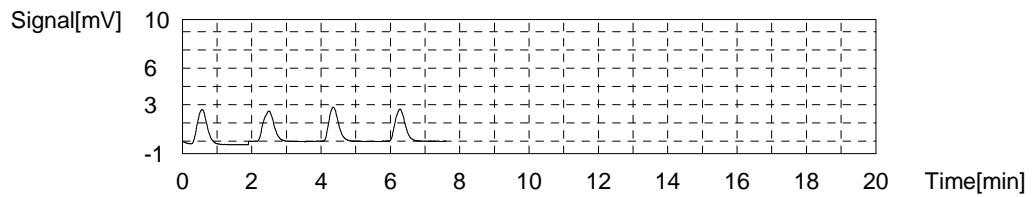
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.791mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.526	1.832mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:19:06 PM
2	5.393	1.787mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:21:10 PM
3	5.361	1.777mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:23:14 PM
4	5.334	1.767mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:25:18 PM

Mean Area 5.404
Mean Conc. 1.791mg/L



Sample

Sample Name: 280-124912-f-8-b
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

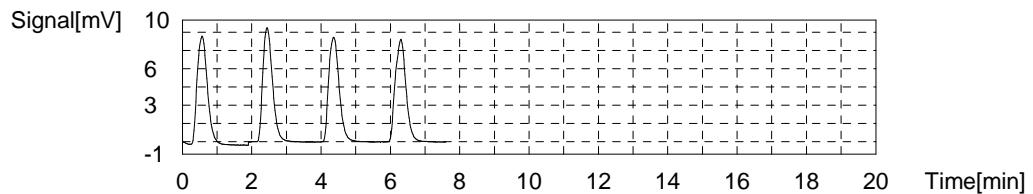
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.136mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.48	6.211mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:33:50 PM
2	18.27	6.140mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:35:54 PM
3	18.07	6.073mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:37:58 PM
4	18.21	6.120mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:40:01 PM

Mean Area 18.26
Mean Conc. 6.136mg/L



Sample

Sample Name: 280-124912-f-12-b
Sample ID:
Origin:
Status Completed
Chk. Result

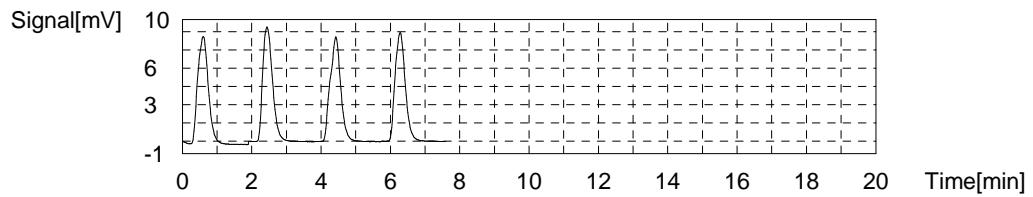
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.237mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.97	6.377mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:48:33 PM
2	18.62	6.259mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:50:37 PM
3	18.25	6.133mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:52:41 PM
4	18.39	6.181mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 5:54:45 PM

Mean Area 18.56
Mean Conc. 6.237mg/L



Sample

Sample Name: LCS
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.24mg/L

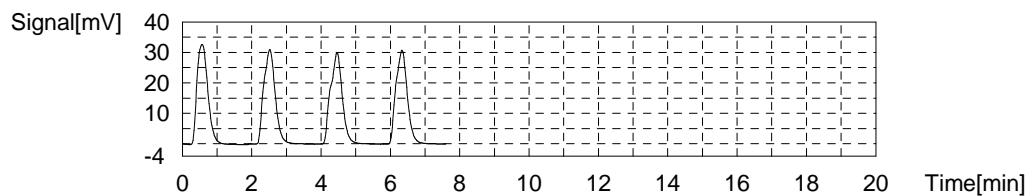
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.03	24.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:03:17 PM
2	71.65	24.18mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:05:21 PM
3	71.31	24.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:07:25 PM
4	71.31	24.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:09:29 PM

Mean Area
Mean Conc.

71.83
24.24mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04679mg/L

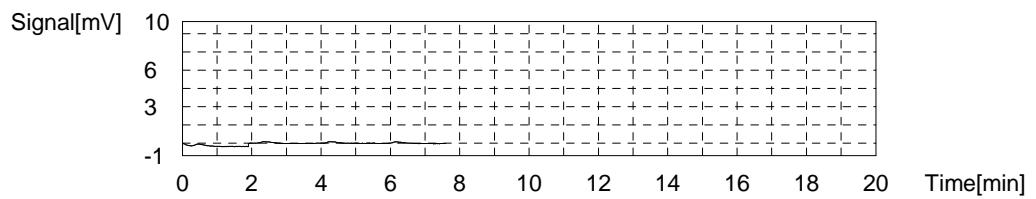
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2635	0.05350mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:18:00 PM
2	0.2567	0.05120mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:20:04 PM
3	0.2057	0.03396mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:22:08 PM
4	0.2488	0.04853mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:24:12 PM

Mean Area
Mean Conc.

0.2437
0.04679mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

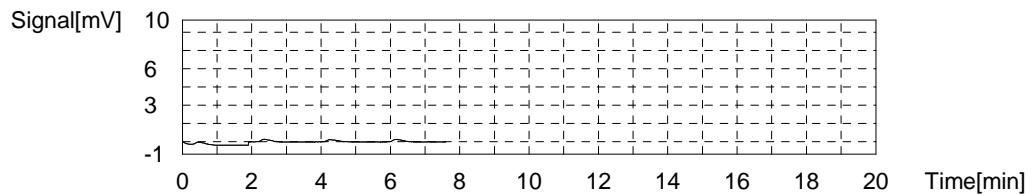
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08606mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3384	0.07881mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:32:43 PM
2	0.3624	0.08693mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:34:47 PM
3	0.3548	0.08436mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:36:51 PM
4	0.3837	0.09413mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:38:55 PM

Mean Area 0.3598
Mean Conc. 0.08606mg/L



Sample

Sample Name: 280-124711-e-1
Sample ID:
Origin:
Status Completed
Chk. Result

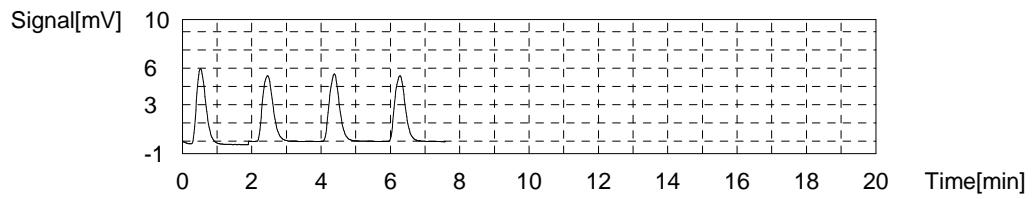
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.826mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.49	3.848mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:47:27 PM
2	11.44	3.832mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:49:31 PM
3	11.34	3.798mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:51:35 PM
4	11.43	3.828mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 6:53:38 PM

Mean Area 11.42
Mean Conc. 3.826mg/L



Sample

Sample Name: 280-124711-c-2
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5168mg/L

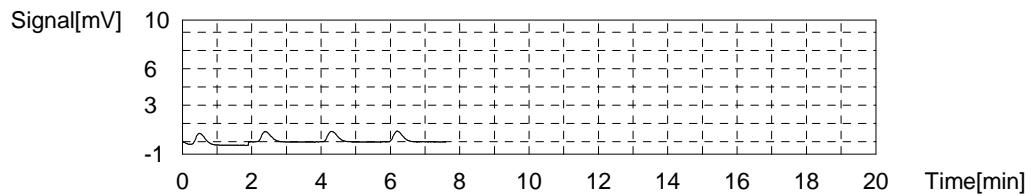
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.663	0.5266mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:02:10 PM
2	1.590	0.5019mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:04:14 PM
3	1.654	0.5235mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:06:18 PM
4	1.629	0.5151mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:08:22 PM

Mean Area
Mean Conc.

1.634
0.5168mg/L



Sample

Sample Name: 280-124711-d-3
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4367mg/L

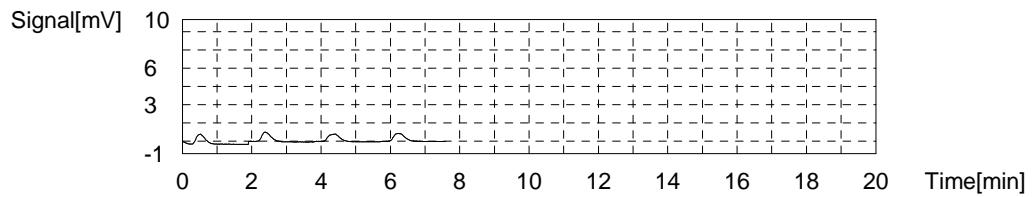
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.425	0.4461mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:16:53 PM
2	1.381	0.4312mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:18:57 PM
3	1.369	0.4272mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:21:01 PM
4	1.413	0.4421mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:23:05 PM

Mean Area
Mean Conc.

1.397
0.4367mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.05mg/L

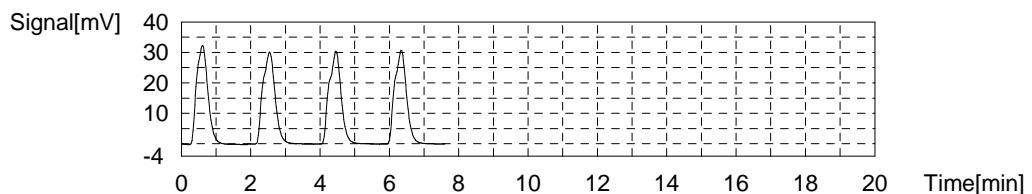
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.98	25.31mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:31:36 PM
2	74.23	25.06mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:33:40 PM
3	73.75	24.89mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:35:44 PM
4	73.93	24.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:37:48 PM

Mean Area
Mean Conc.

74.22
25.05mg/L



Sample

Sample Name: CCB
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03924mg/L

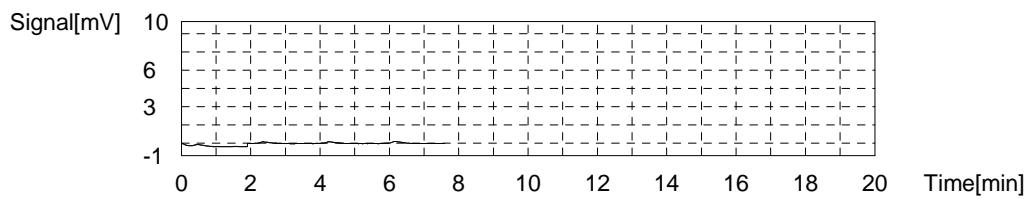
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1895	0.02848mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:46:20 PM
2	0.2047	0.03362mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:48:24 PM
3	0.2087	0.03497mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:50:28 PM
4	0.2824	0.05988mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 7:52:32 PM

Mean Area
Mean Conc.

0.2213
0.03924mg/L



Sample

Sample Name: 280-124711-e-4
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3690mg/L

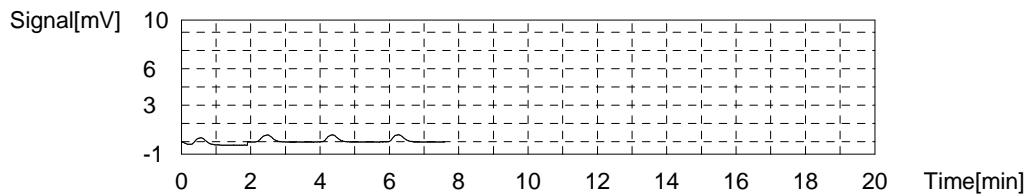
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.128	0.3457mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:01:04 PM
2	1.216	0.3755mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:03:08 PM
3	1.194	0.3680mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:05:12 PM
4	1.250	0.3870mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:07:15 PM

Mean Area
Mean Conc.

1.197
0.3690mg/L



Sample

Sample Name: 280-124711-e-4 MS
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.94mg/L

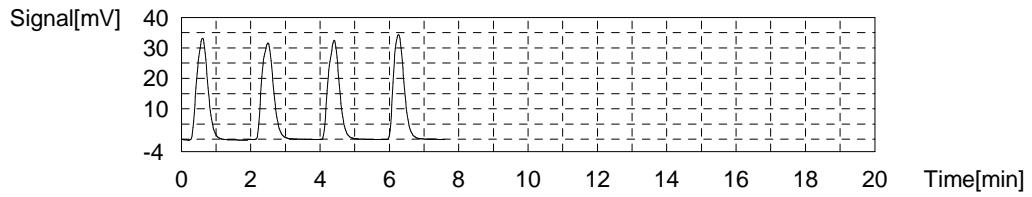
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.90	25.28mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:15:47 PM
2	74.12	25.02mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:17:51 PM
3	73.19	24.70mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:19:55 PM
4	73.36	24.76mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:21:59 PM

Mean Area
Mean Conc.

73.89
24.94mg/L



Sample

Sample Name: 280-124711-e-4 MSD
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

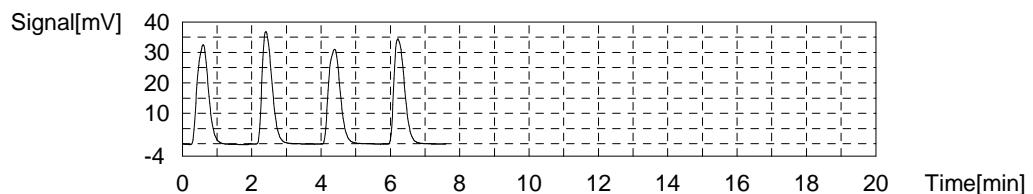
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.97mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.79	25.25mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:30:31 PM
2	74.14	25.03mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:32:35 PM
3	73.42	24.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:34:39 PM
4	73.59	24.84mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:36:43 PM

Mean Area 73.99
Mean Conc. 24.97mg/L



Sample

Sample Name: 280-124717-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

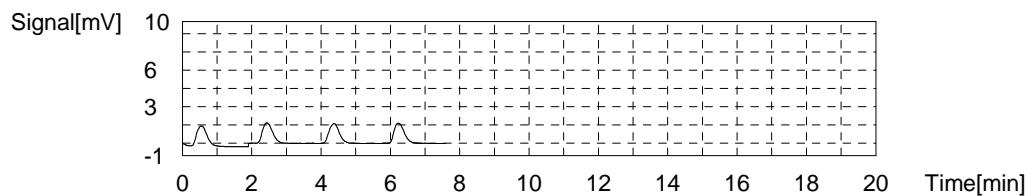
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.104mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.381	1.107mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:45:14 PM
2	3.401	1.114mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:47:18 PM
3	3.331	1.090mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:49:22 PM
4	3.370	1.104mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:51:26 PM

Mean Area 3.371
Mean Conc. 1.104mg/L



Sample

Sample Name: 280-124717-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1349mg/L

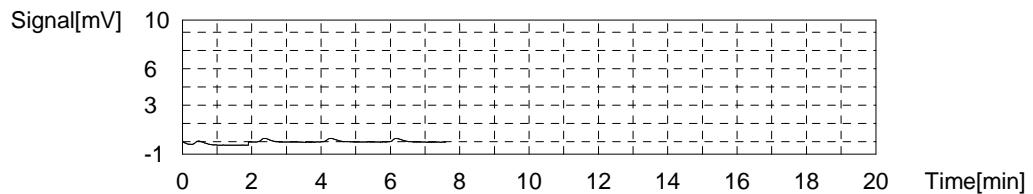
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4606	0.1201mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 8:59:57 PM
2	0.5242	0.1416mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:02:01 PM
3	0.5209	0.1405mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:04:05 PM
4	0.5117	0.1374mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:06:09 PM

Mean Area
Mean Conc.

0.5044
0.1349mg/L



Sample

Sample Name: 280-124717-b-3
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4101mg/L

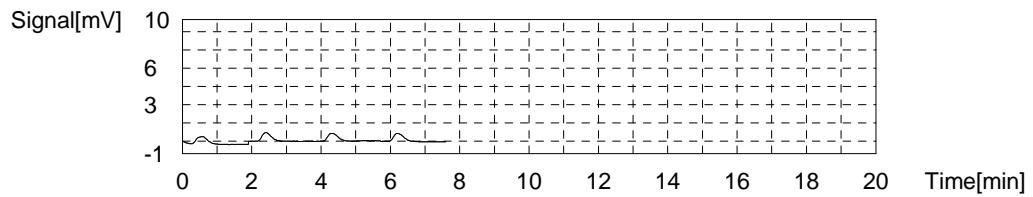
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.287	0.3995mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:14:41 PM
2	1.347	0.4198mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:16:45 PM
3	1.307	0.4062mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:18:49 PM
4	1.333	0.4150mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:20:52 PM

Mean Area
Mean Conc.

1.319
0.4101mg/L



Sample

Sample Name: 490-175605-d-1
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

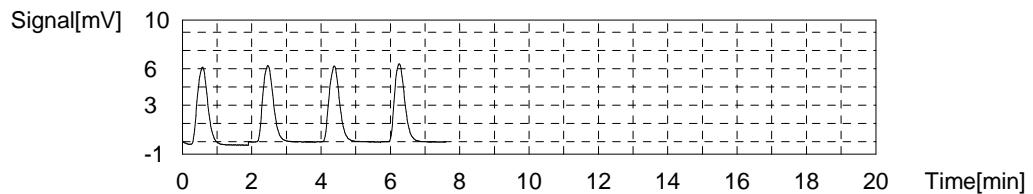
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.427mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.31	4.464mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:29:25 PM
2	13.27	4.450mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:31:29 PM
3	13.08	4.386mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:33:33 PM
4	13.15	4.410mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:35:36 PM

Mean Area 13.20
Mean Conc. 4.427mg/L



Sample

Sample Name: 490-175605-d-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

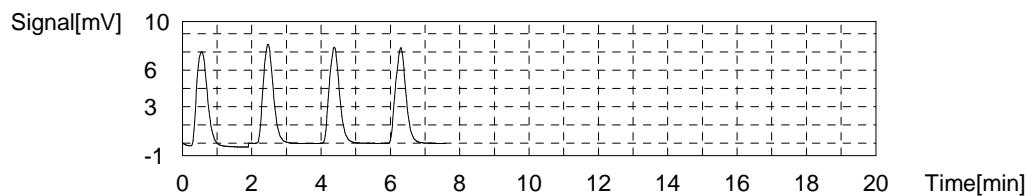
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.561mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.81	5.647mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:44:09 PM
2	16.57	5.566mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:46:13 PM
3	16.33	5.484mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:48:17 PM
4	16.51	5.545mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:50:21 PM

Mean Area 16.56
Mean Conc. 5.561mg/L



Sample

Sample Name: 490-175605-d-2 MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

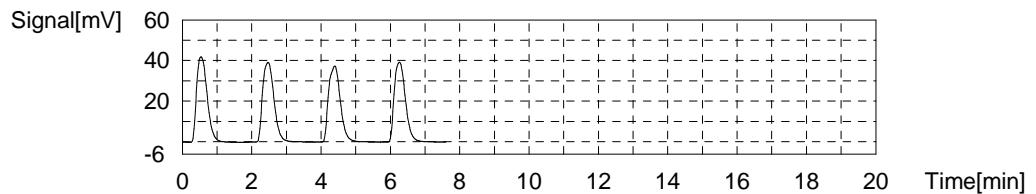
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.23mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.79	30.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 9:58:53 PM
2	89.82	30.33mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:00:57 PM
3	88.77	29.97mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:03:01 PM
4	88.78	29.97mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:05:04 PM

Mean Area 89.54
Mean Conc. 30.23mg/L



Sample

Sample Name: 490-175605-d-2 MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

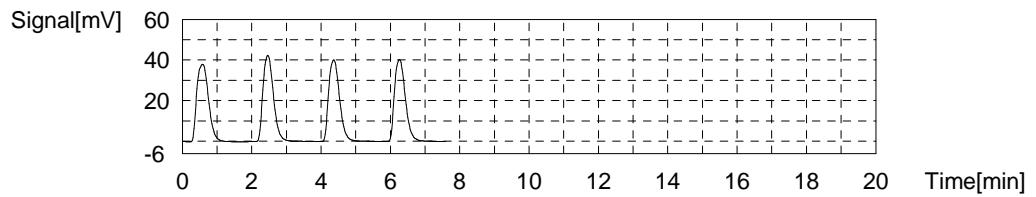
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.20mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.00	30.73mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:13:37 PM
2	89.73	30.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:15:41 PM
3	88.27	29.80mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:17:45 PM
4	88.84	30.00mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:19:49 PM

Mean Area 89.46
Mean Conc. 30.20mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.09mg/L

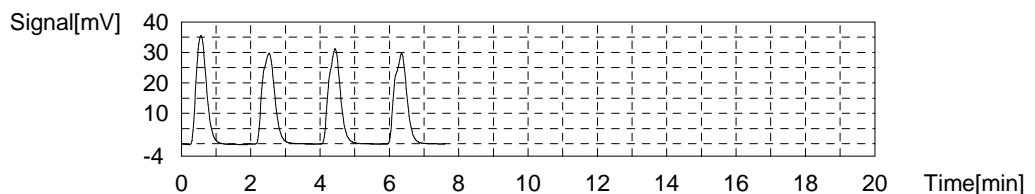
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.19	25.38mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:28:21 PM
2	74.53	25.16mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:30:25 PM
3	73.78	24.90mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:32:29 PM
4	73.82	24.92mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:34:32 PM

Mean Area
Mean Conc.

74.33
25.09mg/L



Sample

Sample Name: CCB
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05462mg/L

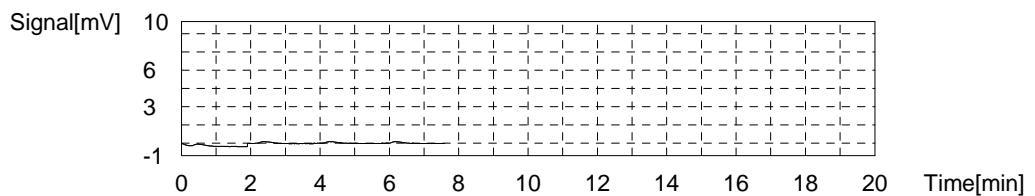
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2626	0.05319mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:43:05 PM
2	0.2945	0.06397mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:45:09 PM
3	0.2455	0.04741mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:47:13 PM
4	0.2647	0.05390mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:49:16 PM

Mean Area
Mean Conc.

0.2668
0.05462mg/L



Sample

Sample Name: 490-175605-d-3
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

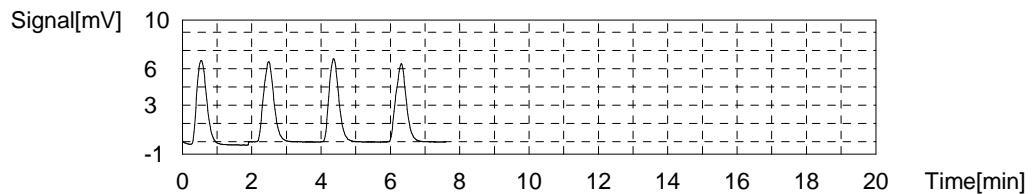
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.569mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.80	4.629mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:57:49 PM
2	13.67	4.585mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 10:59:53 PM
3	13.48	4.521mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:01:57 PM
4	13.54	4.541mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:04:01 PM

Mean Area 13.62
Mean Conc. 4.569mg/L



Sample

Sample Name: 490-175605-d-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

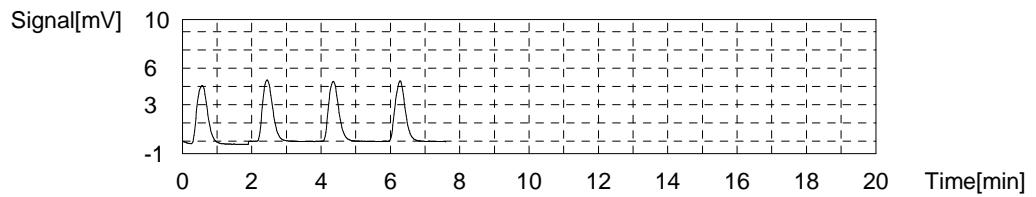
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.406mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.30	3.446mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:12:33 PM
2	10.26	3.433mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:14:37 PM
3	10.07	3.368mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:16:41 PM
4	10.10	3.379mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:18:44 PM

Mean Area 10.18
Mean Conc. 3.406mg/L



Sample

Sample Name: 490-175605-d-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

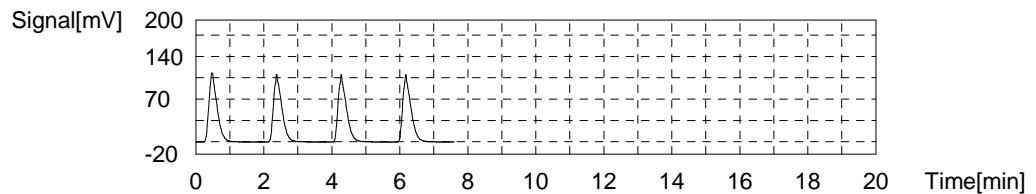
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:63.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	189.8	64.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:27:17 PM
2	187.8	63.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:29:21 PM
3	184.8	62.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:31:25 PM
4	184.0	62.16mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:33:29 PM

Mean Area 186.6
Mean Conc. 63.04mg/L



Sample

Sample Name: 490-175605-e-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

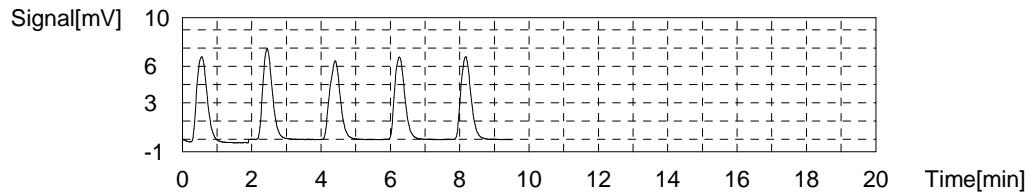
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.696mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.72	4.940mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:42:01 PM
2	14.33	4.808mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:44:05 PM
3	13.89	4.660mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:46:08 PM
4	13.87	4.653mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:48:12 PM
5	13.90	4.663mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:50:16 PM

Mean Area 14.00
Mean Conc. 4.696mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

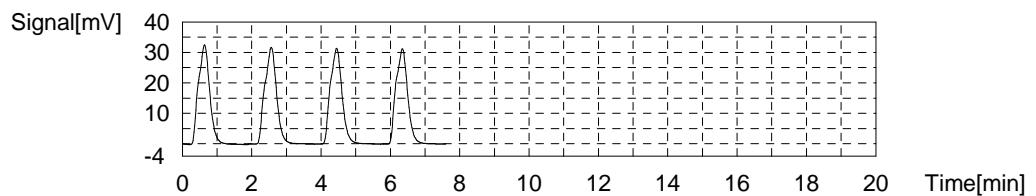
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.42	25.46mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/1/2019 11:58:48 PM
2	75.25	25.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:00:52 AM
3	74.26	25.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:02:56 AM
4	73.85	24.93mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:04:59 AM

Mean Area 74.70
Mean Conc. 25.21mg/L



Sample

Sample Name: MB
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

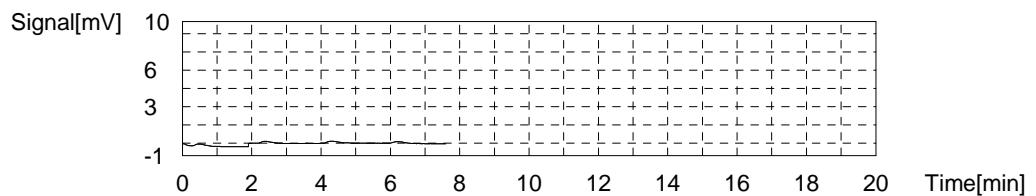
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06403mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3014	0.06631mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:13:32 AM
2	0.2865	0.06127mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:15:36 AM
3	0.2959	0.06445mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:17:40 AM
4	0.2949	0.06411mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:19:43 AM

Mean Area 0.2947
Mean Conc. 0.06403mg/L



Sample

Sample Name: TIC
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

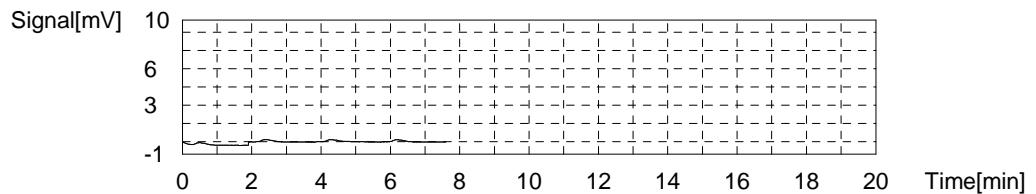
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07732mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2828	0.06002mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:28:16 AM
2	0.3821	0.09359mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:30:20 AM
3	0.3001	0.06587mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:32:24 AM
4	0.3709	0.08980mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:34:27 AM

Mean Area 0.3340
Mean Conc. 0.07732mg/L



Sample

Sample Name: 280-124678-c-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

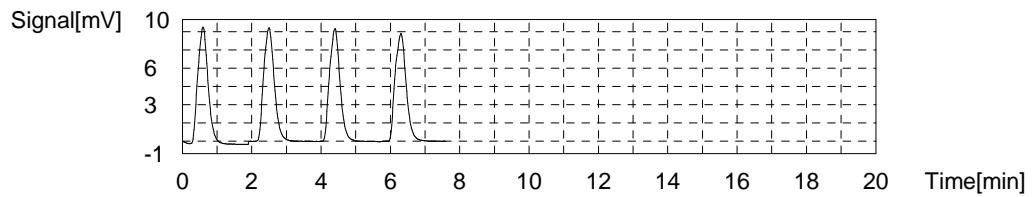
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.630mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.80	6.657mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:43:00 AM
2	19.87	6.681mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:45:04 AM
3	19.52	6.563mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:47:08 AM
4	19.68	6.617mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:49:12 AM

Mean Area 19.72
Mean Conc. 6.630mg/L



Sample

Sample Name: 280-124678-c-2 MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.65mg/L

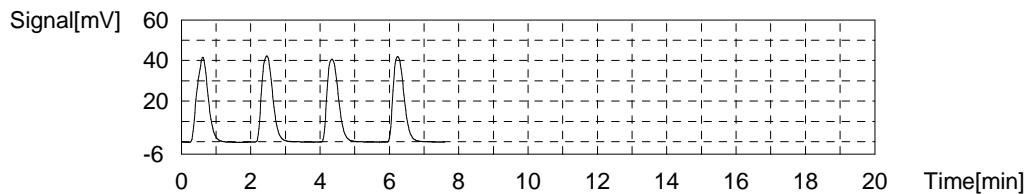
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	95.06	32.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:57:44 AM
2	94.41	31.88mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 12:59:48 AM
3	92.87	31.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:01:51 AM
4	92.62	31.27mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:03:55 AM

Mean Area
Mean Conc.

93.74
31.65mg/L



Sample

Sample Name: 280-124678-c-2 MSD
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.91mg/L

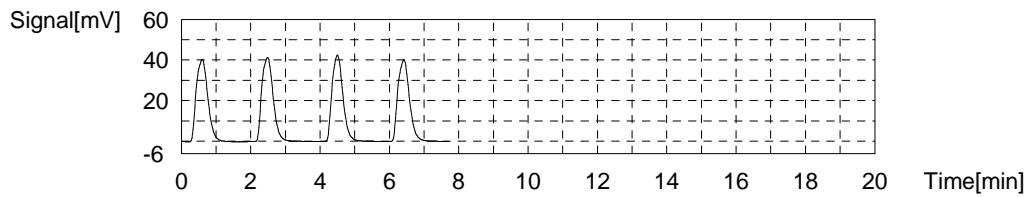
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	95.42	32.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:12:28 AM
2	94.77	32.00mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:14:39 AM
3	93.71	31.64mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:16:43 AM
4	94.16	31.79mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:18:46 AM

Mean Area
Mean Conc.

94.52
31.91mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.15mg/L

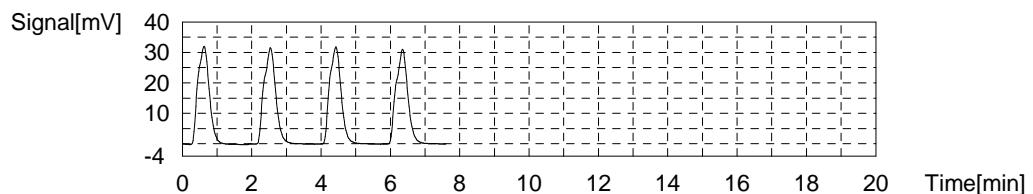
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.38	25.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:27:19 AM
2	74.85	25.27mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:29:23 AM
3	73.78	24.90mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:31:27 AM
4	74.02	24.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:33:30 AM

Mean Area
Mean Conc.

74.51
25.15mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05150mg/L

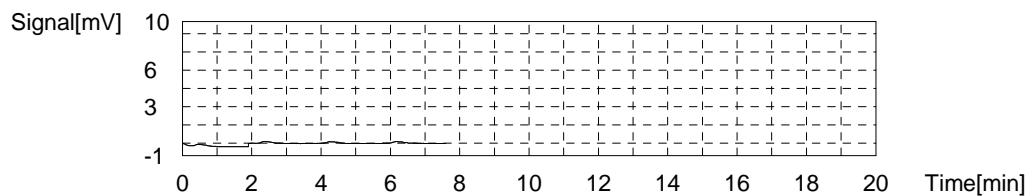
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2529	0.04991mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:42:03 AM
2	0.2663	0.05444mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:44:07 AM
3	0.2629	0.05329mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:46:11 AM
4	0.2483	0.04836mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:48:14 AM

Mean Area
Mean Conc.

0.2576
0.05150mg/L



Sample

Sample Name: 280-124728-a-5
Sample ID:
Origin:
Status Completed
Chk. Result

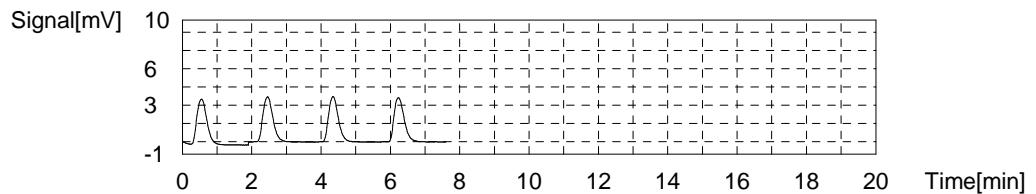
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.447mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.385	2.461mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:56:47 AM
2	7.428	2.475mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 1:58:51 AM
3	7.259	2.418mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:00:55 AM
4	7.308	2.435mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:02:59 AM

Mean Area 7.345
Mean Conc. 2.447mg/L



Sample

Sample Name: 280-124728-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

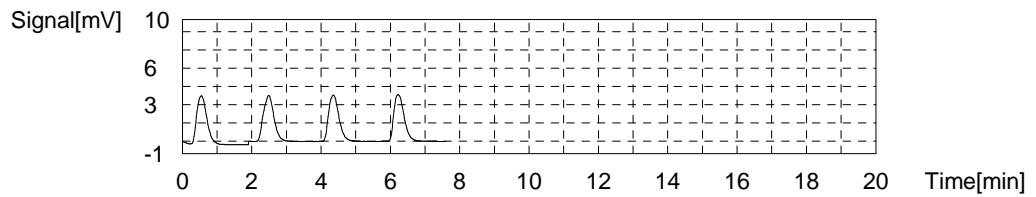
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.659mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.056	2.688mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:11:31 AM
2	8.044	2.684mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:13:35 AM
3	7.885	2.630mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:15:39 AM
4	7.895	2.633mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:17:42 AM

Mean Area 7.970
Mean Conc. 2.659mg/L



Sample

Sample Name: 280-124728-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

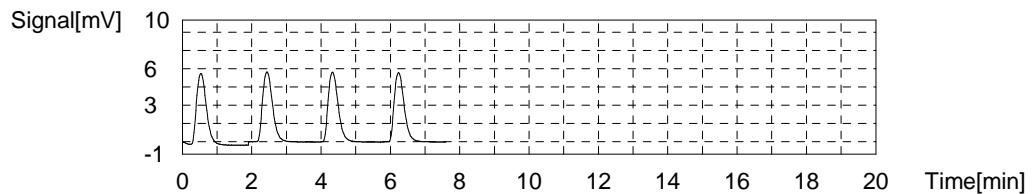
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.832mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.52	3.859mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:26:15 AM
2	11.45	3.835mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:28:19 AM
3	11.44	3.832mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:30:23 AM
4	11.36	3.804mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:32:26 AM

Mean Area 11.44
Mean Conc. 3.832mg/L



Sample

Sample Name: 280-124728-a-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

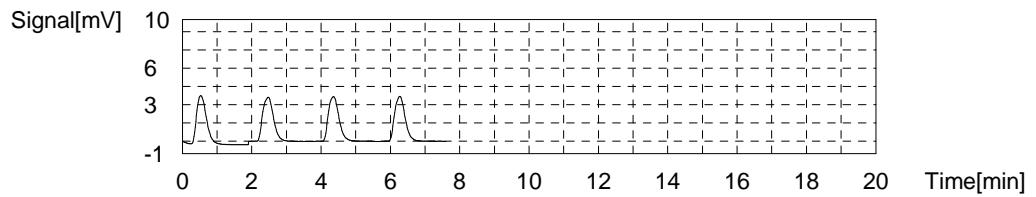
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.612mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.908	2.638mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:40:59 AM
2	7.849	2.618mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:43:03 AM
3	7.761	2.588mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:45:06 AM
4	7.807	2.603mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:47:10 AM

Mean Area 7.831
Mean Conc. 2.612mg/L



Sample

Sample Name: 280-124728-a-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

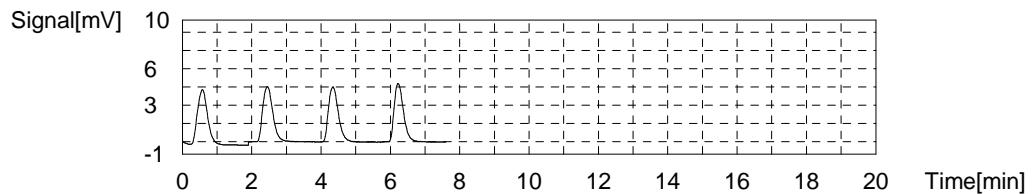
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.029mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.120	3.047mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:55:43 AM
2	9.150	3.057mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:57:47 AM
3	9.010	3.010mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:59:51 AM
4	8.980	3.000mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:01:54 AM

Mean Area 9.065
Mean Conc. 3.029mg/L



Sample

Sample Name: 280-124728-a-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

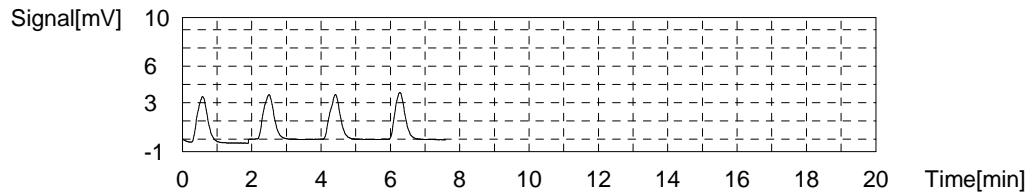
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.570mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.729	2.577mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:10:27 AM
2	7.768	2.590mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:12:31 AM
3	7.611	2.537mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:14:35 AM
4	7.723	2.575mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:16:38 AM

Mean Area 7.708
Mean Conc. 2.570mg/L



Sample

Sample Name: 280-124728-a-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

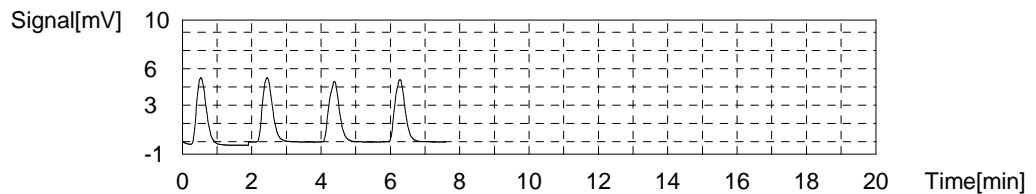
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.529mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.70	3.581mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:25:12 AM
2	10.60	3.548mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:27:16 AM
3	10.36	3.466mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:29:19 AM
4	10.52	3.521mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:31:23 AM

Mean Area 10.55
Mean Conc. 3.529mg/L



Sample

Sample Name: 280-124728-a-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

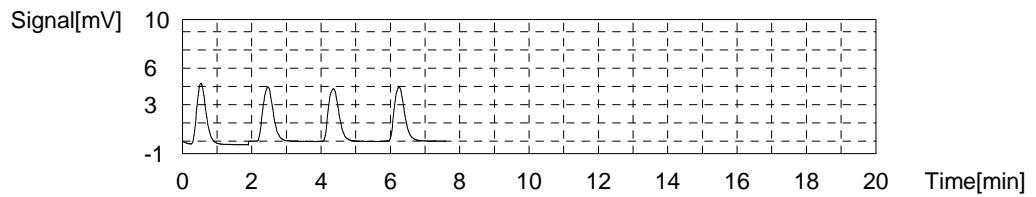
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.091mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.291	3.105mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:39:57 AM
2	9.259	3.094mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:42:01 AM
3	9.234	3.086mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:44:04 AM
4	9.219	3.081mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:46:08 AM

Mean Area 9.251
Mean Conc. 3.091mg/L



Sample

Sample Name: 280-124728-a-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

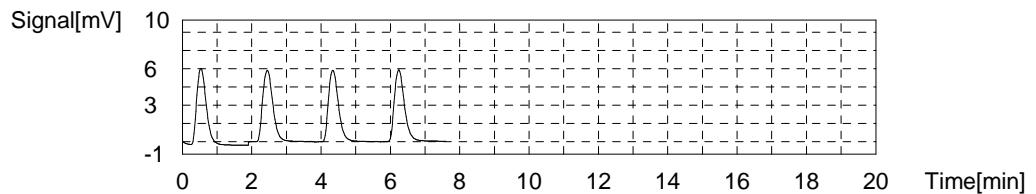
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.983mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.00	4.021mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:54:42 AM
2	11.93	3.997mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:56:46 AM
3	11.68	3.913mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:58:49 AM
4	11.94	4.001mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:00:53 AM

Mean Area 11.89
Mean Conc. 3.983mg/L



Sample

Sample Name: 280-124728-a-14
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

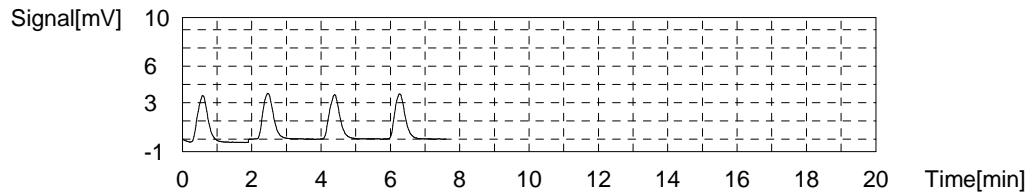
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.583mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.873	2.626mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:09:27 AM
2	7.805	2.603mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:11:31 AM
3	7.627	2.543mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:13:35 AM
4	7.683	2.562mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:15:38 AM

Mean Area 7.747
Mean Conc. 2.583mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.16mg/L

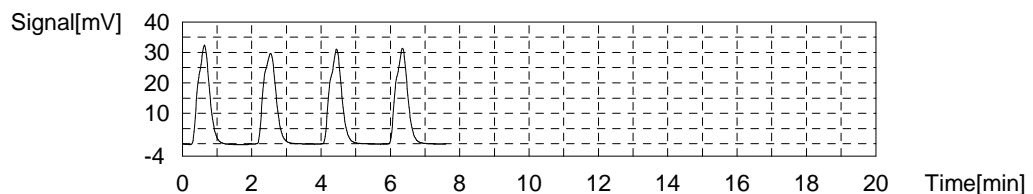
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.55	25.50mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:24:12 AM
2	74.69	25.21mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:26:16 AM
3	73.80	24.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:28:20 AM
4	74.16	25.03mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:30:23 AM

Mean Area
Mean Conc.

74.55
25.16mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06839mg/L

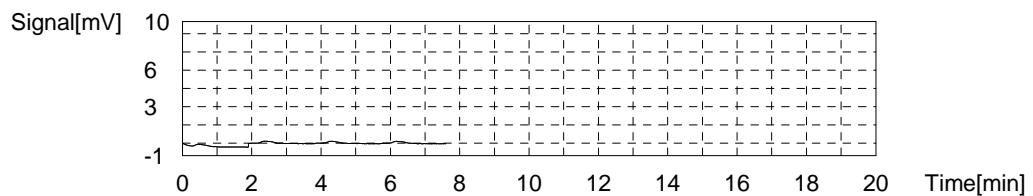
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2598	0.05224mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:38:57 AM
2	0.3490	0.08240mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:41:01 AM
3	0.2814	0.05955mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:43:04 AM
4	0.3400	0.07935mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:45:08 AM

Mean Area
Mean Conc.

0.3076
0.06839mg/L



Sample

Sample Name: 280-124728-a-15
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.336mg/L

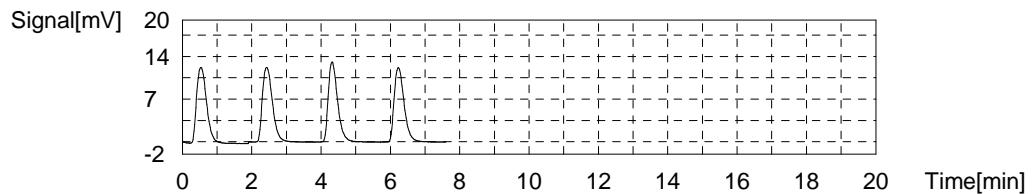
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.12	8.456mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:53:42 AM
2	24.83	8.358mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:55:46 AM
3	24.66	8.300mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:57:49 AM
4	24.45	8.229mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:59:53 AM

Mean Area
Mean Conc.

24.77
8.336mg/L



Sample

Sample Name: 280-124728-a-16
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.363mg/L

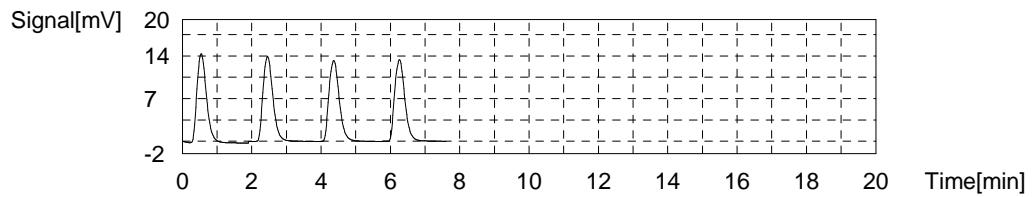
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.11	9.466mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:08:27 AM
2	27.89	9.392mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:10:31 AM
3	27.63	9.304mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:12:34 AM
4	27.59	9.291mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:14:38 AM

Mean Area
Mean Conc.

27.81
9.363mg/L



Sample

Sample Name: 280-124740-c-2
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2457mg/L

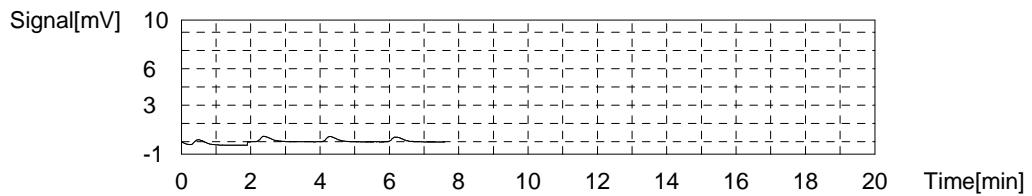
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8025	0.2357mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:23:12 AM
2	0.8902	0.2653mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:25:16 AM
3	0.8382	0.2478mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:27:19 AM
4	0.7976	0.2340mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:29:23 AM

Mean Area
Mean Conc.

0.8321
0.2457mg/L



Sample

Sample Name: 280-124740-c-2 MS
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.29mg/L

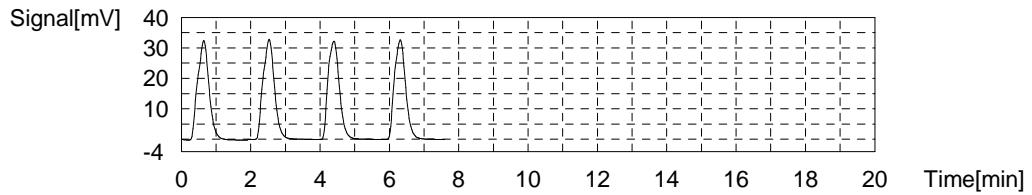
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.75	25.57mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:37:57 AM
2	75.49	25.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:40:01 AM
3	73.88	24.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:42:05 AM
4	74.51	25.15mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:44:08 AM

Mean Area
Mean Conc.

74.91
25.29mg/L



Sample

Sample Name: 280-124740-c-2 MSD
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.36mg/L

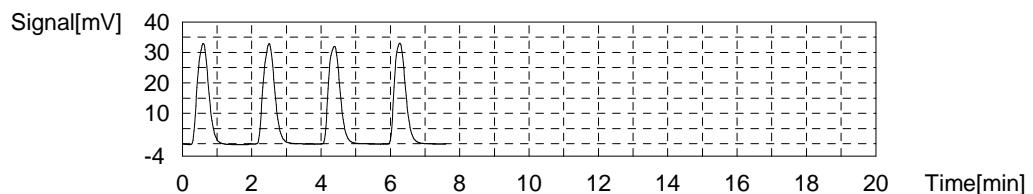
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.91	25.62mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:52:42 AM
2	75.70	25.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:54:46 AM
3	74.41	25.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:56:49 AM
4	74.48	25.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:58:53 AM

Mean Area
Mean Conc.

75.13
25.36mg/L



Sample

Sample Name: 280-124740-c-3
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6482mg/L

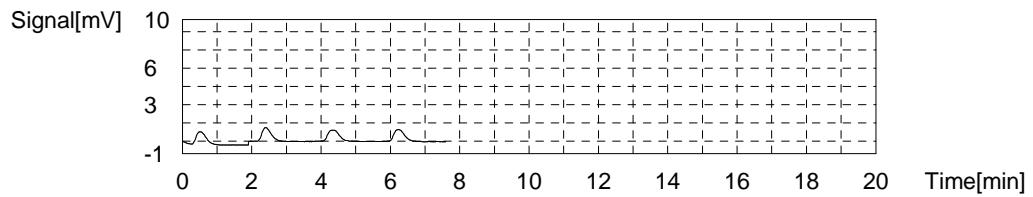
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.915	0.6118mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:07:27 AM
2	2.059	0.6604mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:09:31 AM
3	2.031	0.6510mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:11:34 AM
4	2.086	0.6696mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:13:38 AM

Mean Area
Mean Conc.

2.023
0.6482mg/L



Sample

Sample Name: 280-124740-c-4
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6330mg/L

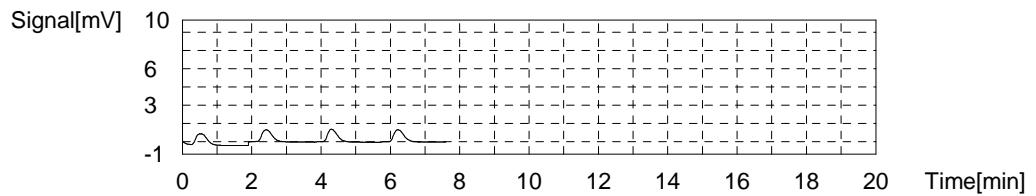
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.947	0.6226mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:22:12 AM
2	1.980	0.6337mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:24:16 AM
3	1.997	0.6395mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:26:19 AM
4	1.988	0.6364mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:28:23 AM

Mean Area
Mean Conc.

1.978
0.6330mg/L



Sample

Sample Name: 280-124740-c-5
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.13mg/L

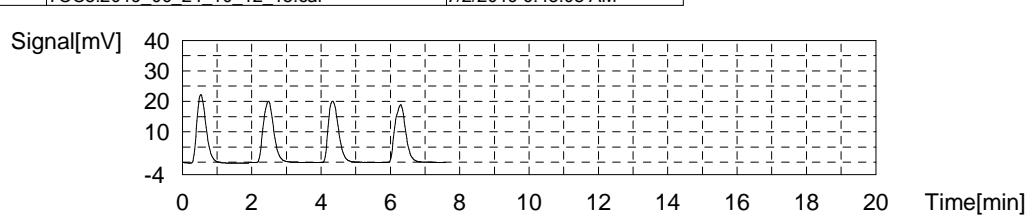
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	42.17	14.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:36:57 AM
2	42.39	14.29mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:39:01 AM
3	41.54	14.01mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:41:04 AM
4	41.54	14.01mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:43:08 AM

Mean Area
Mean Conc.

41.91
14.13mg/L



Sample

Sample Name: 280-124740-c-6
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

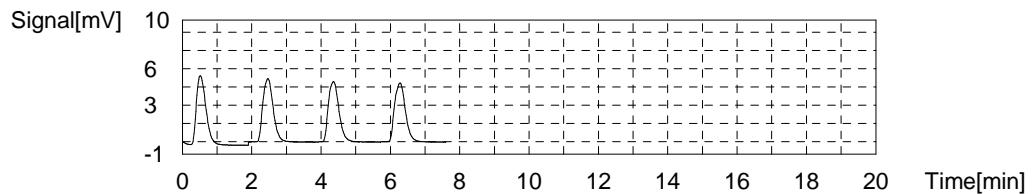
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.568mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.85	3.632mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:51:42 AM
2	10.75	3.598mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:53:46 AM
3	10.52	3.521mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:55:50 AM
4	10.52	3.521mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:57:53 AM

Mean Area 10.66
Mean Conc. 3.568mg/L



Sample

Sample Name: 280-124740-c-7
Sample ID:
Origin:
Status Completed
Chk. Result

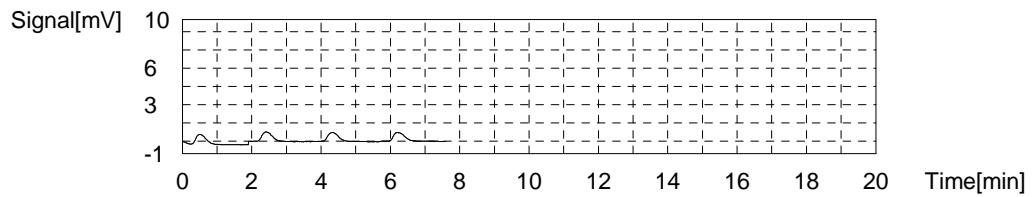
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4890mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.573	0.4961mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:06:27 AM
2	1.557	0.4907mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:08:30 AM
3	1.522	0.4789mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:10:34 AM
4	1.556	0.4904mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:12:38 AM

Mean Area 1.552
Mean Conc. 0.4890mg/L



Sample

Sample Name: CCV
Sample ID:
Origin:
Status Completed
Chk. Result

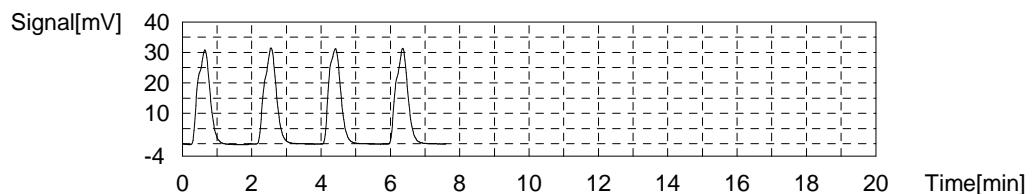
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.49mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.22	25.73mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:21:12 AM
2	76.13	25.70mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:23:16 AM
3	74.79	25.25mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:25:19 AM
4	74.93	25.29mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:27:23 AM

Mean Area 75.52
Mean Conc. 25.49mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

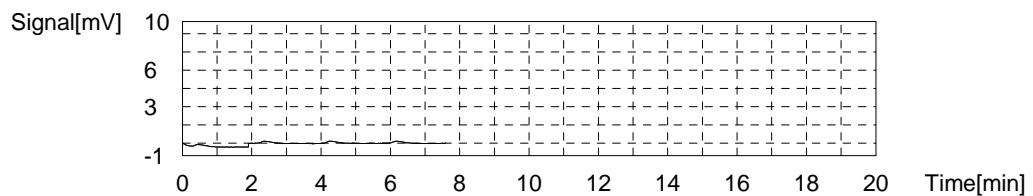
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06525mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2692	0.05542mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:35:57 AM
2	0.3208	0.07286mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:38:01 AM
3	0.3131	0.07026mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:40:04 AM
4	0.2900	0.06245mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:42:08 AM

Mean Area 0.2983
Mean Conc. 0.06525mg/L



Sample

Sample Name: 280-124740-c-8
Sample ID:
Origin:
Status Completed
Chk. Result

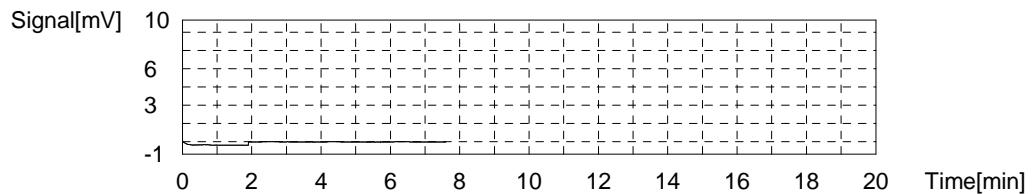
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.03558mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:50:43 AM
2	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:52:47 AM
3	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:54:50 AM
4	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:56:54 AM

Mean Area 0.000
Mean Conc. -0.03558mg/L



Sample

Sample Name: CCV
Sample ID:
Origin:
Status Completed
Chk. Result

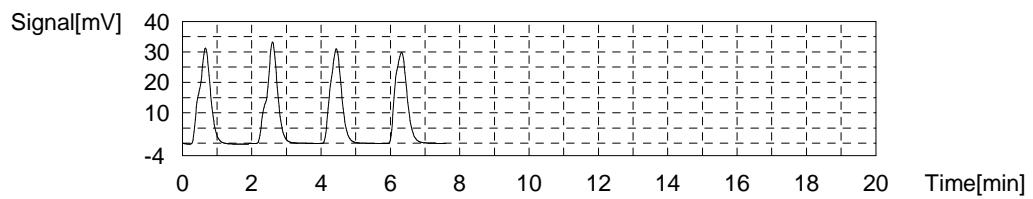
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.67	24.53mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:05:29 AM
2	72.53	24.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:07:33 AM
3	70.82	23.90mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:09:37 AM
4	72.19	24.37mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:11:41 AM

Mean Area 72.05
Mean Conc. 24.32mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04352mg/L

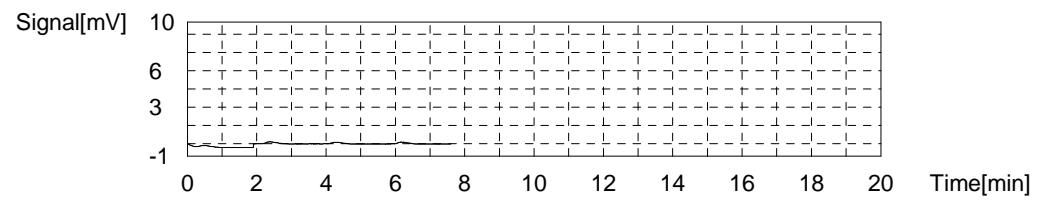
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1757	0.02382mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:20:15 AM
2	0.2936	0.06367mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:22:19 AM
3	0.2364	0.04433mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:24:22 AM
4	0.2303	0.04227mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:26:26 AM

Mean Area
Mean Conc.

0.2340
0.04352mg/L



Date of Creation 11:17:07 AM 6/24/2019
 User wetchemd
 System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
 Sample ID: Untitled
 Object ID: OA-103108-04335027-13415A0166CC-0000
 Cal. Curve: TOC3.2019_06_24_10_12_13.cal
 Status: Completed
 Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2765	50uL	1	*****		6/24/2019 10:19:54 A
2	0.3484	50uL	1	*****		6/24/2019 10:21:58 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 0.3125
 SD Area 0.05084
 CV Area 16.27%
 Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.311	50uL	1	*****		6/24/2019 10:30:32 A
2	3.309	50uL	1	*****		6/24/2019 10:32:36 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 3.310
 SD Area 0.00141
 CV Area 0.04%
 Vial 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	14.36	50uL	1	*****	E	6/24/2019 10:41:10 A
2	14.95	50uL	1	*****		6/24/2019 10:43:14 A
3	14.85	50uL	1	*****		6/24/2019 10:45:18 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 14.90
 SD Area 0.07071
 CV Area 0.47%
 Vial 3

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	29.38	50uL	1	*****		6/24/2019 10:53:47 A
2	29.94	50uL	1	*****		6/24/2019 10:55:51 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 29.66
 SD Area 0.3960
 CV Area 1.34%
 Vial 4

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	72.31	50uL	1	*****		6/24/2019 11:04:25 A
2	74.10	50uL	1	*****		6/24/2019 11:06:29 A

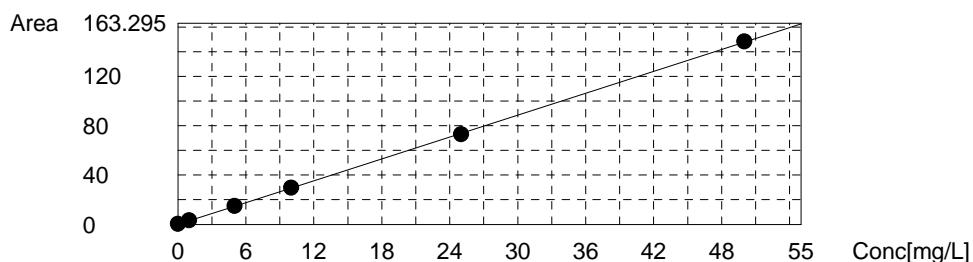
Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 73.21
 SD Area 1.266
 CV Area 1.73%
 Vial 5

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	147.7	50uL	1	*****		6/24/2019 11:15:03 A
2	149.2	50uL	1	*****		6/24/2019 11:17:07 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 148.5
 SD Area 1.061
 CV Area 0.71%
 Vial 6

Slope: 2.958
 Intercept 0.1052
 r^2 0.9999
 r 1.0000
 Zero Shift No



JM 7/2/19
PH

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
1*	NPOC	ICV		1.000	<2			1
2*	NPOC	ICB		1.000	<2			2
3*	NPOC	Ics 280-463396/1-a		1.000	<2			3
4*	NPOC	mb 280-463396/2-a		1.000	<2			4
5*	NPOC	TIC		1.000	<2			5
6*	NPOC	280-124912-f-4-a		1.000	8			6
7*	NPOC	280-124912-f-4-b ms		1.000	8			7
8*	NPOC	280-124912-f-4-c msd		1.000	8			8
9*	NPOC	280-124912-f-5-a		1.000	8			9
10*	NPOC	280-124912-f-5-b ms		1.000	8			10
11*	NPOC	280-124912-f-5-c msd		1.000	8			11
12*	NPOC	280-124912-f-9-a		1.000	8			12
13*	NPOC	280-124912-f-10-a		1.000	8			13
14*	NPOC	280-124912-f-11-a		1.000	8			14
15*	NPOC	CCV		1.000	<2			15
16*	NPOC	CCB		1.000	<2			16
17*	NPOC	280-124912-f-12-c		1.000	8			17
18*	NPOC	280-124912-f-12-d ms		1.000	8			18
19*	NPOC	280-124912-f-12-e ms		1.000	8			19
20*	NPOC	LCS		1.000	<2			20
21*	NPOC	LCSD		1.000	<2			21
22*	NPOC	MB		1.000	<2			22
23*	NPOC	TIC		1.000	<2			23
24*	NPOC	280-124691-g-1		1.000	<2			24
25*	NPOC	280-124691-h-3		1.000	<2			25
26*	NPOC	CCV		1.000	<2			26
27*	NPOC	CCB		1.000	<2			27
28*	NPOC	280-124691-i-5		1.000	<2			28
29*	NPOC	280-124691-i-5 MS		1.000	<2			29
30*	NPOC	280-124691-i-5 MSD		1.000	<2			30
31*	NPOC	280-124691-f-7		1.000	<2			31
32*	NPOC	280-124740-c-5		1.000	<2			32
33*	NPOC	280-124740-c-5 MS		1.000	<2			33
34*	NPOC	280-124740-c-5 MSD		1.000	<2			34
35*	NPOC	280-124740-c-6		1.000	<2			35
36*	NPOC	280-124740-c-6 MS		1.000	<2			36
37*	NPOC	280-124740-c-6 MSD		1.000	<2			37
38*	NPOC	CCV		1.000	<2			38
39*	NPOC	CCB		1.000	<2			39
40*	NPOC	280-124740-c-9		1.000	<2			40
41*	NPOC	280-124740-c-10		1.000	<2			41
42*	NPOC	280-124740-c-11		1.000	<2			42
43*	NPOC	280-124740-c-12		1.000	<2			43
44*	NPOC	280-124740-c-13		1.000	<2			44
45*	NPOC	280-124830-n-1		20x 1.000	<2	yellow, stinky		45
46*	NPOC	280-124830-n-2		20x 1.000	<2	yellow		46
47*	NPOC	280-124830-n-3		20x 1.000	<2	yellow		47
48*	NPOC	280-124830-m-4		20x 1.000	<2	yellow		48
49*	NPOC	280-124830-n-5		1.000	<2			49
50*	NPOC	CCV		1.000	<2			50
51*	NPOC	CCB		1.000	<2			51

Jm 7/27/19
PTI

9060

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
52*	NPOC	280-124713-b-2		1.000	<2			52
53*	NPOC	280-124713-c-4		1.000	<2			53
54*	NPOC	280-124713-b-7		1.000	<2			54
55*	NPOC	280-124713-c-8		1.000	<2			55
56*	NPOC	LCS		1.000	<2			56
57*	NPOC	LCSD		1.000	<2			57
58*	NPOC	MB		1.000	<2			58
59*	NPOC	TIC		1.000	<2			59
60*	NPOC	280-124717-b-4		1.000	<2			60
61*	NPOC	280-124717-b-5		1.000	<2			61
62*	NPOC	CCV		1.000	<2			62
63*	NPOC	CCB		1.000	<2			63
64*	NPOC	280-124717-b-6		1.000	<2			64
65*	NPOC	280-124717-b-6 MS		1.000	<2			65
66*	NPOC	280-124717-b-6 MSD		1.000	<2			66
67*	NPOC	280-124717-b-7		1.000	<2			67
68*	NPOC	280-124717-b-8		1.000	<2			68
69*	NPOC	280-124719-b-1		2X 1.000	<2	yellow		69
70*	NPOC	280-124719-b-2		2X 1.000	<2	yellow		70
71*	NPOC	280-124719-b-3		2X 1.000	<2	yellow		71
72*	NPOC	280-124719-b-4		2X 1.000	4	yellow		72
73*	NPOC	280-124724-b-2		1.000	<2			73
74*	NPOC	CCV		1.000	<2			74
75*	NPOC	CCB		1.000	<2			75
76*	NPOC	280-124838-a-4		1.000	<2			76
77*	NPOC	490-175605-d-5		2X 1.000	<2	re-run		77
78*	NPOC	490-175605-d-6		1.000	<2			78
79*	NPOC	280-124894-b-8		1.000	<2			79
80*	NPOC	280-124894-b-9		1.000	<2			80
81*	NPOC	280-124894-b-10		1.000	<2			81
82*	NPOC	280-124894-a-11		1.000	7			82
83*	NPOC	280-124894-b-12		1.000	<2			83
84*	NPOC	280-124894-b-13		1.000	<2			84
85*	NPOC	CCV		1.000	<2			85
86*	NPOC	CCB		1.000	<2			86
87*	NPOC	280-124815-d-1		1.000	<2			87
88*	NPOC	280-124815-d-1 MS		1.000	<2			88
89*	NPOC	280-124815-d-1 MSD		1.000	<2			89
90*	NPOC	CCV		1.000	<2			90
91*	NPOC	CCB		1.000	<2			91

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
1	NPOC	ICV		1.000	NPOC:19.8		7/2/2019 3:01:4	1
2	NPOC	ICB		1.000	NPOC:-0.02		7/2/2019 3:16:2	2
3	NPOC	Ics 280-463396/1-a		1.000	NPOC:24.2		7/2/2019 3:31:0	3
4	NPOC	mb 280-463396/2-a		1.000	NPOC:0.18		7/2/2019 3:47:5	4
5	NPOC	TIC		1.000	NPOC:0.06		7/2/2019 4:02:3	5
6	NPOC	280-124912-f-4-a		1.000	NPOC:3.84		7/2/2019 4:17:2	6
7	NPOC	280-124912-f-4-b ms		1.000	NPOC:28.1		7/2/2019 4:32:1	7
8	NPOC	280-124912-f-4-c msd		1.000	NPOC:28.0		7/2/2019 4:46:5	8
9	NPOC	280-124912-f-5-a		1.000	NPOC:4.67		7/2/2019 5:01:3	9
10	NPOC	280-124912-f-5-b ms		1.000	NPOC:28.8		7/2/2019 5:16:2	10
11	NPOC	280-124912-f-5-c msd		1.000	NPOC:28.9		7/2/2019 5:31:0	11
12	NPOC	280-124912-f-9-a		1.000	NPOC:5.48		7/2/2019 5:45:4	12
13	NPOC	280-124912-f-10-a		1.000	NPOC:233.		7/2/2019 6:08:0	13
14	NPOC	280-124912-f-11-a		1.000	NPOC:4.46		7/2/2019 6:24:5	14
15	NPOC	CCV		1.000	NPOC:25.3		7/2/2019 6:39:3	15
16	NPOC	CCB		1.000	NPOC:0.09		7/2/2019 6:54:1	16
17	NPOC	280-124912-f-12-c		1.000	NPOC:6.18		7/2/2019 7:08:5	17
18	NPOC	280-124912-f-12-d ms		1.000	NPOC:30.5		7/2/2019 7:23:4	18
19	NPOC	280-124912-f-12-e ms		1.000	NPOC:30.5		7/2/2019 7:38:2	19
20	NPOC	LCS		1.000	NPOC:25.1		7/2/2019 7:53:1	20
21	NPOC	LCSD		1.000	NPOC:25.1		7/2/2019 8:07:5	21
22	NPOC	MB		1.000	NPOC:0.06		7/2/2019 8:22:3	22
23	NPOC	TIC		1.000	NPOC:0.06		7/2/2019 8:37:2	23
24	NPOC	280-124691-g-1		1.000	NPOC:1.07		7/2/2019 8:52:0	24
25	NPOC	280-124691-h-3		1.000	NPOC:3.20		7/2/2019 9:06:4	25
26	NPOC	CCV		1.000	NPOC:24.9		7/2/2019 9:21:3	26
27	NPOC	CCB		1.000	NPOC:0.04		7/2/2019 9:36:1	27
28	NPOC	280-124691-i-5		1.000	NPOC:2.86		7/2/2019 9:50:5	28
29	NPOC	280-124691-i-5 MS		1.000	NPOC:27.8		7/2/2019 10:05:	29
30	NPOC	280-124691-i-5 MSD		1.000	NPOC:28.0		7/2/2019 10:20:	30
31	NPOC	280-124691-f-7		1.000	NPOC:0.15		7/2/2019 10:35:	31
32	NPOC	280-124740-c-5		1.000	NPOC:13.8		7/2/2019 10:49:	32
33	NPOC	280-124740-c-5 MS		1.000	NPOC:38.8		7/2/2019 11:04:	33
34	NPOC	280-124740-c-5 MSD		1.000	NPOC:39.1		7/2/2019 11:19:	34
35	NPOC	280-124740-c-6		1.000	NPOC:3.57		7/2/2019 11:34:	35
36	NPOC	280-124740-c-6 MS		1.000	NPOC:28.7		7/2/2019 11:49:	36
37	NPOC	280-124740-c-6 MSD		1.000	NPOC:28.8		7/3/2019 12:03:	37
38	NPOC	CCV		1.000	NPOC:25.2		7/3/2019 12:18:	38
39	NPOC	CCB		1.000	NPOC:0.07		7/3/2019 12:33:	39
40	NPOC	280-124740-c-9		1.000	NPOC:1.99		7/3/2019 12:48:	40
41	NPOC	280-124740-c-10		1.000	NPOC:4.43		7/3/2019 1:02:5	41
42	NPOC	280-124740-c-11		1.000	NPOC:5.49		7/3/2019 1:17:3	42
43	NPOC	280-124740-c-12		1.000	NPOC:0.80		7/3/2019 1:32:2	43
44	NPOC	280-124740-c-13		1.000	NPOC:1.09		7/3/2019 1:47:0	44
45	NPOC	280-124830-n-1		2.000	NPOC:408.		7/3/2019 2:09:2	45
46	NPOC	280-124830-n-2		20.00	NPOC:551.		7/3/2019 2:24:0	46
47	NPOC	280-124830-n-3		20.00	NPOC:1405		7/3/2019 2:40:5	47
48	NPOC	280-124830-m-4		20.00	NPOC:470.		7/3/2019 2:55:3	48
49	NPOC	280-124830-n-5		1.000	NPOC:25.8		7/3/2019 3:10:2	49
50	NPOC	CCV		1.000	NPOC:24.6		7/3/2019 3:25:0	50
51	NPOC	CCB		1.000	NPOC:0.10		7/3/2019 3:39:5	51
52	NPOC	280-124713-b-2		1.000	NPOC:2.65		7/3/2019 3:54:3	52
53	NPOC	280-124713-c-4		1.000	NPOC:2.04		7/3/2019 4:11:2	53

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
54	NPOC	280-124713-b-7		1.000	NPOC:4.87		7/3/2019 4:26:0	54
55	NPOC	280-124713-c-8		1.000	NPOC:5.19		7/3/2019 4:40:5	55
56	NPOC	LCS		1.000	NPOC:24.3		7/3/2019 4:55:3	56
57	NPOC	LCSD		1.000	NPOC:24.3		7/3/2019 5:10:3	57
58	NPOC	MB		1.000	NPOC:0.08		7/3/2019 5:25:1	58
59	NPOC	TIC		1.000	NPOC:0.10		7/3/2019 5:40:0	59
60	NPOC	280-124717-b-4		1.000	NPOC:1.30		7/3/2019 5:54:4	60
61	NPOC	280-124717-b-5		1.000	NPOC:1.03		7/3/2019 6:09:3	61
62	NPOC	CCV		1.000	NPOC:25.0		7/3/2019 6:24:1	62
63	NPOC	CCB		1.000	NPOC:0.07		7/3/2019 6:39:0	63
64	NPOC	280-124717-b-6		1.000	NPOC:2.82		7/3/2019 6:53:4	64
65	NPOC	280-124717-b-6 MS		1.000	NPOC:27.2		7/3/2019 7:08:3	65
66	NPOC	280-124717-b-6 MSD		1.000	NPOC:27.3		7/3/2019 7:23:1	66
67	NPOC	280-124717-b-7		1.000	NPOC:2.82		7/3/2019 7:38:0	67
68	NPOC	280-124717-b-8		1.000	NPOC:0.33		7/3/2019 7:52:4	68
69	NPOC	280-124719-b-1		2.000	NPOC:144.		7/3/2019 8:09:3	69
70	NPOC	280-124719-b-2		2.000	NPOC:268.		7/3/2019 8:32:5	70
71	NPOC	280-124719-b-3		2.000	NPOC:300.		7/3/2019 8:56:0	71
72	NPOC	280-124719-b-4		2.000	NPOC:137.		7/3/2019 9:12:4	72
73	NPOC	280-124724-b-2		1.000	NPOC:0.92		7/3/2019 9:31:3	73
74	NPOC	CCV		1.000	NPOC:25.4		7/3/2019 9:46:1	74
75	NPOC	CCB		1.000	NPOC:0.13		7/3/2019 10:01:	75
76	NPOC	280-124838-a-4		1.000	NPOC:3.93		7/3/2019 10:15:	76
77	NPOC	490-175605-d-5		2.000	NPOC:61.2		7/3/2019 10:30:	77
78	NPOC	490-175605-d-6		1.000	NPOC:4.53		7/3/2019 10:45:	78
79	NPOC	280-124894-b-8		1.000	NPOC:4.59		7/3/2019 11:00:	79
80	NPOC	280-124894-b-9		1.000	NPOC:4.60		7/3/2019 11:14:	80
81	NPOC	280-124894-b-10		1.000	NPOC:2.41		7/3/2019 11:29:	81
82	NPOC	280-124894-a-11		1.000	NPOC:0.65		7/3/2019 11:44:	82
83	NPOC	280-124894-b-12		1.000	NPOC:6.39		7/3/2019 11:59:	83
84	NPOC	280-124894-b-13		1.000	NPOC:0.23		7/3/2019 12:13:	84
85	NPOC	CCV		1.000	NPOC:25.3		7/3/2019 12:28:	85
86	NPOC	CCB		1.000	NPOC:0.14		7/3/2019 12:43:	86
87	NPOC	280-124815-d-1		1.000	NPOC:1.08		7/3/2019 12:58:	87
88	NPOC	280-124815-d-1 MS		1.000	NPOC:25.5		7/3/2019 1:13:0	88
89	NPOC	280-124815-d-1 MSD		1.000	NPOC:25.6		7/3/2019 1:27:4	89
90	NPOC	CCV		1.000	NPOC:25.3		7/3/2019 1:42:3	90
91	NPOC	CCB		1.000	NPOC:0.13		7/3/2019 1:57:2	91

Instr.Information

System
Instrument Options
Catalyst

TOC-V cpn 3
TOC/ASI/
Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

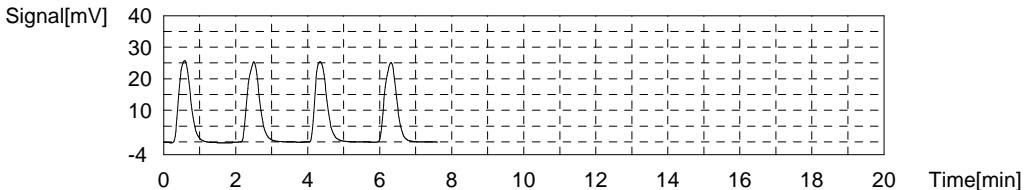
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.86mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.56	20.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:55:30 PM
2	59.49	20.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:57:33 PM
3	57.96	19.56mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 2:59:37 PM
4	58.38	19.70mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:01:41 PM

Mean Area 58.85
Mean Conc. 19.86mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

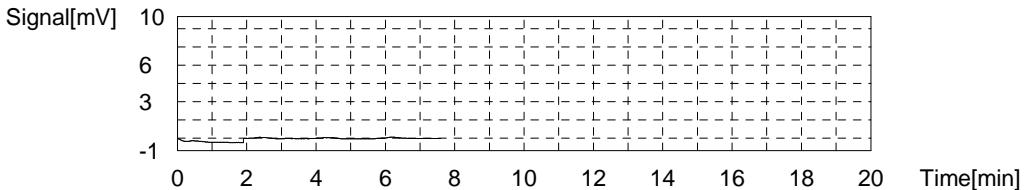
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.02412mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:10:13 PM
2	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:12:16 PM
3	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:14:20 PM
4	0.1355	0.01023mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:16:24 PM

Mean Area 0.03388
Mean Conc. -0.02412mg/L



Sample

Sample Name: lcs 280-463396/1-a
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

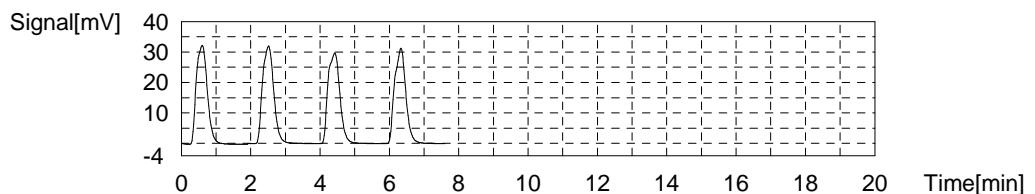
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.92	24.61mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:24:55 PM
2	72.46	24.46mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:26:59 PM
3	71.36	24.09mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:29:03 PM
4	70.98	23.96mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:31:07 PM

Mean Area 71.93
 Mean Conc. 24.28mg/L



Sample

Sample Name: mb 280-463396/2-a
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

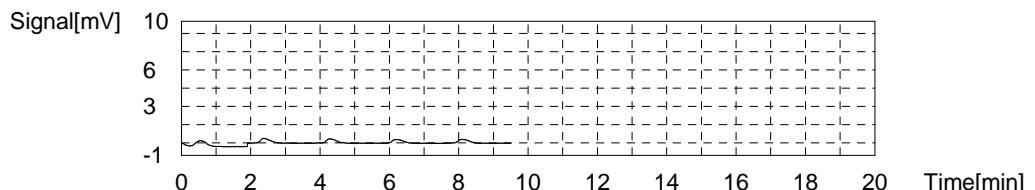
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1834mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8834	0.2630mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:39:39 PM
2	0.6974	0.2002mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:41:42 PM
3	0.6364	0.1795mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:43:46 PM
4	0.6467	0.1830mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:45:50 PM
5	0.6104	0.1708mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:47:54 PM

Mean Area 0.6477
 Mean Conc. 0.1834mg/L



Sample

Sample Name: TIC
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

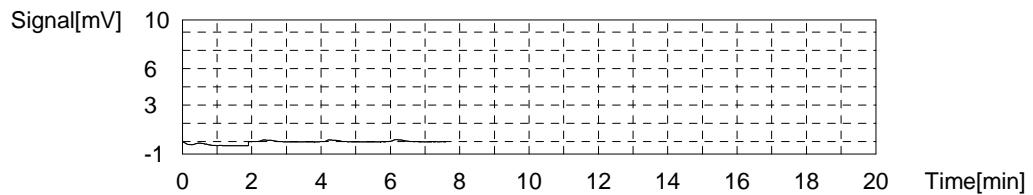
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06561mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2693	0.05546mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:56:25 PM
2	0.2914	0.06293mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 3:58:28 PM
3	0.2875	0.06161mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:00:32 PM
4	0.3491	0.08243mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:02:36 PM

Mean Area 0.2993
 Mean Conc. 0.06561mg/L



Sample

Sample Name: 280-124912-f-4-a
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

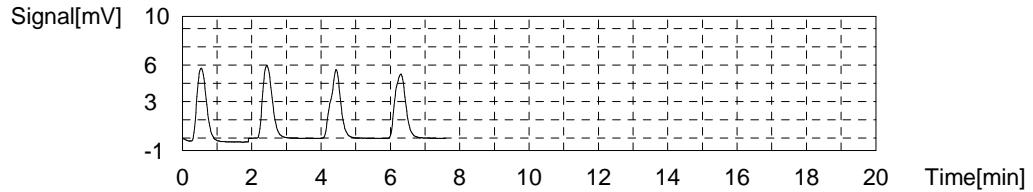
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.843mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.55	3.869mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:11:08 PM
2	11.54	3.865mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:13:12 PM
3	11.34	3.798mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:15:16 PM
4	11.47	3.842mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:17:20 PM

Mean Area 11.48
 Mean Conc. 3.843mg/L



Sample

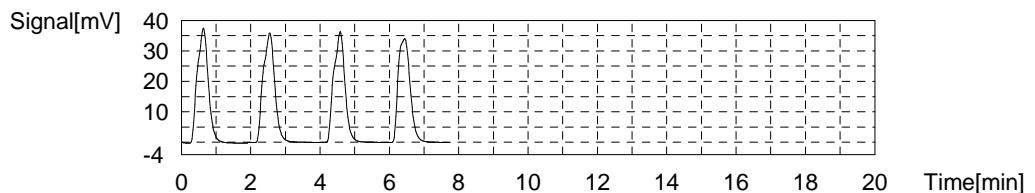
Sample Name: 280-124912-f-4-b ms
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.19mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.55	28.54mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:25:52 PM	
2	84.19	28.42mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:28:03 PM	
3	82.48	27.85mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:30:07 PM	
4	82.75	27.94mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:32:11 PM	

Mean Area 83.49
Mean Conc. 28.19mg/L

Sample

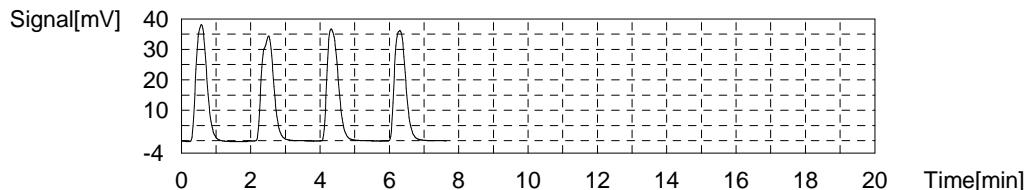
Sample Name: 280-124912-f-4-c msd
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.02mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.28	28.45mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:40:42 PM	
2	83.14	28.07mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:42:46 PM	
3	82.33	27.79mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:44:52 PM	
4	82.29	27.78mg/L	50uL	1	TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:46:56 PM	

Mean Area 83.01
Mean Conc. 28.02mg/L

Sample

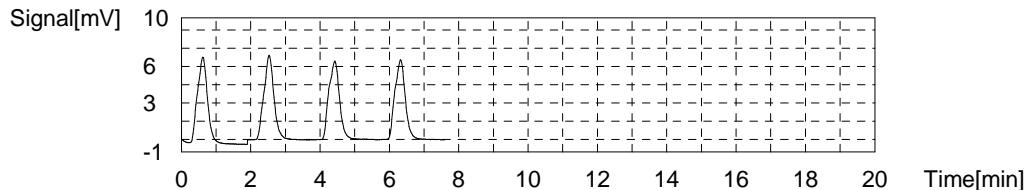
Sample Name: 280-124912-f-5-a
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.675mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.24	4.778mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:55:28 PM
2	14.01	4.700mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:57:31 PM
3	13.81	4.633mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 4:59:35 PM
4	13.68	4.589mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:01:39 PM

Mean Area 13.94
Mean Conc. 4.675mg/L

Sample

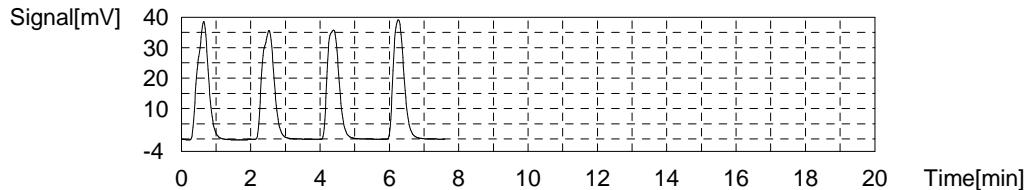
Sample Name: 280-124912-f-5-b ms
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.52	29.21mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:10:11 PM
2	85.94	29.01mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:12:14 PM
3	84.51	28.53mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:14:18 PM
4	84.74	28.61mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:16:22 PM

Mean Area 85.43
Mean Conc. 28.84mg/L

Sample

Sample Name: 280-124912-f-5-c msd
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

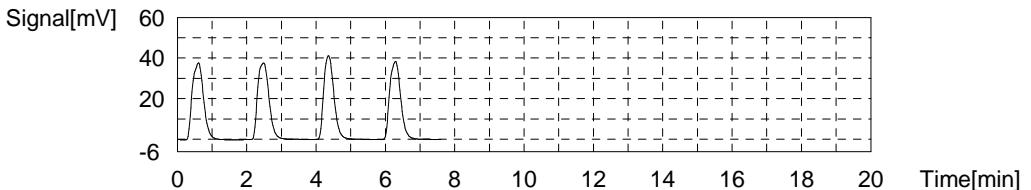
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.99mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.03	29.38mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:24:54 PM
2	86.33	29.15mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:26:58 PM
3	84.80	28.63mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:29:02 PM
4	85.33	28.81mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:31:06 PM

Mean Area 85.87
Mean Conc. 28.99mg/L



Sample

Sample Name: 280-124912-f-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

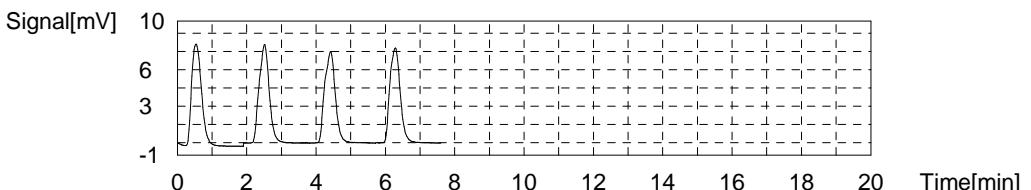
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.486mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.64	5.589mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:39:37 PM
2	16.44	5.522mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:41:41 PM
3	16.04	5.386mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:43:45 PM
4	16.22	5.447mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:45:49 PM

Mean Area 16.34
Mean Conc. 5.486mg/L



Sample

Sample Name: 280-124912-f-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

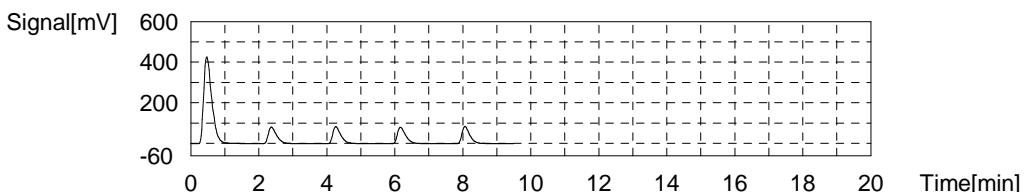
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:233.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	717.0	242.3mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/2/2019 5:54:21 PM
2	139.8	236.1mg/L	50uL	5		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:01:51 PM
3	138.2	233.4mg/L	50uL	5		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:03:55 PM
4	137.7	232.6mg/L	50uL	5		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:05:59 PM
5	136.8	231.0mg/L	50uL	5		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:08:03 PM

Mean Area 138.1
 Mean Conc. 233.3mg/L



Sample

Sample Name: 280-124912-f-11-a
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

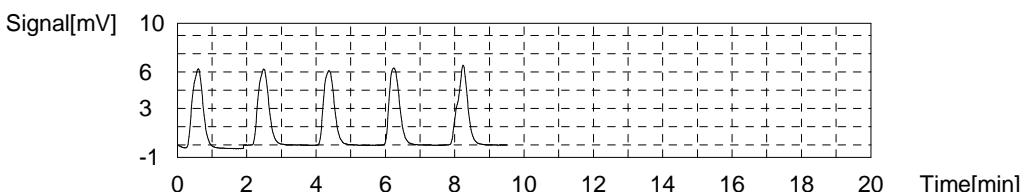
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.462mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.93	4.673mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:16:35 PM
2	13.48	4.521mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:18:38 PM
3	13.27	4.450mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:20:42 PM
4	13.22	4.433mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:22:46 PM
5	13.25	4.443mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:24:50 PM

Mean Area 13.31
 Mean Conc. 4.462mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

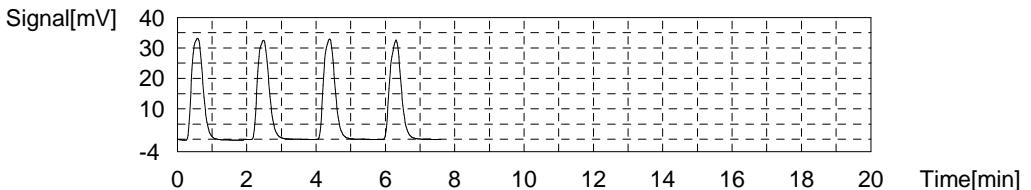
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.30mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.16	25.71mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:33:21 PM
2	75.25	25.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:35:24 PM
3	74.44	25.13mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:37:28 PM
4	74.01	24.98mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:39:32 PM

Mean Area 74.97
 Mean Conc. 25.30mg/L



Sample

Sample Name: CCB
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

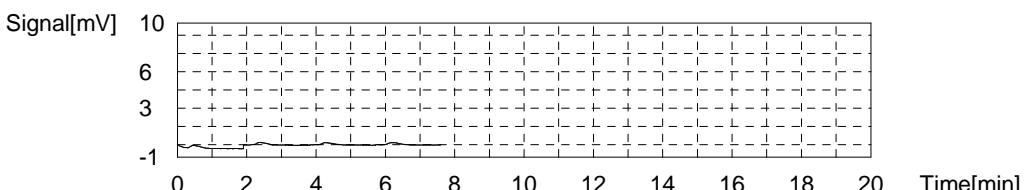
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.09214mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3551	0.08446mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:48:03 PM
2	0.3979	0.09893mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:50:07 PM
3	0.3765	0.09169mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:52:11 PM
4	0.3818	0.09348mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 6:54:15 PM

Mean Area 0.3778
 Mean Conc. 0.09214mg/L



Sample

Sample Name: 280-124912-f-12-c
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

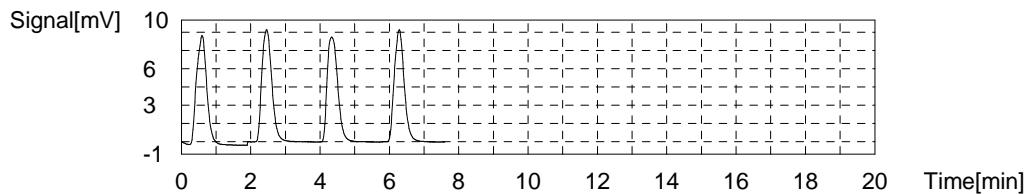
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.183mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.48	6.211mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:02:47 PM
2	18.52	6.225mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:04:50 PM
3	18.21	6.120mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:06:54 PM
4	18.37	6.174mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:08:58 PM

Mean Area 18.40
Mean Conc. 6.183mg/L



Sample

Sample Name: 280-124912-f-12-d ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

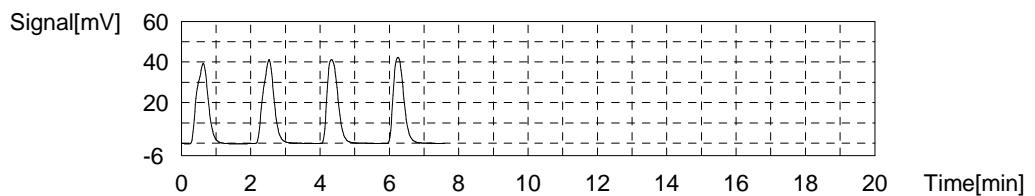
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.93	31.04mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:17:29 PM
2	90.97	30.72mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:19:33 PM
3	89.60	30.25mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:21:37 PM
4	89.78	30.31mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:23:41 PM

Mean Area 90.57
Mean Conc. 30.58mg/L



Sample

Sample Name: 280-124912-f-12-e msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

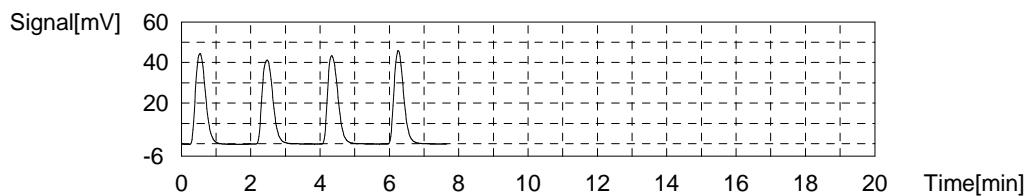
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.41	30.86mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:32:14 PM
2	89.85	30.34mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:34:17 PM
3	90.14	30.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:36:21 PM
4	90.03	30.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:38:27 PM

Mean Area 90.36
Mean Conc. 30.51mg/L



Sample

Sample Name: LCS
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

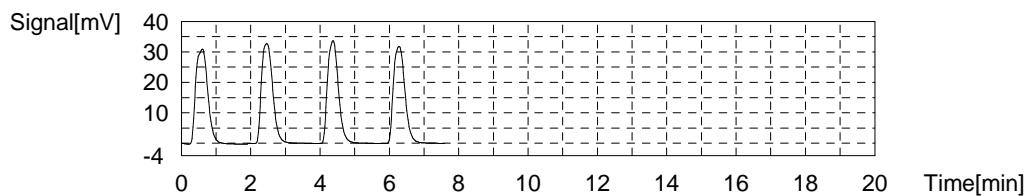
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.16mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.84	25.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:46:59 PM
2	74.36	25.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:49:03 PM
3	74.02	24.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:51:07 PM
4	73.91	24.95mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 7:53:11 PM

Mean Area 74.53
Mean Conc. 25.16mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

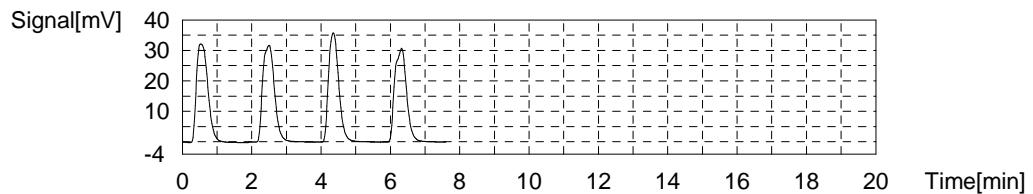
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.12mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.14	25.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:01:42 PM
2	75.05	25.33mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:03:46 PM
3	73.94	24.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:05:50 PM
4	73.55	24.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:07:54 PM

Mean Area 74.42
Mean Conc. 25.12mg/L



Sample

Sample Name: MB
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

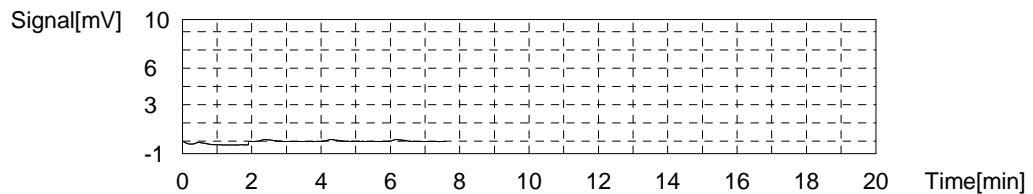
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06054mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2566	0.05116mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:16:25 PM
2	0.3358	0.07794mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:18:29 PM
3	0.2427	0.04646mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:20:33 PM
4	0.3023	0.06661mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:22:37 PM

Mean Area 0.2843
Mean Conc. 0.06054mg/L



Sample

Sample Name: TIC
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

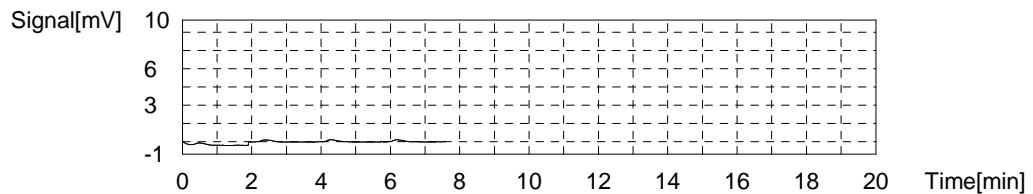
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06449mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2752	0.05745mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:31:08 PM
2	0.3166	0.07144mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:33:12 PM
3	0.3124	0.07003mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:35:16 PM
4	0.2799	0.05904mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:37:20 PM

Mean Area 0.2960
Mean Conc. 0.06449mg/L



Sample

Sample Name: 280-124691-g-1
Sample ID:
Origin:
Status Completed
Chk. Result

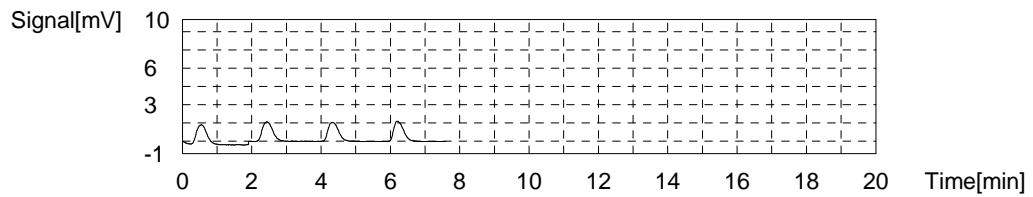
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.076mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.256	1.065mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:45:52 PM
2	3.378	1.106mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:47:55 PM
3	3.260	1.066mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:49:59 PM
4	3.264	1.068mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 8:52:03 PM

Mean Area 3.290
Mean Conc. 1.076mg/L



Sample

Sample Name: 280-124691-h-3
Sample ID:
Origin:
Status Completed
Chk. Result

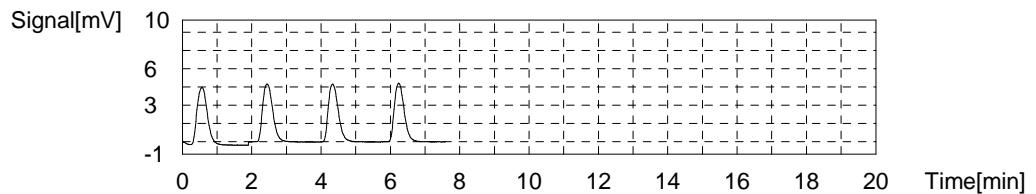
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.207mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.738	3.256mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:00:35 PM
2	9.631	3.220mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:02:39 PM
3	9.506	3.178mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:04:43 PM
4	9.493	3.173mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:06:47 PM

Mean Area 9.592
Mean Conc. 3.207mg/L



Sample

Sample Name: CCV
Sample ID:
Origin:
Status Completed
Chk. Result

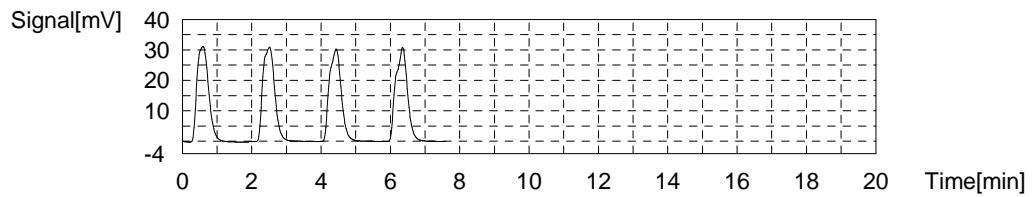
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.80	25.25mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:15:18 PM
2	74.16	25.03mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:17:22 PM
3	72.97	24.63mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:19:26 PM
4	73.55	24.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:21:30 PM

Mean Area 73.87
Mean Conc. 24.93mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

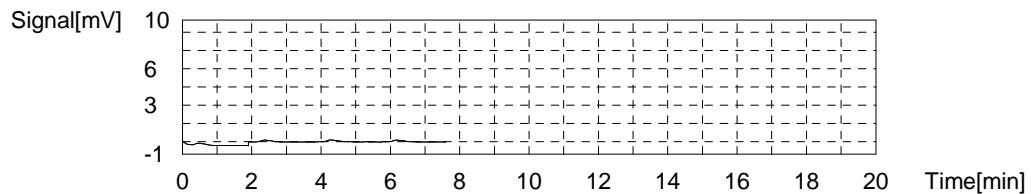
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04962mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2310	0.04251mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:30:01 PM
2	0.2773	0.05816mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:32:05 PM
3	0.2789	0.05870mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:34:09 PM
4	0.2210	0.03913mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:36:13 PM

Mean Area 0.2521
Mean Conc. 0.04962mg/L



Sample

Sample Name: 280-124691-i-5
Sample ID:
Origin:
Status Completed
Chk. Result

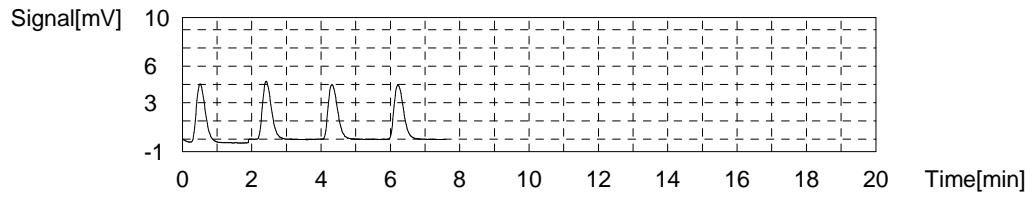
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.867mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.634	2.883mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:44:44 PM
2	8.608	2.874mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:46:48 PM
3	8.487	2.833mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:48:52 PM
4	8.612	2.876mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:50:56 PM

Mean Area 8.585
Mean Conc. 2.867mg/L



Sample

Sample Name: 280-124691-i-5 MS
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.87mg/L

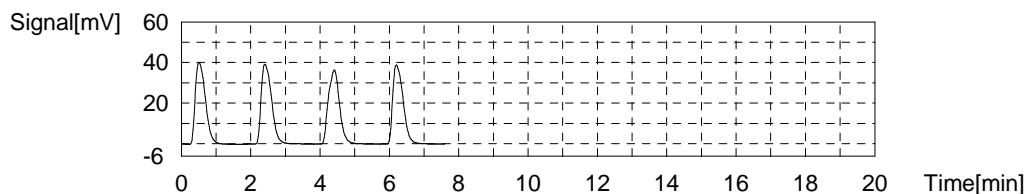
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.64	28.24mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 9:59:27 PM
2	82.66	27.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:01:31 PM
3	82.04	27.70mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:03:35 PM
4	81.86	27.64mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:05:39 PM

Mean Area
Mean Conc.

82.55
27.87mg/L



Sample

Sample Name: 280-124691-i-5 MSD
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.02mg/L

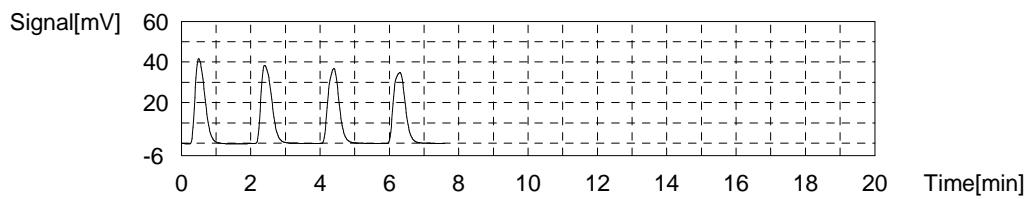
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.74	28.27mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:14:10 PM
2	83.08	28.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:16:14 PM
3	82.23	27.76mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:18:18 PM
4	82.89	27.98mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:20:22 PM

Mean Area
Mean Conc.

82.98
28.02mg/L



Sample

Sample Name: 280-124691-f-7
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1544mg/L

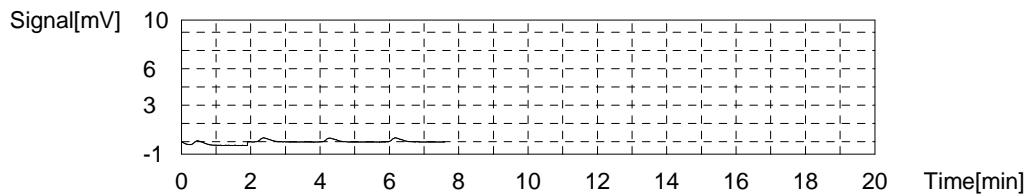
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5357	0.1455mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:28:54 PM
2	0.5843	0.1619mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:30:58 PM
3	0.5694	0.1569mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:33:02 PM
4	0.5585	0.1532mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:35:06 PM

Mean Area
Mean Conc.

0.5620
0.1544mg/L



Sample

Sample Name: 280-124740-c-5
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.85mg/L

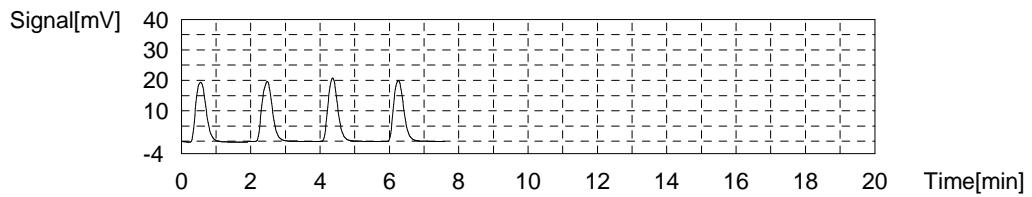
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	41.16	13.88mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:43:38 PM
2	41.18	13.88mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:45:42 PM
3	40.88	13.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:47:46 PM
4	41.07	13.85mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:49:50 PM

Mean Area
Mean Conc.

41.07
13.85mg/L



Sample

Sample Name: 280-124740-c-5 MS
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:38.86mg/L

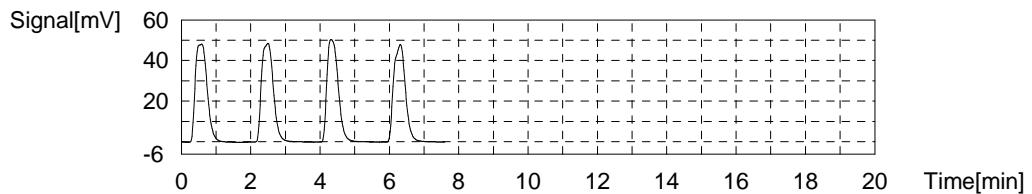
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	116.5	39.35mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 10:58:22 PM
2	115.8	39.11mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:00:26 PM
3	114.0	38.50mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:02:30 PM
4	114.0	38.50mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:04:34 PM

Mean Area
Mean Conc.

115.1
38.86mg/L



Sample

Sample Name: 280-124740-c-5 MSD
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:39.15mg/L

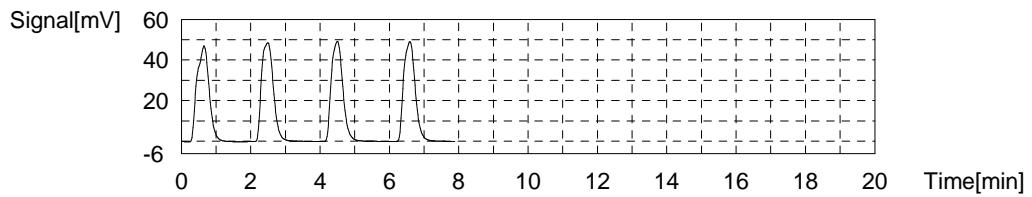
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	116.8	39.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:13:06 PM
2	116.8	39.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:15:16 PM
3	115.4	38.97mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:17:31 PM
4	114.7	38.74mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:19:35 PM

Mean Area
Mean Conc.

115.9
39.15mg/L



Sample

Sample Name: 280-124740-c-6
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

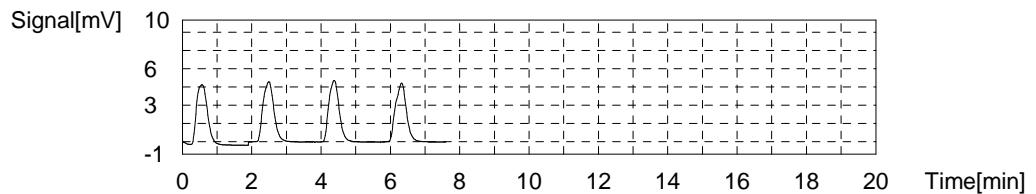
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.570mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.82	3.622mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:28:07 PM
2	10.79	3.612mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:30:11 PM
3	10.50	3.514mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:32:15 PM
4	10.55	3.531mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:34:19 PM

Mean Area 10.66
Mean Conc. 3.570mg/L



Sample

Sample Name: 280-124740-c-6 MS
Sample ID:
Origin:
Status Completed
Chk. Result

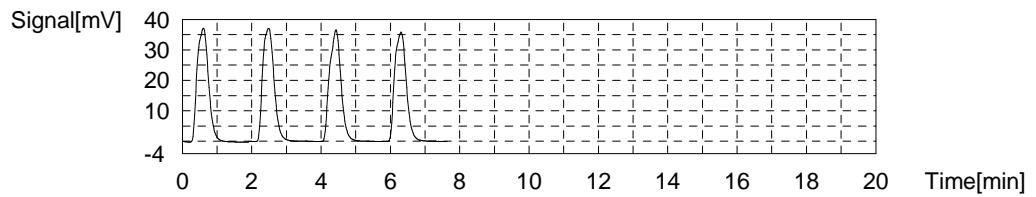
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.76mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.35	29.15mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:42:51 PM
2	85.15	28.75mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:44:55 PM
3	84.77	28.62mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:46:59 PM
4	84.53	28.54mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:49:05 PM

Mean Area 85.20
Mean Conc. 28.76mg/L



Sample

Sample Name: 280-124740-c-6 MSD
Sample ID:
Origin:
Status Completed
Chk. Result

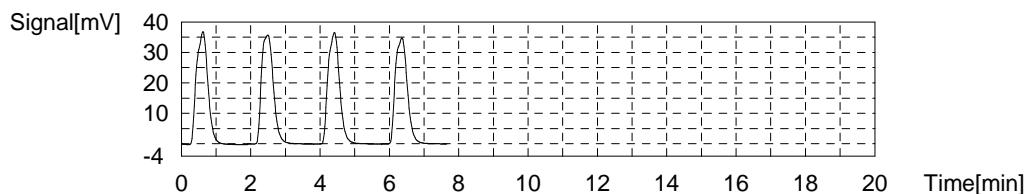
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.36	29.16mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:57:37 PM
2	85.44	28.85mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/2/2019 11:59:41 PM
3	85.23	28.77mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:01:48 AM
4	84.25	28.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:03:52 AM

Mean Area 85.32
Mean Conc. 28.81mg/L



Sample

Sample Name: CCV
Sample ID:
Origin:
Status Completed
Chk. Result

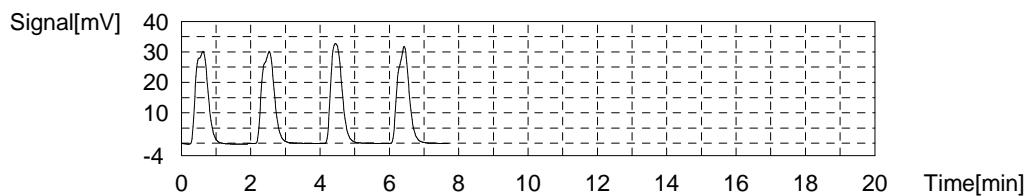
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.87	25.61mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:12:24 AM
2	75.14	25.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:14:34 AM
3	74.02	24.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:16:38 AM
4	74.19	25.04mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:18:42 AM

Mean Area 74.81
Mean Conc. 25.25mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

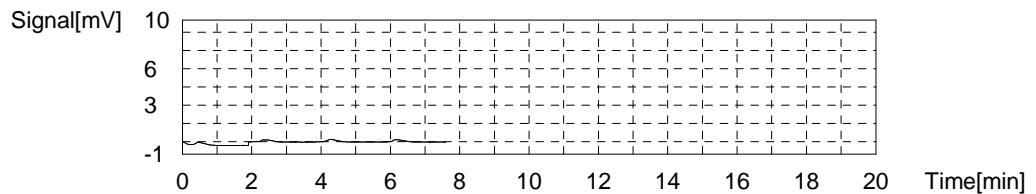
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07803mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3380	0.07868mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:27:14 AM
2	0.3516	0.08328mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:29:18 AM
3	0.3117	0.06979mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:31:22 AM
4	0.3430	0.08037mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:33:26 AM

Mean Area 0.3361
Mean Conc. 0.07803mg/L



Sample

Sample Name: 280-124740-c-9
Sample ID:
Origin:
Status Completed
Chk. Result

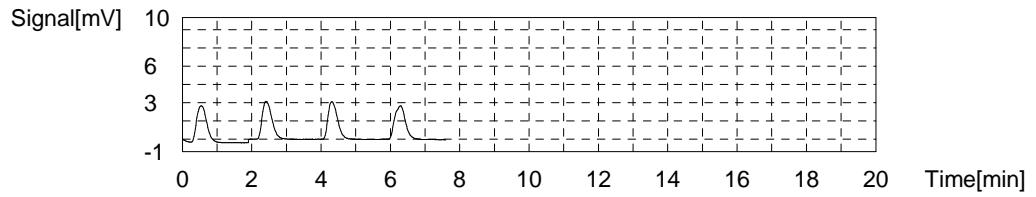
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.992mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.007	1.995mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:41:58 AM
2	6.080	2.020mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:44:02 AM
3	5.884	1.953mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:46:06 AM
4	6.023	2.000mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:48:10 AM

Mean Area 5.998
Mean Conc. 1.992mg/L



Sample

Sample Name: 280-124740-c-10
Sample ID:
Origin:
Status Completed
Chk. Result

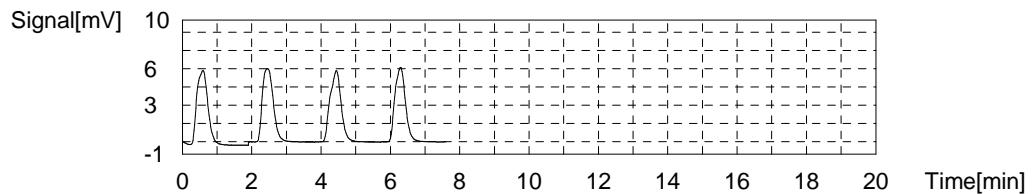
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.436mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.56	4.548mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:56:42 AM
2	13.25	4.443mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:58:46 AM
3	13.05	4.376mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:00:50 AM
4	13.05	4.376mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:02:54 AM

Mean Area 13.23
Mean Conc. 4.436mg/L



Sample

Sample Name: 280-124740-c-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

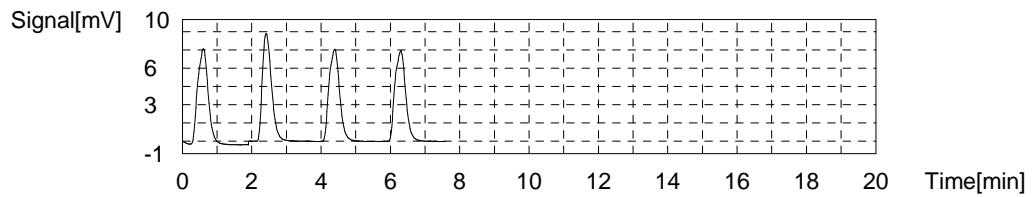
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.498mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.69	5.606mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:11:26 AM
2	16.40	5.508mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:13:30 AM
3	16.23	5.451mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:15:34 AM
4	16.16	5.427mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:17:38 AM

Mean Area 16.37
Mean Conc. 5.498mg/L



Sample

Sample Name: 280-124740-c-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8011mg/L

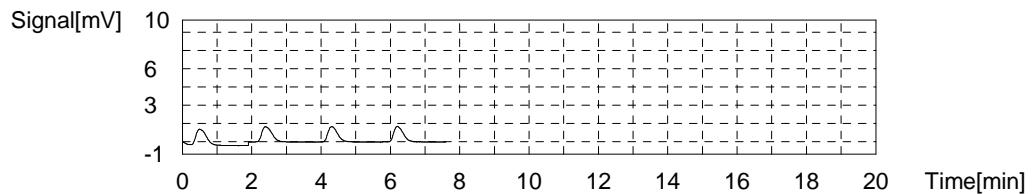
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.592	0.8406mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:26:10 AM
2	2.506	0.8115mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:28:14 AM
3	2.383	0.7700mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:30:18 AM
4	2.419	0.7821mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:32:22 AM

Mean Area
Mean Conc.

2.475
0.8011mg/L



Sample

Sample Name: 280-124740-c-13
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.095mg/L

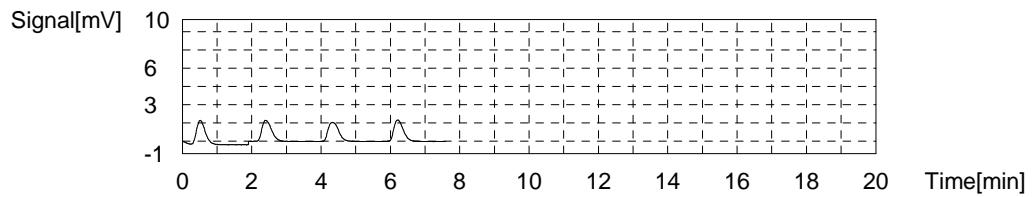
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.395	1.112mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:40:54 AM
2	3.326	1.089mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:42:58 AM
3	3.306	1.082mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:45:02 AM
4	3.353	1.098mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:47:06 AM

Mean Area
Mean Conc.

3.345
1.095mg/L



Sample

Sample Name: 280-124830-n-1
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:408.4mg/L

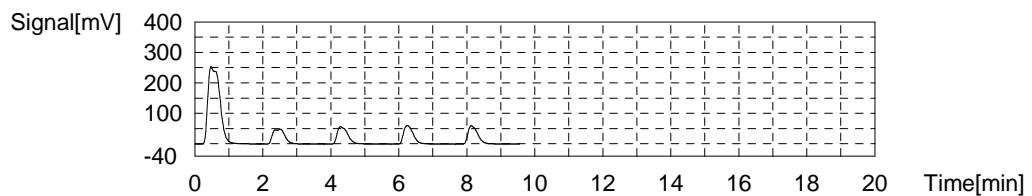
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	622.9	421.0mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:55:38 AM
2	122.4	413.4mg/L	50uL	5		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:03:09 AM
3	122.3	413.1mg/L	50uL	5		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:05:16 AM
4	119.3	402.9mg/L	50uL	5		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:07:20 AM
5	119.7	404.3mg/L	50uL	5		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:09:24 AM

Mean Area
Mean Conc.

120.9
408.4mg/L



Sample

Sample Name: 280-124830-n-2
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:551.5mg/L

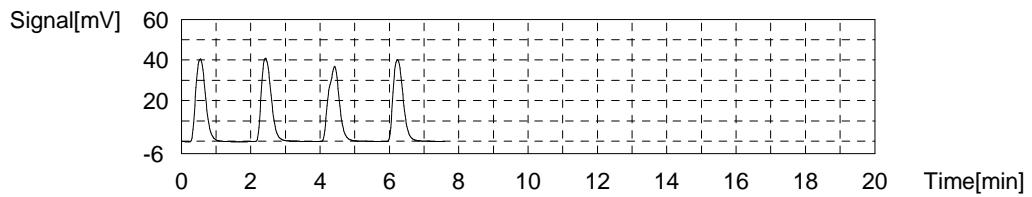
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.80	552.3mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:17:56 AM
2	81.82	552.4mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:20:00 AM
3	81.50	550.3mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:22:04 AM
4	81.60	551.0mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:24:08 AM

Mean Area
Mean Conc.

81.68
551.5mg/L



Sample

Sample Name: 280-124830-n-3
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

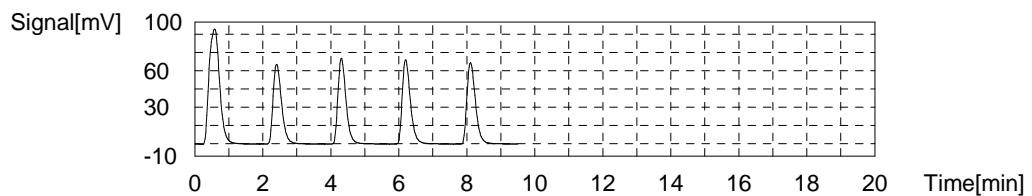
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:1405mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	205.5	1389mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:32:40 AM
2	114.6	1383mg/L	28uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:34:44 AM
3	116.6	1407mg/L	28uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:36:48 AM
4	116.7	1408mg/L	28uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:38:52 AM
5	117.9	1423mg/L	28uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:40:56 AM

Mean Area 116.5
Mean Conc. 1405mg/L



Sample

Sample Name: 280-124830-m-4
Sample ID:
Origin:
Status Completed
Chk. Result

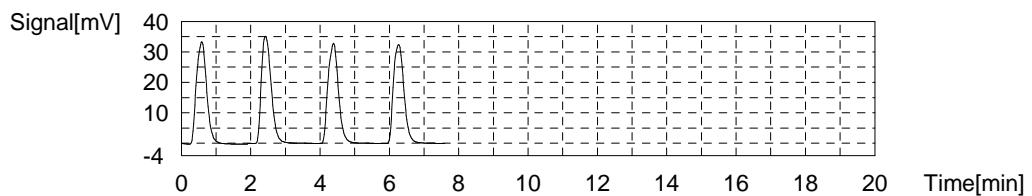
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:470.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.20	473.9mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:49:27 AM
2	69.94	472.1mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:51:31 AM
3	69.39	468.4mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:53:35 AM
4	69.02	465.9mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 2:55:39 AM

Mean Area 69.64
Mean Conc. 470.1mg/L



Sample

Sample Name: 280-124830-n-5
Sample ID:
Origin:
Status Completed
Chk. Result

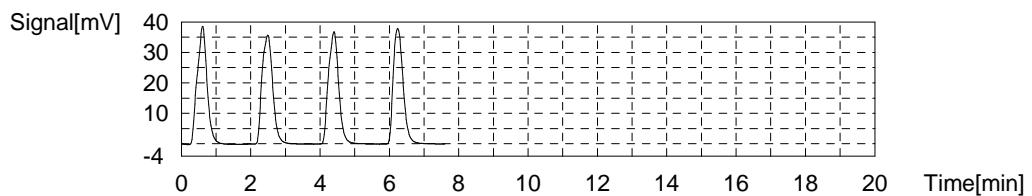
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.89mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	78.06	26.35mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:04:11 AM
2	77.00	25.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:06:15 AM
3	76.24	25.74mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:08:19 AM
4	75.46	25.47mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:10:23 AM

Mean Area 76.69
Mean Conc. 25.89mg/L



Sample

Sample Name: CCV
Sample ID:
Origin:
Status Completed
Chk. Result

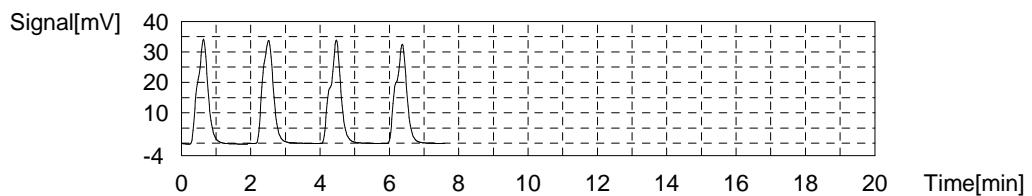
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.90	24.61mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:18:55 AM
2	73.63	24.85mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:20:59 AM
3	73.41	24.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:23:03 AM
4	72.60	24.51mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:25:07 AM

Mean Area 73.14
Mean Conc. 24.69mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1014mg/L

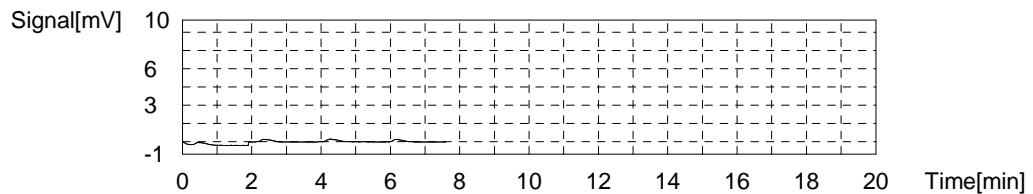
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3789	0.09250mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:33:39 AM
2	0.4171	0.1054mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:35:43 AM
3	0.4161	0.1051mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:37:47 AM
4	0.4087	0.1026mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:39:51 AM

Mean Area
Mean Conc.

0.4052
0.1014mg/L



Sample

Sample Name: 280-124713-b-2
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.650mg/L

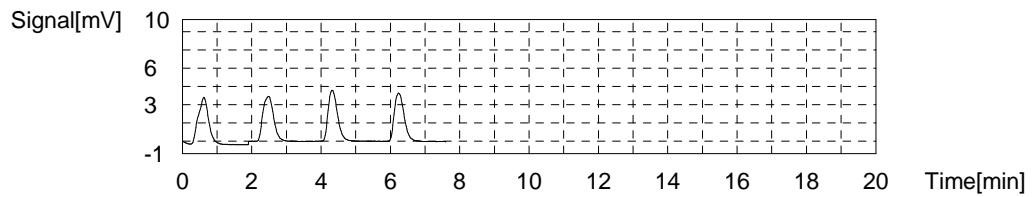
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.014	2.673mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:48:23 AM
2	7.982	2.663mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:50:27 AM
3	7.921	2.642mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:52:31 AM
4	7.858	2.621mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:54:35 AM

Mean Area
Mean Conc.

7.944
2.650mg/L



Sample

Sample Name: 280-124713-c-4
 Sample ID:
 Origin: NPOC.met
 Status Completed
 Chk. Result

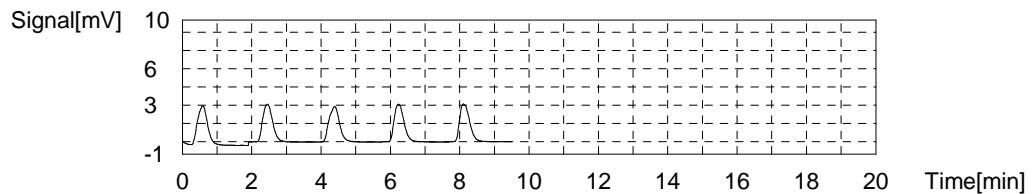
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.043mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.456	2.147mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:03:07 AM
2	6.166	2.049mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:05:11 AM
3	6.132	2.037mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:07:15 AM
4	6.104	2.028mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:09:19 AM
5	6.194	2.058mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:11:23 AM

Mean Area 6.149
Mean Conc. 2.043mg/L



Sample

Sample Name: 280-124713-b-7
Sample ID:
Origin:
Status Completed
Chk. Result

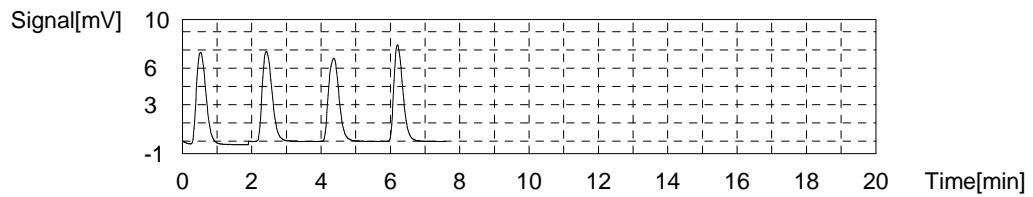
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.871mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.61	4.903mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:19:54 AM
2	14.61	4.903mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:21:58 AM
3	14.43	4.842mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:24:02 AM
4	14.41	4.835mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:26:06 AM

Mean Area 14.52
Mean Conc. 4.871mg/L



Sample

Sample Name: 280-124713-c-8
Sample ID:
Origin:
Status Completed
Chk. Result

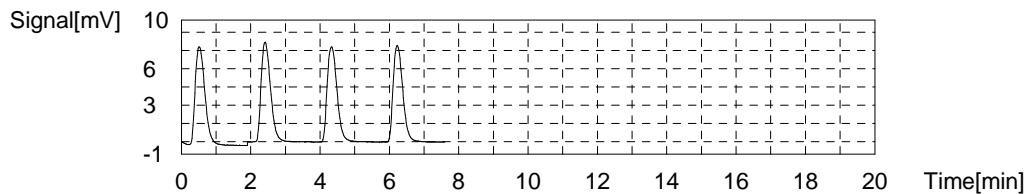
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.199mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.60	5.238mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:34:39 AM
2	15.52	5.211mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:36:43 AM
3	15.42	5.177mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:38:47 AM
4	15.40	5.170mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:40:51 AM

Mean Area 15.49
Mean Conc. 5.199mg/L



Sample

Sample Name: LCS
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

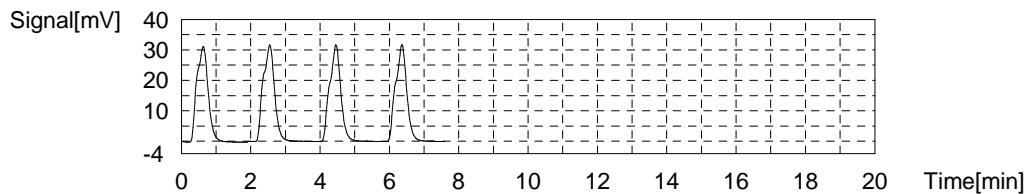
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.36mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.51	24.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:49:24 AM
2	72.75	24.56mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:51:28 AM
3	71.43	24.11mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:53:32 AM
4	71.96	24.29mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:55:36 AM

Mean Area 72.16
Mean Conc. 24.36mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.34mg/L

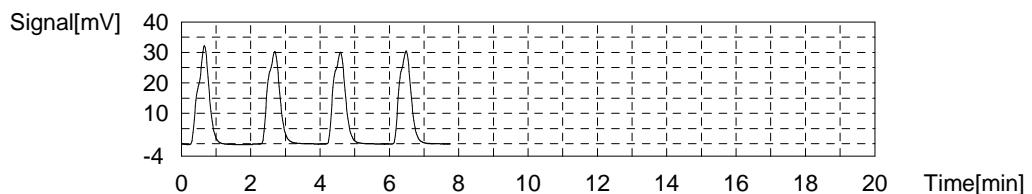
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.98	24.63mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:04:18 AM
2	72.80	24.57mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:06:22 AM
3	71.70	24.20mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:08:26 AM
4	70.96	23.95mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:10:30 AM

Mean Area
Mean Conc.

72.11
24.34mg/L



Sample

Sample Name: MB
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08247mg/L

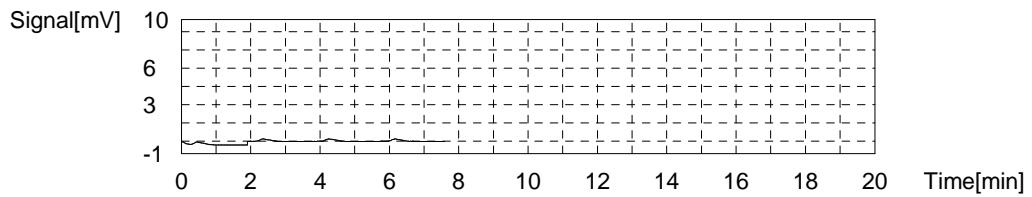
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3403	0.07946mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:19:03 AM
2	0.3713	0.08994mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:21:07 AM
3	0.3745	0.09102mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:23:11 AM
4	0.3108	0.06948mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:25:15 AM

Mean Area
Mean Conc.

0.3492
0.08247mg/L



Sample

Sample Name: TIC
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1005mg/L

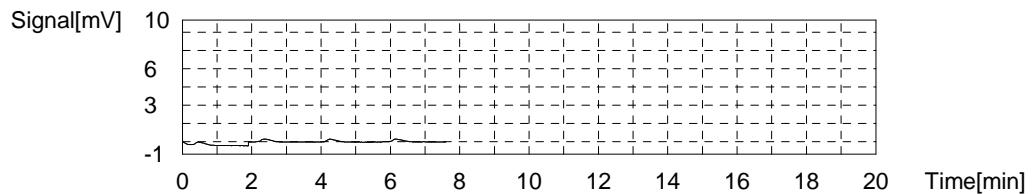
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3716	0.09004mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:33:48 AM
2	0.4266	0.1086mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:35:52 AM
3	0.4142	0.1044mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:37:56 AM
4	0.3974	0.09876mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:40:00 AM

Mean Area
Mean Conc.

0.4025
0.1005mg/L



Sample

Sample Name: 280-124717-b-4
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.304mg/L

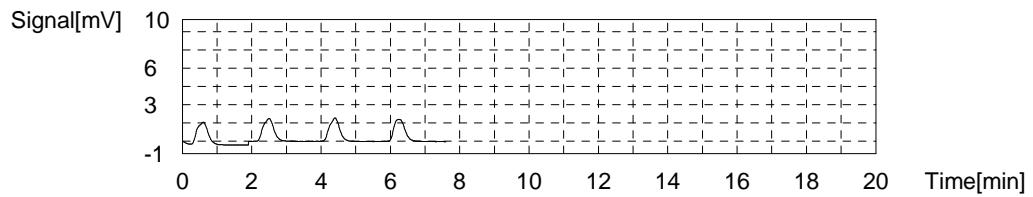
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.981	1.310mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:48:33 AM
2	3.957	1.302mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:50:37 AM
3	3.945	1.298mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:52:41 AM
4	3.970	1.306mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:54:45 AM

Mean Area
Mean Conc.

3.963
1.304mg/L



Sample

Sample Name: 280-124717-b-5
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.032mg/L

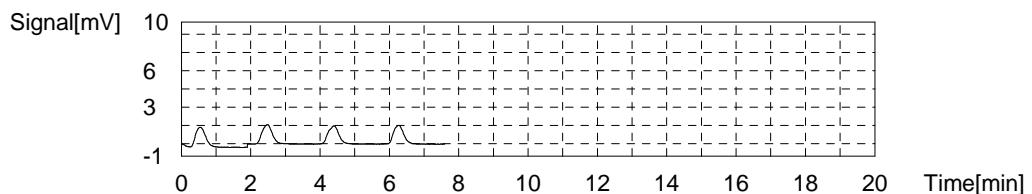
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.167	1.035mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:03:18 AM
2	3.199	1.046mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:05:22 AM
3	3.174	1.037mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:07:26 AM
4	3.089	1.009mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:09:30 AM

Mean Area
Mean Conc.

3.157
1.032mg/L



Sample

Sample Name: CCV
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.06mg/L

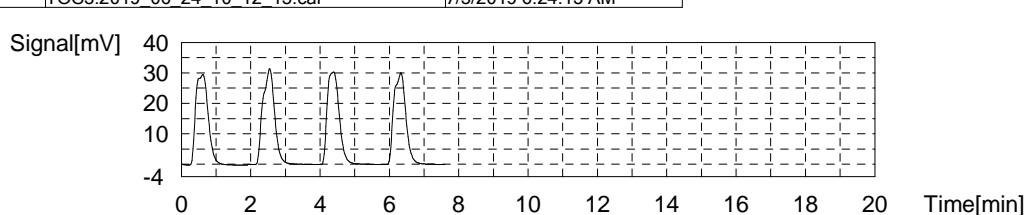
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.40	25.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:18:03 AM
2	74.66	25.20mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:20:07 AM
3	73.58	24.84mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:22:11 AM
4	73.28	24.74mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:24:15 AM

Mean Area
Mean Conc.

74.23
25.06mg/L



Sample

Sample Name: CCB
 Sample ID:
 Origin:
 Status Completed
 Chk. Result

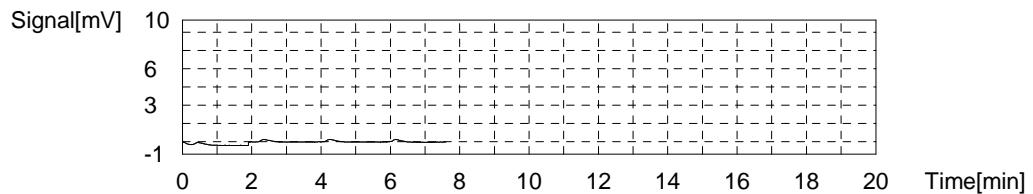
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07261mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2929	0.06343mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:32:48 AM
2	0.3481	0.08209mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:34:52 AM
3	0.3208	0.07286mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:36:56 AM
4	0.3184	0.07205mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:39:00 AM

Mean Area 0.3201
Mean Conc. 0.07261mg/L



Sample

Sample Name: 280-124717-b-6
Sample ID:
Origin:
Status Completed
Chk. Result

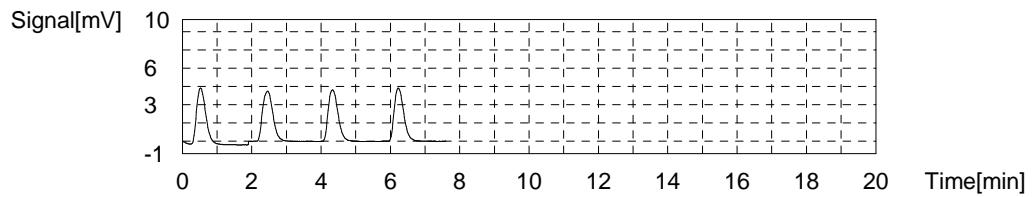
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.827mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.584	2.866mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:47:33 AM
2	8.565	2.860mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:49:37 AM
3	8.375	2.795mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:51:41 AM
4	8.353	2.788mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:53:45 AM

Mean Area 8.469
Mean Conc. 2.827mg/L



Sample

Sample Name: 280-124717-b-6 MS
Sample ID:
Origin:
Status Completed
Chk. Result

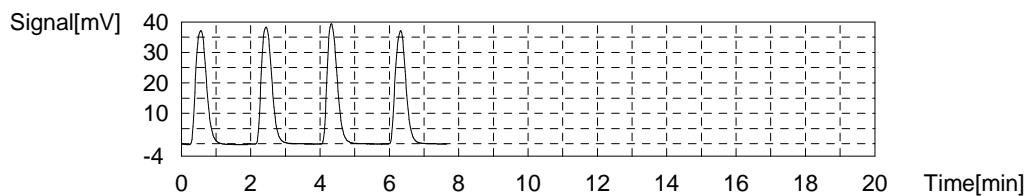
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.06	27.70mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:02:18 AM
2	81.50	27.51mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:04:22 AM
3	79.78	26.93mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:06:29 AM
4	79.42	26.81mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:08:33 AM

Mean Area 80.69
Mean Conc. 27.24mg/L



Sample

Sample Name: 280-124717-b-6 MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

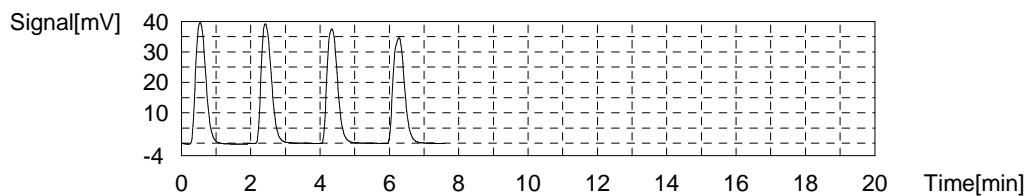
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.30mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.64	27.90mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:17:06 AM
2	81.16	27.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:19:10 AM
3	80.19	27.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:21:14 AM
4	79.50	26.84mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:23:18 AM

Mean Area 80.87
Mean Conc. 27.30mg/L



Sample

Sample Name: 280-124717-b-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

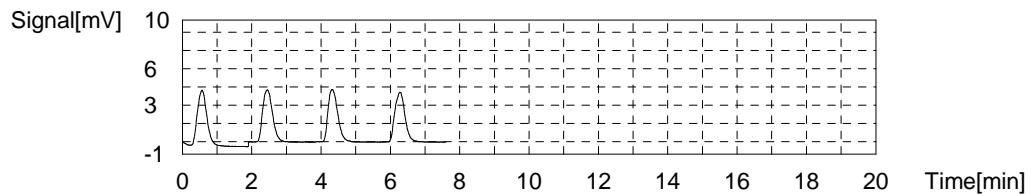
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.826mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.656	2.890mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:31:51 AM
2	8.492	2.835mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:33:55 AM
3	8.362	2.791mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:35:59 AM
4	8.348	2.786mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:38:03 AM

Mean Area 8.465
Mean Conc. 2.826mg/L



Sample

Sample Name: 280-124717-b-8
Sample ID:
Origin:
Status Completed
Chk. Result

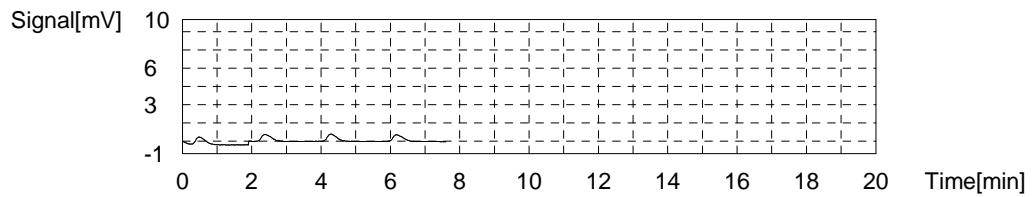
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3325mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.068	0.3254mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:46:36 AM
2	1.117	0.3420mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:48:40 AM
3	1.088	0.3322mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:50:44 AM
4	1.083	0.3305mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:52:48 AM

Mean Area 1.089
Mean Conc. 0.3325mg/L



Sample

Sample Name: 280-124719-b-1
Sample ID:
Origin:
Status Completed
Chk. Result

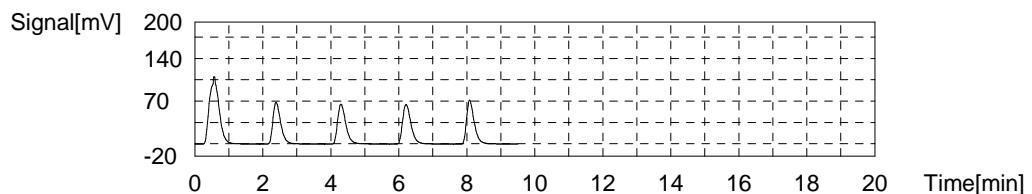
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:144.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	219.6	148.4mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:01:21 AM
2	109.5	142.3mg/L	26uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:03:25 AM
3	109.9	142.8mg/L	26uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:05:29 AM
4	112.1	145.7mg/L	26uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:07:33 AM
5	112.8	146.6mg/L	26uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:09:36 AM

Mean Area 111.1
Mean Conc. 144.3mg/L



Sample

Sample Name: 280-124719-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

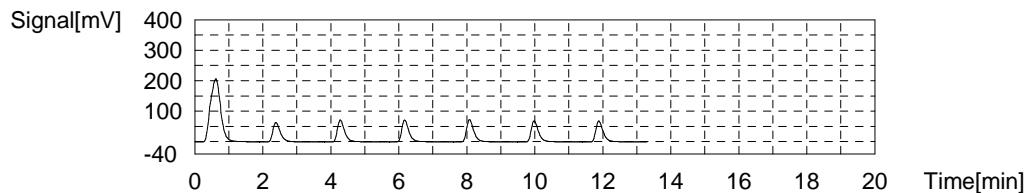
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:268.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	437.1	295.4mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:18:09 AM
2	96.95	252.0mg/L	13uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:20:13 AM
3	105.3	273.7mg/L	13uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:22:17 AM
4	103.4	268.8mg/L	13uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:24:21 AM
5	107.8	280.2mg/L	13uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:26:24 AM
6	102.3	265.9mg/L	13uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:28:28 AM
7	102.3	265.9mg/L	13uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:32:52 AM

Mean Area 103.3
Mean Conc. 268.6mg/L



Sample

Sample Name: 280-124719-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

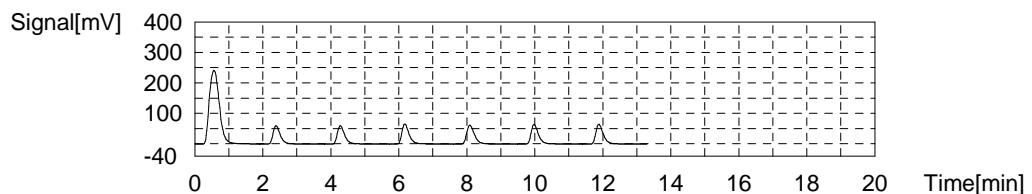
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:300.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	501.0	338.6mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:41:19 AM
2	89.57	275.2mg/L	11uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:43:23 AM
3	89.62	275.3mg/L	11uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:45:27 AM
4	97.23	298.7mg/L	11uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:47:31 AM
5	98.65	303.1mg/L	11uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:49:34 AM
6	96.04	295.1mg/L	11uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:51:38 AM
7	99.28	305.0mg/L	11uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:56:02 AM

Mean Area 97.80
Mean Conc. 300.5mg/L



Sample

Sample Name: 280-124719-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

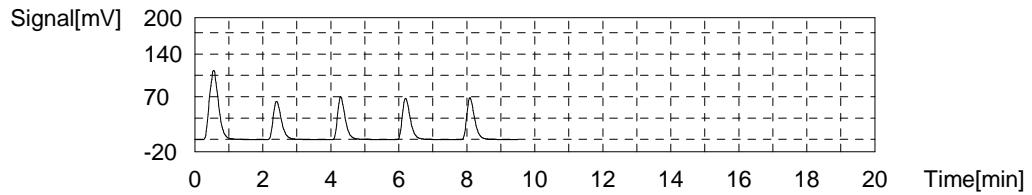
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:137.0mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	212.2	143.4mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:04:28 AM
2	106.9	133.8mg/L	27uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:06:32 AM
3	109.7	137.3mg/L	27uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:08:36 AM
4	111.0	138.9mg/L	27uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:10:40 AM
5	110.3	138.0mg/L	27uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:12:43 AM

Mean Area 109.5
Mean Conc. 137.0mg/L



Sample

Sample Name: 280-124724-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9268mg/L

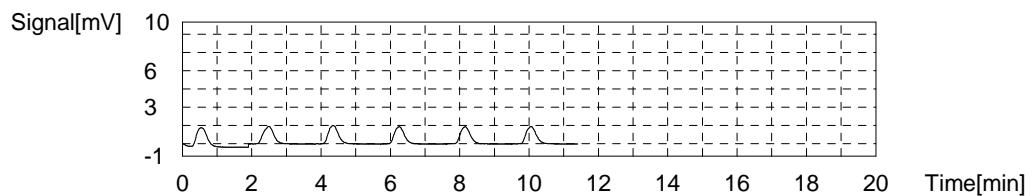
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.146	1.028mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:21:16 AM
2	2.983	0.9728mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:23:20 AM
3	2.940	0.9582mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:25:24 AM
4	2.802	0.9116mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:27:28 AM
5	2.779	0.9038mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:29:32 AM
6	2.867	0.9336mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:31:36 AM

Mean Area
Mean Conc.

2.847
0.9268mg/L



Sample

Sample Name: CCV
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.49mg/L

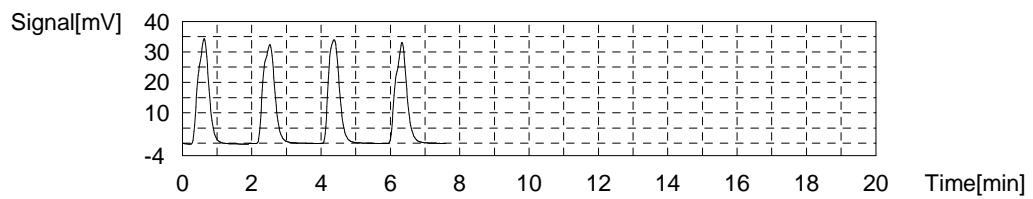
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.06	25.68mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:40:03 AM
2	76.14	25.70mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:42:07 AM
3	75.08	25.34mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:44:11 AM
4	74.82	25.26mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:46:15 AM

Mean Area
Mean Conc.

75.52
25.49mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

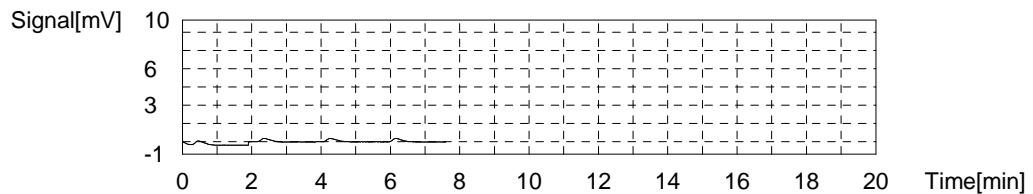
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1310mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5036	0.1347mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:54:49 AM
2	0.4735	0.1245mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:56:53 AM
3	0.5231	0.1412mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:58:57 AM
4	0.4711	0.1237mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:01:01 AM

Mean Area 0.4928
Mean Conc. 0.1310mg/L



Sample

Sample Name: 280-124838-a-4
Sample ID:
Origin:
Status Completed
Chk. Result

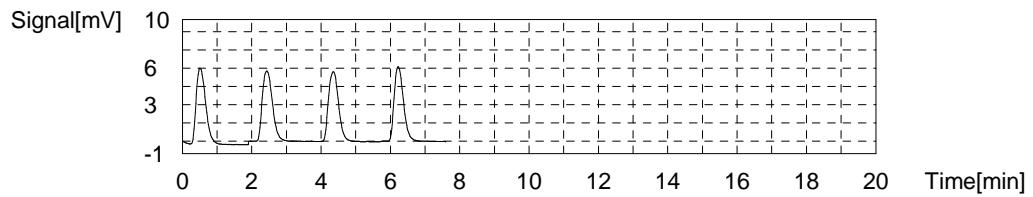
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.931mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.93	3.997mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:09:35 AM
2	11.82	3.960mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:11:39 AM
3	11.63	3.896mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:13:43 AM
4	11.56	3.872mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:15:47 AM

Mean Area 11.74
Mean Conc. 3.931mg/L



Sample

Sample Name: 490-175605-d-5
Sample ID:
Origin:
Status Completed
Chk. Result

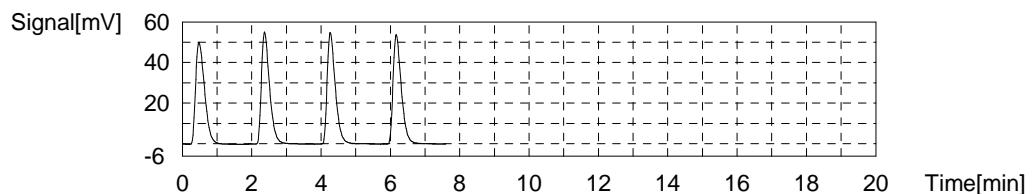
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:61.22mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.32	61.67mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:24:21 AM
2	91.32	61.67mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:26:25 AM
3	90.00	60.77mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:28:29 AM
4	89.97	60.75mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:30:33 AM

Mean Area 90.65
Mean Conc. 61.22mg/L



Sample

Sample Name: 490-175605-d-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

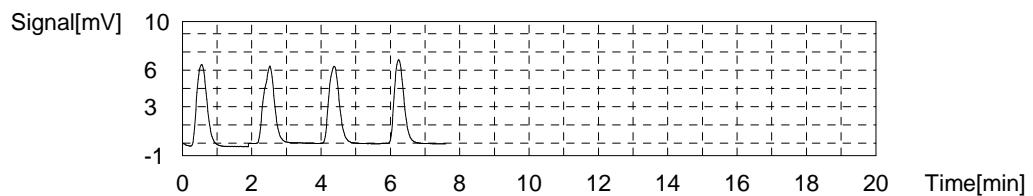
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.533mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.73	4.606mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:39:07 AM
2	13.63	4.572mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:41:11 AM
3	13.39	4.491mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:43:15 AM
4	13.31	4.464mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:45:19 AM

Mean Area 13.52
Mean Conc. 4.533mg/L



Sample

Sample Name: 280-124894-b-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

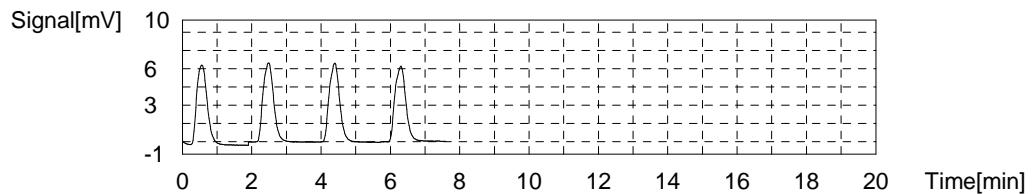
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.591mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.75	4.612mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:53:53 AM
2	13.80	4.629mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:55:57 AM
3	13.58	4.555mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:58:01 AM
4	13.62	4.568mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:00:05 AM

Mean Area 13.69
Mean Conc. 4.591mg/L



Sample

Sample Name: 280-124894-b-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

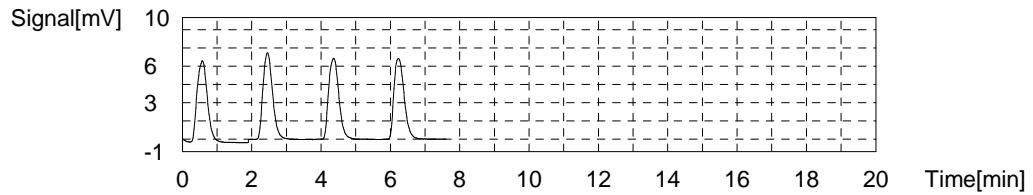
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.606mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.83	4.639mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:08:39 AM
2	13.81	4.633mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:10:43 AM
3	13.65	4.579mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:12:47 AM
4	13.64	4.575mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:14:51 AM

Mean Area 13.73
Mean Conc. 4.606mg/L



Sample

Sample Name: 280-124894-b-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

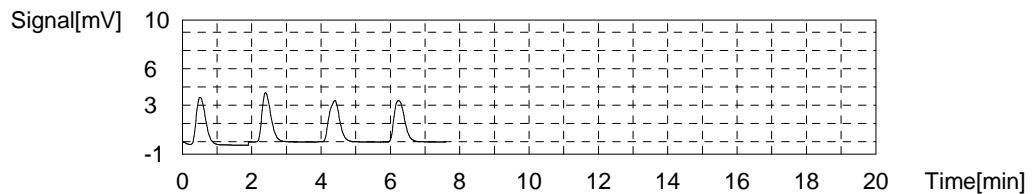
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.412mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.258	2.418mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:23:25 AM
2	7.297	2.431mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:25:29 AM
3	7.209	2.401mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:27:33 AM
4	7.196	2.397mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:29:37 AM

Mean Area 7.240
Mean Conc. 2.412mg/L



Sample

Sample Name: 280-124894-a-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

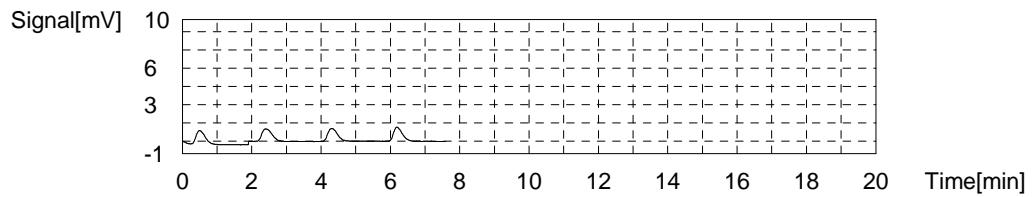
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6560mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.983	0.6347mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:38:11 AM
2	2.103	0.6753mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:40:15 AM
3	2.054	0.6587mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:42:19 AM
4	2.044	0.6554mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:44:23 AM

Mean Area 2.046
Mean Conc. 0.6560mg/L



Sample

Sample Name: 280-124894-b-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

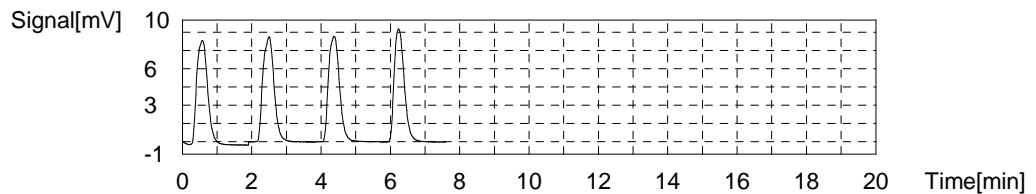
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.392mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.85	6.336mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:52:57 AM
2	19.34	6.502mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:55:01 AM
3	19.06	6.407mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:57:05 AM
4	18.81	6.323mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:59:09 AM

Mean Area 19.02
Mean Conc. 6.392mg/L



Sample

Sample Name: 280-124894-b-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

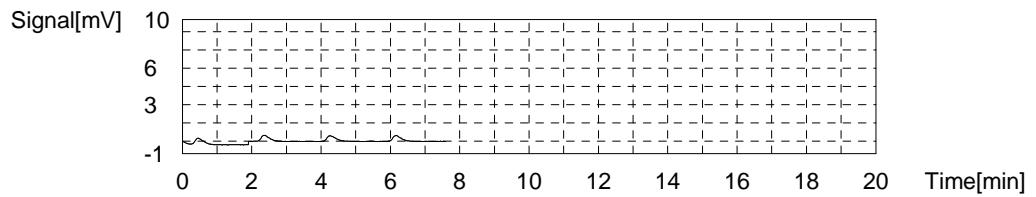
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2371mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7742	0.2261mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:07:43 PM
2	0.8258	0.2436mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:09:47 PM
3	0.8185	0.2411mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:11:51 PM
4	0.8086	0.2378mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:13:55 PM

Mean Area 0.8068
Mean Conc. 0.2371mg/L



Sample

Sample Name: CCV
Sample ID:
Origin:
Status Completed
Chk. Result

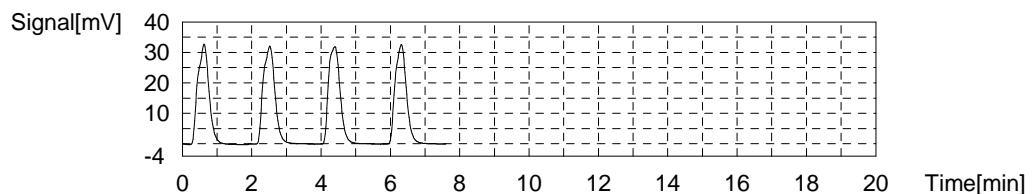
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.78	25.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:22:29 PM
2	75.49	25.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:24:33 PM
3	74.59	25.18mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:26:37 PM
4	74.35	25.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:28:41 PM

Mean Area 75.05
Mean Conc. 25.33mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

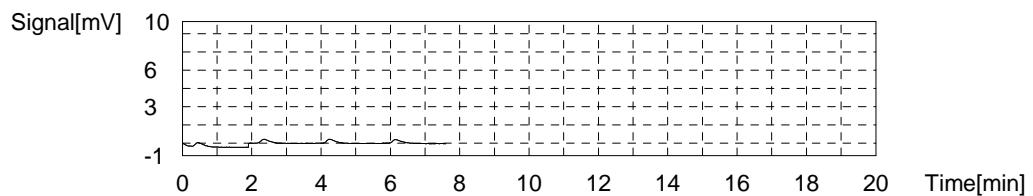
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1446mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4719	0.1239mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:37:15 PM
2	0.5576	0.1529mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:39:19 PM
3	0.5656	0.1556mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:41:23 PM
4	0.5367	0.1458mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:43:27 PM

Mean Area 0.5330
Mean Conc. 0.1446mg/L



Sample

Sample Name: 280-124815-d-1
Sample ID:
Origin:
Status NPOC.met
Chk. Result Completed

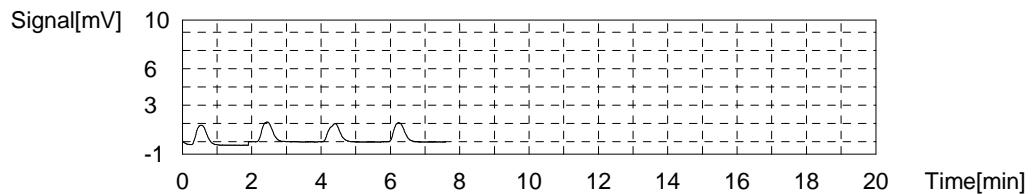
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.088mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.300	1.080mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:52:02 PM
2	3.343	1.094mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:54:06 PM
3	3.359	1.100mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:56:10 PM
4	3.299	1.080mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 12:58:14 PM

Mean Area 3.325
Mean Conc. 1.088mg/L



Sample

Sample Name: 280-124815-d-1 MS
Sample ID:
Origin:
Status Completed
Chk. Result

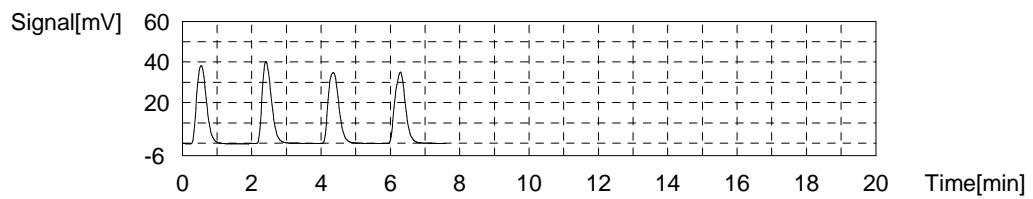
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.89	25.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:06:49 PM
2	75.85	25.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:08:53 PM
3	75.22	25.39mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:10:57 PM
4	75.13	25.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:13:01 PM

Mean Area 75.77
Mean Conc. 25.58mg/L



Sample

Sample Name: 280-124815-d-1 MSD
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.66mg/L

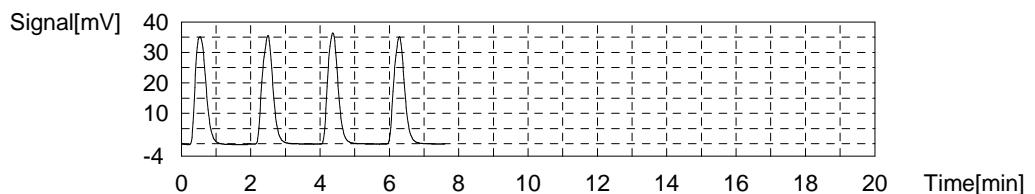
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.75	25.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:21:36 PM
2	76.39	25.79mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:23:40 PM
3	75.57	25.51mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:25:44 PM
4	75.30	25.42mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:27:48 PM

Mean Area
Mean Conc.

76.00
25.66mg/L



Sample

Sample Name: CCV
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.31mg/L

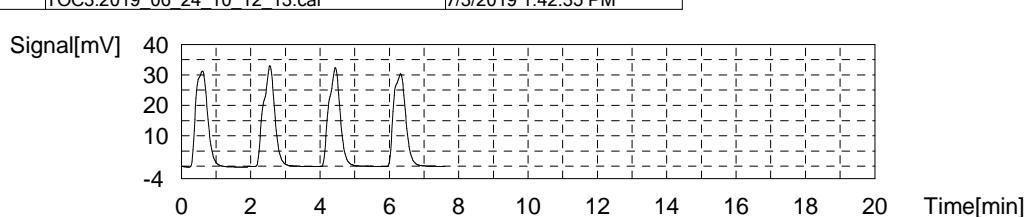
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.75	25.57mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:36:23 PM
2	75.78	25.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:38:27 PM
3	74.11	25.02mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:40:31 PM
4	74.26	25.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:42:35 PM

Mean Area
Mean Conc.

74.97
25.31mg/L



Sample

Sample Name: CCB
Sample ID:
Origin:
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1369mg/L

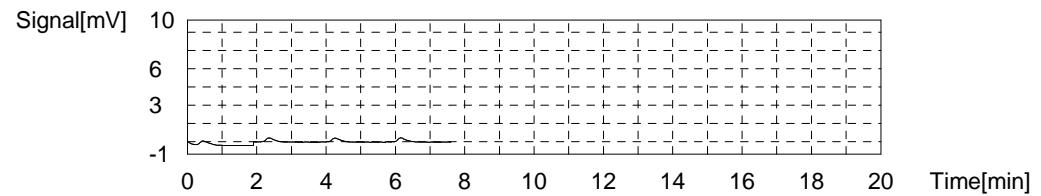
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5067	0.1357mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:51:10 PM
2	0.5071	0.1358mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:53:14 PM
3	0.5210	0.1405mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:55:18 PM
4	0.5058	0.1354mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 1:57:22 PM

Mean Area
Mean Conc.

0.5102
0.1369mg/L



Date of Creation 11:17:07 AM 6/24/2019
 User wetchemd
 System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
 Sample ID: Untitled
 Object ID: OA-103108-04335027-13415A0166CC-0000
 Cal. Curve: TOC3.2019_06_24_10_12_13.cal
 Status: Completed
 Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2765	50uL	1	*****		6/24/2019 10:19:54 A
2	0.3484	50uL	1	*****		6/24/2019 10:21:58 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 0.3125
 SD Area 0.05084
 CV Area 16.27%
 Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.311	50uL	1	*****		6/24/2019 10:30:32 A
2	3.309	50uL	1	*****		6/24/2019 10:32:36 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 3.310
 SD Area 0.00141
 CV Area 0.04%
 Vial 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	14.36	50uL	1	*****	E	6/24/2019 10:41:10 A
2	14.95	50uL	1	*****		6/24/2019 10:43:14 A
3	14.85	50uL	1	*****		6/24/2019 10:45:18 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 14.90
 SD Area 0.07071
 CV Area 0.47%
 Vial 3

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	29.38	50uL	1	*****		6/24/2019 10:53:47 A
2	29.94	50uL	1	*****		6/24/2019 10:55:51 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 29.66
 SD Area 0.3960
 CV Area 1.34%
 Vial 4

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	72.31	50uL	1	*****		6/24/2019 11:04:25 A
2	74.10	50uL	1	*****		6/24/2019 11:06:29 A

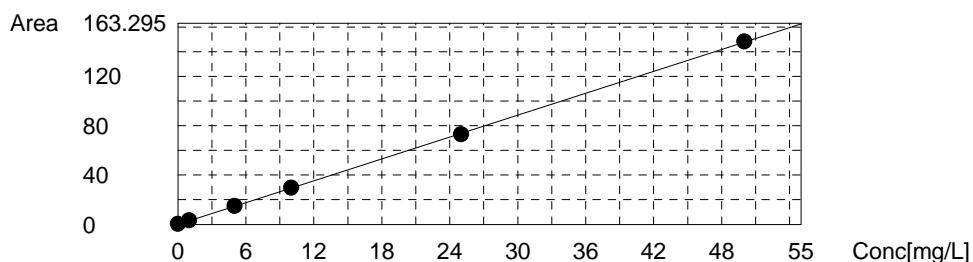
Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 73.21
 SD Area 1.266
 CV Area 1.73%
 Vial 5

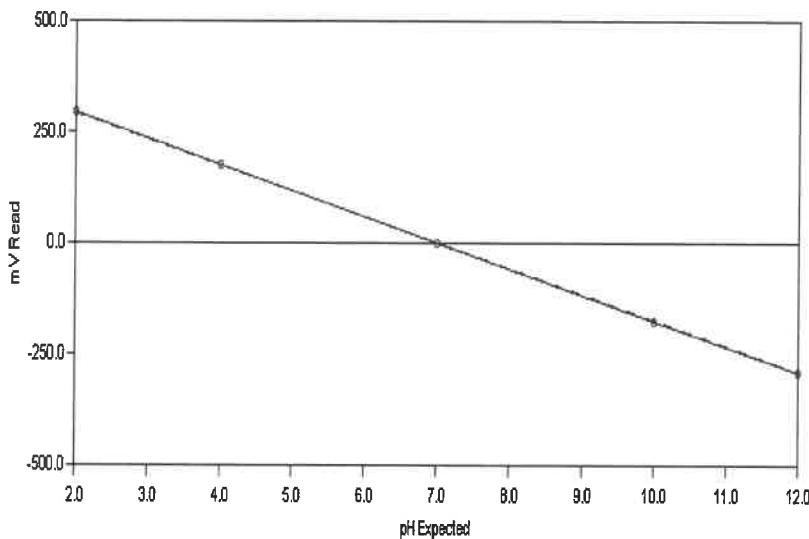
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	147.7	50uL	1	*****		6/24/2019 11:15:03 A
2	149.2	50uL	1	*****		6/24/2019 11:17:07 A

Acid Add. 0.000%
 Sp. Time 90.00sec
 Mean Area 148.5
 SD Area 1.061
 CV Area 0.71%
 Vial 6

Slope: 2.958
 Intercept 0.1052
 r^2 0.9999
 r 1.0000
 Zero Shift No



Calibration Report**Calibration Record # 1412****Calibration Settings**

Calibration ID	PH	Date	06/13/2019
Channel	1	Time	11:01 AM
Probe Type	pH	Temperature	296.32 K 23.17 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-58.579	CorrCoeff	1.0000
Intercept	-0.022	Equation: Y = (-58.579) X + (-0.022)	

Calibration Validity

True	Operator
------	----------

	Result	Minimum	Maximum
Slope	-58.579	-65.00	-53.00
Intercept	-0.022	-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	293.09
4.00	175.78
7.00	-0.61
10.00	-175.65
12.00	-292.72

Water Analysis Historical Data Report

Run Number	4670	Order Number		20190614-1													
<u>SampleID</u>	<u>RunDate</u>	<u>RunTime</u>	<u>Temp</u>	<u>cond (µS)</u>	<u>pH</u>	<u>pH2</u>	<u>pH3</u>	<u>Acid</u>	<u>palk ppm</u>	<u>talk ppm</u>	<u>bcarb ppm</u>	<u>carb ppm</u>	<u>hydr ppm</u>	<u>mL @8.3</u>	<u>mL @4.5</u>	<u>mL @4.2</u>	<u>tcon</u>
rinse	6/14/2019	3:07 PM	22.86	-1.00	5.63	-1.00	-1.00	-1.00	.00	.27	.27	.00	.00	.00	.05	.10	.02
check	6/14/2019	3:15 PM	22.48	-1.00	10.66	-1.00	-1.00	-1.00	106.31	209.16	.00	205.71	3.45	2.66	5.23	-1.00	.02
b7	6/14/2019	3:19 PM	22.86	-1.00	7.35	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
lcs	6/14/2019	3:35 PM	22.63	-1.00	10.64	-1.00	-1.00	-1.00	103.80	211.48	3.89	207.59	.00	2.59	5.29	-1.00	.02
mb	6/14/2019	3:42 PM	21.77	-1.00	7.31	-1.00	-1.00	-1.00	.00	.76	.76	.00	.00	.00	.06	.10	.02
280-124794-I-4	6/14/2019	3:50 PM	18.76	-1.00	7.66	-1.00	-1.00	-1.00	.00	210.32	210.32	.00	.00	.00	5.26	-1.00	.02
280-124794-I-4 du	6/14/2019	3:59 PM	18.81	-1.00	7.68	-1.00	-1.00	-1.00	.00	209.91	209.91	.00	.00	.00	5.25	-1.00	.02
280-124794-I-2	6/14/2019	4:05 PM	18.88	-1.00	6.51	-1.00	-1.00	-1.00	.00	.25	.25	.00	.00	.00	.05	.10	.02
280-124794-I-5	6/14/2019	4:13 PM	18.74	-1.00	7.68	-1.00	-1.00	-1.00	.00	204.00	204.00	.00	.00	.00	5.10	-1.00	.02
280-124794-I-6	6/14/2019	4:22 PM	18.99	-1.00	7.82	-1.00	-1.00	-1.00	.00	253.83	253.83	.00	.00	.00	6.35	-1.00	.02
280-124794-I-7	6/14/2019	4:30 PM	19.64	-1.00	7.83	-1.00	-1.00	-1.00	.00	255.07	255.07	.00	.00	.00	6.38	-1.00	.02
280-124673-A-1	6/14/2019	4:37 PM	20.20	-1.00	7.05	-1.00	-1.00	-1.00	.00	.54	.54	.00	.00	.00	.06	.10	.02
280-124673-A-2	6/14/2019	4:45 PM	20.85	-1.00	6.20	-1.00	-1.00	-1.00	.00	162.85	162.85	.00	.00	.00	4.07	-1.00	.02
280-124673-A-3	6/14/2019	4:51 PM	21.19	-1.00	5.79	-1.00	-1.00	-1.00	.00	.30	.30	.00	.00	.00	.05	.09	.02
280-124673-A-4	6/14/2019	5:00 PM	20.74	-1.00	7.48	-1.00	-1.00	-1.00	.00	332.39	332.39	.00	.00	.00	8.31	-1.00	.02
ccv	6/14/2019	5:10 PM	20.81	-1.00	10.65	-1.00	-1.00	-1.00	105.11	212.21	2.00	210.21	.00	2.63	5.31	-1.00	.02
ccb	6/14/2019	5:16 PM	20.54	-1.00	6.38	-1.00	-1.00	-1.00	.00	.38	.38	.00	.00	.00	.05	.10	.02
280-124673-A-5	6/14/2019	5:28 PM	20.18	-1.00	7.16	-1.00	-1.00	-1.00	.00	467.72	467.72	.00	.00	.00	11.69	-1.00	.02
280-124673-A-6	6/14/2019	5:36 PM	20.49	-1.00	7.47	-1.00	-1.00	-1.00	.00	299.26	299.26	.00	.00	.00	7.48	-1.00	.02
280-124673-A-7	6/14/2019	5:49 PM	21.09	-1.00	7.45	-1.00	-1.00	-1.00	.00	552.07	552.07	.00	.00	.00	13.80	-1.00	.02
280-124673-A-8	6/14/2019	5:58 PM	21.96	-1.00	7.47	-1.00	-1.00	-1.00	.00	319.37	319.37	.00	.00	.00	7.98	-1.00	.02
280-124724-A-2	6/14/2019	6:05 PM	21.38	-1.00	6.84	-1.00	-1.00	-1.00	.00	176.53	176.53	.00	.00	.00	4.41	-1.00	.02
280-124678-B-1	6/14/2019	6:12 PM	20.99	-1.00	7.85	-1.00	-1.00	-1.00	.00	61.51	61.51	.00	.00	.00	1.54	-1.00	.02
280-124678-A-3	6/14/2019	6:19 PM	20.74	-1.00	7.89	-1.00	-1.00	-1.00	.00	60.14	60.14	.00	.00	.00	1.50	-1.00	.02
280-124678-A-2	6/14/2019	6:26 PM	20.66	-1.00	7.88	-1.00	-1.00	-1.00	.00	59.93	59.93	.00	.00	.00	1.50	-1.00	.02
280-124682-G-1	6/14/2019	6:34 PM	20.67	-1.00	8.32	-1.00	-1.00	-1.00	2.89	251.23	245.45	5.78	.00	.07	6.28	-1.00	.02
280-124682-G-2	6/14/2019	6:42 PM	21.27	-1.00	6.55	-1.00	-1.00	-1.00	.00	.34	.34	.00	.00	.00	.05	.10	.02
ccv	6/14/2019	6:51 PM	22.10	-1.00	10.59	-1.00	-1.00	-1.00	100.78	212.82	11.26	201.56	.00	2.52	5.32	-1.00	.02
ccb	6/14/2019	6:58 PM	21.71	-1.00	6.35	-1.00	-1.00	-1.00	.00	.21	.21	.00	.00	.00	.05	.10	.02
lcs	6/14/2019	7:07 PM	21.34	-1.00	10.60	-1.00	-1.00	-1.00	102.78	212.61	7.06	205.55	.00	2.57	5.32	-1.00	.02
mb	6/14/2019	7:14 PM	21.18	-1.00	6.42	-1.00	-1.00	-1.00	.00	.48	.48	.00	.00	.00	.06	.10	.02
280-124682-G-3	6/14/2019	7:22 PM	20.94	-1.00	8.32	-1.00	-1.00	-1.00	3.13	239.33	233.07	6.26	.00	.08	5.98	-1.00	.02
du	6/14/2019	7:29 PM	21.03	-1.00	8.35	-1.00	-1.00	-1.00	4.20	243.12	234.71	8.40	.00	.11	6.08	-1.00	.02
280-124682-G-4	6/14/2019	7:39 PM	21.48	-1.00	8.16	-1.00	-1.00	-1.00	.00	276.35	276.35	.00	.00	.00	6.91	-1.00	.02
280-124682-G-5	6/14/2019	7:48 PM	22.37	-1.00	8.27	-1.00	-1.00	-1.00	.00	284.86	284.86	.00	.00	.00	7.12	-1.00	.02
280-124682-G-6	6/14/2019	7:57 PM	21.93	-1.00	8.21	-1.00	-1.00	-1.00	.00	275.74	275.74	.00	.00	.00	6.89	-1.00	.02
280-124682-G-7	6/14/2019	8:06 PM	21.64	-1.00	8.03	-1.00	-1.00	-1.00	.00	281.55	281.55	.00	.00	.00	7.04	-1.00	.02
280-124682-G-8	6/14/2019	8:15 PM	21.48	-1.00	7.89	-1.00	-1.00	-1.00	.00	297.88	297.88	.00	.00	.00	7.45	-1.00	.02
280-124682-G-9	6/14/2019	8:24 PM	21.41	-1.00	8.15	-1.00	-1.00	-1.00	.00	266.67	266.67	.00	.00	.00	6.67	-1.00	.02
280-124711-A-1	6/14/2019	8:34 PM	21.47	-1.00	7.31	-1.00	-1.00	-1.00	.00	395.33	395.33	.00	.00	.00	9.88	-1.00	.02
280-124711-A-2	6/14/2019	8:44 PM	21.70	-1.00	7.90	-1.00	-1.00	-1.00	.00	359.67	359.67	.00	.00	.00	8.99	-1.00	.02
ccv	6/14/2019	8:52 PM	22.45	-1.00	10.53	-1.00	-1.00	-1.00	99.11	214.71	16.49	198.22	.00	2.48	5.37	-1.00	.02

<u>Run Number</u>		4670	<u>Order Number</u>		20190614-1												
<u>SampleID</u>	<u>RunDate</u>	<u>RunTime</u>	<u>Temp</u>	<u>cond (<u>µS</u>)</u>	<u>pH</u>	<u>pH2</u>	<u>pH3</u>	<u>Acid</u>	<u>palk ppm</u>	<u>talk ppm</u>	<u>bcarb ppm</u>	<u>carb ppm</u>	<u>hydr ppm</u>	<u>mL @8.3</u>	<u>mL @4.5</u>	<u>mL @4.2</u>	<u>tcon</u>
ccb	6/14/2019	8:59 PM	22.11	-1.00	6.39	-1.00	-1.00	-1.00	.00	.29	.29	.00	.00	.00	.05	.10	.02
280-124711-B-3	6/14/2019	9:06 PM	21.83	-1.00	7.68	-1.00	-1.00	-1.00	.00	205.57	205.57	.00	.00	.00	5.14	-1.00	.02
280-124717-A-1	6/14/2019	9:15 PM	21.73	-1.00	8.14	-1.00	-1.00	-1.00	.00	209.89	209.89	.00	.00	.00	5.25	-1.00	.02
280-124717-A-2	6/14/2019	9:22 PM	21.71	-1.00	6.25	-1.00	-1.00	-1.00	.00	.36	.36	.00	.00	.00	.05	.09	.02
280-124717-A-3	6/14/2019	9:29 PM	21.69	-1.00	7.97	-1.00	-1.00	-1.00	.00	127.76	127.76	.00	.00	.00	3.19	-1.00	.02
280-124711-A-4	6/14/2019	9:37 PM	21.80	-1.00	7.73	-1.00	-1.00	-1.00	.00	202.43	202.43	.00	.00	.00	5.06	-1.00	.02
280-124717-A-5	6/14/2019	9:45 PM	22.31	-1.00	7.70	-1.00	-1.00	-1.00	.00	134.52	134.52	.00	.00	.00	3.36	-1.00	.02
280-124717-A-6	6/14/2019	9:52 PM	22.08	-1.00	7.66	-1.00	-1.00	-1.00	.00	115.42	115.42	.00	.00	.00	2.89	-1.00	.02
280-124717-A-7	6/14/2019	9:59 PM	21.96	-1.00	7.68	-1.00	-1.00	-1.00	.00	114.17	114.17	.00	.00	.00	2.85	-1.00	.02
280-124717-A-8	6/14/2019	10:06 PM	21.93	-1.00	8.09	-1.00	-1.00	-1.00	.00	120.70	120.70	.00	.00	.00	3.02	-1.00	.02
ccv	6/14/2019	10:16 PM	21.87	-1.00	10.51	-1.00	-1.00	-1.00	99.65	212.51	13.22	199.30	.00	2.49	5.31	-1.00	.02

Shipping and Receiving Documents

CHAIN OF CUSTODY RECORD

Project Name: 2019
 CHAAP 2048 OU1/OU3 LTM Groundwater Sampling

AECOM Project Number: 60565355
 AECOM Project Manager: Dean Converse

Project Location:
 Grand Island, Nebraska

Sampler(s): SA, CH, KL, BE

Sample

Type

Comp

Grab

X

PZ004-19A

X

60044-19A

✓

PZ015-19A

✓

H2D

✓

A B C D E F

✓

9

✓

H2O

✓

Containers

No.

Type

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Bill to: Brice Engineering

Remarks

Methane (RSK 175)

standard TAT

standard

TAT

*

DOC

9060A

SO₂

(9056A)

NH₃

(350.1)

NO₂/NO_x

(353.2)

TKN

(351.2)

NH₄

(350.1)

Explosives+MNX

(8330B)

SO₄

(9056A)

Alkalinity

(2320B)

Sulfide

(9034)

DOC

(9060A)

SO₂

(9056A)

NH₃

(350.1)

NO₂/NO_x

(353.2)

TKN

(351.2)

NH₄

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Explosives+MNX

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(9060A)

SO₂

(9056A)

NH₃

(350.1)

NO₂/NO_x

(353.2)

TKN

(351.2)

NH₄

(350.1)

Explosives+MNX

(8330B)

SO₄

(9056A)

Alkalinity

(2320B)

Sulfide

(9034)

DOC

(9060

CHAIN OF CUSTODY RECORD

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

White copy - Laboratory Yellow copy - Laboratory

Pink copy - Sampler

2019051

Project Name: <u>2019</u> CHAAP 2018 OUI/OU3 LTM Groundwater Sampling	AECOM Project Number: 60565355	Analytical Parameters										Bill to: Brice Engineering	
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse											Remarks standard TAT	
Sampler(s): <u>SA, CH, KL, BE</u>	Sample	Type	Sample Identification		Matrix	Containers							
	Date	Time	Comp	Grab		No.	Type						
(6-4-19) 1230		X	60049-19A		H ₂ O	9	ABCDEF					6°C	
1340		X	60048-19A										
1500		X	60049-19A										
			60023-19A										
Signature: <u>John</u>													Signatures
Date <u>6/5/19</u> Time <u>1800</u> Method of Shipment: Federal Express													Date <u>6/5/19</u>
Received by: <u>John</u> Airbill No: <u>8092 4626 7572</u>													Time <u>0545</u>
Relinquished by:													Method of Shipment: <u>500mL</u>
Received for Laboratory by:													Special Instructions * Filter groundwater sample before analyzing for DOC
Attn: <u>Guissa Cumine</u> Lab Address: <u>TestAmerica Lab, Inc.</u>													(A) (2) 1L Ambers (Explosives)
Attn: <u>Pat McEntee</u>													(B) (1) 500mL HDPE w/ H ₂ SO ₄ (TKN, NH ₃ , NO ₂ /NO ₃)
(303) 736-0164													(C) (1) 250mL HDPE (SO ₄ , Alkalinity)
(4955 Yarrow St. Arvada, CO 80002													(D) (1) 250mL Amber (DOC)
(303) 736-0164													(E) (3) 40 mL VOA w/ HCl (Methane)
TAL #: <u>28017805</u>													(F) (3) 40 mL VOA w/ HCl (Methane)

AECOM

12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Page 1 of 4

Project Name:	2019		AECOM Project Number:	60565355		Analytical Parameters		Bill to: Brice Engineering	
Project Location:	CHAAP 2018 OU1/OU3 LTM Groundwater Sampling Grand Island, Nebraska		AECOM Project Manager:	Dean Converse				Remarks	
Sampler(s):	SA, CH, RL, BE						standard TAT		
Sample	Type	Sample Identification	Matrix	Containers	No.	Type			
Date	Time	Comp Grab							
6-5-19	0930	X	PZ 005 - 19A	H ₂ O	1	A,B,C,D,E,F		6°C	
	1310	X	630/03 - 19A		2	V			
	1430	X	630/04 - 19A		3	V			
<i>[Large handwritten signature over the sample section]</i>									
Signatures		Date	Time	Shipping Details					Special Instructions
Relinquished by:	<i>[Signature]</i>	6/5/19	1800	Method of Shipment:	Federal Express		* Filter groundwater sample before analyzing for DOC <i>Soon L</i>		
Received by:	<i>[Signature]</i>	06-06-19	0845	Airbill Number:	8092 4(26 7572		(A) (2) <i>Y</i> Ambers (Explosives)		
Relinquished by:						(B) (1) 500mL HDPE w/ H ₂ SO ₄ (TKN, NH ₃ , NO ₂ /NO ₃)			
Received for Laboratory by:						(C) (1) 250mL HDPE (SO ₄ , Alkalinity)			
						(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)			
						(E) (1) 250mL Amber (DOC)*			
						(F) (3) 40 mL VOA w/ HCl (Methane)			
								TAL: 28017805	
								CC: 2019 504	

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-124912-1

Login Number: 124912

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Dunlap, Krista M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
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.	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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	