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ANALYTICAL REPORT

Job Number: 280-129936-1

Job Description: Cornhusker (CHAAP)

For:
Brice Environmental Services, Corp
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Attention: Scott Mann



Approved for release.
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Manager of Project Management
1/6/2020 4:23 PM

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The Lab Certification ID# is 4025.

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

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Qualifiers

GC VOA

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

HPLC/IC

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

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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: 280-129936-1

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.

REVISION 1, JANUARY 6, 2020
Client request to change the sample ID for G0070-1 (280-129936-11) to NW070-1.

RECEIPT
The samples were received on 10/22/2019 at 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 0.1º C, 1.4º C, 2.6º C, 2.9º C, 3.4º C and 4.6º C.

DISSOLVED GASES (GC)
Samples CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 10/31/2019.

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

NITROAROMATICS AND NITRAMINES (HPLC)
Samples CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 10/24/2019 and analyzed on 10/29/2019 and 10/31/2019.

1,2-Dinitrobenzene failed the surrogate recovery criteria low for EW7-PM24B-1-35 (280-129936-4) due to the required dilution. Associated results are flagged "Q".

1,2-Dinitrobenzene failed the surrogate recovery criteria low for EW7-PM29B-1-35 (280-129936-5) and EW7-PM28B-1-35 (280-129936-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Associated results are flagged "Q".

1,2-Dinitrobenzene failed the surrogate recovery criteria low for MB 280-475259/1-A. The surrogate recoveries for all other QC were within control limits; therefore, the data is reported. Associated results are flagged "Q".

The initial calibration verification (ICV) result for batch 280-475429 was failing control limits for m-Nitrotoluene. The instrument is confirming detections and the analyte not in control is a non target for confirmation. Associated results are flagged "Q".

The %RPD between the primary and confirmation column exceeded 40% for 4-Amino-2,6-dinitrotoluene for the following sample: EW7-PM29A-1-25 (280-129936-6), G0075-1 (280-129936-13). The results from both columns have been reported and qualified in accordance with the laboratory's QAS.

The %RPD between the primary and confirmation column exceeded 40% for 1,2-Dinitrobenzene for the following sample: EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8). The results from both columns have been reported and qualified in accordance with the laboratory's QAS.

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene for the following sample: G0080-1 (280-129936-15). The results from both columns have been reported and qualified in accordance with the laboratory's QAS.

Method 8330A: The %RPD between the primary and confirmation column exceeded 40% for HMX for the following sample: EW7-PM29B-1-35 (280-129936-5). The results from both columns have been reported and qualified in accordance with the laboratory's QAS.

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene and 4-Amino-2,6-dinitrotoluene for the following sample: G0081-1 (280-129936-12). The results from both columns have been reported and qualified in accordance with the laboratory's QAS.

The following sample required filtration to reduce matrix interferences: EW7-PM24B-1-35 (280-129936-4).

2-Nitrotoluene failed the recovery criteria low for the MS of sample G0070-1 (280-129936-9) in batch 280-475588. 2-Nitrotoluene, 3-Nitrotoluene and 4-Nitrotoluene failed the recovery criteria low for the MSD of sample G0070-1 (280-129936-9) in batch 280-475588. Refer to the QC report for details.

Samples EW7-PM24B-1-35 (280-129936-4)[20X] and EW7-PM28B-1-35 (280-129936-8)[20X] 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.

ALKALINITY

Samples CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 10/29/2019.

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

AMMONIA

Samples CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 11/06/2019.

Sample EW7-PM28B-1-35 (280-129936-8)[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 CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 11/04/2019 and analyzed on 11/05/2019.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MS and MSD of sample G0070-1 (280-129936-9) in batch 280-476608. 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 CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 11/04/2019 and 11/05/2019.

Samples CA210-1 (280-129936-1)[10X], CA211-1 (280-129936-2)[10X], CA212-1 (280-129936-3)[5X], EW7-PM24B-1-35 (280-129936-4)[2X], EW7-PM29A-1-25 (280-129936-6)[2X] and EW7-PM28A-1-25 (280-129936-7)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE

Samples CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for sulfide in accordance with EPA SW-846

Method 9034. The samples were prepared and analyzed on 10/23/2019.

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

ANIONS (28 DAYS)

Samples CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for anions (28 days) in accordance with 9056A. The samples were analyzed on 11/14/2019.

Sulfate failed the recovery criteria high for the MS and MSD of sample G0070-1 (280-129936-9) in batch 280-477599. 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.

DISSOLVED ORGANIC CARBON

Samples CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14) and G0080-1 (280-129936-15) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 11/04/2019 and 11/05/2019.

The following samples were received unpreserved at pH 7 and acidified to pH<2 prior to analysis: CA210-1 (280-129936-1), CA211-1 (280-129936-2), CA212-1 (280-129936-3), EW7-PM24B-1-35 (280-129936-4), EW7-PM29B-1-35 (280-129936-5), EW7-PM29A-1-25 (280-129936-6), EW7-PM28A-1-25 (280-129936-7), EW7-PM28B-1-35 (280-129936-8), G0070-1 (280-129936-9), CA213-1 (280-129936-10), NW070-1 (280-129936-11), G0081-1 (280-129936-12), G0075-1 (280-129936-13), G0079-1 (280-129936-14), G0080-1 (280-129936-15).

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: 280-129936-1

Client Sample ID: CA210-1 — Lab Sample ID: 280-129936-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.023		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Nitrate Nitrite as N	22		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfate	120		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	310		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	9.7		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: CA211-1 — Lab Sample ID: 280-129936-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia	0.11		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	30		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfate	93		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	200		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.3		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: CA212-1 — Lab Sample ID: 280-129936-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	14		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfate	72		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	190		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.6		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM24B-1-35 — Lab Sample ID: 280-129936-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	1.3		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2,4,6-Trinitrotoluene	11		0.38	0.38	0.15	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.2		0.19	0.11	0.048	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.9		0.19	0.11	0.054	ug/L	1		8330A	Total/NA
HMX	0.37	J M	0.38	0.19	0.083	ug/L	1		8330A	Total/NA
RDX	0.41	M	0.38	0.38	0.15	ug/L	1		8330A	Total/NA
1,3,5-Trinitrobenzene - DL	38	Q D	19	7.6	3.8	ug/L	20		8330A	Total/NA
Ammonia	1.3		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	11		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	110		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	330		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.8		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM29B-1-35 — Lab Sample ID: 280-129936-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.75		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	13	Q	0.97	0.39	0.19	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	3.6	Q	0.39	0.39	0.15	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.3	Q	0.19	0.12	0.049	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EW7-PM29B-1-35 (Continued)
Lab Sample ID: 280-129936-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
4-Amino-2,6-dinitrotoluene	0.98	Q	0.19	0.12	0.056	ug/L	1		8330A	Total/NA
HMX	0.32	J Q M J1	0.39	0.19	0.085	ug/L	1		8330A	Total/NA
HMX	0.58	J1	0.39	0.19	0.085	ug/L	1		8330A	Total/NA
Ammonia	2.4		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.4		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	2.5		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	140		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	350		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.7		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM29A-1-25
Lab Sample ID: 280-129936-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.45		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	11		0.98	0.39	0.20	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	5.9		0.39	0.39	0.16	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.5		0.20	0.12	0.050	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.6	J1	0.20	0.12	0.057	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.5	J1	0.20	0.12	0.057	ug/L	1		8330A	Total/NA
HMX	0.62	M	0.39	0.20	0.086	ug/L	1		8330A	Total/NA
RDX	1.2	M	0.39	0.39	0.15	ug/L	1		8330A	Total/NA
Ammonia	0.12		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	12		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	97		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	230		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.1		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM28A-1-25
Lab Sample ID: 280-129936-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	1.6		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	23	M	1.0	0.40	0.20	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	13		0.40	0.40	0.16	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	3.8		0.20	0.12	0.051	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	3.8		0.20	0.12	0.058	ug/L	1		8330A	Total/NA
HMX	0.87	M	0.40	0.20	0.088	ug/L	1		8330A	Total/NA
RDX	1.1	M	0.40	0.40	0.16	ug/L	1		8330A	Total/NA
Ammonia	0.53		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	16		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	80		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	370		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.8		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 280-129936-1

Client Sample ID: EW7-PM28B-1-35 — Lab Sample ID: 280-129936-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	3.5		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2,4,6-Trinitrotoluene	5.6	Q	0.39	0.39	0.16	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.2	Q	0.19	0.12	0.049	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.3	Q	0.19	0.12	0.056	ug/L	1		8330A	Total/NA
RDX	0.22	J Q M	0.39	0.39	0.15	ug/L	1		8330A	Total/NA
1,3,5-Trinitrobenzene - DL	42	Q D	19	7.8	3.9	ug/L	20		8330A	Total/NA
Ammonia	1.0		0.20	0.10	0.044	mg/L	2		350.1	Total/NA
Nitrogen, Total Kjeldahl	5.2		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	2.7		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	71		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	450		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.5		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0070-1 — Lab Sample ID: 280-129936-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	0.025	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	34	J1	5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	220		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	1.0		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: CA213-1 — Lab Sample ID: 280-129936-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Total Kjeldahl	0.97	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	1.3		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	63		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	130		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.2		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW070-1 — Lab Sample ID: 280-129936-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.018		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.024	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.030	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	3.9	J	5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	51		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.2		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0081-1 — Lab Sample ID: 280-129936-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	3.5		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	1.1	M	0.98	0.39	0.20	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.29	J	0.39	0.39	0.16	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.20	J1	0.20	0.12	0.050	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0081-1 (Continued)

Lab Sample ID: 280-129936-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.36	M J1	0.20	0.12	0.050	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.15	J J1	0.20	0.12	0.056	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.45	M J1	0.20	0.12	0.056	ug/L	1		8330A	Total/NA
Ammonia	0.26		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.36		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	120		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	370		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.8		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0075-1

Lab Sample ID: 280-129936-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.012		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
4-Amino-2,6-dinitrotoluene	0.085	J J1	0.19	0.11	0.055	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.30	J1	0.19	0.11	0.055	ug/L	1		8330A	Total/NA
Ammonia	0.056	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.92	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	1.2		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	150		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	390		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.4		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0079-1

Lab Sample ID: 280-129936-14

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Total Kjeldahl	0.76	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.21		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	17		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	130		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.2		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0080-1

Lab Sample ID: 280-129936-15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0011	J	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.096	J M J1	0.19	0.11	0.048	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.15	J J1	0.19	0.11	0.048	ug/L	1		8330A	Total/NA
HMX	0.18	J M	0.38	0.19	0.083	ug/L	1		8330A	Total/NA
Ammonia	0.064	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	2.7		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	84		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	350		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.9		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: CA210-1
Lab Sample ID: 280-129936-1

Date Collected: 10/21/19 09:50
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.023**		0.0050	0.0020	0.00063	mg/L		10/31/19 12:55	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.20	ug/L		10/29/19 01:14	1
1,3-Dinitrobenzene	0.20	U	0.41	0.20	0.091	ug/L		10/29/19 01:14	1
2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16	ug/L		10/29/19 01:14	1
2,4-Dinitrotoluene	0.20	U	0.41	0.20	0.086	ug/L		10/29/19 01:14	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.066	ug/L		10/29/19 01:14	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.052	ug/L		10/29/19 01:14	1
2-Nitrotoluene	0.20	U	0.41	0.20	0.087	ug/L		10/29/19 01:14	1
3-Nitrotoluene	0.41	U M	0.41	0.41	0.20	ug/L		10/29/19 01:14	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.059	ug/L		10/29/19 01:14	1
4-Nitrotoluene	0.41	U	1.0	0.41	0.20	ug/L		10/29/19 01:14	1
HMX	0.20	U	0.41	0.20	0.089	ug/L		10/29/19 01:14	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		10/29/19 01:14	1
Nitrobenzene	0.20	U	0.41	0.20	0.093	ug/L		10/29/19 01:14	1
RDX	0.41	U	0.41	0.41	0.16	ug/L		10/29/19 01:14	1
Tetryl	0.20	U	0.24	0.20	0.081	ug/L		10/29/19 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 01:14*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/06/19 12:23	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 20:56	1
Nitrate Nitrite as N	**22**		1.0	0.50	0.19	mg/L		11/04/19 18:50	10
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 15:35	1
Sulfate	**120**		5.0	3.0	1.0	mg/L		11/14/19 16:38	1
Total Alkalinity as CaCO3	**310**		10	10	3.1	mg/L		10/29/19 15:28	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**9.7**		1.0	1.0	0.35	mg/L		11/04/19 22:34	1

Client Sample ID: CA211-1
Lab Sample ID: 280-129936-2

Date Collected: 10/21/19 11:25
Matrix: Water
Date Received: 10/22/19 09:30

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		10/31/19 13:09	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.21	ug/L		10/29/19 01:37	1
1,3-Dinitrobenzene	0.21	U	0.41	0.21	0.091	ug/L		10/29/19 01:37	1
2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16	ug/L		10/29/19 01:37	1
2,4-Dinitrotoluene	0.21	U	0.41	0.21	0.086	ug/L		10/29/19 01:37	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.066	ug/L		10/29/19 01:37	1

Client Sample ID: CA211-1
Lab Sample ID: 280-129936-2

Date Collected: 10/21/19 11:25
Matrix: Water
Date Received: 10/22/19 09:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.12	U	0.21	0.12	0.052	ug/L		10/29/19 01:37	1
2-Nitrotoluene	0.21	U	0.41	0.21	0.088	ug/L		10/29/19 01:37	1
3-Nitrotoluene	0.41	U M	0.41	0.41	0.20	ug/L		10/29/19 01:37	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.21	0.12	0.059	ug/L		10/29/19 01:37	1
4-Nitrotoluene	0.41	U	1.0	0.41	0.21	ug/L		10/29/19 01:37	1
HMX	0.21	U	0.41	0.21	0.090	ug/L		10/29/19 01:37	1
MNX	0.41	U	2.1	0.41	0.16	ug/L		10/29/19 01:37	1
Nitrobenzene	0.21	U	0.41	0.21	0.094	ug/L		10/29/19 01:37	1
RDX	0.41	U	0.41	0.41	0.16	ug/L		10/29/19 01:37	1
Tetryl	0.21	U	0.25	0.21	0.082	ug/L		10/29/19 01:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*114*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 01:37*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.11**		0.10	0.050	0.022	mg/L		11/06/19 12:25	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 21:04	1
Nitrate Nitrite as N	**30**		1.0	0.50	0.19	mg/L		11/04/19 18:52	10
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 15:35	1
Sulfate	**93**		5.0	3.0	1.0	mg/L		11/14/19 16:56	1
Total Alkalinity as CaCO3	**200**		10	10	3.1	mg/L		10/29/19 15:52	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.3**		1.0	1.0	0.35	mg/L		11/04/19 23:21	1

Client Sample ID: CA212-1
Lab Sample ID: 280-129936-3

Date Collected: 10/21/19 12:50
Matrix: Water
Date Received: 10/22/19 09:30

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		10/31/19 13:22	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		10/29/19 02:00	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		10/29/19 02:00	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		10/29/19 02:00	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		10/29/19 02:00	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.064	ug/L		10/29/19 02:00	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		10/29/19 02:00	1
2-Nitrotoluene	0.20	U	0.40	0.20	0.085	ug/L		10/29/19 02:00	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.19	ug/L		10/29/19 02:00	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		10/29/19 02:00	1
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		10/29/19 02:00	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		10/29/19 02:00	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		10/29/19 02:00	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		10/29/19 02:00	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		10/29/19 02:00	1

Client Sample ID: CA212-1
Lab Sample ID: 280-129936-3
Date Collected: 10/21/19 12:50
Matrix: Water
Date Received: 10/22/19 09:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		10/29/19 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*110*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 02:00*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/06/19 12:27	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 21:05	1
Nitrate Nitrite as N	**14**		0.50	0.25	0.095	mg/L		11/04/19 18:54	5
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 15:35	1
Sulfate	**72**		5.0	3.0	1.0	mg/L		11/14/19 17:13	1
Total Alkalinity as CaCO3	**190**		10	10	3.1	mg/L		10/29/19 16:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.6**		1.0	1.0	0.35	mg/L		11/04/19 23:35	1

Client Sample ID: EW7-PM24B-1-35
Lab Sample ID: 280-129936-4
Date Collected: 10/19/19 09:55
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**1.3**		0.0050	0.0020	0.00063	mg/L		10/31/19 13:36	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dinitrobenzene	0.19	U M	0.38	0.19	0.084	ug/L		10/31/19 00:55	1
2,4,6-Trinitrotoluene	**11**		0.38	0.38	0.15	ug/L		10/29/19 02:23	1
2,4-Dinitrotoluene	0.19	U M	0.38	0.19	0.079	ug/L		10/31/19 00:55	1
2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.061	ug/L		10/29/19 02:23	1
2-Amino-4,6-dinitrotoluene	**2.2**		0.19	0.11	0.048	ug/L		10/29/19 02:23	1
2-Nitrotoluene	0.19	U M	0.38	0.19	0.081	ug/L		10/29/19 02:23	1
3-Nitrotoluene	0.38	U M	0.38	0.38	0.18	ug/L		10/29/19 02:23	1
4-Amino-2,6-dinitrotoluene	**1.9**		0.19	0.11	0.054	ug/L		10/29/19 02:23	1
4-Nitrotoluene	0.38	U M	0.94	0.38	0.19	ug/L		10/29/19 02:23	1
HMX	**0.37**	**J M**	0.38	0.19	0.083	ug/L		10/29/19 02:23	1
MNX	0.38	U M	1.9	0.38	0.15	ug/L		10/29/19 02:23	1
Nitrobenzene	0.19	U	0.38	0.19	0.086	ug/L		10/29/19 02:23	1
RDX	**0.41**	**M**	0.38	0.38	0.15	ug/L		10/29/19 02:23	1
Tetryl	0.19	U M	0.23	0.19	0.075	ug/L		10/29/19 02:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*87*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 02:23*	*1*
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*	*10/24/19 16:31*	*10/31/19 00:55*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**38**	**Q D**	19	7.6	3.8	ug/L		10/31/19 20:23	20

Client Sample ID: EW7-PM24B-1-35
Lab Sample ID: 280-129936-4

Date Collected: 10/19/19 09:55
Matrix: Water
Date Received: 10/22/19 09:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*0*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/31/19 01:30*	*20*
1,2-Dinitrobenzene	*78*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/31/19 20:23*	*20*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.3**		0.10	0.050	0.022	mg/L		11/06/19 12:29	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 21:06	1
Nitrate Nitrite as N	**11**		0.20	0.10	0.038	mg/L		11/05/19 17:29	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 15:35	1
Sulfate	**110**		5.0	3.0	1.0	mg/L		11/14/19 17:31	1
Total Alkalinity as CaCO3	**330**		10	10	3.1	mg/L		10/29/19 16:09	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.8**		1.0	1.0	0.35	mg/L		11/04/19 23:50	1

Client Sample ID: EW7-PM29B-1-35
Lab Sample ID: 280-129936-5

Date Collected: 10/19/19 11:55
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.75**		0.0050	0.0020	0.00063	mg/L		10/31/19 13:50	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**13**	**Q**	0.97	0.39	0.19	ug/L		10/29/19 02:46	1
1,3-Dinitrobenzene	0.19	U Q	0.39	0.19	0.086	ug/L		10/29/19 02:46	1
2,4,6-Trinitrotoluene	**3.6**	**Q**	0.39	0.39	0.15	ug/L		10/29/19 02:46	1
2,4-Dinitrotoluene	0.19	U Q	0.39	0.19	0.081	ug/L		10/29/19 02:46	1
2,6-Dinitrotoluene	0.19	U Q	0.19	0.19	0.062	ug/L		10/29/19 02:46	1
2-Amino-4,6-dinitrotoluene	**1.3**	**Q**	0.19	0.12	0.049	ug/L		10/29/19 02:46	1
2-Nitrotoluene	0.19	U Q	0.39	0.19	0.083	ug/L		10/29/19 02:46	1
3-Nitrotoluene	0.39	U Q M	0.39	0.39	0.19	ug/L		10/29/19 02:46	1
4-Amino-2,6-dinitrotoluene	**0.98**	**Q**	0.19	0.12	0.056	ug/L		10/29/19 02:46	1
4-Nitrotoluene	0.39	U Q M	0.97	0.39	0.19	ug/L		10/29/19 02:46	1
HMX	**0.32**	**J Q M J1**	0.39	0.19	0.085	ug/L		10/29/19 02:46	1
HMX	**0.58**	**J1**	0.39	0.19	0.085	ug/L		10/31/19 02:05	1
MNX	0.39	U M	1.9	0.39	0.15	ug/L		10/29/19 02:46	1
Nitrobenzene	0.19	U Q	0.39	0.19	0.088	ug/L		10/29/19 02:46	1
RDX	0.39	U Q M	0.39	0.39	0.15	ug/L		10/29/19 02:46	1
Tetryl	0.19	U Q M	0.23	0.19	0.077	ug/L		10/29/19 02:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*80*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/29/19 02:46*	*1*
1,2-Dinitrobenzene	*90*		*83 - 119*	*10/24/19 16:31*	*10/31/19 02:05*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.4**		0.10	0.050	0.022	mg/L		11/06/19 12:43	1
Nitrogen, Total Kjeldahl	**2.4**		1.0	1.0	0.69	mg/L		11/05/19 21:08	1
Nitrate Nitrite as N	**2.5**		0.10	0.050	0.019	mg/L		11/04/19 19:10	1

Client Sample ID: EW7-PM29B-1-35
Lab Sample ID: 280-129936-5
Date Collected: 10/19/19 11:55
Matrix: Water
Date Received: 10/22/19 09:30

General Chemistry (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 15:35	1
Sulfate	**140**		5.0	3.0	1.0	mg/L		11/14/19 17:48	1
Total Alkalinity as CaCO3	**350**		10	10	3.1	mg/L		10/29/19 16:18	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.7**		1.0	1.0	0.35	mg/L		11/05/19 00:07	1

Client Sample ID: EW7-PM29A-1-25
Lab Sample ID: 280-129936-6
Date Collected: 10/19/19 14:05
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.45**		0.0050	0.0020	0.00063	mg/L		10/31/19 14:03	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**11**		0.98	0.39	0.20	ug/L		10/29/19 03:09	1
1,3-Dinitrobenzene	0.20	U M	0.39	0.20	0.087	ug/L		10/31/19 02:40	1
2,4,6-Trinitrotoluene	**5.9**		0.39	0.39	0.16	ug/L		10/29/19 03:09	1
2,4-Dinitrotoluene	0.20	U M	0.39	0.20	0.082	ug/L		10/31/19 02:40	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.063	ug/L		10/29/19 03:09	1
2-Amino-4,6-dinitrotoluene	**1.5**		0.20	0.12	0.050	ug/L		10/29/19 03:09	1
2-Nitrotoluene	0.20	U M	0.39	0.20	0.084	ug/L		10/29/19 03:09	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		10/29/19 03:09	1
4-Amino-2,6-dinitrotoluene	**1.6**	**J1**	0.20	0.12	0.057	ug/L		10/29/19 03:09	1
4-Amino-2,6-dinitrotoluene	**2.5**	**J1**	0.20	0.12	0.057	ug/L		10/31/19 02:40	1
4-Nitrotoluene	0.39	U M	0.98	0.39	0.20	ug/L		10/29/19 03:09	1
HMX	**0.62**	**M**	0.39	0.20	0.086	ug/L		10/29/19 03:09	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		10/29/19 03:09	1
Nitrobenzene	0.20	U	0.39	0.20	0.089	ug/L		10/29/19 03:09	1
RDX	**1.2**	**M**	0.39	0.39	0.15	ug/L		10/29/19 03:09	1
Tetryl	0.20	U M	0.24	0.20	0.078	ug/L		10/29/19 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*88*		*83 - 119*	*10/24/19 16:31*	*10/29/19 03:09*	*1*
1,2-Dinitrobenzene	*90*		*83 - 119*	*10/24/19 16:31*	*10/31/19 02:40*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.12**		0.10	0.050	0.022	mg/L		11/06/19 12:45	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 21:25	1
Nitrate Nitrite as N	**12**		0.20	0.10	0.038	mg/L		11/04/19 19:12	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**97**		5.0	3.0	1.0	mg/L		11/14/19 18:06	1
Total Alkalinity as CaCO3	**230**		10	10	3.1	mg/L		10/29/19 16:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.1**		1.0	1.0	0.35	mg/L		11/05/19 00:22	1

Client Sample ID: EW7-PM28A-1-25
Lab Sample ID: 280-129936-7

Date Collected: 10/19/19 16:20
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**1.6**		0.0050	0.0020	0.00063	mg/L		10/31/19 14:17	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**23**	**M**	1.0	0.40	0.20	ug/L		10/29/19 03:32	1
1,3-Dinitrobenzene	0.20	U M Q	0.40	0.20	0.089	ug/L		10/31/19 03:15	1
2,4,6-Trinitrotoluene	**13**		0.40	0.40	0.16	ug/L		10/29/19 03:32	1
2,4-Dinitrotoluene	0.20	U Q	0.40	0.20	0.084	ug/L		10/31/19 03:15	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		10/29/19 03:32	1
2-Amino-4,6-dinitrotoluene	**3.8**		0.20	0.12	0.051	ug/L		10/29/19 03:32	1
2-Nitrotoluene	0.20	U M	0.40	0.20	0.086	ug/L		10/29/19 03:32	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.20	ug/L		10/29/19 03:32	1
4-Amino-2,6-dinitrotoluene	**3.8**		0.20	0.12	0.058	ug/L		10/29/19 03:32	1
4-Nitrotoluene	0.40	U M	1.0	0.40	0.20	ug/L		10/29/19 03:32	1
HMX	**0.87**	**M**	0.40	0.20	0.088	ug/L		10/29/19 03:32	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		10/29/19 03:32	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		10/29/19 03:32	1
RDX	**1.1**	**M**	0.40	0.40	0.16	ug/L		10/29/19 03:32	1
Tetryl	0.20	U M	0.24	0.20	0.080	ug/L		10/29/19 03:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*86*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 03:32*	*1*
1,2-Dinitrobenzene	*147*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/31/19 03:15*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.53**		0.10	0.050	0.022	mg/L		11/06/19 12:47	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 21:23	1
Nitrate Nitrite as N	**16**		0.20	0.10	0.038	mg/L		11/04/19 19:14	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**80**		5.0	3.0	1.0	mg/L		11/14/19 18:58	1
Total Alkalinity as CaCO3	**370**		10	10	3.1	mg/L		10/29/19 16:35	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.8**		1.0	1.0	0.35	mg/L		11/05/19 02:40	1

Client Sample ID: EW7-PM28B-1-35
Lab Sample ID: 280-129936-8

Date Collected: 10/20/19 12:10
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**3.5**		0.0050	0.0020	0.00063	mg/L		10/31/19 14:31	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dinitrobenzene	0.19	U M Q	0.39	0.19	0.086	ug/L		10/31/19 03:50	1
2,4,6-Trinitrotoluene	**5.6**	**Q**	0.39	0.39	0.16	ug/L		10/29/19 05:04	1
2,4-Dinitrotoluene	0.19	U Q	0.39	0.19	0.082	ug/L		10/29/19 05:04	1
2,6-Dinitrotoluene	0.19	U Q	0.19	0.19	0.063	ug/L		10/29/19 05:04	1

Client Sample ID: EW7-PM28B-1-35

Date Collected: 10/20/19 12:10
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-8

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	**2.2**	**Q**	0.19	0.12	0.049	ug/L		10/29/19 05:04	1
2-Nitrotoluene	0.19	U Q	0.39	0.19	0.083	ug/L		10/29/19 05:04	1
3-Nitrotoluene	0.39	U Q M	0.39	0.39	0.19	ug/L		10/29/19 05:04	1
4-Amino-2,6-dinitrotoluene	**2.3**	**Q**	0.19	0.12	0.056	ug/L		10/29/19 05:04	1
4-Nitrotoluene	0.39	U Q M	0.97	0.39	0.19	ug/L		10/29/19 05:04	1
HMX	0.19	U Q	0.39	0.19	0.085	ug/L		10/29/19 05:04	1
MNX	0.39	U M	1.9	0.39	0.15	ug/L		10/29/19 05:04	1
Nitrobenzene	0.19	U Q	0.39	0.19	0.089	ug/L		10/29/19 05:04	1
RDX	**0.22**	**J Q M**	0.39	0.39	0.15	ug/L		10/29/19 05:04	1
Tetryl	0.19	U Q M	0.23	0.19	0.077	ug/L		10/29/19 05:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*81*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/29/19 05:04*	*1*
1,2-Dinitrobenzene	*141*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/31/19 03:50*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**42**	**Q D**	19	7.8	3.9	ug/L		10/31/19 20:46	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*0*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/31/19 04:25*	*20*
1,2-Dinitrobenzene	*82*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/31/19 20:46*	*20*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.0**		0.20	0.10	0.044	mg/L		11/06/19 15:43	2
Nitrogen, Total Kjeldahl	**5.2**		1.0	1.0	0.69	mg/L		11/05/19 21:24	1
Nitrate Nitrite as N	**2.7**		0.10	0.050	0.019	mg/L		11/04/19 19:16	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**71**		5.0	3.0	1.0	mg/L		11/14/19 19:16	1
Total Alkalinity as CaCO3	**450**		10	10	3.1	mg/L		10/29/19 16:46	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.5**		1.0	1.0	0.35	mg/L		11/05/19 02:55	1

Client Sample ID: G0070-1

Date Collected: 10/21/19 14:45
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-9

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		10/31/19 12:01	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.38	U	0.95	0.38	0.19	ug/L		10/29/19 05:27	1
1,3-Dinitrobenzene	0.19	U	0.38	0.19	0.085	ug/L		10/29/19 05:27	1
2,4,6-Trinitrotoluene	0.38	U	0.38	0.38	0.15	ug/L		10/29/19 05:27	1
2,4-Dinitrotoluene	0.19	U	0.38	0.19	0.080	ug/L		10/29/19 05:27	1
2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.062	ug/L		10/29/19 05:27	1

Client Sample ID: G0070-1
Lab Sample ID: 280-129936-9

Date Collected: 10/21/19 14:45
Matrix: Water
Date Received: 10/22/19 09:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.11	U	0.19	0.11	0.048	ug/L		10/29/19 05:27	1
2-Nitrotoluene	0.19	U J1	0.38	0.19	0.082	ug/L		10/29/19 05:27	1
3-Nitrotoluene	0.38	U J1 M	0.38	0.38	0.19	ug/L		10/29/19 05:27	1
4-Amino-2,6-dinitrotoluene	0.11	U	0.19	0.11	0.055	ug/L		10/29/19 05:27	1
4-Nitrotoluene	0.38	U J1	0.95	0.38	0.19	ug/L		10/29/19 05:27	1
HMX	0.19	U	0.38	0.19	0.084	ug/L		10/29/19 05:27	1
MNX	0.38	U	1.9	0.38	0.15	ug/L		10/29/19 05:27	1
Nitrobenzene	0.19	U	0.38	0.19	0.087	ug/L		10/31/19 05:35	1
RDX	0.38	U	0.38	0.38	0.15	ug/L		10/29/19 05:27	1
Tetryl	0.19	U	0.23	0.19	0.076	ug/L		10/29/19 05:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*91*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 05:27*	*1*
1,2-Dinitrobenzene	*87*		*83 - 119*	*10/24/19 16:31*	*10/31/19 05:35*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/06/19 12:57	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		11/05/19 21:13	1
Nitrate Nitrite as N	**0.025**	**J**	0.10	0.050	0.019	mg/L		11/04/19 19:22	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**34**	**J1**	5.0	3.0	1.0	mg/L		11/14/19 15:29	1
Total Alkalinity as CaCO3	**220**		10	10	3.1	mg/L		10/29/19 16:54	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**1.0**		1.0	1.0	0.35	mg/L		11/05/19 01:23	1

Client Sample ID: CA213-1
Lab Sample ID: 280-129936-10

Date Collected: 10/21/19 14:25
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U M	0.0050	0.0020	0.00063	mg/L		10/31/19 14:45	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.21	ug/L		10/29/19 07:21	1
1,3-Dinitrobenzene	0.21	U	0.41	0.21	0.091	ug/L		10/29/19 07:21	1
2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16	ug/L		10/29/19 07:21	1
2,4-Dinitrotoluene	0.21	U	0.41	0.21	0.086	ug/L		10/29/19 07:21	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.066	ug/L		10/29/19 07:21	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.21	0.12	0.052	ug/L		10/29/19 07:21	1
2-Nitrotoluene	0.21	U	0.41	0.21	0.088	ug/L		10/29/19 07:21	1
3-Nitrotoluene	0.41	U M	0.41	0.41	0.20	ug/L		10/29/19 07:21	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.21	0.12	0.059	ug/L		10/29/19 07:21	1
4-Nitrotoluene	0.41	U	1.0	0.41	0.21	ug/L		10/29/19 07:21	1
HMX	0.21	U	0.41	0.21	0.090	ug/L		10/29/19 07:21	1
MNX	0.41	U	2.1	0.41	0.16	ug/L		10/29/19 07:21	1
Nitrobenzene	0.21	U M	0.41	0.21	0.094	ug/L		10/29/19 07:21	1

Client Sample ID: CA213-1
Lab Sample ID: 280-129936-10
Date Collected: 10/21/19 14:25
Matrix: Water
Date Received: 10/22/19 09:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
RDX	0.41	U	0.41	0.41	0.16	ug/L		10/29/19 07:21	1
Tetryl	0.21	U	0.25	0.21	0.082	ug/L		10/29/19 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*84*		*83 - 119*	*10/24/19 16:31*	*10/29/19 07:21*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/06/19 13:15	1
Nitrogen, Total Kjeldahl	**0.97**	**J**	1.0	1.0	0.69	mg/L		11/05/19 21:26	1
Nitrate Nitrite as N	**1.3**		0.10	0.050	0.019	mg/L		11/04/19 19:28	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**63**		5.0	3.0	1.0	mg/L		11/14/19 19:33	1
Total Alkalinity as CaCO3	**130**		10	10	3.1	mg/L		10/29/19 17:02	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.2**		1.0	1.0	0.35	mg/L		11/05/19 03:12	1

Client Sample ID: NW070-1
Lab Sample ID: 280-129936-11
Date Collected: 10/21/19 16:15
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.018**		0.0050	0.0020	0.00063	mg/L		10/31/19 15:12	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.20	ug/L		10/29/19 07:44	1
1,3-Dinitrobenzene	0.20	U	0.41	0.20	0.090	ug/L		10/29/19 07:44	1
2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16	ug/L		10/29/19 07:44	1
2,4-Dinitrotoluene	0.20	U	0.41	0.20	0.085	ug/L		10/29/19 07:44	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.066	ug/L		10/29/19 07:44	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.052	ug/L		10/29/19 07:44	1
2-Nitrotoluene	0.20	U	0.41	0.20	0.087	ug/L		10/29/19 07:44	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		10/29/19 07:44	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.059	ug/L		10/29/19 07:44	1
4-Nitrotoluene	0.41	U	1.0	0.41	0.20	ug/L		10/29/19 07:44	1
HMX	0.20	U	0.41	0.20	0.089	ug/L		10/29/19 07:44	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		10/29/19 07:44	1
Nitrobenzene	0.20	U	0.41	0.20	0.093	ug/L		10/29/19 07:44	1
RDX	0.41	U	0.41	0.41	0.16	ug/L		10/29/19 07:44	1
Tetryl	0.20	U	0.24	0.20	0.081	ug/L		10/29/19 07:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*83*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 07:44*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.024**	**J**	0.10	0.050	0.022	mg/L		11/06/19 13:17	1

Client Sample ID: NW070-1
Lab Sample ID: 280-129936-11
Date Collected: 10/21/19 16:15
Matrix: Water
Date Received: 10/22/19 09:30

General Chemistry (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	5.0	U	5.0	5.0	3.4	mg/L		11/05/19 21:28	1
Nitrate Nitrite as N	**0.030**	**J**	0.10	0.050	0.019	mg/L		11/04/19 19:42	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**3.9**	**J**	5.0	3.0	1.0	mg/L		11/14/19 19:51	1
Total Alkalinity as CaCO3	**51**		10	10	3.1	mg/L		10/29/19 17:09	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.2**		1.0	1.0	0.35	mg/L		11/05/19 03:29	1

Client Sample ID: G0081-1
Lab Sample ID: 280-129936-12
Date Collected: 10/21/19 16:15
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**3.5**		0.0050	0.0020	0.00063	mg/L		10/31/19 15:39	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.1**	**M**	0.98	0.39	0.20	ug/L		10/29/19 08:07	1
1,3-Dinitrobenzene	0.20	U	0.39	0.20	0.087	ug/L		10/29/19 08:07	1
2,4,6-Trinitrotoluene	**0.29**	**J**	0.39	0.39	0.16	ug/L		10/29/19 08:07	1
2,4-Dinitrotoluene	0.20	U	0.39	0.20	0.082	ug/L		10/29/19 08:07	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.063	ug/L		10/29/19 08:07	1
2-Amino-4,6-dinitrotoluene	**0.20**	**J1**	0.20	0.12	0.050	ug/L		10/29/19 08:07	1
2-Amino-4,6-dinitrotoluene	**0.36**	**M J1**	0.20	0.12	0.050	ug/L		10/31/19 08:30	1
2-Nitrotoluene	0.20	U	0.39	0.20	0.084	ug/L		10/29/19 08:07	1
3-Nitrotoluene	0.39	U M	0.39	0.39	0.19	ug/L		10/29/19 08:07	1
4-Amino-2,6-dinitrotoluene	**0.15**	**J J1**	0.20	0.12	0.056	ug/L		10/29/19 08:07	1
4-Amino-2,6-dinitrotoluene	**0.45**	**M J1**	0.20	0.12	0.056	ug/L		10/31/19 08:30	1
4-Nitrotoluene	0.39	U	0.98	0.39	0.20	ug/L		10/29/19 08:07	1
HMX	0.20	U	0.39	0.20	0.086	ug/L		10/29/19 08:07	1
MNX	0.39	U	2.0	0.39	0.15	ug/L		10/29/19 08:07	1
Nitrobenzene	0.20	U	0.39	0.20	0.089	ug/L		10/31/19 08:30	1
RDX	0.39	U	0.39	0.39	0.15	ug/L		10/29/19 08:07	1
Tetryl	0.20	U M	0.23	0.20	0.078	ug/L		10/29/19 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*83*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 08:07*	*1*
1,2-Dinitrobenzene	*94*		*83 - 119*	*10/24/19 16:31*	*10/31/19 08:30*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.26**		0.10	0.050	0.022	mg/L		11/06/19 13:19	1
Nitrogen, Total Kjeldahl	5.0	U	5.0	5.0	3.4	mg/L		11/05/19 21:31	1
Nitrate Nitrite as N	**0.36**		0.10	0.050	0.019	mg/L		11/04/19 19:44	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**120**		5.0	3.0	1.0	mg/L		11/14/19 20:08	1
Total Alkalinity as CaCO3	**370**		10	10	3.1	mg/L		10/29/19 18:01	1

Client Sample ID: G0081-1
Lab Sample ID: 280-129936-12
Date Collected: 10/21/19 16:15
Matrix: Water
Date Received: 10/22/19 09:30

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.8**		1.0	1.0	0.35	mg/L		11/05/19 03:43	1

Client Sample ID: G0075-1
Lab Sample ID: 280-129936-13
Date Collected: 10/21/19 12:00
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.012**		0.0050	0.0020	0.00063	mg/L		10/31/19 15:53	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.38	U	0.95	0.38	0.19	ug/L		10/29/19 08:30	1
1,3-Dinitrobenzene	0.19	U	0.38	0.19	0.084	ug/L		10/29/19 08:30	1
2,4,6-Trinitrotoluene	0.38	U	0.38	0.38	0.15	ug/L		10/29/19 08:30	1
2,4-Dinitrotoluene	0.19	U	0.38	0.19	0.079	ug/L		10/29/19 08:30	1
2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.061	ug/L		10/29/19 08:30	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.19	0.11	0.048	ug/L		10/29/19 08:30	1
2-Nitrotoluene	0.19	U	0.38	0.19	0.081	ug/L		10/29/19 08:30	1
3-Nitrotoluene	0.38	U M	0.38	0.38	0.18	ug/L		10/29/19 08:30	1
4-Amino-2,6-dinitrotoluene	**0.085**	**J J1**	0.19	0.11	0.055	ug/L		10/29/19 08:30	1
4-Amino-2,6-dinitrotoluene	**0.30**	**J1**	0.19	0.11	0.055	ug/L		10/31/19 09:05	1
4-Nitrotoluene	0.38	U	0.95	0.38	0.19	ug/L		10/29/19 08:30	1
HMX	0.19	U	0.38	0.19	0.083	ug/L		10/29/19 08:30	1
MNX	0.38	U	1.9	0.38	0.15	ug/L		10/29/19 08:30	1
Nitrobenzene	0.19	U	0.38	0.19	0.086	ug/L		10/29/19 08:30	1
RDX	0.38	U	0.38	0.38	0.15	ug/L		10/29/19 08:30	1
Tetryl	0.19	U M	0.23	0.19	0.075	ug/L		10/29/19 08:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*85*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 08:30*	*1*
1,2-Dinitrobenzene	*80*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/31/19 09:05*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.056**	**J**	0.10	0.050	0.022	mg/L		11/06/19 13:21	1
Nitrogen, Total Kjeldahl	**0.92**	**J**	1.0	1.0	0.69	mg/L		11/05/19 21:33	1
Nitrate Nitrite as N	**1.2**		0.10	0.050	0.019	mg/L		11/04/19 19:46	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**150**		5.0	3.0	1.0	mg/L		11/14/19 20:26	1
Total Alkalinity as CaCO3	**390**		10	10	3.1	mg/L		10/29/19 18:21	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.4**		1.0	1.0	0.35	mg/L		11/05/19 03:58	1

Client Sample ID: G0079-1
Lab Sample ID: 280-129936-14

Date Collected: 10/21/19 10:45
Matrix: Water
Date Received: 10/22/19 09:30

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		10/31/19 16:07	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.38	U	0.96	0.38	0.19	ug/L		10/29/19 10:02	1
1,3-Dinitrobenzene	0.19	U	0.38	0.19	0.085	ug/L		10/29/19 10:02	1
2,4,6-Trinitrotoluene	0.38	U	0.38	0.38	0.15	ug/L		10/29/19 10:02	1
2,4-Dinitrotoluene	0.19	U	0.38	0.19	0.081	ug/L		10/29/19 10:02	1
2,6-Dinitrotoluene	0.19	U M	0.19	0.19	0.062	ug/L		10/31/19 09:40	1
2-Amino-4,6-dinitrotoluene	0.12	U M	0.19	0.12	0.049	ug/L		10/29/19 10:02	1
2-Nitrotoluene	0.19	U	0.38	0.19	0.082	ug/L		10/29/19 10:02	1
3-Nitrotoluene	0.38	U	0.38	0.38	0.19	ug/L		10/29/19 10:02	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.19	0.12	0.055	ug/L		10/29/19 10:02	1
4-Nitrotoluene	0.38	U	0.96	0.38	0.19	ug/L		10/29/19 10:02	1
HMX	0.19	U	0.38	0.19	0.084	ug/L		10/31/19 09:40	1
MNX	0.38	U	1.9	0.38	0.15	ug/L		10/29/19 10:02	1
Nitrobenzene	0.19	U	0.38	0.19	0.088	ug/L		10/29/19 10:02	1
RDX	0.38	U	0.38	0.38	0.15	ug/L		10/29/19 10:02	1
Tetryl	0.19	U M	0.23	0.19	0.076	ug/L		10/29/19 10:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*90*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 10:02*	*1*
1,2-Dinitrobenzene	*91*		*83 - 119*	*10/24/19 16:31*	*10/31/19 09:40*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/06/19 13:23	1
Nitrogen, Total Kjeldahl	**0.76**	**J**	1.0	1.0	0.69	mg/L		11/05/19 21:34	1
Nitrate Nitrite as N	**0.21**		0.10	0.050	0.019	mg/L		11/04/19 19:48	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**17**		5.0	3.0	1.0	mg/L		11/14/19 20:43	1
Total Alkalinity as CaCO3	**130**		10	10	3.1	mg/L		10/29/19 18:28	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.2**		1.0	1.0	0.35	mg/L		11/05/19 04:15	1

Client Sample ID: G0080-1
Lab Sample ID: 280-129936-15

Date Collected: 10/21/19 09:10
Matrix: Water
Date Received: 10/22/19 09:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0011**	**J**	0.0050	0.0020	0.00063	mg/L		10/31/19 16:20	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.38	U	0.95	0.38	0.19	ug/L		10/29/19 10:25	1
1,3-Dinitrobenzene	0.19	U	0.38	0.19	0.084	ug/L		10/29/19 10:25	1
2,4,6-Trinitrotoluene	0.38	U	0.38	0.38	0.15	ug/L		10/29/19 10:25	1
2,4-Dinitrotoluene	0.19	U	0.38	0.19	0.079	ug/L		10/29/19 10:25	1

Client Sample ID: G0080-1
Date Collected: 10/21/19 09:10
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-15
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.061	ug/L		10/29/19 10:25	1
2-Amino-4,6-dinitrotoluene	**0.096**	**J M J1**	0.19	0.11	0.048	ug/L		10/29/19 10:25	1
2-Amino-4,6-dinitrotoluene	**0.15**	**J J1**	0.19	0.11	0.048	ug/L		10/31/19 10:15	1
2-Nitrotoluene	0.19	U	0.38	0.19	0.081	ug/L		10/29/19 10:25	1
3-Nitrotoluene	0.38	U M	0.38	0.38	0.18	ug/L		10/29/19 10:25	1
4-Amino-2,6-dinitrotoluene	0.11	U M	0.19	0.11	0.055	ug/L		10/31/19 10:15	1
4-Nitrotoluene	0.38	U	0.95	0.38	0.19	ug/L		10/29/19 10:25	1
HMX	**0.18**	**J M**	0.38	0.19	0.083	ug/L		10/29/19 10:25	1
MNX	0.38	U	1.9	0.38	0.15	ug/L		10/29/19 10:25	1
Nitrobenzene	0.19	U	0.38	0.19	0.086	ug/L		10/29/19 10:25	1
RDX	0.38	U M	0.38	0.38	0.15	ug/L		10/29/19 10:25	1
Tetryl	0.19	U	0.23	0.19	0.075	ug/L		10/29/19 10:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*86*	*M*	*83 - 119*	*10/24/19 16:31*	*10/29/19 10:25*	*1*
1,2-Dinitrobenzene	*80*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/31/19 10:15*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.064**	**J**	0.10	0.050	0.022	mg/L		11/06/19 13:25	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 21:35	1
Nitrate Nitrite as N	**2.7**		0.10	0.050	0.019	mg/L		11/04/19 19:50	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1
Sulfate	**84**		5.0	3.0	1.0	mg/L		11/14/19 21:01	1
Total Alkalinity as CaCO3	**350**		10	10	3.1	mg/L		10/29/19 18:38	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.9**		1.0	1.0	0.35	mg/L		11/05/19 04:30	1

Default Detection Limits

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

Job ID: 280-129936-1

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 CaCO3	10	3.1	mg/L

General Chemistry

Prep: 351.2

Analyte	LOQ	DL	Units
Nitrogen, Total Kjeldahl	1.0	0.69	mg/L

General Chemistry

Prep: 9030B

Analyte	LOQ	DL	Units
Sulfide	4.0	0.79	mg/L

General Chemistry - Dissolved

Analyte	LOQ	DL	Units
Dissolved Organic Carbon - Quad	1.0	0.35	mg/L

Surrogate Summary

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

Job ID: 280-129936-1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
		12DNB1						
Lab Sample ID	Client Sample ID	(83-119)						
280-129936-1	CA210-1	95 M						
280-129936-2	CA211-1	114 M						
280-129936-3	CA212-1	110 M						
280-129936-4	EW7-PM24B-1-35	87 M						
280-129936-4	EW7-PM24B-1-35	100 M						
280-129936-4 - DL	EW7-PM24B-1-35	0 Q						
280-129936-4 - DL	EW7-PM24B-1-35	78 Q						
280-129936-5	EW7-PM29B-1-35	80 Q						
280-129936-5	EW7-PM29B-1-35	90						
280-129936-6	EW7-PM29A-1-25	88						
280-129936-6	EW7-PM29A-1-25	90						
280-129936-7	EW7-PM28A-1-25	86 M						
280-129936-7	EW7-PM28A-1-25	147 Q						
280-129936-8	EW7-PM28B-1-35	81 Q						
280-129936-8	EW7-PM28B-1-35	141 Q						
280-129936-8 - DL	EW7-PM28B-1-35	0 Q						
280-129936-8 - DL	EW7-PM28B-1-35	82 Q						
280-129936-9	G0070-1	91 M						
280-129936-9	G0070-1	87						
280-129936-9 MS	G0070-1	89						
280-129936-9 MS	G0070-1	91						
280-129936-9 MSD	G0070-1	86						
280-129936-9 MSD	G0070-1	86						
280-129936-10	CA213-1	84						
280-129936-11	NW070-1	83 M						
280-129936-12	G0081-1	83 M						
280-129936-12	G0081-1	94						
280-129936-13	G0075-1	85 M						
280-129936-13	G0075-1	80 Q						
280-129936-14	G0079-1	90 M						
280-129936-14	G0079-1	91						
280-129936-15	G0080-1	86 M						
280-129936-15	G0080-1	80 Q						
LCS 280-475259/2-A	Lab Control Sample	90						
LCS 280-475259/3-A	Lab Control Sample	85						
MB 280-475259/1-A	Method Blank	68 Q						

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-476033/7
Matrix: Water
Analysis Batch: 476033

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		10/31/19 10:43	1

Lab Sample ID: LCS 280-476033/5
Matrix: Water
Analysis Batch: 476033

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0730	0.0683		mg/L		94	73 - 125

Lab Sample ID: LCSD 280-476033/6
Matrix: Water
Analysis Batch: 476033

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0730	0.0713		mg/L		98	73 - 125	4	20

Lab Sample ID: 280-129936-9 MS
Matrix: Water
Analysis Batch: 476033

Client Sample ID: G0070-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0020	U	0.0730	0.0622		mg/L		85	73 - 125

Lab Sample ID: 280-129936-9 MSD
Matrix: Water
Analysis Batch: 476033

Client Sample ID: G0070-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0020	U	0.0730	0.0650		mg/L		89	73 - 125	4	20

Lab Sample ID: 280-129936-9 DU
Matrix: Water
Analysis Batch: 476033

Client Sample ID: G0070-1
Prep Type: Total/NA

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

Lab Sample ID: 280-129936-11 DU
Matrix: Water
Analysis Batch: 476033

Client Sample ID: NW070-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Methane	0.018		0.0204		mg/L		12	20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-475259/1-A
Matrix: Water
Analysis Batch: 475588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475259

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		10/29/19 00:05	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		10/29/19 00:05	1
2,4,6-Trinitrotoluene	0.40	U Q	0.40	0.40	0.16	ug/L		10/29/19 00:05	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		10/29/19 00:05	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		10/29/19 00:05	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		10/29/19 00:05	1
2-Nitrotoluene	0.20	U	0.40	0.20	0.086	ug/L		10/29/19 00:05	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.20	ug/L		10/29/19 00:05	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		10/29/19 00:05	1
4-Nitrotoluene	0.40	U Q	1.0	0.40	0.20	ug/L		10/29/19 00:05	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		10/29/19 00:05	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		10/29/19 00:05	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		10/29/19 00:05	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		10/29/19 00:05	1
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		10/29/19 00:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*68*	*Q*	*83 - 119*	*10/24/19 16:31*	*10/29/19 00:05*	*1*

Lab Sample ID: LCS 280-475259/2-A
Matrix: Water
Analysis Batch: 475588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	1.87		ug/L		94	73 - 125
1,3-Dinitrobenzene	2.00	1.85		ug/L		93	78 - 120
2,4,6-Trinitrotoluene	2.00	1.76		ug/L		88	71 - 123
2,4-Dinitrotoluene	2.00	1.78		ug/L		89	78 - 120
2,6-Dinitrotoluene	2.00	1.76		ug/L		88	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.77		ug/L		88	79 - 120
2-Nitrotoluene	2.00	1.55		ug/L		78	70 - 127
3-Nitrotoluene	2.00	1.67		ug/L		83	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.61		ug/L		81	76 - 125
4-Nitrotoluene	2.00	1.67		ug/L		83	71 - 127
HMX	2.00	1.84		ug/L		92	65 - 135
Nitrobenzene	2.00	1.75		ug/L		87	65 - 134
RDX	2.00	1.86		ug/L		93	68 - 130
Tetryl	2.00	2.01		ug/L		101	64 - 128

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

Lab Sample ID: LCS 280-475259/3-A
Matrix: Water
Analysis Batch: 475588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.36		ug/L		101	57 - 132

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	85		83 - 119

Lab Sample ID: 280-129936-9 MS — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 475588 — **Prep Batch: 475259**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.38	U	1.93	1.79		ug/L		93	73 - 125
1,3-Dinitrobenzene	0.19	U	1.93	1.76		ug/L		91	78 - 120
2,4,6-Trinitrotoluene	0.38	U	1.93	1.70		ug/L		88	71 - 123
2,4-Dinitrotoluene	0.19	U	1.93	1.68		ug/L		87	78 - 120
2,6-Dinitrotoluene	0.19	U	1.93	1.68		ug/L		87	77 - 127
2-Amino-4,6-dinitrotoluene	0.11	U	1.93	1.63		ug/L		85	79 - 120
2-Nitrotoluene	0.19	U J1	1.93	1.33	J1	ug/L		69	70 - 127
3-Nitrotoluene	0.38	U J1 M	1.93	1.44		ug/L		75	73 - 125
4-Amino-2,6-dinitrotoluene	0.11	U	1.93	1.53		ug/L		79	76 - 125
4-Nitrotoluene	0.38	U J1	1.93	1.52		ug/L		79	71 - 127
HMX	0.19	U	1.93	1.71	M	ug/L		89	65 - 135
Nitrobenzene	0.12	J M	1.93	1.65		ug/L		79	65 - 134
RDX	0.38	U	1.93	1.82	M	ug/L		94	68 - 130
Tetryl	0.19	U	1.93	1.96		ug/L		102	64 - 128

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dinitrobenzene	89		83 - 119

Lab Sample ID: 280-129936-9 MS — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 475588 — **Prep Batch: 475259**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	0.38	U	2.25	2.23	M	ug/L		99	57 - 132

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dinitrobenzene	91		83 - 119

Lab Sample ID: 280-129936-9 MSD — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 475588 — **Prep Batch: 475259**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.38	U	1.91	1.74		ug/L		91	73 - 125	3	30
1,3-Dinitrobenzene	0.19	U	1.91	1.71		ug/L		90	78 - 120	3	30
2,4,6-Trinitrotoluene	0.38	U	1.91	1.64		ug/L		86	71 - 123	4	30
2,4-Dinitrotoluene	0.19	U	1.91	1.58		ug/L		83	78 - 120	6	30
2,6-Dinitrotoluene	0.19	U	1.91	1.57		ug/L		82	77 - 127	7	30
2-Amino-4,6-dinitrotoluene	0.11	U	1.91	1.58		ug/L		83	79 - 120	3	30
2-Nitrotoluene	0.19	U J1	1.91	1.07	J1	ug/L		56	70 - 127	22	30
3-Nitrotoluene	0.38	U J1 M	1.91	1.15	J1	ug/L		60	73 - 125	22	30
4-Amino-2,6-dinitrotoluene	0.11	U	1.91	1.47		ug/L		77	76 - 125	4	30
4-Nitrotoluene	0.38	U J1	1.91	1.26	J1	ug/L		66	71 - 127	19	30
HMX	0.19	U	1.91	1.65	M	ug/L		87	65 - 135	3	30

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

Lab Sample ID: 280-129936-9 MSD — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 475588 — **Prep Batch: 475259**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrobenzene	0.12	J M	1.91	1.43		ug/L		69	65 - 134	14	30
RDX	0.38	U	1.91	1.73	M	ug/L		91	68 - 130	5	30
Tetryl	0.19	U	1.91	1.91		ug/L		100	64 - 128	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*86*		*83 - 119*

Lab Sample ID: 280-129936-9 MSD — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 475588 — **Prep Batch: 475259**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	0.38	U	2.21	2.14	M	ug/L		96	57 - 132	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*86*		*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-476739/104 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476739

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/06/19 14:25	1

Lab Sample ID: MB 280-476739/20 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476739

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/06/19 11:37	1

Lab Sample ID: MB 280-476739/59 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476739

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/06/19 12:55	1

Lab Sample ID: LCS 280-476739/102 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476739

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.48		mg/L		99	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 280-476739/18
Matrix: Water
Analysis Batch: 476739

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

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

Lab Sample ID: LCS 280-476739/57
Matrix: Water
Analysis Batch: 476739

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

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

Lab Sample ID: LCSD 280-476739/103
Matrix: Water
Analysis Batch: 476739

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	2.50		mg/L		100	90 - 110	1	10

Lab Sample ID: LCSD 280-476739/19
Matrix: Water
Analysis Batch: 476739

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	2.54		mg/L		101	90 - 110	1	10

Lab Sample ID: LCSD 280-476739/58
Matrix: Water
Analysis Batch: 476739

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	2.43		mg/L		97	90 - 110	3	10

Lab Sample ID: 280-129936-9 MS
Matrix: Water
Analysis Batch: 476739

Client Sample ID: G0070-1
Prep Type: Total/NA

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

Lab Sample ID: 280-129936-9 MSD
Matrix: Water
Analysis Batch: 476739

Client Sample ID: G0070-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.050	U	1.00	1.03		mg/L		103	90 - 110	4	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-476444/28-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476608 — **Prep Batch: 476444**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 21:11	1

Lab Sample ID: MB 280-476444/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476608 — **Prep Batch: 476444**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/05/19 20:20	1

Lab Sample ID: LCS 280-476444/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476608 — **Prep Batch: 476444**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	6.00	6.27		mg/L		104	90 - 110

Lab Sample ID: LCS 280-476444/27-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476608 — **Prep Batch: 476444**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	6.00	6.28		mg/L		105	90 - 110

Lab Sample ID: 280-129936-9 MS — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476608 — **Prep Batch: 476444**

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	1.78	J1	mg/L		59	90 - 110

Lab Sample ID: 280-129936-9 MSD — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476608 — **Prep Batch: 476444**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	1.72	J1	mg/L		57	90 - 110	3	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-476445/22 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 476445

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/04/19 18:04	1

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

Lab Sample ID: MB 280-476445/60
Matrix: Water
Analysis Batch: 476445

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/04/19 19:20	1

Lab Sample ID: LCS 280-476445/21
Matrix: Water
Analysis Batch: 476445

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.07		mg/L		101	90 - 110

Lab Sample ID: LCS 280-476445/59
Matrix: Water
Analysis Batch: 476445

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	4.96		mg/L		99	90 - 110

Lab Sample ID: 280-129936-9 MS
Matrix: Water
Analysis Batch: 476445

Client Sample ID: G0070-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.025	J	4.00	4.07		mg/L		101	90 - 110

Lab Sample ID: 280-129936-9 MSD
Matrix: Water
Analysis Batch: 476445

Client Sample ID: G0070-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.025	J	4.00	3.78		mg/L		94	90 - 110	7	10

Lab Sample ID: MB 280-476607/22
Matrix: Water
Analysis Batch: 476607

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/05/19 17:17	1

Lab Sample ID: LCS 280-476607/103
Matrix: Water
Analysis Batch: 476607

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.41		mg/L		108	90 - 110

Lab Sample ID: LCS 280-476607/59
Matrix: Water
Analysis Batch: 476607

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.26		mg/L		105	90 - 110

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

Lab Sample ID: MB 280-475095/2-A
Matrix: Water
Analysis Batch: 475124

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475095

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 15:35	1

Lab Sample ID: LCS 280-475095/1-A
Matrix: Water
Analysis Batch: 475124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475095

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	21.8	18.4		mg/L		84	44 - 110

Lab Sample ID: 280-129936-5 MS
Matrix: Water
Analysis Batch: 475124

Client Sample ID: EW7-PM29B-1-35
Prep Type: Total/NA
Prep Batch: 475095

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	1.9	U	21.8	16.8		mg/L		77	44 - 110

Lab Sample ID: 280-129936-5 MSD
Matrix: Water
Analysis Batch: 475124

Client Sample ID: EW7-PM29B-1-35
Prep Type: Total/NA
Prep Batch: 475095

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	21.8	20.0		mg/L		92	44 - 110	17	20

Lab Sample ID: MB 280-475115/3-A
Matrix: Water
Analysis Batch: 475145

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475115

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		10/23/19 19:16	1

Lab Sample ID: LCS 280-475115/1-A
Matrix: Water
Analysis Batch: 475145

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	21.8	19.2		mg/L		88	44 - 110

Lab Sample ID: LCSD 280-475115/2-A
Matrix: Water
Analysis Batch: 475145

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 475115

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	21.8	18.4		mg/L		84	44 - 110	4	20

Lab Sample ID: 280-129936-9 MS
Matrix: Water
Analysis Batch: 475145

Client Sample ID: G0070-1
Prep Type: Total/NA
Prep Batch: 475115

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	1.9	U	21.8	19.2		mg/L		88	44 - 110

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

Lab Sample ID: 280-129936-9 MSD — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 475145 — **Prep Batch: 475115**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	21.8	20.0		mg/L		92	44 - 110	4	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-477599/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 477599

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	3.0	U	5.0	3.0	1.0	mg/L		11/14/19 12:42	1

Lab Sample ID: LCS 280-477599/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 477599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	99.5		mg/L		100	87 - 112

Lab Sample ID: LCSD 280-477599/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 477599

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	99.2		mg/L		99	87 - 112	0	10

Lab Sample ID: MRL 280-477599/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 477599

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.35	J	mg/L		87	50 - 150

Lab Sample ID: 280-129936-9 MS — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 477599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	34	J1	50.0	91.0	J1	mg/L		113	87 - 112

Lab Sample ID: 280-129936-9 MSD — **Client Sample ID: G0070-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 477599

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	34	J1	50.0	91.9	J1	mg/L		115	87 - 112	1	10

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

Lab Sample ID: 280-129936-9 DU
Matrix: Water
Analysis Batch: 477599

Client Sample ID: G0070-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	34	J1	34.2		mg/L		0.4	10

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

Lab Sample ID: MB 280-476389/28-A
Matrix: Water
Analysis Batch: 476539

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	1.0	U	1.0	1.0	0.35	mg/L		11/05/19 00:53	1

Lab Sample ID: MB 280-476389/2-A
Matrix: Water
Analysis Batch: 476539

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	1.0	U	1.0	1.0	0.35	mg/L		11/04/19 16:54	1

Lab Sample ID: LCS 280-476389/1-A
Matrix: Water
Analysis Batch: 476539

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	25.0	23.7		mg/L		95	88 - 112

Lab Sample ID: LCS 280-476389/27-A
Matrix: Water
Analysis Batch: 476539

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	25.0	23.7		mg/L		95	88 - 112

Lab Sample ID: 280-129936-9 MS
Matrix: Water
Analysis Batch: 476539

Client Sample ID: G0070-1
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	1.0		25.0	25.0		mg/L		96	88 - 112

Lab Sample ID: 280-129936-9 MSD
Matrix: Water
Analysis Batch: 476539

Client Sample ID: G0070-1
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	1.0		25.0	24.4		mg/L		93	88 - 112	3	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-475854/33
Matrix: Water
Analysis Batch: 475854

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	10	U	10	10	3.1	mg/L		10/29/19 17:52	1

Lab Sample ID: MB 280-475854/6
Matrix: Water
Analysis Batch: 475854

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	10	U	10	10	3.1	mg/L		10/29/19 14:16	1

Lab Sample ID: LCS 280-475854/31
Matrix: Water
Analysis Batch: 475854

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3			200	205		mg/L		103	89 - 109		

Lab Sample ID: LCS 280-475854/4
Matrix: Water
Analysis Batch: 475854

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3			200	206		mg/L		103	89 - 109		

Lab Sample ID: LCSD 280-475854/32
Matrix: Water
Analysis Batch: 475854

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Alkalinity as CaCO3			200	207		mg/L		103	89 - 109	1	10

Lab Sample ID: 280-129936-12 DU
Matrix: Water
Analysis Batch: 475854

Client Sample ID: G0081-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity as CaCO3	370			390		mg/L				5	10

GC VOA

Analysis Batch: 476033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	RSK-175	
280-129936-2	CA211-1	Total/NA	Water	RSK-175	
280-129936-3	CA212-1	Total/NA	Water	RSK-175	
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	RSK-175	
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	RSK-175	
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	RSK-175	
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	RSK-175	
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	RSK-175	
280-129936-9	G0070-1	Total/NA	Water	RSK-175	
280-129936-10	CA213-1	Total/NA	Water	RSK-175	
280-129936-11	NW070-1	Total/NA	Water	RSK-175	
280-129936-12	G0081-1	Total/NA	Water	RSK-175	
280-129936-13	G0075-1	Total/NA	Water	RSK-175	
280-129936-14	G0079-1	Total/NA	Water	RSK-175	
280-129936-15	G0080-1	Total/NA	Water	RSK-175	
MB 280-476033/7	Method Blank	Total/NA	Water	RSK-175	
LCS 280-476033/5	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-476033/6	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-129936-9 MS	G0070-1	Total/NA	Water	RSK-175	
280-129936-9 MSD	G0070-1	Total/NA	Water	RSK-175	
280-129936-9 DU	G0070-1	Total/NA	Water	RSK-175	
280-129936-11 DU	NW070-1	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 475259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	3535	
280-129936-2	CA211-1	Total/NA	Water	3535	
280-129936-3	CA212-1	Total/NA	Water	3535	
280-129936-4 - DL	EW7-PM24B-1-35	Total/NA	Water	3535	
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	3535	
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	3535	
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	3535	
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	3535	
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	3535	
280-129936-8 - DL	EW7-PM28B-1-35	Total/NA	Water	3535	
280-129936-9	G0070-1	Total/NA	Water	3535	
280-129936-10	CA213-1	Total/NA	Water	3535	
280-129936-11	NW070-1	Total/NA	Water	3535	
280-129936-12	G0081-1	Total/NA	Water	3535	
280-129936-13	G0075-1	Total/NA	Water	3535	
280-129936-14	G0079-1	Total/NA	Water	3535	
280-129936-15	G0080-1	Total/NA	Water	3535	
MB 280-475259/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-475259/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-475259/3-A	Lab Control Sample	Total/NA	Water	3535	
280-129936-9 MS	G0070-1	Total/NA	Water	3535	
280-129936-9 MS	G0070-1	Total/NA	Water	3535	
280-129936-9 MSD	G0070-1	Total/NA	Water	3535	
280-129936-9 MSD	G0070-1	Total/NA	Water	3535	

HPLC/IC

Analysis Batch: 475588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	8330A	475259
280-129936-2	CA211-1	Total/NA	Water	8330A	475259
280-129936-3	CA212-1	Total/NA	Water	8330A	475259
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	8330A	475259
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	8330A	475259
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	8330A	475259
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	8330A	475259
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	8330A	475259
280-129936-9	G0070-1	Total/NA	Water	8330A	475259
280-129936-10	CA213-1	Total/NA	Water	8330A	475259
280-129936-11	NW070-1	Total/NA	Water	8330A	475259
280-129936-12	G0081-1	Total/NA	Water	8330A	475259
280-129936-13	G0075-1	Total/NA	Water	8330A	475259
280-129936-14	G0079-1	Total/NA	Water	8330A	475259
280-129936-15	G0080-1	Total/NA	Water	8330A	475259
MB 280-475259/1-A	Method Blank	Total/NA	Water	8330A	475259
LCS 280-475259/2-A	Lab Control Sample	Total/NA	Water	8330A	475259
LCS 280-475259/3-A	Lab Control Sample	Total/NA	Water	8330A	475259
280-129936-9 MS	G0070-1	Total/NA	Water	8330A	475259
280-129936-9 MS	G0070-1	Total/NA	Water	8330A	475259
280-129936-9 MSD	G0070-1	Total/NA	Water	8330A	475259
280-129936-9 MSD	G0070-1	Total/NA	Water	8330A	475259

Analysis Batch: 475884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	8330A	475259
280-129936-4 - DL	EW7-PM24B-1-35	Total/NA	Water	8330A	475259
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	8330A	475259
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	8330A	475259
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	8330A	475259
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	8330A	475259
280-129936-8 - DL	EW7-PM28B-1-35	Total/NA	Water	8330A	475259
280-129936-9	G0070-1	Total/NA	Water	8330A	475259
280-129936-12	G0081-1	Total/NA	Water	8330A	475259
280-129936-13	G0075-1	Total/NA	Water	8330A	475259
280-129936-14	G0079-1	Total/NA	Water	8330A	475259
280-129936-15	G0080-1	Total/NA	Water	8330A	475259

Analysis Batch: 476053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-4 - DL	EW7-PM24B-1-35	Total/NA	Water	8330A	475259
280-129936-8 - DL	EW7-PM28B-1-35	Total/NA	Water	8330A	475259

General Chemistry

Prep Batch: 475095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	9030B	
280-129936-2	CA211-1	Total/NA	Water	9030B	
280-129936-3	CA212-1	Total/NA	Water	9030B	
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	9030B	

General Chemistry (Continued)

Prep Batch: 475095 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	9030B	
MB 280-475095/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-475095/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-129936-5 MS	EW7-PM29B-1-35	Total/NA	Water	9030B	
280-129936-5 MSD	EW7-PM29B-1-35	Total/NA	Water	9030B	

Prep Batch: 475115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	9030B	
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	9030B	
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	9030B	
280-129936-9	G0070-1	Total/NA	Water	9030B	
280-129936-10	CA213-1	Total/NA	Water	9030B	
280-129936-11	NW070-1	Total/NA	Water	9030B	
280-129936-12	G0081-1	Total/NA	Water	9030B	
280-129936-13	G0075-1	Total/NA	Water	9030B	
280-129936-14	G0079-1	Total/NA	Water	9030B	
280-129936-15	G0080-1	Total/NA	Water	9030B	
MB 280-475115/3-A	Method Blank	Total/NA	Water	9030B	
LCS 280-475115/1-A	Lab Control Sample	Total/NA	Water	9030B	
LCSD 280-475115/2-A	Lab Control Sample Dup	Total/NA	Water	9030B	
280-129936-9 MS	G0070-1	Total/NA	Water	9030B	
280-129936-9 MSD	G0070-1	Total/NA	Water	9030B	

Analysis Batch: 475124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	9034	475095
280-129936-2	CA211-1	Total/NA	Water	9034	475095
280-129936-3	CA212-1	Total/NA	Water	9034	475095
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	9034	475095
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	9034	475095
MB 280-475095/2-A	Method Blank	Total/NA	Water	9034	475095
LCS 280-475095/1-A	Lab Control Sample	Total/NA	Water	9034	475095
280-129936-5 MS	EW7-PM29B-1-35	Total/NA	Water	9034	475095
280-129936-5 MSD	EW7-PM29B-1-35	Total/NA	Water	9034	475095

Analysis Batch: 475145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	9034	475115
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	9034	475115
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	9034	475115
280-129936-9	G0070-1	Total/NA	Water	9034	475115
280-129936-10	CA213-1	Total/NA	Water	9034	475115
280-129936-11	NW070-1	Total/NA	Water	9034	475115
280-129936-12	G0081-1	Total/NA	Water	9034	475115
280-129936-13	G0075-1	Total/NA	Water	9034	475115
280-129936-14	G0079-1	Total/NA	Water	9034	475115
280-129936-15	G0080-1	Total/NA	Water	9034	475115
MB 280-475115/3-A	Method Blank	Total/NA	Water	9034	475115
LCS 280-475115/1-A	Lab Control Sample	Total/NA	Water	9034	475115
LCSD 280-475115/2-A	Lab Control Sample Dup	Total/NA	Water	9034	475115

General Chemistry (Continued)

Analysis Batch: 475145 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-9 MS	G0070-1	Total/NA	Water	9034	475115
280-129936-9 MSD	G0070-1	Total/NA	Water	9034	475115

Analysis Batch: 475854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	SM 2320B	
280-129936-2	CA211-1	Total/NA	Water	SM 2320B	
280-129936-3	CA212-1	Total/NA	Water	SM 2320B	
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	SM 2320B	
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	SM 2320B	
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	SM 2320B	
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	SM 2320B	
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	SM 2320B	
280-129936-9	G0070-1	Total/NA	Water	SM 2320B	
280-129936-10	CA213-1	Total/NA	Water	SM 2320B	
280-129936-11	NW070-1	Total/NA	Water	SM 2320B	
280-129936-12	G0081-1	Total/NA	Water	SM 2320B	
280-129936-13	G0075-1	Total/NA	Water	SM 2320B	
280-129936-14	G0079-1	Total/NA	Water	SM 2320B	
280-129936-15	G0080-1	Total/NA	Water	SM 2320B	
MB 280-475854/33	Method Blank	Total/NA	Water	SM 2320B	
MB 280-475854/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-475854/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-475854/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-475854/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-129936-12 DU	G0081-1	Total/NA	Water	SM 2320B	

Filtration Batch: 476389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Dissolved	Water	FILTRATION	
280-129936-2	CA211-1	Dissolved	Water	FILTRATION	
280-129936-3	CA212-1	Dissolved	Water	FILTRATION	
280-129936-4	EW7-PM24B-1-35	Dissolved	Water	FILTRATION	
280-129936-5	EW7-PM29B-1-35	Dissolved	Water	FILTRATION	
280-129936-6	EW7-PM29A-1-25	Dissolved	Water	FILTRATION	
280-129936-7	EW7-PM28A-1-25	Dissolved	Water	FILTRATION	
280-129936-8	EW7-PM28B-1-35	Dissolved	Water	FILTRATION	
280-129936-9	G0070-1	Dissolved	Water	FILTRATION	
280-129936-10	CA213-1	Dissolved	Water	FILTRATION	
280-129936-11	NW070-1	Dissolved	Water	FILTRATION	
280-129936-12	G0081-1	Dissolved	Water	FILTRATION	
280-129936-13	G0075-1	Dissolved	Water	FILTRATION	
280-129936-14	G0079-1	Dissolved	Water	FILTRATION	
280-129936-15	G0080-1	Dissolved	Water	FILTRATION	
MB 280-476389/28-A	Method Blank	Dissolved	Water	FILTRATION	
MB 280-476389/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-476389/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCS 280-476389/27-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-129936-9 MS	G0070-1	Dissolved	Water	FILTRATION	
280-129936-9 MSD	G0070-1	Dissolved	Water	FILTRATION	

General Chemistry

Prep Batch: 476444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	351.2	
280-129936-2	CA211-1	Total/NA	Water	351.2	
280-129936-3	CA212-1	Total/NA	Water	351.2	
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	351.2	
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	351.2	
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	351.2	
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	351.2	
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	351.2	
280-129936-9	G0070-1	Total/NA	Water	351.2	
280-129936-10	CA213-1	Total/NA	Water	351.2	
280-129936-11	NW070-1	Total/NA	Water	351.2	
280-129936-12	G0081-1	Total/NA	Water	351.2	
280-129936-13	G0075-1	Total/NA	Water	351.2	
280-129936-14	G0079-1	Total/NA	Water	351.2	
280-129936-15	G0080-1	Total/NA	Water	351.2	
MB 280-476444/28-A	Method Blank	Total/NA	Water	351.2	
MB 280-476444/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-476444/1-A	Lab Control Sample	Total/NA	Water	351.2	
LCS 280-476444/27-A	Lab Control Sample	Total/NA	Water	351.2	
280-129936-9 MS	G0070-1	Total/NA	Water	351.2	
280-129936-9 MSD	G0070-1	Total/NA	Water	351.2	

Analysis Batch: 476445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	353.2	
280-129936-2	CA211-1	Total/NA	Water	353.2	
280-129936-3	CA212-1	Total/NA	Water	353.2	
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	353.2	
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	353.2	
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	353.2	
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	353.2	
280-129936-9	G0070-1	Total/NA	Water	353.2	
280-129936-10	CA213-1	Total/NA	Water	353.2	
280-129936-11	NW070-1	Total/NA	Water	353.2	
280-129936-12	G0081-1	Total/NA	Water	353.2	
280-129936-13	G0075-1	Total/NA	Water	353.2	
280-129936-14	G0079-1	Total/NA	Water	353.2	
280-129936-15	G0080-1	Total/NA	Water	353.2	
MB 280-476445/22	Method Blank	Total/NA	Water	353.2	
MB 280-476445/60	Method Blank	Total/NA	Water	353.2	
LCS 280-476445/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-476445/59	Lab Control Sample	Total/NA	Water	353.2	
280-129936-9 MS	G0070-1	Total/NA	Water	353.2	
280-129936-9 MSD	G0070-1	Total/NA	Water	353.2	

Analysis Batch: 476539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Dissolved	Water	9060A	476389
280-129936-2	CA211-1	Dissolved	Water	9060A	476389
280-129936-3	CA212-1	Dissolved	Water	9060A	476389
280-129936-4	EW7-PM24B-1-35	Dissolved	Water	9060A	476389

General Chemistry (Continued)

Analysis Batch: 476539 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-5	EW7-PM29B-1-35	Dissolved	Water	9060A	476389
280-129936-6	EW7-PM29A-1-25	Dissolved	Water	9060A	476389
280-129936-7	EW7-PM28A-1-25	Dissolved	Water	9060A	476389
280-129936-8	EW7-PM28B-1-35	Dissolved	Water	9060A	476389
280-129936-9	G0070-1	Dissolved	Water	9060A	476389
280-129936-10	CA213-1	Dissolved	Water	9060A	476389
280-129936-11	NW070-1	Dissolved	Water	9060A	476389
280-129936-12	G0081-1	Dissolved	Water	9060A	476389
280-129936-13	G0075-1	Dissolved	Water	9060A	476389
280-129936-14	G0079-1	Dissolved	Water	9060A	476389
280-129936-15	G0080-1	Dissolved	Water	9060A	476389
MB 280-476389/28-A	Method Blank	Dissolved	Water	9060A	476389
MB 280-476389/2-A	Method Blank	Dissolved	Water	9060A	476389
LCS 280-476389/1-A	Lab Control Sample	Dissolved	Water	9060A	476389
LCS 280-476389/27-A	Lab Control Sample	Dissolved	Water	9060A	476389
280-129936-9 MS	G0070-1	Dissolved	Water	9060A	476389
280-129936-9 MSD	G0070-1	Dissolved	Water	9060A	476389

Analysis Batch: 476607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	353.2	
MB 280-476607/22	Method Blank	Total/NA	Water	353.2	
LCS 280-476607/103	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-476607/59	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 476608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	351.2	476444
280-129936-2	CA211-1	Total/NA	Water	351.2	476444
280-129936-3	CA212-1	Total/NA	Water	351.2	476444
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	351.2	476444
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	351.2	476444
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	351.2	476444
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	351.2	476444
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	351.2	476444
280-129936-9	G0070-1	Total/NA	Water	351.2	476444
280-129936-10	CA213-1	Total/NA	Water	351.2	476444
280-129936-11	NW070-1	Total/NA	Water	351.2	476444
280-129936-12	G0081-1	Total/NA	Water	351.2	476444
280-129936-13	G0075-1	Total/NA	Water	351.2	476444
280-129936-14	G0079-1	Total/NA	Water	351.2	476444
280-129936-15	G0080-1	Total/NA	Water	351.2	476444
MB 280-476444/28-A	Method Blank	Total/NA	Water	351.2	476444
MB 280-476444/2-A	Method Blank	Total/NA	Water	351.2	476444
LCS 280-476444/1-A	Lab Control Sample	Total/NA	Water	351.2	476444
LCS 280-476444/27-A	Lab Control Sample	Total/NA	Water	351.2	476444
280-129936-9 MS	G0070-1	Total/NA	Water	351.2	476444
280-129936-9 MSD	G0070-1	Total/NA	Water	351.2	476444

General Chemistry

Analysis Batch: 476739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	350.1	
280-129936-2	CA211-1	Total/NA	Water	350.1	
280-129936-3	CA212-1	Total/NA	Water	350.1	
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	350.1	
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	350.1	
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	350.1	
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	350.1	
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	350.1	
280-129936-9	G0070-1	Total/NA	Water	350.1	
280-129936-10	CA213-1	Total/NA	Water	350.1	
280-129936-11	NW070-1	Total/NA	Water	350.1	
280-129936-12	G0081-1	Total/NA	Water	350.1	
280-129936-13	G0075-1	Total/NA	Water	350.1	
280-129936-14	G0079-1	Total/NA	Water	350.1	
280-129936-15	G0080-1	Total/NA	Water	350.1	
MB 280-476739/104	Method Blank	Total/NA	Water	350.1	
MB 280-476739/20	Method Blank	Total/NA	Water	350.1	
MB 280-476739/59	Method Blank	Total/NA	Water	350.1	
LCS 280-476739/102	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-476739/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-476739/57	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-476739/103	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-476739/19	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-476739/58	Lab Control Sample Dup	Total/NA	Water	350.1	
280-129936-9 MS	G0070-1	Total/NA	Water	350.1	
280-129936-9 MSD	G0070-1	Total/NA	Water	350.1	

Analysis Batch: 477599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-129936-1	CA210-1	Total/NA	Water	9056A	
280-129936-2	CA211-1	Total/NA	Water	9056A	
280-129936-3	CA212-1	Total/NA	Water	9056A	
280-129936-4	EW7-PM24B-1-35	Total/NA	Water	9056A	
280-129936-5	EW7-PM29B-1-35	Total/NA	Water	9056A	
280-129936-6	EW7-PM29A-1-25	Total/NA	Water	9056A	
280-129936-7	EW7-PM28A-1-25	Total/NA	Water	9056A	
280-129936-8	EW7-PM28B-1-35	Total/NA	Water	9056A	
280-129936-9	G0070-1	Total/NA	Water	9056A	
280-129936-10	CA213-1	Total/NA	Water	9056A	
280-129936-11	NW070-1	Total/NA	Water	9056A	
280-129936-12	G0081-1	Total/NA	Water	9056A	
280-129936-13	G0075-1	Total/NA	Water	9056A	
280-129936-14	G0079-1	Total/NA	Water	9056A	
280-129936-15	G0080-1	Total/NA	Water	9056A	
MB 280-477599/6	Method Blank	Total/NA	Water	9056A	
LCS 280-477599/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-477599/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-477599/3	Lab Control Sample	Total/NA	Water	9056A	
280-129936-9 MS	G0070-1	Total/NA	Water	9056A	
280-129936-9 MSD	G0070-1	Total/NA	Water	9056A	
280-129936-9 DU	G0070-1	Total/NA	Water	9056A	

Client Sample ID: CA210-1
Date Collected: 10/21/19 09:50
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-1
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	476033	10/31/19 12:55	CAS	TAL DEN
Total/NA	Prep	3535			489.9 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 01:14	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 12:23	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 20:56	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	476445	11/04/19 18:50	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475095	10/23/19 11:13	JLA	TAL DEN
Total/NA	Analysis	9034		1			475124	10/23/19 15:35	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 16:38	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/04/19 22:34	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 15:28	SPG	TAL DEN

Client Sample ID: CA211-1
Date Collected: 10/21/19 11:25
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-2
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	476033	10/31/19 13:09	CAS	TAL DEN
Total/NA	Prep	3535			485.8 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 01:37	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 12:25	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:04	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	476445	11/04/19 18:52	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475095	10/23/19 11:13	JLA	TAL DEN
Total/NA	Analysis	9034		1			475124	10/23/19 15:35	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 16:56	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/04/19 23:21	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 15:52	SPG	TAL DEN

Client Sample ID: CA212-1
Date Collected: 10/21/19 12:50
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-3
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	476033	10/31/19 13:22	CAS	TAL DEN
Total/NA	Prep	3535			500.2 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 02:00	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 12:27	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:05	SVC	TAL DEN

Client Sample ID: CA212-1
Lab Sample ID: 280-129936-3

Date Collected: 10/21/19 12:50
Matrix: Water
Date Received: 10/22/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		5	100 mL	100 mL	476445	11/04/19 18:54	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475095	10/23/19 11:13	JLA	TAL DEN
Total/NA	Analysis	9034		1			475124	10/23/19 15:35	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 17:13	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/04/19 23:35	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 16:00	SPG	TAL DEN

Client Sample ID: EW7-PM24B-1-35
Lab Sample ID: 280-129936-4

Date Collected: 10/19/19 09:55
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 13:36	CAS	TAL DEN
Total/NA	Prep	3535			529.6 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 00:55	CBB	TAL DEN
Total/NA	Prep	3535	DL		529.6 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A	DL	20			475884	10/31/19 01:30	CBB	TAL DEN
Total/NA	Prep	3535			529.6 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	475588	10/29/19 02:23	CBB	TAL DEN
Total/NA	Prep	3535	DL		529.6 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A	DL	20			476053	10/31/19 20:23	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 12:29	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:06	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	476607	11/05/19 17:29	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475095	10/23/19 11:13	JLA	TAL DEN
Total/NA	Analysis	9034		1			475124	10/23/19 15:35	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 17:31	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/04/19 23:50	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 16:09	SPG	TAL DEN

Client Sample ID: EW7-PM29B-1-35
Lab Sample ID: 280-129936-5

Date Collected: 10/19/19 11:55
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 13:50	CAS	TAL DEN
Total/NA	Prep	3535			516.4 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 02:05	CBB	TAL DEN
Total/NA	Prep	3535			516.4 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 02:46	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 12:43	BWH	TAL DEN

Client Sample ID: EW7-PM29B-1-35
Lab Sample ID: 280-129936-5

Date Collected: 10/19/19 11:55
Matrix: Water
Date Received: 10/22/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:08	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:10	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475095	10/23/19 11:13	JLA	TAL DEN
Total/NA	Analysis	9034		1			475124	10/23/19 15:35	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 17:48	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 00:07	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 16:18	SPG	TAL DEN

Client Sample ID: EW7-PM29A-1-25
Lab Sample ID: 280-129936-6

Date Collected: 10/19/19 14:05
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 14:03	CAS	TAL DEN
Total/NA	Prep	3535			510.3 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 02:40	CBB	TAL DEN
Total/NA	Prep	3535			510.3 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 03:09	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 12:45	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:25	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	476445	11/04/19 19:12	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 18:06	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 00:22	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 16:26	SPG	TAL DEN

Client Sample ID: EW7-PM28A-1-25
Lab Sample ID: 280-129936-7

Date Collected: 10/19/19 16:20
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 14:17	CAS	TAL DEN
Total/NA	Prep	3535			498.4 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 03:15	CBB	TAL DEN
Total/NA	Prep	3535			498.4 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 03:32	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 12:47	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:23	SVC	TAL DEN

Client Sample ID: EW7-PM28A-1-25
Lab Sample ID: 280-129936-7

Date Collected: 10/19/19 16:20
Matrix: Water
Date Received: 10/22/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		2	100 mL	100 mL	476445	11/04/19 19:14	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 18:58	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 02:40	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 16:35	SPG	TAL DEN

Client Sample ID: EW7-PM28B-1-35
Lab Sample ID: 280-129936-8

Date Collected: 10/20/19 12:10
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 14:31	CAS	TAL DEN
Total/NA	Prep	3535			513.8 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 03:50	CBB	TAL DEN
Total/NA	Prep	3535	DL		513.8 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A	DL	20			475884	10/31/19 04:25	CBB	TAL DEN
Total/NA	Prep	3535			513.8 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 05:04	CBB	TAL DEN
Total/NA	Prep	3535	DL		513.8 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A	DL	20			476053	10/31/19 20:46	CBB	TAL DEN
Total/NA	Analysis	350.1		2	10 mL	10 mL	476739	11/06/19 15:43	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:24	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:16	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 19:16	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 02:55	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 16:46	SPG	TAL DEN

Client Sample ID: G0070-1
Lab Sample ID: 280-129936-9

Date Collected: 10/21/19 14:45
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 12:01	CAS	TAL DEN
Total/NA	Prep	3535			524.2 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 05:35	CBB	TAL DEN
Total/NA	Prep	3535			524.2 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 05:27	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 12:57	BWH	TAL DEN

Client Sample ID: G0070-1
Lab Sample ID: 280-129936-9

Date Collected: 10/21/19 14:45
Matrix: Water
Date Received: 10/22/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:13	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:22	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 15:29	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 01:23	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 16:54	SPG	TAL DEN

Client Sample ID: CA213-1
Lab Sample ID: 280-129936-10

Date Collected: 10/21/19 14:25
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 14:45	CAS	TAL DEN
Total/NA	Prep	3535			485.7 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 07:21	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 13:15	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:26	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:28	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 19:33	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 03:12	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 17:02	SPG	TAL DEN

Client Sample ID: NW070-1
Lab Sample ID: 280-129936-11

Date Collected: 10/21/19 16:15
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 15:12	CAS	TAL DEN
Total/NA	Prep	3535			491.7 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	475588	10/29/19 07:44	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 13:17	BWH	TAL DEN
Total/NA	Prep	351.2			5 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:28	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:42	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 19:51	JAP	TAL DEN

Client Sample ID: NW070-1
Lab Sample ID: 280-129936-11
Date Collected: 10/21/19 16:15
Matrix: Water
Date Received: 10/22/19 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 03:29	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 17:09	SPG	TAL DEN

Client Sample ID: G0081-1
Lab Sample ID: 280-129936-12
Date Collected: 10/21/19 16:15
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 15:39	CAS	TAL DEN
Total/NA	Prep	3535			511.3 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 08:30	CBB	TAL DEN
Total/NA	Prep	3535			511.3 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 08:07	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 13:19	BWH	TAL DEN
Total/NA	Prep	351.2			5 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:31	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:44	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 20:08	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 03:43	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 18:01	SPG	TAL DEN

Client Sample ID: G0075-1
Lab Sample ID: 280-129936-13
Date Collected: 10/21/19 12:00
Matrix: Water
Date Received: 10/22/19 09:30

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	476033	10/31/19 15:53	CAS	TAL DEN
Total/NA	Prep	3535			528.5 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 09:05	CBB	TAL DEN
Total/NA	Prep	3535			528.5 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 08:30	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 13:21	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:33	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:46	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 20:26	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 03:58	SGB	TAL DEN

Client Sample ID: G0075-1
Date Collected: 10/21/19 12:00
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 18:21	SPG	TAL DEN

Client Sample ID: G0079-1
Date Collected: 10/21/19 10:45
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	476033	10/31/19 16:07	CAS	TAL DEN
Total/NA	Prep	3535			519.9 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 09:40	CBB	TAL DEN
Total/NA	Prep	3535			519.9 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 10:02	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 13:23	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:34	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:48	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 20:43	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 04:15	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 18:28	SPG	TAL DEN

Client Sample ID: G0080-1
Date Collected: 10/21/19 09:10
Date Received: 10/22/19 09:30

Lab Sample ID: 280-129936-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	476033	10/31/19 16:20	CAS	TAL DEN
Total/NA	Prep	3535			528.5 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475884	10/31/19 10:15	CBB	TAL DEN
Total/NA	Prep	3535			528.5 mL	5 mL	475259	10/24/19 16:31	KSA	TAL DEN
Total/NA	Analysis	8330A		1			475588	10/29/19 10:25	CBB	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	476739	11/06/19 13:25	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	476444	11/04/19 18:36	SVC	TAL DEN
Total/NA	Analysis	351.2		1			476608	11/05/19 21:35	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	476445	11/04/19 19:50	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	475115	10/23/19 14:49	JLA	TAL DEN
Total/NA	Analysis	9034		1			475145	10/23/19 19:16	JLA	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	477599	11/14/19 21:01	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	476389	11/04/19 11:18	BWH	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	476539	11/05/19 04:30	SGB	TAL DEN
Total/NA	Analysis	SM 2320B		1			475854	10/29/19 18:38	SPG	TAL DEN

Lab Chronicle

Client: Brice Environmental Services, Corp
Job ID: 280-129936-1
Project/Site: Cornhusker (CHAAP)

Laboratory References:

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

Accreditation/Certification Summary

Client: Brice Environmental Services, Corp
Job ID: 280-129936-1
Project/Site: Cornhusker (CHAAP)

Laboratory: Eurofins TestAmerica, Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	DoD	2907.01	10-31-21

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

Method Summary

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

Job ID: 280-129936-1

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: 280-129936-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-129936-1	CA210-1	Water	10/21/19 09:50	10/22/19 09:30	
280-129936-2	CA211-1	Water	10/21/19 11:25	10/22/19 09:30	
280-129936-3	CA212-1	Water	10/21/19 12:50	10/22/19 09:30	
280-129936-4	EW7-PM24B-1-35	Water	10/19/19 09:55	10/22/19 09:30	
280-129936-5	EW7-PM29B-1-35	Water	10/19/19 11:55	10/22/19 09:30	
280-129936-6	EW7-PM29A-1-25	Water	10/19/19 14:05	10/22/19 09:30	
280-129936-7	EW7-PM28A-1-25	Water	10/19/19 16:20	10/22/19 09:30	
280-129936-8	EW7-PM28B-1-35	Water	10/20/19 12:10	10/22/19 09:30	
280-129936-9	G0070-1	Water	10/21/19 14:45	10/22/19 09:30	
280-129936-10	CA213-1	Water	10/21/19 14:25	10/22/19 09:30	
280-129936-11	NW070-1	Water	10/21/19 16:15	10/22/19 09:30	
280-129936-12	G0081-1	Water	10/21/19 16:15	10/22/19 09:30	
280-129936-13	G0075-1	Water	10/21/19 12:00	10/22/19 09:30	
280-129936-14	G0079-1	Water	10/21/19 10:45	10/22/19 09:30	
280-129936-15	G0080-1	Water	10/21/19 09:10	10/22/19 09:30	

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 454595

Lab 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

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 476033

Lab Sample ID: 280-129936-9 DU Client Sample ID: G0070-1 DU

Date Analyzed: 10/31/19 12:14 Lab File ID: 009F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.27	Peak assignment corrected	sciannac	10/31/19 13:41

Lab Sample ID: 280-129936-10 Client Sample ID: CA213-1

Date Analyzed: 10/31/19 14:45 Lab File ID: 020F1301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak assignment corrected	sciannac	10/31/19 15:01

Lab Sample ID: 280-129936-10 Client Sample ID: CA213-1

Date Analyzed: 10/31/19 14:45 Lab File ID: 020F1301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.65	Peak assignment corrected	sciannac	10/31/19 15:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 475429

Lab Sample ID: IC 280-475429/7 Client Sample ID:

Date Analyzed: 10/25/19 19:30 Lab File ID: 10250007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.95	Baseline Smoothing	beckerc	10/26/19 10:04
2-Nitrotoluene	16.70	Baseline Smoothing	beckerc	10/26/19 10:05
4-Nitrotoluene	16.90	Baseline Smoothing	beckerc	10/26/19 10:05
4-Amino-2,6-dinitrotoluene	17.28	Baseline Smoothing	beckerc	10/26/19 10:05
3-Nitrotoluene	18.04	Baseline Smoothing	beckerc	10/26/19 10:05
1,3,5-Trinitrobenzene	19.06	Baseline Smoothing	beckerc	10/26/19 10:05

Lab Sample ID: IC 280-475429/9 Client Sample ID:

Date Analyzed: 10/25/19 20:40 Lab File ID: 10250009.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	5.61	Baseline Smoothing	beckerc	10/26/19 10:08
HMX	7.09	Baseline Smoothing	beckerc	10/30/19 15:38

Lab Sample ID: IC 280-475429/10 Client Sample ID:

Date Analyzed: 10/25/19 21:15 Lab File ID: 10250010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	5.68	Peak assignment corrected	beckerc	10/26/19 10:09
HMX	7.08	Baseline Smoothing	beckerc	10/30/19 15:38

Lab Sample ID: IC 280-475429/11 Client Sample ID:

Date Analyzed: 10/25/19 21:50 Lab File ID: 10250011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	5.74	Assign Peak	beckerc	10/26/19 10:01
HMX	7.08	Baseline Smoothing	beckerc	10/30/19 15:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 475429

Lab Sample ID: IC 280-475429/12 Client Sample ID:

Date Analyzed: 10/25/19 22:25 Lab File ID: 10250012.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.10	Baseline Smoothing	beckerc	10/30/19 15:35
Nitroglycerin	16.02	Baseline Smoothing	beckerc	10/26/19 10:12
2-Nitrotoluene	16.75	Baseline Smoothing	beckerc	10/26/19 10:13
4-Nitrotoluene	17.05	Baseline Smoothing	beckerc	10/26/19 10:13
4-Amino-2,6-dinitrotoluene	17.37	Baseline Smoothing	beckerc	10/26/19 10:13
3-Nitrotoluene	17.96	Baseline Smoothing	beckerc	10/26/19 10:13
2-Amino-4,6-dinitrotoluene	18.26	Baseline Smoothing	beckerc	10/26/19 10:13
1,3,5-Trinitrobenzene	19.12	Baseline Smoothing	beckerc	10/26/19 10:13
2,6-Dinitrotoluene	20.05	Baseline Smoothing	beckerc	10/26/19 10:13

Lab Sample ID: IC 280-475429/13 Client Sample ID:

Date Analyzed: 10/25/19 23:00 Lab File ID: 10250013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.07	Baseline Smoothing	beckerc	10/30/19 15:35
Tetryl	23.80	Baseline Smoothing	beckerc	10/26/19 10:14
2,4,6-Trinitrotoluene	24.87	Baseline Smoothing	beckerc	10/26/19 10:14

Lab Sample ID: IC 280-475429/14 Client Sample ID:

Date Analyzed: 10/25/19 23:35 Lab File ID: 10250014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.07	Baseline Smoothing	beckerc	10/30/19 15:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 475884

Lab Sample ID: 280-129936-4 Client Sample ID: EW7-PM24B-1-35

Date Analyzed: 10/31/19 00:55 Lab File ID: 10300027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.05	Baseline Smoothing	beckerc	10/31/19 15:45
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 15:46
2,4-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 15:46
Tetryl		Invalid Compound ID	beckerc	10/31/19 15:46
1,2-Dinitrobenzene	13.16	Baseline Smoothing	beckerc	10/31/19 15:45

Lab Sample ID: 280-129936-4 DL Client Sample ID: EW7-PM24B-1-35 DL

Date Analyzed: 10/31/19 01:30 Lab File ID: 10300028.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 15:46
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 15:46
2-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 15:46
3-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 15:46
4-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 15:46
HMX		Invalid Compound ID	beckerc	10/31/19 15:46
RDX		Invalid Compound ID	beckerc	10/31/19 15:46
Tetryl		Invalid Compound ID	beckerc	10/31/19 15:46
2,4,6-Trinitrotoluene	24.81	Baseline Smoothing	beckerc	10/31/19 15:47

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 475884

Lab Sample ID: 280-129936-5 Client Sample ID: EW7-PM29B-1-35

Date Analyzed: 10/31/19 02:05 Lab File ID: 10300029.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:01
2,4-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:01
2,6-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:01
4-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:01
Tetryl		Invalid Compound ID	beckerc	10/31/19 16:02

Lab Sample ID: 280-129936-6 Client Sample ID: EW7-PM29A-1-25

Date Analyzed: 10/31/19 02:40 Lab File ID: 10300030.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.02	Baseline Smoothing	beckerc	10/31/19 16:04
RDX	9.23	Baseline Smoothing	beckerc	10/31/19 16:04
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:05
2,4-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:09
3-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:05
Tetryl		Invalid Compound ID	beckerc	10/31/19 16:09

Lab Sample ID: 280-129936-7 Client Sample ID: EW7-PM28A-1-25

Date Analyzed: 10/31/19 03:15 Lab File ID: 10300031.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.04	Baseline Smoothing	beckerc	10/31/19 16:10
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:10
3-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 475884

Lab Sample ID: 280-129936-8 Client Sample ID: EW7-PM28B-1-35

Date Analyzed: 10/31/19 03:50 Lab File ID: 10300032.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.04	Baseline Smoothing	beckerc	10/31/19 16:12
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:12
2,4-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:13
2-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:12

Lab Sample ID: 280-129936-8 DL Client Sample ID: EW7-PM28B-1-35 DL

Date Analyzed: 10/31/19 04:25 Lab File ID: 10300033.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:13
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:13
2-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:13
3-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:13
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:13
4-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:13
HMX		Invalid Compound ID	beckerc	10/31/19 16:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 475884

Lab Sample ID: 280-129936-9 Client Sample ID: G0070-1

Date Analyzed: 10/31/19 05:35 Lab File ID: 10300035.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:17
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:17
2,4-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:17
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:17
2-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:17
3-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:17
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:17
HMX		Invalid Compound ID	beckerc	10/31/19 16:17
Tetryl		Invalid Compound ID	beckerc	10/31/19 16:17

Lab Sample ID: 280-129936-12 Client Sample ID: G0081-1

Date Analyzed: 10/31/19 08:30 Lab File ID: 10300040.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:22
2,6-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:22
2-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:22
4-Nitrotoluene		Baseline Smoothing	beckerc	10/31/19 16:22
Tetryl		Invalid Compound ID	beckerc	10/31/19 16:22
4-Amino-2,6-dinitrotoluene	17.32	Baseline Smoothing	beckerc	10/31/19 16:22
2-Amino-4,6-dinitrotoluene	18.18	Baseline Smoothing	beckerc	10/31/19 16:22
2,4,6-Trinitrotoluene	24.74	Baseline Smoothing	beckerc	10/31/19 16:23

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 475884

Lab Sample ID: 280-129936-13 Client Sample ID: G0075-1

Date Analyzed: 10/31/19 09:05 Lab File ID: 10300041.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:23
2,4-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:23
2,6-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:23
2-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:23
3-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:23
HMX		Invalid Compound ID	beckerc	10/31/19 16:23

Lab Sample ID: 280-129936-14 Client Sample ID: G0079-1

Date Analyzed: 10/31/19 09:40 Lab File ID: 10300042.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:24
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:24
2,4-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:24
2,6-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:24
2-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:24
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:24

Lab Sample ID: 280-129936-15 Client Sample ID: G0080-1

Date Analyzed: 10/31/19 10:15 Lab File ID: 10300043.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	beckerc	10/31/19 16:24
2,6-Dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:24
2-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:24
3-Nitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:24
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	beckerc	10/31/19 16:24
Tetryl		Invalid Compound ID	beckerc	10/31/19 16:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 475884

Lab Sample ID: CCV 280-475884/44 Client Sample ID:

Date Analyzed: 10/31/19 10:50 Lab File ID: 10300044.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene	18.02	Baseline Smoothing	beckerc	10/31/19 16:26
2-Amino-4,6-dinitrotoluene	18.16	Baseline Smoothing	beckerc	10/31/19 16:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

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.: 280-129936-1

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.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 463276

Lab 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.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 475588

Lab Sample ID: CCV 280-475588/35 Client Sample ID:

Date Analyzed: 10/28/19 23:42 Lab File ID: 10280035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	10/29/19 10:46
DNX	6.91	Baseline Smoothing	beckerc	10/29/19 10:46

Lab Sample ID: MB 280-475259/1-A Client Sample ID:

Date Analyzed: 10/29/19 00:05 Lab File ID: 10280036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:46
MNX		Invalid Compound ID	beckerc	10/29/19 10:46

Lab Sample ID: 280-129936-1 Client Sample ID: CA210-1

Date Analyzed: 10/29/19 01:14 Lab File ID: 10280039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 10:48
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:50

Lab Sample ID: 280-129936-2 Client Sample ID: CA211-1

Date Analyzed: 10/29/19 01:37 Lab File ID: 10280040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 10:51
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:51

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 475588

Lab Sample ID: 280-129936-3 Client Sample ID: CA212-1

Date Analyzed: 10/29/19 02:00 Lab File ID: 10280041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 10:52
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:52

Lab Sample ID: 280-129936-4 Client Sample ID: EW7-PM24B-1-35

Date Analyzed: 10/29/19 02:23 Lab File ID: 10280042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	beckerc	10/29/19 10:52
RDX	7.75	Baseline Smoothing	beckerc	10/29/19 10:53
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 10:53
2-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:54
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:54
4-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:54
MNX		Invalid Compound ID	beckerc	10/29/19 10:53
Tetryl		Invalid Compound ID	beckerc	10/29/19 10:54

Lab Sample ID: 280-129936-5 Client Sample ID: EW7-PM29B-1-35

Date Analyzed: 10/29/19 02:46 Lab File ID: 10280043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	beckerc	10/29/19 10:55
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:56
4-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:56
MNX		Invalid Compound ID	beckerc	10/29/19 10:55
RDX		Invalid Compound ID	beckerc	10/29/19 10:55
Tetryl		Invalid Compound ID	beckerc	10/29/19 10:55

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 475588

Lab Sample ID: 280-129936-6 Client Sample ID: EW7-PM29A-1-25

Date Analyzed: 10/29/19 03:09 Lab File ID: 10280044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	beckerc	10/29/19 10:56
RDX	7.75	Baseline Smoothing	beckerc	10/29/19 10:56
2-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:57
4-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:57
MNX		Invalid Compound ID	beckerc	10/29/19 10:56
Tetryl		Invalid Compound ID	beckerc	10/29/19 10:57

Lab Sample ID: 280-129936-7 Client Sample ID: EW7-PM28A-1-25

Date Analyzed: 10/29/19 03:32 Lab File ID: 10280045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	beckerc	10/29/19 10:58
RDX	7.75	Baseline Smoothing	beckerc	10/29/19 10:58
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 10:58
1,3,5-Trinitrobenzene	8.89	Baseline Smoothing	beckerc	10/29/19 10:58
2-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:59
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:59
4-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 10:59
MNX		Invalid Compound ID	beckerc	10/29/19 10:58
Tetryl		Invalid Compound ID	beckerc	10/29/19 10:58

Lab Sample ID: CCV 280-475588/48 Client Sample ID:

Date Analyzed: 10/29/19 04:41 Lab File ID: 10280048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	10/29/19 11:00

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 475588

Lab Sample ID: 280-129936-8 Client Sample ID: EW7-PM28B-1-35

Date Analyzed: 10/29/19 05:04 Lab File ID: 10280049.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.75	Baseline Smoothing	beckerc	10/29/19 11:02
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:03
4-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:03
MNX		Invalid Compound ID	beckerc	10/29/19 11:00
Tetryl		Invalid Compound ID	beckerc	10/29/19 11:03

Lab Sample ID: 280-129936-9 Client Sample ID: G0070-1

Date Analyzed: 10/29/19 05:27 Lab File ID: 10280050.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 11:04
Nitrobenzene	9.92	Baseline Smoothing	beckerc	10/29/19 11:04
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:03

Lab Sample ID: 280-129936-9 MS Client Sample ID: G0070-1 MS

Date Analyzed: 10/29/19 05:50 Lab File ID: 10280051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline Smoothing	beckerc	10/29/19 11:04
RDX	7.76	Baseline Smoothing	beckerc	10/29/19 11:05

Lab Sample ID: 280-129936-9 MSD Client Sample ID: G0070-1 MSD

Date Analyzed: 10/29/19 06:13 Lab File ID: 10280052.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline Smoothing	beckerc	10/29/19 11:05
RDX	7.75	Baseline Smoothing	beckerc	10/29/19 11:05

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 475588

Lab Sample ID: 280-129936-9 MS Client Sample ID: G0070-1 MS

Date Analyzed: 10/29/19 06:35 Lab File ID: 10280053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.35	Baseline Smoothing	beckerc	10/29/19 11:06
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:07
4-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:07

Lab Sample ID: 280-129936-9 MSD Client Sample ID: G0070-1 MSD

Date Analyzed: 10/29/19 06:58 Lab File ID: 10280054.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.36	Baseline Smoothing	beckerc	10/29/19 11:07
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:08

Lab Sample ID: 280-129936-10 Client Sample ID: CA213-1

Date Analyzed: 10/29/19 07:21 Lab File ID: 10280055.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene	9.92	Baseline Smoothing	beckerc	10/29/19 11:08
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:08

Lab Sample ID: 280-129936-11 Client Sample ID: NW070-1

Date Analyzed: 10/29/19 07:44 Lab File ID: 10280056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.71	Baseline Smoothing	beckerc	10/29/19 11:08

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 475588

Lab Sample ID: 280-129936-12 Client Sample ID: G0081-1

Date Analyzed: 10/29/19 08:07 Lab File ID: 10280057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 11:09
1,3,5-Trinitrobenzene	8.88	Baseline Smoothing	beckerc	10/29/19 11:09
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:09
Tetryl		Invalid Compound ID	beckerc	10/29/19 11:09

Lab Sample ID: 280-129936-13 Client Sample ID: G0075-1

Date Analyzed: 10/29/19 08:30 Lab File ID: 10280058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 11:10
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:10
Tetryl		Invalid Compound ID	beckerc	10/29/19 11:10

Lab Sample ID: CCV 280-475588/61 Client Sample ID:

Date Analyzed: 10/29/19 09:39 Lab File ID: 10280061.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	10/29/19 11:11
DNX	6.91	Baseline Smoothing	beckerc	10/29/19 11:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 475588

Lab Sample ID: 280-129936-14 Client Sample ID: G0079-1

Date Analyzed: 10/29/19 10:02 Lab File ID: 10280062.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	beckerc	10/29/19 11:11
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 11:12
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:12
Tetryl		Invalid Compound ID	beckerc	10/29/19 11:12

Lab Sample ID: 280-129936-15 Client Sample ID: G0080-1

Date Analyzed: 10/29/19 10:25 Lab File ID: 10280063.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	beckerc	10/29/19 11:12
RDX	7.76	Baseline Smoothing	beckerc	10/29/19 11:12
1,2-Dinitrobenzene	8.72	Baseline Smoothing	beckerc	10/29/19 11:13
3-Nitrotoluene		Invalid Compound ID	beckerc	10/29/19 11:13
4-Amino-2,6-dinitrotoluene	11.36	Baseline Smoothing	beckerc	10/29/19 11:13
2-Amino-4,6-dinitrotoluene	11.66	Baseline Smoothing	beckerc	10/29/19 11:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 476053

Lab Sample ID: CCV 280-476053/22 Client Sample ID:

Date Analyzed: 10/31/19 19:14 Lab File ID: 10310022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	11/01/19 08:40
DNX	6.91	Baseline Smoothing	beckerc	11/01/19 08:40

Lab Sample ID: 280-129936-4 DL Client Sample ID: EW7-PM24B-1-35 DL

Date Analyzed: 10/31/19 20:23 Lab File ID: 10310025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.48	Baseline Smoothing	beckerc	11/01/19 08:44

Lab Sample ID: 280-129936-8 DL Client Sample ID: EW7-PM28B-1-35 DL

Date Analyzed: 10/31/19 20:46 Lab File ID: 10310026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX		Invalid Compound ID	beckerc	11/01/19 08:45
Tetryl		Invalid Compound ID	beckerc	11/01/19 08:45

Lab Sample ID: CCV 280-476053/29 Client Sample ID:

Date Analyzed: 10/31/19 21:54 Lab File ID: 10310029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	11/01/19 08:49
DNX	6.91	Baseline Smoothing	beckerc	11/01/19 08:49

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00392	11/13/19	11/06/19	Di Water, Lot na	100 mL	NH3 CAL STD_00031	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00031	08/31/20		Ricca, Lot 2902E25		(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV_00376	11/06/19	11/04/19	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	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00027	12/31/19		ULTRA Scientific, Lot CS-5628		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 LCS_00089	11/08/19	05/08/19	Acetonitrile, Lot ACN_00030	100 mL	8330LCSMix1_00109	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00008	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
.8330LCSMix1_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
8330 LCS_00094	04/03/20	10/03/19	Acetonitrile, Lot ACN_00039	100 mL	8330 LCSMix2_00105	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					8330_NG_Stk_00077	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00078	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00083	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00084	1 mL	PETN	100 ug/mL
					EXP-SS-MIX1_00008	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					PicricARestek_00085	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330 LCSMix2_00105	08/07/23	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
.8330_NG_Stk_00077	08/31/22	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00078	08/31/22	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00083	09/30/22	Restek, Lot A0152514			(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00084	09/30/22	Restek, Lot A0152514			(Purchased Reagent)		PETN	5000 ug/mL
.EXP-SS-MIX1_00008	07/31/24	Restek, Lot A0151407			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.PicricARestek_00085	11/30/23	Restek, Lot A0148431			(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	MNX	11.67 ug/mL
.MNX,TNX,DNX_00026	12/31/19	ULTRA Scientific, Lot CS-5628			(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00003	12/31/19	07/16/19	Acetonitrile, Lot 00226	10 mL	MNX,TNX,DNX_00036	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00036	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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	20.04 ug/mL
							2,6-Dinitrotoluene	20.06 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330IntermStk_00059	11/30/19	07/22/19	Acetonitrile, Lot 200488	10 mL	8330_NG_Stk_00052	200 uL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00056	200 uL	PETN	100 ug/mL
					8330ICALStock_00029	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10.01 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.02 ug/mL
							2,6-Dinitrotoluene	10.03 ug/mL
							2-Amino-4,6-dinitrotoluene	10.03 ug/mL
							2-Nitrotoluene	10.03 ug/mL
							3-Nitrotoluene	10.04 ug/mL
							4-Amino-2,6-dinitrotoluene	10.03 ug/mL
							4-Nitrotoluene	10.04 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.02 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00059	1 mL	2,4,6-Trinitrophenol	10 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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00059	04/12/20	AccuStandard, Lot 218031154			(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
					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_00109	03/20/20	09/20/19	Acetonitrile, Lot ACN_00223	250 mL	8330SurrStkSS_00147	0.5 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00155	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00158	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00147	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00155	07/31/23	Restek, Lot A0139489			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00158	07/31/24	Restek, Lot A0146866			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_00861	11/04/19	10/28/19	Di Water, Lot na	1000 mL	Alk stk std_00017	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00017	03/30/21	Fischer, Lot 191517			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
IC CAL cl/so4_00279	10/18/19	10/11/19	Di Water, Lot na	100 mL	IC CL cal_00058	25 mL	Chloride	250 mg/L
					IC sulfatecal_00057	25 mL	Sulfate	250 mg/L
.IC CL cal_00058	04/30/20	SPEX CertiPrep, Lot 4-154CL-2X			(Purchased Reagent)		Chloride	1000 mg/L
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00284	11/21/19	11/14/19	Di Water, Lot na	100 mL	IC sulfatecal_00057	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00488	10/22/19	10/15/19	Di Water, Lot NA	100 mL	IC BR ICV_00017	5 mL	Bromide	50 mg/L
					IC FL cal_00013	5 mL	Fluoride	50 mg/L
.IC BR ICV_00017	06/30/20	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_01709	11/19/19	11/12/19	Di Water, Lot 27	200 mL	IC sulfatecal_00057	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC SO4 ICV_00020	08/31/20	ERA, Lot 180818			(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00622	11/18/19	11/11/19	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00022	5 mL	Sulfate	5000.51 mg/L
.IC SPK 6 ANIO_00022	09/29/20	10/01/19	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00005	18.1408 g	Sulfate	10001 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..IC MS/MSD S04_00005	09/29/20	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
NXN CAL INT_00511	11/05/19	10/29/19	Di Water, Lot NA	100 mL	NOXT Cal STD_00023	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00023	12/31/20	RICCA, Lot 1906A84			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00492	11/05/19	10/29/19	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 ICV INT_01626	01/09/20	10/09/19	Di Water, Lot N/A	500 mL	50% NaOH_00017	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00007	4.09 g	Sulfide	1092.03 mg/L
.50% NaOH_00017	10/01/20	Fisher, Lot 186215			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00007	06/28/23	Acros, Lot B0132482A			(Purchased Reagent)		Sulfide	0.1335 g/g
TKN 25ppm_00799	11/18/19	10/17/19	Di Water, Lot 1	100 mL	TKN 100PPM_00113	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00113	11/18/19	10/17/19	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_00084	11/18/19	10/17/19	DI water, Lot 1	100 mL	TKN ICV 100_00075	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00075	11/18/19	10/17/19	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_00041	05/31/20	Ricca, Lot 4905J38			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm
							DOC Result 1	1000 ppm
							DOC Result 2	1000 ppm
							DOC Result 3	1000 ppm
							DOC Result 4	1000 ppm
TOC LCS Std_00048	06/30/21	Agilent, Lot 0006465171			(Purchased Reagent)		Dissolved Organic Carbon	1001 ppm
							Dissolved Organic Carbon - Duplicate	1001 ppm
							Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm
							DOC Result 2	1001 ppm
							DOC Result 3	1001 ppm
							DOC Result 4	1001 ppm
							TOC Result 1	1001 ppm
							TOC Result 2	1001 ppm
							TOC Result 3	1001 ppm
							TOC Result 4	1001 ppm
							Total Carbon	1001 ppm
							Total Carbon Res 1	1001 ppm
							Total Carbon Res 2	1001 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Total Carbon Res 3	1001 ppm
							Total Carbon Res 4	1001 ppm
							Total Organic Carbon	1001 ppm
							Total Organic Carbon - Duplicates	1001 ppm
							Total Organic Carbon - Quad	1001 ppm

Reagent

50% NaOH_00017

ThermoFisher SCIENTIFIC

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 DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	SS254	Quality Test / Release Date	10/03/2018
Lot Number	186215	Expiration Date	Oct/2020
Description	SODIUM HYDROXIDE, 50%, CERTIFIED		
Country of Origin	United States		
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	This product is of mineral origin, not animal origin, and to the best of our knowledge, does not contribute to BSE or TSE.		
Chemical Comment	This product is not manufactured with natural latex rubber or genetically modified organisms. Also it is not manufactured using allergenic materials, including dyes/food dyes, eggs/egg products, fish/shellfish/crustaceans, flavors, glutens, legumes, milk, mollusks, MSG, mustards, plant nuts/seeds/oils, peanuts/peanut products, protein hydrolysates, soybean products, spices, sulfites, sulfates, tree nuts or oils, and wheat.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	CLEAR, COLORLESS LIQUID HAVING NO SEDIMENT OR PARTICULATES
ASSAY	%	Inclusive Between 50 - 52	50.5
CARBONATE	%	<= 0.10	0.07
CHLORIDE	%	<= 0.005	<0.005
HEAVY METALS (as Ag)	%	<= 0.001	<0.001
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	%	<= 0.002	<0.002
AMMONIUM HYDROX. PPT	%	<= 0.010	<0.010
NITROGEN COMPOUNDS	ppm	<= 5	<5
PHOSPHATE (PO4)	ppm	<= 5	<5
POTASSIUM (K)	%	<= 0.025	<0.003
SILICA (SiO2)	%	<= 0.01	<0.01
IRON (Fe)	ppm	<= 5	<5

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Bridgewater

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

8330 LCSMix2_00105

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0141002

Description : 8330 Calibration Mix #2

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

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

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

CERTIFIED VALUES

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

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

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

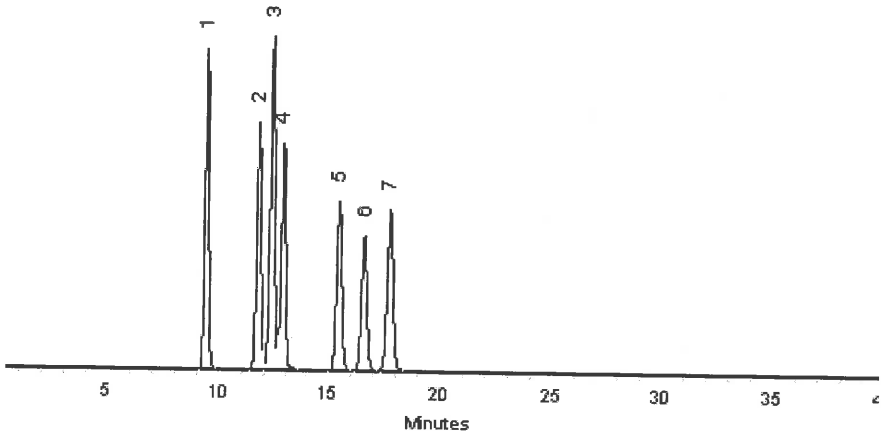
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician **Date Mixed:** 23-Aug-2018 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 28-Aug-2018

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

Reagent

8330 Stock_TS_00012

Certificate of Analysis

Agilent

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 9001
Registered
TUV USA, Inc.

250 Smith Street North Kingstown, Rhode Island 02852 **www.ultrasci.com**

Reagent

8330_NG_Stk_00052

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0124122

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/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	5,016.0 µg/mL	+/- 46.6461 µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 150612JLM)		+/- 277.1256 µg/mL	Unstressed
	Purity 99%		+/- 322.4378 µg/mL	Stressed

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

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

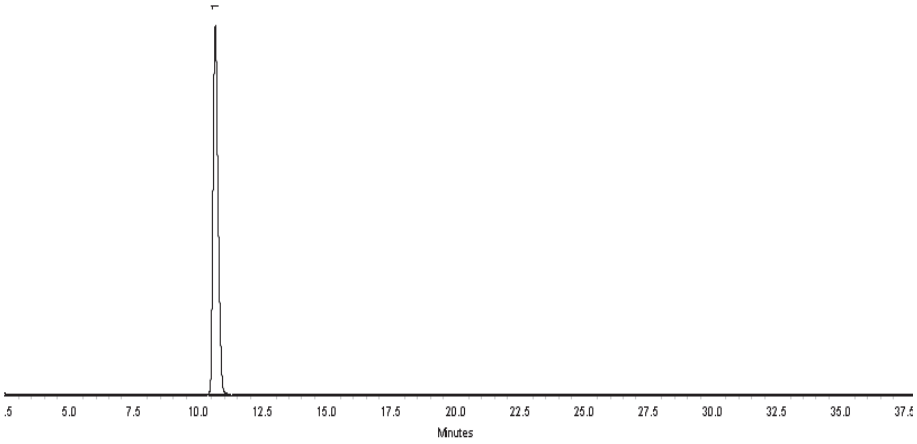
Flow Rate:
1.0 ml/min.

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00077

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0151571

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : August 31, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,036.0 µg/mL	+/- 46.8321	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 170616JLM)		+/- 278.2306	µg/mL	Unstressed
	Purity 99%		+/- 323.7234	µg/mL	Stressed

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

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

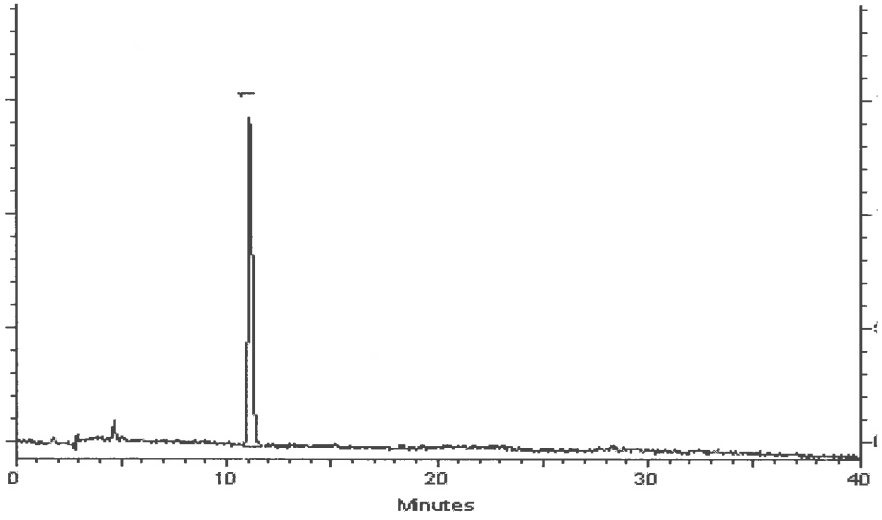
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph A Jaglowski
Joseph Jaglowski - Mix Technician

Date Mixed: 05-Aug-2019 **Balance:** B707717271

Jennifer A Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 09-Aug-2019

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

Reagent

8330_NG_Stk_00078

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Catalog No. : 568871 **Lot No.:** A0151571

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : August 31, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,036.0 µg/mL	+/- 46.8321	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 170616JLM)		+/- 278.2306	µg/mL	Unstressed
	Purity 99%		+/- 323.7234	µg/mL	Stressed

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

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

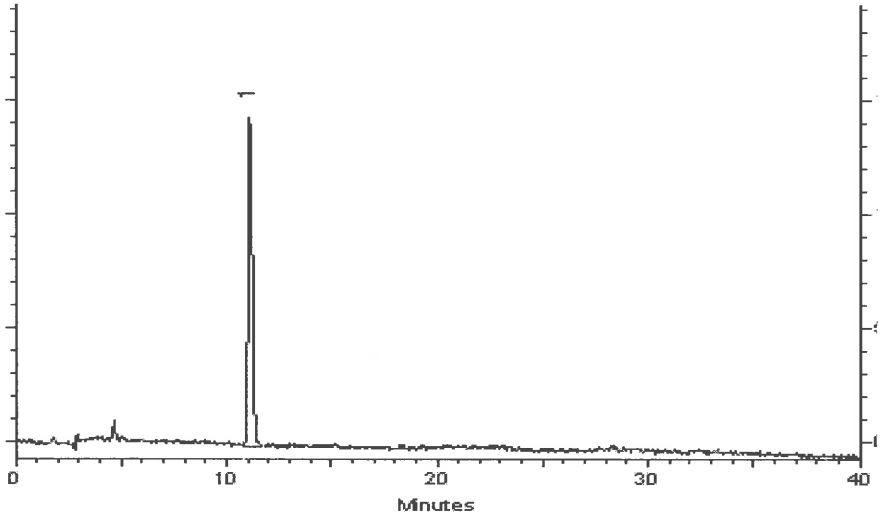
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph J Jaglowski - Mix Technician **Date Mixed:** 05-Aug-2019 **Balance:** B707717271

Jennifer J Pollino - Operations Tech-ARM QC **Date Passed:** 09-Aug-2019

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

Reagent

8330_OP_DMT_00002

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8330_OP_DMT_00002

Reagent ID: 8330_OP_DMT_00002

		Expiration Date:	12/31/2019
Description:	Use for MNX, DNX, TNX spike	Laboratory:	TestAmerica Denver
No. of Bottles:	1	Prepared By:	Becker, Chad B
Storage Location:	_Pick Storage Location	Solvent:	Acetonitrile
Reagent Volume:	10.000 mL	Solvent Lot:	00222
Creation Date:	03/12/2019		
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,DNX_00026	12/31/2019	100.10000	ug/mL	10.01000	ug/mL
MNX	MNX,TNX,DNX_00026	12/31/2019	116.70000	ug/mL	11.67000	ug/mL
TNX	MNX,TNX,DNX_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
MNX,TNX,DNX_00026	Custom MNX,TNX,DNX 8321 exp ULTRA	ASTD	12/31/19	ULTRA Scientific	CS-5628	CUS-23984	1.00000	mL

HF 3/19/19

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

This section to be completed by the analyst creating the standard:		
Standard Name	8330_OP_DMT	
Analyst name (and trainer if applicable)	CB	
Creation Date		
Checklist	Initial each item:	
	✓	Stock standard catalog # in TALS matches the catalog # on the vendor label.
	✓	All stock standards have a correct open date in TALS.
	✓	All stock standards have a correct expiration date in TALS.
Verification status	Initial one of the following:	
		Requires MeCl2 exchange prior to verification. Paperwork submitted to concentrations. Date/time submitted to concentrations:
		Requires esterification priot to verification. Paperwork submitted to concentrations. Date/time submitted to concentrations:
	CB	No exchange needed; aliquot submitted to analytical group for analysis. Date/time submitted to analytical group for analysis:
		No verification required. Submit to group leader.
		Other (specify and submit to group leader):

This section to be completed by concentrations analyst, if applicable:	
Volume of standard used:	Initials:
Final volume after exchange:	
Date/time submitted for analysis:	
Submitted with batch # (or other designated location):	
Volume of standard used:	Initials:
Final volume after esterification:	
Date/time submitted for analysis:	
Submitted with batch # (or other designated location):	

Page 101 of 1213

01/06/2020

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

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Certificate of Composition

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** 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 (Lot 051108JLM)		+/- 277.5676 µg/mL	Unstressed
	Purity 99%		+/- 322.9521 µg/mL	Stressed

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

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

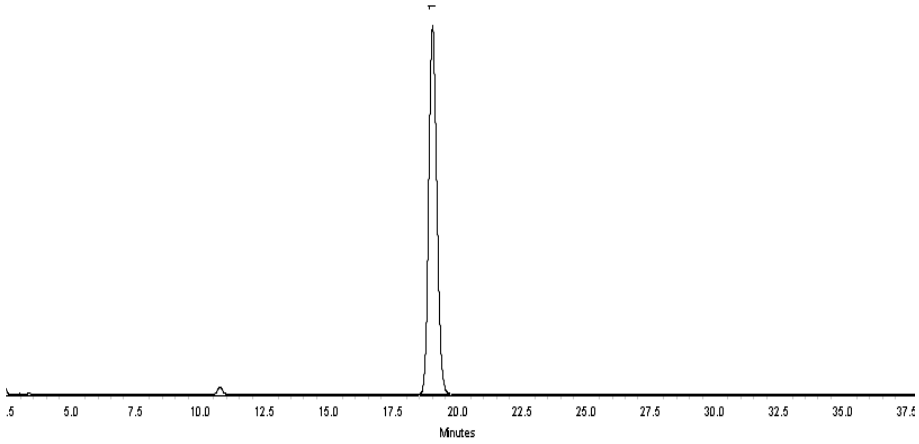
Flow Rate:
1.0 ml/min.

Mobile Phase A:
-

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00083

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Fax: (814)353-1309

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0152514

Description : Custom PETN Standard

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

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

Expiration Date : September 30, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	PETN	5,004.0 µg/mL	+/- 46.5345 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 276.4626 µg/mL	Unstressed
	Purity 99%		+/- 321.6664 µg/mL	Stressed

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

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

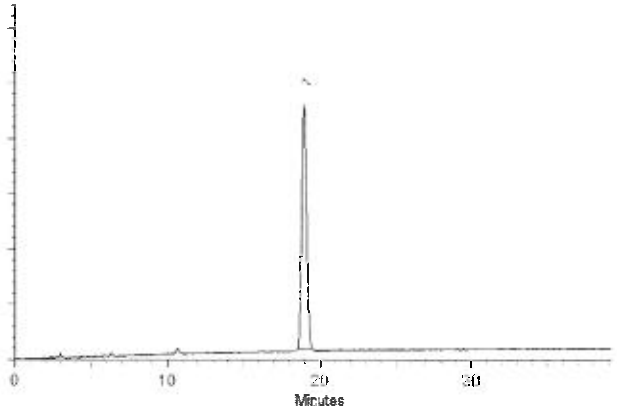
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 03-Sep-2019 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 06-Sep-2019

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

Reagent

8330_PETN_Stk_00084

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 568872 **Lot No.:** A0152514

Description : Custom PETN Standard

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

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

Expiration Date : September 30, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	PETN	5,004.0 µg/mL	+/- 46.5345 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 276.4626 µg/mL	Unstressed
	Purity 99%		+/- 321.6664 µg/mL	Stressed

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

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

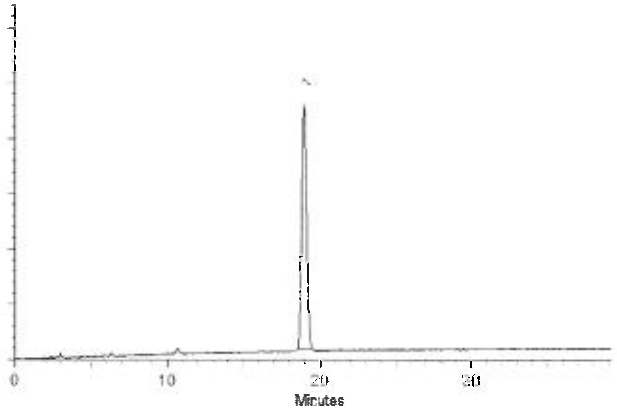
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 03-Sep-2019 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 06-Sep-2019

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

Reagent

8330LCSMix1_00109

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0131772

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/mL, Acetonitrile, 1mL/ampul

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

Expiration Date : October 31, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

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

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

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

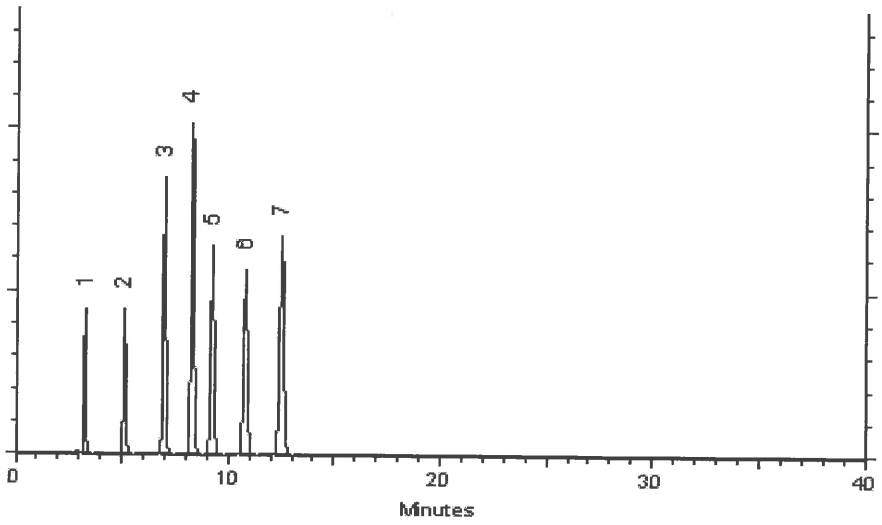
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dawn Brownson - Mix Technician **Date Mixed:** 19-Oct-2017 **Balance:** B707717271

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

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0141002

Description : 8330 Calibration Mix #2

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

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

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

CERTIFIED VALUES

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

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

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

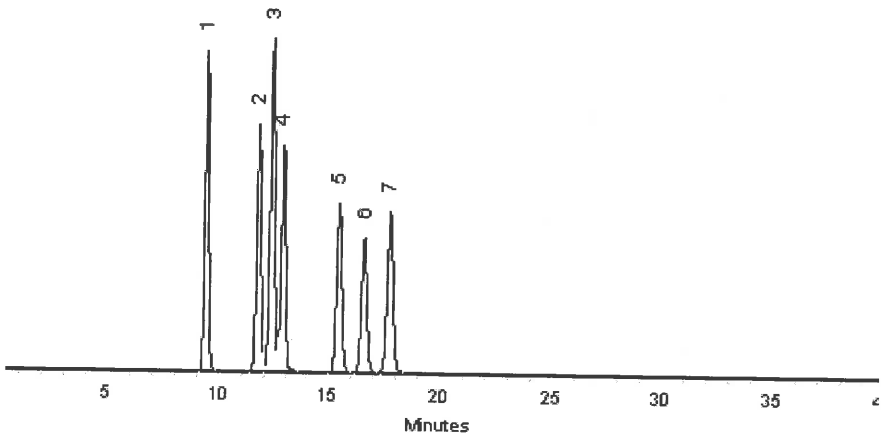
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 23-Aug-2018 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 28-Aug-2018

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

Reagent

8330PAStkPS_00058

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

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 % (HPLC)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

Superseded

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

For use in routine laboratory analysis.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 4/17

Reagent

8330PAStkPS_00059

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 218031154
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 12, 2018
Expiration: Apr 12, 2020
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 % (HPLC)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

R 9/25/18 TP

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

8330SurrStkSS_00134

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Certificate of Analysis

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0124792

Description : 8330 Surrogate Mix

8330 Surrogate Std 1, 2-Dinitrobenzene 1000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : February 28, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.4187	µg/mL	Unstressed
	Purity 99%		+/- 57.7382	µg/mL	Stressed

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

Reagent

8330SurrStkSS_00135

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0124792

Description : 8330 Surrogate Mix

8330 Surrogate Std 1, 2-Dinitrobenzene 1000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : February 28, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.4187	µg/mL	Unstressed
	Purity 99%		+/- 57.7382	µg/mL	Stressed

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

Reagent

8330SurrStkSS_00147

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0135839

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.0822	µg/mL	Unstressed
	Purity 99%		+/- 57.3938	µg/mL	Stressed

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

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

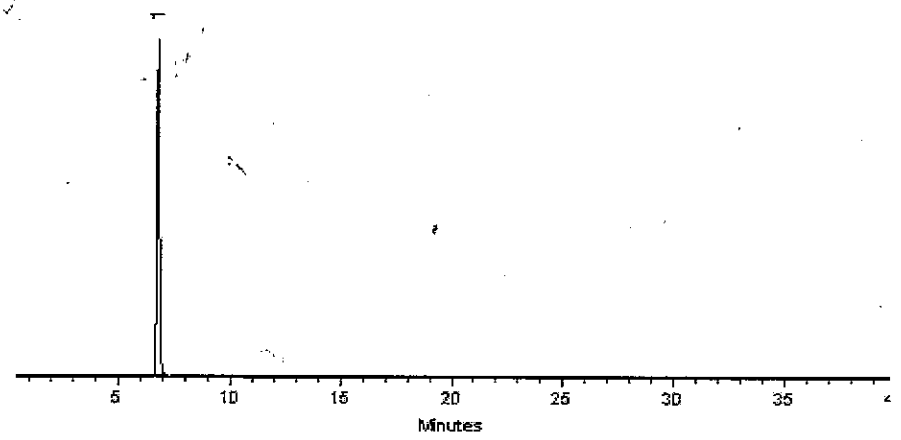
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dustin J Lidgett
Dustin Lidgett - Mix Technician

Date Mixed: 05-Mar-2018 **Balance:** 1128360905

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 09-Mar-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00152

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Bellefonte, PA 16823-8812
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	1,2-Dinitrobenzene	1,001.0 µg/mL	+/- 5.9456 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.1383 µg/mL	Unstressed
	Purity 99%		+/- 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/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

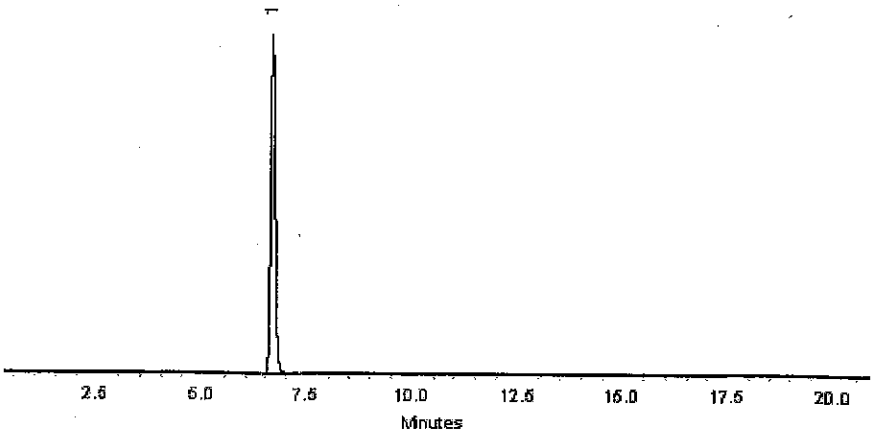
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 10-Jul-2018 **Balance:** B707717271

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	1,2-Dinitrobenzene	1,001.0 µg/mL	+/- 5.9456 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.1383 µg/mL	Unstressed
	Purity 99%		+/- 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/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

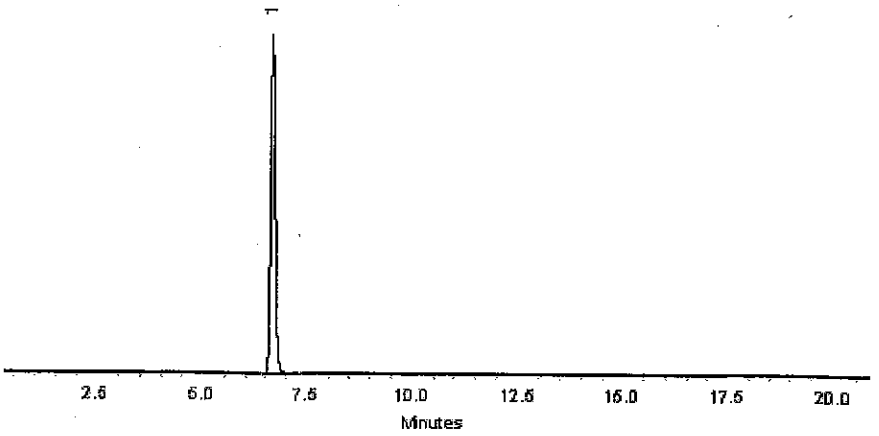
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 10-Jul-2018 **Balance:** B707717271

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_00155

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	1,2-Dinitrobenzene	1,001.0 µg/mL	+/- 5.9456 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.1383 µg/mL	Unstressed
	Purity 99%		+/- 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/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

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

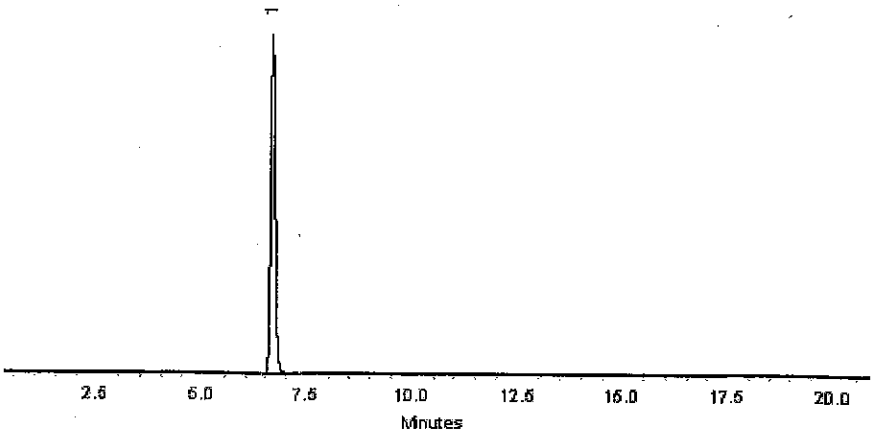
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 10-Jul-2018 **Balance:** B707717271

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_00158

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

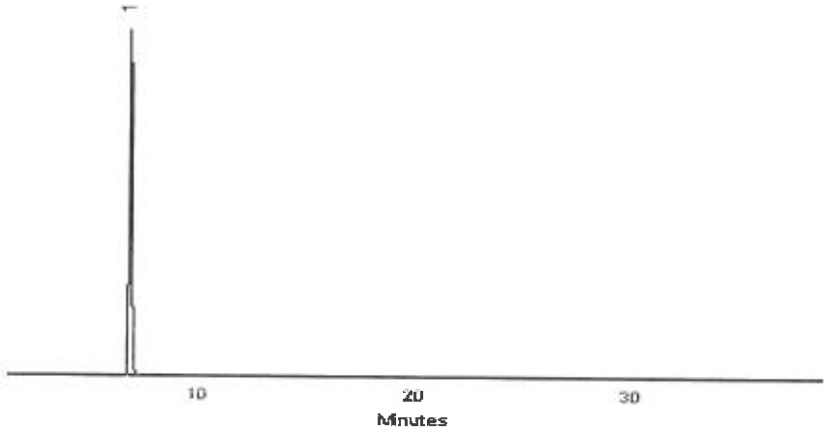
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStock_00163

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 216071012
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Jul 1, 2016
Expiration: Jul 1, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

Sample

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

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

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

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

See reverse side for additional information

Certified By: _____
Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

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

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

Reagent

Alk stk std_00017

ThermoFisher SCIENTIFIC

Certificate of Analysis

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

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

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	SS148	Quality Test / Release Date	03/20/2019
Lot Number	191517	Expiration Date	Mar/2021
Description	SODIUM CARBONATE SOLUTION, 1N		
Country of Origin	United States		
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, Colorless liquid
NORMALITY		Inclusive Between 0.995 - 1.000	0.999
COLOR	APHA	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

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

Reagent

EXP-SS-MIX1_00008

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Bellefonte, PA 16823-8812
Tel: (800)356-1688
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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0151407

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/mL, Acetonitrile, 1mL/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,004.9 µg/mL	+/- 5.9689	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 190402JLM)		+/- 55.0525	µg/mL	Unstressed
	Purity 97%			+/- 64.1967	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,003.0 µg/mL	+/- 5.9574	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot DJ5QO)		+/- 54.9463	µg/mL	Unstressed
	Purity 97%			+/- 64.0727	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
5	Nitrobenzene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed

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

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

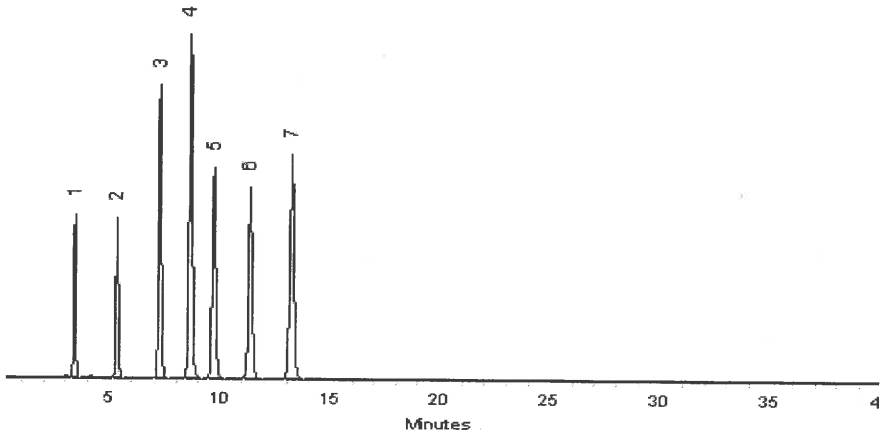
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 30-Jul-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Aug-2019

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

Reagent

IC BR ICV_00017

Standard Verification Form

Standard Information			
Vendor Standard Name	BROMIDE 1000 mg/L		
Vendor	RICCA		
Lot number	1804F11		
Initial Verification	☐	Re-Verification	☒

TALS "Reagent" Information	
TALS Standard ID	IC BR ICV 1000 mg/L
COA Reviewed against what is in TALS	☒

Verification Information and Data			
Verified by	JP	Instrument ID	IC11
Verification Date	9/30/19	Method Reference	300.0 ANIONS
ID of Standard Used for Verification	IC ICV S_00248	Batch # / Chrom Work List #	470931 85335
Attach to this form: formulary report , COA and data used for verification **Attach to standard in TALS: this form and all supporting documentation including the original CoA**			
See Acceptance Criteria Below:			
Approved for Use	☒	Not Approved for Use	☐
New expiration date can be no greater than ½ the designated standards shelf life from the date of re-verification. Standards can only be re-verified one time.			
New Expiration Date:	+2/31/19 06/30/19 JP 9/30/19 JP 9/30/19		

1st Level Review: JP Date: 9/30/19

2nd Level Review: [signature] Date: 9/30/19

QA Review (Re-verification only)	[signature]	Date: 9/30/19

Acceptance Criteria		
Department	**Standard Analytes**	**Poor Performers* and Esterified Analytes**
GC/HPLC	≤ 15 %D	≤ 35 %D or ≤ 50 %D for dinoseb
GCMS/LCMS	≤ 35 %D	≤ 55 %D
MSVOA	≤ 25 %D	≤ 55 %D
Metals	≤ 8 %D	NA
Wet Chemistry	≤ 5 %D	NA

*See analytical SOP for details on poor performing analytes.

DV-F0038–9-1-2015 Rev0

TALS Raw Data Report

Job Number: 280-127984-1
LIMS Batch: 470931
Equipment: WC_IonChrom11

Laboratory: Eurofins TestAmerica, Denver

IC BR ICV_ 00013 INORGANIC VENTURES

RS# 8 Lab ID: **ICV 280-470931/8** Inj Date: 9/17/2019 5:15:00PM Dil: 1.0 Meth: 9056A_28D

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Fluoride		326087446 ug/mL	mg/L	101	90 110		
Sulfate		513177614 ug/mL	mg/L	97	90 110		
Chloride		562198627 ug/mL	mg/L	98	90 110		
Bromide		335770599 ug/mL	mg/L	105	90 110		

RS# 9 Lab ID: **ICB 280-470931/9** Inj Date: 9/17/2019 5:31:00PM Dil: 1.0 Meth: 9056A_28D

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Fluoride		538152227 ug/mL	mg/L				
Sulfate		ND ug/mL	mg/L				
Chloride		ND ug/mL	mg/L				
Bromide		ND ug/mL	mg/L				

TALS Raw Data Report

Job Number: 280-128788-1
LIMS Batch: 472004
Equipment: WC_IonChrom11

Laboratory: Eurofins TestAmerica, Denver

IC BR ICV_00017 RICLA

RS# 1 Lab ID: **CCV 280-472004/1** Inj Date: 9/26/2019 10:26:00AM Dil: 1.0 Meth: 9056A_28D_DOD5

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Bromide		378723886 ug/mL	mg/L	100	90 110		
Fluoride		474521679 ug/mL	mg/L	101	90 110		
Sulfate		457171622 ug/mL	mg/L	100	90 110		
Chloride		453919791 ug/mL	mg/L	99	90 110		

RS# 2 Lab ID: **CCB 280-472004/2** Inj Date: 9/26/2019 10:42:00AM Dil: 1.0 Meth: 9056A_28D_DOD5

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Bromide		ND ug/mL	0.50 U mg/L				
Fluoride		126258159 ug/mL	0.50 U mg/L				
Sulfate		950391078 ug/mL	2.5 U mg/L				
Chloride		ND ug/mL	2.5 U mg/L				

RS# 3 Lab ID: **MRL 280-472004/3** Inj Date: 9/26/2019 10:58:00AM Dil: 1.0 Meth: 9056A_28D_DOD5

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Bromide		464051419 ug/mL	mg/L	109	50 150		
Fluoride		738847983 ug/mL	0.574 J mg/L	115	50 150		
Sulfate		586210798 ug/mL	4.48 J mg/L	90	50 150		
Chloride		398424907 ug/mL	mg/L	82	50 150		

RS# 4 Lab ID: **LCS 280-472004/4** Inj Date: 9/26/2019 11:15:00AM Dil: 1.0 Meth: 9056A_28D_DOD5

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Bromide		599114194 ug/mL	mg/L	100	91 110		
Fluoride		512427147 ug/mL	mg/L	100	88 112		
Sulfate		415430054 ug/mL	mg/L	99	87 112		
Chloride		389947419 ug/mL	mg/L	99	87 111		

RS# 5 Lab ID: **LCSD 280-472004/5** Inj Date: 9/26/2019 11:31:00AM Dil: 1.0 Meth: 9056A_28D_DOD5

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Bromide		242213319 ug/mL	mg/L	100	91 110	0	10
Fluoride		745510552 ug/mL	mg/L	100	88 112	0	10
Sulfate		017601849 ug/mL	mg/L	100	87 112	0	10
Chloride		265784938 ug/mL	mg/L	99	87 111	0	10

RS# 6 Lab ID: **MB 280-472004/6** Inj Date: 9/26/2019 11:48:00AM Dil: 1.0 Meth: 9056A_28D_DOD5

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Bromide		ND ug/mL	0.50 U mg/L				
Fluoride		ND ug/mL	0.50 U mg/L				
Sulfate		096458054 ug/mL	3.0 U mg/L				
Chloride		ND ug/mL	3.0 U mg/L				

RS# 7 Lab ID: **280-128788-D-1** Inj Date: 9/26/2019 6:06:00PM Dil: 1.0 Meth: 9056A_28D_DOD5

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Fluoride		393697342 ug/mL	0.34 J mg/L				
Sulfate		766656671 ug/mL	mg/L				
Chloride		043879112 ug/mL	mg/L				
Bromide		439183912 ug/mL	0.50 U mg/L				

RS# 8 Lab ID: **280-128788-D-1** Inj Date: 9/26/2019 6:22:00PM Dil: 20.0 Meth: 9056A_28D_DOD5

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Fluoride		777758385 ug/mL	10 U mg/L				

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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."

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Reagent

IC CL cal_00058

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-CL9-2X **Lot No.** 4-154CL-2X

Description: 1000 µg/mL Chloride

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 997 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: 996 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	$PO4^{-3}$	<0.06
NO_2^-	<0.03	$SO4^{-2}$	<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 kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: APR - - 2019

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials -- Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001, ISO 17025, and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c=combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:

All certified values reported were derived from the Certification Report, SPEX CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

Reagent

IC FL cal_00013

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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

Fisher Scientific

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

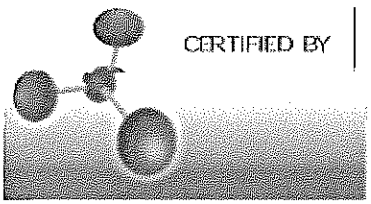
Certificate of Analysis

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

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

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

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



CERTIFIED BY

Lab Manager Fair Lawn

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

Reagent

IC SO4 ICV_00020

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Sulfate (SO_4)
CATALOG NUMBER:	062 -125 mL; 995 - 500 mL
LOT NUMBER:	180818
ISSUE DATE:	August 16, 2018
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Sulfate (K_2SO_4)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	0.9985 ± 0.0008 g/mL at 19.8°C and 755 mm Hg
TRACEABILITY[3]:	99.2%
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 8/2020**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009 ACCREDITED
REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED
CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

IC sulfatecal_00057

ACCREDITED
Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 4-197SO4-2X

Description: 1000 µg/mL Sulfate

EXPIRES JUN. 30, 2020

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1001 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3181*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# MAN1018SO4. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 1002 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 999 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.006	NO_2^-	<0.004
Cl^-	<0.01	NO_3^-	<0.006
F^-	<0.008	$PO4^{-3}$	<0.01

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: JUN -- 2019

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001, ISO 17025, and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c=combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:

All certified values reported were derived from the Certification Report, SPEX CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Legal Notice:

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Reagent

MNX,TNX,DNX_00026

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number: CUS-23984 **Page:** 1 of 1

Lot Number: CS-5628 **Lot Issue Date:** 16-Nov-2018 **Expiration Date:** 31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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

Monica Bourgeois
QMS Representative

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

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

ORG ver 1.1

250 Smith Street North Kingstown, Rhode Island 02852 **www.ultrasci.com**

Reagent

MNX,TNX,DNX_00027

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number: CUS-23984 **Page:** 1 of 1

Lot Number: CS-5628 **Lot Issue Date:** 16-Nov-2018 **Expiration Date:** 31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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

Monica Bourgeois
QMS Representative

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

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

ORG ver 1.1

250 Smith Street North Kingstown, Rhode Island 02852 **www.ultrasci.com**

Reagent

MNX,TNX,DNX_00036

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number: CUS-23984 **Page:** 1 of 1

Lot Number: CS-5628 **Lot Issue Date:** 16-Nov-2018 **Expiration Date:** 31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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

Monica Bourgeois
QMS Representative

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

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

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.ultrasci.com

Reagent

NH3 ICV STD_00026

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	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 (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

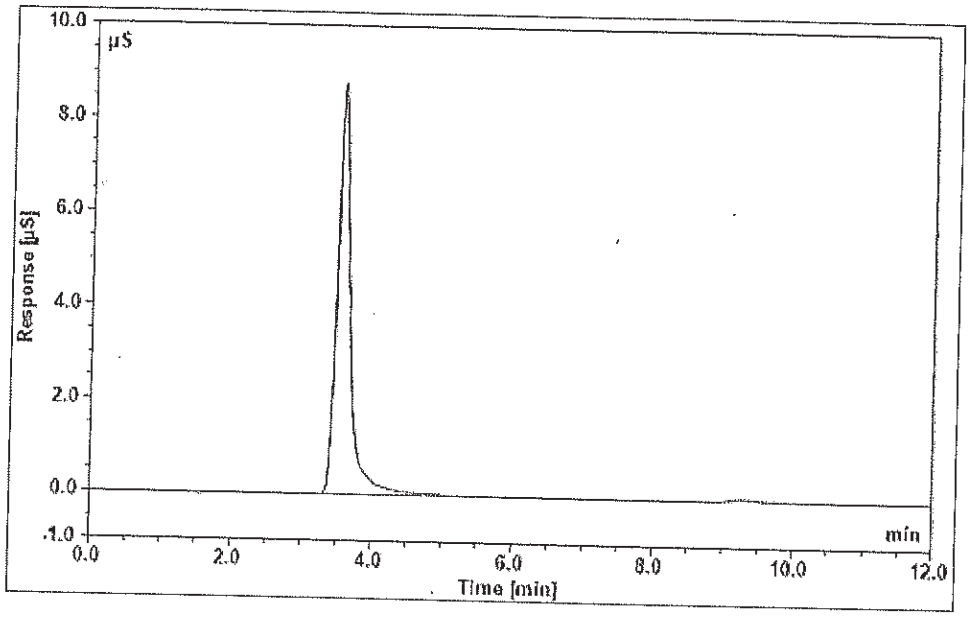
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS12A-5µm 3x150mm	**Eluent:**	20 mM MSA
Guard Column:	IonPac CG12A-5µm 3x30mm	**Eluent Flow Rate:**	0.50 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	35° C
		Cell Temp:	35° C
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale X-Axis:**	minutes
		Scale Y-Axis:	10 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	30 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 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: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

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

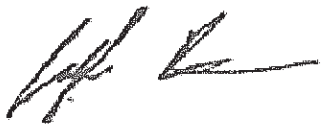
- Sealed TCT Bag Open Date: _____

- 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

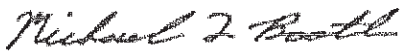
Certificate Prepared By:

Joseph Burns
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

NOXT ICV STD_00022

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Nitrate as N (NO_3-N)
CATALOG NUMBER:	052 -125 mL; 991 - 500 mL
LOT NUMBER:	031217
ISSUE DATE:	January 8, 2018
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Nitrate (KNO_3)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	1.0028 ± 0.0008 g/mL at 21.5°C and 627 mm Hg
TRACEABILITY[3]:	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
ACCREDITED
REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005
ACCREDITED
CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

PicricARestek_00085

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499 **Lot No.:** A0148431

Description : Picric Acid Standard

Picric Acid Standard 1000µg/mL, Methanol, 1mL/1000µg/mL *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

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

Expiration Date : April 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid	1,001.0 µg/mL	+/- 5.9459	µg/mL	Gravimetric
	CAS # 88-89-1 (Lot 06130CU)		+/- 54.8400	µg/mL	Unstressed
	Purity 97%		+/- 63.9488	µg/mL	Stressed

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

Specific Reference Material Notes:
This is a derivatized analysis.

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

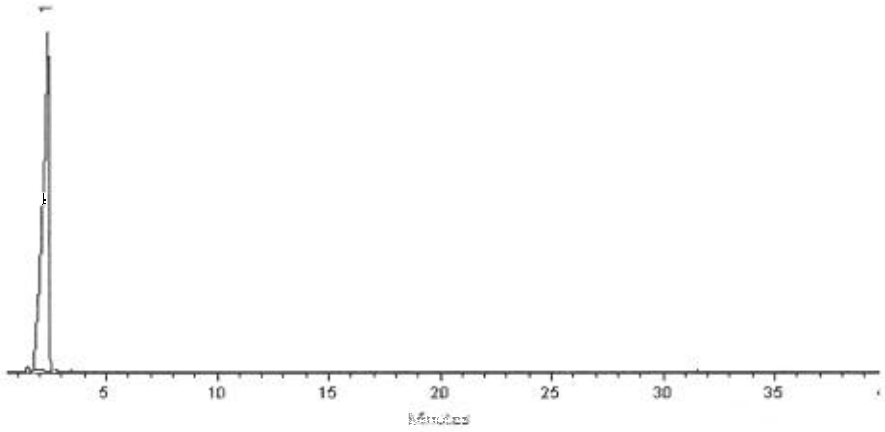
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dustin J Lidgett

Dustin Lidgett - Mix Technician **Date Mixed:** 22-Apr-2019 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 25-Apr-2019

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

Reagent

RSK7gasMathes_00025

MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture

Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS

Contents:
Net: 7.57 ft³; 0.21 m³

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)
*DM016894

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.00	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	0.995	%	±10%	±2%
Ethylene	1.00	0.973	%	±10%	±2%
Methane	1.00	1.00	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

*** Indicates the actual cylinder(s) analyzed.**

Lot No: 9307628511
Fill Date: 11/30/2017
Expiration Date: 12/01/2019

Analysis Date: 12/01/2017

Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Andrew L. Couch — 12/01/2017
Andrew Couch - Analyst — Date

Jesse Hayes — 12/04/2017
Jesse Hayes - QA Approval — Date

Reagent

TKN CAL STD_00017

nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Certificate of Analysis

TKN Calibration Standard - 1000 mg/L

Catalog Number: IS-009, IS-009-500
Lot Number: 010617
Manufacture Date: 01/06/17
Certified Date: 01/12/17

Expiration: 01/31/2021
Matrix: Water
Hazards: Irritant
(See MSDS)

Bulk Number	Analyte	CAS #	Purity	Certified Concentration (mg/L TKN)
W-1477-25	TKN from Glycine	56-40-6	99.4%	1000 ± 4.60

Packaging, Storage, Instructions For Use

Store at room temperature (15-30°C). After opening, this solution should be stored tightly capped at 2-8°C.

This certified reference material (CRM) is packaged in low density polyethylene. Allow to equilibrate to room temperature before use. Small aliquots should be poured out of the bottle rather than directly pipetted out of bottle in order to prevent contamination or premature degradation. A 1 mL sample size is recommended. Smaller sample volumes may negatively affect estimated uncertainty.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this CRM. The actual purity is referenced above. Analyte source material purity and associated uncertainty has been analytically verified against appropriate NIST SRMs, if available.

Method: Certified concentration confirmed by HPLC analysis against an independent reference standard with n=3.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Catalog Number: IS-009, IS-009-500
Lot Number: 010617

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Uncertainty

The ± uncertainty associated with the certified concentration is the expanded uncertainty at 95% confidence interval (CI) with K=2. This expanded uncertainty incorporates contributions from manufacturing, homogeneity, and stability.

Homogeneity

This CRM was thoroughly mixed in production. Batch homogeneity was established through analysis of samples chosen at random. A minimum 1 mL sample size is recommended.

Stability/Expiration

The stability of this CRM is based on short-term and long-term monitoring of the certified concentration. The expiration date is guaranteed to be valid from the manufacture date and is based on results of long-term monitoring.

Ewart Morris

Ewart Morris, Inorganics Technical Manager

Mark Hammersla

Mark Hammersla, President

Reagent

TKN ICV_00011

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Total Kjeldahl Nitrogen (TKN)
CATALOG NUMBER:	043 -125 mL; 996 - 500 mL
LOT NUMBER:	281018
ISSUE DATE:	December 7, 2018
REVISION DATE:	Original
STARTING MATERIAL:	Glycine (NH_2CH_2COOH)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water and 1% (v/v) HCl
DENSITY:	1.0055 ± 0.0010 g/mL at 16.6°C and 754 mm Hg
TRACEABILITY[3]:	100%
NIST/SRM:	194a Ammonium Dihydrogen Phosphate
VERIFICATION METHOD:	Ion Selective Electrode (ISE)
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 10/2020**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1439.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

TOC LCS Std_00048

Agilent

Certificate of Analysis
ISO Guide 34

Product Number: IQC-106
Lot Number: 0006465171

Lot Issue Date: 10-May 2019
Expiration Date: 30-Jun 2021

Product Name: Total Organic Carbon (TOC) Standard

Description:
This Reference Material (RM) was gravimetrically prepared in accordance with ISO Guide 34 and under Agilent's ISO 9001 registered quality system. The neat materials used for this product have been verified by Agilent's ISO 17025 laboratory and under Agilent's ISO Guide 34 accreditation. The analyte concentrations were verified by Agilent's ISO 17025 accredited laboratory. For each analyte, the true value, with its uncertainty value calculated at the 95% confidence level, is reported below.

Analyte	Starting Material	Lot Number	Purity (%)	Analyte Concentration	Traceability & Method
TOC	potassium hydrogen phthalate	RM14067	99.97	1001 ± 5 µg/mL	NAA02099; TOC Analyzer

Solvent: water (low TOC, <50 ppb)

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

Traceability:
Traceability has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on appropriate physical or chemical measurements, including gravimetric or volumetric dilution, where the mass or volume of a solution before and after dilution is measured. The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1, ISO 9001, ISO 17025, and ISO Guide 34. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 819.

Estimation of Uncertainties:
The true value is reported, with its uncertainty value calculated at the 95% confidence level.

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

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

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening and should be processed without delay for the true value to be valid within the stated uncertainties. Do not pipet from the bottle. Do not return any material removed for pipetting to the bottle. Tightly cap the bottle after removing any material and store according to the instructions noted above.

Hazards:
Refer to the Safety Data Sheet for information regarding this RM.

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

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

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis
ISO Guide 34

Product Number: IQC-106
Lot Number: 0006465171

Lot Issue Date: 10-May 2019
Expiration Date: 30-Jun 2021

Maintenance of Certification:
The real-time, long term stability of the RM may be monitored over the lifetime of the certification. If substantive changes occur that affect the certification before the expiration of this certificate, Agilent Technologies will notify the purchaser.

Monica Bourgeois
QMS Representative

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

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

Page 2 of 2

ANAB ACCREDITED TESTING LABORATORY
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.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05F0401.D

Lab ID: LCS 280-476033/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0683	94	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.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 006F0101.D

Lab ID: LCSD 280-476033/6 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0713	98	4	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.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 010F0301.D

Lab ID: 280-129936-9 MS Client ID: G0070-1 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0730	0.0020 U	0.0622	85	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.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 011F0401.D

Lab ID: 280-129936-9 MSD Client ID: G0070-1 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0650	89	4	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.: 280-129936-1

SDG No.:

Lab Sample ID: MB 280-476033/7

Matrix: Water Date Extracted:

Lab File ID:(1) 007F0201.D Lab File ID:(2) 007F0201.D

Date Analyzed:(1) 10/31/2019 10:43 Date Analyzed:(2) 10/31/2019 10:43

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 280-476033/5	10/31/2019 10:16	10/31/2019 10:16
	LCSD 280-476033/6	10/31/2019 10:29	10/31/2019 10:29
G0070-1	280-129936-9	10/31/2019 12:01	10/31/2019 12:01
G0070-1 DU	280-129936-9 DU	10/31/2019 12:14	10/31/2019 12:14
G0070-1 MS	280-129936-9 MS	10/31/2019 12:28	10/31/2019 12:28
G0070-1 MSD	280-129936-9 MSD	10/31/2019 12:41	10/31/2019 12:41
CA210-1	280-129936-1	10/31/2019 12:55	10/31/2019 12:55
CA211-1	280-129936-2	10/31/2019 13:09	10/31/2019 13:09
CA212-1	280-129936-3	10/31/2019 13:22	10/31/2019 13:22
EW7-PM24B-1-35	280-129936-4	10/31/2019 13:36	10/31/2019 13:36
EW7-PM29B-1-35	280-129936-5	10/31/2019 13:50	10/31/2019 13:50
EW7-PM29A-1-25	280-129936-6	10/31/2019 14:03	10/31/2019 14:03
EW7-PM28A-1-25	280-129936-7	10/31/2019 14:17	10/31/2019 14:17
EW7-PM28B-1-35	280-129936-8	10/31/2019 14:31	10/31/2019 14:31
CA213-1	280-129936-10	10/31/2019 14:45	10/31/2019 14:45
NW070-1	280-129936-11	10/31/2019 15:12	10/31/2019 15:12
NW070-1 DU	280-129936-11 DU	10/31/2019 15:26	10/31/2019 15:26
G0081-1	280-129936-12	10/31/2019 15:39	10/31/2019 15:39
G0075-1	280-129936-13	10/31/2019 15:53	10/31/2019 15:53
G0079-1	280-129936-14	10/31/2019 16:07	10/31/2019 16:07
G0080-1	280-129936-15	10/31/2019 16:20	10/31/2019 16:20

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: CA210-1 Lab Sample ID: 280-129936-1

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 12:55 Date Analyzed (2): 10/31/2019 12:55

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	0.023		1.5
	2		1.26	1.23	1.31	0.023		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM24B-1-35 Lab Sample ID: 280-129936-4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 13:36 Date Analyzed (2): 10/31/2019 13:36

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	1.3		1.6
	2		1.25	1.23	1.31	1.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29B-1-35 Lab Sample ID: 280-129936-5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 13:50 Date Analyzed (2): 10/31/2019 13:50

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		1.67	1.66	1.74	0.75		1.6
	2		1.25	1.23	1.31	0.76		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29A-1-25 Lab Sample ID: 280-129936-6

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 14:03 Date Analyzed (2): 10/31/2019 14:03

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	0.45		1.1
	2		1.26	1.23	1.31	0.46		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28A-1-25 Lab Sample ID: 280-129936-7

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 14:17 Date Analyzed (2): 10/31/2019 14:17

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	1.6		1.8
	2		1.25	1.23	1.31	1.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28B-1-35 Lab Sample ID: 280-129936-8

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 14:31 Date Analyzed (2): 10/31/2019 14:31

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	3.5		2.3
	2		1.25	1.23	1.31	3.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 MS Lab Sample ID: 280-129936-9 MS

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 12:28 Date Analyzed (2): 10/31/2019 12:28

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	0.0622		0.8
	2		1.26	1.23	1.31	0.0627		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 MSD Lab Sample ID: 280-129936-9 MSD

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 12:41 Date Analyzed (2): 10/31/2019 12:41

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0650		0.8
	2		1.26	1.23	1.31	0.0655		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: NW070-1 Lab Sample ID: 280-129936-11

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 15:12 Date Analyzed (2): 10/31/2019 15:12

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	0.018		0.1
	2		1.26	1.23	1.31	0.018		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: NW070-1 DU Lab Sample ID: 280-129936-11 DU

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 15:26 Date Analyzed (2): 10/31/2019 15:26

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	0.0204		0.1
	2		1.26	1.23	1.31	0.0204		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0081-1 Lab Sample ID: 280-129936-12

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 15:39 Date Analyzed (2): 10/31/2019 15:39

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		1.66	1.66	1.74	3.5		2.1
	2		1.25	1.23	1.31	3.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0075-1 Lab Sample ID: 280-129936-13

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 15:53 Date Analyzed (2): 10/31/2019 15:53

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	0.012		1.3
	2		1.25	1.23	1.31	0.012		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0080-1 Lab Sample ID: 280-129936-15

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 16:20 Date Analyzed (2): 10/31/2019 16:20

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.66	1.74	0.0011		0.4
	2		1.25	1.23	1.31	0.0011		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-476033/5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 10:16 Date Analyzed (2): 10/31/2019 10:16

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	0.0683		0.5
	2		1.26	1.23	1.31	0.0680		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-476033/6

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 10/31/2019 10:29 Date Analyzed (2): 10/31/2019 10:29

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	0.0713		0.6
	2		1.26	1.23	1.31	0.0709		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: CA210-1 Lab Sample ID: 280-129936-1

Matrix: Water Lab File ID: 012F0501.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 09:50

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 12:55

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.023		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\012F0501.D
Lims ID: 280-129936-H-1
Client ID: CA210-1
Sample Type: Client
Inject. Date: 31-Oct-2019 12:55:29 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-h-1
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:15:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.259	1.269	-0.010	3162165	23.3	
2	1.677	1.696	-0.019	2659332	23.0	
					RPD = 1.53	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

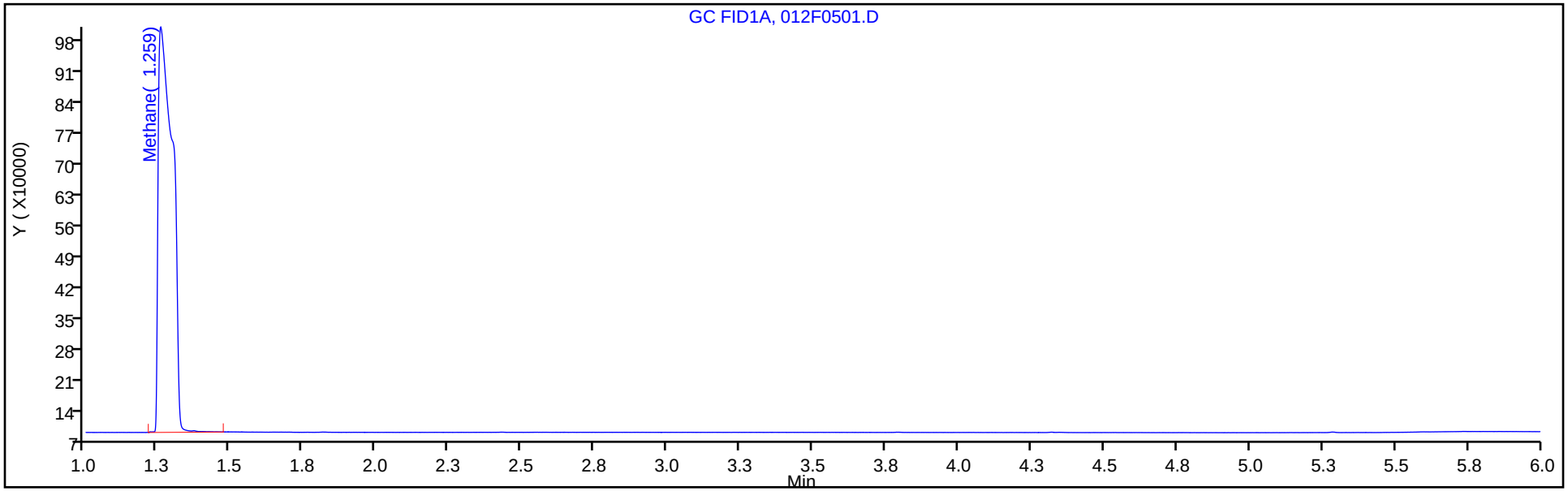
Report Date: 04-Nov-2019 08:04:06 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

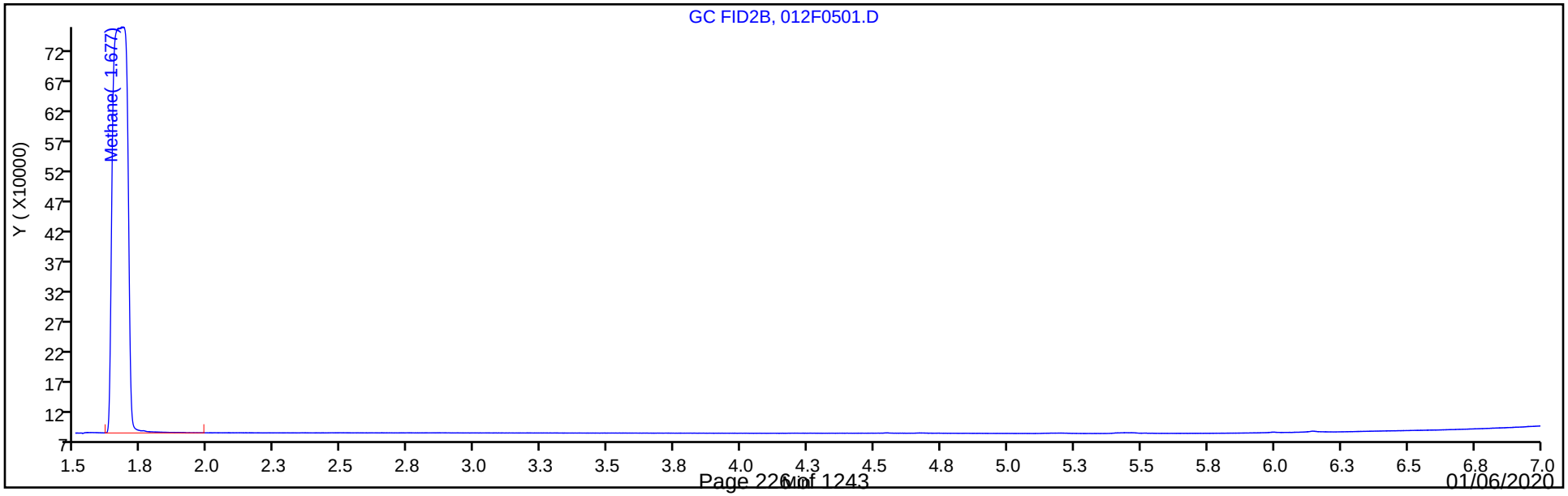
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\012F0501.D

Injection Date:	31-Oct-2019 12:55:29	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-H-1	Lab Sample ID:	280-129936-1	Worklist Smp#:	12
Client ID:	CA210-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: CA211-1 Lab Sample ID: 280-129936-2

Matrix: Water Lab File ID: 013F0601.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 11:25

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 13:09

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.: 476033 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\20191031-86685.b\013F0601.D				
Lims ID:	280-129936-G-2				
Client ID:	CA211-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 13:09:14	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-129936-g-2				
Operator ID:	SCIANNAC	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	04-Nov-2019 08:03:38	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:	CTX0320				

First Level Reviewer: sciannac Date: 01-Nov-2019 08:58:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1		1.269			ND	
2		1.696				
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

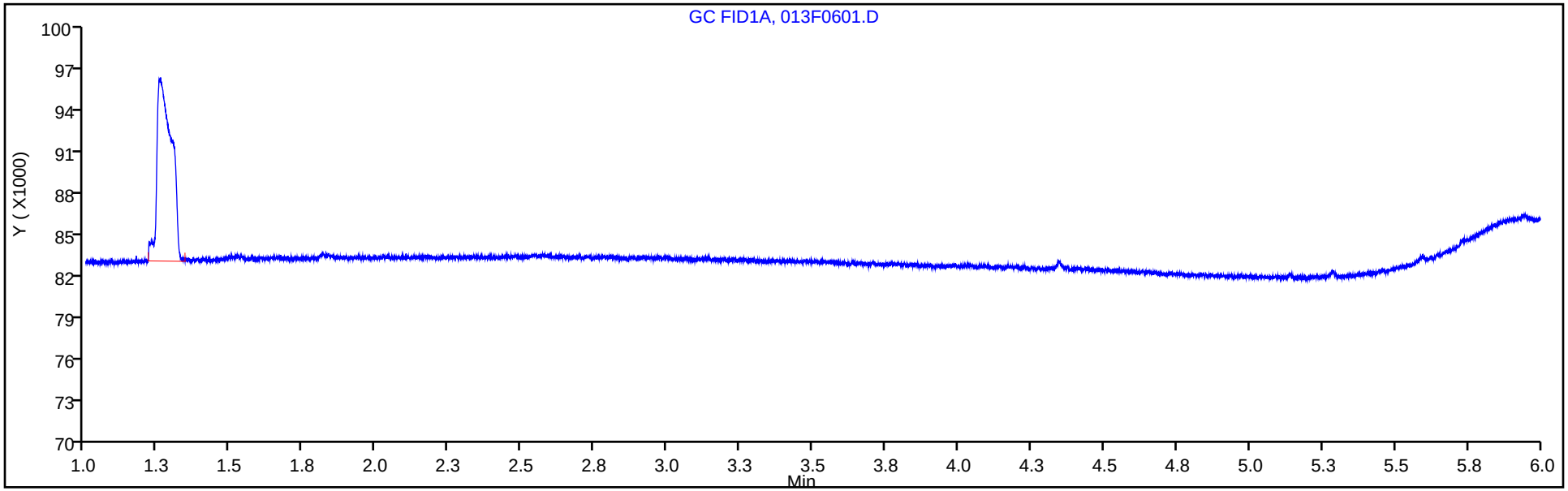
Report Date: 04-Nov-2019 08:04:10 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

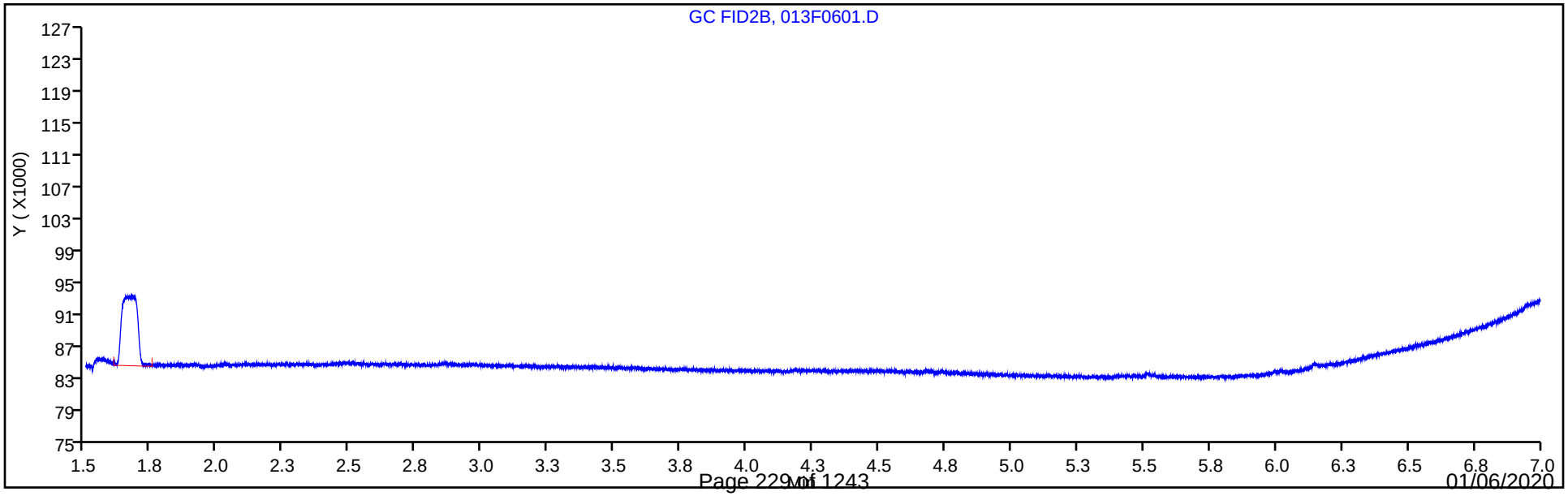
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\013F0601.D

Injection Date:	31-Oct-2019 13:09:14	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-2	Lab Sample ID:	280-129936-2	Worklist Smp#:	13
Client ID:	CA211-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: CA212-1 Lab Sample ID: 280-129936-3

Matrix: Water Lab File ID: 014F0701.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 12:50

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 13:22

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.: 476033 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\20191031-86685.b\014F0701.D				
Lims ID:	280-129936-H-3				
Client ID:	CA212-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 13:22:51	ALS Bottle#:	14	Worklist Smp#:	14
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-129936-h-3				
Operator ID:	SCIANNAC	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	04-Nov-2019 08:03:38	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:	CTX0320				

First Level Reviewer: sciannac Date: 01-Nov-2019 09:15:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1		1.269			ND	
2		1.696				
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

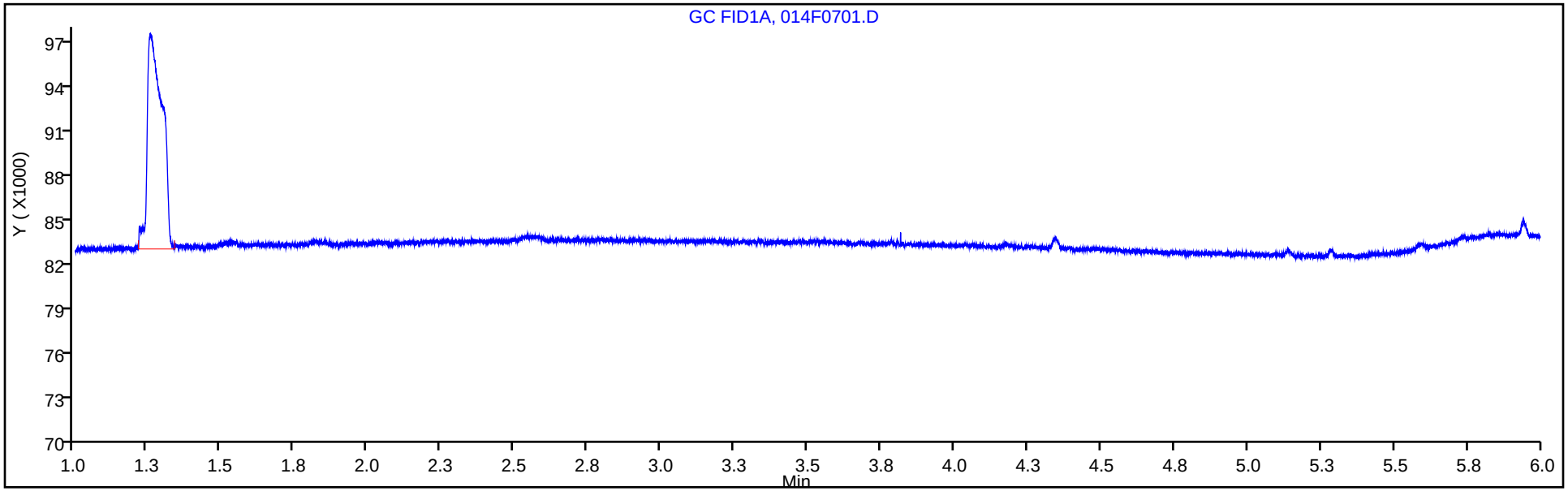
Report Date: 04-Nov-2019 08:04:13 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

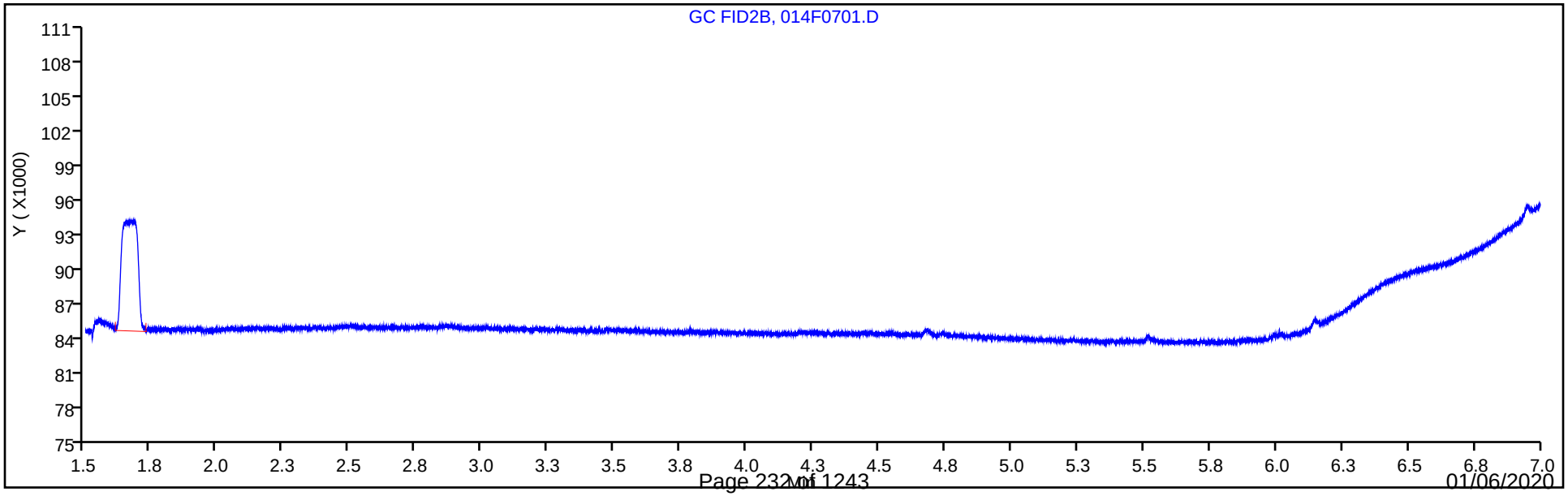
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\014F0701.D

Injection Date:	31-Oct-2019 13:22:51	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-H-3	Lab Sample ID:	280-129936-3	Worklist Smp#:	14
Client ID:	CA212-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM24B-1-35 Lab Sample ID: 280-129936-4

Matrix: Water Lab File ID: 015F0801.D

Analysis Method: RSK-175 Date Collected: 10/19/2019 09:55

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 13:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	1.3		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\015F0801.D
Lims ID: 280-129936-I-4
Client ID: EW7-PM24B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 13:36:37 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-i-4
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:14:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.254	1.269	-0.015	172192274	1285.3	
2	1.673	1.696	-0.023	144955198	1265.2	
					RPD = 1.58	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						Ua
1		5.275			ND	
2		5.996				

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

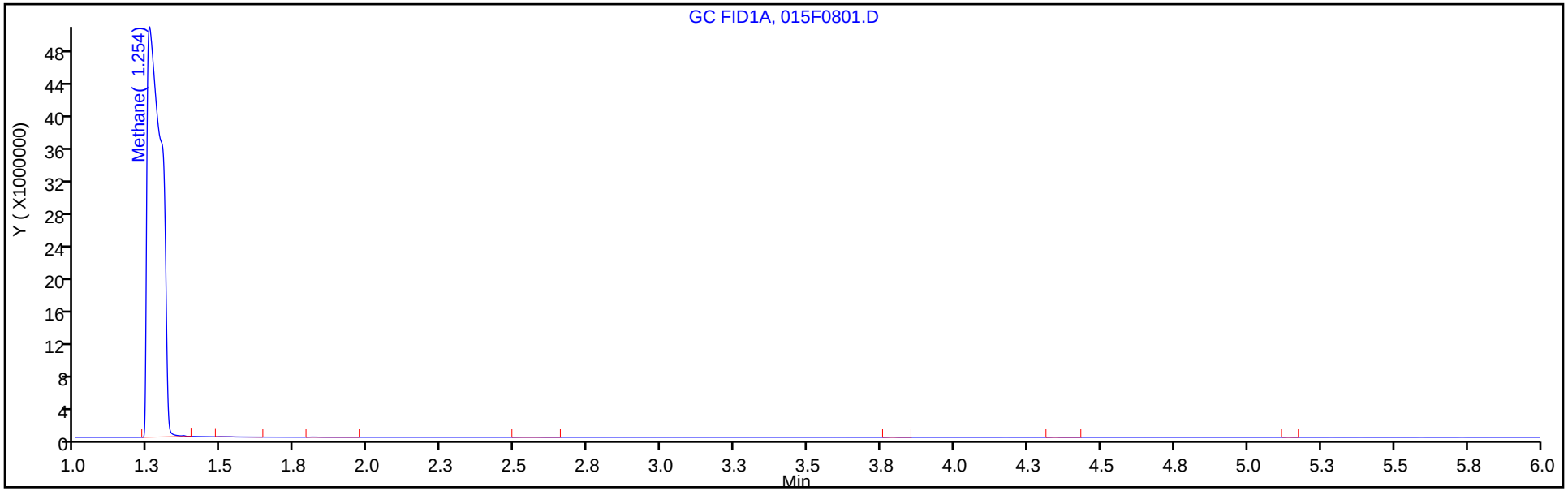
Report Date: 04-Nov-2019 08:04:17 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

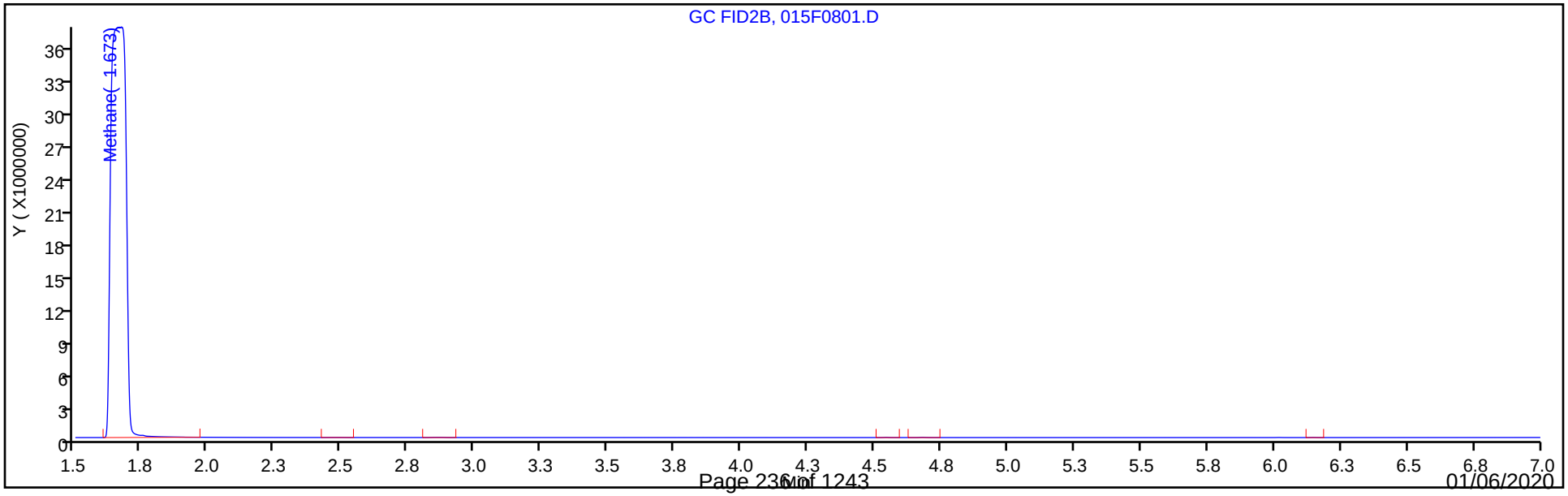
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\015F0801.D

Injection Date:	31-Oct-2019 13:36:37	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-I-4	Lab Sample ID:	280-129936-4	Worklist Smp#:	15
Client ID:	EW7-PM24B-1-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29B-1-35 Lab Sample ID: 280-129936-5

Matrix: Water Lab File ID: 016F0901.D

Analysis Method: RSK-175 Date Collected: 10/19/2019 11:55

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 13:50

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.75		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\016F0901.D
Lims ID: 280-129936-H-5
Client ID: EW7-PM29B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 13:50:09 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-h-5
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:14:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.254	1.269	-0.015	101851829	760.2	
2	1.672	1.696	-0.024	85758259	748.4	
					RPD = 1.56	
2 Ethane						a
1	0.000	1.546	0.000	0	0	
2	2.870	2.884	-0.014	40777	0.3796	a
					RPD = 200.00	
LOD = 0.5720						
3 Ethylene						a
1	0.000	1.859	-1.859	0	0	
2	2.473	2.507	-0.034	22087	0.2454	
					RPD = 200.00	
LOD = 0.3970						
4 Propane						Ua
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						a
1	4.343	4.337	0.006	12144	0.0862	
2	0.000	6.142	-6.142	0	0	
					RPD = 200.00	
LOD = 0.9300						
7 isobutylene						Ua
1		5.275			ND	
2		5.996				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

a - User Assigned ID

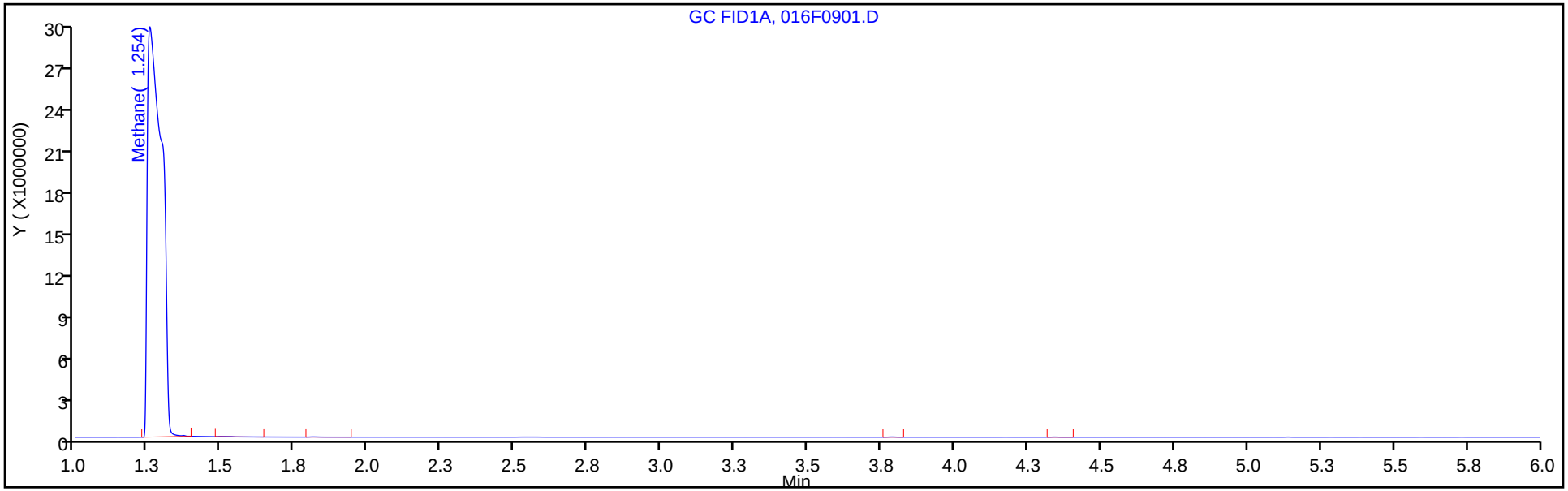
Report Date: 04-Nov-2019 08:04:20 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

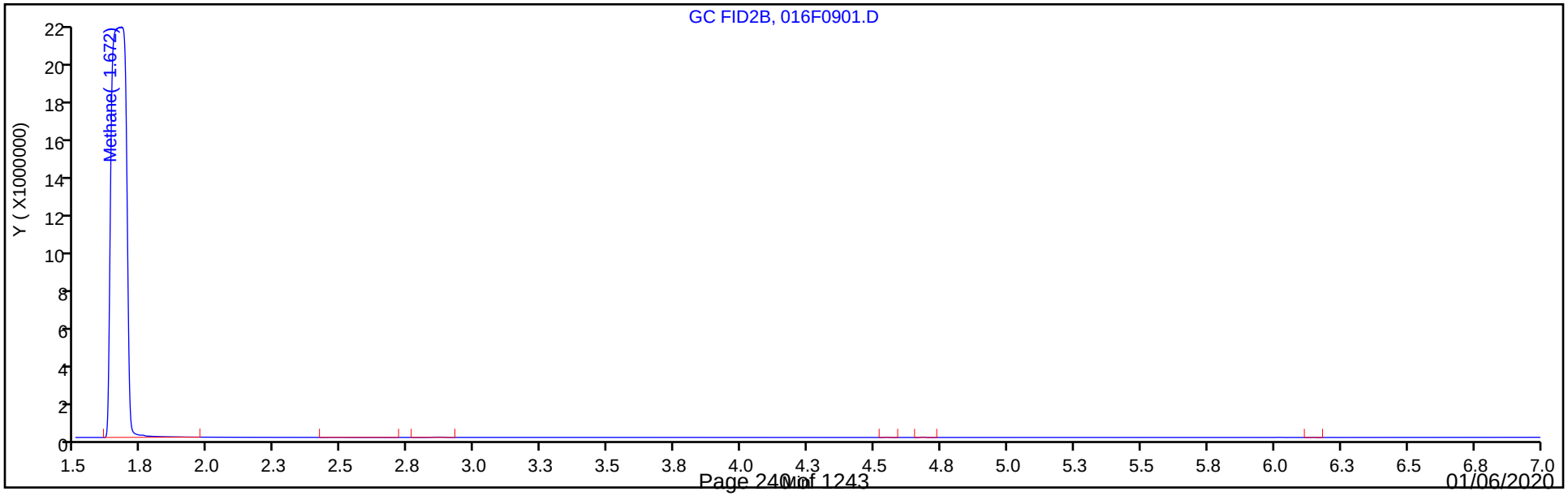
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\016F0901.D

Injection Date:	31-Oct-2019 13:50:09	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-H-5	Lab Sample ID:	280-129936-5	Worklist Smp#:	16
Client ID:	EW7-PM29B-1-35				
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.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29A-1-25 Lab Sample ID: 280-129936-6

Matrix: Water Lab File ID: 017F1001.D

Analysis Method: RSK-175 Date Collected: 10/19/2019 14:05

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 14:03

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.45		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\017F1001.D
Lims ID: 280-129936-G-6
Client ID: EW7-PM29A-1-25
Sample Type: Client
Inject. Date: 31-Oct-2019 14:03:57 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-g-6
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:12:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.256	1.269	-0.013	61351405	457.8	
2	1.674	1.696	-0.022	51868394	452.6	
					RPD = 1.15	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

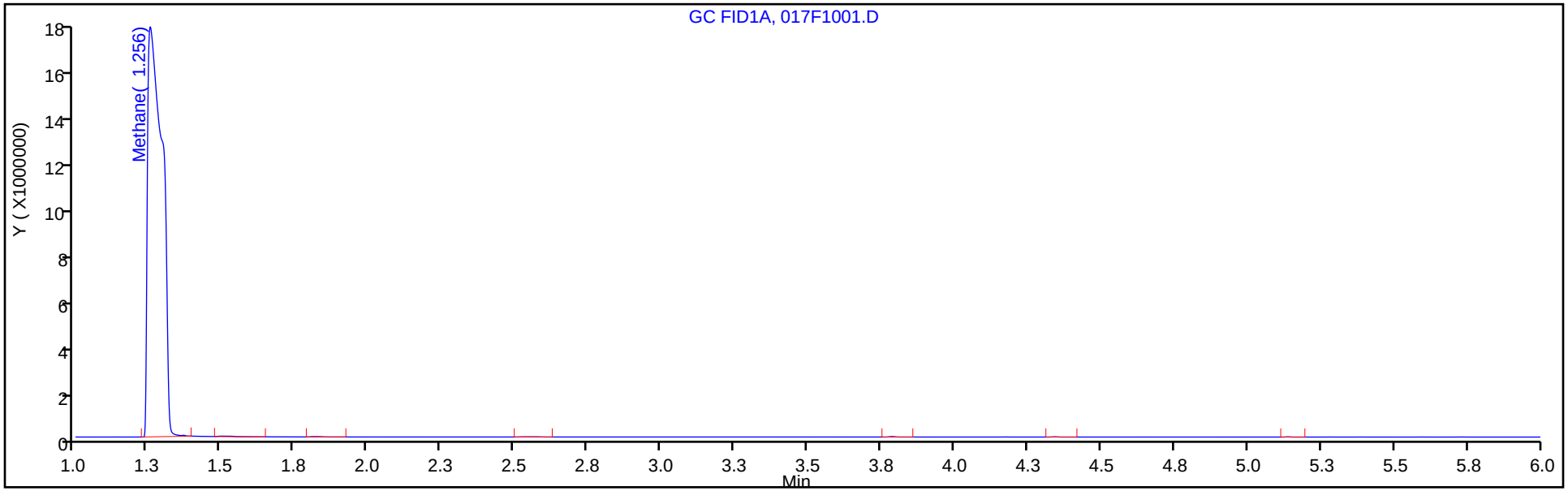
Report Date: 04-Nov-2019 08:04:25 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

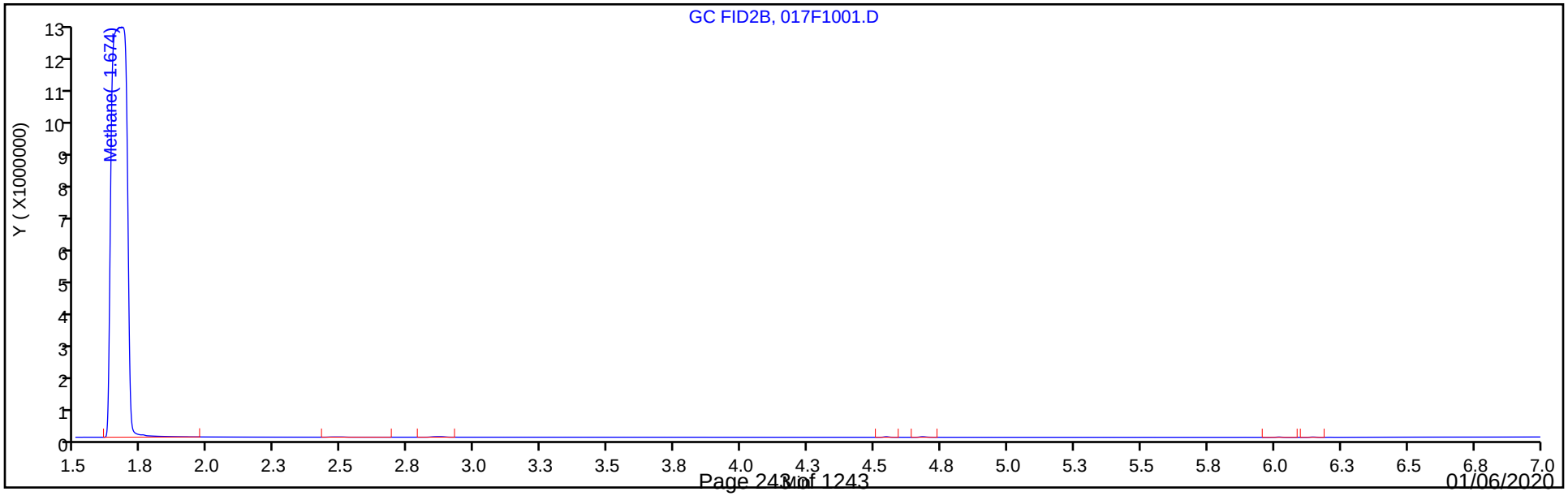
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\017F1001.D

Injection Date:	31-Oct-2019 14:03:57	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-6	Lab Sample ID:	280-129936-6	Worklist Smp#:	17
Client ID:	EW7-PM29A-1-25				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28A-1-25 Lab Sample ID: 280-129936-7

Matrix: Water Lab File ID: 018F1101.D

Analysis Method: RSK-175 Date Collected: 10/19/2019 16:20

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 14:17

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	1.6		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\018F1101.D
Lims ID: 280-129936-G-7
Client ID: EW7-PM28A-1-25
Sample Type: Client
Inject. Date: 31-Oct-2019 14:17:41 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-g-7
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 15:01:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.253	1.269	-0.016	216714622	1617.8	
2	1.666	1.696	-0.030	181962189	1588.3	
					RPD = 1.84	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

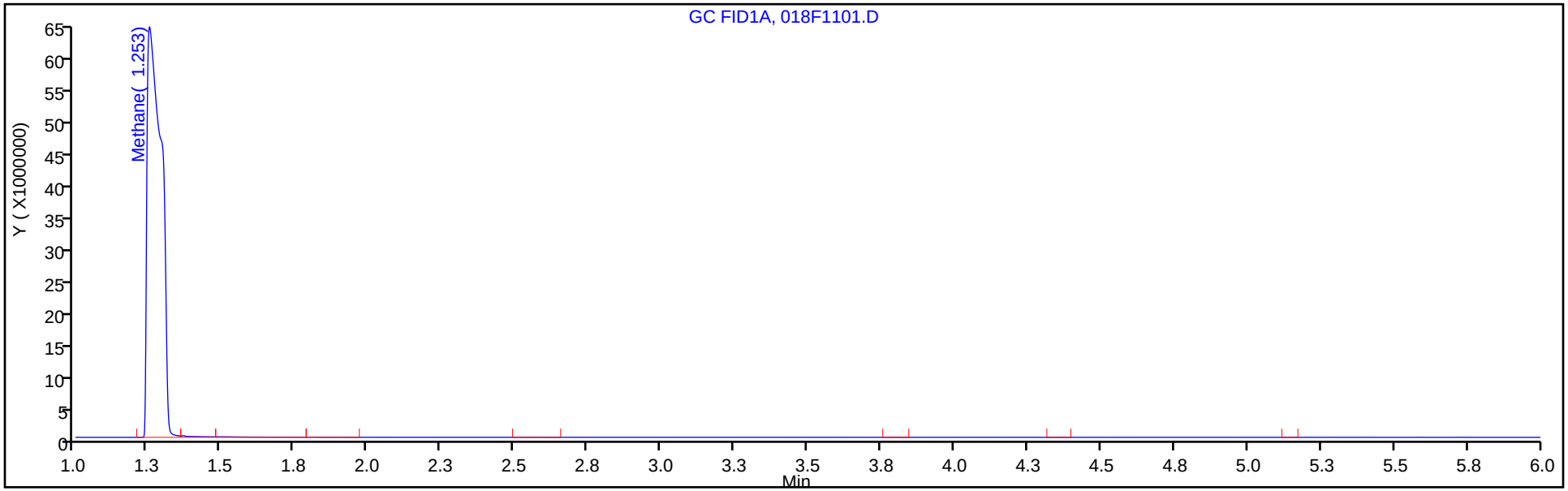
Report Date: 04-Nov-2019 08:04:30 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

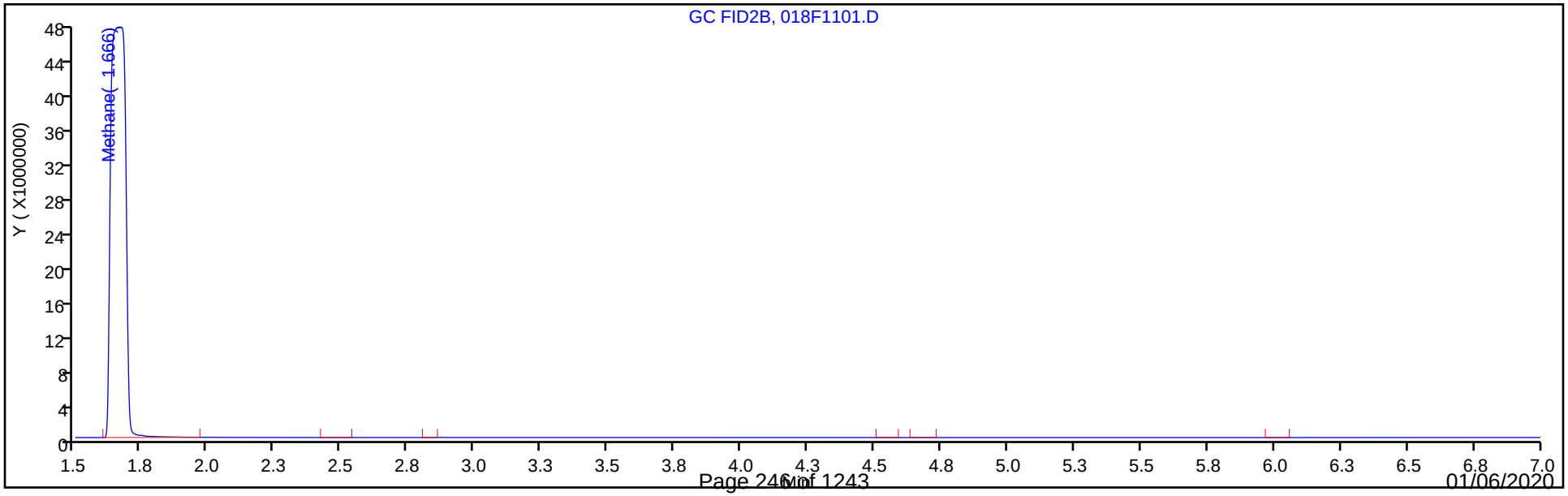
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\018F1101.D

Injection Date:	31-Oct-2019 14:17:41	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-7	Lab Sample ID:	280-129936-7	Worklist Smp#:	18
Client ID:	EW7-PM28A-1-25				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28B-1-35 Lab Sample ID: 280-129936-8

Matrix: Water Lab File ID: 019F1201.D

Analysis Method: RSK-175 Date Collected: 10/20/2019 12:10

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 14:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	3.5		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\019F1201.D
Lims ID: 280-129936-H-8
Client ID: EW7-PM28B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 14:31:27 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-h-8
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 15:01:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.252	1.269	-0.017	473174241	3532.5	
2	1.669	1.696	-0.027	395342461	3451.0	
					RPD = 2.33	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

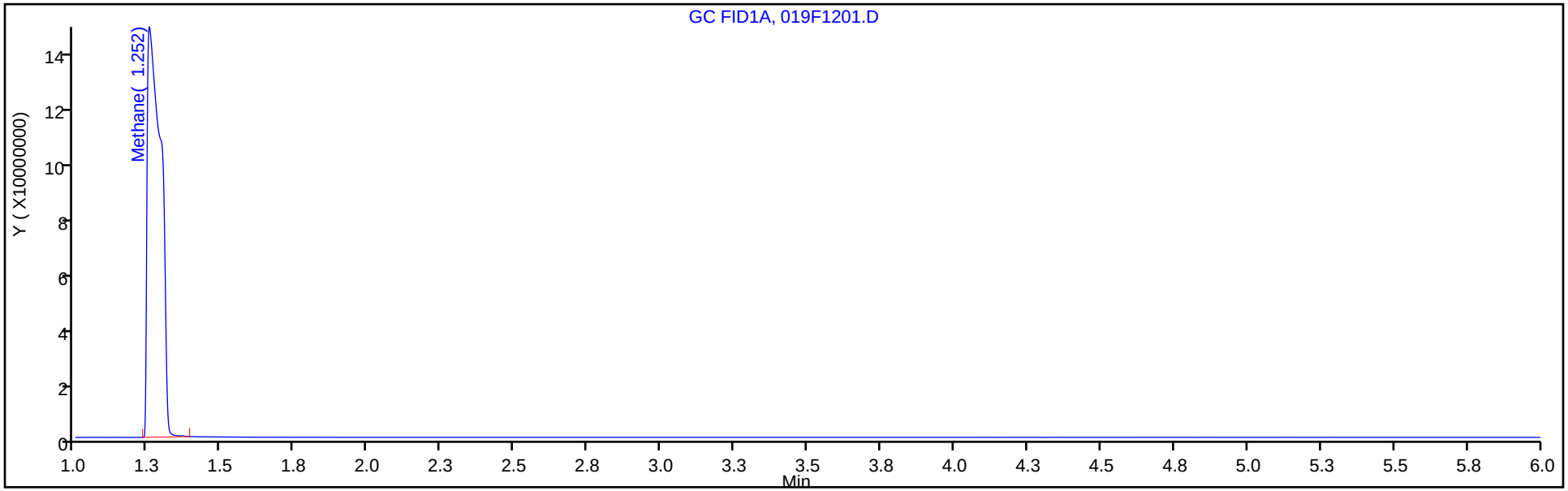
Report Date: 04-Nov-2019 08:04:33 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

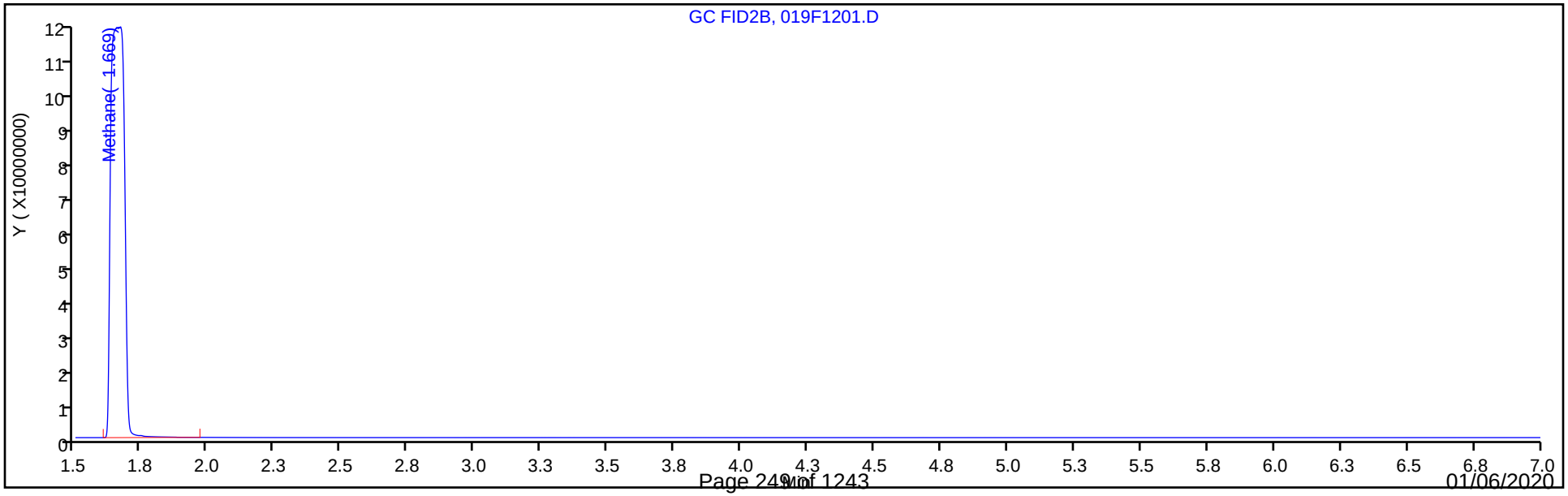
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\019F1201.D

Injection Date:	31-Oct-2019 14:31:27	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-H-8	Lab Sample ID:	280-129936-8	Worklist Smp#:	19
Client ID:	EW7-PM28B-1-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 Lab Sample ID: 280-129936-9

Matrix: Water Lab File ID: 008F0101.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 14:45

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 12:01

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.: 476033 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\20191031-86685.b\008F0101.D				
Lims ID:	280-129936-G-9				
Client ID:	G0070-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 12:01:13	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-129936-g-9				
Operator ID:	SCIANNAC	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	04-Nov-2019 08:03:38	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:	CTX0320				

First Level Reviewer: sciannac Date: 31-Oct-2019 13:41:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1		1.269			ND	
2		1.696				
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

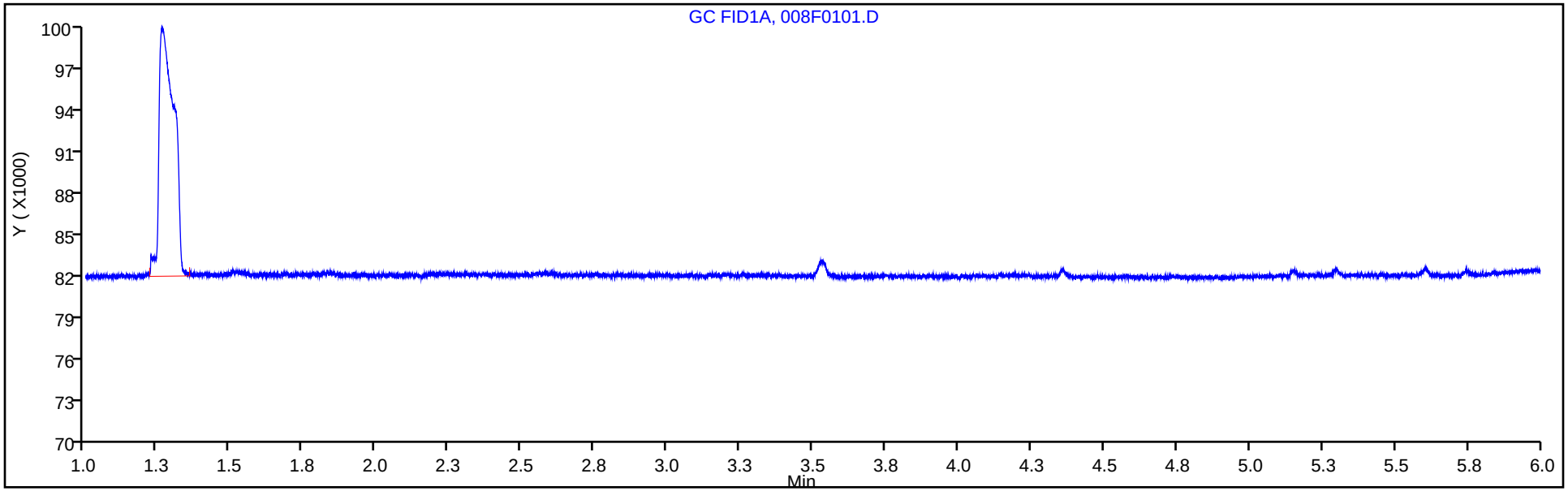
Report Date: 04-Nov-2019 08:03:50 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

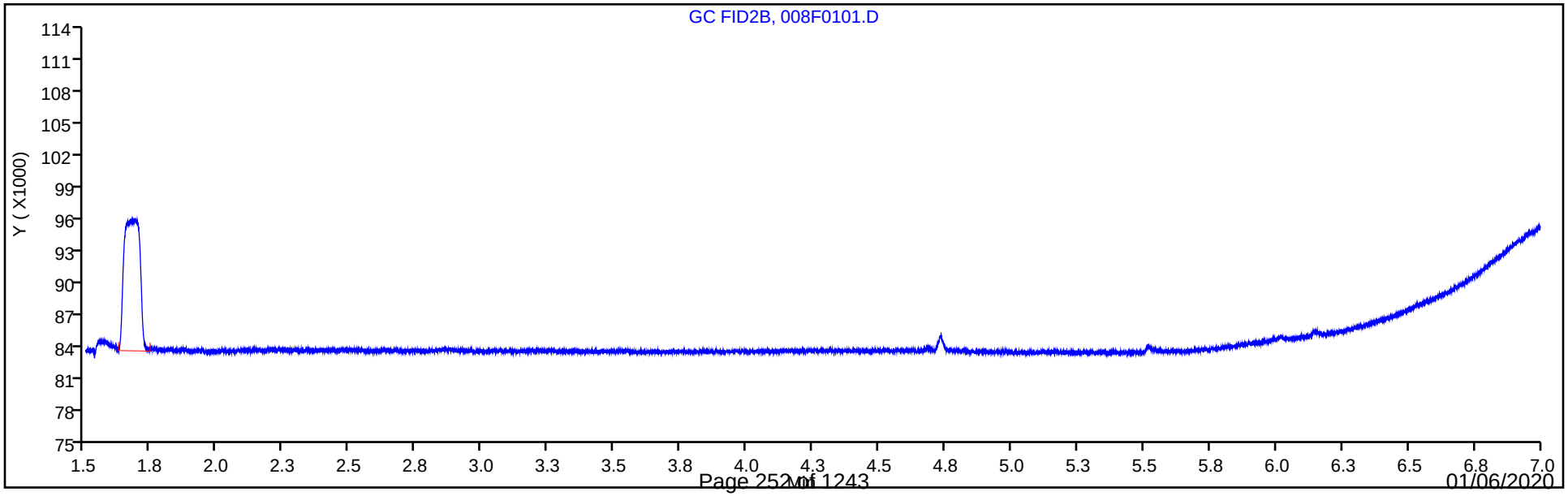
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\008F0101.D

Injection Date:	31-Oct-2019 12:01:13	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-9	Lab Sample ID:	280-129936-9	Worklist Smp#:	8
Client ID:	G0070-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: CA213-1 Lab Sample ID: 280-129936-10

Matrix: Water Lab File ID: 020F1301.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 14:25

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\020F1301.D
Lims ID: 280-129936-I-10
Client ID: CA213-1
Sample Type: Client
Inject. Date: 31-Oct-2019 14:45:11 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-i-10
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 15:01:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						a
1	1.250	1.269	-0.019	86278	0.3779	a
2	1.651	1.696	-0.045	69327	0.3774	a
					RPD = 0.14	
LOD = 0.6300						
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

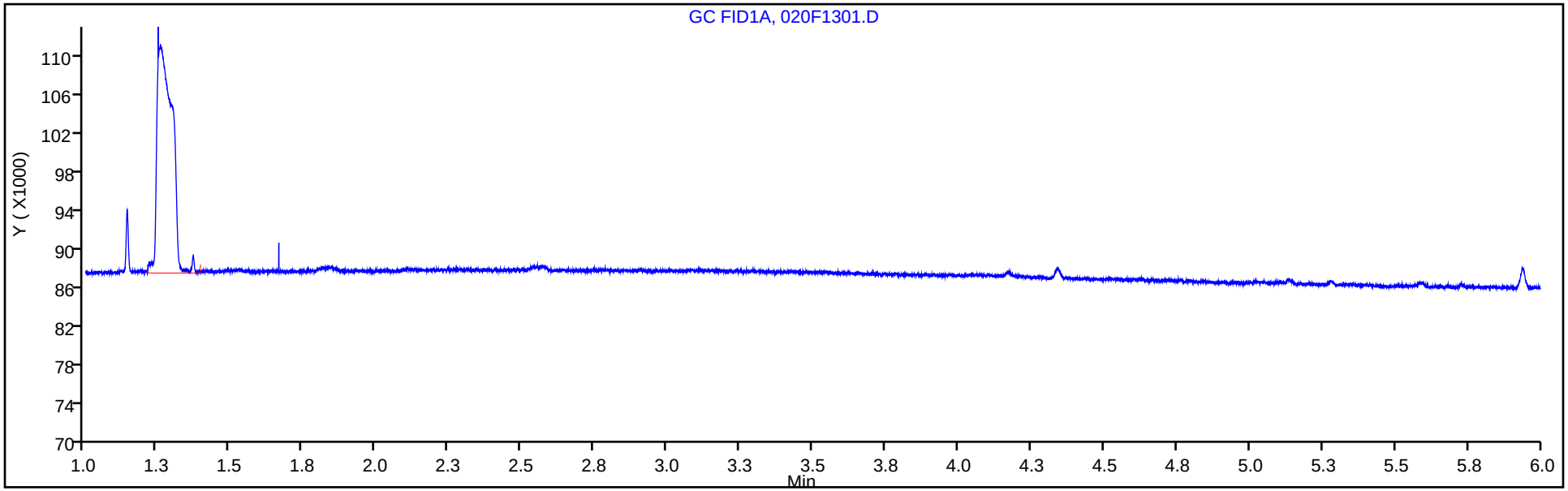
Report Date: 04-Nov-2019 08:04:36 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

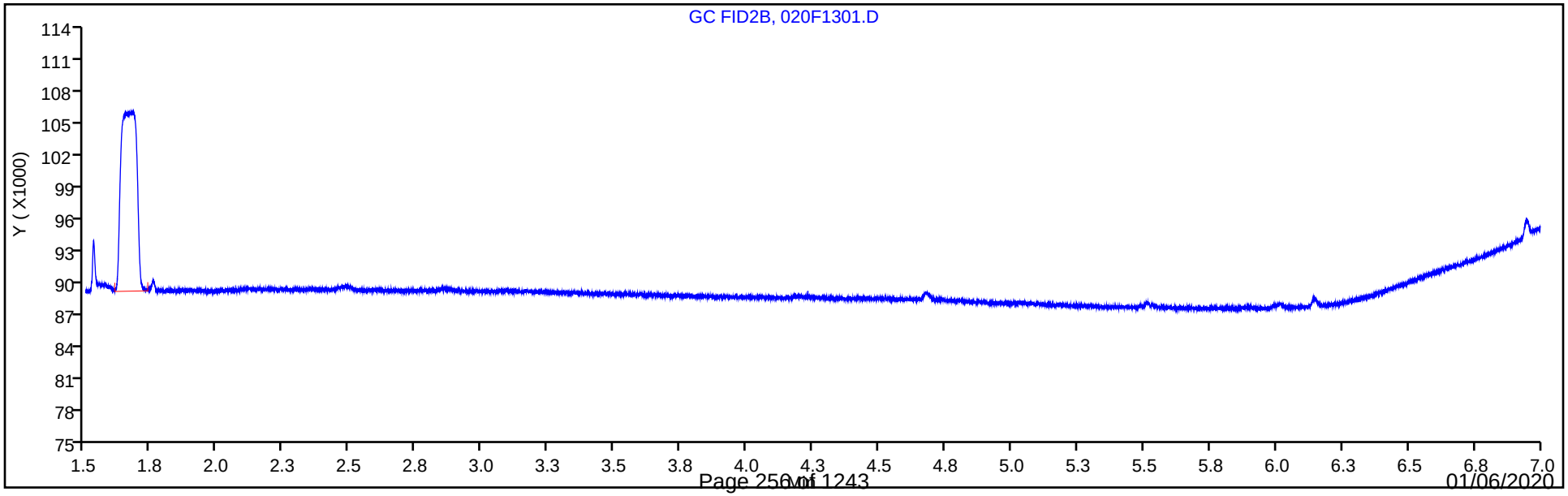
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\020F1301.D

Injection Date:	31-Oct-2019 14:45:11	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-I-10	Lab Sample ID:	280-129936-10	Worklist Smp#:	20
Client ID:	CA213-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

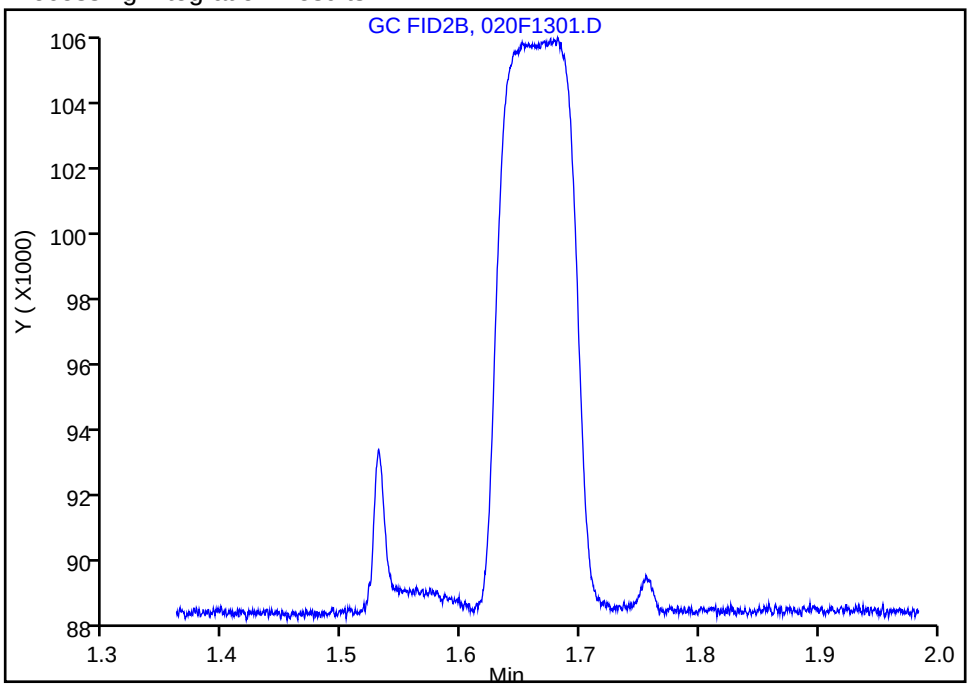
Data File:	\\chromna\Denver\ChromData\VGC_J\20191031-86685.b\020F1301.D				
Injection Date:	31-Oct-2019 14:45:11	Instrument ID:	VGC_J		
Lims ID:	280-129936-I-10	Lab Sample ID:	280-129936-10		
Client ID:	CA213-1				
Operator ID:	SCIANNAC	ALS Bottle#:	20	Worklist Smp#:	20
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

1 Methane, CAS: 74-82-8

Signal: 2

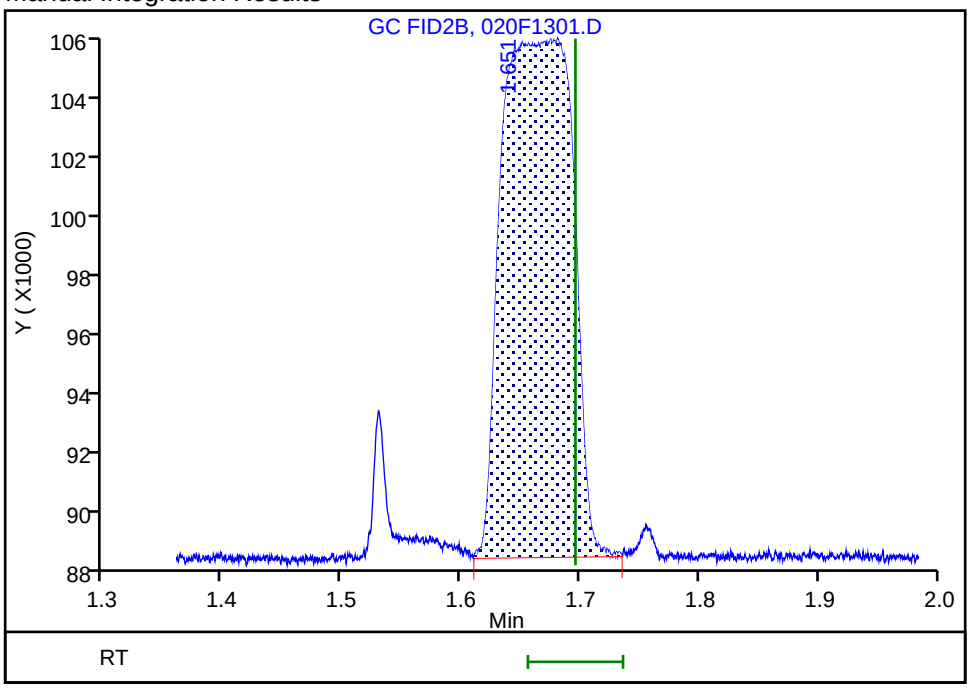
Not Detected
Expected RT: 1.70

Processing Integration Results



Manual Integration Results

RT: 1.65
Area: 69327
Amount: 0.377416
Amount Units: ug/l



Reviewer: sciannac, 31-Oct-2019 15:01:40
Audit Action: Assigned Compound ID Audit Reason:

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: NW070-1 Lab Sample ID: 280-129936-11

Matrix: Water Lab File ID: 022F1501.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 16:15

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 15:12

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.018		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\022F1501.D
Lims ID: 280-129936-G-11
Client ID: NW070-1
Sample Type: Client
Inject. Date: 31-Oct-2019 15:12:38 ALS Bottle#: 22 Worklist Smp#: 22
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-g-11
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 22-Dec-2019 20:45:14 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: CTX0324

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.256	1.269	-0.013	2456136	18.1	
2	1.675	1.696	-0.021	2098104	18.1	
					RPD = 0.09	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

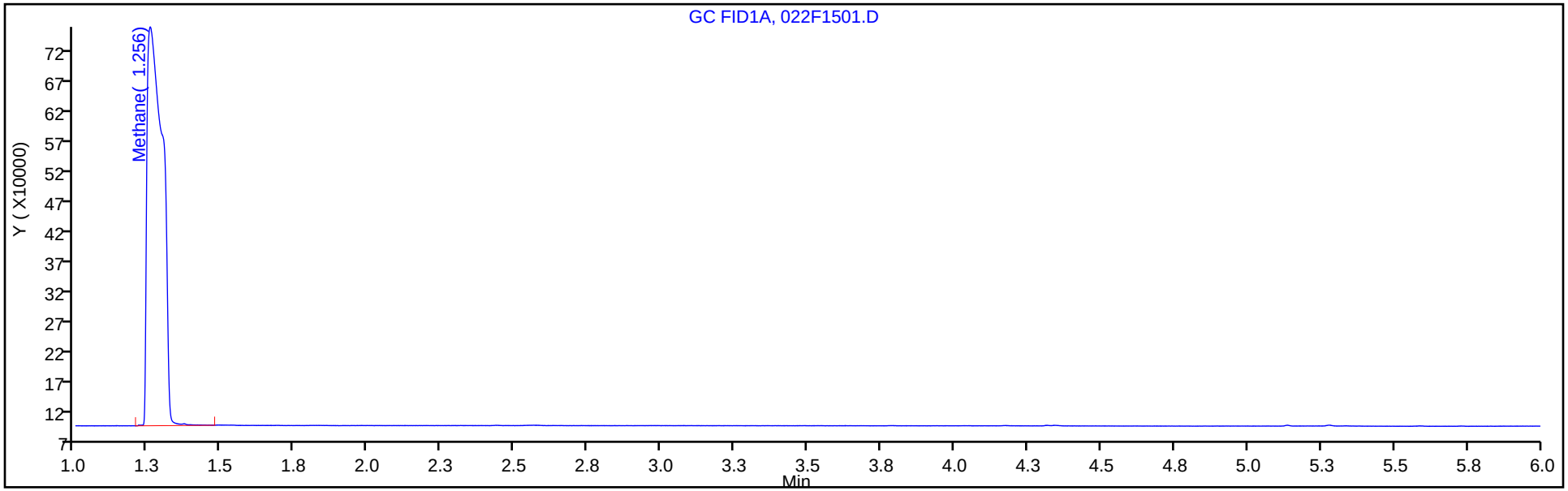
Report Date: 22-Dec-2019 20:45:17 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

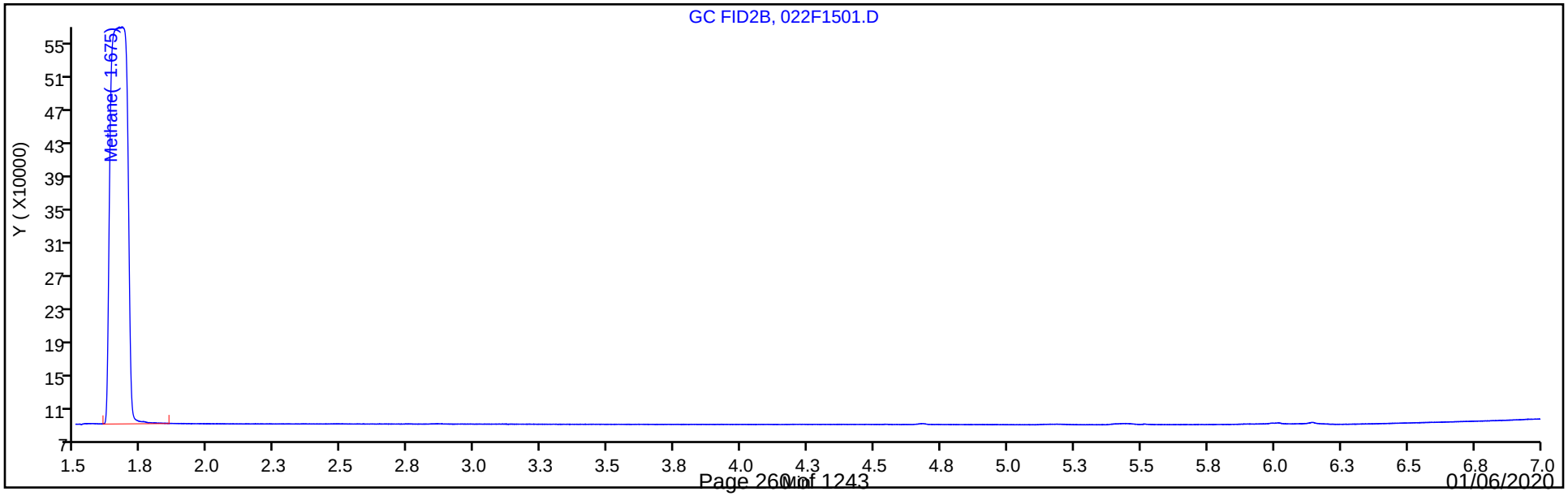
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\022F1501.D

Injection Date:	31-Oct-2019 15:12:38	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-11	Lab Sample ID:	280-129936-11	Worklist Smp#:	22
Client ID:	NW070-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0081-1 Lab Sample ID: 280-129936-12

Matrix: Water Lab File ID: 024F1701.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 16:15

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 15:39

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	3.5		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\024F1701.D
Lims ID: 280-129936-G-12
Client ID: G0081-1
Sample Type: Client
Inject. Date: 31-Oct-2019 15:39:57 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-g-12
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:04:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:12:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.249	1.269	-0.020	478043848	3568.9	
2	1.663	1.696	-0.033	400529696	3496.3	
					RPD = 2.05	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

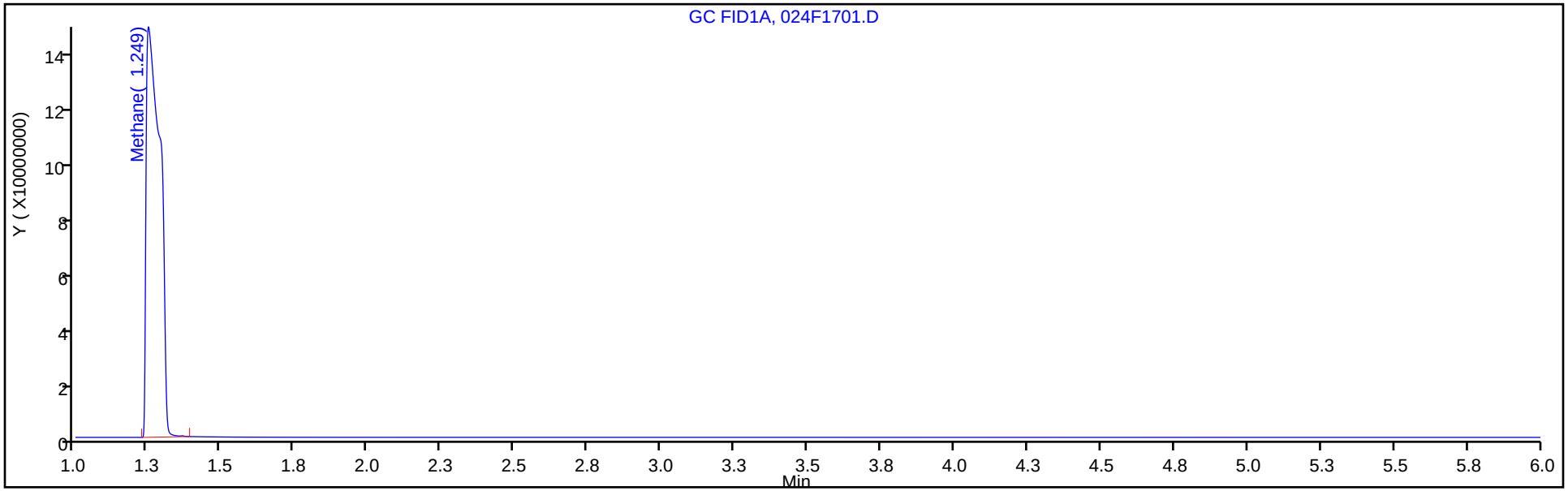
Report Date: 04-Nov-2019 08:04:46 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

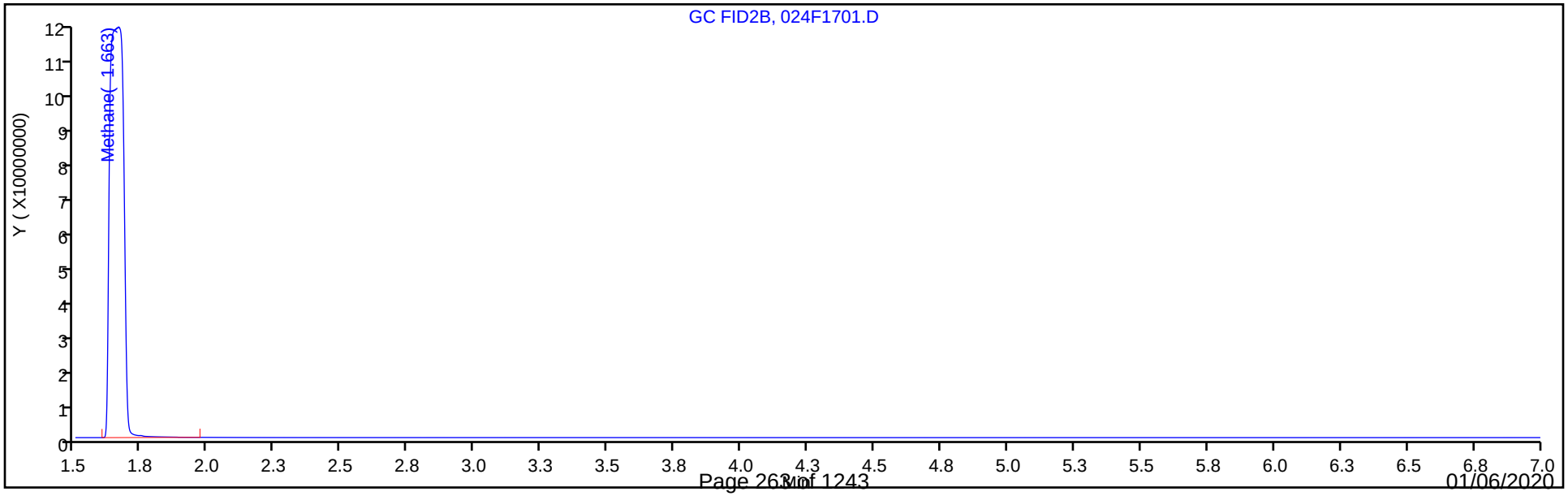
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\024F1701.D

Injection Date:	31-Oct-2019 15:39:57	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-12	Lab Sample ID:	280-129936-12	Worklist Smp#:	24
Client ID:	G0081-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0075-1 Lab Sample ID: 280-129936-13

Matrix: Water Lab File ID: 025F1801.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 12:00

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 15:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.012		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\025F1801.D
Lims ID: 280-129936-H-13
Client ID: G0075-1
Sample Type: Client
Inject. Date: 31-Oct-2019 15:53:31 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-h-13
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:04:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:11:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.253	1.269	-0.016	1677868	12.3	
2	1.670	1.696	-0.026	1412492	12.1	
					RPD = 1.30	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

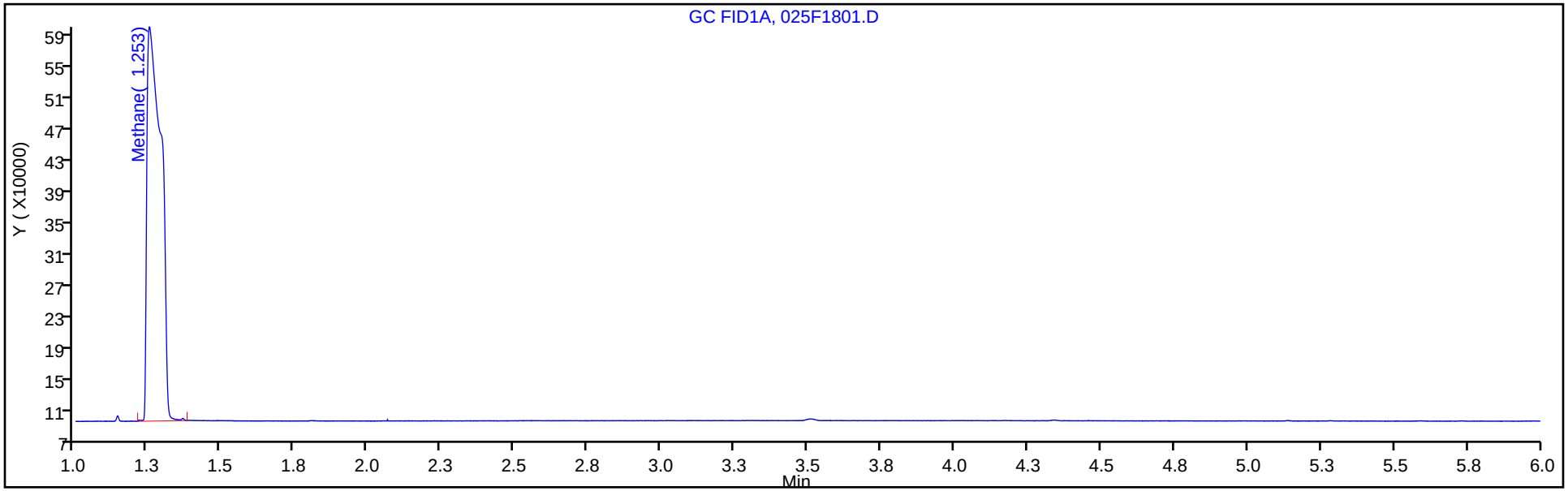
Report Date: 04-Nov-2019 08:04:48 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

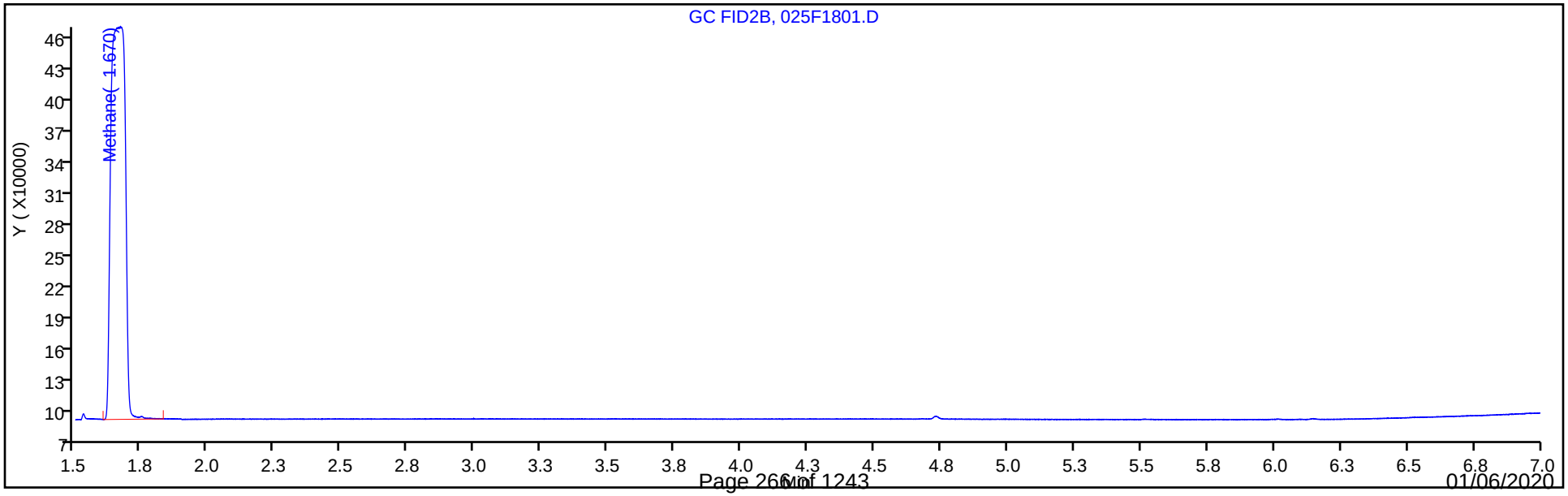
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\025F1801.D

Injection Date:	31-Oct-2019 15:53:31	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-H-13	Lab Sample ID:	280-129936-13	Worklist Smp#:	25
Client ID:	G0075-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0079-1 Lab Sample ID: 280-129936-14

Matrix: Water Lab File ID: 026F1901.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 10:45

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 16:07

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.: 476033 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\20191031-86685.b\026F1901.D				
Lims ID:	280-129936-G-14				
Client ID:	G0079-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 16:07:14	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-129936-g-14				
Operator ID:	SCIANNAC	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	04-Nov-2019 08:04:38	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:	CTX0320				

First Level Reviewer: sciannac Date: 01-Nov-2019 09:11:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1		1.269			ND	
2		1.696				
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

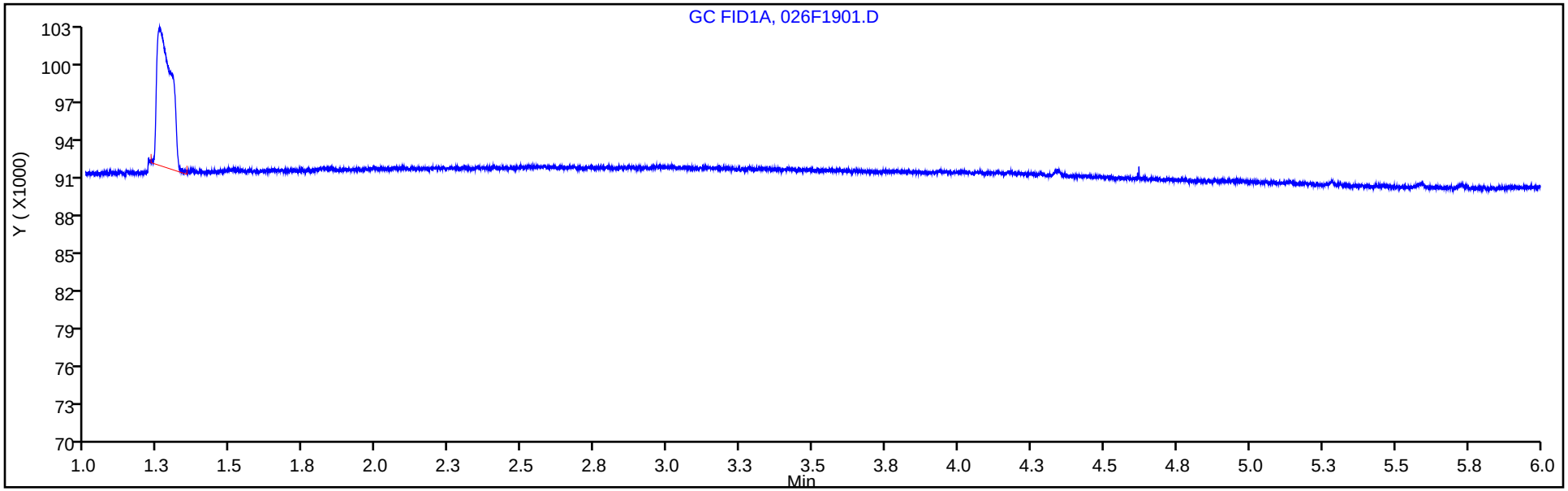
Report Date: 04-Nov-2019 08:04:50 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

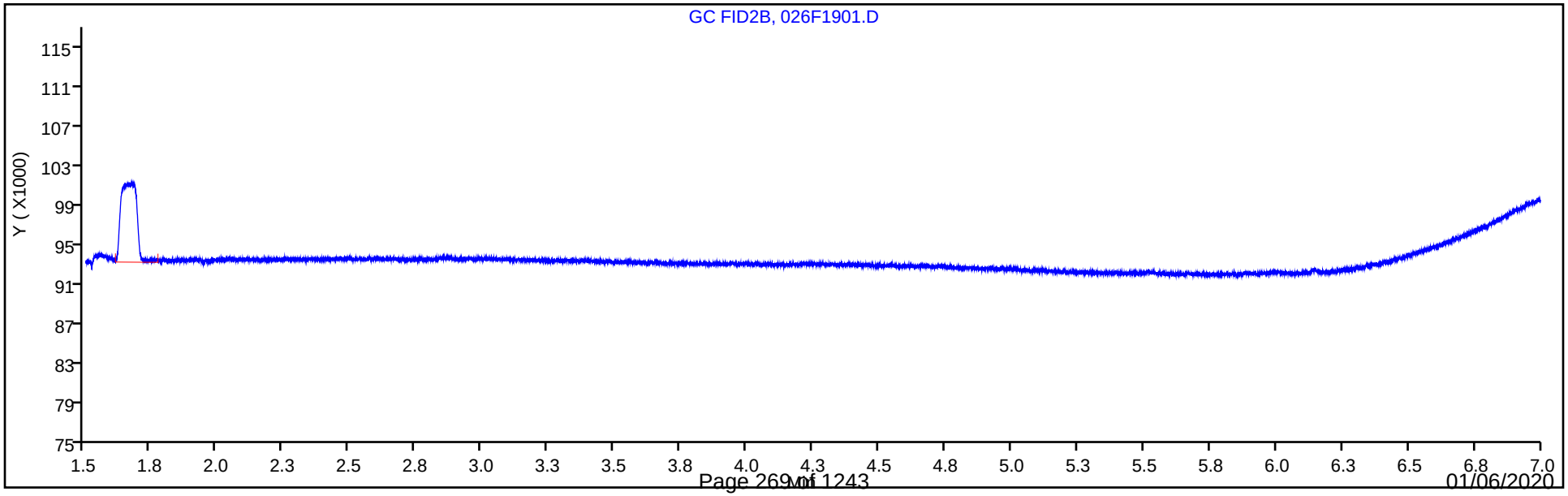
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\026F1901.D

Injection Date:	31-Oct-2019 16:07:14	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-14	Lab Sample ID:	280-129936-14	Worklist Smp#:	26
Client ID:	G0079-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0080-1 Lab Sample ID: 280-129936-15

Matrix: Water Lab File ID: 027F2001.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 09:10

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 16:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0011	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\027F2001.D
Lims ID: 280-129936-I-15
Client ID: G0080-1
Sample Type: Client
Inject. Date: 31-Oct-2019 16:20:57 ALS Bottle#: 27 Worklist Smp#: 27
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-i-15
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:04:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:11:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.253	1.269	-0.016	188083	1.14	
2	1.660	1.696	-0.036	157001	1.14	
					RPD = 0.42	
2 Ethane						
1		1.546			ND	
2		2.884				
3 Ethylene						
1		1.859			ND	
2		2.507				
4 Propane						
1		2.586			ND	
2		4.685				
5 Acetylene						
1		4.031			ND	
2		2.659				
6 Butane						
1		4.337			ND	
2		6.142				
7 isobutylene						
1		5.275			ND	
2		5.996				

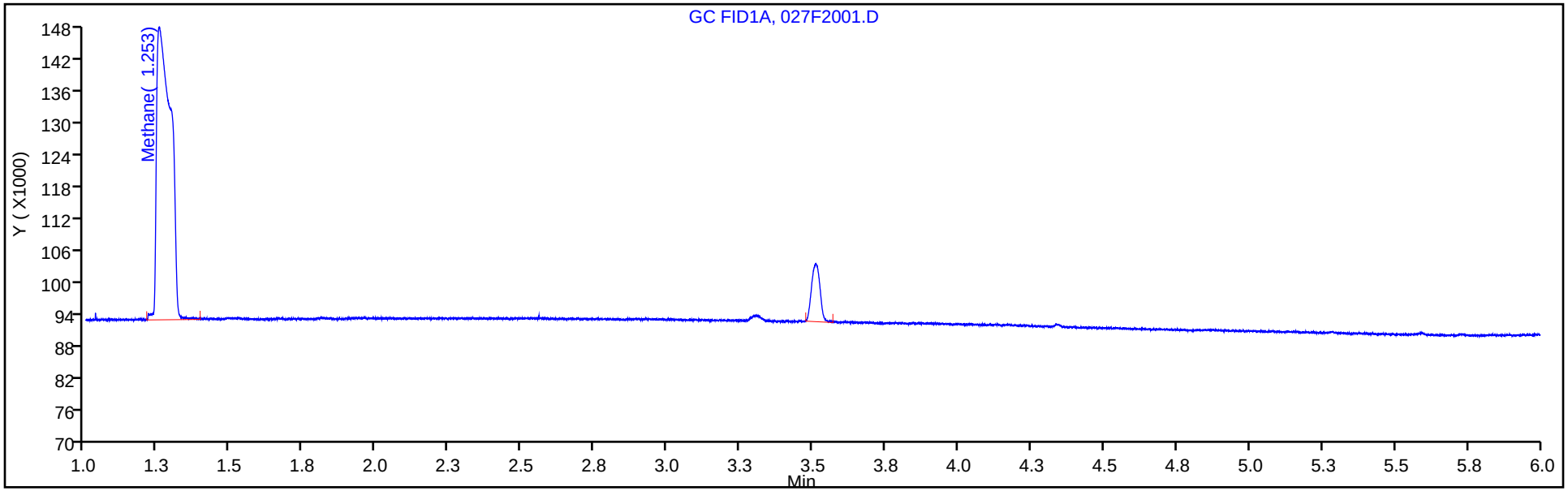
Report Date: 04-Nov-2019 08:04:53 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

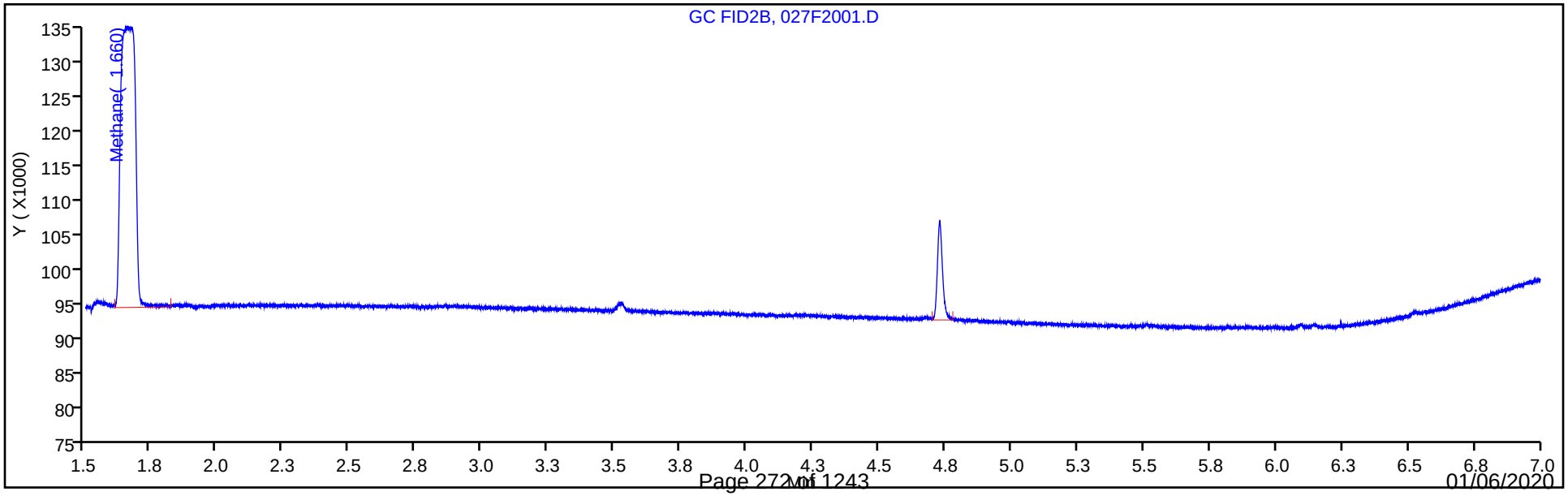
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\027F2001.D

Injection Date:	31-Oct-2019 16:20:57	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-I-15	Lab Sample ID:	280-129936-15	Worklist Smp#:	27
Client ID:	G0080-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1 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.: 280-129936-1 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.: 280-129936-1 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							M
1	4.410	4.381	0.029	211953	1.65	1.51	
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

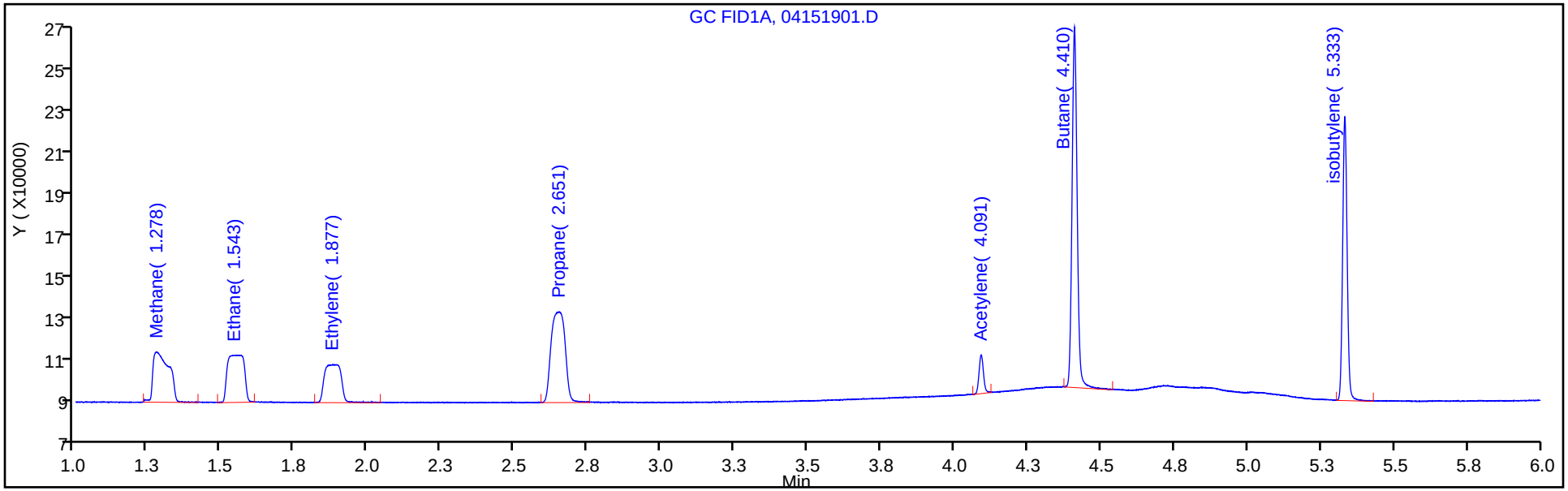
Report Date: 15-May-2019 11:57:50 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

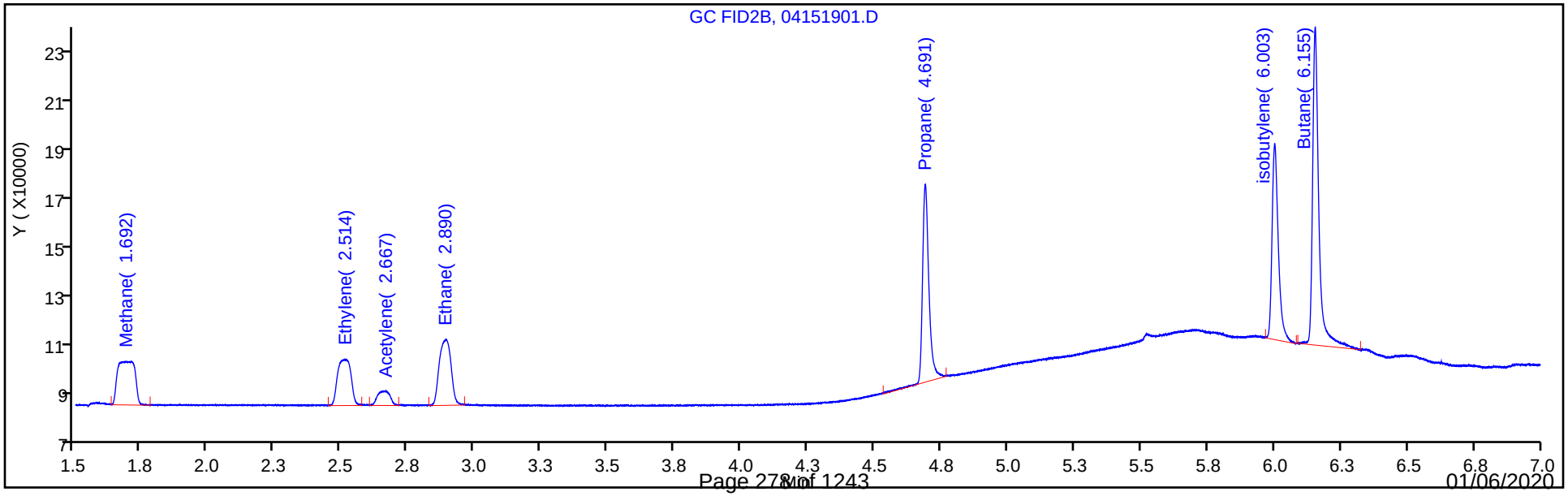
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D

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	

Reagents:

RSK7gasMathes_00026 Amount Added: 2.50 Units: uL

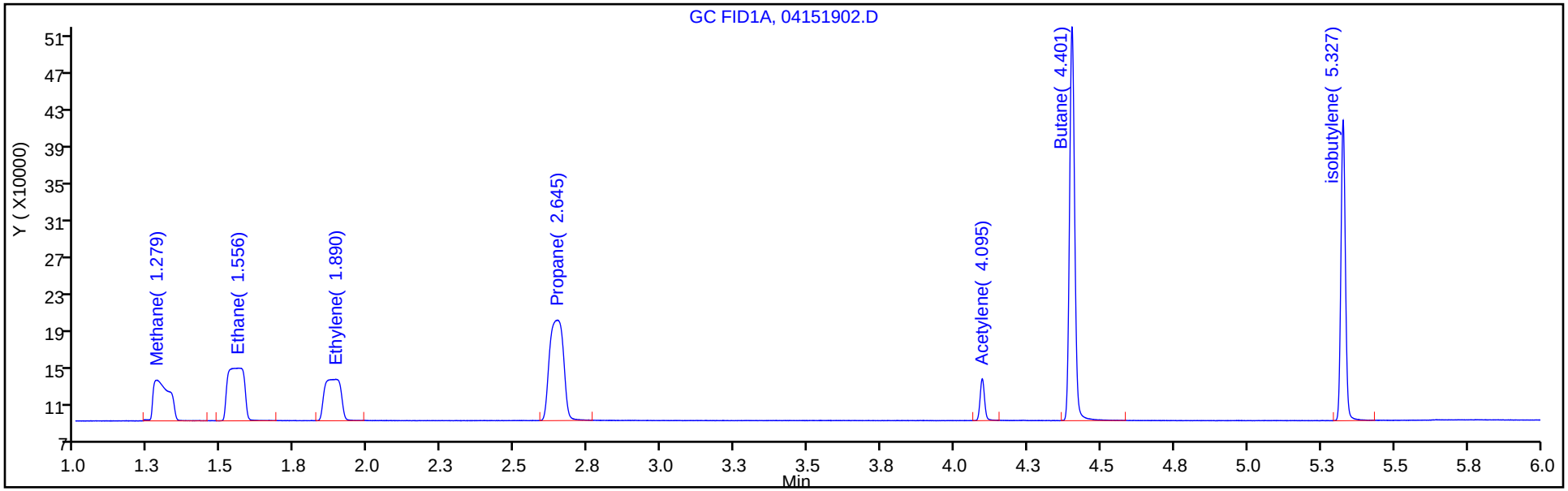
Report Date: 15-May-2019 11:57:51 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

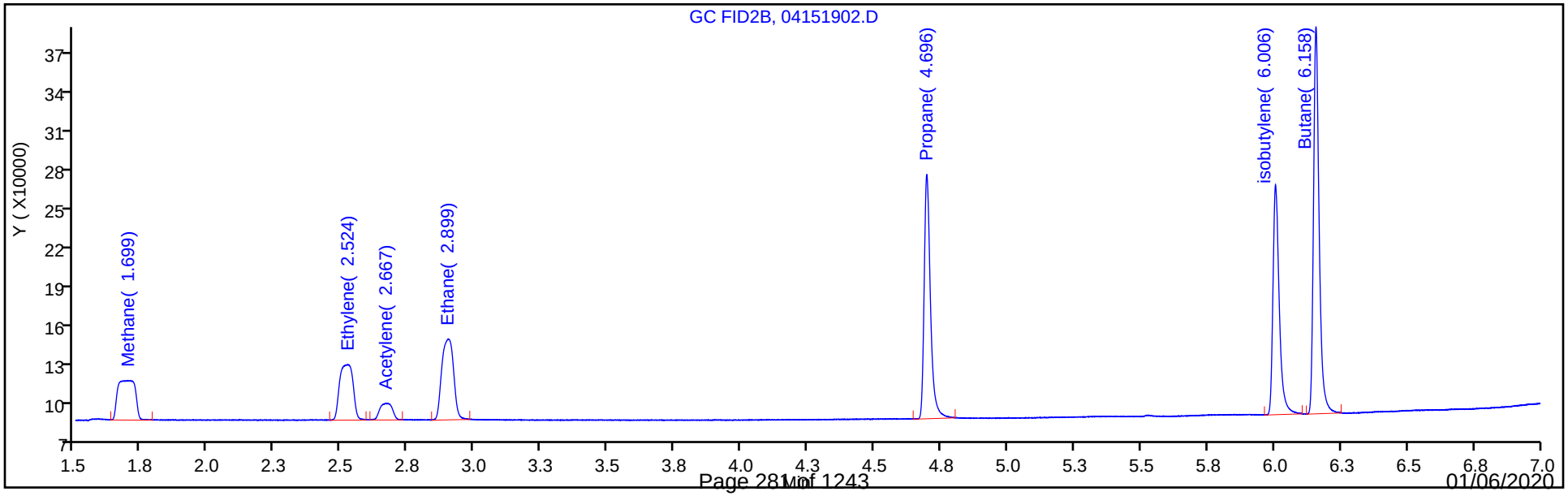
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D

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
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	

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

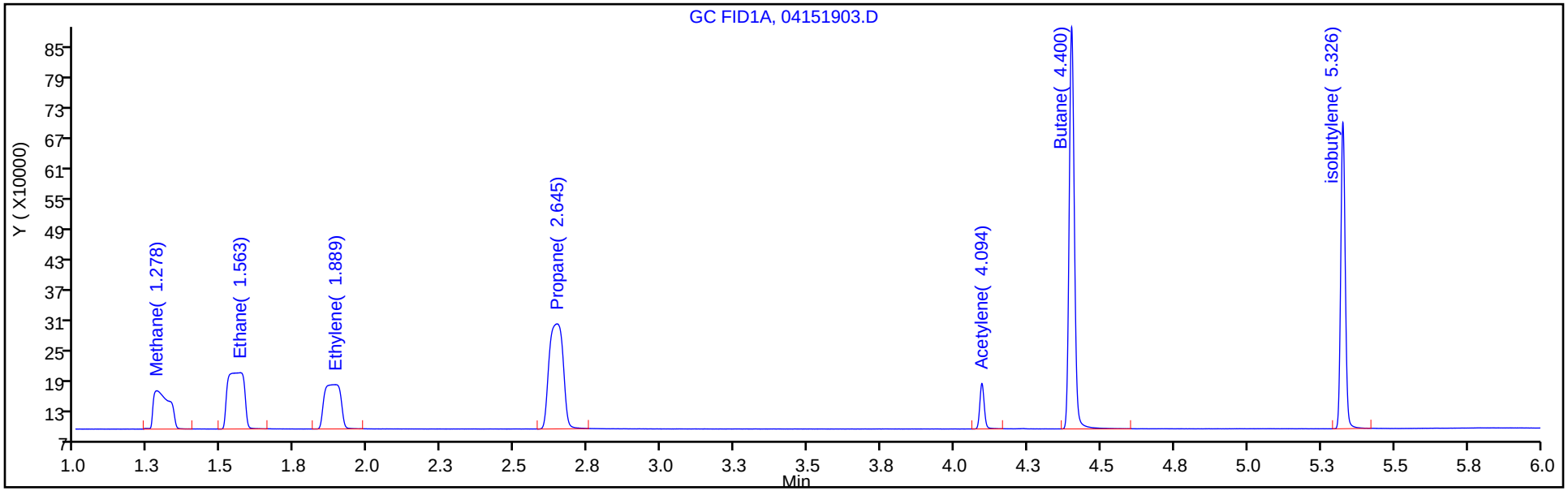
Lims ID: IC L3 Worklist Smp#: 3

Client ID:

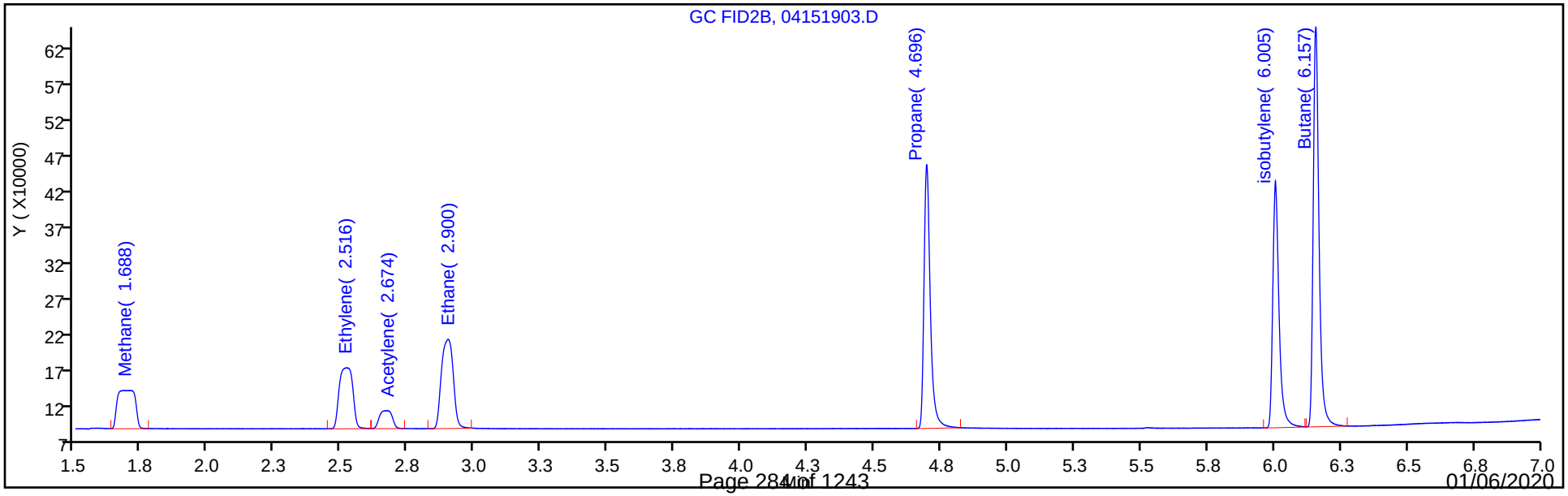
Purge Vol: 18.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

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	

Reagents:

RSK7gasMathes_00026 Amount Added: 40.00 Units: uL

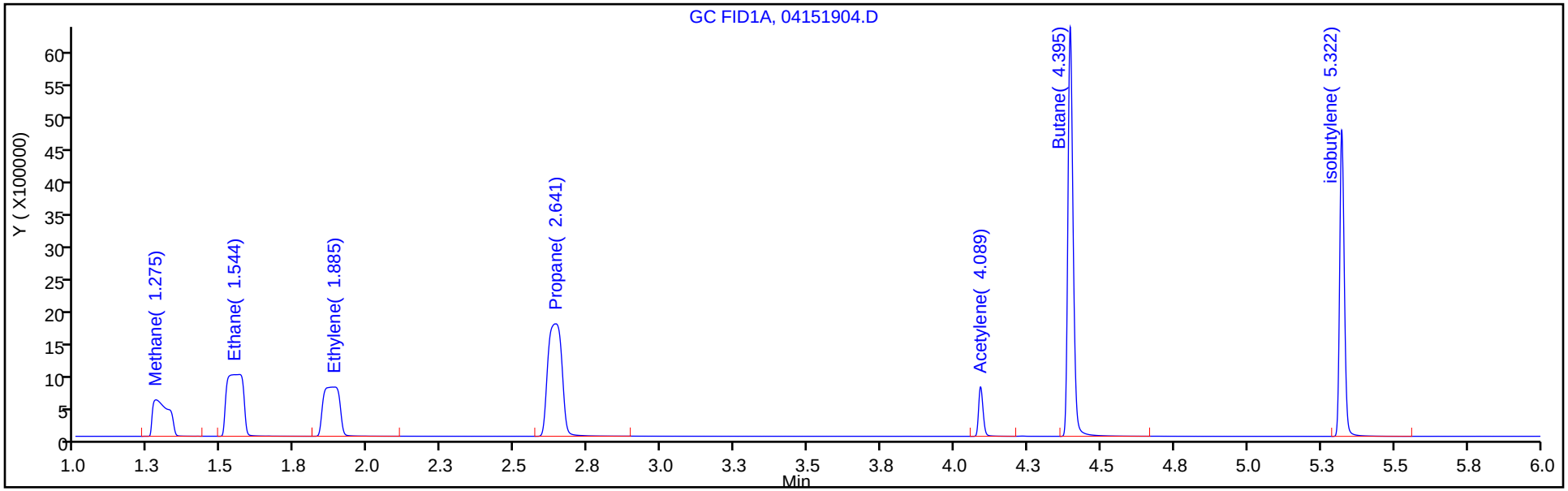
Report Date: 15-May-2019 11:57:55 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

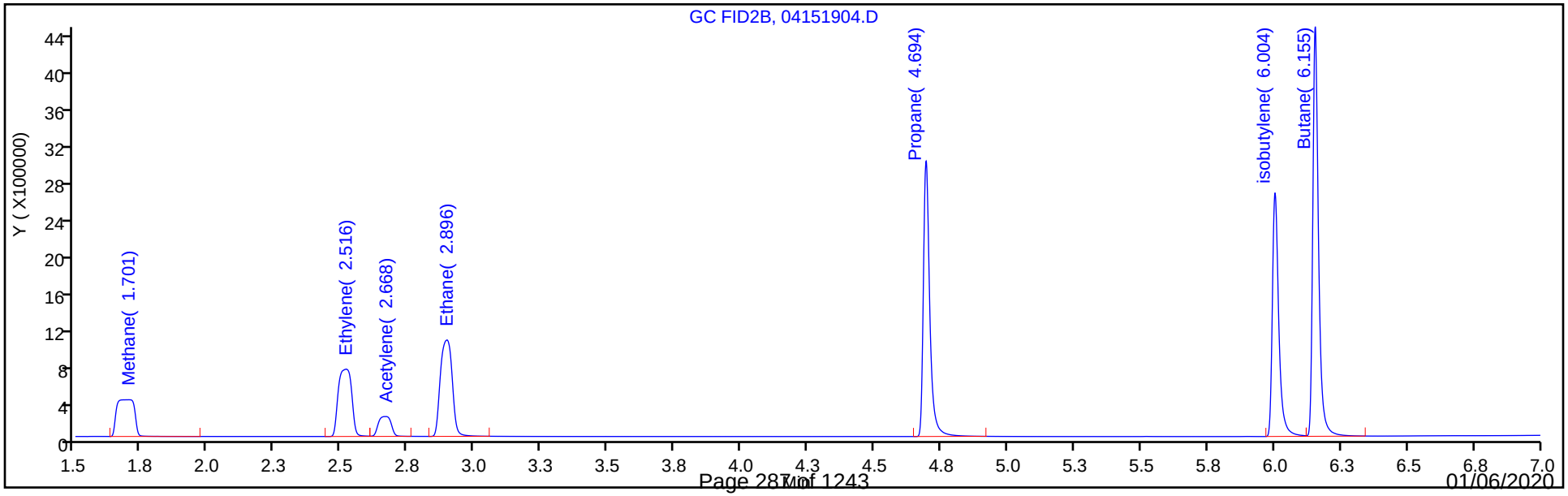
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D

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	

Reagents:

RSK7gasMathes_00026 Amount Added: 200.00 Units: uL

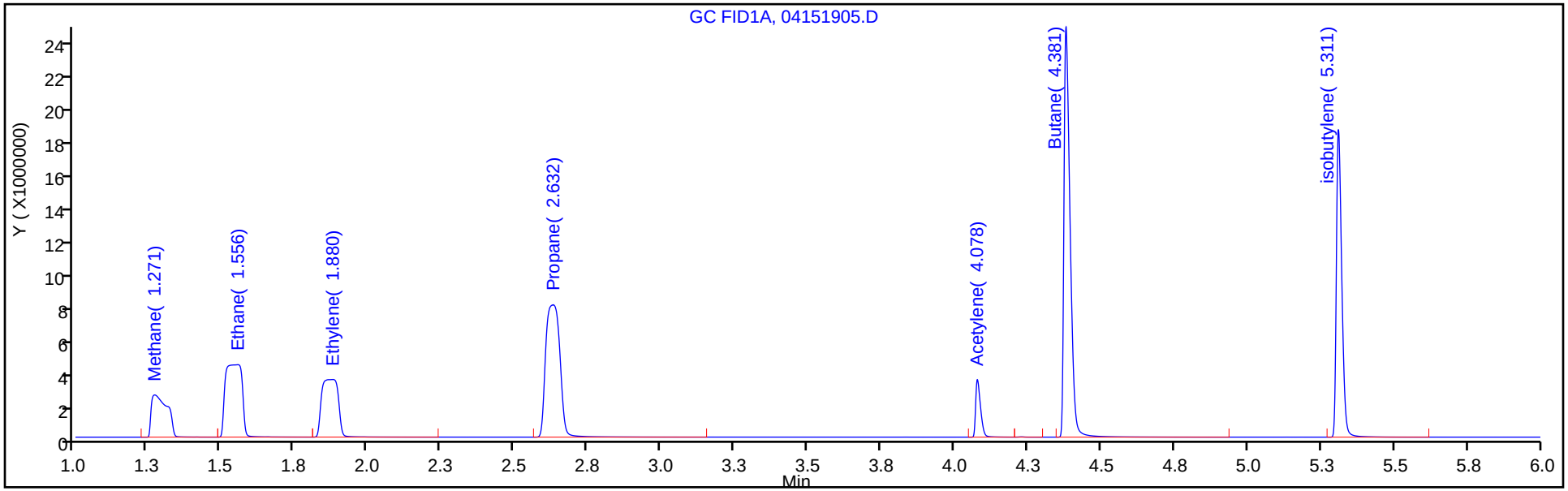
Report Date: 15-May-2019 11:57:56 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

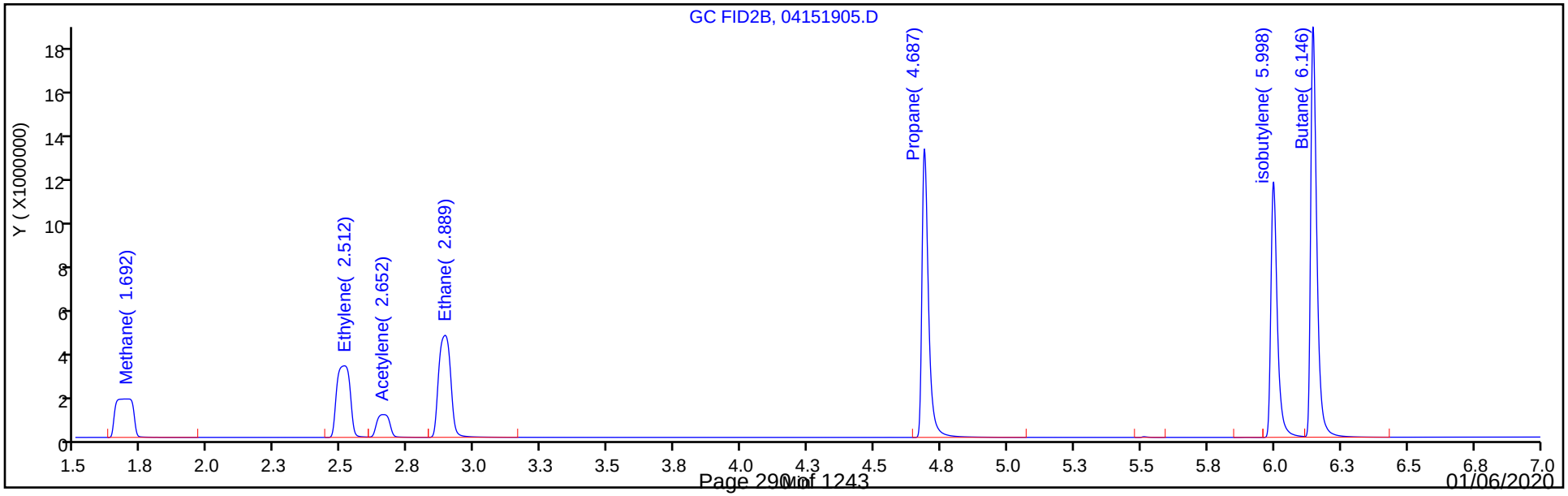
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D

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



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\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
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							M
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

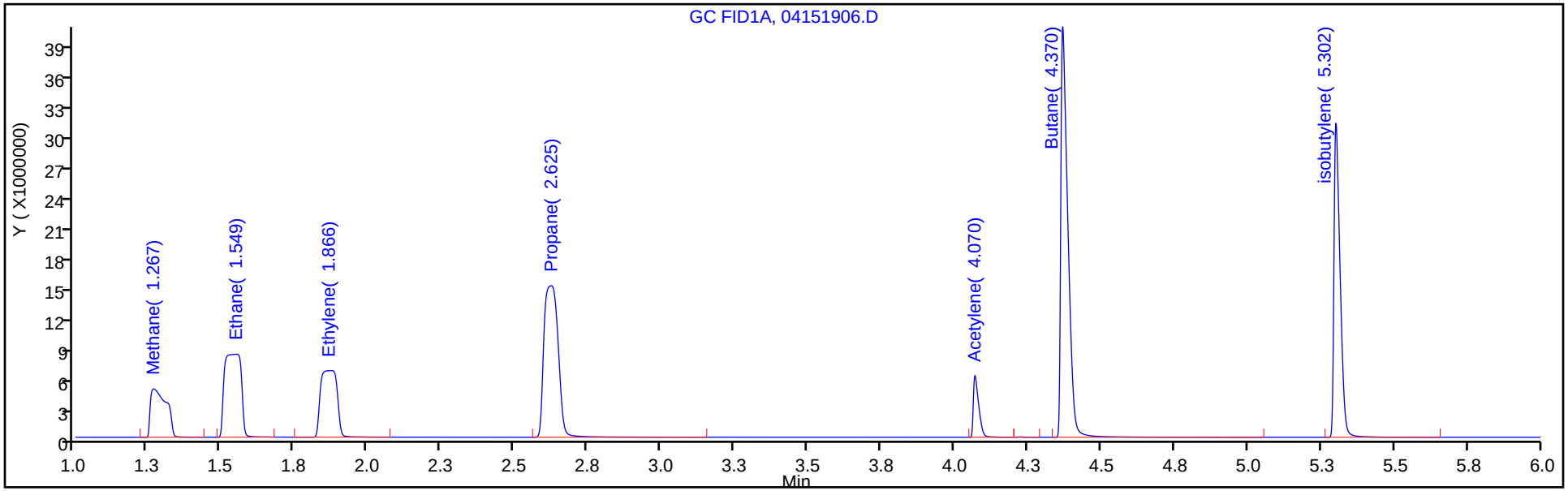
Report Date: 15-May-2019 11:57:57 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

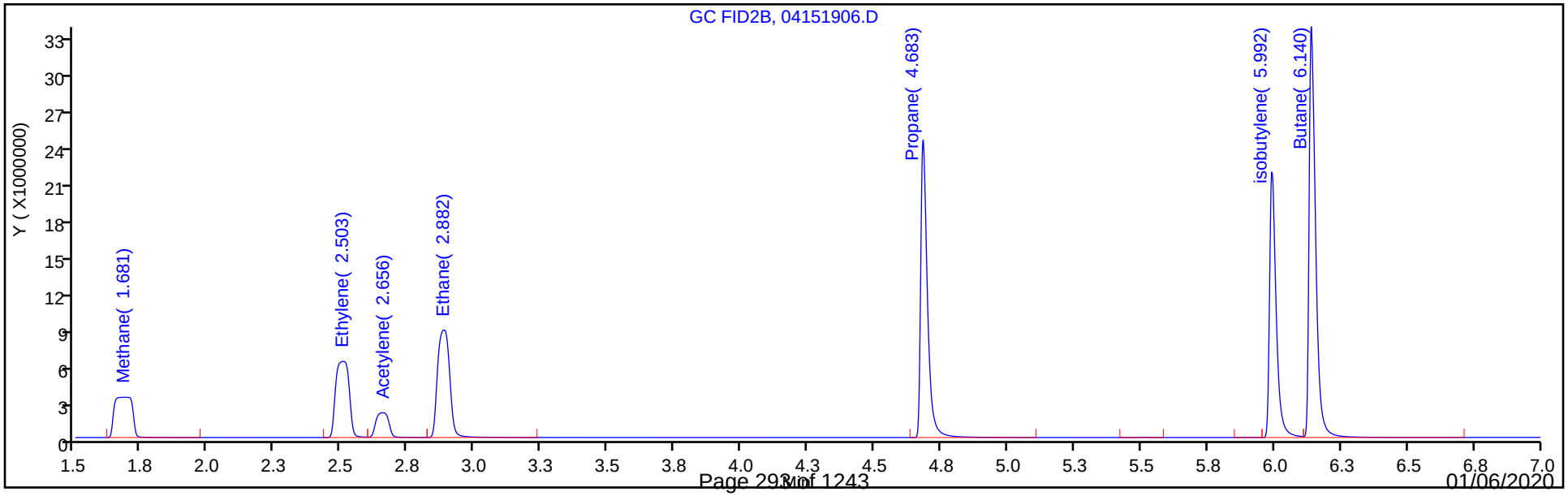
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D

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

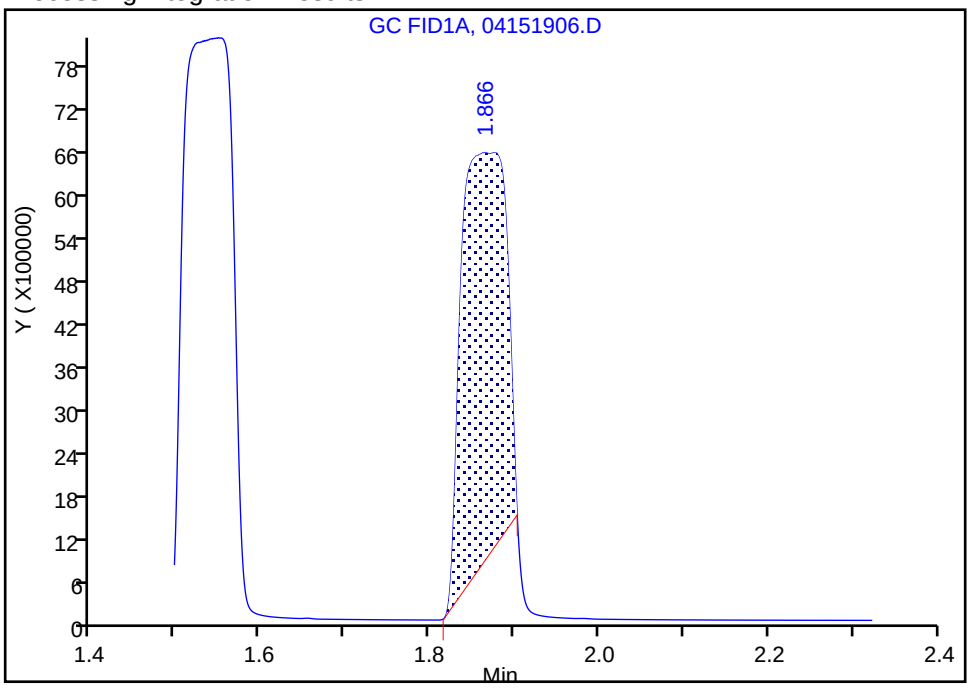
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D
Injection Date: 15-Apr-2019 11:30:32 Instrument ID: VGC_J
Lims ID: IC L6
Client ID:
Operator ID: ms ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

3 Ethylene, CAS: 74-85-1

Signal: 1

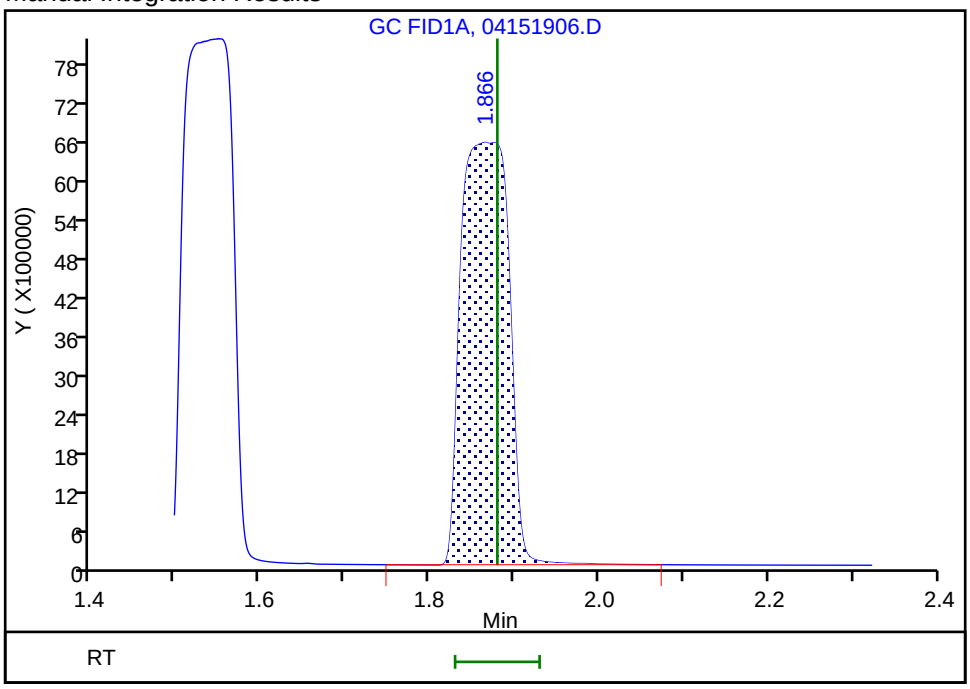
Processing Integration Results

RT: 1.87
Area: 21017489
Amount: 203.4324
Amount Units: ug/l



Manual Integration Results

RT: 1.87
Area: 25472652
Amount: 240.7464
Amount Units: ug/l



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
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							M
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	
						RPD = 0.62	
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

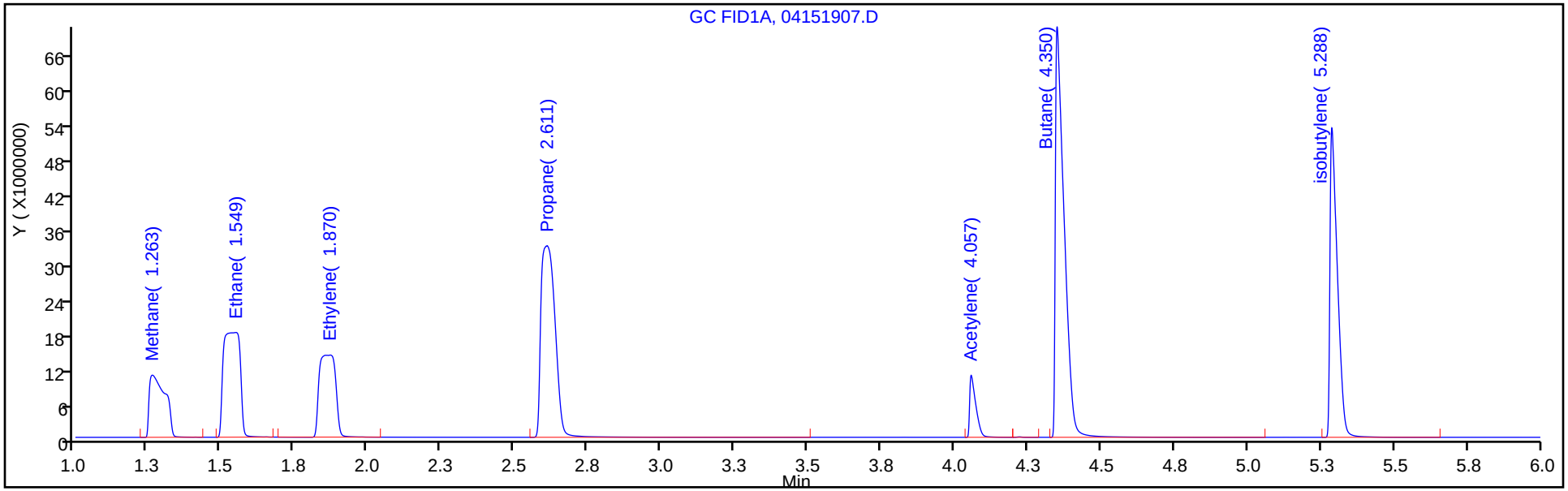
Report Date: 15-May-2019 11:57:59 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

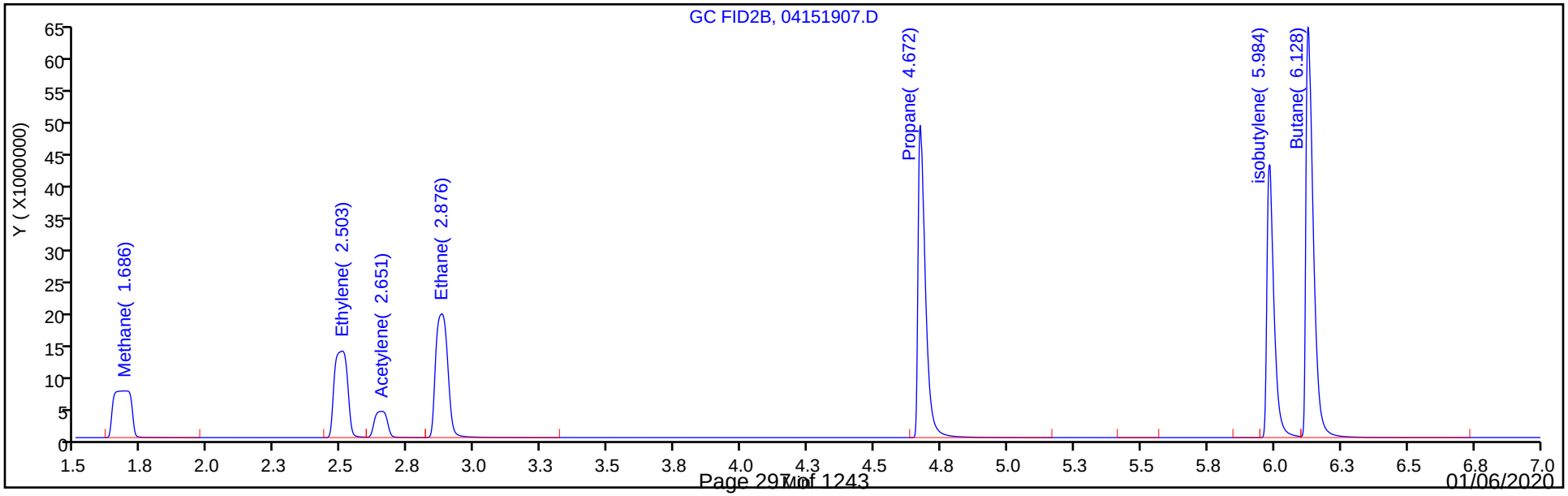
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D

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



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

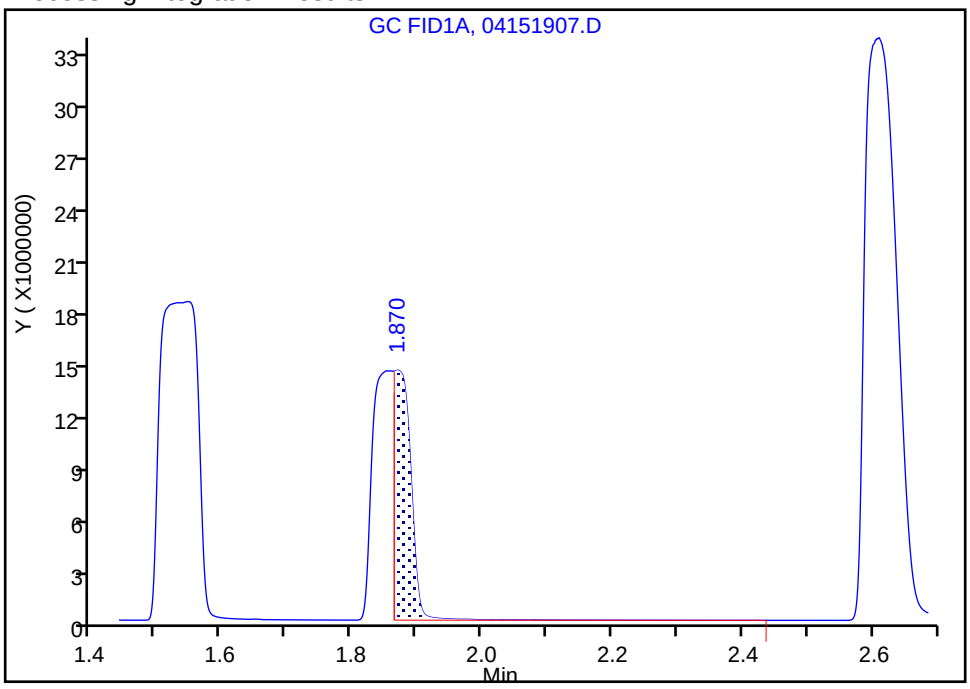
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D
Injection Date: 15-Apr-2019 11:44:06 Instrument ID: VGC_J
Lims ID: IC L7
Client ID:
Operator ID: ms ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

3 Ethylene, CAS: 74-85-1

Signal: 1

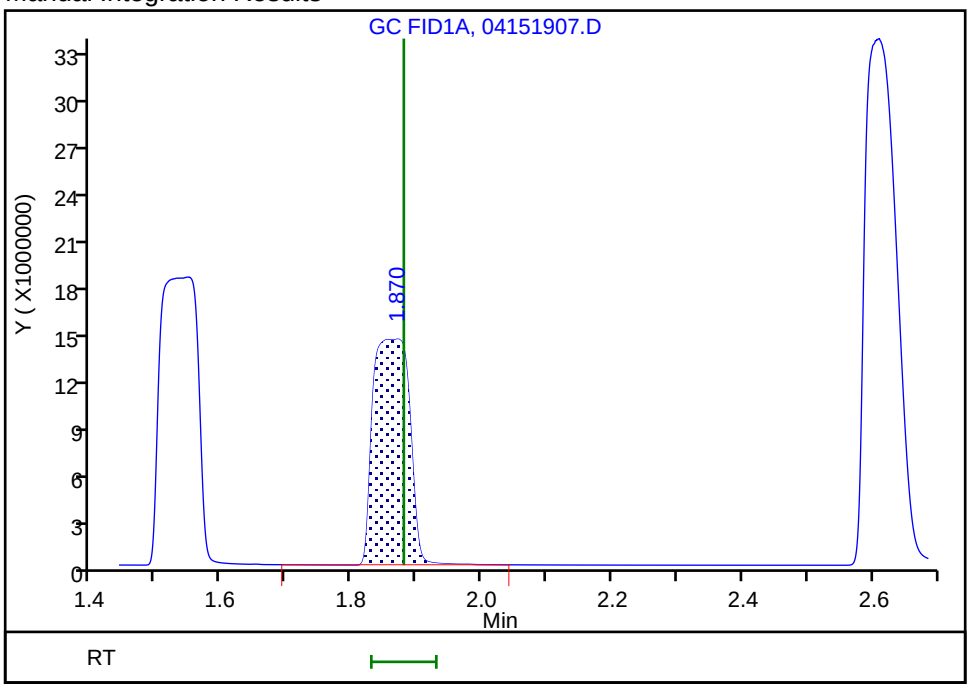
Processing Integration Results

RT: 1.87
Area: 24366908
Amount: 337.8607
Amount Units: ug/l



Manual Integration Results

RT: 1.87
Area: 54838846
Amount: 518.2913
Amount Units: ug/l



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

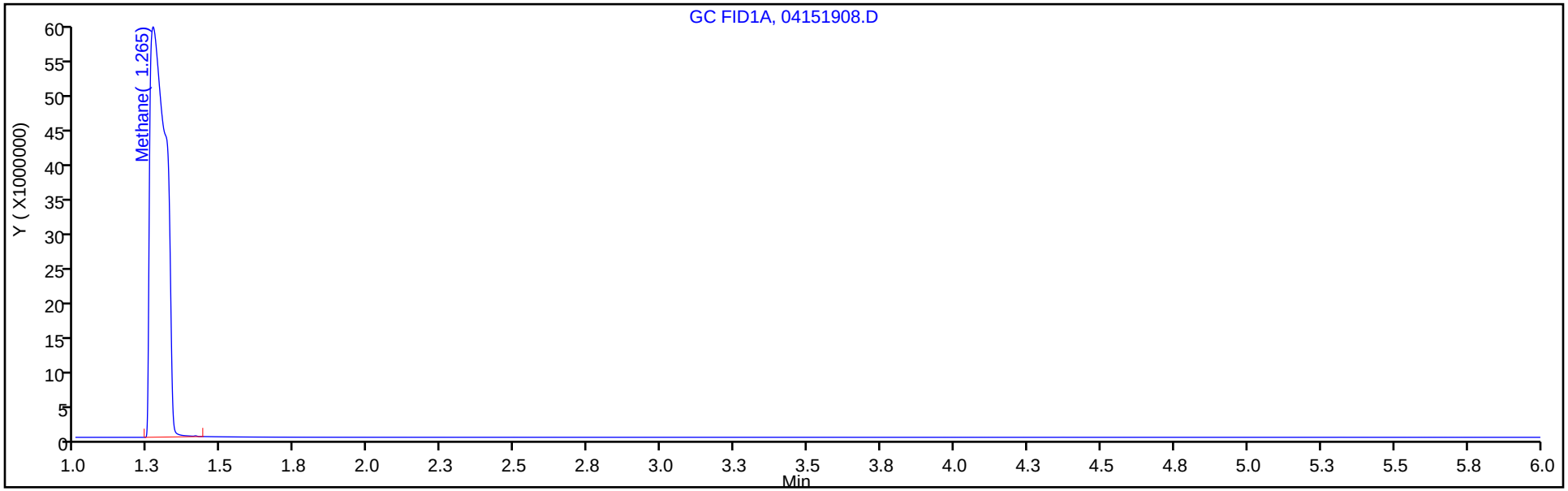
Report Date: 15-May-2019 11:58:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

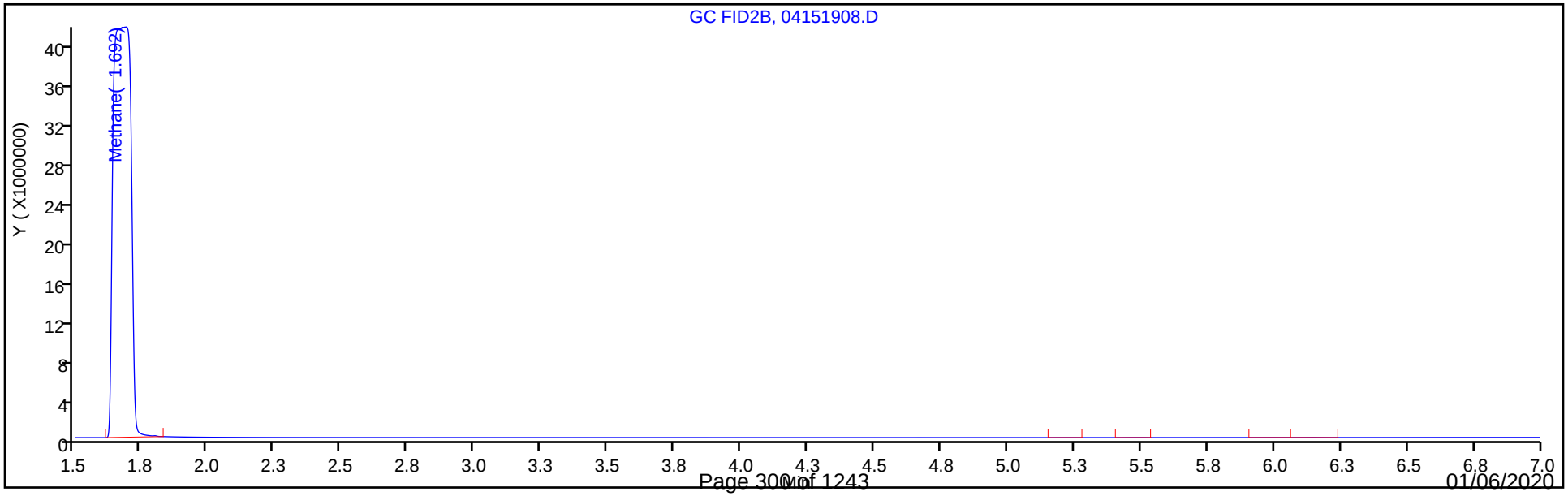
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D

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



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\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

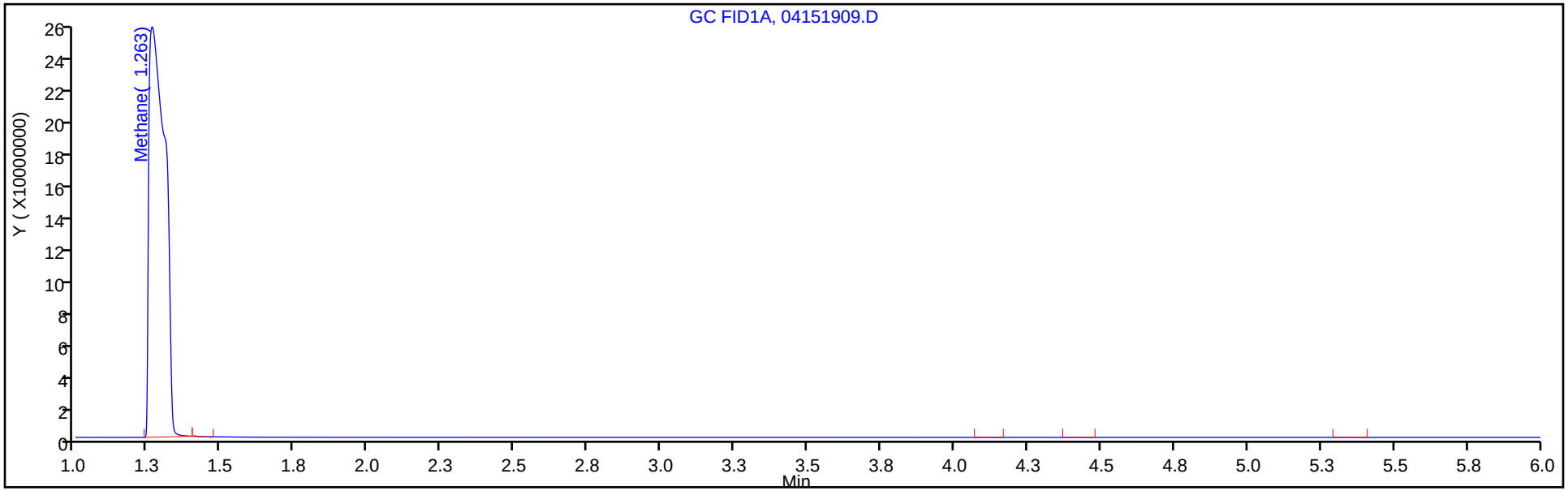
Report Date: 15-May-2019 11:58:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

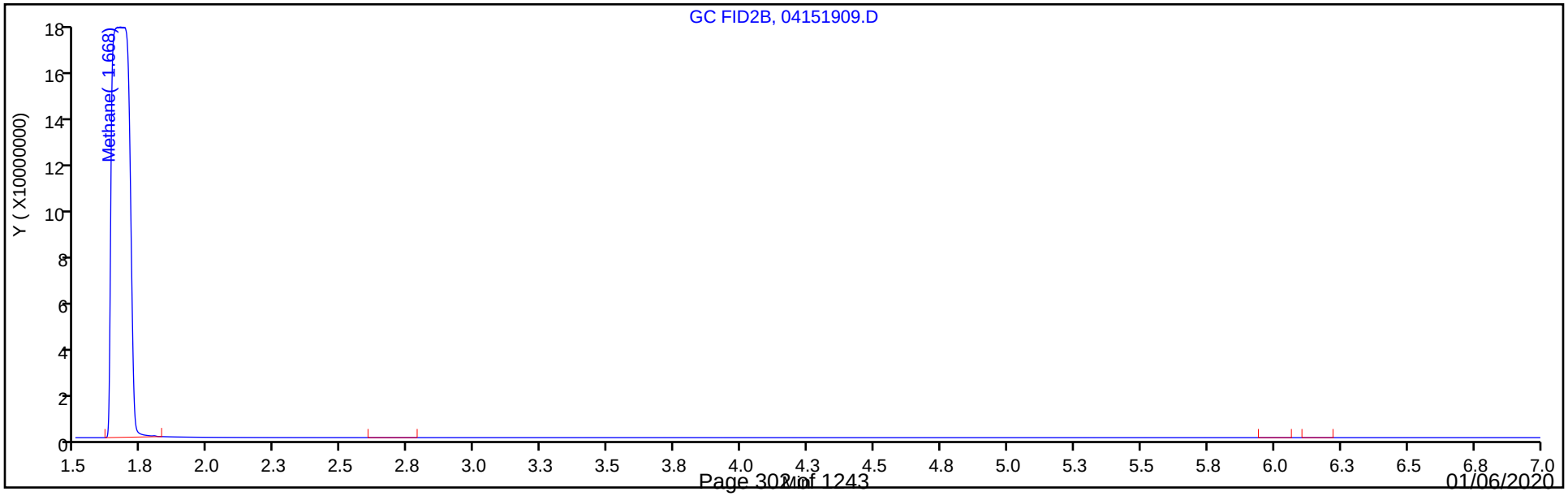
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

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.: 280-129936-1 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.: 280-129936-1 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.: 280-129936-1 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							M
1	4.410	4.381	0.029	211953	1.65	1.51	
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

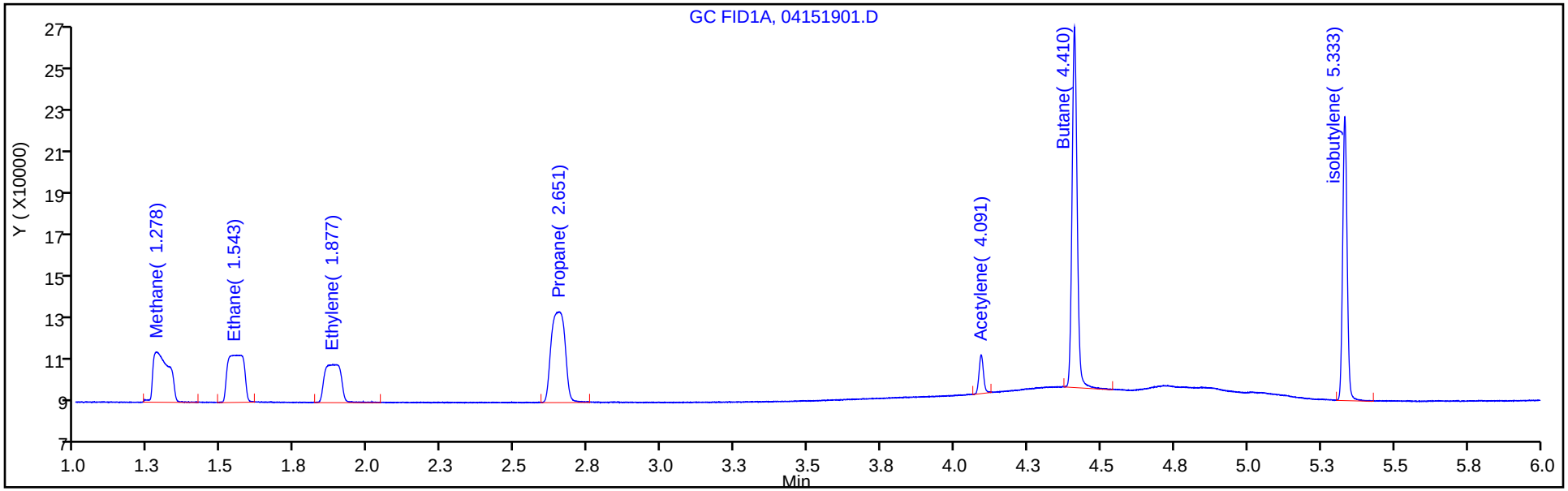
Report Date: 15-May-2019 11:57:50 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

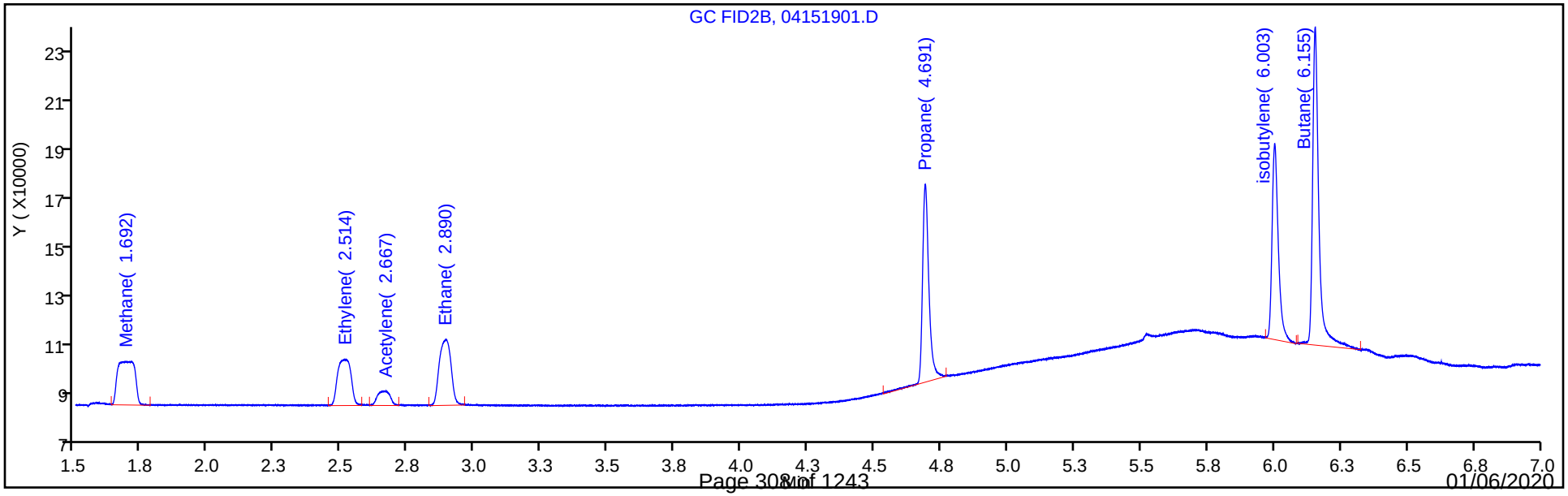
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D

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	

Reagents:

RSK7gasMathes_00026 Amount Added: 2.50 Units: uL

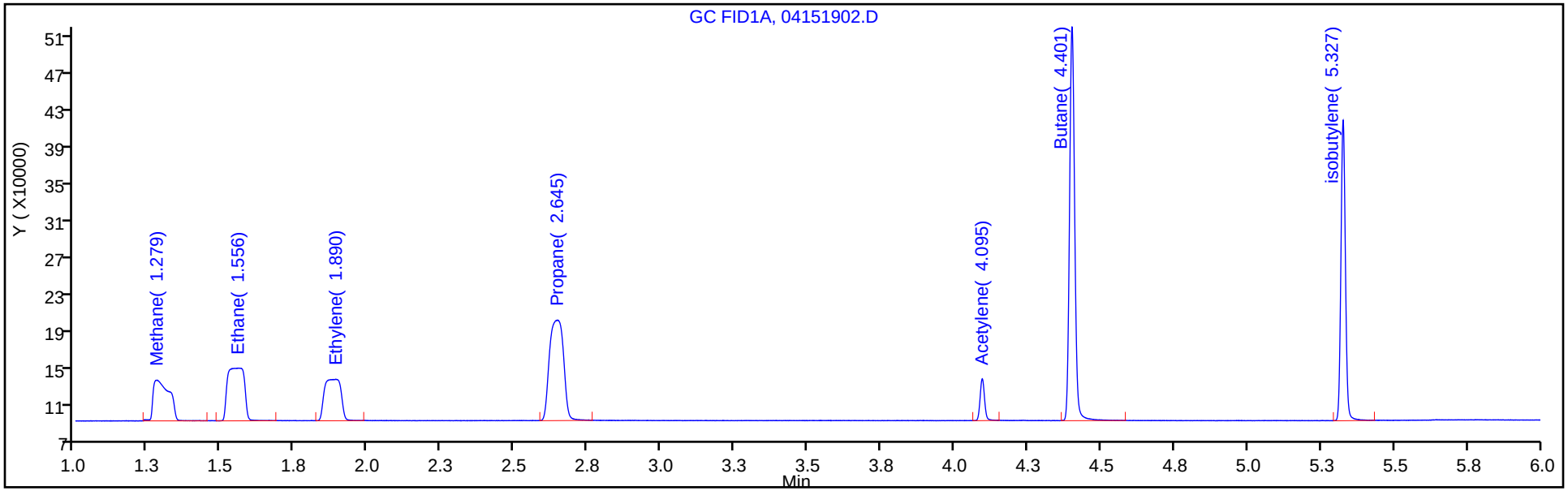
Report Date: 15-May-2019 11:57:52 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

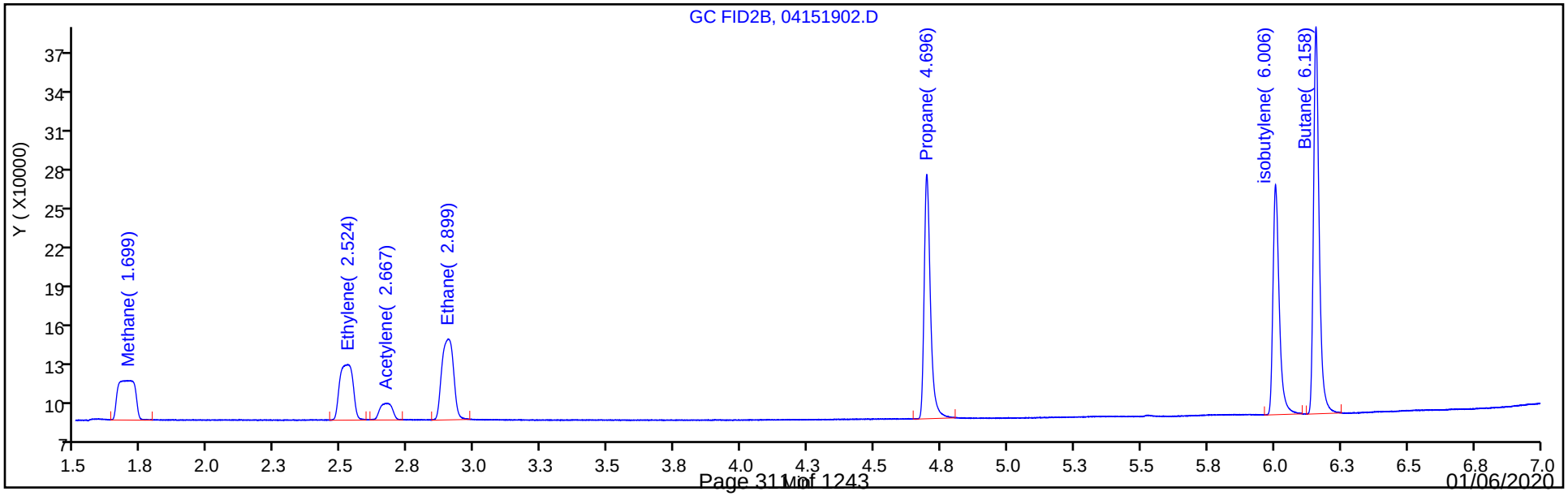
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D

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



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
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	

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

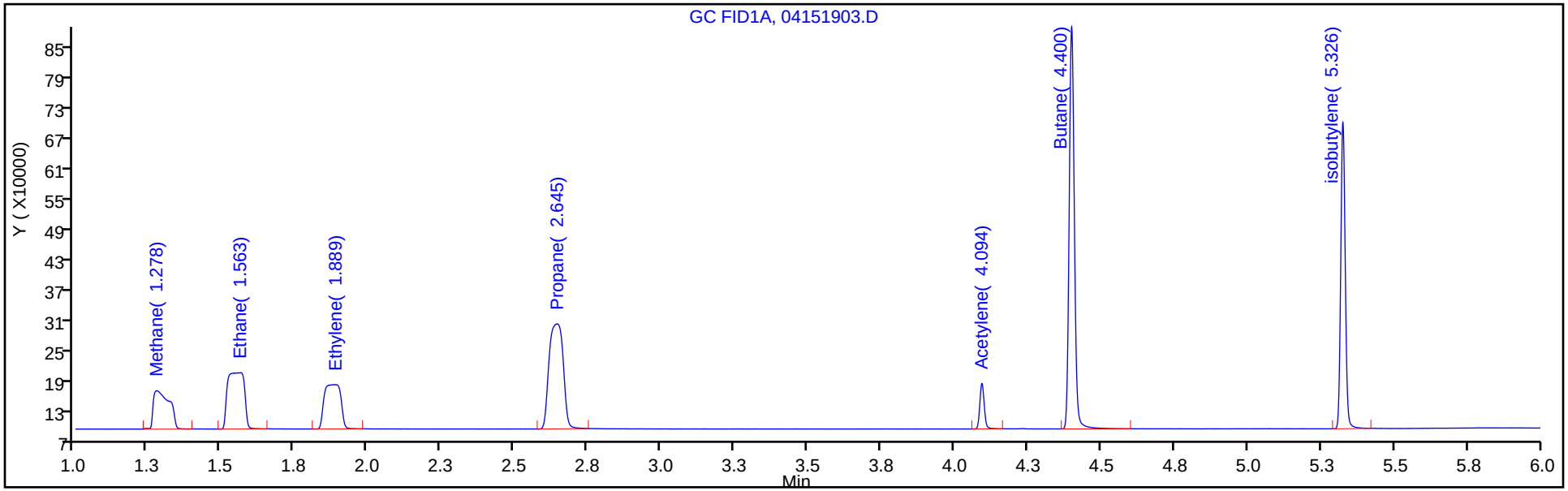
Lims ID: IC L3 Worklist Smp#: 3

Client ID:

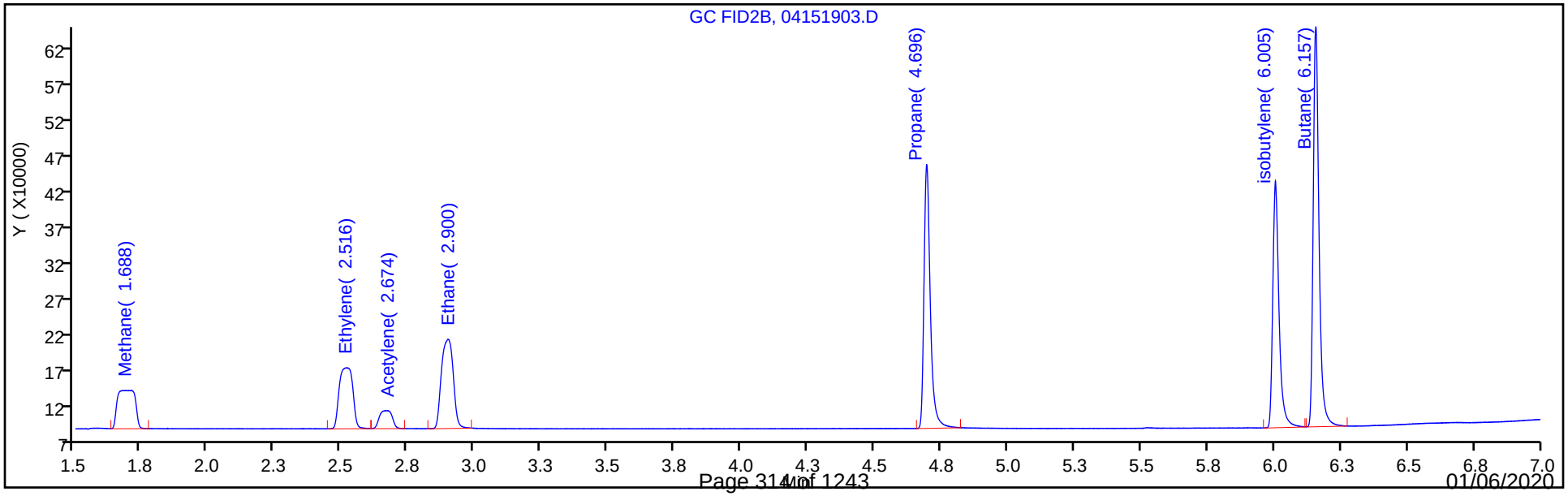
Purge Vol: 18.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

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	

Reagents:

RSK7gasMathes_00026 Amount Added: 40.00 Units: uL

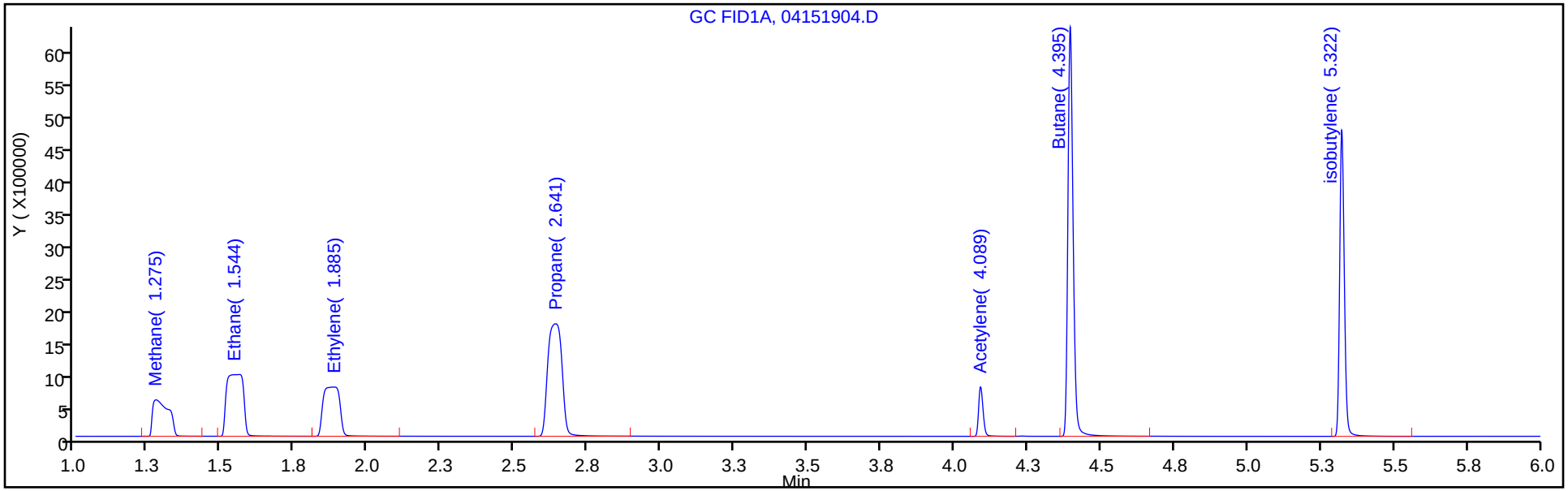
Report Date: 15-May-2019 11:57:55 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

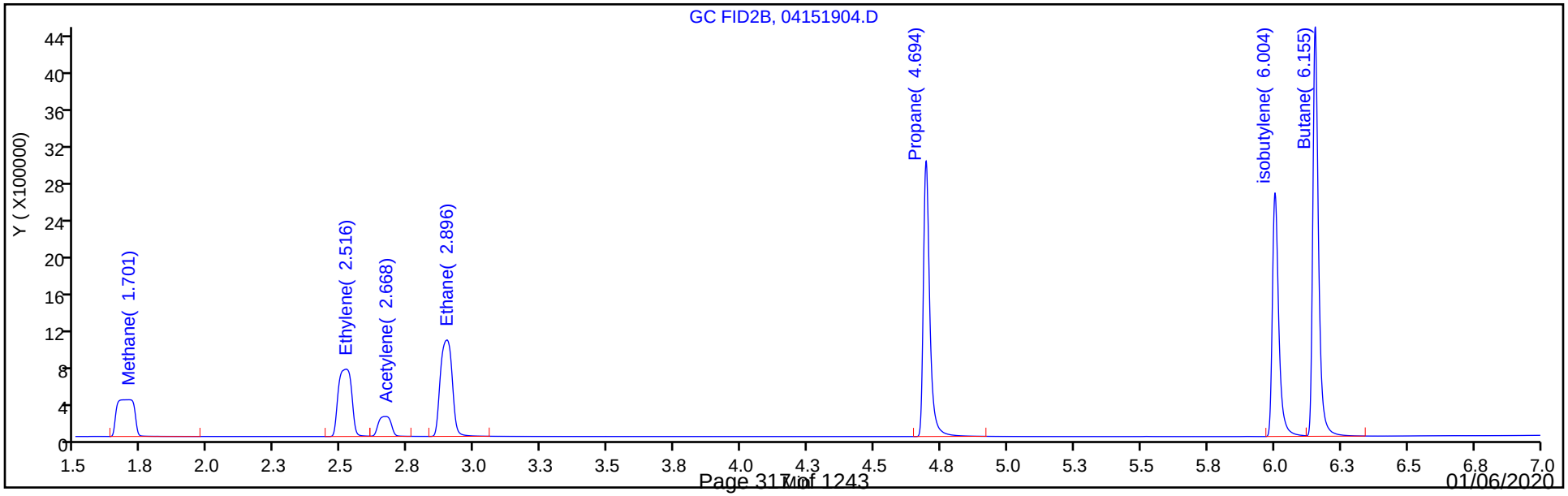
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D

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	

Reagents:

RSK7gasMathes_00026 Amount Added: 200.00 Units: uL

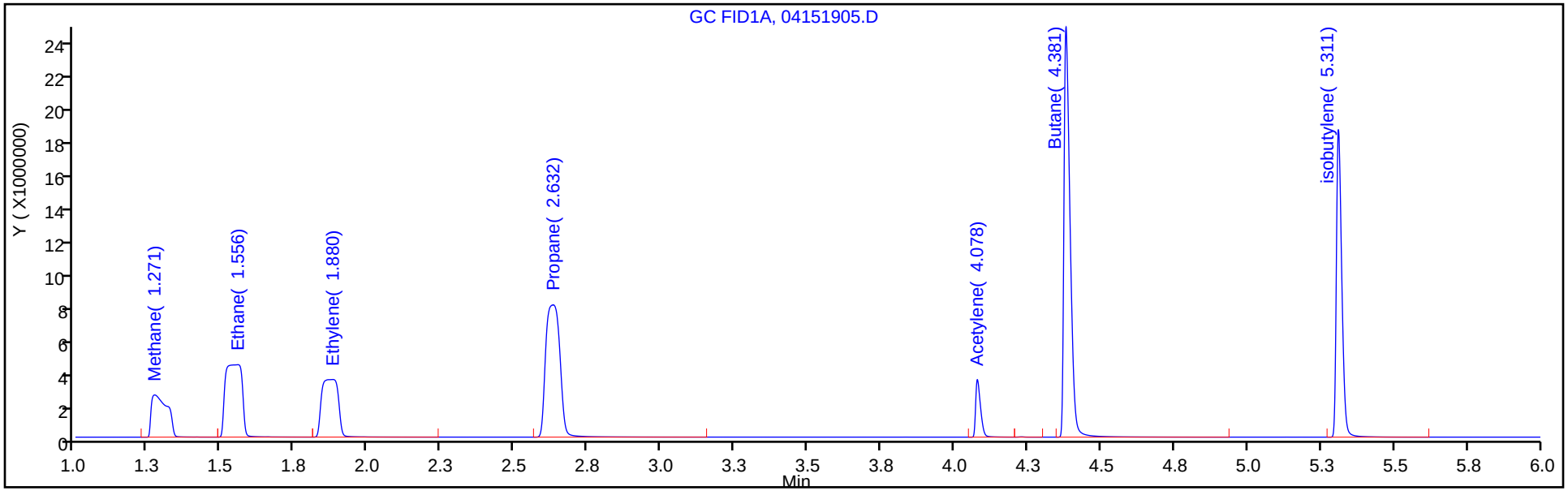
Report Date: 15-May-2019 11:57:56 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

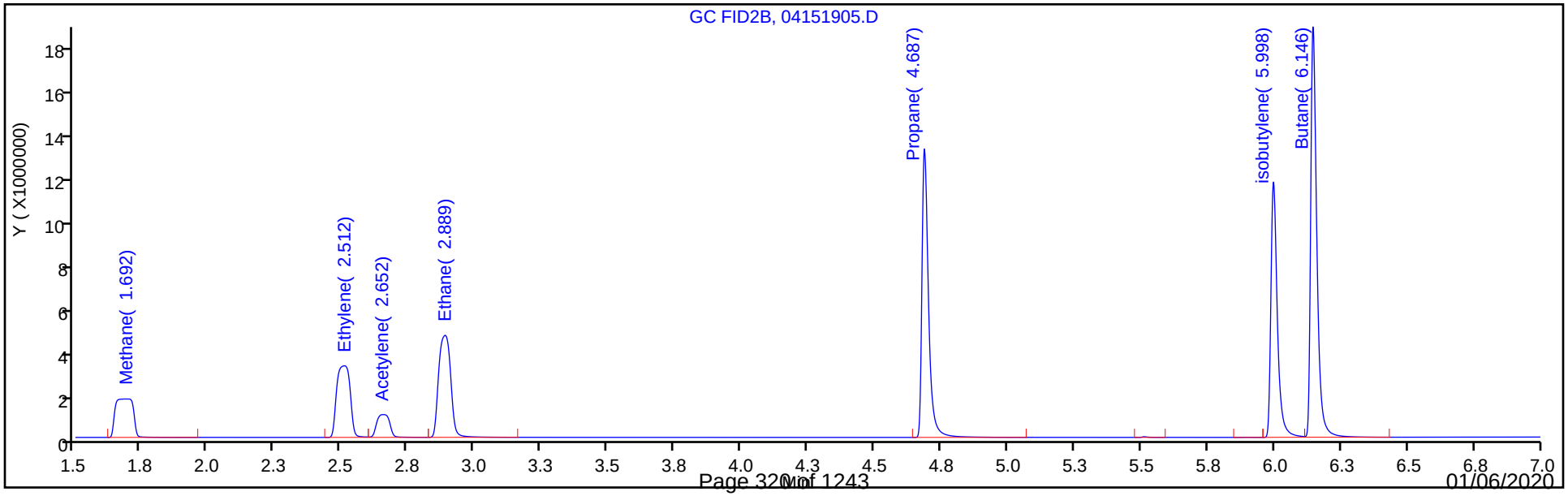
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D

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



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\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
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							M
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

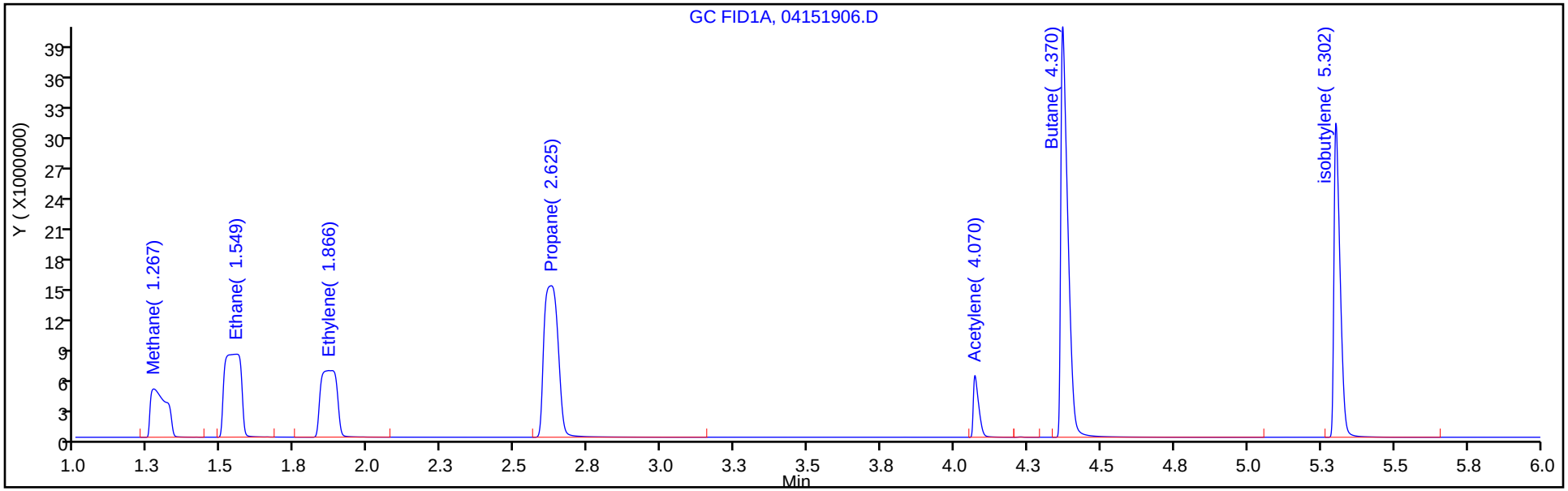
Report Date: 15-May-2019 11:57:58 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

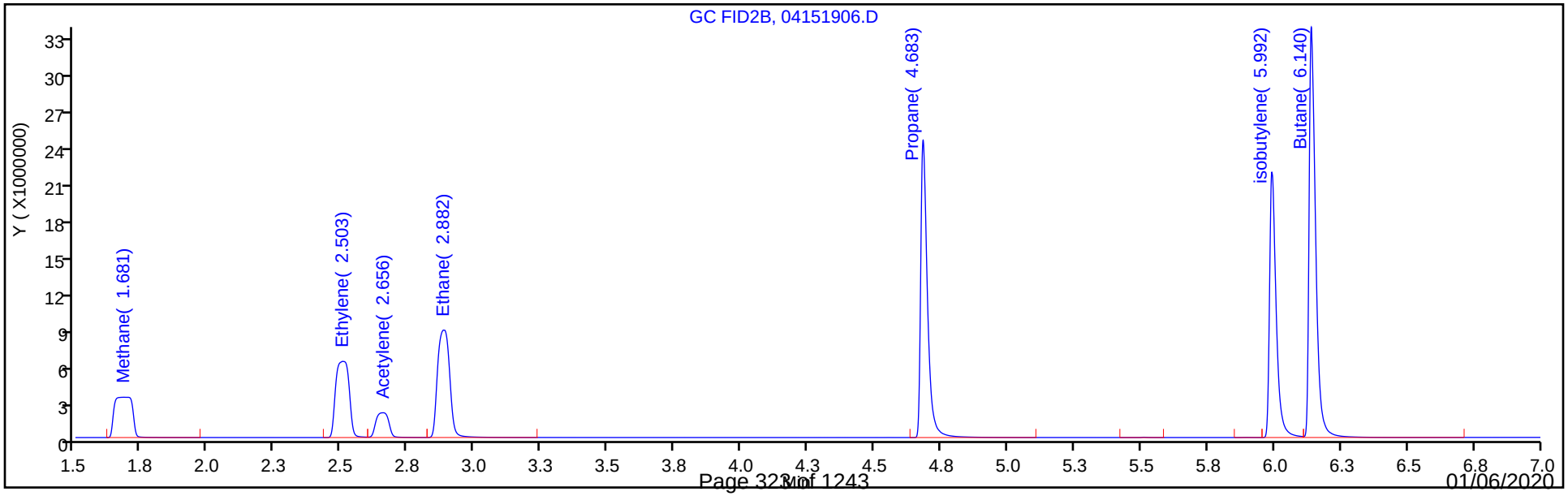
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D

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
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							M
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	
						RPD = 0.62	
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

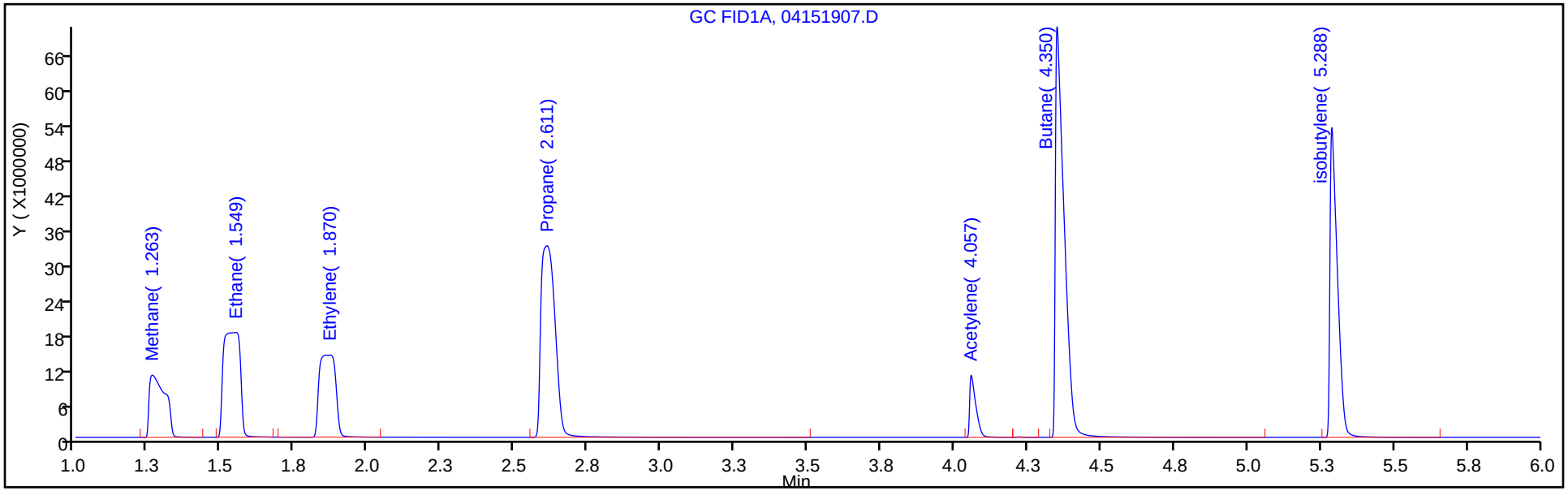
Report Date: 15-May-2019 11:57:59 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

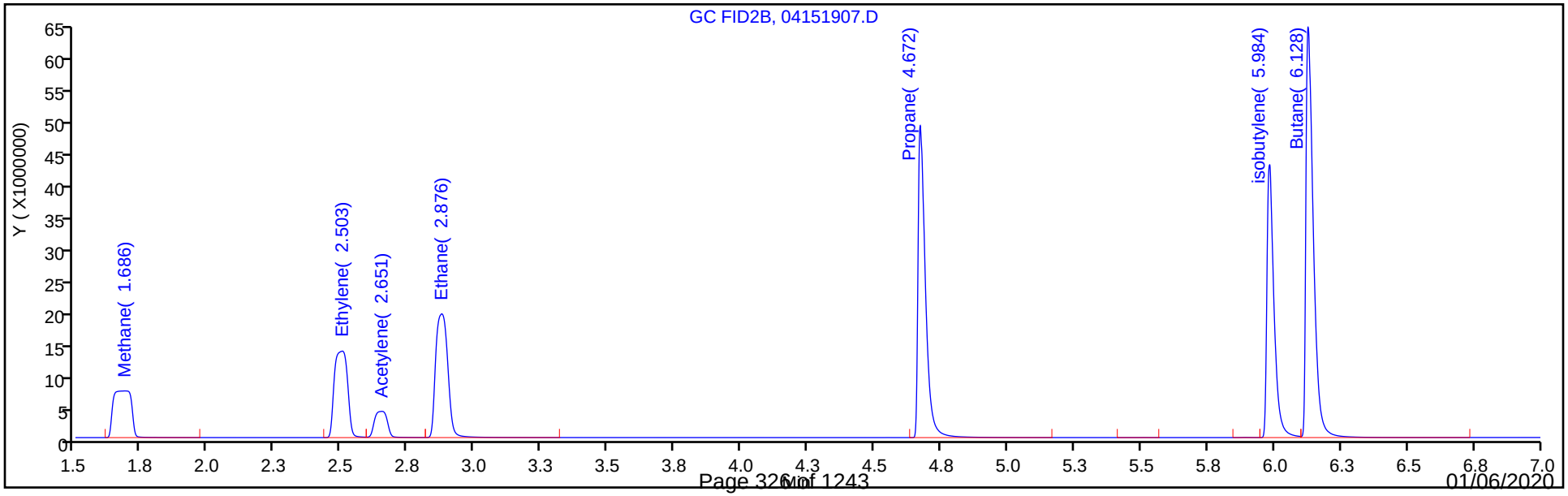
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D

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



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\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

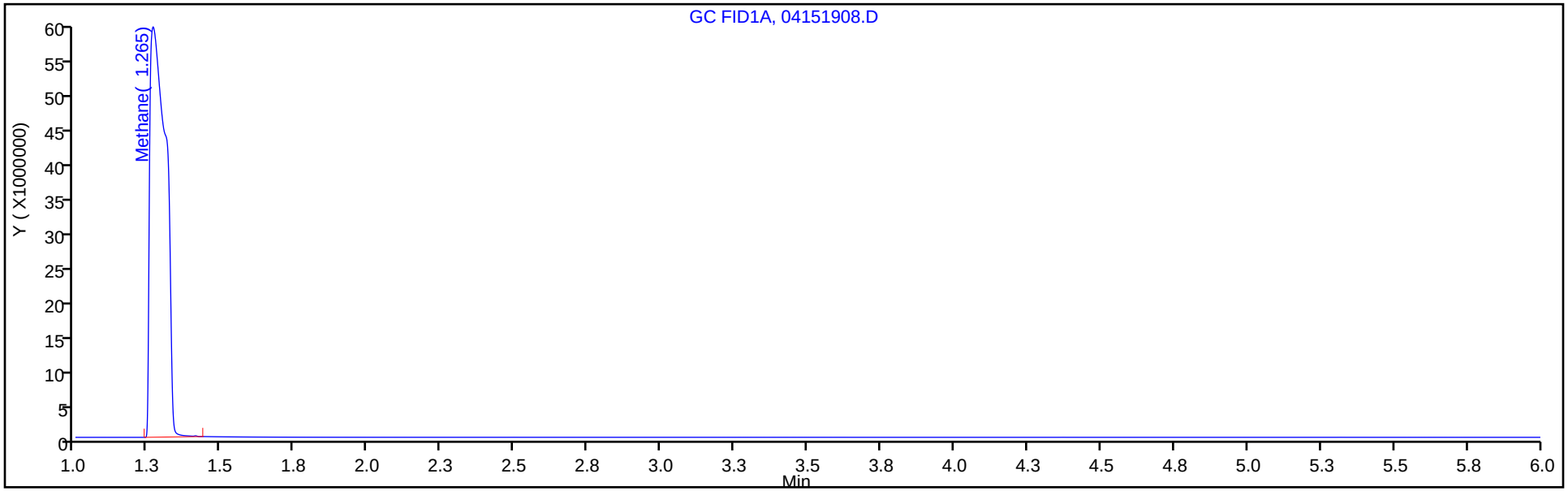
Report Date: 15-May-2019 11:58:01 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

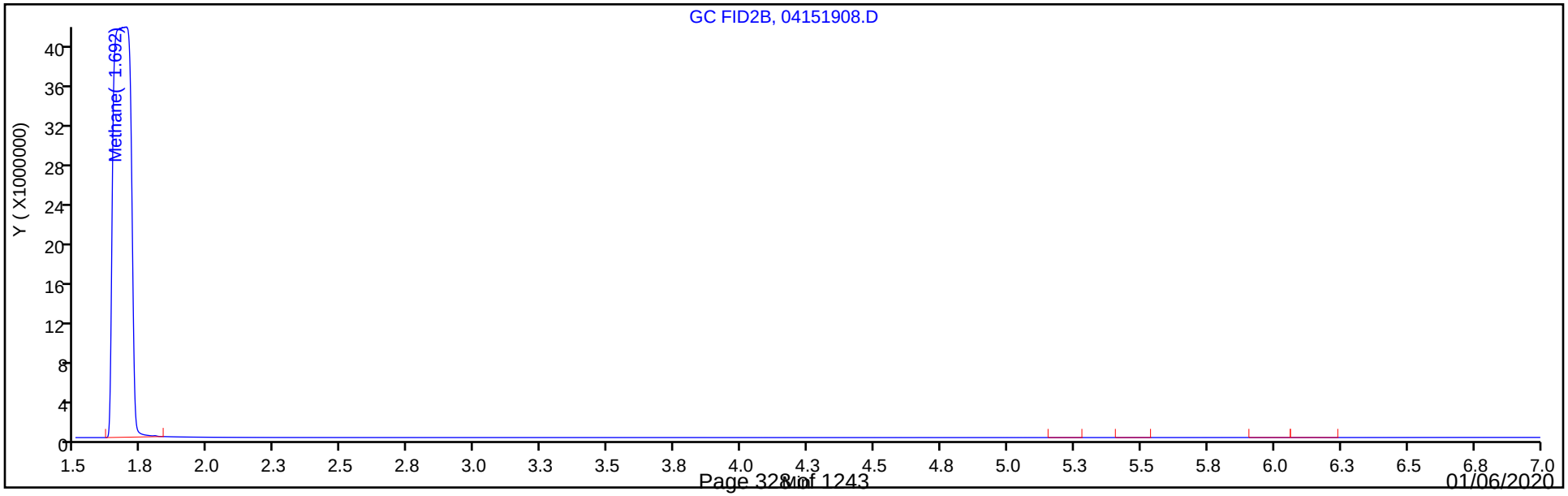
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D

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



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\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

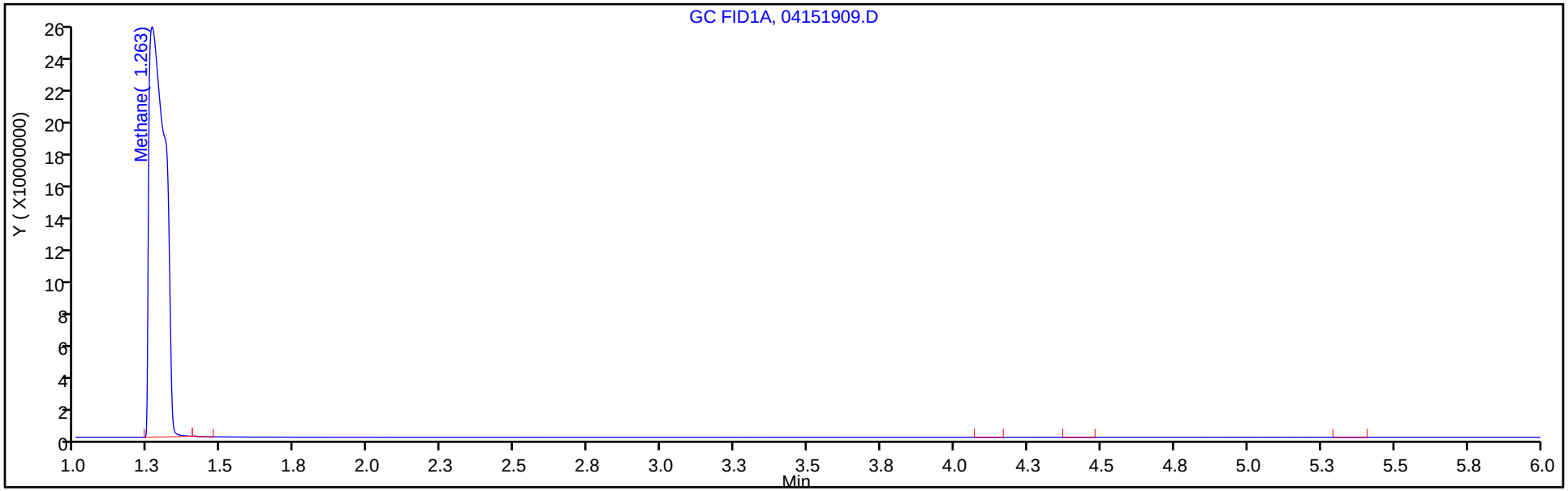
Report Date: 15-May-2019 11:58:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

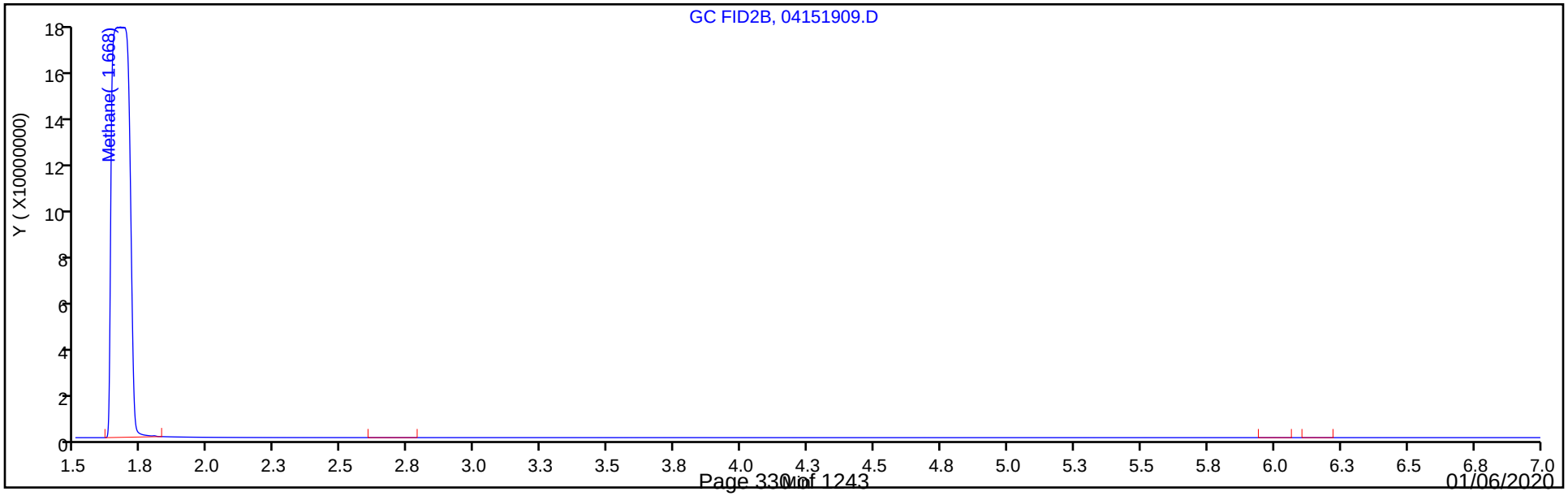
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

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 VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

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.: 280-129936-1

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	

Reagents:

RSK7gasMathes_00025 Amount Added: 400.00 Units: uL

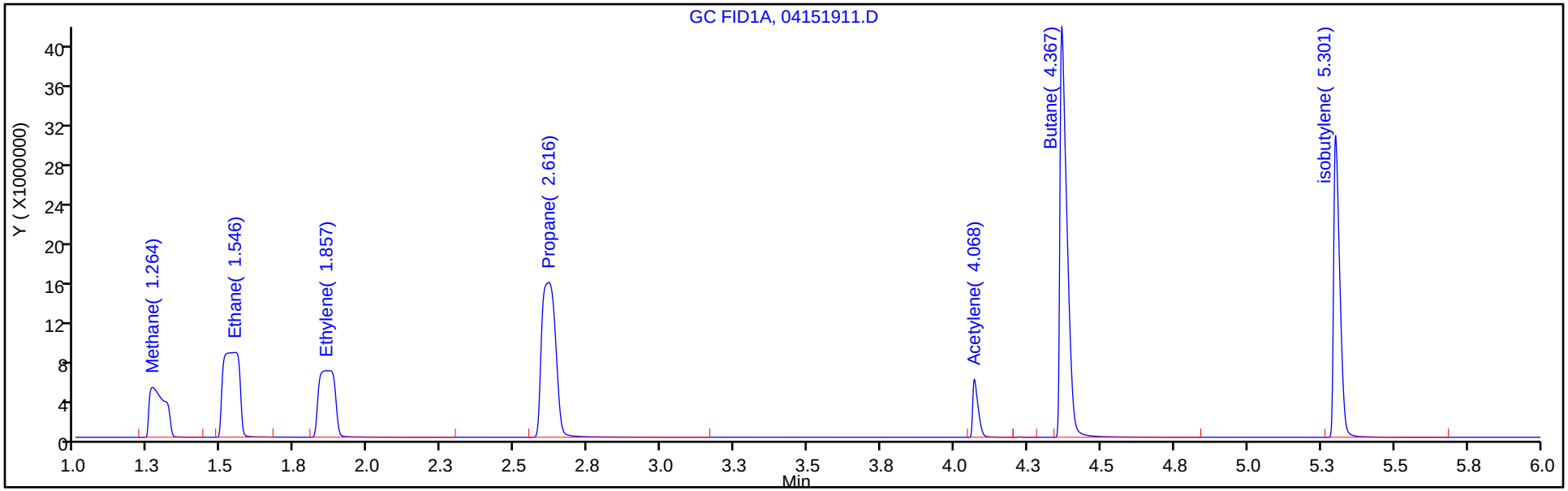
Report Date: 15-May-2019 11:58:04 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

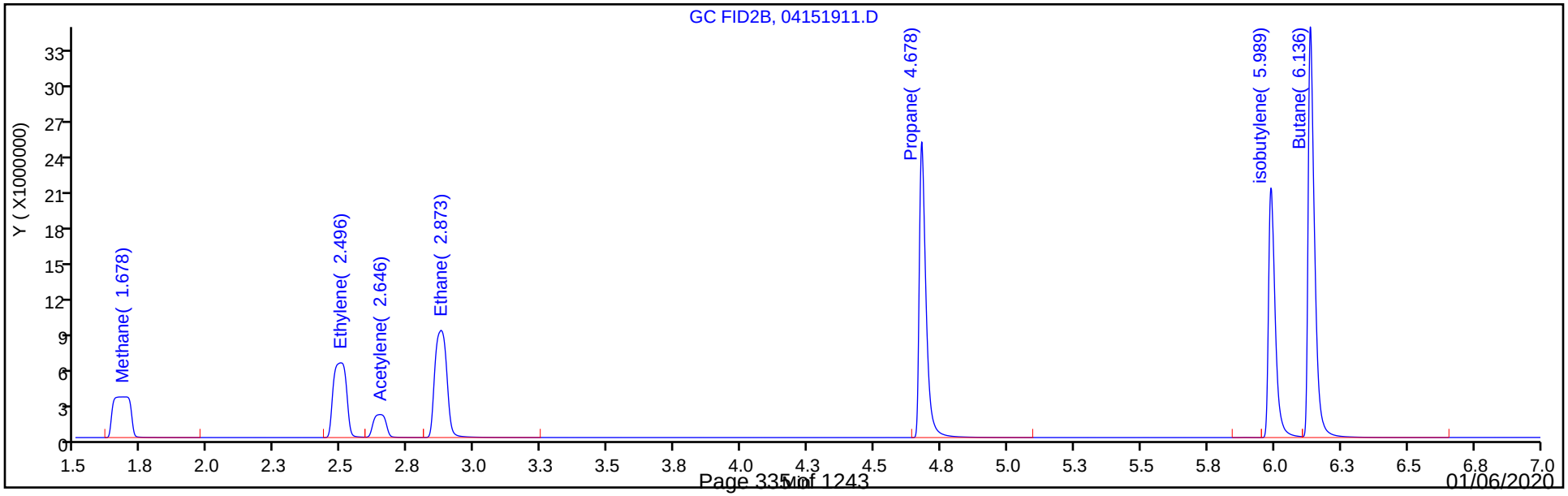
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D

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.: 280-129936-1

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.: 280-129936-1

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	

Reagents:

RSK7gasMathes_00025 Amount Added: 400.00 Units: uL

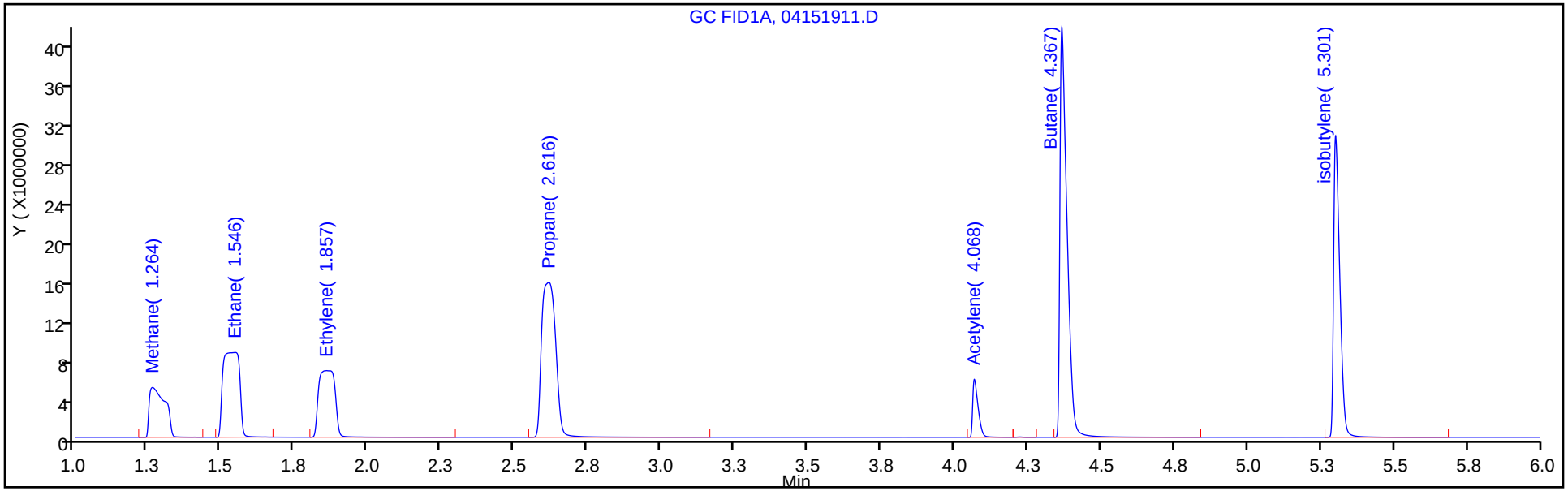
Report Date: 15-May-2019 11:58:04 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

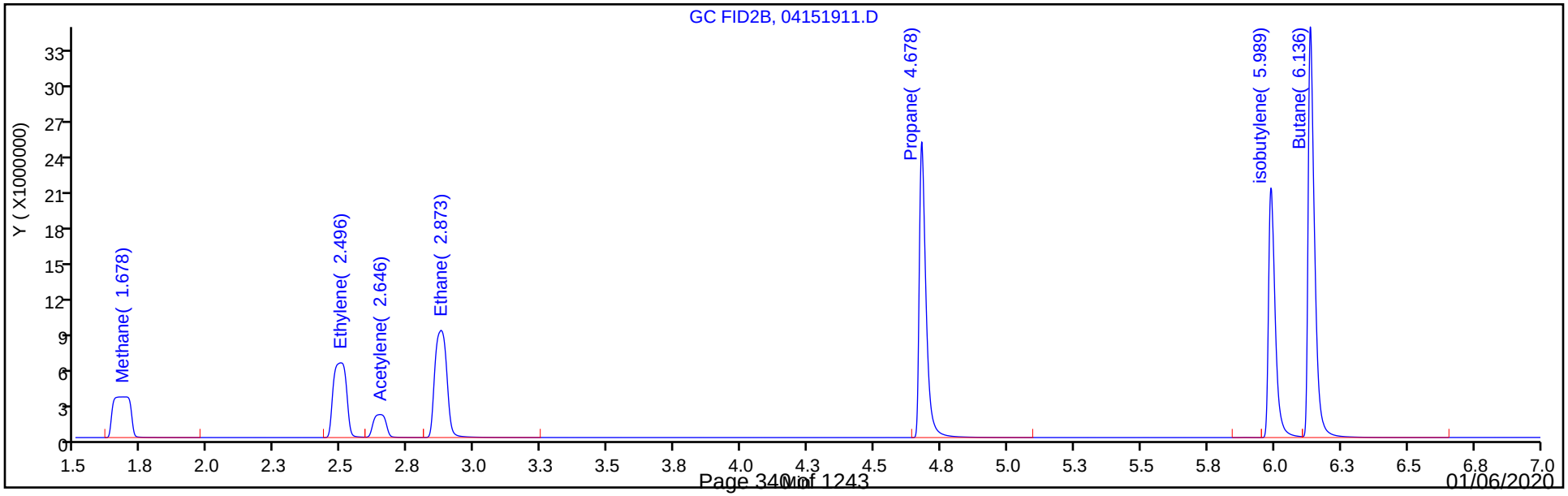
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D

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.: 280-129936-1

SDG No.:

Lab Sample ID: CCVRT 280-476033/4 Calibration Date: 10/31/2019 10:02

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: 004F0401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		126926		68.9	73.0	-5.6	20.0
Ethane	Ave	126364	119271		129	137	-5.6	20.0
Ethylene	Ave	105807	100578		121	128	-4.9	20.0
Acetylene	Ave	32129	38006		140	119	18.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCVRT 280-476033/4 Calibration Date: 10/31/2019 10:02

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: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.23	1.31
Ethane	1.55	1.50	1.60
Ethylene	1.86	1.81	1.91
Acetylene	4.03	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 31-Oct-2019 10:02:22 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCVRT
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 10:37:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.269	1.269	0.000	9266050	73.0	68.9	
2	1.696	1.696	0.000	7974160	73.0	69.4	
						RPD = 0.68	
2 Ethane							
1	1.546	1.546	0.000	16322871	136.9	129.2	
2	2.884	2.884	0.000	14009634	136.9	130.4	
						RPD = 0.97	
3 Ethylene							
1	1.859	1.859	0.000	12840442	127.7	121.4	
2	2.507	2.507	0.000	10973339	127.7	121.9	
						RPD = 0.46	
4 Propane							
1	2.586	2.586	0.000	25183453	200.7	186.2	
2	4.685	4.685	0.000	21525860	200.7	187.6	
						RPD = 0.77	
5 Acetylene							
1	4.031	4.031	0.000	4504612	118.5	140.2	
2	2.659	2.659	0.000	3931667	118.5	138.8	
						RPD = 1.00	
6 Butane							
1	4.337	4.337	0.000	33351998	264.5	236.8	
2	6.142	6.142	0.000	28488877	264.5	236.7	
						RPD = 0.08	
7 isobutylene							
1	5.275	5.275	0.000	23055173	255.4	238.3	
2	5.996	5.996	0.000	19399534	255.4	239.4	
						RPD = 0.47	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

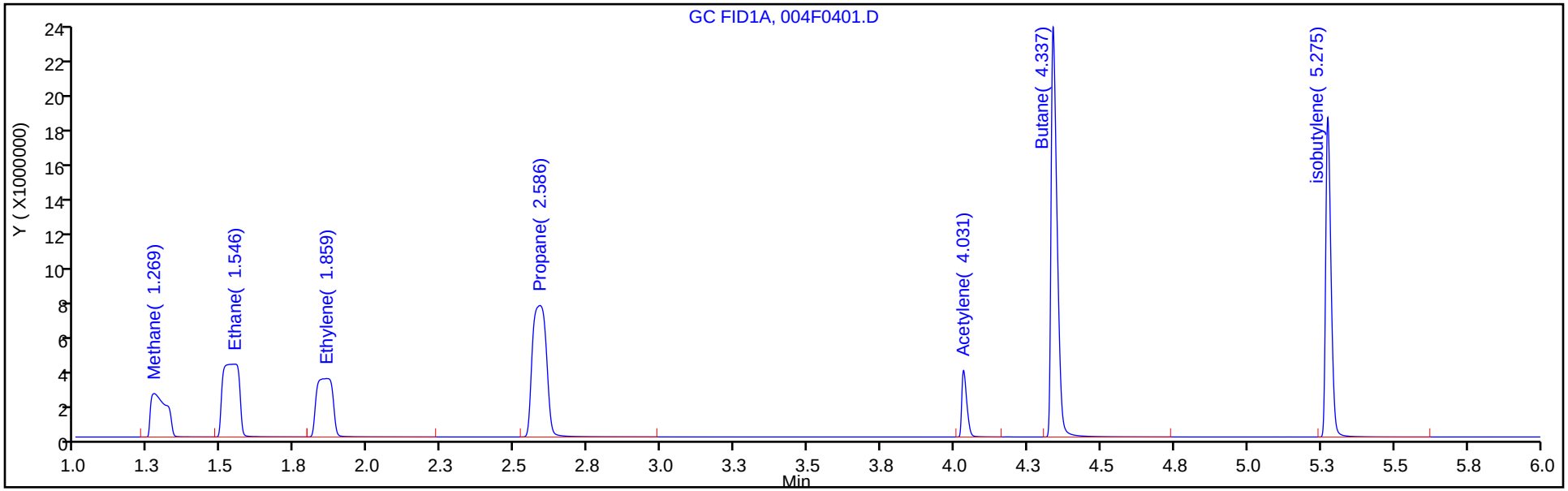
Report Date: 04-Nov-2019 08:03:38 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

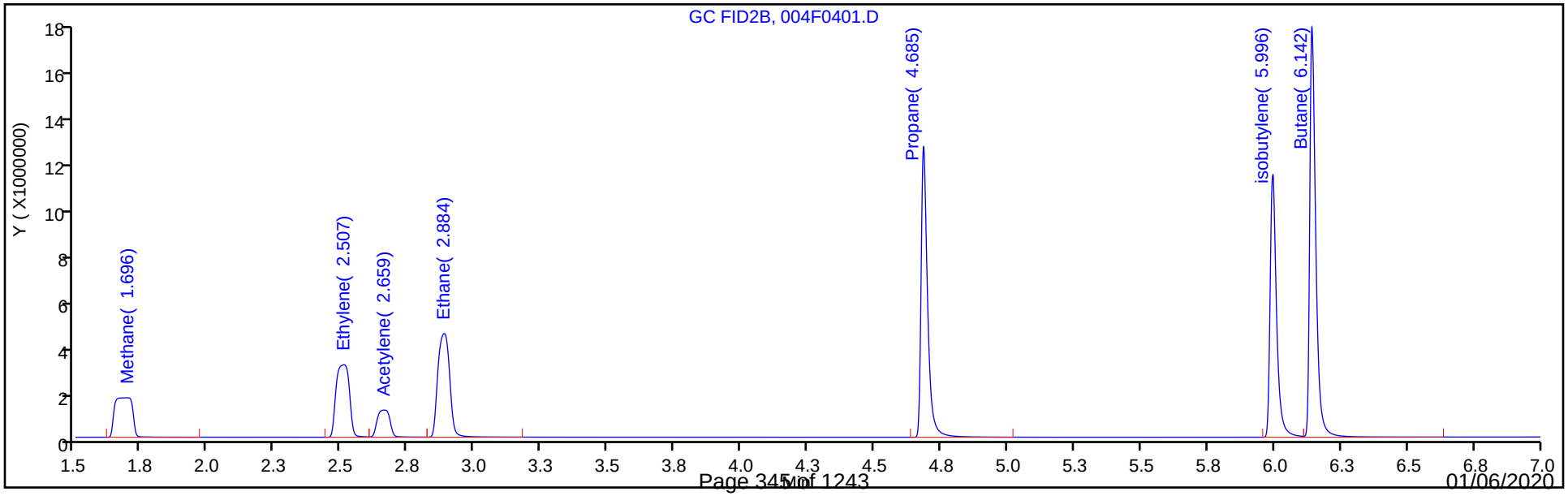
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\004F0401.D

Injection Date:	31-Oct-2019 10:02:22	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCVRT 280-476033/4 Calibration Date: 10/31/2019 10:02

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: 004F0401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		109230		69.4	73.0	-5.0	20.0
Ethylene	Ave	90007	85953		122	128	-4.5	20.0
Acetylene	Ave	28324	33172		139	119	17.1	20.0
Ethane	Ave	107408	102368		130	137	-4.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCVRT 280-476033/4 Calibration Date: 10/31/2019 10:02

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: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.70	1.66	1.74
Ethylene	2.51	2.46	2.56
Acetylene	2.66	2.58	2.74
Ethane	2.88	2.83	2.93

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 31-Oct-2019 10:02:22 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCVRT
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 10:37:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.269	1.269	0.000	9266050	73.0	68.9	
2	1.696	1.696	0.000	7974160	73.0	69.4	
						RPD = 0.68	
2 Ethane							
1	1.546	1.546	0.000	16322871	136.9	129.2	
2	2.884	2.884	0.000	14009634	136.9	130.4	
						RPD = 0.97	
3 Ethylene							
1	1.859	1.859	0.000	12840442	127.7	121.4	
2	2.507	2.507	0.000	10973339	127.7	121.9	
						RPD = 0.46	
4 Propane							
1	2.586	2.586	0.000	25183453	200.7	186.2	
2	4.685	4.685	0.000	21525860	200.7	187.6	
						RPD = 0.77	
5 Acetylene							
1	4.031	4.031	0.000	4504612	118.5	140.2	
2	2.659	2.659	0.000	3931667	118.5	138.8	
						RPD = 1.00	
6 Butane							
1	4.337	4.337	0.000	33351998	264.5	236.8	
2	6.142	6.142	0.000	28488877	264.5	236.7	
						RPD = 0.08	
7 isobutylene							
1	5.275	5.275	0.000	23055173	255.4	238.3	
2	5.996	5.996	0.000	19399534	255.4	239.4	
						RPD = 0.47	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

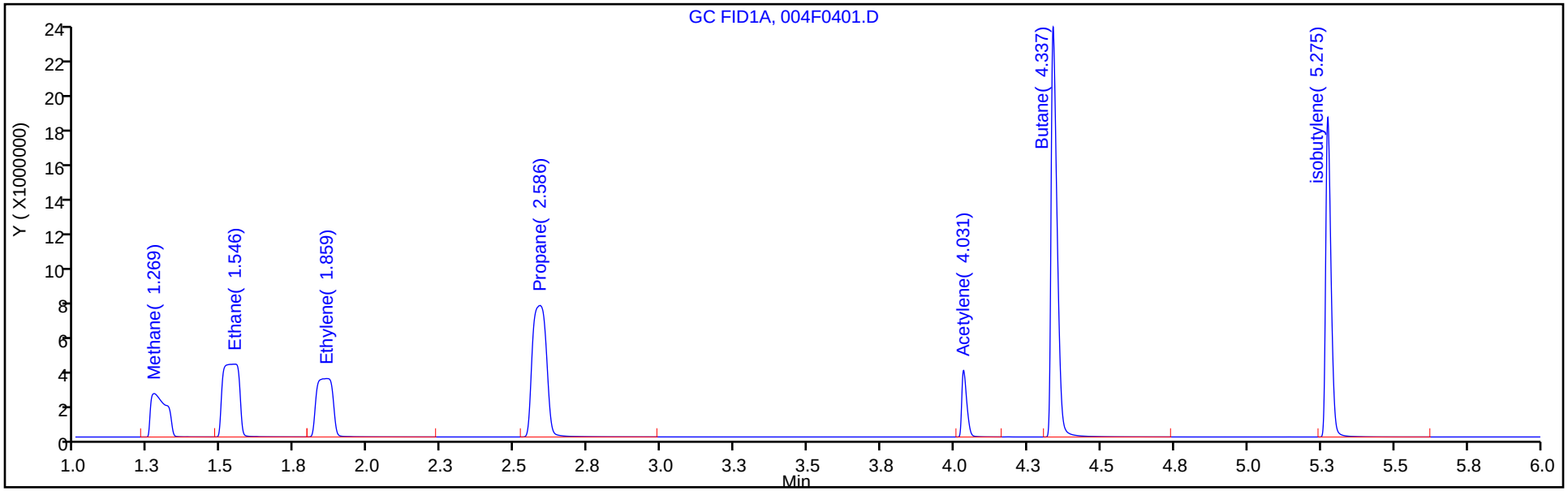
Report Date: 04-Nov-2019 08:03:38 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

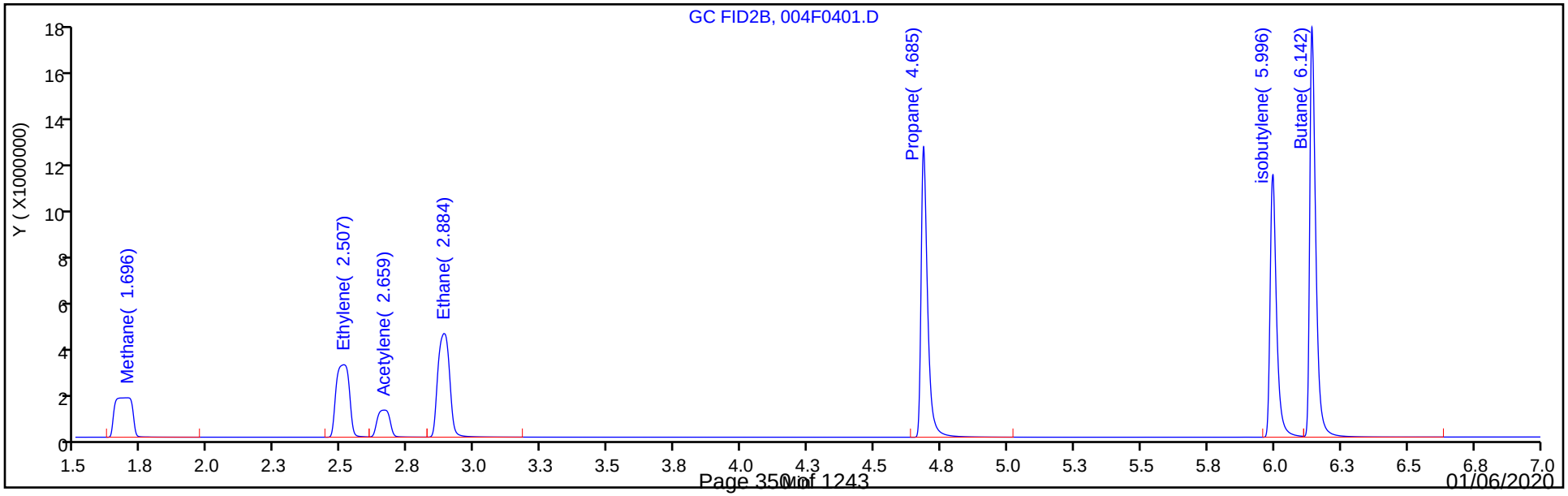
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\004F0401.D

Injection Date:	31-Oct-2019 10:02:22	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476033/21 Calibration Date: 10/31/2019 14:58

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: 021F1401.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		131359		71.3	73.0	-2.3	20.0
Ethane	Ave	126364	124600		135	137	-1.4	20.0
Ethylene	Ave	105807	103830		125	128	-1.9	20.0
Acetylene	Ave	32129	37882		140	119	17.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476033/21 Calibration Date: 10/31/2019 14:58

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: 021F1401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.50	1.60
Ethylene	1.84	1.81	1.91
Acetylene	4.02	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\021F1401.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 14:58:49 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:04:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 16:41:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.255	1.269	-0.014	9589629	73.0	71.3	
2	1.676	1.696	-0.020	8255169	73.0	71.8	
						RPD = 0.71	
2 Ethane							
1	1.528	1.546	-0.018	17052221	136.9	134.9	
2	2.862	2.884	-0.022	14625031	136.9	136.2	
						RPD = 0.90	
3 Ethylene							
1	1.835	1.859	-0.024	13255660	127.7	125.3	
2	2.486	2.507	-0.021	11329820	127.7	125.9	
						RPD = 0.47	
4 Propane							
1	2.562	2.586	-0.024	26727774	200.7	197.6	
2	4.675	4.685	-0.010	22800365	200.7	198.7	
						RPD = 0.57	
5 Acetylene							
1	4.018	4.031	-0.013	4489900	118.5	139.7	
2	2.640	2.659	-0.019	3914286	118.5	138.2	
						RPD = 1.12	
6 Butane							
1	4.323	4.337	-0.014	36420449	264.5	258.6	
2	6.136	6.142	-0.006	31019239	264.5	257.7	
						RPD = 0.37	
7 isobutylene							
1	5.264	5.275	-0.011	24722412	255.4	255.5	
2	5.988	5.996	-0.008	20796485	255.4	256.6	
						RPD = 0.44	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

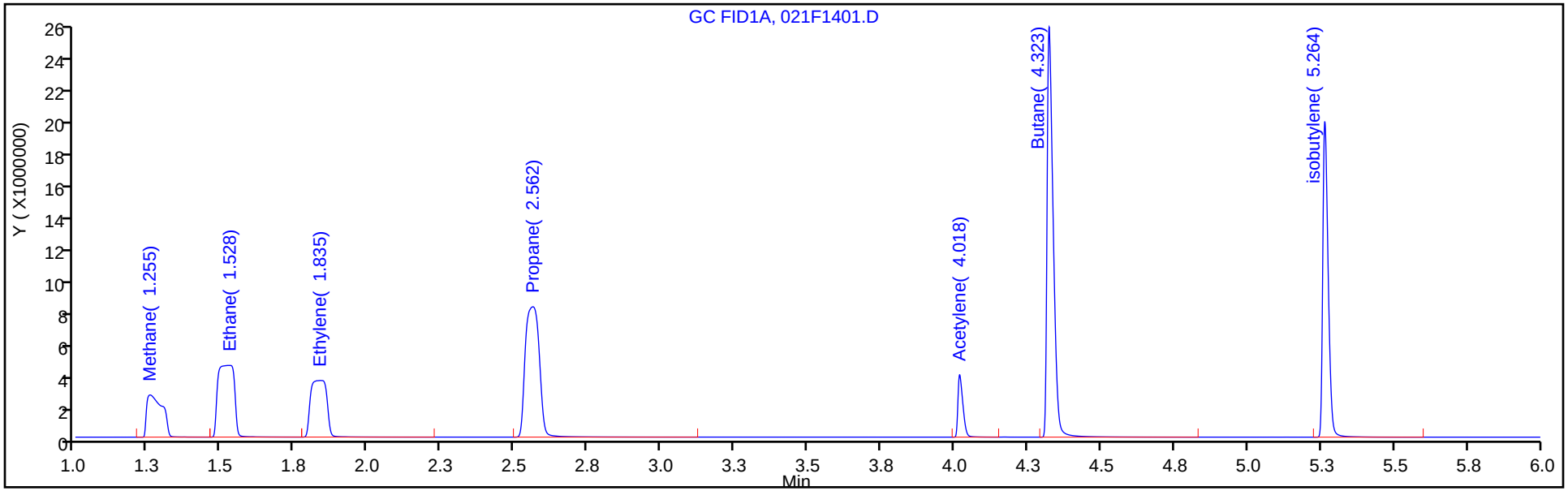
Report Date: 04-Nov-2019 08:04:39 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

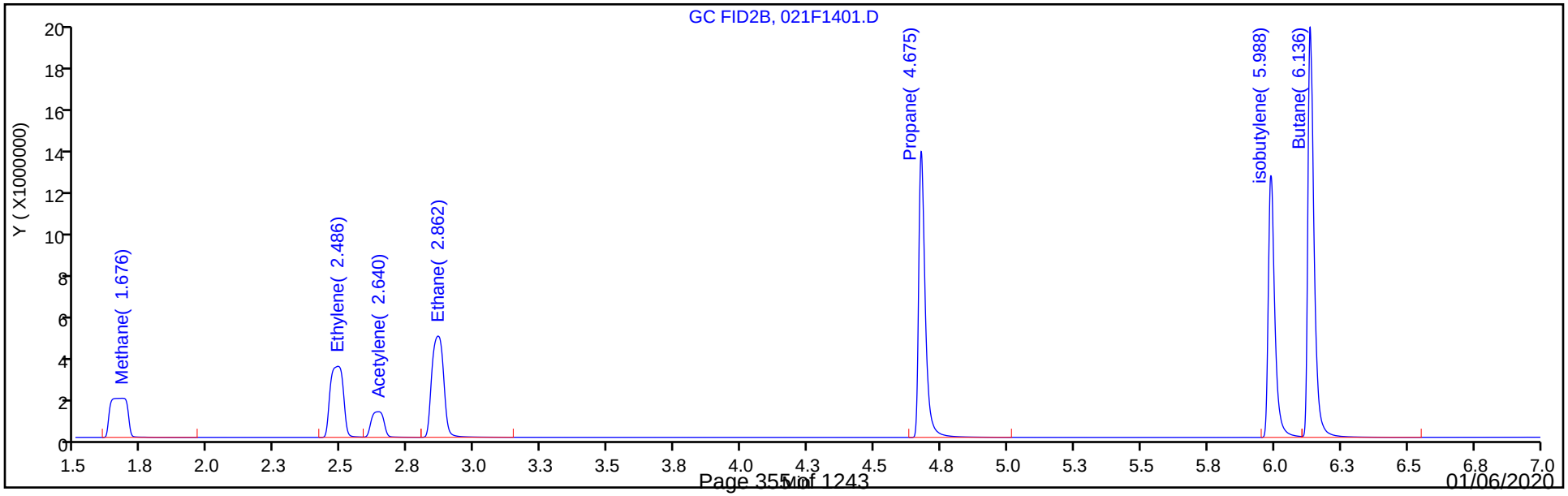
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\021F1401.D

Injection Date:	31-Oct-2019 14:58:49	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476033/21 Calibration Date: 10/31/2019 14:58

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: 021F1401.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		113079		71.8	73.0	-1.6	20.0
Ethylene	Ave	90007	88745		126	128	-1.4	20.0
Acetylene	Ave	28324	33026		138	119	16.6	20.0
Ethane	Ave	107408	106865		136	137	-0.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476033/21 Calibration Date: 10/31/2019 14:58

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: 021F1401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.66	1.74
Ethylene	2.49	2.46	2.56
Acetylene	2.64	2.58	2.74
Ethane	2.86	2.83	2.93

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\021F1401.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 14:58:49 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:04:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 16:41:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.255	1.269	-0.014	9589629	73.0	71.3	
2	1.676	1.696	-0.020	8255169	73.0	71.8	
						RPD = 0.71	
2 Ethane							
1	1.528	1.546	-0.018	17052221	136.9	134.9	
2	2.862	2.884	-0.022	14625031	136.9	136.2	
						RPD = 0.90	
3 Ethylene							
1	1.835	1.859	-0.024	13255660	127.7	125.3	
2	2.486	2.507	-0.021	11329820	127.7	125.9	
						RPD = 0.47	
4 Propane							
1	2.562	2.586	-0.024	26727774	200.7	197.6	
2	4.675	4.685	-0.010	22800365	200.7	198.7	
						RPD = 0.57	
5 Acetylene							
1	4.018	4.031	-0.013	4489900	118.5	139.7	
2	2.640	2.659	-0.019	3914286	118.5	138.2	
						RPD = 1.12	
6 Butane							
1	4.323	4.337	-0.014	36420449	264.5	258.6	
2	6.136	6.142	-0.006	31019239	264.5	257.7	
						RPD = 0.37	
7 isobutylene							
1	5.264	5.275	-0.011	24722412	255.4	255.5	
2	5.988	5.996	-0.008	20796485	255.4	256.6	
						RPD = 0.44	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

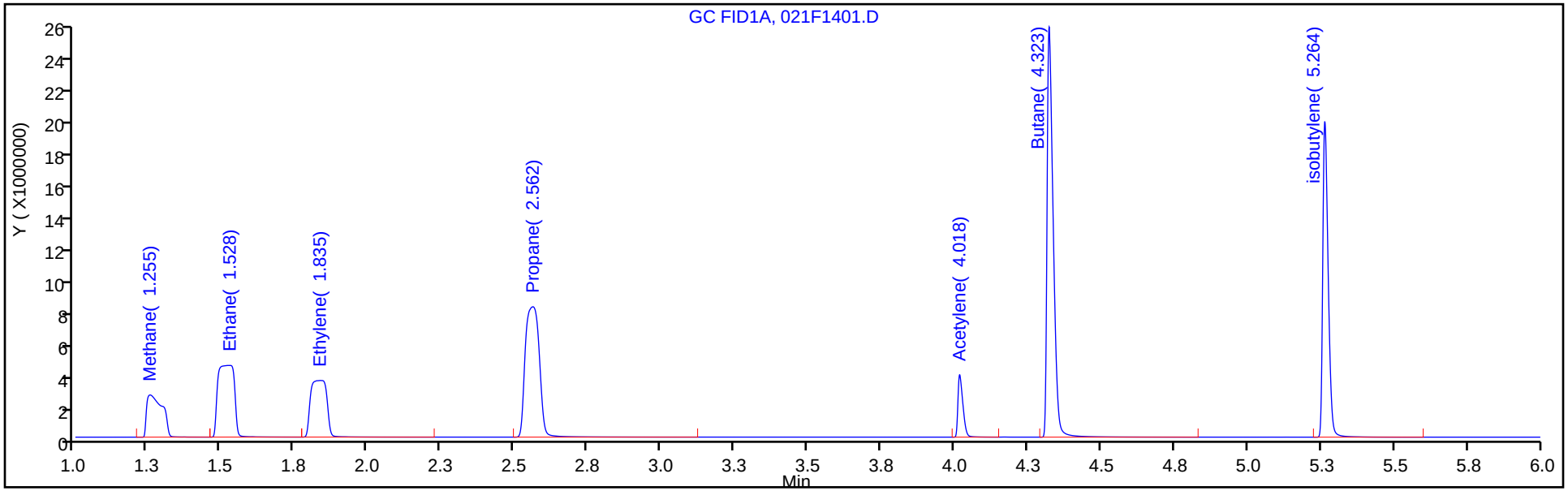
Report Date: 04-Nov-2019 08:04:39 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

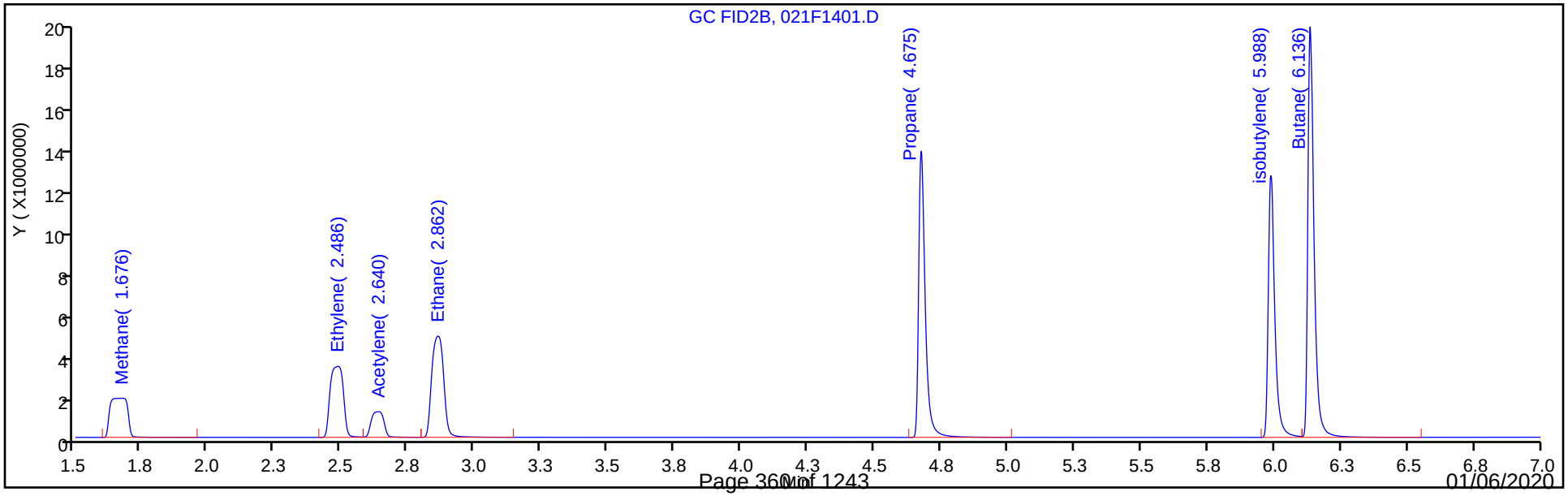
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\021F1401.D

Injection Date:	31-Oct-2019 14:58:49	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476033/32 Calibration Date: 10/31/2019 17:29

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: 032F2501.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		124351		67.5	73.0	-7.5	20.0
Ethane	Ave	126364	118508		128	137	-6.2	20.0
Ethylene	Ave	105807	99875		121	128	-5.6	20.0
Acetylene	Ave	32129	37878		140	119	17.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476033/32 Calibration Date: 10/31/2019 17:29

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: 032F2501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.52	1.50	1.60
Ethylene	1.84	1.81	1.91
Acetylene	4.02	3.95	4.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\032F2501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 17:29:00 ALS Bottle#: 32 Worklist Smp#: 32
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:05:08 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: CTX0320

First Level Reviewer: sciannac Date: 03-Nov-2019 11:04:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.255	1.269	-0.014	9078005	73.0	67.5	
2	1.669	1.696	-0.027	7750155	73.0	67.4	
						RPD = 0.12	
2 Ethane							
1	1.523	1.546	-0.023	16218545	136.9	128.3	
2	2.864	2.884	-0.020	13887137	136.9	129.3	
						RPD = 0.73	
3 Ethylene							
1	1.837	1.859	-0.022	12750676	127.7	120.5	
2	2.488	2.507	-0.019	10883435	127.7	120.9	
						RPD = 0.34	
4 Propane							
1	2.561	2.586	-0.025	25390193	200.7	187.7	
2	4.675	4.685	-0.010	21646116	200.7	188.7	
						RPD = 0.51	
5 Acetylene							
1	4.020	4.031	-0.011	4489435	118.5	139.7	
2	2.639	2.659	-0.020	3899125	118.5	137.7	
						RPD = 1.50	
6 Butane							
1	4.326	4.337	-0.011	34605123	264.5	245.7	
2	6.138	6.142	-0.004	29477188	264.5	244.9	
						RPD = 0.36	
7 isobutylene							
1	5.267	5.275	-0.008	23888175	255.4	246.9	
2	5.989	5.996	-0.007	20069242	255.4	247.7	
						RPD = 0.32	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

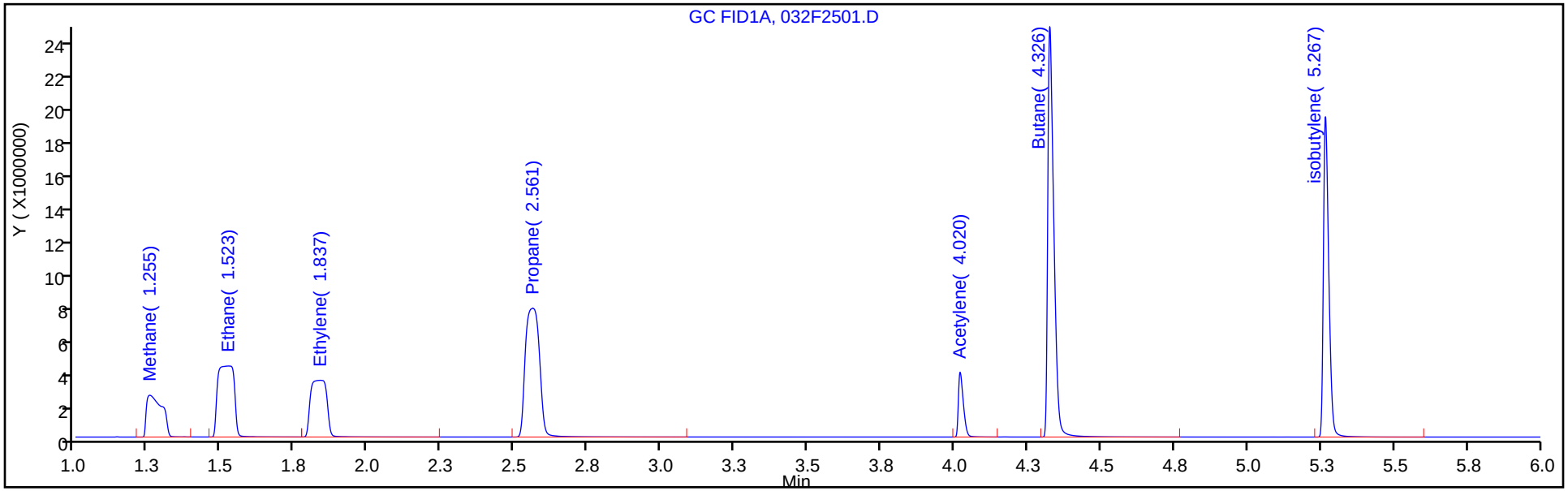
Report Date: 04-Nov-2019 08:05:08 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

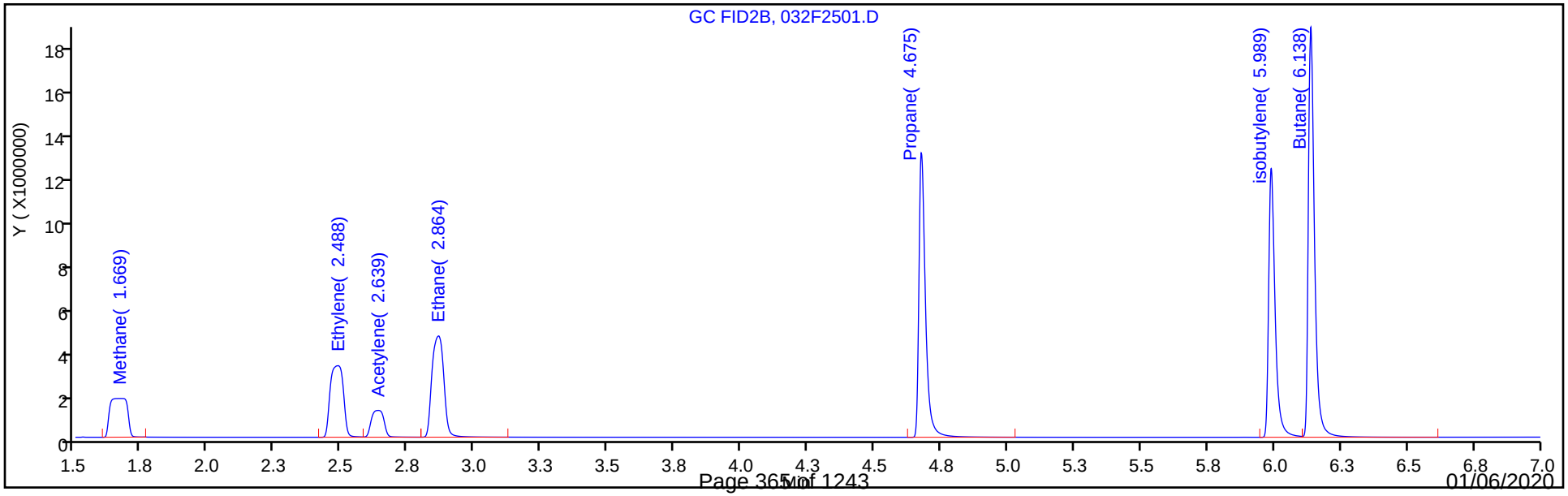
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\032F2501.D

Injection Date:	31-Oct-2019 17:29:00	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	32
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476033/32 Calibration Date: 10/31/2019 17:29

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: 032F2501.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		106162		67.4	73.0	-7.6	20.0
Ethylene	Ave	90007	85249		121	128	-5.3	20.0
Acetylene	Ave	28324	32898		138	119	16.1	20.0
Ethane	Ave	107408	101473		129	137	-5.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476033/32 Calibration Date: 10/31/2019 17:29

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: 032F2501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.66	1.74
Ethylene	2.49	2.46	2.56
Acetylene	2.64	2.58	2.74
Ethane	2.86	2.83	2.93

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\032F2501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 17:29:00 ALS Bottle#: 32 Worklist Smp#: 32
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:05:08 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: CTX0320

First Level Reviewer: sciannac Date: 03-Nov-2019 11:04:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.255	1.269	-0.014	9078005	73.0	67.5	
2	1.669	1.696	-0.027	7750155	73.0	67.4	
						RPD = 0.12	
2 Ethane							
1	1.523	1.546	-0.023	16218545	136.9	128.3	
2	2.864	2.884	-0.020	13887137	136.9	129.3	
						RPD = 0.73	
3 Ethylene							
1	1.837	1.859	-0.022	12750676	127.7	120.5	
2	2.488	2.507	-0.019	10883435	127.7	120.9	
						RPD = 0.34	
4 Propane							
1	2.561	2.586	-0.025	25390193	200.7	187.7	
2	4.675	4.685	-0.010	21646116	200.7	188.7	
						RPD = 0.51	
5 Acetylene							
1	4.020	4.031	-0.011	4489435	118.5	139.7	
2	2.639	2.659	-0.020	3899125	118.5	137.7	
						RPD = 1.50	
6 Butane							
1	4.326	4.337	-0.011	34605123	264.5	245.7	
2	6.138	6.142	-0.004	29477188	264.5	244.9	
						RPD = 0.36	
7 isobutylene							
1	5.267	5.275	-0.008	23888175	255.4	246.9	
2	5.989	5.996	-0.007	20069242	255.4	247.7	
						RPD = 0.32	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

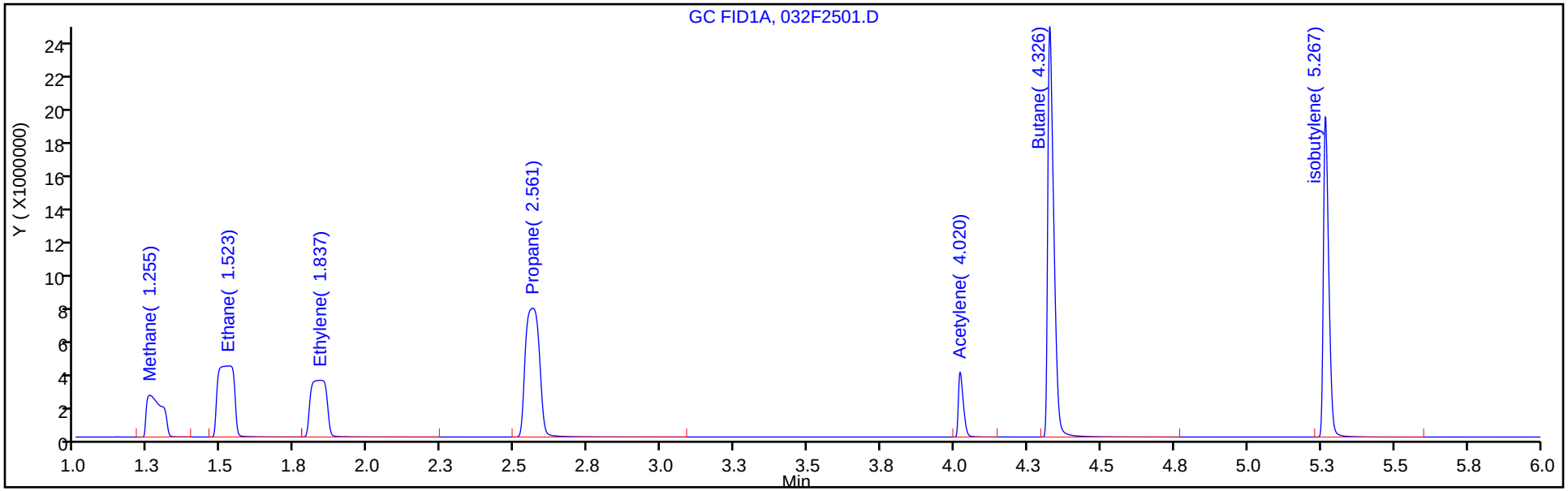
Report Date: 04-Nov-2019 08:05:08 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

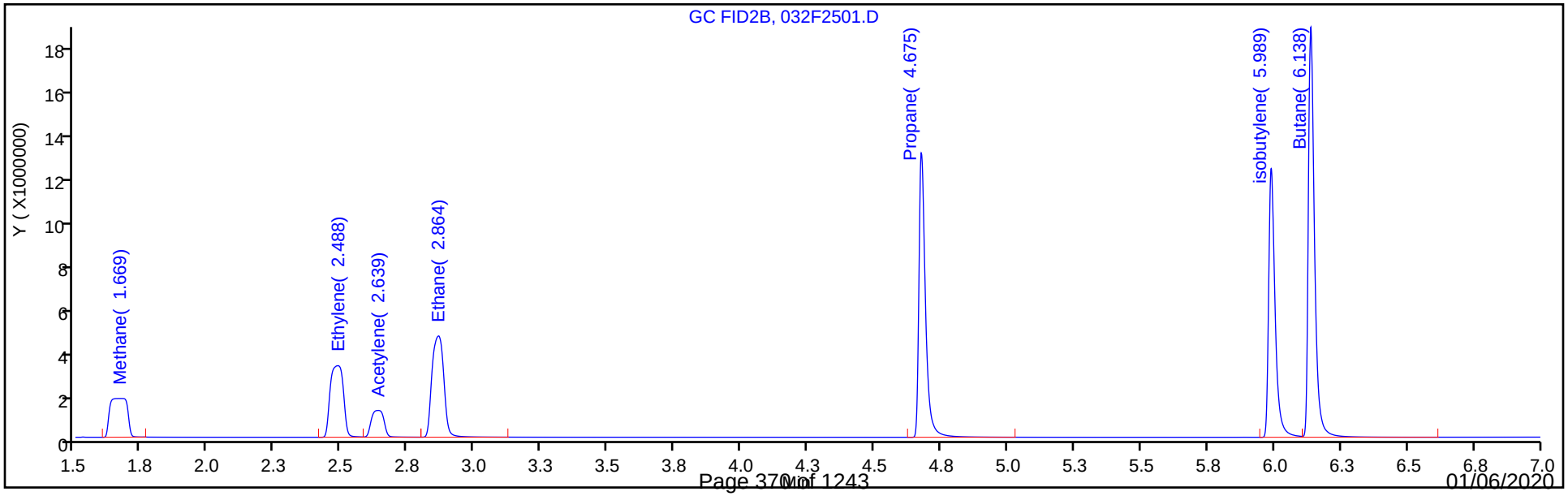
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\032F2501.D

Injection Date:	31-Oct-2019 17:29:00	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	32
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-476033/7

Matrix: Water Lab File ID: 007F0201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 10:43

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.: 476033 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\20191031-86685.b\007F0201.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 31-Oct-2019 10:43:39 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:19:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1		1.269				ND	
2		1.696					
2 Ethane							
1		1.546				ND	
2		2.884					
3 Ethylene							
1		1.859				ND	
2		2.507					
4 Propane							
1		2.586				ND	
2		4.685					
5 Acetylene							
1		4.031				ND	
2		2.659					
6 Butane							
1		4.337				ND	
2		6.142					
7 isobutylene							
1		5.275				ND	
2		5.996					

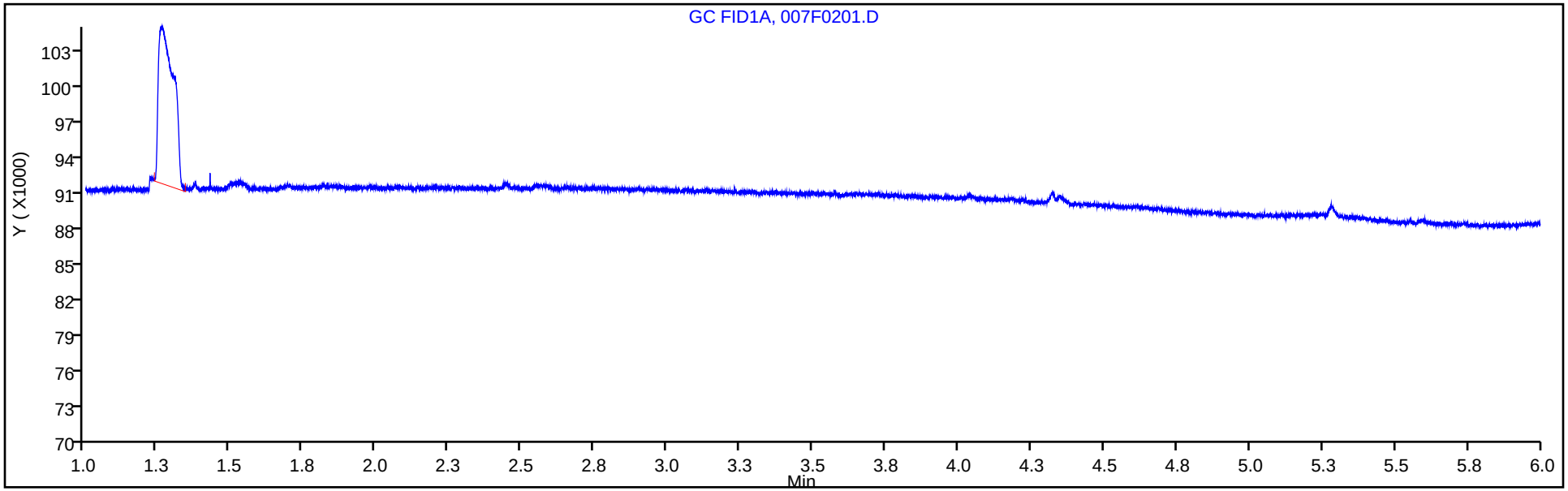
Report Date: 04-Nov-2019 08:03:47 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

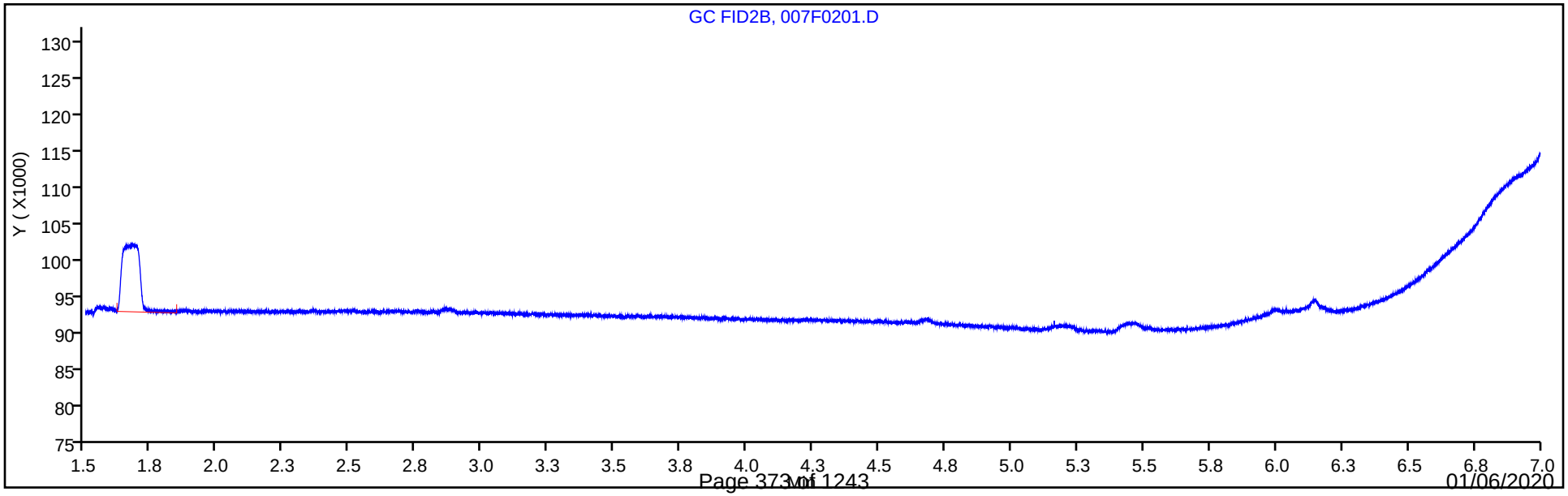
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\007F0201.D

Injection Date:	31-Oct-2019 10:43:39	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	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.: 280-129936-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-476033/5

Matrix: Water Lab File ID: 05F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 10:16

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0683		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\05F0401.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 31-Oct-2019 10:16:07 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 10:38:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.261	1.269	-0.008	9143803	73.0	68.0	
2	1.679	1.696	-0.017	7854644	73.0	68.3	
						RPD = 0.50	
2 Ethane							
1	1.530	1.546	-0.016	15952843	136.9	126.2	
2	2.874	2.884	-0.010	13664381	136.9	127.2	
						RPD = 0.77	
3 Ethylene							
1	1.851	1.859	-0.008	12494108	127.7	118.1	
2	2.498	2.507	-0.009	10669187	127.7	118.5	
						RPD = 0.38	
4 Propane							
1	2.577	2.586	-0.009	24417128	200.7	180.5	
2	4.683	4.685	-0.002	20825822	200.7	181.5	
						RPD = 0.55	
5 Acetylene							
1	4.029	4.031	-0.002	4241893	118.5	132.0	
2	2.651	2.659	-0.008	3694098	118.5	130.4	
						RPD = 1.22	
6 Butane							
1	4.335	4.337	-0.002	31411696	264.5	223.1	
2	6.142	6.142	0.000	26667772	264.5	221.5	
						RPD = 0.69	
7 isobutylene							
1	5.274	5.275	-0.001	21649757	255.4	223.8	
2	5.993	5.996	-0.003	18155719	255.4	224.1	
						RPD = 0.14	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

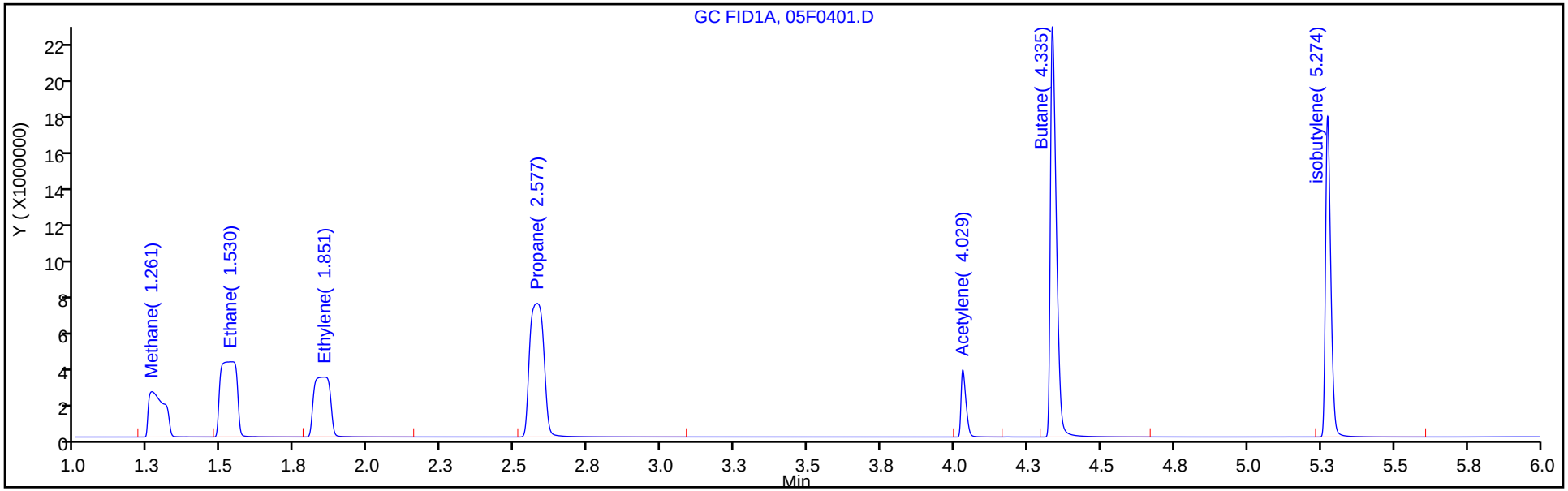
Report Date: 04-Nov-2019 08:03:42 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

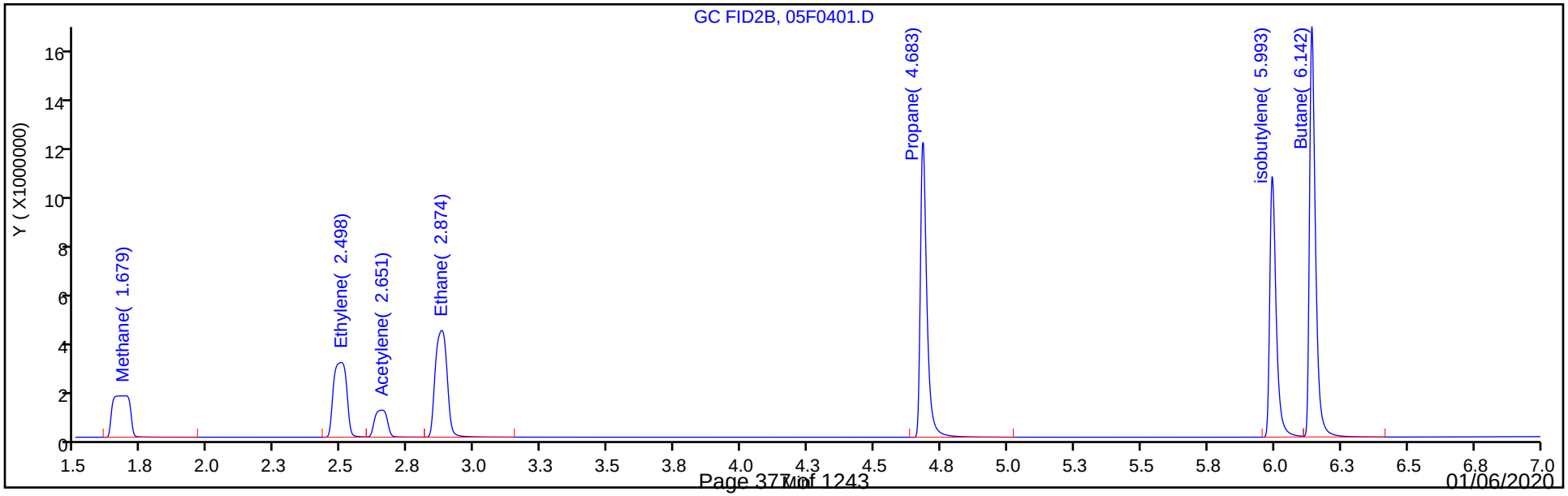
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\05F0401.D

Injection Date:	31-Oct-2019 10:16:07	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-476033/6

Matrix: Water Lab File ID: 006F0101.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 10:29

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0713		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\006F0101.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 31-Oct-2019 10:29:55 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:19:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.260	1.269	-0.009	9526687	73.0	70.9	
2	1.675	1.696	-0.021	8192909	73.0	71.3	
						RPD = 0.61	
2 Ethane							
1	1.535	1.546	-0.011	16436085	136.9	130.1	
2	2.872	2.884	-0.012	14095711	136.9	131.2	
						RPD = 0.89	
3 Ethylene							
1	1.850	1.859	-0.009	12809355	127.7	121.1	
2	2.496	2.507	-0.011	10939283	127.7	121.5	
						RPD = 0.39	
4 Propane							
1	2.575	2.586	-0.011	24877859	200.7	183.9	
2	4.680	4.685	-0.005	21216831	200.7	184.9	
						RPD = 0.54	
5 Acetylene							
1	4.027	4.031	-0.004	4278537	118.5	133.2	
2	2.646	2.659	-0.013	3732771	118.5	131.8	
						RPD = 1.04	
6 Butane							
1	4.333	4.337	-0.004	30941790	264.5	219.7	
2	6.140	6.142	-0.002	26368357	264.5	219.0	
						RPD = 0.31	
7 isobutylene							
1	5.272	5.275	-0.003	21221874	255.4	219.3	
2	5.992	5.996	-0.004	17848369	255.4	220.3	
						RPD = 0.42	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

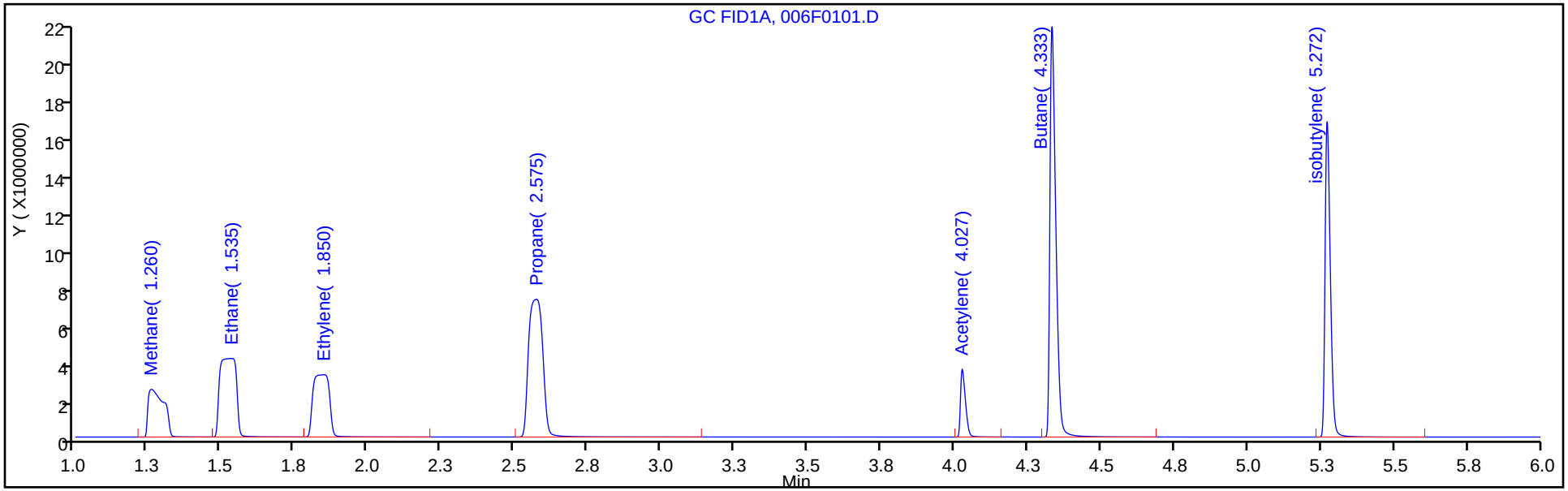
Report Date: 04-Nov-2019 08:03:45 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

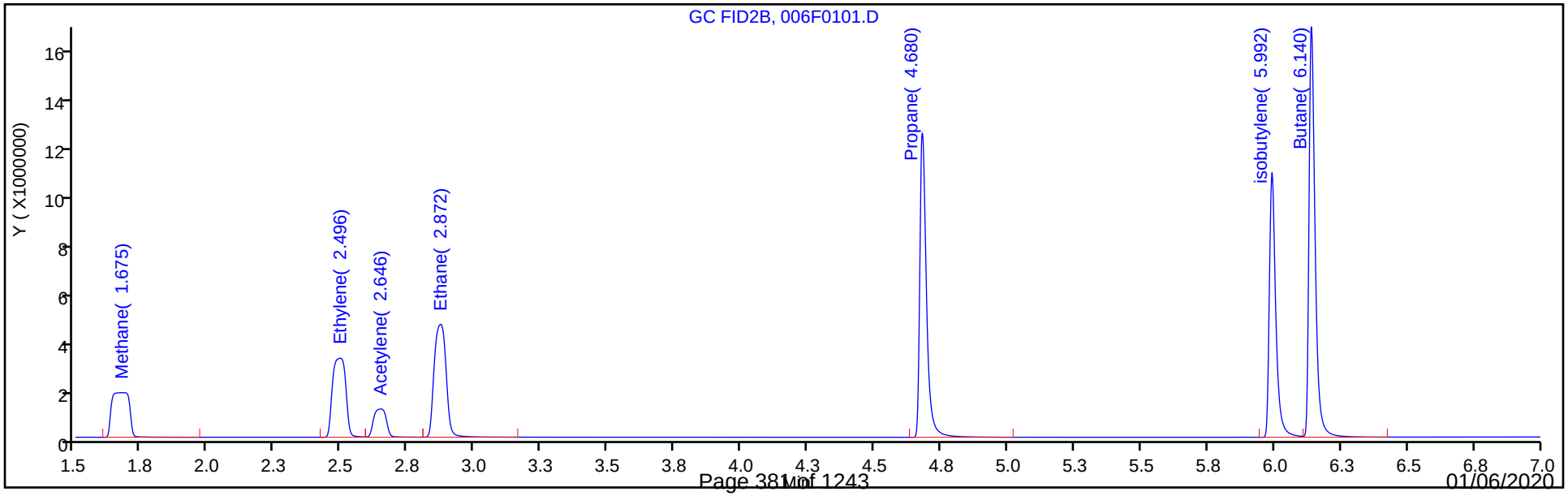
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\006F0101.D

Injection Date:	31-Oct-2019 10:29:55	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	LCSD			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 MS Lab Sample ID: 280-129936-9 MS

Matrix: Water Lab File ID: 010F0301.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 14:45

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 12:28

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0622		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\010F0301.D
Lims ID: 280-129936-I-9 MS
Client ID: G0070-1
Sample Type: MS
Inject. Date: 31-Oct-2019 12:28:09 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-i-9ms
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:16:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.261	1.269	-0.008	8429004	73.0	62.7	
2	1.684	1.696	-0.012	7149083	73.0	62.2	
						RPD = 0.77	
2 Ethane							M
1	1.533	1.546	-0.013	14656881	136.9	116.0	M
2	2.879	2.884	-0.005	12471558	136.9	116.1	
						RPD = 0.11	
3 Ethylene							
1	1.828	1.859	-0.031	11744163	127.7	111.0	
2	2.499	2.507	-0.008	9911227	127.7	110.1	
						RPD = 0.80	
4 Propane							
1	2.564	2.586	-0.022	22739801	200.7	168.1	
2	4.682	4.685	-0.003	19122697	200.7	166.7	
						RPD = 0.86	
5 Acetylene							
1	4.028	4.031	-0.003	4308577	118.5	134.1	
2	2.649	2.659	-0.010	3700733	118.5	130.7	
						RPD = 2.61	
6 Butane							
1	4.337	4.337	0.000	30074610	264.5	213.6	
2	6.143	6.142	0.001	25248445	264.5	209.7	
						RPD = 1.81	
7 isobutylene							
1	5.278	5.275	0.003	20705029	255.4	214.0	
2	5.995	5.996	-0.001	17195757	255.4	212.2	
						RPD = 0.83	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

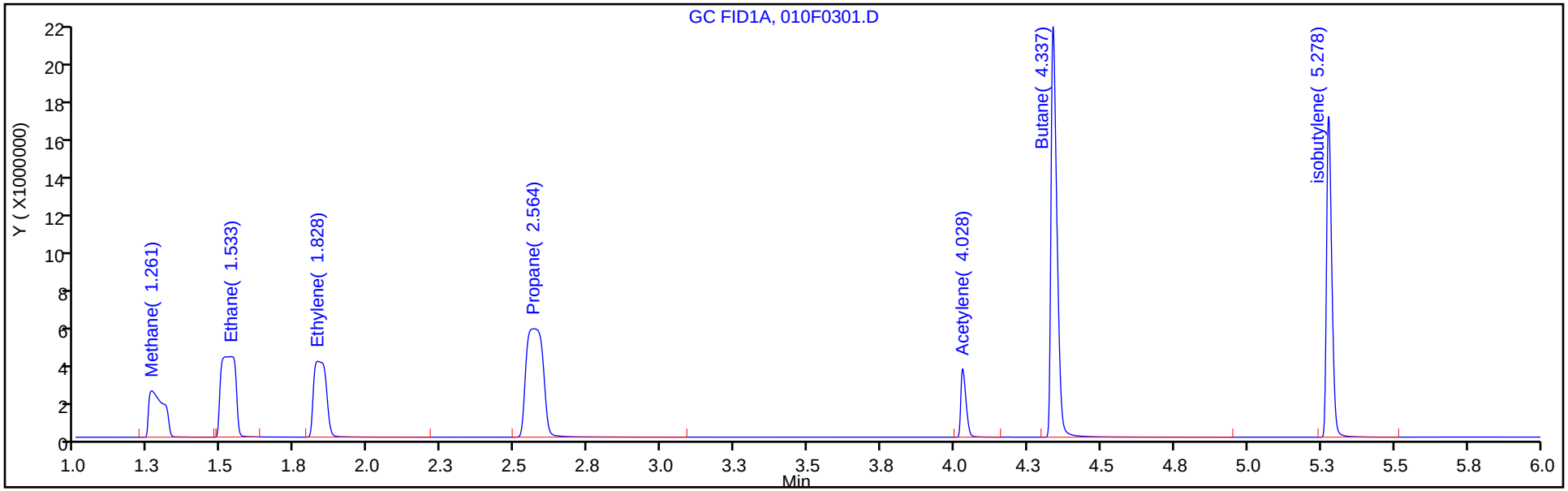
Report Date: 04-Nov-2019 08:03:57 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

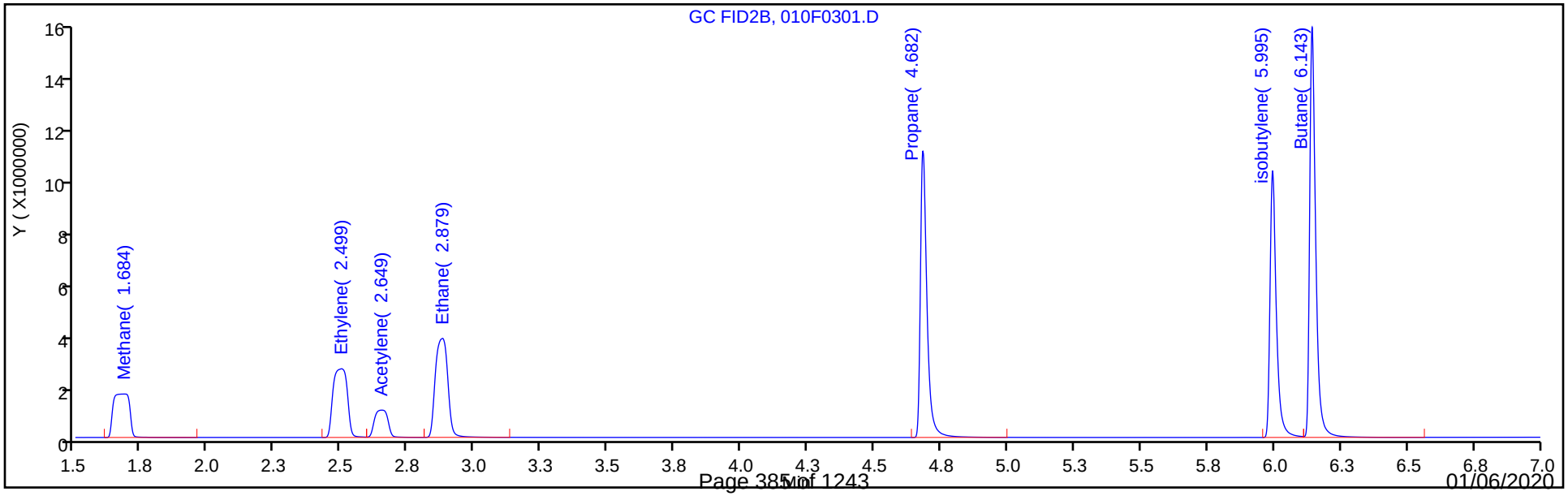
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\010F0301.D

Injection Date:	31-Oct-2019 12:28:09	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-I-9 MS			Worklist Smp#:	10
Client ID:	G0070-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 MSD Lab Sample ID: 280-129936-9 MSD

Matrix: Water Lab File ID: 011F0401.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 14:45

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 12:41

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.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0650		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\011F0401.D
Lims ID: 280-129936-I-9 MSD
Client ID: G0070-1
Sample Type: MSD
Inject. Date: 31-Oct-2019 12:41:44 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-i-9ms
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 01-Nov-2019 09:16:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.260	1.269	-0.009	8804351	73.0	65.5	
2	1.684	1.696	-0.012	7466141	73.0	65.0	
						RPD = 0.79	
2 Ethane							
1	1.519	1.546	-0.027	15388100	136.9	121.8	
2	2.876	2.884	-0.008	13025778	136.9	121.3	
						RPD = 0.41	
3 Ethylene							
1	1.823	1.859	-0.036	12166901	127.7	115.0	
2	2.498	2.507	-0.009	10263433	127.7	114.0	
						RPD = 0.84	
4 Propane							M
1	2.555	2.586	-0.031	23395130	200.7	173.0	M
2	4.682	4.685	-0.003	20034108	200.7	174.6	
						RPD = 0.95	
5 Acetylene							
1	4.026	4.031	-0.005	4424145	118.5	137.7	
2	2.653	2.659	-0.006	3801852	118.5	134.2	
						RPD = 2.56	
6 Butane							
1	4.334	4.337	-0.003	31751642	264.5	225.5	
2	6.141	6.142	-0.001	26700009	264.5	221.8	
						RPD = 1.64	
7 isobutylene							
1	5.275	5.275	0.000	21599896	255.4	223.2	
2	5.994	5.996	-0.002	17938287	255.4	221.4	
						RPD = 0.84	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

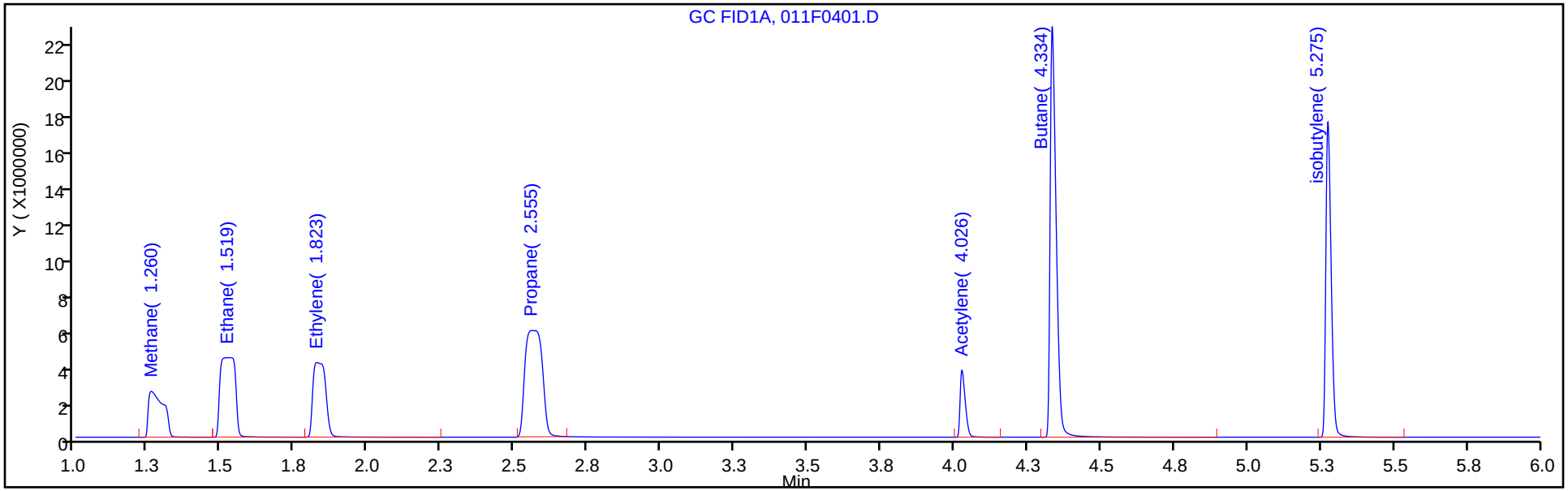
Report Date: 04-Nov-2019 08:04:03 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

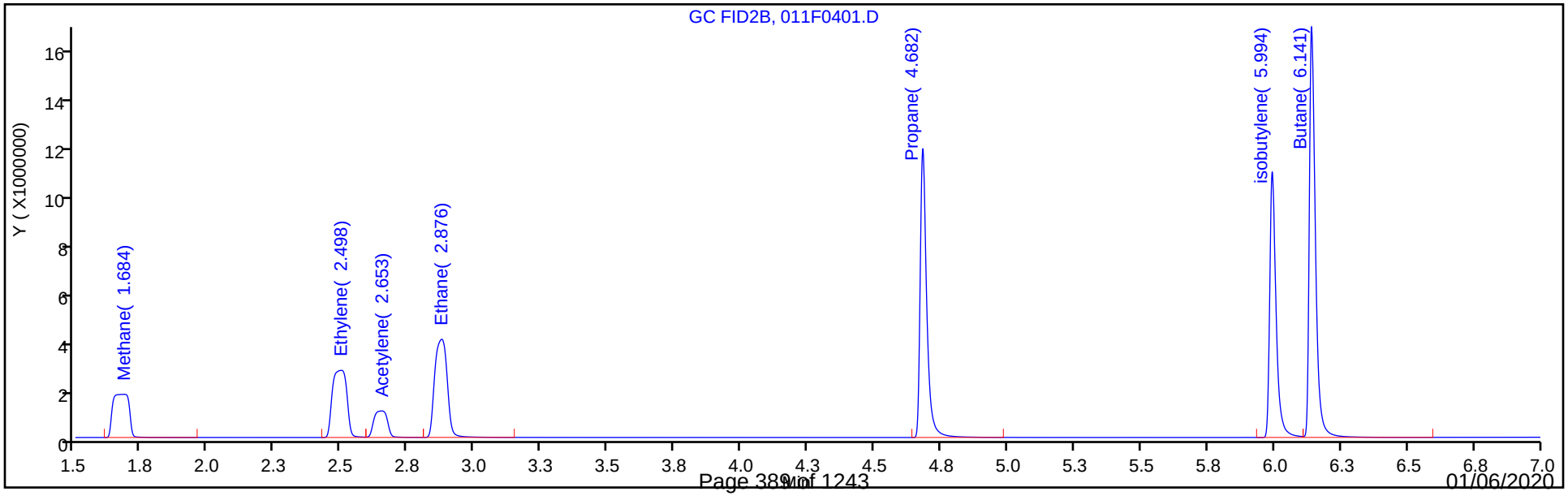
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\011F0401.D

Injection Date:	31-Oct-2019 12:41:44	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-I-9 MSD			Worklist Smp#:	11
Client ID:	G0070-1				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 DU Lab Sample ID: 280-129936-9 DU

Matrix: Water Lab File ID: 009F0201.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 14:45

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 12:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 476033 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\20191031-86685.b\009F0201.D
Lims ID: 280-129936-G-9 DU
Client ID:
Sample Type: DU
Inject. Date: 31-Oct-2019 12:14:31 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-g-9
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 04-Nov-2019 08:03:38 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: CTX0320

First Level Reviewer: sciannac Date: 31-Oct-2019 13:41:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							a
1	1.267	1.269	-0.002	64167		0.2129	a
2	0.000	1.696	0.000	0		0	
						RPD = 200.00	
LOD = 0.6300							
2 Ethane							
1		1.546				ND	
2		2.884					
3 Ethylene							
1		1.859				ND	
2		2.507					
4 Propane							
1		2.586				ND	
2		4.685					
5 Acetylene							
1		4.031				ND	
2		2.659					
6 Butane							
1		4.337				ND	
2		6.142					
7 isobutylene							
1		5.275				ND	
2		5.996					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

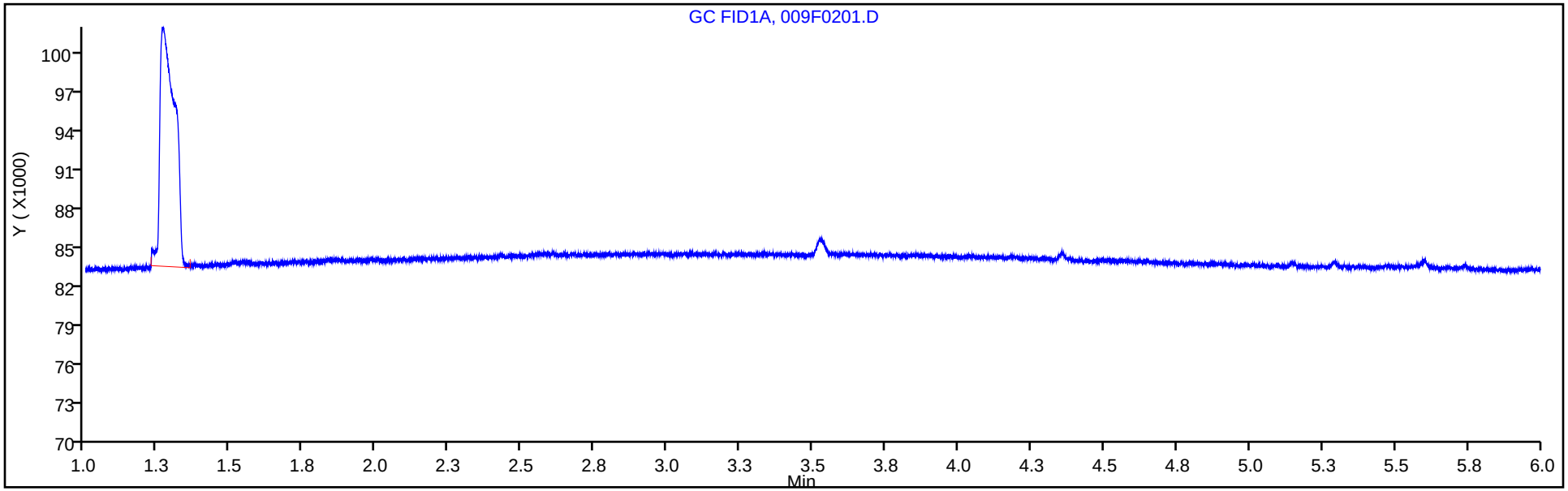
Report Date: 04-Nov-2019 08:03:53 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

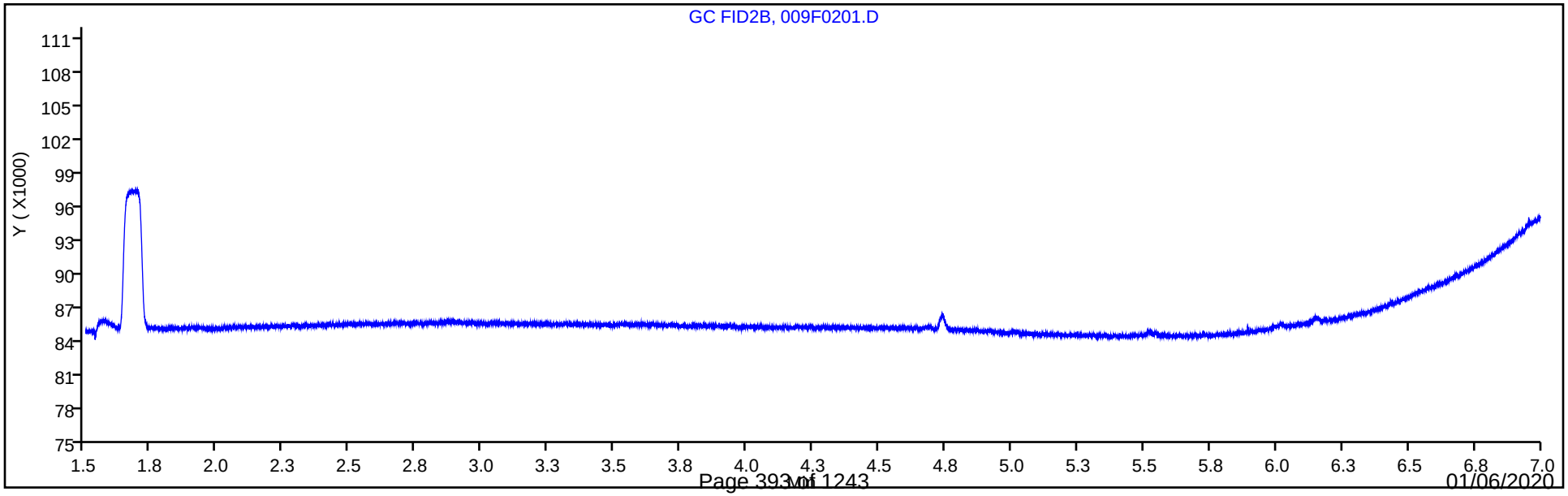
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\009F0201.D

Injection Date:	31-Oct-2019 12:14:31	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-9 DU			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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: NW070-1 DU Lab Sample ID: 280-129936-11 DU

Matrix: Water Lab File ID: 023F1601.D

Analysis Method: RSK-175 Date Collected: 10/21/2019 16:15

Sample wt/vol: 18(mL) Date Analyzed: 10/31/2019 15:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 476033 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0204		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\023F1601.D
Lims ID: 280-129936-G-11 DU
Client ID:
Sample Type: DU
Inject. Date: 31-Oct-2019 15:26:10 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-129936-g-11
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 22-Dec-2019 20:45:22 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: CTX0324

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.256	1.269	-0.013	2761892		20.4	
2	1.666	1.696	-0.030	2359408		20.4	
						RPD = 0.07	
2 Ethane							
1		1.546				ND	
2		2.884					
3 Ethylene							
1		1.859				ND	
2		2.507					
4 Propane							
1		2.586				ND	
2		4.685					
5 Acetylene							
1		4.031				ND	
2		2.659					
6 Butane							
1		4.337				ND	
2		6.142					
7 isobutylene							
1		5.275				ND	
2		5.996					

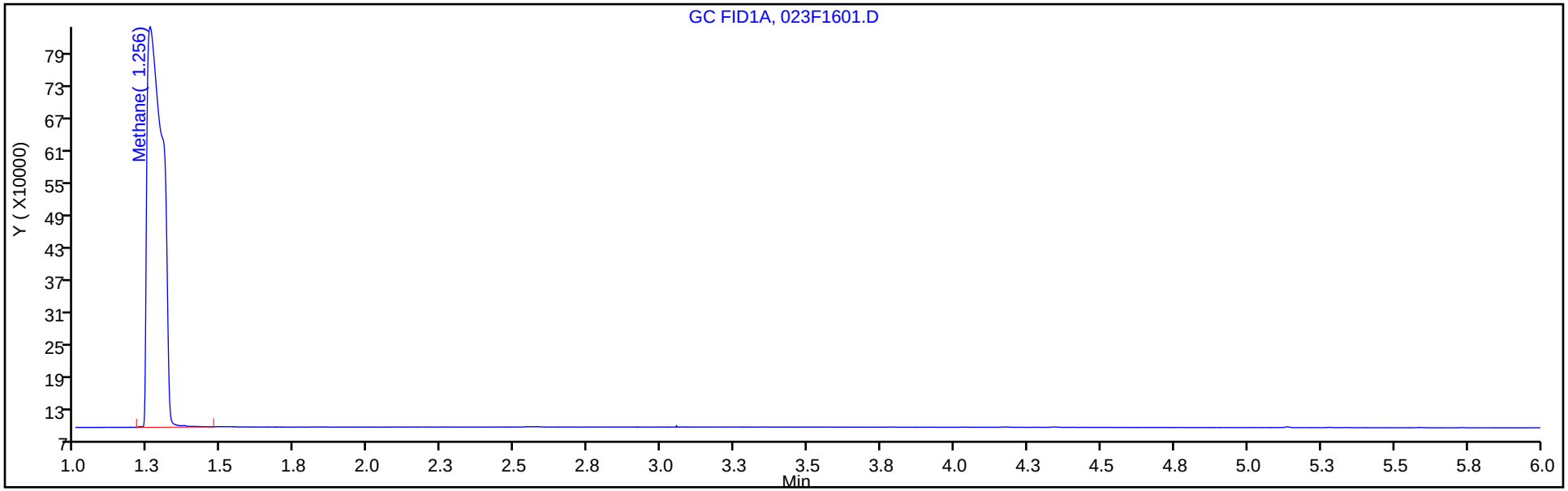
Report Date: 22-Dec-2019 20:45:23 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

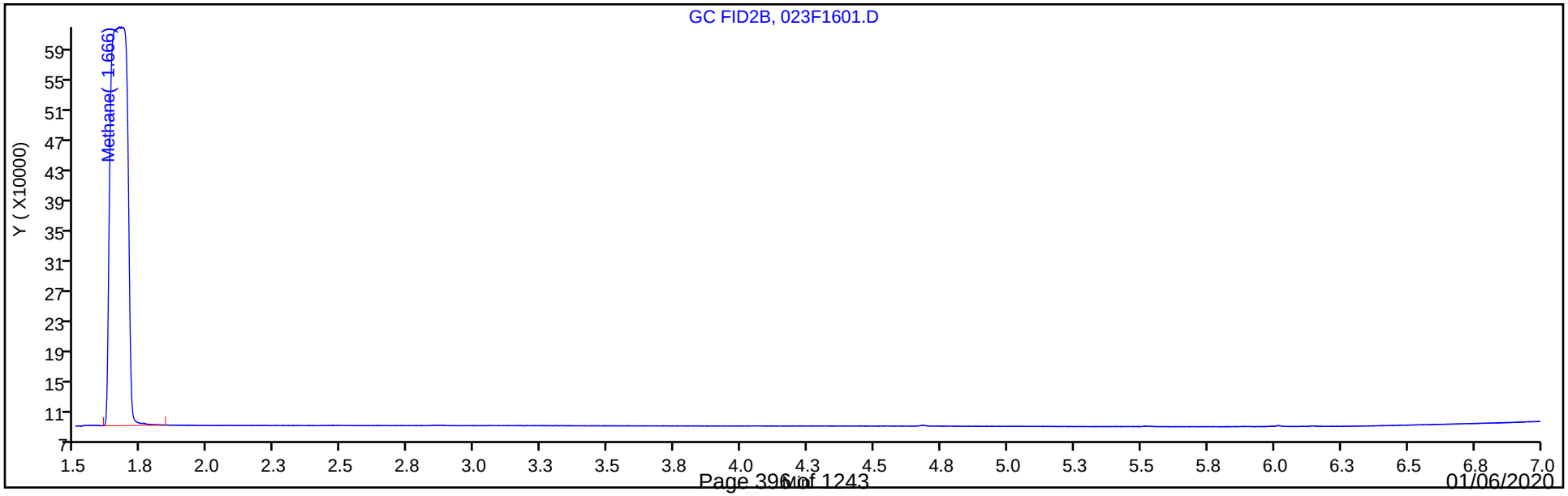
Data File: \\chromna\Denver\ChromData\VGC_J\20191031-86685.b\023F1601.D

Injection Date:	31-Oct-2019 15:26:10	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-129936-G-11 DU			Worklist Smp#:	23
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

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.: 280-129936-1

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.: 280-129936-1

SDG No.:

Instrument ID: VGC_J Start Date: 10/31/2019 10:02

Analysis Batch Number: 476033 End Date: 11/01/2019 00:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-476033/4		10/31/2019 10:02	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-476033/4		10/31/2019 10:02	1	004F0401.D	HP-Plot Q 0.53(mm)
LCS 280-476033/5		10/31/2019 10:16	1	05F0401.D	Rt-Alumina KCl 0.53(mm)
LCS 280-476033/5		10/31/2019 10:16	1	05F0401.D	HP-Plot Q 0.53(mm)
LCSD 280-476033/6		10/31/2019 10:29	1	006F0101.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-476033/6		10/31/2019 10:29	1	006F0101.D	HP-Plot Q 0.53(mm)
MB 280-476033/7		10/31/2019 10:43	1	007F0201.D	Rt-Alumina KCl 0.53(mm)
MB 280-476033/7		10/31/2019 10:43	1	007F0201.D	HP-Plot Q 0.53(mm)
280-129936-9		10/31/2019 12:01	1	008F0101.D	Rt-Alumina KCl 0.53(mm)
280-129936-9		10/31/2019 12:01	1	008F0101.D	HP-Plot Q 0.53(mm)
280-129936-9 DU		10/31/2019 12:14	1	009F0201.D	Rt-Alumina KCl 0.53(mm)
280-129936-9 DU		10/31/2019 12:14	1	009F0201.D	HP-Plot Q 0.53(mm)
280-129936-9 MS		10/31/2019 12:28	1	010F0301.D	Rt-Alumina KCl 0.53(mm)
280-129936-9 MS		10/31/2019 12:28	1	010F0301.D	HP-Plot Q 0.53(mm)
280-129936-9 MSD		10/31/2019 12:41	1	011F0401.D	Rt-Alumina KCl 0.53(mm)
280-129936-9 MSD		10/31/2019 12:41	1	011F0401.D	HP-Plot Q 0.53(mm)
280-129936-1		10/31/2019 12:55	1	012F0501.D	Rt-Alumina KCl 0.53(mm)
280-129936-1		10/31/2019 12:55	1	012F0501.D	HP-Plot Q 0.53(mm)
280-129936-2		10/31/2019 13:09	1	013F0601.D	Rt-Alumina KCl 0.53(mm)
280-129936-2		10/31/2019 13:09	1	013F0601.D	HP-Plot Q 0.53(mm)
280-129936-3		10/31/2019 13:22	1	014F0701.D	Rt-Alumina KCl 0.53(mm)
280-129936-3		10/31/2019 13:22	1	014F0701.D	HP-Plot Q 0.53(mm)
280-129936-4		10/31/2019 13:36	1	015F0801.D	Rt-Alumina KCl 0.53(mm)
280-129936-4		10/31/2019 13:36	1	015F0801.D	HP-Plot Q 0.53(mm)
280-129936-5		10/31/2019 13:50	1	016F0901.D	Rt-Alumina KCl 0.53(mm)
280-129936-5		10/31/2019 13:50	1	016F0901.D	HP-Plot Q 0.53(mm)
280-129936-6		10/31/2019 14:03	1	017F1001.D	Rt-Alumina KCl 0.53(mm)
280-129936-6		10/31/2019 14:03	1	017F1001.D	HP-Plot Q 0.53(mm)
280-129936-7		10/31/2019 14:17	1	018F1101.D	Rt-Alumina KCl 0.53(mm)
280-129936-7		10/31/2019 14:17	1	018F1101.D	HP-Plot Q 0.53(mm)
280-129936-8		10/31/2019 14:31	1	019F1201.D	Rt-Alumina KCl 0.53(mm)
280-129936-8		10/31/2019 14:31	1	019F1201.D	HP-Plot Q 0.53(mm)
280-129936-10		10/31/2019 14:45	1	020F1301.D	Rt-Alumina KCl 0.53(mm)
280-129936-10		10/31/2019 14:45	1	020F1301.D	HP-Plot Q 0.53(mm)
CCV 280-476033/21		10/31/2019 14:58	1	021F1401.D	Rt-Alumina KCl 0.53(mm)
CCV 280-476033/21		10/31/2019 14:58	1	021F1401.D	HP-Plot Q 0.53(mm)
280-129936-11		10/31/2019 15:12	1	022F1501.D	Rt-Alumina KCl 0.53(mm)
280-129936-11		10/31/2019 15:12	1	022F1501.D	HP-Plot Q 0.53(mm)
280-129936-11 DU		10/31/2019 15:26	1	023F1601.D	Rt-Alumina KCl 0.53(mm)
280-129936-11 DU		10/31/2019 15:26	1	023F1601.D	HP-Plot Q 0.53(mm)
280-129936-12		10/31/2019 15:39	1	024F1701.D	Rt-Alumina KCl 0.53(mm)
280-129936-12		10/31/2019 15:39	1	024F1701.D	HP-Plot Q 0.53(mm)
280-129936-13		10/31/2019 15:53	1	025F1801.D	Rt-Alumina KCl 0.53(mm)
280-129936-13		10/31/2019 15:53	1	025F1801.D	HP-Plot Q 0.53(mm)
280-129936-14		10/31/2019 16:07	1	026F1901.D	Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: VGC_J Start Date: 10/31/2019 10:02

Analysis Batch Number: 476033 End Date: 11/01/2019 00:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-129936-14		10/31/2019 16:07	1	026F1901.D	HP-Plot Q 0.53(mm)
280-129936-15		10/31/2019 16:20	1	027F2001.D	Rt-Alumina KCl 0.53(mm)
280-129936-15		10/31/2019 16:20	1	027F2001.D	HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 16:34	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 16:34	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 16:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 16:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 17:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 17:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 17:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 17:15	1		HP-Plot Q 0.53(mm)
CCV 280-476033/32		10/31/2019 17:29	1	032F2501.D	Rt-Alumina KCl 0.53(mm)
CCV 280-476033/32		10/31/2019 17:29	1	032F2501.D	HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 17:42	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 17:42	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 17:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 17:56	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 18:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 18:09	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 18:23	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 18:23	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 18:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 18:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 18:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 18:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 19:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 19:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 19:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 19:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 19:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 19:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 19:44	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 19:44	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 19:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 19:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 20:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 20:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 20:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 20:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 20:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 20:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 20:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 20:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 21:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 21:06	1		HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: VGC_J Start Date: 10/31/2019 10:02

Analysis Batch Number: 476033 End Date: 11/01/2019 00:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-476033/49		10/31/2019 21:19	1		Rt-Alumina KCl 0.53(mm)
CCV 280-476033/49		10/31/2019 21:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 21:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 21:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 21:47	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 21:47	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 22:00	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 22:00	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 22:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 22:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 22:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 22:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 22:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 22:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 22:55	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 22:55	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 23:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 23:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 23:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 23:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 23:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 23:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		10/31/2019 23:49	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		10/31/2019 23:49	1		HP-Plot Q 0.53(mm)
CCV 280-476033/61		11/01/2019 00:03	1		Rt-Alumina KCl 0.53(mm)
CCV 280-476033/61		11/01/2019 00:03	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 476033 Batch Start Date: 10/31/19 10:02 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00027		
CCVRT 280-476033/4		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-476033/5		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-476033/6		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-476033/7		RSK-175		18 mL	18 mL	5 SU			
280-129936-G-9	G0070-1	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-G-9 DU	G0070-1	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-I-9 MS	G0070-1	RSK-175	T	18 mL	18 mL	< 2 SU	200 uL		
280-129936-I-9 MSD	G0070-1	RSK-175	T	18 mL	18 mL	< 2 SU	200 uL		
280-129936-H-1	CA210-1	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-G-2	CA211-1	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-H-3	CA212-1	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-I-4	EW7-PM24B-1-35	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-H-5	EW7-PM29B-1-35	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-G-6	EW7-PM29A-1-25	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-G-7	EW7-PM28A-1-25	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-H-8	EW7-PM28B-1-35	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-I-10	CA213-1	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-476033/21		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-129936-G-11	NW070-1	RSK-175	T	18 mL	18 mL				
280-129936-G-11 DU	NW070-1	RSK-175	T	18 mL	18 mL				
280-129936-G-12	G0081-1	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-H-13	G0075-1	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-G-14	G0079-1	RSK-175	T	18 mL	18 mL	< 2 SU			
280-129936-I-15	G0080-1	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-476033/32		RSK-175		18 mL	18 mL	5 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.: 280-129936-1

SDG No.:

Batch Number: 476033 Batch Start Date: 10/31/19 10:02 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

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.: 280-129936-1

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 #
CA210-1	280-129936-1	95 M	
CA211-1	280-129936-2	114 M	
CA212-1	280-129936-3	110 M	
EW7-PM24B-1-35	280-129936-4		100 M
EW7-PM24B-1-35	280-129936-4	87 M	
EW7-PM24B-1-35 DL	280-129936-4 DL		0 Q
EW7-PM24B-1-35 DL	280-129936-4 DL	78 Q	
EW7-PM29B-1-35	280-129936-5		90
EW7-PM29B-1-35	280-129936-5	80 Q	
EW7-PM29A-1-25	280-129936-6		90
EW7-PM29A-1-25	280-129936-6	88	
EW7-PM28A-1-25	280-129936-7		147 Q
EW7-PM28A-1-25	280-129936-7	86 M	
EW7-PM28B-1-35	280-129936-8		141 Q
EW7-PM28B-1-35	280-129936-8	81 Q	
EW7-PM28B-1-35 DL	280-129936-8 DL		0 Q
EW7-PM28B-1-35 DL	280-129936-8 DL	82 Q	
G0070-1	280-129936-9		87
G0070-1	280-129936-9	91 M	
CA213-1	280-129936-10	84	
NW070-1	280-129936-11	83 M	
G0081-1	280-129936-12		94
G0081-1	280-129936-12	83 M	
G0075-1	280-129936-13		80 Q
G0075-1	280-129936-13	85 M	
G0079-1	280-129936-14		91
G0079-1	280-129936-14	90 M	
G0080-1	280-129936-15		80 Q
G0080-1	280-129936-15	86 M	
	MB 280-475259/1-A	68 Q	
	LCS 280-475259/2-A	90	
	LCS 280-475259/3-A	85	
G0070-1 MS	280-129936-9 MS	89	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330A

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

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 #
G0070-1 MS	280-129936-9 MS	91	
G0070-1 MSD	280-129936-9 MSD	86	
G0070-1 MSD	280-129936-9 MSD	86	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10280037.D

Lab ID: LCS 280-475259/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.87	94	73-125	
1,3-Dinitrobenzene	2.00	1.85	93	78-120	
2,4,6-Trinitrotoluene	2.00	1.76	88	71-123	
2,4-Dinitrotoluene	2.00	1.78	89	78-120	
2,6-Dinitrotoluene	2.00	1.76	88	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.77	88	79-120	
2-Nitrotoluene	2.00	1.55	78	70-127	
3-Nitrotoluene	2.00	1.67	83	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.61	81	76-125	
4-Nitrotoluene	2.00	1.67	83	71-127	
HMX	2.00	1.84	92	65-135	
Nitrobenzene	2.00	1.75	87	65-134	
RDX	2.00	1.86	93	68-130	
Tetryl	2.00	2.01	101	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.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10280038.D

Lab ID: LCS 280-475259/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.36	101	57-132	

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.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10280051.D

Lab ID: 280-129936-9 MS Client ID: G0070-1 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	1.93	0.38 U	1.79	93	73-125	
1,3-Dinitrobenzene	1.93	0.19 U	1.76	91	78-120	
2,4,6-Trinitrotoluene	1.93	0.38 U	1.70	88	71-123	
2,4-Dinitrotoluene	1.93	0.19 U	1.68	87	78-120	
2,6-Dinitrotoluene	1.93	0.19 U	1.68	87	77-127	
2-Amino-4,6-dinitrotoluene	1.93	0.11 U	1.63	85	79-120	
2-Nitrotoluene	1.93	0.19 U	1.33	69	70-127	J1
3-Nitrotoluene	1.93	0.38 U	1.44	75	73-125	
4-Amino-2,6-dinitrotoluene	1.93	0.11 U	1.53	79	76-125	
4-Nitrotoluene	1.93	0.38 U	1.52	79	71-127	
HMX	1.93	0.19 U	1.71	89	65-135	M
Nitrobenzene	1.93	0.12 J	1.65	79	65-134	
RDX	1.93	0.38 U	1.82	94	68-130	M
Tetryl	1.93	0.19 U	1.96	102	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.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10280053.D

Lab ID: 280-129936-9 MS Client ID: G0070-1 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.25	0.38 U	2.23	99	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10280052.D

Lab ID: 280-129936-9 MSD Client ID: G0070-1 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	1.91	1.74	91	3	30	73-125	
1,3-Dinitrobenzene	1.91	1.71	90	3	30	78-120	
2,4,6-Trinitrotoluene	1.91	1.64	86	4	30	71-123	
2,4-Dinitrotoluene	1.91	1.58	83	6	30	78-120	
2,6-Dinitrotoluene	1.91	1.57	82	7	30	77-127	
2-Amino-4,6-dinitrotoluene	1.91	1.58	83	3	30	79-120	
2-Nitrotoluene	1.91	1.07	56	22	30	70-127	J1
3-Nitrotoluene	1.91	1.15	60	22	30	73-125	J1
4-Amino-2,6-dinitrotoluene	1.91	1.47	77	4	30	76-125	
4-Nitrotoluene	1.91	1.26	66	19	30	71-127	J1
HMX	1.91	1.65	87	3	30	65-135	M
Nitrobenzene	1.91	1.43	69	14	30	65-134	
RDX	1.91	1.73	91	5	30	68-130	M
Tetryl	1.91	1.91	100	3	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.: 280-129936-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10280054.D

Lab ID: 280-129936-9 MSD Client ID: G0070-1 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.21	2.14	96	4	30	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: MB 280-475259/1-A

Matrix: Water Date Extracted: 10/24/2019 16:31

Lab File ID:(1) 10280036.D Lab File ID:(2)

Date Analyzed:(1) 10/29/2019 00:05 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 280-475259/2-A	10/29/2019 00:28	
	LCS 280-475259/3-A	10/29/2019 00:51	
CA210-1	280-129936-1	10/29/2019 01:14	
CA211-1	280-129936-2	10/29/2019 01:37	
CA212-1	280-129936-3	10/29/2019 02:00	
EW7-PM24B-1-35	280-129936-4	10/29/2019 02:23	10/31/2019 00:55
EW7-PM29B-1-35	280-129936-5	10/29/2019 02:46	10/31/2019 02:05
EW7-PM29A-1-25	280-129936-6	10/29/2019 03:09	10/31/2019 02:40
EW7-PM28A-1-25	280-129936-7	10/29/2019 03:32	10/31/2019 03:15
EW7-PM28B-1-35	280-129936-8	10/29/2019 05:04	10/31/2019 03:50
G0070-1	280-129936-9	10/29/2019 05:27	10/31/2019 05:35
G0070-1 MS	280-129936-9 MS	10/29/2019 05:50	
G0070-1 MSD	280-129936-9 MSD	10/29/2019 06:13	
G0070-1 MS	280-129936-9 MS	10/29/2019 06:35	
G0070-1 MSD	280-129936-9 MSD	10/29/2019 06:58	
CA213-1	280-129936-10	10/29/2019 07:21	
NW070-1	280-129936-11	10/29/2019 07:44	
G0081-1	280-129936-12	10/29/2019 08:07	10/31/2019 08:30
G0075-1	280-129936-13	10/29/2019 08:30	10/31/2019 09:05
G0079-1	280-129936-14	10/29/2019 10:02	10/31/2019 09:40
G0080-1	280-129936-15	10/29/2019 10:25	10/31/2019 10:15
EW7-PM24B-1-35 DL	280-129936-4 DL	10/31/2019 20:23	10/31/2019 01:30
EW7-PM28B-1-35 DL	280-129936-8 DL	10/31/2019 20:46	10/31/2019 04:25

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM24B-1-35 Lab Sample ID: 280-129936-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/29/2019 02:23 Date Analyzed (2): 10/31/2019 00:55

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.67	6.53	6.83	0.37		26.3
	2		7.05	6.91	7.21	0.49		
RDX	1		7.75	7.61	7.91	0.41		39.2
	2		9.22	9.11	9.41	0.28		
2,4,6-Trinitrotoluene	1		11.20	11.10	11.30	11		3.0
	2		24.82	24.68	24.98	10		
4-Amino-2,6-dinitrotoluene	1		11.36	11.27	11.47	1.9		35.6
	2		17.30	17.16	17.46	2.8		
2-Amino-4,6-dinitrotoluene	1		11.66	11.56	11.76	2.2		11.8
	2		18.16	18.05	18.35	2.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM24B-1-35 DL Lab Sample ID: 280-129936-4 DL

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/31/2019 20:23 Date Analyzed (2): 10/31/2019 01:30

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.88	8.73	9.03	38		3.2
	2		19.06	18.91	19.21	37		
2,4,6-Trinitrotoluene	1		11.19	11.09	11.29	12		49.6
	2		24.81	24.68	24.98	7.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29B-1-35 Lab Sample ID: 280-129936-5

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/29/2019 02:46 Date Analyzed (2): 10/31/2019 02:05

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		6.67	6.53	6.83	0.32		55.8
	2		7.05	6.91	7.21	0.58		
1,3,5-Trinitrobenzene	1		8.87	8.73	9.03	13		5.8
	2		19.05	18.91	19.21	13		
2,4,6-Trinitrotoluene	1		11.18	11.10	11.30	3.6		1.5
	2		24.84	24.68	24.98	3.7		
4-Amino-2,6-dinitrotoluene	1		11.35	11.27	11.47	0.98		34.8
	2		17.30	17.16	17.46	1.4		
2-Amino-4,6-dinitrotoluene	1		11.64	11.56	11.76	1.3		15.3
	2		18.16	18.05	18.35	1.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29A-1-25 Lab Sample ID: 280-129936-6

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/29/2019 03:09 Date Analyzed (2): 10/31/2019 02:40

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		6.67	6.53	6.83	0.62		0.3
	2		7.02	6.91	7.21	0.62		
RDX	1		7.75	7.61	7.91	1.2		10.1
	2		9.23	9.11	9.41	1.1		
1,3,5-Trinitrobenzene	1		8.89	8.73	9.03	11		6.5
	2		19.04	18.91	19.21	9.9		
2,4,6-Trinitrotoluene	1		11.20	11.10	11.30	5.9		3.7
	2		24.82	24.68	24.98	5.7		
4-Amino-2,6-dinitrotoluene	1		11.37	11.27	11.47	1.6		45.9
	2		17.28	17.16	17.46	2.5		
2-Amino-4,6-dinitrotoluene	1		11.66	11.56	11.76	1.5		23.3
	2		18.16	18.05	18.35	1.9		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28A-1-25 Lab Sample ID: 280-129936-7

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/29/2019 03:32 Date Analyzed (2): 10/31/2019 03:15

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.67	6.53	6.83	0.87		27.6
	2		7.04	6.91	7.21	1.1		
RDX	1		7.75	7.61	7.91	1.1		16.5
	2		9.24	9.11	9.41	1.3		
1,3,5-Trinitrobenzene	1		8.89	8.73	9.03	23		7.9
	2		19.06	18.91	19.21	21		
2,4,6-Trinitrotoluene	1		11.20	11.10	11.30	13		5.5
	2		24.84	24.68	24.98	12		
4-Amino-2,6-dinitrotoluene	1		11.37	11.27	11.47	3.8		10.7
	2		17.30	17.16	17.46	4.2		
2-Amino-4,6-dinitrotoluene	1		11.67	11.56	11.76	3.8		2.2
	2		18.18	18.05	18.35	3.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28B-1-35 Lab Sample ID: 280-129936-8

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/29/2019 05:04 Date Analyzed (2): 10/31/2019 03:50

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	
RDX	1		7.75	7.61	7.91	0.22		30.7
	2		9.20	9.11	9.41	0.16		
2,4,6-Trinitrotoluene	1		11.19	11.10	11.30	5.6		2.3
	2		24.84	24.68	24.98	5.7		
4-Amino-2,6-dinitrotoluene	1		11.36	11.27	11.47	2.3		18.6
	2		17.30	17.16	17.46	2.7		
2-Amino-4,6-dinitrotoluene	1		11.65	11.56	11.76	2.2		6.3
	2		18.18	18.05	18.35	2.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28B-1-35 DL Lab Sample ID: 280-129936-8 DL

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/31/2019 20:46 Date Analyzed (2): 10/31/2019 04:25

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.88	8.73	9.03	42		6.9
	2		19.07	18.91	19.21	39		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0081-1 Lab Sample ID: 280-129936-12

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/29/2019 08:07 Date Analyzed (2): 10/31/2019 08:30

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.88	8.73	9.03	1.1		18.8
	2		19.06	18.91	19.21	1.3		
2,4,6-Trinitrotoluene	1		11.20	11.10	11.30	0.29		37.4
	2		24.74	24.68	24.98	0.20		
4-Amino-2,6-dinitrotoluene	1		11.36	11.27	11.47	0.15		102.7
	2		17.32	17.16	17.46	0.45		
2-Amino-4,6-dinitrotoluene	1		11.66	11.56	11.76	0.20		56.1
	2		18.18	18.05	18.35	0.36		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0075-1 Lab Sample ID: 280-129936-13

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/29/2019 08:30 Date Analyzed (2): 10/31/2019 09:05

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4-Amino-2,6-dinitrotoluene	1		11.37	11.27	11.47	0.085		112.2
	2		17.34	17.16	17.46	0.30		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0080-1 Lab Sample ID: 280-129936-15

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 10/29/2019 10:25 Date Analyzed (2): 10/31/2019 10:15

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.67	6.53	6.83	0.18		34.8
	2		7.05	6.91	7.21	0.25		
2-Amino-4,6-dinitrotoluene	1		11.66	11.56	11.76	0.096		42.7
	2		18.14	18.05	18.35	0.15		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: CA210-1 Lab Sample ID: 280-129936-1

Matrix: Water Lab File ID: 10280039.D

Analysis Method: 8330A Date Collected: 10/21/2019 09:50

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 489.9(mL) Date Analyzed: 10/29/2019 01:14

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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.41	0.20	0.091
118-96-7	2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.41	0.20	0.086
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.066
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.052
88-72-2	2-Nitrotoluene	0.20	U	0.41	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U M	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	1.0	0.41	0.20
2691-41-0	HMX	0.20	U	0.41	0.20	0.089
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.41	0.20	0.093
121-82-4	RDX	0.41	U	0.41	0.41	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.081

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\20191028-86569.b\10280039.D
Lims ID: 280-129936-A-1-A
Client ID: CA210-1
Sample Type: Client
Inject. Date: 29-Oct-2019 01:14:46 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-1-A
Misc. Info.: 280-0086569-039
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:50:21

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.675			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.761			ND	
$	9 1,2-Dinitrobenzene	1	8.724	8.715	0.009	26516	0.1903	M
	10 1,3,5-Trinitrobenzene	1		8.881			ND	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.368			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.661			ND	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

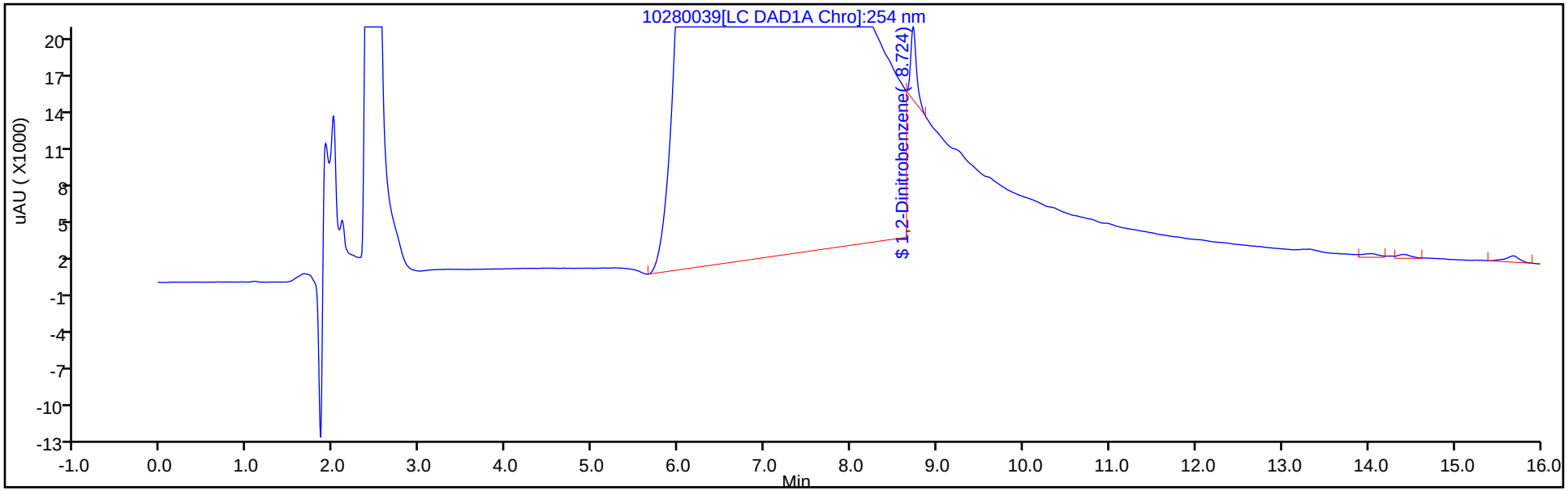
Report Date: 29-Oct-2019 11:54:52 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

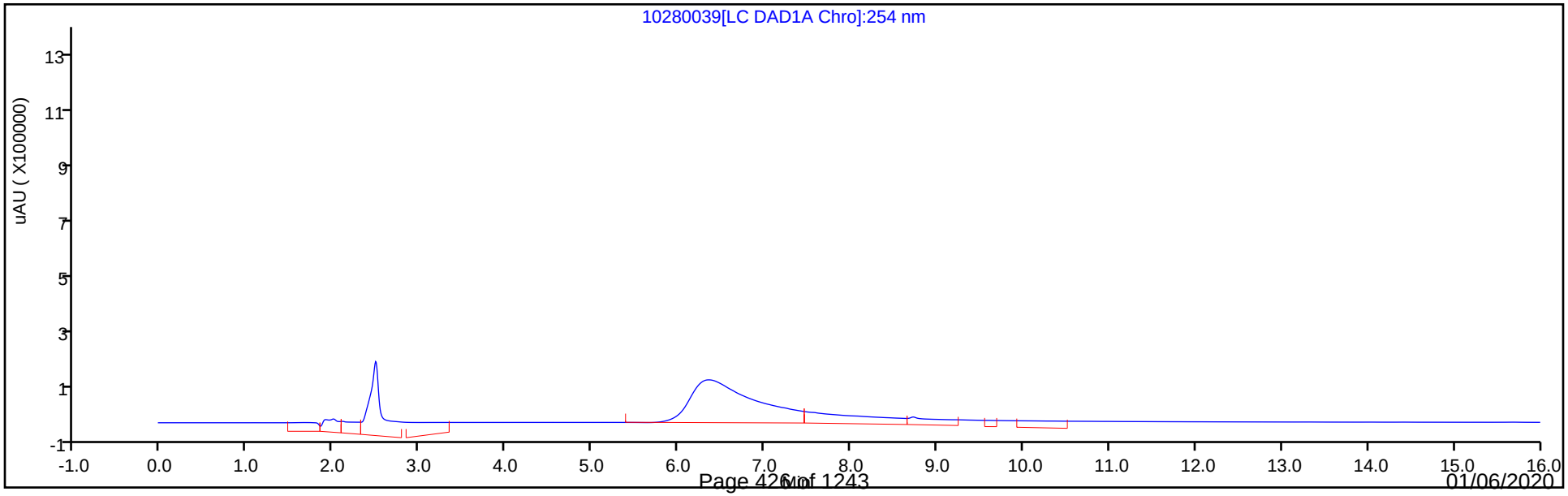
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280039.D

Injection Date:	29-Oct-2019 01:14:46	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-1-A	Lab Sample ID:	280-129936-1	Worklist Smp#:	39
Client ID:	CA210-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280039.D				
Lims ID:	280-129936-A-1-A				
Client ID:	CA210-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 01:14:46	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-1-A				
Misc. Info.:	280-0086569-039				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:43	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:	CTX0329				

First Level Reviewer: beckerc Date: 29-Oct-2019 10:50:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1903	95.16

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

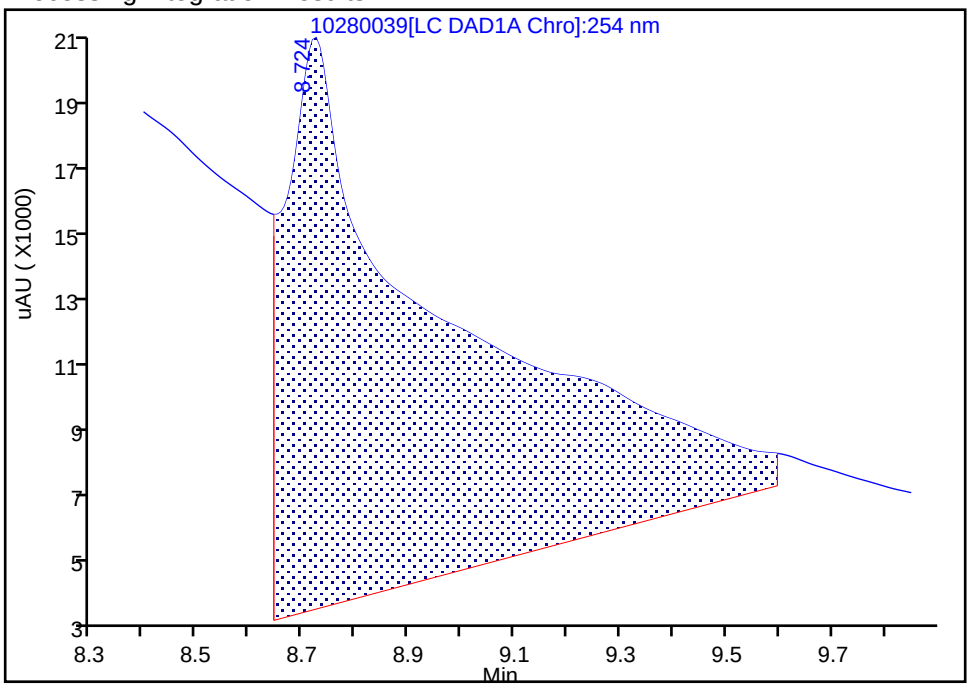
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280039.D				
Injection Date:	29-Oct-2019 01:14:46	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-1-A	Lab Sample ID:	280-129936-1		
Client ID:	CA210-1				
Operator ID:	CB	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

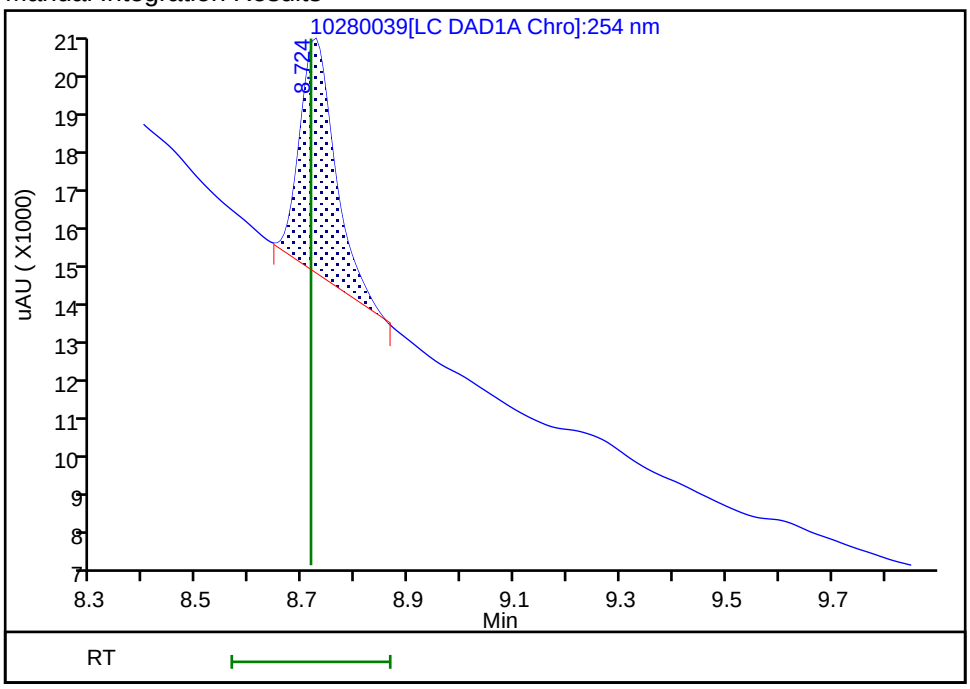
Processing Integration Results

RT: 8.72
Area: 356160
Amount: 2.556261
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 26516
Amount: 0.190313
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:48:41

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

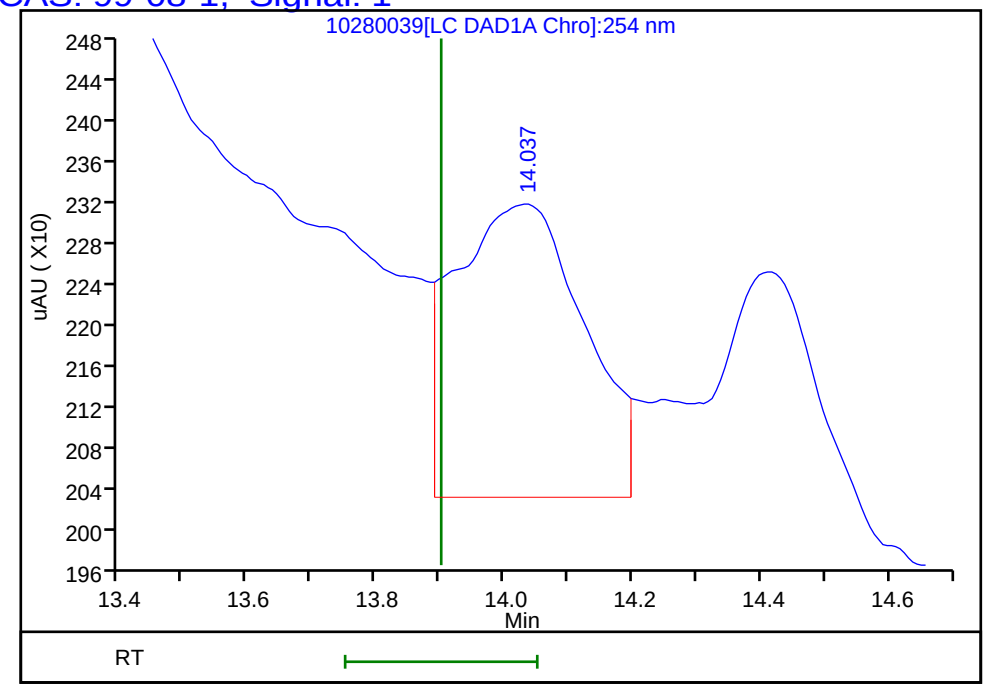
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280039.D

Injection Date:	29-Oct-2019 01:14:46	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-1-A	Lab Sample ID:	280-129936-1		
Client ID:	CA210-1				
Operator ID:	CB	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: 14.04
Response: 3966
Amount: 0.027329



Reviewer: beckerc, 29-Oct-2019 10:50:21
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.: 280-129936-1

SDG No.:

Client Sample ID: CA211-1 Lab Sample ID: 280-129936-2

Matrix: Water Lab File ID: 10280040.D

Analysis Method: 8330A Date Collected: 10/21/2019 11:25

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 485.8(mL) Date Analyzed: 10/29/2019 01:37

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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.41	0.21	0.091
118-96-7	2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16
121-14-2	2,4-Dinitrotoluene	0.21	U	0.41	0.21	0.086
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.066
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.21	0.12	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.41	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U M	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.21	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	1.0	0.41	0.21
2691-41-0	HMX	0.21	U	0.41	0.21	0.090
5755-27-1	MNX	0.41	U	2.1	0.41	0.16
98-95-3	Nitrobenzene	0.21	U	0.41	0.21	0.094
121-82-4	RDX	0.41	U	0.41	0.41	0.16
479-45-8	Tetryl	0.21	U	0.25	0.21	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	114	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280040.D
Lims ID: 280-129936-A-2-A
Client ID: CA211-1
Sample Type: Client
Inject. Date: 29-Oct-2019 01:37:42 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-2-A
Misc. Info.: 280-0086569-040
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:51:24

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.675			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.761			ND	
$	9 1,2-Dinitrobenzene	1	8.719	8.715	0.004	31898	0.2289	M
	10 1,3,5-Trinitrobenzene	1		8.881			ND	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.368			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.661			ND	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

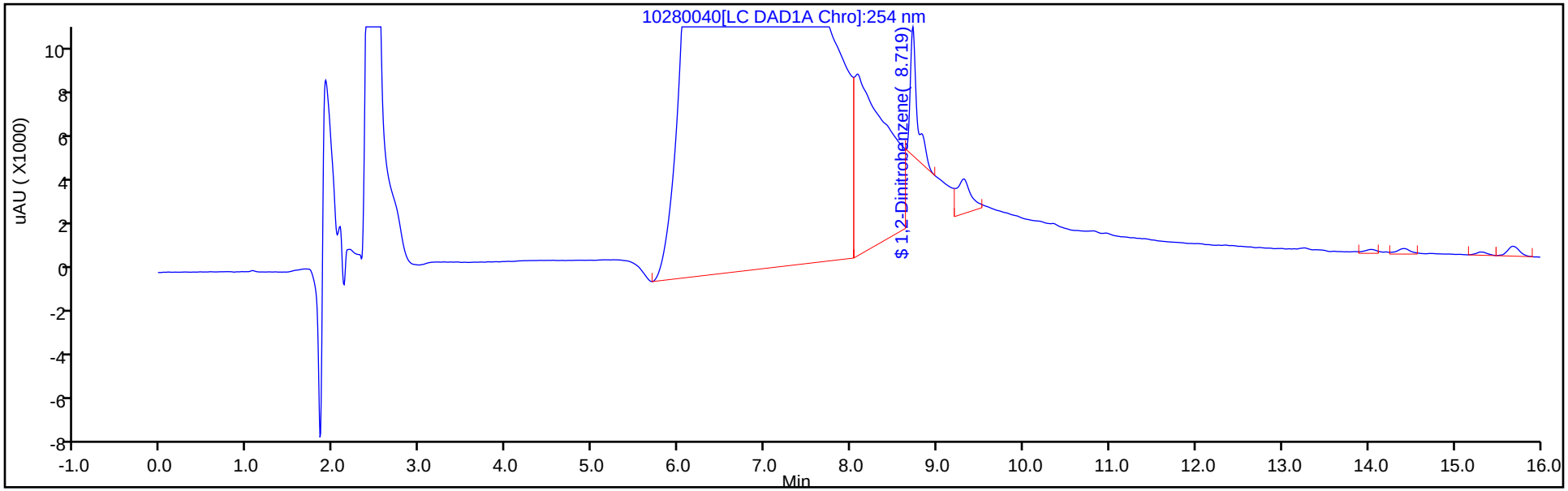
Report Date: 29-Oct-2019 11:54:51 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

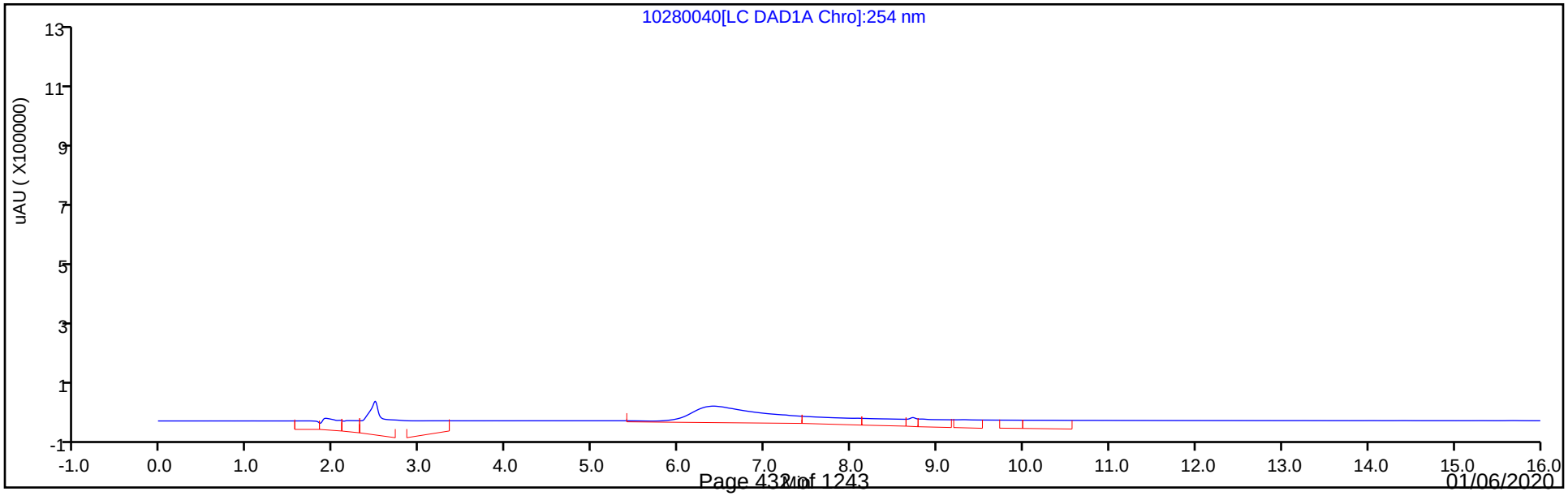
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280040.D

Injection Date:	29-Oct-2019 01:37:42	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-2-A	Lab Sample ID:	280-129936-2	Worklist Smp#:	40
Client ID:	CA211-1				
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\20191028-86569.b\10280040.D				
Lims ID:	280-129936-A-2-A				
Client ID:	CA211-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 01:37:42	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-2-A				
Misc. Info.:	280-0086569-040				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:43	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 10:51:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2289	114.47

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

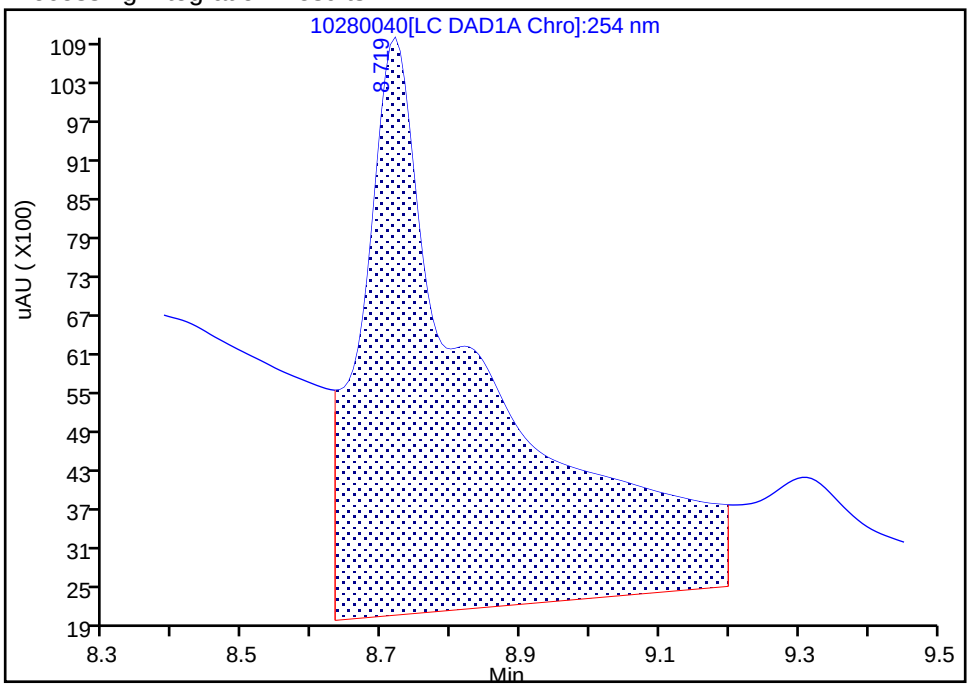
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280040.D				
Injection Date:	29-Oct-2019 01:37:42	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-2-A	Lab Sample ID:	280-129936-2		
Client ID:	CA211-1				
Operator ID:	CB	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

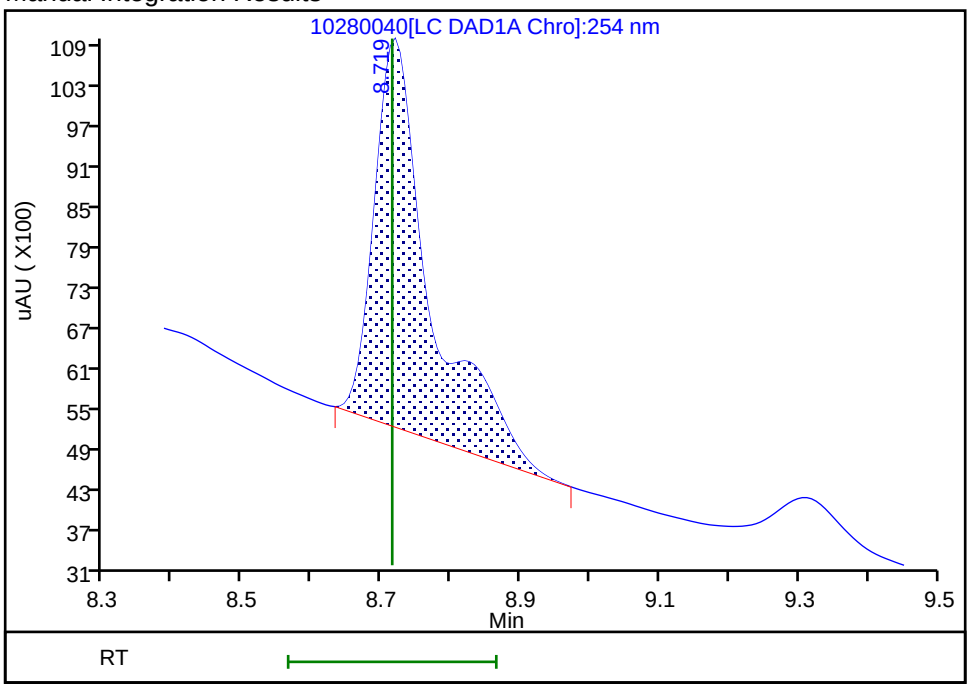
Processing Integration Results

RT: 8.72
Area: 110546
Amount: 0.793420
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 31898
Amount: 0.228941
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:51:17

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

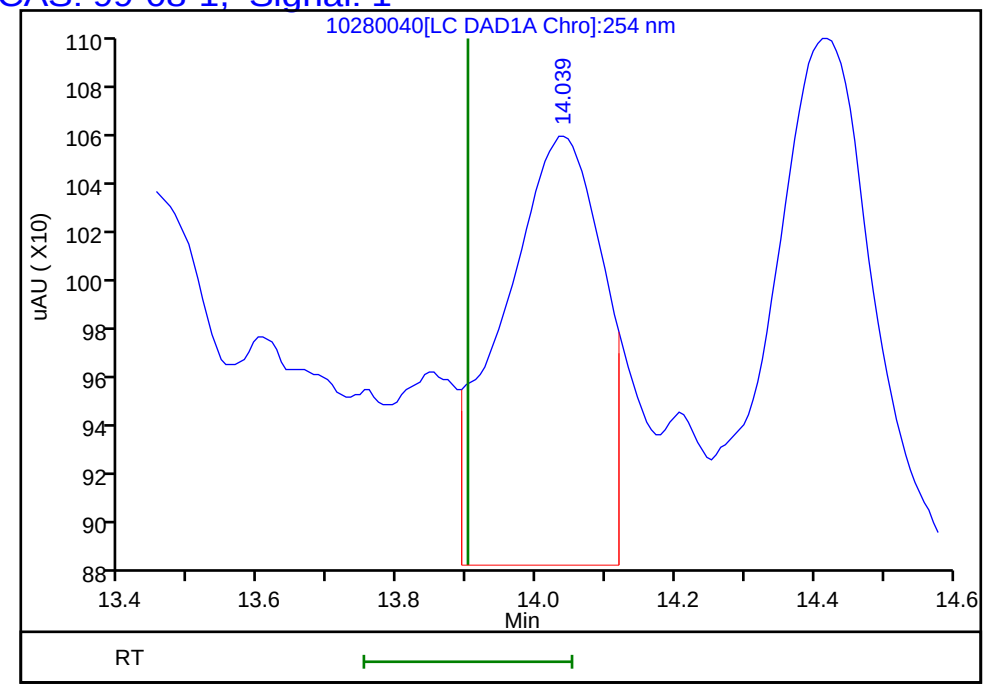
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280040.D				
Injection Date:	29-Oct-2019 01:37:42	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-2-A	Lab Sample ID:	280-129936-2		
Client ID:	CA211-1				
Operator ID:	CB	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		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.04
Response: 1694
Amount: 0.011673



Reviewer: beckerc, 29-Oct-2019 10:51:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: CA212-1 Lab Sample ID: 280-129936-3

Matrix: Water Lab File ID: 10280041.D

Analysis Method: 8330A Date Collected: 10/21/2019 12:50

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 500.2(mL) Date Analyzed: 10/29/2019 02:00

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 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	0.064
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	0.085
99-08-1	3-Nitrotoluene	0.40	U M	0.40	0.40	0.19
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	110	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280041.D
Lims ID: 280-129936-A-3-A
Client ID: CA212-1
Sample Type: Client
Inject. Date: 29-Oct-2019 02:00:41 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-3-A
Misc. Info.: 280-0086569-041
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:52:32

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.675			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.761			ND	
$	9 1,2-Dinitrobenzene	1	8.717	8.715	0.002	30748	0.2207	M
	10 1,3,5-Trinitrobenzene	1		8.881			ND	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.368			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.661			ND	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

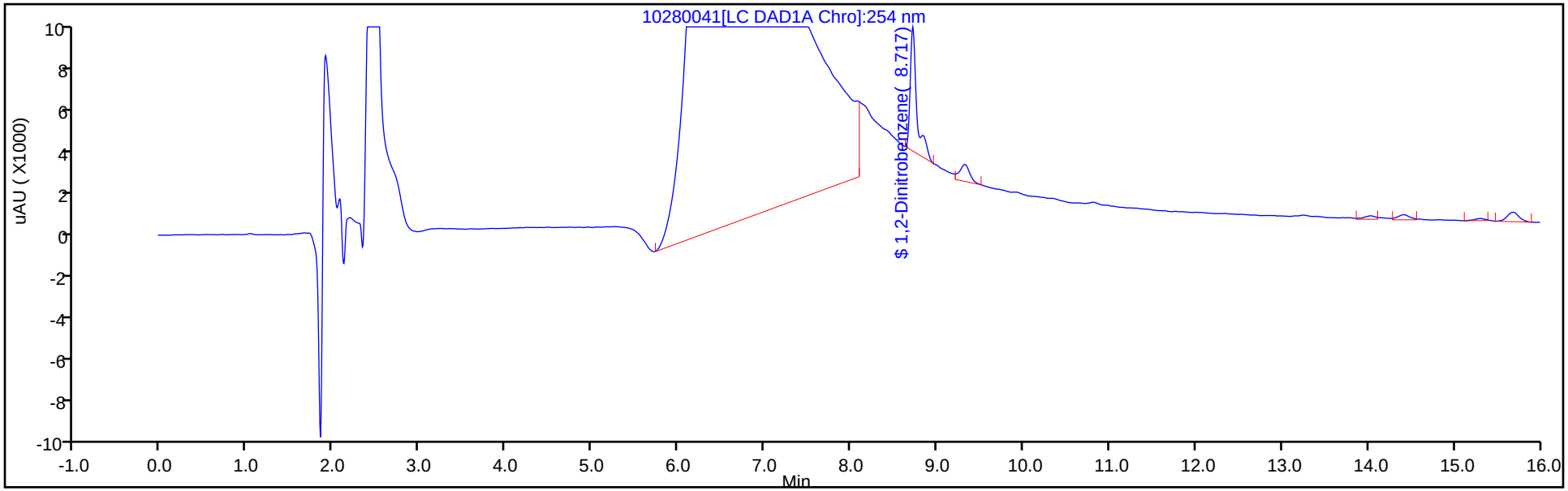
Report Date: 29-Oct-2019 11:54:50 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

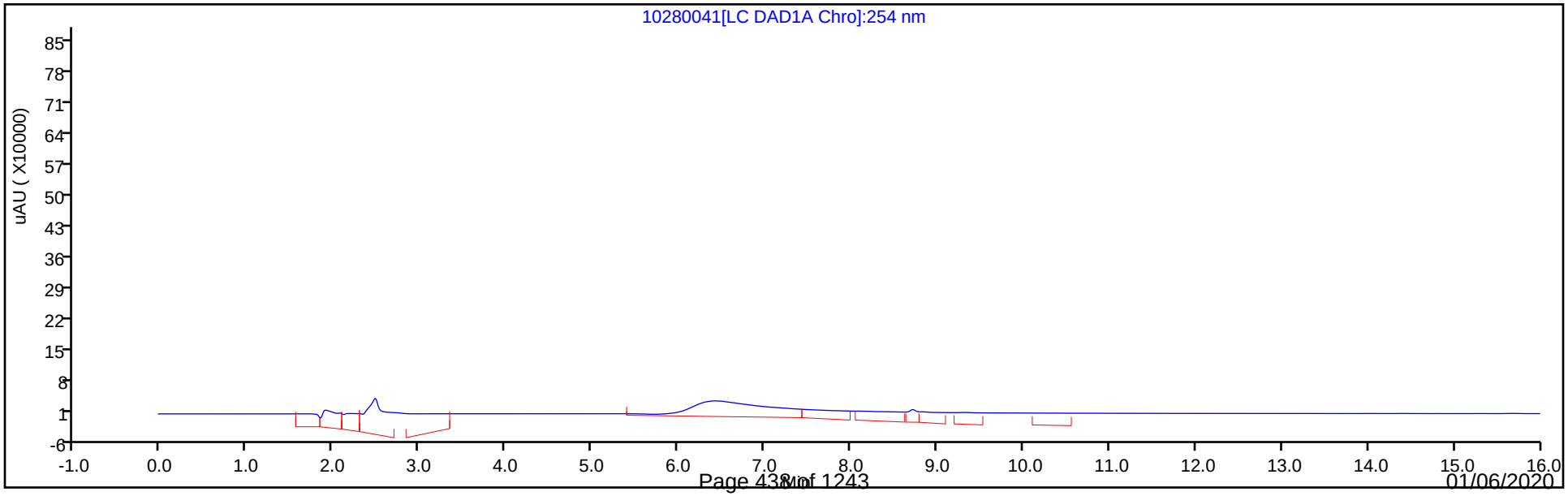
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280041.D

Injection Date:	29-Oct-2019 02:00:41	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-3-A	Lab Sample ID:	280-129936-3	Worklist Smp#:	41
Client ID:	CA212-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280041.D				
Lims ID:	280-129936-A-3-A				
Client ID:	CA212-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 02:00:41	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-3-A				
Misc. Info.:	280-0086569-041				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:43	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:	CTX0329				

First Level Reviewer: beckerc Date: 29-Oct-2019 10:52:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2207	110.34

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

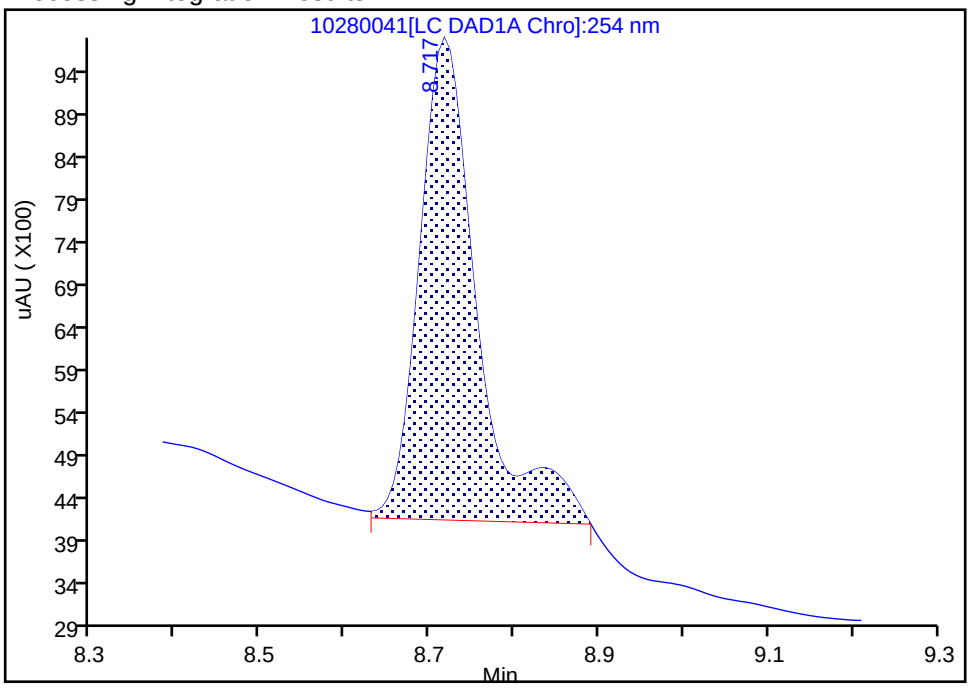
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280041.D				
Injection Date:	29-Oct-2019 02:00:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-3-A	Lab Sample ID:	280-129936-3		
Client ID:	CA212-1				
Operator ID:	CB	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

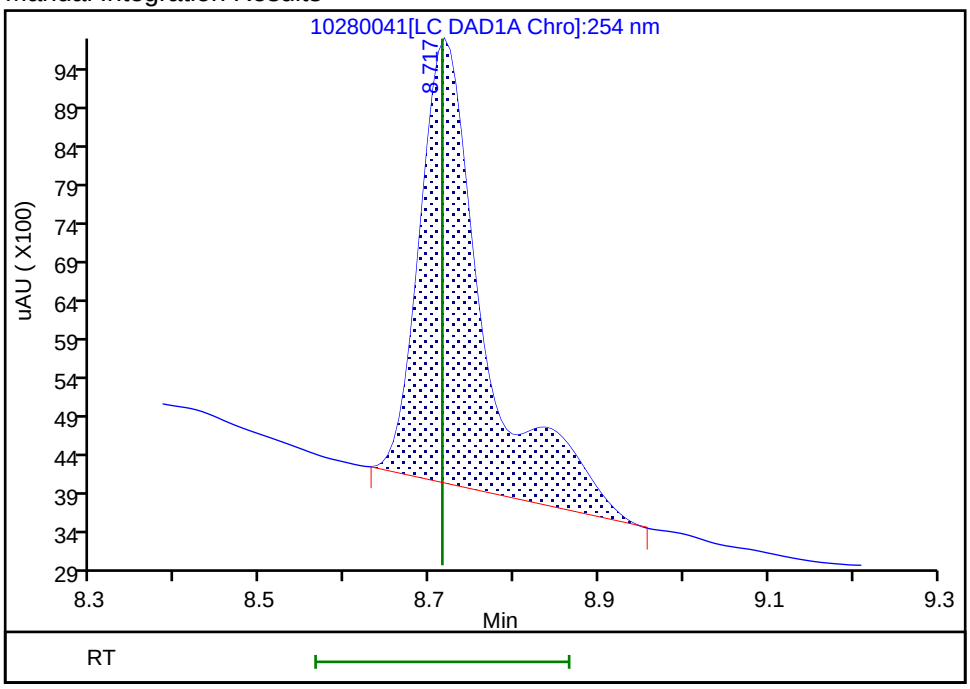
Processing Integration Results

RT: 8.72
Area: 27000
Amount: 0.193787
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 30748
Amount: 0.220687
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:52:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

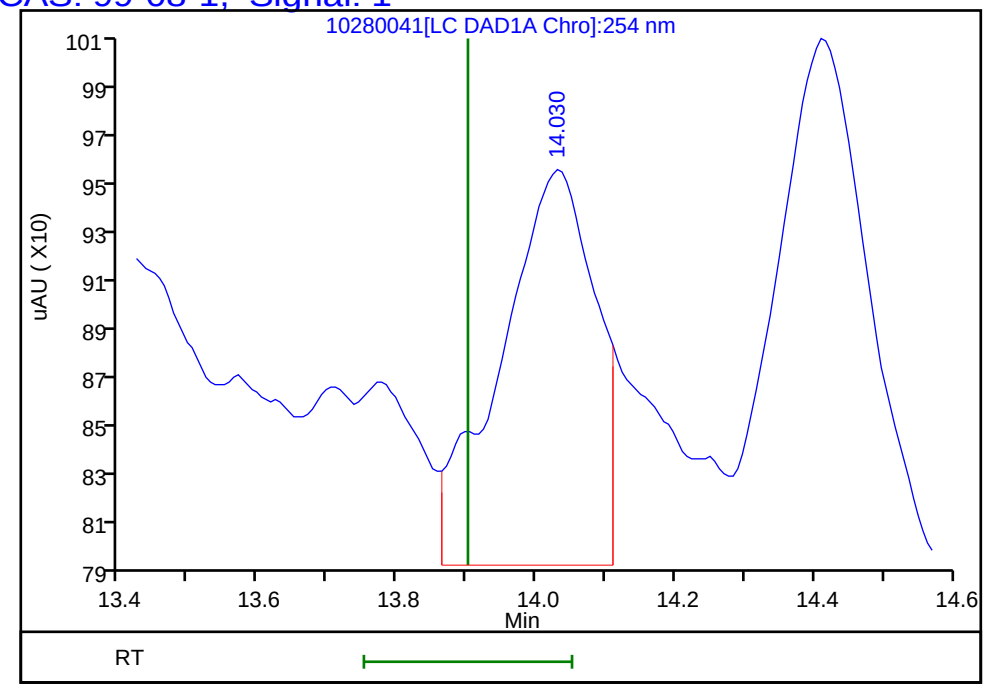
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280041.D				
Injection Date:	29-Oct-2019 02:00:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-3-A	Lab Sample ID:	280-129936-3		
Client ID:	CA212-1				
Operator ID:	CB	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.03
Response: 1504
Amount: 0.010364



Reviewer: beckerc, 29-Oct-2019 10:52:32
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.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM24B-1-35 Lab Sample ID: 280-129936-4

Matrix: Water Lab File ID: 10280042.D

Analysis Method: 8330A Date Collected: 10/19/2019 09:55

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 529.6(mL) Date Analyzed: 10/29/2019 02:23

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	11		0.38	0.38	0.15
606-20-2	2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.061
35572-78-2	2-Amino-4,6-dinitrotoluene	2.2		0.19	0.11	0.048
88-72-2	2-Nitrotoluene	0.19	U M	0.38	0.19	0.081
99-08-1	3-Nitrotoluene	0.38	U M	0.38	0.38	0.18
19406-51-0	4-Amino-2,6-dinitrotoluene	1.9		0.19	0.11	0.054
99-99-0	4-Nitrotoluene	0.38	U M	0.94	0.38	0.19
2691-41-0	HMX	0.37	J M	0.38	0.19	0.083
5755-27-1	MNX	0.38	U M	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.38	0.19	0.086
121-82-4	RDX	0.41	M	0.38	0.38	0.15
479-45-8	Tetryl	0.19	U M	0.23	0.19	0.075

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\20191028-86569.b\10280042.D
Lims ID: 280-129936-A-4-A
Client ID: EW7-PM24B-1-35
Sample Type: Client
Inject. Date: 29-Oct-2019 02:23:36 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-4-A
Misc. Info.: 280-0086569-042
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 16:05:14 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: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:15:46

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.669	6.675	-0.006	3635	0.0396	M
	6 MNX	1		7.367			ND	U
	7 RDX	1	7.749	7.761	-0.012	4868	0.0438	M
$	9 1,2-Dinitrobenzene	1	8.722	8.715	0.007	24144	0.1733	M
	10 1,3,5-Trinitrobenzene	1	8.889	8.881	0.008	983099	4.01	EM
	11 1,3-Dinitrobenzene	1	9.575	9.534	0.041	10119	0.0325	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	U
	16 2,4,6-Trinitrotoluene	1	11.202	11.201	0.001	259248	1.14	
	17 4-Amino-2,6-dinitrotoluene	1	11.362	11.368	-0.006	33832	0.2033	
	18 2-Amino-4,6-dinitrotoluene	1	11.662	11.661	0.001	48558	0.2366	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1	12.015	12.008	0.007	2677	0.008910	
	21 o-Nitrotoluene	1		12.854			ND	U
	22 p-Nitrotoluene	1		13.301			ND	U
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated
U - Marked Undetected

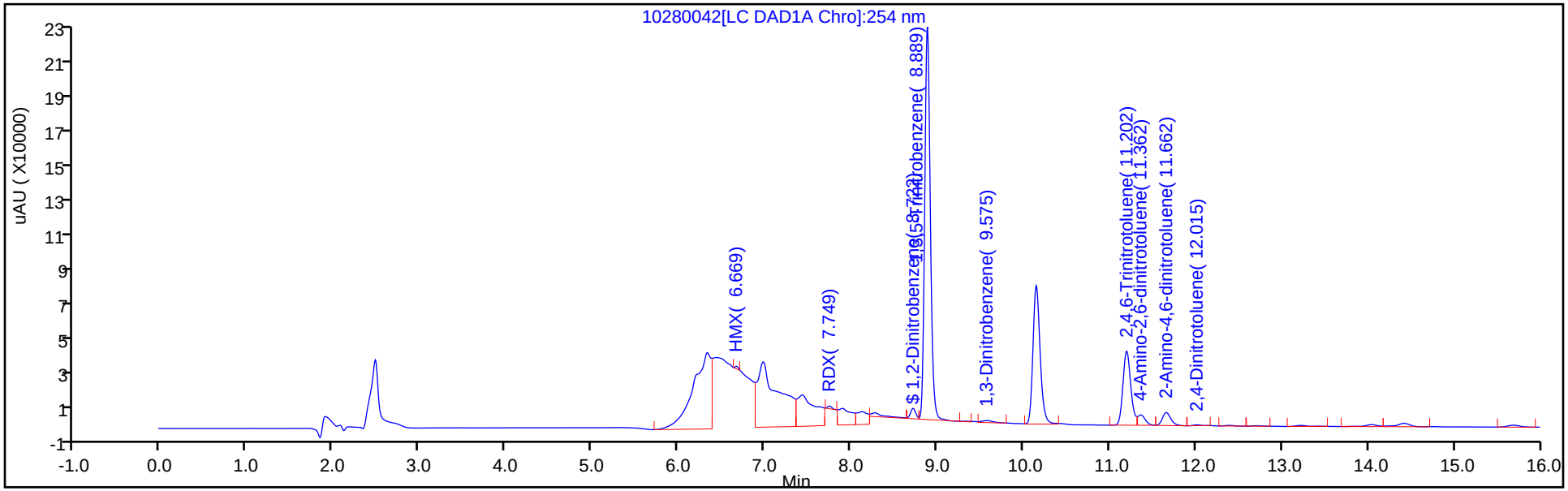
Report Date: 31-Oct-2019 16:15:49 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

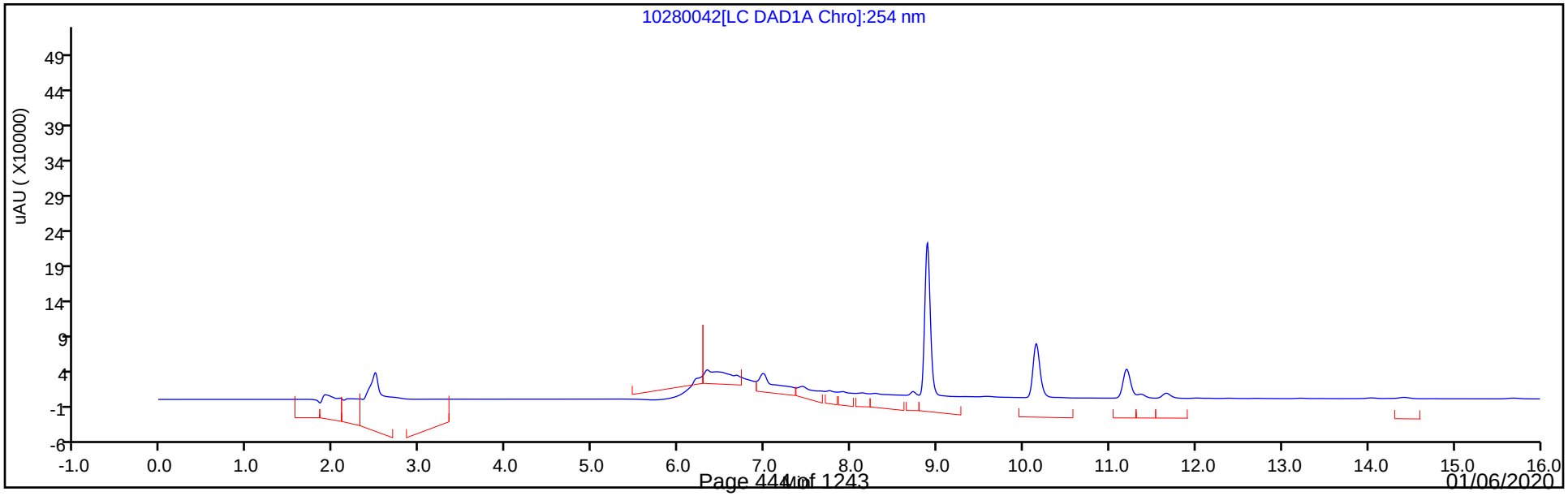
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D

Injection Date:	29-Oct-2019 02:23:36	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4	Worklist Smp#:	42
Client ID:	EW7-PM24B-1-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D				
Lims ID:	280-129936-A-4-A				
Client ID:	EW7-PM24B-1-35				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 02:23:36	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-4-A				
Misc. Info.:	280-0086569-042				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 16:05:14	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:	CTX0321				
First Level Reviewer: beckerc		Date:	31-Oct-2019 16:15:46		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1733	86.64

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

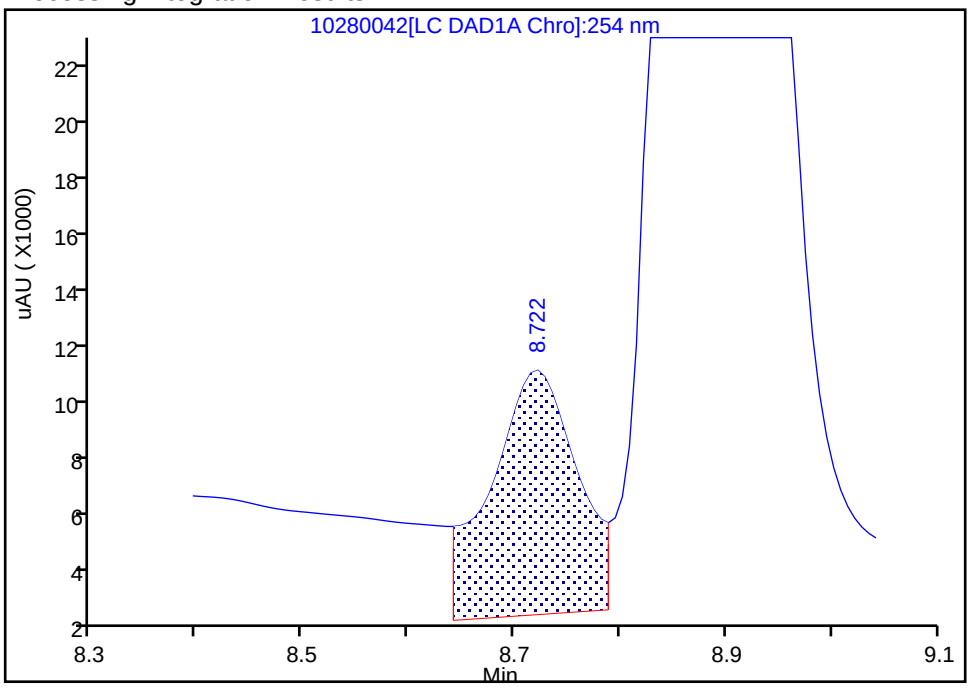
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D				
Injection Date:	29-Oct-2019 02:23:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

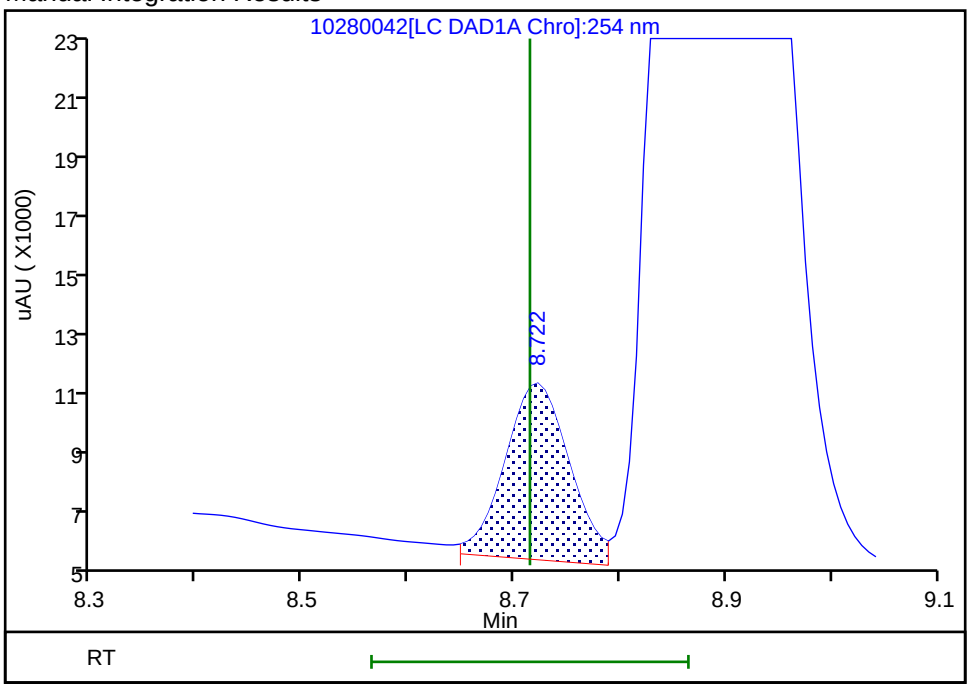
Processing Integration Results

RT: 8.72
Area: 46263
Amount: 0.332043
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 24144
Amount: 0.173288
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:53:59

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

User Disabled Compound Report

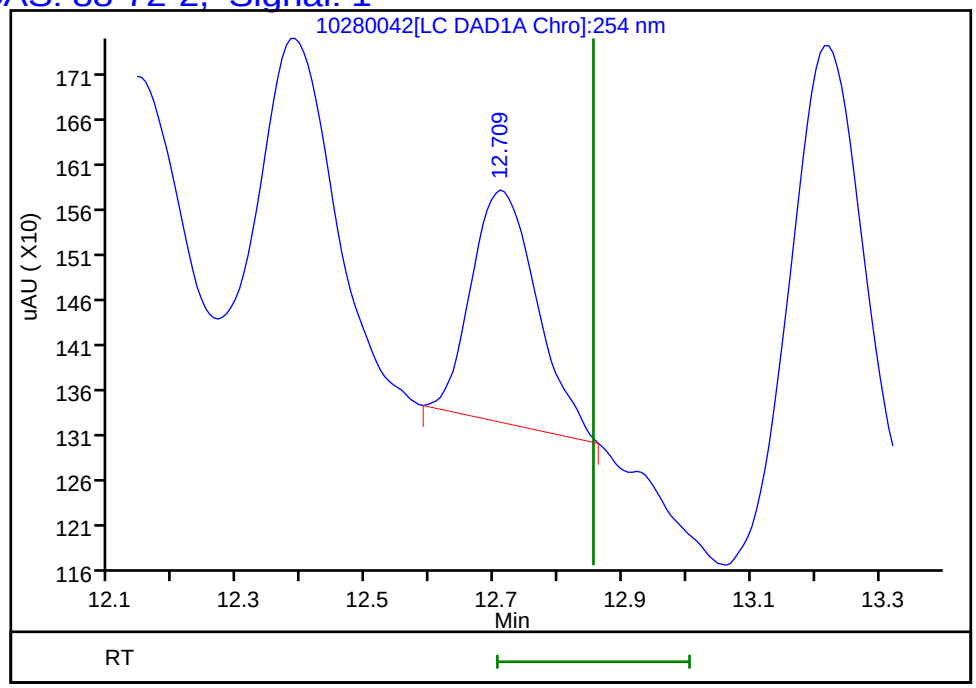
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D

Injection Date:	29-Oct-2019 02:23:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.71
Response: 1838
Amount: 0.014162



Reviewer: beckerc, 29-Oct-2019 10:55:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

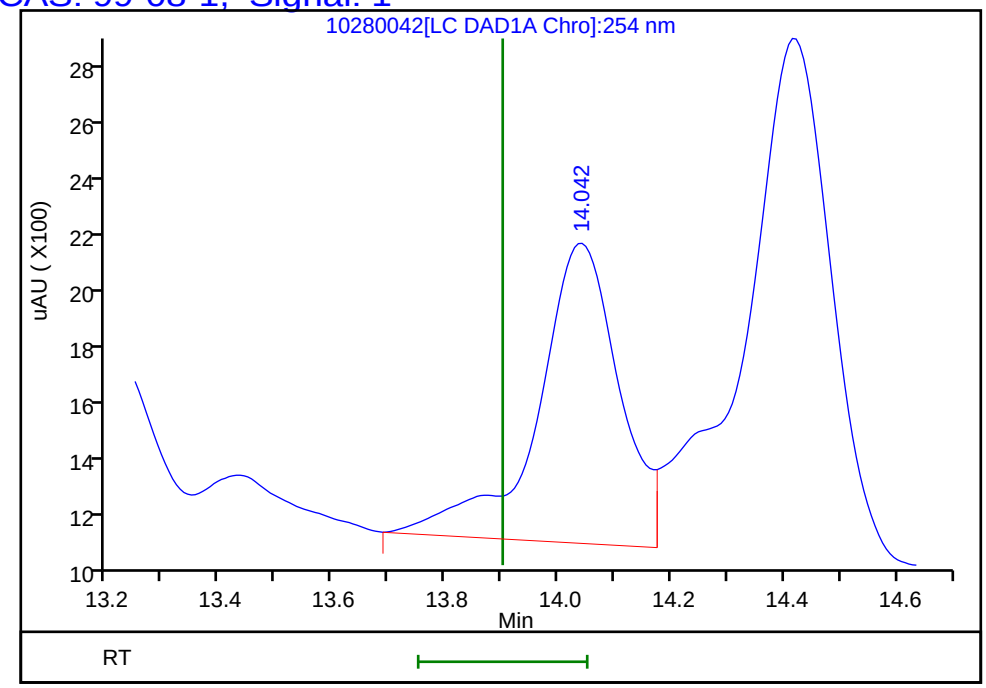
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D				
Injection Date:	29-Oct-2019 02:23:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.04
Response: 10918
Amount: 0.075233



Reviewer: beckerc, 29-Oct-2019 10:55:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

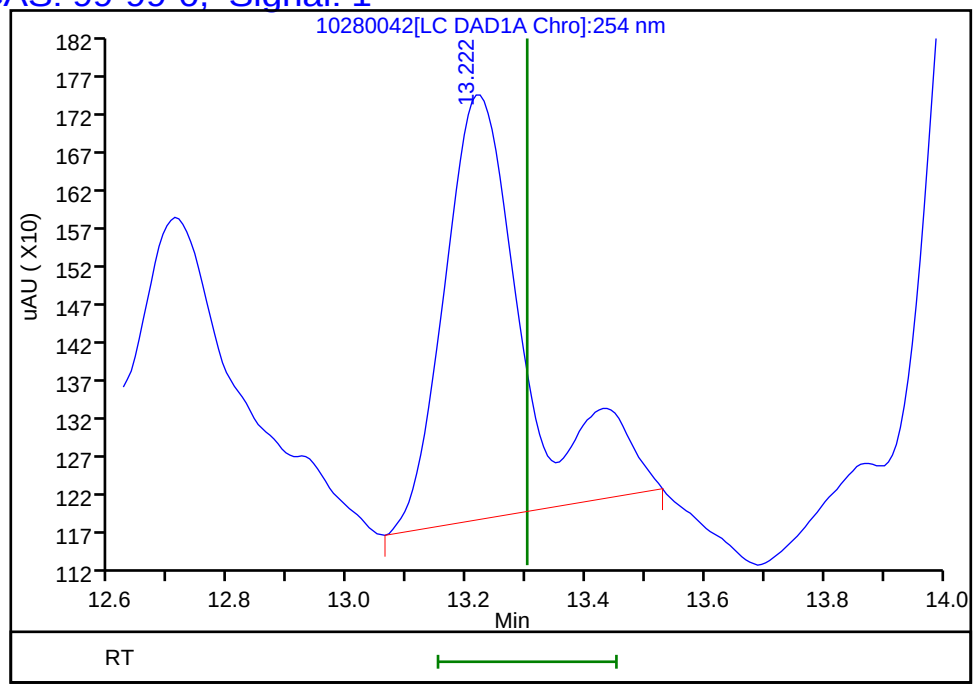
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D

Injection Date:	29-Oct-2019 02:23:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.22
Response: 5249
Amount: 0.047608



Reviewer: beckerc, 29-Oct-2019 10:55:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

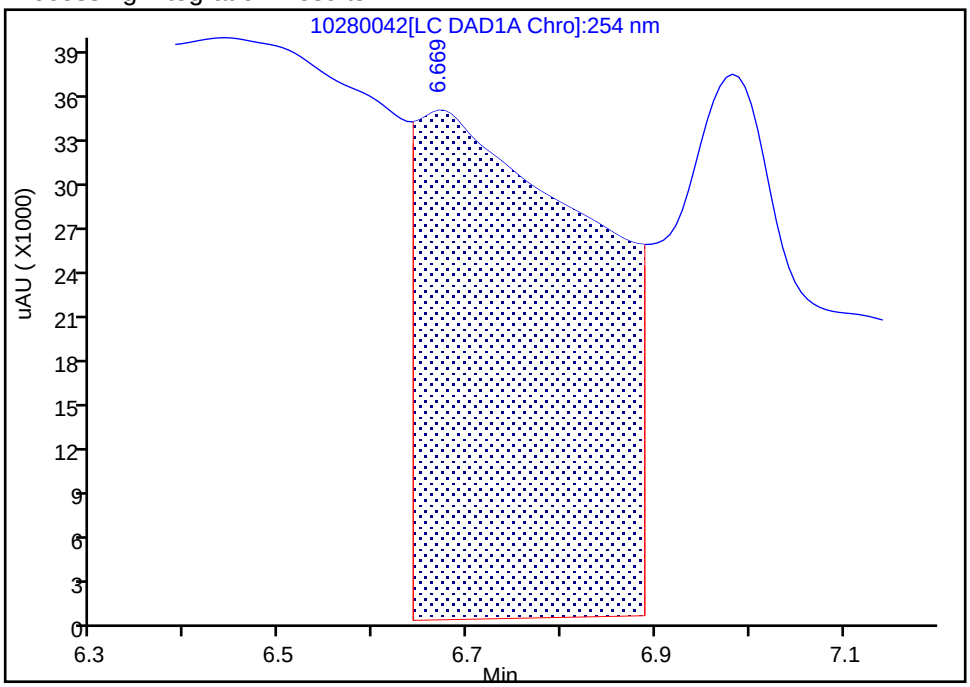
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D				
Injection Date:	29-Oct-2019 02:23:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

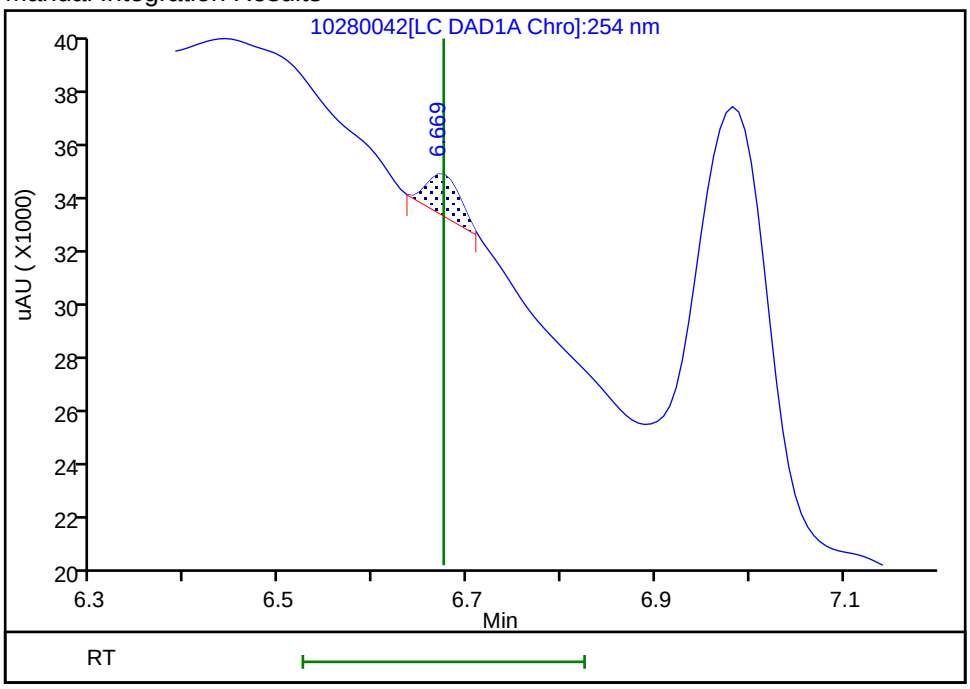
Processing Integration Results

RT: 6.67
Area: 431868
Amount: 4.702741
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 3635
Amount: 0.039583
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:52:55

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

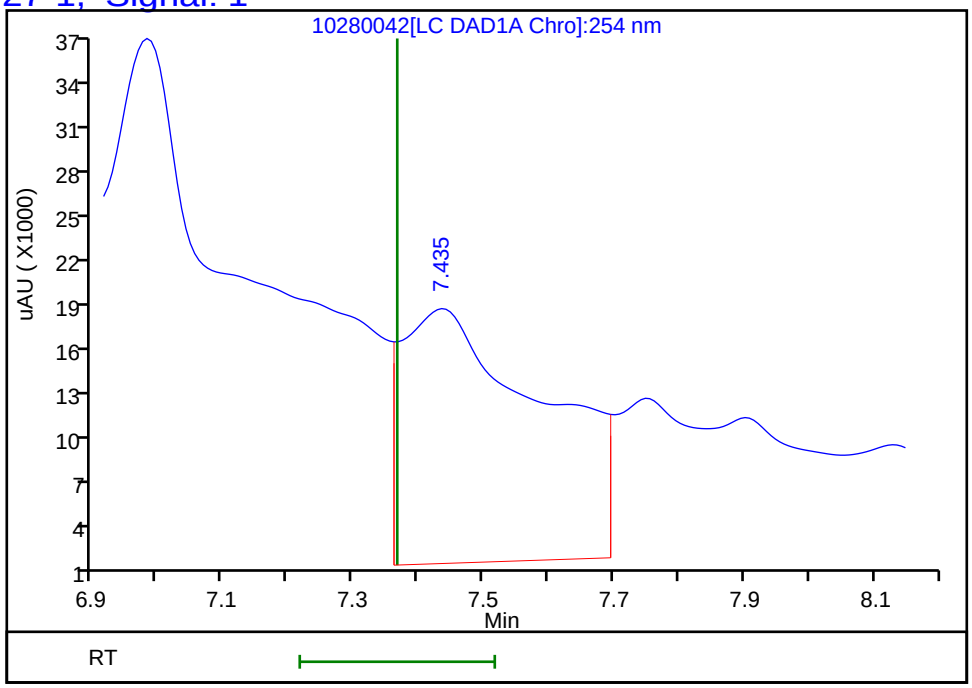
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D
Injection Date: 29-Oct-2019 02:23:36 Instrument ID: CHHPLC_X3
Lims ID: 280-129936-A-4-A Lab Sample ID: 280-129936-4
Client ID: EW7-PM24B-1-35
Operator ID: CB ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.44
Response: 257636
Amount: 1.839719



Reviewer: beckerc, 29-Oct-2019 10:55:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

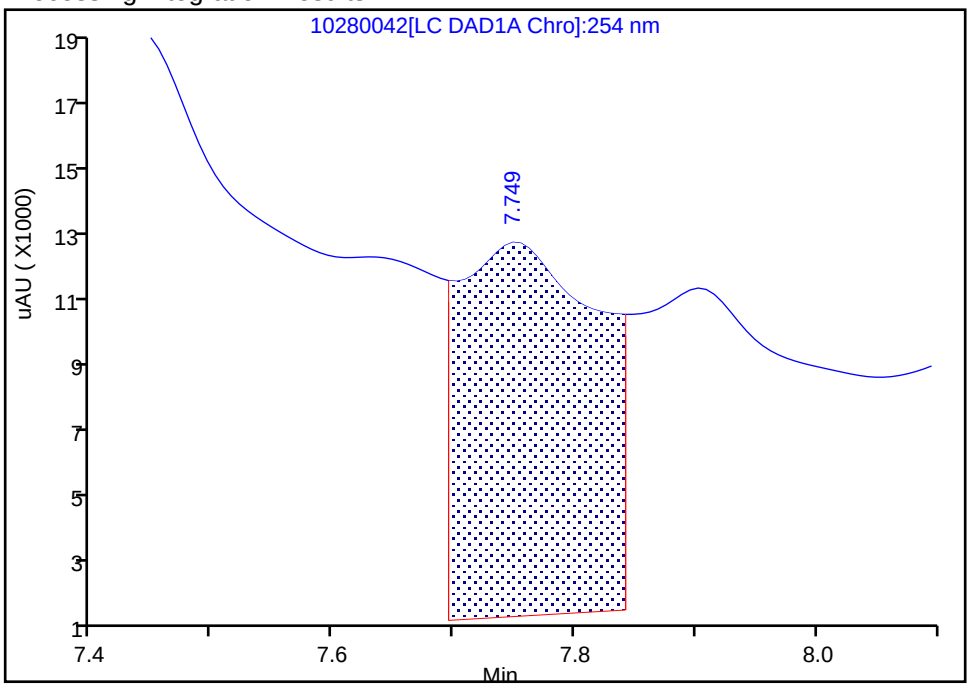
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D				
Injection Date:	29-Oct-2019 02:23:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

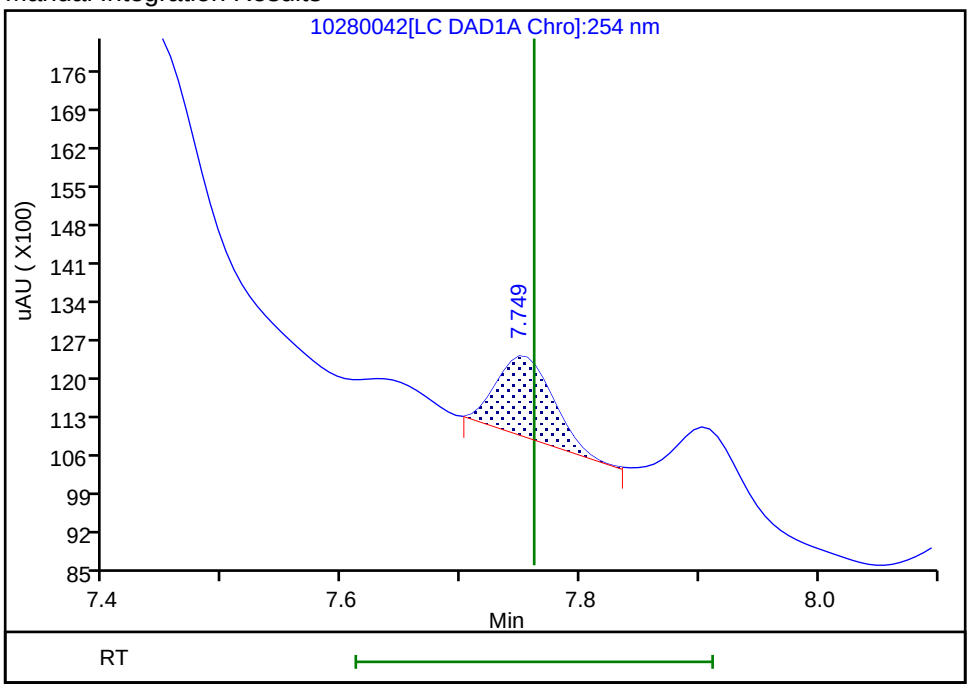
Processing Integration Results

RT: 7.75
Area: 84052
Amount: 0.756405
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 4868
Amount: 0.043808
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:53:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

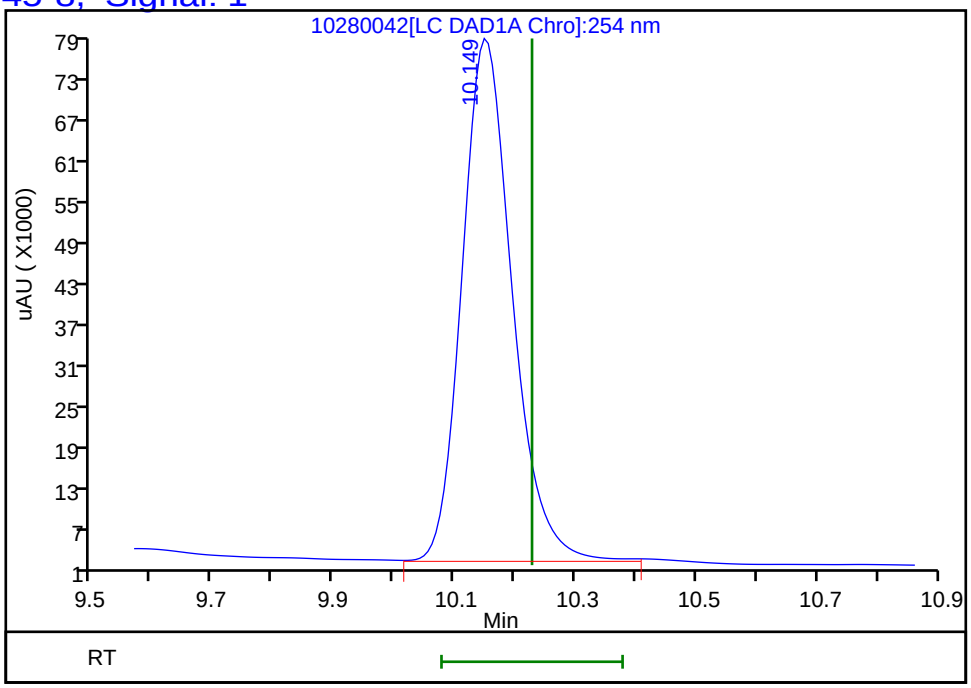
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280042.D
Injection Date: 29-Oct-2019 02:23:36 Instrument ID: CHHPLC_X3
Lims ID: 280-129936-A-4-A Lab Sample ID: 280-129936-4
Client ID: EW7-PM24B-1-35
Operator ID: CB ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.15
Response: 440187
Amount: 2.717921



Reviewer: beckerc, 29-Oct-2019 10:55:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM24B-1-35 Lab Sample ID: 280-129936-4

Matrix: Water Lab File ID: 10300027.D

Analysis Method: 8330A Date Collected: 10/19/2019 09:55

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 529.6(mL) Date Analyzed: 10/31/2019 00:55

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.19	U M	0.38	0.19	0.084
121-14-2	2,4-Dinitrotoluene	0.19	U M	0.38	0.19	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300027.D
Lims ID: 280-129936-A-4-A
Client ID: EW7-PM24B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 00:55:47 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-4-A
Misc. Info.: 280-0086641-027
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:35 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 15:46:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.050	7.059	-0.009	11125	0.0516	M
	7 MNX	1	7.990	7.989	0.001	820	NC	
	8 RDX	1	9.224	9.259	-0.035	10310	0.0295	
	9 Nitrobenzene	1	12.210	12.232	-0.022	29416	0.0578	
$	10 1,2-Dinitrobenzene	1	13.157	13.172	-0.015	61208	0.1991	M
	12 1,3-Dinitrobenzene	1		15.705			ND	U
	14 o-Nitrotoluene	1	16.684	16.705	-0.021	16611	0.0595	
	15 p-Nitrotoluene	1		16.992			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.297	17.305	-0.008	94727	0.2915	
	17 m-Nitrotoluene	1		17.919			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.164	18.199	-0.035	122431	0.2663	
	19 1,3,5-Trinitrobenzene	1	19.050	19.059	-0.009	1840954	3.72	E
	20 2,6-Dinitrotoluene	1		19.985			ND	
	21 2,4-Dinitrotoluene	1		20.479			ND	U
	22 Tetryl	1		23.732			ND	U
	23 2,4,6-Trinitrotoluene	1	24.824	24.832	-0.008	497070	1.11	

QC Flag Legend

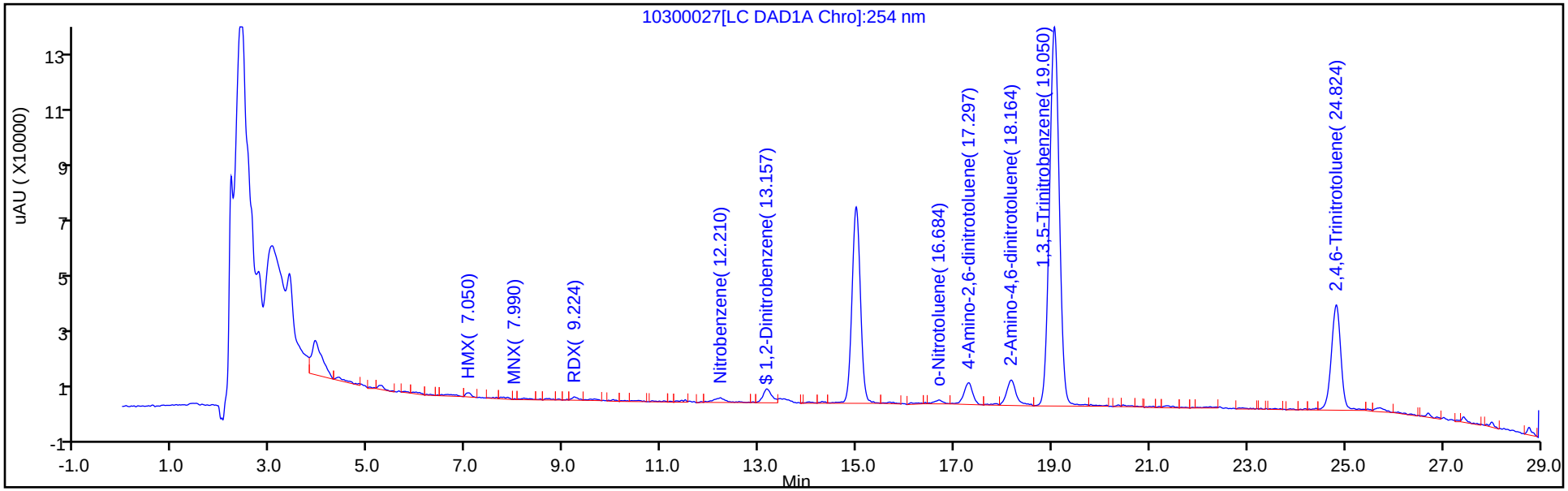
Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Oct-2019 16:27:39 Chrom Revision: 2.3 09-Oct-2019 11:13:36

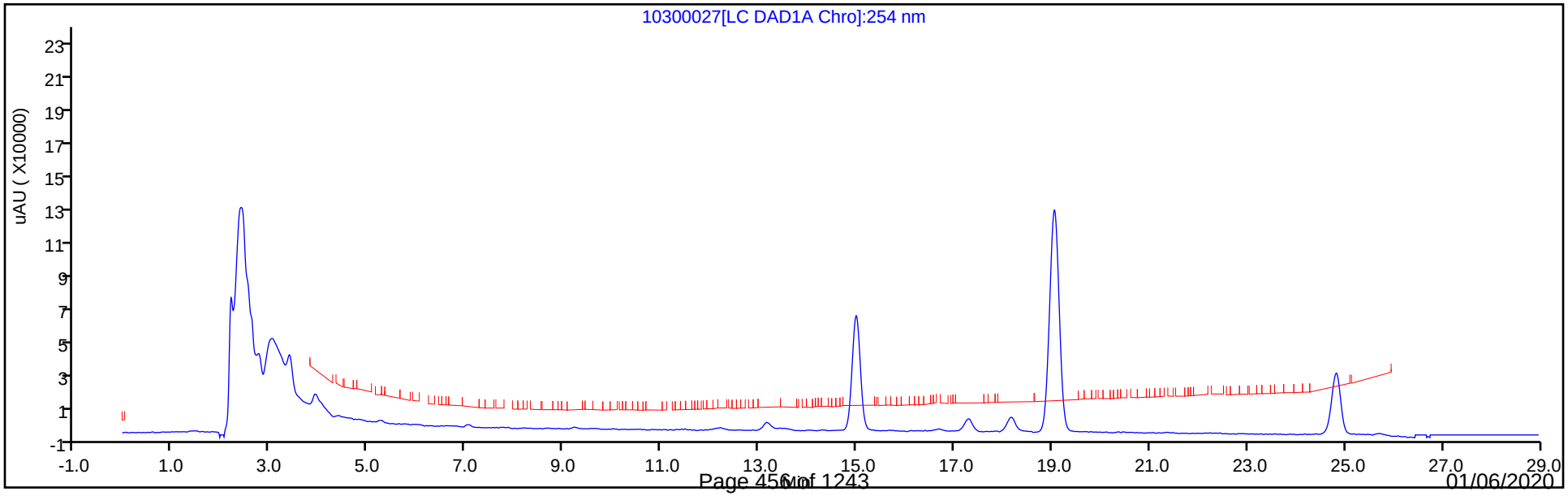
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300027.D				
Injection Date:	31-Oct-2019 00:55:47	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4	Worklist Smp#:	27
Client ID:	EW7-PM24B-1-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300027.D				
Lims ID:	280-129936-A-4-A				
Client ID:	EW7-PM24B-1-35				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 00:55:47	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-4-A				
Misc. Info.:	280-0086641-027				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:35	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				
First Level Reviewer: beckerc		Date:	31-Oct-2019 15:46:30		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1991	99.57

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

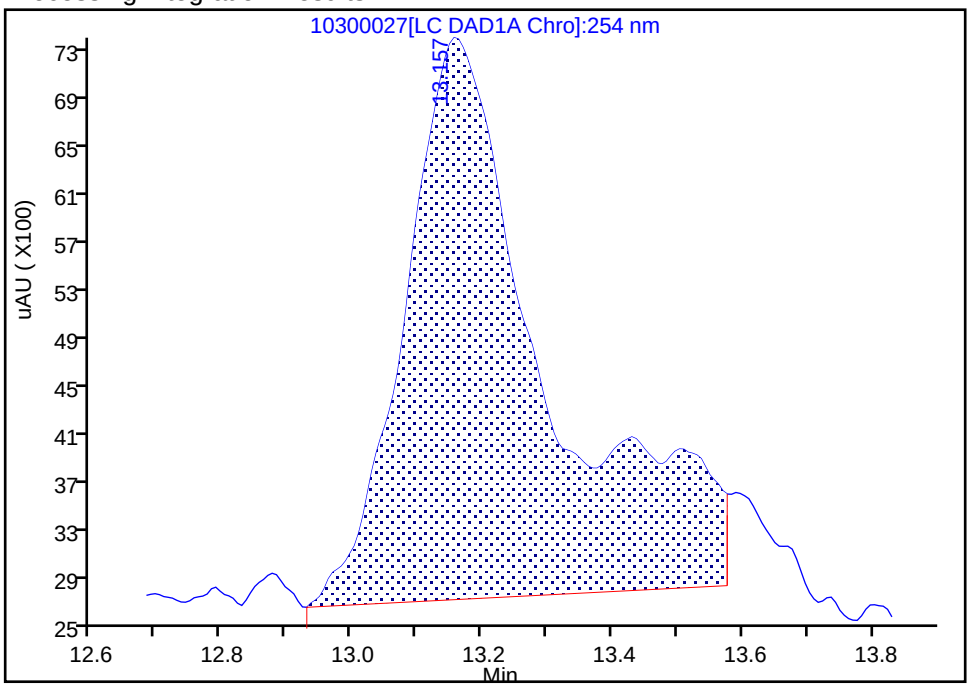
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300027.D				
Injection Date:	31-Oct-2019 00:55:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

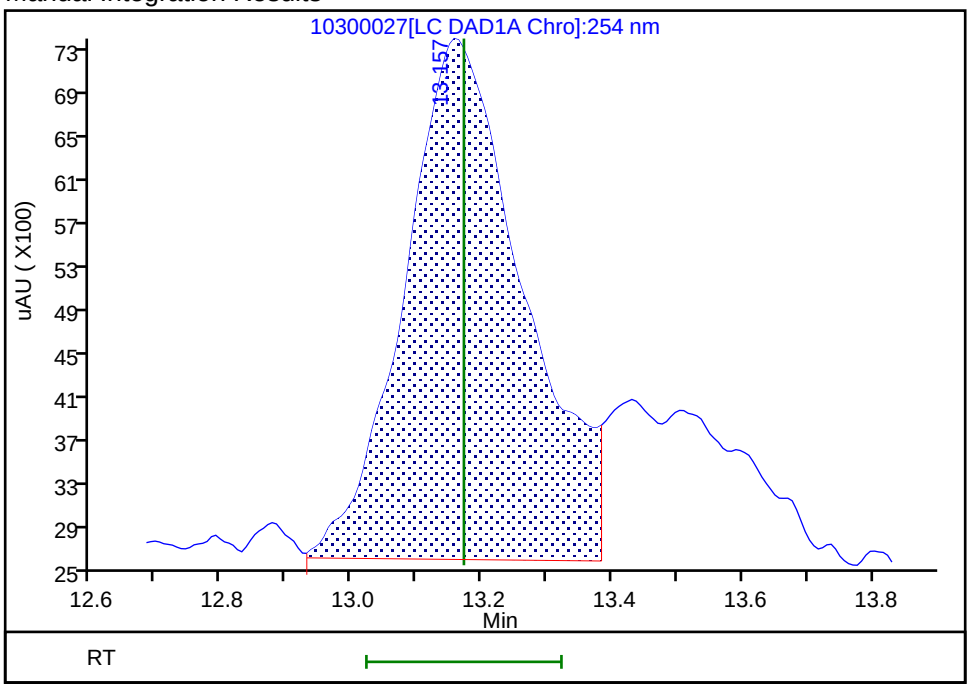
Processing Integration Results

RT: 13.16
Area: 70677
Amount: 0.233697
Amount Units: ug/ml



Manual Integration Results

RT: 13.16
Area: 61208
Amount: 0.199139
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 15:45:53

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

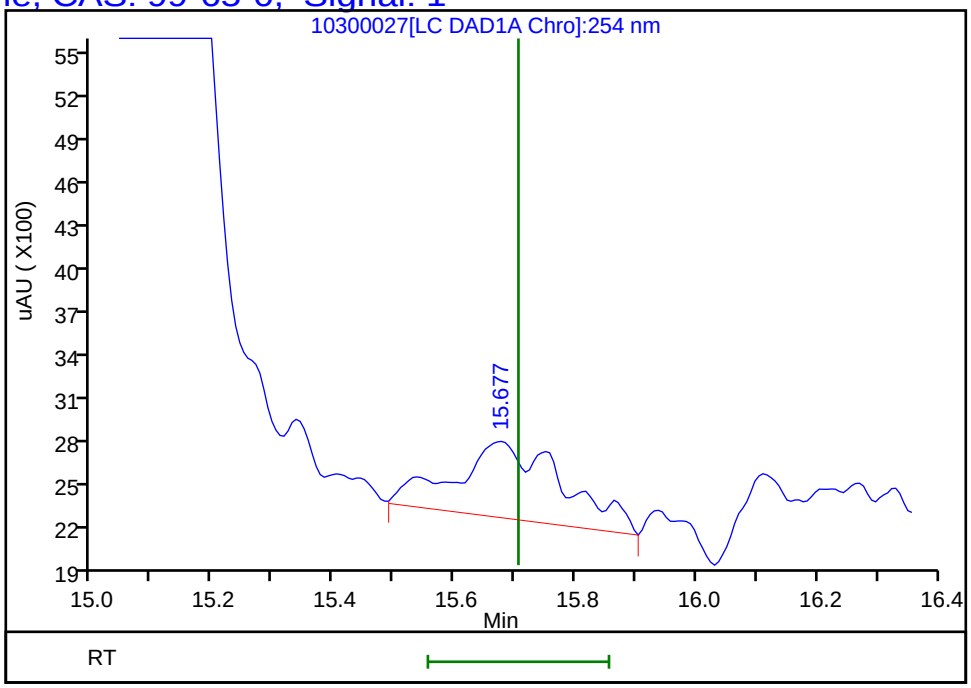
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300027.D				
Injection Date:	31-Oct-2019 00:55:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.68
Response: 6709
Amount: 0.010201



Reviewer: beckerc, 31-Oct-2019 15:46:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

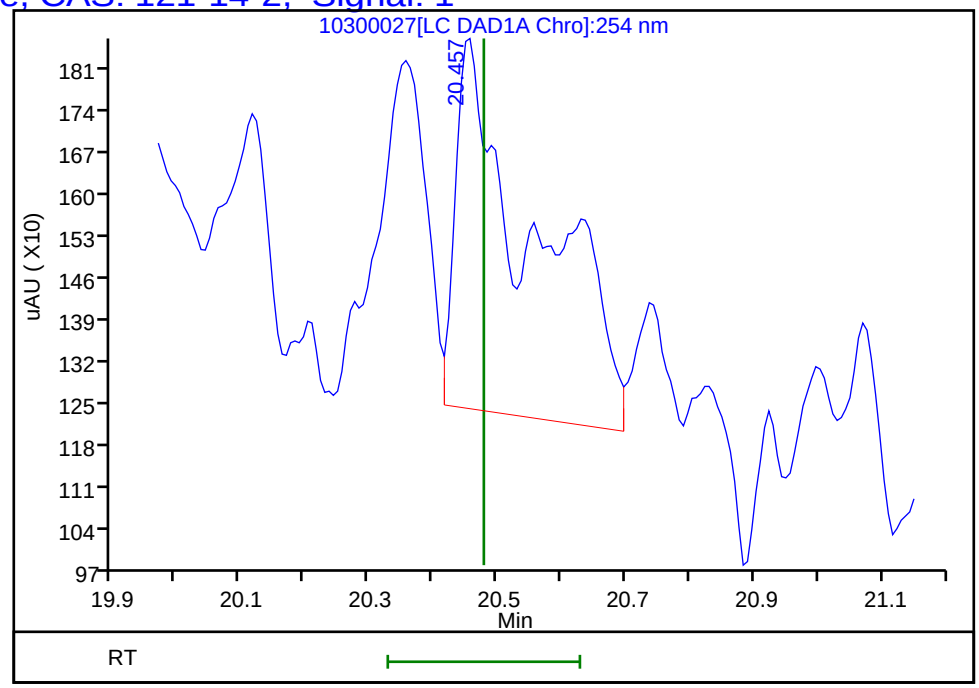
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300027.D				
Injection Date:	31-Oct-2019 00:55:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.46
Response: 5330
Amount: 0.008750



Reviewer: beckerc, 31-Oct-2019 15:46:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

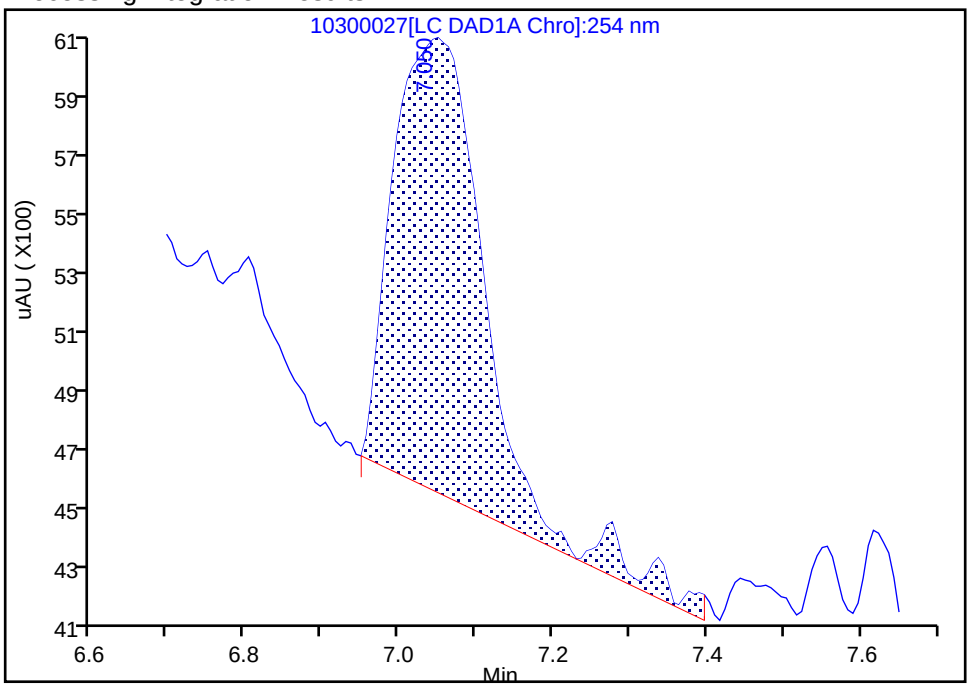
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300027.D				
Injection Date:	31-Oct-2019 00:55:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

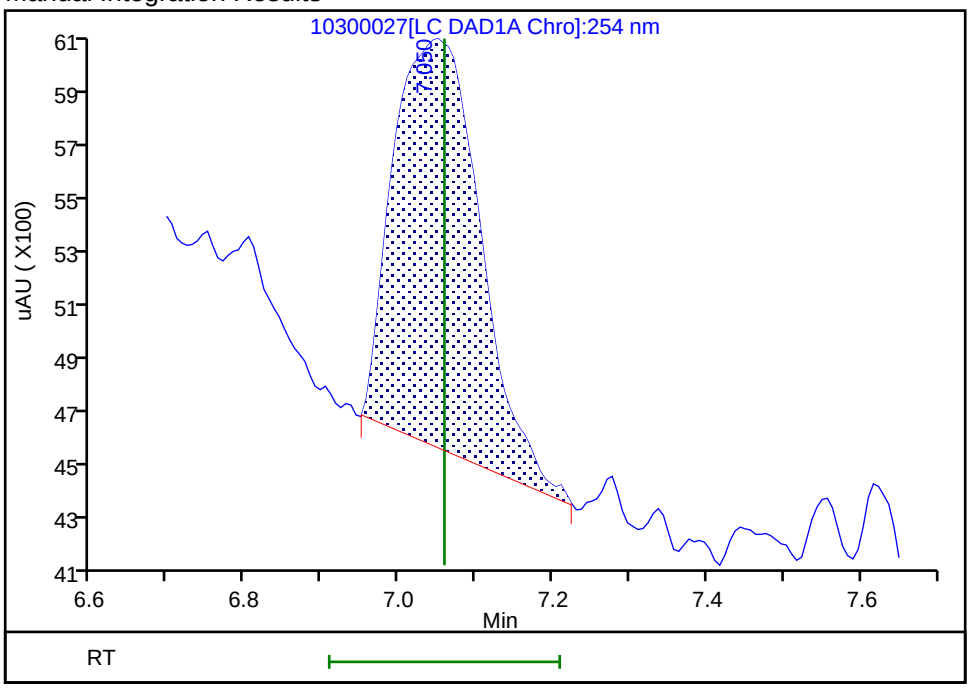
Processing Integration Results

RT: 7.05
Area: 11922
Amount: 0.055244
Amount Units: ug/ml



Manual Integration Results

RT: 7.05
Area: 11125
Amount: 0.051551
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 15:45:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

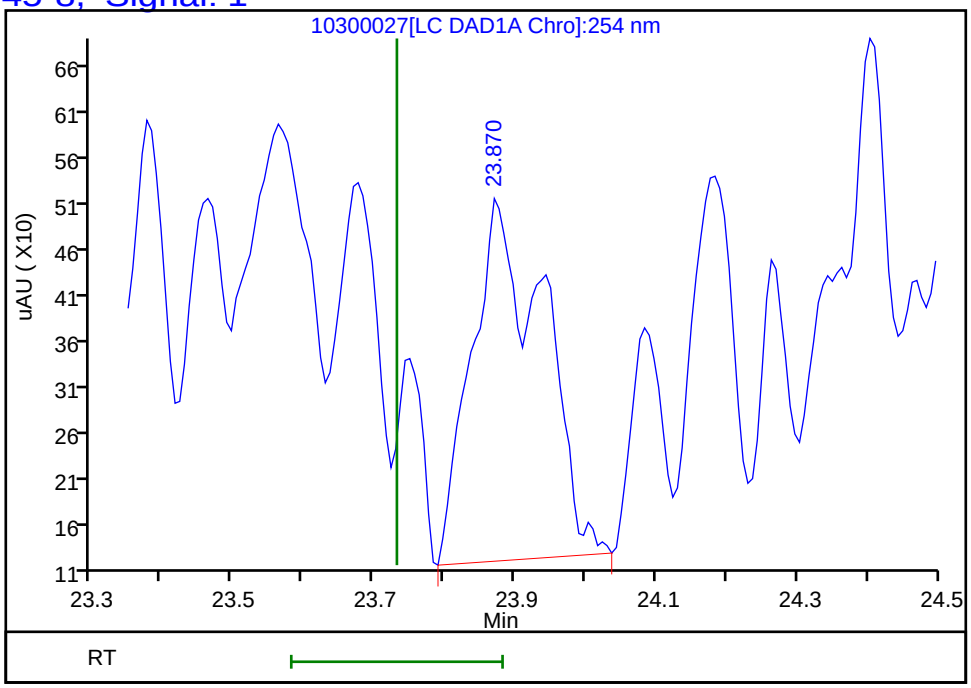
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300027.D				
Injection Date:	31-Oct-2019 00:55:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8, Signal: 1

RT: 23.87
Response: 2751
Amount: 0.007774



Reviewer: beckerc, 31-Oct-2019 15:46:30
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.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM24B-1-35 DL Lab Sample ID: 280-129936-4 DL

Matrix: Water Lab File ID: 10300028.D

Analysis Method: 8330A Date Collected: 10/19/2019 09:55

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 529.6(mL) Date Analyzed: 10/31/2019 01:30

Con. Extract Vol.: 5(mL) Dilution Factor: 20

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	0	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D
Lims ID: 280-129936-A-4-A
Client ID: EW7-PM24B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 01:30:44 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 20.0000
Sample Info: 280-129936-A-4-A
Misc. Info.: 280-0086641-028
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:35 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 15:47:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		7.059			ND	U
7 MNX	1	8.053	7.989	0.064	1351	NC	
8 RDX	1		9.259			ND	U
9 Nitrobenzene	1		12.232			ND	
$ 10 1,2-Dinitrobenzene	1		13.172			ND(<0)	
12 1,3-Dinitrobenzene	1		15.705			ND	
14 o-Nitrotoluene	1		16.705			ND	U
15 p-Nitrotoluene	1		16.992			ND	U
16 4-Amino-2,6-dinitrotoluene	1		17.305			ND	
17 m-Nitrotoluene	1		17.919			ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.199			ND	U
19 1,3,5-Trinitrobenzene	1	19.059	19.059	0.000	95551	0.1933	
20 2,6-Dinitrotoluene	1		19.985			ND	
21 2,4-Dinitrotoluene	1		20.479			ND	U
22 Tetryl	1		23.732			ND	U
23 2,4,6-Trinitrotoluene	1	24.813	24.832	-0.019	33248	0.0372	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

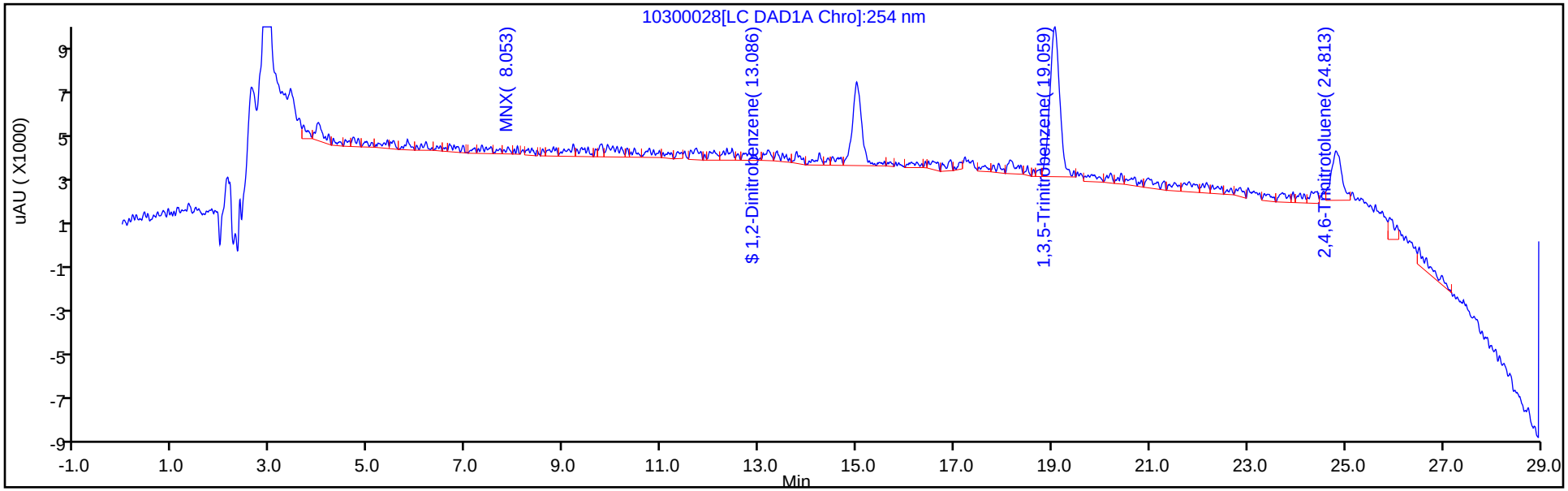
Report Date: 31-Oct-2019 16:27:40 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

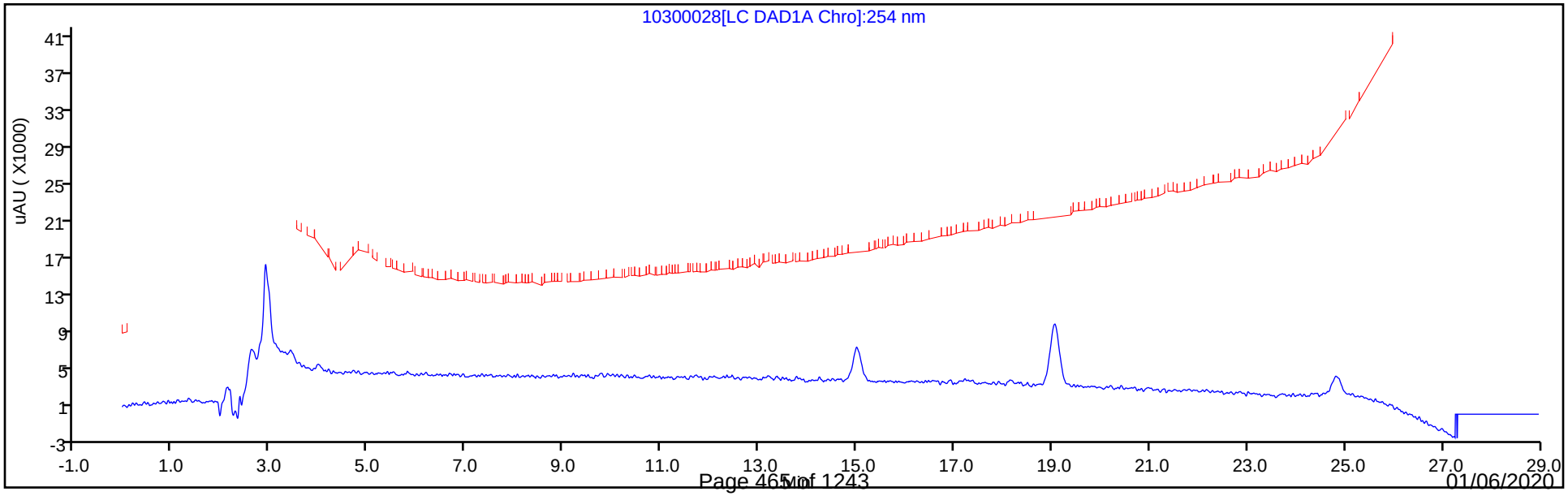
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D

Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4	Worklist Smp#:	28
Client ID:	EW7-PM24B-1-35				
Injection Vol:	100.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	28
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

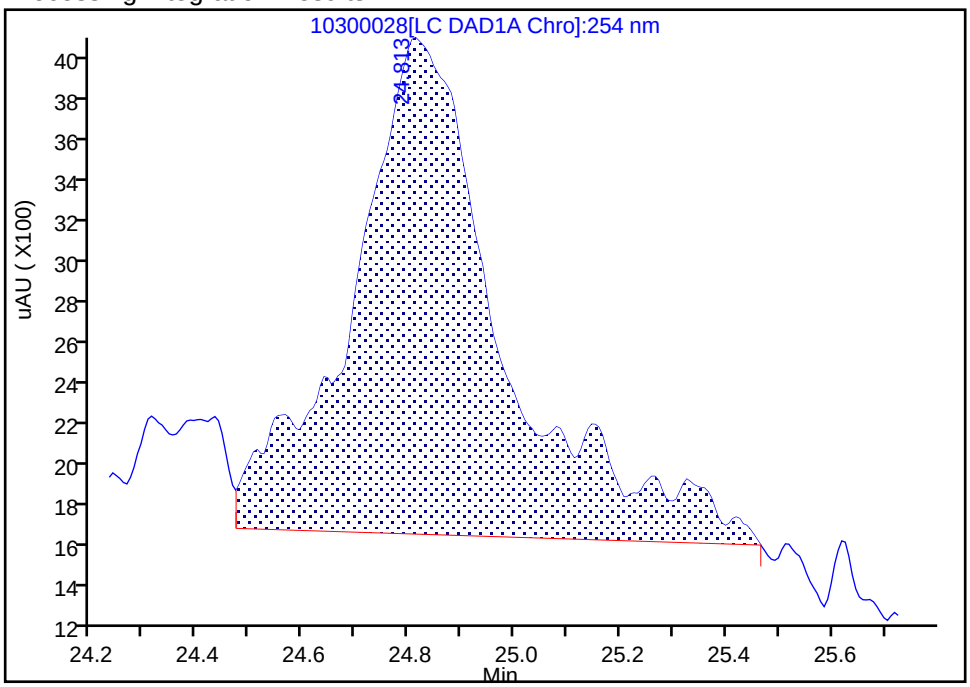
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

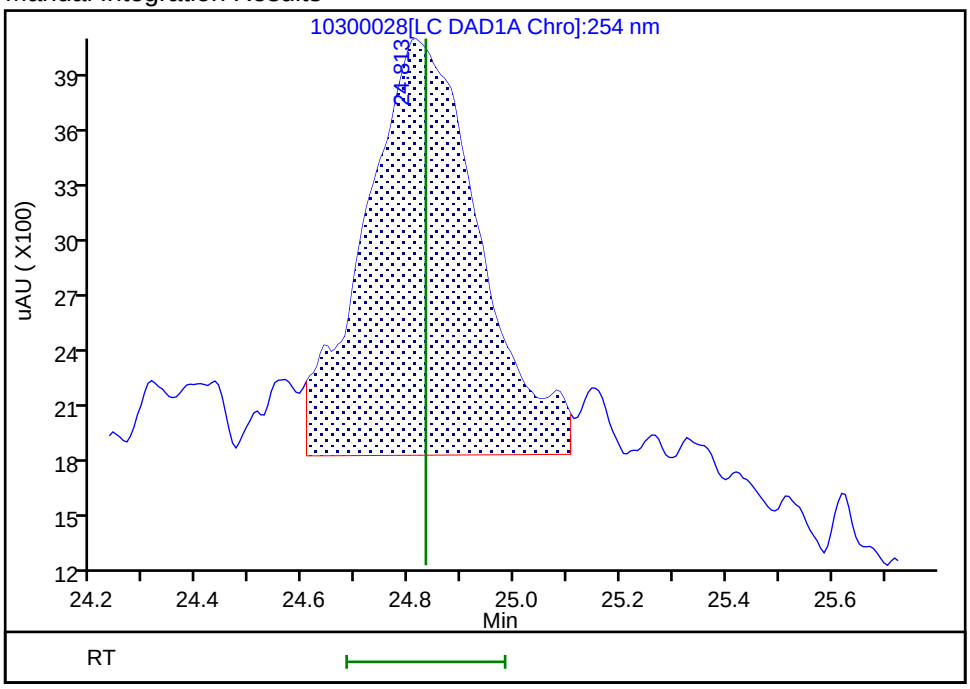
Processing Integration Results

RT: 24.81
Area: 47523
Amount: 0.070094
Amount Units: ug/ml



Manual Integration Results

RT: 24.81
Area: 33248
Amount: 0.037168
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 15:47:10

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

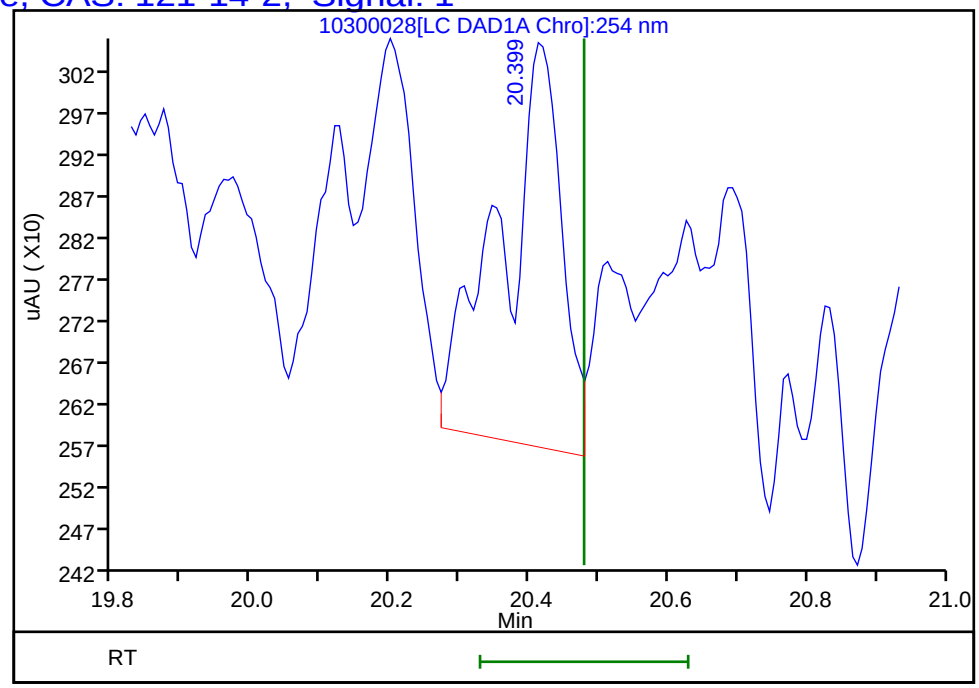
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.40
Response: 2943
Amount: 0.004831



Reviewer: beckerc, 31-Oct-2019 15:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

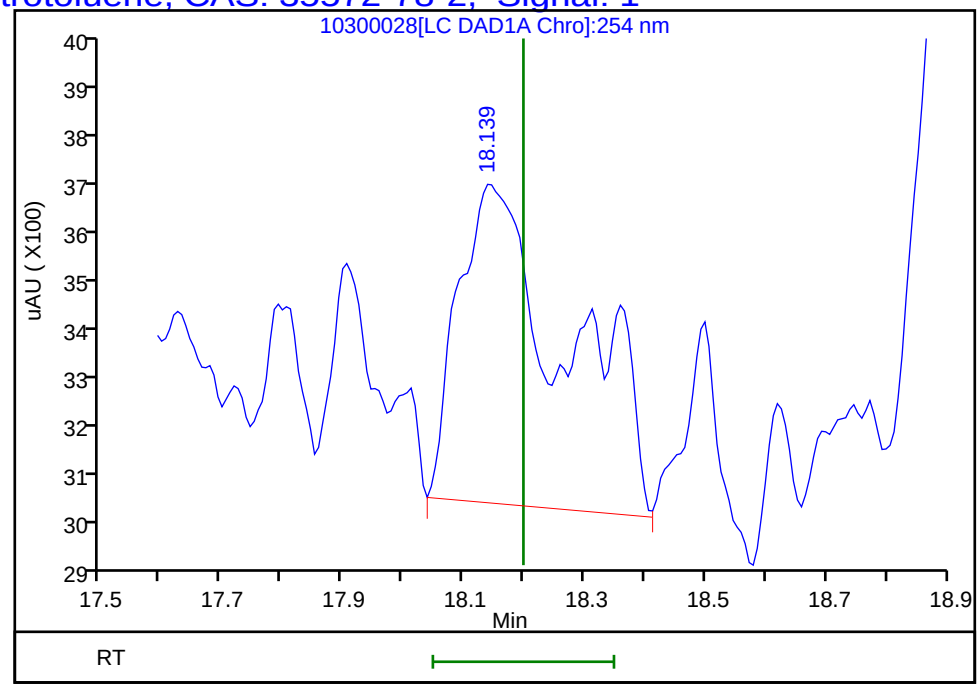
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 18.14
Response: 7746
Amount: 0.016847



Reviewer: beckerc, 31-Oct-2019 15:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

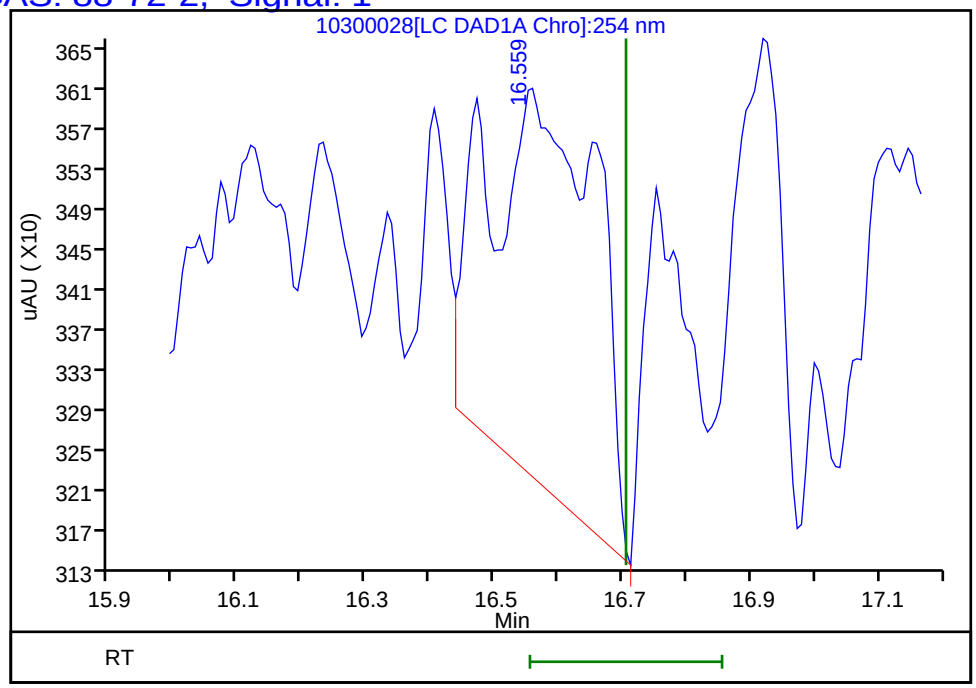
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 16.56
Response: 4542
Amount: 0.016271



Reviewer: beckerc, 31-Oct-2019 15:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

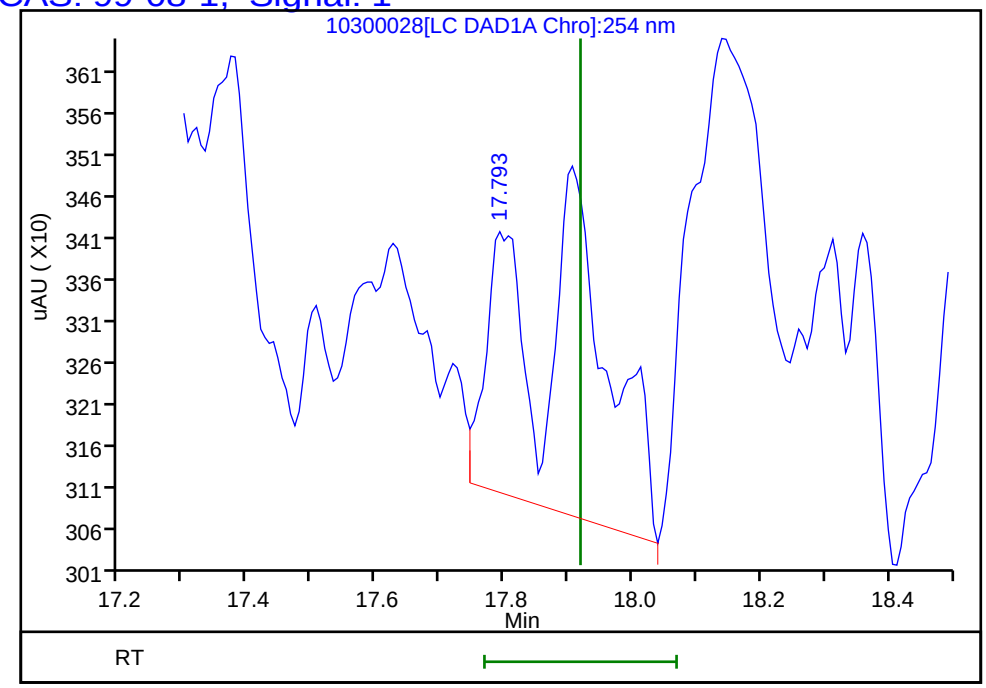
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 17.79
Response: 3552
Amount: NaN



Reviewer: beckerc, 31-Oct-2019 15:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

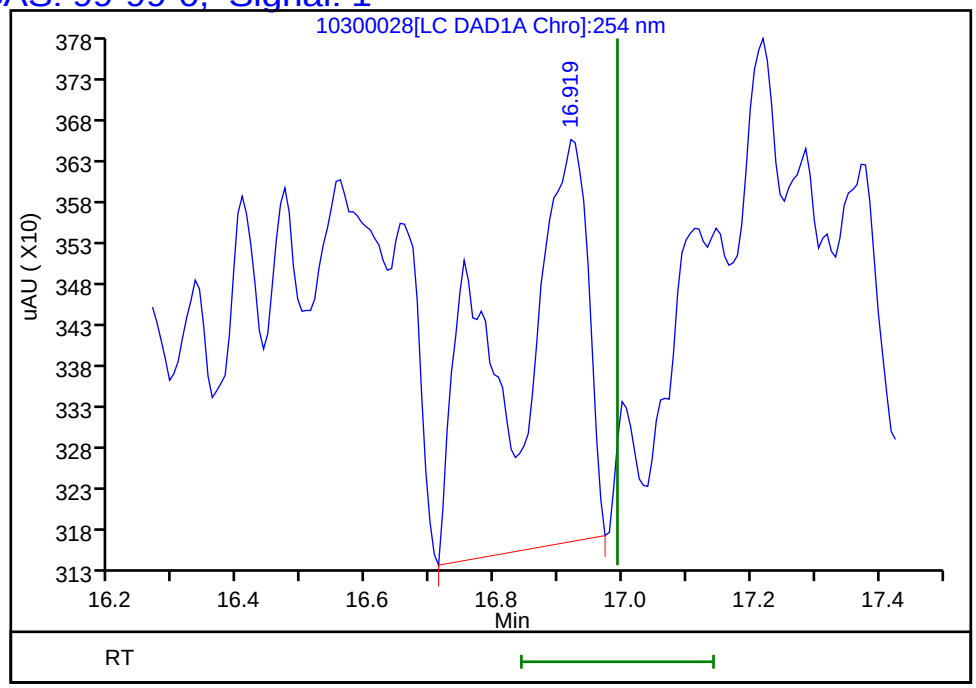
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 16.92
Response: 4172
Amount: 0.018666



Reviewer: beckerc, 31-Oct-2019 15:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

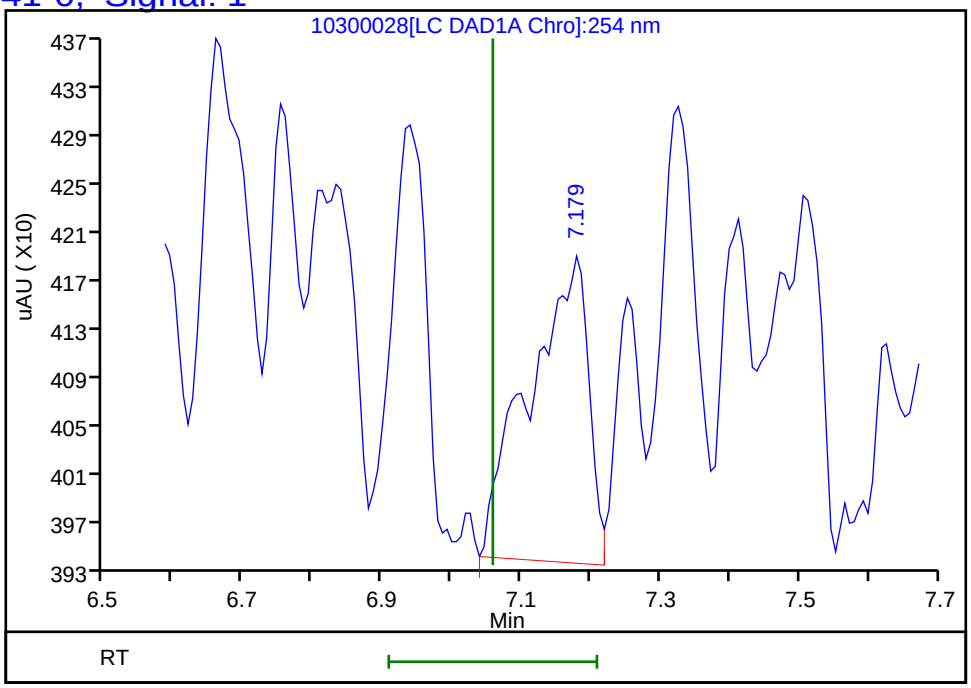
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 7.18
Response: 1467
Amount: 0.006798



Reviewer: beckerc, 31-Oct-2019 15:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

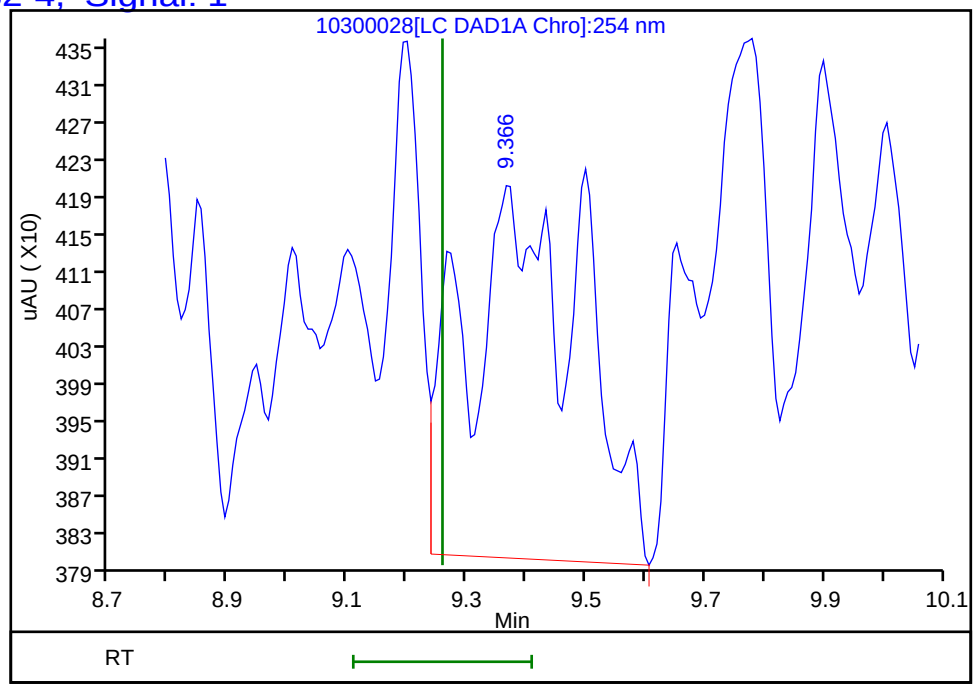
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 5396
Amount: 0.007569



Reviewer: beckerc, 31-Oct-2019 15:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

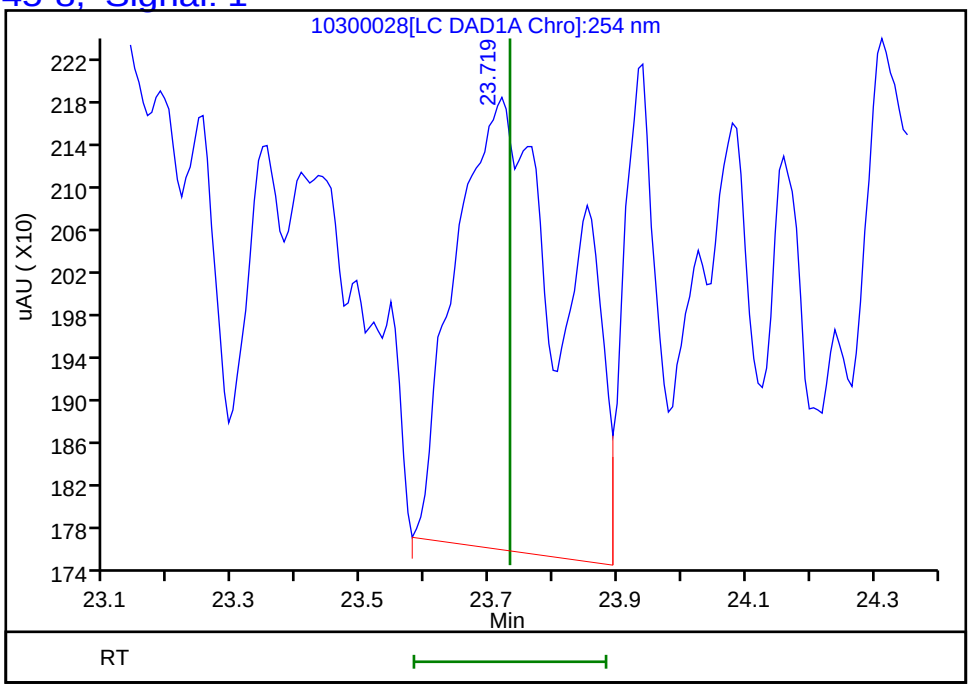
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300028.D				
Injection Date:	31-Oct-2019 01:30:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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
Response: 5041
Amount: 0.014246



Reviewer: beckerc, 31-Oct-2019 15:47:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM24B-1-35 DL Lab Sample ID: 280-129936-4 DL

Matrix: Water Lab File ID: 10310025.D

Analysis Method: 8330A Date Collected: 10/19/2019 09:55

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 529.6(mL) Date Analyzed: 10/31/2019 20:23

Con. Extract Vol.: 5(mL) Dilution Factor: 20

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 476053 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	38	Q D	19	7.6	3.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	78	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310025.D
Lims ID: 280-129936-A-4-A
Client ID: EW7-PM24B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 20:23:14 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 20.0000
Sample Info: 280-129936-A-4-A
Misc. Info.: 280-0086686-025
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 01-Nov-2019 09:13:27 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: CTX0335

First Level Reviewer: beckerc Date: 01-Nov-2019 08:45:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.682			ND	
6 MNX	1	7.480	7.367	0.113	1240	0.008855	M
7 RDX	1		7.756			ND	
$ 9 1,2-Dinitrobenzene	1	8.713	8.716	-0.003	1085	0.007787	
10 1,3,5-Trinitrobenzene	1	8.880	8.882	-0.002	48922	0.1996	
11 1,3-Dinitrobenzene	1		9.529			ND	
12 Nitrobenzene	1		9.915			ND	
14 Tetryl	1	10.140	10.222	-0.082	21367	0.1319	
16 2,4,6-Trinitrotoluene	1	11.187	11.189	-0.002	14021	0.0617	
17 4-Amino-2,6-dinitrotoluene	1		11.355			ND	
18 2-Amino-4,6-dinitrotoluene	1	11.640	11.642	-0.002	2350	0.0115	
19 2,6-Dinitrotoluene	1		11.802			ND	
20 2,4-Dinitrotoluene	1		11.995			ND	
21 o-Nitrotoluene	1		12.842			ND	
22 p-Nitrotoluene	1		13.282			ND	
23 m-Nitrotoluene	1		13.882			ND	

QC Flag Legend

Review Flags
M - Manually Integrated

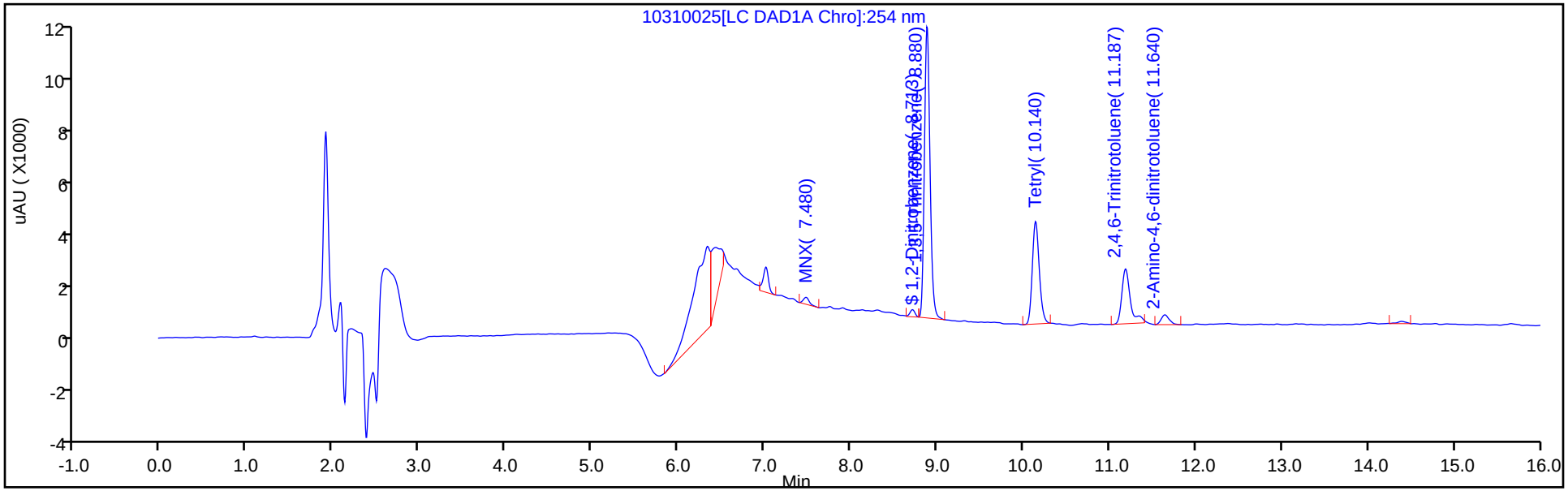
Report Date: 01-Nov-2019 09:13:30 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

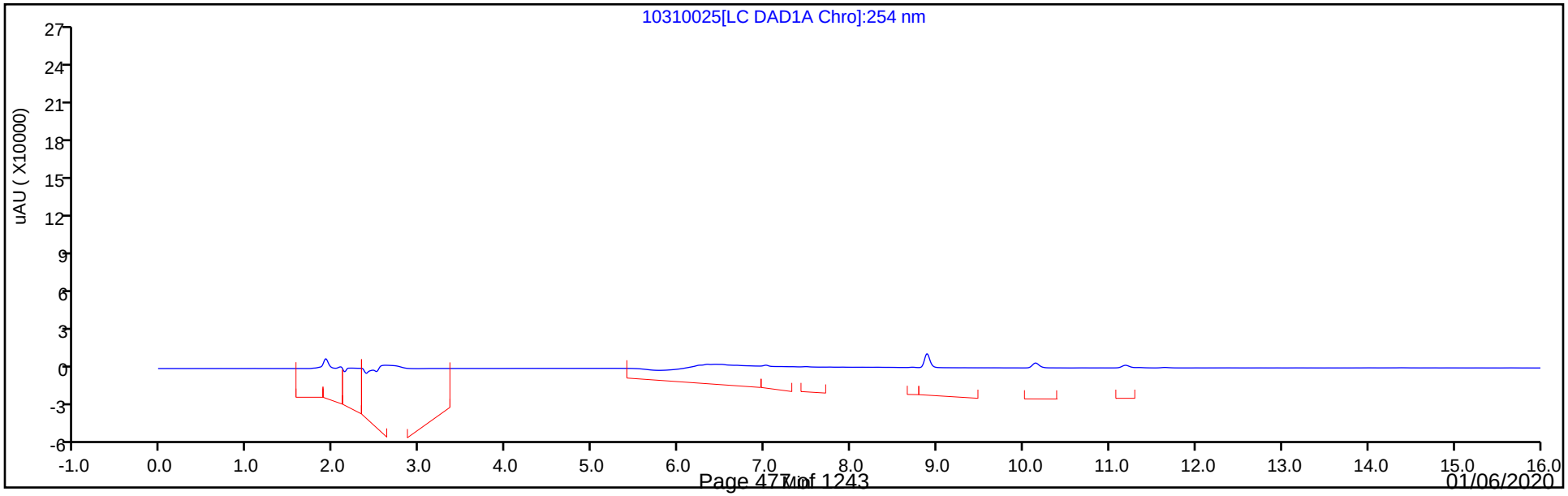
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310025.D

Injection Date:	31-Oct-2019 20:23:14	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4	Worklist Smp#:	25
Client ID:	EW7-PM24B-1-35				
Injection Vol:	100.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310025.D
Lims ID: 280-129936-A-4-A
Client ID: EW7-PM24B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 20:23:14 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 20.0000
Sample Info: 280-129936-A-4-A
Misc. Info.: 280-0086686-025
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 01-Nov-2019 09:13:27 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: CTX0335

First Level Reviewer: beckerc Date: 01-Nov-2019 08:45:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.007787	3.89

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

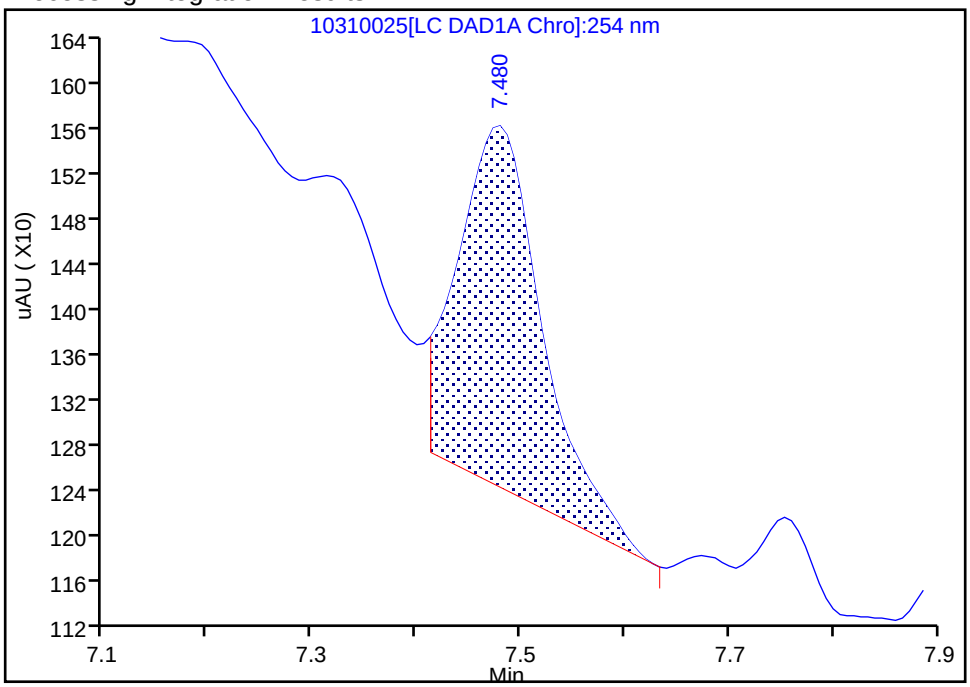
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310025.D				
Injection Date:	31-Oct-2019 20:23:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-4-A	Lab Sample ID:	280-129936-4		
Client ID:	EW7-PM24B-1-35				
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

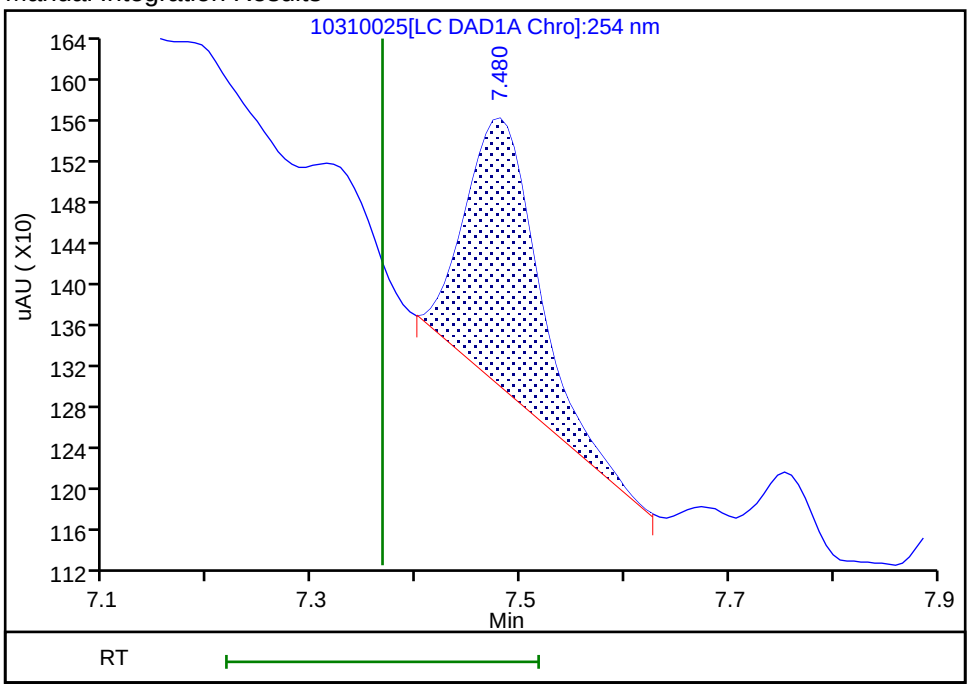
Processing Integration Results

RT: 7.48
Area: 1744
Amount: 0.012453
Amount Units: ug/mL



Manual Integration Results

RT: 7.48
Area: 1240
Amount: 0.008855
Amount Units: ug/mL



Reviewer: beckerc, 01-Nov-2019 08:44:41

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29B-1-35 Lab Sample ID: 280-129936-5

Matrix: Water Lab File ID: 10280043.D

Analysis Method: 8330A Date Collected: 10/19/2019 11:55

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 516.4(mL) Date Analyzed: 10/29/2019 02:46

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	13	Q	0.97	0.39	0.19
99-65-0	1,3-Dinitrobenzene	0.19	U Q	0.39	0.19	0.086
118-96-7	2,4,6-Trinitrotoluene	3.6	Q	0.39	0.39	0.15
121-14-2	2,4-Dinitrotoluene	0.19	U Q	0.39	0.19	0.081
606-20-2	2,6-Dinitrotoluene	0.19	U Q	0.19	0.19	0.062
35572-78-2	2-Amino-4,6-dinitrotoluene	1.3	Q	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 M	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.98	Q	0.19	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U Q M	0.97	0.39	0.19
2691-41-0	HMX	0.32	J Q M J1	0.39	0.19	0.085
5755-27-1	MNX	0.39	U M	1.9	0.39	0.15
98-95-3	Nitrobenzene	0.19	U Q	0.39	0.19	0.088
121-82-4	RDX	0.39	U Q M	0.39	0.39	0.15
479-45-8	Tetryl	0.19	U Q M	0.23	0.19	0.077

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	80	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280043.D
Lims ID: 280-129936-A-5-A
Client ID: EW7-PM29B-1-35
Sample Type: Client
Inject. Date: 29-Oct-2019 02:46:31 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-5-A
Misc. Info.: 280-0086569-043
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:56:19

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.673	6.675	-0.002	3081	0.0335	M
	6 MNX	1		7.367			ND	U
	7 RDX	1		7.761			ND	U
$	9 1,2-Dinitrobenzene	1	8.700	8.715	-0.015	22329	0.1603	
	10 1,3,5-Trinitrobenzene	1	8.867	8.881	-0.014	340000	1.39	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	U
	16 2,4,6-Trinitrotoluene	1	11.180	11.201	-0.021	84695	0.3727	
	17 4-Amino-2,6-dinitrotoluene	1	11.347	11.368	-0.021	16836	0.1012	
	18 2-Amino-4,6-dinitrotoluene	1	11.640	11.661	-0.021	26941	0.1313	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1	11.987	12.008	-0.021	1196	0.003981	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	U
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

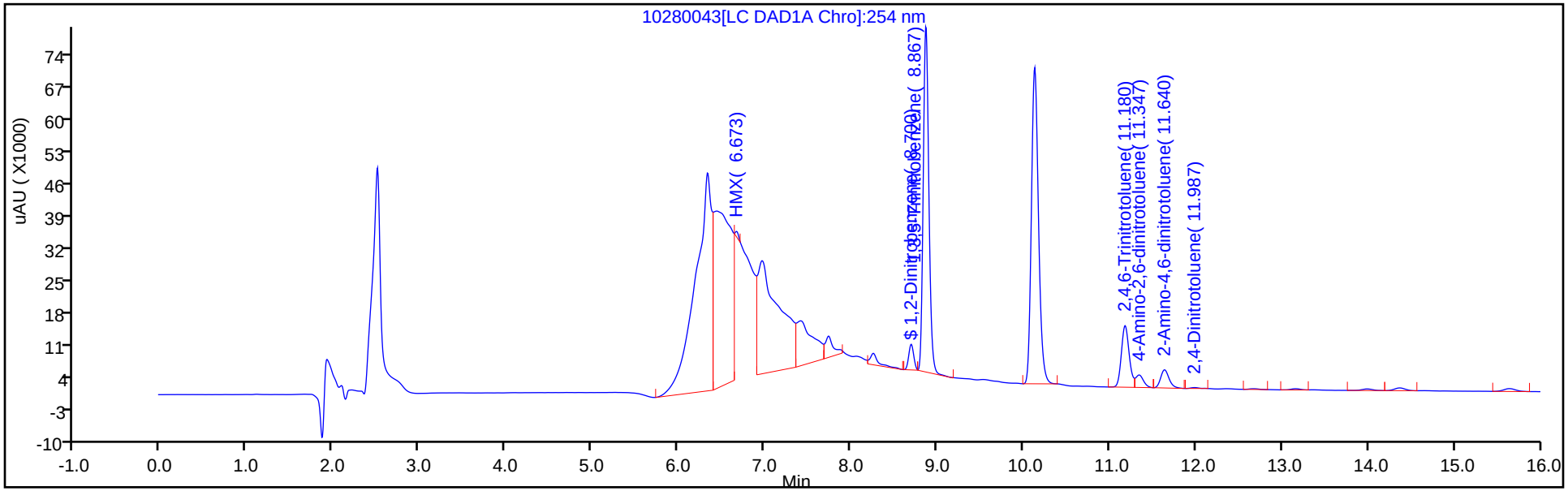
Report Date: 29-Oct-2019 11:54:47 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

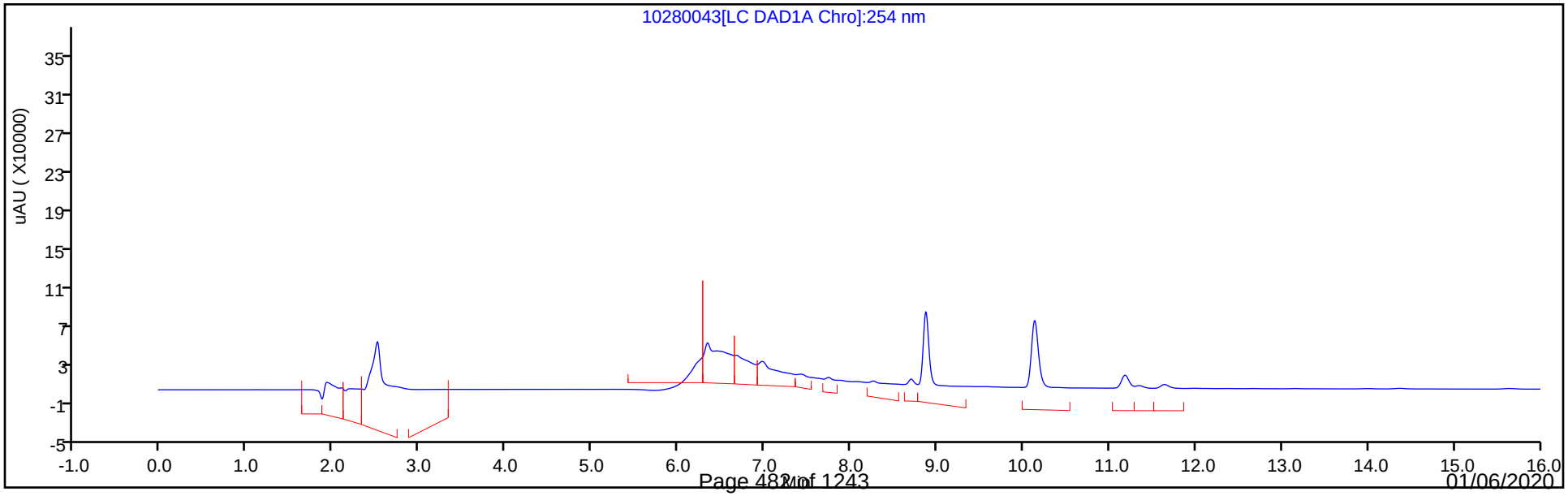
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280043.D

Injection Date:	29-Oct-2019 02:46:31	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5	Worklist Smp#:	43
Client ID:	EW7-PM29B-1-35				
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\20191028-86569.b\10280043.D				
Lims ID:	280-129936-A-5-A				
Client ID:	EW7-PM29B-1-35				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 02:46:31	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-5-A				
Misc. Info.:	280-0086569-043				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:43	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 10:56:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1603	80.13

User Disabled Compound Report

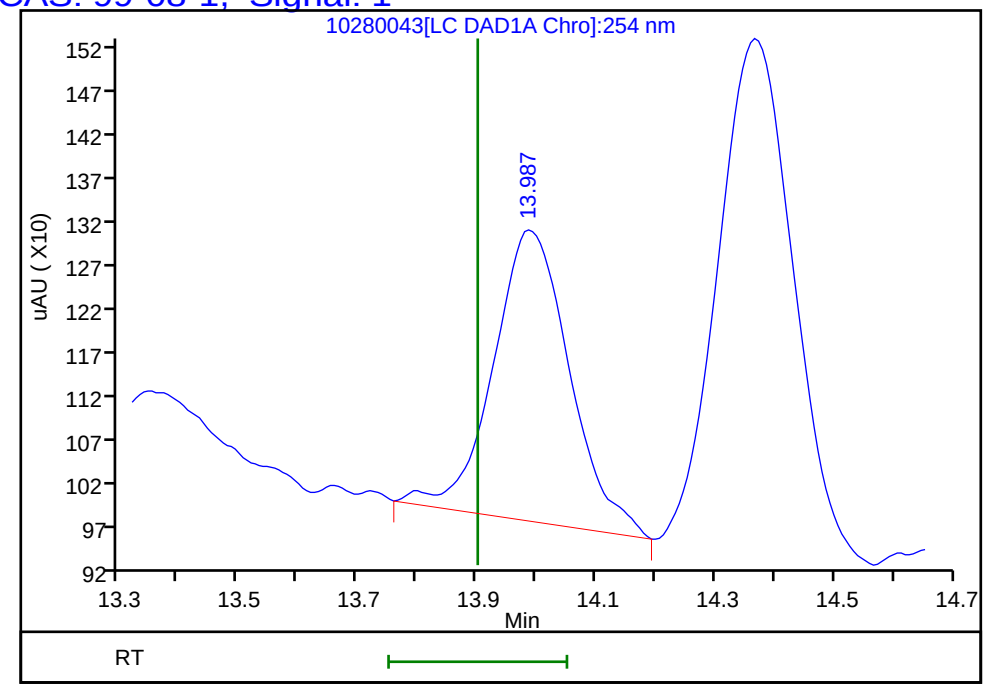
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280043.D
Injection Date: 29-Oct-2019 02:46:31 Instrument ID: CHHPLC_X3
Lims ID: 280-129936-A-5-A Lab Sample ID: 280-129936-5
Client ID: EW7-PM29B-1-35
Operator ID: CB 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: 13.99
Response: 3011
Amount: 0.020748



Reviewer: beckerc, 29-Oct-2019 10:56:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

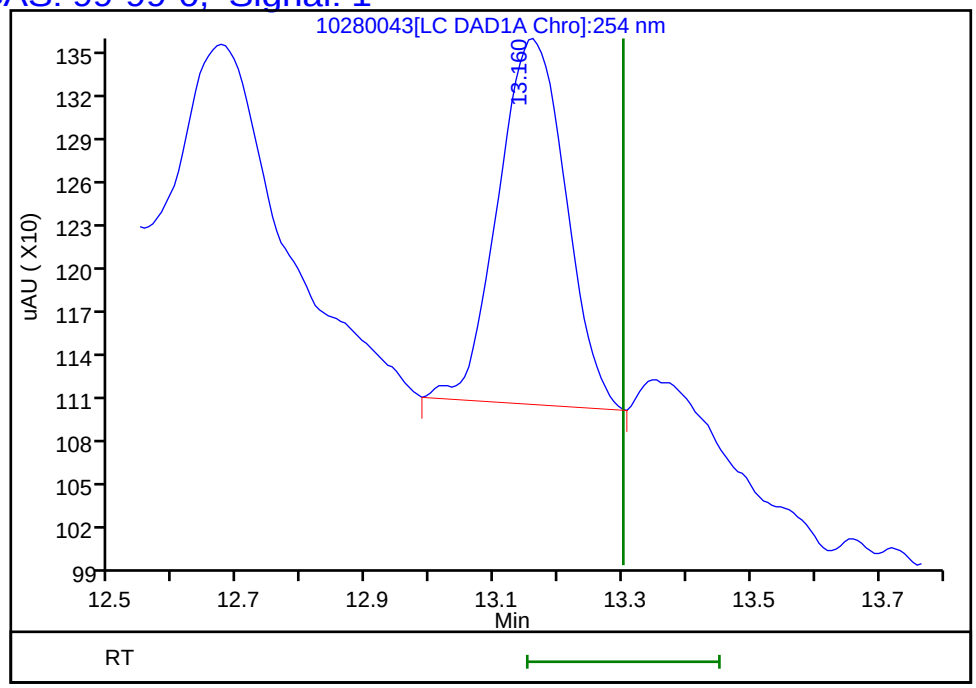
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280043.D
Injection Date: 29-Oct-2019 02:46:31 Instrument ID: CHHPLC_X3
Lims ID: 280-129936-A-5-A Lab Sample ID: 280-129936-5
Client ID: EW7-PM29B-1-35
Operator ID: CB ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.16
Response: 1844
Amount: 0.016725



Reviewer: beckerc, 29-Oct-2019 10:56:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

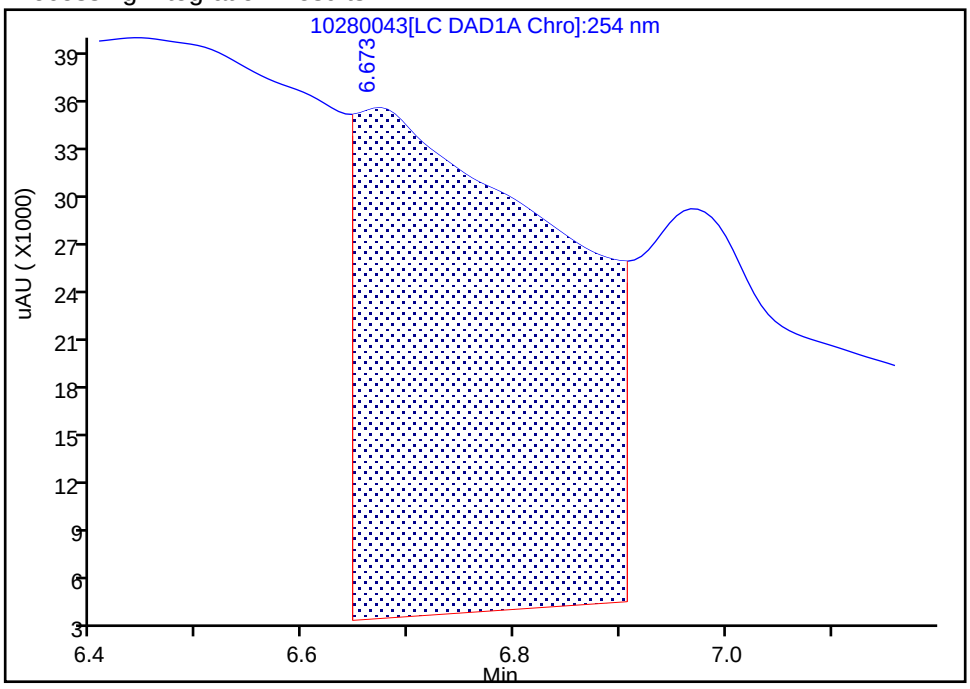
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280043.D				
Injection Date:	29-Oct-2019 02:46:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5		
Client ID:	EW7-PM29B-1-35				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

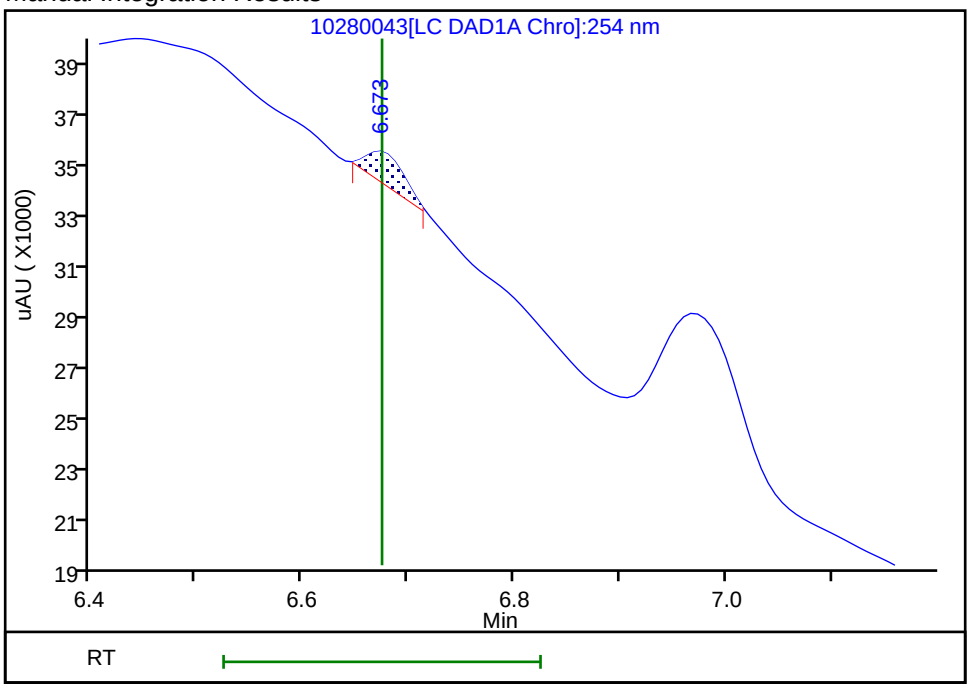
Processing Integration Results

RT: 6.67
Area: 418210
Amount: 4.554015
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 3081
Amount: 0.033550
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:55:26

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

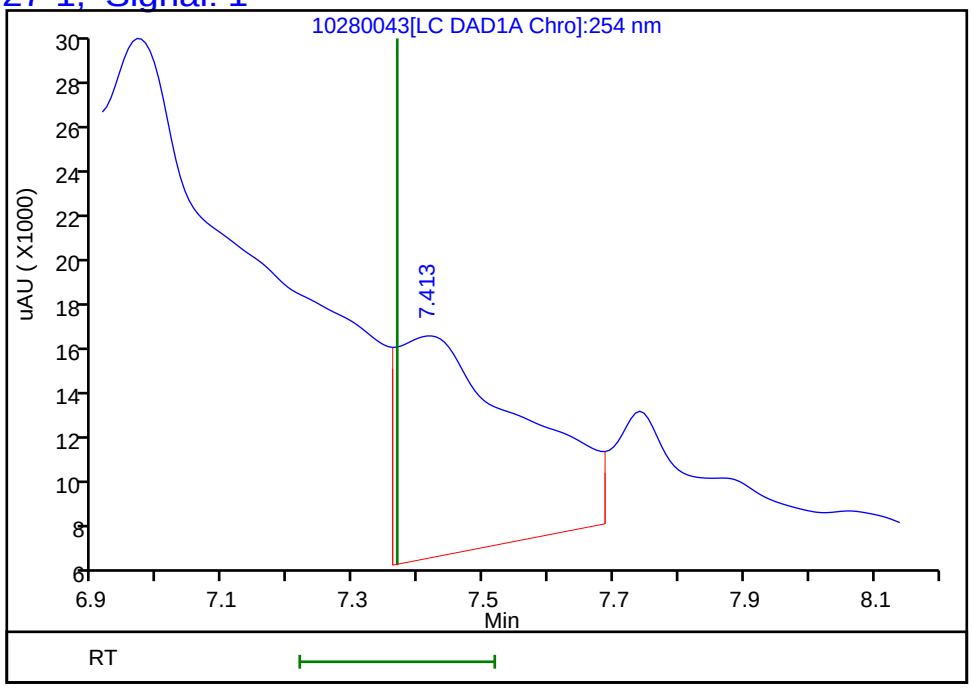
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280043.D
Injection Date: 29-Oct-2019 02:46:31 Instrument ID: CHHPLC_X3
Lims ID: 280-129936-A-5-A Lab Sample ID: 280-129936-5
Client ID: EW7-PM29B-1-35
Operator ID: CB ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.41
Response: 127806
Amount: 0.912633



Reviewer: beckerc, 29-Oct-2019 10:56:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

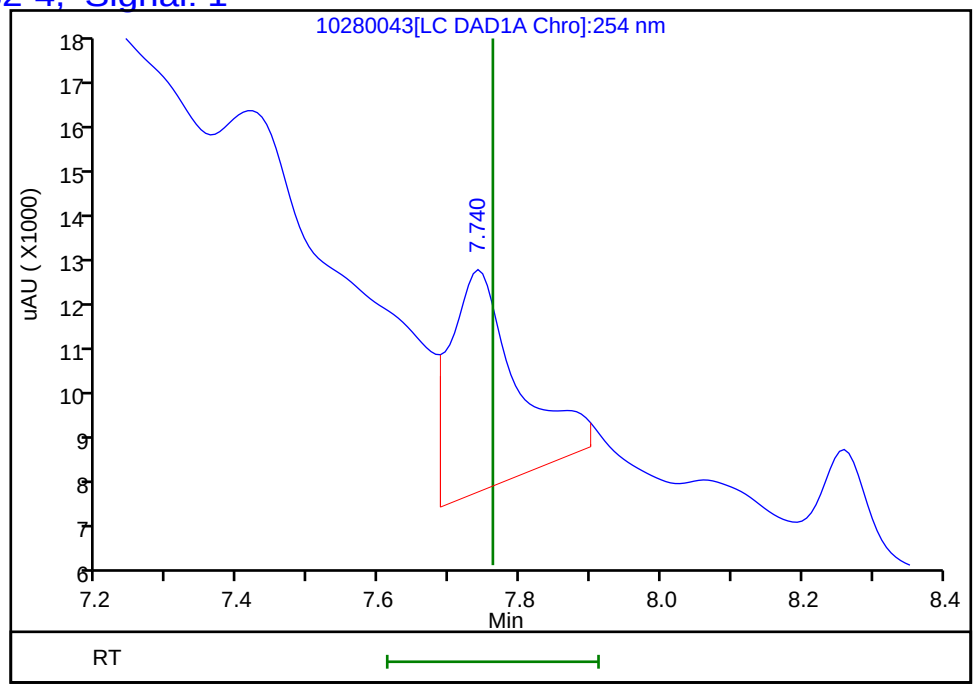
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280043.D

Injection Date:	29-Oct-2019 02:46:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5		
Client ID:	EW7-PM29B-1-35				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.74
Response: 30021
Amount: 0.270166



Reviewer: beckerc, 29-Oct-2019 10:56:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

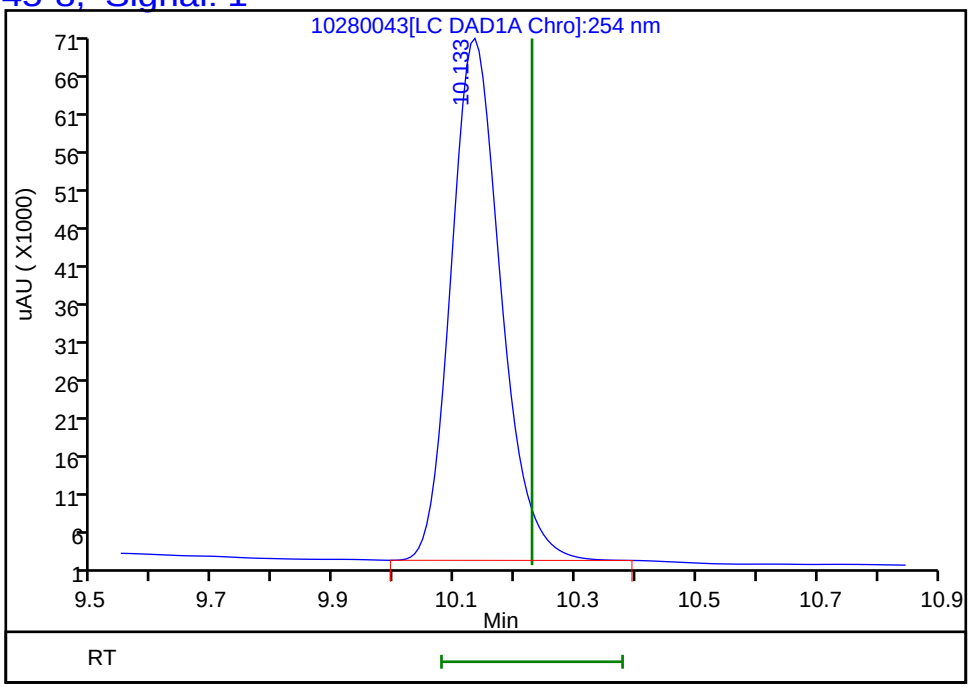
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280043.D				
Injection Date:	29-Oct-2019 02:46:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5		
Client ID:	EW7-PM29B-1-35				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.13
Response: 393294
Amount: 2.428382



Reviewer: beckerc, 29-Oct-2019 10:56:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29B-1-35 Lab Sample ID: 280-129936-5

Matrix: Water Lab File ID: 10300029.D

Analysis Method: 8330A Date Collected: 10/19/2019 11:55

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 516.4(mL) Date Analyzed: 10/31/2019 02:05

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	*HMX*	*0.58*	*J1*	*0.39*	0.19	*0.085*

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\G2_LUNA\20191030-86641.b\10300029.D
Lims ID: 280-129936-A-5-A
Client ID: EW7-PM29B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 02:05:44 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-5-A
Misc. Info.: 280-0086641-029
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:35 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 15:48:14

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.049	7.059	-0.010	12845	0.0595	
	7 MNX	1	8.075	7.989	0.086	3189	NC	
	8 RDX	1	9.242	9.259	-0.017	19852	0.0720	
	9 Nitrobenzene	1		12.232			ND	
$	10 1,2-Dinitrobenzene	1	13.155	13.172	-0.017	56180	0.1808	
	12 1,3-Dinitrobenzene	1		15.705			ND	U
	14 o-Nitrotoluene	1	16.662	16.705	-0.043	10175	0.0365	
	15 p-Nitrotoluene	1		16.992			ND	U
	16 4-Amino-2,6-dinitrotoluene	1	17.302	17.305	-0.003	46752	0.1439	
	17 m-Nitrotoluene	1		17.919			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.162	18.199	-0.037	70334	0.1530	
	19 1,3,5-Trinitrobenzene	1	19.049	19.059	-0.010	647199	1.31	
	20 2,6-Dinitrotoluene	1		19.985			ND	U
	21 2,4-Dinitrotoluene	1		20.479			ND	U
	22 Tetryl	1		23.732			ND	U
	23 2,4,6-Trinitrotoluene	1	24.835	24.832	0.003	181198	0.3784	

QC Flag Legend

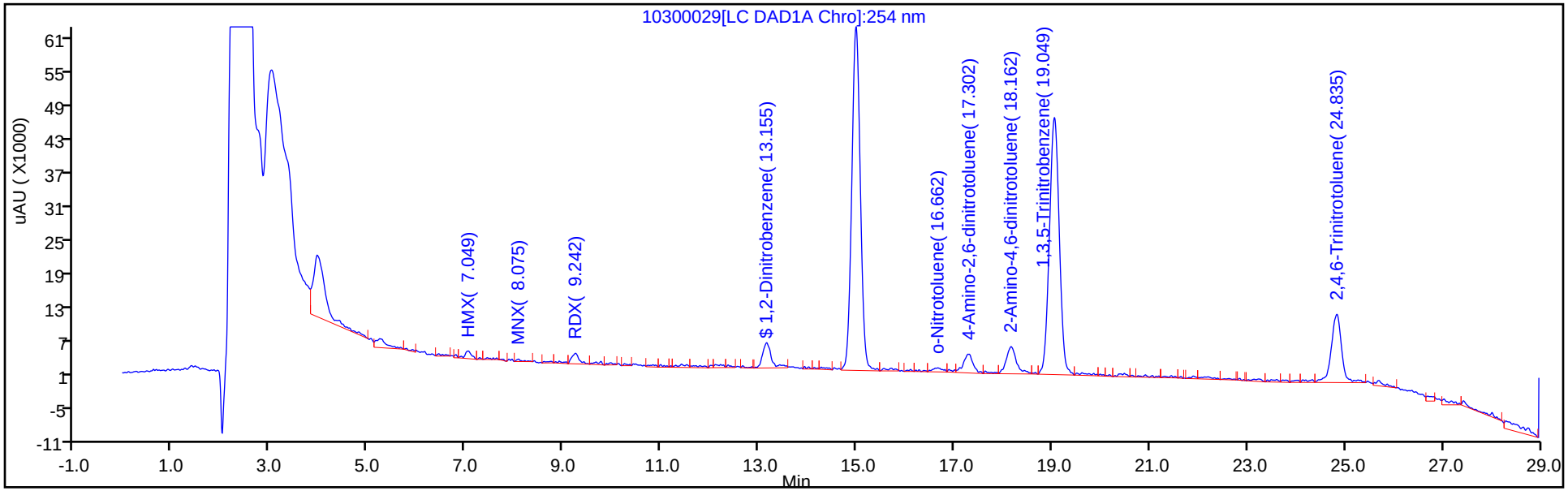
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 31-Oct-2019 16:27:42 Chrom Revision: 2.3 09-Oct-2019 11:13:36

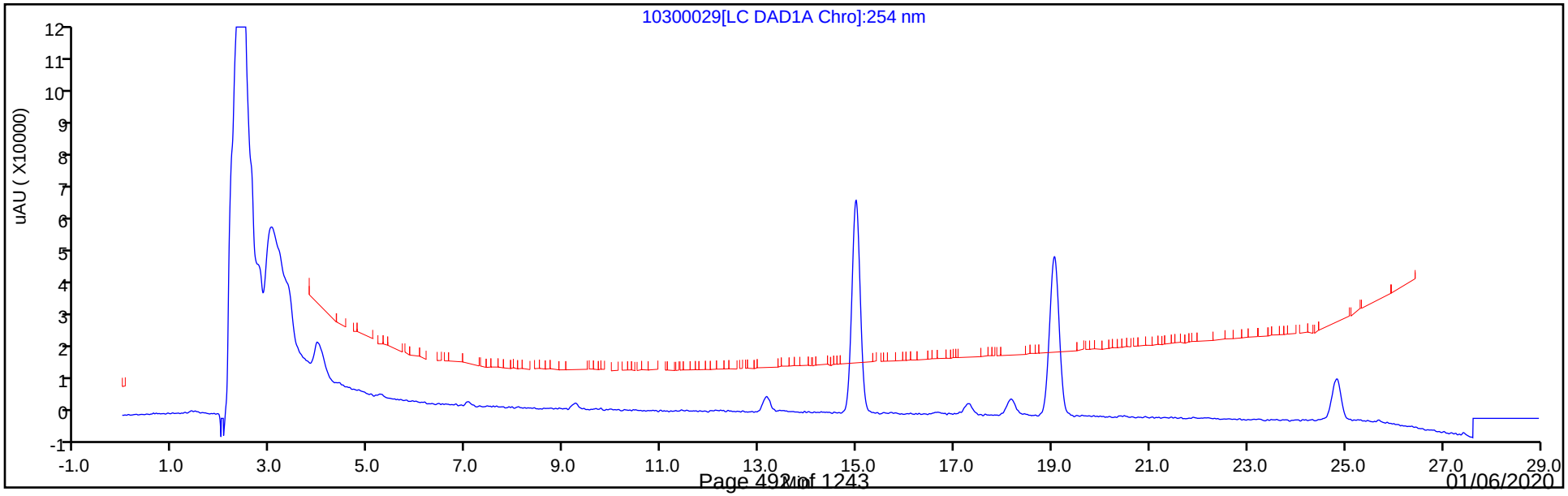
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300029.D				
Injection Date:	31-Oct-2019 02:05:44	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5	Worklist Smp#:	29
Client ID:	EW7-PM29B-1-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300029.D				
Lims ID:	280-129936-A-5-A				
Client ID:	EW7-PM29B-1-35				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 02:05:44	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-5-A				
Misc. Info.:	280-0086641-029				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:35	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				

First Level Reviewer: beckerc Date: 31-Oct-2019 15:48:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1808	90.39

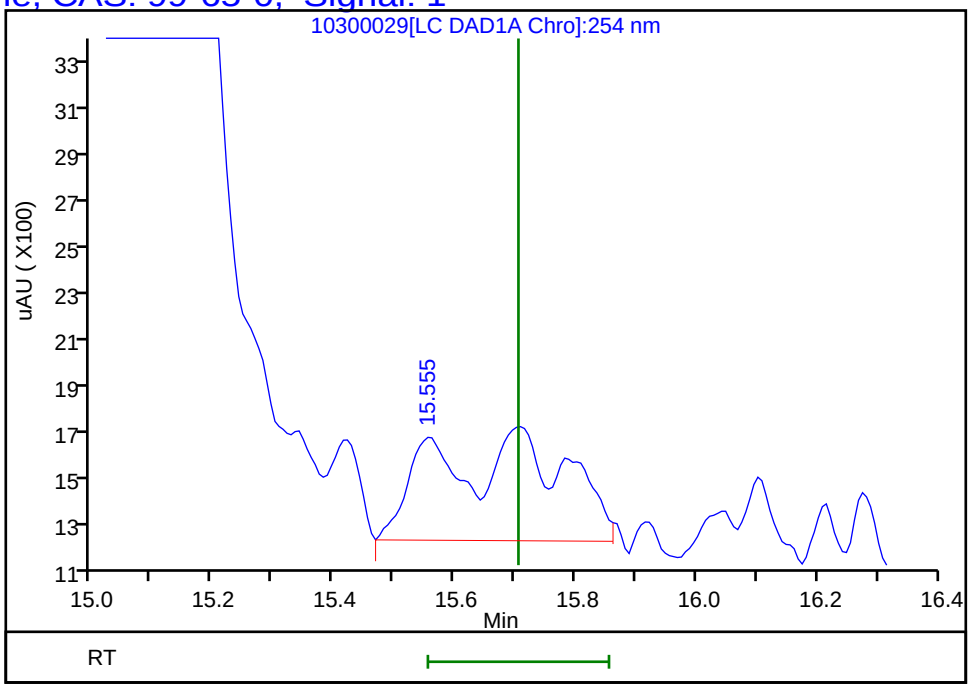
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300029.D				
Injection Date:	31-Oct-2019 02:05:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5		
Client ID:	EW7-PM29B-1-35				
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.56
Response: 6548
Amount: 0.009957



Reviewer: beckerc, 31-Oct-2019 16:02:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

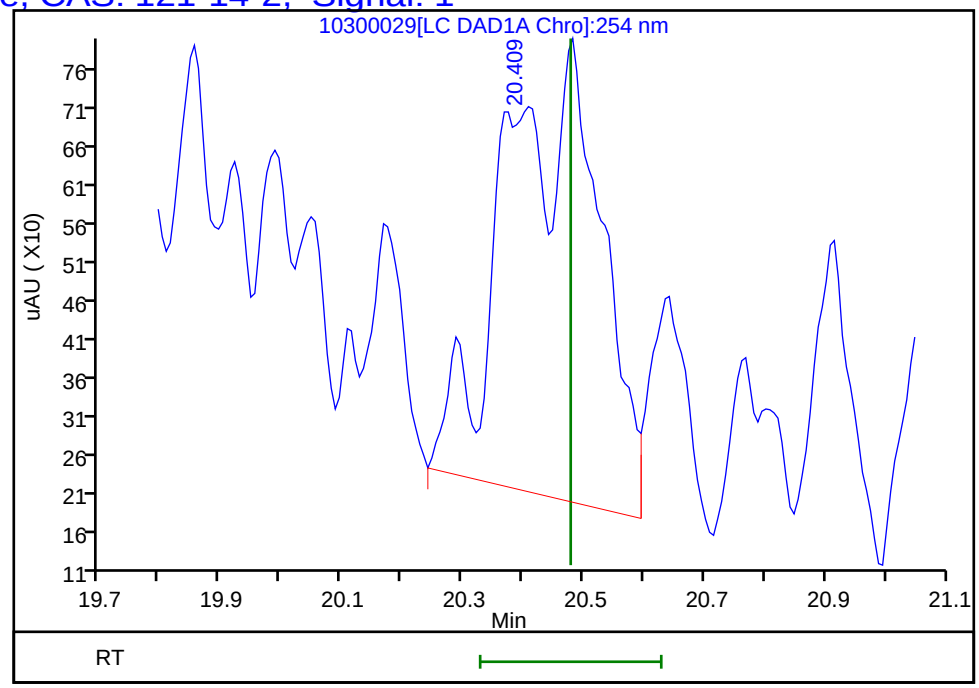
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300029.D				
Injection Date:	31-Oct-2019 02:05:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5		
Client ID:	EW7-PM29B-1-35				
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.41
Response: 6531
Amount: 0.010721



Reviewer: beckerc, 31-Oct-2019 16:02:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

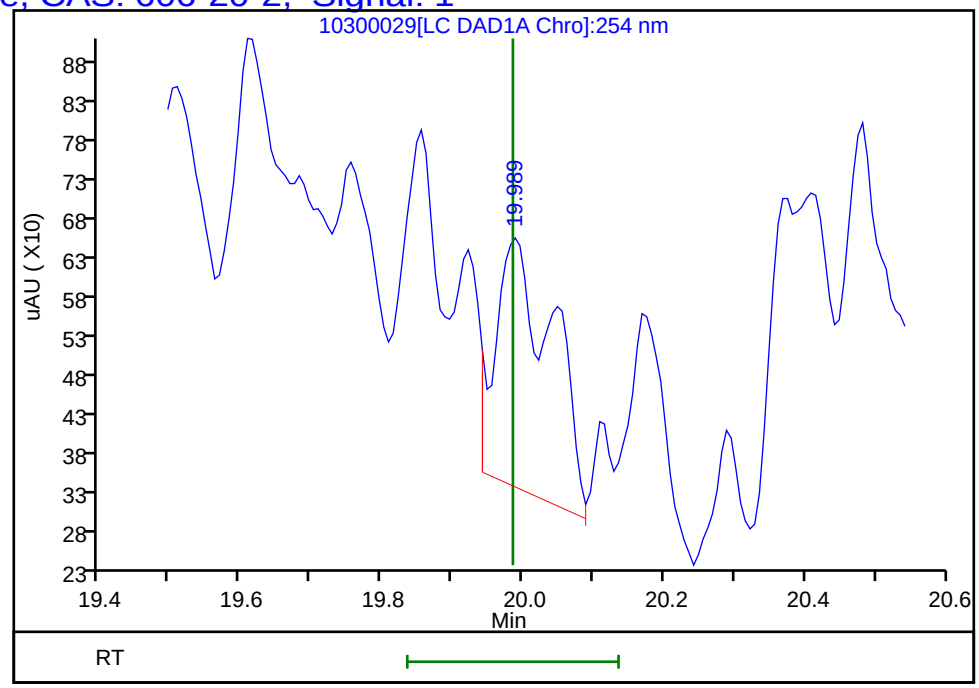
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300029.D				
Injection Date:	31-Oct-2019 02:05:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5		
Client ID:	EW7-PM29B-1-35				
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 19.99
Response: 1772
Amount: 0.005488



Reviewer: beckerc, 31-Oct-2019 16:02:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

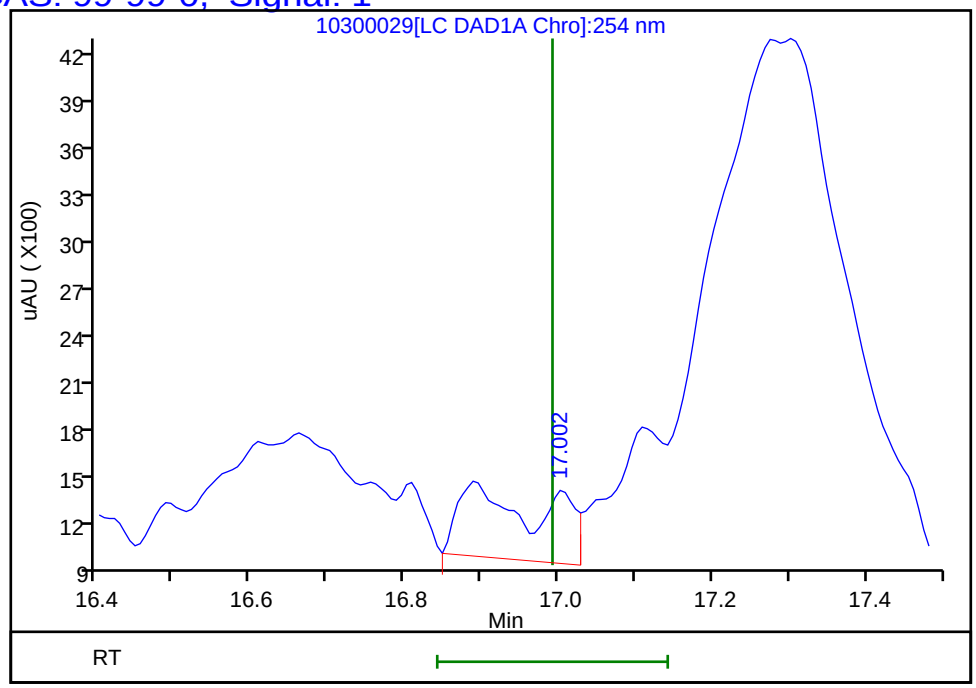
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300029.D				
Injection Date:	31-Oct-2019 02:05:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5		
Client ID:	EW7-PM29B-1-35				
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 17.00
Response: 3401
Amount: 0.015217



Reviewer: beckerc, 31-Oct-2019 16:02:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

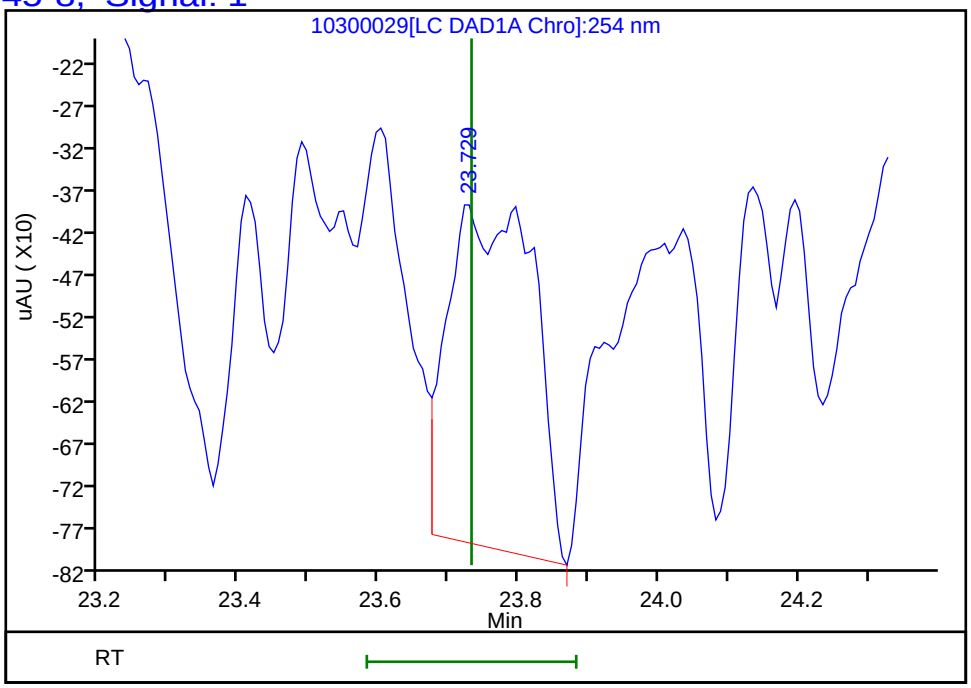
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300029.D				
Injection Date:	31-Oct-2019 02:05:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-5-A	Lab Sample ID:	280-129936-5		
Client ID:	EW7-PM29B-1-35				
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8, Signal: 1

RT: 23.73
Response: 3409
Amount: 0.009634



Reviewer: beckerc, 31-Oct-2019 16:02:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29A-1-25 Lab Sample ID: 280-129936-6

Matrix: Water Lab File ID: 10280044.D

Analysis Method: 8330A Date Collected: 10/19/2019 14:05

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 510.3(mL) Date Analyzed: 10/29/2019 03:09

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	11		0.98	0.39	0.20
118-96-7	2,4,6-Trinitrotoluene	5.9		0.39	0.39	0.16
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	1.5		0.20	0.12	0.050
88-72-2	2-Nitrotoluene	0.20	U M	0.39	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.6	J1	0.20	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U M	0.98	0.39	0.20
2691-41-0	HMX	0.62	M	0.39	0.20	0.086
5755-27-1	MNX	0.39	U M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U	0.39	0.20	0.089
121-82-4	RDX	1.2	M	0.39	0.39	0.15
479-45-8	Tetryl	0.20	U M	0.24	0.20	0.078

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\20191028-86569.b\10280044.D
Lims ID: 280-129936-A-6-A
Client ID: EW7-PM29A-1-25
Sample Type: Client
Inject. Date: 29-Oct-2019 03:09:27 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-6-A
Misc. Info.: 280-0086569-044
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:57:52

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.673	6.675	-0.002	5809	0.0633	M
	6 MNX	1		7.367			ND	U
	7 RDX	1	7.753	7.761	-0.008	13679	0.1231	M
$	9 1,2-Dinitrobenzene	1	8.720	8.715	0.005	24418	0.1753	
	10 1,3,5-Trinitrobenzene	1	8.886	8.881	0.005	264740	1.08	
	11 1,3-Dinitrobenzene	1	9.566	9.534	0.032	6150	0.0198	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	U
	16 2,4,6-Trinitrotoluene	1	11.200	11.201	-0.001	137410	0.6046	
	17 4-Amino-2,6-dinitrotoluene	1	11.366	11.368	-0.002	26928	0.1618	
	18 2-Amino-4,6-dinitrotoluene	1	11.660	11.661	-0.001	32256	0.1572	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1	12.020	12.008	0.012	2749	0.009150	
	21 o-Nitrotoluene	1		12.854			ND	U
	22 p-Nitrotoluene	1		13.301			ND	U
	23 m-Nitrotoluene	1		13.901			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

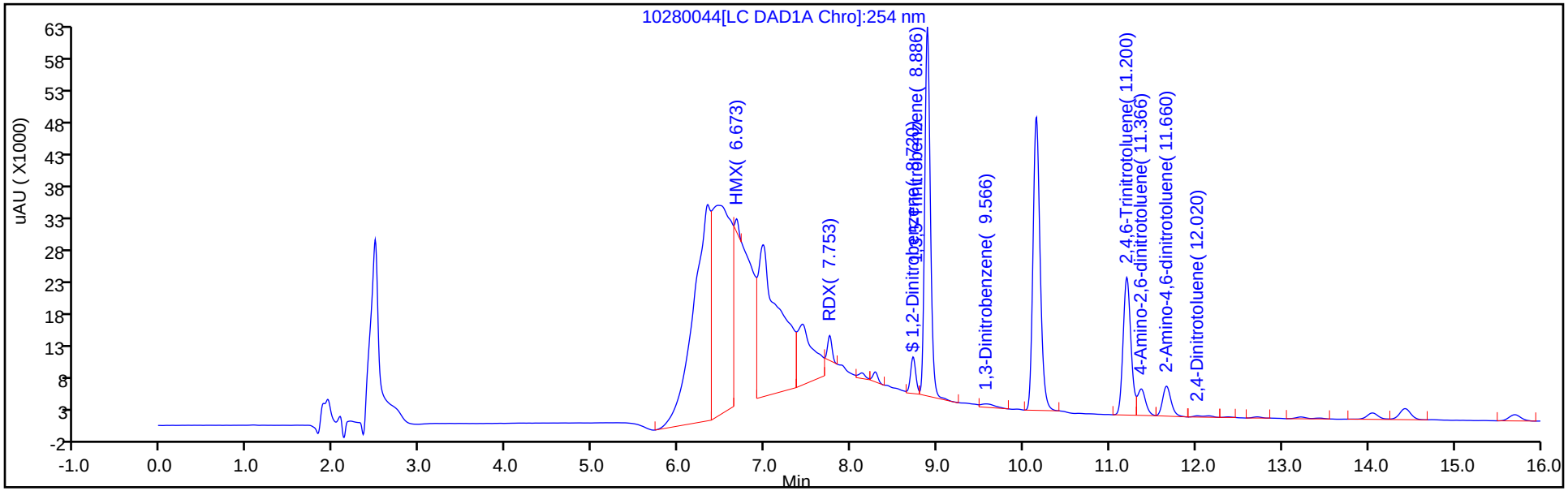
Report Date: 29-Oct-2019 11:54:46 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

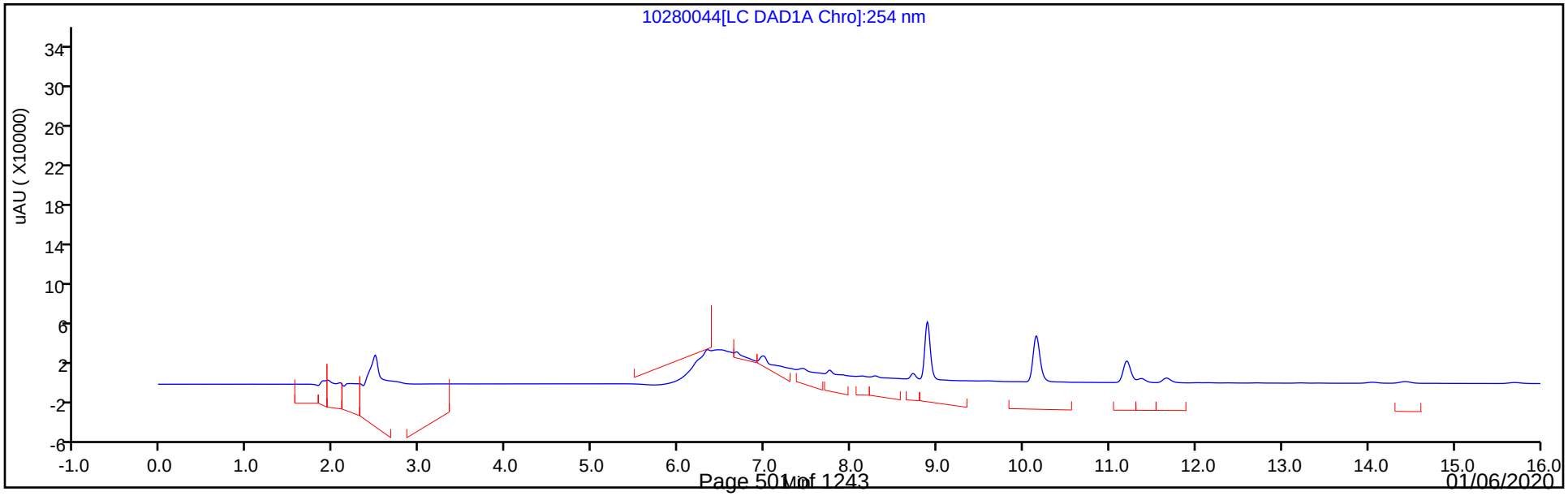
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280044.D

Injection Date:	29-Oct-2019 03:09:27	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6	Worklist Smp#:	44
Client ID:	EW7-PM29A-1-25				
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\20191028-86569.b\10280044.D				
Lims ID:	280-129936-A-6-A				
Client ID:	EW7-PM29A-1-25				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 03:09:27	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-6-A				
Misc. Info.:	280-0086569-044				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:43	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 10:57:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1753	87.63

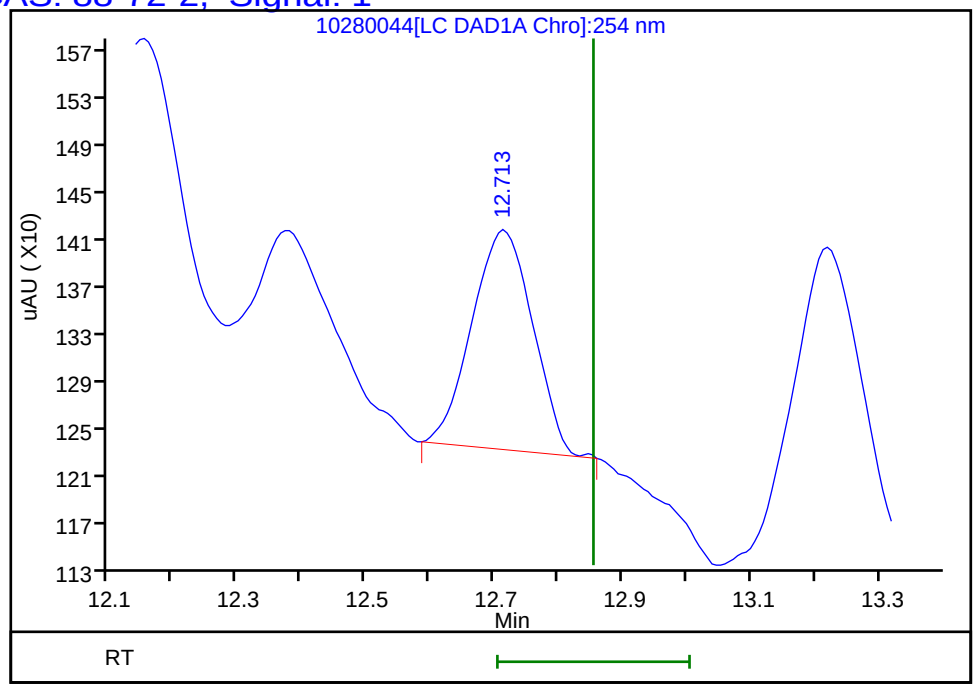
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280044.D				
Injection Date:	29-Oct-2019 03:09:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	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		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.71
Response: 1221
Amount: 0.009408



Reviewer: beckerc, 29-Oct-2019 10:57:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

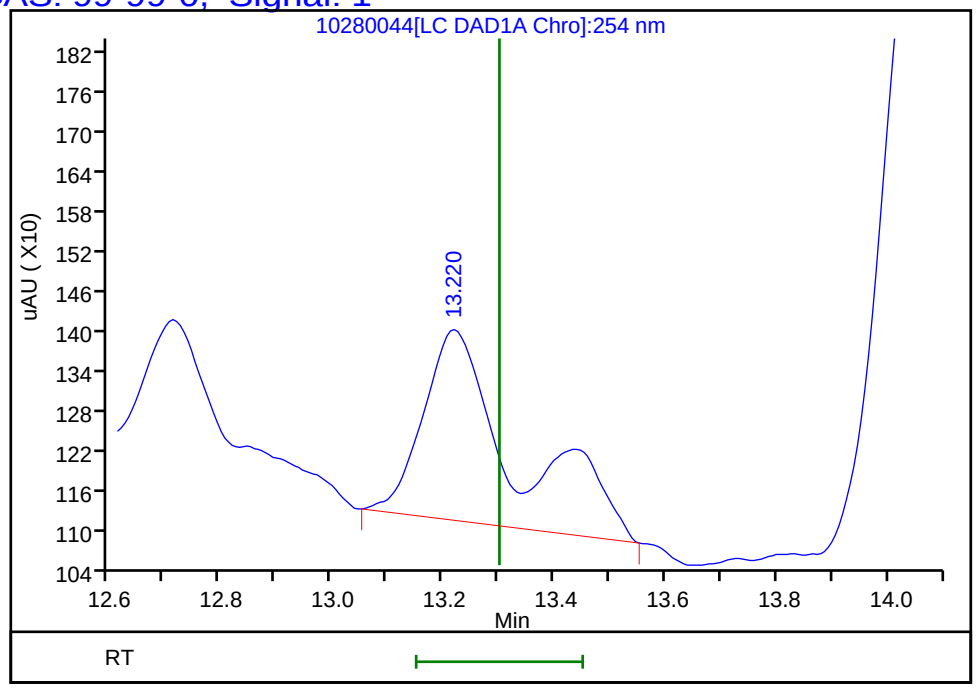
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280044.D

Injection Date:	29-Oct-2019 03:09:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.22
Response: 3263
Amount: 0.029595



Reviewer: beckerc, 29-Oct-2019 10:57:52

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

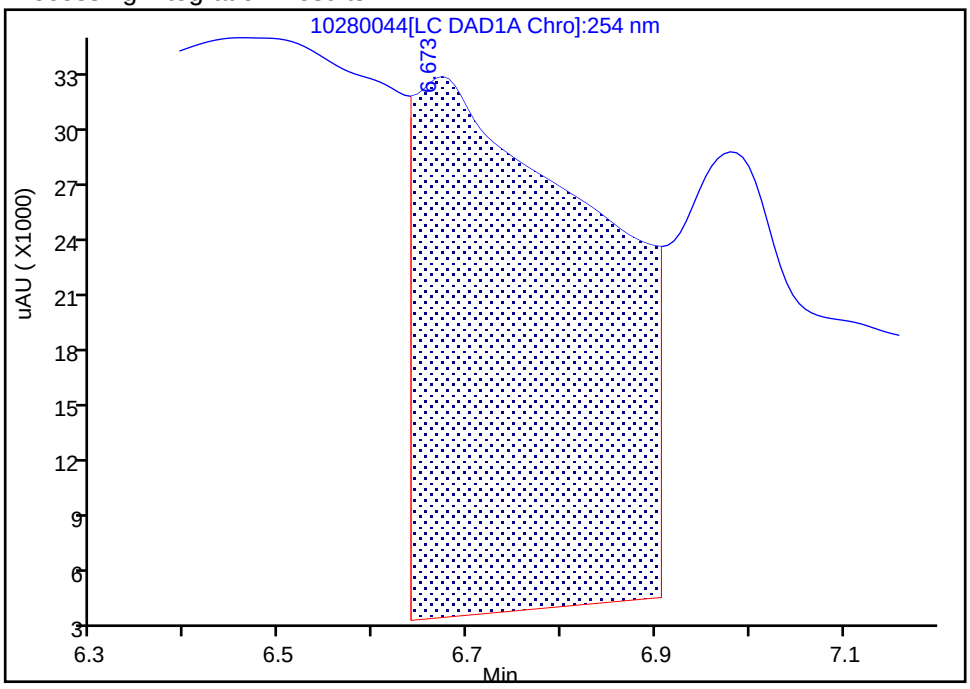
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280044.D				
Injection Date:	29-Oct-2019 03:09:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

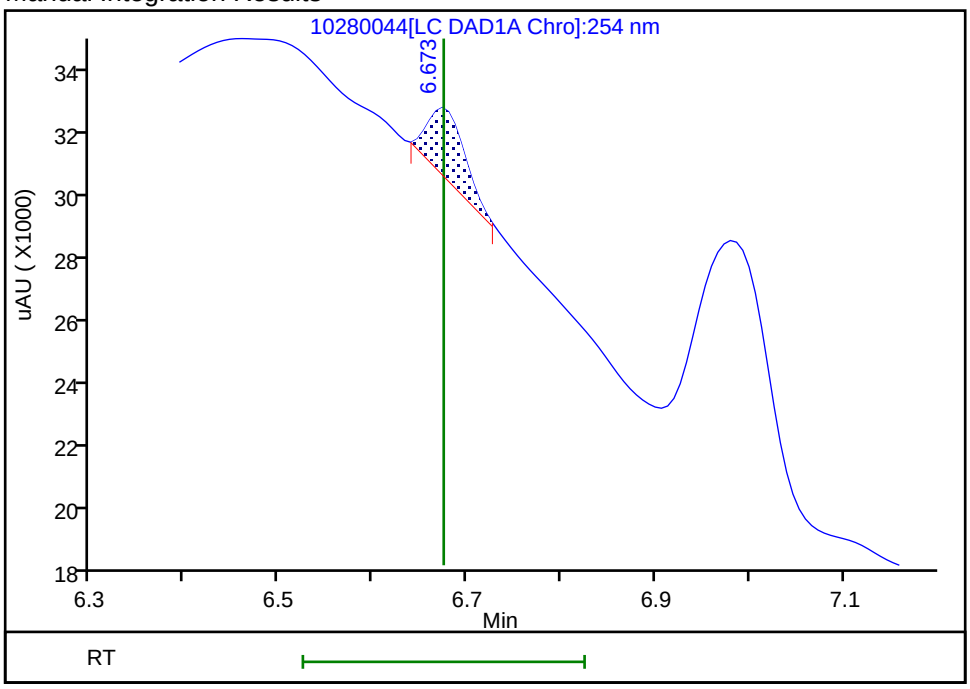
Processing Integration Results

RT: 6.67
Area: 385148
Amount: 4.193993
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 5809
Amount: 0.063256
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:56:36
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

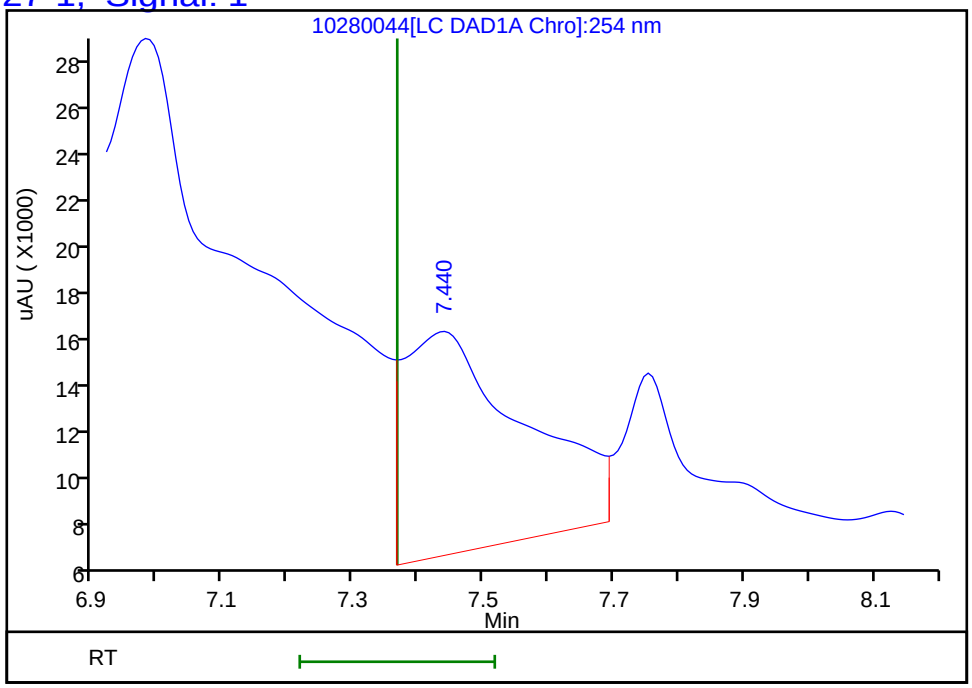
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280044.D				
Injection Date:	29-Oct-2019 03:09:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.44
Response: 121103
Amount: 0.864768



Reviewer: beckerc, 29-Oct-2019 10:57:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

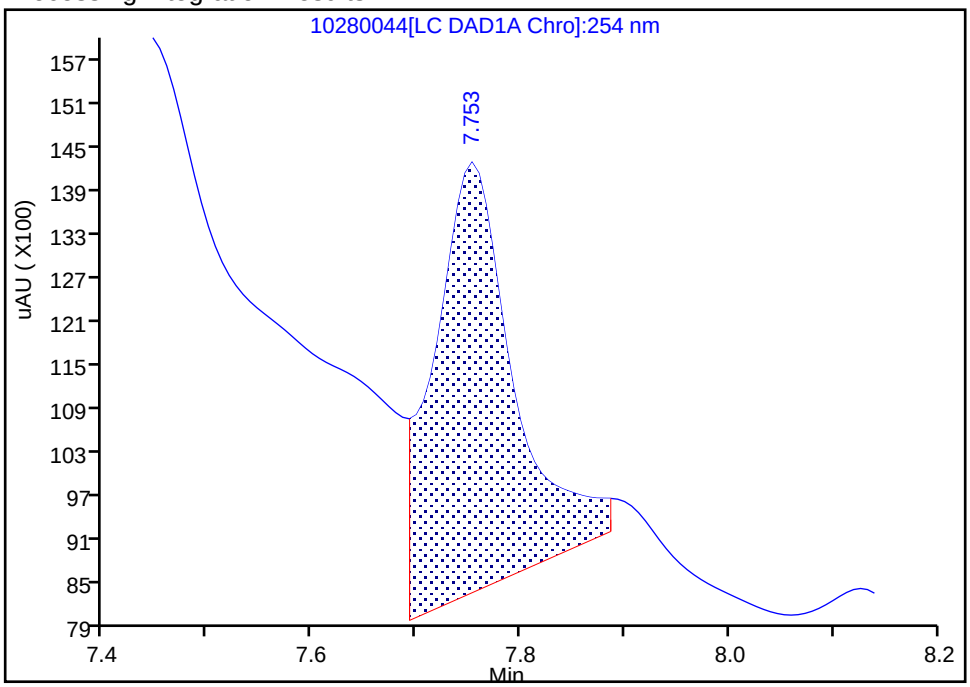
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280044.D				
Injection Date:	29-Oct-2019 03:09:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

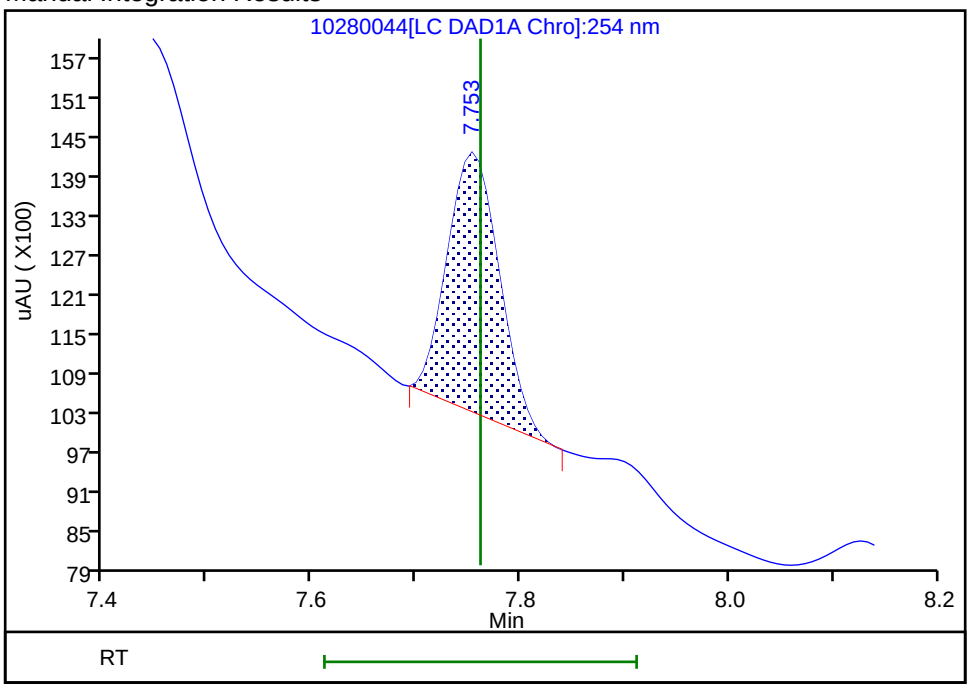
Processing Integration Results

RT: 7.75
Area: 31778
Amount: 0.285978
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 13679
Amount: 0.123101
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:56:52

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

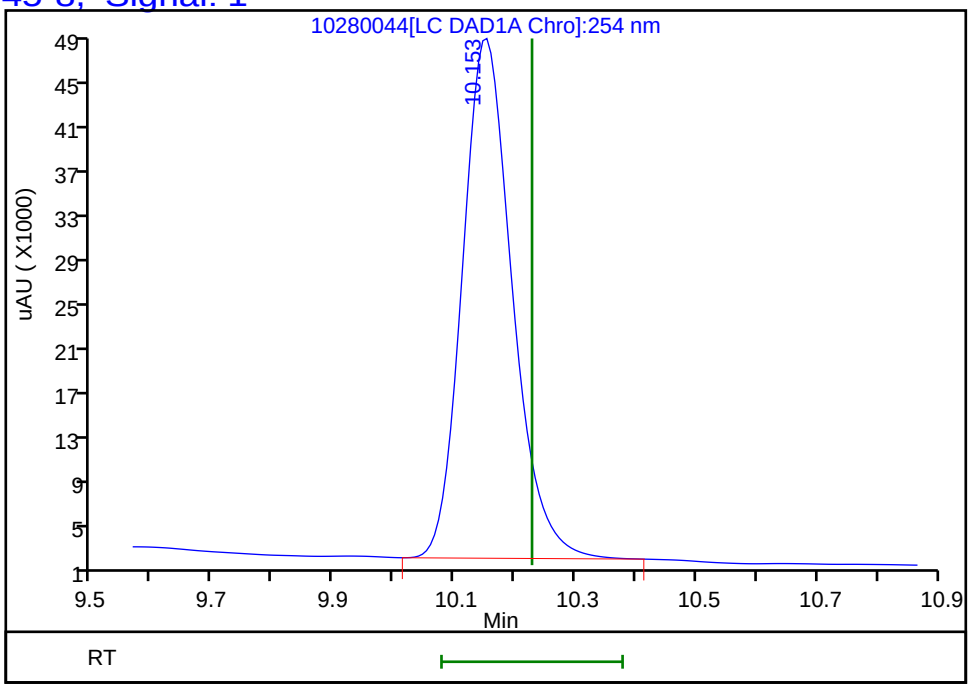
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280044.D

Injection Date:	29-Oct-2019 03:09:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.15
Response: 265949
Amount: 1.642094



Reviewer: beckerc, 29-Oct-2019 10:57:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM29A-1-25 Lab Sample ID: 280-129936-6

Matrix: Water Lab File ID: 10300030.D

Analysis Method: 8330A Date Collected: 10/19/2019 14:05

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 510.3(mL) Date Analyzed: 10/31/2019 02:40

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.20	U M	0.39	0.20	0.087
121-14-2	2,4-Dinitrotoluene	0.20	U M	0.39	0.20	0.082
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*2.5*	*J1*	*0.20*	0.12	*0.057*

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\G2_LUNA\20191030-86641.b\10300030.D
Lims ID: 280-129936-A-6-A
Client ID: EW7-PM29A-1-25
Sample Type: Client
Inject. Date: 31-Oct-2019 02:40:45 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-6-A
Misc. Info.: 280-0086641-030
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:35 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:09:53

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.019	7.059	-0.040	13610	0.0631	M
	7 MNX	1		7.989			ND	
	8 RDX	1	9.232	9.259	-0.027	28675	0.1113	M
	9 Nitrobenzene	1	12.139	12.232	-0.093	9850	0.007653	
$	10 1,2-Dinitrobenzene	1	13.145	13.172	-0.027	56036	0.1803	
	12 1,3-Dinitrobenzene	1		15.705			ND	U
	14 o-Nitrotoluene	1	16.712	16.705	0.007	27670	0.0991	
	15 p-Nitrotoluene	1		16.992			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.279	17.305	-0.026	83922	0.2582	
	17 m-Nitrotoluene	1		17.919			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.159	18.199	-0.040	91319	0.1986	
	19 1,3,5-Trinitrobenzene	1	19.039	19.059	-0.020	500547	1.01	
	20 2,6-Dinitrotoluene	1		19.985			ND	
	21 2,4-Dinitrotoluene	1		20.479			ND	U
	22 Tetryl	1		23.732			ND	U
	23 2,4,6-Trinitrotoluene	1	24.819	24.832	-0.013	269623	0.5824	

QC Flag Legend

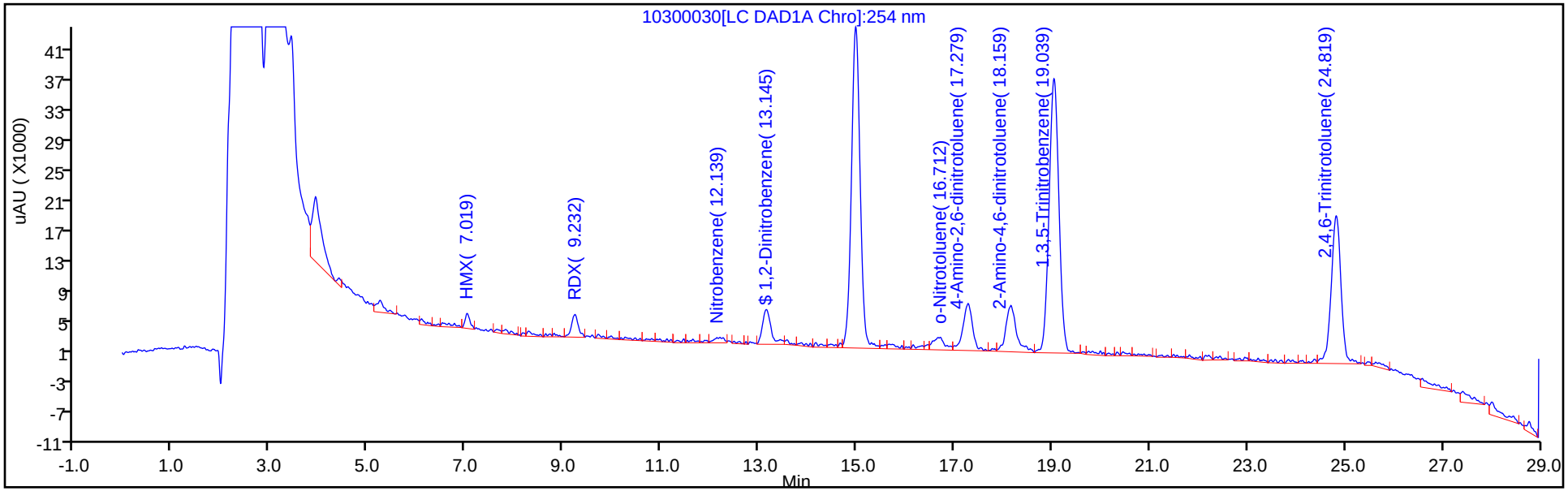
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Oct-2019 16:27:43 Chrom Revision: 2.3 09-Oct-2019 11:13:36

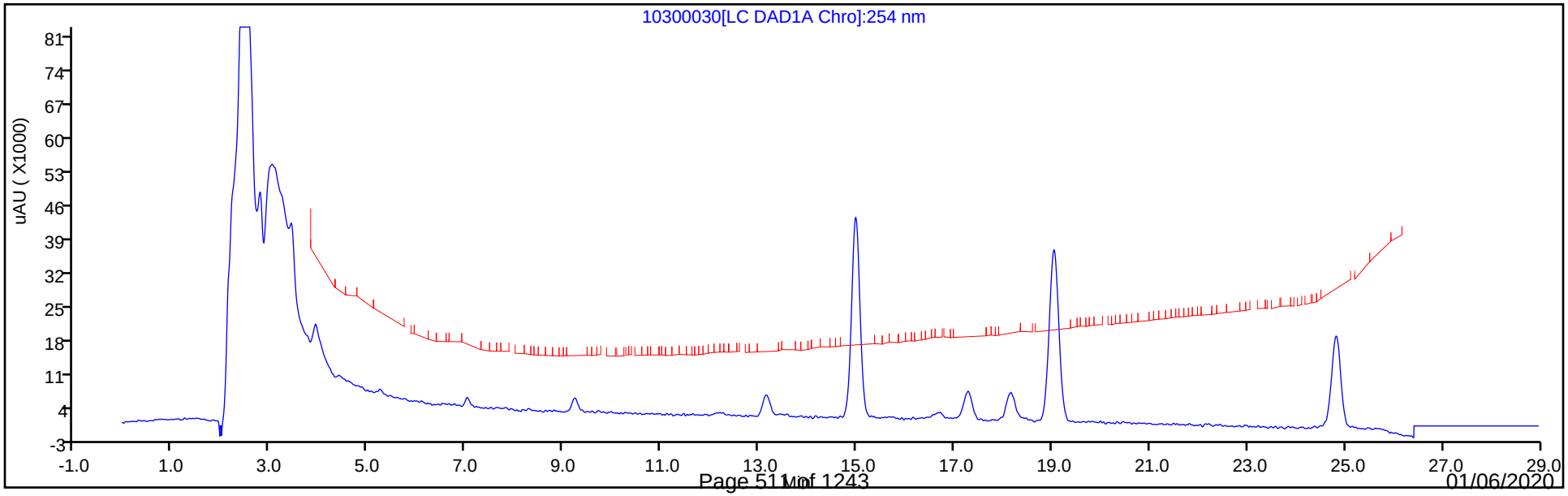
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300030.D				
Injection Date:	31-Oct-2019 02:40:45	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6	Worklist Smp#:	30
Client ID:	EW7-PM29A-1-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300030.D				
Lims ID:	280-129936-A-6-A				
Client ID:	EW7-PM29A-1-25				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 02:40:45	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-6-A				
Misc. Info.:	280-0086641-030				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:35	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				

First Level Reviewer: beckerc Date: 31-Oct-2019 16:09:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1803	90.13

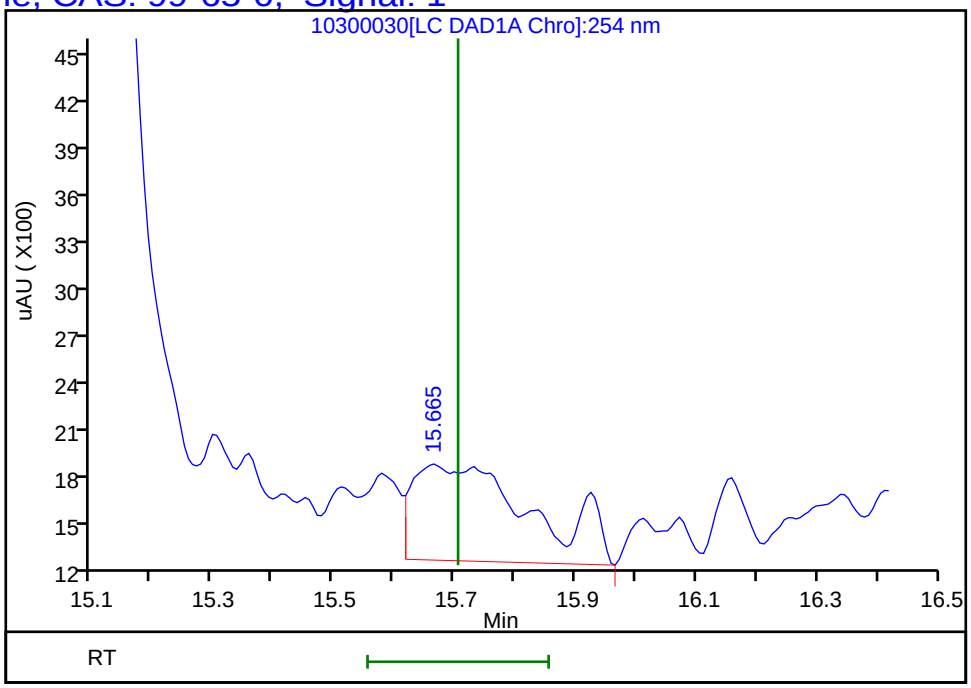
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300030.D				
Injection Date:	31-Oct-2019 02:40:45	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	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		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.67
Response: 8244
Amount: 0.012535



Reviewer: beckerc, 31-Oct-2019 16:09:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

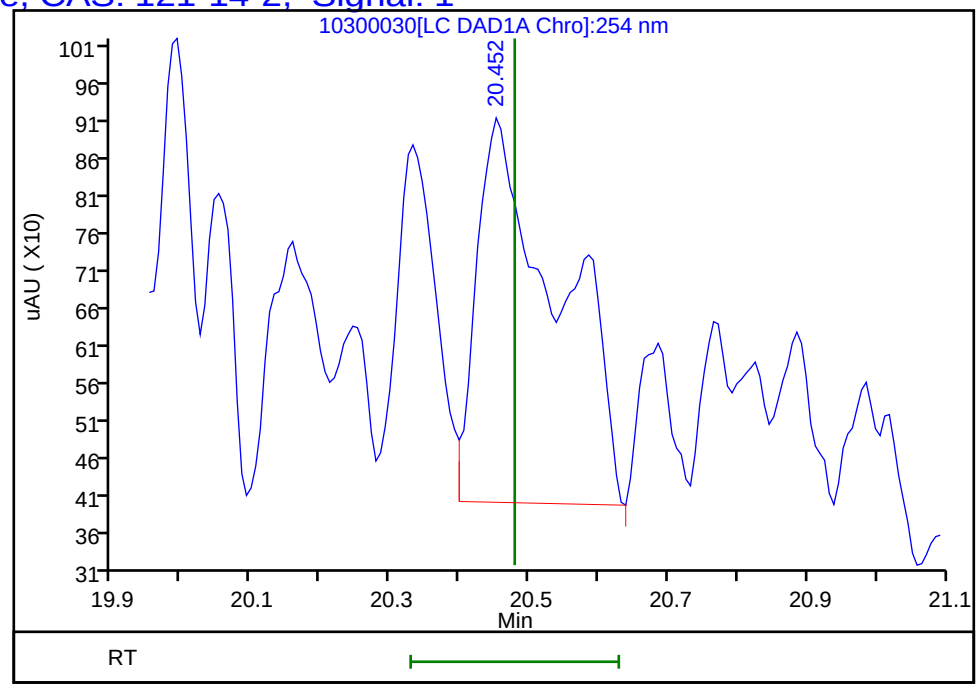
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300030.D				
Injection Date:	31-Oct-2019 02:40:45	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	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		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.45
Response: 4161
Amount: 0.006831



Reviewer: beckerc, 31-Oct-2019 16:09:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

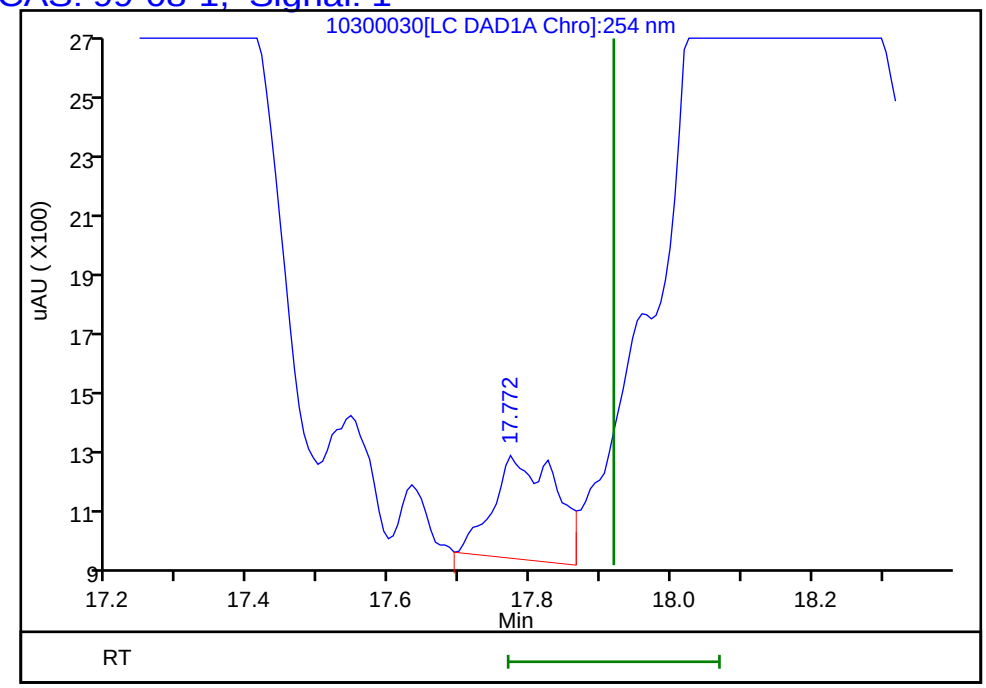
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300030.D				
Injection Date:	31-Oct-2019 02:40:45	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.77
Response: 2025
Amount: NaN



Reviewer: beckerc, 31-Oct-2019 16:09:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

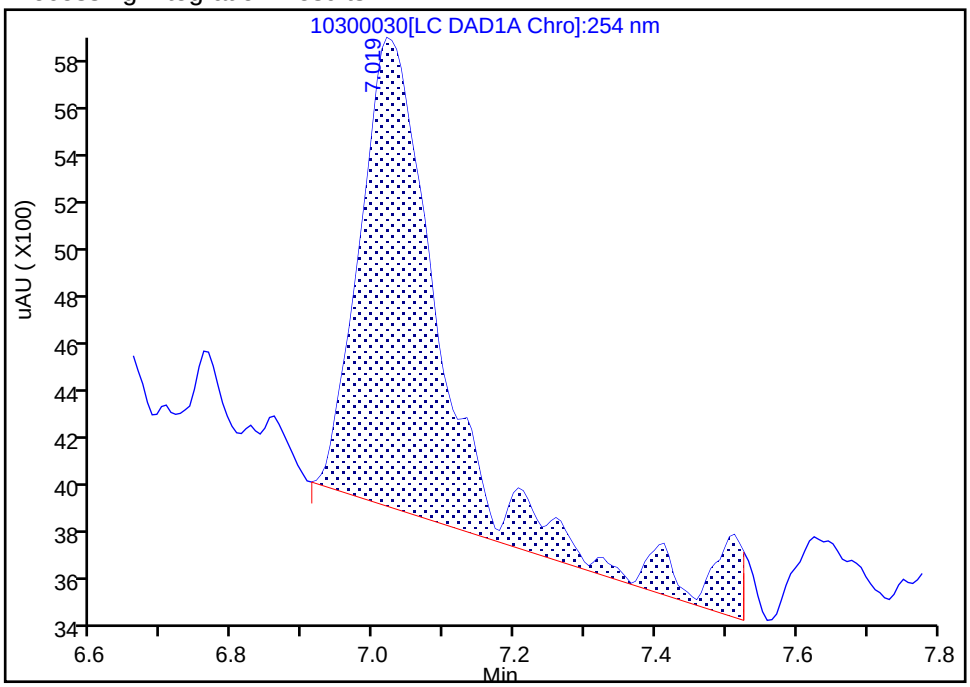
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300030.D				
Injection Date:	31-Oct-2019 02:40:45	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 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		

6 HMX, CAS: 2691-41-0

Signal: 1

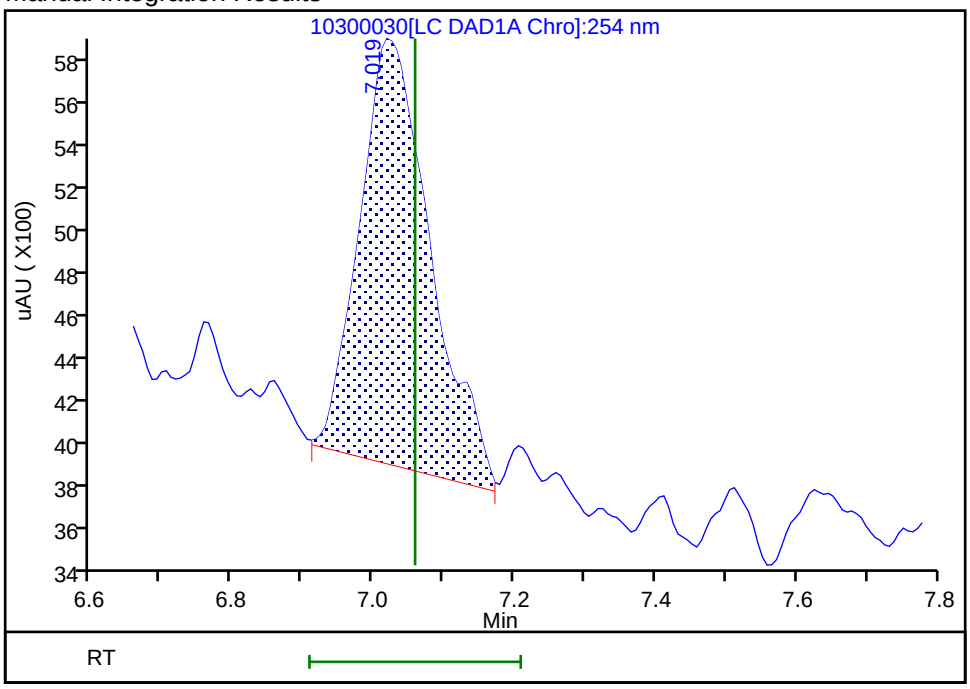
Processing Integration Results

RT: 7.02
Area: 16184
Amount: 0.074993
Amount Units: ug/ml



Manual Integration Results

RT: 7.02
Area: 13610
Amount: 0.063066
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:04:26

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

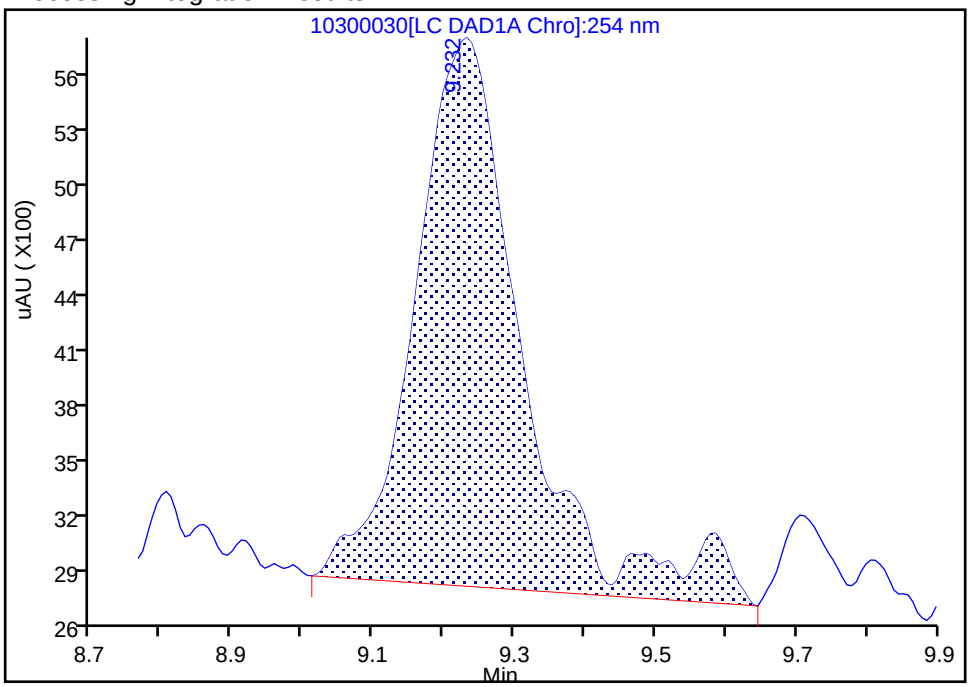
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300030.D				
Injection Date:	31-Oct-2019 02:40:45	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 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		

8 RDX, CAS: 121-82-4

Signal: 1

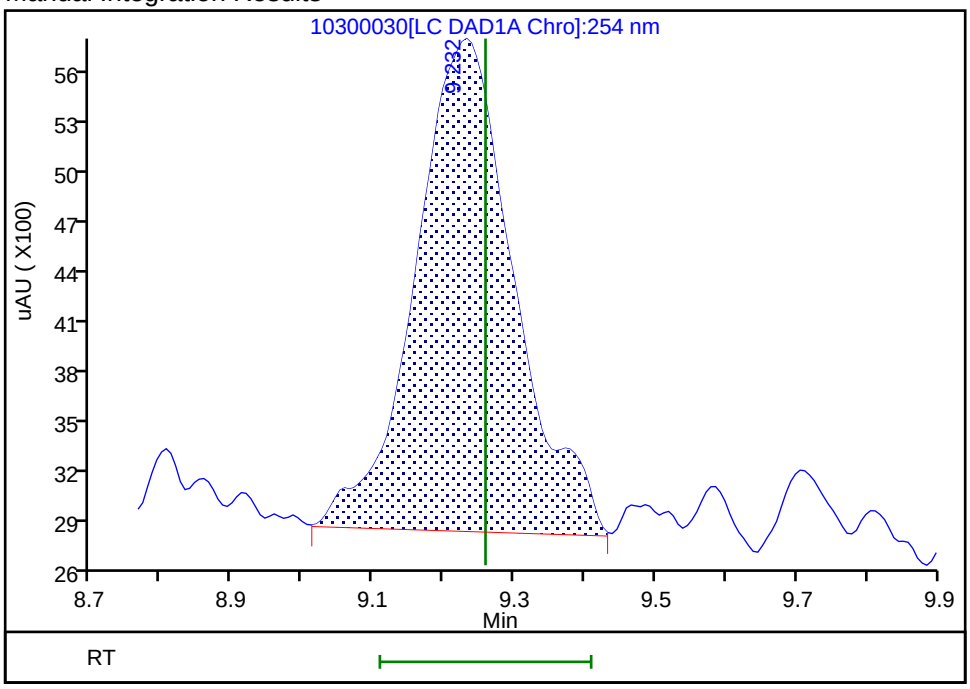
Processing Integration Results

RT: 9.23
Area: 31519
Amount: 0.123958
Amount Units: ug/ml



Manual Integration Results

RT: 9.23
Area: 28675
Amount: 0.111287
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:04:39

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

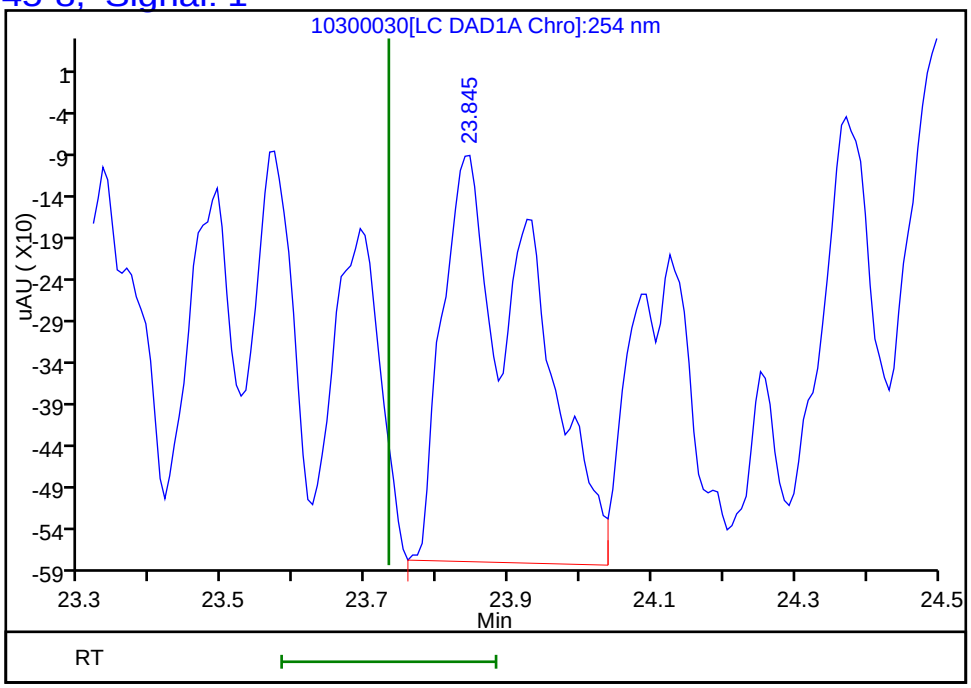
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300030.D				
Injection Date:	31-Oct-2019 02:40:45	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-6-A	Lab Sample ID:	280-129936-6		
Client ID:	EW7-PM29A-1-25				
Operator ID:	CB	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		

22 Tetryl, CAS: 479-45-8, Signal: 1

RT: 23.85
Response: 4140
Amount: 0.011700



Reviewer: beckerc, 31-Oct-2019 16:09:53
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.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28A-1-25 Lab Sample ID: 280-129936-7

Matrix: Water Lab File ID: 10280045.D

Analysis Method: 8330A Date Collected: 10/19/2019 16:20

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 498.4(mL) Date Analyzed: 10/29/2019 03:32

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	23	M	1.0	0.40	0.20
118-96-7	2,4,6-Trinitrotoluene	13		0.40	0.40	0.16
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	3.8		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U M	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	3.8		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U M	1.0	0.40	0.20
2691-41-0	HMX	0.87	M	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	1.1	M	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	86	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D
Lims ID: 280-129936-A-7-A
Client ID: EW7-PM28A-1-25
Sample Type: Client
Inject. Date: 29-Oct-2019 03:32:23 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-7-A
Misc. Info.: 280-0086569-045
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:59:23

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.674	6.675	-0.001	7964	0.0867	M
	6 MNX	1		7.367			ND	U
	7 RDX	1	7.754	7.761	-0.007	11984	0.1078	M
$	9 1,2-Dinitrobenzene	1	8.720	8.715	0.005	23880	0.1714	M
	10 1,3,5-Trinitrobenzene	1	8.887	8.881	0.006	564395	2.30	M
	11 1,3-Dinitrobenzene	1	9.574	9.534	0.040	20417	0.0656	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	U
	16 2,4,6-Trinitrotoluene	1	11.200	11.201	-0.001	296386	1.30	
	17 4-Amino-2,6-dinitrotoluene	1	11.374	11.368	0.006	63068	0.3791	
	18 2-Amino-4,6-dinitrotoluene	1	11.667	11.661	0.006	77811	0.3791	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1	12.020	12.008	0.012	3611	0.0120	
	21 o-Nitrotoluene	1		12.854			ND	U
	22 p-Nitrotoluene	1		13.301			ND	U
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

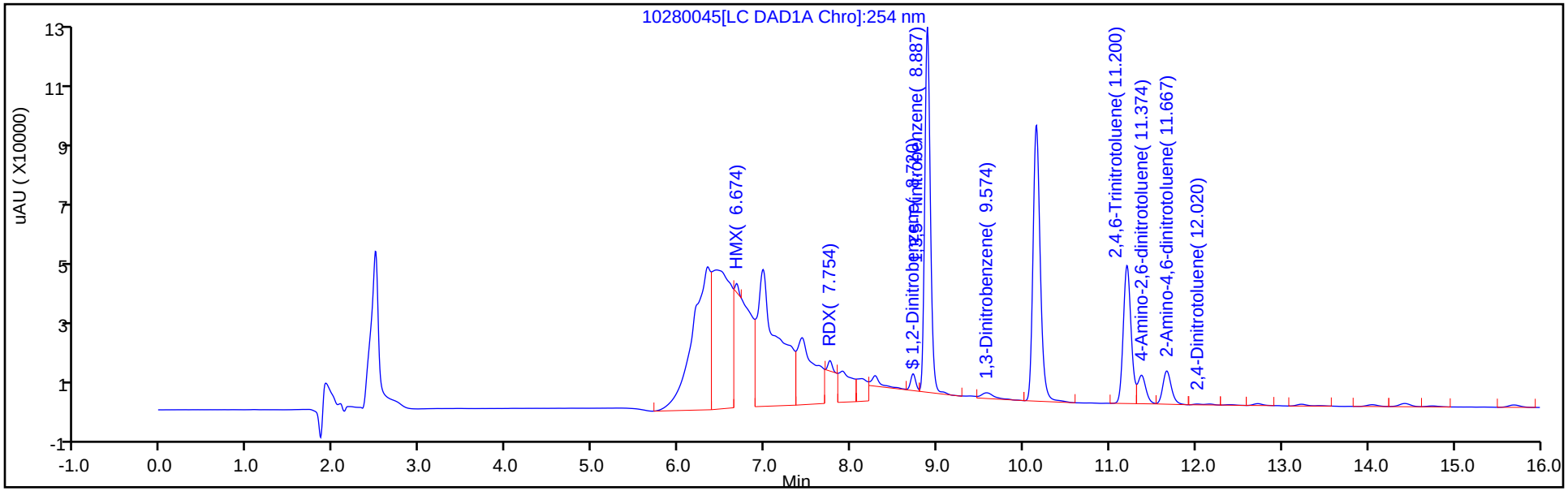
Report Date: 29-Oct-2019 11:54:45 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

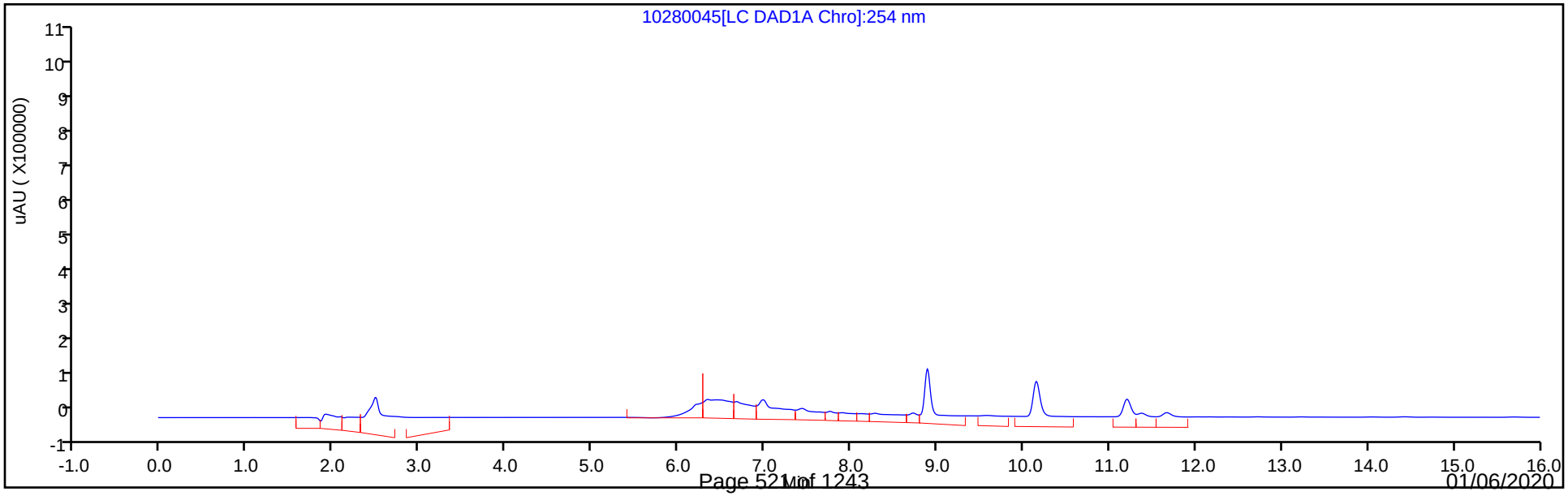
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D

Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7	Worklist Smp#:	45
Client ID:	EW7-PM28A-1-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D				
Lims ID:	280-129936-A-7-A				
Client ID:	EW7-PM28A-1-25				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 03:32:23	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-7-A				
Misc. Info.:	280-0086569-045				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:43	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 10:59:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1714	85.70

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

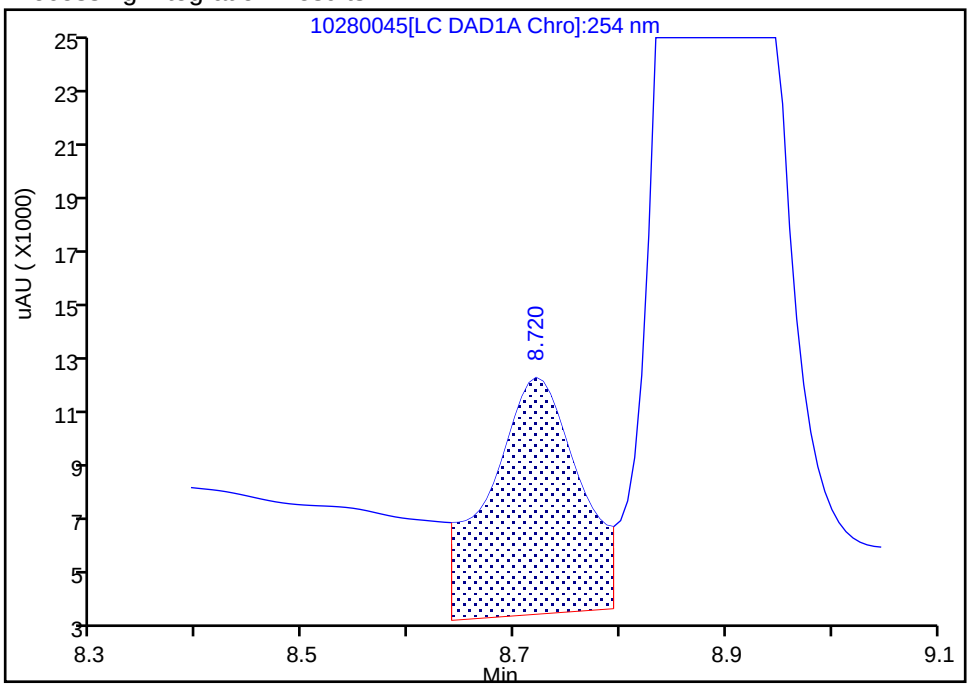
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D				
Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

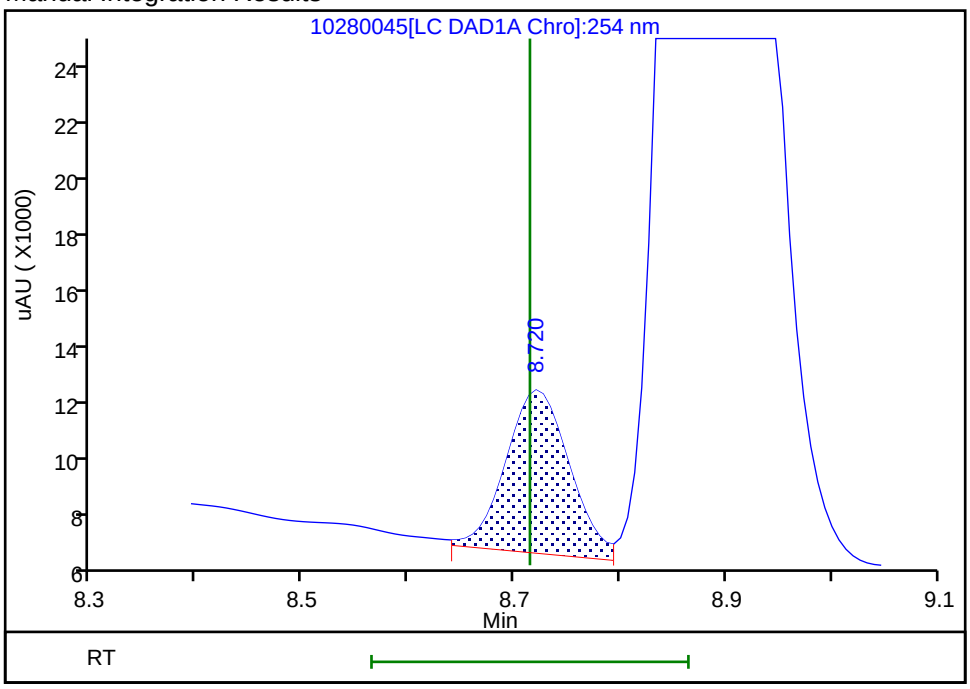
Processing Integration Results

RT: 8.72
Area: 50256
Amount: 0.360702
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 23880
Amount: 0.171394
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:58:35

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

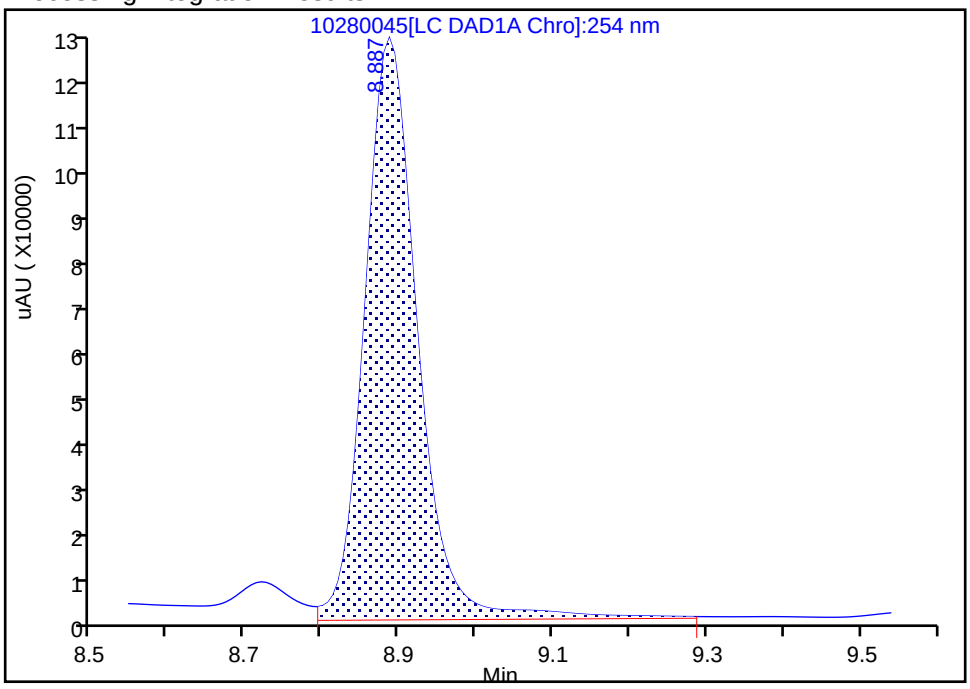
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D				
Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

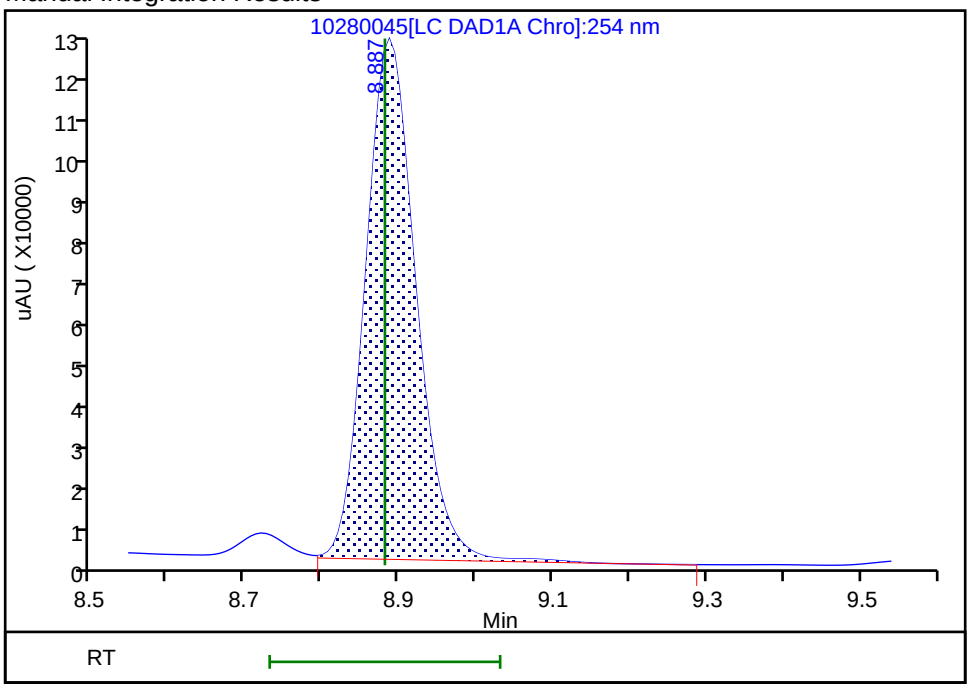
Processing Integration Results

RT: 8.89
Area: 603304
Amount: 2.461697
Amount Units: ug/mL



Manual Integration Results

RT: 8.89
Area: 564395
Amount: 2.302934
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:58:35

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

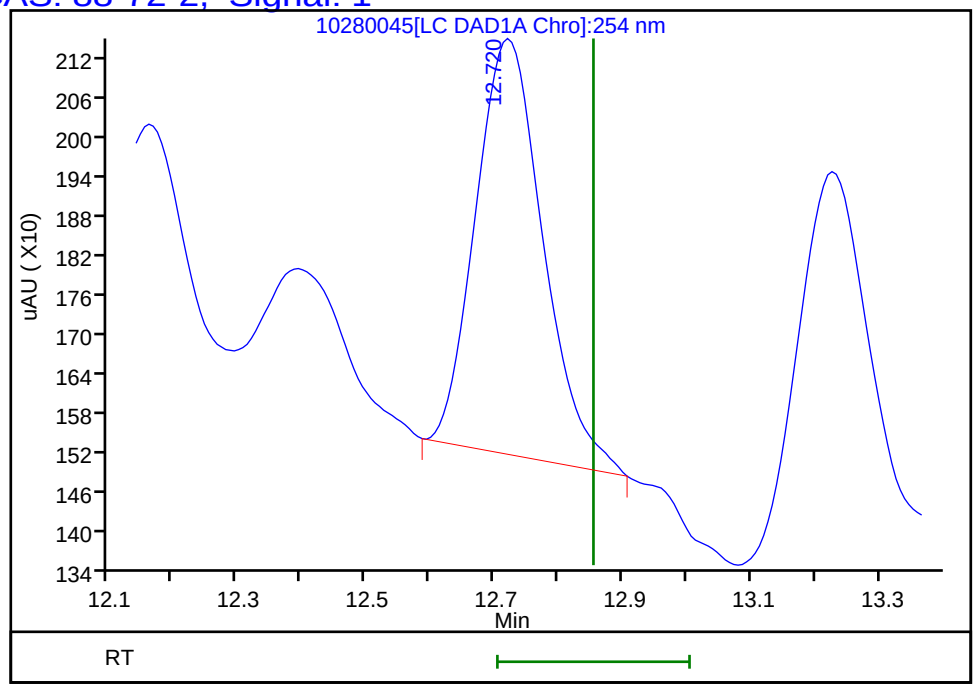
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D				
Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.72
Response: 4630
Amount: 0.035675



Reviewer: beckerc, 29-Oct-2019 10:59:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

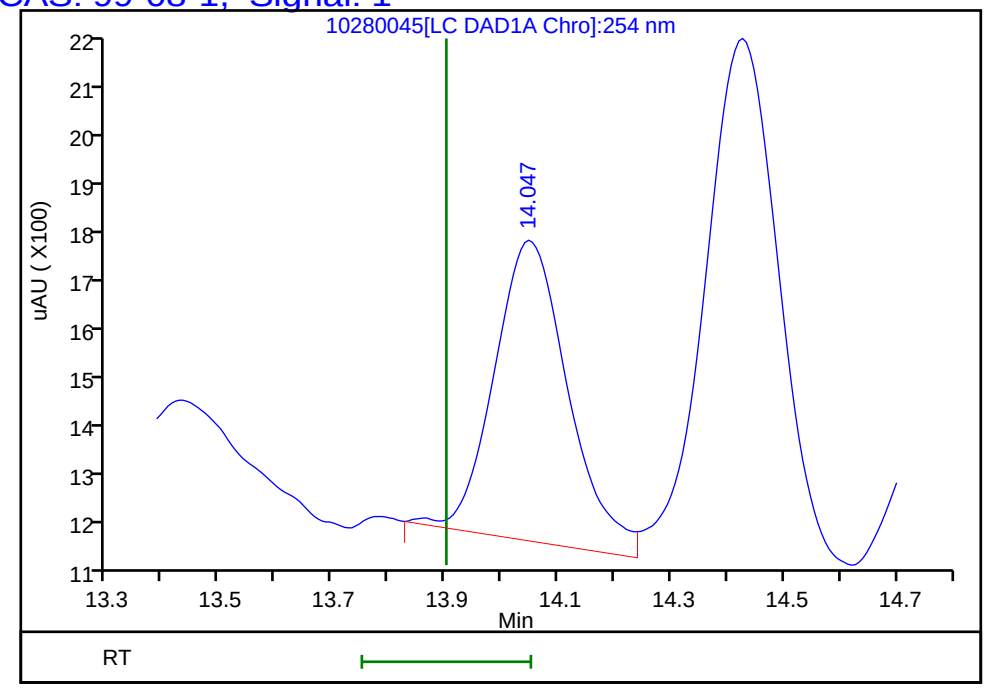
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D

Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.05
Response: 5590
Amount: 0.038519



Reviewer: beckerc, 29-Oct-2019 10:59:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

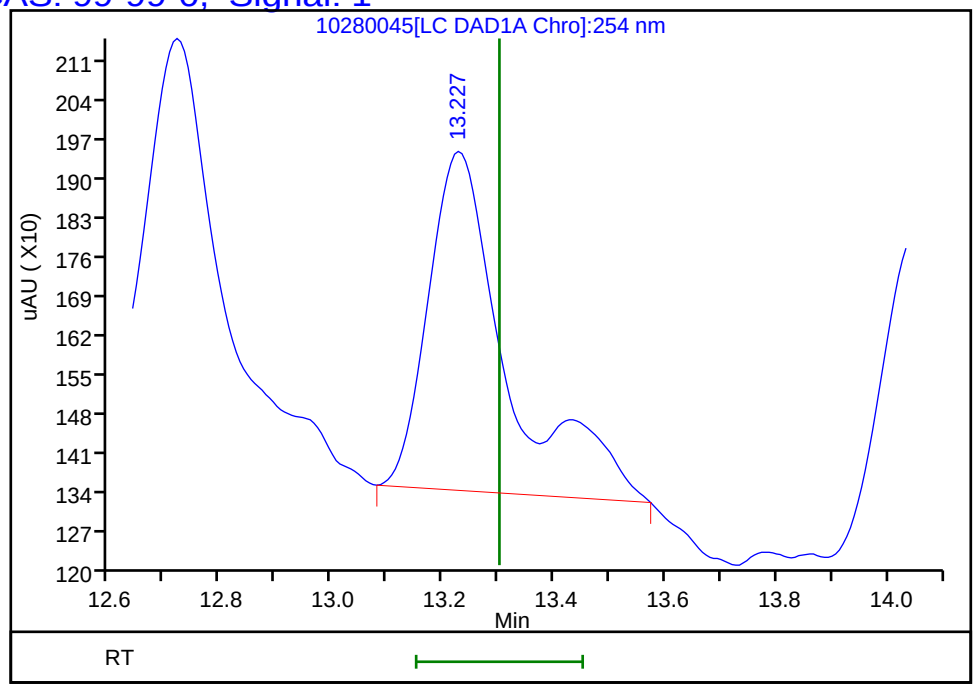
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D

Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.23
Response: 5954
Amount: 0.054002



Reviewer: beckerc, 29-Oct-2019 10:59:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

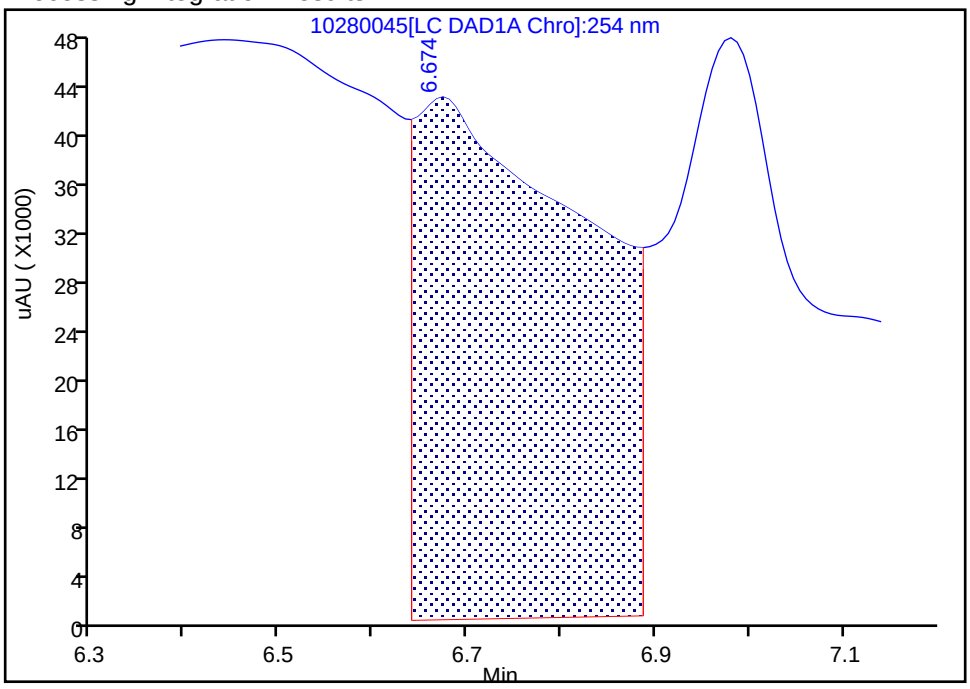
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D				
Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

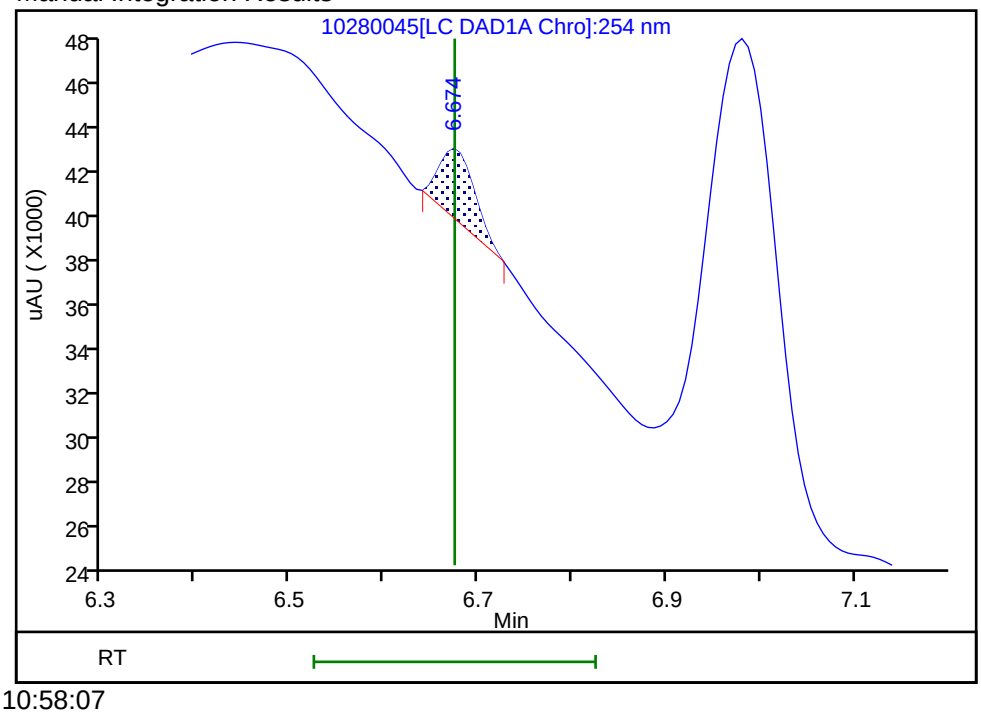
Processing Integration Results

RT: 6.67
Area: 525251
Amount: 5.719617
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 7964
Amount: 0.086722
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:58:07

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

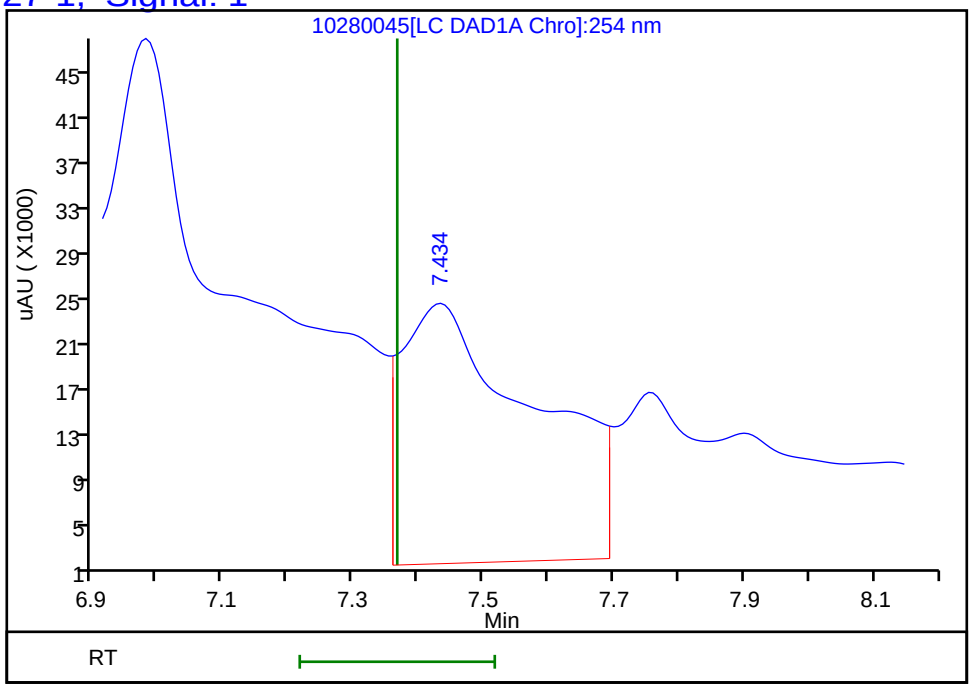
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D

Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.43
Response: 323489
Amount: 2.309960



Reviewer: beckerc, 29-Oct-2019 10:59:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

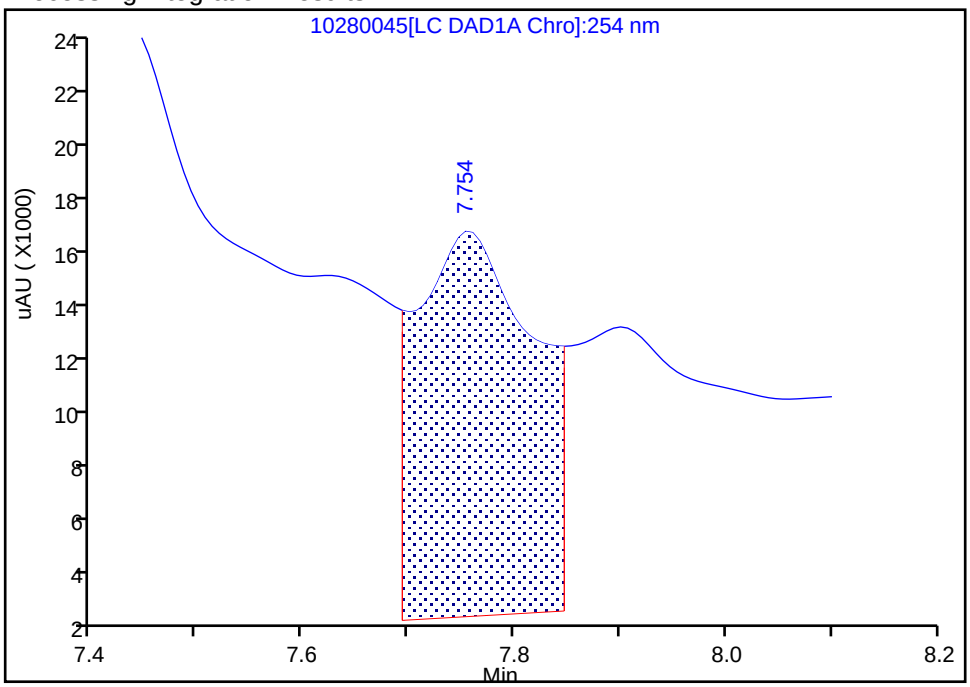
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D				
Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

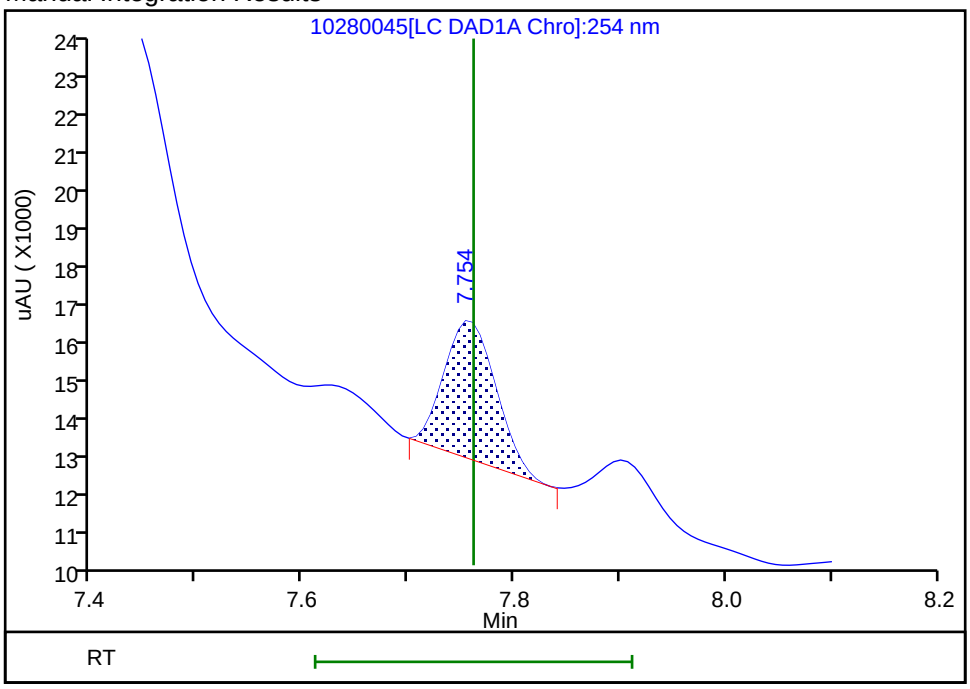
Processing Integration Results

RT: 7.75
Area: 110292
Amount: 0.992545
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 11984
Amount: 0.107847
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:58:23

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

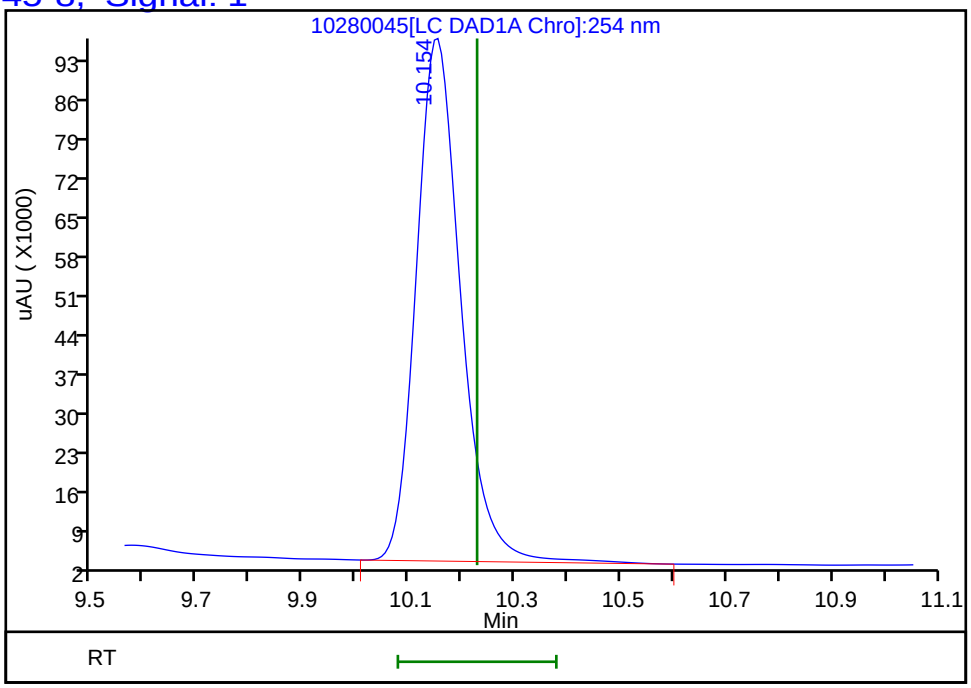
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280045.D

Injection Date:	29-Oct-2019 03:32:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.15
Response: 548467
Amount: 3.386493



Reviewer: beckerc, 29-Oct-2019 10:59:23

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.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28A-1-25 Lab Sample ID: 280-129936-7

Matrix: Water Lab File ID: 10300031.D

Analysis Method: 8330A Date Collected: 10/19/2019 16:20

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 498.4(mL) Date Analyzed: 10/31/2019 03:15

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.20	U M Q	0.40	0.20	0.089
121-14-2	2,4-Dinitrotoluene	0.20	U Q	0.40	0.20	0.084

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	147	*Q*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300031.D
Lims ID: 280-129936-A-7-A
Client ID: EW7-PM28A-1-25
Sample Type: Client
Inject. Date: 31-Oct-2019 03:15:42 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-7-A
Misc. Info.: 280-0086641-031
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:35 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:11:47

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.042	7.059	-0.017	24718	0.1145	M
	7 MNX	1		7.989			ND	
	8 RDX	1	9.242	9.259	-0.017	32254	0.1272	
	9 Nitrobenzene	1	12.175	12.232	-0.057	41499	0.0888	
$	10 1,2-Dinitrobenzene	1	13.169	13.172	-0.003	87404	0.2947	
	12 1,3-Dinitrobenzene	1		15.705			ND	U
	14 o-Nitrotoluene	1	16.722	16.705	0.017	15259	0.0547	
	15 p-Nitrotoluene	1		16.992			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.302	17.305	-0.003	137103	0.4219	
	17 m-Nitrotoluene	1		17.919			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.175	18.199	-0.024	170522	0.3709	
	19 1,3,5-Trinitrobenzene	1	19.062	19.059	0.003	1052157	2.13	
	20 2,6-Dinitrotoluene	1		19.985			ND	
	21 2,4-Dinitrotoluene	1		20.479			ND	
	22 Tetryl	1		23.732			ND	
	23 2,4,6-Trinitrotoluene	1	24.842	24.832	0.010	552445	1.23	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

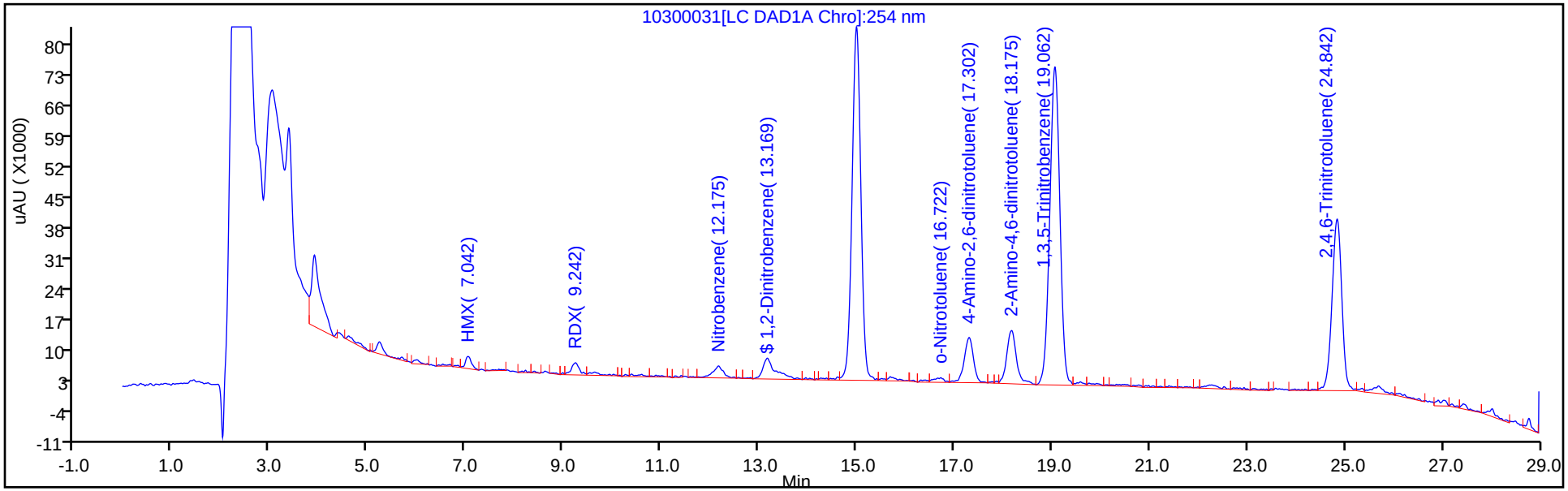
Report Date: 31-Oct-2019 16:27:44 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

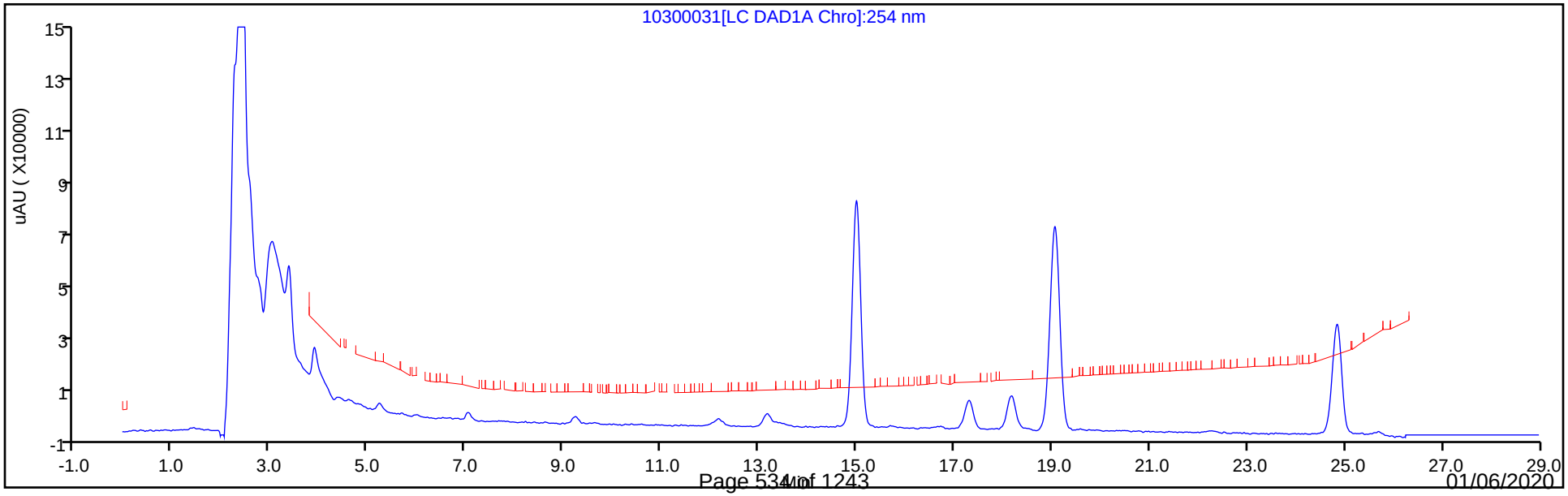
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300031.D

Injection Date:	31-Oct-2019 03:15:42	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7	Worklist Smp#:	31
Client ID:	EW7-PM28A-1-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300031.D				
Lims ID:	280-129936-A-7-A				
Client ID:	EW7-PM28A-1-25				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 03:15:42	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-7-A				
Misc. Info.:	280-0086641-031				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:35	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				

First Level Reviewer: beckerc Date: 31-Oct-2019 16:11:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2947	147.37

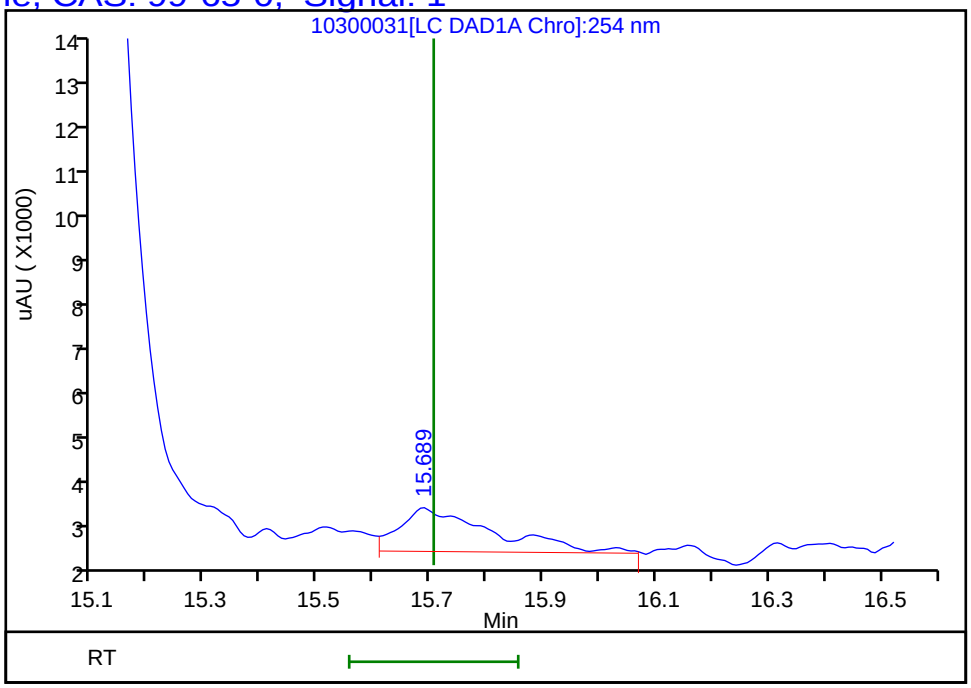
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300031.D				
Injection Date:	31-Oct-2019 03:15:42	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.69
Response: 10696
Amount: 0.016264



Reviewer: beckerc, 31-Oct-2019 16:11:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

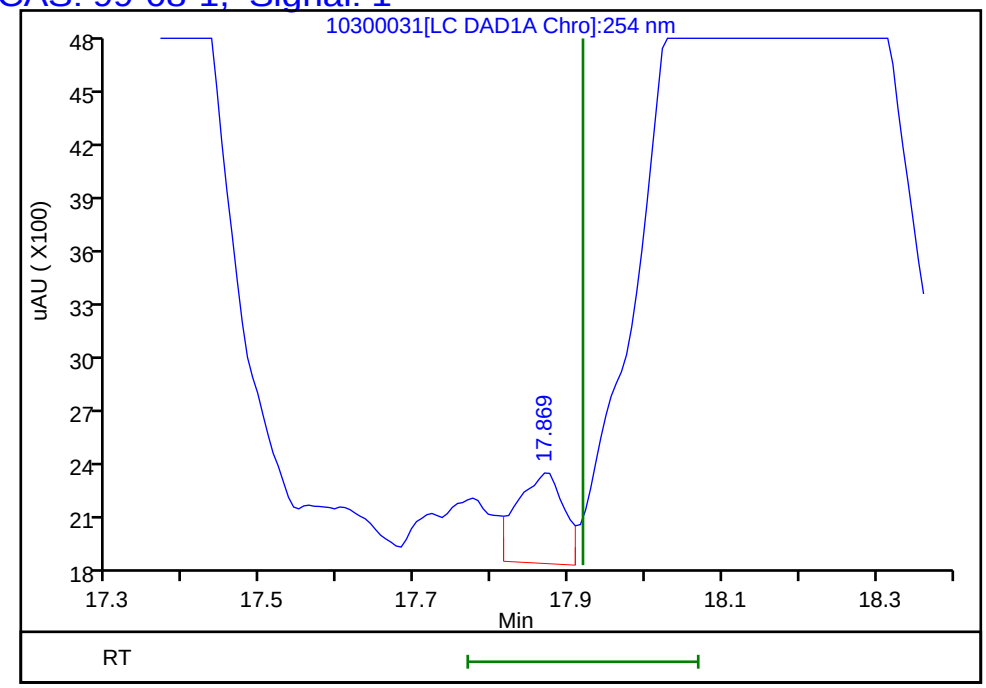
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300031.D
Injection Date: 31-Oct-2019 03:15:42 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-129936-A-7-A Lab Sample ID: 280-129936-7
Client ID: EW7-PM28A-1-25
Operator ID: CB ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.87
Response: 2032
Amount: NaN



Reviewer: beckerc, 31-Oct-2019 16:11:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

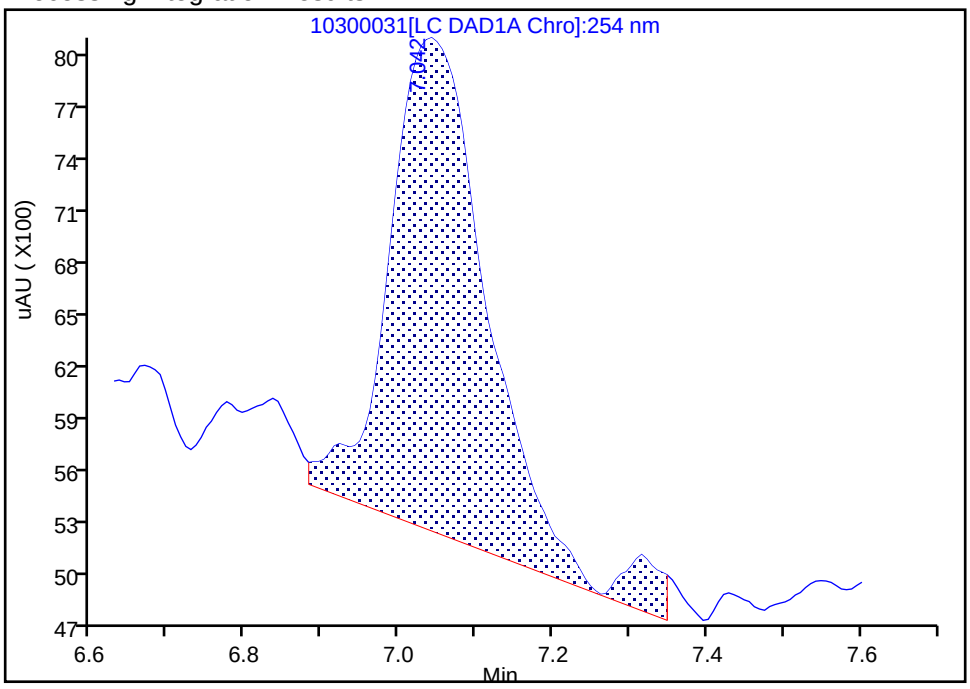
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300031.D				
Injection Date:	31-Oct-2019 03:15:42	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-7-A	Lab Sample ID:	280-129936-7		
Client ID:	EW7-PM28A-1-25				
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

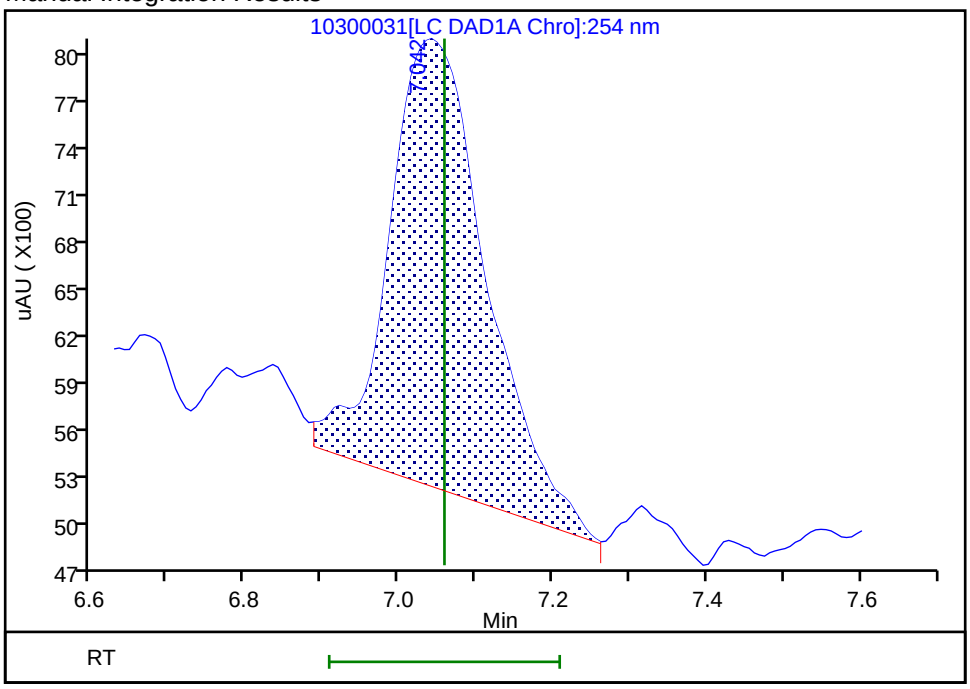
Processing Integration Results

RT: 7.04
Area: 25550
Amount: 0.118393
Amount Units: ug/ml



Manual Integration Results

RT: 7.04
Area: 24718
Amount: 0.114538
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:10:08

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28B-1-35 Lab Sample ID: 280-129936-8

Matrix: Water Lab File ID: 10280049.D

Analysis Method: 8330A Date Collected: 10/20/2019 12:10

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 513.8(mL) Date Analyzed: 10/29/2019 05:04

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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	5.6	Q	0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	0.19	U Q	0.39	0.19	0.082
606-20-2	2,6-Dinitrotoluene	0.19	U Q	0.19	0.19	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	2.2	Q	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 M	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	2.3	Q	0.19	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U Q M	0.97	0.39	0.19
2691-41-0	HMX	0.19	U Q	0.39	0.19	0.085
5755-27-1	MNX	0.39	U M	1.9	0.39	0.15
98-95-3	Nitrobenzene	0.19	U Q	0.39	0.19	0.089
121-82-4	RDX	0.22	J Q M	0.39	0.39	0.15
479-45-8	Tetryl	0.19	U Q M	0.23	0.19	0.077

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	81	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280049.D
Lims ID: 280-129936-A-8-A
Client ID: EW7-PM28B-1-35
Sample Type: Client
Inject. Date: 29-Oct-2019 05:04:09 ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-8-A
Misc. Info.: 280-0086569-049
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:03:25

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.675			ND	
	6 MNX	1		7.367			ND	U
	7 RDX	1	7.745	7.761	-0.016	2542	0.0229	M
$	9 1,2-Dinitrobenzene	1	8.719	8.715	0.004	22641	0.1625	
	10 1,3,5-Trinitrobenzene	1	8.885	8.881	0.004	1066232	4.35	E
	11 1,3-Dinitrobenzene	1	9.538	9.534	0.004	3704	0.0119	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	U
	16 2,4,6-Trinitrotoluene	1	11.192	11.201	-0.009	130927	0.5761	
	17 4-Amino-2,6-dinitrotoluene	1	11.358	11.368	-0.010	38920	0.2339	
	18 2-Amino-4,6-dinitrotoluene	1	11.652	11.661	-0.009	46504	0.2266	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	U
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

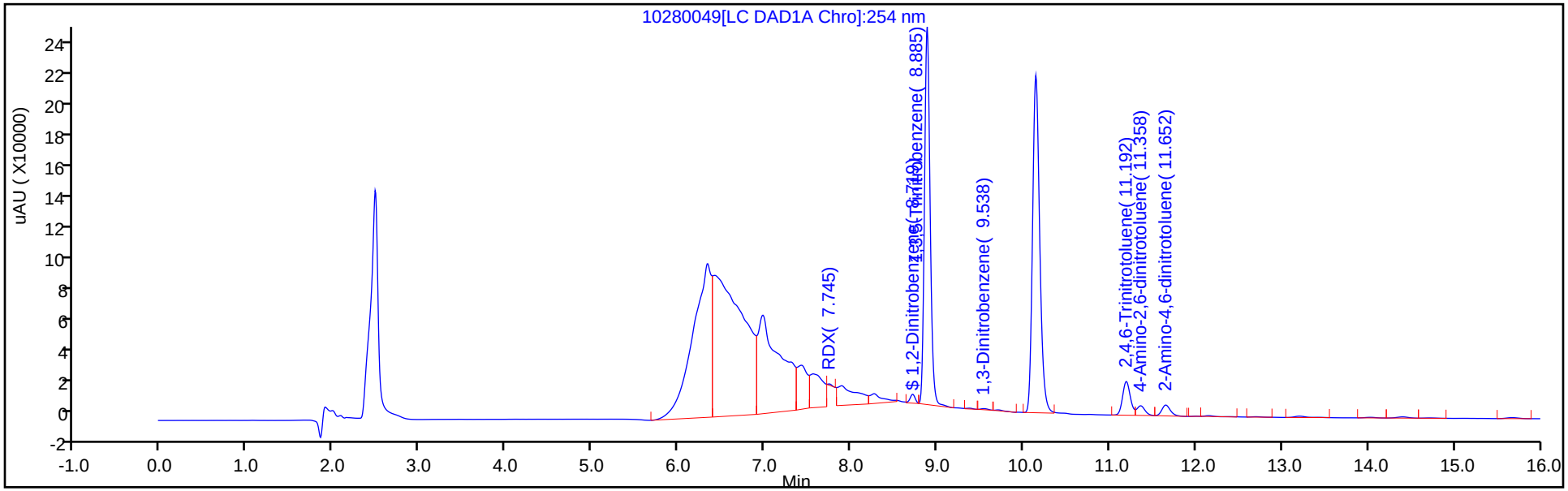
Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 29-Oct-2019 11:54:40 Chrom Revision: 2.3 09-Oct-2019 11:13:36

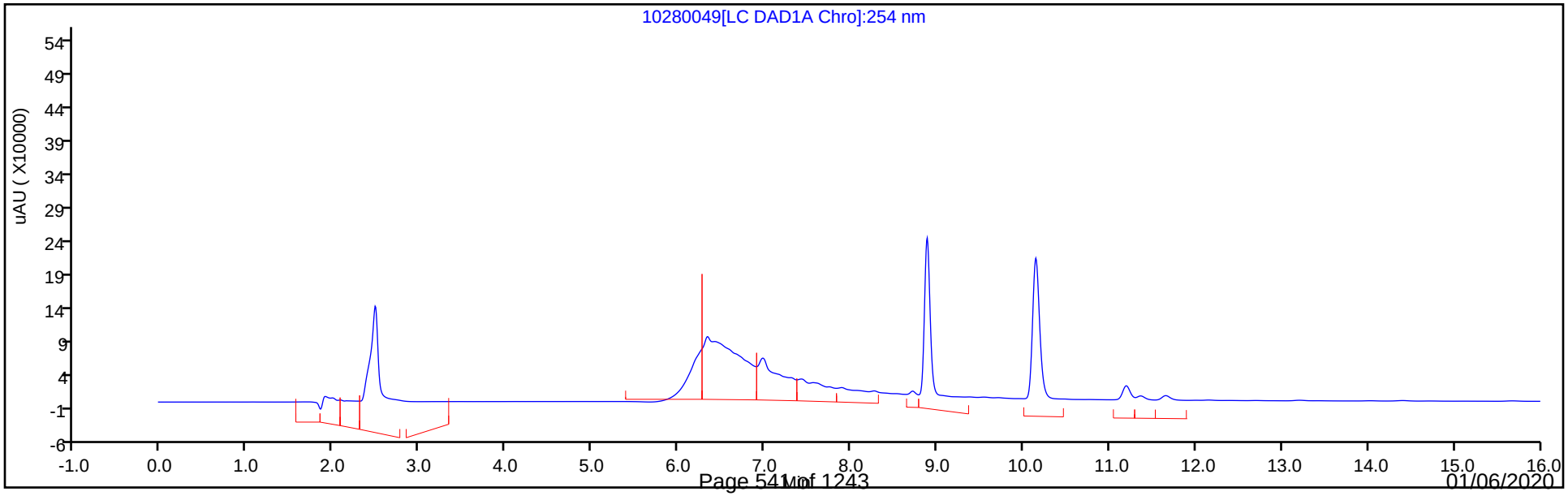
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280049.D				
Injection Date:	29-Oct-2019 05:04:09	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8	Worklist Smp#:	49
Client ID:	EW7-PM28B-1-35				
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\20191028-86569.b\10280049.D				
Lims ID:	280-129936-A-8-A				
Client ID:	EW7-PM28B-1-35				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 05:04:09	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-8-A				
Misc. Info.:	280-0086569-049				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:03:25		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1625	81.25

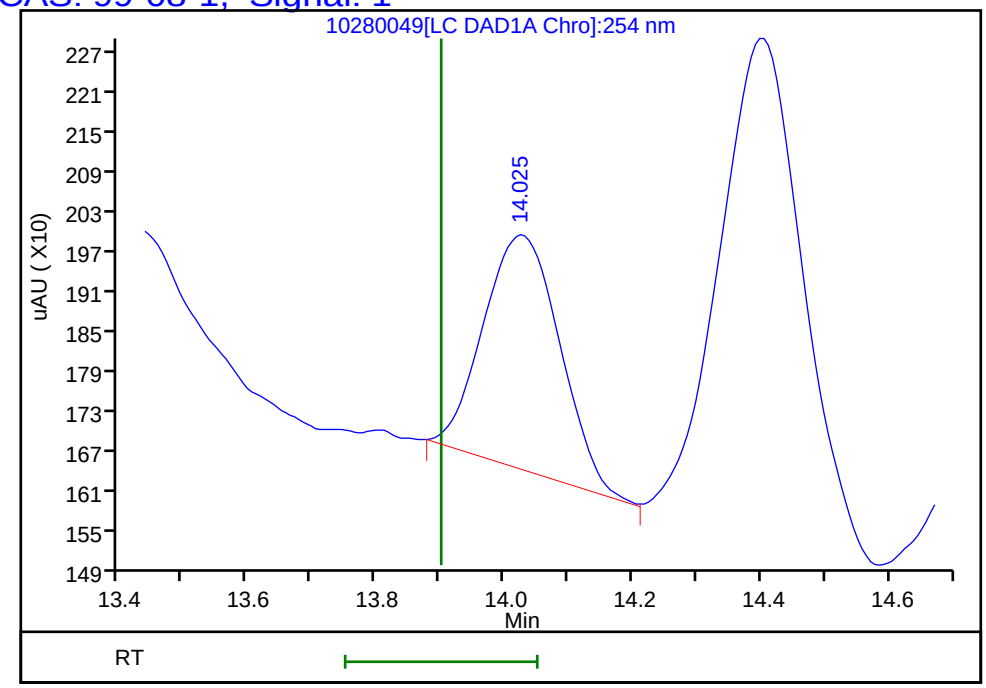
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280049.D				
Injection Date:	29-Oct-2019 05:04:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	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: 14.03
Response: 2902
Amount: 0.019997



Reviewer: beckerc, 29-Oct-2019 11:03:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

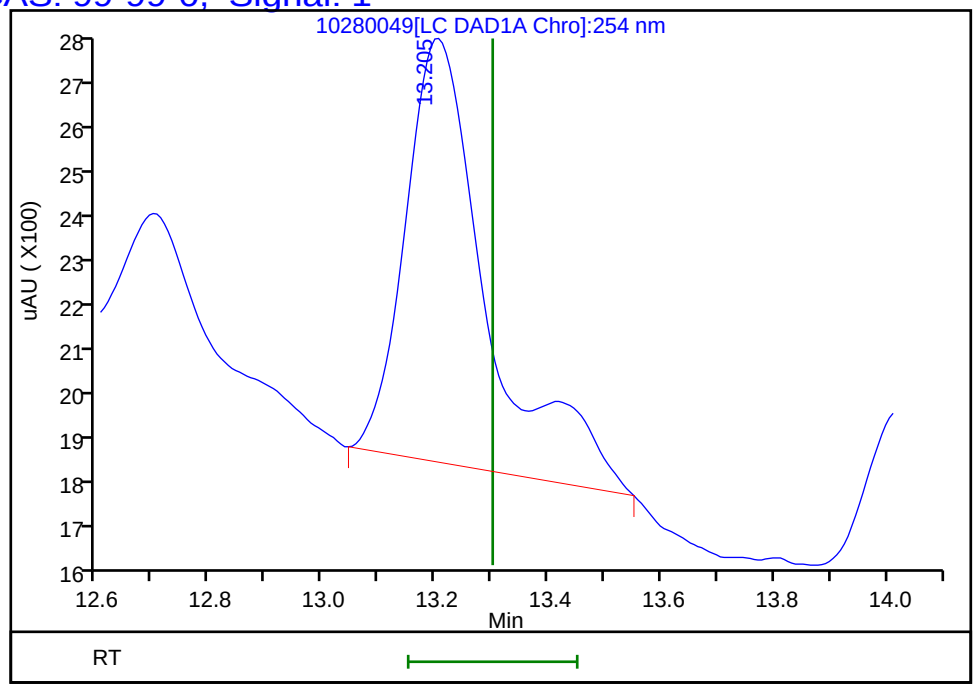
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280049.D				
Injection Date:	29-Oct-2019 05:04:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	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: 13.21
Response: 8317
Amount: 0.075434



Reviewer: beckerc, 29-Oct-2019 11:03:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

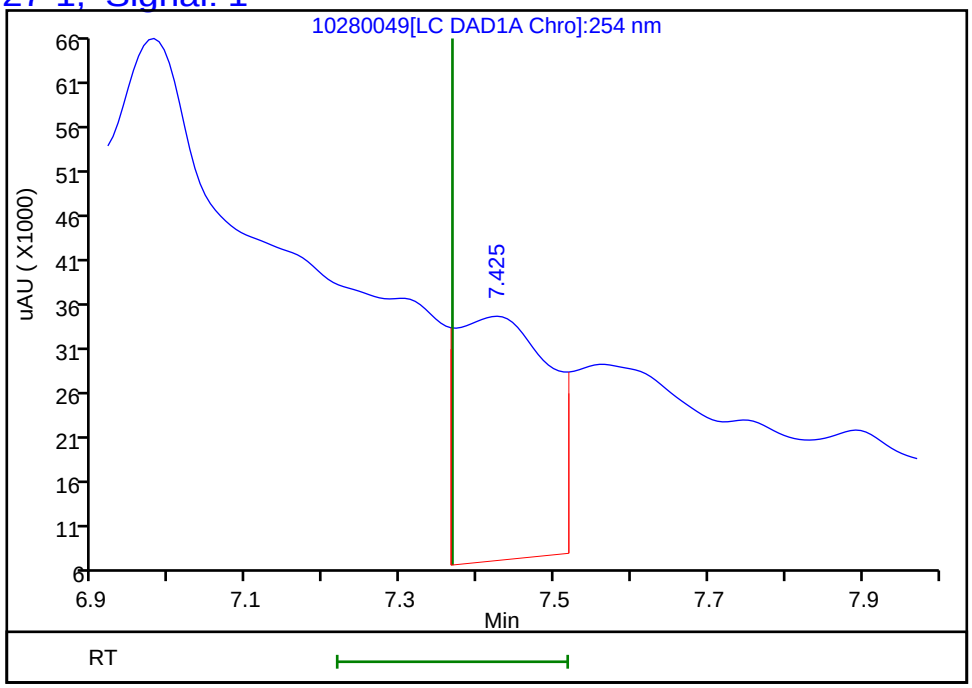
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280049.D

Injection Date:	29-Oct-2019 05:04:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.43
Response: 228182
Amount: 1.629395



Reviewer: beckerc, 29-Oct-2019 11:03:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

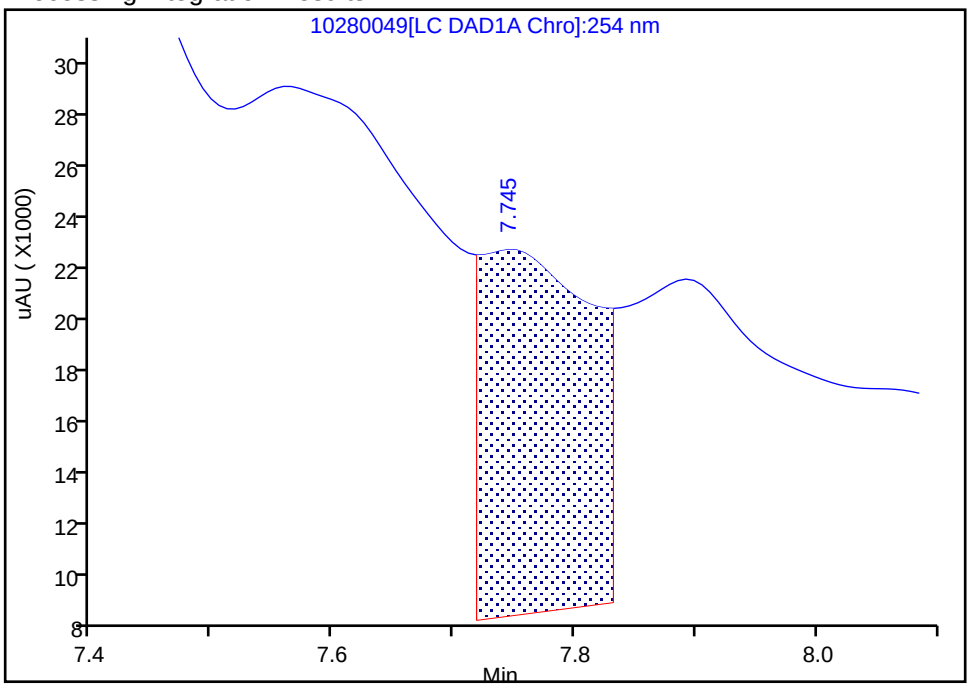
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280049.D				
Injection Date:	29-Oct-2019 05:04:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

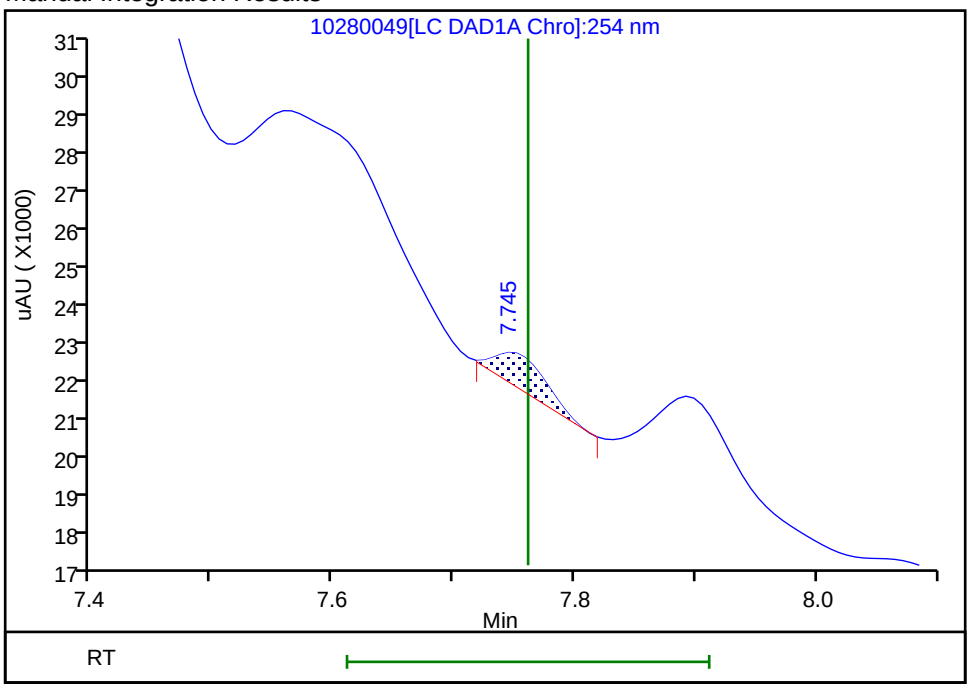
Processing Integration Results

RT: 7.75
Area: 87068
Amount: 0.783546
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 2542
Amount: 0.022876
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:02:20
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

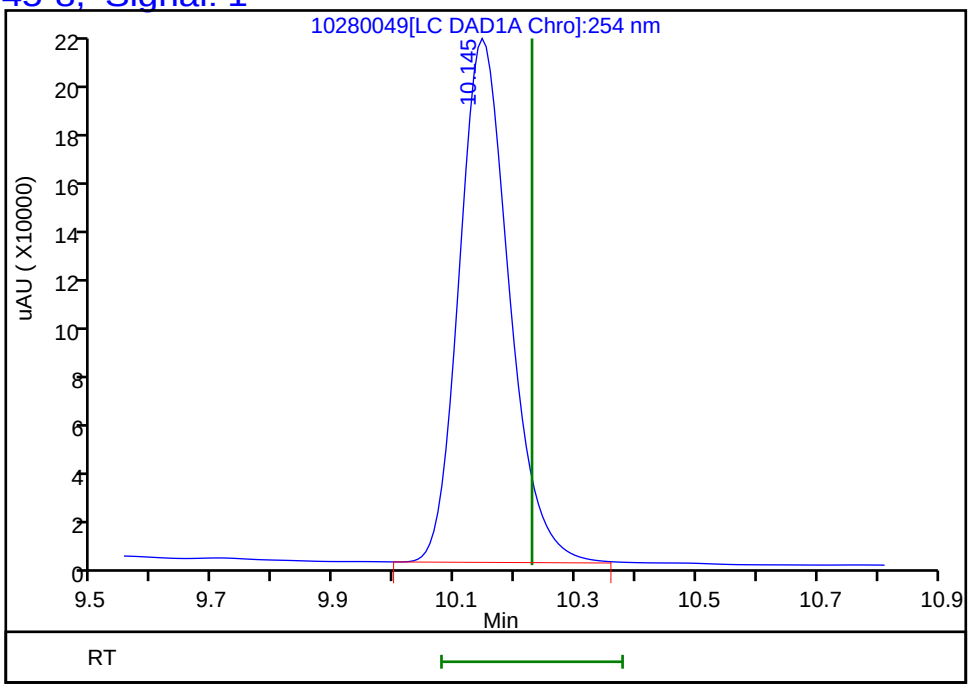
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280049.D

Injection Date:	29-Oct-2019 05:04:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	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: 10.15
Response: 1204025
Amount: 7.434216



Reviewer: beckerc, 29-Oct-2019 11:03:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28B-1-35 Lab Sample ID: 280-129936-8

Matrix: Water Lab File ID: 10300032.D

Analysis Method: 8330A Date Collected: 10/20/2019 12:10

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 513.8(mL) Date Analyzed: 10/31/2019 03:50

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.19	U M Q	0.39	0.19	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	141	*Q*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300032.D
Lims ID: 280-129936-A-8-A
Client ID: EW7-PM28B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 03:50:42 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-8-A
Misc. Info.: 280-0086641-032
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:35 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:13:11

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.035	7.059	-0.024	7787	0.0361	M
	7 MNX	1	8.129	7.989	0.140	4322	NC	
	8 RDX	1	9.195	9.259	-0.064	7464	0.0168	
	9 Nitrobenzene	1		12.232			ND	
$	10 1,2-Dinitrobenzene	1	13.169	13.172	-0.003	84052	0.2825	
	12 1,3-Dinitrobenzene	1		15.705			ND	U
	14 o-Nitrotoluene	1		16.705			ND	U
	15 p-Nitrotoluene	1		16.992			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.302	17.305	-0.003	91616	0.2819	
	17 m-Nitrotoluene	1		17.919			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.175	18.199	-0.024	110940	0.2413	
	19 1,3,5-Trinitrobenzene	1	19.062	19.059	0.003	1974396	3.99	E
	20 2,6-Dinitrotoluene	1		19.985			ND	
	21 2,4-Dinitrotoluene	1		20.479			ND	U
	22 Tetryl	1		23.732			ND	
	23 2,4,6-Trinitrotoluene	1	24.835	24.832	0.003	272626	0.5893	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- E - Exceeded Maximum Amount

Review Flags
- M - Manually Integrated
- U - Marked Undetected

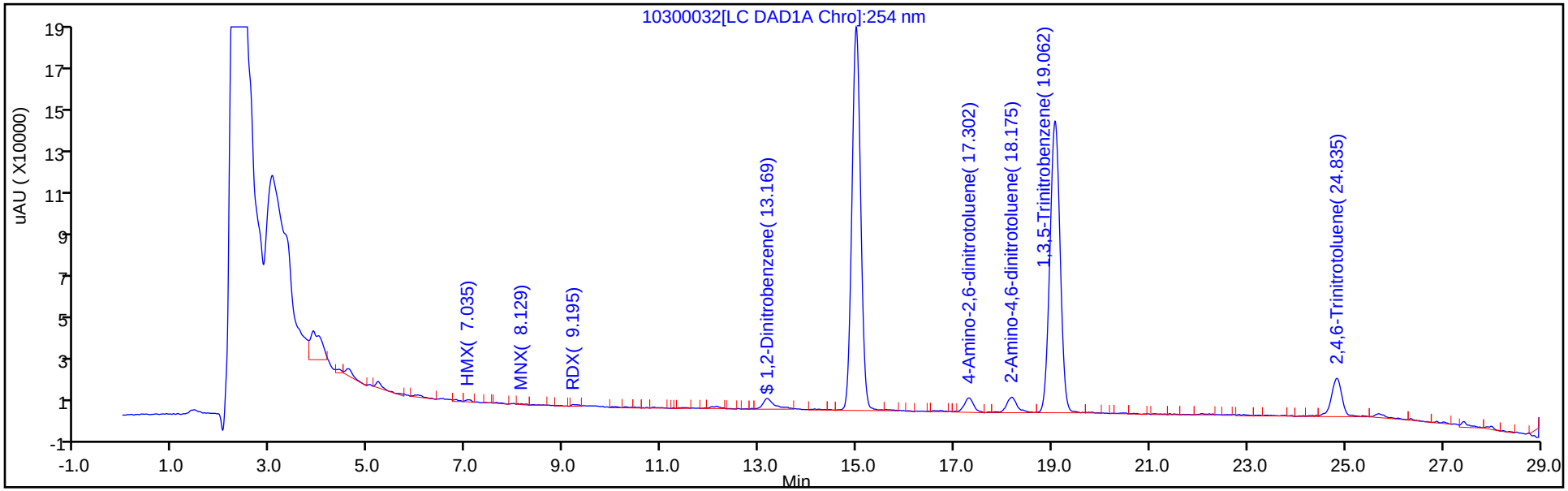
Report Date: 31-Oct-2019 16:27:45 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

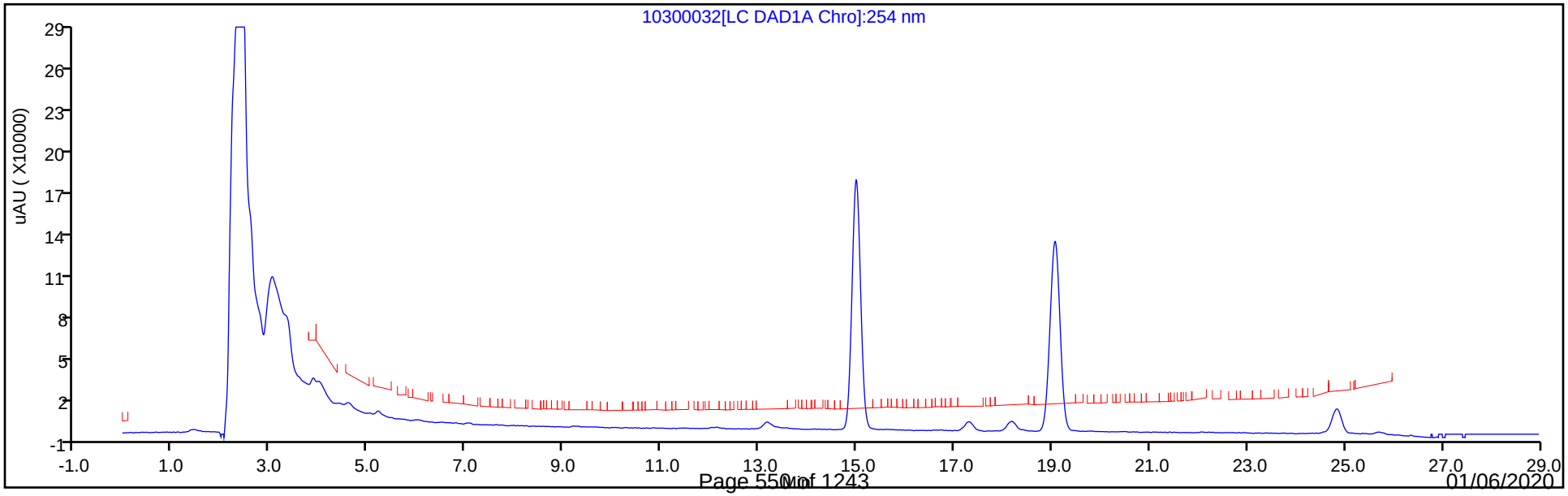
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300032.D

Injection Date:	31-Oct-2019 03:50:42	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8	Worklist Smp#:	32
Client ID:	EW7-PM28B-1-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300032.D				
Lims ID:	280-129936-A-8-A				
Client ID:	EW7-PM28B-1-35				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 03:50:42	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-8-A				
Misc. Info.:	280-0086641-032				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:35	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				

First Level Reviewer: beckerc Date: 31-Oct-2019 16:13:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2825	141.26

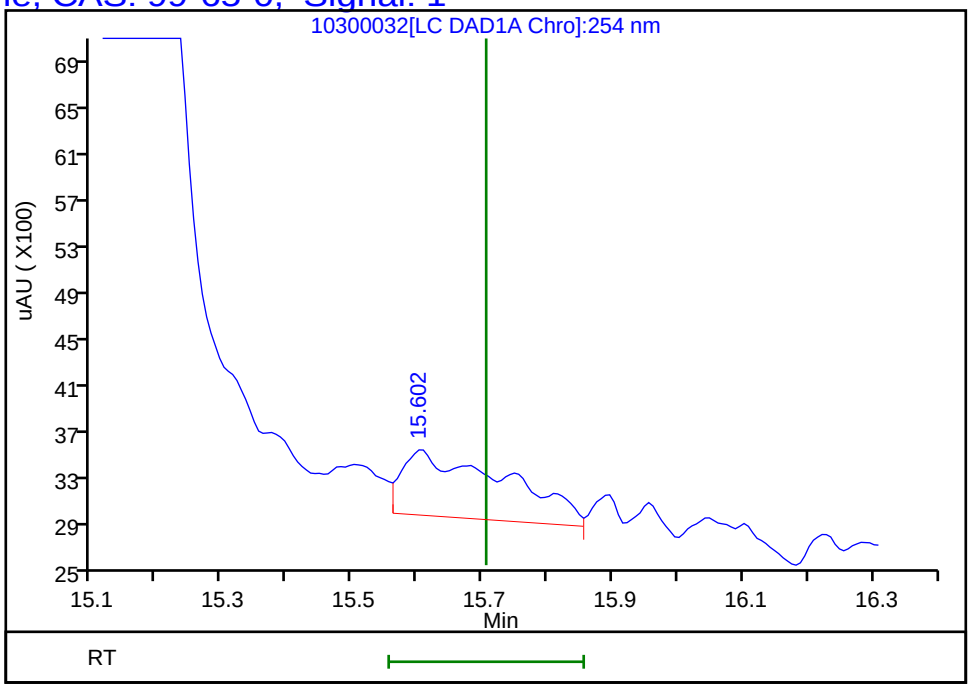
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300032.D				
Injection Date:	31-Oct-2019 03:50:42	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.60
Response: 6249
Amount: 0.009502



Reviewer: beckerc, 31-Oct-2019 16:13:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

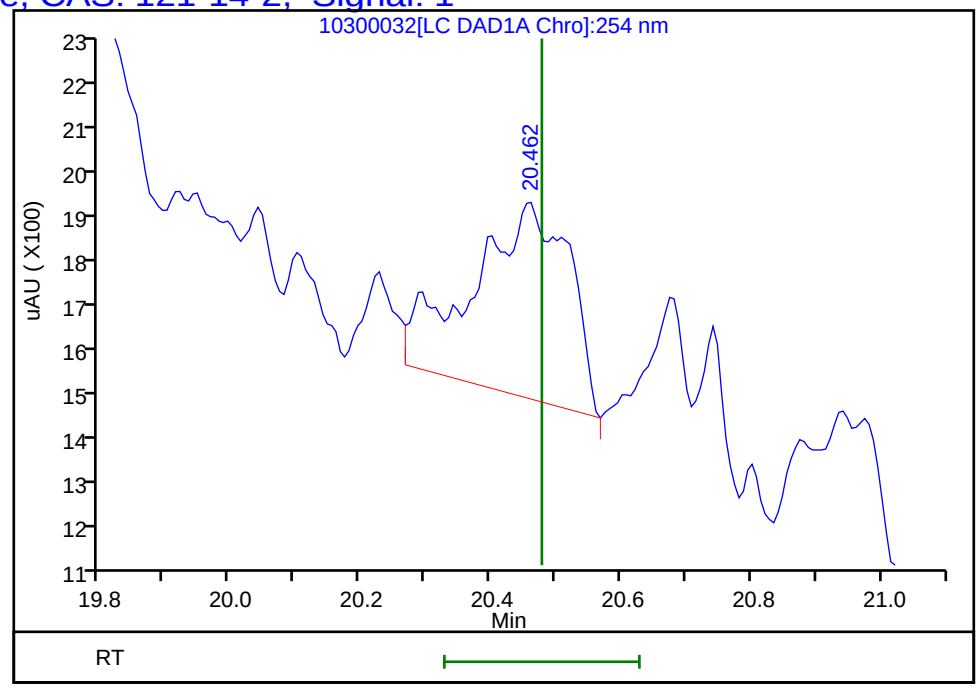
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300032.D				
Injection Date:	31-Oct-2019 03:50:42	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.46
Response: 4078
Amount: 0.006694



Reviewer: beckerc, 31-Oct-2019 16:13:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

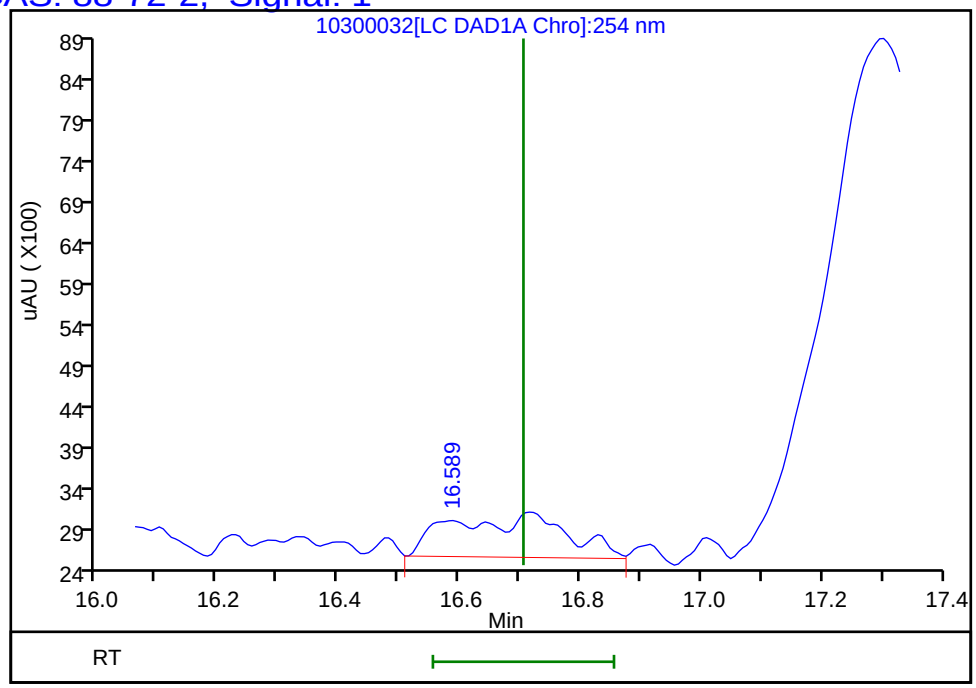
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300032.D				
Injection Date:	31-Oct-2019 03:50:42	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.59
Response: 6996
Amount: 0.025062



Reviewer: beckerc, 31-Oct-2019 16:13:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

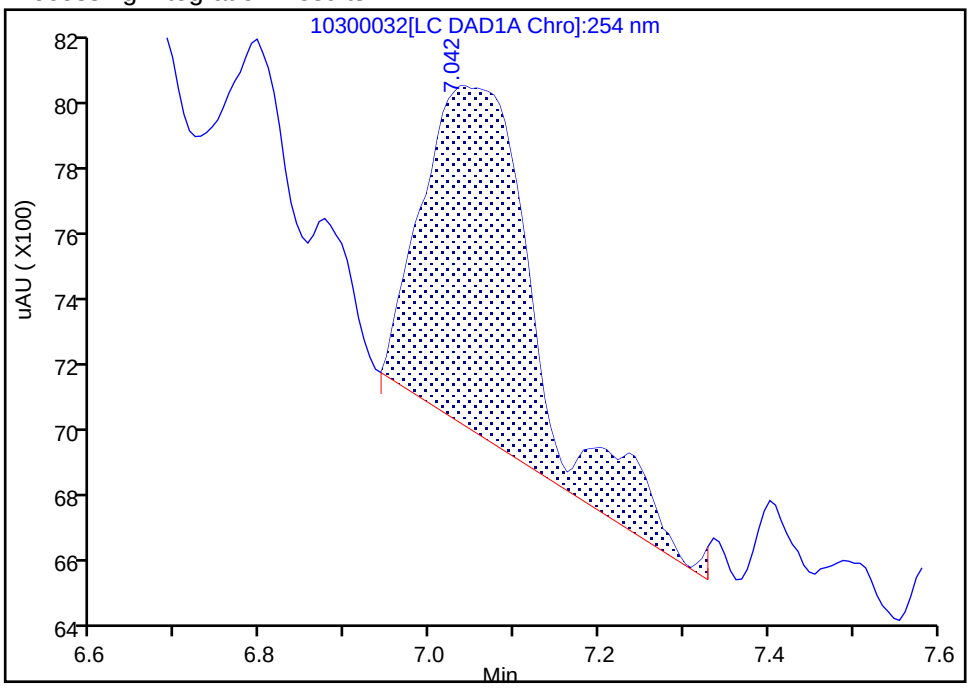
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300032.D				
Injection Date:	31-Oct-2019 03:50:42	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

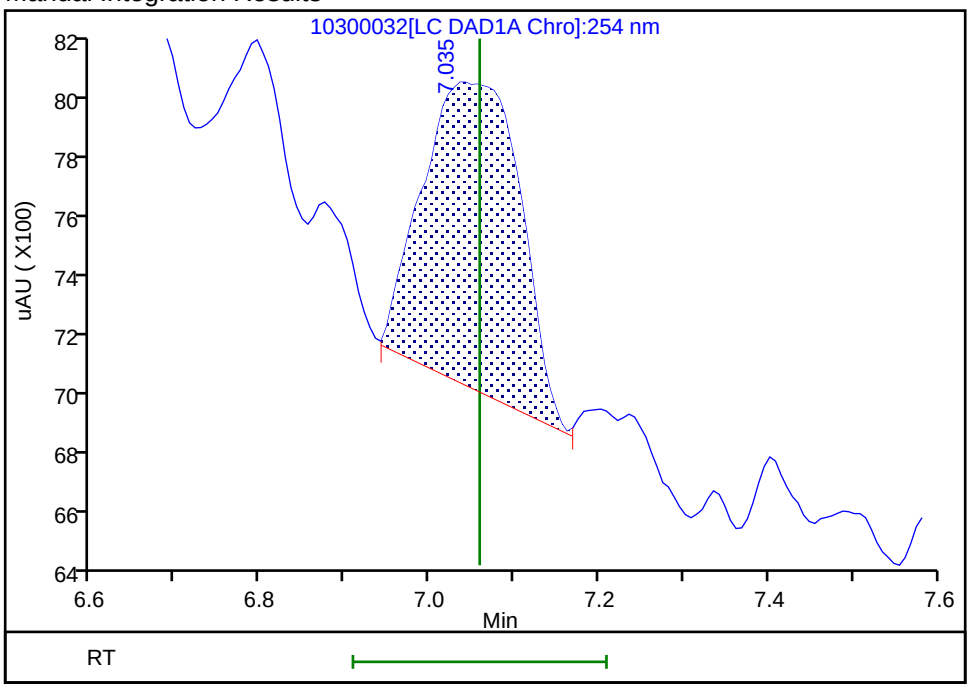
Processing Integration Results

RT: 7.04
Area: 9186
Amount: 0.042566
Amount Units: ug/ml



Manual Integration Results

RT: 7.04
Area: 7787
Amount: 0.036083
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:12:05

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28B-1-35 DL Lab Sample ID: 280-129936-8 DL

Matrix: Water Lab File ID: 10300033.D

Analysis Method: 8330A Date Collected: 10/20/2019 12:10

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 513.8(mL) Date Analyzed: 10/31/2019 04:25

Con. Extract Vol.: 5(mL) Dilution Factor: 20

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	0	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D
Lims ID: 280-129936-A-8-A
Client ID: EW7-PM28B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 04:25:39 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 20.0000
Sample Info: 280-129936-A-8-A
Misc. Info.: 280-0086641-033
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:35 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:14:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		7.059			ND	U
7 MNX	1	7.979	7.989	-0.010	4456	NC	
8 RDX	1		9.259			ND	
9 Nitrobenzene	1		12.232			ND	
$ 10 1,2-Dinitrobenzene	1		13.172			ND(<0)	
12 1,3-Dinitrobenzene	1		15.705			ND	U
14 o-Nitrotoluene	1		16.705			ND	U
15 p-Nitrotoluene	1		16.992			ND	U
16 4-Amino-2,6-dinitrotoluene	1		17.305			ND	U
17 m-Nitrotoluene	1		17.919			ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.199			ND	U
19 1,3,5-Trinitrobenzene	1	19.066	19.059	0.007	99746	0.2018	
20 2,6-Dinitrotoluene	1		19.985			ND	
21 2,4-Dinitrotoluene	1		20.479			ND	
22 Tetryl	1		23.732			ND	
23 2,4,6-Trinitrotoluene	1	24.866	24.832	0.034	21969	0.0112	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

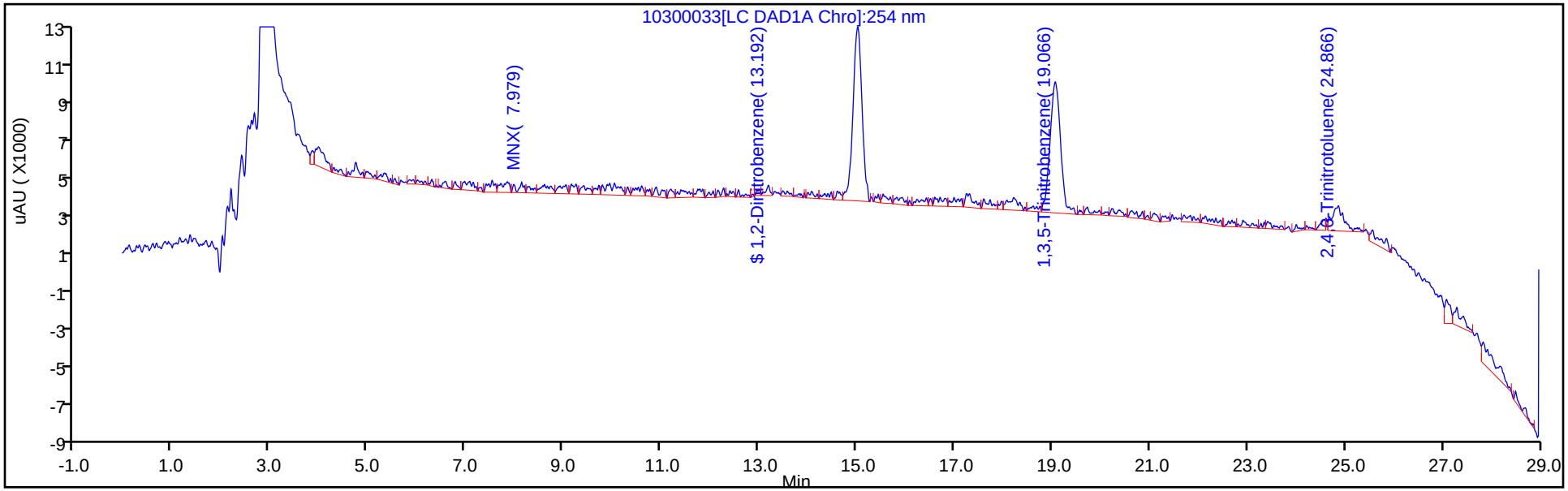
Report Date: 31-Oct-2019 16:27:46 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

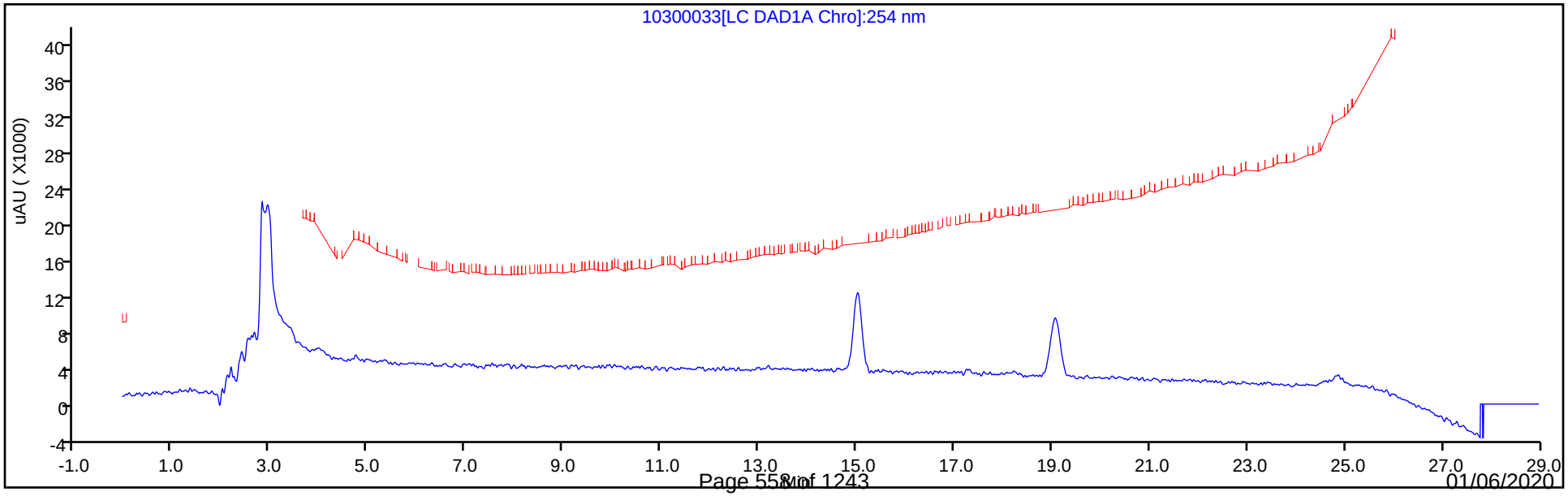
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D

Injection Date:	31-Oct-2019 04:25:39	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8	Worklist Smp#:	33
Client ID:	EW7-PM28B-1-35				
Injection Vol:	100.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	33
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



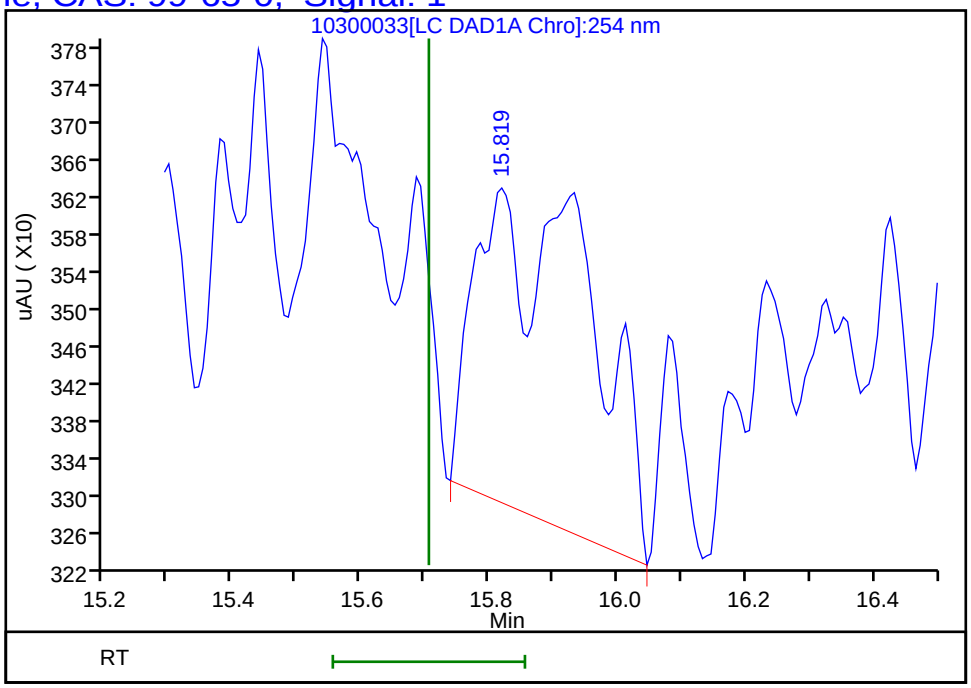
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D				
Injection Date:	31-Oct-2019 04:25:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 15.82
Response: 4418
Amount: 0.006718



Reviewer: beckerc, 31-Oct-2019 16:14:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

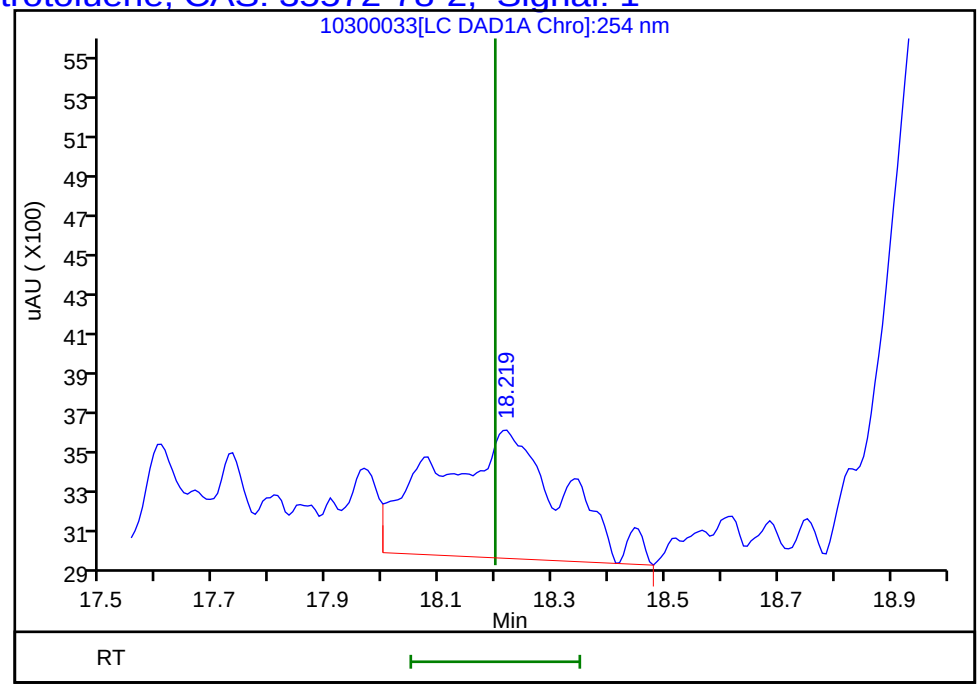
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D				
Injection Date:	31-Oct-2019 04:25:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 18.22
Response: 9948
Amount: 0.021637



Reviewer: beckerc, 31-Oct-2019 16:14:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

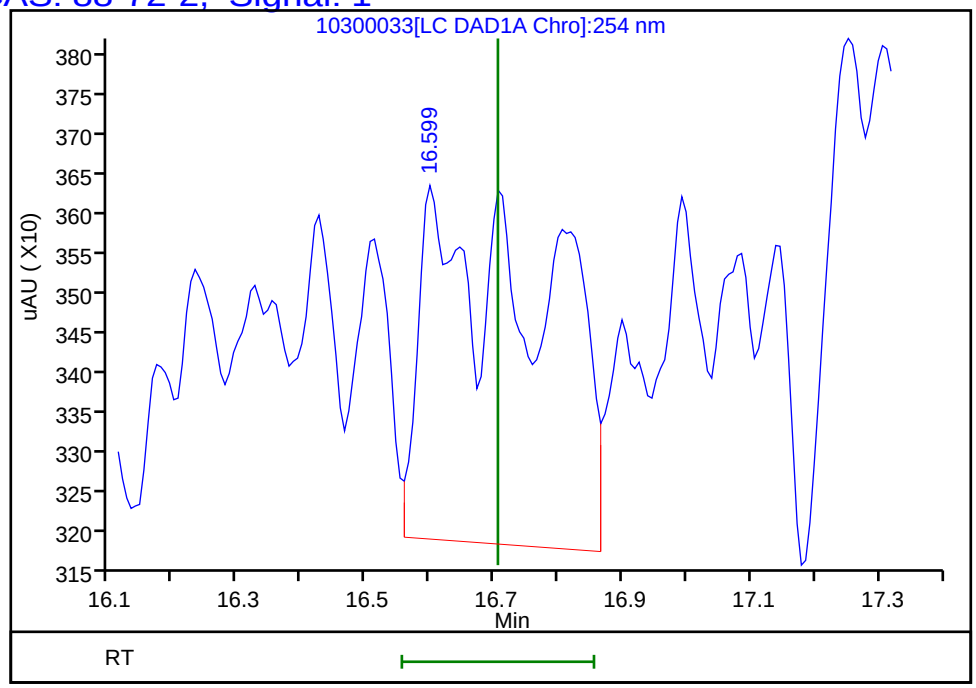
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D				
Injection Date:	31-Oct-2019 04:25:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.60
Response: 5766
Amount: 0.020656



Reviewer: beckerc, 31-Oct-2019 16:14:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

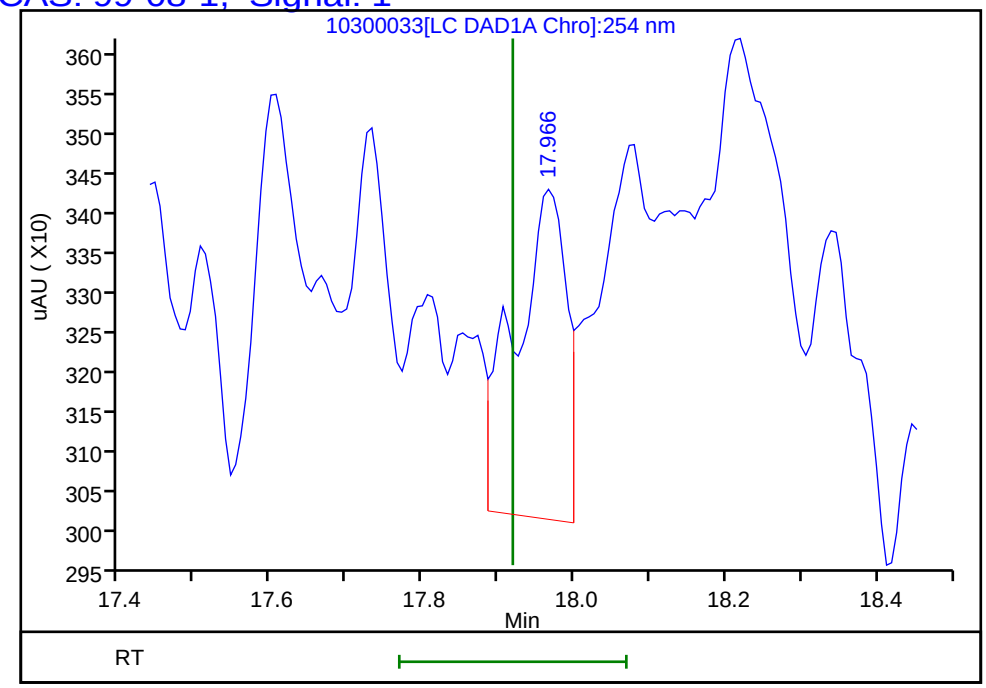
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D				
Injection Date:	31-Oct-2019 04:25:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 17.97
Response: 1917
Amount: NaN



Reviewer: beckerc, 31-Oct-2019 16:14:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

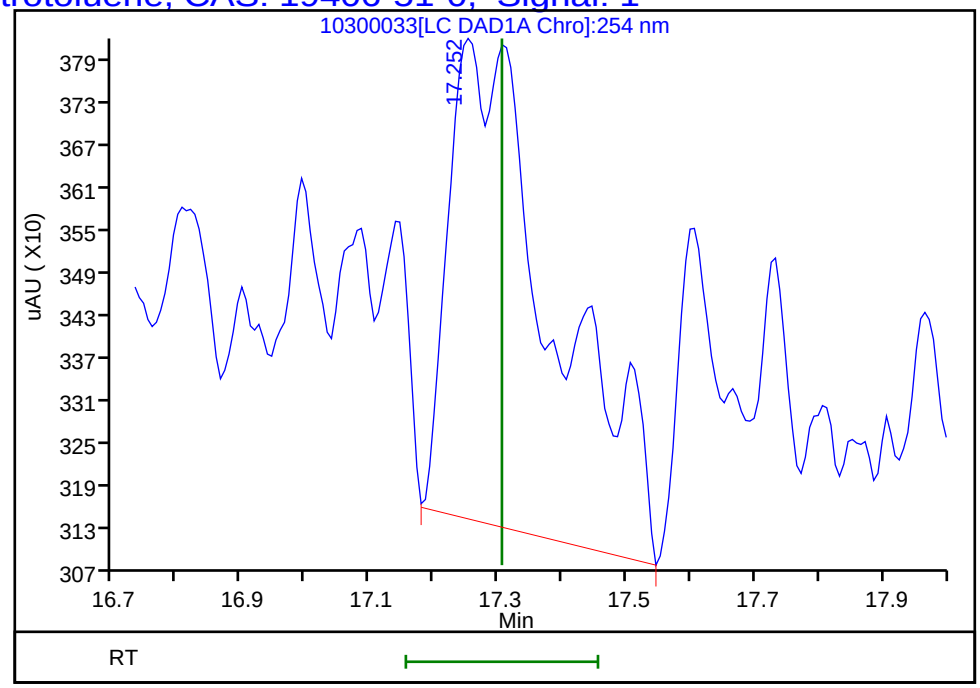
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D				
Injection Date:	31-Oct-2019 04:25:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.25
Response: 7875
Amount: 0.024233



Reviewer: beckerc, 31-Oct-2019 16:14:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

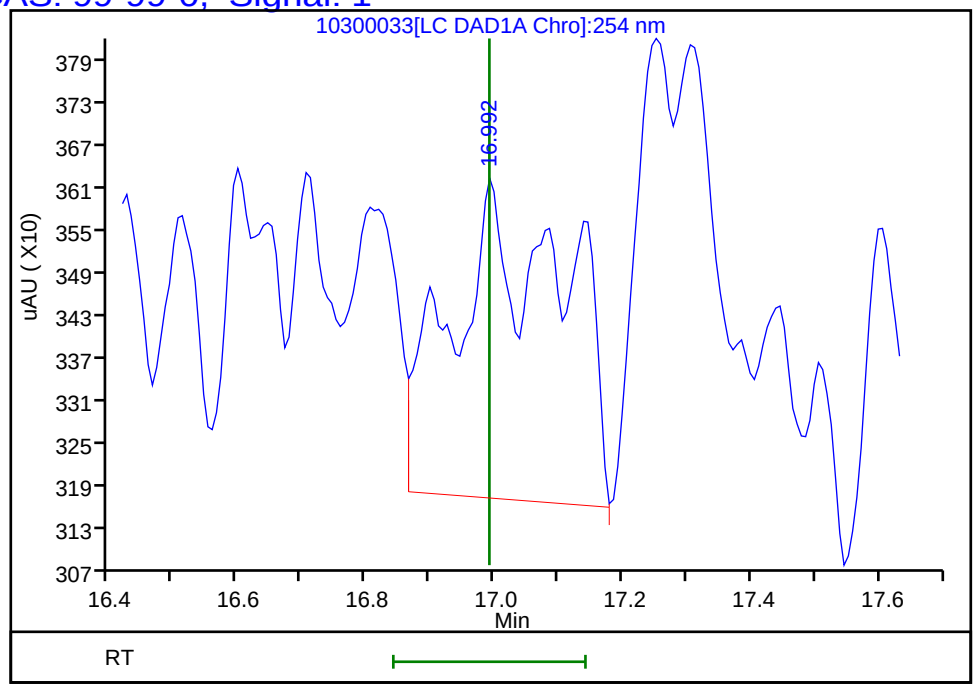
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D				
Injection Date:	31-Oct-2019 04:25:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 16.99
Response: 5415
Amount: 0.024228



Reviewer: beckerc, 31-Oct-2019 16:14:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

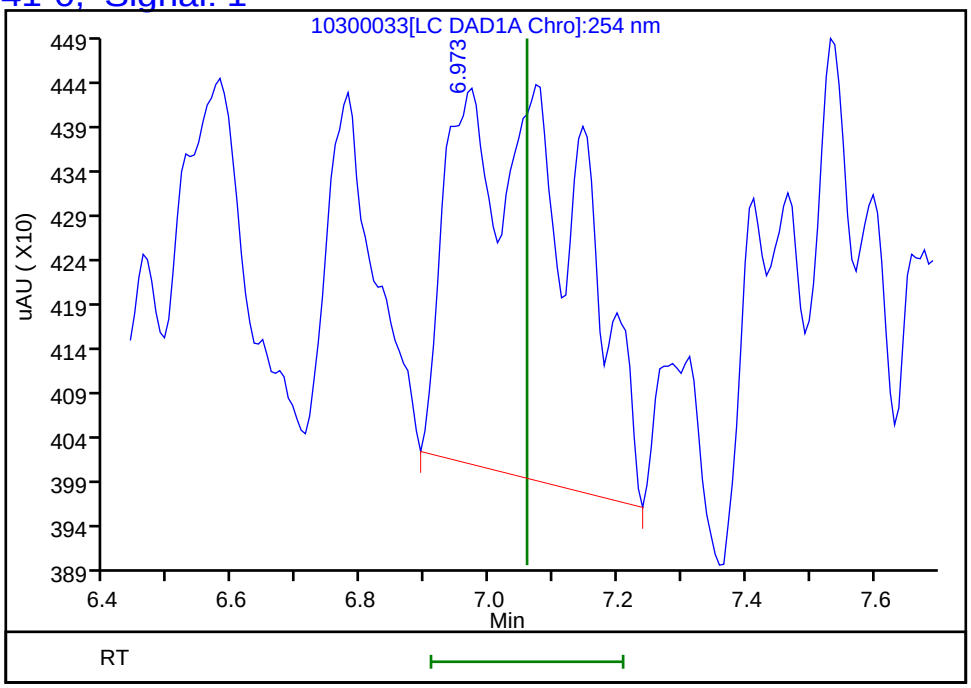
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300033.D				
Injection Date:	31-Oct-2019 04:25:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 6.97
Response: 5938
Amount: 0.027515



Reviewer: beckerc, 31-Oct-2019 16:14:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: EW7-PM28B-1-35 DL Lab Sample ID: 280-129936-8 DL

Matrix: Water Lab File ID: 10310026.D

Analysis Method: 8330A Date Collected: 10/20/2019 12:10

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 513.8(mL) Date Analyzed: 10/31/2019 20:46

Con. Extract Vol.: 5(mL) Dilution Factor: 20

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 476053 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	42	Q D	19	7.8	3.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	82	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310026.D
Lims ID: 280-129936-A-8-A
Client ID: EW7-PM28B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 20:46:09 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 20.0000
Sample Info: 280-129936-A-8-A
Misc. Info.: 280-0086686-026
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 01-Nov-2019 09:13:27 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: CTX0335

First Level Reviewer: beckerc Date: 01-Nov-2019 08:46:27

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.682			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.756			ND	U
$	9 1,2-Dinitrobenzene	1	8.713	8.716	-0.003	1145	0.008218	
	10 1,3,5-Trinitrobenzene	1	8.880	8.882	-0.002	52996	0.2162	
	11 1,3-Dinitrobenzene	1		9.529			ND	
	12 Nitrobenzene	1		9.915			ND	
	14 Tetryl	1		10.222			ND	U
	16 2,4,6-Trinitrotoluene	1	11.173	11.189	-0.016	6542	0.0288	
	17 4-Amino-2,6-dinitrotoluene	1	11.333	11.355	-0.022	1711	0.0103	
	18 2-Amino-4,6-dinitrotoluene	1	11.626	11.642	-0.016	2219	0.0108	
	19 2,6-Dinitrotoluene	1		11.802			ND	
	20 2,4-Dinitrotoluene	1		11.995			ND	
	21 o-Nitrotoluene	1		12.842			ND	
	22 p-Nitrotoluene	1		13.282			ND	
	23 m-Nitrotoluene	1		13.882			ND	

QC Flag Legend

Review Flags
U - Marked Undetected

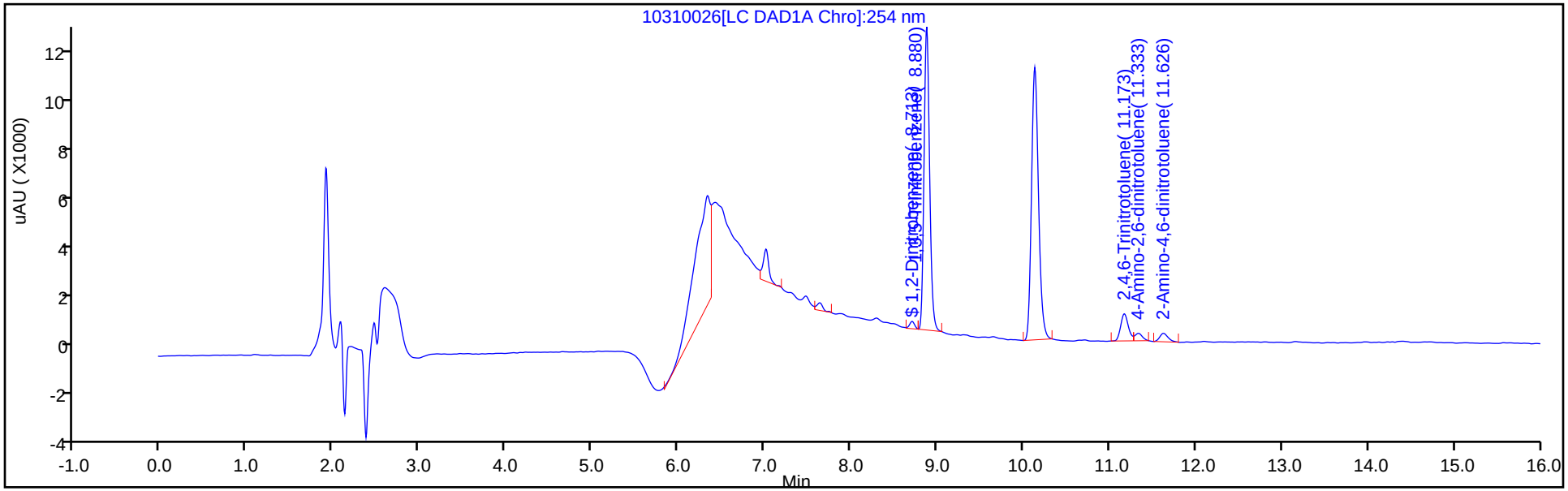
Report Date: 01-Nov-2019 09:13:31 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

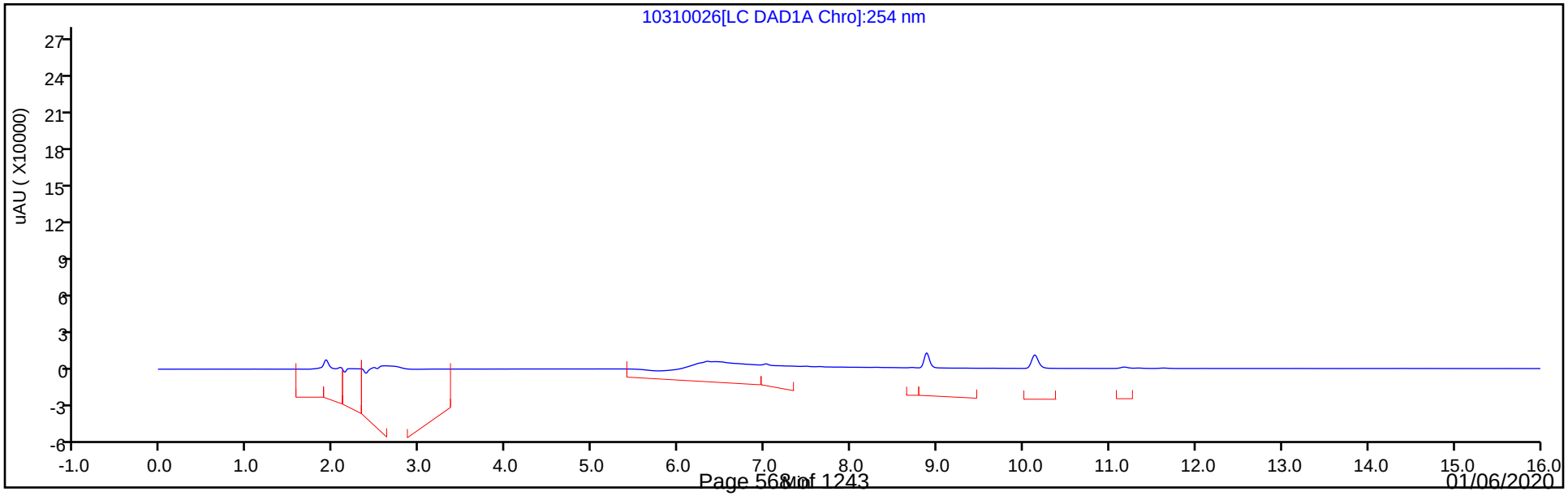
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310026.D

Injection Date:	31-Oct-2019 20:46:09	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8	Worklist Smp#:	26
Client ID:	EW7-PM28B-1-35				
Injection Vol:	100.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310026.D
Lims ID: 280-129936-A-8-A
Client ID: EW7-PM28B-1-35
Sample Type: Client
Inject. Date: 31-Oct-2019 20:46:09 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 20.0000
Sample Info: 280-129936-A-8-A
Misc. Info.: 280-0086686-026
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 01-Nov-2019 09:13:27 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: CTX0335

First Level Reviewer: beckerc Date: 01-Nov-2019 08:46:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.008218	4.11

User Disabled Compound Report

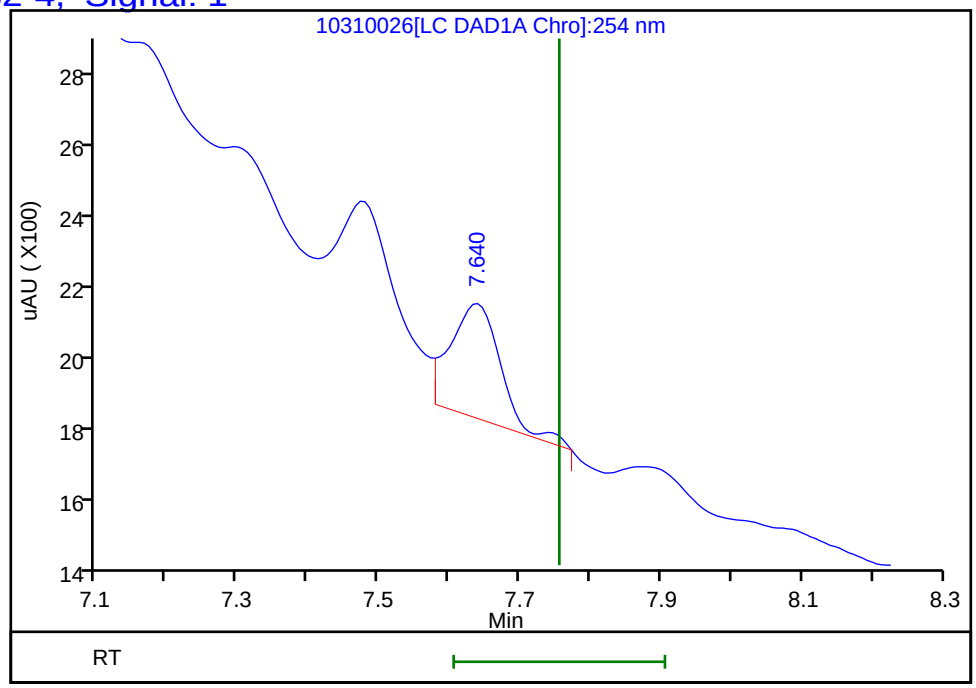
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310026.D

Injection Date:	31-Oct-2019 20:46:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 1428
Amount: 0.012851



Reviewer: beckerc, 01-Nov-2019 08:46:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

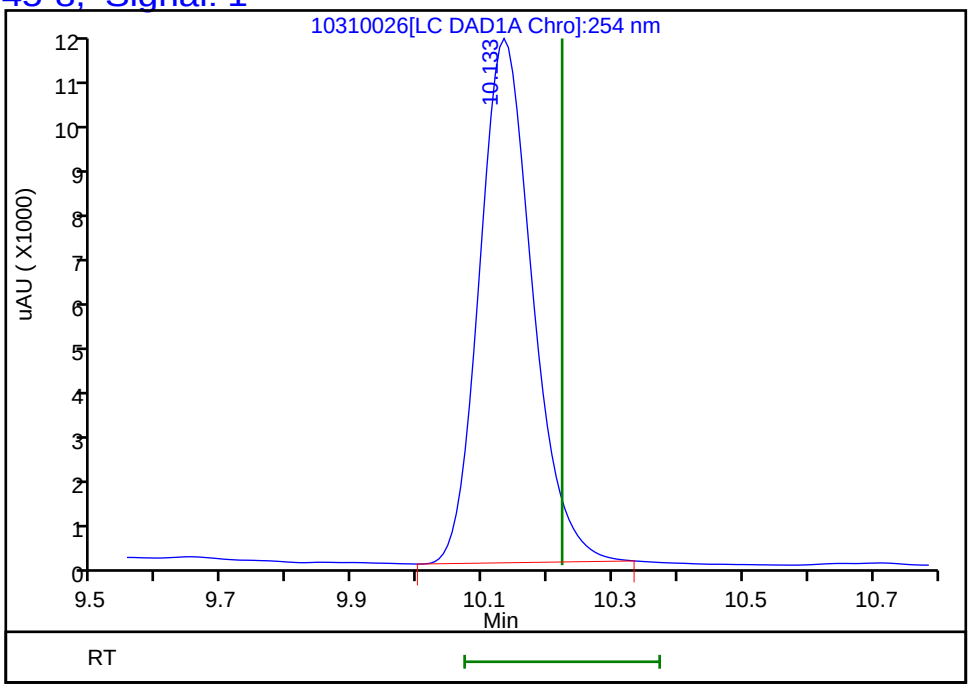
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310026.D

Injection Date:	31-Oct-2019 20:46:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-8-A	Lab Sample ID:	280-129936-8		
Client ID:	EW7-PM28B-1-35				
Operator ID:	CB	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	20.0000		
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: 10.13
Response: 59886
Amount: 0.369764



Reviewer: beckerc, 01-Nov-2019 08:46:27

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.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 Lab Sample ID: 280-129936-9

Matrix: Water Lab File ID: 10280050.D

Analysis Method: 8330A Date Collected: 10/21/2019 14:45

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 524.2(mL) Date Analyzed: 10/29/2019 05:27

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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.38	U	0.95	0.38	0.19
99-65-0	1,3-Dinitrobenzene	0.19	U	0.38	0.19	0.085
118-96-7	2,4,6-Trinitrotoluene	0.38	U	0.38	0.38	0.15
121-14-2	2,4-Dinitrotoluene	0.19	U	0.38	0.19	0.080
606-20-2	2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.062
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.19	0.11	0.048
88-72-2	2-Nitrotoluene	0.19	U J1	0.38	0.19	0.082
99-08-1	3-Nitrotoluene	0.38	U J1 M	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.11	U	0.19	0.11	0.055
99-99-0	4-Nitrotoluene	0.38	U J1	0.95	0.38	0.19
2691-41-0	HMX	0.19	U	0.38	0.19	0.084
5755-27-1	MNX	0.38	U	1.9	0.38	0.15
121-82-4	RDX	0.38	U	0.38	0.38	0.15
479-45-8	Tetryl	0.19	U	0.23	0.19	0.076

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\20191028-86569.b\10280050.D
Lims ID: 280-129936-A-9-A
Client ID: G0070-1
Sample Type: Client
Inject. Date: 29-Oct-2019 05:27:06 ALS Bottle#: 50 Worklist Smp#: 50
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-9-A
Misc. Info.: 280-0086569-050
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:04:26

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1	2,6-diamino-4-nitrotoluene	1		6.540			ND	U
2	TNX	1		6.587			ND	
3	HMX	1		6.675			ND	
4	2,4-diamino-6-nitrotoluene	1		6.727			ND	
5	DNX	1		6.907			ND	
6	MNX	1		7.367			ND	
7	RDX	1		7.761			ND	
8	2,4,6-Trinitrophenol	1		8.095			ND	U
$ 9	1,2-Dinitrobenzene	1	8.716	8.715	0.001	25344	0.1819	M
10	1,3,5-Trinitrobenzene	1		8.881			ND	
11	1,3-Dinitrobenzene	1		9.534			ND	
12	Nitrobenzene	1	9.923	9.921	0.002	2568	0.0129	M
13	3,5-Dinitroaniline	1		10.173			ND	
14	Tetryl	1		10.228			ND	
15	Nitroglycerin	2		10.741			ND	
16	2,4,6-Trinitrotoluene	1		11.201			ND	
17	4-Amino-2,6-dinitrotoluene	1		11.368			ND	
18	2-Amino-4,6-dinitrotoluene	1		11.661			ND	
19	2,6-Dinitrotoluene	1		11.814			ND	
20	2,4-Dinitrotoluene	1		12.008			ND	
21	o-Nitrotoluene	1		12.854			ND	
22	p-Nitrotoluene	1		13.301			ND	
23	m-Nitrotoluene	1		13.901			ND	U
24	PETN	2		15.001			ND	
25	Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

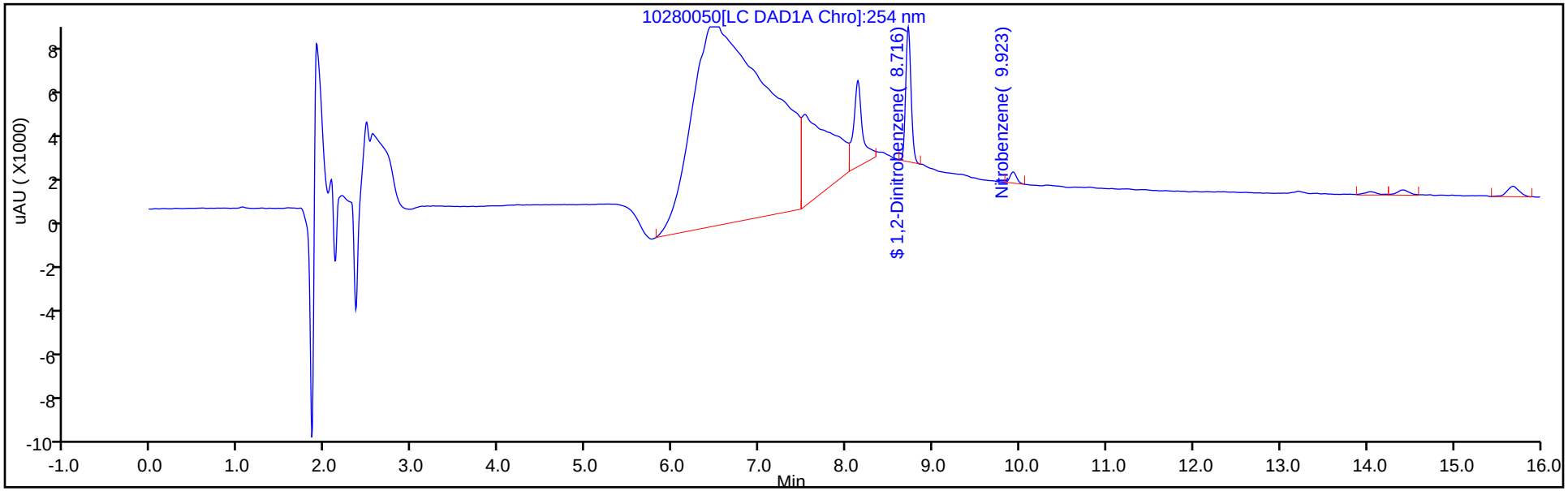
Report Date: 29-Oct-2019 11:54:39 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

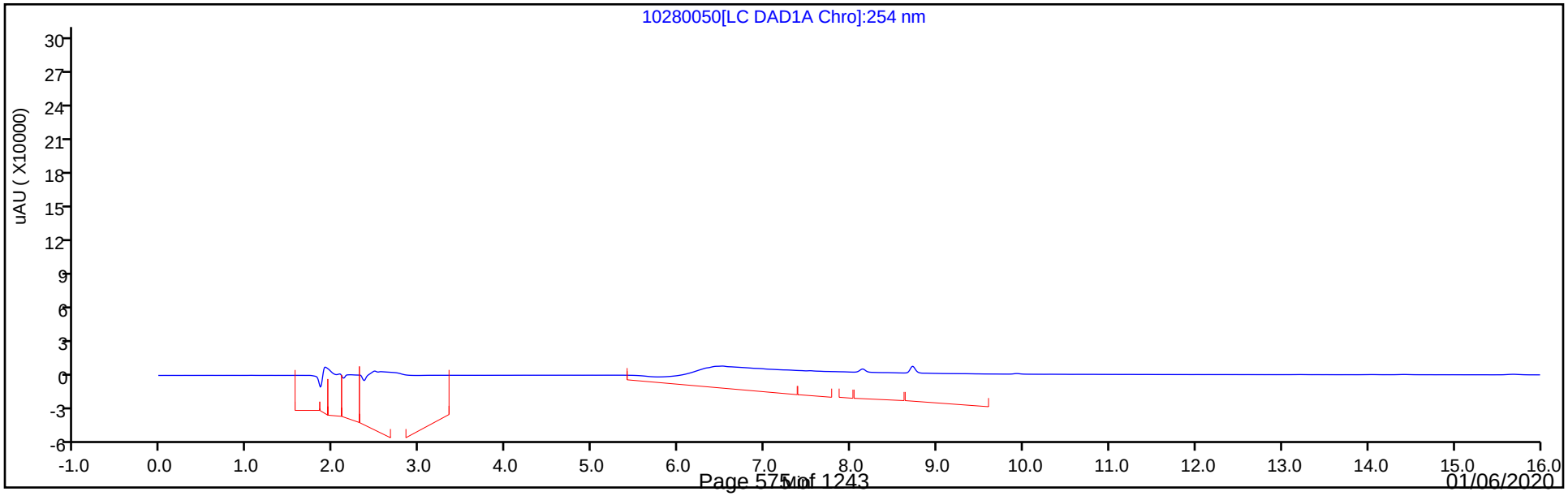
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280050.D

Injection Date:	29-Oct-2019 05:27:06	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9	Worklist Smp#:	50
Client ID:	G0070-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	50
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280050.D				
Lims ID:	280-129936-A-9-A				
Client ID:	G0070-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 05:27:06	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-9-A				
Misc. Info.:	280-0086569-050				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:04:26		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1819	90.95

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

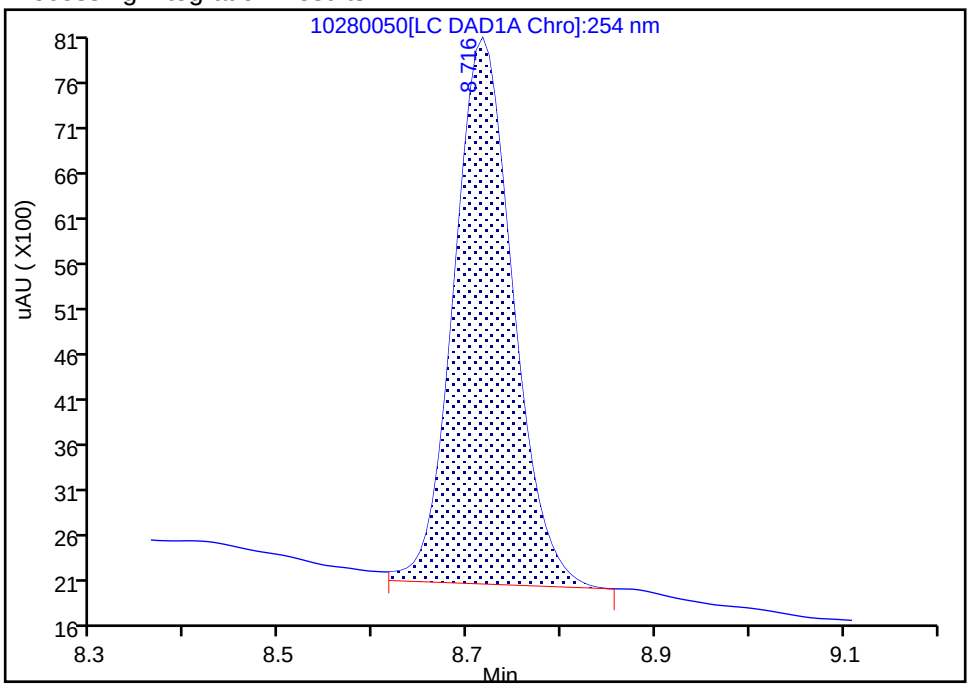
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280050.D				
Injection Date:	29-Oct-2019 05:27:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. 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

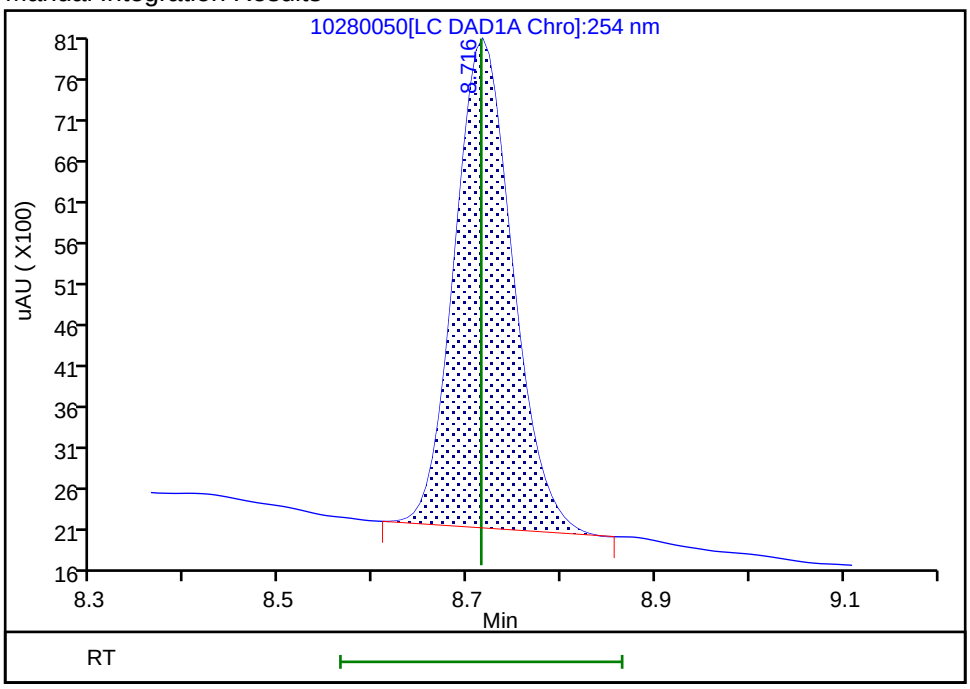
Processing Integration Results

RT: 8.72
Area: 26014
Amount: 0.186710
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 25344
Amount: 0.181901
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:04:24

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

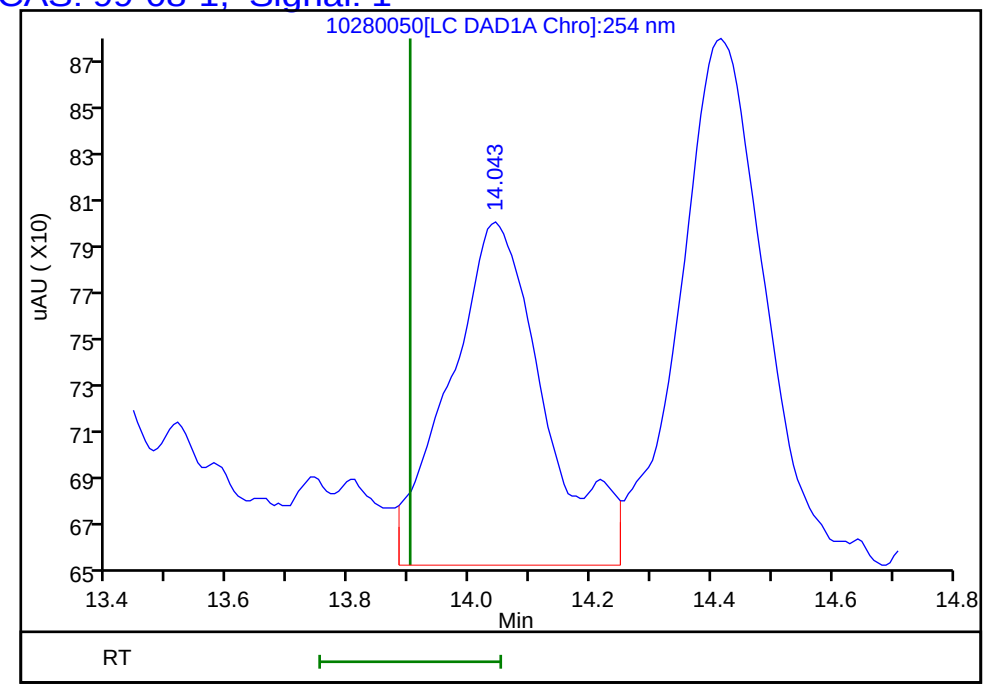
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280050.D				
Injection Date:	29-Oct-2019 05:27:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	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		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.04
Response: 1575
Amount: 0.010853



Reviewer: beckerc, 29-Oct-2019 11:04:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

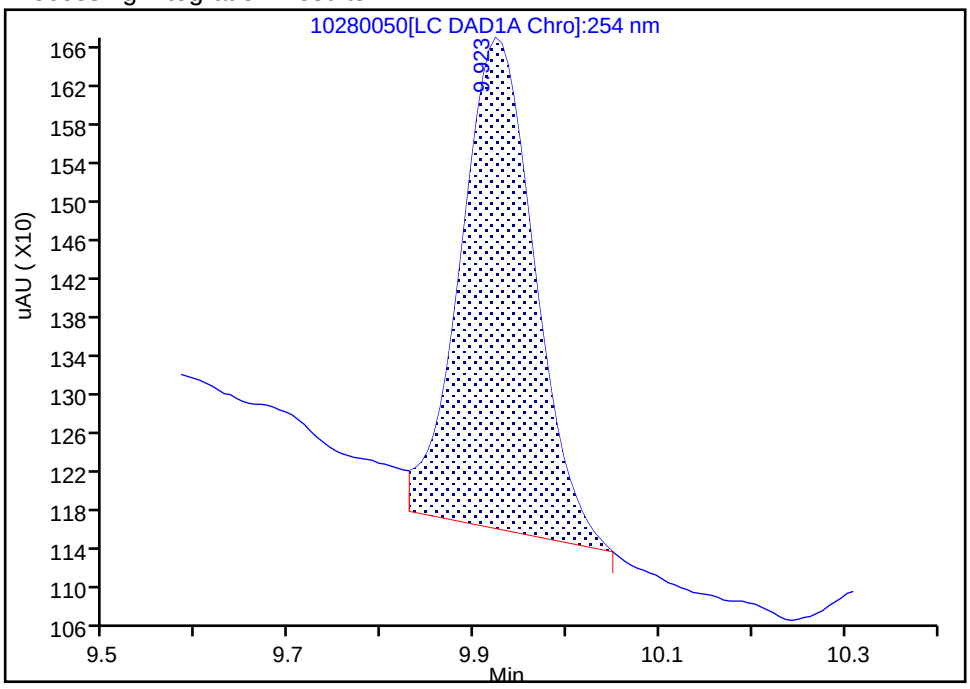
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280050.D				
Injection Date:	29-Oct-2019 05:27:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. 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

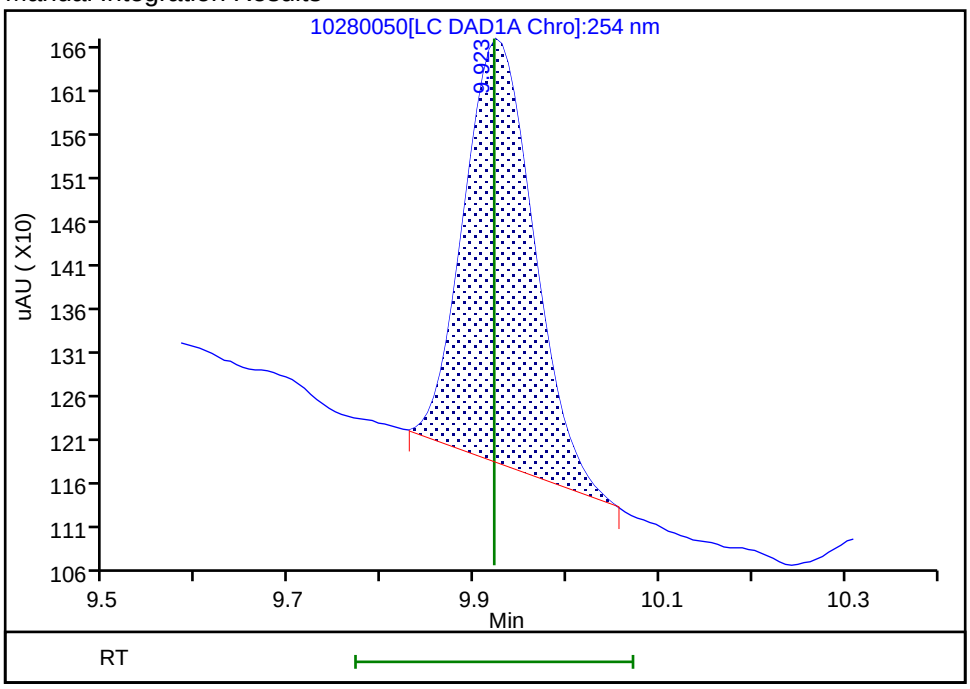
Processing Integration Results

RT: 9.92
Area: 2829
Amount: 0.014223
Amount Units: ug/mL



Manual Integration Results

RT: 9.92
Area: 2568
Amount: 0.012911
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:04:15

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 Lab Sample ID: 280-129936-9

Matrix: Water Lab File ID: 10300035.D

Analysis Method: 8330A Date Collected: 10/21/2019 14:45

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 524.2(mL) Date Analyzed: 10/31/2019 05:35

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
98-95-3	Nitrobenzene	0.19	U	0.38	0.19	0.087

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\G2_LUNA\20191030-86641.b\10300035.D
Lims ID: 280-129936-A-9-A
Client ID: G0070-1
Sample Type: Client
Inject. Date: 31-Oct-2019 05:35:33 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-9-A
Misc. Info.: 280-0086641-035
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:47 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:18:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.399			ND	
2 2,4-diamino-6-nitrotoluene	1		4.959			ND	
3 TNX	1	5.659	5.533	0.126	6350	NC	
5 2,4,6-Trinitrophenol	1		5.805			ND	
4 DNX	1	6.339	6.302	0.037	1045	NC	
6 HMX	1		7.059			ND	U
7 MNX	1	8.025	7.989	0.036	5144	NC	
8 RDX	1		9.259			ND	
9 Nitrobenzene	1		12.232			ND	
$ 10 1,2-Dinitrobenzene	1	13.165	13.172	-0.007	54425	0.1744	
11 3,5-Dinitroaniline	1		15.019			ND	U
12 1,3-Dinitrobenzene	1		15.705			ND	U
13 Nitroglycerin	2		15.959			ND	
14 o-Nitrotoluene	1		16.705			ND	U
15 p-Nitrotoluene	1		16.992			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.305			ND	U
17 m-Nitrotoluene	1		17.919			ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.199			ND	U
19 1,3,5-Trinitrobenzene	1		19.059			ND	U
20 2,6-Dinitrotoluene	1		19.985			ND	
21 2,4-Dinitrotoluene	1		20.479			ND	U
22 Tetryl	1		23.732			ND	U
23 2,4,6-Trinitrotoluene	1		24.832			ND	
24 PETN	2		25.392			ND	U
25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Review Flags
U - Marked Undetected

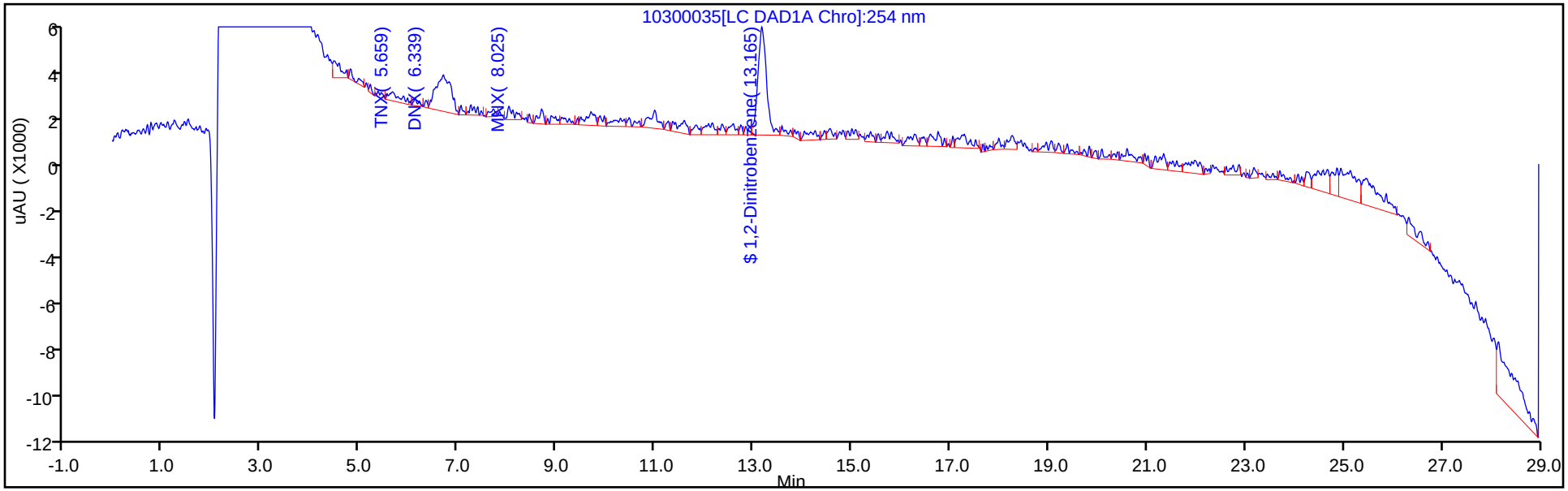
Report Date: 31-Oct-2019 16:27:48 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

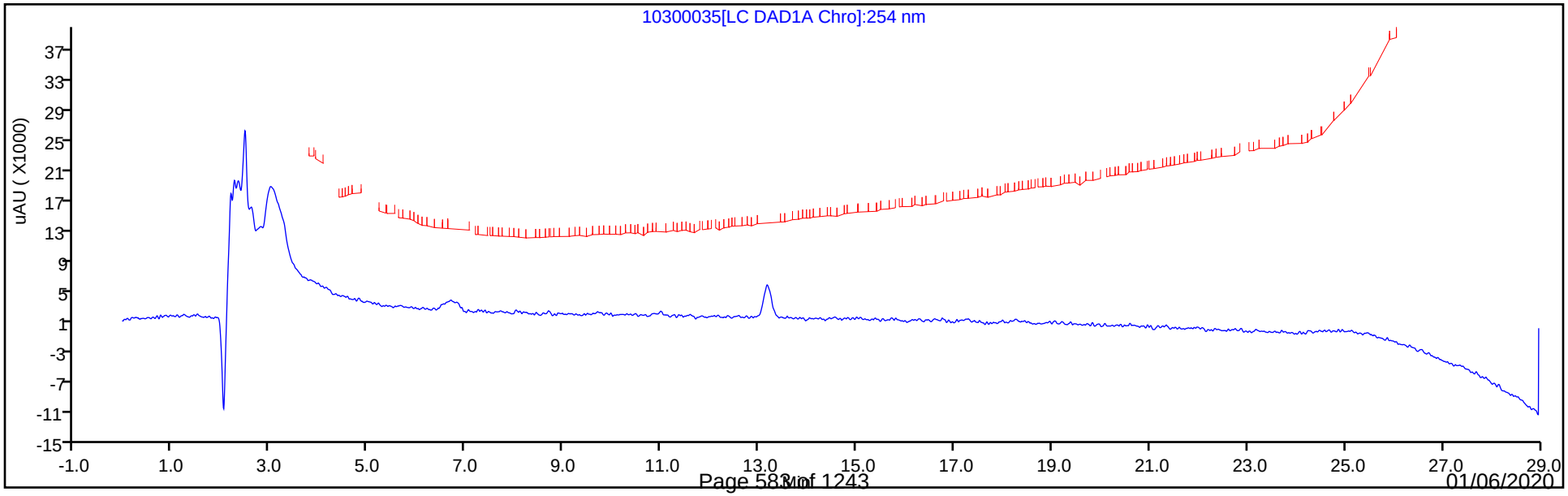
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D

Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9	Worklist Smp#:	35
Client ID:	G0070-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Lims ID:	280-129936-A-9-A				
Client ID:	G0070-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 05:35:33	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-9-A				
Misc. Info.:	280-0086641-035				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:47	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				
First Level Reviewer: beckerc		Date:	31-Oct-2019 16:18:03		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1744	87.19

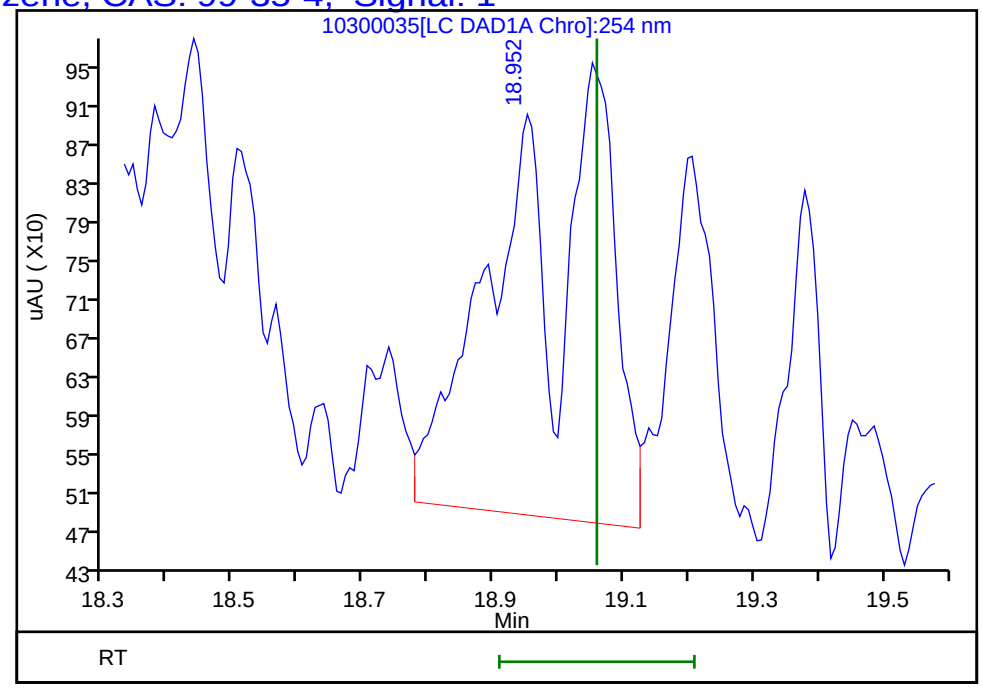
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 18.95
Response: 4869
Amount: 0.009850



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

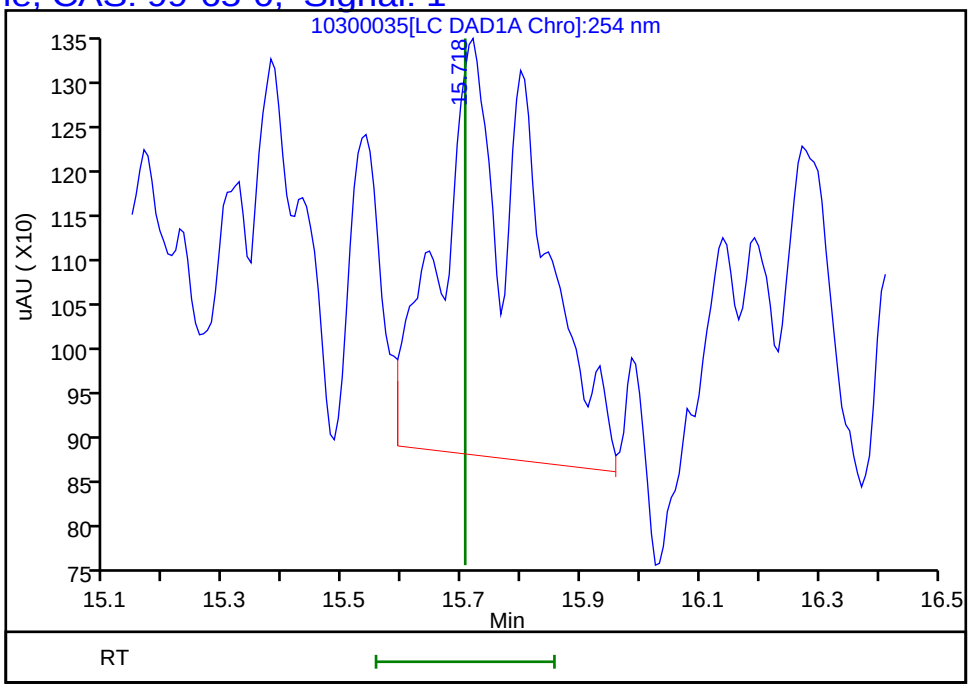
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.72
Response: 5084
Amount: 0.007730



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

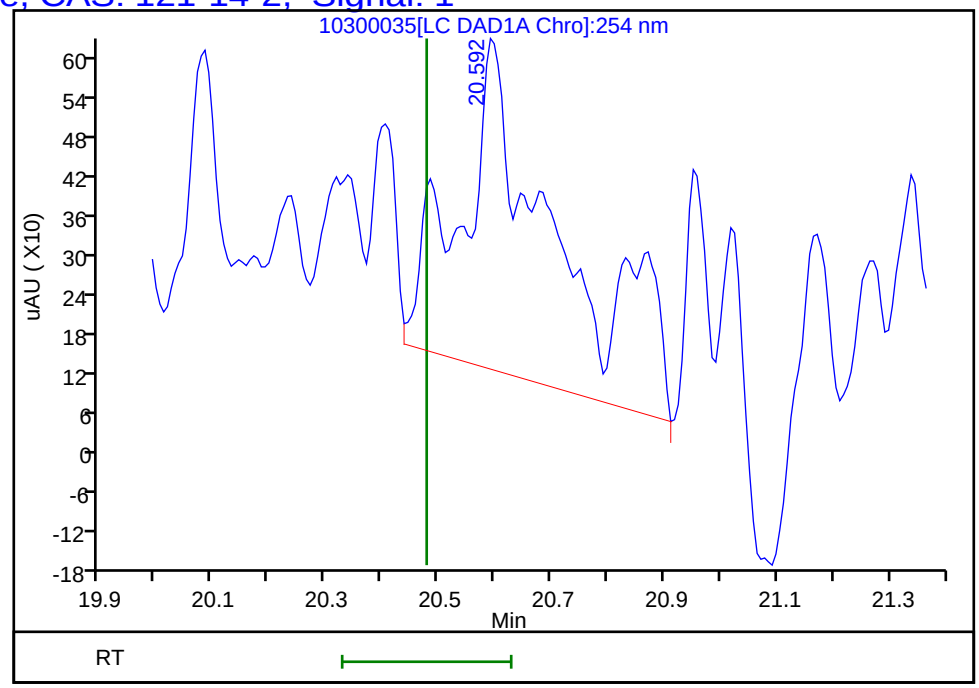
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.59
Response: 6165
Amount: 0.010120



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

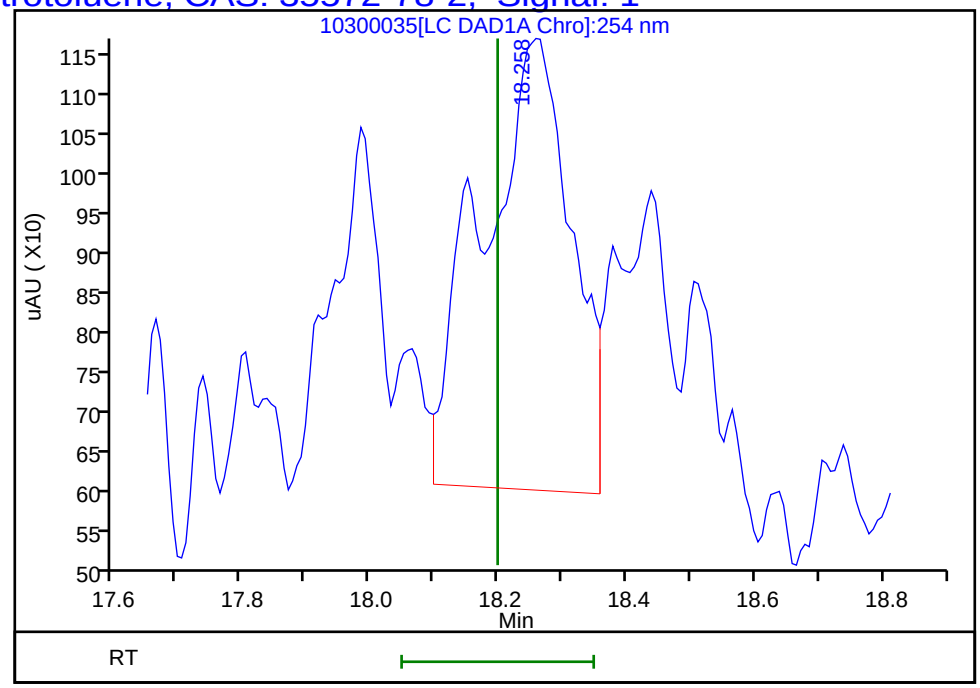
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 18.26
Response: 5456
Amount: 0.011867



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

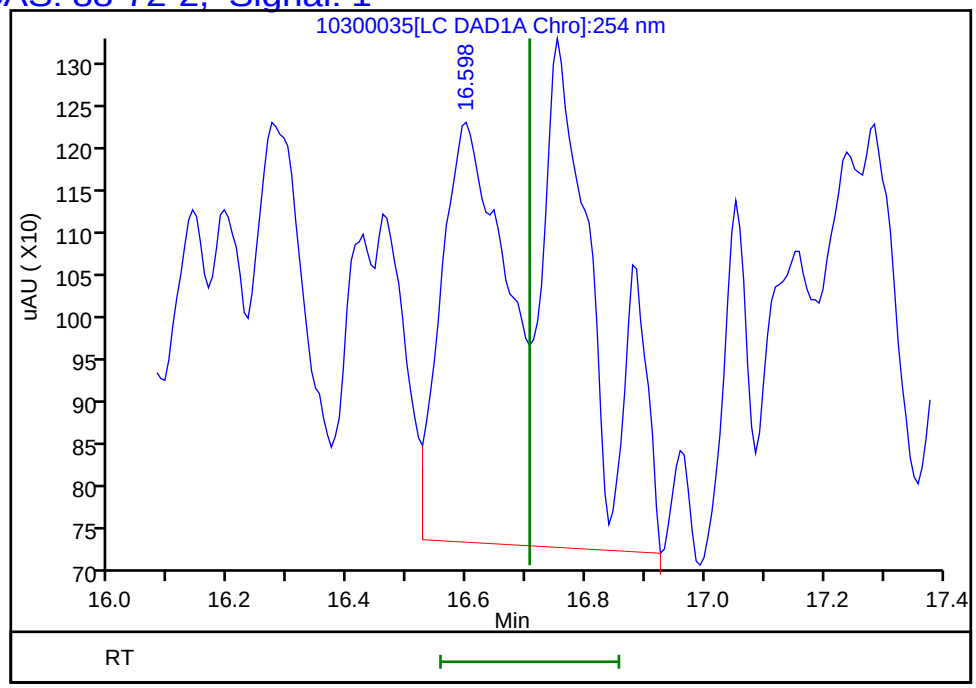
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.60
Response: 7623
Amount: 0.027308



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

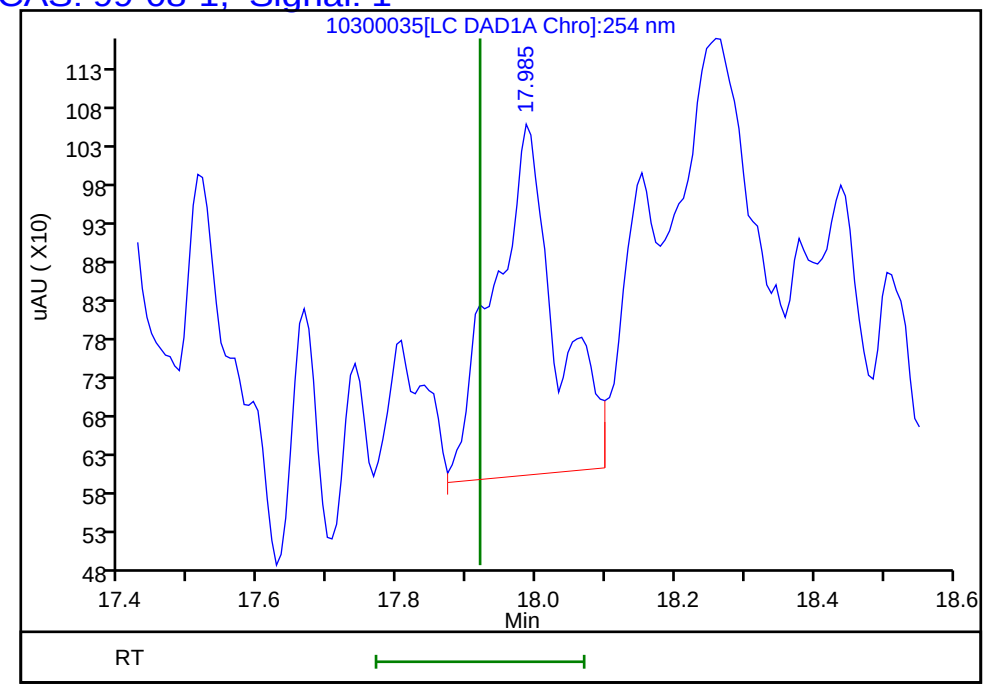
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.99
Response: 2815
Amount: NaN



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

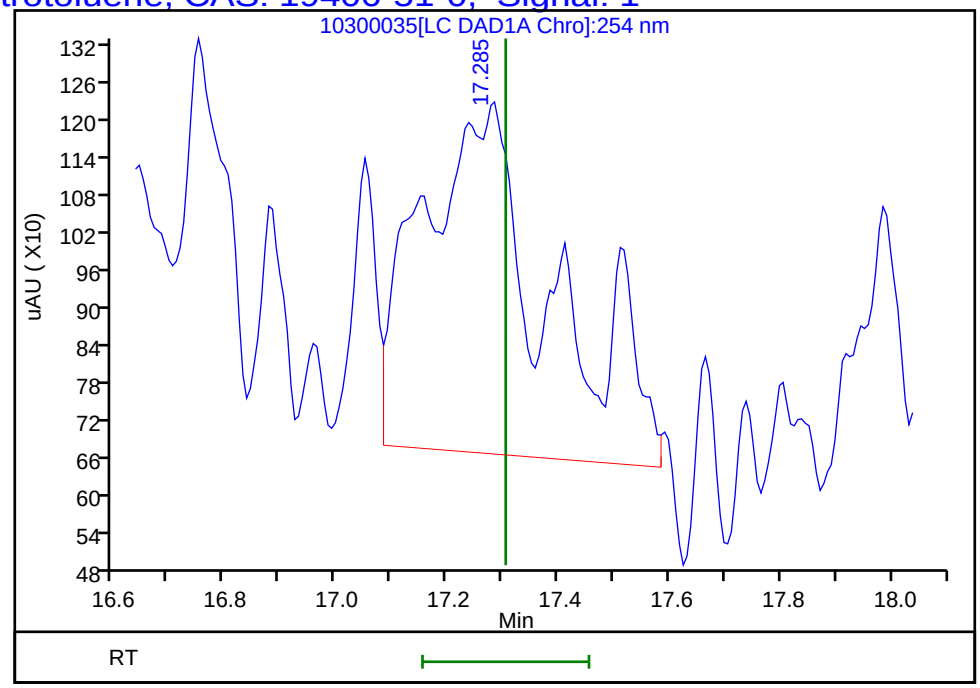
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.29
Response: 8946
Amount: 0.027528



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

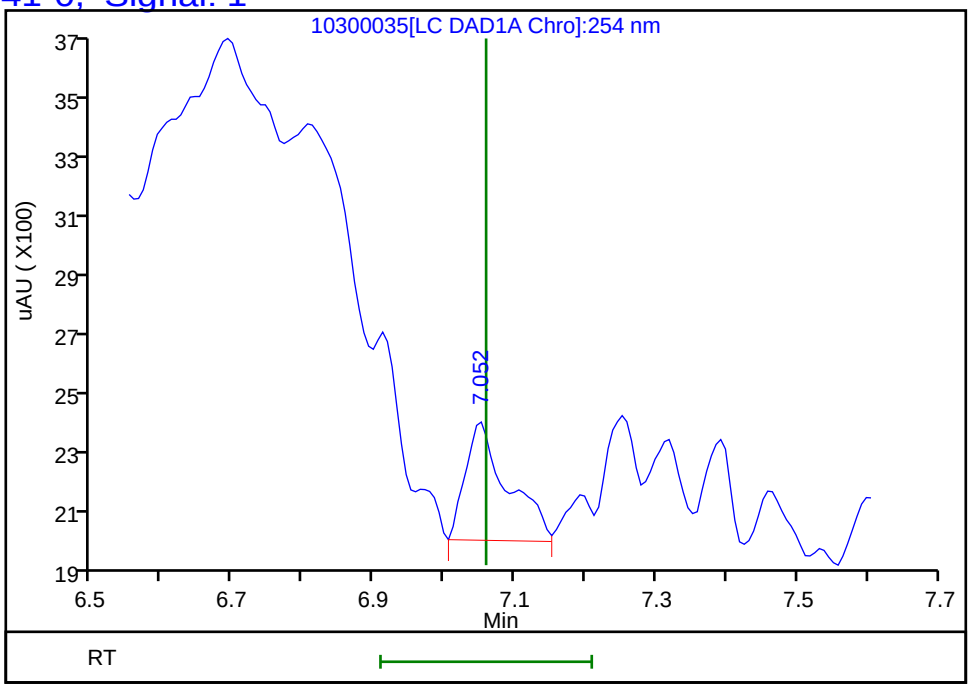
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0, Signal: 1

RT: 7.05
Response: 1599
Amount: 0.007409



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

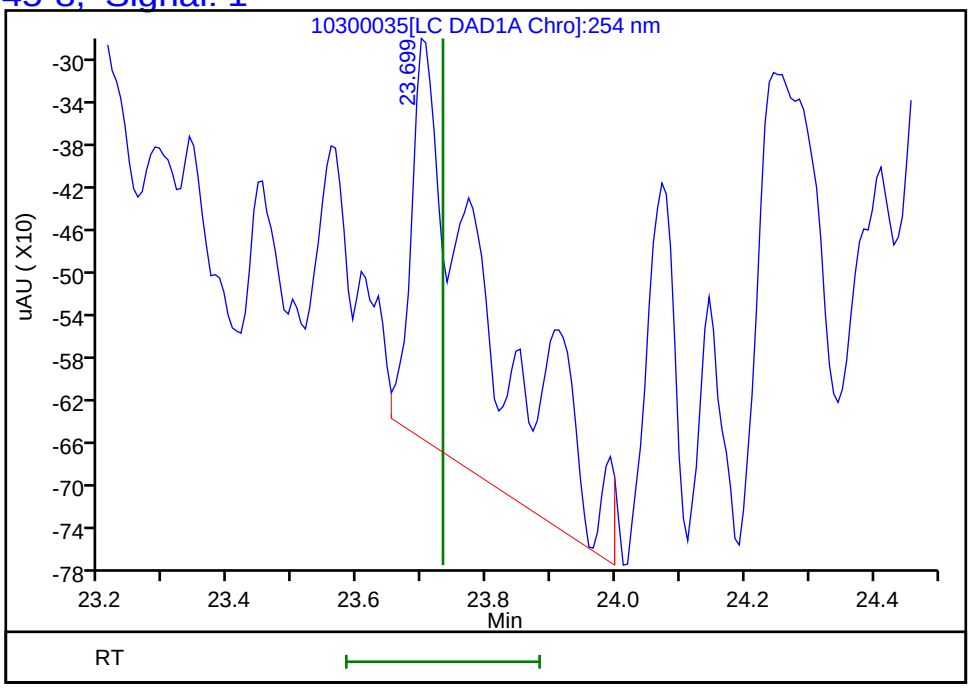
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300035.D				
Injection Date:	31-Oct-2019 05:35:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-9-A	Lab Sample ID:	280-129936-9		
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8, Signal: 1

RT: 23.70
Response: 3120
Amount: 0.008817



Reviewer: beckerc, 31-Oct-2019 16:18:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: CA213-1 Lab Sample ID: 280-129936-10

Matrix: Water Lab File ID: 10280055.D

Analysis Method: 8330A Date Collected: 10/21/2019 14:25

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 485.7(mL) Date Analyzed: 10/29/2019 07:21

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.41	0.21	0.091
118-96-7	2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16
121-14-2	2,4-Dinitrotoluene	0.21	U	0.41	0.21	0.086
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.066
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.21	0.12	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.41	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U M	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.21	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	1.0	0.41	0.21
2691-41-0	HMX	0.21	U	0.41	0.21	0.090
5755-27-1	MNX	0.41	U	2.1	0.41	0.16
98-95-3	Nitrobenzene	0.21	U M	0.41	0.21	0.094
121-82-4	RDX	0.41	U	0.41	0.41	0.16
479-45-8	Tetryl	0.21	U	0.25	0.21	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	84		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280055.D
Lims ID: 280-129936-A-10-A
Client ID: CA213-1
Sample Type: Client
Inject. Date: 29-Oct-2019 07:21:51 ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-10-
Misc. Info.: 280-0086569-055
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:08:32

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.675			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.761			ND	
$	9 1,2-Dinitrobenzene	1	8.724	8.715	0.009	23390	0.1679	
	10 1,3,5-Trinitrobenzene	1		8.881			ND	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1	9.924	9.921	0.003	1657	0.008331	M
	14 Tetryl	1		10.228			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.368			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.661			ND	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

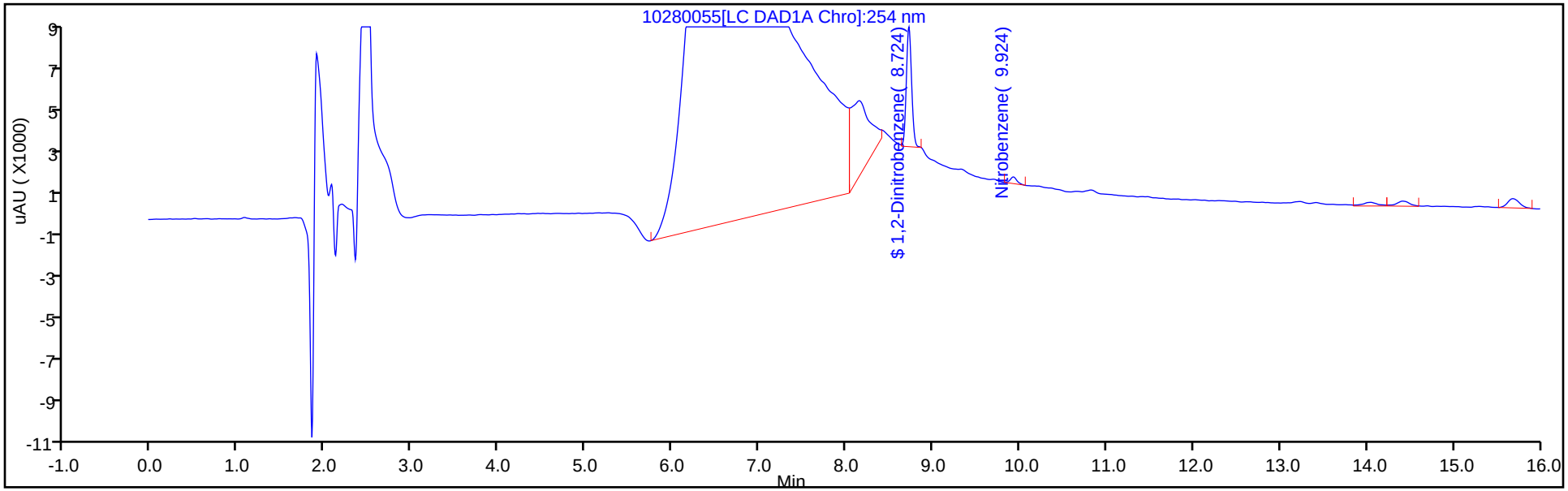
Report Date: 29-Oct-2019 11:54:34 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

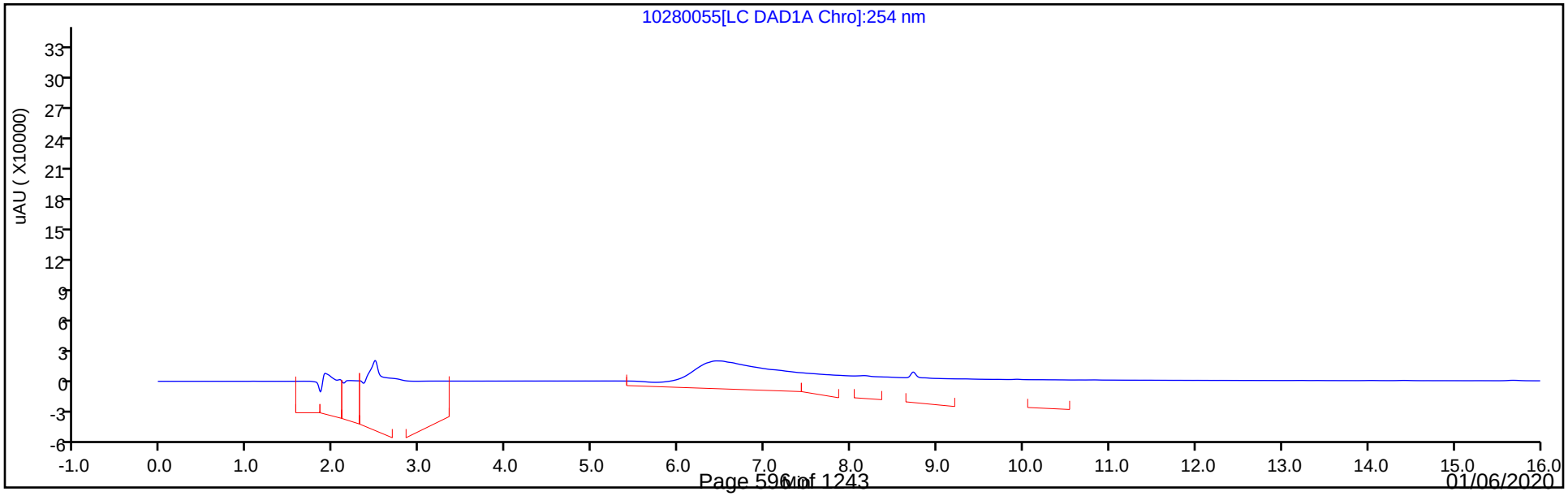
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280055.D

Injection Date:	29-Oct-2019 07:21:51	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-10-A	Lab Sample ID:	280-129936-10	Worklist Smp#:	55
Client ID:	CA213-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	55
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280055.D				
Lims ID:	280-129936-A-10-A				
Client ID:	CA213-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 07:21:51	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-10-				
Misc. Info.:	280-0086569-055				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:08:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1679	83.94

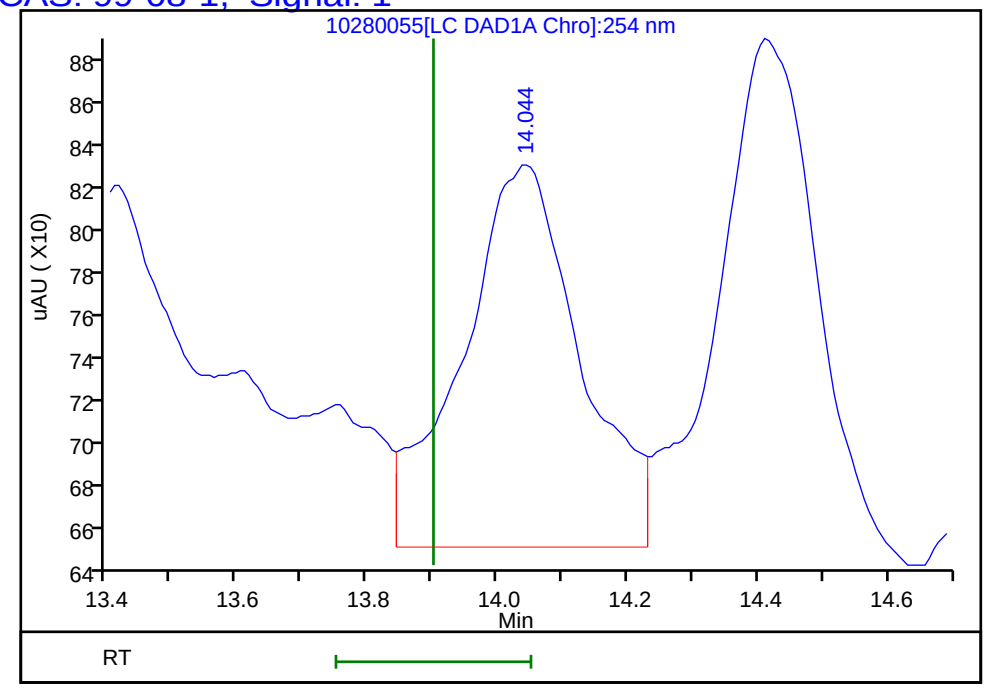
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280055.D				
Injection Date:	29-Oct-2019 07:21:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-10-A	Lab Sample ID:	280-129936-10		
Client ID:	CA213-1				
Operator ID:	CB	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.04
Response: 2128
Amount: 0.014664



Reviewer: beckerc, 29-Oct-2019 11:08:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

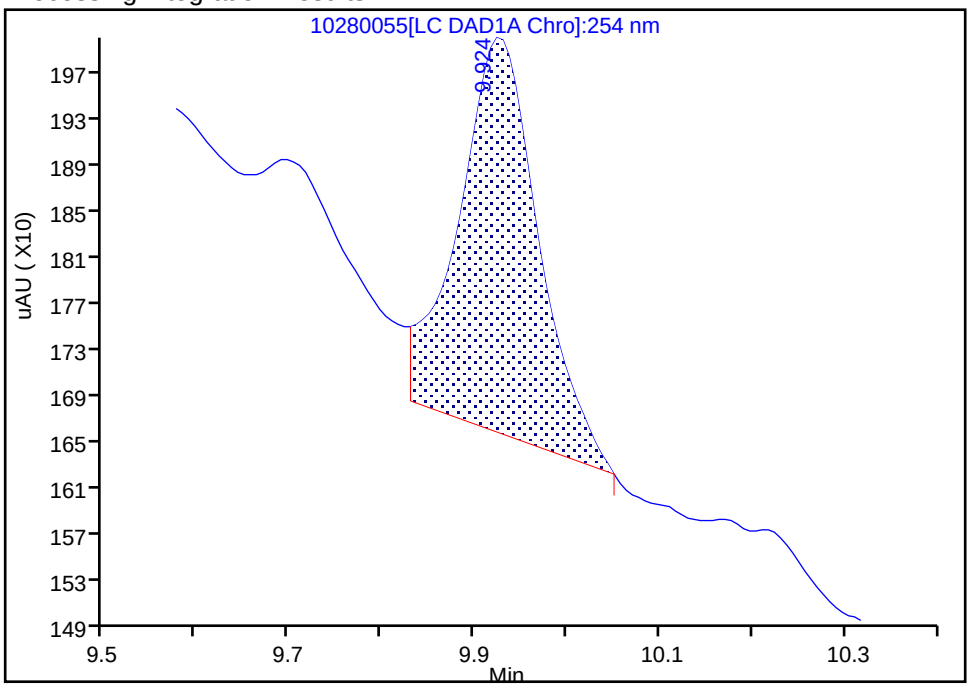
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280055.D				
Injection Date:	29-Oct-2019 07:21:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-10-A	Lab Sample ID:	280-129936-10		
Client ID:	CA213-1				
Operator ID:	CB	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

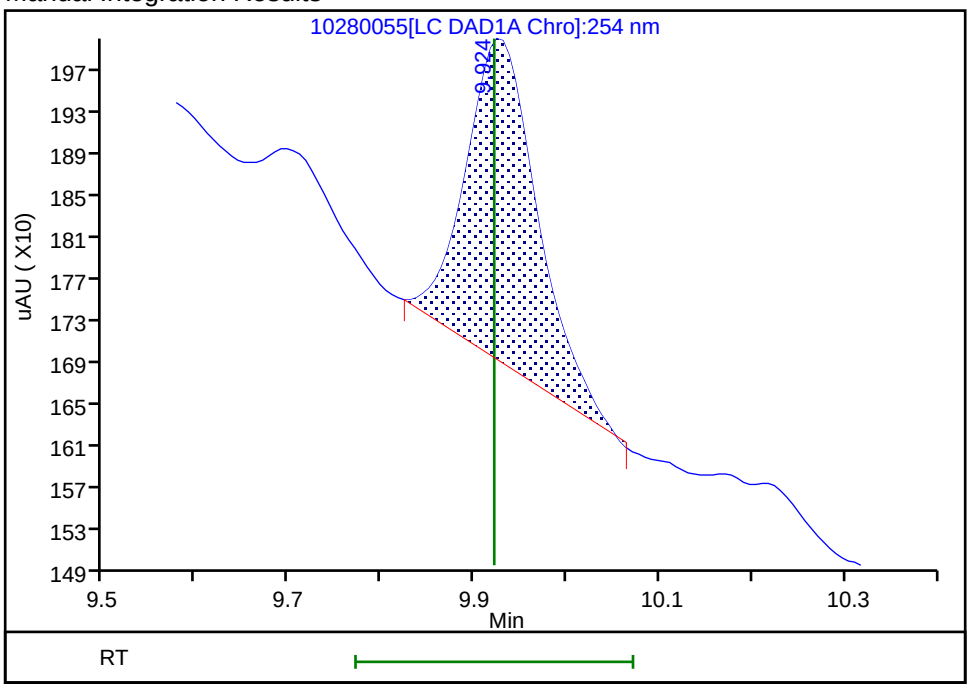
Processing Integration Results

RT: 9.92
Area: 2046
Amount: 0.010286
Amount Units: ug/mL



Manual Integration Results

RT: 9.92
Area: 1657
Amount: 0.008331
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:08:26

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: NW070-1 Lab Sample ID: 280-129936-11

Matrix: Water Lab File ID: 10280056.D

Analysis Method: 8330A Date Collected: 10/21/2019 16:15

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 491.7(mL) Date Analyzed: 10/29/2019 07:44

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.41	0.20	0.090
118-96-7	2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.41	0.20	0.085
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.066
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.052
88-72-2	2-Nitrotoluene	0.20	U	0.41	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	1.0	0.41	0.20
2691-41-0	HMX	0.20	U	0.41	0.20	0.089
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.41	0.20	0.093
121-82-4	RDX	0.41	U	0.41	0.41	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.081

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	83	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280056.D
Lims ID: 280-129936-A-11-A
Client ID: NW070-1
Sample Type: Client
Inject. Date: 29-Oct-2019 07:44:47 ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-11-
Misc. Info.: 280-0086569-056
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 16:05:14 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: CTX0340

First Level Reviewer: beckerc Date: 29-Oct-2019 11:08:49

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.675			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.761			ND	
$	9 1,2-Dinitrobenzene	1	8.714	8.715	-0.001	23140	0.1661	M
	10 1,3,5-Trinitrobenzene	1		8.881			ND	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.368			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.661			ND	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	

QC Flag Legend

Review Flags
M - Manually Integrated

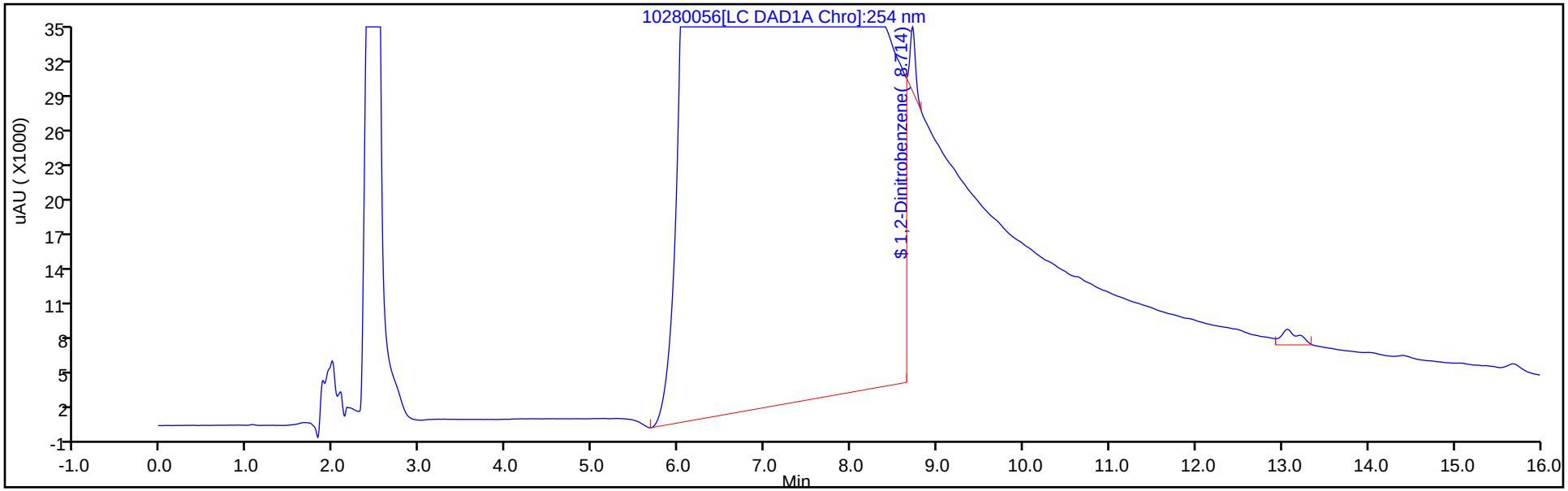
Report Date: 19-Dec-2019 16:59:53 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

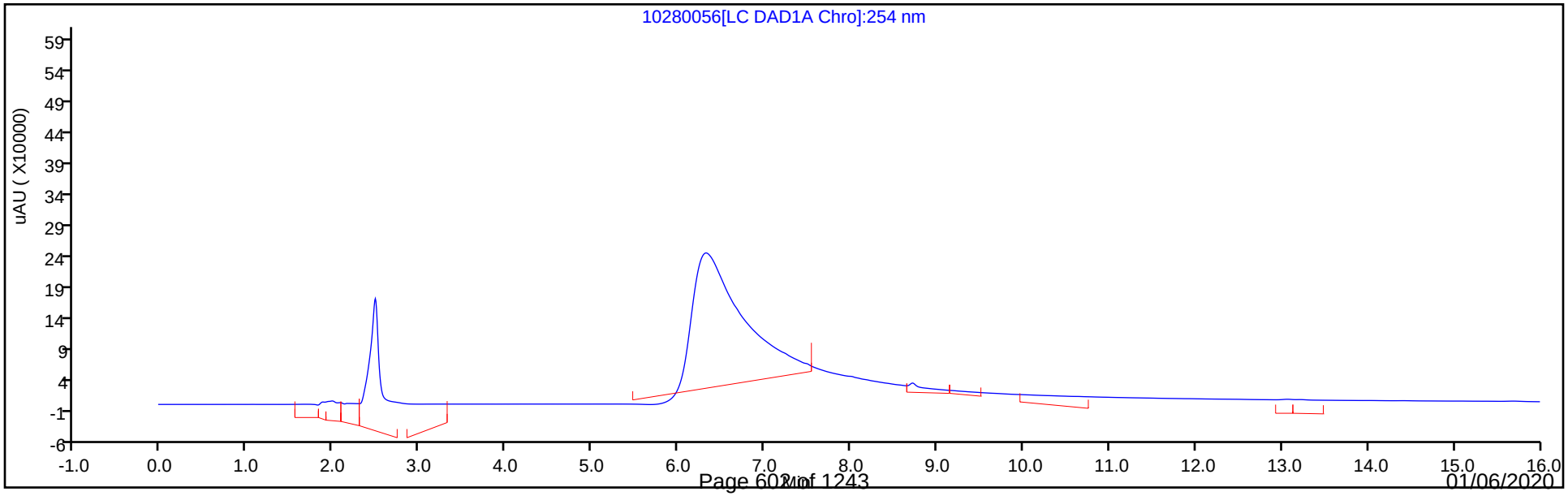
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280056.D

Injection Date:	29-Oct-2019 07:44:47	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-11-A	Lab Sample ID:	280-129936-11	Worklist Smp#:	56
Client ID:	NW070-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	56
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280056.D				
Lims ID:	280-129936-A-11-A				
Client ID:	NW070-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 07:44:47	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-11-				
Misc. Info.:	280-0086569-056				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 16:05:14	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:	CTX0340				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:08:49		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1661	83.04

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

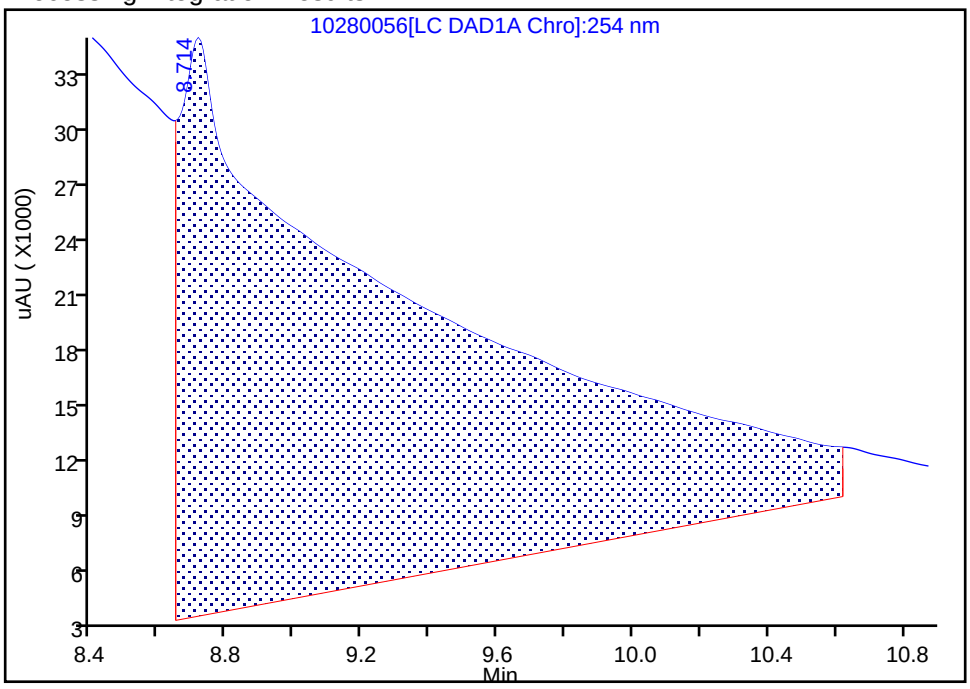
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280056.D				
Injection Date:	29-Oct-2019 07:44:47	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-11-A	Lab Sample ID:	280-129936-11		
Client ID:	NW070-1				
Operator ID:	CB	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. 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

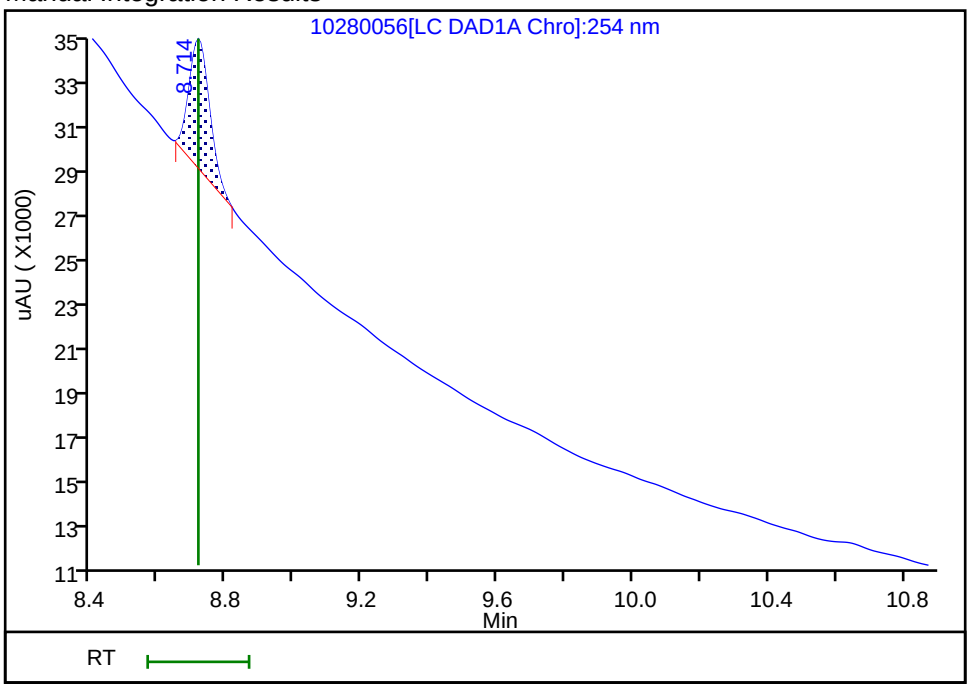
Processing Integration Results

RT: 8.71
Area: 1448141
Amount: 10.393719
Amount Units: ug/mL



Manual Integration Results

RT: 8.71
Area: 23140
Amount: 0.166082
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:08:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0081-1 Lab Sample ID: 280-129936-12

Matrix: Water Lab File ID: 10280057.D

Analysis Method: 8330A Date Collected: 10/21/2019 16:15

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 511.3(mL) Date Analyzed: 10/29/2019 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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.1	M	0.98	0.39	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.39	0.20	0.087
118-96-7	2,4,6-Trinitrotoluene	0.29	J	0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.39	0.20	0.082
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	0.20	J1	0.20	0.12	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.39	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U M	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.15	J J1	0.20	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U	0.98	0.39	0.20
2691-41-0	HMX	0.20	U	0.39	0.20	0.086
5755-27-1	MNX	0.39	U	2.0	0.39	0.15
121-82-4	RDX	0.39	U	0.39	0.39	0.15
479-45-8	Tetryl	0.20	U M	0.23	0.20	0.078

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	83	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280057.D
Lims ID: 280-129936-A-12-A
Client ID: G0081-1
Sample Type: Client
Inject. Date: 29-Oct-2019 08:07:47 ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-12-
Misc. Info.: 280-0086569-057
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:09:53

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.675			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.761			ND	
$	9 1,2-Dinitrobenzene	1	8.715	8.715	0.000	23043	0.1654	M
	10 1,3,5-Trinitrobenzene	1	8.882	8.881	0.001	26635	0.1087	M
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1	9.922	9.921	0.001	4507	0.0227	
	14 Tetryl	1		10.228			ND	U
	16 2,4,6-Trinitrotoluene	1	11.195	11.201	-0.006	6726	0.0296	
	17 4-Amino-2,6-dinitrotoluene	1	11.362	11.368	-0.006	2474	0.0149	
	18 2-Amino-4,6-dinitrotoluene	1	11.655	11.661	-0.006	4284	0.0209	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

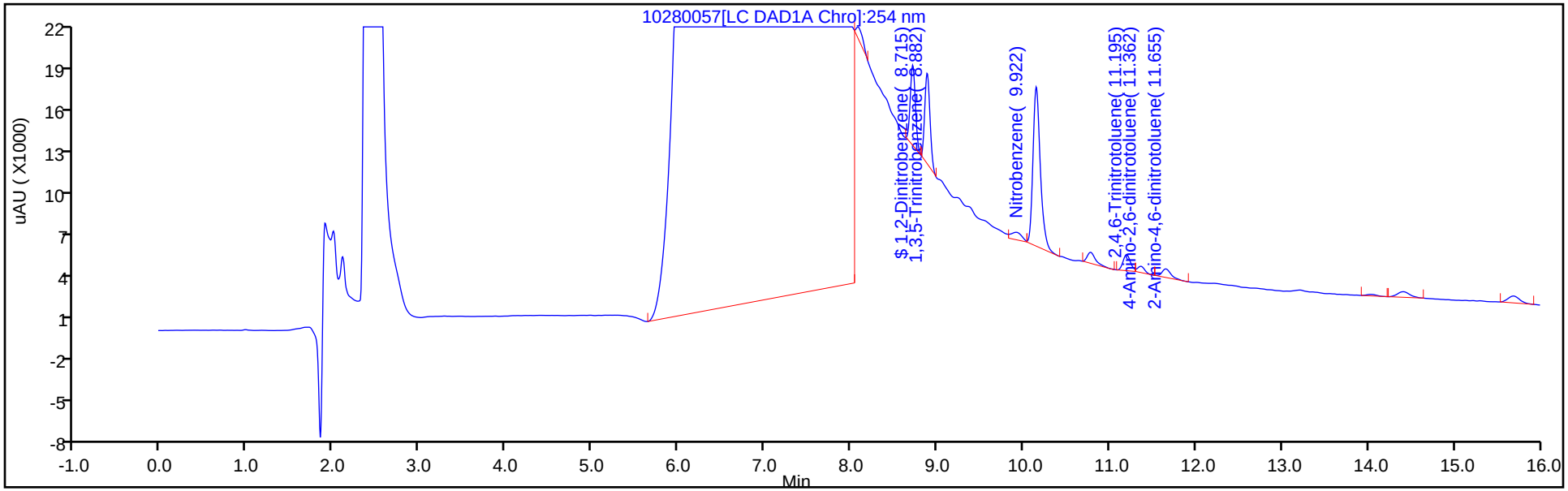
Report Date: 29-Oct-2019 11:54:32 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

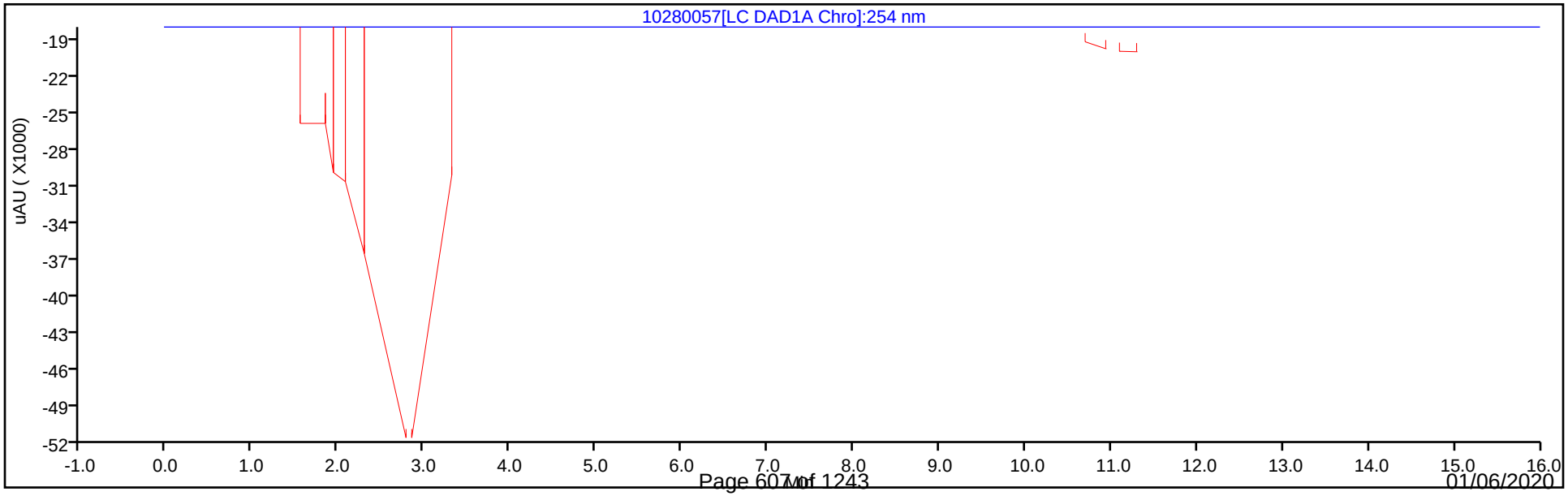
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280057.D

Injection Date:	29-Oct-2019 08:07:47	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12	Worklist Smp#:	57
Client ID:	G0081-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	57
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280057.D				
Lims ID:	280-129936-A-12-A				
Client ID:	G0081-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 08:07:47	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-12-				
Misc. Info.:	280-0086569-057				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:09:53		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1654	82.69

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

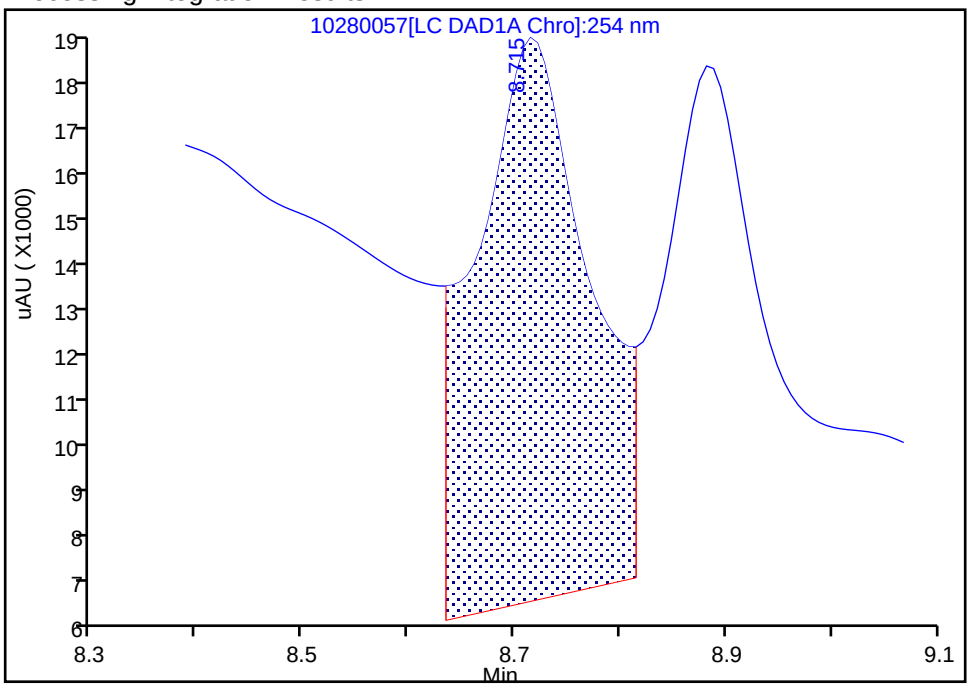
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280057.D				
Injection Date:	29-Oct-2019 08:07:47	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

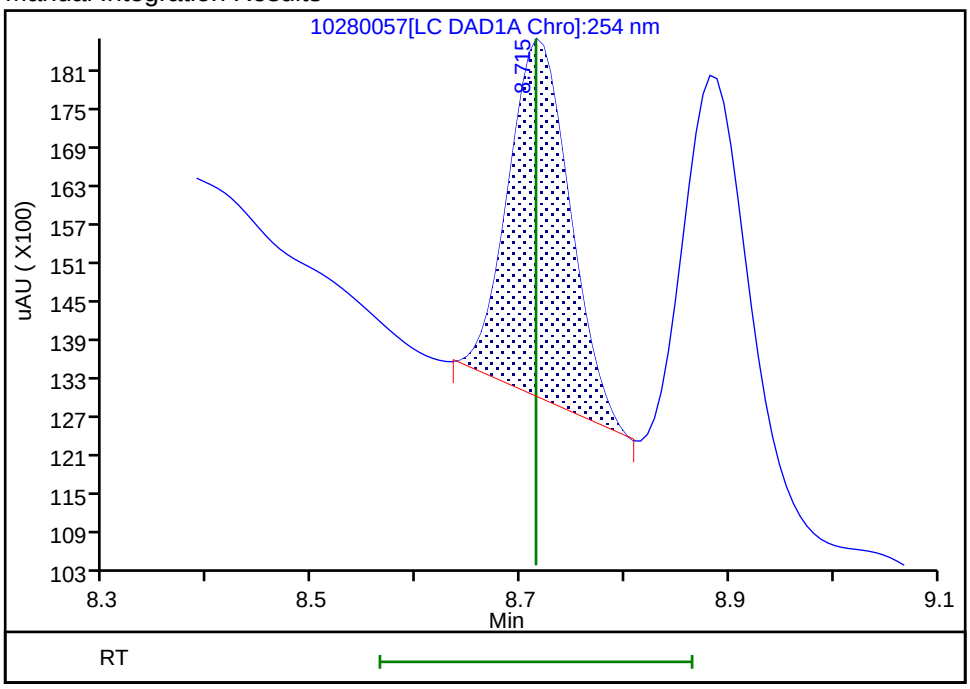
Processing Integration Results

RT: 8.72
Area: 85045
Amount: 0.610392
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 23043
Amount: 0.165386
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:09:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

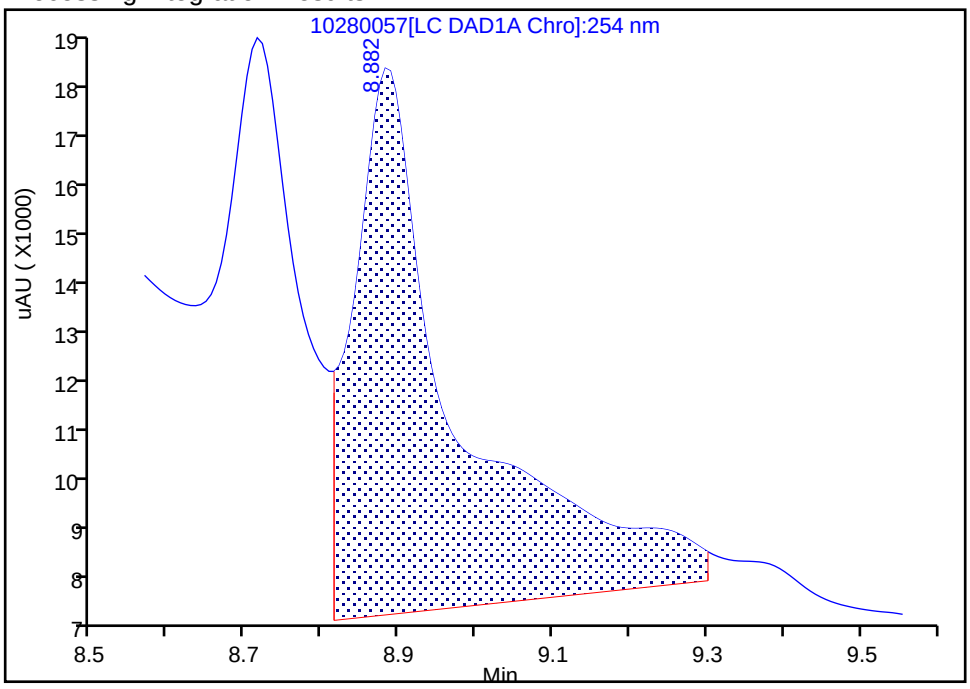
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280057.D				
Injection Date:	29-Oct-2019 08:07:47	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

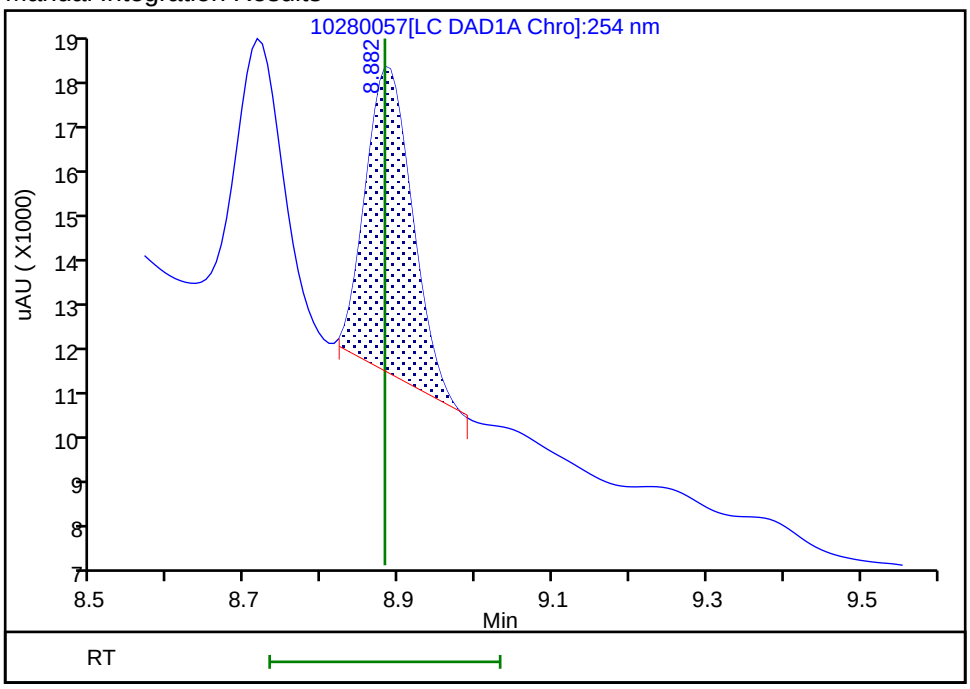
Processing Integration Results

RT: 8.88
Area: 97887
Amount: 0.399414
Amount Units: ug/mL



Manual Integration Results

RT: 8.88
Area: 26635
Amount: 0.108680
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:09:13

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

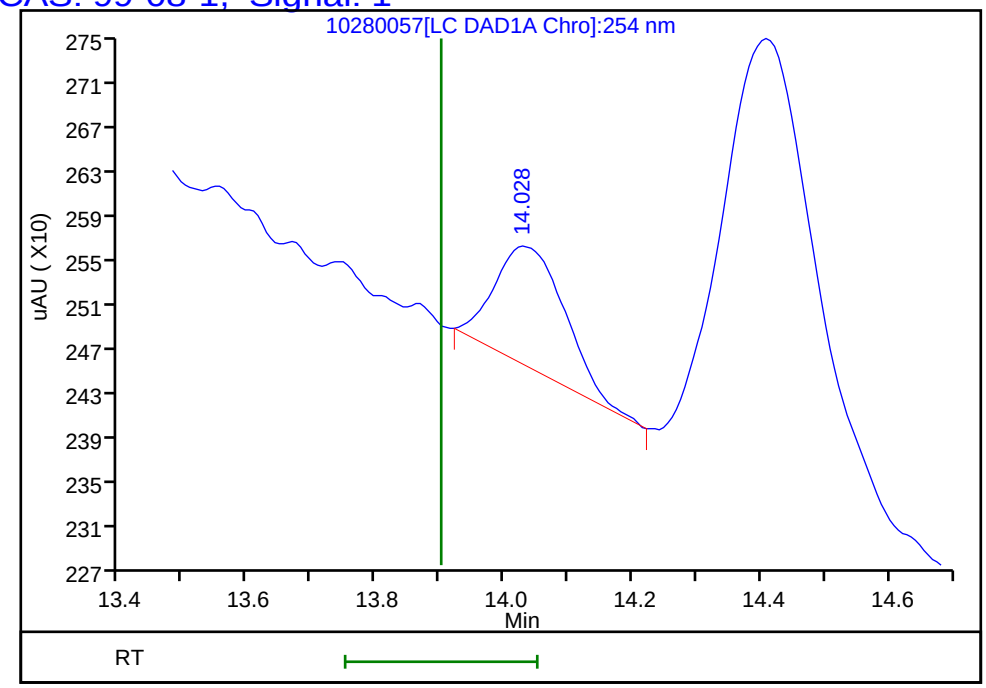
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280057.D

Injection Date:	29-Oct-2019 08:07:47	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	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: 14.03
Response: 817
Amount: 0.005630



Reviewer: beckerc, 29-Oct-2019 11:09:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

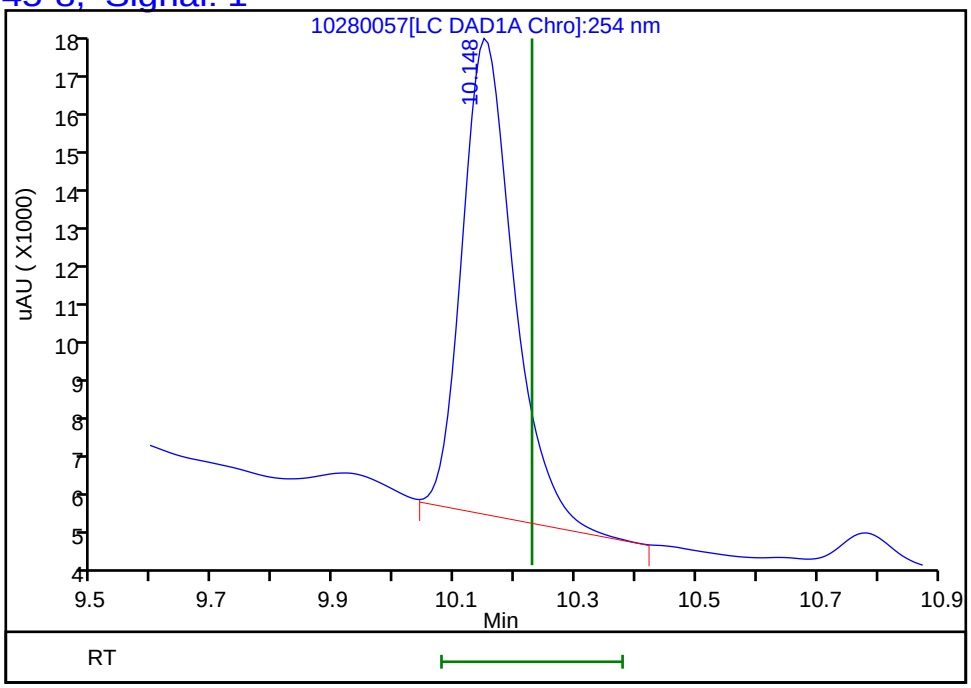
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280057.D

Injection Date:	29-Oct-2019 08:07:47	Instrument ID:	CHHPLC_X3
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12
Client ID:	G0081-1		
Operator ID:	CB	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: 10.15
Response: 66194
Amount: 0.408713



Reviewer: beckerc, 29-Oct-2019 11:09:53
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.: 280-129936-1

SDG No.:

Client Sample ID: G0081-1 Lab Sample ID: 280-129936-12

Matrix: Water Lab File ID: 10300040.D

Analysis Method: 8330A Date Collected: 10/21/2019 16:15

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 511.3(mL) Date Analyzed: 10/31/2019 08:30

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.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.36*	*M J1*	*0.20*	0.12	*0.050*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.45*	*M J1*	*0.20*	0.12	*0.056*
98-95-3	Nitrobenzene	0.20	U	0.39	0.20	0.089

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D
Lims ID: 280-129936-A-12-A
Client ID: G0081-1
Sample Type: Client
Inject. Date: 31-Oct-2019 08:30:27 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-12-
Misc. Info.: 280-0086641-040
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:47 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:23:23

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.015	7.059	-0.044	9339	0.0433	
7 MNX	1	8.049	7.989	0.060	5588	NC	
8 RDX	1	9.202	9.259	-0.057	8703	0.0223	
9 Nitrobenzene	1		12.232			ND	
$ 10 1,2-Dinitrobenzene	1	13.168	13.172	-0.004	58423	0.1890	
12 1,3-Dinitrobenzene	1		15.705			ND	U
14 o-Nitrotoluene	1		16.705			ND	U
15 p-Nitrotoluene	1		16.992			ND	M
16 4-Amino-2,6-dinitrotoluene	1	17.322	17.305	0.017	15031	0.0463	M
17 m-Nitrotoluene	1		17.919			ND	
18 2-Amino-4,6-dinitrotoluene	1	18.182	18.199	-0.017	17079	0.0371	M
19 1,3,5-Trinitrobenzene	1	19.055	19.059	-0.004	64860	0.1312	
20 2,6-Dinitrotoluene	1		19.985			ND	U
21 2,4-Dinitrotoluene	1		20.479			ND	
22 Tetryl	1		23.732			ND	U
23 2,4,6-Trinitrotoluene	1	24.742	24.832	-0.090	25921	0.0203	M

QC Flag Legend

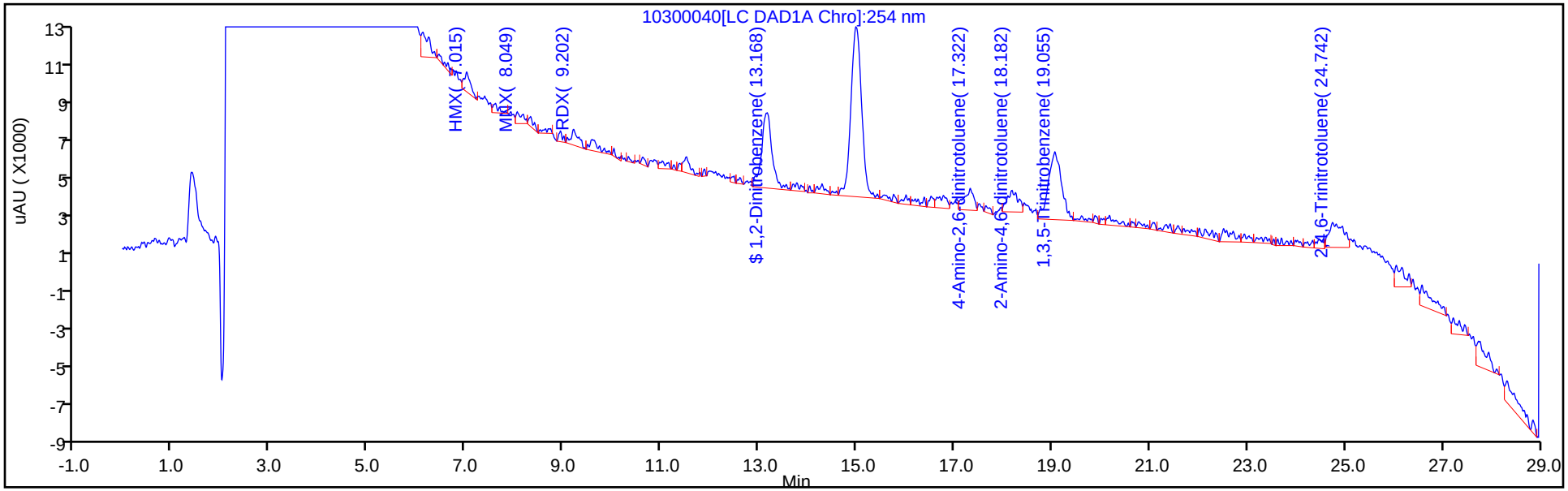
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 31-Oct-2019 16:27:53 Chrom Revision: 2.3 09-Oct-2019 11:13:36

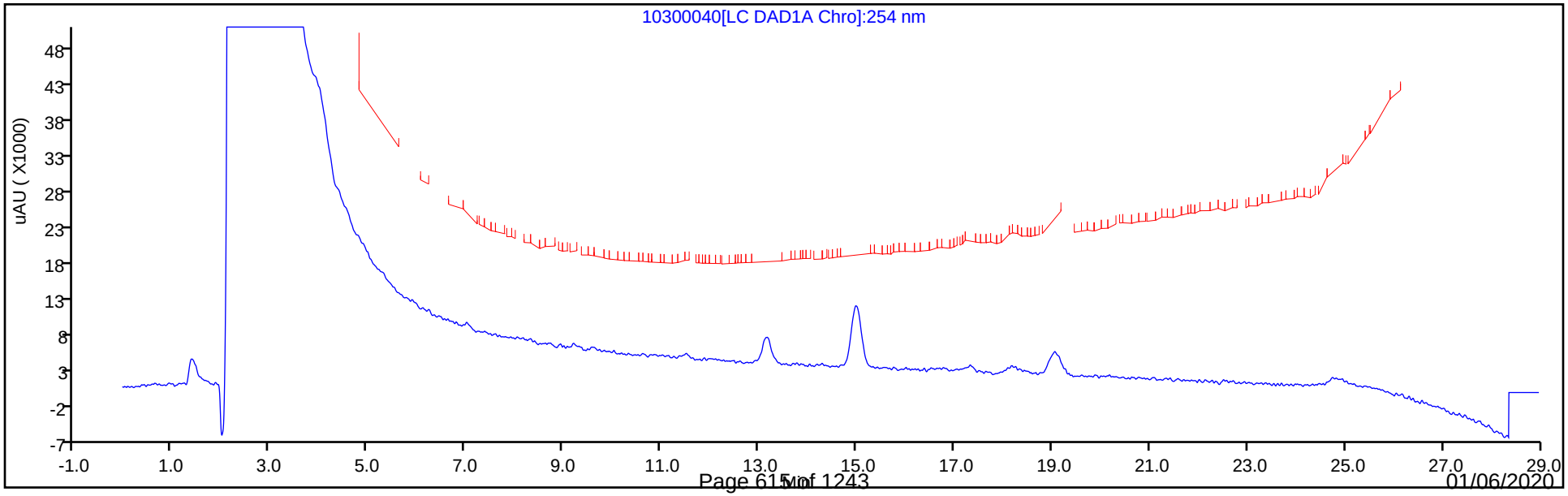
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Injection Date:	31-Oct-2019 08:30:27	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12	Worklist Smp#:	40
Client ID:	G0081-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Lims ID:	280-129936-A-12-A				
Client ID:	G0081-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 08:30:27	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-12-				
Misc. Info.:	280-0086641-040				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:47	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				
First Level Reviewer: beckerc		Date:	31-Oct-2019 16:23:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1890	94.49

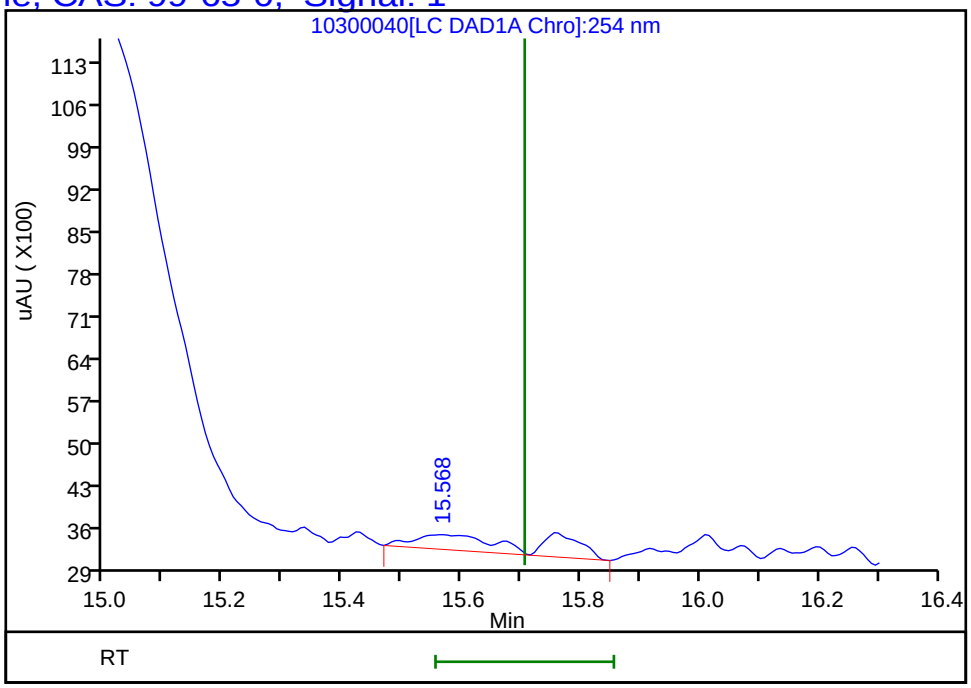
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Injection Date:	31-Oct-2019 08:30:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.57
Response: 4033
Amount: 0.006132



Reviewer: beckerc, 31-Oct-2019 16:23:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

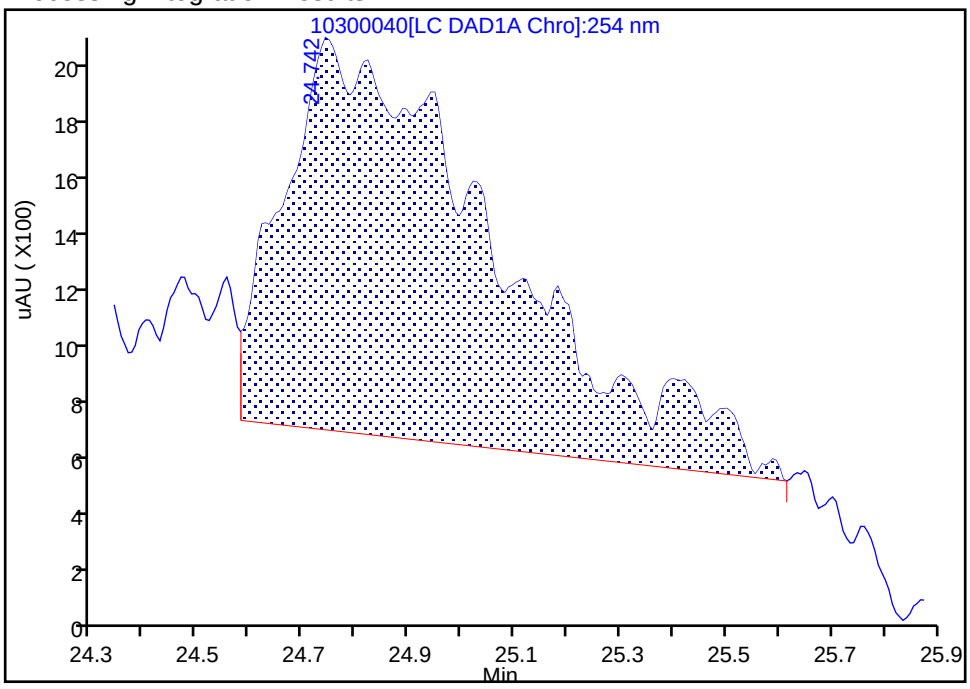
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Injection Date:	31-Oct-2019 08:30:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

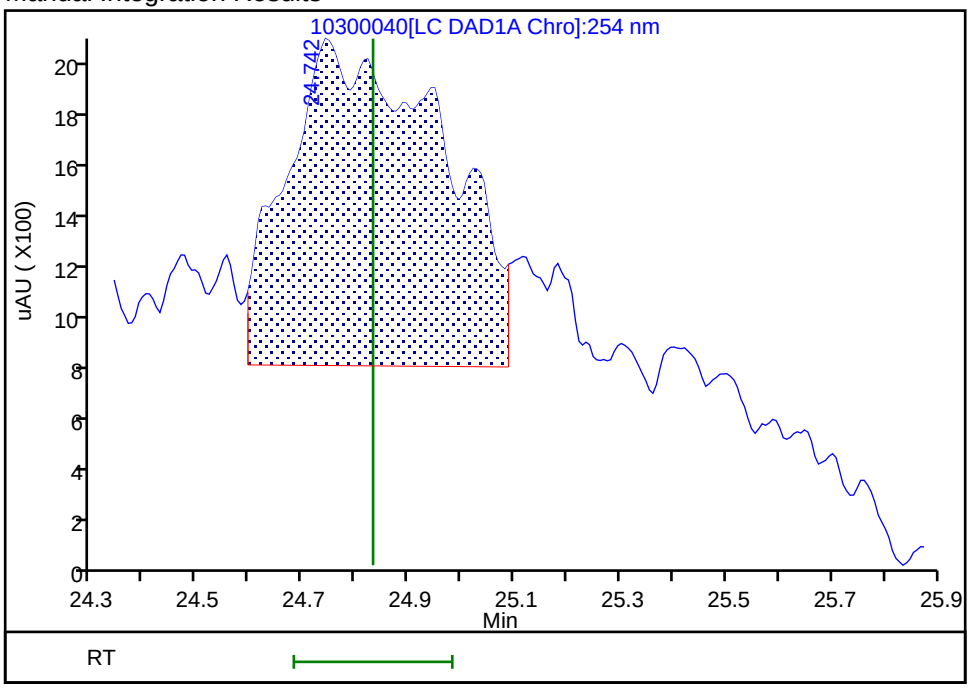
Processing Integration Results

RT: 24.74
Area: 38966
Amount: 0.050357
Amount Units: ug/ml



Manual Integration Results

RT: 24.74
Area: 25921
Amount: 0.020268
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:23:14

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

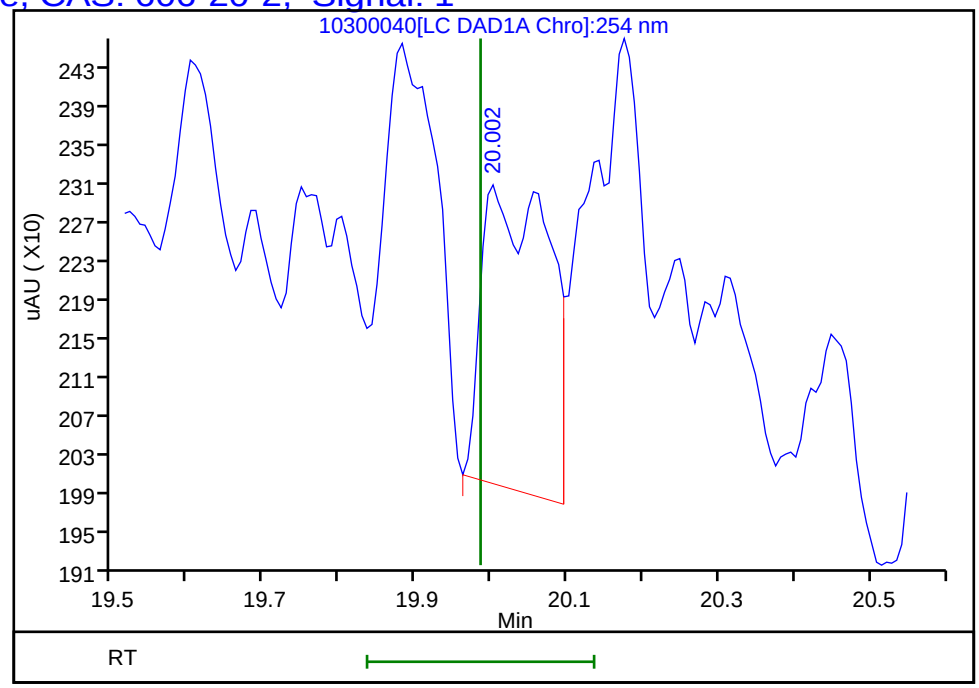
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Injection Date:	31-Oct-2019 08:30:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 20.00
Response: 1880
Amount: 0.005822



Reviewer: beckerc, 31-Oct-2019 16:23:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

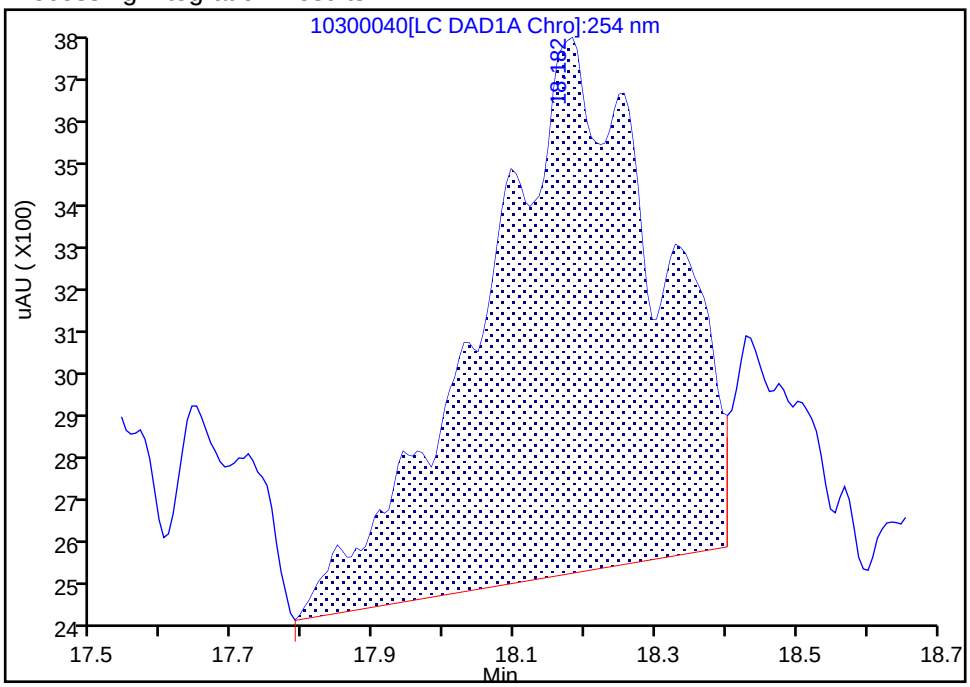
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Injection Date:	31-Oct-2019 08:30:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

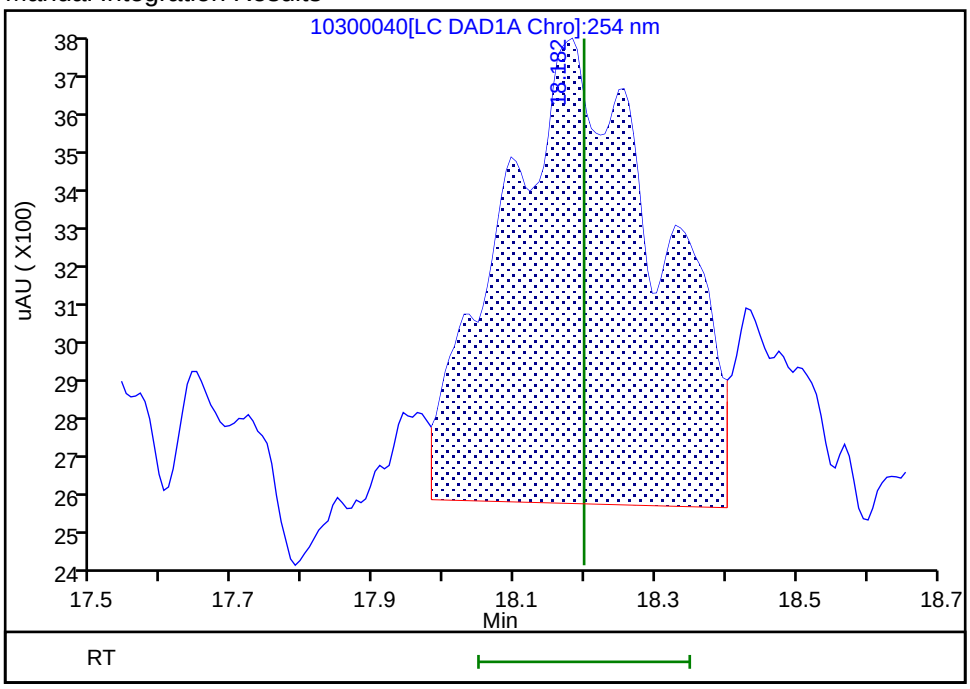
Processing Integration Results

RT: 18.18
Area: 20103
Amount: 0.043724
Amount Units: ug/ml



Manual Integration Results

RT: 18.18
Area: 17079
Amount: 0.037146
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:22:48

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

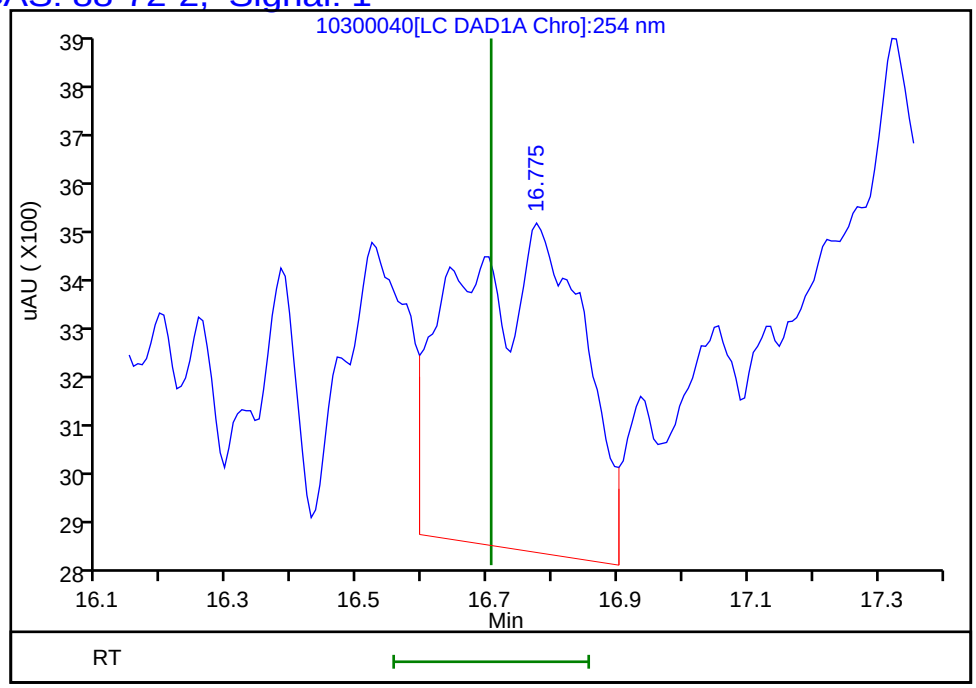
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Injection Date:	31-Oct-2019 08:30:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.78
Response: 8631
Amount: 0.030919



Reviewer: beckerc, 31-Oct-2019 16:23:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

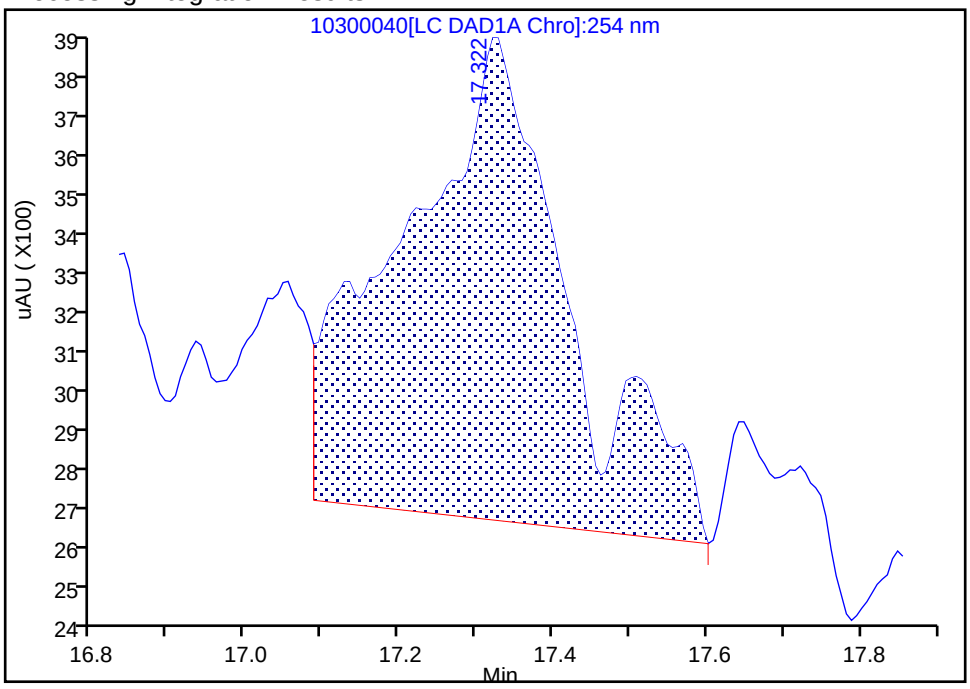
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Injection Date:	31-Oct-2019 08:30:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

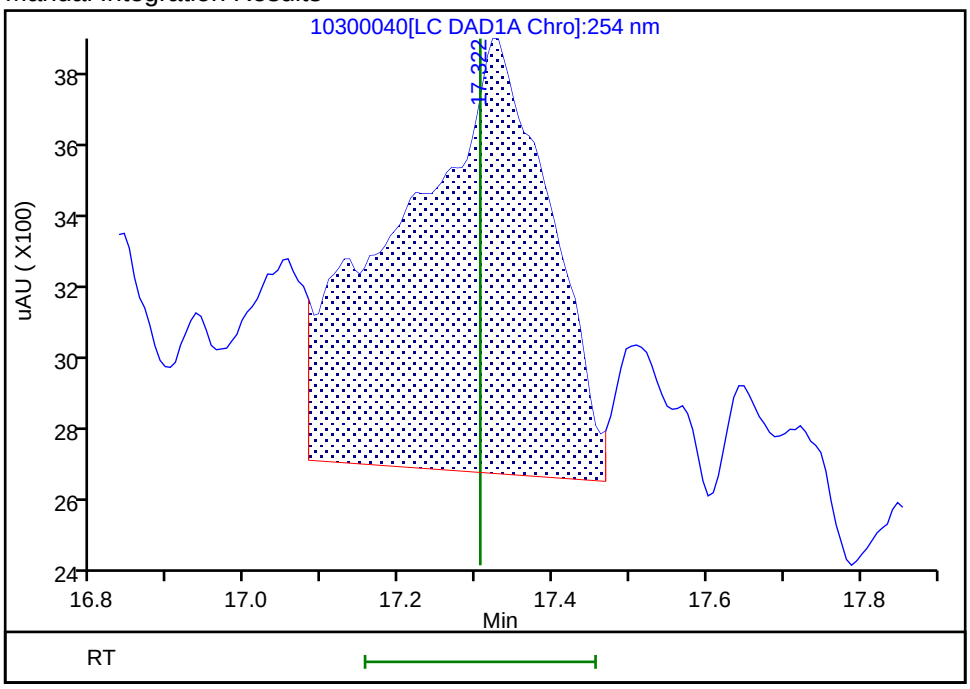
Processing Integration Results

RT: 17.32
Area: 16814
Amount: 0.051739
Amount Units: ug/ml



Manual Integration Results

RT: 17.32
Area: 15031
Amount: 0.046253
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:22:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

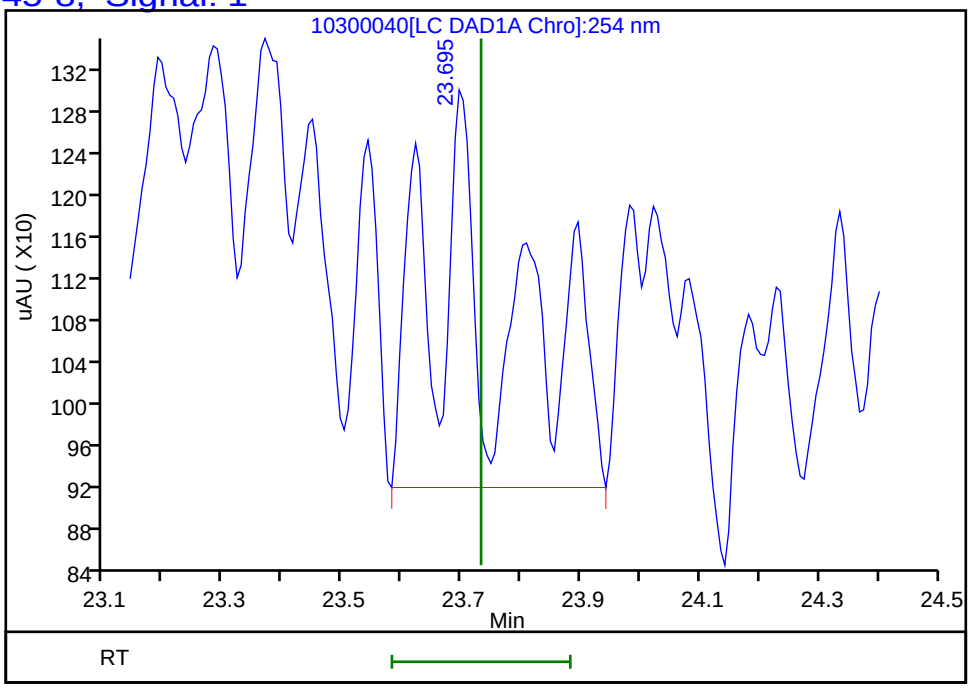
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300040.D				
Injection Date:	31-Oct-2019 08:30:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-12-A	Lab Sample ID:	280-129936-12		
Client ID:	G0081-1				
Operator ID:	CB	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8, Signal: 1

RT: 23.70
Response: 3471
Amount: 0.009809



Reviewer: beckerc, 31-Oct-2019 16:23:23
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.: 280-129936-1

SDG No.:

Client Sample ID: G0075-1 Lab Sample ID: 280-129936-13

Matrix: Water Lab File ID: 10280058.D

Analysis Method: 8330A Date Collected: 10/21/2019 12:00

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 528.5(mL) Date Analyzed: 10/29/2019 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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.38	U	0.95	0.38	0.19
99-65-0	1,3-Dinitrobenzene	0.19	U	0.38	0.19	0.084
118-96-7	2,4,6-Trinitrotoluene	0.38	U	0.38	0.38	0.15
121-14-2	2,4-Dinitrotoluene	0.19	U	0.38	0.19	0.079
606-20-2	2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.061
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.19	0.11	0.048
88-72-2	2-Nitrotoluene	0.19	U	0.38	0.19	0.081
99-08-1	3-Nitrotoluene	0.38	U M	0.38	0.38	0.18
19406-51-0	4-Amino-2,6-dinitrotoluene	0.085	J J1	0.19	0.11	0.055
99-99-0	4-Nitrotoluene	0.38	U	0.95	0.38	0.19
2691-41-0	HMX	0.19	U	0.38	0.19	0.083
5755-27-1	MNX	0.38	U	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.38	0.19	0.086
121-82-4	RDX	0.38	U	0.38	0.38	0.15
479-45-8	Tetryl	0.19	U M	0.23	0.19	0.075

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280058.D
Lims ID: 280-129936-A-13-A
Client ID: G0075-1
Sample Type: Client
Inject. Date: 29-Oct-2019 08:30:45 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-13-
Misc. Info.: 280-0086569-058
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:10:19

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.675			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.761			ND	
$	9 1,2-Dinitrobenzene	1	8.720	8.715	0.005	23782	0.1707	M
	10 1,3,5-Trinitrobenzene	1		8.881			ND	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	U
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1	11.367	11.368	-0.001	1501	0.009022	
	18 2-Amino-4,6-dinitrotoluene	1		11.661			ND	
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

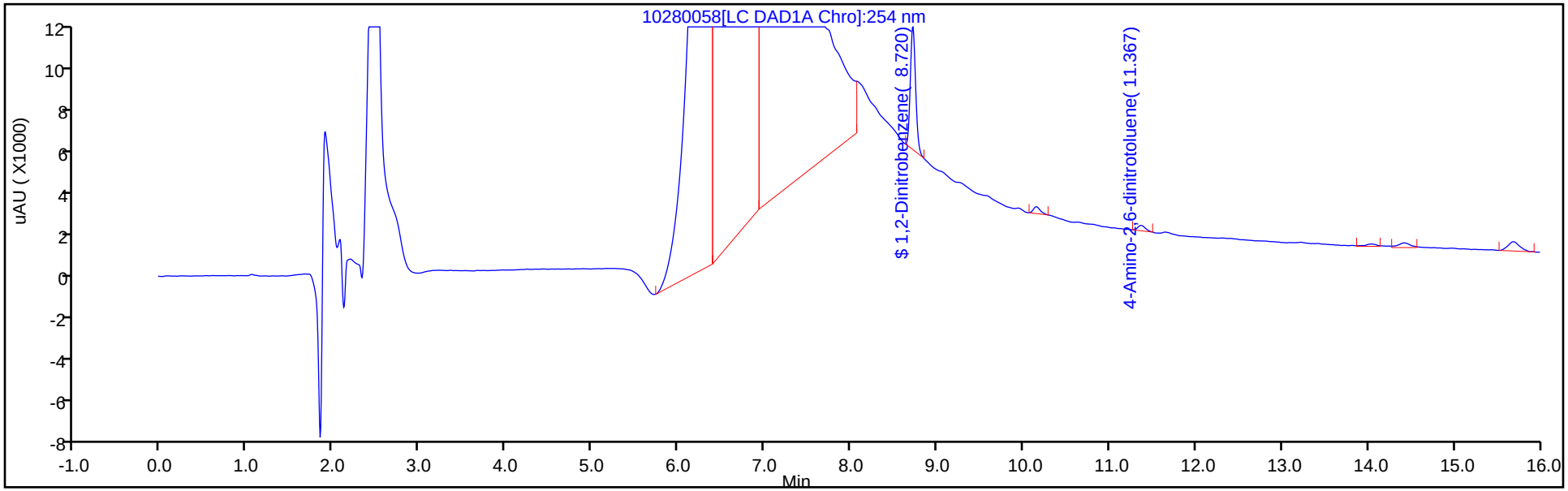
Report Date: 29-Oct-2019 11:54:30 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

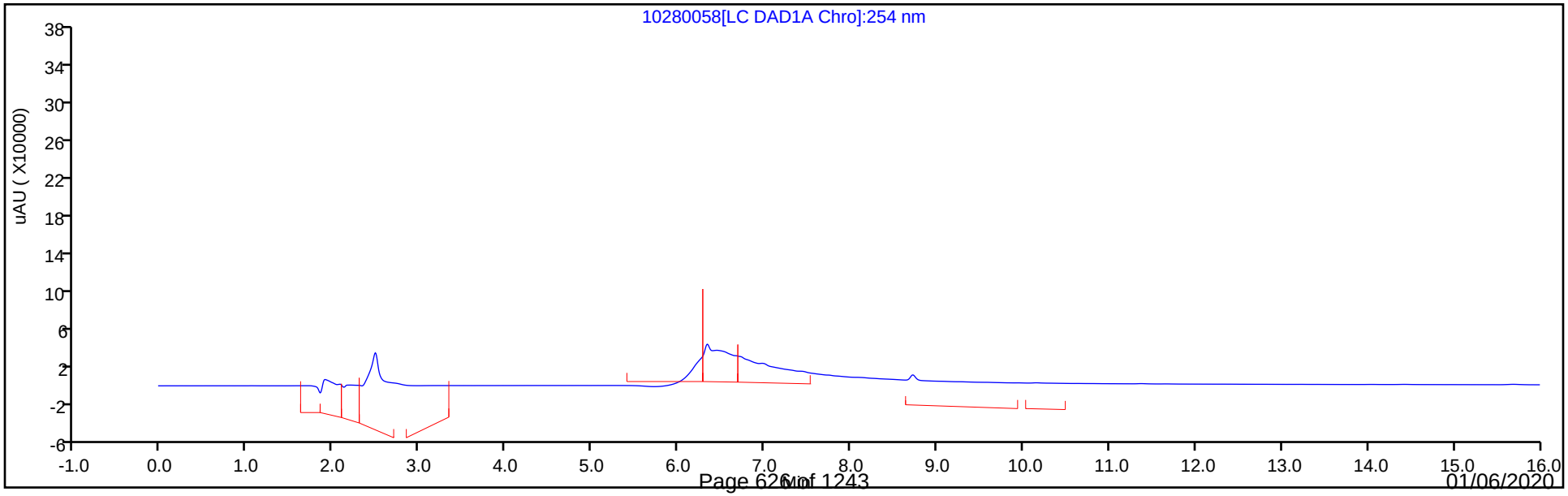
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280058.D

Injection Date:	29-Oct-2019 08:30:45	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13	Worklist Smp#:	58
Client ID:	G0075-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280058.D				
Lims ID:	280-129936-A-13-A				
Client ID:	G0075-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 08:30:45	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-13-				
Misc. Info.:	280-0086569-058				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:10:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1707	85.35

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

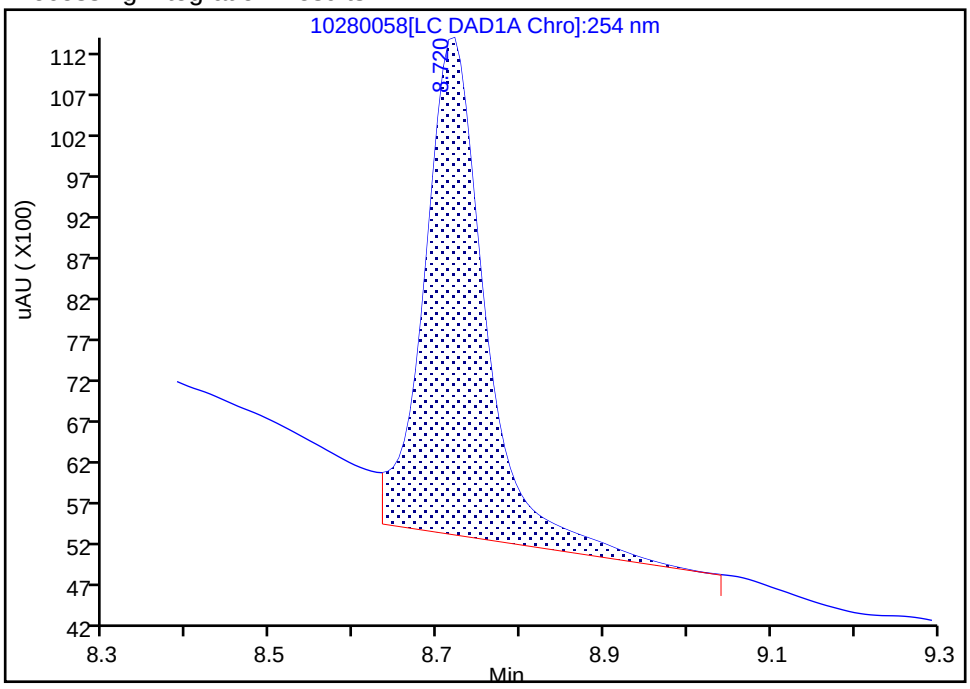
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280058.D				
Injection Date:	29-Oct-2019 08:30:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. 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

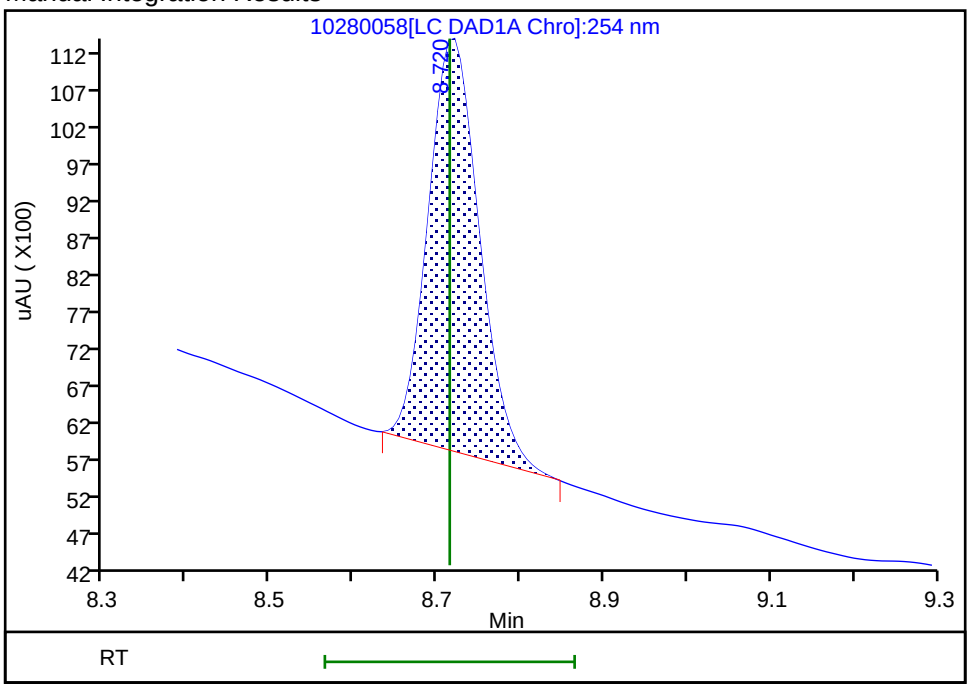
Processing Integration Results

RT: 8.72
Area: 30854
Amount: 0.221448
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 23782
Amount: 0.170690
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:10:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

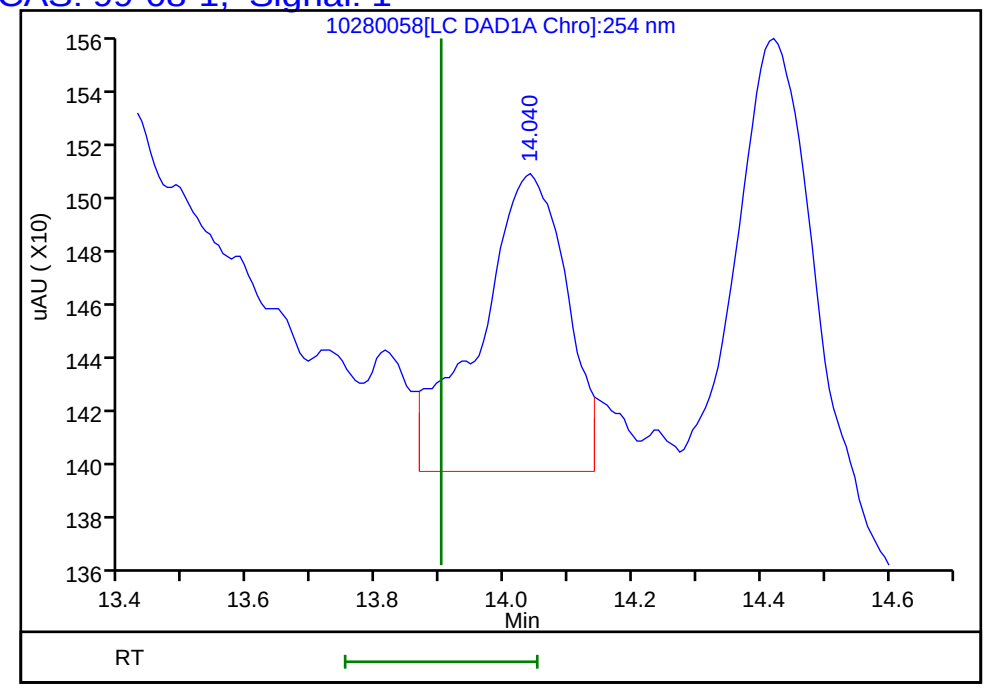
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280058.D				
Injection Date:	29-Oct-2019 08:30:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	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: 14.04
Response: 1015
Amount: 0.006994



Reviewer: beckerc, 29-Oct-2019 11:10:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

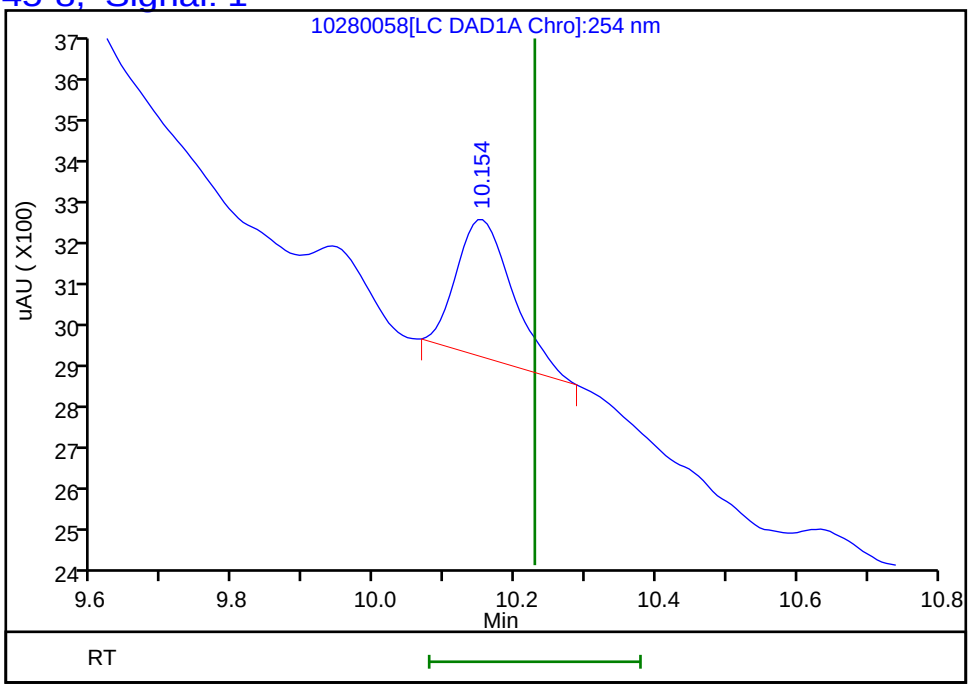
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280058.D				
Injection Date:	29-Oct-2019 08:30:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	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: 1729
Amount: 0.010676



Reviewer: beckerc, 29-Oct-2019 11:10:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0075-1 Lab Sample ID: 280-129936-13

Matrix: Water Lab File ID: 10300041.D

Analysis Method: 8330A Date Collected: 10/21/2019 12:00

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 528.5(mL) Date Analyzed: 10/31/2019 09:05

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.30*	*J1*	*0.19*	0.11	*0.055*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	80	*Q*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D
Lims ID: 280-129936-A-13-A
Client ID: G0075-1
Sample Type: Client
Inject. Date: 31-Oct-2019 09:05:36 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-13-
Misc. Info.: 280-0086641-041
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:47 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:23:59

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.059			ND	U
	7 MNX	1	7.933	7.989	-0.056	1192	NC	
	8 RDX	1		9.259			ND	
	9 Nitrobenzene	1		12.232			ND	
$	10 1,2-Dinitrobenzene	1	13.159	13.172	-0.013	50756	0.1610	
	12 1,3-Dinitrobenzene	1		15.705			ND	U
	14 o-Nitrotoluene	1		16.705			ND	U
	15 p-Nitrotoluene	1		16.992			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.339	17.305	0.034	10418	0.0321	
	17 m-Nitrotoluene	1		17.919			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.206	18.199	0.007	7663	0.0167	
	19 1,3,5-Trinitrobenzene	1		19.059			ND	
	20 2,6-Dinitrotoluene	1		19.985			ND	U
	21 2,4-Dinitrotoluene	1		20.479			ND	U
	22 Tetryl	1		23.732			ND	
	23 2,4,6-Trinitrotoluene	1		24.832			ND	

QC Flag Legend

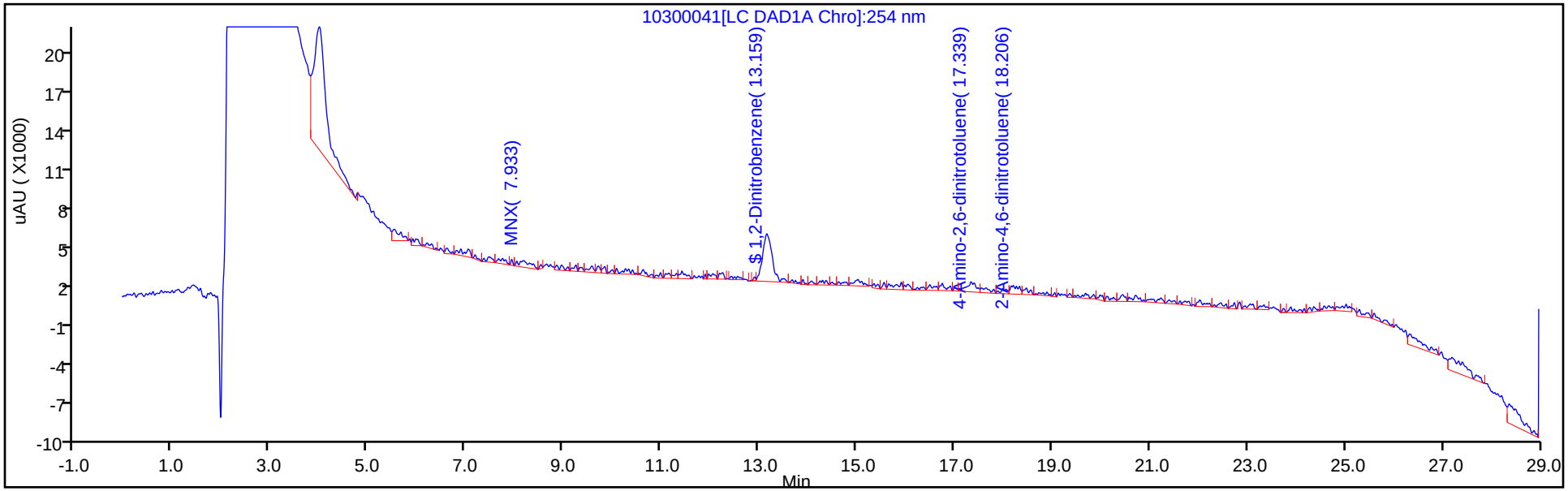
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 31-Oct-2019 16:27:54 Chrom Revision: 2.3 09-Oct-2019 11:13:36

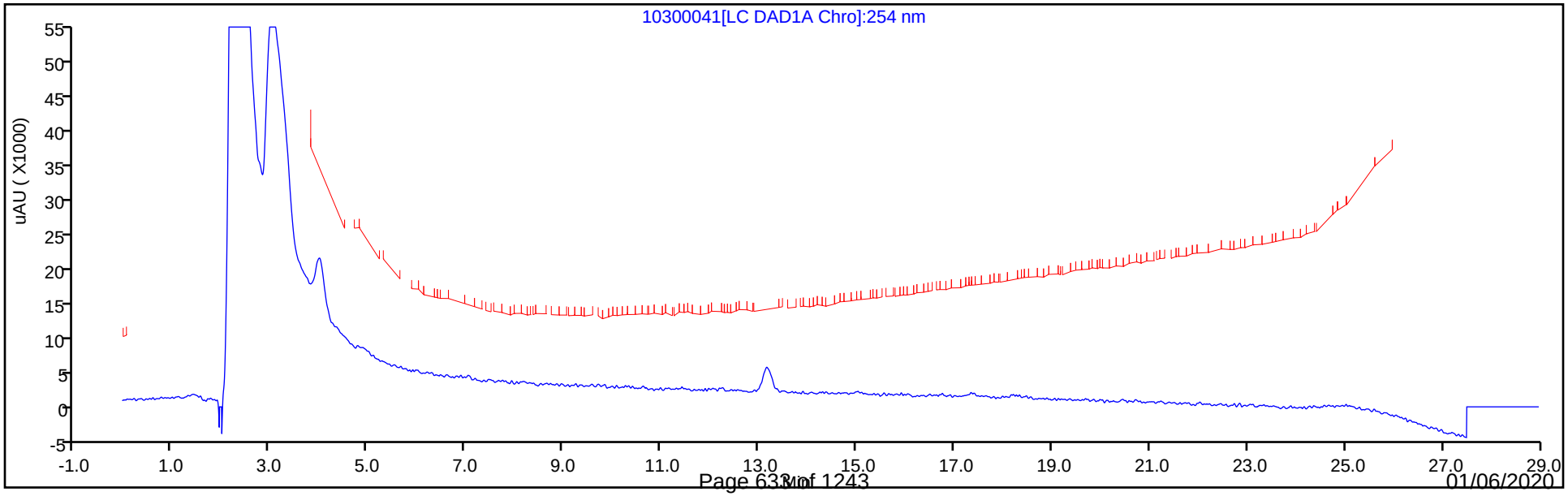
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D				
Injection Date:	31-Oct-2019 09:05:36	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13	Worklist Smp#:	41
Client ID:	G0075-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D				
Lims ID:	280-129936-A-13-A				
Client ID:	G0075-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 09:05:36	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-13-				
Misc. Info.:	280-0086641-041				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:47	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				
First Level Reviewer: beckerc		Date:	31-Oct-2019 16:23:59		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1610	80.50

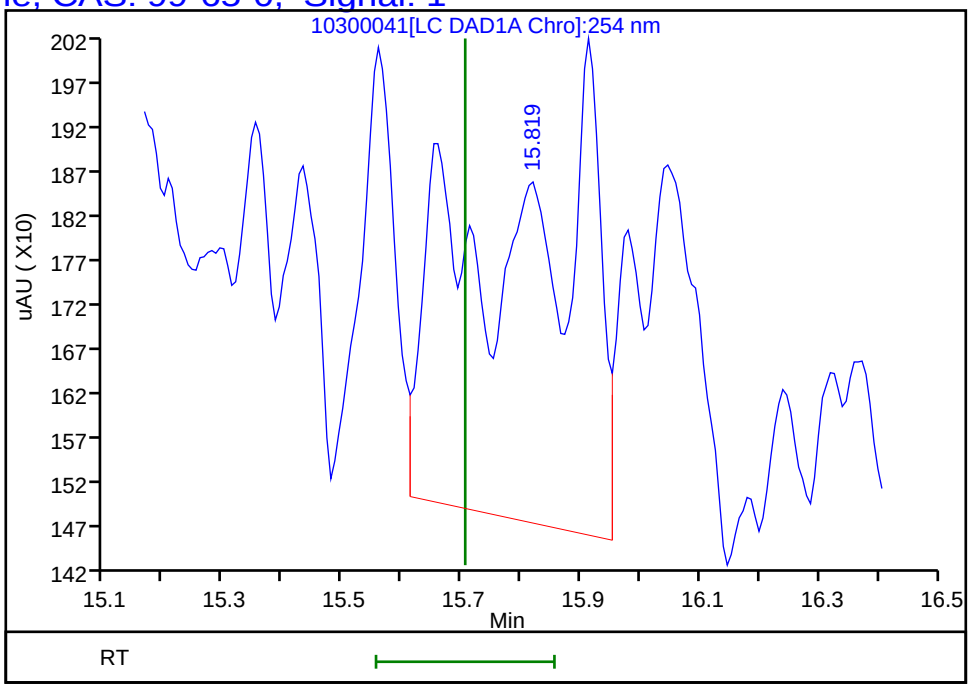
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D				
Injection Date:	31-Oct-2019 09:05:36	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	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: 15.82
Response: 6180
Amount: 0.009397



Reviewer: beckerc, 31-Oct-2019 16:23:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

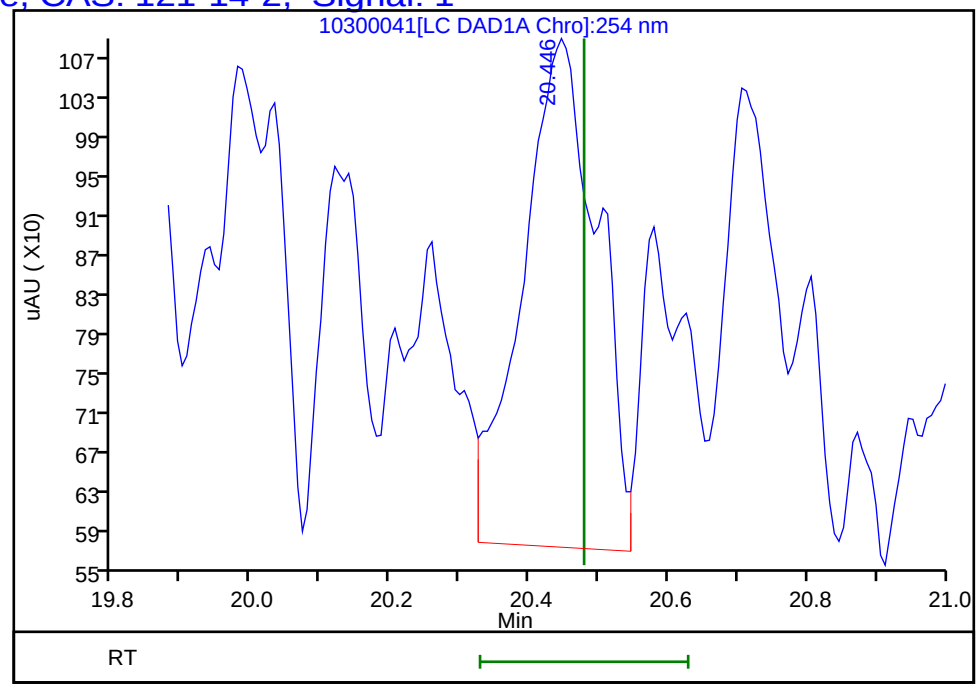
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D				
Injection Date:	31-Oct-2019 09:05:36	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.45
Response: 3866
Amount: 0.006346



Reviewer: beckerc, 31-Oct-2019 16:23:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

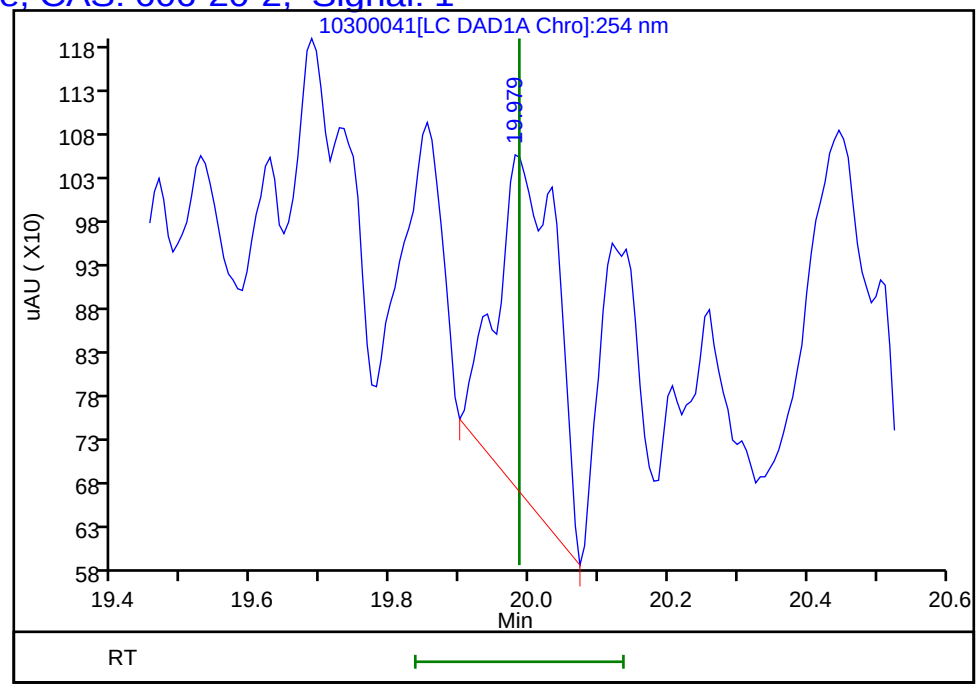
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D				
Injection Date:	31-Oct-2019 09:05:36	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 19.98
Response: 2374
Amount: 0.007352



Reviewer: beckerc, 31-Oct-2019 16:23:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

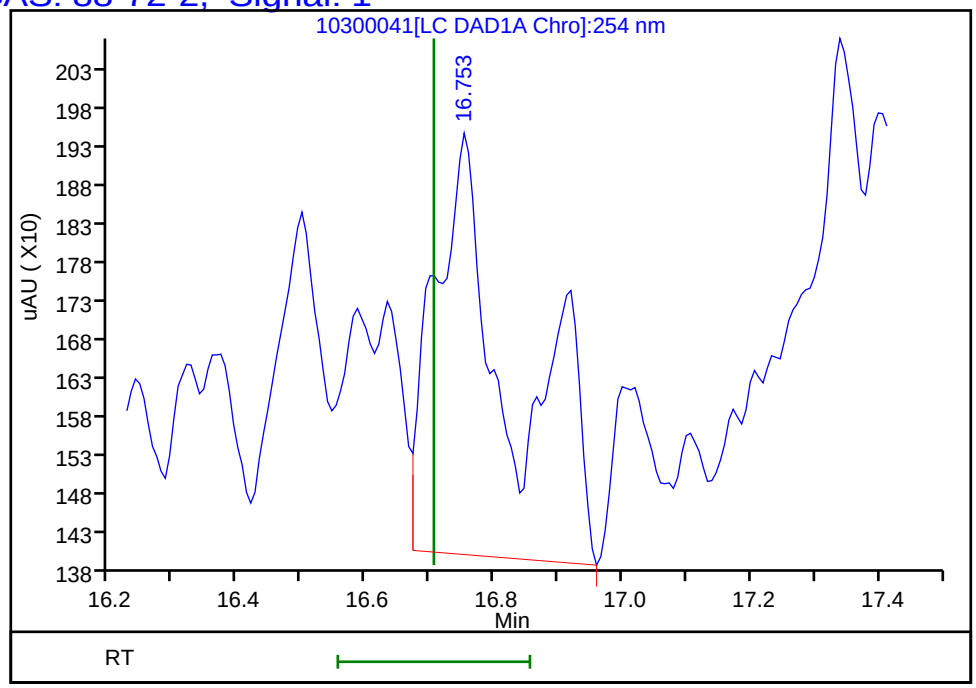
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D				
Injection Date:	31-Oct-2019 09:05:36	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	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: 16.75
Response: 4587
Amount: 0.016432



Reviewer: beckerc, 31-Oct-2019 16:23:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

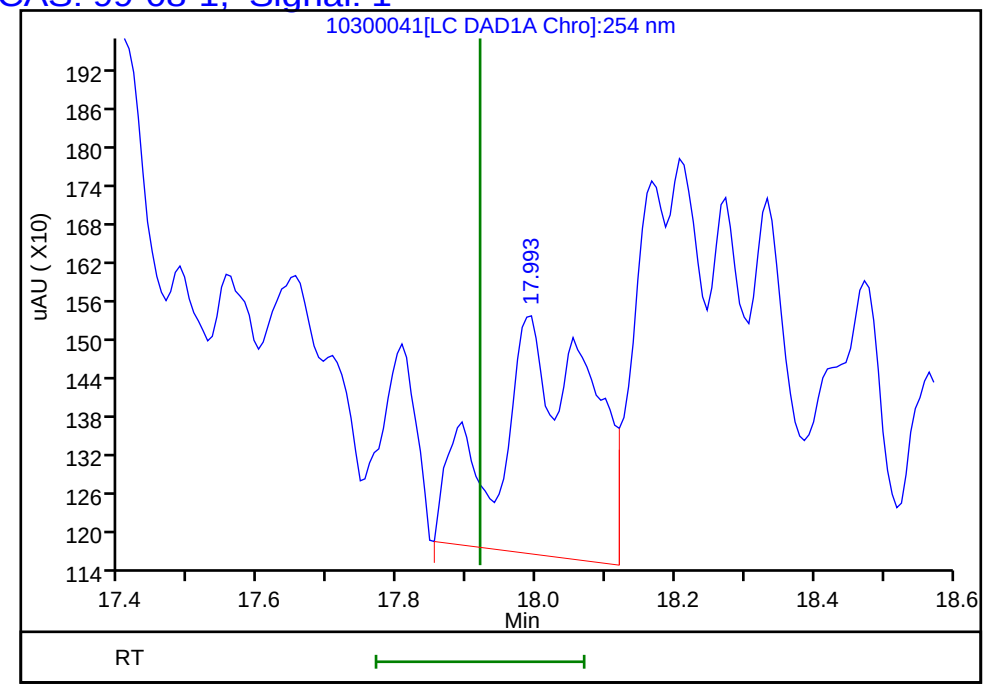
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D				
Injection Date:	31-Oct-2019 09:05:36	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	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: 17.99
Response: 3445
Amount: NaN



Reviewer: beckerc, 31-Oct-2019 16:23:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

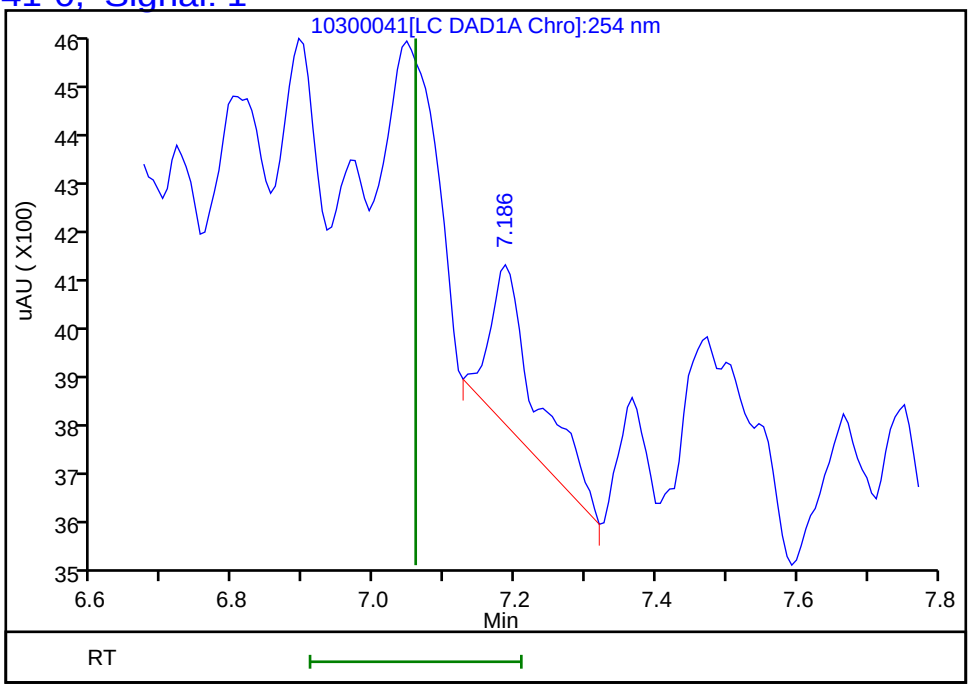
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300041.D				
Injection Date:	31-Oct-2019 09:05:36	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-13-A	Lab Sample ID:	280-129936-13		
Client ID:	G0075-1				
Operator ID:	CB	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	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: 7.19
Response: 1416
Amount: 0.006561



Reviewer: beckerc, 31-Oct-2019 16:23:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0079-1 Lab Sample ID: 280-129936-14

Matrix: Water Lab File ID: 10280062.D

Analysis Method: 8330A Date Collected: 10/21/2019 10:45

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 519.9(mL) Date Analyzed: 10/29/2019 10:02

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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.38	U	0.96	0.38	0.19
99-65-0	1,3-Dinitrobenzene	0.19	U	0.38	0.19	0.085
118-96-7	2,4,6-Trinitrotoluene	0.38	U	0.38	0.38	0.15
121-14-2	2,4-Dinitrotoluene	0.19	U	0.38	0.19	0.081
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U M	0.19	0.12	0.049
88-72-2	2-Nitrotoluene	0.19	U	0.38	0.19	0.082
99-08-1	3-Nitrotoluene	0.38	U	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.19	0.12	0.055
99-99-0	4-Nitrotoluene	0.38	U	0.96	0.38	0.19
5755-27-1	MNX	0.38	U	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.38	0.19	0.088
121-82-4	RDX	0.38	U	0.38	0.38	0.15
479-45-8	Tetryl	0.19	U M	0.23	0.19	0.076

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\20191028-86569.b\10280062.D
Lims ID: 280-129936-A-14-A
Client ID: G0079-1
Sample Type: Client
Inject. Date: 29-Oct-2019 10:02:32 ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-14-
Misc. Info.: 280-0086569-062
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:22 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:12:29

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.669	6.675	-0.006	23642	0.2574	M
	6 MNX	1		7.367			ND	
	7 RDX	1		7.761			ND	
$	9 1,2-Dinitrobenzene	1	8.715	8.715	0.000	24954	0.1791	M
	10 1,3,5-Trinitrobenzene	1		8.881			ND	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	U
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.368			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.661			ND	U
	19 2,6-Dinitrotoluene	1	11.782	11.814	-0.032	2605	0.0164	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

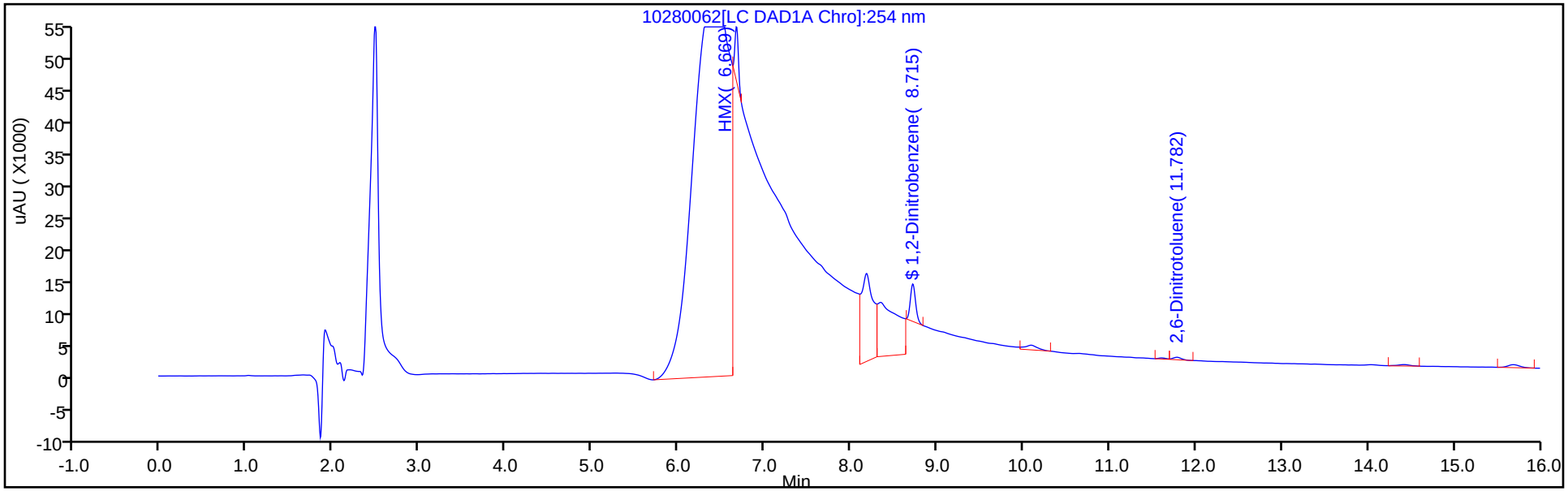
Report Date: 29-Oct-2019 11:54:26 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

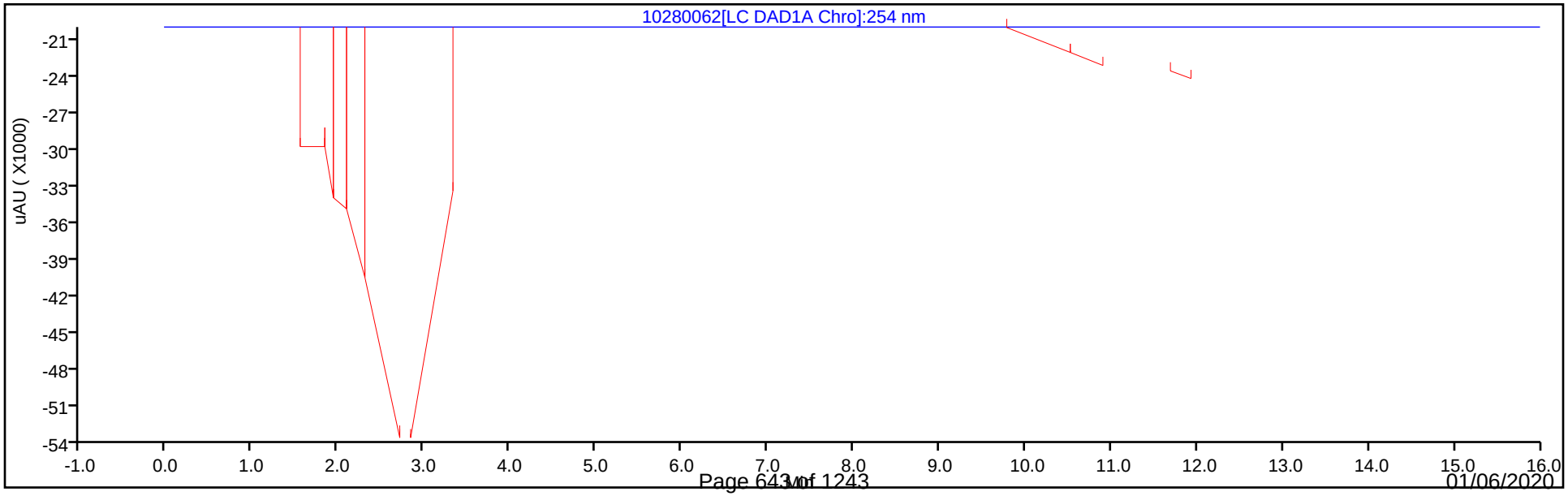
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280062.D

Injection Date:	29-Oct-2019 10:02:32	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14	Worklist Smp#:	62
Client ID:	G0079-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	62
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280062.D				
Lims ID:	280-129936-A-14-A				
Client ID:	G0079-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 10:02:32	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-14-				
Misc. Info.:	280-0086569-062				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:22	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:12:29		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1791	89.55

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

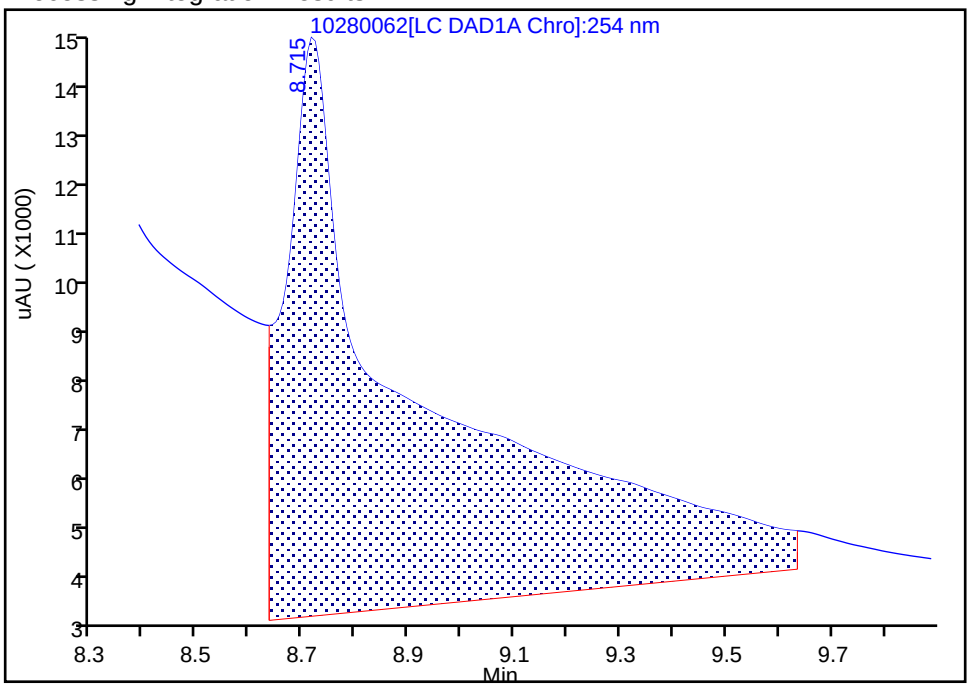
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280062.D				
Injection Date:	29-Oct-2019 10:02:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

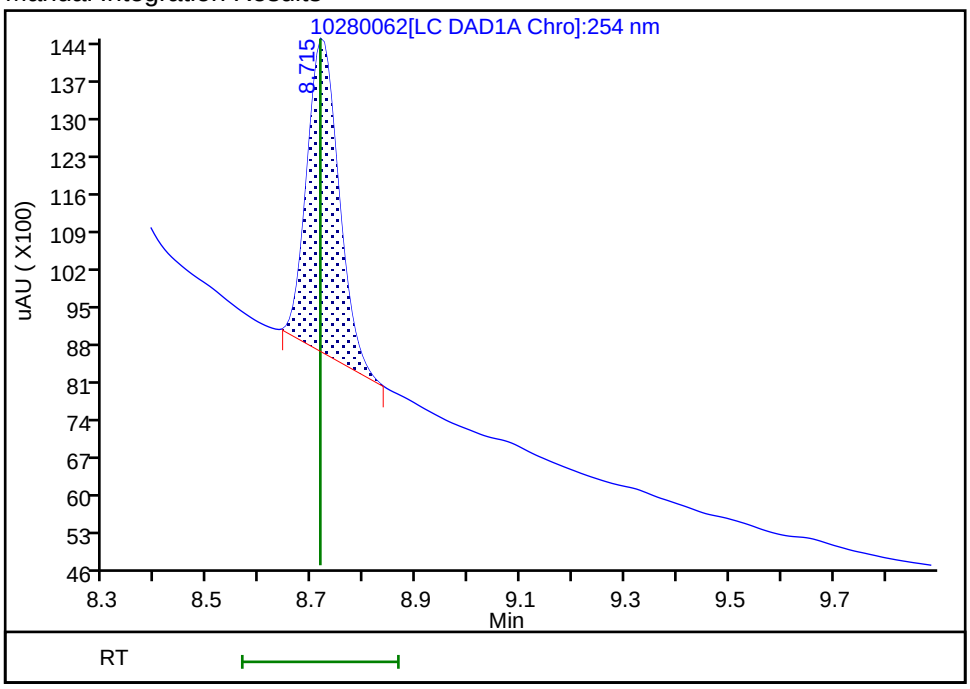
Processing Integration Results

RT: 8.72
Area: 196358
Amount: 1.409317
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 24954
Amount: 0.179102
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:12:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

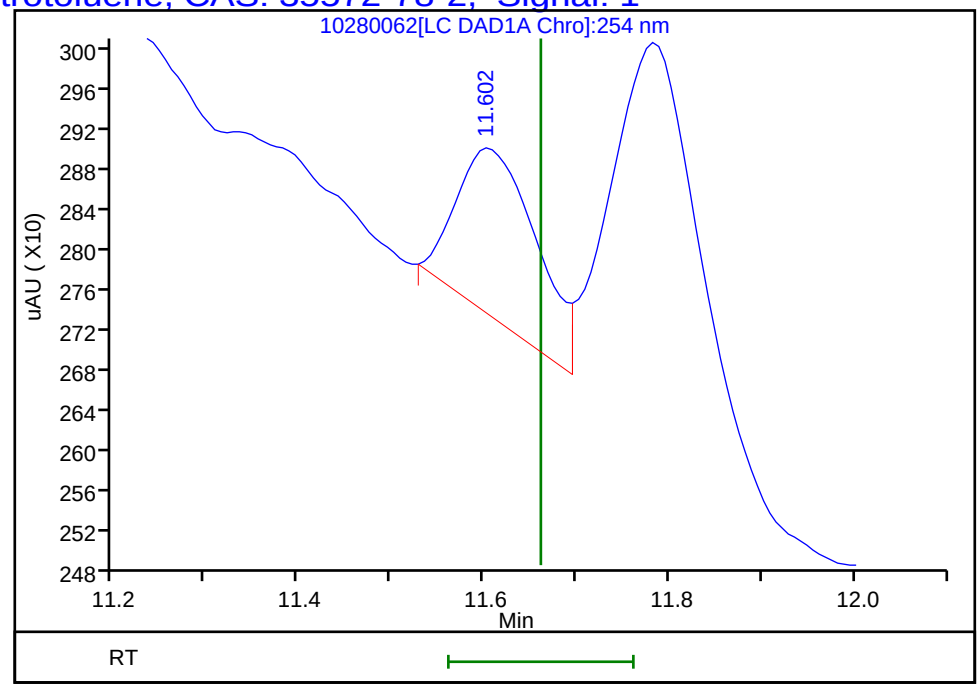
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280062.D				
Injection Date:	29-Oct-2019 10:02:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	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		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.60
Response: 1023
Amount: 0.004984



Reviewer: beckerc, 29-Oct-2019 11:12:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

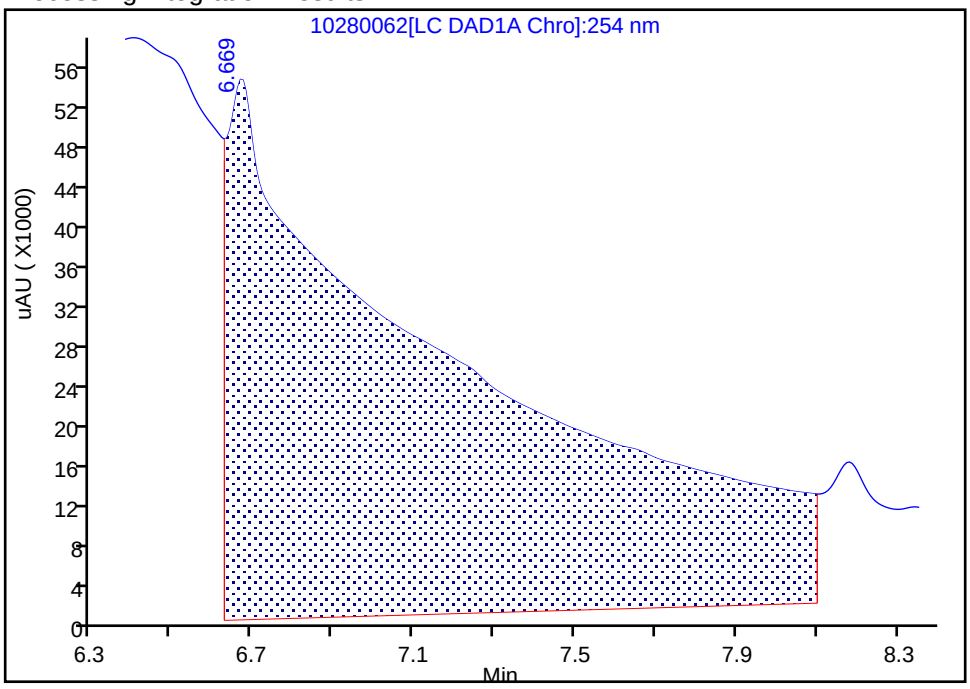
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280062.D				
Injection Date:	29-Oct-2019 10:02:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

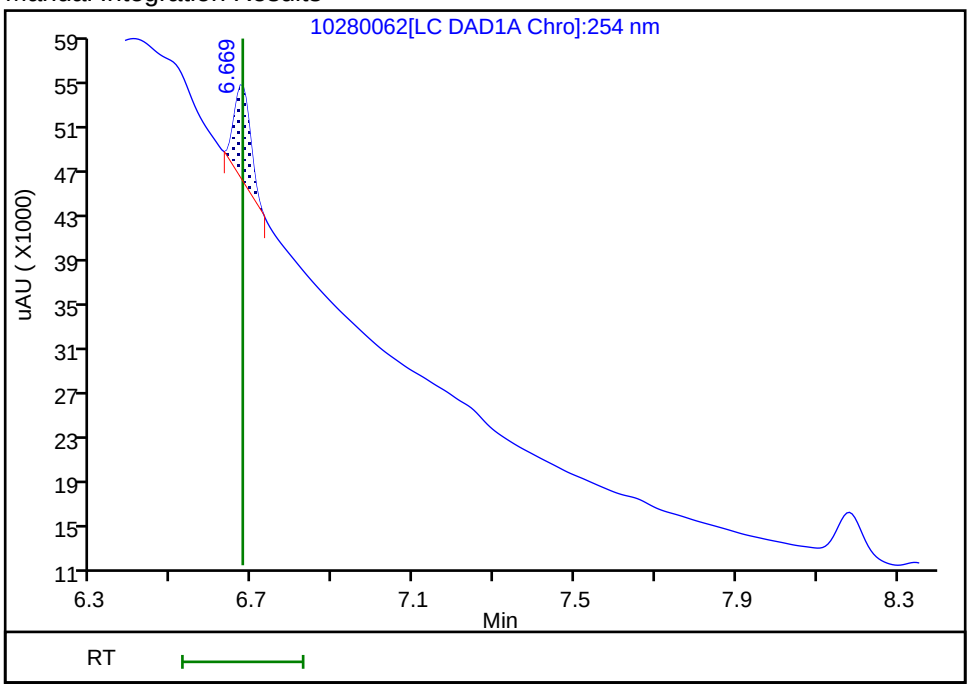
Processing Integration Results

RT: 6.67
Area: 2124155
Amount: 23.130567
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 23642
Amount: 0.257445
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:11:53

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

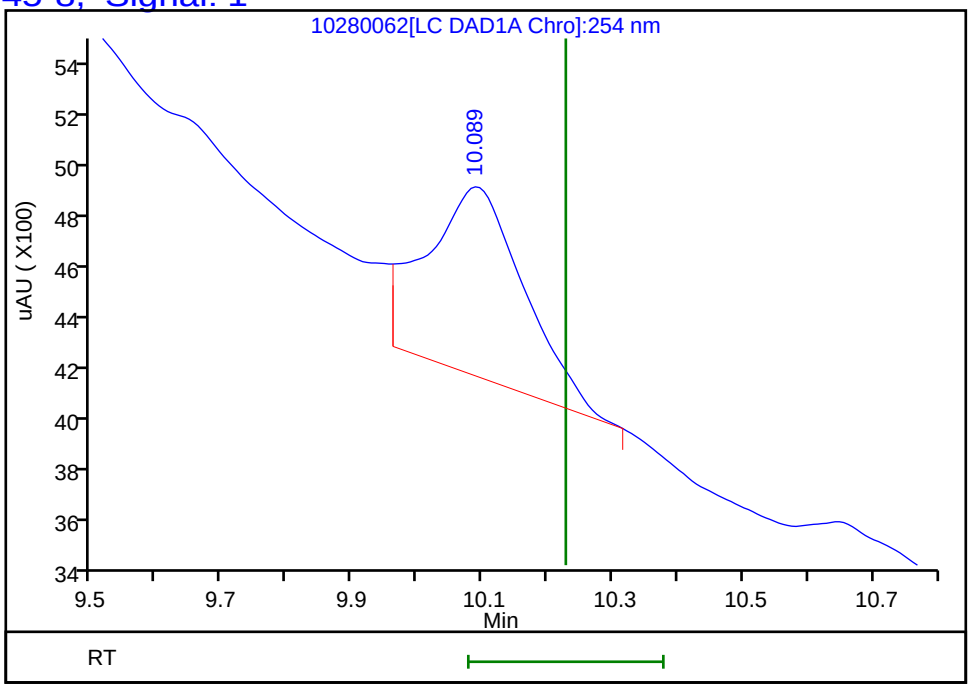
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280062.D				
Injection Date:	29-Oct-2019 10:02:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.09
Response: 7550
Amount: 0.046617



Reviewer: beckerc, 29-Oct-2019 11:12:29
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.: 280-129936-1

SDG No.:

Client Sample ID: G0079-1 Lab Sample ID: 280-129936-14

Matrix: Water Lab File ID: 10300042.D

Analysis Method: 8330A Date Collected: 10/21/2019 10:45

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 519.9(mL) Date Analyzed: 10/31/2019 09:40

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
606-20-2	2,6-Dinitrotoluene	0.19	U M	0.19	0.19	0.062
2691-41-0	HMX	0.19	U	0.38	0.19	0.084

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\20191030-86641.b\10300042.D
Lims ID: 280-129936-A-14-A
Client ID: G0079-1
Sample Type: Client
Inject. Date: 31-Oct-2019 09:40:32 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-14-
Misc. Info.: 280-0086641-042
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:47 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:24:35

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.059			ND	
	7 MNX	1	7.986	7.989	-0.003	3663	NC	
	8 RDX	1		9.259			ND	
	9 Nitrobenzene	1		12.232			ND	
$	10 1,2-Dinitrobenzene	1	13.153	13.172	-0.019	56745	0.1829	
	12 1,3-Dinitrobenzene	1		15.705			ND	U
	14 o-Nitrotoluene	1		16.705			ND	U
	15 p-Nitrotoluene	1		16.992			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.305			ND	U
	17 m-Nitrotoluene	1		17.919			ND	
	18 2-Amino-4,6-dinitrotoluene	1		18.199			ND	
	19 1,3,5-Trinitrobenzene	1		19.059			ND	U
	20 2,6-Dinitrotoluene	1		19.985			ND	U
	21 2,4-Dinitrotoluene	1		20.479			ND	U
	22 Tetryl	1		23.732			ND	
	23 2,4,6-Trinitrotoluene	1		24.832			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

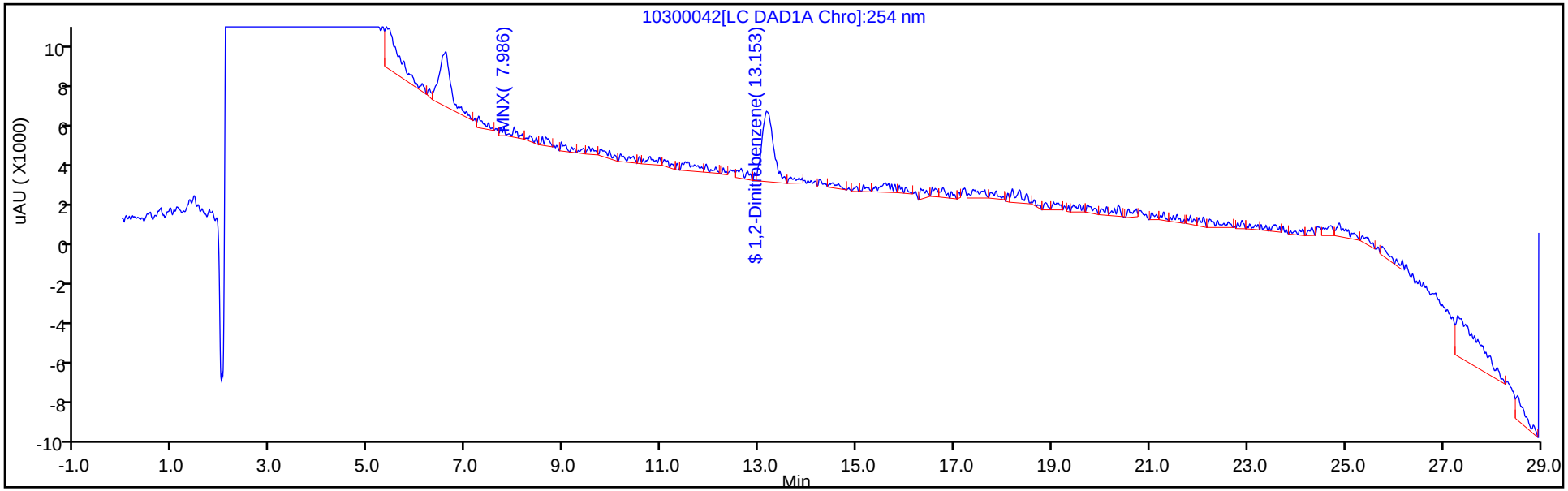
Report Date: 31-Oct-2019 16:27:55 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

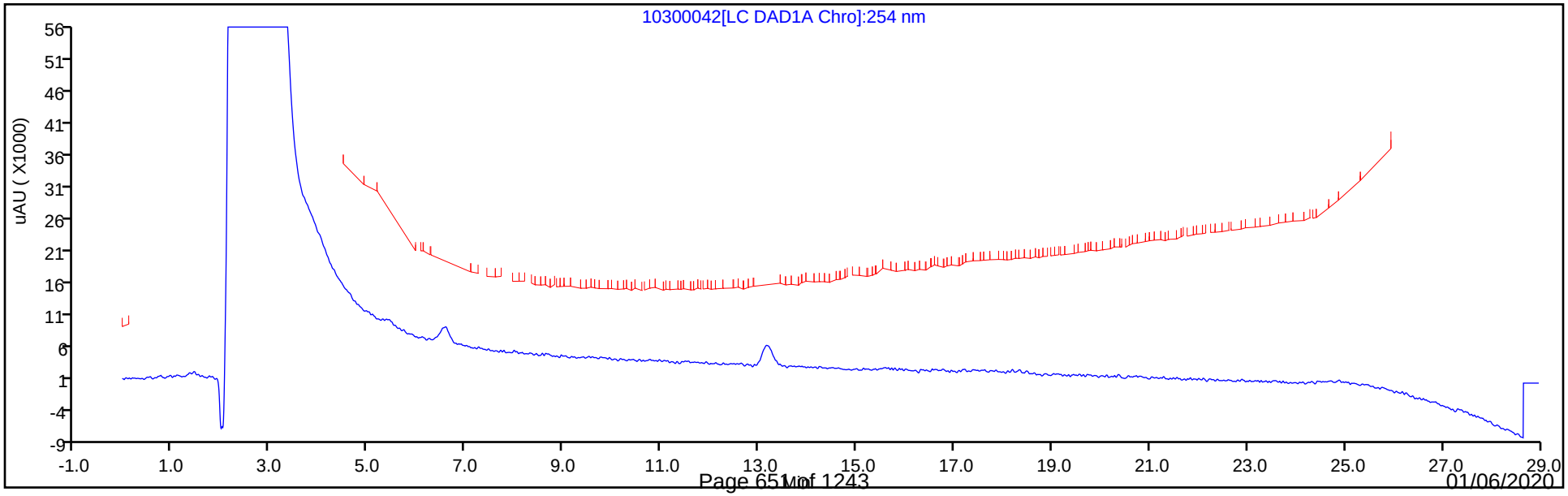
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300042.D

Injection Date:	31-Oct-2019 09:40:32	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14	Worklist Smp#:	42
Client ID:	G0079-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300042.D				
Lims ID:	280-129936-A-14-A				
Client ID:	G0079-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 09:40:32	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-14-				
Misc. Info.:	280-0086641-042				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:47	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				
First Level Reviewer: beckerc		Date:	31-Oct-2019 16:24:35		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1829	91.43

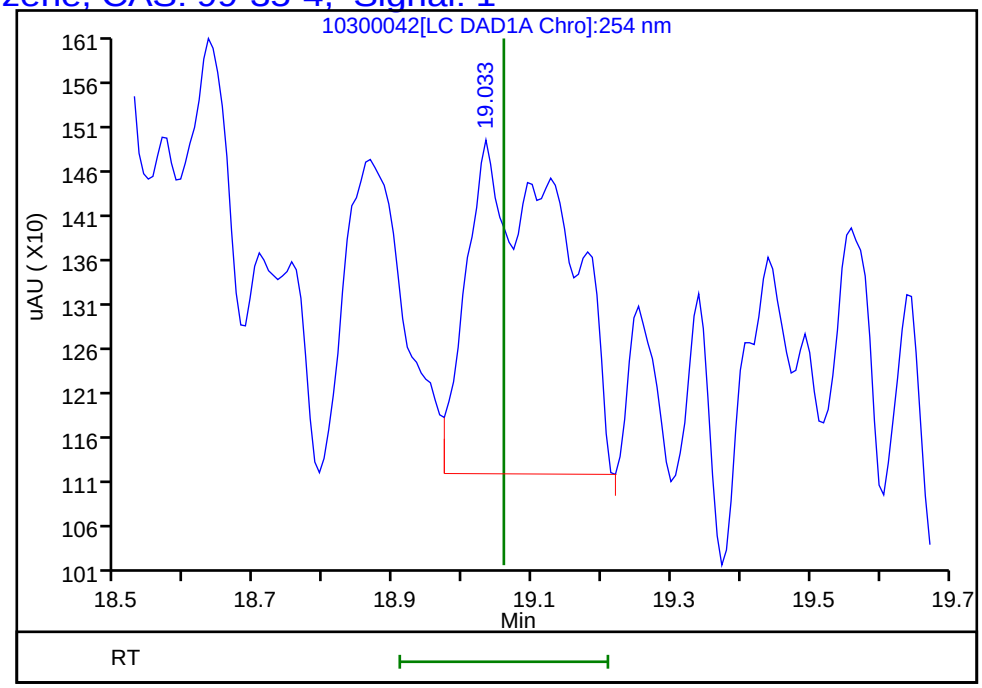
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300042.D				
Injection Date:	31-Oct-2019 09:40:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 19.03
Response: 3611
Amount: 0.007305



Reviewer: beckerc, 31-Oct-2019 16:24:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

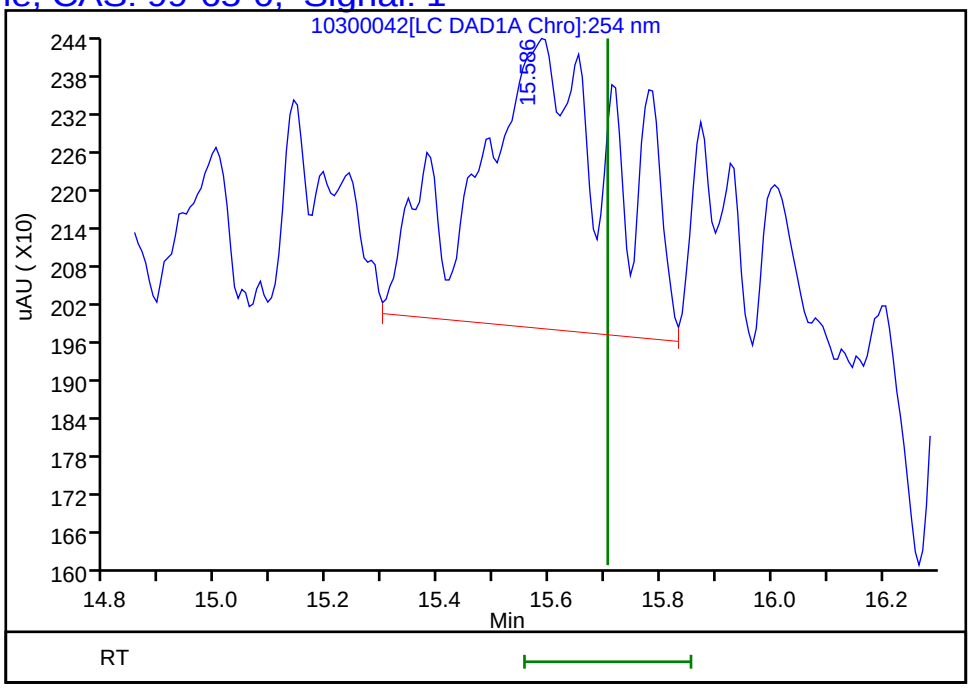
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300042.D				
Injection Date:	31-Oct-2019 09:40:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	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: 15.59
Response: 8109
Amount: 0.012330



Reviewer: beckerc, 31-Oct-2019 16:24:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

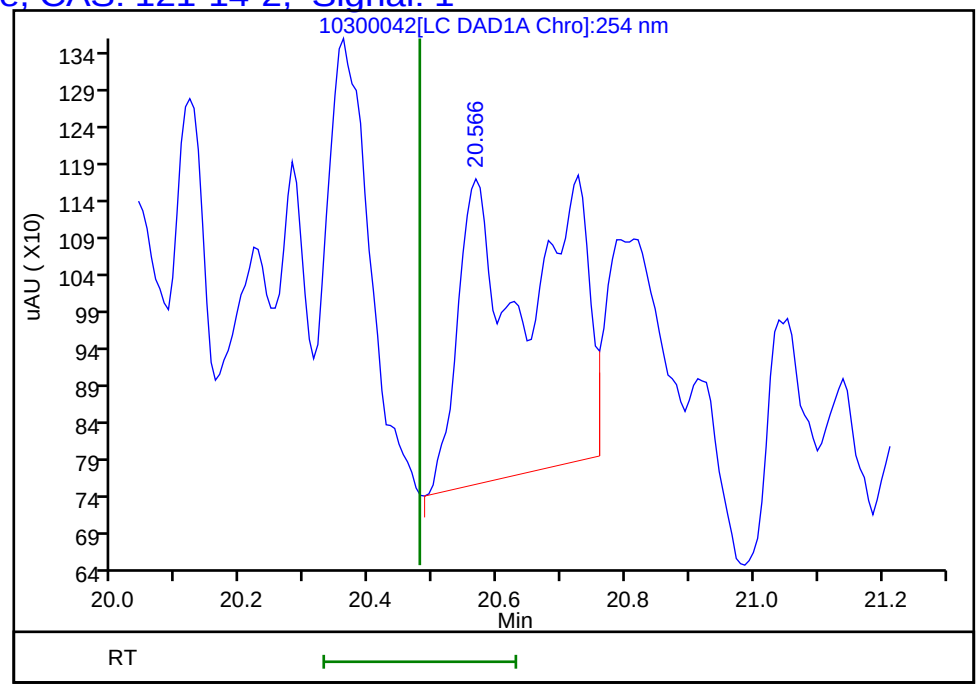
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300042.D				
Injection Date:	31-Oct-2019 09:40:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.57
Response: 3909
Amount: 0.006417



Reviewer: beckerc, 31-Oct-2019 16:24:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

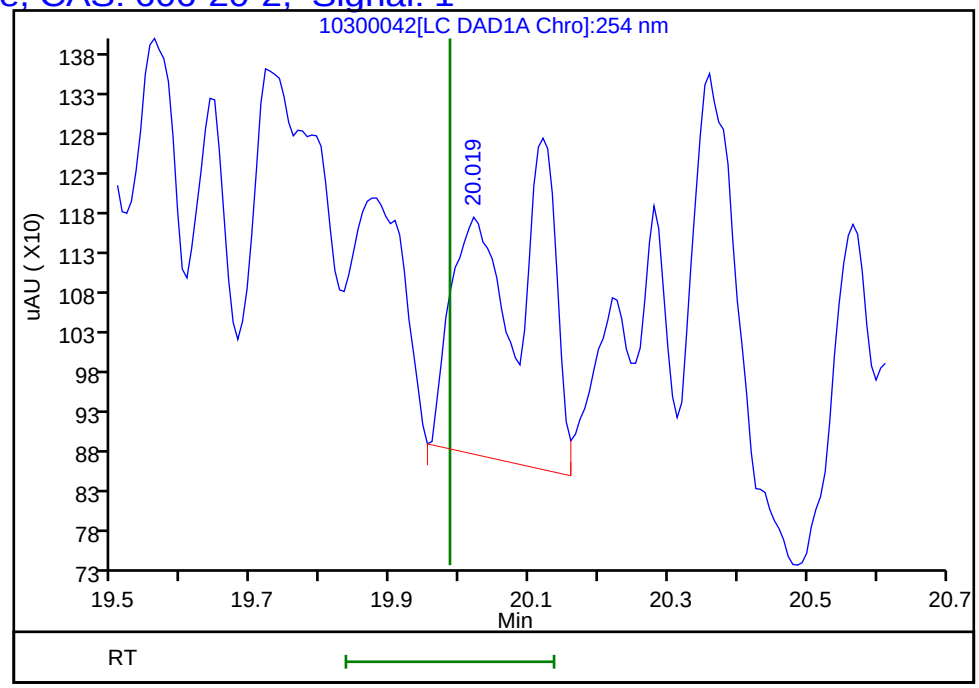
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300042.D				
Injection Date:	31-Oct-2019 09:40:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 20.02
Response: 2693
Amount: 0.008340



Reviewer: beckerc, 31-Oct-2019 16:24:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

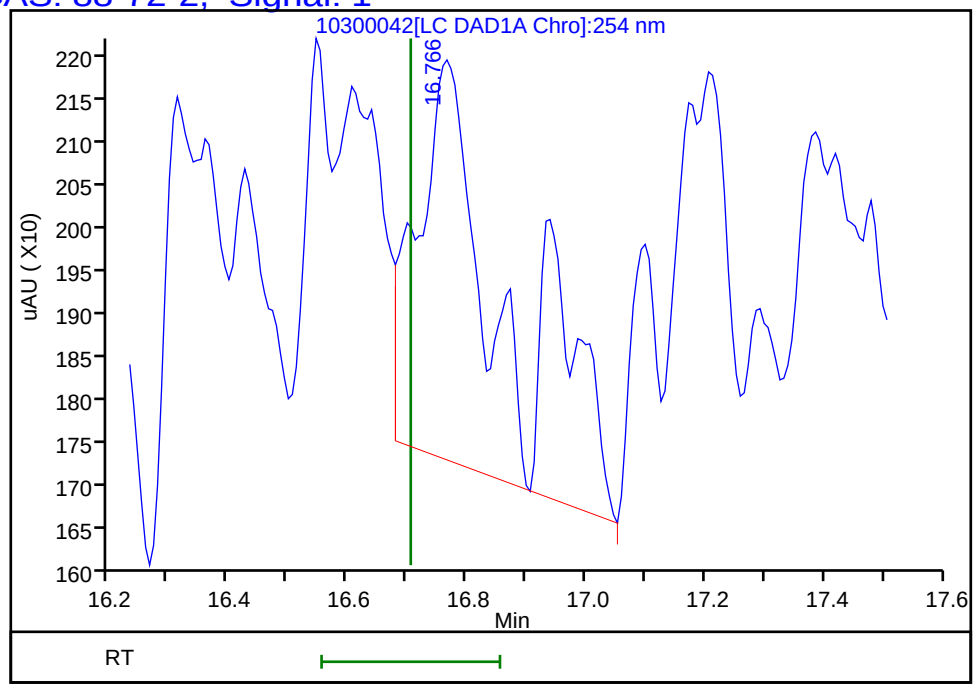
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300042.D				
Injection Date:	31-Oct-2019 09:40:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	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: 16.77
Response: 4894
Amount: 0.017532



Reviewer: beckerc, 31-Oct-2019 16:24:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

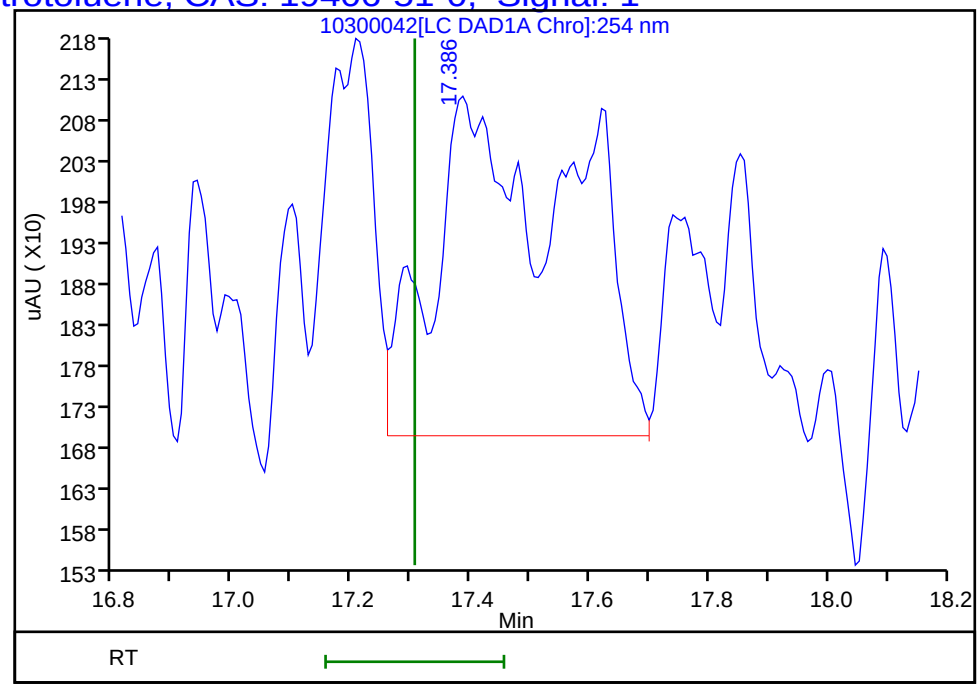
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300042.D				
Injection Date:	31-Oct-2019 09:40:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-14-A	Lab Sample ID:	280-129936-14		
Client ID:	G0079-1				
Operator ID:	CB	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.39
Response: 6693
Amount: 0.020595



Reviewer: beckerc, 31-Oct-2019 16:24:35
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.: 280-129936-1

SDG No.:

Client Sample ID: G0080-1 Lab Sample ID: 280-129936-15

Matrix: Water Lab File ID: 10280063.D

Analysis Method: 8330A Date Collected: 10/21/2019 09:10

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 528.5(mL) Date Analyzed: 10/29/2019 10:25

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.38	U	0.95	0.38	0.19
99-65-0	1,3-Dinitrobenzene	0.19	U	0.38	0.19	0.084
118-96-7	2,4,6-Trinitrotoluene	0.38	U	0.38	0.38	0.15
121-14-2	2,4-Dinitrotoluene	0.19	U	0.38	0.19	0.079
606-20-2	2,6-Dinitrotoluene	0.19	U	0.19	0.19	0.061
35572-78-2	2-Amino-4,6-dinitrotoluene	0.096	J M J1	0.19	0.11	0.048
88-72-2	2-Nitrotoluene	0.19	U	0.38	0.19	0.081
99-08-1	3-Nitrotoluene	0.38	U M	0.38	0.38	0.18
99-99-0	4-Nitrotoluene	0.38	U	0.95	0.38	0.19
2691-41-0	HMX	0.18	J M	0.38	0.19	0.083
5755-27-1	MNX	0.38	U	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.38	0.19	0.086
121-82-4	RDX	0.38	U M	0.38	0.38	0.15
479-45-8	Tetryl	0.19	U	0.23	0.19	0.075

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\20191028-86569.b\10280063.D
Lims ID: 280-129936-A-15-A
Client ID: G0080-1
Sample Type: Client
Inject. Date: 29-Oct-2019 10:25:29 ALS Bottle#: 63 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-15-
Misc. Info.: 280-0086569-063
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:22 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:13:27

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.670	6.675	-0.005	1714	0.0187	M
	6 MNX	1		7.367			ND	
	7 RDX	1	7.756	7.761	-0.005	1673	0.0151	M
$	9 1,2-Dinitrobenzene	1	8.723	8.715	0.008	24050	0.1726	M
	10 1,3,5-Trinitrobenzene	1		8.881			ND	
	11 1,3-Dinitrobenzene	1		9.534			ND	
	12 Nitrobenzene	1		9.921			ND	
	14 Tetryl	1		10.228			ND	
	16 2,4,6-Trinitrotoluene	1		11.201			ND	
	17 4-Amino-2,6-dinitrotoluene	1	11.363	11.368	-0.005	1319	0.007928	M
	18 2-Amino-4,6-dinitrotoluene	1	11.656	11.661	-0.005	2073	0.0101	M
	19 2,6-Dinitrotoluene	1		11.814			ND	
	20 2,4-Dinitrotoluene	1		12.008			ND	
	21 o-Nitrotoluene	1		12.854			ND	
	22 p-Nitrotoluene	1		13.301			ND	
	23 m-Nitrotoluene	1		13.901			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

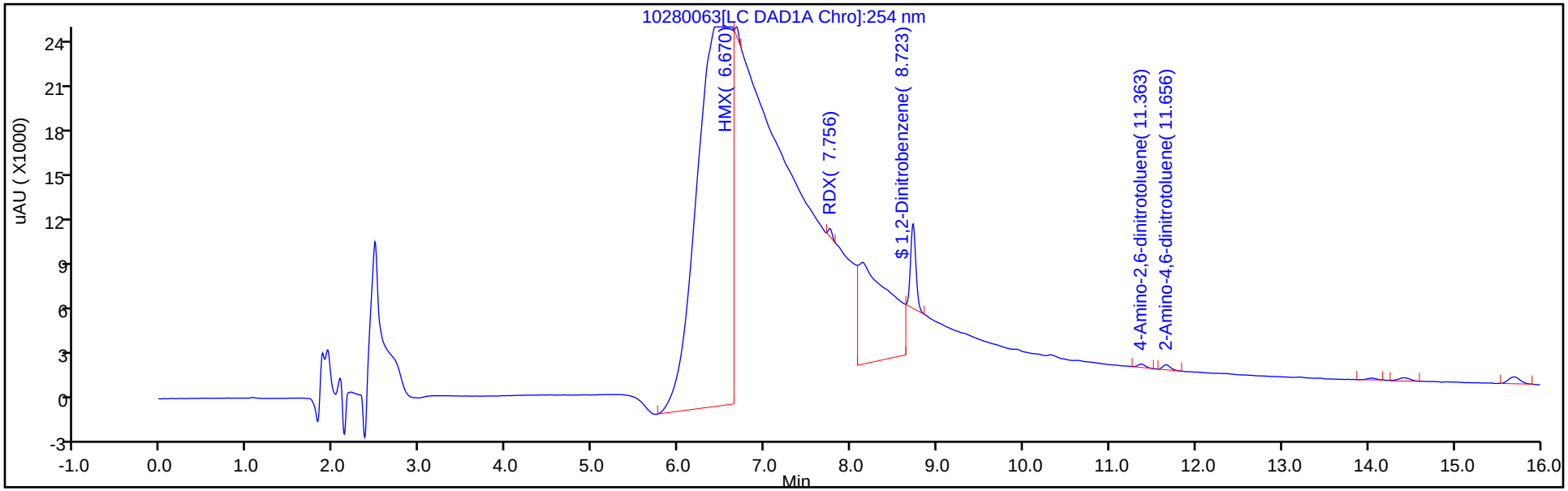
Report Date: 29-Oct-2019 11:54:25 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

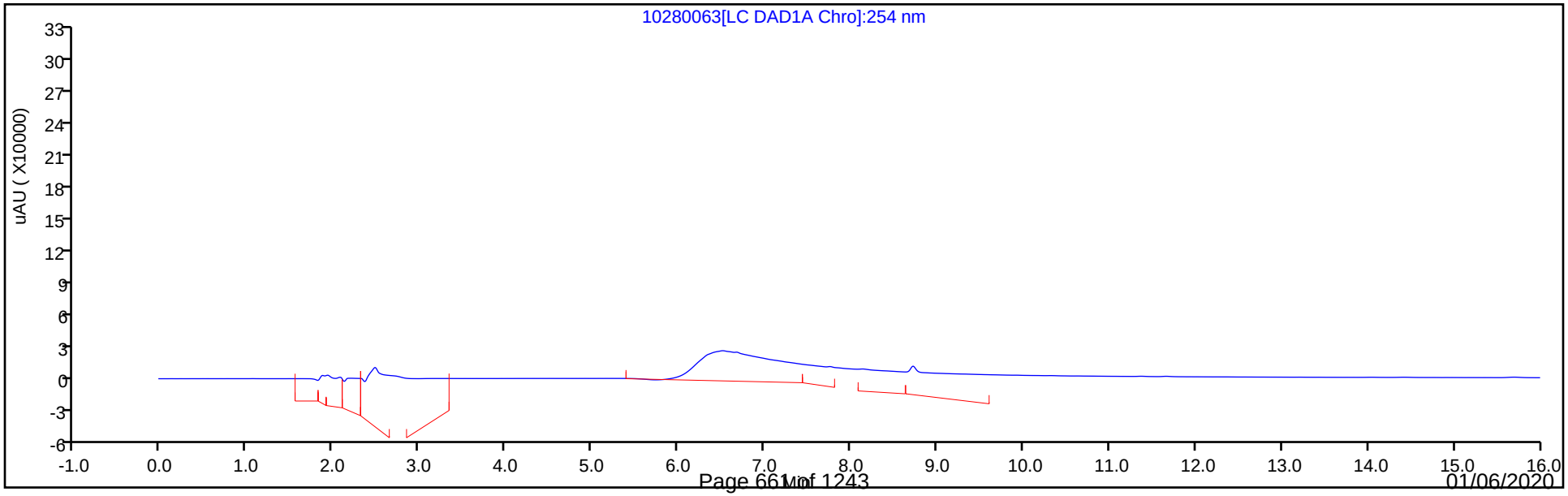
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280063.D

Injection Date:	29-Oct-2019 10:25:29	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15	Worklist Smp#:	63
Client ID:	G0080-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	63
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 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\20191028-86569.b\10280063.D				
Lims ID:	280-129936-A-15-A				
Client ID:	G0080-1				
Sample Type:	Client				
Inject. Date:	29-Oct-2019 10:25:29	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-15-				
Misc. Info.:	280-0086569-063				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:22	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:13:27		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1726	86.31

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

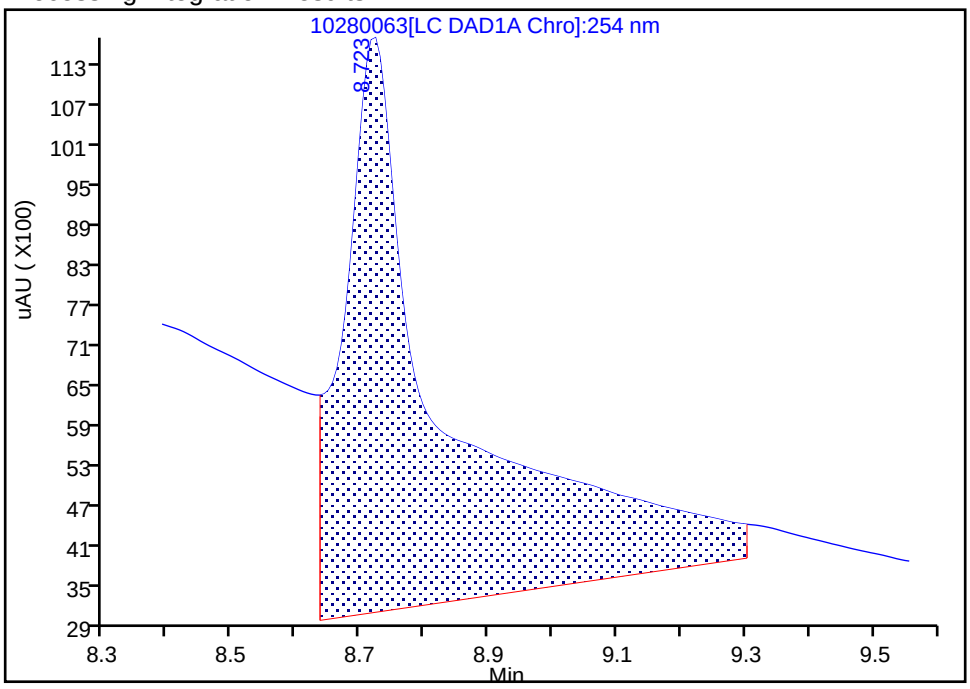
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280063.D				
Injection Date:	29-Oct-2019 10:25:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. 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

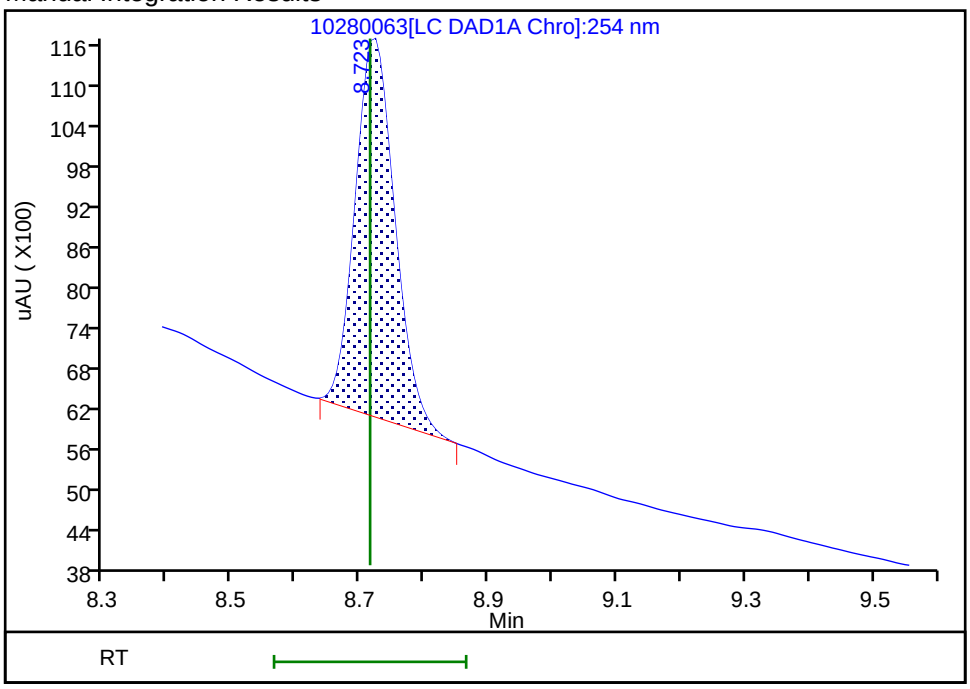
Processing Integration Results

RT: 8.72
Area: 97806
Amount: 0.701981
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 24050
Amount: 0.172614
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:13:07

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

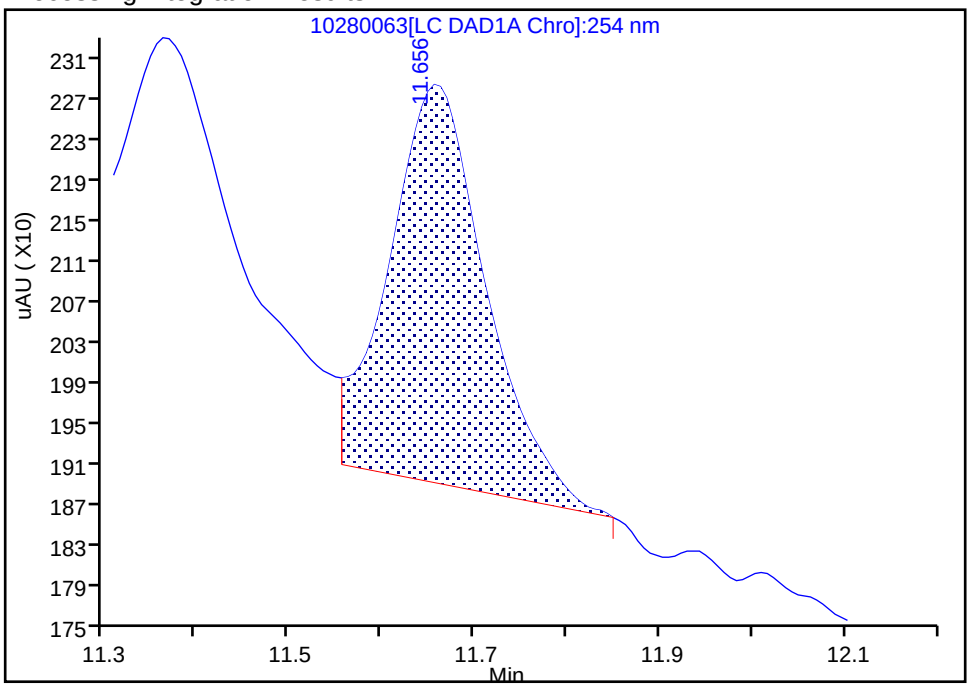
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280063.D				
Injection Date:	29-Oct-2019 10:25:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

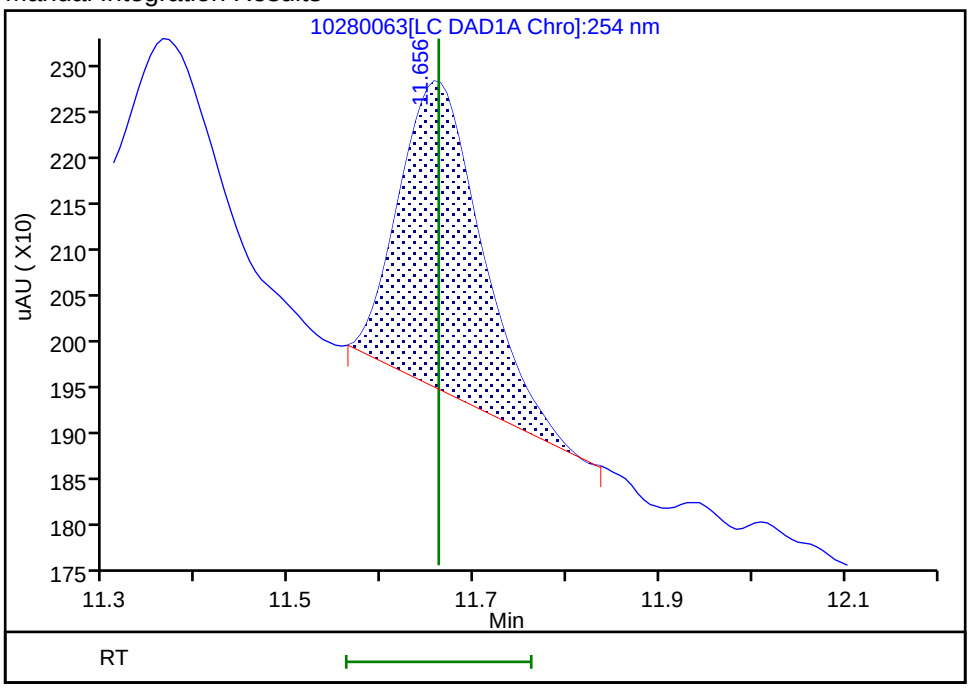
Processing Integration Results

RT: 11.66
Area: 2846
Amount: 0.013867
Amount Units: ug/mL



Manual Integration Results

RT: 11.66
Area: 2073
Amount: 0.010101
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:13:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

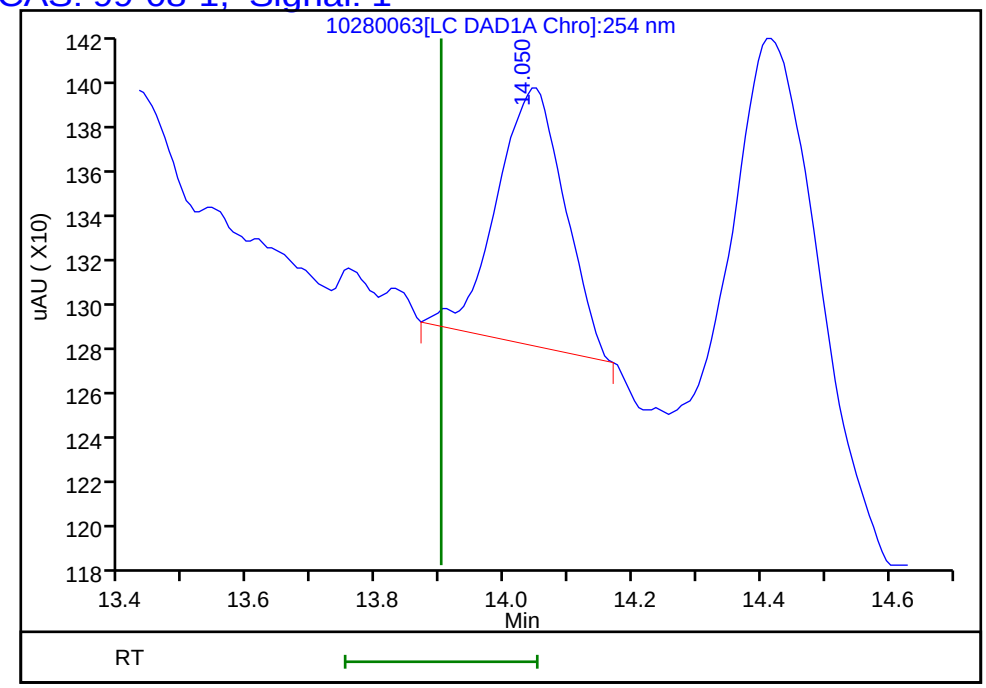
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280063.D				
Injection Date:	29-Oct-2019 10:25:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	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: 14.05
Response: 842
Amount: 0.005802



Reviewer: beckerc, 29-Oct-2019 11:13:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

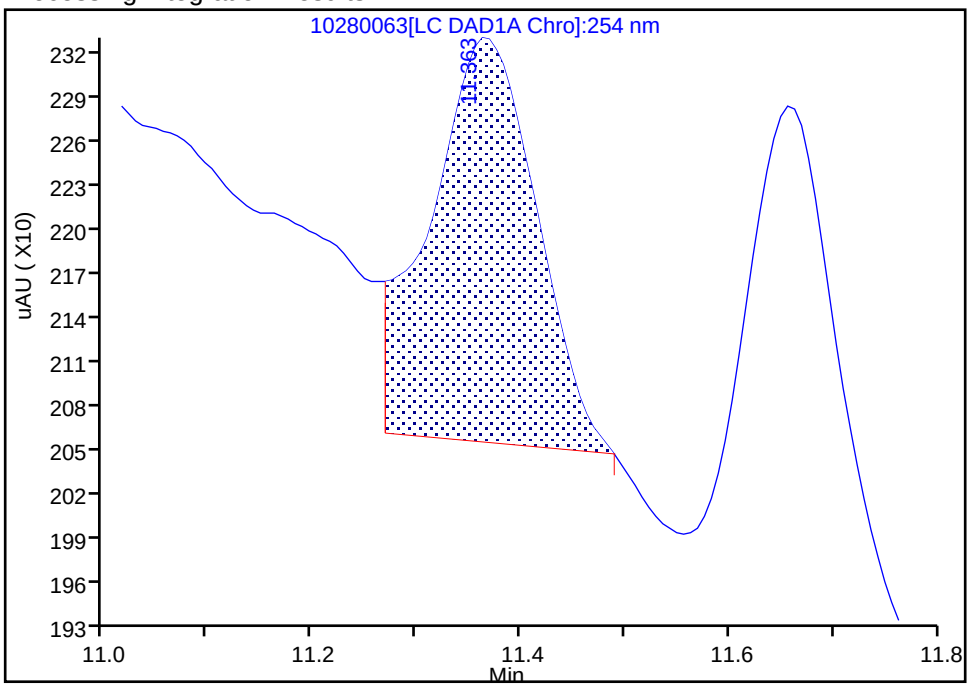
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280063.D				
Injection Date:	29-Oct-2019 10:25:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

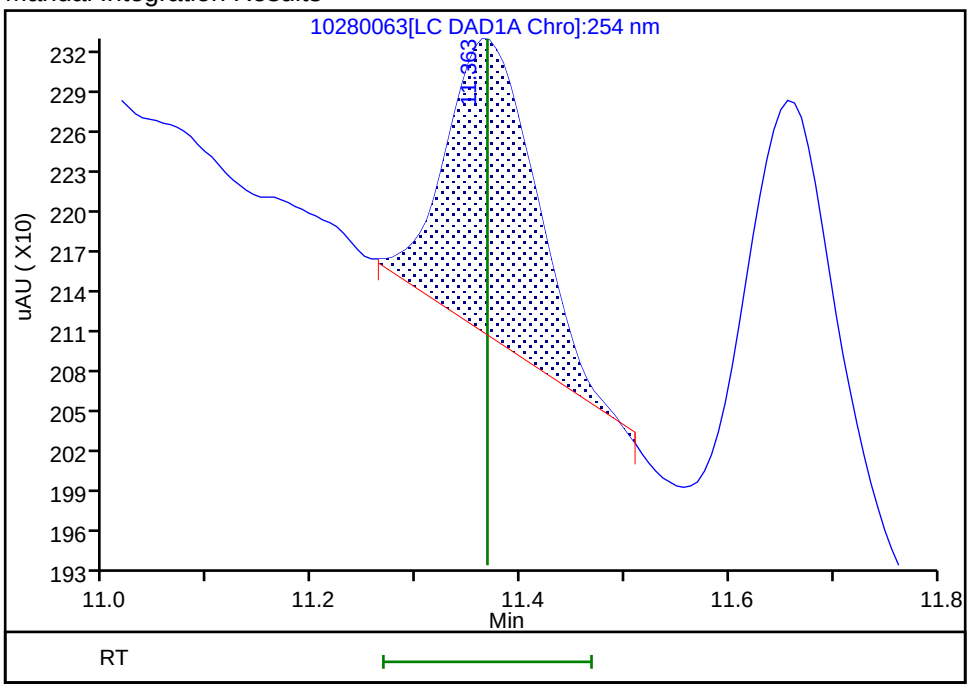
Processing Integration Results

RT: 11.36
Area: 1933
Amount: 0.011618
Amount Units: ug/mL



Manual Integration Results

RT: 11.36
Area: 1319
Amount: 0.007928
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:13:15

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

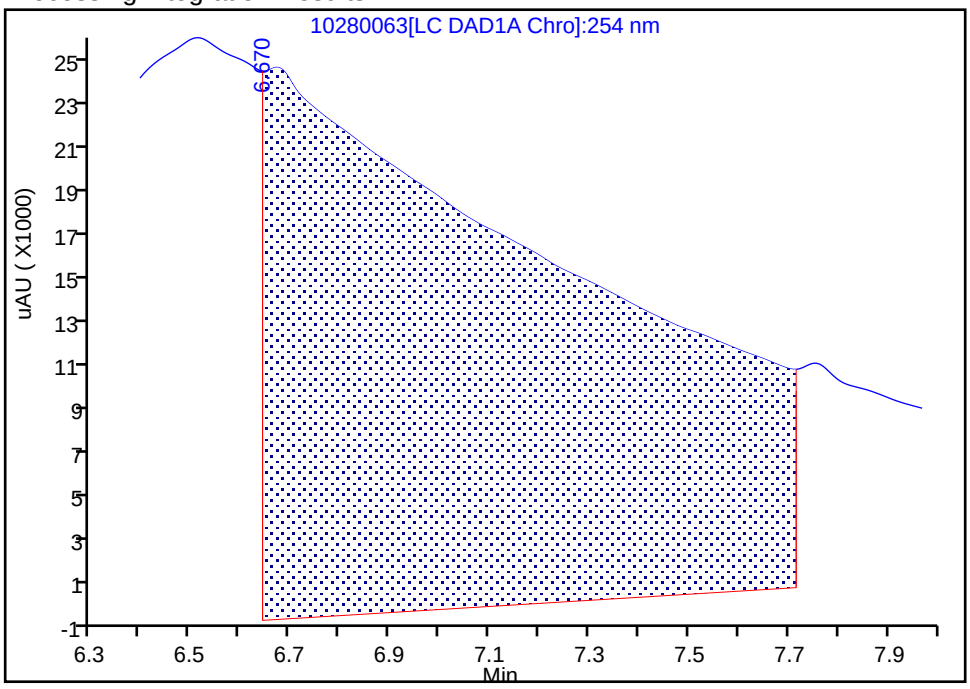
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280063.D		
Injection Date:	29-Oct-2019 10:25:29	Instrument ID:	CHHPLC_X3
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15
Client ID:	G0080-1		
Operator ID:	CB	ALS Bottle#:	63 Worklist Smp#: 63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

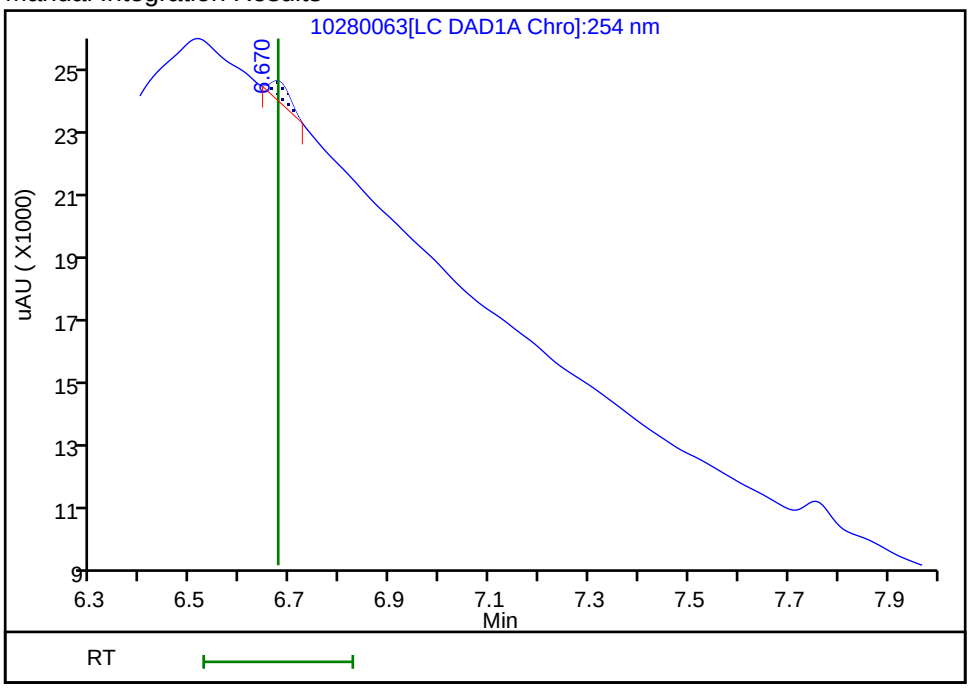
Processing Integration Results

RT: 6.67
Area: 1058802
Amount: 11.529615
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 1714
Amount: 0.018664
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:12:50
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

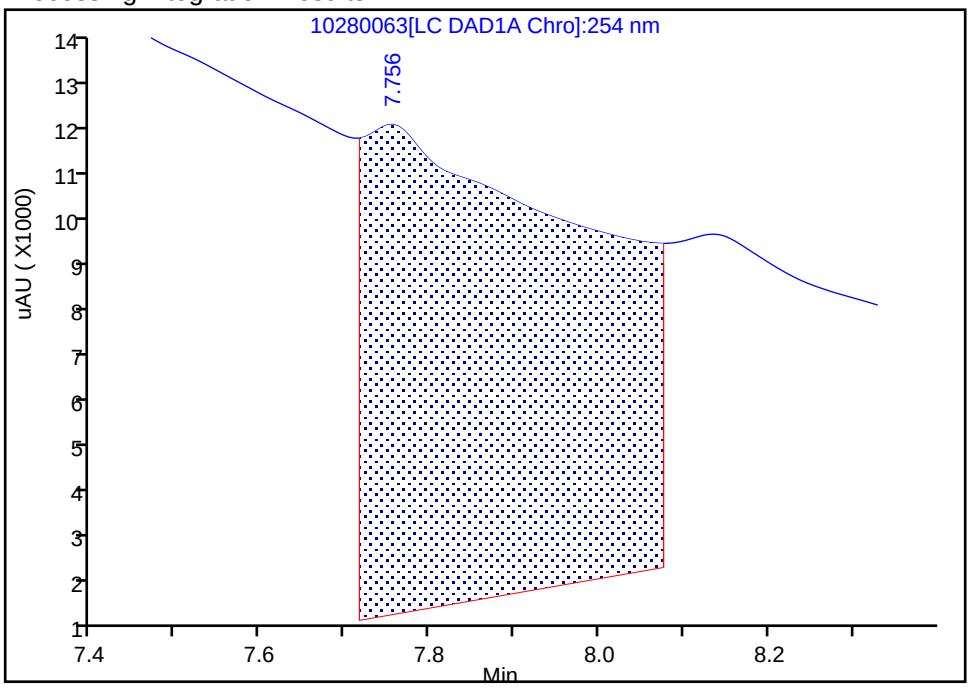
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280063.D				
Injection Date:	29-Oct-2019 10:25:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. 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

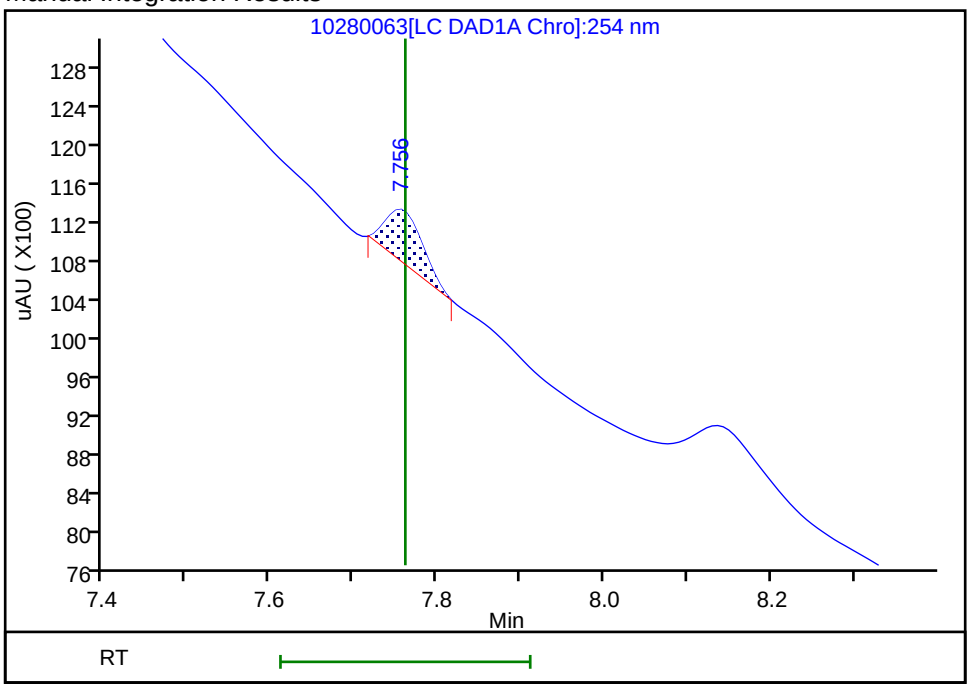
Processing Integration Results

RT: 7.76
Area: 176960
Amount: 1.592507
Amount Units: ug/mL



Manual Integration Results

RT: 7.76
Area: 1673
Amount: 0.015056
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:12:58
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0080-1 Lab Sample ID: 280-129936-15

Matrix: Water Lab File ID: 10300043.D

Analysis Method: 8330A Date Collected: 10/21/2019 09:10

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 528.5(mL) Date Analyzed: 10/31/2019 10:15

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.15*	*J J1*	*0.19*	0.11	*0.048*
19406-51-0	4-Amino-2,6-dinitrotoluene	0.11	U M	0.19	0.11	0.055

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	80	*Q*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D
Lims ID: 280-129936-A-15-A
Client ID: G0080-1
Sample Type: Client
Inject. Date: 31-Oct-2019 10:15:32 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-15-
Misc. Info.: 280-0086641-043
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:47 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:25:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.048	7.059	-0.011	5725	0.0265	
7 MNX	1	7.874	7.989	-0.115	3672	NC	
8 RDX	1	9.228	9.259	-0.031	9261	0.0248	
9 Nitrobenzene	1		12.232			ND	
$ 10 1,2-Dinitrobenzene	1	13.128	13.172	-0.044	50551	0.1602	
12 1,3-Dinitrobenzene	1		15.705			ND	
14 o-Nitrotoluene	1		16.705			ND	U
15 p-Nitrotoluene	1		16.992			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.305			ND	U
17 m-Nitrotoluene	1		17.919			ND	U
18 2-Amino-4,6-dinitrotoluene	1	18.141	18.199	-0.058	7168	0.0156	
19 1,3,5-Trinitrobenzene	1		19.059			ND	U
20 2,6-Dinitrotoluene	1		19.985			ND	U
21 2,4-Dinitrotoluene	1		20.479			ND	
22 Tetryl	1		23.732			ND	U
23 2,4,6-Trinitrotoluene	1		24.832			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

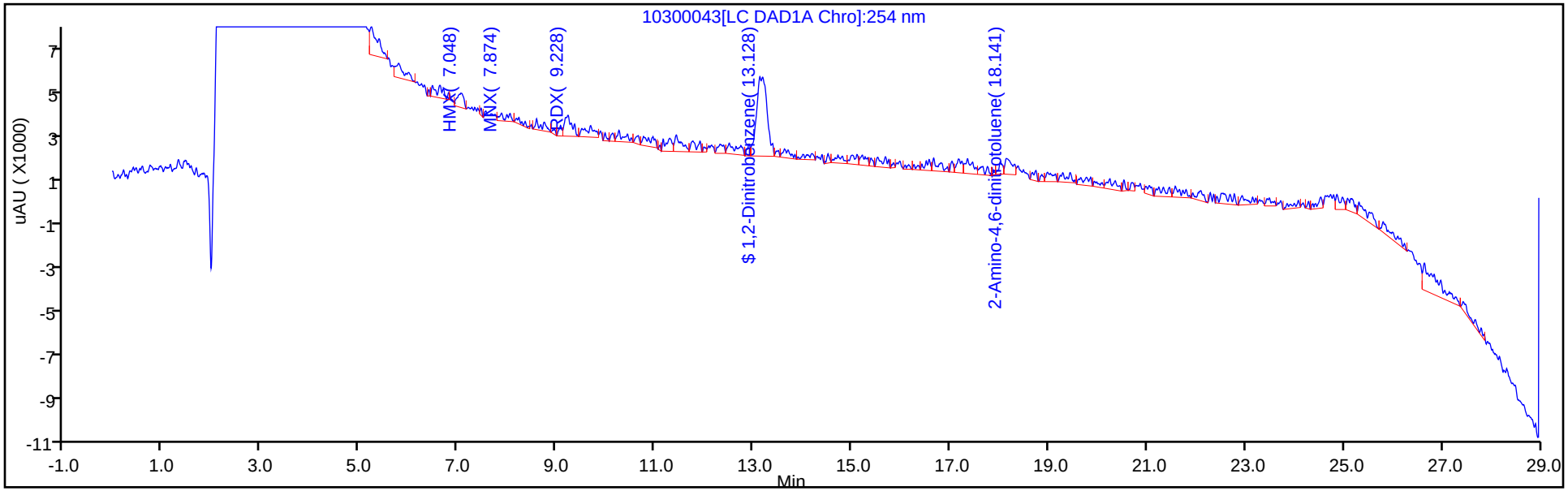
Report Date: 31-Oct-2019 16:27:56 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

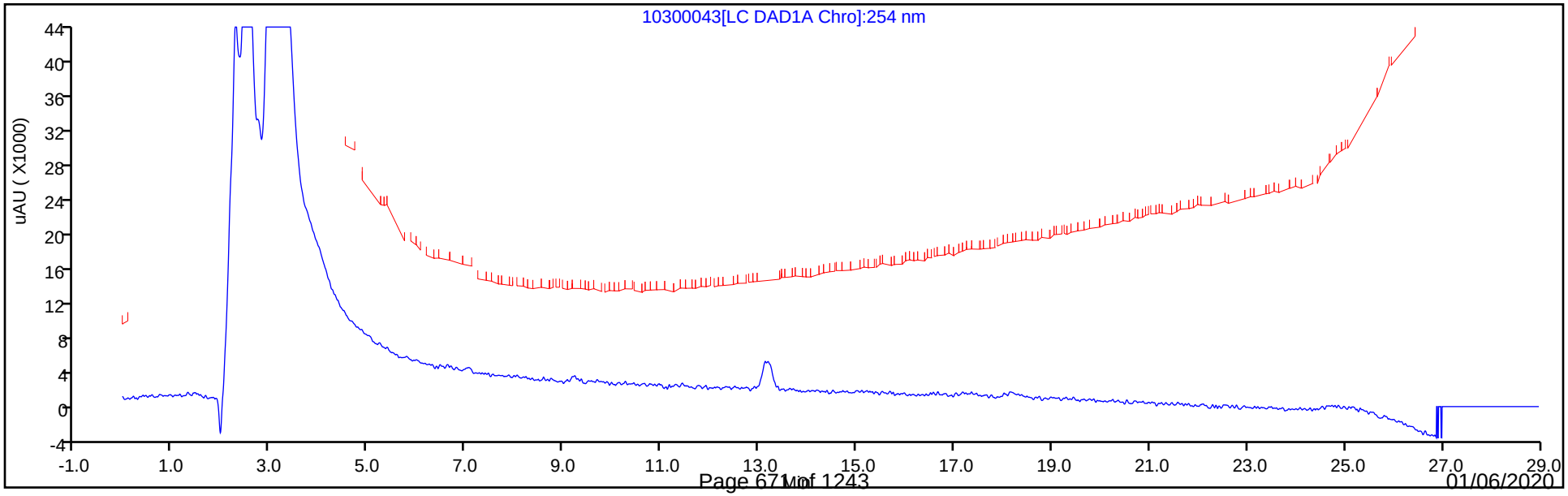
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D

Injection Date:	31-Oct-2019 10:15:32	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15	Worklist Smp#:	43
Client ID:	G0080-1				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D				
Lims ID:	280-129936-A-15-A				
Client ID:	G0080-1				
Sample Type:	Client				
Inject. Date:	31-Oct-2019 10:15:32	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-15-				
Misc. Info.:	280-0086641-043				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	31-Oct-2019 16:27:47	Calib Date:	25-Oct-2019 23:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0321				
First Level Reviewer: beckerc		Date:	31-Oct-2019 16:25:19		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1602	80.12

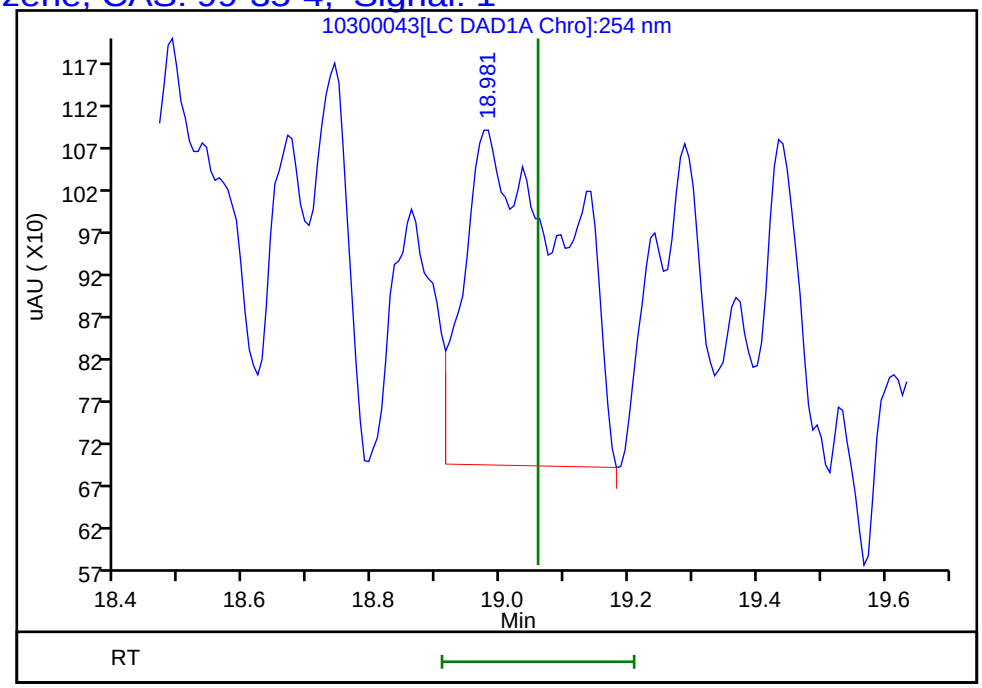
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D				
Injection Date:	31-Oct-2019 10:15:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 18.98
Response: 4292
Amount: 0.008683



Reviewer: beckerc, 31-Oct-2019 16:25:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

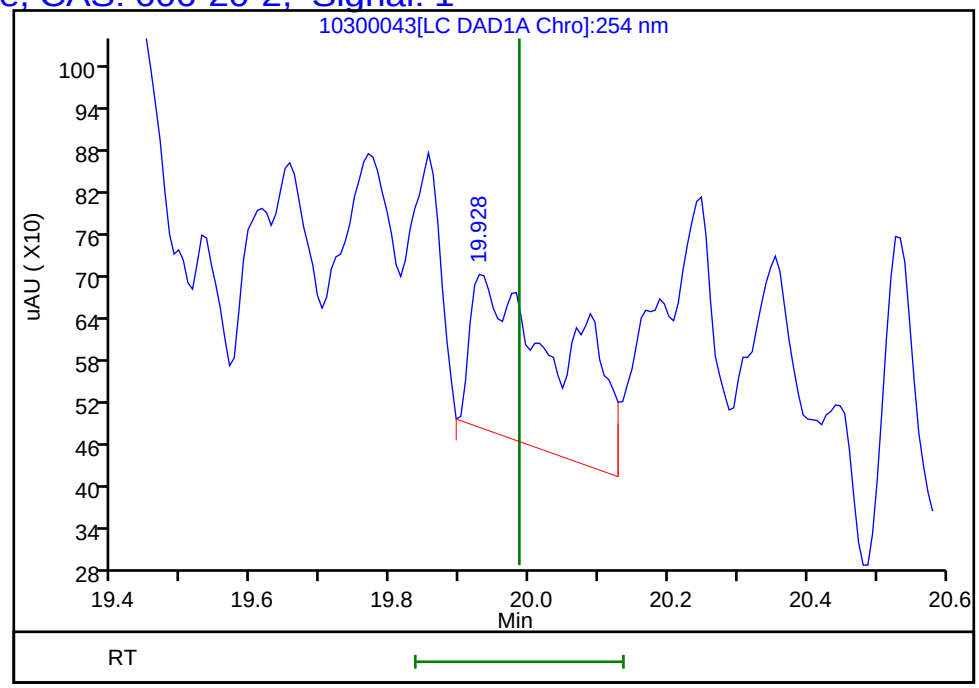
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D				
Injection Date:	31-Oct-2019 10:15:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 19.93
Response: 2170
Amount: 0.006720



Reviewer: beckerc, 31-Oct-2019 16:25:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

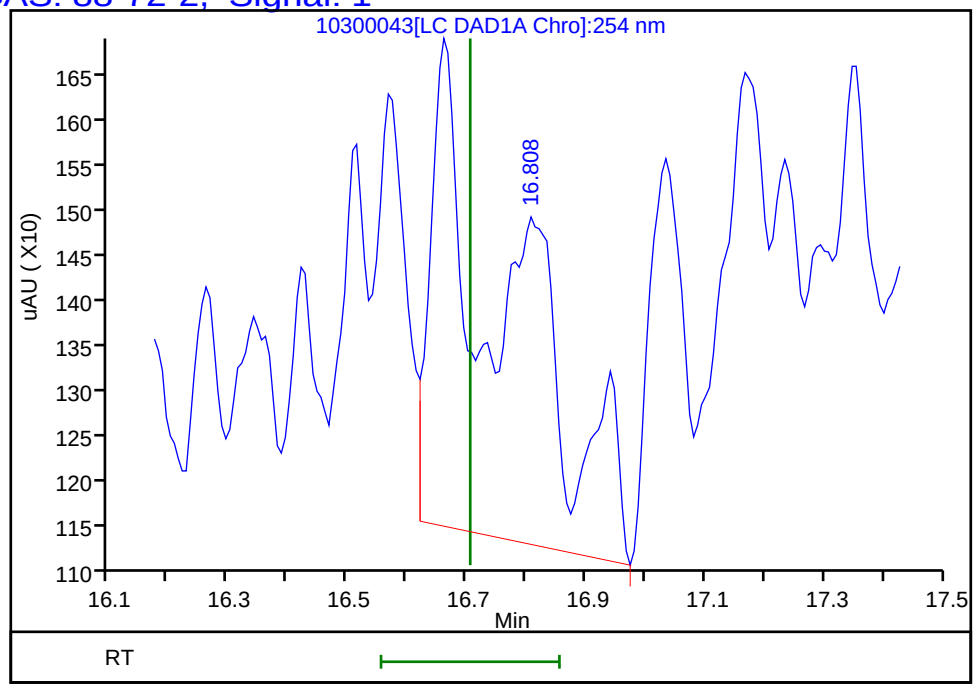
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D				
Injection Date:	31-Oct-2019 10:15:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	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: 16.81
Response: 4960
Amount: 0.017768



Reviewer: beckerc, 31-Oct-2019 16:25:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

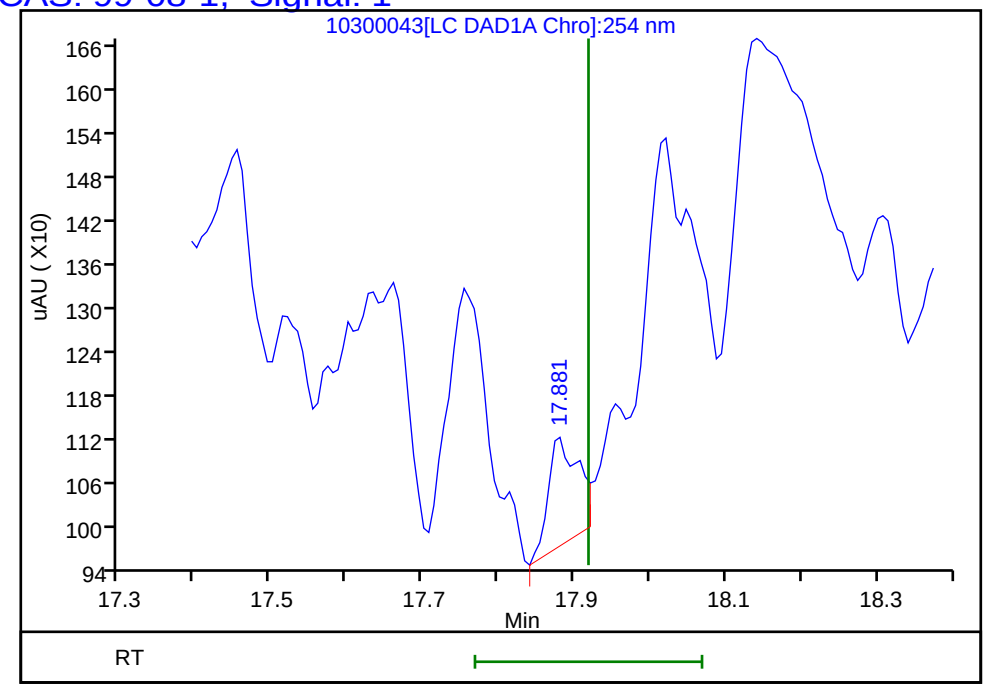
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D				
Injection Date:	31-Oct-2019 10:15:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	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
Response: 402
Amount: NaN



Reviewer: beckerc, 31-Oct-2019 16:25:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

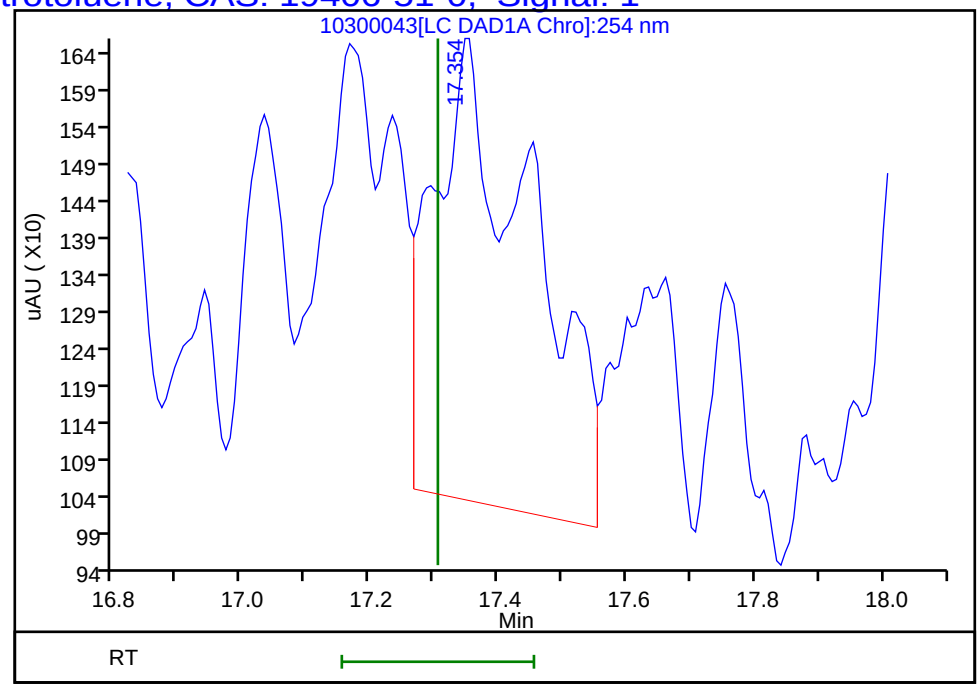
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D				
Injection Date:	31-Oct-2019 10:15:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.35
Response: 6685
Amount: 0.020571



Reviewer: beckerc, 31-Oct-2019 16:25:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

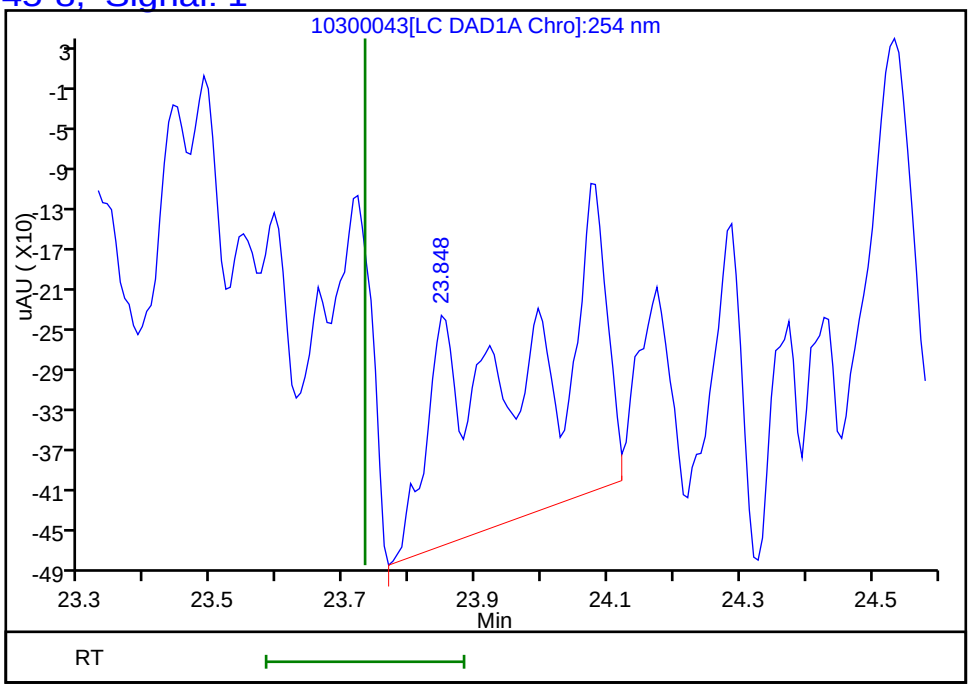
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300043.D				
Injection Date:	31-Oct-2019 10:15:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-129936-A-15-A	Lab Sample ID:	280-129936-15		
Client ID:	G0080-1				
Operator ID:	CB	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	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: 23.85
Response: 2916
Amount: 0.008241



Reviewer: beckerc, 31-Oct-2019 16:25:19
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.: 280-129936-1 Analy Batch No.: 475429

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/25/2019 19:30 Calibration End Date: 10/25/2019 23:35 Calibration ID: 39062

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-475429/14	10250014.D
Level 2	IC 280-475429/13	10250013.D
Level 3	IC 280-475429/12	10250012.D
Level 4	IC 280-475429/11	10250011.D
Level 5	IC 280-475429/10	10250010.D
Level 6	IC 280-475429/9	10250009.D
Level 7	IC 280-475429/8	10250008.D
Level 8	IC 280-475429/7	10250007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Picric acid	5.807	5.697	5.785	5.736	5.680	5.605	5.520	5.422			5.530 - 5.830	5.657
HMX	7.067	7.070	7.098	7.082	7.080	7.085	7.060	7.002			6.930 - 7.230	7.068
RDX	9.287	9.270	9.311	9.289	9.286	9.291	9.247	9.195			9.136 - 9.436	9.272
Nitrobenzene	12.280	12.257	12.284	12.282	12.279	12.278	12.253	12.168			12.129 - 12.429	12.260
1,3-Dinitrobenzene	15.747	15.723	15.771	15.762	15.759	15.751	15.733	15.668			15.609 - 15.909	15.739
Nitroglycerin	16.027	15.997	16.018	16.016	16.019	16.011	16.000	15.948			15.869 - 16.169	16.005
2-Nitrotoluene	16.753	16.730	16.751	16.782	16.773	16.764	16.747	16.702			16.623 - 16.923	16.750
4-Nitrotoluene	17.060	16.990	17.051	17.042	17.053	17.038	17.027	16.902			16.903 - 17.203	17.020
4-Amino-2,6-dinitrotoluene	17.267	17.337	17.371	17.376	17.386	17.358	17.347	17.282			17.236 - 17.536	17.341
3-Nitrotoluene	17.873	17.943	17.958	17.982	17.979	17.971	17.960	18.035			17.829 - 18.129	17.963
2-Amino-4,6-dinitrotoluene	18.193	18.237	18.258	18.256	18.259	18.231	18.220				18.109 - 18.409	18.236
1,3,5-Trinitrobenzene	19.087	19.103	19.118	19.109	19.126	19.104	19.100	19.062			18.976 - 19.276	19.101
2,6-Dinitrotoluene	20.047	20.017	20.051	20.042	20.059	20.038	20.040	19.982			19.909 - 20.209	20.035
2,4-Dinitrotoluene	20.533	20.510	20.538	20.536	20.540	20.518	20.520	20.468			20.390 - 20.690	20.520
Tetryl	23.787	23.803	23.818	23.802	23.806	23.791	23.800	23.769			23.656 - 23.956	23.797
2,4,6-Trinitrotoluene	24.907	24.870	24.918	24.896	24.900	24.898	24.900	24.875			24.750 - 25.050	24.896
PETN	25.447	25.437	25.451	25.442	25.440	25.445	25.453	25.435			25.290 - 25.590	25.444
1,2-Dinitrobenzene	13.220	13.197	13.224	13.229	13.219	13.211	13.187	13.108			13.069 - 13.369	13.199

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1 Analy Batch No.: 475429

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/25/2019 19:30 Calibration End Date: 10/25/2019 23:35 Calibration ID: 39062

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-475429/14	10250014.D
Level 2	IC 280-475429/13	10250013.D
Level 3	IC 280-475429/12	10250012.D
Level 4	IC 280-475429/11	10250011.D
Level 5	IC 280-475429/10	10250010.D
Level 6	IC 280-475429/9	10250009.D
Level 7	IC 280-475429/8	10250008.D
Level 8	IC 280-475429/7	10250007.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								
Picric acid	334550 181543	181160 177883	164700 173865	188756 70886	Qua	-4404.1603	235046.060	-64833.731						0.9950		0.9900
HMX	245950 188875	227860 174443	193780 178398	182364 183359	Ave		196878.632				13.1		20.0			
RDX	402000 240158	308980 226034	277120 209518	240752 221263	Lin2	3697.24649	224444.355							0.9970		0.9900
Nitrobenzene	895858 406791	419880 404605	437555 378827	385701 403751	Lin1	6864.40196	390125.682							0.9970		0.9900
1,3-Dinitrobenzene	501898 691903	789351 648808	712627 623316	659341 634018	Ave		657657.685				12.5		20.0			
Nitroglycerin	142835 137165	133886 130238	135121 129564	132050 137440	Ave		134787.340				3.2		20.0			
2-Nitrotoluene	359123 262861	320857 254863	275404 241531	252239 266302	Ave		279147.600				14.4		20.0			
4-Nitrotoluene	155080 230919	278167 222554	273416 208871	232175 186850	Ave		223504.032				18.4		20.0			
4-Amino-2,6-dinitrotoluene	270040 325847	343091 317724	371176 308398	326951 336575	Ave		324975.267				9.0		20.0			
3-Nitrotoluene	238347 281076	337211 270273	311106 258565	278550 724837	Qua	31549.8581	-12542.684	288015.175						0.9980		0.9900
2-Amino-4,6-dinitrotoluene	410419 462081	490389 439610	510877 437892	467159	Ave		459775.256				7.4		20.0			
1,3,5-Trinitrobenzene	546500 491528	519000 472567	529050 450189	478820 466667	Ave		494290.105				6.8		20.0			
2,6-Dinitrotoluene	433998 308063	341276 297463	332961 280288	297539 291697	Ave		322910.844				15.3		20.0			
2,4-Dinitrotoluene	696058 593965	638024 573685	661317 552026	585545 572680	Ave		609162.495				8.3		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.: 280-129936-1 Analy Batch No.: 475429

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/25/2019 19:30 Calibration End Date: 10/25/2019 23:35 Calibration ID: 39062

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	349050 345133	398100 332869	371730 338329	358516 337087	Ave		353851.659				6.2		20.0			
2,4,6-Trinitrotoluene	1204681 506718	882072 468973	551225 440321	501665 437156	Lin1	17134.0460	433543.641							0.9980		0.9900
PETN	111595 135883	135988 131394	154093 127214	131951 123803	Ave		131490.050				9.2		20.0			
1,2-Dinitrobenzene	622700 297805	366420 288090	336710 285803	297416 290577	Lin2	6644.44402	273997.764							0.9950		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1 Analy Batch No.: 475429

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/25/2019 19:30 Calibration End Date: 10/25/2019 23:35 Calibration ID: 39062

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-475429/14	10250014.D
Level 2	IC 280-475429/13	10250013.D
Level 3	IC 280-475429/12	10250012.D
Level 4	IC 280-475429/11	10250011.D
Level 5	IC 280-475429/10	10250010.D
Level 6	IC 280-475429/9	10250009.D
Level 7	IC 280-475429/8	10250008.D
Level 8	IC 280-475429/7	10250007.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	Qua	6691 124518	9058 173865	16470 177215	47189	72617	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
HMX	Ave	4919 122110	11393 178398	19378 458398	45591	75550	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Lin2	8040 158224	15449 209518	27712 553157	60188	96063	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Lin1	17953 283790	21036 379585	43843 1011396	96618	163042	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
1,3-Dinitrobenzene	Ave	10048 454620	39507 623939	71334 1586629	165000	277038	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
Nitroglycerin	Ave	28567 911667	66943 1295638	135121 3436007	330125	548658	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2-Nitrotoluene	Ave	7204 178939	16091 242256	27623 667753	63249	105460	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
4-Nitrotoluene	Ave	3114 156411	13964 209706	27451 468994	58276	92737	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	5417 223074	17206 309323	37229 843961	81983	130730	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
3-Nitrotoluene	Qua	4786 189948	16928 259599	31235 1819340	69916	112880	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2-Amino-4,6-dinitrotoluene	Ave	8233 308650	24593 439206	51241	117140	185387	0.0201 0.702	0.0502 1.00	0.100	0.251	0.401
1,3,5-Trinitrobenzene	Ave	10930 330797	25950 450189	52905 1166668	119705	196611	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
2,6-Dinitrotoluene	Ave	8706 208849	17115 281129	33396 731431	74608	123595	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,4-Dinitrotoluene	Ave	13949 402383	31965 553130	66264 1434563	146679	238061	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Tetryl	Ave	6981 233008	19905 338329	37173 842718	89629	138053	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.: 280-129936-1 Analy Batch No.: 475429

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/25/2019 19:30 Calibration End Date: 10/25/2019 23:35 Calibration ID: 39062

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	Lin1	24190 329594	44280 442082	55343 1097262	125918	203498	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Ave	22319 919755	67994 1272136	154093 3095082	329878	543531	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Lin2	12454 201663	18321 285803	33671 726442	74354	119122	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:

Ave = Average
Lin1 = Linear 1/conc
Lin2 = Linear 1/conc^2
Qua = Quadratic

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250007.D
Lims ID: IC FULL LV 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 25-Oct-2019 19:30:17 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 8
Misc. Info.: 280-0086515-007
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 15:39:50 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 26-Oct-2019 10:06:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.395	4.453	-0.058	1015073	2.50	2.53	
	2 2,4-diamino-6-nitrotoluene	1	4.862	5.006	-0.144	540922	2.50	1.68	
	5 2,4,6-Trinitrophenol	1	5.422	5.680	-0.258	177215	2.50	1.12	
	6 HMX	1	7.002	7.080	-0.078	458398	2.50	2.33	
	8 RDX	1	9.195	9.286	-0.091	553157	2.50	2.45	
	9 Nitrobenzene	1	12.168	12.279	-0.111	1011396	2.51	2.57	
$	10 1,2-Dinitrobenzene	1	13.108	13.219	-0.111	726442	2.50	2.63	
	11 3,5-Dinitroaniline	1	14.962	14.939	0.023	1167133	2.50	2.21	
	12 1,3-Dinitrobenzene	1	15.668	15.759	-0.091	1586629	2.50	2.41	
	13 Nitroglycerin	2	15.948	16.019	-0.071	3436007	25.0	25.5	M
	14 o-Nitrotoluene	1	16.702	16.773	-0.071	667753	2.51	2.39	M
	15 p-Nitrotoluene	1	16.902	17.053	-0.151	468994	2.51	2.10	M
	16 4-Amino-2,6-dinitrotoluene	1	17.282	17.386	-0.104	843961	2.51	2.60	M
	17 m-Nitrotoluene	1	18.035	17.979	0.056	1819340	2.51	2.51	M
	18 2-Amino-4,6-dinitrotoluene	1		18.259			ND	ND	
	19 1,3,5-Trinitrobenzene	1	19.062	19.126	-0.064	1166668	2.50	2.36	M
	20 2,6-Dinitrotoluene	1	19.982	20.059	-0.077	731431	2.51	2.27	
	21 2,4-Dinitrotoluene	1	20.468	20.540	-0.071	1434563	2.51	2.35	
	22 Tetryl	1	23.769	23.806	-0.037	842718	2.50	2.38	
	23 2,4,6-Trinitrotoluene	1	24.875	24.900	-0.025	1097262	2.51	2.49	
	24 PETN	2	25.435	25.440	-0.005	3095082	25.0	23.5	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00059	Amount Added: 250.00	Units: uL
8330_ADDs_00023	Amount Added: 125.00	Units: uL

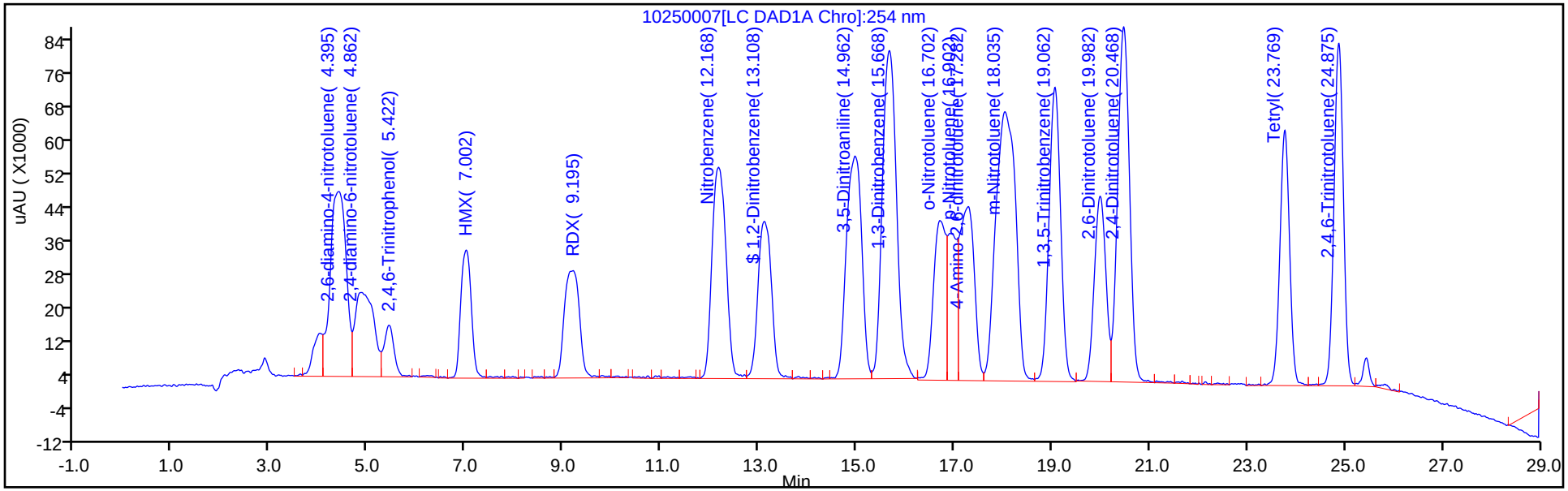
Report Date: 30-Oct-2019 15:39:51 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

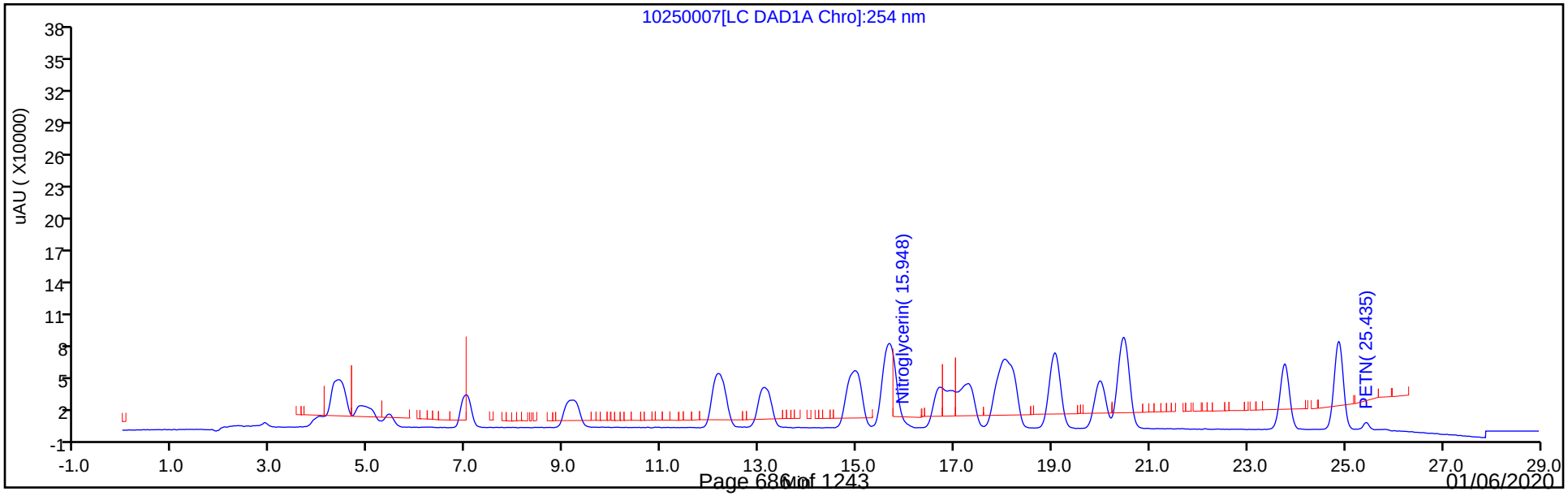
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250007.D

Injection Date:	25-Oct-2019 19:30:17	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

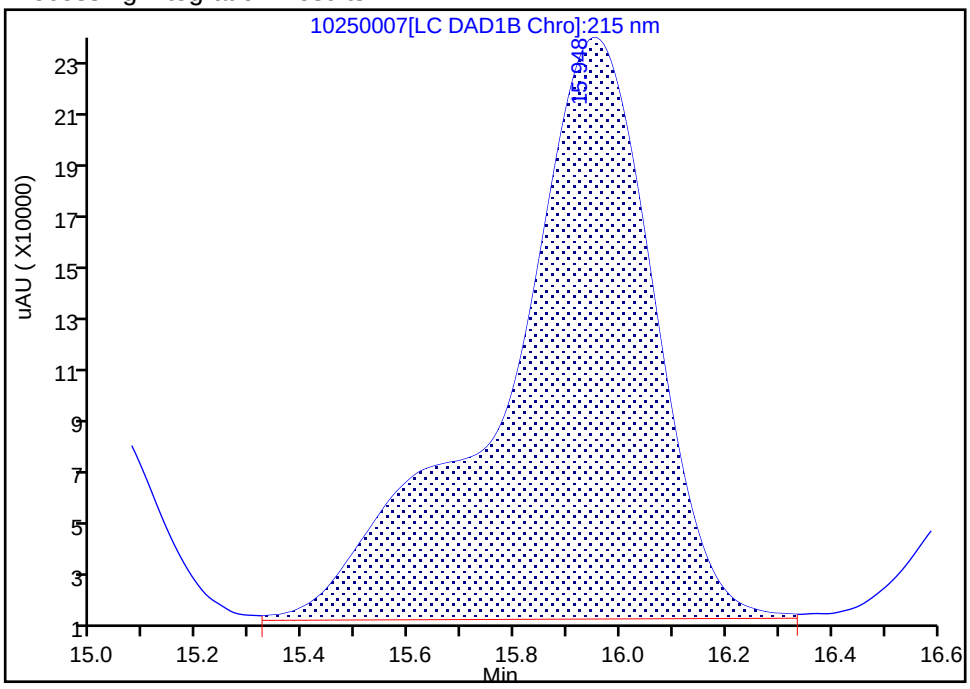
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250007.D				
Injection Date:	25-Oct-2019 19:30:17	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

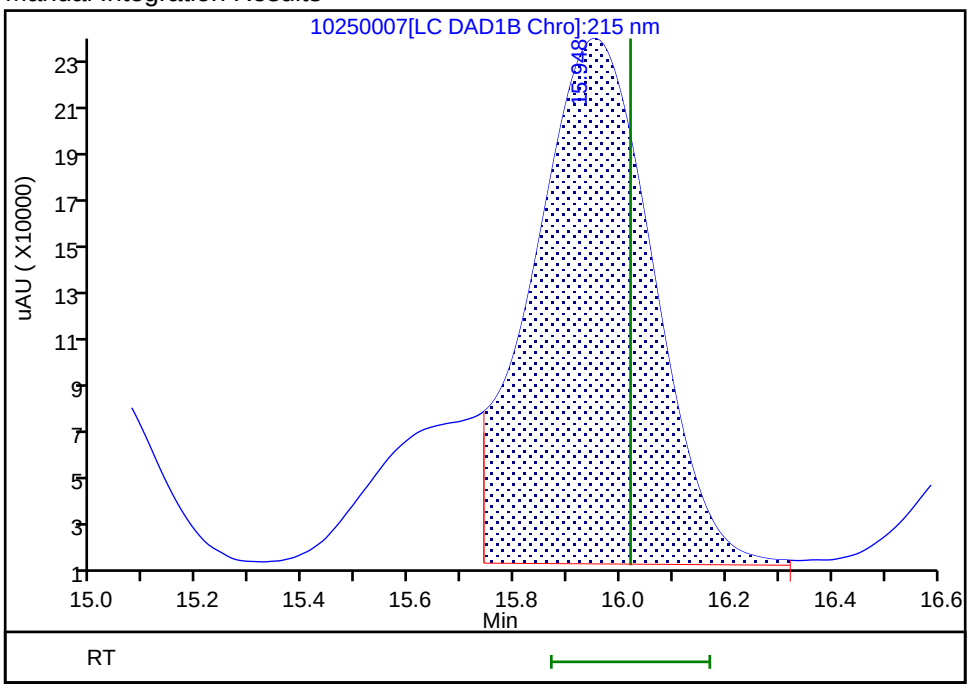
Processing Integration Results

RT: 15.95
Area: 4287695
Amount: 31.430934
Amount Units: ug/ml



Manual Integration Results

RT: 15.95
Area: 3436007
Amount: 25.492060
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:04:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

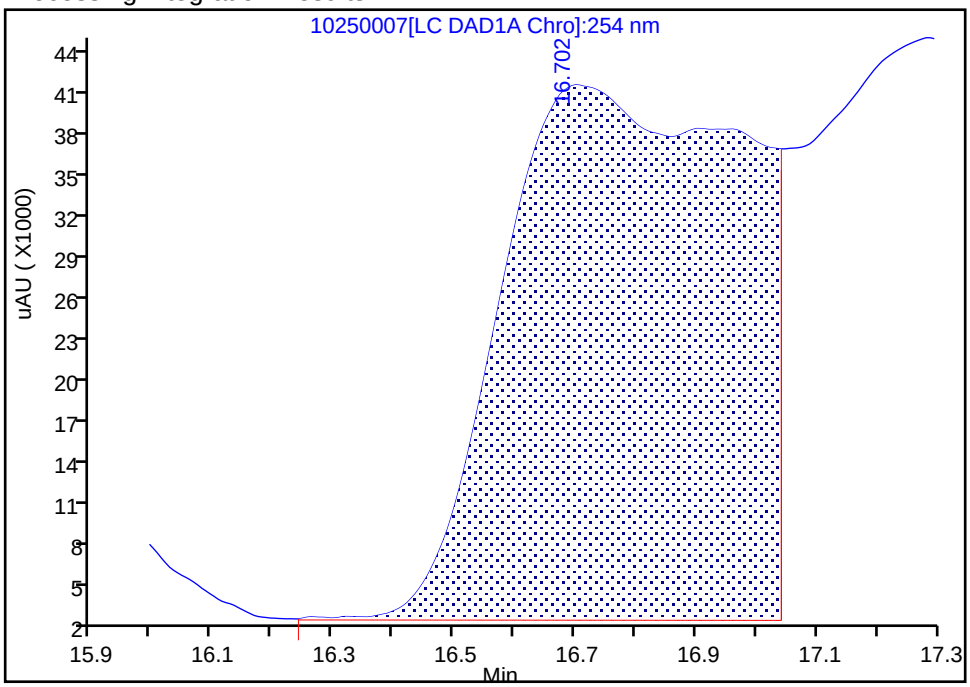
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250007.D
Injection Date: 25-Oct-2019 19:30:17 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL LV 8
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

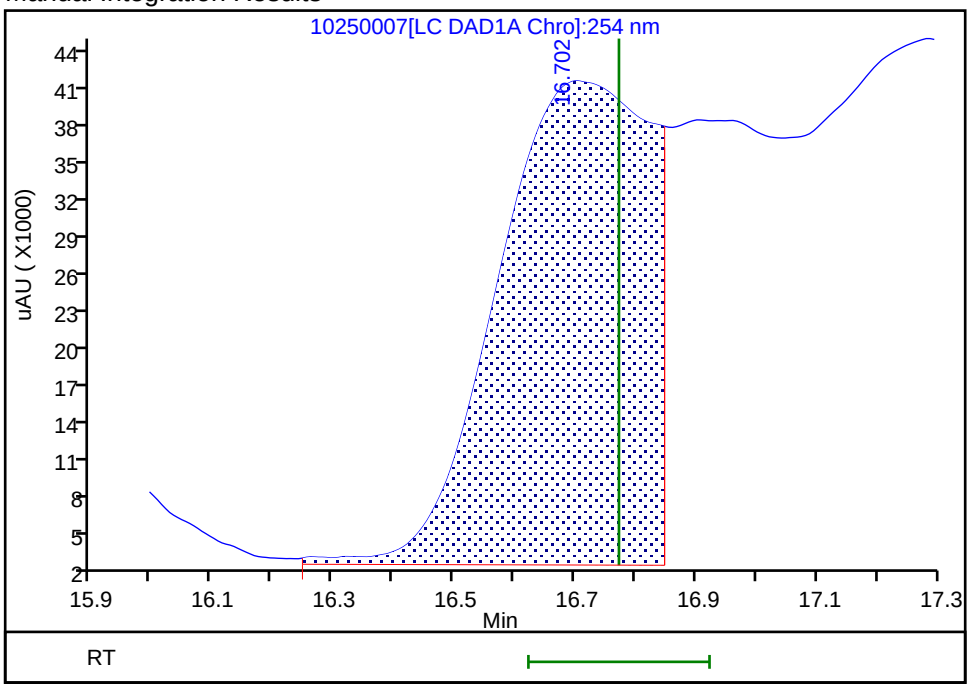
Processing Integration Results

RT: 16.70
Area: 1050487
Amount: 3.535486
Amount Units: ug/ml



Manual Integration Results

RT: 16.70
Area: 667753
Amount: 2.392114
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:05:51
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

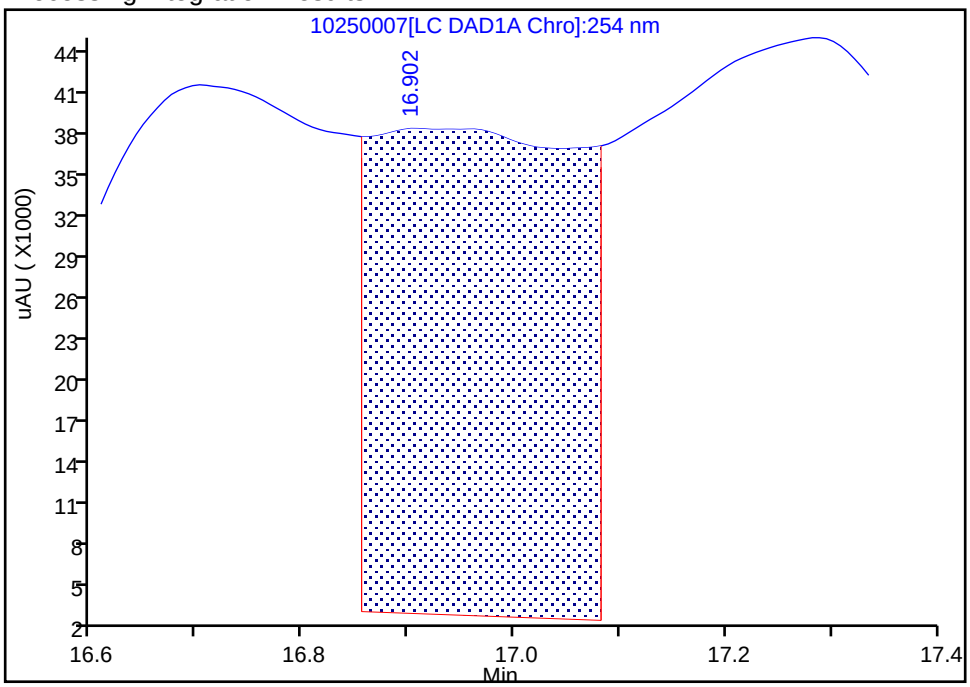
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250007.D				
Injection Date:	25-Oct-2019 19:30:17	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

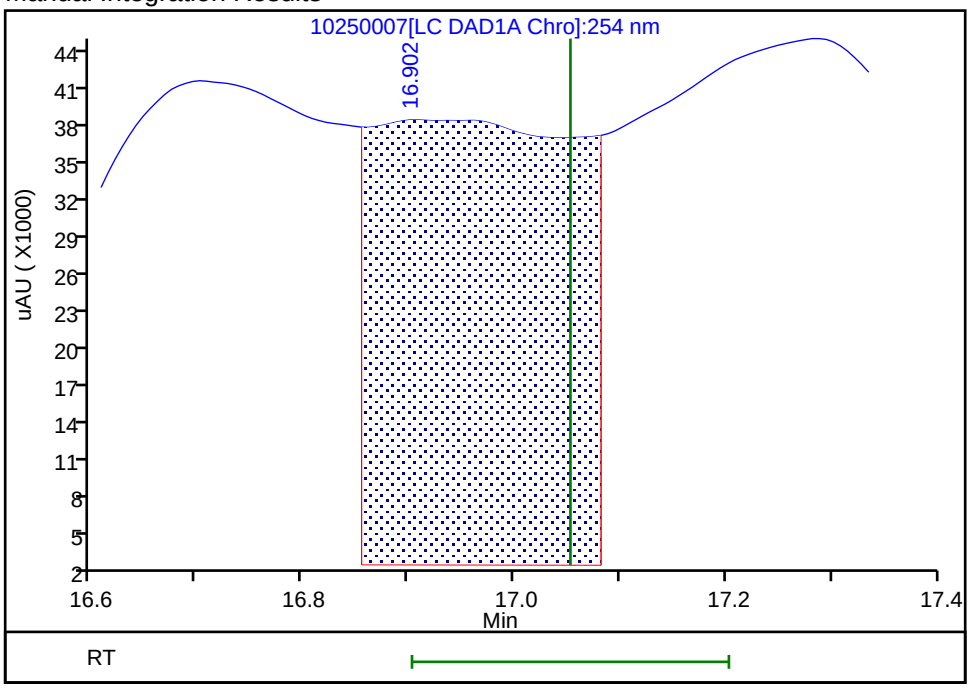
Processing Integration Results

RT: 16.90
Area: 459276
Amount: 2.066559
Amount Units: ug/ml



Manual Integration Results

RT: 16.90
Area: 468994
Amount: 2.098369
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:05:51
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

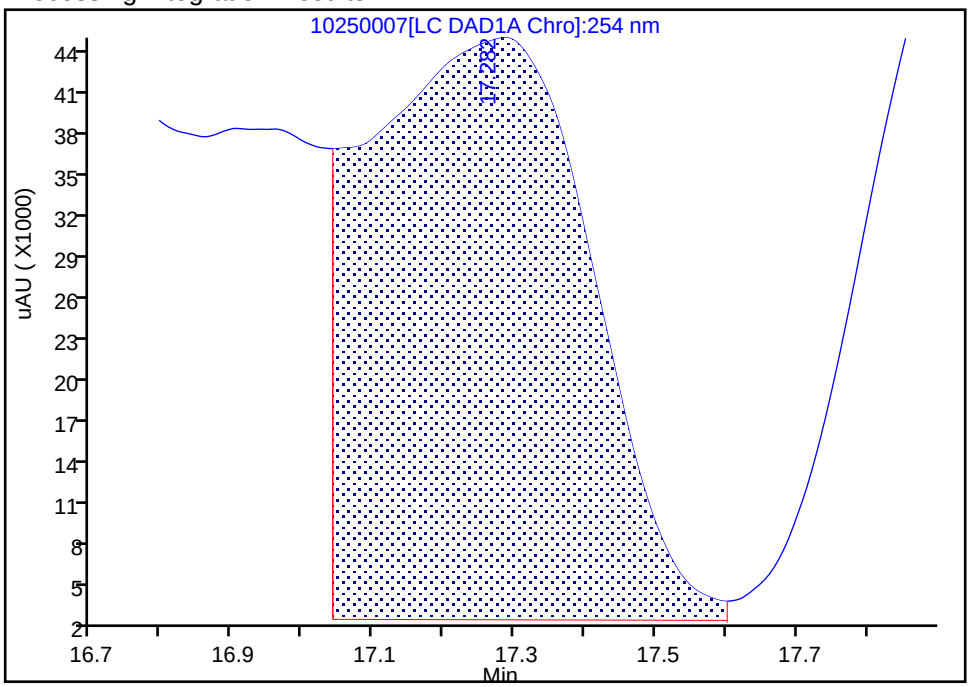
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250007.D				
Injection Date:	25-Oct-2019 19:30:17	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

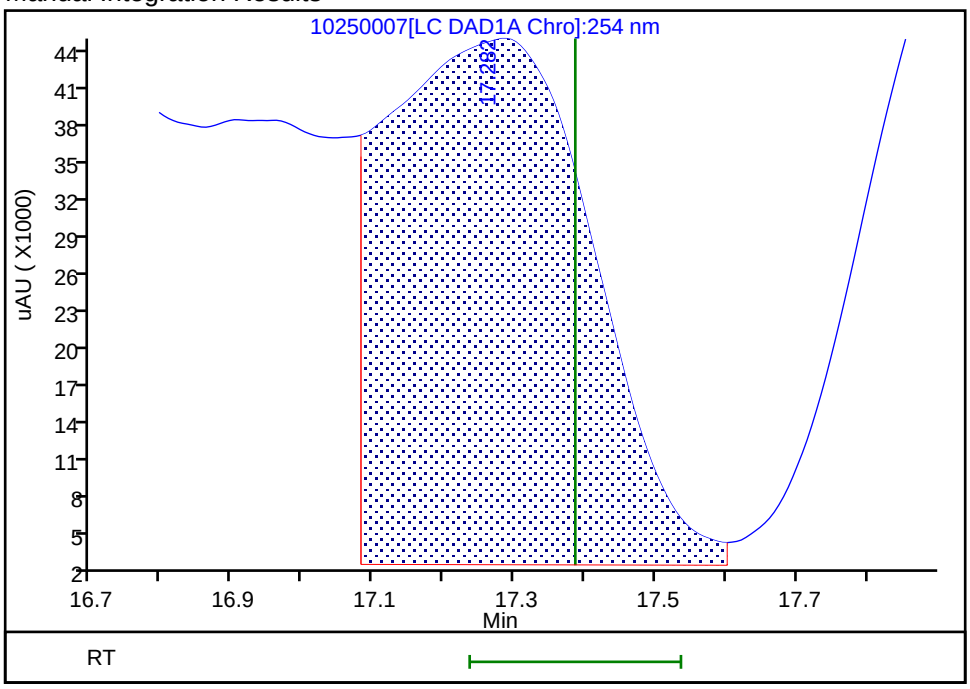
Processing Integration Results

RT: 17.28
Area: 910241
Amount: 2.775503
Amount Units: ug/ml



Manual Integration Results

RT: 17.28
Area: 843961
Amount: 2.597001
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:05:51
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

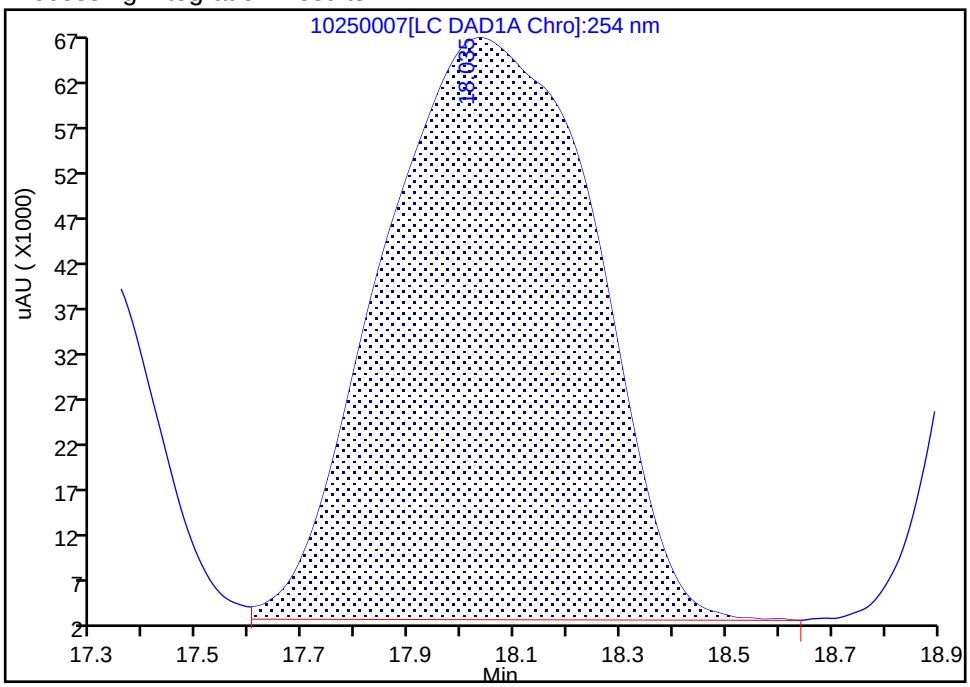
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250007.D				
Injection Date:	25-Oct-2019 19:30:17	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

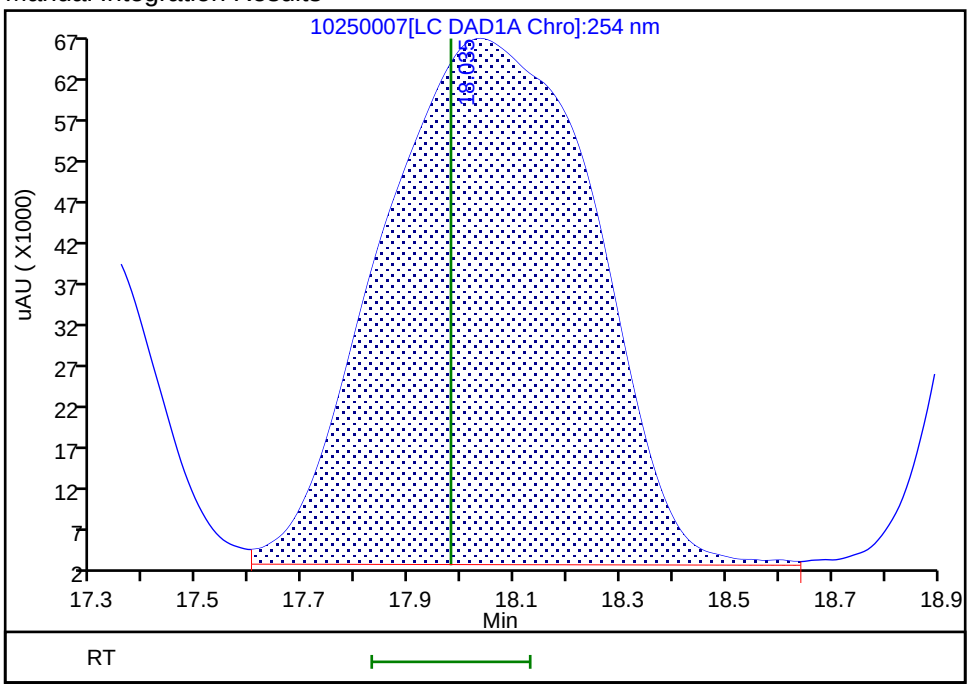
Processing Integration Results

RT: 18.04
Area: 1791884
Amount: 2.513306
Amount Units: ug/ml



Manual Integration Results

RT: 18.04
Area: 1819340
Amount: 2.513310
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:05:51

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

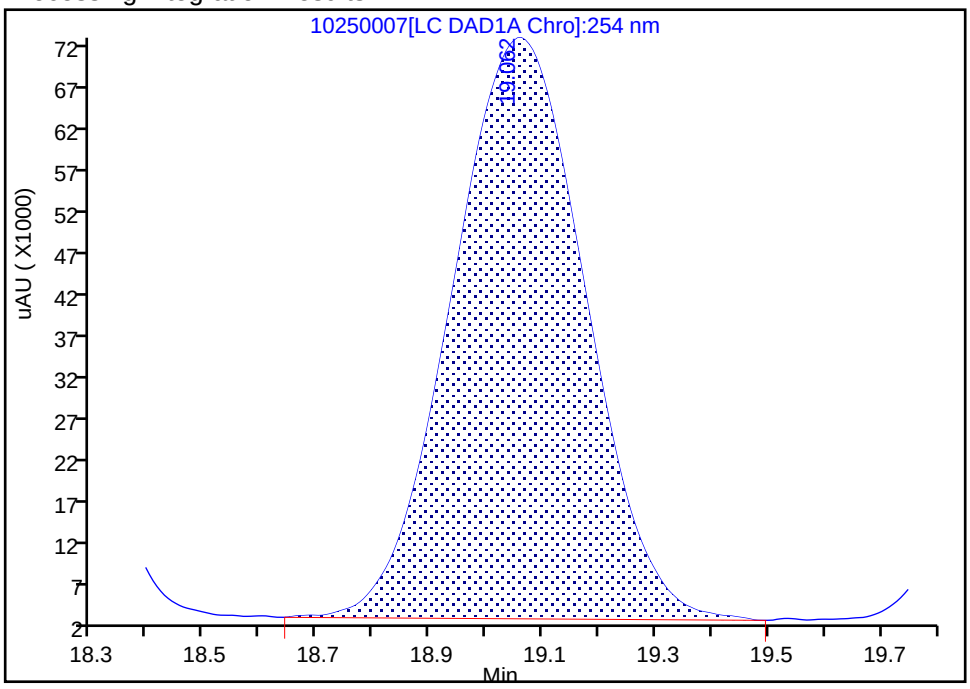
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250007.D				
Injection Date:	25-Oct-2019 19:30:17	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

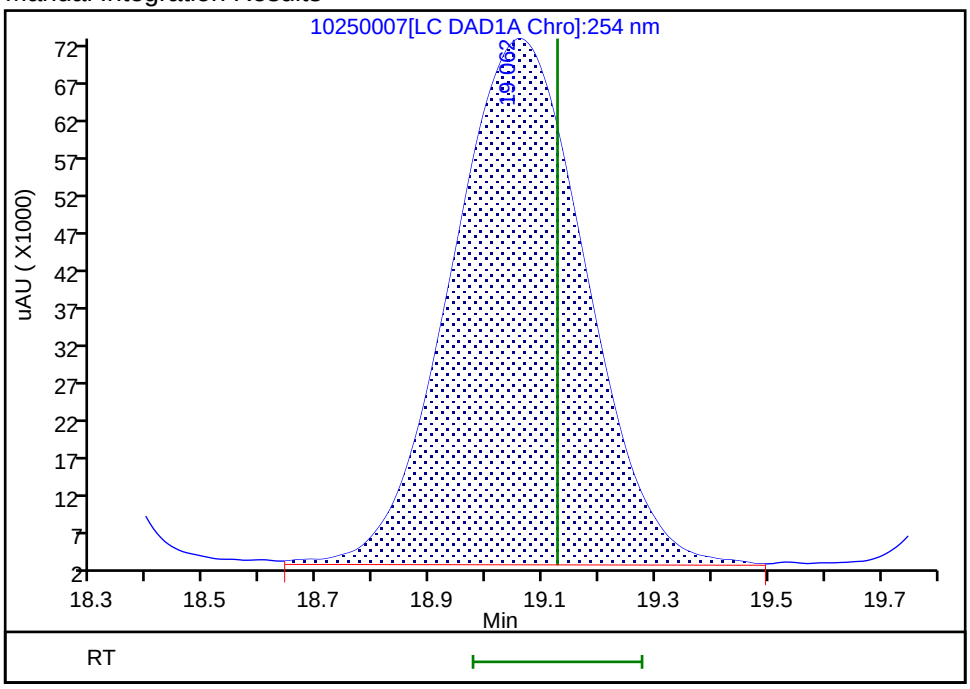
Processing Integration Results

RT: 19.06
Area: 1150643
Amount: 2.344345
Amount Units: ug/ml



Manual Integration Results

RT: 19.06
Area: 1166668
Amount: 2.360290
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:05:51

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250008.D
Lims ID: IC FULL LV 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 25-Oct-2019 20:05:18 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 7
Misc. Info.: 280-0086515-008
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 15:39:52 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 26-Oct-2019 10:07:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.380	4.453	-0.073	372398	1.00	0.9107	
2 2,4-diamino-6-nitrotoluene	1	5.013	5.006	0.007	240674	1.00	0.7460	M
5 2,4,6-Trinitrophenol	1	5.520	5.680	-0.160	173865	1.00	1.08	
6 HMX	1	7.060	7.080	-0.020	178398	1.00	0.9061	
8 RDX	1	9.247	9.286	-0.039	209518	1.00	0.9170	
9 Nitrobenzene	1	12.253	12.279	-0.026	379585	1.00	0.9554	
$ 10 1,2-Dinitrobenzene	1	13.187	13.219	-0.032	285803	1.00	1.02	
11 3,5-Dinitroaniline	1	15.033	14.939	0.094	441163	1.00	0.8357	
12 1,3-Dinitrobenzene	1	15.733	15.759	-0.026	623939	1.00	0.9487	
13 Nitroglycerin	2	16.000	16.019	-0.019	1295638	10.0	9.61	
14 o-Nitrotoluene	1	16.747	16.773	-0.026	242256	1.00	0.8678	
15 p-Nitrotoluene	1	17.027	17.053	-0.026	209706	1.00	0.9383	
16 4-Amino-2,6-dinitrotoluene	1	17.347	17.386	-0.039	309323	1.00	0.9518	
17 m-Nitrotoluene	1	17.960	17.979	-0.019	259599	1.00	0.9119	
18 2-Amino-4,6-dinitrotoluene	1	18.220	18.259	-0.039	439206	1.00	0.9553	
19 1,3,5-Trinitrobenzene	1	19.100	19.126	-0.026	450189	1.00	0.9108	
20 2,6-Dinitrotoluene	1	20.040	20.059	-0.019	281129	1.00	0.8706	
21 2,4-Dinitrotoluene	1	20.520	20.540	-0.019	553130	1.00	0.9080	
22 Tetryl	1	23.800	23.806	-0.006	338329	1.00	0.9561	
23 2,4,6-Trinitrotoluene	1	24.900	24.900	0.000	442082	1.00	0.9802	
24 PETN	2	25.453	25.440	0.013	1272136	10.0	9.67	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

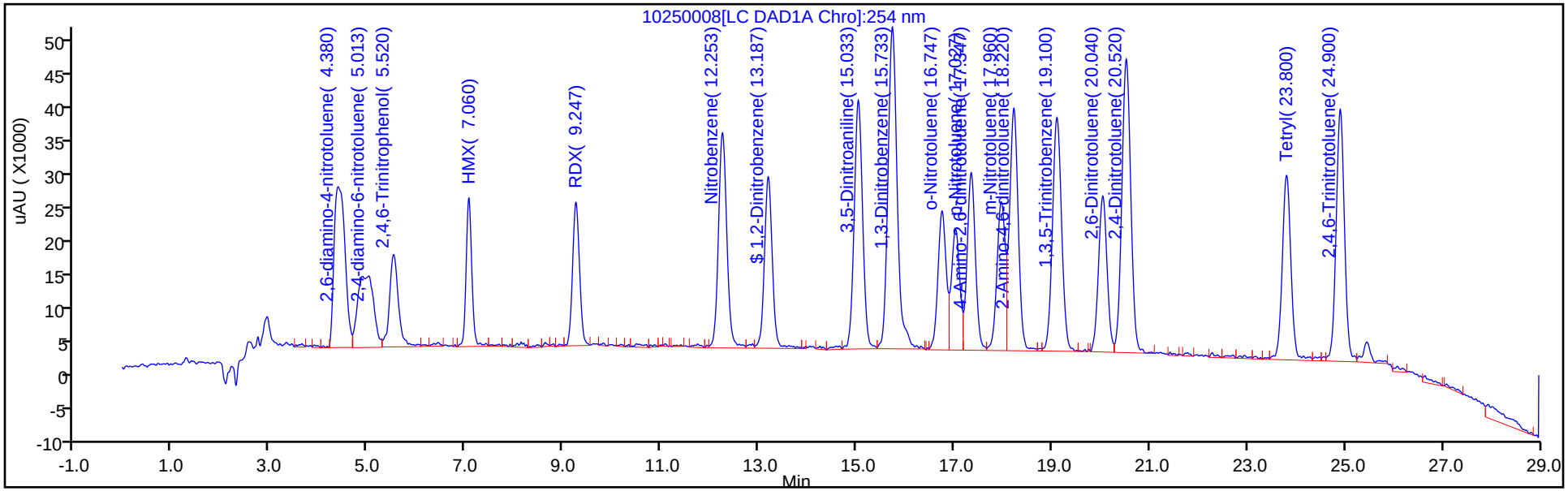
8330_ADDs_00023	Amount Added: 50.00	Units: uL
8330IntermStk_00059	Amount Added: 100.00	Units: uL

Report Date: 30-Oct-2019 15:39:52 Chrom Revision: 2.3 09-Oct-2019 11:13:36

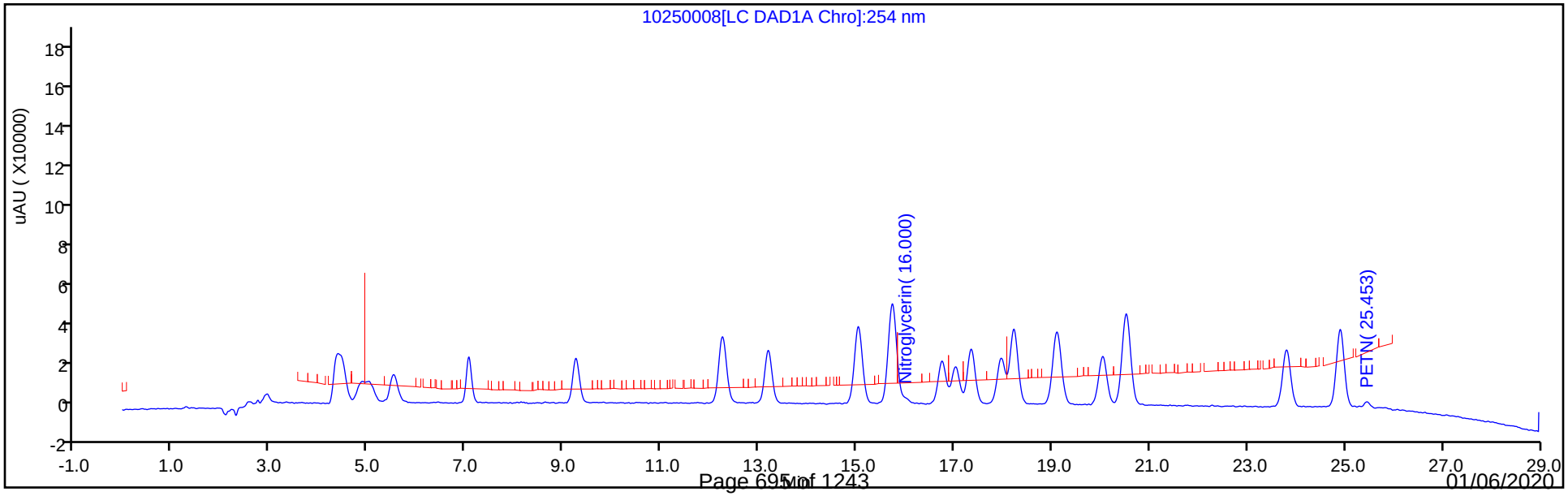
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250008.D				
Injection Date:	25-Oct-2019 20:05:18	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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



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\20191025-86515.b\10250009.D
Lims ID: IC FULL LV 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Oct-2019 20:40:21 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 6
Misc. Info.: 280-0086515-009
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 15:39:53 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 26-Oct-2019 10:08:40

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.405	4.453	-0.048	282445	0.7000	0.6844	M
	2 2,4-diamino-6-nitrotoluene	1	4.925	5.006	-0.081	181895	0.7000	0.5638	M
	5 2,4,6-Trinitrophenol	1	5.605	5.680	-0.075	124518	0.7000	0.6737	Ma
	6 HMX	1	7.085	7.080	0.005	122110	0.7000	0.6202	M
	8 RDX	1	9.291	9.286	0.005	158224	0.7000	0.6885	
	9 Nitrobenzene	1	12.278	12.279	-0.001	283790	0.7014	0.7098	
$	10 1,2-Dinitrobenzene	1	13.211	13.219	-0.008	201663	0.7000	0.7118	
	11 3,5-Dinitroaniline	1	15.051	14.939	0.112	327189	0.7000	0.6196	
	12 1,3-Dinitrobenzene	1	15.751	15.759	-0.008	454620	0.7007	0.6913	
	13 Nitroglycerin	2	16.011	16.019	-0.008	911667	7.00	6.76	
	14 o-Nitrotoluene	1	16.764	16.773	-0.009	178939	0.7021	0.6410	
	15 p-Nitrotoluene	1	17.038	17.053	-0.015	156411	0.7028	0.6998	
	16 4-Amino-2,6-dinitrotoluene	1	17.358	17.386	-0.028	223074	0.7021	0.6864	
	17 m-Nitrotoluene	1	17.971	17.979	-0.008	189948	0.7028	0.7637	
	18 2-Amino-4,6-dinitrotoluene	1	18.231	18.259	-0.028	308650	0.7021	0.6713	
	19 1,3,5-Trinitrobenzene	1	19.104	19.126	-0.022	330797	0.7000	0.6692	
	20 2,6-Dinitrotoluene	1	20.038	20.059	-0.021	208849	0.7021	0.6468	
	21 2,4-Dinitrotoluene	1	20.518	20.540	-0.021	402383	0.7014	0.6606	
	22 Tetryl	1	23.791	23.806	-0.015	233008	0.7000	0.6585	
	23 2,4,6-Trinitrotoluene	1	24.898	24.900	-0.002	329594	0.7028	0.7207	
	24 PETN	2	25.445	25.440	0.005	919755	7.00	6.99	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

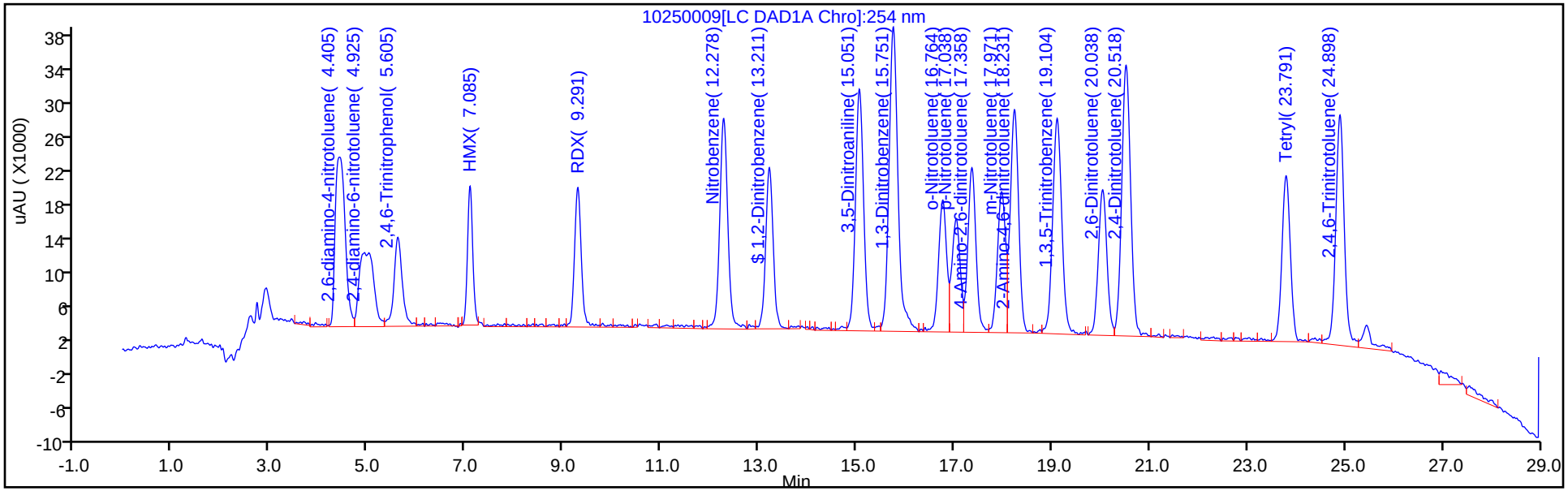
8330_ADDs_00023	Amount Added:	35.00	Units: uL
8330IntermStk_00059	Amount Added:	70.00	Units: uL

Report Date: 30-Oct-2019 15:39:53 Chrom Revision: 2.3 09-Oct-2019 11:13:36

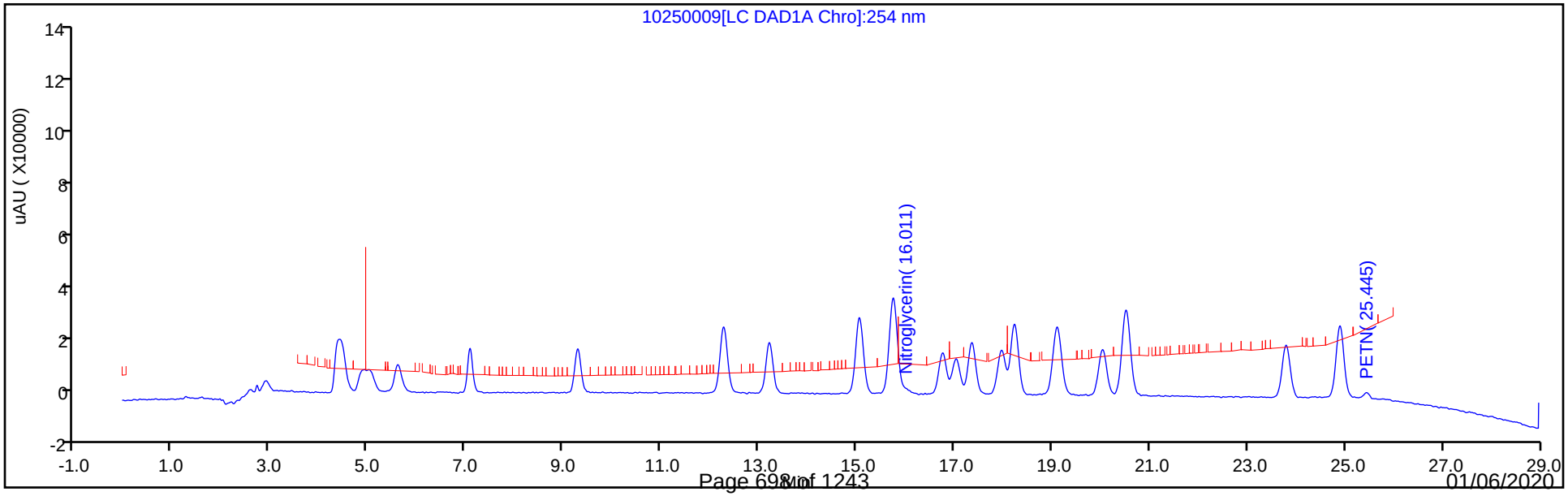
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250009.D				
Injection Date:	25-Oct-2019 20:40:21	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

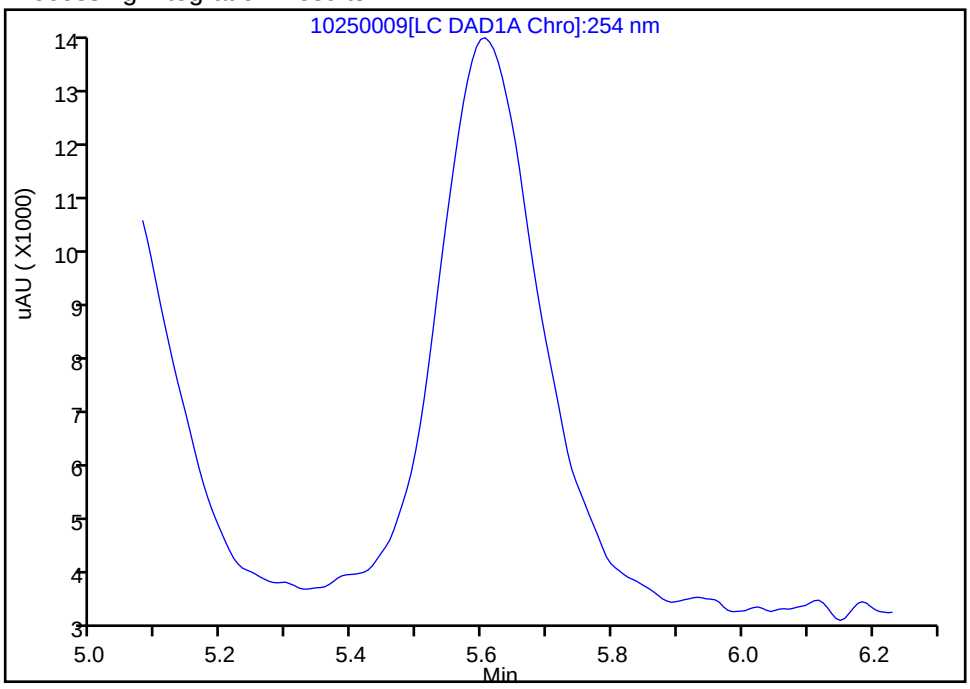
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250009.D				
Injection Date:	25-Oct-2019 20:40:21	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

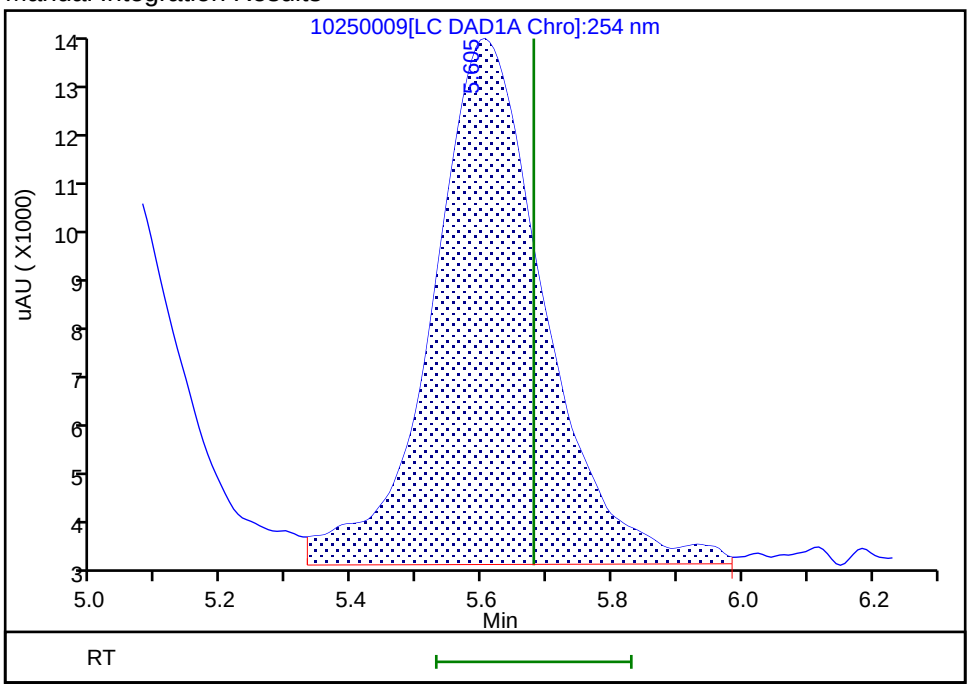
Not Detected
Expected RT: 5.68

Processing Integration Results



Manual Integration Results

RT: 5.60
Area: 124518
Amount: 0.673685
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:08:06
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

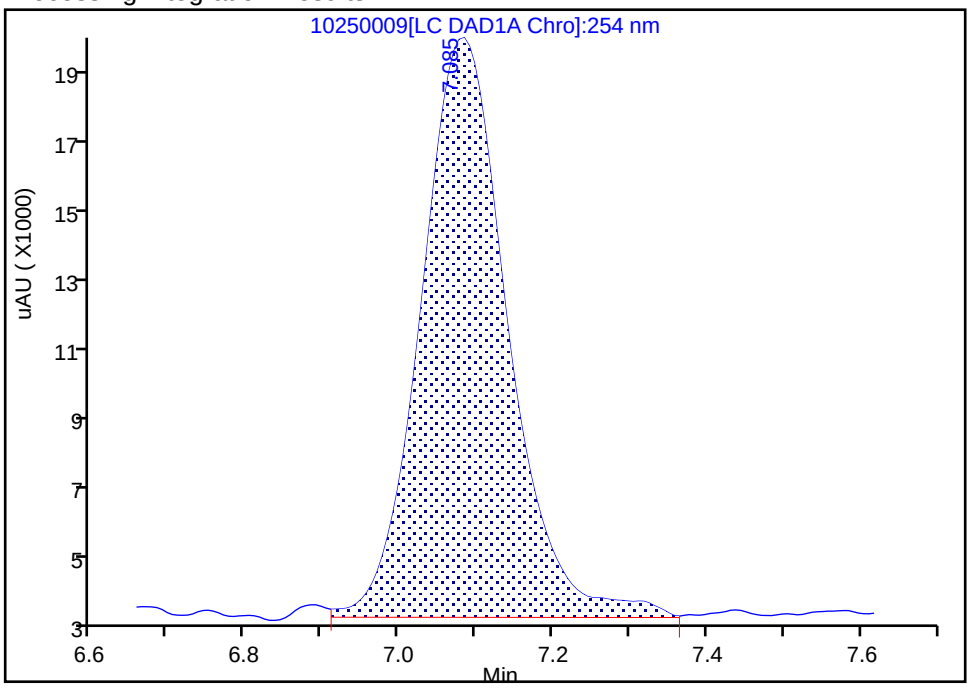
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250009.D				
Injection Date:	25-Oct-2019 20:40:21	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

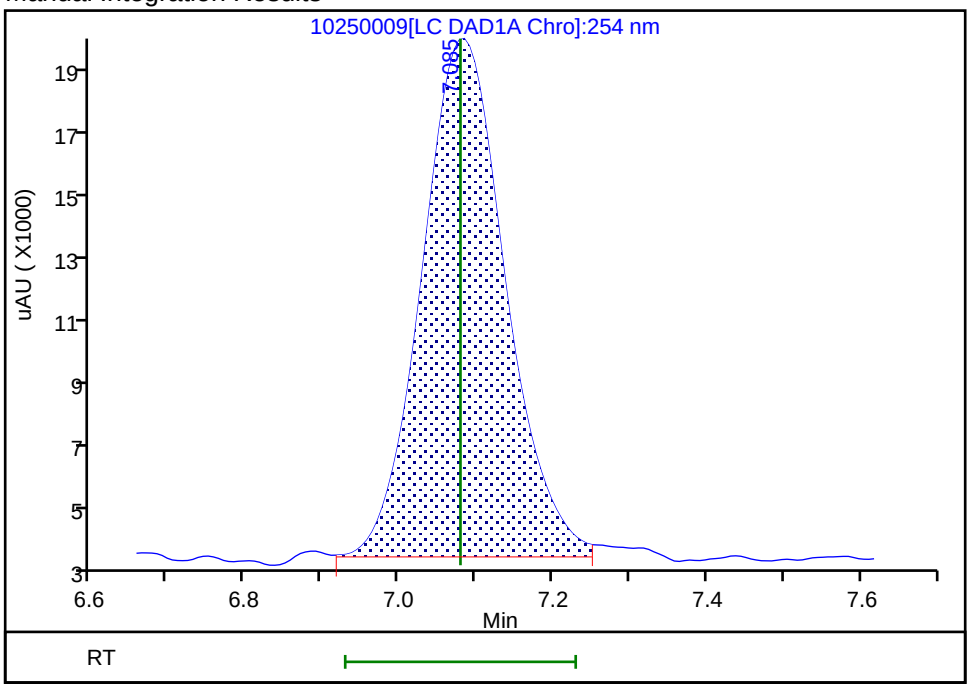
Processing Integration Results

RT: 7.08
Area: 128322
Amount: 0.648130
Amount Units: ug/ml



Manual Integration Results

RT: 7.08
Area: 122110
Amount: 0.620230
Amount Units: ug/ml



Reviewer: beckerc, 30-Oct-2019 15:38:32

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250010.D
Lims ID: IC FULL LV 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Oct-2019 21:15:23 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 5
Misc. Info.: 280-0086515-010
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 15:39:54 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 26-Oct-2019 10:03:21

	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		4.453			ND	ND	U
	2 2,4-diamino-6-nitrotoluene	1		5.006			ND	ND	U
	5 2,4,6-Trinitrophenol	1	5.680	5.680	0.000	72617	0.4000	0.3643	a
	6 HMX	1	7.080	7.080	0.000	75550	0.4000	0.3837	M
	8 RDX	1	9.286	9.286	0.000	96063	0.4000	0.4115	
	9 Nitrobenzene	1	12.279	12.279	0.000	163042	0.4008	0.4003	
$	10 1,2-Dinitrobenzene	1	13.219	13.219	0.000	119122	0.4000	0.4105	
	11 3,5-Dinitroaniline	1		14.939			ND	ND	U
	12 1,3-Dinitrobenzene	1	15.759	15.759	0.000	277038	0.4004	0.4212	
	13 Nitroglycerin	2	16.019	16.019	0.000	548658	4.00	4.07	
	14 o-Nitrotoluene	1	16.773	16.773	0.000	105460	0.4012	0.3778	
	15 p-Nitrotoluene	1	17.053	17.053	0.000	92737	0.4016	0.4149	
	16 4-Amino-2,6-dinitrotoluene	1	17.386	17.386	0.000	130730	0.4012	0.4023	
	17 m-Nitrotoluene	1	17.979	17.979	0.000	112880	0.4016	0.5536	
	18 2-Amino-4,6-dinitrotoluene	1	18.259	18.259	0.000	185387	0.4012	0.4032	
	19 1,3,5-Trinitrobenzene	1	19.126	19.126	0.000	196611	0.4000	0.3978	
	20 2,6-Dinitrotoluene	1	20.059	20.059	0.000	123595	0.4012	0.3828	
	21 2,4-Dinitrotoluene	1	20.540	20.540	0.000	238061	0.4008	0.3908	
	22 Tetryl	1	23.806	23.806	0.000	138053	0.4000	0.3901	
	23 2,4,6-Trinitrotoluene	1	24.900	24.900	0.000	203498	0.4016	0.4299	
	24 PETN	2	25.440	25.440	0.000	543531	4.00	4.13	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

8330_ADDs_00023	Amount Added:	20.00	Units: uL
8330IntermStk_00059	Amount Added:	40.00	Units: uL

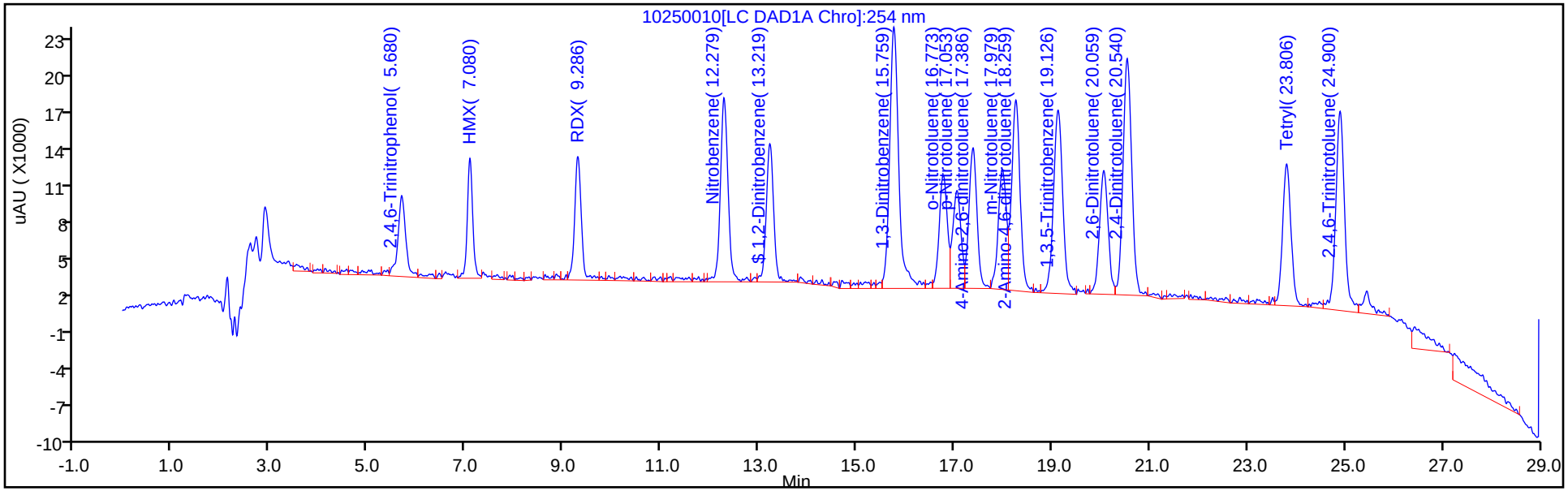
Report Date: 30-Oct-2019 15:39:54 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

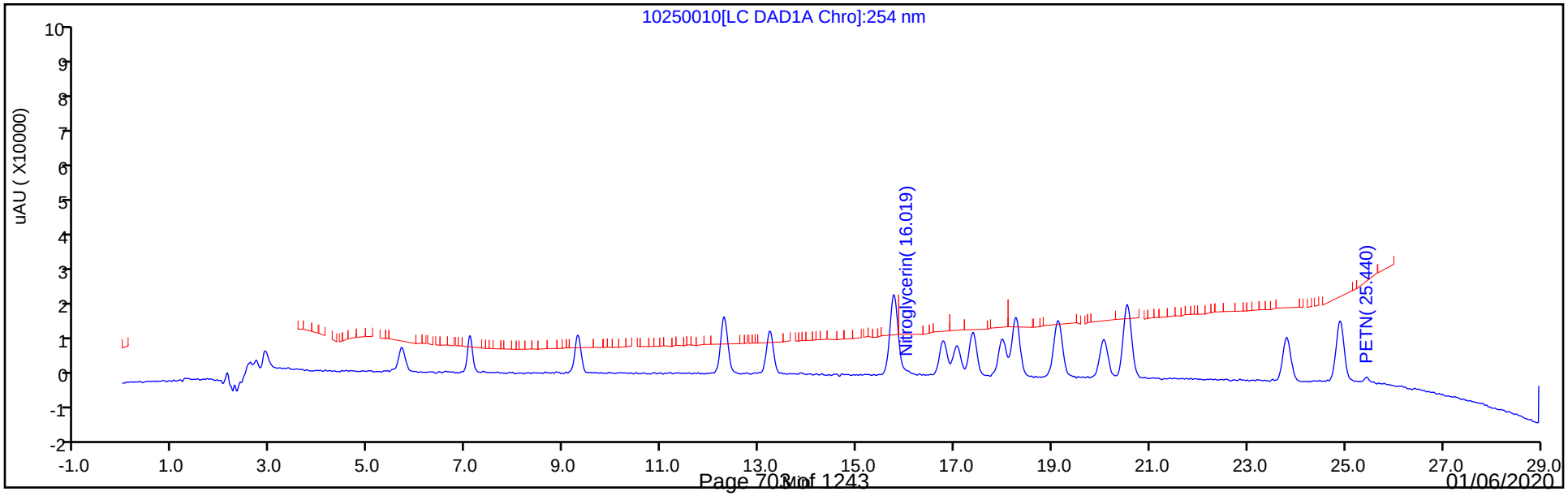
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250010.D

Injection Date:	25-Oct-2019 21:15:23	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

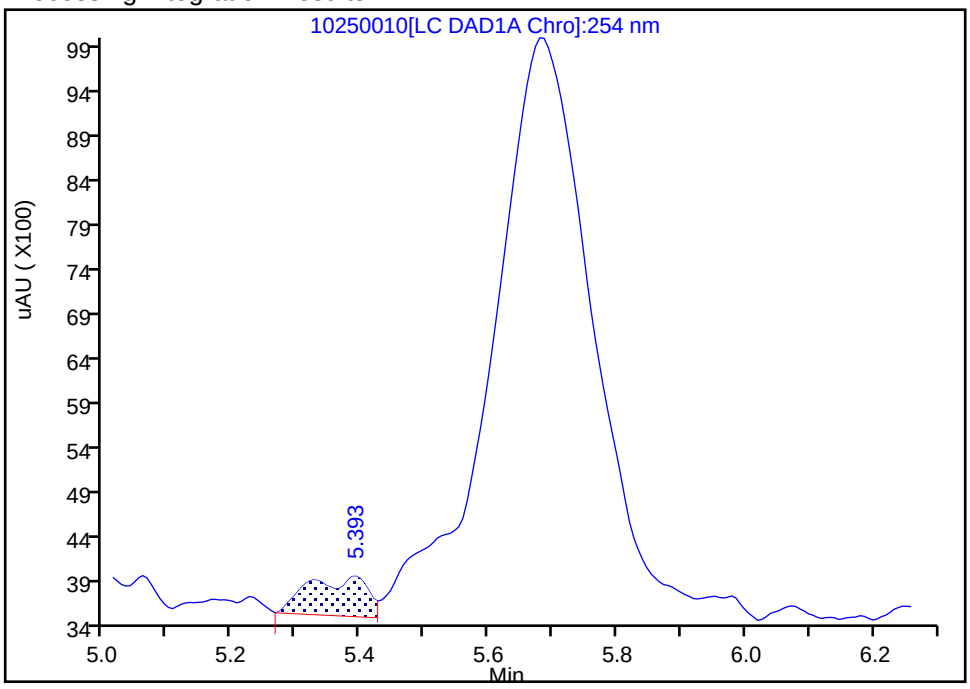
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250010.D
Injection Date: 25-Oct-2019 21:15:23 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL LV 5
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

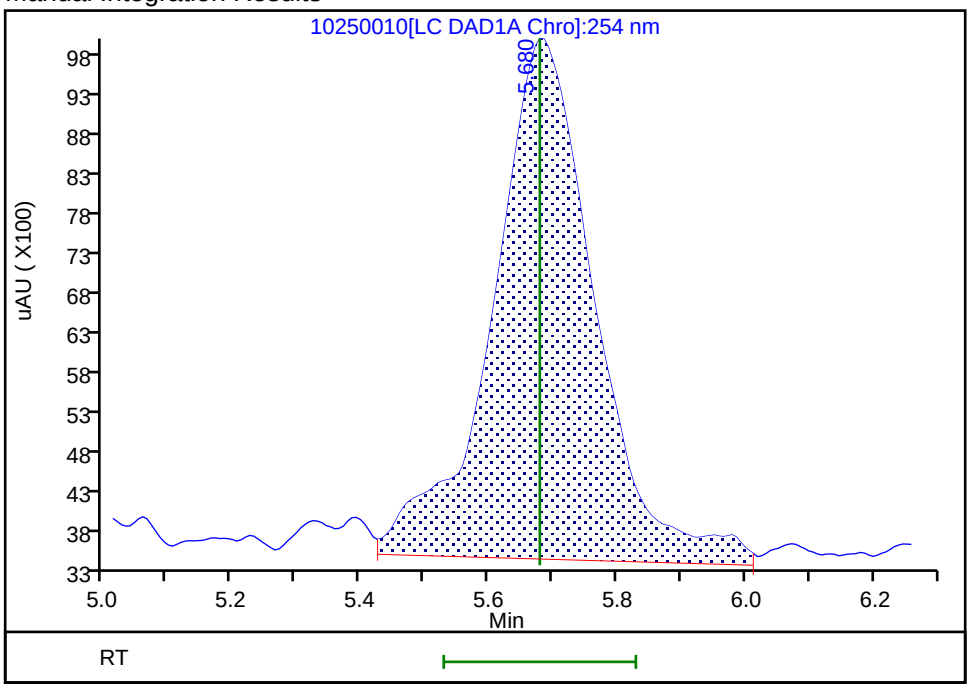
Processing Integration Results

RT: 5.39
Area: 2800
Amount: 0.017247
Amount Units: ug/ml



Manual Integration Results

RT: 5.68
Area: 72617
Amount: 0.364291
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:09:13
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

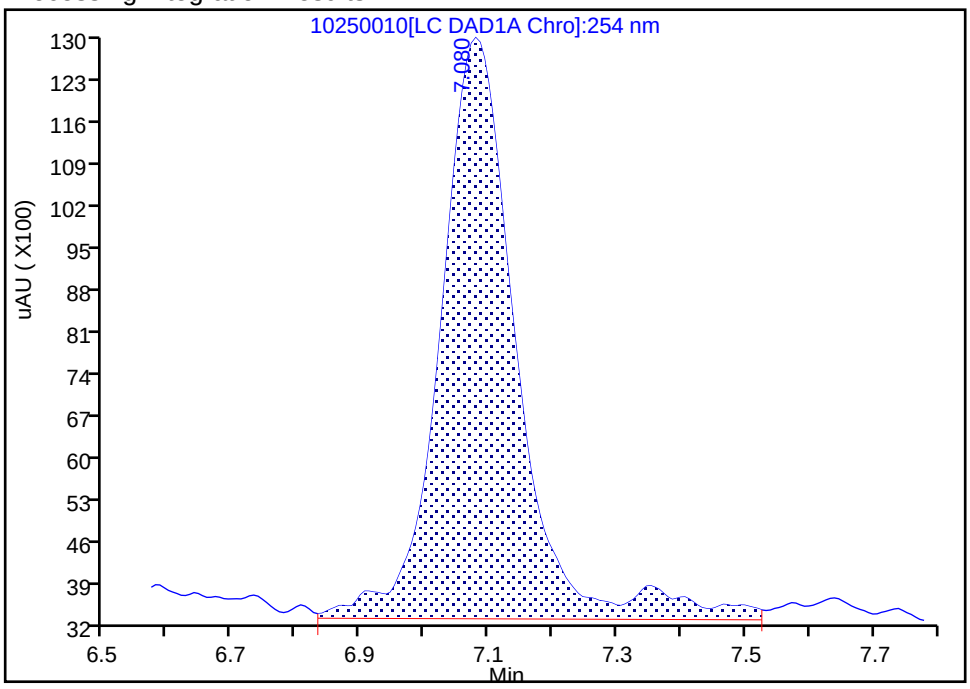
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250010.D				
Injection Date:	25-Oct-2019 21:15:23	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

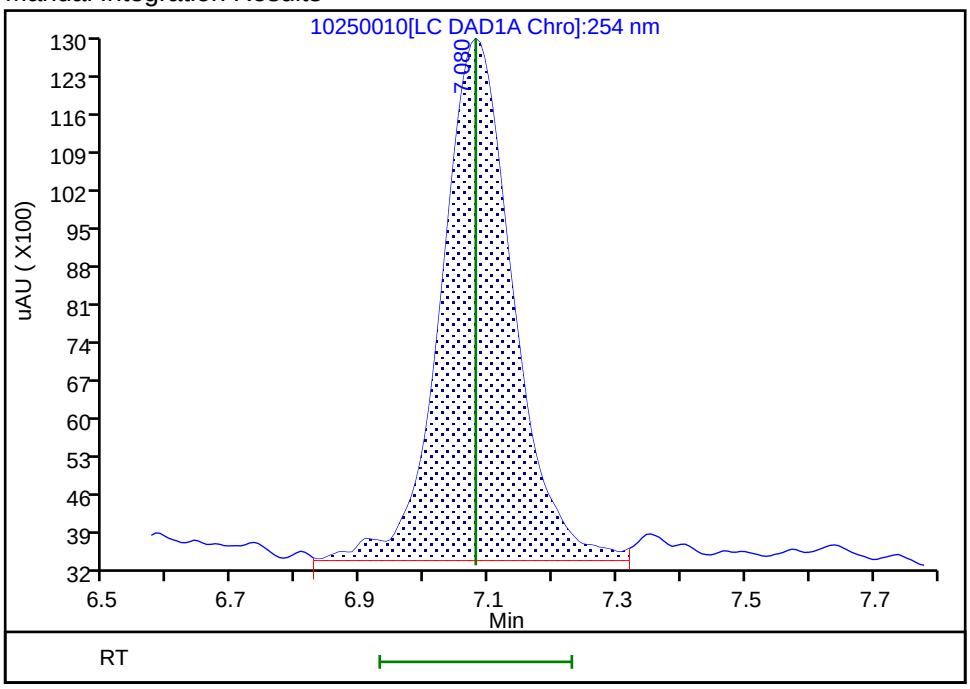
Processing Integration Results

RT: 7.08
Area: 81189
Amount: 0.406453
Amount Units: ug/ml



Manual Integration Results

RT: 7.08
Area: 75550
Amount: 0.383739
Amount Units: ug/ml



Reviewer: beckerc, 30-Oct-2019 15:38:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250011.D
Lims ID: IC FULL LV 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Oct-2019 21:50:18 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 4
Misc. Info.: 280-0086515-011
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 15:39:55 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 26-Oct-2019 10:02:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.416	4.453	-0.037	164999	0.2500	0.3889	
	2 2,4-diamino-6-nitrotoluene	1	4.996	5.006	-0.010	109000	0.2500	0.3378	
	5 2,4,6-Trinitrophenol	1	5.736	5.680	0.056	47189	0.2500	0.2347	a
	6 HMX	1	7.082	7.080	0.002	45591	0.2500	0.2316	M
	8 RDX	1	9.289	9.286	0.003	60188	0.2500	0.2517	
	9 Nitrobenzene	1	12.282	12.279	0.003	96618	0.2505	0.2301	
$	10 1,2-Dinitrobenzene	1	13.229	13.219	0.010	74354	0.2500	0.2471	
	11 3,5-Dinitroaniline	1	15.076	14.939	0.137	193393	0.2500	0.3660	
	12 1,3-Dinitrobenzene	1	15.762	15.759	0.003	165000	0.2503	0.2509	
	13 Nitroglycerin	2	16.016	16.019	-0.003	330125	2.50	2.45	
	14 o-Nitrotoluene	1	16.782	16.773	0.009	63249	0.2508	0.2266	
	15 p-Nitrotoluene	1	17.042	17.053	-0.011	58276	0.2510	0.2607	
	16 4-Amino-2,6-dinitrotoluene	1	17.376	17.386	-0.010	81983	0.2508	0.2523	
	17 m-Nitrotoluene	1	17.982	17.979	0.003	69916	0.2510	0.3874	
	18 2-Amino-4,6-dinitrotoluene	1	18.256	18.259	-0.003	117140	0.2508	0.2548	
	19 1,3,5-Trinitrobenzene	1	19.109	19.126	-0.017	119705	0.2500	0.2422	
	20 2,6-Dinitrotoluene	1	20.042	20.059	-0.017	74608	0.2508	0.2310	
	21 2,4-Dinitrotoluene	1	20.536	20.540	-0.003	146679	0.2505	0.2408	
	22 Tetryl	1	23.802	23.806	-0.004	89629	0.2500	0.2533	
	23 2,4,6-Trinitrotoluene	1	24.896	24.900	-0.004	125918	0.2510	0.2509	
	24 PETN	2	25.442	25.440	0.002	329878	2.50	2.51	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

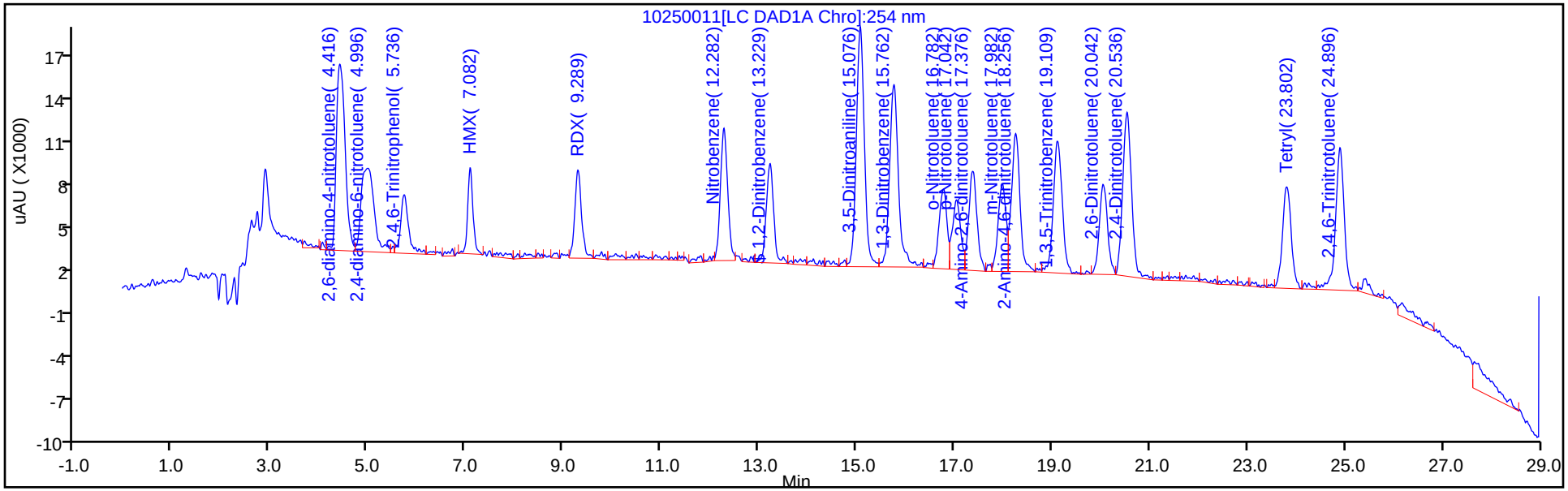
8330_ADDs_00023	Amount Added:	12.50	Units: uL
8330IntermStk_00059	Amount Added:	25.00	Units: uL

Report Date: 30-Oct-2019 15:39:55 Chrom Revision: 2.3 09-Oct-2019 11:13:36

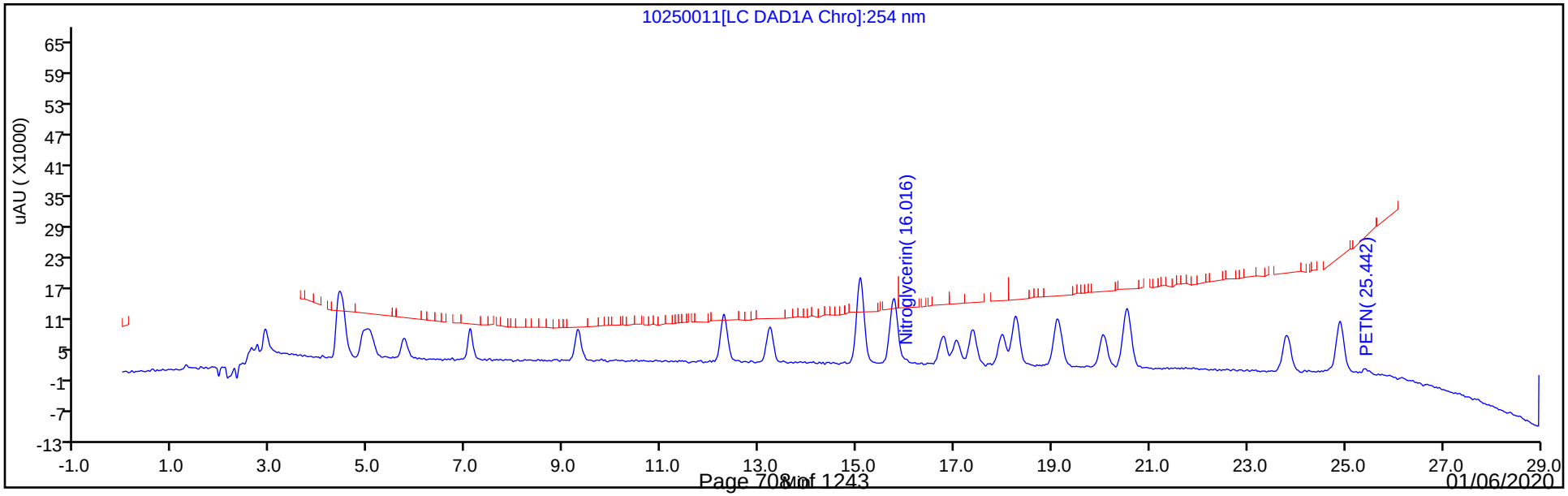
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250011.D				
Injection Date:	25-Oct-2019 21:50:18	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

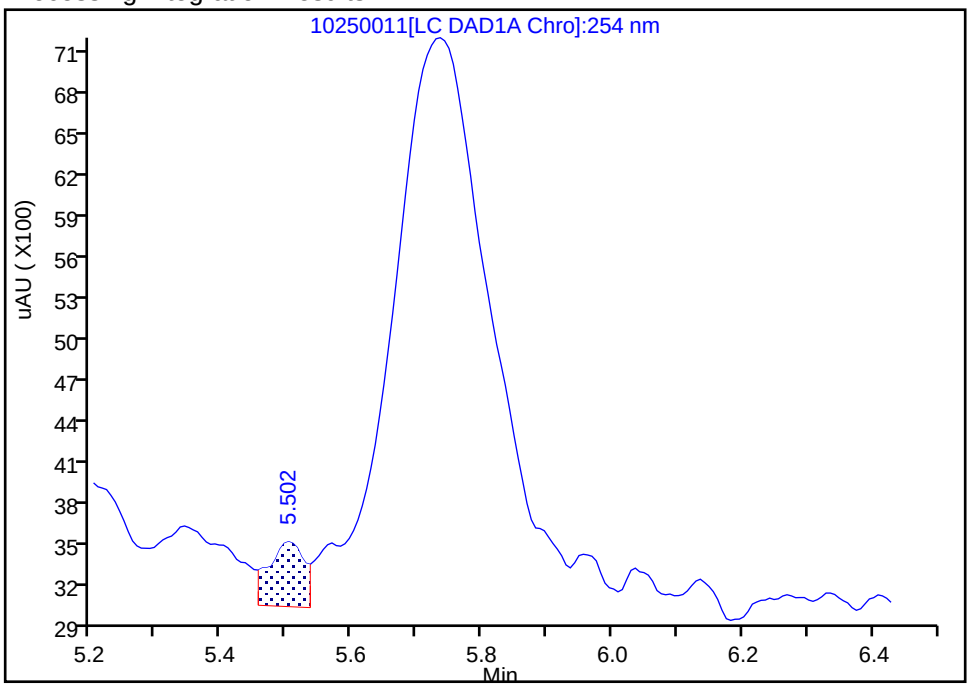
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250011.D				
Injection Date:	25-Oct-2019 21:50:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

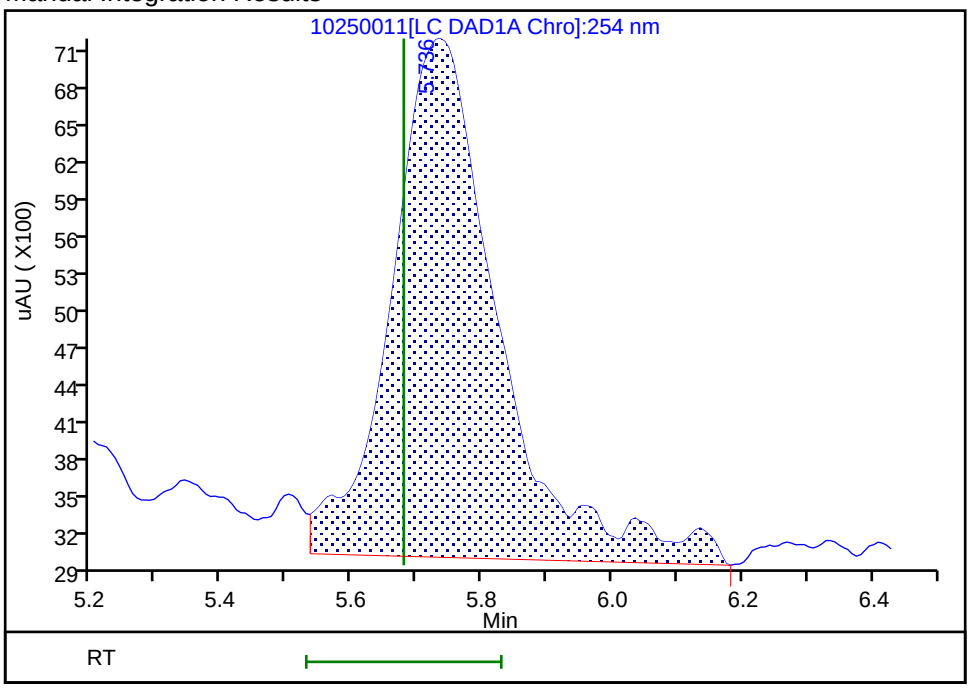
Processing Integration Results

RT: 5.50
Area: 1725
Amount: 0.027583
Amount Units: ug/ml



Manual Integration Results

RT: 5.74
Area: 47189
Amount: 0.234696
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:01:34
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

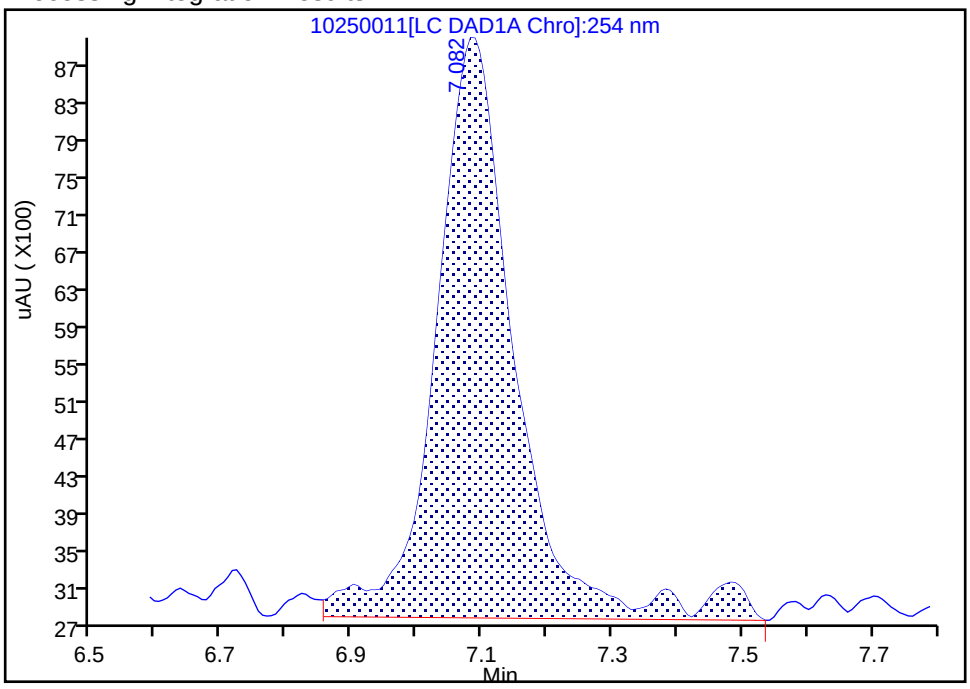
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250011.D				
Injection Date:	25-Oct-2019 21:50:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

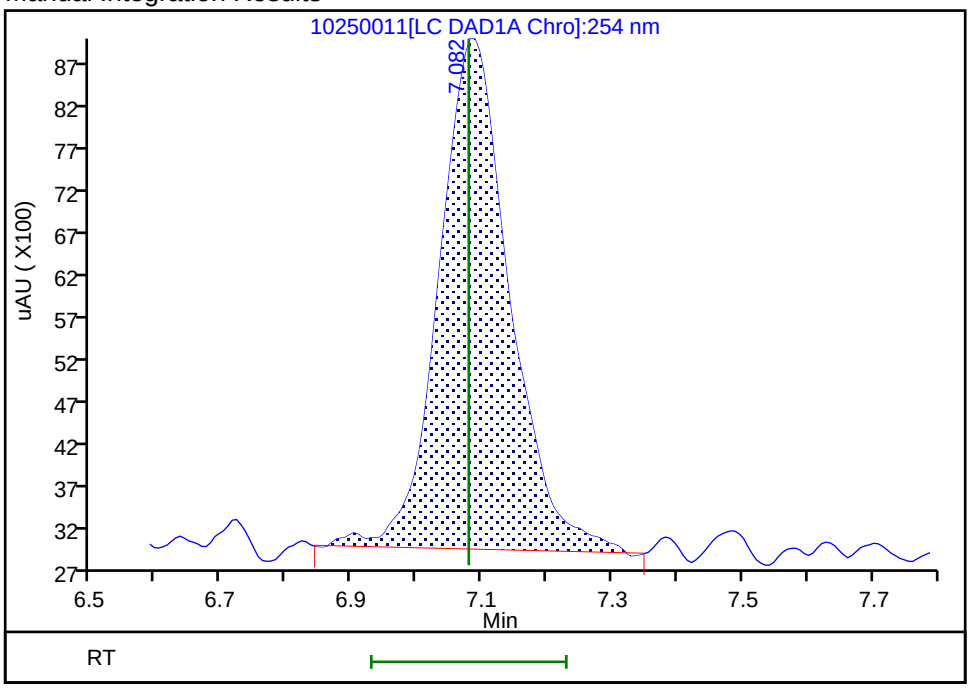
Processing Integration Results

RT: 7.08
Area: 52817
Amount: 0.259718
Amount Units: ug/ml



Manual Integration Results

RT: 7.08
Area: 45591
Amount: 0.231569
Amount Units: ug/ml



Reviewer: beckerc, 30-Oct-2019 15:36:31
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D
Lims ID: IC FULL LV 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Oct-2019 22:25:20 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 3
Misc. Info.: 280-0086515-012
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 15:39:56 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 26-Oct-2019 10:13:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.405	4.453	-0.048	41384	0.1000	0.0779	
	2 2,4-diamino-6-nitrotoluene	1	4.971	5.006	-0.035	25631	0.1000	0.0794	
	5 2,4,6-Trinitrophenol	1	5.785	5.680	0.105	16470	0.1000	0.0911	
	6 HMX	1	7.098	7.080	0.018	19378	0.1000	0.0984	M
	8 RDX	1	9.311	9.286	0.025	27712	0.1000	0.1070	
	9 Nitrobenzene	1	12.284	12.279	0.005	43843	0.1002	0.0948	
$	10 1,2-Dinitrobenzene	1	13.224	13.219	0.005	33671	0.1000	0.0986	
	11 3,5-Dinitroaniline	1	15.071	14.939	0.132	51528	0.1000	0.0970	
	12 1,3-Dinitrobenzene	1	15.771	15.759	0.012	71334	0.1001	0.1085	
	13 Nitroglycerin	2	16.018	16.019	-0.001	135121	1.00	1.00	M
	14 o-Nitrotoluene	1	16.751	16.773	-0.022	27623	0.1003	0.0990	M
	15 p-Nitrotoluene	1	17.051	17.053	-0.002	27451	0.1004	0.1228	M
	16 4-Amino-2,6-dinitrotoluene	1	17.371	17.386	-0.015	37229	0.1003	0.1146	M
	17 m-Nitrotoluene	1	17.958	17.979	-0.021	31235	0.1004	NQ	M
	18 2-Amino-4,6-dinitrotoluene	1	18.258	18.259	-0.001	51241	0.1003	0.1114	M
	19 1,3,5-Trinitrobenzene	1	19.118	19.126	-0.008	52905	0.1000	0.1070	M
	20 2,6-Dinitrotoluene	1	20.051	20.059	-0.008	33396	0.1003	0.1034	M
	21 2,4-Dinitrotoluene	1	20.538	20.540	-0.001	66264	0.1002	0.1088	
	22 Tetryl	1	23.818	23.806	0.012	37173	0.1000	0.1051	
	23 2,4,6-Trinitrotoluene	1	24.918	24.900	0.018	55343	0.1004	0.0881	
	24 PETN	2	25.451	25.440	0.011	154093	1.00	1.17	

QC Flag Legend

Processing Flags
NQ - Not Quantifiable
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00023	Amount Added: 5.00	Units: uL
8330IntermStk_00059	Amount Added: 10.00	Units: uL

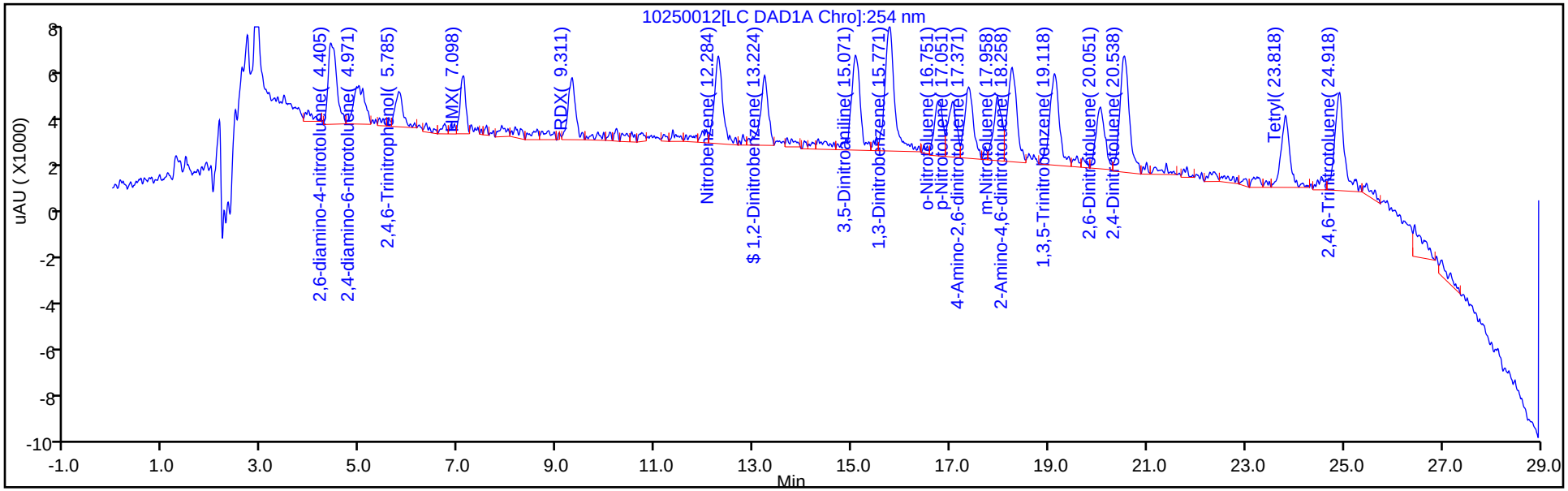
Report Date: 30-Oct-2019 15:39:56 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

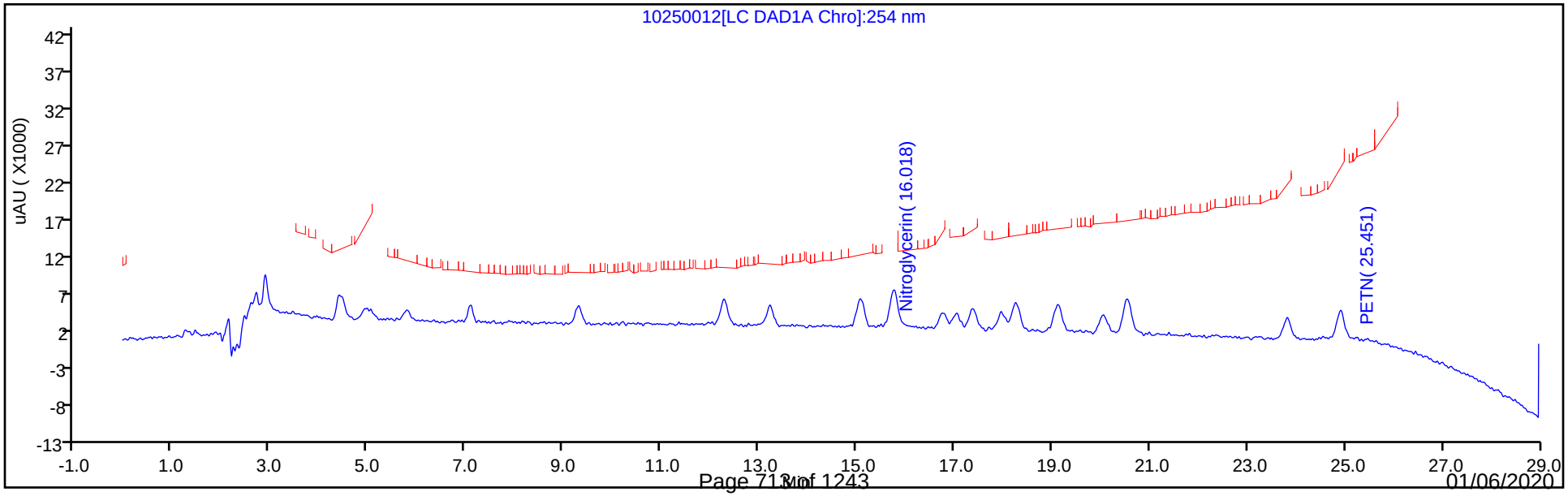
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D

Injection Date:	25-Oct-2019 22:25:20	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

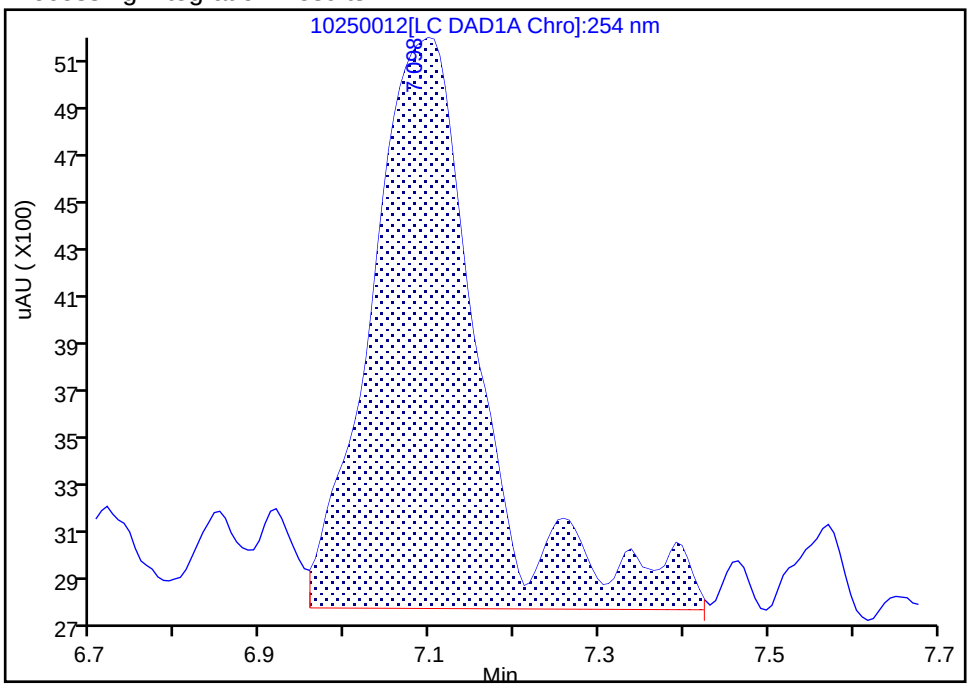
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D				
Injection Date:	25-Oct-2019 22:25:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

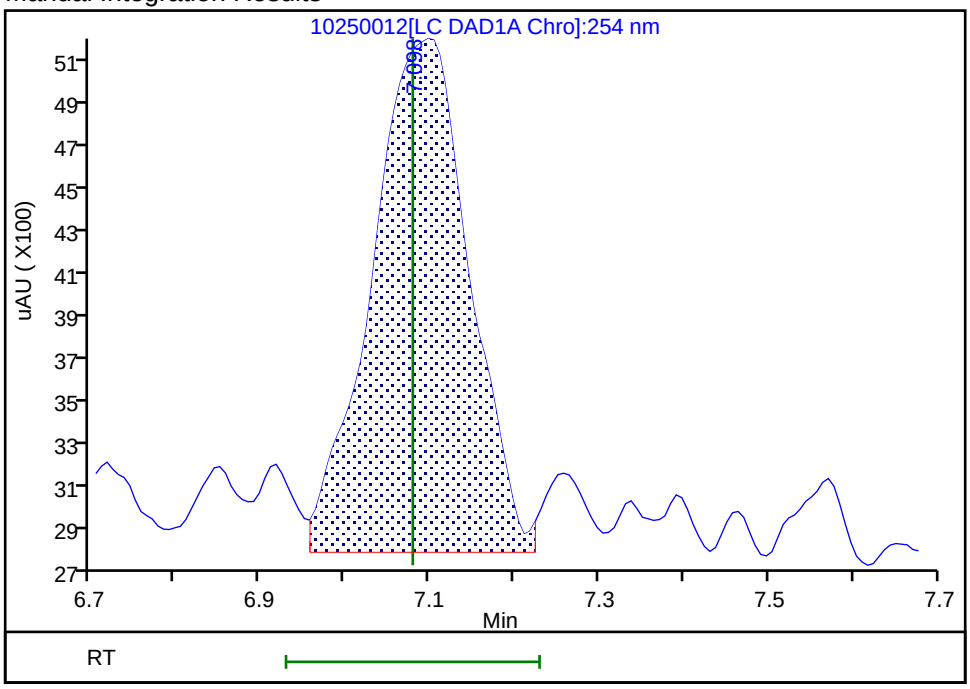
Processing Integration Results

RT: 7.10
Area: 22191
Amount: 0.107265
Amount Units: ug/ml



Manual Integration Results

RT: 7.10
Area: 19378
Amount: 0.098426
Amount Units: ug/ml



Reviewer: beckerc, 30-Oct-2019 15:35:52

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

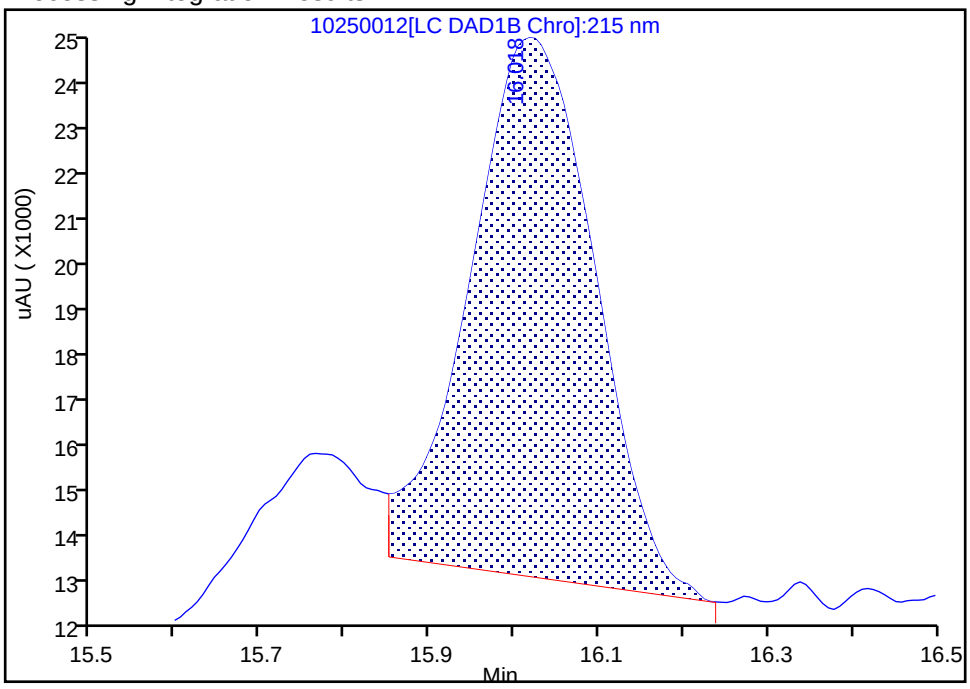
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D
Injection Date: 25-Oct-2019 22:25:20 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL LV 3
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

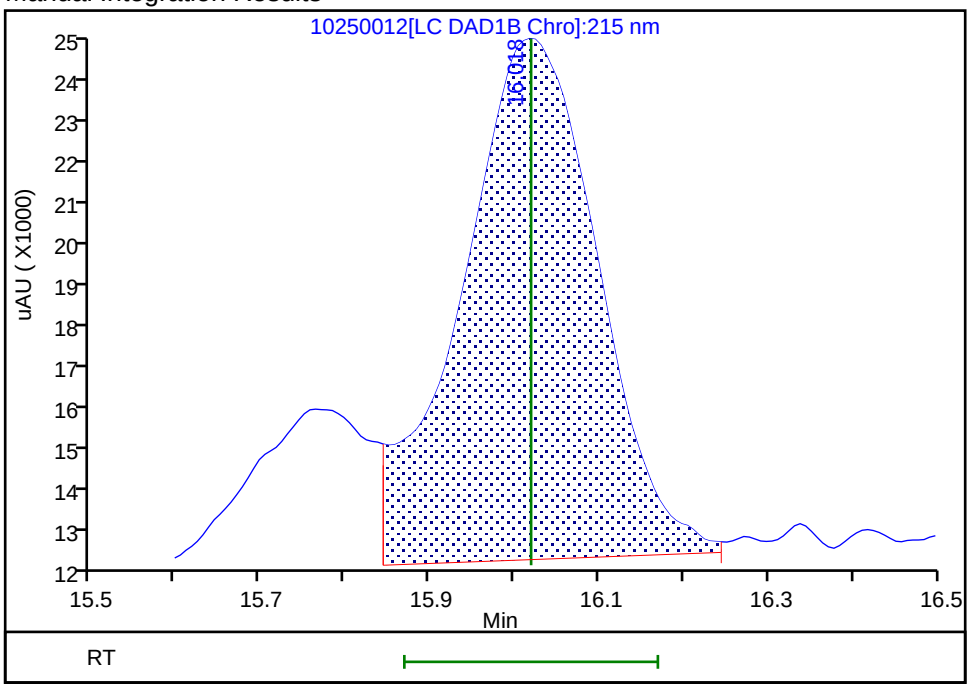
Processing Integration Results

RT: 16.02
Area: 114086
Amount: 0.863255
Amount Units: ug/ml



Manual Integration Results

RT: 16.02
Area: 135121
Amount: 1.002475
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:12:27
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

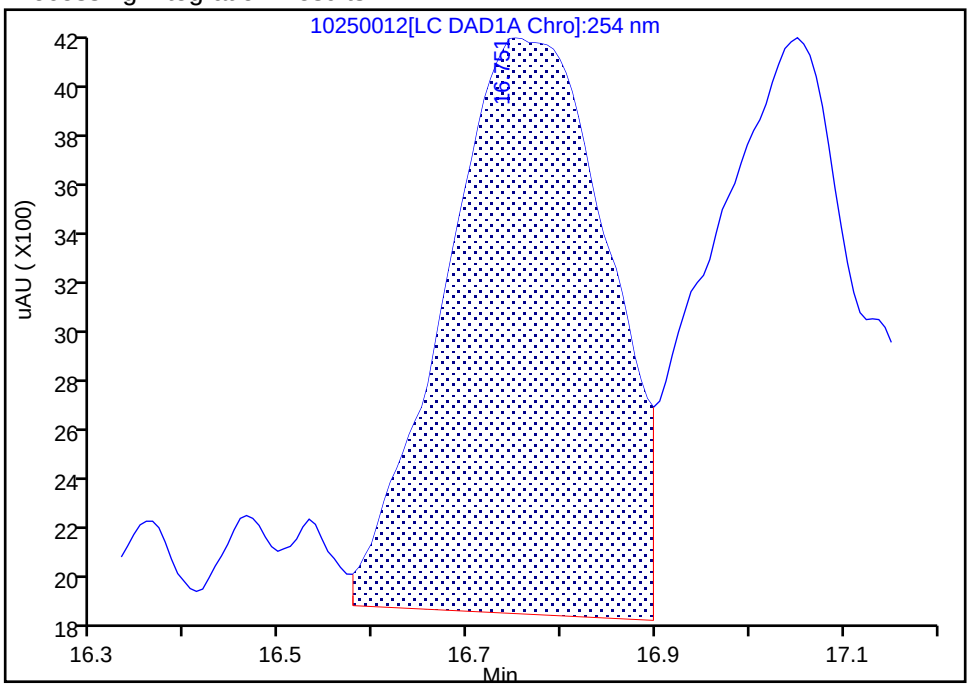
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D				
Injection Date:	25-Oct-2019 22:25:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

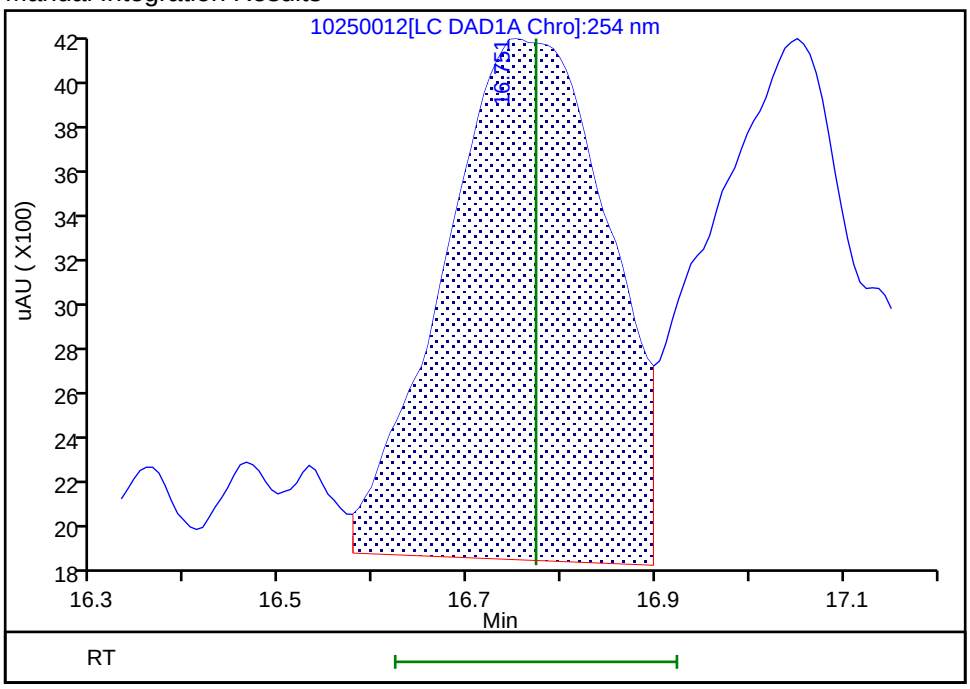
Processing Integration Results

RT: 16.75
Area: 26740
Amount: 0.096171
Amount Units: ug/ml



Manual Integration Results

RT: 16.75
Area: 27623
Amount: 0.098955
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:13:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

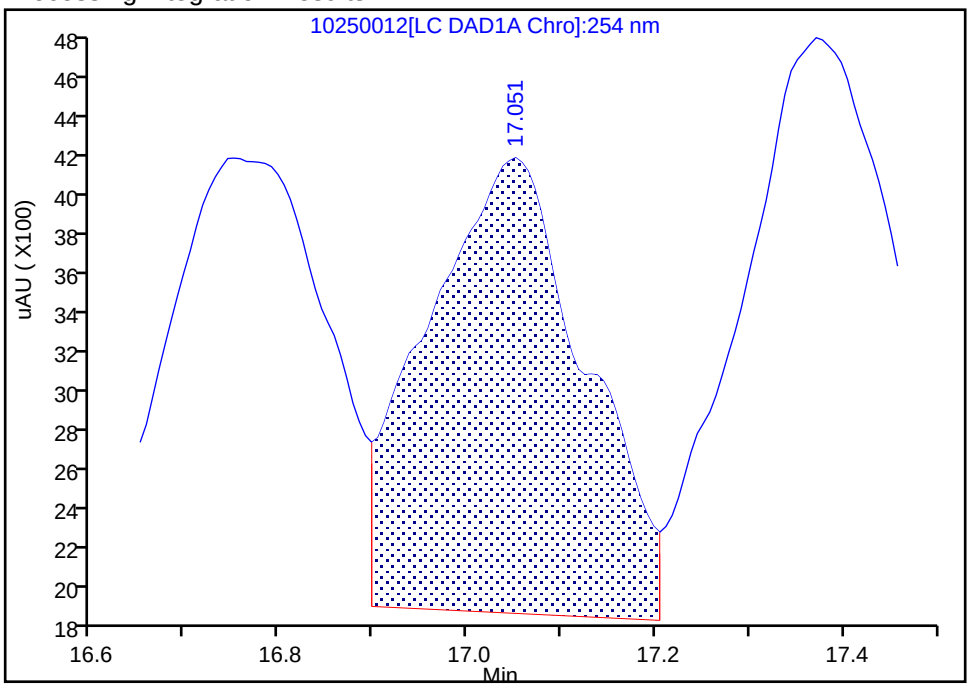
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D				
Injection Date:	25-Oct-2019 22:25:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

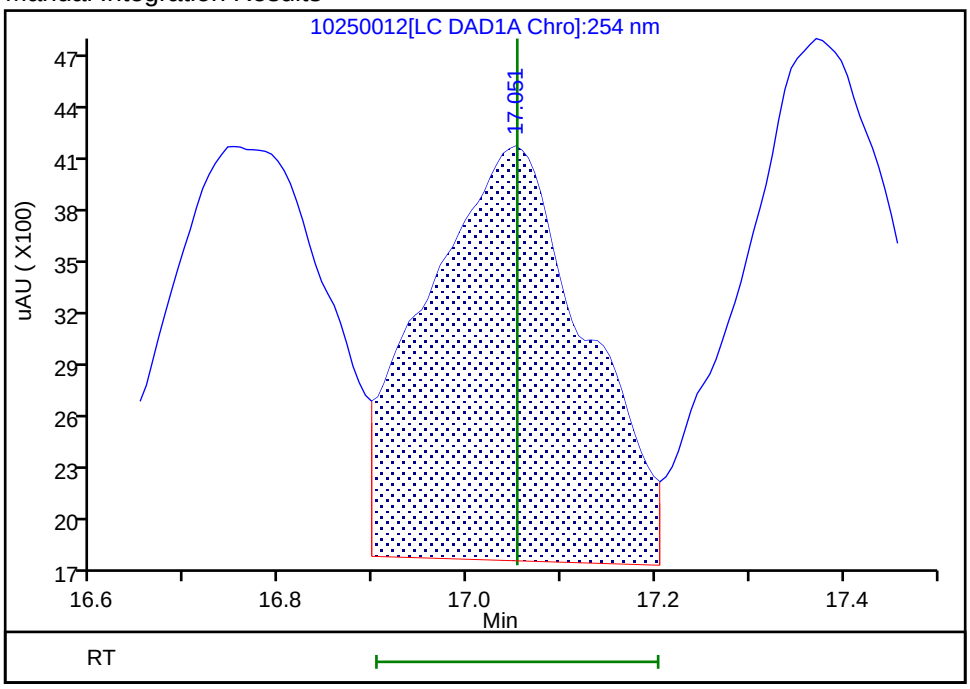
Processing Integration Results

RT: 17.05
Area: 26826
Amount: 0.120444
Amount Units: ug/ml



Manual Integration Results

RT: 17.05
Area: 27451
Amount: 0.122821
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:13:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

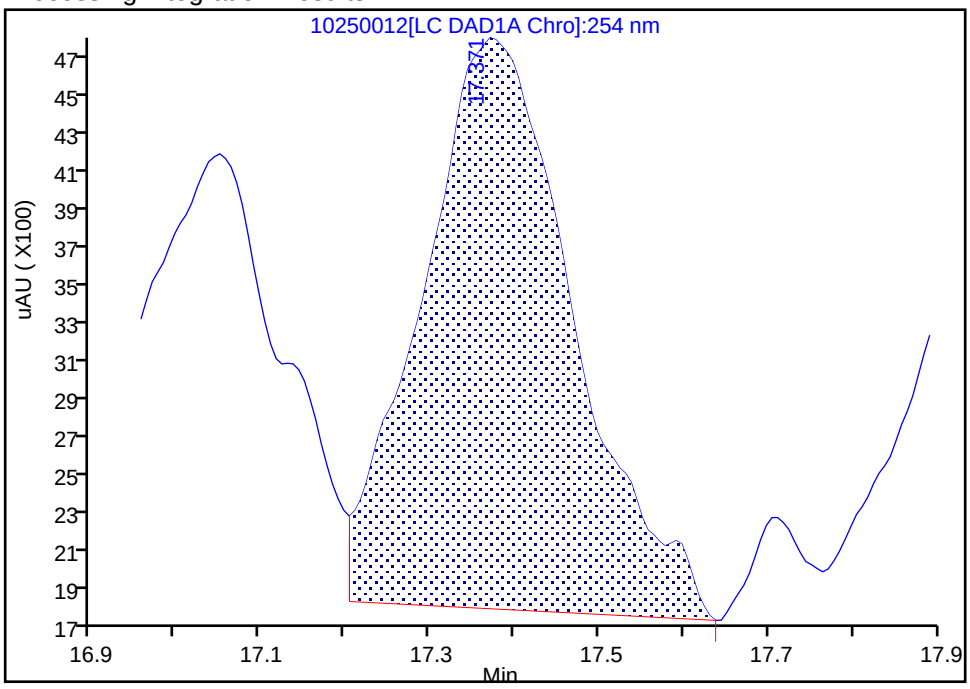
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D				
Injection Date:	25-Oct-2019 22:25:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

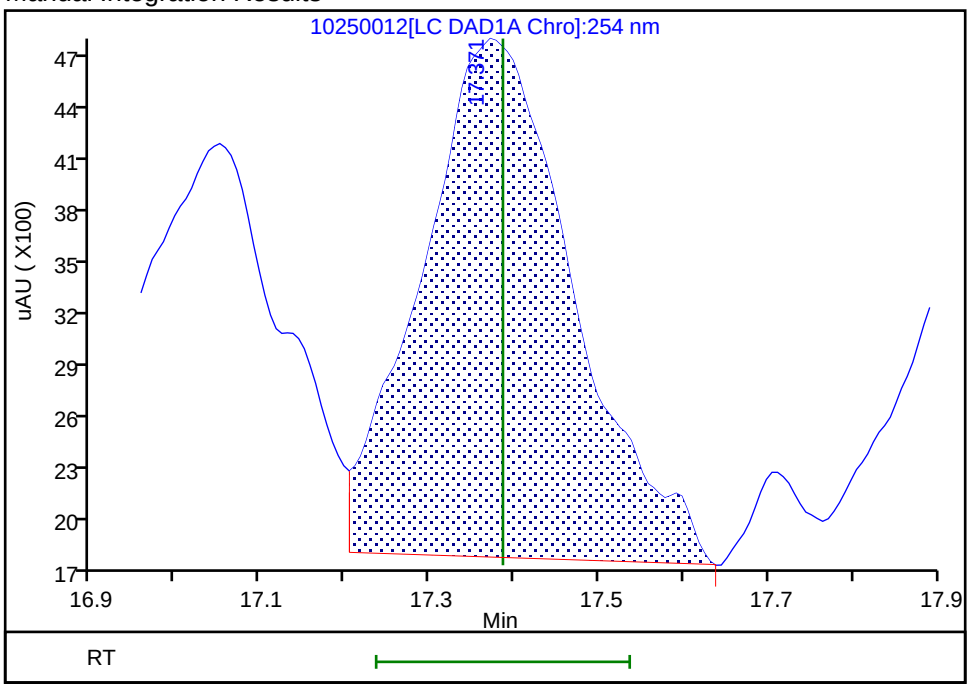
Processing Integration Results

RT: 17.37
Area: 36969
Amount: 0.113873
Amount Units: ug/ml



Manual Integration Results

RT: 17.37
Area: 37229
Amount: 0.114559
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:13:19
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

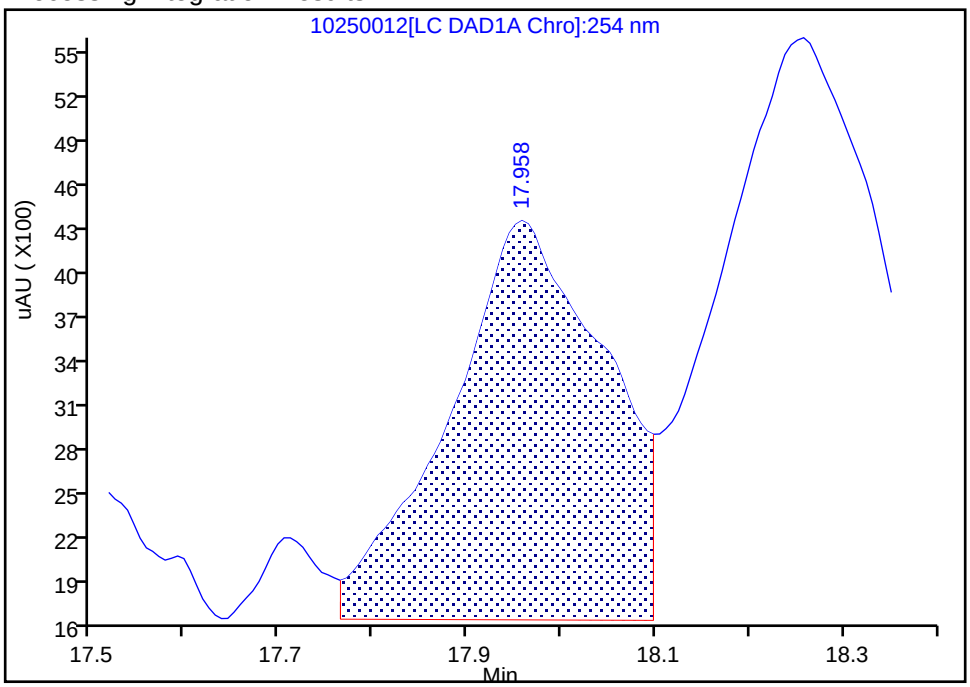
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D				
Injection Date:	25-Oct-2019 22:25:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

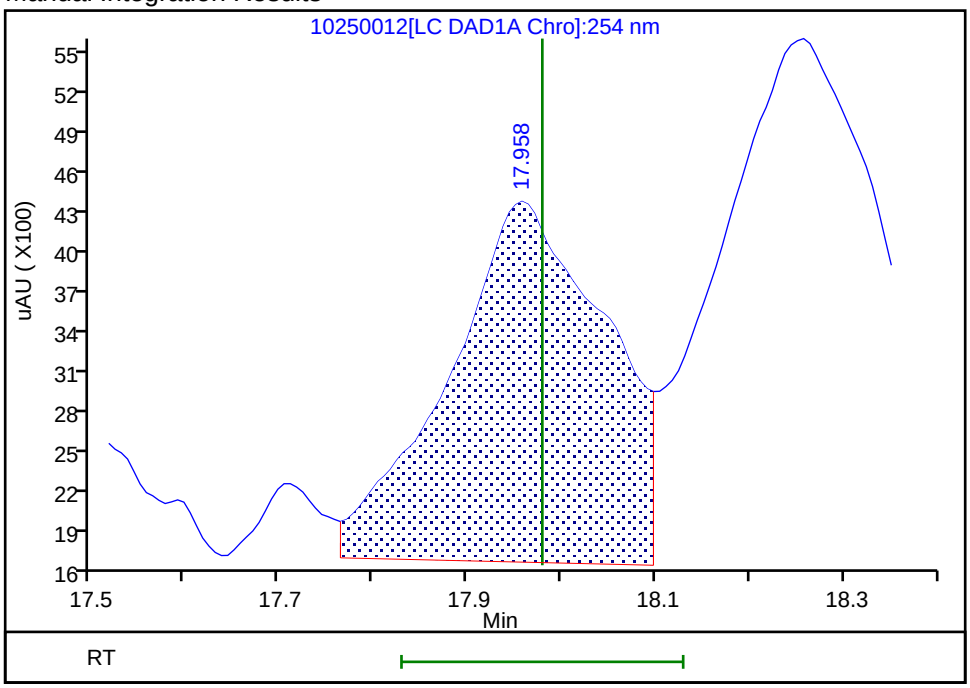
Processing Integration Results

RT: 17.96
Area: 30505
Amount: NaN
Amount Units: ug/ml



Manual Integration Results

RT: 17.96
Area: 31235
Amount: NaN
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:13:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

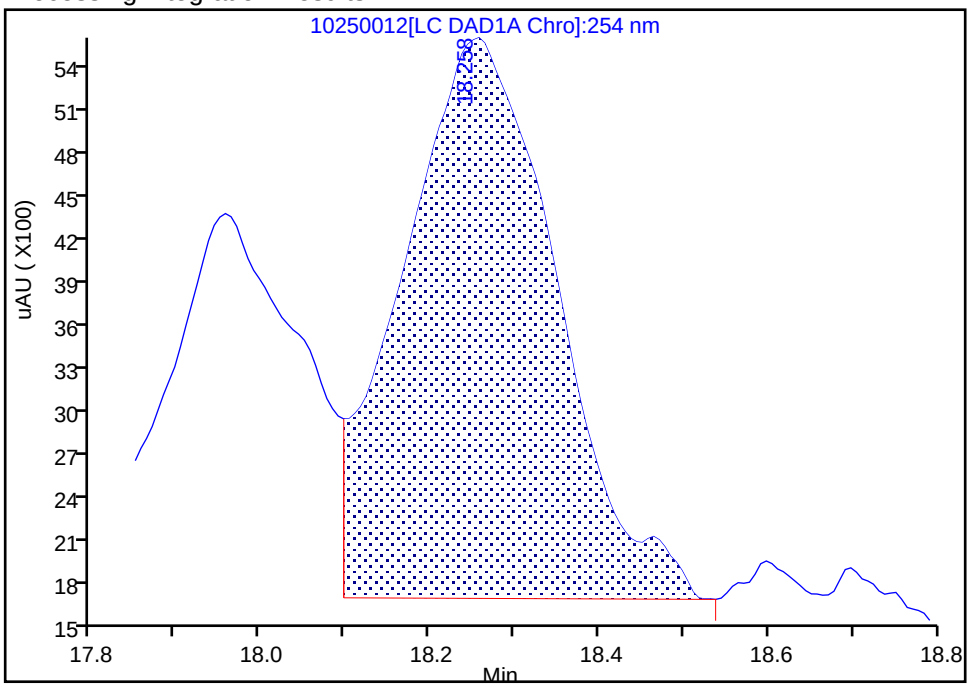
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D
Injection Date: 25-Oct-2019 22:25:20 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL LV 3
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

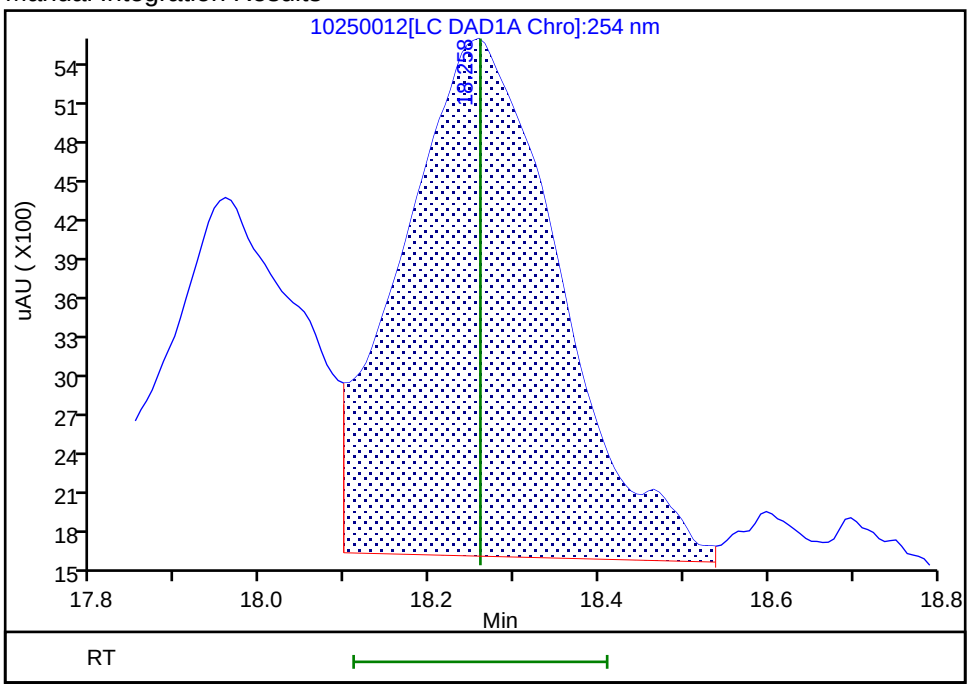
Processing Integration Results

RT: 18.26
Area: 48865
Amount: 0.107068
Amount Units: ug/ml



Manual Integration Results

RT: 18.26
Area: 51241
Amount: 0.111448
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:13:19
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

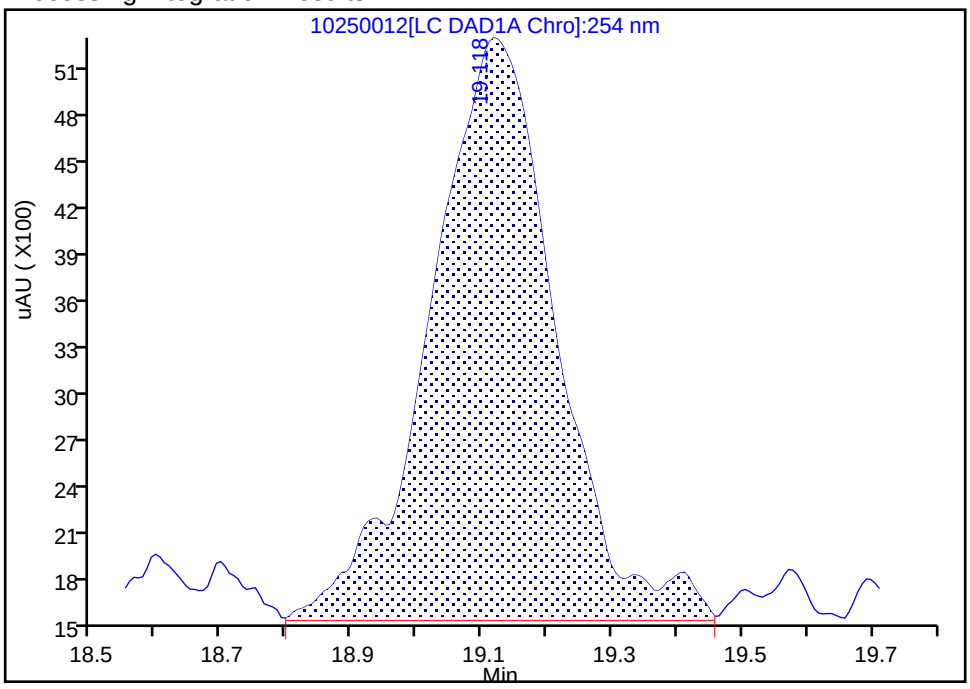
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D				
Injection Date:	25-Oct-2019 22:25:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

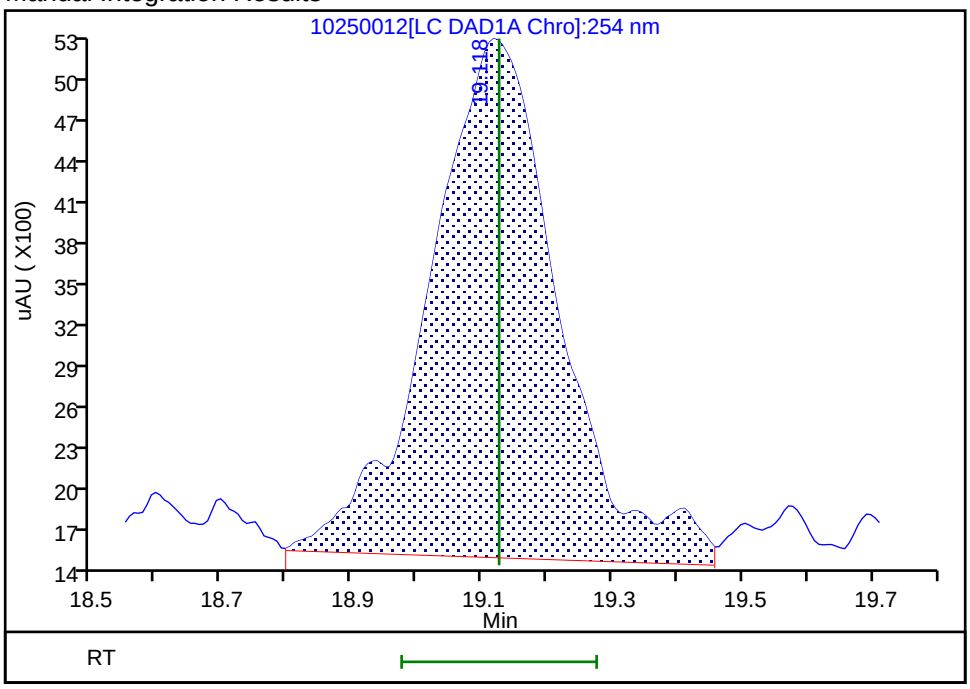
Processing Integration Results

RT: 19.12
Area: 50767
Amount: 0.103265
Amount Units: ug/ml



Manual Integration Results

RT: 19.12
Area: 52905
Amount: 0.107032
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:13:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

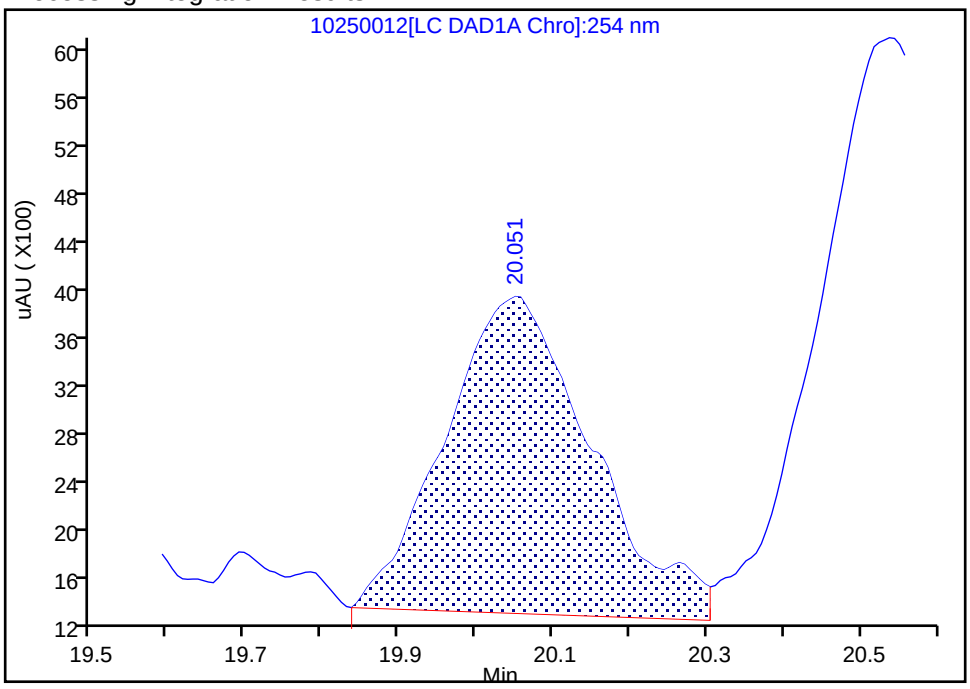
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250012.D				
Injection Date:	25-Oct-2019 22:25:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

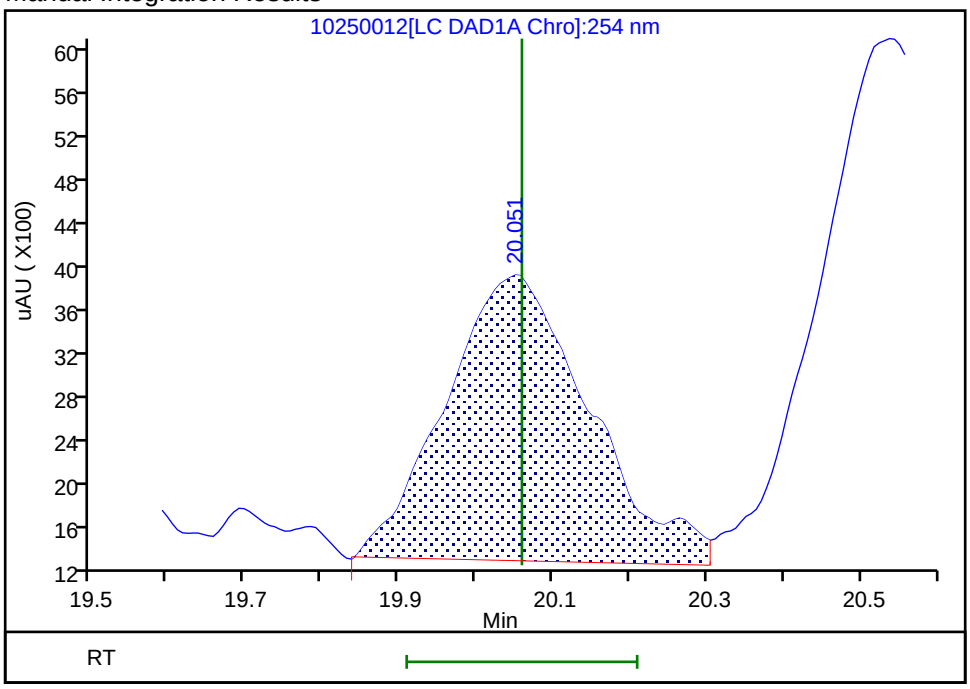
Processing Integration Results

RT: 20.05
Area: 34390
Amount: 0.106093
Amount Units: ug/ml



Manual Integration Results

RT: 20.05
Area: 33396
Amount: 0.103422
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:13:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250013.D
Lims ID: IC FULL LV 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Oct-2019 23:00:18 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 2
Misc. Info.: 280-0086515-013
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 15:39:57 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 26-Oct-2019 10:14:09

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1	4.463	4.453	0.010	22117	0.0500	0.0294	
2	2,4-diamino-6-nitrotoluene	1	5.003	5.006	-0.003	14824	0.0500	0.0459	
5	2,4,6-Trinitrophenol	1	5.697	5.680	0.017	9058	0.0500	0.0582	
6	HMX	1	7.070	7.080	-0.010	11393	0.0500	0.0579	M
8	RDX	1	9.270	9.286	-0.016	15449	0.0500	0.0524	
9	Nitrobenzene	1	12.257	12.279	-0.022	21036	0.0501	0.0363	
$ 10	1,2-Dinitrobenzene	1	13.197	13.219	-0.022	18321	0.0500	0.0426	
11	3,5-Dinitroaniline	1	15.070	14.939	0.131	26041	0.0500	0.0487	
12	1,3-Dinitrobenzene	1	15.723	15.759	-0.036	39507	0.0501	0.0601	
13	Nitroglycerin	2	15.997	16.019	-0.022	66943	0.5000	0.4967	
14	o-Nitrotoluene	1	16.730	16.773	-0.043	16091	0.0502	0.0576	
15	p-Nitrotoluene	1	16.990	17.053	-0.063	13964	0.0502	0.0625	
16	4-Amino-2,6-dinitrotoluene	1	17.337	17.386	-0.049	17206	0.0502	0.0529	
17	m-Nitrotoluene	1	17.943	17.979	-0.036	16928	0.0502	NQ	
18	2-Amino-4,6-dinitrotoluene	1	18.237	18.259	-0.022	24593	0.0502	0.0535	
19	1,3,5-Trinitrobenzene	1	19.103	19.126	-0.023	25950	0.0500	0.0525	
20	2,6-Dinitrotoluene	1	20.017	20.059	-0.042	17115	0.0502	0.0530	
21	2,4-Dinitrotoluene	1	20.510	20.540	-0.029	31965	0.0501	0.0525	
22	Tetryl	1	23.803	23.806	-0.003	19905	0.0500	0.0563	M
23	2,4,6-Trinitrotoluene	1	24.870	24.900	-0.030	44280	0.0502	0.0626	M
24	PETN	2	25.437	25.440	-0.003	67994	0.5000	0.5171	

QC Flag Legend

Processing Flags
NQ - Not Quantifiable
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00023	Amount Added:	2.50	Units: uL
8330IntermStk_00059	Amount Added:	5.00	Units: uL

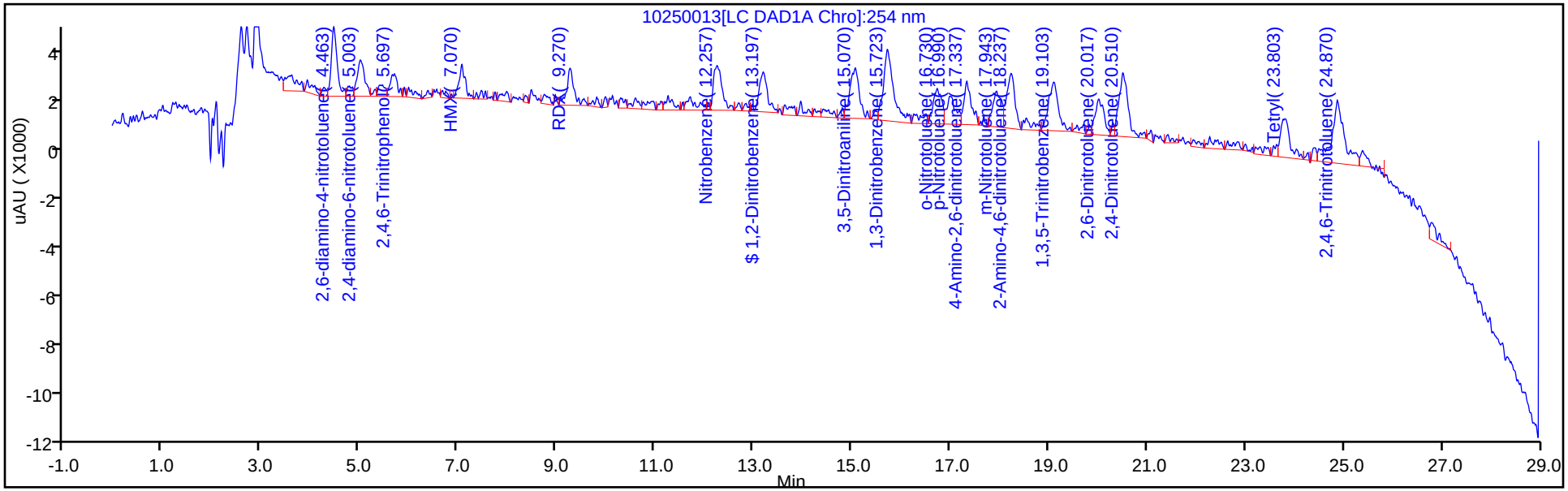
Report Date: 30-Oct-2019 15:39:57 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

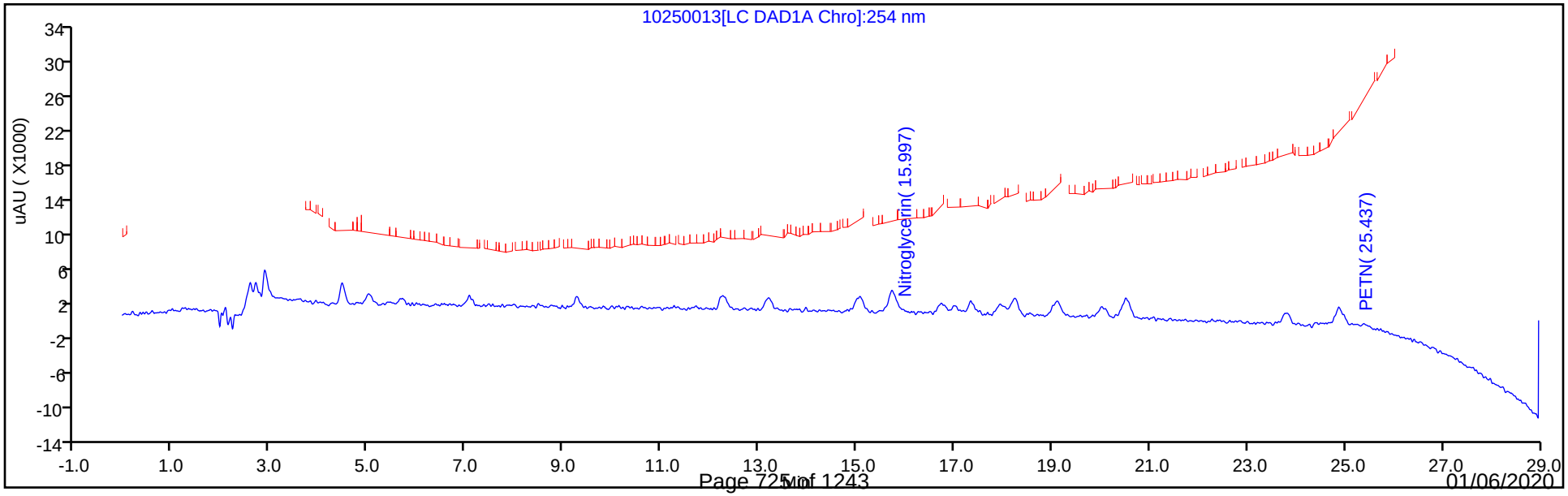
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250013.D

Injection Date:	25-Oct-2019 23:00:18	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

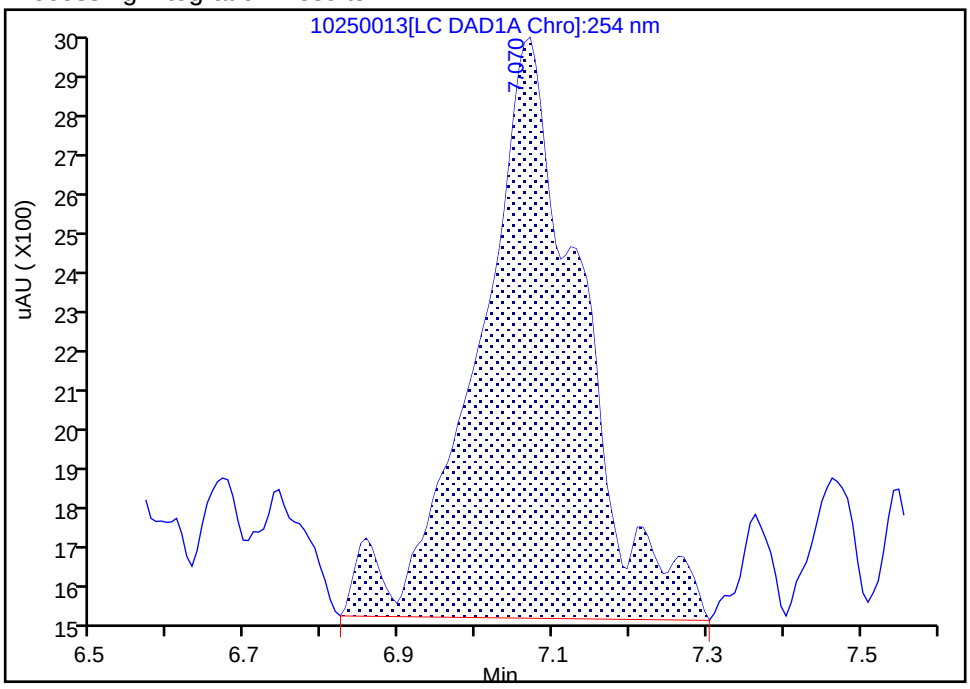
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250013.D				
Injection Date:	25-Oct-2019 23:00:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

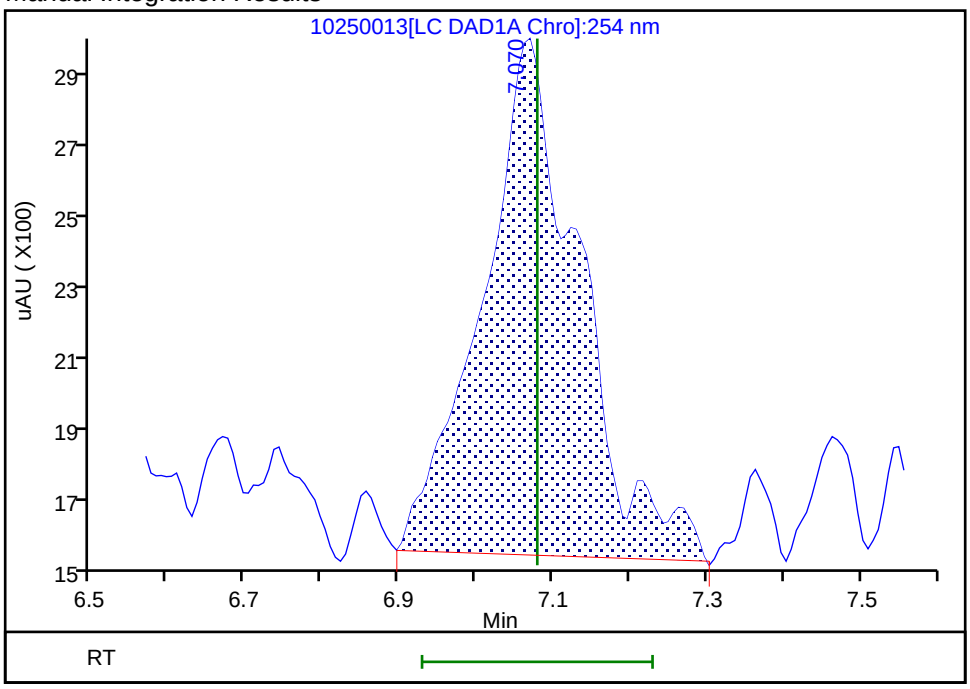
Processing Integration Results

RT: 7.07
Area: 12274
Amount: 0.058704
Amount Units: ug/ml



Manual Integration Results

RT: 7.07
Area: 11393
Amount: 0.057868
Amount Units: ug/ml



Reviewer: beckerc, 30-Oct-2019 15:35:30
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

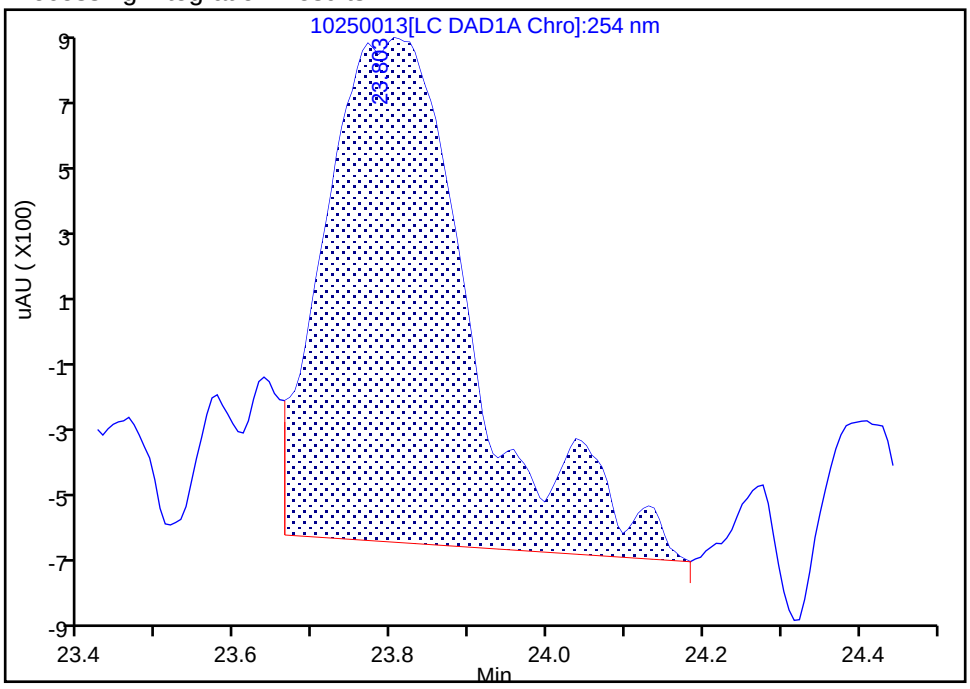
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250013.D
Injection Date: 25-Oct-2019 23:00:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL LV 2
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

22 Tetryl, CAS: 479-45-8

Signal: 1

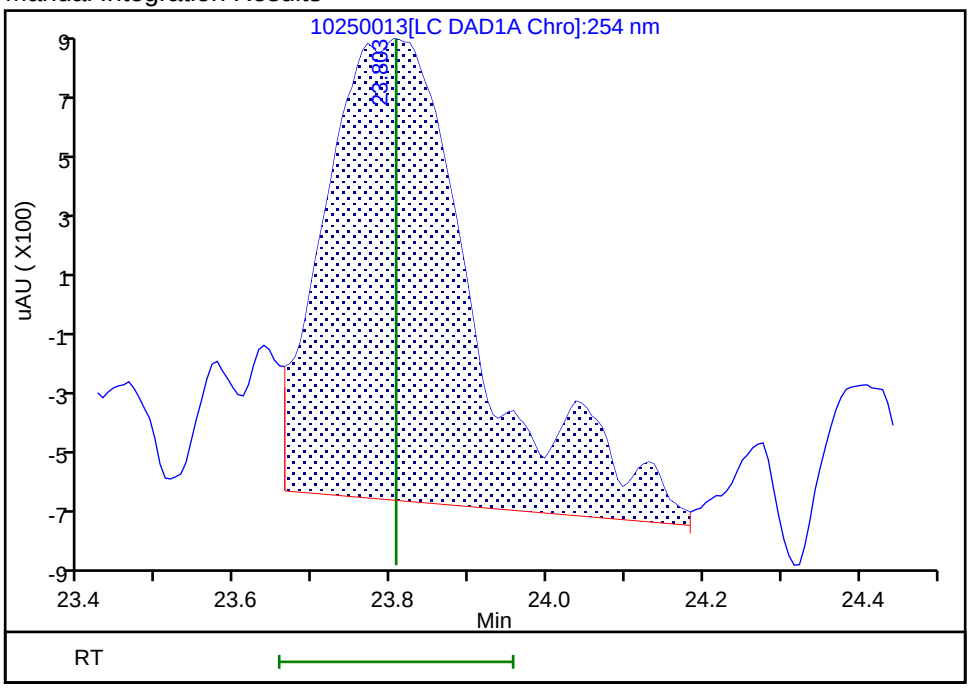
Processing Integration Results

RT: 23.80
Area: 19109
Amount: 0.054308
Amount Units: ug/ml



Manual Integration Results

RT: 23.80
Area: 19905
Amount: 0.056252
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:14:03
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

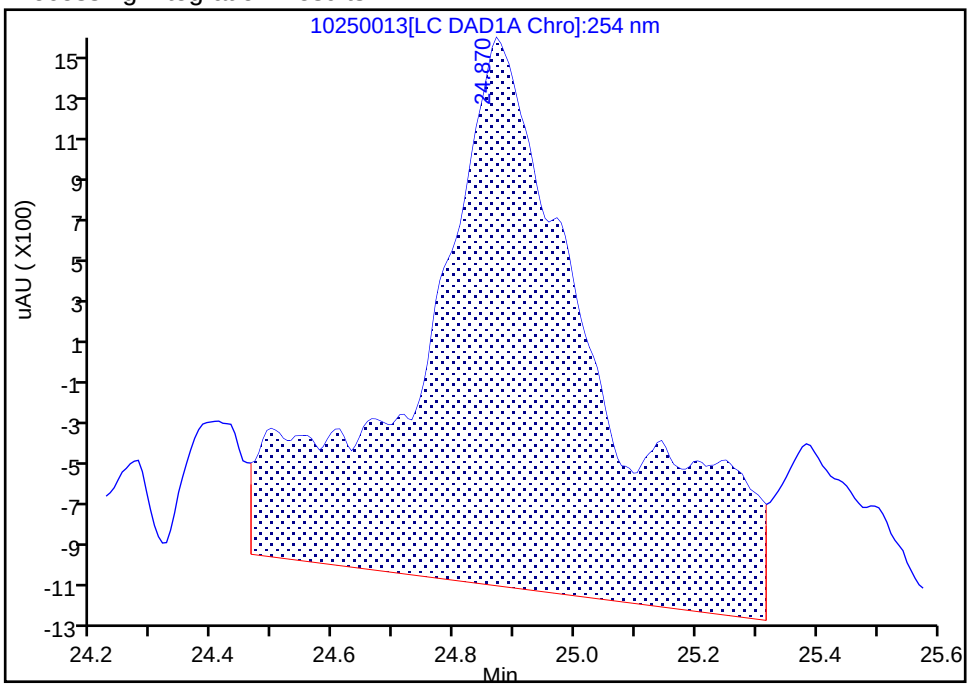
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250013.D				
Injection Date:	25-Oct-2019 23:00:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

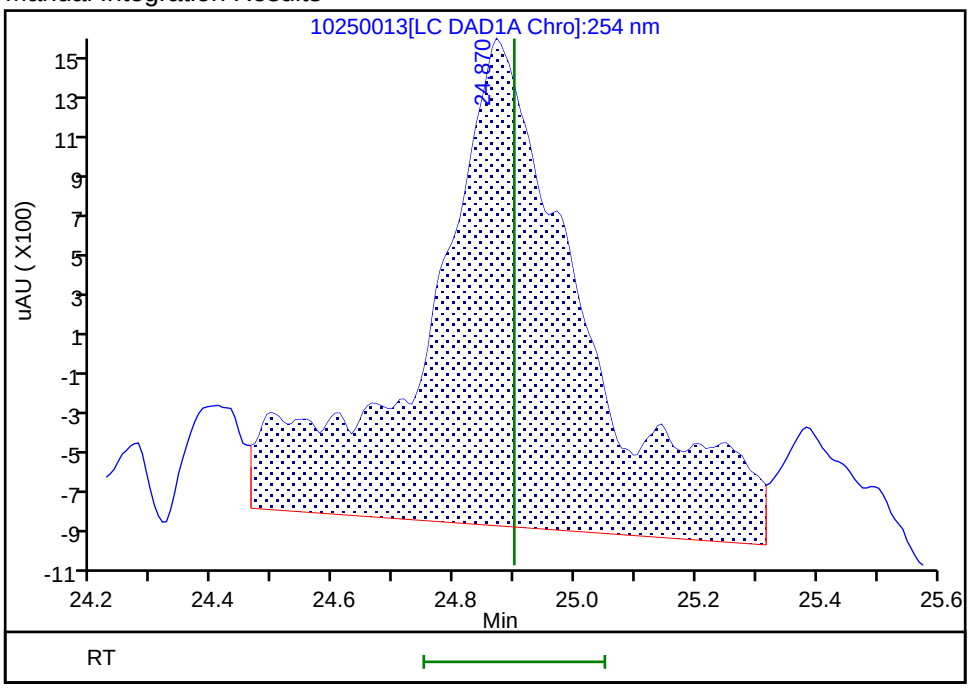
Processing Integration Results

RT: 24.87
Area: 53829
Amount: 0.079667
Amount Units: ug/ml



Manual Integration Results

RT: 24.87
Area: 44280
Amount: 0.062614
Amount Units: ug/ml



Reviewer: beckerc, 26-Oct-2019 10:14:03

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D
Lims ID: IC FULL LV 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Oct-2019 23:35:16 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 1
Misc. Info.: 280-0086515-014
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 15:39:58 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 30-Oct-2019 15:35:14

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	4.413	4.453	-0.040	10879	0.0200	0.001121	
2 2,4-diamino-6-nitrotoluene	1	4.987	5.006	-0.019	11055	0.0200	0.0343	
5 2,4,6-Trinitrophenol	1	5.807	5.680	0.127	6691	0.0200	0.0478	
6 HMX	1	7.067	7.080	-0.013	4919	0.0200	0.0250	M
8 RDX	1	9.287	9.286	0.001	8040	0.0200	0.0193	
9 Nitrobenzene	1	12.280	12.279	0.001	17953	0.0200	0.0284	
$ 10 1,2-Dinitrobenzene	1	13.220	13.219	0.001	12454	0.0200	0.0212	
11 3,5-Dinitroaniline	1	15.073	14.939	0.134	10781	0.0200	0.0197	
12 1,3-Dinitrobenzene	1	15.747	15.759	-0.012	10048	0.0200	0.0153	
13 Nitroglycerin	2	16.027	16.019	0.008	28567	0.2000	0.2119	
14 o-Nitrotoluene	1	16.753	16.773	-0.020	7204	0.0201	0.0258	
15 p-Nitrotoluene	1	17.060	17.053	0.007	3114	0.0201	0.0139	
16 4-Amino-2,6-dinitrotoluene	1	17.267	17.386	-0.119	5417	0.0201	0.0167	
17 m-Nitrotoluene	1	17.873	17.979	-0.106	4786	0.0201	NQ	
18 2-Amino-4,6-dinitrotoluene	1	18.193	18.259	-0.066	8233	0.0201	0.0179	
19 1,3,5-Trinitrobenzene	1	19.087	19.126	-0.039	10930	0.0200	0.0221	
20 2,6-Dinitrotoluene	1	20.047	20.059	-0.012	8706	0.0201	0.0270	
21 2,4-Dinitrotoluene	1	20.533	20.540	-0.006	13949	0.0200	0.0229	
22 Tetryl	1	23.787	23.806	-0.019	6981	0.0200	0.0197	
23 2,4,6-Trinitrotoluene	1	24.907	24.900	0.007	24190	0.0201	0.0163	
24 PETN	2	25.447	25.440	0.007	22319	0.2000	0.1697	

QC Flag Legend

Processing Flags
NQ - Not Quantifiable
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00059	Amount Added:	2.00	Units: uL
8330_ADDs_00023	Amount Added:	1.00	Units: uL

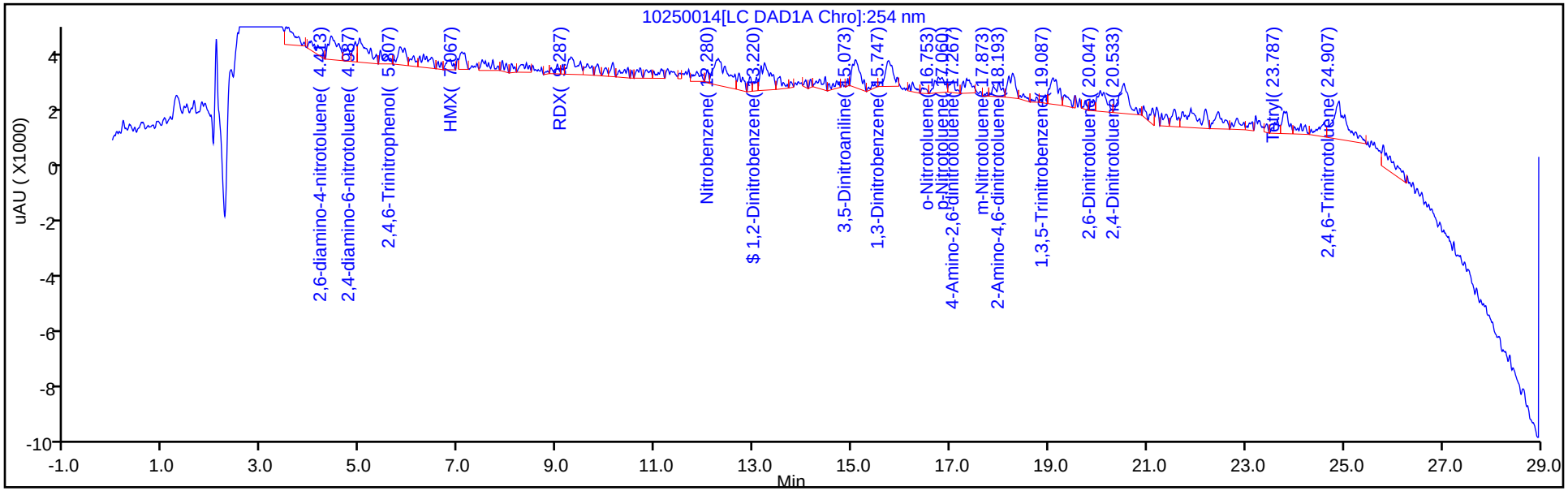
Report Date: 30-Oct-2019 15:39:58 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

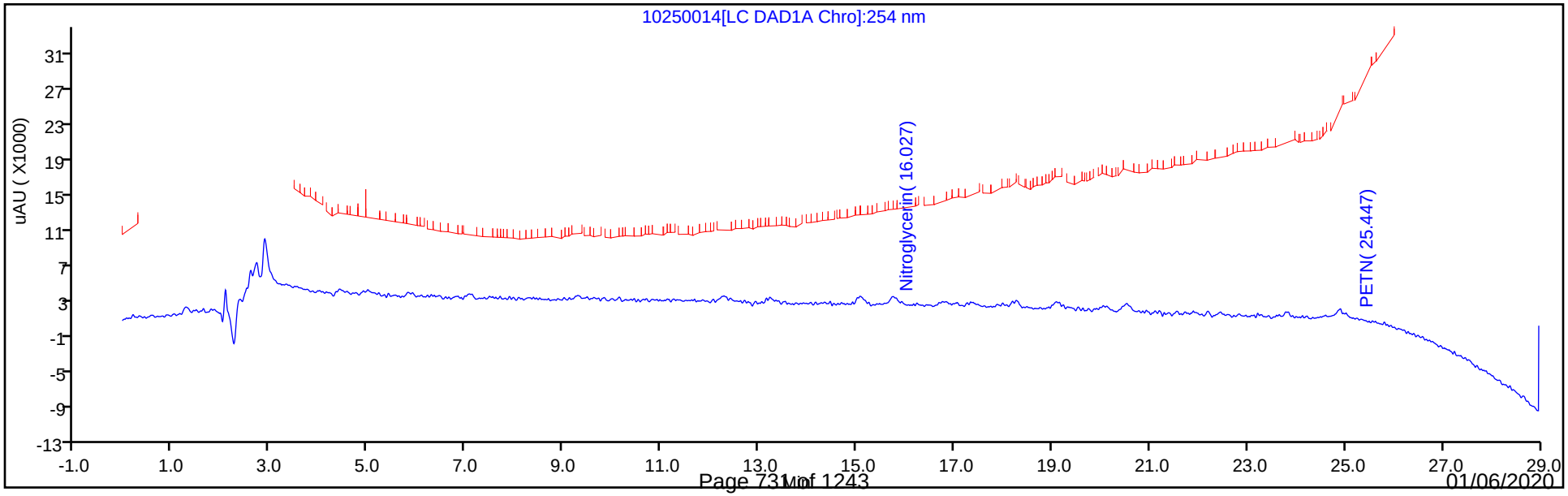
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Injection Date:	25-Oct-2019 23:35:16	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

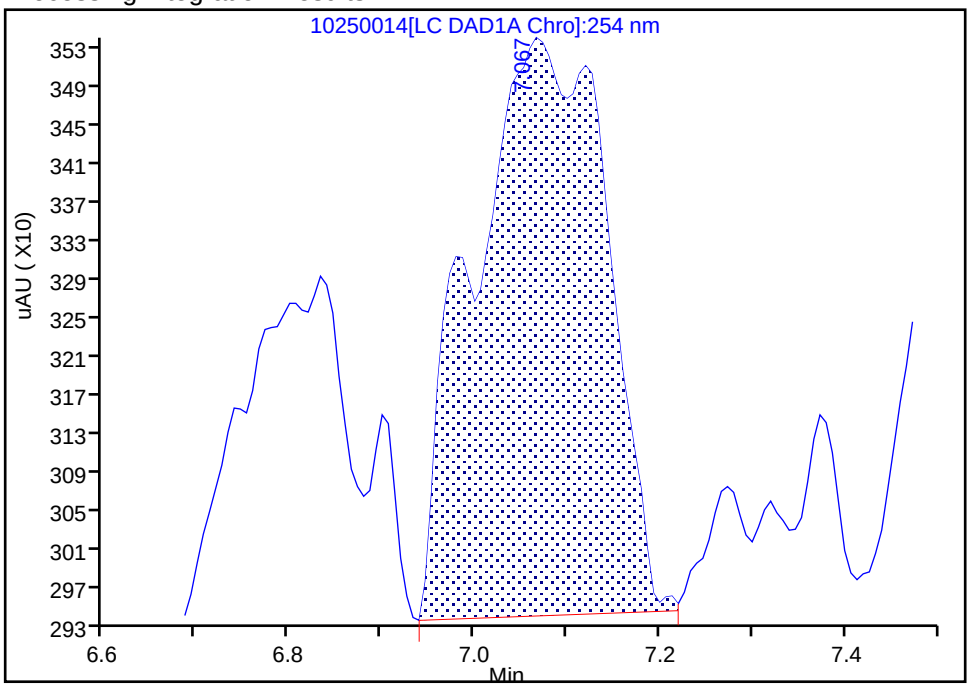
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D				
Injection Date:	25-Oct-2019 23:35:16	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

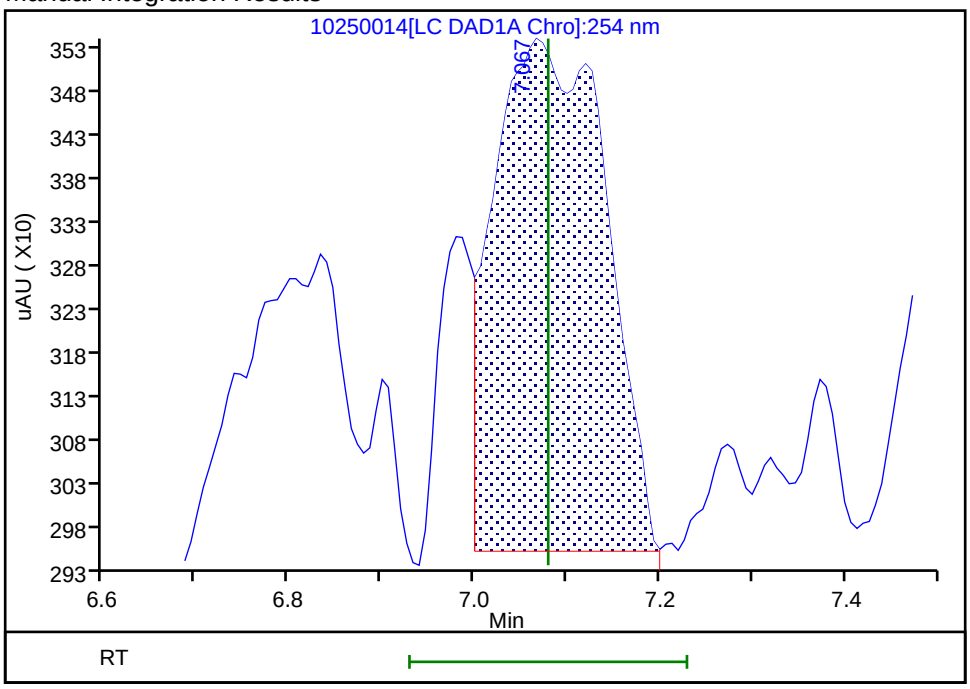
Processing Integration Results

RT: 7.07
Area: 5995
Amount: 0.027779
Amount Units: ug/ml



Manual Integration Results

RT: 7.07
Area: 4919
Amount: 0.024985
Amount Units: ug/ml



Reviewer: beckerc, 30-Oct-2019 15:35:10

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.: 280-129936-1 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.: 280-129936-1 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 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		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.: 280-129936-1 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.: 280-129936-1 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.: 280-129936-1 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:

8330IntermStk_00058 Amount Added: 125.00 Units: uL

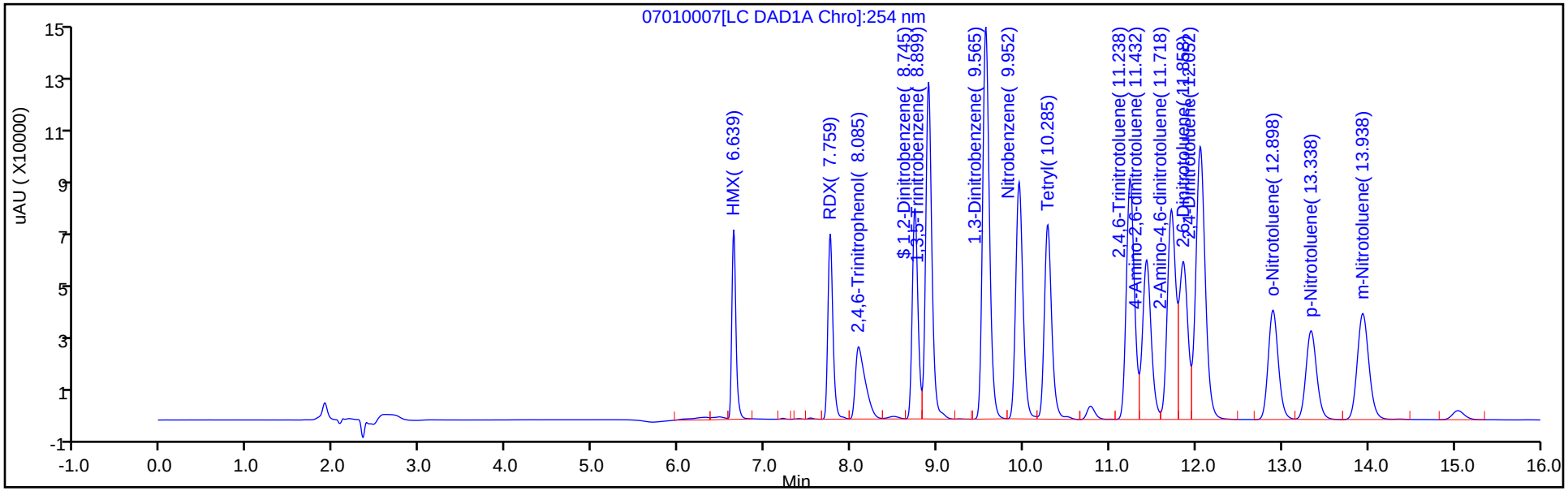
Report Date: 02-Jul-2019 11:34:44 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

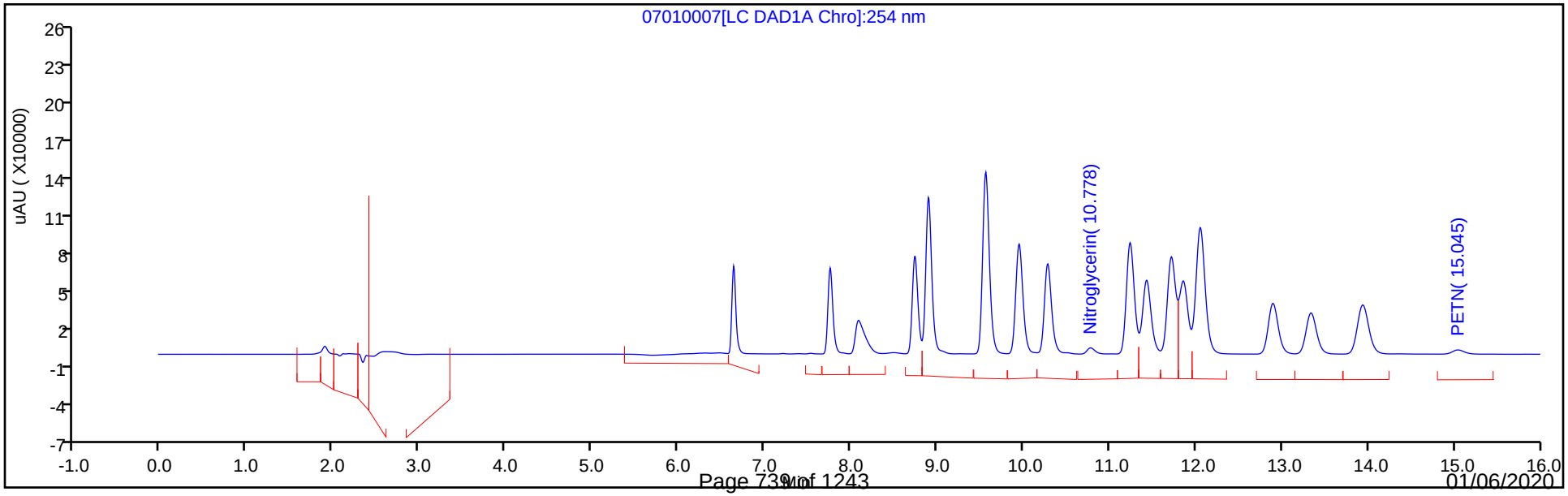
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010007.D

Injection Date:	01-Jul-2019 14:40:42	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L8			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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:

8330IntermStk_00058 Amount Added: 50.00 Units: uL

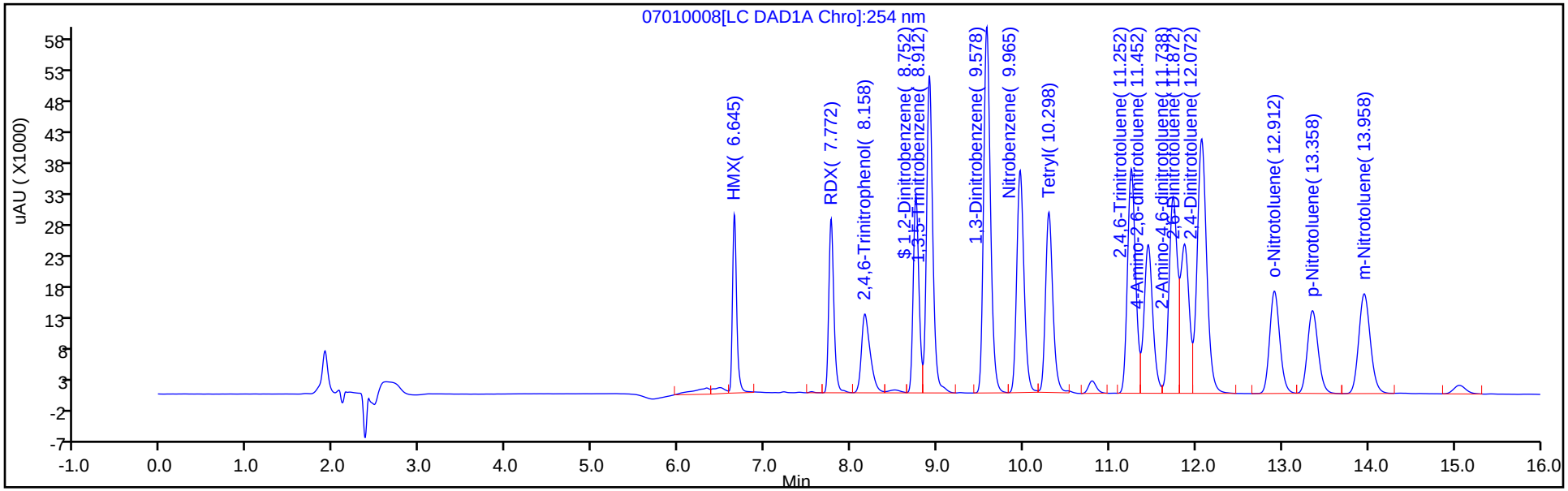
Report Date: 02-Jul-2019 11:34:46 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

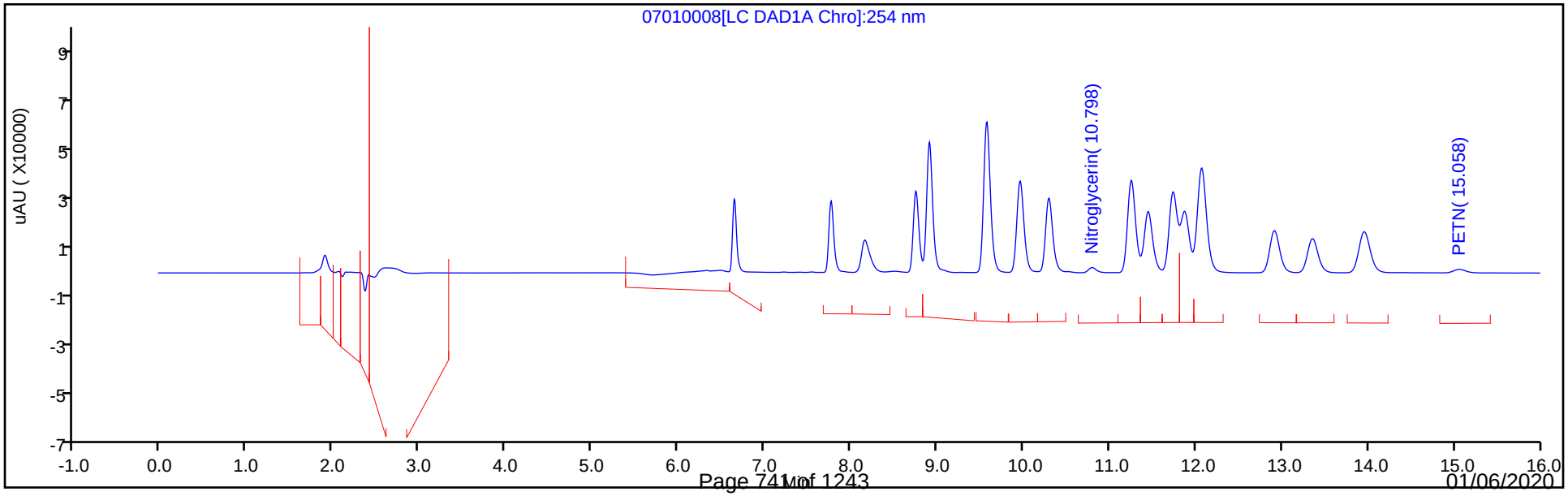
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010008.D

Injection Date:	01-Jul-2019 15:04:44	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L7			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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:

8330IntermStk_00058 Amount Added: 35.00 Units: uL

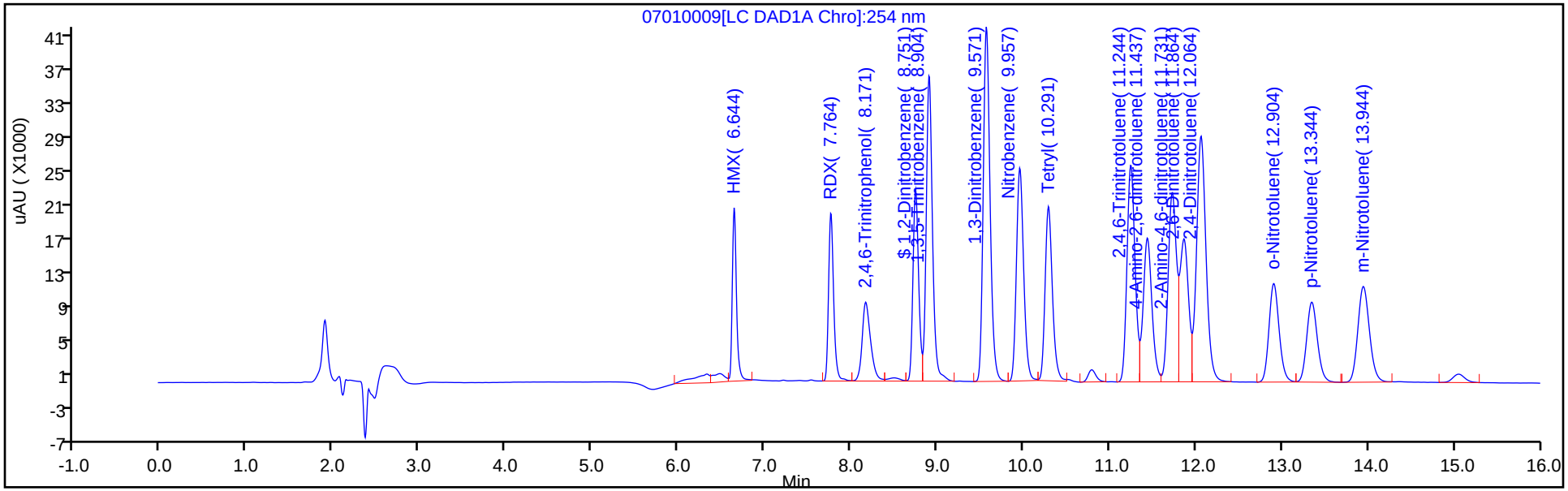
Report Date: 02-Jul-2019 11:34:48 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

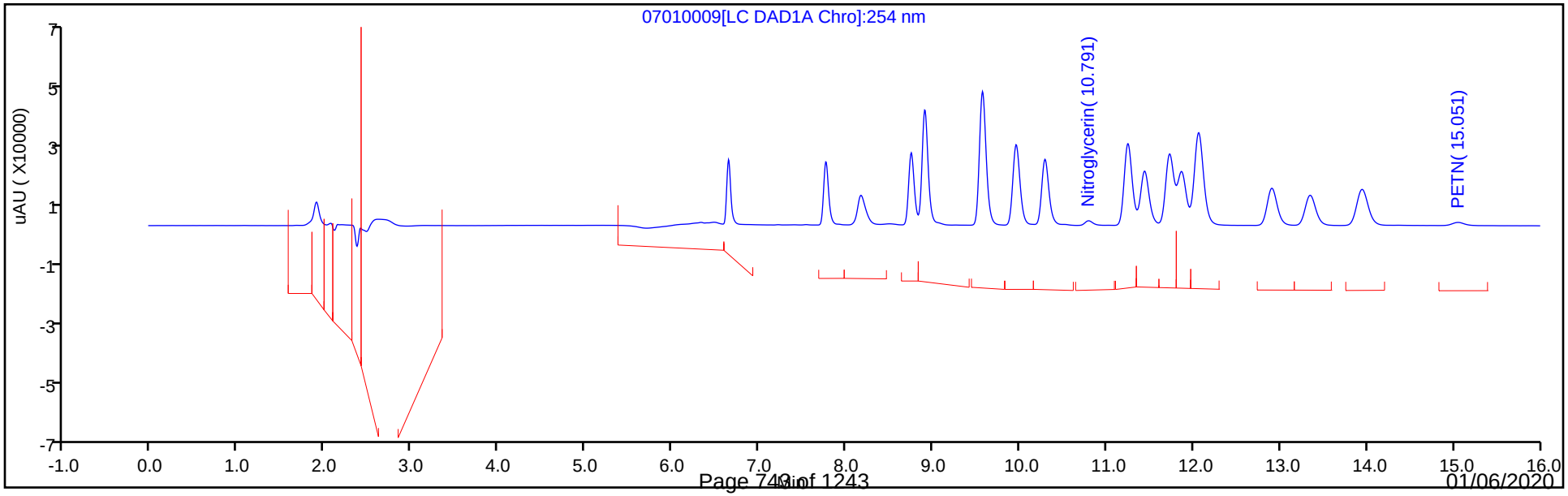
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010009.D

Injection Date:	01-Jul-2019 15:27:41	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L6			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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:

8330IntermStk_00058 Amount Added: 20.00 Units: uL

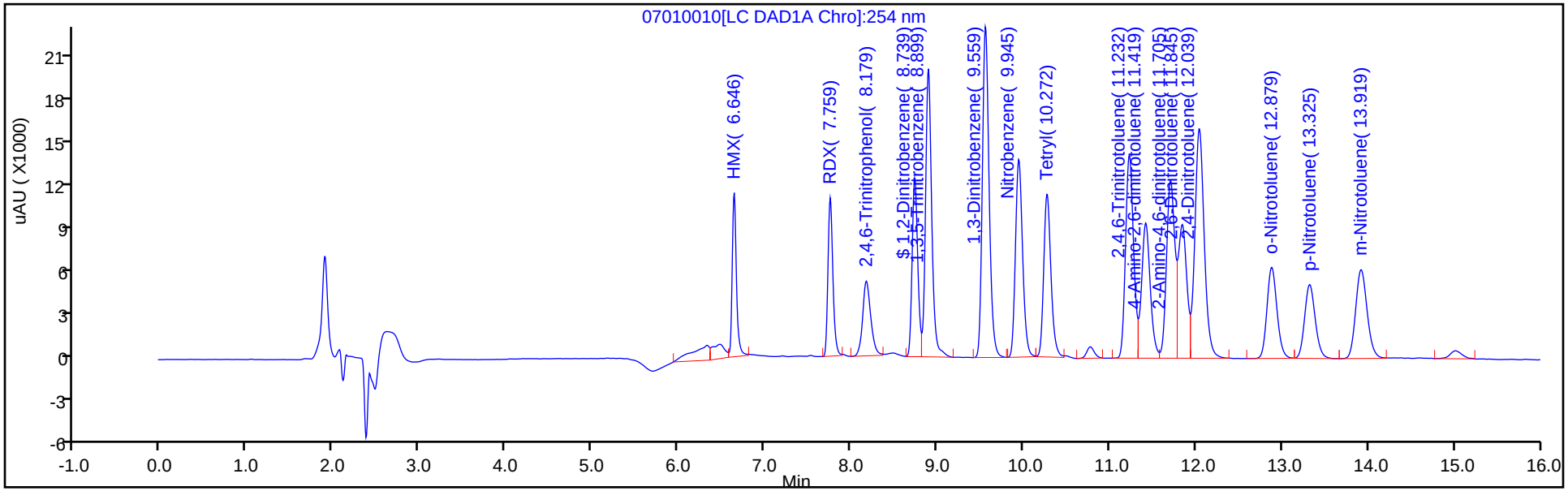
Report Date: 02-Jul-2019 11:34:50 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

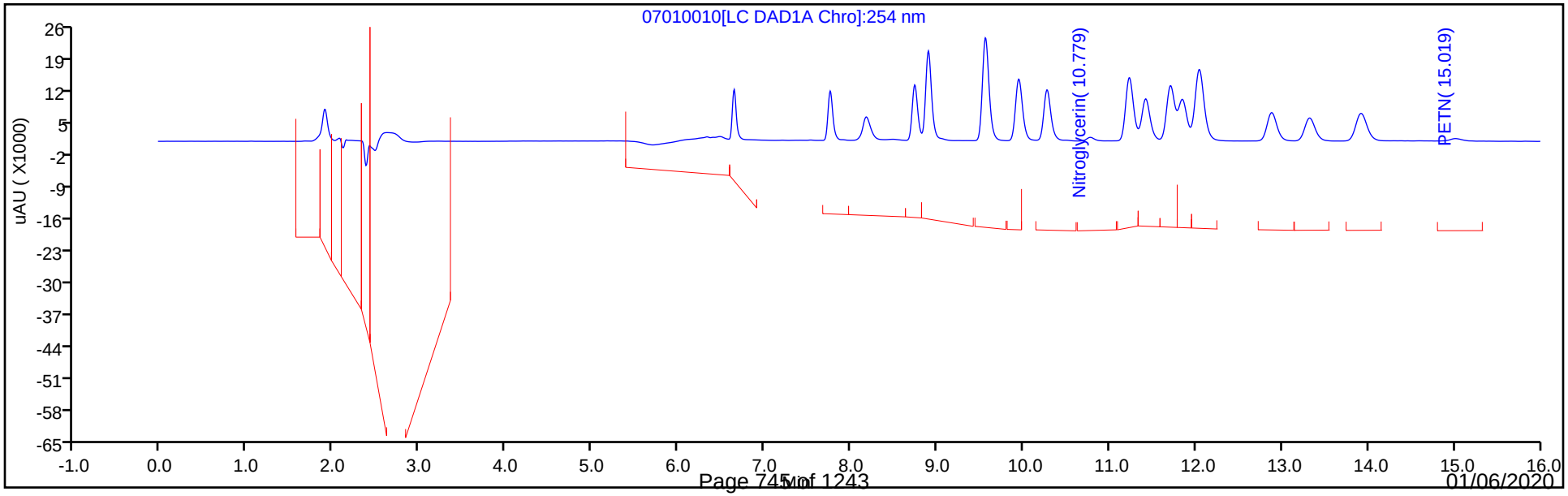
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010010.D

Injection Date:	01-Jul-2019 15:50:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L5			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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

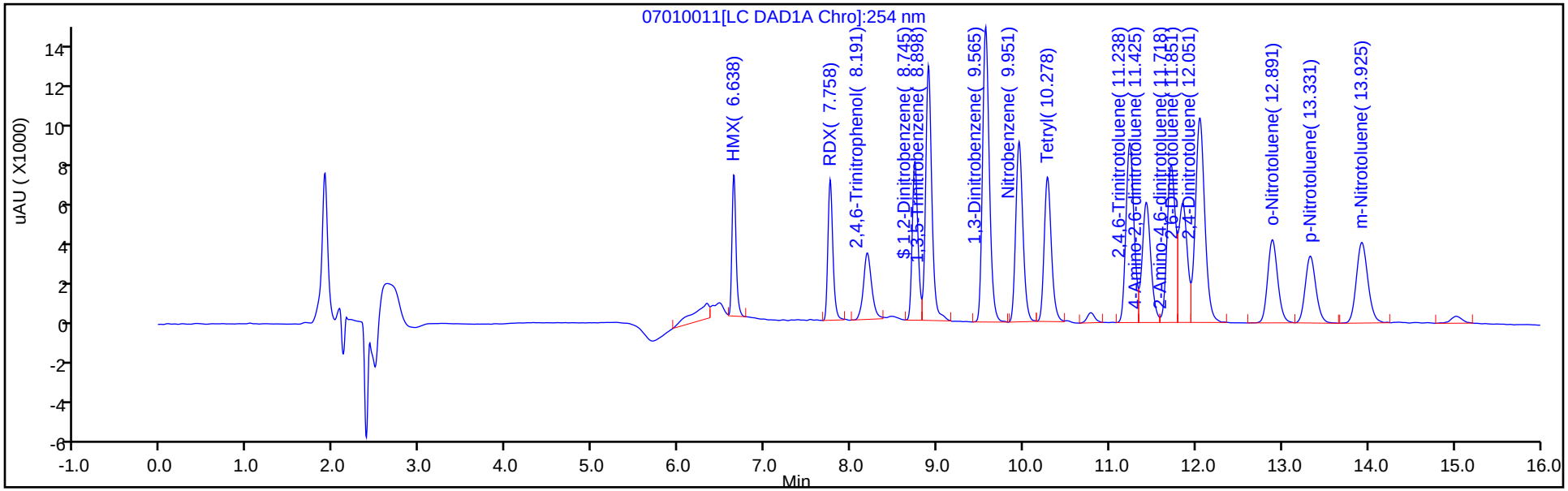
Report Date: 02-Jul-2019 11:34:51 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

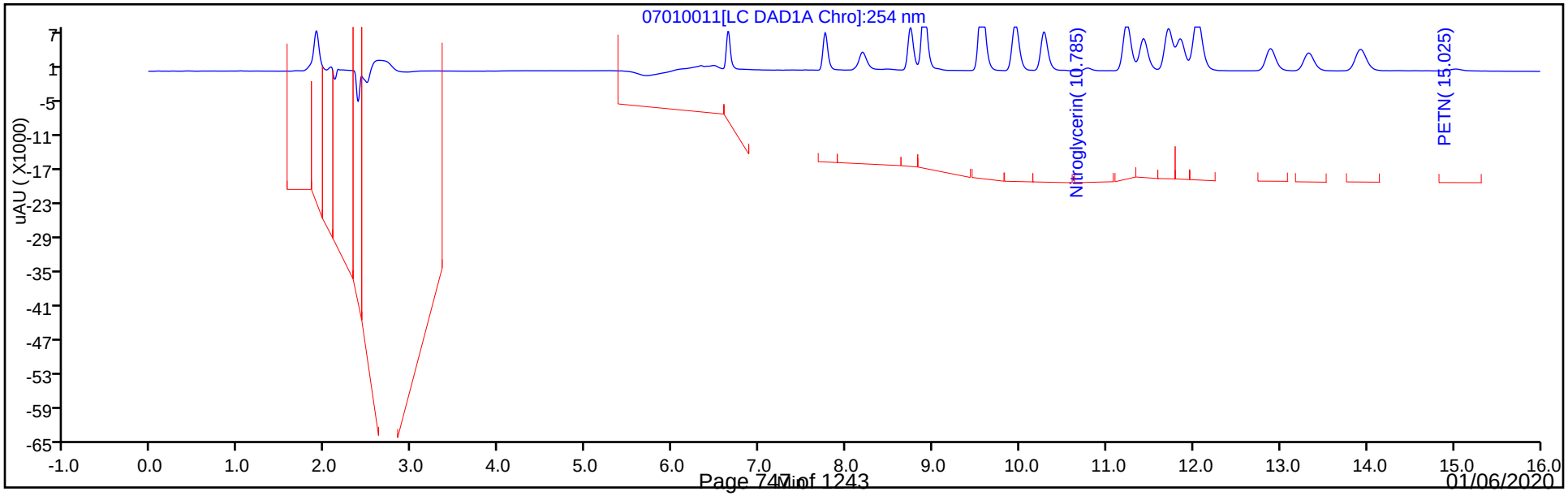
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010011.D

Injection Date:	01-Jul-2019 16:13:37	Instrument ID:	CHHPLC_X3	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\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

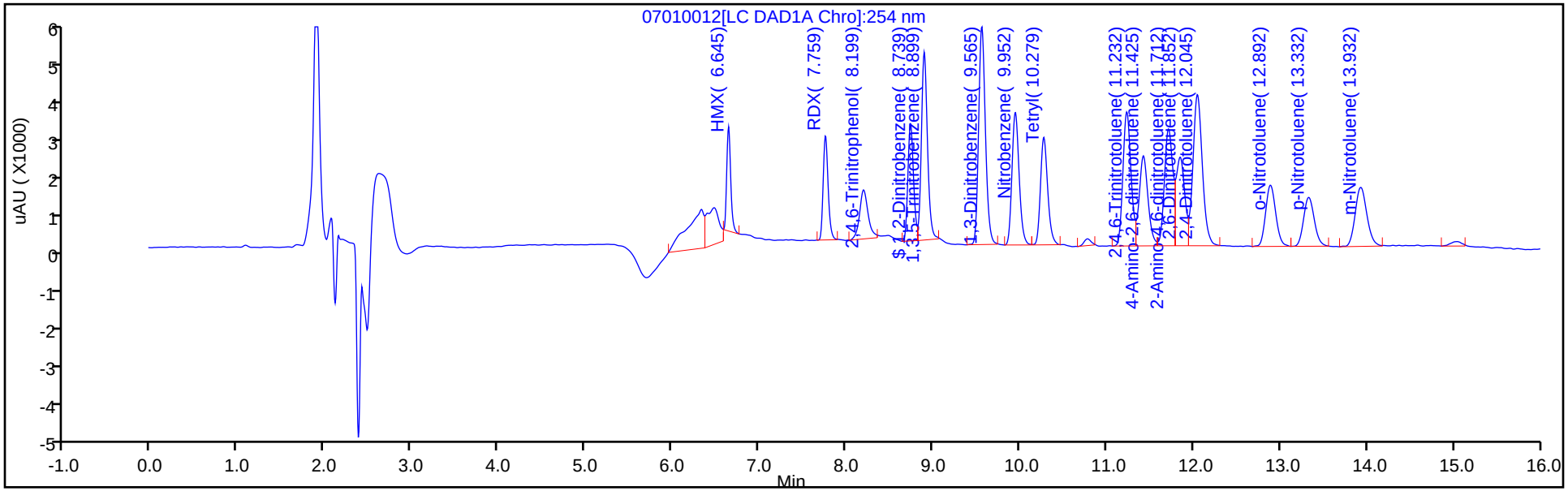
Report Date: 02-Jul-2019 11:34:53 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

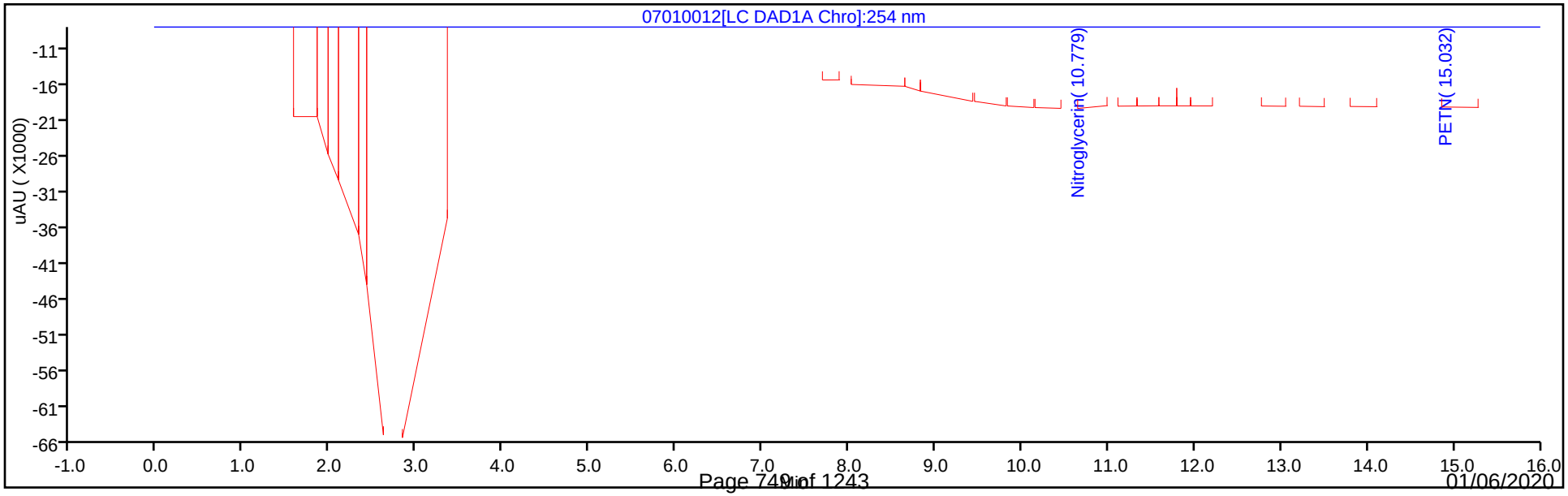
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D

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

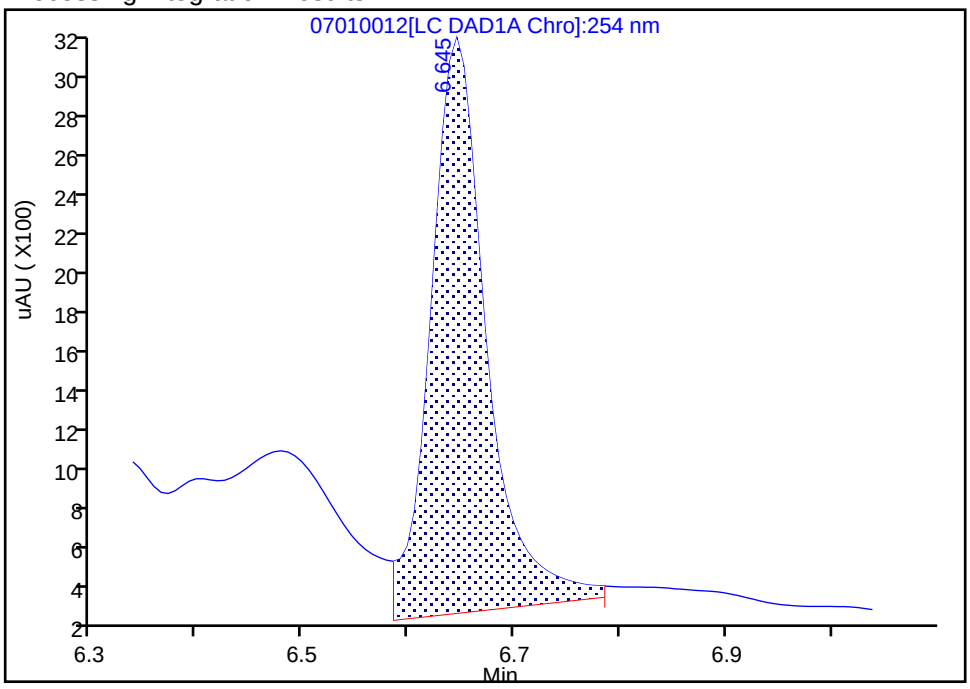
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D
Injection Date: 01-Jul-2019 16:36:33 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L3
Client ID:
Operator ID: hkf ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

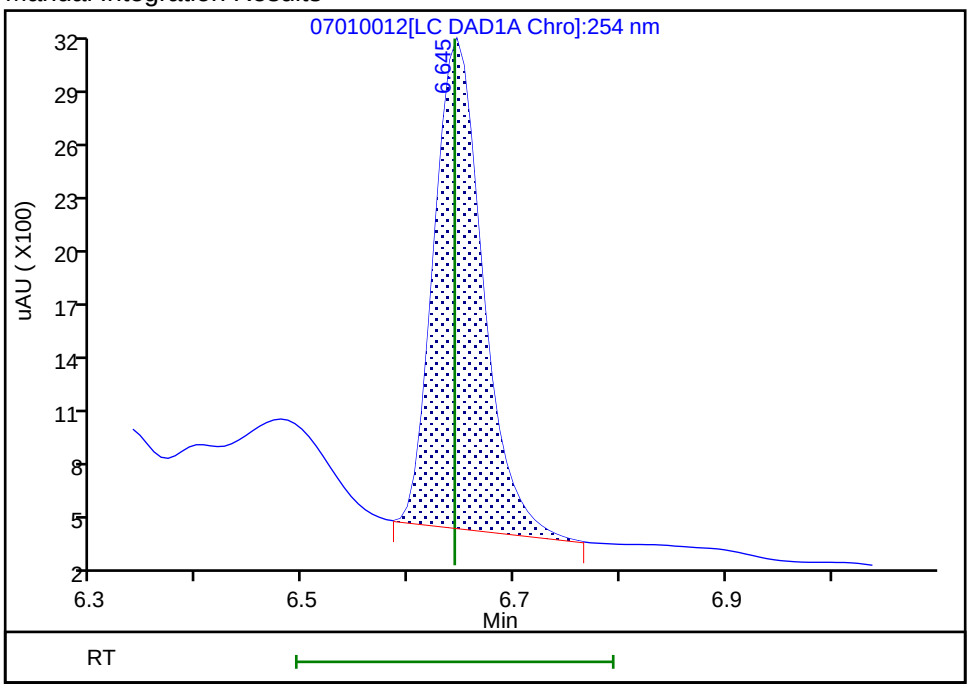
Processing Integration Results

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

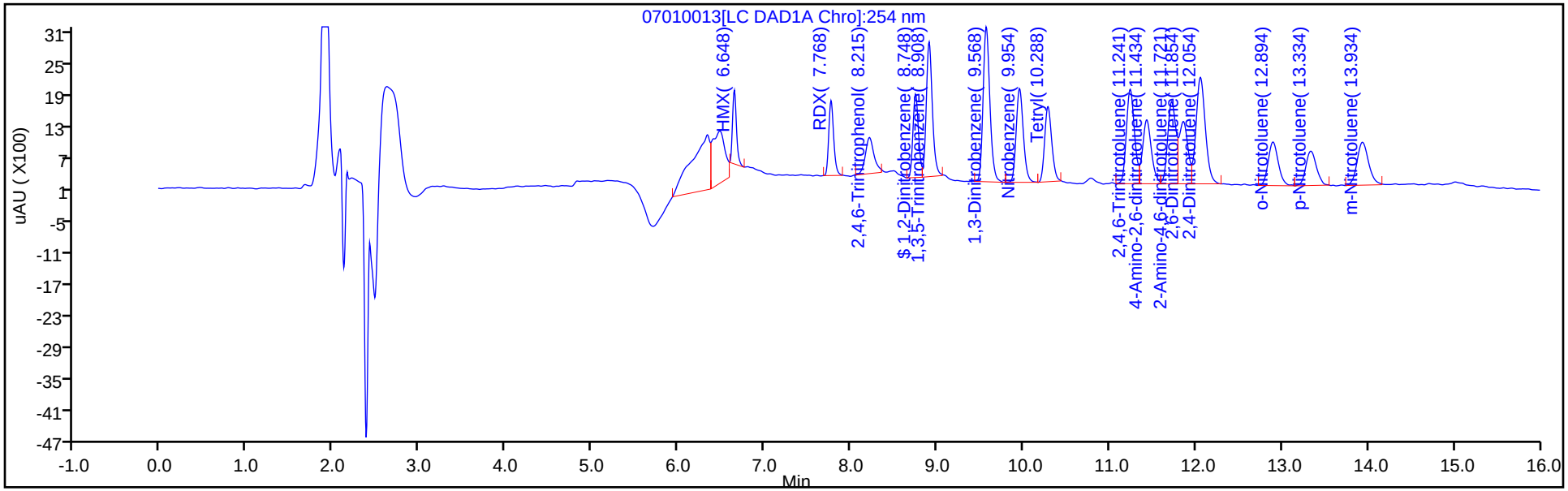
Report Date: 02-Jul-2019 11:34:55 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

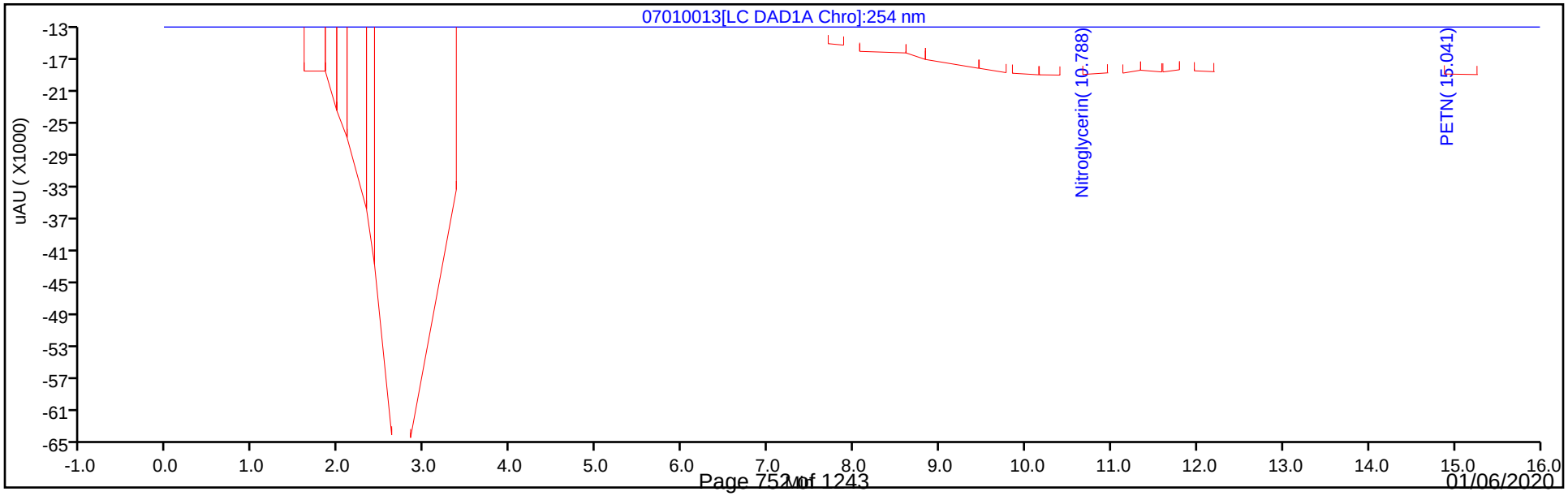
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



01/06/2020

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

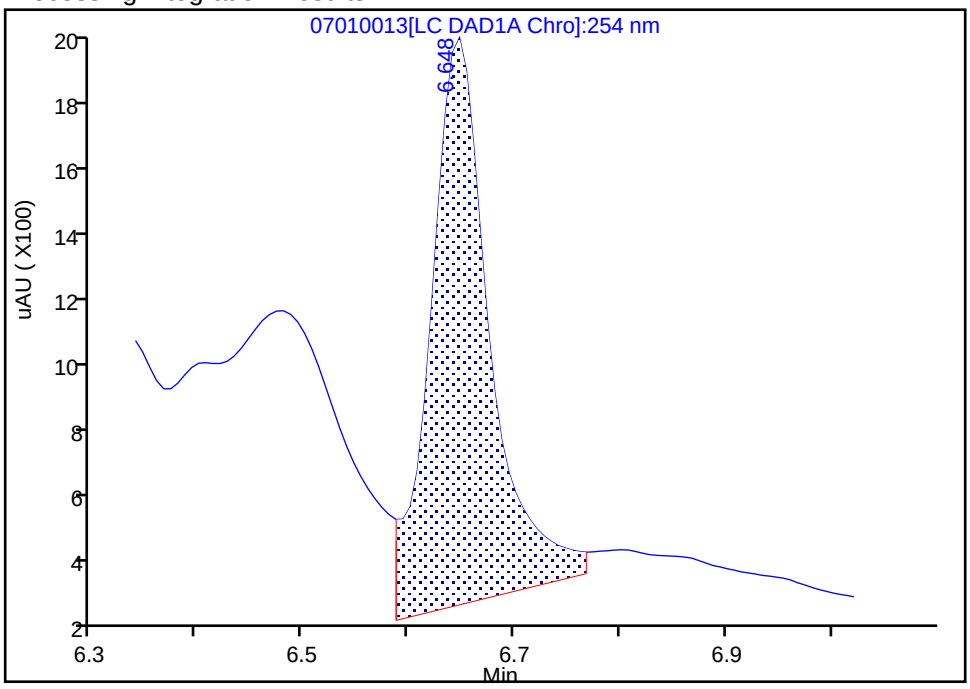
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D				
Injection Date:	01-Jul-2019 17:00:38	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

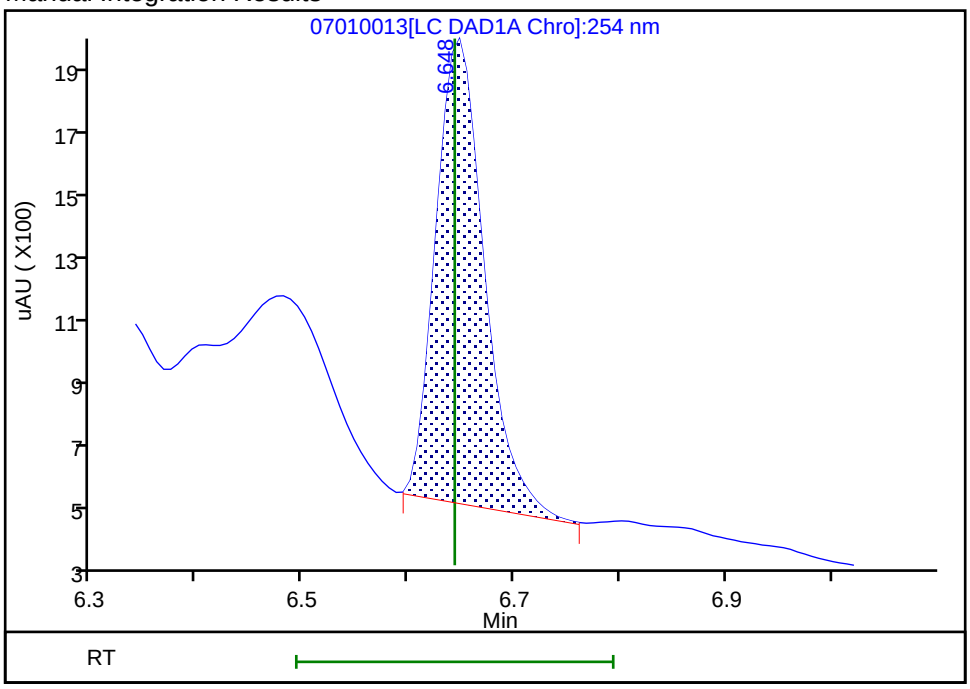
Processing Integration Results

RT: 6.65
Area: 6332
Amount: 0.065662
Amount Units: ug/mL



Manual Integration Results

RT: 6.65
Area: 4492
Amount: 0.048915
Amount Units: ug/mL



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

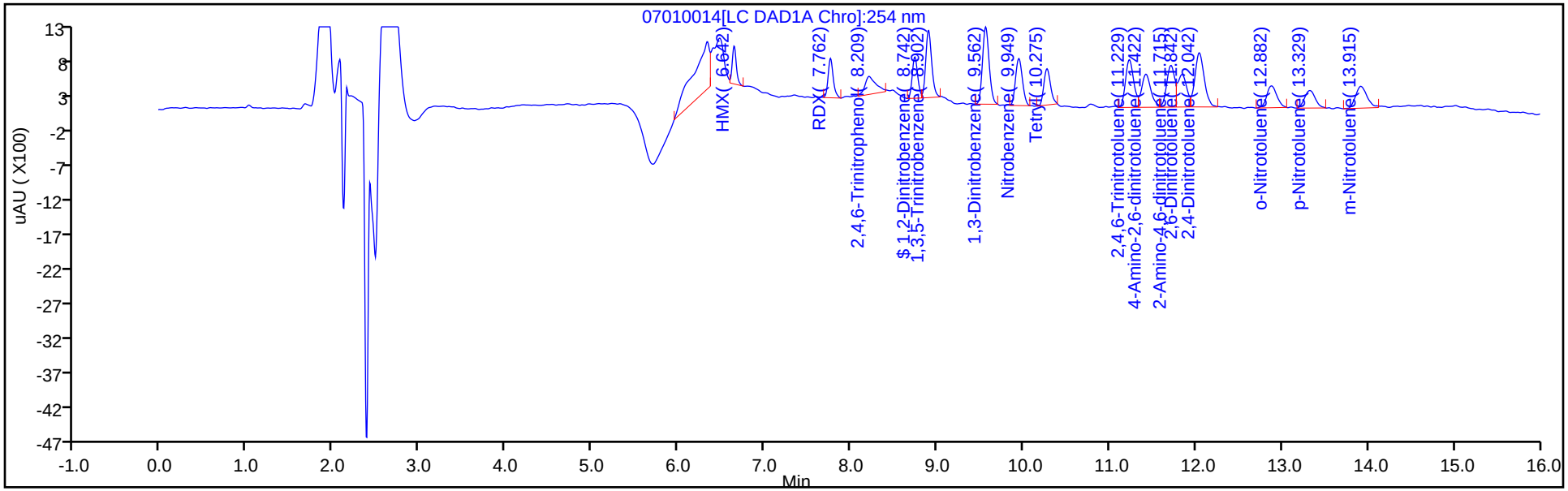
Report Date: 02-Jul-2019 11:34:58 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

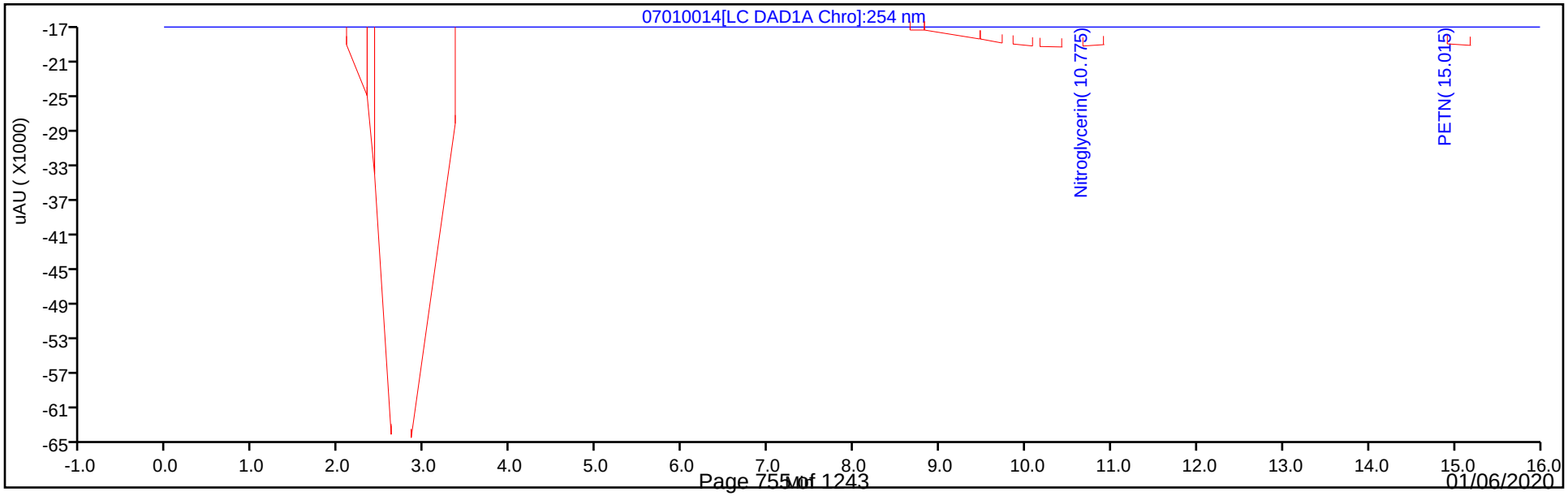
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

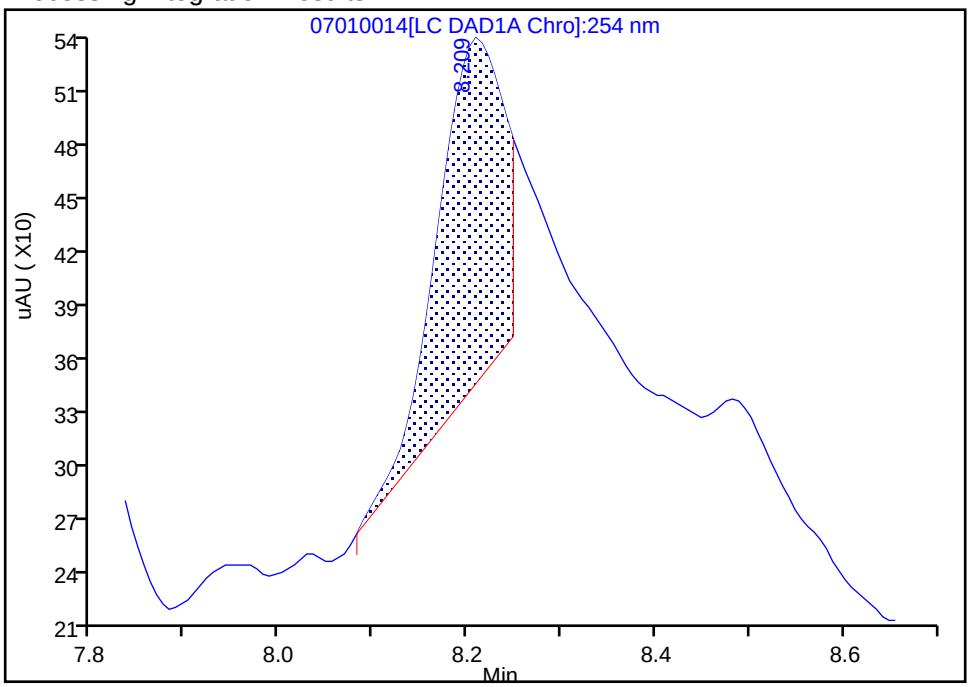
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D
Injection Date: 01-Jul-2019 17:23:38 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L1
Client ID:
Operator ID: hkf ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

8 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

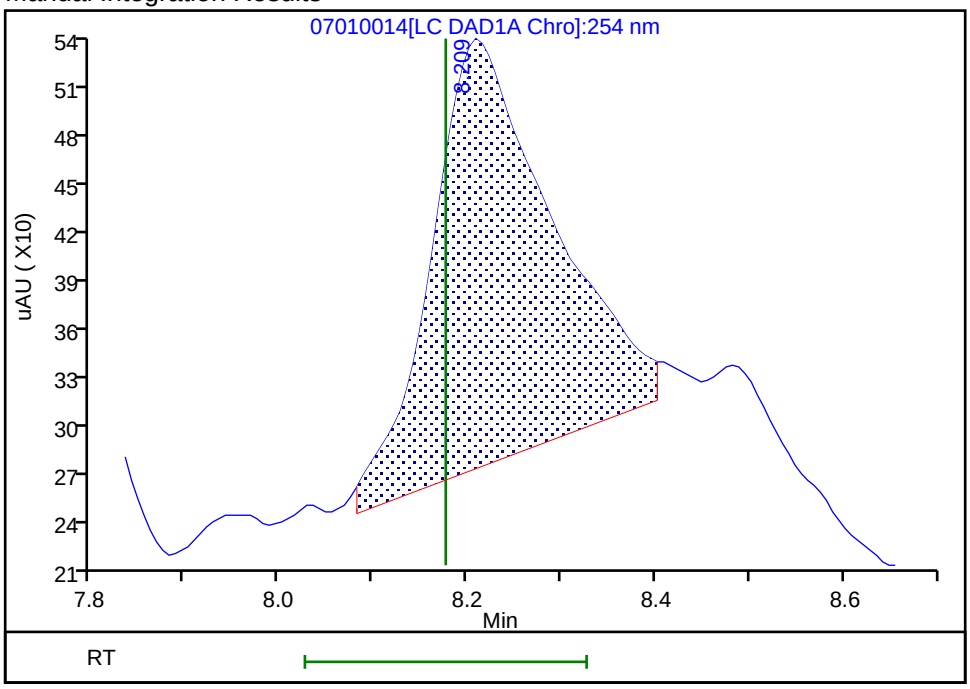
Processing Integration Results

RT: 8.21
Area: 906
Amount: 0.011048
Amount Units: ug/mL



Manual Integration Results

RT: 8.21
Area: 2302
Amount: 0.025371
Amount Units: ug/mL



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.: 280-129936-1 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.: 280-129936-1 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.: 280-129936-1 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

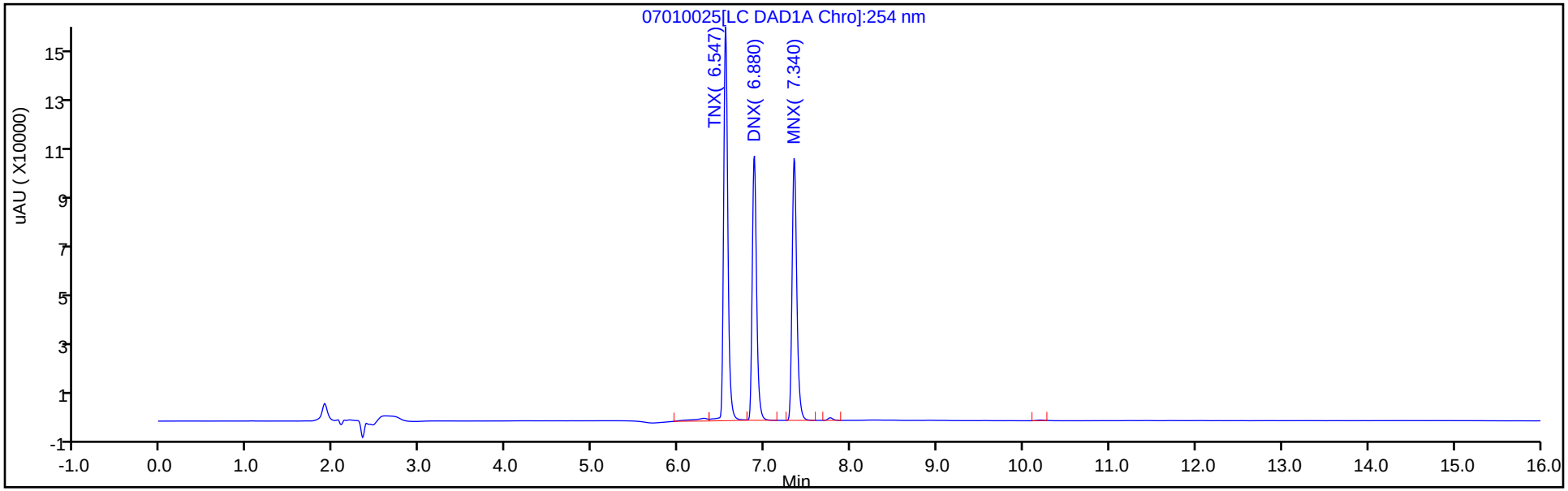
Report Date: 02-Jul-2019 11:35:19 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

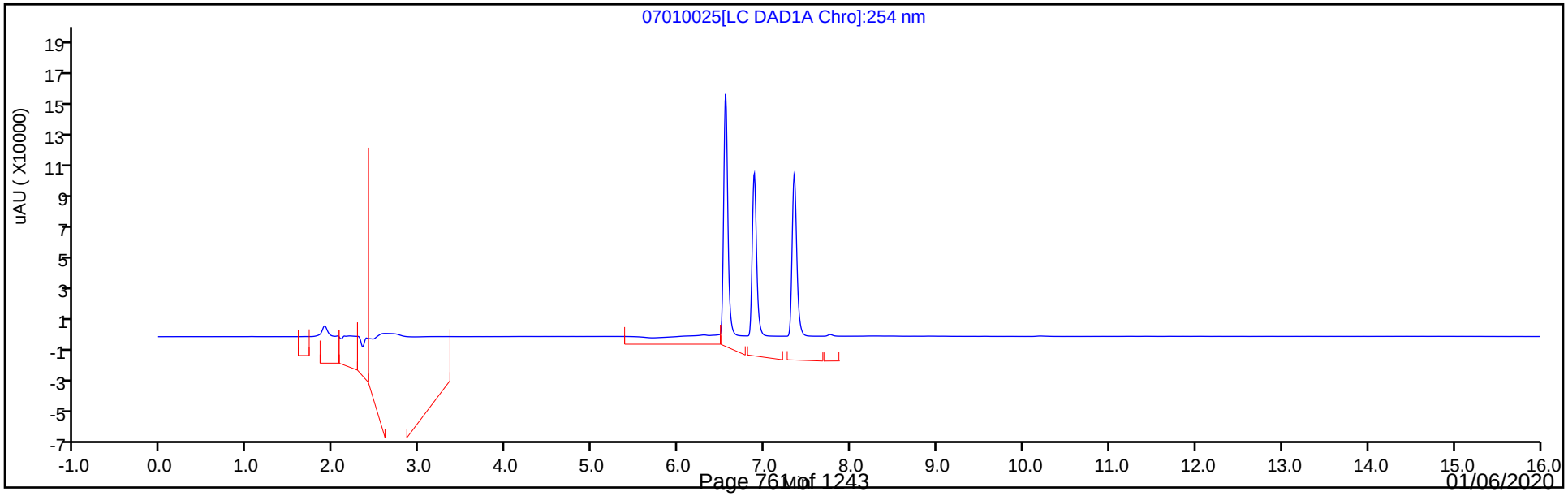
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010025.D

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

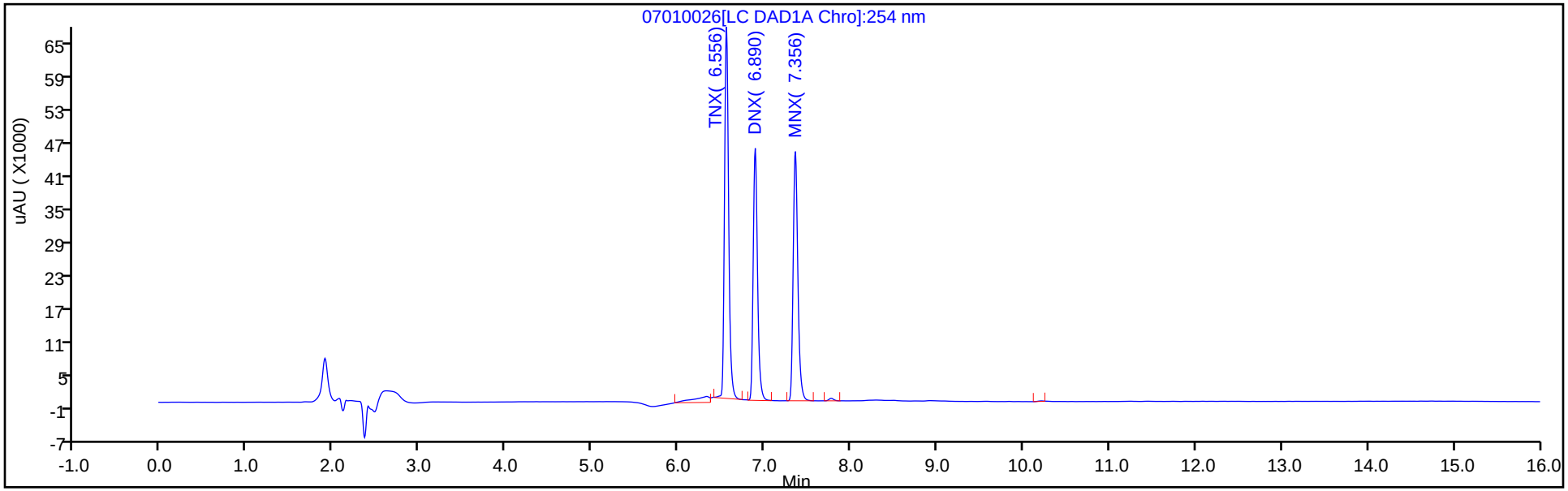
Report Date: 02-Jul-2019 11:35:21 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

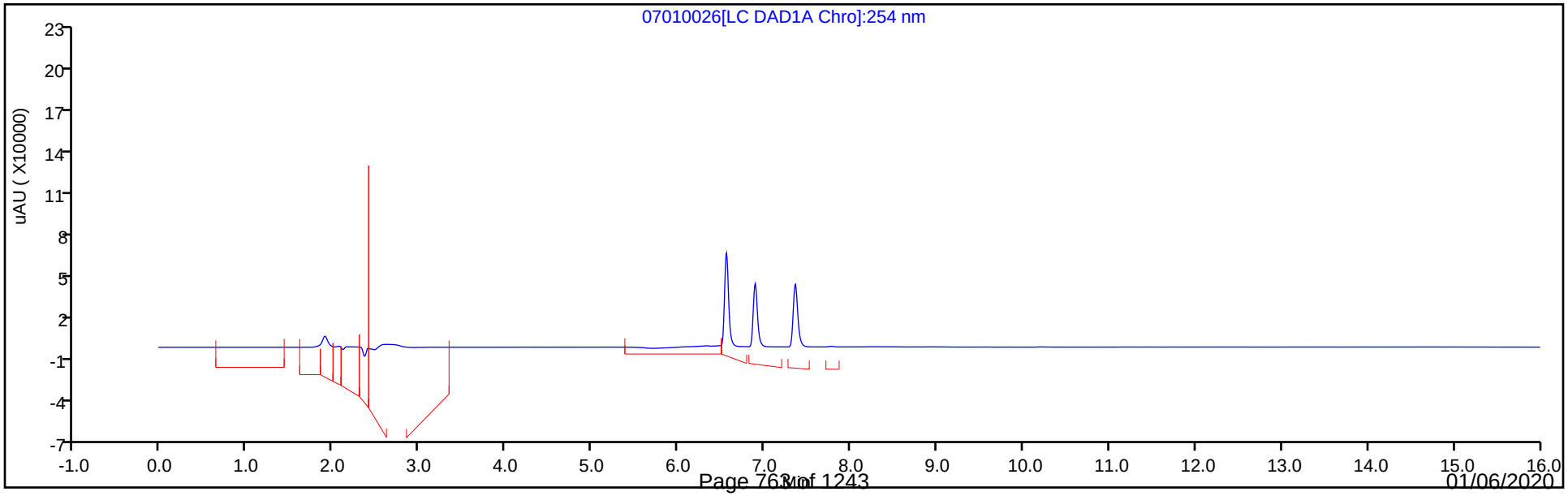
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

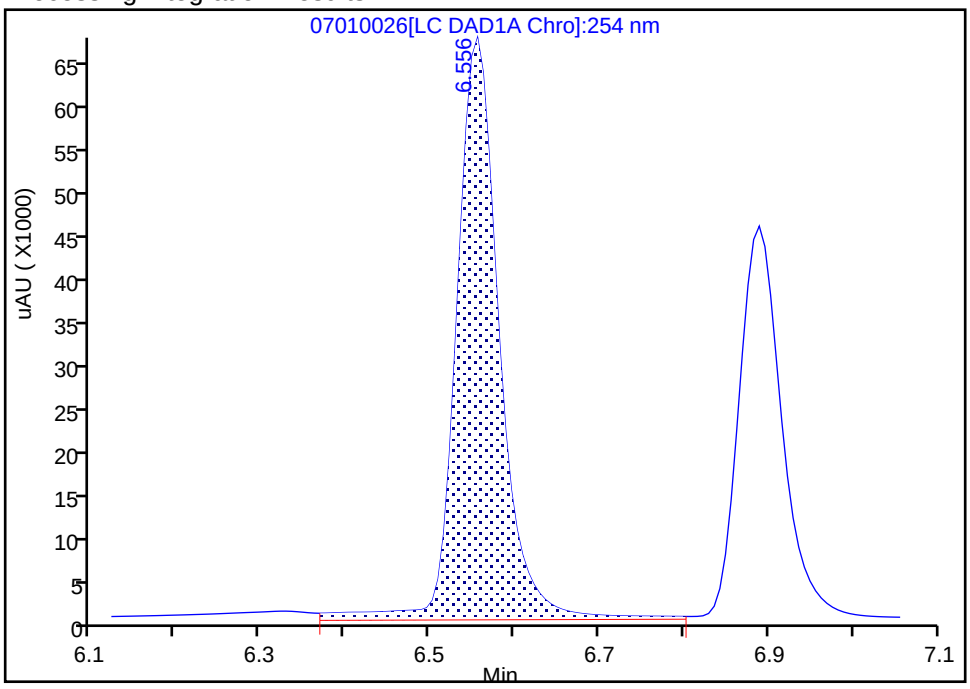
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D				
Injection Date:	01-Jul-2019 22:00:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

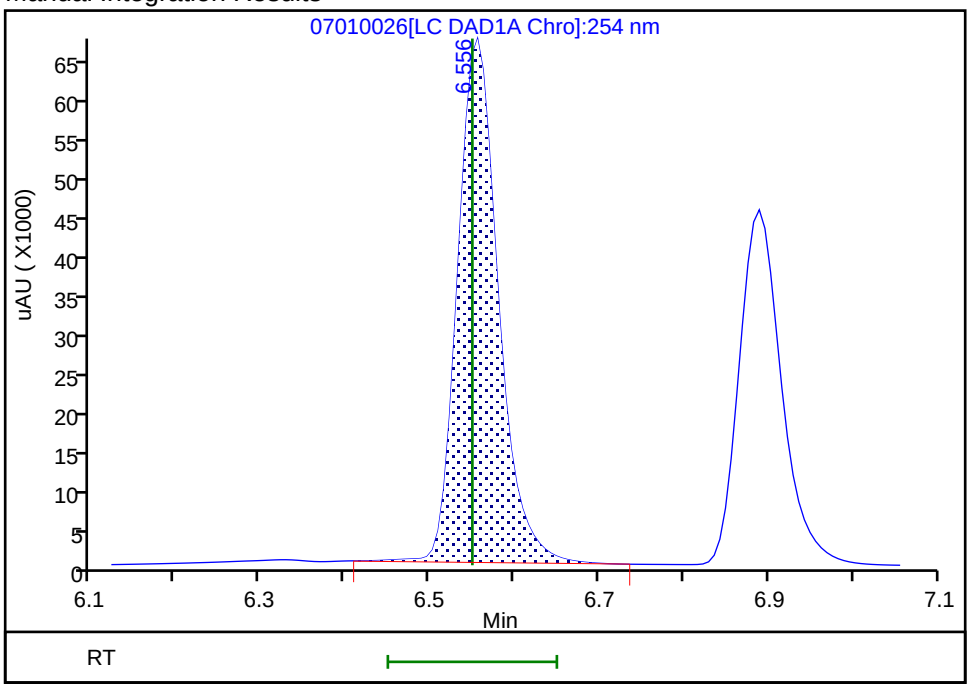
Processing Integration Results

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

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

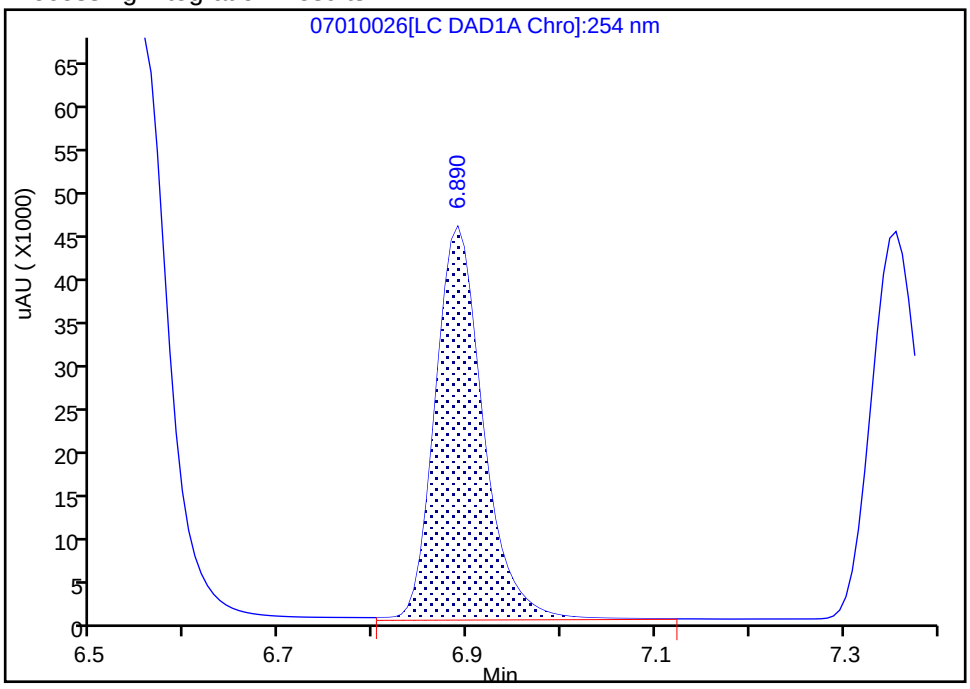
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D				
Injection Date:	01-Jul-2019 22:00:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

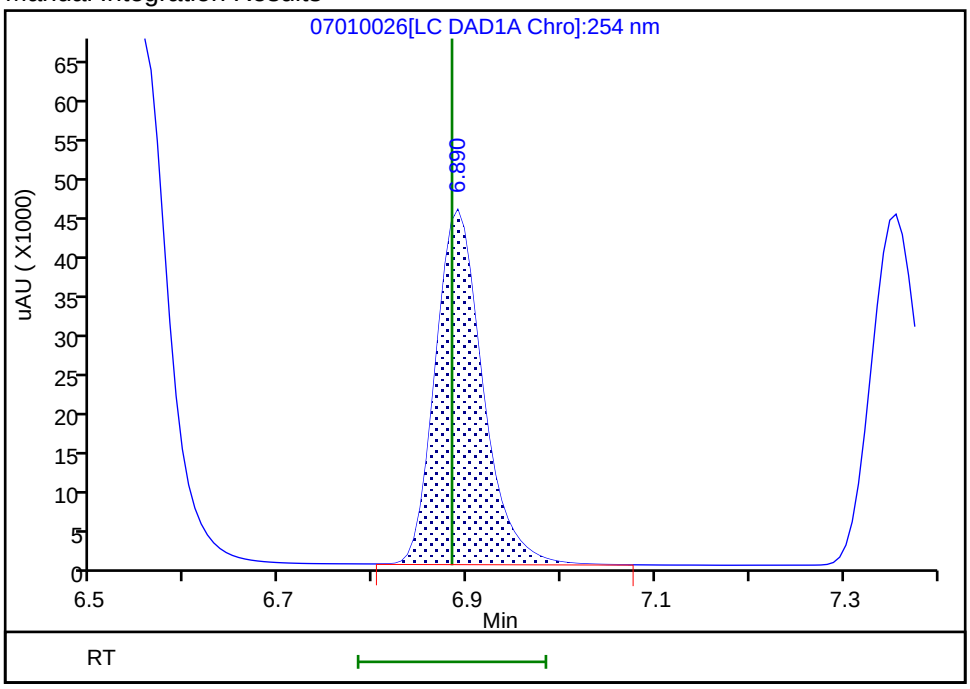
Processing Integration Results

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

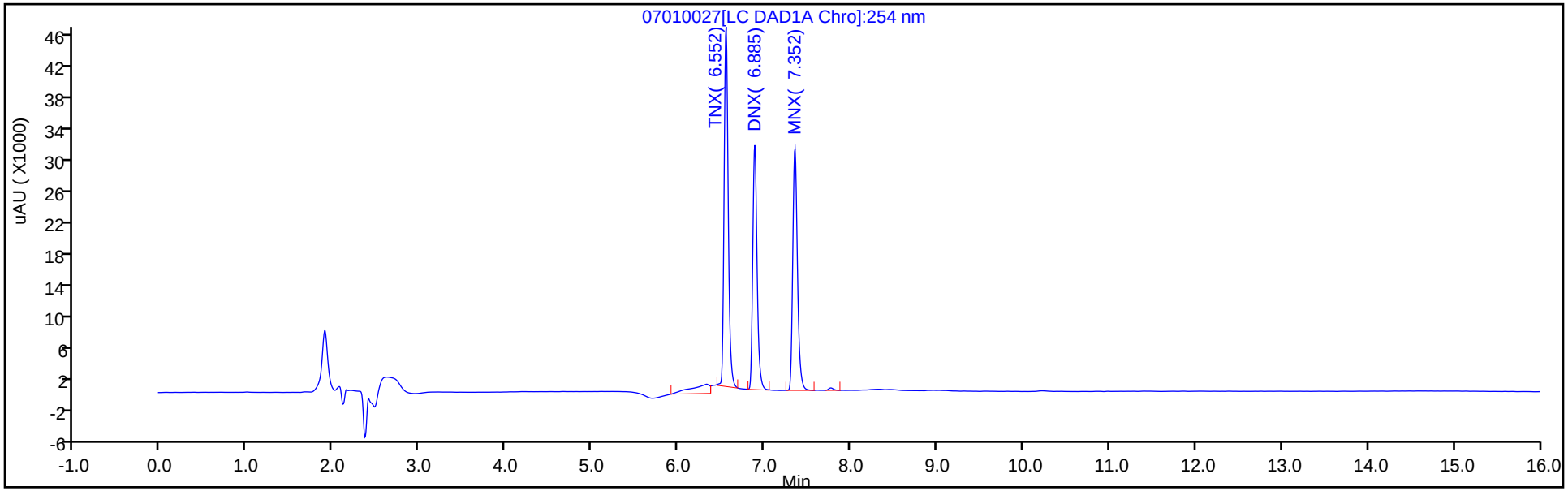
Report Date: 02-Jul-2019 11:35:23 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

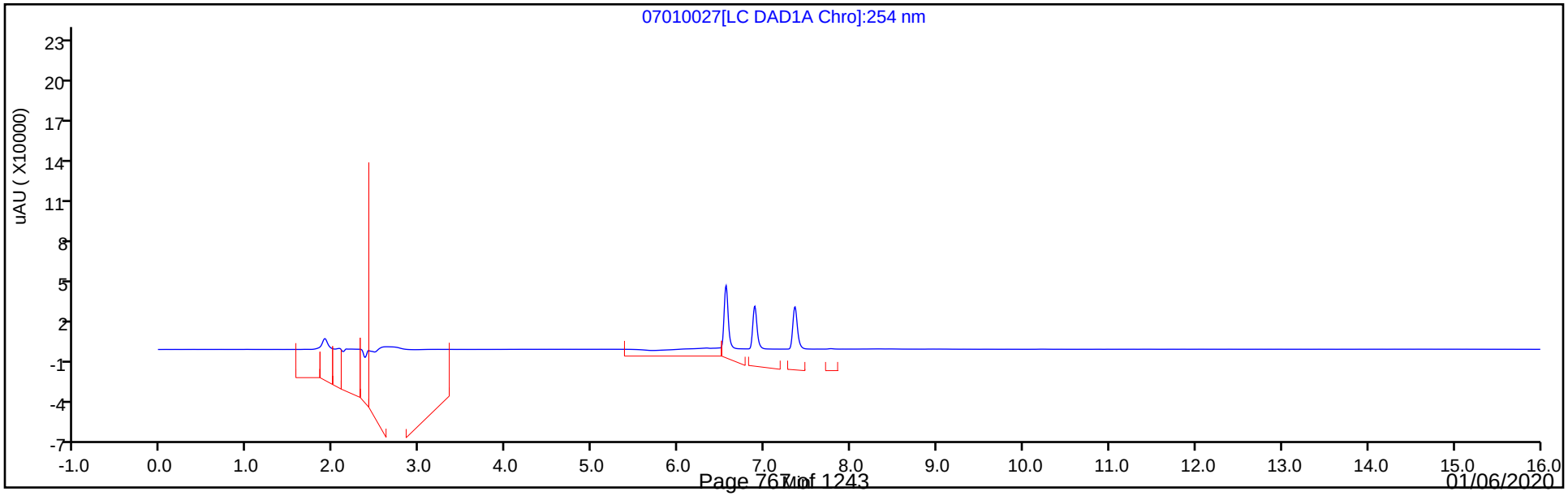
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

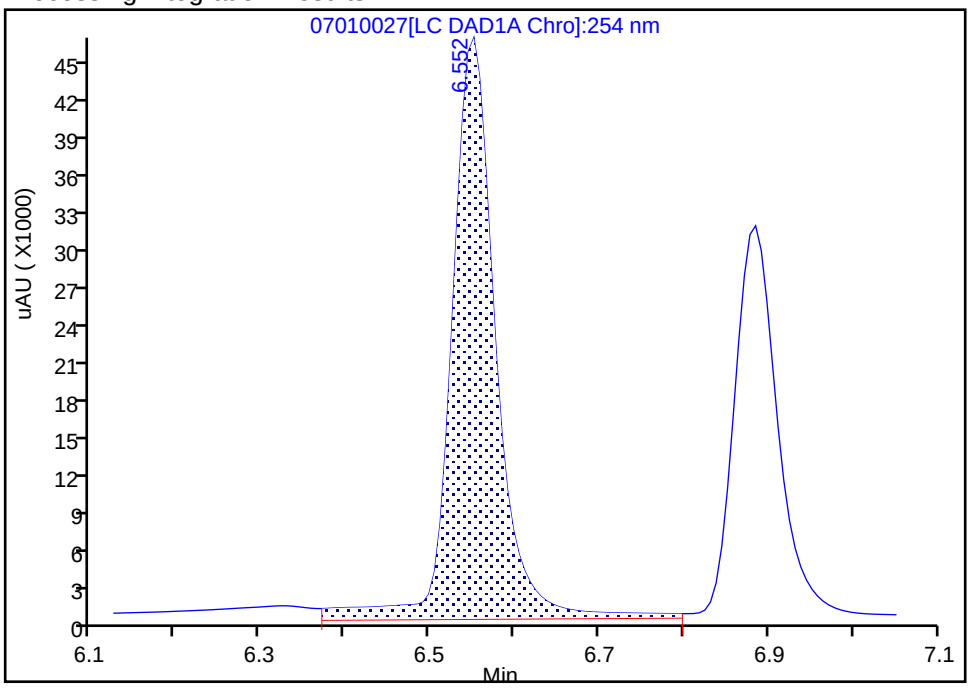
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D				
Injection Date:	01-Jul-2019 22:23:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

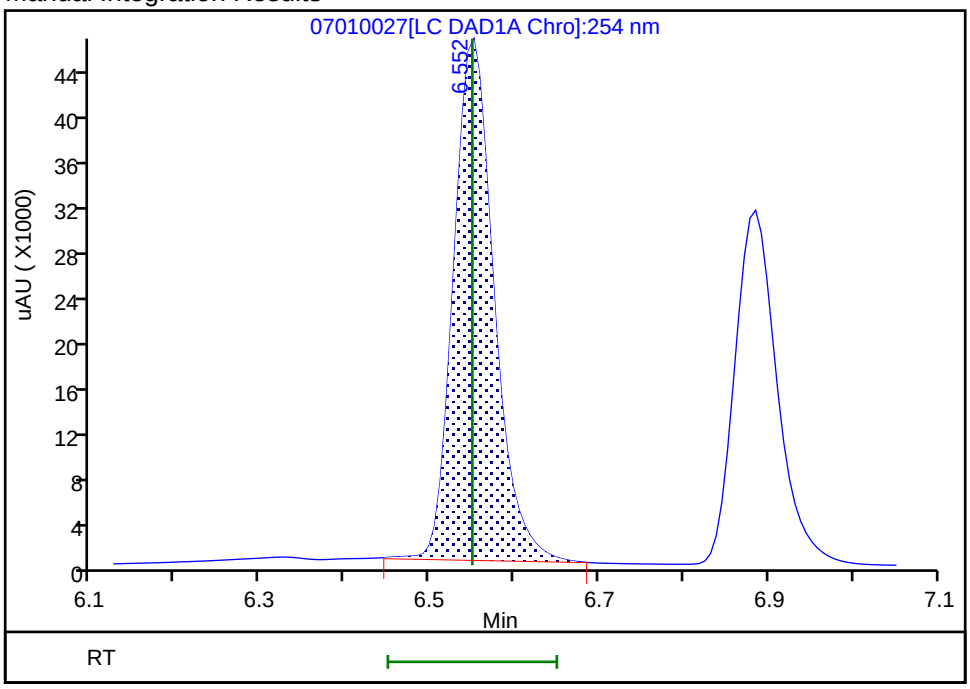
Processing Integration Results

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

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

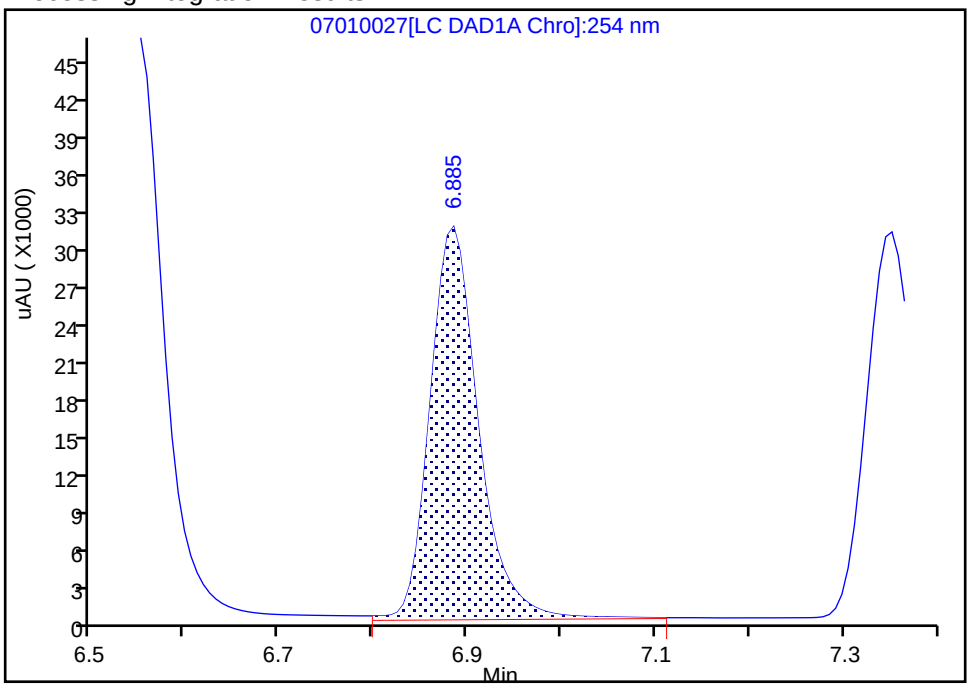
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D				
Injection Date:	01-Jul-2019 22:23:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

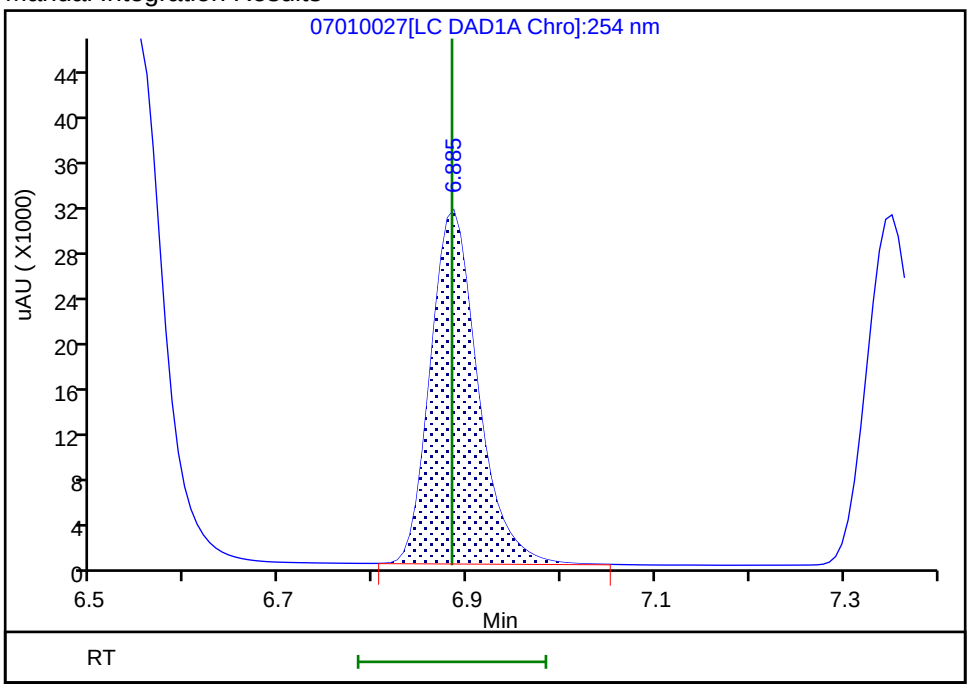
Processing Integration Results

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

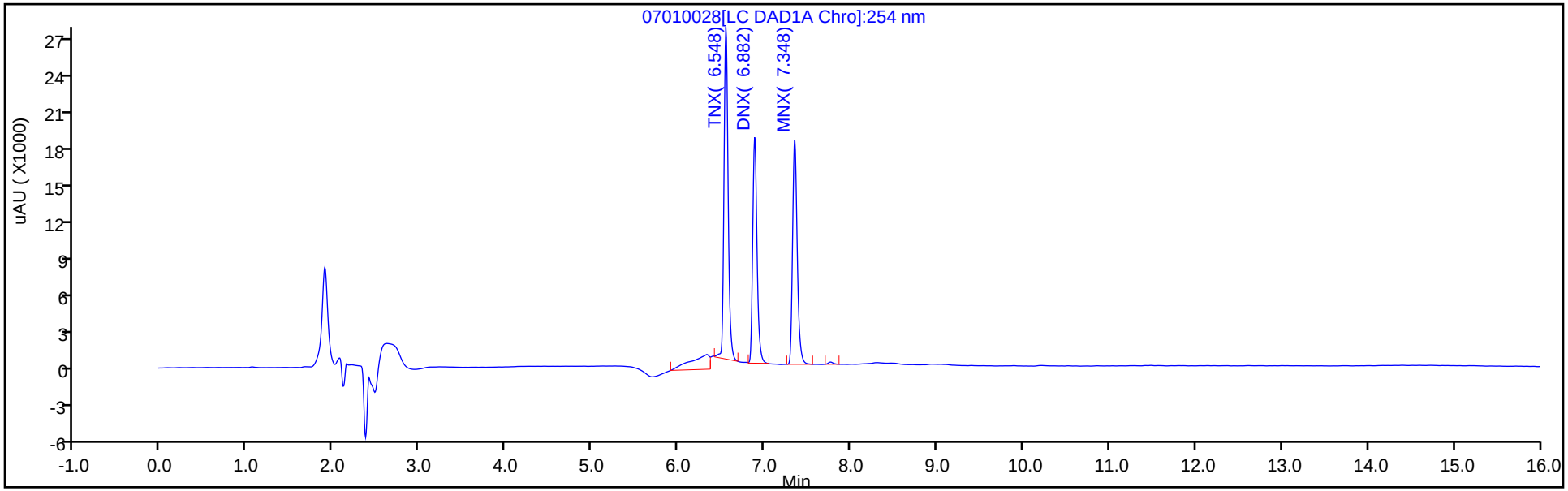
Report Date: 02-Jul-2019 11:35:24 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

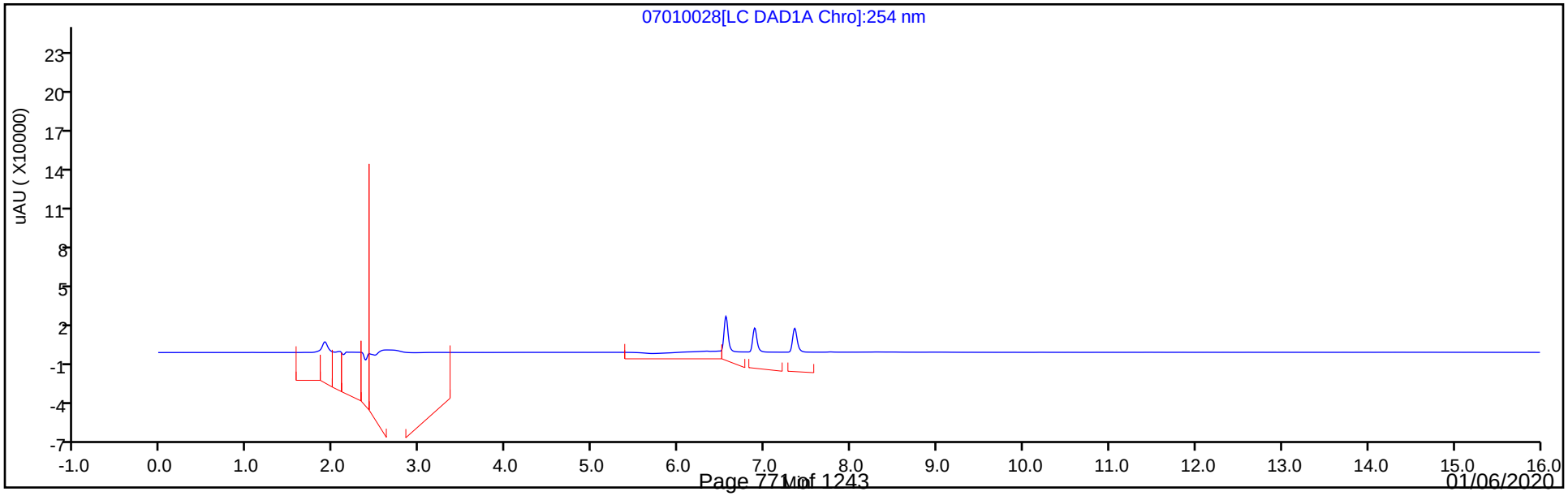
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

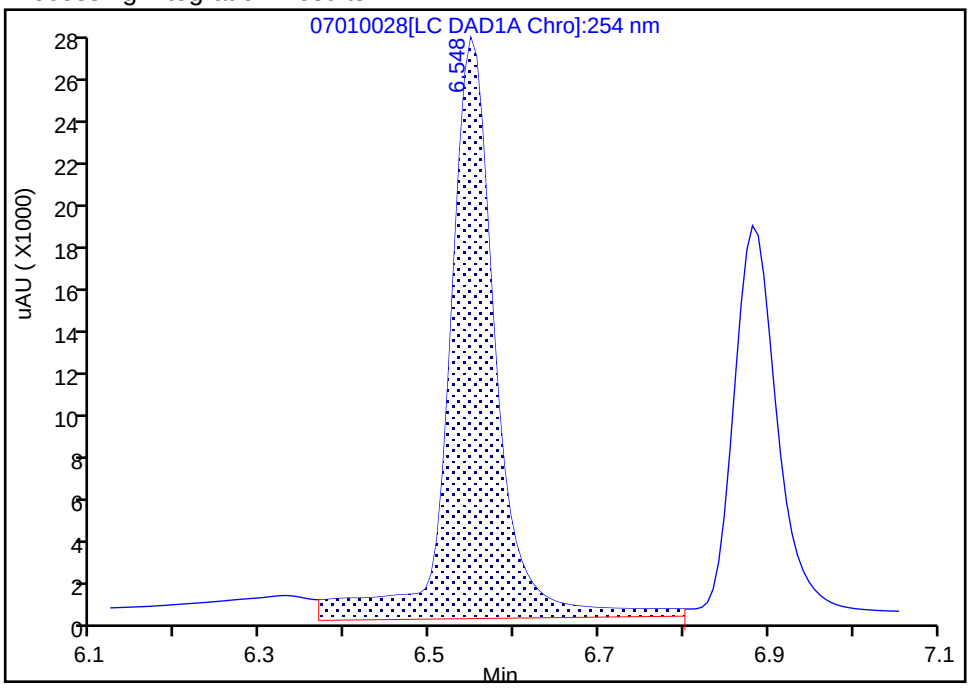
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D				
Injection Date:	01-Jul-2019 22:46:18	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

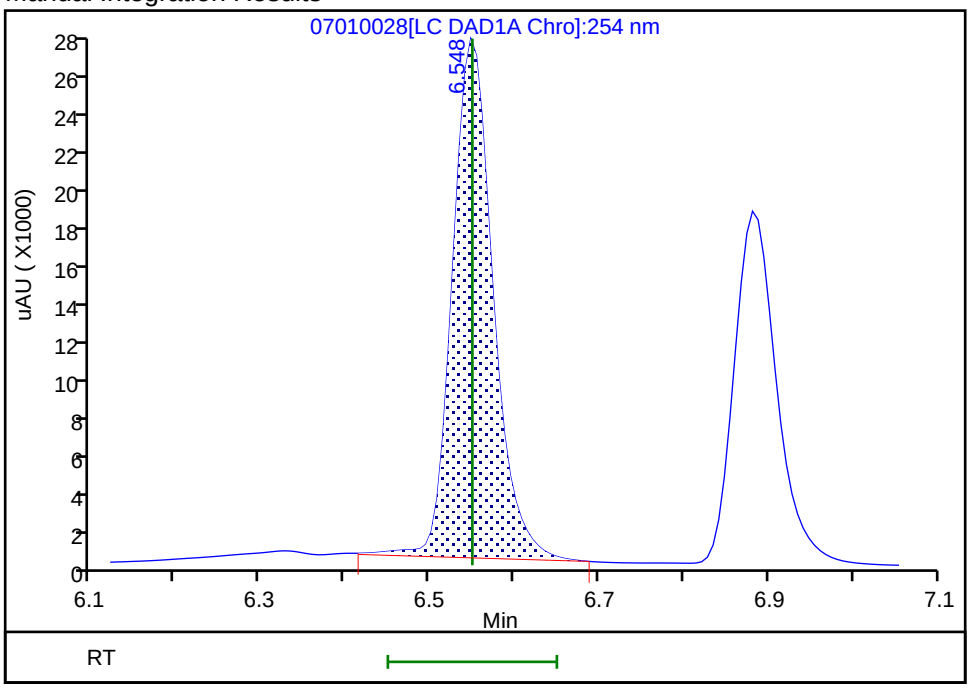
Processing Integration Results

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

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

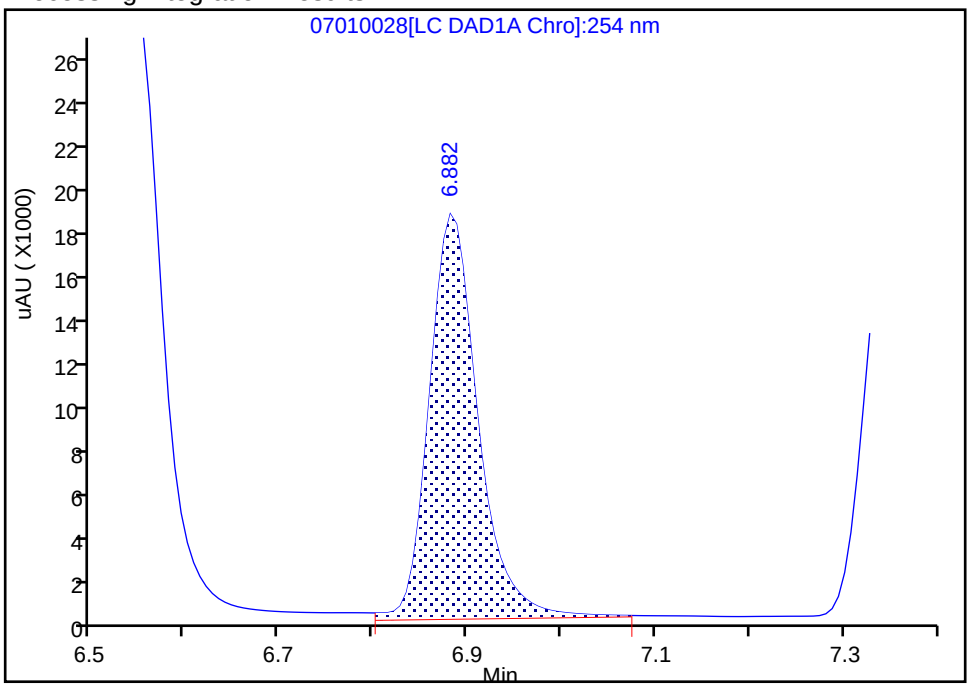
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D				
Injection Date:	01-Jul-2019 22:46:18	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

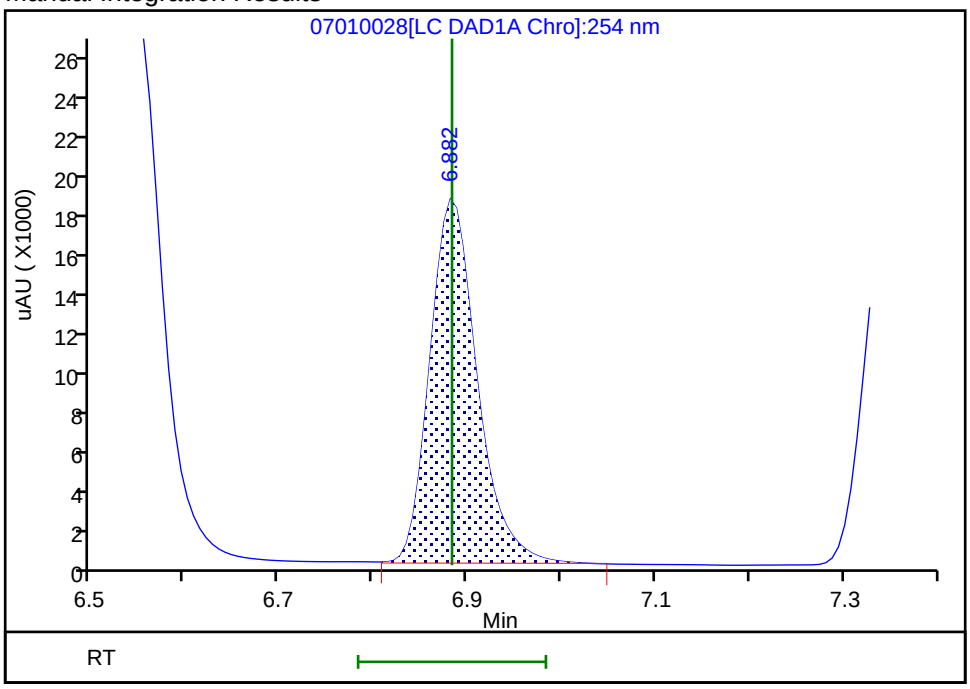
Processing Integration Results

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

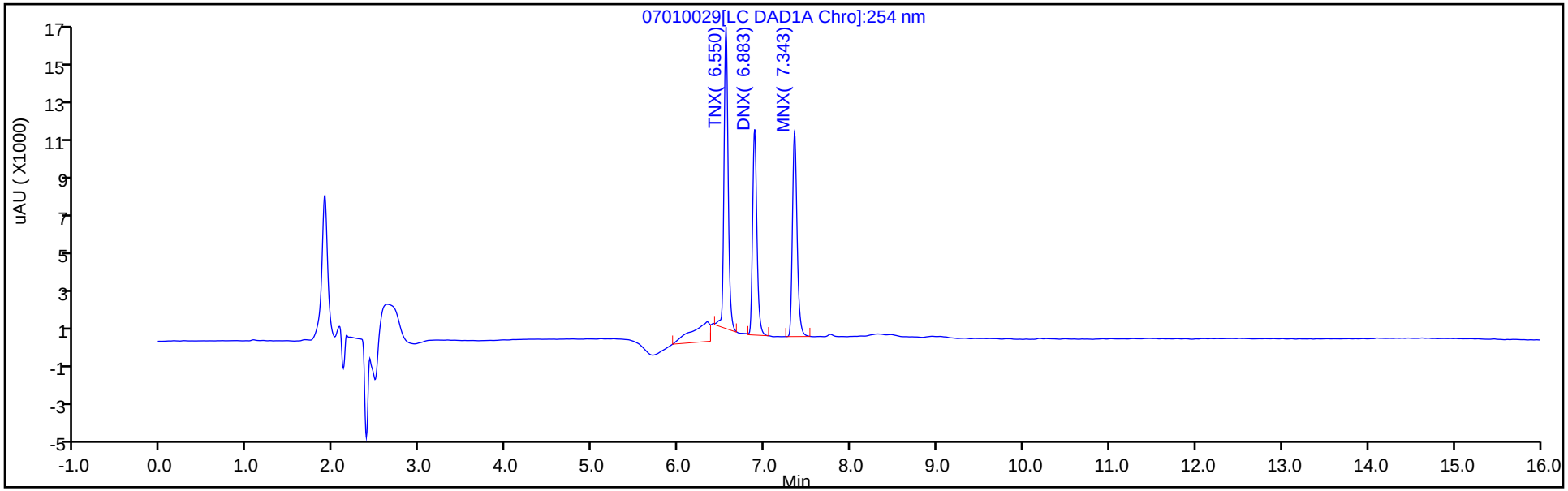
Report Date: 02-Jul-2019 11:35:26 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

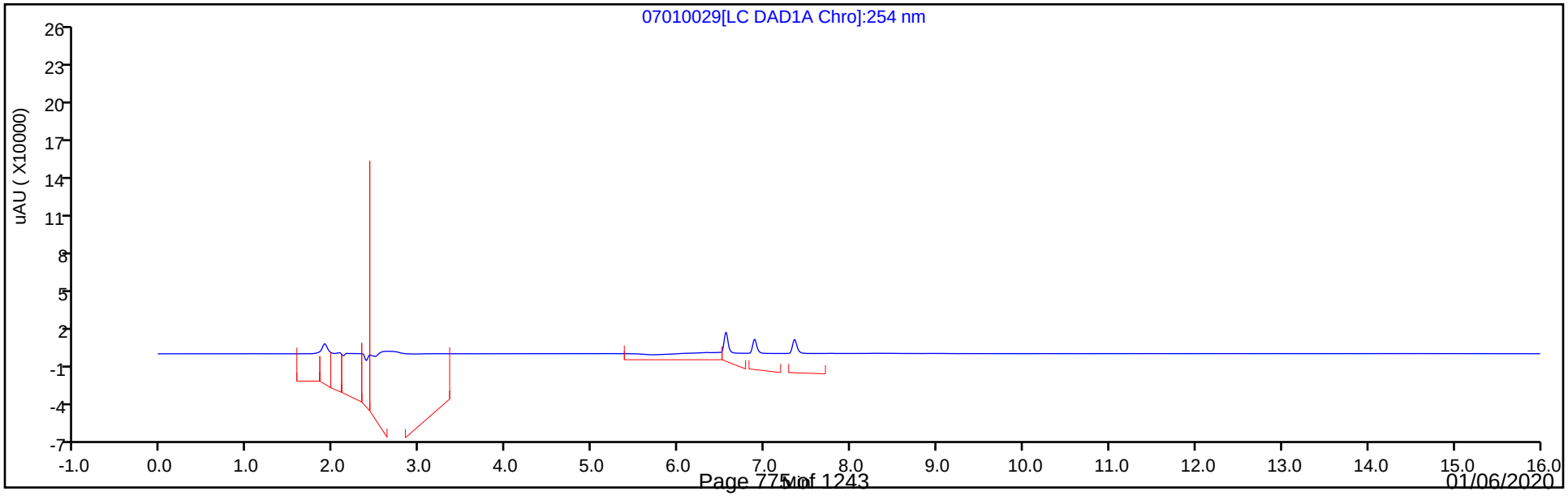
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010029.D

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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

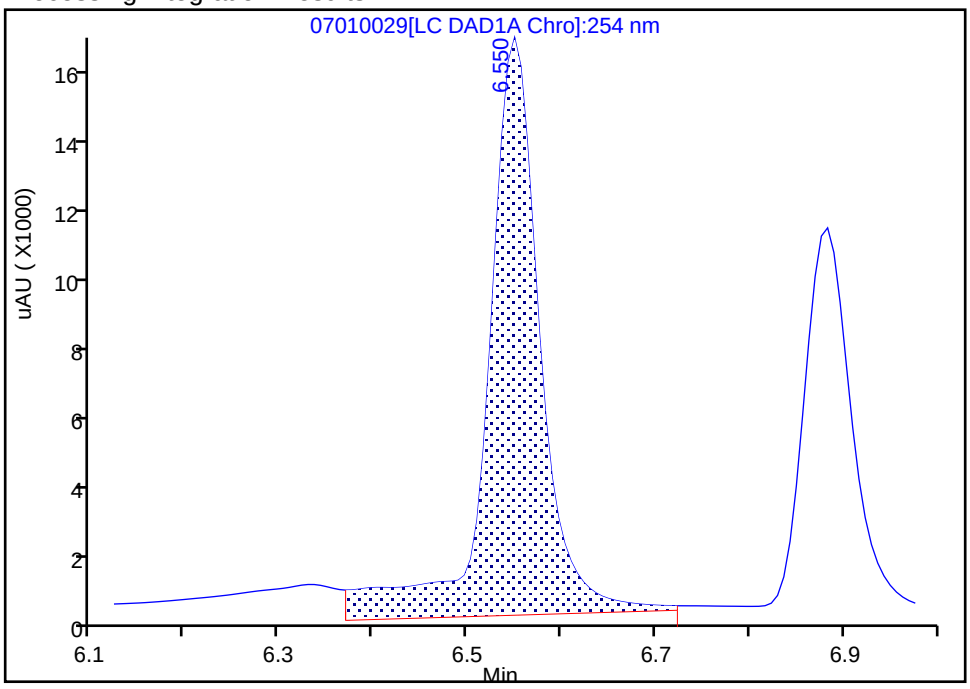
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010029.D				
Injection Date:	01-Jul-2019 23:09:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

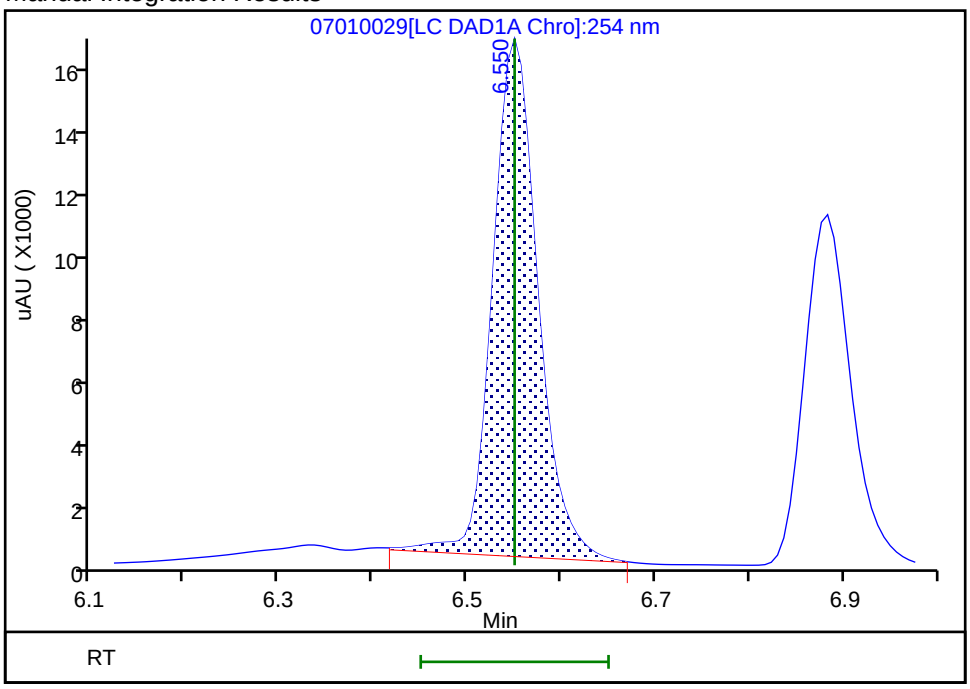
Processing Integration Results

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

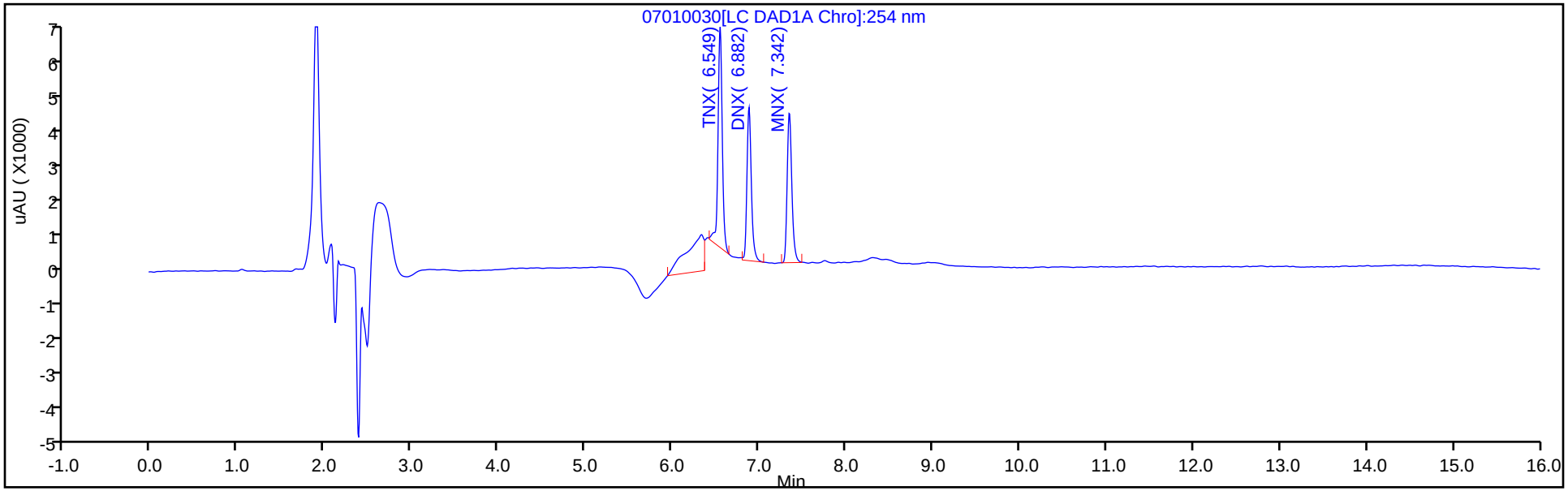
Report Date: 02-Jul-2019 11:35:28 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

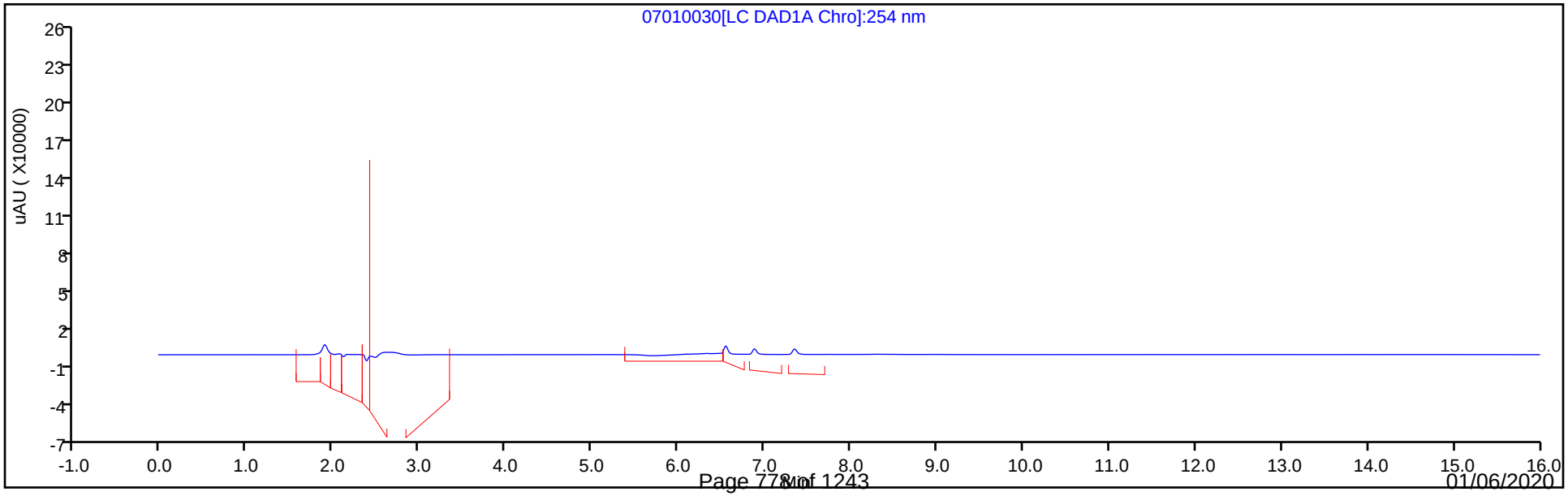
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010030.D

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

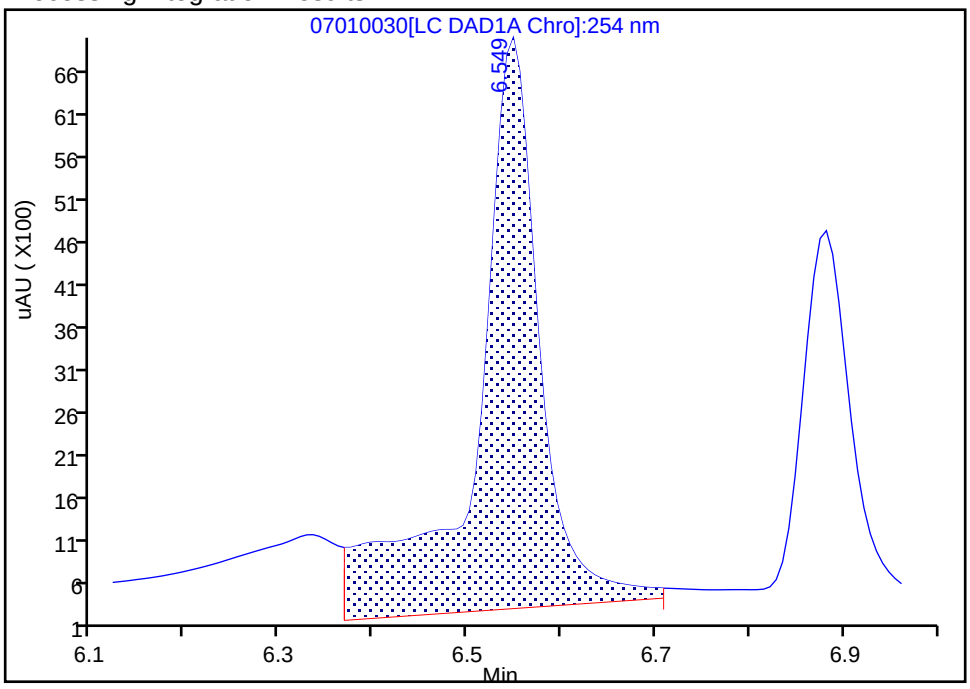
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010030.D				
Injection Date:	01-Jul-2019 23:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

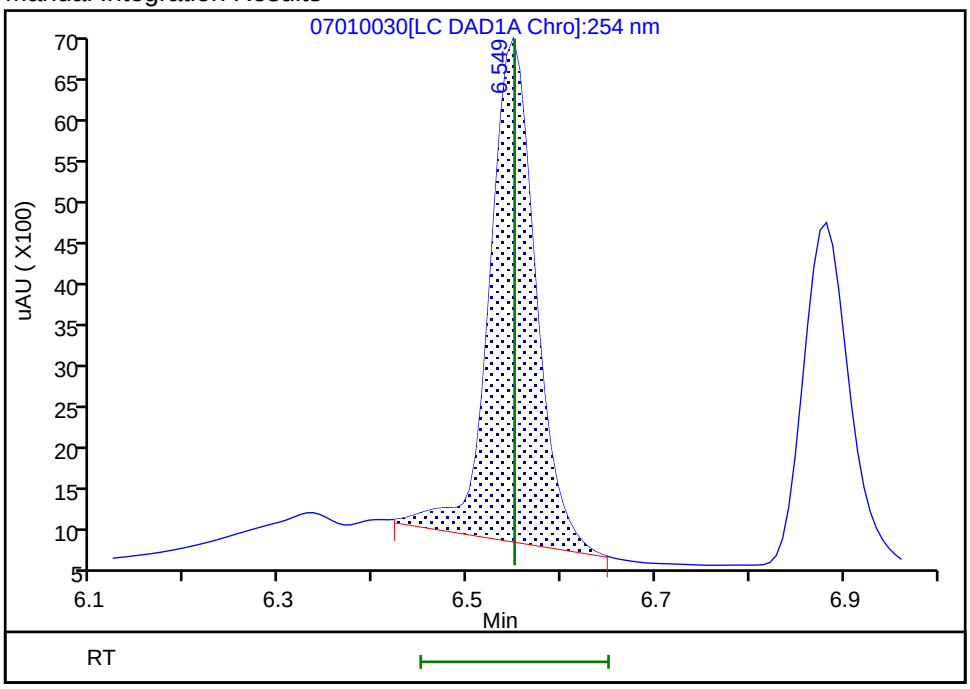
Processing Integration Results

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

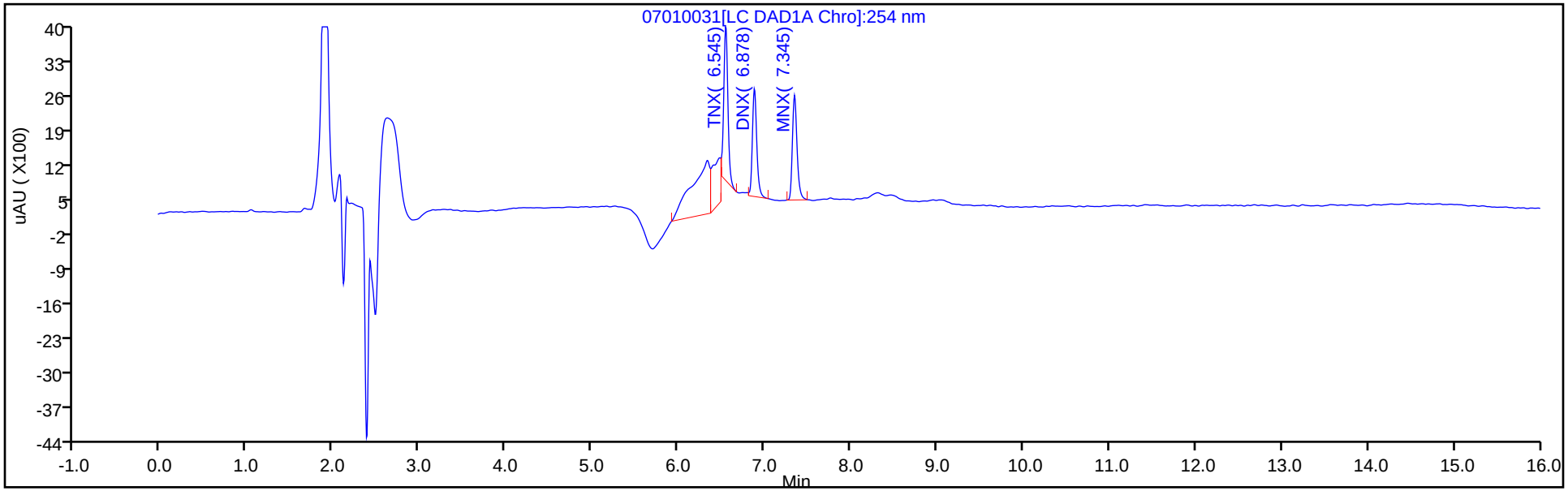
Report Date: 02-Jul-2019 11:35:29 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

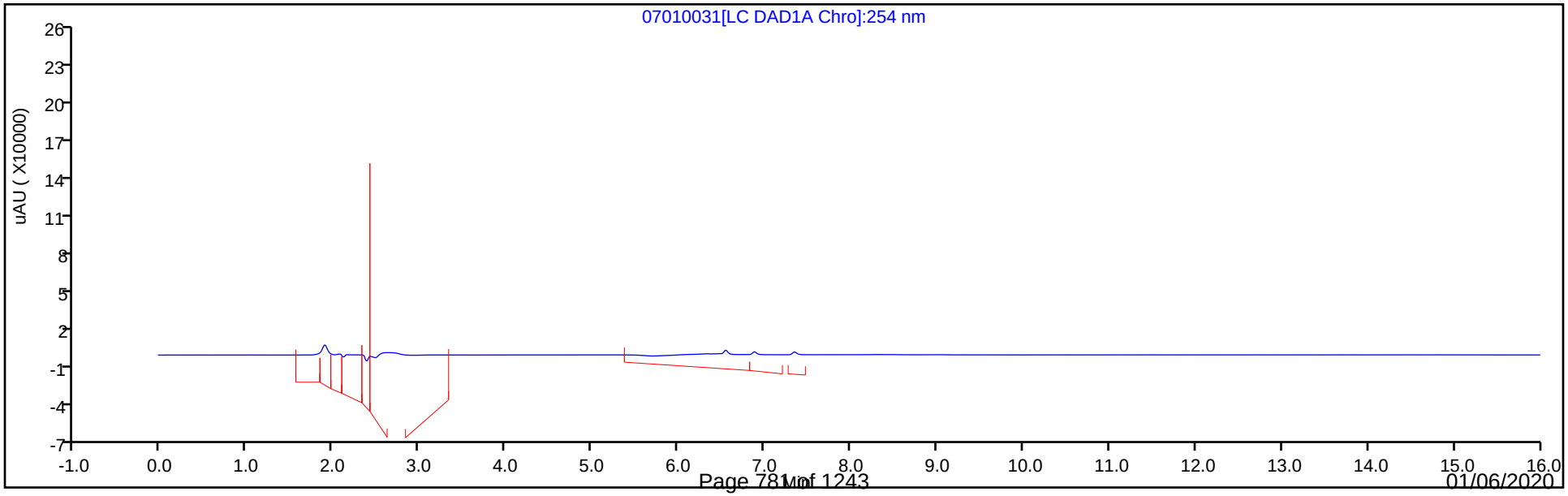
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010031.D

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

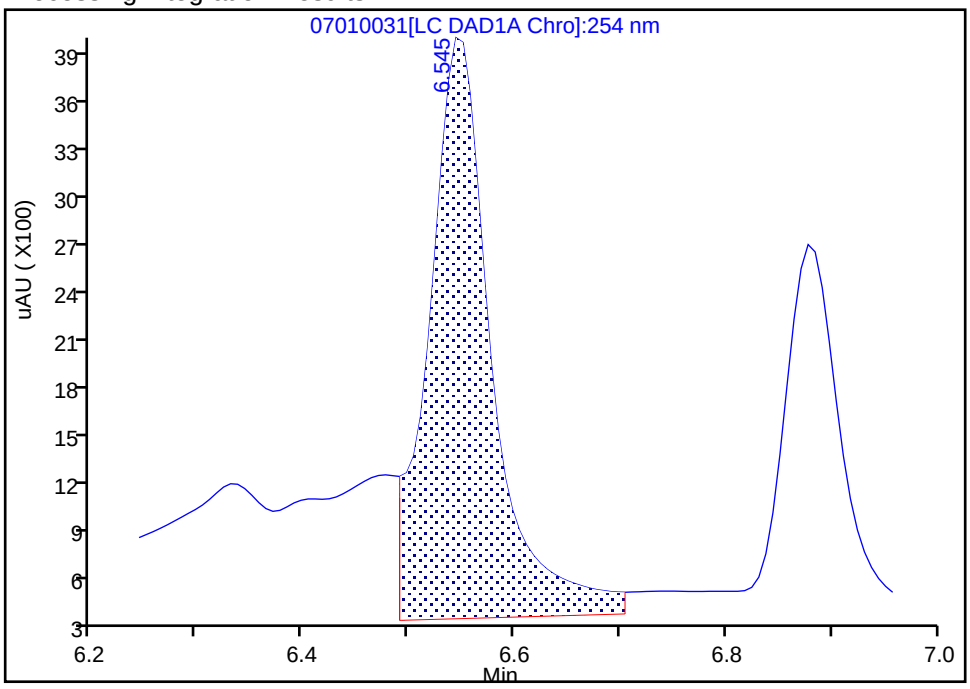
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010031.D				
Injection Date:	01-Jul-2019 23:55:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

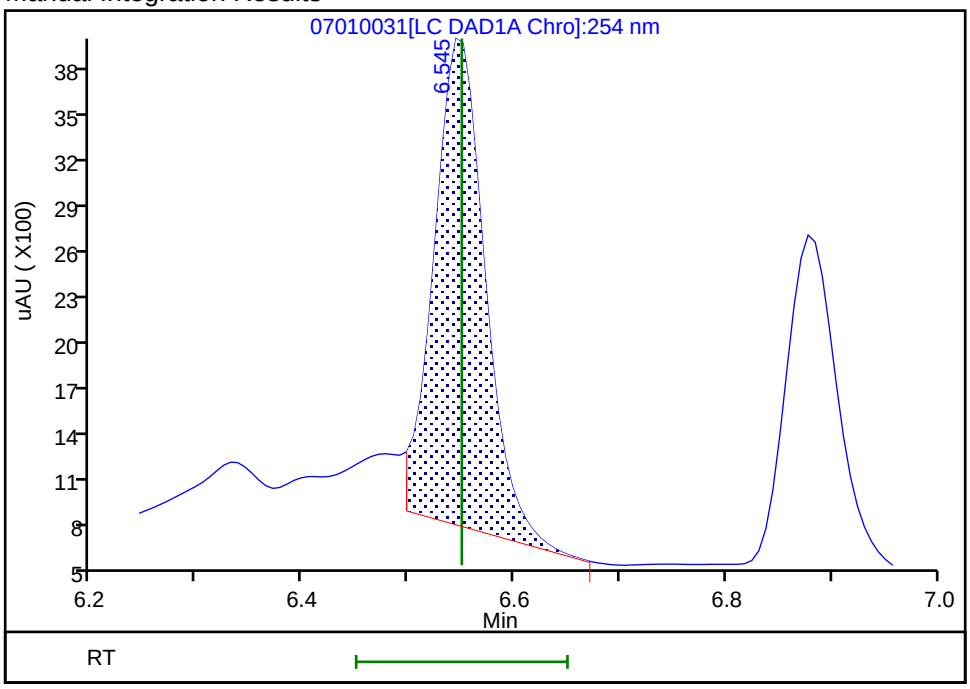
Processing Integration Results

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

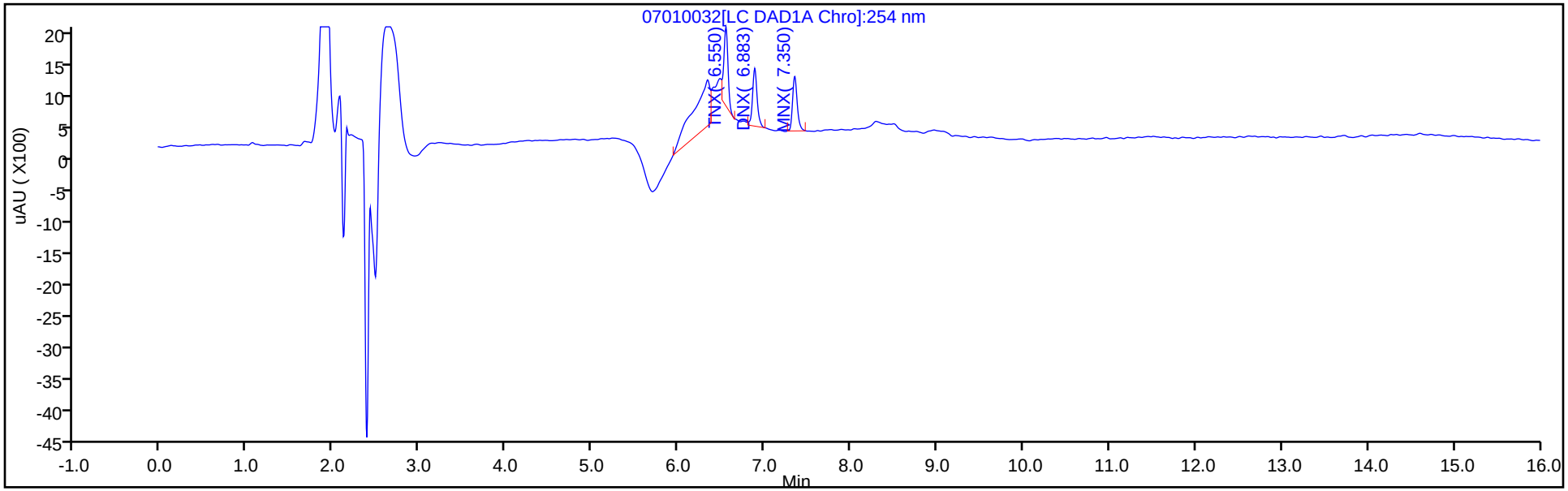
Report Date: 02-Jul-2019 11:35:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

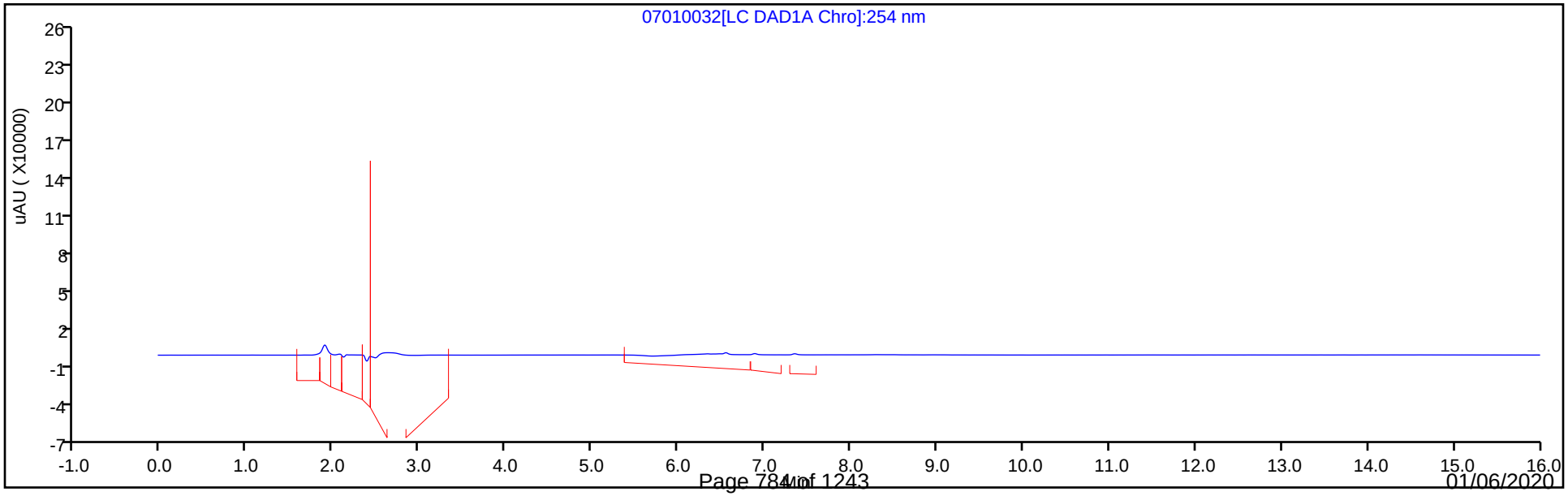
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

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.: 280-129936-1

SDG No.:

Lab Sample ID: ICV 280-475429/15 Calibration Date: 10/26/2019 00:10

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 10/25/2019 19:30

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 10/25/2019 23:35

Lab File ID: 10250015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Qua		174513		349	400	-12.7	15.0
HMX	Ave	196879	173995		354	400	-11.6	15.0
RDX	Lin2		220560		377	400	-5.8	15.0
Nitrobenzene	Lin1		390845		383	400	-4.2	15.0
1,3-Dinitrobenzene	Ave	657658	617915		376	400	-6.0	15.0
Nitroglycerin	Ave	134787	120617		3580	4000	-10.5	15.0
2-Nitrotoluene	Ave	279148	240048		344	400	-14.0	15.0
4-Nitrotoluene	Ave	223504	220263		394	400	-1.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	324975	284988		351	400	-12.3	15.0
3-Nitrotoluene	Qua		267125		534	400	33.4*	15.0
2-Amino-4,6-dinitrotoluene	Ave	459775	410260		357	400	-10.8	15.0
1,3,5-Trinitrobenzene	Ave	494290	455373		369	400	-7.9	15.0
2,6-Dinitrotoluene	Ave	322911	285148		353	400	-11.7	15.0
2,4-Dinitrotoluene	Ave	609162	538500		354	400	-11.6	15.0
Tetryl	Ave	353852	323698		366	400	-8.5	15.0
2,4,6-Trinitrotoluene	Lin1		417675		346	400	-13.5	15.0
PETN	Ave	131490	131971		4010	4000	0.4	15.0
1,2-Dinitrobenzene	Lin2		252335		344	400	-14.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: ICV 280-475429/15 Calibration Date: 10/26/2019 00:10

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 10/25/2019 19:30

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 10/25/2019 23:35

Lab File ID: 10250015.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.76	5.53	5.83
HMX	7.07	6.93	7.23
RDX	9.28	9.14	9.44
Nitrobenzene	12.26	12.13	12.43
1,3-Dinitrobenzene	15.75	15.61	15.91
Nitroglycerin	16.01	15.87	16.17
2-Nitrotoluene	16.75	16.62	16.92
4-Nitrotoluene	17.03	16.90	17.20
4-Amino-2,6-dinitrotoluene	17.36	17.24	17.54
3-Nitrotoluene	17.96	17.83	18.13
2-Amino-4,6-dinitrotoluene	18.25	18.11	18.41
1,3,5-Trinitrobenzene	19.11	18.98	19.28
2,6-Dinitrotoluene	20.05	19.91	20.21
2,4-Dinitrotoluene	20.52	20.39	20.69
Tetryl	23.81	23.66	23.96
2,4,6-Trinitrotoluene	24.89	24.75	25.05
PETN	25.45	25.29	25.59
1,2-Dinitrobenzene	13.21	13.07	13.37

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250015.D
Lims ID: ICV FULL 8330
Client ID:
Sample Type: ICV
Inject. Date: 26-Oct-2019 00:10:10 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL 8330
Misc. Info.: 280-0086515-015
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 30-Oct-2019 16:00:58 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0329

First Level Reviewer: beckerc Date: 30-Oct-2019 12:57:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 2,4,6-Trinitrophenol	1	5.761	5.680	0.081	69805	0.4000	0.3494	
6 HMX	1	7.074	7.080	-0.006	69598	0.4000	0.3535	
8 RDX	1	9.281	9.286	-0.005	88224	0.4000	0.3766	
9 Nitrobenzene	1	12.261	12.279	-0.018	156338	0.4000	0.3831	
$ 10 1,2-Dinitrobenzene	1	13.208	13.219	-0.011	100934	0.4000	0.3441	
11 3,5-Dinitroaniline	1	15.061	14.939	0.122	177928	0.4000	0.3366	
12 1,3-Dinitrobenzene	1	15.748	15.759	-0.011	247166	0.4000	0.3758	
13 Nitroglycerin	2	16.014	16.019	-0.005	482468	4.00	3.58	
14 o-Nitrotoluene	1	16.754	16.773	-0.019	96019	0.4000	0.3440	
15 p-Nitrotoluene	1	17.028	17.053	-0.025	88105	0.4000	0.3942	
16 4-Amino-2,6-dinitrotoluene	1	17.361	17.386	-0.025	113995	0.4000	0.3508	
17 m-Nitrotoluene	1	17.961	17.979	-0.018	106850	0.4000	0.5336	
18 2-Amino-4,6-dinitrotoluene	1	18.248	18.259	-0.011	164104	0.4000	0.3569	
19 1,3,5-Trinitrobenzene	1	19.108	19.126	-0.018	182149	0.4000	0.3685	
20 2,6-Dinitrotoluene	1	20.048	20.059	-0.011	114059	0.4000	0.3532	
21 2,4-Dinitrotoluene	1	20.521	20.540	-0.018	215400	0.4000	0.3536	
22 Tetryl	1	23.808	23.806	0.002	129479	0.4000	0.3659	
23 2,4,6-Trinitrotoluene	1	24.894	24.900	-0.006	167070	0.4000	0.3458	
24 PETN	2	25.448	25.440	0.008	527885	4.00	4.01	

Reagents:

8330 LCS_00094 Amount Added: 40.00 Units: uL
8330Surrogate_00109 Amount Added: 40.00 Units: uL
3,5-DNA LCS_00034 Amount Added: 40.00 Units: uL

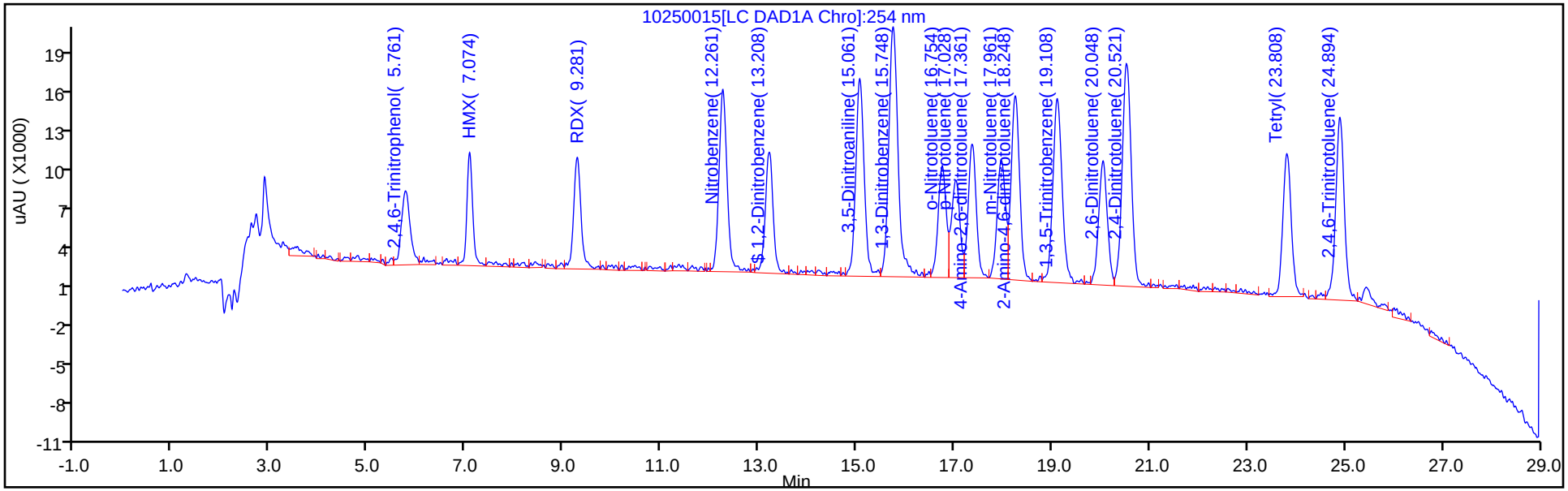
Report Date: 30-Oct-2019 16:01:39 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

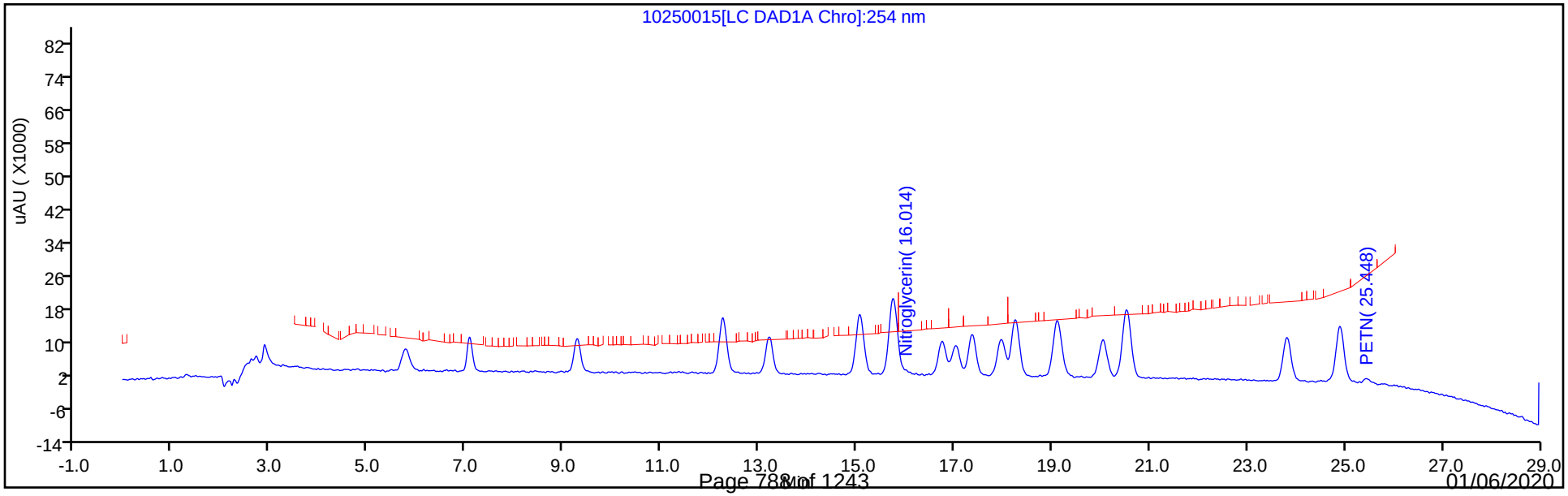
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250015.D

Injection Date:	26-Oct-2019 00:10:10	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
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.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475884/23 Calibration Date: 10/30/2019 22:36

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 10/25/2019 19:30

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 10/25/2019 23:35

Lab File ID: 10300023.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Qua		196328		244	250	-2.4	15.0
HMX	Ave	196879	206596		239	250	4.9	15.0
RDX	Lin2		228752		238	250	-4.7	15.0
Nitrobenzene	Lin1		421904		253	251	1.1	15.0
1,3-Dinitrobenzene	Ave	657658	667157		254	250	1.4	15.0
Nitroglycerin	Ave	134787	134478		2490	2500	-0.2	15.0
2-Nitrotoluene	Ave	279148	269468		242	251	-3.5	15.0
4-Nitrotoluene	Ave	223504	206151		232	251	-7.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	324975	320738		247	251	-1.3	15.0
3-Nitrotoluene	Qua		259056		363	251	44.8*	15.0
2-Amino-4,6-dinitrotoluene	Ave	459775	439059		239	251	-4.5	15.0
1,3,5-Trinitrobenzene	Ave	494290	472260		239	250	-4.5	15.0
2,6-Dinitrotoluene	Ave	322911	312359		243	251	-3.3	15.0
2,4-Dinitrotoluene	Ave	609162	583349		240	251	-4.2	15.0
Tetryl	Ave	353852	345728		244	250	-2.3	15.0
2,4,6-Trinitrotoluene	Lin1		544171		276	251	9.8	15.0
PETN	Ave	131490	130998		2490	2500	-0.4	15.0
1,2-Dinitrobenzene	Lin2		310032		259	250	3.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475884/23 Calibration Date: 10/30/2019 22:36

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 10/25/2019 19:30

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 10/25/2019 23:35

Lab File ID: 10300023.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.63	5.66	5.96
HMX	7.02	6.91	7.21
RDX	9.18	9.11	9.41
Nitrobenzene	12.13	12.08	12.38
1,3-Dinitrobenzene	15.61	15.56	15.86
Nitroglycerin	15.85	15.81	16.11
2-Nitrotoluene	16.61	16.56	16.86
4-Nitrotoluene	16.90	16.84	17.14
4-Amino-2,6-dinitrotoluene	17.20	17.16	17.46
3-Nitrotoluene	17.82	17.77	18.07
2-Amino-4,6-dinitrotoluene	18.09	18.05	18.35
1,3,5-Trinitrobenzene	18.99	18.91	19.21
2,6-Dinitrotoluene	19.91	19.84	20.14
2,4-Dinitrotoluene	20.39	20.33	20.63
Tetryl	23.64	23.58	23.88
2,4,6-Trinitrotoluene	24.77	24.68	24.98
PETN	25.35	25.24	25.54
1,2-Dinitrobenzene	13.05	13.02	13.32

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300023.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 30-Oct-2019 22:36:01 ALS Bottle#: 7 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0086641-023
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:35 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 15:43:24

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	4.380	4.399	-0.019	101162	0.2500	0.2283	
2 2,4-diamino-6-nitrotoluene	1	4.860	4.959	-0.099	54299	0.2500	0.1683	
5 2,4,6-Trinitrophenol	1	5.633	5.805	-0.172	49082	0.2500	0.2440	
6 HMX	1	7.020	7.059	-0.039	51649	0.2500	0.2393	
8 RDX	1	9.180	9.259	-0.079	57188	0.2500	0.2383	
9 Nitrobenzene	1	12.126	12.232	-0.106	105687	0.2505	0.2533	
$ 10 1,2-Dinitrobenzene	1	13.046	13.172	-0.126	77508	0.2500	0.2586	
11 3,5-Dinitroaniline	1	14.893	15.019	-0.126	125434	0.2500	0.2371	
12 1,3-Dinitrobenzene	1	15.606	15.705	-0.099	166956	0.2503	0.2539	
13 Nitroglycerin	2	15.846	15.959	-0.113	336195	2.50	2.49	
14 o-Nitrotoluene	1	16.606	16.705	-0.099	67569	0.2508	0.2421	
15 p-Nitrotoluene	1	16.900	16.992	-0.092	51744	0.2510	0.2315	
16 4-Amino-2,6-dinitrotoluene	1	17.200	17.305	-0.105	80425	0.2508	0.2475	
17 m-Nitrotoluene	1	17.820	17.919	-0.099	65023	0.2510	0.3634	
18 2-Amino-4,6-dinitrotoluene	1	18.093	18.199	-0.106	110094	0.2508	0.2395	
19 1,3,5-Trinitrobenzene	1	18.986	19.059	-0.073	118065	0.2500	0.2389	
20 2,6-Dinitrotoluene	1	19.906	19.985	-0.079	78324	0.2508	0.2426	
21 2,4-Dinitrotoluene	1	20.386	20.479	-0.093	146129	0.2505	0.2399	
22 Tetryl	1	23.640	23.732	-0.092	86432	0.2500	0.2443	
23 2,4,6-Trinitrotoluene	1	24.773	24.832	-0.059	136587	0.2510	0.2755	
24 PETN	2	25.353	25.392	-0.039	327494	2.50	2.49	

Reagents:

8330_ADDs_00023 Amount Added: 12.50 Units: uL
8330IntermStk_00059 Amount Added: 25.00 Units: uL

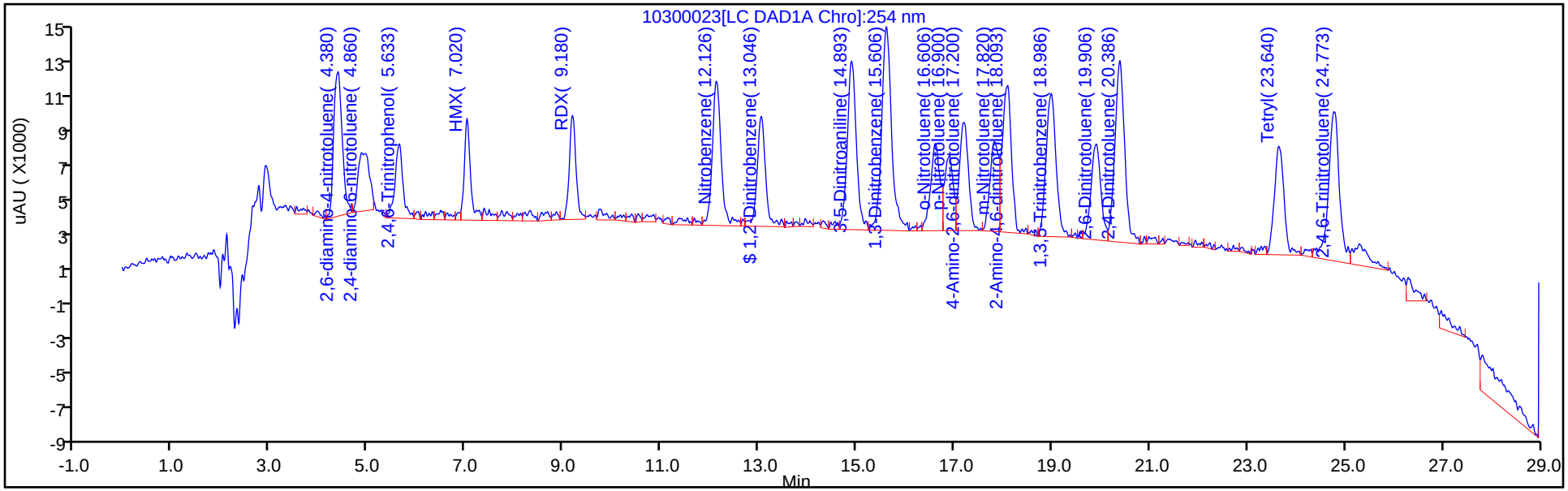
Report Date: 31-Oct-2019 16:27:35 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

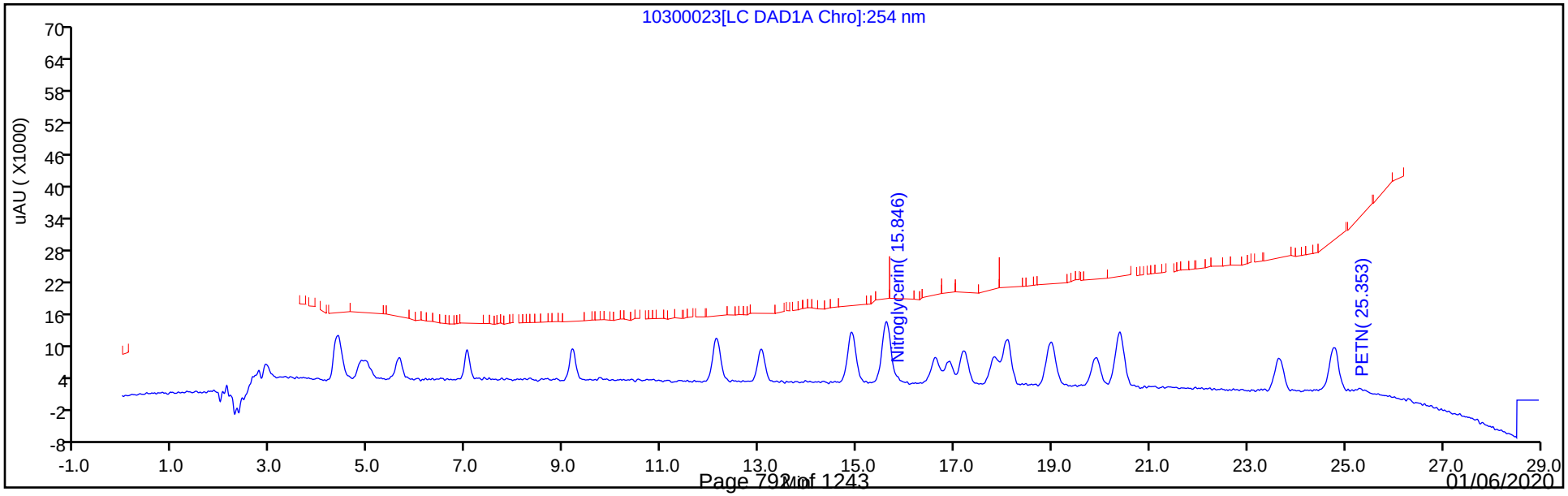
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300023.D

Injection Date:	30-Oct-2019 22:36:01	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV			Worklist Smp#:	23
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.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475884/34 Calibration Date: 10/31/2019 05:00

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 10/25/2019 19:30

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 10/25/2019 23:35

Lab File ID: 10300034.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Qua		188360		234	250	-6.3	15.0
HMX	Ave	196879	190248		220	250	-3.4	15.0
RDX	Lin2		233016		243	250	-2.8	15.0
Nitrobenzene	Lin1		398064		238	251	-5.0	15.0
1,3-Dinitrobenzene	Ave	657658	639209		243	250	-2.8	15.0
Nitroglycerin	Ave	134787	134474		2490	2500	-0.2	15.0
2-Nitrotoluene	Ave	279148	233990		210	251	-16.2*	15.0
4-Nitrotoluene	Ave	223504	197769		222	251	-11.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	324975	318592		246	251	-2.0	15.0
3-Nitrotoluene	Qua		260410		365	251	45.5*	15.0
2-Amino-4,6-dinitrotoluene	Ave	459775	453001		247	251	-1.5	15.0
1,3,5-Trinitrobenzene	Ave	494290	471104		238	250	-4.7	15.0
2,6-Dinitrotoluene	Ave	322911	303697		236	251	-6.0	15.0
2,4-Dinitrotoluene	Ave	609162	591090		243	251	-3.0	15.0
Tetryl	Ave	353852	403516		285	250	14.0	15.0
2,4,6-Trinitrotoluene	Lin1		539466		273	251	8.7	15.0
PETN	Ave	131490	131870		2510	2500	0.3	15.0
1,2-Dinitrobenzene	Lin2		298812		248	250	-0.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475884/34 Calibration Date: 10/31/2019 05:00

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 10/25/2019 19:30

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 10/25/2019 23:35

Lab File ID: 10300034.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.75	5.66	5.96
HMX	7.06	6.91	7.21
RDX	9.26	9.11	9.41
Nitrobenzene	12.25	12.08	12.38
1,3-Dinitrobenzene	15.71	15.56	15.86
Nitroglycerin	15.97	15.81	16.11
2-Nitrotoluene	16.73	16.56	16.86
4-Nitrotoluene	17.00	16.84	17.14
4-Amino-2,6-dinitrotoluene	17.33	17.16	17.46
3-Nitrotoluene	17.96	17.77	18.07
2-Amino-4,6-dinitrotoluene	18.19	18.05	18.35
1,3,5-Trinitrobenzene	19.08	18.91	19.21
2,6-Dinitrotoluene	20.01	19.84	20.14
2,4-Dinitrotoluene	20.49	20.33	20.63
Tetryl	23.73	23.58	23.88
2,4,6-Trinitrotoluene	24.86	24.68	24.98
PETN	25.41	25.24	25.54
1,2-Dinitrobenzene	13.18	13.02	13.32

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300034.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 05:00:32 ALS Bottle#: 7 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0086641-034
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:47 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:16:49

	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	4.405	4.399	0.006	101811	0.2500	0.2299	
	2 2,4-diamino-6-nitrotoluene	1	4.939	4.959	-0.020	65167	0.2500	0.2020	
	5 2,4,6-Trinitrophenol	1	5.745	5.805	-0.060	47090	0.2500	0.2342	
	6 HMX	1	7.059	7.059	0.000	47562	0.2500	0.2204	
	8 RDX	1	9.259	9.259	0.000	58254	0.2500	0.2431	
	9 Nitrobenzene	1	12.245	12.232	0.013	99715	0.2505	0.2380	
$	10 1,2-Dinitrobenzene	1	13.179	13.172	0.007	74703	0.2500	0.2484	
	11 3,5-Dinitroaniline	1	15.019	15.019	0.000	119929	0.2500	0.2267	
	12 1,3-Dinitrobenzene	1	15.705	15.705	0.000	159962	0.2503	0.2432	
	13 Nitroglycerin	2	15.972	15.959	0.013	336184	2.50	2.49	
	14 o-Nitrotoluene	1	16.732	16.705	0.027	58673	0.2508	0.2102	
	15 p-Nitrotoluene	1	16.999	16.992	0.007	49640	0.2510	0.2221	
	16 4-Amino-2,6-dinitrotoluene	1	17.332	17.305	0.027	79887	0.2508	0.2458	
	17 m-Nitrotoluene	1	17.959	17.919	0.040	65363	0.2510	0.3651	
	18 2-Amino-4,6-dinitrotoluene	1	18.192	18.199	-0.007	113590	0.2508	0.2471	
	19 1,3,5-Trinitrobenzene	1	19.079	19.059	0.020	117776	0.2500	0.2383	
	20 2,6-Dinitrotoluene	1	20.005	19.985	0.020	76152	0.2508	0.2358	
	21 2,4-Dinitrotoluene	1	20.485	20.479	0.006	148068	0.2505	0.2431	
	22 Tetryl	1	23.725	23.732	-0.007	100879	0.2500	0.2851	
	23 2,4,6-Trinitrotoluene	1	24.859	24.832	0.027	135406	0.2510	0.2728	
	24 PETN	2	25.405	25.392	0.013	329675	2.50	2.51	

Reagents:

8330_ADDs_00023 Amount Added: 12.50 Units: uL
8330IntermStk_00059 Amount Added: 25.00 Units: uL

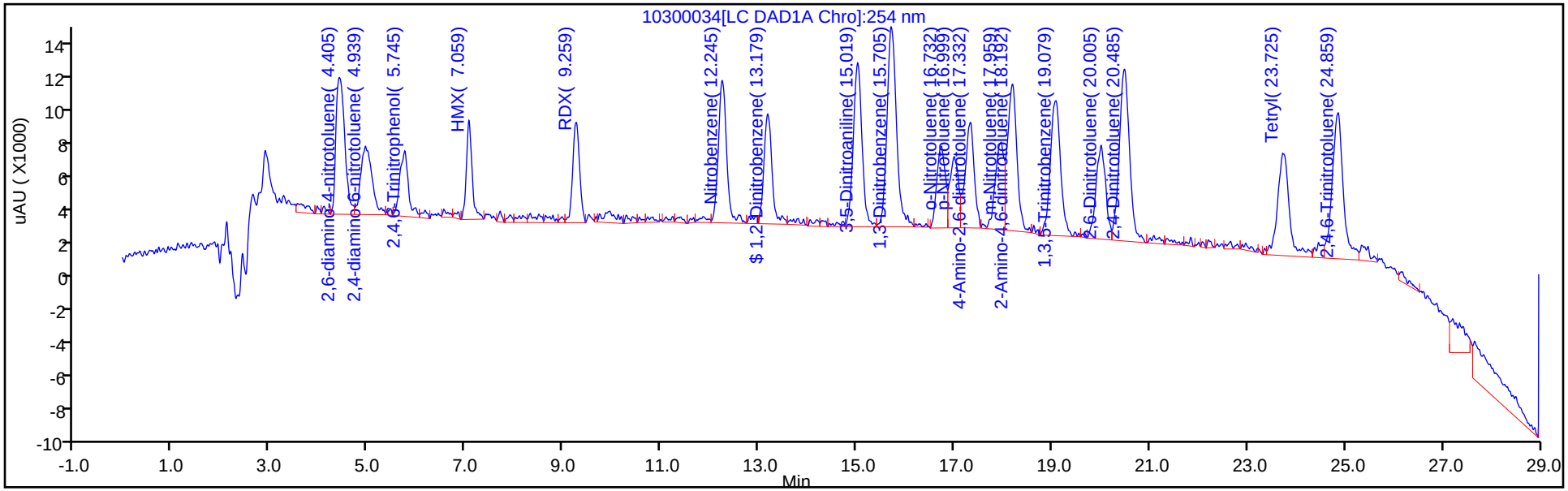
Report Date: 31-Oct-2019 16:27:47 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

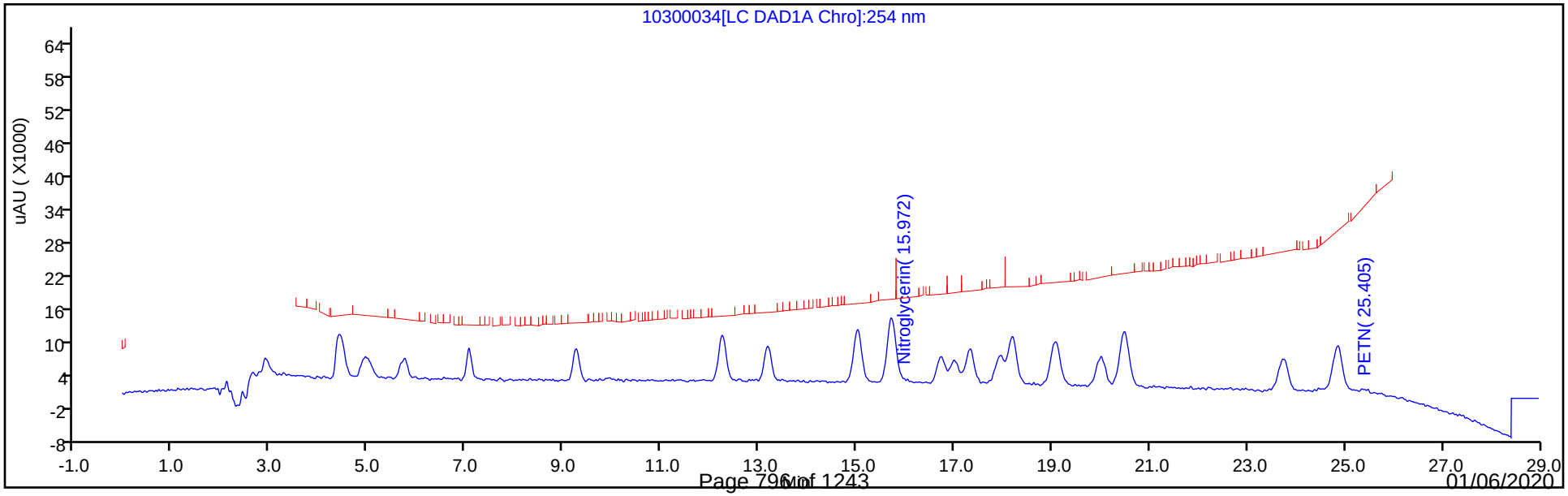
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300034.D

Injection Date:	31-Oct-2019 05:00:32	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475884/44 Calibration Date: 10/31/2019 10:50

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 10/25/2019 19:30

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 10/25/2019 23:35

Lab File ID: 10300044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Qua		194144		241	250	-3.5	15.0
HMX	Ave	196879	198404		230	250	0.8	15.0
RDX	Lin2		233096		243	250	-2.7	15.0
Nitrobenzene	Lin1		396028		237	251	-5.5	15.0
1,3-Dinitrobenzene	Ave	657658	642254		244	250	-2.3	15.0
Nitroglycerin	Ave	134787	183912		3410	2500	36.4*	15.0
2-Nitrotoluene	Ave	279148	256873		231	251	-8.0	15.0
4-Nitrotoluene	Ave	223504	169773		191	251	-24.0*	15.0
4-Amino-2,6-dinitrotoluene	Ave	324975	360144		278	251	10.8	15.0
3-Nitrotoluene	Qua		242992		342	251	36.3*	15.0
2-Amino-4,6-dinitrotoluene	Ave	459775	475318		259	251	3.4	15.0
1,3,5-Trinitrobenzene	Ave	494290	473984		240	250	-4.1	15.0
2,6-Dinitrotoluene	Ave	322911	280594		218	251	-13.1	15.0
2,4-Dinitrotoluene	Ave	609162	587677		242	251	-3.5	15.0
Tetryl	Ave	353852	351728		248	250	-0.6	15.0
2,4,6-Trinitrotoluene	Lin1		531817		268	251	6.9	15.0
PETN	Ave	131490	145020		2760	2500	10.3	15.0
1,2-Dinitrobenzene	Lin2		317004		265	250	6.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475884/44 Calibration Date: 10/31/2019 10:50

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 10/25/2019 19:30

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 10/25/2019 23:35

Lab File ID: 10300044.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.63	5.66	5.96
HMX	7.05	6.91	7.21
RDX	9.24	9.11	9.41
Nitrobenzene	12.25	12.08	12.38
1,3-Dinitrobenzene	15.70	15.56	15.86
Nitroglycerin	15.96	15.81	16.11
2-Nitrotoluene	16.71	16.56	16.86
4-Nitrotoluene	16.96	16.84	17.14
4-Amino-2,6-dinitrotoluene	17.32	17.16	17.46
3-Nitrotoluene	18.02	17.77	18.07
2-Amino-4,6-dinitrotoluene	18.16	18.05	18.35
1,3,5-Trinitrobenzene	19.08	18.91	19.21
2,6-Dinitrotoluene	20.02	19.84	20.14
2,4-Dinitrotoluene	20.47	20.33	20.63
Tetryl	23.73	23.58	23.88
2,4,6-Trinitrotoluene	24.85	24.68	24.98
PETN	25.40	25.24	25.54
1,2-Dinitrobenzene	13.18	13.02	13.32

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300044.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 10:50:39 ALS Bottle#: 7 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0086641-044
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 31-Oct-2019 16:27:56 Calib Date: 25-Oct-2019 23:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20191025-86515.b\10250014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0321

First Level Reviewer: beckerc Date: 31-Oct-2019 16:26:45

	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	4.412	4.399	0.013	104290	0.2500	0.2361	
	2 2,4-diamino-6-nitrotoluene	1	4.912	4.959	-0.047	67975	0.2500	0.2107	
	5 2,4,6-Trinitrophenol	1	5.632	5.805	-0.173	48536	0.2500	0.2413	
	6 HMX	1	7.045	7.059	-0.014	49601	0.2500	0.2298	
	8 RDX	1	9.239	9.259	-0.020	58274	0.2500	0.2432	
	9 Nitrobenzene	1	12.252	12.232	0.020	99205	0.2505	0.2367	
$	10 1,2-Dinitrobenzene	1	13.179	13.172	0.007	79251	0.2500	0.2650	
	11 3,5-Dinitroaniline	1	14.992	15.019	-0.027	118912	0.2500	0.2248	
	12 1,3-Dinitrobenzene	1	15.699	15.705	-0.006	160724	0.2503	0.2444	
	13 Nitroglycerin	2	15.959	15.959	0.000	459779	2.50	3.41	
	14 o-Nitrotoluene	1	16.705	16.705	0.000	64411	0.2508	0.2307	
	15 p-Nitrotoluene	1	16.959	16.992	-0.033	42613	0.2510	0.1907	
	16 4-Amino-2,6-dinitrotoluene	1	17.319	17.305	0.014	90306	0.2508	0.2779	
	17 m-Nitrotoluene	1	18.019	17.919	0.100	60991	0.2510	0.3422	Ma
	18 2-Amino-4,6-dinitrotoluene	1	18.159	18.199	-0.040	119186	0.2508	0.2592	M
	19 1,3,5-Trinitrobenzene	1	19.079	19.059	0.020	118496	0.2500	0.2397	
	20 2,6-Dinitrotoluene	1	20.019	19.985	0.034	70359	0.2508	0.2179	
	21 2,4-Dinitrotoluene	1	20.472	20.479	-0.007	147213	0.2505	0.2417	
	22 Tetryl	1	23.725	23.732	-0.007	87932	0.2500	0.2485	
	23 2,4,6-Trinitrotoluene	1	24.852	24.832	0.020	133486	0.2510	0.2684	
	24 PETN	2	25.399	25.392	0.007	362551	2.50	2.76	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330_ADDs_00023	Amount Added:	12.50	Units: uL
8330IntermStk_00059	Amount Added:	25.00	Units: uL

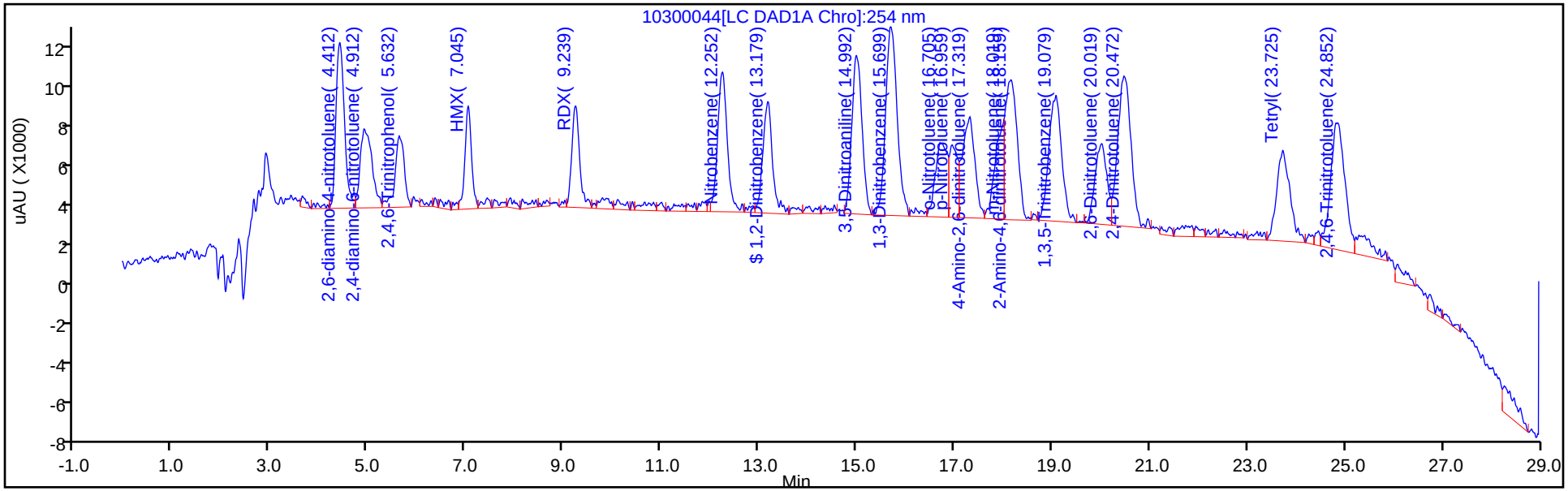
Report Date: 31-Oct-2019 16:27:57 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

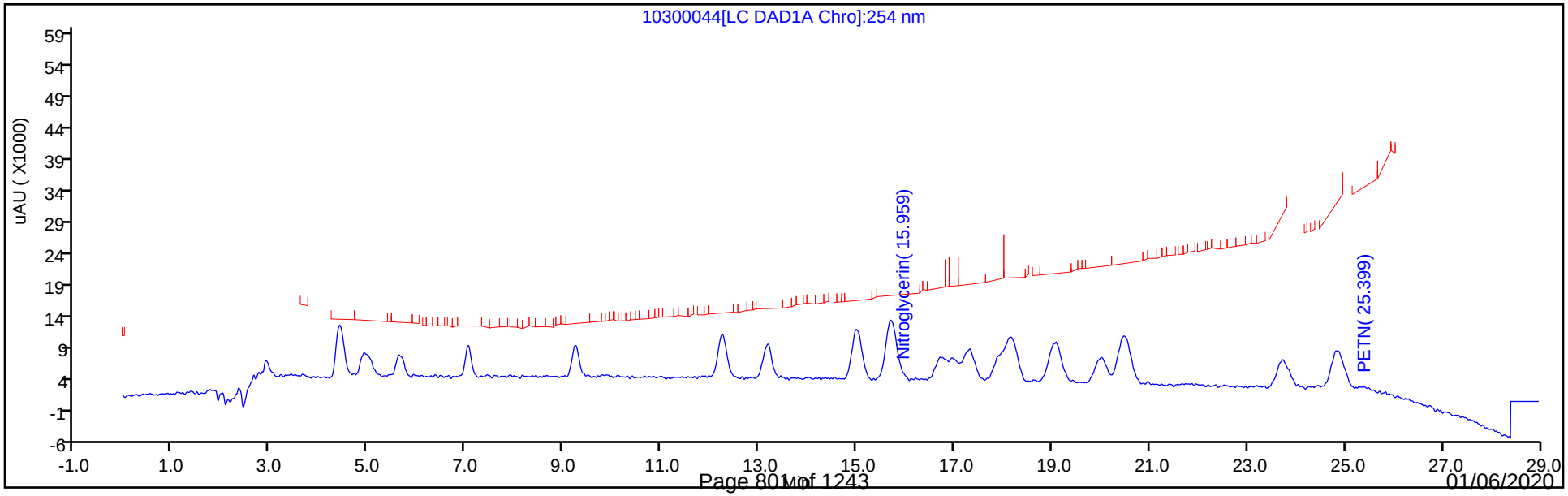
Data File: \\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300044.D

Injection Date:	31-Oct-2019 10:50:39	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV			Worklist Smp#:	44
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

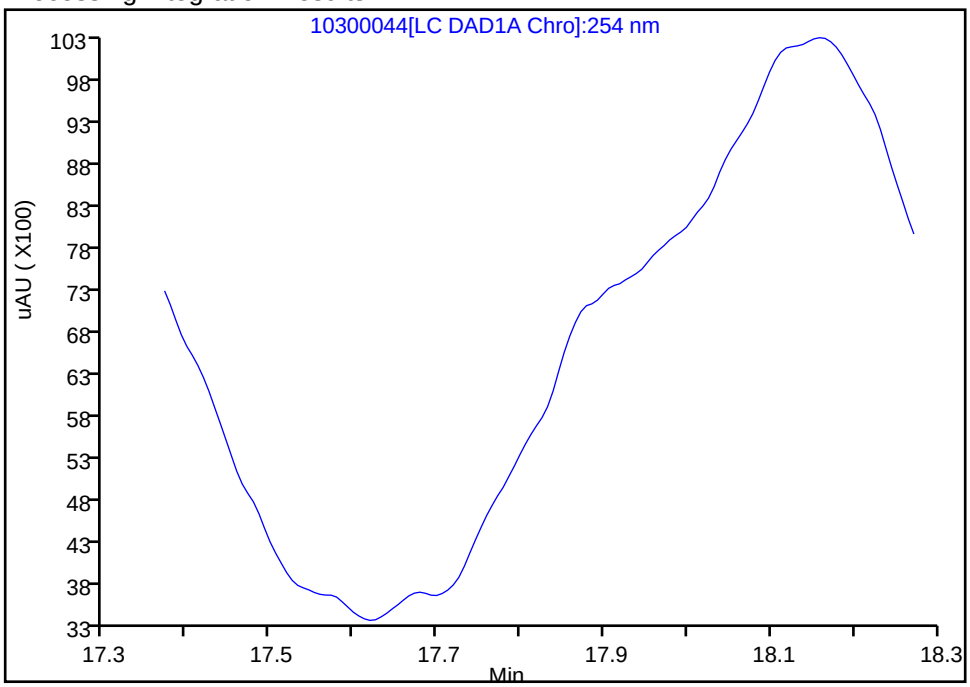
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300044.D				
Injection Date:	31-Oct-2019 10:50:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

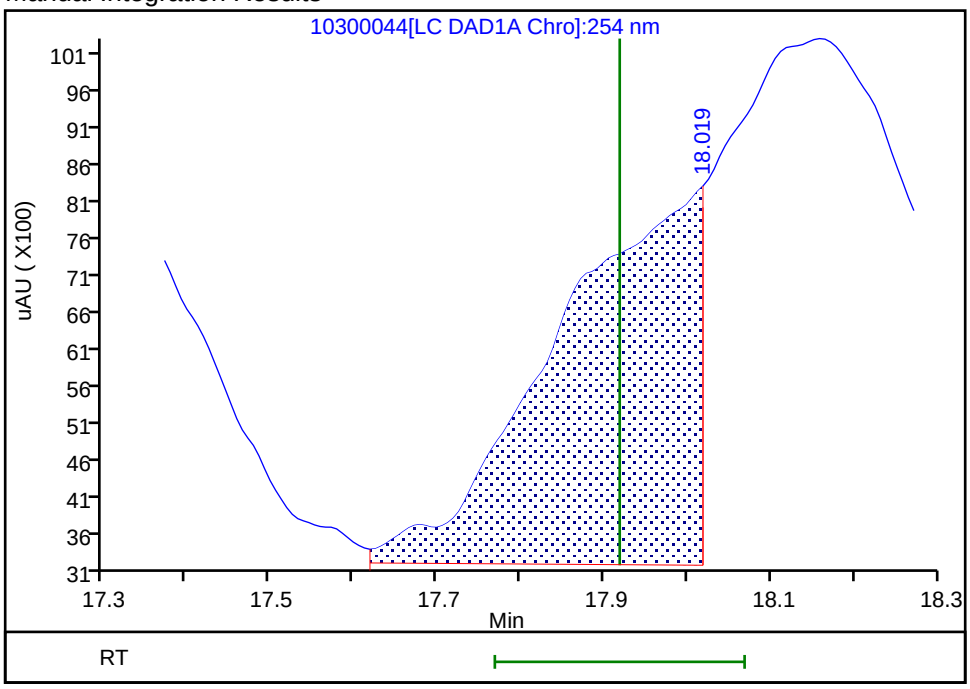
Not Detected
Expected RT: 17.92

Processing Integration Results



Manual Integration Results

RT: 18.02
Area: 60991
Amount: 0.342235
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:26:11
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

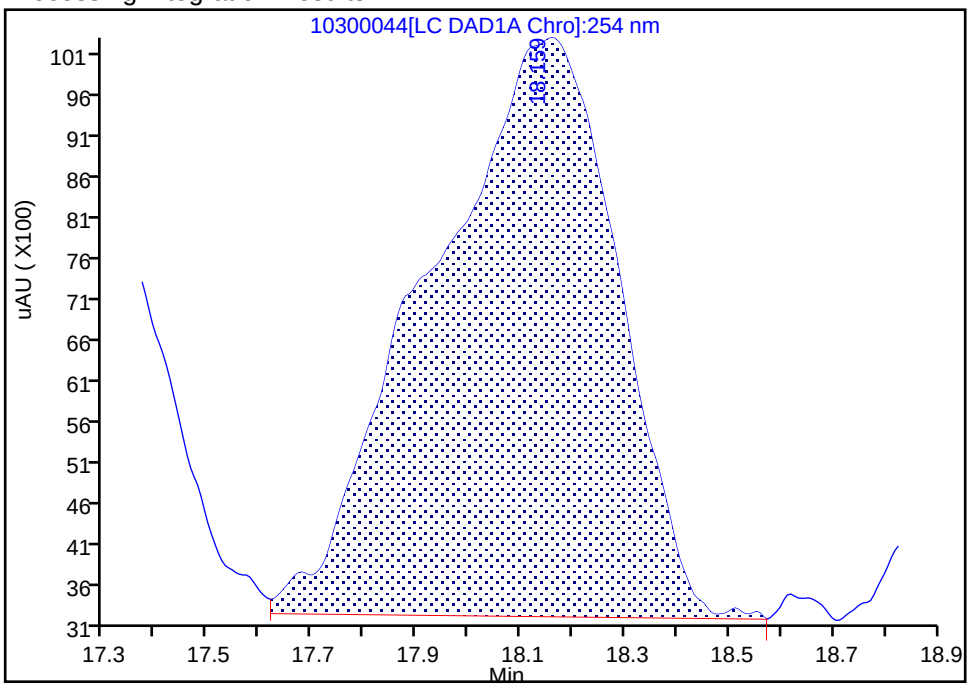
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20191030-86641.b\10300044.D				
Injection Date:	31-Oct-2019 10:50:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

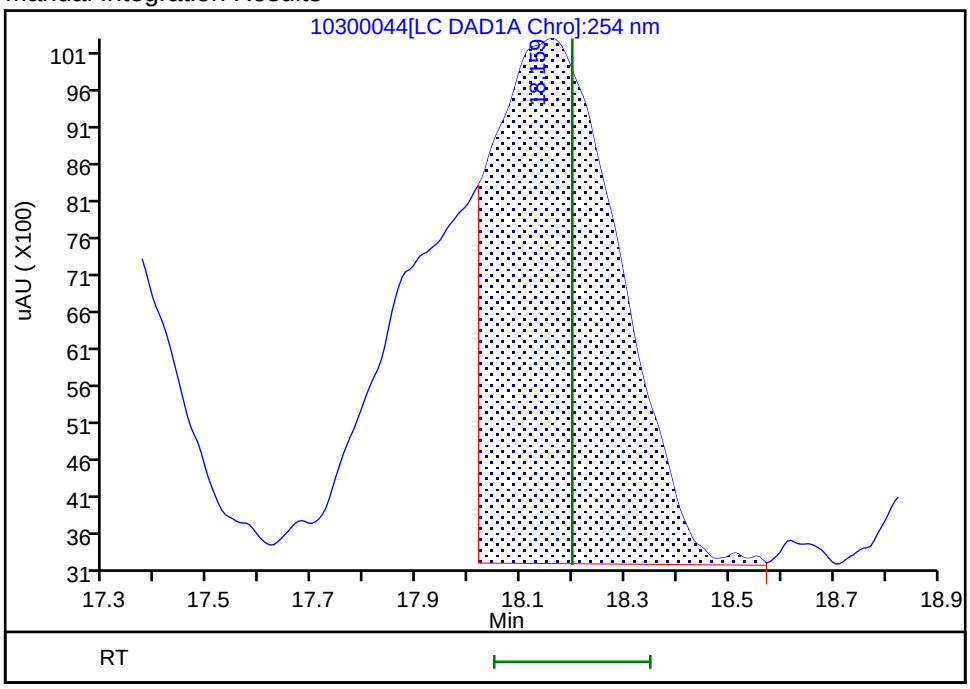
Processing Integration Results

RT: 18.16
Area: 178741
Amount: 0.388757
Amount Units: ug/ml



Manual Integration Results

RT: 18.16
Area: 119186
Amount: 0.259227
Amount Units: ug/ml



Reviewer: beckerc, 31-Oct-2019 16:25:54

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

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.: 280-129936-1

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

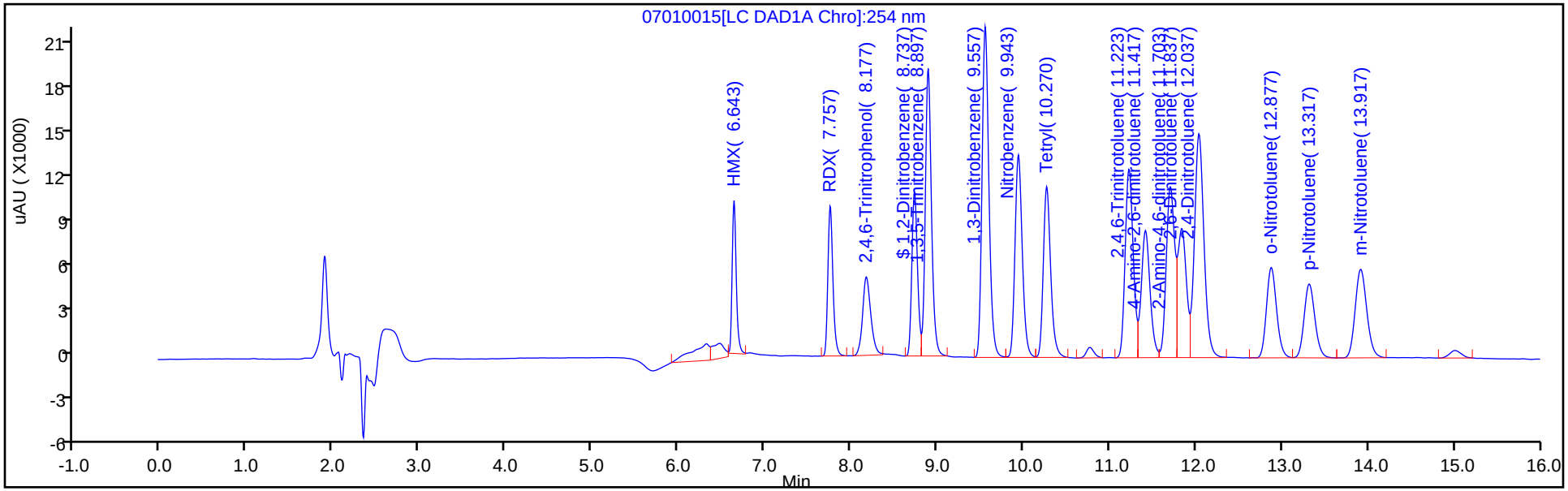
Report Date: 02-Jul-2019 11:34:59 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

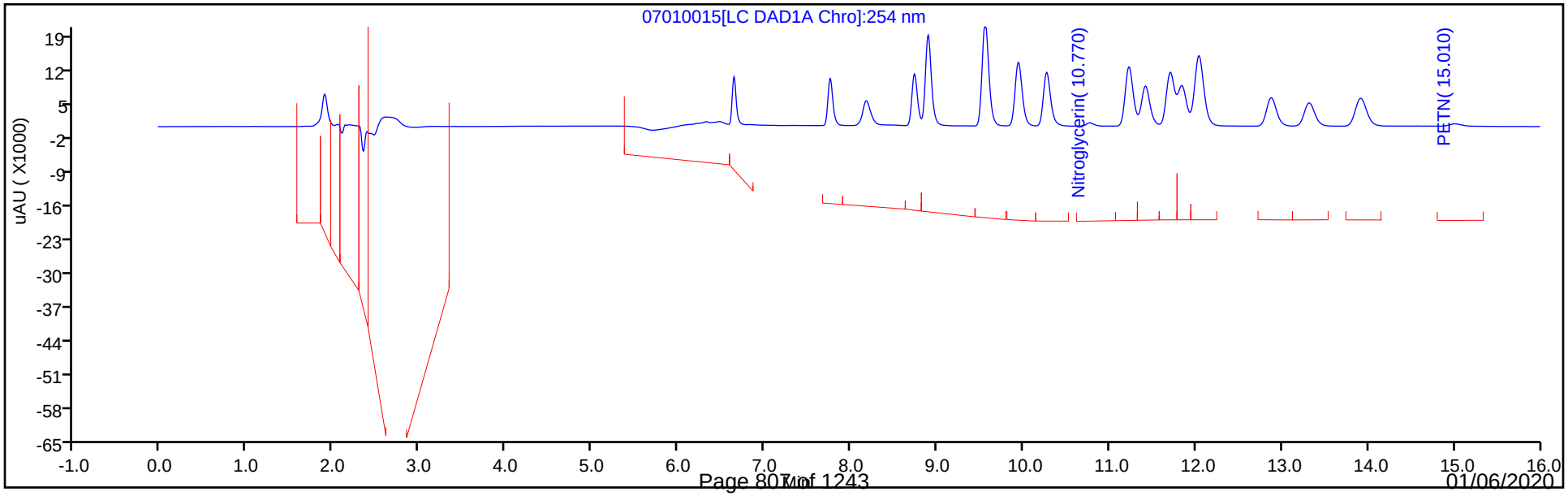
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D

Injection Date:	01-Jul-2019 17:46:34	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	ICV MAIN			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

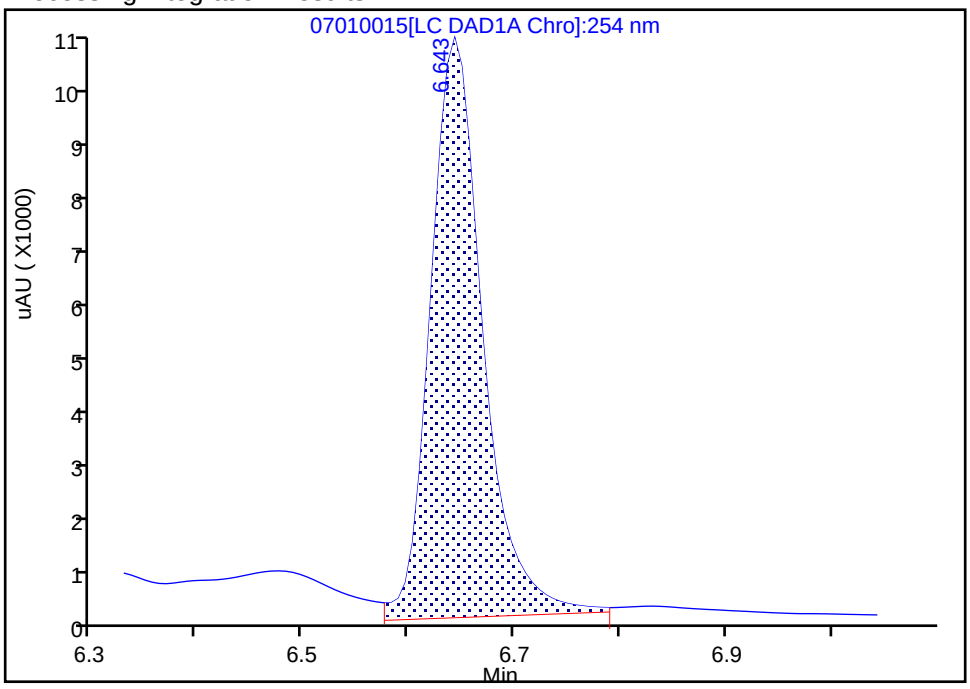
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D				
Injection Date:	01-Jul-2019 17:46:34	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

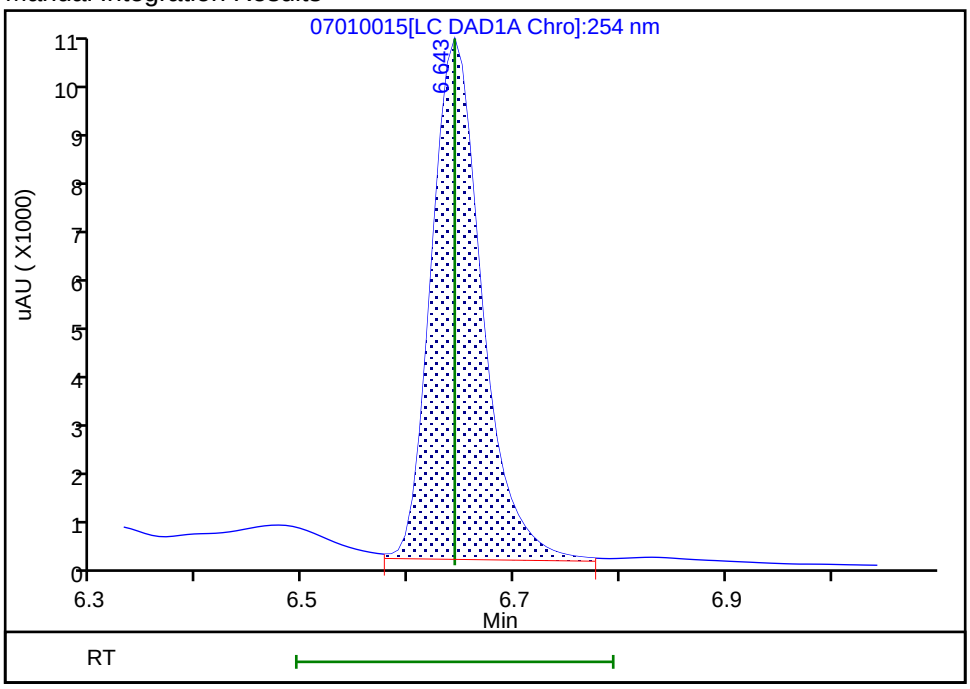
Processing Integration Results

RT: 6.64
Area: 35035
Amount: 0.381507
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 33401
Amount: 0.363714
Amount Units: ug/mL



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.: 280-129936-1

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.: 280-129936-1

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

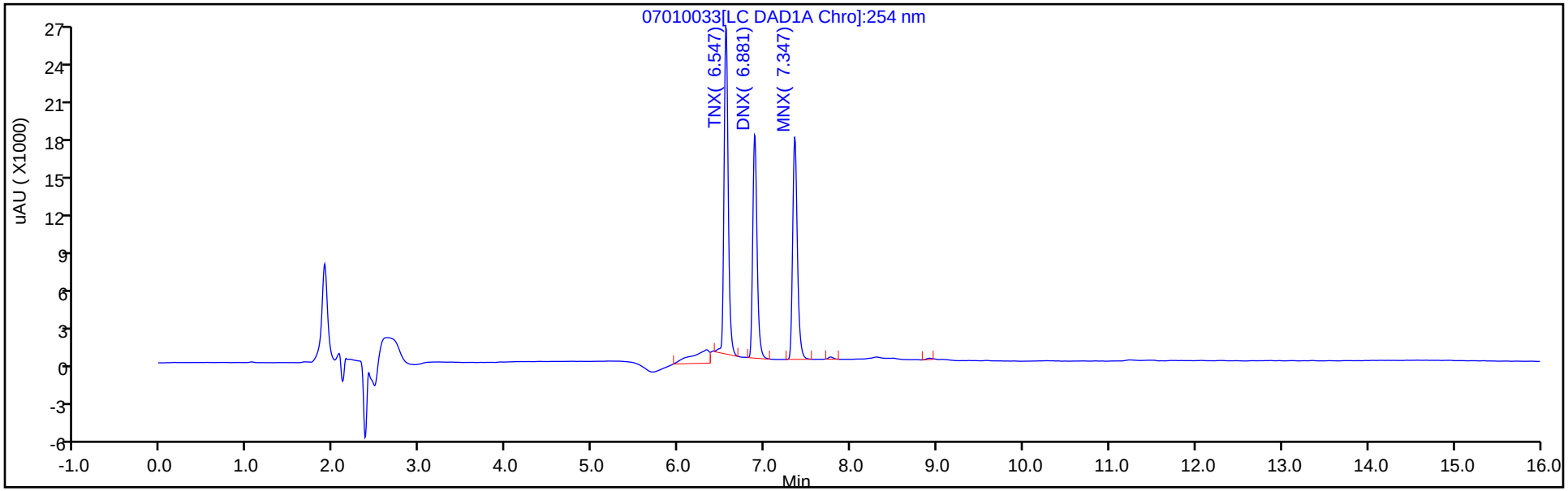
Report Date: 02-Jul-2019 11:35:32 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

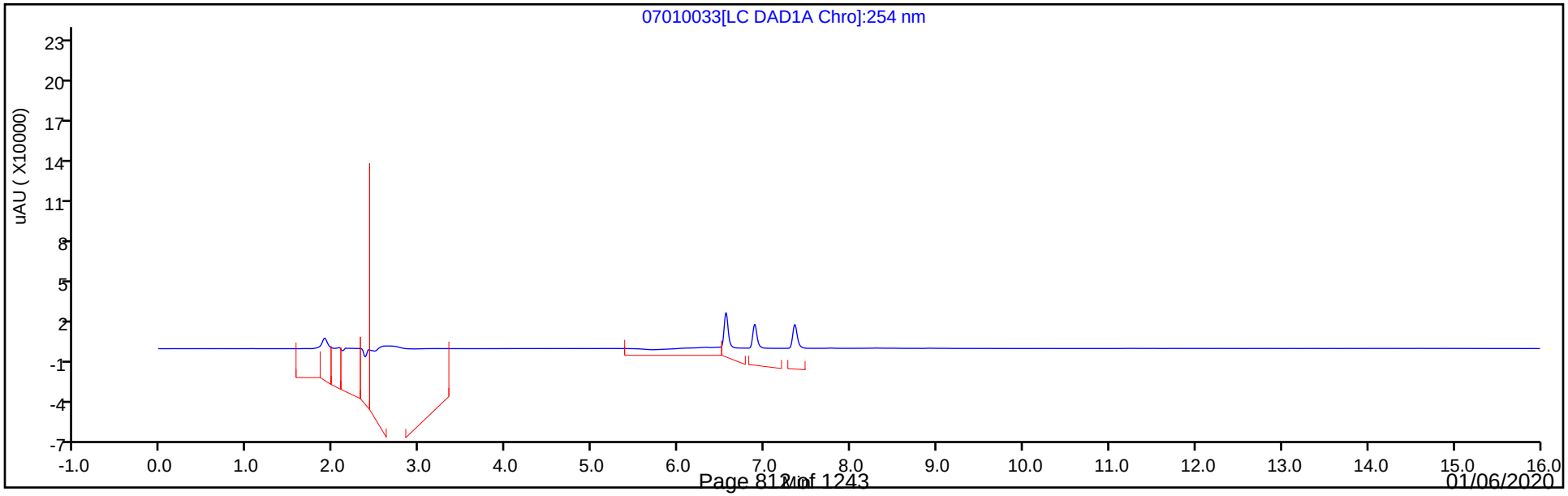
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

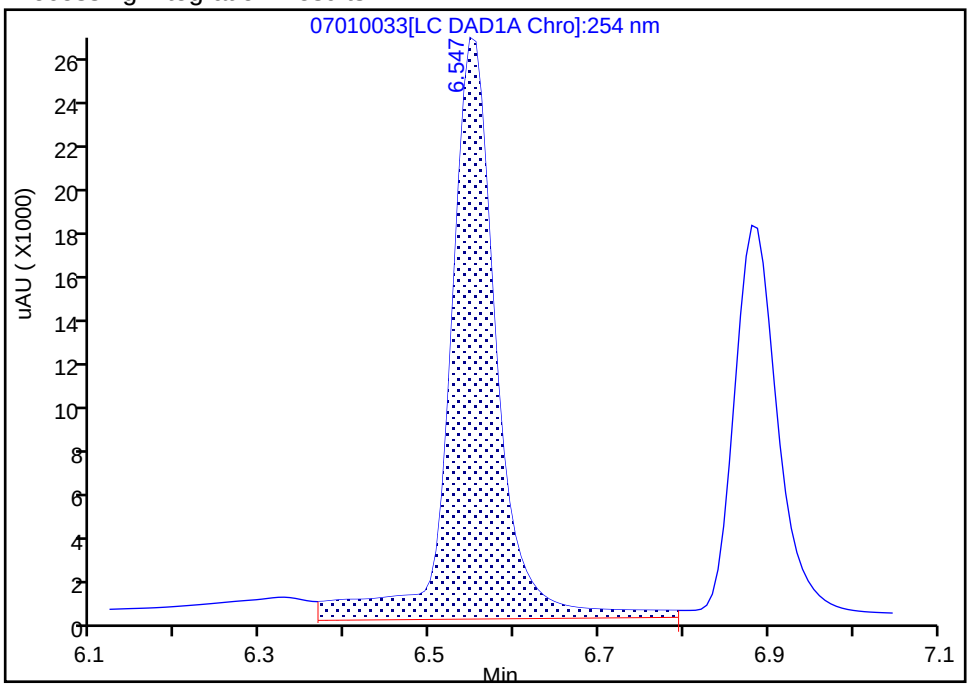
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D				
Injection Date:	02-Jul-2019 00:41:04	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

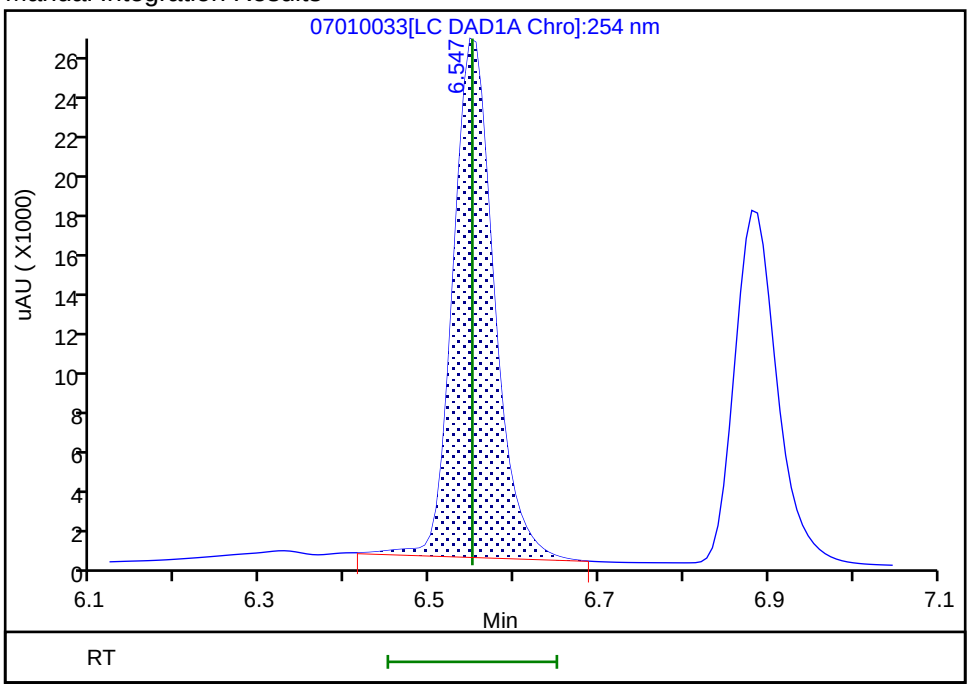
Processing Integration Results

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

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

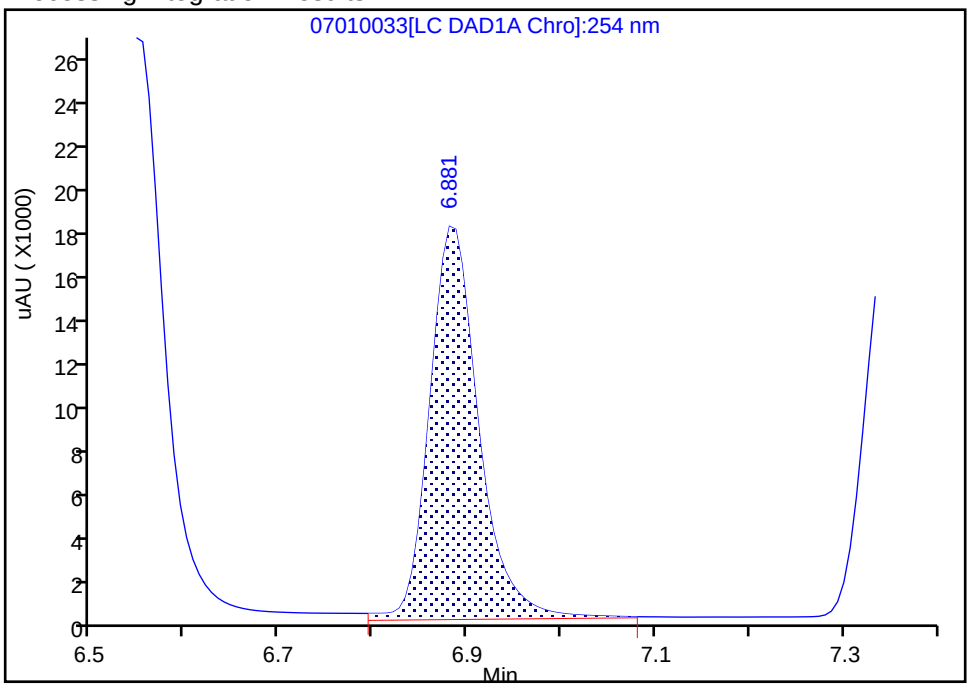
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D				
Injection Date:	02-Jul-2019 00:41:04	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

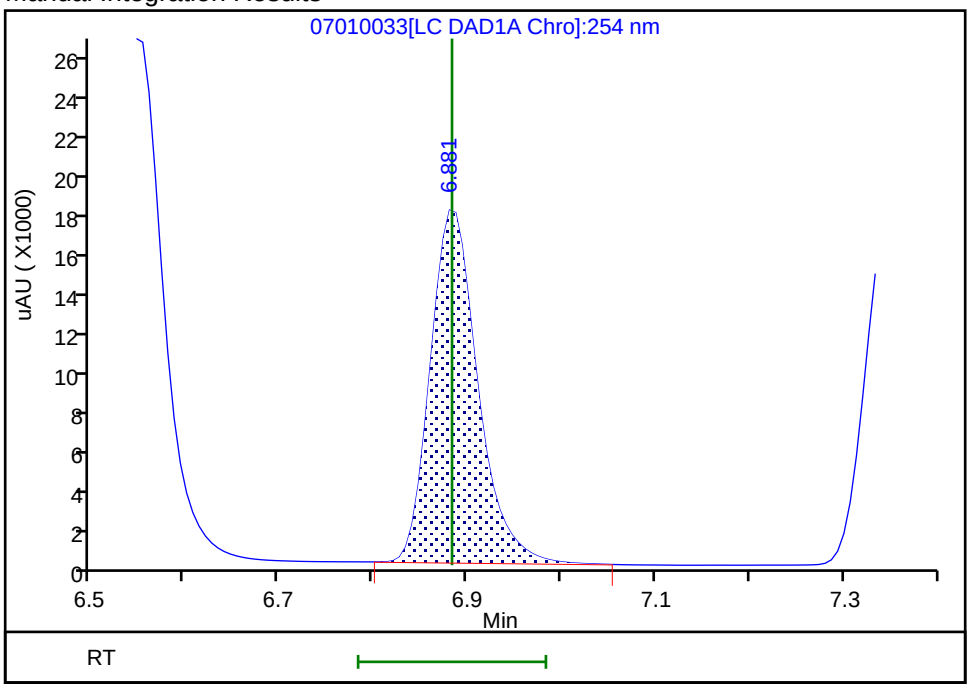
Processing Integration Results

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.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/33 Calibration Date: 10/28/2019 22:57

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: 10280033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	93712		255	250	2.0	15.0
RDX	Ave	111120	111672		251	250	0.5	15.0
Picric acid	Ave	90734	89600		247	250	-1.3	15.0
1,3,5-Trinitrobenzene	Ave	245077	243444		248	250	-0.7	15.0
1,3-Dinitrobenzene	Ave	311175	315025		253	250	1.2	15.0
Nitrobenzene	Ave	198903	200934		253	251	1.0	15.0
Tetryl	Ave	161957	174600		270	250	7.8	15.0
Nitroglycerin	Ave	71108	73400		2580	2500	3.2	15.0
2,4,6-Trinitrotoluene	Ave	227277	231116		255	251	1.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	167737		253	251	0.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	212849		260	251	3.7	15.0
2,6-Dinitrotoluene	Ave	159284	156415		246	251	-1.8	15.0
2,4-Dinitrotoluene	Ave	300447	306092		255	251	1.9	15.0
2-Nitrotoluene	Ave	129784	129416		250	251	-0.3	15.0
4-Nitrotoluene	Ave	110255	112263		256	251	1.8	15.0
3-Nitrotoluene	Ave	145122	145394		251	251	0.2	15.0
PETN	Ave	74289	79657		2680	2500	7.2	15.0
1,2-Dinitrobenzene	Ave	139328	144216		259	250	3.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/33 Calibration Date: 10/28/2019 22:57

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: 10280033.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.76	7.61	7.91
Picric acid	8.12	7.95	8.25
1,3,5-Trinitrobenzene	8.89	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.23	10.08	10.38
Nitroglycerin	10.74	10.59	10.89
2,4,6-Trinitrotoluene	11.19	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.37	11.27	11.47
2-Amino-4,6-dinitrotoluene	11.65	11.56	11.76
2,6-Dinitrotoluene	11.81	11.71	11.91
2,4-Dinitrotoluene	12.01	11.91	12.11
2-Nitrotoluene	12.85	12.70	13.00
4-Nitrotoluene	13.29	13.15	13.45
3-Nitrotoluene	13.89	13.75	14.05
PETN	14.99	14.85	15.15
1,2-Dinitrobenzene	8.72	8.57	8.87

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280033.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 28-Oct-2019 22:57:06 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0086569-033
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:58 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: CTX0329

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.679	6.675	0.004	23428	0.2500	0.2551	
	7 RDX	1	7.759	7.761	-0.002	27918	0.2500	0.2512	
	8 2,4,6-Trinitrophenol	1	8.119	8.095	0.024	22400	0.2500	0.2469	
$	9 1,2-Dinitrobenzene	1	8.719	8.715	0.004	36054	0.2500	0.2588	
	10 1,3,5-Trinitrobenzene	1	8.886	8.881	0.005	60861	0.2500	0.2483	
	11 1,3-Dinitrobenzene	1	9.533	9.534	-0.001	78835	0.2503	0.2533	
	12 Nitrobenzene	1	9.919	9.921	-0.002	50334	0.2505	0.2531	
	14 Tetryl	1	10.226	10.228	-0.002	43650	0.2500	0.2695	
	15 Nitroglycerin	2	10.739	10.741	-0.002	183500	2.50	2.58	
	16 2,4,6-Trinitrotoluene	1	11.193	11.201	-0.008	58010	0.2510	0.2552	
	17 4-Amino-2,6-dinitrotoluene	1	11.366	11.368	-0.002	42060	0.2508	0.2528	
	18 2-Amino-4,6-dinitrotoluene	1	11.653	11.661	-0.008	53372	0.2508	0.2601	
	19 2,6-Dinitrotoluene	1	11.806	11.814	-0.008	39221	0.2508	0.2462	
	20 2,4-Dinitrotoluene	1	12.006	12.008	-0.002	76676	0.2505	0.2552	
	21 o-Nitrotoluene	1	12.853	12.854	-0.001	32451	0.2508	0.2500	
	22 p-Nitrotoluene	1	13.293	13.301	-0.008	28178	0.2510	0.2556	
	23 m-Nitrotoluene	1	13.893	13.901	-0.008	36494	0.2510	0.2515	
	24 PETN	2	14.993	15.001	-0.008	199143	2.50	2.68	

Reagents:

8330IntermStk_00059 Amount Added: 25.00 Units: uL

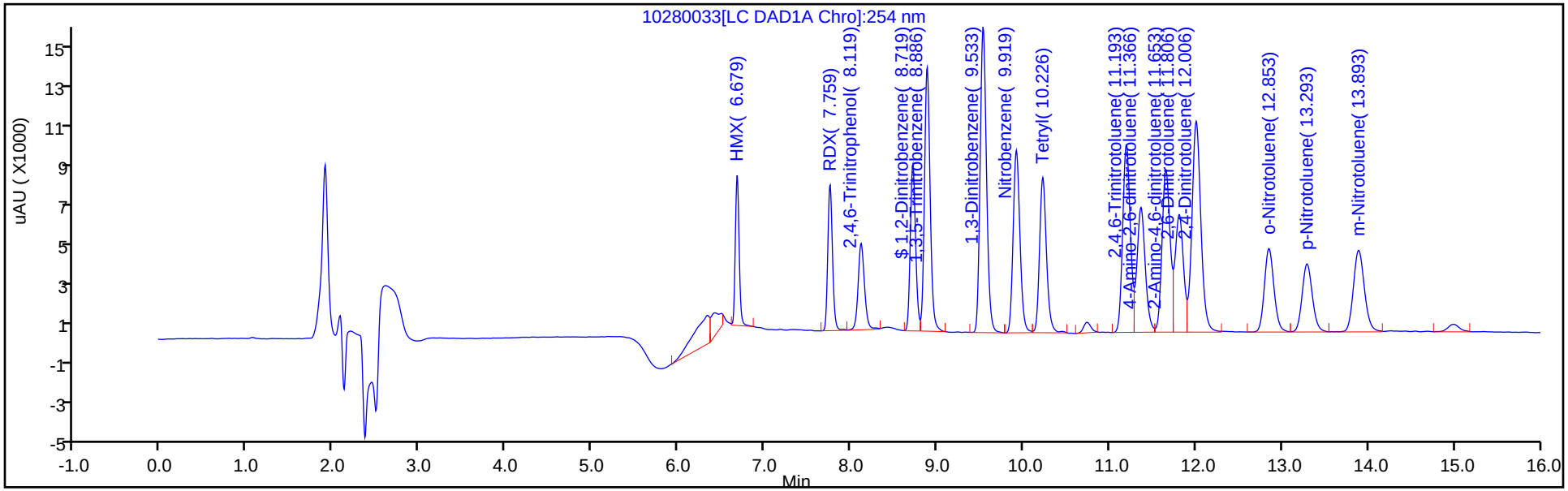
Report Date: 29-Oct-2019 11:54:59 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

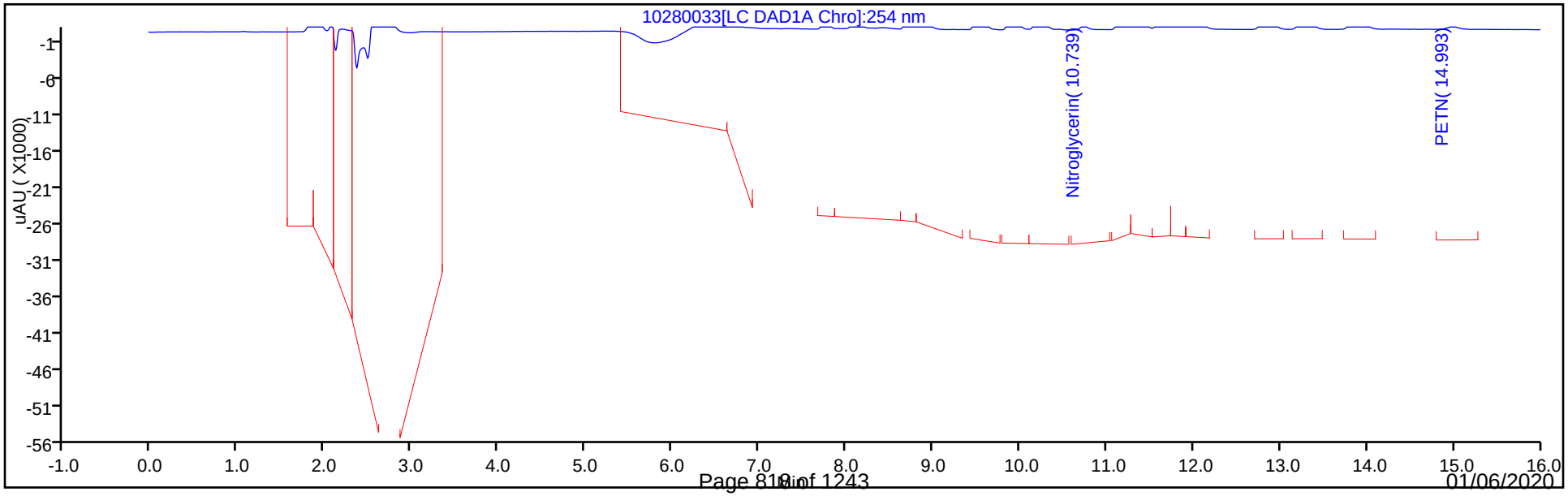
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280033.D

Injection Date:	28-Oct-2019 22:57:06	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/35 Calibration Date: 10/28/2019 23:42

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: 10280035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	210258		245	250	-2.2	15.0
DNX	Ave	156126	158102		253	250	1.3	15.0
MNX	Ave	140041	146358		305	292	4.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/35 Calibration Date: 10/28/2019 23:42

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: 10280035.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.35	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280035.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 28-Oct-2019 23:42:59 ALS Bottle#: 9 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0086569-035
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:56 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:46:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.589	6.587	0.002	52617	0.2503	0.2448	M
5 DNX	1	6.909	6.907	0.002	39565	0.2503	0.2534	M
6 MNX	1	7.349	7.367	-0.018	42700	0.2918	0.3049	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

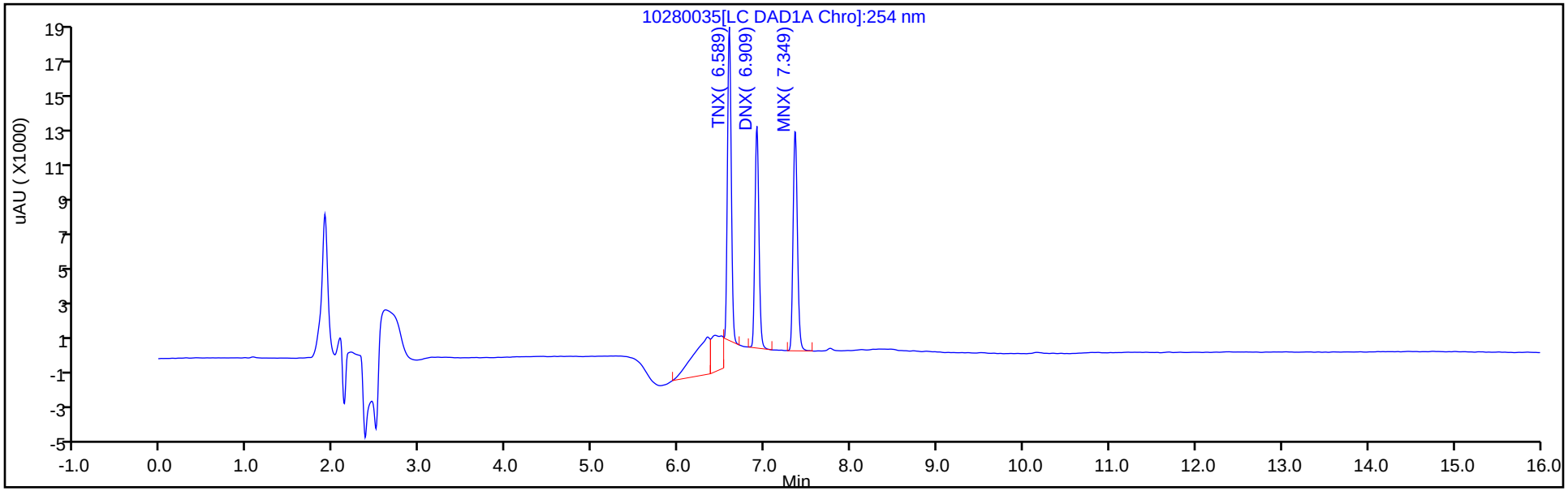
Report Date: 29-Oct-2019 11:54:56 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

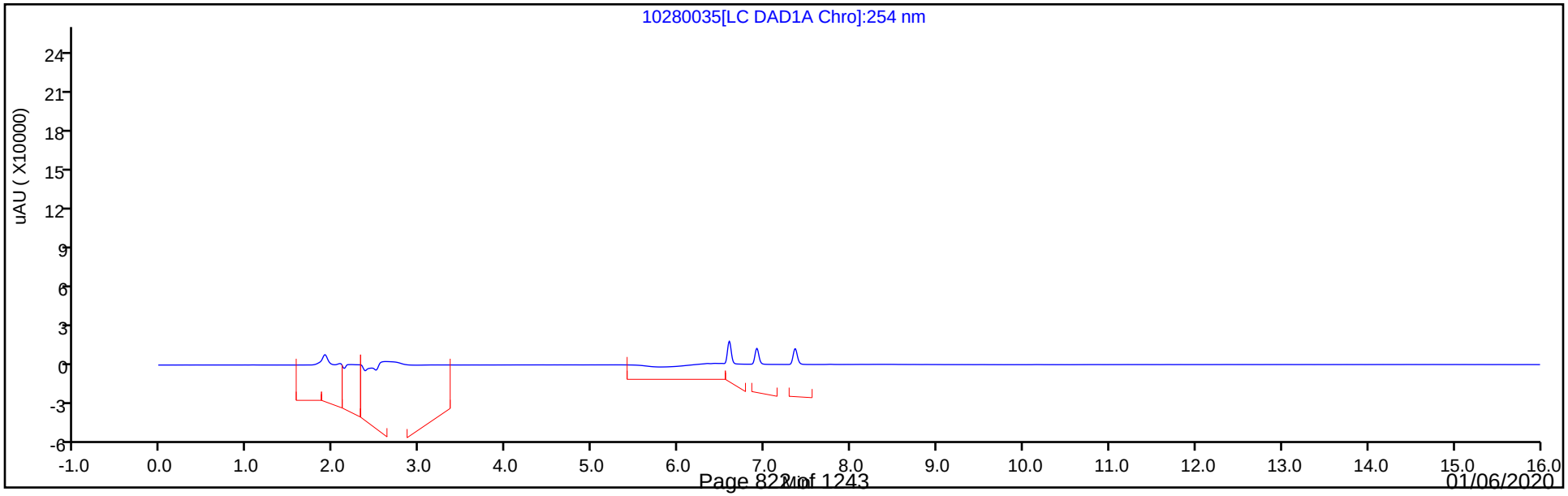
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280035.D

Injection Date:	28-Oct-2019 23:42:59	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	35
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

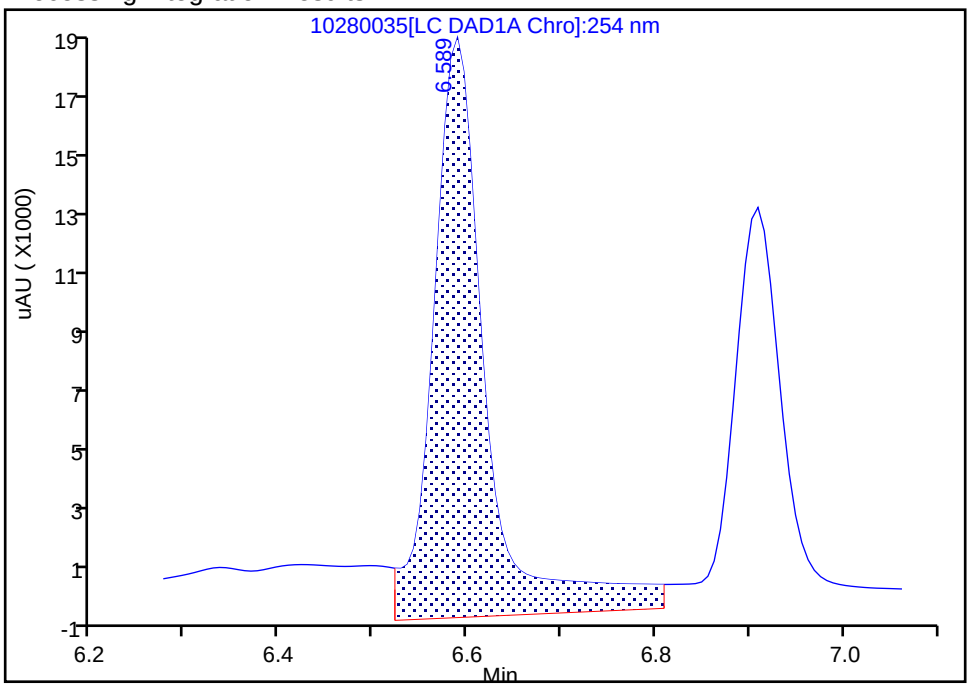
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280035.D				
Injection Date:	28-Oct-2019 23:42:59	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

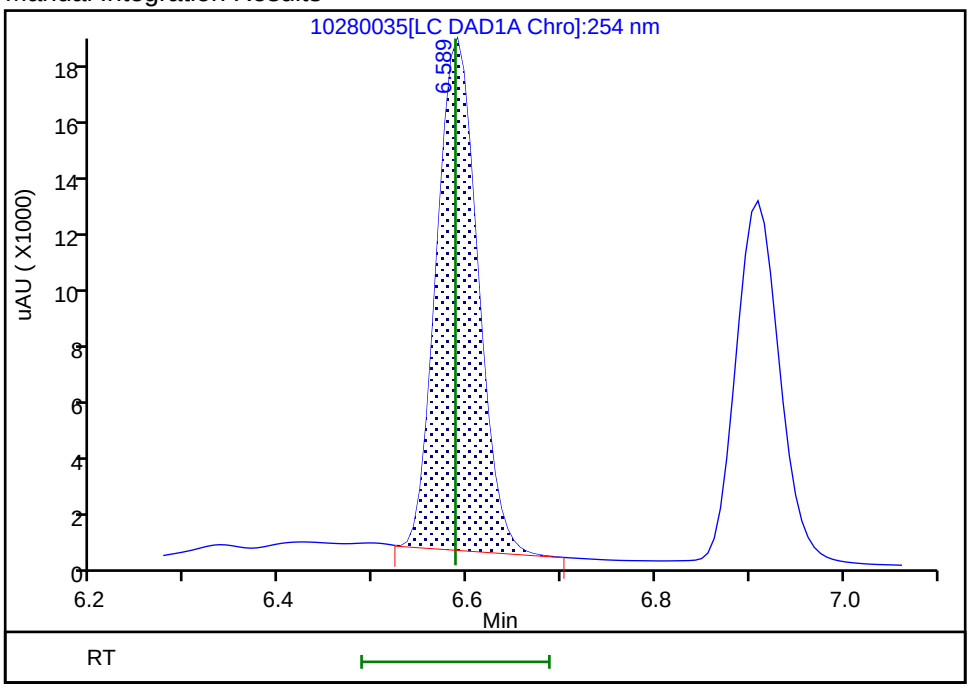
Processing Integration Results

RT: 6.59
Area: 72650
Amount: 0.337963
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 52617
Amount: 0.244771
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:46:20

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

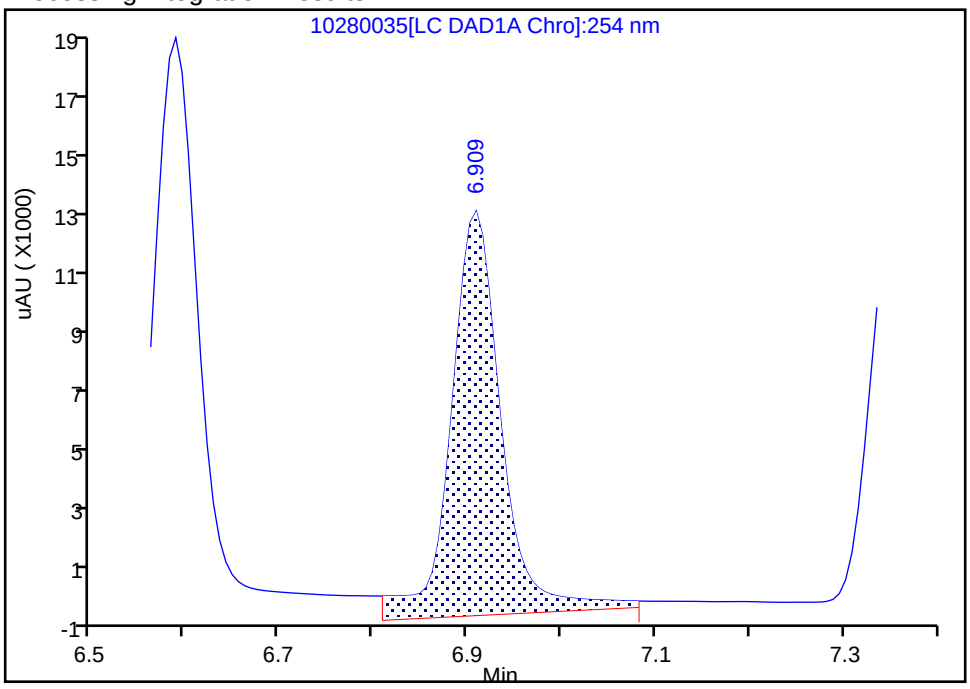
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280035.D				
Injection Date:	28-Oct-2019 23:42:59	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

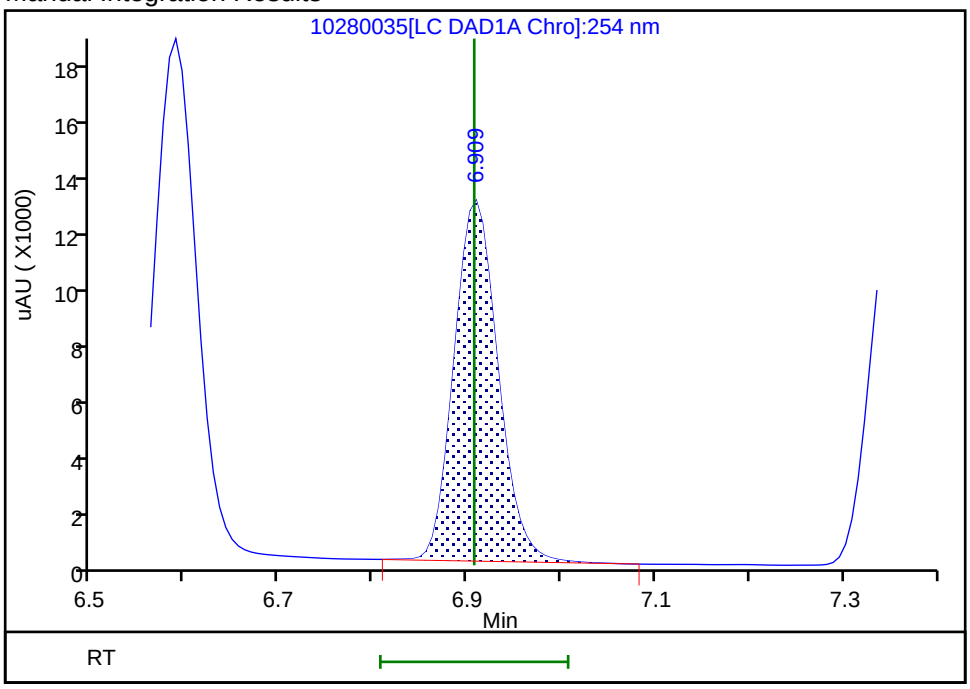
Processing Integration Results

RT: 6.91
Area: 47486
Amount: 0.304152
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 39565
Amount: 0.253418
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 10:46:27

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/46 Calibration Date: 10/29/2019 03:55

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: 10280046.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	93520		255	250	1.8	15.0
RDX	Ave	111120	110356		248	250	-0.7	15.0
Picric acid	Ave	90734	87372		241	250	-3.7	15.0
1,3,5-Trinitrobenzene	Ave	245077	243668		249	250	-0.6	15.0
1,3-Dinitrobenzene	Ave	311175	315441		254	250	1.4	15.0
Nitrobenzene	Ave	198903	197880		249	251	-0.5	15.0
Tetryl	Ave	161957	175432		271	250	8.3	15.0
Nitroglycerin	Ave	71108	72794		2560	2500	2.4	15.0
2,4,6-Trinitrotoluene	Ave	227277	233203		258	251	2.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	165954		250	251	-0.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	210736		257	251	2.7	15.0
2,6-Dinitrotoluene	Ave	159284	159390		251	251	0.0	15.0
2,4-Dinitrotoluene	Ave	300447	304040		253	251	1.2	15.0
2-Nitrotoluene	Ave	129784	126919		245	251	-2.2	15.0
4-Nitrotoluene	Ave	110255	111741		254	251	1.3	15.0
3-Nitrotoluene	Ave	145122	143068		247	251	-1.4	15.0
PETN	Ave	74289	79758		2680	2500	7.4	15.0
1,2-Dinitrobenzene	Ave	139328	144068		259	250	3.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/46 Calibration Date: 10/29/2019 03:55

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: 10280046.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.76	7.61	7.91
Picric acid	8.12	7.95	8.25
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.22	10.08	10.38
Nitroglycerin	10.73	10.59	10.89
2,4,6-Trinitrotoluene	11.19	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.36	11.27	11.47
2-Amino-4,6-dinitrotoluene	11.65	11.56	11.76
2,6-Dinitrotoluene	11.80	11.71	11.91
2,4-Dinitrotoluene	12.00	11.91	12.11
2-Nitrotoluene	12.84	12.70	13.00
4-Nitrotoluene	13.28	13.15	13.45
3-Nitrotoluene	13.88	13.75	14.05
PETN	14.98	14.85	15.15
1,2-Dinitrobenzene	8.72	8.57	8.87

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280046.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 29-Oct-2019 03:55:20 ALS Bottle#: 7 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0086569-046
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.683	6.675	0.008	23380	0.2500	0.2546	
	7 RDX	1	7.757	7.761	-0.004	27589	0.2500	0.2483	
	8 2,4,6-Trinitrophenol	1	8.123	8.095	0.028	21843	0.2500	0.2407	
$	9 1,2-Dinitrobenzene	1	8.717	8.715	0.002	36017	0.2500	0.2585	
	10 1,3,5-Trinitrobenzene	1	8.883	8.881	0.002	60917	0.2500	0.2486	
	11 1,3-Dinitrobenzene	1	9.530	9.534	-0.004	78939	0.2503	0.2537	
	12 Nitrobenzene	1	9.917	9.921	-0.004	49569	0.2505	0.2492	
	14 Tetryl	1	10.217	10.228	-0.011	43858	0.2500	0.2708	
	15 Nitroglycerin	2	10.730	10.741	-0.011	181984	2.50	2.56	
	16 2,4,6-Trinitrotoluene	1	11.190	11.201	-0.011	58534	0.2510	0.2575	
	17 4-Amino-2,6-dinitrotoluene	1	11.357	11.368	-0.011	41613	0.2508	0.2501	
	18 2-Amino-4,6-dinitrotoluene	1	11.650	11.661	-0.011	52842	0.2508	0.2575	
	19 2,6-Dinitrotoluene	1	11.803	11.814	-0.011	39967	0.2508	0.2509	
	20 2,4-Dinitrotoluene	1	11.997	12.008	-0.011	76162	0.2505	0.2535	
	21 o-Nitrotoluene	1	12.843	12.854	-0.011	31825	0.2508	0.2452	
	22 p-Nitrotoluene	1	13.283	13.301	-0.018	28047	0.2510	0.2544	
	23 m-Nitrotoluene	1	13.883	13.901	-0.018	35910	0.2510	0.2474	
	24 PETN	2	14.983	15.001	-0.018	199395	2.50	2.68	

Reagents:

8330IntermStk_00059 Amount Added: 25.00 Units: uL

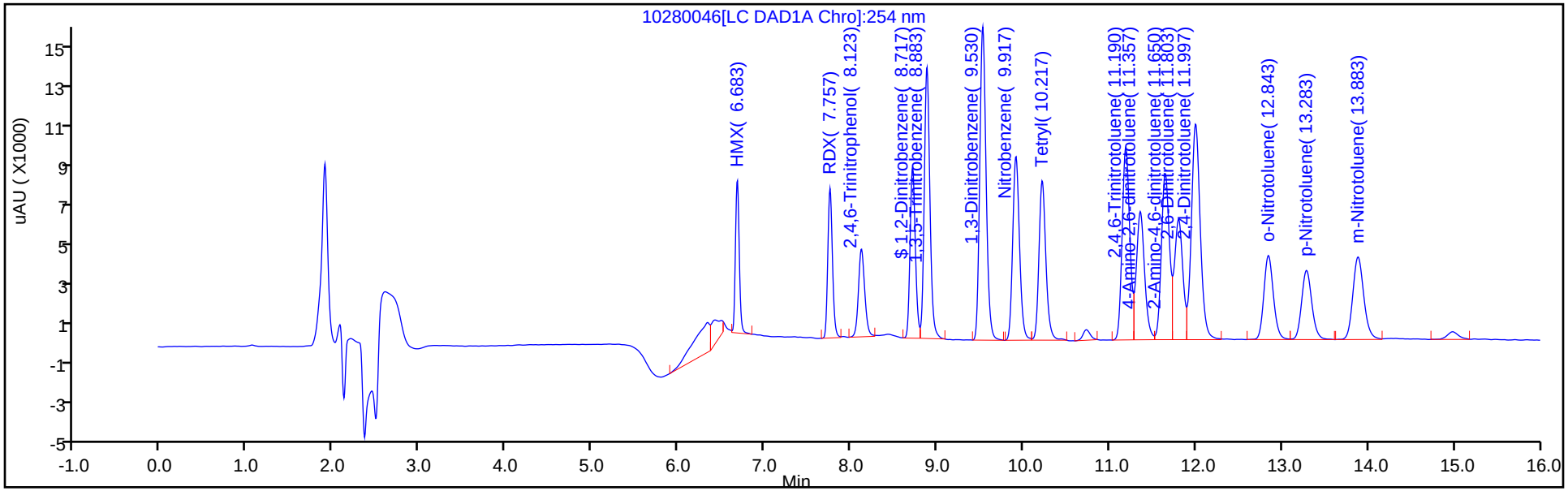
Report Date: 29-Oct-2019 11:54:44 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

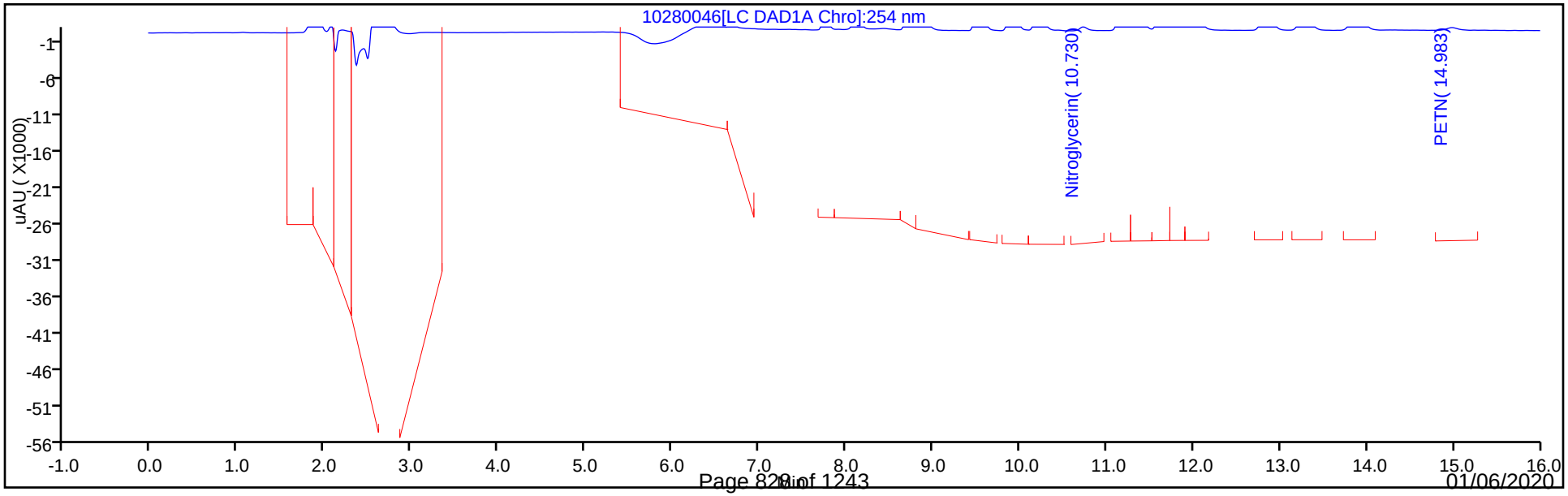
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280046.D

Injection Date:	29-Oct-2019 03:55:20	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	46
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/48 Calibration Date: 10/29/2019 04:41

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: 10280048.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	206246		240	250	-4.1	15.0
DNX	Ave	156126	159149		255	250	1.9	15.0
MNX	Ave	140041	145337		303	292	3.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/48 Calibration Date: 10/29/2019 04:41

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: 10280048.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.35	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280048.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 29-Oct-2019 04:41:13 ALS Bottle#: 9 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0086569-048
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:41 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:00:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.587	6.587	0.000	51613	0.2503	0.2401	M
5 DNX	1	6.913	6.907	0.006	39827	0.2503	0.2551	
6 MNX	1	7.353	7.367	-0.014	42402	0.2918	0.3028	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

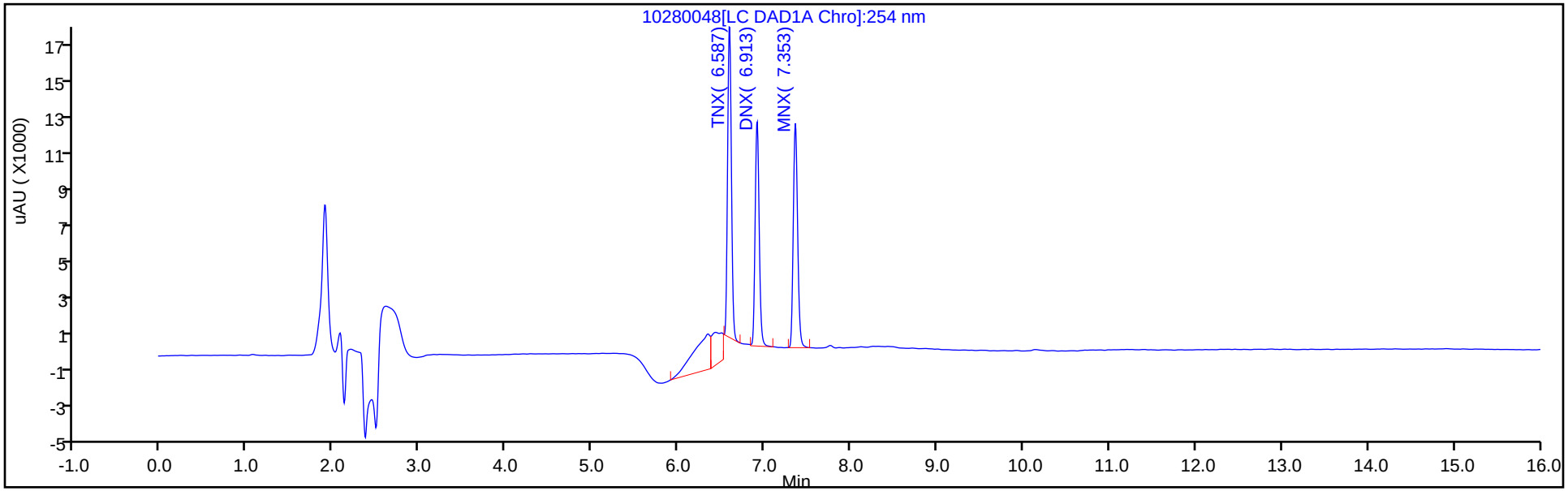
Report Date: 29-Oct-2019 11:54:42 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

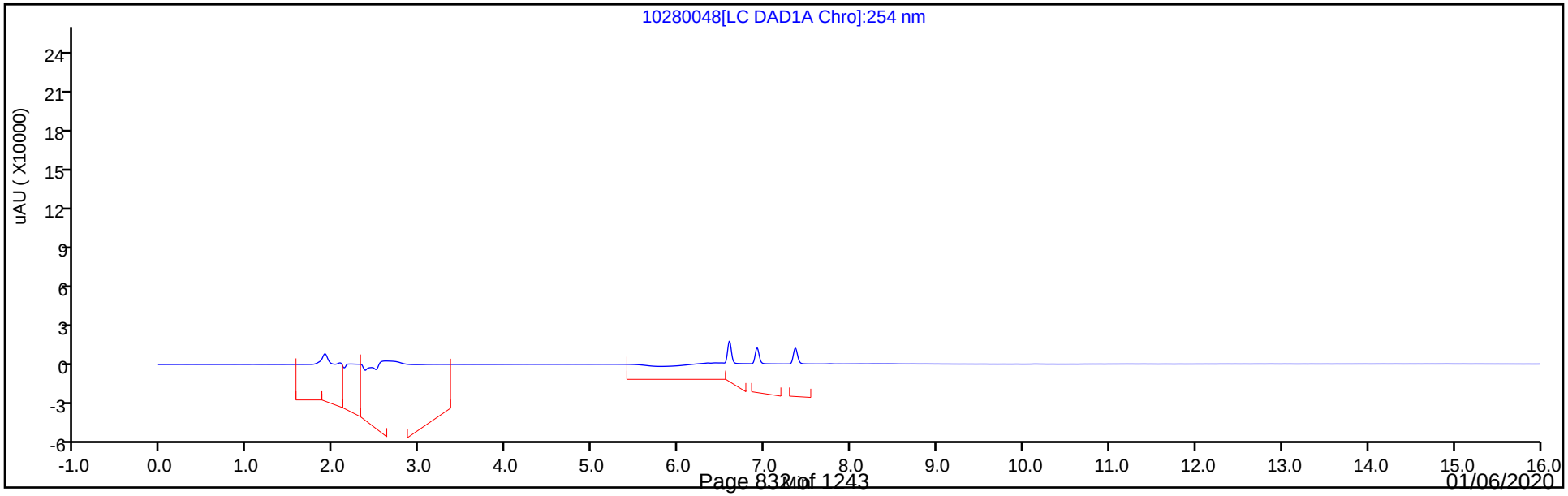
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280048.D

Injection Date:	29-Oct-2019 04:41:13	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	48
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

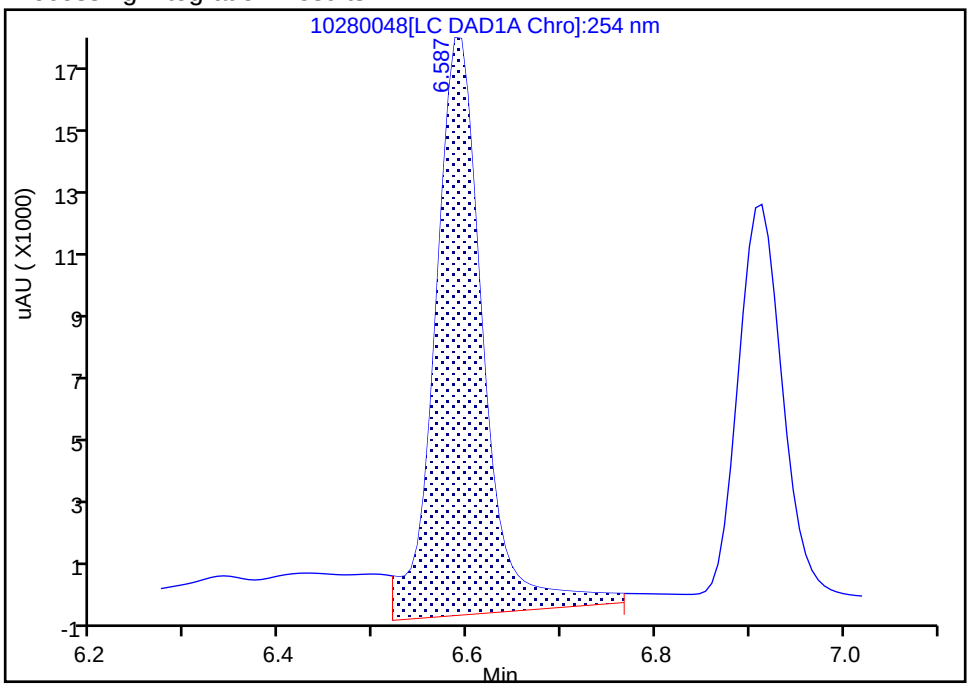
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280048.D				
Injection Date:	29-Oct-2019 04:41:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

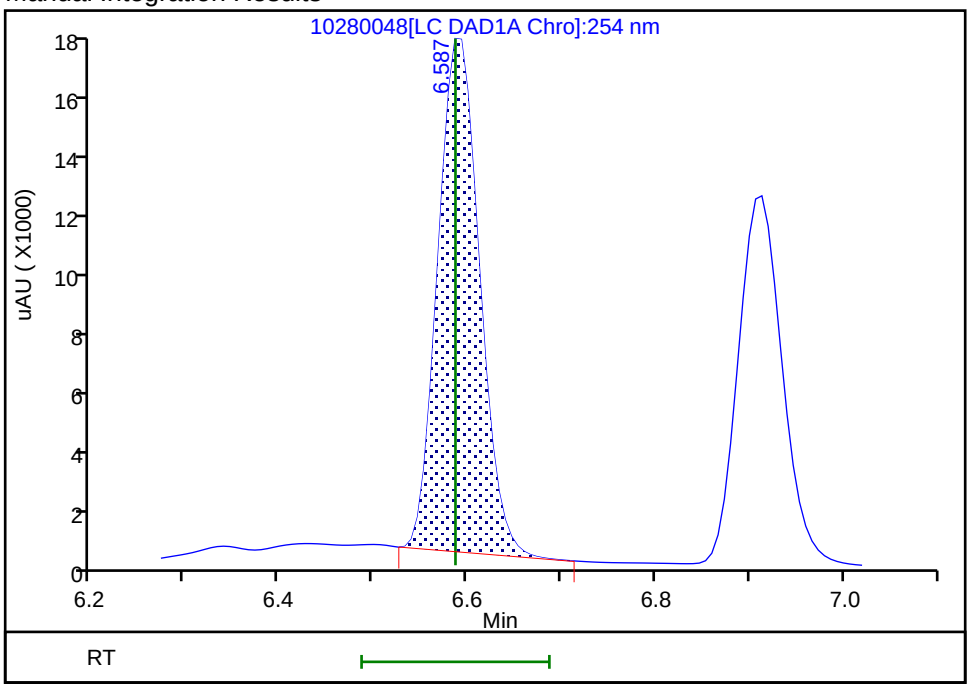
Processing Integration Results

RT: 6.59
Area: 63189
Amount: 0.293951
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 51613
Amount: 0.240101
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:00:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/59 Calibration Date: 10/29/2019 08:53

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: 10280059.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	92808		253	250	1.1	15.0
RDX	Ave	111120	109964		247	250	-1.0	15.0
Picric acid	Ave	90734	86716		239	250	-4.4	15.0
1,3,5-Trinitrobenzene	Ave	245077	244912		250	250	-0.0	15.0
1,3-Dinitrobenzene	Ave	311175	315640		254	250	1.4	15.0
Nitrobenzene	Ave	198903	192998		243	251	-3.0	15.0
Tetryl	Ave	161957	171004		264	250	5.6	15.0
Nitroglycerin	Ave	71108	72478		2550	2500	1.9	15.0
2,4,6-Trinitrotoluene	Ave	227277	230622		255	251	1.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	166919		252	251	0.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	211151		258	251	2.9	15.0
2,6-Dinitrotoluene	Ave	159284	159218		251	251	-0.0	15.0
2,4-Dinitrotoluene	Ave	300447	304355		254	251	1.3	15.0
2-Nitrotoluene	Ave	129784	126138		244	251	-2.8	15.0
4-Nitrotoluene	Ave	110255	110028		250	251	-0.2	15.0
3-Nitrotoluene	Ave	145122	141235		244	251	-2.7	15.0
PETN	Ave	74289	79645		2680	2500	7.2	15.0
1,2-Dinitrobenzene	Ave	139328	143804		258	250	3.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/59 Calibration Date: 10/29/2019 08:53

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: 10280059.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.76	7.61	7.91
Picric acid	8.12	7.95	8.25
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.54	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.23	10.08	10.38
Nitroglycerin	10.74	10.59	10.89
2,4,6-Trinitrotoluene	11.20	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.37	11.27	11.47
2-Amino-4,6-dinitrotoluene	11.66	11.56	11.76
2,6-Dinitrotoluene	11.82	11.71	11.91
2,4-Dinitrotoluene	12.01	11.91	12.11
2-Nitrotoluene	12.86	12.70	13.00
4-Nitrotoluene	13.30	13.15	13.45
3-Nitrotoluene	13.90	13.75	14.05
PETN	15.00	14.85	15.15
1,2-Dinitrobenzene	8.72	8.57	8.87

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280059.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 29-Oct-2019 08:53:41 ALS Bottle#: 7 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0086569-059
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:10:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.676	6.675	0.001	23202	0.2500	0.2527	
7 RDX	1	7.756	7.761	-0.005	27491	0.2500	0.2474	
8 2,4,6-Trinitrophenol	1	8.123	8.095	0.028	21679	0.2500	0.2389	
$ 9 1,2-Dinitrobenzene	1	8.716	8.715	0.001	35951	0.2500	0.2580	
10 1,3,5-Trinitrobenzene	1	8.883	8.881	0.002	61228	0.2500	0.2498	
11 1,3-Dinitrobenzene	1	9.536	9.534	0.002	78989	0.2503	0.2538	
12 Nitrobenzene	1	9.923	9.921	0.002	48346	0.2505	0.2431	
14 Tetryl	1	10.230	10.228	0.002	42751	0.2500	0.2640	
15 Nitroglycerin	2	10.743	10.741	0.002	181195	2.50	2.55	
16 2,4,6-Trinitrotoluene	1	11.196	11.201	-0.005	57886	0.2510	0.2547	
17 4-Amino-2,6-dinitrotoluene	1	11.370	11.368	0.002	41855	0.2508	0.2516	
18 2-Amino-4,6-dinitrotoluene	1	11.656	11.661	-0.005	52946	0.2508	0.2580	
19 2,6-Dinitrotoluene	1	11.816	11.814	0.002	39924	0.2508	0.2506	
20 2,4-Dinitrotoluene	1	12.010	12.008	0.002	76241	0.2505	0.2538	
21 o-Nitrotoluene	1	12.856	12.854	0.002	31629	0.2508	0.2437	
22 p-Nitrotoluene	1	13.303	13.301	0.002	27617	0.2510	0.2505	
23 m-Nitrotoluene	1	13.903	13.901	0.002	35450	0.2510	0.2443	
24 PETN	2	15.003	15.001	0.002	199112	2.50	2.68	

Reagents:

8330IntermStk_00059 Amount Added: 25.00 Units: uL

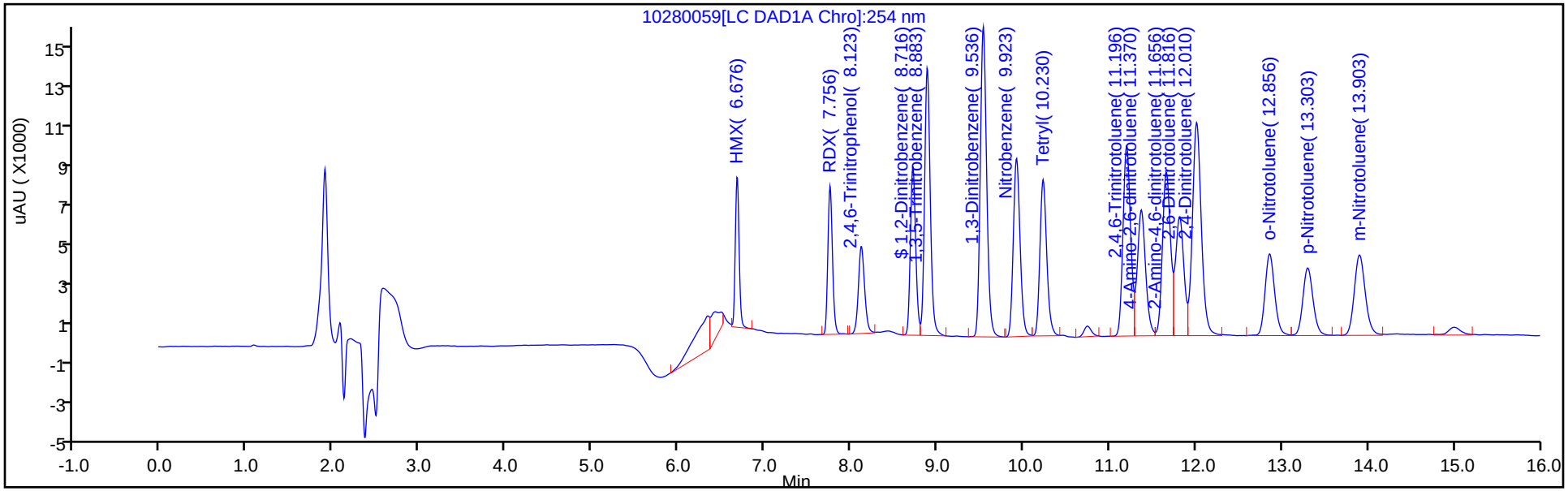
Report Date: 29-Oct-2019 11:54:29 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

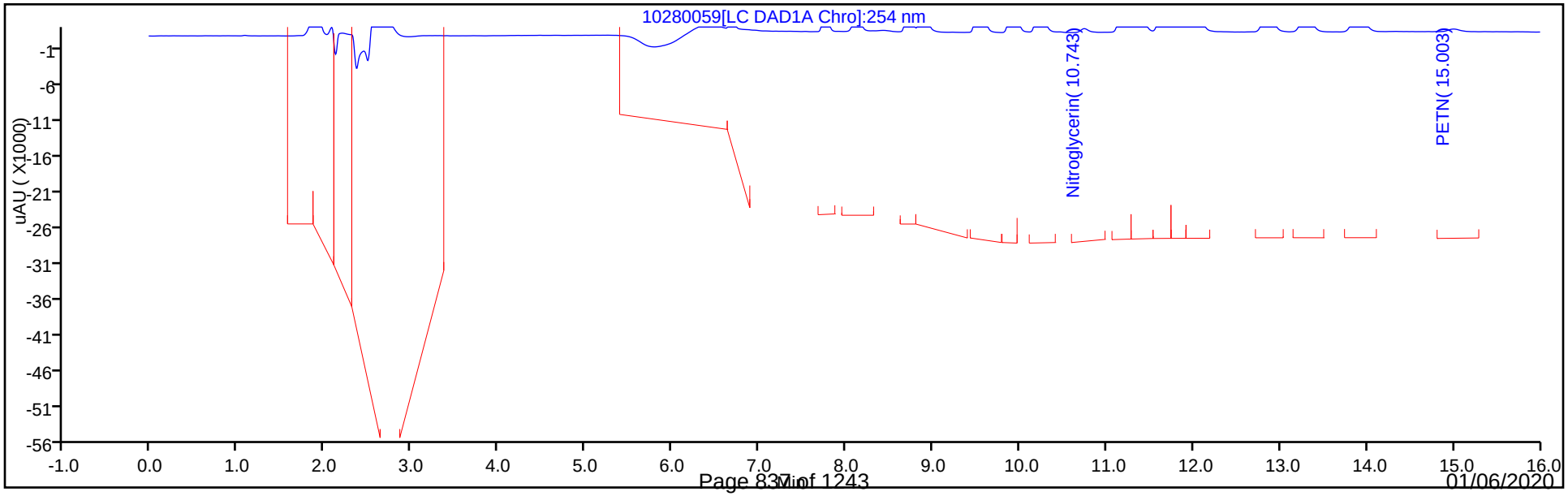
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280059.D

Injection Date:	29-Oct-2019 08:53:41	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	59
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.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/61 Calibration Date: 10/29/2019 09:39

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: 10280061.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	201131		234	250	-6.4	15.0
DNX	Ave	156126	155684		250	250	-0.3	15.0
MNX	Ave	140041	145440		303	292	3.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/61 Calibration Date: 10/29/2019 09:39

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: 10280061.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.36	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280061.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	29-Oct-2019 09:39:32	ALS Bottle#:	9	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0086569-061				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:27	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:11:35		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.589	6.587	0.002	50333	0.2503	0.2341	M
5 DNX	1	6.909	6.907	0.002	38960	0.2503	0.2495	M
6 MNX	1	7.356	7.367	-0.011	42432	0.2918	0.3030	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

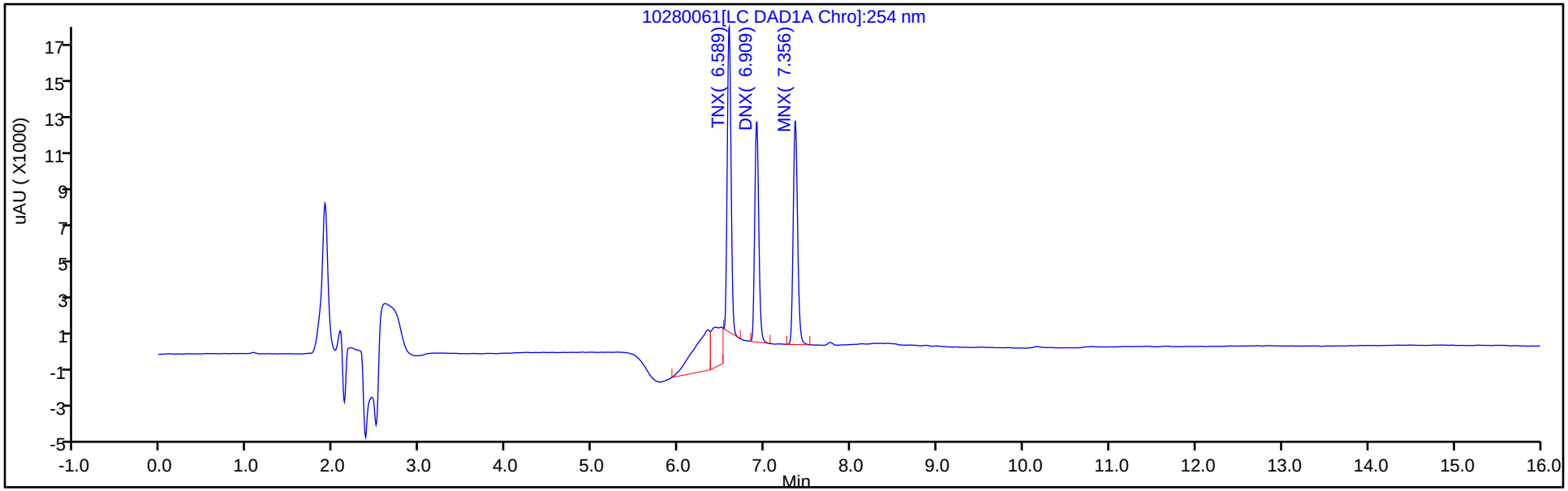
Report Date: 29-Oct-2019 11:54:27 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

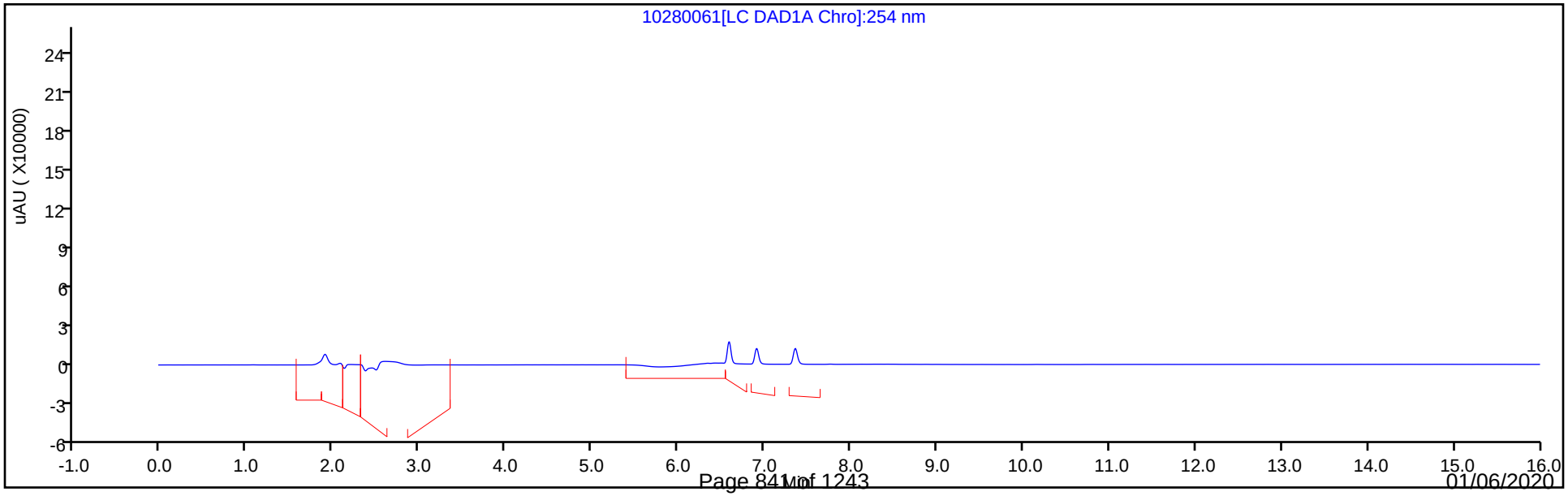
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280061.D

Injection Date:	29-Oct-2019 09:39:32	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	61
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

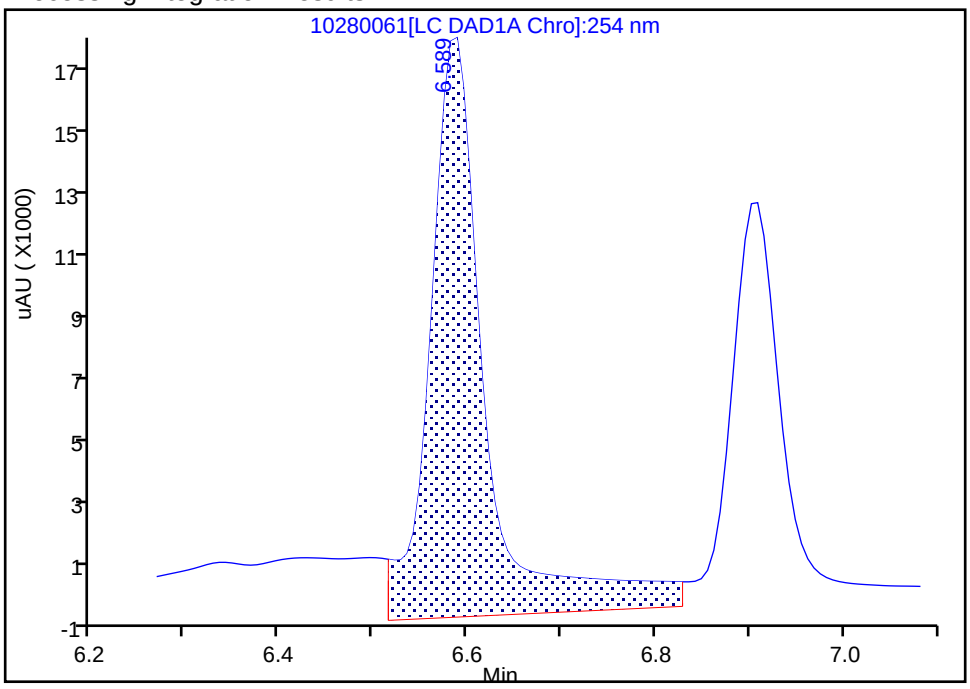
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280061.D				
Injection Date:	29-Oct-2019 09:39:32	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

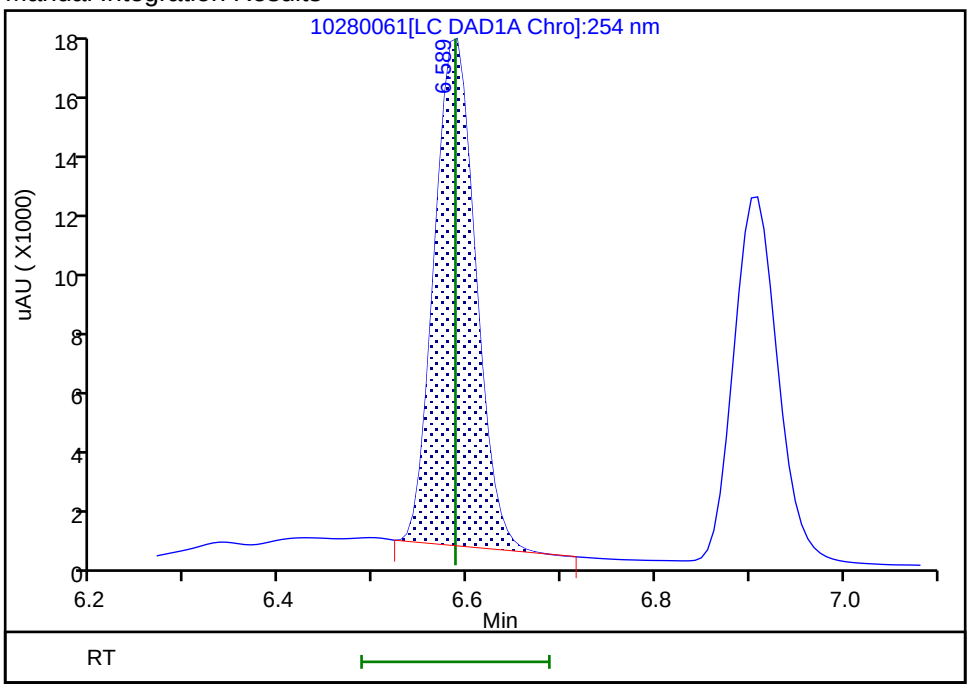
Processing Integration Results

RT: 6.59
Area: 74039
Amount: 0.344425
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 50333
Amount: 0.234146
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:11:10

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

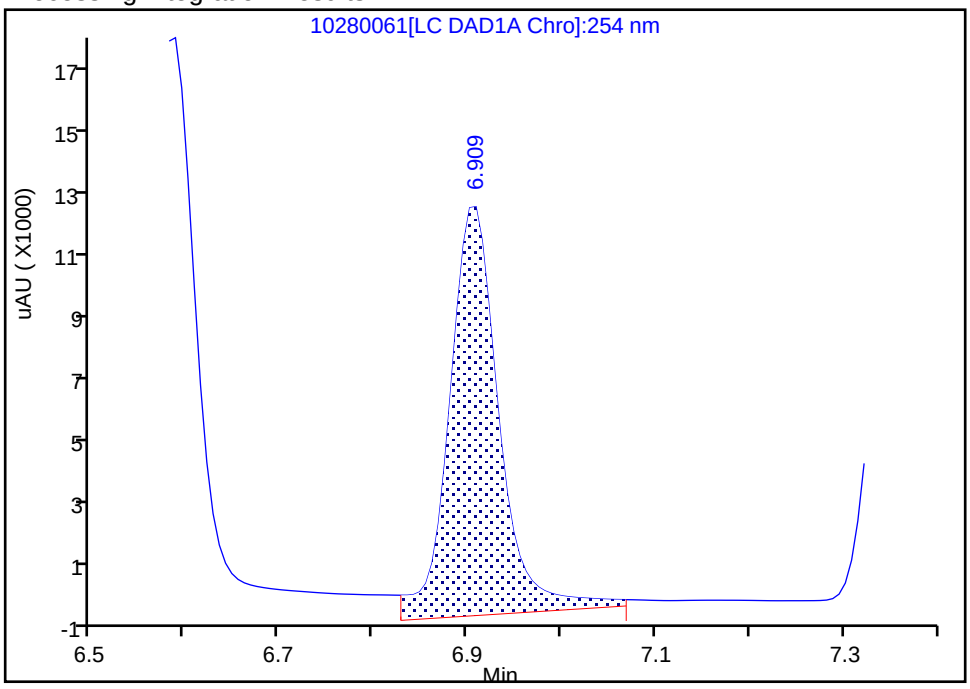
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280061.D				
Injection Date:	29-Oct-2019 09:39:32	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

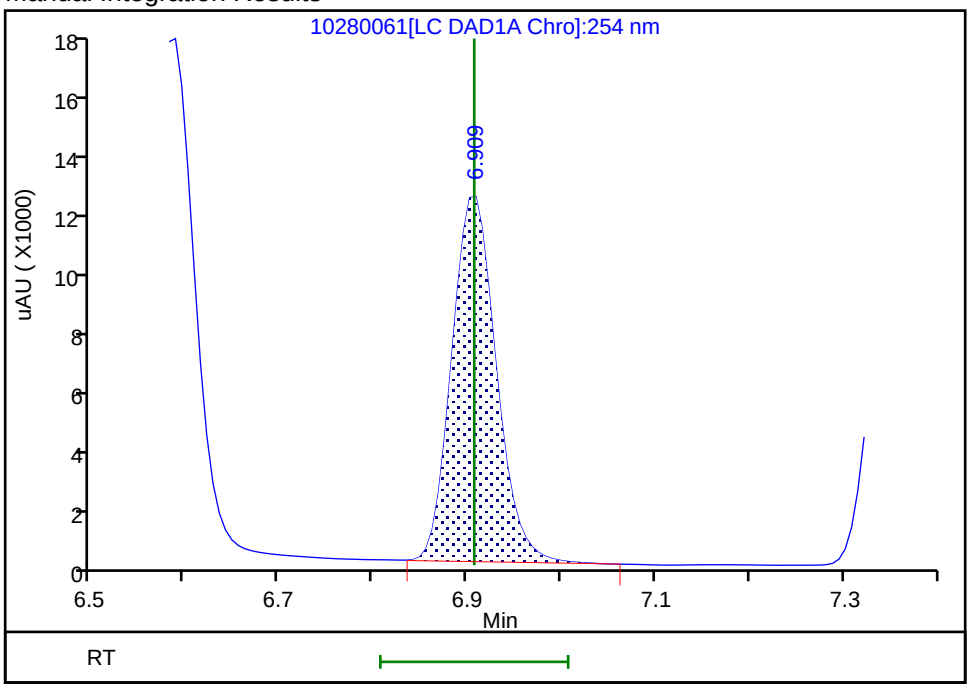
Processing Integration Results

RT: 6.91
Area: 45782
Amount: 0.293238
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 38960
Amount: 0.249542
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:11:13
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/64 Calibration Date: 10/29/2019 10:48

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: 10280064.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	91852		250	250	0.0	15.0
RDX	Ave	111120	110440		248	250	-0.6	15.0
Picric acid	Ave	90734	86132		237	250	-5.1	15.0
1,3,5-Trinitrobenzene	Ave	245077	244592		250	250	-0.2	15.0
1,3-Dinitrobenzene	Ave	311175	314525		253	250	1.1	15.0
Nitrobenzene	Ave	198903	192866		243	251	-3.0	15.0
Tetryl	Ave	161957	172356		266	250	6.4	15.0
Nitroglycerin	Ave	71108	72932		2560	2500	2.6	15.0
2,4,6-Trinitrotoluene	Ave	227277	231566		256	251	1.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	166915		252	251	0.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	211629		259	251	3.1	15.0
2,6-Dinitrotoluene	Ave	159284	156471		246	251	-1.8	15.0
2,4-Dinitrotoluene	Ave	300447	305110		254	251	1.6	15.0
2-Nitrotoluene	Ave	129784	123577		239	251	-4.8	15.0
4-Nitrotoluene	Ave	110255	108900		248	251	-1.2	15.0
3-Nitrotoluene	Ave	145122	139371		241	251	-4.0	15.0
PETN	Ave	74289	79493		2680	2500	7.0	15.0
1,2-Dinitrobenzene	Ave	139328	143432		257	250	2.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-475588/64 Calibration Date: 10/29/2019 10:48

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: 10280064.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.76	7.61	7.91
Picric acid	8.12	7.95	8.25
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.54	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.23	10.08	10.38
Nitroglycerin	10.74	10.59	10.89
2,4,6-Trinitrotoluene	11.20	11.10	11.30
4-Amino-2,6-dinitrotoluene	11.37	11.27	11.47
2-Amino-4,6-dinitrotoluene	11.66	11.56	11.76
2,6-Dinitrotoluene	11.81	11.71	11.91
2,4-Dinitrotoluene	12.01	11.91	12.11
2-Nitrotoluene	12.86	12.70	13.00
4-Nitrotoluene	13.30	13.15	13.45
3-Nitrotoluene	13.90	13.75	14.05
PETN	15.00	14.85	15.15
1,2-Dinitrobenzene	8.72	8.57	8.87

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280064.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 29-Oct-2019 10:48:26 ALS Bottle#: 7 Worklist Smp#: 64
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0086569-064
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:22 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: CTX0329

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.677	6.675	0.002	22963	0.2500	0.2501	
	7 RDX	1	7.757	7.761	-0.004	27610	0.2500	0.2485	
	8 2,4,6-Trinitrophenol	1	8.123	8.095	0.028	21533	0.2500	0.2373	
$	9 1,2-Dinitrobenzene	1	8.717	8.715	0.002	35858	0.2500	0.2574	
	10 1,3,5-Trinitrobenzene	1	8.883	8.881	0.002	61148	0.2500	0.2495	
	11 1,3-Dinitrobenzene	1	9.536	9.534	0.002	78710	0.2503	0.2529	
	12 Nitrobenzene	1	9.923	9.921	0.002	48313	0.2505	0.2429	
	14 Tetryl	1	10.230	10.228	0.002	43089	0.2500	0.2661	
	15 Nitroglycerin	2	10.743	10.741	0.002	182329	2.50	2.56	
	16 2,4,6-Trinitrotoluene	1	11.196	11.201	-0.005	58123	0.2510	0.2557	
	17 4-Amino-2,6-dinitrotoluene	1	11.370	11.368	0.002	41854	0.2508	0.2516	
	18 2-Amino-4,6-dinitrotoluene	1	11.656	11.661	-0.005	53066	0.2508	0.2586	
	19 2,6-Dinitrotoluene	1	11.810	11.814	-0.004	39235	0.2508	0.2463	
	20 2,4-Dinitrotoluene	1	12.010	12.008	0.002	76430	0.2505	0.2544	
	21 o-Nitrotoluene	1	12.856	12.854	0.002	30987	0.2508	0.2388	
	22 p-Nitrotoluene	1	13.303	13.301	0.002	27334	0.2510	0.2479	
	23 m-Nitrotoluene	1	13.903	13.901	0.002	34982	0.2510	0.2411	
	24 PETN	2	15.003	15.001	0.002	198733	2.50	2.68	

Reagents:

8330IntermStk_00059 Amount Added: 25.00 Units: uL

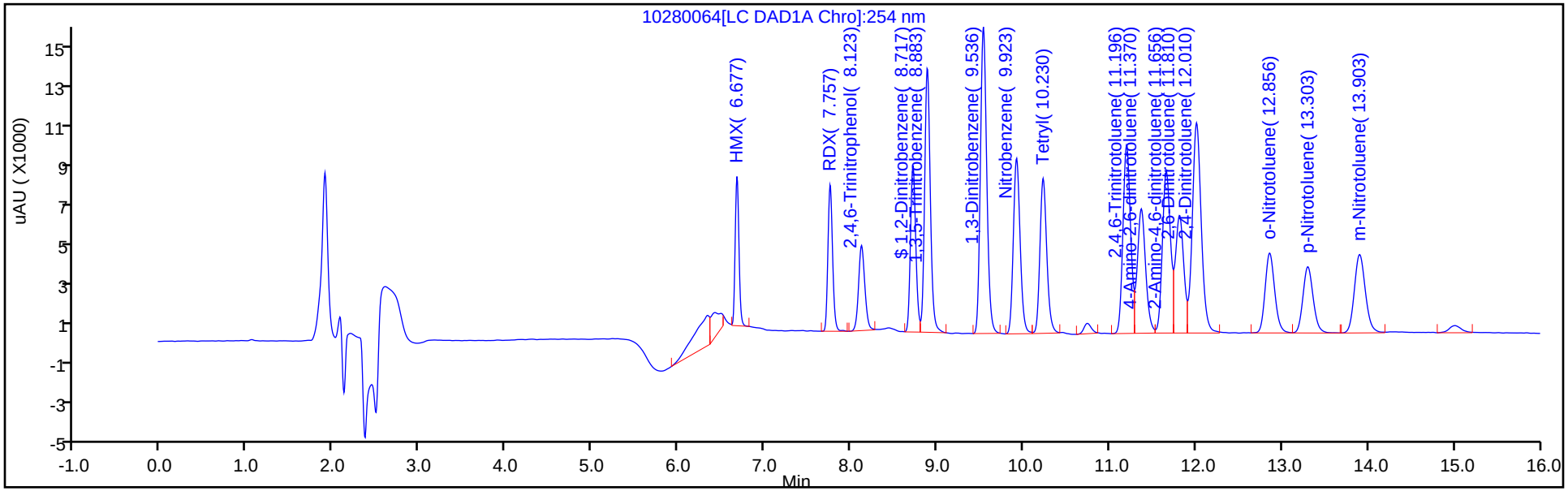
Report Date: 29-Oct-2019 11:54:23 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

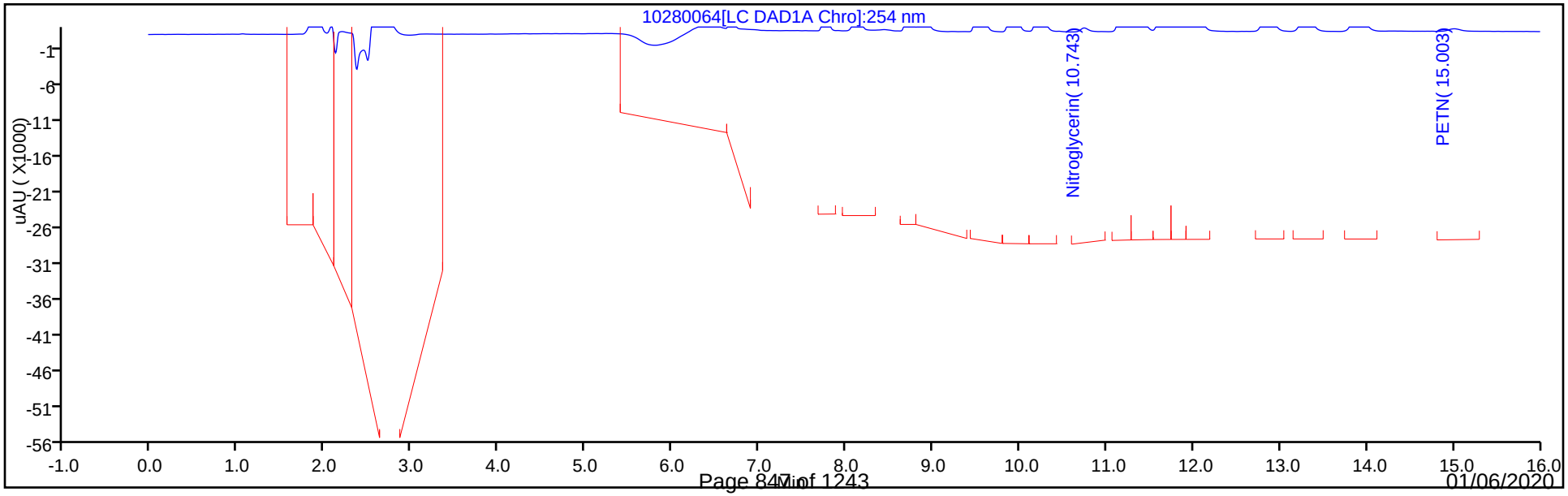
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280064.D

Injection Date:	29-Oct-2019 10:48:26	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	64
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.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476053/20 Calibration Date: 10/31/2019 18:28

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: 10310020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	94068		256	250	2.4	15.0
RDX	Ave	111120	111516		251	250	0.4	15.0
Picric acid	Ave	90734	87216		240	250	-3.9	15.0
1,3,5-Trinitrobenzene	Ave	245077	244996		250	250	-0.0	15.0
1,3-Dinitrobenzene	Ave	311175	316903		255	250	1.8	15.0
Nitrobenzene	Ave	198903	203525		256	251	2.3	15.0
Tetryl	Ave	161957	172704		267	250	6.6	15.0
Nitroglycerin	Ave	71108	75342		2650	2500	6.0	15.0
2,4,6-Trinitrotoluene	Ave	227277	232944		257	251	2.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	169472		255	251	1.9	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	211581		259	251	3.1	15.0
2,6-Dinitrotoluene	Ave	159284	160925		253	251	1.0	15.0
2,4-Dinitrotoluene	Ave	300447	306148		255	251	1.9	15.0
2-Nitrotoluene	Ave	129784	131346		254	251	1.2	15.0
4-Nitrotoluene	Ave	110255	113785		259	251	3.2	15.0
3-Nitrotoluene	Ave	145122	147199		255	251	1.4	15.0
PETN	Ave	74289	80510		2710	2500	8.4	15.0
1,2-Dinitrobenzene	Ave	139328	144340		259	250	3.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476053/20 Calibration Date: 10/31/2019 18:28

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: 10310020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.76	7.61	7.91
Picric acid	8.12	7.96	8.26
1,3,5-Trinitrobenzene	8.89	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.22	10.07	10.37
Nitroglycerin	10.73	10.59	10.89
2,4,6-Trinitrotoluene	11.19	11.09	11.29
4-Amino-2,6-dinitrotoluene	11.35	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.65	11.54	11.74
2,6-Dinitrotoluene	11.80	11.70	11.90
2,4-Dinitrotoluene	12.00	11.90	12.10
2-Nitrotoluene	12.84	12.69	12.99
4-Nitrotoluene	13.28	13.13	13.43
3-Nitrotoluene	13.88	13.73	14.03
PETN	14.98	14.84	15.14
1,2-Dinitrobenzene	8.72	8.57	8.87

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310020.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 18:28:34 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0086686-020
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 01-Nov-2019 09:13:24 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: CTX0335

First Level Reviewer: beckerc Date: 01-Nov-2019 08:39:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.680	6.682	-0.002	23517	0.2500	0.2561	
7 RDX	1	7.760	7.756	0.004	27879	0.2500	0.2509	
8 2,4,6-Trinitrophenol	1	8.120	8.109	0.011	21804	0.2500	0.2403	
$ 9 1,2-Dinitrobenzene	1	8.720	8.716	0.004	36085	0.2500	0.2590	
10 1,3,5-Trinitrobenzene	1	8.887	8.882	0.005	61249	0.2500	0.2499	
11 1,3-Dinitrobenzene	1	9.533	9.529	0.004	79305	0.2503	0.2549	
12 Nitrobenzene	1	9.920	9.915	0.005	50983	0.2505	0.2563	
14 Tetryl	1	10.220	10.222	-0.002	43176	0.2500	0.2666	
15 Nitroglycerin	2	10.733	10.735	-0.002	188354	2.50	2.65	
16 2,4,6-Trinitrotoluene	1	11.187	11.189	-0.002	58469	0.2510	0.2573	
17 4-Amino-2,6-dinitrotoluene	1	11.353	11.355	-0.002	42495	0.2508	0.2554	
18 2-Amino-4,6-dinitrotoluene	1	11.647	11.642	0.005	53054	0.2508	0.2585	
19 2,6-Dinitrotoluene	1	11.800	11.802	-0.002	40352	0.2508	0.2533	
20 2,4-Dinitrotoluene	1	12.000	11.995	0.005	76690	0.2505	0.2553	
21 o-Nitrotoluene	1	12.840	12.842	-0.002	32935	0.2508	0.2538	
22 p-Nitrotoluene	1	13.280	13.282	-0.002	28560	0.2510	0.2590	
23 m-Nitrotoluene	1	13.880	13.882	-0.002	36947	0.2510	0.2546	
24 PETN	2	14.980	14.989	-0.009	201274	2.50	2.71	

Reagents:

8330IntermStk_00059 Amount Added: 25.00 Units: uL

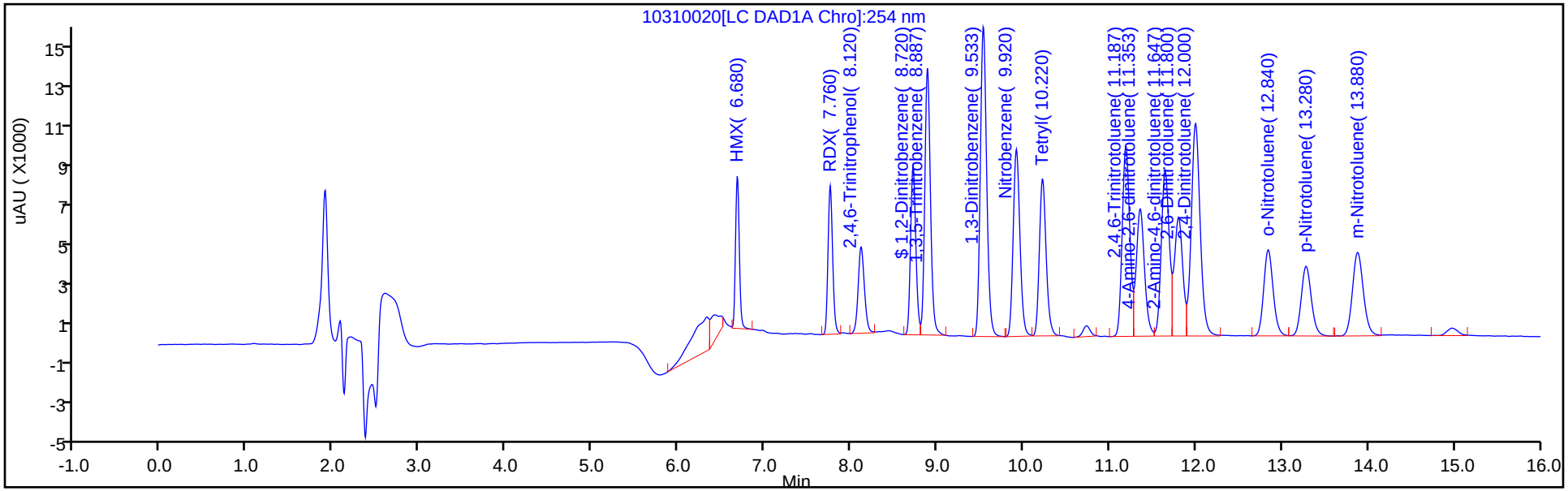
Report Date: 01-Nov-2019 09:13:25 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

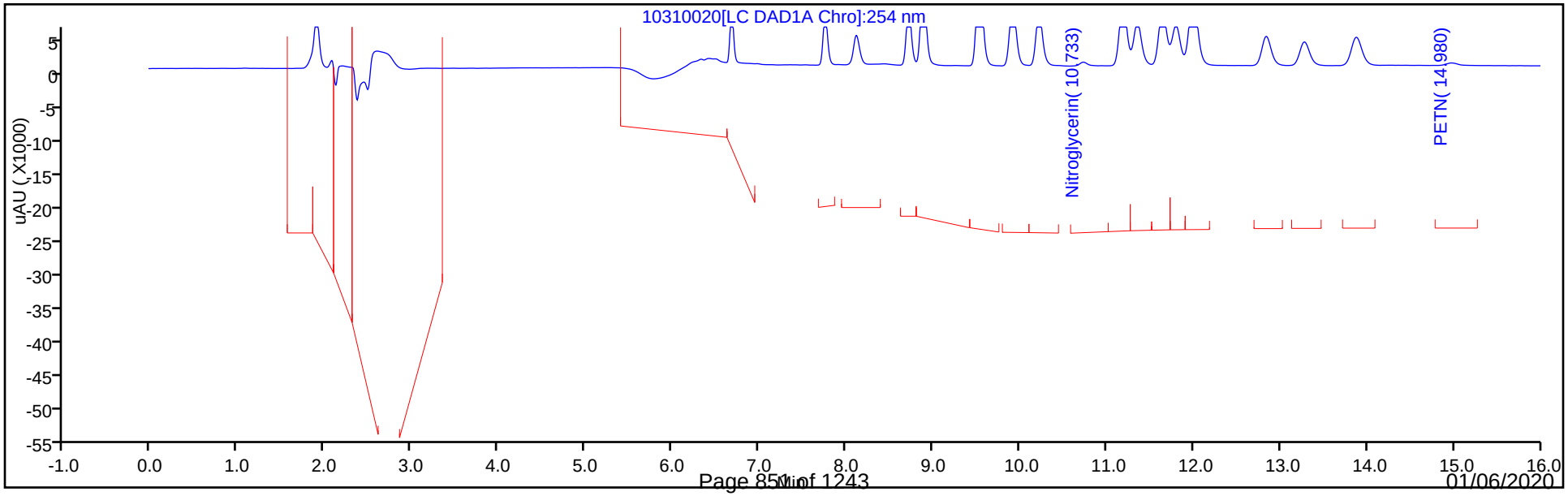
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310020.D

Injection Date:	31-Oct-2019 18:28:34	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476053/22 Calibration Date: 10/31/2019 19:14

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: 10310022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	233594		272	250	8.7	15.0
DNX	Ave	156126	174386		280	250	11.7	15.0
MNX	Ave	140041	159815		333	292	14.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476053/22 Calibration Date: 10/31/2019 19:14

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: 10310022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.36	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310022.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	31-Oct-2019 19:14:26	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0086686-022				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	01-Nov-2019 09:13:27	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:	CTX0335				
First Level Reviewer: beckerc		Date:	01-Nov-2019 08:40:27		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.589	6.587	0.002	58457	0.2503	0.2719	M
5 DNX	1	6.909	6.907	0.002	43640	0.2503	0.2795	M
6 MNX	1	7.356	7.367	-0.011	46626	0.2918	0.3329	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

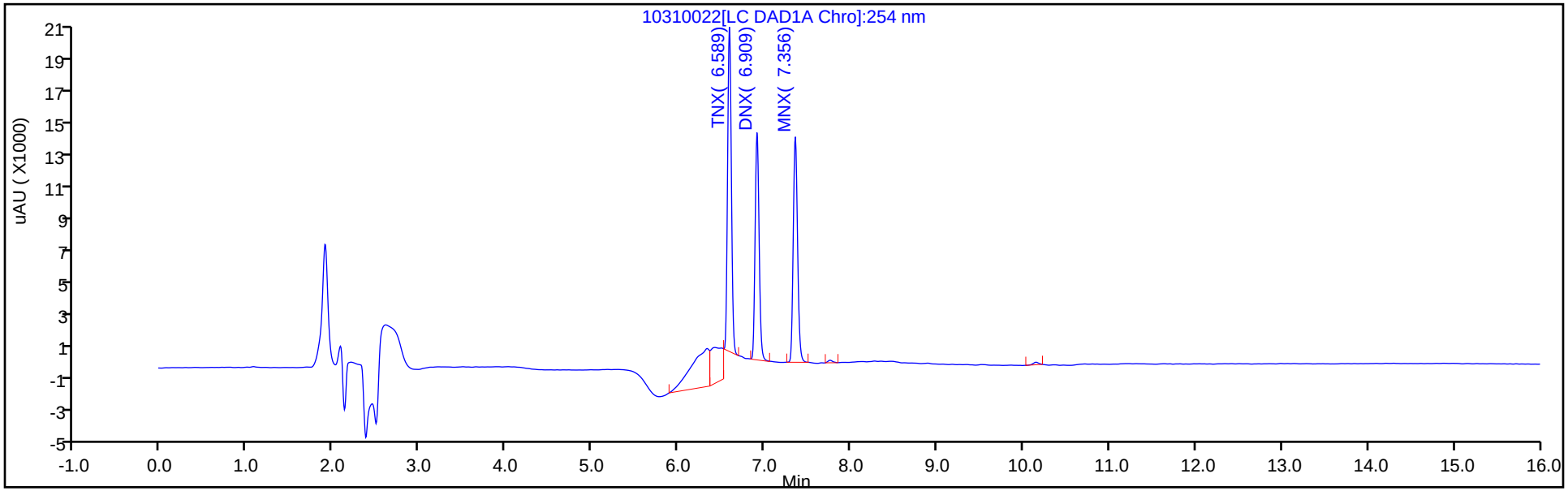
Report Date: 01-Nov-2019 09:13:27 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

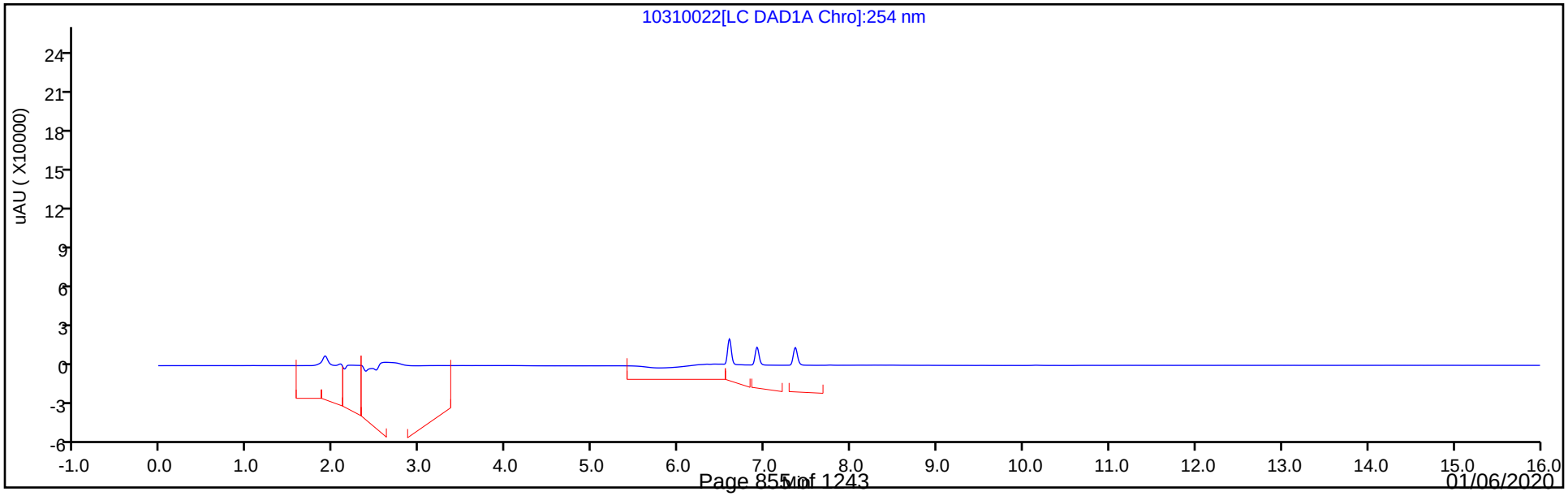
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310022.D

Injection Date:	31-Oct-2019 19:14:26	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

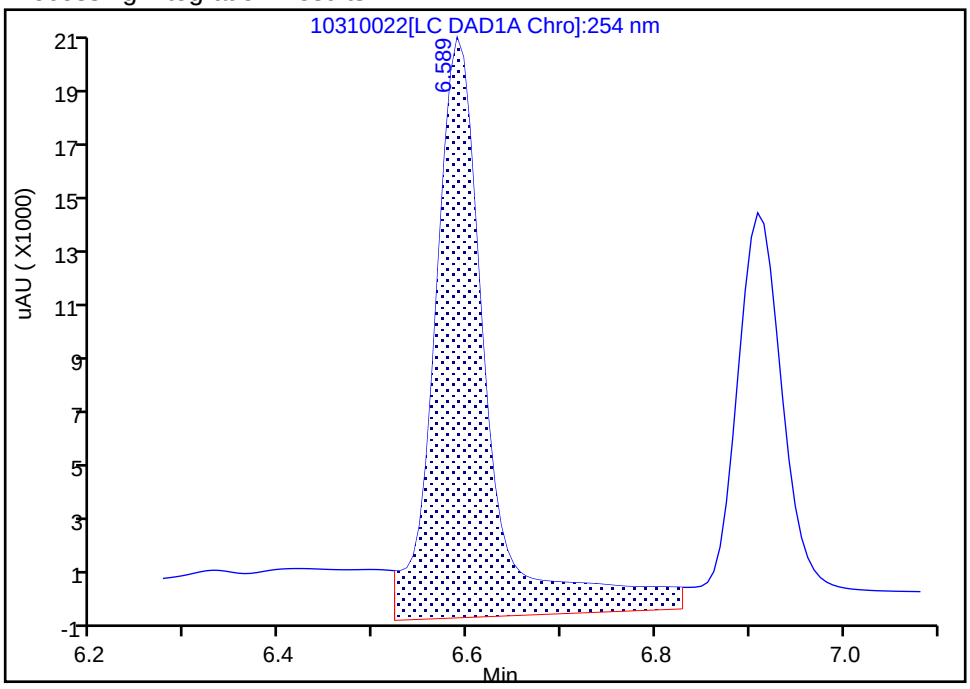
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310022.D				
Injection Date:	31-Oct-2019 19:14:26	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

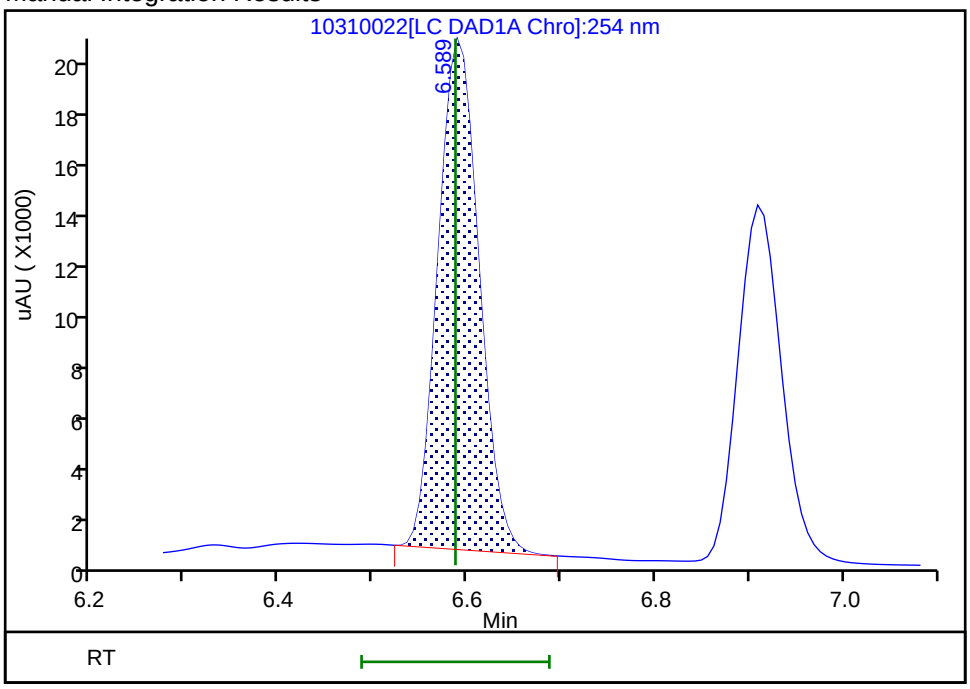
Processing Integration Results

RT: 6.59
Area: 81052
Amount: 0.377049
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 58457
Amount: 0.271938
Amount Units: ug/mL



Reviewer: beckerc, 01-Nov-2019 08:40:16

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

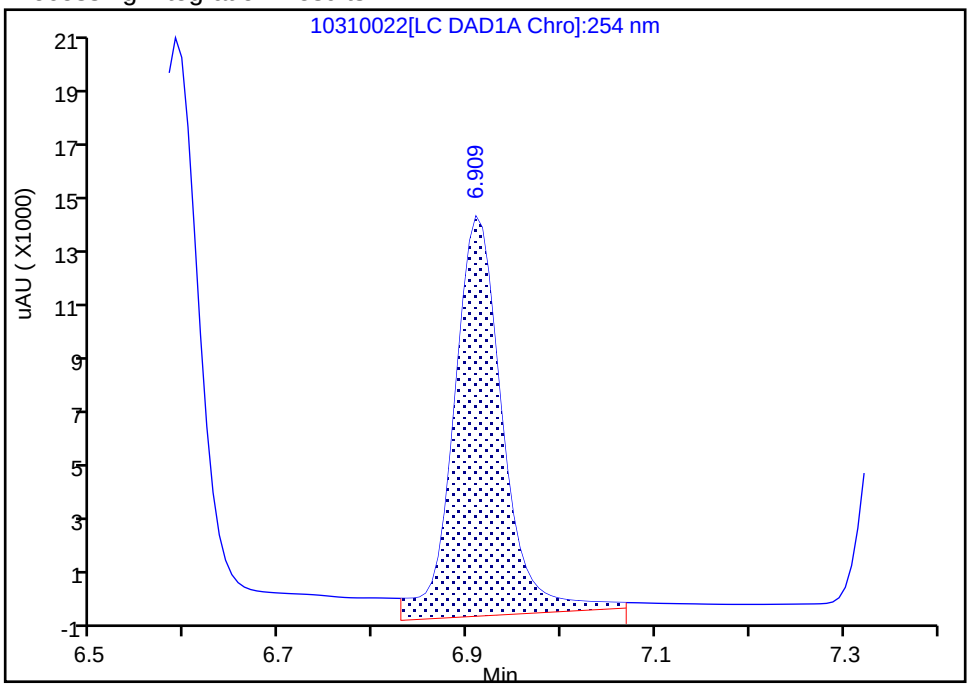
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310022.D				
Injection Date:	31-Oct-2019 19:14:26	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

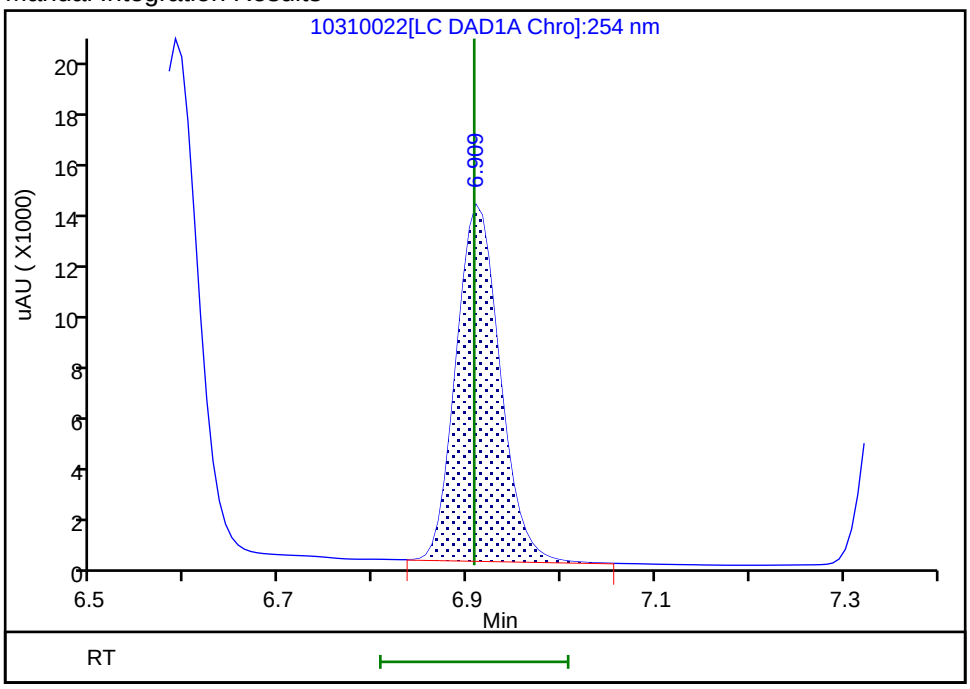
Processing Integration Results

RT: 6.91
Area: 50361
Amount: 0.322567
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 43640
Amount: 0.279518
Amount Units: ug/mL



Reviewer: beckerc, 01-Nov-2019 08:40:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476053/27 Calibration Date: 10/31/2019 21:09

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: 10310027.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	93196		254	250	1.5	15.0
RDX	Ave	111120	111972		252	250	0.8	15.0
Picric acid	Ave	90734	87000		240	250	-4.1	15.0
1,3,5-Trinitrobenzene	Ave	245077	244308		249	250	-0.3	15.0
1,3-Dinitrobenzene	Ave	311175	317119		255	250	1.9	15.0
Nitrobenzene	Ave	198903	201593		254	251	1.4	15.0
Tetryl	Ave	161957	173112		267	250	6.9	15.0
Nitroglycerin	Ave	71108	74853		2630	2500	5.3	15.0
2,4,6-Trinitrotoluene	Ave	227277	234869		259	251	3.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	167577		253	251	0.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	213523		261	251	4.0	15.0
2,6-Dinitrotoluene	Ave	159284	159797		252	251	0.3	15.0
2,4-Dinitrotoluene	Ave	300447	305301		255	251	1.6	15.0
2-Nitrotoluene	Ave	129784	131649		254	251	1.4	15.0
4-Nitrotoluene	Ave	110255	113697		259	251	3.1	15.0
3-Nitrotoluene	Ave	145122	146068		253	251	0.7	15.0
PETN	Ave	74289	81041		2730	2500	9.1	15.0
1,2-Dinitrobenzene	Ave	139328	144368		259	250	3.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476053/27 Calibration Date: 10/31/2019 21:09

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: 10310027.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.76	7.61	7.91
Picric acid	8.12	7.96	8.26
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.22	10.07	10.37
Nitroglycerin	10.73	10.59	10.89
2,4,6-Trinitrotoluene	11.18	11.09	11.29
4-Amino-2,6-dinitrotoluene	11.35	11.26	11.46
2-Amino-4,6-dinitrotoluene	11.64	11.54	11.74
2,6-Dinitrotoluene	11.80	11.70	11.90
2,4-Dinitrotoluene	11.99	11.90	12.10
2-Nitrotoluene	12.84	12.69	12.99
4-Nitrotoluene	13.28	13.13	13.43
3-Nitrotoluene	13.88	13.73	14.03
PETN	14.98	14.84	15.14
1,2-Dinitrobenzene	8.72	8.57	8.87

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310027.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 21:09:04 ALS Bottle#: 7 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0086686-027
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 01-Nov-2019 09:13:32 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: CTX0335

First Level Reviewer: beckerc Date: 01-Nov-2019 08:46:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.684	6.682	0.002	23299	0.2500	0.2537	
7 RDX	1	7.758	7.756	0.002	27993	0.2500	0.2519	
8 2,4,6-Trinitrophenol	1	8.118	8.109	0.009	21750	0.2500	0.2397	
$ 9 1,2-Dinitrobenzene	1	8.718	8.716	0.002	36092	0.2500	0.2590	
10 1,3,5-Trinitrobenzene	1	8.884	8.882	0.002	61077	0.2500	0.2492	
11 1,3-Dinitrobenzene	1	9.531	9.529	0.002	79359	0.2503	0.2550	
12 Nitrobenzene	1	9.918	9.915	0.003	50499	0.2505	0.2539	
14 Tetryl	1	10.218	10.222	-0.004	43278	0.2500	0.2672	
15 Nitroglycerin	2	10.731	10.735	-0.004	187132	2.50	2.63	
16 2,4,6-Trinitrotoluene	1	11.184	11.189	-0.005	58952	0.2510	0.2594	
17 4-Amino-2,6-dinitrotoluene	1	11.351	11.355	-0.004	42020	0.2508	0.2526	
18 2-Amino-4,6-dinitrotoluene	1	11.638	11.642	-0.004	53541	0.2508	0.2609	
19 2,6-Dinitrotoluene	1	11.798	11.802	-0.004	40069	0.2508	0.2516	
20 2,4-Dinitrotoluene	1	11.991	11.995	-0.004	76478	0.2505	0.2545	
21 o-Nitrotoluene	1	12.838	12.842	-0.004	33011	0.2508	0.2544	
22 p-Nitrotoluene	1	13.278	13.282	-0.004	28538	0.2510	0.2588	
23 m-Nitrotoluene	1	13.878	13.882	-0.004	36663	0.2510	0.2526	
24 PETN	2	14.978	14.989	-0.011	202602	2.50	2.73	

Reagents:

8330IntermStk_00059 Amount Added: 25.00 Units: uL

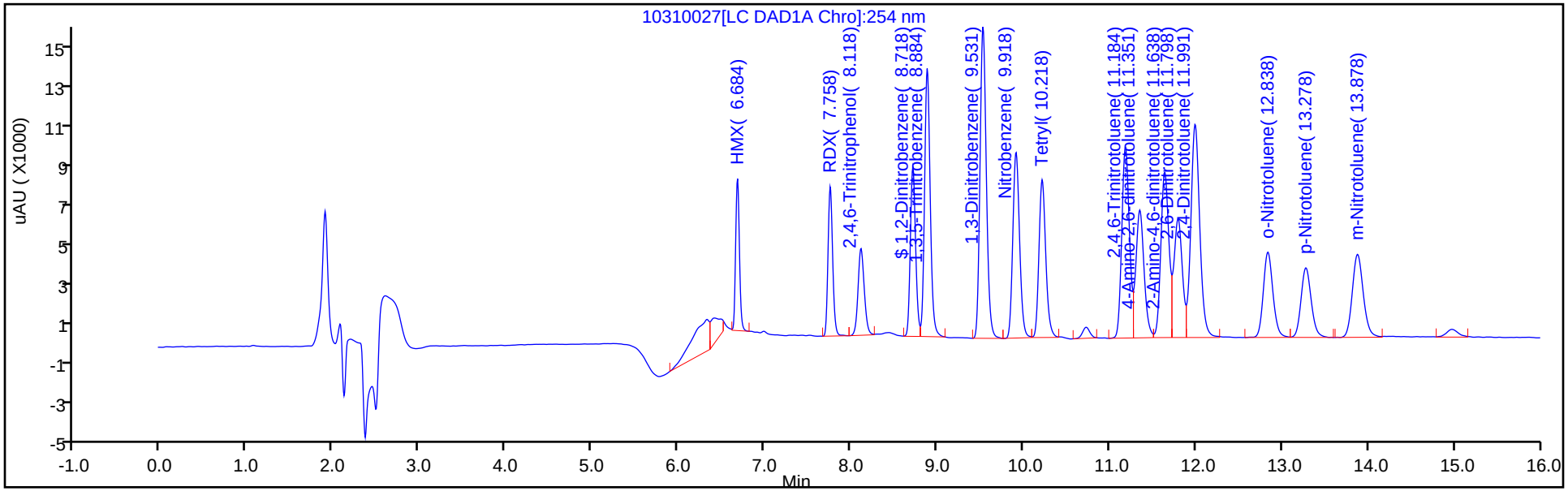
Report Date: 01-Nov-2019 09:13:32 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

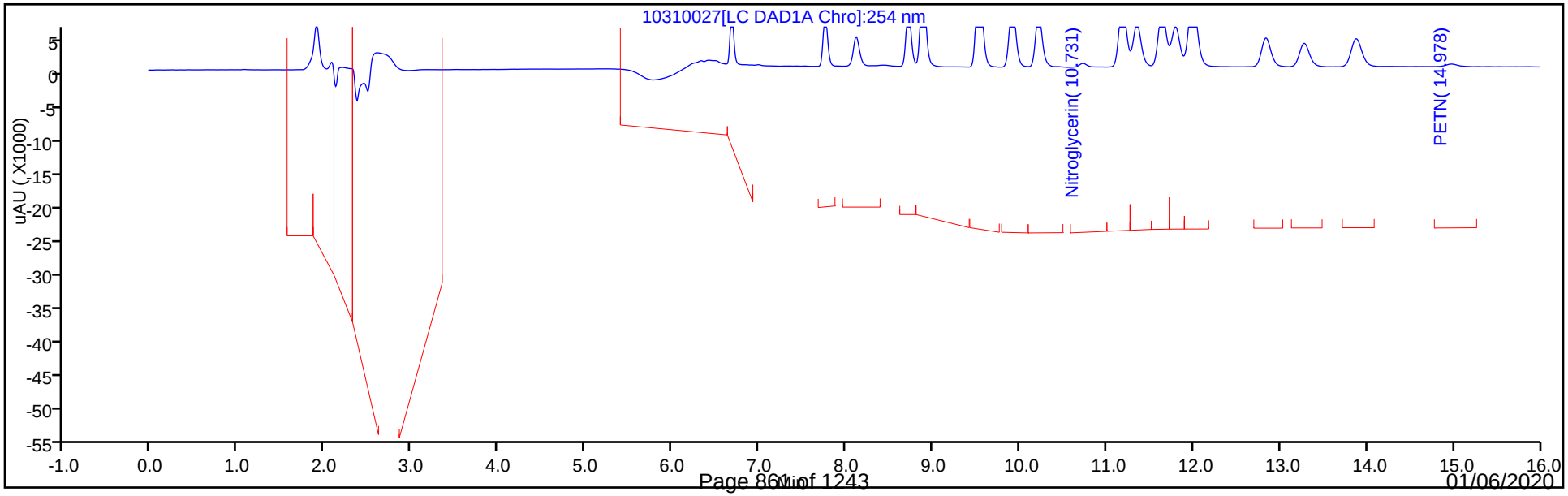
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310027.D

Injection Date:	31-Oct-2019 21:09:04	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	27
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.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476053/29 Calibration Date: 10/31/2019 21:54

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: 10310029.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	230973		269	250	7.4	15.0
DNX	Ave	156126	173862		279	250	11.4	15.0
MNX	Ave	140041	159709		333	292	14.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Lab Sample ID: CCV 280-476053/29 Calibration Date: 10/31/2019 21:54

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: 10310029.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.35	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310029.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 31-Oct-2019 21:54:55 ALS Bottle#: 9 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0086686-029
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 01-Nov-2019 09:13:34 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: CTX0335

First Level Reviewer: beckerc Date: 01-Nov-2019 08:50:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.594	6.587	0.007	57801	0.2503	0.2689	M
5 DNX	1	6.907	6.907	0.000	43509	0.2503	0.2787	M
6 MNX	1	7.354	7.367	-0.013	46595	0.2918	0.3327	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

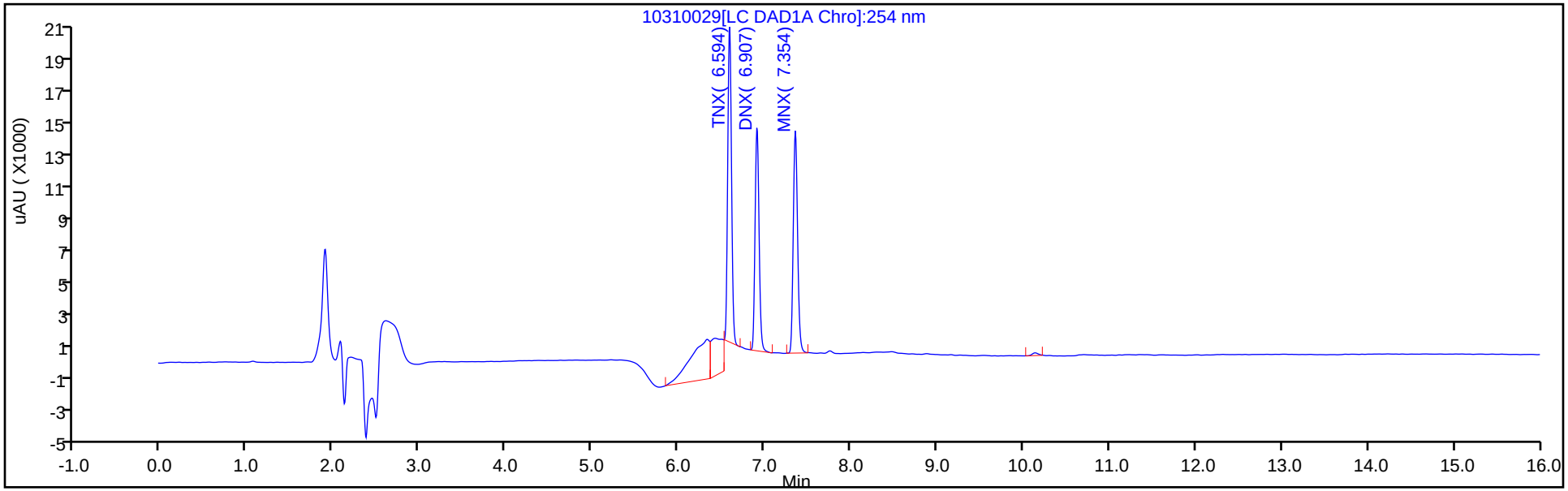
Report Date: 01-Nov-2019 09:13:35 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

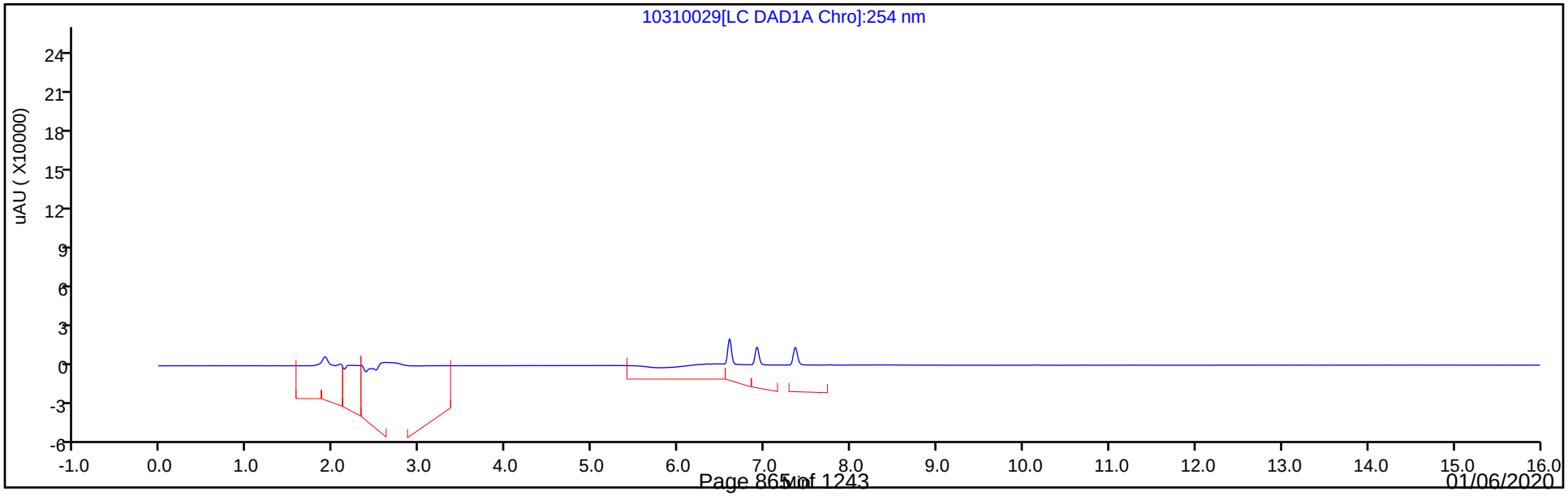
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310029.D

Injection Date:	31-Oct-2019 21:54:55	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

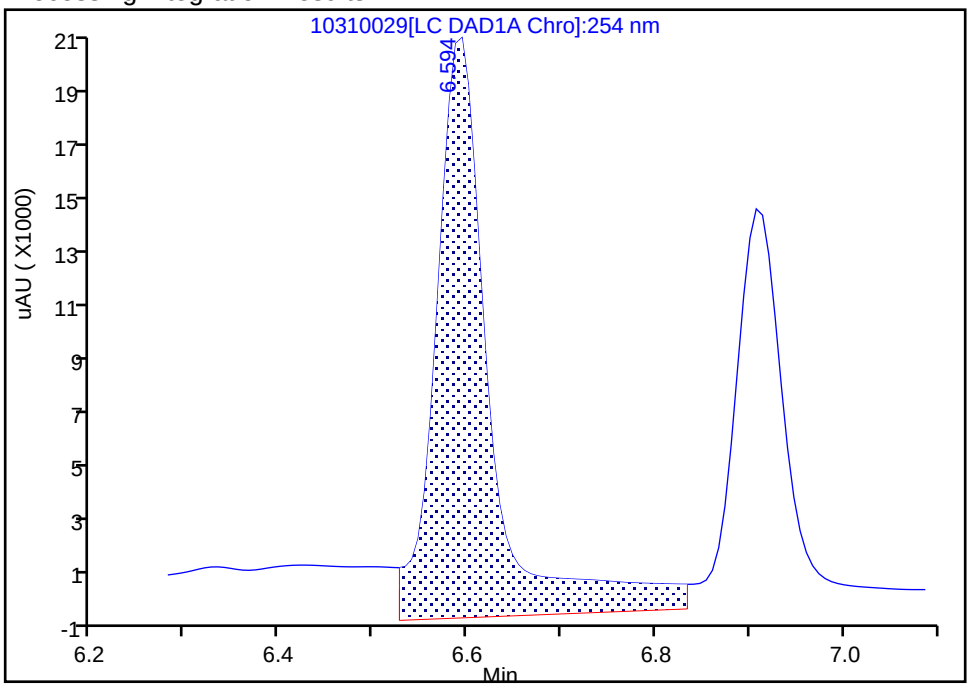
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310029.D				
Injection Date:	31-Oct-2019 21:54:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

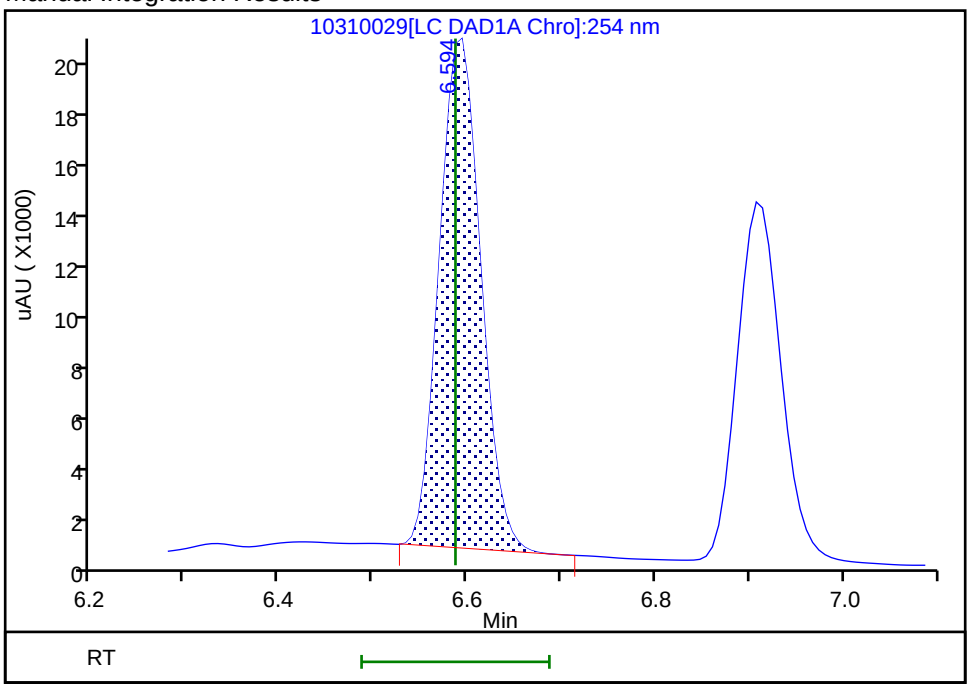
Processing Integration Results

RT: 6.59
Area: 82358
Amount: 0.383124
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 57801
Amount: 0.268887
Amount Units: ug/mL



Reviewer: beckerc, 01-Nov-2019 08:49:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

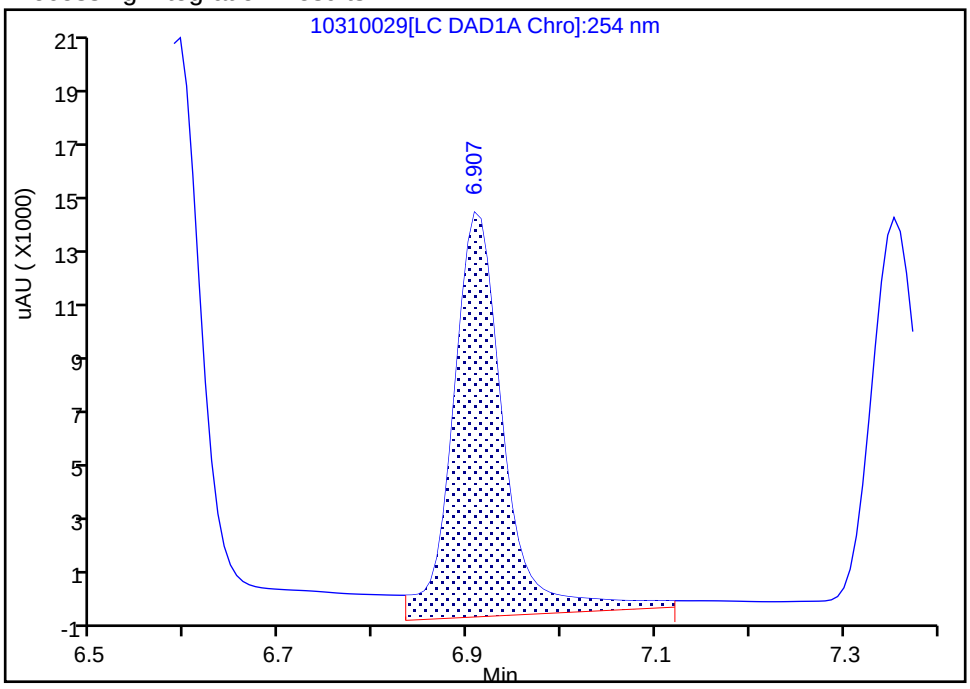
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191031-86686.b\10310029.D				
Injection Date:	31-Oct-2019 21:54:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

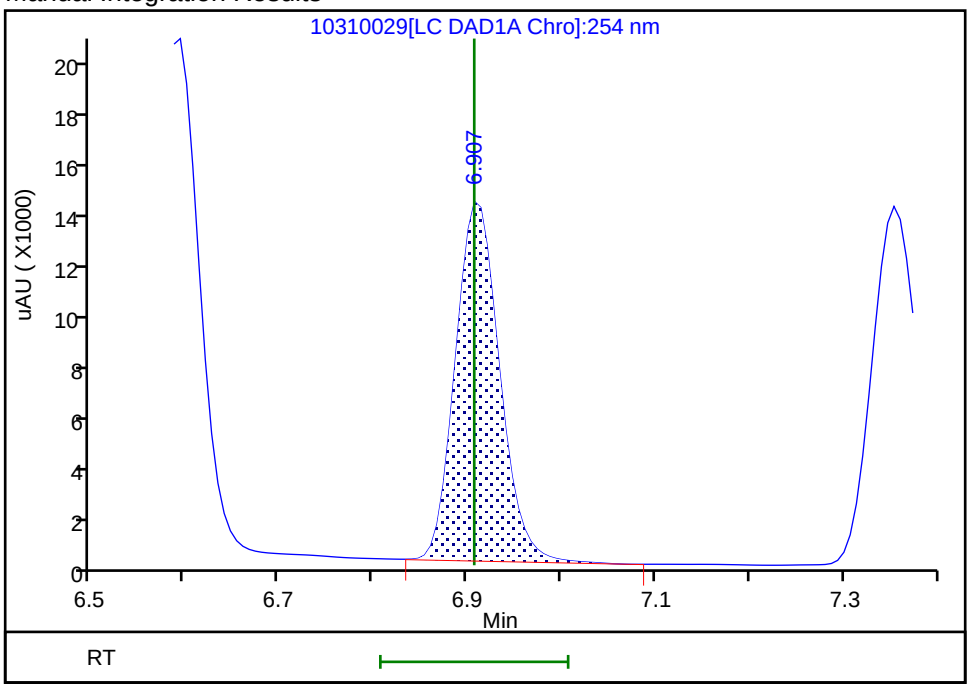
Processing Integration Results

RT: 6.91
Area: 52509
Amount: 0.336325
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 43509
Amount: 0.278679
Amount Units: ug/mL



Reviewer: beckerc, 01-Nov-2019 08:49:55
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-475259/1-A

Matrix: Water Lab File ID: 10280036.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 500(mL) Date Analyzed: 10/29/2019 00:05

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.: 475588 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 Q	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 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 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	68	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280036.D
Lims ID: MB 280-475259/1-A
Client ID:
Sample Type: MB
Inject. Date: 29-Oct-2019 00:05:56 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-475259/1-
Misc. Info.: 280-0086569-036
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:46:58

	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		6.540				ND	U
2	TNX	1		6.587				ND	
3	HMX	1		6.675				ND	
4	2,4-diamino-6-nitrotoluene	1		6.727				ND	
5	DNX	1		6.907				ND	
6	MNX	1		7.367				ND	U
7	RDX	1		7.761				ND	
8	2,4,6-Trinitrophenol	1		8.095				ND	U
$ 9	1,2-Dinitrobenzene	1	8.725	8.715	0.010	18835	0.2000	0.1352	
10	1,3,5-Trinitrobenzene	1		8.881				ND	
11	1,3-Dinitrobenzene	1		9.534				ND	
12	Nitrobenzene	1		9.921				ND	
13	3,5-Dinitroaniline	1		10.173				ND	
14	Tetryl	1		10.228				ND	
15	Nitroglycerin	2		10.741				ND	
16	2,4,6-Trinitrotoluene	1		11.201				ND	
17	4-Amino-2,6-dinitrotoluene	1		11.368				ND	
18	2-Amino-4,6-dinitrotoluene	1		11.661				ND	
19	2,6-Dinitrotoluene	1		11.814				ND	
20	2,4-Dinitrotoluene	1		12.008				ND	
21	o-Nitrotoluene	1		12.854				ND	
22	p-Nitrotoluene	1		13.301				ND	
23	m-Nitrotoluene	1		13.901				ND	U
24	PETN	2		15.001				ND	
25	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

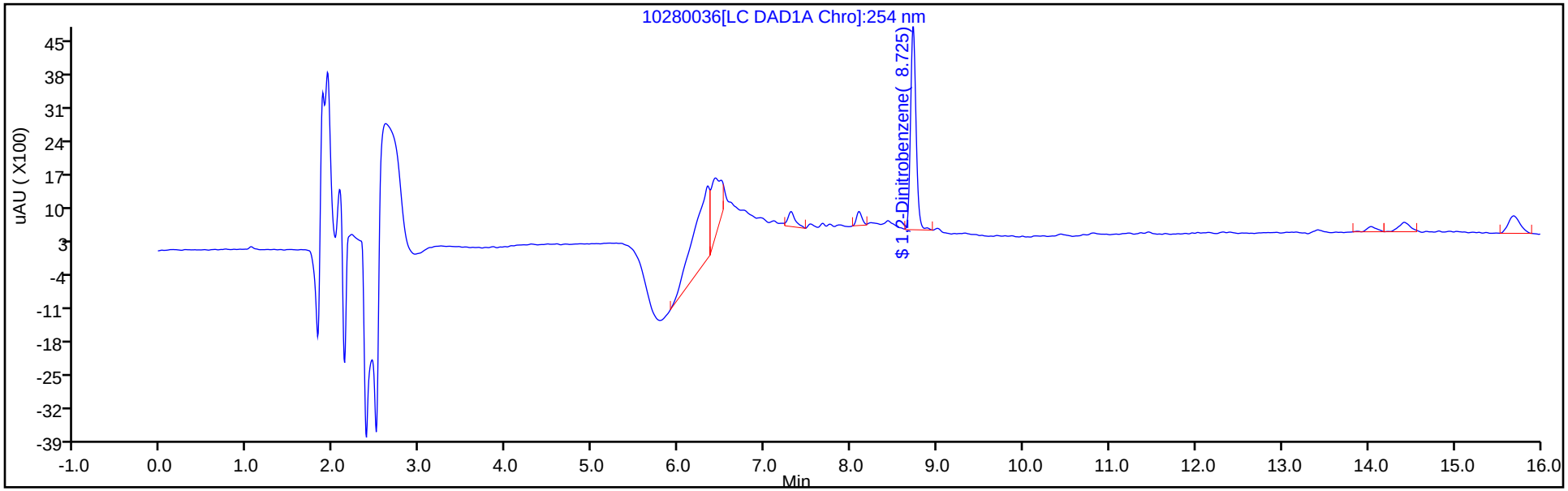
Report Date: 29-Oct-2019 11:54:55 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

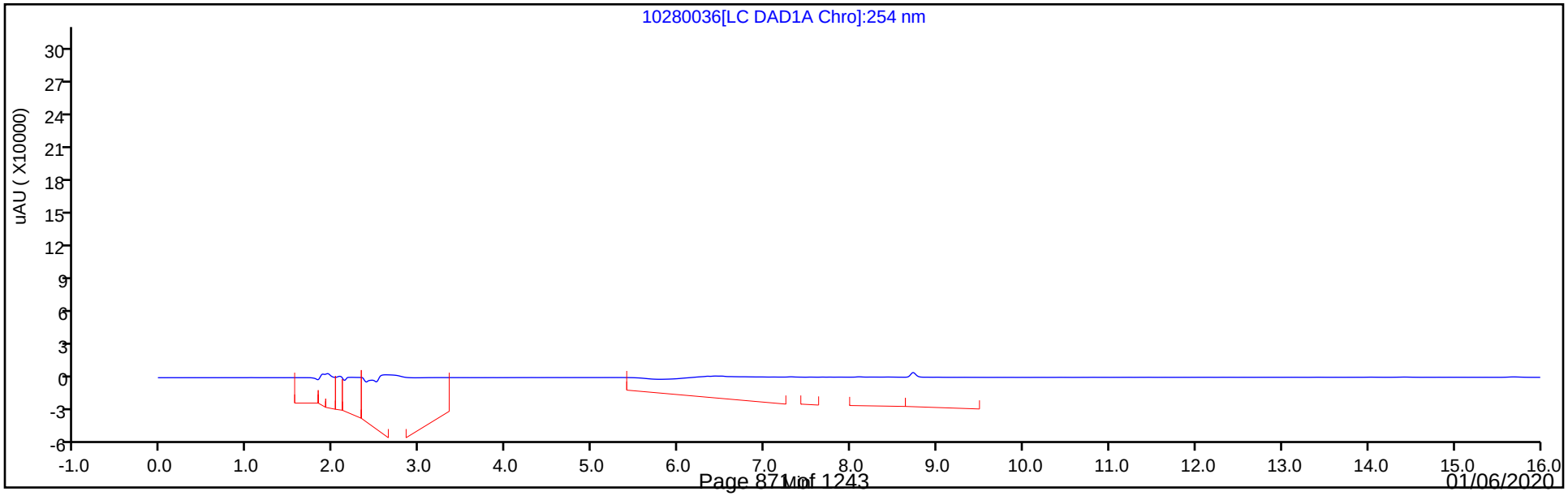
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280036.D

Injection Date:	29-Oct-2019 00:05:56	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	MB 280-475259/1-A			Worklist Smp#:	36
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280036.D				
Lims ID:	MB 280-475259/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	29-Oct-2019 00:05:56	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-475259/1-				
Misc. Info.:	280-0086569-036				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:43	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 10:46:58		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1352	67.59

User Disabled Compound Report

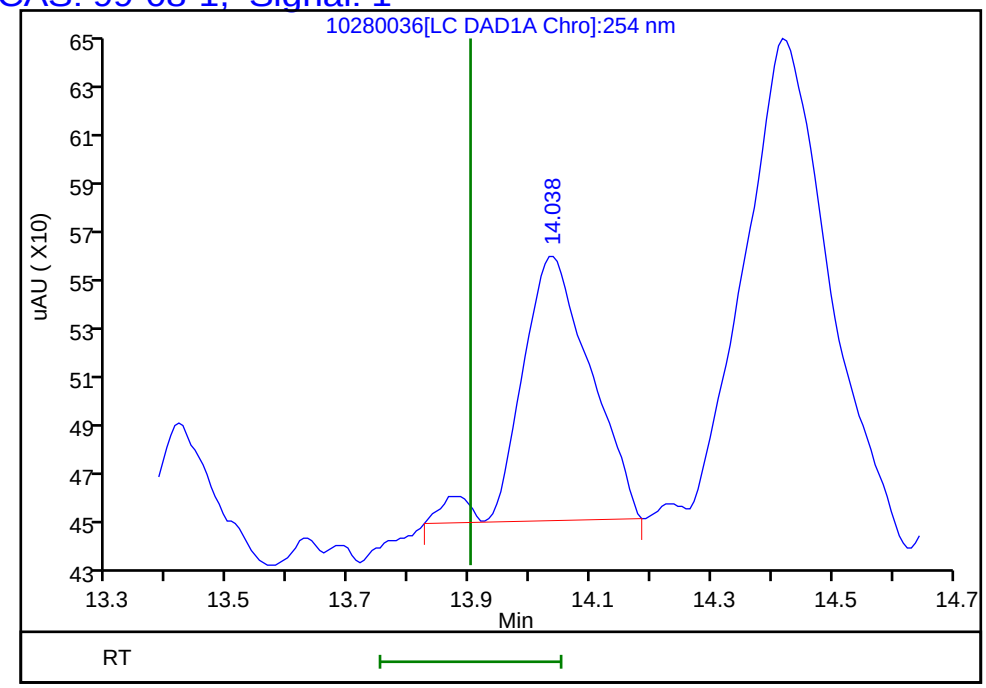
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280036.D
Injection Date: 29-Oct-2019 00:05:56 Instrument ID: CHHPLC_X3
Lims ID: MB 280-475259/1-A
Client ID:
Operator ID: CB ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.04
Response: 867
Amount: 0.005974



Reviewer: beckerc, 29-Oct-2019 10:46:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

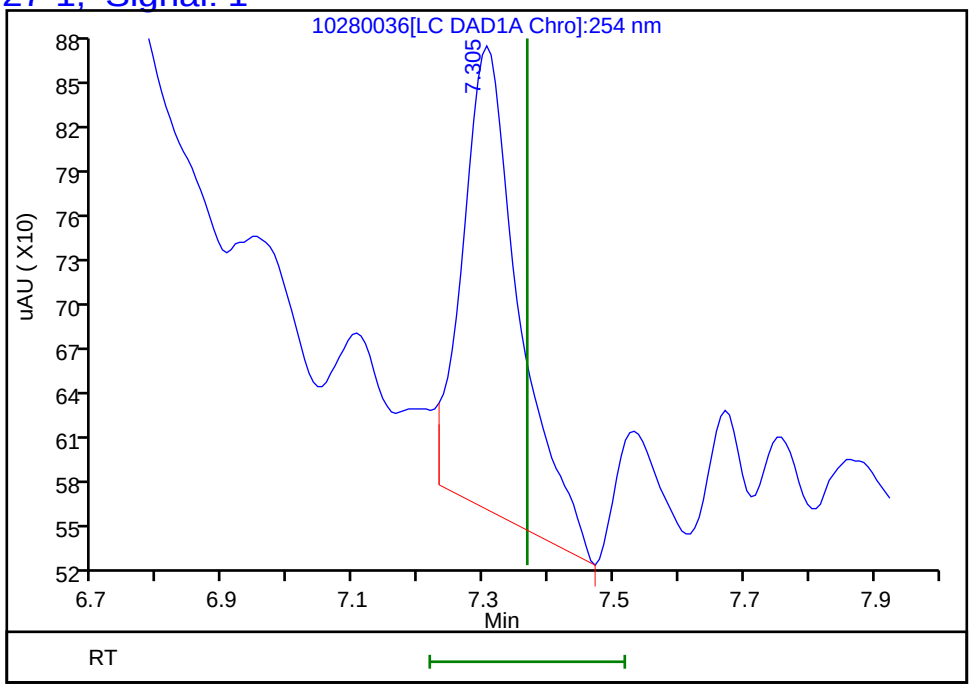
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280036.D
Injection Date: 29-Oct-2019 00:05:56 Instrument ID: CHHPLC_X3
Lims ID: MB 280-475259/1-A
Client ID:
Operator ID: CB ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.30
Response: 1881
Amount: 0.013432



Reviewer: beckerc, 29-Oct-2019 10:46:58
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.: 280-129936-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-475259/2-A

Matrix: Water Lab File ID: 10280037.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 500(mL) Date Analyzed: 10/29/2019 00:28

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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.87		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	1.85		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.76		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.78		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	1.76		0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.77		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.55		0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.67		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.61		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.67		1.0	0.40	0.20
2691-41-0	HMX	1.84		0.40	0.20	0.088
98-95-3	Nitrobenzene	1.75		0.40	0.20	0.091
121-82-4	RDX	1.86		0.40	0.40	0.16
479-45-8	Tetryl	2.01		0.24	0.20	0.079

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\20191028-86569.b\10280037.D
Lims ID: LCS 280-475259/2-A
Client ID:
Sample Type: LCS
Inject. Date: 29-Oct-2019 00:28:53 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-475259/2
Misc. Info.: 280-0086569-037
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:47:26

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.680	6.675	0.005	16926	0.2000	0.1843	
	7 RDX	1	7.753	7.761	-0.008	20623	0.2000	0.1856	
	8 2,4,6-Trinitrophenol	1	8.107	8.095	0.012	17628	0.2000	0.1943	
$	9 1,2-Dinitrobenzene	1	8.720	8.715	0.005	25136	0.2000	0.1804	
	10 1,3,5-Trinitrobenzene	1	8.887	8.881	0.006	45908	0.2000	0.1873	
	11 1,3-Dinitrobenzene	1	9.533	9.534	-0.001	57570	0.2000	0.1850	
	12 Nitrobenzene	1	9.920	9.921	-0.001	34807	0.2000	0.1750	
	14 Tetryl	1	10.227	10.228	-0.001	32583	0.2000	0.2012	
	15 Nitroglycerin	2	10.740	10.741	-0.001	127585	2.00	1.79	
	16 2,4,6-Trinitrotoluene	1	11.200	11.201	-0.001	39976	0.2000	0.1759	
	17 4-Amino-2,6-dinitrotoluene	1	11.367	11.368	-0.001	26792	0.2000	0.1610	
	18 2-Amino-4,6-dinitrotoluene	1	11.660	11.661	-0.001	36297	0.2000	0.1769	
	19 2,6-Dinitrotoluene	1	11.813	11.814	-0.001	28083	0.2000	0.1763	
	20 2,4-Dinitrotoluene	1	12.007	12.008	-0.001	53570	0.2000	0.1783	
	21 o-Nitrotoluene	1	12.853	12.854	-0.001	20149	0.2000	0.1553	
	22 p-Nitrotoluene	1	13.300	13.301	-0.001	18408	0.2000	0.1670	
	23 m-Nitrotoluene	1	13.900	13.901	-0.001	24163	0.2000	0.1665	
	24 PETN	2	15.000	15.001	-0.001	142250	2.00	1.91	

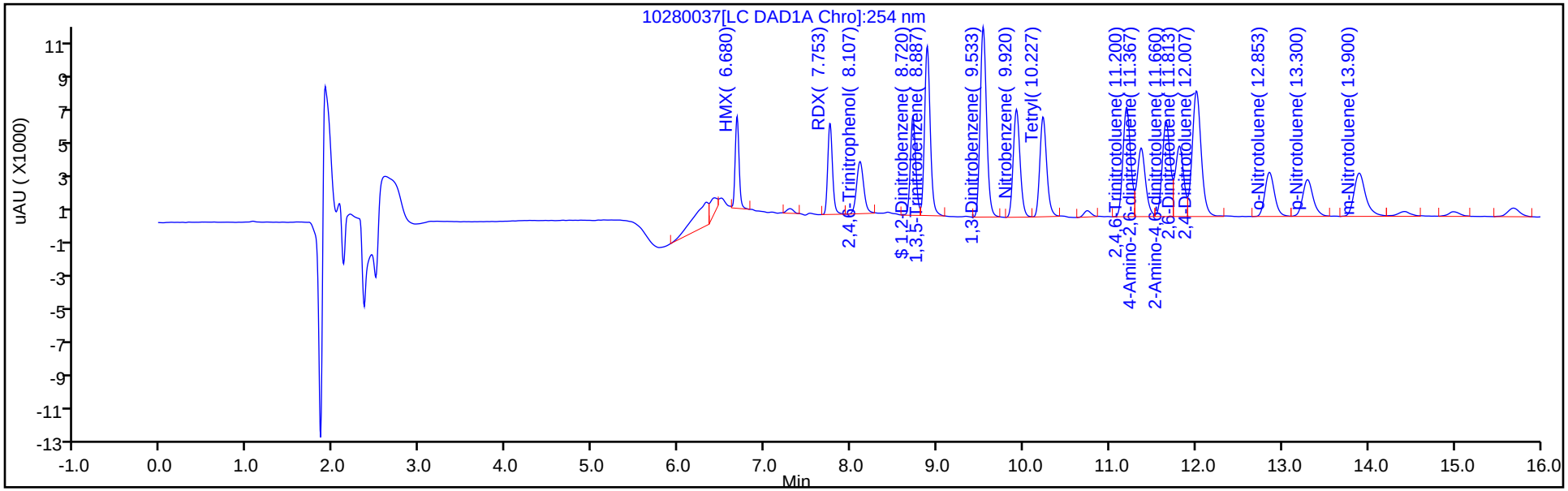
Report Date: 29-Oct-2019 11:54:54 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

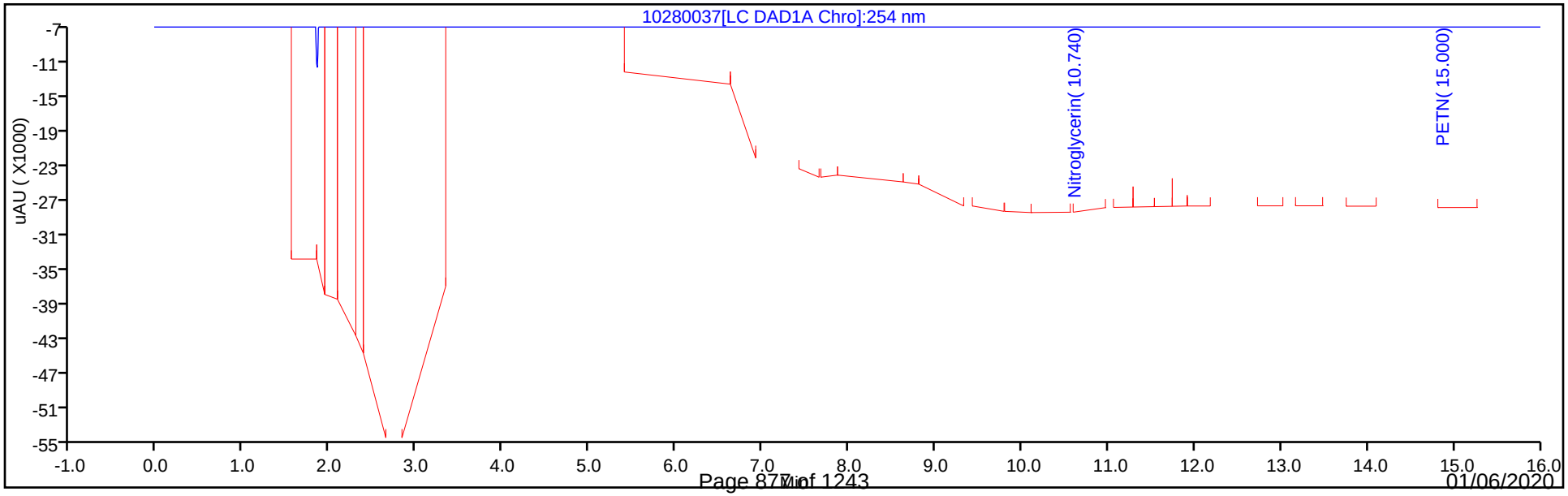
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280037.D

Injection Date:	29-Oct-2019 00:28:53	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	LCS 280-475259/2-A			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280037.D
Lims ID: LCS 280-475259/2-A
Client ID:
Sample Type: LCS
Inject. Date: 29-Oct-2019 00:28:53 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-475259/2
Misc. Info.: 280-0086569-037
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:47:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1804	90.20

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-475259/3-A

Matrix: Water Lab File ID: 10280038.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 500(mL) Date Analyzed: 10/29/2019 00:51

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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.36		2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280038.D
Lims ID: LCS 280-475259/3-A
Client ID:
Sample Type: LCS
Inject. Date: 29-Oct-2019 00:51:49 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-475259/3
Misc. Info.: 280-0086569-038
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:48:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.588	6.587	0.001	37576	0.2002	0.1748	
5 DNX	1	6.908	6.907	0.001	29350	0.2002	0.1880	
6 MNX	1	7.355	7.367	-0.012	33013	0.2334	0.2357	
$ 9 1,2-Dinitrobenzene	1	8.721	8.715	0.006	23576	0.2000	0.1692	

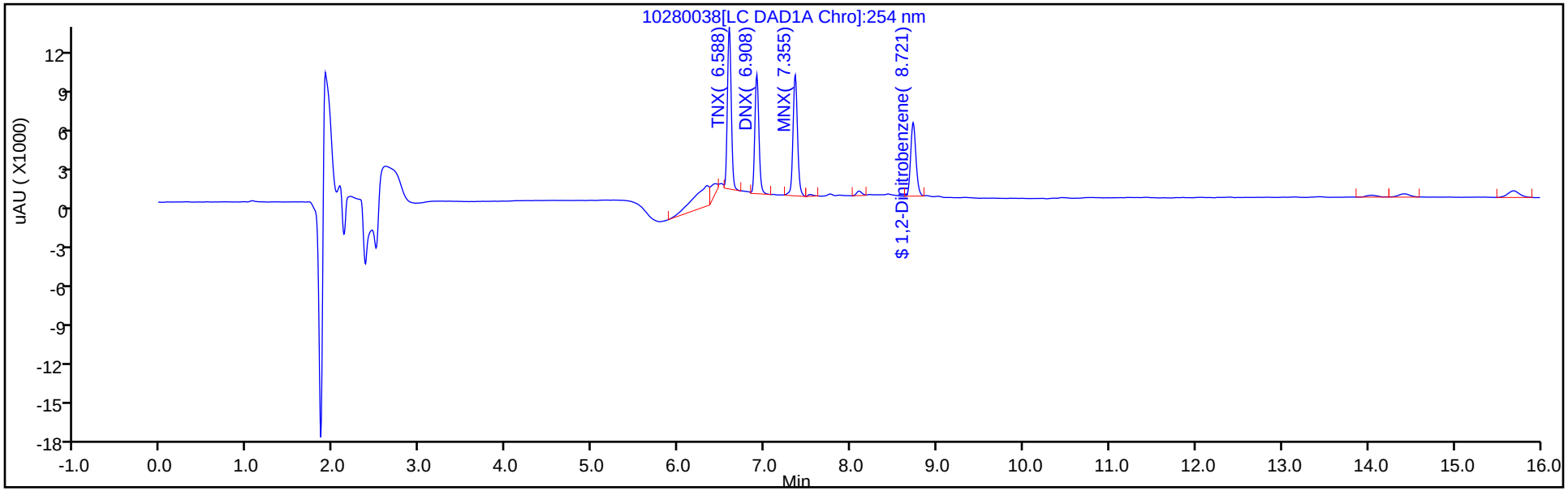
Report Date: 29-Oct-2019 11:54:53 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

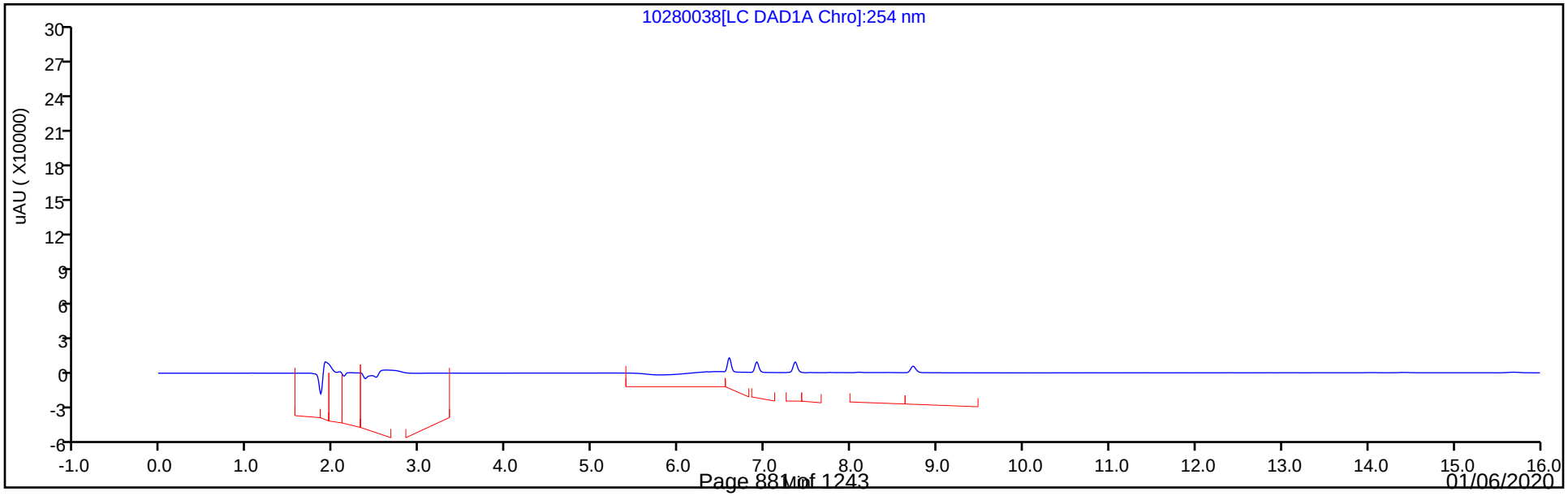
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280038.D

Injection Date:	29-Oct-2019 00:51:49	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	LCS 280-475259/3-A			Worklist Smp#:	38
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280038.D
Lims ID: LCS 280-475259/3-A
Client ID:
Sample Type: LCS
Inject. Date: 29-Oct-2019 00:51:49 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-475259/3
Misc. Info.: 280-0086569-038
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:43 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 10:48:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1692	84.61

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 MS Lab Sample ID: 280-129936-9 MS

Matrix: Water Lab File ID: 10280051.D

Analysis Method: 8330A Date Collected: 10/21/2019 14:45

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 519(mL) Date Analyzed: 10/29/2019 05:50

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.79		0.96	0.39	0.19
99-65-0	1,3-Dinitrobenzene	1.76		0.39	0.19	0.085
118-96-7	2,4,6-Trinitrotoluene	1.70		0.39	0.39	0.15
121-14-2	2,4-Dinitrotoluene	1.68		0.39	0.19	0.081
606-20-2	2,6-Dinitrotoluene	1.68		0.19	0.19	0.062
35572-78-2	2-Amino-4,6-dinitrotoluene	1.63		0.19	0.12	0.049
88-72-2	2-Nitrotoluene	1.33	J1	0.39	0.19	0.082
99-08-1	3-Nitrotoluene	1.44		0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.53		0.19	0.12	0.056
99-99-0	4-Nitrotoluene	1.52		0.96	0.39	0.19
2691-41-0	HMX	1.71	M	0.39	0.19	0.084
98-95-3	Nitrobenzene	1.65		0.39	0.19	0.088
121-82-4	RDX	1.82	M	0.39	0.39	0.15
479-45-8	Tetryl	1.96		0.23	0.19	0.076

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\CHHPLC_X\20191028-86569.b\10280051.D
Lims ID: 280-129936-A-9-B MS
Client ID: G0070-1
Sample Type: MS
Inject. Date: 29-Oct-2019 05:50:05 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-9-B
Misc. Info.: 280-0086569-051
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:05:16

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1	2,6-diamino-4-nitrotoluene	1		6.540				ND	U
2	TNX	1		6.587				ND	
3	HMX	1	6.679	6.675	0.004	16279	0.2000	0.1773	M
4	2,4-diamino-6-nitrotoluene	1		6.727				ND	
5	DNX	1		6.907				ND	
6	MNX	1		7.367				ND	
7	RDX	1	7.759	7.761	-0.002	20943	0.2000	0.1885	M
8	2,4,6-Trinitrophenol	1	8.119	8.095	0.024	29858	0.2000	0.3291	M
$ 9	1,2-Dinitrobenzene	1	8.719	8.715	0.004	24878	0.2000	0.1786	
10	1,3,5-Trinitrobenzene	1	8.885	8.881	0.004	45539	0.2000	0.1858	
11	1,3-Dinitrobenzene	1	9.532	9.534	-0.002	56791	0.2000	0.1825	
12	Nitrobenzene	1	9.918	9.921	-0.003	33987	0.2000	0.1709	
13	3,5-Dinitroaniline	1		10.173				ND	
14	Tetryl	1	10.225	10.228	-0.003	32967	0.2000	0.2036	
15	Nitroglycerin	2	10.738	10.741	-0.003	130445	2.00	1.83	
16	2,4,6-Trinitrotoluene	1	11.192	11.201	-0.009	40017	0.2000	0.1761	
17	4-Amino-2,6-dinitrotoluene	1	11.358	11.368	-0.010	26438	0.2000	0.1589	
18	2-Amino-4,6-dinitrotoluene	1	11.652	11.661	-0.009	34818	0.2000	0.1696	
19	2,6-Dinitrotoluene	1	11.805	11.814	-0.009	27734	0.2000	0.1741	
20	2,4-Dinitrotoluene	1	12.005	12.008	-0.003	52454	0.2000	0.1746	
21	o-Nitrotoluene	1	12.852	12.854	-0.002	17926	0.2000	0.1381	
22	p-Nitrotoluene	1	13.292	13.301	-0.009	17436	0.2000	0.1581	
23	m-Nitrotoluene	1	13.892	13.901	-0.009	21629	0.2000	0.1490	
24	PETN	2	14.998	15.001	-0.003	146059	2.00	1.97	
25	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

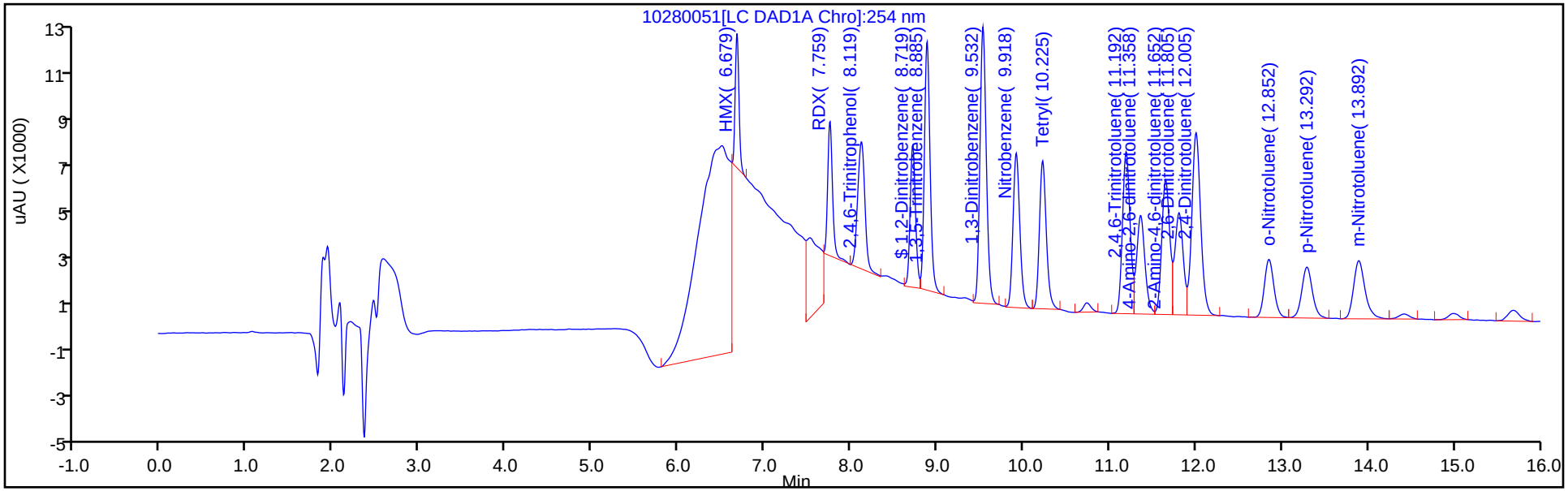
Report Date: 29-Oct-2019 11:54:38 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

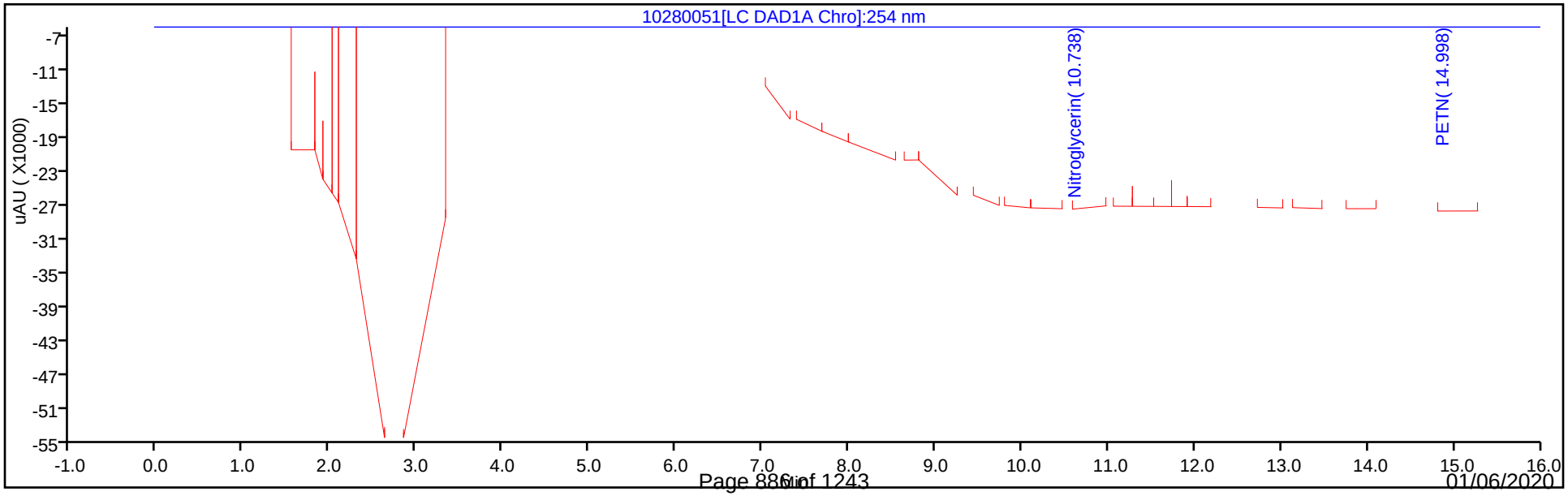
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280051.D

Injection Date:	29-Oct-2019 05:50:05	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-9-B MS			Worklist Smp#:	51
Client ID:	G0070-1				
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\20191028-86569.b\10280051.D				
Lims ID:	280-129936-A-9-B MS				
Client ID:	G0070-1				
Sample Type:	MS				
Inject. Date:	29-Oct-2019 05:50:05	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-9-B				
Misc. Info.:	280-0086569-051				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:05:16		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1786	89.28

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

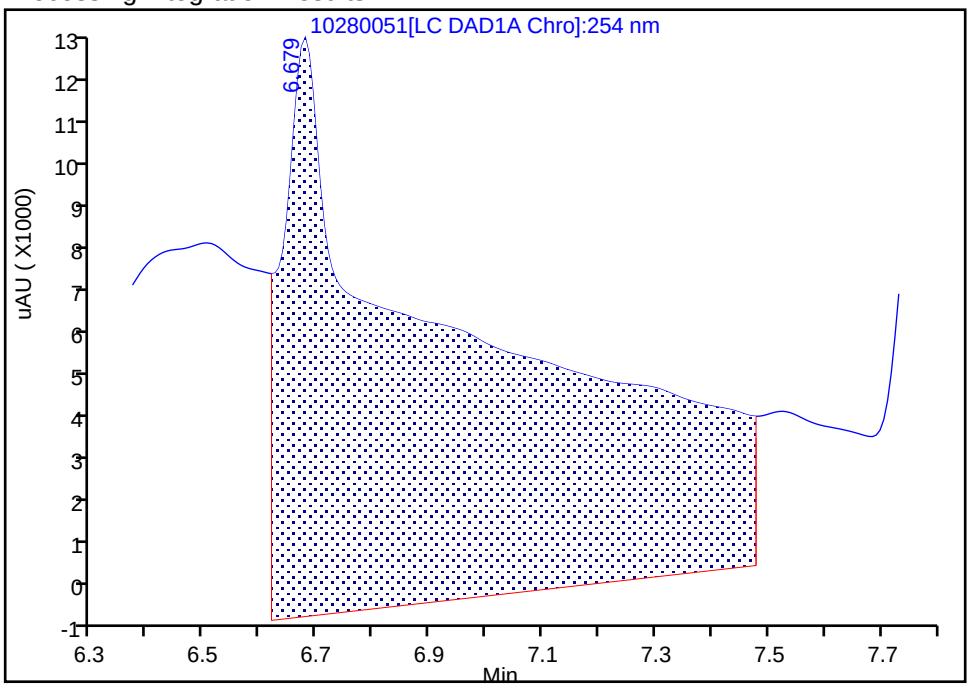
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280051.D				
Injection Date:	29-Oct-2019 05:50:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-9-B MS				
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

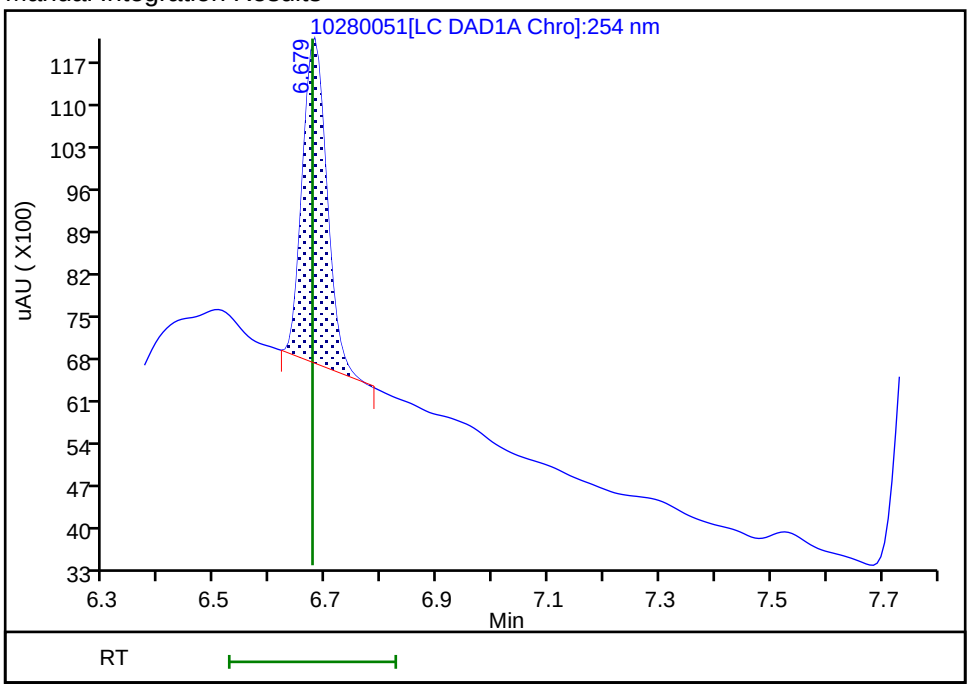
Processing Integration Results

RT: 6.68
Area: 291230
Amount: 3.171292
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 16279
Amount: 0.177267
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:04:48
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

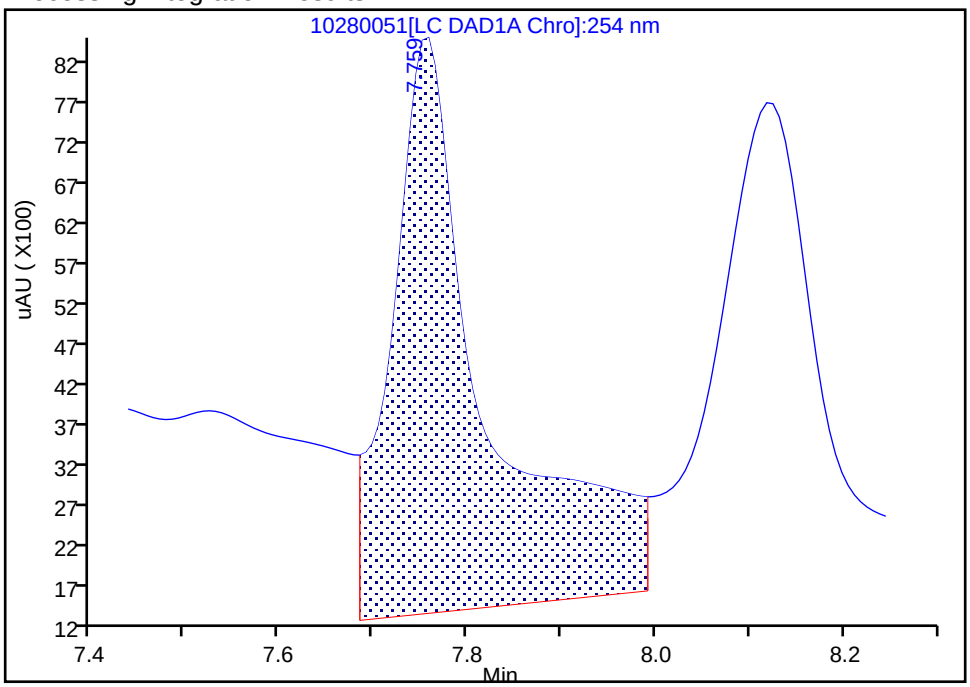
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280051.D				
Injection Date:	29-Oct-2019 05:50:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-9-B MS				
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	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

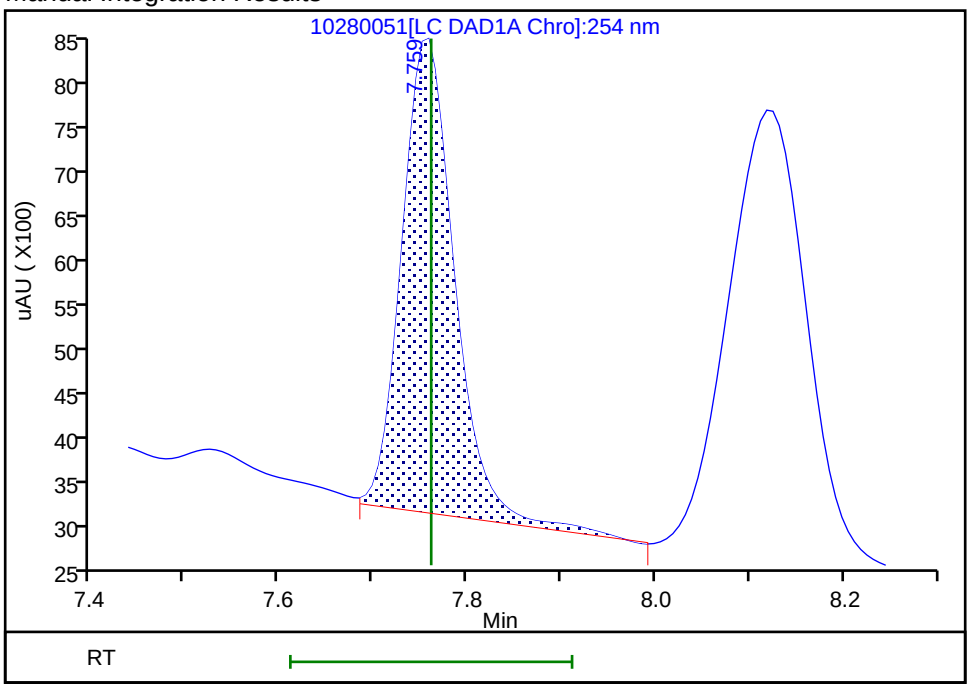
RT: 7.76
Area: 50098
Amount: 0.450844
Amount Units: ug/mL

Processing Integration Results



RT: 7.76
Area: 20943
Amount: 0.188471
Amount Units: ug/mL

Manual Integration Results



Reviewer: beckerc, 29-Oct-2019 11:05:01
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 MS Lab Sample ID: 280-129936-9 MS

Matrix: Water Lab File ID: 10280053.D

Analysis Method: 8330A Date Collected: 10/21/2019 14:45

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 519.6(mL) Date Analyzed: 10/29/2019 06:35

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.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.23	M	1.9	0.38	0.15

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\CHHPLC_X\20191028-86569.b\10280053.D
Lims ID: 280-129936-B-9-A MS
Client ID: G0070-1
Sample Type: MS
Inject. Date: 29-Oct-2019 06:35:56 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-B-9-A
Misc. Info.: 280-0086569-053
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:07:24

	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		6.540				ND	U
	2 TNX	1	6.586	6.587	-0.001	39196	0.2002	0.1823	M
	3 HMX	1		6.675				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.727				ND	
	5 DNX	1	6.906	6.907	-0.001	30323	0.2002	0.1942	M
	6 MNX	1	7.352	7.367	-0.015	32396	0.2334	0.2313	M
	7 RDX	1		7.761				ND	
	8 2,4,6-Trinitrophenol	1		8.095				ND	U
$	9 1,2-Dinitrobenzene	1	8.719	8.715	0.004	25375	0.2000	0.1821	
	10 1,3,5-Trinitrobenzene	1		8.881				ND	
	11 1,3-Dinitrobenzene	1		9.534				ND	
	12 Nitrobenzene	1	9.925	9.921	0.004	2667		0.0134	
	13 3,5-Dinitroaniline	1		10.173				ND	
	14 Tetryl	1		10.228				ND	
	15 Nitroglycerin	2		10.741				ND	
	16 2,4,6-Trinitrotoluene	1		11.201				ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.368				ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.661				ND	
	19 2,6-Dinitrotoluene	1		11.814				ND	
	20 2,4-Dinitrotoluene	1		12.008				ND	
	21 o-Nitrotoluene	1		12.854				ND	
	22 p-Nitrotoluene	1		13.301				ND	U
	23 m-Nitrotoluene	1		13.901				ND	U
	24 PETN	2		15.001				ND	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

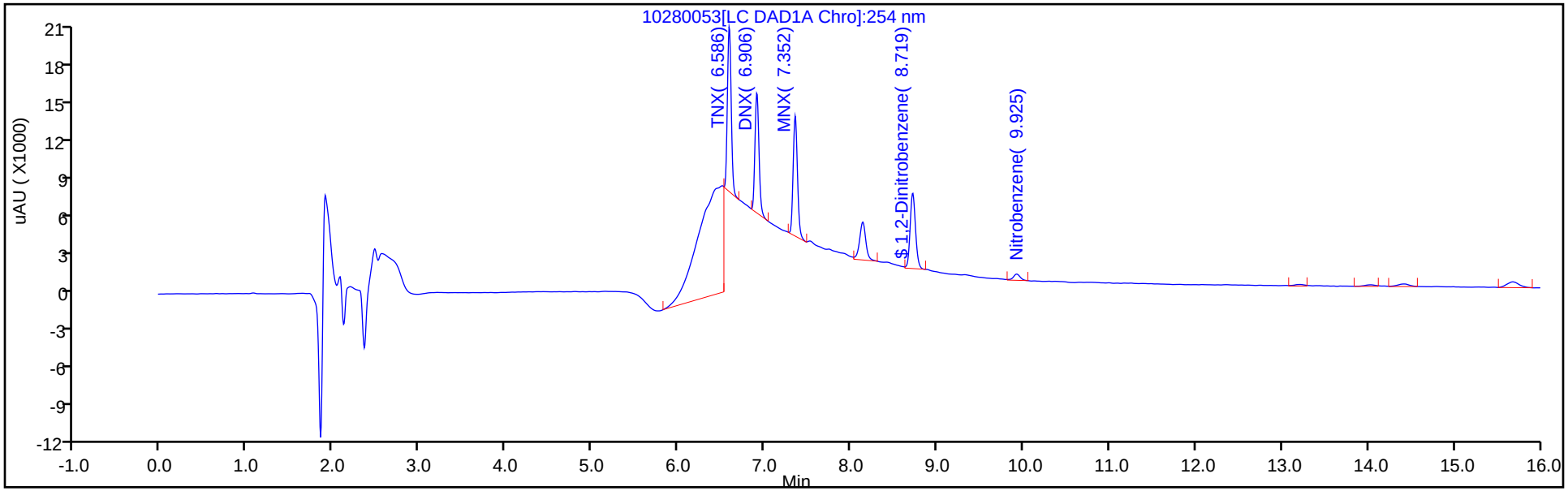
Report Date: 29-Oct-2019 11:54:36 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

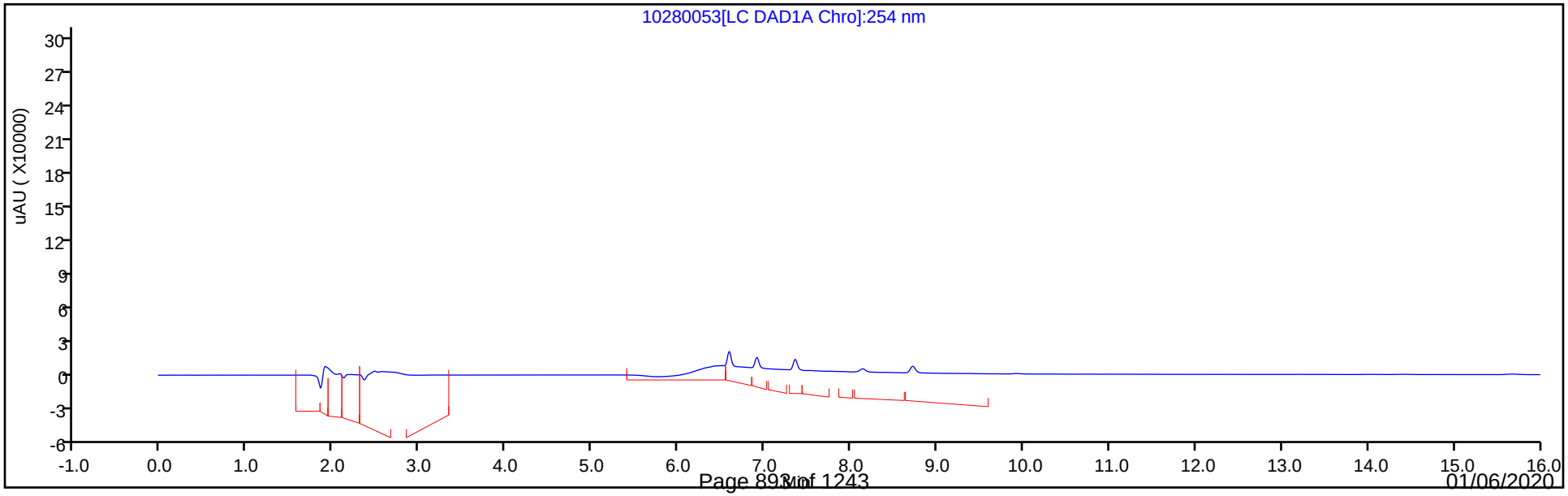
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280053.D

Injection Date:	29-Oct-2019 06:35:56	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-B-9-A MS			Worklist Smp#:	53
Client ID:	G0070-1				
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280053.D				
Lims ID:	280-129936-B-9-A MS				
Client ID:	G0070-1				
Sample Type:	MS				
Inject. Date:	29-Oct-2019 06:35:56	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-B-9-A				
Misc. Info.:	280-0086569-053				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:07:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1821	91.06

User Disabled Compound Report

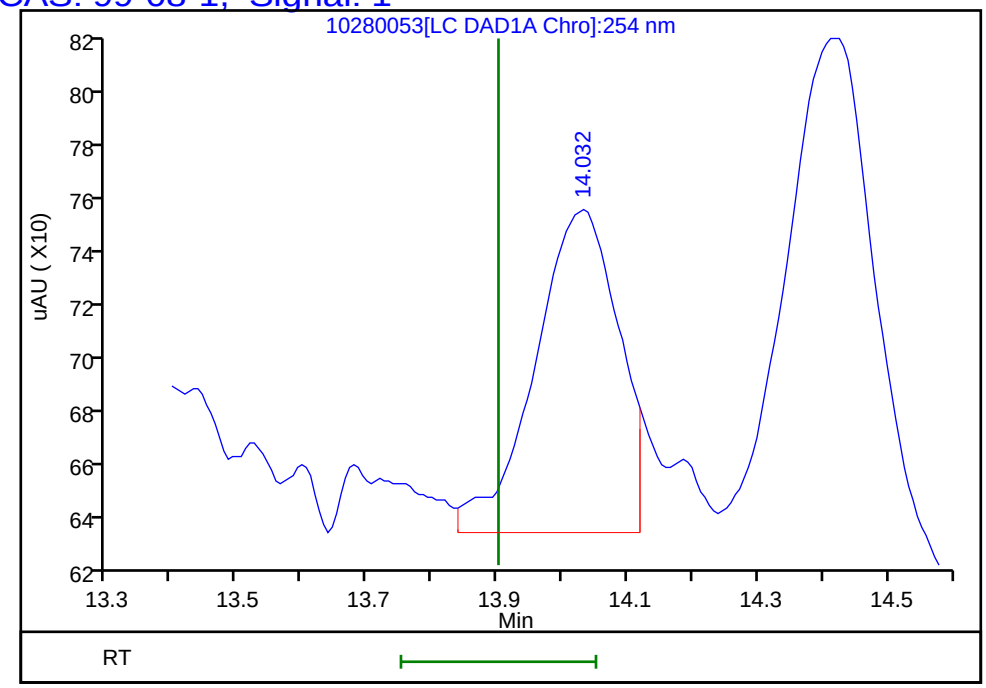
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280053.D
Injection Date: 29-Oct-2019 06:35:56 Instrument ID: CHHPLC_X3
Lims ID: 280-129936-B-9-A MS
Client ID: G0070-1
Operator ID: CB 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: 14.03
Response: 1055
Amount: 0.007270



Reviewer: beckerc, 29-Oct-2019 11:07:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

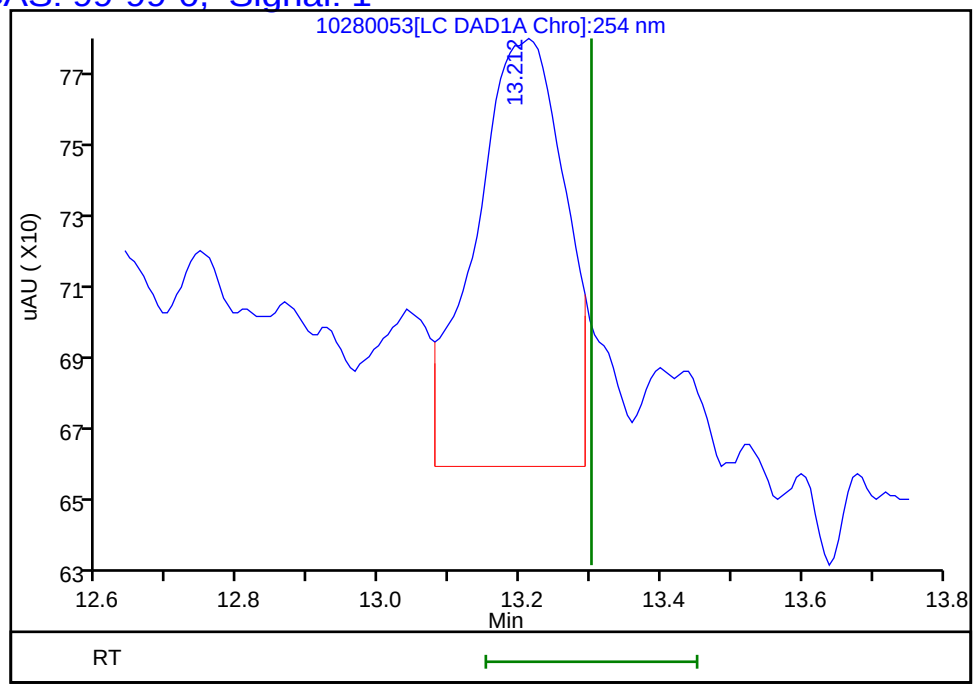
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280053.D
Injection Date: 29-Oct-2019 06:35:56 Instrument ID: CHHPLC_X3
Lims ID: 280-129936-B-9-A MS
Client ID: G0070-1
Operator ID: CB 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

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.21
Response: 1022
Amount: 0.009269



Reviewer: beckerc, 29-Oct-2019 11:07:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

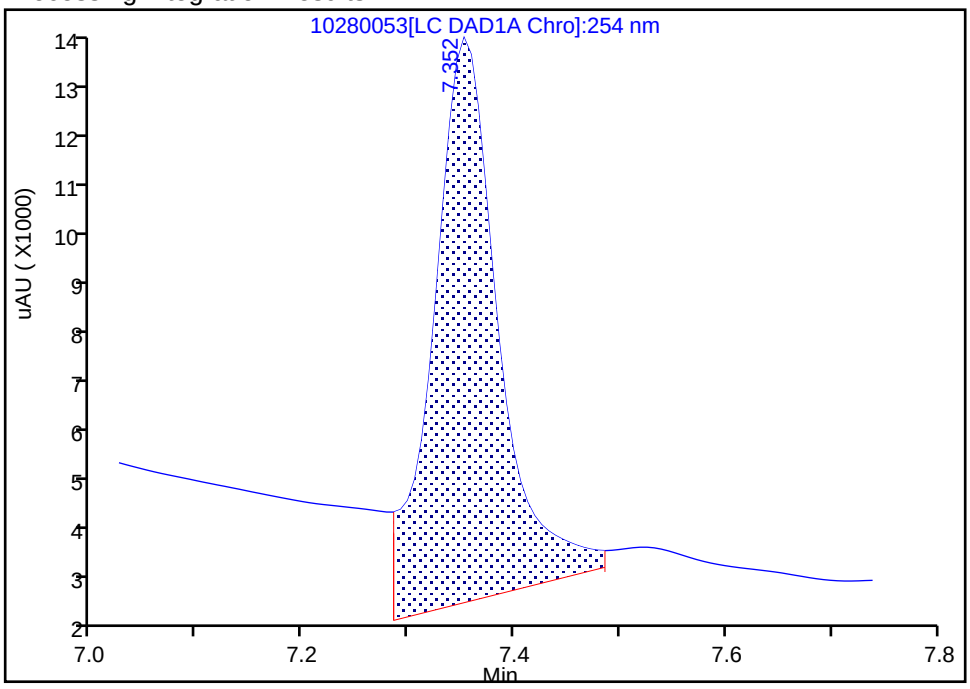
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280053.D				
Injection Date:	29-Oct-2019 06:35:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-B-9-A MS				
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	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

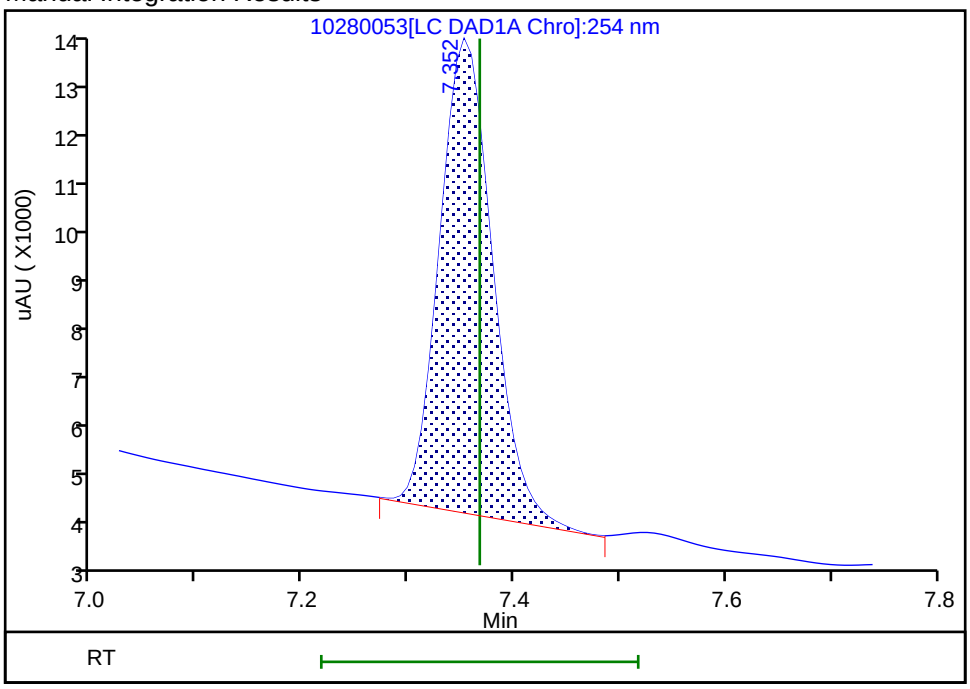
Processing Integration Results

RT: 7.35
Area: 46091
Amount: 0.329125
Amount Units: ug/mL



Manual Integration Results

RT: 7.35
Area: 32396
Amount: 0.231332
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:06:51

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 MSD Lab Sample ID: 280-129936-9 MSD

Matrix: Water Lab File ID: 10280052.D

Analysis Method: 8330A Date Collected: 10/21/2019 14:45

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 524.3(mL) Date Analyzed: 10/29/2019 06:13

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.74		0.95	0.38	0.19
99-65-0	1,3-Dinitrobenzene	1.71		0.38	0.19	0.085
118-96-7	2,4,6-Trinitrotoluene	1.64		0.38	0.38	0.15
121-14-2	2,4-Dinitrotoluene	1.58		0.38	0.19	0.080
606-20-2	2,6-Dinitrotoluene	1.57		0.19	0.19	0.062
35572-78-2	2-Amino-4,6-dinitrotoluene	1.58		0.19	0.11	0.048
88-72-2	2-Nitrotoluene	1.07	J1	0.38	0.19	0.082
99-08-1	3-Nitrotoluene	1.15	J1	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.47		0.19	0.11	0.055
99-99-0	4-Nitrotoluene	1.26	J1	0.95	0.38	0.19
2691-41-0	HMX	1.65	M	0.38	0.19	0.084
98-95-3	Nitrobenzene	1.43		0.38	0.19	0.087
121-82-4	RDX	1.73	M	0.38	0.38	0.15
479-45-8	Tetryl	1.91		0.23	0.19	0.076

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280052.D
Lims ID: 280-129936-A-9-C MSD
Client ID: G0070-1
Sample Type: MSD
Inject. Date: 29-Oct-2019 06:13:00 ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-A-9-C
Misc. Info.: 280-0086569-052
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:06:12

	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		6.540				ND	U
2	TNX	1		6.587				ND	
3	HMX	1	6.681	6.675	0.006	15930	0.2000	0.1735	M
4	2,4-diamino-6-nitrotoluene	1		6.727				ND	
5	DNX	1		6.907				ND	
6	MNX	1		7.367				ND	
7	RDX	1	7.754	7.761	-0.007	20173	0.2000	0.1815	M
8	2,4,6-Trinitrophenol	1	8.121	8.095	0.026	29538	0.2000	0.3255	M
$ 9	1,2-Dinitrobenzene	1	8.714	8.715	-0.001	24047	0.2000	0.1726	
10	1,3,5-Trinitrobenzene	1	8.887	8.881	0.006	44707	0.2000	0.1824	
11	1,3-Dinitrobenzene	1	9.534	9.534	0.000	55873	0.2000	0.1796	
12	Nitrobenzene	1	9.920	9.921	-0.001	29876	0.2000	0.1502	
13	3,5-Dinitroaniline	1		10.173				ND	
14	Tetryl	1	10.220	10.228	-0.008	32380	0.2000	0.1999	
15	Nitroglycerin	2	10.740	10.741	-0.001	132492	2.00	1.86	
16	2,4,6-Trinitrotoluene	1	11.194	11.201	-0.007	39019	0.2000	0.1717	
17	4-Amino-2,6-dinitrotoluene	1	11.360	11.368	-0.008	25598	0.2000	0.1539	
18	2-Amino-4,6-dinitrotoluene	1	11.654	11.661	-0.007	34093	0.2000	0.1661	
19	2,6-Dinitrotoluene	1	11.807	11.814	-0.007	26204	0.2000	0.1645	
20	2,4-Dinitrotoluene	1	12.000	12.008	-0.008	49674	0.2000	0.1653	
21	o-Nitrotoluene	1	12.847	12.854	-0.007	14495	0.2000	0.1117	
22	p-Nitrotoluene	1	13.287	13.301	-0.014	14617	0.2000	0.1326	
23	m-Nitrotoluene	1	13.894	13.901	-0.007	17529	0.2000	0.1208	
24	PETN	2	14.994	15.001	-0.007	143483	2.00	1.93	
25	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

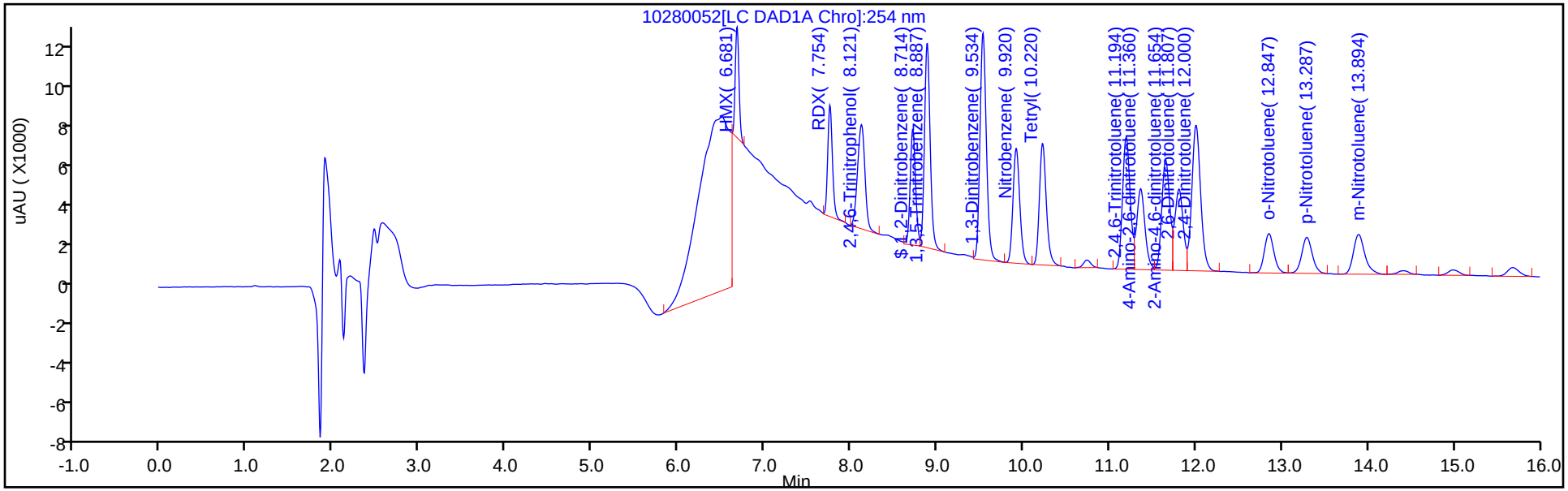
Report Date: 29-Oct-2019 11:54:37 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

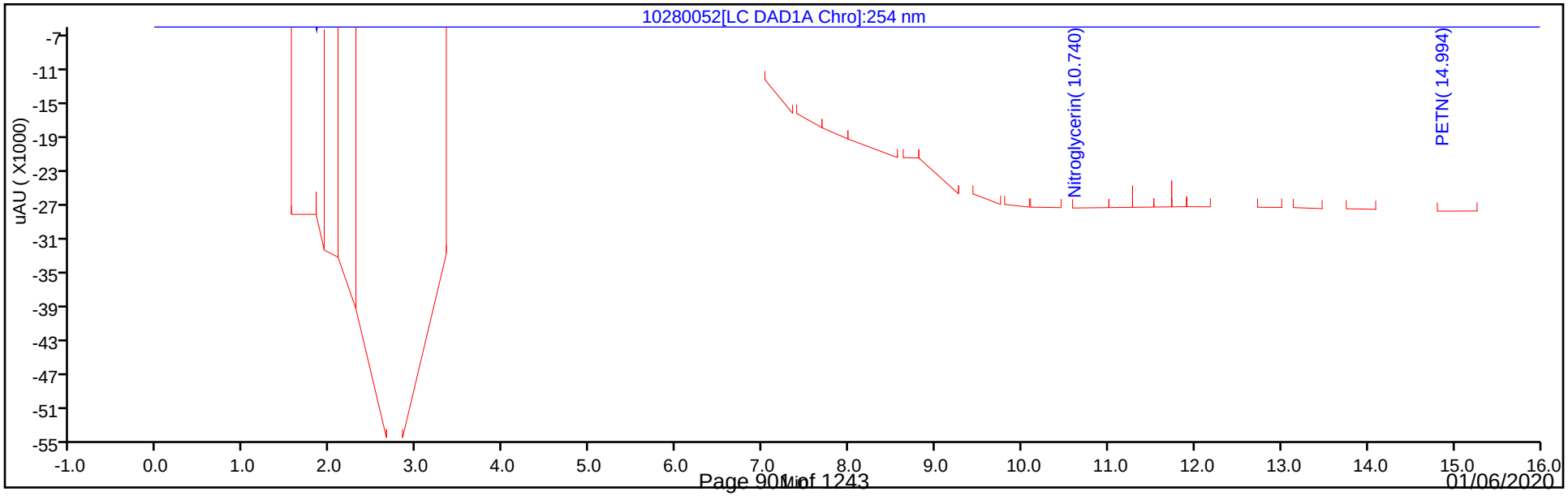
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280052.D

Injection Date:	29-Oct-2019 06:13:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-A-9-C MSD			Worklist Smp#:	52
Client ID:	G0070-1				
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\20191028-86569.b\10280052.D				
Lims ID:	280-129936-A-9-C MSD				
Client ID:	G0070-1				
Sample Type:	MSD				
Inject. Date:	29-Oct-2019 06:13:00	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-A-9-C				
Misc. Info.:	280-0086569-052				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				

First Level Reviewer: beckerc Date: 29-Oct-2019 11:06:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1726	86.30

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

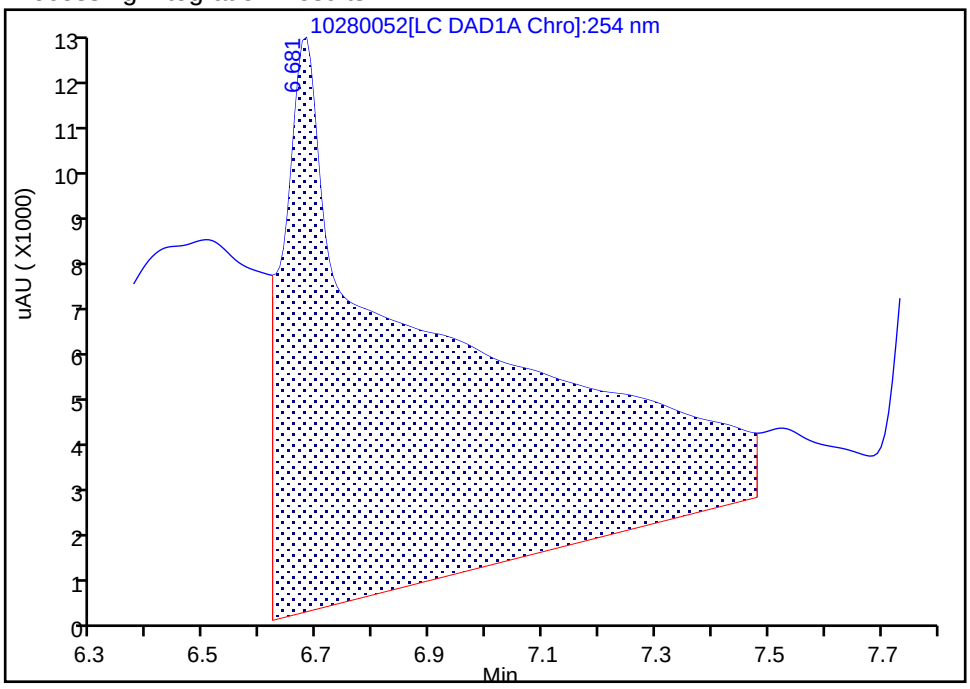
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280052.D				
Injection Date:	29-Oct-2019 06:13:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-9-C MSD				
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

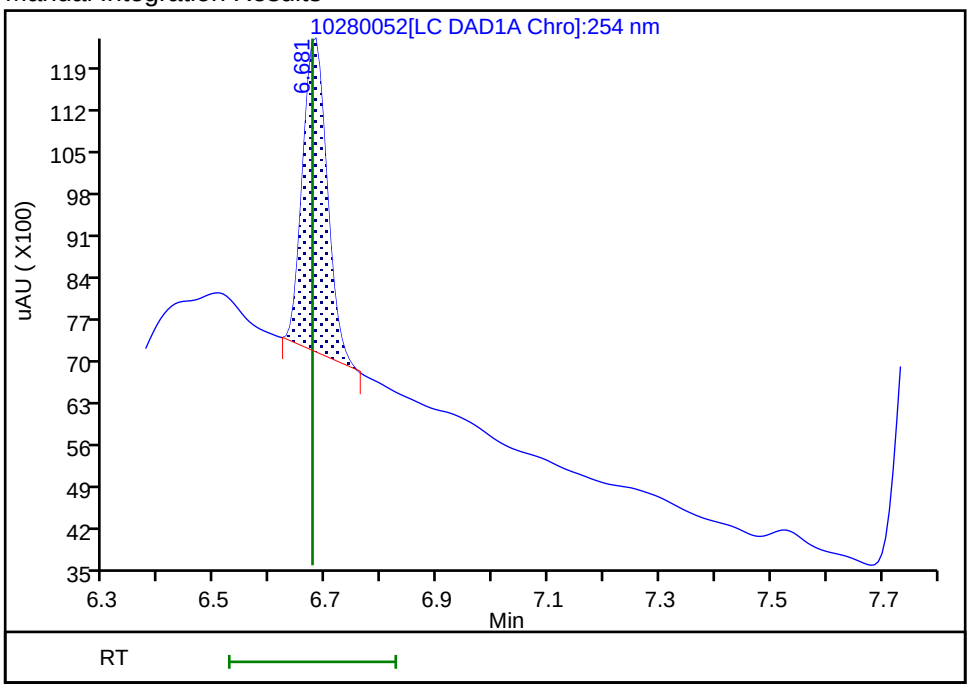
Processing Integration Results

RT: 6.68
Area: 233360
Amount: 2.541128
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 15930
Amount: 0.173467
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:05:33
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

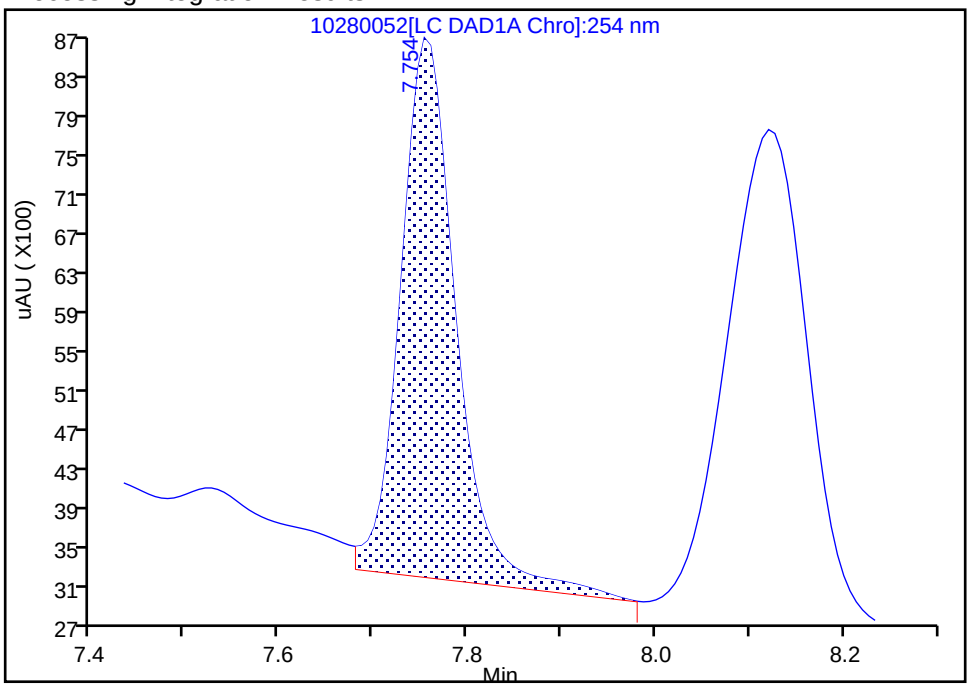
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280052.D				
Injection Date:	29-Oct-2019 06:13:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-A-9-C MSD				
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

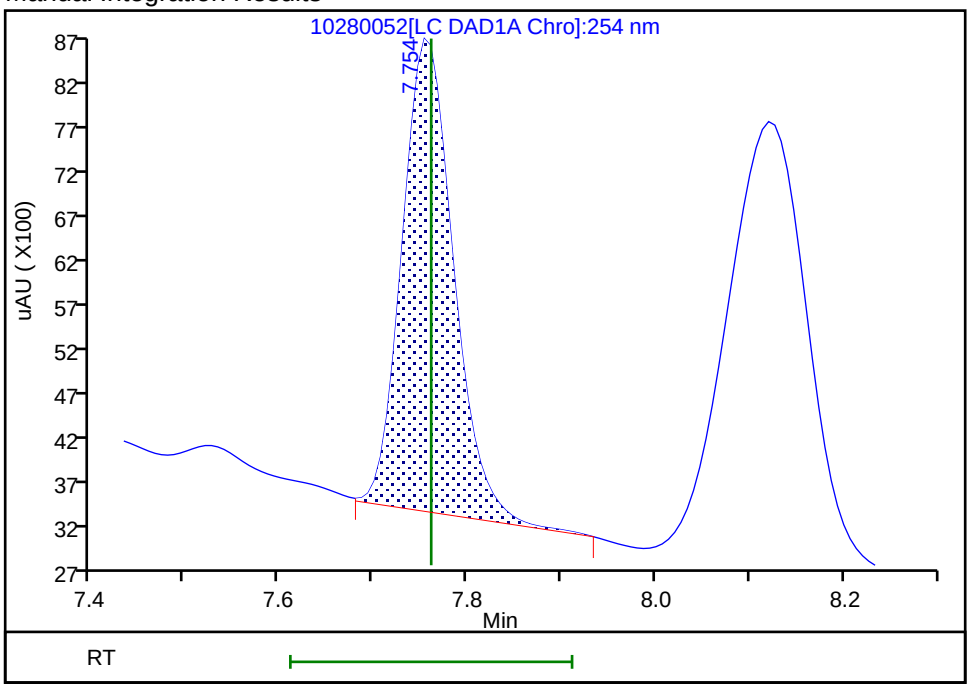
Processing Integration Results

RT: 7.75
Area: 22448
Amount: 0.202015
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 20173
Amount: 0.181542
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:05:57

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Client Sample ID: G0070-1 MSD Lab Sample ID: 280-129936-9 MSD

Matrix: Water Lab File ID: 10280054.D

Analysis Method: 8330A Date Collected: 10/21/2019 14:45

Extraction Method: 3535 Date Extracted: 10/24/2019 16:31

Sample wt/vol: 527.1(mL) Date Analyzed: 10/29/2019 06:58

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 475588 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.14	M	1.9	0.38	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280054.D
Lims ID: 280-129936-B-9-B MSD
Client ID: G0070-1
Sample Type: MSD
Inject. Date: 29-Oct-2019 06:58:54 ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-129936-B-9-B
Misc. Info.: 280-0086569-054
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 29-Oct-2019 11:54:29 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: CTX0329

First Level Reviewer: beckerc Date: 29-Oct-2019 11:08:09

	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		6.540				ND	U
	2 TNX	1	6.583	6.587	-0.004	36682	0.2002	0.1706	M
	3 HMX	1		6.675				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.727				ND	
	5 DNX	1	6.910	6.907	0.003	29268	0.2002	0.1875	M
	6 MNX	1	7.357	7.367	-0.010	31521	0.2334	0.2251	M
	7 RDX	1		7.761				ND	
	8 2,4,6-Trinitrophenol	1		8.095				ND	U
$	9 1,2-Dinitrobenzene	1	8.723	8.715	0.008	24023	0.2000	0.1724	
	10 1,3,5-Trinitrobenzene	1		8.881				ND	
	11 1,3-Dinitrobenzene	1		9.534				ND	
	12 Nitrobenzene	1	9.930	9.921	0.009	2430		0.0122	
	13 3,5-Dinitroaniline	1		10.173				ND	
	14 Tetryl	1		10.228				ND	
	15 Nitroglycerin	2		10.741				ND	
	16 2,4,6-Trinitrotoluene	1		11.201				ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.368				ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.661				ND	
	19 2,6-Dinitrotoluene	1		11.814				ND	
	20 2,4-Dinitrotoluene	1		12.008				ND	
	21 o-Nitrotoluene	1		12.854				ND	
	22 p-Nitrotoluene	1		13.301				ND	
	23 m-Nitrotoluene	1		13.901				ND	U
	24 PETN	2		15.001				ND	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

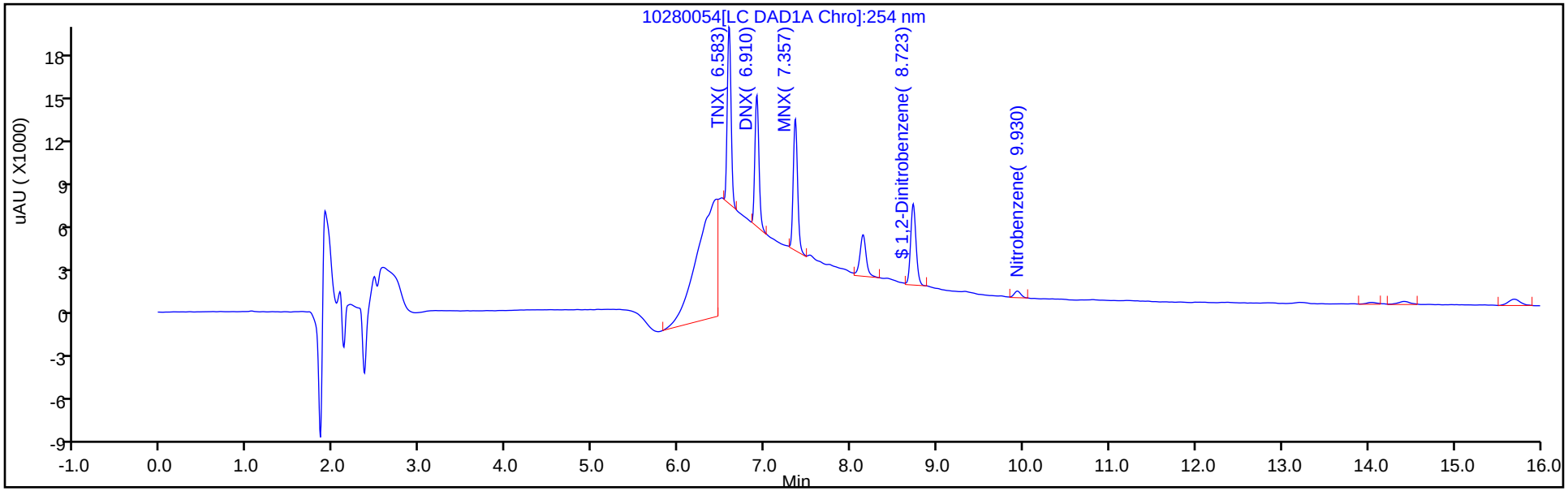
Report Date: 29-Oct-2019 11:54:35 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

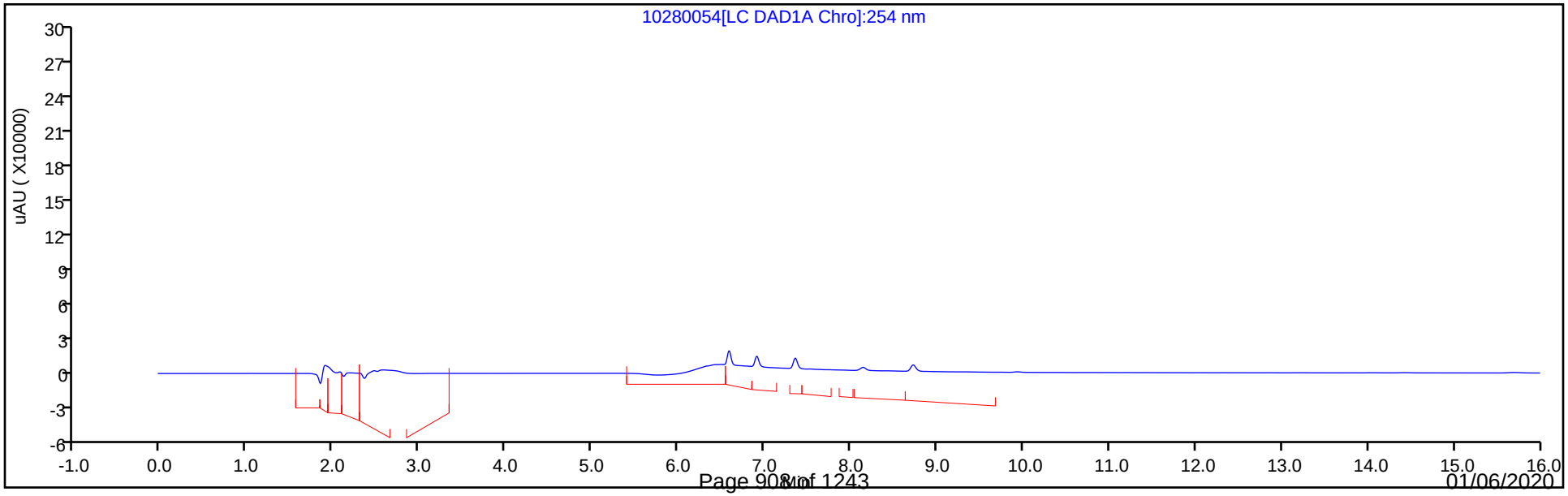
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280054.D

Injection Date:	29-Oct-2019 06:58:54	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-129936-B-9-B MSD			Worklist Smp#:	54
Client ID:	G0070-1				
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\20191028-86569.b\10280054.D				
Lims ID:	280-129936-B-9-B MSD				
Client ID:	G0070-1				
Sample Type:	MSD				
Inject. Date:	29-Oct-2019 06:58:54	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-129936-B-9-B				
Misc. Info.:	280-0086569-054				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Oct-2019 11:54:29	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:	CTX0329				
First Level Reviewer: beckerc		Date:	29-Oct-2019 11:08:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1724	86.21

User Disabled Compound Report

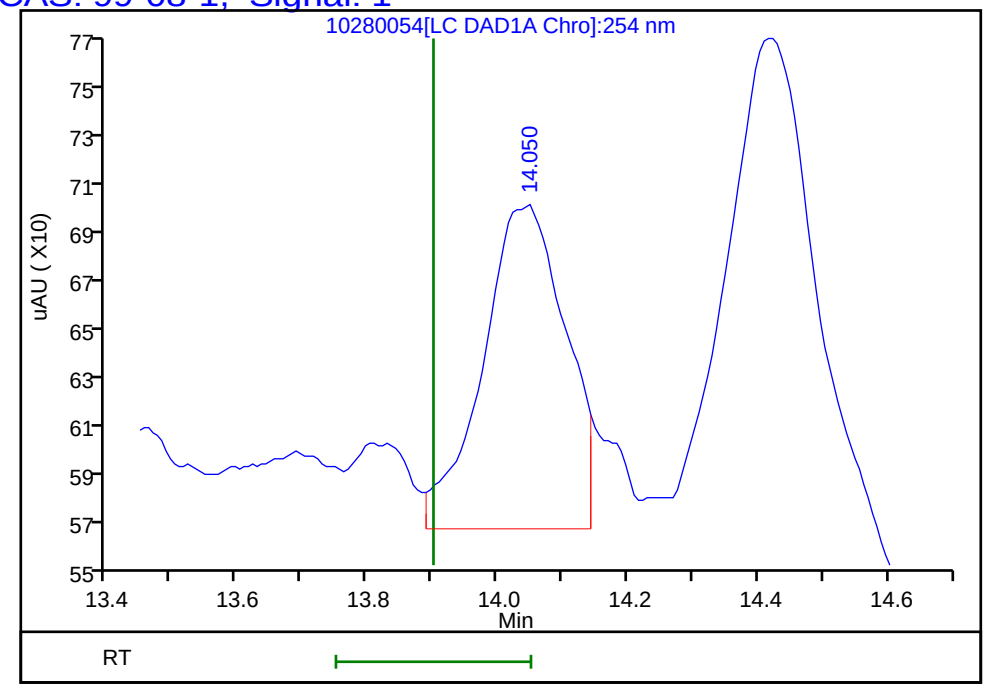
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280054.D
Injection Date: 29-Oct-2019 06:58:54 Instrument ID: CHHPLC_X3
Lims ID: 280-129936-B-9-B MSD
Client ID: G0070-1
Operator ID: CB 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

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.05
Response: 1097
Amount: 0.007559



Reviewer: beckerc, 29-Oct-2019 11:08:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

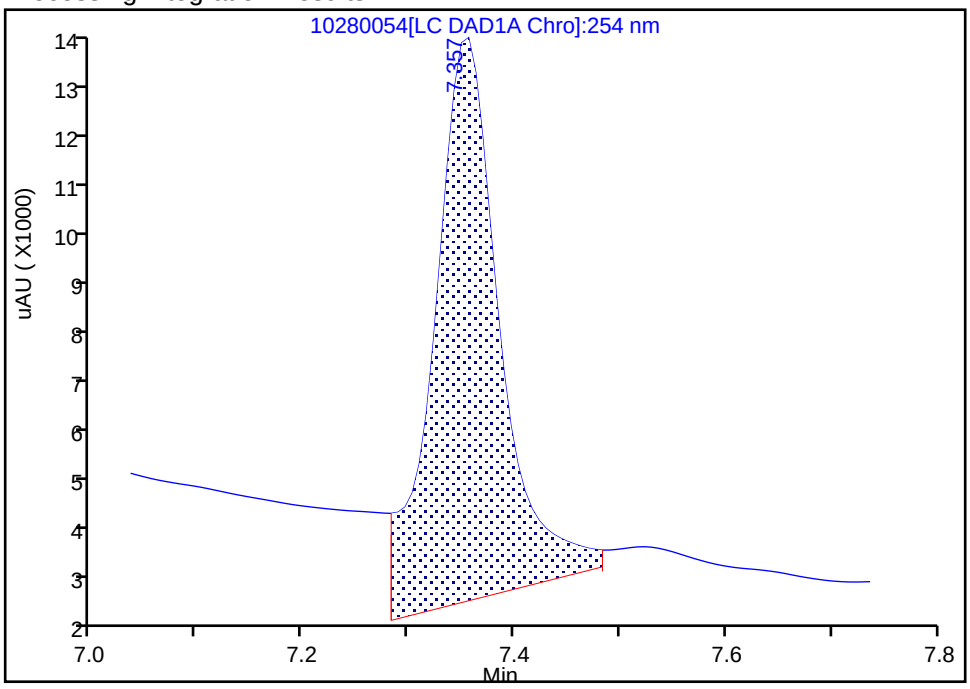
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20191028-86569.b\10280054.D				
Injection Date:	29-Oct-2019 06:58:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-129936-B-9-B MSD				
Client ID:	G0070-1				
Operator ID:	CB	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	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

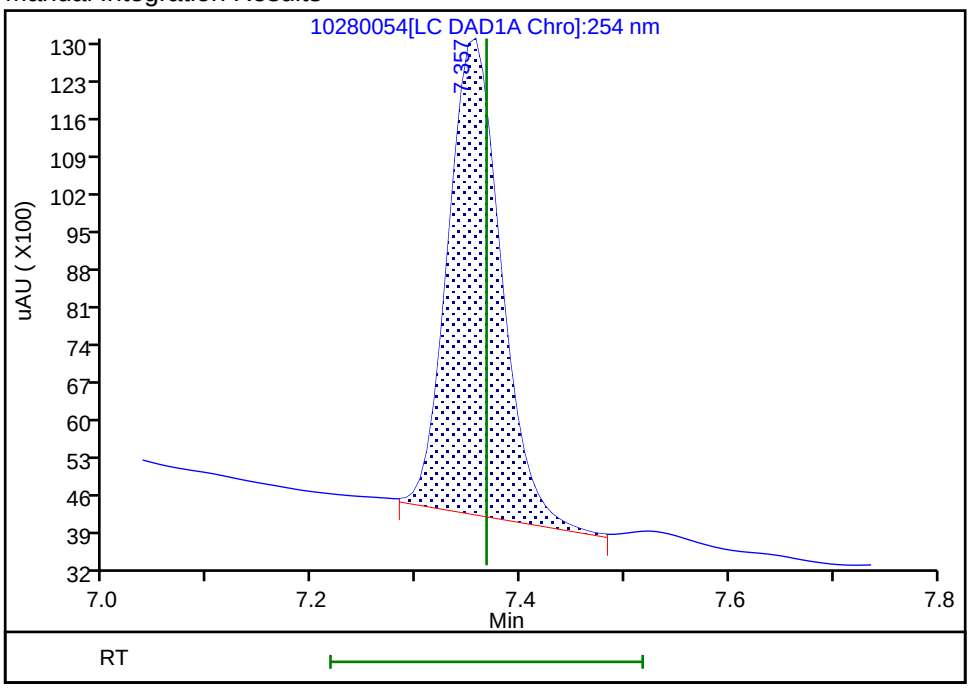
Processing Integration Results

RT: 7.36
Area: 44229
Amount: 0.315829
Amount Units: ug/mL



Manual Integration Results

RT: 7.36
Area: 31521
Amount: 0.225084
Amount Units: ug/mL



Reviewer: beckerc, 29-Oct-2019 11:07:43
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 07/01/2019 14:40

Analysis Batch Number: 463276 End 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, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 10/25/2019 19:30

Analysis Batch Number: 475429 End Date: 10/26/2019 00:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-475429/7		10/25/2019 19:30	1	10250007.D	Luna-phenylhex 4.6(mm)
IC 280-475429/8		10/25/2019 20:05	1	10250008.D	Luna-phenylhex 4.6(mm)
IC 280-475429/9		10/25/2019 20:40	1	10250009.D	Luna-phenylhex 4.6(mm)
IC 280-475429/10		10/25/2019 21:15	1	10250010.D	Luna-phenylhex 4.6(mm)
IC 280-475429/11		10/25/2019 21:50	1	10250011.D	Luna-phenylhex 4.6(mm)
IC 280-475429/12		10/25/2019 22:25	1	10250012.D	Luna-phenylhex 4.6(mm)
IC 280-475429/13		10/25/2019 23:00	1	10250013.D	Luna-phenylhex 4.6(mm)
IC 280-475429/14		10/25/2019 23:35	1	10250014.D	Luna-phenylhex 4.6(mm)
ICV 280-475429/15		10/26/2019 00:10	1	10250015.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/28/2019 22:57

Analysis Batch Number: 475588 End Date: 10/29/2019 11:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-475588/33		10/28/2019 22:57	1	10280033.D	UltraCarb5uODS 4.6(mm)
CCV 280-475588/34		10/28/2019 23:20	1		UltraCarb5uODS 4.6(mm)
CCV 280-475588/35		10/28/2019 23:42	1	10280035.D	UltraCarb5uODS 4.6(mm)
MB 280-475259/1-A		10/29/2019 00:05	1	10280036.D	UltraCarb5uODS 4.6(mm)
LCS 280-475259/2-A		10/29/2019 00:28	1	10280037.D	UltraCarb5uODS 4.6(mm)
LCS 280-475259/3-A		10/29/2019 00:51	1	10280038.D	UltraCarb5uODS 4.6(mm)
280-129936-1		10/29/2019 01:14	1	10280039.D	UltraCarb5uODS 4.6(mm)
280-129936-2		10/29/2019 01:37	1	10280040.D	UltraCarb5uODS 4.6(mm)
280-129936-3		10/29/2019 02:00	1	10280041.D	UltraCarb5uODS 4.6(mm)
280-129936-4		10/29/2019 02:23	1	10280042.D	UltraCarb5uODS 4.6(mm)
280-129936-5		10/29/2019 02:46	1	10280043.D	UltraCarb5uODS 4.6(mm)
280-129936-6		10/29/2019 03:09	1	10280044.D	UltraCarb5uODS 4.6(mm)
280-129936-7		10/29/2019 03:32	1	10280045.D	UltraCarb5uODS 4.6(mm)
CCV 280-475588/46		10/29/2019 03:55	1	10280046.D	UltraCarb5uODS 4.6(mm)
CCV 280-475588/47		10/29/2019 04:18	1		UltraCarb5uODS 4.6(mm)
CCV 280-475588/48		10/29/2019 04:41	1	10280048.D	UltraCarb5uODS 4.6(mm)
280-129936-8		10/29/2019 05:04	1	10280049.D	UltraCarb5uODS 4.6(mm)
280-129936-9		10/29/2019 05:27	1	10280050.D	UltraCarb5uODS 4.6(mm)
280-129936-9 MS		10/29/2019 05:50	1	10280051.D	UltraCarb5uODS 4.6(mm)
280-129936-9 MSD		10/29/2019 06:13	1	10280052.D	UltraCarb5uODS 4.6(mm)
280-129936-9 MS		10/29/2019 06:35	1	10280053.D	UltraCarb5uODS 4.6(mm)
280-129936-9 MSD		10/29/2019 06:58	1	10280054.D	UltraCarb5uODS 4.6(mm)
280-129936-10		10/29/2019 07:21	1	10280055.D	UltraCarb5uODS 4.6(mm)
280-129936-11		10/29/2019 07:44	1	10280056.D	UltraCarb5uODS 4.6(mm)
280-129936-12		10/29/2019 08:07	1	10280057.D	UltraCarb5uODS 4.6(mm)
280-129936-13		10/29/2019 08:30	1	10280058.D	UltraCarb5uODS 4.6(mm)
CCV 280-475588/59		10/29/2019 08:53	1	10280059.D	UltraCarb5uODS 4.6(mm)
CCV 280-475588/60		10/29/2019 09:16	1		UltraCarb5uODS 4.6(mm)
CCV 280-475588/61		10/29/2019 09:39	1	10280061.D	UltraCarb5uODS 4.6(mm)
280-129936-14		10/29/2019 10:02	1	10280062.D	UltraCarb5uODS 4.6(mm)
280-129936-15		10/29/2019 10:25	1	10280063.D	UltraCarb5uODS 4.6(mm)
CCV 280-475588/64		10/29/2019 10:48	1	10280064.D	UltraCarb5uODS 4.6(mm)
CCV 280-475588/65		10/29/2019 11:11	1		UltraCarb5uODS 4.6(mm)
CCV 280-475588/66		10/29/2019 11:34	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 10/30/2019 13:16

Analysis Batch Number: 475884 End Date: 10/31/2019 10:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-475884/7		10/30/2019 13:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 13:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 14:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 15:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 15:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 16:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 16:46	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 17:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 17:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 18:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 19:06	1		Luna-phenylhex 4.6(mm)
CCV 280-475884/18		10/30/2019 19:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 20:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 20:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 21:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 22:01	1		Luna-phenylhex 4.6(mm)
CCV 280-475884/23		10/30/2019 22:36	1	10300023.D	Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 23:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/30/2019 23:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/31/2019 00:20	1		Luna-phenylhex 4.6(mm)
280-129936-4		10/31/2019 00:55	1	10300027.D	Luna-phenylhex 4.6(mm)
280-129936-4 DL		10/31/2019 01:30	20	10300028.D	Luna-phenylhex 4.6(mm)
280-129936-5		10/31/2019 02:05	1	10300029.D	Luna-phenylhex 4.6(mm)
280-129936-6		10/31/2019 02:40	1	10300030.D	Luna-phenylhex 4.6(mm)
280-129936-7		10/31/2019 03:15	1	10300031.D	Luna-phenylhex 4.6(mm)
280-129936-8		10/31/2019 03:50	1	10300032.D	Luna-phenylhex 4.6(mm)
280-129936-8 DL		10/31/2019 04:25	20	10300033.D	Luna-phenylhex 4.6(mm)
CCV 280-475884/34		10/31/2019 05:00	1	10300034.D	Luna-phenylhex 4.6(mm)
280-129936-9		10/31/2019 05:35	1	10300035.D	Luna-phenylhex 4.6(mm)
ZZZZZ		10/31/2019 06:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/31/2019 06:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/31/2019 07:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/31/2019 07:55	1		Luna-phenylhex 4.6(mm)
280-129936-12		10/31/2019 08:30	1	10300040.D	Luna-phenylhex 4.6(mm)
280-129936-13		10/31/2019 09:05	1	10300041.D	Luna-phenylhex 4.6(mm)
280-129936-14		10/31/2019 09:40	1	10300042.D	Luna-phenylhex 4.6(mm)
280-129936-15		10/31/2019 10:15	1	10300043.D	Luna-phenylhex 4.6(mm)
CCV 280-475884/44		10/31/2019 10:50	1	10300044.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/31/2019 13:30

Analysis Batch Number: 476053 End Date: 10/31/2019 21:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-476053/7		10/31/2019 13:30	1		UltraCarb5uODS 4.6(mm)
CCV 280-476053/8		10/31/2019 13:53	1		UltraCarb5uODS 4.6(mm)
CCV 280-476053/9		10/31/2019 14:16	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 14:39	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 15:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 15:25	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 15:48	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 16:10	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 16:33	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 16:56	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 17:19	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 17:42	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 18:05	1		UltraCarb5uODS 4.6(mm)
CCV 280-476053/20		10/31/2019 18:28	1	10310020.D	UltraCarb5uODS 4.6(mm)
CCV 280-476053/21		10/31/2019 18:51	1		UltraCarb5uODS 4.6(mm)
CCV 280-476053/22		10/31/2019 19:14	1	10310022.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 19:37	250		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/31/2019 20:00	25		UltraCarb5uODS 4.6(mm)
280-129936-4 DL		10/31/2019 20:23	20	10310025.D	UltraCarb5uODS 4.6(mm)
280-129936-8 DL		10/31/2019 20:46	20	10310026.D	UltraCarb5uODS 4.6(mm)
CCV 280-476053/27		10/31/2019 21:09	1	10310027.D	UltraCarb5uODS 4.6(mm)
CCV 280-476053/28		10/31/2019 21:32	1		UltraCarb5uODS 4.6(mm)
CCV 280-476053/29		10/31/2019 21:54	1	10310029.D	UltraCarb5uODS 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 475259 Batch Start Date: 10/24/19 16:31 Batch Analyst: Anders, Kayla S

Batch Method: 3535 Batch End Date: 10/24/19 18:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00094	8330_OP_DMT 00003
MB 280-475259/1		3535, 8330A				500 mL	5 mL		
LCS 280-475259/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-475259/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-129936-A-1	CA210-1	3535, 8330A	T	775.7 g	285.8 g	489.9 mL	5 mL		
280-129936-A-2	CA211-1	3535, 8330A	T	771.8 g	286.0 g	485.8 mL	5 mL		
280-129936-A-3	CA212-1	3535, 8330A	T	786.8 g	286.6 g	500.2 mL	5 mL		
280-129936-A-4	EW7-PM24B-1-35	3535, 8330A	T	814.1 g	284.5 g	529.6 mL	5 mL		
280-129936-A-5	EW7-PM29B-1-35	3535, 8330A	T	801.3 g	284.9 g	516.4 mL	5 mL		
280-129936-A-6	EW7-PM29A-1-25	3535, 8330A	T	794.9 g	284.6 g	510.3 mL	5 mL		
280-129936-A-7	EW7-PM28A-1-25	3535, 8330A	T	784.2 g	285.8 g	498.4 mL	5 mL		
280-129936-A-8	EW7-PM28B-1-35	3535, 8330A	T	799.2 g	285.4 g	513.8 mL	5 mL		
280-129936-A-9	G0070-1	3535, 8330A	T	810.1 g	285.9 g	524.2 mL	5 mL		
280-129936-A-9 MS	G0070-1	3535, 8330A	T	805.9 g	286.9 g	519 mL	5 mL	0.1 mL	
280-129936-A-9 MSD	G0070-1	3535, 8330A	T	810.1 g	285.8 g	524.3 mL	5 mL	0.1 mL	
280-129936-B-9 MS	G0070-1	3535, 8330A	T	805.5 g	285.9 g	519.6 mL	5 mL		0.1 mL
280-129936-B-9 MSD	G0070-1	3535, 8330A	T	812.6 g	285.5 g	527.1 mL	5 mL		0.1 mL
280-129936-A-10	CA213-1	3535, 8330A	T	772.4 g	286.7 g	485.7 mL	5 mL		
280-129936-A-11	NW070-1	3535, 8330A	T	777.1 g	285.4 g	491.7 mL	5 mL		
280-129936-A-12	G0081-1	3535, 8330A	T	797.7 g	286.4 g	511.3 mL	5 mL		
280-129936-A-13	G0075-1	3535, 8330A	T	814.1 g	285.6 g	528.5 mL	5 mL		
280-129936-A-14	G0079-1	3535, 8330A	T	806.6 g	286.7 g	519.9 mL	5 mL		
280-129936-A-15	G0080-1	3535, 8330A	T	814.4 g	285.9 g	528.5 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00109	AnalysisComment				
MB 280-475259/1		3535, 8330A		0.1 mL					
LCS 280-475259/2		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.: 280-129936-1

SDG No.:

Batch Number: 475259 Batch Start Date: 10/24/19 16:31 Batch Analyst: Anders, Kayla S

Batch Method: 3535 Batch End Date: 10/24/19 18:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00109	AnalysisComment				
LCS 280-475259/3		3535, 8330A		0.1 mL					
280-129936-A-1	CA210-1	3535, 8330A	T	0.1 mL					
280-129936-A-2	CA211-1	3535, 8330A	T	0.1 mL					
280-129936-A-3	CA212-1	3535, 8330A	T	0.1 mL					
280-129936-A-4	EW7-PM24B-1-35	3535, 8330A	T	0.1 mL	FILTERED				
280-129936-A-5	EW7-PM29B-1-35	3535, 8330A	T	0.1 mL					
280-129936-A-6	EW7-PM29A-1-25	3535, 8330A	T	0.1 mL					
280-129936-A-7	EW7-PM28A-1-25	3535, 8330A	T	0.1 mL					
280-129936-A-8	EW7-PM28B-1-35	3535, 8330A	T	0.1 mL					
280-129936-A-9	G0070-1	3535, 8330A	T	0.1 mL					
280-129936-A-9 MS	G0070-1	3535, 8330A	T	0.1 mL					
280-129936-A-9 MSD	G0070-1	3535, 8330A	T	0.1 mL					
280-129936-B-9 MS	G0070-1	3535, 8330A	T	0.1 mL					
280-129936-B-9 MSD	G0070-1	3535, 8330A	T	0.1 mL					
280-129936-A-10	CA213-1	3535, 8330A	T	0.1 mL					
280-129936-A-11	NW070-1	3535, 8330A	T	0.1 mL					
280-129936-A-12	G0081-1	3535, 8330A	T	0.1 mL					
280-129936-A-13	G0075-1	3535, 8330A	T	0.1 mL					
280-129936-A-14	G0079-1	3535, 8330A	T	0.1 mL					
280-129936-A-15	G0080-1	3535, 8330A	T	0.1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 475259 Batch Start Date: 10/24/19 16:31 Batch Analyst: Anders, Kayla S

Batch Method: 3535 Batch End Date: 10/24/19 18:39

Batch Notes	
Acid ID	0.1AAinACN_00131
Acid Name	0.1AAinACN
Balance ID	24350888
Batch Comment	DV-OP-0017
First End time	10/24/2019 18:13
Pipette/Syringe/Dispenser ID	Jiji, Soot
Rinse Solvent Lot	Acetonitrile_00041
Rinse Solvent Name	Acetonitrile
Solvent Lot #	CaCl2_Sol_00068
Solvent Name	Calcium Chloride
SPE Cartridge Lot ID	005039142A
SPE Cartridge Type	Porapak RDX Cartridges
Analyst ID - Spike Analyst	KA(trainer)/MA(trainee)
Analyst ID - Spike Witness Analyst	Reviewer:FL
First Start time	10/24/2019 17:03

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: 280-129936-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
CA210-1	280-129936-1
CA211-1	280-129936-2
CA212-1	280-129936-3
EW7-PM24B-1-35	280-129936-4
EW7-PM29B-1-35	280-129936-5
EW7-PM29A-1-25	280-129936-6
EW7-PM28A-1-25	280-129936-7
EW7-PM28B-1-35	280-129936-8
G0070-1	280-129936-9
CA213-1	280-129936-10
NW070-1	280-129936-11
G0081-1	280-129936-12
G0075-1	280-129936-13
G0079-1	280-129936-14
G0080-1	280-129936-15

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA210-1 Lab Sample ID: 280-129936-1

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 09:50

Reporting Basis: WET Date Received: 10/22/2019 09:30

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	22	1.0	0.50	0.19	mg/L			10	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	120	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	310	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA210-1 Lab Sample ID: 280-129936-1

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 09:50

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	9.7	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA211-1 Lab Sample ID: 280-129936-2

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 11:25

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.11	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	30	1.0	0.50	0.19	mg/L			10	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	93	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	200	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA211-1 Lab Sample ID: 280-129936-2

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 11:25

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.3	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA212-1 Lab Sample ID: 280-129936-3

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 12:50

Reporting Basis: WET Date Received: 10/22/2019 09:30

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	14	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	72	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	190	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA212-1 Lab Sample ID: 280-129936-3

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 12:50

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.6	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM24B-1-35 Lab Sample ID: 280-129936-4

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/19/2019 09:55

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.3	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	11	0.20	0.10	0.038	mg/L			2	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	110	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	330	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM24B-1-35 Lab Sample ID: 280-129936-4

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/19/2019 09:55

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.8	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM29B-1-35 Lab Sample ID: 280-129936-5

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/19/2019 11:55

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.4	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.4	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	2.5	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	140	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	350	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM29B-1-35 Lab Sample ID: 280-129936-5

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/19/2019 11:55

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.7	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM29A-1-25 Lab Sample ID: 280-129936-6

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/19/2019 14:05

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.12	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	12	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	97	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	230	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM29A-1-25 Lab Sample ID: 280-129936-6

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/19/2019 14:05

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.1	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM28A-1-25 Lab Sample ID: 280-129936-7

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/19/2019 16:20

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.53	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	16	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	80	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	370	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM28A-1-25 Lab Sample ID: 280-129936-7

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/19/2019 16:20

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.8	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM28B-1-35 Lab Sample ID: 280-129936-8

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/20/2019 12:10

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.0	0.20	0.10	0.044	mg/L			2	350.1
Nitrogen, Total Kjeldahl	5.2	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	2.7	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	71	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	450	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM28B-1-35 Lab Sample ID: 280-129936-8

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/20/2019 12:10

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.5	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0070-1 Lab Sample ID: 280-129936-9

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 14:45

Reporting Basis: WET Date Received: 10/22/2019 09:30

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	J1	1	351.2
Nitrate Nitrite as N	0.025	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	34	5.0	3.0	1.0	mg/L		J1	1	9056A
Total Alkalinity as CaCO3	220	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0070-1 Lab Sample ID: 280-129936-9

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 14:45

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	1.0	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA213-1 Lab Sample ID: 280-129936-10

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 14:25

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	0.97	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	1.3	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	63	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	130	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA213-1 Lab Sample ID: 280-129936-10

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 14:25

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.2	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW070-1 Lab Sample ID: 280-129936-11

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 16:15

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.024	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	5.0	5.0	5.0	3.4	mg/L	U		1	351.2
Nitrate Nitrite as N	0.030	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	3.9	5.0	3.0	1.0	mg/L	J		1	9056A
Total Alkalinity as CaCO3	51	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW070-1 Lab Sample ID: 280-129936-11

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 16:15

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.2	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0081-1 Lab Sample ID: 280-129936-12

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 16:15

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.26	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	5.0	5.0	5.0	3.4	mg/L	U		1	351.2
Nitrate Nitrite as N	0.36	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	120	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	370	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0081-1 Lab Sample ID: 280-129936-12

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 16:15

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.8	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0075-1 Lab Sample ID: 280-129936-13

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 12:00

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.056	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	0.92	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	1.2	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	150	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	390	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0075-1 Lab Sample ID: 280-129936-13

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 12:00

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.4	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0079-1 Lab Sample ID: 280-129936-14

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 10:45

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	0.76	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	0.21	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	17	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	130	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0079-1 Lab Sample ID: 280-129936-14

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 10:45

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.2	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0080-1 Lab Sample ID: 280-129936-15

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 09:10

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.064	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	2.7	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	84	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	350	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0080-1 Lab Sample ID: 280-129936-15

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG ID.:

Matrix: Water Date Sampled: 10/21/2019 09:10

Reporting Basis: WET Date Received: 10/22/2019 09:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.9	1.0	1.0	0.35	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Analyst: BWH Batch Start Date: 11/06/2019

Reporting Units: mg/L Analytical Batch No.: 476739

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	11:25	Ammonia	0.518	0.498	104	90-110		350.1 ICV_00376
15	ICV	11:27	Ammonia	2.53	2.49	102	90-110		350.1 ICV_00376
16	ICB	11:29	Ammonia	0.050				U	
33	CCVL	12:03	Ammonia	0.527	0.500	105	90-110		350.1 cal_00392
34	CCV	12:05	Ammonia	2.57	2.50	103	90-110		350.1 cal_00392
35	CCB	12:07	Ammonia	0.050				U	
49	CCVL	12:35	Ammonia	0.538	0.500	108	90-110		350.1 cal_00392
50	CCV	12:37	Ammonia	2.55	2.50	102	90-110		350.1 cal_00392
51	CCB	12:39	Ammonia	0.050				U	
65	CCVL	13:07	Ammonia	0.496	0.500	99	90-110		350.1 cal_00392
66	CCV	13:09	Ammonia	2.55	2.50	102	90-110		350.1 cal_00392
67	CCB	13:11	Ammonia	0.050				U	
81	CCVL	13:39	Ammonia	0.519	0.500	104	90-110		350.1 cal_00392
82	CCV	13:41	Ammonia	2.49	2.50	100	90-110		350.1 cal_00392
83	CCB	13:43	Ammonia	0.050				U	
98	CCV	14:13	Ammonia	2.60	2.50	104	90-110		350.1 cal_00392
99	CCB	14:15	Ammonia	0.050				U	
113	CCV	14:43	Ammonia	2.62	2.50	105	90-110		350.1 cal_00392
114	CCB	14:45	Ammonia	0.050				U	
128	CCVL	15:17	Ammonia	0.471	0.500	94	90-110		350.1 cal_00392
129	CCV	15:19	Ammonia	2.62	2.50	105	90-110		350.1 cal_00392
130	CCB	15:21	Ammonia	0.050				U	
144	CCVL	15:49	Ammonia	0.476	0.500	95	90-110		350.1 cal_00392
145	CCV	15:51	Ammonia	2.62	2.50	105	90-110		350.1 cal_00392
146	CCB	15:53	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.: 280-129936-1

SDG No.:

Analyst: SVC Batch Start Date: 11/05/2019

Reporting Units: mg/L Analytical Batch No.: 476608

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	ICV	20:16	Nitrogen, Total Kjeldahl	5.21	5.00	104	90-110		TKN ICV 25_00084
14	ICB	20:18	Nitrogen, Total Kjeldahl	1.0				U	
31	CCV	20:39	Nitrogen, Total Kjeldahl	4.55	5.00	91	90-110		TKN 25ppm_00799
32	CCB	20:40	Nitrogen, Total Kjeldahl	1.0				U	
49	CCV	21:01	Nitrogen, Total Kjeldahl	4.50	5.00	90	90-110		TKN 25ppm_00799
50	CCB	21:03	Nitrogen, Total Kjeldahl	1.0				U	
64	CCV	21:20	Nitrogen, Total Kjeldahl	4.65	5.00	93	90-110		TKN 25ppm_00799
65	CCB	21:21	Nitrogen, Total Kjeldahl	1.0				U	
78	CCV	21:38	Nitrogen, Total Kjeldahl	4.74	5.00	95	90-110		TKN 25ppm_00799
79	CCB	21:39	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.: 280-129936-1

SDG No.:

Analyst: SVC Batch Start Date: 11/04/2019

Reporting Units: mg/L Analytical Batch No.: 476445

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
18	ICVL	17:56	Nitrate Nitrite as N	2.10	2.00	105	90-110		NXN ICV INT_00492
19	ICB	17:58	Nitrate Nitrite as N	0.050				U	
35	CCV	18:30	Nitrate Nitrite as N	4.90	5.00	98	90-110		NXN CAL INT_00511
36	CCVL	18:32	Nitrate Nitrite as N	1.06	1.00	106	90-110		NXN CAL INT_00511
37	CCB	18:34	Nitrate Nitrite as N	0.050				U	
51	CCV	19:02	Nitrate Nitrite as N	4.98	5.00	100	90-110		NXN CAL INT_00511
52	CCVL	19:04	Nitrate Nitrite as N	1.08	1.00	108	90-110		NXN CAL INT_00511
53	CCB	19:06	Nitrate Nitrite as N	0.050				U	
67	CCV	19:34	Nitrate Nitrite as N	4.84	5.00	97	90-110		NXN CAL INT_00511
68	CCVL	19:36	Nitrate Nitrite as N	1.02	1.00	102	90-110		NXN CAL INT_00511
69	CCB	19:38	Nitrate Nitrite as N	0.050				U	
83	CCV	20:06	Nitrate Nitrite as N	5.21	5.00	104	90-110		NXN CAL INT_00511
84	CCVL	20:08	Nitrate Nitrite as N	1.02	1.00	102	90-110		NXN CAL INT_00511
85	CCB	20:10	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.: 280-129936-1

SDG No.:

Analyst: SVC Batch Start Date: 11/05/2019

Reporting Units: mg/L Analytical Batch No.: 476607

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	17:07	Nitrate Nitrite as N	4.85	5.00	97	90-110		NXN ICV INT_00492
18	ICVL	17:09	Nitrate Nitrite as N	1.80	2.00	90	90-110		NXN ICV INT_00492
19	ICB	17:11	Nitrate Nitrite as N	0.050				U	
35	CCV	17:43	Nitrate Nitrite as N	4.86	5.00	97	90-110		NXN CAL INT_00511
36	CCVL	17:45	Nitrate Nitrite as N	1.02	1.00	102	90-110		NXN CAL INT_00511
37	CCB	17:47	Nitrate Nitrite as N	0.050				U	
51	CCV	18:15	Nitrate Nitrite as N	5.08	5.00	102	90-110		NXN CAL INT_00511
52	CCVL	18:17	Nitrate Nitrite as N	1.05	1.00	105	90-110		NXN CAL INT_00511
53	CCB	18:19	Nitrate Nitrite as N	0.050				U	
67	CCV	18:47	Nitrate Nitrite as N	5.21	5.00	104	90-110		NXN CAL INT_00511
69	CCB	18:51	Nitrate Nitrite as N	0.050				U	
99	CCV	19:51	Nitrate Nitrite as N	5.36	5.00	107	90-110		NXN CAL INT_00511
101	CCB	19:55	Nitrate Nitrite as N	0.050				U	
119	CCV	20:45	Nitrate Nitrite as N	4.94	5.00	99	90-110		NXN CAL INT_00511
122	CCB	20:51	Nitrate Nitrite as N	0.050				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Analyst: JAP Batch Start Date: 10/16/2019

Reporting Units: mg/L Analytical Batch No.: 474200

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	13:41	Sulfate	77.3	80.0	97	90-110		IC SO4 ICV_00020
9	ICB	13:58	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.: 280-129936-1

SDG No.:

Analyst: JAP Batch Start Date: 11/14/2019

Reporting Units: mg/L Analytical Batch No.: 477599

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	11:15	Sulfate	99.0	100	99	90-110		IC LCS_01709
2	CCB	11:33	Sulfate	2.5				U	
17	CCV	18:23	Sulfate	99.5	100	100	90-110		IC LCS_01709
18	CCB	18:41	Sulfate	2.5				U	
29	CCV	21:54	Sulfate	101	100	101	90-110		IC LCS_01709
30	CCB	22:11	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.: 280-129936-1

SDG No.:

Analyst: SGB Batch Start Date: 11/04/2019

Reporting Units: mg/L Analytical Batch No.: 476539

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	16:10	Dissolved Organic Carbon - Quad	19.8	20.0	99	90-110		TOC ICV Std_00041
2	ICB	16:24	Dissolved Organic Carbon - Quad	1.0				U	
15	CCV	19:44	Dissolved Organic Carbon - Quad	23.7	25.0	95	90-110		TOC LCS Std_00048
16	CCB	20:01	Dissolved Organic Carbon - Quad	1.0				U	
27	CCV	22:49	Dissolved Organic Carbon - Quad	23.4	25.0	94	90-110		TOC LCS Std_00048
28	CCB	23:06	Dissolved Organic Carbon - Quad	1.0				U	
39	CCV	01:52	Dissolved Organic Carbon - Quad	24.2	25.0	97	90-110		TOC LCS Std_00048
40	CCB	02:09	Dissolved Organic Carbon - Quad	1.0				U	
51	CCV	04:59	Dissolved Organic Carbon - Quad	23.7	25.0	95	90-110		TOC LCS Std_00048
52	CCB	05:16	Dissolved Organic Carbon - Quad	1.0				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Analyst: SPG Batch Start Date: 10/29/2019

Reporting Units: mg/L Analytical Batch No.: 475854

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	CCV	15:37	Total Alkalinity as CaCO3	211	200	105	90-110		Alk daily lcs 00861
18	CCB	15:45	Total Alkalinity as CaCO3	10				U	
29	CCV	17:18	Total Alkalinity as CaCO3	206	200	103	90-110		Alk daily lcs 00861
30	CCB	17:25	Total Alkalinity as CaCO3	10				U	
44	CCV	19:26	Total Alkalinity as CaCO3	206	200	103	90-110		Alk daily lcs 00861
45	CCB	19:33	Total Alkalinity as CaCO3	10				U	

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 476739 Date: 11/06/2019 11:37							
350.1	MB 280-476739/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 476739 Date: 11/06/2019 12:55							
350.1	MB 280-476739/59	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 476739 Date: 11/06/2019 14:25							
350.1	MB 280-476739/104	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 476608 Date: 11/05/2019 20:20 Prep Batch: 476444 Date: 11/04/2019 18:36							
351.2	MB 280-476444/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 476608 Date: 11/05/2019 21:11 Prep Batch: 476444 Date: 11/04/2019 18:36							
351.2	MB 280-476444/28-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 476445 Date: 11/04/2019 18:04							
353.2	MB 280-476445/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 476445 Date: 11/04/2019 19:20							
353.2	MB 280-476445/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 476607 Date: 11/05/2019 17:17							
353.2	MB 280-476607/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 475124 Date: 10/23/2019 15:35 Prep Batch: 475095 Date: 10/23/2019 11:13							
9034	MB 280-475095/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 475145 Date: 10/23/2019 19:16 Prep Batch: 475115 Date: 10/23/2019 14:49							
9034	MB 280-475115/3-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 477599 Date: 11/14/2019 12:42							
9056A	MB 280-477599/6	Sulfate	3.0	U	mg/L	5.0	1
Batch ID: 476539 Date: 11/04/2019 16:54							
9060A	MB 280-476389/2-A	Dissolved Organic Carbon - Quad	1.0	U	mg/L	1.0	1
Batch ID: 476539 Date: 11/05/2019 00:53							
9060A	MB 280-476389/28-A	Dissolved Organic Carbon - Quad	1.0	U	mg/L	1.0	1
Batch ID: 475854 Date: 10/29/2019 14:16							
SM 2320B	MB 280-475854/6	Total Alkalinity as CaCO3	10	U	mg/L	10	1
Batch ID: 475854 Date: 10/29/2019 17:52							
SM 2320B	MB 280-475854/33	Total Alkalinity as CaCO3	10	U	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 476739	Date: 11/06/2019 12:59										
350.1	280-129936-9	Ammonia	0.050	U	mg/L						
350.1	280-129936-9 MS	Ammonia	1.07		mg/L	1.00	107	90-110			
Batch ID: 476608	Date: 11/05/2019 21:16	Prep Batch: 476444	Date: 11/04/2019 18:36								
351.2	280-129936-9	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-129936-9 MS	Nitrogen, Total Kjeldahl	1.78		mg/L	3.00	59	90-110			J1
Batch ID: 476445	Date: 11/04/2019 19:24										
353.2	280-129936-9	Nitrate Nitrite as N	0.025	J	mg/L						
353.2	280-129936-9 MS	Nitrate Nitrite as N	4.07		mg/L	4.00	101	90-110			
Batch ID: 475124	Date: 10/23/2019 15:35	Prep Batch: 475095	Date: 10/23/2019 11:13								
9034	280-129936-5	Sulfide	1.9	U	mg/L						
9034	280-129936-5 MS	Sulfide	16.8		mg/L	21.8	77	44-110			
Batch ID: 475145	Date: 10/23/2019 19:16	Prep Batch: 475115	Date: 10/23/2019 14:49								
9034	280-129936-9	Sulfide	1.9	U	mg/L						
9034	280-129936-9 MS	Sulfide	19.2		mg/L	21.8	88	44-110			
Batch ID: 477599	Date: 11/14/2019 16:04										
9056A	280-129936-9	Sulfate	34		mg/L						J1
9056A	280-129936-9 MS	Sulfate	91.0		mg/L	50.0	113	87-112			J1
Batch ID: 476539	Date: 11/05/2019 01:37										
9060A	280-129936-9	Dissolved Organic Carbon - Quad	1.0		mg/L						
9060A	280-129936-9 MS	Dissolved Organic Carbon - Quad	25.0		mg/L	25.0	96	88-112			

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 476739	Date: 11/06/2019 13:01										
350.1	280-129936-9 MSD	Ammonia	1.03		mg/L	1.00	103	90-110	4	10	
Batch ID: 476608	Date: 11/05/2019 21:18	Prep Batch: 476444	Date: 11/04/2019 18:36								
351.2	280-129936-9 MSD	Nitrogen, Total Kjeldahl	1.72		mg/L	3.00	57	90-110	3	25	J1
Batch ID: 476445	Date: 11/04/2019 19:26										
353.2	280-129936-9 MSD	Nitrate Nitrite as N	3.78		mg/L	4.00	94	90-110	7	10	
Batch ID: 475124	Date: 10/23/2019 15:35	Prep Batch: 475095	Date: 10/23/2019 11:13								
9034	280-129936-5 MSD	Sulfide	20.0		mg/L	21.8	92	44-110	17	20	
Batch ID: 475145	Date: 10/23/2019 19:16	Prep Batch: 475115	Date: 10/23/2019 14:49								
9034	280-129936-9 MSD	Sulfide	20.0		mg/L	21.8	92	44-110	4	20	
Batch ID: 477599	Date: 11/14/2019 16:21										
9056A	280-129936-9 MSD	Sulfate	91.9		mg/L	50.0	115	87-112	1	10	J1
Batch ID: 476539	Date: 11/05/2019 02:24										
9060A	280-129936-9 MSD	Dissolved Organic Carbon - Quad	24.4		mg/L	25.0	93	88-112	3	15	

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 477599	Date: 11/14/2019 15:46							
9056A	G0070-1	280-129936-9	Sulfate	34	mg/L			
9056A	G0070-1	280-129936-9 DU	Sulfate	34.2	mg/L	0.4	10	
Batch ID: 475854	Date: 10/29/2019 18:11							
SM 2320B	G0081-1	280-129936-12	Total Alkalinity as CaCO3	370	mg/L			
SM 2320B	G0081-1	280-129936-12 DU	Total Alkalinity as CaCO3	390	mg/L	5	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.: 280-129936-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 476739	Date: 11/06/2019 11:33										
						LCS Source: 350.1 cal_00392					
350.1	LCS 280-476739/18	Ammonia	2.52		mg/L	2.50	101	90-110	1	10	
Batch ID: 476739	Date: 11/06/2019 12:51										
						LCS Source: 350.1 cal_00392					
350.1	LCS 280-476739/57	Ammonia	2.50		mg/L	2.50	100	90-110	3	10	
Batch ID: 476739	Date: 11/06/2019 14:21										
						LCS Source: 350.1 cal_00392					
350.1	LCS 280-476739/102	Ammonia	2.48		mg/L	2.50	99	90-110	1	10	
Batch ID: 476608	Date: 11/05/2019 20:19	Prep Batch: 476444	Date: 11/04/2019 18:36								
						LCS Source: TKN 25ppm_00799					
351.2	LCS 280-476444/1-A	Nitrogen, Total Kjeldahl	6.27		mg/L	6.00	104	90-110			
Batch ID: 476608	Date: 11/05/2019 21:10	Prep Batch: 476444	Date: 11/04/2019 18:36								
						LCS Source: TKN 25ppm_00799					
351.2	LCS 280-476444/27-A	Nitrogen, Total Kjeldahl	6.28		mg/L	6.00	105	90-110			
Batch ID: 476445	Date: 11/04/2019 18:02										
						LCS Source: NXN CAL INT_00511					
353.2	LCS 280-476445/21	Nitrate Nitrite as N	5.07		mg/L	5.00	101	90-110			
Batch ID: 476445	Date: 11/04/2019 19:18										
						LCS Source: NXN CAL INT_00511					
353.2	LCS 280-476445/59	Nitrate Nitrite as N	4.96		mg/L	5.00	99	90-110			
Batch ID: 476607	Date: 11/05/2019 18:31										
						LCS Source: NXN CAL INT_00511					
353.2	LCS 280-476607/59	Nitrate Nitrite as N	5.26		mg/L	5.00	105	90-110			
Batch ID: 476607	Date: 11/05/2019 19:59										
						LCS Source: NXN CAL INT_00511					
353.2	LCS 280-476607/103	Nitrate Nitrite as N	5.41		mg/L	5.00	108	90-110			
Batch ID: 475124	Date: 10/23/2019 15:35	Prep Batch: 475095	Date: 10/23/2019 11:13								
						LCS Source: SFD ICV INT_01626					
9034	LCS 280-475095/1-A	Sulfide	18.4		mg/L	21.8	84	44-110			
Batch ID: 475145	Date: 10/23/2019 19:16	Prep Batch: 475115	Date: 10/23/2019 14:49								
						LCS Source: SFD ICV INT_01626					
9034	LCS 280-475115/1-A	Sulfide	19.2		mg/L	21.8	88	44-110	4	20	

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.: 280-129936-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 477599	Date: 11/14/2019 12:08										
						LCS Source: IC LCS_01709					
9056A	LCS 280-477599/4	Sulfate	99.5		mg/L	100	100	87-112	0	10	
Batch ID: 476539	Date: 11/04/2019 16:39										
						LCS Source: TOC LCS Std_00048					
9060A	LCS 280-476389/1-A	Dissolved Organic Carbon - Quad	23.7		mg/L	25.0	95	88-112			
Batch ID: 476539	Date: 11/05/2019 00:36										
						LCS Source: TOC LCS Std_00048					
9060A	LCS 280-476389/27-A	Dissolved Organic Carbon - Quad	23.7		mg/L	25.0	95	88-112			
Batch ID: 475854	Date: 10/29/2019 13:59										
						LCS Source: Alk daily lcs_00861					
SM 2320B	LCS 280-475854/4	Total Alkalinity as CaCO3	206		mg/L	200	103	89-109			
Batch ID: 475854	Date: 10/29/2019 17:35										
						LCS Source: Alk daily lcs_00861					
SM 2320B	LCS 280-475854/31	Total Alkalinity as CaCO3	205		mg/L	200	103	89-109	1	10	

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.: 280-129936-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 476739	Date: 11/06/2019 11:35										
						LCSD Source: 350.1 cal_00392					
350.1	LCSD 280-476739/19	Ammonia	2.54		mg/L	2.50	101	90-110	1	10	
Batch ID: 476739	Date: 11/06/2019 12:53										
						LCSD Source: 350.1 cal_00392					
350.1	LCSD 280-476739/58	Ammonia	2.43		mg/L	2.50	97	90-110	3	10	
Batch ID: 476739	Date: 11/06/2019 14:23										
						LCSD Source: 350.1 cal_00392					
350.1	LCSD 280-476739/103	Ammonia	2.50		mg/L	2.50	100	90-110	1	10	
Batch ID: 475145	Date: 10/23/2019 19:16	Prep Batch: 475115	Date: 10/23/2019 14:49								
						LCSD Source: SFD ICV INT_01626					
9034	LCSD 280-475115/2-A	Sulfide	18.4		mg/L	21.8	84	44-110	4	20	
Batch ID: 477599	Date: 11/14/2019 12:25										
						LCSD Source: IC LCS_01709					
9056A	LCSD 280-477599/5	Sulfate	99.2		mg/L	100	99	87-112	0	10	
Batch ID: 475854	Date: 10/29/2019 17:44										
						LCSD Source: Alk daily lcs_00861					
SM 2320B	LCSD 280-475854/32	Total Alkalinity as CaCO3	207		mg/L	200	103	89-109	1	10	

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

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 477599	Date: 11/14/2019 11:50										
						LCS Source: IC CAL cl/so4_00284					
9056A	MRL 280-477599/3	Sulfate	4.35	J	mg/L	5.00	87	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: 280-129936-1

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: 280-129936-1

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: 280-129936-1

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: 280-129936-1

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: 280-129936-1

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: 280-129936-1

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: 280-129936-1

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: 280-129936-1

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: 280-129936-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

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: 280-129936-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

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: 280-129936-1

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: 280-129936-1

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: 280-129936-1

SDG Number:

Matrix: Water Instrument ID: WC_AT2

Method: SM 2320B DL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Alkalinity as CaCO3		10	3.08

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-129936-1

SDG Number:

Matrix: Water Instrument ID: WC_AT2

Method: SM 2320B XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Alkalinity as CaCO3		10	3.08

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-476444/1-A	11/04/2019 18:36	476444		25	25
MB 280-476444/2-A	11/04/2019 18:36	476444		25	25
280-129936-1	11/04/2019 18:36	476444		25	25
280-129936-2	11/04/2019 18:36	476444		25	25
280-129936-3	11/04/2019 18:36	476444		25	25
280-129936-4	11/04/2019 18:36	476444		25	25
280-129936-5	11/04/2019 18:36	476444		25	25
LCS 280-476444/27-A	11/04/2019 18:36	476444		25	25
MB 280-476444/28-A	11/04/2019 18:36	476444		25	25
280-129936-9	11/04/2019 18:36	476444		25	25
280-129936-9 MS	11/04/2019 18:36	476444		25	25
280-129936-9 MSD	11/04/2019 18:36	476444		25	25
280-129936-7	11/04/2019 18:36	476444		25	25
280-129936-8	11/04/2019 18:36	476444		25	25
280-129936-6	11/04/2019 18:36	476444		25	25
280-129936-10	11/04/2019 18:36	476444		25	25
280-129936-11	11/04/2019 18:36	476444		5	25
280-129936-12	11/04/2019 18:36	476444		5	25
280-129936-13	11/04/2019 18:36	476444		25	25
280-129936-14	11/04/2019 18:36	476444		25	25
280-129936-15	11/04/2019 18:36	476444		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-475095/1-A	10/23/2019 11:13	475095		50	50
MB 280-475095/2-A	10/23/2019 11:13	475095		50	50
280-129936-1	10/23/2019 11:13	475095		50	50
280-129936-2	10/23/2019 11:13	475095		50	50
280-129936-3	10/23/2019 11:13	475095		50	50
280-129936-4	10/23/2019 11:13	475095		50	50
280-129936-5	10/23/2019 11:13	475095		50	50
280-129936-5 MS	10/23/2019 11:13	475095		50	50
280-129936-5 MSD	10/23/2019 11:13	475095		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-475115/1-A	10/23/2019 14:49	475115		50	50
LCSD 280-475115/2-A	10/23/2019 14:49	475115		50	50
MB 280-475115/3-A	10/23/2019 14:49	475115		50	50
280-129936-6	10/23/2019 14:49	475115		50	50
280-129936-7	10/23/2019 14:49	475115		50	50
280-129936-8	10/23/2019 14:49	475115		50	50
280-129936-9	10/23/2019 14:49	475115		50	50
280-129936-9 MS	10/23/2019 14:49	475115		50	50
280-129936-9 MSD	10/23/2019 14:49	475115		50	50
280-129936-10	10/23/2019 14:49	475115		50	50
280-129936-11	10/23/2019 14:49	475115		50	50
280-129936-12	10/23/2019 14:49	475115		50	50
280-129936-13	10/23/2019 14:49	475115		50	50
280-129936-14	10/23/2019 14:49	475115		50	50
280-129936-15	10/23/2019 14:49	475115		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 11/06/2019 10:59 End Date: 11/06/2019 16:13

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			10:59																									
ZZZZZZ			11:01																									
ZZZZZZ			11:03																									
IC 280-476739/4			11:05	X																								
IC 280-476739/5			11:07	X																								
IC 280-476739/6			11:09	X																								
IC 280-476739/7			11:11	X																								
IC 280-476739/8			11:13	X																								
IC 280-476739/9			11:15	X																								
IC 280-476739/10			11:17	X																								
IC 280-476739/11			11:19	X																								
ZZZZZZ			11:21																									
ZZZZZZ			11:23																									
ICVL 280-476739/14	1		11:25	X																								
ICV 280-476739/15	1		11:27	X																								
ICB 280-476739/16	1		11:29	X																								
ZZZZZZ			11:31																									
LCS 280-476739/18	1	T	11:33	X																								
LCSD 280-476739/19	1	T	11:35	X																								
MB 280-476739/20	1	T	11:37	X																								
ZZZZZZ			11:39																									
ZZZZZZ			11:41																									
ZZZZZZ			11:43																									
ZZZZZZ			11:45																									
ZZZZZZ			11:47																									
ZZZZZZ			11:49																									
ZZZZZZ			11:51																									
ZZZZZZ			11:53																									
ZZZZZZ			11:55																									
ZZZZZZ			11:57																									
RINSE 280-476739/31			11:59																									
ZZZZZZ			12:01																									
CCVL 280-476739/33	1		12:03	X																								
CCV 280-476739/34	1		12:05	X																								
CCB 280-476739/35	1		12:07	X																								
ZZZZZZ			12:09																									
ZZZZZZ			12:11																									
ZZZZZZ			12:13																									
ZZZZZZ			12:15																									
ZZZZZZ			12:17																									
ZZZZZZ			12:19																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 11/06/2019 10:59 End Date: 11/06/2019 16:13

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			12:21																									
280-129936-1	1	T	12:23	X																								
280-129936-2	1	T	12:25	X																								
280-129936-3	1	T	12:27	X																								
280-129936-4	1	T	12:29	X																								
RINSE 280-476739/47			12:31																									
ZZZZZZ			12:33																									
CCVL 280-476739/49	1		12:35	X																								
CCV 280-476739/50	1		12:37	X																								
CCB 280-476739/51	1		12:39	X																								
ZZZZZZ			12:41																									
280-129936-5	1	T	12:43	X																								
280-129936-6	1	T	12:45	X																								
280-129936-7	1	T	12:47	X																								
ZZZZZZ			12:49																									
LCS 280-476739/57	1	T	12:51	X																								
LCSD 280-476739/58	1	T	12:53	X																								
MB 280-476739/59	1	T	12:55	X																								
280-129936-9	1	T	12:57	X																								
280-129936-9 MS	1	T	12:59	X																								
280-129936-9 MSD	1	T	13:01	X																								
RINSE 280-476739/63			13:03																									
ZZZZZZ			13:05																									
CCVL 280-476739/65	1		13:07	X																								
CCV 280-476739/66	1		13:09	X																								
CCB 280-476739/67	1		13:11	X																								
ZZZZZZ			13:13																									
280-129936-10	1	T	13:15	X																								
280-129936-11	1	T	13:17	X																								
280-129936-12	1	T	13:19	X																								
280-129936-13	1	T	13:21	X																								
280-129936-14	1	T	13:23	X																								
280-129936-15	1	T	13:25	X																								
ZZZZZZ			13:27																									
ZZZZZZ			13:29																									
ZZZZZZ			13:31																									
ZZZZZZ			13:33																									
RINSE 280-476739/79			13:35																									
ZZZZZZ			13:37																									
CCVL 280-476739/81	1		13:39	X																								
CCV 280-476739/82	1		13:41	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 11/06/2019 10:59 End Date: 11/06/2019 16:13

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCB 280-476739/83	1		13:43	X																								
ZZZZZZ			13:45																									
ZZZZZZ			13:47																									
ZZZZZZ			13:49																									
ZZZZZZ			13:51																									
ZZZZZZ			13:53																									
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
ZZZZZZ			13:59																									
ZZZZZZ			14:01																									
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
RINSE 280-476739/95			14:07																									
ZZZZZZ			14:09																									
CCVL 280-476739/97			14:11																									
CCV 280-476739/98	1		14:13	X																								
CCB 280-476739/99	1		14:15	X																								
ZZZZZZ			14:17																									
ZZZZZZ			14:19																									
LCS 280-476739/102	1	T	14:21	X																								
LCSD 280-476739/103	1	T	14:23	X																								
MB 280-476739/104	1	T	14:25	X																								
ZZZZZZ			14:27																									
ZZZZZZ			14:29																									
ZZZZZZ			14:31																									
ZZZZZZ			14:33																									
ZZZZZZ			14:35																									
RINSE 280-476739/110			14:37																									
ZZZZZZ			14:39																									
CCVL 280-476739/112			14:41																									
CCV 280-476739/113	1		14:43	X																								
CCB 280-476739/114	1		14:45	X																								
ZZZZZZ			14:47																									
ZZZZZZ			14:49																									
ZZZZZZ			14:51																									
ZZZZZZ			14:57																									
ZZZZZZ			14:59																									
ZZZZZZ			15:01																									
ZZZZZZ			15:03																									
ZZZZZZ			15:05																									
ZZZZZZ			15:07																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 11/06/2019 10:59 End Date: 11/06/2019 16:13

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			15:09																									
ZZZZZZ			15:11																									
RINSE 280-476739/126			15:13																									
ZZZZZZ			15:15																									
CCVL 280-476739/128	1		15:17	X																								
CCV 280-476739/129	1		15:19	X																								
CCB 280-476739/130	1		15:21	X																								
ZZZZZZ			15:23																									
ZZZZZZ			15:25																									
ZZZZZZ			15:27																									
ZZZZZZ			15:29																									
ZZZZZZ			15:31																									
ZZZZZZ			15:33																									
ZZZZZZ			15:35																									
ZZZZZZ			15:37																									
ZZZZZZ			15:39																									
ZZZZZZ			15:41																									
280-129936-8	2	T	15:43	X																								
RINSE 280-476739/142			15:45																									
ZZZZZZ			15:47																									
CCVL 280-476739/144	1		15:49	X																								
CCV 280-476739/145	1		15:51	X																								
CCB 280-476739/146	1		15:53	X																								
ZZZZZZ			15:55																									
ZZZZZZ			15:57																									
RINSE 280-476739/149			16:03																									
ZZZZZZ			16:05																									
CCVL 280-476739/151			16:07																									
CCV 280-476739/152			16:09																									
CCB 280-476739/153			16:11																									
ZZZZZZ			16:13																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 11/05/2019 20:02 End Date: 11/05/2019 21:49

Lab Sample Id	D/F	Type	Time	Analytes
				TKN
ZZZZZZ			20:02	
ZZZZZZ			20:03	
ZZZZZZ			20:04	
ZZZZZZ			20:05	
IC 280-474499/1-A			20:06	X
IC 280-474499/2-A			20:08	X
IC 280-474499/3-A			20:09	X
IC 280-474499/4-A			20:10	X
IC 280-474499/5-A			20:11	X
IC 280-474499/6-A			20:13	X
ZZZZZZ			20:14	
ZZZZZZ			20:15	
ICV 280-474499/7-A	1		20:16	X
ICB 280-474499/8-A	1		20:18	X
LCS 280-476444/1-A	1	T	20:19	X
MB 280-476444/2-A	1	T	20:20	X
ZZZZZZ			20:21	
ZZZZZZ			20:23	
ZZZZZZ			20:24	
ZZZZZZ			20:25	
ZZZZZZ			20:26	
ZZZZZZ			20:28	
ZZZZZZ			20:29	
ZZZZZZ			20:30	
ZZZZZZ			20:31	
ZZZZZZ			20:33	
ZZZZZZ			20:34	
ZZZZZZ			20:35	
ZZZZZZ			20:36	
ZZZZZZ			20:38	
CCV 280-474499/9-A	1		20:39	X
CCB 280-474499/10-A	1		20:40	X
ZZZZZZ			20:41	
ZZZZZZ			20:43	
ZZZZZZ			20:44	
ZZZZZZ			20:45	
ZZZZZZ			20:46	
ZZZZZZ			20:48	
ZZZZZZ			20:49	
ZZZZZZ			20:50	
ZZZZZZ			20:51	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 11/05/2019 20:02 End Date: 11/05/2019 21:49

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			20:53																									
ZZZZZZ			20:54																									
ZZZZZZ			20:55																									
280-129936-1	1	T	20:56	X																								
ZZZZZZ			20:58																									
ZZZZZZ			20:59																									
ZZZZZZ			21:00																									
CCV 280-474499/9-A	1		21:01	X																								
CCB 280-474499/10-A	1		21:03	X																								
280-129936-2	1	T	21:04	X																								
280-129936-3	1	T	21:05	X																								
280-129936-4	1	T	21:06	X																								
280-129936-5	1	T	21:08	X																								
ZZZZZZ			21:09																									
LCS 280-476444/27-A	1	T	21:10	X																								
MB 280-476444/28-A	1	T	21:11	X																								
280-129936-9	1	T	21:13	X																								
ZZZZZZ			21:14																									
ZZZZZZ			21:15																									
280-129936-9 MS	1	T	21:16	X																								
280-129936-9 MSD	1	T	21:18	X																								
ZZZZZZ			21:19																									
CCV 280-474499/9-A	1		21:20	X																								
CCB 280-474499/10-A	1		21:21	X																								
280-129936-7	1	T	21:23	X																								
280-129936-8	1	T	21:24	X																								
280-129936-6	1	T	21:25	X																								
280-129936-10	1	T	21:26	X																								
280-129936-11	1	T	21:28	X																								
ZZZZZZ			21:29																									
ZZZZZZ			21:30																									
280-129936-12	1	T	21:31	X																								
280-129936-13	1	T	21:33	X																								
280-129936-14	1	T	21:34	X																								
280-129936-15	1	T	21:35	X																								
ZZZZZZ			21:36																									
CCV 280-474499/9-A	1		21:38	X																								
CCB 280-474499/10-A	1		21:39	X																								
ZZZZZZ			21:40																									
ZZZZZZ			21:41																									
ZZZZZZ			21:43																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 11/05/2019 20:02 End Date: 11/05/2019 21:49

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			21:44																									
ZZZZZZ			21:45																									
ZZZZZZ			21:46																									
ZZZZZZ			21:48																									
ZZZZZZ			21:49																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/04/2019 17:22 End Date: 11/04/2019 21:18

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			17:22	
ZZZZZZ			17:24	
ZZZZZZ			17:26	
ZZZZZZ			17:28	
IC 280-476445/5			17:30	X
IC 280-476445/6			17:32	X
IC 280-476445/7			17:34	X
IC 280-476445/8			17:36	X
IC 280-476445/9			17:38	X
IC 280-476445/10			17:40	X
IC 280-476445/11			17:42	X
IC 280-476445/12			17:44	X
IC 280-476445/13			17:46	X
ZZZZZZ			17:48	
ZZZZZZ			17:50	
ZZZZZZ			17:52	
ICV 280-476445/17			17:54	
ICVL 280-476445/18	1		17:56	X
ICB 280-476445/19	1		17:58	X
ZZZZZZ			18:00	
LCS 280-476445/21	1	T	18:02	X
MB 280-476445/22	1	T	18:04	X
ZZZZZZ			18:06	
ZZZZZZ			18:08	
ZZZZZZ			18:10	
ZZZZZZ			18:12	
ZZZZZZ			18:14	
ZZZZZZ			18:16	
ZZZZZZ			18:18	
ZZZZZZ			18:20	
ZZZZZZ			18:22	
ZZZZZZ			18:24	
RINSE 280-476445/33			18:26	
ZZZZZZ			18:28	
CCV 280-476445/35	1		18:30	X
CCVL 280-476445/36	1		18:32	X
CCB 280-476445/37	1		18:34	X
ZZZZZZ			18:36	
ZZZZZZ			18:38	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/04/2019 17:22 End Date: 11/04/2019 21:18

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			18:40	
ZZZZZZ			18:42	
ZZZZZZ			18:44	
ZZZZZZ			18:46	
ZZZZZZ			18:48	
280-129936-1	10	T	18:50	X
280-129936-2	10	T	18:52	X
280-129936-3	5	T	18:54	X
ZZZZZZ			18:56	
RINSE 280-476445/49			18:58	
ZZZZZZ			19:00	
CCV 280-476445/51	1		19:02	X
CCVL 280-476445/52	1		19:04	X
CCB 280-476445/53	1		19:06	X
ZZZZZZ			19:08	
280-129936-5	1	T	19:10	X
280-129936-6	2	T	19:12	X
280-129936-7	2	T	19:14	X
280-129936-8	1	T	19:16	X
LCS 280-476445/59	1	T	19:18	X
MB 280-476445/60	1	T	19:20	X
280-129936-9	1	T	19:22	X
280-129936-9 MS	1	T	19:24	X
280-129936-9 MSD	1	T	19:26	X
280-129936-10	1	T	19:28	X
RINSE 280-476445/65			19:30	
ZZZZZZ			19:32	
CCV 280-476445/67	1		19:34	X
CCVL 280-476445/68	1		19:36	X
CCB 280-476445/69	1		19:38	X
ZZZZZZ			19:40	
280-129936-11	1	T	19:42	X
280-129936-12	1	T	19:44	X
280-129936-13	1	T	19:46	X
280-129936-14	1	T	19:48	X
280-129936-15	1	T	19:50	X
ZZZZZZ			19:52	
ZZZZZZ			19:54	
ZZZZZZ			19:56	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/04/2019 17:22 End Date: 11/04/2019 21:18

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			19:58	
ZZZZZZ			20:00	
RINSE 280-476445/81			20:02	
ZZZZZZ			20:04	
CCV 280-476445/83	1		20:06	X
CCVL 280-476445/84	1		20:08	X
CCB 280-476445/85	1		20:10	X
ZZZZZZ			20:12	
ZZZZZZ			20:14	
ZZZZZZ			20:16	
ZZZZZZ			20:18	
ZZZZZZ			20:20	
ZZZZZZ			20:22	
ZZZZZZ			20:24	
ZZZZZZ			20:26	
ZZZZZZ			20:28	
ZZZZZZ			20:30	
ZZZZZZ			20:32	
RINSE 280-476445/97			20:34	
ZZZZZZ			20:36	
CCV 280-476445/99			20:38	
CCVL 280-476445/100			20:40	
CCB 280-476445/101			20:42	
ZZZZZZ			20:44	
ZZZZZZ			20:46	
ZZZZZZ			20:48	
ZZZZZZ			20:50	
ZZZZZZ			20:52	
ZZZZZZ			20:54	
ZZZZZZ			20:56	
ZZZZZZ			20:58	
ZZZZZZ			21:00	
ZZZZZZ			21:02	
ZZZZZZ			21:04	
ZZZZZZ			21:06	
RINSE 280-476445/114			21:08	
ZZZZZZ			21:10	
CCV 280-476445/116			21:12	
CCVL 280-476445/117			21:14	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/04/2019 17:22 End Date: 11/04/2019 21:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
CCB 280-476445/118			21:16																									
ZZZZZZ			21:18																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/05/2019 16:35 End Date: 11/05/2019 20:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			16:35																									
ZZZZZZ			16:37																									
ZZZZZZ			16:39																									
ZZZZZZ			16:41																									
IC 280-476607/5			16:43	X																								
IC 280-476607/6			16:45	X																								
IC 280-476607/7			16:47	X																								
IC 280-476607/8			16:49	X																								
IC 280-476607/9			16:51	X																								
IC 280-476607/10			16:53	X																								
IC 280-476607/11			16:55	X																								
IC 280-476607/12			16:57	X																								
IC 280-476607/13			16:59	X																								
ZZZZZZ			17:01																									
ZZZZZZ			17:03																									
ZZZZZZ			17:05																									
ICV 280-476607/17	1		17:07	X																								
ICVL 280-476607/18	1		17:09	X																								
ICB 280-476607/19	1		17:11	X																								
ZZZZZZ			17:13																									
ZZZZZZ			17:15																									
MB 280-476607/22	1	T	17:17	X																								
ZZZZZZ			17:19																									
ZZZZZZ			17:21																									
ZZZZZZ			17:23																									
ZZZZZZ			17:25																									
ZZZZZZ			17:27																									
280-129936-4	2	T	17:29	X																								
ZZZZZZ			17:31																									
ZZZZZZ			17:33																									
ZZZZZZ			17:35																									
ZZZZZZ			17:37																									
RINSE 280-476607/33			17:39																									
ZZZZZZ			17:41																									
CCV 280-476607/35	1		17:43	X																								
CCVL 280-476607/36	1		17:45	X																								
CCB 280-476607/37	1		17:47	X																								
ZZZZZZ			17:49																									
ZZZZZZ			17:51																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/05/2019 16:35 End Date: 11/05/2019 20:57

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			17:53	
ZZZZZZ			17:55	
ZZZZZZ			17:57	
ZZZZZZ			17:59	
ZZZZZZ			18:01	
ZZZZZZ			18:03	
ZZZZZZ			18:05	
ZZZZZZ			18:07	
ZZZZZZ			18:09	
RINSE 280-476607/49			18:11	
ZZZZZZ			18:13	
CCV 280-476607/51	1		18:15	X
CCVL 280-476607/52	1		18:17	X
CCB 280-476607/53	1		18:19	X
ZZZZZZ			18:21	
ZZZZZZ			18:23	
ZZZZZZ			18:25	
ZZZZZZ			18:27	
ZZZZZZ			18:29	
LCS 280-476607/59	1	T	18:31	X
ZZZZZZ			18:33	
ZZZZZZ			18:35	
ZZZZZZ			18:37	
ZZZZZZ			18:39	
ZZZZZZ			18:41	
RINSE 280-476607/65			18:43	
ZZZZZZ			18:45	
CCV 280-476607/67	1		18:47	X
CCVL 280-476607/68			18:49	
CCB 280-476607/69	1		18:51	X
ZZZZZZ			18:53	
ZZZZZZ			18:55	
ZZZZZZ			18:57	
ZZZZZZ			18:59	
ZZZZZZ			19:01	
ZZZZZZ			19:03	
ZZZZZZ			19:05	
ZZZZZZ			19:07	
ZZZZZZ			19:09	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/05/2019 16:35 End Date: 11/05/2019 20:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			19:11																									
ZZZZZZ			19:13																									
RINSE 280-476607/81			19:15																									
ZZZZZZ			19:17																									
CCV 280-476607/83			19:19																									
CCVL 280-476607/84			19:21																									
CCB 280-476607/85			19:23																									
ZZZZZZ			19:25																									
ZZZZZZ			19:27																									
ZZZZZZ			19:29																									
ZZZZZZ			19:31																									
ZZZZZZ			19:33																									
ZZZZZZ			19:35																									
ZZZZZZ			19:37																									
ZZZZZZ			19:39																									
ZZZZZZ			19:41																									
ZZZZZZ			19:43																									
ZZZZZZ			19:45																									
RINSE 280-476607/97			19:47																									
ZZZZZZ			19:49																									
CCV 280-476607/99	1		19:51	X																								
CCVL 280-476607/100			19:53																									
CCB 280-476607/101	1		19:55	X																								
ZZZZZZ			19:57																									
LCS 280-476607/103	1	T	19:59	X																								
ZZZZZZ			20:01																									
ZZZZZZ			20:03																									
ZZZZZZ			20:05																									
ZZZZZZ			20:07																									
ZZZZZZ			20:09																									
ZZZZZZ			20:11																									
ZZZZZZ			20:13																									
ZZZZZZ			20:15																									
ZZZZZZ			20:17																									
RINSE 280-476607/113			20:19																									
ZZZZZZ			20:21																									
ZZZZZZ			20:23																									
ZZZZZZ			20:25																									
ZZZZZZ			20:27																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/05/2019 16:35 End Date: 11/05/2019 20:57

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			20:29	
CCV 280-476607/119	1		20:45	X
CCV 280-476607/120			20:47	
CCVL 280-476607/121			20:49	
CCB 280-476607/122	1		20:51	X
ZZZZZZ			20:53	
ZZZZZZ			20:55	
ZZZZZZ			20:57	

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 10/23/2019 15:35 End Date: 10/23/2019 15:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-475095/1-A	1	T	15:35	X																								
MB 280-475095/2-A	1	T	15:35	X																								
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
ZZZZZZ			15:35																									
280-129936-1	1	T	15:35	X																								
280-129936-2	1	T	15:35	X																								
280-129936-3	1	T	15:35	X																								
280-129936-4	1	T	15:35	X																								
280-129936-5	1	T	15:35	X																								
280-129936-5 MS	1	T	15:35	X																								
280-129936-5 MSD	1	T	15:35	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 10/23/2019 19:16 End Date: 10/23/2019 19:16

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-475115/1-A	1	T	19:16	X																								
LCSD 280-475115/2-A	1	T	19:16	X																								
MB 280-475115/3-A	1	T	19:16	X																								
280-129936-6	1	T	19:16	X																								
280-129936-7	1	T	19:16	X																								
280-129936-8	1	T	19:16	X																								
280-129936-9	1	T	19:16	X																								
280-129936-9 MS	1	T	19:16	X																								
280-129936-9 MSD	1	T	19:16	X																								
280-129936-10	1	T	19:16	X																								
280-129936-11	1	T	19:16	X																								
280-129936-12	1	T	19:16	X																								
280-129936-13	1	T	19:16	X																								
280-129936-14	1	T	19:16	X																								
280-129936-15	1	T	19:16	X																								
ZZZZZZ			19:16																									
ZZZZZZ			19:16																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 10/16/2019 09:39 End Date: 10/16/2019 22:21

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
RTC 280-474200/1			09:39																									
STD1 280-474200/2 IC	1		09:56	X																								
STD2 280-474200/3 IC	1		10:14	X																								
STD3 280-474200/4 IC	1		10:31	X																								
STD4 280-474200/5 IC	1		10:49	X																								
STD5 280-474200/6 IC	1		11:06	X																								
STD6 280-474200/7 IC	1		11:24	X																								
ICV 280-474200/8	1		13:41	X																								
ICB 280-474200/9	1		13:58	X																								
ZZZZZZ			14:15																									
ZZZZZZ			14:33																									
ZZZZZZ			14:50																									
ZZZZZZ			15:08																									
ZZZZZZ			16:49																									
ZZZZZZ			17:06																									
ZZZZZZ			17:24																									
ZZZZZZ			17:41																									
ZZZZZZ			17:59																									
ZZZZZZ			18:16																									
CCV 280-474200/24			18:34																									
CCB 280-474200/25			18:51																									
ZZZZZZ			19:09																									
ZZZZZZ			19:26																									
ZZZZZZ			19:44																									
ZZZZZZ			20:01																									
ZZZZZZ			20:19																									
ZZZZZZ			20:36																									
ZZZZZZ			20:54																									
ZZZZZZ			21:29																									
ZZZZZZ			21:46																									
CCV 280-474200/36			22:04																									
CCB 280-474200/37			22:21																									

Prep Types:
=

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2019 11:15 End Date: 11/15/2019 13:02

Lab Sample Id	D/F	Type	Time	Analytes
				SO4
CCV 280-477599/1	1		11:15	X
CCB 280-477599/2	1		11:33	X
MRL 280-477599/3	1	T	11:50	X
LCS 280-477599/4	1	T	12:08	X
LCSD 280-477599/5	1	T	12:25	X
MB 280-477599/6	1	T	12:42	X
280-129936-9	1	T	15:29	X
280-129936-9 DU	1	T	15:46	X
280-129936-9 MS	1	T	16:04	X
280-129936-9 MSD	1	T	16:21	X
280-129936-1	1	T	16:38	X
280-129936-2	1	T	16:56	X
280-129936-3	1	T	17:13	X
280-129936-4	1	T	17:31	X
280-129936-5	1	T	17:48	X
280-129936-6	1	T	18:06	X
CCV 280-477599/17	1		18:23	X
CCB 280-477599/18	1		18:41	X
280-129936-7	1	T	18:58	X
280-129936-8	1	T	19:16	X
280-129936-10	1	T	19:33	X
280-129936-11	1	T	19:51	X
280-129936-12	1	T	20:08	X
280-129936-13	1	T	20:26	X
280-129936-14	1	T	20:43	X
280-129936-15	1	T	21:01	X
ZZZZZZ			21:18	
ZZZZZZ			21:36	
CCV 280-477599/29	1		21:54	X
CCB 280-477599/30	1		22:11	X
ZZZZZZ			22:29	
ZZZZZZ			22:46	
ZZZZZZ			23:04	
ZZZZZZ			23:21	
ZZZZZZ			23:39	
ZZZZZZ			23:56	
ZZZZZZ			00:14	
ZZZZZZ			00:31	
ZZZZZZ			00:48	
ZZZZZZ			01:06	
CCV 280-477599/41			01:23	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2019 11:15 End Date: 11/15/2019 13:02

Lab Sample Id	D/F	Type	Time	Analytes																									
				SO4																									
CCB 280-477599/42			01:41																										
ZZZZZZ			01:58																										
ZZZZZZ			02:16																										
ZZZZZZ			02:33																										
ZZZZZZ			02:51																										
ZZZZZZ			03:08																										
ZZZZZZ			03:25																										
ZZZZZZ			03:43																										
ZZZZZZ			04:00																										
ZZZZZZ			04:18																										
ZZZZZZ			04:35																										
CCV 280-477599/53			04:53																										
CCB 280-477599/54			05:10																										
ZZZZZZ			05:28																										
ZZZZZZ			05:45																										
ZZZZZZ			06:02																										
ZZZZZZ			06:20																										
ZZZZZZ			06:37																										
ZZZZZZ			06:55																										
ZZZZZZ			07:12																										
ZZZZZZ			07:30																										
ZZZZZZ			07:47																										
ZZZZZZ			08:05																										
CCV 280-477599/65			08:22																										
CCB 280-477599/66			08:40																										
ZZZZZZ			08:57																										
ZZZZZZ			09:15																										
ZZZZZZ			09:32																										
ZZZZZZ			09:50																										
ZZZZZZ			10:07																										
ZZZZZZ			10:25																										
ZZZZZZ			10:42																										
ZZZZZZ			11:00																										
ZZZZZZ			11:17																										
ZZZZZZ			11:35																										
CCV 280-477599/77			11:52																										
CCB 280-477599/78			12:10																										
ZZZZZZ			12:27																										
CCV 280-477599/80			12:45																										
CCB 280-477599/81			13:02																										

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2019 11:15 End Date: 11/15/2019 13:02

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 11/04/2019 16:10 End Date: 11/05/2019 11:40

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ICV 280-476539/1	1		16:10	X																									
ICB 280-476539/2	1		16:24	X																									
LCS 280-476389/1-A	1	D	16:39	X																									
MB 280-476389/2-A	1	D	16:54	X																									
ZZZZZZ			17:09																										
ZZZZZZ			17:23																										
ZZZZZZ			17:38																										
ZZZZZZ			17:53																										
ZZZZZZ			18:07																										
ZZZZZZ			18:24																										
ZZZZZZ			18:39																										
ZZZZZZ			18:54																										
ZZZZZZ			19:13																										
ZZZZZZ			19:29																										
CCV 280-476539/15	1		19:44	X																									
CCB 280-476539/16	1		20:01	X																									
ZZZZZZ			20:15																										
ZZZZZZ			20:32																										
ZZZZZZ			20:47																										
ZZZZZZ			21:02																										
ZZZZZZ			21:16																										
ZZZZZZ			21:31																										
ZZZZZZ			21:48																										
ZZZZZZ			22:05																										
ZZZZZZ			22:19																										
280-129936-1	1	D	22:34	X																									
CCV 280-476539/27	1		22:49	X																									
CCB 280-476539/28	1		23:06	X																									
280-129936-2	1	D	23:21	X																									
280-129936-3	1	D	23:35	X																									
280-129936-4	1	D	23:50	X																									
280-129936-5	1	D	00:07	X																									
280-129936-6	1	D	00:22	X																									
LCS 280-476389/27-A	1	D	00:36	X																									
MB 280-476389/28-A	1	D	00:53	X																									
ZZZZZZ			01:08																										
280-129936-9	1	D	01:23	X																									
280-129936-9 MS	1	D	01:37	X																									
CCV 280-476539/39	1		01:52	X																									
CCB 280-476539/40	1		02:09	X																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 11/04/2019 16:10 End Date: 11/05/2019 11:40

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
280-129936-9 MSD	1	D	02:24	X
280-129936-7	1	D	02:40	X
280-129936-8	1	D	02:55	X
280-129936-10	1	D	03:12	X
280-129936-11	1	D	03:29	X
280-129936-12	1	D	03:43	X
280-129936-13	1	D	03:58	X
280-129936-14	1	D	04:15	X
280-129936-15	1	D	04:30	X
ZZZZZZ			04:44	
CCV 280-476539/51	1		04:59	X
CCB 280-476539/52	1		05:16	X
ZZZZZZ			05:31	
ZZZZZZ			05:45	
ZZZZZZ			06:00	
ZZZZZZ			06:17	
ZZZZZZ			06:36	
ZZZZZZ			06:50	
ZZZZZZ			07:05	
ZZZZZZ			07:20	
ZZZZZZ			07:35	
ZZZZZZ			07:49	
CCV 280-476539/63			08:04	
CCB 280-476539/64			08:21	
ZZZZZZ			08:38	
ZZZZZZ			08:52	
ZZZZZZ			09:07	
ZZZZZZ			09:30	
ZZZZZZ			09:45	
ZZZZZZ			10:04	
ZZZZZZ			10:18	
ZZZZZZ			10:41	
CCV 280-476539/73			10:56	
CCB 280-476539/74			11:11	
EMPTY 280-476539/75			11:25	
EMPTY 280-476539/76			11:40	

Prep Types:
D = Dissolved

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_AT2 Analysis Method: SM 2320B

Start Date: 10/29/2019 13:24 End Date: 10/29/2019 20:37

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-475854/1			13:24																									
ZZZZZZ			13:41																									
ZZZZZZ			13:50																									
LCS 280-475854/4	1	T	13:59	X																								
ZZZZZZ			14:09																									
MB 280-475854/6	1	T	14:16	X																								
ZZZZZZ			14:22																									
ZZZZZZ			14:28																									
ZZZZZZ			14:36																									
ZZZZZZ			14:42																									
ZZZZZZ			14:50																									
ZZZZZZ			14:57																									
ZZZZZZ			15:04																									
ZZZZZZ			15:12																									
ZZZZZZ			15:19																									
280-129936-1	1	T	15:28	X																								
CCV 280-475854/17	1		15:37	X																								
CCB 280-475854/18	1		15:45	X																								
280-129936-2	1	T	15:52	X																								
280-129936-3	1	T	16:00	X																								
280-129936-4	1	T	16:09	X																								
280-129936-5	1	T	16:18	X																								
280-129936-6	1	T	16:26	X																								
280-129936-7	1	T	16:35	X																								
280-129936-8	1	T	16:46	X																								
280-129936-9	1	T	16:54	X																								
280-129936-10	1	T	17:02	X																								
280-129936-11	1	T	17:09	X																								
CCV 280-475854/29	1		17:18	X																								
CCB 280-475854/30	1		17:25	X																								
LCS 280-475854/31	1	T	17:35	X																								
LCSD 280-475854/32	1	T	17:44	X																								
MB 280-475854/33	1	T	17:52	X																								
280-129936-12	1	T	18:01	X																								
280-129936-12 DU	1	T	18:11	X																								
280-129936-13	1	T	18:21	X																								
280-129936-14	1	T	18:28	X																								
280-129936-15	1	T	18:38	X																								
ZZZZZZ			18:46																									
ZZZZZZ			18:52																									
ZZZZZZ			19:02																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Instrument ID: WC_AT2 Analysis Method: SM 2320B

Start Date: 10/29/2019 13:24 End Date: 10/29/2019 20:37

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			19:09																									
ZZZZZZ			19:16																									
CCV 280-475854/44	1		19:26	X																								
CCB 280-475854/45	1		19:33	X																								
ZZZZZZ			19:39																									
ZZZZZZ			19:46																									
ZZZZZZ			19:53																									
ZZZZZZ			20:00																									
ZZZZZZ			20:07																									
ZZZZZZ			20:14																									
ZZZZZZ			20:20																									
CCV 280-475854/53			20:30																									
CCB 280-475854/54			20:37																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 476739 Batch Start Date: 11/06/19 10:59 Batch Analyst: Hunter, Brandon W

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00392	350.1 ICV 00376
ICVL 280-476739/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-476739/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-476739/16		350.1			10 mL	10 mL			
LCS 280-476739/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-476739/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-476739/20		350.1			10 mL	10 mL			
CCVL 280-476739/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-476739/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-476739/35		350.1			10 mL	10 mL			
280-129936-C-1	CA210-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-2	CA211-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-3	CA212-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-4	EW7-PM24B-1-35	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-476739/49		350.1			100 mL	100 mL		0.5 mL	
CCV 280-476739/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-476739/51		350.1			10 mL	10 mL			
280-129936-C-5	EW7-PM29B-1-35	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-6	EW7-PM29A-1-25	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-7	EW7-PM28A-1-25	350.1	T	No	10 mL	10 mL	<2 SU		
LCS 280-476739/57		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-476739/58		350.1			100 mL	100 mL		2.5 mL	
MB 280-476739/59		350.1			10 mL	10 mL			
280-129936-C-9	G0070-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-9 MS	G0070-1	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 476739 Batch Start Date: 11/06/19 10:59 Batch Analyst: Hunter, Brandon W

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00392	350.1 ICV 00376
280-129936-C-9 MSD	G0070-1	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
CCVL 280-476739/65		350.1			100 mL	100 mL		0.5 mL	
CCV 280-476739/66		350.1			100 mL	100 mL		2.5 mL	
CCB 280-476739/67		350.1			10 mL	10 mL			
280-129936-C-10	CA213-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-11	NW070-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-12	G0081-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-13	G0075-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-14	G0079-1	350.1	T	No	10 mL	10 mL	<2 SU		
280-129936-C-15	G0080-1	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-476739/81		350.1			100 mL	100 mL		0.5 mL	
CCV 280-476739/82		350.1			100 mL	100 mL		2.5 mL	
CCB 280-476739/83		350.1			10 mL	10 mL			
CCV 280-476739/98		350.1			100 mL	100 mL		2.5 mL	
CCB 280-476739/99		350.1			10 mL	10 mL			
LCS 280-476739/102		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-476739/103		350.1			100 mL	100 mL		2.5 mL	
MB 280-476739/104		350.1			10 mL	10 mL			
CCV 280-476739/113		350.1			100 mL	100 mL		2.5 mL	
CCB 280-476739/114		350.1			10 mL	10 mL			
CCVL 280-476739/128		350.1			100 mL	100 mL		0.5 mL	
CCV 280-476739/129		350.1			100 mL	100 mL		2.5 mL	
CCB 280-476739/130		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.: 280-129936-1

SDG No.:

Batch Number: 476739 Batch Start Date: 11/06/19 10:59 Batch Analyst: Hunter, Brandon W

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00392	350.1 ICV 00376
280-129936-C-8	EW7-PM28B-1-35	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-476739/144		350.1			100 mL	100 mL		0.5 mL	
CCV 280-476739/145		350.1			100 mL	100 mL		2.5 mL	
CCB 280-476739/146		350.1			10 mL	10 mL			

Batch Notes	
Batch Comment	BWH
Carrier Identification	350.1 complex_00461
Hypochlorite ID	350.1 bleach_01160
Sodium Nitroprusside ID	350.1 color_00173
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.: 280-129936-1

SDG No.:

Batch Number: 474499 Batch Start Date: 10/17/19 18:01 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 00799	TKN ICV 25 00084		
ICV 280-474499/7		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-474499/8		351.2, 351.2		25 mL	25 mL				
CCV 280-474499/9		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-474499/10		351.2, 351.2		25 mL	25 mL				

Batch Notes	
Block Digestion End time	10/18/19 0400
Block Digestion Start time	10/17/19 2100
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00129
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.: 280-129936-1

SDG No.:

Batch Number: 476444 Batch Start Date: 11/04/19 18:36 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00799		
LCS 280-476444/1		351.2, 351.2		<2	25 mL	25 mL	6 mL		
MB 280-476444/2		351.2, 351.2		<2	25 mL	25 mL			
280-129936-C-1	CA210-1	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-2	CA211-1	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-3	CA212-1	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-4	EW7-PM24B-1-35	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-5	EW7-PM29B-1-35	351.2, 351.2	T	<2	25 mL	25 mL			
LCS 280-476444/27		351.2, 351.2		<2	25 mL	25 mL	6 mL		
MB 280-476444/28		351.2, 351.2		<2	25 mL	25 mL			
280-129936-C-9	G0070-1	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-9 MS	G0070-1	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-129936-C-9 MSD	G0070-1	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-129936-C-7	EW7-PM28A-1-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-8	EW7-PM28B-1-35	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-6	EW7-PM29A-1-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-10	CA213-1	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-11	NW070-1	351.2, 351.2	T	<2	5 mL	25 mL			
280-129936-C-12	G0081-1	351.2, 351.2	T	<2	5 mL	25 mL			
280-129936-C-13	G0075-1	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-14	G0079-1	351.2, 351.2	T	<2	25 mL	25 mL			
280-129936-C-15	G0080-1	351.2, 351.2	T	<2	25 mL	25 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 476444 Batch Start Date: 11/04/19 18:36 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Batch Notes	
Block Digestion End time	11/05/19 0500
Block Digestion Start time	11/04/19 2200
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00129
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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 476608 Batch Start Date: 11/05/19 20:02 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-474499/7-A		351.2		4 mL					
ICB 280-474499/8-A		351.2		4 mL					
LCS 280-476444/1-A		351.2		4 mL					
MB 280-476444/2-A		351.2		4 mL					
CCV 280-474499/9-A		351.2		4 mL					
CCB 280-474499/10-A		351.2		4 mL					
280-129936-C-1-A	CA210-1	351.2	T	4 mL					
CCV 280-474499/9-A		351.2		4 mL					
CCB 280-474499/10-A		351.2		4 mL					
280-129936-C-2-A	CA211-1	351.2	T	4 mL					
280-129936-C-3-A	CA212-1	351.2	T	4 mL					
280-129936-C-4-A	EW7-PM24B-1-35	351.2	T	4 mL					
280-129936-C-5-A	EW7-PM29B-1-35	351.2	T	4 mL					
LCS 280-476444/27-A		351.2		4 mL					
MB 280-476444/28-A		351.2		4 mL					
280-129936-C-9-B	G0070-1	351.2	T	4 mL					
280-129936-C-9-C MS	G0070-1	351.2	T	4 mL					
280-129936-C-9-D MSD	G0070-1	351.2	T	4 mL					
CCV 280-474499/9-A		351.2		4 mL					
CCB 280-474499/10-A		351.2		4 mL					
280-129936-C-7-A	EW7-PM28A-1-25	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.: 280-129936-1

SDG No.:

Batch Number: 476608 Batch Start Date: 11/05/19 20:02 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
280-129936-C-8-A	EW7-PM28B-1-35	351.2	T	4 mL					
280-129936-C-6-D	EW7-PM29A-1-25	351.2	T	4 mL					
280-129936-C-10-A	CA213-1	351.2	T	4 mL					
280-129936-C-11-A	NW070-1	351.2	T	4 mL					
280-129936-C-12-A	G0081-1	351.2	T	4 mL					
280-129936-C-13-A	G0075-1	351.2	T	4 mL					
280-129936-C-14-A	G0079-1	351.2	T	4 mL					
280-129936-C-15-A	G0080-1	351.2	T	4 mL					
CCV 280-474499/9-A		351.2		4 mL					
CCB 280-474499/10-A		351.2		4 mL					

Batch Notes	
Buffer Reagent ID	TKN Buffer_00122
Hypochlorite ID	TKN Hypo_00666
Sodium Nitroprusside ID	Sodium Nitro_0098
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.: 280-129936-1

SDG No.:

Batch Number: 476445 Batch Start Date: 11/04/19 17:22 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 00511	NXN ICV INT 00492		
ICVL 280-476445/18		353.2		100 mL	100 mL		2 mL		
ICB 280-476445/19		353.2		100 mL	100 mL				
LCS 280-476445/21		353.2		100 mL	100 mL	5 mL			
MB 280-476445/22		353.2		100 mL	100 mL				
CCV 280-476445/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-476445/36		353.2		100 mL	100 mL	1 mL			
CCB 280-476445/37		353.2		100 mL	100 mL				
280-129936-C-1	CA210-1	353.2	T	100 mL	100 mL				
280-129936-C-2	CA211-1	353.2	T	100 mL	100 mL				
280-129936-C-3	CA212-1	353.2	T	100 mL	100 mL				
CCV 280-476445/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-476445/52		353.2		100 mL	100 mL	1 mL			
CCB 280-476445/53		353.2		100 mL	100 mL				
280-129936-C-5	EW7-PM29B-1-35	353.2	T	100 mL	100 mL				
280-129936-C-6	EW7-PM29A-1-25	353.2	T	100 mL	100 mL				
280-129936-C-7	EW7-PM28A-1-25	353.2	T	100 mL	100 mL				
280-129936-C-8	EW7-PM28B-1-35	353.2	T	100 mL	100 mL				
LCS 280-476445/59		353.2		100 mL	100 mL	5 mL			
MB 280-476445/60		353.2		100 mL	100 mL				
280-129936-C-9	G0070-1	353.2	T	100 mL	100 mL				
280-129936-C-9 MS	G0070-1	353.2	T	5 mL	5 mL	0.2 mL			
280-129936-C-9 MSD	G0070-1	353.2	T	5 mL	5 mL	0.2 mL			
280-129936-C-10	CA213-1	353.2	T	100 mL	100 mL				
CCV 280-476445/67		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.: 280-129936-1

SDG No.:

Batch Number: 476445 Batch Start Date: 11/04/19 17:22 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 00511	NXN ICV INT 00492		
CCVL 280-476445/68		353.2		100 mL	100 mL	1 mL			
CCB 280-476445/69		353.2		100 mL	100 mL				
280-129936-C-11	NW070-1	353.2	T	100 mL	100 mL				
280-129936-C-12	G0081-1	353.2	T	100 mL	100 mL				
280-129936-C-13	G0075-1	353.2	T	100 mL	100 mL				
280-129936-C-14	G0079-1	353.2	T	100 mL	100 mL				
280-129936-C-15	G0080-1	353.2	T	100 mL	100 mL				
CCV 280-476445/83		353.2		100 mL	100 mL	5 mL			
CCVL 280-476445/84		353.2		100 mL	100 mL	1 mL			
CCB 280-476445/85		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_00206
Color Reagent ID	NOXT CR_00105
Copper Sulfate ID	CuSO4 NOXT_0007
Hydrochloric Acid ID	0.5N HCl_0075
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.: 280-129936-1

SDG No.:

Batch Number: 476607 Batch Start Date: 11/05/19 16:35 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 00511	NXN ICV INT 00492		
ICV 280-476607/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-476607/18		353.2		100 mL	100 mL		2 mL		
ICB 280-476607/19		353.2		100 mL	100 mL				
MB 280-476607/22		353.2		100 mL	100 mL				
280-129936-C-4	EW7-PM24B-1-35	353.2	T	100 mL	100 mL				
CCV 280-476607/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-476607/36		353.2		100 mL	100 mL	1 mL			
CCB 280-476607/37		353.2		100 mL	100 mL				
CCV 280-476607/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-476607/52		353.2		100 mL	100 mL	1 mL			
CCB 280-476607/53		353.2		100 mL	100 mL				
LCS 280-476607/59		353.2		100 mL	100 mL	5 mL			
CCV 280-476607/67		353.2		100 mL	100 mL	5 mL			
CCB 280-476607/69		353.2		100 mL	100 mL				
CCV 280-476607/99		353.2		100 mL	100 mL	5 mL			
CCB 280-476607/101		353.2		100 mL	100 mL				
LCS 280-476607/103		353.2		100 mL	100 mL	5 mL			
CCV 280-476607/119		353.2		100 mL	100 mL	5 mL			
CCB 280-476607/122		353.2		100 mL	100 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 476607 Batch Start Date: 11/05/19 16:35 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Batch Notes	
Acid used for pH adjustment	SulfuricAcid_00223
Base used for pH adjustment	50% NaOH_00016
Buffer Reagent ID	NOXT Buffer_00206
Color Reagent ID	NOXT CR_00105
Copper Sulfate ID	CuSO4 NOXT_0007
Hydrochloric Acid ID	0.5N HCl_0075
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.: 280-129936-1

SDG No.:

Batch Number: 475095 Batch Start Date: 10/23/19 11:13 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 280-475095/1		9030B, 9034		50 mL	50 mL	1		<2 SU	5 mL
MB 280-475095/2		9030B, 9034		50 mL	50 mL	2		<2 SU	5 mL
280-129936-E-1	CA210-1	9030B, 9034	T	50 mL	50 mL	14	14 SU	<2 SU	5 mL
280-129936-E-2	CA211-1	9030B, 9034	T	50 mL	50 mL	15	14 SU	<2 SU	5 mL
280-129936-E-3	CA212-1	9030B, 9034	T	50 mL	50 mL	16	14 SU	<2 SU	5 mL
280-129936-E-4	EW7-PM24B-1-35	9030B, 9034	T	50 mL	50 mL	17	14 SU	<2 SU	5 mL
280-129936-E-5	EW7-PM29B-1-35	9030B, 9034	T	50 mL	50 mL	18	14 SU	<2 SU	5 mL
280-129936-E-5 MS	EW7-PM29B-1-35	9030B, 9034	T	50 mL	50 mL	19	14 SU	<2 SU	5 mL
280-129936-E-5 MSD	EW7-PM29B-1-35	9030B, 9034	T	50 mL	50 mL	20	14 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01626					
LCS 280-475095/1		9030B, 9034		1 mL					
MB 280-475095/2		9030B, 9034							
280-129936-E-1	CA210-1	9030B, 9034	T						
280-129936-E-2	CA211-1	9030B, 9034	T						
280-129936-E-3	CA212-1	9030B, 9034	T						
280-129936-E-4	EW7-PM24B-1-35	9030B, 9034	T						
280-129936-E-5	EW7-PM29B-1-35	9030B, 9034	T						
280-129936-E-5 MS	EW7-PM29B-1-35	9030B, 9034	T	1 mL					
280-129936-E-5 MSD	EW7-PM29B-1-35	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.: 280-129936-1

SDG No.:

Batch Number: 475095 Batch Start Date: 10/23/19 11:13 Batch Analyst: Abeyta, Joseph L

Batch Method: 9030B Batch End Date:

Batch Notes	
Batch Comment	JLA
Distillation End Time	10/23/2019 14:24
Distillation Start Time	10/22/2019 13:00
Formaldehyde ID	Form_00116
pH Indicator ID	HC989495 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00201
Zinc Acetate Buffer ID	Znac_00110

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.: 280-129936-1

SDG No.:

Batch Number: 475115 Batch Start Date: 10/23/19 14:49 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 280-475115/1		9030B, 9034		50 mL	50 mL	1		<2 SU	5 mL
LCSD 280-475115/2		9030B, 9034		50 mL	50 mL	2		<2 SU	5 mL
MB 280-475115/3		9030B, 9034		50 mL	50 mL	3		<2 SU	5 mL
280-129936-E-6	EW7-PM29A-1-25	9030B, 9034	T	50 mL	50 mL	4	14 SU	<2 SU	5 mL
280-129936-E-7	EW7-PM28A-1-25	9030B, 9034	T	50 mL	50 mL	5	14 SU	<2 SU	5 mL
280-129936-E-8	EW7-PM28B-1-35	9030B, 9034	T	50 mL	50 mL	6	14 SU	<2 SU	5 mL
280-129936-E-9	G0070-1	9030B, 9034	T	50 mL	50 mL	7	14 SU	<2 SU	5 mL
280-129936-E-9 MS	G0070-1	9030B, 9034	T	50 mL	50 mL	8	14 SU	<2 SU	5 mL
280-129936-E-9 MSD	G0070-1	9030B, 9034	T	50 mL	50 mL	9	14 SU	<2 SU	5 mL
280-129936-E-10	CA213-1	9030B, 9034	T	50 mL	50 mL	10	14 SU	<2 SU	5 mL
280-129936-E-11	NW070-1	9030B, 9034	T	50 mL	50 mL	11	14 SU	<2 SU	5 mL
280-129936-E-12	G0081-1	9030B, 9034	T	50 mL	50 mL	12	14 SU	<2 SU	5 mL
280-129936-E-13	G0075-1	9030B, 9034	T	50 mL	50 mL	13	14 SU	<2 SU	5 mL
280-129936-E-14	G0079-1	9030B, 9034	T	50 mL	50 mL	14	14 SU	<2 SU	5 mL
280-129936-E-15	G0080-1	9030B, 9034	T	50 mL	50 mL	15	14 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01626					
LCS 280-475115/1		9030B, 9034		1 mL					
LCSD 280-475115/2		9030B, 9034		1 mL					
MB 280-475115/3		9030B, 9034							
280-129936-E-6	EW7-PM29A-1-25	9030B, 9034	T						
280-129936-E-7	EW7-PM28A-1-25	9030B, 9034	T						
280-129936-E-8	EW7-PM28B-1-35	9030B, 9034	T						
280-129936-E-9	G0070-1	9030B, 9034	T						
280-129936-E-9 MS	G0070-1	9030B, 9034	T	1 mL					
280-129936-E-9 MSD	G0070-1	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.: 280-129936-1

SDG No.:

Batch Number: 475115 Batch Start Date: 10/23/19 14:49 Batch Analyst: Abeyta, Joseph L

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01626					
280-129936-E-10	CA213-1	9030B, 9034	T						
280-129936-E-11	NW070-1	9030B, 9034	T						
280-129936-E-12	G0081-1	9030B, 9034	T						
280-129936-E-13	G0075-1	9030B, 9034	T						
280-129936-E-14	G0079-1	9030B, 9034	T						
280-129936-E-15	G0080-1	9030B, 9034	T						

Batch Notes	
Batch Comment	JLA
Distillation End Time	10/23/2019 18:56
Distillation Start Time	10/22/2019 17:33
Formaldehyde ID	Form_00116
pH Indicator ID	HC989495 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00201
Zinc Acetate Buffer ID	Znac_00110

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.: 280-129936-1

SDG No.:

Batch Number: 475124 Batch Start Date: 10/23/19 15:34 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 280-475095/1-A		9034		0.00 mL	2.70 mL	5 mL	2.7 mL	50 mL	
MB 280-475095/2-A		9034		2.70 mL	3.70 mL	1 mL	1 mL	50 mL	
280-129936-E-1-A	CA210-1	9034	T	15.20 mL	16.20 mL	1 mL	1 mL	50 mL	
280-129936-E-2-A	CA211-1	9034	T	16.20 mL	17.20 mL	1 mL	1 mL	50 mL	
280-129936-E-3-A	CA212-1	9034	T	17.20 mL	18.30 mL	1 mL	1.1 mL	50 mL	
280-129936-E-4-A	EW7-PM24B-1-35	9034	T	18.30 mL	19.30 mL	1 mL	1 mL	50 mL	
280-129936-E-5-A	EW7-PM29B-1-35	9034	T	19.30 mL	20.30 mL	1 mL	1 mL	50 mL	
280-129936-E-5-B MS	EW7-PM29B-1-35	9034	T	20.30 mL	23.20 mL	5 mL	2.9 mL	50 mL	
280-129936-E-5-C MSD	EW7-PM29B-1-35	9034	T	0.00 mL	2.50 mL	5 mL	2.5 mL	50 mL	

Batch Notes	
Batch Comment	JA
Hydrochloric Acid ID	HCL Sol_00172
Iodine ID	Iod_00242
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00159
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Starch Reagent ID	Starch Ind_00059
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.: 280-129936-1

SDG No.:

Batch Number: 475145 Batch Start Date: 10/23/19 19:16 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 280-475115/1-A		9034		0.00 mL	2.60 mL	5 mL	2.6 mL	50 mL	
LCSD 280-475115/2-A		9034		2.60 mL	5.30 mL	5 mL	2.7 mL	50 mL	
MB 280-475115/3-A		9034		5.30 mL	6.30 mL	1 mL	1 mL	50 mL	
280-129936-E-6-B	EW7-PM29A-1-25	9034	T	6.30 mL	7.50 mL	1 mL	1.2 mL	50 mL	
280-129936-E-7-B	EW7-PM28A-1-25	9034	T	7.50 mL	8.50 mL	1 mL	1 mL	50 mL	
280-129936-E-8-B	EW7-PM28B-1-35	9034	T	9.50 mL	10.50 mL	1 mL	1 mL	50 mL	
280-129936-E-9-D	G0070-1	9034	T	10.50 mL	11.50 mL	1 mL	1 mL	50 mL	
280-129936-E-9-E MS	G0070-1	9034	T	11.50 mL	14.10 mL	5 mL	2.6 mL	50 mL	
280-129936-E-9-F MSD	G0070-1	9034	T	14.10 mL	16.60 mL	5 mL	2.5 mL	50 mL	
280-129936-E-10-B	CA213-1	9034	T	16.60 mL	17.60 mL	1 mL	1 mL	50 mL	
280-129936-E-11-B	NW070-1	9034	T	17.60 mL	18.60 mL	1 mL	1 mL	50 mL	
280-129936-E-12-B	G0081-1	9034	T	18.60 mL	19.70 mL	1 mL	1.1 mL	50 mL	
280-129936-E-13-B	G0075-1	9034	T	19.70 mL	20.70 mL	1 mL	1 mL	50 mL	
280-129936-E-14-B	G0079-1	9034	T	20.70 mL	21.80 mL	1 mL	1.1 mL	50 mL	
280-129936-E-15-B	G0080-1	9034	T	21.80 mL	22.80 mL	1 mL	1 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.: 280-129936-1

SDG No.:

Batch Number: 475145 Batch Start Date: 10/23/19 19:16 Batch Analyst: Abeyta, Joseph L

Batch Method: 9034 Batch End Date:

Batch Notes	
Batch Comment	JA
Hydrochloric Acid ID	HCL Sol_00172
Iodine ID	Iod_00242
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00159
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Starch Reagent ID	Starch Ind_00059
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.: 280-129936-1

SDG No.:

Batch Number: 474200 Batch Start Date: 10/16/19 09:39 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 00279	IC Cal low 00488	IC CL ICV 00016	IC ICV 5 00250
STD1 280-474200/2 IC		9056A		5 mL	5 mL	0.04 mL	0.04 mL		
STD2 280-474200/3 IC		9056A		5 mL	5 mL	0.1 mL	0.1 mL		
STD3 280-474200/4 IC		9056A		5 mL	5 mL	0.2 mL	0.2 mL		
STD4 280-474200/5 IC		9056A		5 mL	5 mL	2.4 mL	0.8 mL		
STD5 280-474200/6 IC		9056A		5 mL	5 mL	4.8 mL	1.6 mL		
STD6 280-474200/7 IC		9056A		5 mL	5 mL	8 mL	2 mL		
ICV 280-474200/8		9056A		5 mL	5 mL			0.8 mL	0.8 mL
ICB 280-474200/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00020					
STD1 280-474200/2 IC		9056A							
STD2 280-474200/3 IC		9056A							
STD3 280-474200/4 IC		9056A							
STD4 280-474200/5 IC		9056A							
STD5 280-474200/6 IC		9056A							
STD6 280-474200/7 IC		9056A							
ICV 280-474200/8		9056A		0.8 mL					
ICB 280-474200/9		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.: 280-129936-1

SDG No.:

Batch Number: 474200 Batch Start Date: 10/16/19 09:39 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Batch Notes	
Eluent 1 ID	Water
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Regeneration Solution ID	ic10 H3PO4_00002
Sufficient Volume for Batch QC	Yes

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 477599 Batch Start Date: 11/14/19 11:15 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 00284	IC Cal low 00493	IC LCS 01709	ICMS/MSD WEEK 00622
CCV 280-477599/1		9056A		5 mL	5 mL			10 mL	
CCB 280-477599/2		9056A		5 mL	5 mL				
MRL 280-477599/3		9056A		5 mL	5 mL	0.2 mL	0.1 mL		
LCS 280-477599/4		9056A		5 mL	5 mL			10 mL	
LCSD 280-477599/5		9056A		5 mL	5 mL			10 mL	
MB 280-477599/6		9056A		5 mL	5 mL				
280-129936-F-9	G0070-1	9056A	T	5 mL	5 mL				
280-129936-F-9 DU	G0070-1	9056A	T	5 mL	5 mL				
280-129936-F-9 MS	G0070-1	9056A	T	5 mL	5 mL				0.1 mL
280-129936-F-9 MSD	G0070-1	9056A	T	5 mL	5 mL				0.1 mL
280-129936-F-1	CA210-1	9056A	T	5 mL	5 mL				
280-129936-F-2	CA211-1	9056A	T	5 mL	5 mL				
280-129936-F-3	CA212-1	9056A	T	5 mL	5 mL				
280-129936-F-4	EW7-PM24B-1-35	9056A	T	5 mL	5 mL				
280-129936-F-5	EW7-PM29B-1-35	9056A	T	5 mL	5 mL				
280-129936-F-6	EW7-PM29A-1-25	9056A	T	5 mL	5 mL				
CCV 280-477599/17		9056A		5 mL	5 mL			10 mL	
CCB 280-477599/18		9056A		5 mL	5 mL				
280-129936-F-7	EW7-PM28A-1-25	9056A	T	5 mL	5 mL				
280-129936-F-8	EW7-PM28B-1-35	9056A	T	5 mL	5 mL				
280-129936-F-10	CA213-1	9056A	T	5 mL	5 mL				
280-129936-F-11	NW070-1	9056A	T	5 mL	5 mL				
280-129936-F-12	G0081-1	9056A	T	5 mL	5 mL				
280-129936-F-13	G0075-1	9056A	T	5 mL	5 mL				
280-129936-F-14	G0079-1	9056A	T	5 mL	5 mL				
280-129936-F-15	G0080-1	9056A	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 477599 Batch Start Date: 11/14/19 11:15 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 00284	IC Cal low 00493	IC LCS 01709	ICMS/MSD WEEK 00622
CCV 280-477599/29		9056A		5 mL	5 mL			10 mL	
CCB 280-477599/30		9056A		5 mL	5 mL				

Batch Notes	
Eluent 1 ID	Water
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Regeneration Solution ID	ic10 H3PO4_00002
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.: 280-129936-1

SDG No.:

Batch Number: 476389 Batch Start Date: 11/04/19 11:18 Batch Analyst: Hunter, Brandon W

Batch Method: FILTRATION Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TOC LCS Std 00048			
LCS 280-476389/1		FILTRATION, 9060A		200 mL	200 mL	5 mL			
MB 280-476389/2		FILTRATION, 9060A		20 mL	20 mL				
280-129936-D-1	CA210-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-2	CA211-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-3	CA212-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-4	EW7-PM24B-1-35	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-5	EW7-PM29B-1-35	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-6	EW7-PM29A-1-25	FILTRATION, 9060A	D	20 mL	20 mL				
LCS 280-476389/27		FILTRATION, 9060A		200 mL	200 mL	5 mL			
MB 280-476389/28		FILTRATION, 9060A		20 mL	20 mL				
280-129936-D-9	G0070-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-7	EW7-PM28A-1-25	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-8	EW7-PM28B-1-35	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-10	CA213-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-11	NW070-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-12	G0081-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-13	G0075-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-14	G0079-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-15	G0080-1	FILTRATION, 9060A	D	20 mL	20 mL				
280-129936-D-9 MS	G0070-1	FILTRATION, 9060A	D	50 mL	50 mL				
280-129936-D-9 MSD	G0070-1	FILTRATION, 9060A	D	50 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.: 280-129936-1

SDG No.:

Batch Number: 476389 Batch Start Date: 11/04/19 11:18 Batch Analyst: Hunter, Brandon W

Batch Method: FILTRATION Batch End Date:

Batch Notes	
Filter ID	9743727
Pipette/Syringe/Dispenser ID	8332928

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 476539 Batch Start Date: 11/04/19 16:10 Batch Analyst: Barker, Scott G

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00041	TOC LCS Std 00048	
ICV 280-476539/1		9060A		50 mL	50 mL	<2 SU	1 mL		
ICB 280-476539/2		9060A		20 mL	20 mL	<2 SU			
LCS 280-476389/1-A		9060A		200 mL	200 mL	<2 SU			
MB 280-476389/2-A		9060A		20 mL	20 mL	<2 SU			
CCV 280-476539/15		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-476539/16		9060A		20 mL	20 mL	<2 SU			
280-129936-D-1-B	CA210-1	9060A	D	20 mL	20 mL	7 SU			
CCV 280-476539/27		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-476539/28		9060A		20 mL	20 mL	<2 SU			
280-129936-D-2-B	CA211-1	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-3-B	CA212-1	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-4-B	EW7-PM24B-1-35	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-5-B	EW7-PM29B-1-35	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-6-B	EW7-PM29A-1-25	9060A	D	20 mL	20 mL	7 SU			
LCS 280-476389/27-A		9060A		200 mL	200 mL	<2 SU			
MB 280-476389/28-A		9060A		20 mL	20 mL	<2 SU			
280-129936-D-9-D	G0070-1	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-9-E MS	G0070-1	9060A	D	50 mL	50 mL	7 SU		1.25 mL	
CCV 280-476539/39		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-476539/40		9060A		20 mL	20 mL	<2 SU			
280-129936-D-9-F MSD	G0070-1	9060A	D	50 mL	50 mL	7 SU		1.25 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 476539 Batch Start Date: 11/04/19 16:10 Batch Analyst: Barker, Scott G

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00041	TOC LCS Std 00048	
280-129936-D-7-B	EW7-PM28A-1-25	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-8-B	EW7-PM28B-1-35	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-10-B	CA213-1	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-11-B	NW070-1	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-12-B	G0081-1	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-13-B	G0075-1	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-14-B	G0079-1	9060A	D	20 mL	20 mL	7 SU			
280-129936-D-15-B	G0080-1	9060A	D	20 mL	20 mL	7 SU			
CCV 280-476539/51		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-476539/52		9060A		20 mL	20 mL	<2 SU			

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 475854 Batch Start Date: 10/29/19 13:24 Batch Analyst: Gonzalez, Sofie P

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00861				
LCS 280-475854/4		SM 2320B		InitialAmount is blank	25 mL				
MB 280-475854/6		SM 2320B		InitialAmount is blank					
280-129936-F-1	CA210-1	SM 2320B	T	InitialAmount is blank					
CCV 280-475854/17		SM 2320B		InitialAmount is blank	25 mL				
CCB 280-475854/18		SM 2320B		InitialAmount is blank					
280-129936-F-2	CA211-1	SM 2320B	T	InitialAmount is blank					
280-129936-F-3	CA212-1	SM 2320B	T	InitialAmount is blank					
280-129936-F-4	EW7-PM24B-1-35	SM 2320B	T	InitialAmount is blank					
280-129936-F-5	EW7-PM29B-1-35	SM 2320B	T	InitialAmount is blank					
280-129936-F-6	EW7-PM29A-1-25	SM 2320B	T	InitialAmount is blank					
280-129936-F-7	EW7-PM28A-1-25	SM 2320B	T	InitialAmount is blank					
280-129936-F-8	EW7-PM28B-1-35	SM 2320B	T	InitialAmount is blank					
280-129936-F-9	G0070-1	SM 2320B	T	InitialAmount is blank					
280-129936-F-10	CA213-1	SM 2320B	T	InitialAmount is blank					
280-129936-F-11	NW070-1	SM 2320B	T	InitialAmount is blank					
CCV 280-475854/29		SM 2320B		InitialAmount is blank	25 mL				
CCB 280-475854/30		SM 2320B		InitialAmount is blank					
LCS 280-475854/31		SM 2320B		InitialAmount is blank	25 mL				
LCSD 280-475854/32		SM 2320B		InitialAmount is blank	25 mL				
MB 280-475854/33		SM 2320B		InitialAmount is blank					
280-129936-F-12	G0081-1	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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-129936-1

SDG No.:

Batch Number: 475854 Batch Start Date: 10/29/19 13:24 Batch Analyst: Gonzalez, Sofie P

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00861				
280-129936-F-12 DU	G0081-1	SM 2320B	T	InitialAmount is blank					
280-129936-F-13	G0075-1	SM 2320B	T	InitialAmount is blank					
280-129936-F-14	G0079-1	SM 2320B	T	InitialAmount is blank					
280-129936-F-15	G0080-1	SM 2320B	T	InitialAmount is blank					
CCV 280-475854/44		SM 2320B		InitialAmount is blank	25 mL				
CCB 280-475854/45		SM 2320B		InitialAmount is blank					

Batch Notes	
Acid ID	0.02 H2SO4_00268
pH Buffer 1 ID	pH 2.0 Buffer_00082
pH Buffer 2 ID	pH 4.0 Buffer_00184
pH Buffer 3 ID	pH 7.0 Buffer_00272
pH Buffer 4 ID	pH 10 Buffer_00146
pH Buffer 5 ID	pH 12 Buffer_00159
pH Buffer 6 ID	pH 7,0 Buffer_00271
Sodium Carbonate ID	alk stk std_00017
Nominal Amount Used	25 mL
pH Meter ID	SV1
Probe ID	PCE 86 pH 1105_5241
Normality of First Titrant	0.02 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

*** Sample Table from Analysis ***

BWH

File name: *** Sample Table from Analysis ***
Date: 06-Nov-19

Cup	Name	Type	R	Dil	Wt	Comment	PH	Cl-
5	Sync	SYNC	1	1	1			
0	blk	CO	1	1	1			
0	Read Baseline	RB	1	1	1			
1	Cal 0.0 PPB	C	1	1	1			
3	Cal 25.0 ppb	C	1	1	1			
4	Cal 50.0 ppb	C	1	1	1			
5	Cal 100.0 ppb	C	1	1	1			
6	Cal 500.0 ppb	C	1	1	1			
7	Cal 1000.0 ppb	C	1	1	1			
8	Cal 2500.0 ppb	C	1	1	1			
9	Cal 5000.0 ppb	C	1	1	1			
0	blank	BLNK	1	1	1			
0	read baseline	RB	1	1	1			
10	ICVL 500.0 ppb	U	1	1	1			
11	ICV 2500.0 ppb	U	1	1	1			
12	ICB	U	1	1	1			
0	read baseline	RB	1	1	1			
8	LCS	U	1	1	1			
8	LCSD	U	1	1	1			
12	MB	U	1	1	1			
13	280-129857-c-3	U	1	1	1		<2	n
14	MS 280-129857-c-3	U	1	1	1		<2	n
15	MSD 280-129857-c-3	U	1	1	1		<2	n
16	280-129857-c-4	U	1	1	1		<2	n
17	280-129857-c-5	U	1	1	1		<2	n
18	680-176048-a-1	U	1	1	1		<2	n
19	680-176048-a-3	U	1	1	1		<2	n
20	680-176048-a-4	U	1	1	1		<2	n
21	280-130066-g-1	U	1	10	1		<2	n
22	280-129965-l-6	U	1	1	1		<2	
0	rinse	U	1	1	1			
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1			
23	280-129965-l-5	U	1	1	1		<2	
24	280-129965-l-4	U	1	1	1		<2	n
25	280-129965-l-3	U	1	1	1		<2	n
26	MS 280-129965-l-3	U	1	1	1		<2	n
27	MSD 280-129965-l-3	U	1	1	1		<2	n
28	280-130157-b-1	U	1	1	1		<2	n
29	280-129936-c-1	U	1	1	1		<2	n
30	280-129936-c-2	U	1	1	1		<2	n
31	280-129936-c-3	U	1	1	1		<2	n
32	280-129936-c-4	U	1	1	1		<2	n
0	rinse	U	1	1	1			
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1			
33	280-129936-c-5	U	1	1	1		<2	
34	280-129936-c-6	U	1	1	1		<2	n
35	280-129936-c-7	U	1	1	1		<2	n
36	280-129936-c-8 X	U	1	1	1		<2	n

350.1 Color_00173
350.1 bleach_01160
350.1 complex_00461

Cup	Name	Type	R	Dil	Wt	Comment		
8	LCS	U	1	1	1	pH	Cl⁻	
8	LCSD	U	1	1	1			
12	MB	U	1	1	1			
37	280-129936-c-9	U	1	1	1	<2	n	
38	MS 280-129936-c-9	U	1	1	1	<2	n	
39	MSD 280-129936-c-9	U	1	1	1	<2	n	
0	rinse	U	1	1	1			
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1			
40	280-129936-c-10	U	1	1	1	<2	n	
41	280-129936-c-11	U	1	1	1	<2	n	
42	280-129936-c-12	U	1	1	1	<2	n	
43	280-129936-c-13	U	1	1	1	<2	n	
44	280-129936-c-14	U	1	1	1	<2	n	
45	280-129936-c-15	U	1	1	1	<2	n	
46	280-129974-d-2	U	1	1	1	<2	n	
47	280-129974-d-4	U	1	1	1	<2	n	
48	MS 280-129974-d-4	U	1	1	1	<2	n	
49	MSD 280-129974-d-4	U	1	1	1	<2	n	
0	rinse	U	1	1	1			
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1			
50	280-129974-d-3	U	1	1	1	<2	n	
51	280-129990-c-1	U	1	1	1	<2	n	
52	280-129990-c-2	U	1	1	1	<2	n	
53	280-129990-c-3	U	1	1	1	<2	n	
54	280-129990-c-4	U	1	1	1	<2	n	
55	280-129990-c-5 X	U	1	1	1	<2	n	
56	280-129990-c-6	U	1	1	1	<2	n	
57	280-129990-c-7	U	1	1	1	<2	n	
58	280-129990-c-8	U	1	1	1	<2	n	
59	280-129990-c-9	U	1	1	1	<2		
0	rinse	U	1	1	1			
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1			
60	280-129990-c-10	U	1	1	1	<2	n	
8	LCS	U	1	1	1			
8	LCSD	U	1	1	1			
12	MB	U	1	1	1			
61	280-129990-c-11	U	1	1	1	<2	n	
62	MS 280-129990-c-11	U	1	1	1	<2	n	
63	MSD 280-129990-c-11	U	1	1	1	<2	n	
64	280-129990-c-12	U	1	1	1	<2	n	
65	280-129990-c-13	U	1	1	1	<2	n	
0	rinse	U	1	1	1			
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1			
66	280-129990-c-14	U	1	1	1	<2	n	

Cup	Name	Type	R	Dil	Wt	Comment	pH	Cl-
67	280-129990-c-15	U	1	1	1		<2	n
68	280-129992-b-1	U	1	1	1		<2	n
69	280-129992-a-2	U	1	1	1		<2	n
70	280-129992-a-4	U	1	1	1		<2	n
71	280-129992-a-5	U	1	1	1		<2	n
72	280-129992-b-6	U	1	1	1		<2	n
73	280-129915-l-4	U	1	1	1		<2	n
74	MS 280-129915-l-4	U	1	1	1		<2	n
75	MSD 280-129915-l-4	U	1	1	1		<2	n
0	rinse	U	1	1	1		<2	
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1		<2	n
76	280-129992-b-9	U	1	1	1		<2	n
77	280-129992-b-10	U	1	1	1		<2	n
78	280-130068-a-2	U	1	1	1		<2	n
79	280-130068-a-3	U	1	1	1		<2	n
80	280-130068-a-4	U	1	1	1		<2	n
81	280-130068-a-7	U	1	1	1		<2	n
82	280-130068-a-8	U	1	1	1		<2	n
83	280-130068-a-9	U	1	1	1		<2	n
84	280-130068-a-11	U	1	1	1		<2	n
85	280-129936-c-8	U	1	2	1		<2	n
0	rinse	U	1	1	1		<2	
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1			
86	280-129990-c-5	U	1	2	1		<2	n
0	rinse	U	1	1	1			
0	read baseline	RB	1	1	1			
6	CCVL 500.0 ppb	U	1	1	1			
8	CCV 2500.0 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	read baseline	RB	1	1	1			

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	bwh
Operator ID	bwh
Platform	FS 3000
Software Rev Code	222
Data system ID	57
Result path	C:\FLOW_4\110619.RST
Sample table path	C:\FLOW_4\110619.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	06-Nov-19
Time acquired	16:19

				Ammonia		
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
06-Nov-19	10:59	5	Sync	10381	96.336	
06-Nov-19	11:01	0	blk	318	-9.318	LO
06-Nov-19	11:03	0	Read Baseline	0	-12.611	BL
06-Nov-19	11:05	1	Cal 0.0 PPB	1109	-1.101	LO UM
06-Nov-19	11:07	3	Cal 25.0 ppb	3440	23.193	
06-Nov-19	11:09	4	Cal 50.0 ppb	5597	45.792	
06-Nov-19	11:11	5	Cal 100.0 ppb	10280	95.259	
06-Nov-19	11:13	6	Cal 500.0 ppb	50298	540.127	
06-Nov-19	11:15	7	Cal 1000.0 ppb	88042	996.118	
06-Nov-19	11:17	8	Cal 2500.0 ppb	195217	2483.476	
06-Nov-19	11:19	9	Cal 5000.0 ppb	343168	5004.742	
06-Nov-19	11:21	0	blank	-10570	-120.794	LO
06-Nov-19	11:23	0	read baseline	0	-12.611	BL
06-Nov-19	11:25	10	ICVL 500.0 ppb	48429	518.471	
06-Nov-19	11:27	11	ICV 2500.0 ppb	198315	2530.701	
06-Nov-19	11:29	12	ICB	-4731	-61.368	LO
06-Nov-19	11:31	0	read baseline	0	-12.611	BL
06-Nov-19	11:33	8	LCS	197689	2521.137	
06-Nov-19	11:35	8	LCSD	198645	2535.751	
06-Nov-19	11:37	12	MB	-4778	-61.859	LO
06-Nov-19	11:39	13	280-129857-c-3	15349	149.408	
06-Nov-19	11:41	14	MS 280-129857-c-3	106472	1231.608	
06-Nov-19	11:43	15	MSD 280-129857-c-3	103144	1188.461	
06-Nov-19	11:45	16	280-129857-c-4	102182	1176.033	
06-Nov-19	11:47	17	280-129857-c-5	94913	1082.924	
06-Nov-19	11:49	18	680-176048-a-1	118863	1394.661	
06-Nov-19	11:51	19	680-176048-a-3	566	-6.737	LO
06-Nov-19	11:53	20	680-176048-a-4	5130	40.894	
06-Nov-19	11:55	21	280-130066-g-1	24222	2457.367	
06-Nov-19	11:57	22	280-129965-l-6	74914	833.507	
06-Nov-19	11:59	0	rinse	-2712	-40.634	LO
06-Nov-19	12:01	0	read baseline	0	-12.611	BL
06-Nov-19	12:03	6	CCVL 500.0 ppb	49167	527.012	
06-Nov-19	12:05	8	CCV 2500.0 ppb	200621	2566.019	
06-Nov-19	12:07	12	CCB	-4435	-58.340	LO
06-Nov-19	12:09	0	read baseline	0	-12.611	BL
06-Nov-19	12:11	23	280-129965-l-5	5452	44.276	
06-Nov-19	12:13	24	280-129965-l-4	-122	-13.871	LO
06-Nov-19	12:15	25	280-129965-l-3	4424	33.485	
06-Nov-19	12:17	26	MS 280-129965-l-3	96516	1103.344	
06-Nov-19	12:19	27	MSD 280-129965-l-3	89913	1019.635	
06-Nov-19	12:21	28	280-130157-b-1	115	-11.418	LO
06-Nov-19	12:23	29	280-129936-c-1	1910	7.231	
06-Nov-19	12:25	30	280-129936-c-2	12075	114.360	
06-Nov-19	12:27	31	280-129936-c-3	62	-11.968	LO
06-Nov-19	12:29	32	280-129936-c-4	110904	1289.493	

Result path C:\FLOW_4\110619.RST
Sample table path C:\FLOW_4\110619.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 06-Nov-19
Time acquired 16:19

				Ammonia		
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
06-Nov-19	12:31	0	rinse	-3254	-46.205	LO
06-Nov-19	12:33	0	read baseline	0	-12.611	BL
06-Nov-19	12:35	6	CCVL 500.0 ppb	50090	537.718	
06-Nov-19	12:37	8	CCV 2500.0 ppb	199750	2552.664	
06-Nov-19	12:39	12	CCB	-4614	-60.173	LO
06-Nov-19	12:41	0	read baseline	0	-12.611	BL
06-Nov-19	12:43	33	280-129936-c-5	188289	2378.719	
06-Nov-19	12:45	34	280-129936-c-6	12629	120.274	
06-Nov-19	12:47	35	280-129936-c-7	49544	531.381	
06-Nov-19	12:49	36	280-129936-c-8 X	344180	5023.862	
06-Nov-19	12:51	8	LCS	196167	2497.929	
06-Nov-19	12:53	8	LCSD	191777	2431.306	
06-Nov-19	12:55	12	MB	-4364	-57.609	LO
06-Nov-19	12:57	37	280-129936-c-9	1144	-0.734	LO
06-Nov-19	12:59	38	MS 280-129936-c-9	94045	1071.896	
06-Nov-19	13:01	39	MSD 280-129936-c-9	90741	1030.076	
06-Nov-19	13:03	0	rinse	-2633	-39.813	LO
06-Nov-19	13:05	0	read baseline	0	-12.611	BL
06-Nov-19	13:07	6	CCVL 500.0 ppb	46449	495.615	
06-Nov-19	13:09	8	CCV 2500.0 ppb	199300	2545.770	
06-Nov-19	13:11	12	CCB	-4293	-56.878	LO
06-Nov-19	13:13	0	read baseline	0	-12.611	BL
06-Nov-19	13:15	40	280-129936-c-10	742	-4.913	LO
06-Nov-19	13:17	41	280-129936-c-11	3545	24.287	
06-Nov-19	13:19	42	280-129936-c-12	25901	264.191	
06-Nov-19	13:21	43	280-129936-c-13	6599	56.334	
06-Nov-19	13:23	44	280-129936-c-14	192	-10.623	LO
06-Nov-19	13:25	45	280-129936-c-15	7294	63.656	
06-Nov-19	13:27	46	280-129974-d-2	-220	-14.887	LO
06-Nov-19	13:29	47	280-129974-d-4	922	-3.040	LO
06-Nov-19	13:31	48	MS 280-129974-d-4	92629	1053.934	
06-Nov-19	13:33	49	MSD 280-129974-d-4	90050	1021.358	
06-Nov-19	13:35	0	rinse	-2682	-40.325	LO
06-Nov-19	13:37	0	read baseline	0	-12.611	BL
06-Nov-19	13:39	6	CCVL 500.0 ppb	48512	519.424	
06-Nov-19	13:41	8	CCV 2500.0 ppb	195726	2491.221	
06-Nov-19	13:43	12	CCB	-4690	-60.949	LO
06-Nov-19	13:45	0	read baseline	0	-12.611	BL
06-Nov-19	13:47	50	280-129974-d-3	502	-7.407	LO
06-Nov-19	13:49	51	280-129990-c-1	53	-12.059	LO
06-Nov-19	13:51	52	280-129990-c-2	430	-8.154	LO
06-Nov-19	13:53	53	280-129990-c-3	283	-9.672	LO
06-Nov-19	13:55	54	280-129990-c-4	14890	144.487	
06-Nov-19	13:57	55	280-129990-c-5 X	367340	5468.257	
06-Nov-19	13:59	56	280-129990-c-6	54687	591.340	
06-Nov-19	14:01	57	280-129990-c-7	-1676	-29.949	LO
06-Nov-19	14:03	58	280-129990-c-8	275336	3781.413	
06-Nov-19	14:05	59	280-129990-c-9	272532	3733.308	
06-Nov-19	14:07	0	rinse	-8470	-99.516	LO
06-Nov-19	14:09	0	read baseline	0	-12.611	BL
06-Nov-19	14:11	6	CCVL 500.0 ppb	45729	487.325	
06-Nov-19	14:13	8	CCV 2500.0 ppb	202514	2595.100	
06-Nov-19	14:15	12	CCB	-4438	-58.369	LO
06-Nov-19	14:17	0	read baseline	0	-12.611	BL
06-Nov-19	14:19	60	280-129990-c-10	3964	28.679	
06-Nov-19	14:21	8	LCS	195126	2482.099	
06-Nov-19	14:23	8	LCSD	196007	2495.502	

Result path C:\FLOW_4\110619.RST
Sample table path C:\FLOW_4\110619.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 06-Nov-19
Time acquired 16:19

				Ammonia		
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
06-Nov-19	14:25	12	MB	-4313	-57.082	LO
06-Nov-19	14:27	61	280-129990-c-11	1558	3.567	
06-Nov-19	14:29	62	MS 280-129990-c-11	93765	1068.343	
06-Nov-19	14:31	63	MSD 280-129990-c-11	91144	1035.158	
06-Nov-19	14:33	64	280-129990-c-12	-1935	-32.626	LO
06-Nov-19	14:35	65	280-129990-c-13	2168	9.924	
06-Nov-19	14:37	0	rinse	-97	-13.617	LO
06-Nov-19	14:39	0	read baseline	0	-12.611	BL
06-Nov-19	14:41	6	CCVL 500.0 ppb	45981	490.224	
06-Nov-19	14:43	8	CCV 2500.0 ppb	204263	2622.052	
06-Nov-19	14:45	12	CCB	-4590	-59.927	LO
06-Nov-19	14:47	0	read baseline	0	-12.611	BL
06-Nov-19	14:49	66	280-129990-c-14	898	-3.296	LO
06-Nov-19	14:51	67	280-129990-c-15	93381	1063.473	
06-Nov-19	14:57	68	280-129992-b-1	3837	27.342	
06-Nov-19	14:59	69	280-129992-a-2	2221	10.469	
06-Nov-19	15:01	70	280-129992-a-4	440	-8.046	LO
06-Nov-19	15:03	71	280-129992-a-5	478	-7.651	LO
06-Nov-19	15:05	72	280-129992-b-6	993	-2.303	LO
06-Nov-19	15:07	73	280-129915-l-4	584	-6.556	LO
06-Nov-19	15:09	74	MS 280-129915-l-4	90168	1022.847	
06-Nov-19	15:11	75	MSD 280-129915-l-4	90429	1026.145	
06-Nov-19	15:13	0	rinse	-2624	-39.727	LO
06-Nov-19	15:15	0	read baseline	0	-12.611	BL
06-Nov-19	15:17	6	CCVL 500.0 ppb	44348	471.475	
06-Nov-19	15:19	8	CCV 2500.0 ppb	204082	2619.258	
06-Nov-19	15:21	12	CCB	-4411	-58.095	LO
06-Nov-19	15:23	0	read baseline	0	-12.611	BL
06-Nov-19	15:25	76	280-129992-b-9	851	-3.778	LO
06-Nov-19	15:27	77	280-129992-b-10	442	-8.023	LO
06-Nov-19	15:29	78	280-130068-a-2	989	-2.348	LO
06-Nov-19	15:31	79	280-130068-a-3	813	-4.180	LO
06-Nov-19	15:33	80	280-130068-a-4	440	-8.044	LO
06-Nov-19	15:35	81	280-130068-a-7	537	-7.042	LO
06-Nov-19	15:37	82	280-130068-a-8	2894	17.491	
06-Nov-19	15:39	83	280-130068-a-9	960	-2.653	LO
06-Nov-19	15:41	84	280-130068-a-11	1500	2.965	
06-Nov-19	15:43	85	280-129936-c-8	48271	1033.278	
06-Nov-19	15:45	0	rinse	-1484	-27.961	LO
06-Nov-19	15:47	0	read baseline	0	-12.611	BL
06-Nov-19	15:49	6	CCVL 500.0 ppb	44702	475.531	
06-Nov-19	15:51	8	CCV 2500.0 ppb	204195	2620.994	
06-Nov-19	15:53	12	CCB	-4599	-60.017	LO
06-Nov-19	15:55	0	read baseline	0	-12.611	BL
06-Nov-19	15:57	86	280-129990-c-5	220393	5748.359	
06-Nov-19	16:03	0	rinse	-48	-13.105	LO
06-Nov-19	16:05	0	read baseline	0	-12.611	BL
06-Nov-19	16:07	6	CCVL 500.0 ppb	44637	474.790	
06-Nov-19	16:09	8	CCV 2500.0 ppb	198956	2540.502	
06-Nov-19	16:11	12	CCB	-5215	-66.327	LO
06-Nov-19	16:13	0	read baseline	0	-12.611	BL

Peak Table:Ammonia

File name: C:\FLOW_4\110619.RST
Date: 06-Nov-19
Operator: bwh

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	5	Sync	1	SYNC	1	1	10381	96.335503	
2	0	blk	1	CO	1	1	318	-9.317984	LO
B	0	Read Baseline	1	RB	1	1	0	-12.610562	BL
4	1	Cal 0.0 PPB	1	C	1	1	1109	-1.101110	LO UM
5	3	Cal 25.0 ppb	1	C	1	1	3440	23.193125	
6	4	Cal 50.0 ppb	1	C	1	1	5597	45.791584	
7	5	Cal 100.0 ppb	1	C	1	1	10280	95.258751	
8	6	Cal 500.0 ppb	1	C	1	1	50298	540.127319	
9	7	Cal 1000.0 ppb	1	C	1	1	88042	996.118164	
10	8	Cal 2500.0 ppb	1	C	1	1	195217	2483.475830	
11	9	Cal 5000.0 ppb	1	C	1	1	343168	5004.741699	
12	0	blank	1	BLNK	1	1	-10570	-120.794289	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
14	10	ICVL 500.0 ppb	1	U	1	1	48429	518.470886	
15	11	ICV 2500.0 ppb	1	U	1	1	198315	2530.700684	
16	12	ICB	1	U	1	1	-4731	-61.368443	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
18	8	LCS	1	U	1	1	197689	2521.136719	
19	8	LCSD	1	U	1	1	198645	2535.751465	
20	12	MB	1	U	1	1	-4778	-61.858799	LO
21	13	280-129857-c-3	1	U	1	1	15349	149.408356	
22	14	MS 280-129857-c-3	1	U	1	1	106472	1231.608276	
23	15	MSD 280-129857-c-3	1	U	1	1	103144	1188.460815	
24	16	280-129857-c-4	1	U	1	1	102182	1176.033447	
25	17	280-129857-c-5	1	U	1	1	94913	1082.924072	
26	18	680-176048-a-1	1	U	1	1	118863	1394.661255	
27	19	680-176048-a-3	1	U	1	1	566	-6.737254	LO
28	20	680-176048-a-4	1	U	1	1	5130	40.893505	
29	21	280-130066-g-1	1	U	10	1	24222	2457.366699	
30	22	280-129965-l-6	1	U	1	1	74914	833.507263	
31	0	rinse	1	U	1	1	-2712	-40.634083	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
33	6	CCVL 500.0 ppb	1	U	1	1	49167	527.012146	
34	8	CCV 2500.0 ppb	1	U	1	1	200621	2566.019043	
35	12	CCB	1	U	1	1	-4435	-58.339813	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
37	23	280-129965-l-5	1	U	1	1	5452	44.276375	
38	24	280-129965-l-4	1	U	1	1	-122	-13.870750	LO
39	25	280-129965-l-3	1	U	1	1	4424	33.484726	
40	26	MS 280-129965-l-3	1	U	1	1	96516	1103.343994	
41	27	MSD 280-129965-l-3	1	U	1	1	89913	1019.635315	
42	28	280-130157-b-1	1	U	1	1	115	-11.417693	LO
43	29	280-129936-c-1	1	U	1	1	1910	7.230513	
44	30	280-129936-c-2	1	U	1	1	12075	114.360283	
45	31	280-129936-c-3	1	U	1	1	62	-11.968334	LO
46	32	280-129936-c-4	1	U	1	1	110904	1289.493042	
47	0	rinse	1	U	1	1	-3254	-46.205479	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
49	6	CCVL 500.0 ppb	1	U	1	1	50090	537.717773	
50	8	CCV 2500.0 ppb	1	U	1	1	199750	2552.664307	
51	12	CCB	1	U	1	1	-4614	-60.172550	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
53	33	280-129936-c-5	1	U	1	1	188289	2378.718506	
54	34	280-129936-c-6	1	U	1	1	12629	120.274284	
55	35	280-129936-c-7	1	U	1	1	49544	531.380615	
56	36	280-129936-c-8 X	1	U	1	1	344180	5023.862305	
57	8	LCS	1	U	1	1	196167	2497.929443	
58	8	LCSD	1	U	1	1	191777	2431.306152	
59	12	MB	1	U	1	1	-4364	-57.608654	LO
60	37	280-129936-c-9	1	U	1	1	1144	-0.734091	LO
61	38	MS 280-129936-c-9	1	U	1	1	94045	1071.895630	
62	39	MSD 280-129936-c-9	1	U	1	1	90741	1030.076416	
63	0	rinse	1	U	1	1	-2633	-39.812710	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
65	6	CCVL 500.0 ppb	1	U	1	1	46449	495.615448	
66	8	CCV 2500.0 ppb	1	U	1	1	199300	2545.770020	
67	12	CCB	1	U	1	1	-4293	-56.877853	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
69	40	280-129936-c-10	1	U	1	1	742	-4.913116	LO
70	41	280-129936-c-11	1	U	1	1	3545	24.286663	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	42	280-129936-c-12	1	U	1	1	25901	264.191193	
72	43	280-129936-c-13	1	U	1	1	6599	56.334141	
73	44	280-129936-c-14	1	U	1	1	192	-10.622737	LO
74	45	280-129936-c-15	1	U	1	1	7294	63.655922	
75	46	280-129974-d-2	1	U	1	1	-220	-14.887381	LO
76	47	280-129974-d-4	1	U	1	1	922	-3.040112	LO
77	48	MS 280-129974-d-4	1	U	1	1	92629	1053.934448	
78	49	MSD 280-129974-d-4	1	U	1	1	90050	1021.358093	
79	0	rinse	1	U	1	1	-2682	-40.325096	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
81	6	CCVL 500.0 ppb	1	U	1	1	48512	519.423767	
82	8	CCV 2500.0 ppb	1	U	1	1	195726	2491.221191	
83	12	CCB	1	U	1	1	-4690	-60.948856	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
85	50	280-129974-d-3	1	U	1	1	502	-7.406524	LO
86	51	280-129990-c-1	1	U	1	1	53	-12.059186	LO
87	52	280-129990-c-2	1	U	1	1	430	-8.154180	LO
88	53	280-129990-c-3	1	U	1	1	283	-9.671524	LO
89	54	280-129990-c-4	1	U	1	1	14890	144.486557	
90	55	280-129990-c-5 X	1	U	1	1	367340	5468.257324	
91	56	280-129990-c-6	1	U	1	1	54687	591.339966	
92	57	280-129990-c-7	1	U	1	1	-1676	-29.948792	LO
93	58	280-129990-c-8	1	U	1	1	275336	3781.412598	
94	59	280-129990-c-9	1	U	1	1	272532	3733.307617	
95	0	rinse	1	U	1	1	-8470	-99.516121	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
97	6	CCVL 500.0 ppb	1	U	1	1	45729	487.325165	
98	8	CCV 2500.0 ppb	1	U	1	1	202514	2595.099854	
99	12	CCB	1	U	1	1	-4438	-58.368927	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
101	60	280-129990-c-10	1	U	1	1	3964	28.678566	
102	8	LCS	1	U	1	1	195126	2482.098633	
103	8	LCSD	1	U	1	1	196007	2495.501953	
104	12	MB	1	U	1	1	-4313	-57.082359	LO
105	61	280-129990-c-11	1	U	1	1	1558	3.566602	
106	62	MS 280-129990-c-11	1	U	1	1	93765	1068.342896	
107	63	MSD 280-129990-c-11	1	U	1	1	91144	1035.158447	
108	64	280-129990-c-12	1	U	1	1	-1935	-32.625671	LO
109	65	280-129990-c-13	1	U	1	1	2168	9.923516	
110	0	rinse	1	U	1	1	-97	-13.616671	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
112	6	CCVL 500.0 ppb	1	U	1	1	45981	490.224426	
113	8	CCV 2500.0 ppb	1	U	1	1	204263	2622.051758	
114	12	CCB	1	U	1	1	-4590	-59.926750	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
116	66	280-129990-c-14	1	U	1	1	898	-3.296066	LO
117	67	280-129990-c-15	1	U	1	1	93381	1063.472656	
118	68	280-129992-b-1	1	U	1	1	3837	27.341965	
119	69	280-129992-a-2	1	U	1	1	2221	10.469234	
120	70	280-129992-a-4	1	U	1	1	440	-8.046155	LO
121	71	280-129992-a-5	1	U	1	1	478	-7.650853	LO
122	72	280-129992-b-6	1	U	1	1	993	-2.303275	LO
123	73	280-129915-l-4	1	U	1	1	584	-6.556267	LO
124	74	MS 280-129915-l-4	1	U	1	1	90168	1022.847107	
125	75	MSD 280-129915-l-4	1	U	1	1	90429	1026.145264	
126	0	rinse	1	U	1	1	-2624	-39.727062	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
128	6	CCVL 500.0 ppb	1	U	1	1	44348	471.475281	
129	8	CCV 2500.0 ppb	1	U	1	1	204082	2619.258057	
130	12	CCB	1	U	1	1	-4411	-58.094990	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
132	76	280-129992-b-9	1	U	1	1	851	-3.777638	LO
133	77	280-129992-b-10	1	U	1	1	442	-8.023331	LO
134	78	280-130068-a-2	1	U	1	1	989	-2.347541	LO
135	79	280-130068-a-3	1	U	1	1	813	-4.179743	LO
136	80	280-130068-a-4	1	U	1	1	440	-8.044169	LO
137	81	280-130068-a-7	1	U	1	1	537	-7.041781	LO
138	82	280-130068-a-8	1	U	1	1	2894	17.491096	
139	83	280-130068-a-9	1	U	1	1	960	-2.653116	LO
140	84	280-130068-a-11	1	U	1	1	1500	2.964771	
141	85	280-129936-c-8	1	U	2	1	48271	1033.278442	
142	0	rinse	1	U	1	1	-1484	-27.961294	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
144	6	CCVL 500.0 ppb	1	U	1	1	44702	475.530823	
145	8	CCV 2500.0 ppb	1	U	1	1	204195	2620.993652	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
146	12	CCB	1	U	1	1	-4599	-60.016590	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
148	86	280-129990-c-5	1	U	2	1	220393	5748.359375	
149	0	rinse	1	U	1	1	-48	-13.105225	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL
151	6	CCVL 500.0 ppb	1	U	1	1	44637	474.790039	
152	8	CCV 2500.0 ppb	1	U	1	1	198956	2540.501709	
153	12	CCB	1	U	1	1	-5215	-66.326981	LO
B	0	read baseline	1	RB	1	1	0	-12.610562	BL

Ammonia:Calibration 1: Peak 4-154

File name: C:\FLOW_4\110619.RST
Date: 06-Nov-19
Operator: bwh

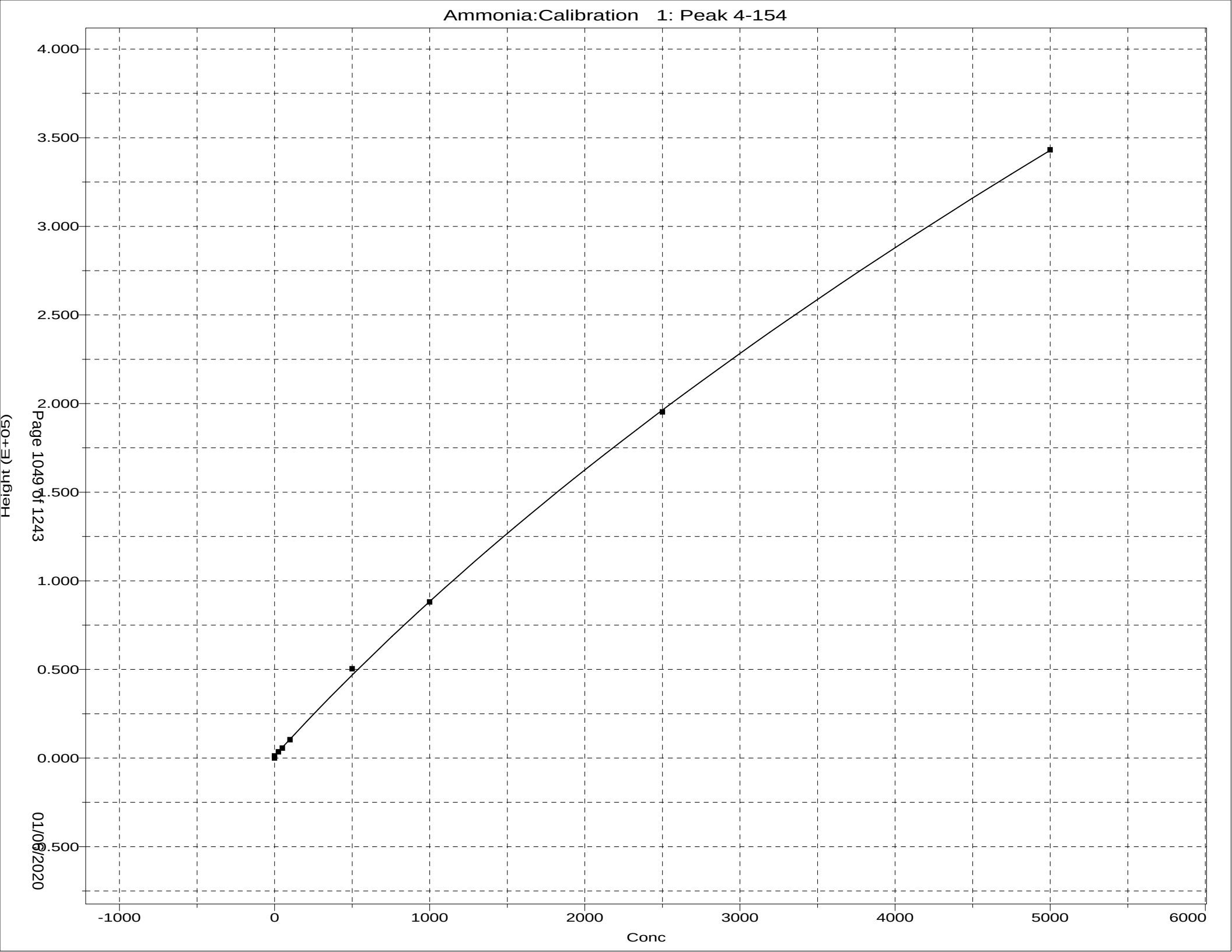
*	Name	Conc	Height
*	Cal 0.0 PPB	0.000000	1108.871948
*	Cal 25.0 ppb	25.000000	3439.907959
*	Cal 50.0 ppb	50.000000	5596.718750
*	Cal 100.0 ppb	100.000000	10279.985352
*	Cal 500.0 ppb	500.000000	50297.707031
*	Cal 1000.0 ppb	1000.000000	88042.226562
*	Cal 2500.0 ppb	2500.000000	195217.062500
*	Cal 5000.0 ppb	5000.000000	343168.093750

Calib Coef:
x=cyy+by+a
a: (intercept) -1.2611e+01
b: 1.0366e-02
c: 1.2399e-08

Corr Coef: 0.999954

Carryover: 3.06%

No Drift Peaks


Ammonia:Calibration 1: Peak 4-154
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3.000
2.500
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1.500
1.000
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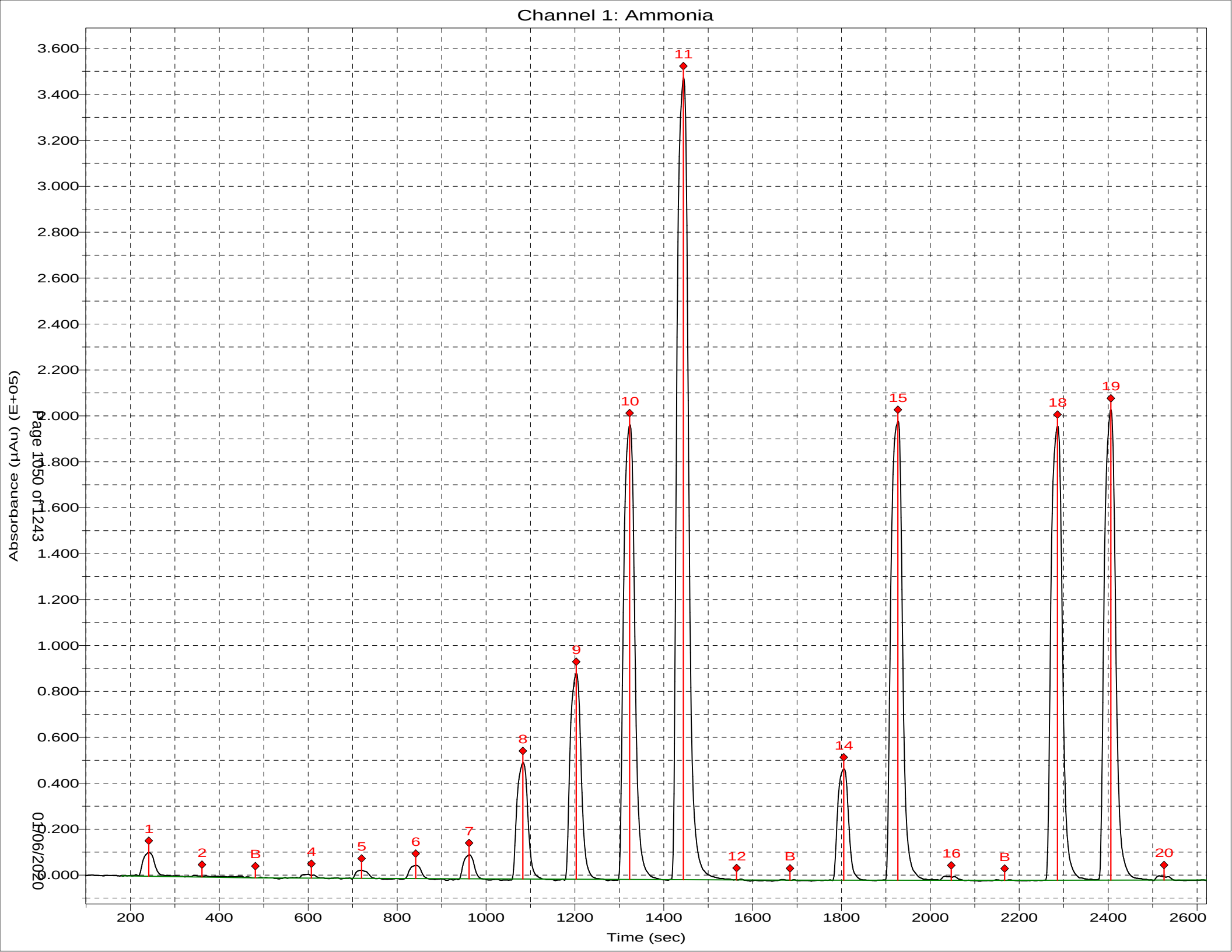
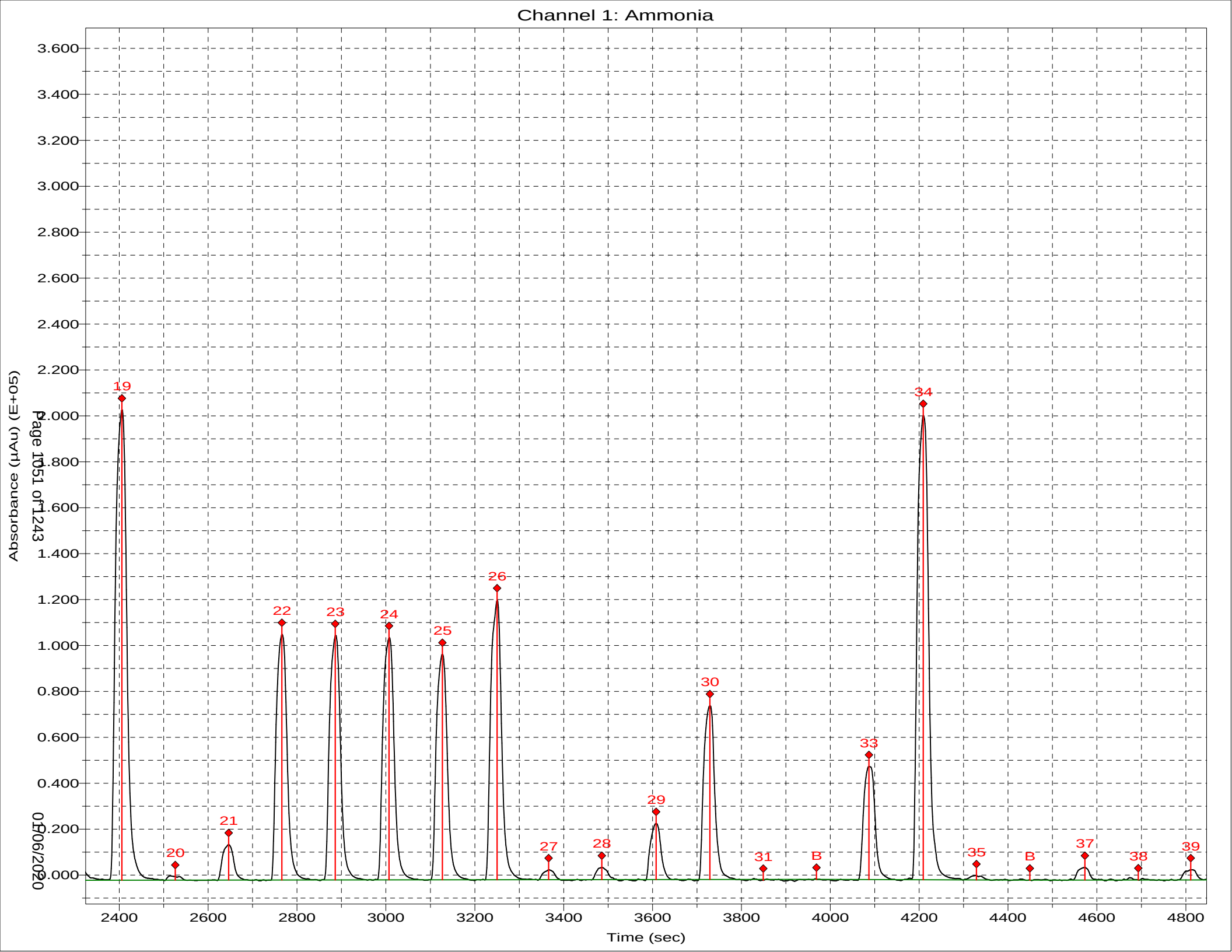
0.000
-0.500
Height (E+05)
-1000
0
1000
2000
3000
4000
5000
6000
Conc


Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec)
Page 1050 of 1243
01/06/2020
1
2
B
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20


Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec)
Page 1051 of 1243
01/06/2020
19
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26
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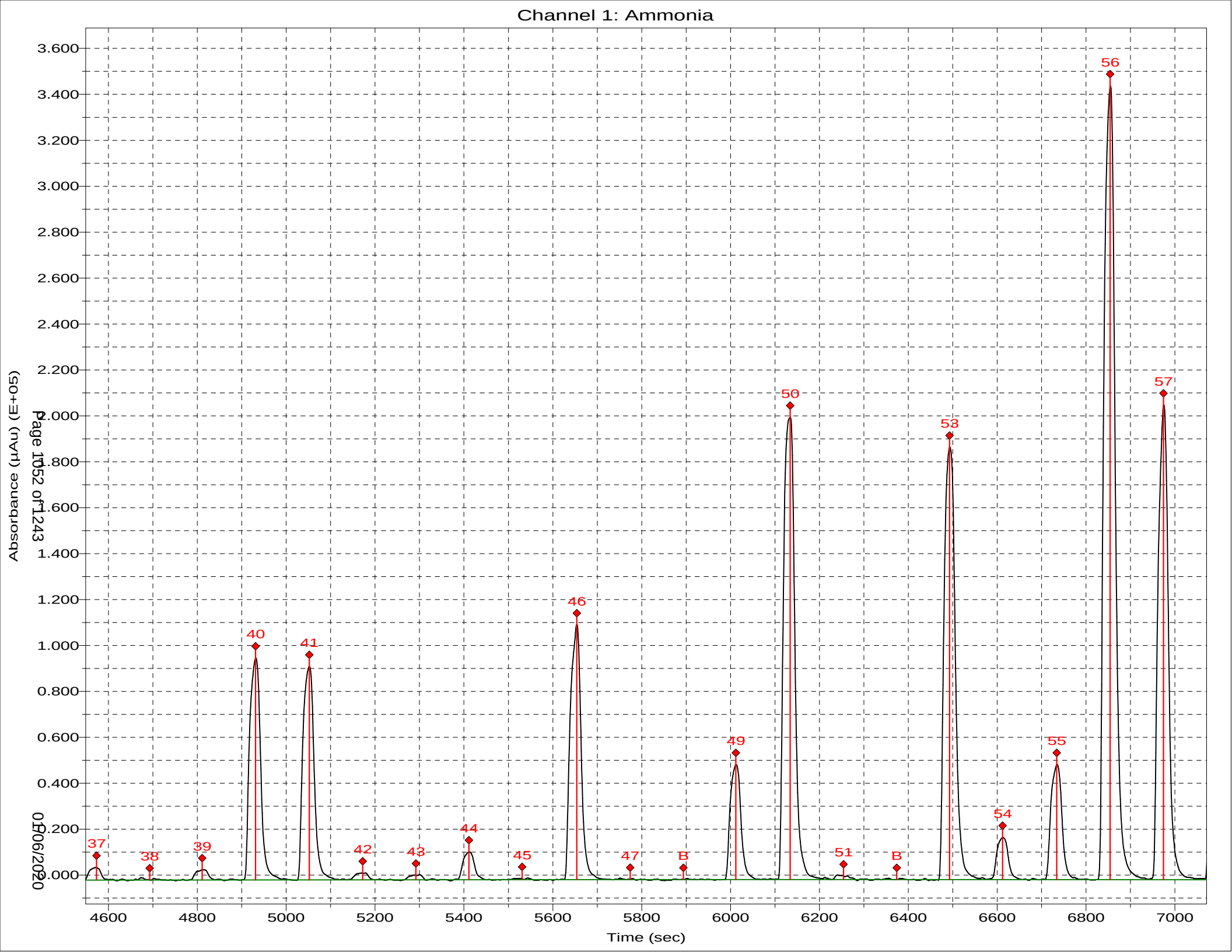
28
29
30
31
B
33
34
35
B
37
38
39


Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec)
Page 1052 of 1243
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2.000
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1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
7000
37
38
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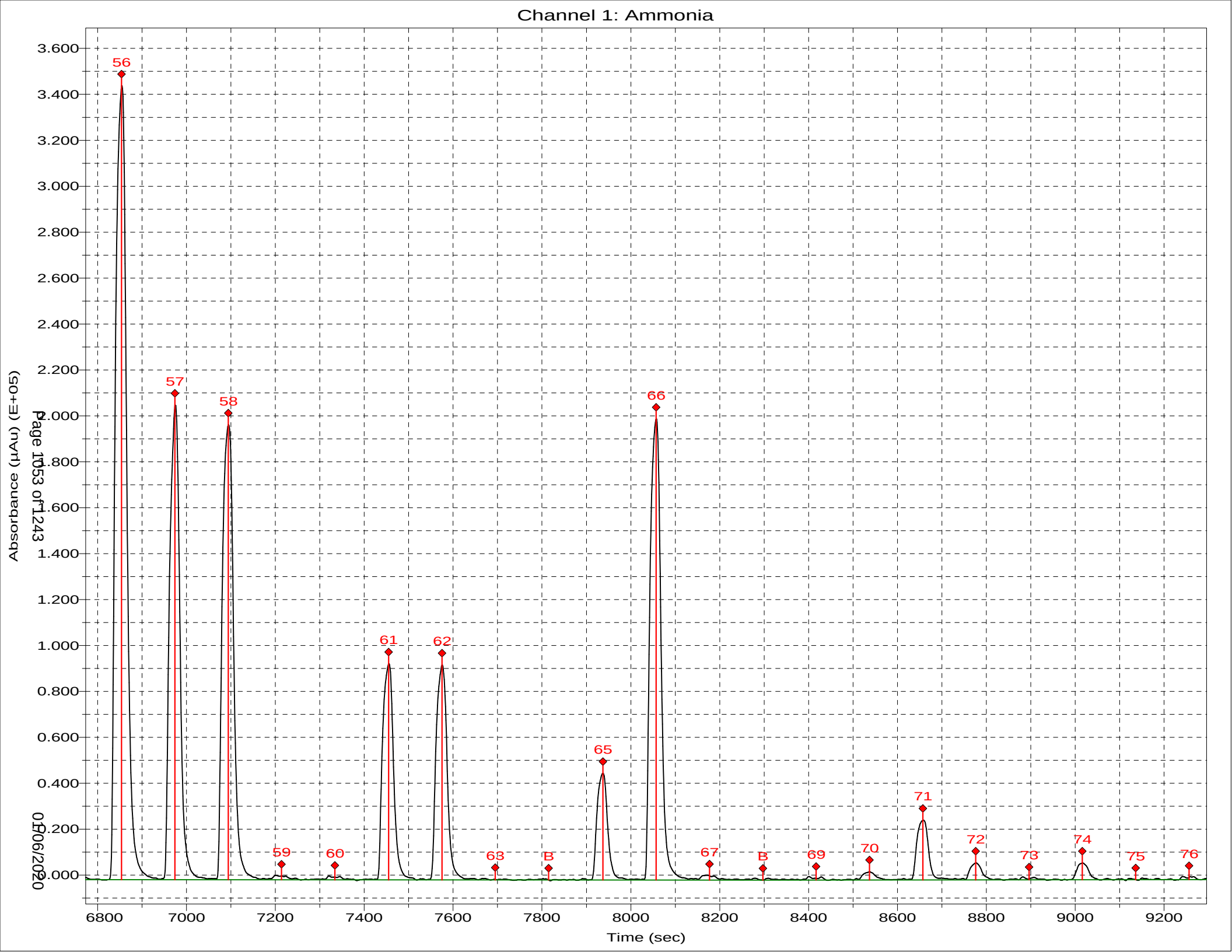
43
44
45
46
47
B
49
50
51
B
53
54
55
56
57


Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec)
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58
59
60
61
62
63
B
65
66
67
B
69
70
71
72
73
74
75
76
3.600
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
6800
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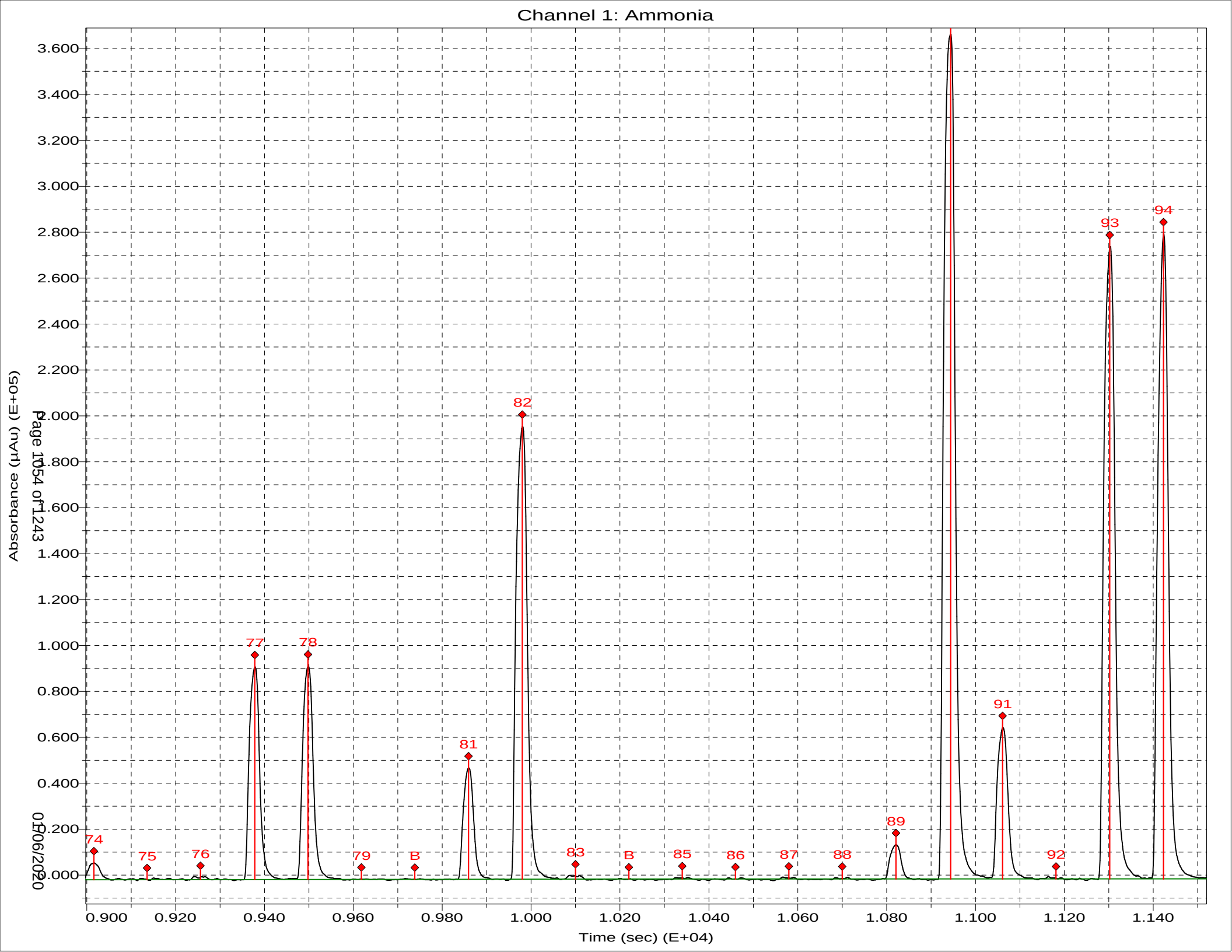
7800
8000
8200
8400
8600
8800
9000
9200
Page 1053 of 1243
01/06/2020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Absorbance (µAu) (E+05)
Time (sec) (E+04)
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2.200
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1.800
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1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
1.080
1.100
1.120
1.140
74
75
76
77
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79
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81
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B
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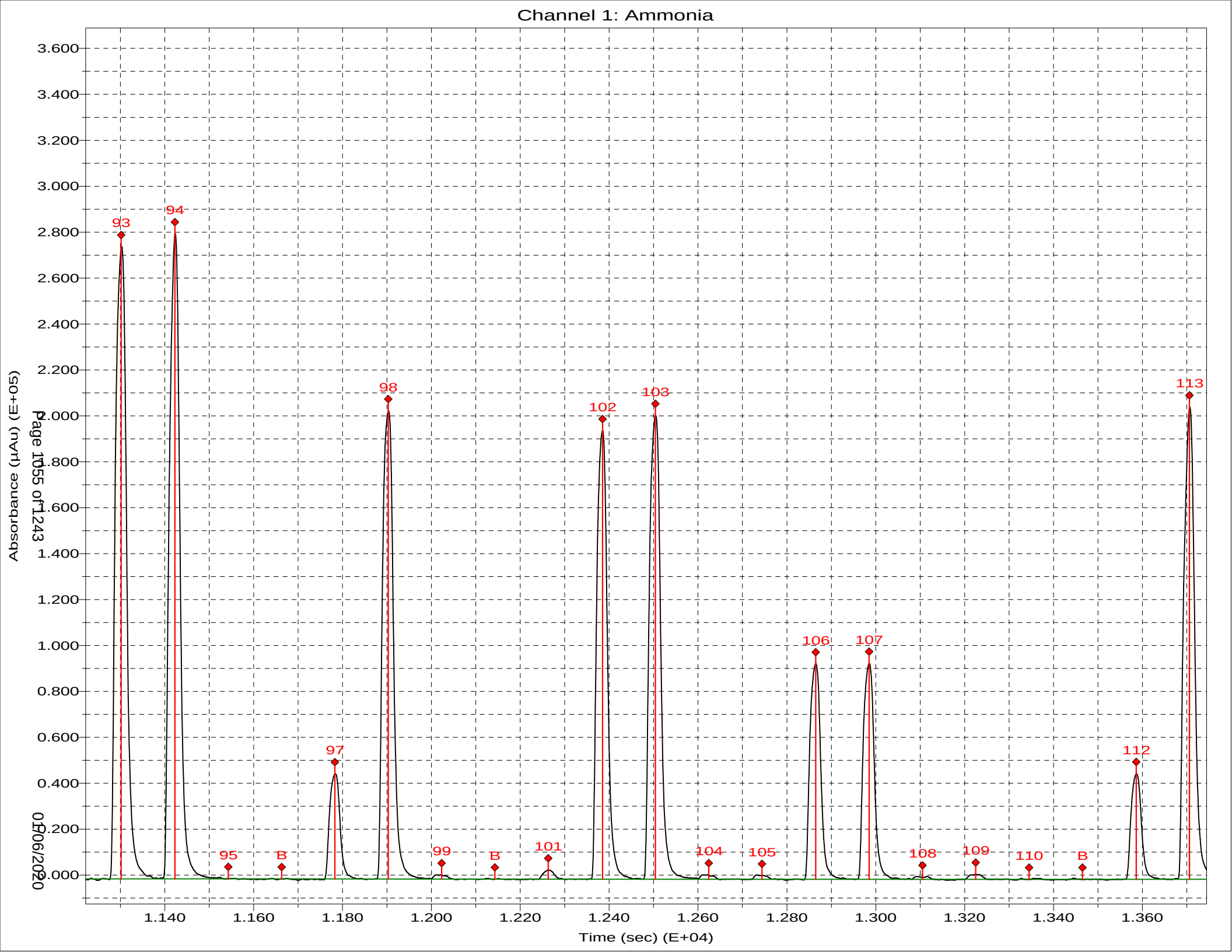
92
93
94
Page 1054 of 1243
01/06/2020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Absorbance (µAu) (E+05)
Time (sec) (E+04)
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2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
1.140
1.160
1.180
1.200
1.220
1.240
1.260
1.280
1.300
1.320
1.340
1.360
93
94
95
B
97
98
99
B
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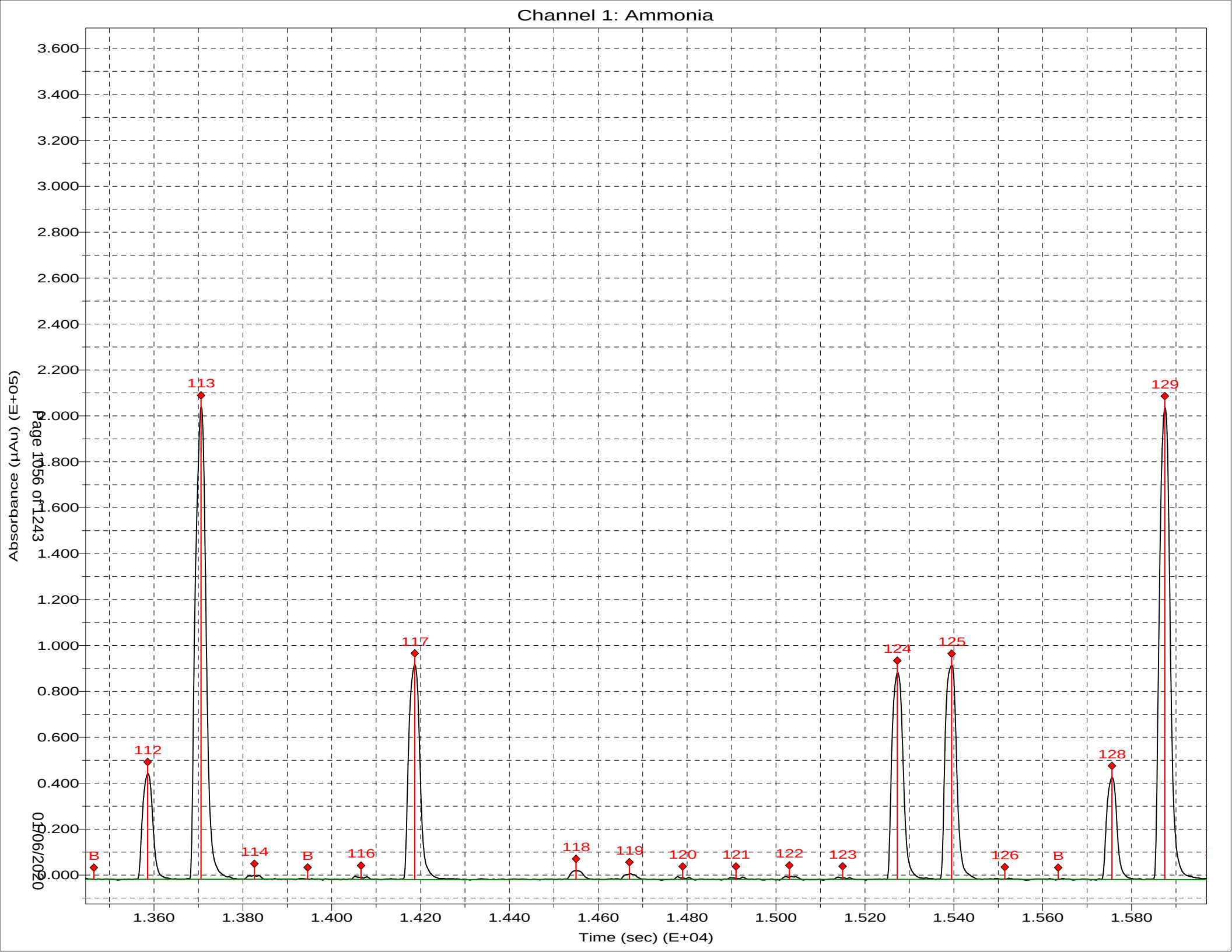
104
105
106
107
108
109
110
B
112
113
Page 1055 of 1243
01/06/2020


Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec) (E+04)
Page 1056 of 1243
01/06/2020
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3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
1.360
1.380
1.400
1.420
1.440
1.460
1.480
1.500
1.520
1.540
1.560
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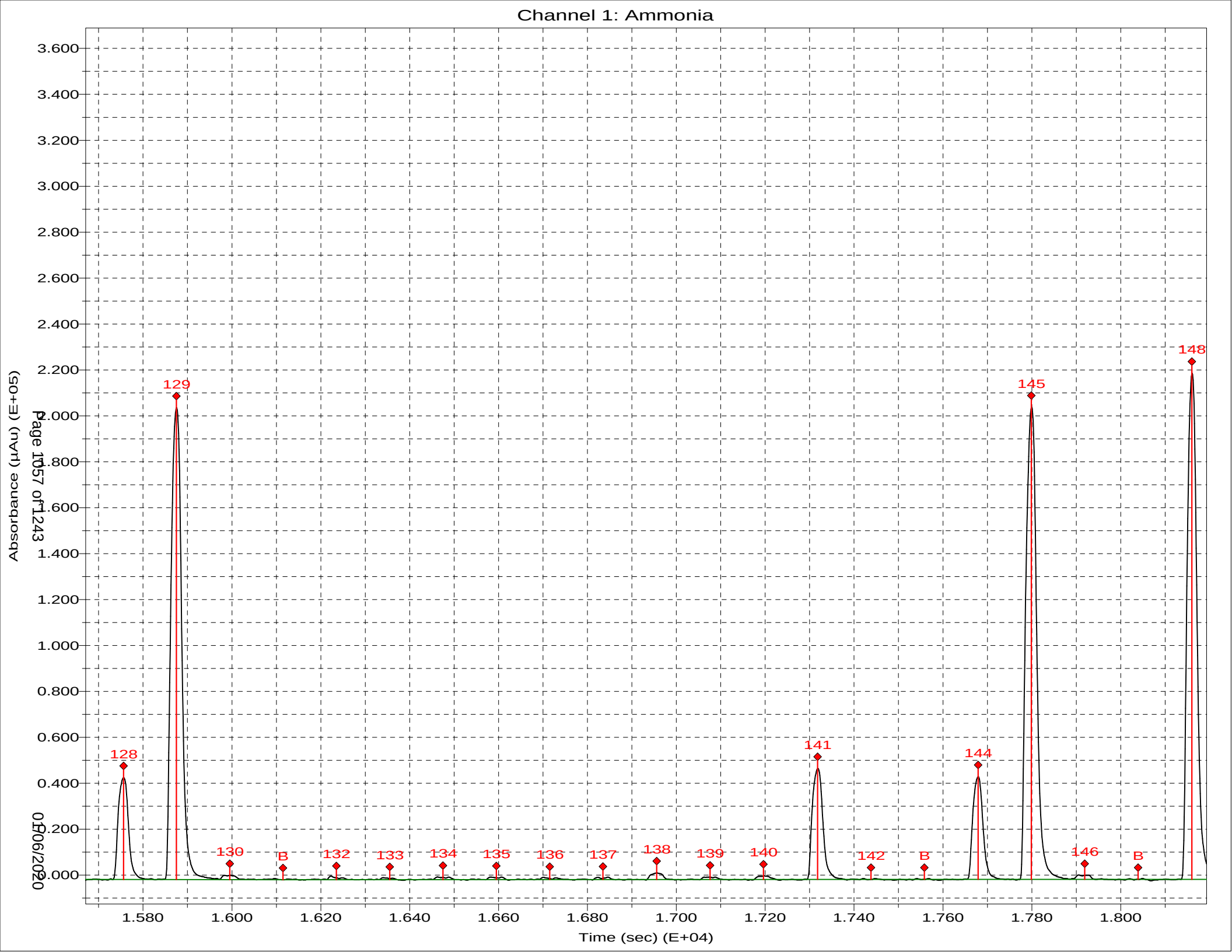
126
B
128
129


Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec) (E+04)
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1.000
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0.400
0.200
0.000
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1.600
1.620
1.640
1.660
1.680
1.700
1.720
1.740
1.760
1.780
1.800
128
129
130
B
132
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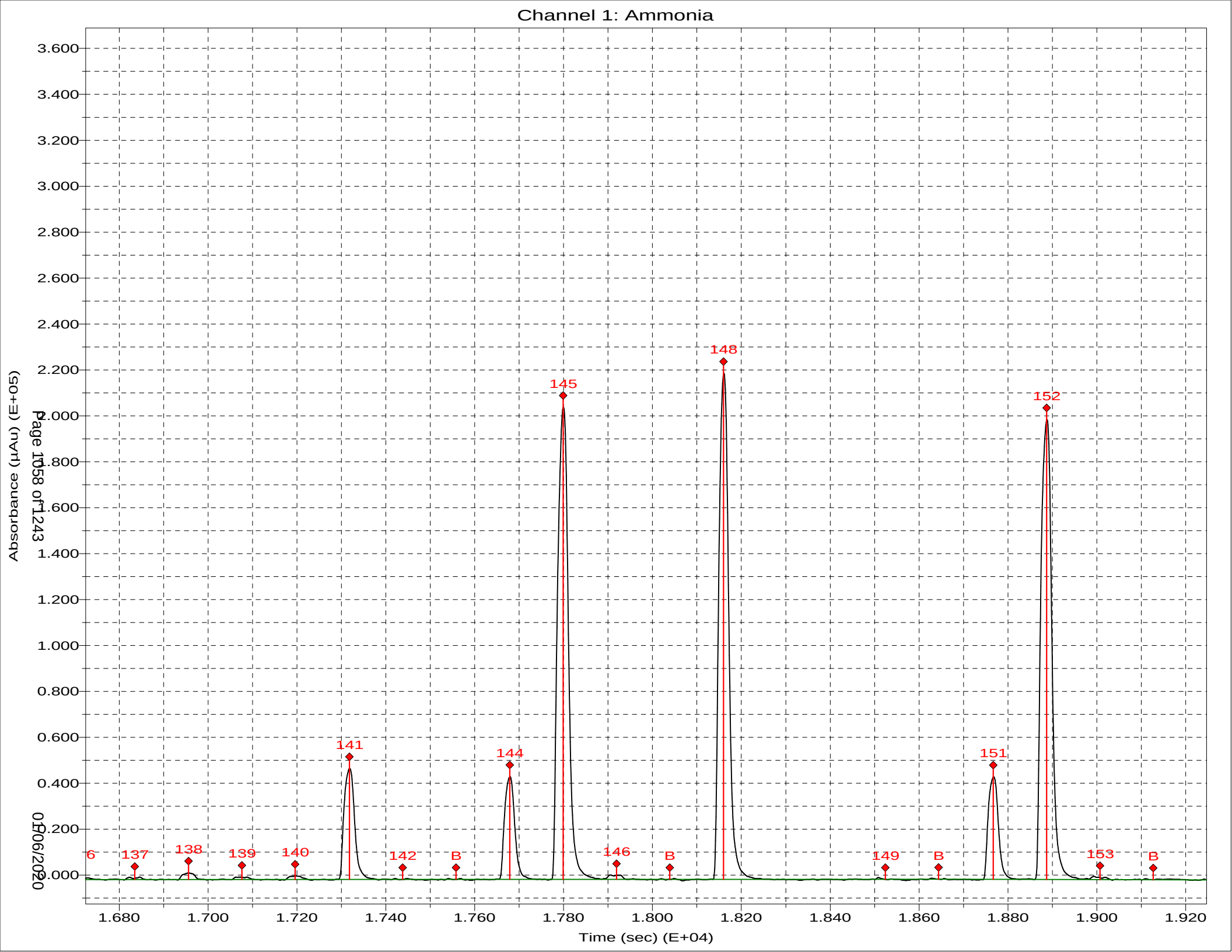
146
B
148
Page 1057 of 1243
01/06/2020


Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec) (E+04)
Page 1058 of 1243
01/06/2020
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2.000
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1.600
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1.200
1.000
0.800
0.600
0.400
0.200
0.000
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1.700
1.720
1.740
1.760
1.780
1.800
1.820
1.840
1.860
1.880
1.900
1.920
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137
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142
B
144
145
146
B
148
149
B
151
152
153
B

Sample Table for 110519

	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 280-474499/7-A	Unknown	4 ml
14	1:16	ICB 280-474499/8-A	Unknown	4 ml
15	1:17	LCS 280-476444/1-A	Unknown	4 ml
16	1:18	MB 280-476444/2-A	Unknown	4 ml
17	1:19	280-129931-B-11-B	Unknown	4 ml
18	1:20	280-129931-B-11-C M	Unknown	4 ml
19	1:21	280-129931-B-11-D M	Unknown	4 ml
20	1:22	w	Blank	4 ml
21	1:23	280-129931-B-12-B	Unknown	4 ml
22	1:24	280-129931-B-13-B	Unknown	4 ml
23	1:25	280-129931-B-14-D	Unknown	4 ml
24	1:26	280-130232-A-1-A	Unknown	4 ml
25	1:27	280-129990-B-1-A	Unknown	4 ml
26	1:28	280-129990-B-2-A	Unknown	4 ml
27	1:29	280-129990-B-3-A	Unknown	4 ml
28	1:30	w	Blank	4 ml
29	1:31	CCV 280-474499/9-A	Unknown	4 ml
30	1:32	CCB 280-474499/10-A	Unknown	4 ml
31	1:33	280-129990-B-4-A	Unknown	4 ml
32	1:34	280-129990-B-5-A	Unknown	4 ml
33	1:35	280-129990-B-6-A	Unknown	4 ml
34	1:36	280-129990-B-6-B MS	Unknown	4 ml
35	1:37	280-129990-B-6-C MS	Unknown	4 ml
36	1:38	w	Blank	4 ml
37	1:39	280-129990-B-7-A	Unknown	4 ml
38	1:40	280-129990-B-8-A	Unknown	4 ml
39	1:41	580-90002-A-2-A	Unknown	4 ml
40	1:42	580-90357-B-1-A	Unknown	4 ml
41	1:43	280-129936-C-1-A	Unknown	4 ml
42	1:44	w	Blank	4 ml
43	1:45	CCV 280-474499/9-A	Unknown	4 ml
44	1:46	CCB 280-474499/10-A	Unknown	4 ml

Sample Table for 110519

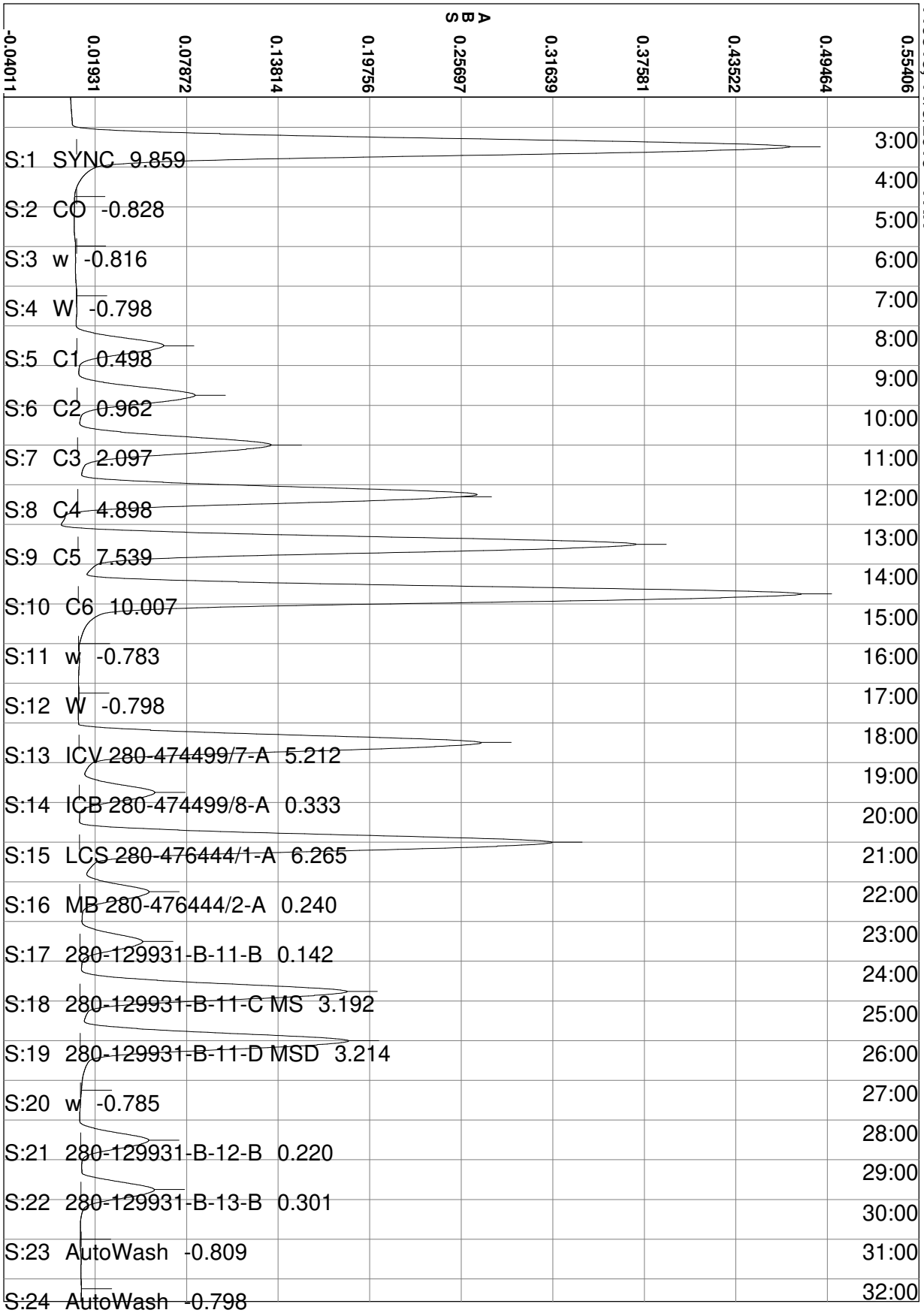
	Position	Identifier	Type	Cup Type
45	1:47	280-129936-C-2-A	Unknown	4 ml
46	1:48	280-129936-C-3-A	Unknown	4 ml
47	1:49	280-129936-C-4-A	Unknown	4 ml
48	1:50	280-129936-C-5-A	Unknown	4 ml
49	1:51	280-130232-A-1-A	Unknown	4 ml
50	1:52	LCS 280-476444/27-A	Unknown	4 ml
51	1:53	MB 280-476444/28-A	Unknown	4 ml
52	1:54	280-129936-C-9-B	Unknown	4 ml
53	1:55	280-129936-C-9-C MS	Unknown	4 ml
54	1:56	280-129936-C-9-D MS	Unknown	4 ml
55	1:57	580-90002-A-2-A	Unknown	4 ml
56	1:58	CCV 280-474499/9-A	Unknown	4 ml
57	1:59	CCB 280-474499/10-A	Unknown	4 ml
58	1:60	280-129936-C-7-A	Unknown	4 ml
59	2:1	280-129936-C-8-A	Unknown	4 ml
60	2:2	280-129936-C-6-D	Unknown	4 ml
61	2:3	280-129936-C-10-A	Unknown	4 ml
62	2:4	280-129936-C-11-A	Unknown	4 ml
63	2:5	280-129936-C-12-A	Unknown	4 ml
64	2:6	280-129936-C-13-A	Unknown	4 ml
65	2:7	280-129936-C-14-A	Unknown	4 ml
66	2:8	280-129936-C-15-A	Unknown	4 ml
67	2:9	w	Blank	4 ml
68	2:10	CCV 280-474499/9-A	Unknown	4 ml
69	2:11	CCB 280-474499/10-A	Unknown	4 ml
70	2:12	w	Blank	4 ml
71	2:13	w	Blank	4 ml
72	2:14	w	Blank	4 ml
73	2:15	w	Blank	4 ml

Run Name: 110519
Configuration: TKN
Run date: 11/5/2019

	Position	Identifier	Type	Comme	Date	Time	otal	TKN Cor Ht	mg/l
1	1:1	SYNC	SYNC	50;351.2	11/5/2019	8:02:37 PM	1	0.46227	9.859
2	1:2	CO	Carry over		11/5/2019	8:03:06 PM	1	-0.00133	-0.828
3	1:3	w	Blank		11/5/2019	8:04:21 PM	1	-0.00079	-0.816
4	1:4	W	Wash		11/5/2019	8:05:36 PM	1	0.00000	-0.798
5	1:5	C1	Calibrant		11/5/2019	8:06:51 PM	1	0.05619	0.498
6	1:6	C2	Calibrant		11/5/2019	8:08:06 PM	1	0.07633	0.962
7	1:7	C3	Calibrant		11/5/2019	8:09:21 PM	1	0.12556	2.097
8	1:8	C4	Calibrant		11/5/2019	8:10:36 PM	1	0.24704	4.898
9	1:9	C5	Calibrant		11/5/2019	8:11:51 PM	1	0.36160	7.539
10	1:10	C6	Calibrant		11/5/2019	8:13:07 PM	1	0.46865	10.007
		Curve #:							1
		Curve Type:							Linear
		Correlation:							0.99985
		Intercept:							0.034596
		Linear coef:							0.043377
11	1:13	w	Blank		11/5/2019	8:14:22 PM	1	0.00062	-0.783
12	1:14	W	Wash		11/5/2019	8:15:37 PM	1	0.00000	-0.798
13	1:15	ICV 280-474499/7-A	Unknown		11/5/2019	8:16:52 PM	1	0.26066	5.212
14	1:16	ICB 280-474499/8-A	Unknown		11/5/2019	8:18:07 PM	1	0.04902	0.333
15	1:17	LCS 280-476444/1-A	Unknown		11/5/2019	8:19:22 PM	1	0.30636	6.265
16	1:18	MB 280-476444/2-A	Unknown		11/5/2019	8:20:37 PM	1	0.04499	0.240
17	1:19	280-129931-B-11-B	Unknown		11/5/2019	8:21:52 PM	1	0.04074	0.142
18	1:20	280-129931-B-11-C MS	Unknown		11/5/2019	8:23:07 PM	1	0.17306	3.192
19	1:21	280-129931-B-11-D MSD	Unknown		11/5/2019	8:24:22 PM	1	0.17400	3.214
20	1:22	w	Blank		11/5/2019	8:25:37 PM	1	0.00056	-0.785
21	1:23	280-129931-B-12-B	Unknown		11/5/2019	8:26:52 PM	1	0.04416	0.220
22	1:24	280-129931-B-13-B	Unknown		11/5/2019	8:28:06 PM	1	0.04764	0.301
23	0	AutoWash	AutoWash		11/5/2019	8:29:21 PM	1	-0.00050	-0.809
24	0	AutoWash	AutoWash		11/5/2019	8:30:36 PM	1	0.00000	-0.798
25	1:25	280-129931-B-14-D	Unknown		11/5/2019	8:31:51 PM	1	0.04938	0.341
26	1:26	280-130232-A-1-A	Unknown		11/5/2019	8:33:06 PM	1	0.51605	11.099
27	1:27	280-129990-B-1-A	Unknown		11/5/2019	8:34:21 PM	1	0.04092	0.146
28	1:28	280-129990-B-2-A	Unknown		11/5/2019	8:35:36 PM	1	0.02729	-0.169
29	1:29	280-129990-B-3-A	Unknown		11/5/2019	8:36:51 PM	1	0.03943	0.112
30	1:30	w	Blank		11/5/2019	8:38:06 PM	1	0.00185	-0.755
31	1:31	CCV 280-474499/9-A	Unknown		11/5/2019	8:39:21 PM	1	0.23211	4.553
32	1:32	CCB 280-474499/10-A	Unknown		11/5/2019	8:40:36 PM	1	0.04481	0.235
33	1:33	280-129990-B-4-A	Unknown		11/5/2019	8:41:51 PM	1	0.04016	0.128
34	1:34	280-129990-B-5-A	Unknown		11/5/2019	8:43:06 PM	1	0.24726	4.903
35	0	AutoWash	AutoWash		11/5/2019	8:44:21 PM	1	0.00048	-0.787
36	0	AutoWash	AutoWash		11/5/2019	8:45:36 PM	1	0.00000	-0.798
37	1:35	280-129990-B-6-A	Unknown		11/5/2019	8:46:51 PM	1	0.07839	1.010
38	1:36	280-129990-B-6-B MS	Unknown		11/5/2019	8:48:06 PM	1	0.19184	3.625

	Position	Identifier	Type	Comme	Date	Time	otal	Cor Ht	TKN mg/l
39	1:37	280-129990-B-6-C MSD	Unknown		11/5/2019	8:49:21 PM	1	0.19500	3.698
40	1:38	w	Blank		11/5/2019	8:50:37 PM	1	0.00022	-0.792
41	1:39	280-129990-B-7-A	Unknown		11/5/2019	8:51:52 PM	1	0.01602	-0.428
42	1:40	280-129990-B-8-A	Unknown		11/5/2019	8:53:07 PM	1	0.18711	3.516
43	1:41	580-90002-A-2-A	Unknown		11/5/2019	8:54:22 PM	20	0.07603	19.106
44	1:42	580-90357-B-1-A	Unknown		11/5/2019	8:55:37 PM	1	0.02723	-0.170
45	1:43	280-129936-C-1-A	Unknown		11/5/2019	8:56:52 PM	1	0.02367	-0.252
46	1:44	w	Blank		11/5/2019	8:58:07 PM	1	0.00048	-0.787
47	0	AutoWash	AutoWash		11/5/2019	8:59:22 PM	1	0.00087	-0.777
48	0	AutoWash	AutoWash		11/5/2019	9:00:36 PM	1	0.00000	-0.798
49	1:45	CCV 280-474499/9-A	Unknown		11/5/2019	9:01:51 PM	1	0.22988	4.502
50	1:46	CCB 280-474499/10-A	Unknown		11/5/2019	9:03:06 PM	1	0.04415	0.220
51	1:47	280-129936-C-2-A	Unknown		11/5/2019	9:04:21 PM	1	0.02642	-0.188
52	1:48	280-129936-C-3-A	Unknown		11/5/2019	9:05:36 PM	1	0.02606	-0.197
53	1:49	280-129936-C-4-A	Unknown		11/5/2019	9:06:51 PM	1	0.04208	0.173
54	1:50	280-129936-C-5-A	Unknown		11/5/2019	9:08:06 PM	1	0.13850	2.395
55	1:51	280-130232-A-1-A	Unknown		11/5/2019	9:09:21 PM	2	0.29293	11.911
56	1:52	LCS 280-476444/27-A	Unknown		11/5/2019	9:10:36 PM	1	0.30694	6.278
57	1:53	MB 280-476444/28-A	Unknown		11/5/2019	9:11:51 PM	1	0.04603	0.264
58	1:54	280-129936-C-9-B	Unknown		11/5/2019	9:13:06 PM	1	0.02540	-0.212
59	0	AutoWash	AutoWash		11/5/2019	9:14:21 PM	1	-0.00020	-0.802
60	0	AutoWash	AutoWash		11/5/2019	9:15:36 PM	1	0.00000	-0.798
61	1:55	280-129936-C-9-C MS	Unknown		11/5/2019	9:16:51 PM	1	0.11182	1.780
62	1:56	280-129936-C-9-D MSD	Unknown		11/5/2019	9:18:06 PM	1	0.10914	1.719
63	1:57	580-90002-A-2-A	Unknown		11/5/2019	9:19:21 PM	5	0.18149	16.933
64	1:58	CCV 280-474499/9-A	Unknown		11/5/2019	9:20:36 PM	1	0.23611	4.646
65	1:59	CCB 280-474499/10-A	Unknown		11/5/2019	9:21:51 PM	1	0.04660	0.277
66	1:60	280-129936-C-7-A	Unknown		11/5/2019	9:23:06 PM	1	0.02607	-0.196
67	2:1	280-129936-C-8-A	Unknown		11/5/2019	9:24:22 PM	1	0.25994	5.195
68	2:2	280-129936-C-6-D	Unknown		11/5/2019	9:25:37 PM	1	0.04131	0.155
69	2:3	280-129936-C-10-A	Unknown		11/5/2019	9:26:52 PM	1	0.07674	0.972
70	2:4	280-129936-C-11-A	Unknown		11/5/2019	9:28:07 PM	1	0.06287	0.652
71	0	AutoWash	AutoWash		11/5/2019	9:29:22 PM	1	0.00093	-0.776
72	0	AutoWash	AutoWash		11/5/2019	9:30:37 PM	1	0.00000	-0.798
73	2:5	280-129936-C-12-A	Unknown		11/5/2019	9:31:52 PM	1	0.06190	0.629
74	2:6	280-129936-C-13-A	Unknown		11/5/2019	9:33:07 PM	1	0.07438	0.917
75	2:7	280-129936-C-14-A	Unknown		11/5/2019	9:34:21 PM	1	0.06765	0.762
76	2:8	280-129936-C-15-A	Unknown		11/5/2019	9:35:36 PM	1	0.04540	0.249
77	2:9	w	Blank		11/5/2019	9:36:51 PM	1	0.00142	-0.765
78	2:10	CCV 280-474499/9-A	Unknown		11/5/2019	9:38:06 PM	1	0.24011	4.738
79	2:11	CCB 280-474499/10-A	Unknown		11/5/2019	9:39:21 PM	1	0.04549	0.251
80	2:12	w	Blank		11/5/2019	9:40:36 PM	1	0.00069	-0.782
81	2:13	w	Blank		11/5/2019	9:41:51 PM	1	0.00006	-0.796
82	2:14	w	Blank		11/5/2019	9:43:06 PM	1	0.00037	-0.789
83	0	AutoWash	AutoWash		11/5/2019	9:44:21 PM	1	0.00008	-0.796
84	0	AutoWash	AutoWash		11/5/2019	9:45:36 PM	1	0.00000	-0.798
85	2:15	w	Blank		11/5/2019	9:46:51 PM	1	-0.00075	-0.815
86	0	AutoWash	AutoWash		11/5/2019	9:48:06 PM	1	-0.00089	-0.818

	Position	Identifier	Type	Comme	Date	Time	otal	Cor Ht	TKN mg/l
87	0	AutoWash	AutoWash		11/5/2019	9:49:21 PM	1	0.00000	-0.798


110519, 11/5/2019 - TKN
ABS
-0.04011
0.01931
0.07872
0.13814
0.19756
0.25697
0.31639
0.37581
0.43522
0.49464
0.55406
S:1 SYNC 9.859
S:2 CO -0.828
S:3 w -0.816
S:4 W -0.798
S:5 C1 0.498
S:6 C2 0.962
S:7 C3 2.097
S:8 C4 4.898
S:9 C5 7.539
S:10 C6 10.007
S:11 w -0.783
S:12 W -0.798
S:13 ICV 280-474499/7-A 5.212
S:14 ICB 280-474499/8-A 0.333
S:15 LCS 280-476444/1-A 6.265
S:16 MB 280-476444/2-A 0.240
S:17 280-129931-B-11-B 0.142
S:18 280-129931-B-11-C MS 3.192
S:19 280-129931-B-11-D MSD 3.214
S:20 w -0.785
S:21 280-129931-B-12-B 0.220
S:22 280-129931-B-13-B 0.301
S:23 AutoWash -0.809
S:24 AutoWash -0.798
3:00
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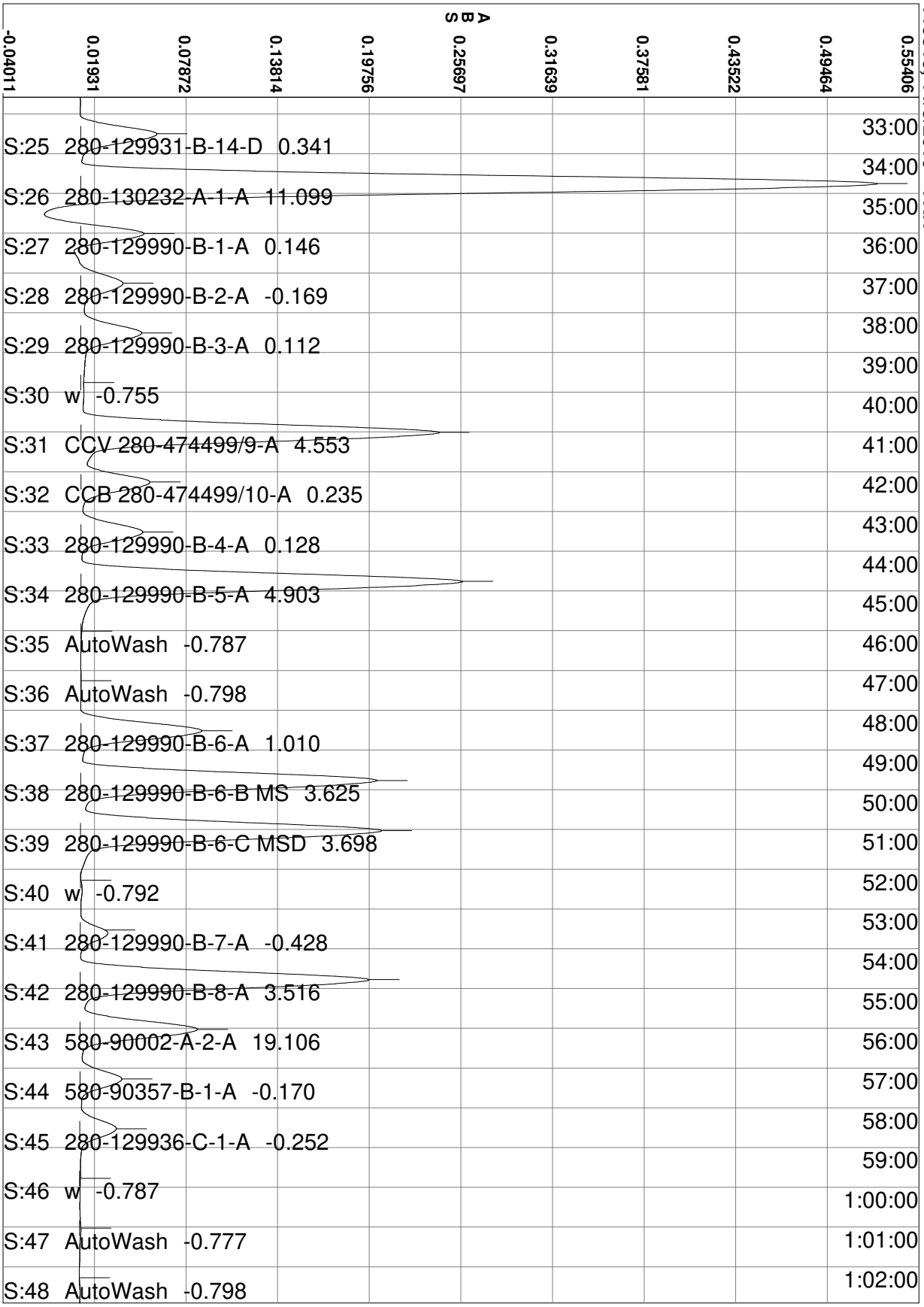
110519, 11/5/2019 - TKN
ABS
-0.04011
0.01931
0.07872
0.13814
0.19756
0.25697
0.31639
0.37581
0.43522
0.49464
0.55406
S:25 280-129931-B-14-D 0.341
S:26 280-130232-A-1-A 11.099
S:27 280-129990-B-1-A 0.146
S:28 280-129990-B-2-A -0.169
S:29 280-129990-B-3-A 0.112
S:30 w -0.755
S:31 CCV 280-474499/9-A 4.553
S:32 CCB 280-474499/10-A 0.235
S:33 280-129990-B-4-A 0.128
S:34 280-129990-B-5-A 4.903
S:35 AutoWash -0.787
S:36 AutoWash -0.798
S:37 280-129990-B-6-A 1.010
S:38 280-129990-B-6-B MS 3.625
S:39 280-129990-B-6-C MSD 3.698
S:40 w -0.792
S:41 280-129990-B-7-A -0.428
S:42 280-129990-B-8-A 3.516
S:43 580-90002-A-2-A 19.106
S:44 580-90357-B-1-A -0.170
S:45 280-129936-C-1-A -0.252
S:46 w -0.787
S:47 AutoWash -0.777
S:48 AutoWash -0.798
33:00
34:00
35:00
36:00
37:00
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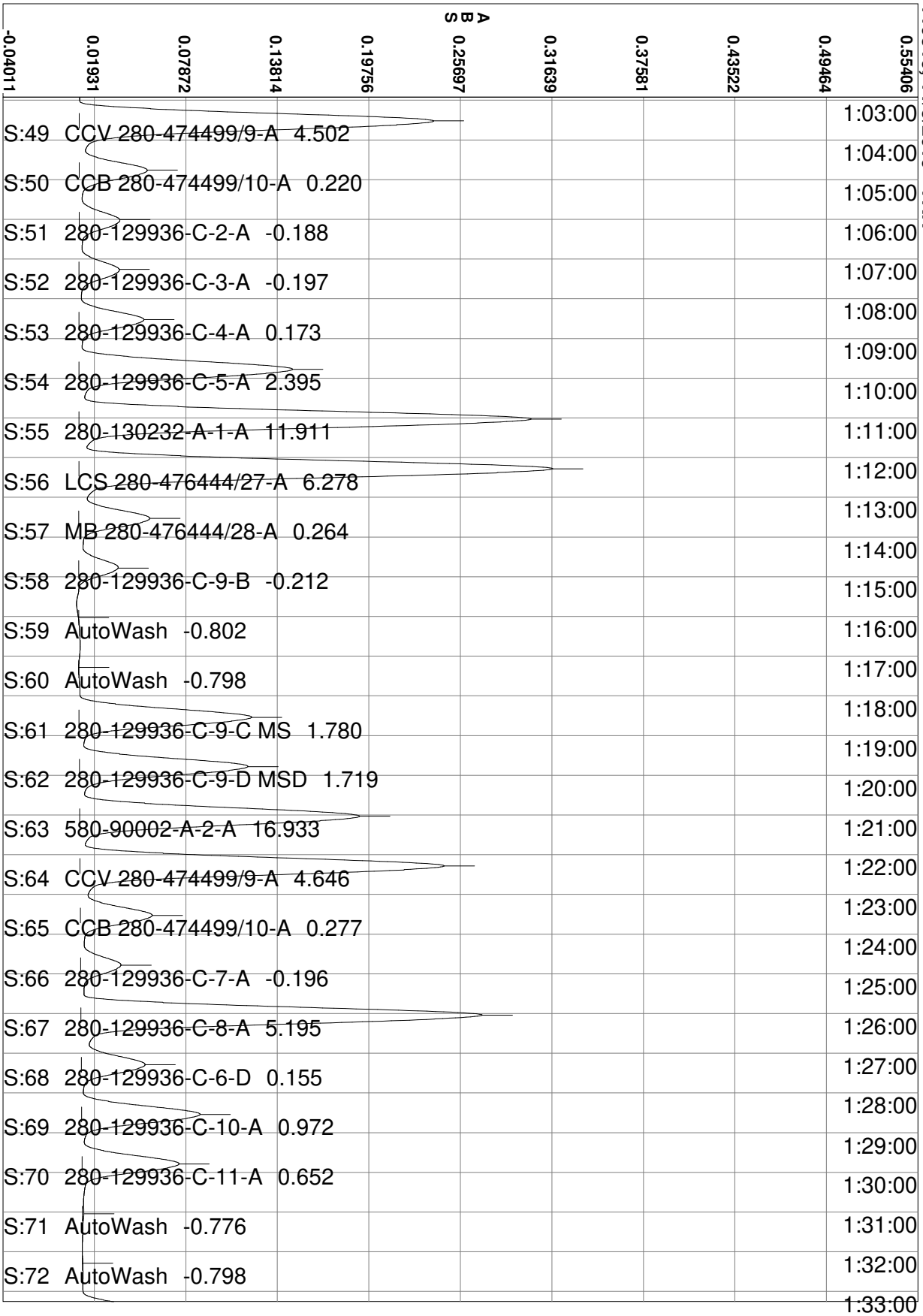
110519, 11/5/2019 - TKN
ABS
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0.01931
0.07872
0.13814
0.19756
0.25697
0.31639
0.37581
0.43522
0.49464
0.55406
S:49 CCV 280-474499/9-A 4.502
S:50 CCB 280-474499/10-A 0.220
S:51 280-129936-C-2-A -0.188
S:52 280-129936-C-3-A -0.197
S:53 280-129936-C-4-A 0.173
S:54 280-129936-C-5-A 2.395
S:55 280-130232-A-1-A 11.911
S:56 LCS 280-476444/27-A 6.278
S:57 MB 280-476444/28-A 0.264
S:58 280-129936-C-9-B -0.212
S:59 AutoWash -0.802
S:60 AutoWash -0.798
S:61 280-129936-C-9-C MS 1.780
S:62 280-129936-C-9-D MSD 1.719
S:63 580-90002-A-2-A 16.933
S:64 CCV 280-474499/9-A 4.646
S:65 CCB 280-474499/10-A 0.277
S:66 280-129936-C-7-A -0.196
S:67 280-129936-C-8-A 5.195
S:68 280-129936-C-6-D 0.155
S:69 280-129936-C-10-A 0.972
S:70 280-129936-C-11-A 0.652
S:71 AutoWash -0.776
S:72 AutoWash -0.798
1:03:00
1:04:00
1:05:00
1:06:00
1:07:00
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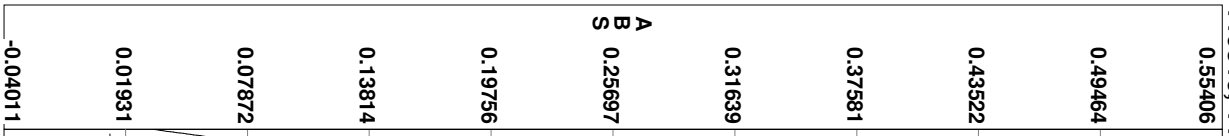
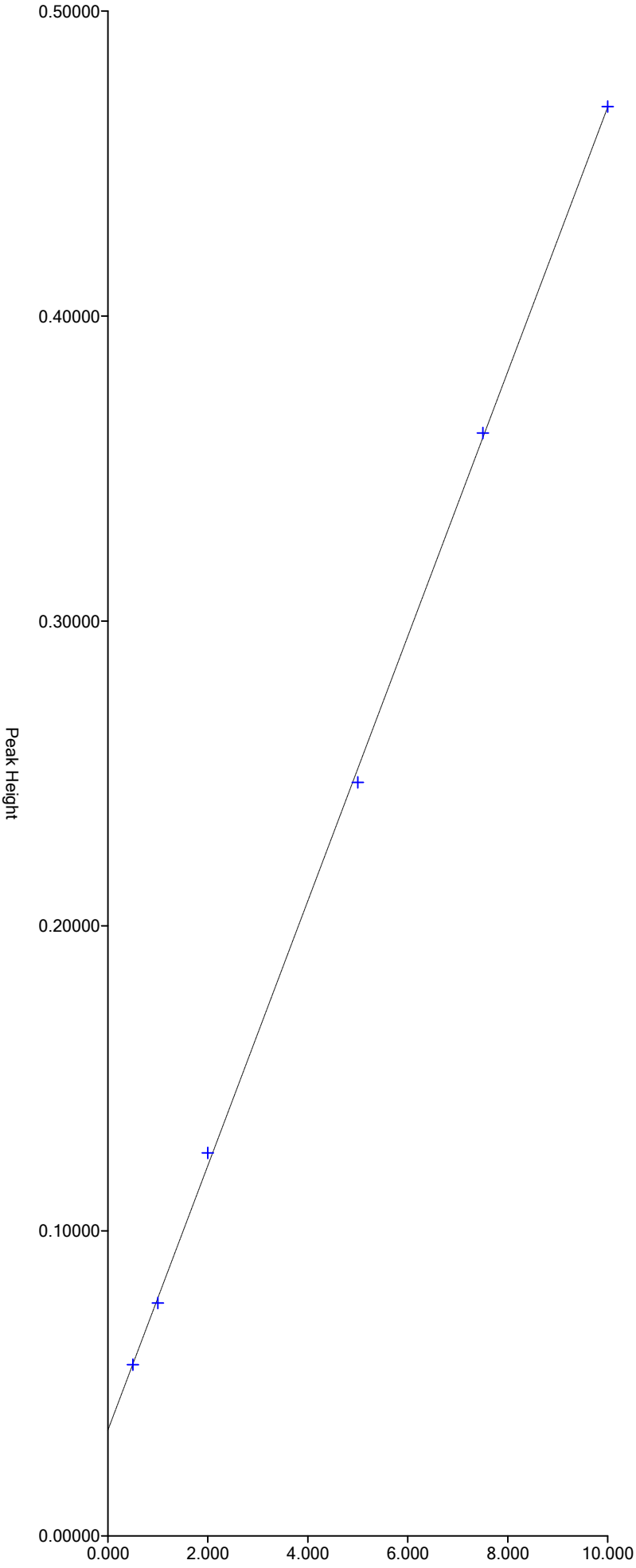


110519, 11/5/2019 - TKN

S:73	280-129936-C-12-A	0.629		1:34:00
S:74	280-129936-C-13-A	0.917		1:35:00
S:75	280-129936-C-14-A	0.762		1:36:00
S:76	280-129936-C-15-A	0.249		1:37:00
S:77	w	-0.765		1:38:00
S:78	CCV	280-474499/9-A	4.738	1:39:00
S:79	CCB	280-474499/10-A	0.251	1:40:00
S:80	w	-0.782		1:41:00
S:81	w	-0.796		1:42:00
S:82	w	-0.789		1:43:00
S:83	AutoWash	-0.796		1:44:00
S:84	AutoWash	-0.798		1:45:00
S:85	w	-0.815		1:46:00
S:86	AutoWash	-0.818		1:47:00
S:87	AutoWash	-0.798		1:48:00
				1:49:00
				1:50:00
				1:51:00
				1:52:00
				1:53:00
				1:54:00
				1:55:00
				1:56:00
				1:57:00
				1:58:00
				1:59:00
				2:00:00
				2:01:00
				2:02:00
				2:03:00

Calibration for TKN



Segment 1: Equation: y = 0.04338x + 0.03460
Correlation: 0.9998
X Range = 0.000 to 10.000
Y Range = 0.00000 to 7.20000

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	svc
Operator ID	svc
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	54
Result path	C:\FLOW_4\110419.RST
Sample table path	C:\FLOW_4\110419.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	04-Nov-19
Time acquired	21:24

Date	Time	Cup	Name
04-Nov-19	17:22	109	SYNC
04-Nov-19	17:24	0	Carryover
04-Nov-19	17:26	0	Carryover (Statistics)
04-Nov-19	17:28	0	read baseline
04-Nov-19	17:30	101	Cal 0.00 ppb
04-Nov-19	17:32	102	Cal 50.0 ppb
04-Nov-19	17:34	103	Cal 100 ppb
04-Nov-19	17:36	104	Cal 500 ppb
04-Nov-19	17:38	105	Cal 1000 ppb
04-Nov-19	17:40	106	Cal 2500 ppb
04-Nov-19	17:42	107	Cal 5000 ppb
04-Nov-19	17:44	108	Cal 7500 ppb
04-Nov-19	17:46	109	Cal 10000 ppb
04-Nov-19	17:48	0	Blank
04-Nov-19	17:50	0	Read Baseline
04-Nov-19	17:52	110	5000 PPB NO2
04-Nov-19	17:54	111	ICV 5000 PPB
04-Nov-19	17:56	112	ICV 2000 PPB
04-Nov-19	17:58	0	ICB
04-Nov-19	18:00	0	Read Baseline
04-Nov-19	18:02	107	LCS
04-Nov-19	18:04	0	MB
04-Nov-19	18:06	113	280-129794-C-1
04-Nov-19	18:08	114	ms 280-129794-C-1
04-Nov-19	18:10	115	msd 280-129794-C-1
04-Nov-19	18:12	116	280-129794-C-2
04-Nov-19	18:14	117	280-129794-C-3
04-Nov-19	18:16	118	280-129794-C-4
04-Nov-19	18:18	119	280-129794-C-5
04-Nov-19	18:20	120	280-129794-C-6
04-Nov-19	18:22	121	280-130232-A-1
04-Nov-19	18:24	122	280-129857-C-1
04-Nov-19	18:26	0	Rinse
04-Nov-19	18:28	0	Read Baseline
04-Nov-19	18:30	107	CCV 5000 ppb
04-Nov-19	18:32	105	CCVL 1000 ppb
04-Nov-19	18:34	0	CCB
04-Nov-19	18:36	0	Read Baseline
04-Nov-19	18:38	123	280-129857-C-2
04-Nov-19	18:40	124	280-129857-C-3
04-Nov-19	18:42	125	280-129857-C-4
04-Nov-19	18:44	126	ms 280-129857-C-4
04-Nov-19	18:46	127	msd 280-129857-C-4
04-Nov-19	18:48	128	280-129857-C-5

Result path C:\FLOW_4\110419.RST
Sample table path C:\FLOW_4\110419.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 04-Nov-19
Time acquired 21:24

Date	Time	Cup	Name
04-Nov-19	18:50	129	280-129936-C-1
04-Nov-19	18:52	130	280-129936-C-2
04-Nov-19	18:54	131	280-129936-C-3
04-Nov-19	18:56	132	280-129936-C-4
04-Nov-19	18:58	0	Rinse
04-Nov-19	19:00	0	Read Baseline
04-Nov-19	19:02	107	CCV 5000 ppb
04-Nov-19	19:04	105	CCVL 1000 ppb
04-Nov-19	19:06	0	CCB
04-Nov-19	19:08	0	Read Baseline
04-Nov-19	19:10	133	280-129936-C-5
04-Nov-19	19:12	134	280-129936-C-6
04-Nov-19	19:14	135	280-129936-C-7
04-Nov-19	19:16	136	280-129936-C-8
04-Nov-19	19:18	107	LCS
04-Nov-19	19:20	0	MB
04-Nov-19	19:22	137	280-129936-C-9
04-Nov-19	19:24	138	ms 280-129936-C-9
04-Nov-19	19:26	139	msd 280-129936-C-9
04-Nov-19	19:28	140	280-129936-C-10
04-Nov-19	19:30	0	Rinse
04-Nov-19	19:32	0	Read Baseline
04-Nov-19	19:34	107	CCV 5000 ppb
04-Nov-19	19:36	105	CCVL 1000 ppb
04-Nov-19	19:38	0	CCB
04-Nov-19	19:40	0	Read Baseline
04-Nov-19	19:42	141	280-129936-C-11
04-Nov-19	19:44	142	280-129936-C-12
04-Nov-19	19:46	143	280-129936-C-13
04-Nov-19	19:48	144	280-129936-C-14
04-Nov-19	19:50	145	280-129936-C-15
04-Nov-19	19:52	146	680-175921-L-1
04-Nov-19	19:54	147	680-175921-L-2
04-Nov-19	19:56	148	680-175921-L-3
04-Nov-19	19:58	149	680-175921-L-5
04-Nov-19	20:00	150	ms 680-175921-L-5
04-Nov-19	20:02	0	Rinse
04-Nov-19	20:04	0	Read Baseline
04-Nov-19	20:06	107	CCV 5000 ppb
04-Nov-19	20:08	105	CCVL 1000 ppb
04-Nov-19	20:10	0	CCB
04-Nov-19	20:12	0	Read Baseline
04-Nov-19	20:14	151	msd 680-175921-L-5
04-Nov-19	20:16	152	680-175921-L-4
04-Nov-19	20:18	153	280-130036-B-1
04-Nov-19	20:20	154	280-129961-A-1
04-Nov-19	20:22	155	280-129961-B-2
04-Nov-19	20:24	156	280-129961-B-3
04-Nov-19	20:26	157	280-129961-B-4
04-Nov-19	20:28	158	280-129992-A-1
04-Nov-19	20:30	159	280-129992-A-2
04-Nov-19	20:32	160	280-129992-A-3
04-Nov-19	20:34	0	Rinse
04-Nov-19	20:36	0	Read Baseline
04-Nov-19	20:38	107	CCV 5000 ppb
04-Nov-19	20:40	105	CCVL 1000 ppb
04-Nov-19	20:42	0	CCB

Result path C:\FLOW_4\110419.RST
Sample table path C:\FLOW_4\110419.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 04-Nov-19
Time acquired 21:24

Date	Time	Cup	Name
04-Nov-19	20:44	0	Read Baseline
04-Nov-19	20:46	107	LCS
04-Nov-19	20:48	0	MB
04-Nov-19	20:50	201	280-129992-A-4
04-Nov-19	20:52	202	ms 280-129992-A-4
04-Nov-19	20:54	203	msd 280-129992-A-4
04-Nov-19	20:56	204	280-129992-A-5
04-Nov-19	20:58	205	280-129992-A-6
04-Nov-19	21:00	206	280-129992-A-9
04-Nov-19	21:02	207	280-129992-A-10
04-Nov-19	21:04	208	280-130064-D-1
04-Nov-19	21:06	209	280-130066-G-1
04-Nov-19	21:08	0	Rinse
04-Nov-19	21:10	0	Read Baseline
04-Nov-19	21:12	107	CCV 5000 ppb
04-Nov-19	21:14	105	CCVL 1000 ppb
04-Nov-19	21:16	0	CCB
04-Nov-19	21:18	0	Read Baseline

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	svc
Operator ID	svc
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	54
Result path	C:\FLOW_4\110419.RST
Sample table path	C:\FLOW_4\110419.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	04-Nov-19
Time acquired	21:24

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2166000	9893.371				
Carryover	1532	12.650				
Carryover	375	7.367				
(Statistics)				954	10.009	N
read baseline	0	5.655	BL			
Cal 0.00 ppb	951	9.995				
Cal 50.0 ppb	12598	63.164				
Cal 100 ppb	24578	117.855				
Cal 500 ppb	115270	531.858				
Cal 1000 ppb	234813	1077.567				
Cal 2500 ppb	564874	2584.284				
Cal 5000 ppb	1020606	4664.688				
Cal 7500 ppb	1609810	7354.387				
Cal 10000 ppb	2243290	10246.199	HI			
Blank	101	6.118				
Read Baseline	0	5.655	BL			
5000 PPB NO2	1072690	4902.452				
ICV 5000 PPB	1069097	4886.049				
ICV 2000 PPB	458726	2099.723				
ICB	93	6.081				
Read Baseline	0	5.655	BL			
LCS	1109688	5071.345				
MB	-155	4.947				
280-129794-C-1	222636	51099.031				
ms 280-129794-C-1	1083496	247588.844				
msd 280-129794-C-1	794609	181650.875				
280-129794-C-2	560718	12826.580				
280-129794-C-3	421581	1930.158				
280-129794-C-4	513447	23495.252				
280-129794-C-5	539386	2467.935				
280-129794-C-6	544374	2490.706				
280-130232-A-1	103110	476.349				
280-129857-C-1	1211282	11070.236				
Rinse	-227	4.617				
Read Baseline	0	5.655	BL			
CCV 5000 ppb	1072536	4901.746				
CCVL 1000 ppb	231193	1061.044				
CCB	89	6.063				
Read Baseline	0	5.655	BL			
280-129857-C-2	1651243	7543.524				
280-129857-C-3	565019	25849.484				
280-129857-C-4	956650	4372.731				
ms 280-129857-C-4	1668911	7624.181				
msd 280-129857-C-4	1602412	7320.613				
280-129857-C-5	1819576	8311.960				

Result path C:\FLOW_4\110419.RST
Sample table path C:\FLOW_4\110419.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 04-Nov-19
Time acquired 21:24

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-129936-C-1	478153	21884.084			
280-129936-C-2	664038	30369.678			
280-129936-C-3	631081	14432.586			
280-129936-C-4	2259102	10318.384	HI		
Rinse	-175	4.858	FL		
Read Baseline	0	5.655	BL		
CCV 5000 ppb	1090222	4982.484			
CCVL 1000 ppb	235642	1081.354			
CCB	29	5.789			
Read Baseline	0	5.655	BL		
280-129936-C-5	546002	2498.136			
280-129936-C-6	1259978	11514.829			
280-129936-C-7	1725804	15767.784			
280-129936-C-8	585438	2678.158			
LCS	1086157	4963.924			
MB	-37	5.486			
280-129936-C-9	4341	25.471			
ms 280-129936-C-9	889986	4068.411			
msd 280-129936-C-9	826391	3778.104			
280-129936-C-10	283777	1301.088			
Rinse	1133	10.825			
Read Baseline	0	5.655	BL		
CCV 5000 ppb	1058219	4836.391			
CCVL 1000 ppb	221818	1018.247			
CCB	101	6.116			
Read Baseline	0	5.655	BL		
280-129936-C-11	5332	29.995			
280-129936-C-12	77415	359.054			
280-129936-C-13	251280	1152.742			
280-129936-C-14	44169	207.287			
280-129936-C-15	597949	2735.272			
680-175921-L-1	2538	17.243			
680-175921-L-2	1998	14.777			
680-175921-L-3	44331	208.024			
680-175921-L-5	7918	41.800			
ms 680-175921-L-5	703439	3216.832			
Rinse	116	6.184			
Read Baseline	0	5.655	BL		
CCV 5000 ppb	1139754	5208.596			
CCVL 1000 ppb	222729	1022.405			
CCB	-79	5.294			
Read Baseline	0	5.655	BL		
msd 680-175921-L-5	765922	3502.062			
680-175921-L-4	570	8.259			
280-130036-B-1	4268	25.137			
280-129961-A-1	69727	323.957			
280-129961-B-2	1256030	57393.891			
280-129961-B-3	1250957	57162.320			
280-129961-B-4	1131223	51696.504			
280-129992-A-1	176794	812.716			
280-129992-A-2	234075	1074.202			
280-129992-A-3	350071	1603.718			
Rinse	170	6.431			
Read Baseline	0	5.655	BL		
CCV 5000 ppb	1121456	5125.065			
CCVL 1000 ppb	234428	1075.811			
CCB	154	6.338			

Result path C:\FLOW_4\110419.RST
Sample table path C:\FLOW_4\110419.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 04-Nov-19
Time acquired 21:24

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Read Baseline	0	5.655	BL		
LCS	1085426	4960.590			
MB	-425	3.713			
280-129992-A-4	204752	940.341			
ms 280-129992-A-4	1020449	4663.970			
msd 280-129992-A-4	1016864	4647.605			
280-129992-A-5	13608	67.776			
280-129992-A-6	2897	18.881			
280-129992-A-9	392857	1799.035			
280-129992-A-10	11007	55.901			
280-130064-D-1	887209	4055.736			
280-130066-G-1	11513	58.210			
Rinse	109	6.153			
Read Baseline	0	5.655	BL		
CCV 5000 ppb	1093989	4999.677			
CCVL 1000 ppb	230473	1057.758			
CCB	943	9.961			
Read Baseline	0	5.655	BL		

Nitrate as N:Calibration 1: Peak 5-119

File name: C:\FLOW_4\110419.RST
Date: 04-Nov-19
Operator: svc

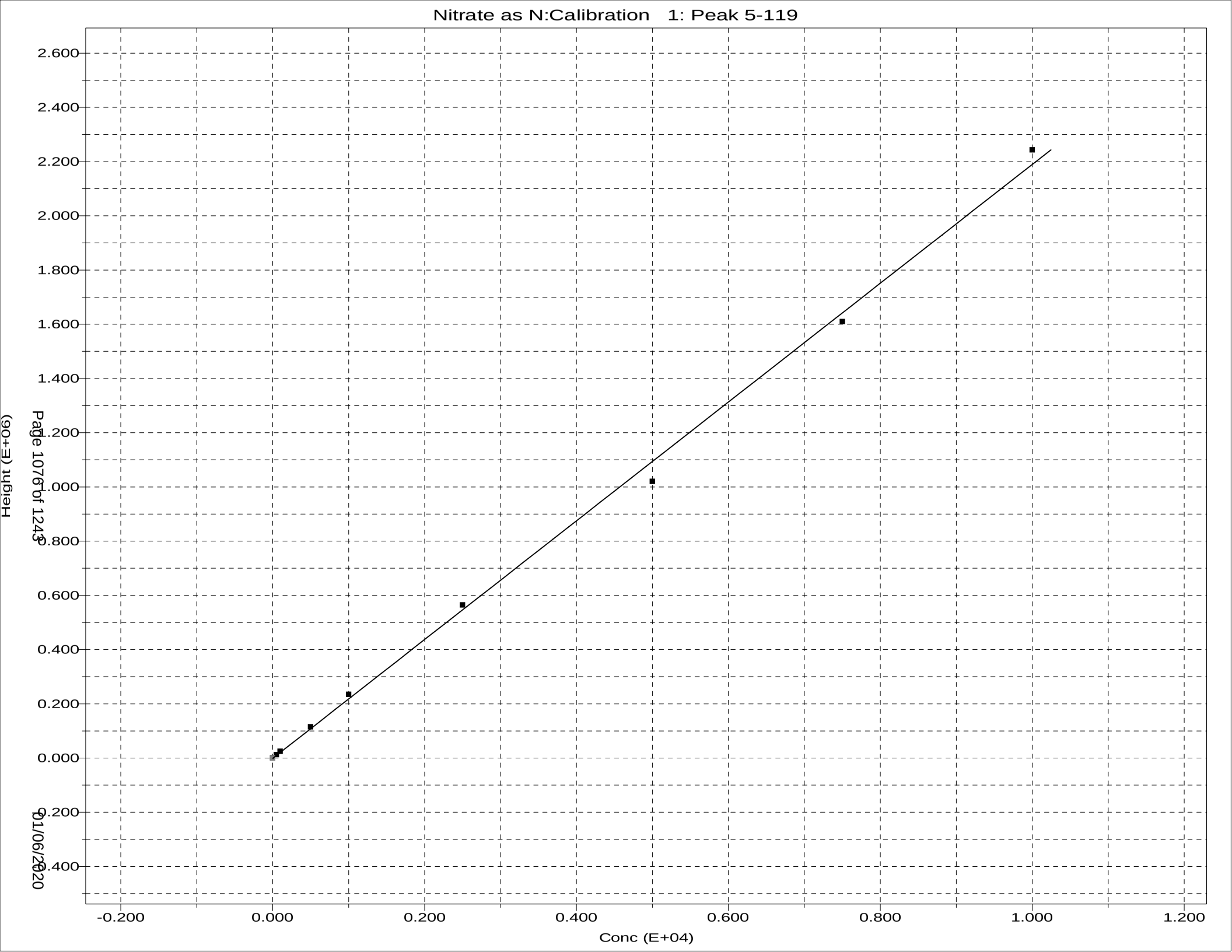
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	950.621399
*	Cal 50.0 ppb	50.000000	12597.991211
*	Cal 100 ppb	100.000000	24578.474609
*	Cal 500 ppb	500.000000	115269.757812
*	Cal 1000 ppb	1000.000000	234812.718750
*	Cal 2500 ppb	2500.000000	564873.500000
*	Cal 5000 ppb	5000.000000	1020606.062500
*	Cal 7500 ppb	7500.000000	1609810.500000
*	Cal 10000 ppb	10000.000000	2243289.750000

Calib Coef:
y=bx+a
a: (intercept) -1.2388e+03
b: 2.1906e+02

Corr Coef: 0.999050

Carryover: 0.0707%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-119
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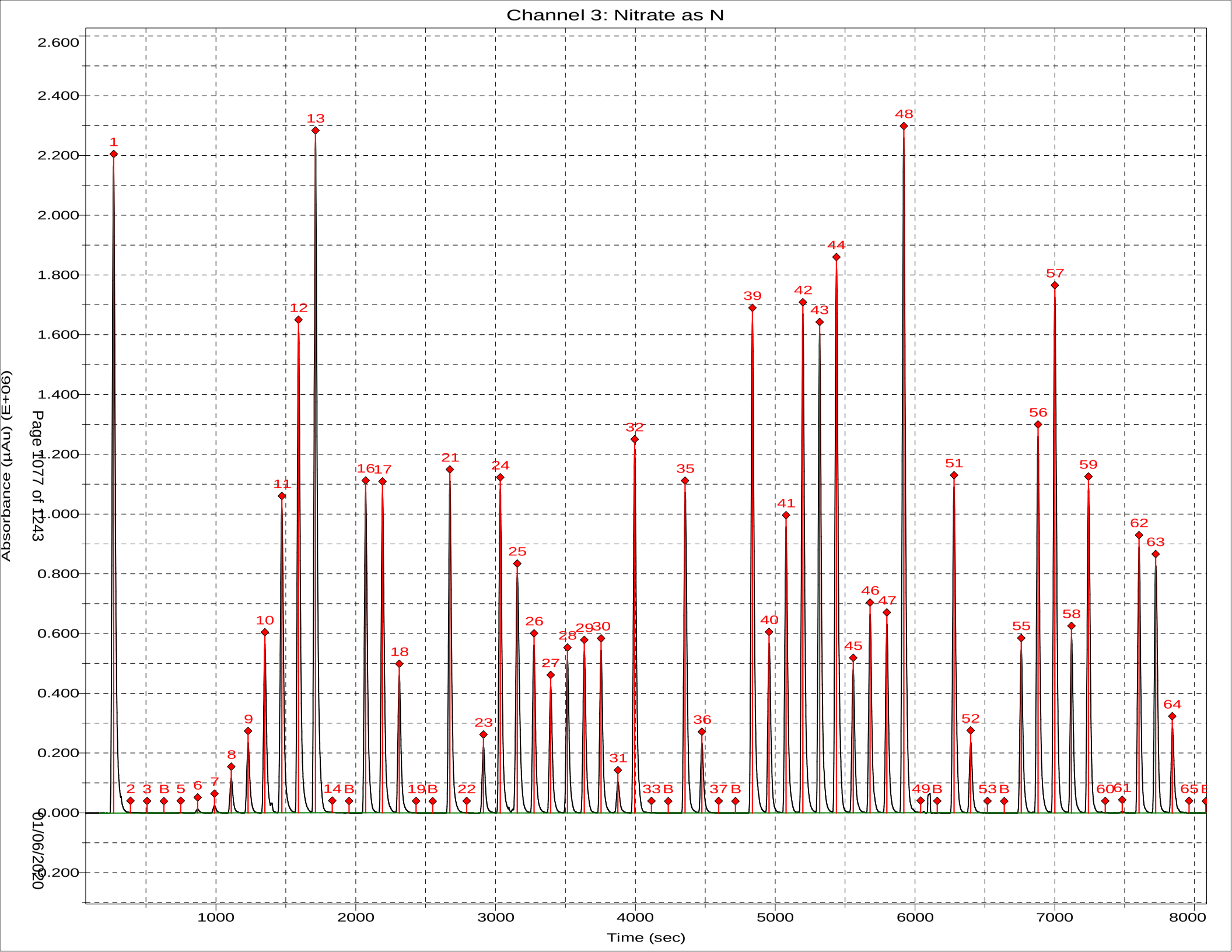
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
Height (E+06)
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
Page 1077 of 1243
01/06/2020
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
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2000
3000
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6000
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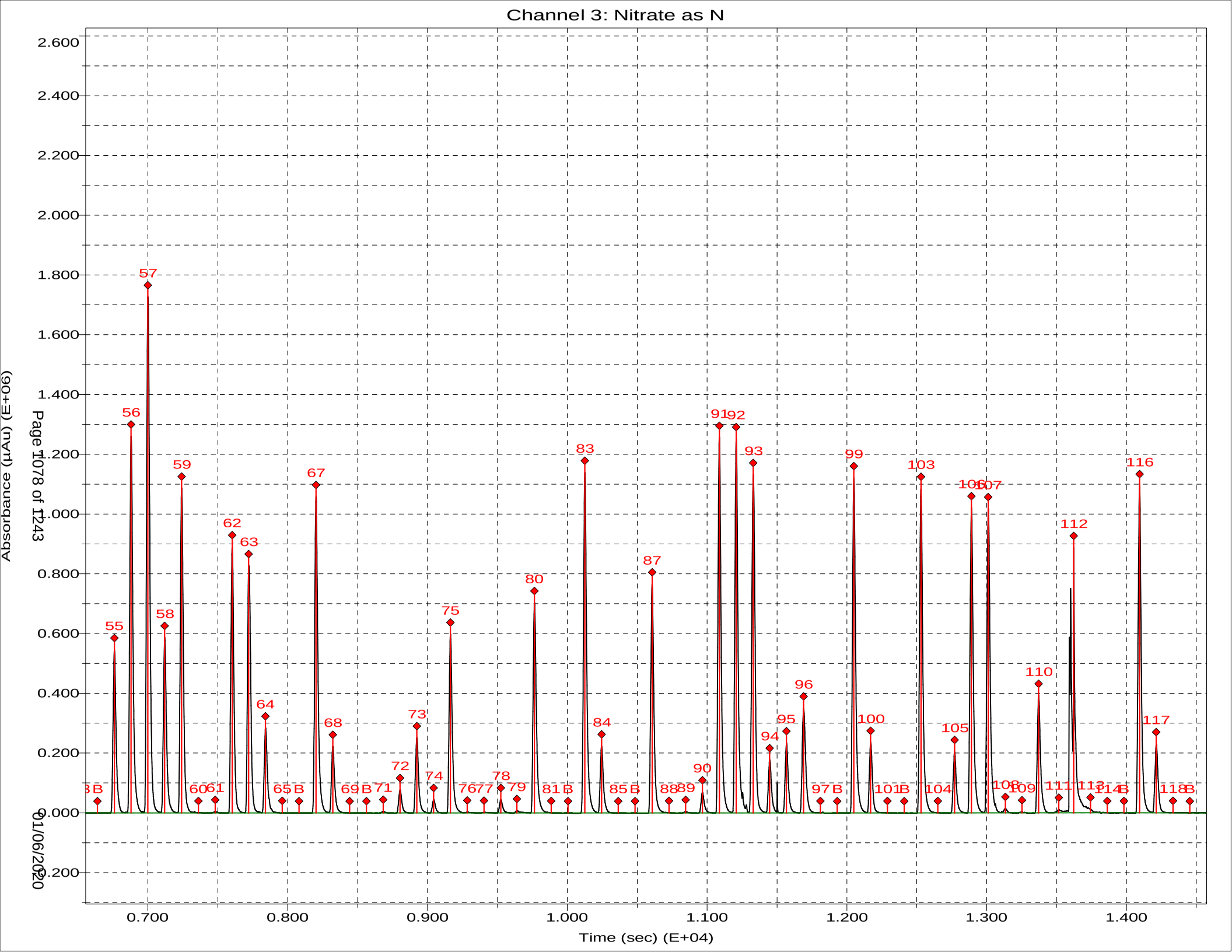
Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1078 of 1243
01/06/2020
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
0.700
0.800
0.900
1.000
1.100
1.200
1.300
1.400
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Sample Table - 110419.tbl

File name: C:\FLOW_4\110419.TBL
Date: 04-Nov-19

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1	1	1		
0	Carryover	CO	1	1	1		
0	Carryover	CO	1	1	1		
0	read baseline	RB	1	1	1		
101	Cal 0.00 ppb	C	1	1	1		
102	Cal 50.0 ppb	C	1	1	1		
103	Cal 100 ppb	C	1	1	1		
104	Cal 500 ppb	C	1	1	1		
105	Cal 1000 ppb	C	1	1	1		
106	Cal 2500 ppb	C	1	1	1		
107	Cal 5000 ppb	C	1	1	1		
108	Cal 7500 ppb	C	1	1	1		
109	Cal 10000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
110	5000 PPB NO2	U	1	1	1		
111	ICV 5000 PPB	CCV	1	1	1		
112	ICV 2000 PPB	CCV	1	1	1		
0	ICB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		pH
0	MB	U	1	1	1		
113	280-129794-C-1	U	1	50 ~~25~~ 1	1		2
114	ms 280-129794-C-1	U	1	50 ~~25~~ 1	1		"
115	msd 280-129794-C-1	U	1	50 ~~25~~ 1	1		"
116	280-129794-C-2	U	1	5 ~~1~~	1		"
117	280-129794-C-3	U	1	1	1		"
118	280-129794-C-4	U	1	10 ~~1~~	1		"
119	280-129794-C-5	U	1	1	1		"
120	280-129794-C-6	U	1	1	1		"
121	280-130232-A-1	U	1	1	1		"
122	280-129857-C-1	U	1	2 ~~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		
123	280-129857-C-2	U	1	1	1		"
124	280-129857-C-3	U	1	10 ~~1~~	1		"
125	280-129857-C-4	U	1	1	1		"
126	ms 280-129857-C-4	U	1	1	1		"
127	msd 280-129857-C-4	U	1	1	1		"
128	280-129857-C-5	U	1	1	1		"
129	280-129936-C-1	U	1	10 ~~1~~	1		"
130	280-129936-C-2	U	1	10 ~~1~~	1		"
131	280-129936-C-3	U	1	5 ~~1~~	1		"
132	280-129936-C-4	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		
133	280-129936-C-5	U	1	1	1		"
134	280-129936-C-6	U	1	2 ~~1~~	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-129936-C-7	U	1	2	1		
136	280-129936-C-8	U	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-129936-C-9	U	1	1	1		
138	ms 280-129936-C-9	U	1	1	1		
139	msd 280-129936-C-9	U	1	1	1		
140	280-129936-C-10	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	280-129936-C-11	U	1	1	1		
142	280-129936-C-12	U	1	1	1		
143	280-129936-C-13	U	1	1	1		
144	280-129936-C-14	U	1	1	1		
145	280-129936-C-15	U	1	1	1		
146	680-175921-L-1	U	1	1	1		
147	680-175921-L-2	U	1	1	1		
148	680-175921-L-3	U	1	1	1		
149	680-175921-L-5	U	1	1	1		
150	ms 680-175921-L-5	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
151	msd 680-175921-L-5	U	1	1	1		
152	680-175921-L-4	U	1	1	1		
153	280-130036-B-1	U	1	1	1		
154	280-129961-A-1	U	1	1	1		
155	280-129961-B-2	U	1	10	1		
156	280-129961-B-3	U	1	10	1		
157	280-129961-B-4	U	1	10	1		
158	280-129992-A-1	U	1	1	1		
159	280-129992-A-2	U	1	1	1		
160	280-129992-A-3	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		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
201	280-129992-A-4	U	1	1	1		
202	ms 280-129992-A-4	U	1	1	1		
203	msd 280-129992-A-4	U	1	1	1		
204	280-129992-A-5	U	1	1	1		
205	280-129992-A-6	U	1	1	1		
206	280-129992-A-9	U	1	1	1		
207	280-129992-A-10	U	1	1	1		
208	280-130064-D-1	U	1	1	1		
209	280-130066-G-1	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		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		

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\110519.RST
Sample table path	C:\FLOW_4\110519.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	05-Nov-19
Time acquired	20:59

Date	Time	Cup	Name
05-Nov-19	16:35	109	SYNC
05-Nov-19	16:37	0	Carryover
05-Nov-19	16:39	0	Carryover (Statistics)
05-Nov-19	16:41	0	read baseline
05-Nov-19	16:43	101	Cal 0.00 ppb
05-Nov-19	16:45	102	Cal 50.0 ppb
05-Nov-19	16:47	103	Cal 100 ppb
05-Nov-19	16:49	104	Cal 500 ppb
05-Nov-19	16:51	105	Cal 1000 ppb
05-Nov-19	16:53	106	Cal 2500 ppb
05-Nov-19	16:55	107	Cal 5000 ppb
05-Nov-19	16:57	108	Cal 7500 ppb
05-Nov-19	16:59	109	Cal 10000 ppb
05-Nov-19	17:01	0	Blank
05-Nov-19	17:03	0	Read Baseline
05-Nov-19	17:05	110	5000 PPB NO2
05-Nov-19	17:07	111	ICV 5000 PPB
05-Nov-19	17:09	112	ICV 2000 PPB
05-Nov-19	17:11	0	ICB
05-Nov-19	17:13	0	Read Baseline
05-Nov-19	17:15	107	xLCS
05-Nov-19	17:17	0	MB
05-Nov-19	17:19	113	280-129400-A-1
05-Nov-19	17:21	114	ms 280-129400-A-1
05-Nov-19	17:23	115	msd 280-129400-A-1
05-Nov-19	17:25	116	280-129400-B-2
05-Nov-19	17:27	117	280-129400-A-3
05-Nov-19	17:29	118	280-129936-C-4
05-Nov-19	17:31	119	280-129882-A-1
05-Nov-19	17:33	120	280-129882-A-2
05-Nov-19	17:35	121	280-129882-A-3
05-Nov-19	17:37	122	280-129882-A-4
05-Nov-19	17:39	0	Rinse
05-Nov-19	17:41	0	Read Baseline
05-Nov-19	17:43	107	CCV 5000 ppb
05-Nov-19	17:45	105	CCVL 1000 ppb
05-Nov-19	17:47	0	CCB
05-Nov-19	17:49	0	Read Baseline
05-Nov-19	17:51	123	280-129882-A-5
05-Nov-19	17:53	124	280-129882-A-6
05-Nov-19	17:55	125	280-129882-A-7
05-Nov-19	17:57	126	ms 280-129882-A-7
05-Nov-19	17:59	127	msd 280-129882-A-7
05-Nov-19	18:01	128	280-129882-A-8

Result path C:\FLOW_4\110519.RST
Sample table path C:\FLOW_4\110519.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 05-Nov-19
Time acquired 20:59

Date	Time	Cup	Name
05-Nov-19	18:03	129	280-129882-A-9
05-Nov-19	18:05	130	280-129882-A-10
05-Nov-19	18:07	131	280-129990-B-1
05-Nov-19	18:09	132	280-129990-B-2
05-Nov-19	18:11	0	Rinse
05-Nov-19	18:13	0	Read Baseline
05-Nov-19	18:15	107	CCV 5000 ppb
05-Nov-19	18:17	105	CCVL 1000 ppb
05-Nov-19	18:19	0	CCB
05-Nov-19	18:21	0	Read Baseline
05-Nov-19	18:23	133	280-129990-B-3
05-Nov-19	18:25	134	280-129990-B-4
05-Nov-19	18:27	135	280-129990-B-5
05-Nov-19	18:29	136	280-129990-B-6
05-Nov-19	18:31	107	LCS
05-Nov-19	18:33	0	MB
05-Nov-19	18:35	137	280-129990-B-7
05-Nov-19	18:37	138	ms 280-129990-B-7
05-Nov-19	18:39	139	msd 280-129990-B-7
05-Nov-19	18:41	140	280-129990-B-8
05-Nov-19	18:43	0	Rinse
05-Nov-19	18:45	0	Read Baseline
05-Nov-19	18:47	107	CCV 5000 ppb
05-Nov-19	18:49	105	CCVL 1000 ppb
05-Nov-19	18:51	0	CCB
05-Nov-19	18:53	0	Read Baseline
05-Nov-19	18:55	141	280-129990-B-9
05-Nov-19	18:57	142	280-129990-B-10
05-Nov-19	18:59	143	280-129990-B-11
05-Nov-19	19:01	144	280-129990-B-12
05-Nov-19	19:03	145	280-129990-B-13
05-Nov-19	19:05	146	280-129990-B-14
05-Nov-19	19:07	147	280-129990-B-15
05-Nov-19	19:09	148	280-130070-C-1
05-Nov-19	19:11	149	280-130070-C-6
05-Nov-19	19:13	150	ms 280-130070-C-6
05-Nov-19	19:15	0	Rinse
05-Nov-19	19:17	0	Read Baseline
05-Nov-19	19:19	107	CCV 5000 ppb
05-Nov-19	19:21	105	CCVL 1000 ppb
05-Nov-19	19:23	0	CCB
05-Nov-19	19:25	0	Read Baseline
05-Nov-19	19:27	151	msd 280-130070-C-6
05-Nov-19	19:29	152	280-130070-C-2
05-Nov-19	19:31	153	280-130070-C-3
05-Nov-19	19:33	154	280-130070-C-4
05-Nov-19	19:35	155	280-130070-C-5
05-Nov-19	19:37	156	280-130070-C-7
05-Nov-19	19:39	157	280-130070-C-8
05-Nov-19	19:41	158	280-130070-C-9
05-Nov-19	19:43	159	280-130070-C-10
05-Nov-19	19:45	160	280-130070-C-12
05-Nov-19	19:47	0	Rinse
05-Nov-19	19:49	0	Read Baseline
05-Nov-19	19:51	107	CCV 5000 ppb
05-Nov-19	19:53	105	CCVL 1000 ppb
05-Nov-19	19:55	0	CCB

Result path C:\FLOW_4\110519.RST
Sample table path C:\FLOW_4\110519.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 05-Nov-19
Time acquired 20:59

Date	Time	Cup	Name
05-Nov-19	19:57	0	Read Baseline
05-Nov-19	19:59	107	LCS
05-Nov-19	20:01	0	MB
05-Nov-19	20:03	201	280-130070-C-13
05-Nov-19	20:05	202	ms 280-130070-C-13
05-Nov-19	20:07	203	msd 280-130070-C-13
05-Nov-19	20:09	204	d
05-Nov-19	20:11	205	280-130157-B-1
05-Nov-19	20:13	206	LCS
05-Nov-19	20:15	207	280-130070-C-14
05-Nov-19	20:17	208	d
05-Nov-19	20:19	0	Rinse
05-Nov-19	20:21	0	Read Baseline
05-Nov-19	20:23	107	CCV 5000 ppb
05-Nov-19	20:25	105	CCVL 1000 ppb
05-Nov-19	20:27	0	CCB
05-Nov-19	20:29	0	Read Baseline
05-Nov-19	20:45	107	CCV 5000 ppb
05-Nov-19	20:47	107	CCV 5000 ppb (Statistics)
05-Nov-19	20:49	105	CCVL 1000 ppb
05-Nov-19	20:51	0	CCB
05-Nov-19	20:53	0	Read Baseline
05-Nov-19	20:55	107	CCV 5000 ppb
05-Nov-19	20:57	107	CCV 5000 ppb (Statistics)

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\110519.RST
Sample table path	C:\FLOW_4\110519.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	05-Nov-19
Time acquired	20:59

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2185081	10135.255	HI			
Carryover	1333	-18.390	LO			
Carryover	326	-23.070	LO			
(Statistics)				830	-20.730	N
read baseline	0	-24.588	BL			
Cal 0.00 ppb	0	-24.589	LO			
Cal 50.0 ppb	11692	29.776				
Cal 100 ppb	25669	94.766				
Cal 500 ppb	114689	508.674				
Cal 1000 ppb	232160	1054.871				
Cal 2500 ppb	555993	2560.577				
Cal 5000 ppb	1084288	5016.959				
Cal 7500 ppb	1565287	7253.435				
Cal 10000 ppb	2189443	10155.533	HI			
Blank	69	-24.268	LO			
Read Baseline	0	-24.588	BL			
5000 PPB NO2	1099718	5088.704				
ICV 5000 PPB	1047308	4845.019				
ICV 2000 PPB	393033	1802.876				
ICB	-9	-24.629	LO			
Read Baseline	0	-24.588	BL			
xLCS	820458	3790.246				
MB	-100	-25.054	LO			
280-129400-A-1	481073	4424.455				
ms 280-129400-A-1	1267487	11737.541				
msd 280-129400-A-1	1250338	11578.071				
280-129400-B-2	511264	4705.209				
280-129400-A-3	228613	1038.379				
280-129936-C-4	1147375	10620.583				
280-129882-A-1	32922	128.487				
280-129882-A-2	416289	1911.008				
280-129882-A-3	461164	2119.661				
280-129882-A-4	689740	15912.267				
Rinse	-200	-25.520	LO			
Read Baseline	0	-24.588	BL			
CCV 5000 ppb	1051394	4864.017				
CCVL 1000 ppb	223835	1016.162				
CCB	13	-24.528	LO			
Read Baseline	0	-24.588	BL			
280-129882-A-5	1375582	6371.375				
280-129882-A-6	918806	8495.055				
280-129882-A-7	83334	362.887				
ms 280-129882-A-7	891510	4120.615				
msd 280-129882-A-7	912358	4217.549				
280-129882-A-8	417033	1914.465				

Result path C:\FLOW_4\110519.RST
Sample table path C:\FLOW_4\110519.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 05-Nov-19
Time acquired 20:59

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-129882-A-9	1323329	12256.829			
280-129882-A-10	1801886	16707.068			
280-129990-B-1	102120	450.232			
280-129990-B-2	1364686	31603.551			
Rinse	-171	-25.383	LO		
Read Baseline	0	-24.588	BL		
CCV 5000 ppb	1098592	5083.469			
CCVL 1000 ppb	230093	1045.263			
CCB	171	-23.792	LO		
Read Baseline	0	-24.588	BL		
280-129990-B-3	277877	1267.438			
280-129990-B-4	391033	1793.577			
280-129990-B-5	987288	4565.945			
280-129990-B-6	3546	-8.103	LO		
LCS	1135945	5257.146			
MB	-159	-25.327	LO		
280-129990-B-7	1329384	61565.684			
ms 280-129990-B-7	1992415	92394.234			
msd 280-129990-B-7	2015327	93459.570			
280-129990-B-8	186501	842.577			
Rinse	269	-23.336	LO		
Read Baseline	0	-24.588	BL		
CCV 5000 ppb	1125171	5207.051			
CCVL 1000 ppb	239103	1087.157	UM		
CCB	-168	-25.370	LO UM		
Read Baseline	0	-24.588	BL UM		
280-129990-B-9	195378	883.850			
280-129990-B-10	1009749	46703.836			
280-129990-B-11	635222	29289.660			
280-129990-B-12	441095	20263.449			
280-129990-B-13	739975	3416.029			
280-129990-B-14	636152	2933.289			
280-129990-B-15	667	-21.486	LO		
280-130070-C-1	1032638	4776.806			
280-130070-C-6	300124	34272.062			
ms 280-130070-C-6	942991	108999.547			
Rinse	58	-24.318	LO		
Read Baseline	0	-24.588	BL		
CCV 5000 ppb	1166462	5399.040			
CCVL 1000 ppb	241230	1097.046	UM		
CCB	-765	-28.147	LO		
Read Baseline	0	-24.588	BL		
msd 280-130070-C-6	1136881	131537.516			
280-130070-C-2	30161	115.649			
280-130070-C-3	859767	39730.176			
280-130070-C-4	878980	20311.754			
280-130070-C-5	1154	-19.221	LO		
280-130070-C-7	1238380	28667.184			
280-130070-C-8	890690	41168.016			
280-130070-C-9	869796	40196.492			
280-130070-C-10	524613	24146.727			
280-130070-C-12	1336302	61887.348			
Rinse	1353	-18.296	LO		
Read Baseline	0	-24.588	BL		
CCV 5000 ppb	1158888	5363.823			
CCVL 1000 ppb	241417	1097.914			
CCB	5	-24.564	LO I		

Result path C:\FLOW_4\110519.RST
Sample table path C:\FLOW_4\110519.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 05-Nov-19
Time acquired 20:59

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
Read Baseline	0	-24.588	BL I			
LCS	1169419	5412.788	I			
MB	-63	-24.880	LO I			
280-130070-C-13	578579	26655.947	I			
ms 280-130070-C-13	1806640	83756.398	I			
msd 280-130070-C-13	1791244	83040.539	I			
d	1444	-17.873	LO I			
280-130157-B-1	42220	171.718	I			
LCS	1140139	5276.647	I			
280-130070-C-14	1145663	53023.344	I			
d	861	-20.586	LO I			
Rinse	68	-24.270	LO I			
Read Baseline	0	-24.588	BL I			
CCV 5000 ppb	757253	3496.366	F			
CCVL 1000 ppb	233452	1060.881				
CCB	160	-23.846	LO I			
Read Baseline	0	-24.588	BL I			
CCV 5000 ppb	1067921	4940.861				
CCV 5000 ppb	1063976	4922.520				
(Statistics)				1065949	4931.690	N
CCVL 1000 ppb	229638	1043.147				
CCB	337	-23.021	LO			
Read Baseline	0	-24.588	BL			
CCV 5000 ppb	n/m	n/m	n/m			
CCV 5000 ppb	n/m	n/m	n/m			
(Statistics)				n/m	n/m	

Nitrate as N:Calibration 1: Peak 5-125

File name: C:\FLOW_4\110519.RST
Date: 05-Nov-19
Operator: svc

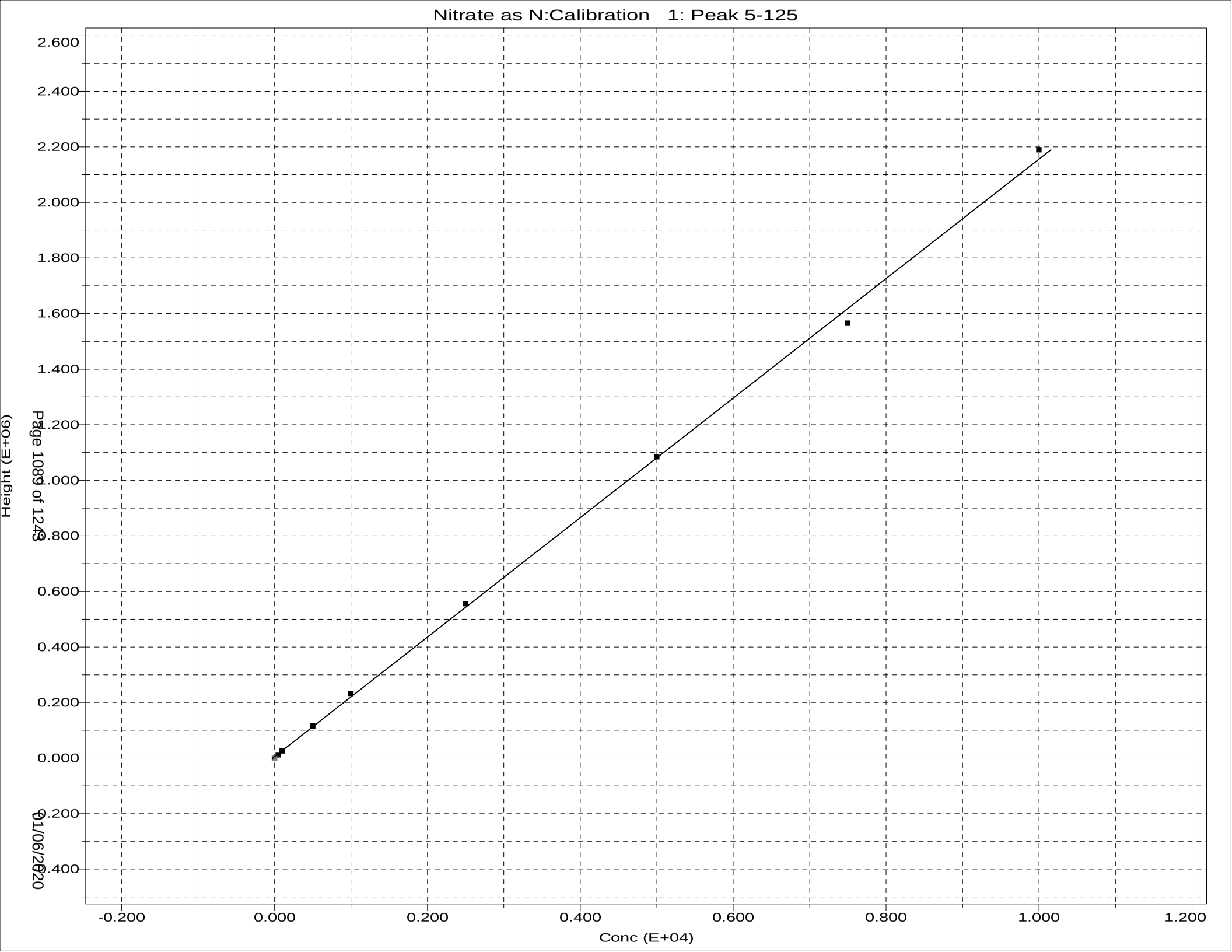
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	-0.285198
*	Cal 50.0 ppb	50.000000	11692.012695
*	Cal 100 ppb	100.000000	25669.431641
*	Cal 500 ppb	500.000000	114688.804688
*	Cal 1000 ppb	1000.000000	232159.625000
*	Cal 2500 ppb	2500.000000	555992.562500
*	Cal 5000 ppb	5000.000000	1084287.500000
*	Cal 7500 ppb	7500.000000	1565287.250000
*	Cal 10000 ppb	10000.000000	2189442.750000

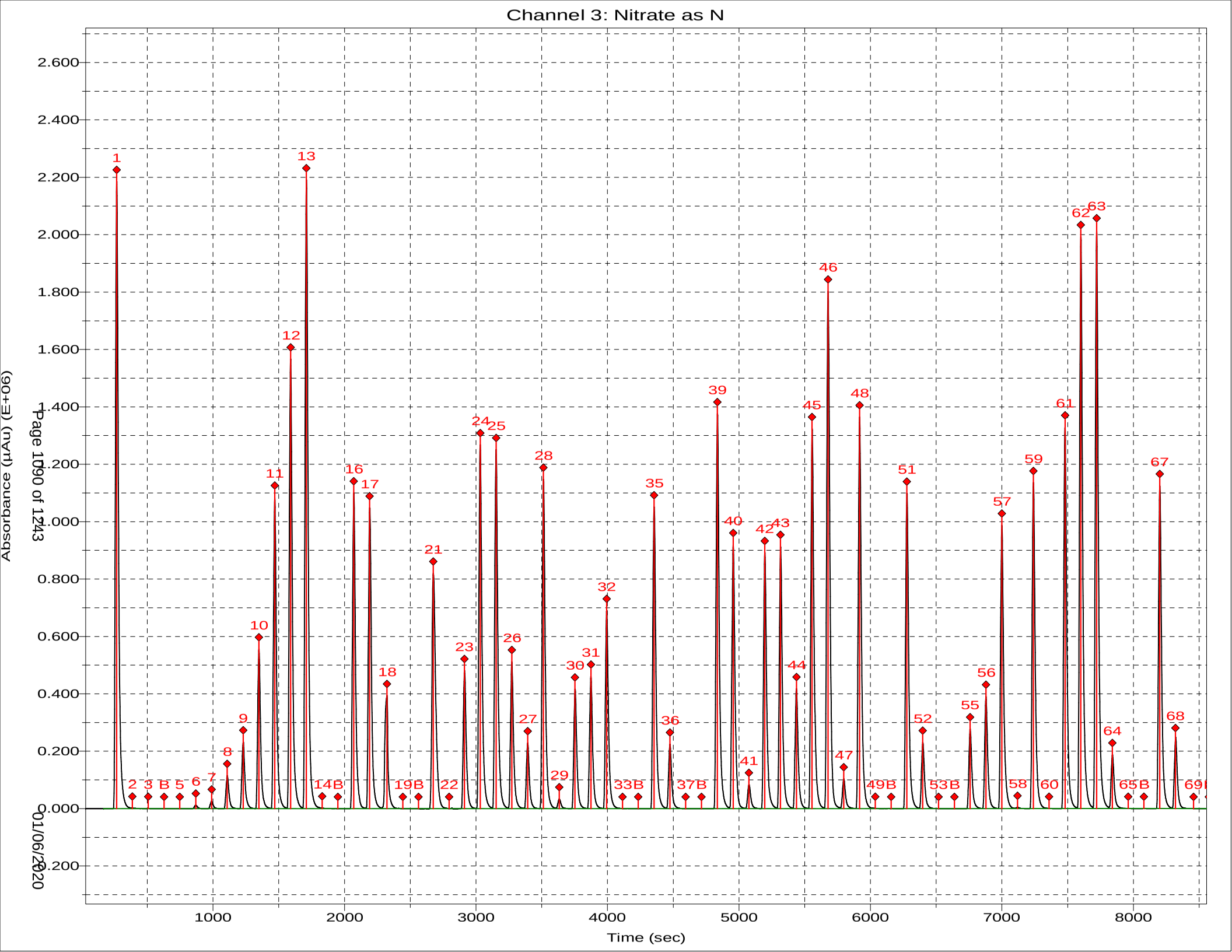
Calib Coef:
y=bx+a
a: (intercept) 5.2882e+03
b: 2.1507e+02

Corr Coef: 0.999577

Carryover: 0.061%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-125
Height (E+06)
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
Page 10 of 12
01/06/2020
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
1000
2000
3000
4000
5000
6000
7000
8000
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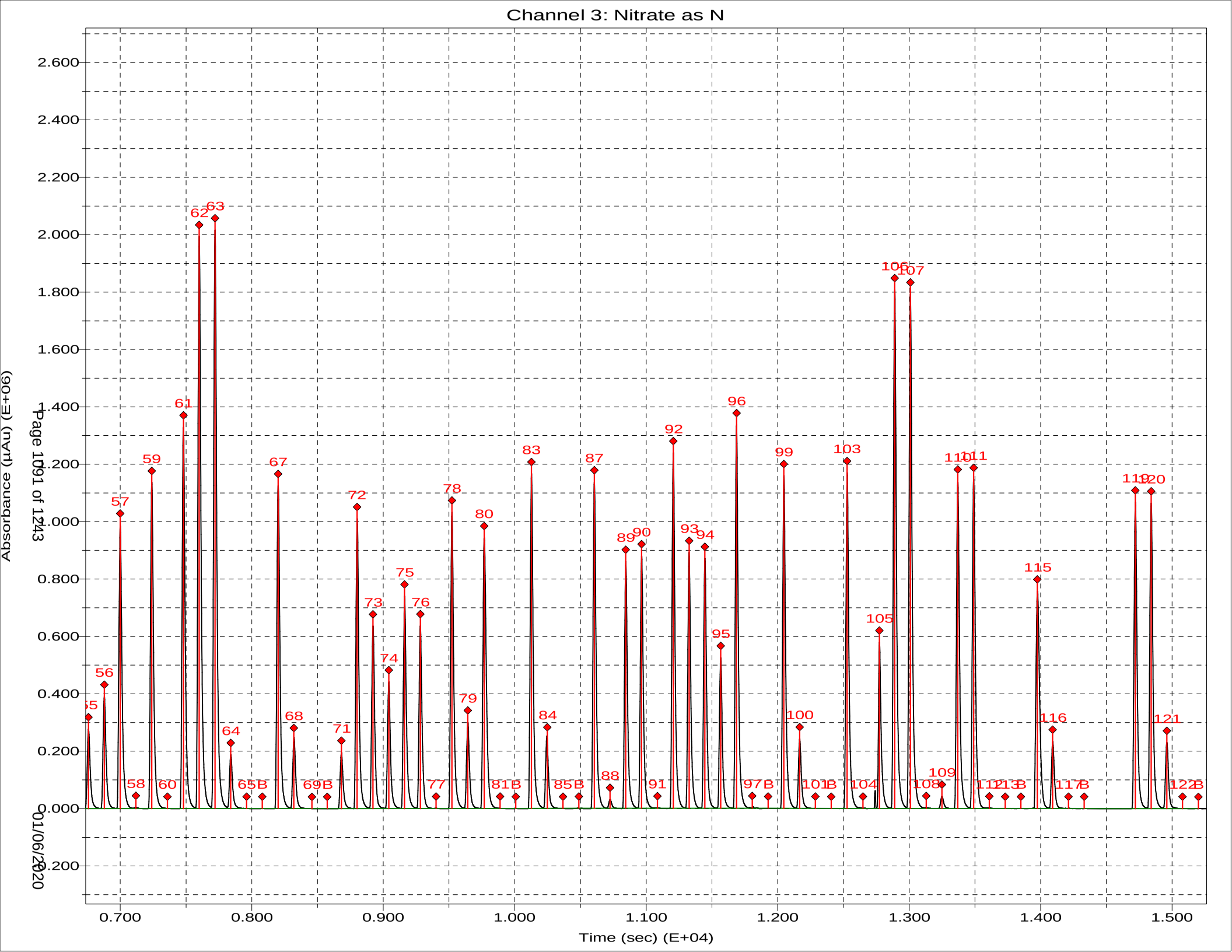
Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1091 of 1243
01/06/2020
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
0.700
0.800
0.900
1.000
1.100
1.200
1.300
1.400
1.500

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 05-Nov-19

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1	1	1		
0	Carryover	CO	1	1	1		
0	Carryover	CO	1	1	1		
0	read baseline	RB	1	1	1		
101	Cal 0.00 ppb	C	1	1	1		
102	Cal 50.0 ppb	C	1	1	1		
103	Cal 100 ppb	C	1	1	1		
104	Cal 500 ppb	C	1	1	1		
105	Cal 1000 ppb	C	1	1	1		
106	Cal 2500 ppb	C	1	1	1		
107	Cal 5000 ppb	C	1	1	1		
108	Cal 7500 ppb	C	1	1	1		
109	Cal 10000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
110	5000 PPB NO2	U	1	1	1		
111	ICV 5000 PPB	CCV	1	1	1		
112	ICV 2000 PPB	CCV	1	1	1		
0	ICB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
113	280-129400-A-1	U	1	2	1		
114	ms 280-129400-A-1	U	1	2	1		
115	msd 280-129400-A-1	U	1	2	1		
116	280-129400-B-2	U	1	2	1		
117	280-129400-A-3	U	1	5	1		
118	280-129936-C-4	U	1	2	1		
119	280-129882-A-1	U	1	1	1		
120	280-129882-A-2	U	1	1	1		
121	280-129882-A-3	U	1	1	1		
122	280-129882-A-4	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		
123	280-129882-A-5	U	1	1	1		
124	280-129882-A-6	U	1	2	1		
125	280-129882-A-7	U	1	1	1		
126	ms 280-129882-A-7	U	1	1	1		
127	msd 280-129882-A-7	U	1	1	1		
128	280-129882-A-8	U	1	1	1		
129	280-129882-A-9	U	1	2	1		
130	280-129882-A-10	U	1	2	1		
131	280-129990-B-1	U	1	1	1		
132	280-129990-B-2	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		
133	280-129990-B-3	U	1	1	1		
134	280-129990-B-4	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-129990-B-5	U	1	1	1		
136	280-129990-B-6	U	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-129990-B-7	U	1	10	1		
138	ms 280-129990-B-7	U	1	10	1		
139	msd 280-129990-B-7	U	1	10	1		
140	280-129990-B-8	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	280-129990-B-9	U	1	1	1		
142	280-129990-B-10	U	1	10	1		
143	280-129990-B-11	U	1	10	1		
144	280-129990-B-12	U	1	10	1		
145	280-129990-B-13	U	1	1	1		
146	280-129990-B-14	U	1	1	1		
147	280-129990-B-15	U	1	1	1		
148	280-130070-C-1	U	1	1	1		
149	280-130070-C-6	U	1	25	1		
150	ms 280-130070-C-6	U	1	25	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 280-130070-C-6	U	1	25	1		
152	280-130070-C-2	U	1	1	1		
153	280-130070-C-3	U	1	10	1		
154	280-130070-C-4	U	1	5	1		
155	280-130070-C-5	U	1	1	1		
156	280-130070-C-7	U	1	5	1		
157	280-130070-C-8	U	1	10	1		
158	280-130070-C-9	U	1	10	1		
159	280-130070-C-10	U	1	10	1		
160	280-130070-C-12	U	1	10	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
201	280-130070-C-13	U	1	10	1		
202	ms 280-130070-C-13	U	1	10	1		
203	msd 280-130070-C-13	U	1	10	1		
204	~~280-130070-C-14~~ d	U	1	~~10~~ 1	1		
205	280-130157-B-1	U	1	1	1		
206	d LCS	U	1	1	1		
207	d 280-130070-C-14	U	1	10	1		
208	d	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		

Sulfide by Titration

Analyst:	JLA	SOP Information:	
Date:	10/23/2019	Number:	WC 0091
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_01675
TALS ID	Iod_00243	Prep Date:	10/9/2019
Normality:	0.025	Made By:	JLA
Solution 2:	sodium thiosulfate	Concentration:	1236
TALS ID	Na Thio_00159	Expiration Date:	1/9/2020
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00059		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	4.70	20	4.70	1224.000
CAL	5	4.70	9.10	20	4.40	1248.000

For SM4500 S2 D colorimetric

ICV Information	
Source/Ver-Lot#:	INT_01626
Prep Date:	10/9/2019
Made By:	JLA
Concentration:	1032
Expiration Date:	1/9/2020

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	7.00	20	7.00	1040.000
ICV	5	7.00	14.20	20	7.20	1024.000

TALS Raw Data Report

Job Number: 280-129794-1
LIMS Batch: 475124
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-475095/1-A** Inj Date: 10/23/2019 3:35:01PM 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	84	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-475095/2-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-129794-E-2-A** Inj Date: 10/23/2019 3:35:01PM 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# 5 Lab ID: **280-129794-E-3-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 6 Lab ID: **280-129794-E-4-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 7 Lab ID: **280-129794-E-5-A** Inj Date: 10/23/2019 3:35:01PM 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: **280-129794-E-6-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 18 Lab ID: **280-129936-E-5-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 19 Lab ID: **280-129936-E-5-B MS** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	77	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 20 Lab ID: **280-129936-E-5-C MSD** Inj Date: 10/23/2019 3:35:01PM 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	92	44 110	17	20
Sulfide as H2S		21.25 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-129812-1
LIMS Batch: 475124
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-475095/1-A** Inj Date: 10/23/2019 3:35:01PM 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	84	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-475095/2-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-129812-I-1-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 18 Lab ID: **280-129936-E-5-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 19 Lab ID: **280-129936-E-5-B MS** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	77	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 20 Lab ID: **280-129936-E-5-C MSD** Inj Date: 10/23/2019 3:35:01PM 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	92	44 110	17	20
Sulfide as H2S		21.25 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-129857-1
LIMS Batch: 475124
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-475095/1-A** Inj Date: 10/23/2019 3:35:01PM 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	84	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-475095/2-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-129857-E-1-A** Inj Date: 10/23/2019 3:35:01PM 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# 10 Lab ID: **280-129857-E-2-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 11 Lab ID: **280-129857-E-3-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-129857-E-4-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-129857-E-5-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 18 Lab ID: **280-129936-E-5-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 19 Lab ID: **280-129936-E-5-B MS** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	77	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 20 Lab ID: **280-129936-E-5-C MSD** Inj Date: 10/23/2019 3:35:01PM 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	92	44 110	17	20
Sulfide as H2S		21.25 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-129936-1
LIMS Batch: 475124
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-475095/1-A** Inj Date: 10/23/2019 3:35:01PM 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	84	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-475095/2-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-129936-E-1-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-129936-E-2-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 16 Lab ID: **280-129936-E-3-A** Inj Date: 10/23/2019 3:35:01PM 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# 17 Lab ID: **280-129936-E-4-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 18 Lab ID: **280-129936-E-5-A** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 19 Lab ID: **280-129936-E-5-B MS** Inj Date: 10/23/2019 3:35:01PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	77	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 20 Lab ID: **280-129936-E-5-C MSD** Inj Date: 10/23/2019 3:35:01PM 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	92	44 110	17	20
Sulfide as H2S		21.25 mg/L	mg/L				

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Titration Data Review Checklist

LIMS Batch Number: 475124	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: Joseph Abeyta	**2310B 2320B 2340C**	**(Standard) DoD QAPP Other**
Date: 10/23/19	**4500 S2 F 4500 SO3 B (9030B/9034)**	
Matrix (circle): **(Water) Solid**	**Automated or (Manual) (circle one)**	**Instrument ID (circle one if applicable):** **AT2 AT3**

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		✓	If no, list details:
3. Are samples analyzed within the required hold time?	✓		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		✓	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	✓		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		✓	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	NA		✓	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		✓	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	✓		✓	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	✓		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	✓		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	✓		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		✓	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	✓		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		✓	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	✓		✓	□ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data	✓		✓	
a. Unused data is clearly identified with reason	✓		✓	
b. All crossed out data is initialed and dated	✓		✓	
c. Out of control QC is clearly identified	✓		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		✓	
f. 100% of manual calculations are verified.	✓		✓	
18. TALS Samples Tab	✓		✓	
a. LIMS Sample IDs / Containers are correct	✓		✓	
b. Method and matrix are correct	✓		✓	
c. Date and time match raw data	✓		✓	
d. Dilutions are correct	✓		✓	
e. Correct suffix designated (where applicable)	✓		✓	
19. TALS Worksheet Tab is complete and correct	✓		✓	
20. TALS Reagent Tab is complete and correct	✓		✓	
21. TALS QC Links Tab is correct	✓		✓	
22. TALS Sample Results Tab	✓		✓	
a. All unused data are marked Rejected or Accepted	✓		✓	
b. All reported analytes are marked Primary or Secondary	✓		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		✓	
d. TALS Batch Information Screen documentation is complete	✓		✓	
e. TALS Status set to appropriate review level	✓		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: _____

_____

_____

2nd Reviewer: GT **Review Date:** 10/24/19

Sulfide by Titration

Analyst:	JLA	SOP Information:	
Date:	10/23/2019	Number:	WC 0091
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_01675
TALS ID	Iod_00243	Prep Date:	10/9/2019
Normality:	0.025	Made By:	JLA
Solution 2:	sodium thiosulfate	Concentration:	1236
TALS ID	Na Thio_00159	Expiration Date:	1/9/2020
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00059		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	4.70	20	4.70	1224.000
CAL	5	4.70	9.10	20	4.40	1248.000

For SM4500 S2 D colorimetric

ICV Information	
Source/Ver-Lot#:	INT_01626
Prep Date:	10/9/2019
Made By:	JLA
Concentration:	1032
Expiration Date:	1/9/2020

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	7.00	20	7.00	1040.000
ICV	5	7.00	14.20	20	7.20	1024.000

TALS Raw Data Report

Job Number: 280-129936-1
LIMS Batch: 475145
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-475115/1-A** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	88	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-475115/2-A** Inj Date: 10/23/2019 7:16:21PM 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	84	44 110	4	20
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-475115/3-A** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-129936-E-6-B** Inj Date: 10/23/2019 7:16:21PM 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				

RS# 5 Lab ID: **280-129936-E-7-B** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 6 Lab ID: **280-129936-E-8-B** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 7 Lab ID: **280-129936-E-9-D** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-129936-E-9-E MS** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	88	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 9 Lab ID: **280-129936-E-9-F MSD** Inj Date: 10/23/2019 7:16:21PM 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	92	44 110	4	20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 10 Lab ID: **280-129936-E-10-B** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 11 Lab ID: **280-129936-E-11-B** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-129936-E-12-B** Inj Date: 10/23/2019 7:16:21PM 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# 13 Lab ID: **280-129936-E-13-B** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-129936-E-14-B** Inj Date: 10/23/2019 7:16:21PM 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: **280-129936-E-15-B** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-129968-1
LIMS Batch: 475145
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-475115/1-A** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	88	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-475115/2-A** Inj Date: 10/23/2019 7:16:21PM 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	84	44 110	4	20
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-475115/3-A** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

RS# 7 Lab ID: **280-129936-E-9-D** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

RS# 8 Lab ID: **280-129936-E-9-E MS** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	88	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 9 Lab ID: **280-129936-E-9-F MSD** Inj Date: 10/23/2019 7:16:21PM 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	92	44 110	4	20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 16 Lab ID: **280-129968-E-2-B** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

RS# 17 Lab ID: **280-129968-E-4-B** Inj Date: 10/23/2019 7:16:21PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

Titration Data Review Checklist

LIMS Batch Number: 475145	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: Joseph	2310B 2320B 2340C	~~Standard~~ DoD QAPP Other
Date: 10/23/2019 Abeyta	4500 S2 F 4500 SO3 B 9030B/9034	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		/	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		/	If no, list details:
3. Are samples analyzed within the required hold time?	✓		/	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		/	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	✓		/	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		/	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	NA		/	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		/	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	✓		/	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	✓		/	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	✓		/	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	✓		/	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		/	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	✓		/	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		/	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	✓		✓	□ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data	✓		✓	
a. Unused data is clearly identified with reason	✓		✓	
b. All crossed out data is initialed and dated	✓		✓	
c. Out of control QC is clearly identified	✓		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		✓	
f. 100% of manual calculations are verified.	✓		✓	
18. TALS Samples Tab	✓		✓	
a. LIMS Sample IDs / Containers are correct	✓		✓	
b. Method and matrix are correct	✓		✓	
c. Date and time match raw data	✓		✓	
d. Dilutions are correct	✓		✓	
e. Correct suffix designated (where applicable)	✓		✓	
19. TALS Worksheet Tab is complete and correct	✓		✓	
20. TALS Reagent Tab is complete and correct	✓		✓	
21. TALS QC Links Tab is correct	✓		✓	
22. TALS Sample Results Tab	✓		✓	
a. All unused data are marked Rejected or Accepted	✓		✓	
b. All reported analytes are marked Primary or Secondary	✓		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		✓	
d. TALS Batch Information Screen documentation is complete	✓		✓	
e. TALS Status set to appropriate review level	✓		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: _____

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2nd Reviewer: _____ **Review Date:** 10/24/19

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-101
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Oct-2019 09:56:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0086204-002
Misc. Info.: 280-0086204-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Oct-2019 08:07:50 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0337

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.232	3.230	0.002	1002740	0.2000	0.2366	
2 Chloride	4.403	4.397	0.006	2974754	1.00	1.20	
3 Nitrite as N	5.082	5.073	0.009	1074611	NC	NC	
4 Bromide	6.155	6.137	0.018	258005	0.2000	0.2376	
5 Nitrate as N	6.932	6.888	0.044	1373194	NC	NC	
6 Orthophosphate as P	9.392	9.353	0.039	1269882	NC	NC	
7 Sulfate	10.710	10.693	0.017	2094368	1.00	1.26	

QC Flag Legend

Processing Flags
NC - Not Calibrated

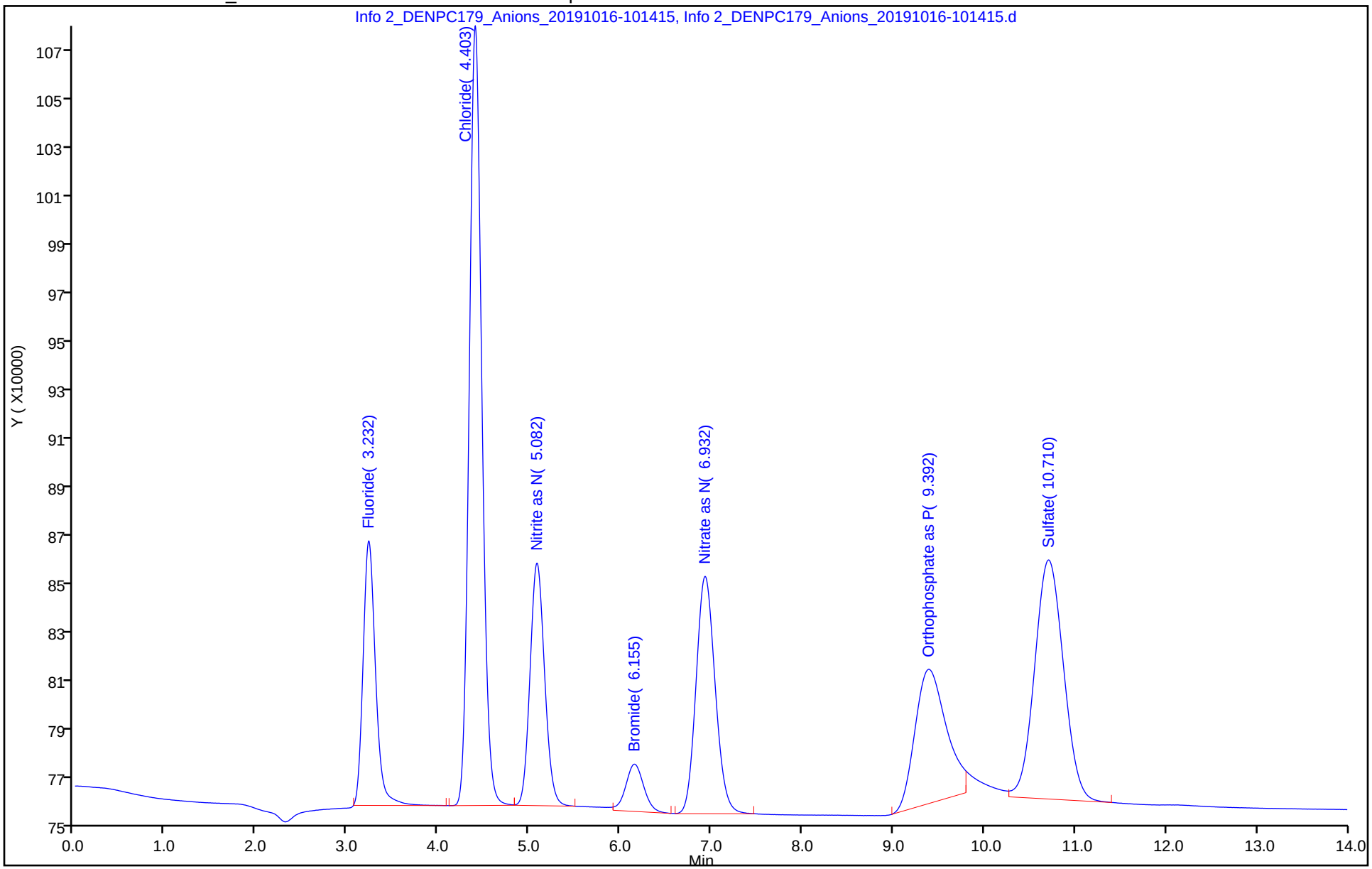
Reagents:

IC Cal low_00488 Amount Added: 0.04 Units: mL
IC CAL cl/so4_00279 Amount Added: 0.04 Units: mL

Report Date: 17-Oct-2019 08:07:50 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-101415.d				
Injection Date:	16-Oct-2019 09:56:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD1			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-103
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Oct-2019 10:14:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0086204-003
Misc. Info.: 280-0086204-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Oct-2019 08:07:49 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0337

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.228	3.230	-0.002	2620818	0.5000	0.4568	
2 Chloride	4.398	4.397	0.001	7619029	2.50	2.29	
3 Nitrite as N	5.080	5.073	0.007	2684802	NC	NC	
4 Bromide	6.150	6.137	0.013	589406	0.5000	0.4745	
5 Nitrate as N	6.920	6.888	0.032	3496323	NC	NC	
6 Orthophosphate as P	9.375	9.353	0.022	2908622	NC	NC	
7 Sulfate	10.703	10.693	0.010	5258185	2.50	2.27	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

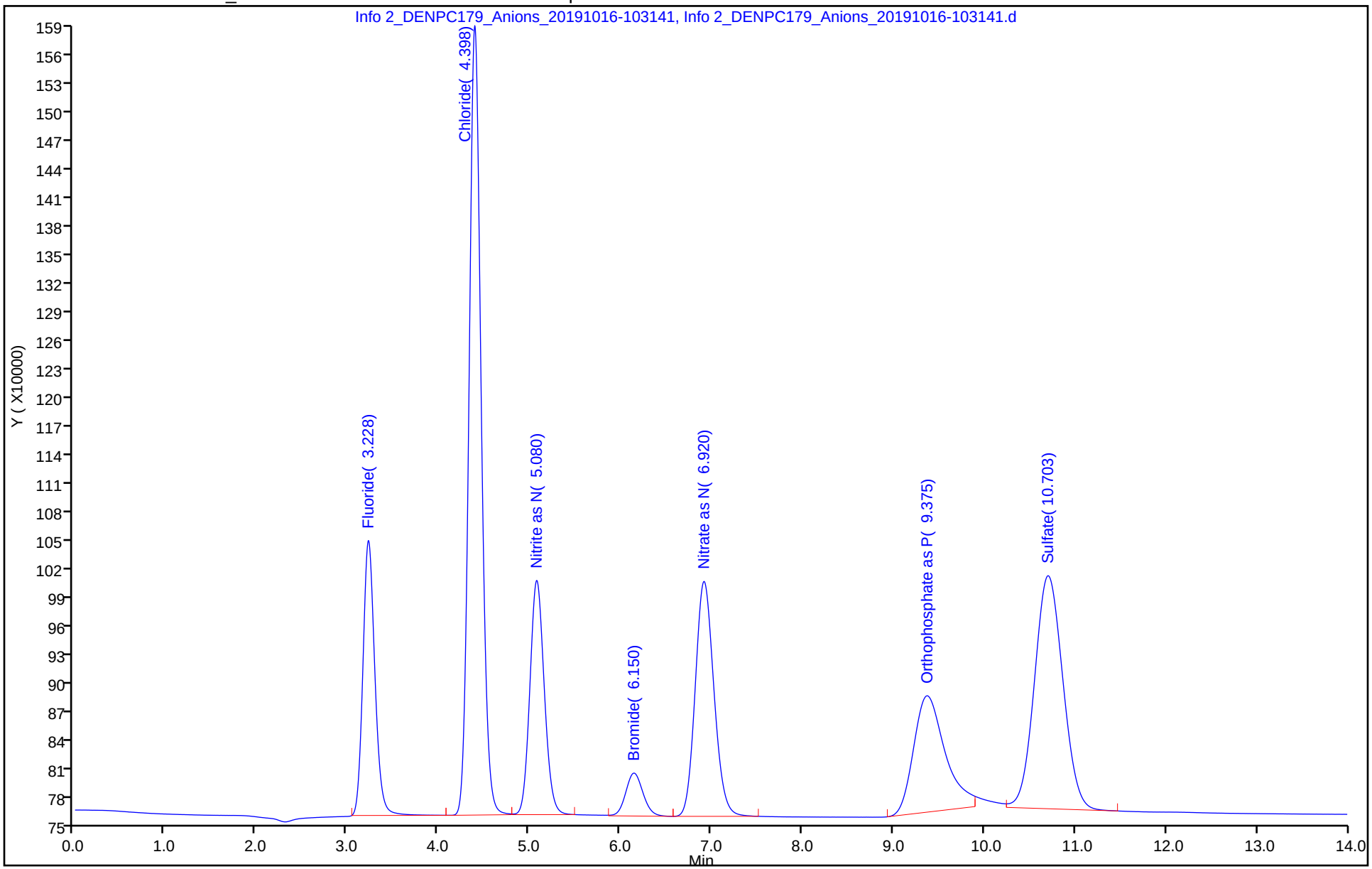
IC Cal low_00488 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00279 Amount Added: 0.10 Units: mL

Report Date: 17-Oct-2019 08:07:49 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-103141.d

Injection Date:	16-Oct-2019 10:14:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD2			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-104
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Oct-2019 10:31:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0086204-004
Misc. Info.: 280-0086204-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Oct-2019 08:07:48 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0337

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.230	3.230	0.000	5802506	1.00	0.8897	
2 Chloride	4.398	4.397	0.001	16645385	5.00	4.41	
3 Nitrite as N	5.078	5.073	0.005	5995758	NC	NC	
4 Bromide	6.147	6.137	0.010	1172610	1.00	0.8912	
5 Nitrate as N	6.913	6.888	0.025	7395115	NC	NC	
6 Orthophosphate as P	9.370	9.353	0.017	6150863	NC	NC	
7 Sulfate	10.703	10.693	0.010	11314027	5.00	4.20	

QC Flag Legend

Processing Flags
NC - Not Calibrated

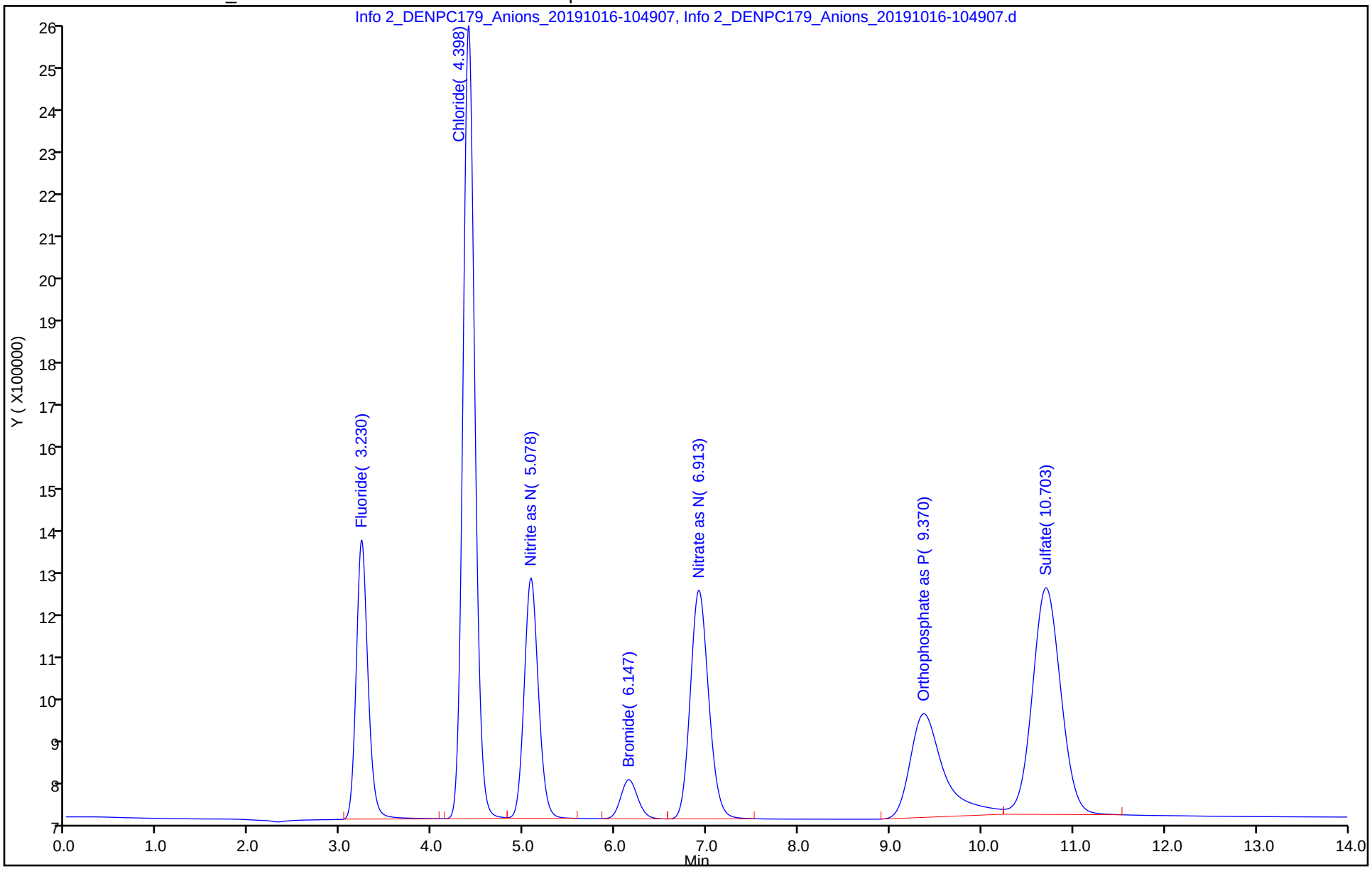
Reagents:

IC Cal low_00488 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00279 Amount Added: 0.20 Units: mL

Report Date: 17-Oct-2019 08:07:48 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-104907.d				
Injection Date:	16-Oct-2019 10:31:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD3			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-110				
Lims ID:	STD4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	16-Oct-2019 10:49:00	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0086204-005				
Misc. Info.:	280-0086204-005				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub2				
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	17-Oct-2019 08:07:47	Calib Date:	16-Oct-2019 11:24:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0337				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.230	3.230	0.000	28651108	4.00	4.00	
2 Chloride	4.397	4.397	0.000	251096867	60.0	59.4	
3 Nitrite as N	5.073	5.073	0.000	30588598	NC	NC	
4 Bromide	6.137	6.137	0.000	5152478	4.00	3.74	
5 Nitrate as N	6.888	6.888	0.000	36456238	NC	NC	
6 Orthophosphate as P	9.353	9.353	0.000	22227008	NC	NC	
7 Sulfate	10.693	10.693	0.000	181914278	60.0	58.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

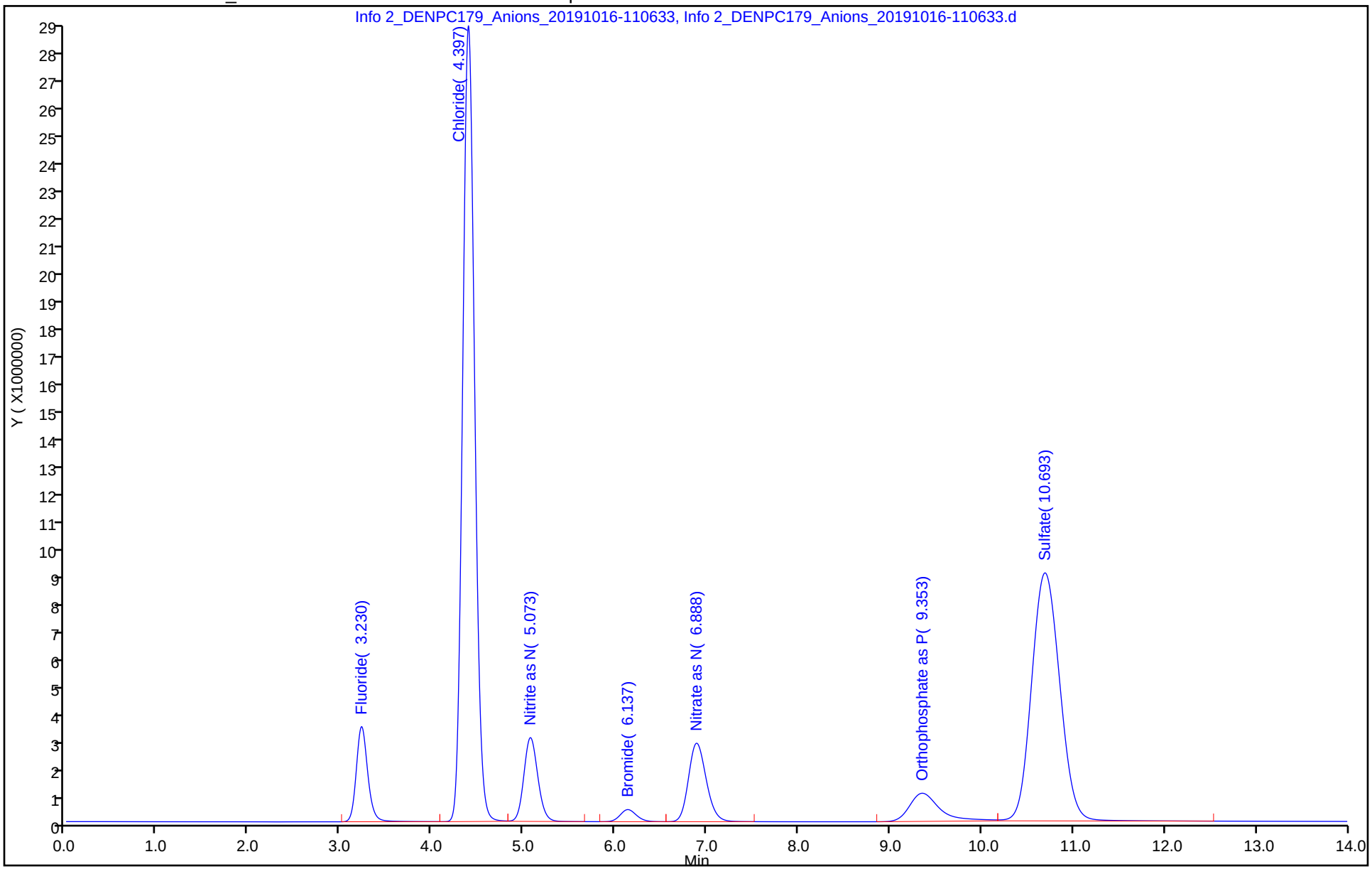
IC Cal low_00488	Amount Added:	0.80	Units: mL
IC CAL cl/so4_00279	Amount Added:	2.40	Units: mL

Report Date: 17-Oct-2019 08:07:47 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-110633.d

Injection Date:	16-Oct-2019 10:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD4			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-112
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Oct-2019 11:06:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0086204-006
Misc. Info.: 280-0086204-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Oct-2019 08:07:46 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0337

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.232	3.223	0.009	58734368	8.00	8.09	
2 Chloride	4.402	4.417	-0.015	511590511	120.0	120.5	
3 Nitrite as N	5.075	5.113	-0.038	65194107	NC	NC	
4 Bromide	6.138	6.225	-0.087	11214767	8.00	8.07	
5 Nitrate as N	6.887	7.007	-0.120	79358403	NC	NC	
6 Orthophosphate as P	9.332	9.287	0.045	40702804	NC	NC	
7 Sulfate	10.663	10.613	0.050	376005839	120.0	120.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

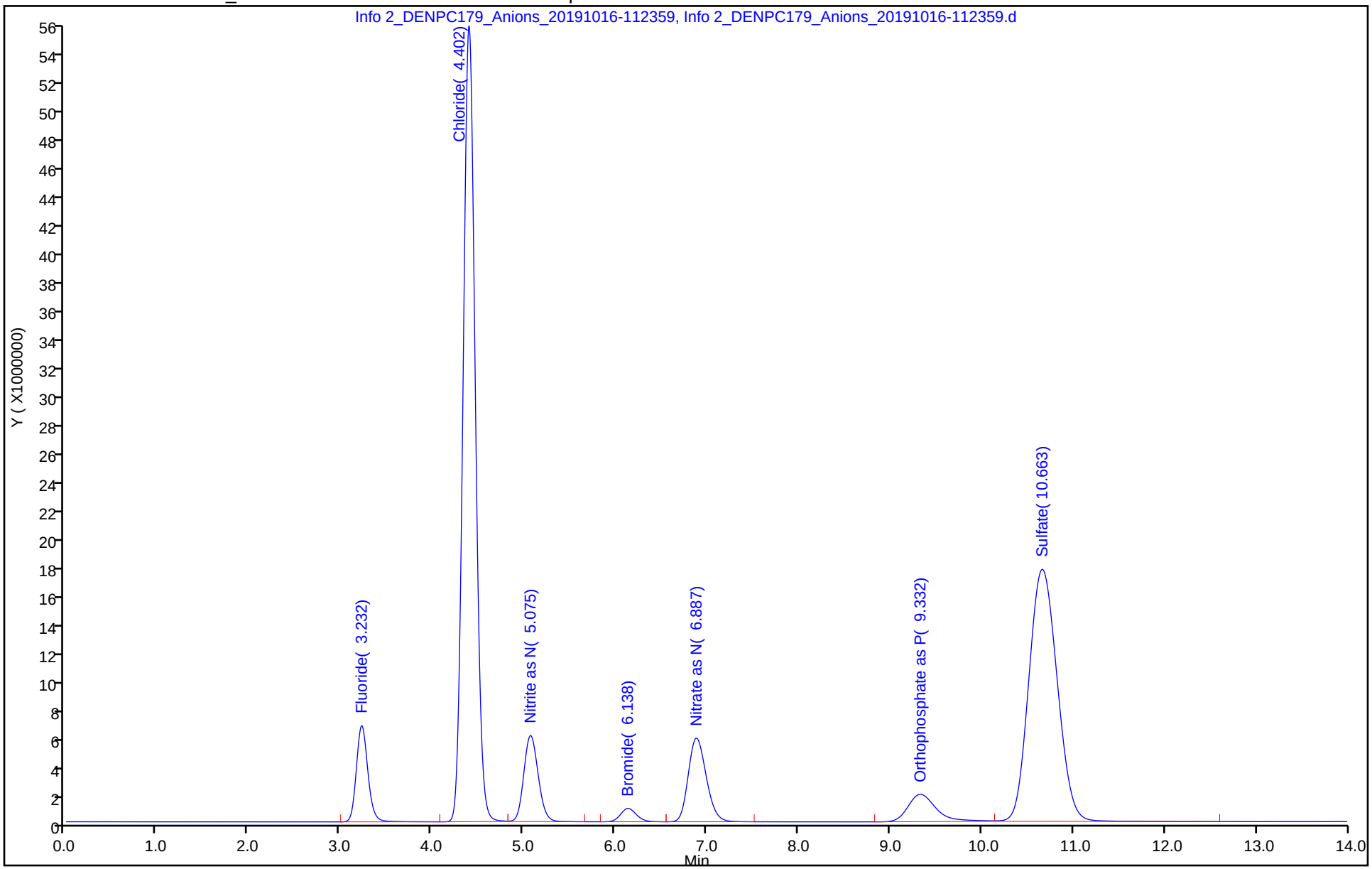
Reagents:

IC Cal low_00488 Amount Added: 1.60 Units: mL
IC CAL cl/so4_00279 Amount Added: 4.80 Units: mL

Report Date: 17-Oct-2019 08:07:46 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-112359.d				
Injection Date:	16-Oct-2019 11:06:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Oct-2019 11:24:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0086204-007
Misc. Info.: 280-0086204-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Oct-2019 08:07:45 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0337

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.228	3.223	0.005	72959380	10.0	10.0	
2 Chloride	4.428	4.417	0.011	853716021	200.0	200.7	
3 Nitrite as N	5.112	5.113	-0.001	83596523	NC	NC	
4 Bromide	6.218	6.225	-0.007	14330248	10.0	10.3	
5 Nitrate as N	6.987	7.007	-0.020	100613170	NC	NC	
6 Orthophosphate as P	9.287	9.287	0.000	48862862	NC	NC	
7 Sulfate	10.610	10.613	-0.003	632188294	200.0	201.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

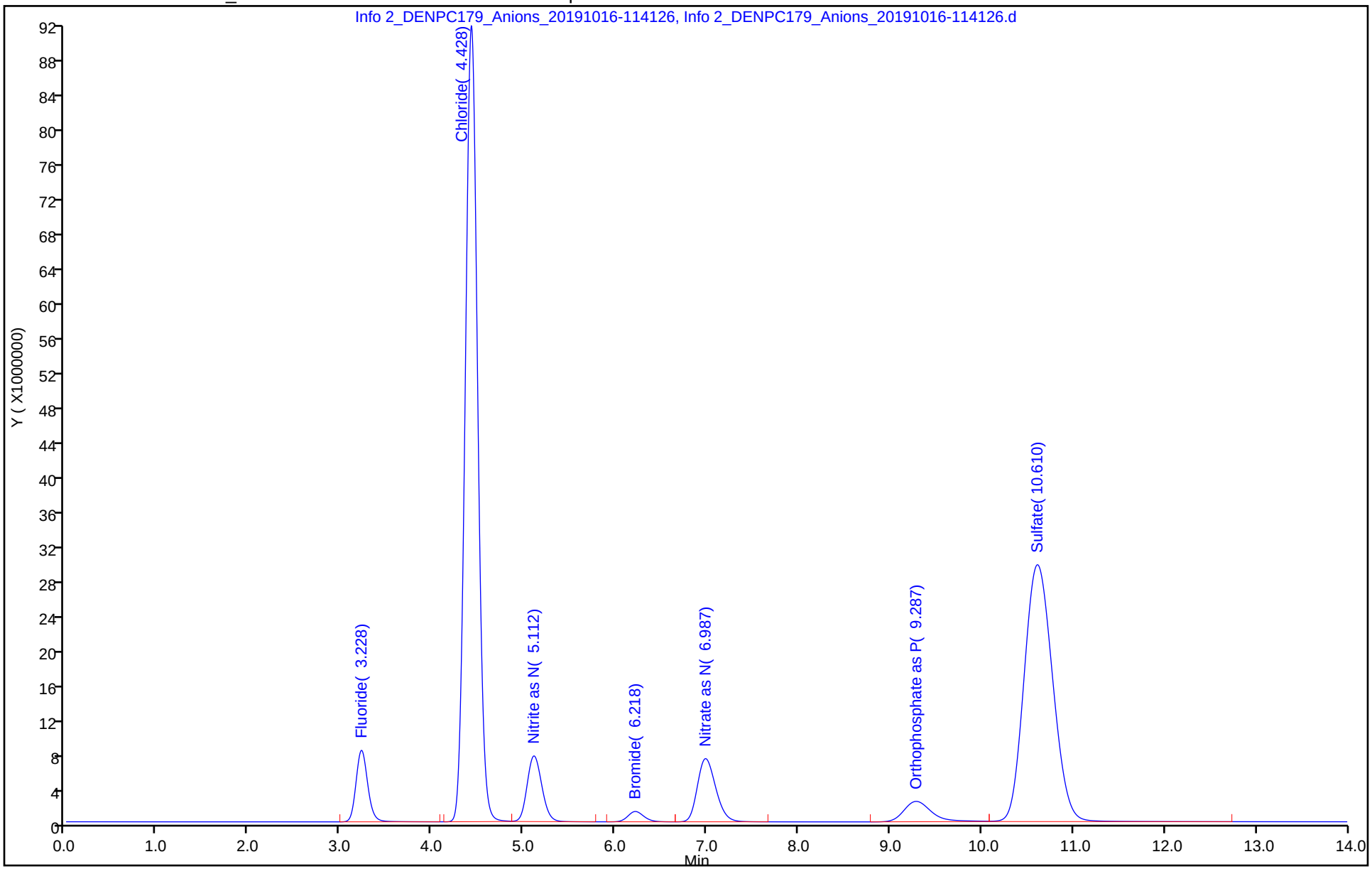
IC Cal low_00488 Amount Added: 2.00 Units: mL
IC CAL cl/so4_00279 Amount Added: 8.00 Units: mL

Report Date: 17-Oct-2019 08:07:45 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114126.d

Injection Date:	16-Oct-2019 11:24:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD6			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 86204 **Inst ID:** 10 **Analysis Date:** 10/14/19 **Analyst:** JP

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	129308	1	F Cl NO2 Br NO3 PO4 SO4	MS/D 1	
☐	129194	3	F Cl NO2 Br NO3 PO4 SO4	MS/D 1	
☐	129571	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129486	10/16/19 3 1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	127963	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129322	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	128979	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129442	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129604	4	F Cl NO2 Br NO3 PO4 SO4	MS/D 1	
☐	129584	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	89764	9	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	89765	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
308		F Cl NO2 Br NO3 PO4 SO4	5X	RERUN
194		F Cl NO2 Br NO3 PO4 SO4	10X	RERUN
571		F Cl NO2 Br NO3 PO4 SO4	2X	RERUN
486		F Cl NO2 Br NO3 PO4 SO4	10, 100X	COVERAGE
963		F Cl NO2 Br NO3 PO4 SO4	10, 100X	COVERAGE
322		F Cl NO2 Br NO3 PO4 SO4	10X	RERUN
979		F Cl NO2 Br NO3 PO4 SO4	5, 20X	RERUN
442		F Cl NO2 Br NO3 PO4 SO4	5X	RERUN
584		F Cl NO2 Br NO3 PO4 SO4	50X	RERUN
764			100, 500, 1000 10000, 20000	RERUN
765			10, 100, 1000	RERUN

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Oct-2019 12:35:03
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b
Inj Date : 16-Oct-2019 09:56:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-736288	7349732		0.999				
2 Chloride	-215711	4264055		1.000				
3 Nitrite as N					-100454	8234670		0.997
4 Bromide	-74537	1399356		0.998				
5 Nitrate as N					-108509	9924177		0.997
6 Orthophosphate as P					421424	5046139		0.997
7 Sulfate	-187445	3140339		0.999				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Oct-2019 12:35:03
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-17.267 No. Points: 7196

Calibration File Names

Level: 1 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-10141
Inj Date: 16-Oct-2019 09:56:00 Worklist: 86204 Sample#: 2
Level: 2 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-10314
Inj Date: 16-Oct-2019 10:14:00 Worklist: 86204 Sample#: 3
Level: 3 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-10490
Inj Date: 16-Oct-2019 10:31:00 Worklist: 86204 Sample#: 4
Level: 4 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-11063
Inj Date: 16-Oct-2019 10:49:00 Worklist: 86204 Sample#: 5
Level: 5 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-11235
Inj Date: 16-Oct-2019 11:06:00 Worklist: 86204 Sample#: 6
Level: 6 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-11412
Inj Date: 16-Oct-2019 11:24:00 Worklist: 86204 Sample#: 7

Start Cal Date: 16-Oct-2019 09:56:00 End Cal Date: 16-Oct-2019 11:24:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
5013700	5241636	5802506	7162777	7341796	7295938	**-736288**			**0.999**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**7349732**		
1002740	2620818	5802506	28651108	58734368	72959380				
86204(2)	86204(3)	86204(4)	86204(5)	86204(6)	86204(7)				
2 Chloride				Signal: 1					
2974754	3047612	3329077	4184948	4263254	4268580	**-2157119**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**4264055**		
2974754	7619029	16645385	251096867	511590511	853716021				
86204(2)	86204(3)	86204(4)	86204(5)	86204(6)	86204(7)				
4 Bromide				Signal: 1					
1290025	1178812	1172610	1288120	1401846	1433025	**-74537**			**0.998**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**1399356**		
258005	589406	1172610	5152478	11214767	14330248				
86204(2)	86204(3)	86204(4)	86204(5)	86204(6)	86204(7)				
7 Sulfate				Signal: 1					
2094368	2103274	2262805	3031905	3133382	3160941	**-1874453**			**0.999**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**3140339**		
2094368	5258185	11314027	181914278	376005839	632188294				
86204(2)	86204(3)	86204(4)	86204(5)	86204(6)	86204(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-135
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Oct-2019 13:41:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0086204-008
Misc. Info.: 280-0086204-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Oct-2019 08:07:44 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0337

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.223	3.223	0.000	28761700	4.00	4.01	
2 Chloride	4.417	4.417	0.000	335727051	80.0	79.2	
3 Nitrite as N	5.113	5.113	0.000	33076019	NC	NC	
4 Bromide	6.225	6.225	0.000	5194127	4.00	3.77	
5 Nitrate as N	7.007	7.007	0.000	36954215	NC	NC	
6 Orthophosphate as P	9.287	9.287	0.000	21190799	NC	NC	
7 Sulfate	10.613	10.613	0.000	240813859	80.0	77.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

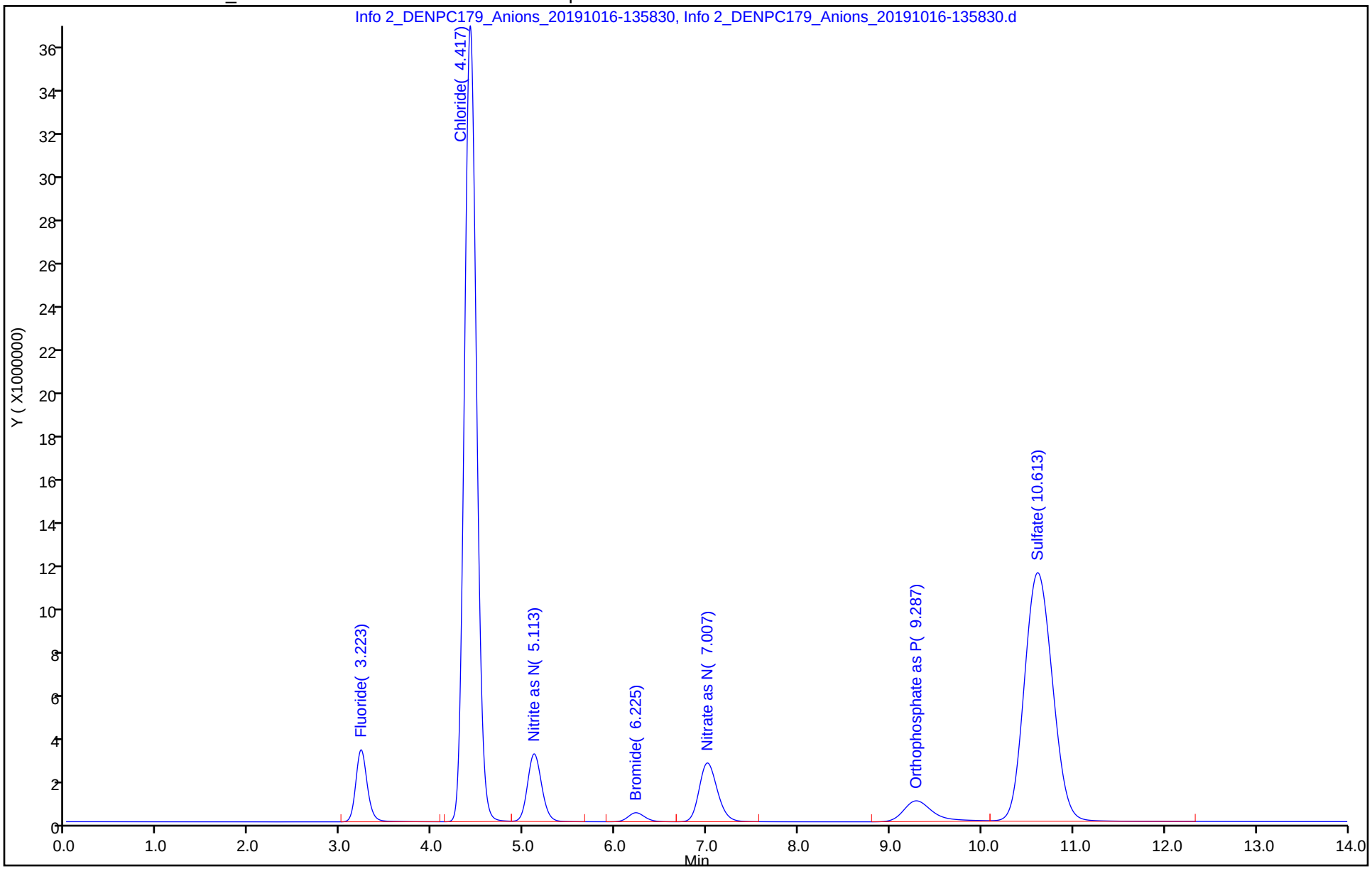
IC SO4 ICV_00020	Amount Added:	0.80	Units: mL
IC ICV 5_00250	Amount Added:	0.80	Units: mL
IC CL ICV_00016	Amount Added:	0.80	Units: mL

Report Date: 17-Oct-2019 08:07:45 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-135830.d

Injection Date:	16-Oct-2019 13:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICV			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-141
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 16-Oct-2019 13:58:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0086204-009
Misc. Info.: 280-0086204-009
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Oct-2019 08:07:32 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0337

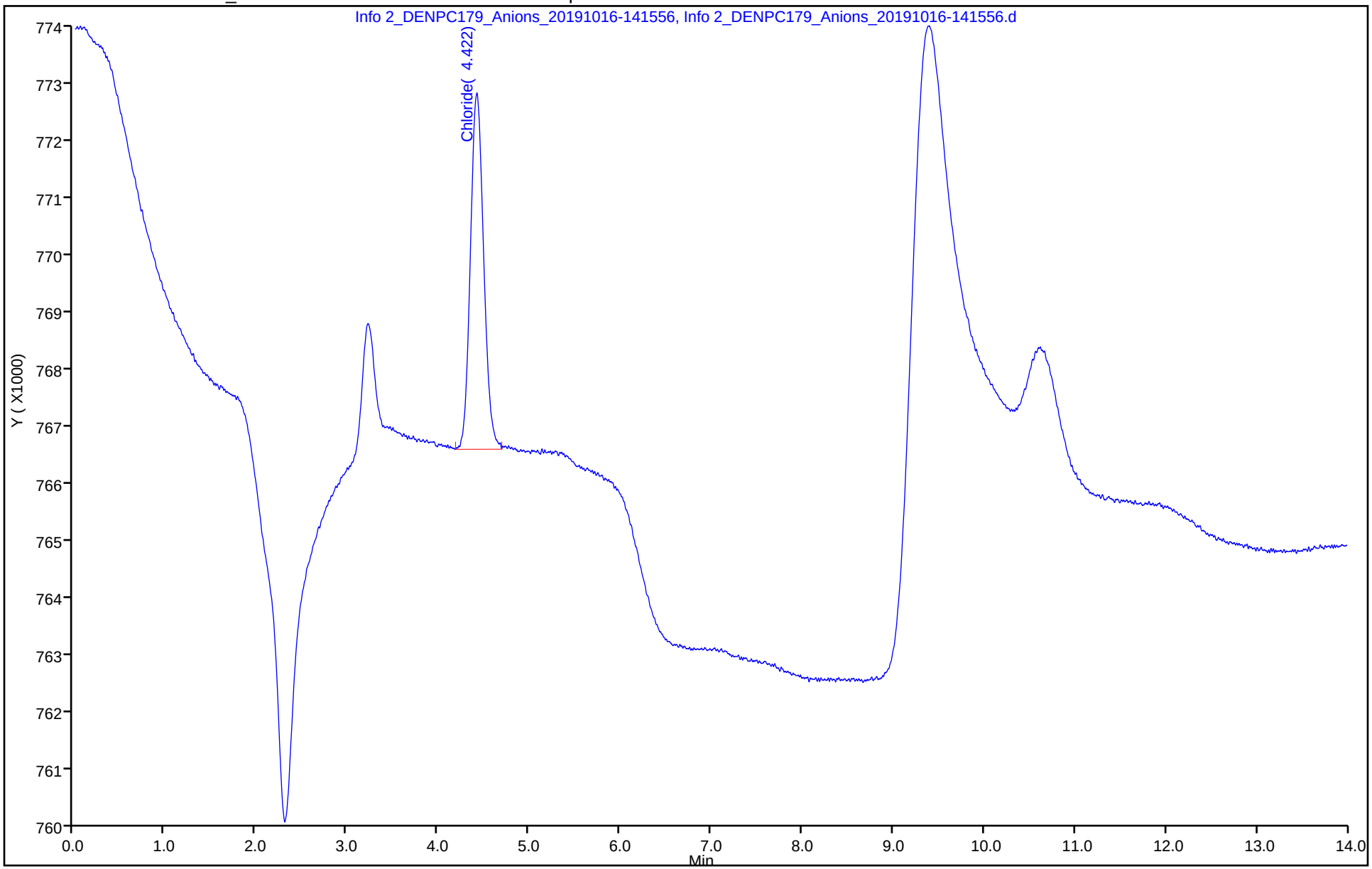
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.223				ND	
2 Chloride	4.422	4.417	0.005	57654		0.5194	
3 Nitrite as N		5.113				ND	
4 Bromide		6.225				ND	
5 Nitrate as N		7.007				ND	
6 Orthophosphate as P		9.287				ND	
7 Sulfate		10.613				ND	

Report Date: 17-Oct-2019 08:07:44 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-141556.d

Injection Date:	16-Oct-2019 13:58:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICB			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 87123 **Inst ID:** 10 **Analysis Date:** 1/14/19 **Analyst:** JP

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	129936	15	F Cl NO2 Br NO3 PO4 SO4	MS/D 9	
☐	129959	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129923	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129945	1	F Cl NO2 Br NO3 PO4 SO4	MS/D 1	
☐	129862	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129906	4	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129948	1	F Cl NO2 Br NO3 PO4 SO4	MS/D 1	
☐	130066	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	130064	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129968	2	F Cl NO2 Br NO3 PO4 SO4	MS/D 2	
☐	130573	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	129995	7	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
923		F Cl NO2 Br NO3 PO4 (SO4)	20X	RERUN
862		(F) Cl NO2 Br NO3 PO4 SO4	1000X	RERUN FILTHY
906		F Cl NO2 Br NO3 PO4 (SO4)	5,50X	RERUN
066		F (Cl) NO2 Br NO3 PO4 (SO4)	100X	TEST
064		(F) (Cl) NO2 Br NO3 PO4 (SO4)	10X	TEST
573		(F) (Cl) NO2 Br NO3 PO4 (SO4)	20X	TEST
995		F (Cl) NO2 Br NO3 PO4 (SO4)	10,100X	TEST
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Oct-2019 12:35:03
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b
Inj Date : 16-Oct-2019 09:56:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-736288	7349732		0.999				
2 Chloride	-215711	4264055		1.000				
3 Nitrite as N					-100454	8234670		0.997
4 Bromide	-74537	1399356		0.998				
5 Nitrate as N					-108509	9924177		0.997
6 Orthophosphate as P					421424	5046139		0.997
7 Sulfate	-187445	3140339		0.999				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Oct-2019 12:35:03
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-17.267 No. Points: 7196

Calibration File Names

Level: 1 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-10141
Inj Date: 16-Oct-2019 09:56:00 Worklist: 86204 Sample#: 2
Level: 2 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-10314
Inj Date: 16-Oct-2019 10:14:00 Worklist: 86204 Sample#: 3
Level: 3 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-10490
Inj Date: 16-Oct-2019 10:31:00 Worklist: 86204 Sample#: 4
Level: 4 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-11063
Inj Date: 16-Oct-2019 10:49:00 Worklist: 86204 Sample#: 5
Level: 5 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-11235
Inj Date: 16-Oct-2019 11:06:00 Worklist: 86204 Sample#: 6
Level: 6 \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-11412
Inj Date: 16-Oct-2019 11:24:00 Worklist: 86204 Sample#: 7

Start Cal Date: 16-Oct-2019 09:56:00 End Cal Date: 16-Oct-2019 11:24:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
5013700	5241636	5802506	7162777	7341796	7295938	**-736288**			**0.999**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**7349732**		
1002740	2620818	5802506	28651108	58734368	72959380				
86204(2)	86204(3)	86204(4)	86204(5)	86204(6)	86204(7)				
2 Chloride				Signal: 1					
2974754	3047612	3329077	4184948	4263254	4268580	**-2157119**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**4264055**		
2974754	7619029	16645385	251096867	511590511	853716021				
86204(2)	86204(3)	86204(4)	86204(5)	86204(6)	86204(7)				
4 Bromide				Signal: 1					
1290025	1178812	1172610	1288120	1401846	1433025	**-74537**			**0.998**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**1399356**		
258005	589406	1172610	5152478	11214767	14330248				
86204(2)	86204(3)	86204(4)	86204(5)	86204(6)	86204(7)				
7 Sulfate				Signal: 1					
2094368	2103274	2262805	3031905	3133382	3160941	**-1874453**			**0.999**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**3140339**		
2094368	5258185	11314027	181914278	376005839	632188294				
86204(2)	86204(3)	86204(4)	86204(5)	86204(6)	86204(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-113
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 14-Nov-2019 11:15:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-001
Misc. Info.: 280-0087123-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	37983162	5.00	5.27	
2 Chloride	4.412	4.402	0.010	425998961	100.0	100.4	
3 Nitrite as N	5.112	5.072	0.040	42070942	NC	NC	
4 Bromide	6.242	6.138	0.104	6434110	5.00	4.65	
5 Nitrate as N	7.025	6.887	0.138	48014530	NC	NC	
6 Orthophosphate as P	9.258	9.355	-0.097	23053111	NC	NC	
7 Sulfate	10.602	10.688	-0.086	309075291	100.0	99.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

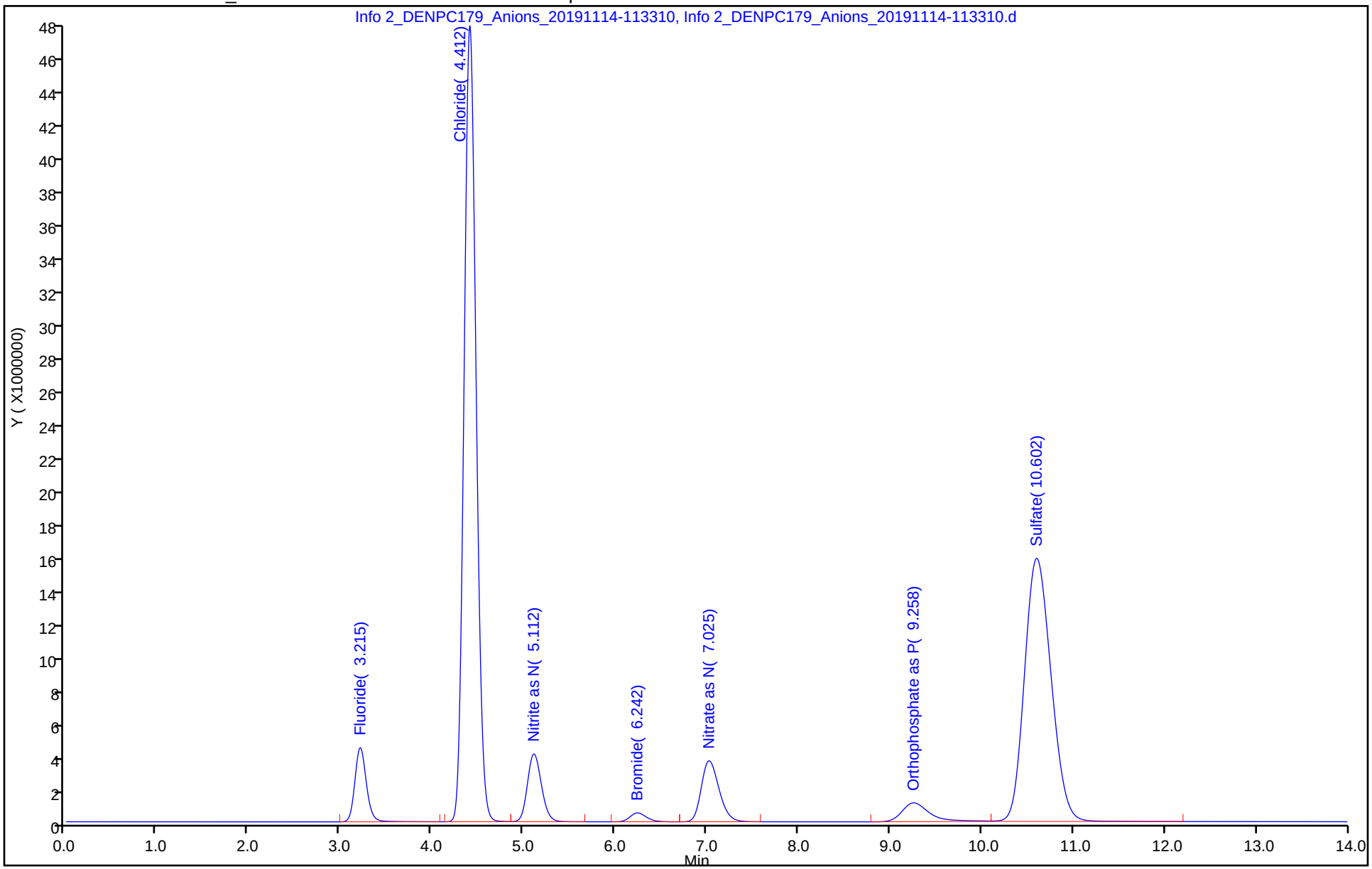
Reagents:

IC LCS_01709 Amount Added: 10.00 Units: mL

Report Date: 15-Nov-2019 09:15:54 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-113310.d				
Injection Date:	14-Nov-2019 11:15:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-115				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	14-Nov-2019 11:33:00	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0087123-002				
Misc. Info.:	280-0087123-002				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	15-Nov-2019 09:15:53	Calib Date:	16-Oct-2019 11:24:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0320				

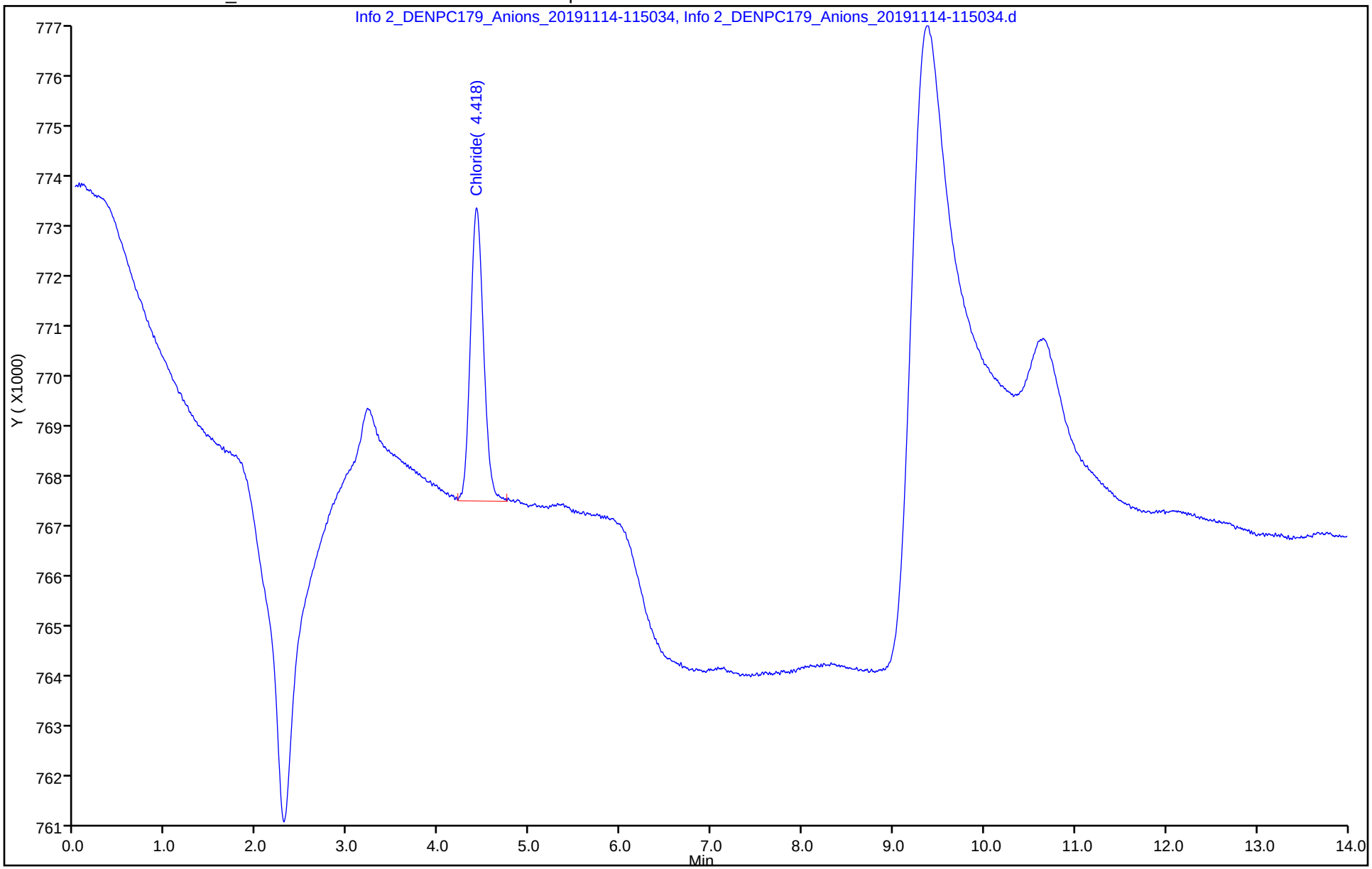
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.233				ND	
2 Chloride	4.418	4.402	0.016	54351		0.5186	
3 Nitrite as N		5.072				ND	
4 Bromide		6.138				ND	
5 Nitrate as N		6.887				ND	
6 Orthophosphate as P		9.355				ND	
7 Sulfate		10.688				ND	

Report Date: 15-Nov-2019 09:15:56 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-115034.d

Injection Date:	14-Nov-2019 11:33:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-120
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 14-Nov-2019 11:50:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-003
Misc. Info.: 280-0087123-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.217	3.233	-0.016	3468641	0.5000	0.5721	
2 Chloride	4.415	4.402	0.013	17637713	5.00	4.64	
3 Nitrite as N	5.127	5.072	0.055	2998821	NC	NC	
4 Bromide	6.270	6.138	0.132	581581	0.5000	0.4689	
5 Nitrate as N	7.082	6.887	0.195	3647363	NC	NC	
6 Orthophosphate as P	9.287	9.355	-0.068	2680796	NC	NC	
7 Sulfate	10.623	10.688	-0.065	11794913	5.00	4.35	

QC Flag Legend

Processing Flags
NC - Not Calibrated

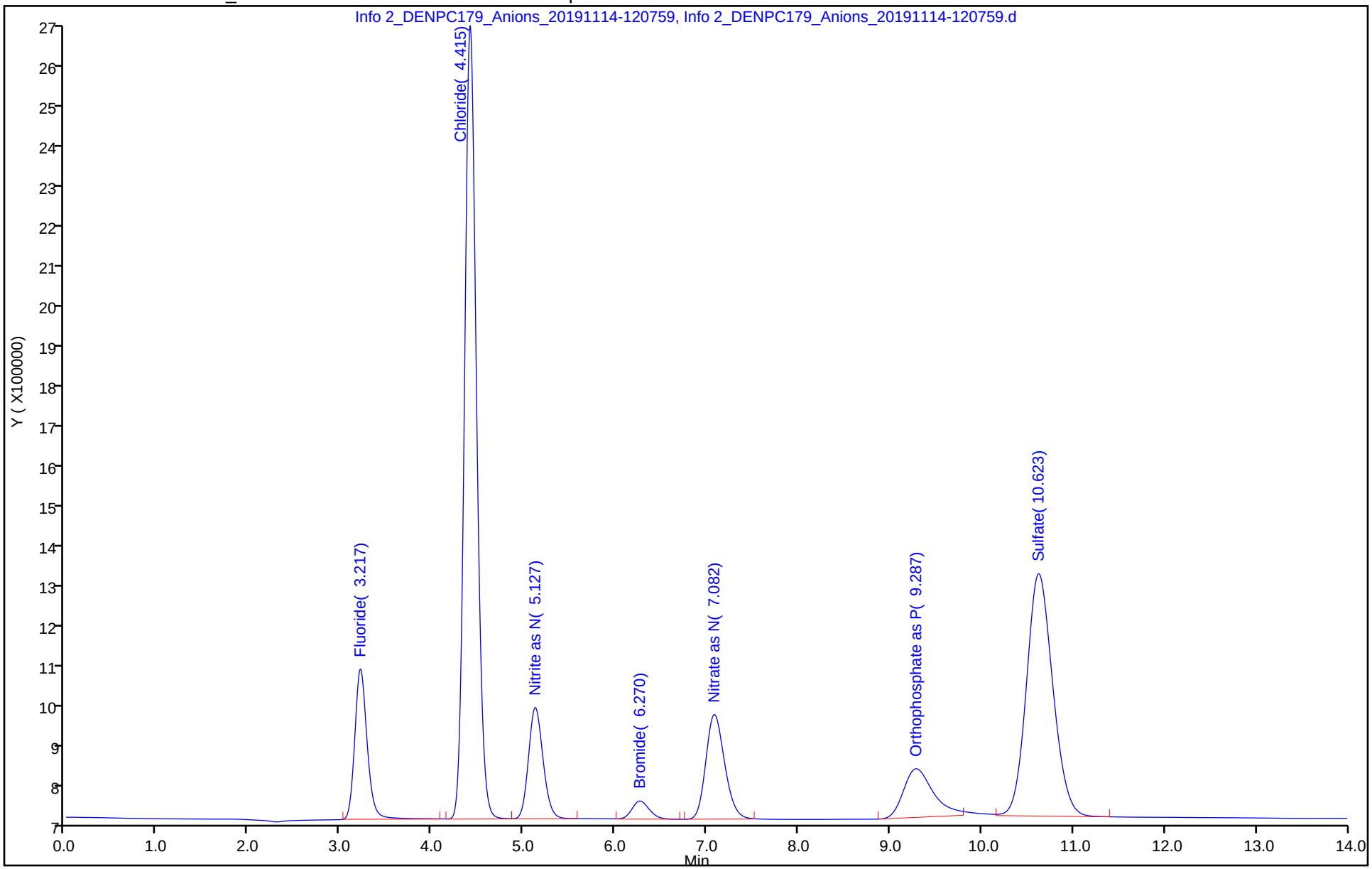
Reagents:

IC Cal low_00493 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00284 Amount Added: 0.20 Units: mL

Report Date: 15-Nov-2019 09:15:58 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-120759.d				
Injection Date:	14-Nov-2019 11:50:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-122
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Nov-2019 12:08:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-004
Misc. Info.: 280-0087123-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.217	3.233	-0.016	39759513	5.00	5.51	
2 Chloride	4.413	4.402	0.011	426658225	100.0	100.6	
3 Nitrite as N	5.113	5.072	0.041	42242662	NC	NC	
4 Bromide	6.247	6.138	0.109	6450624	5.00	4.66	
5 Nitrate as N	7.030	6.887	0.143	48106420	NC	NC	
6 Orthophosphate as P	9.260	9.355	-0.095	24026301	NC	NC	
7 Sulfate	10.603	10.688	-0.085	310617042	100.0	99.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

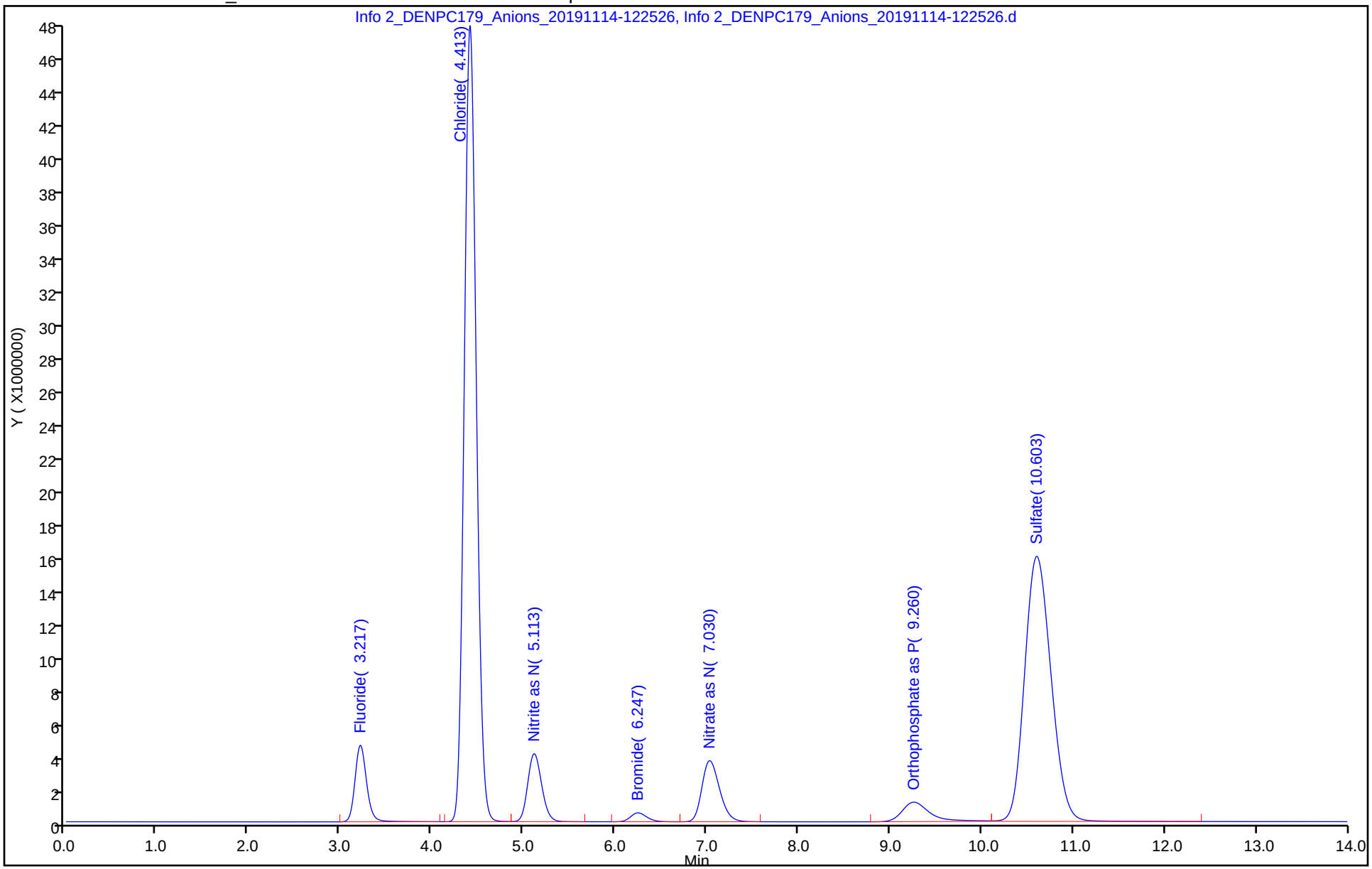
Reagents:

IC LCS_01709 Amount Added: 10.00 Units: mL

Report Date: 15-Nov-2019 09:16:00 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-122526.d				
Injection Date:	14-Nov-2019 12:08:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-124
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 14-Nov-2019 12:25:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-005
Misc. Info.: 280-0087123-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.217	3.233	-0.016	38766142	5.00	5.37	
2 Chloride	4.417	4.402	0.015	426981471	100.0	100.6	
3 Nitrite as N	5.118	5.072	0.046	42253828	NC	NC	
4 Bromide	6.253	6.138	0.115	6464941	5.00	4.67	
5 Nitrate as N	7.038	6.887	0.151	48088049	NC	NC	
6 Orthophosphate as P	9.262	9.355	-0.093	23340080	NC	NC	
7 Sulfate	10.605	10.688	-0.083	309490814	100.0	99.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

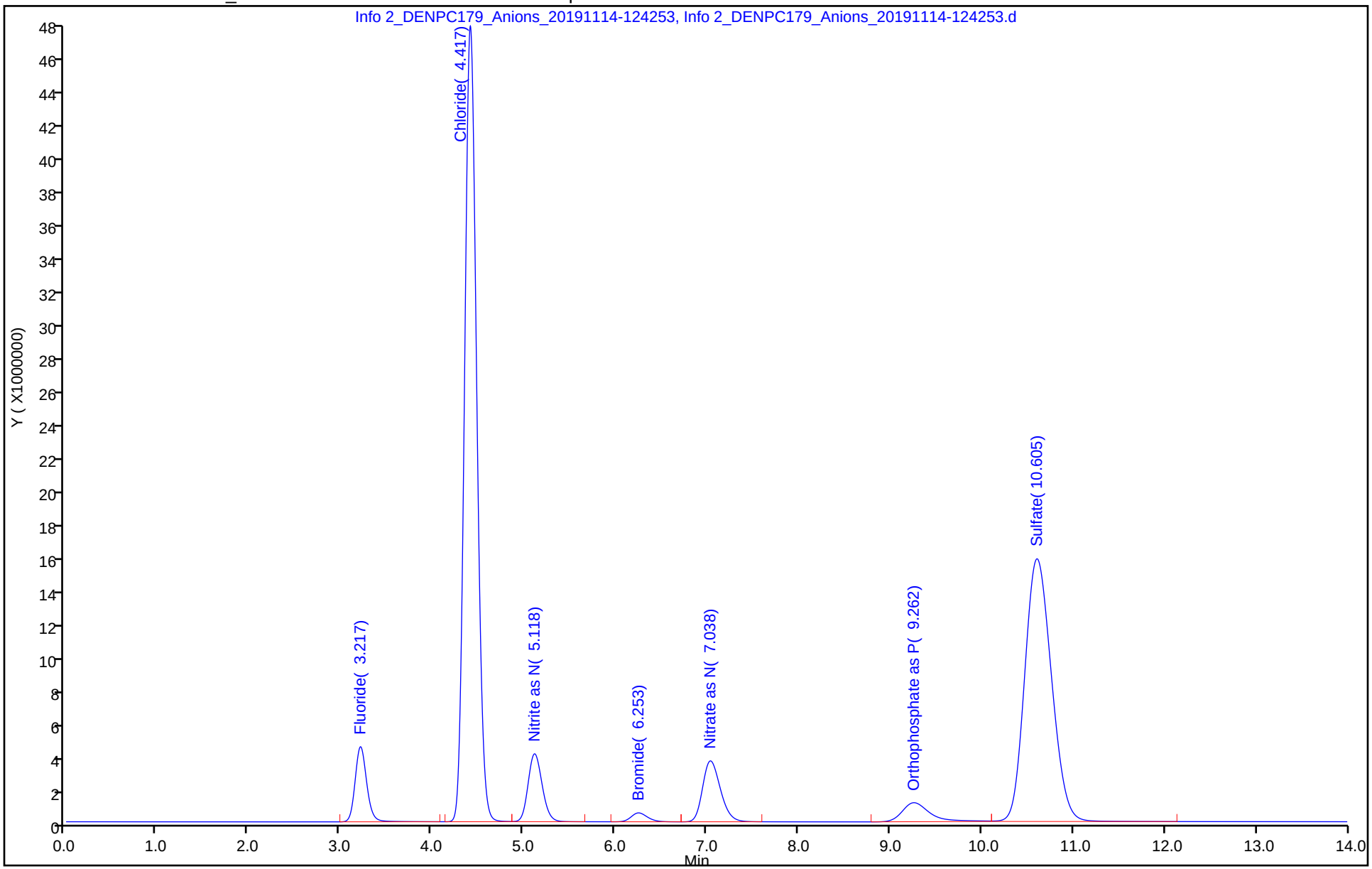
Reagents:

IC LCS_01709 Amount Added: 10.00 Units: mL

Report Date: 15-Nov-2019 09:16:02 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-124253.d				
Injection Date:	14-Nov-2019 12:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-130
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 14-Nov-2019 12:42:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-006
Misc. Info.: 280-0087123-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

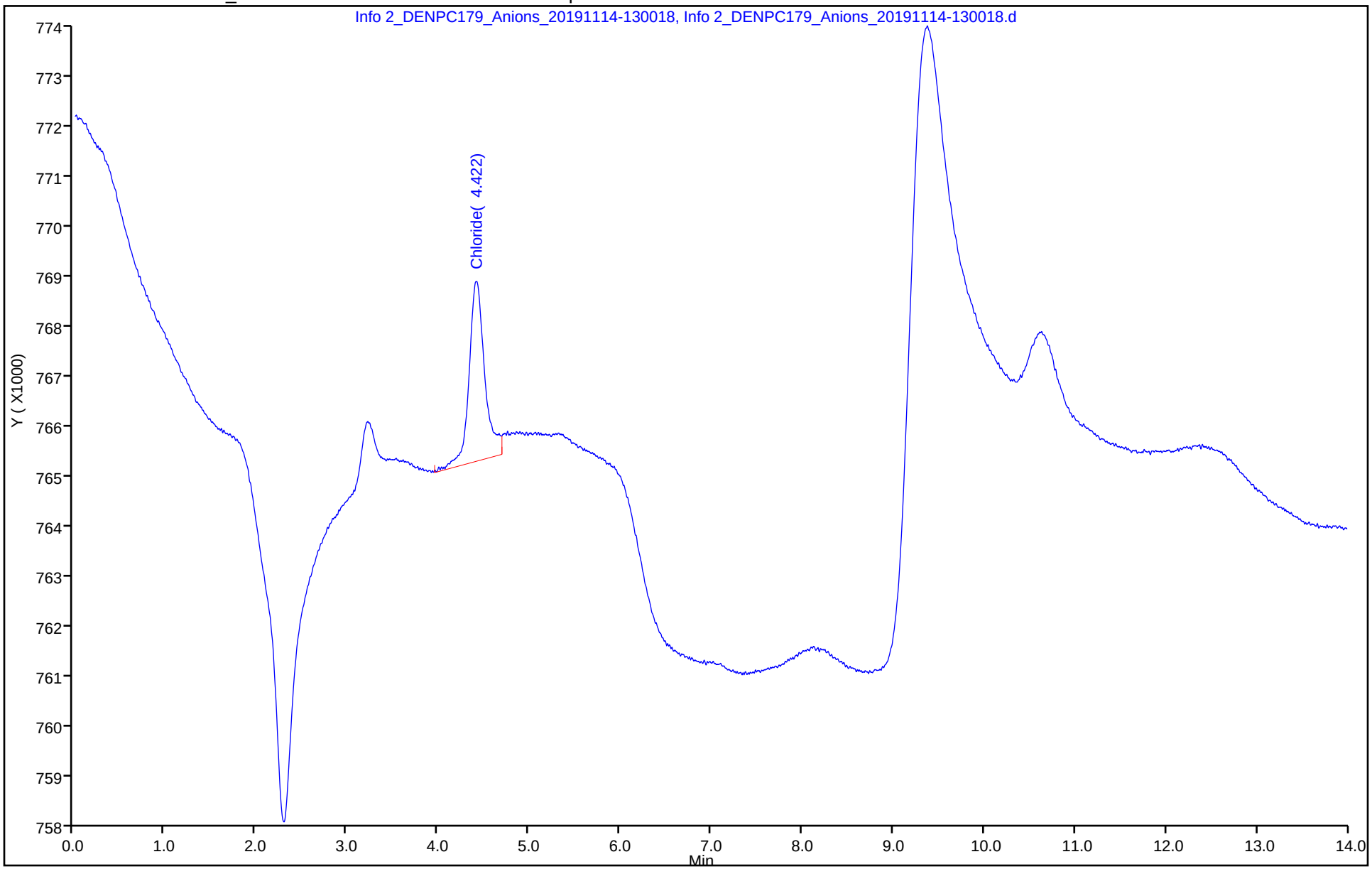
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.233				ND	
2 Chloride	4.422	4.402	0.020	39967		0.5153	
3 Nitrite as N		5.072				ND	
4 Bromide		6.138				ND	
5 Nitrate as N		6.887				ND	
6 Orthophosphate as P		9.355				ND	
7 Sulfate		10.688				ND	

Report Date: 15-Nov-2019 09:16:04 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-130018.d

Injection Date:	14-Nov-2019 12:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-154
Lims ID: 280-129936-F-9
Client ID: G0070-1
Sample Type: Client
Inject. Date: 14-Nov-2019 15:29:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-007
Misc. Info.: 280-0087123-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	1078276	0.2469	
2 Chloride	4.415	4.402	0.013	32950325	8.23	
3 Nitrite as N		5.072			ND	
4 Bromide		6.138			ND	
5 Nitrate as N		6.887			ND	
6 Orthophosphate as P	9.348	9.355	-0.007	234854	NC	
7 Sulfate	10.622	10.688	-0.066	105955852	34.3	

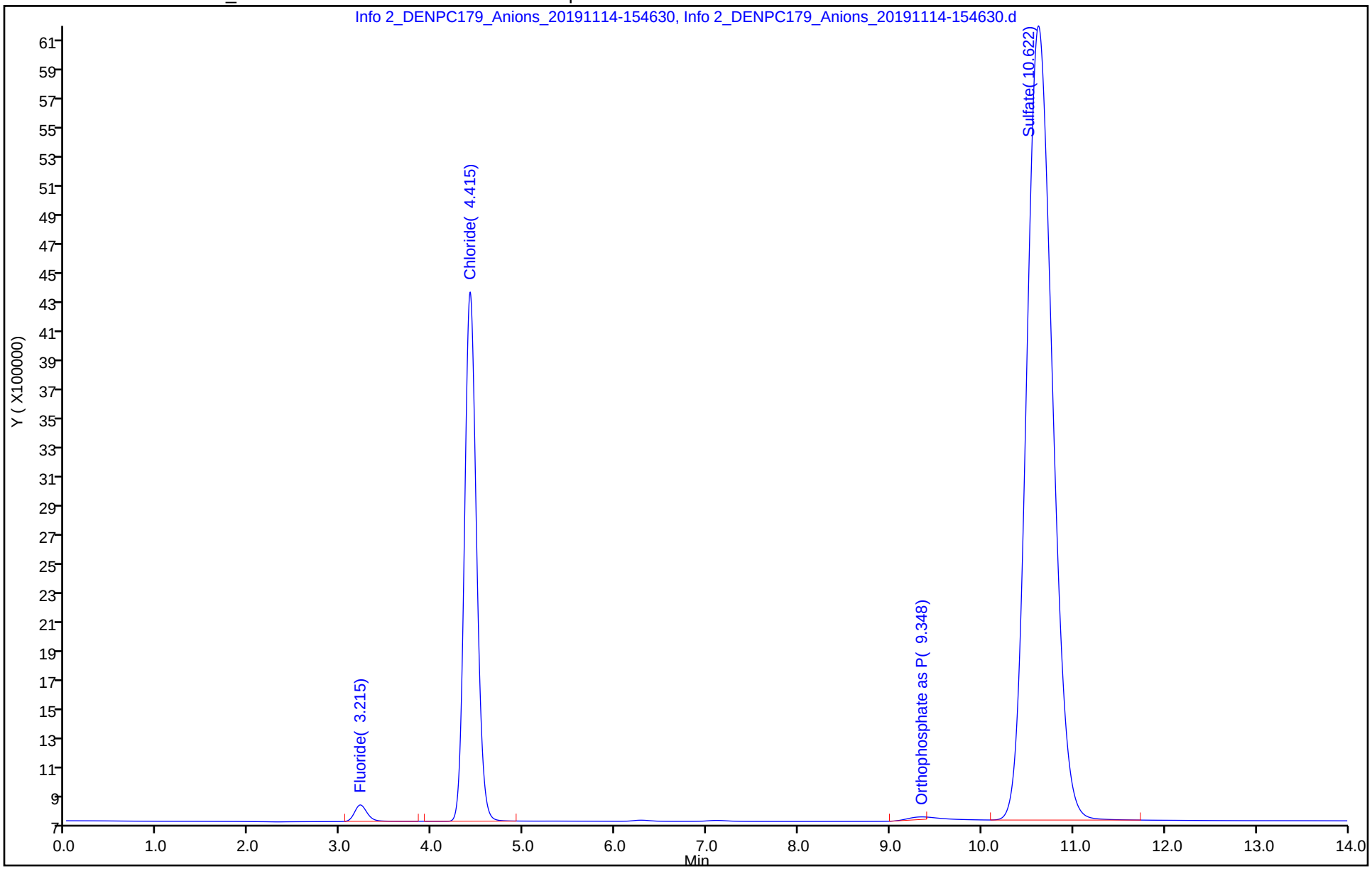
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:07 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-154630.d				
Injection Date:	14-Nov-2019 15:29:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-9	Lab Sample ID:	280-129936-9	Worklist Smp#:	7
Client ID:	G0070-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-160
Lims ID: 280-129936-F-9 DU
Client ID:
Sample Type: DU
Inject. Date: 14-Nov-2019 15:46:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-008
Misc. Info.: 280-0087123-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.233	-0.020	1035130		0.2410	
2 Chloride	4.413	4.402	0.011	32898481		8.22	
3 Nitrite as N		5.072				ND	
4 Bromide		6.138				ND	
5 Nitrate as N		6.887				ND	
6 Orthophosphate as P	9.332	9.355	-0.023	209513		NC	
7 Sulfate	10.613	10.688	-0.075	105505596		34.2	

QC Flag Legend

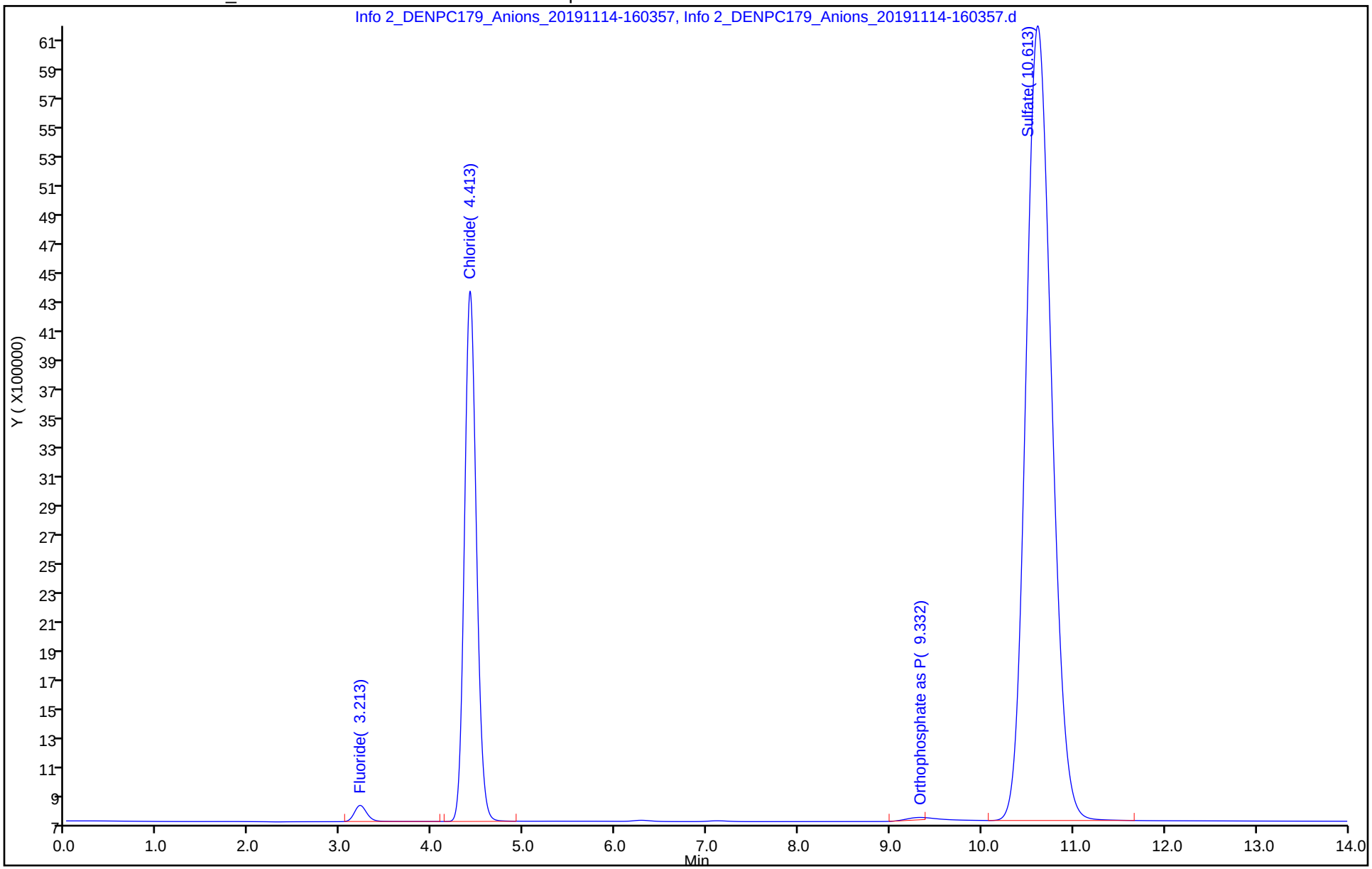
Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:09 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-160357.d

Injection Date:	14-Nov-2019 15:46:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-9 DU			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-162
Lims ID: 280-129936-F-9 MS
Client ID: G0070-1
Sample Type: MS
Inject. Date: 14-Nov-2019 16:04:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-009
Misc. Info.: 280-0087123-009
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.233	-0.020	37689242	5.00	5.23	
2 Chloride	4.413	4.402	0.011	272717238	50.0	64.5	
3 Nitrite as N	5.127	5.072	0.055	44660197	NC	NC	
4 Bromide	6.258	6.138	0.120	7336664	5.00	5.30	
5 Nitrate as N	7.040	6.887	0.153	51237789	NC	NC	
6 Orthophosphate as P	9.268	9.355	-0.087	29711342	NC	NC	
7 Sulfate	10.605	10.688	-0.083	284043422	50.0	91.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

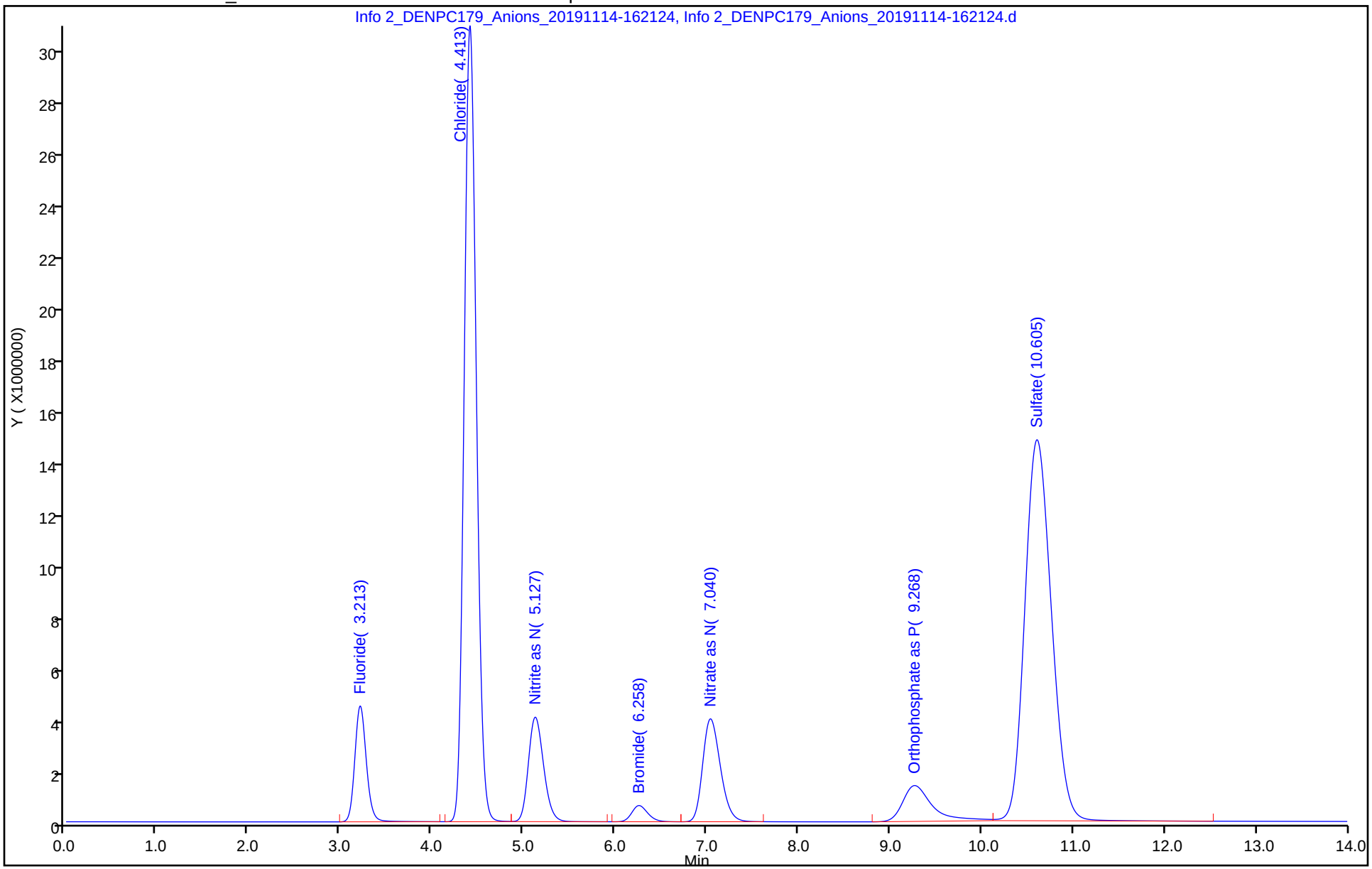
Reagents:

ICMS/MSD WEEK_00622 Amount Added: 0.10 Units: mL

Report Date: 15-Nov-2019 09:16:10 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-162124.d				
Injection Date:	14-Nov-2019 16:04:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-9 MS			Worklist Smp#:	9
Client ID:	G0070-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-163
Lims ID: 280-129936-F-9 MSD
Client ID: G0070-1
Sample Type: MSD
Inject. Date: 14-Nov-2019 16:21:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-010
Misc. Info.: 280-0087123-010
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	38102042	5.00	5.28	
2 Chloride	4.418	4.402	0.016	275795153	50.0	65.2	
3 Nitrite as N	5.132	5.072	0.060	45397950	NC	NC	
4 Bromide	6.270	6.138	0.132	7402024	5.00	5.34	
5 Nitrate as N	7.053	6.887	0.166	51781619	NC	NC	
6 Orthophosphate as P	9.275	9.355	-0.080	30337361	NC	NC	
7 Sulfate	10.612	10.688	-0.076	286788842	50.0	91.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated

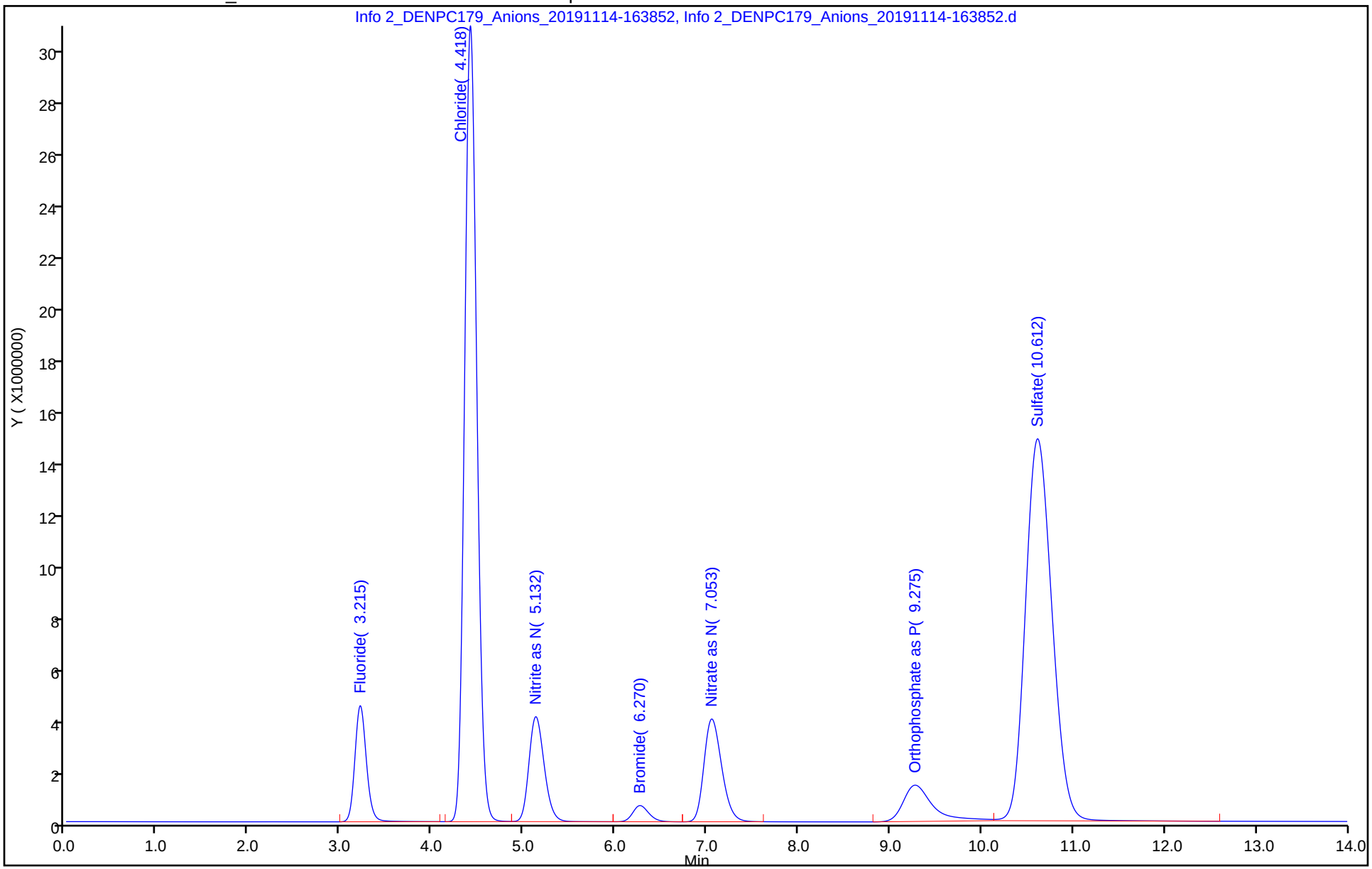
Reagents:

ICMS/MSD WEEK_00622 Amount Added: 0.10 Units: mL

Report Date: 15-Nov-2019 09:16:12 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-163852.d				
Injection Date:	14-Nov-2019 16:21:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-9 MSD			Worklist Smp#:	10
Client ID:	G0070-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-165
Lims ID: 280-129936-F-1
Client ID: CA210-1
Sample Type: Client
Inject. Date: 14-Nov-2019 16:38:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-011
Misc. Info.: 280-0087123-011
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	1665361	0.3268	
2 Chloride	4.420	4.402	0.018	436581212	102.9	
3 Nitrite as N	5.147	5.072	0.075	258879	NC	
4 Bromide	6.295	6.138	0.157	188451	0.1879	
5 Nitrate as N	7.017	6.887	0.130	222309374	NC	
6 Orthophosphate as P	9.302	9.355	-0.053	9443308	NC	
7 Sulfate	10.615	10.688	-0.073	377520133	120.8	

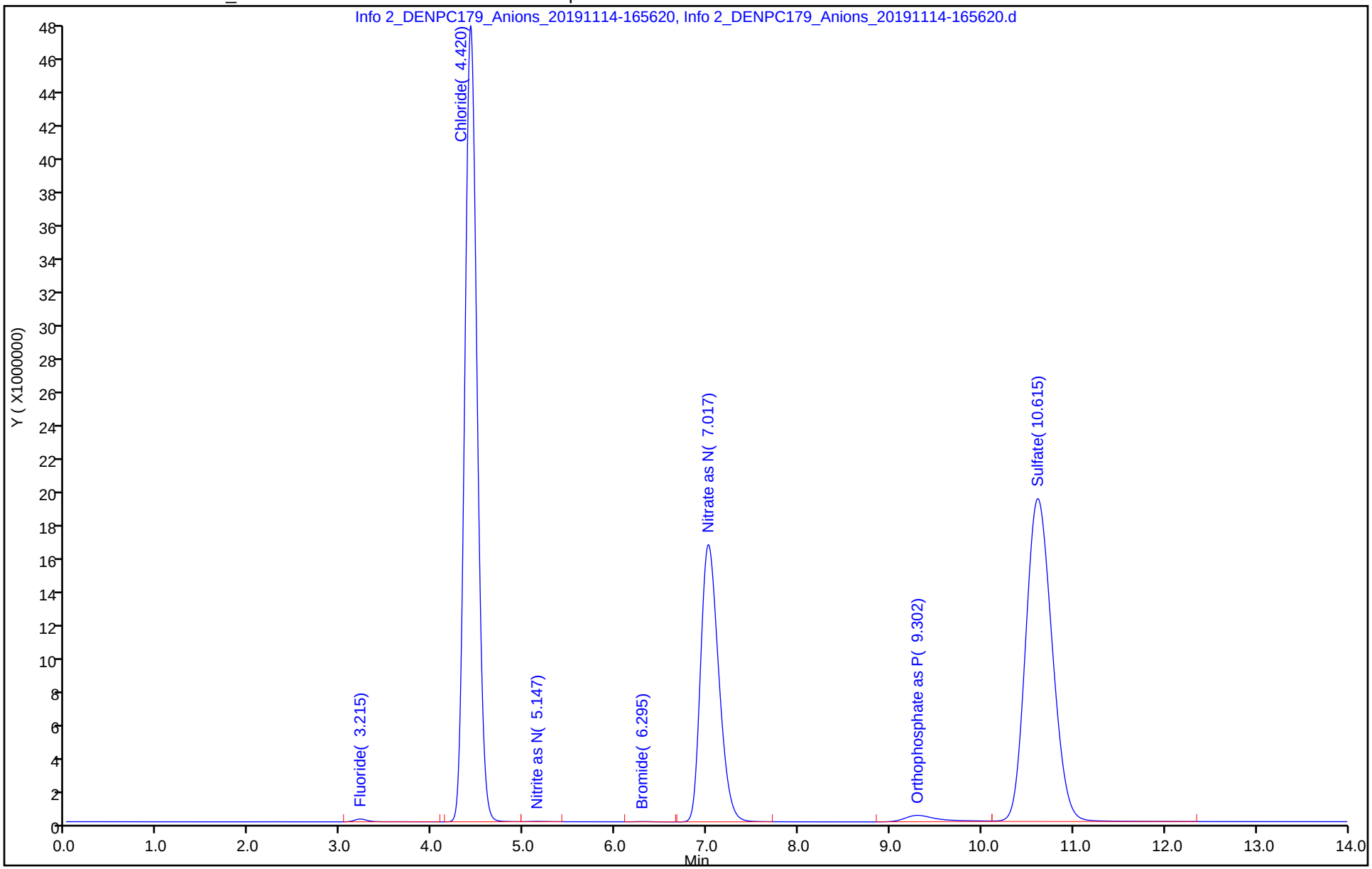
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:13 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-165620.d				
Injection Date:	14-Nov-2019 16:38:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-1	Lab Sample ID:	280-129936-1	Worklist Smp#:	11
Client ID:	CA210-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-171
Lims ID: 280-129936-F-2
Client ID: CA211-1
Sample Type: Client
Inject. Date: 14-Nov-2019 16:56:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-012
Misc. Info.: 280-0087123-012
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.217	3.233	-0.016	845656	0.2152	
2 Chloride	4.418	4.402	0.016	157455437	37.4	
3 Nitrite as N	5.137	5.072	0.065	44554	NC	
4 Bromide	6.292	6.138	0.154	133472	0.1486	
5 Nitrate as N	7.007	6.887	0.120	322328854	NC	
6 Orthophosphate as P	9.343	9.355	-0.012	1043081	NC	
7 Sulfate	10.615	10.688	-0.073	290948933	93.2	

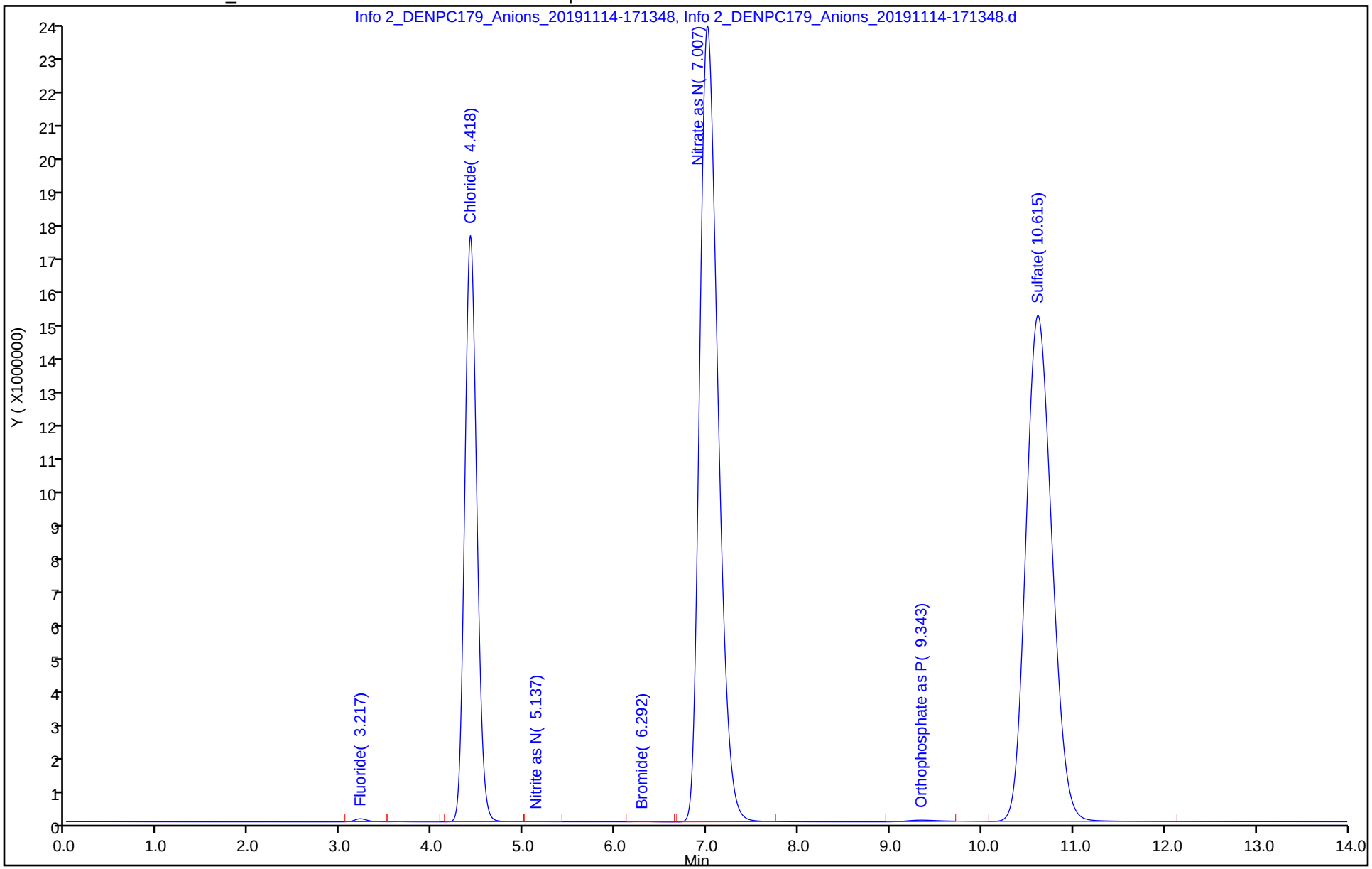
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:14 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-171348.d				
Injection Date:	14-Nov-2019 16:56:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-2	Lab Sample ID:	280-129936-2	Worklist Smp#:	12
Client ID:	CA211-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-173
Lims ID: 280-129936-F-3
Client ID: CA212-1
Sample Type: Client
Inject. Date: 14-Nov-2019 17:13:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-013
Misc. Info.: 280-0087123-013
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.212	3.233	-0.021	751176	0.2024	
2 Chloride	4.413	4.402	0.011	70295876	17.0	
3 Nitrite as N	5.138	5.072	0.066	262797	NC	
4 Bromide		6.138			ND	
5 Nitrate as N	7.025	6.887	0.138	147635973	NC	
6 Orthophosphate as P	9.367	9.355	0.012	118661	NC	
7 Sulfate	10.608	10.688	-0.080	225779008	72.5	

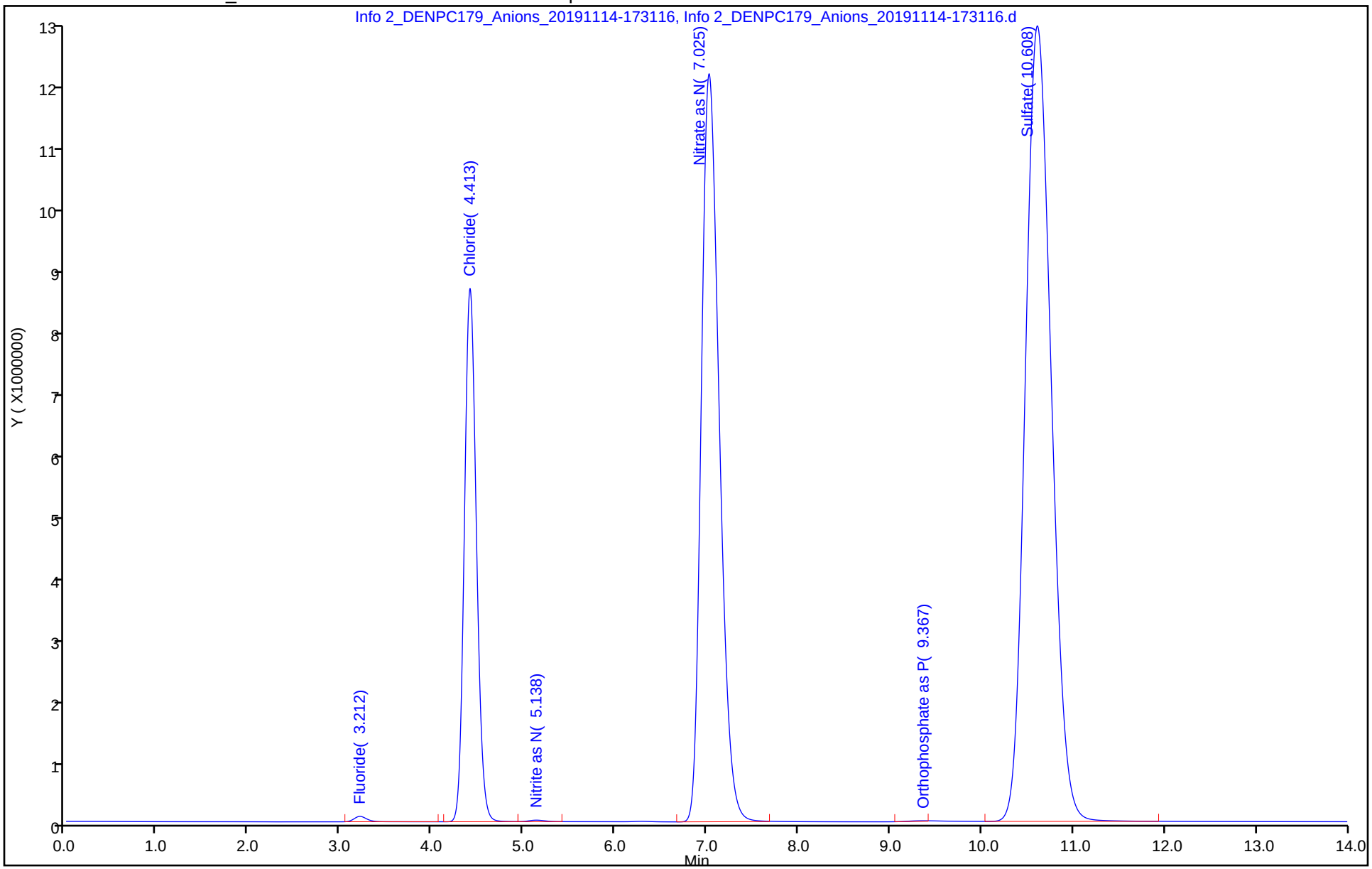
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:15 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-173116.d				
Injection Date:	14-Nov-2019 17:13:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-3	Lab Sample ID:	280-129936-3	Worklist Smp#:	13
Client ID:	CA212-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-174
Lims ID: 280-129936-F-4
Client ID: EW7-PM24B-1-35
Sample Type: Client
Inject. Date: 14-Nov-2019 17:31:00 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-014
Misc. Info.: 280-0087123-014
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	1378217	0.2877	
2 Chloride	4.420	4.402	0.018	131097954	31.3	
3 Nitrite as N	5.158	5.072	0.086	154892	NC	
4 Bromide	6.308	6.138	0.170	216137	0.2077	
5 Nitrate as N	7.052	6.887	0.165	110113033	NC	
6 Orthophosphate as P		9.355			ND	
7 Sulfate	10.610	10.688	-0.078	338219611	108.3	

QC Flag Legend

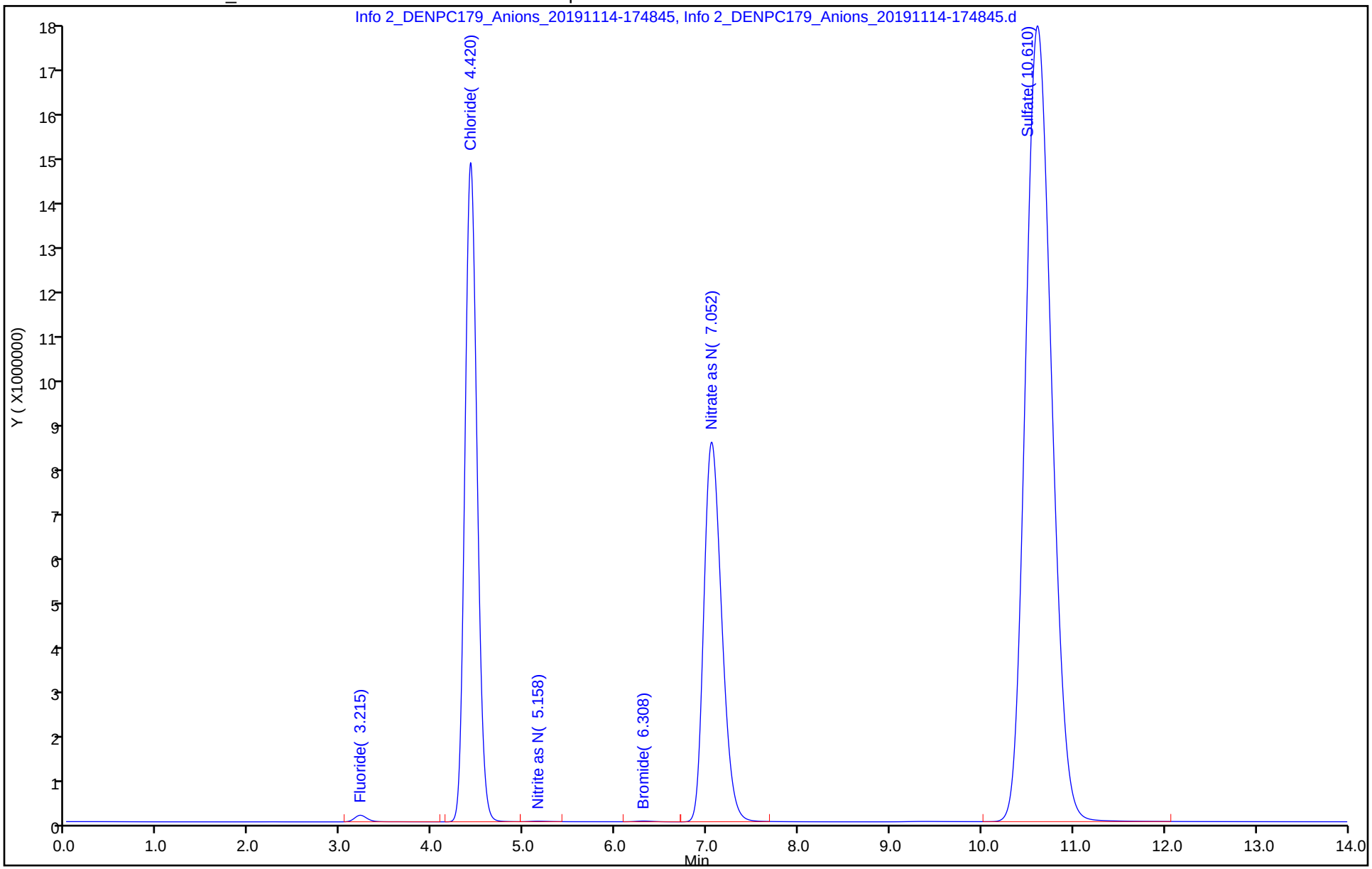
Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:16 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-174845.d

Injection Date:	14-Nov-2019 17:31:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-4	Lab Sample ID:	280-129936-4	Worklist Smp#:	14
Client ID:	EW7-PM24B-1-35				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-180
Lims ID: 280-129936-F-5
Client ID: EW7-PM29B-1-35
Sample Type: Client
Inject. Date: 14-Nov-2019 17:48:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-015
Misc. Info.: 280-0087123-015
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:15:53 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.212	3.233	-0.021	843401	0.2149	
2 Chloride	4.418	4.402	0.016	176832710	42.0	
3 Nitrite as N		5.072			ND	
4 Bromide	6.307	6.138	0.169	297954	0.2662	
5 Nitrate as N	7.088	6.887	0.201	19804398	NC	
6 Orthophosphate as P		9.355			ND	
7 Sulfate	10.602	10.688	-0.086	450971062	144.2	

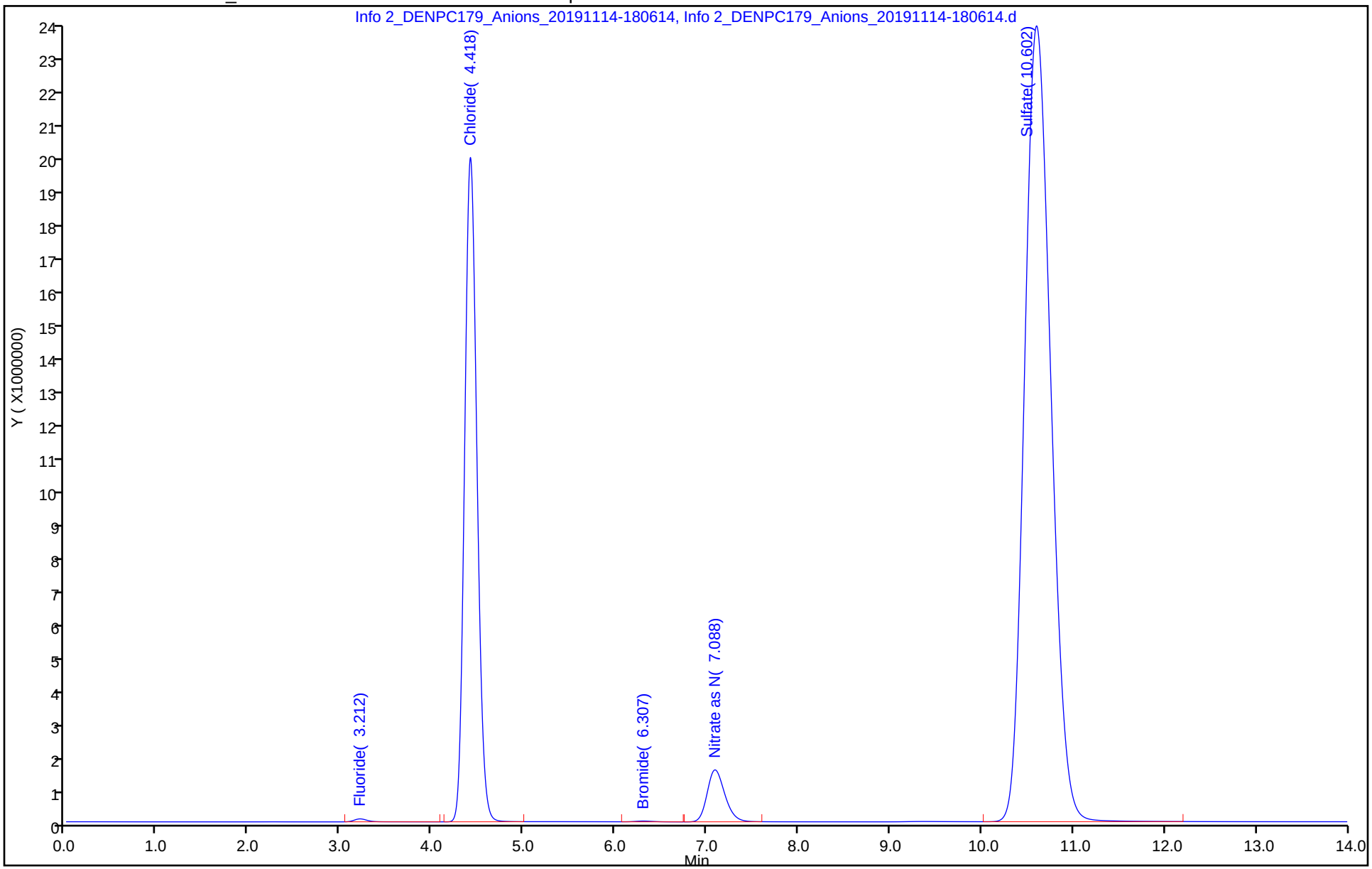
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:17 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-180614.d				
Injection Date:	14-Nov-2019 17:48:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-5	Lab Sample ID:	280-129936-5	Worklist Smp#:	15
Client ID:	EW7-PM29B-1-35				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-182				
Lims ID:	280-129936-F-6				
Client ID:	EW7-PM29A-1-25				
Sample Type:	Client				
Inject. Date:	14-Nov-2019 18:06:00	ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0087123-016				
Misc. Info.:	280-0087123-016				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	15-Nov-2019 09:15:53	Calib Date:	16-Oct-2019 11:24:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0320				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	775535	0.2057	
2 Chloride	4.417	4.402	0.015	118276148	28.2	
3 Nitrite as N	5.148	5.072	0.076	166409	NC	
4 Bromide	6.300	6.138	0.162	186442	0.1865	
5 Nitrate as N	7.040	6.887	0.153	121614583	NC	
6 Orthophosphate as P		9.355			ND	
7 Sulfate	10.613	10.688	-0.075	301778711	96.7	

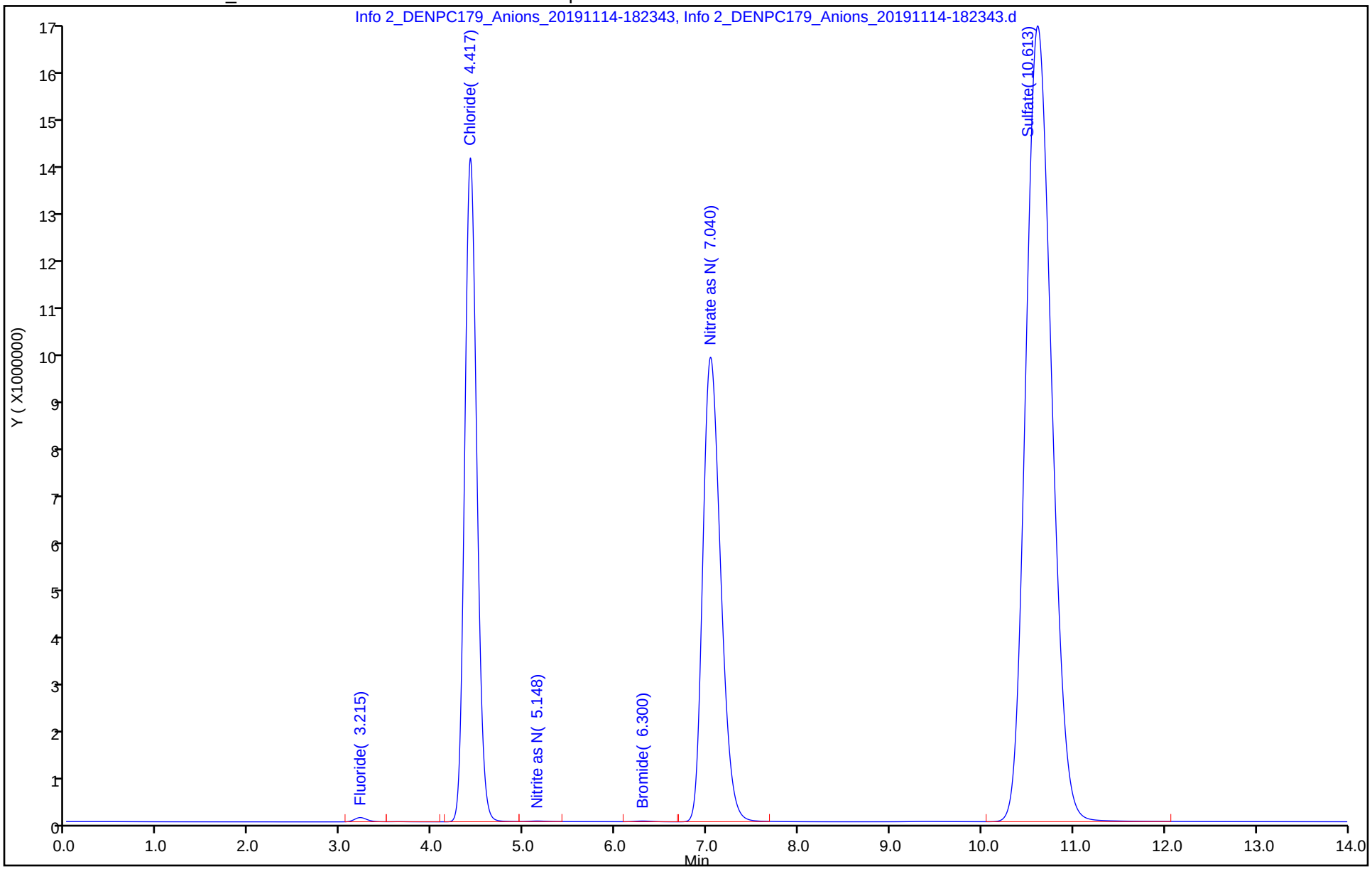
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:19 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-182343.d				
Injection Date:	14-Nov-2019 18:06:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-6	Lab Sample ID:	280-129936-6	Worklist Smp#:	16
Client ID:	EW7-PM29A-1-25				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-184
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 14-Nov-2019 18:23:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-017
Misc. Info.: 280-0087123-017
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:20 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.233	-0.020	36547375	5.00	5.07	
2 Chloride	4.417	4.402	0.015	426908922	100.0	100.6	
3 Nitrite as N	5.122	5.072	0.050	41803067	NC	NC	
4 Bromide	6.262	6.138	0.124	6423009	5.00	4.64	
5 Nitrate as N	7.053	6.887	0.166	47929503	NC	NC	
6 Orthophosphate as P	9.250	9.355	-0.105	22886317	NC	NC	
7 Sulfate	10.593	10.688	-0.095	310611289	100.0	99.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

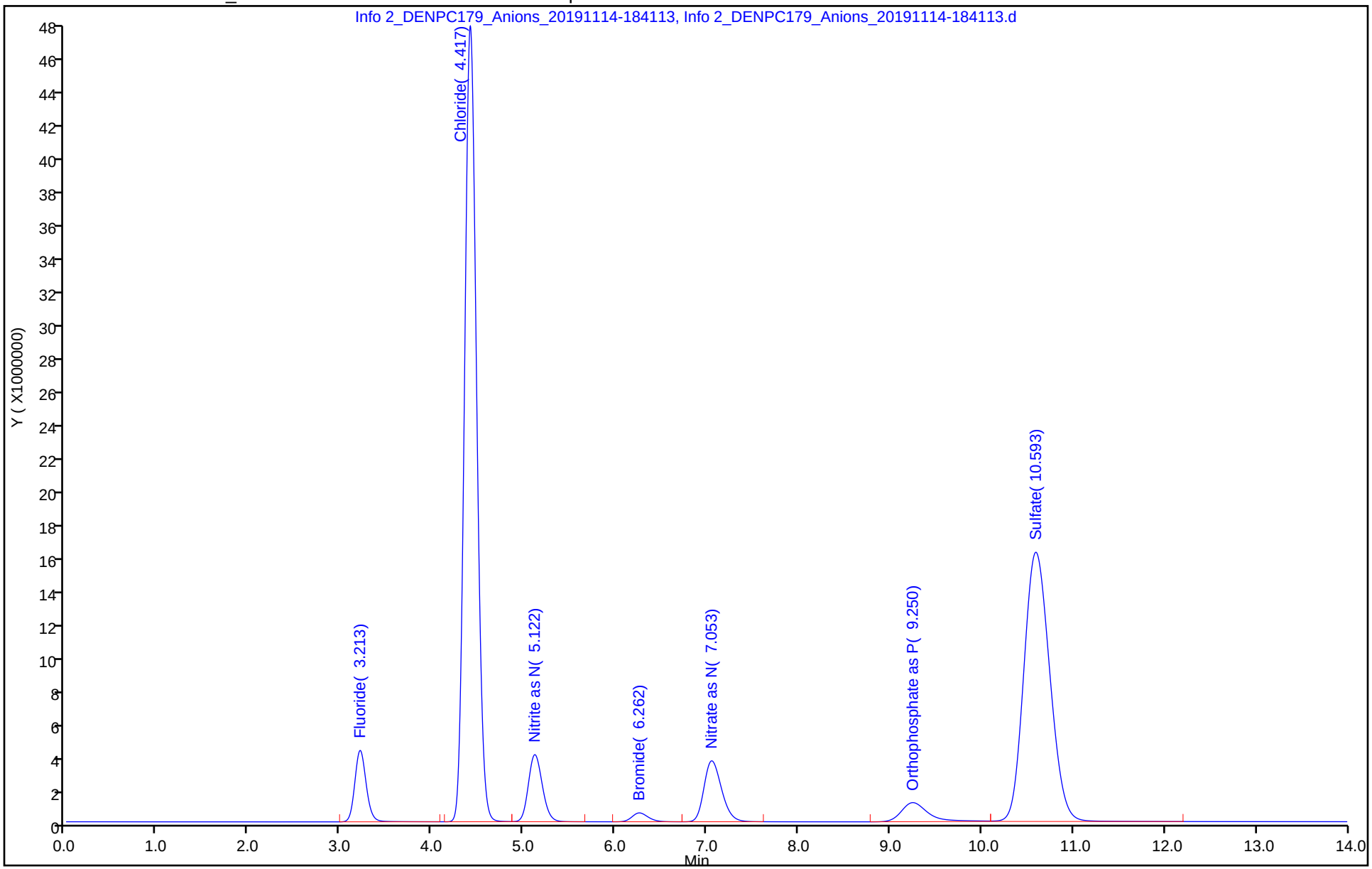
Reagents:

IC LCS_01709 Amount Added: 10.00 Units: mL

Report Date: 15-Nov-2019 09:16:20 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-184113.d				
Injection Date:	14-Nov-2019 18:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-185
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 14-Nov-2019 18:41:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-018
Misc. Info.: 280-0087123-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:20 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

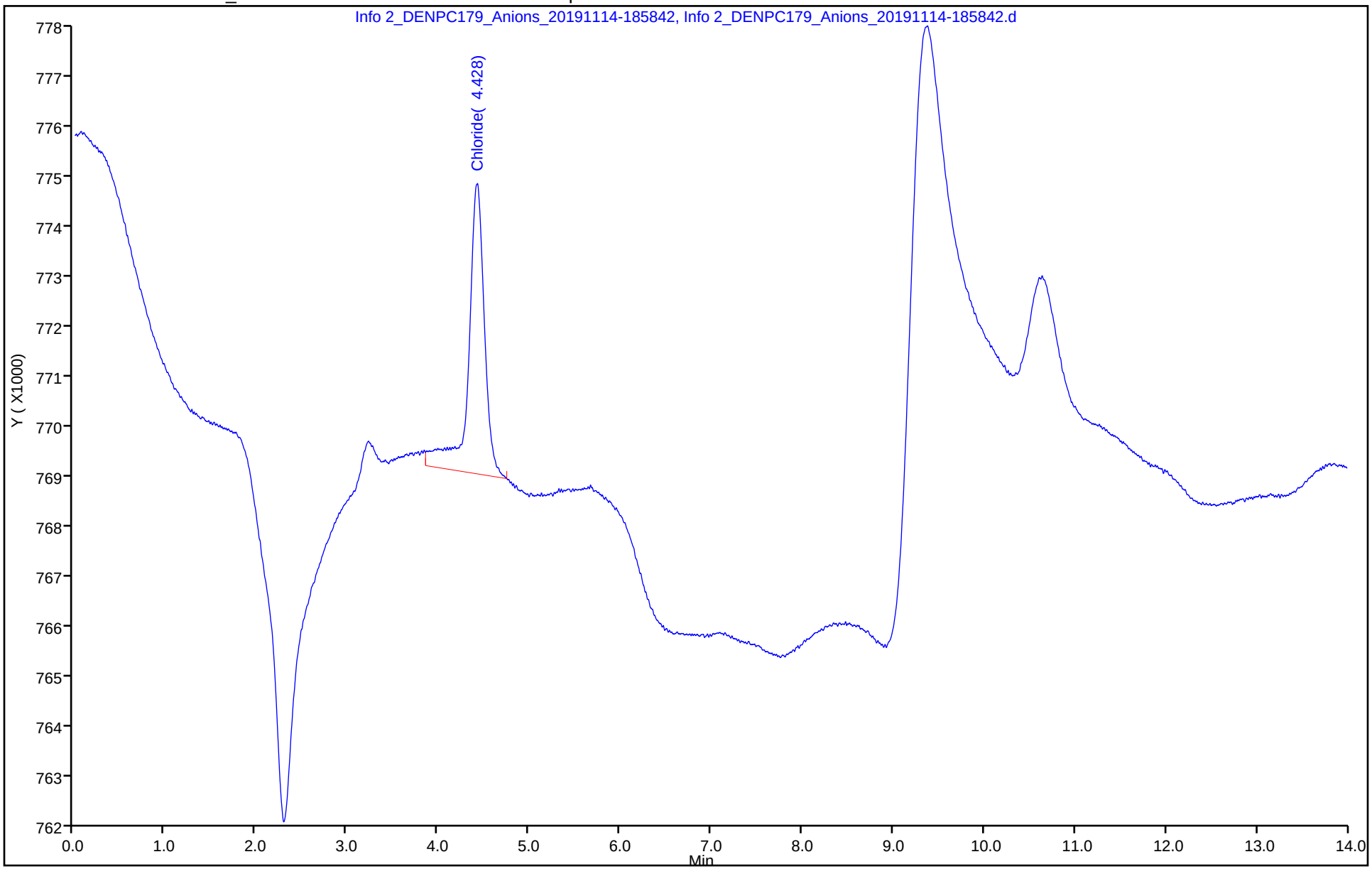
Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.233				ND	
2 Chloride	4.428	4.402	0.026	64924		0.5211	
3 Nitrite as N		5.072				ND	
4 Bromide		6.138				ND	
5 Nitrate as N		6.887				ND	
6 Orthophosphate as P		9.355				ND	
7 Sulfate		10.688				ND	

Report Date: 15-Nov-2019 09:16:21 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-185842.d				
Injection Date:	14-Nov-2019 18:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-191
Lims ID: 280-129936-F-7
Client ID: EW7-PM28A-1-25
Sample Type: Client
Inject. Date: 14-Nov-2019 18:58:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-019
Misc. Info.: 280-0087123-019
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:20 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.212	3.233	-0.021	1240253	0.2689	
2 Chloride	4.417	4.402	0.015	135661676	32.3	
3 Nitrite as N	5.155	5.072	0.083	151574	NC	
4 Bromide	6.302	6.138	0.164	227105	0.2156	
5 Nitrate as N	7.030	6.887	0.143	175319532	NC	
6 Orthophosphate as P		9.355			ND	
7 Sulfate	10.610	10.688	-0.078	249748949	80.1	

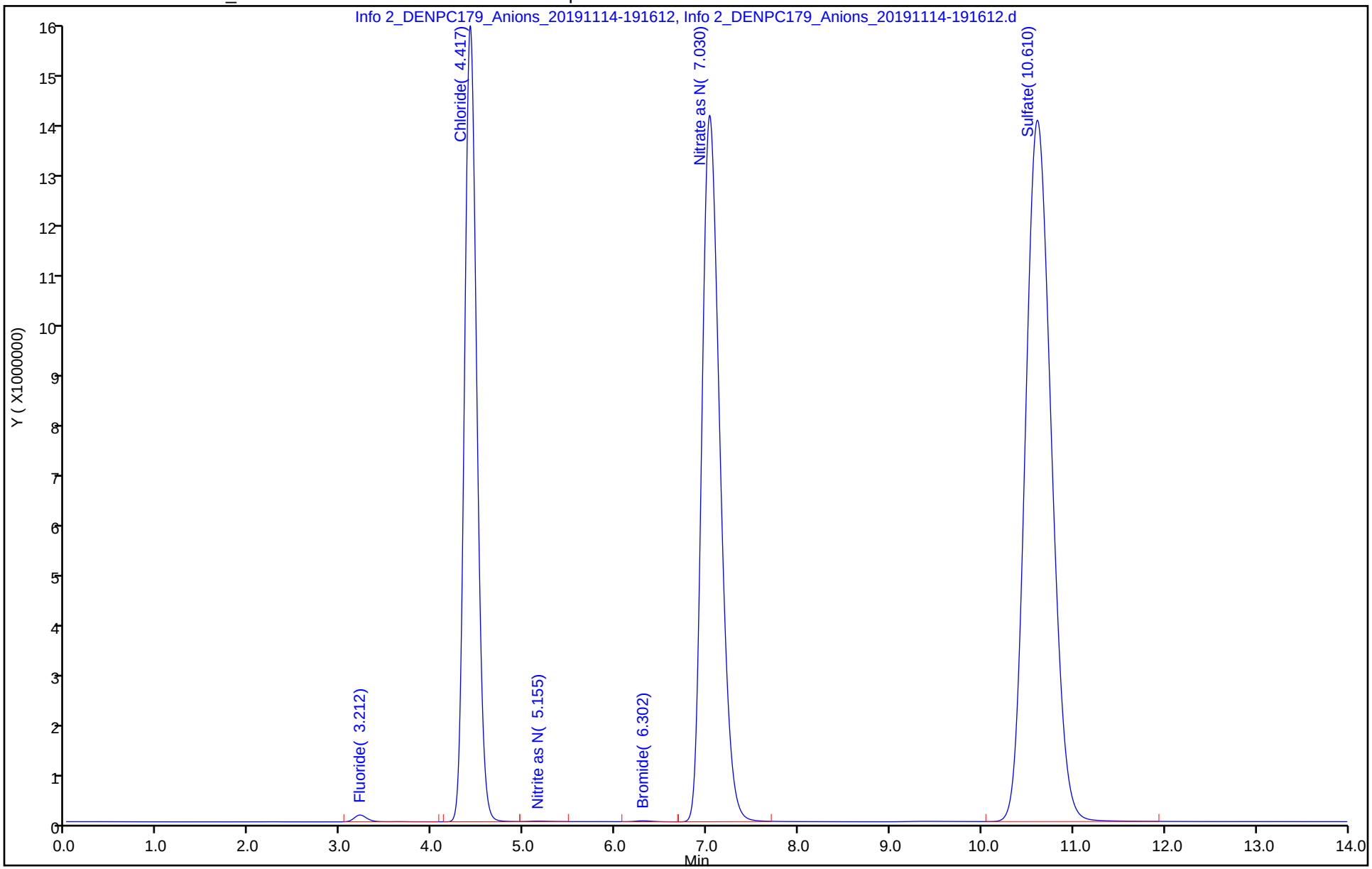
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:24 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-191612.d				
Injection Date:	14-Nov-2019 18:58:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-7	Lab Sample ID:	280-129936-7	Worklist Smp#:	19
Client ID:	EW7-PM28A-1-25				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-193
Lims ID: 280-129936-F-8
Client ID: EW7-PM28B-1-35
Sample Type: Client
Inject. Date: 14-Nov-2019 19:16:00 ALS Bottle#: 0 Worklist Smp#: 20
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-020
Misc. Info.: 280-0087123-020
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:20 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	862006	0.2175	
2 Chloride	4.422	4.402	0.020	192006624	45.5	
3 Nitrite as N		5.072			ND	
4 Bromide	6.315	6.138	0.177	270965	0.2469	
5 Nitrate as N	7.092	6.887	0.205	21884125	NC	
6 Orthophosphate as P		9.355			ND	
7 Sulfate	10.623	10.688	-0.065	221328761	71.1	

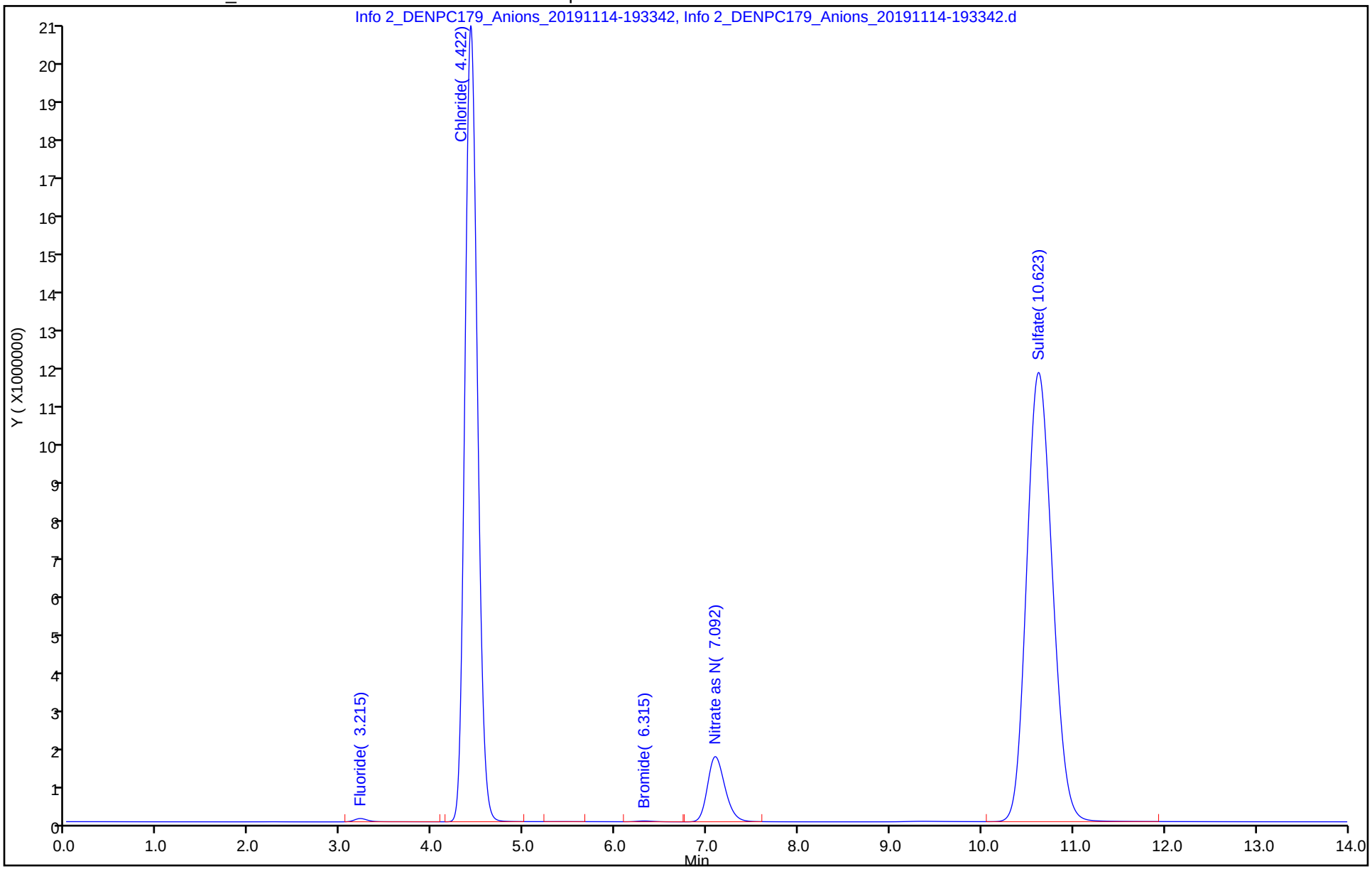
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:25 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-193342.d				
Injection Date:	14-Nov-2019 19:16:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-8	Lab Sample ID:	280-129936-8	Worklist Smp#:	20
Client ID:	EW7-PM28B-1-35				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-195
Lims ID: 280-129936-F-10
Client ID: CA213-1
Sample Type: Client
Inject. Date: 14-Nov-2019 19:33:00 ALS Bottle#: 0 Worklist Smp#: 21
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-021
Misc. Info.: 280-0087123-021
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:20 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	1222820	0.2666	
2 Chloride	4.417	4.402	0.015	143183550	34.1	
3 Nitrite as N	5.138	5.072	0.066	89393	NC	
4 Bromide		6.138			ND	
5 Nitrate as N	7.092	6.887	0.205	9419556	NC	
6 Orthophosphate as P		9.355			ND	
7 Sulfate	10.608	10.688	-0.080	195074574	62.7	

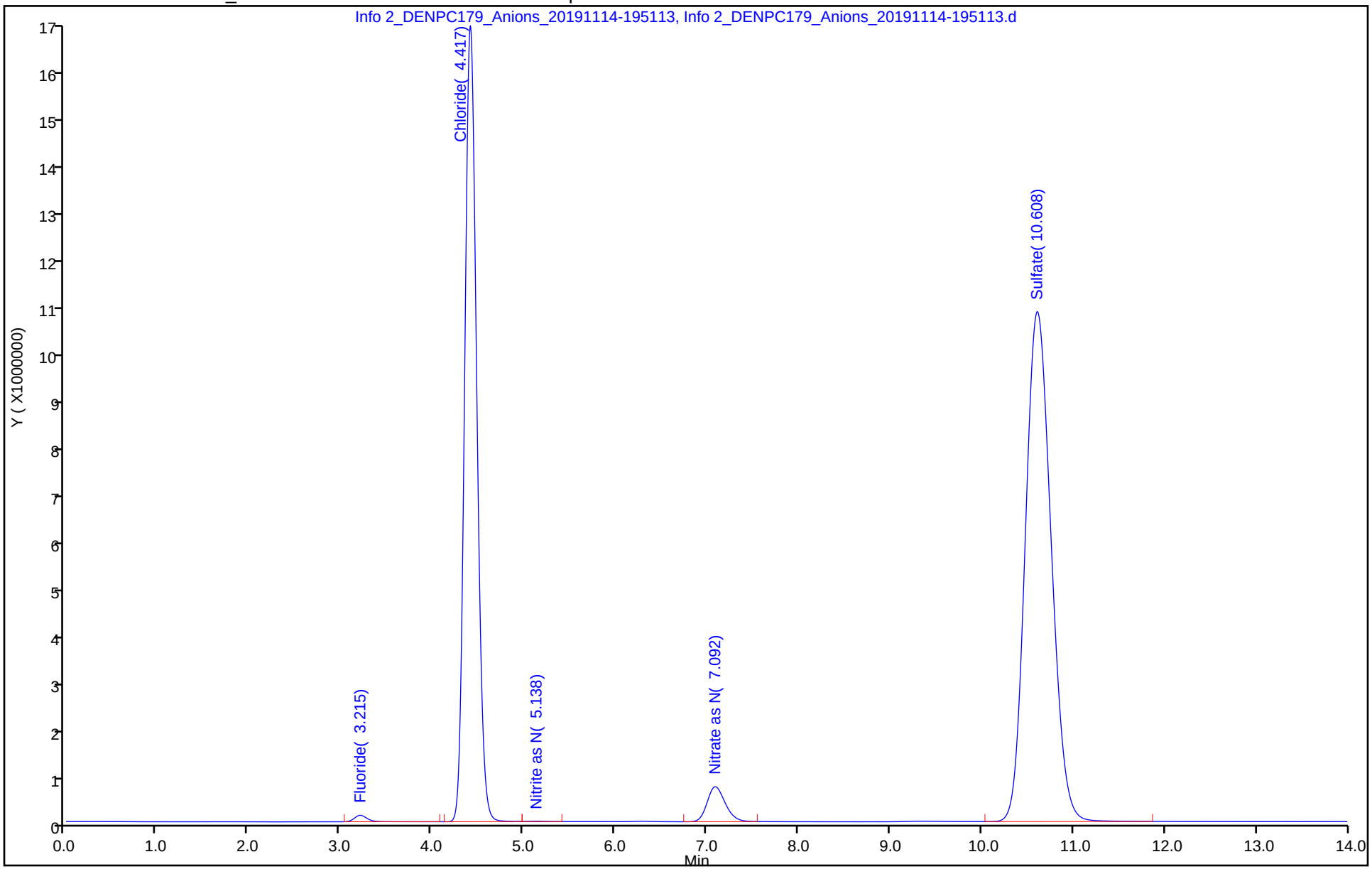
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:28 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-195113.d				
Injection Date:	14-Nov-2019 19:33:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-10	Lab Sample ID:	280-129936-10	Worklist Smp#:	21
Client ID:	CA213-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-200
Lims ID: 280-129936-F-11
Client ID: NW070-1
Sample Type: Client
Inject. Date: 14-Nov-2019 19:51:00 ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-022
Misc. Info.: 280-0087123-022
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 14:27:31 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0330

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.233	-0.020	845259	0.2152	
2 Chloride	4.420	4.402	0.018	2323619	1.05	
3 Nitrite as N		5.072			ND	
4 Bromide		6.138			ND	
5 Nitrate as N		6.887			ND	
6 Orthophosphate as P	9.275	9.355	-0.080	6537976	NC	
7 Sulfate	10.617	10.688	-0.071	10515151	3.95	

QC Flag Legend

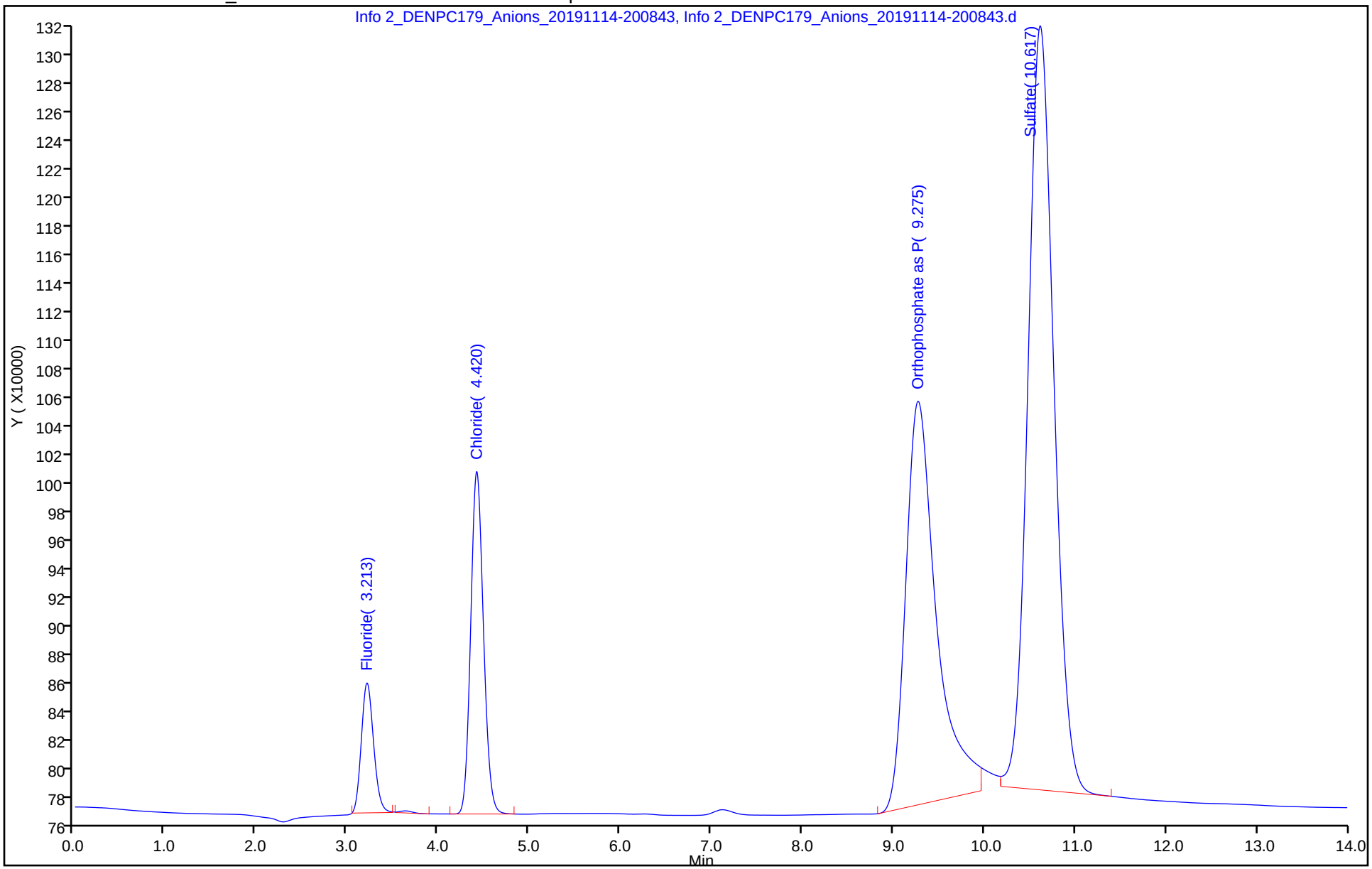
Processing Flags
NC - Not Calibrated

Report Date: 06-Jan-2020 09:18:59 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-200843.d

Injection Date:	14-Nov-2019 19:51:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-11	Lab Sample ID:	280-129936-11	Worklist Smp#:	22
Client ID:	NW070-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-202
Lims ID: 280-129936-F-12
Client ID: G0081-1
Sample Type: Client
Inject. Date: 14-Nov-2019 20:08:00 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-023
Misc. Info.: 280-0087123-023
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:20 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.217	3.233	-0.016	1455998	0.2983	
2 Chloride	4.422	4.402	0.020	166100657	39.5	
3 Nitrite as N		5.072			ND	
4 Bromide	6.317	6.138	0.179	254363	0.2350	
5 Nitrate as N	7.127	6.887	0.240	2169619	NC	
6 Orthophosphate as P	9.303	9.355	-0.052	6855005	NC	
7 Sulfate	10.615	10.688	-0.073	365900760	117.1	

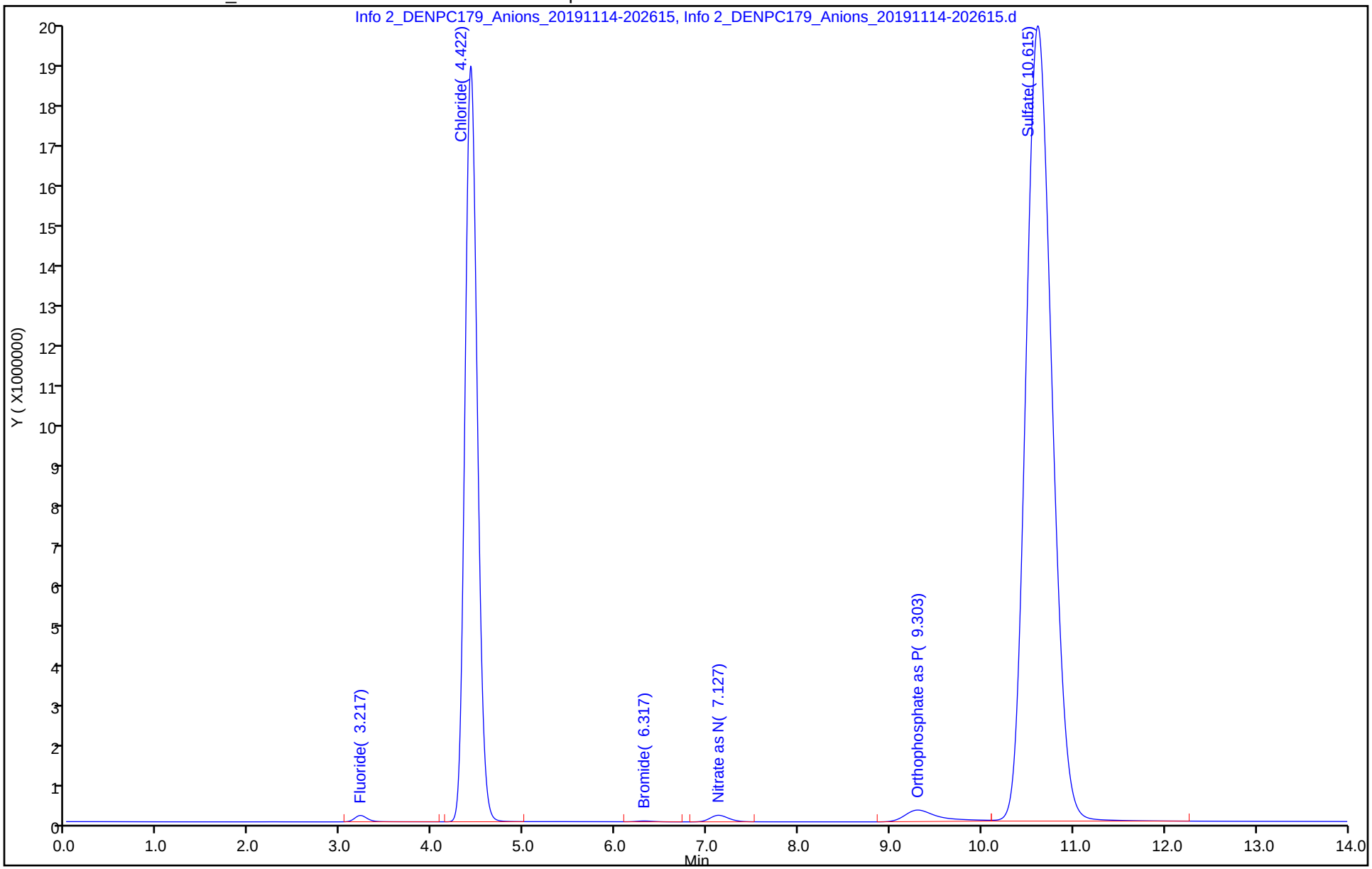
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:32 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-202615.d				
Injection Date:	14-Nov-2019 20:08:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-12	Lab Sample ID:	280-129936-12	Worklist Smp#:	23
Client ID:	G0081-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-204
Lims ID: 280-129936-F-13
Client ID: G0075-1
Sample Type: Client
Inject. Date: 14-Nov-2019 20:26:00 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-024
Misc. Info.: 280-0087123-024
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:20 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.233	-0.020	1311649	0.2786	
2 Chloride	4.422	4.402	0.020	141532525	33.7	
3 Nitrite as N	5.160	5.072	0.088	62919	NC	
4 Bromide	6.313	6.138	0.175	263515	0.2416	
5 Nitrate as N	7.110	6.887	0.223	8232188	NC	
6 Orthophosphate as P	9.310	9.355	-0.045	3022451	NC	
7 Sulfate	10.607	10.688	-0.081	480627463	153.6	

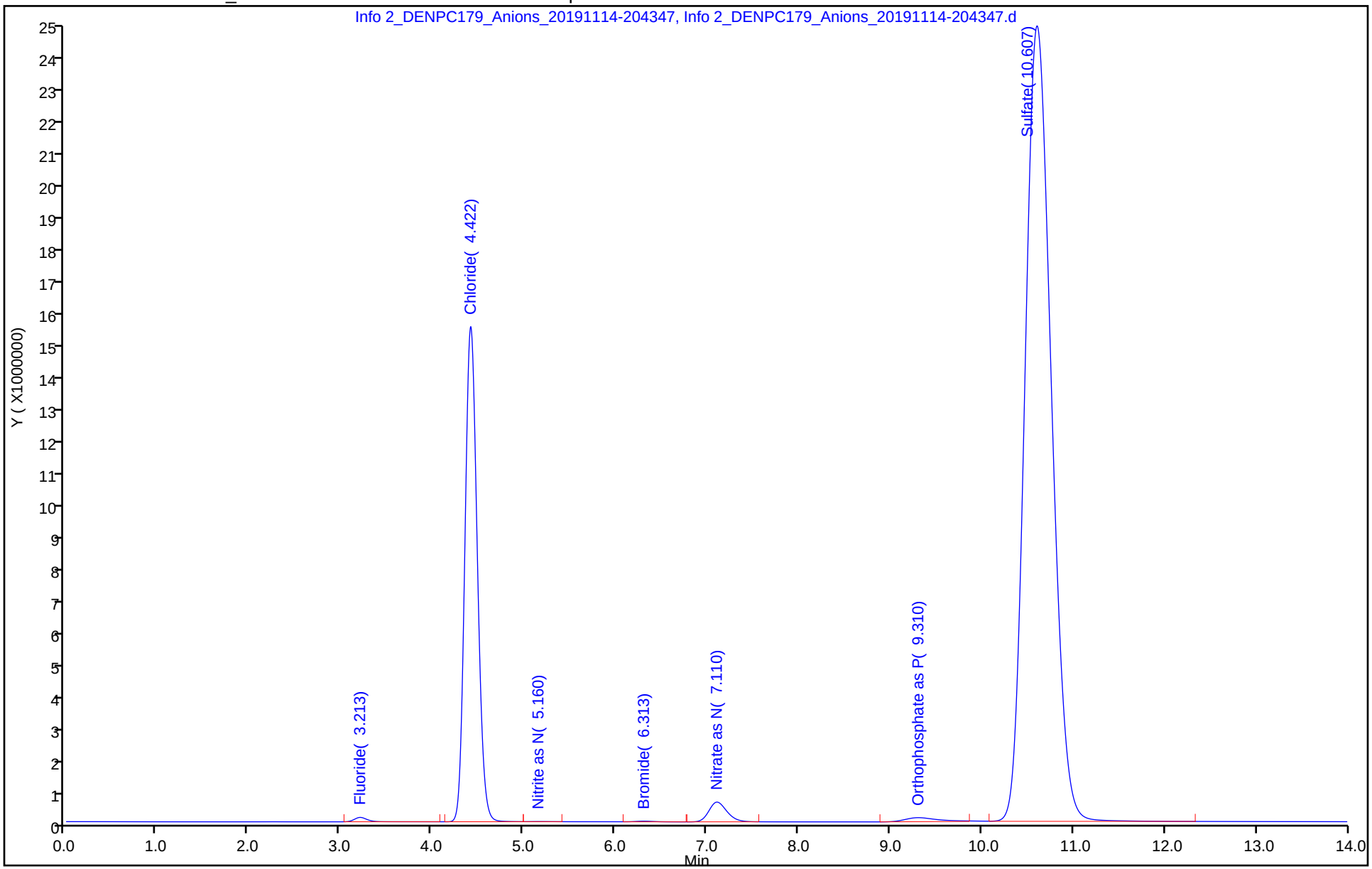
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:33 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-204347.d				
Injection Date:	14-Nov-2019 20:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-13	Lab Sample ID:	280-129936-13	Worklist Smp#:	24
Client ID:	G0075-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-210
Lims ID: 280-129936-F-14
Client ID: G0079-1
Sample Type: Client
Inject. Date: 14-Nov-2019 20:43:00 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-025
Misc. Info.: 280-0087123-025
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:20 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.210	3.233	-0.023	1599075	0.3177	
2 Chloride	4.415	4.402	0.013	14848853	3.99	
3 Nitrite as N	5.175	5.072	0.103	16792	NC	
4 Bromide		6.138			ND	
5 Nitrate as N	7.117	6.887	0.230	885684	NC	
6 Orthophosphate as P	9.285	9.355	-0.070	3174680	NC	
7 Sulfate	10.608	10.688	-0.080	50583239	16.7	

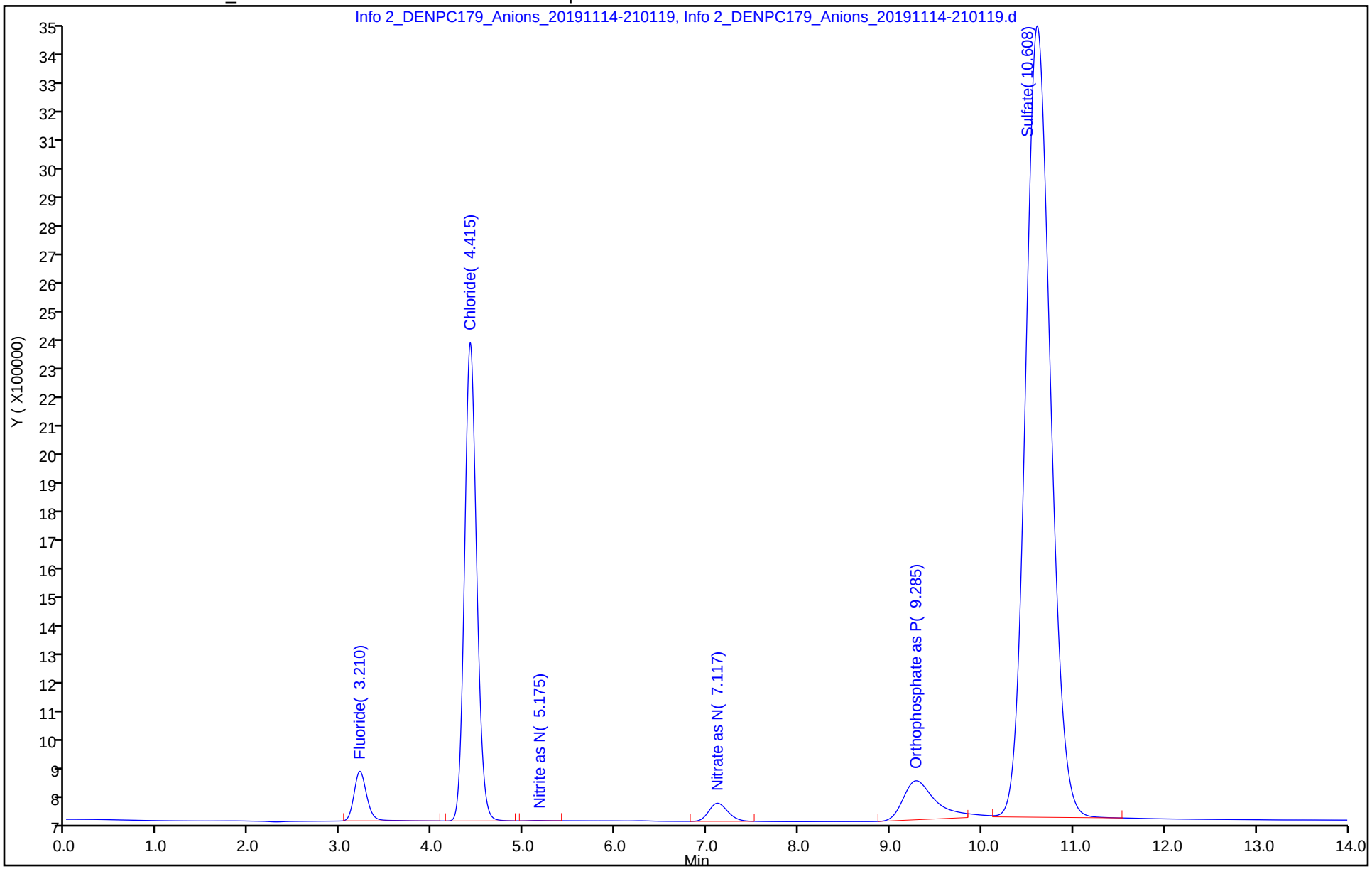
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:34 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-210119.d				
Injection Date:	14-Nov-2019 20:43:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-14	Lab Sample ID:	280-129936-14	Worklist Smp#:	25
Client ID:	G0079-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-211				
Lims ID:	280-129936-F-15				
Client ID:	G0080-1				
Sample Type:	Client				
Inject. Date:	14-Nov-2019 21:01:00	ALS Bottle#:	0	Worklist Smp#:	26
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0087123-026				
Misc. Info.:	280-0087123-026				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	15-Nov-2019 09:16:20	Calib Date:	16-Oct-2019 11:24:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0320				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.213	3.233	-0.020	1550951	0.3112	
2 Chloride	4.418	4.402	0.016	62860539	15.2	
3 Nitrite as N	5.173	5.072	0.101	49910	NC	
4 Bromide	6.303	6.138	0.165	197520	0.1944	
5 Nitrate as N	7.085	6.887	0.198	22985354	NC	
6 Orthophosphate as P	9.317	9.355	-0.038	1230088	NC	
7 Sulfate	10.610	10.688	-0.078	261155596	83.8	

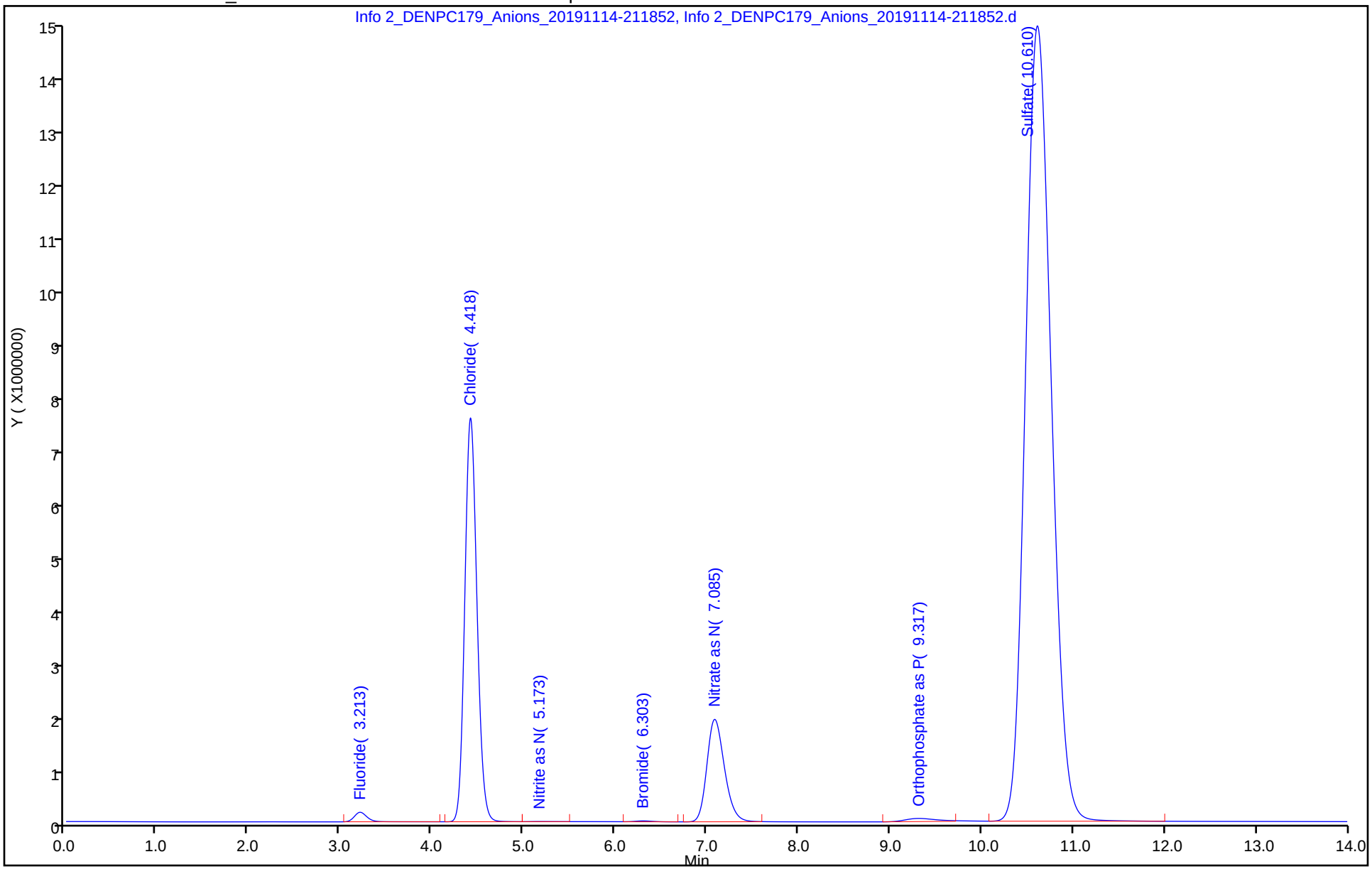
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 15-Nov-2019 09:16:36 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-211852.d				
Injection Date:	14-Nov-2019 21:01:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-129936-F-15	Lab Sample ID:	280-129936-15	Worklist Smp#:	26
Client ID:	G0080-1				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-221
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 14-Nov-2019 21:54:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0087123-029
Misc. Info.: 280-0087123-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2019 09:16:43 Calib Date: 16-Oct-2019 11:24:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114

Column 1 : Det: Info 2_091554_1
Process Host: CTX0320

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.215	3.233	-0.018	36868043	5.00	5.12	
2 Chloride	4.420	4.402	0.018	432191279	100.0	101.9	
3 Nitrite as N	5.125	5.072	0.053	42370560	NC	NC	
4 Bromide	6.268	6.138	0.130	6519123	5.00	4.71	
5 Nitrate as N	7.060	6.887	0.173	48564727	NC	NC	
6 Orthophosphate as P	9.250	9.355	-0.105	22847137	NC	NC	
7 Sulfate	10.597	10.688	-0.091	314407105	100.0	100.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

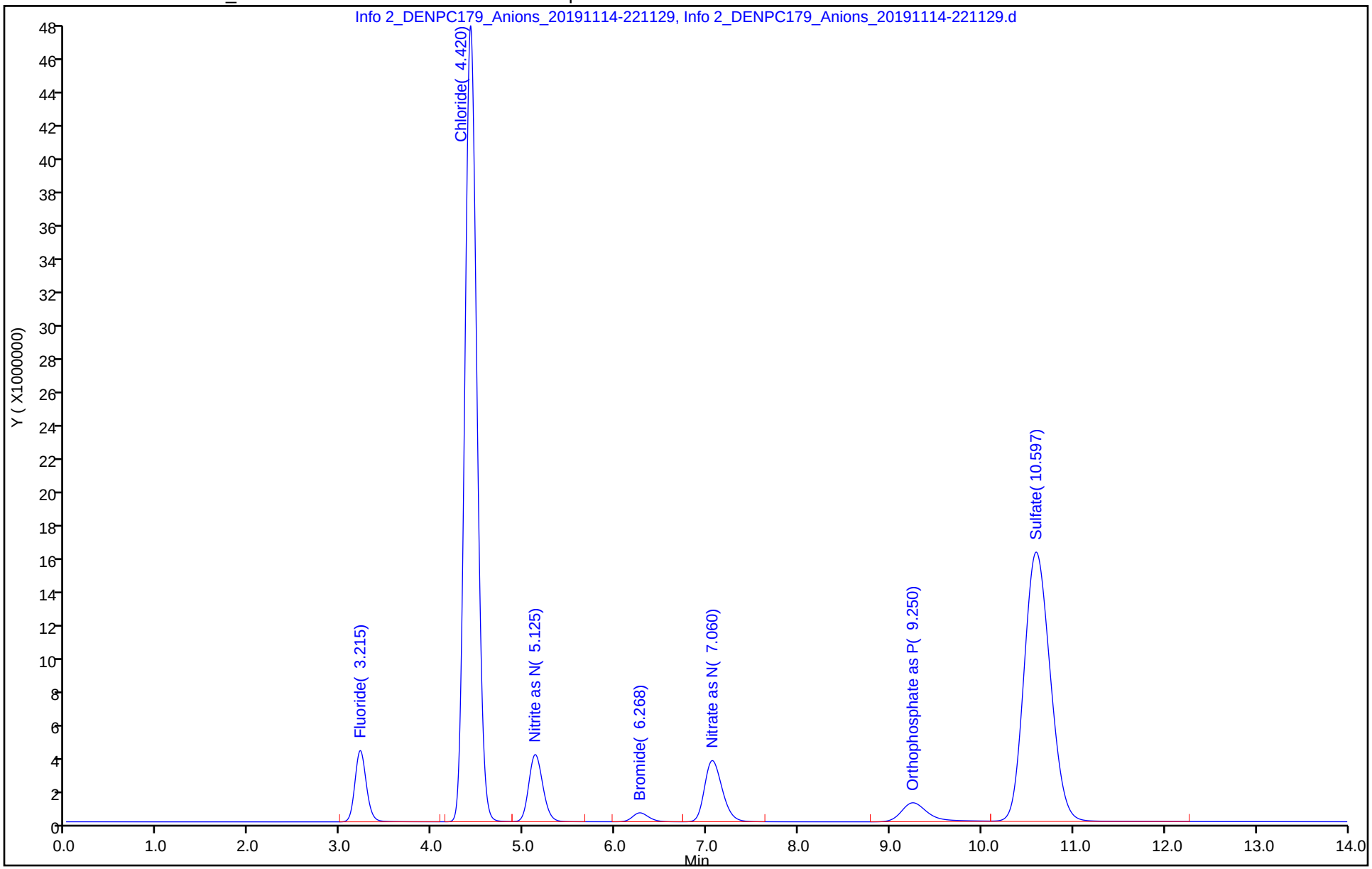
Reagents:

IC LCS_01709 Amount Added: 10.00 Units: mL

Report Date: 15-Nov-2019 09:16:44 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-221129.d				
Injection Date:	14-Nov-2019 21:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

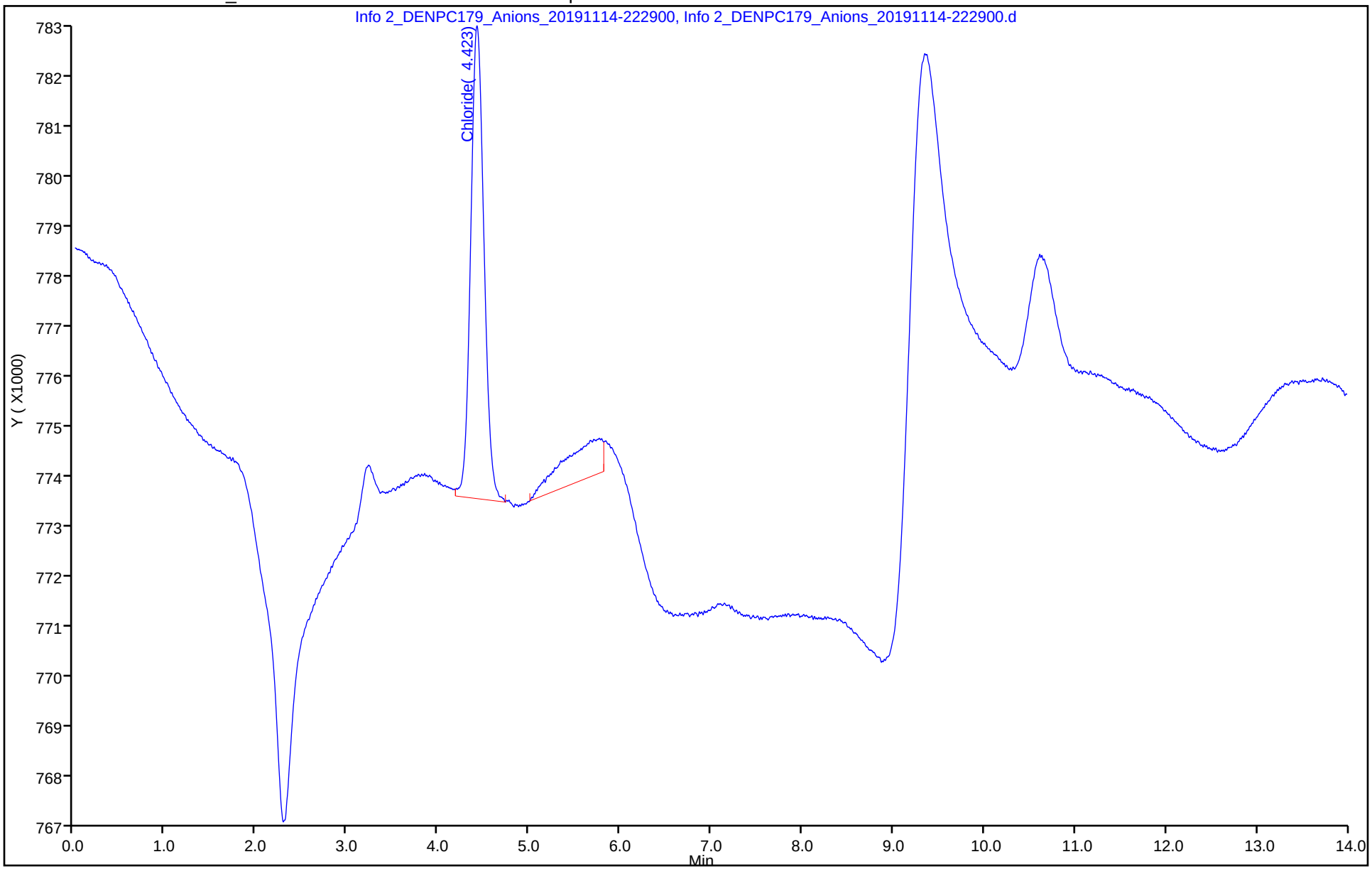
Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-222				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	14-Nov-2019 22:11:00	ALS Bottle#:	0	Worklist Smp#:	30
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0087123-030				
Misc. Info.:	280-0087123-030				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	15-Nov-2019 09:16:43	Calib Date:	16-Oct-2019 11:24:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191016-86204.b\Info 2_DENPC179_Anions_20191016-114				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0320				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.233				ND	
2 Chloride	4.423	4.402	0.021	91398		0.5273	
3 Nitrite as N		5.072				ND	
4 Bromide		6.138				ND	
5 Nitrate as N		6.887				ND	
6 Orthophosphate as P		9.355				ND	
7 Sulfate		10.688				ND	

Report Date: 15-Nov-2019 09:16:47 Chrom Revision: 2.3 09-Oct-2019 11:13:36

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20191114-87123.b\Info 2_DENPC179_Anions_20191114-222900.d				
Injection Date:	14-Nov-2019 22:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



	Analysi	Sample Name	Manual	Result	Notes	Status	Date / Time	Vial
1	NPOC	icv	1.000	NPOC:19.75mg/L		Completed	11/4/2019 4:16:23	1
2	NPOC	icb	1.000	NPOC:0.1006mg/L		Completed	11/4/2019 4:31:06	2
3	NPOC	LCS 280-476389/1-A	1.000	NPOC:23.74mg/L		Completed	11/4/2019 4:45:50	3
4	NPOC	MB 280-476389/2-A	1.000	NPOC:0.2949mg/L		Completed	11/4/2019 5:00:33	4
5	NPOC	tic	1.000	NPOC:0.5173mg/L		Completed	11/4/2019 5:15:16	5
6	NPOC	280-129830-D-3-D	1.000	NPOC:4.844mg/L		Completed	11/4/2019 5:29:59	6
7	NPOC	280-129830-D-3-E MS	1.000	NPOC:28.78mg/L		Completed	11/4/2019 5:44:42	7
8	NPOC	280-129830-D-3-F MS	1.000	NPOC:28.94mg/L		Completed	11/4/2019 5:59:26	8
9	NPOC	280-129794-F-1-B	1.000	NPOC:3.753mg/L		Completed	11/4/2019 6:14:10	9
10	NPOC	280-129830-D-1-B	1.000	NPOC:3.588mg/L		Completed	11/4/2019 6:30:57	10
11	NPOC	280-129830-D-2-B	1.000	NPOC:4.362mg/L		Completed	11/4/2019 6:45:39	11
12	NPOC	280-129794-F-2-B	1.000	NPOC:3.519mg/L		Completed	11/4/2019 7:02:26	12
13	NPOC	280-129794-F-3-B	1.000	NPOC:3.336mg/L		Completed	11/4/2019 7:19:12	13
14	NPOC	280-129794-F-4-B	1.000	NPOC:3.722mg/L		Completed	11/4/2019 7:35:58	14
15	NPOC	ccv	1.000	NPOC:23.71mg/L		Completed	11/4/2019 7:50:40	15
16	NPOC	ccb	1.000	NPOC:0.2471mg/L		Completed	11/4/2019 8:07:27	16
17	NPOC	280-129794-F-5-B	1.000	NPOC:3.227mg/L		Completed	11/4/2019 8:22:09	17
18	NPOC	280-129794-F-6-B	1.000	NPOC:3.237mg/L		Completed	11/4/2019 8:38:56	18
19	NPOC	280-129857-F-1-E	1.000	NPOC:3.871mg/L		Completed	11/4/2019 8:53:38	19
20	NPOC	280-129857-F-3-B	1.000	NPOC:4.184mg/L		Completed	11/4/2019 9:08:22	20
21	NPOC	280-129857-F-3-C MS	1.000	NPOC:27.62mg/L		Completed	11/4/2019 9:23:05	21
22	NPOC	280-129857-F-3-D MS	1.000	NPOC:27.74mg/L		Completed	11/4/2019 9:37:48	22
23	NPOC	280-129857-F-2-E	1.000	NPOC:4.746mg/L		Completed	11/4/2019 9:54:36	23
24	NPOC	280-129857-F-4-B	1.000	NPOC:3.164mg/L		Completed	11/4/2019 10:11:2	24
25	NPOC	280-129857-F-5-B	1.000	NPOC:5.079mg/L		Completed	11/4/2019 10:26:2	25
26	NPOC	280-129936-D-1-B	1.000	NPOC:9.716mg/L		Completed	11/4/2019 10:41:0	26
27	NPOC	ccv	1.000	NPOC:23.42mg/L		Completed	11/4/2019 10:55:4	27
28	NPOC	ccb	1.000	NPOC:0.2314mg/L		Completed	11/4/2019 11:12:3	28
29	NPOC	280-129936-D-2-B	1.000	NPOC:4.332mg/L		Completed	11/4/2019 11:27:1	29
30	NPOC	280-129936-D-3-B	1.000	NPOC:2.558mg/L		Completed	11/4/2019 11:41:5	30
31	NPOC	280-129936-D-4-B	1.000	NPOC:3.753mg/L		Completed	11/4/2019 11:56:4	31
32	NPOC	280-129936-D-5-B	1.000	NPOC:3.747mg/L		Completed	11/5/2019 12:13:3	32
33	NPOC	280-129936-D-6-B	1.000	NPOC:3.105mg/L		Completed	11/5/2019 12:28:1	33
34	NPOC	LCS 280-476389/27-A	1.000	NPOC:23.68mg/L		Completed	11/5/2019 12:42:5	34
35	NPOC	MB 280-476389/28-A	1.000	NPOC:0.1844mg/L		Completed	11/5/2019 12:59:4	35
36	NPOC	tic	1.000	NPOC:0.1925mg/L		Completed	11/5/2019 1:14:29	36
37	NPOC	280-129936-D-9-D	1.000	NPOC:1.016mg/L		Completed	11/5/2019 1:29:13	37
38	NPOC	280-129936-D-9-E MS	1.000	NPOC:24.98mg/L		Completed	11/5/2019 1:43:57	38
39	NPOC	ccv	1.000	NPOC:24.23mg/L		Completed	11/5/2019 1:58:41	39
40	NPOC	ccb	1.000	NPOC:0.1173mg/L		Completed	11/5/2019 2:15:29	40
41	NPOC	280-129936-D-9-F MS	1.000	NPOC:24.36mg/L		Completed	11/5/2019 2:30:12	41
42	NPOC	280-129936-D-7-B	1.000	NPOC:4.817mg/L		Completed	11/5/2019 2:47:00	42
43	NPOC	280-129936-D-8-B	1.000	NPOC:6.505mg/L		Completed	11/5/2019 3:01:43	43
44	NPOC	280-129936-D-10-B	1.000	NPOC:2.223mg/L		Completed	11/5/2019 3:18:31	44
45	NPOC	280-129936-D-11-B	1.000	NPOC:7.156mg/L		Completed	11/5/2019 3:35:18	45
46	NPOC	280-129936-D-12-B	1.000	NPOC:7.799mg/L		Completed	11/5/2019 3:50:01	46
47	NPOC	280-129936-D-13-B	1.000	NPOC:3.390mg/L		Completed	11/5/2019 4:06:49	47
48	NPOC	280-129936-D-14-B	1.000	NPOC:3.181mg/L		Completed	11/5/2019 4:21:32	48
49	NPOC	280-129936-D-15-B	1.000	NPOC:2.907mg/L		Completed	11/5/2019 4:36:16	49
50	NPOC	280-129990-D-1-F	1.000	NPOC:2.925mg/L		Completed	11/5/2019 4:51:00	50
51	NPOC	ccv	1.000	NPOC:23.68mg/L		Completed	11/5/2019 5:05:44	51
52	NPOC	ccb	1.000	NPOC:0.1584mg/L		Completed	11/5/2019 5:22:32	52
53	NPOC	280-129990-D-2-H	1.000	NPOC:3.588mg/L		Completed	11/5/2019 5:37:15	53

	Analysi	Sample Name	Manual	Result	Notes	Status	Date / Time	Vial
54	NPOC	280-129990-D-2-I MS	1.000	NPOC:27.63mg/L		Completed	11/5/2019 5:51:59	54
55	NPOC	280-129990-D-2-J MS	1.000	NPOC:28.63mg/L		Completed	11/5/2019 6:06:44	55
56	NPOC	280-129990-D-3-B	1.000	NPOC:2.934mg/L		Completed	11/5/2019 6:25:37	56
57	NPOC	280-129990-D-4-B	1.000	NPOC:1.790mg/L		Completed	11/5/2019 6:42:19	57
58	NPOC	280-129990-D-5-B	1.000	NPOC:4.363mg/L		Completed	11/5/2019 6:57:03	58
59	NPOC	280-129990-D-6-B	1.000	NPOC:2.771mg/L		Completed	11/5/2019 7:11:48	59
60	NPOC	0-129990-D-7-B	1.000	NPOC:3.648mg/L		Completed	11/5/2019 7:26:33	60
61	NPOC	280-129990-D-8-B	1.000	NPOC:2.908mg/L		Completed	11/5/2019 7:41:18	61
62	NPOC	280-129990-D-9-B	1.000	NPOC:2.807mg/L		Completed	11/5/2019 7:56:03	62
63	NPOC	ccv	1.000	NPOC:24.05mg/L		Completed	11/5/2019 8:10:48	63
64	NPOC	ccb	1.000	NPOC:0.1877mg/L		Completed	11/5/2019 8:27:37	64
65	NPOC	280-129990-D-10-B	1.000	NPOC:4.660mg/L		Completed	11/5/2019 8:44:25	65
66	NPOC	280-129990-D-11-B	1.000	NPOC:4.502mg/L		Completed	11/5/2019 8:59:09	66
67	NPOC	280-127028-G-2_10x	10.00	NPOC:67.42mg/L		Completed	11/5/2019 9:18:02	67
68	NPOC	280-127028-G-2_50x	50.00	NPOC:47.84mg/L		Completed	11/5/2019 9:36:48	68
69	NPOC	280-127028-F-4_10x	10.00	NPOC:408.3mg/L		Completed	11/5/2019 9:51:27	69
70	NPOC	280-127028-F-4_50x	50.00	NPOC:46.47mg/L		Completed	11/5/2019 10:10:2	70
71	NPOC	280-127028-G-4_10x	10.00	NPOC:66.10mg/L		Completed	11/5/2019 10:29:0	71
72	NPOC	280-127028-G-4_50x	50.00	NPOC:38.45mg/L		Completed	11/5/2019 10:47:5	72
73	NPOC	ccv	1.000	NPOC:24.60mg/L		Completed	11/5/2019 11:02:3	73
74	NPOC	ccb	1.000	NPOC:0.1477mg/L		Completed	11/5/2019 11:17:1	74

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2019_10_28_16_08_18.cal

Date of Creation 5:11:50 PM 10/28/2019
User sgb
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
Sample ID: Untitled
Object ID 0A-103108-04335027-1341734255C3-0000
Cal. Curve: TOC3.2019_10_28_16_08_18.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.3006	50uL	1	*******		10/28/2019 4:16:16 P
2	0.2177	50uL	1	*******		10/28/2019 4:18:20 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.2591
SD Area 0.05862
CV Area 22.62%
Vial 86

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.694	50uL	1	*******		10/28/2019 4:26:58 P
2	2.643	50uL	1	*******		10/28/2019 4:29:02 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 2.668
SD Area 0.03606
CV Area 1.35%
Vial 87

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	11.38	50uL	1	*******		10/28/2019 4:37:40 P
2	11.57	50uL	1	*******		10/28/2019 4:39:44 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 11.48
SD Area 0.1344
CV Area 1.17%
Vial 88

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	22.72	50uL	1	*******		10/28/2019 4:48:22 P
2	22.90	50uL	1	*******		10/28/2019 4:50:26 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 22.81
SD Area 0.1273
CV Area 0.56%
Vial 89

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	55.91	50uL	1	*******		10/28/2019 4:59:04 P
2	56.10	50uL	1	*******		10/28/2019 5:01:08 P

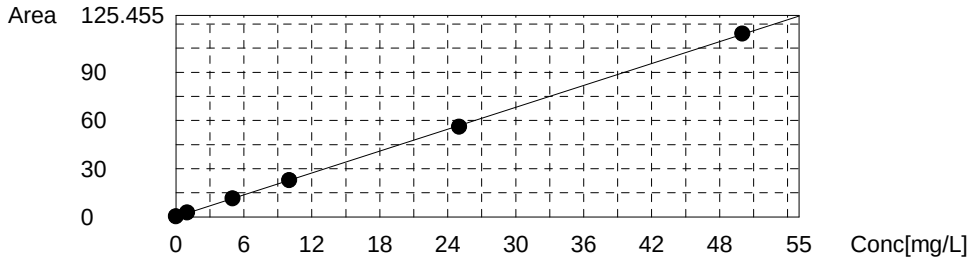
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 56.01
SD Area 0.1344
CV Area 0.24%
Vial 90

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	113.9	50uL	1	*******		10/28/2019 5:09:46 P
2	114.2	50uL	1	*******		10/28/2019 5:11:50 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 114.1
SD Area 0.2121
CV Area 0.19%
Vial 91

Slope: 2.270
Intercept 0.1129
r^2 0.9999
r 0.9999
Zero Shift No



Instr.Information

System TOC-V cpn 3
Instrument Options TOC/ASI/
Catalyst Regular Sensitivity

Sample

Sample Name: icv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

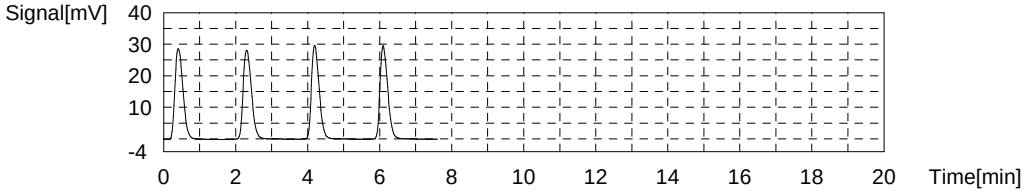
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.75mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.27	19.89mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:10:12 PM
2	45.38	19.94mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:12:16 PM
3	44.65	19.62mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:14:19 PM
4	44.49	19.55mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:16:23 PM

Mean Area 44.95
Mean Conc. 19.75mg/L



Sample

Sample Name: icb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

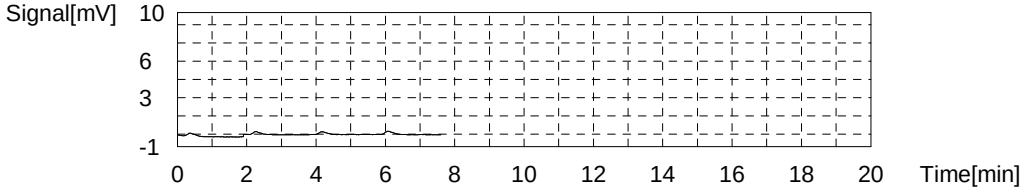
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1006mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2998	0.08233mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:24:55 PM
2	0.3066	0.08533mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:26:59 PM
3	0.3414	0.1007mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:29:03 PM
4	0.4171	0.1340mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:31:06 PM

Mean Area 0.3412
Mean Conc. 0.1006mg/L



Sample

Sample Name: LCS 280-476389/1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

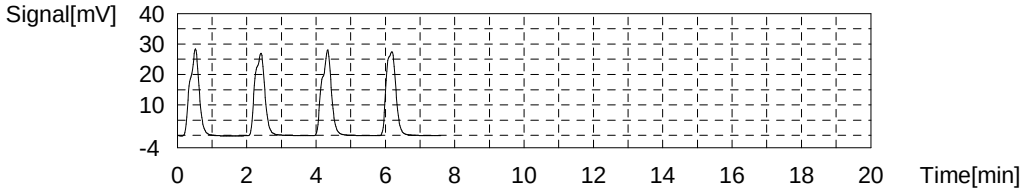
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.46	23.50mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:39:39 PM
2	54.27	23.86mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:41:43 PM
3	54.11	23.78mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:43:46 PM
4	54.22	23.83mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:45:50 PM

Mean Area 54.02
Mean Conc. 23.74mg/L



Sample

Sample Name: MB 280-476389/2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

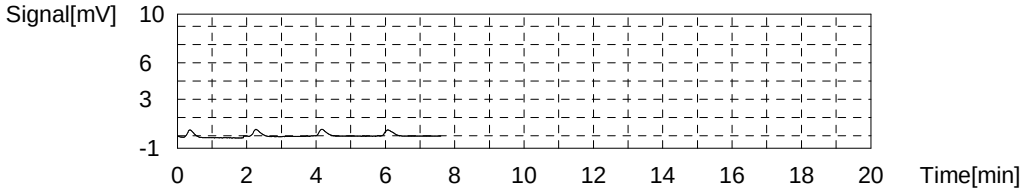
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2949mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7817	0.2946mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:54:22 PM
2	0.7743	0.2913mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:56:26 PM
3	0.7954	0.3006mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 4:58:29 PM
4	0.7783	0.2931mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:00:33 PM

Mean Area 0.7824
Mean Conc. 0.2949mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

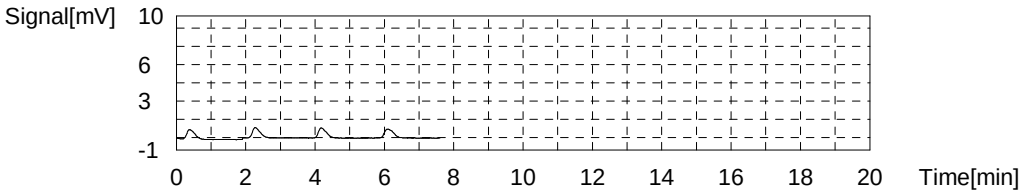
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5173mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.169	0.4652mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:09:05 PM
2	1.305	0.5251mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:11:09 PM
3	1.357	0.5480mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:13:12 PM
4	1.318	0.5308mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:15:16 PM

Mean Area 1.287
Mean Conc. 0.5173mg/L



Sample

Sample Name: 280-129830-D-3-D
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

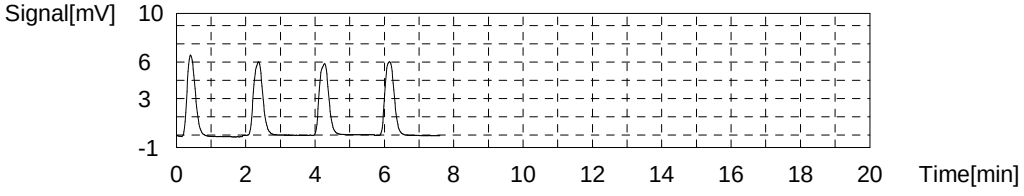
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.844mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.99	4.791mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:23:48 PM
2	11.16	4.866mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:25:52 PM
3	11.09	4.835mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:27:55 PM
4	11.20	4.884mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:29:59 PM

Mean Area 11.11
Mean Conc. 4.844mg/L



Sample

Sample Name: 280-129830-D-3-E MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

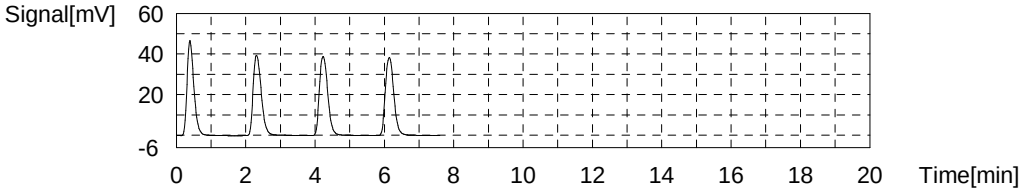
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.78	28.48mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:38:31 PM
2	65.16	28.65mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:40:35 PM
3	65.95	29.00mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:42:39 PM
4	65.87	28.97mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:44:42 PM

Mean Area 65.44
Mean Conc. 28.78mg/L



Sample

Sample Name: 280-129830-D-3-F MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

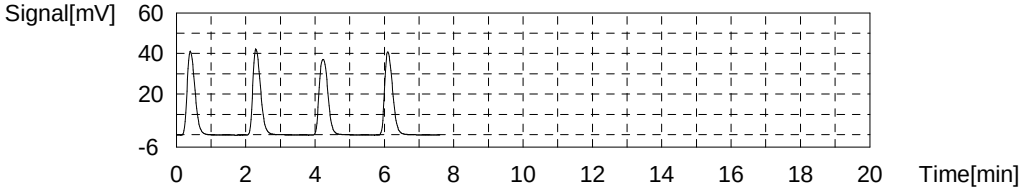
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.94mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.24	28.69mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:53:15 PM
2	66.33	29.17mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:55:19 PM
3	65.85	28.96mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:57:23 PM
4	65.86	28.96mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 5:59:26 PM

Mean Area 65.82
Mean Conc. 28.94mg/L



Sample

Sample Name: 280-129794-F-1-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

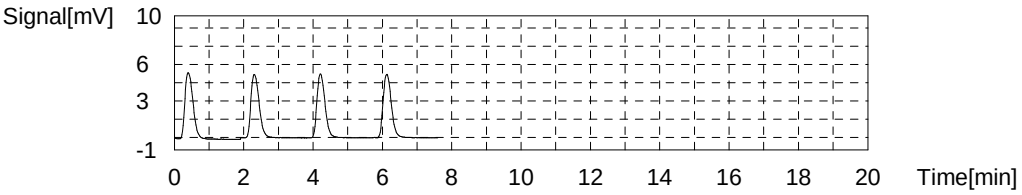
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.753mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.864	3.855mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:07:59 PM
2	8.620	3.747mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:10:03 PM
3	8.493	3.691mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:12:06 PM
4	8.553	3.718mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:14:10 PM

Mean Area 8.633
Mean Conc. 3.753mg/L



Sample

Sample Name: 280-129830-D-1-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

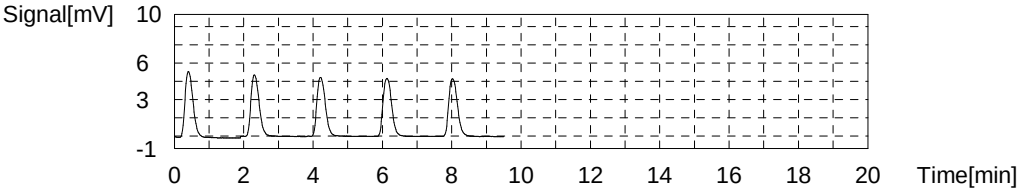
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.588mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.685	3.776mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:22:42 PM
2	8.291	3.602mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:24:46 PM
3	8.175	3.551mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:26:49 PM
4	8.226	3.574mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:28:53 PM
5	8.339	3.623mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:30:57 PM

Mean Area 8.258
Mean Conc. 3.588mg/L



Sample

Sample Name: 280-129830-D-2-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

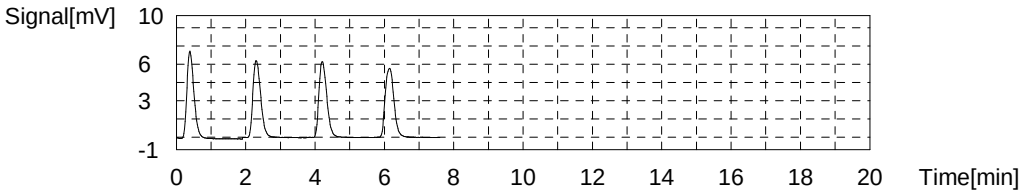
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.362mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.21	4.448mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:39:28 PM
2	9.937	4.327mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:41:32 PM
3	9.909	4.315mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:43:35 PM
4	10.01	4.360mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:45:39 PM

Mean Area 10.02
Mean Conc. 4.362mg/L



Sample

Sample Name: 280-129794-F-2-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

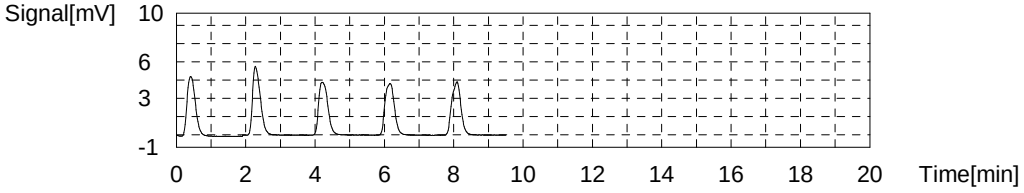
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.519mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.275	3.595mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:54:11 PM
2	8.848	3.848mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:56:15 PM
3	7.980	3.465mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 6:58:19 PM
4	8.013	3.480mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:00:22 PM
5	8.142	3.537mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:02:26 PM

Mean Area 8.103
Mean Conc. 3.519mg/L



Sample

Sample Name: 280-129794-F-3-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

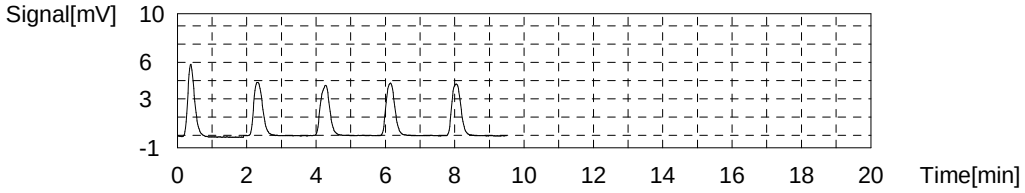
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.336mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.105	3.520mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:10:57 PM
2	7.729	3.355mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:13:01 PM
3	7.624	3.309mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:15:05 PM
4	7.618	3.306mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:17:08 PM
5	7.776	3.375mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:19:12 PM

Mean Area 7.687
Mean Conc. 3.336mg/L



Sample

Sample Name: 280-129794-F-4-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

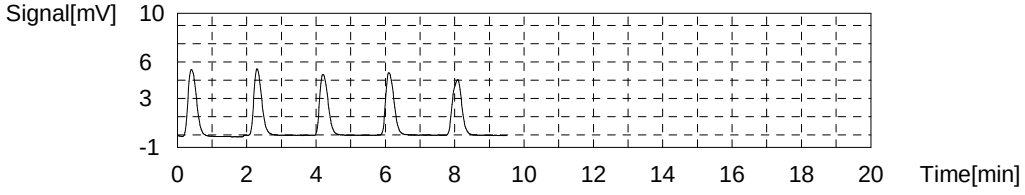
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.722mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.337	4.063mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:27:43 PM
2	8.643	3.757mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:29:47 PM
3	8.399	3.650mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:31:50 PM
4	8.597	3.737mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:33:54 PM
5	8.610	3.743mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:35:58 PM

Mean Area 8.562
Mean Conc. 3.722mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

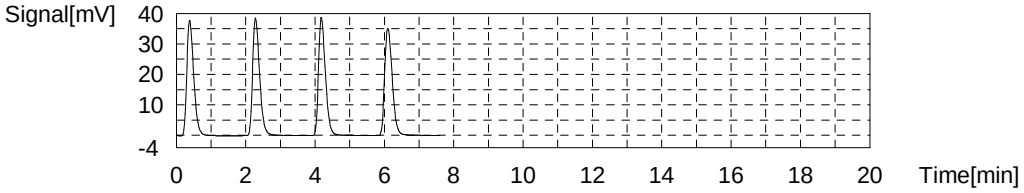
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.71mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.91	23.26mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:44:29 PM
2	54.59	24.00mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:46:33 PM
3	54.19	23.82mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:48:36 PM
4	54.08	23.77mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:50:40 PM

Mean Area 53.94
Mean Conc. 23.71mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

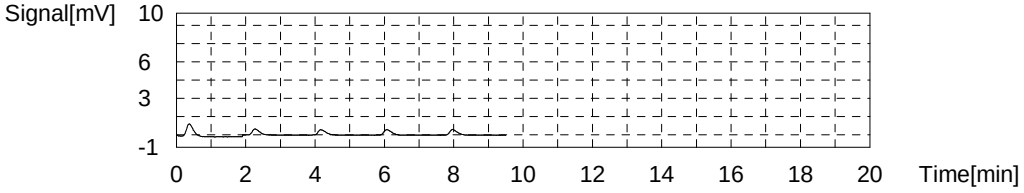
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2471mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.398	0.5661mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 7:59:12 PM
2	0.7027	0.2598mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:01:16 PM
3	0.6538	0.2383mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:03:19 PM
4	0.6600	0.2410mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:05:23 PM
5	0.6791	0.2494mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:07:27 PM

Mean Area 0.6739
Mean Conc. 0.2471mg/L



Sample

Sample Name: 280-129794-F-5-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

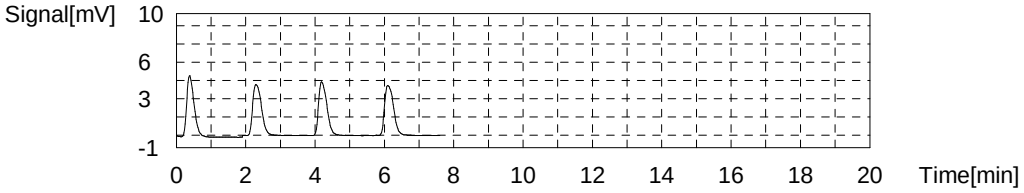
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.227mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.424	3.220mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:15:58 PM
2	7.456	3.235mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:18:02 PM
3	7.415	3.216mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:20:06 PM
4	7.460	3.236mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:22:09 PM

Mean Area 7.439
Mean Conc. 3.227mg/L



Sample

Sample Name: 280-129794-F-6-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

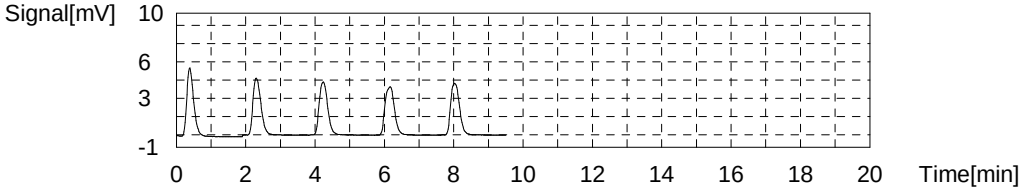
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.237mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.733	3.357mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:30:41 PM
2	7.460	3.236mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:32:45 PM
3	7.344	3.185mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:34:48 PM
4	7.533	3.268mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:36:52 PM
5	7.506	3.257mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:38:56 PM

Mean Area 7.461
Mean Conc. 3.237mg/L



Sample

Sample Name: 280-129857-F-1-E
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

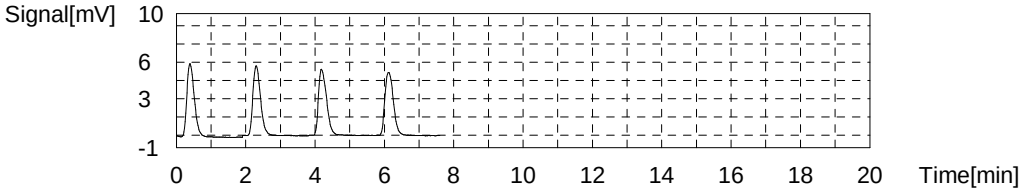
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.871mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.976	3.904mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:47:27 PM
2	8.886	3.864mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:49:31 PM
3	8.803	3.828mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:51:34 PM
4	8.940	3.888mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 8:53:38 PM

Mean Area 8.901
Mean Conc. 3.871mg/L



Sample

Sample Name: 280-129857-F-3-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

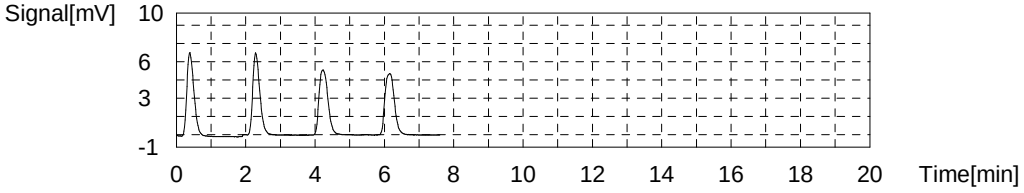
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.184mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.783	4.260mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:02:11 PM
2	9.498	4.134mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:04:15 PM
3	9.560	4.161mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:06:18 PM
4	9.604	4.181mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:08:22 PM

Mean Area 9.611
Mean Conc. 4.184mg/L



Sample

Sample Name: 280-129857-F-3-C MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

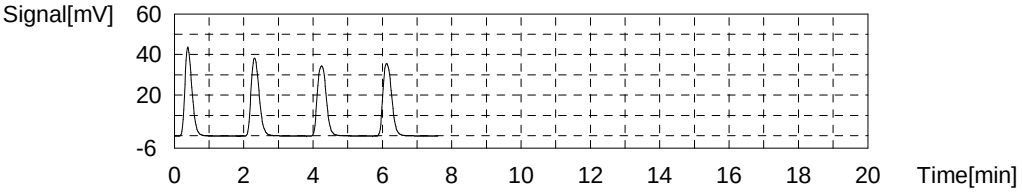
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.62mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.57	27.51mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:16:54 PM
2	63.22	27.80mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:18:58 PM
3	62.45	27.46mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:21:01 PM
4	63.04	27.72mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:23:05 PM

Mean Area 62.82
Mean Conc. 27.62mg/L



Sample

Sample Name: 280-129857-F-3-D MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

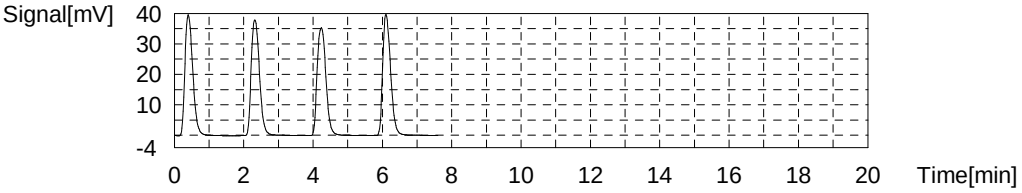
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.08	27.74mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:31:37 PM
2	63.50	27.92mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:33:41 PM
3	62.34	27.41mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:35:45 PM
4	63.40	27.88mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:37:48 PM

Mean Area 63.08
Mean Conc. 27.74mg/L



Sample

Sample Name: 280-129857-F-2-E
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

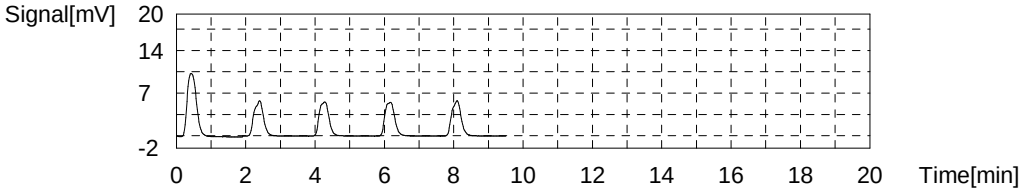
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.746mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.32	8.460mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:46:21 PM
2	10.95	4.774mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:48:25 PM
3	10.80	4.708mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:50:28 PM
4	10.82	4.716mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:52:32 PM
5	10.98	4.787mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 9:54:36 PM

Mean Area 10.89
Mean Conc. 4.746mg/L



Sample

Sample Name: 280-129857-F-4-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

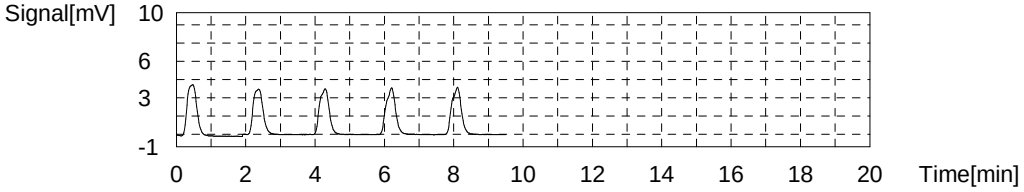
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.164mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.126	3.530mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:03:07 PM
2	7.274	3.154mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:05:11 PM
3	7.230	3.135mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:07:14 PM
4	7.246	3.142mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:09:18 PM
5	7.430	3.223mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:11:22 PM

Mean Area 7.295
Mean Conc. 3.164mg/L



Sample

Sample Name: 280-129857-F-5-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

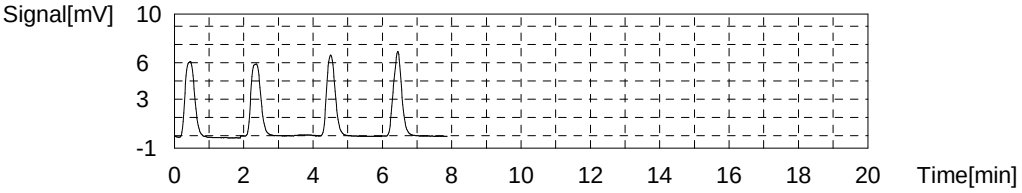
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.079mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.94	5.210mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:19:53 PM
2	11.57	5.047mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:22:12 PM
3	11.40	4.972mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:24:16 PM
4	11.66	5.086mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:26:20 PM

Mean Area 11.64
Mean Conc. 5.079mg/L



Sample

Sample Name: 280-129936-D-1-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

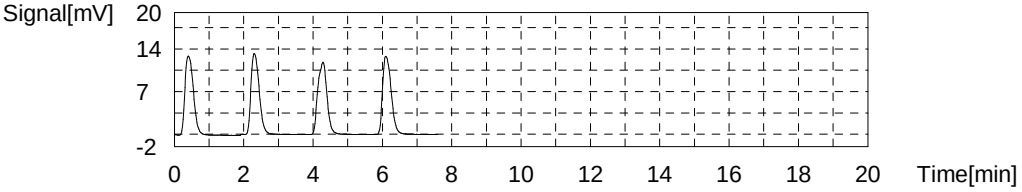
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.716mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.25	9.751mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:34:52 PM
2	22.13	9.698mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:36:56 PM
3	21.91	9.601mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:38:59 PM
4	22.39	9.813mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:41:03 PM

Mean Area 22.17
Mean Conc. 9.716mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

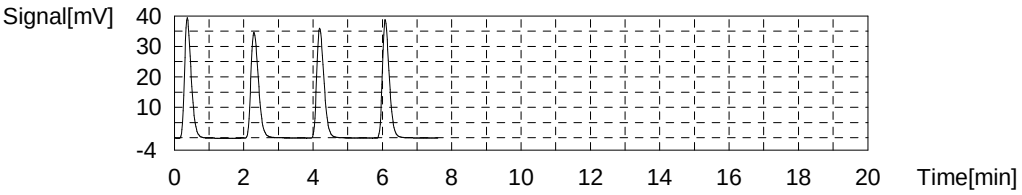
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.42mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.08	23.33mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:49:35 PM
2	53.64	23.58mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:51:38 PM
3	52.78	23.20mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:53:42 PM
4	53.67	23.59mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 10:55:46 PM

Mean Area 53.29
Mean Conc. 23.42mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

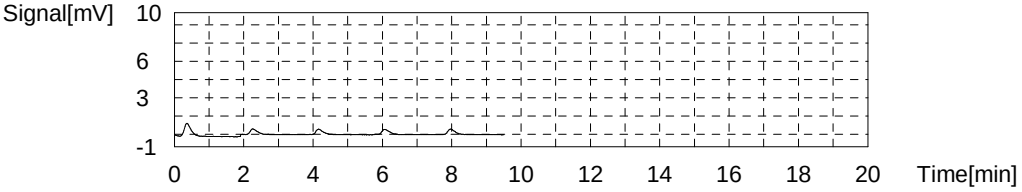
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2314mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.396	0.5652mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:04:18 PM
2	0.6475	0.2355mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:06:22 PM
3	0.6157	0.2215mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:08:25 PM
4	0.6304	0.2280mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:10:29 PM
5	0.6595	0.2408mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:12:33 PM

Mean Area 0.6383
Mean Conc. 0.2314mg/L



Sample

Sample Name: 280-129936-D-2-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

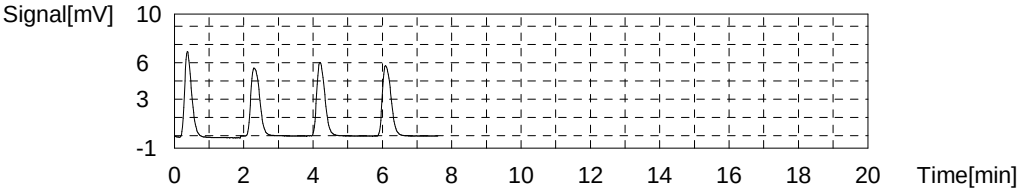
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.332mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.980	4.346mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:21:04 PM
2	9.907	4.314mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:23:08 PM
3	9.897	4.310mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:25:11 PM
4	10.01	4.360mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:27:15 PM

Mean Area 9.948
Mean Conc. 4.332mg/L



Sample

Sample Name: 280-129936-D-3-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

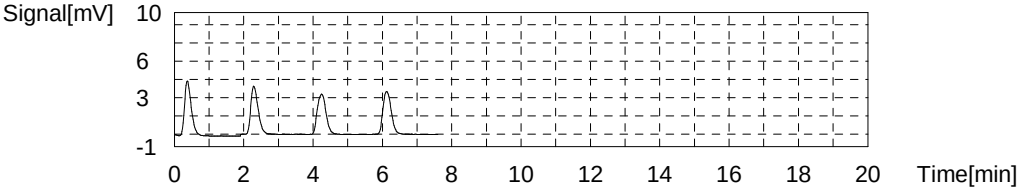
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.558mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.044	2.613mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:35:48 PM
2	5.881	2.541mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:37:51 PM
3	5.870	2.536mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:39:55 PM
4	5.882	2.541mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:41:59 PM

Mean Area 5.919
Mean Conc. 2.558mg/L



Sample

Sample Name: 280-129936-D-4-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

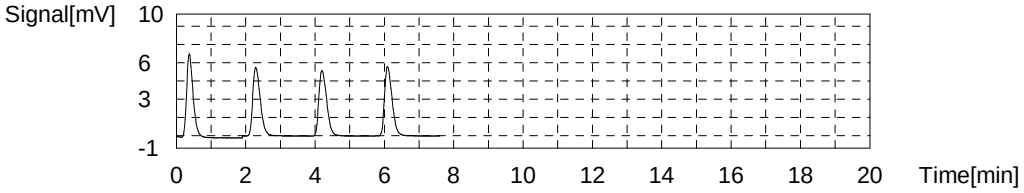
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.753mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.782	3.819mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:50:32 PM
2	8.570	3.725mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:52:36 PM
3	8.544	3.714mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:54:39 PM
4	8.638	3.755mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/4/2019 11:56:43 PM

Mean Area 8.633
Mean Conc. 3.753mg/L



Sample

Sample Name: 280-129936-D-5-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

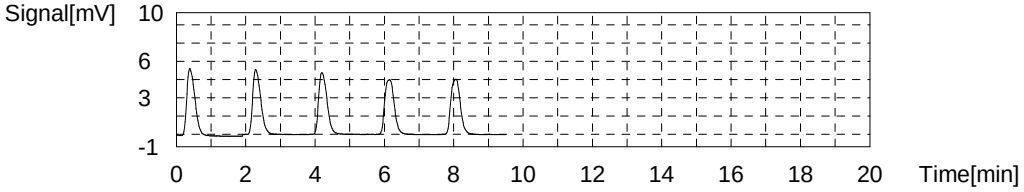
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.747mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.978	3.905mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:05:16 AM
2	8.646	3.759mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:07:19 AM
3	8.547	3.715mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:09:23 AM
4	8.599	3.738mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:11:27 AM
5	8.690	3.778mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:13:31 AM

Mean Area 8.620
Mean Conc. 3.747mg/L



Sample

Sample Name: 280-129936-D-6-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

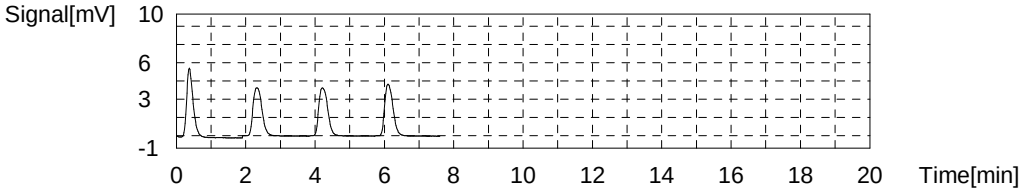
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.105mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.366	3.195mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:22:03 AM
2	7.101	3.078mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:24:07 AM
3	7.057	3.059mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:26:10 AM
4	7.122	3.087mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:28:14 AM

Mean Area 7.162
Mean Conc. 3.105mg/L



Sample

Sample Name: LCS 280-476389/27-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

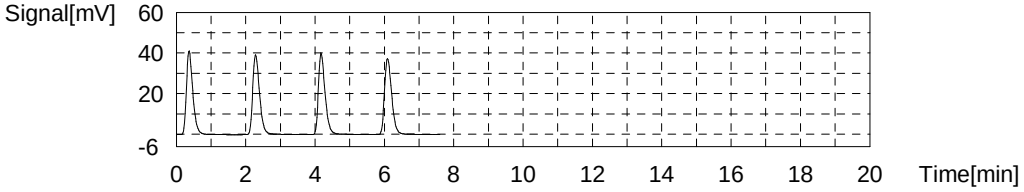
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.04	23.31mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:36:47 AM
2	54.20	23.82mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:38:51 AM
3	54.10	23.78mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:40:54 AM
4	54.19	23.82mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:42:58 AM

Mean Area 53.88
Mean Conc. 23.68mg/L



Sample

Sample Name: MB 280-476389/28-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

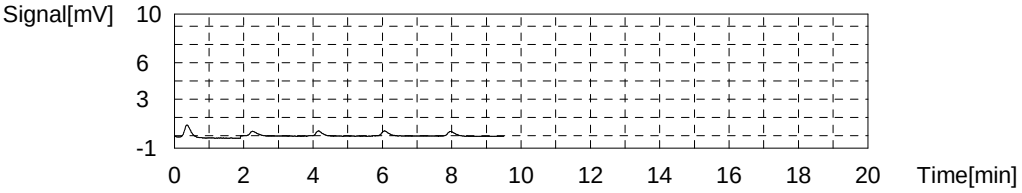
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1844mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.233	0.4934mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:51:31 AM
2	0.5406	0.1884mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:53:34 AM
3	0.5088	0.1744mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:55:38 AM
4	0.5238	0.1810mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:57:42 AM
5	0.5531	0.1939mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 12:59:46 AM

Mean Area 0.5316
Mean Conc. 0.1844mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

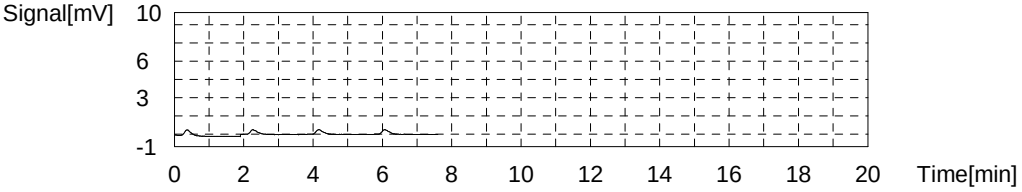
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1925mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6083	0.2182mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:08:18 AM
2	0.5343	0.1856mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:10:22 AM
3	0.5304	0.1839mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:12:25 AM
4	0.5265	0.1822mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:14:29 AM

Mean Area 0.5499
Mean Conc. 0.1925mg/L



Sample

Sample Name: 280-129936-D-9-D
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

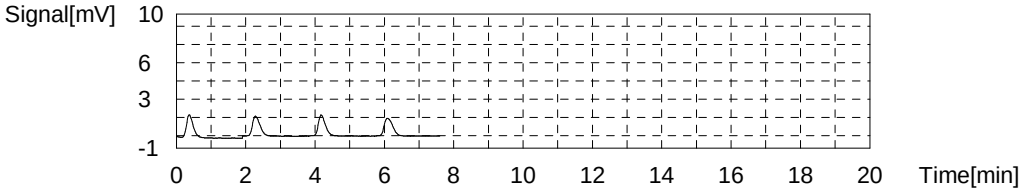
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.016mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.382	0.9995mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:23:02 AM
2	2.439	1.025mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:25:05 AM
3	2.400	1.007mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:27:09 AM
4	2.455	1.032mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:29:13 AM

Mean Area 2.419
Mean Conc. 1.016mg/L



Sample

Sample Name: 280-129936-D-9-E MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

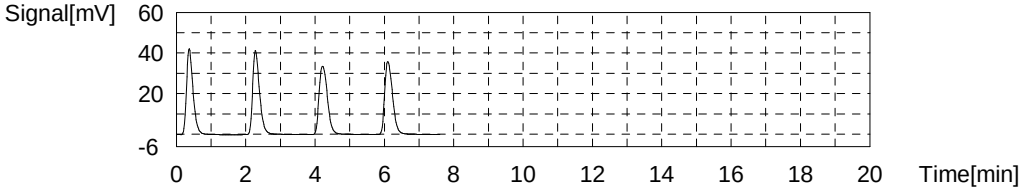
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.85	24.55mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:37:46 AM
2	57.41	25.24mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:39:50 AM
3	56.90	25.01mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:41:53 AM
4	57.16	25.13mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:43:57 AM

Mean Area 56.83
Mean Conc. 24.98mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

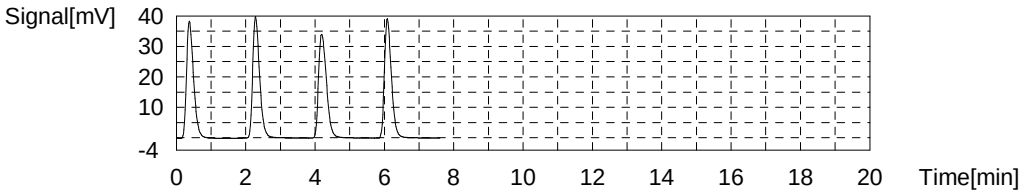
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.23mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.83	24.10mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:52:30 AM
2	55.64	24.46mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:54:33 AM
3	54.79	24.08mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:56:37 AM
4	55.26	24.29mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 1:58:41 AM

Mean Area 55.13
Mean Conc. 24.23mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

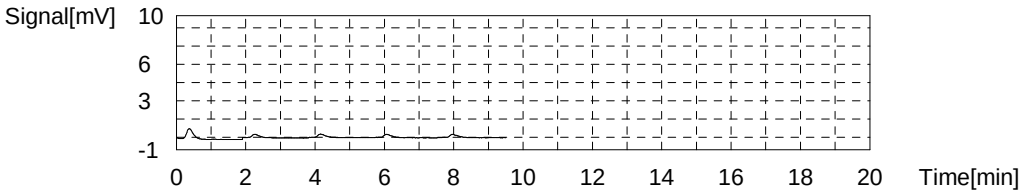
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1173mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.118	0.4427mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:07:14 AM
2	0.3738	0.1149mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:09:17 AM
3	0.3886	0.1214mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:11:21 AM
4	0.3648	0.1110mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:13:25 AM
5	0.3895	0.1218mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:15:29 AM

Mean Area 0.3792
Mean Conc. 0.1173mg/L



Sample

Sample Name: 280-129936-D-9-F MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

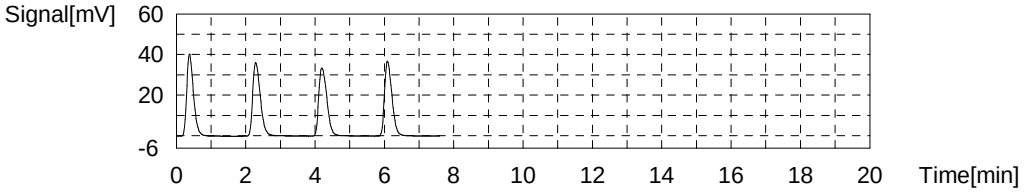
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.36mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.28	24.30mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:24:01 AM
2	55.95	24.60mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:26:05 AM
3	55.06	24.20mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:28:08 AM
4	55.41	24.36mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:30:12 AM

Mean Area 55.43
Mean Conc. 24.36mg/L



Sample

Sample Name: 280-129936-D-7-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

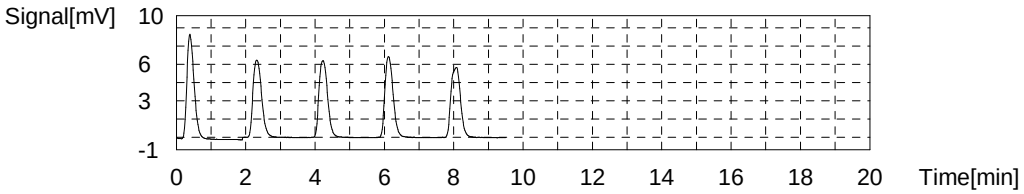
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.817mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.38	5.403mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:38:45 AM
2	11.13	4.853mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:40:48 AM
3	10.92	4.760mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:42:52 AM
4	11.06	4.822mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:44:56 AM
5	11.08	4.831mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:47:00 AM

Mean Area 11.05
Mean Conc. 4.817mg/L



Sample

Sample Name: 280-129936-D-8-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

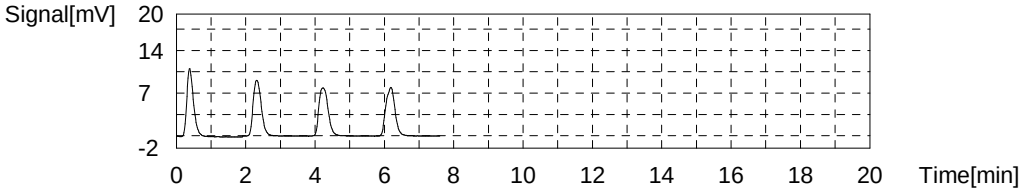
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.505mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.08	6.593mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:55:32 AM
2	15.00	6.558mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:57:36 AM
3	14.68	6.417mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 2:59:39 AM
4	14.76	6.452mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:01:43 AM

Mean Area 14.88
Mean Conc. 6.505mg/L



Sample

Sample Name: 280-129936-D-10-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

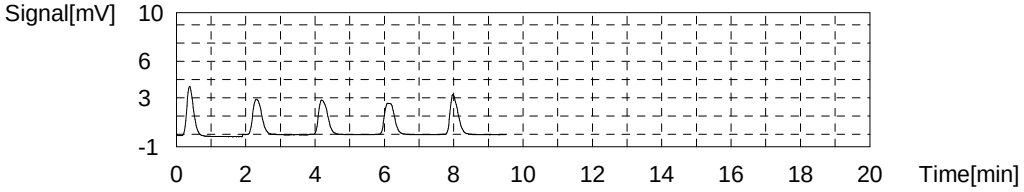
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.223mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.552	2.396mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:10:15 AM
2	5.163	2.224mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:12:19 AM
3	5.116	2.204mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:14:23 AM
4	5.177	2.231mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:16:27 AM
5	5.183	2.233mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:18:31 AM

Mean Area 5.160
Mean Conc. 2.223mg/L



Sample

Sample Name: 280-129936-D-11-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

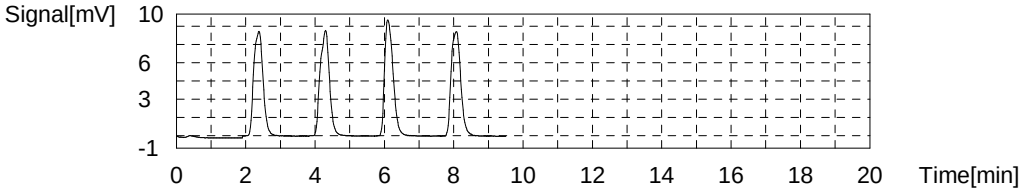
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.156mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2034	0.03987mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:27:03 AM
2	16.22	7.095mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:29:06 AM
3	16.17	7.073mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:31:10 AM
4	16.36	7.157mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:33:14 AM
5	16.68	7.298mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:35:18 AM

Mean Area 16.36
Mean Conc. 7.156mg/L



Sample

Sample Name: 280-129936-D-12-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

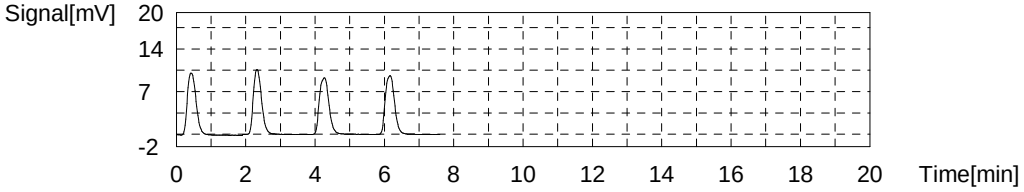
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.799mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.81	7.795mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:43:50 AM
2	17.72	7.756mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:45:53 AM
3	17.80	7.791mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:47:57 AM
4	17.94	7.853mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:50:01 AM

Mean Area 17.82
Mean Conc. 7.799mg/L



Sample

Sample Name: 280-129936-D-13-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

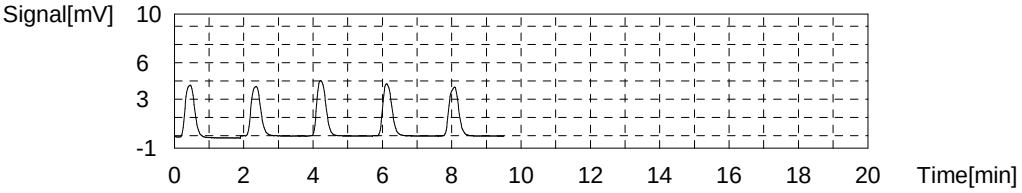
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.390mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.005	3.476mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 3:58:34 AM
2	7.759	3.368mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:00:37 AM
3	8.224	3.573mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:02:41 AM
4	7.709	3.346mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:04:45 AM
5	7.766	3.371mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:06:49 AM

Mean Area 7.810
Mean Conc. 3.390mg/L



Sample

Sample Name: 280-129936-D-14-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

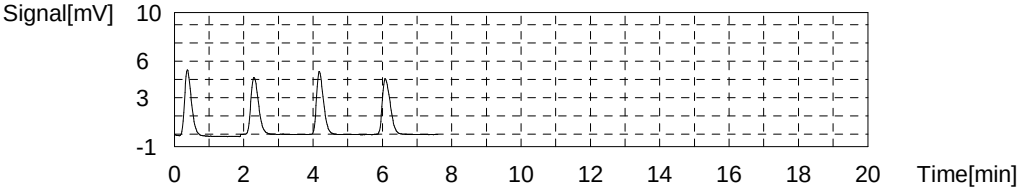
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.181mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.377	3.200mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:15:21 AM
2	7.311	3.171mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:17:24 AM
3	7.317	3.173mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:19:28 AM
4	7.333	3.180mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:21:32 AM

Mean Area 7.335
Mean Conc. 3.181mg/L



Sample

Sample Name: 280-129936-D-15-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

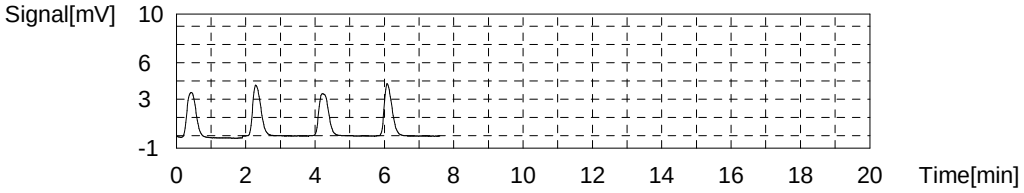
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.907mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.702	2.902mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:30:04 AM
2	6.833	2.960mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:32:08 AM
3	6.636	2.873mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:34:12 AM
4	6.683	2.894mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:36:16 AM

Mean Area 6.713
Mean Conc. 2.907mg/L



Sample

Sample Name: 280-129990-D-1-F
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

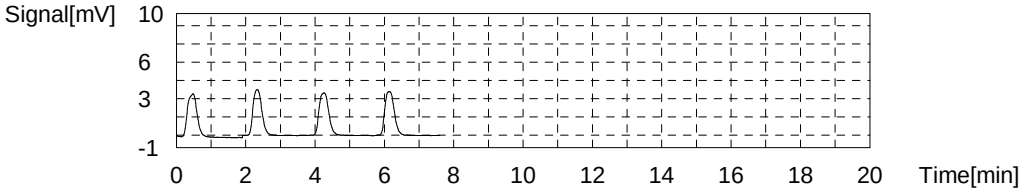
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.925mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.735	2.917mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:44:49 AM
2	6.709	2.905mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:46:52 AM
3	6.738	2.918mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:48:56 AM
4	6.827	2.957mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:51:00 AM

Mean Area 6.752
Mean Conc. 2.925mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

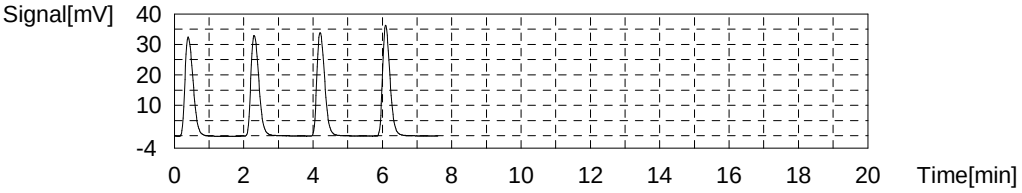
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.58	23.55mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 4:59:33 AM
2	53.83	23.66mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:01:36 AM
3	53.71	23.61mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:03:40 AM
4	54.34	23.89mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:05:44 AM

Mean Area 53.87
Mean Conc. 23.68mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

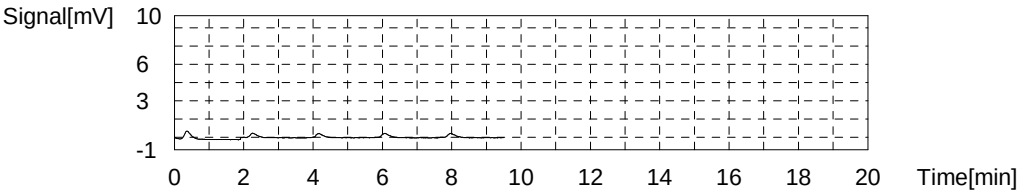
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1584mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7726	0.2906mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:14:17 AM
2	0.4653	0.1552mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:16:20 AM
3	0.4486	0.1479mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:18:24 AM
4	0.4846	0.1637mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:20:28 AM
5	0.4917	0.1669mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:22:32 AM

Mean Area 0.4726
Mean Conc. 0.1584mg/L



Sample

Sample Name: 280-129990-D-2-H
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

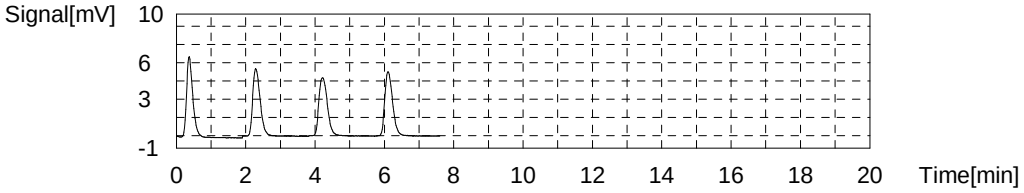
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.588mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.255	3.586mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:31:04 AM
2	8.324	3.617mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:33:07 AM
3	8.126	3.530mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:35:11 AM
4	8.325	3.617mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:37:15 AM

Mean Area 8.258
Mean Conc. 3.588mg/L



Sample

Sample Name: 280-129990-D-2-I MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

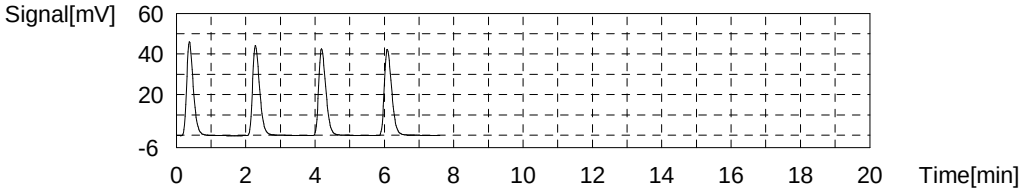
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.28	27.38mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:45:47 AM
2	63.50	27.92mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:47:51 AM
3	62.41	27.44mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:49:55 AM
4	63.19	27.78mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 5:51:59 AM

Mean Area 62.84
Mean Conc. 27.63mg/L



Sample

Sample Name: 280-129990-D-2-J MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

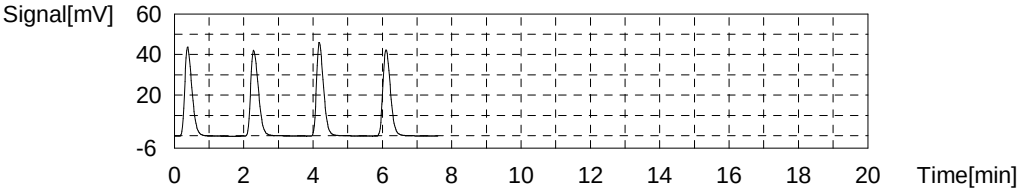
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.90	28.10mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:00:33 AM
2	66.19	29.11mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:02:36 AM
3	65.26	28.70mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:04:40 AM
4	65.13	28.64mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:06:44 AM

Mean Area 65.12
Mean Conc. 28.63mg/L



Sample

Sample Name: 280-129990-D-3-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

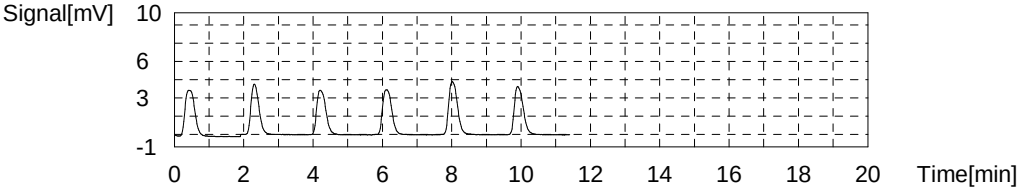
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.934mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.265	3.150mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:15:17 AM
2	6.629	2.870mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:17:21 AM
3	6.645	2.877mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:19:25 AM
4	6.777	2.935mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:21:29 AM
5	7.650	3.320mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:23:33 AM
6	7.041	3.052mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:25:37 AM

Mean Area 6.773
Mean Conc. 2.934mg/L



Sample

Sample Name: 280-129990-D-4-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

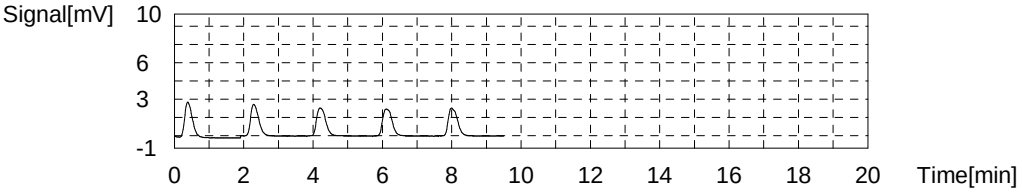
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.790mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.393	1.885mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:34:04 AM
2	4.201	1.801mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:36:07 AM
3	4.122	1.766mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:38:11 AM
4	4.200	1.800mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:40:15 AM
5	4.184	1.793mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:42:19 AM

Mean Area 4.177
Mean Conc. 1.790mg/L



Sample

Sample Name: 280-129990-D-5-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

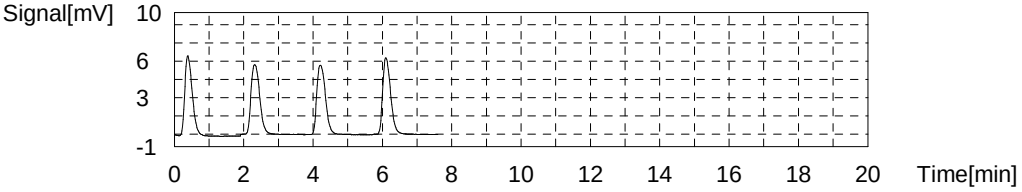
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.363mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.946	4.331mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:50:52 AM
2	10.12	4.408mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:52:55 AM
3	9.924	4.322mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:54:59 AM
4	10.08	4.390mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 6:57:03 AM

Mean Area 10.02
Mean Conc. 4.363mg/L



Sample

Sample Name: 280-129990-D-6-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

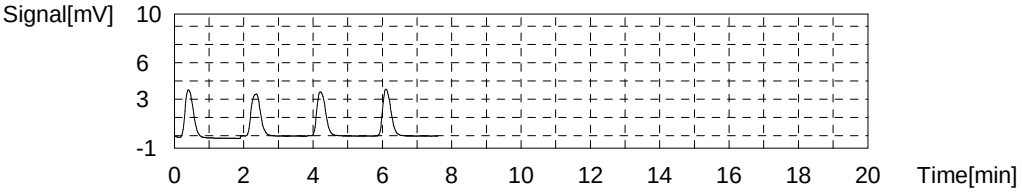
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.771mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.474	2.802mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:05:36 AM
2	6.419	2.778mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:07:40 AM
3	6.329	2.738mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:09:44 AM
4	6.393	2.766mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:11:48 AM

Mean Area 6.404
Mean Conc. 2.771mg/L



Sample

Sample Name: 0-129990-D-7-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

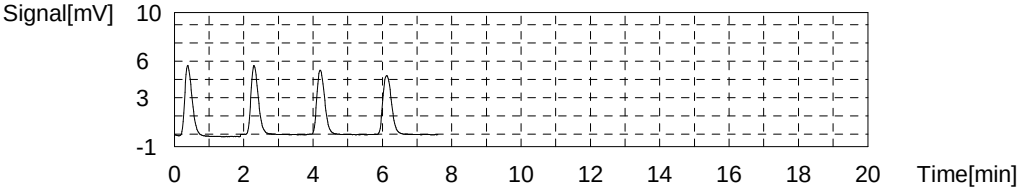
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.648mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.491	3.690mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:20:21 AM
2	8.423	3.660mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:22:25 AM
3	8.316	3.613mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:24:29 AM
4	8.347	3.627mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:26:33 AM

Mean Area 8.394
Mean Conc. 3.648mg/L



Sample

Sample Name: 280-129990-D-8-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

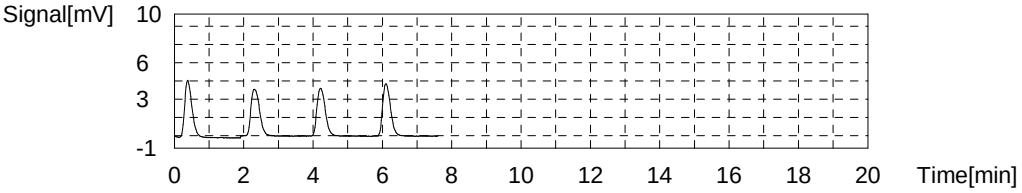
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.908mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.788	2.940mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:35:07 AM
2	6.663	2.885mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:37:10 AM
3	6.583	2.850mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:39:14 AM
4	6.821	2.955mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:41:18 AM

Mean Area 6.714
Mean Conc. 2.908mg/L



Sample

Sample Name: 280-129990-D-9-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

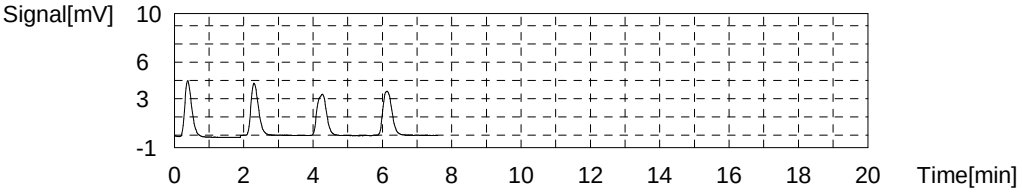
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.807mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.443	2.788mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:49:52 AM
2	6.506	2.816mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:51:55 AM
3	6.442	2.788mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:53:59 AM
4	6.555	2.838mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 7:56:03 AM

Mean Area 6.487
Mean Conc. 2.807mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

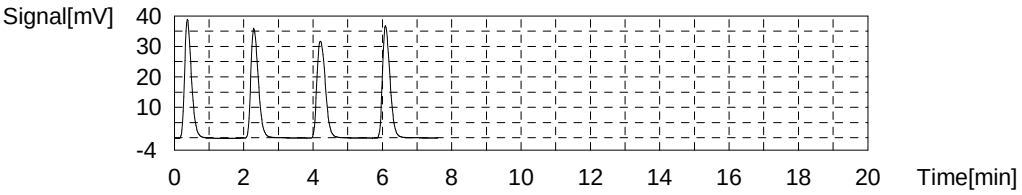
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.05mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.95	23.71mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:04:37 AM
2	54.57	23.99mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:06:40 AM
3	54.72	24.05mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:08:44 AM
4	55.57	24.43mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:10:48 AM

Mean Area 54.70
Mean Conc. 24.05mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

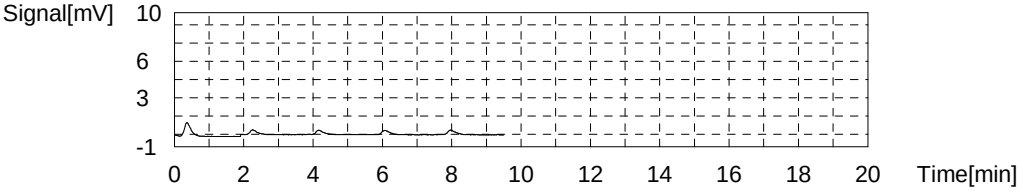
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1877mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.405	0.5692mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:19:21 AM
2	0.5517	0.1933mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:21:25 AM
3	0.5061	0.1732mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:23:29 AM
4	0.5188	0.1788mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:25:33 AM
5	0.5794	0.2055mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:27:37 AM

Mean Area 0.5390
Mean Conc. 0.1877mg/L



Sample

Sample Name: 280-129990-D-10-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

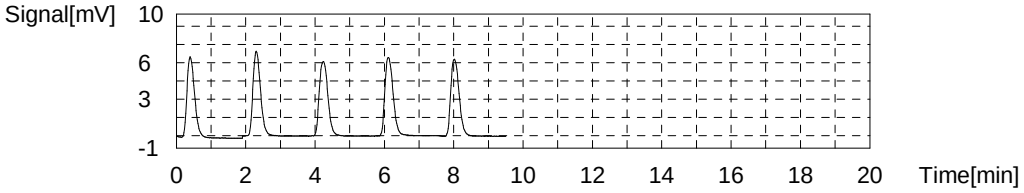
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.660mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.11	4.404mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:36:09 AM
2	10.65	4.641mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:38:13 AM
3	10.63	4.633mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:40:17 AM
4	10.75	4.685mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:42:21 AM
5	10.74	4.681mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:44:25 AM

Mean Area 10.69
Mean Conc. 4.660mg/L



Sample

Sample Name: 280-129990-D-11-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

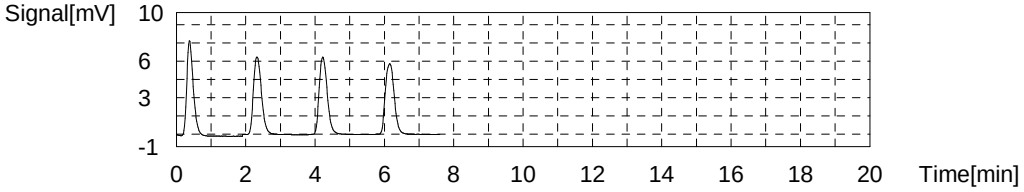
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.502mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.17	4.430mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:52:57 AM
2	10.39	4.527mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:55:01 AM
3	10.37	4.518mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:57:05 AM
4	10.40	4.531mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 8:59:09 AM

Mean Area 10.33
Mean Conc. 4.502mg/L



Sample

Sample Name: 280-127028-G-2_10x
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

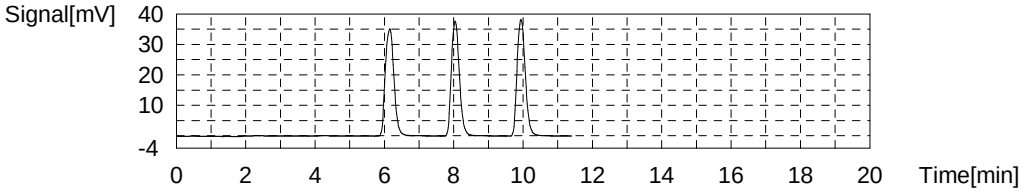
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:67.42mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1421	0.1287mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:07:43 AM
2	0.000	-0.4973mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:09:46 AM
3	0.1491	0.1595mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:11:50 AM
4	61.59	270.8mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:13:54 AM
5	61.38	269.9mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:15:58 AM
6	63.47	279.1mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:18:02 AM

Mean Area 15.42
Mean Conc. 67.42mg/L



Sample

Sample Name: 280-127028-G-2_50x
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

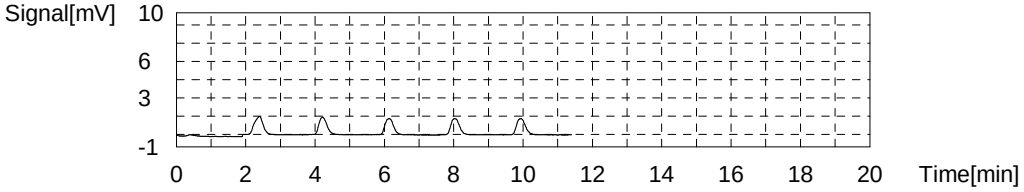
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:47.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1441	0.6874mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:26:29 AM
2	2.638	55.61mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:28:32 AM
3	2.286	47.86mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:30:36 AM
4	2.232	46.67mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:32:40 AM
5	2.307	48.32mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:34:44 AM
6	2.316	48.52mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:36:48 AM

Mean Area 2.285
Mean Conc. 47.84mg/L



Sample

Sample Name: 280-127028-F-4_10x
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

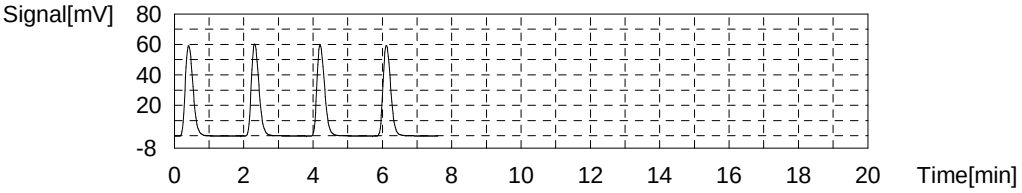
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:408.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.37	410.8mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:45:15 AM
2	93.62	411.9mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:47:19 AM
3	92.27	405.9mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:49:23 AM
4	91.98	404.7mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 9:51:27 AM

Mean Area 92.81
Mean Conc. 408.3mg/L



Sample

Sample Name: 280-127028-F-4_50x
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

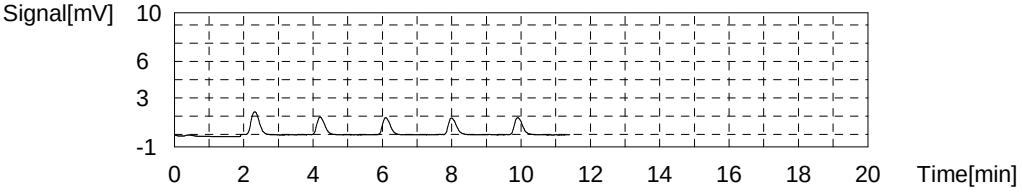
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:46.47mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1217	0.1940mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:00:00 AM
2	3.087	65.50mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:02:04 AM
3	2.282	47.77mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:04:08 AM
4	2.183	45.59mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:06:12 AM
5	2.188	45.70mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:08:16 AM
6	2.238	46.80mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:10:20 AM

Mean Area 2.223
Mean Conc. 46.47mg/L



Sample

Sample Name: 280-127028-G-4_10x
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

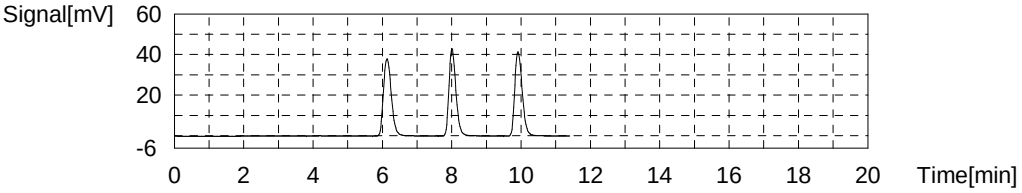
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:66.10mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.4973mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:18:46 AM
2	0.000	-0.4973mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:20:50 AM
3	0.000	-0.4973mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:22:54 AM
4	60.80	267.3mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:24:58 AM
5	60.48	265.9mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:27:02 AM
6	62.43	274.5mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:29:06 AM

Mean Area 15.12
Mean Conc. 66.10mg/L



Sample

Sample Name: 280-127028-G-4_50x
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

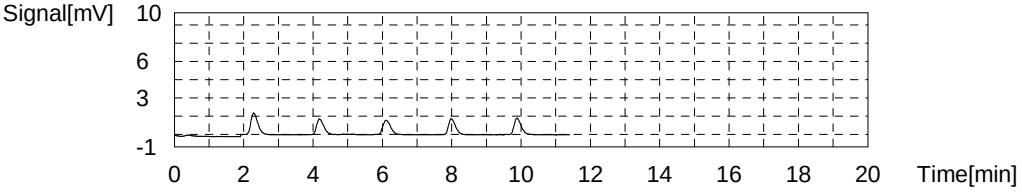
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:38.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1135	0.01342mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:37:32 AM
2	2.508	52.75mg/L	50uL	1	E	TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:39:36 AM
3	1.862	38.52mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:41:40 AM
4	1.797	37.09mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:43:44 AM
5	1.849	38.24mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:45:48 AM
6	1.927	39.95mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:47:52 AM

Mean Area 1.859
Mean Conc. 38.45mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

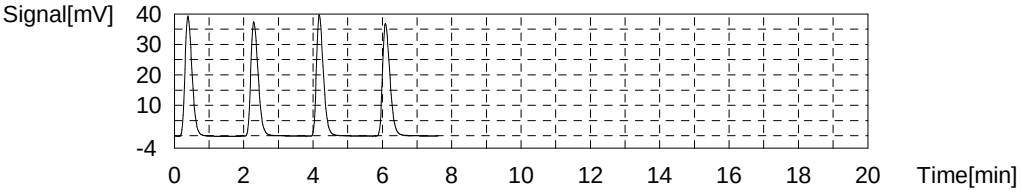
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.60mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.37	24.78mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:56:19 AM
2	56.19	24.70mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 10:58:23 AM
3	55.67	24.47mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 11:00:27 AM
4	55.57	24.43mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 11:02:31 AM

Mean Area 55.95
Mean Conc. 24.60mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

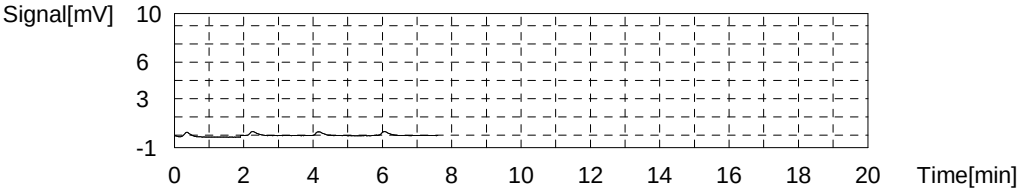
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1477mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4411	0.1446mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 11:11:05 AM
2	0.4721	0.1582mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 11:13:09 AM
3	0.4532	0.1499mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 11:15:13 AM
4	0.4260	0.1379mg/L	50uL	1		TOC3.2019_10_28_16_08_18.cal	11/5/2019 11:17:17 AM

Mean Area 0.4481
Mean Conc. 0.1477mg/L



order modified for analysis

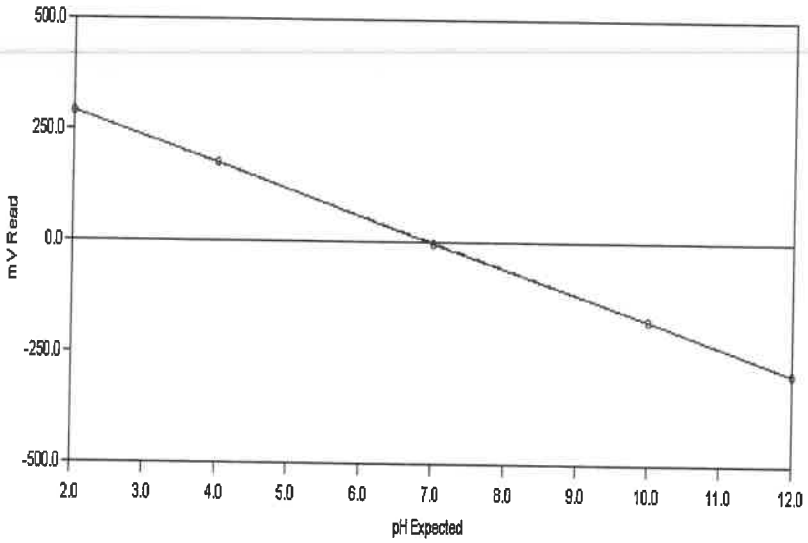
	Analysis	Sample Name	Manual Diluti	pH Result <2?	Notes	Status	Date / Time	Vial
1*	NPOC	icv	1.000	✓		Defined		1
2*	NPOC	icb	1.000	✓		Defined		2
3*	NPOC	LCS 280-475944/1-A	1.000	✓		Defined		3
4*	NPOC	MB 280-475944/2-A	1.000	✓		Defined		4
5*	NPOC	tic	1.000	✓		Defined		5
6*	NPOC	280-129830-D-3-A	1.000	?		Defined		6
7*	NPOC	280-129830-D-3-B MS	1.000	?		Defined		7
8*	NPOC	280-129830-D-3-C MSD	1.000	?		Defined		8
9*	NPOC	280-129794-F-1-A	1.000	?		Defined		9
10*	NPOC	280-129830-D-1-A	1.000	SCB 10/30/19 ~~6~~ ?		Defined		10
11*	NPOC	280-129830-D-2-A	1.000	?		Defined		11
12*	NPOC	280-129794-F-2-A	1.000	?		Defined		12
13*	NPOC	280-129794-F-3-A	1.000	?		Defined		13
14*	NPOC	280-129794-F-4-A	1.000	?		Defined		14
15*	NPOC	ccv	1.000	✓		Defined		15
16*	NPOC	ccb	1.000	✓		Defined		16
17*	NPOC	280-129794-F-5-A	1.000	?		Defined		17
18*	NPOC	280-129794-F-6-A	1.000	?		Defined		18
19*	NPOC	280-129857-F-1-A	1.000	?		Defined		19
20*	NPOC	280-129857-F-2-A	1.000	?		Defined		20
21*	NPOC	280-129857-F-2-B MS	1.000	?		Defined		21
22*	NPOC	280-129857-F-2-C MSD	1.000	?		Defined		22
23*	NPOC	280-129857-F-3-A	1.000	?		Defined		23
24*	NPOC	280-129857-F-4-A	1.000	?		Defined		24
25*	NPOC	280-129857-F-5-A	1.000	?		Defined		25
26*	NPOC	280-129936-D-1-A	1.000	?		Defined		26
27*	NPOC	ccv	1.000	✓		Defined		27
28*	NPOC	ccb	1.000	✓		Defined		28
29*	NPOC	280-129936-D-2-A	1.000	?		Defined		29
30*	NPOC	280-129936-D-3-A	1.000	?		Defined		30
31*	NPOC	280-129936-D-4-A	1.000	?		Defined		31
32*	NPOC	280-129936-D-5-A	1.000	?		Defined		32
33*	NPOC	280-129936-D-6-A	1.000	?		Defined		33
34*	NPOC	LCS 280-475944/27-A	1.000	✓		Defined		34
35*	NPOC	MB 280-475944/28-A	1.000	✓		Defined		35
36*	NPOC	tic	1.000	✓		Defined		36
37*	NPOC	280-129936-D-9-A	1.000	?		Defined		37
38*	NPOC	ms 280-129936-D-9-b	1.000	?		Defined		38
39*	NPOC	ccv	1.000	✓		Defined		39
40*	NPOC	ccb	1.000	✓		Defined		40
41*	NPOC	msd 280-129936-D-9-c	1.000	?		Defined		41
42*	NPOC	280-129936-D-7-A	1.000	?		Defined		42
43*	NPOC	280-129936-D-8-A	1.000	?		Defined		43
44*	NPOC	280-129936-D-10-A	1.000	?		Defined		44
45*	NPOC	280-129936-D-11-A	1.000	?		Defined		45
46*	NPOC	280-129936-D-12-A	1.000	?		Defined		46
47*	NPOC	280-129936-D-13-A	1.000	?		Defined		47
48*	NPOC	280-129936-D-14-A	1.000	?		Defined		48
49*	NPOC	280-~~129990-D-1-A~~ 936-15	1.000	?	~~removed~~	Defined		49
50*	NPOC	280-~~129990-D-2-A~~ 990-1	1.000	?	SCB 11/4/19	Defined		50
51*	NPOC	ccv SCB 10/30/19	1.000	✓		Defined		51

	Analysis	Sample Name	Manual Diluti	Result	Notes	Status	Date / Time	Vial
52*	NPOC	ccb	1.000	✓		Defined		52
53*	NPOC	280-129990-D-2-A	1.000	7		Defined		53
54*	NPOC	280-129990-D-2-B MS	1.000	7		Defined		54
55*	NPOC	280-129990-D-2-C MSD	1.000	7		Defined		55
56*	NPOC	280-129990-D-3-A	1.000	7		Defined		56
57*	NPOC	280-129990-D-4-A	1.000	5		Defined		57
58*	NPOC	280-129990-D-5-A	1.000	7		Defined		58
59*	NPOC	280-129990-D-6-A	1.000	7		Defined		59
60*	NPOC	280-129990-D-7-A	1.000	7		Defined		60
61*	NPOC	280-129990-D-8-A	1.000	7		Defined		61
62*	NPOC	280-129990-D-9-A	1.000	7		Defined		62
63*	NPOC	ccv	1.000	✓		Defined		63
64*	NPOC	ccb	1.000	✓		Defined		64
65*	NPOC	280-129990-D-10-A	1.000	7		Defined		65
66*	NPOC	280-129990-D-11-A	1.000	7		Defined		66
67*	NPOC	ccv	1.000	✓		Defined		67
68*	NPOC	ccb	1.000	✓		Defined		68

PC-TitratION PLUS
Calibration Report

Analyst: SG

Calibration Record # 1501



Calibration Settings

Calibration ID	PH	Date	10/29/2019
Channel	1	Time	10:20 AM
Probe Type	pH	Temperature	296.74 K 23.59 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-58.684	CorrCoeff	1.0000
Intercept	-1.266	Equation: Y = (-58.684) X + (-1.266)	

Calibration Validity True

Operator

	Result	Minimum	Maximum
Slope	-58.684	-65.00	-53.00
Intercept	-1.266	-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	292.48
	4.00	175.04
	7.00	-2.31
	10.00	-177.36
	12.00	-294.18

PC-TitratION PLUS by Man-Tech Associates, Inc.

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Test America

Water Analysis Report

Analyst: SG

Run Number 4876 **Order Number** 20191029-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	pH2	pH3	Acid	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
RINSE	10/29/2019	1:24 PM	23.35	-1.00	5.71	-1.00	-1.00	-1.00	.00	12.63	12.63	.00	.00	.00	.36	.40	.02
BUFFER 7	10/29/2019	1:41 PM	23.47	-1.00	6.97	-1.00	-1.00	-1.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
INITIAL CHECK	10/29/2019	1:50 PM	23.09	-1.00	10.63	-1.00	-1.00	-1.00	101.79	204.11	.53	203.57	.00	2.54	5.10	-1.00	.02
LCS	10/29/2019	1:59 PM	22.86	-1.00	10.64	-1.00	-1.00	-1.00	103.26	205.85	.00	205.17	.68	2.58	5.15	-1.00	.02
LCSD	10/29/2019	2:09 PM	22.86	-1.00	10.64	-1.00	-1.00	-1.00	102.39	205.67	.89	204.77	.00	2.56	5.14	-1.00	.02
MB	10/29/2019	2:16 PM	22.86	-1.00	8.75	-1.00	-1.00	-1.00	.46	1.41	.49	.92	.00	.01	.08	.12	.02
280-129856-A-6	10/29/2019	2:22 PM	22.43	-1.00	6.61	-1.00	-1.00	-1.00	.00	44.98	44.98	.00	.00	.00	1.12	-1.00	.02
DU 280-129856-a-6	10/29/2019	2:28 PM	21.85	-1.00	6.55	-1.00	-1.00	-1.00	.00	43.92	43.92	.00	.00	.00	1.10	-1.00	.02
280-129931-b-4	10/29/2019	2:36 PM	21.34	-1.00	7.76	-1.00	-1.00	-1.00	.00	173.59	173.59	.00	.00	.00	4.34	-1.00	.02
280-129931-b-5	10/29/2019	2:42 PM	21.31	-1.00	6.92	-1.00	-1.00	-1.00	.00	38.71	38.71	.00	.00	.00	.97	-1.00	.02
280-129931-a-6	10/29/2019	2:50 PM	21.37	-1.00	7.16	-1.00	-1.00	-1.00	.00	92.80	92.80	.00	.00	.00	2.32	-1.00	.02
280-129931-a-7	10/29/2019	2:57 PM	21.50	-1.00	7.61	-1.00	-1.00	-1.00	.00	95.17	95.17	.00	.00	.00	2.38	-1.00	.02
280-129931-b-8	10/29/2019	3:04 PM	21.92	-1.00	7.36	-1.00	-1.00	-1.00	.00	144.87	144.87	.00	.00	.00	3.62	-1.00	.02
280-129931-b-9	10/29/2019	3:12 PM	22.48	-1.00	7.86	-1.00	-1.00	-1.00	.00	145.71	145.71	.00	.00	.00	3.64	-1.00	.02
280-129931-a-10	10/29/2019	3:19 PM	21.98	-1.00	7.91	-1.00	-1.00	-1.00	.00	131.37	131.37	.00	.00	.00	3.28	-1.00	.02
280-129936-f-1	10/29/2019	3:28 PM	21.87	-1.00	7.11	-1.00	-1.00	-1.00	.00	313.90	313.90	.00	.00	.00	7.85	-1.00	.02
CCV	10/29/2019	3:37 PM	21.90	-1.00	10.60	-1.00	-1.00	-1.00	106.85	210.82	.00	207.93	2.89	2.67	5.27	-1.00	.02
CCB	10/29/2019	3:45 PM	22.02	-1.00	7.97	-1.00	-1.00	-1.00	.00	1.04	1.04	.00	.00	.00	.07	.12	.02
280-129936-f-2	10/29/2019	3:52 PM	21.89	-1.00	7.15	-1.00	-1.00	-1.00	.00	199.23	199.23	.00	.00	.00	4.98	-1.00	.02
280-129936-f-3	10/29/2019	4:00 PM	22.11	-1.00	7.56	-1.00	-1.00	-1.00	.00	191.52	191.52	.00	.00	.00	4.79	-1.00	.02
280-129936-f-4	10/29/2019	4:09 PM	22.84	-1.00	7.33	-1.00	-1.00	-1.00	.00	331.10	331.10	.00	.00	.00	8.28	-1.00	.02
280-129936-f-5	10/29/2019	4:18 PM	22.46	-1.00	7.41	-1.00	-1.00	-1.00	.00	351.08	351.08	.00	.00	.00	8.78	-1.00	.02
280-129936-f-6	10/29/2019	4:26 PM	22.39	-1.00	7.22	-1.00	-1.00	-1.00	.00	226.53	226.53	.00	.00	.00	5.66	-1.00	.02
280-129936-f-7	10/29/2019	4:35 PM	22.22	-1.00	7.25	-1.00	-1.00	-1.00	.00	365.60	365.60	.00	.00	.00	9.14	-1.00	.02
280-129936-f-8	10/29/2019	4:46 PM	22.23	-1.00	7.15	-1.00	-1.00	-1.00	.00	450.03	450.03	.00	.00	.00	11.25	-1.00	.02
280-129936-f-9	10/29/2019	4:54 PM	22.25	-1.00	7.82	-1.00	-1.00	-1.00	.00	215.57	215.57	.00	.00	.00	5.39	-1.00	.02
280-129936-f-10	10/29/2019	5:02 PM	22.48	-1.00	7.99	-1.00	-1.00	-1.00	.00	132.90	132.90	.00	.00	.00	3.32	-1.00	.02

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GENERAL RESULTS REPORT.SRW

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Run Number 4876 **Order Number** 20191029-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	pH2	pH3	Acid	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-129936-f-11	10/29/2019	5:09 PM	23.17	-1.00	7.60	-1.00	-1.00	-1.00	.00	51.05	51.05	.00	.00	.00	1.28	-1.00	.02
CCV	10/29/2019	5:18 PM	22.83	-1.00	10.55	-1.00	-1.00	-1.00	98.29	205.60	9.02	196.58	.00	2.46	5.14	-1.00	.02
CCB	10/29/2019	5:25 PM	22.75	-1.00	7.71	-1.00	-1.00	-1.00	.00	1.00	1.00	.00	.00	.00	.07	.12	.02
LCS	10/29/2019	5:35 PM	22.54	-1.00	10.54	-1.00	-1.00	-1.00	97.15	205.43	11.14	194.30	.00	2.43	5.14	-1.00	.02
LCSD	10/29/2019	5:44 PM	22.52	-1.00	10.55	-1.00	-1.00	-1.00	98.59	206.95	9.78	197.18	.00	2.46	5.17	-1.00	.02
MB	10/29/2019	5:52 PM	22.58	-1.00	7.87	-1.00	-1.00	-1.00	.00	1.12	1.12	.00	.00	.00	.08	.12	.02
280-129936-f-12	10/29/2019	6:01 PM	22.83	-1.00	7.11	-1.00	-1.00	-1.00	.00	370.60	370.60	.00	.00	.00	9.26	-1.00	.02
DU 280-129936-f-12	10/29/2019	6:11 PM	23.51	-1.00	7.21	-1.00	-1.00	-1.00	.00	390.37	390.37	.00	.00	.00	9.76	-1.00	.02
280-129936-f-13	10/29/2019	6:21 PM	23.17	-1.00	7.53	-1.00	-1.00	-1.00	.00	391.11	391.11	.00	.00	.00	9.78	-1.00	.02
280-129936-f-14	10/29/2019	6:28 PM	22.95	-1.00	7.22	-1.00	-1.00	-1.00	.00	127.63	127.63	.00	.00	.00	3.19	-1.00	.02
280-129936-f-15	10/29/2019	6:38 PM	22.81	-1.00	7.48	-1.00	-1.00	-1.00	.00	347.75	347.75	.00	.00	.00	8.69	-1.00	.02
280-129990-f-13	10/29/2019	6:46 PM	22.89	-1.00	7.25	-1.00	-1.00	-1.00	.00	248.75	248.75	.00	.00	.00	6.22	-1.00	.02
280-129990-f-14	10/29/2019	6:52 PM	22.83	-1.00	7.19	-1.00	-1.00	-1.00	.00	106.12	106.12	.00	.00	.00	2.65	-1.00	.02
280-129990-f-15	10/29/2019	7:02 PM	23.01	-1.00	7.60	-1.00	-1.00	-1.00	.00	352.21	352.21	.00	.00	.00	8.81	-1.00	.02
280-129995-e-7	10/29/2019	7:09 PM	23.65	-1.00	8.73	-1.00	-1.00	-1.00	42.04	169.43	85.34	84.08	.00	1.05	4.24	-1.00	.02
680-176026-c-1	10/29/2019	7:16 PM	23.38	-1.00	7.09	-1.00	-1.00	-1.00	.00	26.18	26.18	.00	.00	.00	.65	-1.00	.02
CCV	10/29/2019	7:26 PM	23.25	-1.00	10.48	-1.00	-1.00	-1.00	95.06	206.27	16.15	190.12	.00	2.38	5.16	-1.00	.02
CCB	10/29/2019	7:33 PM	23.22	-1.00	7.50	-1.00	-1.00	-1.00	.00	1.04	1.04	.00	.00	.00	.07	.12	.02
680-176026-c-2	10/29/2019	7:39 PM	23.14	-1.00	6.79	-1.00	-1.00	-1.00	.00	24.10	24.10	.00	.00	.00	.60	-1.00	.02
680-176026-c-3	10/29/2019	7:46 PM	23.11	-1.00	6.58	-1.00	-1.00	-1.00	.00	9.44	9.44	.00	.00	.00	.28	.32	.02
680-176026-c-4	10/29/2019	7:53 PM	23.27	-1.00	6.96	-1.00	-1.00	-1.00	.00	138.37	138.37	.00	.00	.00	3.46	-1.00	.02
680-176026-c-5	10/29/2019	8:00 PM	23.81	-1.00	7.75	-1.00	-1.00	-1.00	.00	50.72	50.72	.00	.00	.00	1.27	-1.00	.02
680-176026-c-6	10/29/2019	8:07 PM	23.72	-1.00	6.96	-1.00	-1.00	-1.00	.00	172.34	172.34	.00	.00	.00	4.31	-1.00	.02
680-176026-c-7	10/29/2019	8:14 PM	23.67	-1.00	7.10	-1.00	-1.00	-1.00	.00	32.28	32.28	.00	.00	.00	.81	-1.00	.02
680-176026-c-8	10/29/2019	8:20 PM	23.62	-1.00	6.96	-1.00	-1.00	-1.00	.00	47.03	47.03	.00	.00	.00	1.18	-1.00	.02
CCV	10/29/2019	8:30 PM	23.57	-1.00	10.45	-1.00	-1.00	-1.00	93.15	206.57	20.27	186.30	.00	2.33	5.16	-1.00	.02
CCB	10/29/2019	8:37 PM	23.68	-1.00	7.99	-1.00	-1.00	-1.00	.00	1.22	1.22	.00	.00	.00	.08	.13	.02

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Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE RR	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)	
10-21-19	0950		X	CA210-1	AQ	9	ABCDEF	X	X	X	X	X	X	
10-21-19	1125		X	CA211-1	AQ	9	ABCDEF	X	X	X	X	X	X	
10-21-19	1250		X	CA212-1	AQ	9	ABCDEF	X	X	X	X	X	X	

Analytical Parameters

Bill to: Brice Engineering

Remarks

standard TAT

6°C

↓

280-129936 Chain of Custody

Page 1237 of 1243

Signatures	Date	Time
Relinquished by:	10-21-19	1600
Received by: Julian Julie	10-22-19	0930
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: See Email

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

0.1, 2.9, 3.4, 2.6, 1.4, 4.6 °C to IR $ JL 10-22-19

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

01/06/2020

2019521

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE, TY	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives - MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
10-19-19	0955		X	EW7-PM24B-1-35	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		6°C
10-19-19	1155		X	EW7-PM29B-1-35	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		
10-19-19	1405		X	EW7-PM29A-1-25	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		

Bill to: Brice Engineering

standard TAT

Signatures	Date	Time
Relinquished by:	10-21-19	1600
Received by: Felicia Jacki	10-22-19	0930
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number:

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2019515

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355	Bill to: Brice Engineering
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse	Remarks
Sampler(s): BE, TY		standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives - MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Analytical Parameters
10-19-19	1620		X	EW7-PM28A-1-25	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		6°C
10-20-19	1210		X	EW7-PM28B-1-35	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	10-21-19	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by: Julian Fuhr	10-22-19	0930	Airbill Number: See Email	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

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2019514

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): TY CH	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Bill to: Brice Engineering Remarks standard TAT
10-21-19	1445		X	GW070-1	AQ	27	ABCDEF	X	X	X	X	X	X		6°C + MS/MSD

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	10-21-19	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	10-22-19	0930	Airbill Number: See Email	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	TAL/Brice Project #: 28017805
Received for Laboratory by:				

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2019520

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355	Bill to: Brice Engineering
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse	Remarks
Sampler(s): BE RR TY CH		standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
10-21-19	1425		X	CA213-1	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
10-21-19	1615		X	GW070-1	AQ	9	ABCDEF	X	X	X	X	X	X		↓
10-21-19	1615		X	GW081-1	AQ	9	ABCDEF	X	X	X	X	X	X		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	10-21-19	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by: Fulton Lab	10-22-19	0930	Airbill Number: See Email	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

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2019519

AECOM

12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): TY CH	

Bill to: Brice Engineering

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks standard TAT
10-21-19	1200		X	G0075-1	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
10-21-19	1045		X	G0079-1	AQ	9	ABCDEF	X	X	X	X	X	X		
10-21-19	0910		X	G0080-1	AQ	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time
Relinquished by: [signature]	10-21-19	1600
Received by: [signature]	10-22-19	0930
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: See Email

Lab Address:

TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

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2019516

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-129936-1

Login Number: 129936
List Number: 1
Creator: Lubin, Julius C

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	