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ANALYTICAL REPORT

Job Number: 280-137084-1

Job Description: Cornhusker (CHAAP)

For:
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Attention: Corey Schwabenlander

Approved for release.
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6/17/2020 7:48 PM

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The Lab Certification ID# is 4025.

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

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Qualifiers

GC VOA

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

HPLC/IC

Qualifier	Qualifier Description
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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-137084-1

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

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

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

RECEIPT
The samples were received on 5/30/2020 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.0º C, 3.5º C and 4.6º C.

DISSOLVED GASES (GC)
Samples EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 06/01/2020 and 06/03/2020.

Samples EW7-PM24A-3-25 (280-137084-2)[3X], EW7-PM24B-3-35 (280-137084-3)[6X] and EW7-PM22B-3-35 (280-137084-5)[6X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

NITROAROMATICS AND NITRAMINES (HPLC)
Samples EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 06/01/2020 and analyzed on 06/12/2020 and 06/13/2020.

1,2-Dinitrobenzene failed the surrogate recovery criteria high for EW7-PM27A-3-25 (280-137084-1). 1,2-Dinitrobenzene failed the surrogate recovery criteria high for EW7-PM24A-3-25 (280-137084-2). 1,2-Dinitrobenzene failed the surrogate recovery criteria high for EW7-PM24B-3-35 (280-137084-3). 1,2-Dinitrobenzene failed the surrogate recovery criteria high for EW7-PM21B-3-35 (280-137084-4). 1,2-Dinitrobenzene failed the surrogate recovery criteria high for EW7-PM22B-3-35 (280-137084-5). Refer to the QC report for details. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within %R limit in the confirmation column.

The %RPD between the primary and confirmation column exceeded 40% for for the following samples: EW7-PM27A-3-25 (280-137084-1) and EW7-PM24A-3-25 (280-137084-2). The results from both columns has been reported and qualified in accordance with the laboratory's QAS.

A MNX LCSD was not extracted in the batch.

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

ALKALINITY
Samples EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 06/02/2020.

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

AMMONIA
Samples EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/02/2020.

Samples EW7-PM27A-3-25 (280-137084-1)[10X], EW7-PM24B-3-35 (280-137084-3)[10X], EW7-PM21B-3-35 (280-137084-4)[10X] and EW7-PM22B-3-35 (280-137084-5)[10X] 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 EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 06/02/2020 and analyzed on 06/04/2020.

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

NITRATE-NITRITE AS NITROGEN

Samples EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 06/03/2020.

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

SULFIDE

Samples EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 06/02/2020.

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

ANIONS (28 DAYS)

Samples EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for anions (28 days) in accordance with 9056A. The samples were analyzed on 06/01/2020.

Sulfate failed the recovery criteria low for the MS of sample EW7-PM22B-3-35MS (280-137084-5) in batch 280-496899. Sulfate exceeded the RPD limit for the MSD of sample EW7-PM22B-3-35MSD (280-137084-5) in batch 280-496899. 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 EW7-PM27A-3-25 (280-137084-1), EW7-PM24A-3-25 (280-137084-2), EW7-PM24B-3-35 (280-137084-3), EW7-PM21B-3-35 (280-137084-4) and EW7-PM22B-3-35 (280-137084-5) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 06/11/2020 and 06/12/2020.

Samples EW7-PM24B-3-35 (280-137084-3)[4.17X], EW7-PM21B-3-35 (280-137084-4)[1.67X] and EW7-PM22B-3-35 (280-137084-5)[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.

Detection Summary

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

Job ID: 280-137084-1

Client Sample ID: EW7-PM27A-3-25 — Lab Sample ID: 280-137084-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	6.4		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2,4,6-Trinitrotoluene	0.45	Q J1	0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.29	M J1	0.12	0.11	0.048	ug/L	1		8330A	Total/NA
Ammonia	1.1		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.6		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	4.2		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	47		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	440		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	42		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM24A-3-25 — Lab Sample ID: 280-137084-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	9.0	D	0.015	0.0060	0.0019	mg/L	3		RSK-175	Total/NA
1,3,5-Trinitrobenzene	3.3	M Q	0.22	0.21	0.090	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	8.3	M Q	0.12	0.11	0.048	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.5	M Q	0.16	0.13	0.062	ug/L	1		8330A	Total/NA
HMX	4.7	M Q	0.22	0.21	0.094	ug/L	1		8330A	Total/NA
HMX	1.5	M	0.22	0.21	0.094	ug/L	1		8330A	Total/NA
Ammonia	0.20		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.1		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	6.9		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	40		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	480		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	20		1.0	1.0	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM24B-3-35 — Lab Sample ID: 280-137084-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	14	D	0.030	0.012	0.0038	mg/L	6		RSK-175	Total/NA
Ammonia	1.7		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	8.2		2.5	2.5	1.7	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	6.0		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	500		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	150		4.2	4.2	1.4	mg/L	4.17		9060A	Dissolved

Client Sample ID: EW7-PM21B-3-35 — Lab Sample ID: 280-137084-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	6.7		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	1.5		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.6		1.3	1.3	0.86	mg/L	1		351.2	Total/NA
Sulfate	70		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	410		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	63		1.7	1.7	0.58	mg/L	1.67		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 280-137084-1

Client Sample ID: EW7-PM22B-3-35

Lab Sample ID: 280-137084-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	15	D	0.030	0.012	0.0038	mg/L	6		RSK-175	Total/NA
Ammonia	1.0		1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	6.4		2.5	2.5	1.7	mg/L	1		351.2	Total/NA
Sulfate	14	J1	5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	490		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	96		2.0	2.0	0.69	mg/L	2		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 280-137084-1

Client Sample ID: EW7-PM27A-3-25

Lab Sample ID: 280-137084-1

Date Collected: 05/29/20 15:55
Date Received: 05/30/20 09:10

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**6.4**		0.0050	0.0020	0.00063	mg/L		06/01/20 17:26	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M Q	0.23	0.21	0.090	ug/L		06/12/20 04:00	1
1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.040	ug/L		06/12/20 04:00	1
2,4,6-Trinitrotoluene	**0.45**	**Q J1**	0.12	0.11	0.048	ug/L		06/12/20 04:00	1
2,4,6-Trinitrotoluene	**0.29**	**M J1**	0.12	0.11	0.048	ug/L		06/13/20 06:42	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029	ug/L		06/13/20 06:42	1
2,6-Dinitrotoluene	0.086	U M Q	0.11	0.086	0.043	ug/L		06/12/20 04:00	1
2-Amino-4,6-dinitrotoluene	0.11	U Q	0.12	0.11	0.054	ug/L		06/12/20 04:00	1
2-Nitrotoluene	0.21	U Q	0.23	0.21	0.092	ug/L		06/12/20 04:00	1
3-Nitrotoluene	0.43	U Q	0.43	0.43	0.21	ug/L		06/12/20 04:00	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		06/13/20 06:42	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		06/13/20 06:42	1
HMX	0.21	U Q	0.23	0.21	0.094	ug/L		06/12/20 04:00	1
MNX	0.43	U M	2.1	0.43	0.17	ug/L		06/12/20 04:00	1
Nitrobenzene	0.21	U M Q	0.23	0.21	0.098	ug/L		06/12/20 04:00	1
RDX	0.21	U M Q	0.23	0.21	0.055	ug/L		06/12/20 04:00	1
Tetryl	0.11	U M Q	0.12	0.11	0.034	ug/L		06/12/20 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*183*	*M Q*	*83 - 119*	*06/01/20 10:20*	*06/12/20 04:00*	*1*
1,2-Dinitrobenzene	*90*	*M*	*83 - 119*	*06/01/20 10:20*	*06/13/20 06:42*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.1**		1.0	0.50	0.22	mg/L		06/02/20 11:15	10
Nitrogen, Total Kjeldahl	**3.6**		1.0	1.0	0.69	mg/L		06/04/20 16:55	1
Nitrate Nitrite as N	**4.2**		0.10	0.050	0.019	mg/L		06/03/20 19:50	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/02/20 10:59	1
Sulfate	**47**		5.0	3.0	1.0	mg/L		06/01/20 16:12	1
Total Alkalinity as CaCO3	**440**		10	10	3.1	mg/L		06/02/20 11:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**42**		1.0	1.0	0.35	mg/L		06/11/20 22:41	1

Client Sample ID: EW7-PM24A-3-25

Lab Sample ID: 280-137084-2

Date Collected: 05/29/20 12:50
Date Received: 05/30/20 09:10

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**9.0**	**D**	0.015	0.0060	0.0019	mg/L		06/03/20 16:50	3

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**3.3**	**M Q**	0.22	0.21	0.090	ug/L		06/12/20 04:23	1
1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.039	ug/L		06/12/20 04:23	1
2,4,6-Trinitrotoluene	**8.3**	**M Q**	0.12	0.11	0.048	ug/L		06/12/20 04:23	1

Client Sample ID: EW7-PM24A-3-25

Lab Sample ID: 280-137084-2

Date Collected: 05/29/20 12:50

Matrix: Water

Date Received: 05/30/20 09:10

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.086	U M	0.11	0.086	0.029	ug/L		06/13/20 07:17	1
2,6-Dinitrotoluene	0.086	U M Q	0.11	0.086	0.043	ug/L		06/12/20 04:23	1
2-Amino-4,6-dinitrotoluene	0.11	U Q	0.12	0.11	0.054	ug/L		06/12/20 04:23	1
2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.091	ug/L		06/12/20 04:23	1
3-Nitrotoluene	0.43	U M	0.43	0.43	0.21	ug/L		06/13/20 07:17	1
4-Amino-2,6-dinitrotoluene	**2.5**	**M Q**	0.16	0.13	0.062	ug/L		06/12/20 04:23	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		06/13/20 07:17	1
HMX	**4.7**	**M Q**	0.22	0.21	0.094	ug/L		06/12/20 04:23	1
HMX	**1.5**	**M**	0.22	0.21	0.094	ug/L		06/13/20 07:17	1
MNX	0.43	U M	2.1	0.43	0.16	ug/L		06/12/20 04:23	1
Nitrobenzene	0.21	U M Q	0.22	0.21	0.097	ug/L		06/12/20 04:23	1
RDX	0.21	U M Q	0.22	0.21	0.055	ug/L		06/12/20 04:23	1
Tetryl	0.11	U M Q	0.12	0.11	0.034	ug/L		06/12/20 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*216*	*M Q*	*83 - 119*	*06/01/20 10:20*	*06/12/20 04:23*	*1*
1,2-Dinitrobenzene	*96*		*83 - 119*	*06/01/20 10:20*	*06/13/20 07:17*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.20**		0.10	0.050	0.022	mg/L		06/02/20 11:54	1
Nitrogen, Total Kjeldahl	**2.1**		1.0	1.0	0.69	mg/L		06/04/20 16:56	1
Nitrate Nitrite as N	**6.9**		0.10	0.050	0.019	mg/L		06/03/20 19:52	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/02/20 10:59	1
Sulfate	**40**		5.0	3.0	1.0	mg/L		06/01/20 16:29	1
Total Alkalinity as CaCO3	**480**		10	10	3.1	mg/L		06/02/20 11:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**20**		1.0	1.0	0.35	mg/L		06/11/20 23:32	1

Client Sample ID: EW7-PM24B-3-35

Lab Sample ID: 280-137084-3

Date Collected: 05/29/20 14:30

Matrix: Water

Date Received: 05/30/20 09:10

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**14**	**D**	0.030	0.012	0.0038	mg/L		06/03/20 17:07	6

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M Q	0.22	0.21	0.089	ug/L		06/12/20 04:46	1
1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.039	ug/L		06/12/20 04:46	1
2,4,6-Trinitrotoluene	0.11	U M Q	0.12	0.11	0.048	ug/L		06/12/20 04:46	1
2,4-Dinitrotoluene	0.085	U M Q	0.11	0.085	0.029	ug/L		06/12/20 04:46	1
2,6-Dinitrotoluene	0.085	U M Q	0.11	0.085	0.043	ug/L		06/12/20 04:46	1
2-Amino-4,6-dinitrotoluene	0.11	U M Q	0.12	0.11	0.054	ug/L		06/12/20 04:46	1
2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.091	ug/L		06/12/20 04:46	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21	ug/L		06/12/20 04:46	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		06/13/20 07:52	1
4-Nitrotoluene	0.42	U M Q	0.44	0.42	0.11	ug/L		06/12/20 04:46	1

Client Sample ID: EW7-PM24B-3-35

Lab Sample ID: 280-137084-3

Date Collected: 05/29/20 14:30
Date Received: 05/30/20 09:10

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
HMX	0.21	U Q	0.22	0.21	0.093	ug/L		06/12/20 04:46	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/12/20 04:46	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		06/13/20 07:52	1
RDX	0.21	U M Q	0.22	0.21	0.055	ug/L		06/12/20 04:46	1
Tetryl	0.11	U M Q	0.12	0.11	0.034	ug/L		06/12/20 04:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*636*	*M Q*	*83 - 119*	*06/01/20 10:20*	*06/12/20 04:46*	*1*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*06/01/20 10:20*	*06/13/20 07:52*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.7**		1.0	0.50	0.22	mg/L		06/02/20 11:19	10
Nitrogen, Total Kjeldahl	**8.2**		2.5	2.5	1.7	mg/L		06/04/20 17:00	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/03/20 20:16	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/02/20 10:59	1
Sulfate	**6.0**		5.0	3.0	1.0	mg/L		06/01/20 16:45	1
Total Alkalinity as CaCO3	**500**		10	10	3.1	mg/L		06/02/20 11:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**150**		4.2	4.2	1.4	mg/L		06/11/20 23:49	4.17

Client Sample ID: EW7-PM21B-3-35

Lab Sample ID: 280-137084-4

Date Collected: 05/29/20 09:35
Date Received: 05/30/20 09:10

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**6.7**		0.0050	0.0020	0.00063	mg/L		06/01/20 18:15	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M Q	0.23	0.21	0.090	ug/L		06/12/20 17:16	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		06/13/20 08:27	1
2,4,6-Trinitrotoluene	0.11	U M Q	0.12	0.11	0.048	ug/L		06/12/20 17:16	1
2,4-Dinitrotoluene	0.086	U Q	0.11	0.086	0.029	ug/L		06/12/20 17:16	1
2,6-Dinitrotoluene	0.086	U M Q	0.11	0.086	0.043	ug/L		06/12/20 17:16	1
2-Amino-4,6-dinitrotoluene	0.11	U Q	0.12	0.11	0.054	ug/L		06/12/20 17:16	1
2-Nitrotoluene	0.21	U M Q	0.23	0.21	0.092	ug/L		06/12/20 17:16	1
3-Nitrotoluene	0.43	U M Q	0.43	0.43	0.21	ug/L		06/12/20 17:16	1
4-Amino-2,6-dinitrotoluene	0.13	U M Q	0.16	0.13	0.062	ug/L		06/12/20 17:16	1
4-Nitrotoluene	0.43	U Q	0.44	0.43	0.11	ug/L		06/12/20 17:16	1
HMX	0.21	U Q	0.23	0.21	0.094	ug/L		06/12/20 17:16	1
MNX	0.43	U	2.1	0.43	0.17	ug/L		06/13/20 08:27	1
Nitrobenzene	0.21	U	0.23	0.21	0.098	ug/L		06/13/20 08:27	1
RDX	0.21	U M Q	0.23	0.21	0.055	ug/L		06/12/20 17:16	1
Tetryl	0.11	U Q	0.12	0.11	0.034	ug/L		06/12/20 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*233*	*M Q*	*83 - 119*	*06/01/20 10:20*	*06/12/20 17:16*	*1*

Client Sample ID: EW7-PM21B-3-35

Lab Sample ID: 280-137084-4

Date Collected: 05/29/20 09:35
Date Received: 05/30/20 09:10

Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	101		83 - 119	06/01/20 10:20	06/13/20 08:27	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.5**		1.0	0.50	0.22	mg/L		06/02/20 11:21	10
Nitrogen, Total Kjeldahl	**4.6**		1.3	1.3	0.86	mg/L		06/04/20 17:01	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/03/20 20:18	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/02/20 10:59	1
Sulfate	**70**		5.0	3.0	1.0	mg/L		06/01/20 17:01	1
Total Alkalinity as CaCO3	**410**		10	10	3.1	mg/L		06/02/20 10:53	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**63**		1.7	1.7	0.58	mg/L		06/12/20 00:06	1.67

Client Sample ID: EW7-PM22B-3-35

Lab Sample ID: 280-137084-5

Date Collected: 05/29/20 11:25
Date Received: 05/30/20 09:10

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**15**	**D**	0.030	0.012	0.0038	mg/L		06/03/20 17:23	6

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.23	U M Q	0.24	0.23	0.096	ug/L		06/12/20 17:39	1
1,3-Dinitrobenzene	0.11	U M Q	0.13	0.11	0.042	ug/L		06/12/20 17:39	1
2,4,6-Trinitrotoluene	0.11	U Q	0.13	0.11	0.052	ug/L		06/12/20 17:39	1
2,4-Dinitrotoluene	0.092	U Q	0.11	0.092	0.031	ug/L		06/12/20 17:39	1
2,6-Dinitrotoluene	0.092	U M Q	0.11	0.092	0.046	ug/L		06/12/20 17:39	1
2-Amino-4,6-dinitrotoluene	0.11	U M Q	0.13	0.11	0.058	ug/L		06/12/20 17:39	1
2-Nitrotoluene	0.23	U Q	0.24	0.23	0.098	ug/L		06/12/20 17:39	1
3-Nitrotoluene	0.46	U M	0.46	0.46	0.22	ug/L		06/13/20 09:02	1
4-Amino-2,6-dinitrotoluene	0.14	U M Q	0.17	0.14	0.066	ug/L		06/12/20 17:39	1
4-Nitrotoluene	0.46	U M Q	0.47	0.46	0.11	ug/L		06/12/20 17:39	1
HMX	0.23	U Q	0.24	0.23	0.10	ug/L		06/12/20 17:39	1
MNX	0.46	U M	2.3	0.46	0.18	ug/L		06/12/20 17:39	1
Nitrobenzene	0.23	U	0.24	0.23	0.10	ug/L		06/13/20 09:02	1
RDX	0.23	U M Q	0.24	0.23	0.059	ug/L		06/12/20 17:39	1
Tetryl	0.11	U M Q	0.13	0.11	0.036	ug/L		06/12/20 17:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	484	M Q	83 - 119	06/01/20 10:20	06/12/20 17:39	1
1,2-Dinitrobenzene	95	M	83 - 119	06/01/20 10:20	06/13/20 09:02	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.0**		1.0	0.50	0.22	mg/L		06/02/20 11:23	10
Nitrogen, Total Kjeldahl	**6.4**		2.5	2.5	1.7	mg/L		06/04/20 17:03	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/03/20 20:20	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/02/20 10:59	1

Client Sample ID: EW7-PM22B-3-35

Lab Sample ID: 280-137084-5

Date Collected: 05/29/20 11:25

Matrix: Water

Date Received: 05/30/20 09:10

General Chemistry (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	14	J1	5.0	3.0	1.0	mg/L		06/01/20 17:18	1
Total Alkalinity as CaCO3	490		10	10	3.1	mg/L		06/02/20 10:46	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	96		2.0	2.0	0.69	mg/L		06/12/20 00:20	2

Default Detection Limits

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

Job ID: 280-137084-1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	LOQ	DL	Units
Methane	0.0050	0.00063	mg/L

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Prep: 3535

Analyte	LOQ	DL	Units
1,3,5-Trinitrobenzene	0.21	0.084	ug/L
1,3-Dinitrobenzene	0.11	0.037	ug/L
2,4,6-Trinitrotoluene	0.11	0.045	ug/L
2,4-Dinitrotoluene	0.10	0.027	ug/L
2,6-Dinitrotoluene	0.10	0.040	ug/L
2-Amino-4,6-dinitrotoluene	0.11	0.051	ug/L
2-Nitrotoluene	0.21	0.086	ug/L
3-Nitrotoluene	0.40	0.20	ug/L
4-Amino-2,6-dinitrotoluene	0.15	0.058	ug/L
4-Nitrotoluene	0.41	0.10	ug/L
HMX	0.21	0.088	ug/L
MNX	2.0	0.15	ug/L
Nitrobenzene	0.21	0.091	ug/L
RDX	0.21	0.052	ug/L
Tetryl	0.11	0.032	ug/L

General Chemistry

Analyte	LOQ	DL	Units
Ammonia	0.10	0.022	mg/L
Nitrate Nitrite as N	0.10	0.019	mg/L
Sulfate	5.0	1.0	mg/L
Total Alkalinity as CaCO3	10	3.1	mg/L

General Chemistry

Prep: 351.2

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

General Chemistry

Prep: 9030B

Analyte	LOQ	DL	Units
Sulfide	4.0	0.79	mg/L

General Chemistry - Dissolved

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

Surrogate Summary

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

Job ID: 280-137084-1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

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

Lab Sample ID	Client Sample ID	12DNB1 (83-119)
280-137084-1	EW7-PM27A-3-25	183 M Q
280-137084-2	EW7-PM24A-3-25	216 M Q
280-137084-3	EW7-PM24B-3-35	636 M Q
280-137084-4	EW7-PM21B-3-35	233 M Q
280-137084-5	EW7-PM22B-3-35	484 M Q
LCS 280-496861/2-A	Lab Control Sample	95
LCS 280-496861/4-A	Lab Control Sample	95
LCSD 280-496861/3-A	Lab Control Sample Dup	96
MB 280-496861/1-A	Method Blank	94

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

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

Lab Sample ID	Client Sample ID	12DNB2 (83-119)
280-137084-1	EW7-PM27A-3-25	90 M
280-137084-2	EW7-PM24A-3-25	96
280-137084-3	EW7-PM24B-3-35	99 M
280-137084-4	EW7-PM21B-3-35	101
280-137084-5	EW7-PM22B-3-35	95 M

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-496925/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496925

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/01/20 14:02	1

Lab Sample ID: LCS 280-496925/34 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496925

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0730	0.0820		mg/L		112	73 - 125

Lab Sample ID: LCSD 280-496925/35 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496925

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0730	0.0799		mg/L		109	73 - 125	3	20

Lab Sample ID: MB 280-497247/34 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497247

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/03/20 15:12	1

Lab Sample ID: MB 280-497247/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497247

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/03/20 11:52	1

Lab Sample ID: LCS 280-497247/33 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0730	0.0705		mg/L		97	73 - 125

Lab Sample ID: LCSD 280-497247/35 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497247

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0730	0.0704		mg/L		96	73 - 125	0	20

QC Sample Results

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

Job ID: 280-137084-1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-496861/1-A
Matrix: Water
Analysis Batch: 498536

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496861

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		06/12/20 14:35	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		06/12/20 14:35	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		06/12/20 14:35	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		06/12/20 14:35	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		06/12/20 14:35	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		06/12/20 14:35	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		06/12/20 14:35	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		06/12/20 14:35	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		06/12/20 14:35	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		06/12/20 14:35	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		06/12/20 14:35	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		06/12/20 14:35	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		06/12/20 14:35	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		06/12/20 14:35	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		06/12/20 14:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 119*	*06/01/20 10:20*	*06/12/20 14:35*	*1*

Lab Sample ID: LCS 280-496861/2-A
Matrix: Water
Analysis Batch: 498360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	2.11		ug/L		105	73 - 125
1,3-Dinitrobenzene	2.00	2.00		ug/L		100	78 - 120
2,4,6-Trinitrotoluene	2.00	2.09		ug/L		105	71 - 123
2,4-Dinitrotoluene	2.00	1.85		ug/L		93	78 - 120
2,6-Dinitrotoluene	2.00	2.03		ug/L		101	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.81		ug/L		90	79 - 120
2-Nitrotoluene	2.00	1.62		ug/L		81	70 - 127
3-Nitrotoluene	2.00	1.80		ug/L		90	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.68		ug/L		84	76 - 125
4-Nitrotoluene	2.00	1.58		ug/L		79	71 - 127
HMX	2.00	2.00		ug/L		100	65 - 135
Nitrobenzene	2.00	1.88		ug/L		94	65 - 134
RDX	2.00	1.96		ug/L		98	68 - 130
Tetryl	2.00	1.90		ug/L		95	64 - 128

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

Lab Sample ID: LCS 280-496861/4-A
Matrix: Water
Analysis Batch: 498360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.11	M	ug/L		91	57 - 132

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	95		83 - 119

Lab Sample ID: LCSD 280-496861/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 498360 — **Prep Batch: 496861**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	2.18		ug/L		109	73 - 125	3	30
1,3-Dinitrobenzene			2.00	2.05		ug/L		103	78 - 120	3	30
2,4,6-Trinitrotoluene			2.00	2.11		ug/L		106	71 - 123	1	30
2,4-Dinitrotoluene			2.00	1.93		ug/L		96	78 - 120	4	30
2,6-Dinitrotoluene			2.00	2.03		ug/L		101	77 - 127	0	30
2-Amino-4,6-dinitrotoluene			2.00	1.91		ug/L		95	79 - 120	6	30
2-Nitrotoluene			2.00	1.74		ug/L		87	70 - 127	7	30
3-Nitrotoluene			2.00	1.94		ug/L		97	73 - 125	7	30
4-Amino-2,6-dinitrotoluene			2.00	1.75		ug/L		88	76 - 125	4	30
4-Nitrotoluene			2.00	1.83		ug/L		92	71 - 127	15	30
HMX			2.00	2.03	M	ug/L		102	65 - 135	2	30
Nitrobenzene			2.00	1.97		ug/L		99	65 - 134	5	30
RDX			2.00	2.03		ug/L		102	68 - 130	4	30
Tetryl			2.00	1.96		ug/L		98	64 - 128	4	30

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

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-497077/20 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497077

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/02/20 11:03	1

Lab Sample ID: LCS 280-497077/18 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497077

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			2.50	2.44		mg/L		98	90 - 110		

Lab Sample ID: LCSD 280-497077/19 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497077

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia			2.50	2.44		mg/L		98	90 - 110	0	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-497115/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497506 — **Prep Batch: 497115**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/04/20 16:49	1

Lab Sample ID: LCS 280-497115/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497506 — **Prep Batch: 497115**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	6.00	6.06		mg/L		101	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-497312/104 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497312

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/03/20 20:08	1

Lab Sample ID: MB 280-497312/60 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497312

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/03/20 18:40	1

Lab Sample ID: LCS 280-497312/103 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	4.93		mg/L		99	90 - 110

Lab Sample ID: LCS 280-497312/59 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.11		mg/L		102	90 - 110

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

Lab Sample ID: MB 280-497037/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497042 — **Prep Batch: 497037**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/02/20 10:59	1

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

Lab Sample ID: LCS 280-497037/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497042 — **Prep Batch: 497037**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	18.2	12.0		mg/L		66	44 - 110

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-496899/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496899

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	3.0	U	5.0	3.0	1.0	mg/L		06/01/20 15:23	1

Lab Sample ID: LCS 280-496899/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	95.6		mg/L		96	87 - 112

Lab Sample ID: LCSD 280-496899/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496899

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	95.5		mg/L		96	87 - 112	0	10

Lab Sample ID: MRL 280-496899/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496899

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	5.02		mg/L		100	50 - 150

Lab Sample ID: 280-137084-5 MS — **Client Sample ID: EW7-PM22B-3-35**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496899

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	14	J1	50.0	43.2	J1	mg/L		58	87 - 112

Lab Sample ID: 280-137084-5 MSD — **Client Sample ID: EW7-PM22B-3-35**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496899

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	14	J1	50.0	66.0	J1	mg/L		104	87 - 112	42	10

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

Lab Sample ID: 280-137084-5 DU — **Client Sample ID: EW7-PM22B-3-35**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 496899

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	14	J1		14.3		mg/L				0.9	10

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

Lab Sample ID: MB 280-498352/3-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 498580

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

Lab Sample ID: LCS 280-498352/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 498580

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad			25.0	25.8		mg/L		103	88 - 112		

Lab Sample ID: LCSD 280-498352/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 498580

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad			25.0	25.7		mg/L		103	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-497060/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497060

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	10	U	10	10	3.1	mg/L		06/02/20 09:18	1

Lab Sample ID: LCS 280-497060/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 497060

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

GC VOA

Analysis Batch: 496925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	RSK-175	
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	RSK-175	
MB 280-496925/7	Method Blank	Total/NA	Water	RSK-175	
LCS 280-496925/34	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-496925/35	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 497247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	RSK-175	
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	RSK-175	
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	RSK-175	
MB 280-497247/34	Method Blank	Total/NA	Water	RSK-175	
MB 280-497247/7	Method Blank	Total/NA	Water	RSK-175	
LCS 280-497247/33	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-497247/35	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 496861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	3535	
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	3535	
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	3535	
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	3535	
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	3535	
MB 280-496861/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-496861/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-496861/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-496861/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 498360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	8330A	496861
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	8330A	496861
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	8330A	496861
LCS 280-496861/2-A	Lab Control Sample	Total/NA	Water	8330A	496861
LCS 280-496861/4-A	Lab Control Sample	Total/NA	Water	8330A	496861
LCSD 280-496861/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	496861

Analysis Batch: 498536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	8330A	496861
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	8330A	496861
MB 280-496861/1-A	Method Blank	Total/NA	Water	8330A	496861

Analysis Batch: 498568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	8330A	496861
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	8330A	496861
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	8330A	496861
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	8330A	496861

HPLC/IC (Continued)

Analysis Batch: 498568 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	8330A	496861

General Chemistry

Analysis Batch: 496899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	9056A	
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	9056A	
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	9056A	
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	9056A	
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	9056A	
MB 280-496899/6	Method Blank	Total/NA	Water	9056A	
LCS 280-496899/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-496899/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-496899/3	Lab Control Sample	Total/NA	Water	9056A	
280-137084-5 MS	EW7-PM22B-3-35	Total/NA	Water	9056A	
280-137084-5 MSD	EW7-PM22B-3-35	Total/NA	Water	9056A	
280-137084-5 DU	EW7-PM22B-3-35	Total/NA	Water	9056A	

Prep Batch: 497037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	9030B	
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	9030B	
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	9030B	
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	9030B	
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	9030B	
MB 280-497037/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-497037/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 497042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	9034	497037
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	9034	497037
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	9034	497037
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	9034	497037
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	9034	497037
MB 280-497037/2-A	Method Blank	Total/NA	Water	9034	497037
LCS 280-497037/1-A	Lab Control Sample	Total/NA	Water	9034	497037

Analysis Batch: 497060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	SM 2320B	
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	SM 2320B	
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	SM 2320B	
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	SM 2320B	
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	SM 2320B	
MB 280-497060/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-497060/4	Lab Control Sample	Total/NA	Water	SM 2320B	

QC Association Summary

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

Job ID: 280-137084-1

General Chemistry

Analysis Batch: 497077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	350.1	
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	350.1	
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	350.1	
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	350.1	
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	350.1	
MB 280-497077/20	Method Blank	Total/NA	Water	350.1	
LCS 280-497077/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-497077/19	Lab Control Sample Dup	Total/NA	Water	350.1	

Prep Batch: 497115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	351.2	
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	351.2	
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	351.2	
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	351.2	
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	351.2	
MB 280-497115/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-497115/1-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 497312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	353.2	
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	353.2	
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	353.2	
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	353.2	
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	353.2	
MB 280-497312/104	Method Blank	Total/NA	Water	353.2	
MB 280-497312/60	Method Blank	Total/NA	Water	353.2	
LCS 280-497312/103	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-497312/59	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 497506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Total/NA	Water	351.2	497115
280-137084-2	EW7-PM24A-3-25	Total/NA	Water	351.2	497115
280-137084-3	EW7-PM24B-3-35	Total/NA	Water	351.2	497115
280-137084-4	EW7-PM21B-3-35	Total/NA	Water	351.2	497115
280-137084-5	EW7-PM22B-3-35	Total/NA	Water	351.2	497115
MB 280-497115/2-A	Method Blank	Total/NA	Water	351.2	497115
LCS 280-497115/1-A	Lab Control Sample	Total/NA	Water	351.2	497115

Filtration Batch: 498352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Dissolved	Water	FILTRATION	
280-137084-2	EW7-PM24A-3-25	Dissolved	Water	FILTRATION	
280-137084-3	EW7-PM24B-3-35	Dissolved	Water	FILTRATION	
280-137084-4	EW7-PM21B-3-35	Dissolved	Water	FILTRATION	
280-137084-5	EW7-PM22B-3-35	Dissolved	Water	FILTRATION	
MB 280-498352/3-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-498352/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 280-498352/2-A	Lab Control Sample Dup	Dissolved	Water	FILTRATION	

QC Association Summary

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

Job ID: 280-137084-1

General Chemistry

Analysis Batch: 498580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-137084-1	EW7-PM27A-3-25	Dissolved	Water	9060A	498352
280-137084-2	EW7-PM24A-3-25	Dissolved	Water	9060A	498352
280-137084-3	EW7-PM24B-3-35	Dissolved	Water	9060A	498352
280-137084-4	EW7-PM21B-3-35	Dissolved	Water	9060A	498352
280-137084-5	EW7-PM22B-3-35	Dissolved	Water	9060A	498352
MB 280-498352/3-A	Method Blank	Dissolved	Water	9060A	498352
LCS 280-498352/1-A	Lab Control Sample	Dissolved	Water	9060A	498352
LCSD 280-498352/2-A	Lab Control Sample Dup	Dissolved	Water	9060A	498352

Lab Chronicle

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

Job ID: 280-137084-1

Client Sample ID: EW7-PM27A-3-25

Lab Sample ID: 280-137084-1

Date Collected: 05/29/20 15:55

Matrix: Water

Date Received: 05/30/20 09:10

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	496925	06/01/20 17:26	CAS	TAL DEN
Total/NA	Prep	3535			465.7 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498568	06/13/20 06:42	JZ	TAL DEN
Total/NA	Prep	3535			465.7 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498360	06/12/20 04:00	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	497077	06/02/20 11:15	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	497115	06/02/20 16:26	SVC	TAL DEN
Total/NA	Analysis	351.2		1			497506	06/04/20 16:55	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	497312	06/03/20 19:50	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	497037	06/02/20 10:53	AAD	TAL DEN
Total/NA	Analysis	9034		1			497042	06/02/20 10:59	AAD	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	496899	06/01/20 16:12	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	498352	06/11/20 11:10	SPG	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	498580	06/11/20 22:41	JMB	TAL DEN
Total/NA	Analysis	SM 2320B		1			497060	06/02/20 11:15	SPG	TAL DEN

Client Sample ID: EW7-PM24A-3-25

Lab Sample ID: 280-137084-2

Date Collected: 05/29/20 12:50

Matrix: Water

Date Received: 05/30/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		3	18 mL	18 mL	497247	06/03/20 16:50	CAS	TAL DEN
Total/NA	Prep	3535			467.7 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498568	06/13/20 07:17	JZ	TAL DEN
Total/NA	Prep	3535			467.7 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498360	06/12/20 04:23	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	497077	06/02/20 11:54	BWH	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	497115	06/02/20 16:26	SVC	TAL DEN
Total/NA	Analysis	351.2		1			497506	06/04/20 16:56	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	497312	06/03/20 19:52	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	497037	06/02/20 10:53	AAD	TAL DEN
Total/NA	Analysis	9034		1			497042	06/02/20 10:59	AAD	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	496899	06/01/20 16:29	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	498352	06/11/20 11:10	SPG	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	498580	06/11/20 23:32	JMB	TAL DEN
Total/NA	Analysis	SM 2320B		1			497060	06/02/20 11:08	SPG	TAL DEN

Client Sample ID: EW7-PM24B-3-35

Lab Sample ID: 280-137084-3

Date Collected: 05/29/20 14:30

Matrix: Water

Date Received: 05/30/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		6	18 mL	18 mL	497247	06/03/20 17:07	CAS	TAL DEN

Client Sample ID: EW7-PM24B-3-35

Lab Sample ID: 280-137084-3

Date Collected: 05/29/20 14:30

Matrix: Water

Date Received: 05/30/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			470.6 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498568	06/13/20 07:52	JZ	TAL DEN
Total/NA	Prep	3535			470.6 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	498360	06/12/20 04:46	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	497077	06/02/20 11:19	BWH	TAL DEN
Total/NA	Prep	351.2			10 mL	25 mL	497115	06/02/20 16:26	SVC	TAL DEN
Total/NA	Analysis	351.2		1			497506	06/04/20 17:00	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	497312	06/03/20 20:16	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	497037	06/02/20 10:53	AAD	TAL DEN
Total/NA	Analysis	9034		1			497042	06/02/20 10:59	AAD	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	496899	06/01/20 16:45	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	498352	06/11/20 11:10	SPG	TAL DEN
Dissolved	Analysis	9060A		4.17	20 mL	20 mL	498580	06/11/20 23:49	JMB	TAL DEN
Total/NA	Analysis	SM 2320B		1			497060	06/02/20 11:00	SPG	TAL DEN

Client Sample ID: EW7-PM21B-3-35

Lab Sample ID: 280-137084-4

Date Collected: 05/29/20 09:35

Matrix: Water

Date Received: 05/30/20 09:10

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	496925	06/01/20 18:15	CAS	TAL DEN
Total/NA	Prep	3535			465.4 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498568	06/13/20 08:27	JZ	TAL DEN
Total/NA	Prep	3535			465.4 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498536	06/12/20 17:16	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	497077	06/02/20 11:21	BWH	TAL DEN
Total/NA	Prep	351.2			20 mL	25 mL	497115	06/02/20 16:26	SVC	TAL DEN
Total/NA	Analysis	351.2		1			497506	06/04/20 17:01	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	497312	06/03/20 20:18	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	497037	06/02/20 10:53	AAD	TAL DEN
Total/NA	Analysis	9034		1			497042	06/02/20 10:59	AAD	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	496899	06/01/20 17:01	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	498352	06/11/20 11:10	SPG	TAL DEN
Dissolved	Analysis	9060A		1.67	20 mL	20 mL	498580	06/12/20 00:06	JMB	TAL DEN
Total/NA	Analysis	SM 2320B		1			497060	06/02/20 10:53	SPG	TAL DEN

Client Sample ID: EW7-PM22B-3-35

Lab Sample ID: 280-137084-5

Date Collected: 05/29/20 11:25

Matrix: Water

Date Received: 05/30/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		6	18 mL	18 mL	497247	06/03/20 17:23	CAS	TAL DEN
Total/NA	Prep	3535			435.9 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498568	06/13/20 09:02	JZ	TAL DEN

Lab Chronicle

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

Job ID: 280-137084-1

Client Sample ID: EW7-PM22B-3-35

Date Collected: 05/29/20 11:25
Date Received: 05/30/20 09:10

Lab Sample ID: 280-137084-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			435.9 mL	5 mL	496861	06/01/20 10:20	MLA	TAL DEN
Total/NA	Analysis	8330A		1			498536	06/12/20 17:39	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	497077	06/02/20 11:23	BWH	TAL DEN
Total/NA	Prep	351.2			10 mL	25 mL	497115	06/02/20 16:26	SVC	TAL DEN
Total/NA	Analysis	351.2		1			497506	06/04/20 17:03	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	497312	06/03/20 20:20	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	497037	06/02/20 10:53	AAD	TAL DEN
Total/NA	Analysis	9034		1			497042	06/02/20 10:59	AAD	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	496899	06/01/20 17:18	JAP	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	498352	06/11/20 11:10	SPG	TAL DEN
Dissolved	Analysis	9060A		2	20 mL	20 mL	498580	06/12/20 00:20	JMB	TAL DEN
Total/NA	Analysis	SM 2320B		1			497060	06/02/20 10:46	SPG	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 280-137084-1

Laboratory: Eurofins TestAmerica, Denver

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

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

Method Summary

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

Job ID: 280-137084-1

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: 280-137084-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-137084-1	EW7-PM27A-3-25	Water	05/29/20 15:55	05/30/20 09:10	
280-137084-2	EW7-PM24A-3-25	Water	05/29/20 12:50	05/30/20 09:10	
280-137084-3	EW7-PM24B-3-35	Water	05/29/20 14:30	05/30/20 09:10	
280-137084-4	EW7-PM21B-3-35	Water	05/29/20 09:35	05/30/20 09:10	
280-137084-5	EW7-PM22B-3-35	Water	05/29/20 11:25	05/30/20 09:10	

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 495152

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 495152

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 495152

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

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

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

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

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

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

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 496925

Lab Sample ID: CCVRT 280-496925/4 Client Sample ID:

Date Analyzed: 06/01/20 13:13 Lab File ID: A004F0401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	3.87	Wrong Peak	sciannac	06/01/20 13:29

Lab Sample ID: CCVRT 280-496925/4 Client Sample ID:

Date Analyzed: 06/01/20 13:13 Lab File ID: A004F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.03	Wrong Peak	sciannac	06/01/20 13:30
Acetylene	4.13	Wrong Peak	sciannac	06/01/20 13:30
Ethane	4.30	Wrong Peak	sciannac	06/01/20 13:30

Lab Sample ID: CCV 280-496925/33 Client Sample ID:

Date Analyzed: 06/01/20 14:42 Lab File ID: 010F0101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.14	Incomplete Integration	sciannac	06/01/20 15:21

Lab Sample ID: 280-137084-3 Client Sample ID: EW7-PM24B-3-35

Date Analyzed: 06/01/20 17:58 Lab File ID: 022F1301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.24	Peak assignment corrected	sciannac	06/02/20 08:23

Lab Sample ID: 280-137084-3 Client Sample ID: EW7-PM24B-3-35

Date Analyzed: 06/01/20 17:58 Lab File ID: 022F1301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.13	Peak assignment corrected	sciannac	06/02/20 08:23

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 496925

Lab Sample ID: 280-137084-5 Client Sample ID: EW7-PM22B-3-35

Date Analyzed: 06/01/20 18:31 Lab File ID: 024F1501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.24	Peak assignment corrected	sciannac	06/02/20 08:22

Lab Sample ID: 280-137084-5 Client Sample ID: EW7-PM22B-3-35

Date Analyzed: 06/01/20 18:31 Lab File ID: 024F1501.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.13	Peak assignment corrected	sciannac	06/02/20 08:22

Lab Sample ID: CCV 280-496925/36 Client Sample ID:

Date Analyzed: 06/01/20 19:03 Lab File ID: 026F1701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.14	Split Peak	sciannac	06/02/20 08:22

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 497247

Lab Sample ID: CCVRT 280-497247/4 Client Sample ID:

Date Analyzed: 06/03/20 11:03 Lab File ID: 004F0401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	3.89	Split Peak	sciannac	06/03/20 12:47

Lab Sample ID: CCVRT 280-497247/4 Client Sample ID:

Date Analyzed: 06/03/20 11:03 Lab File ID: 004F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	4.02	Split Peak	sciannac	06/03/20 12:47
Acetylene	4.13	Split Peak	sciannac	06/03/20 12:47

Lab Sample ID: CCV 280-497247/32 Client Sample ID:

Date Analyzed: 06/03/20 14:24 Lab File ID: 008F0101.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	06/05/20 13:11
Acetylene	3.90	Split Peak	sciannac	06/05/20 13:12

Lab Sample ID: CCV 280-497247/32 Client Sample ID:

Date Analyzed: 06/03/20 14:24 Lab File ID: 008F0101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	3.21	Peak assignment corrected	sciannac	06/05/20 13:11
Ethylene	4.05	Split Peak	sciannac	06/05/20 13:12
Acetylene	4.16	Split Peak	sciannac	06/05/20 13:12

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 497247

Lab Sample ID: CCV 280-497247/21 Client Sample ID:

Date Analyzed: 06/03/20 19:01 Lab File ID: 025F1801.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	3.90	Peak not integrated	sciannac	06/05/20 13:49

Lab Sample ID: CCV 280-497247/21 Client Sample ID:

Date Analyzed: 06/03/20 19:01 Lab File ID: 025F1801.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.13	Peak not integrated	sciannac	06/05/20 13:50

RSK-175

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

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

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

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

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

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

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

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

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

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

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

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

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

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

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

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

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

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

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

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

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

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

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

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

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

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

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

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

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 498568

Lab Sample ID: CCV 280-498568/26 Client Sample ID:

Date Analyzed: 06/13/20 04:22 Lab File ID: 06120026.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	15.80	Baseline	zhangji	06/16/20 17:52
2-Nitrotoluene	16.73	Baseline	zhangji	06/16/20 17:52
4-Nitrotoluene	17.01	Baseline	zhangji	06/16/20 17:52
4-Amino-2,6-dinitrotoluene	17.47	Baseline	zhangji	06/16/20 17:52
3-Nitrotoluene	17.94	Baseline	zhangji	06/16/20 17:52
2-Amino-4,6-dinitrotoluene	18.41	Baseline	zhangji	06/16/20 17:52
1,3,5-Trinitrobenzene	19.14	Baseline	zhangji	06/16/20 17:52
2,6-Dinitrotoluene	20.07	Baseline	zhangji	06/16/20 17:52
2,4-Dinitrotoluene	20.58	Baseline	zhangji	06/16/20 17:52

Lab Sample ID: CCV 280-498568/27 Client Sample ID:

Date Analyzed: 06/13/20 04:57 Lab File ID: 06120027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.93	Baseline	zhangji	06/16/20 17:53

Lab Sample ID: 280-137084-1 Client Sample ID: EW7-PM27A-3-25

Date Analyzed: 06/13/20 06:42 Lab File ID: 06120030.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 17:56
3-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 17:56
1,2-Dinitrobenzene	13.25	Baseline	zhangji	06/16/20 17:56
2,4,6-Trinitrotoluene	24.86	Baseline	zhangji	06/16/20 17:56

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 498568

Lab Sample ID: 280-137084-2 Client Sample ID: EW7-PM24A-3-25

Date Analyzed: 06/13/20 07:17 Lab File ID: 06120031.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	7.13	Baseline	zhangji	06/16/20 17:57
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/16/20 17:57
2-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 17:57
3-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 17:57

Lab Sample ID: 280-137084-3 Client Sample ID: EW7-PM24B-3-35

Date Analyzed: 06/13/20 07:52 Lab File ID: 06120032.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/16/20 18:00
2-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 18:00
3-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 18:00
HMX		Invalid Compound ID	zhangji	06/16/20 18:00
RDX		Invalid Compound ID	zhangji	06/16/20 18:00
1,2-Dinitrobenzene	13.24	Baseline	zhangji	06/16/20 18:00

Lab Sample ID: 280-137084-4 Client Sample ID: EW7-PM21B-3-35

Date Analyzed: 06/13/20 08:27 Lab File ID: 06120033.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/16/20 18:01
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/16/20 18:01
2-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 18:01
3-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 18:01
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/16/20 18:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 498568

Lab Sample ID: 280-137084-5 Client Sample ID: EW7-PM22B-3-35

Date Analyzed: 06/13/20 09:02 Lab File ID: 06120034.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 18:01
3-Nitrotoluene		Invalid Compound ID	zhangji	06/16/20 18:01
1,2-Dinitrobenzene	13.25	Baseline	zhangji	06/16/20 18:01

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

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

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

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

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

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

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

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

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

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

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

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

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

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

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

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

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

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

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

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

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 489145

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 489145

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

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

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

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

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

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

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

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

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

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 489145

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 498360

Lab Sample ID: CCV 280-498360/16 Client Sample ID:

Date Analyzed: 06/11/20 18:25 Lab File ID: 06110016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.72	Baseline	zhangji	06/11/20 18:51
Nitroglycerin	10.80	Baseline	zhangji	06/11/20 18:51

Lab Sample ID: CCV 280-498360/17 Client Sample ID:

Date Analyzed: 06/11/20 18:48 Lab File ID: 06110017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.62	Baseline	zhangji	06/12/20 11:33
DNX	6.95	Baseline	zhangji	06/12/20 11:33
MNX	7.39	Baseline	zhangji	06/12/20 11:34

Lab Sample ID: LCSD 280-496861/3-A Client Sample ID:

Date Analyzed: 06/11/20 21:29 Lab File ID: 06110024.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.71	Baseline	zhangji	06/12/20 11:09

Lab Sample ID: LCS 280-496861/4-A Client Sample ID:

Date Analyzed: 06/11/20 21:52 Lab File ID: 06110025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.38	Baseline	zhangji	06/12/20 11:05

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 498360

Lab Sample ID: CCV 280-498360/32 Client Sample ID:

Date Analyzed: 06/12/20 00:33 Lab File ID: 06110032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.71	Baseline	zhangji	06/12/20 11:04

Lab Sample ID: CCV 280-498360/33 Client Sample ID:

Date Analyzed: 06/12/20 00:56 Lab File ID: 06110033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.62	Baseline	zhangji	06/12/20 11:16
DNX	6.95	Baseline	zhangji	06/12/20 11:16
MNX	7.39	Baseline	zhangji	06/12/20 11:16

Lab Sample ID: 280-137084-1 Client Sample ID: EW7-PM27A-3-25

Date Analyzed: 06/12/20 04:00 Lab File ID: 06110041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.79	Baseline	zhangji	06/12/20 11:24
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/12/20 11:25
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/12/20 11:25
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 11:25
MNX		Invalid Compound ID	zhangji	06/12/20 11:25
Nitrobenzene		Invalid Compound ID	zhangji	06/12/20 11:25
RDX		Invalid Compound ID	zhangji	06/12/20 11:25
Tetryl		Invalid Compound ID	zhangji	06/12/20 11:25

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 498360

Lab Sample ID: 280-137084-2 Client Sample ID: EW7-PM24A-3-25

Date Analyzed: 06/12/20 04:23 Lab File ID: 06110042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.75	Baseline	zhangji	06/12/20 11:27
1,2-Dinitrobenzene	8.80	Baseline	zhangji	06/12/20 11:27
1,3,5-Trinitrobenzene	8.95	Baseline	zhangji	06/12/20 11:27
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/12/20 11:27
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 11:28
2-Nitrotoluene		Invalid Compound ID	zhangji	06/12/20 11:28
MNX		Invalid Compound ID	zhangji	06/12/20 11:27
Nitrobenzene		Invalid Compound ID	zhangji	06/12/20 11:27
RDX		Invalid Compound ID	zhangji	06/12/20 11:27
Tetryl		Invalid Compound ID	zhangji	06/12/20 11:27
2,4,6-Trinitrotoluene	11.29	Baseline	zhangji	06/12/20 11:28
4-Amino-2,6-dinitrotoluene	11.46	Baseline	zhangji	06/12/20 11:28
2,4-Dinitrotoluene	12.08	Baseline	zhangji	06/12/20 11:28
4-Nitrotoluene	13.32	Baseline	zhangji	06/12/20 11:28

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 498360

Lab Sample ID: 280-137084-3 Client Sample ID: EW7-PM24B-3-35

Date Analyzed: 06/12/20 04:46 Lab File ID: 06110043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.83	Baseline	zhangji	06/12/20 11:29
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/12/20 11:29
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/12/20 11:29
2,4,6-Trinitrotoluene		Baseline	zhangji	06/12/20 11:30
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 11:30
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 11:30
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 11:30
2-Nitrotoluene		Invalid Compound ID	zhangji	06/12/20 11:30
4-Nitrotoluene		Invalid Compound ID	zhangji	06/12/20 11:31
MNX		Invalid Compound ID	zhangji	06/12/20 11:29
RDX		Invalid Compound ID	zhangji	06/16/20 17:58
Tetryl		Invalid Compound ID	zhangji	06/12/20 11:30
Nitrobenzene	10.06	Baseline	zhangji	06/12/20 11:29
4-Amino-2,6-dinitrotoluene	11.44	Baseline	zhangji	06/12/20 11:30

Lab Sample ID: CCV 280-498360/48 Client Sample ID:

Date Analyzed: 06/12/20 06:41 Lab File ID: 06110048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	11.74	Peak assignment corrected	zhangji	06/12/20 11:32
2,6-Dinitrotoluene	11.88	Peak assignment corrected	zhangji	06/12/20 11:32

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 498360

Lab Sample ID: CCV 280-498360/49 Client Sample ID:

Date Analyzed: 06/12/20 07:04 Lab File ID: 06110049.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.62	Baseline	zhangji	06/12/20 11:32
DNX	6.95	Baseline	zhangji	06/12/20 11:32
MNX	7.40	Baseline	zhangji	06/12/20 11:32

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 498536

Lab Sample ID: CCV 280-498536/7 Client Sample ID:

Date Analyzed: 06/12/20 13:26 Lab File ID: 06120007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.70	Baseline	zhangji	06/12/20 13:52

Lab Sample ID: CCV 280-498536/9 Client Sample ID:

Date Analyzed: 06/12/20 14:12 Lab File ID: 06120009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.62	Baseline	zhangji	06/12/20 14:39
DNX	6.95	Baseline	zhangji	06/12/20 14:39

Lab Sample ID: MB 280-496861/1-A Client Sample ID:

Date Analyzed: 06/12/20 14:35 Lab File ID: 06120010.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX		Invalid Compound ID	zhangji	06/12/20 15:01

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 498536

Lab Sample ID: 280-137084-4 Client Sample ID: EW7-PM21B-3-35

Date Analyzed: 06/12/20 17:16 Lab File ID: 06120017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.38	Baseline	zhangji	06/12/20 17:54
1,2-Dinitrobenzene	8.79	Baseline	zhangji	06/12/20 17:54
1,3-Dinitrobenzene	9.65	Baseline	zhangji	06/12/20 17:55
Nitrobenzene	9.99	Baseline	zhangji	06/12/20 17:55
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/12/20 17:55
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	06/12/20 17:55
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 17:55
2-Nitrotoluene		Invalid Compound ID	zhangji	06/12/20 17:55
3-Nitrotoluene		Invalid Compound ID	zhangji	06/12/20 17:55
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 17:55
RDX		Invalid Compound ID	zhangji	06/12/20 17:55

Lab Sample ID: 280-137084-5 Client Sample ID: EW7-PM22B-3-35

Date Analyzed: 06/12/20 17:39 Lab File ID: 06120018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.83	Baseline	zhangji	06/12/20 18:05
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	06/12/20 18:05
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/12/20 18:05
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 18:05
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 18:05
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/12/20 18:05
4-Nitrotoluene		Invalid Compound ID	zhangji	06/12/20 18:05
MNX		Baseline	zhangji	06/12/20 18:04
RDX		Invalid Compound ID	zhangji	06/12/20 18:05
Tetryl		Invalid Compound ID	zhangji	06/12/20 18:05
Nitrobenzene	10.04	Baseline	zhangji	06/12/20 18:05

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 498536

Lab Sample ID: CCV 280-498536/20 Client Sample ID:

Date Analyzed: 06/12/20 18:25 Lab File ID: 06120020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.62	Baseline	zhangji	06/16/20 14:03
DNX	6.94	Baseline	zhangji	06/16/20 14:03

8330A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 494020

Lab Sample ID: STD 280-494020/2 IC Client Sample ID:

Date Analyzed: 05/07/20 11:58 Lab File ID: 02.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.05	Incomplete Integration	pedrickj	05/07/20 15:01
Sulfate	9.76	Incomplete Integration	pedrickj	05/07/20 13:24

Lab Sample ID: STD 280-494020/3 IC Client Sample ID:

Date Analyzed: 05/07/20 12:14 Lab File ID: 03.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.04	Incomplete Integration	pedrickj	05/07/20 13:11
Chloride	3.24	Incomplete Integration	pedrickj	05/07/20 13:11
Sulfate	9.88	Incomplete Integration	pedrickj	05/07/20 13:11

Lab Sample ID: STD 280-494020/4 IC Client Sample ID:

Date Analyzed: 05/07/20 12:30 Lab File ID: 04.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.98	Peak assignment corrected	pedrickj	05/07/20 13:11

Lab Sample ID: STD 280-494020/6 IC Client Sample ID:

Date Analyzed: 05/07/20 13:03 Lab File ID: 06.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	5.51	Peak assignment corrected	pedrickj	05/07/20 13:23

9056A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Batch Number: 494020

Lab Sample ID: STD 280-494020/7 IC Client Sample ID:

Date Analyzed: 05/07/20 13:20 Lab File ID: 07.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	5.35	Peak assignment corrected	pedrickj	05/07/20 15:00

Lab Sample ID: ICV 280-494020/8 Client Sample ID:

Date Analyzed: 05/07/20 13:36 Lab File ID: 08.0000.d GC Column: Ion PAC AS 17 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	5.45	Peak assignment corrected	pedrickj	05/07/20 15:00
Sulfate	9.58	Peak assignment corrected	pedrickj	05/07/20 15:01

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00417	06/04/20	05/28/20	Di Water, Lot na	100 mL	NH3 CAL STD_00031	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00031	08/31/20	Ricca, Lot 2902E25			(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV_00405	06/04/20	05/28/20	na, Lot na	100 mL	NH3 ICV STD_00027	10 mL	Ammonia	100.2 mg/L
.NH3 ICV STD_00027	04/01/21	Inorganic Ventures, Lot N2-NH669544			(Purchased Reagent)		Ammonia	1002 mg/L
8330 DMT_00005	03/31/20	01/21/20	Acetonitrile, Lot 231453	5 mL	MNX,TNX,DNX_00032	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00032	12/31/19	ULTRA Scientific, Lot CS-5628			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 DMT_00006	02/28/21	04/15/20	Acetonitrile, Lot ACN_00232	5 mL	MNX,TNX,DNX_00043	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00043	02/28/21	ULTRA Scientific, Lot 006516106			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 LCS_00095	07/24/20	01/24/20	Acetonitrile, Lot ACN_00231	100 mL	8330LCSMix1_00113	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00009	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
.8330LCSMix1_00113	07/31/24	Restek, Lot A0151407			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00009	05/31/24	Restek, Lot A0149387			(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetryl	1000 ug/mL
8330 LCS_00098	07/31/20	04/28/20	Acetonitrile, Lot Acetonitrile_00233	100 mL	8330_NG_Stk_00084	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00085	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00091	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00095	1 mL	PETN	100 ug/mL
					8330LCSMix1_00111	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00011	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					PicricARestek_00092	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00084	10/28/20	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00085	10/28/20	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00091	10/28/20	Restek, Lot A0158915			(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00095	10/28/20	Restek, Lot A0158915			(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00111	10/28/20	Restek, Lot A0151407			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00011	10/28/20	Restek, Lot A0157533			(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.PicricARestek_00092	10/02/20	Restek, Lot A0139087			(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00006	02/24/21	02/24/20	Acetonitrile, Lot 0000196715	10 mL	MNX,TNX,DNX_00042	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00042	02/28/21	ULTRA Scientific, Lot 006516106			(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00008	02/28/21	04/30/20	Acetonitrile, Lot 0000249516	10 mL	MNX,TNX,DNX_00046	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MNX,TNX,DNX_00046	02/28/21	ULTRA Scientific, Lot 006516106			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00061	09/09/21	01/09/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00075	200 uL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00087	200 uL	PETN	100 ug/mL
					8330ICALStock_00030	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00061	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00075	08/31/22	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22	Restek, Lot A0154763			(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330 Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00015	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00164	07/01/26	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00061	09/09/21	AccuStandard, Lot 214121302-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00064	09/09/21	04/06/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00075	200 uL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00087	200 uL	PETN	100 ug/mL
					8330ICALStock_00030	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00061	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00075	08/31/22	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22	Restek, Lot A0154763			(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330_Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330_Stock_TS_00015	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00164	07/01/26	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00061	09/09/21	AccuStandard, Lot 214121302-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00110	05/17/20	12/17/19	Acetonitrile, Lot ACN_00223	250 mL	8330SurrStkSS_00145	0.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00158	0.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00160	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00161	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00145	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00158	07/31/24	Restek, Lot A0146866			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00160	10/28/22	Restek, Lot A0150790			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00161	07/31/24	Restek, Lot A0150790			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00114	11/07/20	05/07/20	Acetonitrile, Lot ACN_00234	100 mL	8330SurrStkSS_00157	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00157	11/07/20	Restek, Lot A0146866			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00116	11/15/20	05/15/20	Acetonitrile, Lot Acetonitrile_00044	200 mL	8330SurrStkSS_00168	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00169	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00168	11/15/20	Restek, Lot A0155113			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00169	11/15/20	Restek, Lot A0155113			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_00905	06/08/20	06/01/20	Di Water, Lot na	1000 mL	Alk stk std_00017	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00017	03/30/21	Fischer, Lot 191517			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
IC CAL cl/so4_00309	05/11/20	05/04/20	Di Water, Lot na	100 mL	IC CL cal_00060	25 mL	Chloride	250 mg/L
					IC sulfatecal_00059	25 mL	Sulfate	250 mg/L
.IC CL cal_00060	01/30/21	SPEX CertiPrep, Lot 4-176CL-2X			(Purchased Reagent)		Chloride	1000 mg/L
.IC sulfatecal_00059	01/30/21	SPEX CertiPrep, Lot 4-176SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00312	06/02/20	05/26/20	Di Water, Lot na	100 mL	IC sulfatecal_00059	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00059	01/30/21	SPEX CertiPrep, Lot 4-176SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00523	05/08/20	04/30/20	Di Water, Lot NA	100 mL	IC BR ICV_00018	5 mL	Bromide	50 mg/L
					IC FL cal_00015	5 mL	Fluoride	50 mg/L
.IC BR ICV_00018	01/31/21	ricca, Lot 2907E22			(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00015	05/31/20	Ricca, Lot 4811621			(Purchased Reagent)		Fluoride	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
IC LCS_01743	06/05/20	05/29/20	Di Water, Lot 27	200 mL	IC sulfatecal_00057	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC SO4 ICV_00021	08/31/21	ERA, Lot 100819m			(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00650	06/02/20	05/26/20	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00022	5 mL	Sulfate	5000.51 mg/L
.IC SPK 6 ANIO_00022	09/29/20	10/01/19	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00005	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD S04_00005	09/29/20	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
NXN CAL INT_00533	06/03/20	05/27/20	Di Water, Lot NA	100 mL	NOXT Cal STD_00023	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00023	12/31/20	RICCA, Lot 1906A84			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00514	06/03/20	05/27/20	Di Water, Lot NA	100 mL	NOXT ICV STD_00023	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00023	03/11/21	ERA, Lot 130319m			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
RSK175methane_00010	04/16/22	Supelco Analytical, Lot 160-401480003-1			(Purchased Reagent)		Methane	650500 ug/L
RSK7gasMathes_00027	10/24/20	Matheson, Lot 9308634170			(Purchased Reagent)		Methane	6570.3 ug/L
RSK7gasMathes_00031	03/09/22	Matheson, Lot DL0396162			(Purchased Reagent)		Acetylene	10667 ug/L
							Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
SFD CAL INT_01757	07/20/20	04/22/20	Di Water, Lot NA	500 mL	50% NaOH_00017	2 mL	Sodium Hydroxide	2000 mg/L
					SFD CAL STK_00006	3.41574 g	Sulfide	912.001 mg/L
.50% NaOH_00017	10/01/20	Fisher, Lot 186215			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD CAL STK_00006	10/01/23	ACROS, Lot A0390872			(Purchased Reagent)		Sulfide	0.1335 g/g
TKN 25ppm_00808	06/12/20	05/12/20	Di Water, Lot 1	100 mL	TKN 100PPM_00121	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00121	06/12/20	05/12/20	Di Water, Lot 1	500 mL	TKN CAL STD_00017	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN CAL STD_00017	01/31/21	nsi lab solutions, Lot 010617			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TKN ICV 25_00093	06/12/20	05/12/20	DI water, Lot 1	100 mL	TKN ICV 100_00083	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00083	06/12/20	05/12/20	Di Water, Lot 1	500 mL	TKN ICV_00011	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN ICV_00011	11/30/20	ERA, Lot 281018			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TOC ICV Std_00043	08/31/20	Ricca, Lot 2908E72			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm
							DOC Result 1	1000 ppm
							DOC Result 2	1000 ppm
							DOC Result 3	1000 ppm
							DOC Result 4	1000 ppm
TOC LCS Std_00048	06/30/21	Agilent, Lot 0006465171			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm
							DOC Result 2	1001 ppm
							DOC Result 3	1001 ppm
							DOC Result 4	1001 ppm

Reagent

50% NaOH_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 LCS_00098

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20200429-91143.b\04290006.D

Lims ID: C18column:B16162 Inj. Date: 29-Apr-2020 19:29:58

Worklist ID: 280-0091143-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
3 HMX	0.1000	0.0988	98.8	65-135	66-115
7 RDX	0.1000	0.0968	96.8	68-130	69-122
8 2,4,6-Trinitrophenol	0.1000	0.1027	102.7	80-120	63-135
10 1,3,5-Trinitrobenzene	0.1000	0.1037	103.7	73-125	62-127
11 1,3-Dinitrobenzene	0.1000	0.1029	102.9	78-120	59-131
12 Nitrobenzene	0.1000	0.1031	103.1	65-134	46-144
14 Tetryl	0.1000	0.1003	100.3	64-128	56-131
15 Nitroglycerin	1.00	0.9742	97.4	74-127	70-125
16 2,4,6-Trinitrotoluene	0.1000	0.1014	101.4	71-123	46-139
17 4-Amino-2,6-dinitrotolu	0.1000	0.0973	97.3	76-125	43-120
18 2-Amino-4,6-dinitrotolu	0.1000	0.1006	100.6	79-120	46-124
19 2,6-Dinitrotoluene	0.1000	0.1019	101.9	77-127	51-130
20 2,4-Dinitrotoluene	0.1000	0.0984	98.4	78-120	53-127
21 o-Nitrotoluene	0.1000	0.1039	103.9	70-127	37-138
22 p-Nitrotoluene	0.1000	0.1015	101.5	71-127	41-137
23 m-Nitrotoluene	0.1000	0.1043	104.3	73-125	31-140
24 PETN	1.00	0.9068	90.7	73-127	67-127

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

280-135793-A-1-A 280-135793-A-2-A 280-135793-A-3-A
280-135793-B-4-A 280-135793-A-5-A 280-135793-A-6-A
280-135871-A-1-A 280-135930-A-1-A 280-135930-A-2-A

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

480-168872-A-18-A 480-168872-A-19-A 480-168872-A-20-A
480-168872-A-21-A 600-204066-C-1-A

Reagent

8330 Stock_TS_00015

Certificate of Analysis
ISO Guide 34

Agilent

Stock Standard

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

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

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

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

Matrix: acetonitrile

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

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

ANAB ACCREDITED 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

Certificate of Analysis
ISO Guide 34

Stock Standard

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

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

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

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

ISO17025 Cert No.
AT-1937

Reagent

8330_NG_Stk_00075

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

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ilac-MRA

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

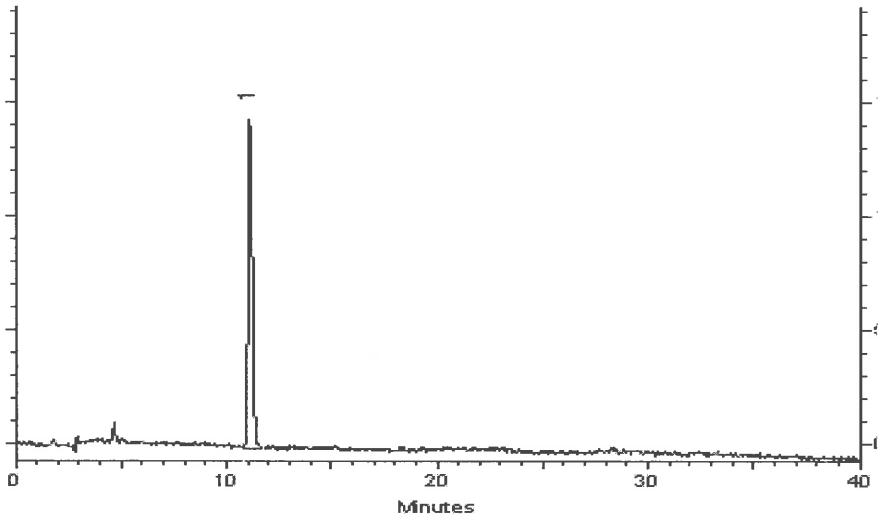
Flow Rate:
1.0 ml/min.

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 Jaglowski - Mix Technician

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

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_00084

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom Nitroglycerin Standard

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

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

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

CERTIFIED VALUES

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

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

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

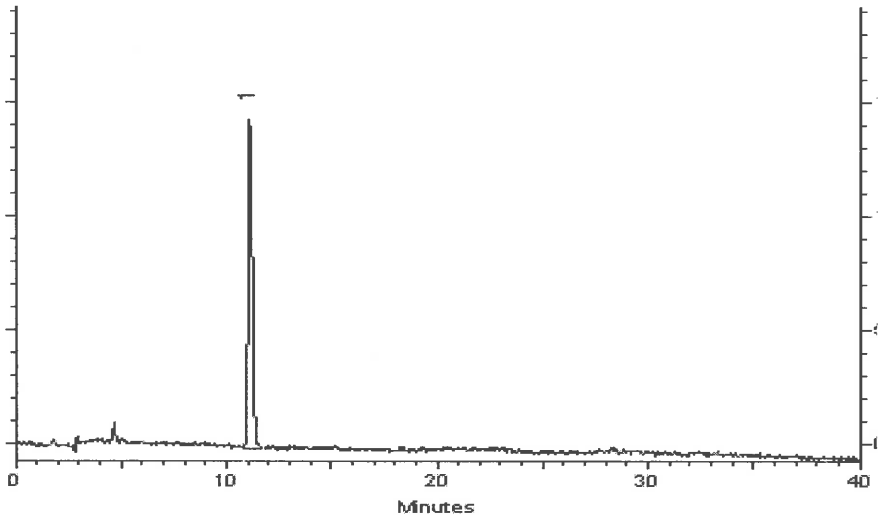
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician

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

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_00085

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom Nitroglycerin Standard

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

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

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

CERTIFIED VALUES

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

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

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

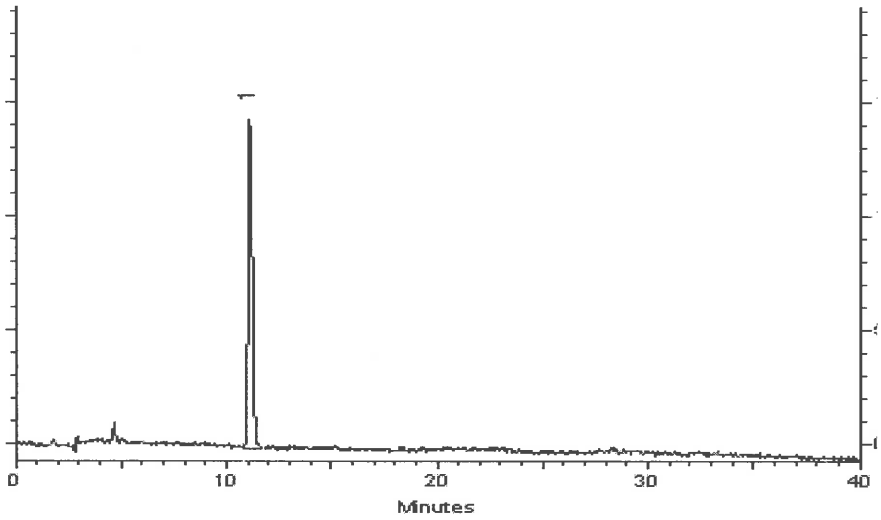
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 09-Aug-2019

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

Reagent

8330_PETN_Stk_00087

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0154763

Description : Custom PETN Standard

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

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

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

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	PETN			5,024.0	µg/mL	+/-	46.7205	µg/mL	Gravimetric
	CAS #	78-11-5	(Lot 051108JLM)			+/-	277.5676	µg/mL	Unstressed
	Purity	99%				+/-	322.9521	µg/mL	Stressed

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

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

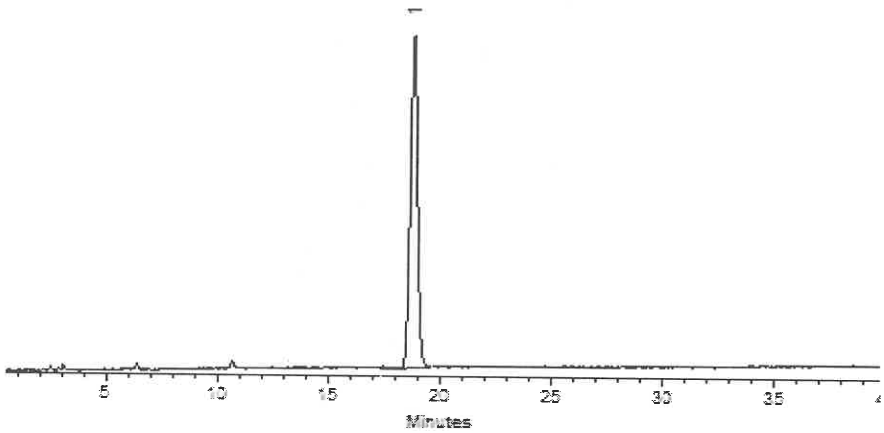
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Clara Windle - Operations Technician I

Date Mixed: 05-Nov-2019 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

Reagent

8330_PETN_Stk_00091

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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.:** A0158915

Description : Custom PETN Standard

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	PETN		5,000.0 µg/mL	+/-	46.4973	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)		+/-	276.2417	µg/mL	Unstressed
	Purity 99%			+/-	321.4093	µg/mL	Stressed

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

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

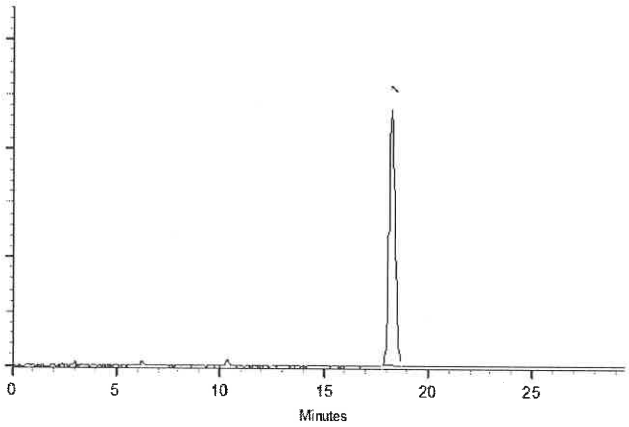
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Michael Maye

Date Mixed: 17-Mar-2020 **Balance:** 1127510105

Justine Alberteson - Operations Tech-ARM QC

Date Passed: 18-Mar-2020

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

Reagent

8330_PETN_Stk_00095

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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.:** A0158915

Description : Custom PETN Standard

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

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

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

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	PETN			5,000.0 µg/mL	+/-	46.4973	µg/mL	Gravimetric
	CAS #	78-11-5	(Lot 051108JLM)		+/-	276.2417	µg/mL	Unstressed
	Purity	99%			+/-	321.4093	µg/mL	Stressed

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

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

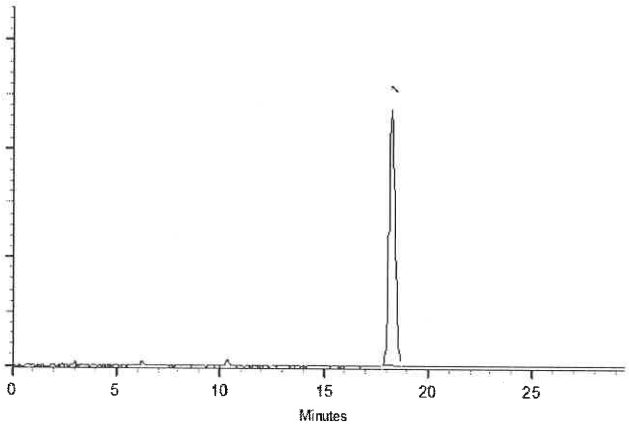
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Michael Maye

Date Mixed: 17-Mar-2020 **Balance:** 1127510105

Justine Alberteson - Operations Tech-ARM QC

Date Passed: 18-Mar-2020

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

Reagent

8330LCSMix1_00111

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0151407

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	HMX **CAS #** 2691-41-0 **Purity** 97%	(Lot 190402JLM)	1,004.9 µg/mL	+/- 5.9689 µg/mL +/- 55.0525 µg/mL +/- 64.1967 µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 97%	(Lot DJ5QO)	1,003.0 µg/mL	+/- 5.9574 µg/mL +/- 54.9463 µg/mL +/- 64.0727 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBJ3622)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 5737200)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL	Gravimetric Unstressed Stressed

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

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

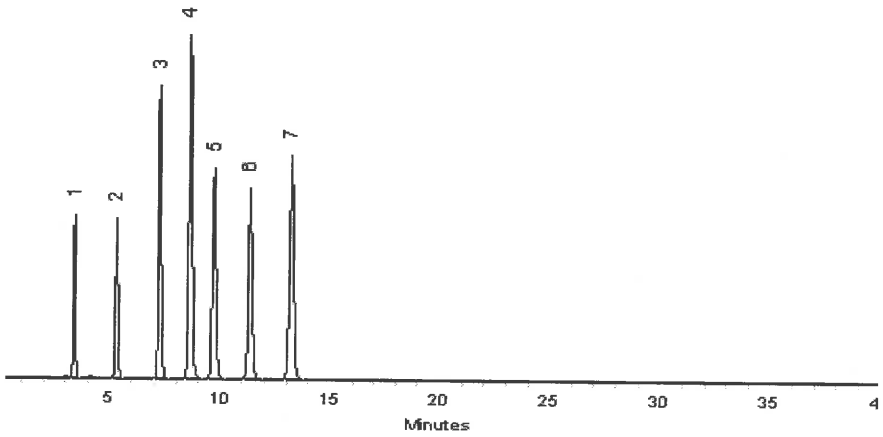
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 30-Jul-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Aug-2019

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

Reagent

8330LCSMix1_00113

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0151407

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 **Purity** 97%	(Lot 190402JLM)	1,004.9 µg/mL	+/- 5.9689 +/- 55.0525 +/- 64.1967	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,005.0 µg/mL	+/- 5.9694 +/- 55.0569 +/- 64.2018	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 97%	(Lot DJ5QO)	1,003.0 µg/mL	+/- 5.9574 +/- 54.9463 +/- 64.0727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBJ3622)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 5737200)	1,005.0 µg/mL	+/- 5.9694 +/- 55.0569 +/- 64.2018	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

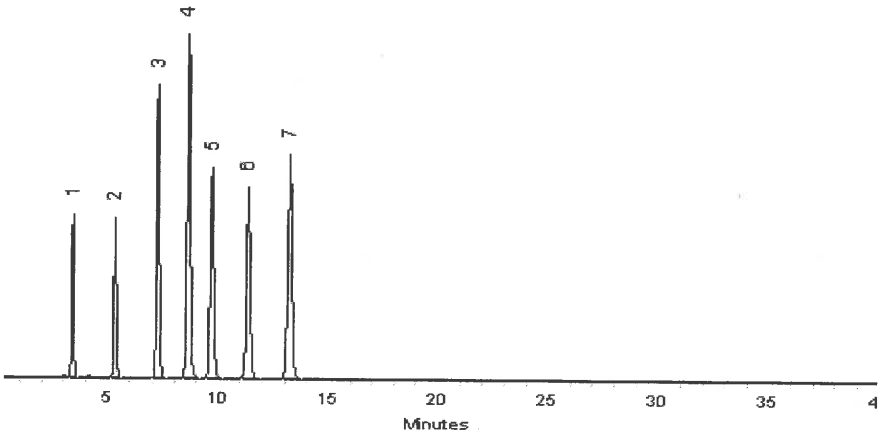
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 30-Jul-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Aug-2019

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

Reagent

8330LCSmix2_00009

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

Catalog No. : 31451 **Lot No.:** A0149387

Description : 8330 Calibration Mix #2

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Tetryl **CAS #** 479-45-8 **Purity** 99%	(Lot 091120JLM)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 98%	(Lot 29550-55)	999.6 µg/mL	+/- 5.9373 µg/mL +/- 54.7611 µg/mL +/- 63.8568 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot 1437483V)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot GA01)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 98%	(Lot 07329LG)	1,007.4 µg/mL	+/- 5.9839 µg/mL +/- 55.1906 µg/mL +/- 64.3577 µg/mL	Gravimetric Unstressed Stressed

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

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

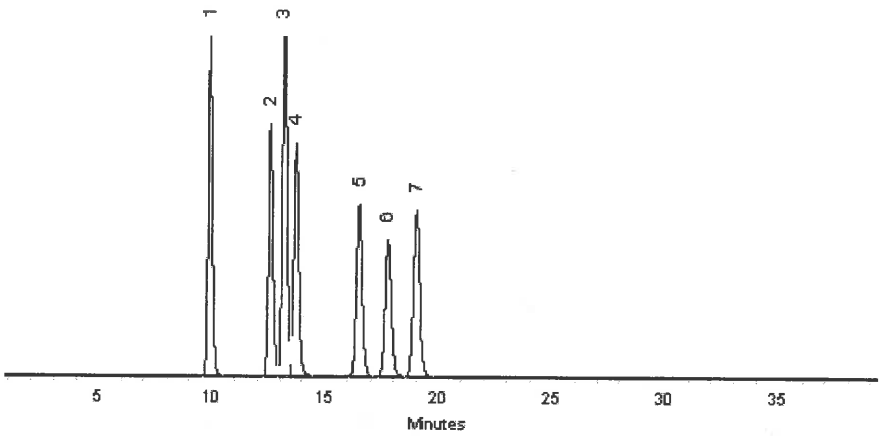
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Lane Kibe - Mix Technician

Date Mixed: 21-May-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2019

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

Reagent

8330LCSmix2_00011

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0157533

Description : 8330 Calibration Mix #2

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

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

Expiration Date : February 28, 2025 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl		1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 479-45-8	(Lot 091120JLM)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%			+/- 64.1379	µg/mL	Stressed
2	4-Amino-2,6-dinitrotoluene		1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 19406-51-0	(Lot ER070908-01)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%			+/- 64.1379	µg/mL	Stressed
3	2-Amino-4,6-dinitrotoluene		999.6 µg/mL	+/- 5.9373	µg/mL	Gravimetric
	CAS # 35572-78-2	(Lot 29550-55)		+/- 54.7611	µg/mL	Unstressed
	Purity 98%			+/- 63.8568	µg/mL	Stressed
4	2,6-Dinitrotoluene		1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606)		+/- 54.8926	µg/mL	Unstressed
	Purity 99%			+/- 64.0101	µg/mL	Stressed
5	2-Nitrotoluene		1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 88-72-2	(Lot BCBZ7826)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%			+/- 64.1379	µg/mL	Stressed
6	4-Nitrotoluene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 99-99-0	(Lot FAU01)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
7	3-Nitrotoluene		1,003.5 µg/mL	+/- 5.9606	µg/mL	Gravimetric
	CAS # 99-08-1	(Lot FBO01)		+/- 54.9758	µg/mL	Unstressed
	Purity 98%			+/- 64.1072	µg/mL	Stressed

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

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

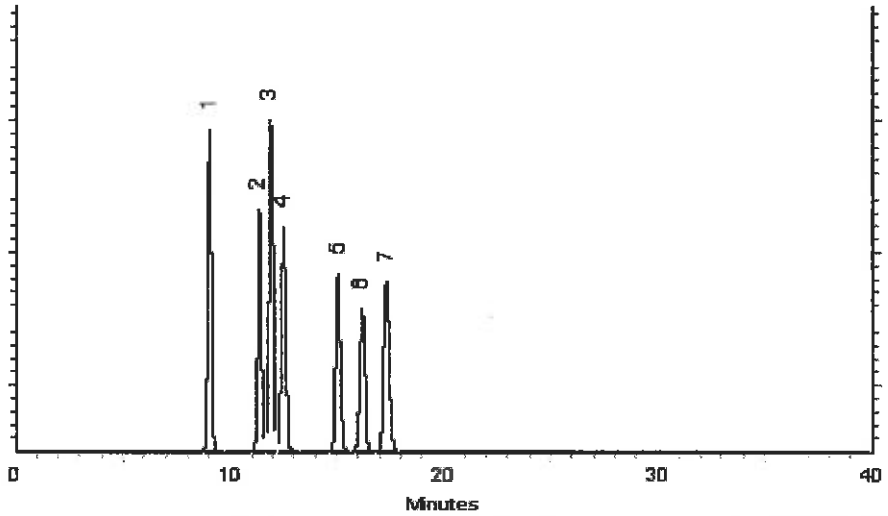
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Clara Windle - Operations Technician I

Date Mixed: 06-Feb-2020 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 10-Feb-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330PAStkPS_00061

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 214121302-02
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Aug 9, 2019
Expiration: Sep 9, 2021
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

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

AccuStandard®, Inc.
125 Market St., New Haven, CT 06513 USA
Tel: 203-786-5290 Fax: 203-786-5287

SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 - Product Identifiers

Catalog Name: M-8330-ADD-3

Description: Picric Acid in Acetonitrile/Methanol Blend

1.2 - Relevant Identified Uses of the Substance or Mixture

Laboratory Chemical Reference Material

1.3 - Supplier Details

Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA

Telephone Number: 203-786-5290

Fax: 203-786-5287

Email: edocs@accustandard.com

1.4 - Emergency Telephone Number

Emergency Phone #: AccuStandard, Inc.
1-203-502-7070 (USA)
+001-203-502-7070 (International)

24 hours / 7 days a week

SECTION 2 - HAZARDS IDENTIFICATION

2.1 - GHS Label Elements

Signal Word: Danger

Hazard Codes:

H225 - Highly Flammable (Flammable liquids, category 2)

H315 - Irritating to skin. (Skin corrosion/irritation, category 2)

H319 - Causes severe eye irritation. (Eye damage/irritation, category 2A)

H332 - Harmful if inhaled. (Acute toxicity, inhalation, category 4)

H336 - Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

H360 - California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

H370 - Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

Precautionary Codes:

P202 - This product should only by used by persons trained in the safe handling of hazardous chemicals.

P233 - Store in a tightly closed container. (P404)

SECTION 2 - HAZARDS IDENTIFICATION *- continued*

2.1 - GHS Label Elements *- continued*

P260 - Do not breathe vapor.

P262 - Do not get in eyes, on skin or clothing.

P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), or a risk assessment shows air-purifying respirators are appropriate, use of a NIOSH/MSHA approved air supplied respirator is advised. Use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges in absence of proper environmental control. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Engineering and/or administrative controls should be implemented to reduce exposure.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P340 - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

P352 - Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists.

2.2 - Other Hazards

2.2.1 - Symptom of Exposure Health/Environment

Highly Flammable (Flammable liquids, category 2)

Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

After ingestion or inhalation, initial symptoms may be only that of mild intoxication, but may become severe after 12 or 18 hours.

Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

2.2.2 - Potential Health Effects

Causes severe eye irritation. (Eye damage/irritation, category 2A)

Irritating to skin. (Skin corrosion/irritation, category 2)

May be harmful if absorbed through the skin. (Acute toxicity, dermal, category 5)

Irritating to mucous membrane and upper respiratory system.

Harmful if inhaled. (Acute toxicity, inhalation, category 4)

May be harmful if swallowed. (Acute toxicity, oral, category 5)

2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

2.2.4 - Carcinogenicity

California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

SECTION 3 - COMPOSITION / ANALYTES DATA

Description: Picric Acid in Acetonitrile/Methanol Blend

			ACGIH -TLV (mg/m³)			OSHA -PEL (mg/m³)		
Analyte	CAS #	% Concentration	TWA	STEL	Skin	TWA	STEL	Skin
Picric acid	88-89-1	0.010	0.1			0.1		
Acetonitrile	75-05-8	49.995				70		
Methanol	67-56-1	49.995				260		

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to Avoid: Acids
Bases
Oxidizers

Hazardous Decomposition: Hydrogen cyanide (HCN); Carbon oxides; Nitrogen oxides Forms HCN when heated to about 120 °C

Hazardous Polymerization: Will not occur

Condition to Avoid: Heat; Contact with ignition sources

SECTION 11 - TOXICOLOGICAL INFORMATION

Human Health Toxicity

See section 2 for specific toxicological information for the ingredients of this product.

LD50 (Oral): N/A

LD50 (Dermal) : N/A

LC50 (Inhalation): N/A

No specific human health toxicity information is available for this product. Information provided is based on similar products.

WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

No other information related to the toxicological properties of this product is available at this time.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Toxicity

By complying with sections 6 and 7 there should be no release to the environment.

LC50 (Fish): N/A

EC50 (Aquatic Invertebrate): N/A

BCF: N/A

No specific environmental toxicity information is available for this product. It is not expected to be an environmental concern.

No other information related to the ecological properties of this product is available at this time.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

SECTION 14 - TRANSPORT INFORMATION

Transportation Information (DOT/IATA)

UN Number: UN1993

Class: 3

Packing Group: II

Proper Shipping Name: Flammable liquid, n.o.s. (Acetonitrile, Methanol)

Poison by Inhalation: No

Marine Pollutant: No

SECTION 15 - REGULATORY INFORMATION

WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

All components are listed on the TSCA Inventory.

For laboratory, research and development use only. Not for manufacturing or commercial purposes.

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations. Chemicals are classified using the Globally Harmonized System for Classification and Labeling of Chemicals and CLP Regulation (EC) No. 1272/2008.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturers control, we make

NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY RESULTING FROM ITS USE.

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

HMIS/NFPA HAZARD INDEX

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Severe

* - Additional Hazard

GHS HAZARD INDEX

Category 1 - Most Severe
Category 5 - Least Severe

**** End of Document ****

Reagent

8330Surrogate_00110

eurofins | Environment Testing TestAmerica

8330Surrogate_00110

good ✓

Reagent ID: 8330Surrogate_00110

		Expiration Date:	05/17/2020
Description:	10ug/mL 1,2-Dinitrobenzene	Laboratory:	Eurofins TestAmerica, Denver
No. of Bottles:	1	Prepared By:	Bourgery, David F
Storage Location:	Explosives Prep	Solvent:	Acetonitrile
Reagent Volume:	250.000 mL	Solvent Lot:	ACN_00223
Creation Date:	12/17/2019		
Open Date:			
Container(s):	6017392		

WL 88127 → C18

Comment: Stored Frozen. 6 month expiration date. Take 1mL of 1,2 Dinitrobenzene (8330SurrStock) and Dilute to 100 mL in ACN. Mulitply recipe as needed.

POS #6

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
1,2-Dinitrobenzene	8330SurrStkSS_00145	03/31/2023	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00145	03/31/2023	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00158	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00158	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00160	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00160	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00161	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00161	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
8330SurrStkSS_00145	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	03/31/23	Restek	A0135839	31453	0.25000	mL
8330SurrStkSS_00158	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0146866	31453	0.25000	mL
8330SurrStkSS_00160	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0150790	31453	1.00000	mL
8330SurrStkSS_00161	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0150790	31453	1.00000	mL

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromna\Denver\ChromData\CHHPLC_X\20191220-88127.b\12200006.D

Lims ID: C18column:B16162 Inj. Date: 20-Dec-2019 11:19:02

Worklist ID: 280-0088127-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
$ 9 1,2-Dinitrobenzene	0.4000	0.3843	96.1	83-119	63-127	

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

280-132090-A-2-A	280-132090-A-3-A	280-132090-A-4-A
280-132090-A-5-A	280-132090-A-6-A	280-132090-A-7-A
280-132090-A-8-A	280-132031-A-1-A	280-132031-A-2-A
280-132031-A-3-A	280-132031-A-4-A	280-131963-A-1-B
280-131963-B-2-A	280-131963-A-3-A	280-131963-B-4-A
280-131977-A-1-A	280-131977-B-2-A	280-131977-B-3-A
280-131977-A-4-A	280-131977-A-5-A	280-131977-A-6-A

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

280-131996-A-4-A	280-131996-A-5-A	280-131996-A-6-A
280-131996-A-7-A	280-131996-A-8-A	280-131996-A-9-A
280-131996-A-11-A	280-131996-A-12-A	280-131996-A-13-A
280-131996-A-14-A	280-131996-A-15-A	280-131996-A-1-A
280-131996-A-2-A	280-131996-A-3-A	280-131996-A-10-A

Samples for Limit Group: 3, Lims Prep Method: 3535

280-132013-A-1-A	600-197143-C-1-A	280-131992-C-1-A
280-131988-A-1-A	280-131988-A-2-A	280-131988-A-3-A
280-131988-B-4-A		

Reagent

8330Surrogate_00114

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\G2_LUNA\20200507-91339.b\05070004.D

Lims ID: CaCl2_Sol_00054 Inj. Date: 07-May-2020 12:25:53

Worklist ID: 280-0091339-004 Instrument: CHHPLC_G2_LUNA

Method: G2_8330_Luna

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.2000	0.1868	93.4	83-122

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

280-135356-A-2-D

Reagent

8330Surrogate_00116

Preliminary Report

Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200515-91560.b\05150003.D				
Lims ID:	MeOH=0000129165				
Client ID:					
Sample Type:	Client				
Inject. Date:	15-May-2020 15:31:37	ALS Bottle#:	6	Worklist Smp#:	3
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MeOH=0000129165				
Misc. Info.:	280-0091560-003				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200515-91560.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 16:18:31	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0318				

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.5000	0.4870	97.40

Reagent

8330SurrStkSS_00145

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0135839

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)		+/- 56.0822	µg/mL	Unstressed
	Purity 99%			+/- 57.3938	µg/mL	Stressed

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

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

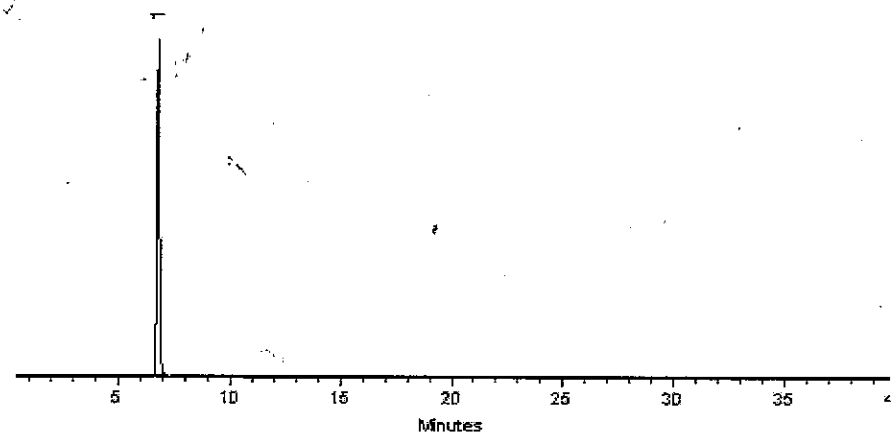
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dustin J Lidgett

Dustin Lidgett - Mix Technician **Date Mixed:** 05-Mar-2018 **Balance:** 1128360905

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 09-Mar-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely

Reagent

8330SurrStkSS_00157

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.:** A0146866

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

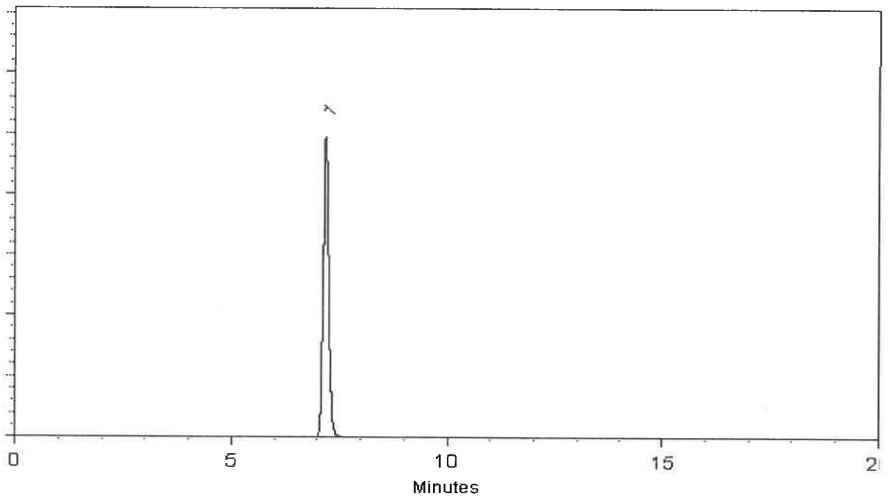
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Date Mixed: 11-Mar-2019 **Balance:** 1128353505

Fang-Yun Lo - QC Analyst

Date Passed: 14-Mar-2019

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

Reagent

8330SurrStkSS_00158

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

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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. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

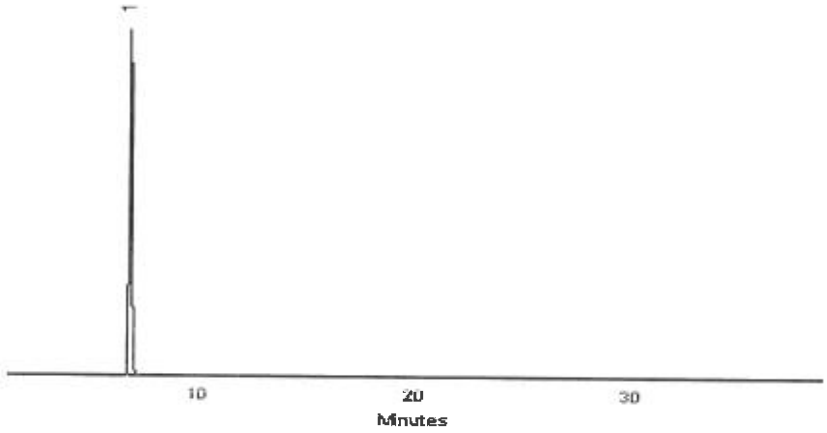
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStkSS_00160

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

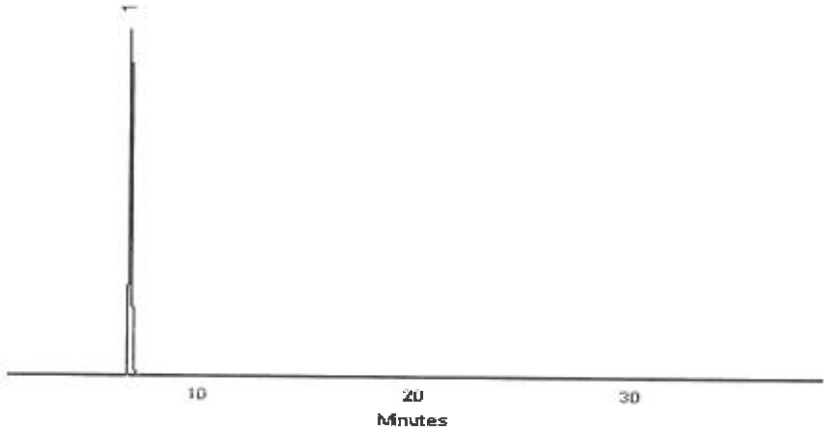
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStkSS_00161

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

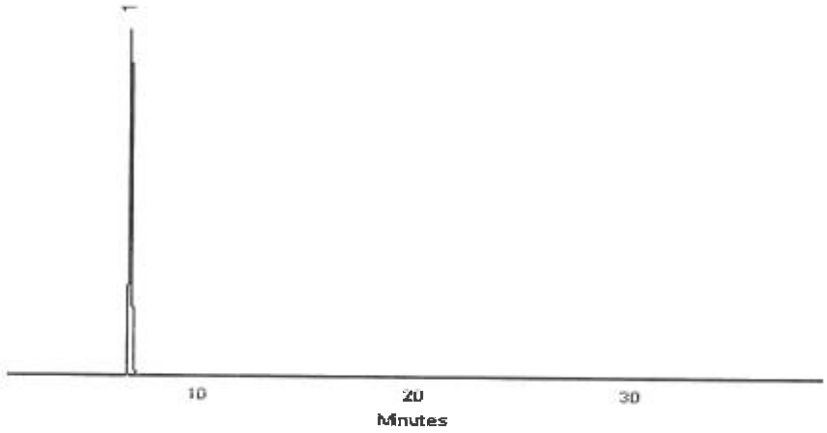
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStkSS_00168

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

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Certificate of Analysis

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Reference Material Producer
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. : 31453 **Lot No.:** A0155113

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

Expiration Date : November 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,2-Dinitrobenzene		1,004.0 µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKCH6067)		+/-	56.3065	µg/mL	Unstressed
	Purity 99%			+/-	57.6234	µg/mL	Stressed

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

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

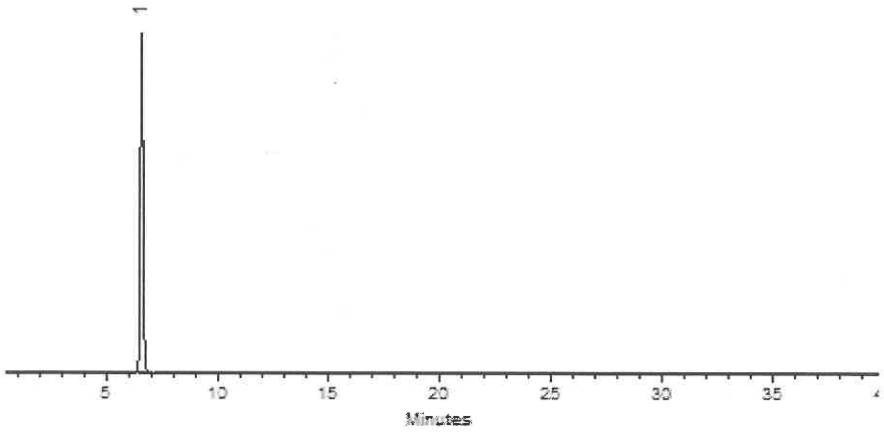
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Miranda Kline

Miranda Kline - Operations Technician I

Date Mixed: 15-Nov-2019 **Balance:** 1128342314

Jennifer L Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 20-Nov-2019

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

Reagent

8330SurrStkSS_00169

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

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Certificate of Analysis

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0155113

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

Expiration Date : November 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,2-Dinitrobenzene		1,004.0 µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKCH6067)		+/-	56.3065	µg/mL	Unstressed
	Purity 99%			+/-	57.6234	µg/mL	Stressed

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

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Ultra C18 (cat.# 9174575)

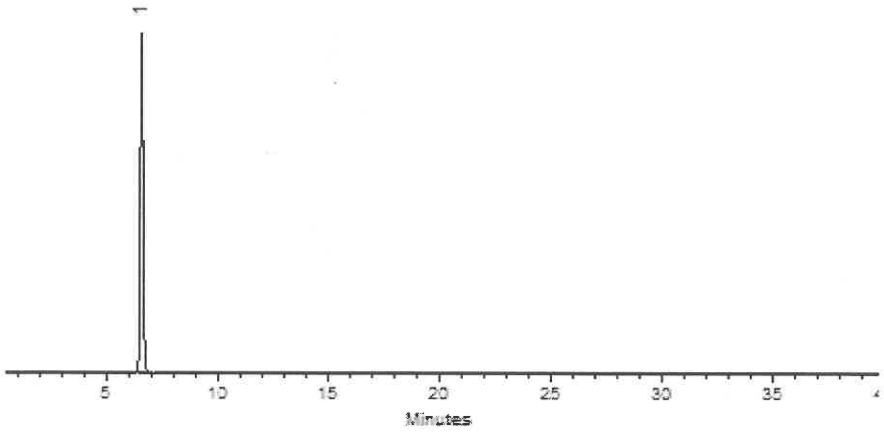
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Miranda Kline

Miranda Kline - Operations Technician I

Date Mixed: 15-Nov-2019 **Balance:** 1128342314

Jennifer L Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 20-Nov-2019

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

Reagent

8330SurrStock_00164

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 216071012
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*

Danger 2

Date Certified: Jul 1, 2016
Expiration: Jul 1, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

Alk stk std_00017

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	SS148	Quality Test / Release Date	03/20/2019
Lot Number	191517	Expiration Date	Mar/2021
Description	SODIUM CARBONATE SOLUTION, 1N		
Country of Origin	United States		
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, Colorless liquid
NORMALITY		Inclusive Between 0.995 - 1.000	0.999
COLOR	APHA	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

IC BR ICV_00018

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

Lot Number: 2907E22 **Product Number:** 1180

Manufacture Date: JUL 23, 2019
Expiration Date: JAN 2021

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Bromide	7647-15-6	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Bromide (Br)	995-1005 ppm	1000 ppm

Specification	Reference
Bromide Solution, Standard (1 mL = 1 mg Br-)	ASTM (D 3869 D)
Standard Bromide Solution, 1000 mg/L	APHA (4110 B)
Bromide Stock Solution (1.00 mL = 1.00 mg Br-)	EPA (SW-846) (9056)
Sodium Bromide Standard Solution, 1000 mg/L	ASTM (D 1246)
Bromide Stock Solution (1.00 mL = 1.00 mg Br?)	ASTM (D 4327)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container
1180-16	500 mL natural poly	18 months
1180-4	120 mL natural poly	18 months
1180-8	250 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Sharon Travers (07/23/2019)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

IC CL cal_00060

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-CL9-2X **Lot No.** 4-176CL-2X

Description: 1000 µg/mL Chloride

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1001 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3182*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Sodium Chloride, Lot# 09141H. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 1004 µg/mL

Method: Precipitation using Silver Nitrate. Filter, dry and weigh as AgCl.

Instrumental Analysis by Ion Chromatography: 997 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_3^-	<0.06
F^-	<0.05	$PO4^{-3}$	<0.03
NO_2^-	<0.05	$SO4^{-2}$	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: JAN - - 2020 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001, ISO 17025, and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Instructions for Use:

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Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c=combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:

All certified values reported were derived from the Certification Report, SPEX CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

SPEX CertiPrep.®
Your Science is Our Passion.®

203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647

Reagent

IC MS/MSD S04_00005

Fisher Scientific

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

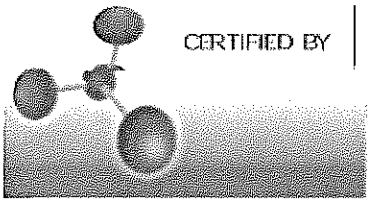
Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	**P304**	**Quality Test / Release Date 3/2/2015**	
Lot Number	**147276**		
Description	**POTASSIUM SULFATE, CRYSTAL, CERTIFIED, A.C.S.**		
Country of Origin	**India**	*** Suggested Retest Date**	**Feb-2020**
Chemical Origin	**Inorganic-non animal**		
BSE/TSE Comment	This product is not manufactured from, or with, any type of animal product, nor any derivative of an animal product. As such, this product should not be considered a vector for BSE or TSE.		

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	FINE WHITE CRYSTALS
ASSAY	%	>= 99	99.4
CALCIUM	%	<= 0.01	<0.010
CHLORIDE	%	<= 0.001	<0.0010
HEAVY METALS (as Pb)	ppm	<= 5	<5.0
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.01	<0.010
IRON (Fe)	ppm	<= 5	<5.0
MAGNESIUM	%	<= 0.005	<0.0050
NITROGEN COMPOUNDS	ppm	<= 5	<5
PH 5% SOLUTION @ 25 DEG C		Inclusive Between 5.5 - 8.5	5.5
SODIUM (Na)	%	<= 0.02	<0.020



CERTIFIED BY

Lab Manager Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.
*Based on suggested storage condition.

Reagent

IC SO4 ICV_00021

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Sulfate (SO_4)
CATALOG NUMBER:	062 -125 mL; 995 - 500 mL
LOT NUMBER:	100819m
ISSUE DATE:	August 23, 2019
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Sulfate (K_2SO_4)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	0.9986 ± 0.0010 g/mL at 19.7°C and 757 mm Hg
TRACEABILITY[3]:	97.6%
NIST/SRM:	3181 Sulfate
VERIFICATION METHOD:	Ion Chromatography
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 08/06/2021**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

IC sulfatecal_00057

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 4-197SO4-2X

Description: 1000 µg/mL Sulfate

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, QC Manager

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Rev. 0

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Report of Certification

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- Guide to the Expression of Uncertainty in Measurement, 2008
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- NIST Technical Note 1297

Material Source:

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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:

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Legal Notice:

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Reagent

IC sulfatecal_00059

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 4-197SO4-2X

Description: 1000 µg/mL Sulfate

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

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Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: JAN - - 2020 Certifying Officer: Katherine Cullinan, QC Manager

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Method of Preparation:

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SPEX CertiPrep®
Your Science is Our Passion.®

203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 800-964-SPEX • Fax: 732-603-9647

Reagent

MNX,TNX,DNX_00032

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number:	CUS-23984			**Page:**	1 of 1
Lot Number:	CS-5628	**Lot Issue Date:**	16-Nov-2018	**Expiration Date:**	31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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

Monica Bourgeois
QMS Representative

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

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No.
AT-1937

ORG ver 1.1

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

Reagent

MNX,TNX,DNX_00042

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 24-Jan-2020

Lot Number: 0006516106 **Expiration Date:** 28-Feb-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.1 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/ CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY

ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006516106

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ISO 17025 Cert
No. AT-1937

Reagent

MNX,TNX,DNX_00043

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 24-Jan-2020

Lot Number: 0006516106 **Expiration Date:** 28-Feb-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.1 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

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ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/ CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY

ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006516106

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

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www.agilent.com/quality/
CSD-QA-015.1

ISO 17025 Cert
No. AT-1937

Reagent

MNX,TNX,DNX_00046

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 24-Jan-2020

Lot Number: 0006516106 **Expiration Date:** 28-Feb-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.1 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/ CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY

ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006516106

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ISO 17025 Cert
No. AT-1937

Reagent

NH3 CAL STD_00031

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH_3)

Lot Number: 2902E25 **Product Number:** 5455

Manufacture Date: FEB 25, 2019
Expiration Date: AUG 2020

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Chloride	12125-02-9	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonia nitrogen)	ASTM (D 3590 A)
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonium nitrogen)	ASTM (D 3590 B)
Stock Ammonium Chloride Solution	APHA (4500-CN- L)
Stock Ammonium Solution	APHA (4500-NH3 C)
Stock Ammonium chloride Solution	APHA (4500-NH3 D)
Stock Ammonium Solution	APHA (4500-NH3 F)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.3)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.4)
Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.1)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5455-16	500 mL natural poly	18 months
5455-32	1 L natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Tara Jones (02/25/2019)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

NH3 ICV STD_00027

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	N2-NH669544
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.0000%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 3 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1005 ± 3 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

Assay Method #2 **997 ± 3 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{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 (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

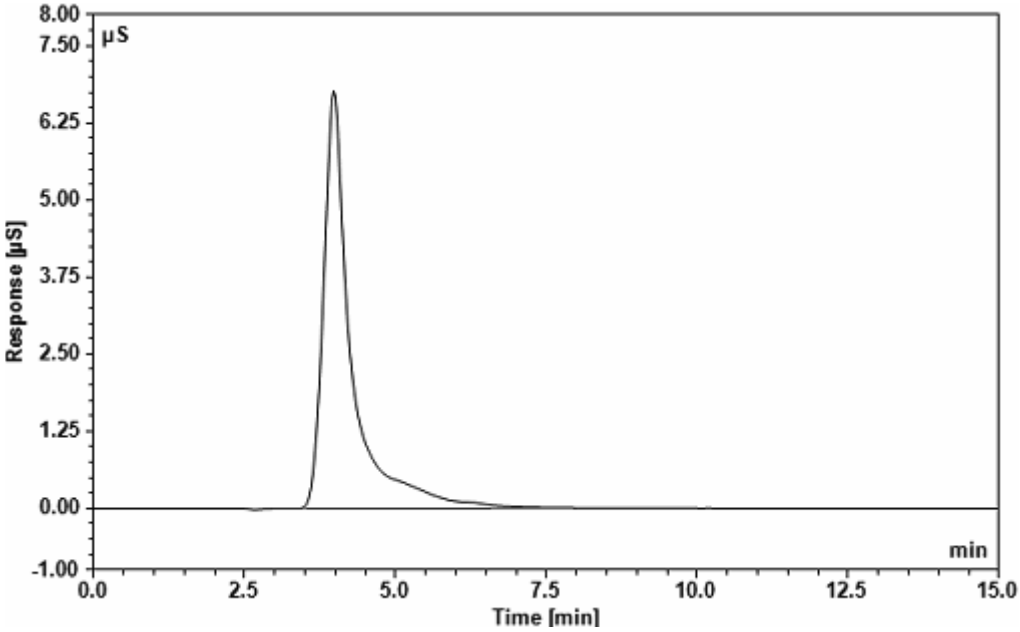
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS18 2 x 250 mm	**Eluent:**	10 mM MSA
Guard Column:	IonPac CG18 2 x 50 mm	**Eluent Flow Rate:**	0.25 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	35 °C
		Cell Temp:	35 °C
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale X-Axis:**	minutes
		Scale Y-Axis:	8 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	8 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 01, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 01, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

James King Jr
Chemist, Technical Manager

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Reagent

NOXT ICV STD_00023

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Nitrate as N (NO_3-N)
CATALOG NUMBER:	052 -125 mL; 991 - 500 mL
LOT NUMBER:	130319m
ISSUE DATE:	April 3, 2019
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Nitrate (KNO_3)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	1.0041 ± 0.0004 g/mL at 18.4°C and 754 mm Hg
TRACEABILITY[3]:	101%
NIST/SRM:	3185 Nitrate
VERIFICATION METHOD:	Ion Chromatography
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 3/11/2021**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

PicricARestek_00092

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499 **Lot No.:** A0139087

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid **CAS #** 88-89-1 (Lot 06130CU) **Purity** 97%	1,001.0 µg/mL	+/- 5.9459	µg/mL	Gravimetric
			+/- 54.8400	µg/mL	Unstressed
			+/- 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)

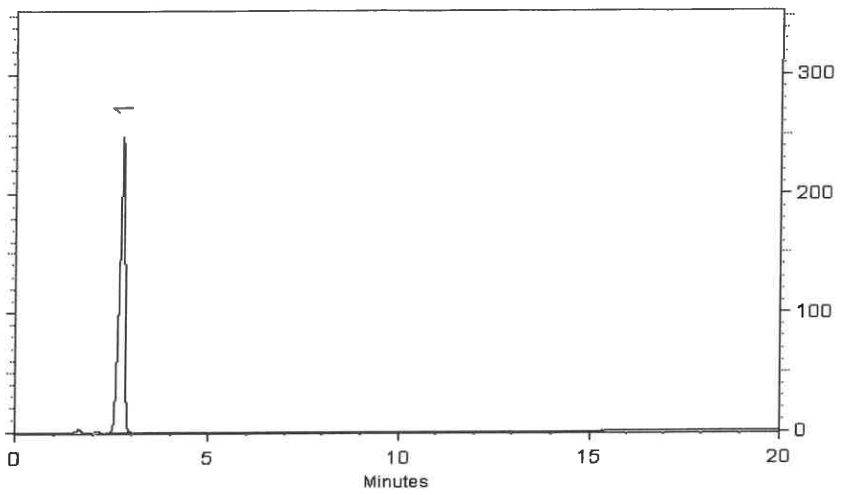
Flow Rate:
1.0 ml/min.

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.

Matt Fragassi - Mix Technician

Date Mixed: 20-Jun-2018 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 28-Jun-2018

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

Reagent

RSK175methane_00010

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
6141 Easton Road
Bldg 1
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF BATCH ANALYSIS

Grade of Product: CP

Customer:	SIGMA-ALDRICH		
Part Number:	ME CPP14C514	Reference Number:	160-401480003-1
Cylinder Analyzed:	ST0000198540	Cylinder Volume:	14.0 LG
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	240 PSIG
Analysis Date:	Apr 16, 2019	Valve Outlet:	160
Lot Number:	160-401480003-1		

Expiration Date: Apr 16, 2022

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
METHANE	> 99.0 %	> 99.0 %

Cylinders in Batch:

ST0000198540, ST0000198541, ST0000198542, ST0000198543

Notes:MANUFACTURE DATE 4-16-2019
PO# P481562
P/N 22562

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Approved for Release

Reagent

RSK7gasMathes_00027

MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
200 ALESSIO DR
JOLIET, IL 60433

Product: Multi-Component Mixture

Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS

Contents:
Net: 7.57 ft³, 0.21 m³

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)
*DL955755

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	0.995	%	±10%	±2%
Acetylene	1.00	0.995	%	±10%	±2%
Isobutylene	1.00	0.995	%	±10%	±2%
Propane	1.00	0.995	%	±10%	±2%
Ethene	1.00	0.996	%	±10%	±2%
Ethylene	1.00	0.996	%	±10%	±2%
Methane	1.00	0.999	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

*** Indicates the actual cylinder(s) analyzed.**

Lot No: 1029602081C
Fill Date: 09/04/2019
Expiration Date: 09/09/2021

Analysis Date: 09/09/2019

Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Jennifer Fender - Analyst — 09/09/2019 Date

Jennifer Fender - QA Approval — 09/09/2019 Date

Reagent

RSK7gasMathes_00031

MATHESON

ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture

Grade: CERTIFIED

MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS

Contents:
Net: 7.57 ft³; 0.21 m³

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)
*DI.039162

	Requested Concentration	Certified Concentration	Units -	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.01	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	1.01	%	±10%	±2%
Ethylene	1.00	1.00	%	±10%	±2%
Methane	1.00	1.00	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

* Indicates the actual cylinder(s) analyzed.

Lot No: 9300606746
Fill Date: 02/23/2020
Expiration Date: 03/09/2022

Analysis Date: 03/09/2020

Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — Date: 03/09/2020

Merich Boyett - QA Approval — Date: 03/09/2020

Reagent

SFD CAL STK_00006

Version	02
Molecular weight	240.18
Quality Test / Release Date	09/06/2018
Molecular Formula	Na2 S . 9 H2 O
CAS No	1313-84-4
Linear Formula	Na2S.9H2O
Flash Point (°C)	

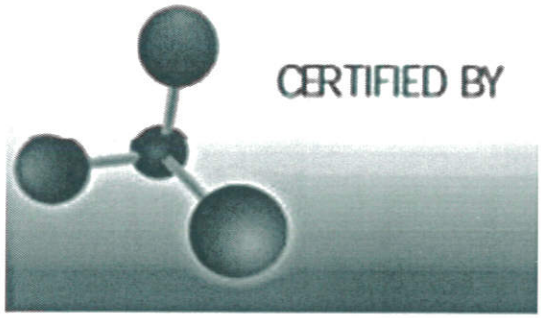
Certificate of Analysis

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties,expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Unless otherwise stated, these products are not intended for dialysis, parenteral, or injectable use without further processing. The following are the actual analytical results obtained:

Catalog Number	38706	**Quality Test / Release Date** 09/06/2018
Lot Number	A0390872	
Description	Sodium sulfide nonahydrate,98+%,extra pure	
Country of Origin	INDIA	
Declaration of Origin	synthetic	

BSE/TSE comment	
Chemical Comment	

Result name	Units	Specifications	Test Value
Appearance (Color)		Colorless to light yellow	Light yellow
Appearance (Form)		Adhering crystals and/or chunks	Adhering crystals and chunks
Titration Iodimetric		32.0 to 38.0 % (Na2S)	35.9 % (Na2S)
Total nitrogen (as N)		=<0.005 %	=<0.005 %
Sulfite (as SO2)		=<2000 ppm	=<2000 ppm
Thiosulphate (S2O3)		=<5000 ppm	=<5000 ppm



L. Van den Broek, QA Manager

Issued: 09-06-2018

Acros Organics
ENA23, zone1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Regent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

Reagent

TKN CAL STD_00017

nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Certificate of Analysis

TKN Calibration Standard - 1000 mg/L

Catalog Number: IS-009, IS-009-500
Lot Number: 010617
Manufacture Date: 01/06/17
Certified Date: 01/12/17

Expiration: 01/31/2021
Matrix: Water
Hazards: Irritant
(See MSDS)

Bulk Number	Analyte	CAS #	Purity	Certified Concentration (mg/L TKN)
W-1477-25	TKN from Glycine	56-40-6	99.4%	1000 ± 4.60

Packaging, Storage, Instructions For Use

Store at room temperature (15-30°C). After opening, this solution should be stored tightly capped at 2-8°C.

This certified reference material (CRM) is packaged in low density polyethylene. Allow to equilibrate to room temperature before use. Small aliquots should be poured out of the bottle rather than directly pipetted out of bottle in order to prevent contamination or premature degradation. A 1 mL sample size is recommended. Smaller sample volumes may negatively affect estimated uncertainty.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this CRM. The actual purity is referenced above. Analyte source material purity and associated uncertainty has been analytically verified against appropriate NIST SRMs, if available.

Method: Certified concentration confirmed by HPLC analysis against an independent reference standard with n=3.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Catalog Number: IS-009, IS-009-500
Lot Number: 010617

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Uncertainty

The ± uncertainty associated with the certified concentration is the expanded uncertainty at 95% confidence interval (CI) with K=2. This expanded uncertainty incorporates contributions from manufacturing, homogeneity, and stability.

Homogeneity

This CRM was thoroughly mixed in production. Batch homogeneity was established through analysis of samples chosen at random. A minimum 1 mL sample size is recommended.

Stability/Expiration

The stability of this CRM is based on short-term and long-term monitoring of the certified concentration. The expiration date is guaranteed to be valid from the manufacture date and is based on results of long-term monitoring.

Ewart Morris

Ewart Morris, Inorganics Technical Manager

Mark Hammersla

Mark Hammersla, President

Reagent

TKN ICV_00011

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Total Kjeldahl Nitrogen (TKN)
CATALOG NUMBER:	043 -125 mL; 996 - 500 mL
LOT NUMBER:	281018
ISSUE DATE:	December 7, 2018
REVISION DATE:	Original
STARTING MATERIAL:	Glycine (NH_2CH_2COOH)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water and 1% (v/v) HCl
DENSITY:	1.0055 ± 0.0010 g/mL at 16.6°C and 754 mm Hg
TRACEABILITY[3]:	100%
NIST/SRM:	194a Ammonium Dihydrogen Phosphate
VERIFICATION METHOD:	Ion Selective Electrode (ISE)
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 10/2020**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1439.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

TOC LCS Std_00048

Agilent

Certificate of Analysis
ISO Guide 34

Product Number: IQC-106
Lot Number: 0006465171

Lot Issue Date: 10-May 2019
Expiration Date: 30-Jun 2021

Product Name: Total Organic Carbon (TOC) Standard

Description:
This Reference Material (RM) was gravimetrically prepared in accordance with ISO Guide 34 and under Agilent's ISO 9001 registered quality system. The neat materials used for this product have been verified by Agilent's ISO 17025 laboratory and under Agilent's ISO Guide 34 accreditation. The analyte concentrations were verified by Agilent's ISO 17025 accredited laboratory. For each analyte, the true value, with its uncertainty value calculated at the 95% confidence level, is reported below.

Analyte	Starting Material	Lot Number	Purity (%)	Analyte Concentration	Traceability & Method
TOC	potassium hydrogen phthalate	RM14067	99.97	1001 ± 5 µg/mL	NAA02099; TOC Analyzer

Solvent: water (low TOC, <50 ppb)

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

Traceability:
Traceability has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on appropriate physical or chemical measurements, including gravimetric or volumetric dilution, where the mass or volume of a solution before and after dilution is measured. The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1, ISO 9001, ISO 17025, and ISO Guide 34. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 819.

Estimation of Uncertainties:
The true value is reported, with its uncertainty value calculated at the 95% confidence level.

Homogeneity:
This RM was formulated and unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening and should be processed without delay for the true value to be valid within the stated uncertainties. Do not pipet from the bottle. Do not return any material removed for pipetting to the bottle. Tightly cap the bottle after removing any material and store according to the instructions noted above.

Hazards:
Refer to the Safety Data Sheet for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid, within the measurement uncertainty specified, until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

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

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

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis
ISO Guide 34

Product Number: IQC-106
Lot Number: 0006465171

Lot Issue Date: 10-May 2019
Expiration Date: 30-Jun 2021

Maintenance of Certification:
The real-time, long term stability of the RM may be monitored over the lifetime of the certification. If substantive changes occur that affect the certification before the expiration of this certificate, Agilent Technologies will notify the purchaser.

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

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

ISO17025 Cert No.
AT-1937

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 011F0201.D

Lab ID: LCS 280-496925/34 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0820	112	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 009F0201.D

Lab ID: LCS 280-497247/33 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0730	0.0705	97	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.: 280-137084-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 012F0301.D

Lab ID: LCSD 280-496925/35 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Methane	0.0730	0.0799	109	3	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 010F0301.D

Lab ID: LCSD 280-497247/35 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Methane	0.0730	0.0704	96	0	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.: 280-137084-1

SDG No.:

Lab Sample ID: MB 280-496925/7

Matrix: Water Date Extracted:

Lab File ID:(1) 007F0701.D Lab File ID:(2) 007F0701.D

Date Analyzed:(1) 06/01/2020 14:02 Date Analyzed:(2) 06/01/2020 14:02

Instrument ID:(1) VGC_J Instrument ID:(2) VGC_J

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-496925/34	06/01/2020 14:59	06/01/2020 14:59
	LCSD 280-496925/35	06/01/2020 15:15	06/01/2020 15:15
EW7-PM27A-3-25	280-137084-1	06/01/2020 17:26	06/01/2020 17:26
EW7-PM24A-3-25	280-137084-2	06/01/2020 17:42	06/01/2020 17:42
EW7-PM24B-3-35	280-137084-3	06/01/2020 17:58	06/01/2020 17:58
EW7-PM21B-3-35	280-137084-4	06/01/2020 18:15	06/01/2020 18:15
EW7-PM22B-3-35	280-137084-5	06/01/2020 18:31	06/01/2020 18:31

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: MB 280-497247/7

Matrix: Water Date Extracted:

Lab File ID:(1) 007F0701.D Lab File ID:(2) 007F0701.D

Date Analyzed:(1) 06/03/2020 11:52 Date Analyzed:(2) 06/03/2020 11:52

Instrument ID:(1) VGC_J Instrument ID:(2) VGC_J

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-497247/33	06/03/2020 14:40	06/03/2020 14:40
	LCSD 280-497247/35	06/03/2020 14:56	06/03/2020 14:56

FORM IV RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: MB 280-497247/34

Matrix: Water Date Extracted:

Lab File ID:(1) 011F0401.D Lab File ID:(2) 011F0401.D

Date Analyzed:(1) 06/03/2020 15:12 Date Analyzed:(2) 06/03/2020 15:12

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
EW7-PM24A-3-25	280-137084-2	06/03/2020 16:50	06/03/2020 16:50
EW7-PM24B-3-35	280-137084-3	06/03/2020 17:07	06/03/2020 17:07
EW7-PM22B-3-35	280-137084-5	06/03/2020 17:23	06/03/2020 17:23

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM27A-3-25 Lab Sample ID: 280-137084-1

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2020 17:26 Date Analyzed (2): 06/01/2020 17:26

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.15	3.13	3.21	6.4		5.2
	2		1.24	1.21	1.29	6.8		

FORM X RSK-175

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM24A-3-25 Lab Sample ID: 280-137084-2

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2020 17:42 Date Analyzed (2): 06/01/2020 17:42

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.15	3.13	3.21	9.8		4.2
	2		1.24	1.21	1.29	10		

FORM X RSK-175

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM24A-3-25 Lab Sample ID: 280-137084-2

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/03/2020 16:50 Date Analyzed (2): 06/03/2020 16:50

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.12	3.20	9.0		2.3
	2		1.25	1.21	1.29	9.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM24B-3-35 Lab Sample ID: 280-137084-3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2020 17:58 Date Analyzed (2): 06/01/2020 17:58

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.13	3.13	3.21	19		5.2
	2		1.24	1.21	1.29	20		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM24B-3-35 Lab Sample ID: 280-137084-3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/03/2020 17:07 Date Analyzed (2): 06/03/2020 17:07

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.16	3.12	3.20	14		3.3
	2		1.24	1.21	1.29	14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM21B-3-35 Lab Sample ID: 280-137084-4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2020 18:15 Date Analyzed (2): 06/01/2020 18:15

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.15	3.13	3.21	6.7		4.0
	2		1.25	1.21	1.29	7.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM22B-3-35 Lab Sample ID: 280-137084-5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2020 18:31 Date Analyzed (2): 06/01/2020 18:31

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.13	3.13	3.21	19		5.7
	2		1.24	1.21	1.29	20		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM22B-3-35 Lab Sample ID: 280-137084-5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/03/2020 17:23 Date Analyzed (2): 06/03/2020 17:23

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.17	3.12	3.20	15		3.4
	2		1.24	1.21	1.29	16		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-496925/34

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2020 14:59 Date Analyzed (2): 06/01/2020 14:59

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.18	3.13	3.21	0.0820		0.3
	2		1.26	1.21	1.29	0.0818		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-496925/35

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2020 15:15 Date Analyzed (2): 06/01/2020 15:15

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.17	3.13	3.21	0.0799		0.2
	2		1.25	1.21	1.29	0.0797		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-497247/33

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/03/2020 14:40 Date Analyzed (2): 06/03/2020 14:40

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.19	3.12	3.20	0.0705		0.2
	2		1.26	1.21	1.29	0.0707		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-497247/35

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/03/2020 14:56 Date Analyzed (2): 06/03/2020 14:56

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		3.18	3.12	3.20	0.0704		0.0
	2		1.26	1.21	1.29	0.0704		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM27A-3-25
Lab Sample ID: 280-137084-1
Matrix: Water
Lab File ID: 020F1101.D
Analysis Method: RSK-175
Date Collected: 05/29/2020 15:55
Sample wt/vol: 18(mL)
Date Analyzed: 06/01/2020 17:26
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.: 496925
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	6.4		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\020F1101.D
Lims ID: 280-137084-I-1
Client ID: EW7-PM27A-3-25
Sample Type: Client
Inject. Date: 01-Jun-2020 17:26:10 ALS Bottle#: 20 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137084-i-1
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:25 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 02-Jun-2020 08:23:27

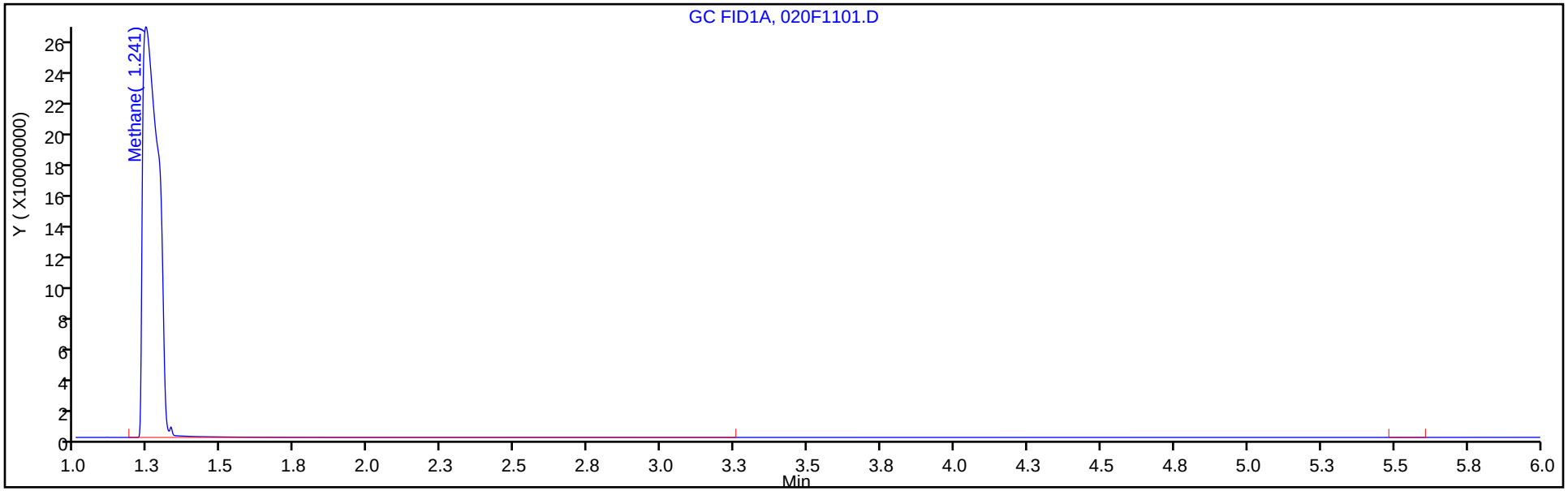
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.241	1.253	-0.012	972538626	6765.9	
2	3.148	3.170	-0.022	439521763	6421.0	
					RPD = 5.23	
3 Ethane						
1		1.503			ND	
2		4.302				
4 Ethylene						
1		1.758			ND	
2		4.028				
5 Propane						
1		2.423			ND	
2		5.923				
6 Acetylene						
1		3.865			ND	
2		4.133				
7 Butane						
1		4.166			ND	
2		7.367				
8 isobutylene						
1		5.065			ND	
2		7.218				

Report Date: 02-Jun-2020 08:27:29 Chrom Revision: 2.3 05-May-2020 17:48:18

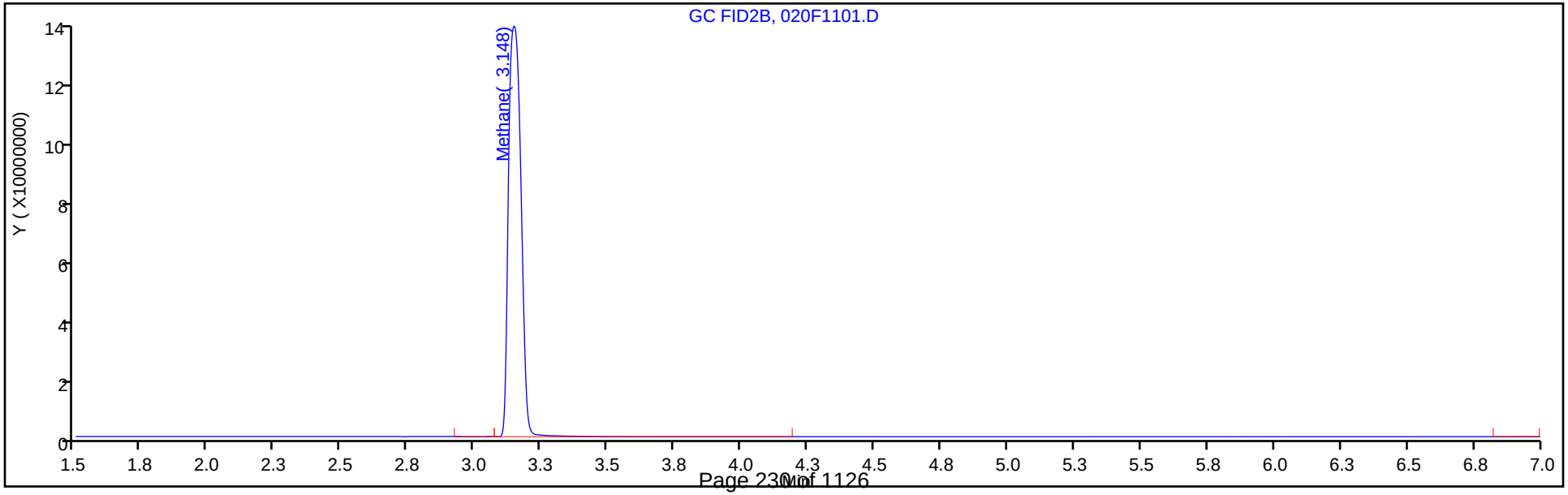
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\020F1101.D				
Injection Date:	01-Jun-2020 17:26:10	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137084-I-1	Lab Sample ID:	280-137084-1	Worklist Smp#:	12
Client ID:	EW7-PM27A-3-25				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM24A-3-25 Lab Sample ID: 280-137084-2

Matrix: Water Lab File ID: 017F1001.D

Analysis Method: RSK-175 Date Collected: 05/29/2020 12:50

Sample wt/vol: 18(mL) Date Analyzed: 06/03/2020 16:50

Soil Aliquot Vol: Dilution Factor: 3

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 497247 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	9.0	D	0.015	0.0060	0.0019

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\017F1001.D				
Lims ID:	280-137084-I-2				
Client ID:	EW7-PM24A-3-25				
Sample Type:	Client				
Inject. Date:	03-Jun-2020 16:50:43	ALS Bottle#:	17	Worklist Smp#:	13
Purge Vol:	18.000 mL	Dil. Factor:	3.0000		
Sample Info:	280-137084-i-2				
Operator ID:	SCIANNAC	Instrument ID:	VGC_J		
Method:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	05-Jun-2020 13:56:29	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1025				

First Level Reviewer: sciannac Date: 05-Jun-2020 13:39:12

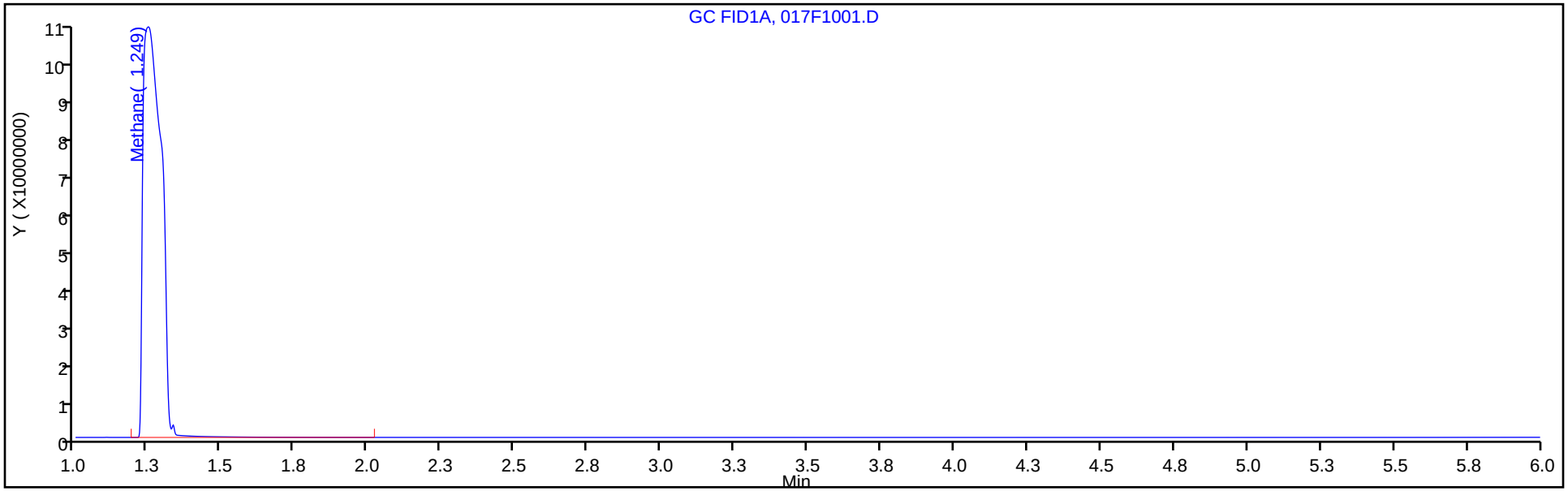
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.249	1.250	-0.001	443633835	3086.2	
2	3.164	3.161	0.003	206483814	3016.4	
					RPD = 2.29	
3 Ethane						
1		1.500			ND	
2		4.296				
4 Ethylene						
1		1.758			ND	
2		4.023				
5 Propane						
1		2.433			ND	
2		5.918				
6 Acetylene						
1		3.886			ND	
2		4.128				
7 Butane						
1		4.181			ND	
2		7.363				
8 isobutylene						
1		5.083			ND	
2		7.216				

Report Date: 05-Jun-2020 13:56:35 Chrom Revision: 2.3 05-May-2020 17:48:18

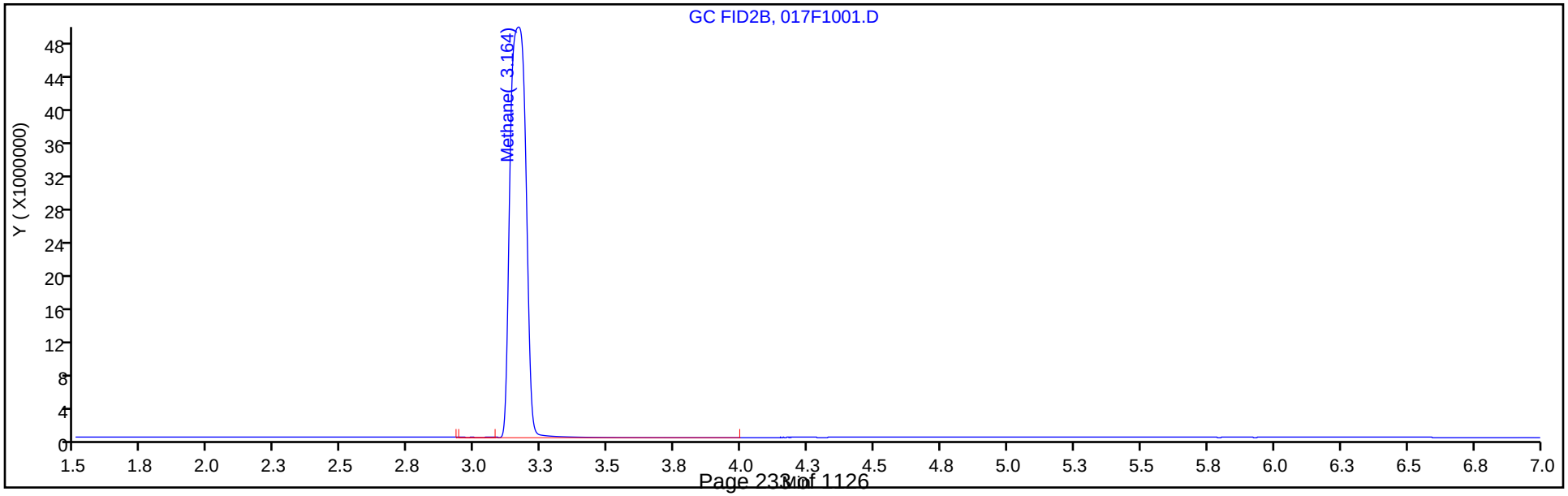
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\017F1001.D				
Injection Date:	03-Jun-2020 16:50:43	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137084-I-2	Lab Sample ID:	280-137084-2	Worklist Smp#:	13
Client ID:	EW7-PM24A-3-25				
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	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.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM24B-3-35 Lab Sample ID: 280-137084-3

Matrix: Water Lab File ID: 018F1101.D

Analysis Method: RSK-175 Date Collected: 05/29/2020 14:30

Sample wt/vol: 18(mL) Date Analyzed: 06/03/2020 17:07

Soil Aliquot Vol: Dilution Factor: 6

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 497247 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	14	D	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\018F1101.D
Lims ID: 280-137084-H-3
Client ID: EW7-PM24B-3-35
Sample Type: Client
Inject. Date: 03-Jun-2020 17:07:03 ALS Bottle#: 18 Worklist Smp#: 14
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137084-h-3
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:29 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 05-Jun-2020 13:39:26

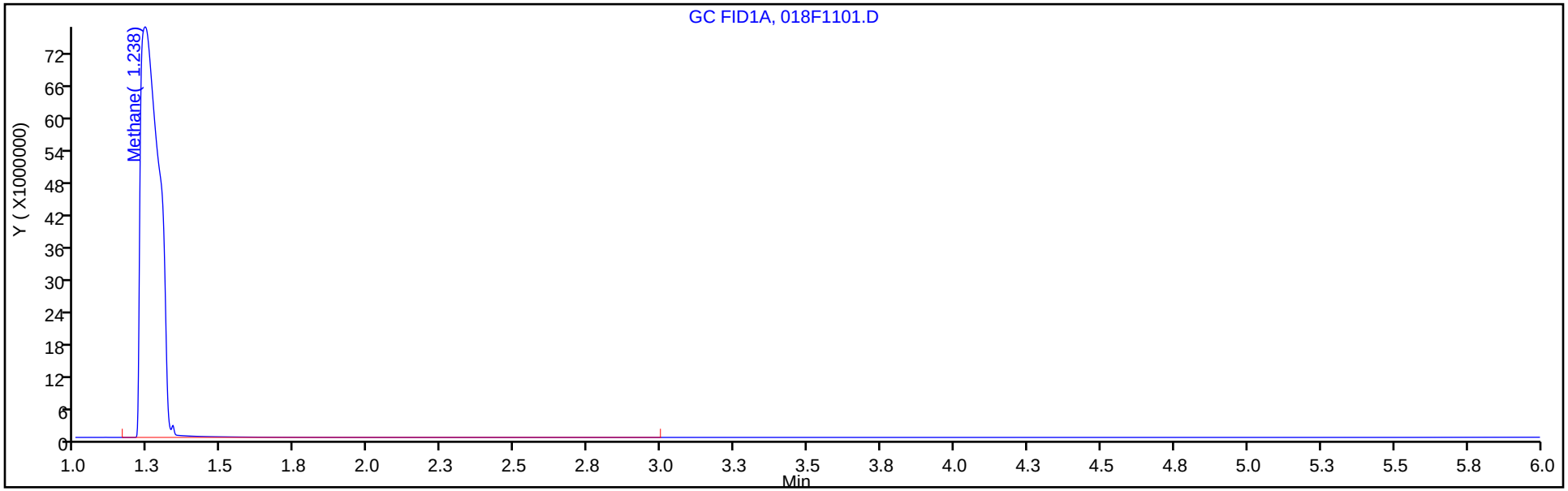
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.238	1.250	-0.012	338658300	2355.8	
2	3.164	3.161	0.003	156081136	2280.0	
					RPD = 3.27	
3 Ethane						
1		1.500			ND	
2		4.296				
4 Ethylene						
1		1.758			ND	
2		4.023				
5 Propane						
1		2.433			ND	
2		5.918				
6 Acetylene						
1		3.886			ND	
2		4.128				
7 Butane						
1		4.181			ND	
2		7.363				
8 isobutylene						
1		5.083			ND	
2		7.216				

Report Date: 05-Jun-2020 13:56:35 Chrom Revision: 2.3 05-May-2020 17:48:18

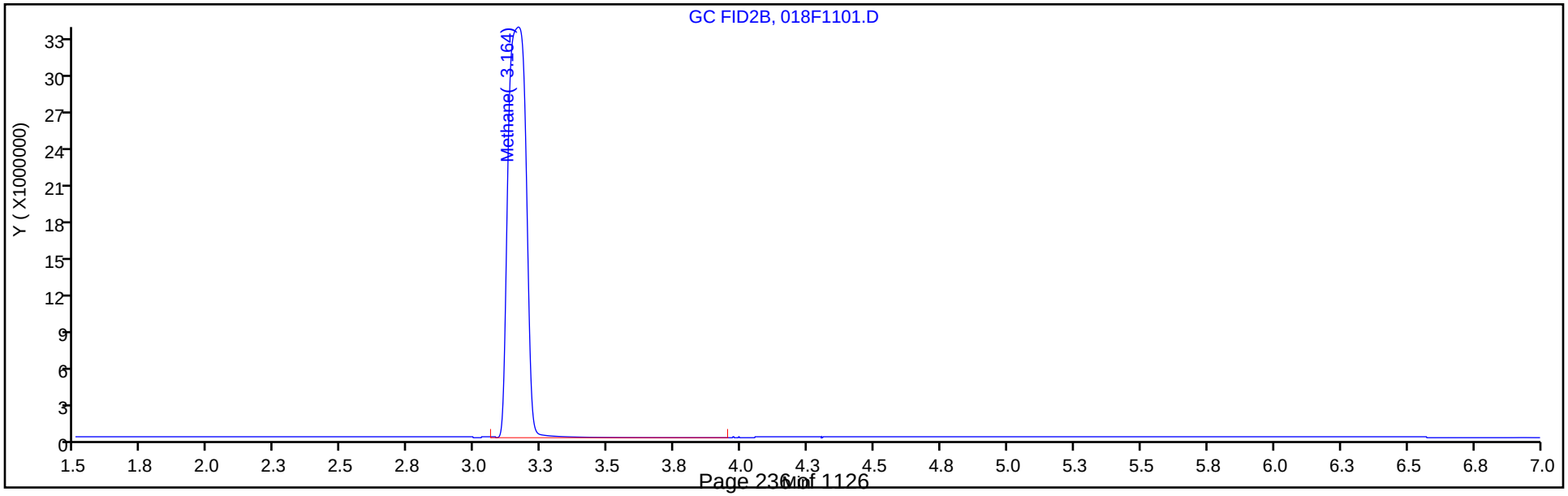
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\018F1101.D				
Injection Date:	03-Jun-2020 17:07:03	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137084-H-3	Lab Sample ID:	280-137084-3	Worklist Smp#:	14
Client ID:	EW7-PM24B-3-35				
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	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.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM21B-3-35 Lab Sample ID: 280-137084-4

Matrix: Water Lab File ID: 023F1401.D

Analysis Method: RSK-175 Date Collected: 05/29/2020 09:35

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2020 18:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 496925 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	6.7		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\023F1401.D
Lims ID: 280-137084-I-4
Client ID: EW7-PM21B-3-35
Sample Type: Client
Inject. Date: 01-Jun-2020 18:15:02 ALS Bottle#: 23 Worklist Smp#: 15
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-137084-i-4
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:25 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 02-Jun-2020 08:22:56

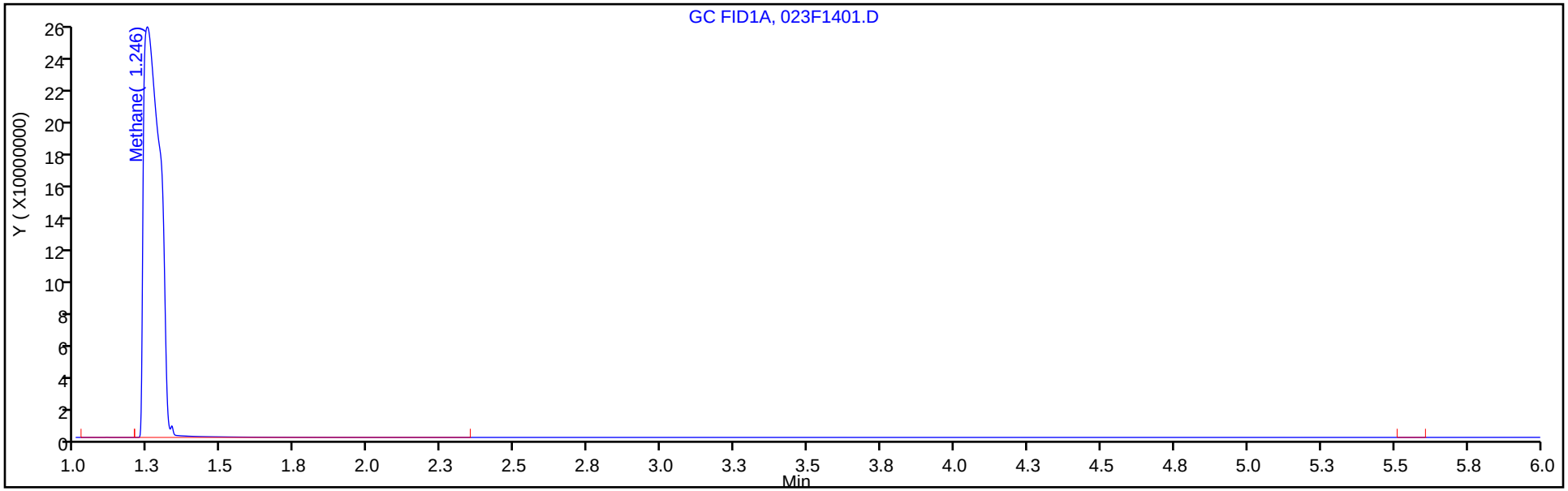
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.246	1.253	-0.007	1003896405	6984.1	
2	3.153	3.170	-0.017	459355643	6710.8	
					RPD = 3.99	
3 Ethane						
1		1.503			ND	
2		4.302				
4 Ethylene						
1		1.758			ND	
2		4.028				
5 Propane						
1		2.423			ND	
2		5.923				
6 Acetylene						
1		3.865			ND	
2		4.133				
7 Butane						
1		4.166			ND	
2		7.367				
8 isobutylene						
1		5.065			ND	
2		7.218				

Report Date: 02-Jun-2020 08:27:31 Chrom Revision: 2.3 05-May-2020 17:48:18

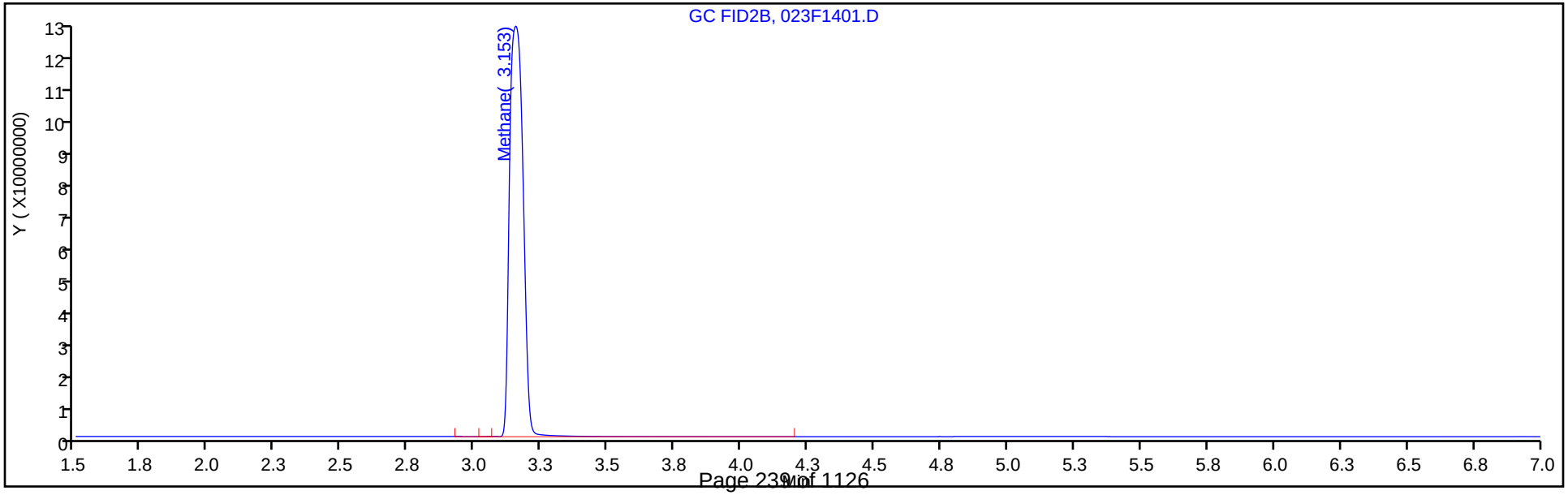
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\023F1401.D				
Injection Date:	01-Jun-2020 18:15:02	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137084-I-4	Lab Sample ID:	280-137084-4	Worklist Smp#:	15
Client ID:	EW7-PM21B-3-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM22B-3-35
Lab Sample ID: 280-137084-5
Matrix: Water
Lab File ID: 019F1201.D
Analysis Method: RSK-175
Date Collected: 05/29/2020 11:25
Sample wt/vol: 18(mL)
Date Analyzed: 06/03/2020 17:23
Soil Aliquot Vol:
Dilution Factor: 6
Soil Extract Vol.:
GC Column: HP-Plot Q ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 497247
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	15	D	0.030	0.012	0.0038

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\019F1201.D
Lims ID: 280-137084-G-5
Client ID: EW7-PM22B-3-35
Sample Type: Client
Inject. Date: 03-Jun-2020 17:23:21 ALS Bottle#: 19 Worklist Smp#: 15
Purge Vol: 18.000 mL Dil. Factor: 6.0000
Sample Info: 280-137084-g-5
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:29 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 05-Jun-2020 13:39:40

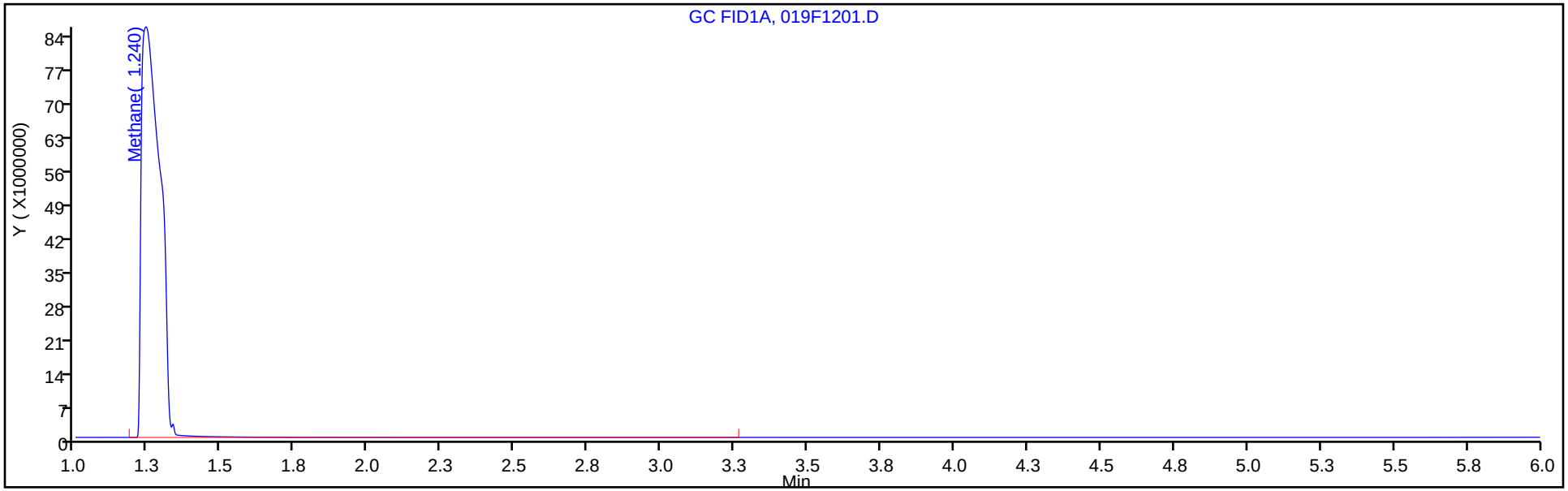
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.098			ND	
2		5.458				
2 Methane						
1	1.240	1.250	-0.010	377316414	2624.8	
2	3.167	3.161	0.006	173590667	2535.8	
					RPD = 3.45	
3 Ethane						
1		1.500			ND	
2		4.296				
4 Ethylene						
1		1.758			ND	
2		4.023				
5 Propane						
1		2.433			ND	
2		5.918				
6 Acetylene						
1		3.886			ND	
2		4.128				
7 Butane						
1		4.181			ND	
2		7.363				
8 isobutylene						
1		5.083			ND	
2		7.216				

Report Date: 05-Jun-2020 13:56:35 Chrom Revision: 2.3 05-May-2020 17:48:18

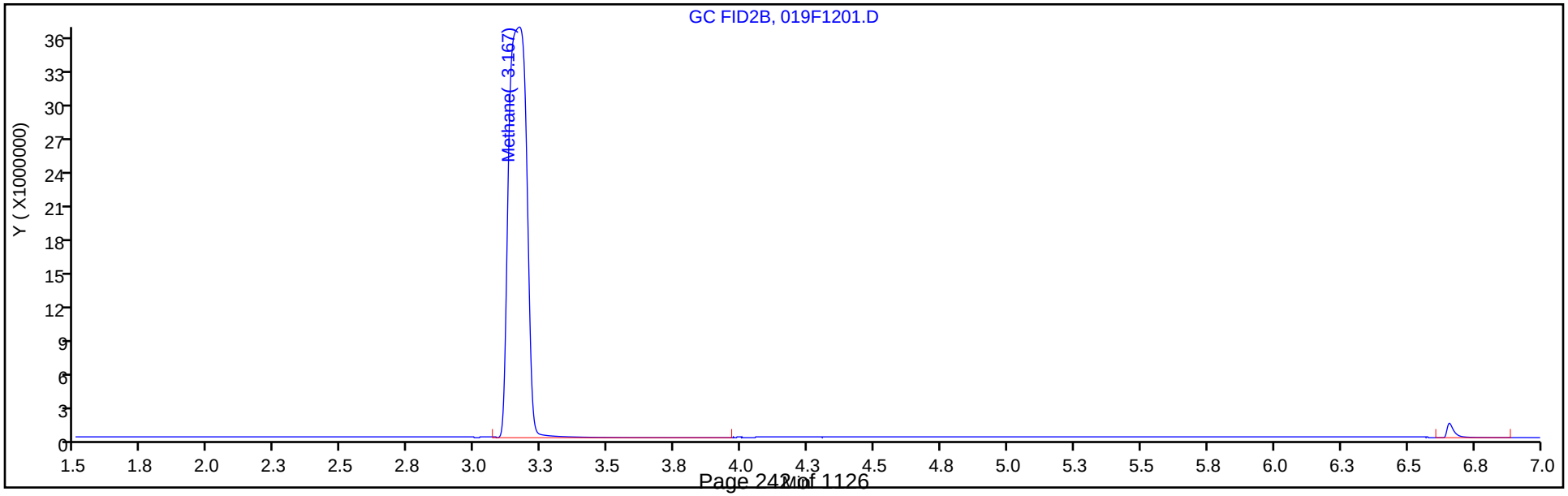
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\019F1201.D				
Injection Date:	03-Jun-2020 17:23:21	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	280-137084-G-5	Lab Sample ID:	280-137084-5	Worklist Smp#:	15
Client ID:	EW7-PM22B-3-35				
Purge Vol:	18.000 mL	Dil. Factor:	6.0000	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 VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Methane	1.250	1.251	1.248	1.249	1.250	1.250	1.243	1.248	1.245		1.210 - 1.290	1.248
Ethane	1.513	1.514	1.511	1.510	1.511	1.512	1.508				1.461 - 1.561	1.511
Ethylene	1.795	1.788	1.791	1.792	1.793	1.785	1.785				1.743 - 1.843	1.790
Acetylene	4.048	4.044	4.043	4.034	4.015	4.002	3.983				3.935 - 4.095	4.024

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Methane	244228 139356 139547	206236 146223	177863 139400	150422 142004	Lin2	48790.6512	143733.270							0.9980		0.9900
Ethane	116248 135523	138788 141935	141875 135846	142086	Ave		136042.830				6.7		20.0			
Ethylene	95153 109903	112972 114358	114801 109412	114895	Ave		110213.494				6.4		20.0			
Acetylene	32541 32001	35741 34987	35768 33689	35334	Ave		34294.2686				4.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44285

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methane	Lin2	111434 21349465	188199 40706597	324614 256592942	2196261 1008615918	10173489	0.456 146	0.913 292	1.83 1807	14.6 7228	73.0
Ethane	Ave	99432 38849075	237424 74364849	485411	3889050	18547040	0.855 274	1.71 547	3.42	27.4	137
Ethylene	Ave	75924 29199476	180285 55873290	366405	2933658	14030935	0.798 255	1.60 511	3.19	25.5	128
Acetylene	Ave	24105 8293493	52951 15971476	105983	837564	3792795	0.741 237	1.48 474	2.96	23.7	119

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-May-2020 10:57:08 ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 1
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:46 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	111434	0.4563	0.4358	
2	3.180	3.172	0.008	47082	0.4563	0.4350	
						RPD = 0.19	
3 Ethane							Ma
1	1.513	1.511	0.002	99432	0.8553	0.7309	M
2	4.310	4.305	0.005	45402	0.8553	0.7436	a
						RPD = 1.73	
4 Ethylene							
1	1.795	1.793	0.002	75924	0.7979	0.6889	
2	4.038	4.032	0.006	33393	0.7979	0.6966	
						RPD = 1.12	
5 Propane							
1	2.535	2.528	0.007	162619	1.25	1.14	
2	5.932	5.928	0.004	68003	1.25	1.09	
						RPD = 4.45	
6 Acetylene							M
1	4.048	4.015	0.033	24105	0.7408	0.7029	
2	4.142	4.137	0.005	13119	0.7408	0.6072	M
						RPD = 14.61	
7 Butane							Ma
1	4.315	4.286	0.029	175523	1.65	1.66	M
2	7.382	7.375	0.007	85626	1.65	1.67	a
						RPD = 0.36	
8 isobutylene							
1	5.190	5.163	0.027	120280	1.60	1.35	
2	7.232	7.227	0.005	54094	1.60	1.30	
						RPD = 3.46	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

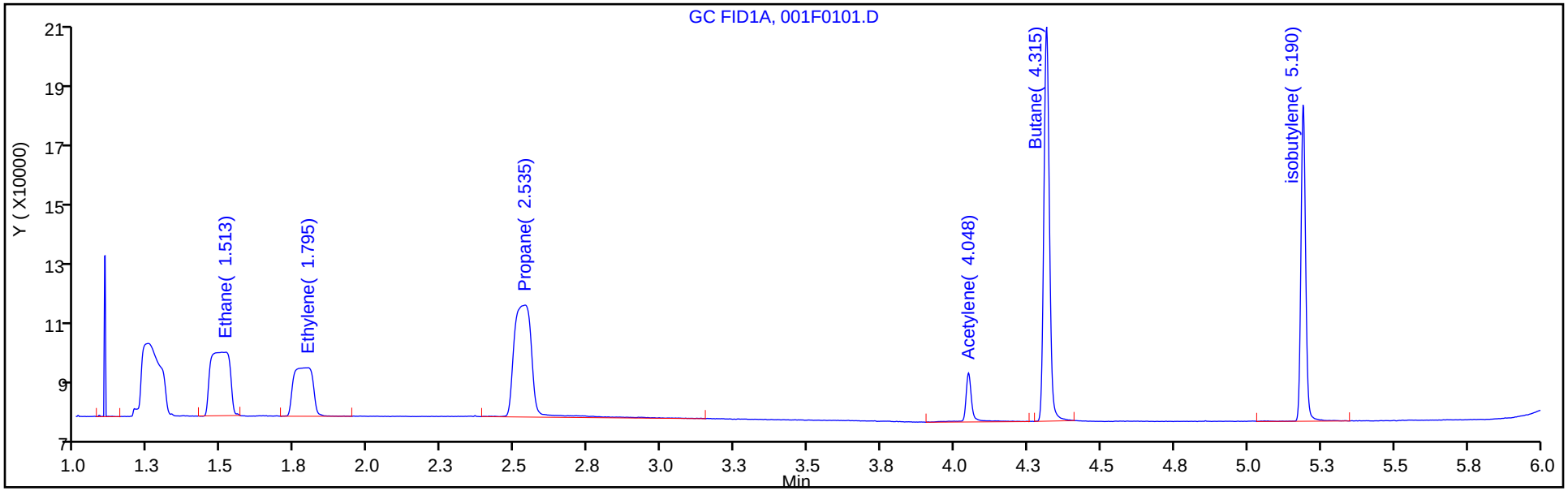
RSK7gasMathes_00031 Amount Added: 1.25 Units: uL

Report Date: 17-May-2020 08:59:46 Chrom Revision: 2.3 05-May-2020 17:48:18

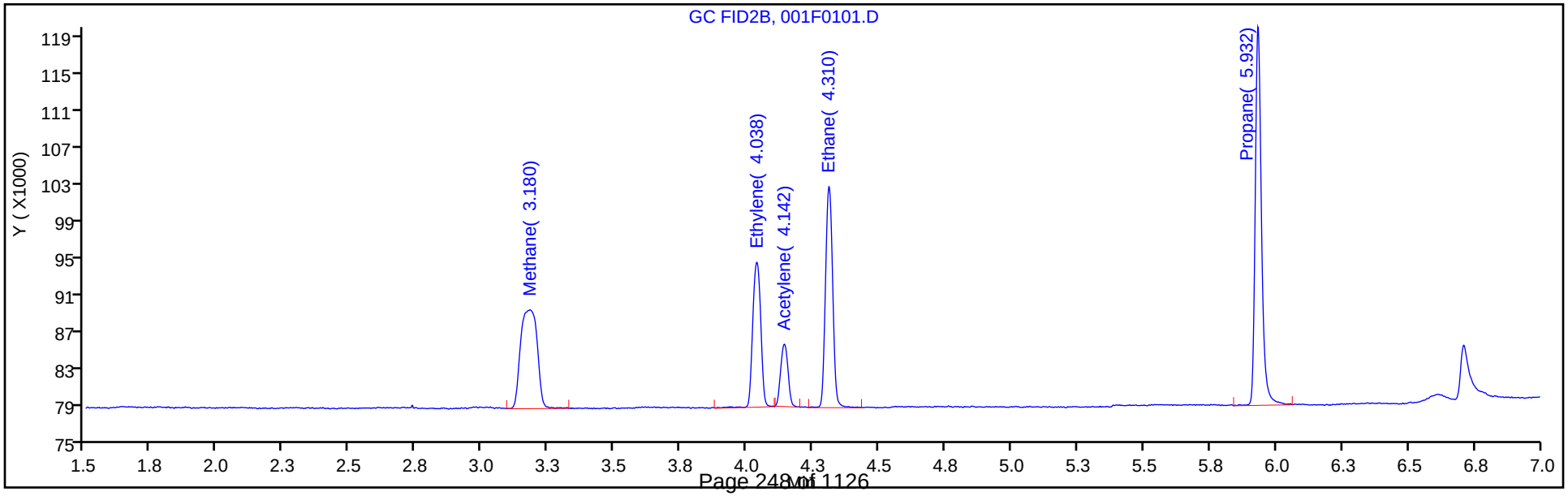
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D				
Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L1			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

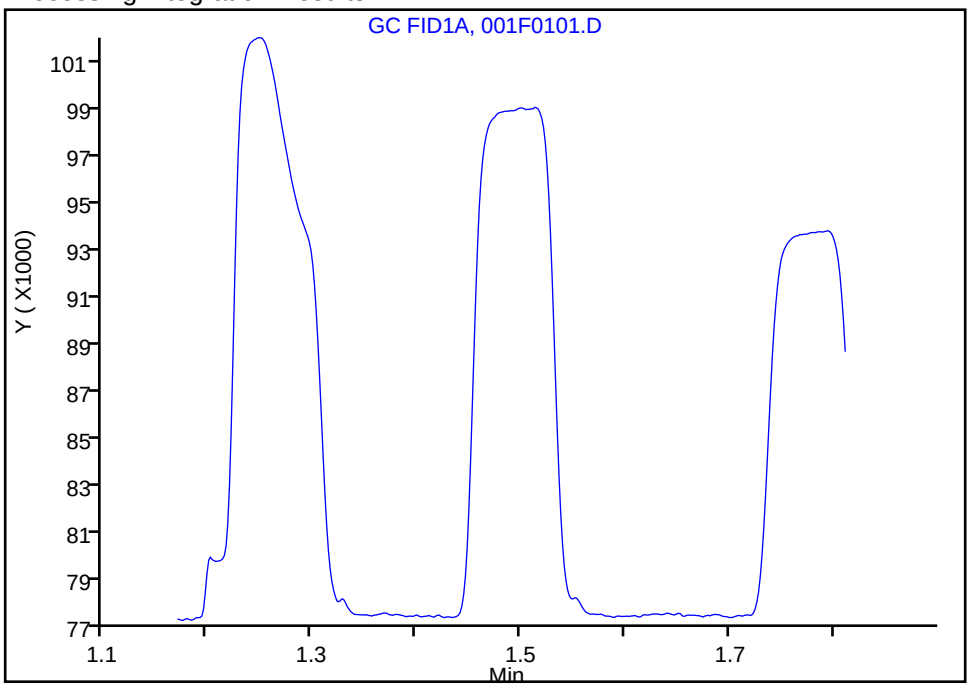
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D				
Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J		
Lims ID:	IC L1				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

3 Ethane, CAS: 74-84-0

Signal: 1

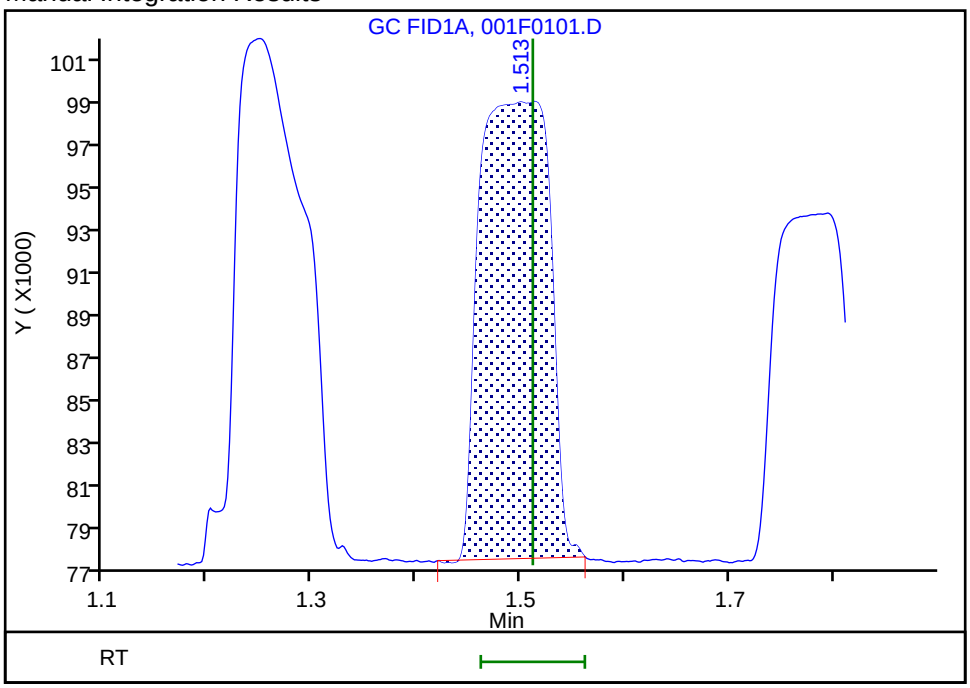
Not Detected
Expected RT: 1.51

Processing Integration Results



Manual Integration Results

RT: 1.51
Area: 99432
Amount: 0.730887
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:37:33
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-May-2020 11:13:34 ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:46 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.251	1.250	0.001	188199	0.9125	0.9699	
2	3.171	3.172	-0.001	83897	0.9125	0.9729	
						RPD = 0.31	
3 Ethane							
1	1.514	1.511	0.003	237424	1.71	1.75	
2	4.306	4.305	0.001	106974	1.71	1.75	
						RPD = 0.39	
4 Ethylene							M
1	1.788	1.793	-0.005	180285	1.60	1.64	
2	4.031	4.032	-0.001	77235	1.60	1.61	M
						RPD = 1.51	
5 Propane							
1	2.534	2.528	0.006	366612	2.51	2.56	
2	5.933	5.928	0.005	156230	2.51	2.49	
						RPD = 2.56	
6 Acetylene							Ma
1	4.044	4.015	0.029	52951	1.48	1.54	a
2	4.136	4.137	-0.001	31554	1.48	1.46	M
						RPD = 5.56	
7 Butane							
1	4.311	4.286	0.025	384054	3.31	3.24	
2	7.381	7.375	0.006	184917	3.31	3.22	
						RPD = 0.55	
8 isobutylene							
1	5.186	5.163	0.023	261296	3.19	2.93	
2	7.231	7.227	0.004	119878	3.19	2.88	
						RPD = 1.46	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

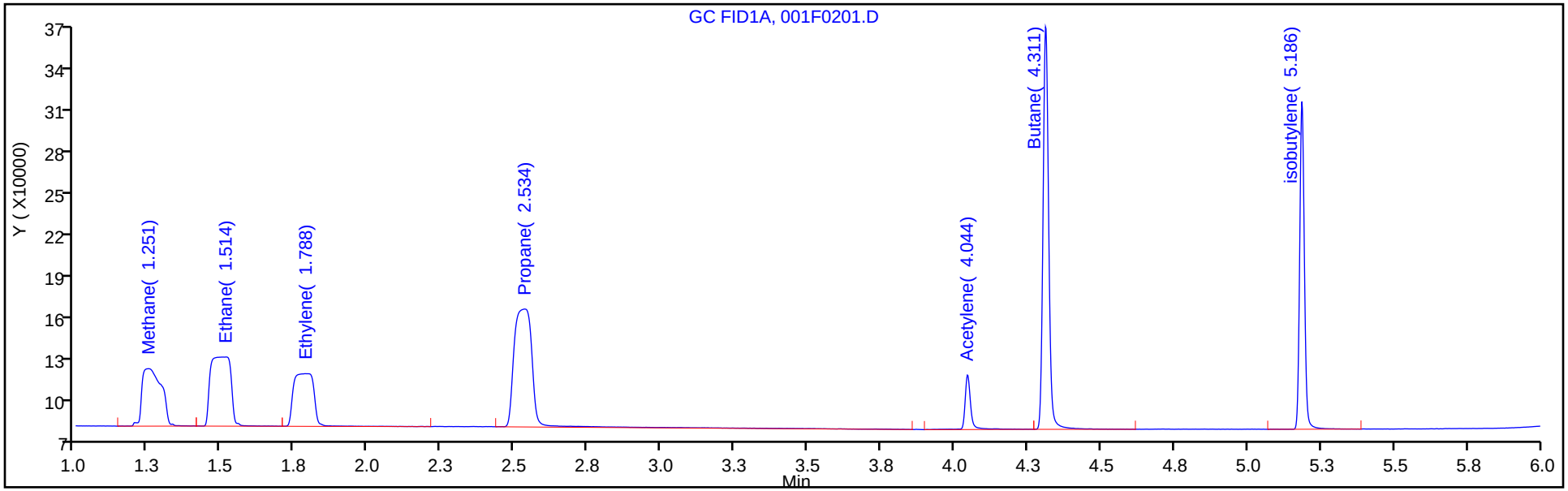
RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

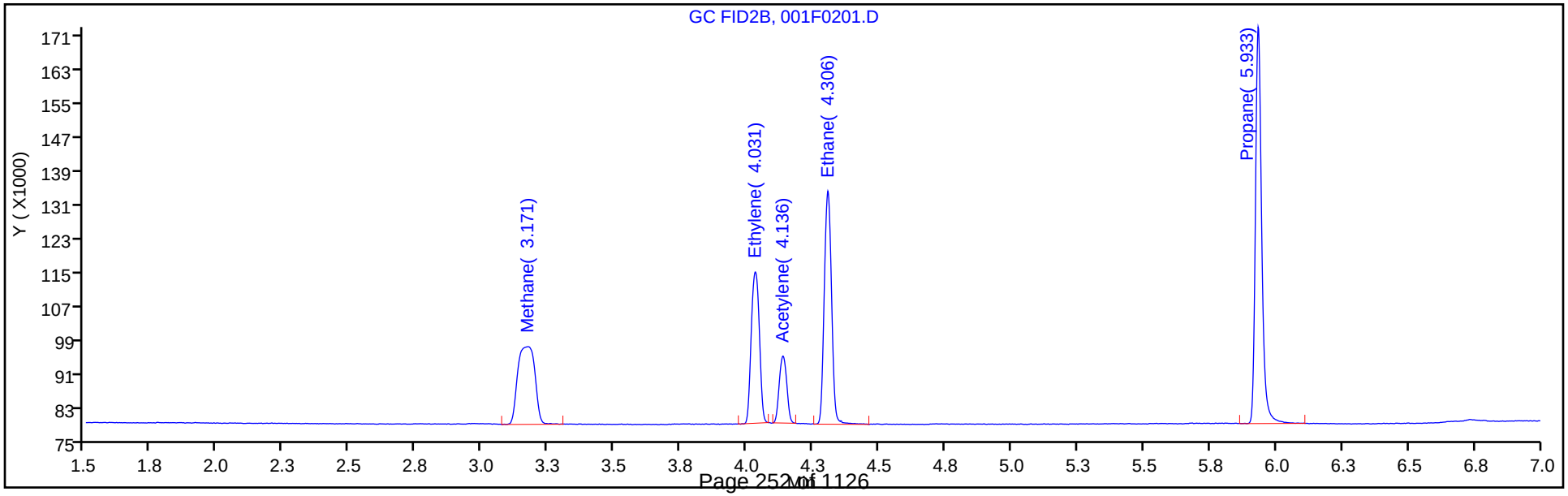
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D				
Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L2			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

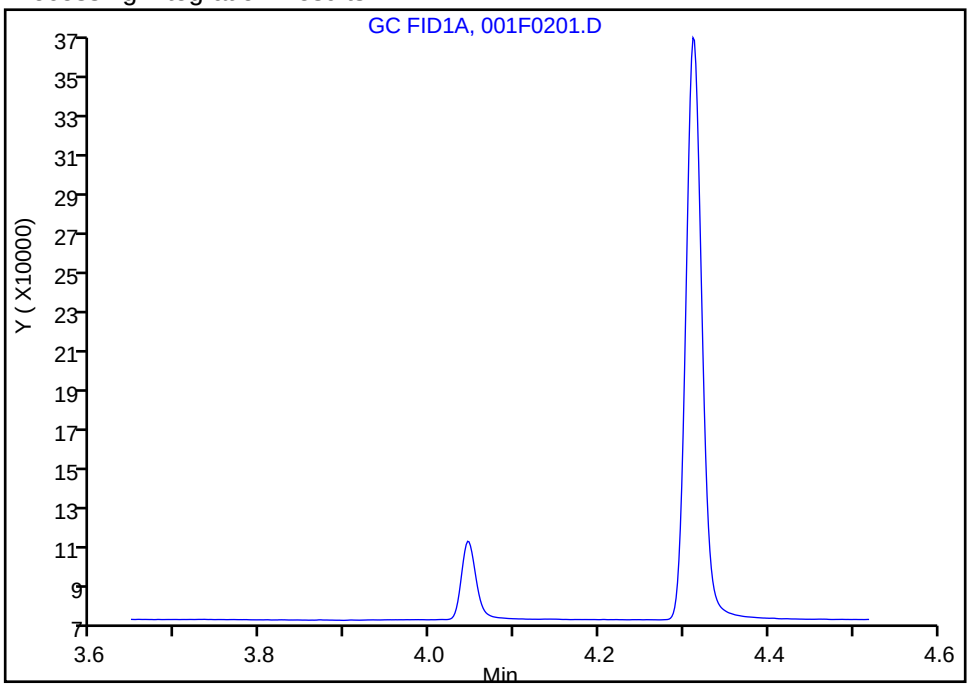
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D				
Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J		
Lims ID:	IC L2				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

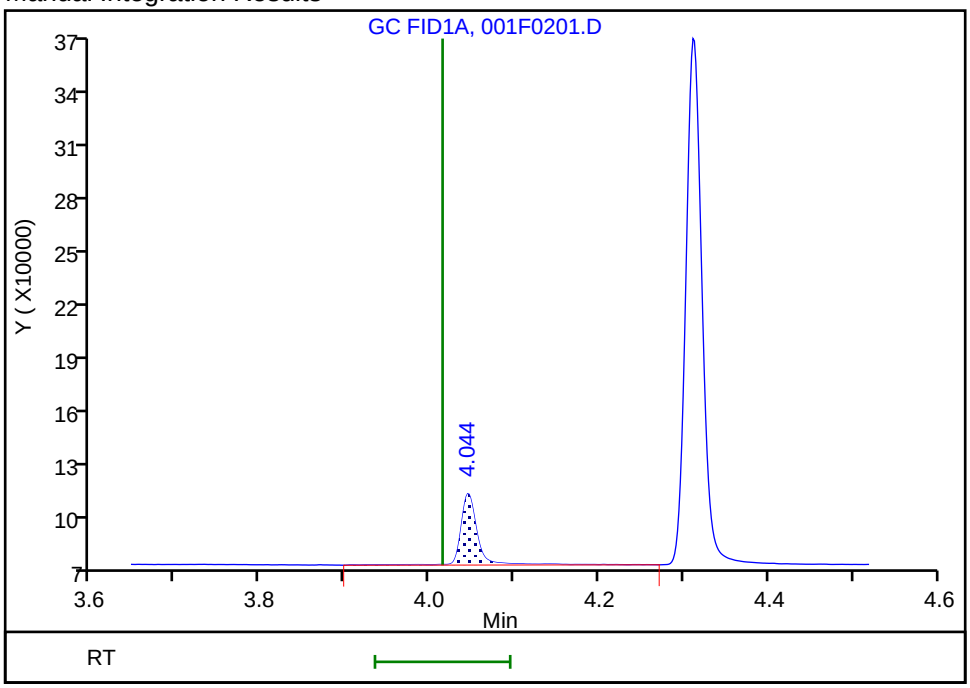
Processing Integration Results

RT: 4.01
Area: 0
Amount: 1.109766
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 52951
Amount: 1.544019
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:43:56

Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-May-2020 11:30:01 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:47 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.248	1.250	-0.002	324614	1.83	1.92	
2	3.169	3.172	-0.003	148689	1.83	1.92	
						RPD = 0.02	
3 Ethane							
1	1.511	1.511	0.000	485411	3.42	3.57	
2	4.306	4.305	0.001	217520	3.42	3.56	
						RPD = 0.15	
4 Ethylene							M
1	1.791	1.793	-0.002	366405	3.19	3.32	
2	4.031	4.032	-0.001	157852	3.19	3.29	M
						RPD = 0.95	
5 Propane							
1	2.531	2.528	0.003	754733	5.02	5.27	
2	5.933	5.928	0.005	326853	5.02	5.22	
						RPD = 0.95	
6 Acetylene							Ma
1	4.043	4.015	0.028	105983	2.96	3.09	a
2	4.136	4.137	-0.001	66161	2.96	3.06	M
						RPD = 0.92	
7 Butane							
1	4.311	4.286	0.025	850630	6.61	6.77	
2	7.379	7.375	0.004	410288	6.61	6.75	
						RPD = 0.31	
8 isobutylene							
1	5.184	5.163	0.021	571566	6.38	6.40	
2	7.229	7.227	0.002	264983	6.38	6.38	
						RPD = 0.42	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

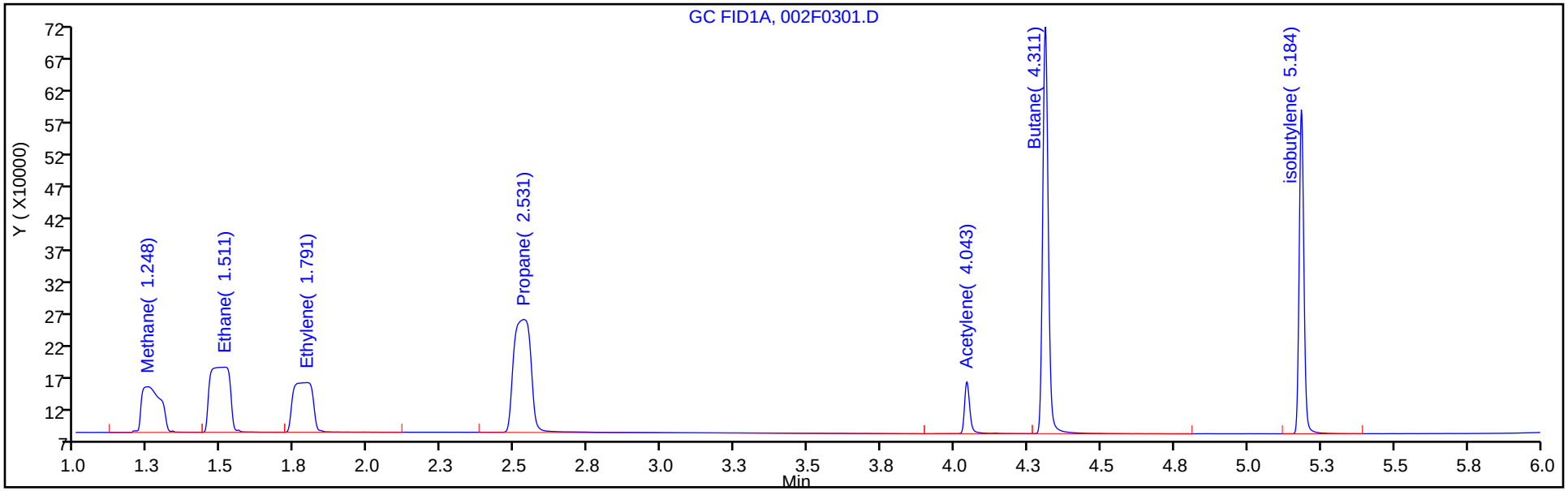
RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

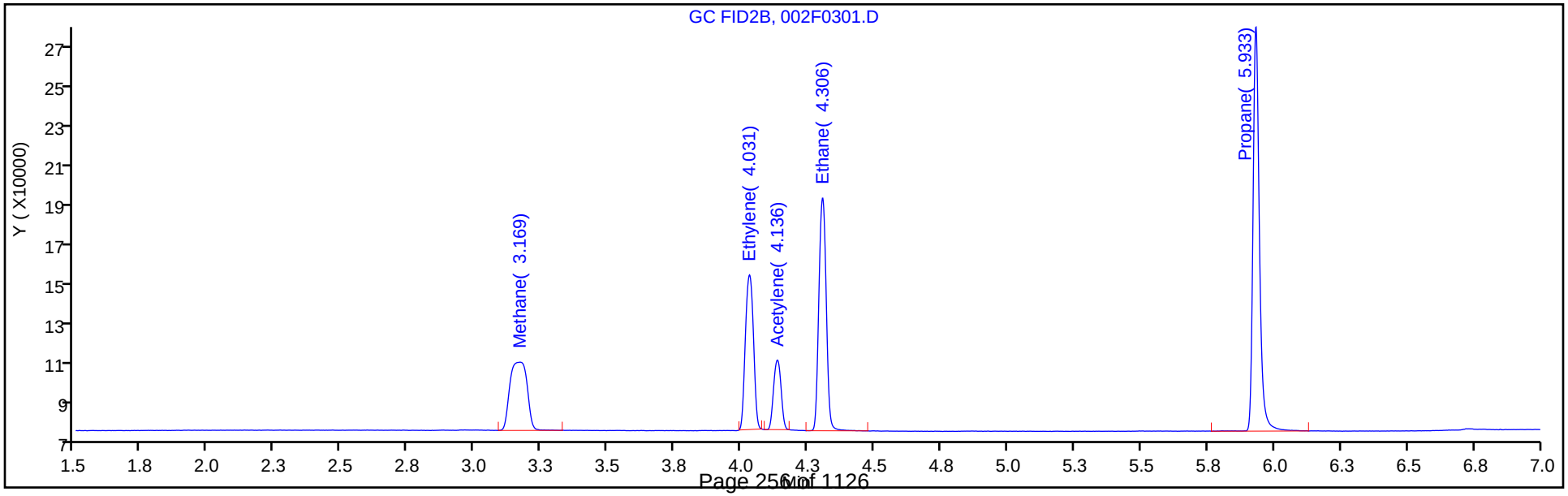
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L3			Worklist Smp#:	8
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

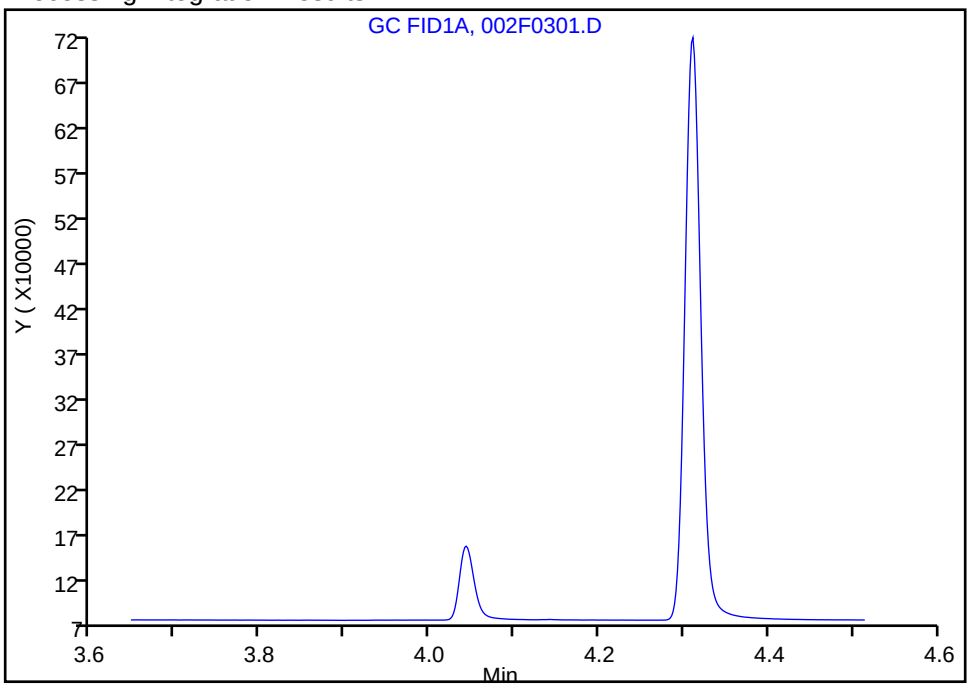
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

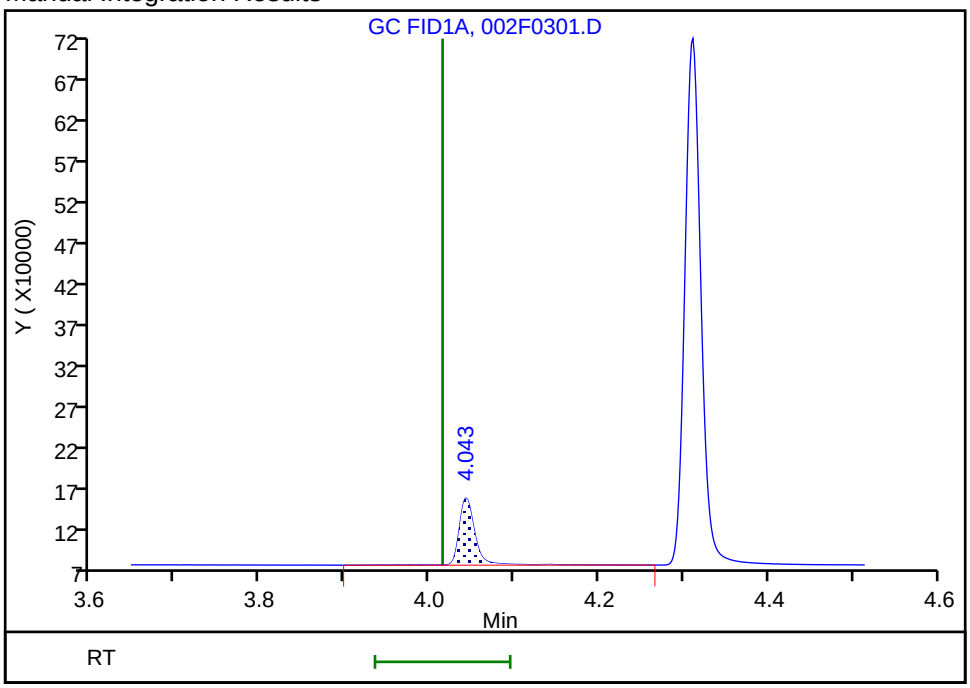
Processing Integration Results

RT: 4.01
Area: 0
Amount: 2.336755
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 105983
Amount: 3.090400
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:45:26
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-May-2020 11:46:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.250	-0.001	2196261	14.6	14.9	
2	3.171	3.172	-0.001	1043265	14.6	15.0	
						RPD = 0.32	
3 Ethane							
1	1.510	1.511	-0.001	3889050	27.4	28.6	
2	4.306	4.305	0.001	1745027	27.4	28.6	
						RPD = 0.02	
4 Ethylene							
1	1.792	1.793	-0.001	2933658	25.5	26.6	
2	4.032	4.032	0.000	1284690	25.5	26.8	
						RPD = 0.69	
5 Propane							
1	2.534	2.528	0.006	5864755	40.1	40.9	
2	5.932	5.928	0.004	2613101	40.1	41.7	
						RPD = 1.89	
6 Acetylene							M
1	4.034	4.015	0.019	837564	23.7	24.4	
2	4.136	4.137	-0.001	545422	23.7	25.2	M
						RPD = 3.31	
7 Butane							
1	4.304	4.286	0.018	6888912	52.9	52.5	
2	7.381	7.375	0.006	3316499	52.9	52.3	
						RPD = 0.43	
8 isobutylene							
1	5.179	5.163	0.016	4611649	51.1	51.7	
2	7.231	7.227	0.004	2147651	51.1	51.7	
						RPD = 0.03	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

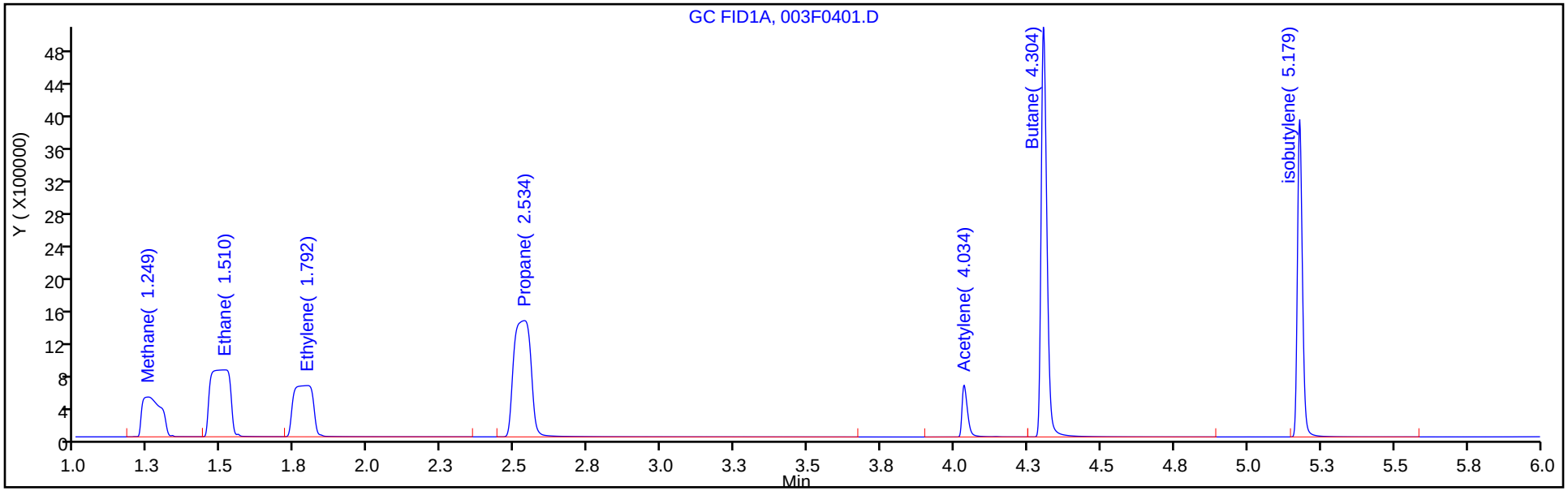
RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

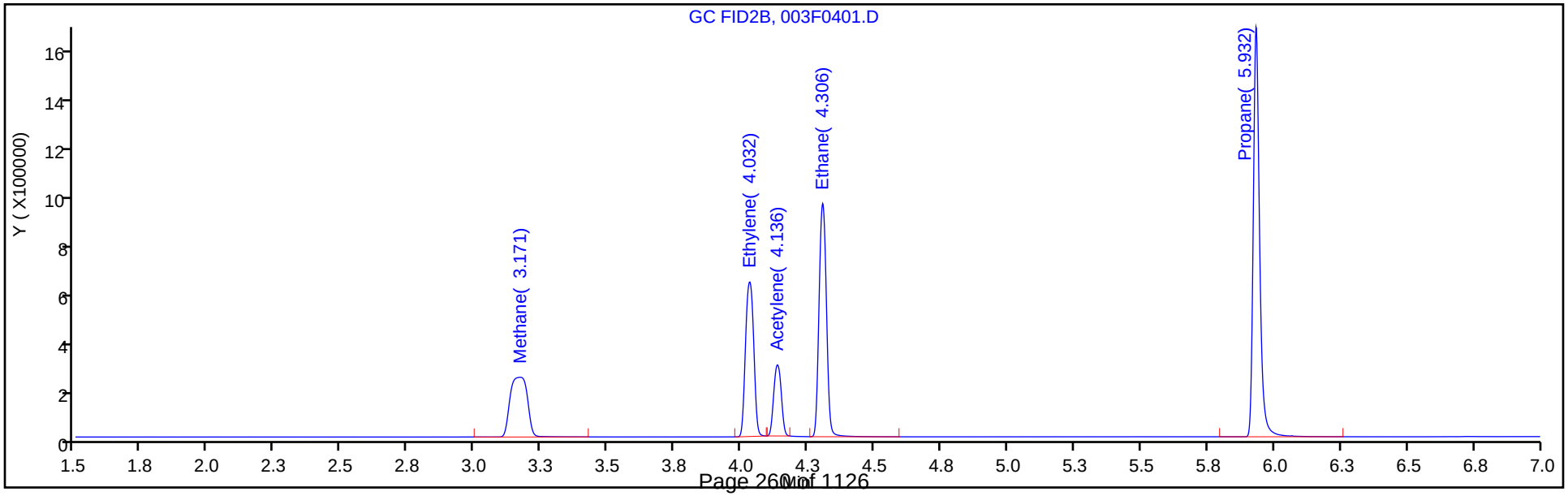
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D				
Injection Date:	16-May-2020 11:46:30	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L4			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D
Lims ID: ICRT L5
Client ID:
Sample Type: ICRT Calib Level: 5
Inject. Date: 16-May-2020 12:02:59 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT 5
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	10173489	73.0	70.4	
2	3.172	3.172	0.000	4836394	73.0	70.4	
						RPD = 0.05	
3 Ethane							
1	1.511	1.511	0.000	18547040	136.9	136.3	
2	4.305	4.305	0.000	8282362	136.9	135.7	
						RPD = 0.50	
4 Ethylene							M
1	1.793	1.793	0.000	14030935	127.7	127.3	
2	4.032	4.032	0.000	6120221	127.7	127.7	M
						RPD = 0.29	
5 Propane							
1	2.528	2.528	0.000	28325635	200.7	197.7	
2	5.928	5.928	0.000	12604888	200.7	201.3	
						RPD = 1.77	
6 Acetylene							Ma
1	4.015	4.015	0.000	3792795	118.5	110.6	M
2	4.137	4.137	0.000	2629705	118.5	121.7	M
						RPD = 9.57	
7 Butane							Ma
1	4.286	4.286	0.000	34343170	264.5	260.4	M
2	7.375	7.375	0.000	16648646	264.5	261.1	a
						RPD = 0.27	
8 isobutylene							
1	5.163	5.163	0.000	23123734	255.4	259.0	
2	7.227	7.227	0.000	10785387	255.4	259.5	
						RPD = 0.19	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

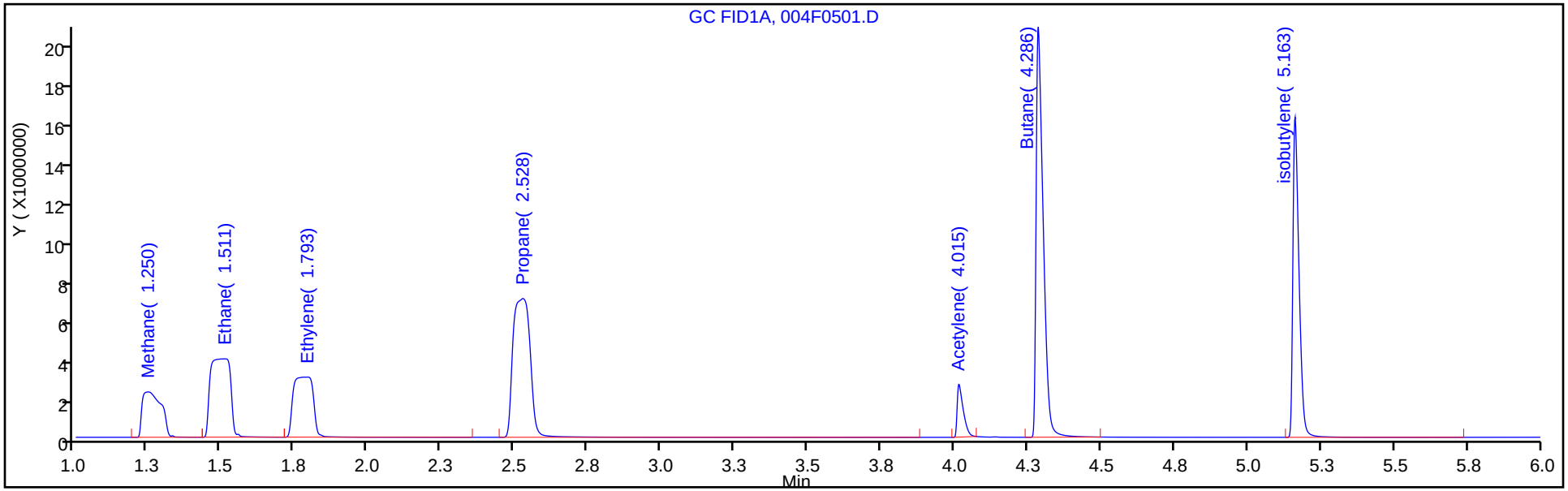
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

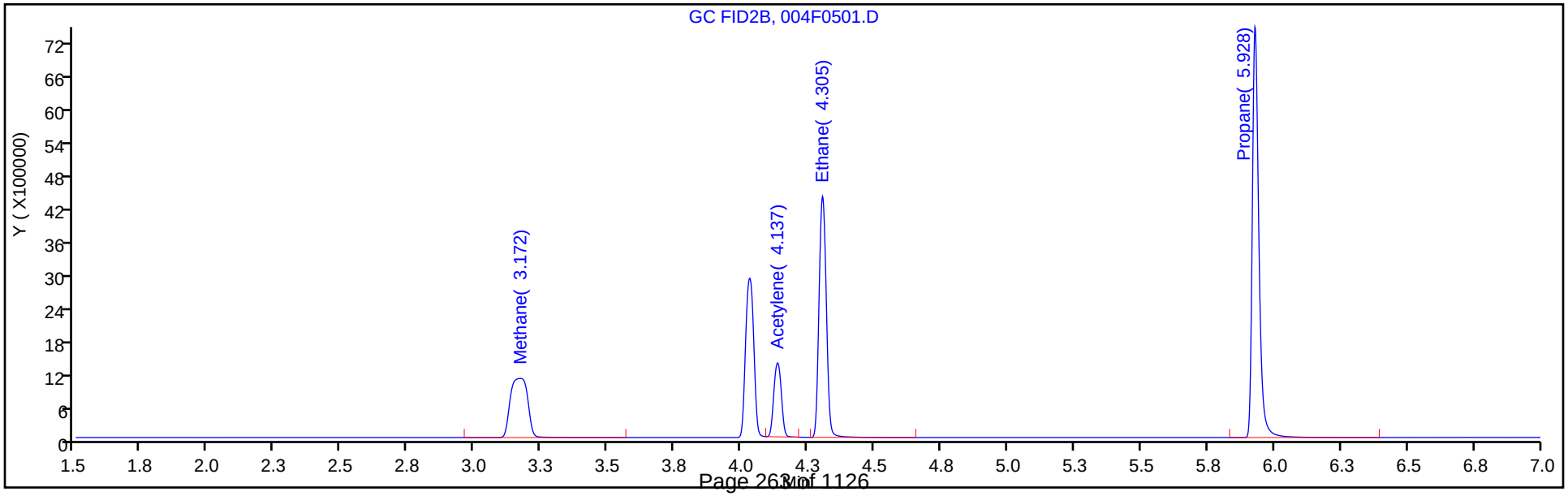
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	ICRT L5			Worklist Smp#:	10
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

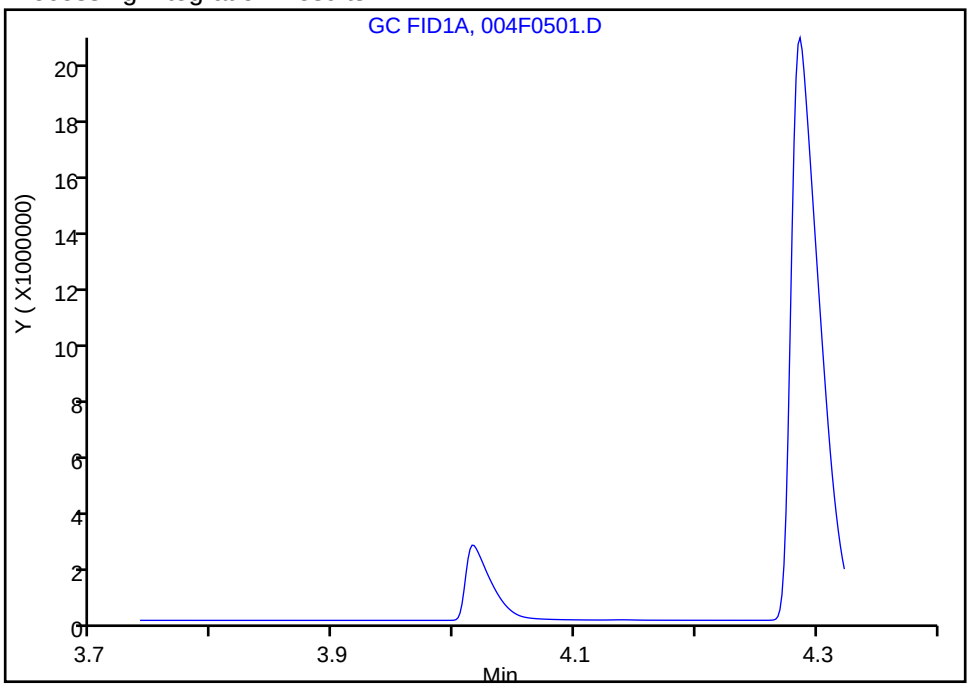
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

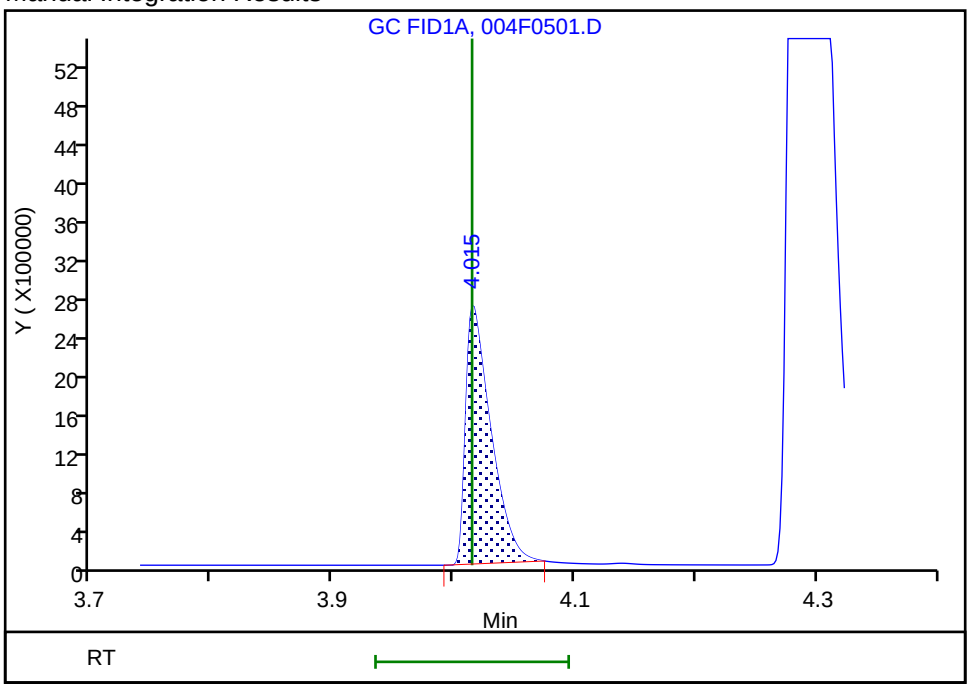
Processing Integration Results

RT: 4.01
Area: 0
Amount: 70.054658
Amount Units: ug/l



Manual Integration Results

RT: 4.01
Area: 3792795
Amount: 110.5956
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:07:53
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-May-2020 12:19:27 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:49 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	21349465	146.0	148.2	
2	3.172	3.172	0.000	10129316	146.0	147.7	
						RPD = 0.31	
3 Ethane							
1	1.512	1.511	0.001	38849075	273.7	285.6	
2	4.306	4.305	0.001	17331467	273.7	283.9	
						RPD = 0.60	
4 Ethylene							
1	1.785	1.793	-0.008	29199476	255.3	264.9	
2	4.032	4.032	0.000	12731776	255.3	265.6	
						RPD = 0.26	
5 Propane							
1	2.522	2.528	-0.006	59231481	401.4	413.5	
2	5.926	5.928	-0.002	26366224	401.4	421.0	
						RPD = 1.80	
6 Acetylene							M
1	4.002	4.015	-0.013	8293493	237.0	241.8	
2	4.137	4.137	0.000	5438964	237.0	251.7	M
						RPD = 4.01	
7 Butane							
1	4.270	4.286	-0.016	71750490	529.0	543.6	
2	7.369	7.375	-0.006	34602301	529.0	542.3	
						RPD = 0.25	
8 isobutylene							Ma
1	5.150	5.163	-0.013	47351348	510.8	530.4	M
2	7.222	7.227	-0.005	22287396	510.8	536.3	a
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

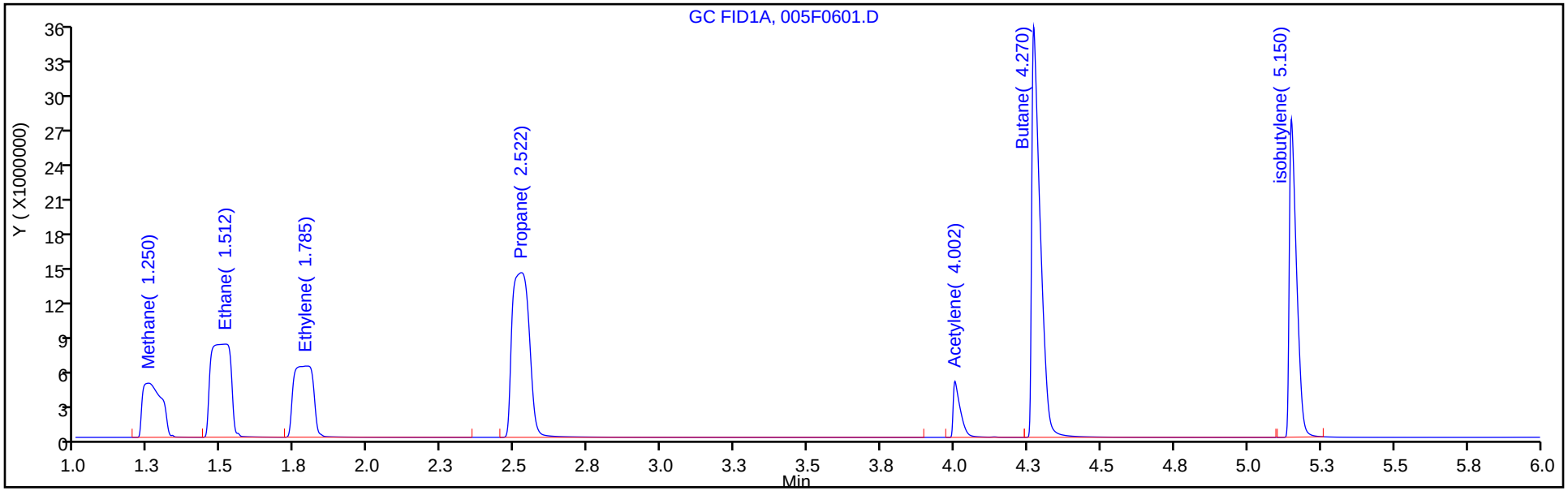
RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

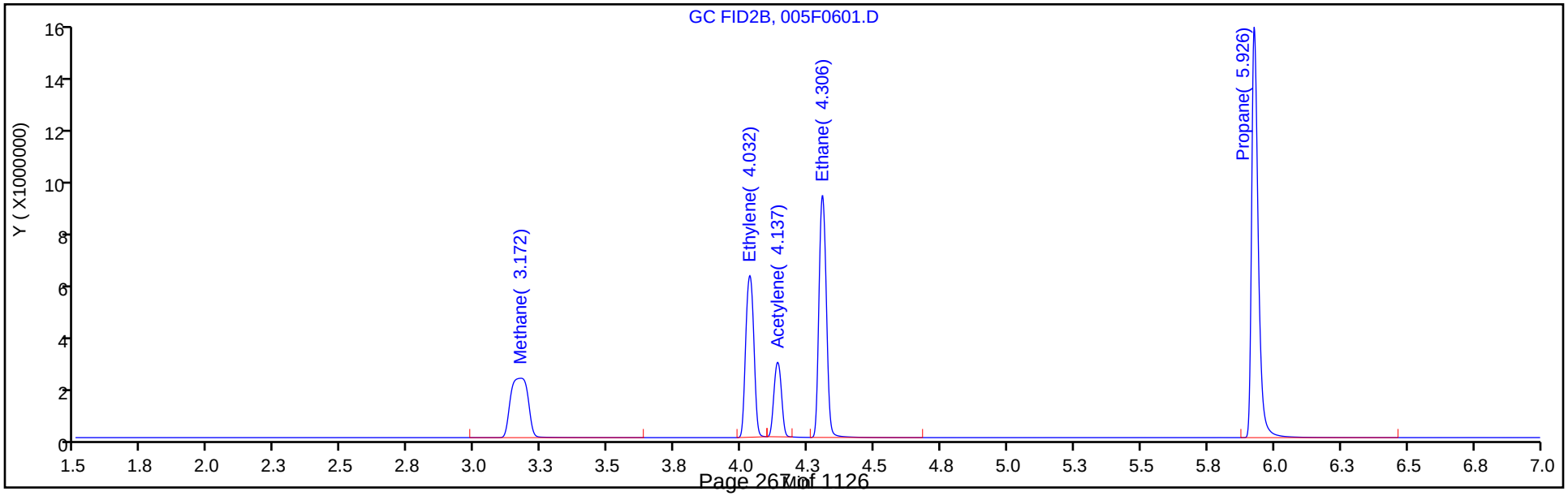
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D				
Injection Date:	16-May-2020 12:19:27	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L6			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-May-2020 12:35:56 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:49 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.243	1.250	-0.007	40706597	292.0	282.9	
2	3.168	3.172	-0.004	19242711	292.0	280.9	
						RPD = 0.71	
3 Ethane							
1	1.508	1.511	-0.003	74364849	547.4	546.6	
2	4.302	4.305	-0.003	33180606	547.4	543.4	
						RPD = 0.58	
4 Ethylene							
1	1.785	1.793	-0.008	55873290	510.7	507.0	
2	4.028	4.032	-0.004	24365732	510.7	508.3	
						RPD = 0.27	
5 Propane							
1	2.510	2.528	-0.018	113846992	802.8	794.7	
2	5.920	5.928	-0.008	50751227	802.8	810.3	
						RPD = 1.94	
6 Acetylene							M
1	3.983	4.015	-0.032	15971476	474.1	465.7	
2	4.135	4.137	-0.002	10316086	474.1	477.5	M
						RPD = 2.49	
7 Butane							
1	4.250	4.286	-0.036	137944774	1058.1	1044.9	
2	7.362	7.375	-0.013	67311032	1058.1	1054.6	
						RPD = 0.92	
8 isobutylene							
1	5.133	5.163	-0.030	92637372	1021.5	1037.7	
2	7.217	7.227	-0.010	43289193	1021.5	1041.6	
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D

Injection Date: 16-May-2020 12:35:56 Instrument ID: VGC_J Operator ID: MEIERG

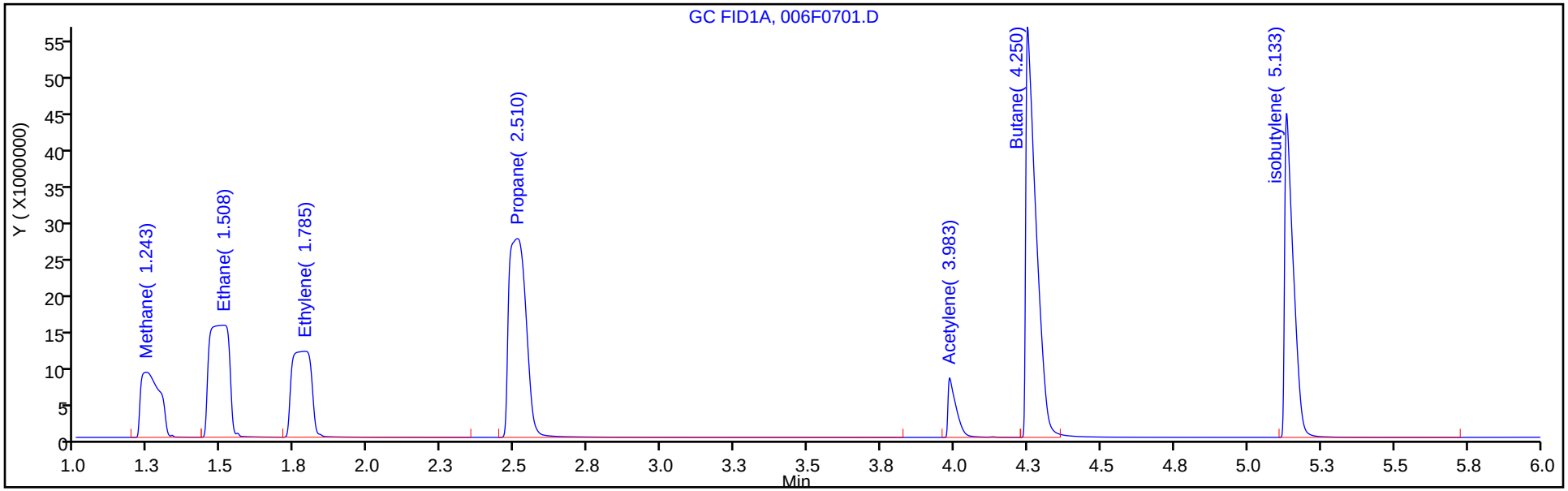
Lims ID: IC L7 Worklist Smp#: 12

Client ID:

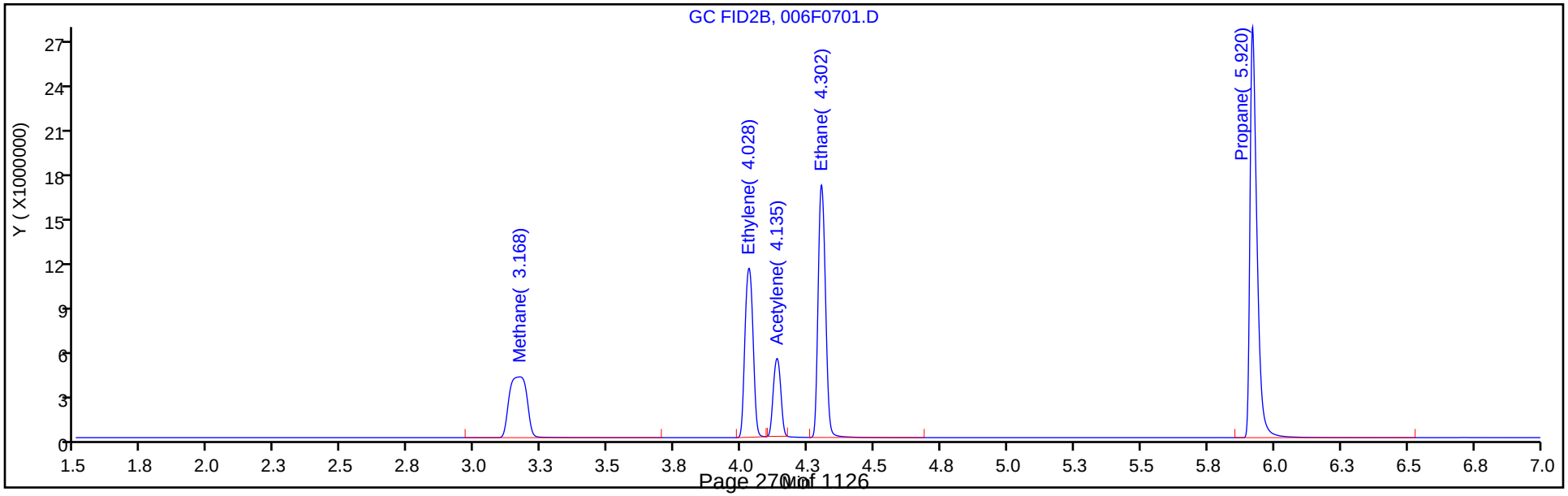
Purge Vol: 18.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: RSK_J Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D				
Lims ID:	IC L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	16-May-2020 12:52:27	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC 8				
Operator ID:	MEIERG	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	17-May-2020 08:59:50	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0312				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.248	1.250	-0.002	256592942	1806.9	1784.9	
2	3.168	3.172	-0.004	121745624	1806.9	1778.4	
						RPD = 0.36	

Reagents:

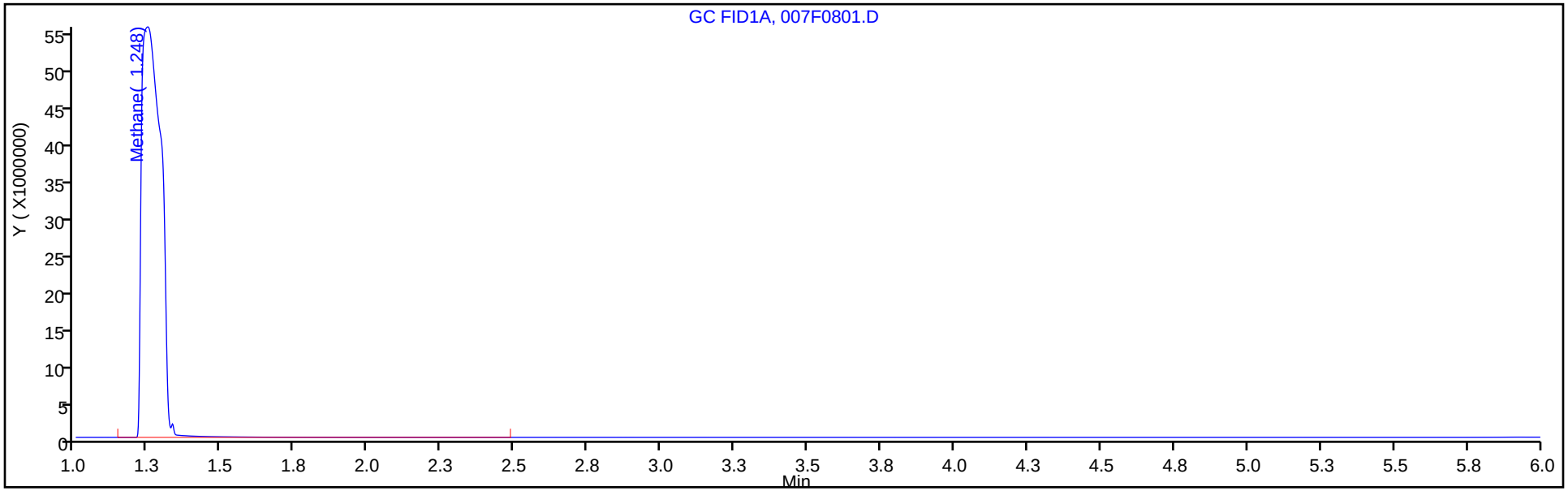
RSK175methane_00010 Amount Added: 50.00 Units: uL

Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

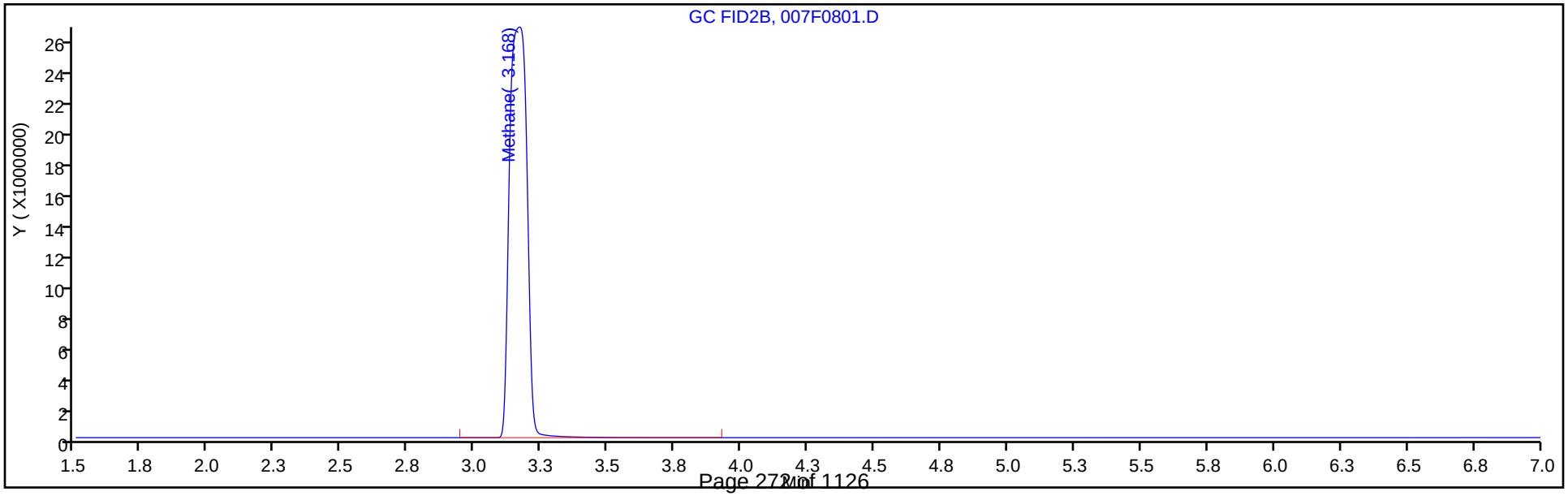
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D				
Injection Date:	16-May-2020 12:52:27	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L8			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Lims ID:	IC L9				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	16-May-2020 13:08:56	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC 9				
Operator ID:	MEIERG	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	17-May-2020 08:59:50	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0312				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.245	1.250	-0.005	1008615918	7227.8	7016.9	
2	3.160	3.172	-0.012	484781088	7227.8	7082.2	
						RPD = 0.93	

Reagents:

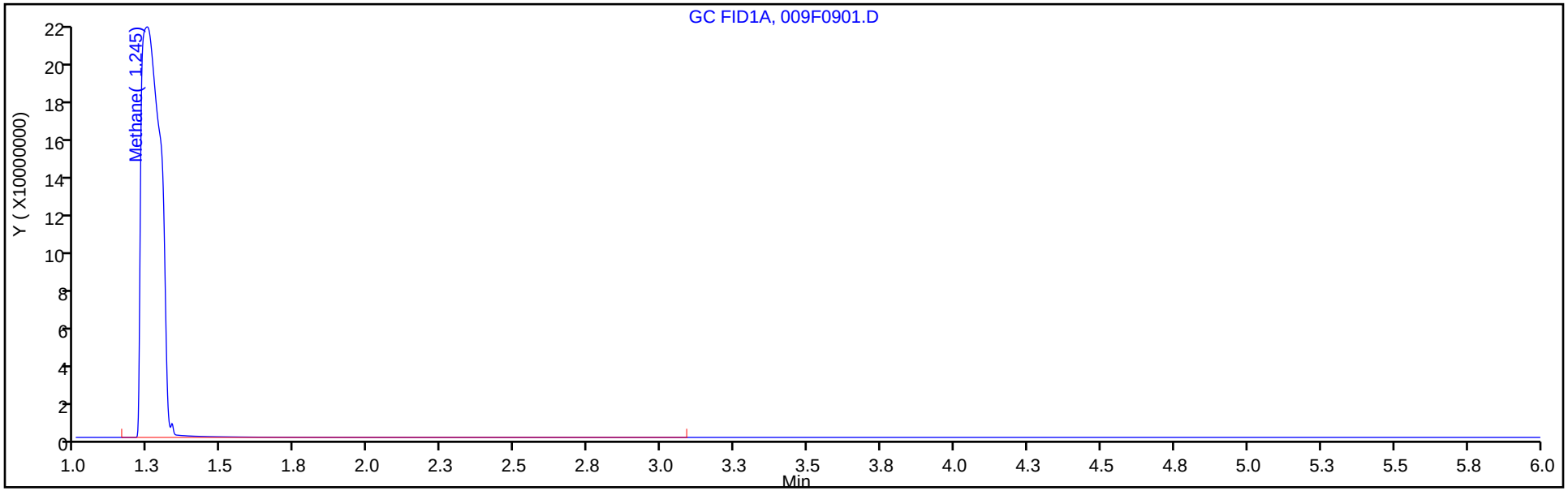
RSK175methane_00010 Amount Added: 200.00 Units: uL

Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

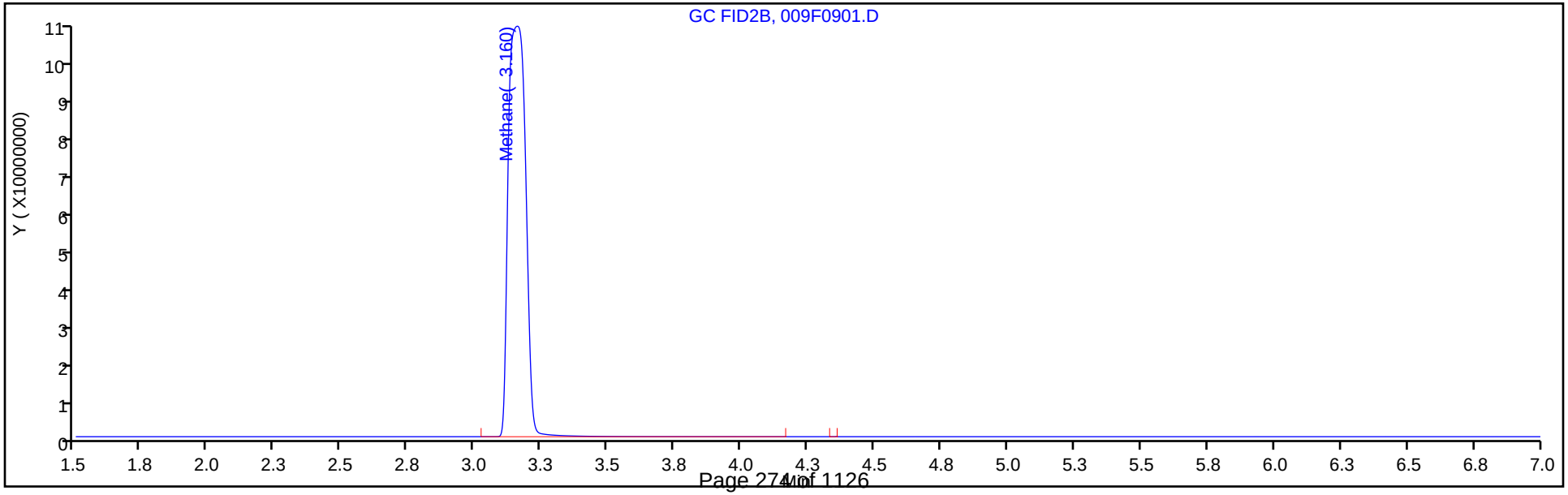
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Injection Date:	16-May-2020 13:08:56	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L9			Worklist Smp#:	14
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Methane	3.180	3.171	3.169	3.171	3.172	3.172	3.168	3.168	3.160		3.132 - 3.212	3.170
Ethylene	4.038	4.031	4.031	4.032	4.032	4.032	4.028				3.982 - 4.082	4.032
Acetylene	4.142	4.136	4.136	4.136	4.137	4.137	4.135				4.057 - 4.217	4.137
Ethane	4.310	4.306	4.306	4.306	4.305	4.306	4.302				4.255 - 4.355	4.306

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Methane	103189 66249 67072	91938 69376	81470 65897	71453 67377	Lin2	17305.4468	68448.1220							0.9980		0.9900
Ethylene	41850 47939	48398 49863	49458 47714	50314	Ave		47933.7023				6.0		20.0			
Acetylene	17710 22187	21298 22945	22329 21760	23009	Ave		21605.4944				8.4		20.0			
Ethane	53080 60519	62532 63320	63577 60612	63754	Ave		61056.4722				6.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 495152

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/16/2020 10:57 Calibration End Date: 05/16/2020 13:08 Calibration ID: 44286

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-495152/6	001F0101.D
Level 2	IC 280-495152/7	001F0201.D
Level 3	IC 280-495152/8	002F0301.D
Level 4	IC 280-495152/9	003F0401.D
Level 5	ICRT 280-495152/10	004F0501.D
Level 6	IC 280-495152/11	005F0601.D
Level 7	IC 280-495152/12	006F0701.D
Level 8	IC 280-495152/13	007F0801.D
Level 9	IC 280-495152/14	009F0901.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methane	Lin2	47082 10129316	83897 19242711	148689 121745624	1043265 484781088	4836394	0.456 146	0.913 292	1.83 1807	14.6 7228	73.0
Ethylene	Ave	33393 12731776	77235 24365732	157852	1284690	6120221	0.798 255	1.60 511	3.19	25.5	128
Acetylene	Ave	13119 5438964	31554 10316086	66161	545422	2629705	0.741 237	1.48 474	2.96	23.7	119
Ethane	Ave	45402 17331467	106974 33180606	217520	1745027	8282362	0.855 274	1.71 547	3.42	27.4	137

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-May-2020 10:57:08 ALS Bottle#: 1 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 1
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:46 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	111434	0.4563	0.4358	
2	3.180	3.172	0.008	47082	0.4563	0.4350	
						RPD = 0.19	
3 Ethane							Ma
1	1.513	1.511	0.002	99432	0.8553	0.7309	M
2	4.310	4.305	0.005	45402	0.8553	0.7436	a
						RPD = 1.73	
4 Ethylene							
1	1.795	1.793	0.002	75924	0.7979	0.6889	
2	4.038	4.032	0.006	33393	0.7979	0.6966	
						RPD = 1.12	
5 Propane							
1	2.535	2.528	0.007	162619	1.25	1.14	
2	5.932	5.928	0.004	68003	1.25	1.09	
						RPD = 4.45	
6 Acetylene							M
1	4.048	4.015	0.033	24105	0.7408	0.7029	
2	4.142	4.137	0.005	13119	0.7408	0.6072	M
						RPD = 14.61	
7 Butane							Ma
1	4.315	4.286	0.029	175523	1.65	1.66	M
2	7.382	7.375	0.007	85626	1.65	1.67	a
						RPD = 0.36	
8 isobutylene							
1	5.190	5.163	0.027	120280	1.60	1.35	
2	7.232	7.227	0.005	54094	1.60	1.30	
						RPD = 3.46	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

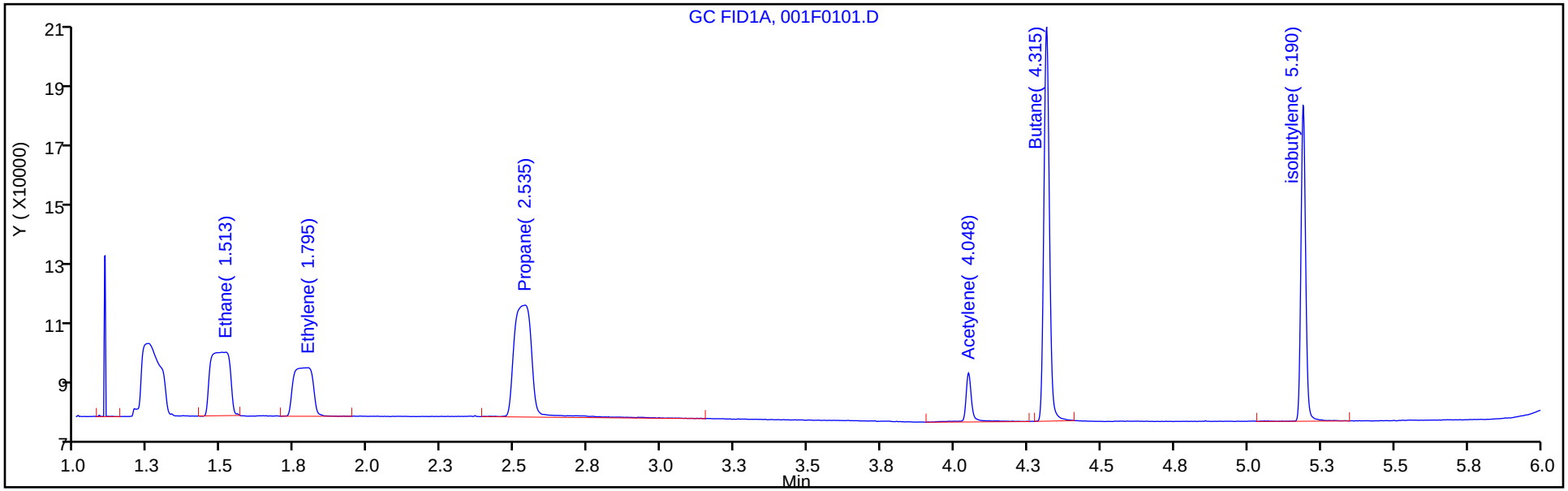
RSK7gasMathes_00031 Amount Added: 1.25 Units: uL

Report Date: 17-May-2020 08:59:46 Chrom Revision: 2.3 05-May-2020 17:48:18

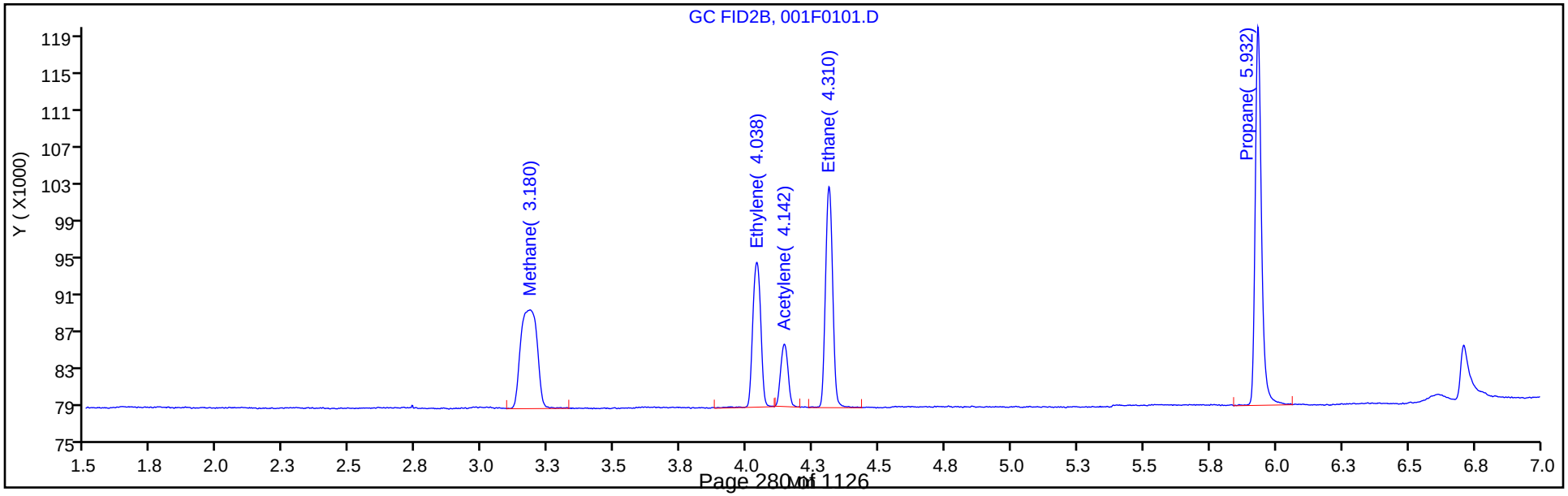
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D				
Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L1			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

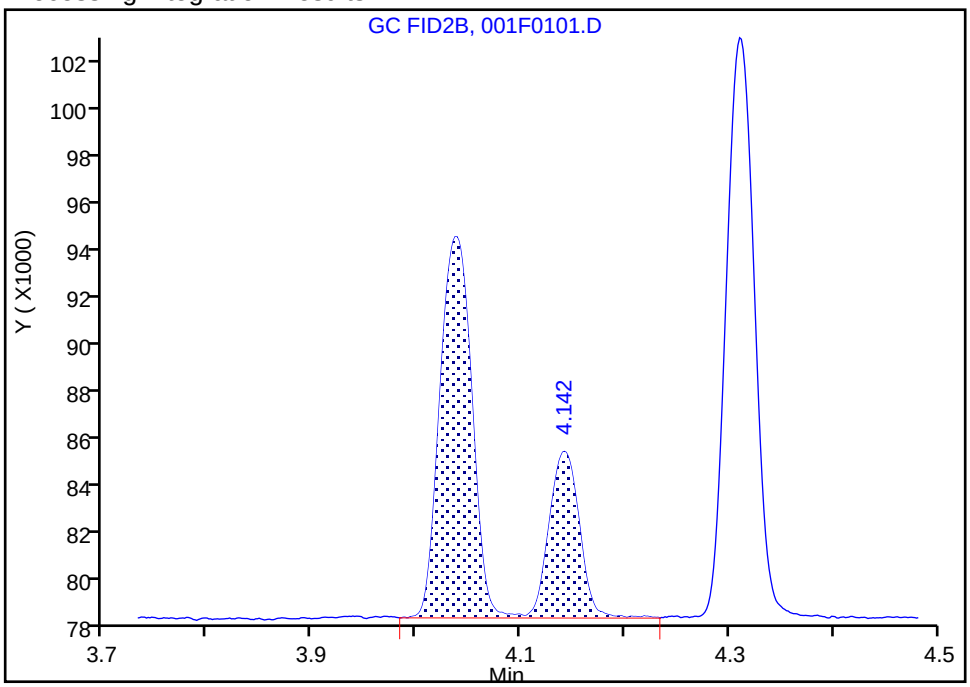
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D				
Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J		
Lims ID:	IC L1				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

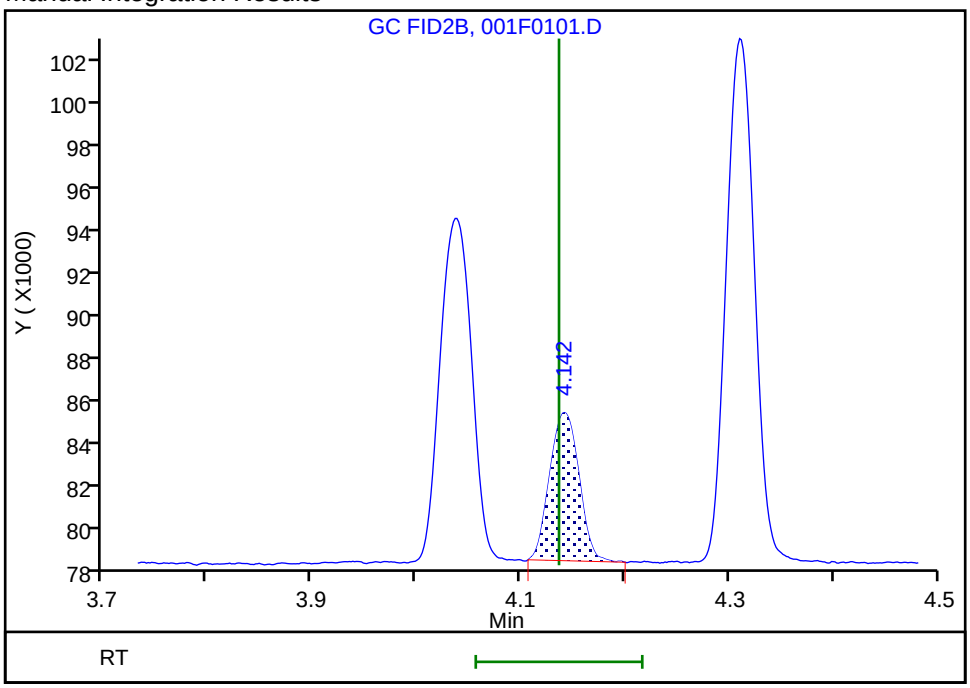
Processing Integration Results

RT: 4.14
Area: 47095
Amount: 1.672538
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 13119
Amount: 0.607207
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:19:02

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

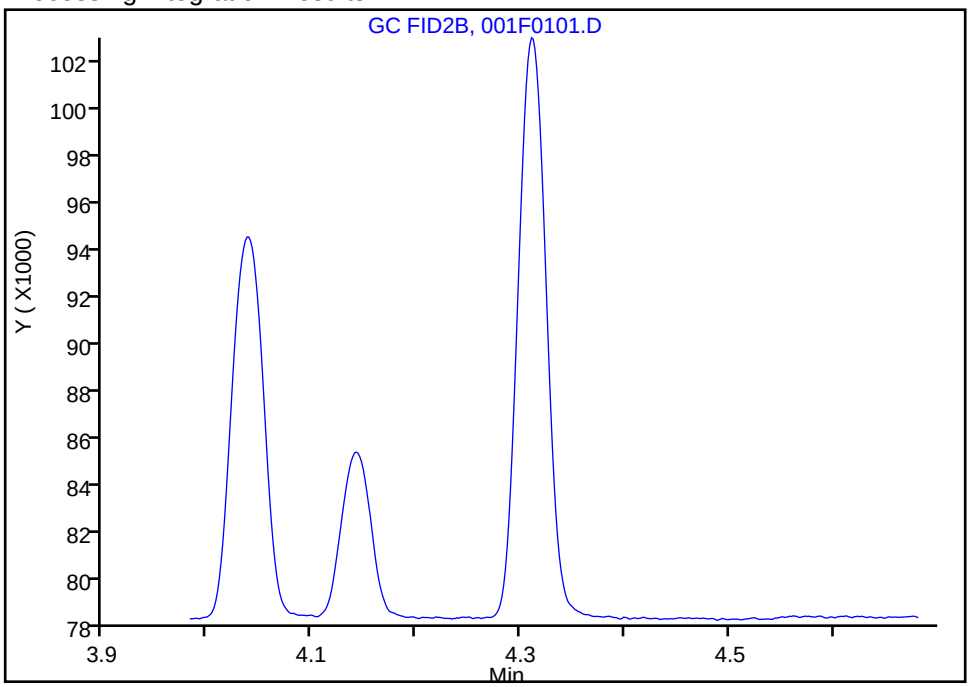
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0101.D				
Injection Date:	16-May-2020 10:57:08	Instrument ID:	VGC_J		
Lims ID:	IC L1				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

3 Ethane, CAS: 74-84-0

Signal: 2

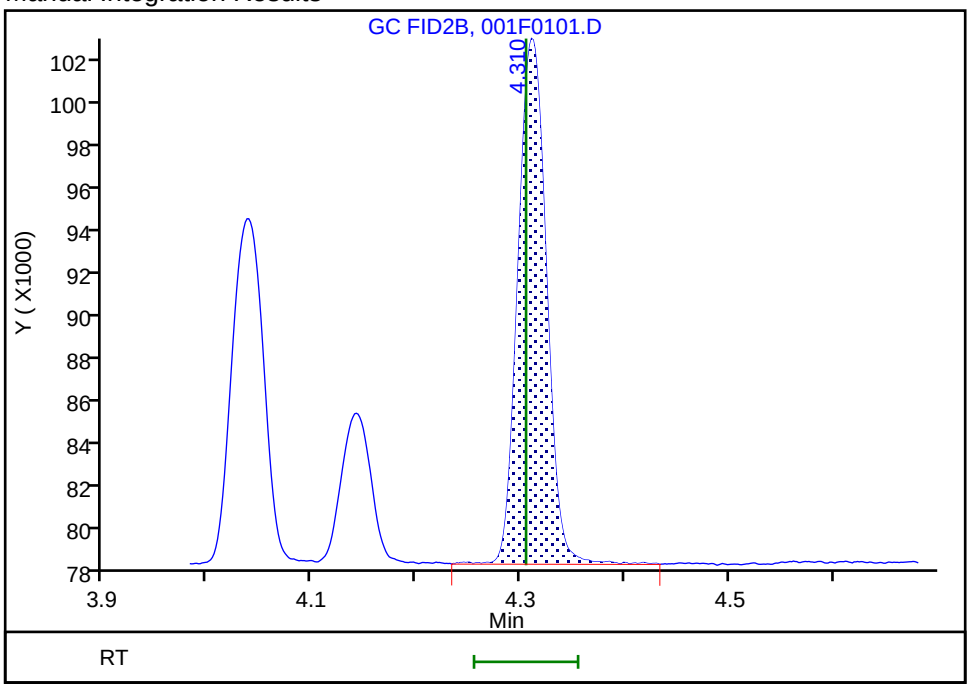
Processing Integration Results

Not Detected
Expected RT: 4.30



Manual Integration Results

RT: 4.31
Area: 45402
Amount: 0.743607
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:37:15
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-May-2020 11:13:34 ALS Bottle#: 1 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:46 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.251	1.250	0.001	188199	0.9125	0.9699	
2	3.171	3.172	-0.001	83897	0.9125	0.9729	
						RPD = 0.31	
3 Ethane							
1	1.514	1.511	0.003	237424	1.71	1.75	
2	4.306	4.305	0.001	106974	1.71	1.75	
						RPD = 0.39	
4 Ethylene							M
1	1.788	1.793	-0.005	180285	1.60	1.64	
2	4.031	4.032	-0.001	77235	1.60	1.61	M
						RPD = 1.51	
5 Propane							
1	2.534	2.528	0.006	366612	2.51	2.56	
2	5.933	5.928	0.005	156230	2.51	2.49	
						RPD = 2.56	
6 Acetylene							Ma
1	4.044	4.015	0.029	52951	1.48	1.54	a
2	4.136	4.137	-0.001	31554	1.48	1.46	M
						RPD = 5.56	
7 Butane							
1	4.311	4.286	0.025	384054	3.31	3.24	
2	7.381	7.375	0.006	184917	3.31	3.22	
						RPD = 0.55	
8 isobutylene							
1	5.186	5.163	0.023	261296	3.19	2.93	
2	7.231	7.227	0.004	119878	3.19	2.88	
						RPD = 1.46	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

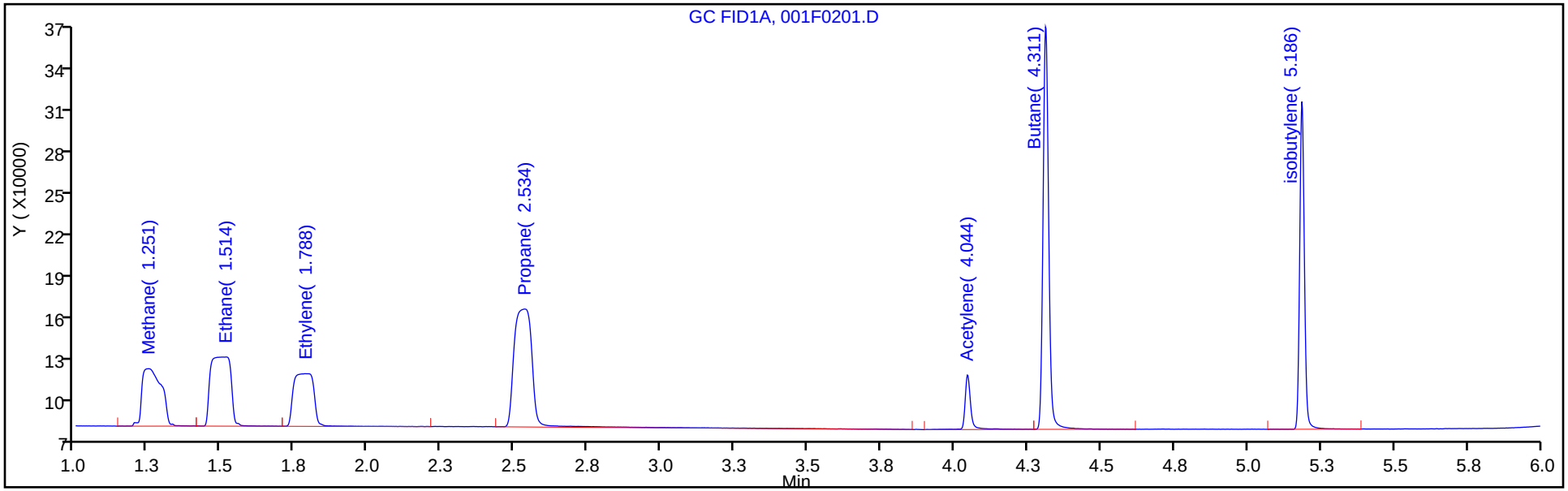
RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

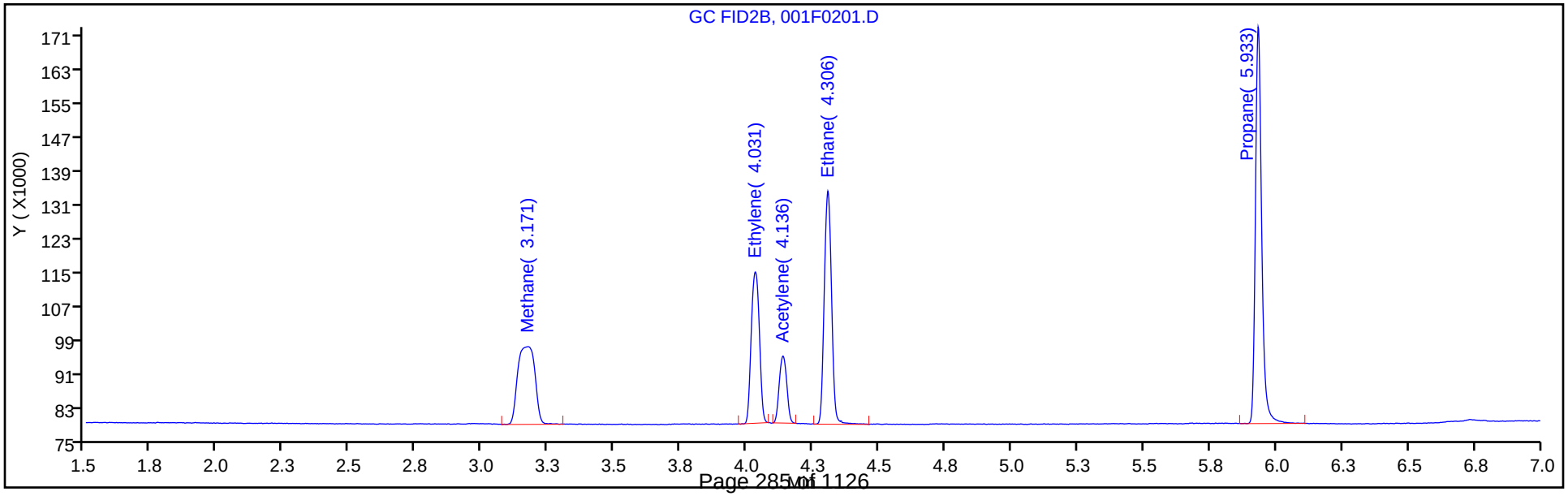
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D				
Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L2			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

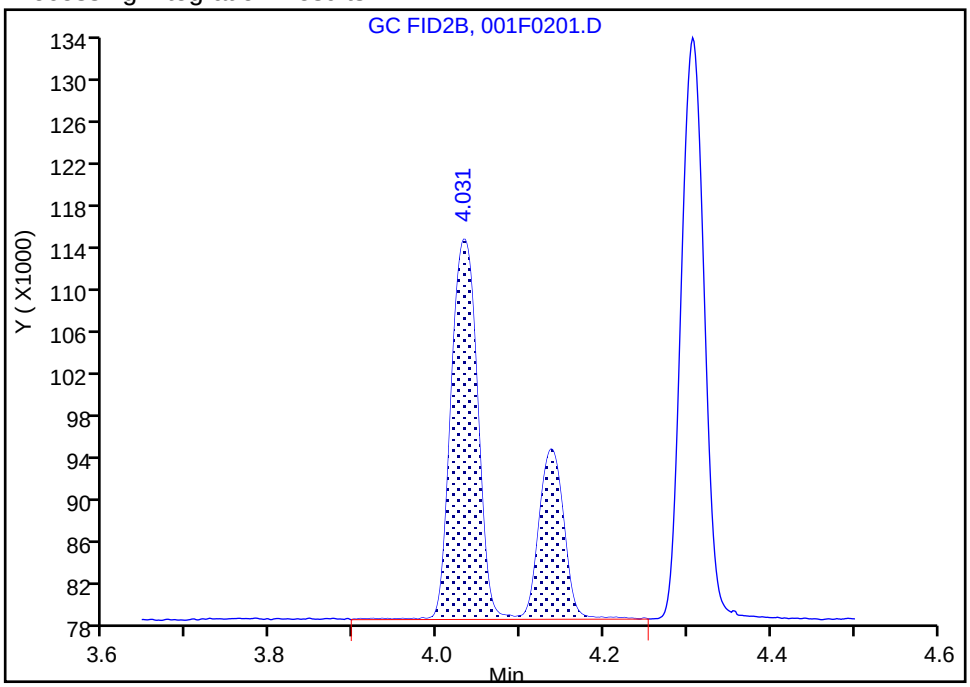
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D				
Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J		
Lims ID:	IC L2				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

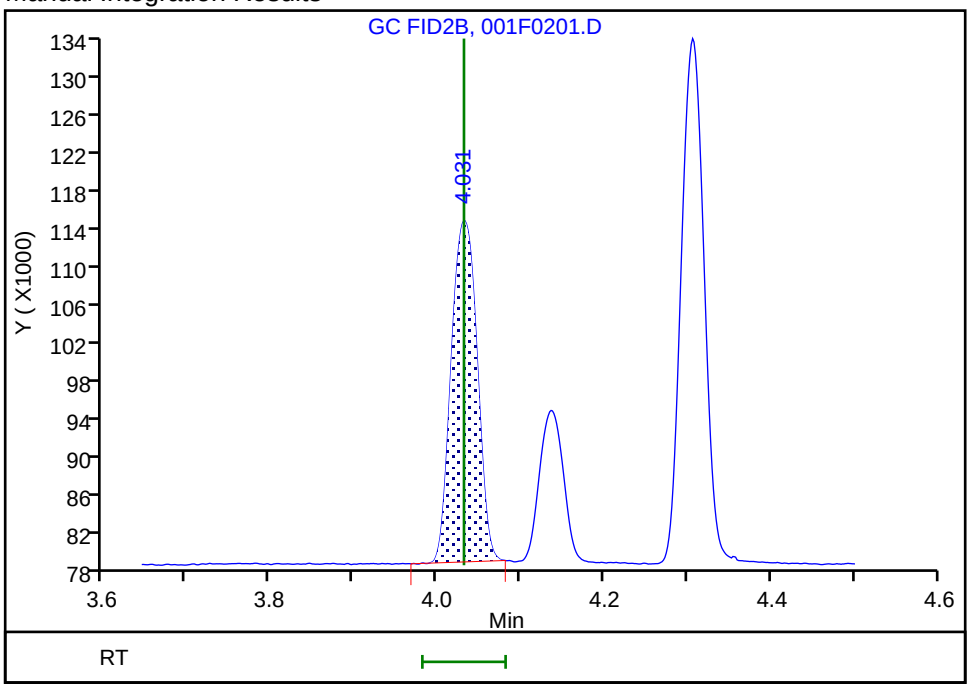
Processing Integration Results

RT: 4.03
Area: 113071
Amount: 2.160644
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 77235
Amount: 1.611288
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:43:17

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

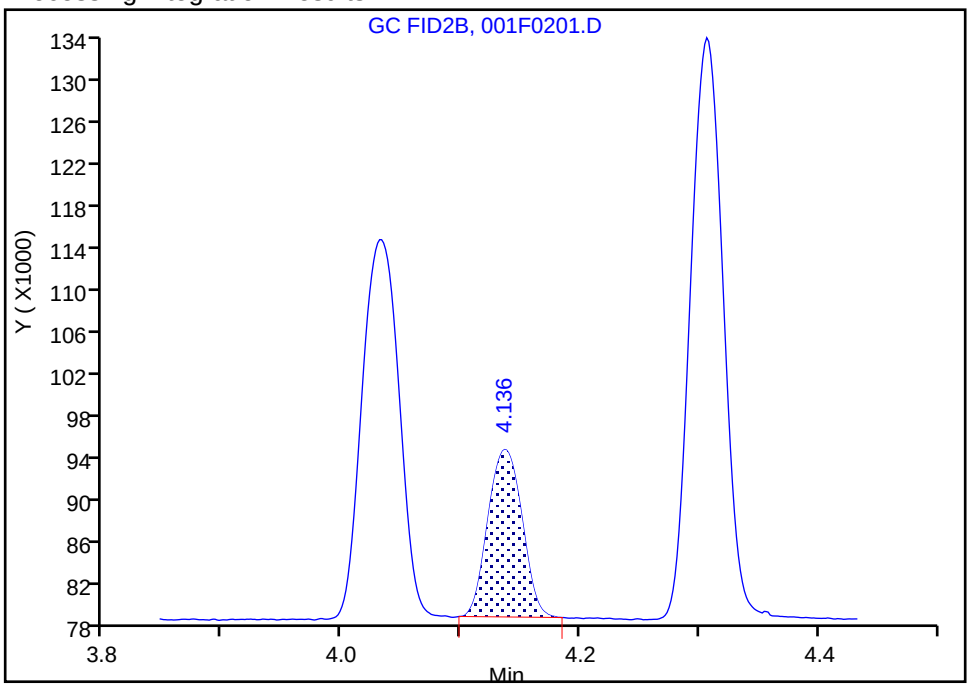
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\001F0201.D				
Injection Date:	16-May-2020 11:13:34	Instrument ID:	VGC_J		
Lims ID:	IC L2				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	1	Worklist Smp#:	7
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

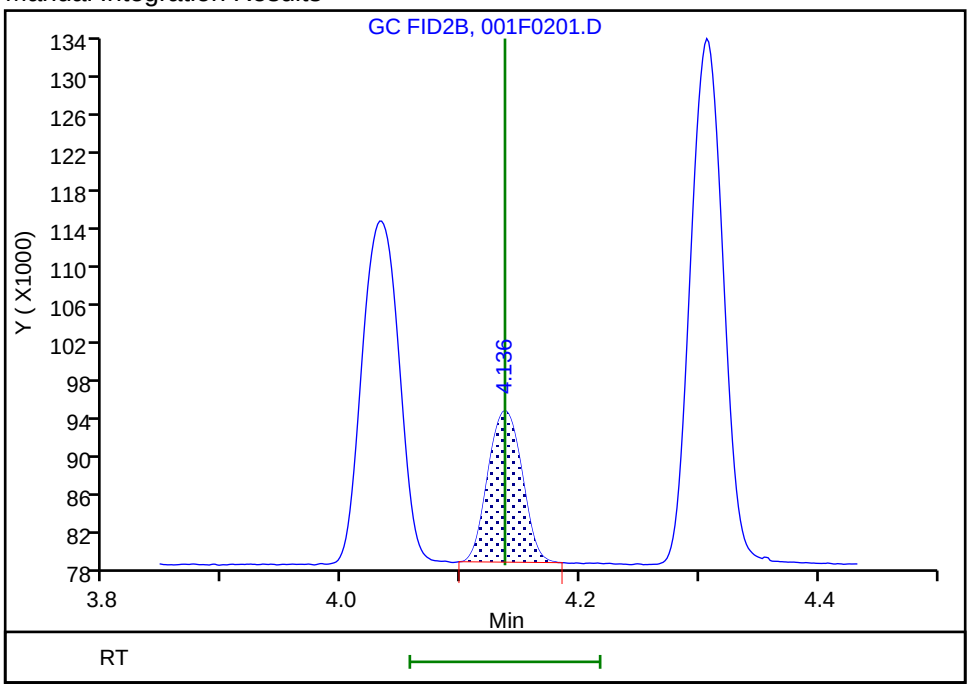
Processing Integration Results

RT: 4.14
Area: 31554
Amount: 1.109766
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 31554
Amount: 1.460462
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:43:43

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-May-2020 11:30:01 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:47 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.248	1.250	-0.002	324614	1.83	1.92	
2	3.169	3.172	-0.003	148689	1.83	1.92	
						RPD = 0.02	
3 Ethane							
1	1.511	1.511	0.000	485411	3.42	3.57	
2	4.306	4.305	0.001	217520	3.42	3.56	
						RPD = 0.15	
4 Ethylene							M
1	1.791	1.793	-0.002	366405	3.19	3.32	
2	4.031	4.032	-0.001	157852	3.19	3.29	M
						RPD = 0.95	
5 Propane							
1	2.531	2.528	0.003	754733	5.02	5.27	
2	5.933	5.928	0.005	326853	5.02	5.22	
						RPD = 0.95	
6 Acetylene							Ma
1	4.043	4.015	0.028	105983	2.96	3.09	a
2	4.136	4.137	-0.001	66161	2.96	3.06	M
						RPD = 0.92	
7 Butane							
1	4.311	4.286	0.025	850630	6.61	6.77	
2	7.379	7.375	0.004	410288	6.61	6.75	
						RPD = 0.31	
8 isobutylene							
1	5.184	5.163	0.021	571566	6.38	6.40	
2	7.229	7.227	0.002	264983	6.38	6.38	
						RPD = 0.42	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

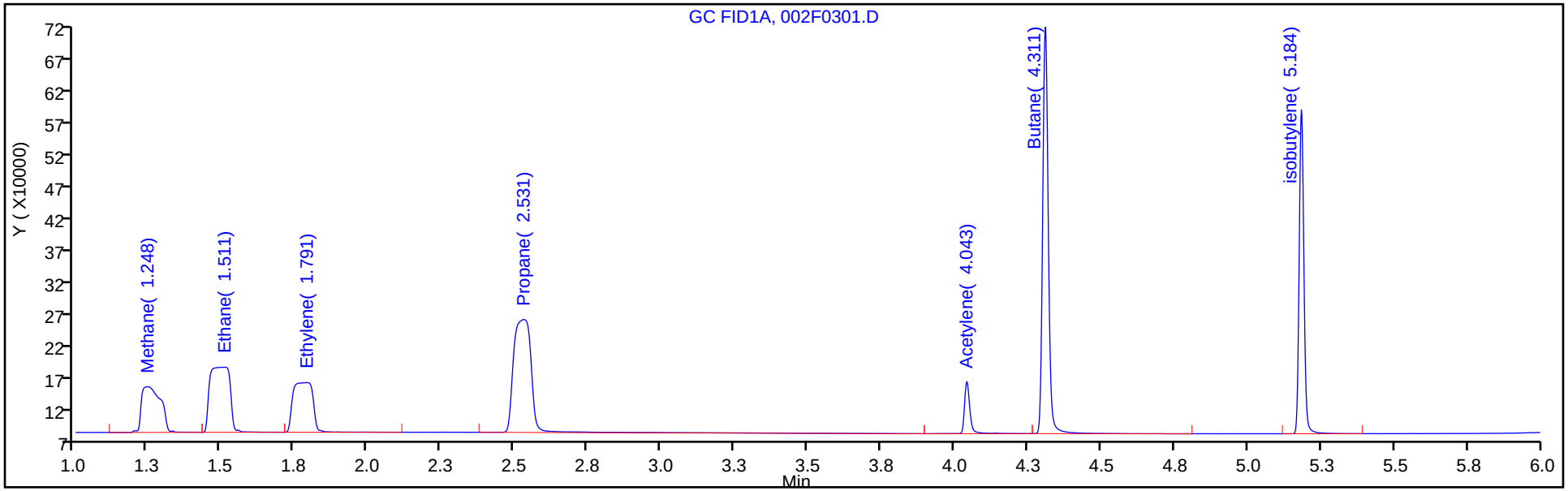
RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

Report Date: 17-May-2020 08:59:47 Chrom Revision: 2.3 05-May-2020 17:48:18

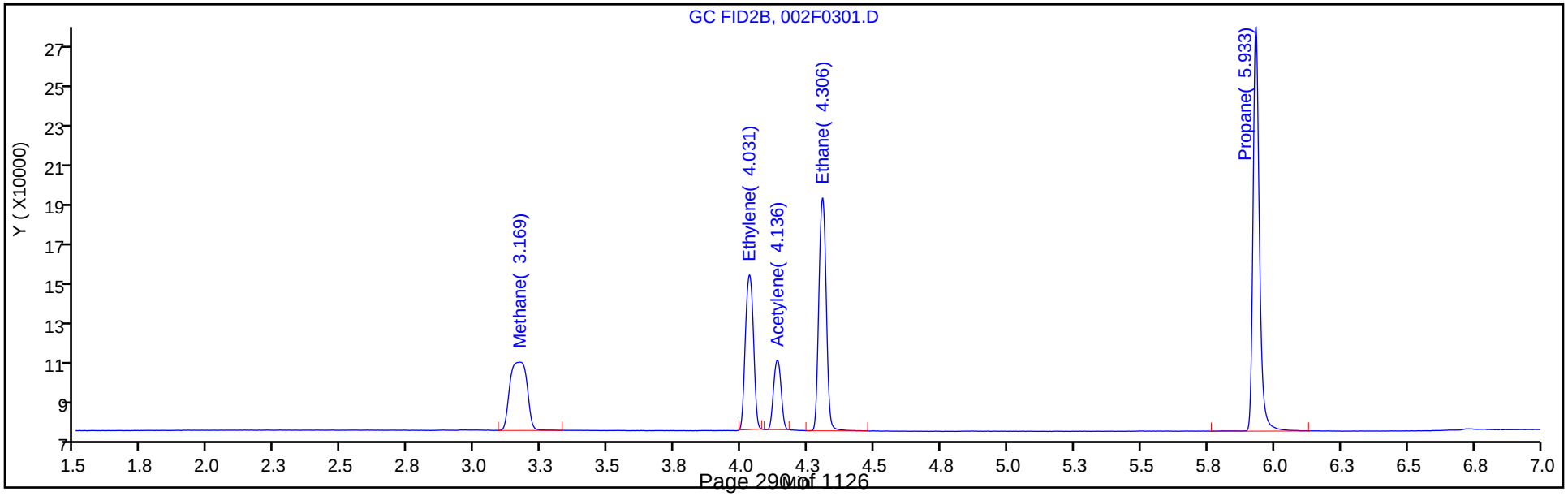
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L3			Worklist Smp#:	8
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

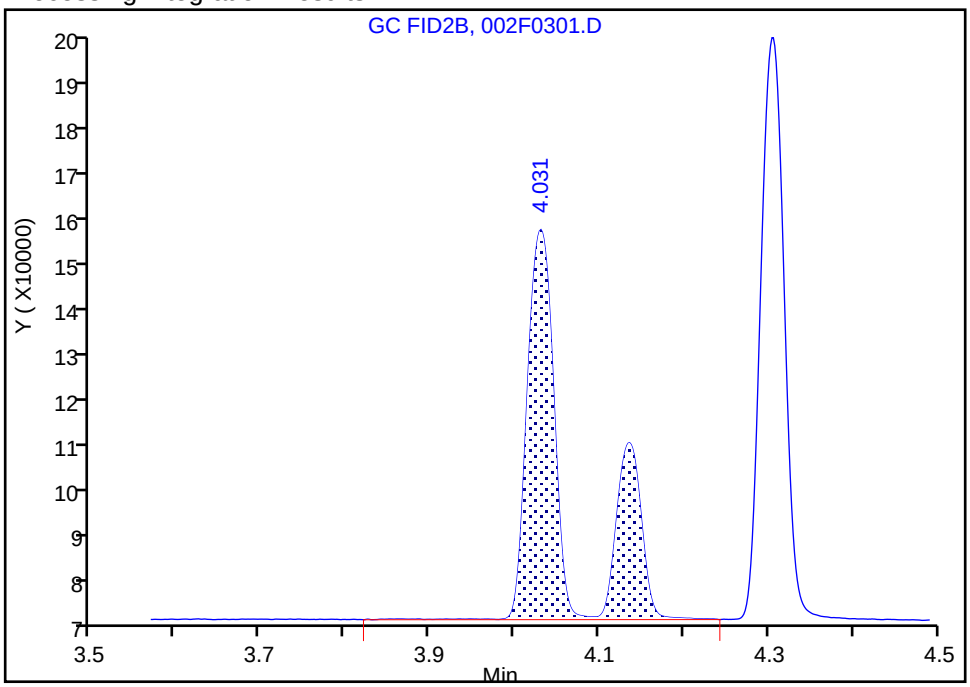
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

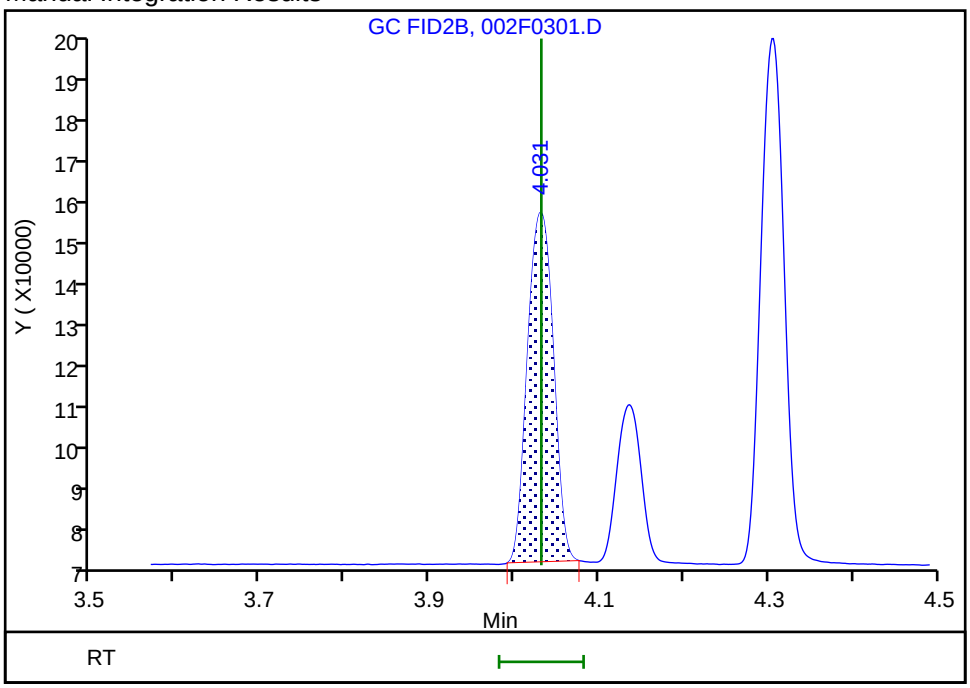
Processing Integration Results

RT: 4.03
Area: 232536
Amount: 4.445704
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 157852
Amount: 3.293132
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:44:57
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

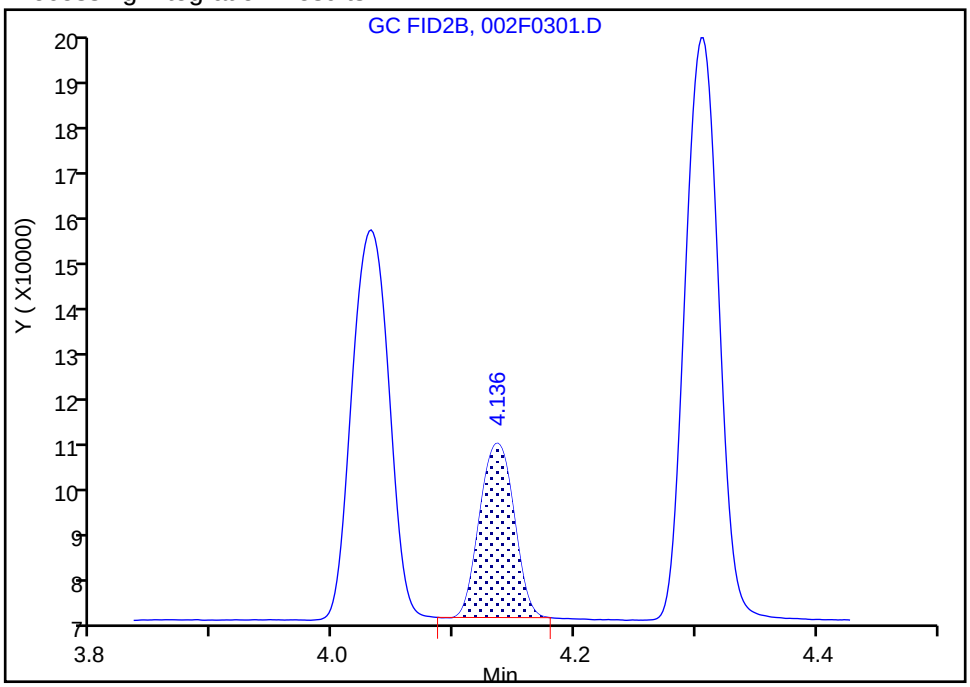
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\002F0301.D				
Injection Date:	16-May-2020 11:30:01	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	2	Worklist Smp#:	8
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

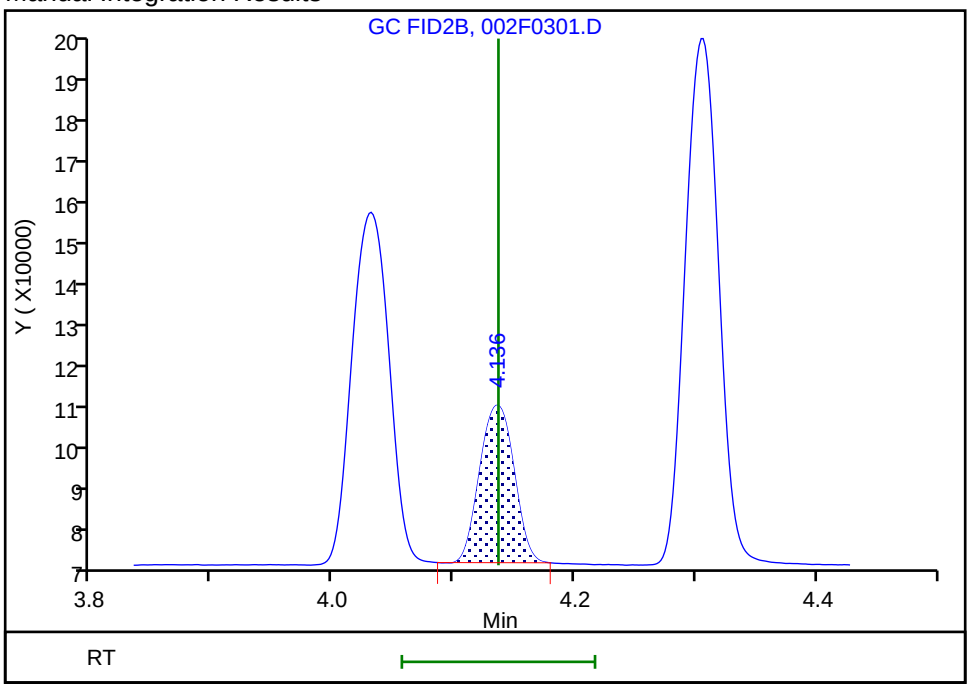
Processing Integration Results

RT: 4.14
Area: 66161
Amount: 2.336755
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 66161
Amount: 3.062230
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:45:15

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-May-2020 11:46:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.250	-0.001	2196261	14.6	14.9	
2	3.171	3.172	-0.001	1043265	14.6	15.0	
						RPD = 0.32	
3 Ethane							
1	1.510	1.511	-0.001	3889050	27.4	28.6	
2	4.306	4.305	0.001	1745027	27.4	28.6	
						RPD = 0.02	
4 Ethylene							
1	1.792	1.793	-0.001	2933658	25.5	26.6	
2	4.032	4.032	0.000	1284690	25.5	26.8	
						RPD = 0.69	
5 Propane							
1	2.534	2.528	0.006	5864755	40.1	40.9	
2	5.932	5.928	0.004	2613101	40.1	41.7	
						RPD = 1.89	
6 Acetylene							M
1	4.034	4.015	0.019	837564	23.7	24.4	
2	4.136	4.137	-0.001	545422	23.7	25.2	M
						RPD = 3.31	
7 Butane							
1	4.304	4.286	0.018	6888912	52.9	52.5	
2	7.381	7.375	0.006	3316499	52.9	52.3	
						RPD = 0.43	
8 isobutylene							
1	5.179	5.163	0.016	4611649	51.1	51.7	
2	7.231	7.227	0.004	2147651	51.1	51.7	
						RPD = 0.03	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

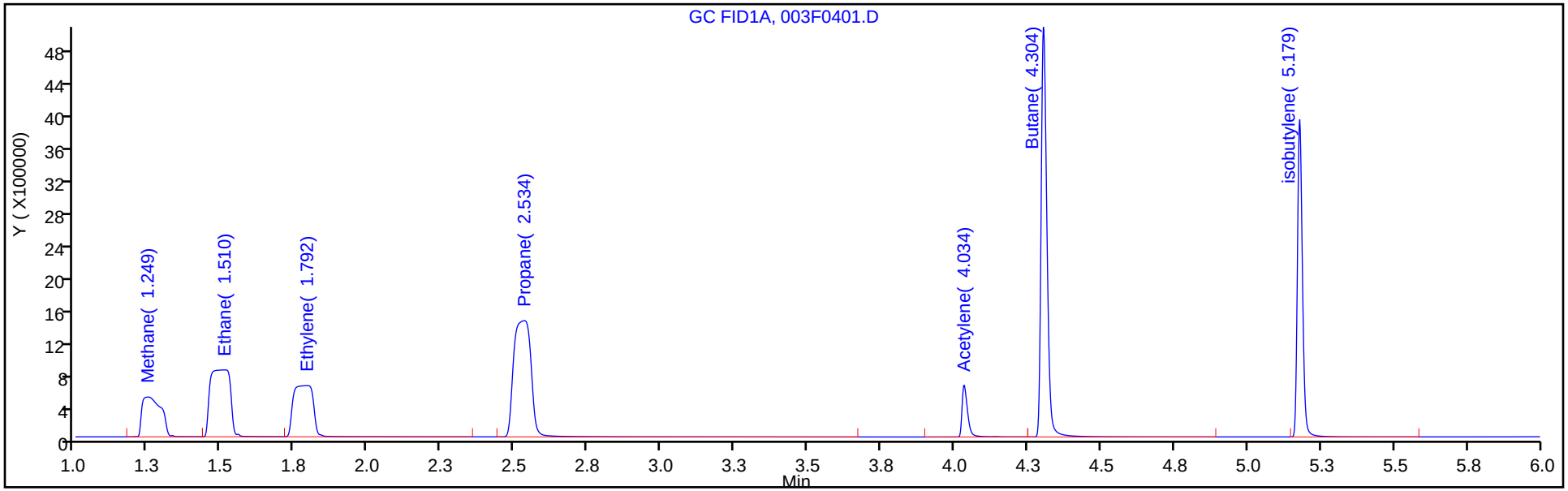
RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

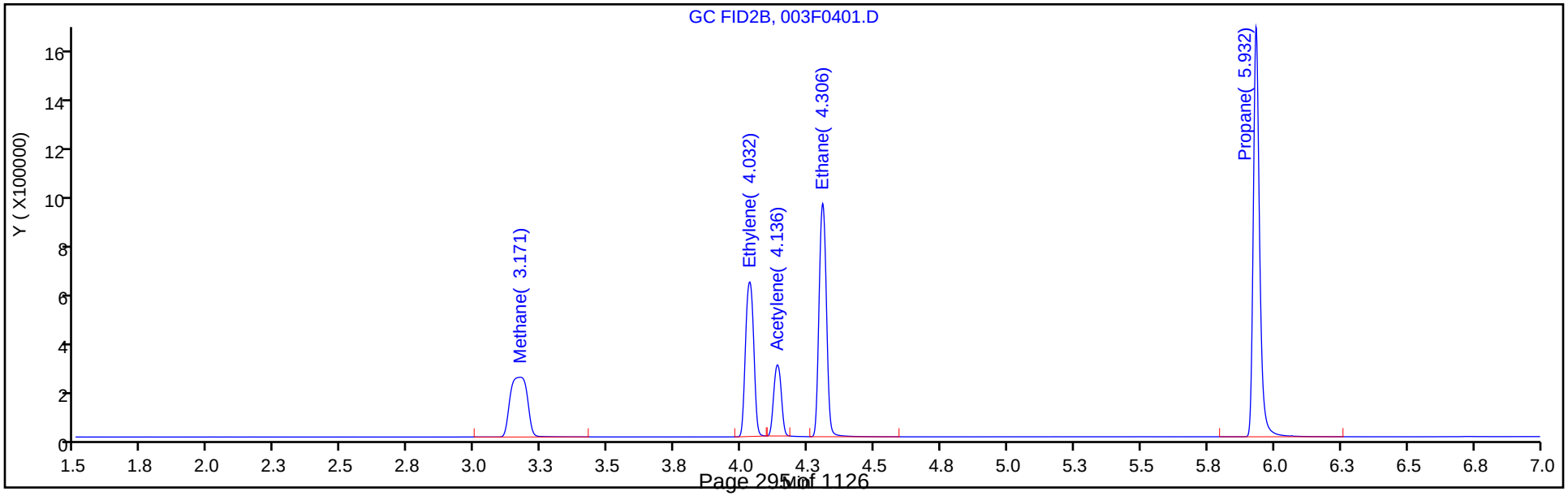
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D				
Injection Date:	16-May-2020 11:46:30	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L4			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

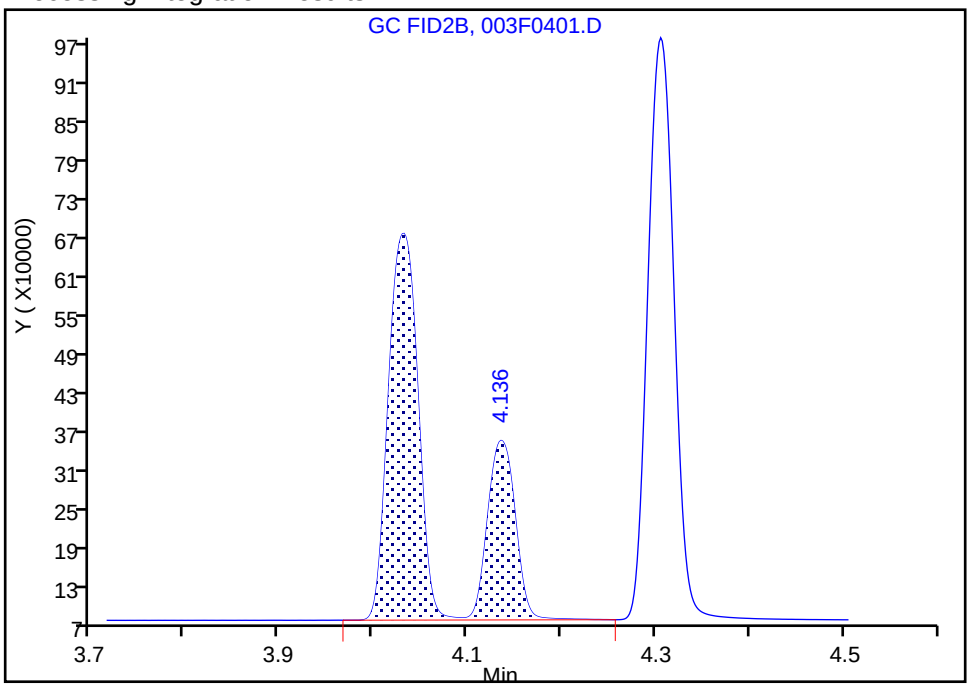
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\003F0401.D				
Injection Date:	16-May-2020 11:46:30	Instrument ID:	VGC_J		
Lims ID:	IC L4				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	3	Worklist Smp#:	9
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

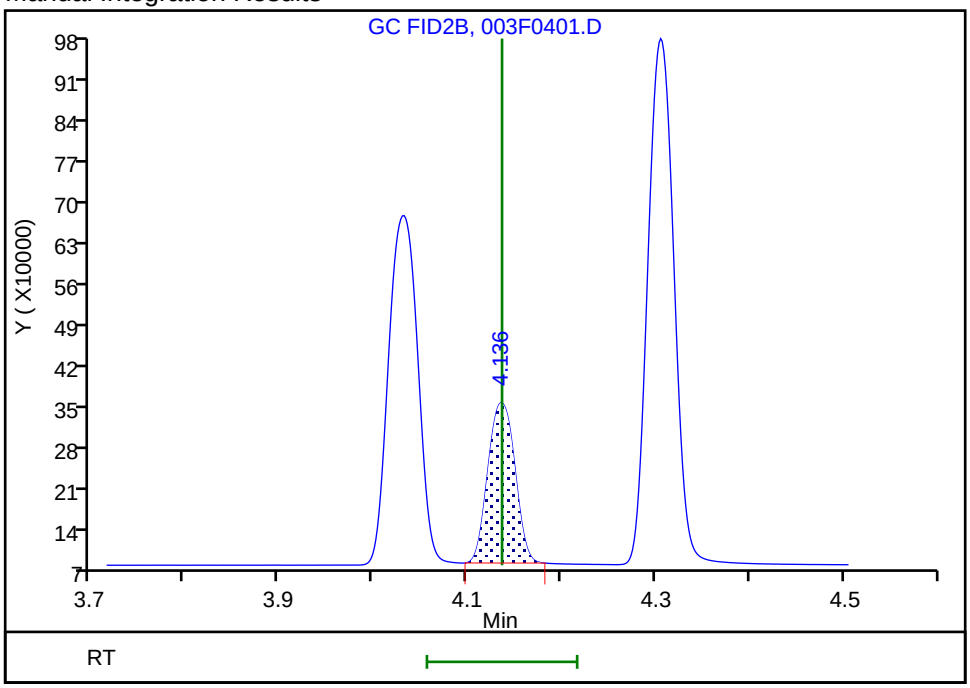
Processing Integration Results

RT: 4.14
Area: 1861367
Amount: 51.616625
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 545422
Amount: 25.244597
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 06:46:16

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D
Lims ID: ICRT L5
Client ID:
Sample Type: ICRT Calib Level: 5
Inject. Date: 16-May-2020 12:02:59 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT 5
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:48 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	10173489	73.0	70.4	
2	3.172	3.172	0.000	4836394	73.0	70.4	
						RPD = 0.05	
3 Ethane							
1	1.511	1.511	0.000	18547040	136.9	136.3	
2	4.305	4.305	0.000	8282362	136.9	135.7	
						RPD = 0.50	
4 Ethylene							M
1	1.793	1.793	0.000	14030935	127.7	127.3	
2	4.032	4.032	0.000	6120221	127.7	127.7	M
						RPD = 0.29	
5 Propane							
1	2.528	2.528	0.000	28325635	200.7	197.7	
2	5.928	5.928	0.000	12604888	200.7	201.3	
						RPD = 1.77	
6 Acetylene							Ma
1	4.015	4.015	0.000	3792795	118.5	110.6	M
2	4.137	4.137	0.000	2629705	118.5	121.7	M
						RPD = 9.57	
7 Butane							Ma
1	4.286	4.286	0.000	34343170	264.5	260.4	M
2	7.375	7.375	0.000	16648646	264.5	261.1	a
						RPD = 0.27	
8 isobutylene							
1	5.163	5.163	0.000	23123734	255.4	259.0	
2	7.227	7.227	0.000	10785387	255.4	259.5	
						RPD = 0.19	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

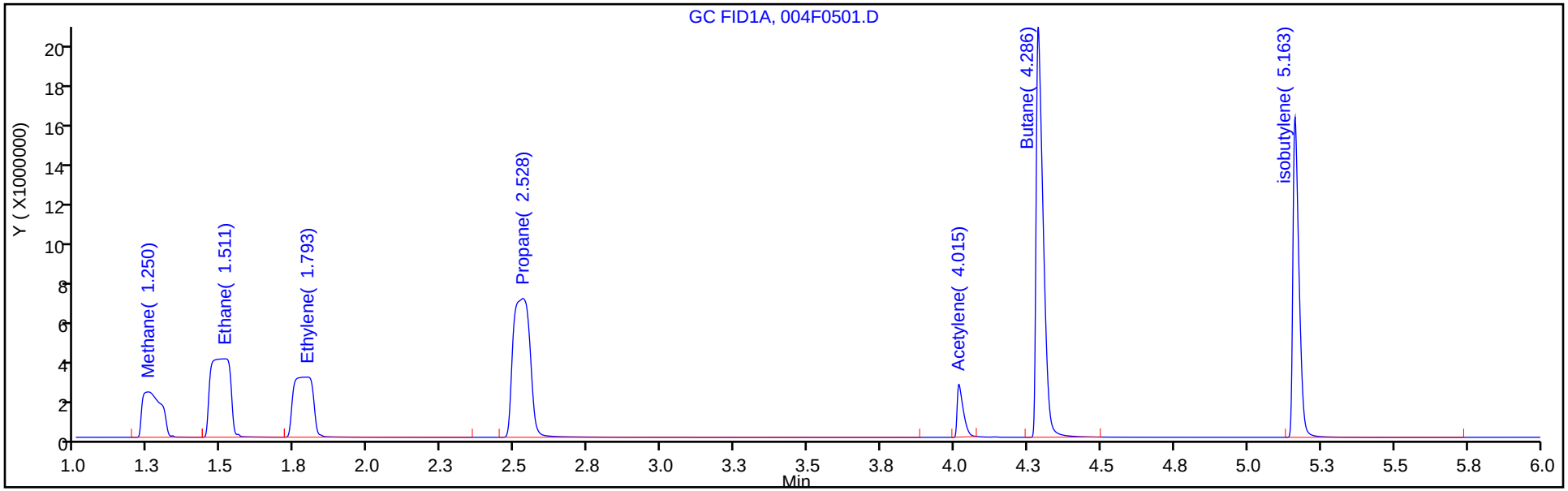
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 17-May-2020 08:59:48 Chrom Revision: 2.3 05-May-2020 17:48:18

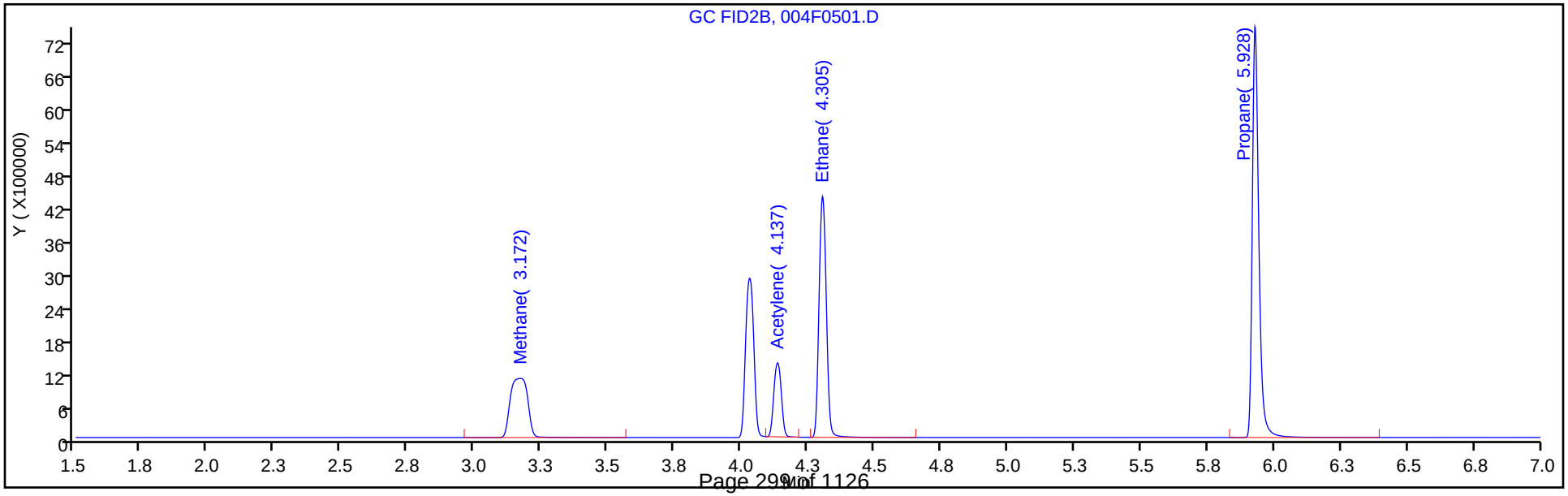
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	ICRT L5			Worklist Smp#:	10
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

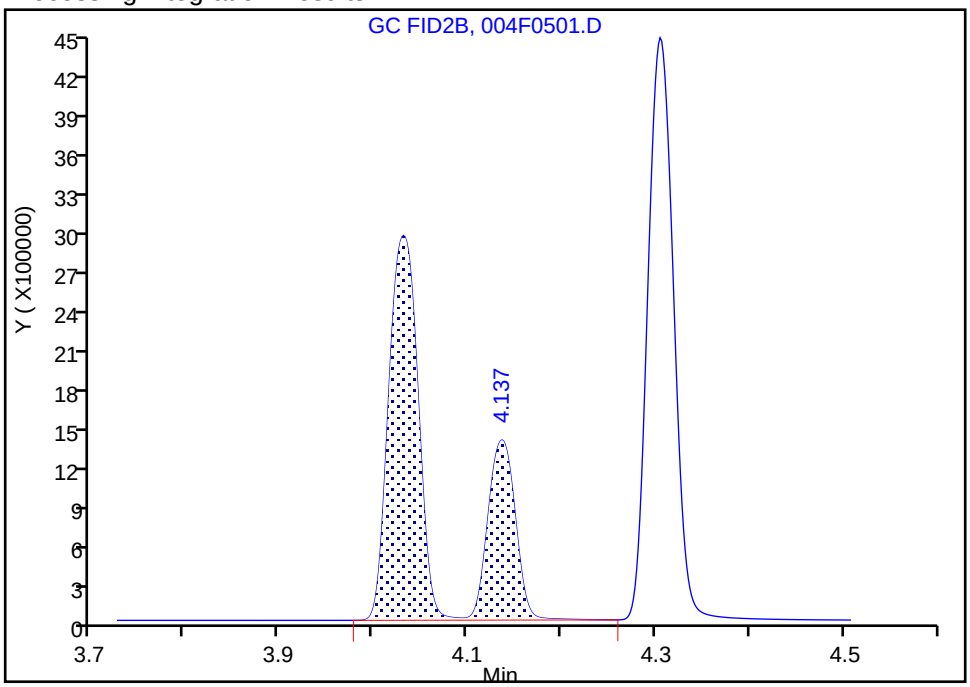
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

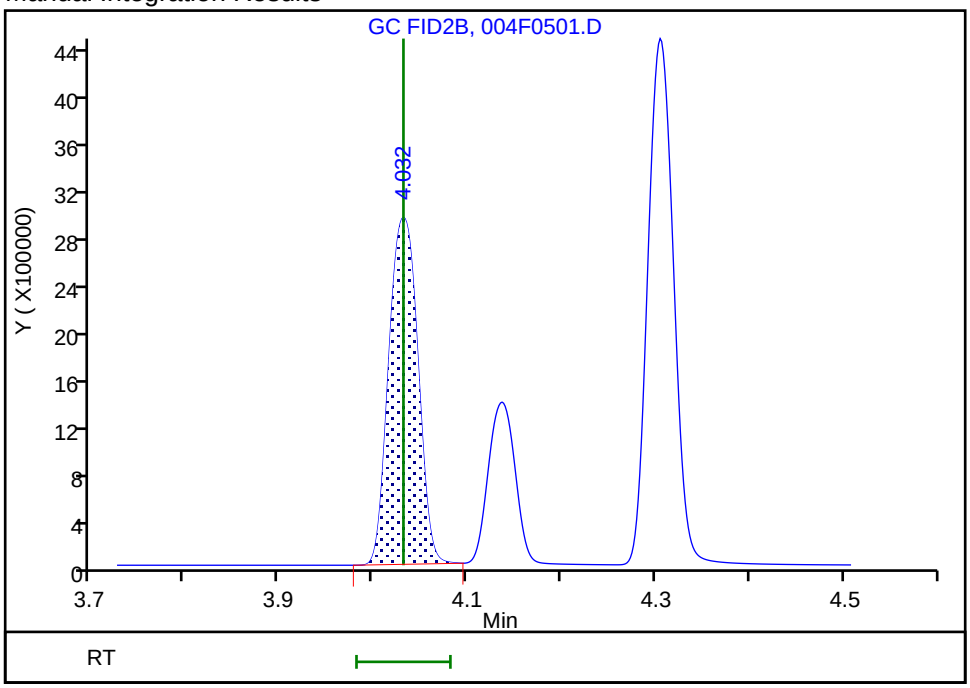
Processing Integration Results

RT: 4.14
Area: 8876599
Amount: 170.8990
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 6120221
Amount: 127.6810
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:06:47

Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

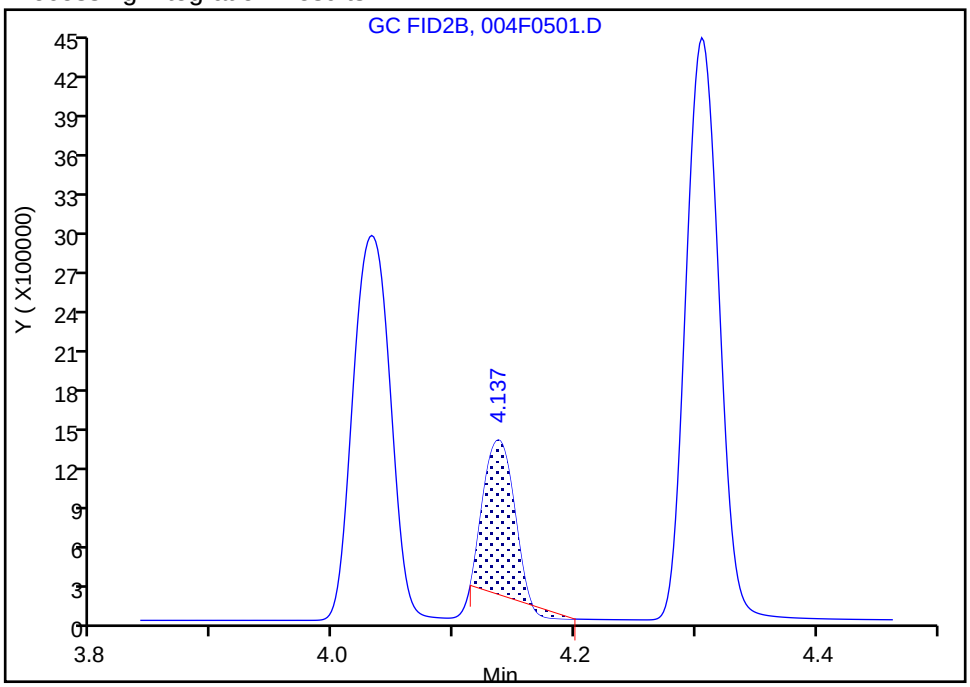
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\004F0501.D				
Injection Date:	16-May-2020 12:02:59	Instrument ID:	VGC_J		
Lims ID:	ICRT L5				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	4	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

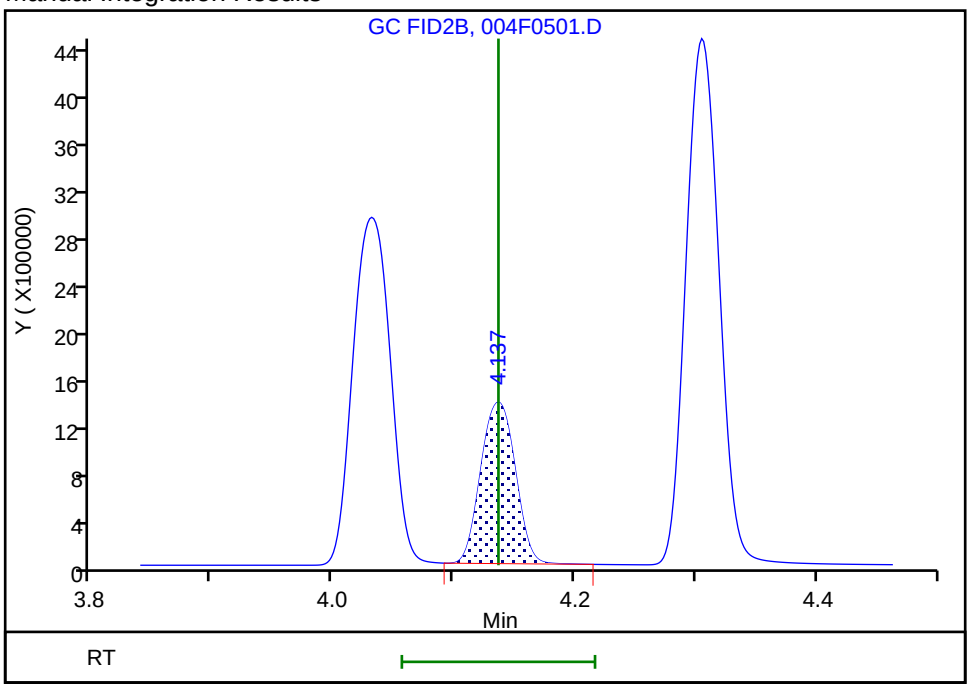
Processing Integration Results

RT: 4.14
Area: 1926231
Amount: 70.054658
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2629705
Amount: 121.7146
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:07:42

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-May-2020 12:19:27 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:49 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	21349465	146.0	148.2	
2	3.172	3.172	0.000	10129316	146.0	147.7	
						RPD = 0.31	
3 Ethane							
1	1.512	1.511	0.001	38849075	273.7	285.6	
2	4.306	4.305	0.001	17331467	273.7	283.9	
						RPD = 0.60	
4 Ethylene							
1	1.785	1.793	-0.008	29199476	255.3	264.9	
2	4.032	4.032	0.000	12731776	255.3	265.6	
						RPD = 0.26	
5 Propane							
1	2.522	2.528	-0.006	59231481	401.4	413.5	
2	5.926	5.928	-0.002	26366224	401.4	421.0	
						RPD = 1.80	
6 Acetylene							M
1	4.002	4.015	-0.013	8293493	237.0	241.8	
2	4.137	4.137	0.000	5438964	237.0	251.7	M
						RPD = 4.01	
7 Butane							
1	4.270	4.286	-0.016	71750490	529.0	543.6	
2	7.369	7.375	-0.006	34602301	529.0	542.3	
						RPD = 0.25	
8 isobutylene							Ma
1	5.150	5.163	-0.013	47351348	510.8	530.4	M
2	7.222	7.227	-0.005	22287396	510.8	536.3	a
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

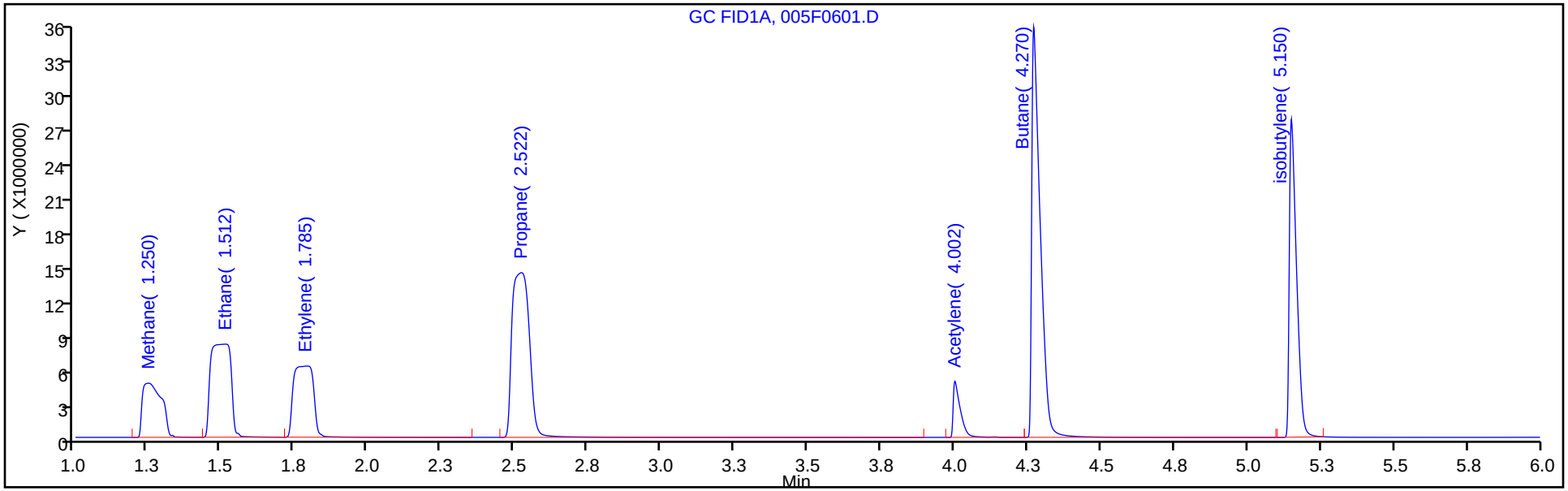
RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

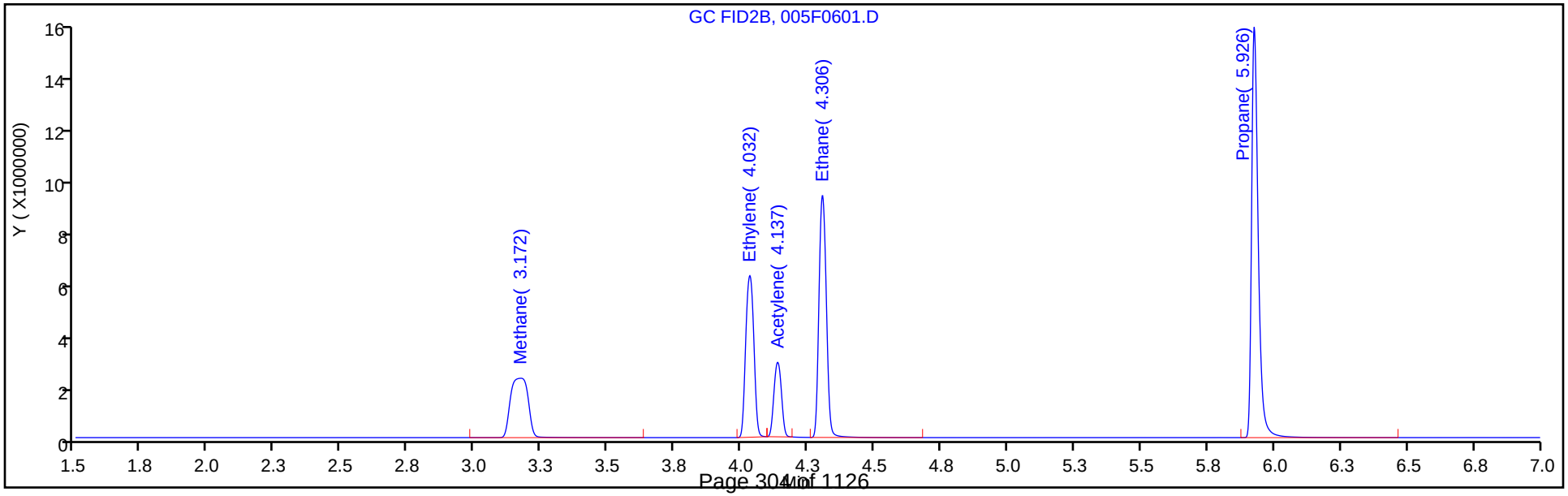
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D				
Injection Date:	16-May-2020 12:19:27	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L6			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

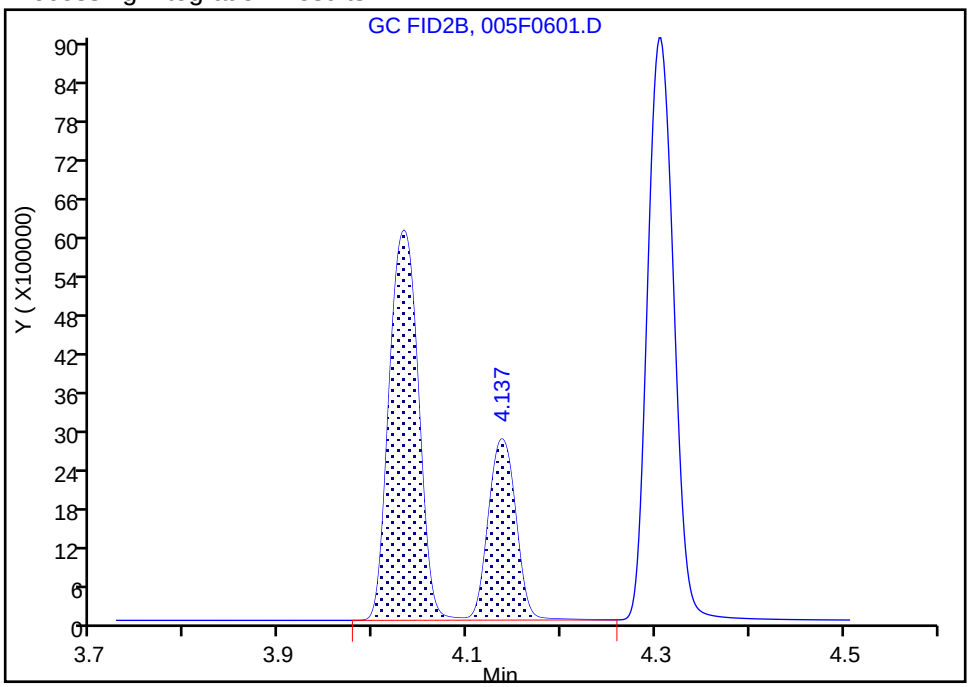
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\005F0601.D				
Injection Date:	16-May-2020 12:19:27	Instrument ID:	VGC_J		
Lims ID:	IC L6				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	5	Worklist Smp#:	11
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

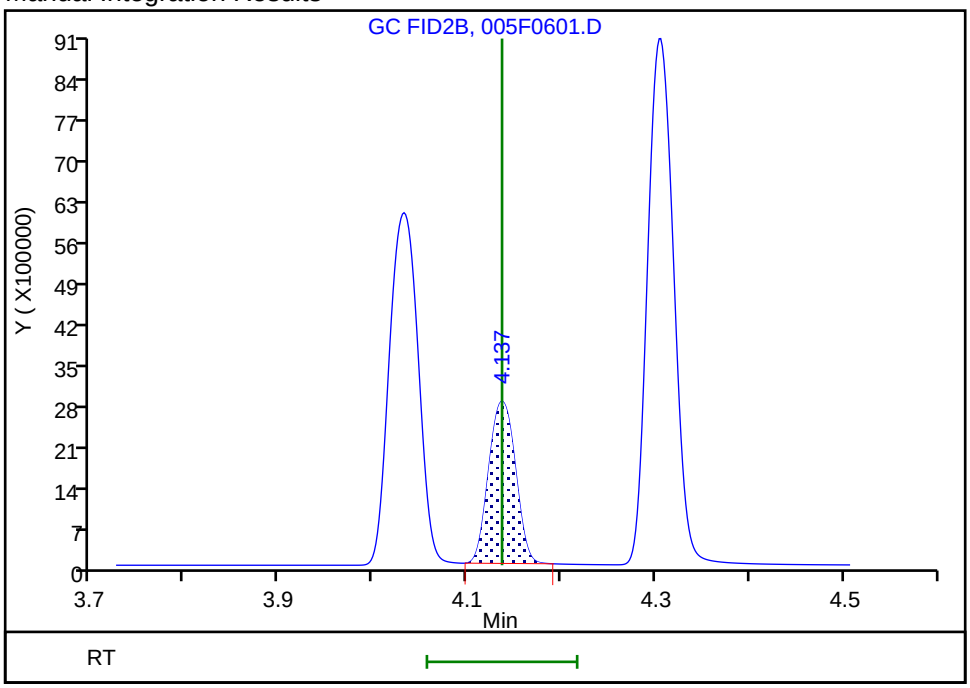
Processing Integration Results

RT: 4.14
Area: 18449274
Amount: 510.5285
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 5438964
Amount: 251.7399
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:09:29

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-May-2020 12:35:56 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Operator ID: MEIERG Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 08:59:49 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.243	1.250	-0.007	40706597	292.0	282.9	
2	3.168	3.172	-0.004	19242711	292.0	280.9	
						RPD = 0.71	
3 Ethane							
1	1.508	1.511	-0.003	74364849	547.4	546.6	
2	4.302	4.305	-0.003	33180606	547.4	543.4	
						RPD = 0.58	
4 Ethylene							
1	1.785	1.793	-0.008	55873290	510.7	507.0	
2	4.028	4.032	-0.004	24365732	510.7	508.3	
						RPD = 0.27	
5 Propane							
1	2.510	2.528	-0.018	113846992	802.8	794.7	
2	5.920	5.928	-0.008	50751227	802.8	810.3	
						RPD = 1.94	
6 Acetylene							M
1	3.983	4.015	-0.032	15971476	474.1	465.7	
2	4.135	4.137	-0.002	10316086	474.1	477.5	M
						RPD = 2.49	
7 Butane							
1	4.250	4.286	-0.036	137944774	1058.1	1044.9	
2	7.362	7.375	-0.013	67311032	1058.1	1054.6	
						RPD = 0.92	
8 isobutylene							
1	5.133	5.163	-0.030	92637372	1021.5	1037.7	
2	7.217	7.227	-0.010	43289193	1021.5	1041.6	
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

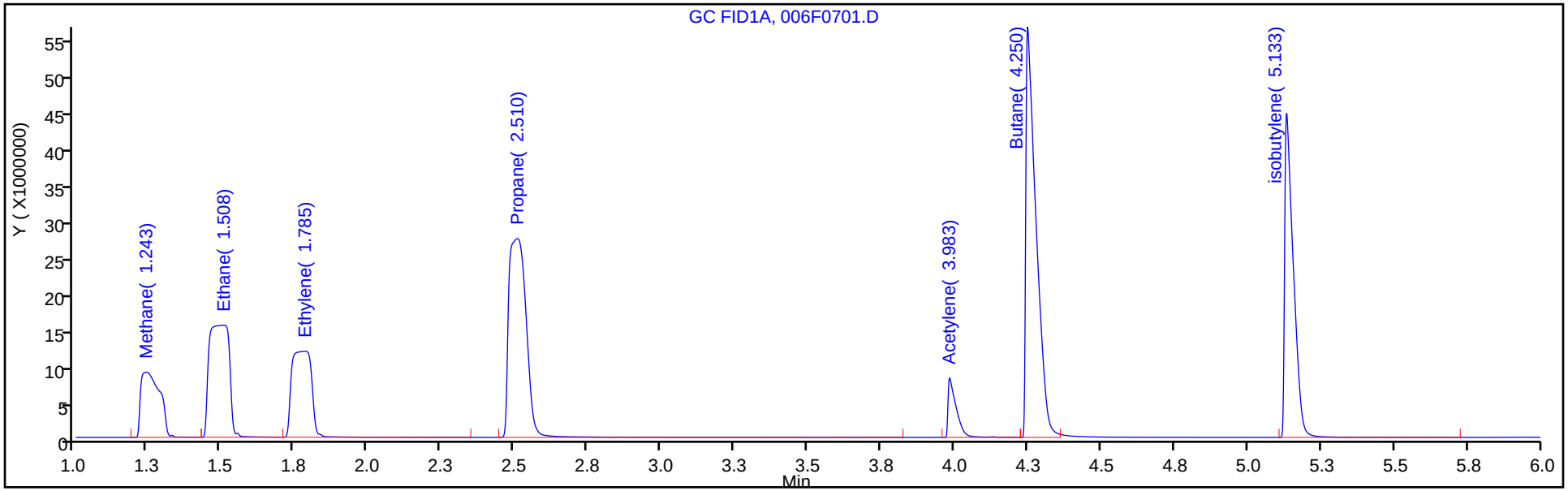
RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

Report Date: 17-May-2020 08:59:49 Chrom Revision: 2.3 05-May-2020 17:48:18

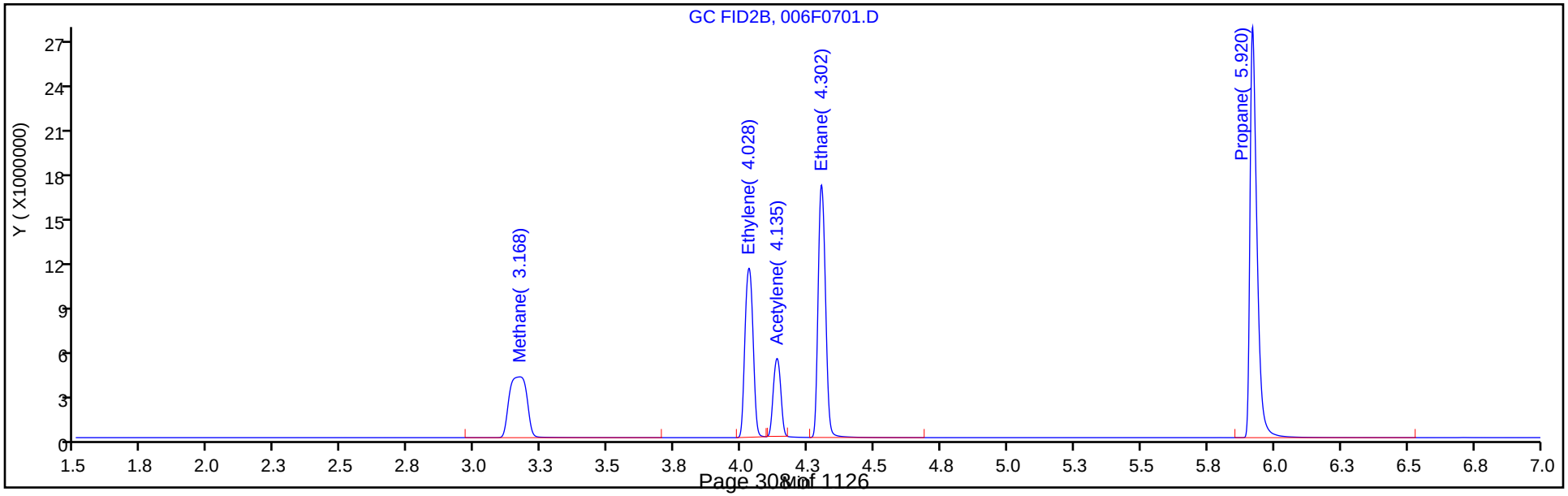
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D				
Injection Date:	16-May-2020 12:35:56	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L7			Worklist Smp#:	12
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

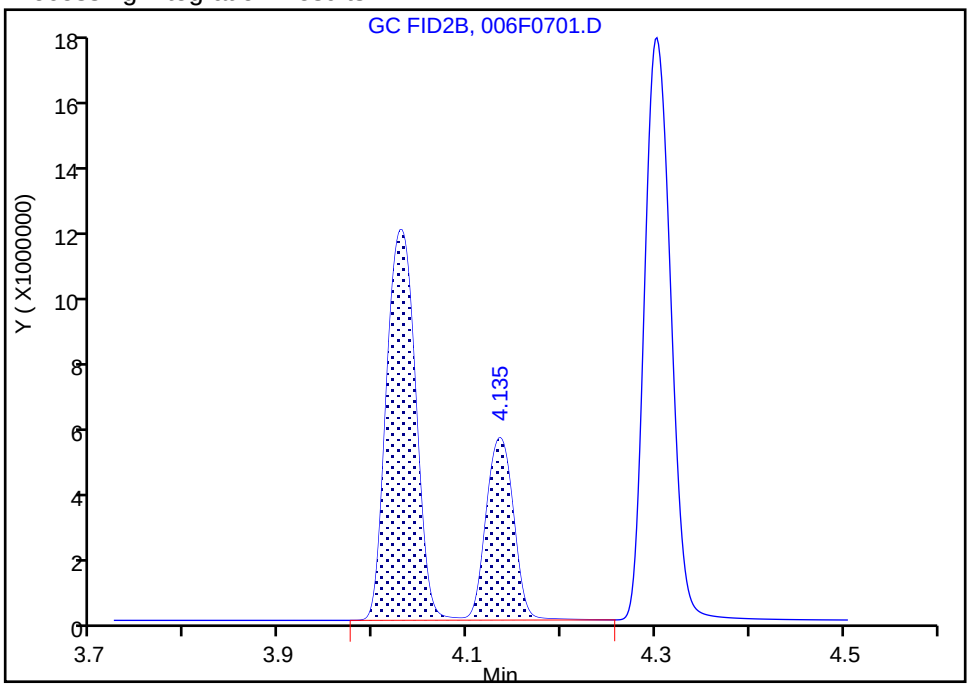
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\006F0701.D				
Injection Date:	16-May-2020 12:35:56	Instrument ID:	VGC_J		
Lims ID:	IC L7				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	6	Worklist Smp#:	12
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

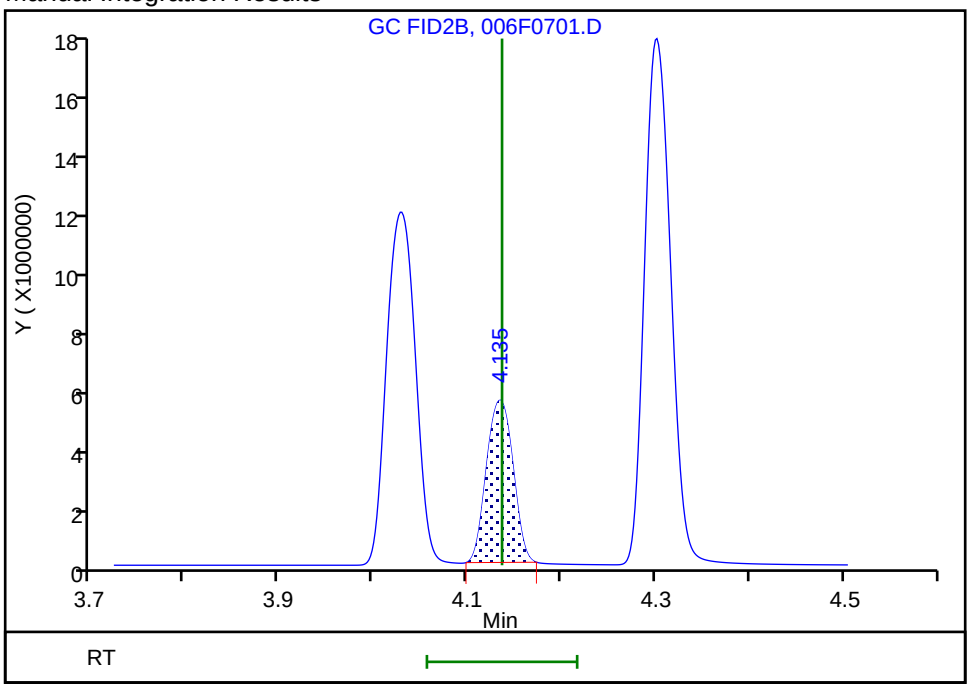
Processing Integration Results

RT: 4.13
Area: 35374141
Amount: 990.6352
Amount Units: ug/l



Manual Integration Results

RT: 4.13
Area: 10316086
Amount: 477.4751
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:16:23

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D				
Lims ID:	IC L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	16-May-2020 12:52:27	ALS Bottle#:	7	Worklist Smp#:	13
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC 8				
Operator ID:	MEIERG	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	17-May-2020 08:59:50	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0312				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.248	1.250	-0.002	256592942	1806.9	1784.9	
2	3.168	3.172	-0.004	121745624	1806.9	1778.4	
						RPD = 0.36	

Reagents:

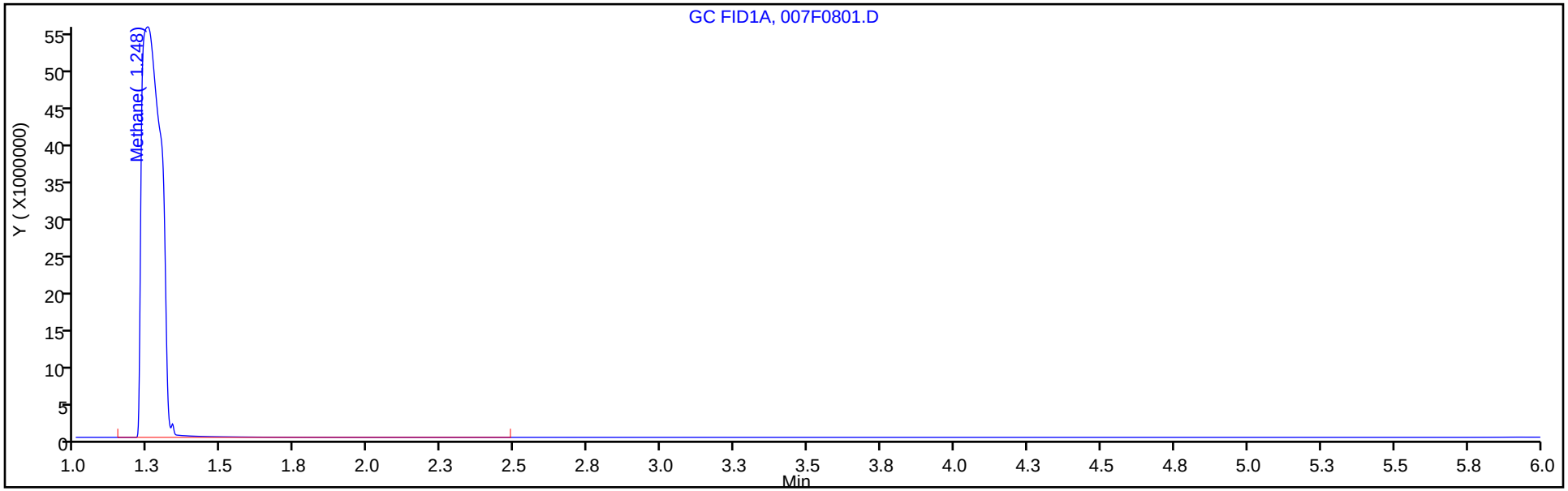
RSK175methane_00010 Amount Added: 50.00 Units: uL

Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

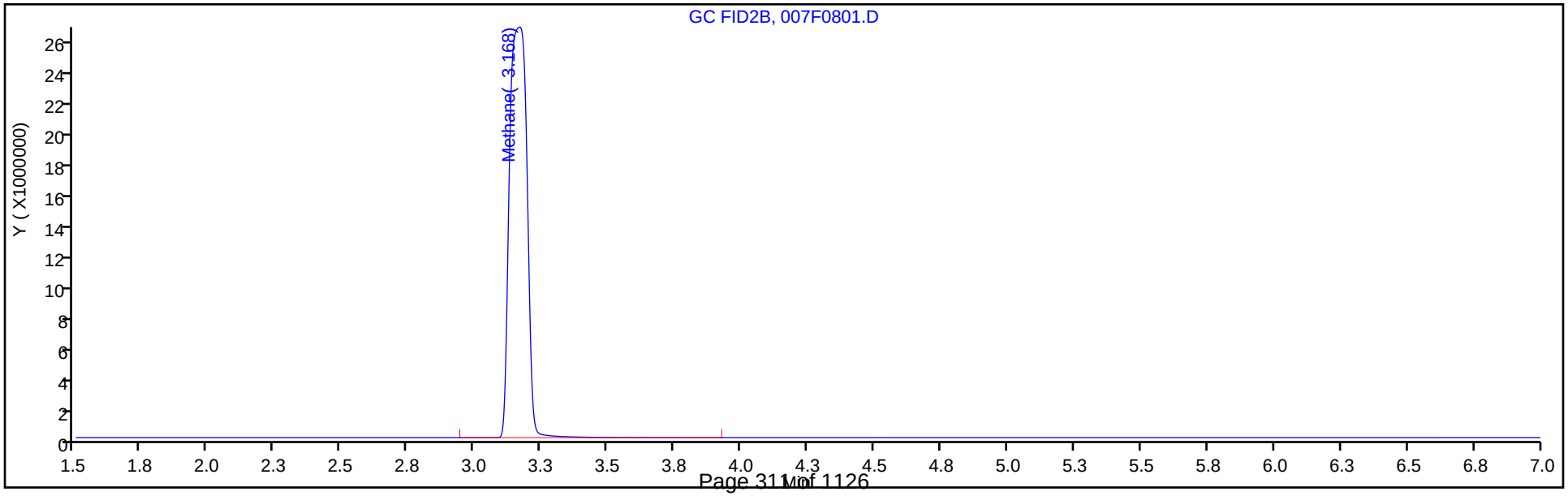
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\007F0801.D				
Injection Date:	16-May-2020 12:52:27	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L8			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Lims ID:	IC L9				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	16-May-2020 13:08:56	ALS Bottle#:	9	Worklist Smp#:	14
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	IC 9				
Operator ID:	MEIERG	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	17-May-2020 08:59:50	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0312				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.245	1.250	-0.005	1008615918	7227.8	7016.9	
2	3.160	3.172	-0.012	484781088	7227.8	7082.2	
						RPD = 0.93	

Reagents:

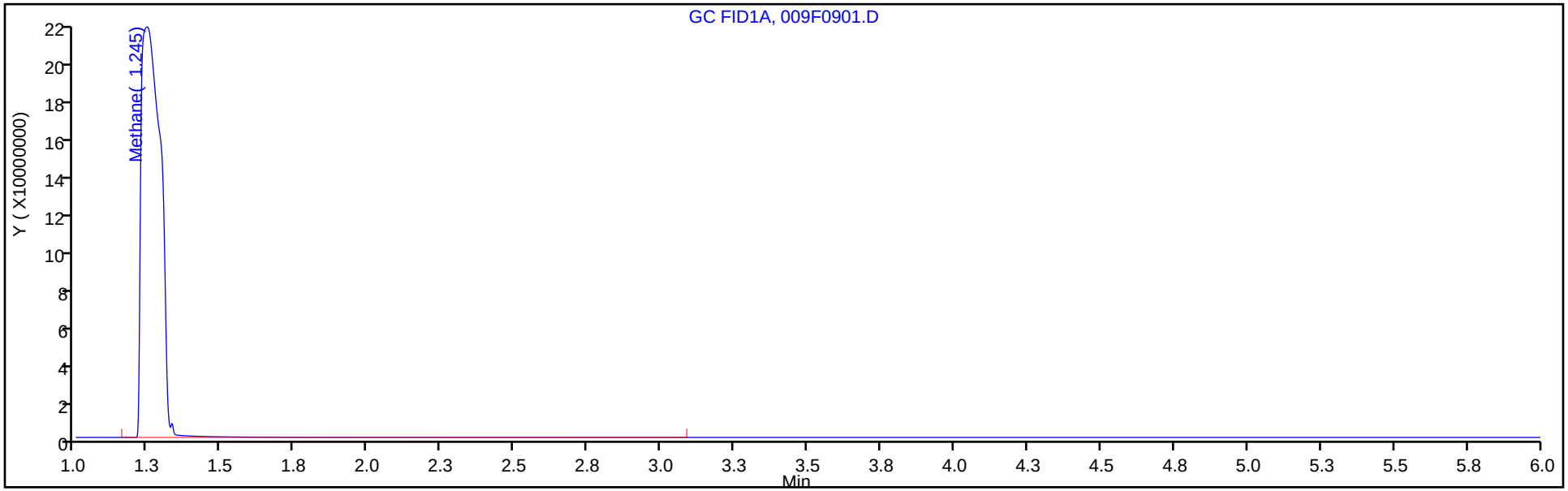
RSK175methane_00010 Amount Added: 200.00 Units: uL

Report Date: 17-May-2020 08:59:50 Chrom Revision: 2.3 05-May-2020 17:48:18

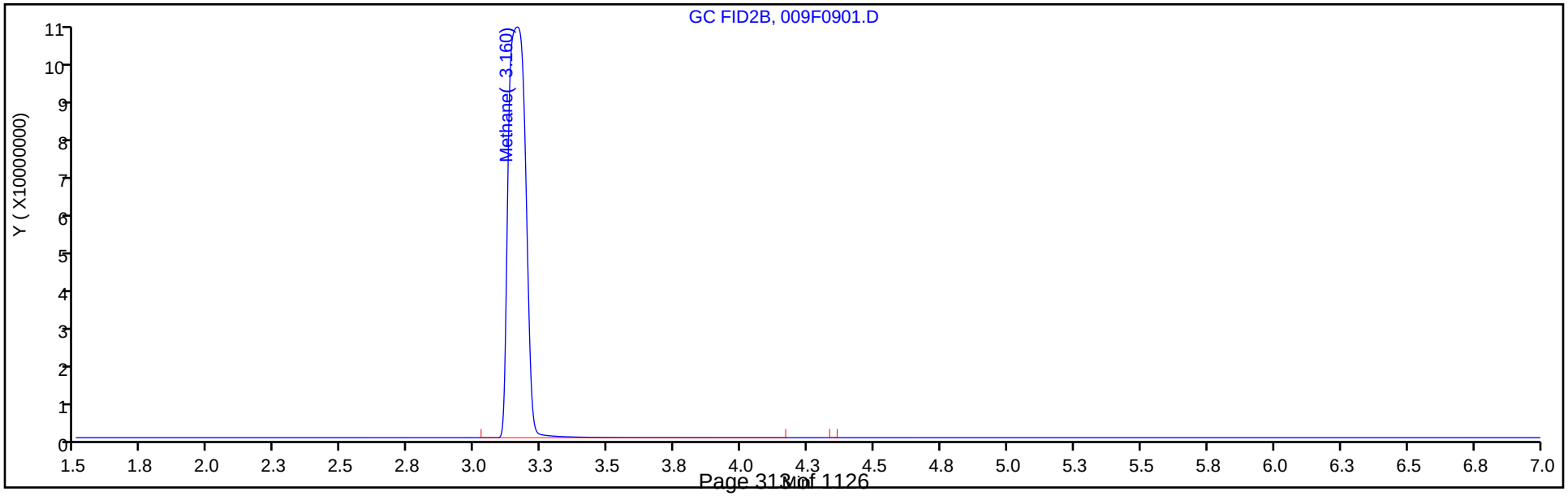
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Injection Date:	16-May-2020 13:08:56	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	IC L9			Worklist Smp#:	14
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-495152/16 Calibration Date: 05/16/2020 13:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F1001.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		158281		80.1	73.0	9.7	20.0
Ethane	Ave	136043	153595		155	137	12.9	20.0
Ethylene	Ave	110213	122313		142	128	11.0	20.0
Acetylene	Ave	34294	36540		126	119	6.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-495152/16 Calibration Date: 05/16/2020 13:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F1001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.21	1.29
Ethane	1.51	1.46	1.56
Ethylene	1.79	1.74	1.84
Acetylene	4.01	3.94	4.10

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-May-2020 13:25:26 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: MEIERG Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 09:03:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.250	-0.001	11555066	73.0	80.1	
2	3.171	3.172	-0.001	5497214	73.0	80.1	
						RPD = 0.01	
3 Ethane							
1	1.513	1.511	0.002	21020301	136.9	154.5	
2	4.305	4.305	0.000	9395211	136.9	153.9	
						RPD = 0.41	
4 Ethylene							
1	1.791	1.793	-0.002	15615273	127.7	141.7	
2	4.031	4.032	-0.001	6823571	127.7	142.4	
						RPD = 0.47	
5 Propane							
1	2.524	2.528	-0.004	32214966	200.7	224.9	
2	5.930	5.928	0.002	14336595	200.7	228.9	
						RPD = 1.77	
6 Acetylene							M
1	4.008	4.015	-0.007	4330795	118.5	126.3	
2	4.136	4.137	-0.001	2842552	118.5	131.6	M
						RPD = 4.10	
7 Butane							Ma
1	4.279	4.286	-0.007	38944801	264.5	295.2	M
2	7.373	7.375	-0.002	18966689	264.5	297.4	a
						RPD = 0.73	
8 isobutylene							
1	5.156	5.163	-0.007	25717354	255.4	288.1	
2	7.226	7.227	-0.001	12003603	255.4	288.8	
						RPD = 0.26	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

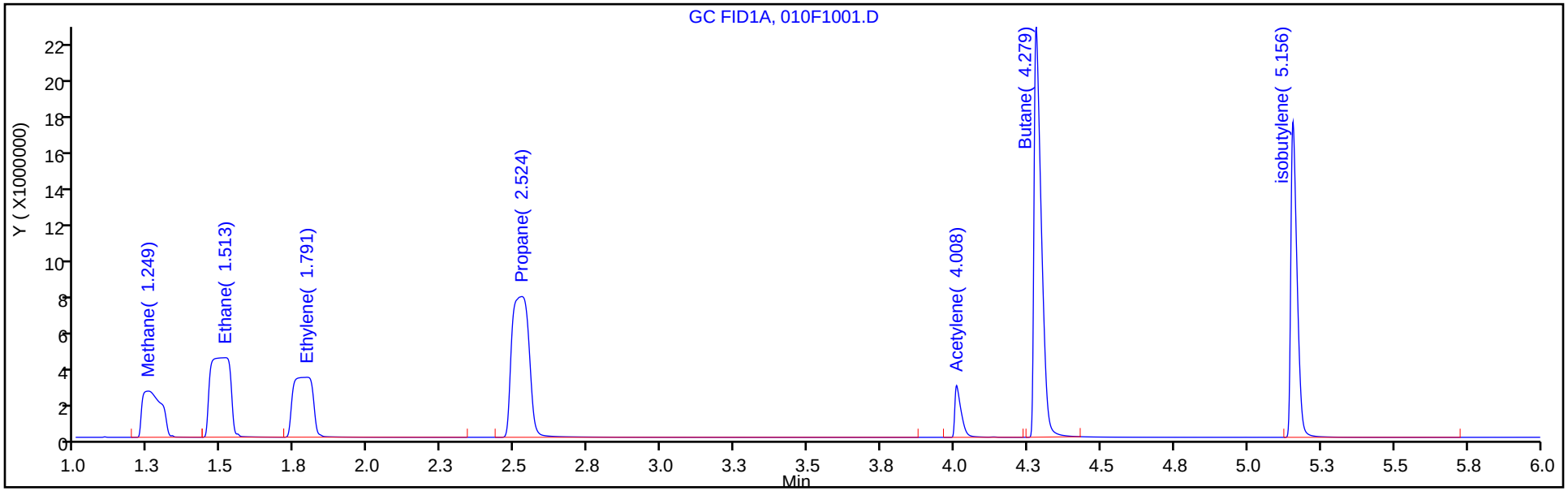
RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

Report Date: 17-May-2020 09:03:52 Chrom Revision: 2.3 05-May-2020 17:48:18

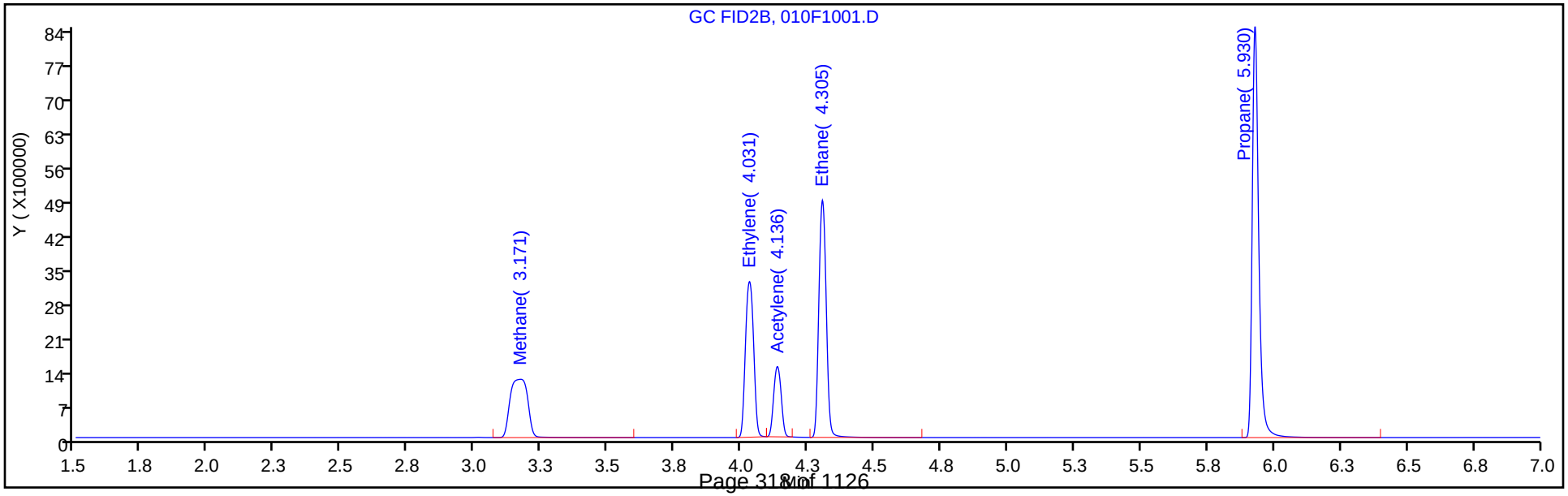
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D				
Injection Date:	16-May-2020 13:25:26	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	ICV			Worklist Smp#:	16
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-495152/16 Calibration Date: 05/16/2020 13:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F1001.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		75301		80.1	73.0	9.7	20.0
Ethylene	Ave	47934	53448		142	128	11.5	20.0
Acetylene	Ave	21605	23983		132	119	11.0	20.0
Ethane	Ave	61056	68651		154	137	12.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-495152/16 Calibration Date: 05/16/2020 13:25

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F1001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.17	3.13	3.21
Ethylene	4.03	3.98	4.08
Acetylene	4.14	4.06	4.22
Ethane	4.31	4.26	4.36

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-May-2020 13:25:26 ALS Bottle#: 10 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: MEIERG Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-May-2020 09:03:52 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0312

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.249	1.250	-0.001	11555066	73.0	80.1	
2	3.171	3.172	-0.001	5497214	73.0	80.1	
						RPD = 0.01	
3 Ethane							
1	1.513	1.511	0.002	21020301	136.9	154.5	
2	4.305	4.305	0.000	9395211	136.9	153.9	
						RPD = 0.41	
4 Ethylene							
1	1.791	1.793	-0.002	15615273	127.7	141.7	
2	4.031	4.032	-0.001	6823571	127.7	142.4	
						RPD = 0.47	
5 Propane							
1	2.524	2.528	-0.004	32214966	200.7	224.9	
2	5.930	5.928	0.002	14336595	200.7	228.9	
						RPD = 1.77	
6 Acetylene							M
1	4.008	4.015	-0.007	4330795	118.5	126.3	
2	4.136	4.137	-0.001	2842552	118.5	131.6	M
						RPD = 4.10	
7 Butane							Ma
1	4.279	4.286	-0.007	38944801	264.5	295.2	M
2	7.373	7.375	-0.002	18966689	264.5	297.4	a
						RPD = 0.73	
8 isobutylene							
1	5.156	5.163	-0.007	25717354	255.4	288.1	
2	7.226	7.227	-0.001	12003603	255.4	288.8	
						RPD = 0.26	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

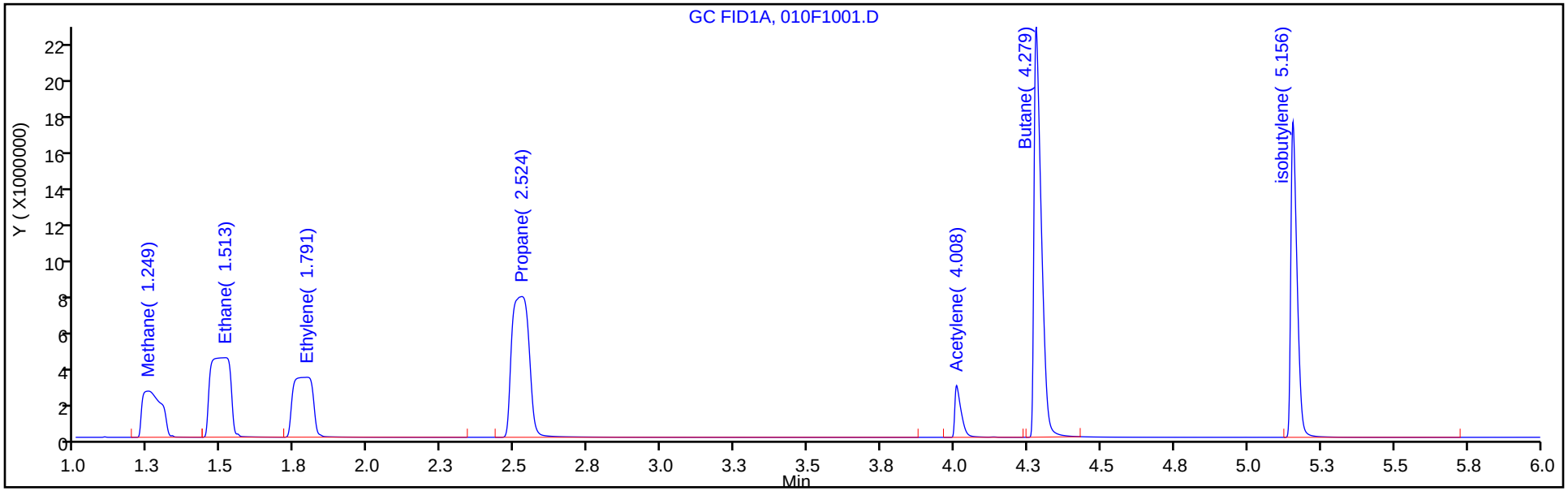
RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

Report Date: 17-May-2020 09:03:52 Chrom Revision: 2.3 05-May-2020 17:48:18

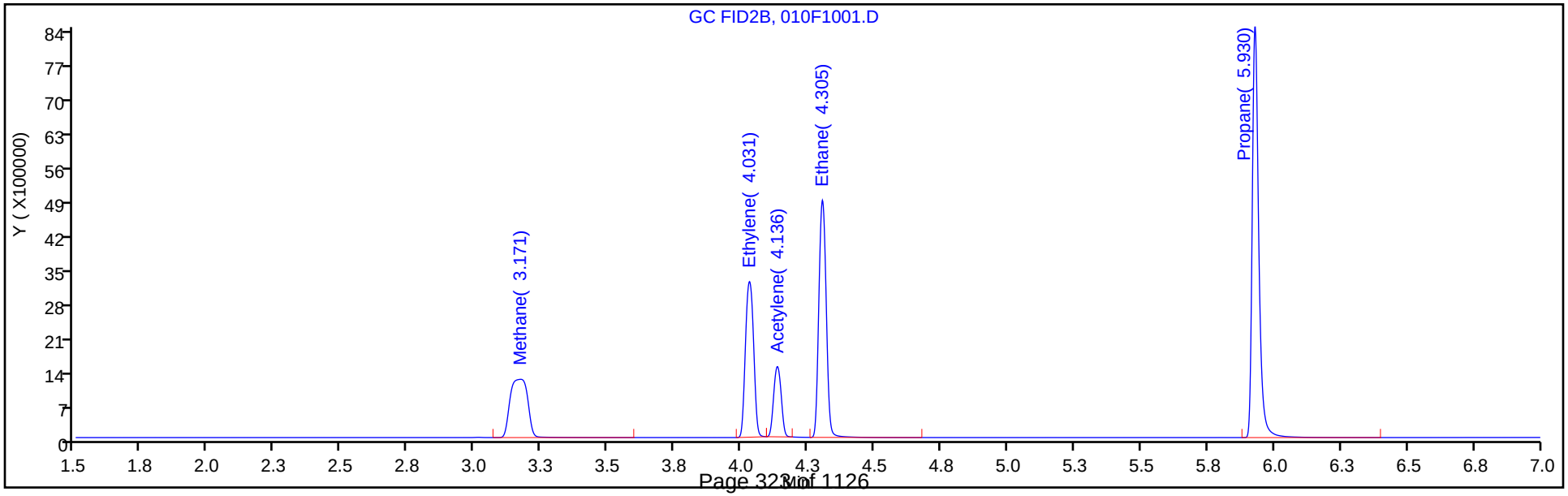
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D				
Injection Date:	16-May-2020 13:25:26	Instrument ID:	VGC_J	Operator ID:	MEIERG
Lims ID:	ICV			Worklist Smp#:	16
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

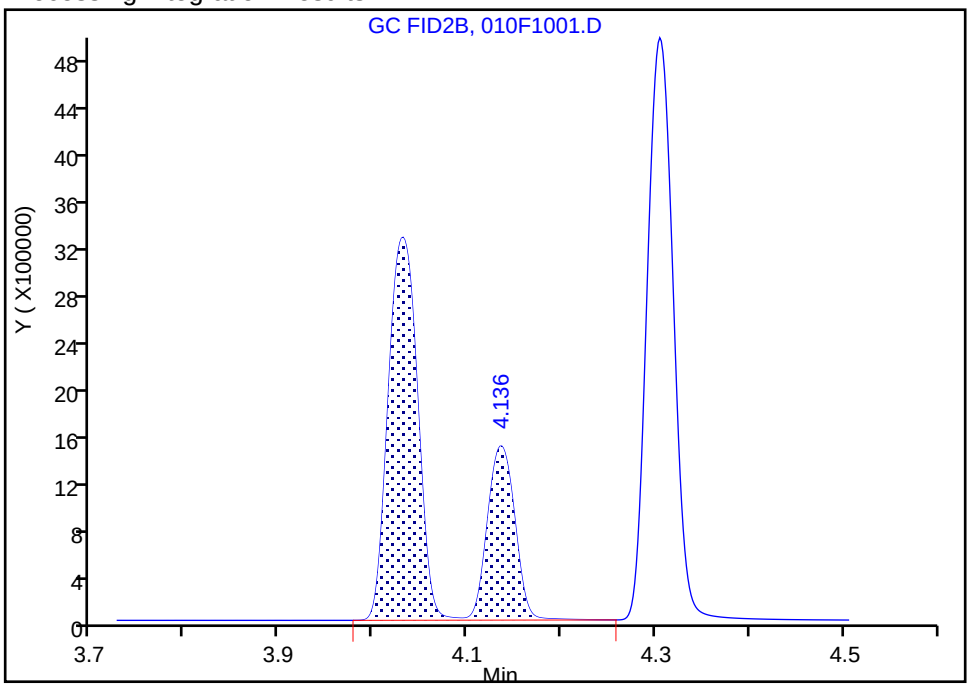
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\010F1001.D				
Injection Date:	16-May-2020 13:25:26	Instrument ID:	VGC_J		
Lims ID:	ICV				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	10	Worklist Smp#:	16
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

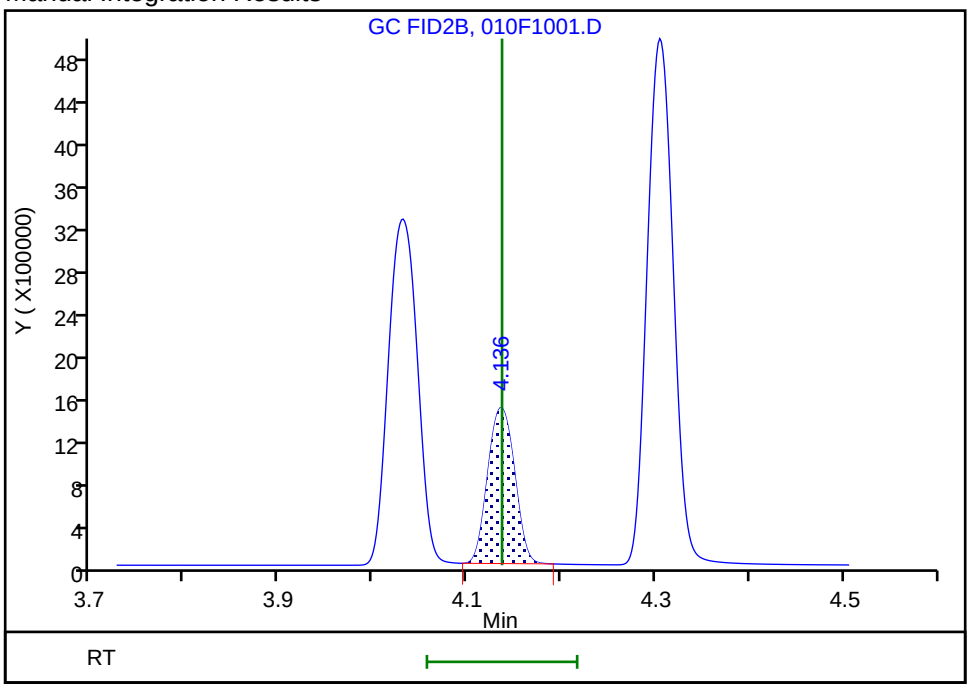
Processing Integration Results

RT: 4.14
Area: 9809067
Amount: 454.0080
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2842552
Amount: 131.5662
Amount Units: ug/l



Reviewer: meierg, 17-May-2020 07:28:53
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCVRT 280-496925/4 Calibration Date: 06/01/2020 13:13

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: A004F0401.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		161087		81.5	73.0	11.6	20.0
Ethane	Ave	136043	162540		164	137	19.5	20.0
Ethylene	Ave	110213	154914		179	128	40.6*	20.0
Acetylene	Ave	34294	58613		203	119	70.9*	20.0

FORM VII RSK-175

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCVRT 280-496925/4 Calibration Date: 06/01/2020 13:13

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: A004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.21	1.29
Ethane	1.50	1.45	1.55
Ethylene	1.76	1.71	1.81
Acetylene	3.87	3.79	3.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\A004F0401.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2020 13:13:44 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:32 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 01-Jun-2020 13:31:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.253	0.000	11759873	73.0	81.5	
2	3.170	3.170	0.000	5615905	73.0	81.8	
						RPD = 0.39	
3 Ethane							Ma
1	1.503	1.503	0.000	22244500	136.9	163.5	
2	4.302	4.302	0.000	9974077	136.9	163.4	a
						RPD = 0.09	
4 Ethylene							Ma
1	1.758	1.758	0.000	19777364	127.7	179.4	
2	4.028	4.028	0.000	8742034	127.7	182.4	M
						RPD = 1.62	
5 Propane							
1	2.423	2.423	0.000	33032790	200.7	230.6	
2	5.923	5.923	0.000	14762047	200.7	235.7	
						RPD = 2.19	
6 Acetylene							Ma
1	3.865	3.865	0.000	6946965	118.5	202.6	a
2	4.133	4.133	0.000	4652968	118.5	215.4	M
						RPD = 6.12	
7 Butane							
1	4.166	4.166	0.000	39410804	264.5	298.8	
2	7.367	7.367	0.000	19182054	264.5	300.8	
						RPD = 0.67	
8 isobutylene							
1	5.065	5.065	0.000	34371587	255.4	385.0	
2	7.218	7.218	0.000	16078086	255.4	386.9	
						RPD = 0.48	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

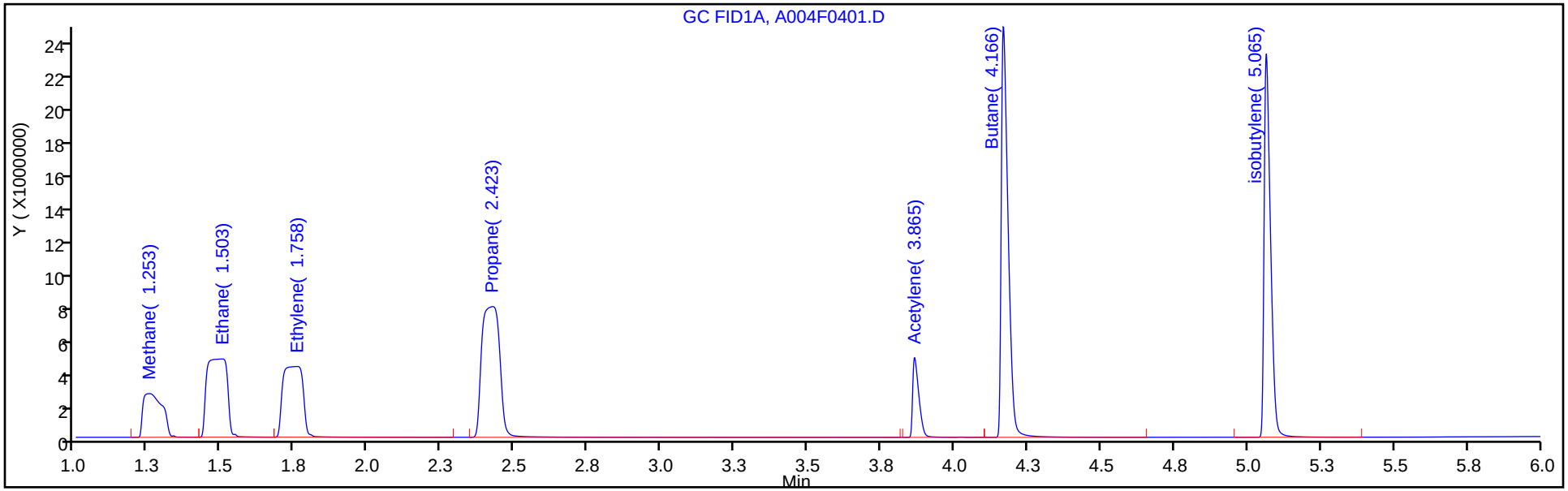
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 02-Jun-2020 08:27:32 Chrom Revision: 2.3 05-May-2020 17:48:18

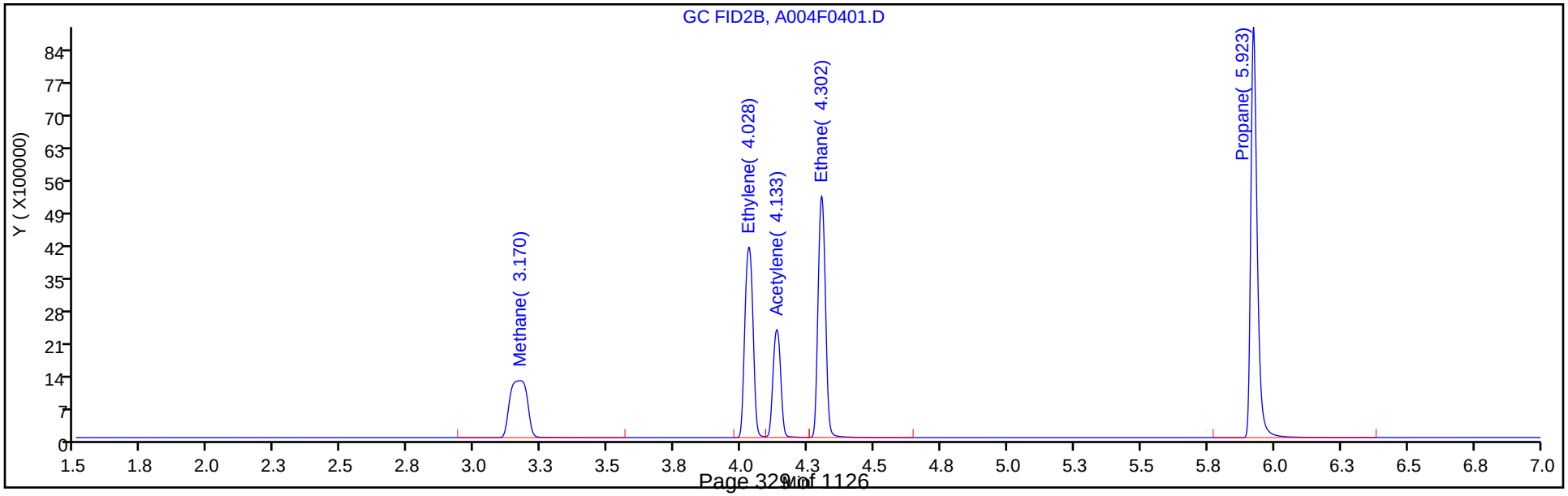
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\A004F0401.D				
Injection Date:	01-Jun-2020 13:13:44	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\A004F0401.D				
Injection Date:	01-Jun-2020 13:13:44	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

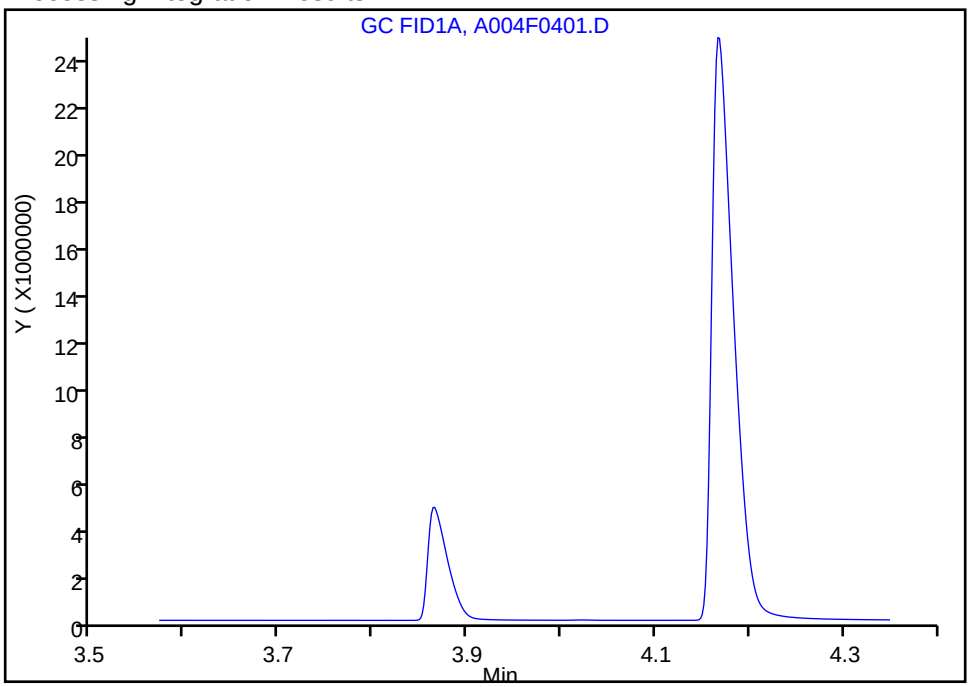
6 Acetylene, CAS: 74-86-2

Signal: 1

Not Detected

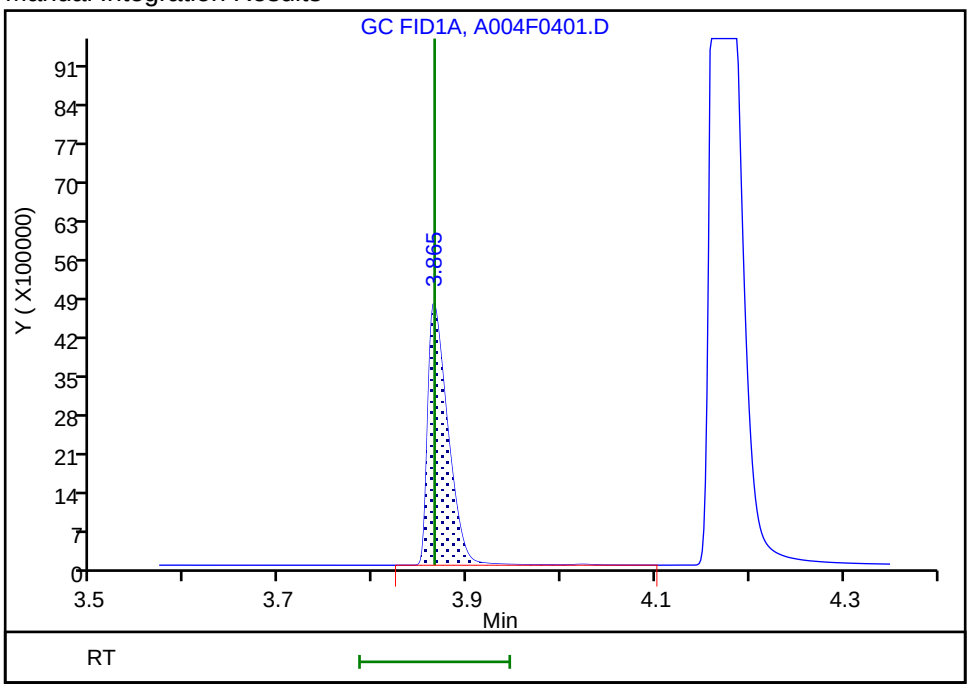
Expected RT: 3.86

Processing Integration Results



Manual Integration Results

RT:	3.86
Area:	6946965
Amount:	202.5693
Amount Units:	ug/l



Reviewer: sciannac, 01-Jun-2020 13:29:14

Audit Action: Assigned Compound ID Audit Reason: Wrong Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCVRT 280-496925/4 Calibration Date: 06/01/2020 13:13

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: A004F0401.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		76927		81.8	73.0	12.0	20.0
Ethylene	Ave	47934	68475		182	128	42.9*	20.0
Acetylene	Ave	21605	39258		215	119	81.7*	20.0
Ethane	Ave	61056	72880		163	137	19.4	20.0

FORM VII RSK-175

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCVRT 280-496925/4 Calibration Date: 06/01/2020 13:13

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: A004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.17	3.13	3.21
Ethylene	4.03	3.98	4.08
Acetylene	4.13	4.05	4.21
Ethane	4.30	4.25	4.35

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\A004F0401.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2020 13:13:44 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:32 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 01-Jun-2020 13:31:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.253	0.000	11759873	73.0	81.5	
2	3.170	3.170	0.000	5615905	73.0	81.8	
						RPD = 0.39	
3 Ethane							Ma
1	1.503	1.503	0.000	22244500	136.9	163.5	
2	4.302	4.302	0.000	9974077	136.9	163.4	a
						RPD = 0.09	
4 Ethylene							Ma
1	1.758	1.758	0.000	19777364	127.7	179.4	
2	4.028	4.028	0.000	8742034	127.7	182.4	M
						RPD = 1.62	
5 Propane							
1	2.423	2.423	0.000	33032790	200.7	230.6	
2	5.923	5.923	0.000	14762047	200.7	235.7	
						RPD = 2.19	
6 Acetylene							Ma
1	3.865	3.865	0.000	6946965	118.5	202.6	a
2	4.133	4.133	0.000	4652968	118.5	215.4	M
						RPD = 6.12	
7 Butane							
1	4.166	4.166	0.000	39410804	264.5	298.8	
2	7.367	7.367	0.000	19182054	264.5	300.8	
						RPD = 0.67	
8 isobutylene							
1	5.065	5.065	0.000	34371587	255.4	385.0	
2	7.218	7.218	0.000	16078086	255.4	386.9	
						RPD = 0.48	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

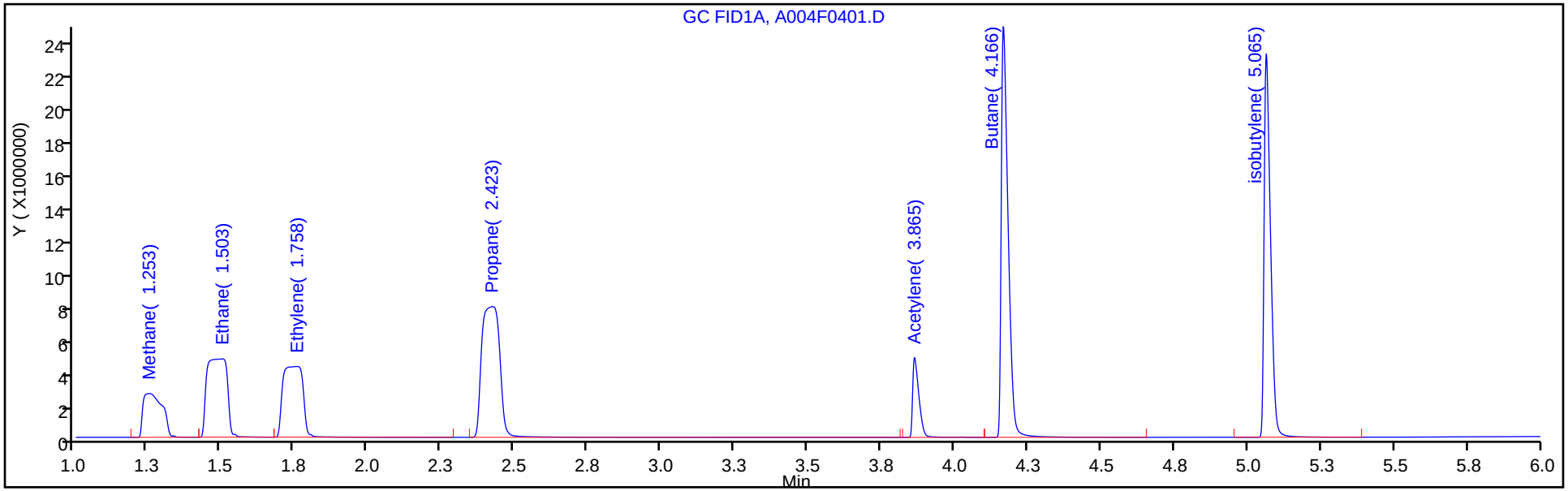
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 02-Jun-2020 08:27:32 Chrom Revision: 2.3 05-May-2020 17:48:18

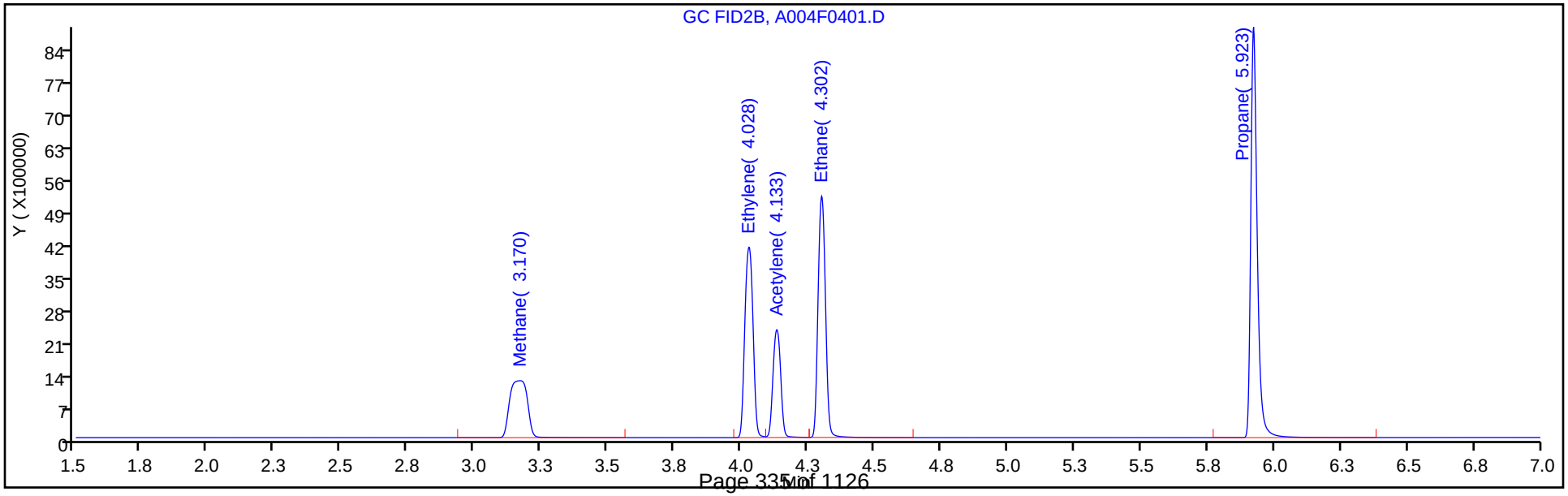
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\A004F0401.D				
Injection Date:	01-Jun-2020 13:13:44	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

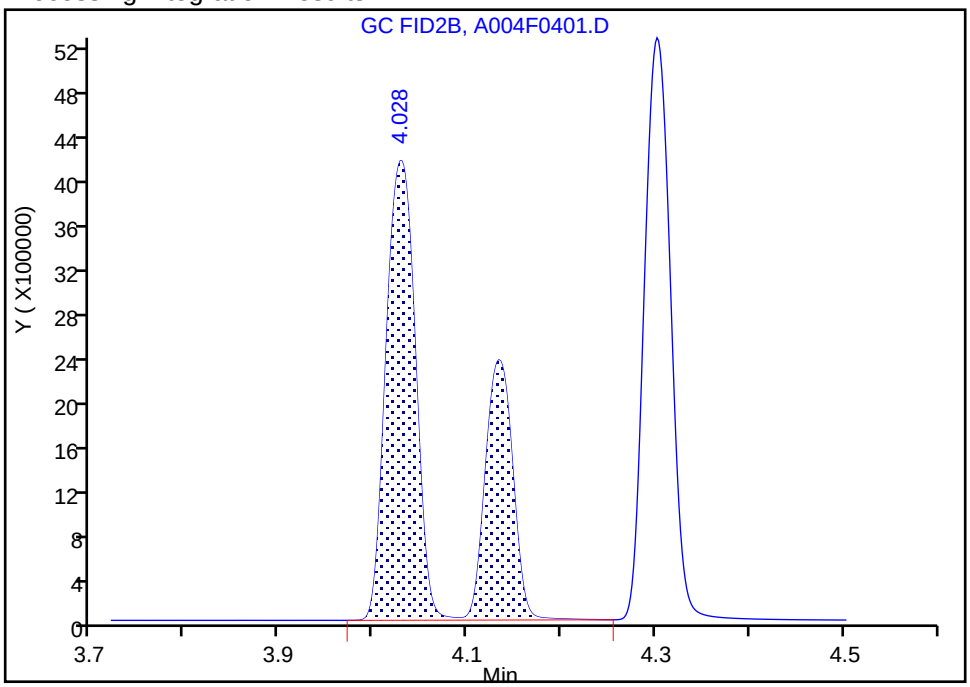
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\A004F0401.D				
Injection Date:	01-Jun-2020 13:13:44	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

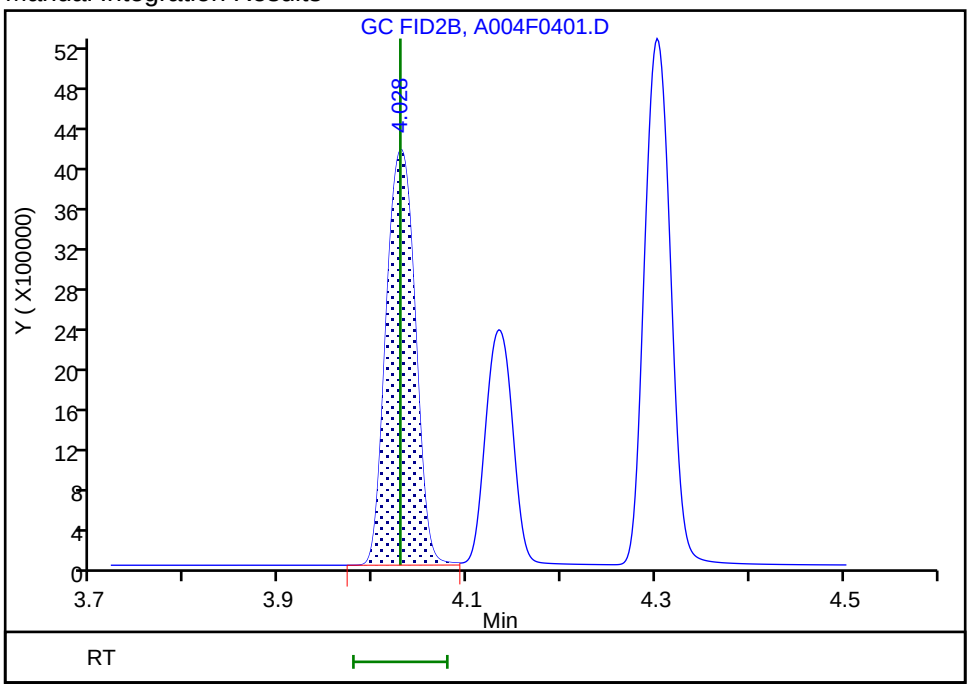
Processing Integration Results

RT: 4.03
Area: 13394965
Amount: 279.4477
Amount Units: ug/l



Manual Integration Results

RT: 4.03
Area: 8742034
Amount: 182.3776
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2020 13:30:47

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Wrong Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

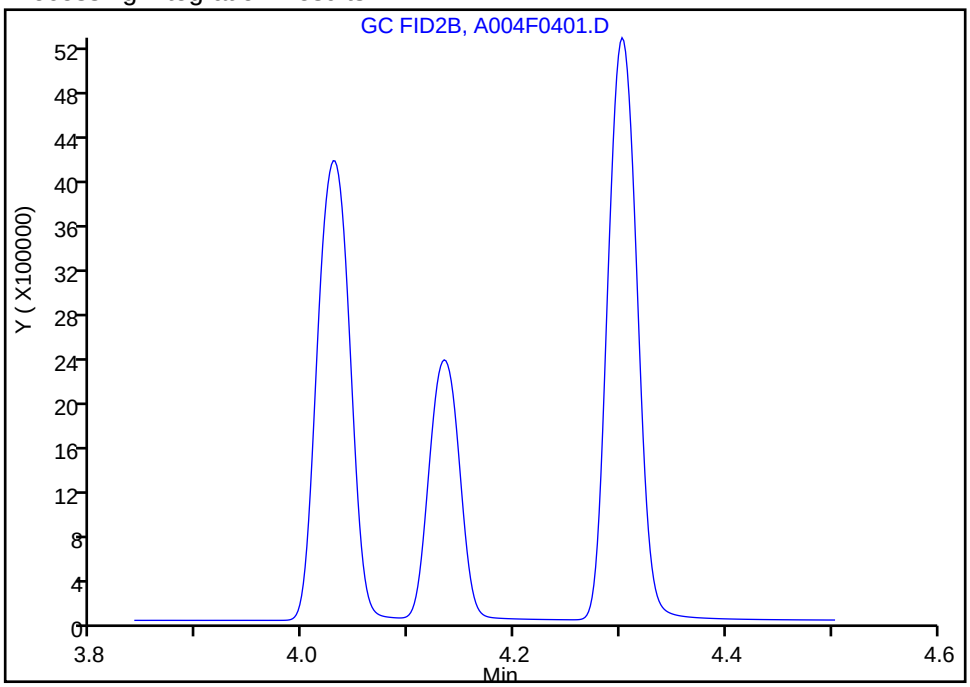
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\A004F0401.D				
Injection Date:	01-Jun-2020 13:13:44	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

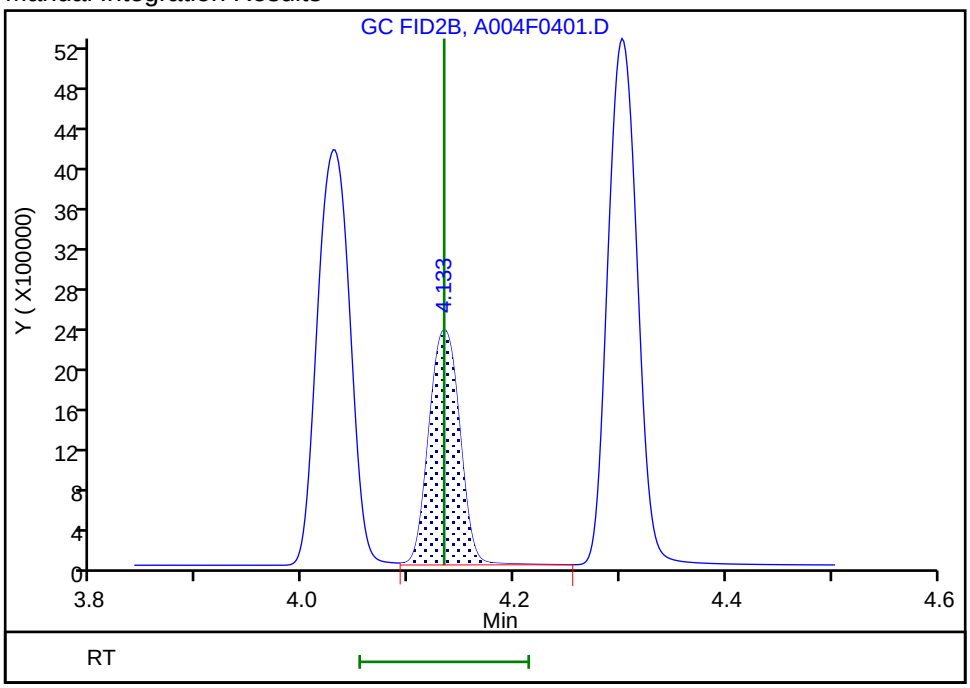
Not Detected
Expected RT: 4.13

Processing Integration Results



RT: 4.13
Area: 4652968
Amount: 215.3604
Amount Units: ug/l

Manual Integration Results



Reviewer: sciannac, 01-Jun-2020 13:30:16
Audit Action: Split an Integrated Peak Audit Reason: Wrong Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

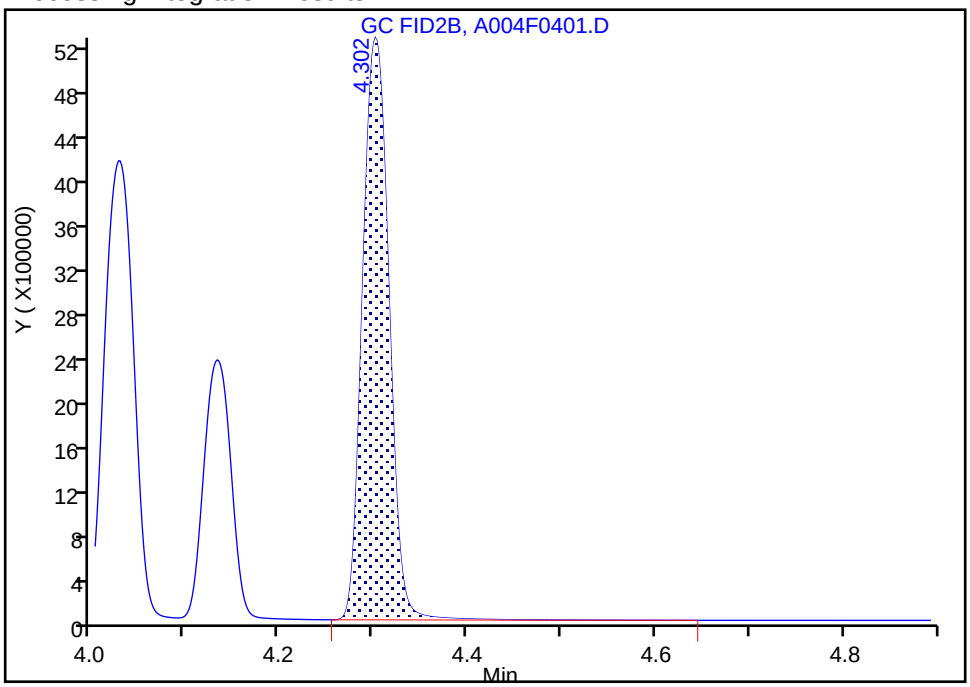
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\A004F0401.D				
Injection Date:	01-Jun-2020 13:13:44	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

3 Ethane, CAS: 74-84-0

Signal: 2

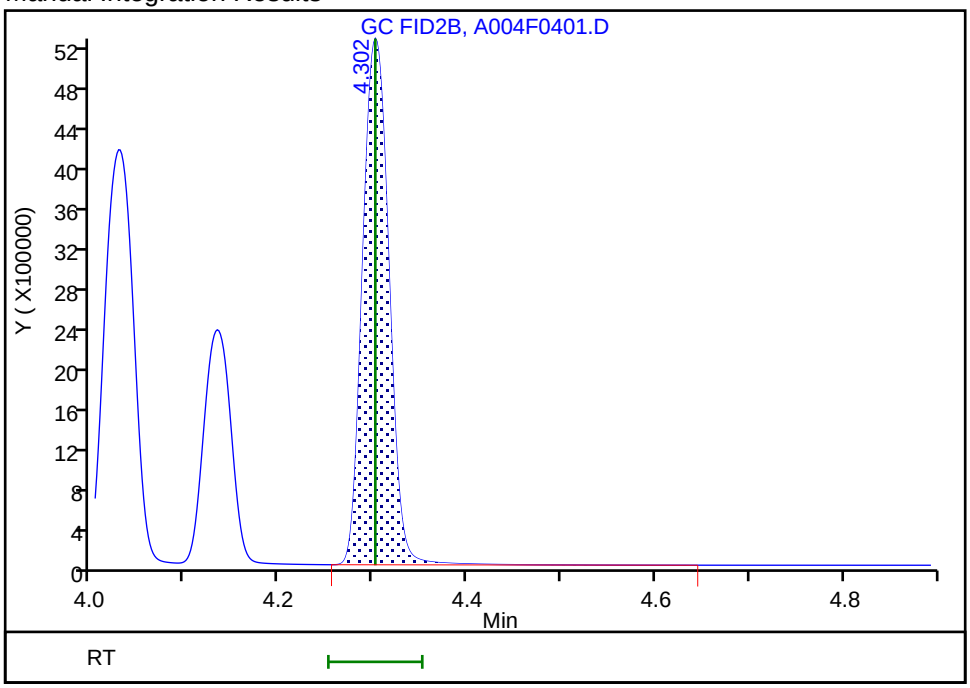
Processing Integration Results

RT: 4.30
Area: 9974077
Amount: 163.3582
Amount Units: ug/l



Manual Integration Results

RT: 4.30
Area: 9974077
Amount: 163.3582
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2020 13:30:38
Audit Action: Assigned Compound ID Audit Reason: Wrong Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-496925/33 Calibration Date: 06/01/2020 14:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F0101.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		159035		80.4	73.0	10.2	20.0
Ethane	Ave	136043	155331		156	137	14.2	20.0
Ethylene	Ave	110213	125235		145	128	13.6	20.0
Acetylene	Ave	34294	35186		122	119	2.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-496925/33 Calibration Date: 06/01/2020 14:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.21	1.29
Ethane	1.50	1.45	1.55
Ethylene	1.76	1.71	1.81
Acetylene	3.89	3.79	3.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\010F0101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2020 14:42:51 ALS Bottle#: 10 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:25 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 01-Jun-2020 15:22:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.253	0.000	11610054	73.0	80.4	
2	3.187	3.170	0.017	5504689	73.0	80.2	
						RPD = 0.33	
3 Ethane							
1	1.503	1.503	0.000	21257856	136.9	156.3	
2	4.312	4.302	0.010	9475209	136.9	155.2	
						RPD = 0.69	
4 Ethylene							
1	1.758	1.758	0.000	15988300	127.7	145.1	
2	4.040	4.028	0.012	6967266	127.7	145.4	
						RPD = 0.20	
5 Propane							
1	2.430	2.423	0.007	32318914	200.7	225.6	
2	5.929	5.923	0.006	14317704	200.7	228.6	
						RPD = 1.32	
6 Acetylene							M
1	3.887	3.865	0.022	4170347	118.5	121.6	
2	4.144	4.133	0.011	2789910	118.5	129.1	M
						RPD = 6.00	
7 Butane							
1	4.182	4.166	0.016	38991391	264.5	295.6	
2	7.370	7.367	0.003	18703137	264.5	293.3	
						RPD = 0.79	
8 isobutylene							
1	5.083	5.065	0.018	26478191	255.4	296.6	
2	7.224	7.218	0.006	12303610	255.4	296.1	
						RPD = 0.19	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

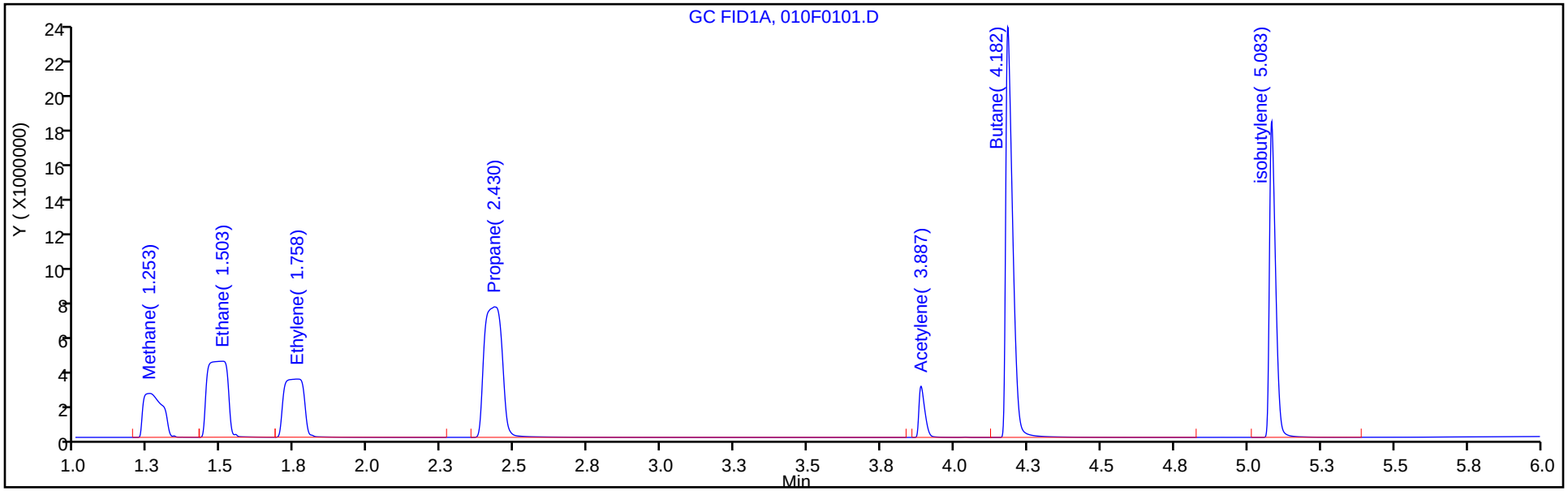
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 02-Jun-2020 08:27:25 Chrom Revision: 2.3 05-May-2020 17:48:18

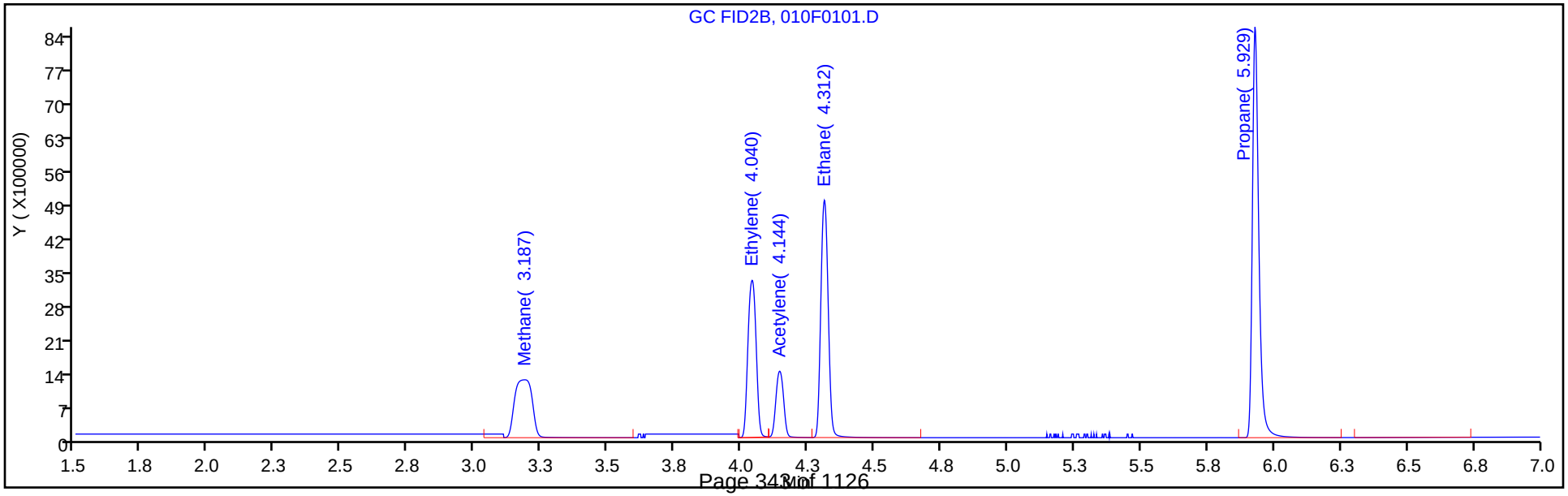
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\010F0101.D				
Injection Date:	01-Jun-2020 14:42:51	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	33
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-496925/33 Calibration Date: 06/01/2020 14:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F0101.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		75403		80.2	73.0	9.8	20.0
Ethylene	Ave	47934	54574		145	128	13.9	20.0
Acetylene	Ave	21605	23539		129	119	8.9	20.0
Ethane	Ave	61056	69235		155	137	13.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-496925/33 Calibration Date: 06/01/2020 14:42

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 010F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.19	3.13	3.21
Ethylene	4.04	3.98	4.08
Acetylene	4.14	4.05	4.21
Ethane	4.31	4.25	4.35

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\010F0101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2020 14:42:51 ALS Bottle#: 10 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:25 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 01-Jun-2020 15:22:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.253	0.000	11610054	73.0	80.4	
2	3.187	3.170	0.017	5504689	73.0	80.2	
						RPD = 0.33	
3 Ethane							
1	1.503	1.503	0.000	21257856	136.9	156.3	
2	4.312	4.302	0.010	9475209	136.9	155.2	
						RPD = 0.69	
4 Ethylene							
1	1.758	1.758	0.000	15988300	127.7	145.1	
2	4.040	4.028	0.012	6967266	127.7	145.4	
						RPD = 0.20	
5 Propane							
1	2.430	2.423	0.007	32318914	200.7	225.6	
2	5.929	5.923	0.006	14317704	200.7	228.6	
						RPD = 1.32	
6 Acetylene							M
1	3.887	3.865	0.022	4170347	118.5	121.6	
2	4.144	4.133	0.011	2789910	118.5	129.1	M
						RPD = 6.00	
7 Butane							
1	4.182	4.166	0.016	38991391	264.5	295.6	
2	7.370	7.367	0.003	18703137	264.5	293.3	
						RPD = 0.79	
8 isobutylene							
1	5.083	5.065	0.018	26478191	255.4	296.6	
2	7.224	7.218	0.006	12303610	255.4	296.1	
						RPD = 0.19	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

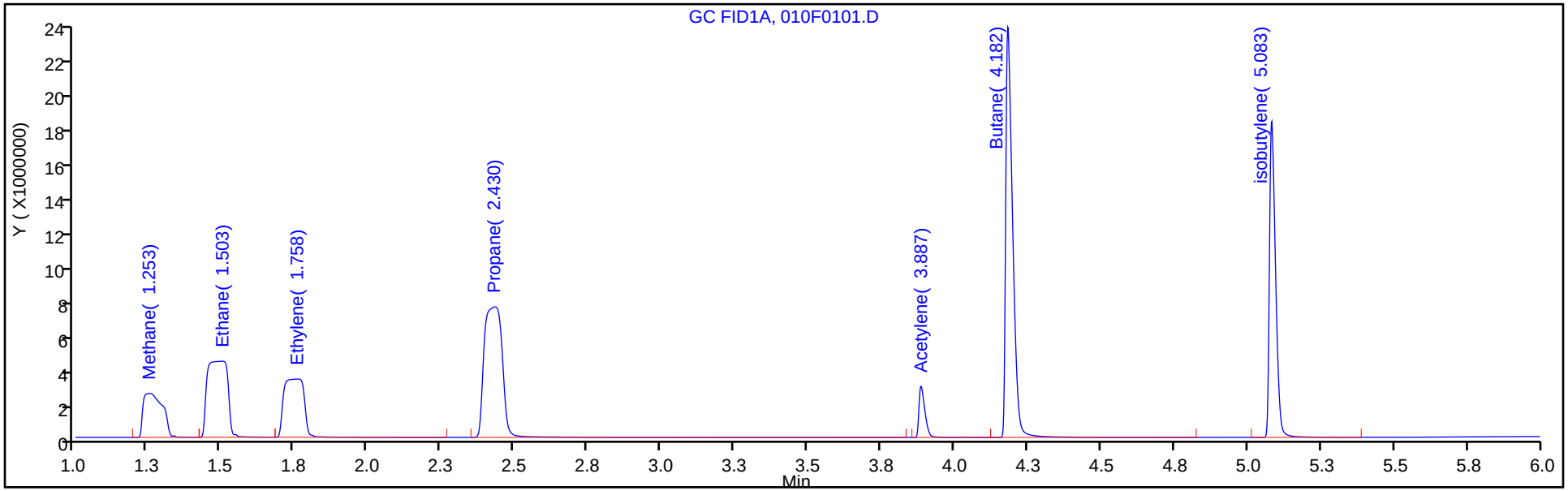
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 02-Jun-2020 08:27:25 Chrom Revision: 2.3 05-May-2020 17:48:18

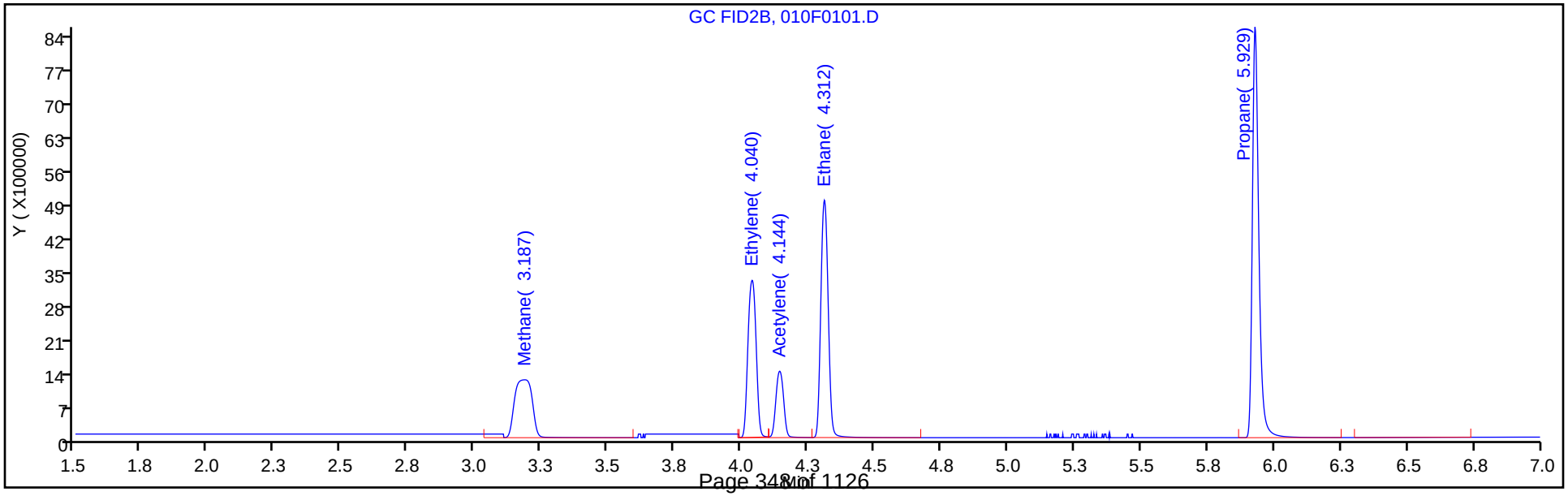
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\010F0101.D				
Injection Date:	01-Jun-2020 14:42:51	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	33
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

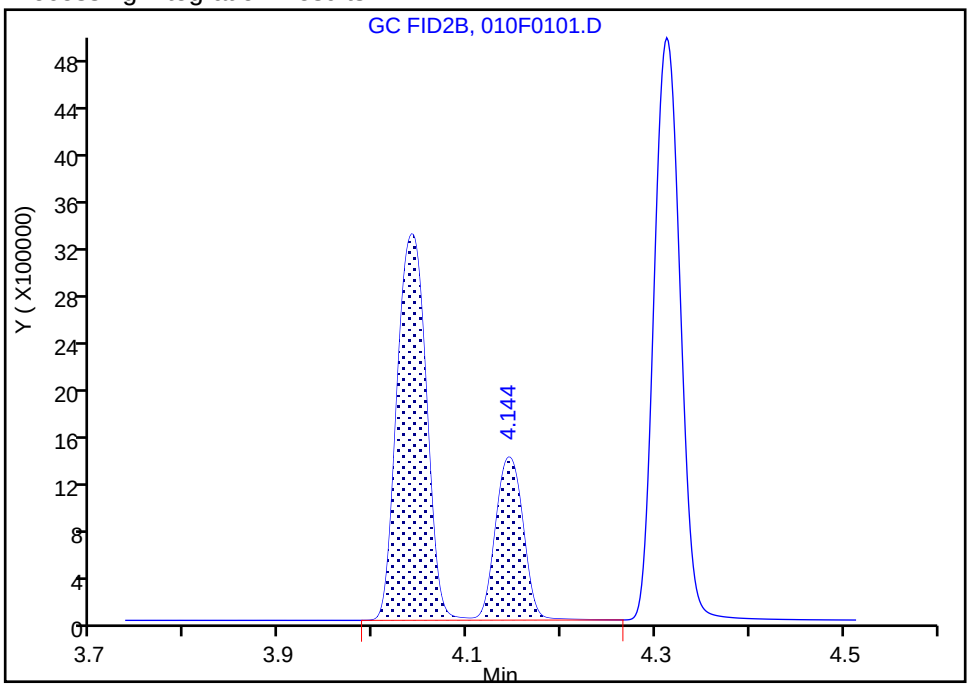
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\010F0101.D				
Injection Date:	01-Jun-2020 14:42:51	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	10	Worklist Smp#:	33
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

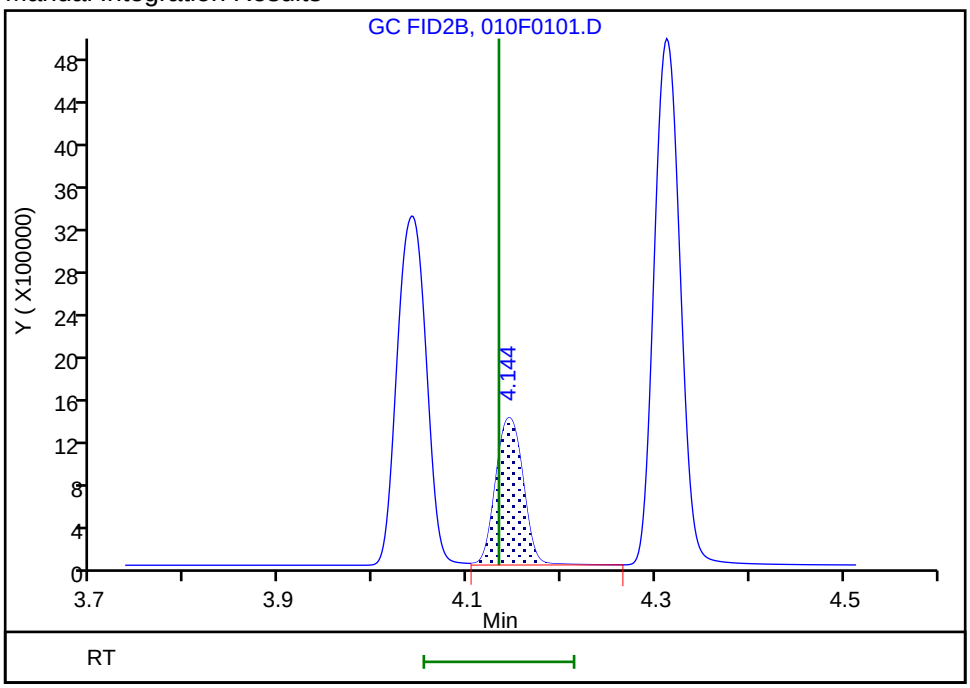
Processing Integration Results

RT: 4.14
Area: 9810623
Amount: 454.0800
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2789910
Amount: 129.1297
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2020 15:21:48

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-496925/36 Calibration Date: 06/01/2020 19:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 026F1701.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		158342		80.1	73.0	9.7	20.0
Ethane	Ave	136043	152997		154	137	12.5	20.0
Ethylene	Ave	110213	120700		140	128	9.5	20.0
Acetylene	Ave	34294	35828		124	119	4.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-496925/36 Calibration Date: 06/01/2020 19:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 026F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.21	1.29
Ethane	1.50	1.45	1.55
Ethylene	1.77	1.71	1.81
Acetylene	3.91	3.79	3.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\026F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2020 19:03:56 ALS Bottle#: 26 Worklist Smp#: 36
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:32 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 02-Jun-2020 08:22:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.257	1.253	0.004	11559466	73.0	80.1	
2	3.179	3.170	0.009	5511892	73.0	80.3	
						RPD = 0.24	
3 Ethane							
1	1.504	1.503	0.001	20938525	136.9	153.9	
2	4.307	4.302	0.005	9387210	136.9	153.7	
						RPD = 0.11	
4 Ethylene							
1	1.774	1.758	0.016	15409413	127.7	139.8	
2	4.034	4.028	0.006	6757269	127.7	141.0	
						RPD = 0.82	
5 Propane							
1	2.454	2.423	0.031	31939392	200.7	223.0	
2	5.925	5.923	0.002	14263541	200.7	227.7	
						RPD = 2.12	
6 Acetylene							M
1	3.907	3.865	0.042	4246364	118.5	123.8	
2	4.139	4.133	0.006	2874363	118.5	133.0	M
						RPD = 7.18	
7 Butane							
1	4.199	4.166	0.033	38390404	264.5	291.0	
2	7.369	7.367	0.002	18566230	264.5	291.1	
						RPD = 0.03	
8 isobutylene							
1	5.097	5.065	0.032	24894289	255.4	278.9	
2	7.222	7.218	0.004	11661797	255.4	280.6	
						RPD = 0.62	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

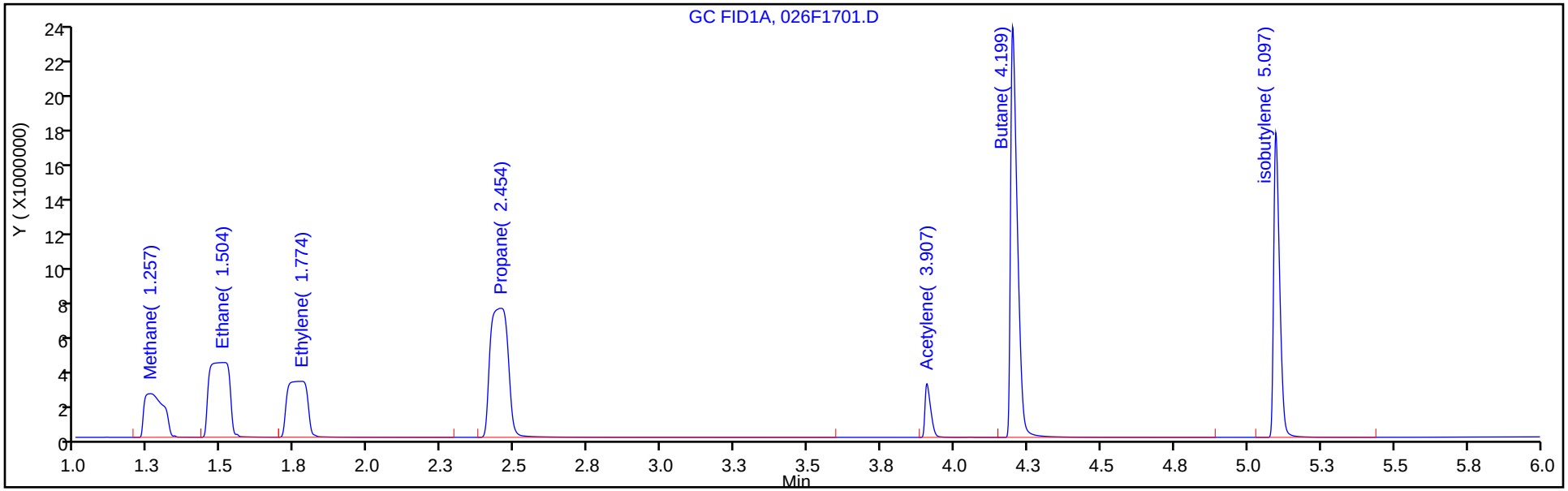
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 02-Jun-2020 08:27:32 Chrom Revision: 2.3 05-May-2020 17:48:18

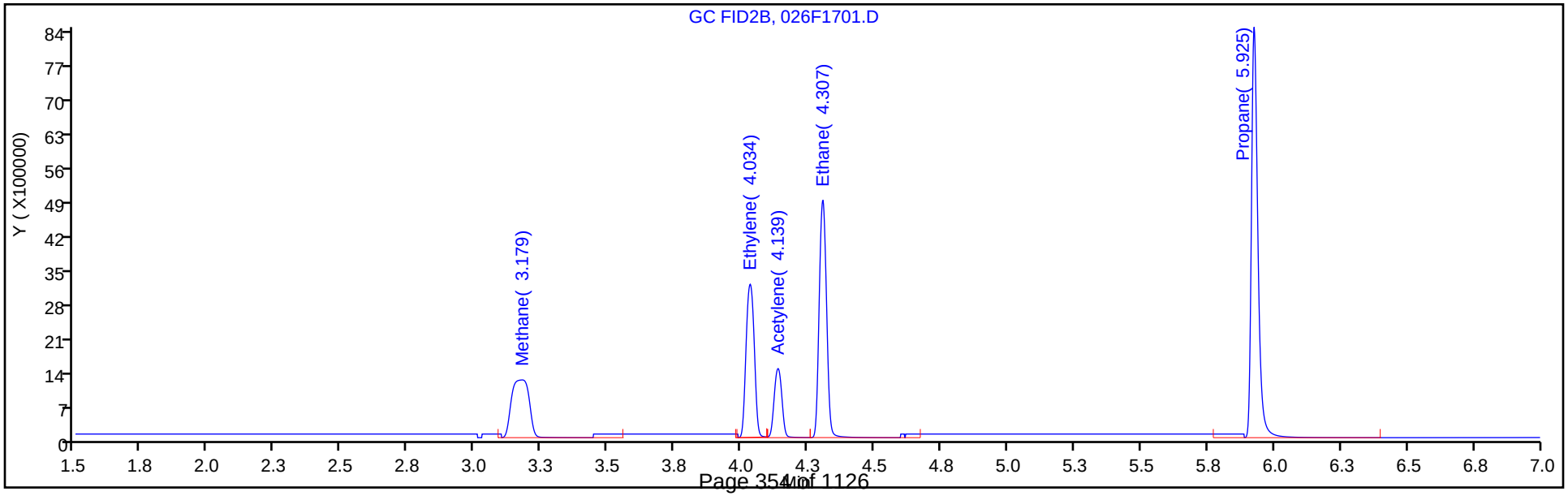
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\026F1701.D				
Injection Date:	01-Jun-2020 19:03:56	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	36
Client ID:					
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 VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-496925/36 Calibration Date: 06/01/2020 19:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 026F1701.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		75502		80.3	73.0	10.0	20.0
Ethylene	Ave	47934	52929		141	128	10.4	20.0
Acetylene	Ave	21605	24252		133	119	12.2	20.0
Ethane	Ave	61056	68592		154	137	12.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-496925/36 Calibration Date: 06/01/2020 19:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 026F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.18	3.13	3.21
Ethylene	4.03	3.98	4.08
Acetylene	4.14	4.05	4.21
Ethane	4.31	4.25	4.35

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\026F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2020 19:03:56 ALS Bottle#: 26 Worklist Smp#: 36
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:32 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 02-Jun-2020 08:22:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.257	1.253	0.004	11559466	73.0	80.1	
2	3.179	3.170	0.009	5511892	73.0	80.3	
						RPD = 0.24	
3 Ethane							
1	1.504	1.503	0.001	20938525	136.9	153.9	
2	4.307	4.302	0.005	9387210	136.9	153.7	
						RPD = 0.11	
4 Ethylene							
1	1.774	1.758	0.016	15409413	127.7	139.8	
2	4.034	4.028	0.006	6757269	127.7	141.0	
						RPD = 0.82	
5 Propane							
1	2.454	2.423	0.031	31939392	200.7	223.0	
2	5.925	5.923	0.002	14263541	200.7	227.7	
						RPD = 2.12	
6 Acetylene							M
1	3.907	3.865	0.042	4246364	118.5	123.8	
2	4.139	4.133	0.006	2874363	118.5	133.0	M
						RPD = 7.18	
7 Butane							
1	4.199	4.166	0.033	38390404	264.5	291.0	
2	7.369	7.367	0.002	18566230	264.5	291.1	
						RPD = 0.03	
8 isobutylene							
1	5.097	5.065	0.032	24894289	255.4	278.9	
2	7.222	7.218	0.004	11661797	255.4	280.6	
						RPD = 0.62	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

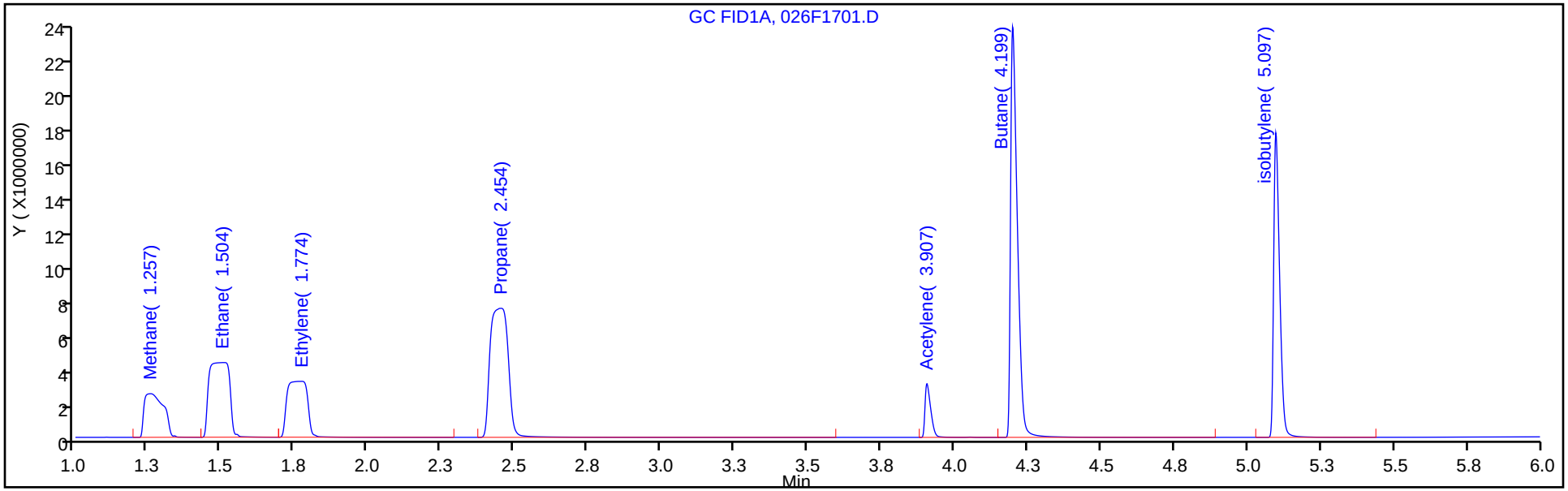
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 02-Jun-2020 08:27:32 Chrom Revision: 2.3 05-May-2020 17:48:18

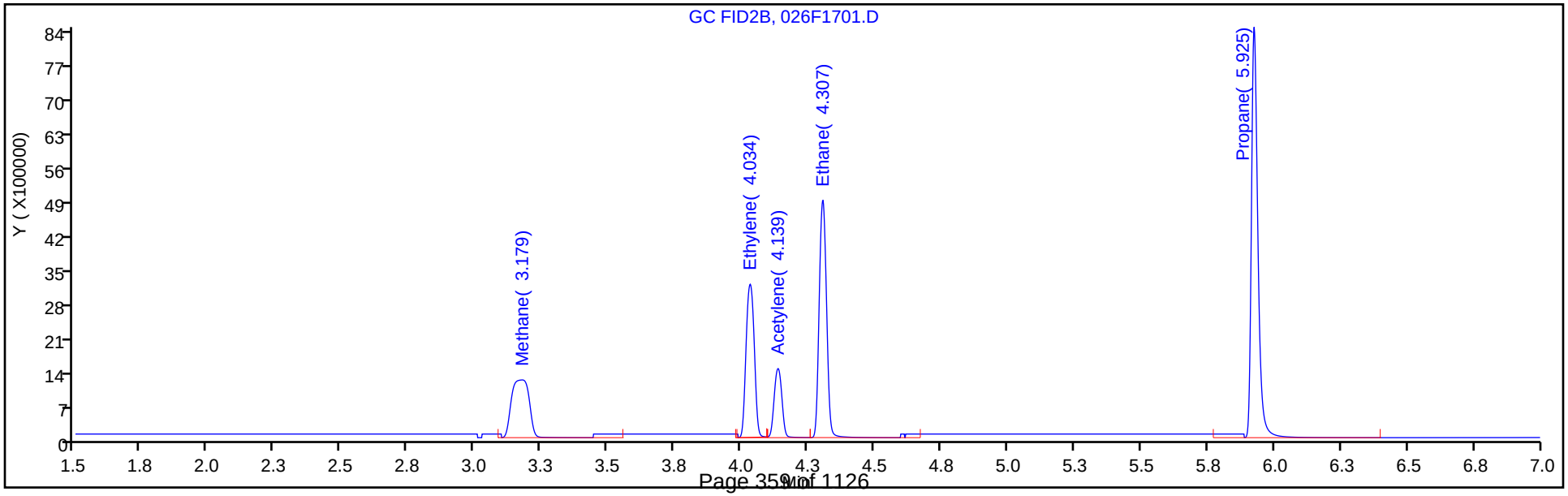
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\026F1701.D				
Injection Date:	01-Jun-2020 19:03:56	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	ccv			Worklist Smp#:	36
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

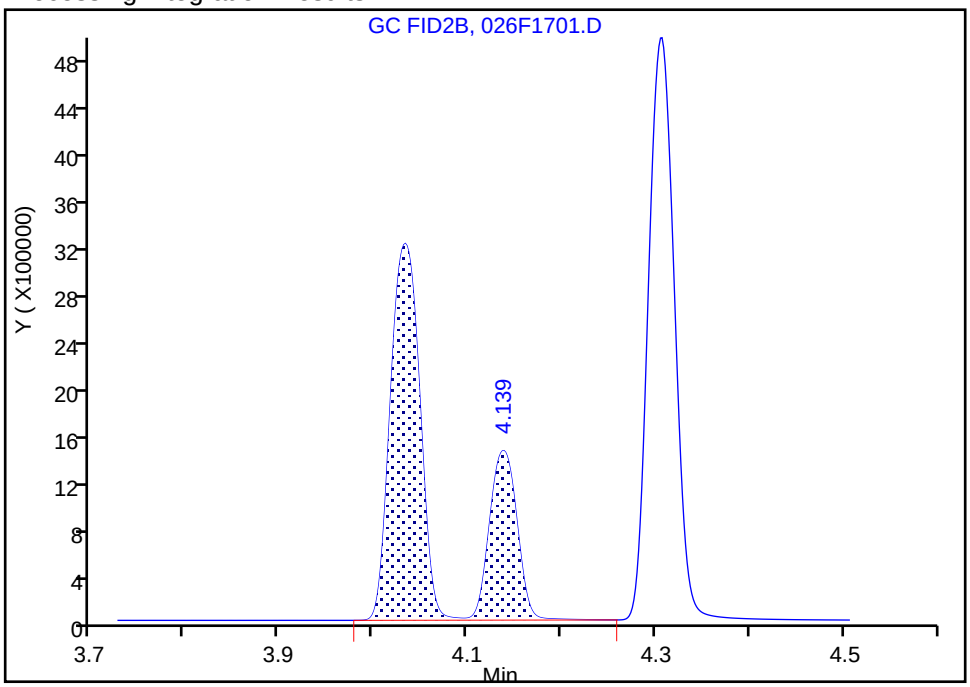
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\026F1701.D				
Injection Date:	01-Jun-2020 19:03:56	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	26	Worklist Smp#:	36
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

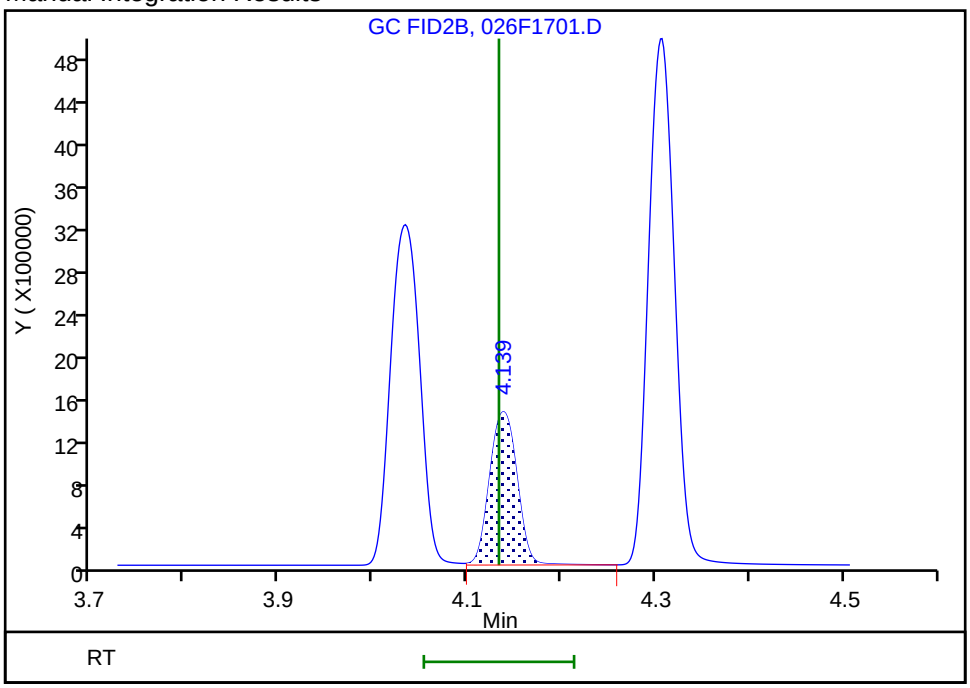
Processing Integration Results

RT: 4.14
Area: 9685032
Amount: 448.2671
Amount Units: ug/l



Manual Integration Results

RT: 4.14
Area: 2874363
Amount: 133.0385
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2020 08:22:02

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCVRT 280-497247/4 Calibration Date: 06/03/2020 11:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 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		158899		80.4	73.0	10.1	20.0
Ethane	Ave	136043	152908		154	137	12.4	20.0
Ethylene	Ave	110213	125872		146	128	14.2	20.0
Acetylene	Ave	34294	36893		128	119	7.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCVRT 280-497247/4 Calibration Date: 06/03/2020 11:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.21	1.29
Ethane	1.50	1.45	1.55
Ethylene	1.76	1.71	1.81
Acetylene	3.89	3.81	3.97

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\004F0401.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Jun-2020 11:03:31 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:27 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 03-Jun-2020 12:50:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	11600168	73.0	80.4	
2	3.161	3.161	0.000	5554229	73.0	80.9	
						RPD = 0.65	
3 Ethane							
1	1.500	1.500	0.000	20926335	136.9	153.8	
2	4.296	4.296	0.000	9427549	136.9	154.4	
						RPD = 0.38	
4 Ethylene							Ma
1	1.758	1.758	0.000	16069673	127.7	145.8	
2	4.023	4.023	0.000	7138347	127.7	148.9	M
						RPD = 2.11	
5 Propane							
1	2.433	2.433	0.000	32812769	200.7	229.1	
2	5.918	5.918	0.000	14715691	200.7	235.0	
						RPD = 2.54	
6 Acetylene							Ma
1	3.886	3.886	0.000	4372610	118.5	127.5	a
2	4.128	4.128	0.000	2958163	118.5	136.9	M
						RPD = 7.12	
7 Butane							
1	4.181	4.181	0.000	40265992	264.5	305.2	
2	7.363	7.363	0.000	19624676	264.5	307.7	
						RPD = 0.80	
8 isobutylene							
1	5.083	5.083	0.000	27463718	255.4	307.7	
2	7.216	7.216	0.000	12911219	255.4	310.7	
						RPD = 0.98	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

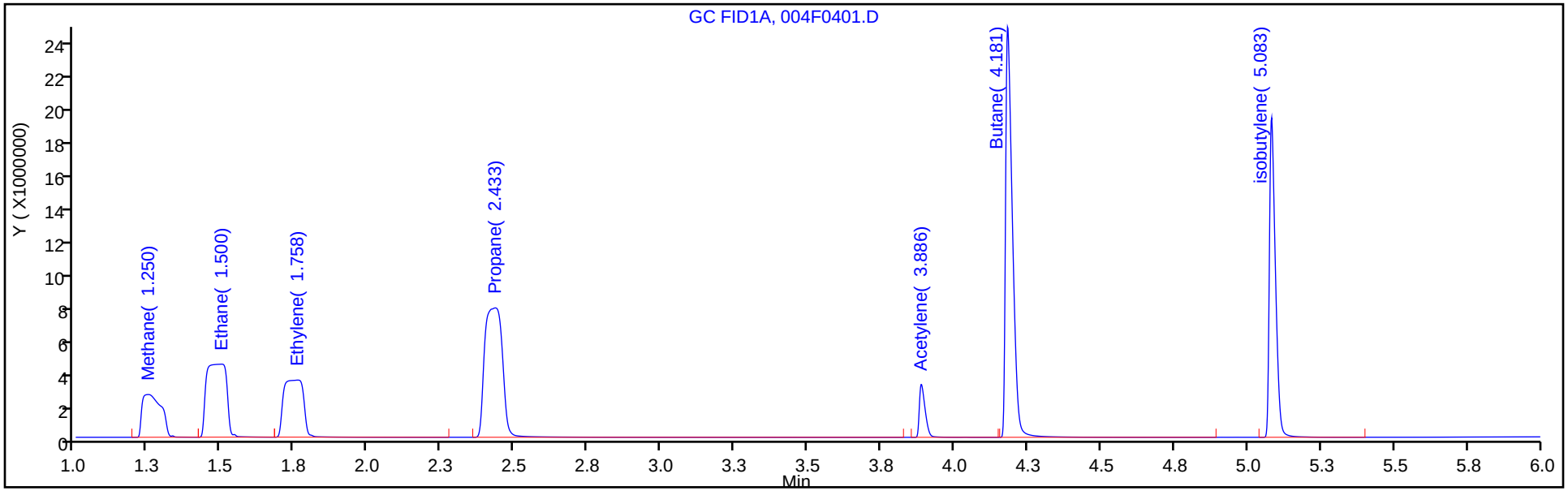
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 05-Jun-2020 13:56:27 Chrom Revision: 2.3 05-May-2020 17:48:18

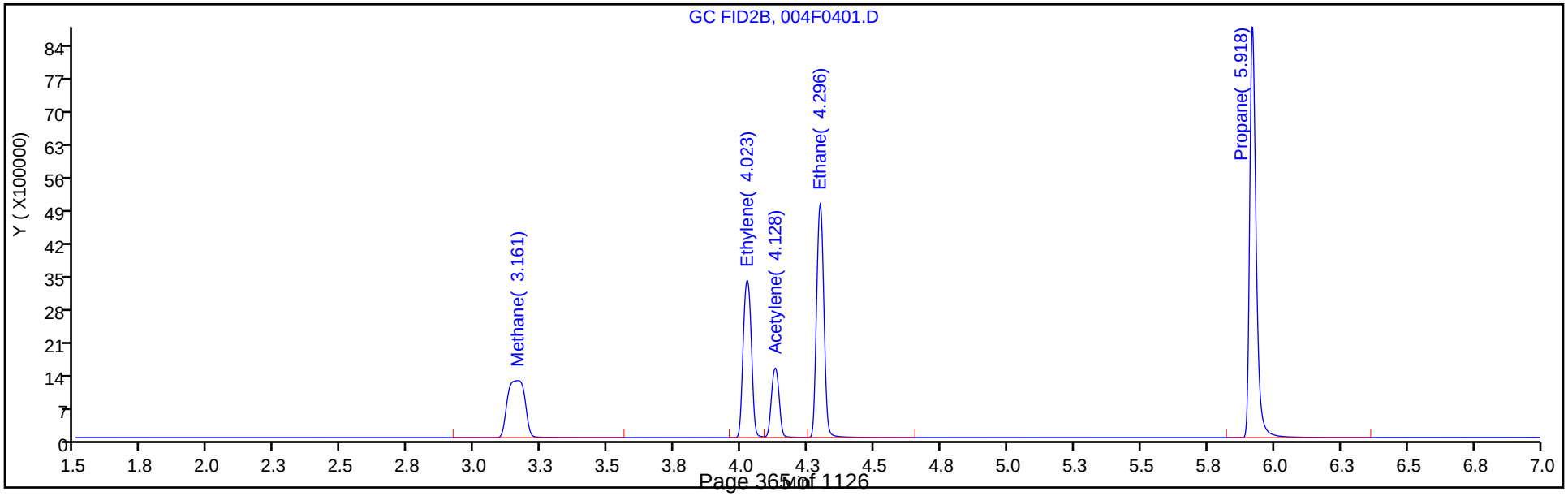
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\004F0401.D				
Injection Date:	03-Jun-2020 11:03:31	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

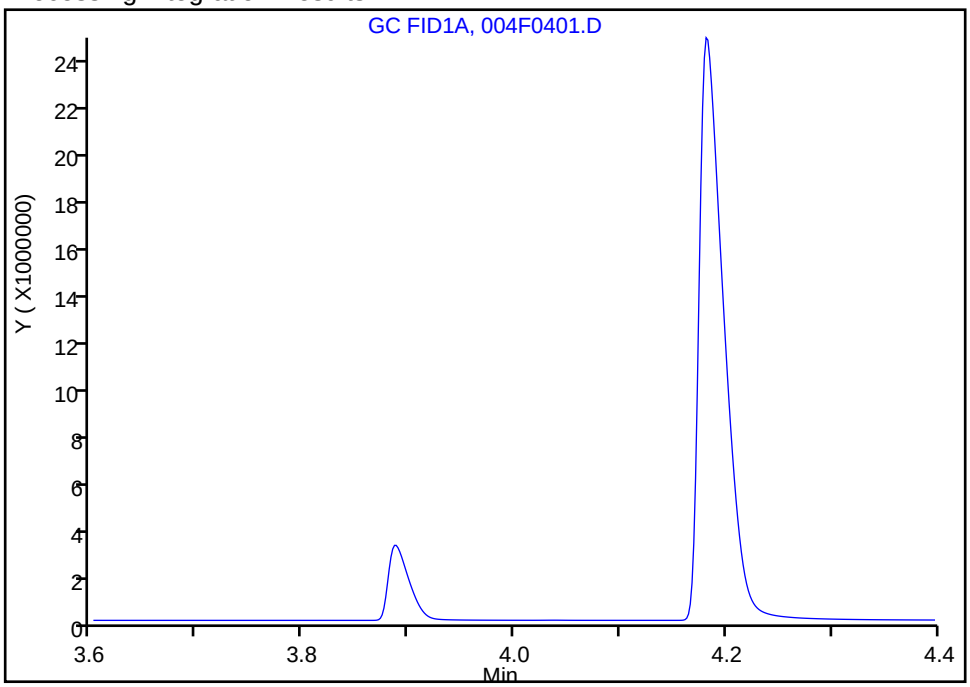
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\004F0401.D				
Injection Date:	03-Jun-2020 11:03:31	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

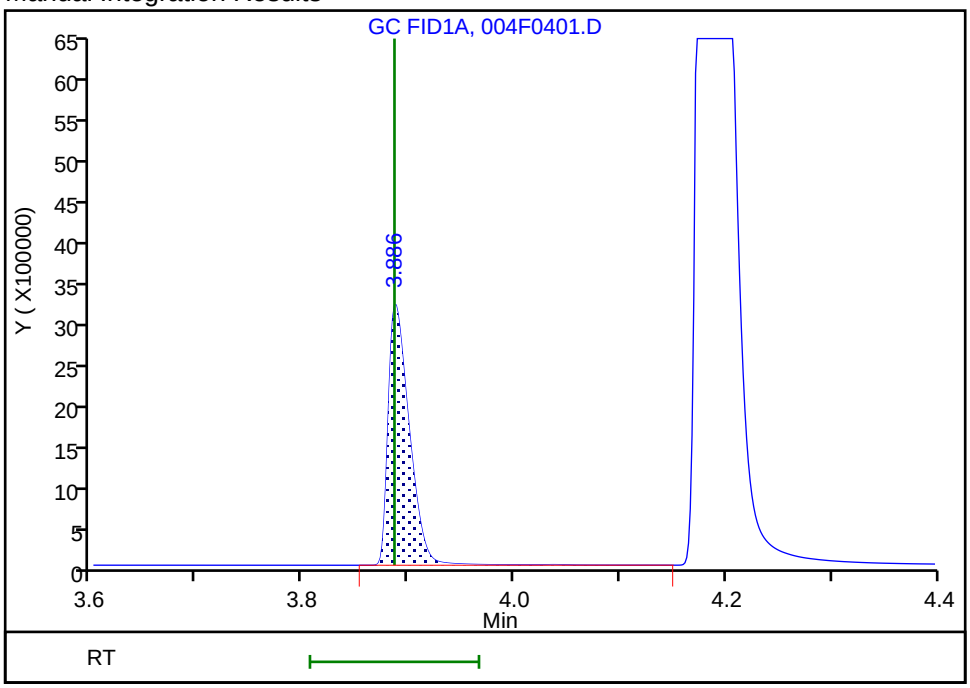
Not Detected
Expected RT: 3.89

Processing Integration Results



Manual Integration Results

RT: 3.89
Area: 4372610
Amount: 127.5026
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2020 12:47:05
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCVRT 280-497247/4 Calibration Date: 06/03/2020 11:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 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		76082		80.9	73.0	10.8	20.0
Ethylene	Ave	47934	55914		149	128	16.6	20.0
Acetylene	Ave	21605	24959		137	119	15.5	20.0
Ethane	Ave	61056	68887		154	137	12.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCVRT 280-497247/4 Calibration Date: 06/03/2020 11:03

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.16	3.12	3.20
Ethylene	4.02	3.97	4.07
Acetylene	4.13	4.05	4.21
Ethane	4.30	4.25	4.35

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\004F0401.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Jun-2020 11:03:31 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SCIANNAC Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:27 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 03-Jun-2020 12:50:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.250	0.000	11600168	73.0	80.4	
2	3.161	3.161	0.000	5554229	73.0	80.9	
						RPD = 0.65	
3 Ethane							
1	1.500	1.500	0.000	20926335	136.9	153.8	
2	4.296	4.296	0.000	9427549	136.9	154.4	
						RPD = 0.38	
4 Ethylene							Ma
1	1.758	1.758	0.000	16069673	127.7	145.8	
2	4.023	4.023	0.000	7138347	127.7	148.9	M
						RPD = 2.11	
5 Propane							
1	2.433	2.433	0.000	32812769	200.7	229.1	
2	5.918	5.918	0.000	14715691	200.7	235.0	
						RPD = 2.54	
6 Acetylene							Ma
1	3.886	3.886	0.000	4372610	118.5	127.5	a
2	4.128	4.128	0.000	2958163	118.5	136.9	M
						RPD = 7.12	
7 Butane							
1	4.181	4.181	0.000	40265992	264.5	305.2	
2	7.363	7.363	0.000	19624676	264.5	307.7	
						RPD = 0.80	
8 isobutylene							
1	5.083	5.083	0.000	27463718	255.4	307.7	
2	7.216	7.216	0.000	12911219	255.4	310.7	
						RPD = 0.98	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

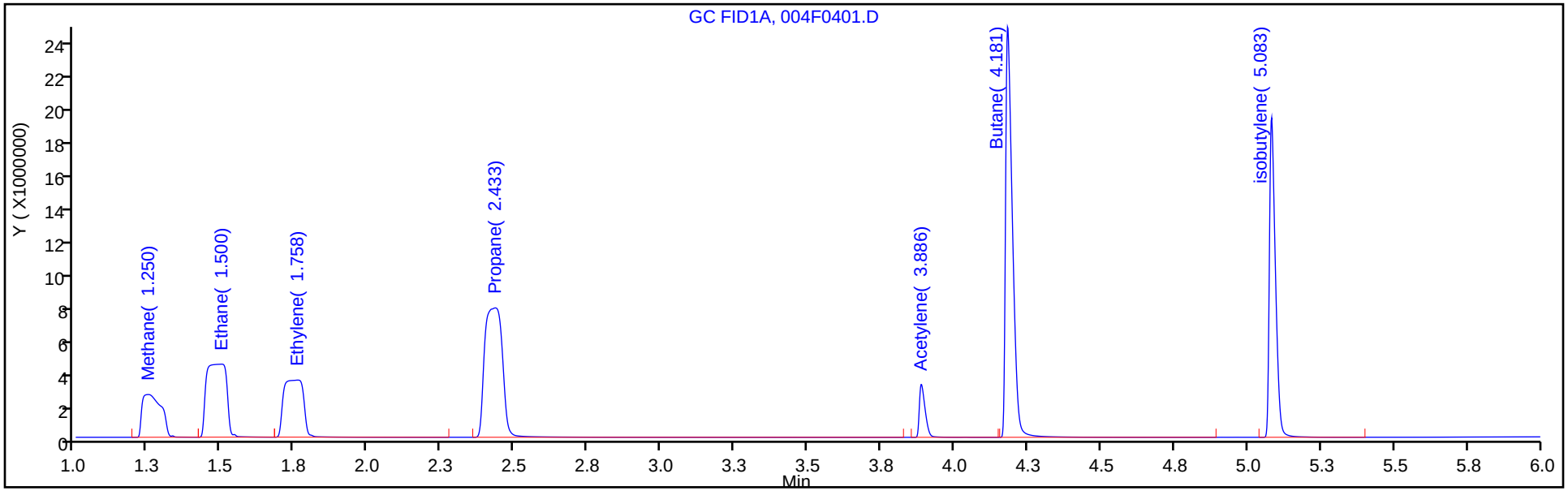
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 05-Jun-2020 13:56:27 Chrom Revision: 2.3 05-May-2020 17:48:18

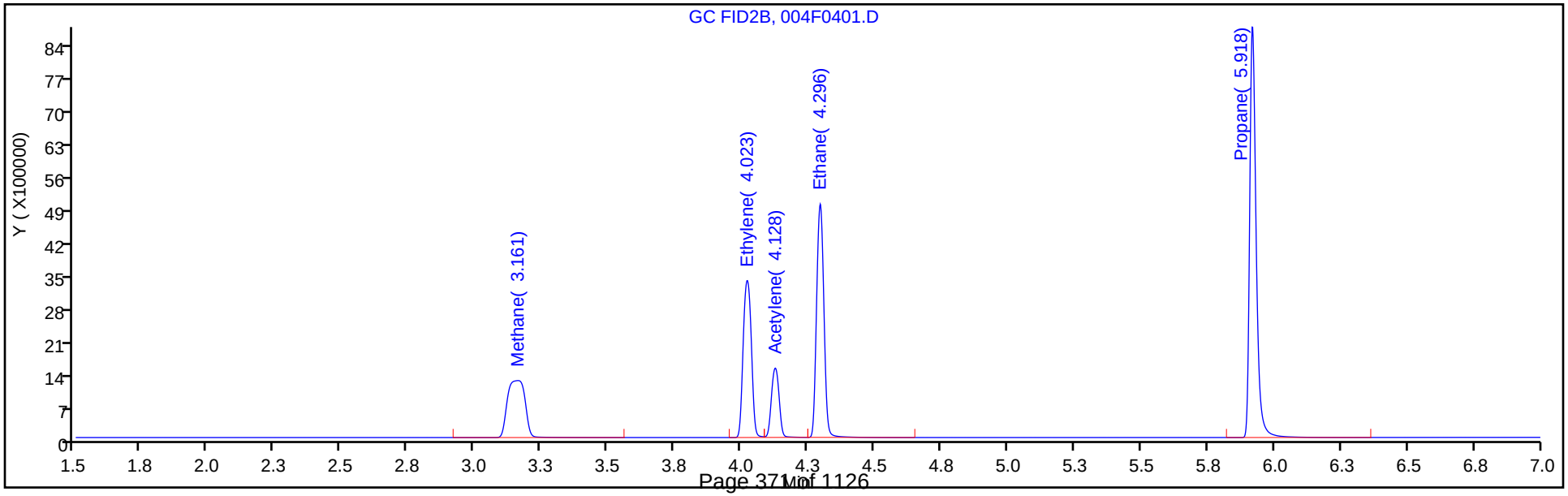
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\004F0401.D				
Injection Date:	03-Jun-2020 11:03:31	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

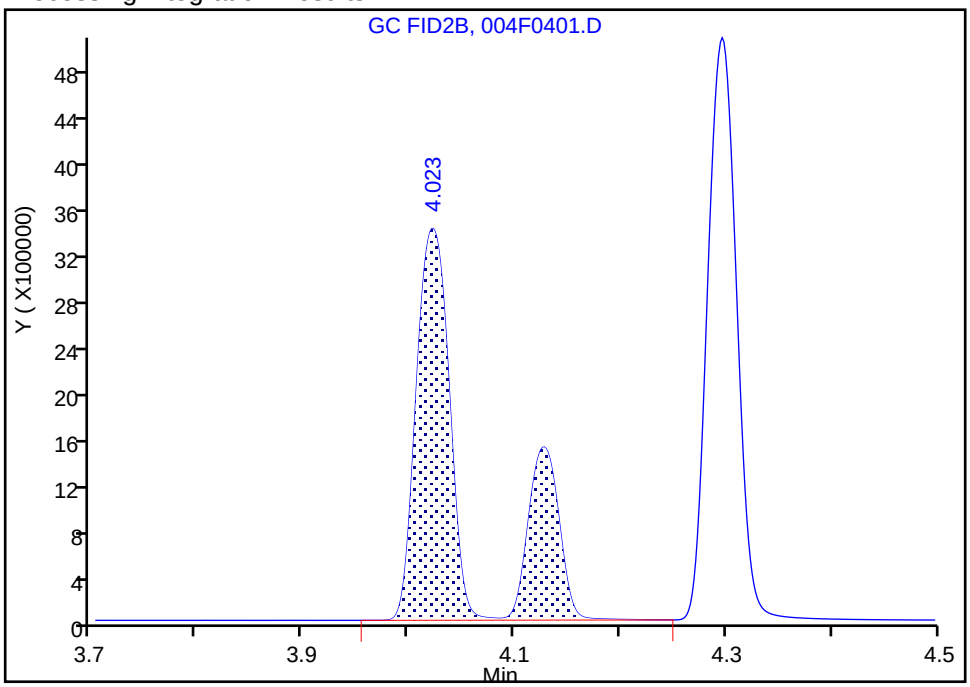
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\004F0401.D				
Injection Date:	03-Jun-2020 11:03:31	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

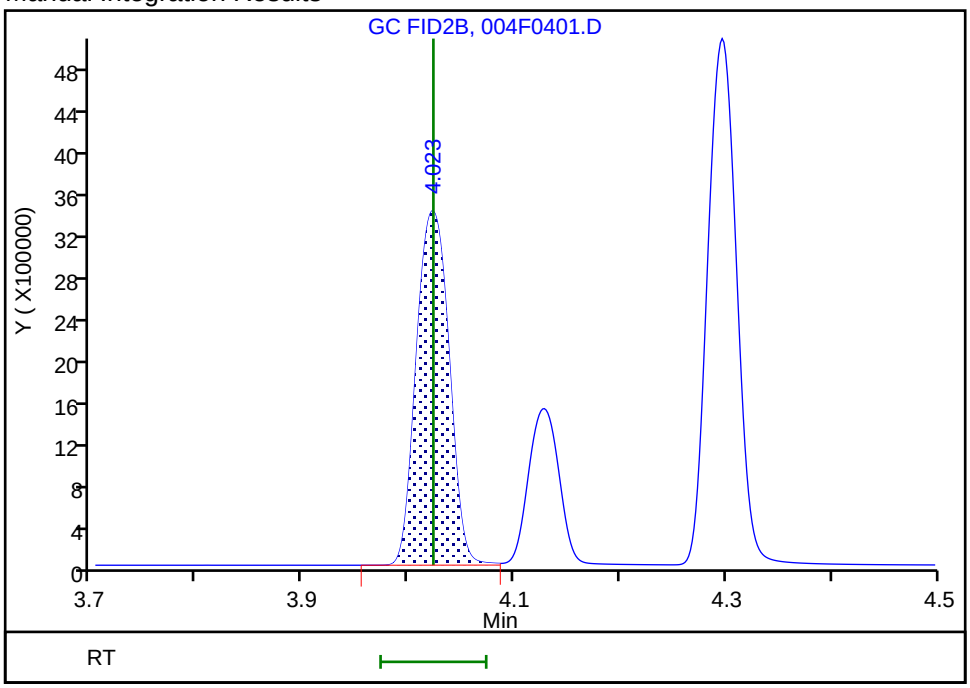
Processing Integration Results

RT: 4.02
Area: 10096422
Amount: 210.6331
Amount Units: ug/l



Manual Integration Results

RT: 4.02
Area: 7138347
Amount: 148.9213
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2020 12:47:53

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

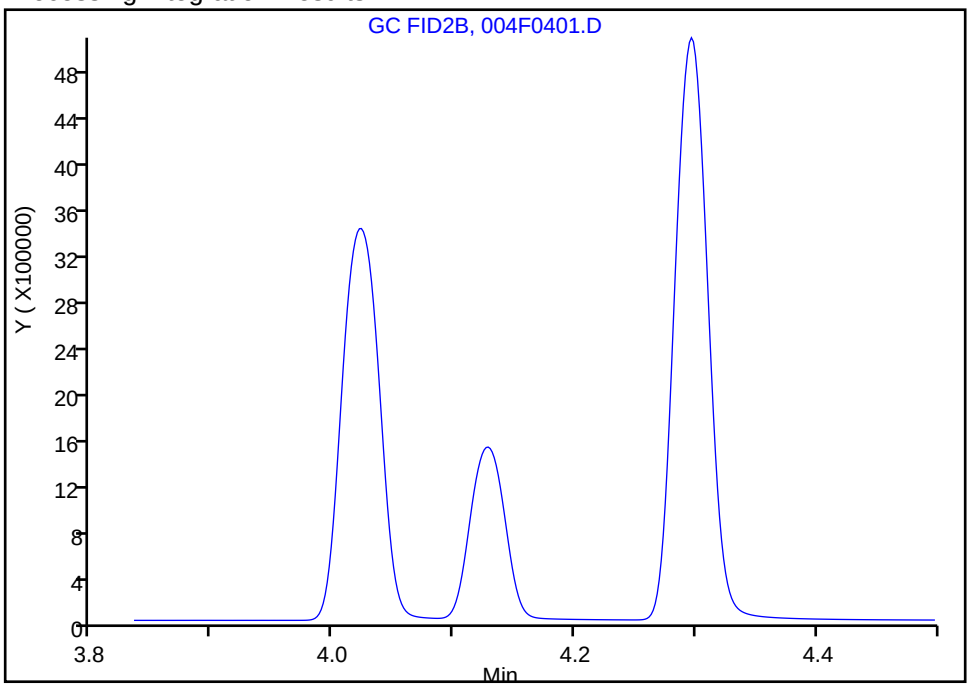
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\004F0401.D				
Injection Date:	03-Jun-2020 11:03:31	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

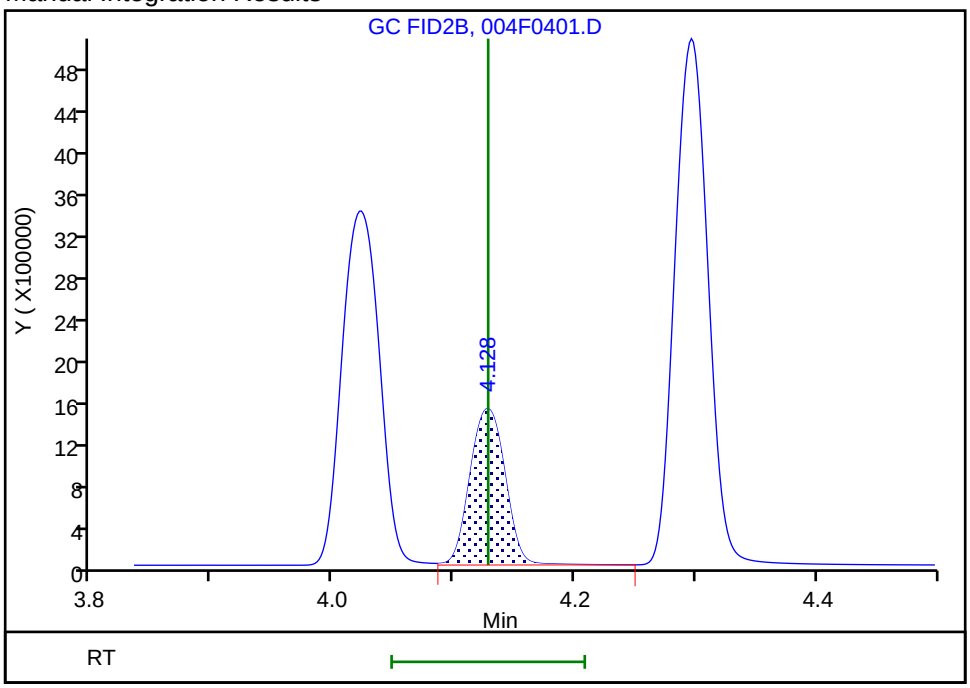
Not Detected
Expected RT: 4.13

Processing Integration Results



Manual Integration Results

RT: 4.13
Area: 2958163
Amount: 136.9172
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2020 12:47:42
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-497247/32 Calibration Date: 06/03/2020 14:24

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 008F0101.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		137580		69.5	73.0	-4.7	20.0
Ethane	Ave	136043	135689		136	137	-0.3	20.0
Ethylene	Ave	110213	110454		128	128	0.2	20.0
Acetylene	Ave	34294	34536		119	119	0.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-497247/32 Calibration Date: 06/03/2020 14:24

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 008F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.21	1.29
Ethane	1.51	1.45	1.55
Ethylene	1.78	1.71	1.81
Acetylene	3.90	3.81	3.97

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2020 14:24:12 ALS Bottle#: 8 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: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:29 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 05-Jun-2020 13:21:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.265	1.250	0.015	10043823	73.0	69.5	a
2	3.207	3.161	0.046	4735482	73.0	68.9	a
						RPD = 0.88	
3 Ethane							
1	1.513	1.500	0.013	18569762	136.9	136.5	
2	4.324	4.296	0.028	8222205	136.9	134.7	
						RPD = 1.35	
4 Ethylene							Ma
1	1.778	1.758	0.020	14101290	127.7	127.9	
2	4.054	4.023	0.031	6150860	127.7	128.3	M
						RPD = 0.29	
5 Propane							
1	2.465	2.433	0.032	28699904	200.7	200.3	
2	5.937	5.918	0.019	12655080	200.7	202.1	
						RPD = 0.85	
6 Acetylene							Ma
1	3.903	3.886	0.017	4093276	118.5	119.4	a
2	4.157	4.128	0.029	2729892	118.5	126.4	M
						RPD = 5.69	
7 Butane							a
1	0.000	4.181	-4.181	0	264.5	0	
2	7.377	7.363	0.014	17122293	264.5	268.5	
						RPD = 200.00	
8 isobutylene							Ma
1	5.100	5.083	0.017	23789251	255.4	266.5	M
2	7.230	7.216	0.014	10696753	255.4	257.4	M
						RPD = 3.48	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

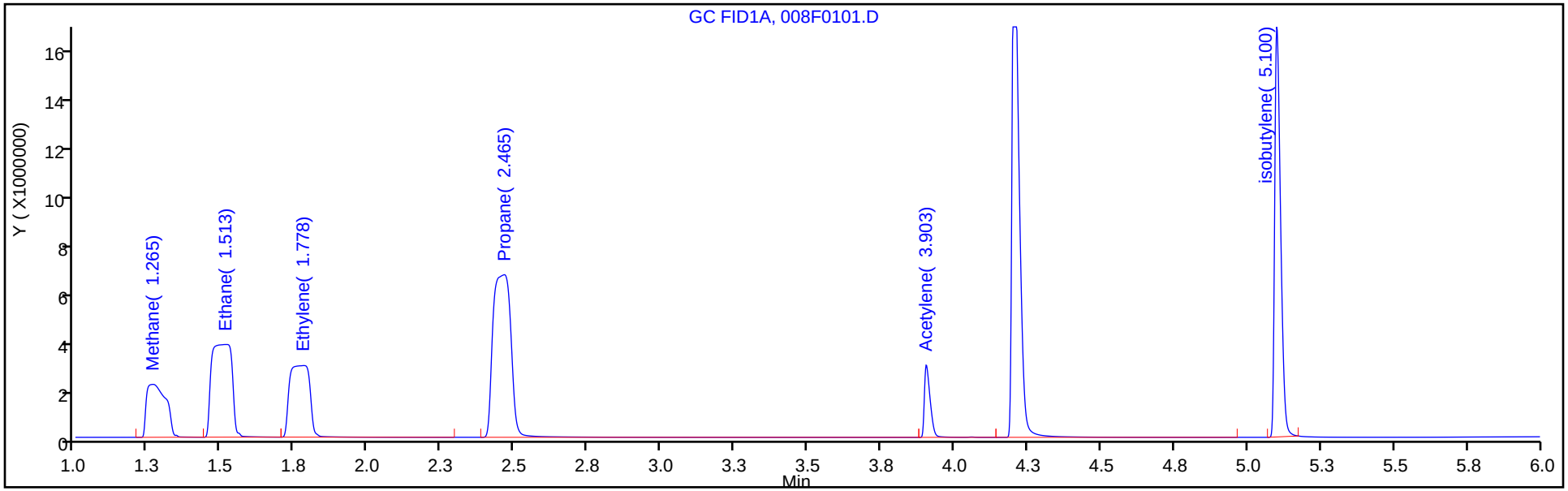
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 05-Jun-2020 13:56:29 Chrom Revision: 2.3 05-May-2020 17:48:18

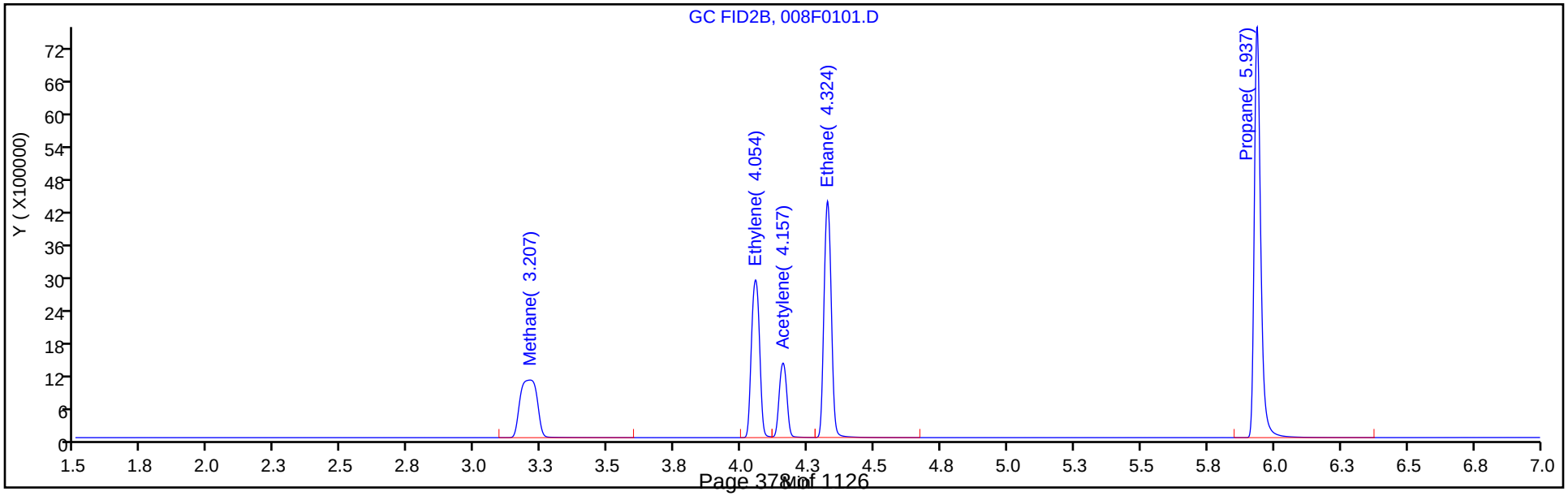
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D				
Injection Date:	03-Jun-2020 14:24:12	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#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

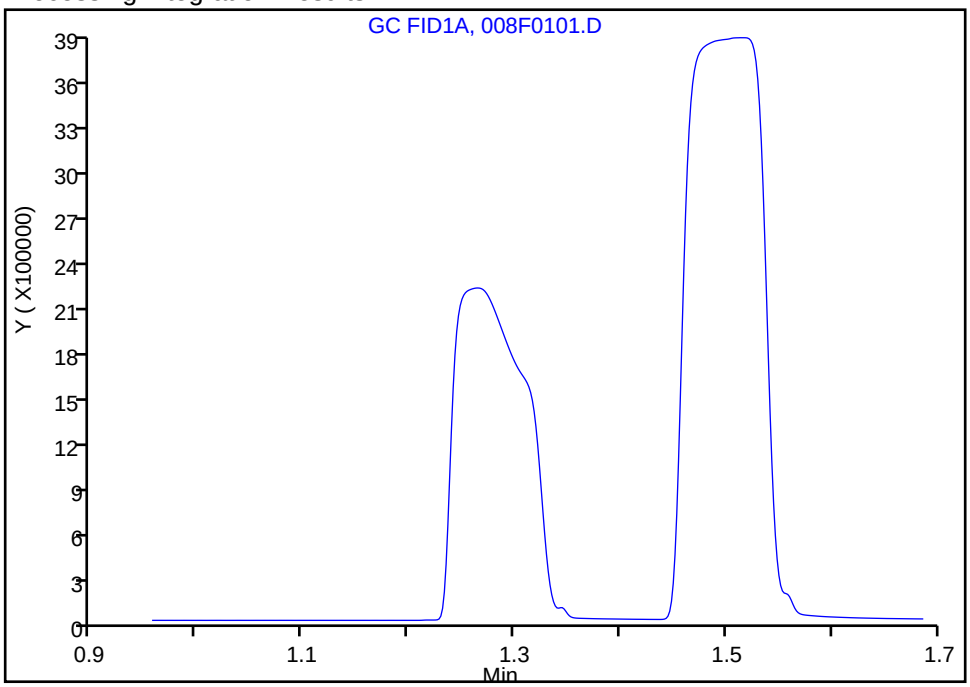
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D				
Injection Date:	03-Jun-2020 14:24:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	8	Worklist Smp#:	32
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

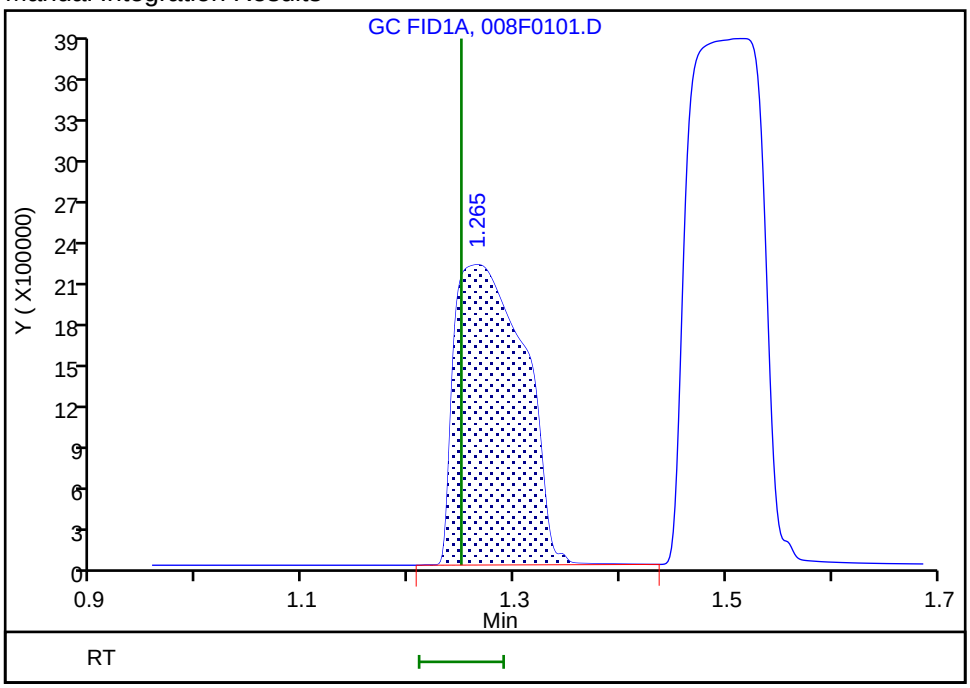
Not Detected
Expected RT: 1.25

Processing Integration Results



Manual Integration Results

RT: 1.27
Area: 10043823
Amount: 69.538753
Amount Units: ug/l



Reviewer: sciannac, 05-Jun-2020 13:11:26
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

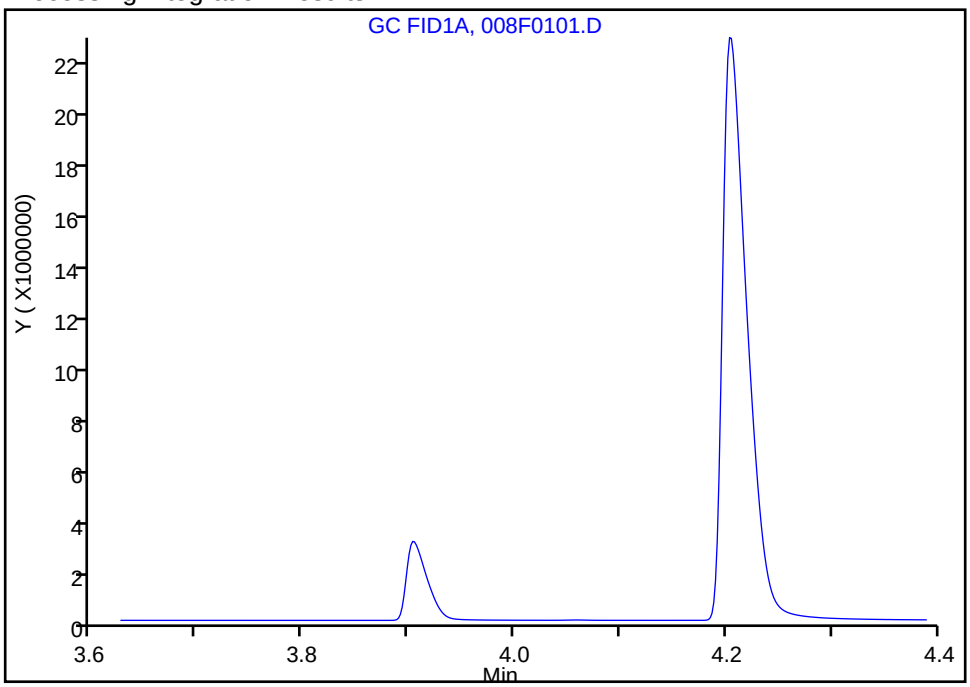
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D				
Injection Date:	03-Jun-2020 14:24:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	8	Worklist Smp#:	32
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

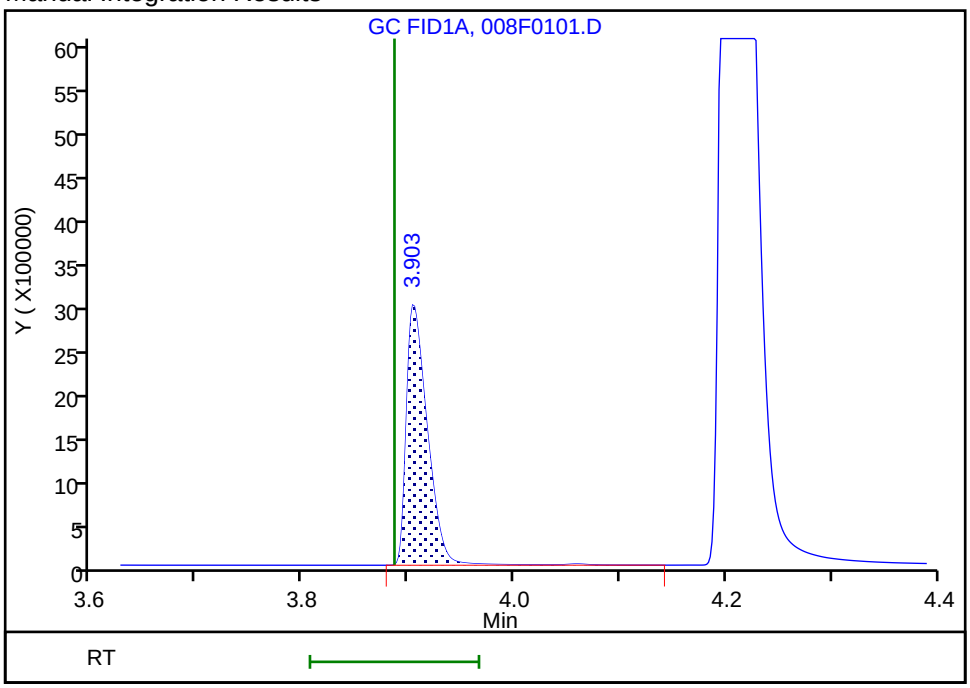
Not Detected
Expected RT: 3.89

Processing Integration Results



Manual Integration Results

RT: 3.90
Area: 4093276
Amount: 119.3574
Amount Units: ug/l



Reviewer: sciannac, 05-Jun-2020 13:12:28
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-497247/32 Calibration Date: 06/03/2020 14:24

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 008F0101.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		64867		68.9	73.0	-5.6	20.0
Ethylene	Ave	47934	48179		128	128	0.5	20.0
Acetylene	Ave	21605	23033		126	119	6.6	20.0
Ethane	Ave	61056	60079		135	137	-1.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-497247/32 Calibration Date: 06/03/2020 14:24

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 008F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	3.21	3.12	3.20
Ethylene	4.05	3.97	4.07
Acetylene	4.16	4.05	4.21
Ethane	4.32	4.25	4.35

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2020 14:24:12 ALS Bottle#: 8 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: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:29 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 05-Jun-2020 13:21:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.265	1.250	0.015	10043823	73.0	69.5	a
2	3.207	3.161	0.046	4735482	73.0	68.9	a
						RPD = 0.88	
3 Ethane							
1	1.513	1.500	0.013	18569762	136.9	136.5	
2	4.324	4.296	0.028	8222205	136.9	134.7	
						RPD = 1.35	
4 Ethylene							Ma
1	1.778	1.758	0.020	14101290	127.7	127.9	
2	4.054	4.023	0.031	6150860	127.7	128.3	M
						RPD = 0.29	
5 Propane							
1	2.465	2.433	0.032	28699904	200.7	200.3	
2	5.937	5.918	0.019	12655080	200.7	202.1	
						RPD = 0.85	
6 Acetylene							Ma
1	3.903	3.886	0.017	4093276	118.5	119.4	a
2	4.157	4.128	0.029	2729892	118.5	126.4	M
						RPD = 5.69	
7 Butane							a
1	0.000	4.181	-4.181	0	264.5	0	
2	7.377	7.363	0.014	17122293	264.5	268.5	
						RPD = 200.00	
8 isobutylene							Ma
1	5.100	5.083	0.017	23789251	255.4	266.5	M
2	7.230	7.216	0.014	10696753	255.4	257.4	M
						RPD = 3.48	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

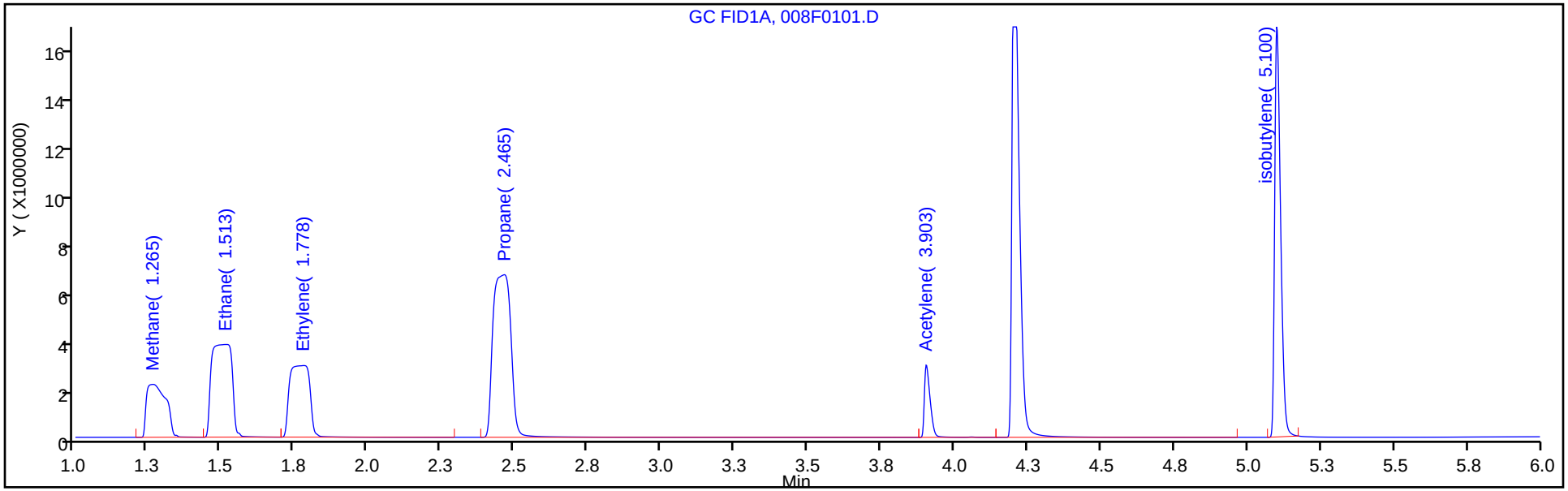
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 05-Jun-2020 13:56:30 Chrom Revision: 2.3 05-May-2020 17:48:18

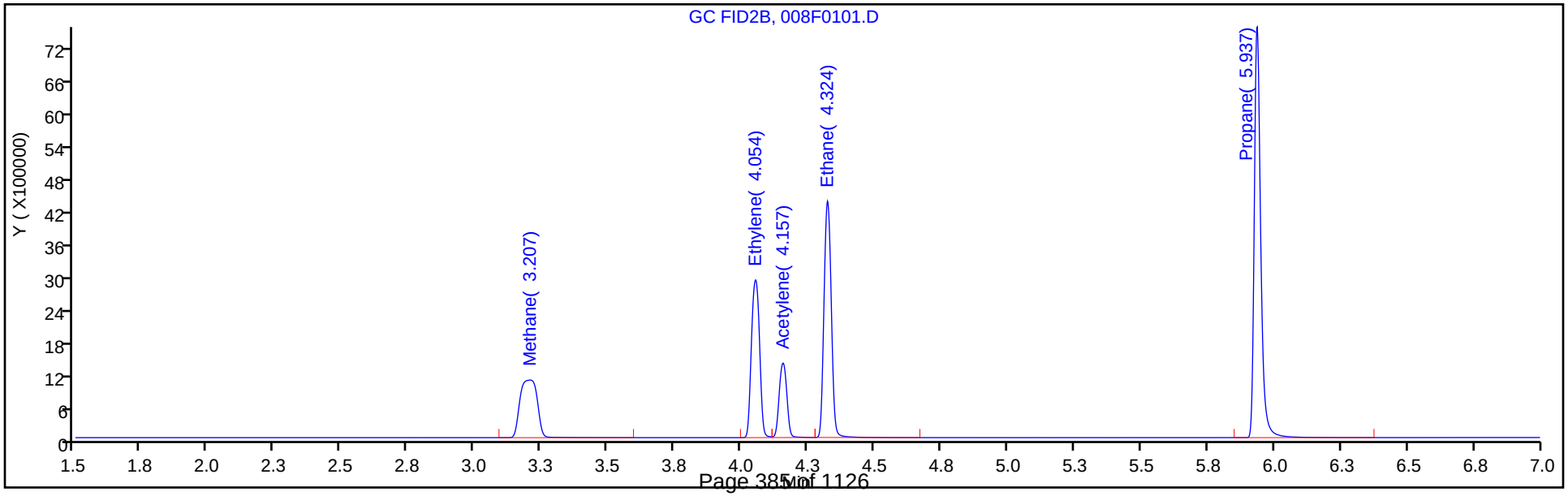
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D				
Injection Date:	03-Jun-2020 14:24:12	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#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

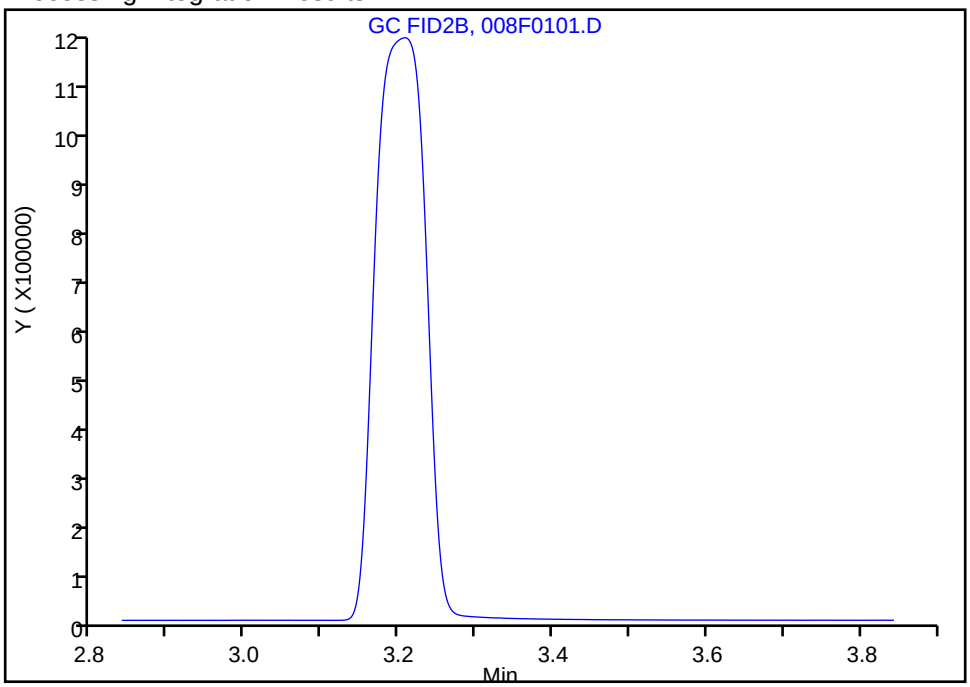
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D				
Injection Date:	03-Jun-2020 14:24:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	8	Worklist Smp#:	32
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

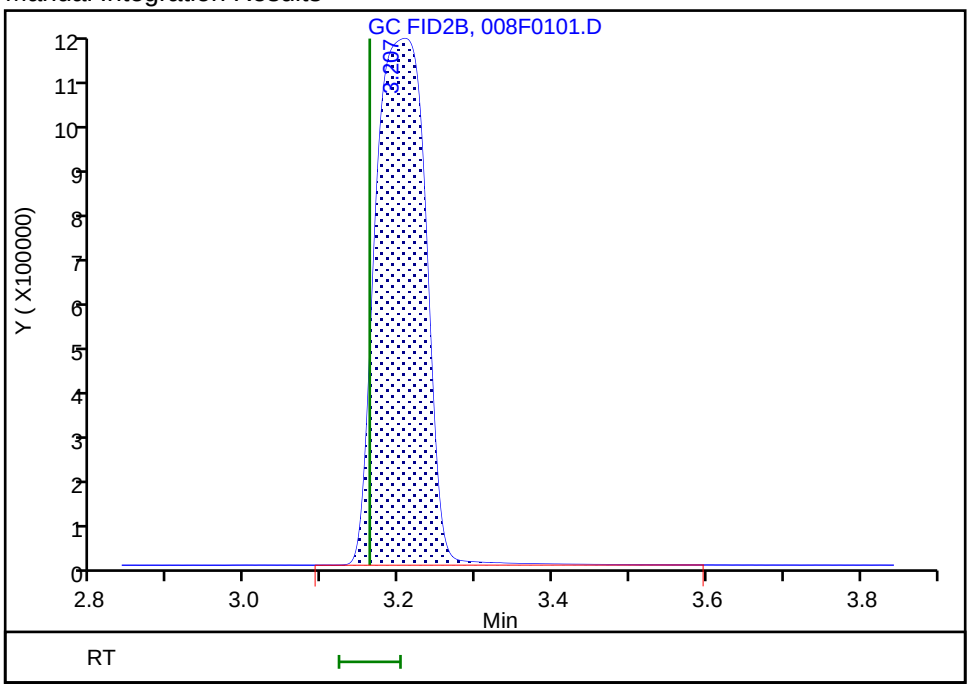
Not Detected
Expected RT: 3.16

Processing Integration Results



Manual Integration Results

RT: 3.21
Area: 4735482
Amount: 68.930694
Amount Units: ug/l



Reviewer: sciannac, 05-Jun-2020 13:11:34
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver

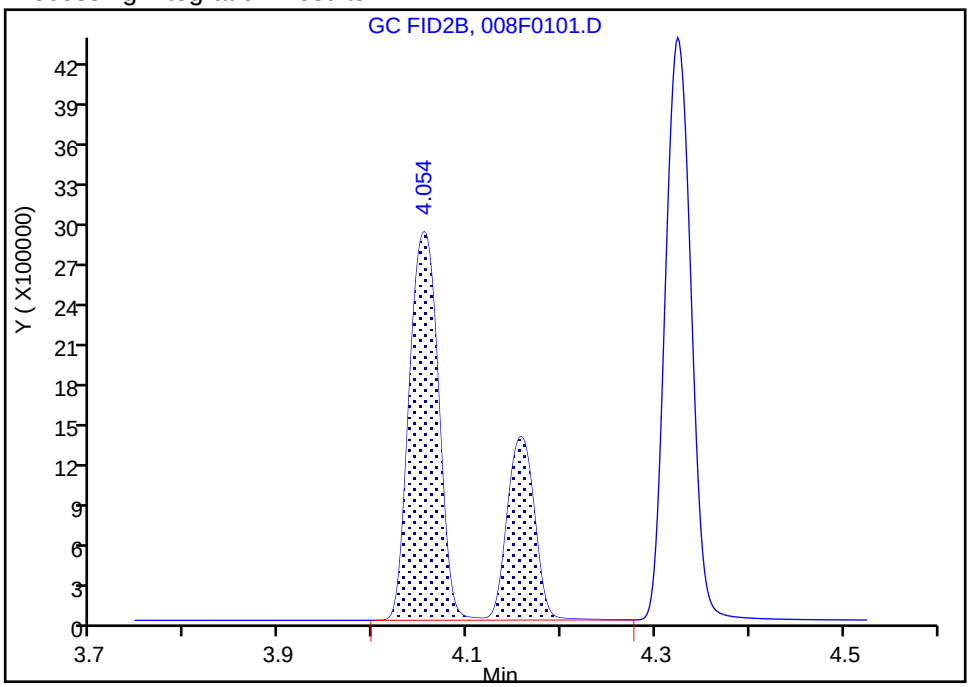
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D				
Injection Date:	03-Jun-2020 14:24:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	8	Worklist Smp#:	32
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

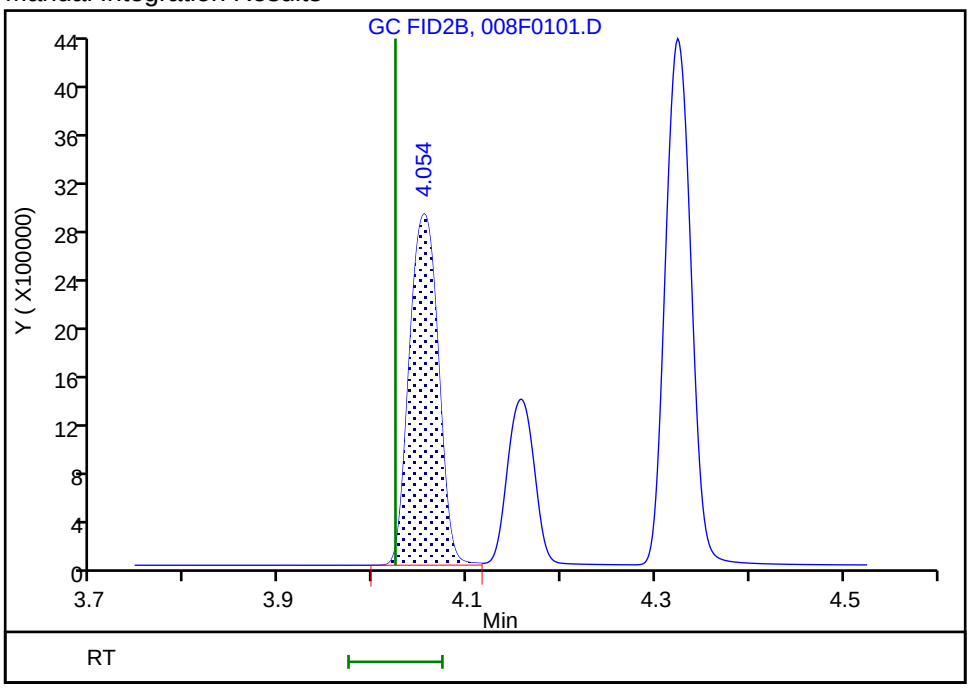
Processing Integration Results

RT: 4.05
Area: 8880779
Amount: 185.2721
Amount Units: ug/l



Manual Integration Results

RT: 4.05
Area: 6150860
Amount: 128.3202
Amount Units: ug/l



Reviewer: sciannac, 05-Jun-2020 13:12:12
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

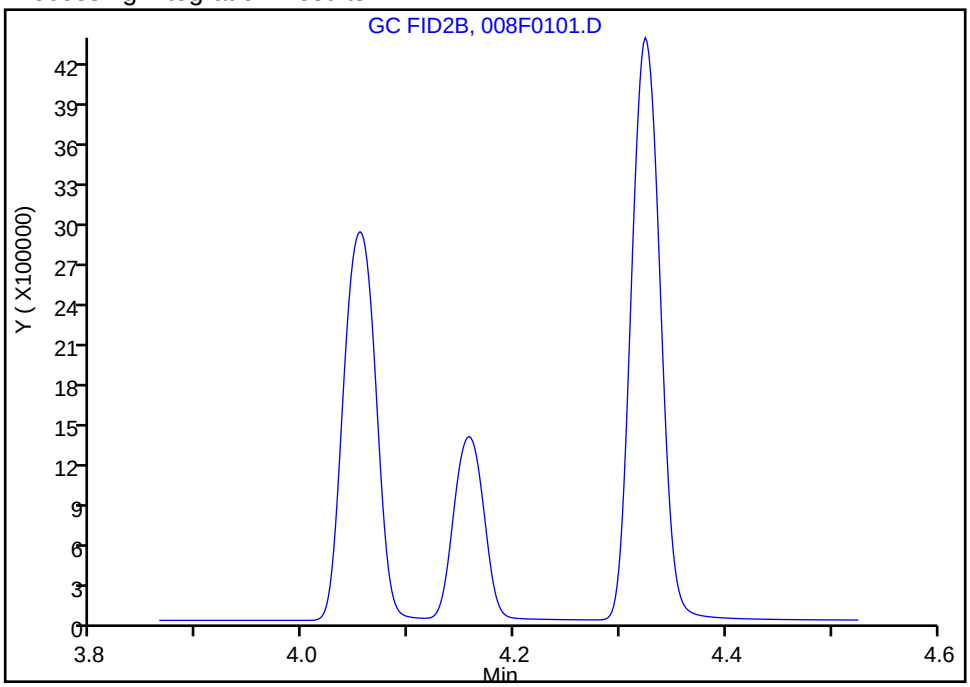
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\008F0101.D				
Injection Date:	03-Jun-2020 14:24:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	8	Worklist Smp#:	32
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

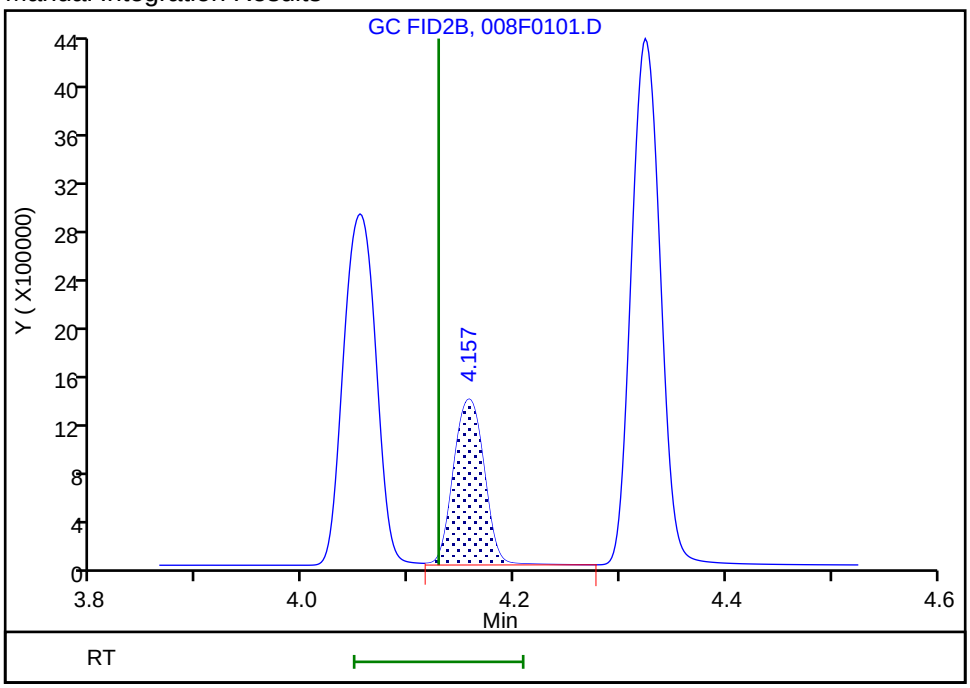
Not Detected
Expected RT: 4.13

Processing Integration Results



RT: 4.16
Area: 2729892
Amount: 126.3517
Amount Units: ug/l

Manual Integration Results



Reviewer: sciannac, 05-Jun-2020 13:12:26
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-497247/21 Calibration Date: 06/03/2020 19:01

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 025F1801.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		135447		68.5	73.0	-6.2	20.0
Ethane	Ave	136043	133782		135	137	-1.7	20.0
Ethylene	Ave	110213	108988		126	128	-1.1	20.0
Acetylene	Ave	34294	34737		120	119	1.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-497247/21 Calibration Date: 06/03/2020 19:01

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 025F1801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.21	1.29
Ethane	1.50	1.45	1.55
Ethylene	1.77	1.71	1.81
Acetylene	3.90	3.81	3.97

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\025F1801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2020 19:01:24 ALS Bottle#: 25 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: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:38 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 05-Jun-2020 13:50:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.250	0.002	9888086	73.0	68.5	
2	3.171	3.161	0.010	4719551	73.0	68.7	
						RPD = 0.35	
3 Ethane							
1	1.504	1.500	0.004	18308840	136.9	134.6	
2	4.301	4.296	0.005	8209089	136.9	134.5	
						RPD = 0.10	
4 Ethylene							a
1	1.767	1.758	0.009	13914165	127.7	126.2	
2	0.000	4.023	-4.023	0	127.7	0	
						RPD = 200.00	
5 Propane							
1	2.449	2.433	0.016	28172712	200.7	196.7	
2	5.924	5.918	0.006	12577133	200.7	200.8	
						RPD = 2.09	
6 Acetylene							Ma
1	3.904	3.886	0.018	4117122	118.5	120.1	a
2	4.134	4.128	0.006	2680144	118.5	124.0	M
						RPD = 3.27	
7 Butane							
1	4.197	4.181	0.016	34756081	264.5	263.5	
2	7.368	7.363	0.005	16782436	264.5	263.2	
						RPD = 0.13	
8 isobutylene							
1	5.097	5.083	0.014	23601880	255.4	264.4	
2	7.219	7.216	0.003	11029701	255.4	265.4	
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

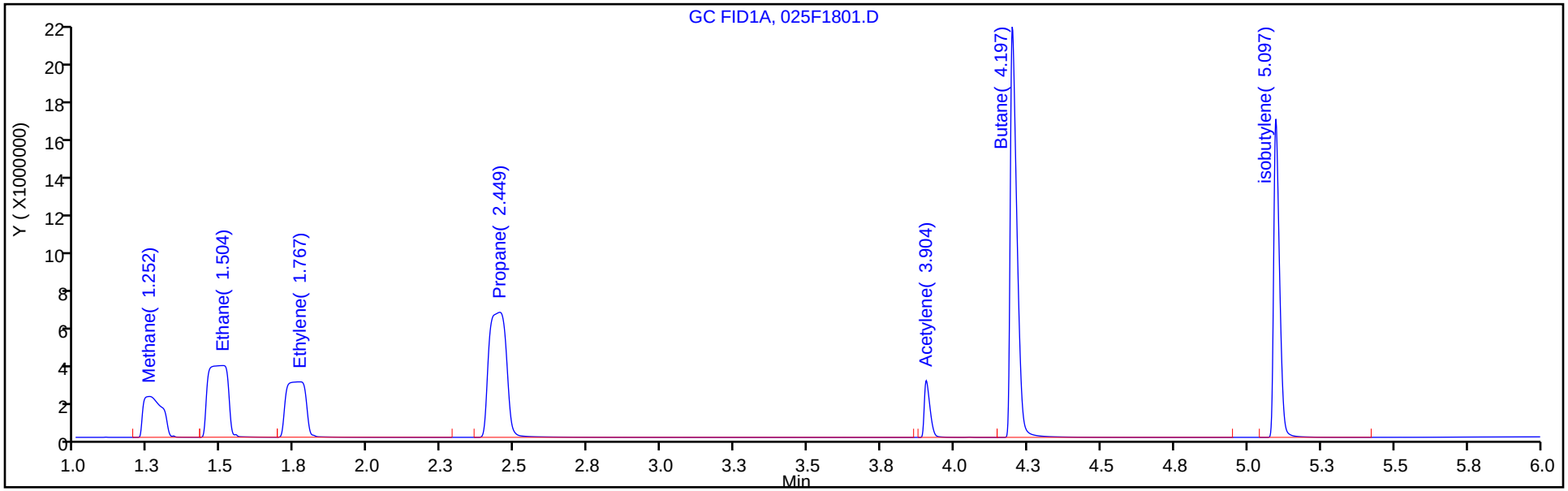
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 05-Jun-2020 13:56:38 Chrom Revision: 2.3 05-May-2020 17:48:18

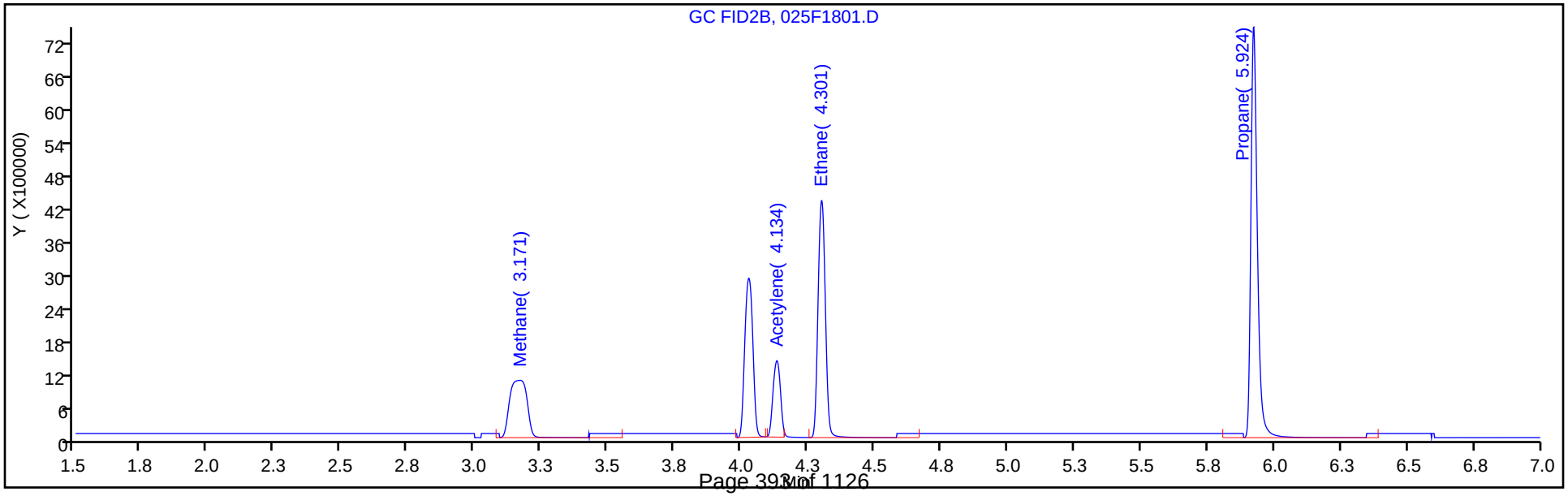
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\025F1801.D				
Injection Date:	03-Jun-2020 19:01:24	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#:	25
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

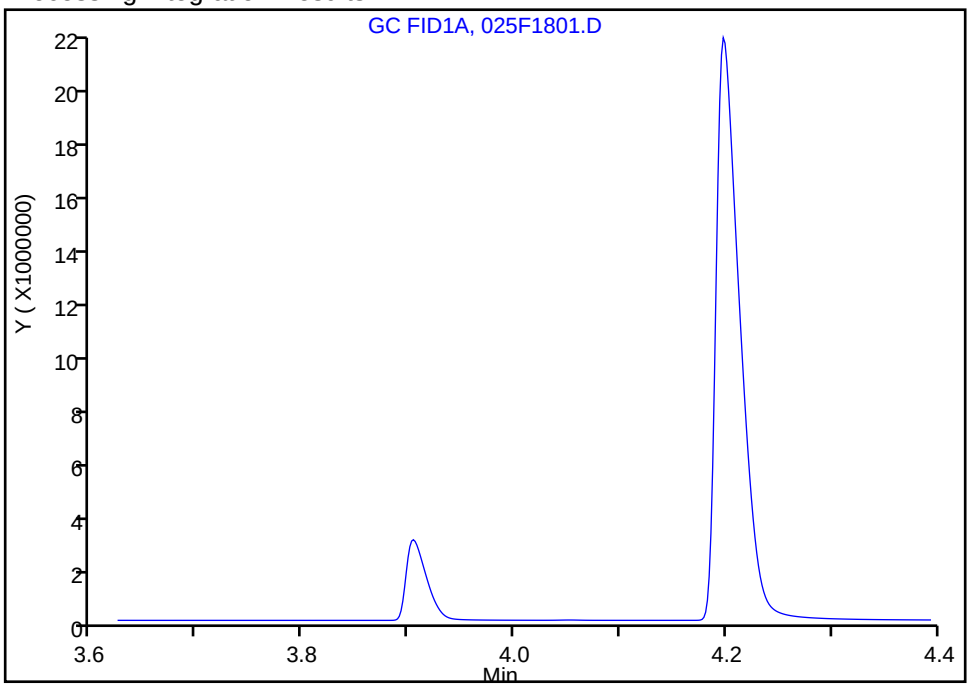
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\025F1801.D				
Injection Date:	03-Jun-2020 19:01:24	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	25	Worklist Smp#:	21
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

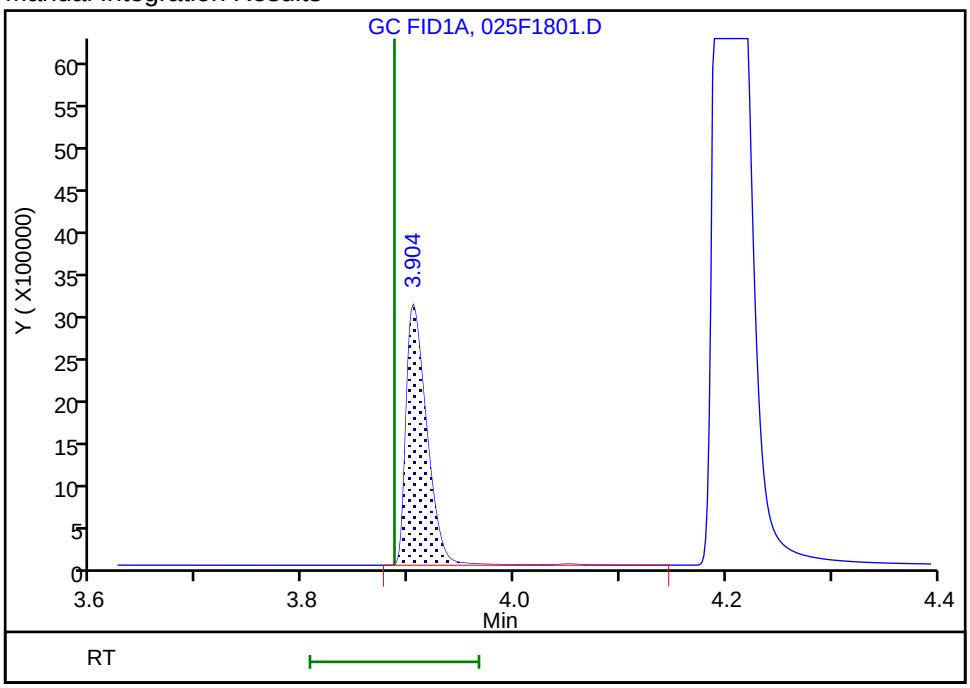
Not Detected
Expected RT: 3.89

Processing Integration Results



Manual Integration Results

RT: 3.90
Area: 4117122
Amount: 120.0528
Amount Units: ug/l



Reviewer: sciannac, 05-Jun-2020 13:49:26
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-497247/21 Calibration Date: 06/03/2020 19:01

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 025F1801.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
Ethylene	Ave	47934	47820		1.40	128	-0.2	20.0
Methane	Lin2		64648		68.7	73.0	-5.9	20.0
Acetylene	Ave	21605	22613		124	119	4.7	20.0
Ethane	Ave	61056	59984		134	137	-1.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-497247/21 Calibration Date: 06/03/2020 19:01

Instrument ID: VGC_J Calib Start Date: 05/16/2020 10:57

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 05/16/2020 13:08

Lab File ID: 025F1801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Ethylene	0.00	3.97	4.07
Methane	3.17	3.12	3.20
Acetylene	4.13	4.05	4.21
Ethane	4.30	4.25	4.35

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\025F1801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2020 19:01:24 ALS Bottle#: 25 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: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:38 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 05-Jun-2020 13:50:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.250	0.002	9888086	73.0	68.5	
2	3.171	3.161	0.010	4719551	73.0	68.7	
						RPD = 0.35	
3 Ethane							
1	1.504	1.500	0.004	18308840	136.9	134.6	
2	4.301	4.296	0.005	8209089	136.9	134.5	
						RPD = 0.10	
4 Ethylene							a
1	1.767	1.758	0.009	13914165	127.7	126.2	
2	0.000	4.023	-4.023	0	127.7	0	
						RPD = 200.00	
5 Propane							
1	2.449	2.433	0.016	28172712	200.7	196.7	
2	5.924	5.918	0.006	12577133	200.7	200.8	
						RPD = 2.09	
6 Acetylene							Ma
1	3.904	3.886	0.018	4117122	118.5	120.1	a
2	4.134	4.128	0.006	2680144	118.5	124.0	M
						RPD = 3.27	
7 Butane							
1	4.197	4.181	0.016	34756081	264.5	263.5	
2	7.368	7.363	0.005	16782436	264.5	263.2	
						RPD = 0.13	
8 isobutylene							
1	5.097	5.083	0.014	23601880	255.4	264.4	
2	7.219	7.216	0.003	11029701	255.4	265.4	
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

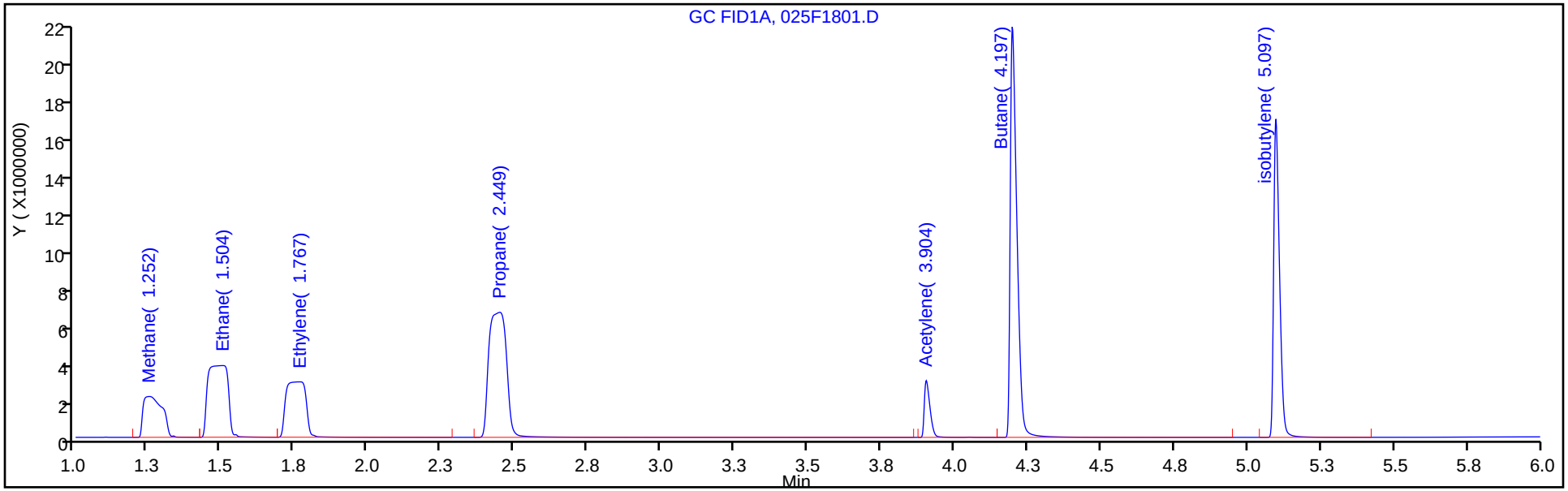
RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Report Date: 05-Jun-2020 13:56:38 Chrom Revision: 2.3 05-May-2020 17:48:18

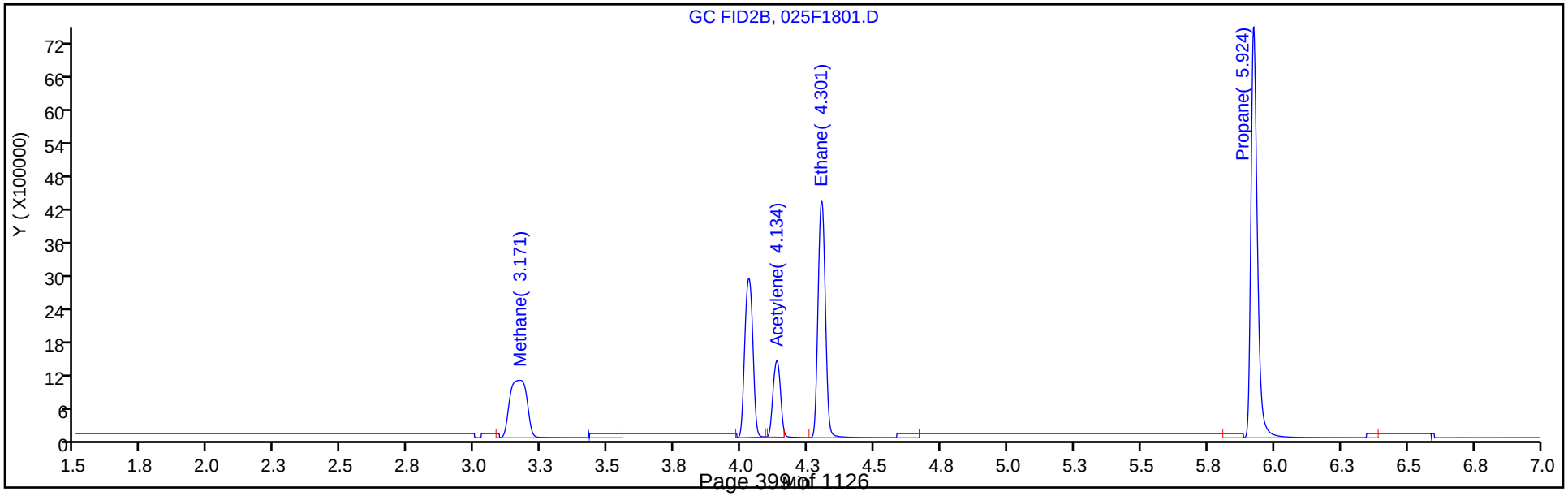
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\025F1801.D				
Injection Date:	03-Jun-2020 19:01:24	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#:	25
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

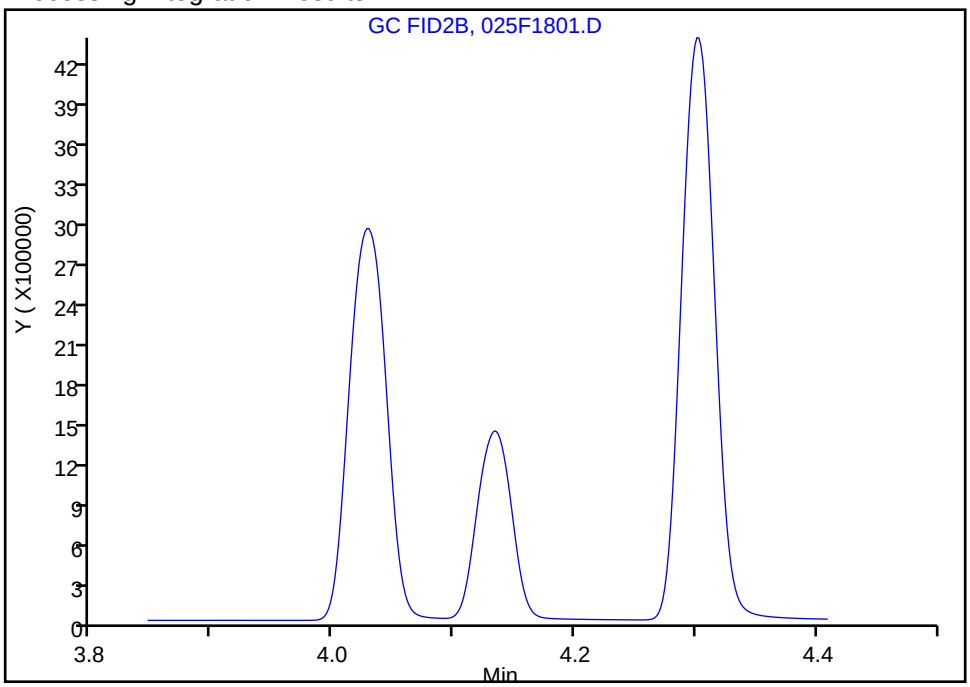
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\025F1801.D				
Injection Date:	03-Jun-2020 19:01:24	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	SCIANNAC	ALS Bottle#:	25	Worklist Smp#:	21
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

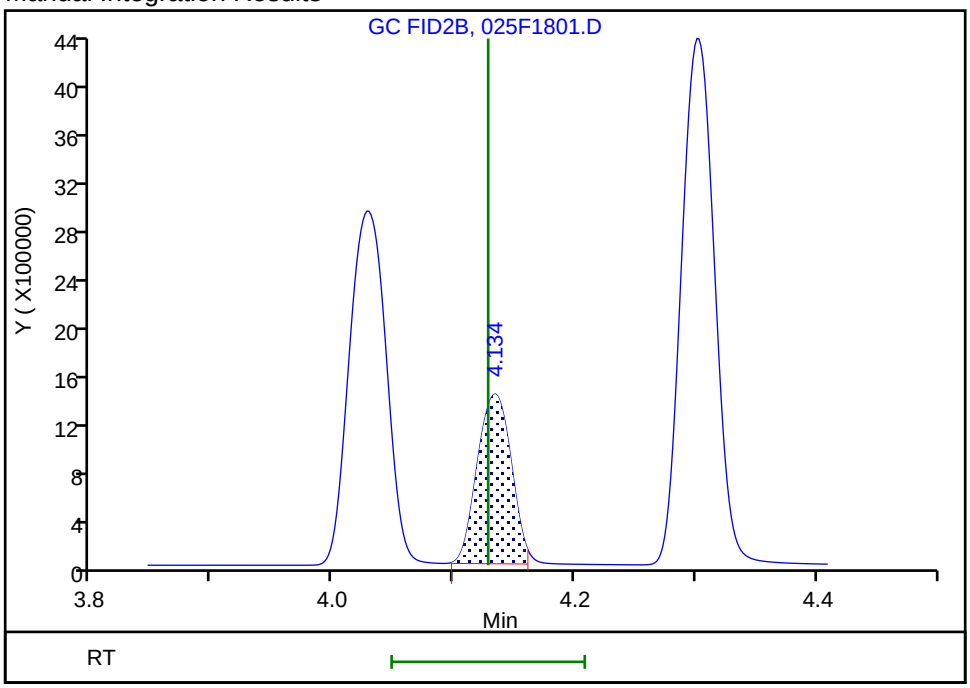
Not Detected
Expected RT: 4.13

Processing Integration Results



RT: 4.13
Area: 2680144
Amount: 124.0492
Amount Units: ug/l

Manual Integration Results



Reviewer: sciannac, 05-Jun-2020 13:50:29
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-496925/7
Matrix: Water
Lab File ID: 007F0701.D
Analysis Method: RSK-175
Date Collected:
Sample wt/vol: 18(mL)
Date Analyzed: 06/01/2020 14:02
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: HP-Plot Q ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 496925
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\007F0701.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	01-Jun-2020 14:02:52	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:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	02-Jun-2020 08:26:37	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1037				

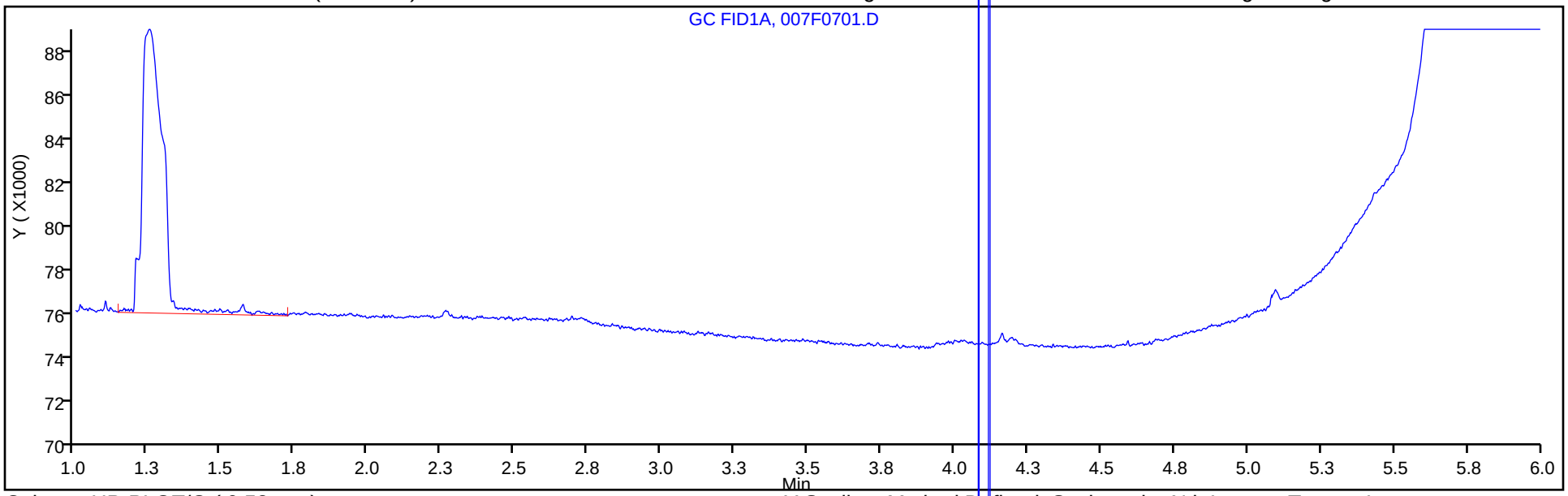
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							
1		1.253				ND	
2		3.170					
3 Ethane							
1		1.503				ND	
2		4.302					
4 Ethylene							
1		1.758				ND	
2		4.028					
5 Propane							
1		2.423				ND	
2		5.923					
6 Acetylene							
1		3.865				ND	
2		4.133					
7 Butane							
1		4.166				ND	
2		7.367					
8 isobutylene							
1		5.065				ND	
2		7.218					

Report Date: 02-Jun-2020 08:27:24 Chrom Revision: 2.3 05-May-2020 17:48:18

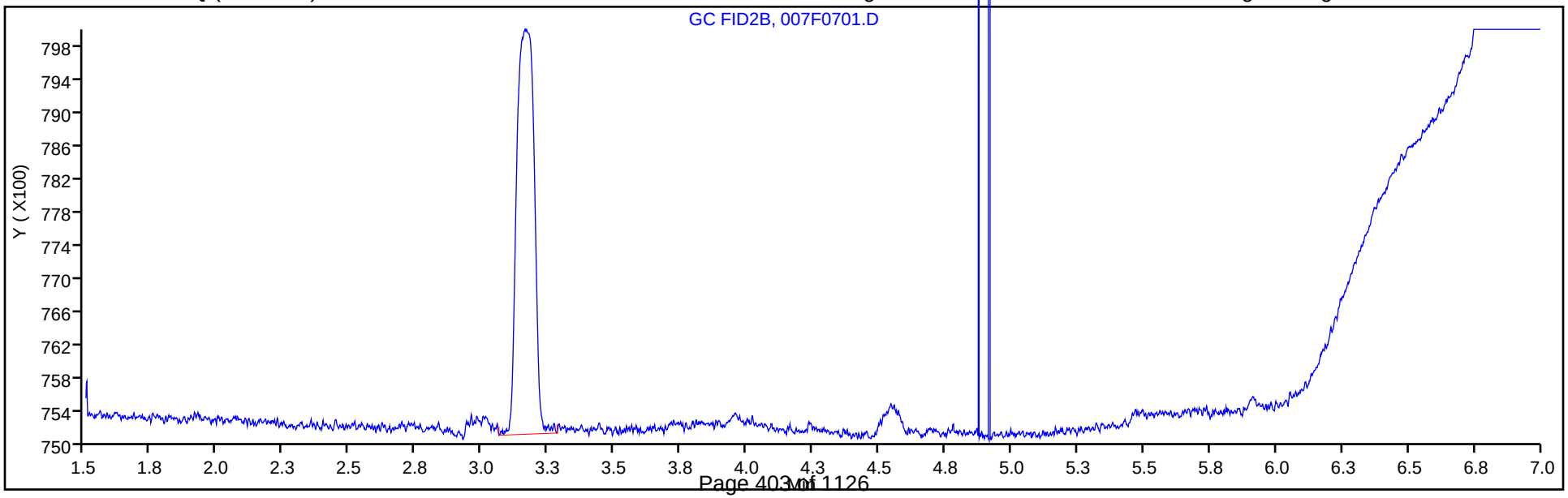
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\007F0701.D				
Injection Date:	01-Jun-2020 14:02:52	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.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-497247/7
Matrix: Water
Lab File ID: 007F0701.D
Analysis Method: RSK-175
Date Collected:
Sample wt/vol: 18(mL)
Date Analyzed: 06/03/2020 11:52
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: HP-Plot Q ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 497247
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\007F0701.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	03-Jun-2020 11:52:57	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:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	05-Jun-2020 13:56:27	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1025				

First Level Reviewer: sciannac Date: 03-Jun-2020 12:44:13

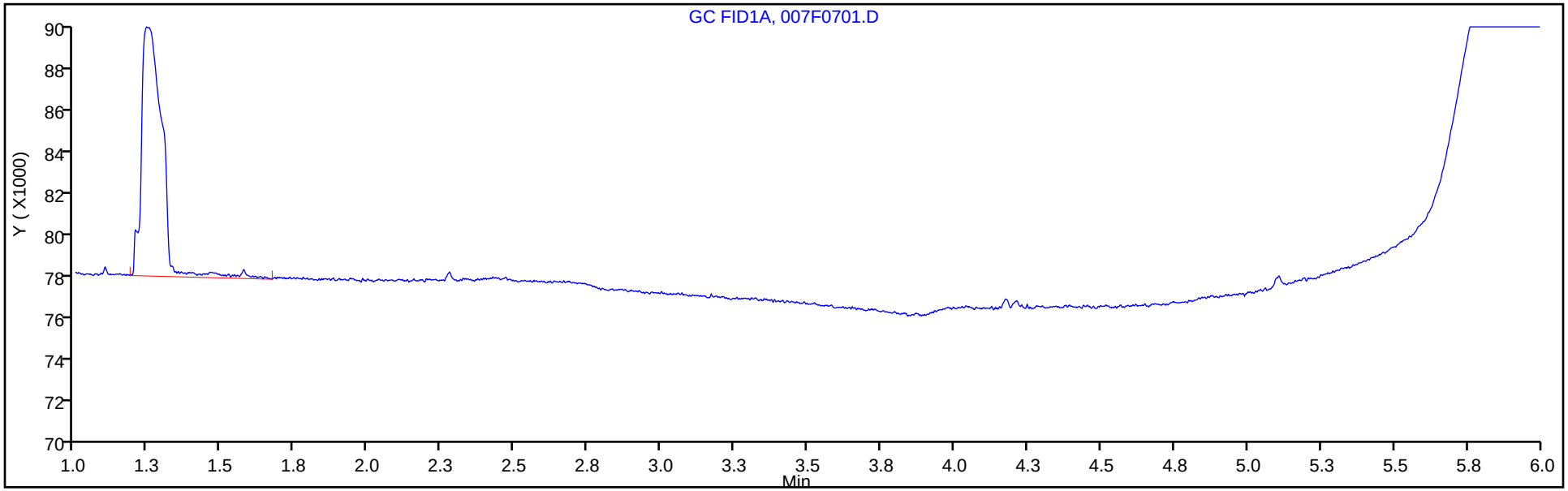
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							
1		1.250				ND	
2		3.161					
3 Ethane							
1		1.500				ND	
2		4.296					
4 Ethylene							
1		1.758				ND	
2		4.023					
5 Propane							
1		2.433				ND	
2		5.918					
6 Acetylene							
1		3.886				ND	
2		4.128					
7 Butane							
1		4.181				ND	
2		7.363					
8 isobutylene							
1		5.083				ND	
2		7.216					

Report Date: 05-Jun-2020 13:56:29 Chrom Revision: 2.3 05-May-2020 17:48:18

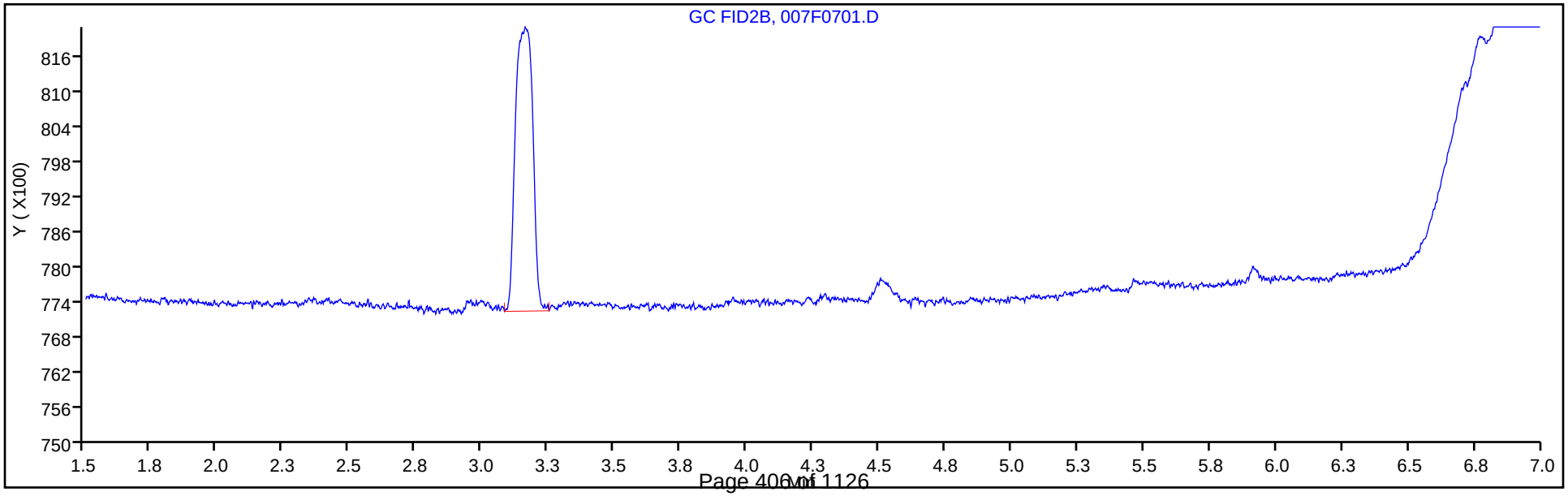
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\007F0701.D				
Injection Date:	03-Jun-2020 11:52:57	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.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-497247/34
Matrix: Water
Lab File ID: 011F0401.D
Analysis Method: RSK-175
Date Collected:
Sample wt/vol: 18(mL)
Date Analyzed: 06/03/2020 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.: 497247
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\011F0401.D				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	03-Jun-2020 15:12:58	ALS Bottle#:	11	Worklist Smp#:	34
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	MB				
Operator ID:	SCIANNAC	Instrument ID:	VGC_J		
Method:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	05-Jun-2020 14:14:44	Calib Date:	16-May-2020 13:08:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1025				

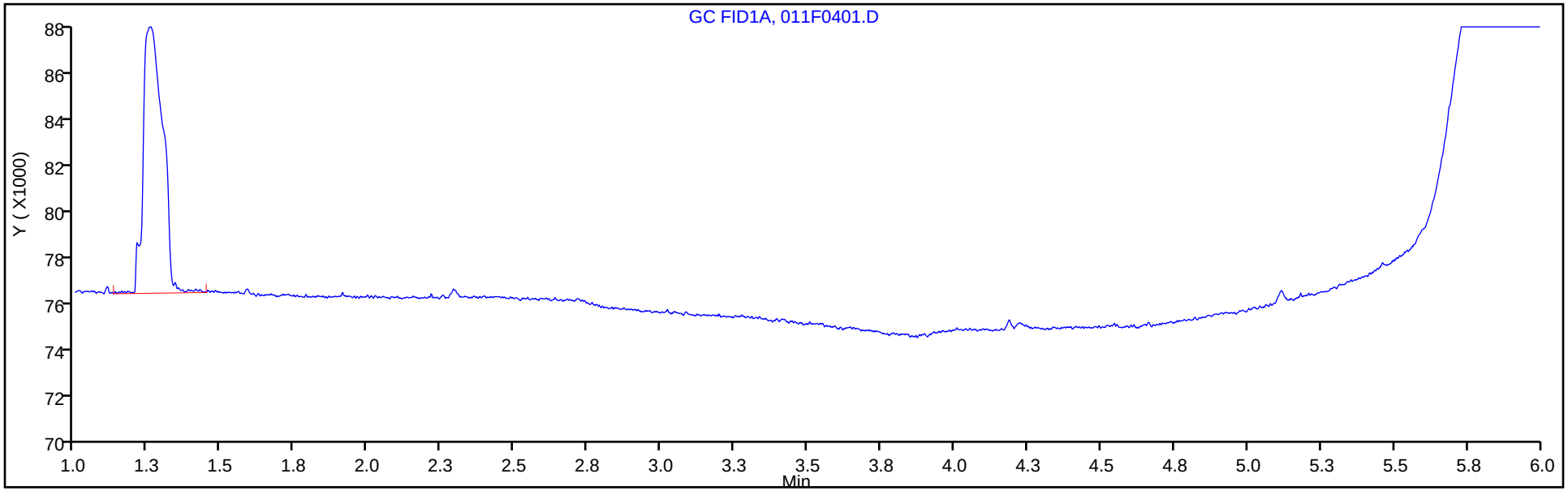
Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.098				ND	
2		5.458					
2 Methane							
1		1.250				ND	
2		3.161					
3 Ethane							
1		1.500				ND	
2		4.296					
4 Ethylene							
1		1.758				ND	
2		4.023					
5 Propane							
1		2.433				ND	
2		5.918					
6 Acetylene							
1		3.886				ND	
2		4.128					
7 Butane							
1		4.181				ND	
2		7.363					
8 isobutylene							
1		5.083				ND	
2		7.216					

Report Date: 05-Jun-2020 14:14:44 Chrom Revision: 2.3 05-May-2020 17:48:18

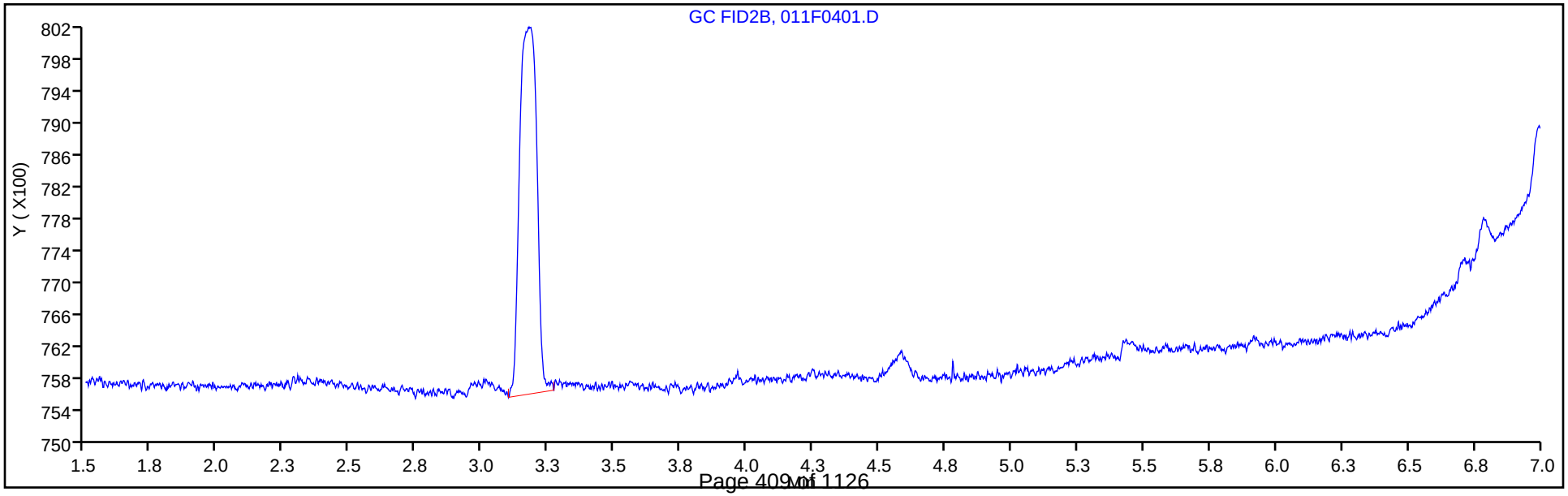
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\011F0401.D				
Injection Date:	03-Jun-2020 15:12:58	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	mb			Worklist Smp#:	34
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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-496925/34
Matrix: Water
Lab File ID: 011F0201.D
Analysis Method: RSK-175
Date Collected:
Sample wt/vol: 18(mL)
Date Analyzed: 06/01/2020 14:59
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.: 496925
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0820		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\011F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2020 14:59:07 ALS Bottle#: 11 Worklist Smp#: 34
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:25 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 01-Jun-2020 15:20:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.256	1.253	0.003	11801101	73.0	81.8	
2	3.176	3.170	0.006	5629362	73.0	82.0	
						RPD = 0.28	
3 Ethane							
1	1.506	1.503	0.003	21753793	136.9	159.9	
2	4.306	4.302	0.004	9749286	136.9	159.7	
						RPD = 0.14	
4 Ethylene							
1	1.766	1.758	0.008	16232880	127.7	147.3	
2	4.034	4.028	0.006	7116512	127.7	148.5	
						RPD = 0.80	
5 Propane							
1	2.437	2.423	0.014	33877876	200.7	236.5	
2	5.926	5.923	0.003	15122816	200.7	241.5	
						RPD = 2.08	
6 Acetylene							Ma
1	4.041	3.865	0.176	4387762	118.5	127.9	a
2	4.139	4.133	0.006	2953294	118.5	136.7	M
						RPD = 6.61	
7 Butane							Ma
1	4.184	4.166	0.018	41637561	264.5	315.6	M
2	7.368	7.367	0.001	20470722	264.5	321.0	a
						RPD = 1.67	
8 isobutylene							
1	5.084	5.065	0.019	28186853	255.4	315.8	
2	7.221	7.218	0.003	13168511	255.4	316.9	
						RPD = 0.35	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

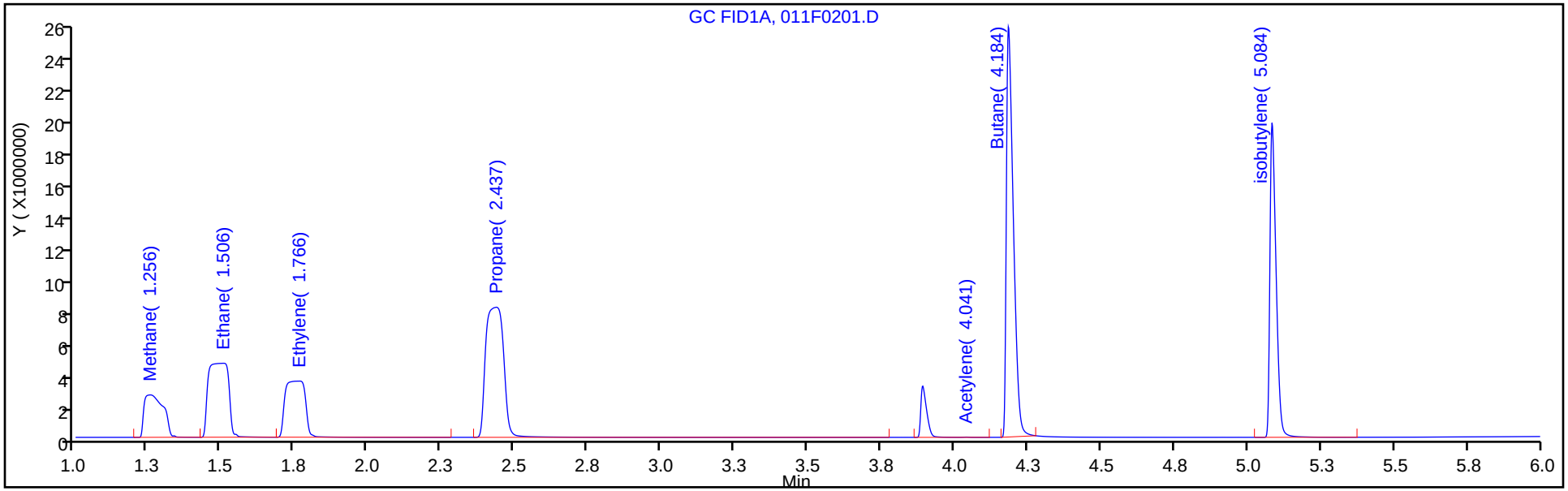
RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

Report Date: 02-Jun-2020 08:27:25 Chrom Revision: 2.3 05-May-2020 17:48:18

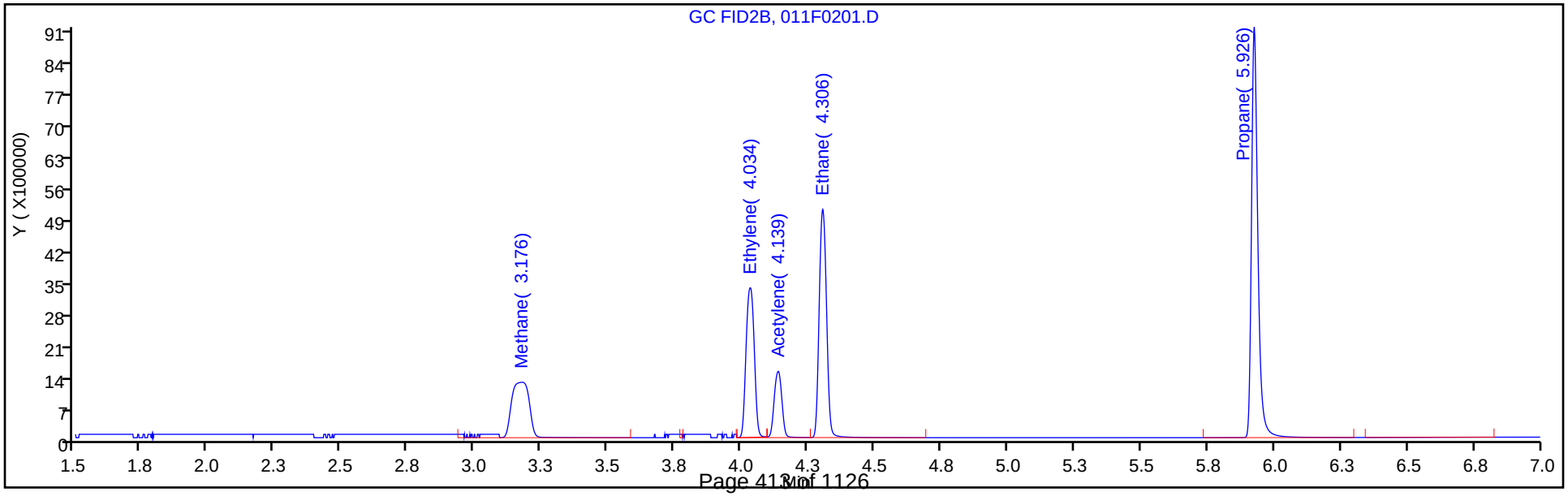
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\011F0201.D				
Injection Date:	01-Jun-2020 14:59:07	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	lcs			Worklist Smp#:	34
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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-497247/33
Matrix: Water
Lab File ID: 009F0201.D
Analysis Method: RSK-175
Date Collected:
Sample wt/vol: 18(mL)
Date Analyzed: 06/03/2020 14:40
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: HP-Plot Q ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 497247
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0705		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\009F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2020 14:40:23 ALS Bottle#: 9 Worklist Smp#: 33
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:29 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 05-Jun-2020 13:27:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.250	0.011	10213276	73.0	70.7	
2	3.188	3.161	0.027	4845776	73.0	70.5	
						RPD = 0.25	
3 Ethane							
1	1.513	1.500	0.013	18347954	136.9	134.9	
2	4.315	4.296	0.019	8182022	136.9	134.0	
						RPD = 0.64	
4 Ethylene							Ma
1	1.780	1.758	0.022	14273643	127.7	129.5	
2	4.043	4.023	0.020	6224414	127.7	129.9	M
						RPD = 0.27	
5 Propane							
1	2.461	2.433	0.028	28768105	200.7	200.8	
2	5.931	5.918	0.013	12783764	200.7	204.1	
						RPD = 1.63	
6 Acetylene							M
1	3.910	3.886	0.024	4153841	118.5	121.1	
2	4.146	4.128	0.018	2725238	118.5	126.1	M
						RPD = 4.05	
7 Butane							
1	4.203	4.181	0.022	35473341	264.5	268.9	
2	7.373	7.363	0.010	17033750	264.5	267.1	
						RPD = 0.68	
8 isobutylene							
1	5.100	5.083	0.017	24075526	255.4	269.7	
2	7.226	7.216	0.010	11197840	255.4	269.4	
						RPD = 0.09	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

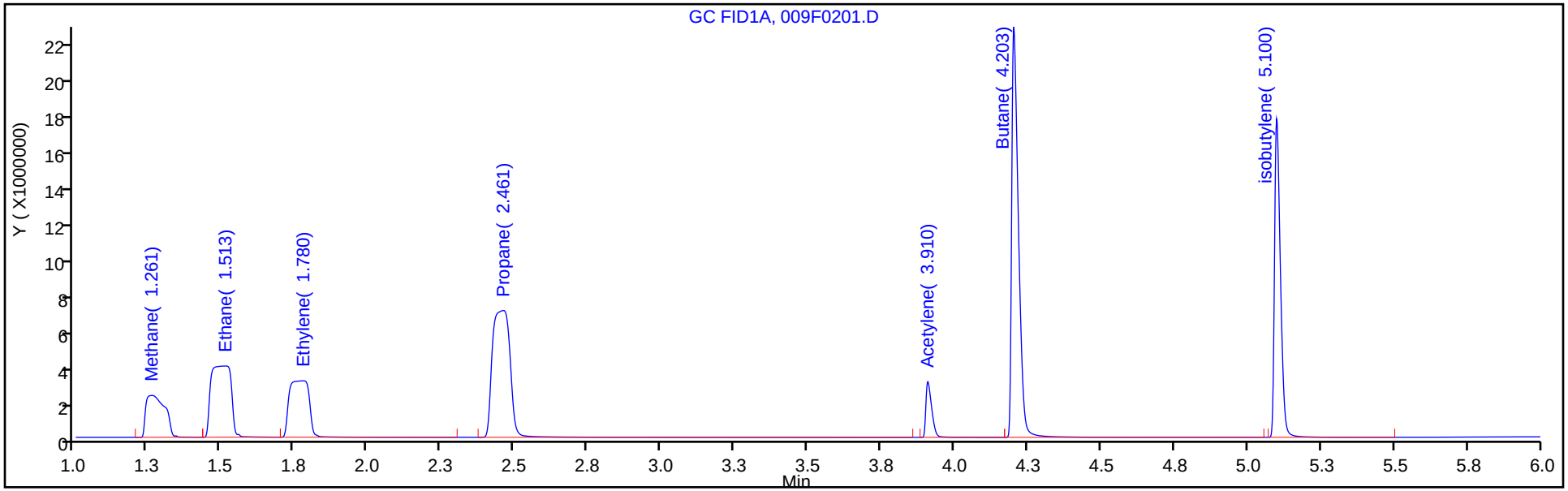
RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

Report Date: 05-Jun-2020 13:56:30 Chrom Revision: 2.3 05-May-2020 17:48:18

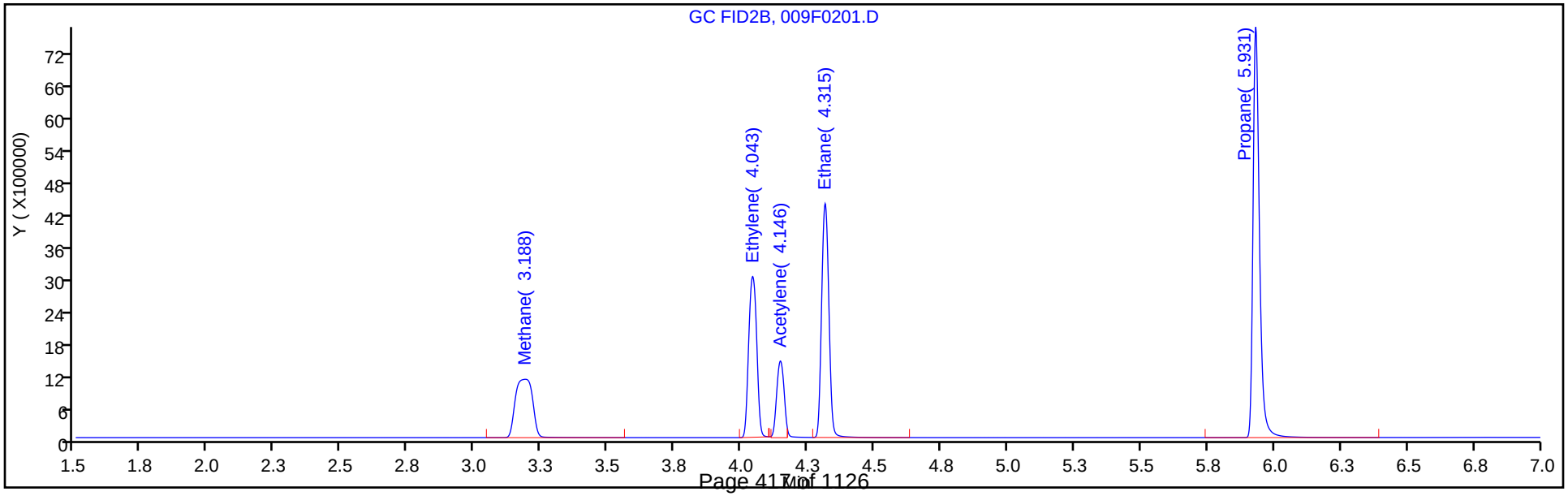
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\009F0201.D				
Injection Date:	03-Jun-2020 14:40:23	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	lcs			Worklist Smp#:	33
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.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 280-496925/35
Matrix: Water
Lab File ID: 012F0301.D
Analysis Method: RSK-175
Date Collected:
Sample wt/vol: 18(mL)
Date Analyzed: 06/01/2020 15:15
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: HP-Plot Q ID: 0.53(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 496925
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0799		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\012F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jun-2020 15:15:27 ALS Bottle#: 12 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2020 08:27:25 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1037

First Level Reviewer: sciannac Date: 01-Jun-2020 15:33:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.253	-0.001	11507178	73.0	79.7	
2	3.172	3.170	0.002	5487302	73.0	79.9	
						RPD = 0.24	
3 Ethane							
1	1.504	1.503	0.001	21324068	136.9	156.7	
2	4.302	4.302	0.000	9558048	136.9	156.5	
						RPD = 0.13	
4 Ethylene							
1	1.761	1.758	0.003	16014329	127.7	145.3	
2	4.031	4.028	0.003	7023466	127.7	146.5	
						RPD = 0.84	
5 Propane							
1	2.434	2.423	0.011	32961008	200.7	230.1	
2	5.924	5.923	0.001	14705057	200.7	234.8	
						RPD = 2.02	
6 Acetylene							Ma
1	4.042	3.865	0.177	4433018	118.5	129.3	a
2	4.136	4.133	0.003	2983911	118.5	138.1	M
						RPD = 6.62	
7 Butane							a
1	4.192	4.166	0.026	41055220	264.5	311.2	a
2	7.367	7.367	0.000	19819455	264.5	310.7	
						RPD = 0.15	
8 isobutylene							Ma
1	5.086	5.065	0.021	27638353	255.4	309.6	M
2	7.221	7.218	0.003	12945628	255.4	311.5	a
						RPD = 0.61	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

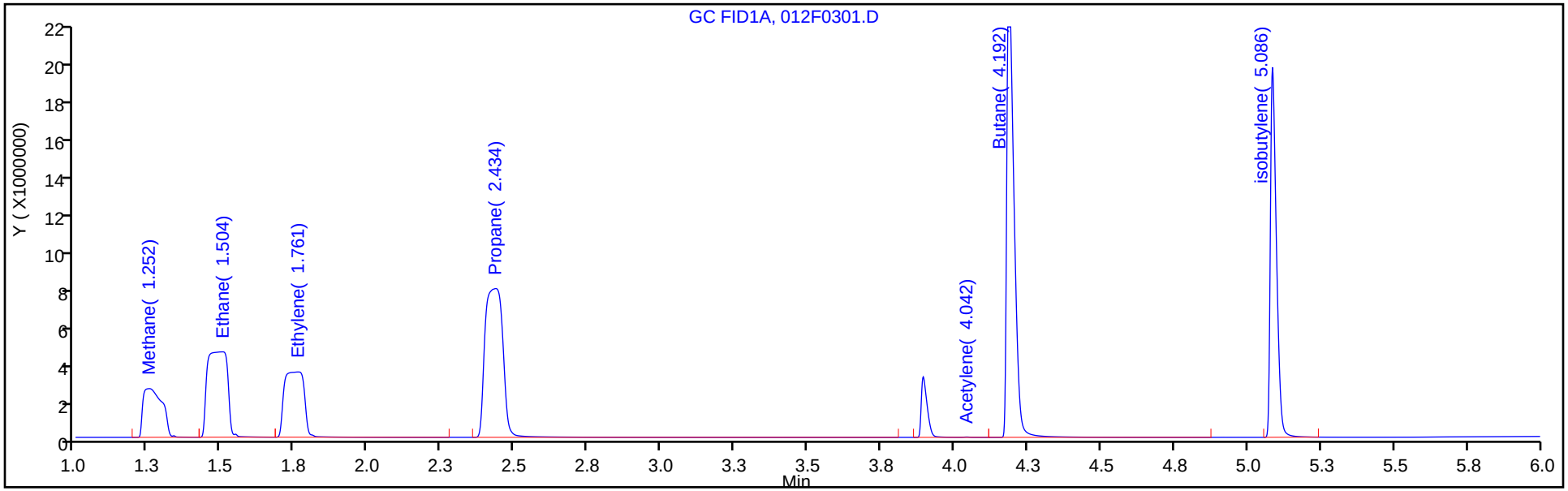
RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

Report Date: 02-Jun-2020 08:27:26 Chrom Revision: 2.3 05-May-2020 17:48:18

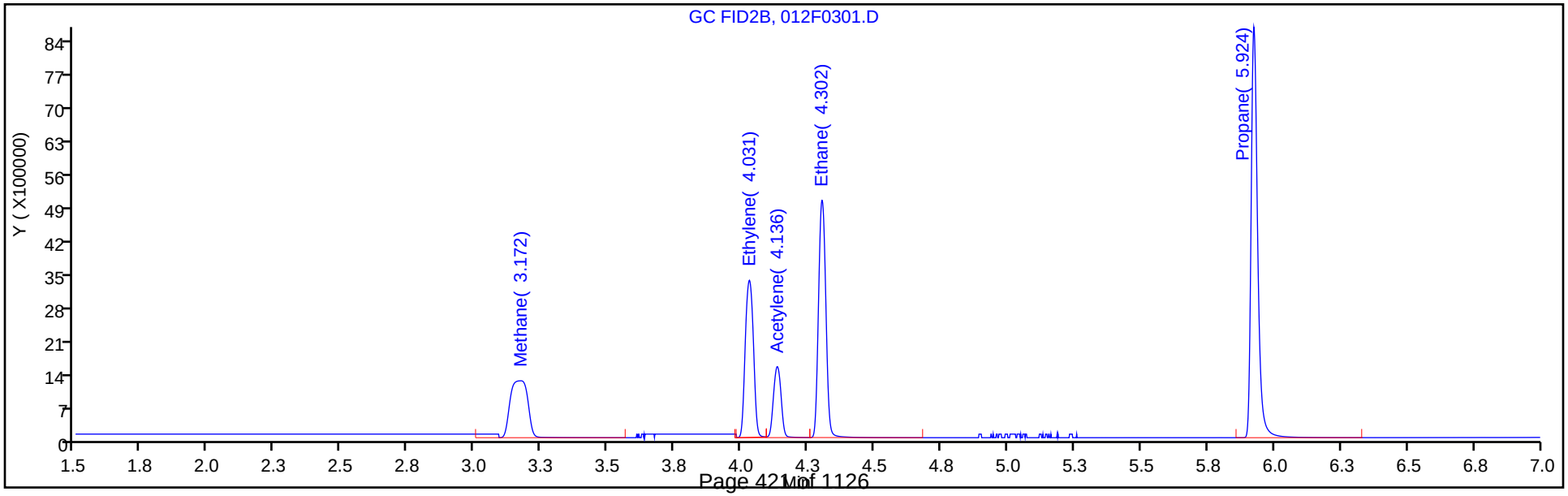
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200601-92001.b\012F0301.D				
Injection Date:	01-Jun-2020 15:15:27	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	lcsd			Worklist Smp#:	35
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 280-497247/35
Matrix: Water
Lab File ID: 010F0301.D
Analysis Method: RSK-175
Date Collected:
Sample wt/vol: 18(mL)
Date Analyzed: 06/03/2020 14:56
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.: 497247
Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0704		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\010F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 03-Jun-2020 14:56:40 ALS Bottle#: 10 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: SCIANNAC Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 05-Jun-2020 13:56:29 Calib Date: 16-May-2020 13:08:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200516-91574.b\009F0901.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1025

First Level Reviewer: sciannac Date: 05-Jun-2020 13:29:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.260	1.250	0.010	10161593	73.0	70.4	
2	3.181	3.161	0.020	4835005	73.0	70.4	
						RPD = 0.04	
3 Ethane							M
1	1.510	1.500	0.010	18276245	136.9	134.3	
2	4.311	4.296	0.015	8150597	136.9	133.5	M
						RPD = 0.63	
4 Ethylene							Ma
1	1.775	1.758	0.017	14299387	127.7	129.7	
2	4.040	4.023	0.017	6251241	127.7	130.4	M
						RPD = 0.52	
5 Propane							
1	2.453	2.433	0.020	28646150	200.7	200.0	
2	5.928	5.918	0.010	12749812	200.7	203.6	
						RPD = 1.78	
6 Acetylene							M
1	3.908	3.886	0.022	4267278	118.5	124.4	
2	4.143	4.128	0.015	2861294	118.5	132.4	M
						RPD = 6.23	
7 Butane							
1	4.201	4.181	0.020	35339157	264.5	267.9	
2	7.371	7.363	0.008	17025112	264.5	267.0	
						RPD = 0.35	
8 isobutylene							
1	5.100	5.083	0.017	24177660	255.4	270.8	
2	7.225	7.216	0.009	11258373	255.4	270.9	
						RPD = 0.02	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

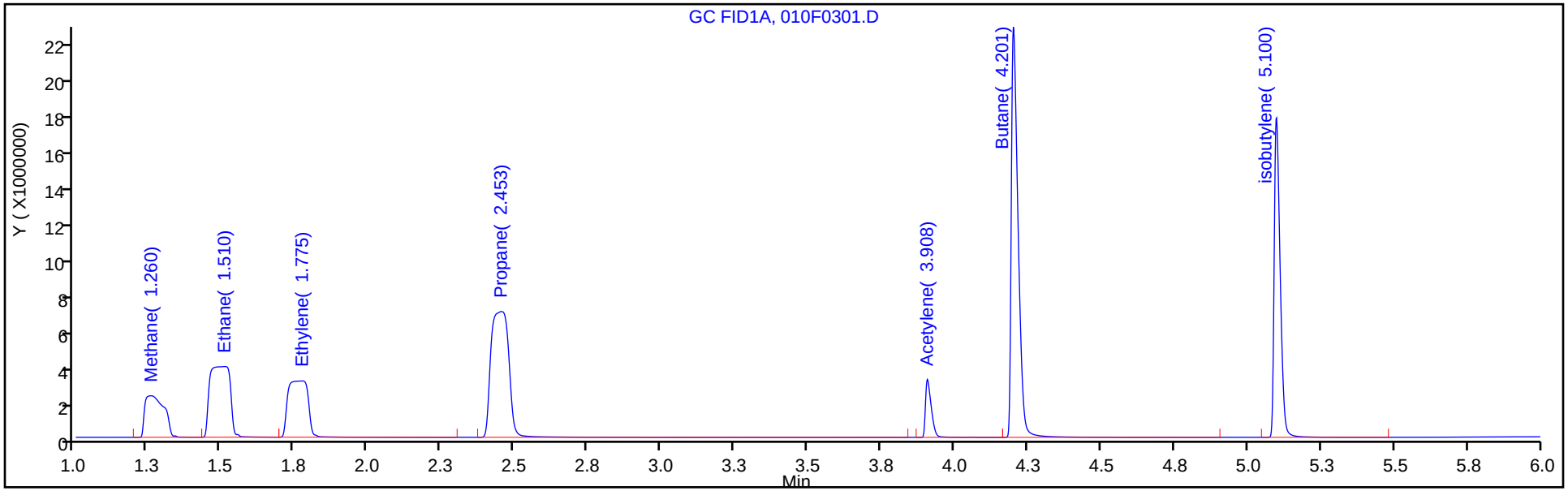
RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

Report Date: 05-Jun-2020 13:56:31 Chrom Revision: 2.3 05-May-2020 17:48:18

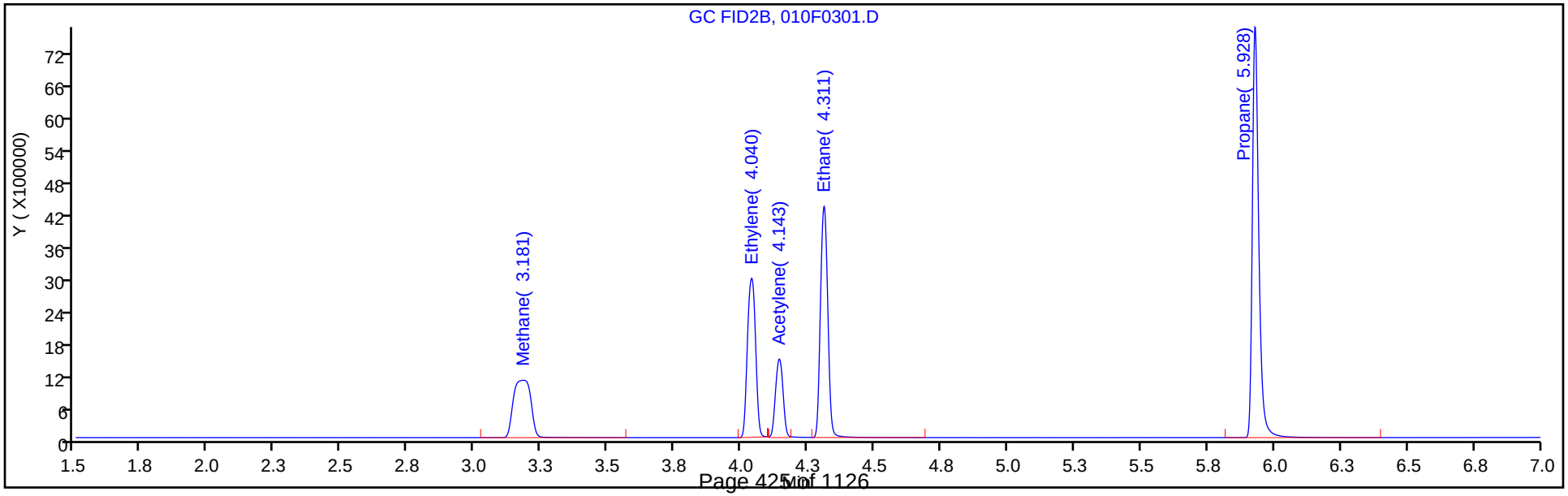
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20200603-92068.b\010F0301.D				
Injection Date:	03-Jun-2020 14:56:40	Instrument ID:	VGC_J	Operator ID:	SCIANNAC
Lims ID:	lcsd			Worklist Smp#:	35
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Start Date: 05/16/2020 10:57

Analysis Batch Number: 495152 End Date: 05/16/2020 13:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-495152/6		05/16/2020 10:57	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/6		05/16/2020 10:57	1	001F0101.D	HP-Plot Q 0.53(mm)
IC 280-495152/7		05/16/2020 11:13	1	001F0201.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/7		05/16/2020 11:13	1	001F0201.D	HP-Plot Q 0.53(mm)
IC 280-495152/8		05/16/2020 11:30	1	002F0301.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/8		05/16/2020 11:30	1	002F0301.D	HP-Plot Q 0.53(mm)
IC 280-495152/9		05/16/2020 11:46	1	003F0401.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/9		05/16/2020 11:46	1	003F0401.D	HP-Plot Q 0.53(mm)
ICRT 280-495152/10		05/16/2020 12:02	1	004F0501.D	Rt-Alumina KCl 0.53(mm)
ICRT 280-495152/10		05/16/2020 12:02	1	004F0501.D	HP-Plot Q 0.53(mm)
IC 280-495152/11		05/16/2020 12:19	1	005F0601.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/11		05/16/2020 12:19	1	005F0601.D	HP-Plot Q 0.53(mm)
IC 280-495152/12		05/16/2020 12:35	1	006F0701.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/12		05/16/2020 12:35	1	006F0701.D	HP-Plot Q 0.53(mm)
IC 280-495152/13		05/16/2020 12:52	1	007F0801.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/13		05/16/2020 12:52	1	007F0801.D	HP-Plot Q 0.53(mm)
IC 280-495152/14		05/16/2020 13:08	1	009F0901.D	Rt-Alumina KCl 0.53(mm)
IC 280-495152/14		05/16/2020 13:08	1	009F0901.D	HP-Plot Q 0.53(mm)
ICV 280-495152/16		05/16/2020 13:25	1	010F1001.D	Rt-Alumina KCl 0.53(mm)
ICV 280-495152/16		05/16/2020 13:25	1	010F1001.D	HP-Plot Q 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2020 13:13

Analysis Batch Number: 496925 End Date: 06/01/2020 19:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-496925/4		06/01/2020 13:13	1	A004F0401.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-496925/4		06/01/2020 13:13	1	A004F0401.D	HP-Plot Q 0.53(mm)
MB 280-496925/7		06/01/2020 14:02	1	007F0701.D	Rt-Alumina KCl 0.53(mm)
MB 280-496925/7		06/01/2020 14:02	1	007F0701.D	HP-Plot Q 0.53(mm)
CCV 280-496925/33		06/01/2020 14:42	1	010F0101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-496925/33		06/01/2020 14:42	1	010F0101.D	HP-Plot Q 0.53(mm)
LCS 280-496925/34		06/01/2020 14:59	1	011F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-496925/34		06/01/2020 14:59	1	011F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-496925/35		06/01/2020 15:15	1	012F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-496925/35		06/01/2020 15:15	1	012F0301.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2020 15:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2020 15:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2020 15:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2020 15:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2020 16:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2020 16:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2020 16:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2020 16:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2020 16:37	6		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2020 16:37	6		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2020 16:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2020 16:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2020 17:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2020 17:09	1		HP-Plot Q 0.53(mm)
280-137084-1		06/01/2020 17:26	1	020F1101.D	Rt-Alumina KCl 0.53(mm)
280-137084-1		06/01/2020 17:26	1	020F1101.D	HP-Plot Q 0.53(mm)
280-137084-2		06/01/2020 17:42	1	021F1201.D	Rt-Alumina KCl 0.53(mm)
280-137084-2		06/01/2020 17:42	1	021F1201.D	HP-Plot Q 0.53(mm)
280-137084-3		06/01/2020 17:58	1	022F1301.D	Rt-Alumina KCl 0.53(mm)
280-137084-3		06/01/2020 17:58	1	022F1301.D	HP-Plot Q 0.53(mm)
280-137084-4		06/01/2020 18:15	1	023F1401.D	Rt-Alumina KCl 0.53(mm)
280-137084-4		06/01/2020 18:15	1	023F1401.D	HP-Plot Q 0.53(mm)
280-137084-5		06/01/2020 18:31	1	024F1501.D	Rt-Alumina KCl 0.53(mm)
280-137084-5		06/01/2020 18:31	1	024F1501.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2020 18:47	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2020 18:47	1		HP-Plot Q 0.53(mm)
CCV 280-496925/36		06/01/2020 19:03	1	026F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-496925/36		06/01/2020 19:03	1	026F1701.D	HP-Plot Q 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/03/2020 11:03

Analysis Batch Number: 497247 End Date: 06/03/2020 21:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-497247/4		06/03/2020 11:03	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-497247/4		06/03/2020 11:03	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 11:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 11:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 11:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 11:36	1		HP-Plot Q 0.53(mm)
MB 280-497247/7		06/03/2020 11:52	1	007F0701.D	Rt-Alumina KCl 0.53(mm)
MB 280-497247/7		06/03/2020 11:52	1	007F0701.D	HP-Plot Q 0.53(mm)
CCV 280-497247/32		06/03/2020 14:24	1	008F0101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-497247/32		06/03/2020 14:24	1	008F0101.D	HP-Plot Q 0.53(mm)
LCS 280-497247/33		06/03/2020 14:40	1	009F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-497247/33		06/03/2020 14:40	1	009F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-497247/35		06/03/2020 14:56	1	010F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-497247/35		06/03/2020 14:56	1	010F0301.D	HP-Plot Q 0.53(mm)
MB 280-497247/34		06/03/2020 15:12	1	011F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-497247/34		06/03/2020 15:12	1	011F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 15:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 15:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 15:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 15:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 16:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 16:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 16:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 16:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 16:34	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 16:34	3		HP-Plot Q 0.53(mm)
280-137084-2		06/03/2020 16:50	3	017F1001.D	Rt-Alumina KCl 0.53(mm)
280-137084-2		06/03/2020 16:50	3	017F1001.D	HP-Plot Q 0.53(mm)
280-137084-3		06/03/2020 17:07	6	018F1101.D	Rt-Alumina KCl 0.53(mm)
280-137084-3		06/03/2020 17:07	6	018F1101.D	HP-Plot Q 0.53(mm)
280-137084-5		06/03/2020 17:23	6	019F1201.D	Rt-Alumina KCl 0.53(mm)
280-137084-5		06/03/2020 17:23	6	019F1201.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 17:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 17:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 17:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 17:56	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 18:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 18:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 18:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 18:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 18:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 18:45	1		HP-Plot Q 0.53(mm)
CCV 280-497247/21		06/03/2020 19:01	1	025F1801.D	Rt-Alumina KCl 0.53(mm)
CCV 280-497247/21		06/03/2020 19:01	1	025F1801.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 19:17	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/03/2020 11:03

Analysis Batch Number: 497247 End Date: 06/03/2020 21:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/03/2020 19:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 19:34	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 19:34	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 19:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 19:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 20:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 20:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 20:23	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 20:23	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 20:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 20:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 20:55	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 20:55	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 21:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 21:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2020 21:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2020 21:28	1		HP-Plot Q 0.53(mm)
CCV 280-497247/31		06/03/2020 21:45	1		Rt-Alumina KCl 0.53(mm)
CCV 280-497247/31		06/03/2020 21:45	1		HP-Plot Q 0.53(mm)

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GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 496925 Batch Start Date: 06/01/20 13:13 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	RSK7gasMathes 00031	
CCVRT 280-496925/4		RSK-175		18 mL	18 mL	5 SU		200 uL	
MB 280-496925/7		RSK-175		18 mL	18 mL	5 SU			
280-137084-I-1	EW7-PM27A-3-25	RSK-175	T	18 mL	18 mL	< 2 SU			
280-137084-H-2	EW7-PM24A-3-25	RSK-175	T	18 mL	18 mL	< 2 SU			
280-137084-I-3	EW7-PM24B-3-35	RSK-175	T	18 mL	18 mL	< 2 SU			
280-137084-I-4	EW7-PM21B-3-35	RSK-175	T	18 mL	18 mL	< 2 SU			
280-137084-H-5	EW7-PM22B-3-35	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-496925/33		RSK-175		18 mL	18 mL	5 SU		200 uL	
LCS 280-496925/34		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-496925/35		RSK-175		18 mL	18 mL	5 SU	200 uL		
CCV 280-496925/36		RSK-175		18 mL	18 mL	5 SU		200 uL	

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 497247 Batch Start Date: 06/03/20 11:03 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	RSK7gasMathes 00031	
CCVRT 280-497247/4		RSK-175		18 mL	18 mL	5 SU		200 uL	
MB 280-497247/7		RSK-175		18 mL	18 mL	5 SU			
280-137084-I-2	EW7-PM24A-3-25	RSK-175	T	18 mL	18 mL	< 2 SU			
280-137084-H-3	EW7-PM24B-3-35	RSK-175	T	18 mL	18 mL	< 2 SU			
280-137084-G-5	EW7-PM22B-3-35	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-497247/21		RSK-175		18 mL	18 mL	5 SU		200 uL	
CCV 280-497247/32		RSK-175		18 mL	18 mL	5 SU		200 uL	
LCS 280-497247/33		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-497247/34		RSK-175		18 mL	18 mL	5 SU			
LCSD 280-497247/35		RSK-175		18 mL	18 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8330A_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): UltraCarb5u ID: 4.6 (mm) GC Column (2): Luna-phenyl 4.6 (mm)

Client Sample ID	Lab Sample ID	12DNB1 #	12DNB2 #
EW7-PM27A-3-25	280-137084-1		90 M
EW7-PM27A-3-25	280-137084-1	183 M Q	
EW7-PM24A-3-25	280-137084-2		96
EW7-PM24A-3-25	280-137084-2	216 M Q	
EW7-PM24B-3-35	280-137084-3		99 M
EW7-PM24B-3-35	280-137084-3	636 M Q	
EW7-PM21B-3-35	280-137084-4		101
EW7-PM21B-3-35	280-137084-4	233 M Q	
EW7-PM22B-3-35	280-137084-5		95 M
EW7-PM22B-3-35	280-137084-5	484 M Q	
	MB 280-496861/1-A	94	
	LCS 280-496861/2-A	95	
	LCS 280-496861/4-A	95	
	LCSD 280-496861/3-A	96	

	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.: 280-137084-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06110023.D

Lab ID: LCS 280-496861/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.11	105	73-125	
1,3-Dinitrobenzene	2.00	2.00	100	78-120	
2,4,6-Trinitrotoluene	2.00	2.09	105	71-123	
2,4-Dinitrotoluene	2.00	1.85	93	78-120	
2,6-Dinitrotoluene	2.00	2.03	101	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.81	90	79-120	
2-Nitrotoluene	2.00	1.62	81	70-127	
3-Nitrotoluene	2.00	1.80	90	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.68	84	76-125	
4-Nitrotoluene	2.00	1.58	79	71-127	
HMX	2.00	2.00	100	65-135	
Nitrobenzene	2.00	1.88	94	65-134	
RDX	2.00	1.96	98	68-130	
Tetryl	2.00	1.90	95	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06110025.D

Lab ID: LCS 280-496861/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.11	91	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06110024.D

Lab ID: LCSD 280-496861/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.18	109	3	30	73-125	
1,3-Dinitrobenzene	2.00	2.05	103	3	30	78-120	
2,4,6-Trinitrotoluene	2.00	2.11	106	1	30	71-123	
2,4-Dinitrotoluene	2.00	1.93	96	4	30	78-120	
2,6-Dinitrotoluene	2.00	2.03	101	0	30	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.91	95	6	30	79-120	
2-Nitrotoluene	2.00	1.74	87	7	30	70-127	
3-Nitrotoluene	2.00	1.94	97	7	30	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.75	88	4	30	76-125	
4-Nitrotoluene	2.00	1.83	92	15	30	71-127	
HMX	2.00	2.03	102	2	30	65-135	M
Nitrobenzene	2.00	1.97	99	5	30	65-134	
RDX	2.00	2.03	102	4	30	68-130	
Tetryl	2.00	1.96	98	4	30	64-128	

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.: 280-137084-1

SDG No.:

Lab Sample ID: MB 280-496861/1-A

Matrix: Water Date Extracted: 06/01/2020 10:20

Lab File ID:(1) 06120010.D Lab File ID:(2)

Date Analyzed:(1) 06/12/2020 14:35 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 280-496861/2-A	06/11/2020 21:06	
	LCSD 280-496861/3-A	06/11/2020 21:29	
	LCS 280-496861/4-A	06/11/2020 21:52	
EW7-PM27A-3-25	280-137084-1	06/12/2020 04:00	06/13/2020 06:42
EW7-PM24A-3-25	280-137084-2	06/12/2020 04:23	06/13/2020 07:17
EW7-PM24B-3-35	280-137084-3	06/12/2020 04:46	06/13/2020 07:52
EW7-PM21B-3-35	280-137084-4	06/12/2020 17:16	06/13/2020 08:27
EW7-PM22B-3-35	280-137084-5	06/12/2020 17:39	06/13/2020 09:02

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM27A-3-25 Lab Sample ID: 280-137084-1

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/12/2020 04:00 Date Analyzed (2): 06/13/2020 06:42

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		11.27	11.12	11.32	0.45		45.1
	2		24.86	24.76	25.06	0.29		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Client Sample ID: EW7-PM24A-3-25 Lab Sample ID: 280-137084-2

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/12/2020 04:23 Date Analyzed (2): 06/13/2020 07:17

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.75	6.55	6.85	4.7		105.4
	2		7.13	7.01	7.31	1.5		
1,3,5-Trinitrobenzene	1		8.95	8.77	9.07	3.3		2.6
	2		19.10	19.00	19.30	3.4		
2,4,6-Trinitrotoluene	1		11.29	11.12	11.32	8.3		10.4
	2		24.85	24.76	25.06	7.5		
4-Amino-2,6-dinitrotoluene	1		11.46	11.28	11.48	2.5		1.4
	2		17.42	17.34	17.64	2.6		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM27A-3-25
Lab Sample ID: 280-137084-1
Matrix: Water
Lab File ID: 06110041.D
Analysis Method: 8330A
Date Collected: 05/29/2020 15:55
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 465.7(mL)
Date Analyzed: 06/12/2020 04:00
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.: 498360
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M Q	0.23	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	0.45	Q J1	0.12	0.11	0.048
606-20-2	2,6-Dinitrotoluene	0.086	U M Q	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U Q	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U Q	0.23	0.21	0.092
99-08-1	3-Nitrotoluene	0.43	U Q	0.43	0.43	0.21
2691-41-0	HMX	0.21	U Q	0.23	0.21	0.094
5755-27-1	MNX	0.43	U M	2.1	0.43	0.17
98-95-3	Nitrobenzene	0.21	U M Q	0.23	0.21	0.098
121-82-4	RDX	0.21	U M Q	0.23	0.21	0.055
479-45-8	Tetryl	0.11	U M Q	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	183	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110041.D				
Lims ID:	280-137084-A-1-A				
Client ID:	EW7-PM27A-3-25				
Sample Type:	Client				
Inject. Date:	12-Jun-2020 04:00:49	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-1-A				
Misc. Info.:	280-0092324-041				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Jun-2020 12:39:47	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1034				
First Level Reviewer: zhangji		Date:	12-Jun-2020 11:24:51		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.696			ND	
6 MNX	1		7.407			ND	U
7 RDX	1		7.776			ND	U
$ 9 1,2-Dinitrobenzene	1	8.791	8.743	0.048	50578	0.3659	M
10 1,3,5-Trinitrobenzene	1		8.916			ND	U
11 1,3-Dinitrobenzene	1		9.569			ND	U
12 Nitrobenzene	1		9.949			ND	U
14 Tetryl	1		10.256			ND	U
16 2,4,6-Trinitrotoluene	1	11.270	11.222	0.048	8583	0.0421	
17 4-Amino-2,6-dinitrotoluene	1	11.444	11.376	0.068	27001	0.1579	
18 2-Amino-4,6-dinitrotoluene	1		11.662			ND	
19 2,6-Dinitrotoluene	1		11.809			ND	U
20 2,4-Dinitrotoluene	1	12.057	12.009	0.048	7494	0.0247	
21 o-Nitrotoluene	1		12.842			ND	
22 p-Nitrotoluene	1	13.324	13.276	0.048	2644	0.0234	
23 m-Nitrotoluene	1		13.862			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

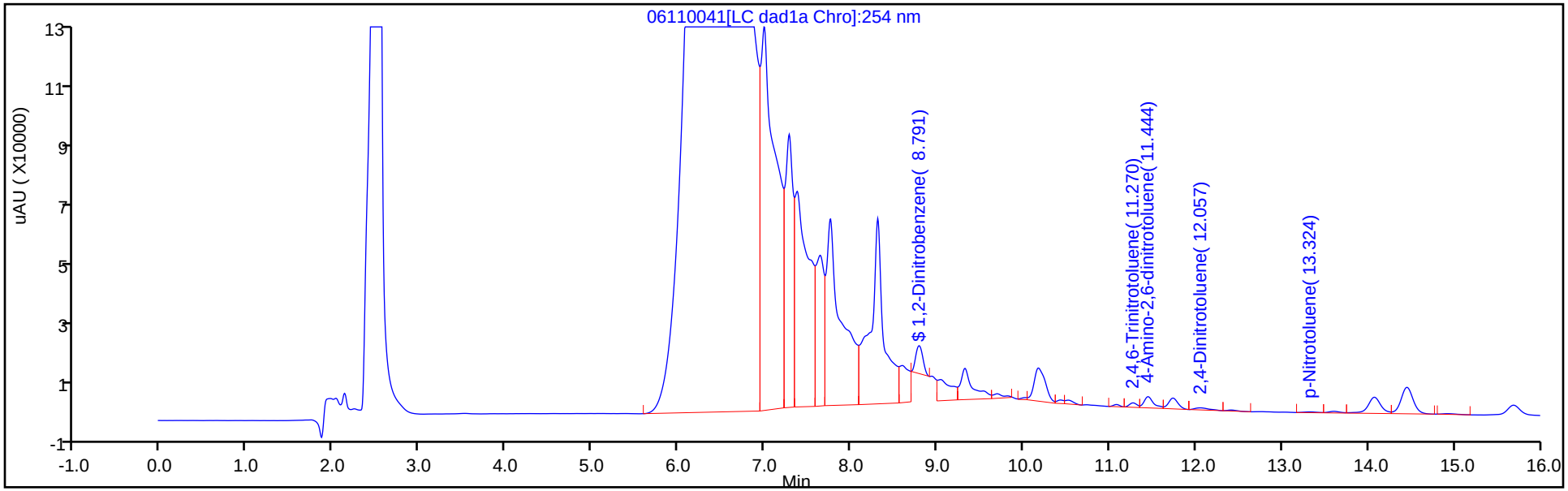
U - Marked Undetected

Report Date: 12-Jun-2020 12:39:51 Chrom Revision: 2.3 10-Jun-2020 22:46:48

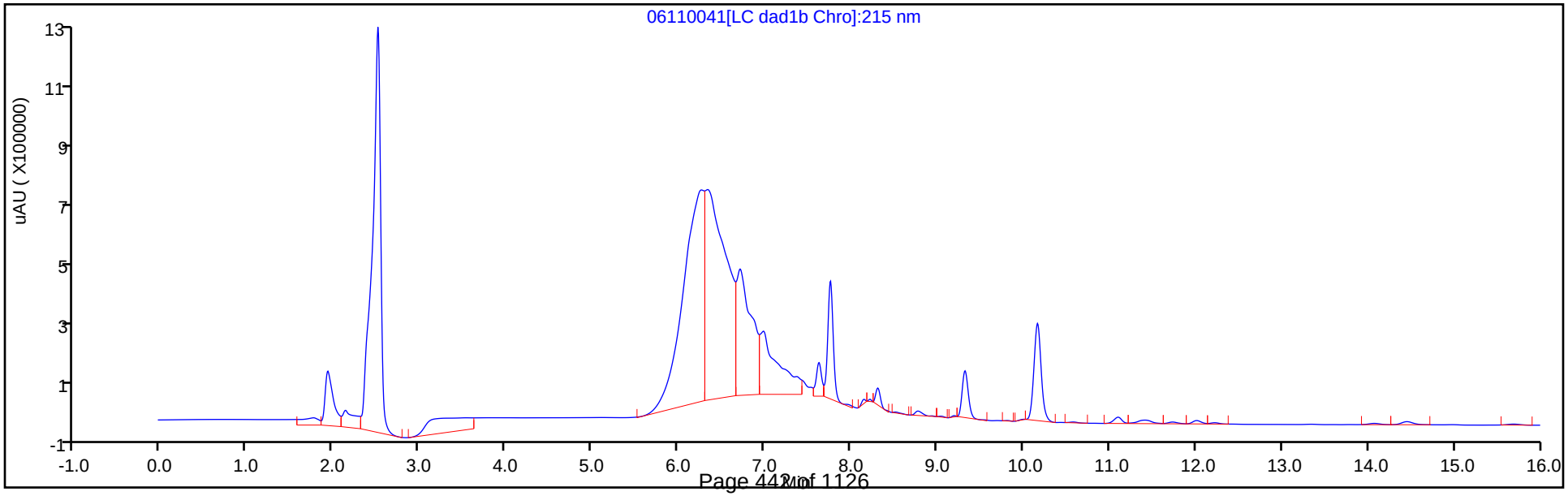
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1	Worklist Smp#:	41
Client ID:	EW7-PM27A-3-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110041.D				
Lims ID:	280-137084-A-1-A				
Client ID:	EW7-PM27A-3-25				
Sample Type:	Client				
Inject. Date:	12-Jun-2020 04:00:49	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-1-A				
Misc. Info.:	280-0092324-041				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		

Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m		
Limit Group:	GCSV - 8330		
Last Update:	12-Jun-2020 12:39:47	Calib Date:	18-Mar-2020 14:39:27
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D		

Column 1 :	UltraCarb5uODS (20) (4.60 mm)	Det: LC DAD1B, 254 nm
Process Host:	CTX1034	

First Level Reviewer: zhangji Date: 12-Jun-2020 11:24:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.3659	182.97

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

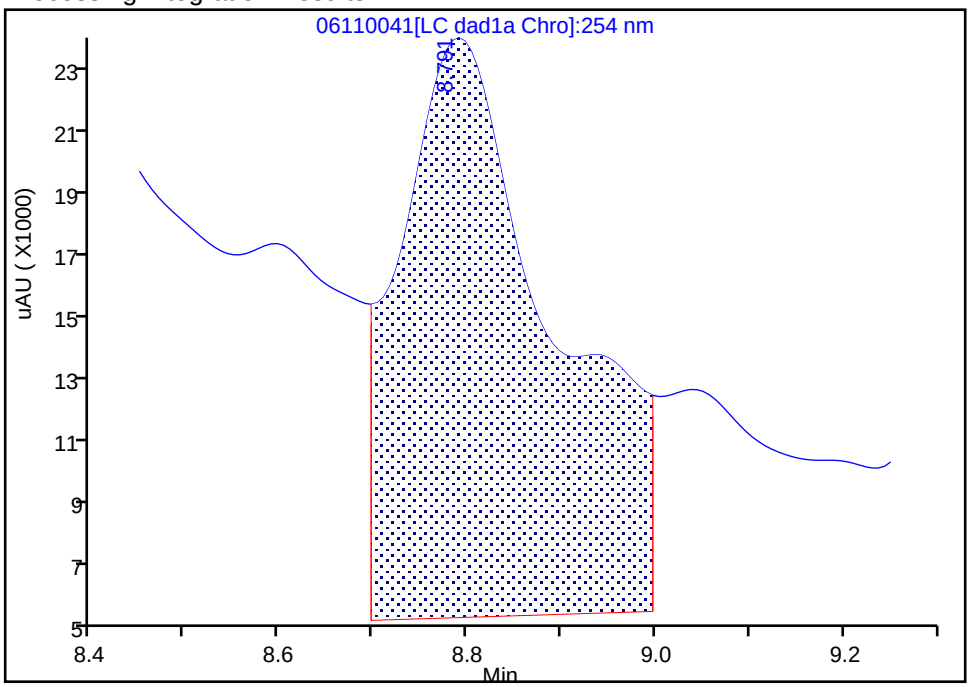
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

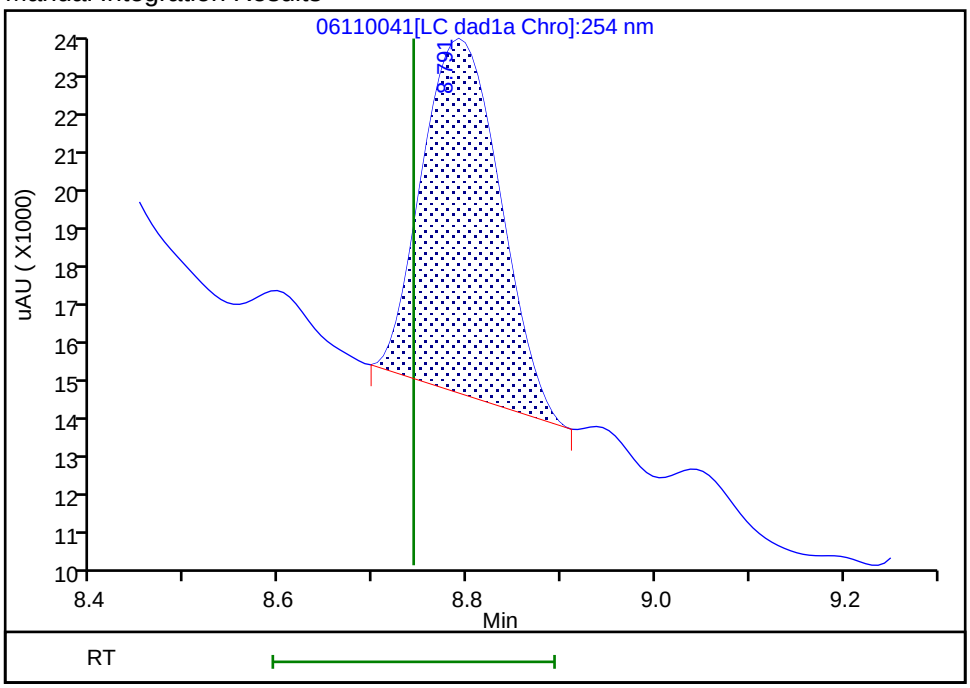
Processing Integration Results

RT: 8.79
Area: 199616
Amount: 1.444272
Amount Units: ug/mL



Manual Integration Results

RT: 8.79
Area: 50578
Amount: 0.365944
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:24:48

Audit Action: Manually Integrated Audit Reason: Baseline

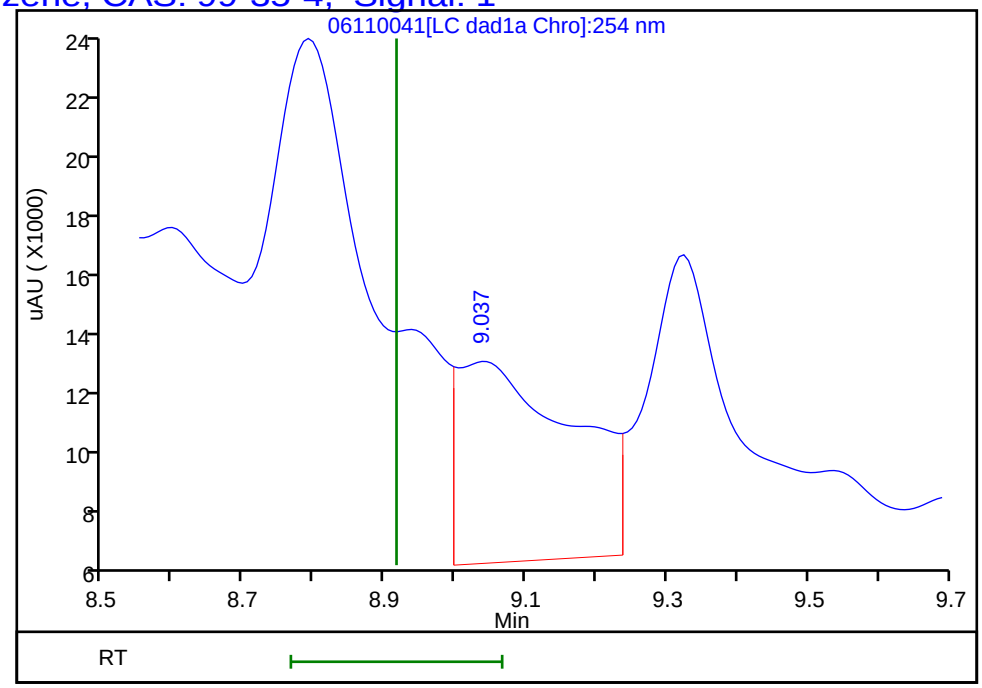
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 9.04
Response: 74913
Amount: 0.325272



Reviewer: zhangji, 12-Jun-2020 11:25:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

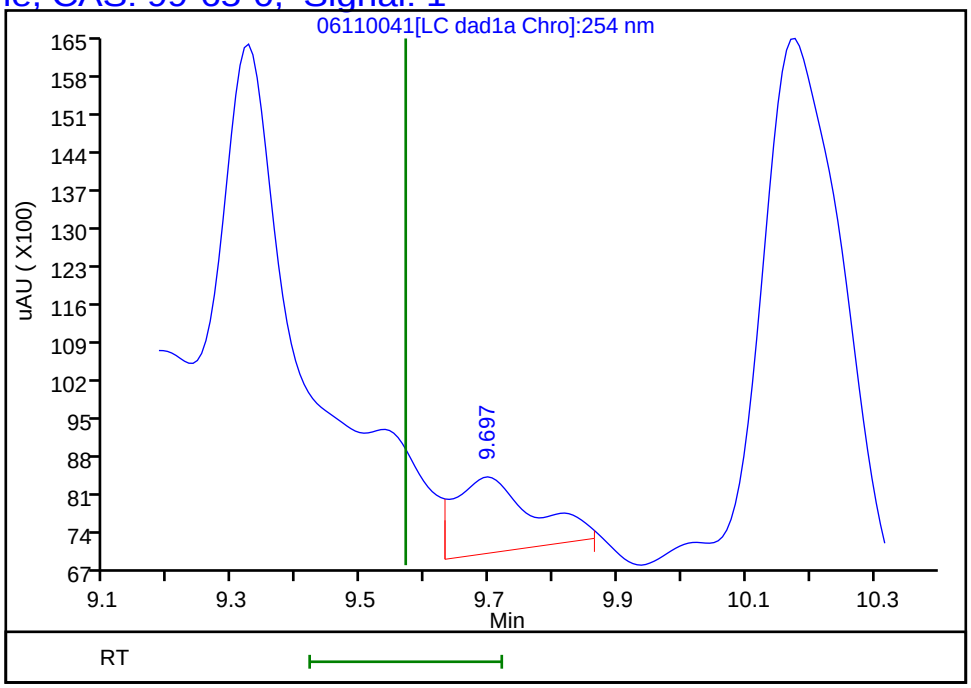
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.70
Response: 11768
Amount: 0.038372



Reviewer: zhangji, 12-Jun-2020 11:25:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

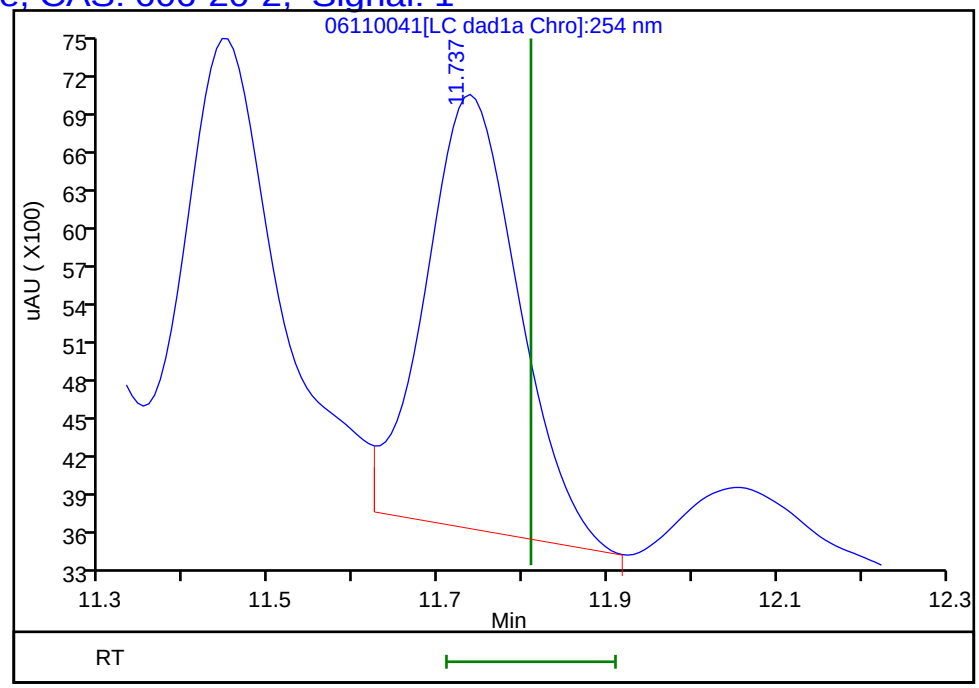
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.74
Response: 25962
Amount: 0.173714



Reviewer: zhangji, 12-Jun-2020 11:25:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

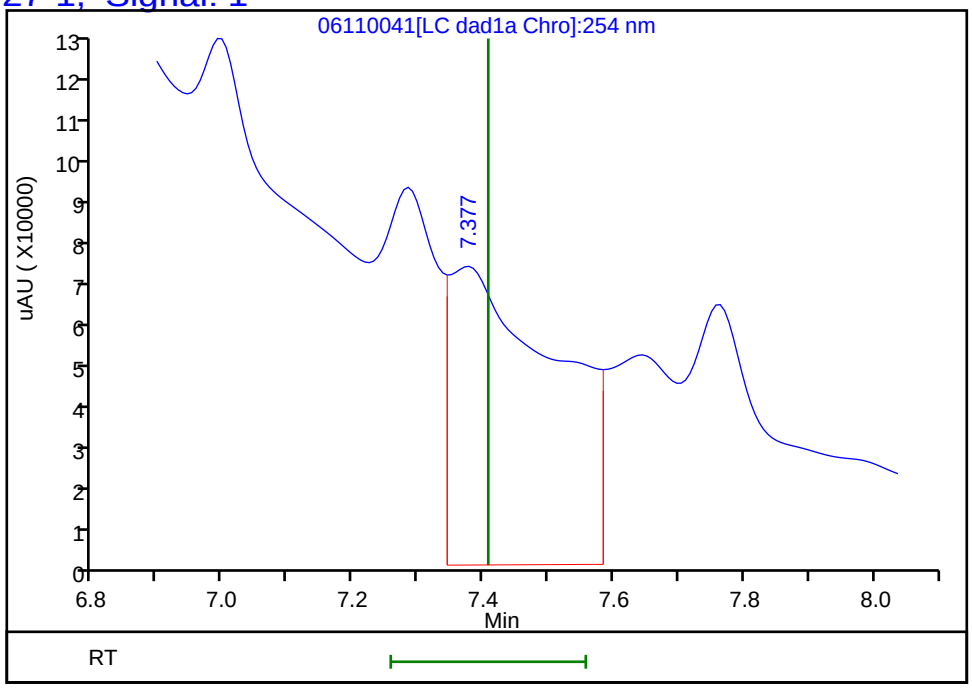
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.38
Response: 767557
Amount: 4.841281



Reviewer: zhangji, 12-Jun-2020 11:25:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

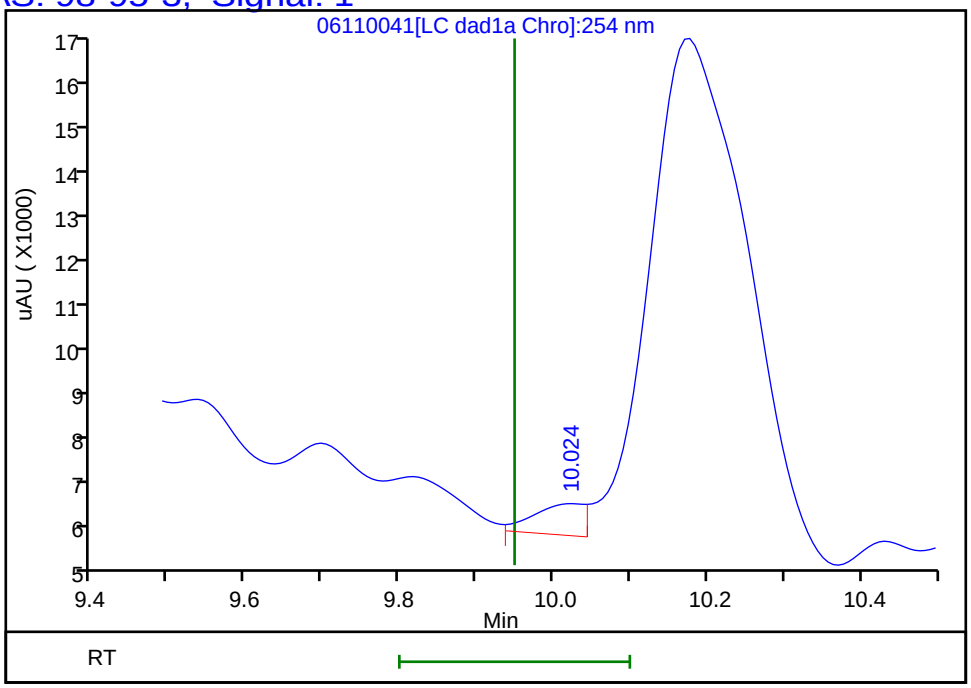
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 10.02
Response: 2844
Amount: 0.014191



Reviewer: zhangji, 12-Jun-2020 11:25:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

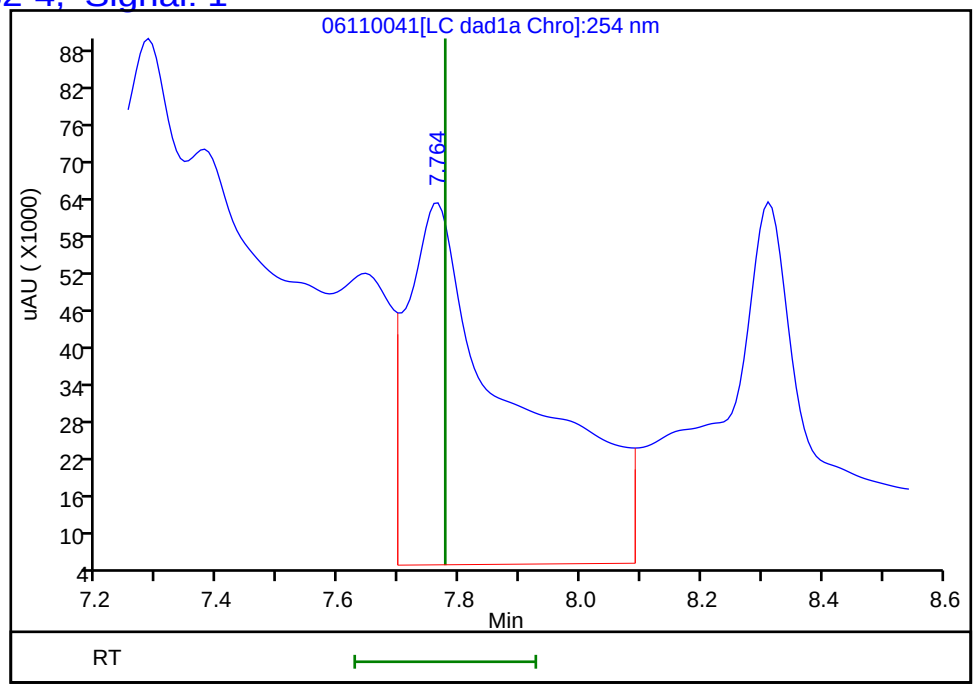
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.76
Response: 734518
Amount: 6.298762



Reviewer: zhangji, 12-Jun-2020 11:25:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

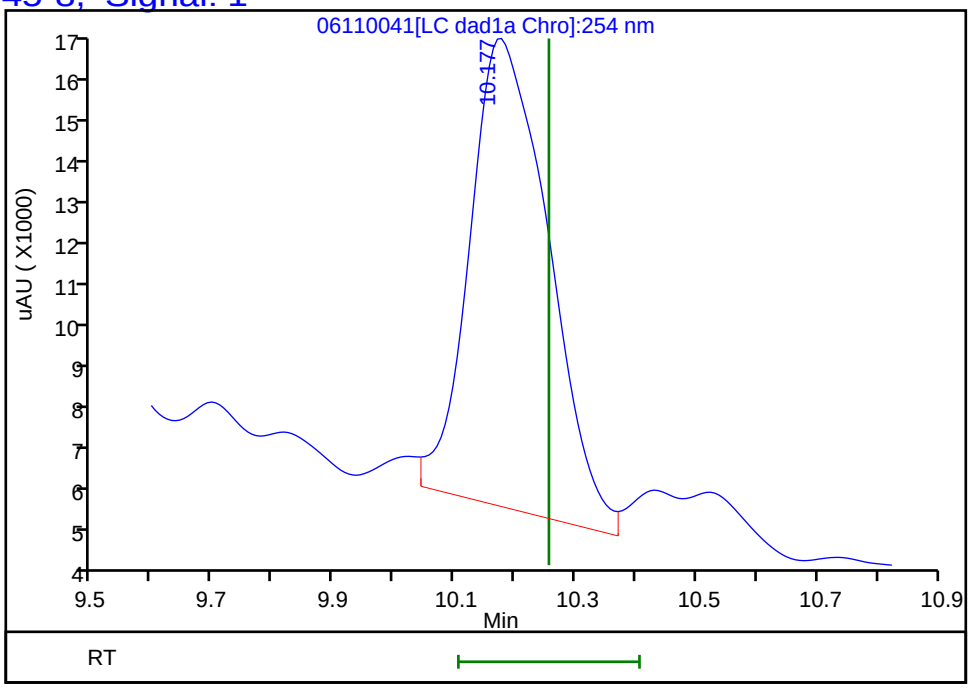
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110041.d				
Injection Date:	12-Jun-2020 04:00:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.18
Response: 95016
Amount: 0.536717



Reviewer: zhangji, 12-Jun-2020 11:25:50
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.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM27A-3-25
Lab Sample ID: 280-137084-1
Matrix: Water
Lab File ID: 06120030.D
Analysis Method: 8330A
Date Collected: 05/29/2020 15:55
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 465.7(mL)
Date Analyzed: 06/13/2020 06:42
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.: 498568
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	*2,4,6-Trinitrotoluene*	*0.29*	*M J1*	*0.12*	0.11	*0.048*
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120030.D				
Lims ID:	280-137084-A-1-A				
Client ID:	EW7-PM27A-3-25				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 06:42:47	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-1-A				
Misc. Info.:	280-0092371-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 17:56:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	7.141	7.161	-0.020	43651	0.2165	
7 MNX	1	7.775	7.876	-0.101	16997	0.0434	
8 RDX	1	9.368	9.387	-0.019	17420	0.0713	
9 Nitrobenzene	1		12.281			ND	
$ 10 1,2-Dinitrobenzene	1	13.248	13.294	-0.046	51579	0.1794	M
12 1,3-Dinitrobenzene	1		15.827			ND	
14 o-Nitrotoluene	1		16.747			ND	U
15 p-Nitrotoluene	1		17.041			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.487			ND	
17 m-Nitrotoluene	1		17.967			ND	U
18 2-Amino-4,6-dinitrotoluene	1	18.341	18.427	-0.086	79847	0.1716	
19 1,3,5-Trinitrobenzene	1	19.101	19.154	-0.053	18050	0.0382	
20 2,6-Dinitrotoluene	1		20.081			ND	
21 2,4-Dinitrotoluene	1		20.601			ND	
22 Tetryl	1		23.908			ND	
23 2,4,6-Trinitrotoluene	1	24.855	24.914	-0.059	13837	0.0266	M

QC Flag Legend

Review Flags

M - Manually Integrated

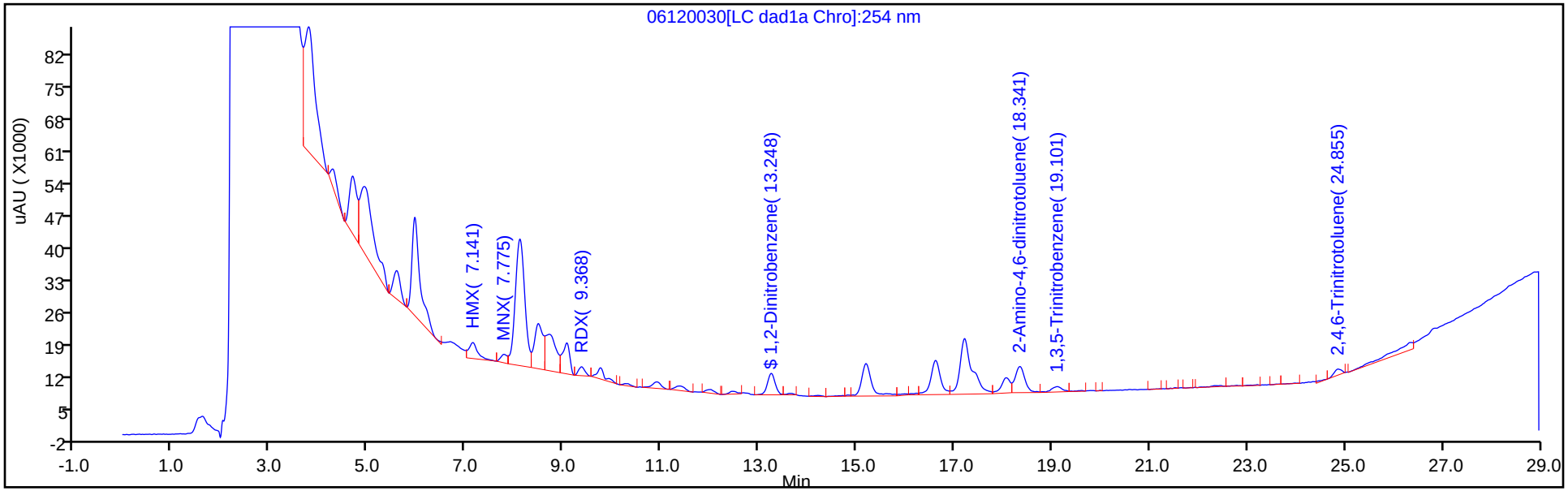
U - Marked Undetected

Report Date: 16-Jun-2020 18:53:21 Chrom Revision: 2.3 10-Jun-2020 22:46:48

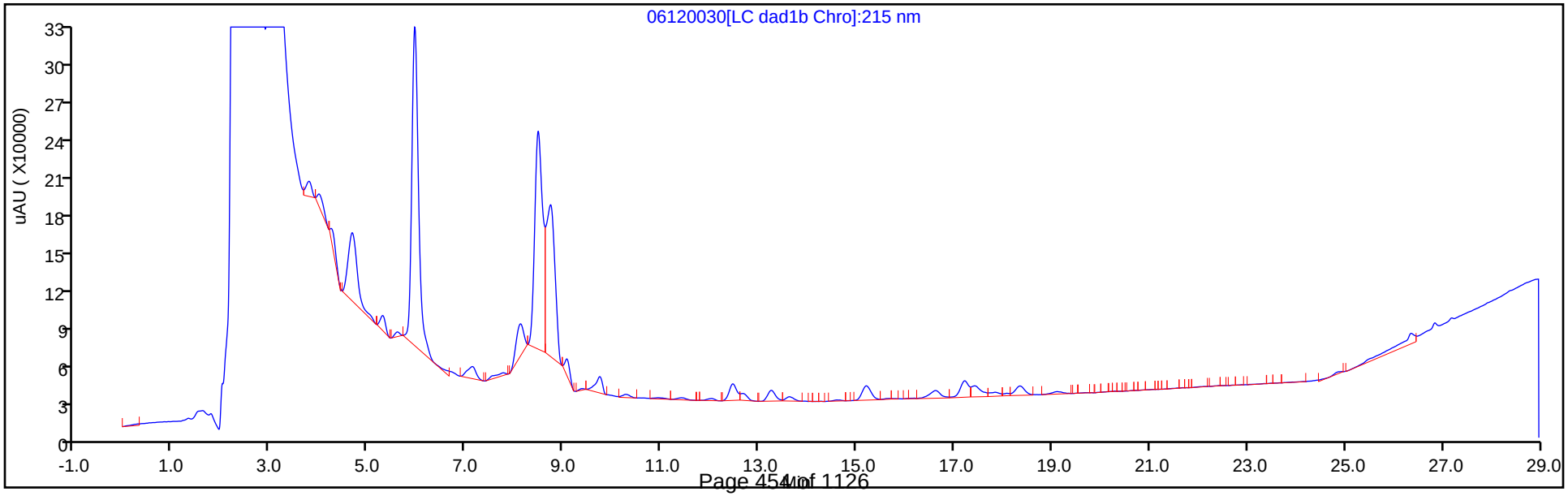
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120030.d				
Injection Date:	13-Jun-2020 06:42:47	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1	Worklist Smp#:	30
Client ID:	EW7-PM27A-3-25				
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:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120030.D				
Lims ID:	280-137084-A-1-A				
Client ID:	EW7-PM27A-3-25				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 06:42:47	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-1-A				
Misc. Info.:	280-0092371-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 17:56:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1794	89.71

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

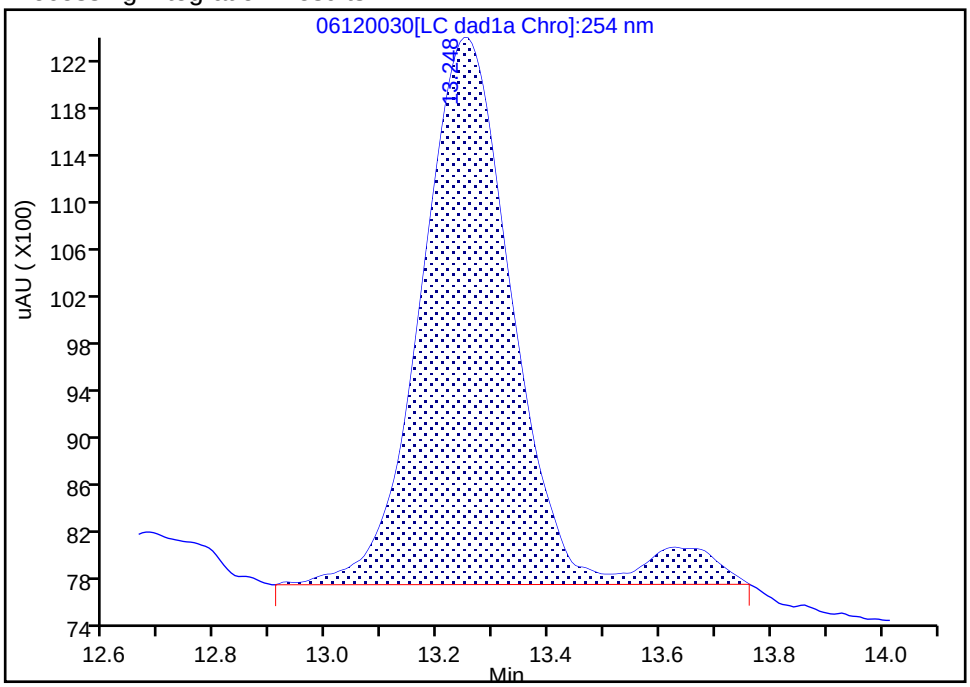
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120030.d				
Injection Date:	13-Jun-2020 06:42:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

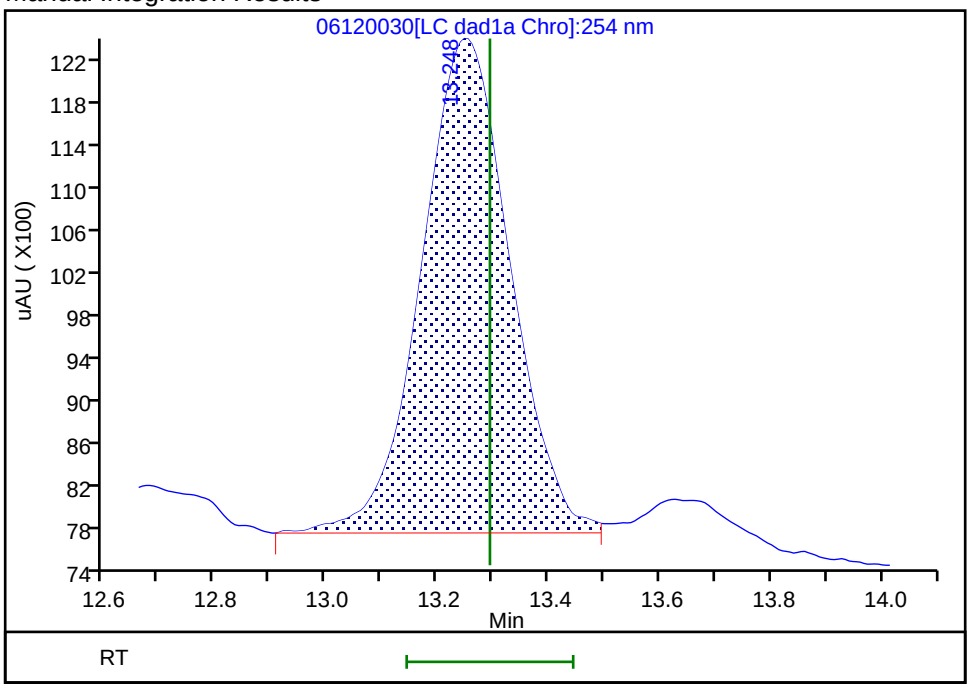
Processing Integration Results

RT: 13.25
Area: 54498
Amount: 0.189948
Amount Units: ug/ml



Manual Integration Results

RT: 13.25
Area: 51579
Amount: 0.179419
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:56:31

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

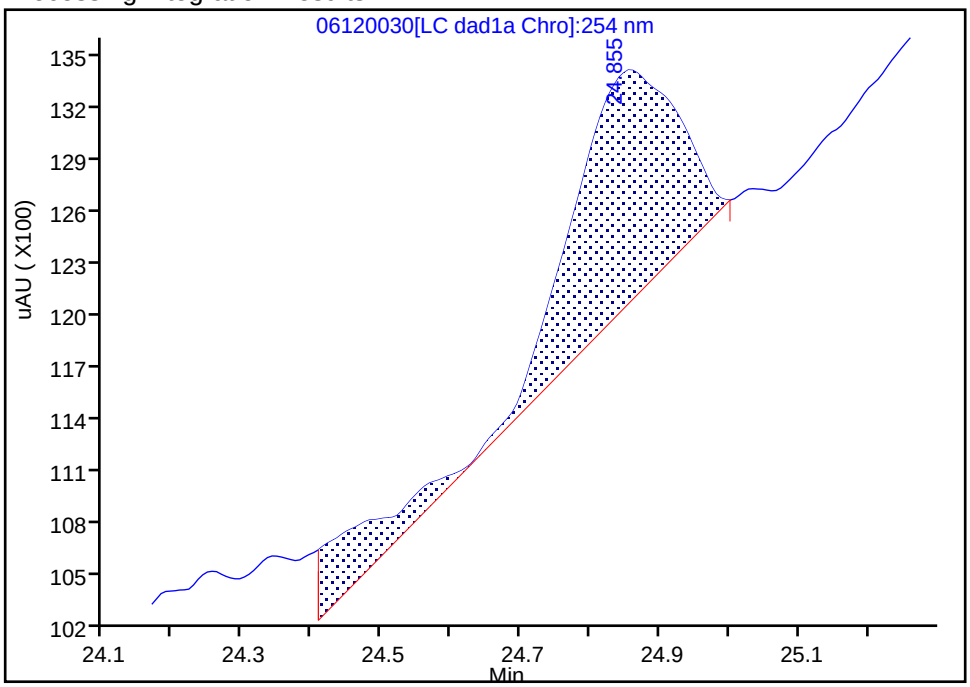
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120030.d				
Injection Date:	13-Jun-2020 06:42:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

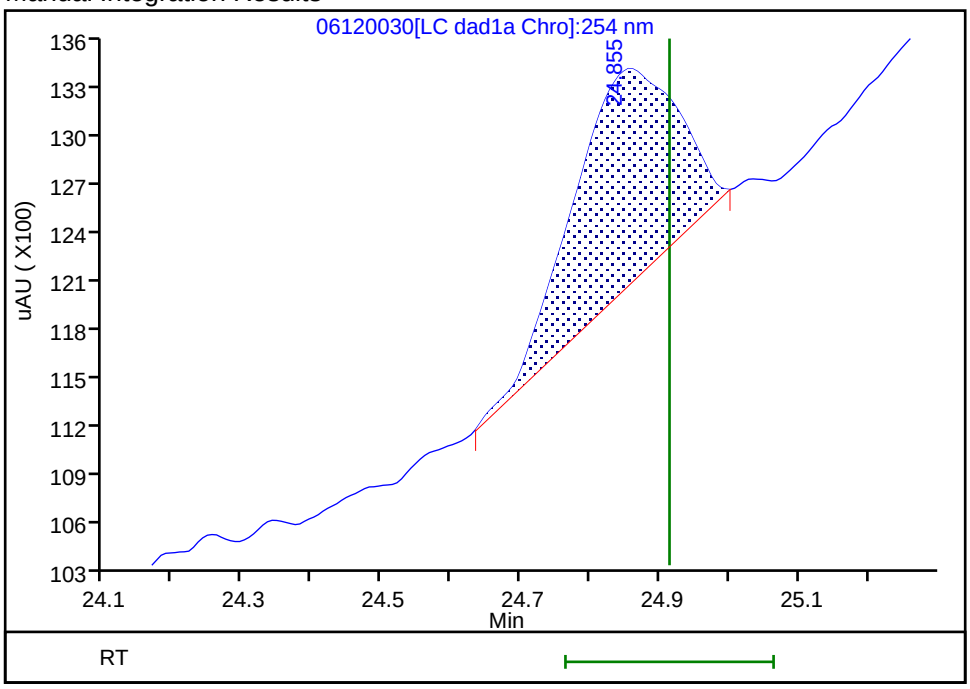
Processing Integration Results

RT: 24.85
Area: 16425
Amount: 0.033034
Amount Units: ug/ml



Manual Integration Results

RT: 24.85
Area: 13837
Amount: 0.026590
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:56:21

Audit Action: Split an Integrated Peak Audit Reason: Baseline

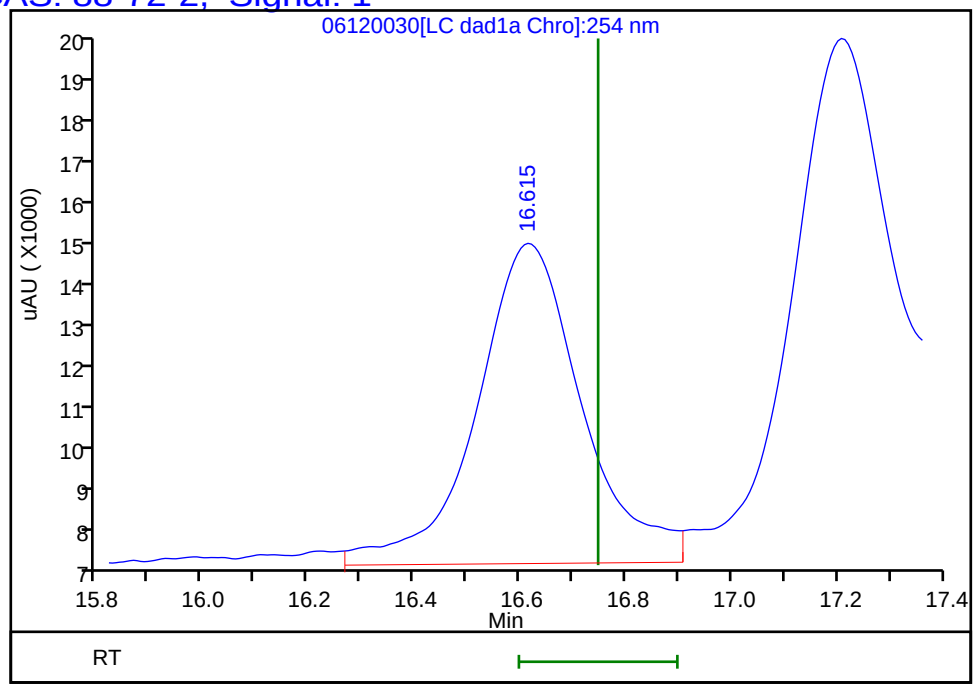
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120030.d				
Injection Date:	13-Jun-2020 06:42:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.61
Response: 102602
Amount: 0.375880



Reviewer: zhangji, 16-Jun-2020 17:56:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

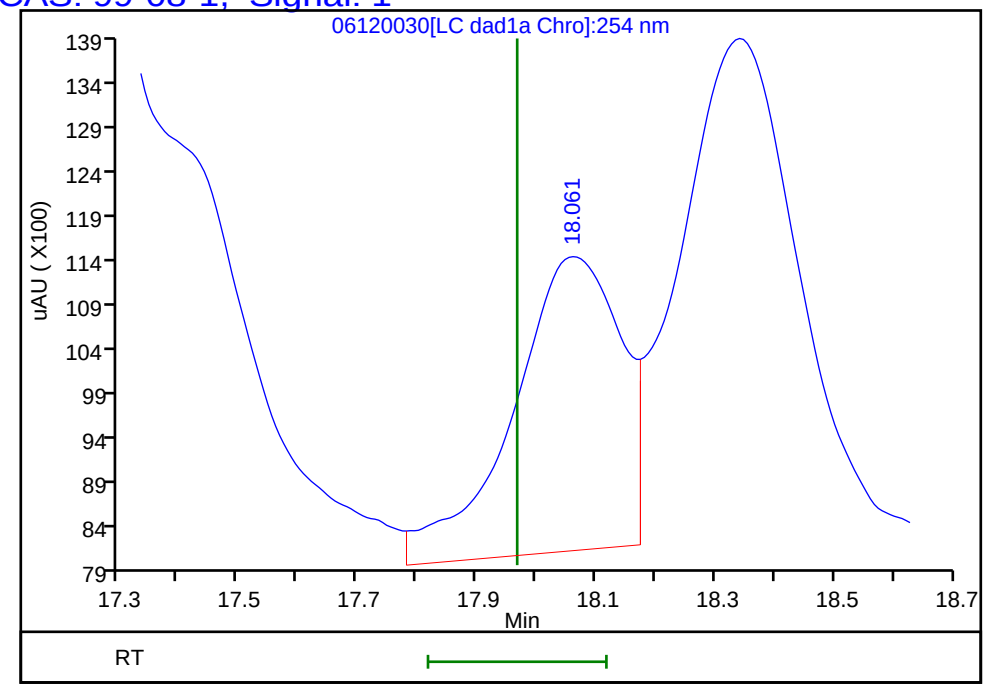
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120030.d				
Injection Date:	13-Jun-2020 06:42:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-1-A	Lab Sample ID:	280-137084-1		
Client ID:	EW7-PM27A-3-25				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.06
Response: 41815
Amount: 0.140165



Reviewer: zhangji, 16-Jun-2020 17:56:35
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.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM24A-3-25
Lab Sample ID: 280-137084-2
Matrix: Water
Lab File ID: 06110042.D
Analysis Method: 8330A
Date Collected: 05/29/2020 12:50
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 467.7(mL)
Date Analyzed: 06/12/2020 04:23
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.: 498360
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	3.3	M Q	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	8.3	M Q	0.12	0.11	0.048
606-20-2	2,6-Dinitrotoluene	0.086	U M Q	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U Q	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.091
19406-51-0	4-Amino-2,6-dinitrotoluene	2.5	M Q	0.16	0.13	0.062
2691-41-0	HMX	4.7	M Q	0.22	0.21	0.094
5755-27-1	MNX	0.43	U M	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U M Q	0.22	0.21	0.097
121-82-4	RDX	0.21	U M Q	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U M Q	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	216	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110042.D
Lims ID: 280-137084-A-2-A
Client ID: EW7-PM24A-3-25
Sample Type: Client
Inject. Date: 12-Jun-2020 04:23:45 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137084-A-2-A
Misc. Info.: 280-0092324-042
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jun-2020 12:39:47 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1034

First Level Reviewer: zhangji Date: 12-Jun-2020 11:28:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.749	6.696	0.053	37754	0.4392	M
6 MNX	1		7.407			ND	U
7 RDX	1		7.776			ND	U
$ 9 1,2-Dinitrobenzene	1	8.803	8.743	0.060	59833	0.4329	M
10 1,3,5-Trinitrobenzene	1	8.949	8.916	0.033	71139	0.3089	M
11 1,3-Dinitrobenzene	1		9.569			ND	U
12 Nitrobenzene	1		9.949			ND	U
14 Tetryl	1		10.256			ND	U
16 2,4,6-Trinitrotoluene	1	11.289	11.222	0.067	159099	0.7798	M
17 4-Amino-2,6-dinitrotoluene	1	11.456	11.376	0.080	40892	0.2358	M
18 2-Amino-4,6-dinitrotoluene	1		11.662			ND	
19 2,6-Dinitrotoluene	1		11.809			ND	MU
20 2,4-Dinitrotoluene	1	12.076	12.009	0.067	4673	0.0154	M
21 o-Nitrotoluene	1		12.842			ND	U
22 p-Nitrotoluene	1	13.322	13.276	0.046	2351	0.0208	M
23 m-Nitrotoluene	1	13.942	13.862	0.080	1834	0.0128	

QC Flag Legend

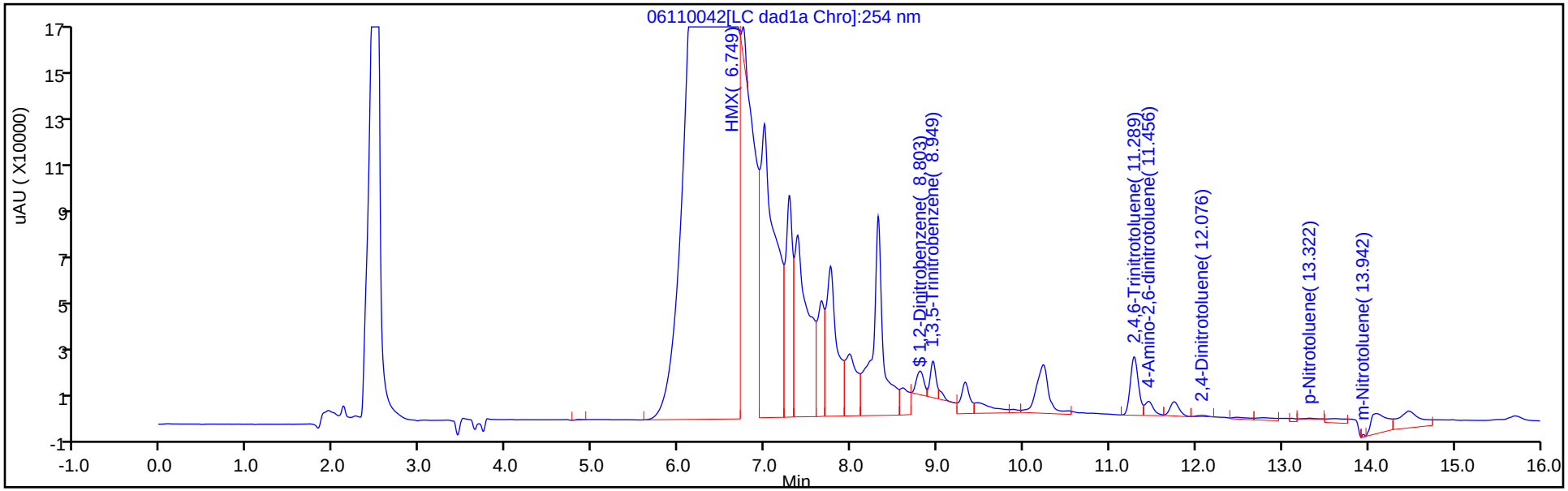
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-Jun-2020 12:39:51 Chrom Revision: 2.3 10-Jun-2020 22:46:48

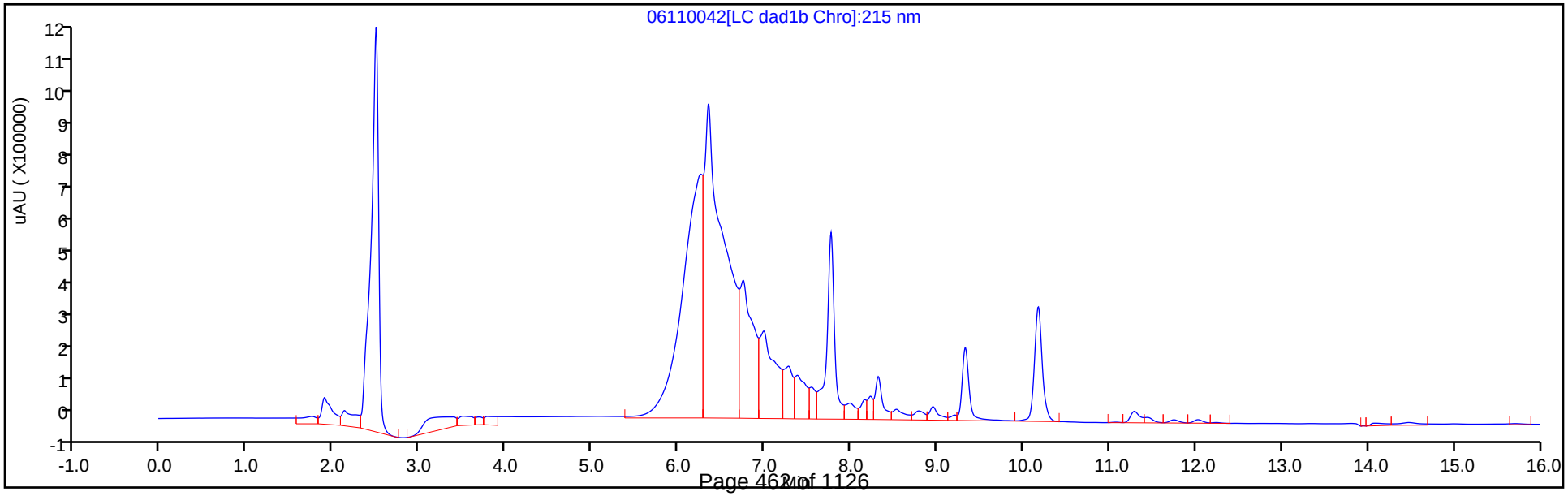
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2	Worklist Smp#:	42
Client ID:	EW7-PM24A-3-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110042.D				
Lims ID:	280-137084-A-2-A				
Client ID:	EW7-PM24A-3-25				
Sample Type:	Client				
Inject. Date:	12-Jun-2020 04:23:45	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-2-A				
Misc. Info.:	280-0092324-042				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Jun-2020 12:39:47	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1034				

First Level Reviewer: zhangji Date: 12-Jun-2020 11:28:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.4329	216.45

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

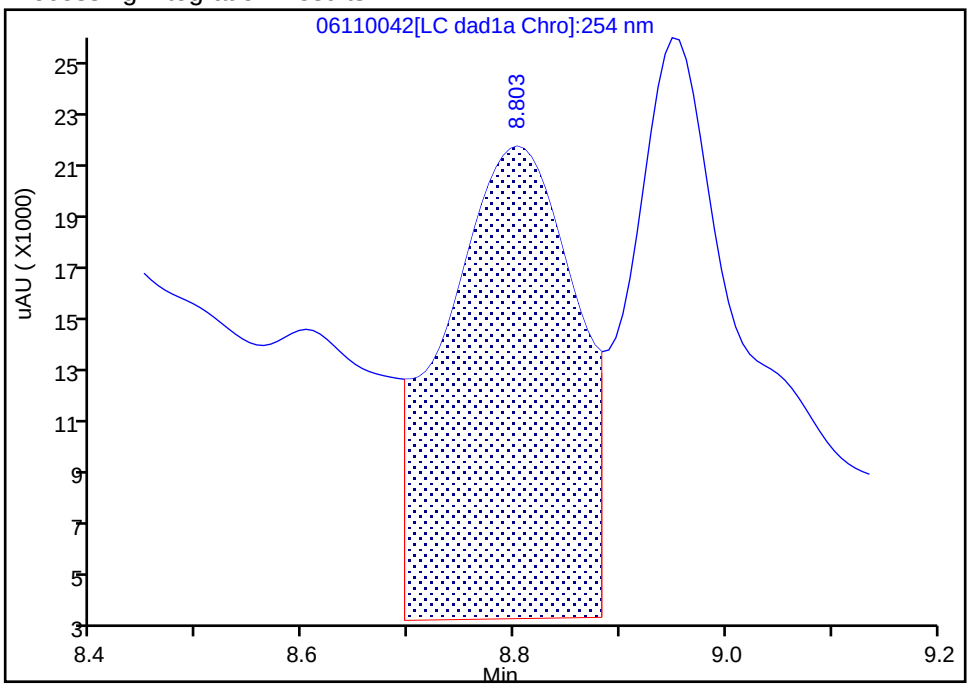
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

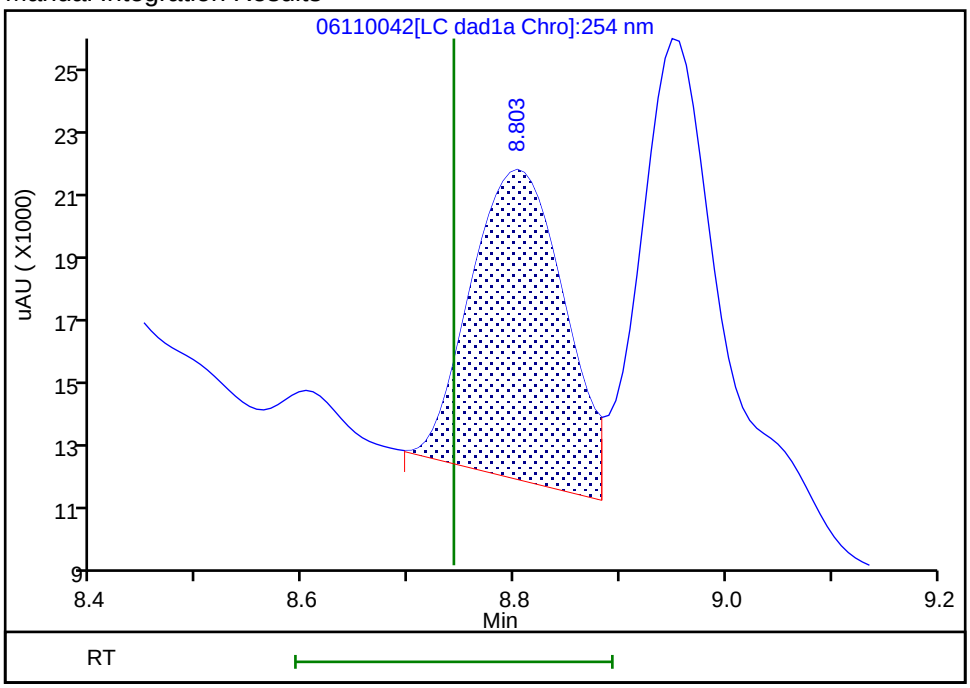
Processing Integration Results

RT: 8.80
Area: 152406
Amount: 1.102696
Amount Units: ug/mL



Manual Integration Results

RT: 8.80
Area: 59833
Amount: 0.432907
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:27:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

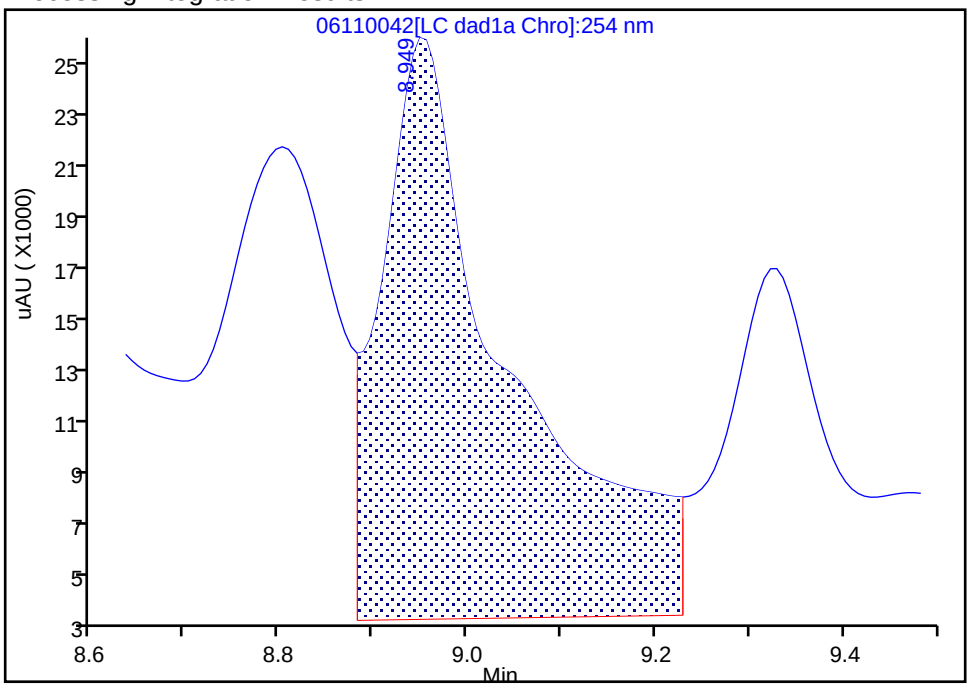
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

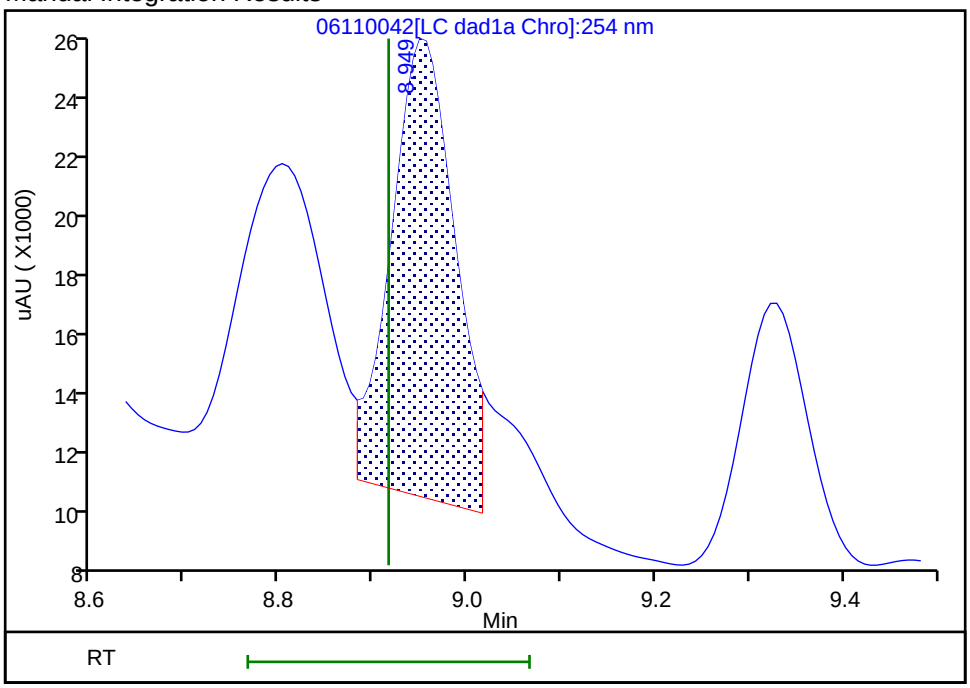
Processing Integration Results

RT: 8.95
Area: 207848
Amount: 0.902475
Amount Units: ug/mL



Manual Integration Results

RT: 8.95
Area: 71139
Amount: 0.308885
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:27:42
Audit Action: Split an Integrated Peak Audit Reason: Baseline

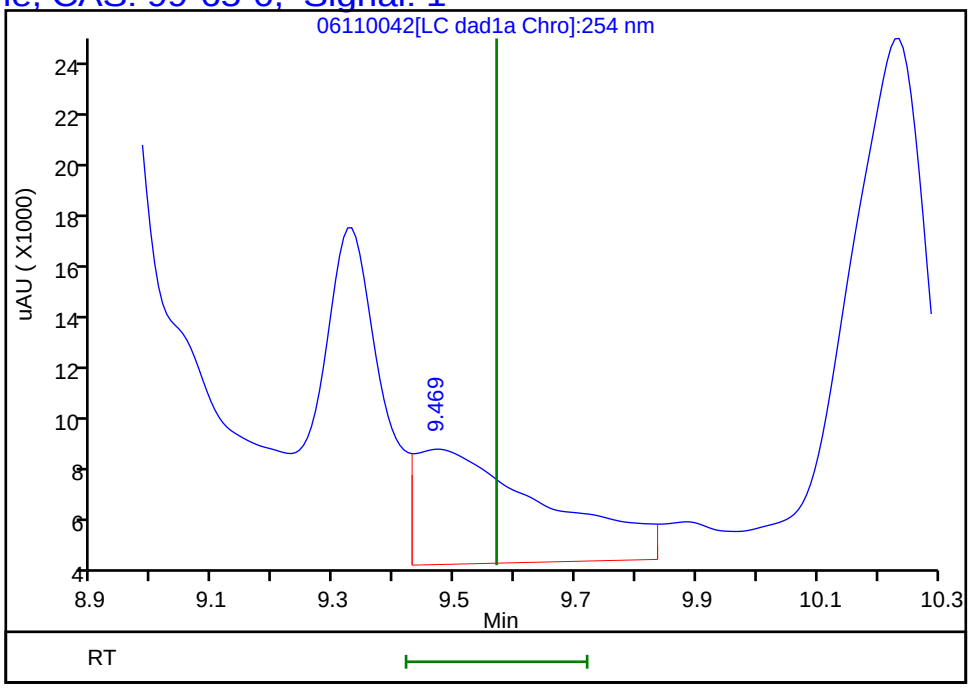
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.47
Response: 65209
Amount: 0.212625



Reviewer: zhangji, 12-Jun-2020 11:28:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

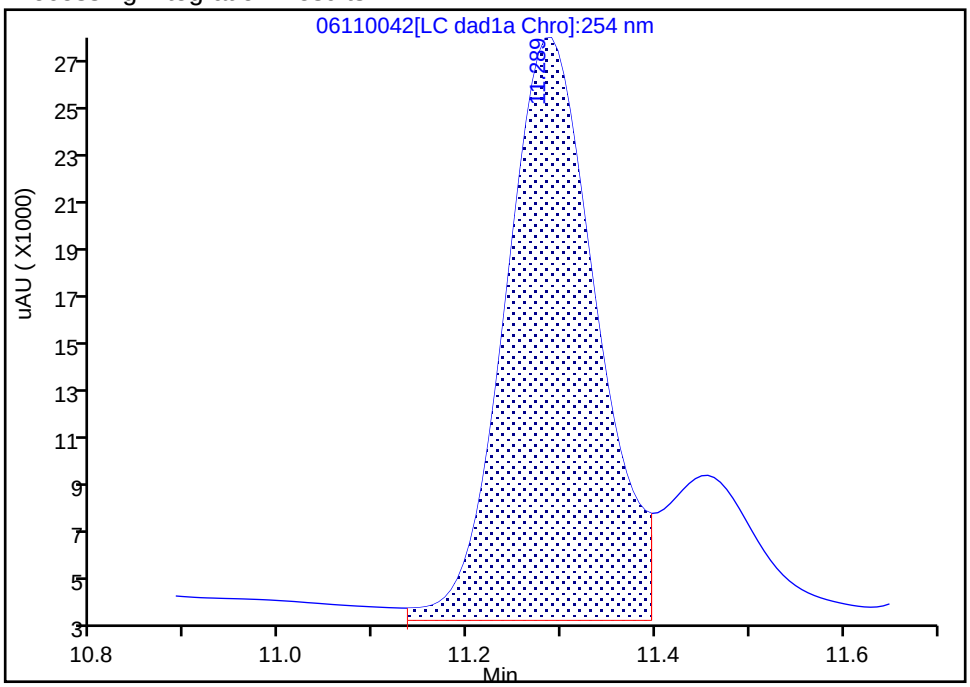
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

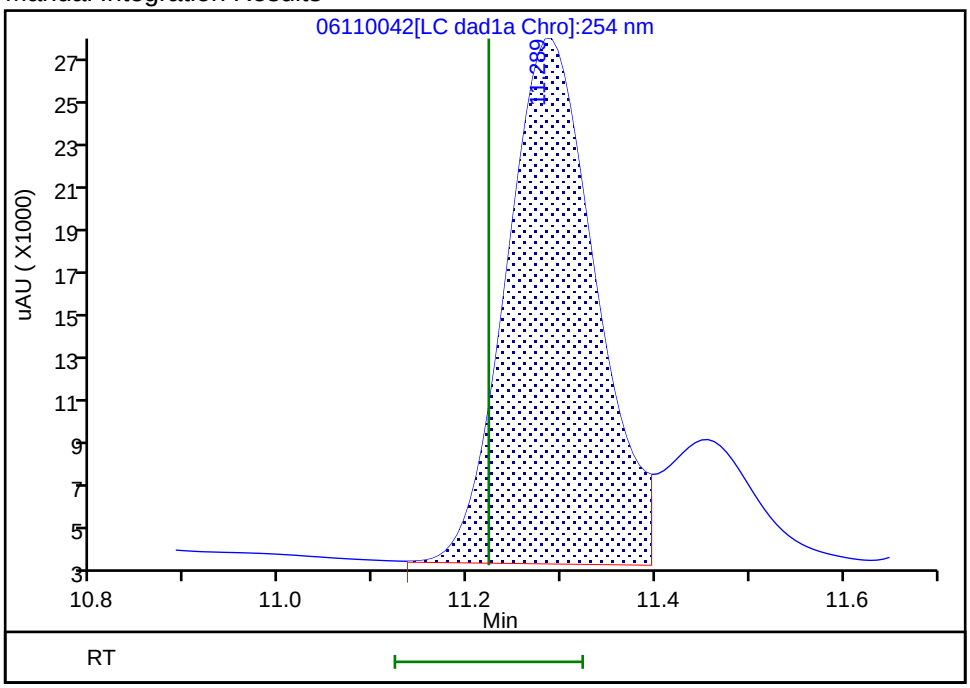
Processing Integration Results

RT: 11.29
Area: 165347
Amount: 0.810401
Amount Units: ug/mL



Manual Integration Results

RT: 11.29
Area: 159099
Amount: 0.779779
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:28:08
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

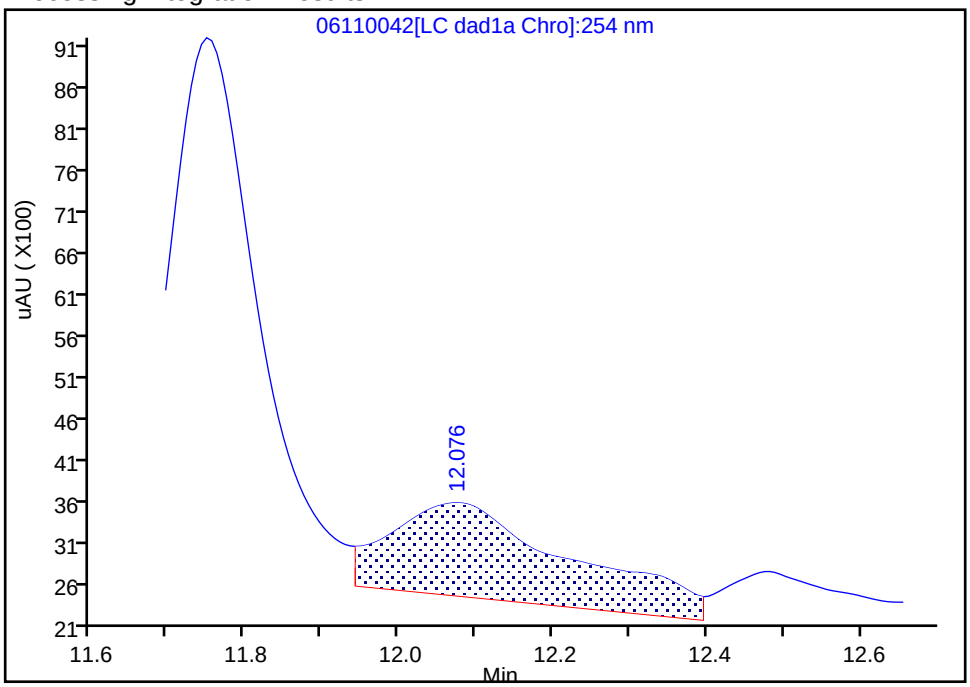
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

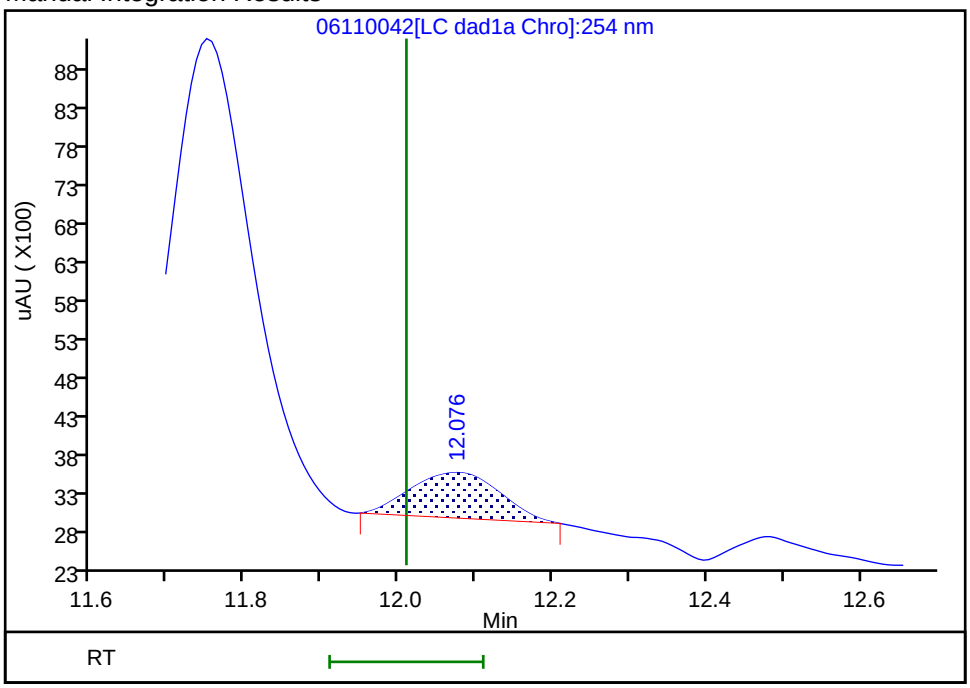
Processing Integration Results

RT: 12.08
Area: 18571
Amount: 0.061173
Amount Units: ug/mL



Manual Integration Results

RT: 12.08
Area: 4673
Amount: 0.015393
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:28:40

Audit Action: Manually Integrated Audit Reason: Baseline

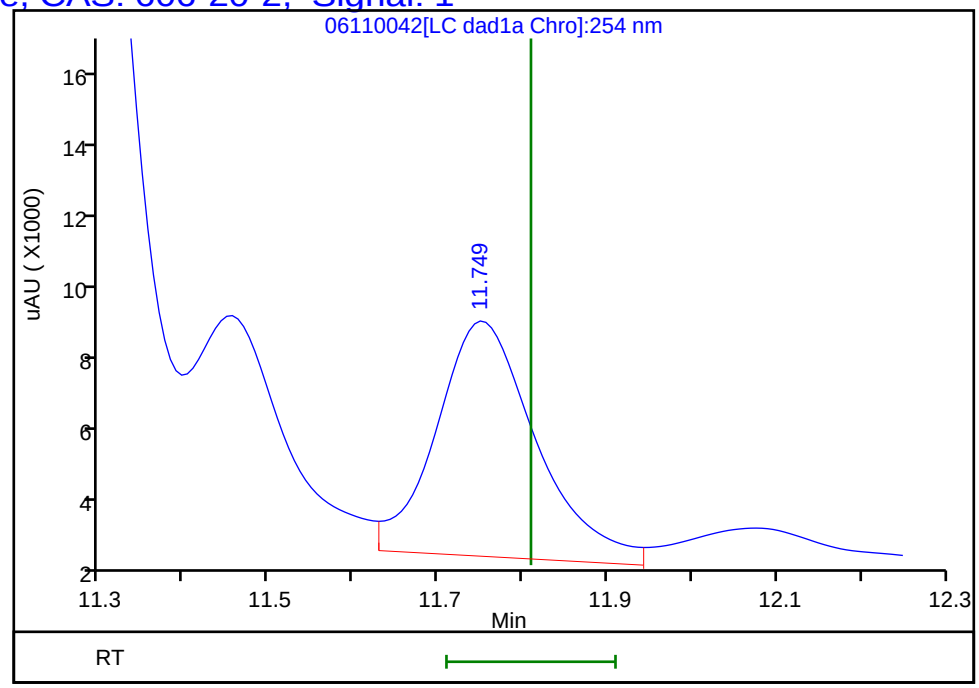
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.75
Response: 52160
Amount: 0.349008



Reviewer: zhangji, 12-Jun-2020 11:28:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

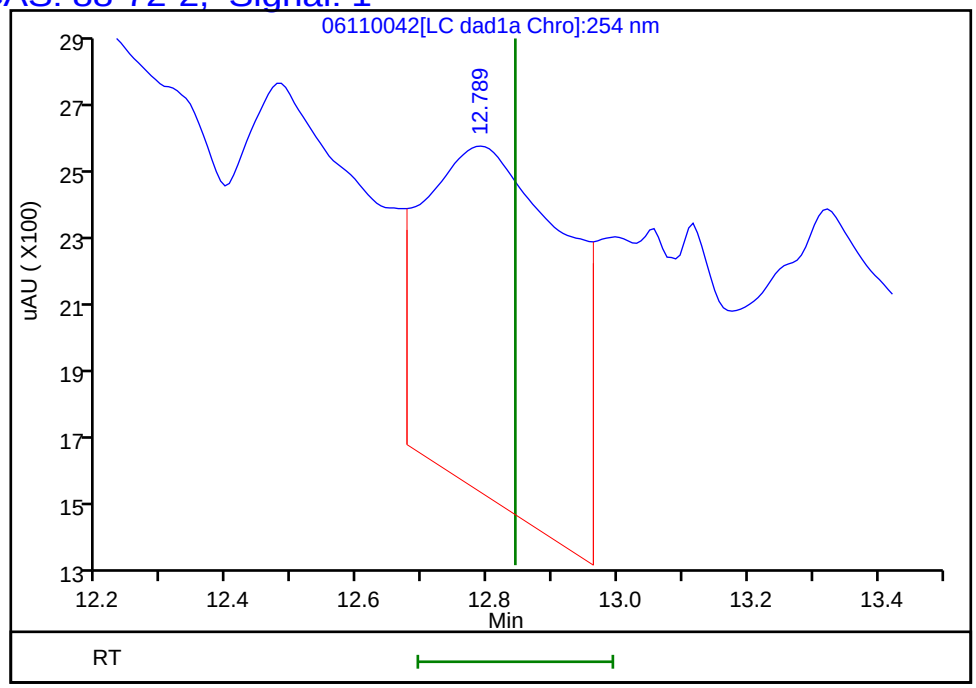
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.79
Response: 15818
Amount: 0.117126



Reviewer: zhangji, 12-Jun-2020 11:28:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

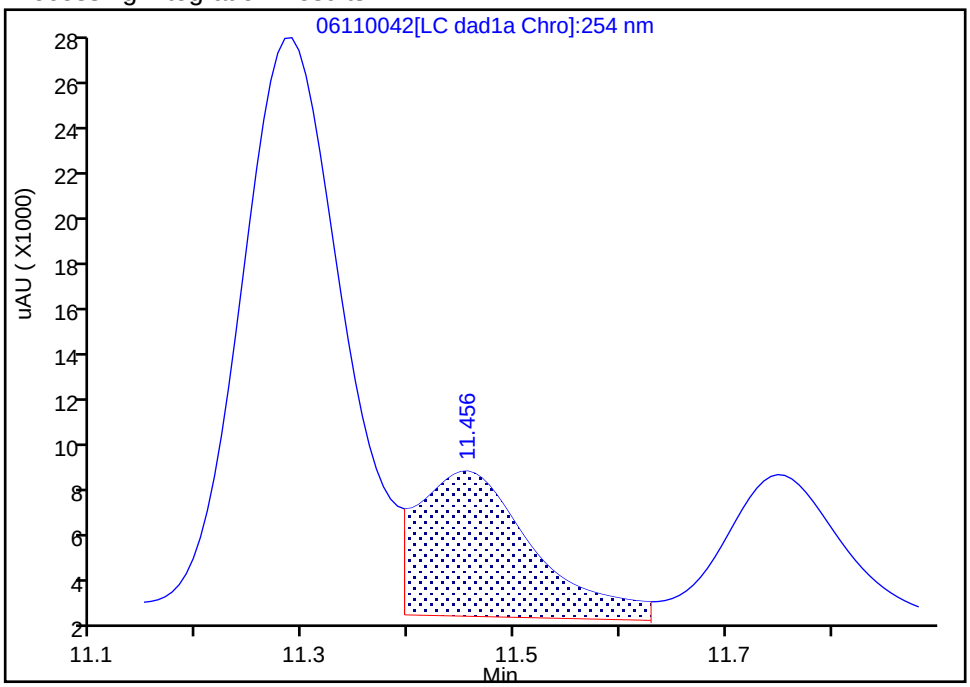
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

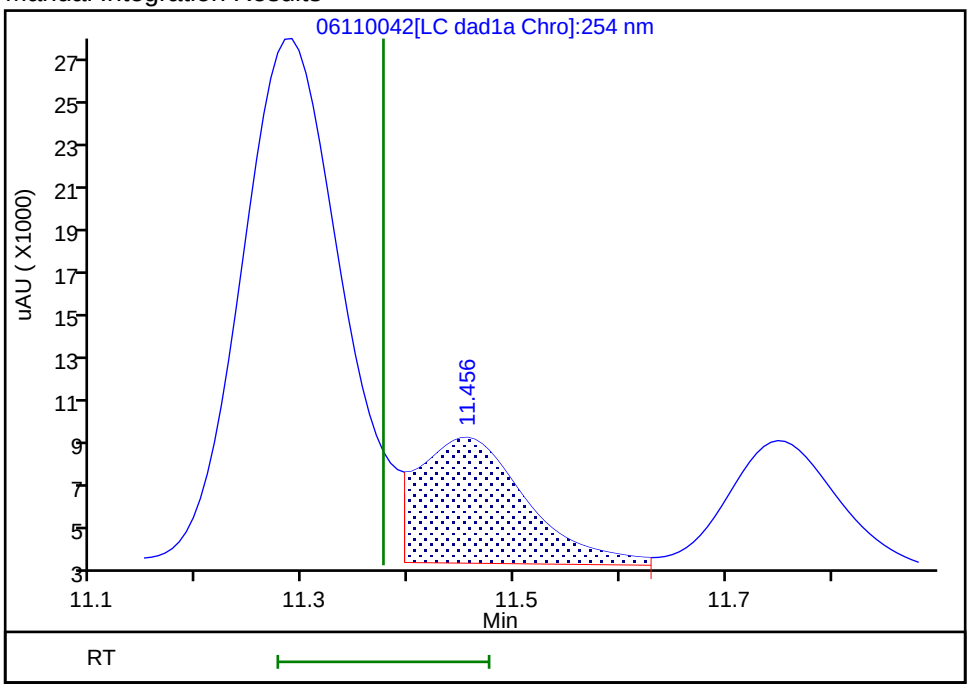
Processing Integration Results

RT: 11.46
Area: 46261
Amount: 0.265873
Amount Units: ug/mL



Manual Integration Results

RT: 11.46
Area: 40892
Amount: 0.235774
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:28:08

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

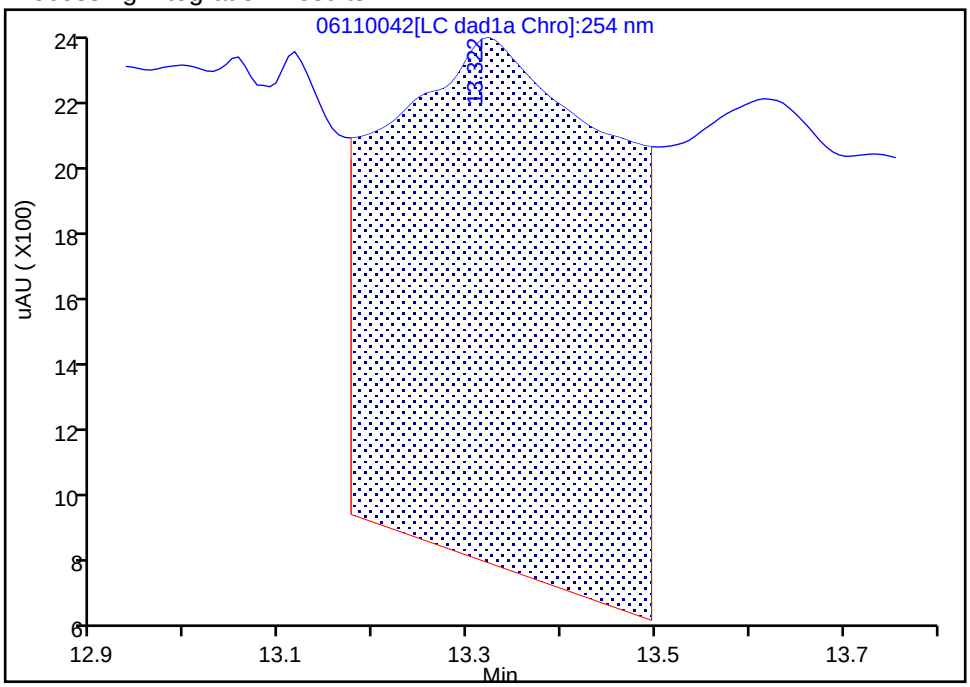
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

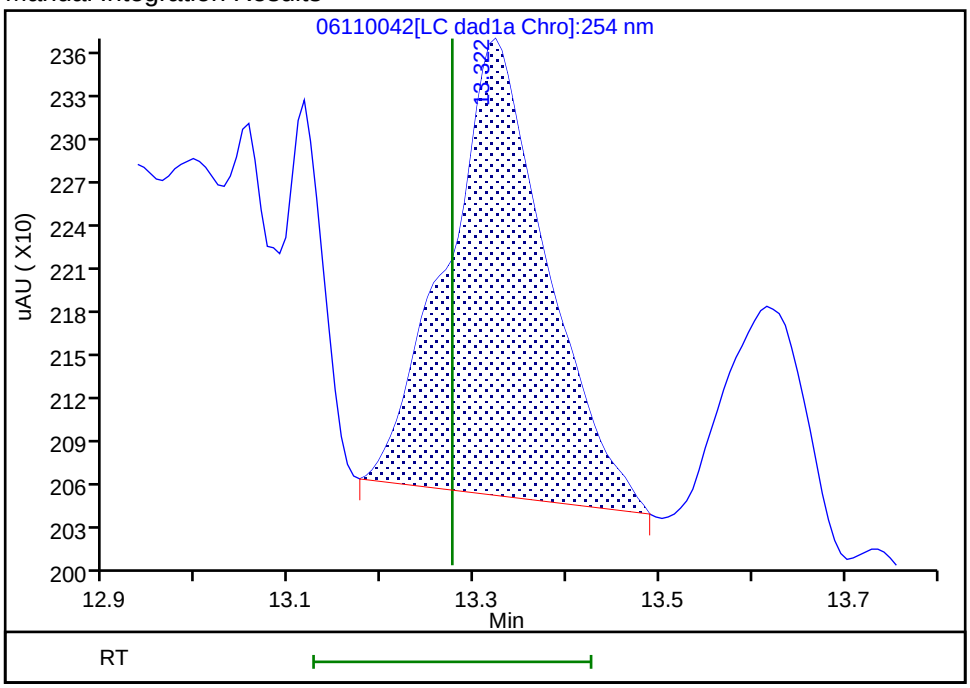
Processing Integration Results

RT: 13.32
Area: 26845
Amount: 0.237556
Amount Units: ug/mL



Manual Integration Results

RT: 13.32
Area: 2351
Amount: 0.020804
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:28:53

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

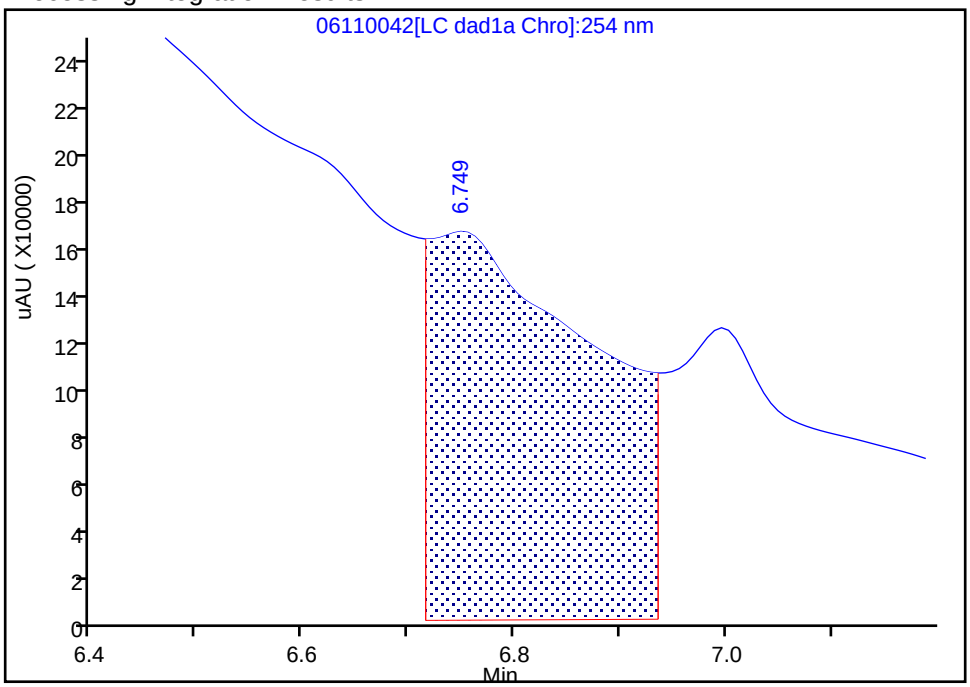
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

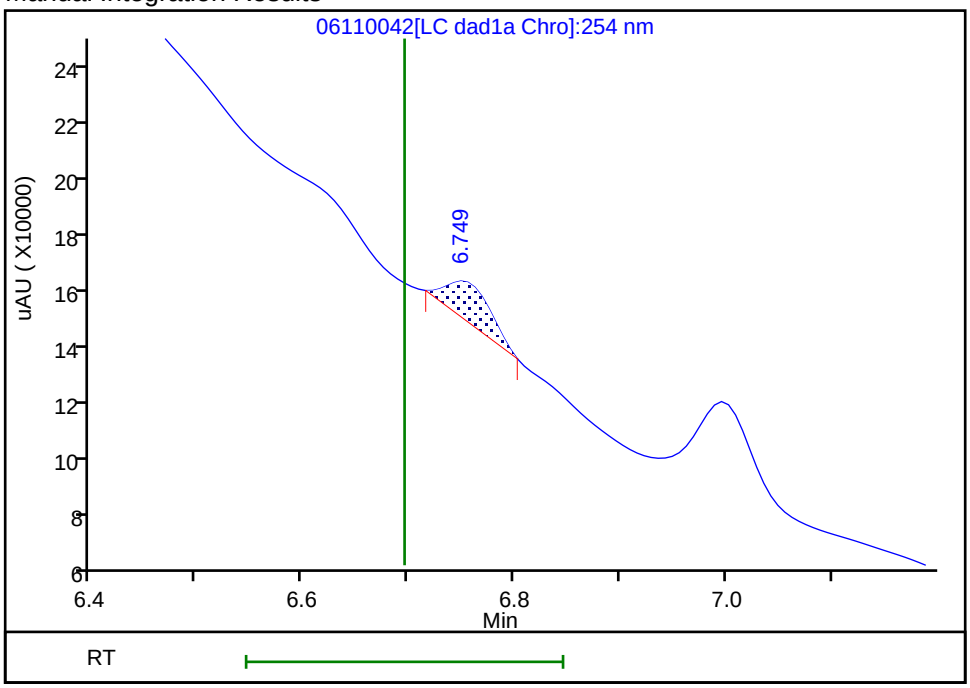
Processing Integration Results

RT: 6.75
Area: 1735609
Amount: 20.190382
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 37754
Amount: 0.439193
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:27:26

Audit Action: Manually Integrated Audit Reason: Baseline

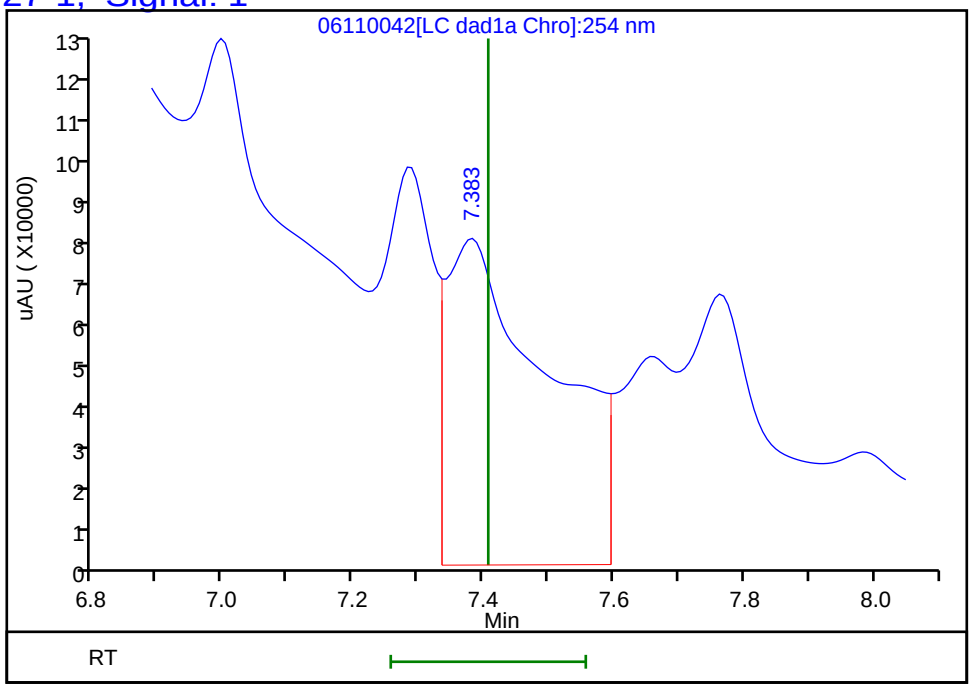
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.38
Response: 820850
Amount: 5.177420



Reviewer: zhangji, 12-Jun-2020 11:28:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

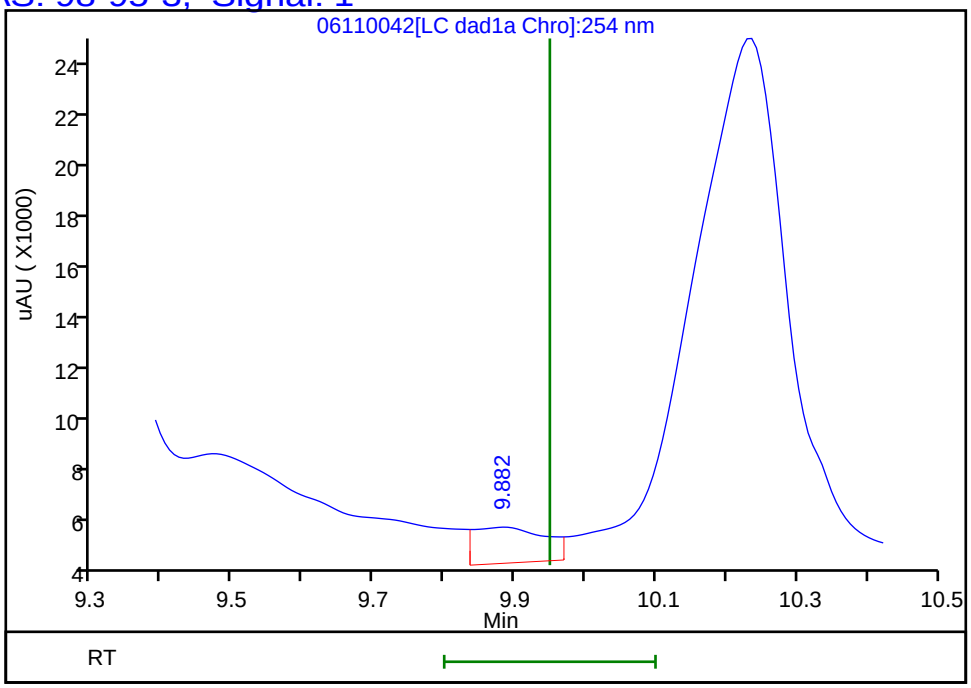
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.88
Response: 9374
Amount: 0.046776



Reviewer: zhangji, 12-Jun-2020 11:28:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

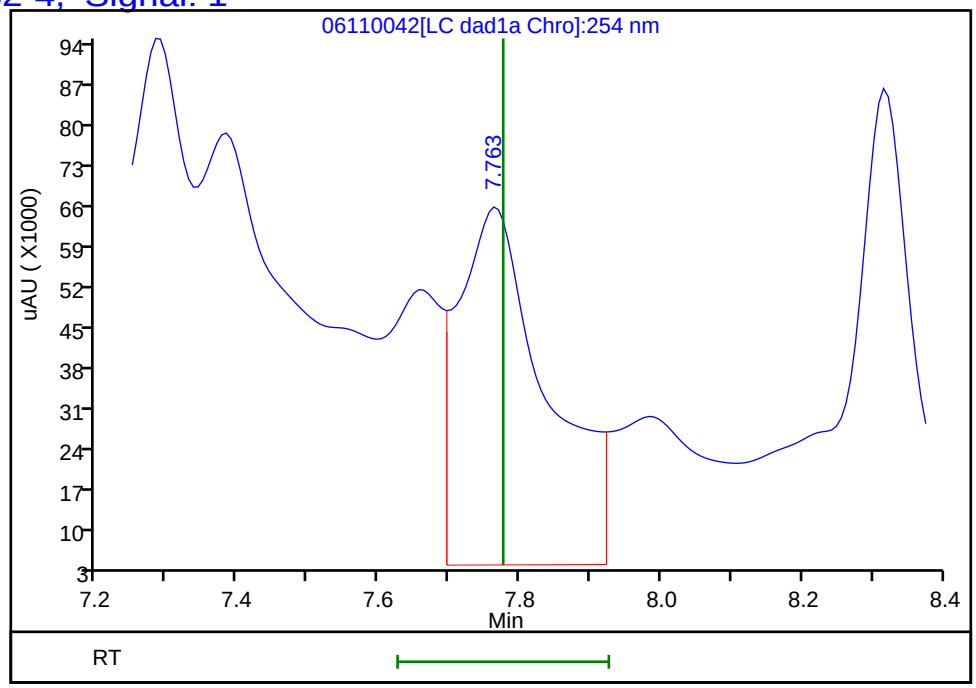
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.76
Response: 534745
Amount: 4.585635



Reviewer: zhangji, 12-Jun-2020 11:28:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

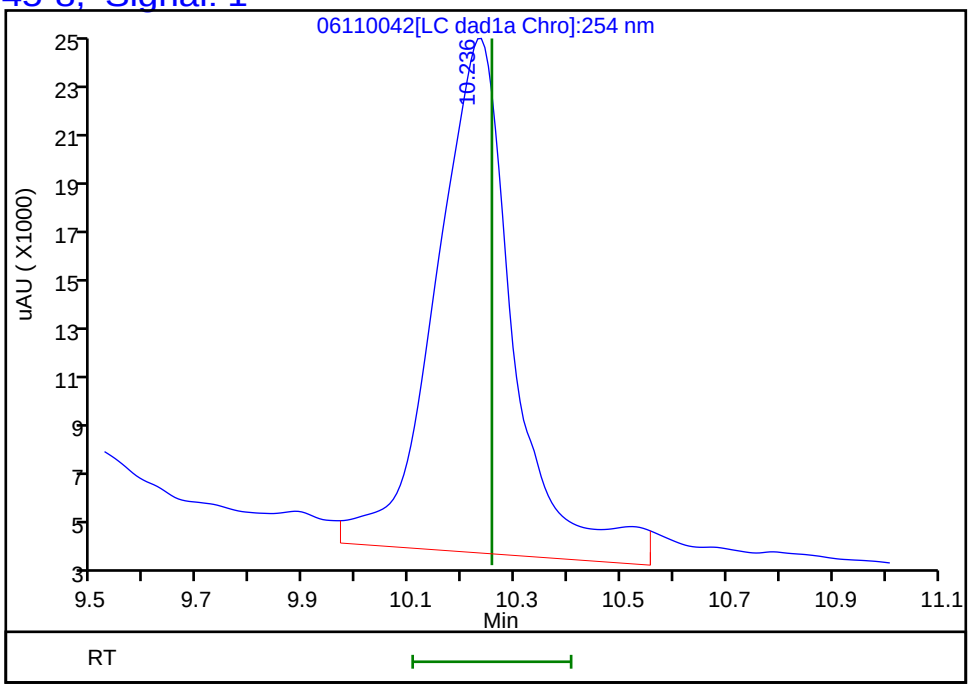
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110042.d				
Injection Date:	12-Jun-2020 04:23:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.24
Response: 205908
Amount: 1.163112



Reviewer: zhangji, 12-Jun-2020 11:28:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM24A-3-25
Lab Sample ID: 280-137084-2
Matrix: Water
Lab File ID: 06120031.D
Analysis Method: 8330A
Date Collected: 05/29/2020 12:50
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 467.7(mL)
Date Analyzed: 06/13/2020 07:17
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.: 498568
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	2,4-Dinitrotoluene	0.086	U M	0.11	0.086	0.029
99-08-1	3-Nitrotoluene	0.43	U M	0.43	0.43	0.21
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
2691-41-0	*HMX*	*1.5*	*M*	*0.22*	0.21	*0.094*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120031.D				
Lims ID:	280-137084-A-2-A				
Client ID:	EW7-PM24A-3-25				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 07:17:47	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-2-A				
Misc. Info.:	280-0092371-031				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX1024	

First Level Reviewer: zhangji Date: 16-Jun-2020 17:57:36

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	7.131	7.161	-0.030	29410	0.1361	M
	7 MNX	1		7.876			ND	
	8 RDX	1	9.357	9.387	-0.030	37647	0.1541	
	9 Nitrobenzene	1		12.281			ND	
$	10 1,2-Dinitrobenzene	1	13.250	13.294	-0.044	55200	0.1925	
	12 1,3-Dinitrobenzene	1		15.827			ND	
	14 o-Nitrotoluene	1		16.747			ND	U
	15 p-Nitrotoluene	1		17.041			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.424	17.487	-0.063	82570	0.2392	
	17 m-Nitrotoluene	1		17.967			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.357	18.427	-0.070	111897	0.2405	
	19 1,3,5-Trinitrobenzene	1	19.104	19.154	-0.050	149787	0.3170	
	20 2,6-Dinitrotoluene	1		20.081			ND	
	21 2,4-Dinitrotoluene	1		20.601			ND	U
	22 Tetryl	1		23.908			ND	
	23 2,4,6-Trinitrotoluene	1	24.851	24.914	-0.063	285286	0.7025	

QC Flag Legend

Review Flags

M - Manually Integrated

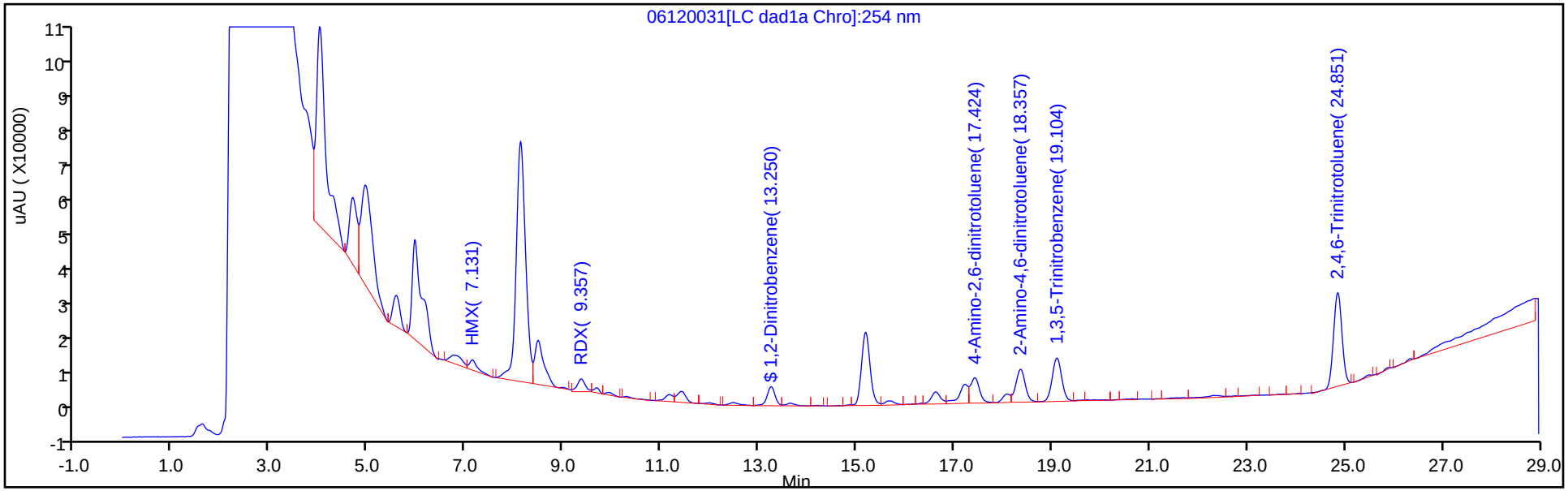
U - Marked Undetected

Report Date: 16-Jun-2020 18:53:20 Chrom Revision: 2.3 10-Jun-2020 22:46:48

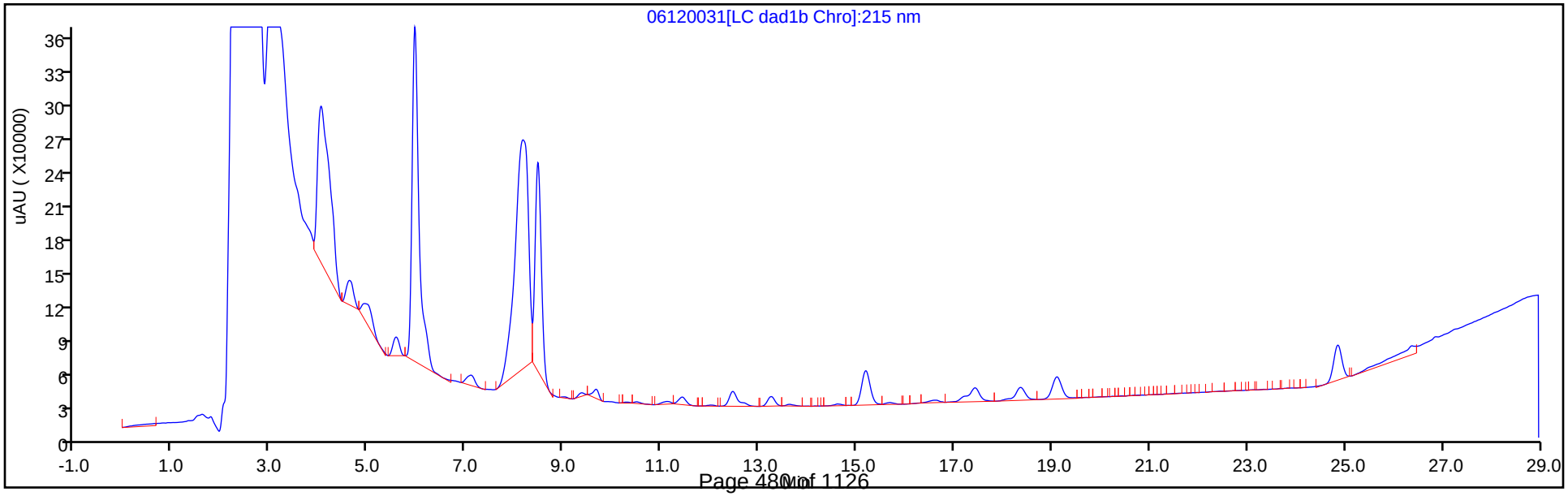
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120031.d				
Injection Date:	13-Jun-2020 07:17:47	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2	Worklist Smp#:	31
Client ID:	EW7-PM24A-3-25				
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:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120031.D				
Lims ID:	280-137084-A-2-A				
Client ID:	EW7-PM24A-3-25				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 07:17:47	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-2-A				
Misc. Info.:	280-0092371-031				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 17:57:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1925	96.24

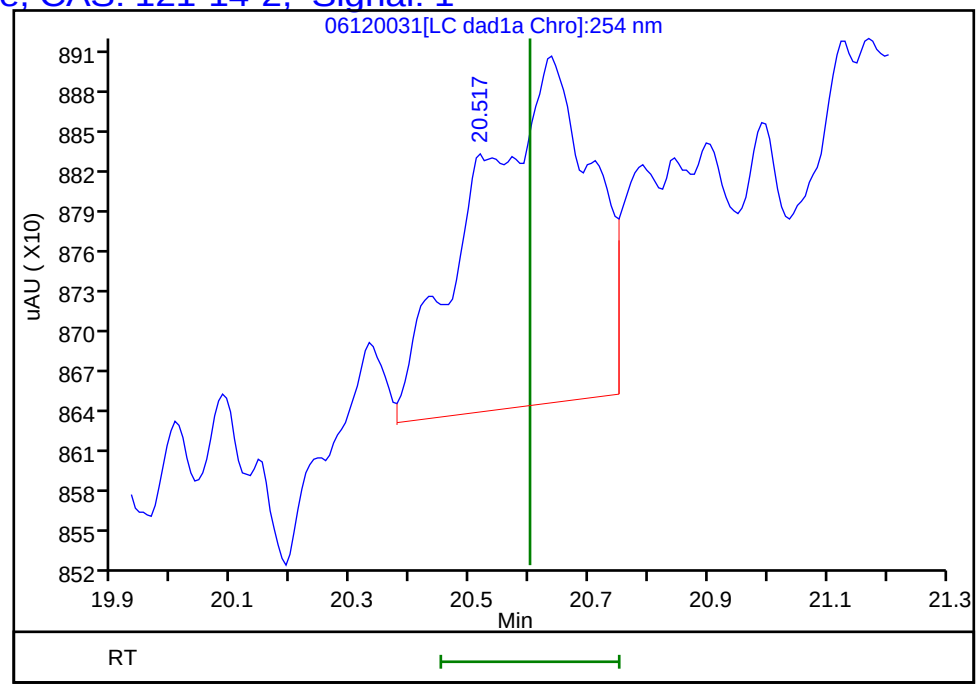
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120031.d				
Injection Date:	13-Jun-2020 07:17:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.52
Response: 3459
Amount: 0.005404



Reviewer: zhangji, 16-Jun-2020 17:57:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

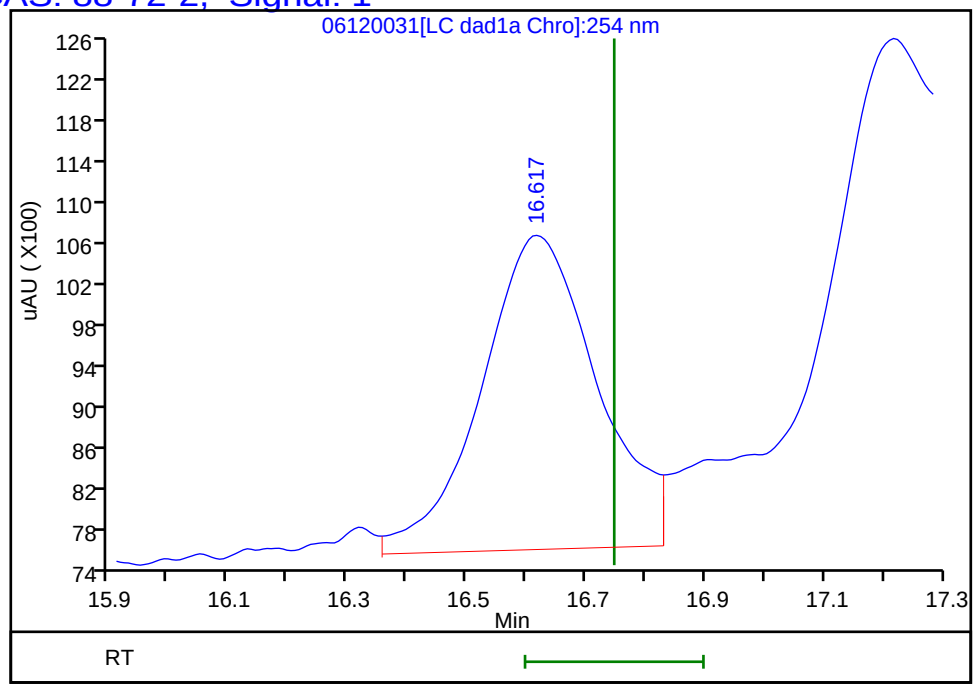
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120031.d				
Injection Date:	13-Jun-2020 07:17:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.62
Response: 41350
Amount: 0.151485



Reviewer: zhangji, 16-Jun-2020 17:57:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

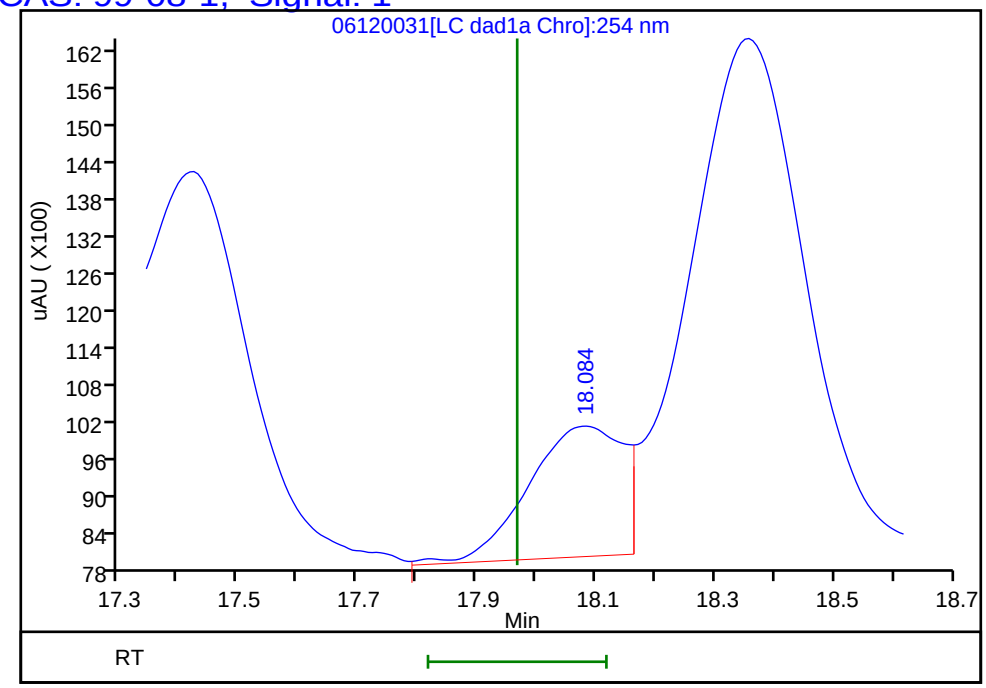
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120031.d				
Injection Date:	13-Jun-2020 07:17:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.08
Response: 23462
Amount: 0.078645



Reviewer: zhangji, 16-Jun-2020 17:57:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

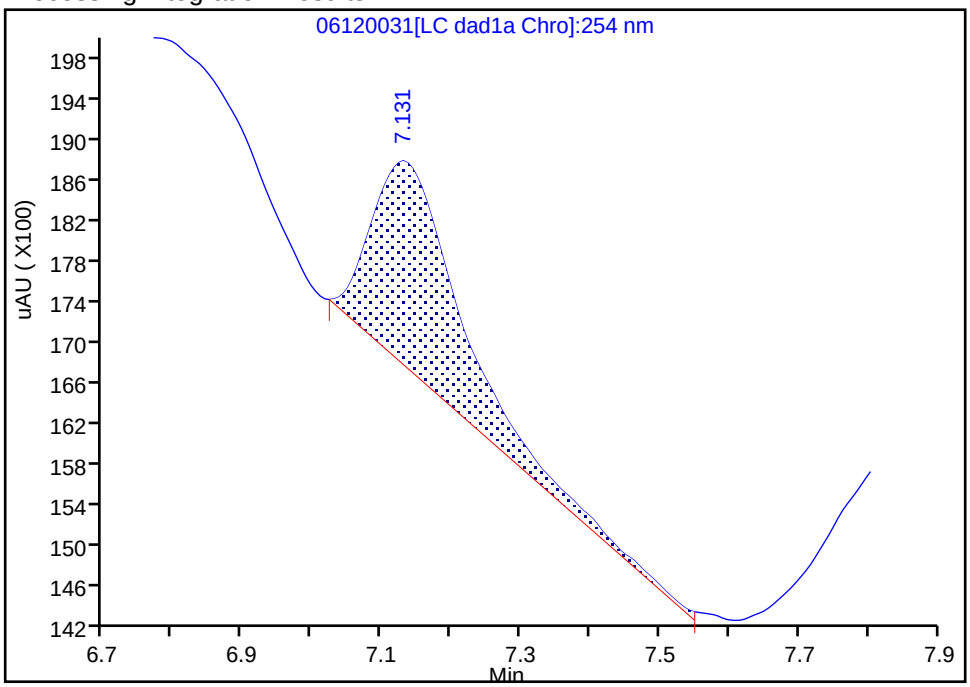
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120031.d				
Injection Date:	13-Jun-2020 07:17:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-2-A	Lab Sample ID:	280-137084-2		
Client ID:	EW7-PM24A-3-25				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

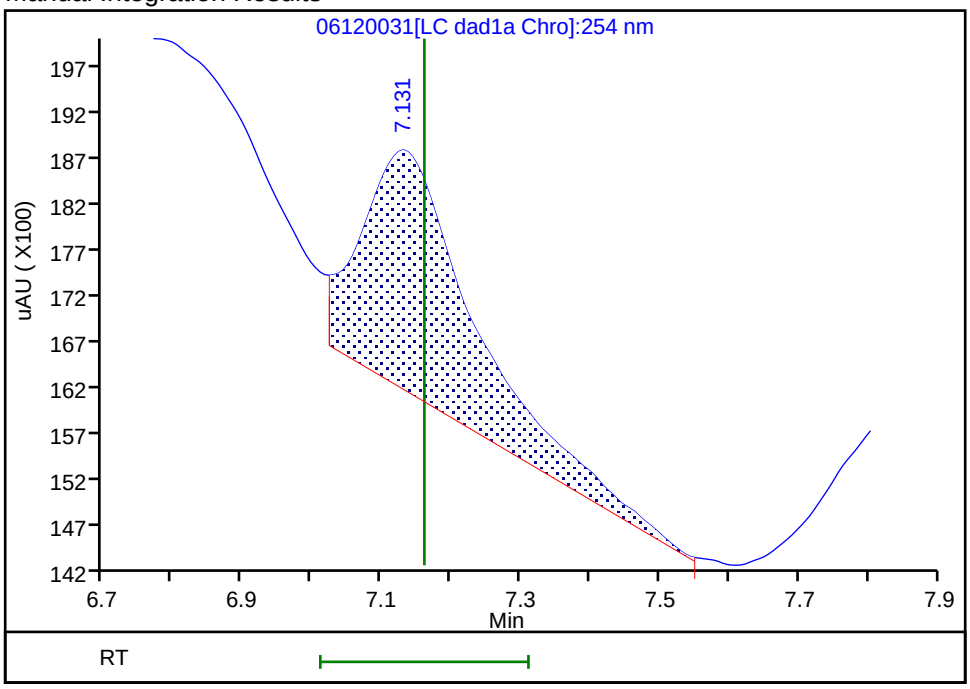
Processing Integration Results

RT: 7.13
Area: 18145
Amount: 0.072430
Amount Units: ug/ml



Manual Integration Results

RT: 7.13
Area: 29410
Amount: 0.136069
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:57:05
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM24B-3-35
Lab Sample ID: 280-137084-3
Matrix: Water
Lab File ID: 06110043.D
Analysis Method: 8330A
Date Collected: 05/29/2020 14:30
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 470.6(mL)
Date Analyzed: 06/12/2020 04:46
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.: 498360
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M Q	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U M Q	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U M Q	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U M Q	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U M Q	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21
99-99-0	4-Nitrotoluene	0.42	U M Q	0.44	0.42	0.11
2691-41-0	HMX	0.21	U Q	0.22	0.21	0.093
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
121-82-4	RDX	0.21	U M Q	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U M Q	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	636	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110043.D				
Lims ID:	280-137084-A-3-A				
Client ID:	EW7-PM24B-3-35				
Sample Type:	Client				
Inject. Date:	12-Jun-2020 04:46:43	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-3-A				
Misc. Info.:	280-0092324-043				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 17:58:10	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1024				
First Level Reviewer: zhangji		Date:	16-Jun-2020 17:58:10		

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.696			ND	
	6 MNX	1		7.407			ND	U
	7 RDX	1		7.776			ND	U
$	9 1,2-Dinitrobenzene	1	8.830	8.743	0.087	175816	1.27	M
	10 1,3,5-Trinitrobenzene	1		8.916			ND	U
	11 1,3-Dinitrobenzene	1		9.569			ND	U
	12 Nitrobenzene	1	10.056	9.949	0.107	43747	0.2183	M
	14 Tetryl	1		10.256			ND	MU
	16 2,4,6-Trinitrotoluene	1		11.222			ND	MU
	17 4-Amino-2,6-dinitrotoluene	1	11.436	11.376	0.060	3850	0.0281	M
	18 2-Amino-4,6-dinitrotoluene	1		11.662			ND	MU
	19 2,6-Dinitrotoluene	1		11.809			ND	MU
	20 2,4-Dinitrotoluene	1		12.009			ND	U
	21 o-Nitrotoluene	1		12.842			ND	U
	22 p-Nitrotoluene	1		13.276			ND	U
	23 m-Nitrotoluene	1		13.862			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

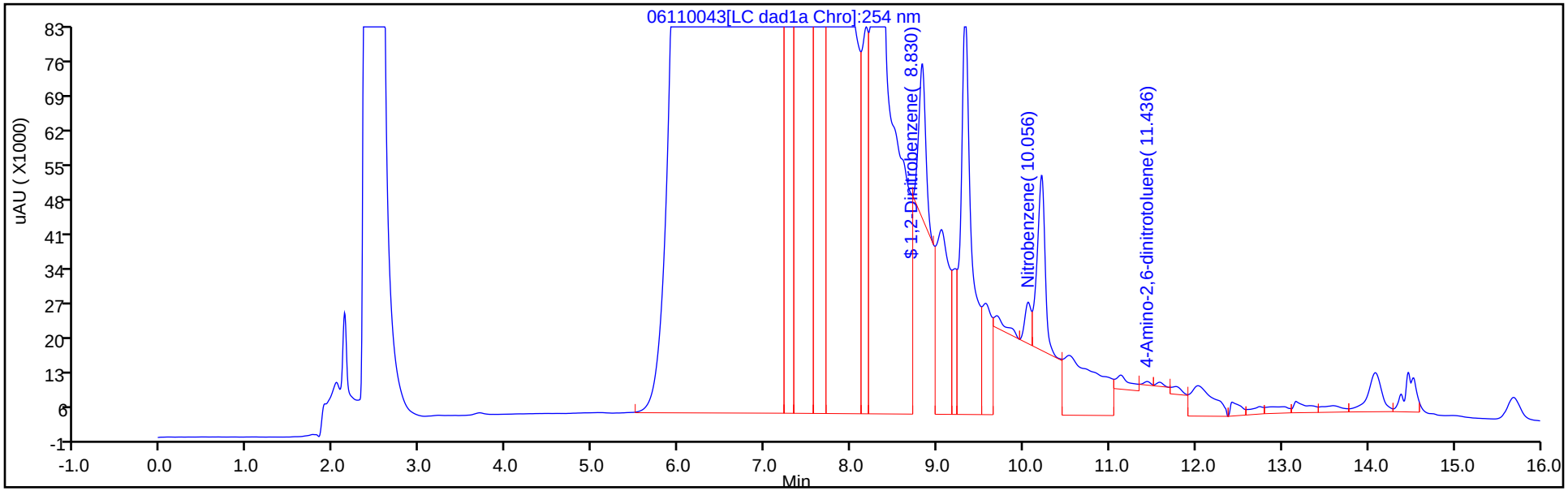
U - Marked Undetected

Report Date: 16-Jun-2020 17:58:10 Chrom Revision: 2.3 10-Jun-2020 22:46:48

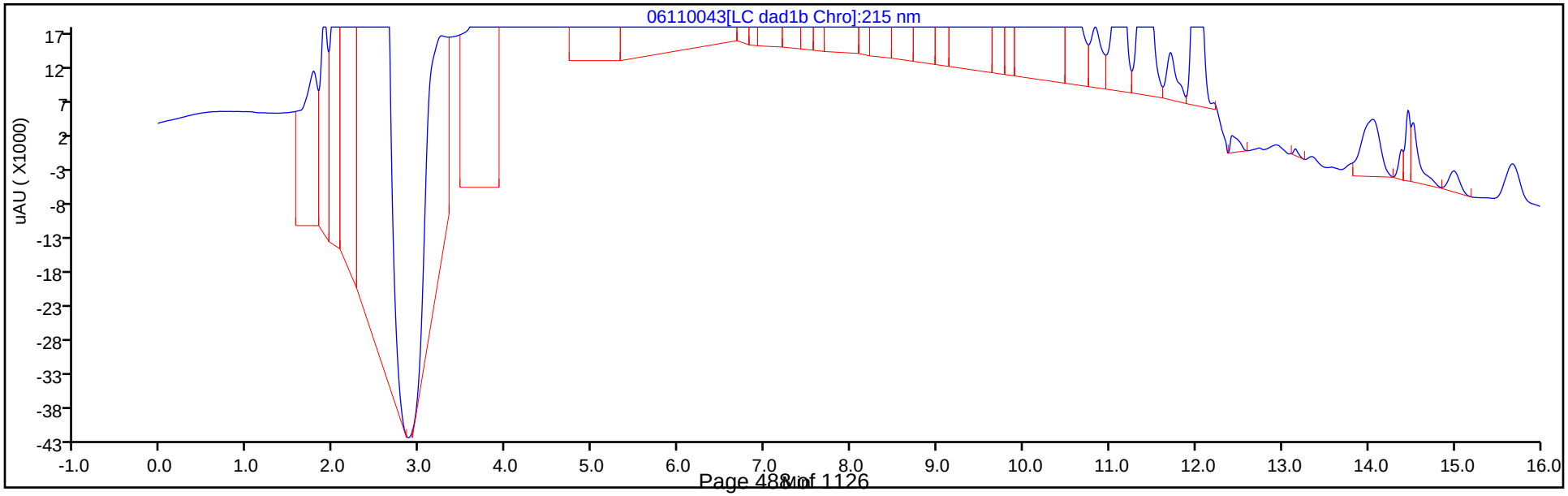
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3	Worklist Smp#:	43
Client ID:	EW7-PM24B-3-35				
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:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110043.D				
Lims ID:	280-137084-A-3-A				
Client ID:	EW7-PM24B-3-35				
Sample Type:	Client				
Inject. Date:	12-Jun-2020 04:46:43	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-3-A				
Misc. Info.:	280-0092324-043				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		

Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m		
Limit Group:	GCSV - 8330		
Last Update:	16-Jun-2020 17:58:10	Calib Date:	18-Mar-2020 14:39:27
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D		

Column 1 :	UltraCarb5uODS (20) (4.60 mm)	Det: LC DAD1B, 254 nm
Process Host:	CTX1024	

First Level Reviewer: zhangji Date: 16-Jun-2020 17:58:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	1.27	636.04

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

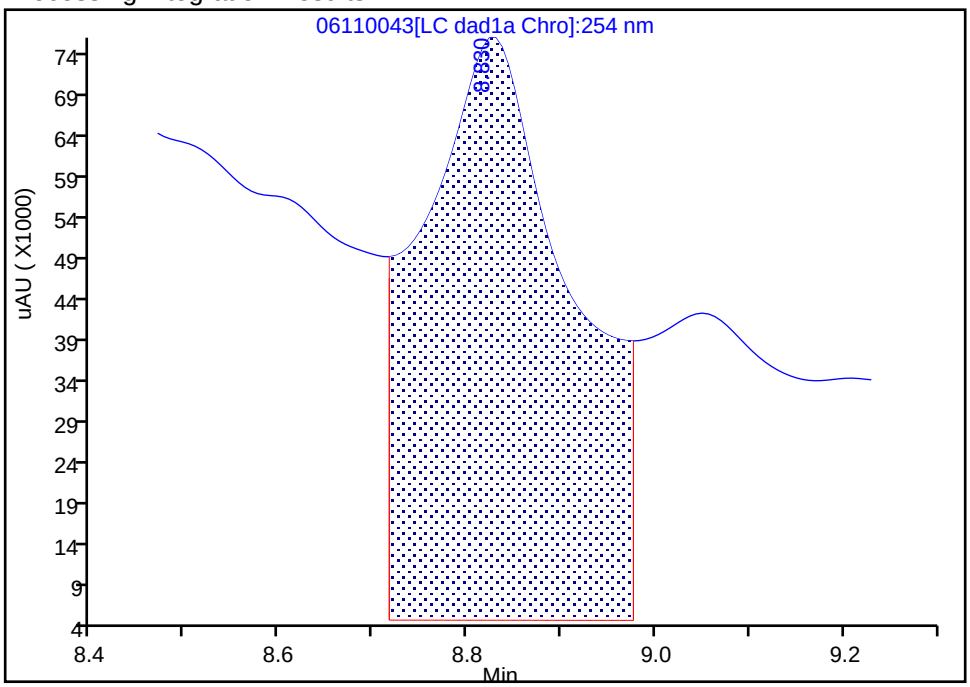
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

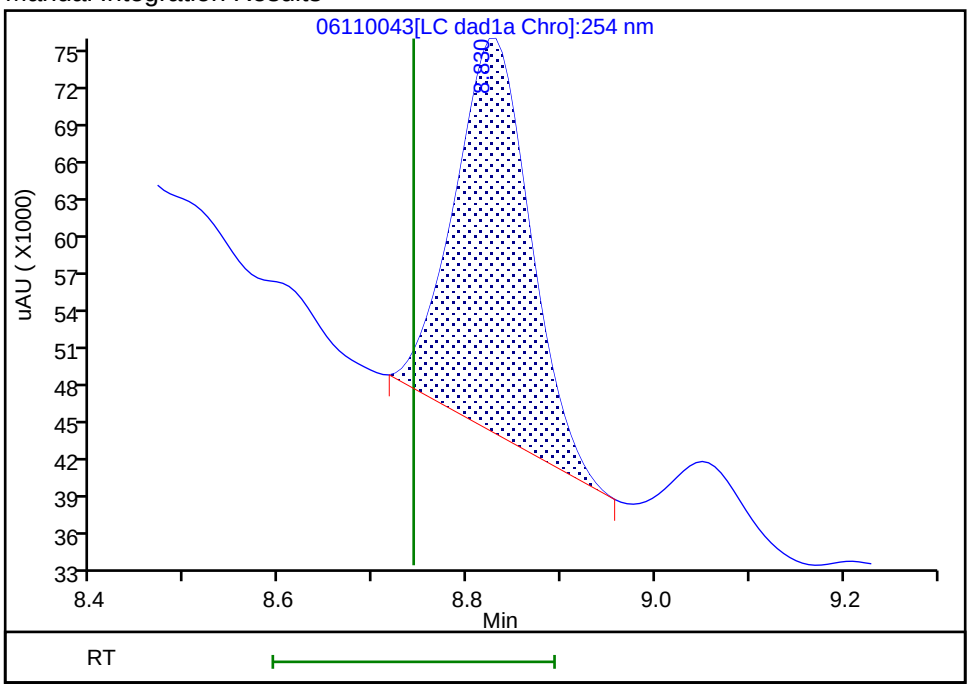
Processing Integration Results

RT: 8.83
Area: 781913
Amount: 5.657336
Amount Units: ug/mL



Manual Integration Results

RT: 8.83
Area: 175816
Amount: 1.272073
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:29:24

Audit Action: Manually Integrated Audit Reason: Baseline

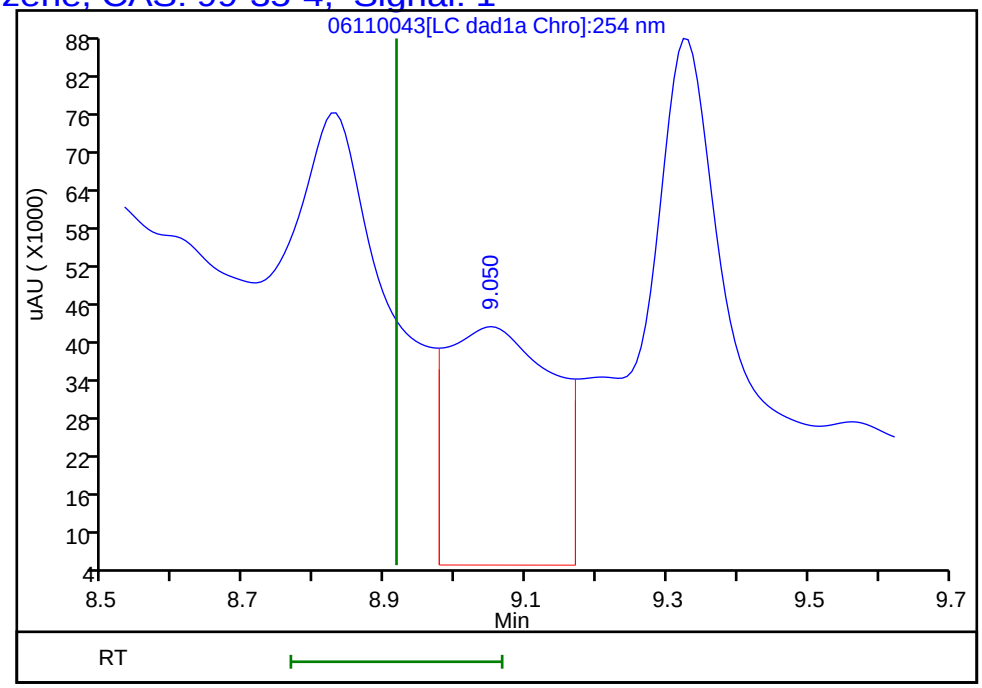
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 9.05
Response: 391503
Amount: 1.699904



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

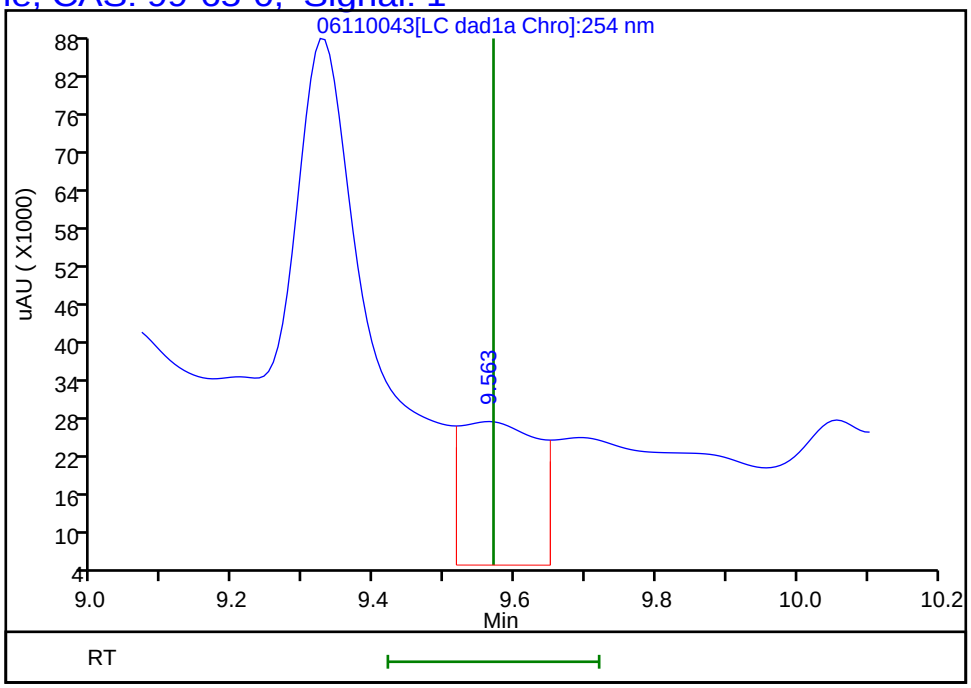
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.56
Response: 171189
Amount: 0.558190



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

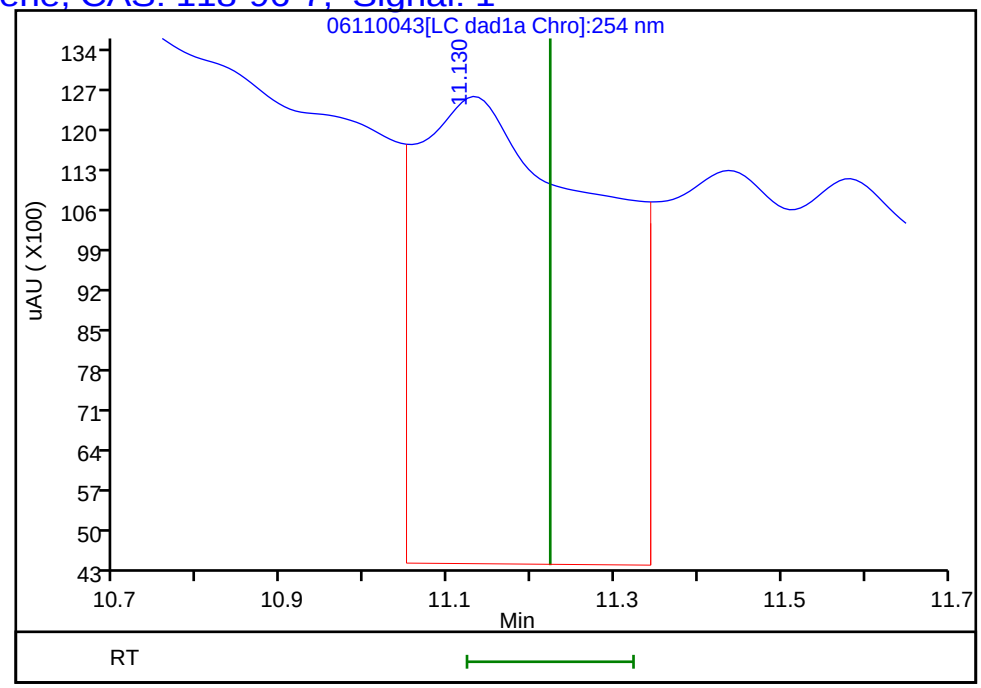
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.13
Response: 124929
Amount: 0.612304



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

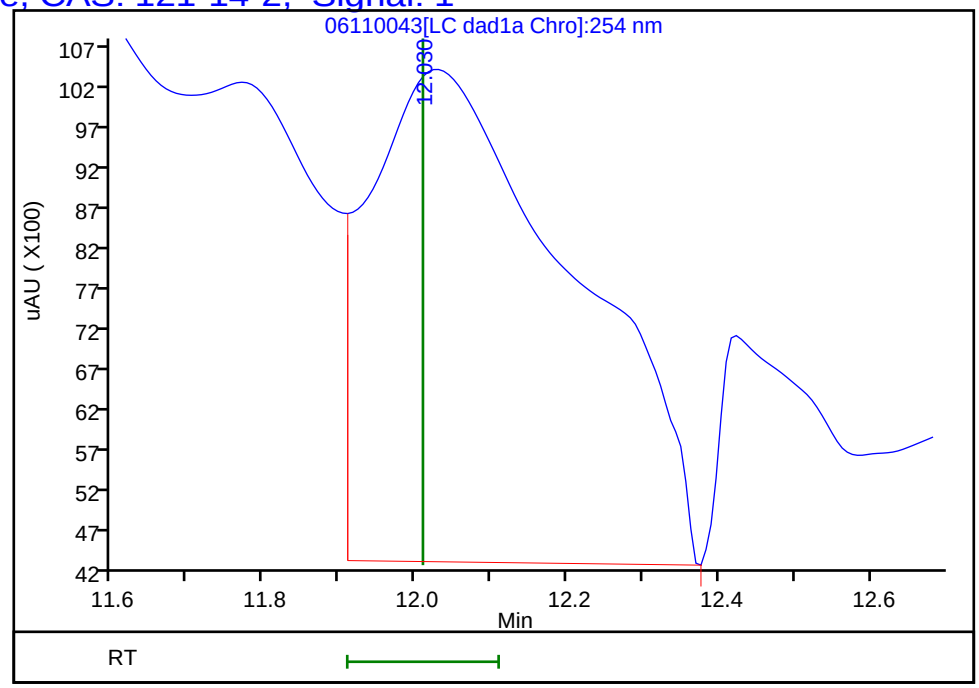
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 12.03
Response: 114923
Amount: 0.378554



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

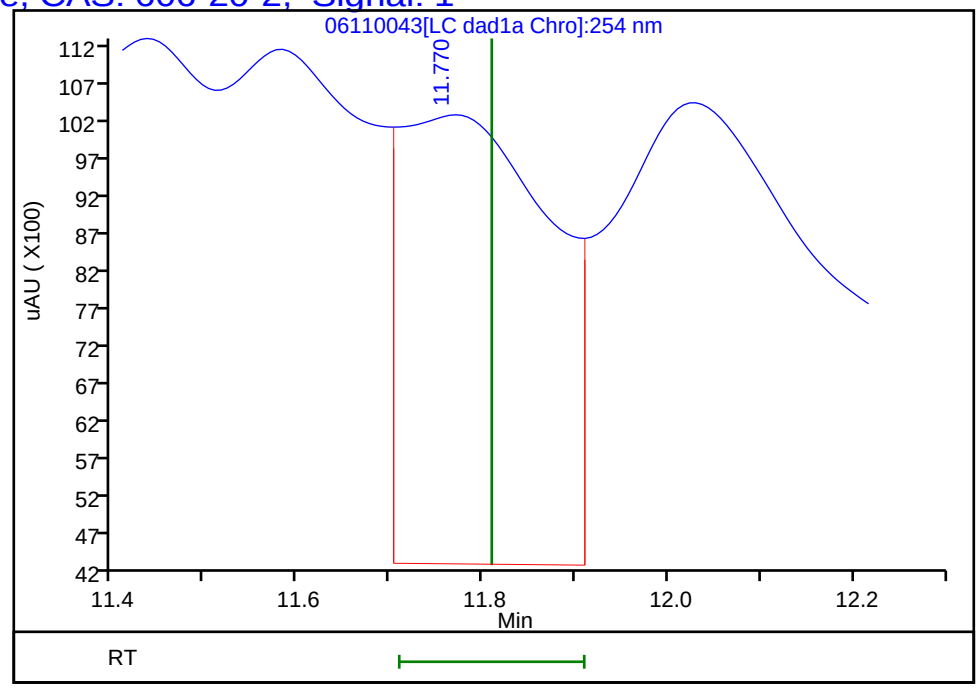
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.77
Response: 66506
Amount: 0.444998



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

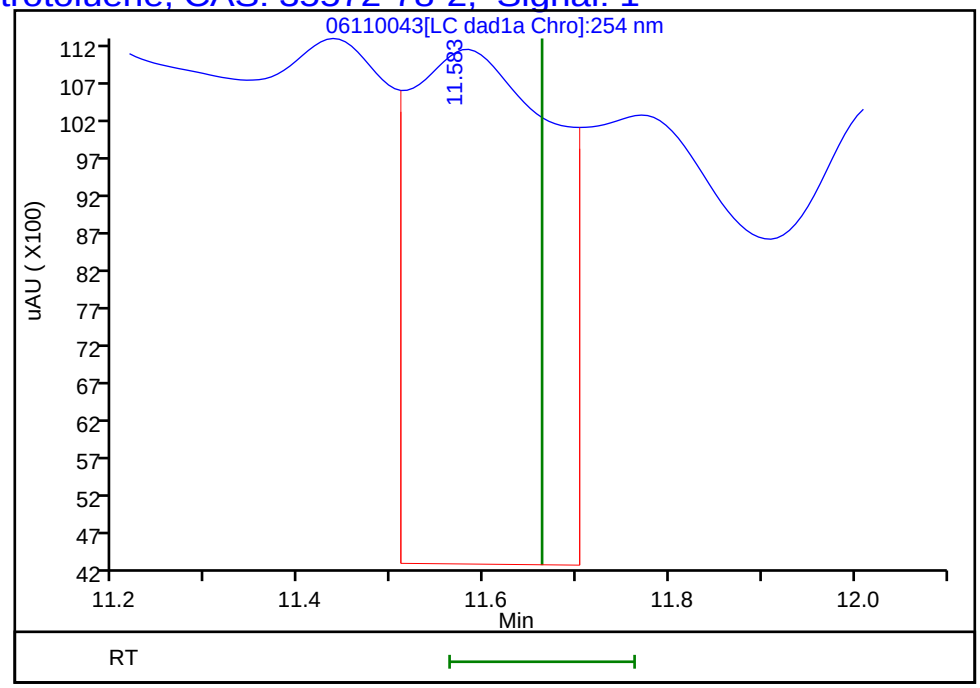
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.58
Response: 73245
Amount: 0.361139



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

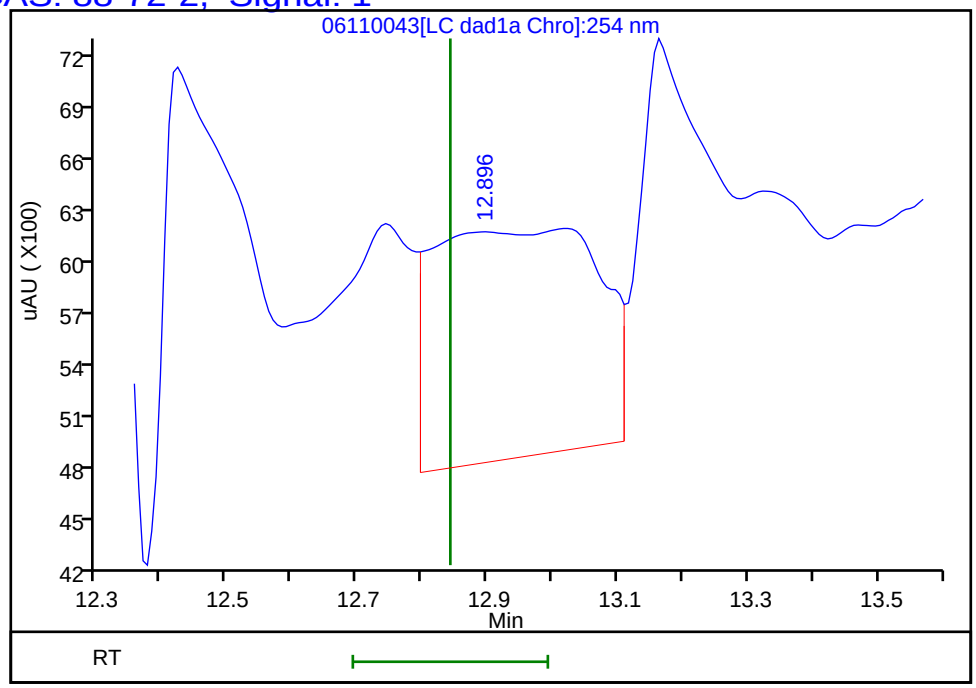
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.90
Response: 23064
Amount: 0.170780



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

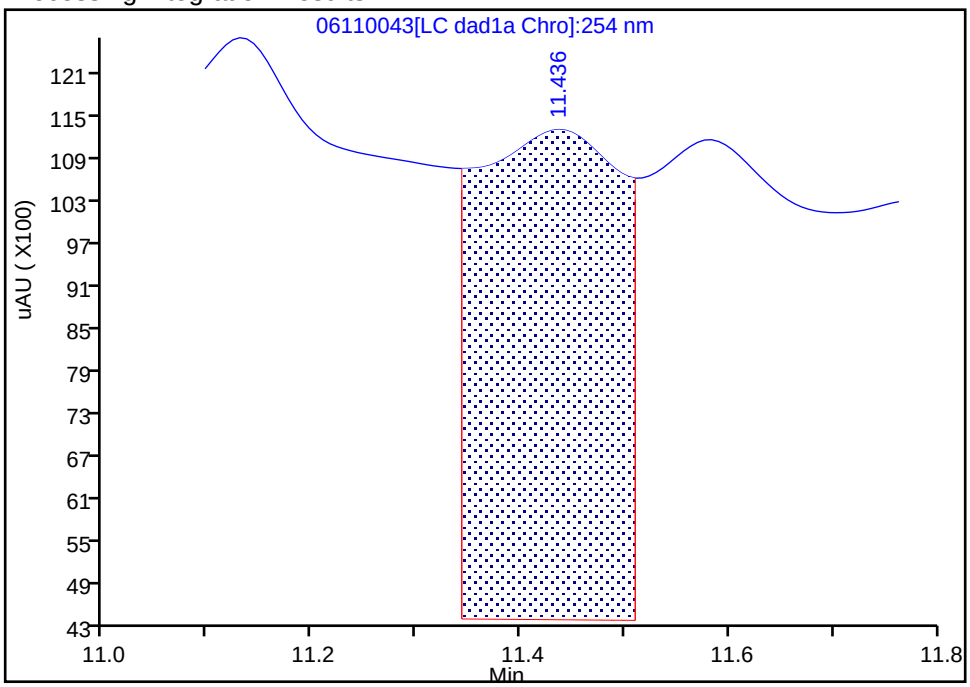
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

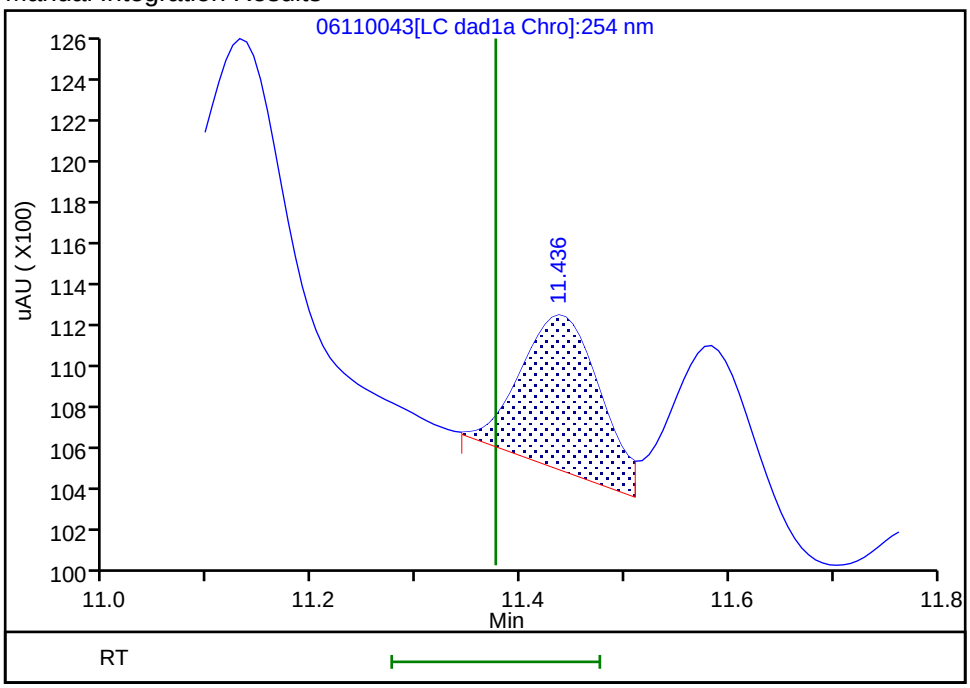
Processing Integration Results

RT: 11.44
Area: 65995
Amount: 0.376507
Amount Units: ug/mL



Manual Integration Results

RT: 11.44
Area: 3850
Amount: 0.028108
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:30:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

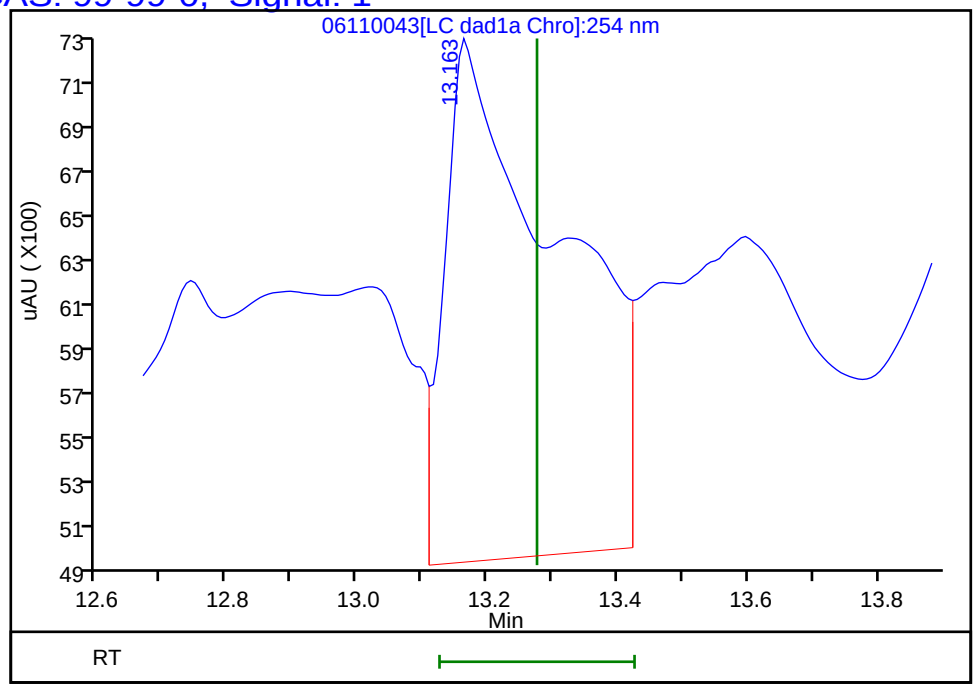
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.16
Response: 28244
Amount: 0.249936



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

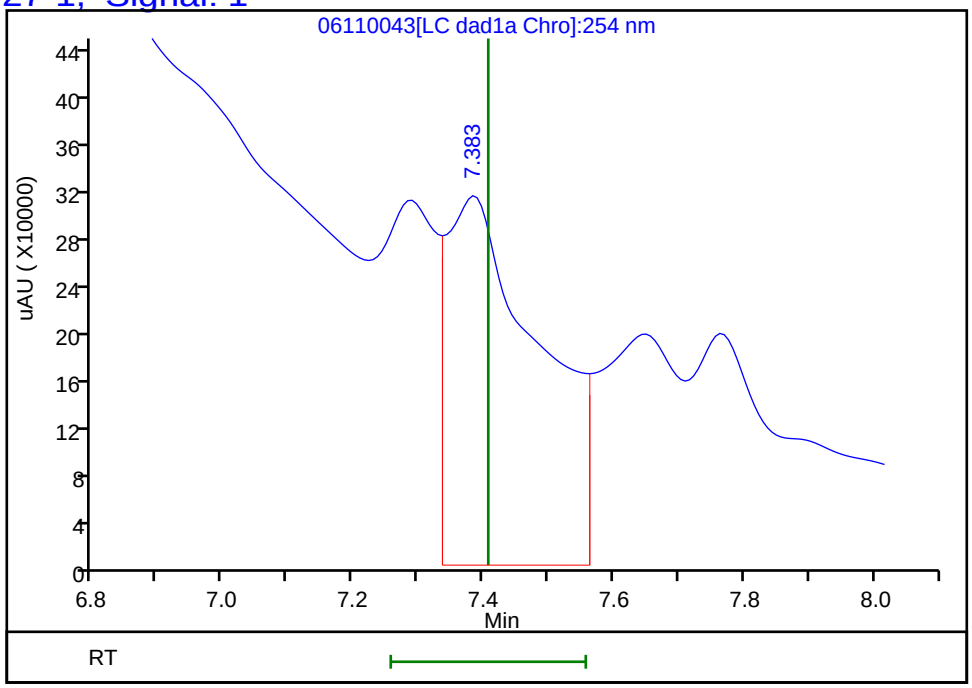
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.38
Response: 3025402
Amount: 19.082388



Reviewer: zhangji, 12-Jun-2020 11:31:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

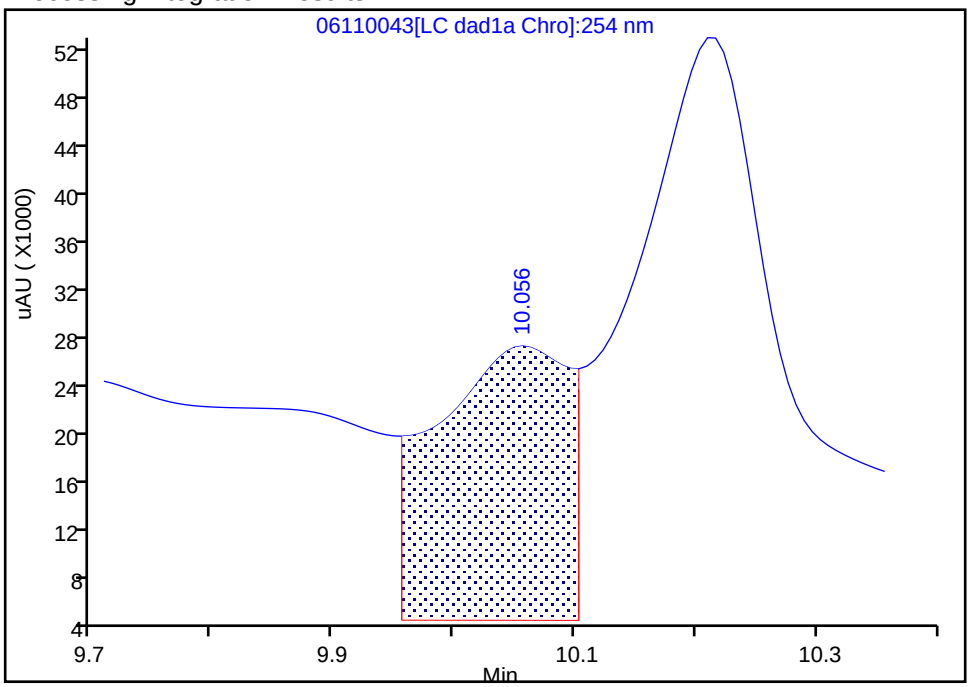
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

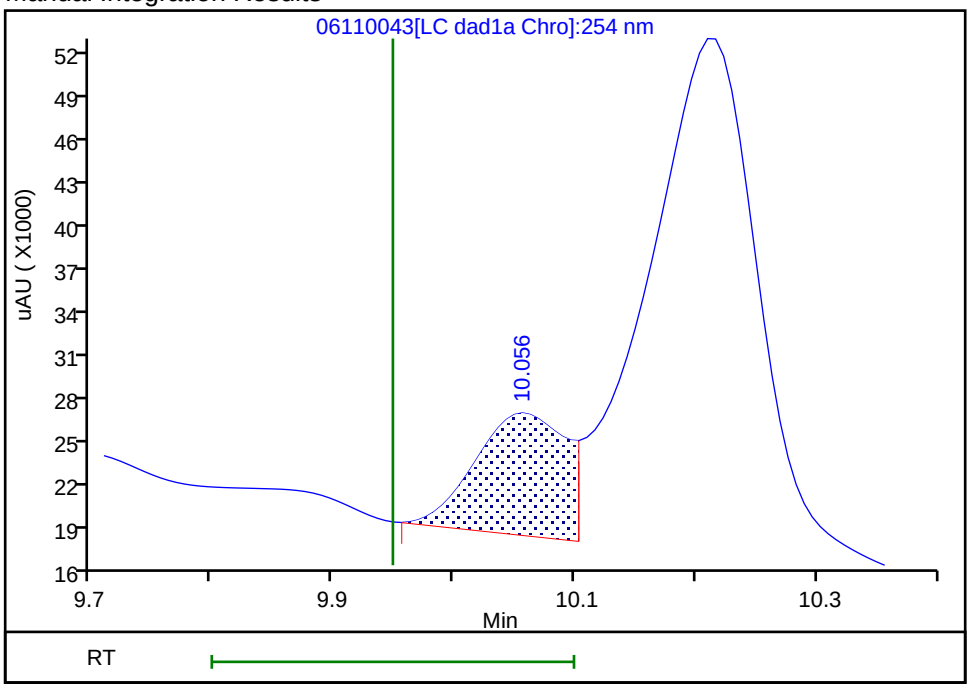
Processing Integration Results

RT: 10.06
Area: 172601
Amount: 0.861271
Amount Units: ug/mL



Manual Integration Results

RT: 10.06
Area: 43747
Amount: 0.218296
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:29:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

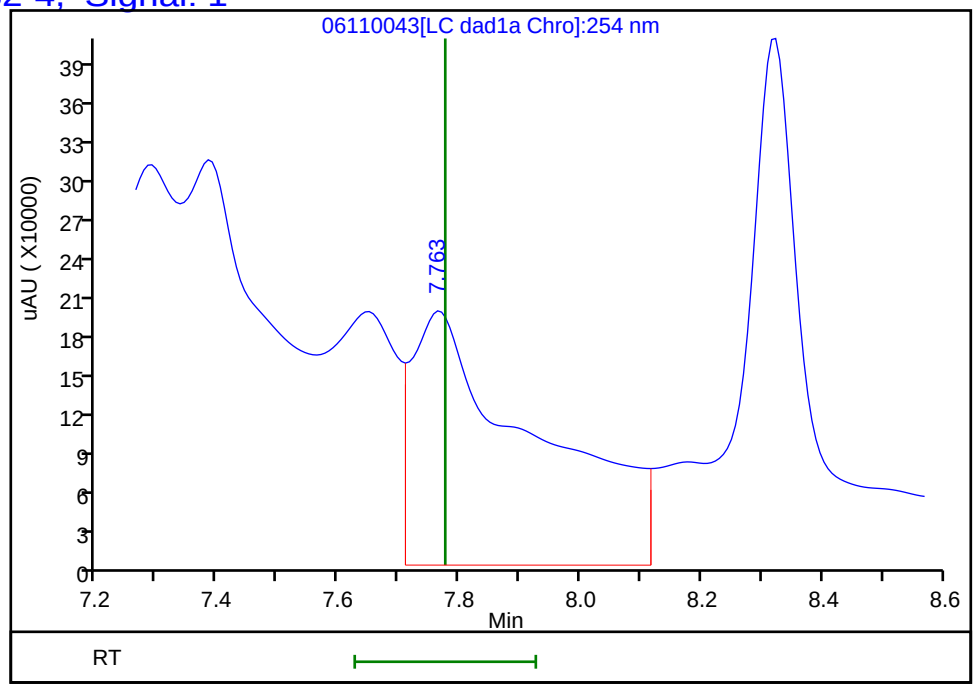
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.76
Response: 2746727
Amount: 23.554195



Reviewer: zhangji, 16-Jun-2020 17:58:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

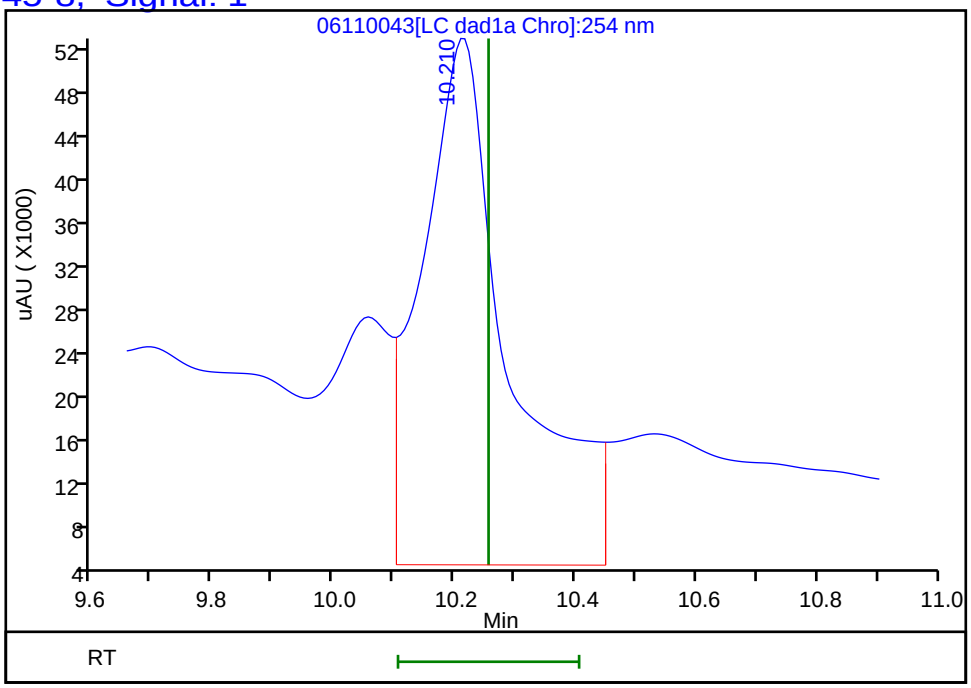
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110043.d				
Injection Date:	12-Jun-2020 04:46:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.21
Response: 488630
Amount: 2.760123



Reviewer: zhangji, 12-Jun-2020 11:31:11
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.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM24B-3-35
Lab Sample ID: 280-137084-3
Matrix: Water
Lab File ID: 06120032.D
Analysis Method: 8330A
Date Collected: 05/29/2020 14:30
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 470.6(mL)
Date Analyzed: 06/13/2020 07:52
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.: 498568
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120032.D				
Lims ID:	280-137084-A-3-A				
Client ID:	EW7-PM24B-3-35				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 07:52:44	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-3-A				
Misc. Info.:	280-0092371-032				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 17:58:31

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.161			ND	U
	7 MNX	1		7.876			ND	
	8 RDX	1		9.387			ND	U
	9 Nitrobenzene	1		12.281			ND	
$	10 1,2-Dinitrobenzene	1	13.238	13.294	-0.056	56622	0.1976	M
	12 1,3-Dinitrobenzene	1		15.827			ND	
	14 o-Nitrotoluene	1		16.747			ND	U
	15 p-Nitrotoluene	1		17.041			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.487			ND	
	17 m-Nitrotoluene	1		17.967			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.311	18.427	-0.116	33209	0.0714	
	19 1,3,5-Trinitrobenzene	1		19.154			ND	MU
	20 2,6-Dinitrotoluene	1		20.081			ND	
	21 2,4-Dinitrotoluene	1		20.601			ND	
	22 Tetryl	1		23.908			ND	
	23 2,4,6-Trinitrotoluene	1		24.914			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

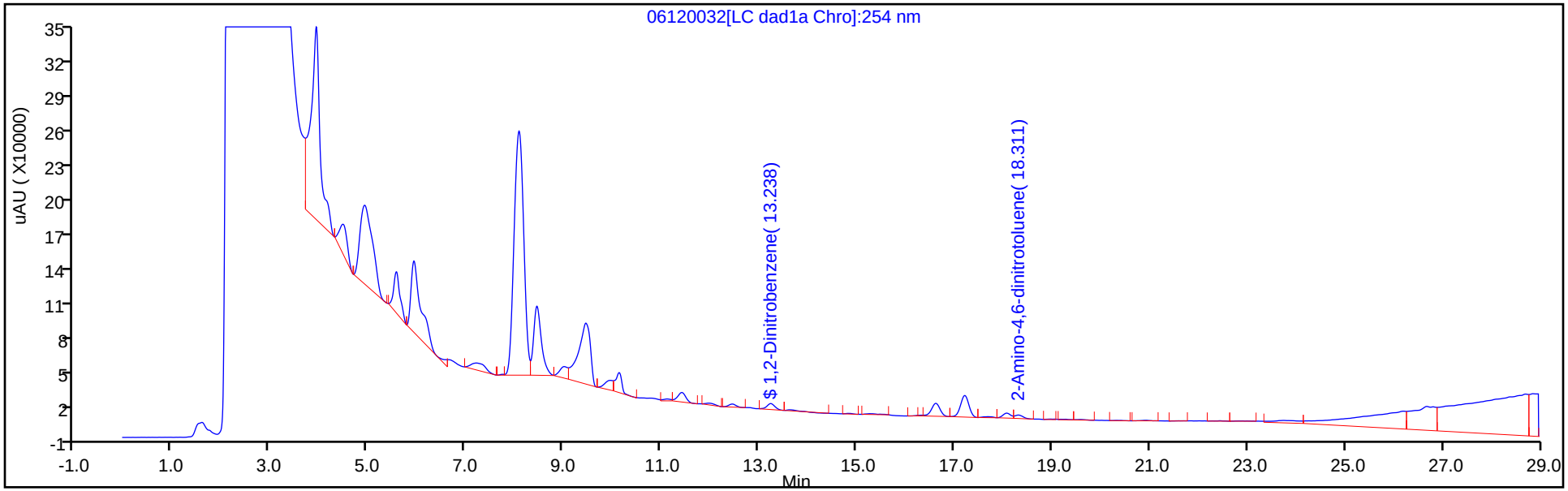
U - Marked Undetected

Report Date: 16-Jun-2020 18:53:20 Chrom Revision: 2.3 10-Jun-2020 22:46:48

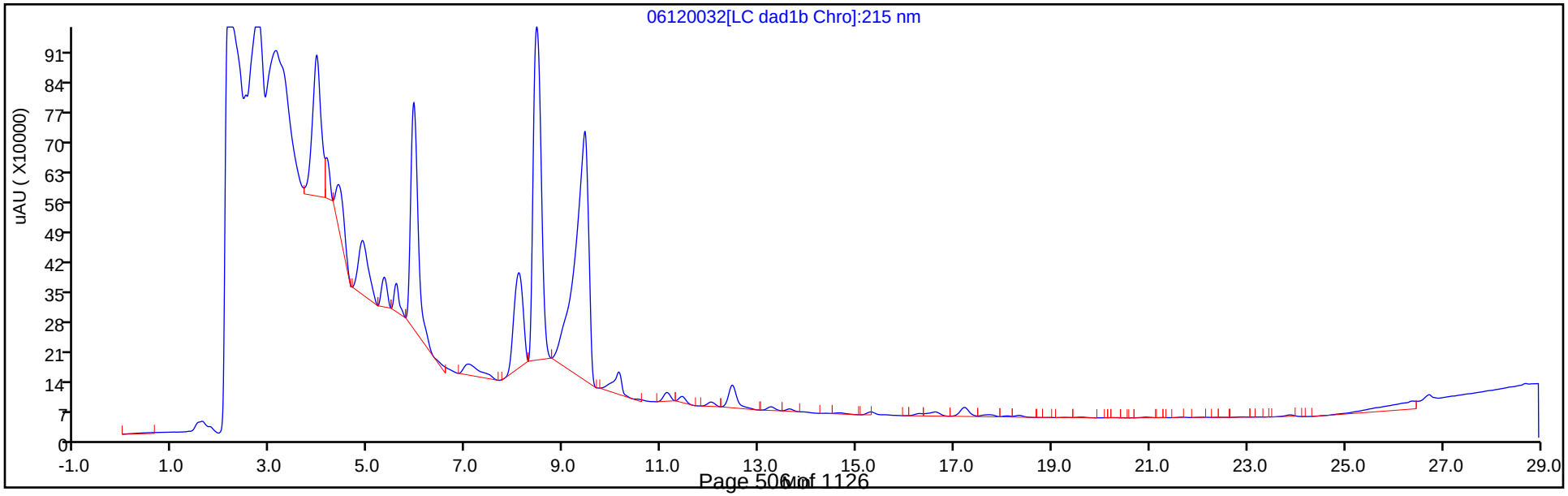
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120032.d				
Injection Date:	13-Jun-2020 07:52:44	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3	Worklist Smp#:	32
Client ID:	EW7-PM24B-3-35				
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:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120032.D				
Lims ID:	280-137084-A-3-A				
Client ID:	EW7-PM24B-3-35				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 07:52:44	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-3-A				
Misc. Info.:	280-0092371-032				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm	
Process Host:	CTX1024		

First Level Reviewer: zhangji Date: 16-Jun-2020 17:58:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1976	98.80

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

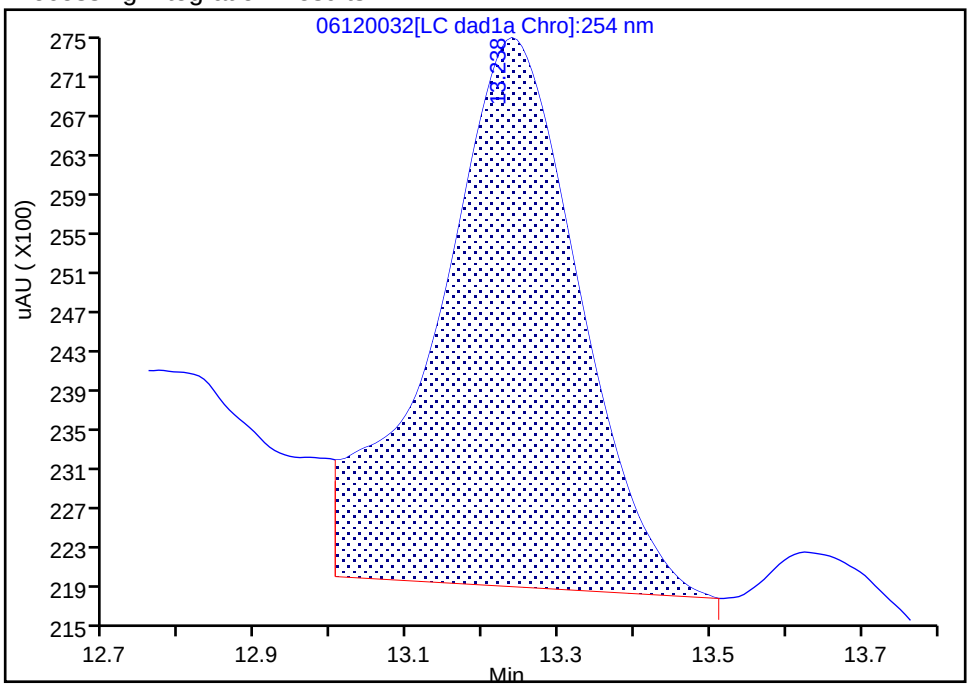
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120032.d				
Injection Date:	13-Jun-2020 07:52:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

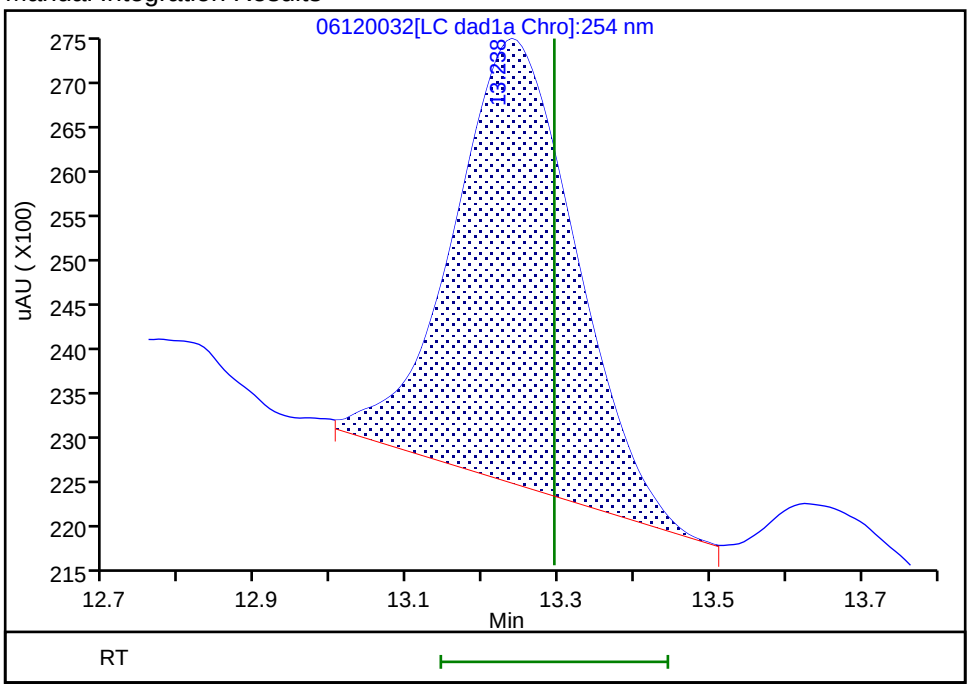
Processing Integration Results

RT: 13.24
Area: 72916
Amount: 0.256385
Amount Units: ug/ml



Manual Integration Results

RT: 13.24
Area: 56622
Amount: 0.197610
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 18:00:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

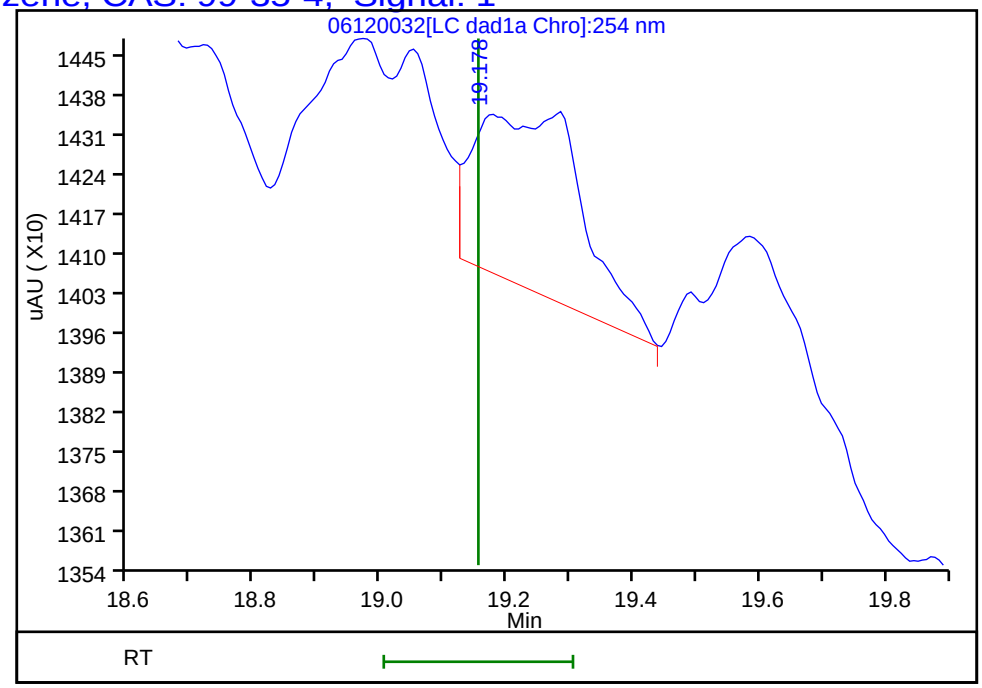
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120032.d				
Injection Date:	13-Jun-2020 07:52:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 19.18
Response: 3718
Amount: 0.007870



Reviewer: zhangji, 16-Jun-2020 18:00:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

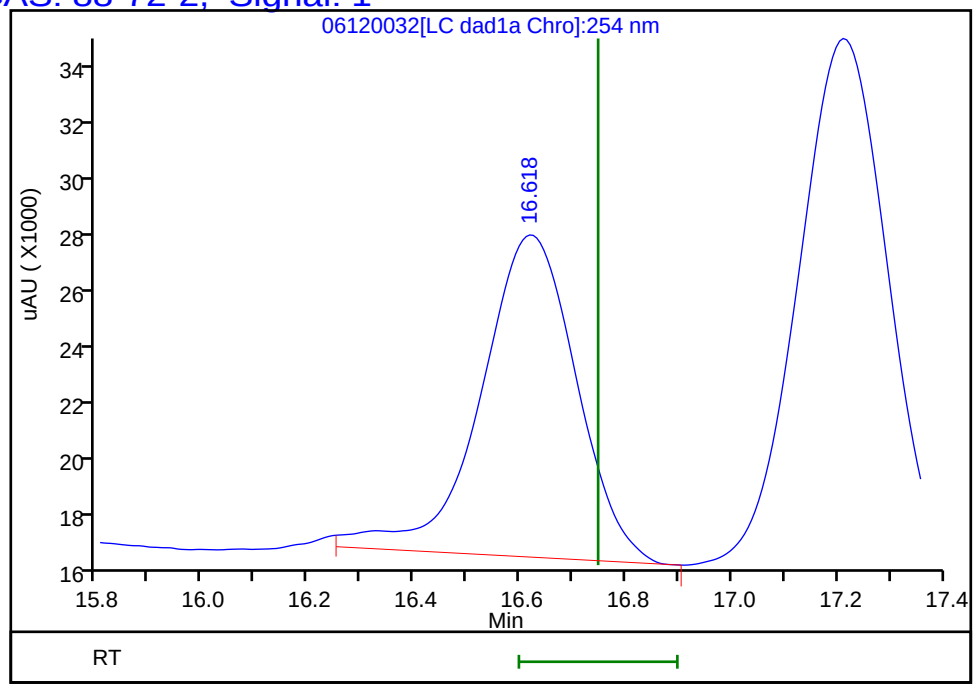
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120032.d				
Injection Date:	13-Jun-2020 07:52:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.62
Response: 135473
Amount: 0.496303



Reviewer: zhangji, 16-Jun-2020 18:00:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

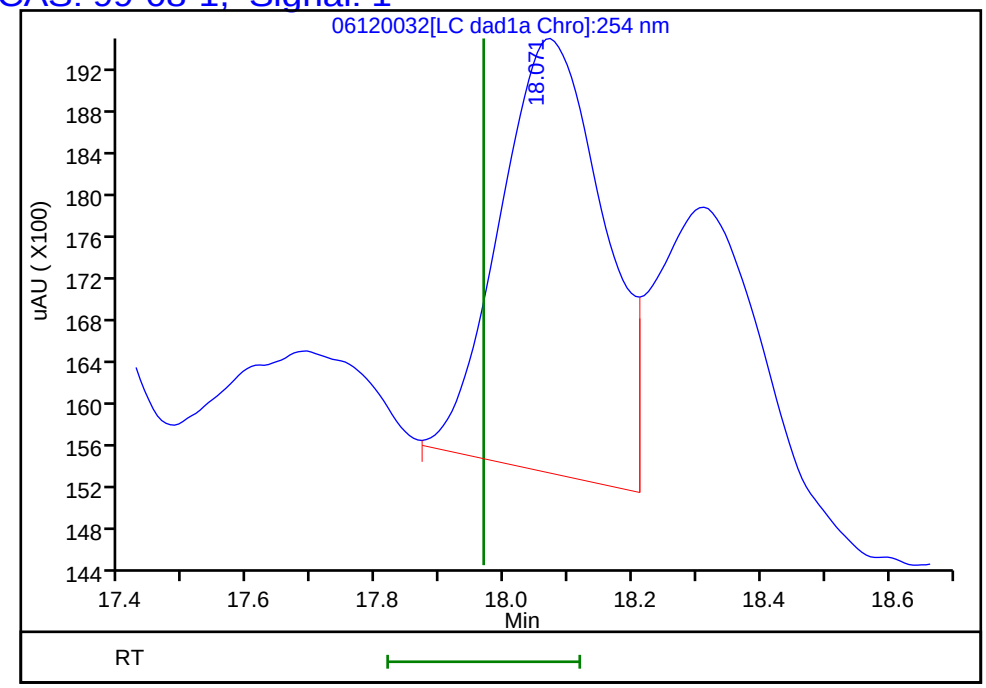
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120032.d				
Injection Date:	13-Jun-2020 07:52:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.07
Response: 46587
Amount: 0.156161



Reviewer: zhangji, 16-Jun-2020 18:00:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

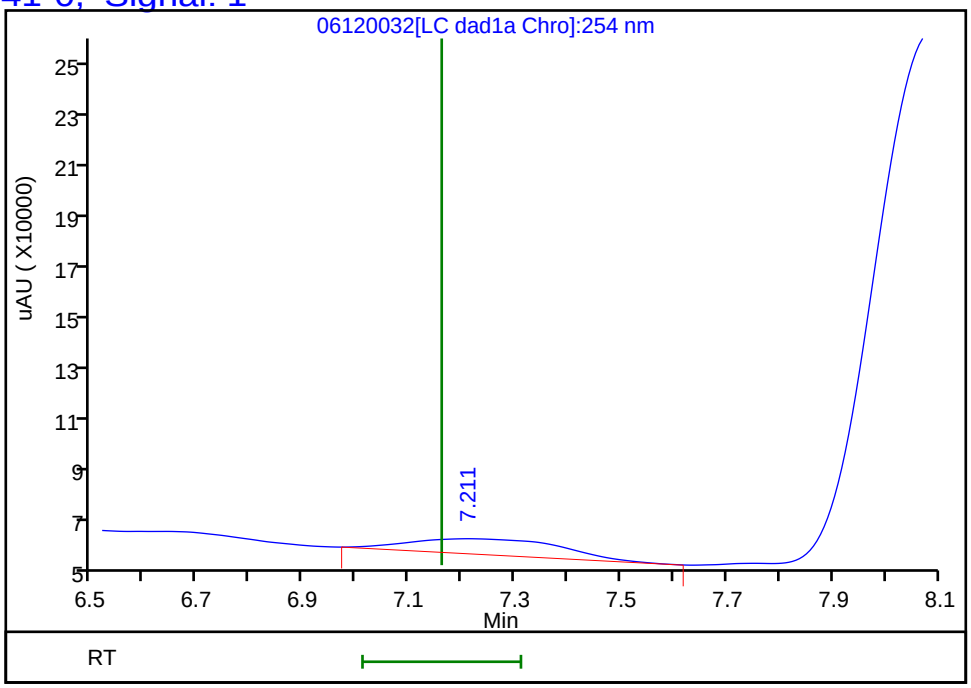
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120032.d				
Injection Date:	13-Jun-2020 07:52:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0, Signal: 1

RT: 7.21
Response: 120958
Amount: 0.653252



Reviewer: zhangji, 16-Jun-2020 18:00:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

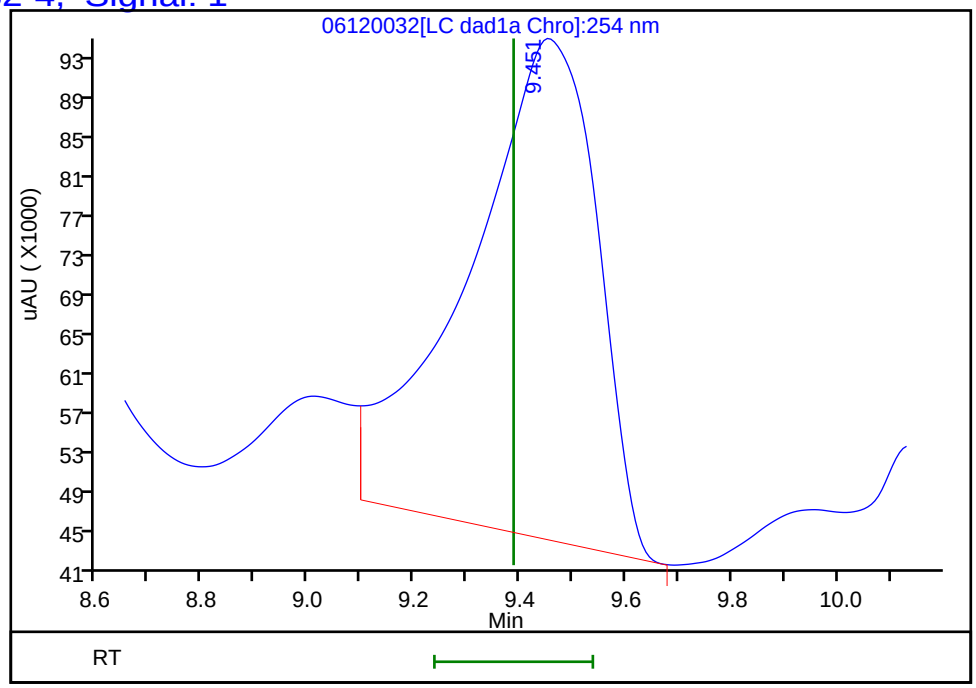
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120032.d				
Injection Date:	13-Jun-2020 07:52:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-3-A	Lab Sample ID:	280-137084-3		
Client ID:	EW7-PM24B-3-35				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 9.45
Response: 862586
Amount: 3.529983



Reviewer: zhangji, 16-Jun-2020 18:00:58
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.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM21B-3-35
Lab Sample ID: 280-137084-4
Matrix: Water
Lab File ID: 06120017.D
Analysis Method: 8330A
Date Collected: 05/29/2020 09:35
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 465.4(mL)
Date Analyzed: 06/12/2020 17:16
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 498536
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M Q	0.23	0.21	0.090
118-96-7	2,4,6-Trinitrotoluene	0.11	U M Q	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.086	U Q	0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	0.086	U M Q	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U Q	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U M Q	0.23	0.21	0.092
99-08-1	3-Nitrotoluene	0.43	U M Q	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U M Q	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U Q	0.44	0.43	0.11
2691-41-0	HMX	0.21	U Q	0.23	0.21	0.094
121-82-4	RDX	0.21	U M Q	0.23	0.21	0.055
479-45-8	Tetryl	0.11	U Q	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	233	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120017.D				
Lims ID:	280-137084-A-4-A				
Client ID:	EW7-PM21B-3-35				
Sample Type:	Client				
Inject. Date:	12-Jun-2020 17:16:31	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-4-A				
Misc. Info.:	280-0092367-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		

Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m		
Limit Group:	GCSV - 8330		
Last Update:	16-Jun-2020 18:11:22	Calib Date:	18-Mar-2020 14:39:27
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D		

Column 1 :	UltraCarb5uODS (20) (4.60 mm)	Det: LC DAD1B, 254 nm
Process Host:	CTX1024	

First Level Reviewer: zhangji Date: 12-Jun-2020 17:56:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.704			ND	
6 MNX	1	7.381	7.394	-0.013	110609	0.6977	M
7 RDX	1		7.797			ND	MU
$ 9 1,2-Dinitrobenzene	1	8.788	8.777	0.011	64488	0.4666	M
10 1,3,5-Trinitrobenzene	1		8.957			ND	U
11 1,3-Dinitrobenzene	1	9.654	9.617	0.037	4040	0.0132	M
12 Nitrobenzene	1	9.994	10.004	-0.010	5978	0.0298	M
14 Tetryl	1		10.330			ND	
16 2,4,6-Trinitrotoluene	1		11.310			ND	U
17 4-Amino-2,6-dinitrotoluene	1		11.484			ND	U
18 2-Amino-4,6-dinitrotoluene	1		11.784			ND	
19 2,6-Dinitrotoluene	1		11.924			ND	U
20 2,4-Dinitrotoluene	1		12.124			ND	
21 o-Nitrotoluene	1		12.977			ND	U
22 p-Nitrotoluene	1		13.424			ND	
23 m-Nitrotoluene	1		14.030			ND	U

QC Flag Legend

Review Flags

M - Manually Integrated

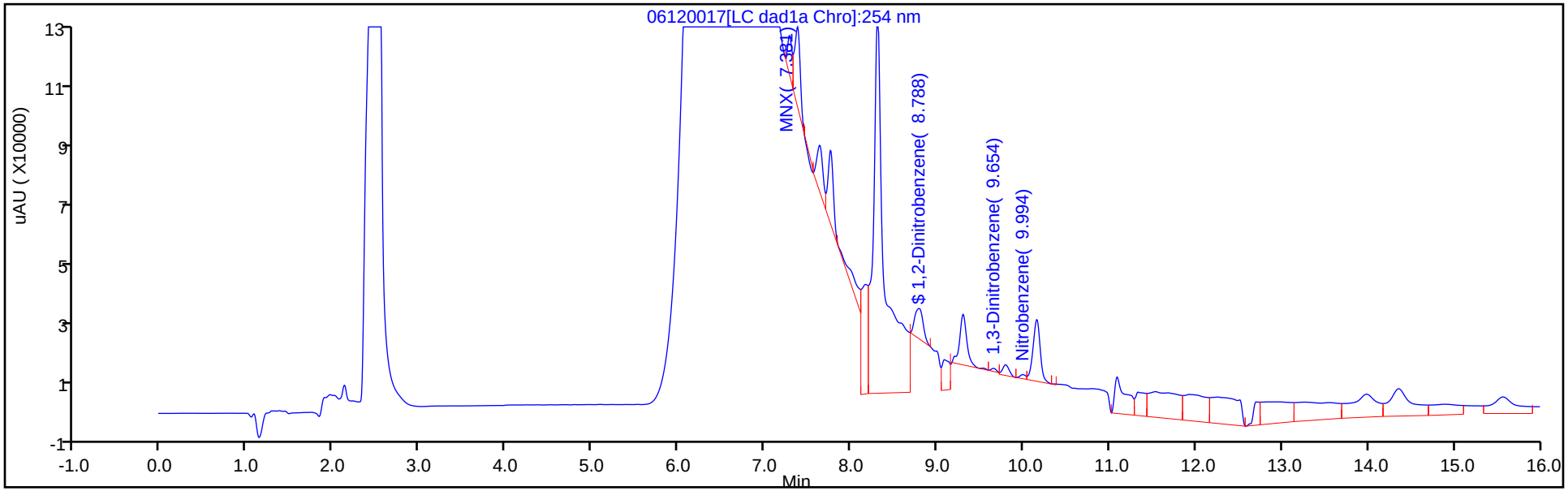
U - Marked Undetected

Report Date: 16-Jun-2020 18:11:25 Chrom Revision: 2.3 10-Jun-2020 22:46:48

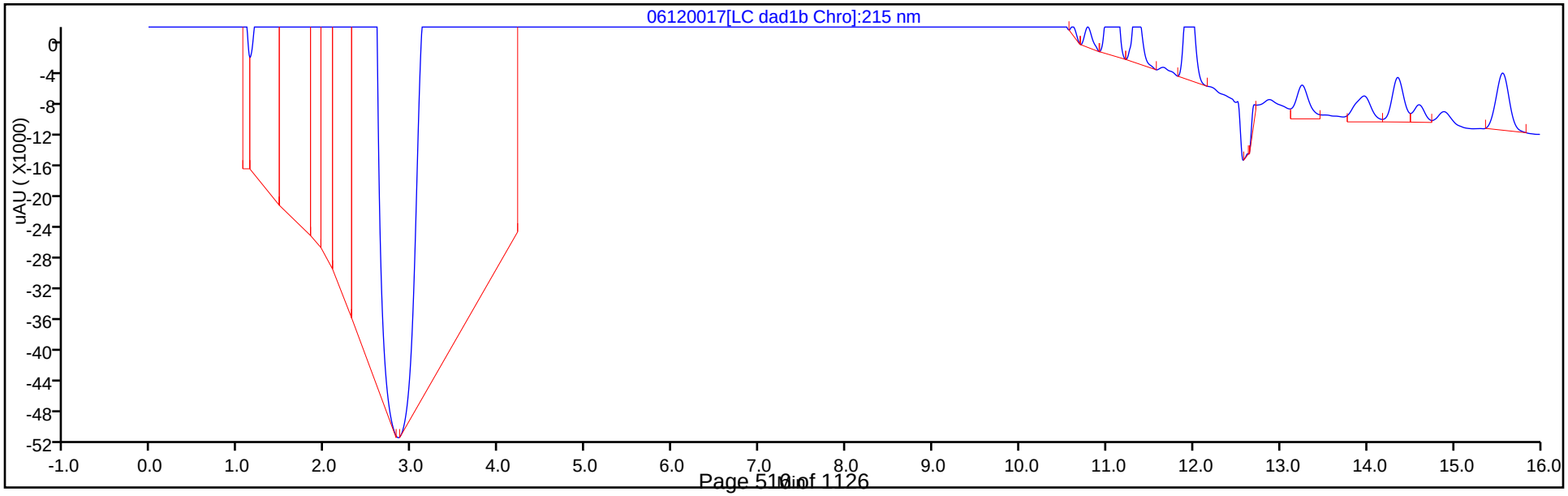
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4	Worklist Smp#:	17
Client ID:	EW7-PM21B-3-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120017.D				
Lims ID:	280-137084-A-4-A				
Client ID:	EW7-PM21B-3-35				
Sample Type:	Client				
Inject. Date:	12-Jun-2020 17:16:31	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-4-A				
Misc. Info.:	280-0092367-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:11:22	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 12-Jun-2020 17:56:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.4666	233.29

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

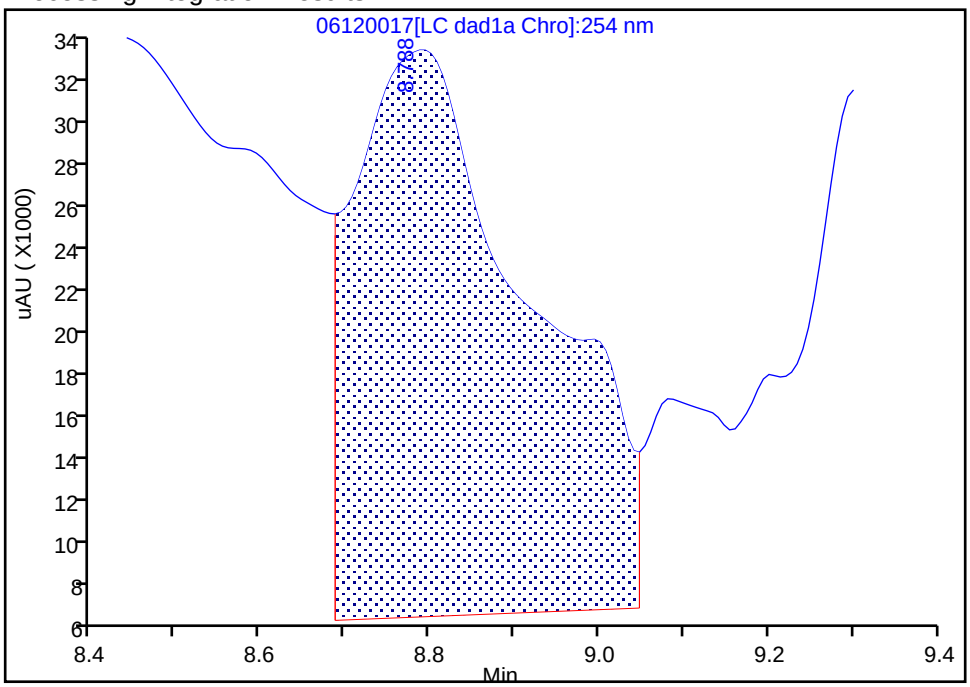
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

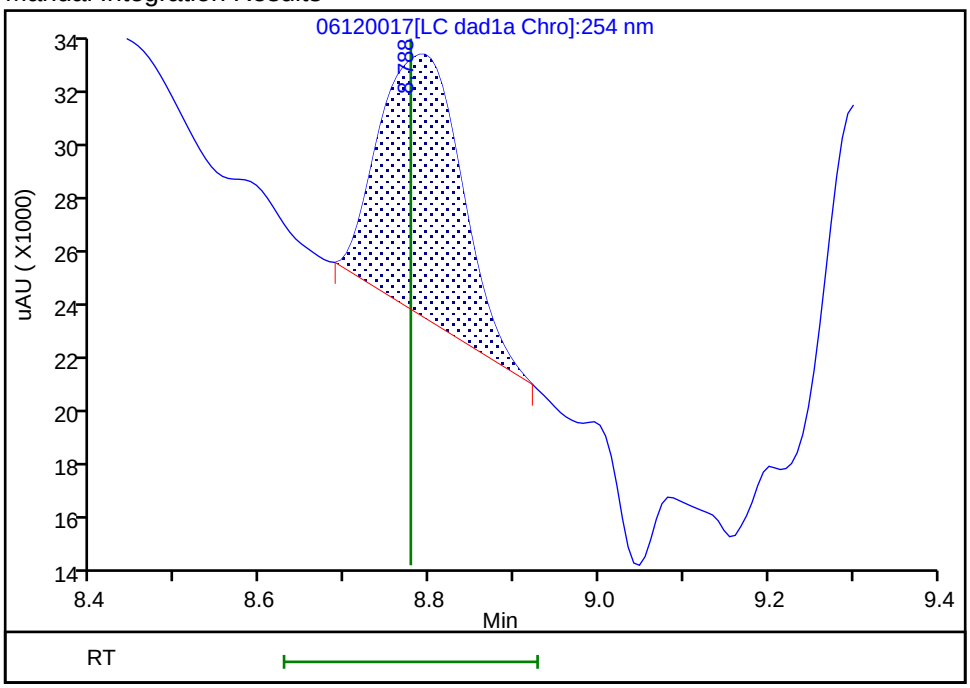
Processing Integration Results

RT: 8.79
Area: 382400
Amount: 2.766760
Amount Units: ug/mL



Manual Integration Results

RT: 8.79
Area: 64488
Amount: 0.466587
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 17:54:21
Audit Action: Manually Integrated Audit Reason: Baseline

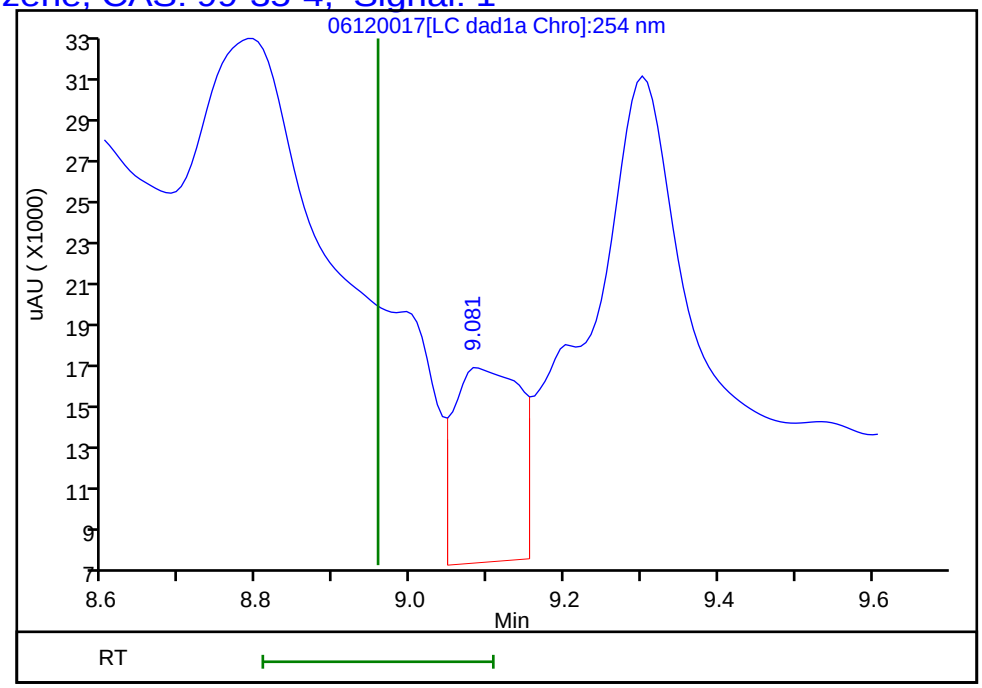
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 9.08
Response: 56235
Amount: 0.244172



Reviewer: zhangji, 12-Jun-2020 17:56:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

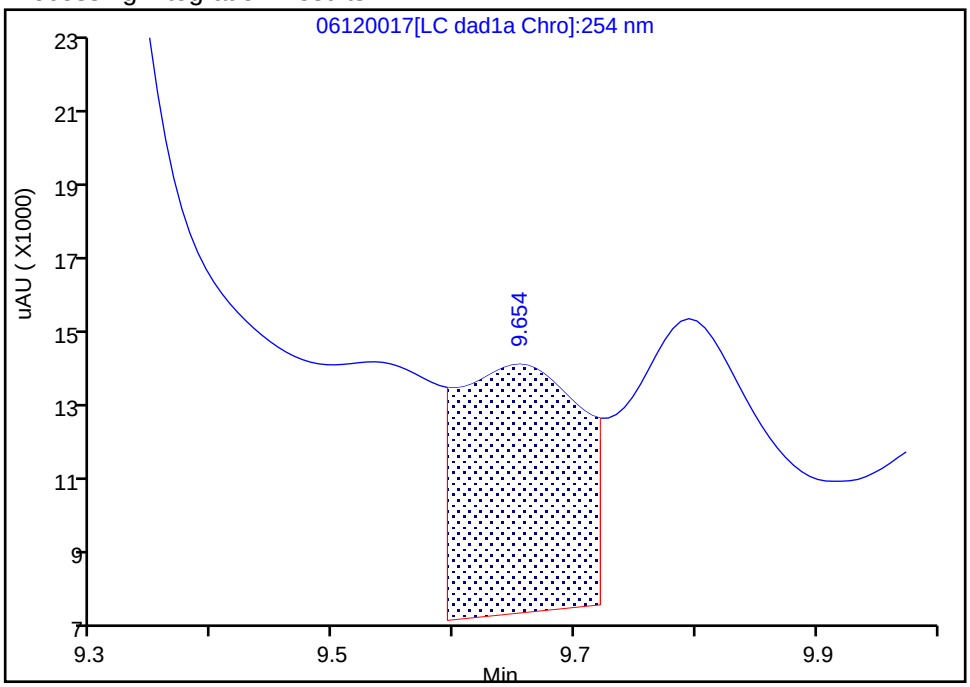
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

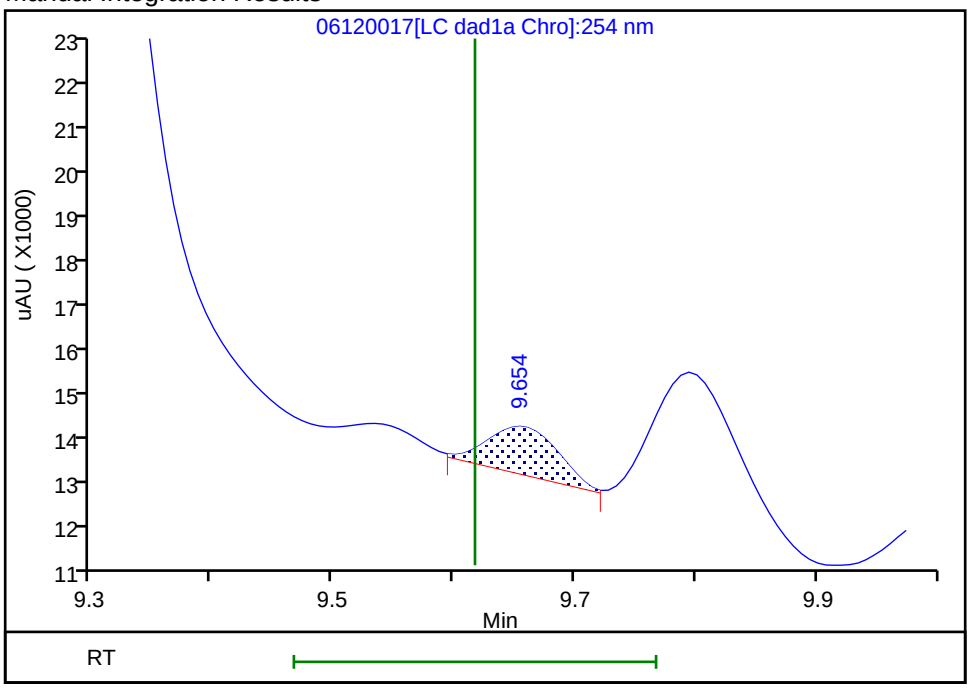
Processing Integration Results

RT: 9.65
Area: 42664
Amount: 0.139113
Amount Units: ug/mL



Manual Integration Results

RT: 9.65
Area: 4040
Amount: 0.013173
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 17:55:28
Audit Action: Assigned New Baseline Audit Reason: Baseline

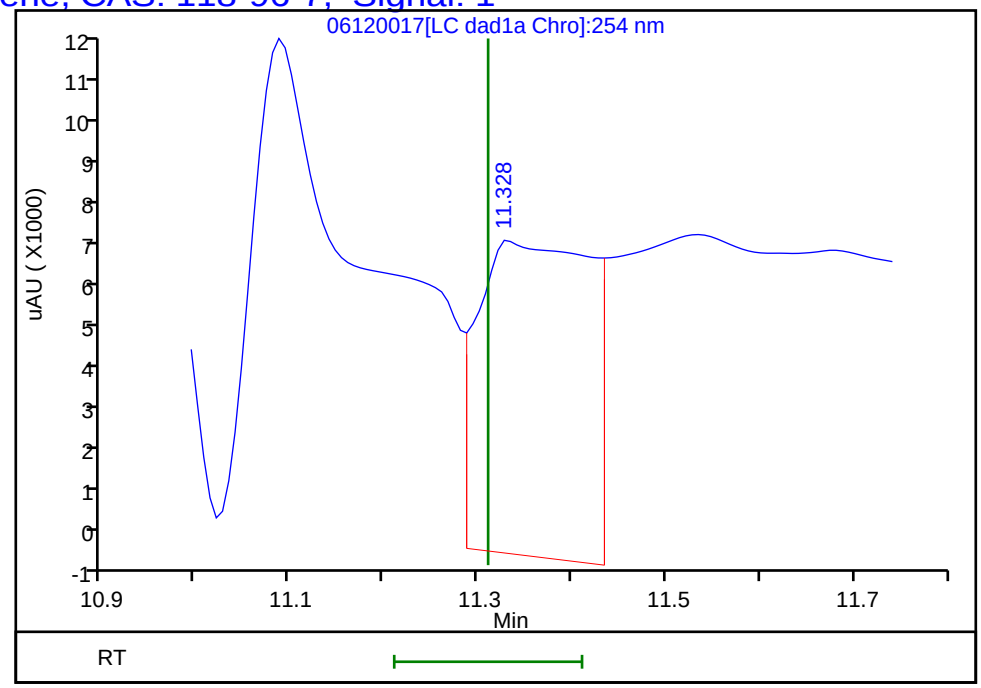
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.33
Response: 61123
Amount: 0.299577



Reviewer: zhangji, 12-Jun-2020 17:56:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

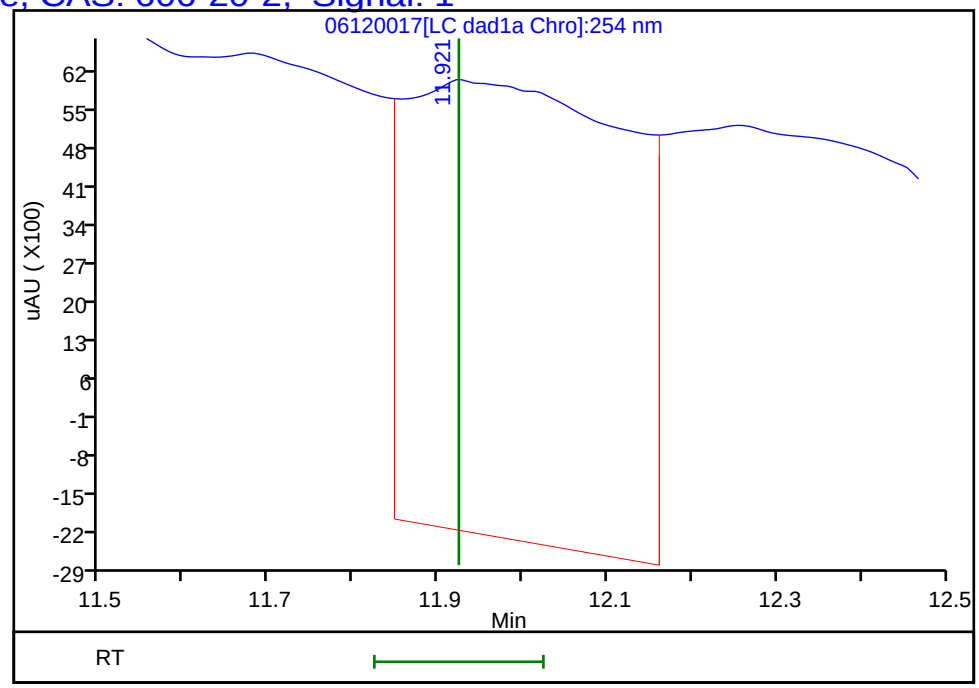
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.92
Response: 151184
Amount: 1.011587



Reviewer: zhangji, 12-Jun-2020 17:56:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

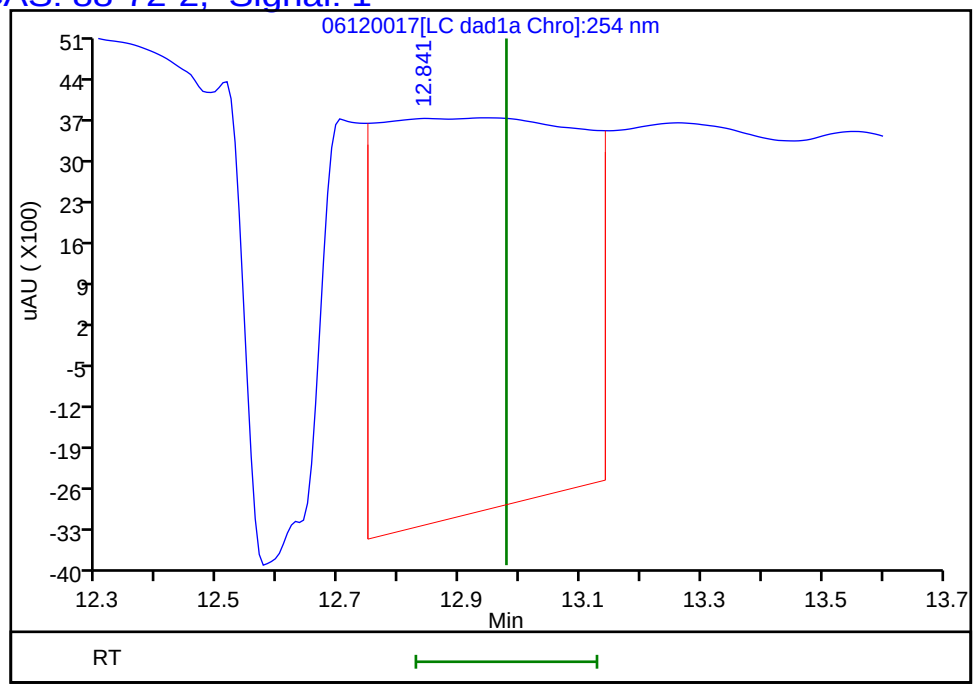
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.84
Response: 156344
Amount: 1.157667



Reviewer: zhangji, 12-Jun-2020 17:56:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

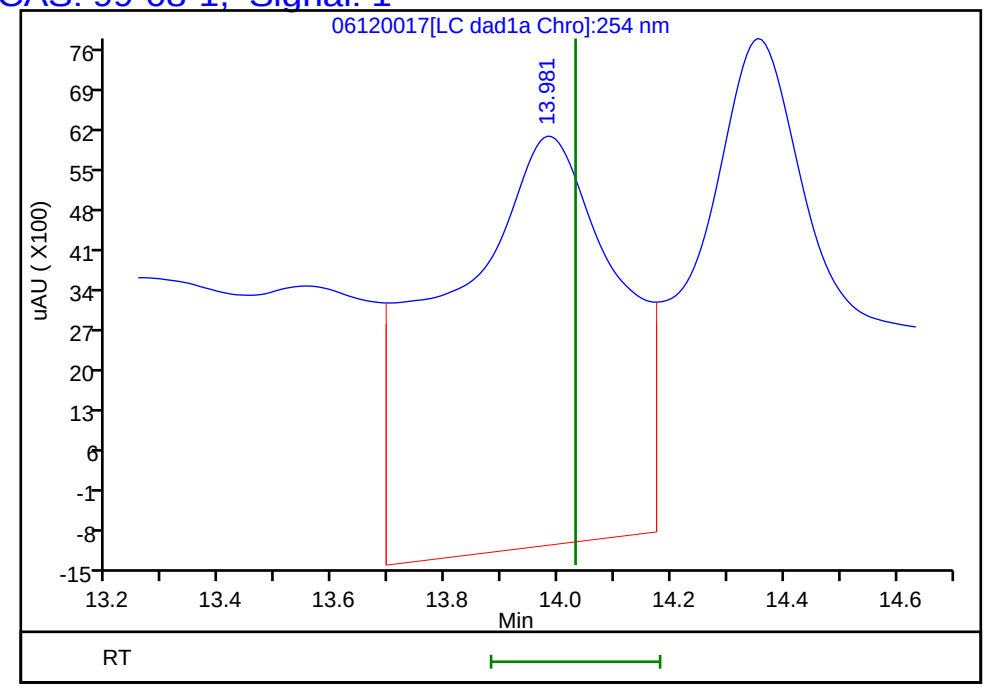
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.98
Response: 152840
Amount: 1.068597



Reviewer: zhangji, 12-Jun-2020 17:56:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

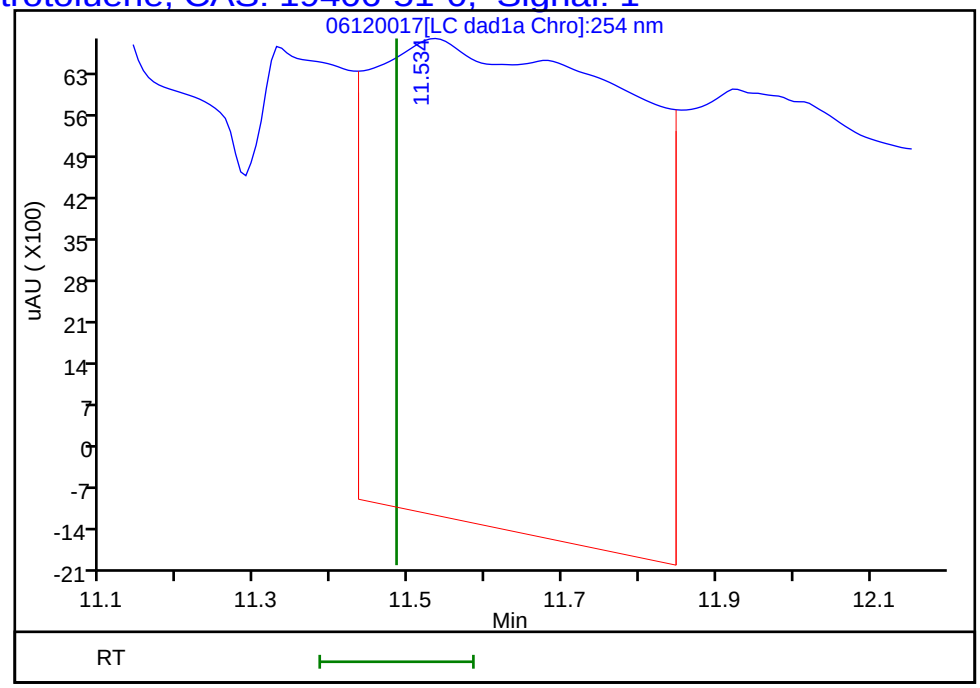
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.53
Response: 194158
Amount: 1.095018



Reviewer: zhangji, 12-Jun-2020 17:56:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

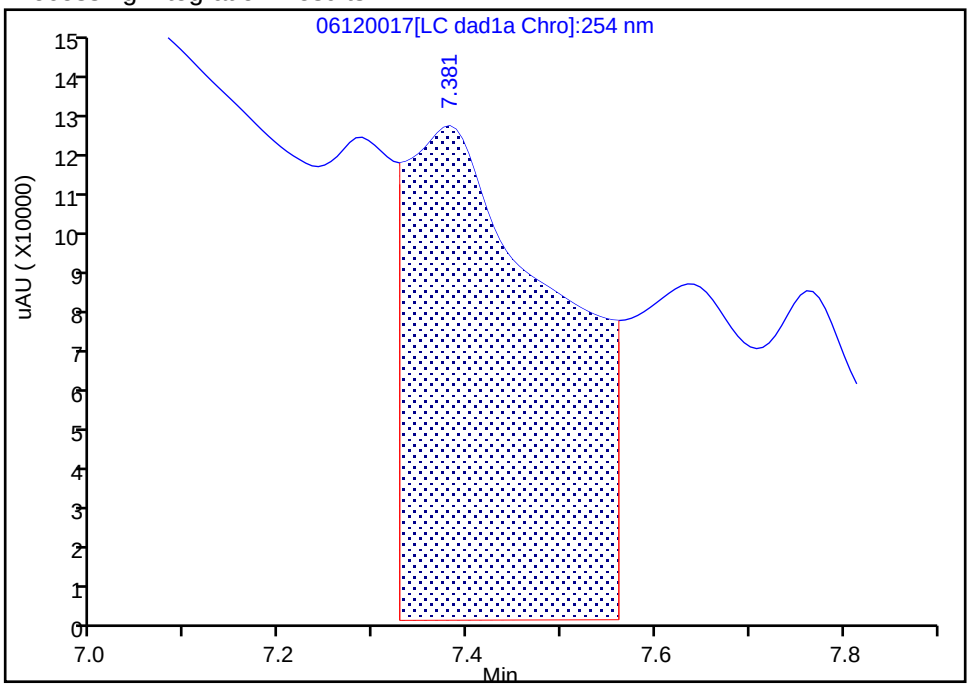
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

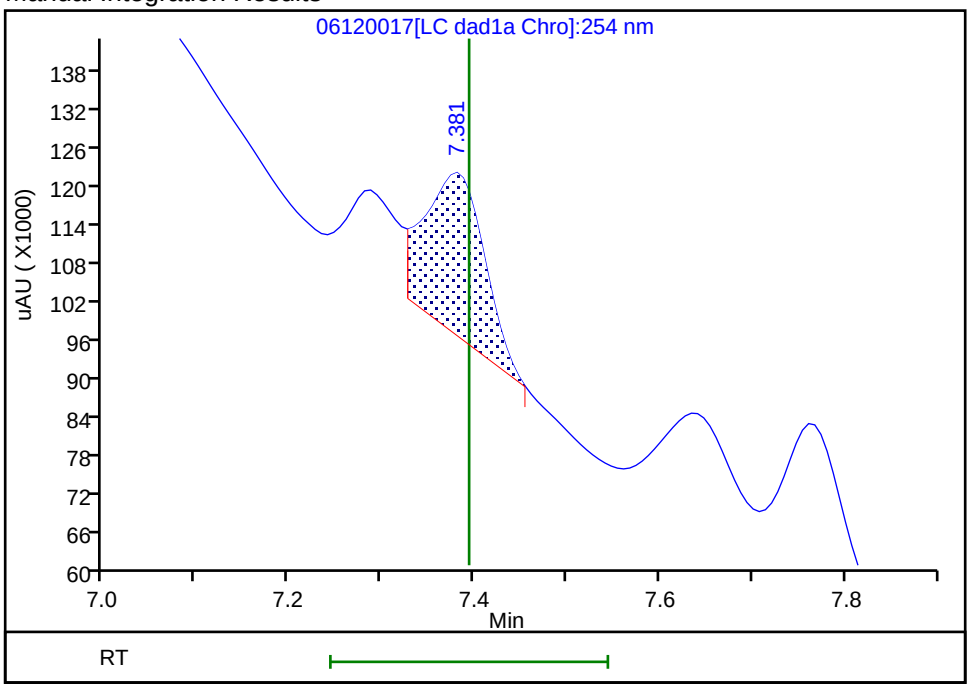
Processing Integration Results

RT: 7.38
Area: 1278865
Amount: 8.066299
Amount Units: ug/mL



Manual Integration Results

RT: 7.38
Area: 110609
Amount: 0.697654
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 17:54:41
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

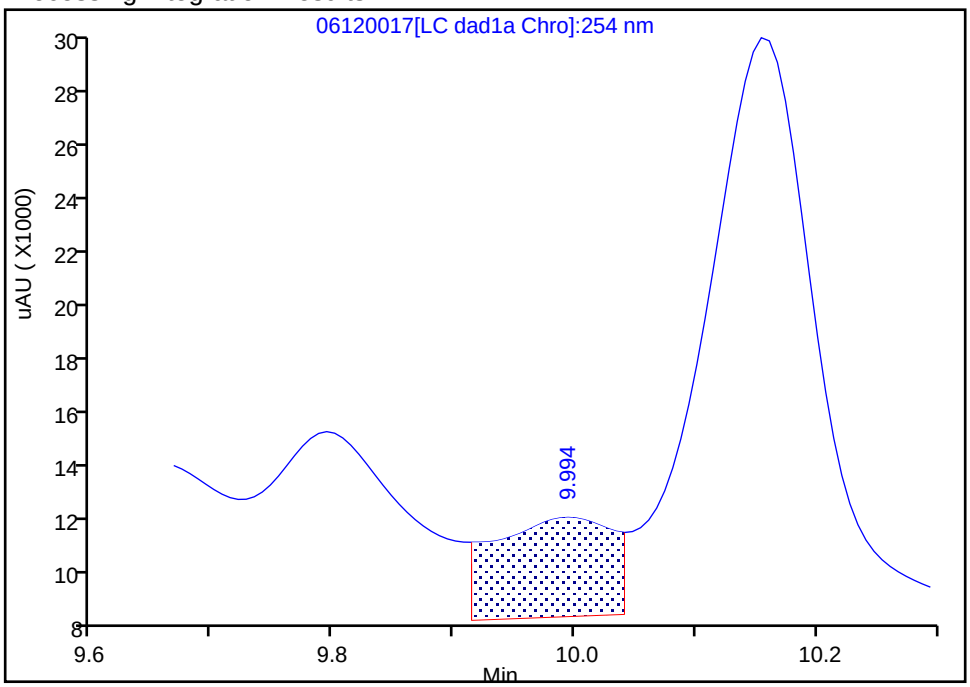
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

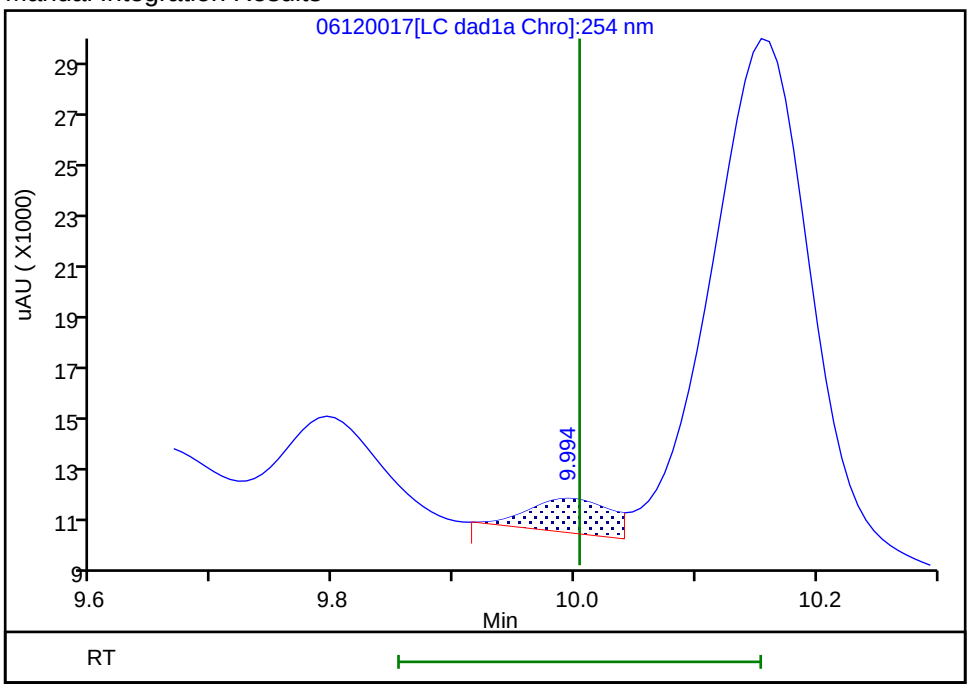
Processing Integration Results

RT: 9.99
Area: 24214
Amount: 0.120827
Amount Units: ug/mL



Manual Integration Results

RT: 9.99
Area: 5978
Amount: 0.029830
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 17:55:38

Audit Action: Assigned New Baseline Audit Reason: Baseline

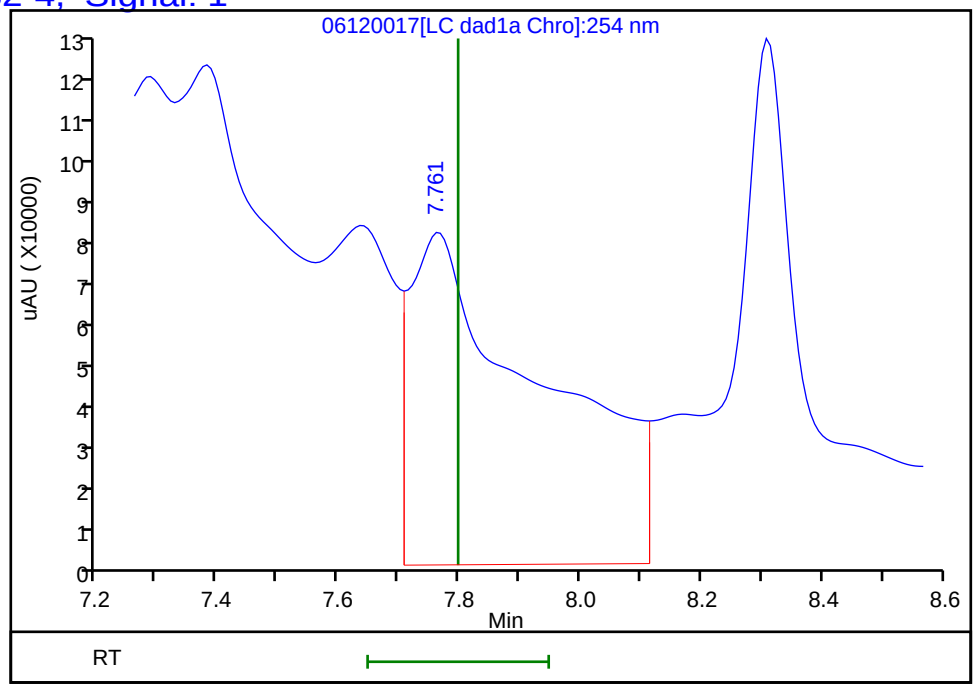
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120017.d				
Injection Date:	12-Jun-2020 17:16:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.76
Response: 1173513
Amount: 10.063306



Reviewer: zhangji, 12-Jun-2020 17:56:02
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.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM21B-3-35
Lab Sample ID: 280-137084-4
Matrix: Water
Lab File ID: 06120033.D
Analysis Method: 8330A
Date Collected: 05/29/2020 09:35
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 465.4(mL)
Date Analyzed: 06/13/2020 08:27
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.: 498568
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040
5755-27-1	MNX	0.43	U	2.1	0.43	0.17
98-95-3	Nitrobenzene	0.21	U	0.23	0.21	0.098

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120033.D				
Lims ID:	280-137084-A-4-A				
Client ID:	EW7-PM21B-3-35				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 08:27:43	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-4-A				
Misc. Info.:	280-0092371-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 18:01:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		7.161			ND	
7 MNX	1		7.876			ND	
8 RDX	1	9.321	9.387	-0.066	130145	0.5326	
9 Nitrobenzene	1		12.281			ND	
$ 10 1,2-Dinitrobenzene	1	13.254	13.294	-0.040	58069	0.2028	
12 1,3-Dinitrobenzene	1		15.827			ND	
14 o-Nitrotoluene	1		16.747			ND	U
15 p-Nitrotoluene	1		17.041			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.487			ND	U
17 m-Nitrotoluene	1		17.967			ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.427			ND	U
19 1,3,5-Trinitrobenzene	1		19.154			ND	U
20 2,6-Dinitrotoluene	1		20.081			ND	
21 2,4-Dinitrotoluene	1		20.601			ND	
22 Tetryl	1		23.908			ND	
23 2,4,6-Trinitrotoluene	1		24.914			ND	

QC Flag Legend

Review Flags

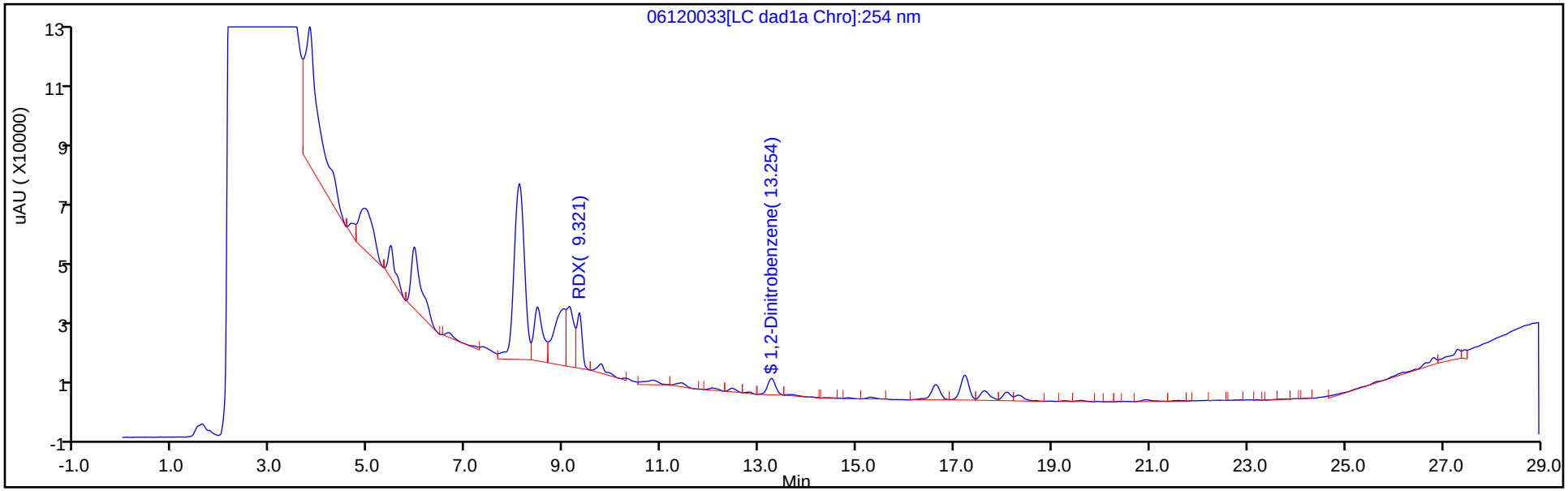
U - Marked Undetected

Report Date: 16-Jun-2020 18:53:19 Chrom Revision: 2.3 10-Jun-2020 22:46:48

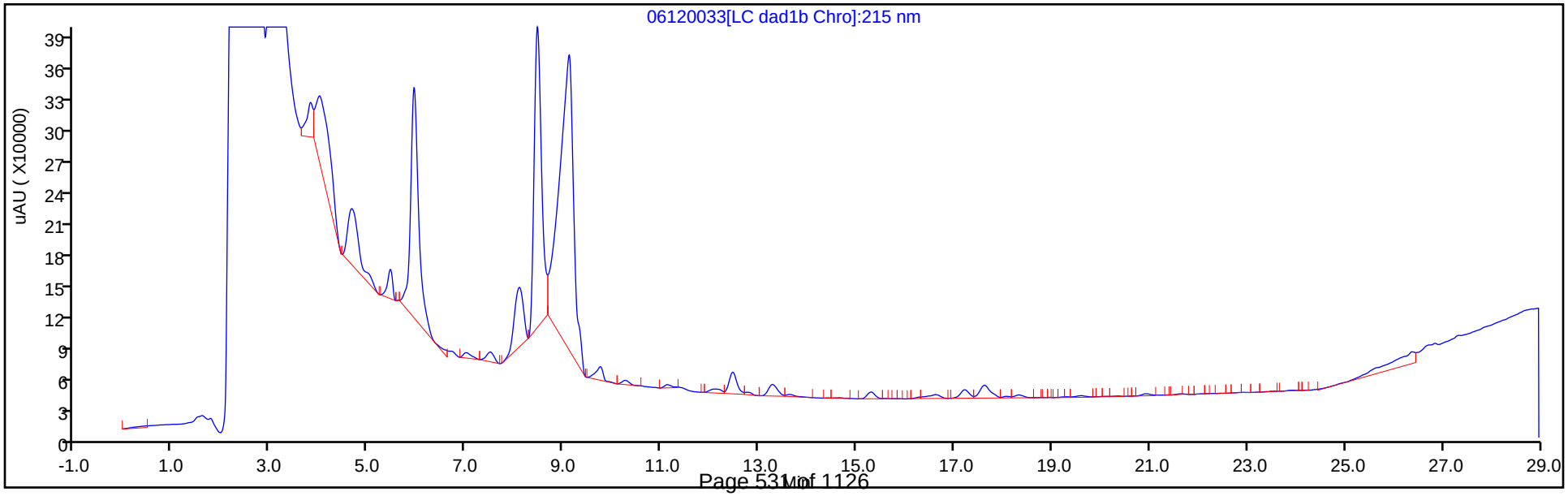
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120033.d				
Injection Date:	13-Jun-2020 08:27:43	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4	Worklist Smp#:	33
Client ID:	EW7-PM21B-3-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120033.D				
Lims ID:	280-137084-A-4-A				
Client ID:	EW7-PM21B-3-35				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 08:27:43	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-4-A				
Misc. Info.:	280-0092371-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 18:01:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2028	101.41

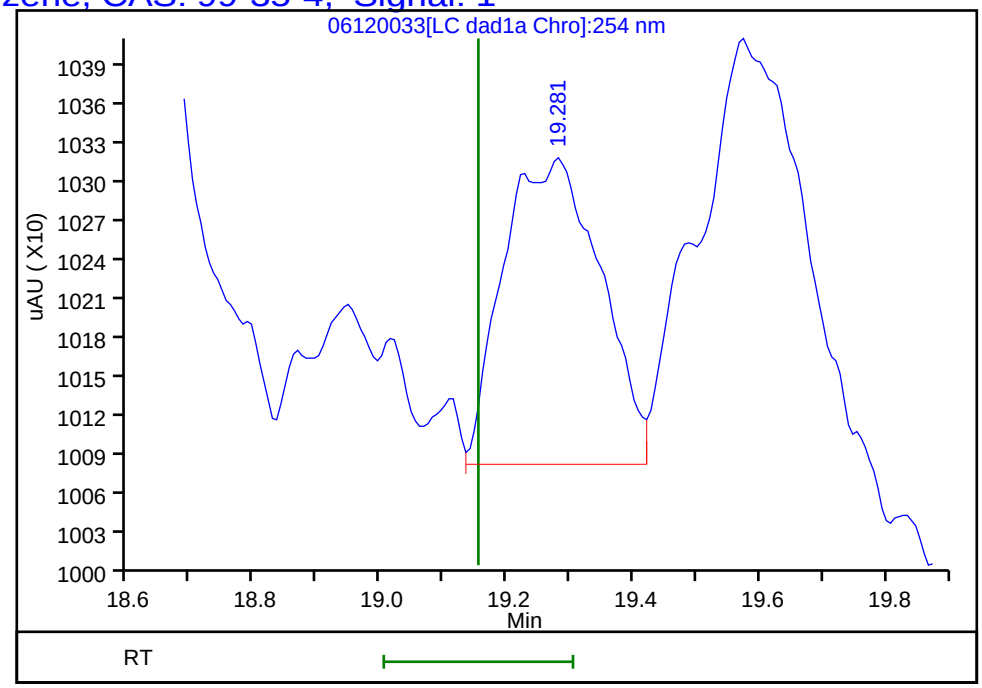
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120033.d				
Injection Date:	13-Jun-2020 08:27:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	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: 19.28
Response: 2510
Amount: 0.005313



Reviewer: zhangji, 16-Jun-2020 18:01:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

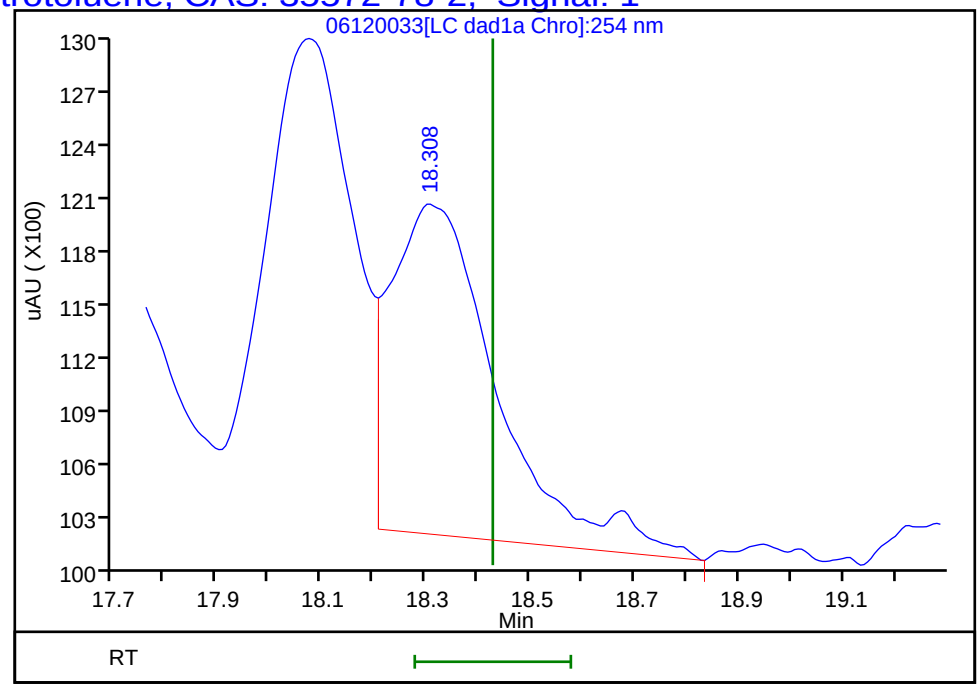
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120033.d				
Injection Date:	13-Jun-2020 08:27:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	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: 18.31
Response: 25143
Amount: 0.054046



Reviewer: zhangji, 16-Jun-2020 18:01:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

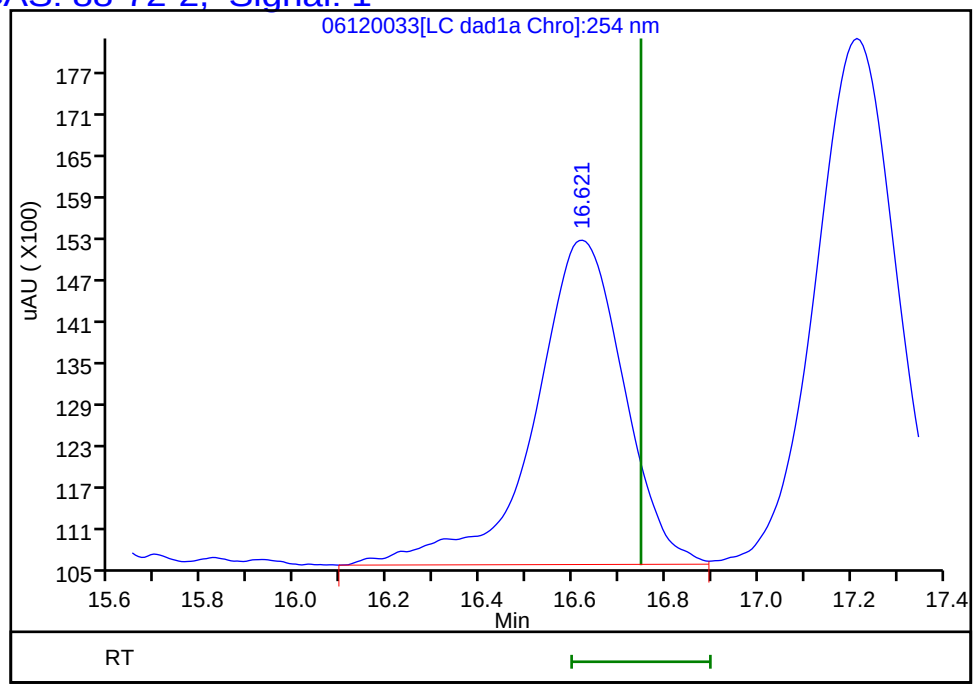
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120033.d				
Injection Date:	13-Jun-2020 08:27:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	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: 16.62
Response: 62595
Amount: 0.229316



Reviewer: zhangji, 16-Jun-2020 18:01:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

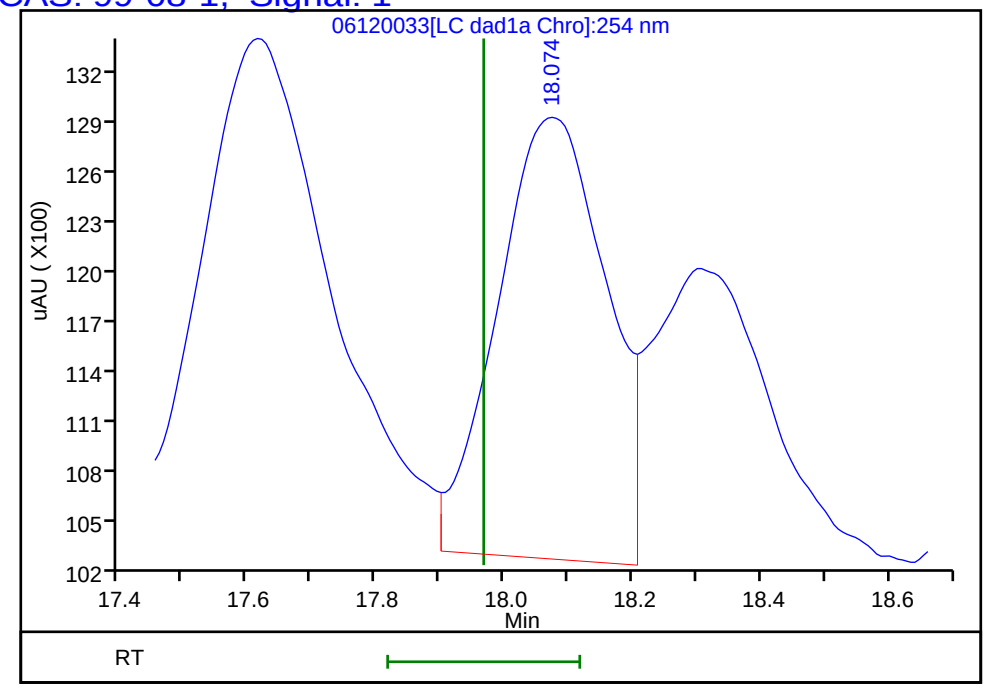
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120033.d				
Injection Date:	13-Jun-2020 08:27:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.07
Response: 30730
Amount: 0.103008



Reviewer: zhangji, 16-Jun-2020 18:01:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

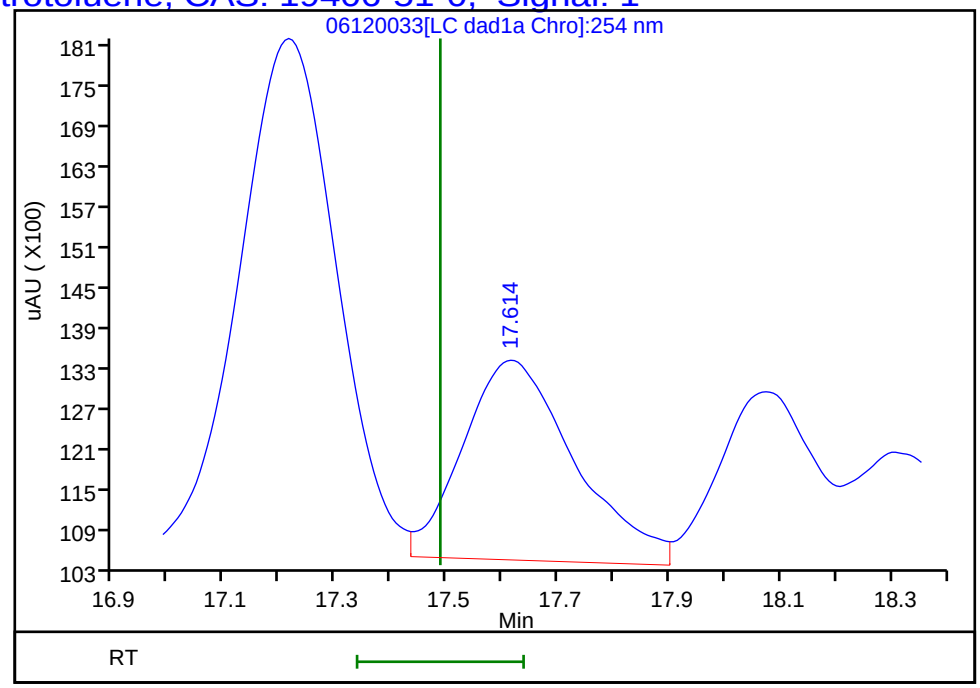
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120033.d				
Injection Date:	13-Jun-2020 08:27:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-4-A	Lab Sample ID:	280-137084-4		
Client ID:	EW7-PM21B-3-35				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	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: 17.61
Response: 41287
Amount: 0.119591



Reviewer: zhangji, 16-Jun-2020 18:01:18
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.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM22B-3-35
Lab Sample ID: 280-137084-5
Matrix: Water
Lab File ID: 06120018.D
Analysis Method: 8330A
Date Collected: 05/29/2020 11:25
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 435.9(mL)
Date Analyzed: 06/12/2020 17:39
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 498536
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.23	U M Q	0.24	0.23	0.096
99-65-0	1,3-Dinitrobenzene	0.11	U M Q	0.13	0.11	0.042
118-96-7	2,4,6-Trinitrotoluene	0.11	U Q	0.13	0.11	0.052
121-14-2	2,4-Dinitrotoluene	0.092	U Q	0.11	0.092	0.031
606-20-2	2,6-Dinitrotoluene	0.092	U M Q	0.11	0.092	0.046
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U M Q	0.13	0.11	0.058
88-72-2	2-Nitrotoluene	0.23	U Q	0.24	0.23	0.098
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U M Q	0.17	0.14	0.066
99-99-0	4-Nitrotoluene	0.46	U M Q	0.47	0.46	0.11
2691-41-0	HMX	0.23	U Q	0.24	0.23	0.10
5755-27-1	MNX	0.46	U M	2.3	0.46	0.18
121-82-4	RDX	0.23	U M Q	0.24	0.23	0.059
479-45-8	Tetryl	0.11	U M Q	0.13	0.11	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	484	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120018.D
Lims ID: 280-137084-A-5-A
Client ID: EW7-PM22B-3-35
Sample Type: Client
Inject. Date: 12-Jun-2020 17:39:35 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-137084-A-5-A
Misc. Info.: 280-0092367-018
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Jun-2020 18:11:22 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1024

First Level Reviewer: zhangji Date: 12-Jun-2020 18:05:47

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.704			ND	
	6 MNX	1		7.394			ND	MU
	7 RDX	1		7.797			ND	MU
$	9 1,2-Dinitrobenzene	1	8.831	8.777	0.054	133917	0.9689	M
	10 1,3,5-Trinitrobenzene	1		8.957			ND	MU
	11 1,3-Dinitrobenzene	1		9.617			ND	U
	12 Nitrobenzene	1	10.038	10.004	0.034	41370	0.2064	M
	14 Tetryl	1		10.330			ND	MU
	16 2,4,6-Trinitrotoluene	1		11.310			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.484			ND	U
	18 2-Amino-4,6-dinitrotoluene	1		11.784			ND	U
	19 2,6-Dinitrotoluene	1		11.924			ND	U
	20 2,4-Dinitrotoluene	1		12.124			ND	
	21 o-Nitrotoluene	1		12.977			ND	
	22 p-Nitrotoluene	1		13.424			ND	U
	23 m-Nitrotoluene	1	14.071	14.030	0.041	72400	0.5062	

QC Flag Legend

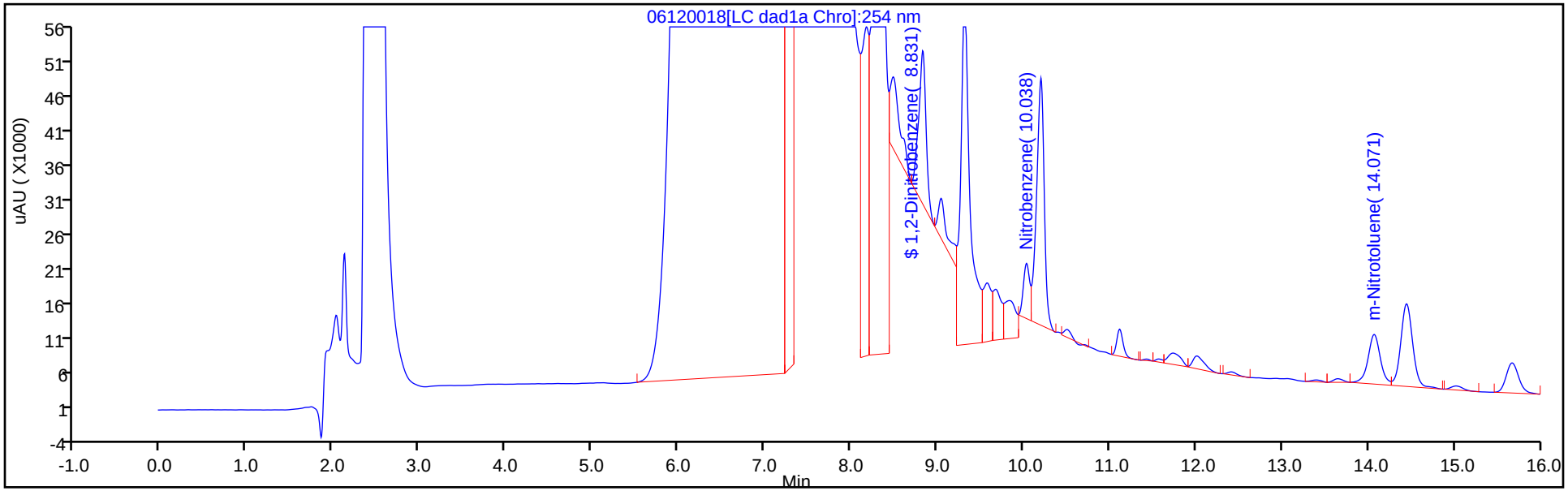
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 16-Jun-2020 18:11:26 Chrom Revision: 2.3 10-Jun-2020 22:46:48

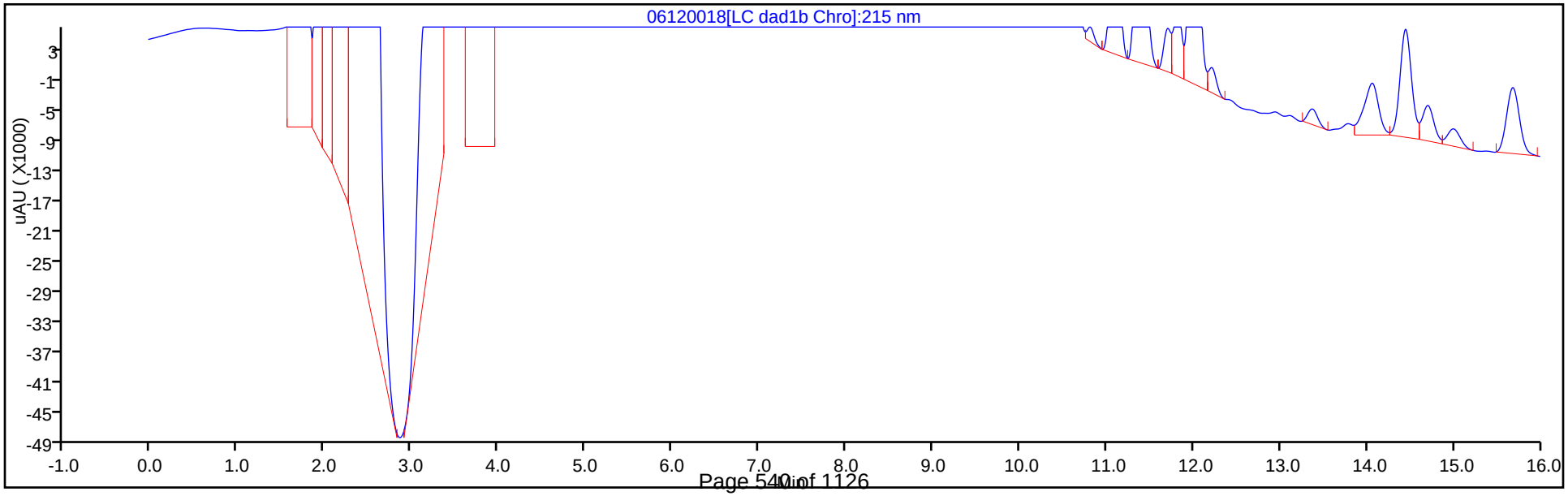
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5	Worklist Smp#:	18
Client ID:	EW7-PM22B-3-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120018.D				
Lims ID:	280-137084-A-5-A				
Client ID:	EW7-PM22B-3-35				
Sample Type:	Client				
Inject. Date:	12-Jun-2020 17:39:35	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-5-A				
Misc. Info.:	280-0092367-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:11:22	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 12-Jun-2020 18:05:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.9689	484.46

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

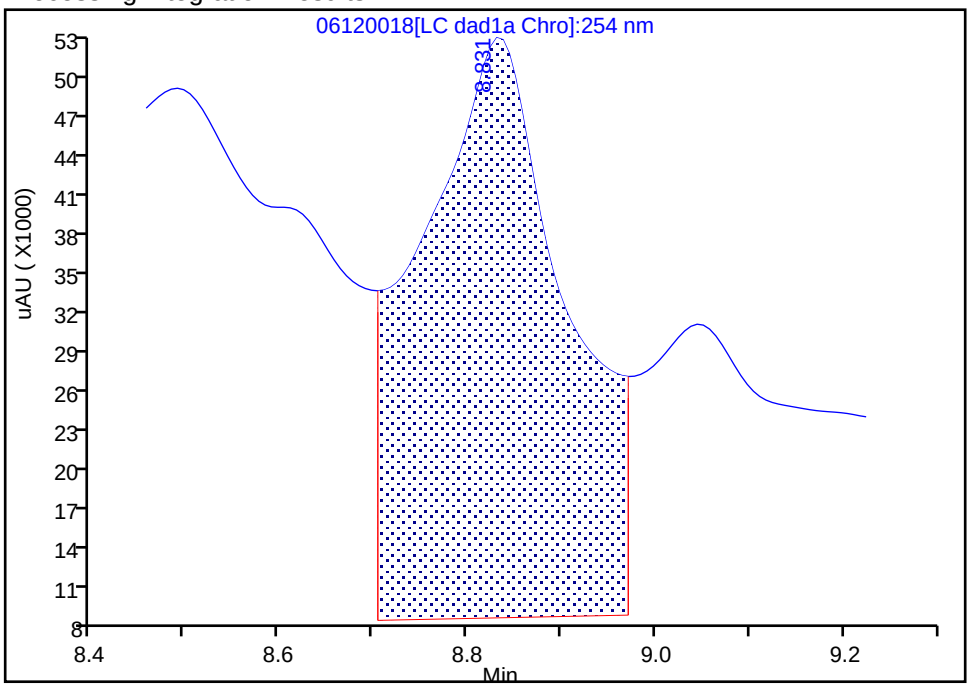
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

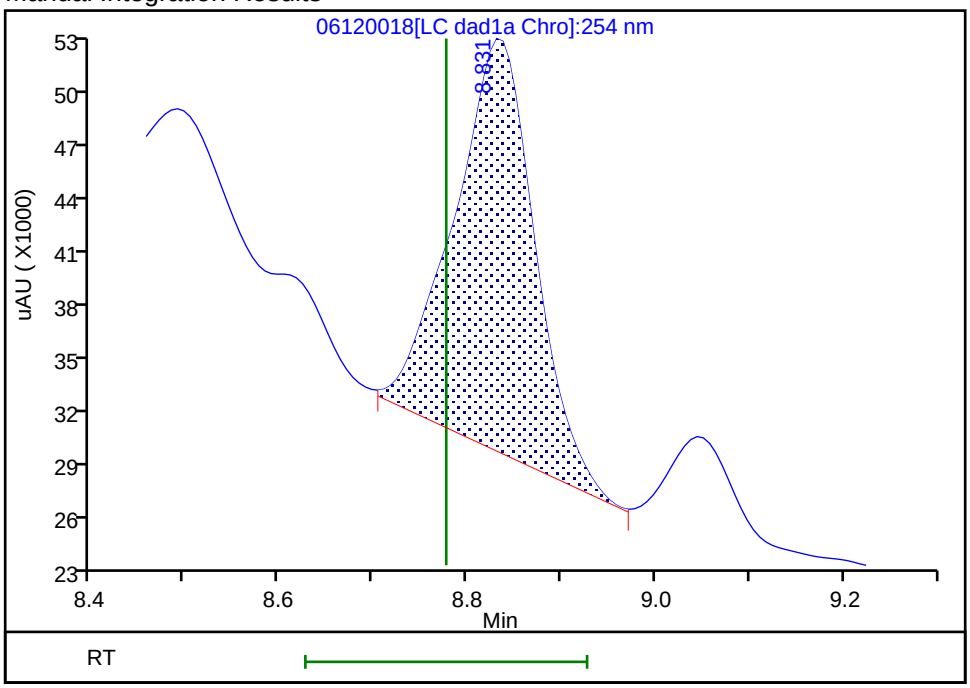
Processing Integration Results

RT: 8.83
Area: 471109
Amount: 3.408592
Amount Units: ug/mL



Manual Integration Results

RT: 8.83
Area: 133917
Amount: 0.968923
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 18:05:06
Audit Action: Assigned New Baseline Audit Reason: Baseline

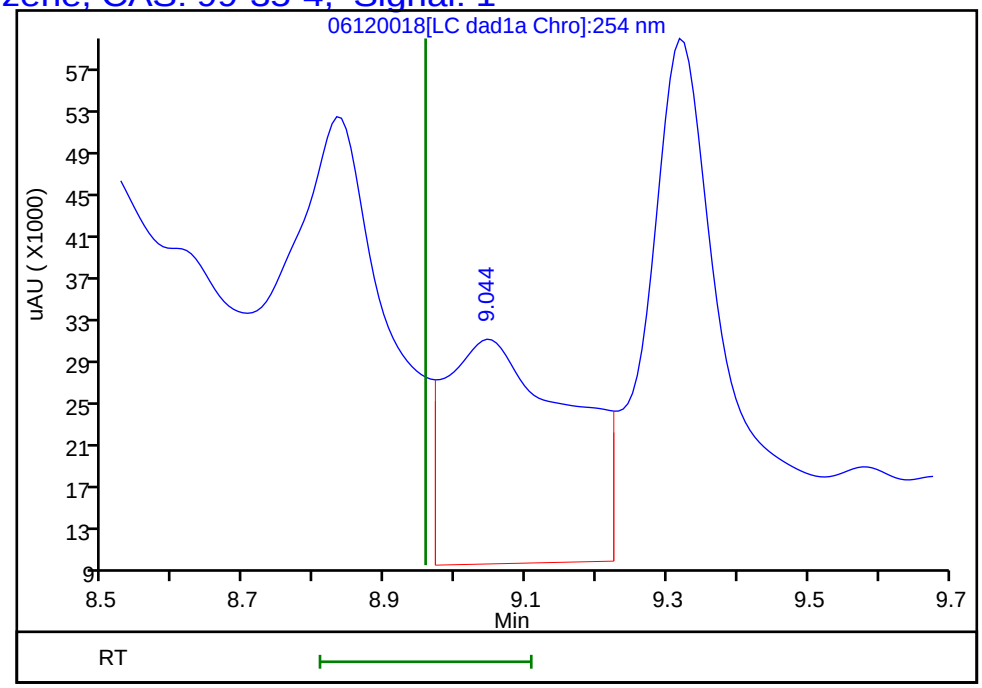
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 9.04
Response: 265927
Amount: 1.154654



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

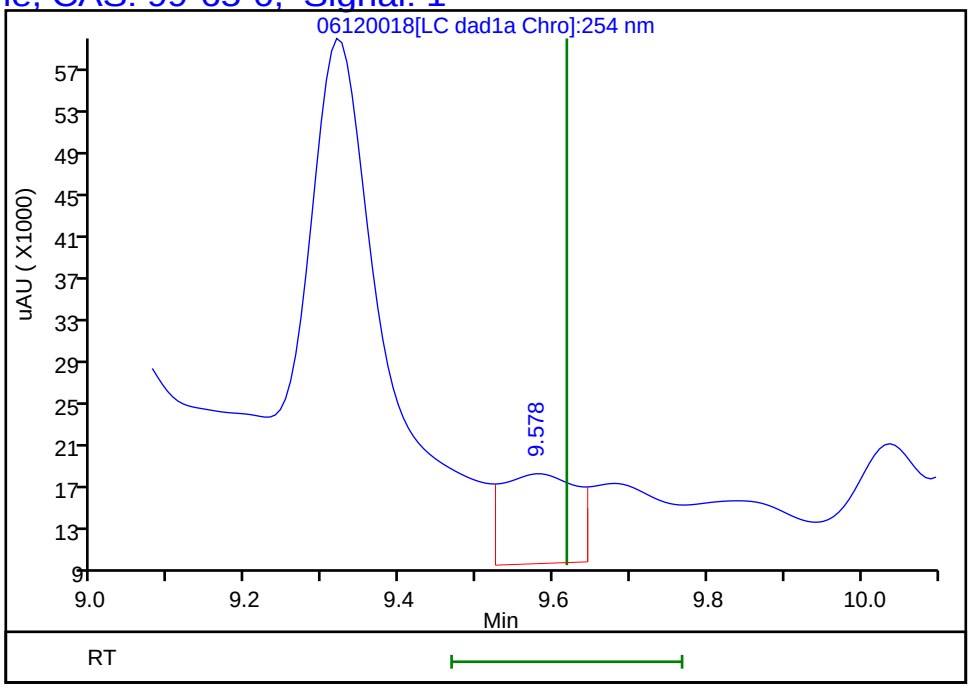
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.58
Response: 57199
Amount: 0.186507



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

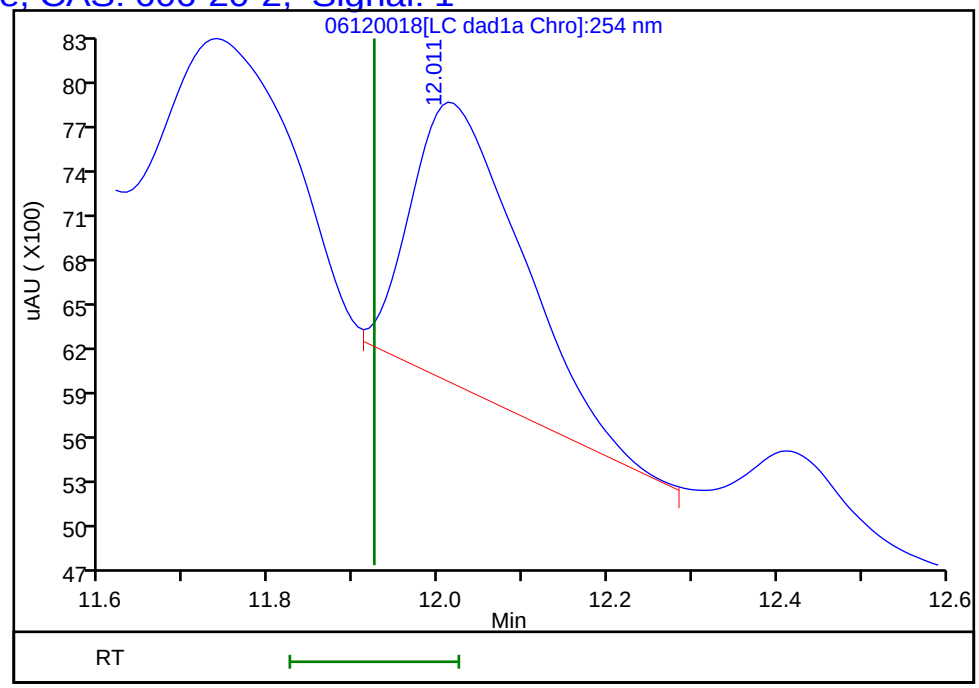
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 12.01
Response: 17313
Amount: 0.115843



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

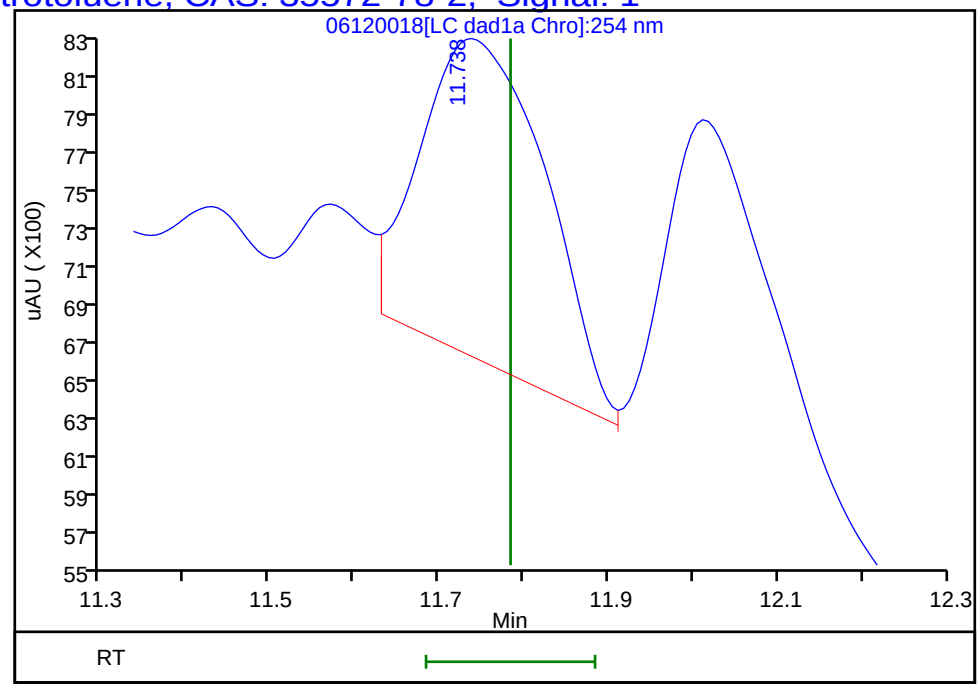
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.74
Response: 17314
Amount: 0.085368



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

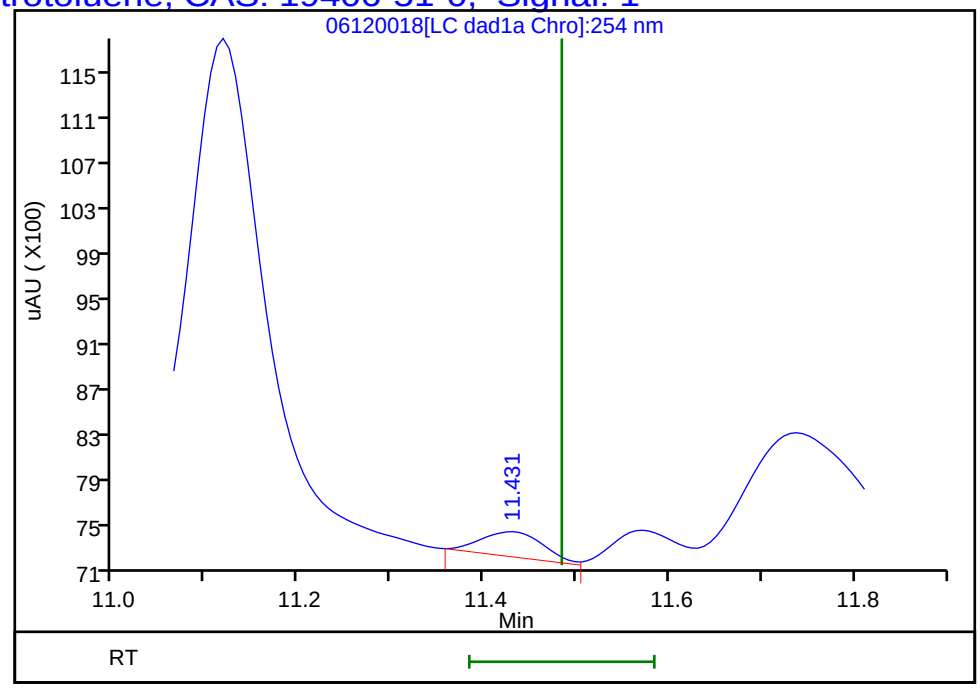
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.43
Response: 1027
Amount: 0.012281



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

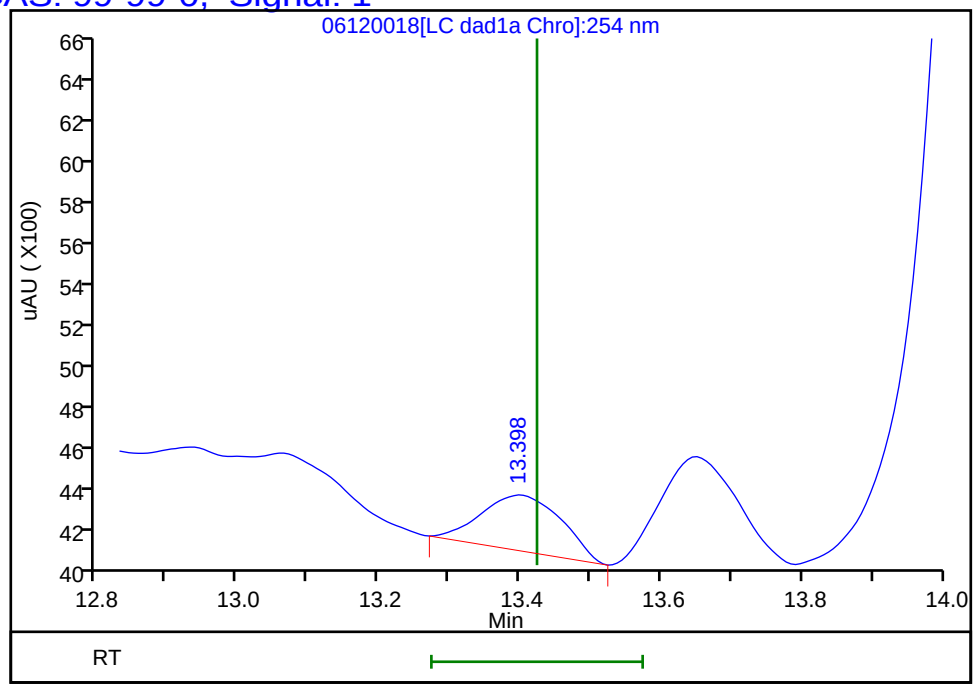
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.40
Response: 2143
Amount: 0.018964



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

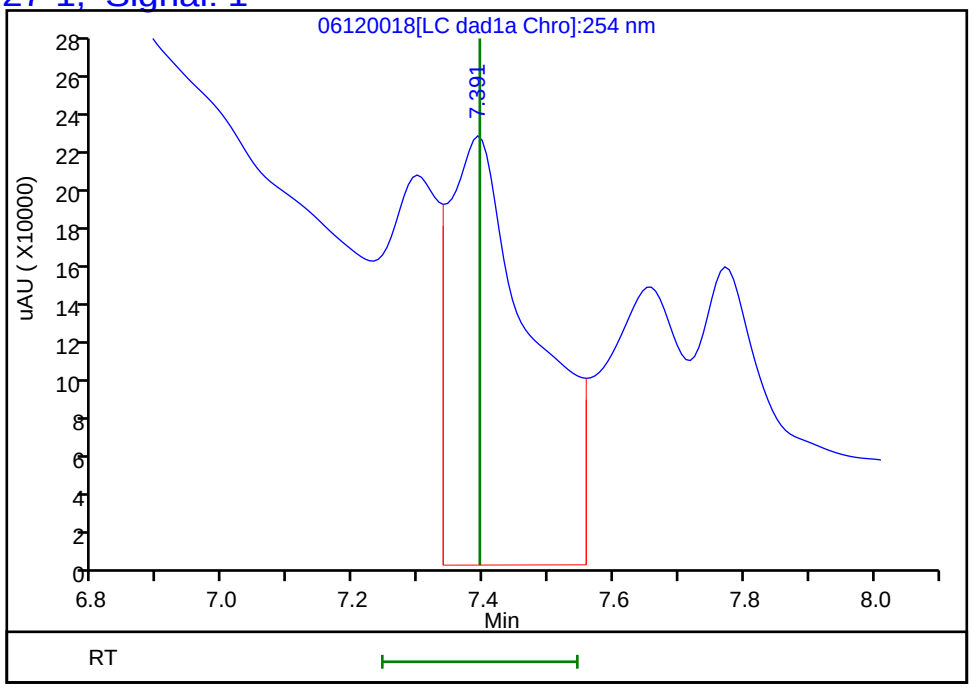
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.39
Response: 1995131
Amount: 12.584068



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

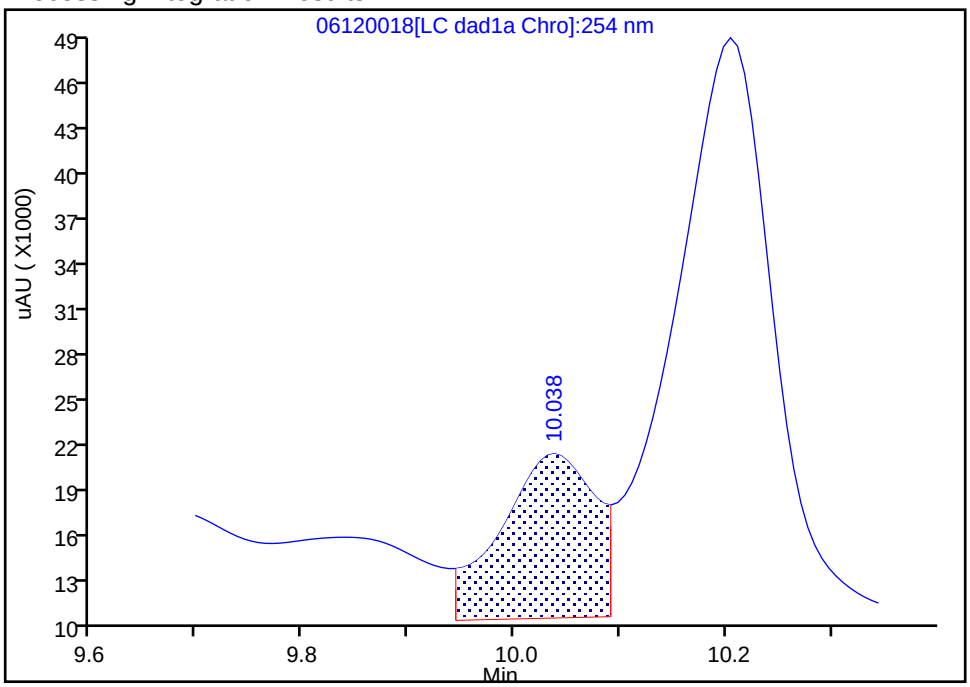
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

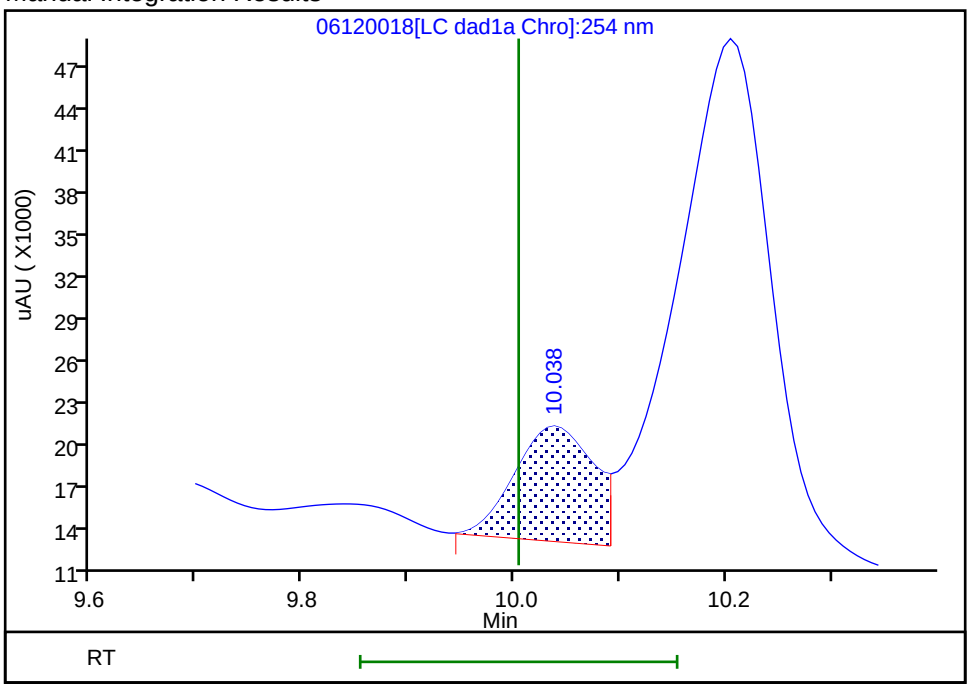
Processing Integration Results

RT: 10.04
Area: 65733
Amount: 0.328005
Amount Units: ug/mL



Manual Integration Results

RT: 10.04
Area: 41370
Amount: 0.206434
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 18:05:29
Audit Action: Assigned New Baseline Audit Reason: Baseline

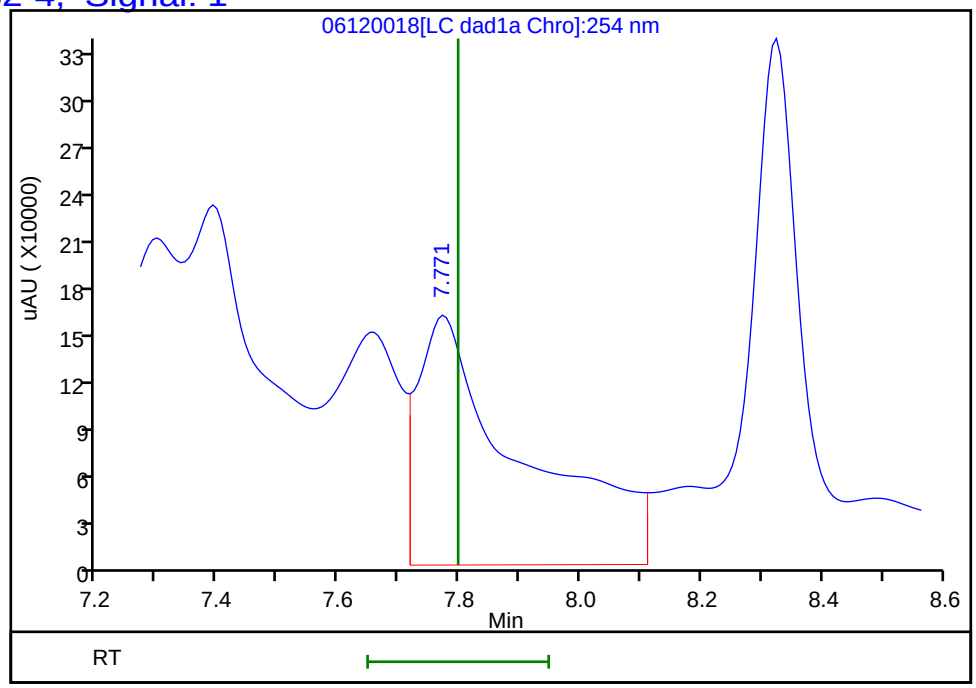
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.77
Response: 1832671
Amount: 15.715828



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

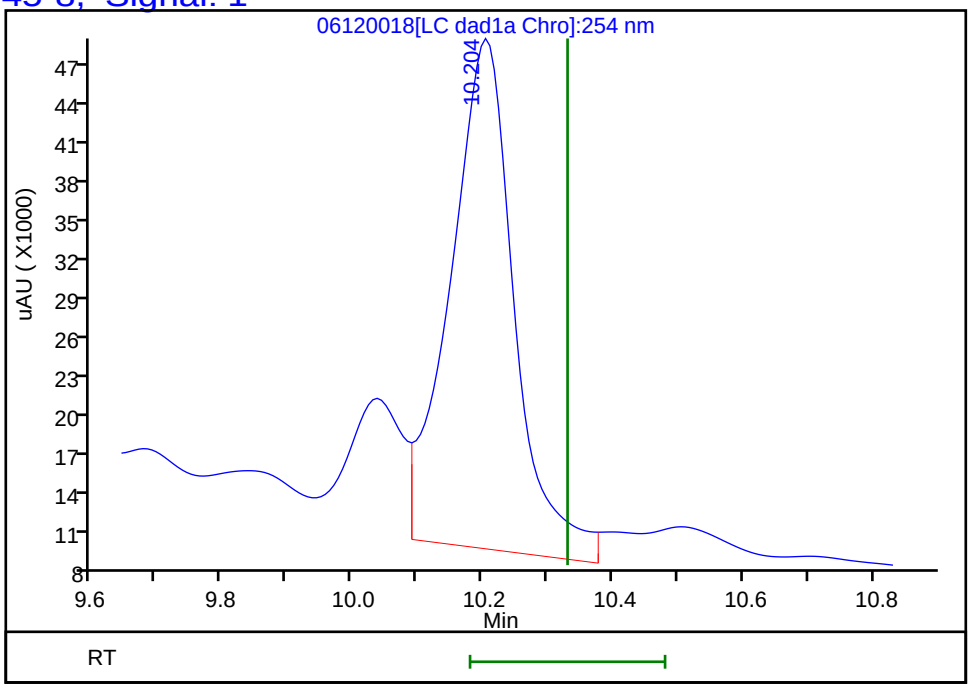
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120018.d				
Injection Date:	12-Jun-2020 17:39:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.20
Response: 261733
Amount: 1.478451



Reviewer: zhangji, 12-Jun-2020 18:05:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID: EW7-PM22B-3-35
Lab Sample ID: 280-137084-5
Matrix: Water
Lab File ID: 06120034.D
Analysis Method: 8330A
Date Collected: 05/29/2020 11:25
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 435.9(mL)
Date Analyzed: 06/13/2020 09:02
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.: 498568
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-08-1	3-Nitrotoluene	0.46	U M	0.46	0.46	0.22
98-95-3	Nitrobenzene	0.23	U	0.24	0.23	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120034.D				
Lims ID:	280-137084-A-5-A				
Client ID:	EW7-PM22B-3-35				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 09:02:41	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-5-A				
Misc. Info.:	280-0092371-034				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 18:01:46

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.161			ND	
	7 MNX	1		7.876			ND	
	8 RDX	1		9.387			ND	
	9 Nitrobenzene	1		12.281			ND	
$	10 1,2-Dinitrobenzene	1	13.252	13.294	-0.042	54514	0.1900	M
	12 1,3-Dinitrobenzene	1		15.827			ND	
	14 o-Nitrotoluene	1		16.747			ND	U
	15 p-Nitrotoluene	1		17.041			ND	
	16 4-Amino-2,6-dinitrotoluene	1		17.487			ND	
	17 m-Nitrotoluene	1		17.967			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	18.318	18.427	-0.109	31551	0.0678	
	19 1,3,5-Trinitrobenzene	1		19.154			ND	
	20 2,6-Dinitrotoluene	1		20.081			ND	
	21 2,4-Dinitrotoluene	1		20.601			ND	
	22 Tetryl	1		23.908			ND	
	23 2,4,6-Trinitrotoluene	1		24.914			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

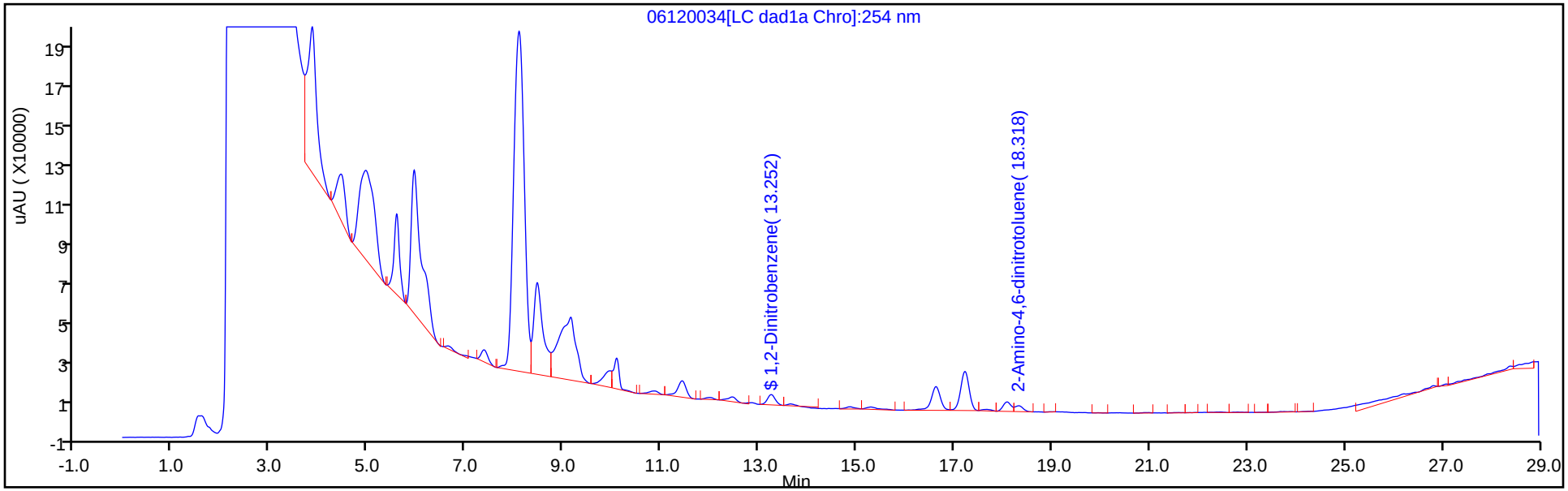
U - Marked Undetected

Report Date: 16-Jun-2020 18:53:19 Chrom Revision: 2.3 10-Jun-2020 22:46:48

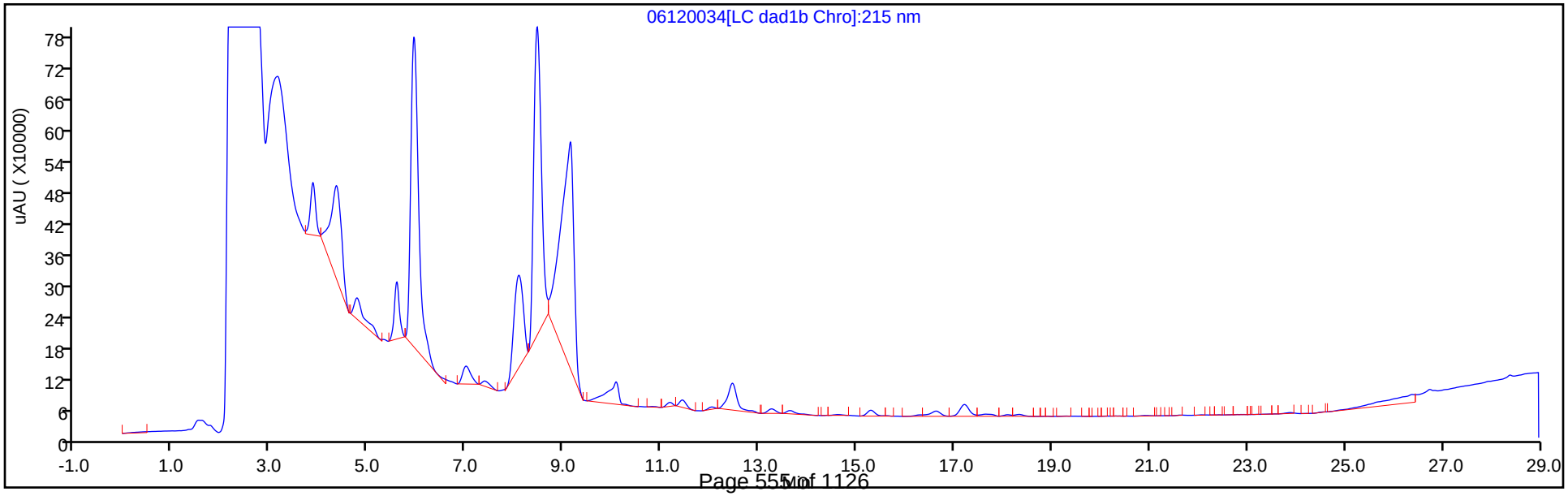
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120034.d				
Injection Date:	13-Jun-2020 09:02:41	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5	Worklist Smp#:	34
Client ID:	EW7-PM22B-3-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120034.D				
Lims ID:	280-137084-A-5-A				
Client ID:	EW7-PM22B-3-35				
Sample Type:	Client				
Inject. Date:	13-Jun-2020 09:02:41	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-137084-A-5-A				
Misc. Info.:	280-0092371-034				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:19	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 18:01:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1900	95.00

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

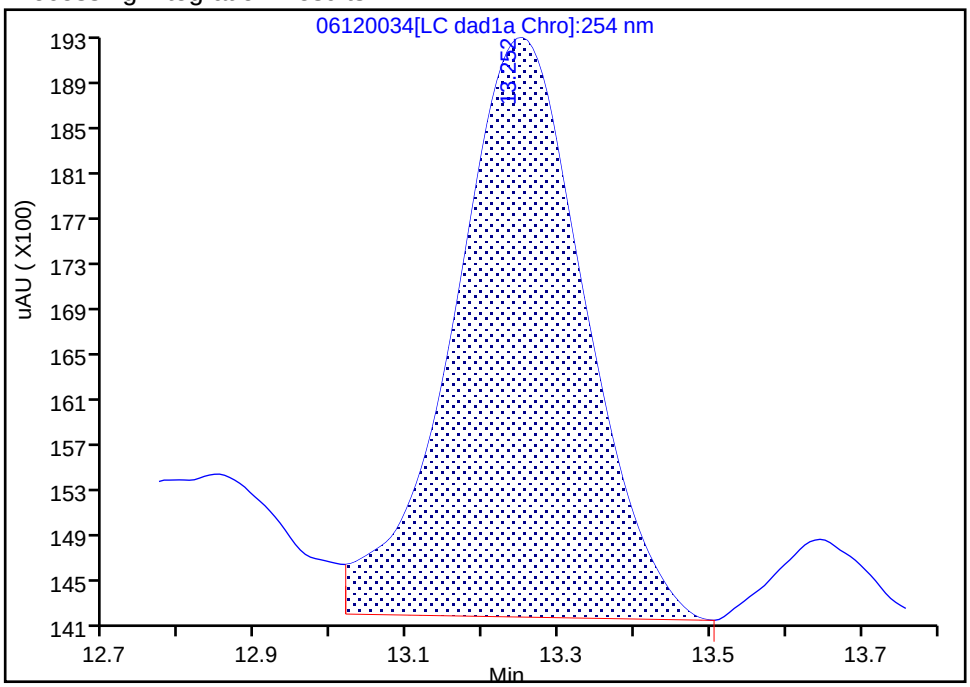
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120034.d				
Injection Date:	13-Jun-2020 09:02:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

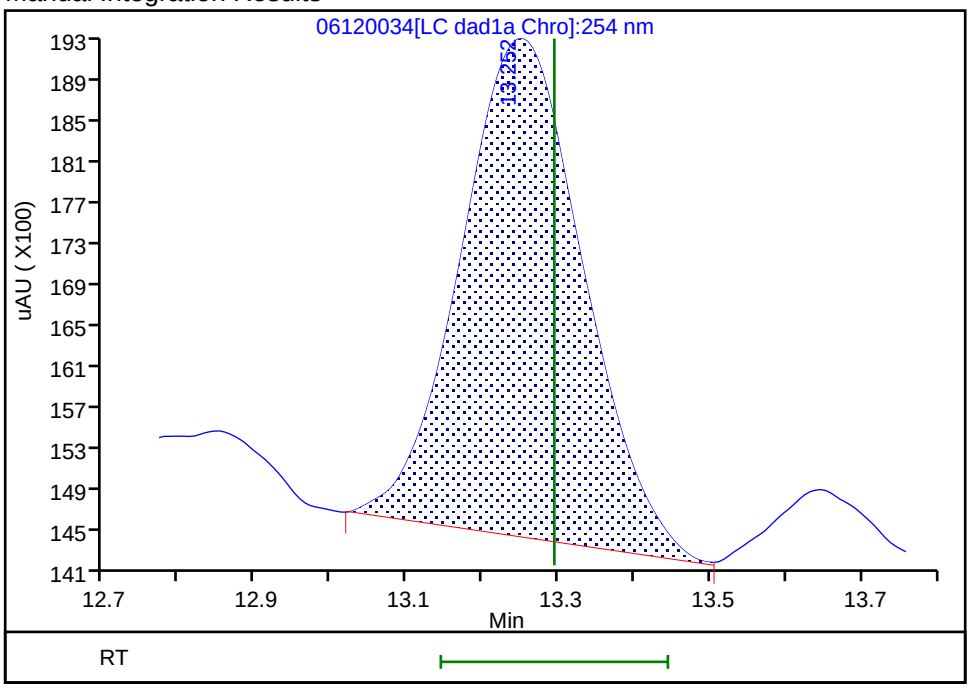
Processing Integration Results

RT: 13.25
Area: 60558
Amount: 0.211808
Amount Units: ug/ml



Manual Integration Results

RT: 13.25
Area: 54514
Amount: 0.190006
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 18:01:44
Audit Action: Assigned New Baseline Audit Reason: Baseline

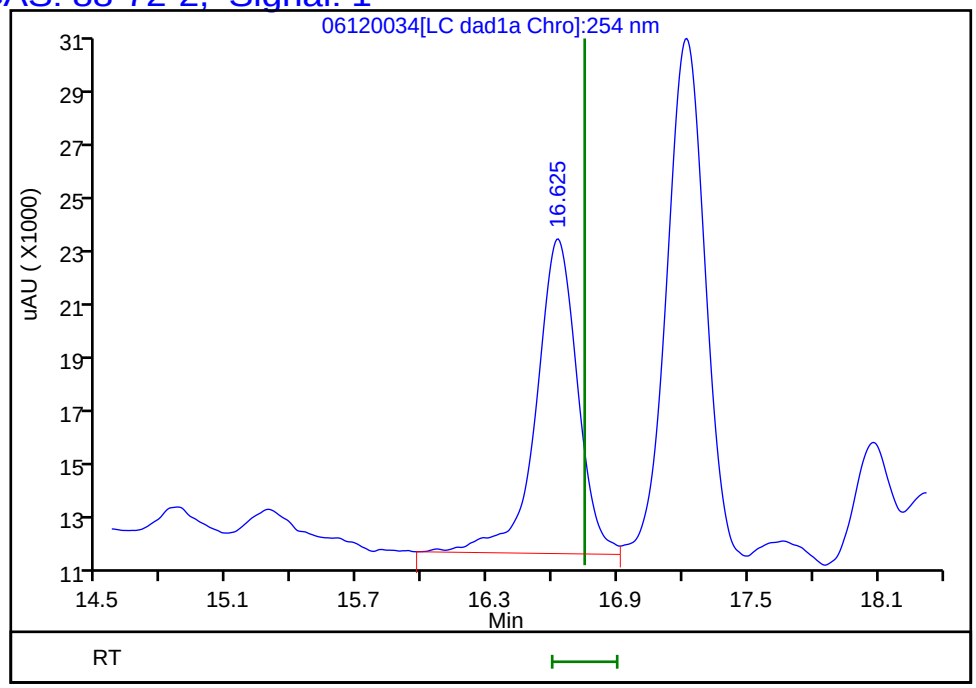
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120034.d				
Injection Date:	13-Jun-2020 09:02:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.63
Response: 148306
Amount: 0.543316



Reviewer: zhangji, 16-Jun-2020 18:01:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

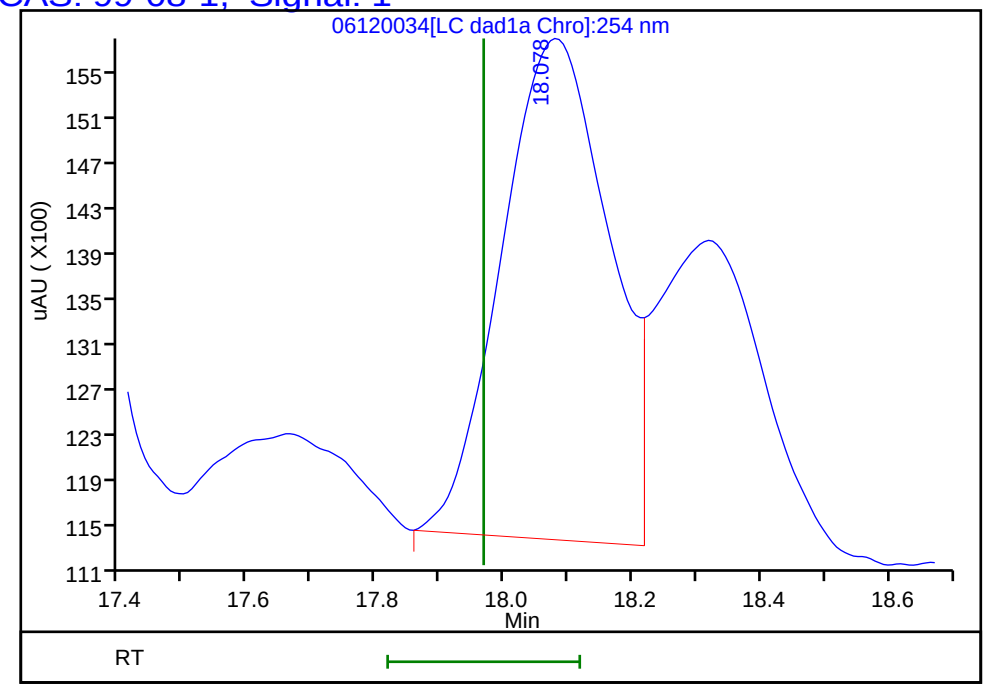
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120034.d				
Injection Date:	13-Jun-2020 09:02:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-137084-A-5-A	Lab Sample ID:	280-137084-5		
Client ID:	EW7-PM22B-3-35				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.08
Response: 51760
Amount: 0.173501



Reviewer: zhangji, 16-Jun-2020 18:01:46
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.: 280-137084-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Picric acid		6.322	6.331	6.308	6.300	6.267	6.235	6.195	+++++		6.150 - 6.450	6.280
HMX		6.982	6.984	6.994	6.986	6.987	6.982	6.968	6.916		6.836 - 7.136	6.975
RDX		9.095	9.184	9.181	9.173	9.173	9.162	9.148	9.076		9.023 - 9.323	9.149
Nitrobenzene		12.095	12.110	12.114	12.106	12.107	12.095	12.088	11.995		11.956 - 12.256	12.089
1,3-Dinitrobenzene		15.542	15.544	15.554	15.553	15.553	15.548	15.541	15.469		15.403 - 15.703	15.538
Nitroglycerin		15.855	15.844	15.848	15.853	15.853	15.842	15.848	15.782		15.703 - 16.003	15.841
2-Nitrotoluene		16.515	16.550	16.534	16.533	16.540	16.535	16.535	16.475		16.383 - 16.683	16.527
4-Nitrotoluene		16.795	16.837	16.828	16.820	16.820	16.808	16.815	16.715		16.670 - 16.970	16.805
4-Amino-2,6-dinitrotoluene		17.155	17.157	17.148	17.146	17.153	17.142	17.141	17.069		16.996 - 17.296	17.139
3-Nitrotoluene		17.748	17.724	17.741	17.753	17.747	17.742	17.741	17.782		17.603 - 17.903	17.747
2-Amino-4,6-dinitrotoluene		18.048	18.030	18.054	18.046	18.040	18.035	18.028	17.935		17.896 - 18.196	18.027
1,3,5-Trinitrobenzene		18.855	18.864	18.881	18.886	18.887	18.875	18.881	18.829		18.736 - 19.036	18.870
2,6-Dinitrotoluene	+++++	19.828	19.817	19.794	19.806	19.807	19.795	19.801	19.742		19.656 - 19.956	19.799
2,4-Dinitrotoluene	20.295	20.295	20.290	20.288	20.293	20.293	20.288	20.288	20.235		20.143 - 20.443	20.285
Tetryl		23.529	23.557	23.548	23.553	23.553	23.542	23.555	23.516		23.403 - 23.703	23.544
2,4,6-Trinitrotoluene		24.682	24.637	24.654	24.653	24.647	24.642	24.648	24.616		24.503 - 24.803	24.647
PETN		+++++	25.277	25.281	25.280	25.280	25.275	25.281	25.269		25.130 - 25.430	25.278
1,2-Dinitrobenzene		13.022	13.037	13.048	13.040	13.040	13.028	13.028	12.949		12.890 - 13.190	13.024

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Picric acid	194456 +++++	227320 170053	189240 169399	231700 174504	Ave		193810.153				13.5		20.0			
HMX	216260 175837	400720 186210	252920 179567	242940 183992	Lin2	5323.97093	177012.867							0.9900		0.9900
RDX	250504 220101	251440 221363	302380 217280	272330 219481	Ave		244359.838				12.7		20.0			
Nitrobenzene	422566 420057	411355 413613	566215 420302	425090 434621	Ave		439227.211				11.8		20.0			
1,3-Dinitrobenzene	687780 651230	649900 645107	741737 661018	688743 667994	Ave		674188.610				4.7		20.0			
Nitroglycerin	132151 128856	106184 127479	128084 121758	141489 128426	Ave		126803.331				7.9		20.0			
2-Nitrotoluene	252584 263350	272480 263733	320060 259206	290620 261684	Ave		272964.527				8.1		20.0			
4-Nitrotoluene	237944 205745	214531 233965	309222 235547	259042 231055	Ave		240881.296				13.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
4-Amino-2,6-dinitrotoluene	316356 338348	374386 325764	441918 319452	324156 321498	Ave		345234.619				12.5		20.0			
3-Nitrotoluene	284364 280237	276523 288039	385215 286309	305554 280373	Ave		298326.800				12.1		20.0			
2-Amino-4,6-dinitrotoluene	449641 452344	413386 446609	577331 454954	473367 454056	Ave		465211.017				10.4		20.0			
1,3,5-Trinitrobenzene	473888 459025	432016 445838	531916 461195	509261 466466	Ave		472450.766				7.0		20.0			
2,6-Dinitrotoluene	+++++ 296084 293622	462869 294056	380618 294513	345209 297272	Lin2	4435.95604	289218.236							0.9990		0.9900
2,4-Dinitrotoluene	636653 610554 606816	669761 610082	743068 605778	672311 605997	Ave		640113.339				7.4		20.0			
Tetryl	368208 349575	394172 348927	403234 350489	384701 350116	Ave		368677.570				6.1		20.0			
2,4,6-Trinitrotoluene	399076 406271	460040 393653	565060 401302	430359 406644	Lin1	3158.03416	401610.023							0.9990		0.9900
PETN	135296 128081	+++++ 139434	204240 136840	132172 136576	Lin1	27366.0232	129287.517							0.9980		0.9900
1,2-Dinitrobenzene	249500 288347	337440 268080	374880 263961	306830 274673	Lin1	1839.02265	277228.024							0.9970		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Picric acid	Ave	68021	5683 118579	9462 174504	23170 +++++	48614	0.400	0.0250 0.700	0.0500 1.00	0.100 +++++	0.250
HMX	Lin2	74484	10018 125697	12646 183992	24294 439592	54065	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	88545	6286 152096	15119 219481	27233 550253	62626	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	166107	10325 295388	28424 436359	42679 1054344	106064	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	258559	16280 463638	37161 669330	69012 1631331	172289	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	509915	26546 852305	64042 1284256	141489 3221406	330378	4.00	0.250 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	105493	6812 181444	16003 261684	29062 658375	63146	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	93773	5374 165213	15492 231517	25956 515391	59605	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	130436	9369 223840	22118 321819	32448 846716	79168	0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	115331	6920 200617	19280 280653	30586 701292	71162	0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	179358	10376 319742	28982 455872	47526 1135384	112860	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Ave	178692	10822 323482	26649 467399	51028 1149858	118709	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Lin2	+++++ 118093	11618 206984	19107 298461	34659 736990	74317	+++++ 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	7990 245009	16811 425741	37302 608421	67500 1523108	153249	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Tetryl	Ave	139850	9874 245833	20202 350816	38547 875686	92236	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
2,4,6-Trinitrotoluene	Lin1	158091	11547 282035	28366 408271	43208 1019741	100168	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
PETN	Lin1	557734	+++++ 957879	102120 1365764	132172 3202028	338241	4.00	+++++ 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Lin1	107232	8436 184773	18744 274673	30683 720867	62375	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend:

Ave = Average
Lin1 = Linear 1/conc
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140007.D
Lims ID: IC FULL 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 14-May-2020 16:16:43 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 9
Misc. Info.: 280-0091518-007
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:54 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 14-May-2020 17:09:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.302	4.366	-0.064	946682	2.50	2.21	M
2 2,4-diamino-6-nitrotoluene	1	4.769	4.880	-0.111	410736	2.50	1.70	M
5 2,4,6-Trinitrophenol	1	6.096	6.300	-0.204	359637	2.50	1.86	
6 HMX	1	6.916	6.986	-0.070	439592	2.50	2.45	
8 RDX	1	9.076	9.173	-0.097	550253	2.50	2.25	
9 Nitrobenzene	1	11.995	12.106	-0.111	1054344	2.51	2.40	
$ 10 1,2-Dinitrobenzene	1	12.949	13.040	-0.091	720867	2.50	2.59	
11 3,5-Dinitroaniline	1	14.795	14.886	-0.091	1218279	2.50	2.51	a
12 1,3-Dinitrobenzene	1	15.469	15.553	-0.084	1631331	2.51	2.42	
13 Nitroglycerin	2	15.782	15.853	-0.071	3221406	25.0	25.4	
14 o-Nitrotoluene	1	16.475	16.533	-0.058	658375	2.50	2.41	a
15 p-Nitrotoluene	1	16.715	16.820	-0.105	515391	2.51	2.14	a
16 4-Amino-2,6-dinitrotoluene	1	17.069	17.146	-0.077	846716	2.50	2.45	a
17 m-Nitrotoluene	1	17.782	17.753	0.029	701292	2.50	2.35	Ma
18 2-Amino-4,6-dinitrotoluene	1	17.935	18.046	-0.111	1135384	2.51	2.44	Ma
19 1,3,5-Trinitrobenzene	1	18.829	18.886	-0.057	1149858	2.51	2.43	a
20 2,6-Dinitrotoluene	1	19.742	19.806	-0.064	736990	2.51	2.53	a
21 2,4-Dinitrotoluene	1	20.235	20.293	-0.058	1523108	2.51	2.38	a
22 Tetryl	1	23.516	23.553	-0.037	875686	2.51	2.38	a
23 2,4,6-Trinitrotoluene	1	24.616	24.653	-0.037	1019741	2.51	2.53	a
24 PETN	2	25.269	25.280	-0.011	3202028	25.0	24.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

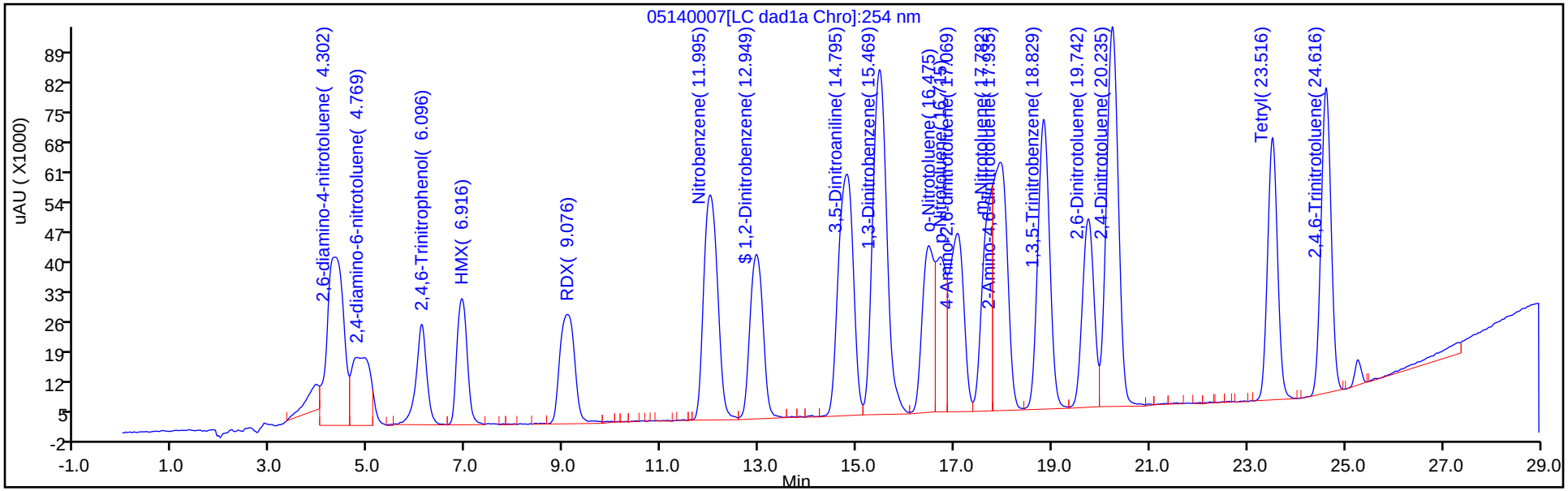
8330IntermStk_00064	Amount Added: 250.00	Units: uL
8330_ADDs_00026	Amount Added: 125.00	Units: uL

Report Date: 15-May-2020 12:00:54 Chrom Revision: 2.3 05-May-2020 17:48:18

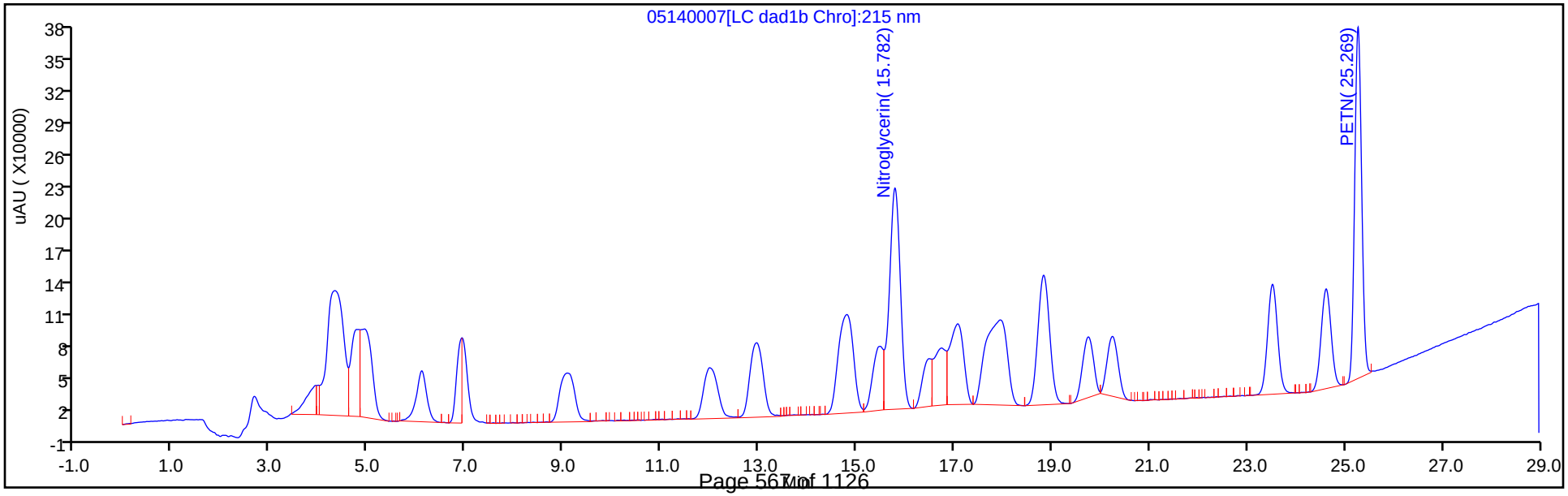
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 9			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

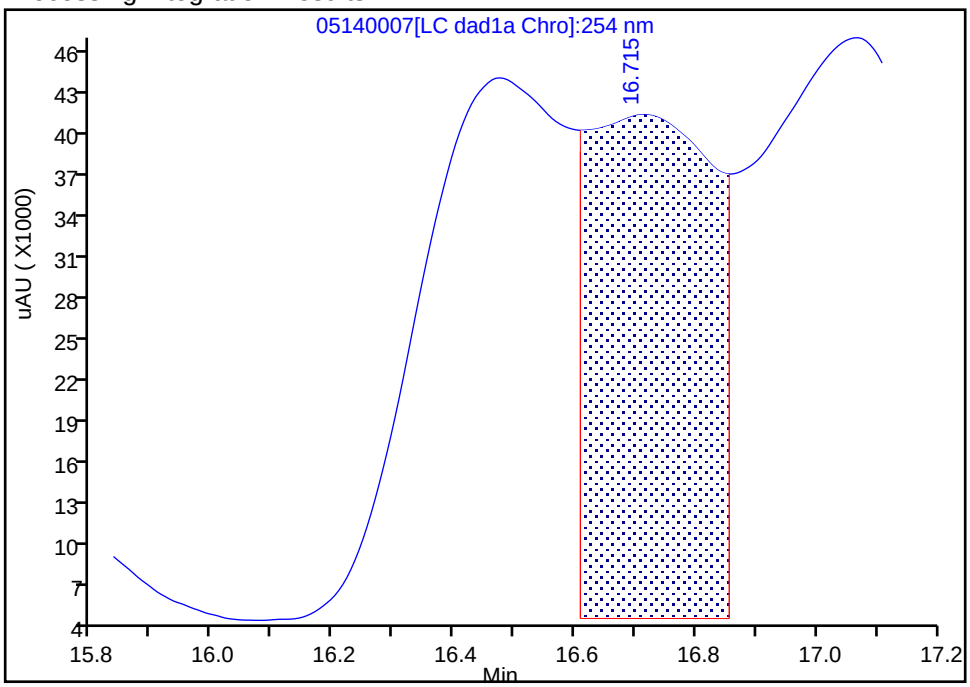
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

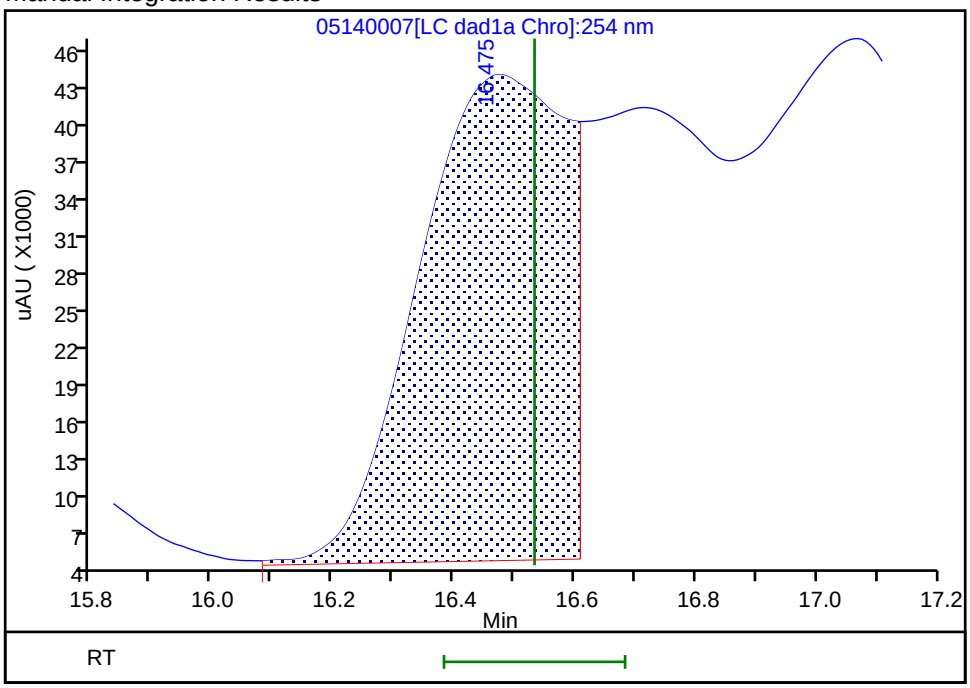
Processing Integration Results

RT: 16.72
Area: 515391
Amount: 1.955872
Amount Units: ug/ml



Manual Integration Results

RT: 16.48
Area: 658375
Amount: 2.411943
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:09:15
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

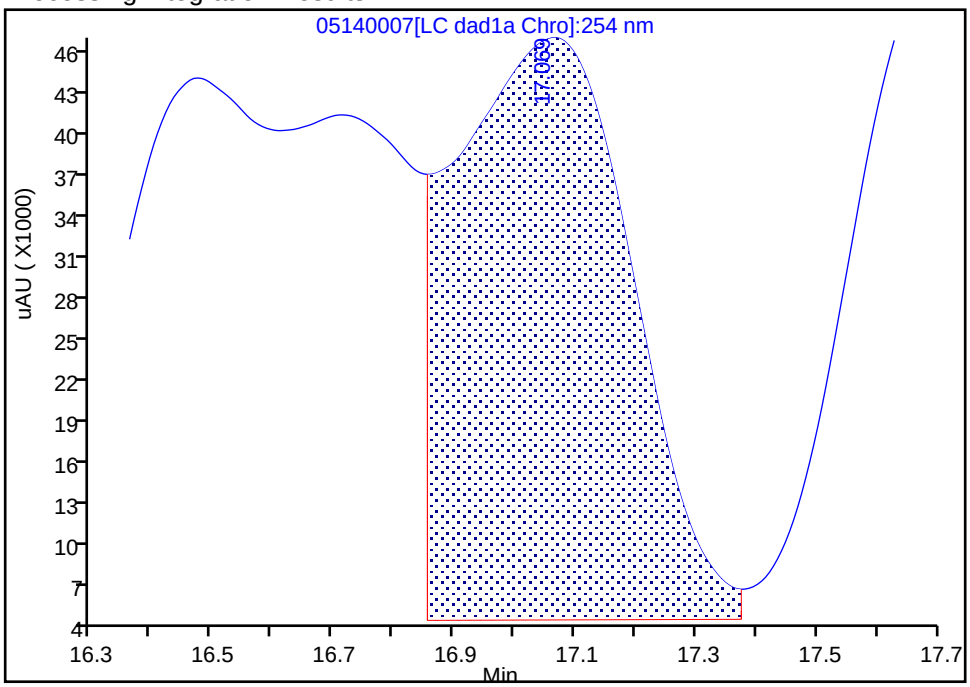
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

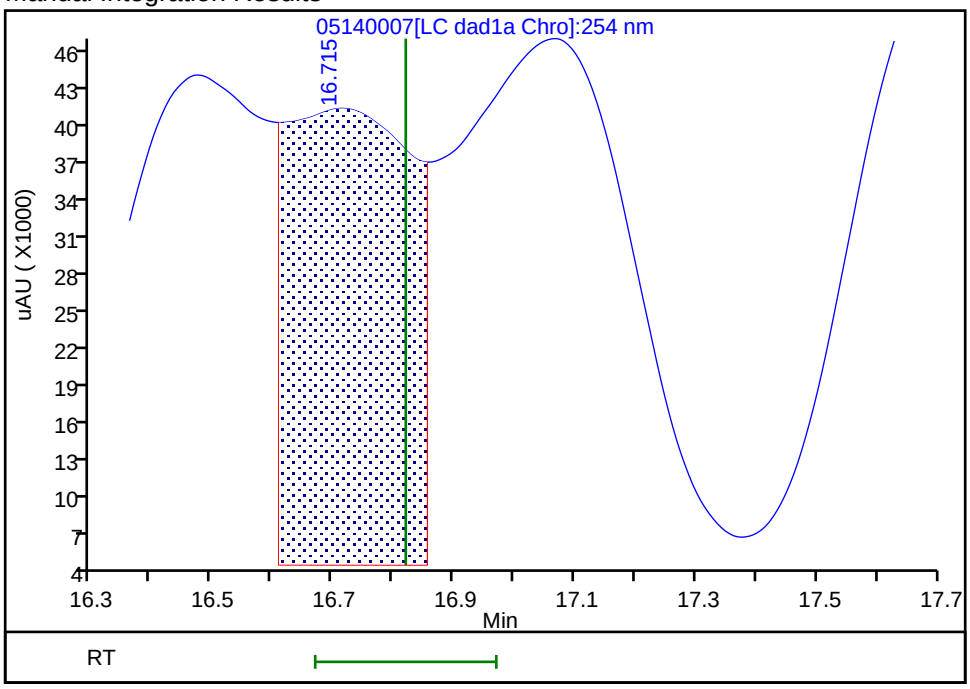
Processing Integration Results

RT: 17.07
Area: 846716
Amount: 4.099164
Amount Units: ug/ml



Manual Integration Results

RT: 16.72
Area: 515391
Amount: 2.139606
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:09:12
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

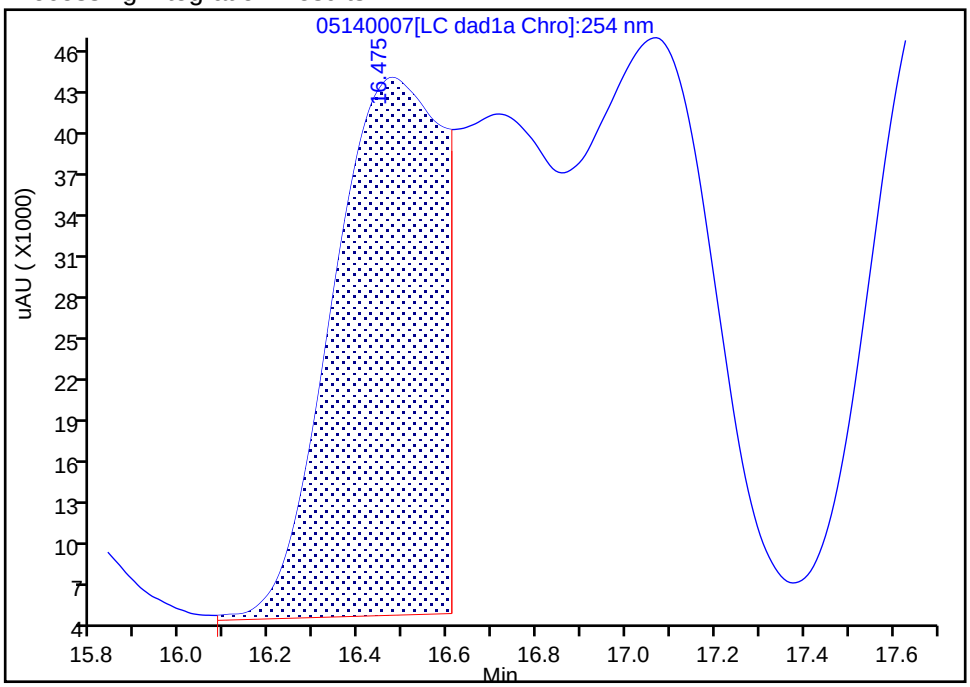
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

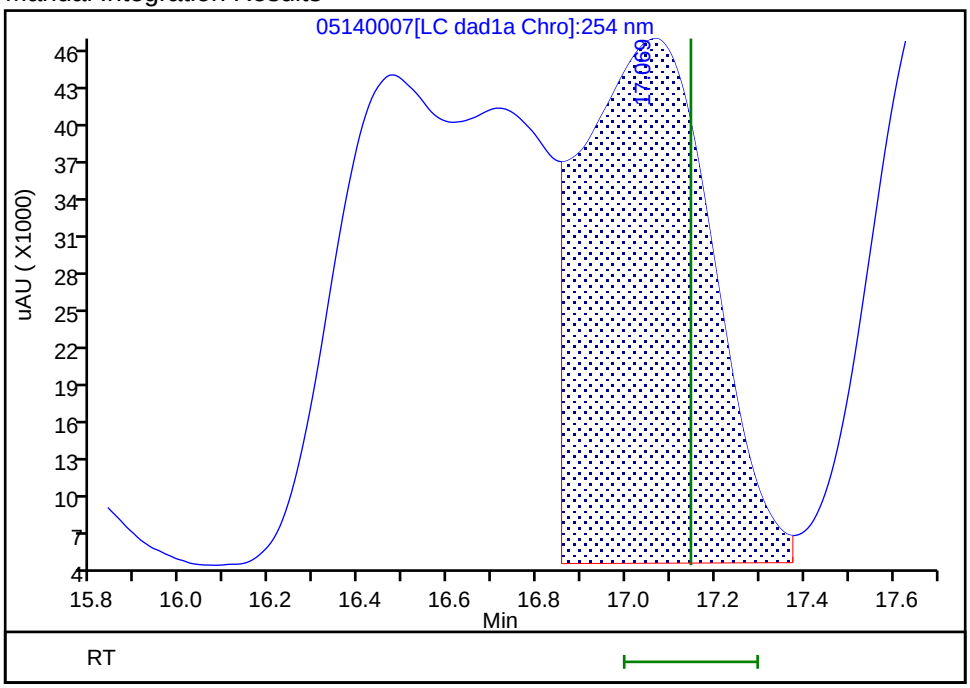
Processing Integration Results

RT: 16.48
Area: 658375
Amount: 2.145710
Amount Units: ug/ml



Manual Integration Results

RT: 17.07
Area: 846716
Amount: 2.452581
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:59
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

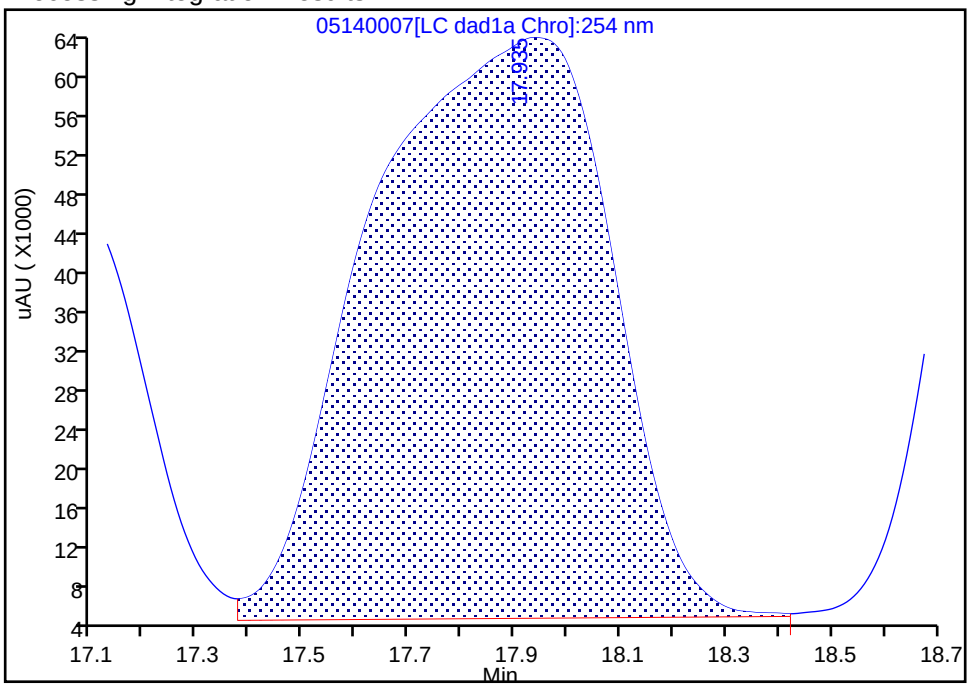
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

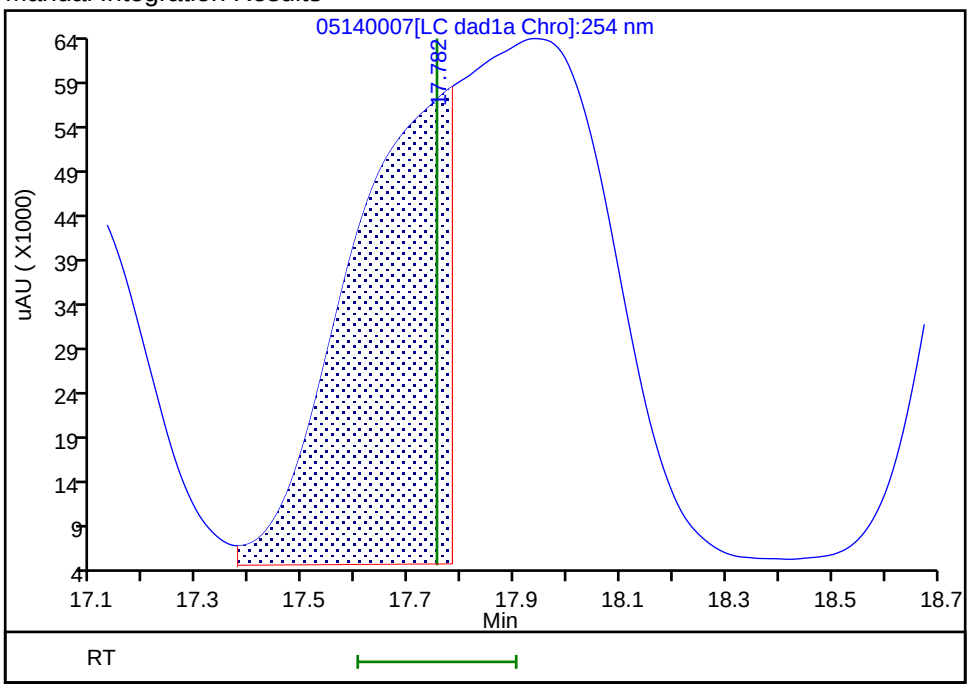
Processing Integration Results

RT: 17.94
Area: 1836650
Amount: 6.513789
Amount Units: ug/ml



Manual Integration Results

RT: 17.78
Area: 701292
Amount: 2.350751
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:45

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

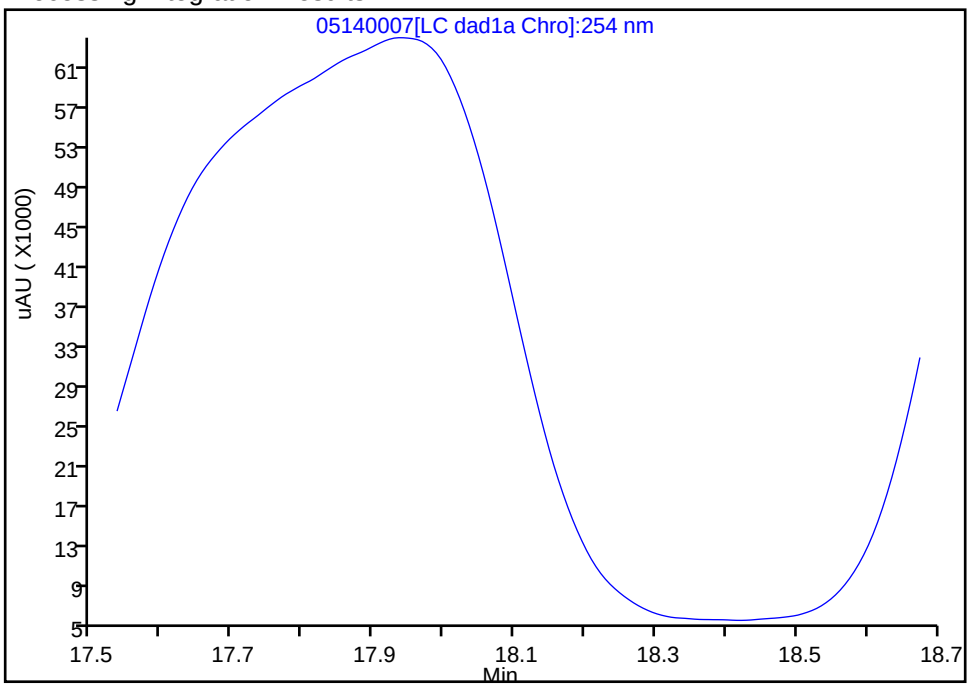
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

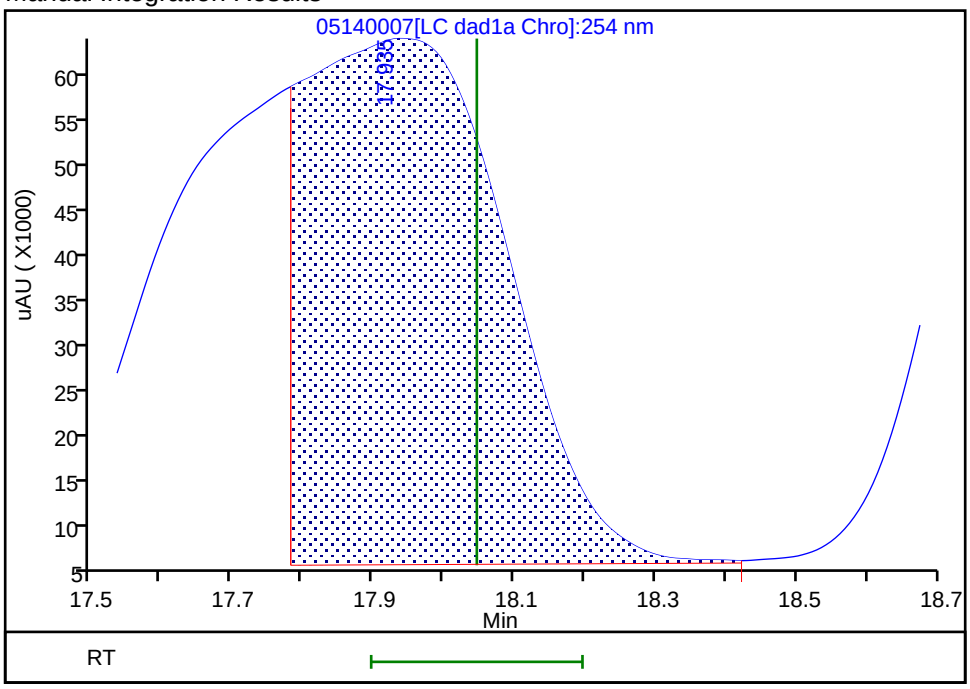
Not Detected
Expected RT: 18.05

Processing Integration Results



Manual Integration Results

RT: 17.94
Area: 1135384
Amount: 2.440578
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:40
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

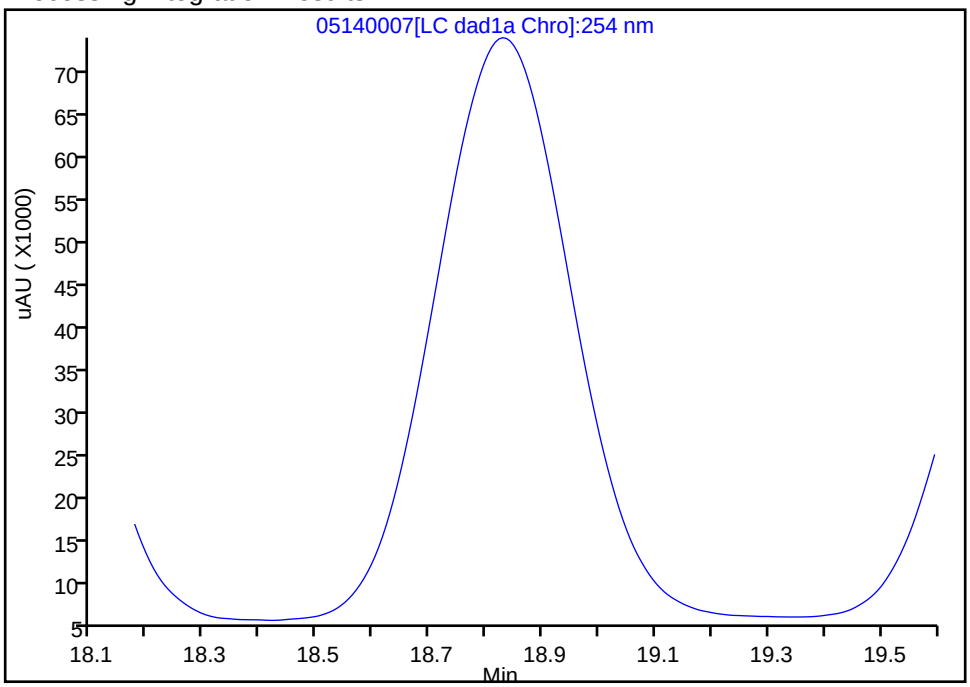
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

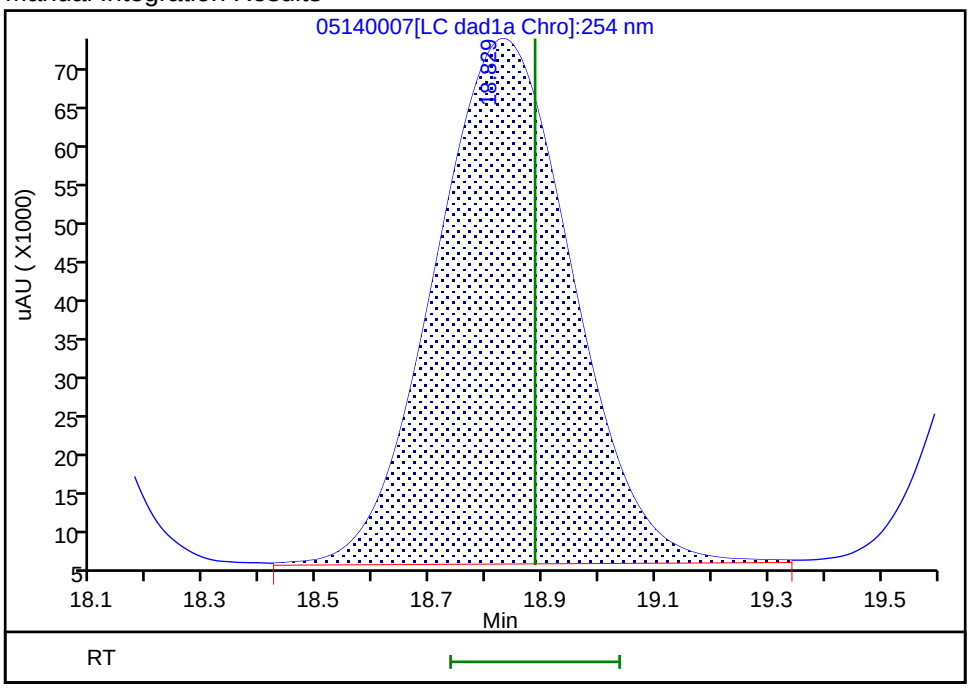
Not Detected
Expected RT: 18.89

Processing Integration Results



Manual Integration Results

RT: 18.83
Area: 1149858
Amount: 2.433816
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:26
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

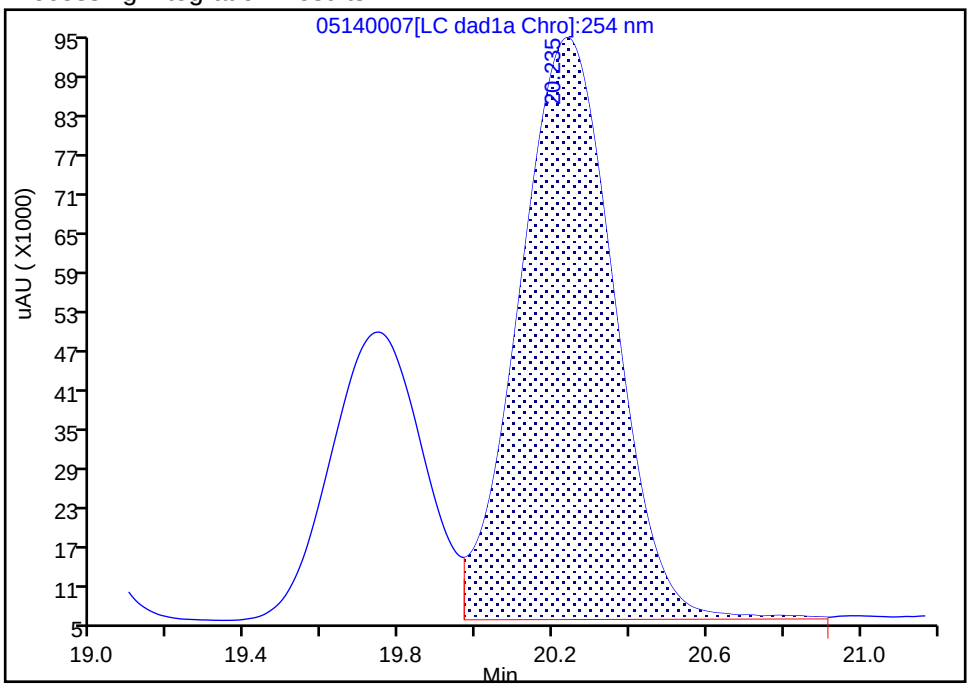
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

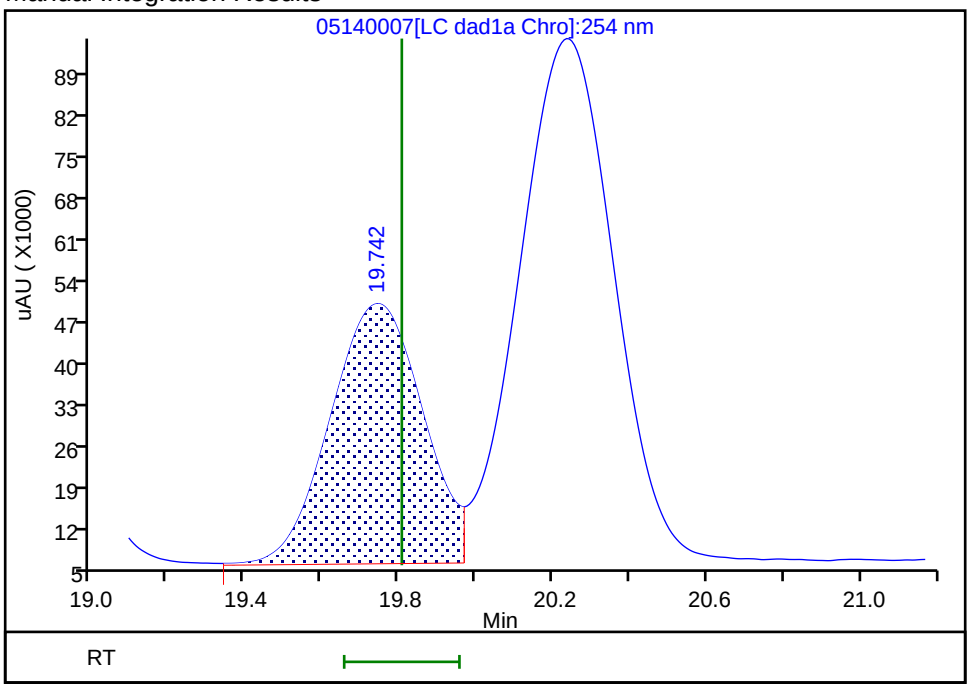
Processing Integration Results

RT: 20.24
Area: 1523108
Amount: 2.510000
Amount Units: ug/ml



Manual Integration Results

RT: 19.74
Area: 736990
Amount: 2.532876
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:23
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

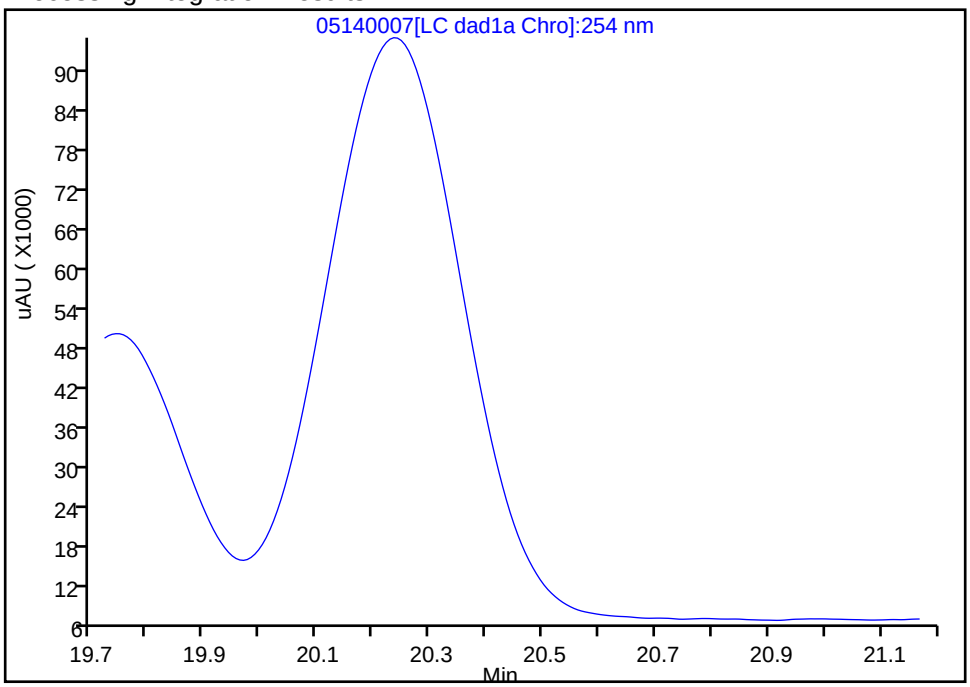
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

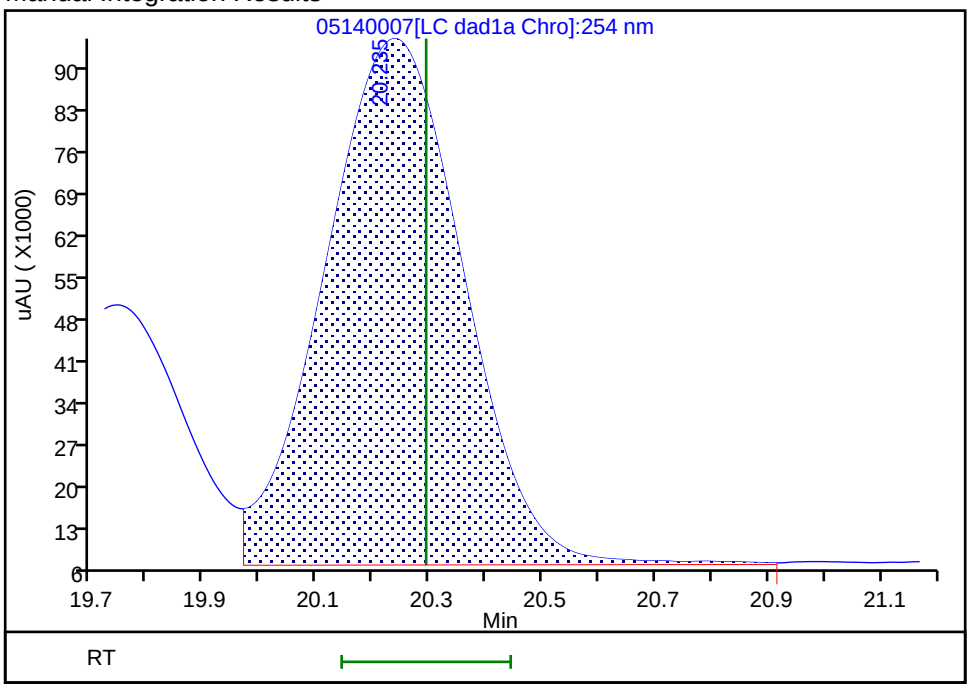
Not Detected
Expected RT: 20.29

Processing Integration Results



Manual Integration Results

RT: 20.24
Area: 1523108
Amount: 2.379435
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:20
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

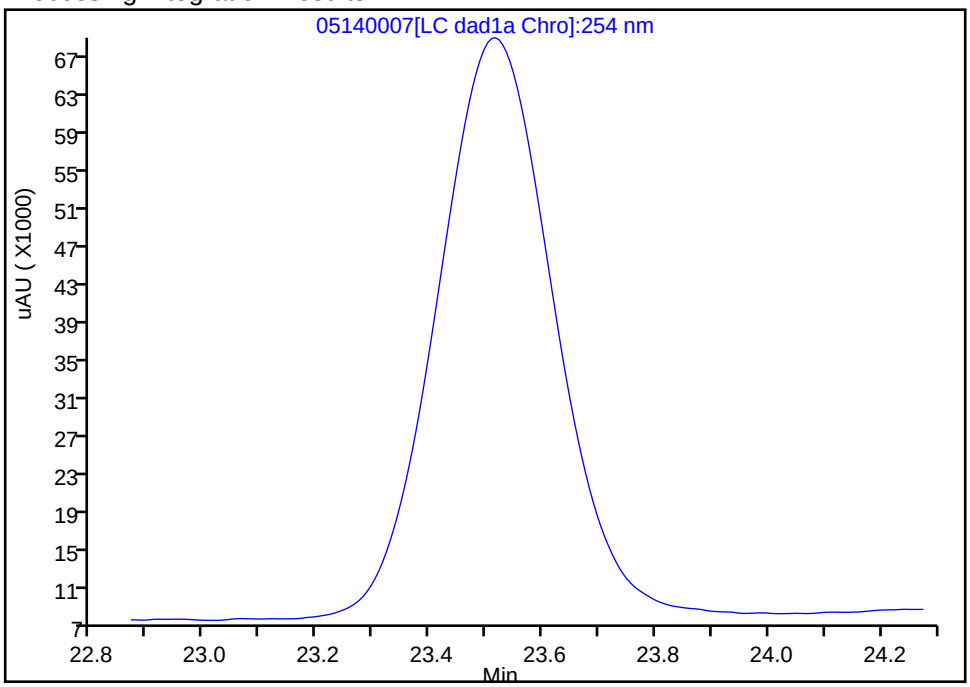
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

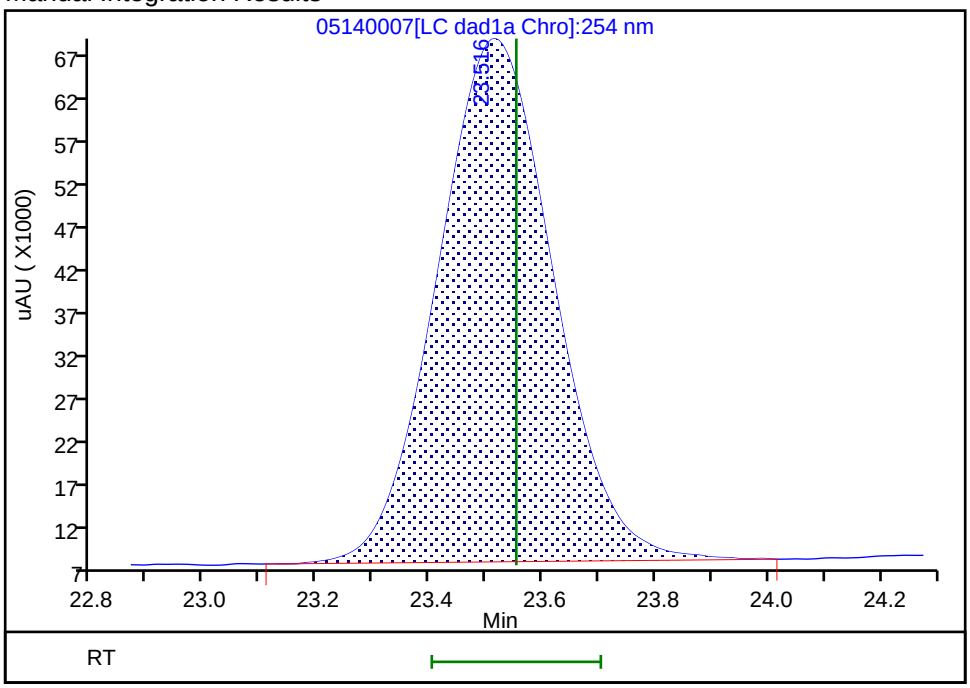
Not Detected
Expected RT: 23.55

Processing Integration Results



Manual Integration Results

RT:	23.52
Area:	875686
Amount:	2.375208
Amount Units:	ug/ml



Reviewer: zhangji, 14-May-2020 17:08:11
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

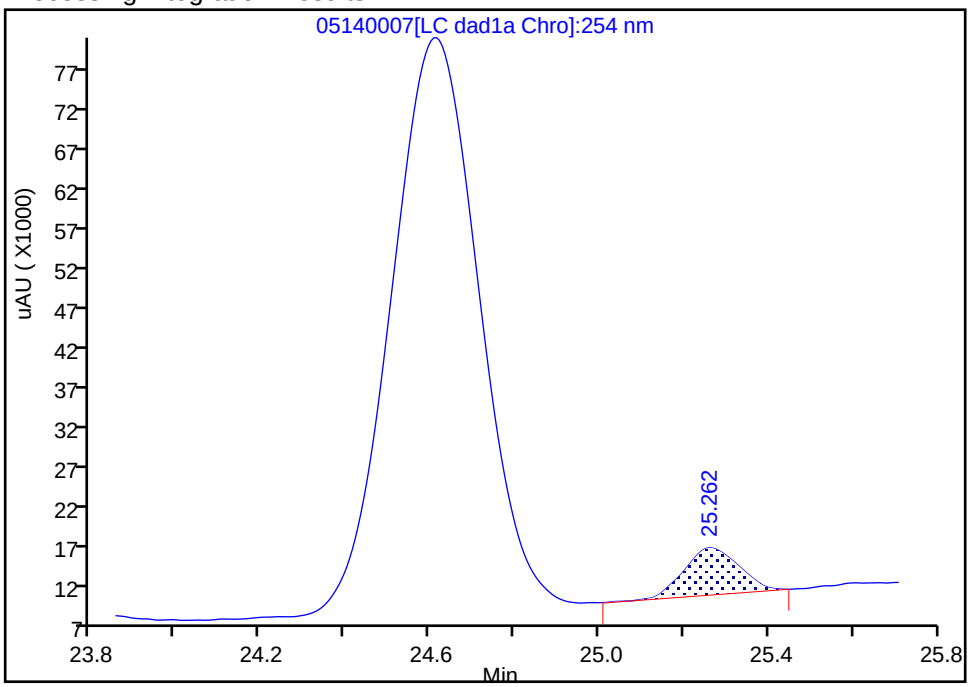
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

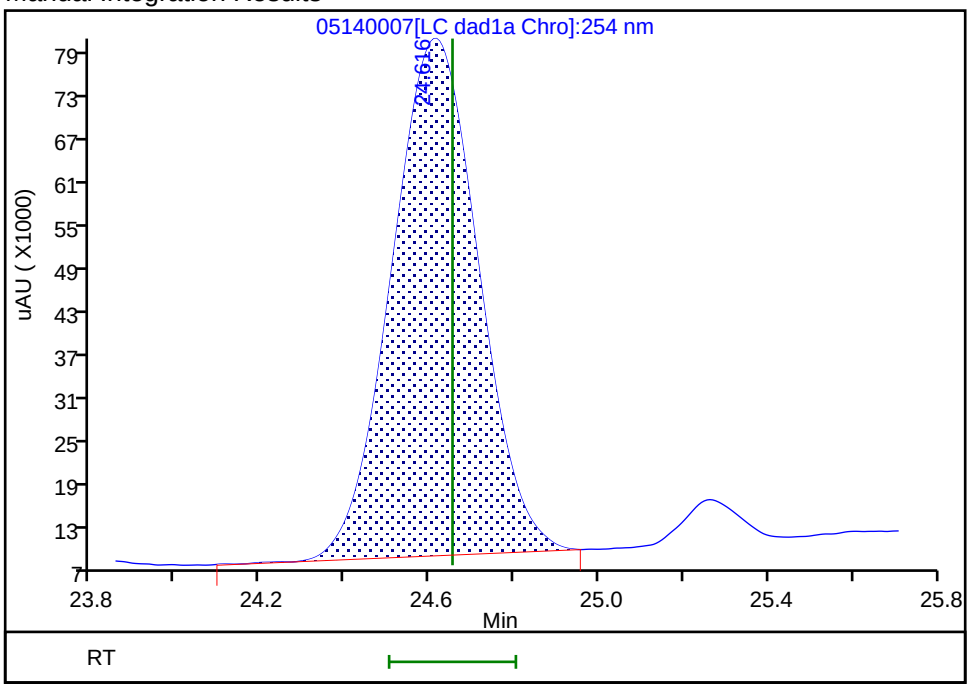
Processing Integration Results

RT: 25.26
Area: 53117
Amount: 0.098897
Amount Units: ug/ml



Manual Integration Results

RT: 24.62
Area: 1019741
Amount: 2.531269
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:08
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140008.D
Lims ID: IC FULL 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 14-May-2020 16:51:43 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 8
Misc. Info.: 280-0091518-008
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:55 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:19:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.315	4.366	-0.051	424864	1.00	0.9896	M
2 2,4-diamino-6-nitrotoluene	1	4.908	4.880	0.028	226554	1.00	0.9296	M
5 2,4,6-Trinitrophenol	1	6.195	6.300	-0.105	174504	1.00	0.9004	
6 HMX	1	6.968	6.986	-0.018	183992	1.00	1.01	
8 RDX	1	9.148	9.173	-0.025	219481	1.00	0.8982	
9 Nitrobenzene	1	12.088	12.106	-0.018	436359	1.00	0.99	
$ 10 1,2-Dinitrobenzene	1	13.028	13.040	-0.012	274673	1.00	0.9842	M
11 3,5-Dinitroaniline	1	14.868	14.886	-0.018	495596	1.00	1.02	
12 1,3-Dinitrobenzene	1	15.541	15.553	-0.012	669330	1.00	0.99	
13 Nitroglycerin	2	15.848	15.853	-0.005	1284256	10.0	10.1	
14 o-Nitrotoluene	1	16.535	16.533	0.002	261684	1.00	0.9587	
15 p-Nitrotoluene	1	16.815	16.820	-0.005	231517	1.00	0.9611	
16 4-Amino-2,6-dinitrotoluene	1	17.141	17.146	-0.005	321819	1.00	0.9322	
17 m-Nitrotoluene	1	17.741	17.753	-0.012	280653	1.00	0.9408	
18 2-Amino-4,6-dinitrotoluene	1	18.028	18.046	-0.018	455872	1.00	0.9799	
19 1,3,5-Trinitrobenzene	1	18.881	18.886	-0.005	467399	1.00	0.9893	
20 2,6-Dinitrotoluene	1	19.801	19.806	-0.005	298461	1.00	1.02	
21 2,4-Dinitrotoluene	1	20.288	20.293	-0.005	608421	1.00	0.9505	
22 Tetryl	1	23.555	23.553	0.002	350816	1.00	0.9516	
23 2,4,6-Trinitrotoluene	1	24.648	24.653	-0.005	408271	1.00	1.01	
24 PETN	2	25.281	25.280	0.001	1365764	10.0	10.4	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

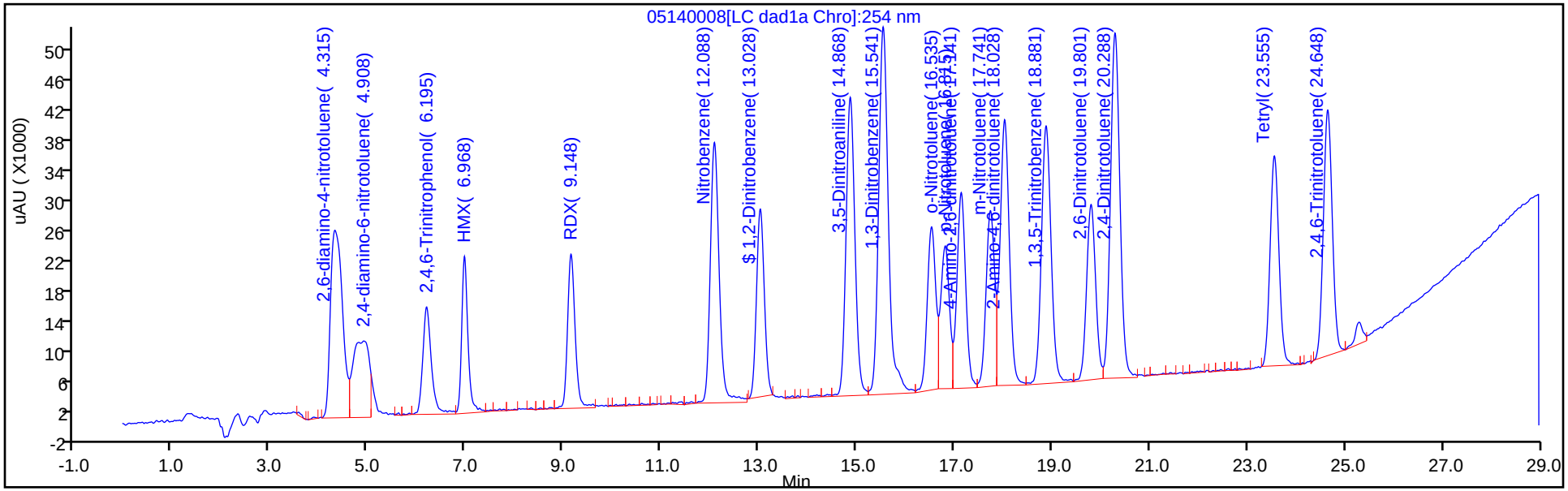
8330IntermStk_00064	Amount Added: 100.00	Units: uL
8330_ADDs_00026	Amount Added: 50.00	Units: uL

Report Date: 15-May-2020 12:00:55 Chrom Revision: 2.3 05-May-2020 17:48:18

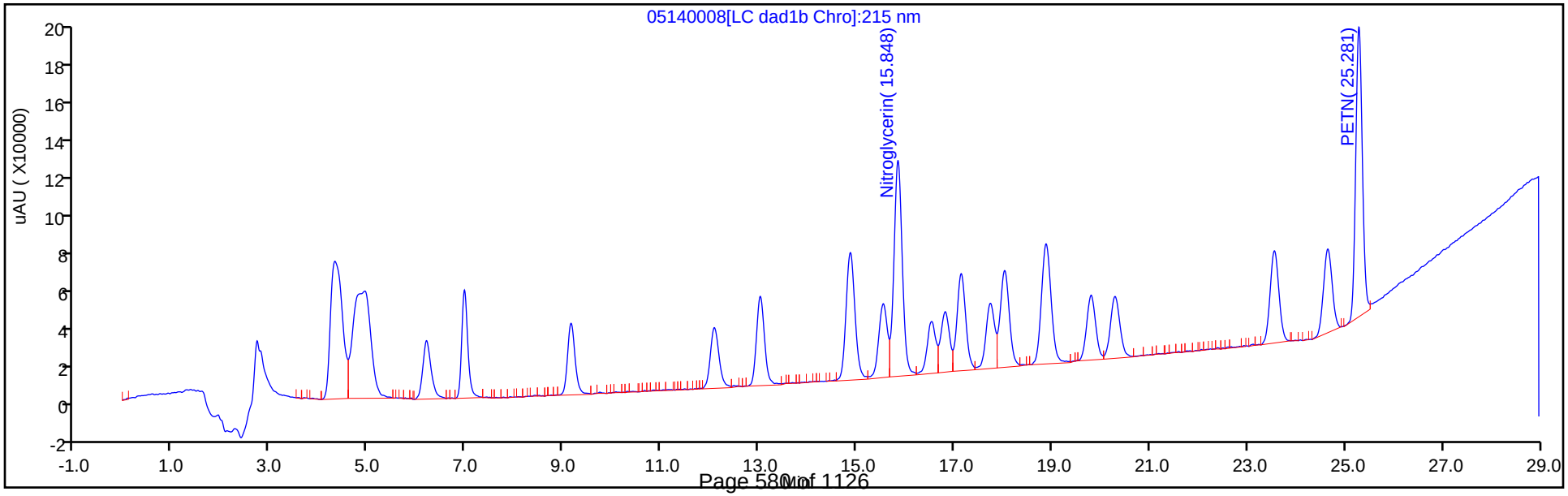
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140008.d				
Injection Date:	14-May-2020 16:51:43	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 8			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

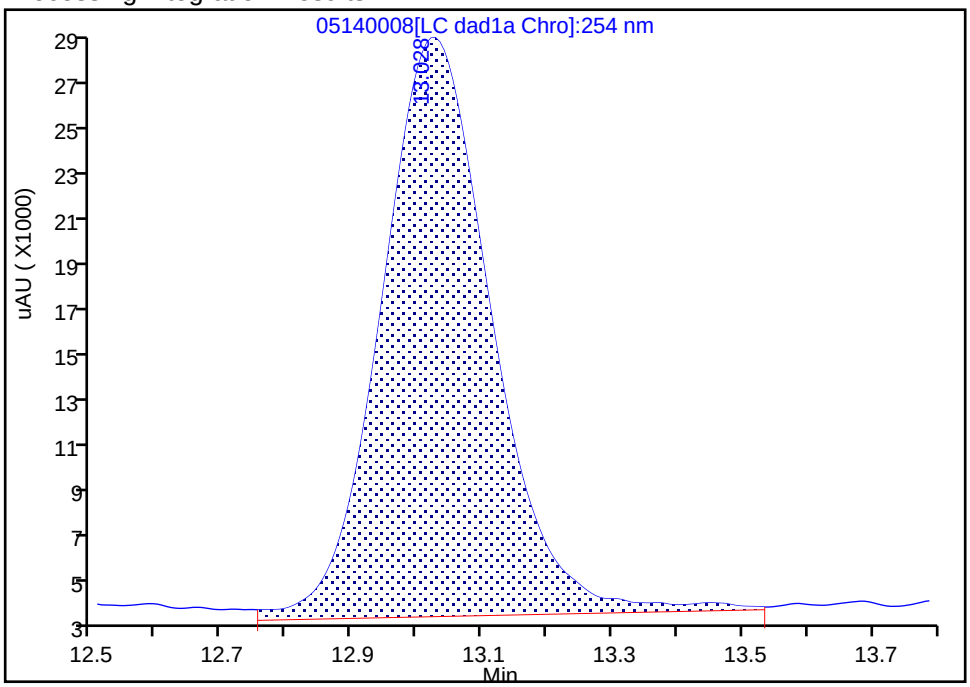
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140008.d				
Injection Date:	14-May-2020 16:51:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

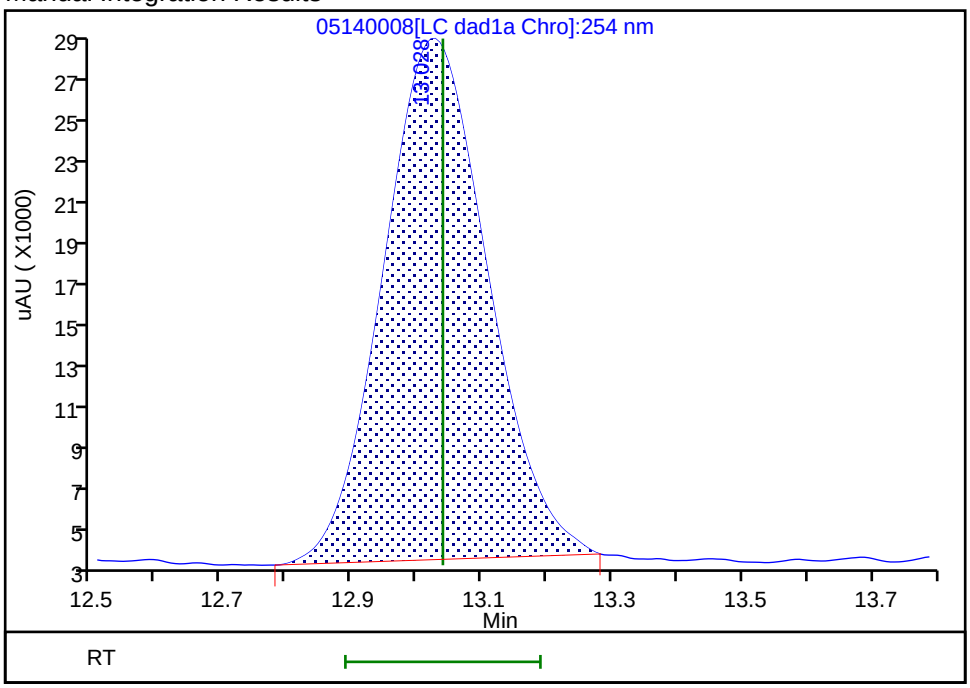
Processing Integration Results

RT: 13.03
Area: 297550
Amount: 0.923853
Amount Units: ug/ml



Manual Integration Results

RT: 13.03
Area: 274673
Amount: 0.984150
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:32

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140009.D
Lims ID: IC FULL 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-May-2020 17:26:40 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 7
Misc. Info.: 280-0091518-009
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:55 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:20:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.342	4.366	-0.024	272072	0.7000	0.6337	
2 2,4-diamino-6-nitrotoluene	1	4.915	4.880	0.035	176663	0.7000	0.7197	
5 2,4,6-Trinitrophenol	1	6.235	6.300	-0.065	118579	0.7000	0.6118	
6 HMX	1	6.982	6.986	-0.004	125697	0.7000	0.6800	
8 RDX	1	9.162	9.173	-0.011	152096	0.7000	0.6224	
9 Nitrobenzene	1	12.095	12.106	-0.011	295388	0.7028	0.6725	
$ 10 1,2-Dinitrobenzene	1	13.028	13.040	-0.012	184773	0.7000	0.6599	M
11 3,5-Dinitroaniline	1	14.875	14.886	-0.011	320559	0.7000	0.6552	
12 1,3-Dinitrobenzene	1	15.548	15.553	-0.005	463638	0.7014	0.6877	
13 Nitroglycerin	2	15.842	15.853	-0.011	852305	7.00	6.72	
14 o-Nitrotoluene	1	16.535	16.533	0.002	181444	0.7000	0.6647	
15 p-Nitrotoluene	1	16.808	16.820	-0.012	165213	0.7014	0.6859	
16 4-Amino-2,6-dinitrotoluene	1	17.142	17.146	-0.004	223840	0.7007	0.6484	
17 m-Nitrotoluene	1	17.742	17.753	-0.011	200617	0.7007	0.6725	
18 2-Amino-4,6-dinitrotoluene	1	18.035	18.046	-0.011	319742	0.7028	0.6873	
19 1,3,5-Trinitrobenzene	1	18.875	18.886	-0.011	323482	0.7014	0.6847	
20 2,6-Dinitrotoluene	1	19.795	19.806	-0.011	206984	0.7028	0.7003	
21 2,4-Dinitrotoluene	1	20.288	20.293	-0.005	425741	0.7028	0.6651	
22 Tetryl	1	23.542	23.553	-0.011	245833	0.7014	0.6668	
23 2,4,6-Trinitrotoluene	1	24.642	24.653	-0.011	282035	0.7028	0.6944	
24 PETN	2	25.275	25.280	-0.005	957879	7.00	7.20	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

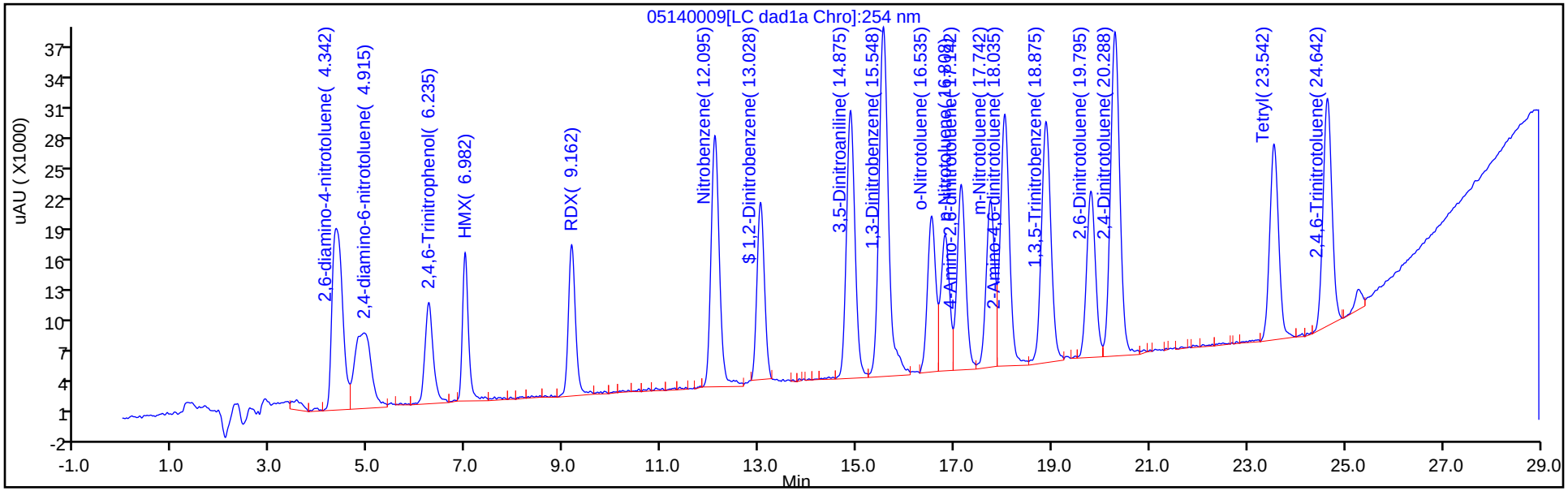
8330_ADDs_00026	Amount Added:	35.00	Units: uL
8330IntermStk_00064	Amount Added:	70.00	Units: uL

Report Date: 15-May-2020 12:00:55 Chrom Revision: 2.3 05-May-2020 17:48:18

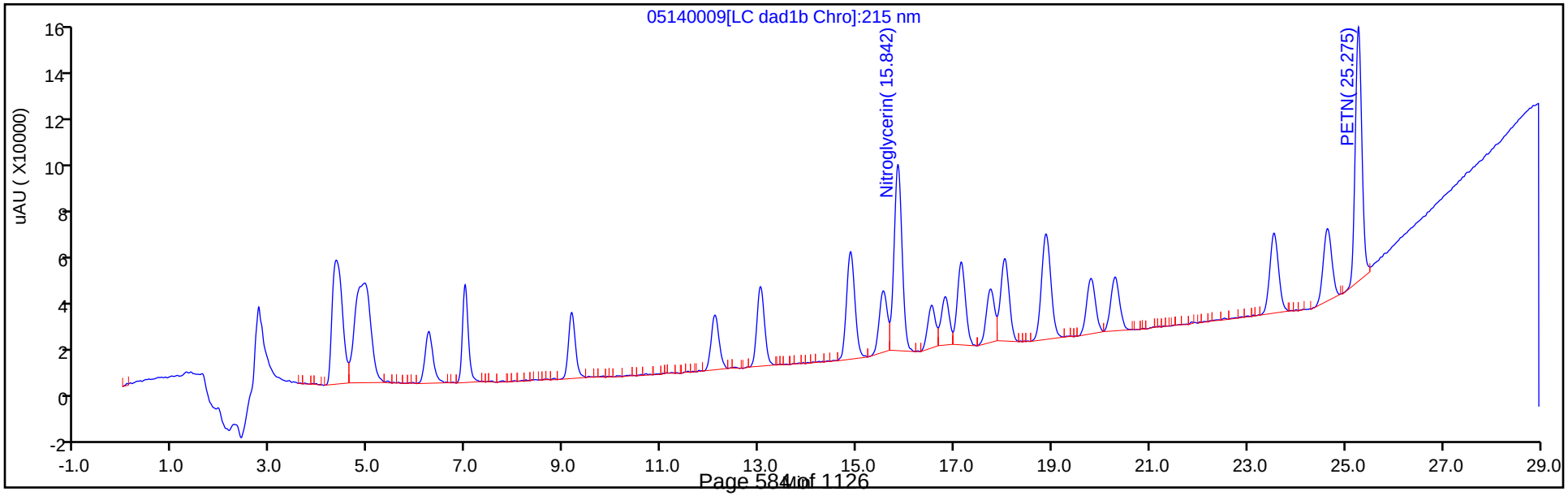
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140009.d				
Injection Date:	14-May-2020 17:26:40	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 7			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

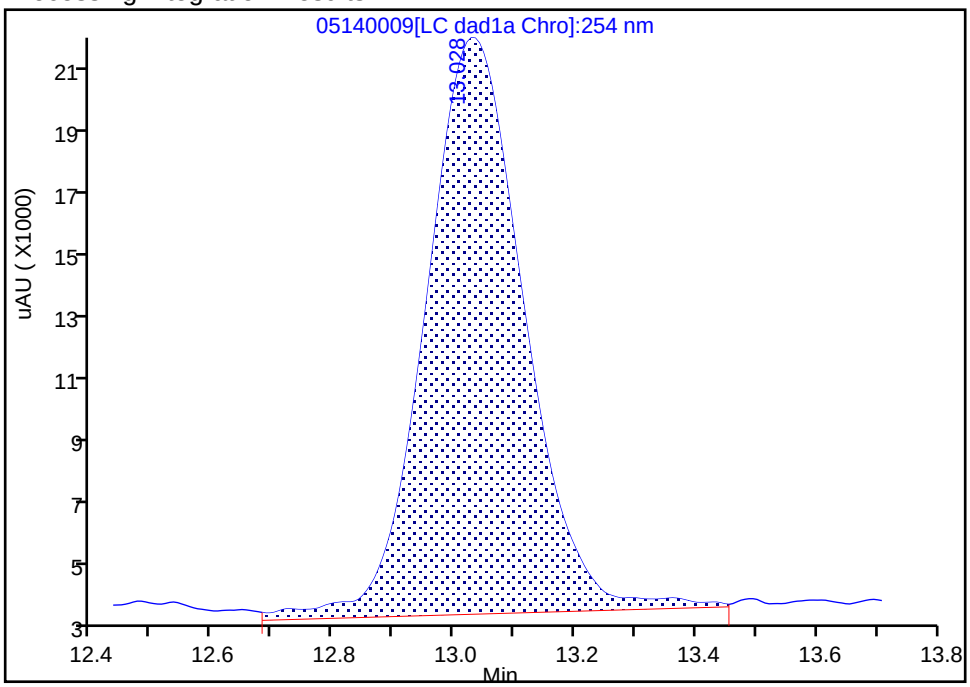
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140009.d				
Injection Date:	14-May-2020 17:26:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

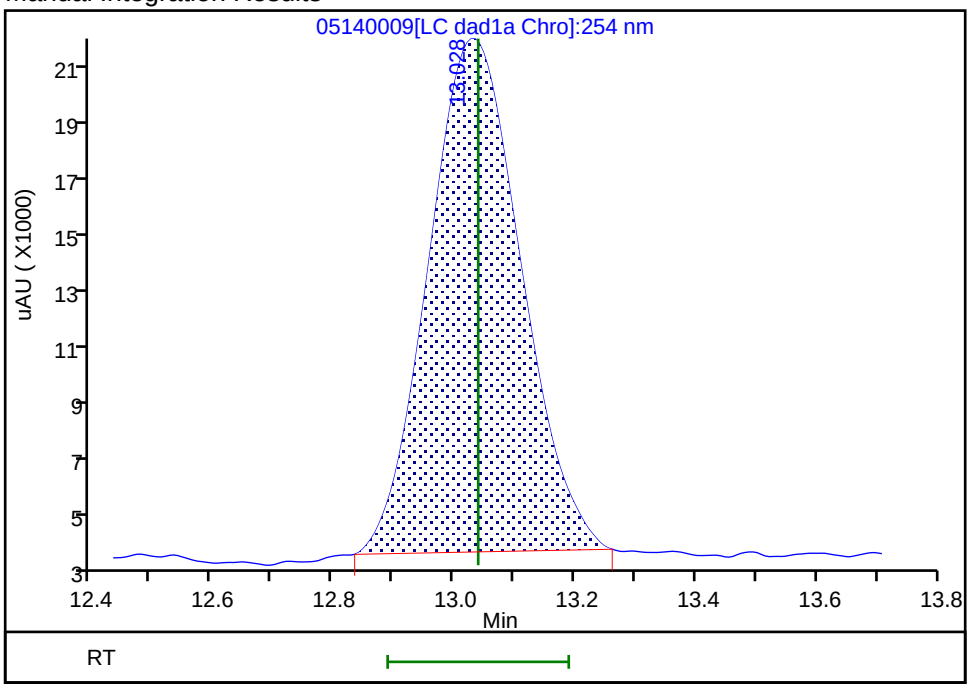
Processing Integration Results

RT: 13.03
Area: 203295
Amount: 0.637674
Amount Units: ug/ml



Manual Integration Results

RT: 13.03
Area: 184773
Amount: 0.659868
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:40

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140010.D
Lims ID: IC FULL 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-May-2020 18:01:41 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 6
Misc. Info.: 280-0091518-010
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:56 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:52:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.347	4.366	-0.019	161291	0.4000	0.3757	M
2 2,4-diamino-6-nitrotoluene	1	4.940	4.880	0.060	100170	0.4000	0.3980	M
5 2,4,6-Trinitrophenol	1	6.267	6.300	-0.033	68021	0.4000	0.3510	a
6 HMX	1	6.987	6.986	0.001	74484	0.4000	0.3907	
8 RDX	1	9.173	9.173	0.000	88545	0.4000	0.3624	
9 Nitrobenzene	1	12.107	12.106	0.001	166107	0.4016	0.3782	
$ 10 1,2-Dinitrobenzene	1	13.040	13.040	0.000	107232	0.4000	0.3802	M
11 3,5-Dinitroaniline	1	14.887	14.886	0.001	190015	0.4000	0.3861	M
12 1,3-Dinitrobenzene	1	15.553	15.553	0.000	258559	0.4008	0.3835	M
13 Nitroglycerin	2	15.853	15.853	0.000	509915	4.00	4.02	
14 o-Nitrotoluene	1	16.540	16.533	0.007	105493	0.4000	0.3865	M
15 p-Nitrotoluene	1	16.820	16.820	0.000	93773	0.4008	0.3893	M
16 4-Amino-2,6-dinitrotoluene	1	17.153	17.146	0.007	130436	0.4004	0.3778	M
17 m-Nitrotoluene	1	17.747	17.753	-0.006	115331	0.4004	0.3866	M
18 2-Amino-4,6-dinitrotoluene	1	18.040	18.046	-0.006	179358	0.4016	0.3855	M
19 1,3,5-Trinitrobenzene	1	18.887	18.886	0.001	178692	0.4008	0.3782	
20 2,6-Dinitrotoluene	1	19.807	19.806	0.001	118093	0.4016	0.3930	M
21 2,4-Dinitrotoluene	1	20.293	20.293	0.000	245009	0.4016	0.3828	M
22 Tetryl	1	23.553	23.553	0.000	139850	0.4008	0.3793	
23 2,4,6-Trinitrotoluene	1	24.647	24.653	-0.006	158091	0.4016	0.3858	
24 PETN	2	25.280	25.280	0.000	557734	4.00	4.10	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

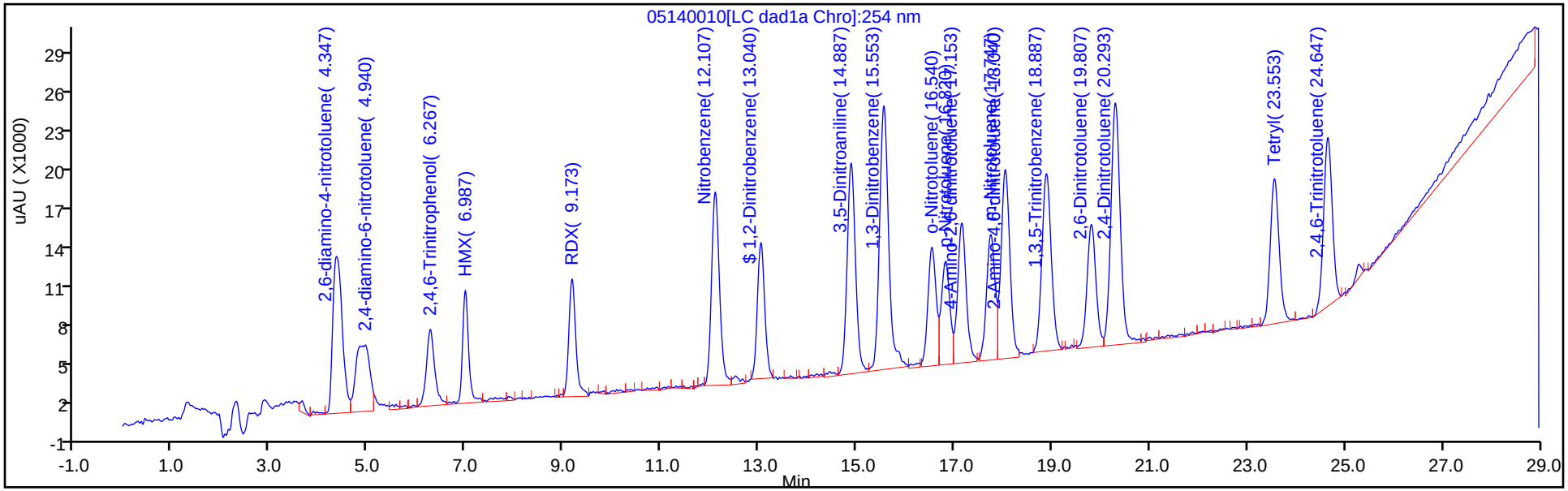
8330IntermStk_00064	Amount Added:	40.00	Units: uL
8330_ADDs_00026	Amount Added:	20.00	Units: uL

Report Date: 15-May-2020 12:00:56 Chrom Revision: 2.3 05-May-2020 17:48:18

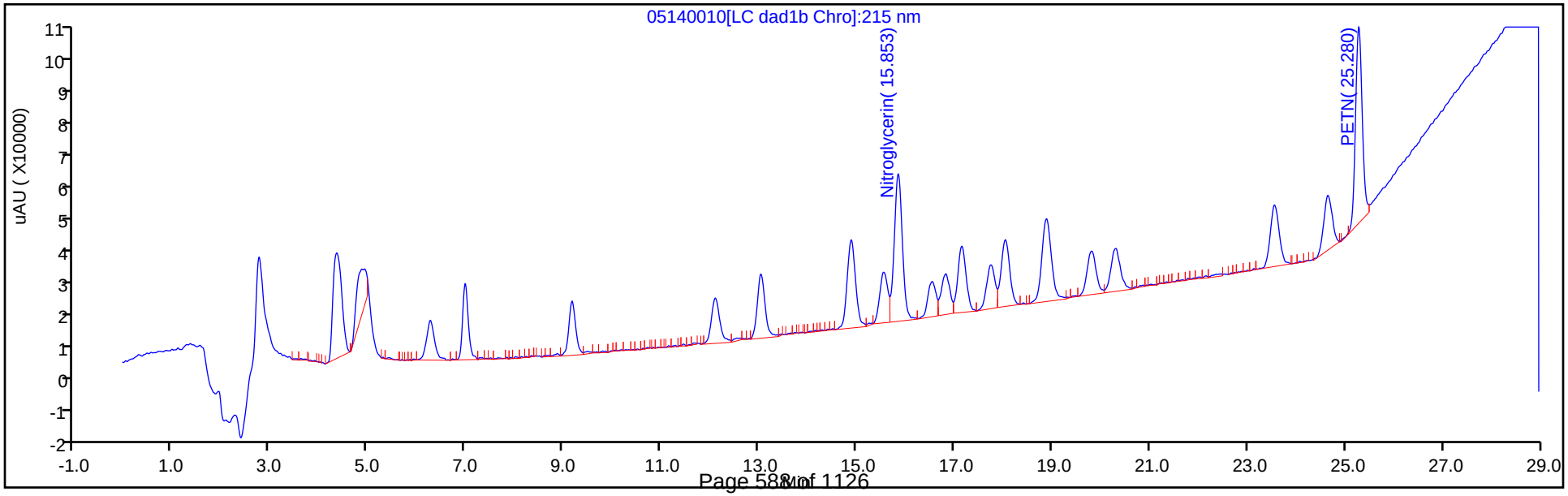
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 6			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

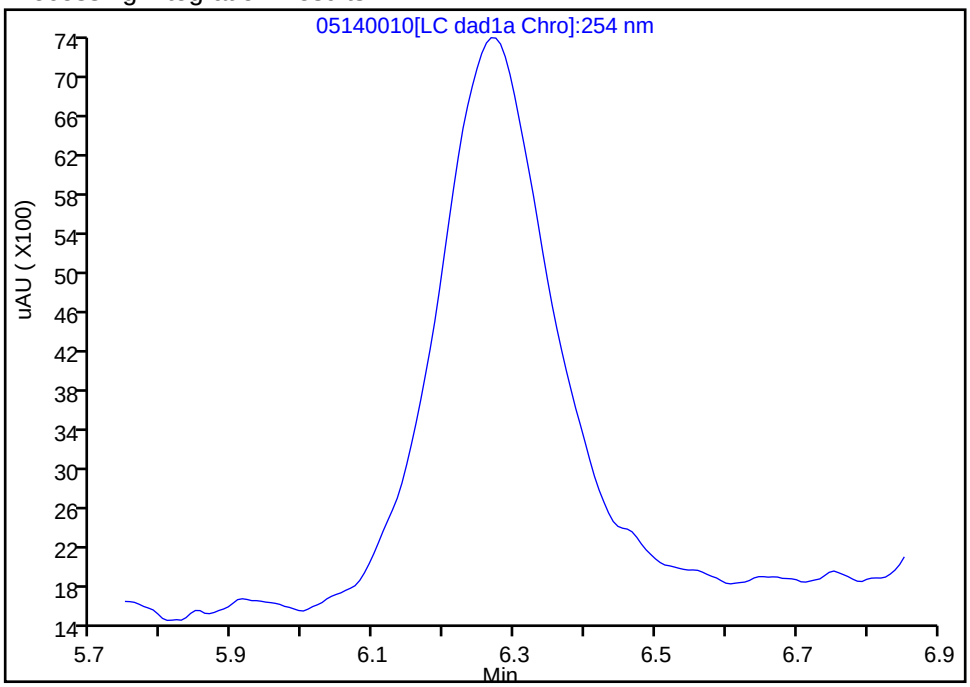
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

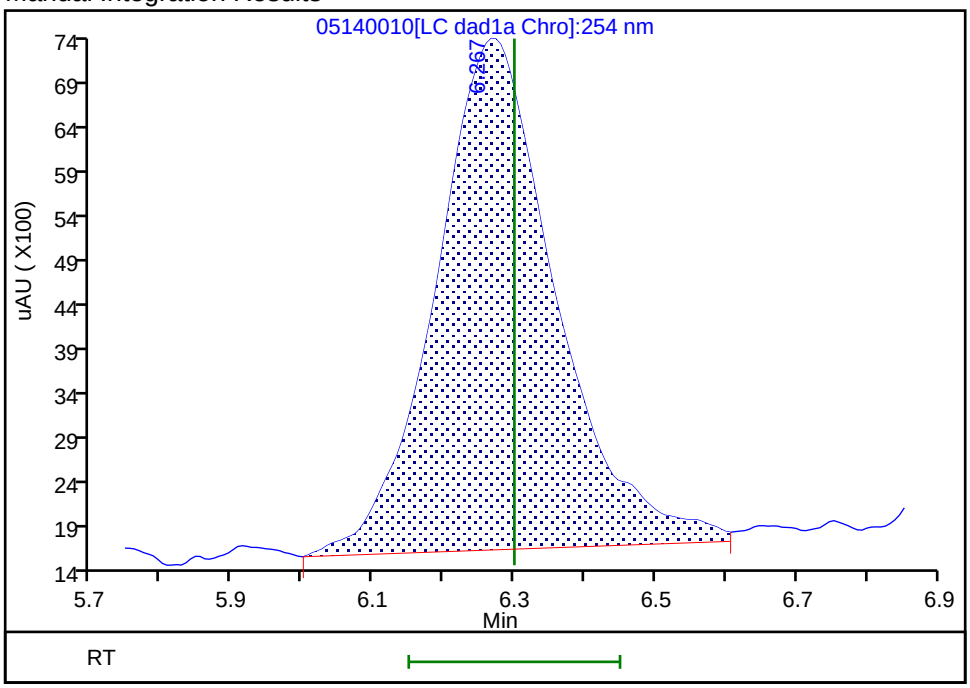
Not Detected
Expected RT: 6.30

Processing Integration Results



RT: 6.27
Area: 68021
Amount: 0.350967
Amount Units: ug/ml

Manual Integration Results



Reviewer: zhangji, 15-May-2020 11:20:14
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

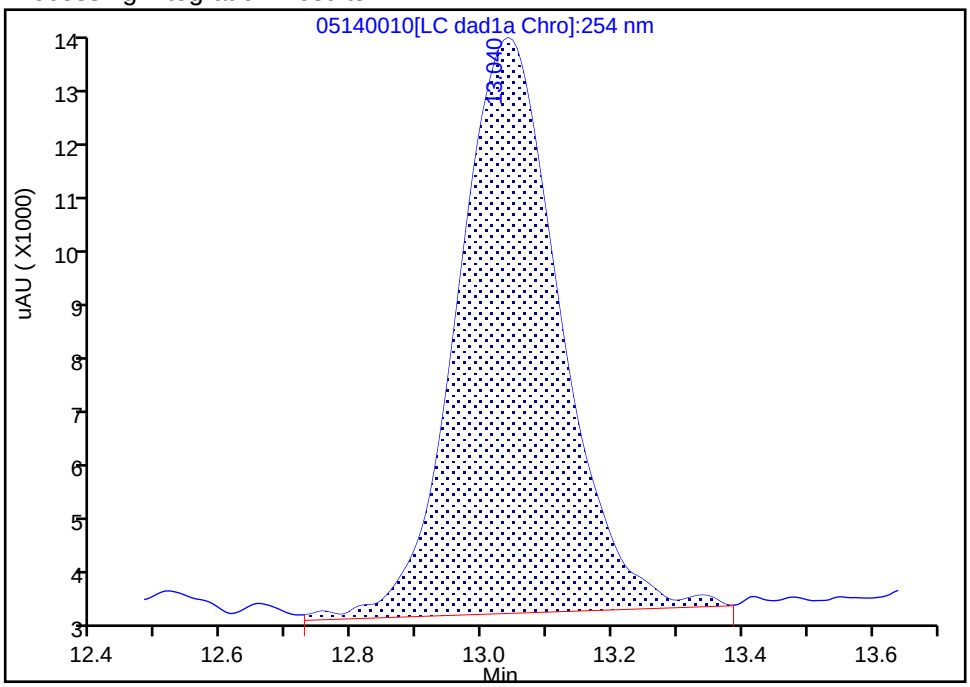
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

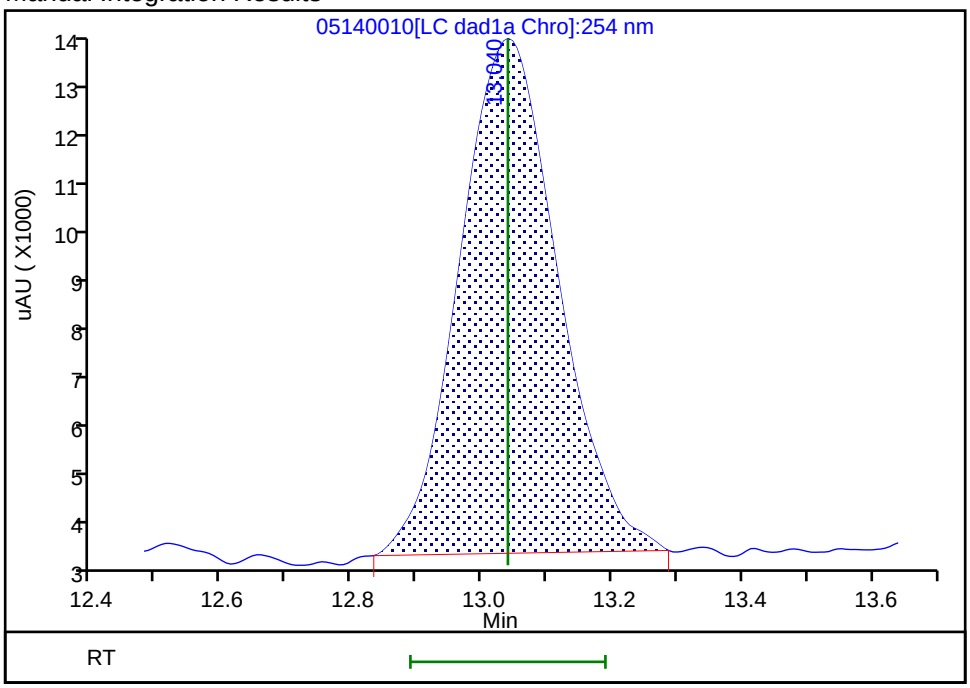
Processing Integration Results

RT: 13.04
Area: 114682
Amount: 0.364039
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 107232
Amount: 0.380167
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:50

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

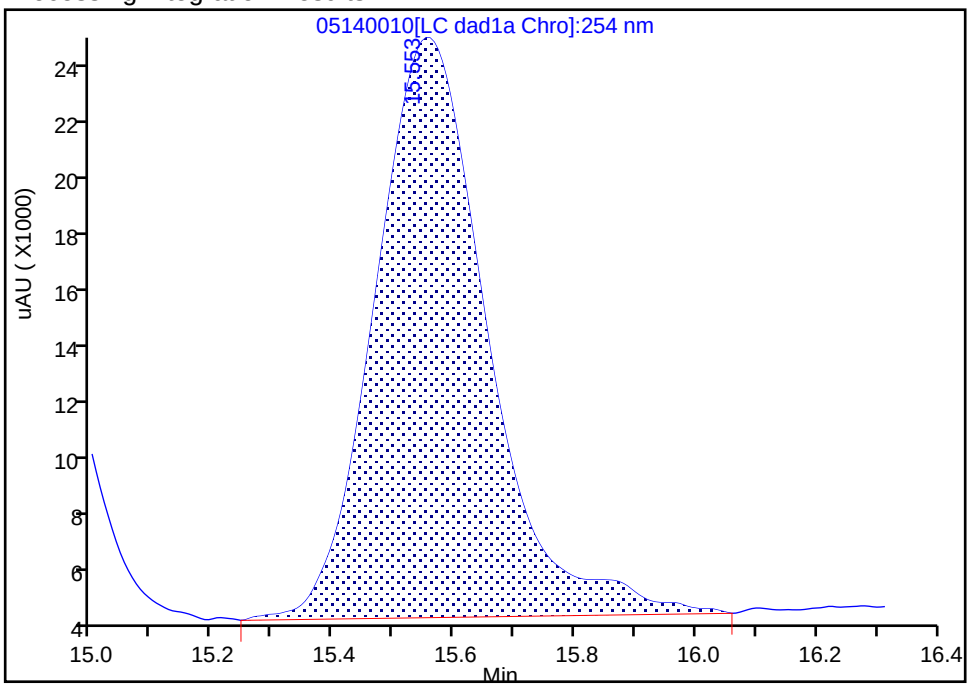
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

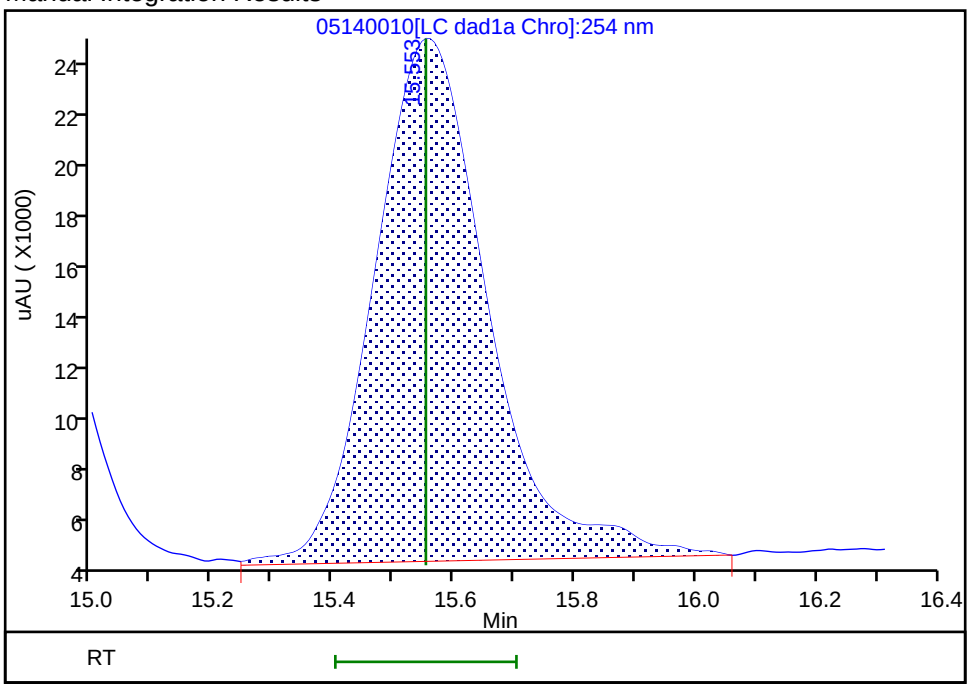
Processing Integration Results

RT: 15.55
Area: 255534
Amount: 0.374138
Amount Units: ug/ml



Manual Integration Results

RT: 15.55
Area: 258559
Amount: 0.383511
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

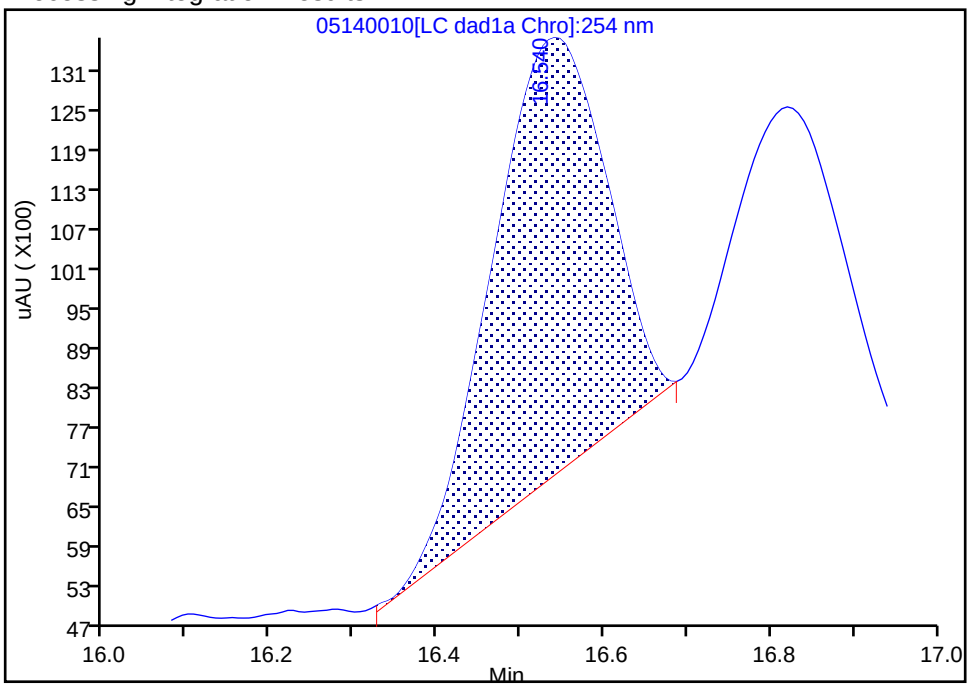
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

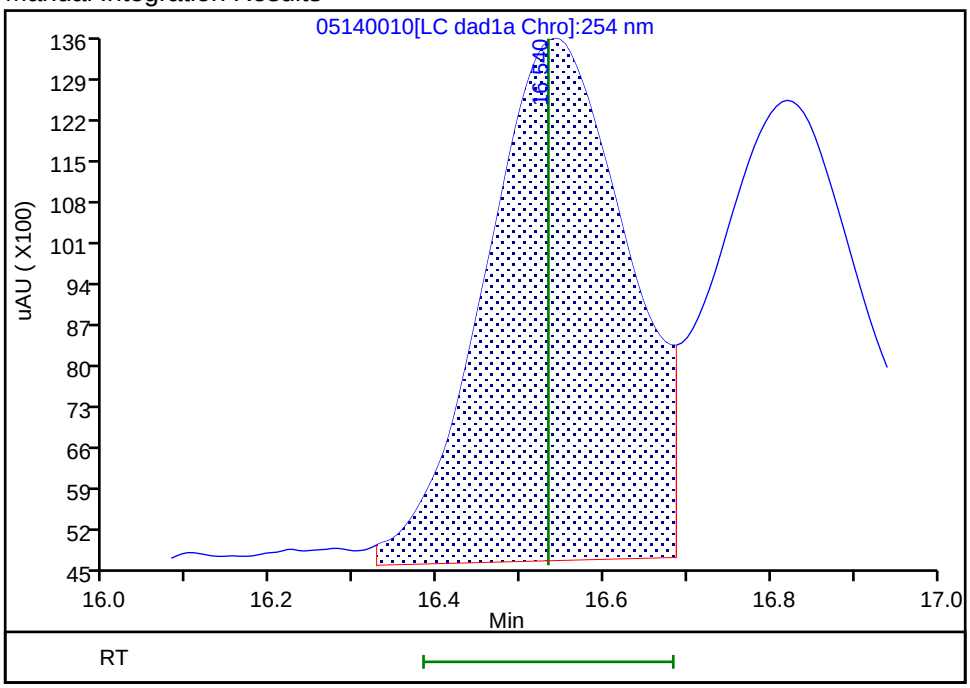
Processing Integration Results

RT: 16.54
Area: 63784
Amount: 0.238403
Amount Units: ug/ml



Manual Integration Results

RT: 16.54
Area: 105493
Amount: 0.386471
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

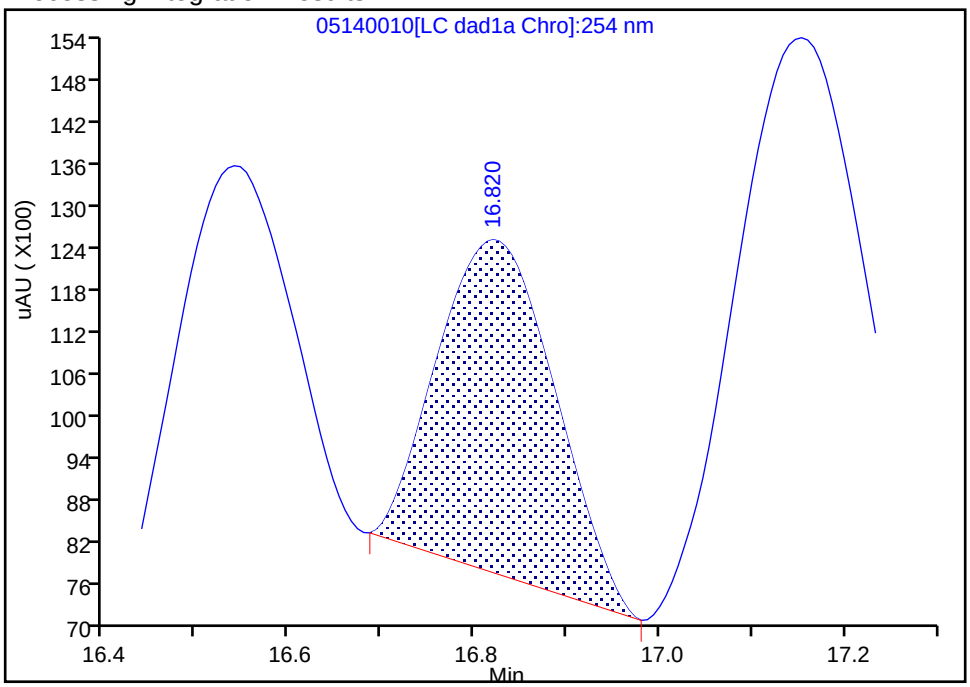
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

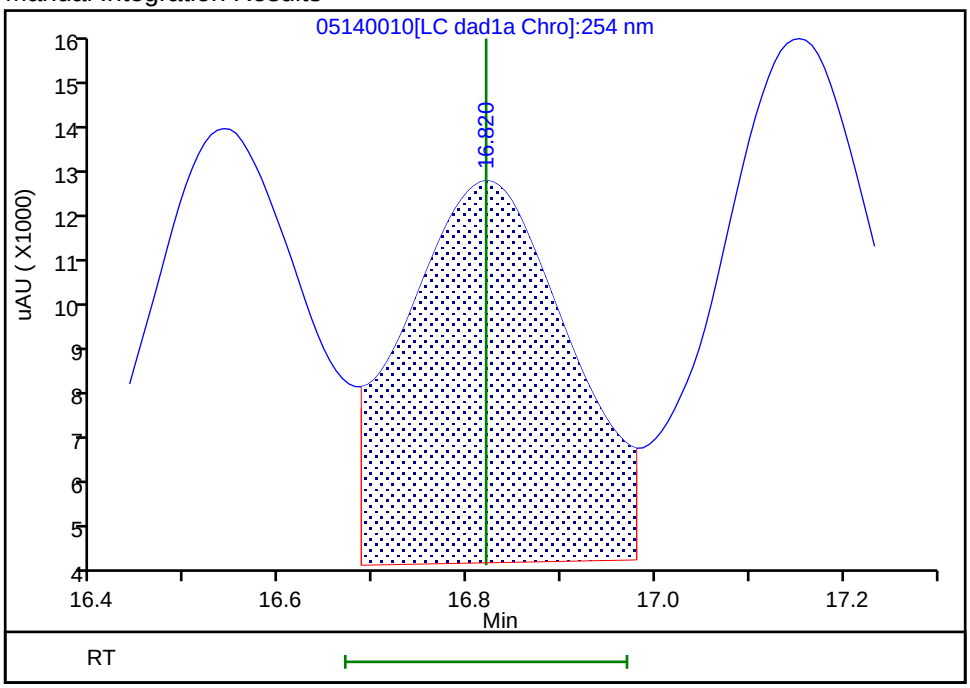
Processing Integration Results

RT: 16.82
Area: 42038
Amount: 0.176152
Amount Units: ug/ml



Manual Integration Results

RT: 16.82
Area: 93773
Amount: 0.389291
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

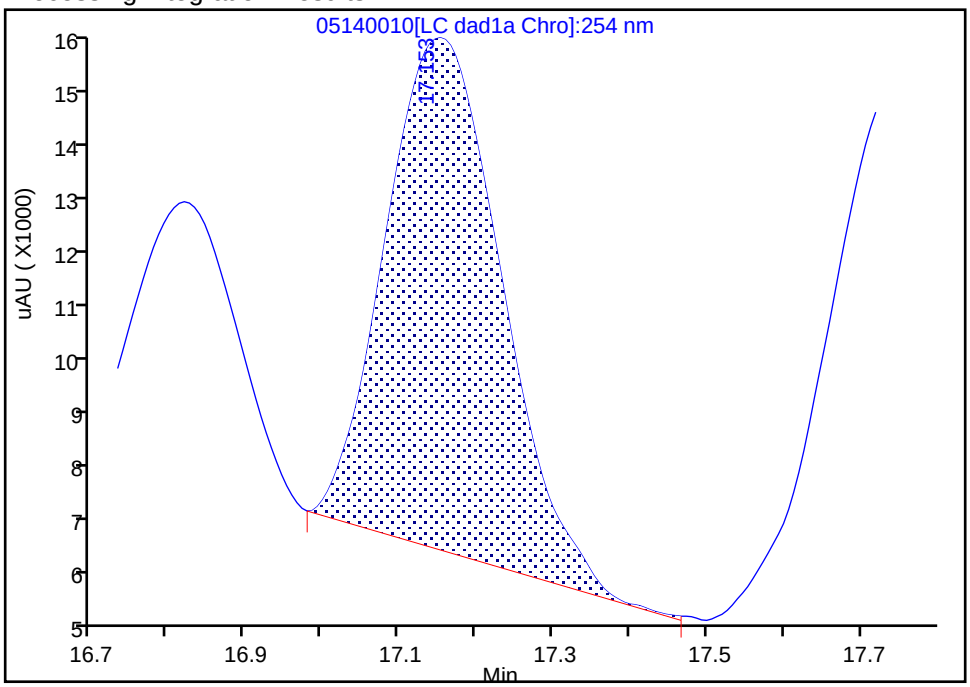
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

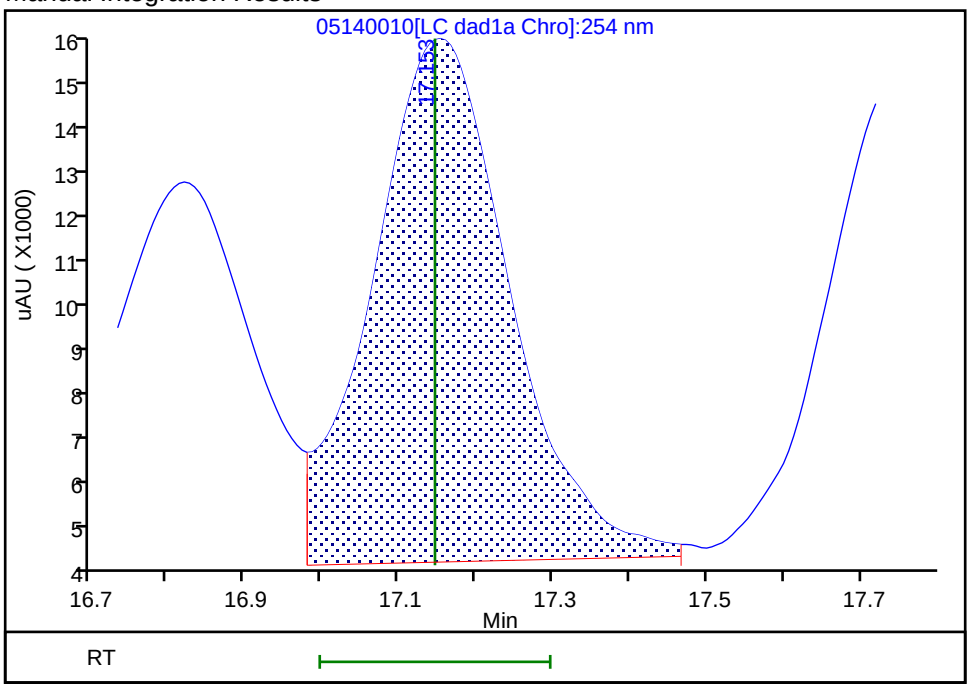
Processing Integration Results

RT: 17.15
Area: 95002
Amount: 0.278639
Amount Units: ug/ml



Manual Integration Results

RT: 17.15
Area: 130436
Amount: 0.377818
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

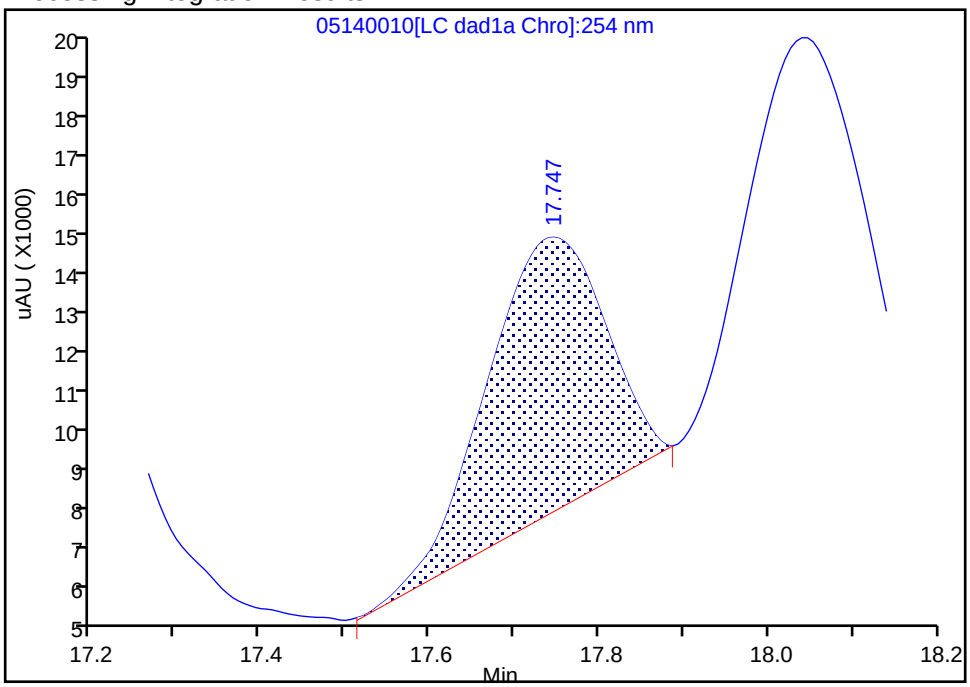
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

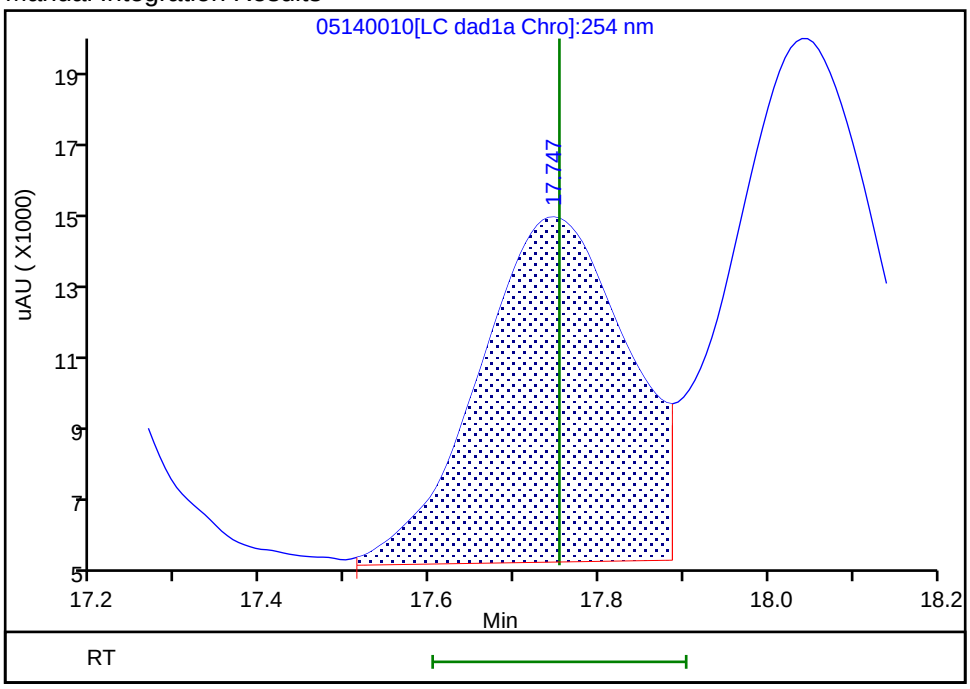
Processing Integration Results

RT: 17.75
Area: 65895
Amount: 0.232967
Amount Units: ug/ml



Manual Integration Results

RT: 17.75
Area: 115331
Amount: 0.386593
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

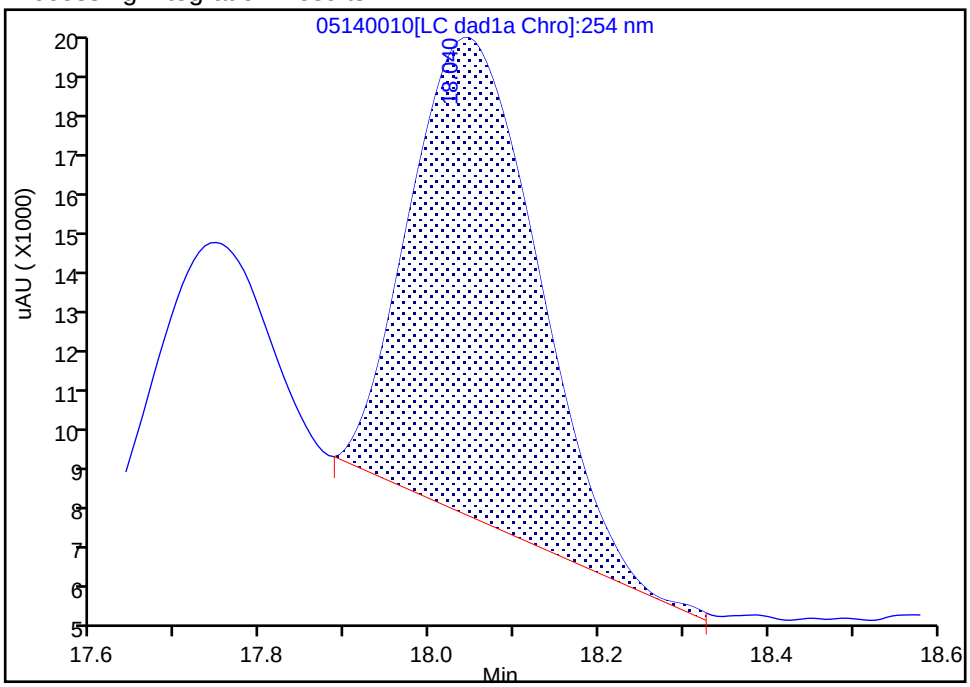
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

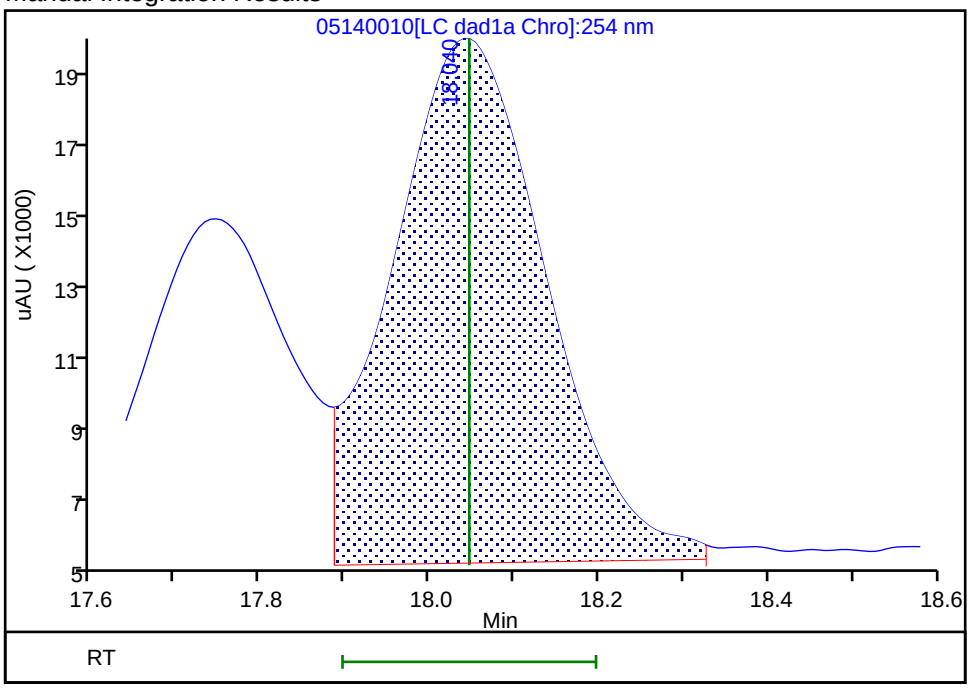
Processing Integration Results

RT: 18.04
Area: 120261
Amount: 0.277181
Amount Units: ug/ml



Manual Integration Results

RT: 18.04
Area: 179358
Amount: 0.385541
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

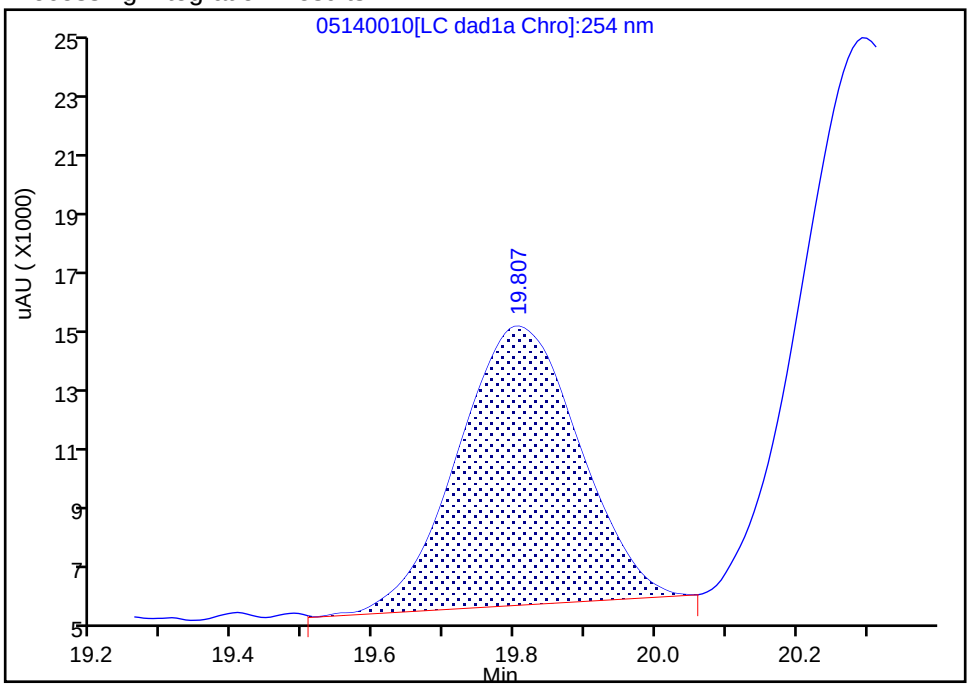
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

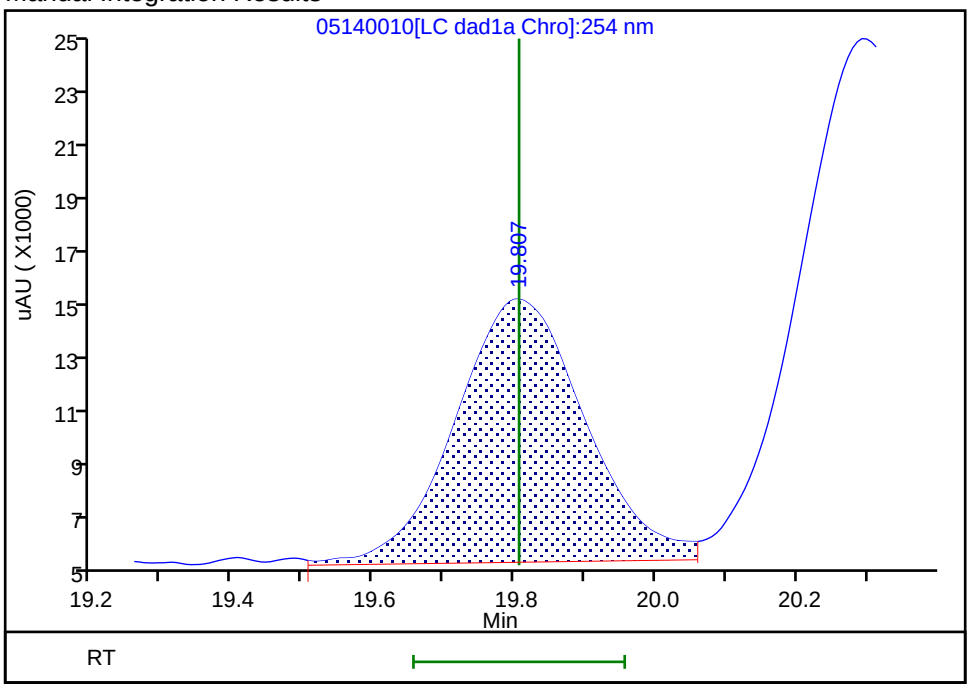
Processing Integration Results

RT: 19.81
Area: 105710
Amount: 0.311662
Amount Units: ug/ml



Manual Integration Results

RT: 19.81
Area: 118093
Amount: 0.392980
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:40
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

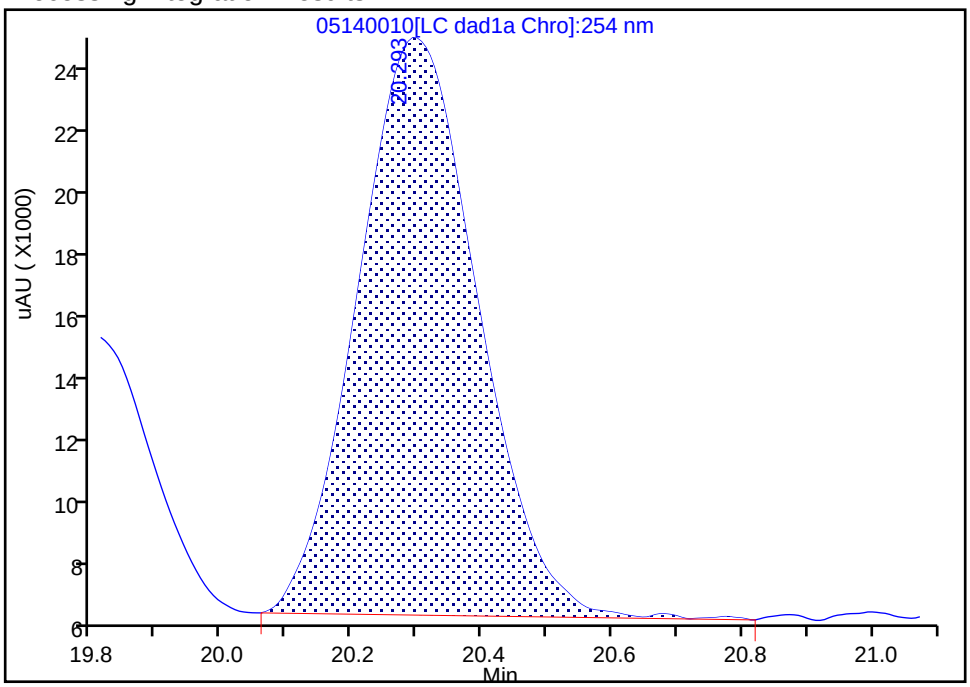
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

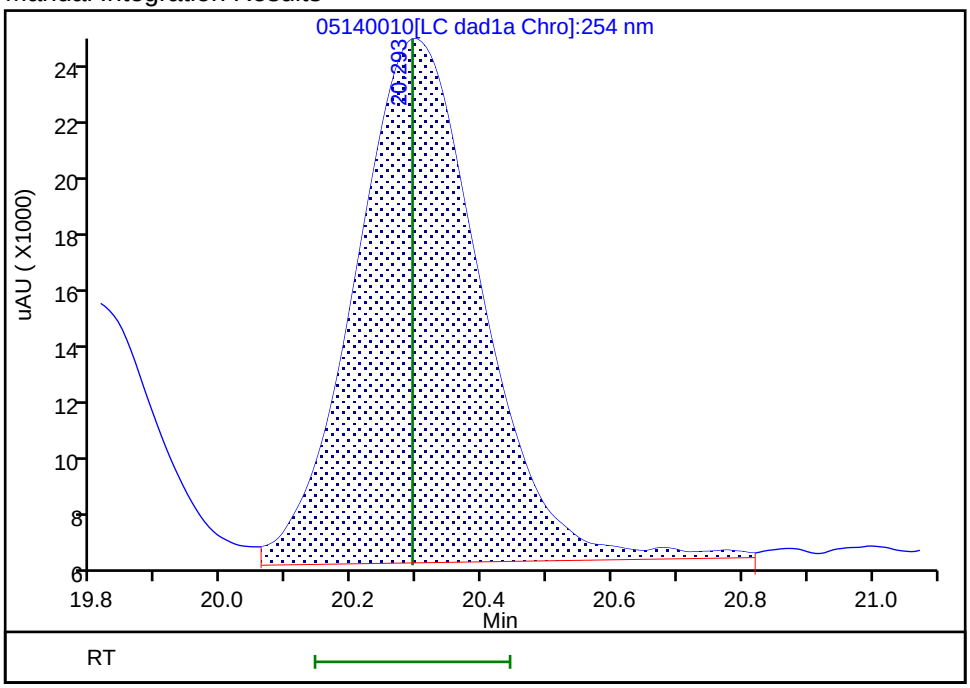
Processing Integration Results

RT: 20.29
Area: 226951
Amount: 0.348081
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 245009
Amount: 0.382759
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:40

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

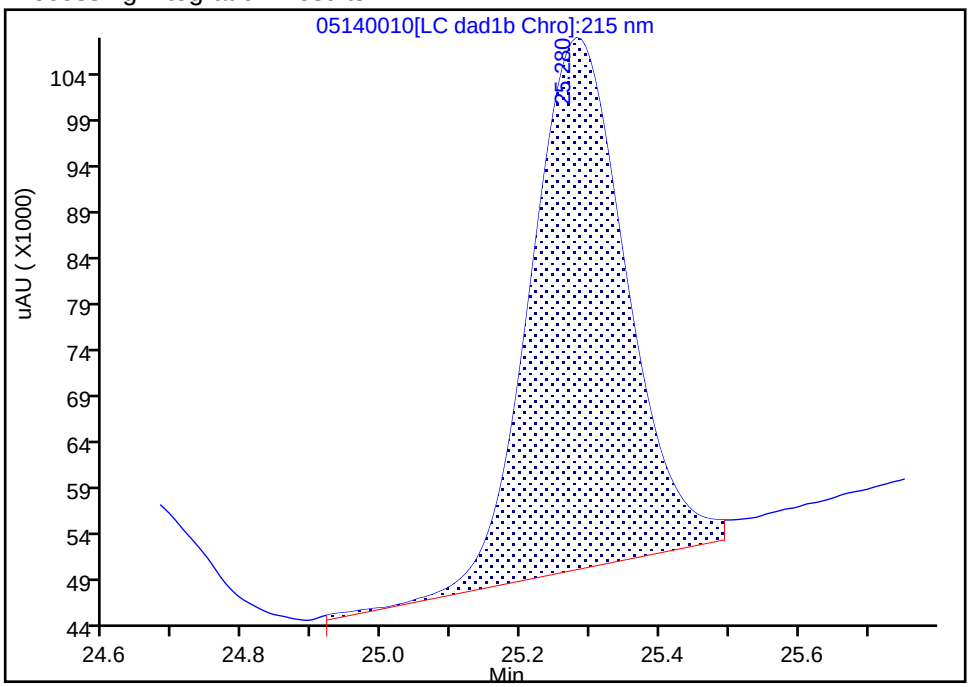
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

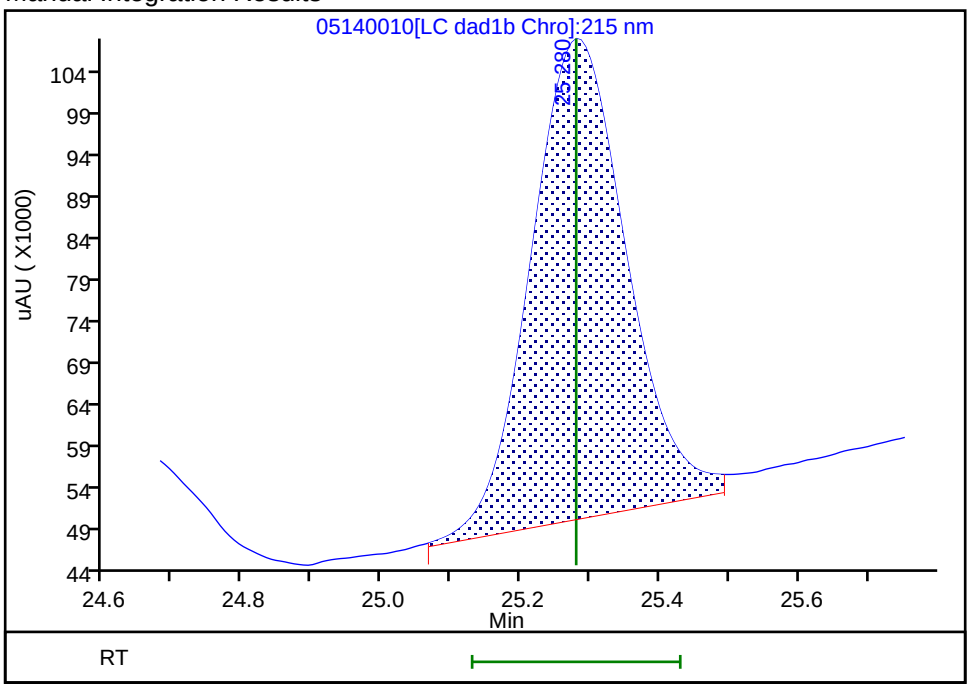
Processing Integration Results

RT: 25.28
Area: 559852
Amount: 4.200524
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 557734
Amount: 4.102237
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:25:18

Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140011.D
Lims ID: IC FULL 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-May-2020 18:36:40 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 5
Misc. Info.: 280-0091518-011
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:56 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:20:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.366	4.366	0.000	106754	0.2500	0.2487	
2 2,4-diamino-6-nitrotoluene	1	4.880	4.880	0.000	74938	0.2500	0.2919	
5 2,4,6-Trinitrophenol	1	6.300	6.300	0.000	48614	0.2500	0.2508	a
6 HMX	1	6.986	6.986	0.000	54065	0.2500	0.2754	
8 RDX	1	9.173	9.173	0.000	62626	0.2500	0.2563	
9 Nitrobenzene	1	12.106	12.106	0.000	106064	0.2510	0.2415	
$ 10 1,2-Dinitrobenzene	1	13.040	13.040	0.000	62375	0.2500	0.2184	M
11 3,5-Dinitroaniline	1	14.886	14.886	0.000	130301	0.2500	0.2629	
12 1,3-Dinitrobenzene	1	15.553	15.553	0.000	172289	0.2505	0.2556	
13 Nitroglycerin	2	15.853	15.853	0.000	330378	2.50	2.61	M
14 o-Nitrotoluene	1	16.533	16.533	0.000	63146	0.2500	0.2313	
15 p-Nitrotoluene	1	16.820	16.820	0.000	59605	0.2505	0.2474	
16 4-Amino-2,6-dinitrotoluene	1	17.146	17.146	0.000	79168	0.2503	0.2293	
17 m-Nitrotoluene	1	17.753	17.753	0.000	71162	0.2503	0.2385	
18 2-Amino-4,6-dinitrotoluene	1	18.046	18.046	0.000	112860	0.2510	0.2426	
19 1,3,5-Trinitrobenzene	1	18.886	18.886	0.000	118709	0.2505	0.2513	
20 2,6-Dinitrotoluene	1	19.806	19.806	0.000	74317	0.2510	0.2416	
21 2,4-Dinitrotoluene	1	20.293	20.293	0.000	153249	0.2510	0.2394	
22 Tetryl	1	23.553	23.553	0.000	92236	0.2505	0.2502	
23 2,4,6-Trinitrotoluene	1	24.653	24.653	0.000	100168	0.2510	0.2416	
24 PETN	2	25.280	25.280	0.000	338241	2.50	2.40	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

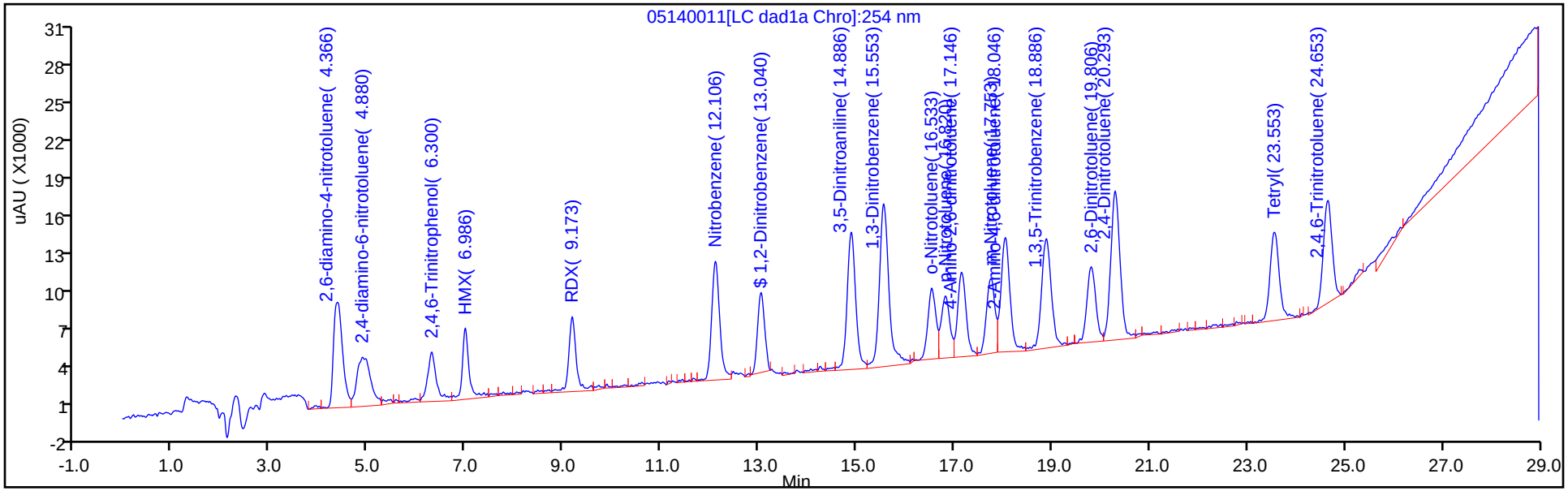
8330IntermStk_00064	Amount Added:	25.00	Units: uL
8330_ADDs_00026	Amount Added:	12.50	Units: uL

Report Date: 15-May-2020 12:00:57 Chrom Revision: 2.3 05-May-2020 17:48:18

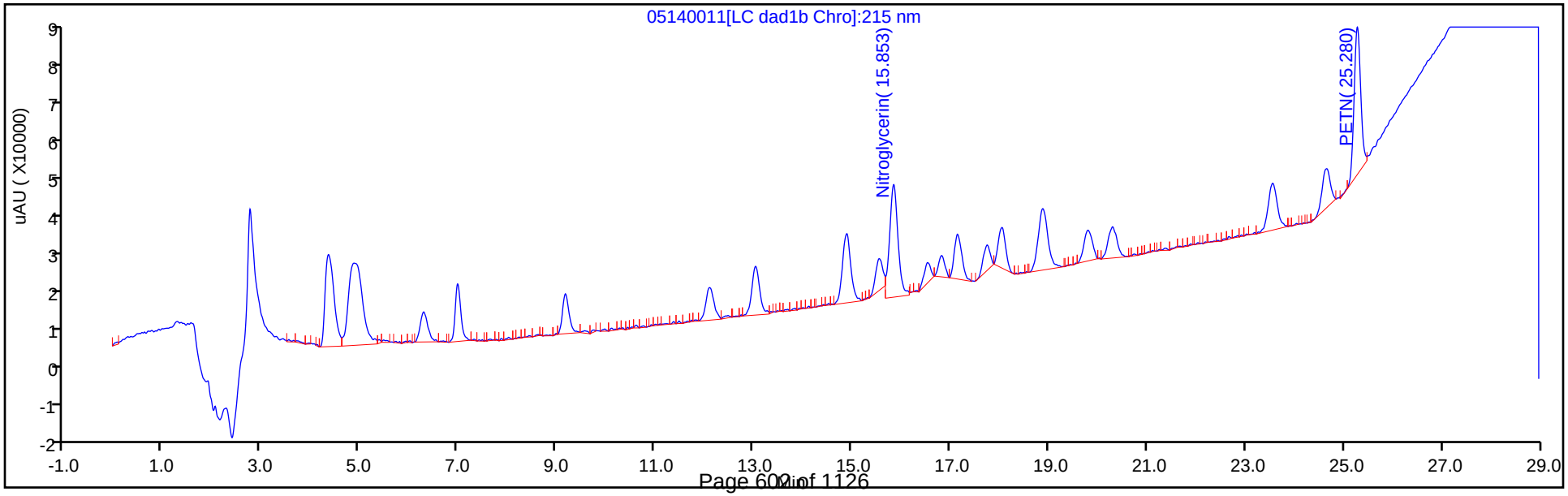
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 5			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

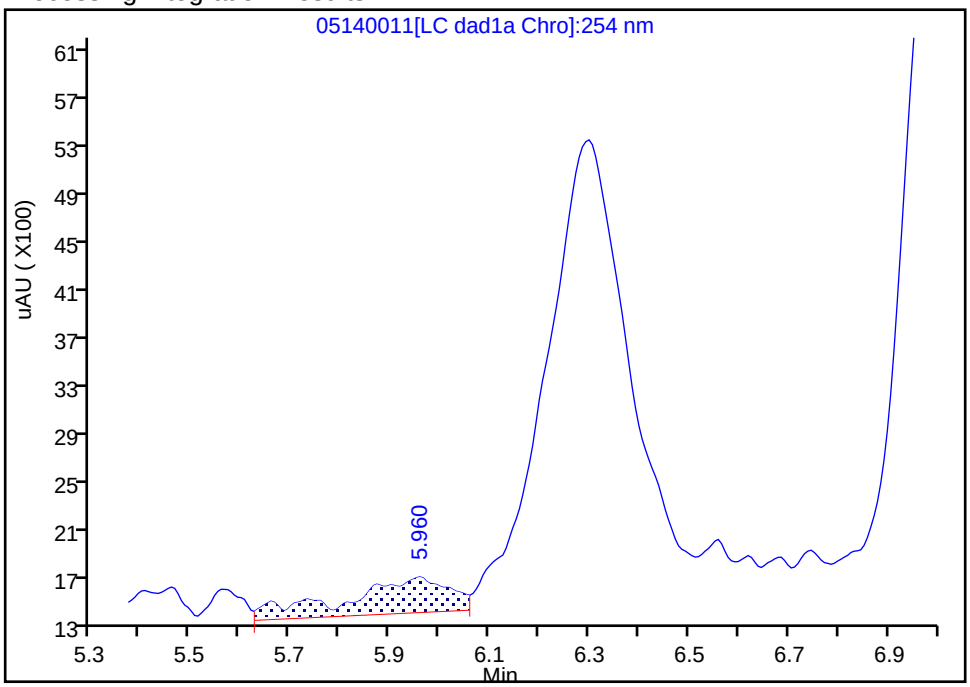
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

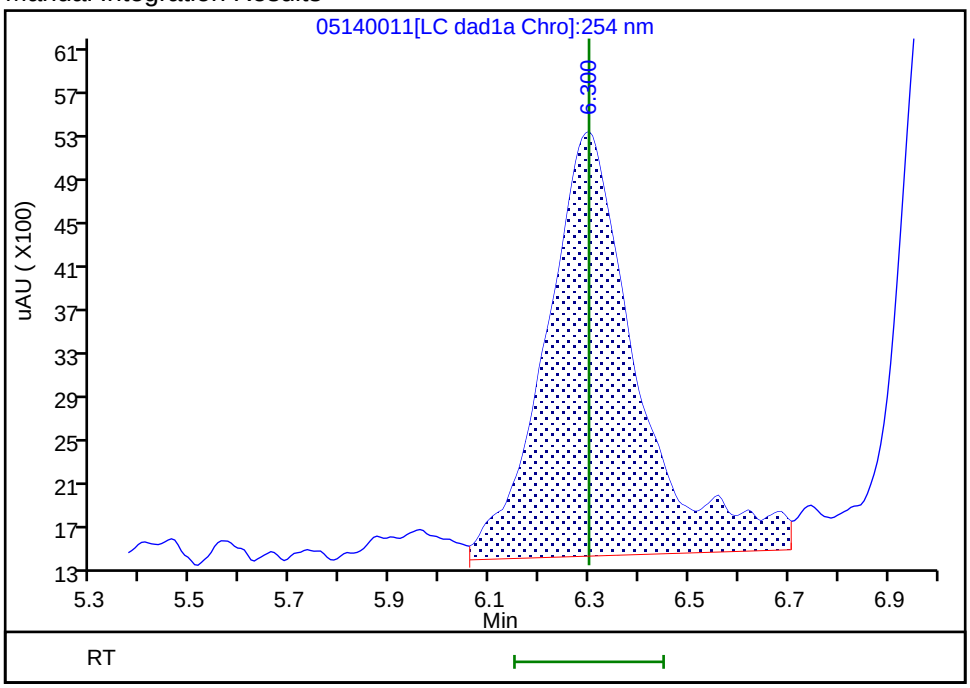
Processing Integration Results

RT: 5.96
Area: 4251
Amount: 0.036696
Amount Units: ug/ml



Manual Integration Results

RT: 6.30
Area: 48614
Amount: 0.250833
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:52
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

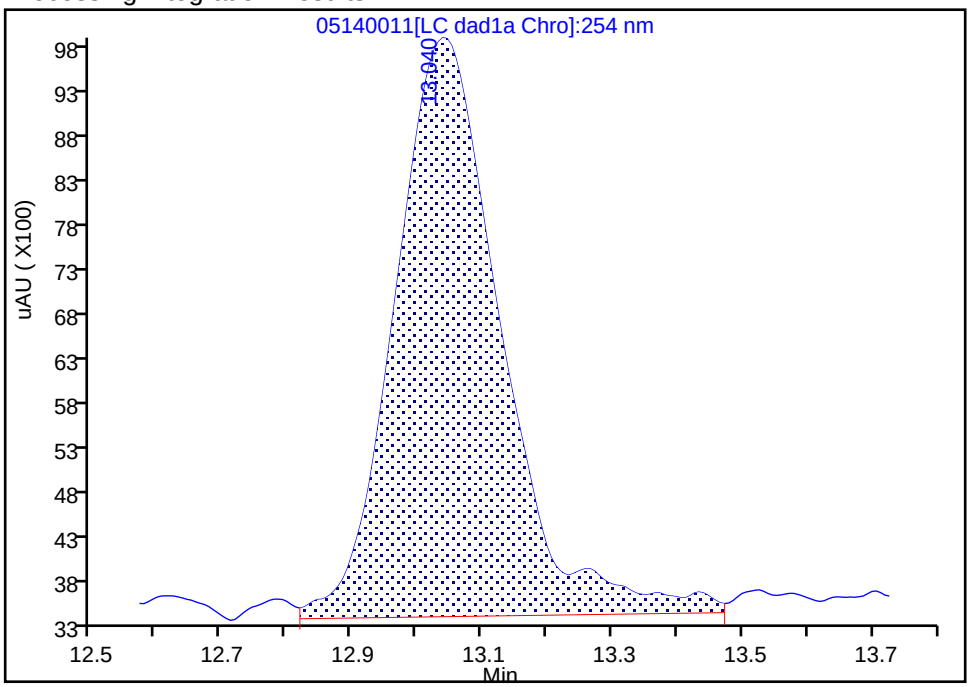
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

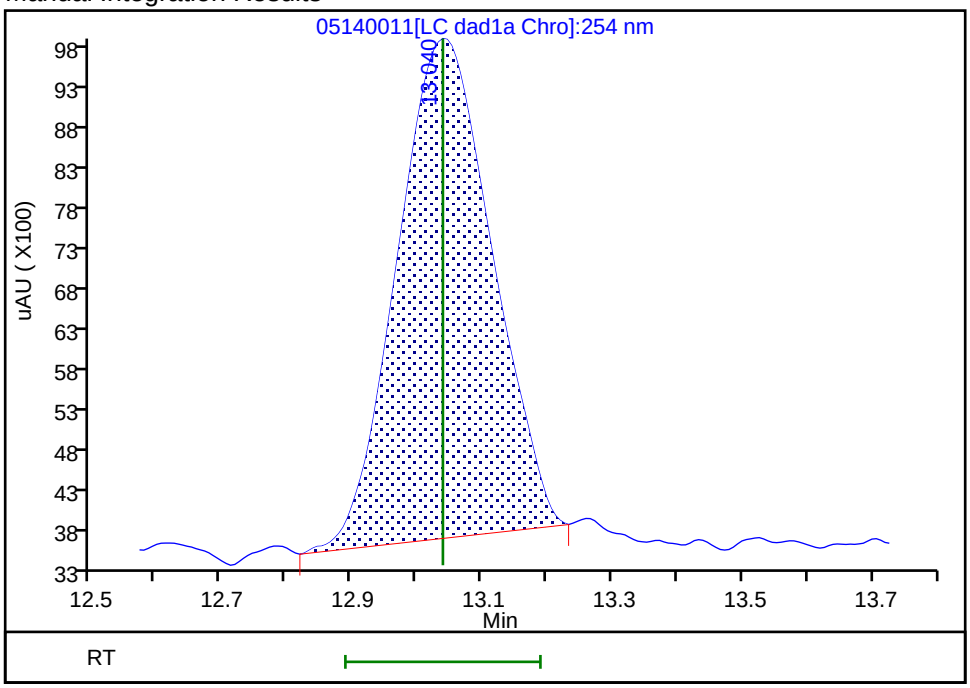
Processing Integration Results

RT: 13.04
Area: 73345
Amount: 0.234804
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 62375
Amount: 0.218362
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:01

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

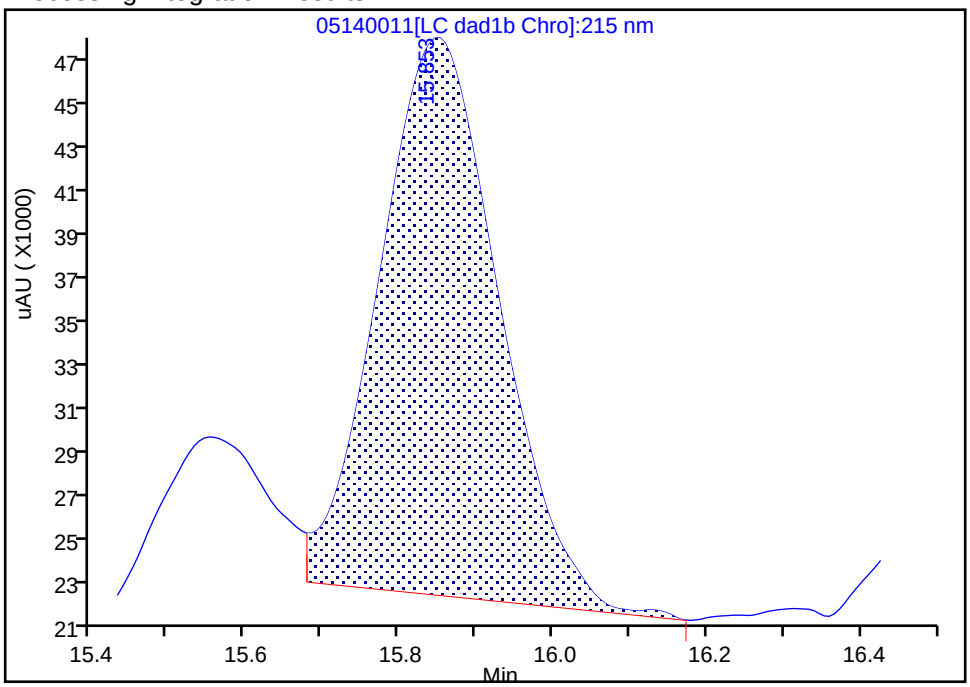
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

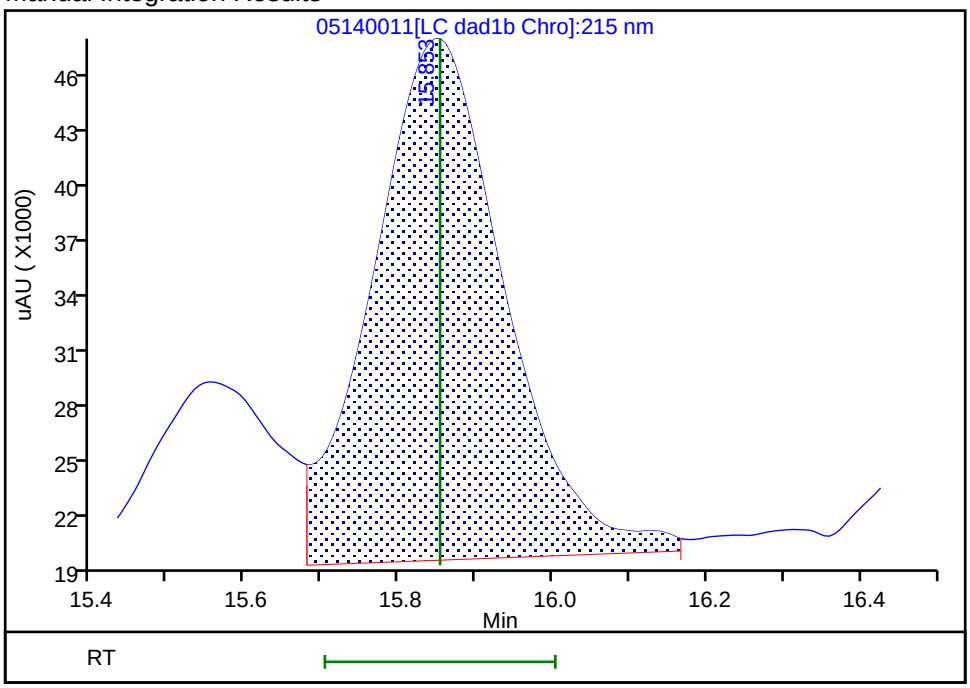
Processing Integration Results

RT: 15.85
Area: 276053
Amount: 2.464482
Amount Units: ug/ml



Manual Integration Results

RT: 15.85
Area: 330378
Amount: 2.605436
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:11

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

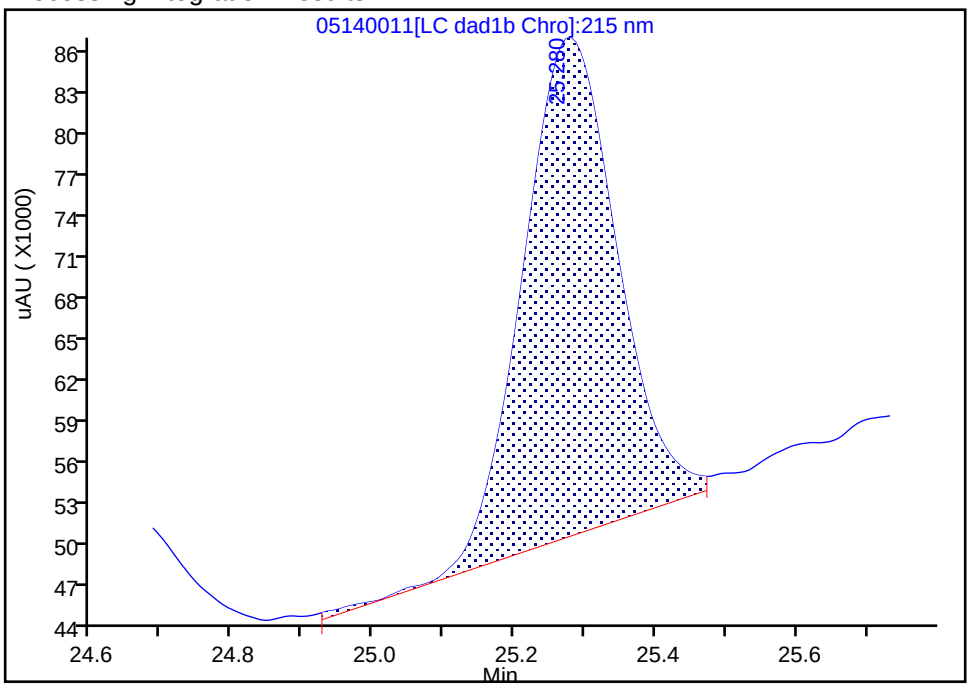
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d				
Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

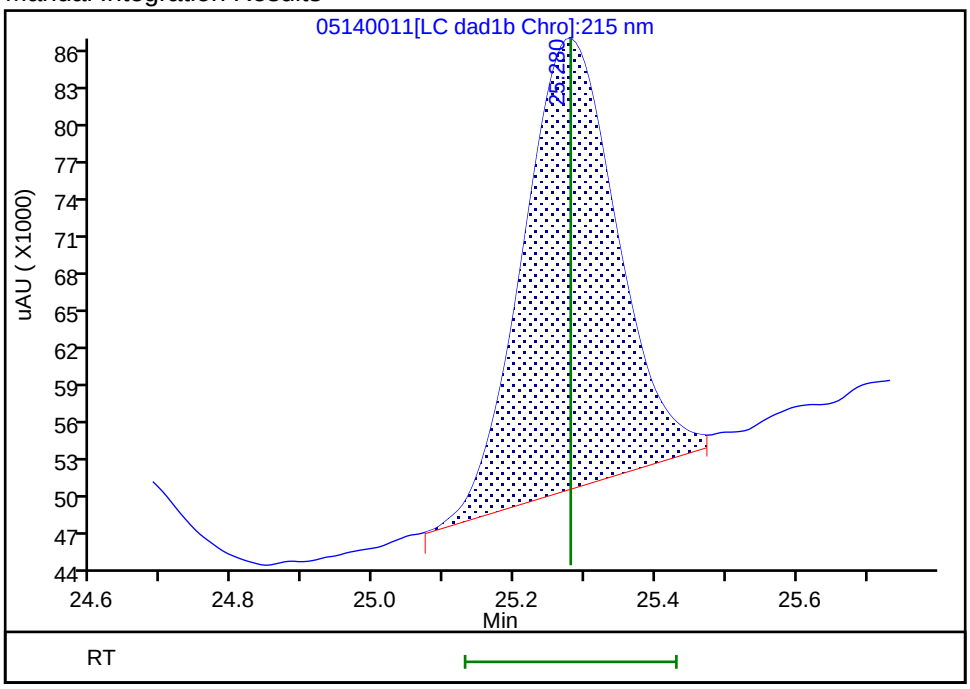
Processing Integration Results

RT: 25.28
Area: 339815
Amount: 2.534573
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 338241
Amount: 2.404524
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:25:08

Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140012.D
Lims ID: IC FULL 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-May-2020 19:11:37 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 4
Misc. Info.: 280-0091518-012
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:57 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:21:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.361	4.366	-0.005	44739	0.1000	0.1042	
2 2,4-diamino-6-nitrotoluene	1	4.941	4.880	0.061	33889	0.1000	0.1193	
5 2,4,6-Trinitrophenol	1	6.308	6.300	0.008	23170	0.1000	0.1195	a
6 HMX	1	6.994	6.986	0.008	24294	0.1000	0.1072	
8 RDX	1	9.181	9.173	0.008	27233	0.1000	0.1114	
9 Nitrobenzene	1	12.114	12.106	0.008	42679	0.1004	0.0972	
$ 10 1,2-Dinitrobenzene	1	13.048	13.040	0.008	30683	0.1000	0.1040	
11 3,5-Dinitroaniline	1	14.901	14.886	0.015	51716	0.1000	0.1009	M
12 1,3-Dinitrobenzene	1	15.554	15.553	0.001	69012	0.1002	0.1024	M
13 Nitroglycerin	2	15.848	15.853	-0.005	141489	1.00	1.12	M
14 o-Nitrotoluene	1	16.534	16.533	0.001	29062	0.1000	0.1065	M
15 p-Nitrotoluene	1	16.828	16.820	0.008	25956	0.1002	0.1078	M
16 4-Amino-2,6-dinitrotoluene	1	17.148	17.146	0.002	32448	0.1001	0.0940	M
17 m-Nitrotoluene	1	17.741	17.753	-0.012	30586	0.1001	0.1025	M
18 2-Amino-4,6-dinitrotoluene	1	18.054	18.046	0.008	47526	0.1004	0.1022	M
19 1,3,5-Trinitrobenzene	1	18.881	18.886	-0.005	51028	0.1002	0.1080	M
20 2,6-Dinitrotoluene	1	19.794	19.806	-0.012	34659	0.1004	0.1045	M
21 2,4-Dinitrotoluene	1	20.288	20.293	-0.005	67500	0.1004	0.1055	M
22 Tetryl	1	23.548	23.553	-0.005	38547	0.1002	0.1046	
23 2,4,6-Trinitrotoluene	1	24.654	24.653	0.001	43208	0.1004	0.0997	
24 PETN	2	25.281	25.280	0.001	132172	1.00	0.8106	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

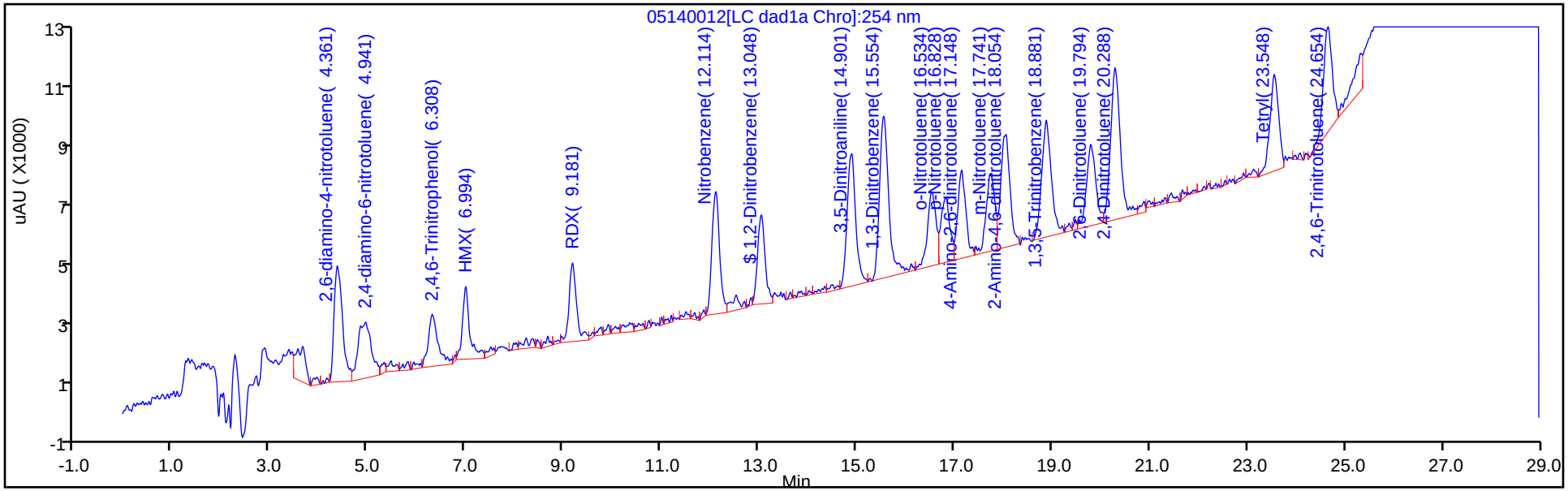
8330IntermStk_00064	Amount Added: 10.00	Units: uL
8330_ADDs_00026	Amount Added: 5.00	Units: uL

Report Date: 15-May-2020 12:00:57 Chrom Revision: 2.3 05-May-2020 17:48:18

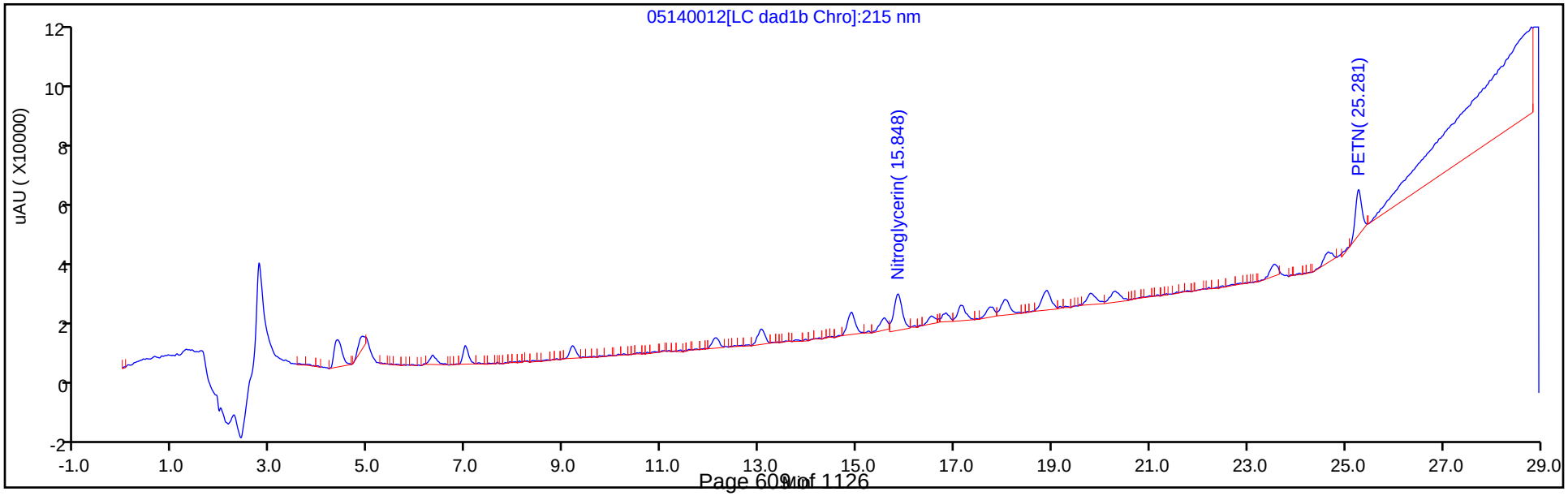
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 4			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

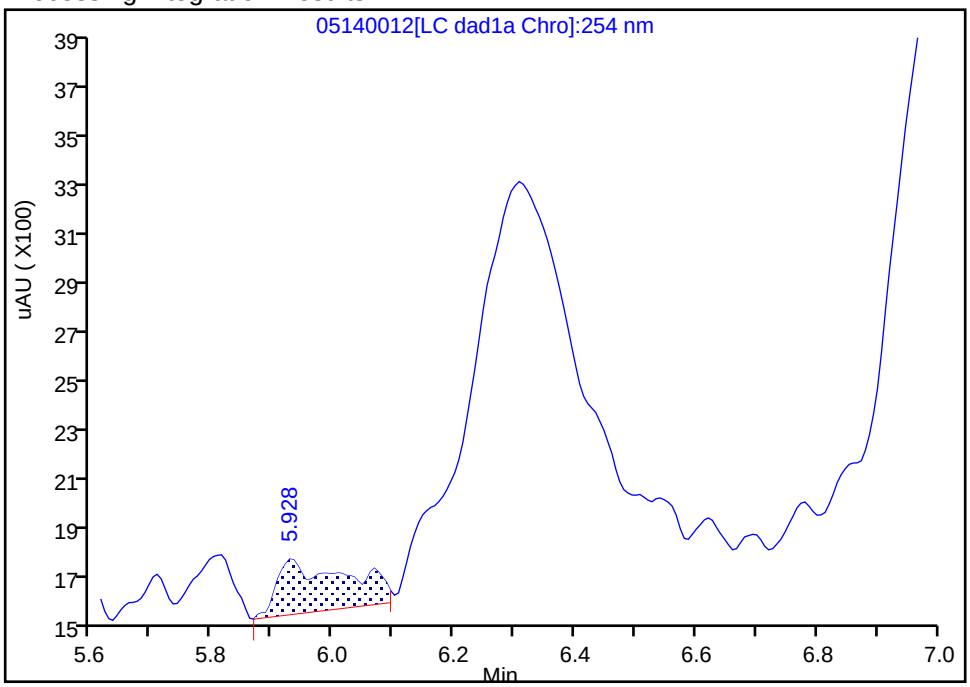
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

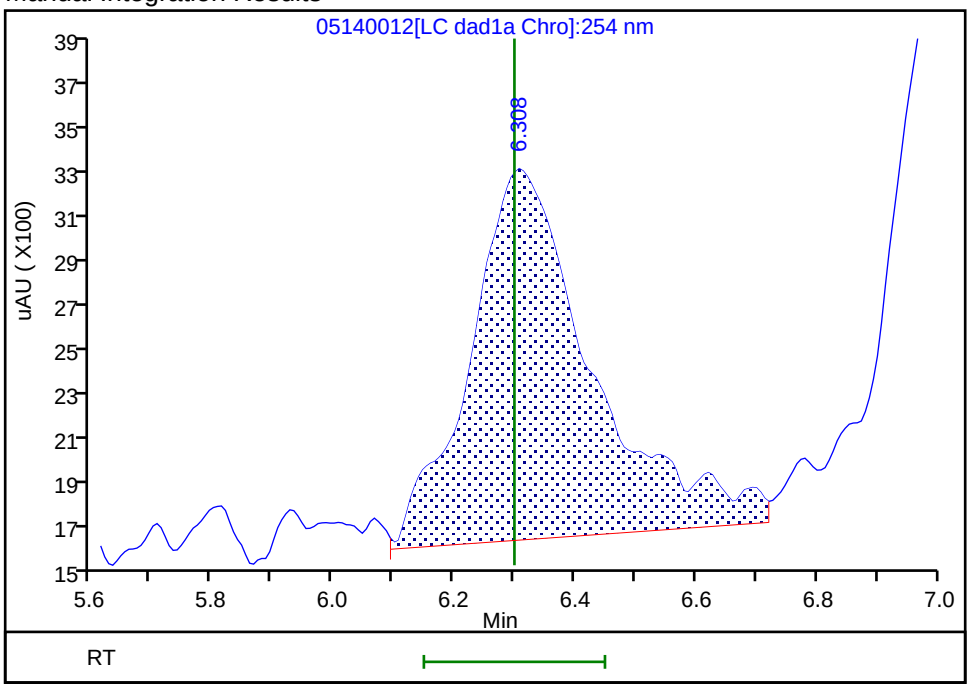
Processing Integration Results

RT: 5.93
Area: 1700
Amount: 0.010784
Amount Units: ug/ml



Manual Integration Results

RT: 6.31
Area: 23170
Amount: 0.119550
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:21
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

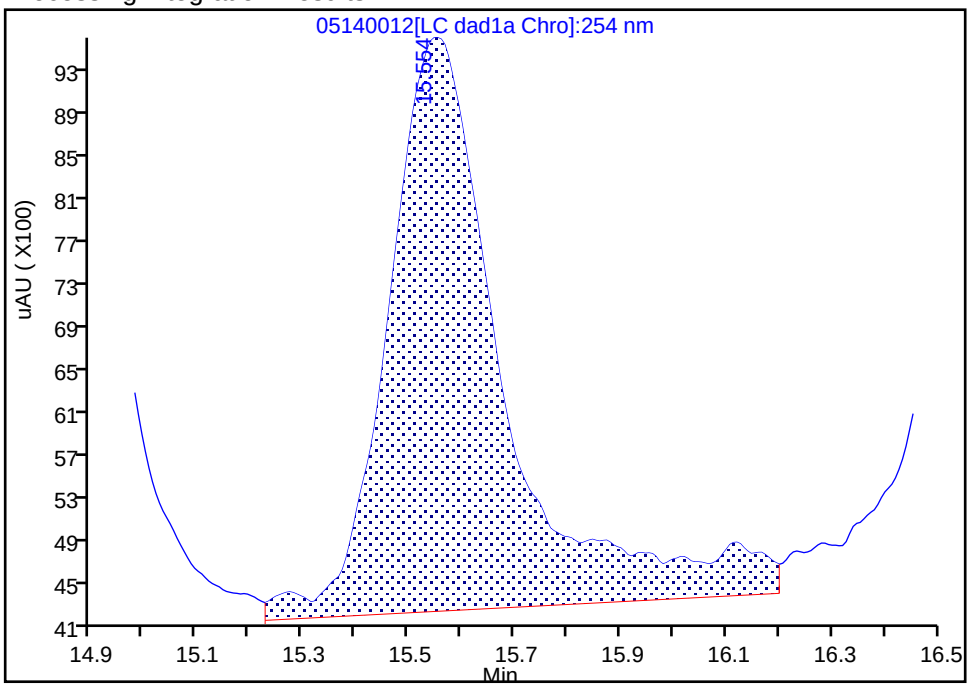
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

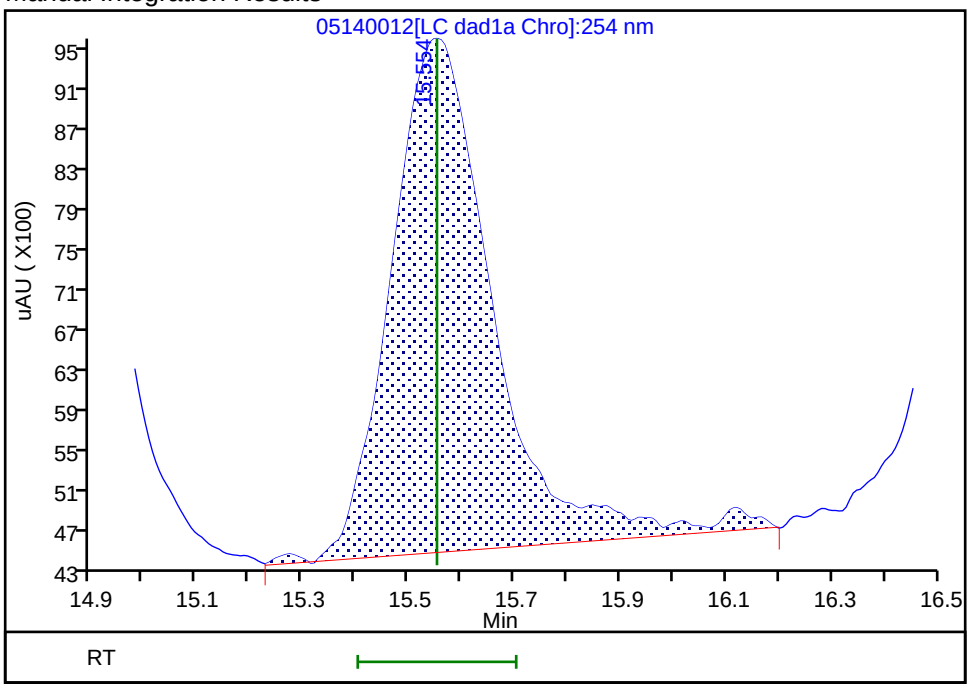
Processing Integration Results

RT: 15.55
Area: 81626
Amount: 0.119366
Amount Units: ug/ml



Manual Integration Results

RT: 15.55
Area: 69012
Amount: 0.102363
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

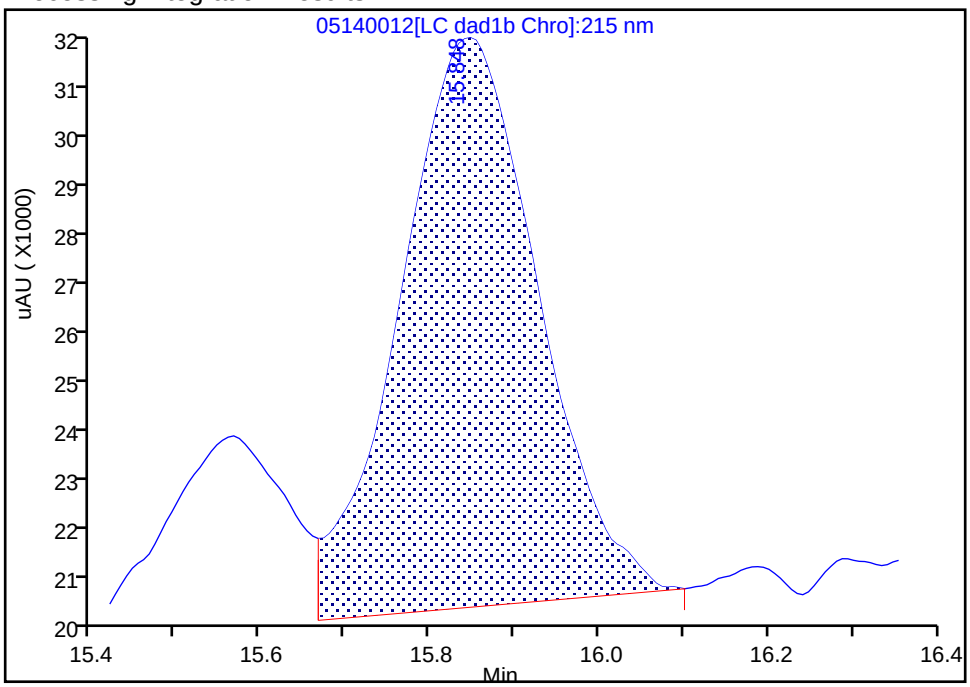
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

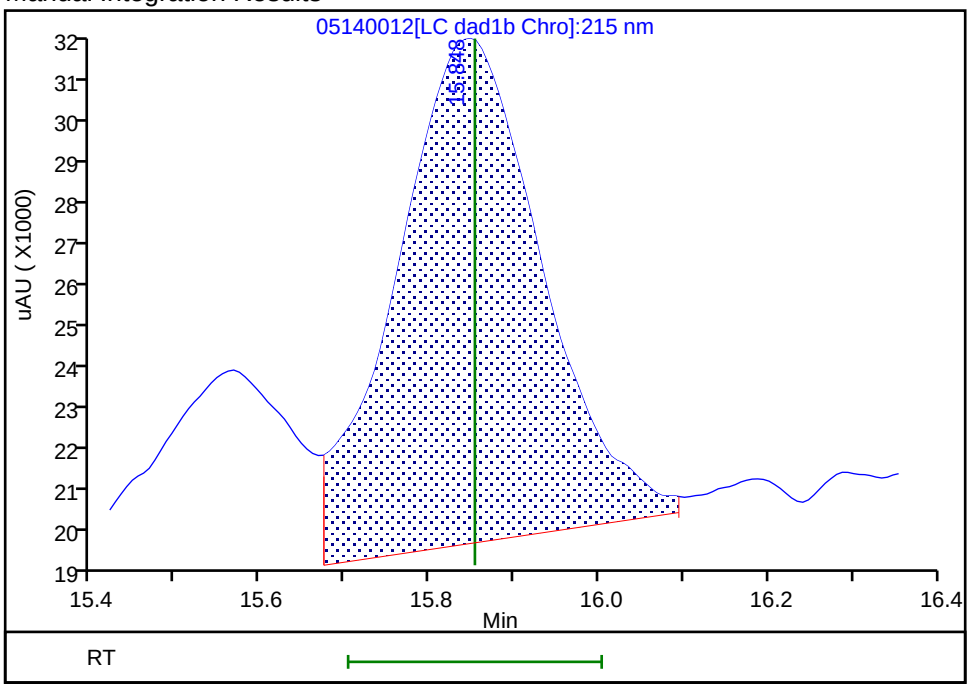
Processing Integration Results

RT: 15.85
Area: 125471
Amount: 1.093631
Amount Units: ug/ml



Manual Integration Results

RT: 15.85
Area: 141489
Amount: 1.115815
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:25

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

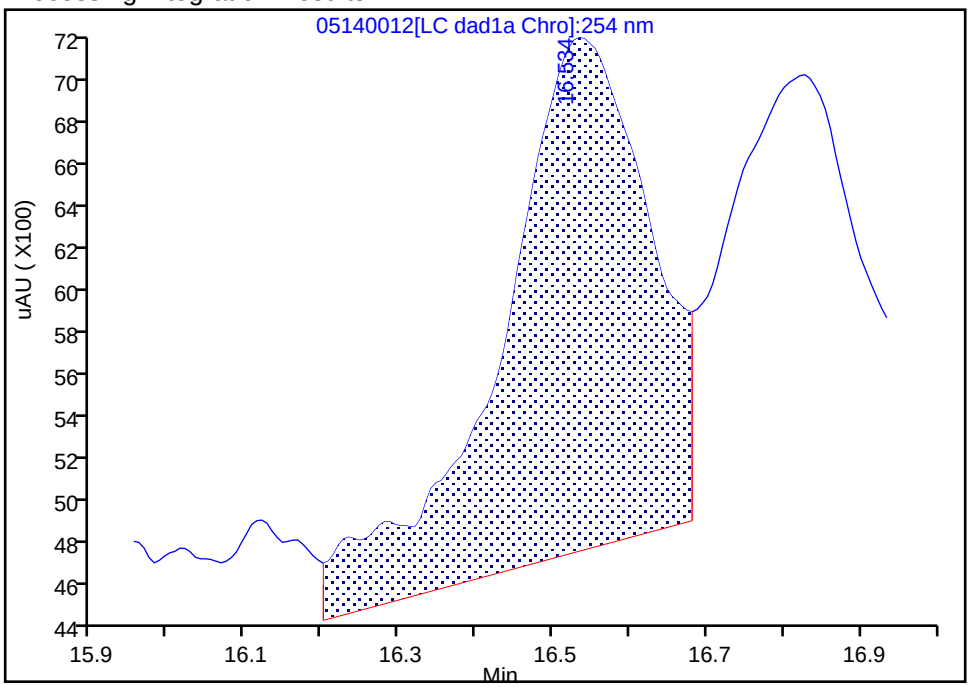
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

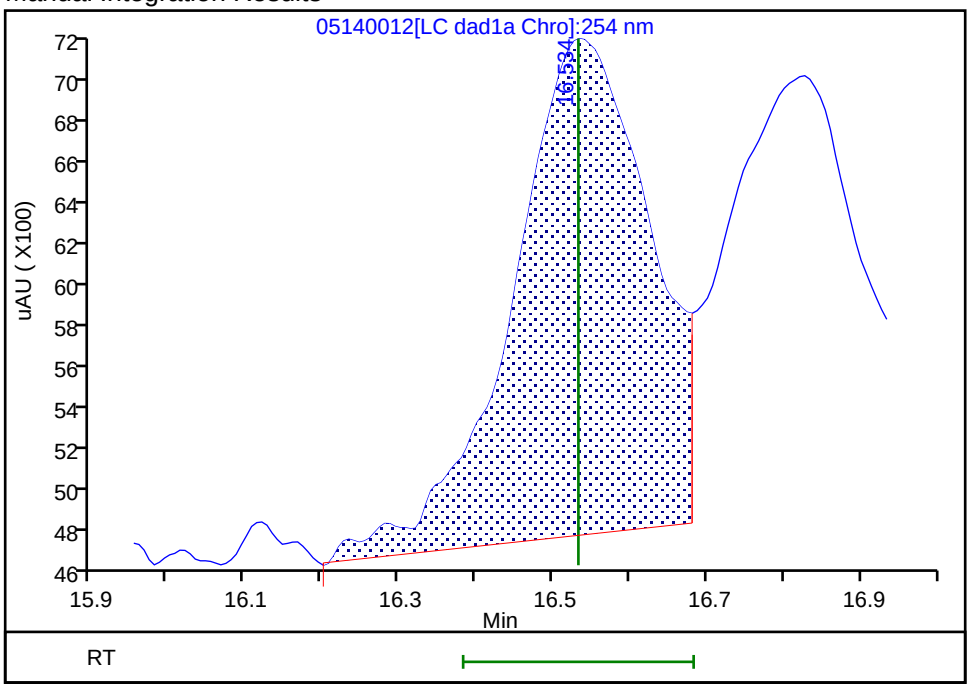
Processing Integration Results

RT: 16.53
Area: 33080
Amount: 0.118510
Amount Units: ug/ml



Manual Integration Results

RT: 16.53
Area: 29062
Amount: 0.106468
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

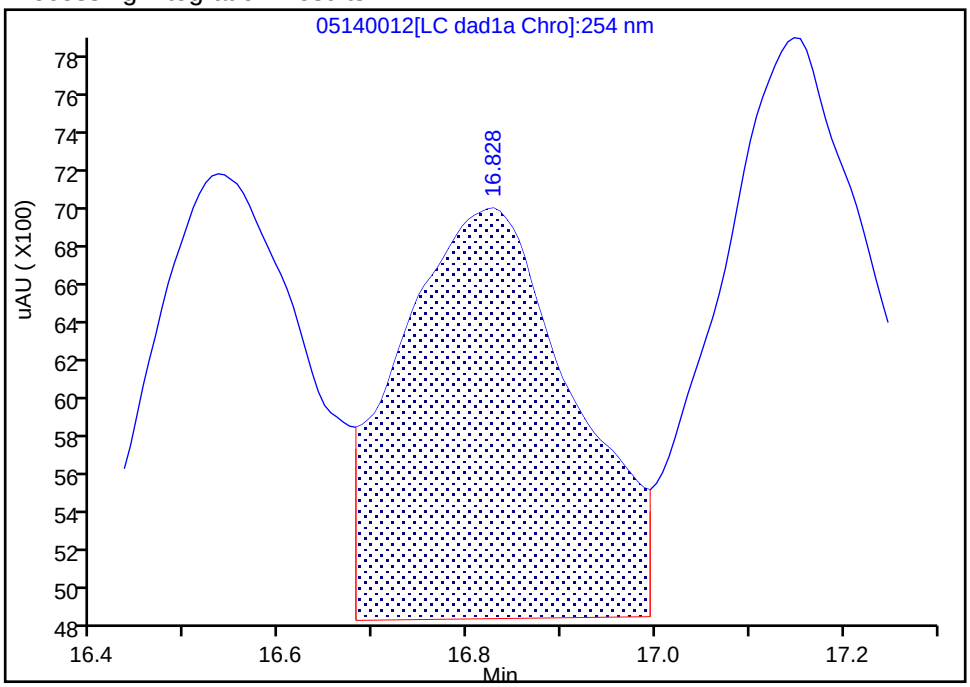
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

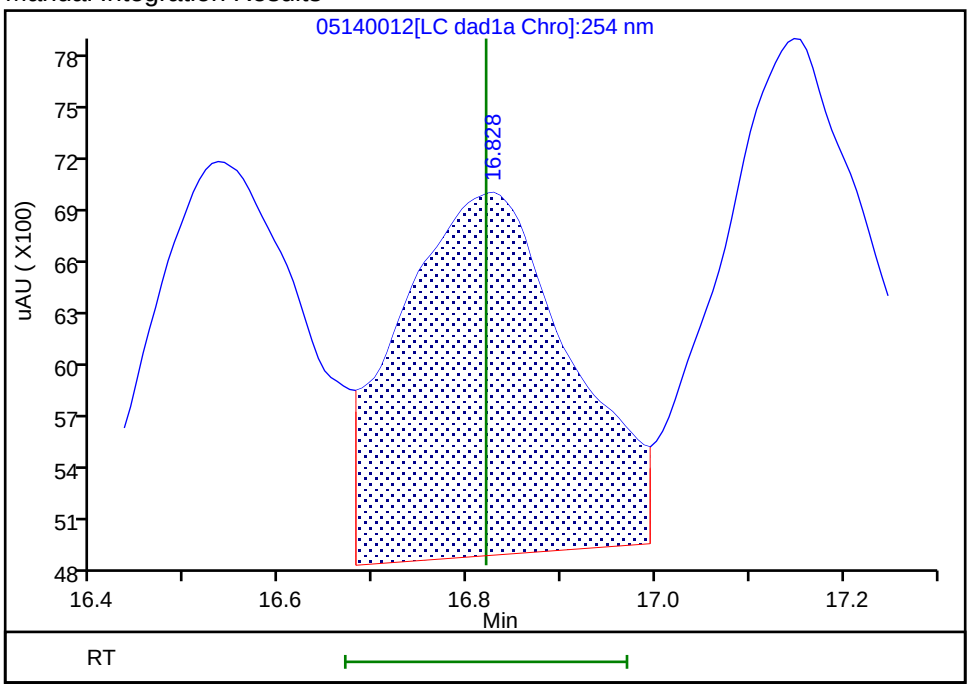
Processing Integration Results

RT: 16.83
Area: 26887
Amount: 0.106277
Amount Units: ug/ml



Manual Integration Results

RT: 16.83
Area: 25956
Amount: 0.107754
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

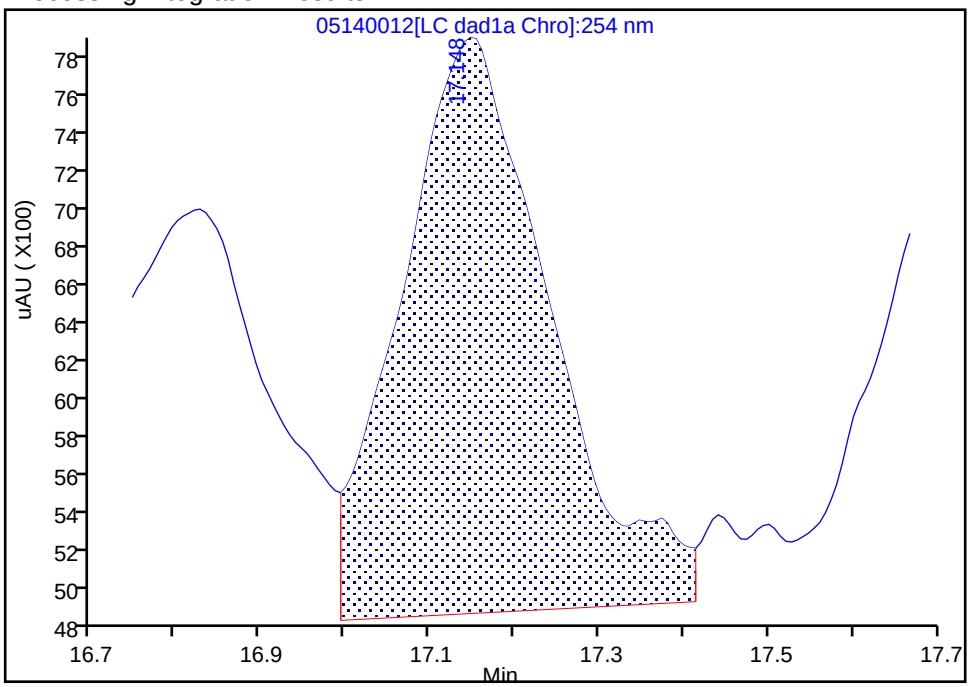
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

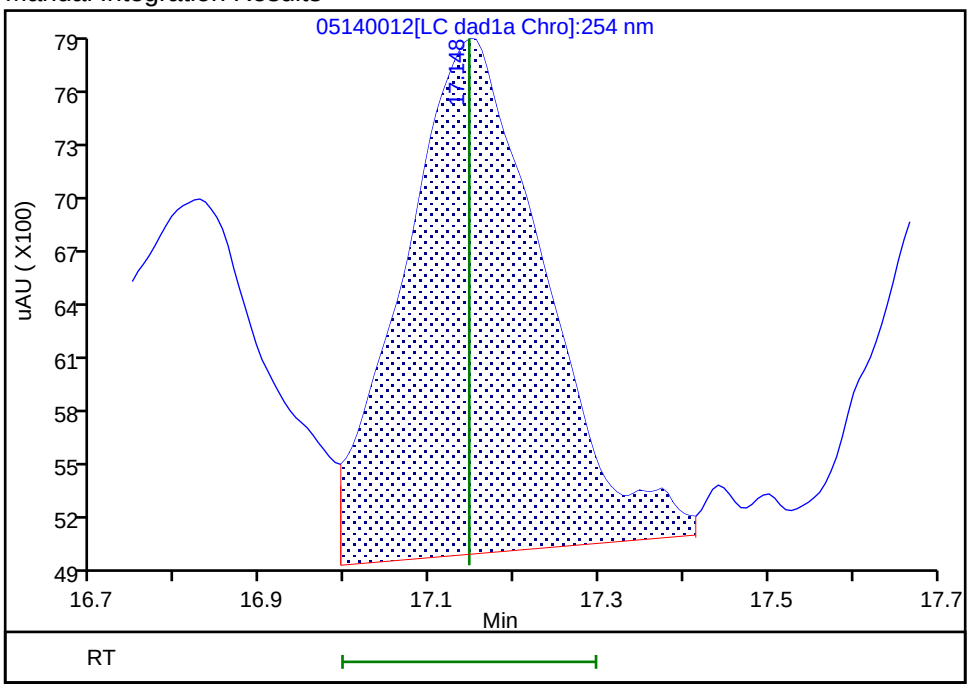
Processing Integration Results

RT: 17.15
Area: 35863
Amount: 0.102237
Amount Units: ug/ml



Manual Integration Results

RT: 17.15
Area: 32448
Amount: 0.093988
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

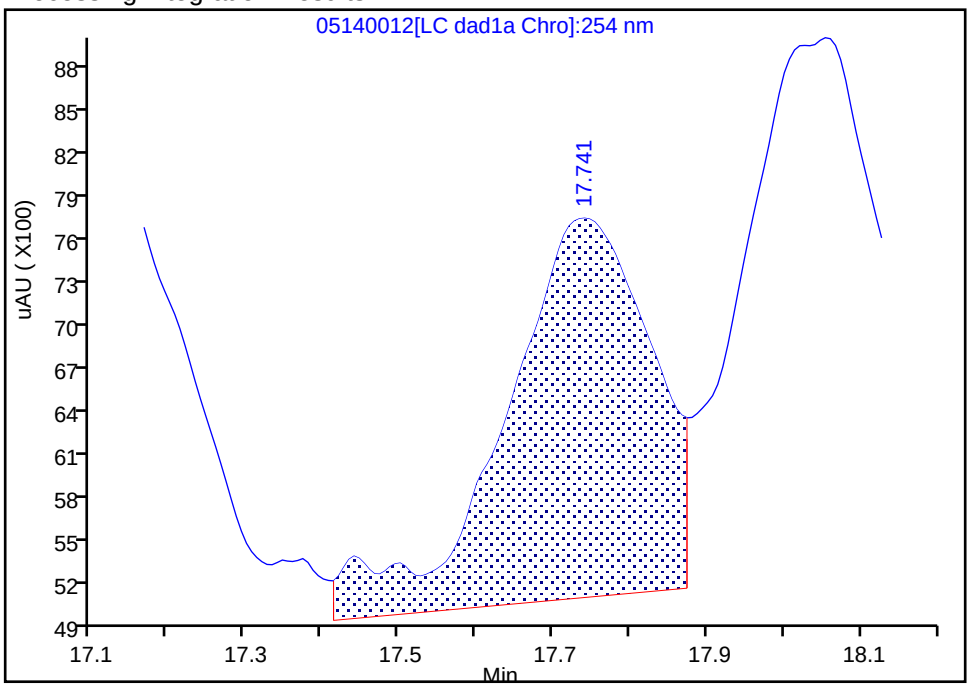
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

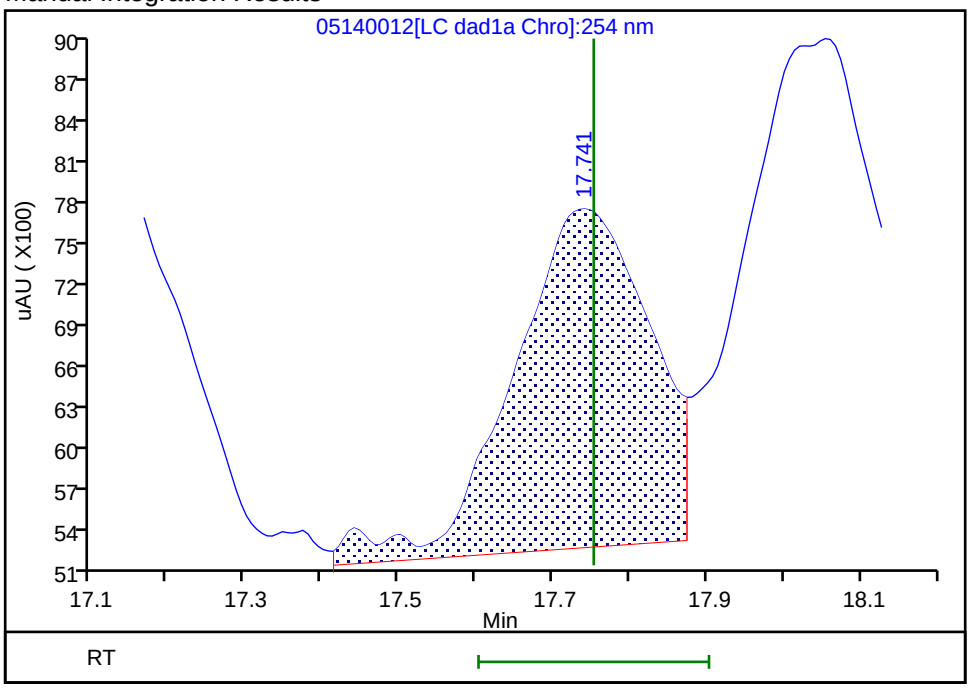
Processing Integration Results

RT: 17.74
Area: 34712
Amount: 0.117045
Amount Units: ug/ml



Manual Integration Results

RT: 17.74
Area: 30586
Amount: 0.102525
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

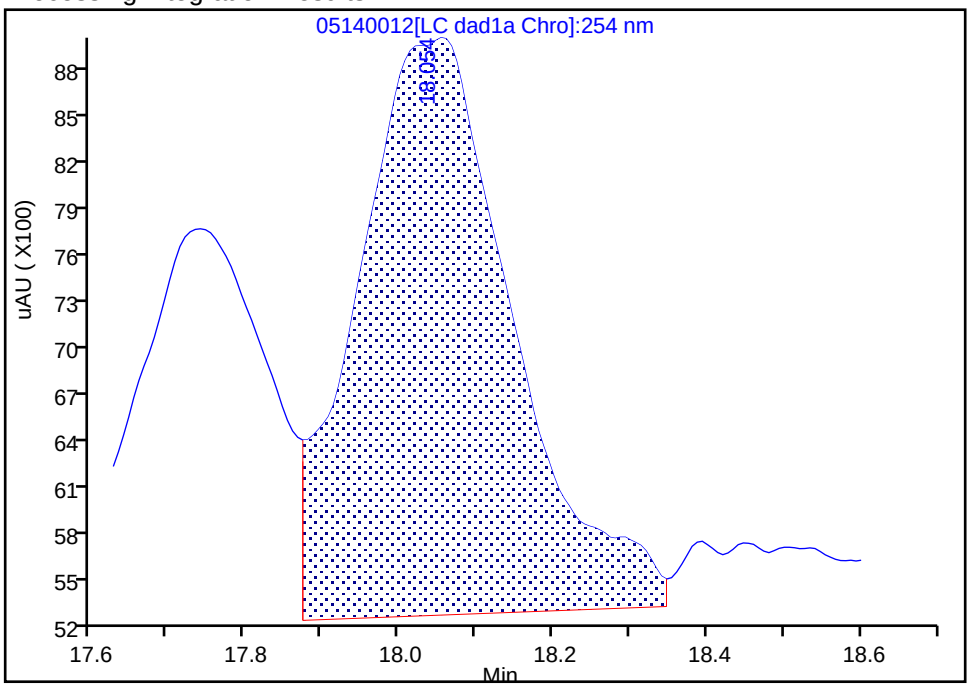
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

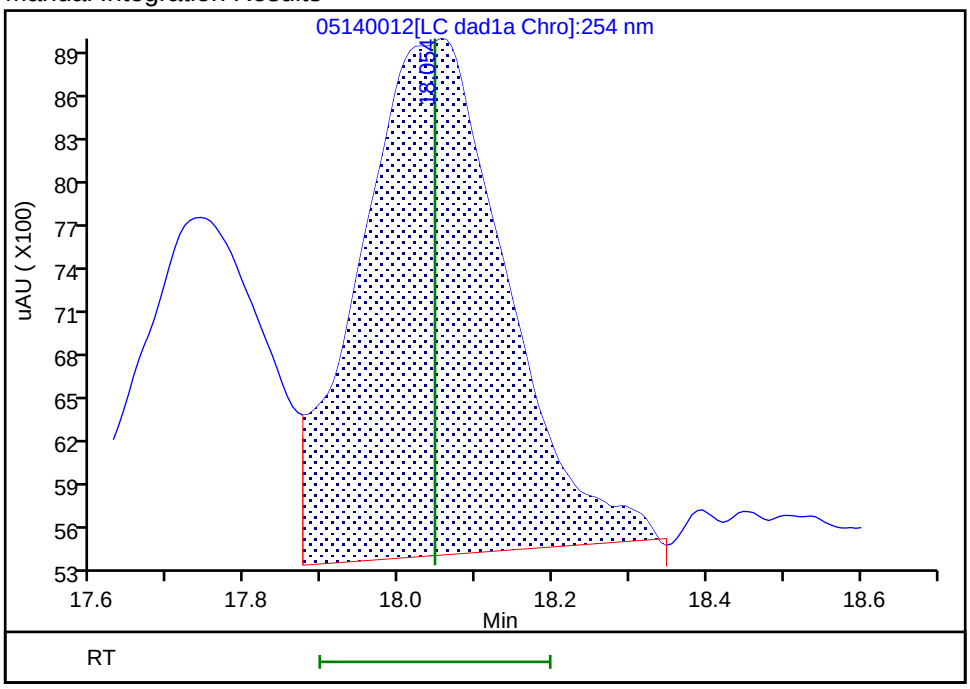
Processing Integration Results

RT: 18.05
Area: 52538
Amount: 0.110599
Amount Units: ug/ml



Manual Integration Results

RT: 18.05
Area: 47526
Amount: 0.102160
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

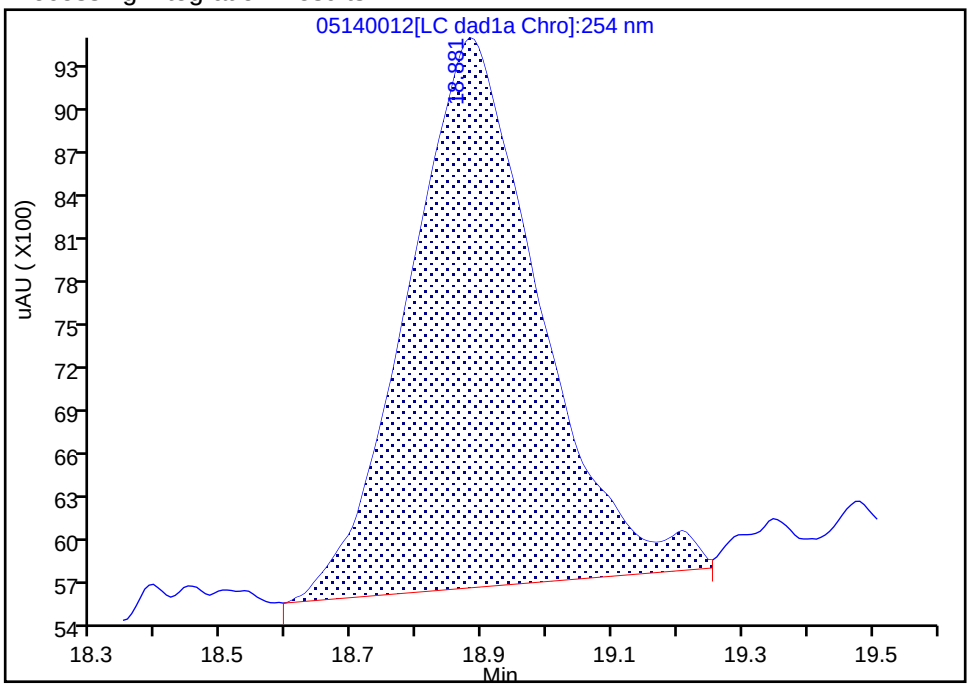
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

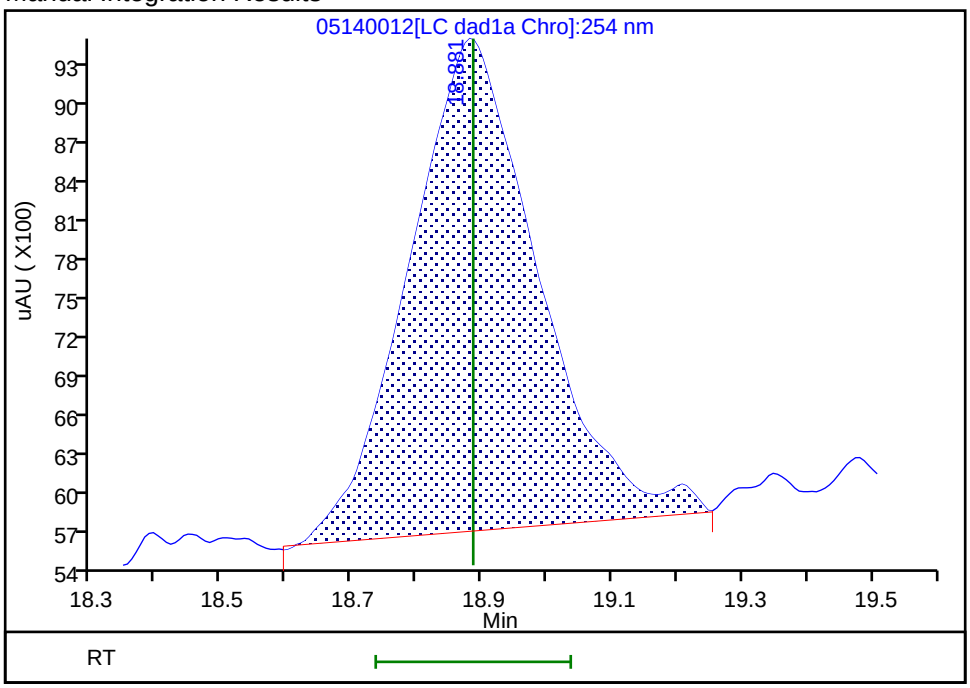
Processing Integration Results

RT: 18.88
Area: 52433
Amount: 0.109995
Amount Units: ug/ml



Manual Integration Results

RT: 18.88
Area: 51028
Amount: 0.108007
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

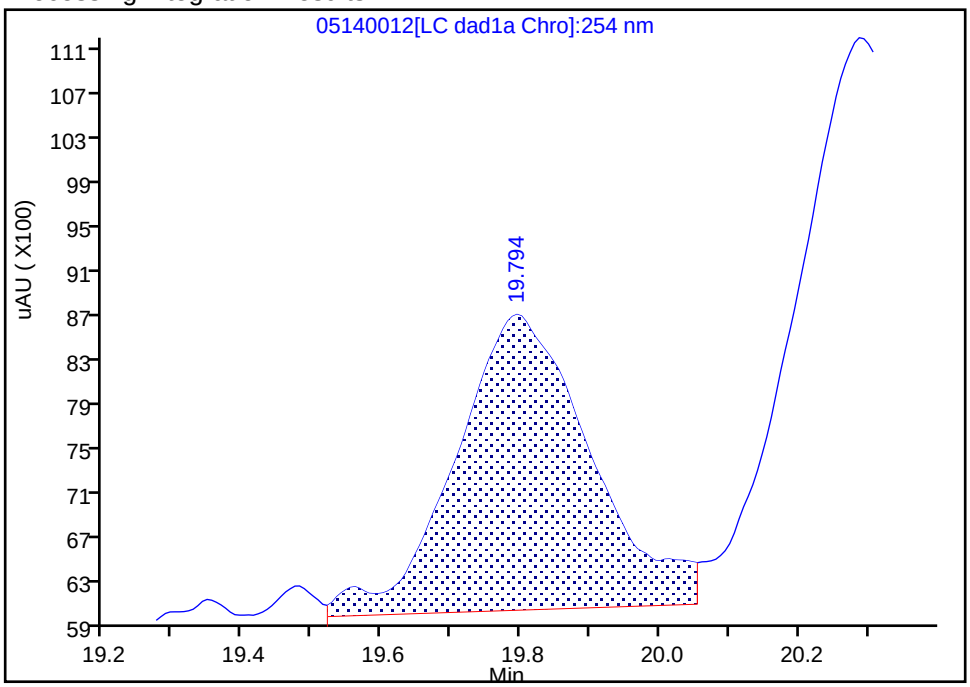
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

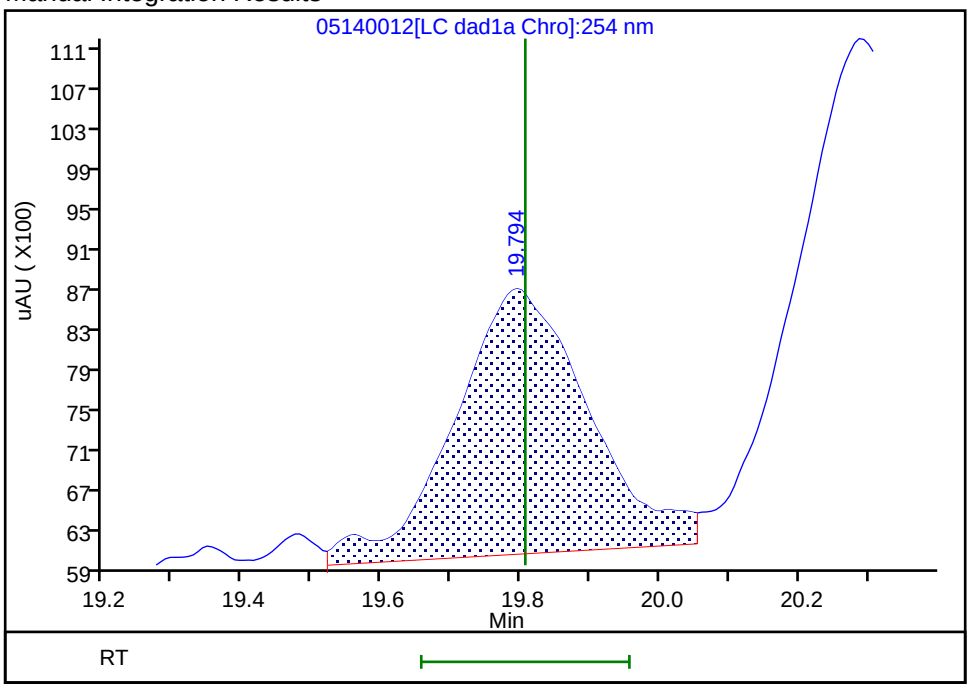
Processing Integration Results

RT: 19.79
Area: 35123
Amount: 0.102517
Amount Units: ug/ml



Manual Integration Results

RT: 19.79
Area: 34659
Amount: 0.104499
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

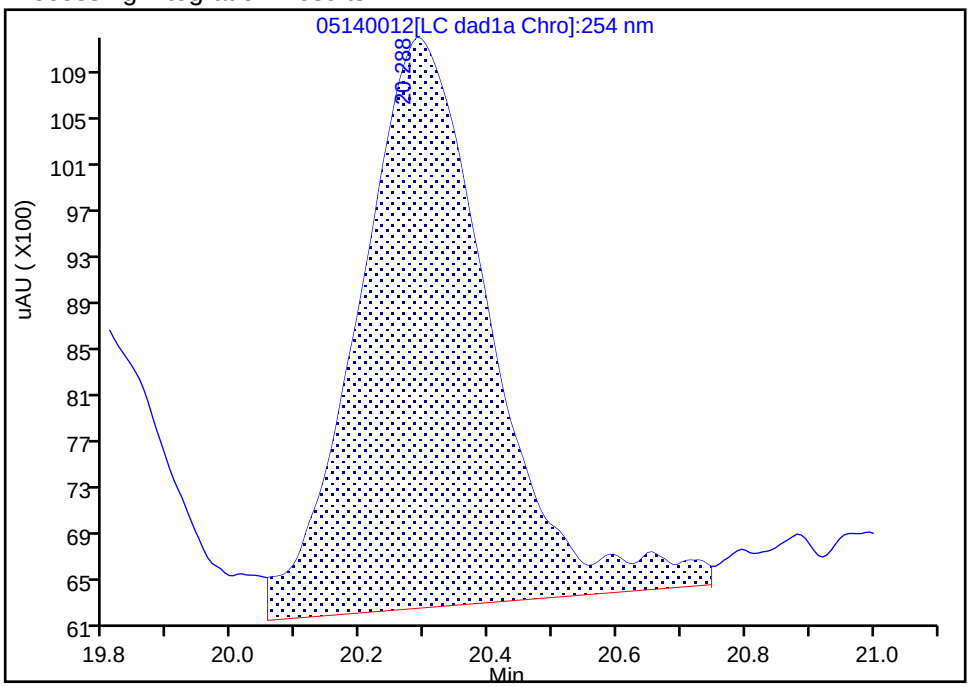
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

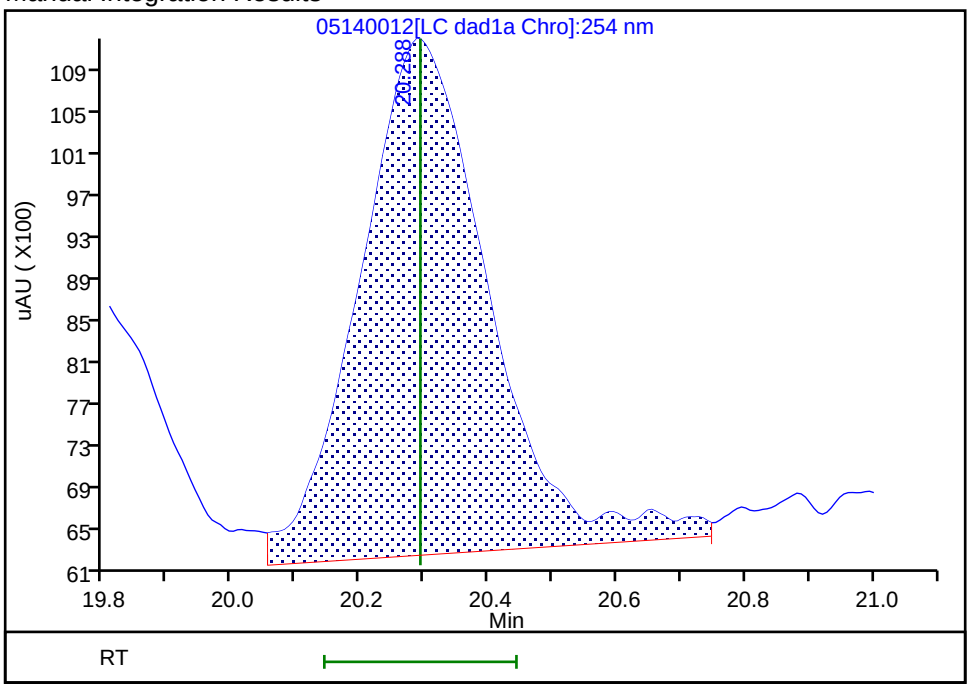
Processing Integration Results

RT: 20.29
Area: 69455
Amount: 0.105715
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 67500
Amount: 0.105450
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

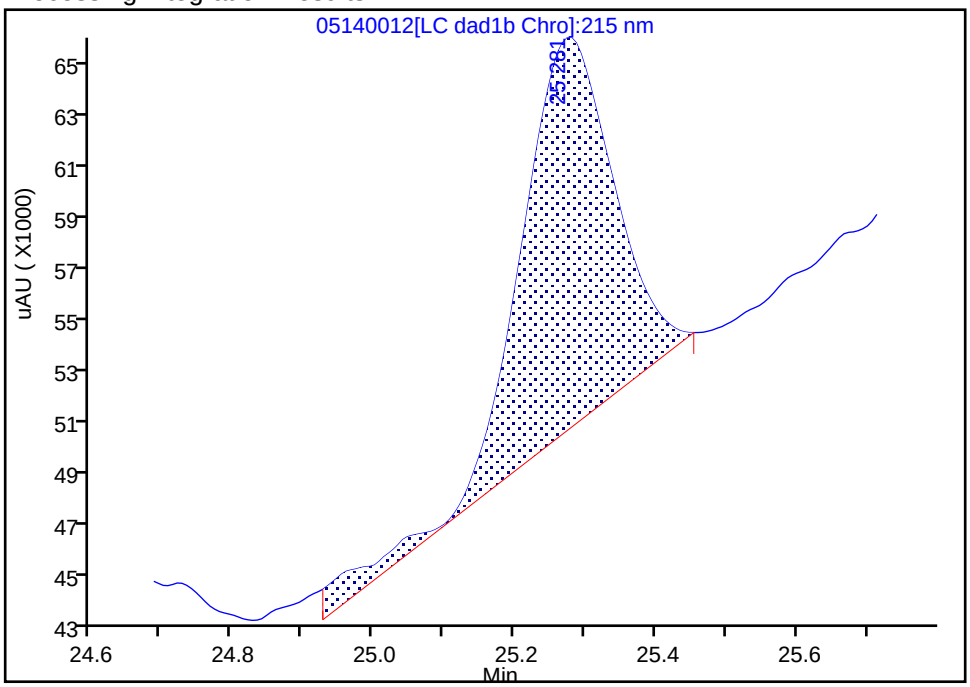
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

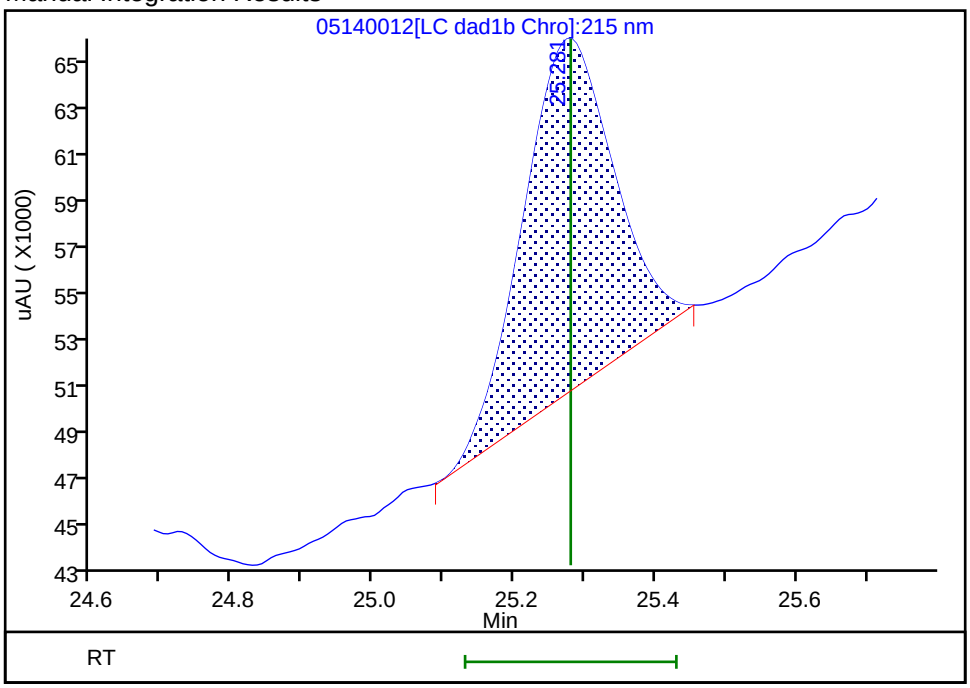
Processing Integration Results

RT: 25.28
Area: 139443
Amount: 1.011611
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 132172
Amount: 0.810643
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:59

Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140013.D
Lims ID: IC FULL 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-May-2020 19:46:37 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 3
Misc. Info.: 280-0091518-013
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:58 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:22:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.357	4.366	-0.009	22969	0.0500	0.0535	
2 2,4-diamino-6-nitrotoluene	1	4.851	4.880	-0.029	16562	0.0500	0.0464	
5 2,4,6-Trinitrophenol	1	6.331	6.300	0.031	9462	0.0500	0.0488	a
6 HMX	1	6.984	6.986	-0.002	12646	0.0500	0.0414	
8 RDX	1	9.184	9.173	0.011	15119	0.0500	0.0619	
9 Nitrobenzene	1	12.110	12.106	0.004	28424	0.0502	0.0647	
$ 10 1,2-Dinitrobenzene	1	13.037	13.040	-0.003	18744	0.0500	0.0610	M
11 3,5-Dinitroaniline	1	14.890	14.886	0.004	27916	0.0500	0.0518	M
12 1,3-Dinitrobenzene	1	15.544	15.553	-0.009	37161	0.0501	0.0551	M
13 Nitroglycerin	2	15.844	15.853	-0.009	64042	0.5000	0.5050	M
14 o-Nitrotoluene	1	16.550	16.533	0.017	16003	0.0500	0.0586	M
15 p-Nitrotoluene	1	16.837	16.820	0.017	15492	0.0501	0.0643	M
16 4-Amino-2,6-dinitrotoluene	1	17.157	17.146	0.011	22118	0.0501	0.0641	M
17 m-Nitrotoluene	1	17.724	17.753	-0.029	19280	0.0501	0.0646	M
18 2-Amino-4,6-dinitrotoluene	1	18.030	18.046	-0.016	28982	0.0502	0.0623	M
19 1,3,5-Trinitrobenzene	1	18.864	18.886	-0.022	26649	0.0501	0.0564	M
20 2,6-Dinitrotoluene	1	19.817	19.806	0.011	19107	0.0502	0.0507	M
21 2,4-Dinitrotoluene	1	20.290	20.293	-0.003	37302	0.0502	0.0583	M
22 Tetryl	1	23.557	23.553	0.004	20202	0.0501	0.0548	
23 2,4,6-Trinitrotoluene	1	24.637	24.653	-0.016	28366	0.0502	0.0628	
24 PETN	2	25.277	25.280	-0.003	102120	0.5000	0.5782	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

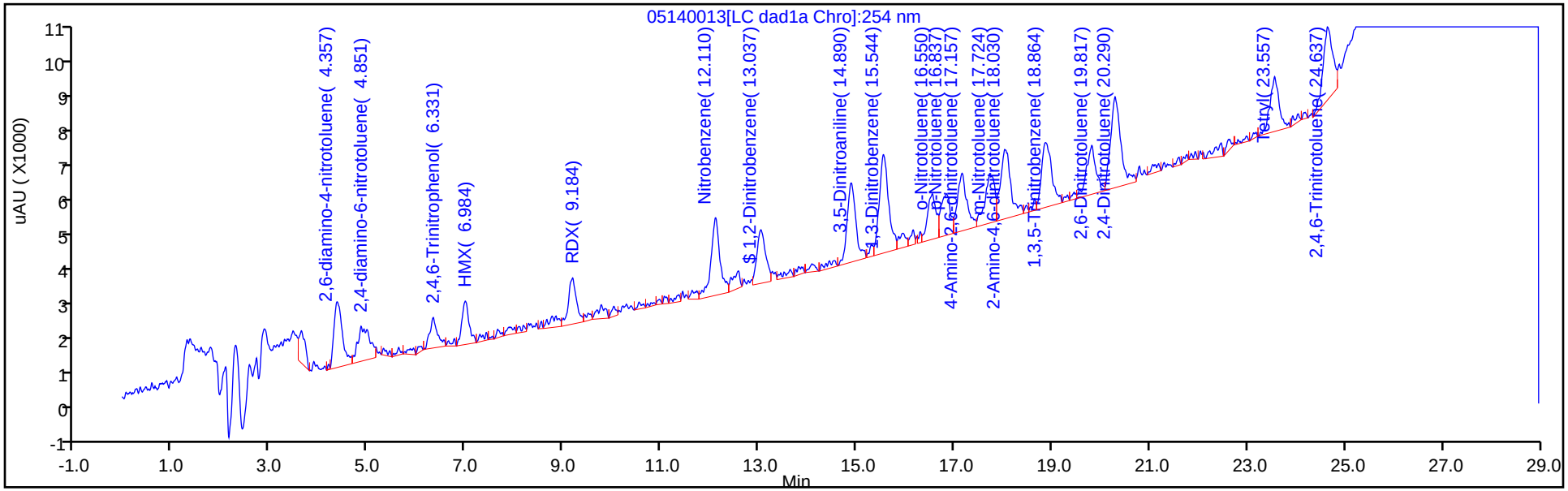
8330IntermStk_00064	Amount Added:	5.00	Units: uL
8330_ADDs_00026	Amount Added:	2.50	Units: uL

Report Date: 15-May-2020 12:00:58 Chrom Revision: 2.3 05-May-2020 17:48:18

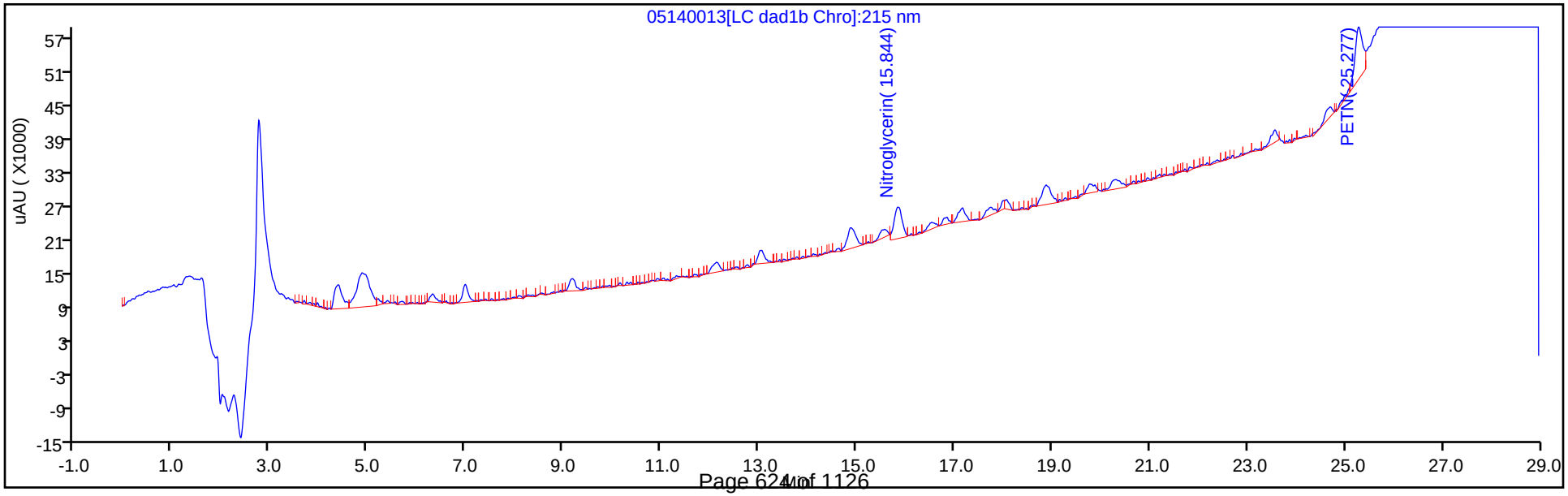
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 3			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

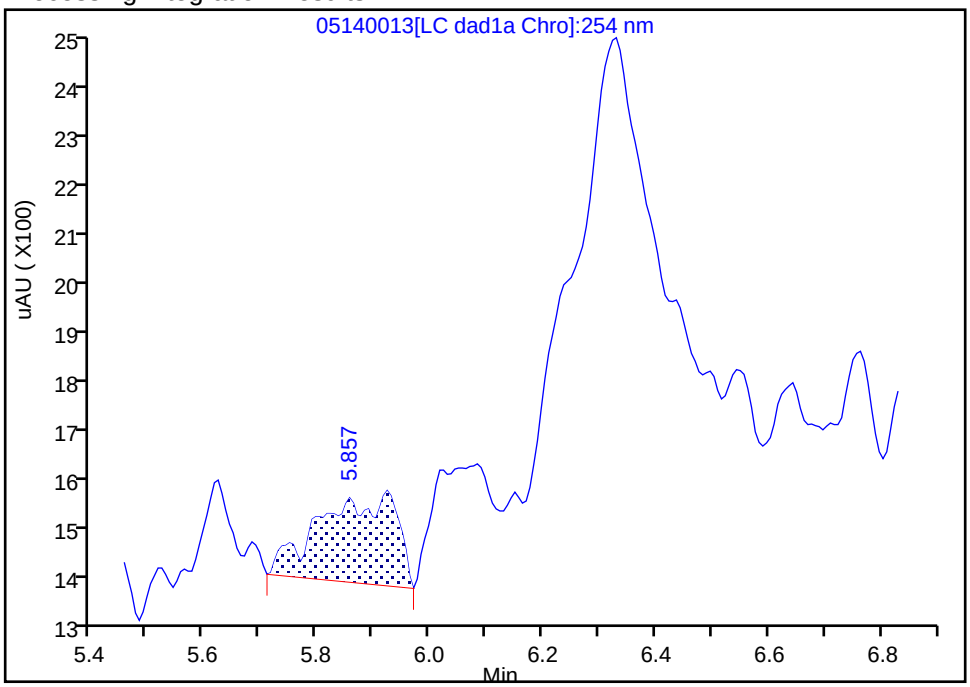
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

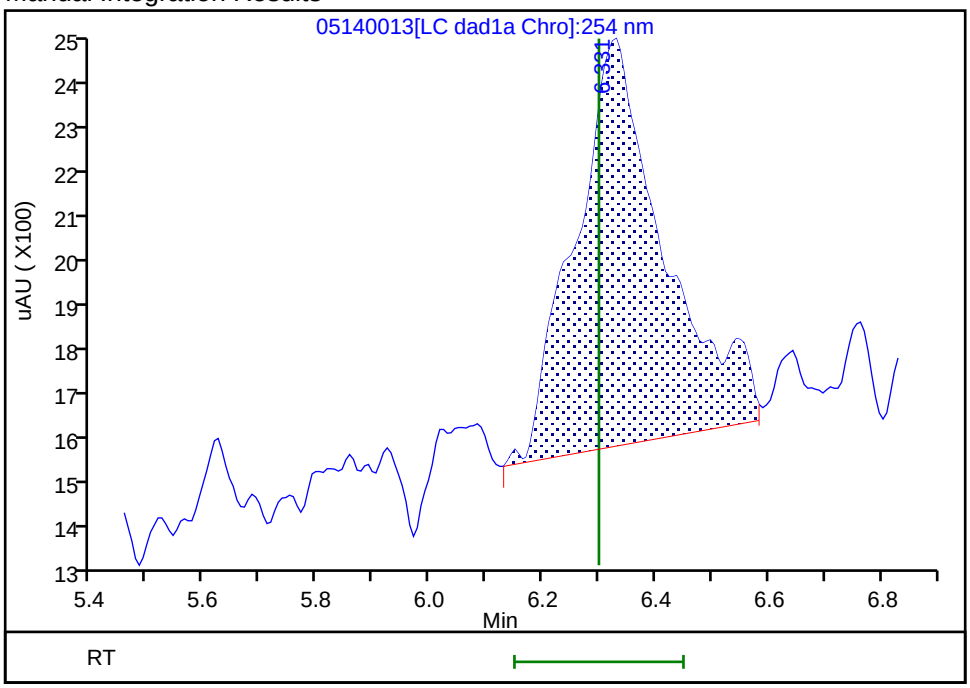
Processing Integration Results

RT: 5.86
Area: 1615
Amount: 0.011701
Amount Units: ug/ml



Manual Integration Results

RT: 6.33
Area: 9462
Amount: 0.048821
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:16
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

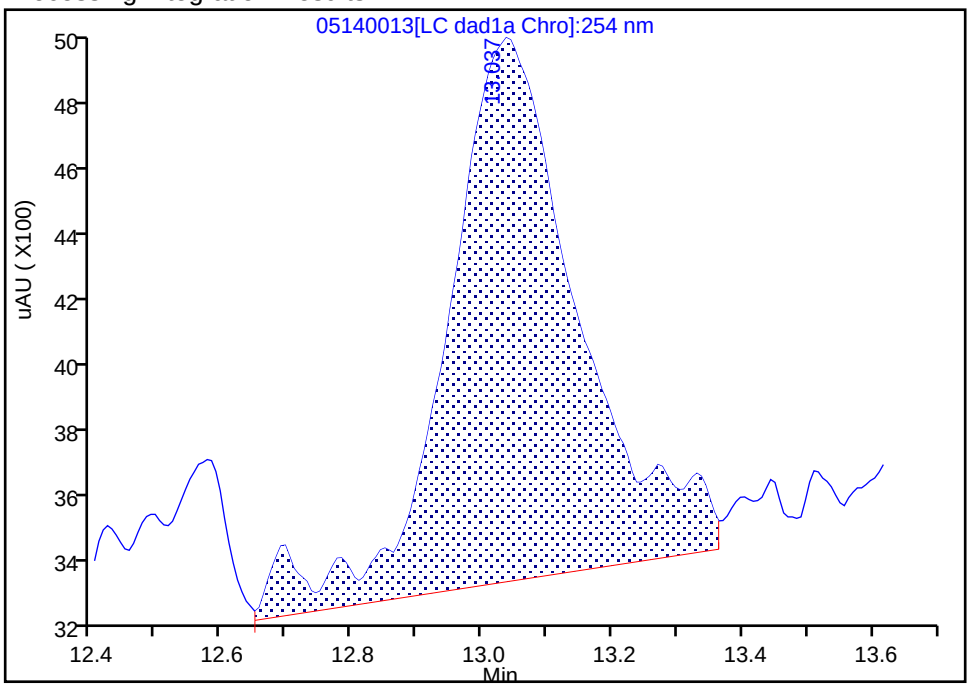
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

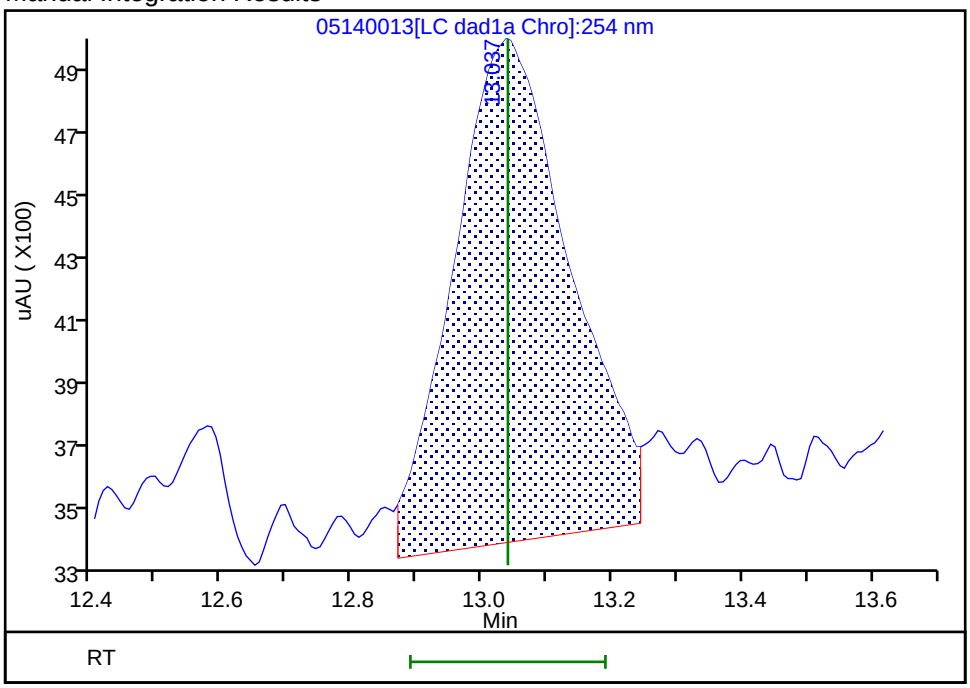
Processing Integration Results

RT: 13.04
Area: 21320
Amount: 0.066490
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 18744
Amount: 0.060979
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:23

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

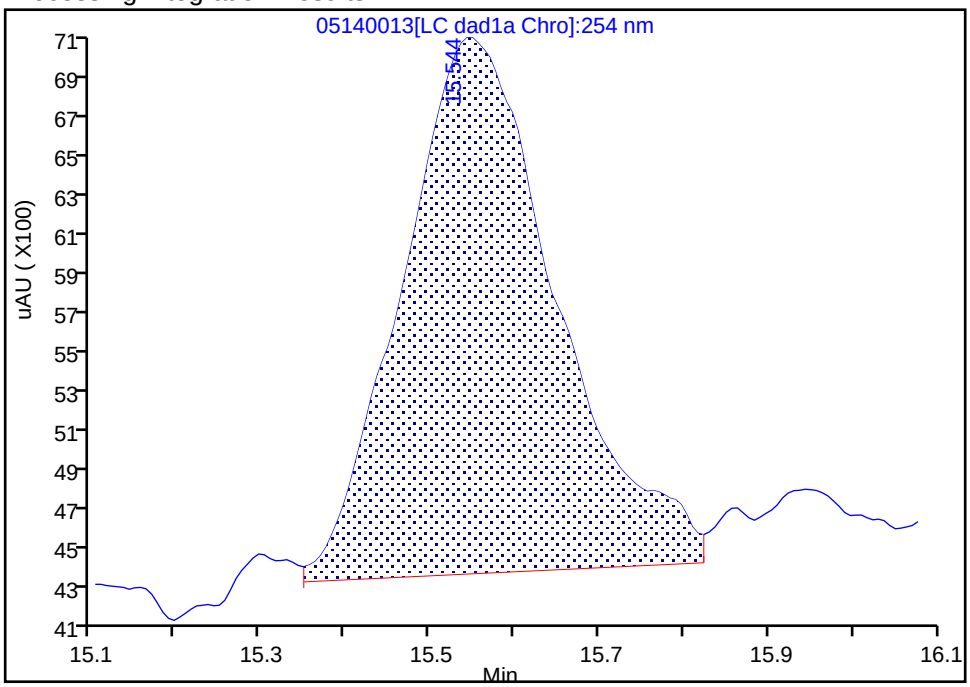
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

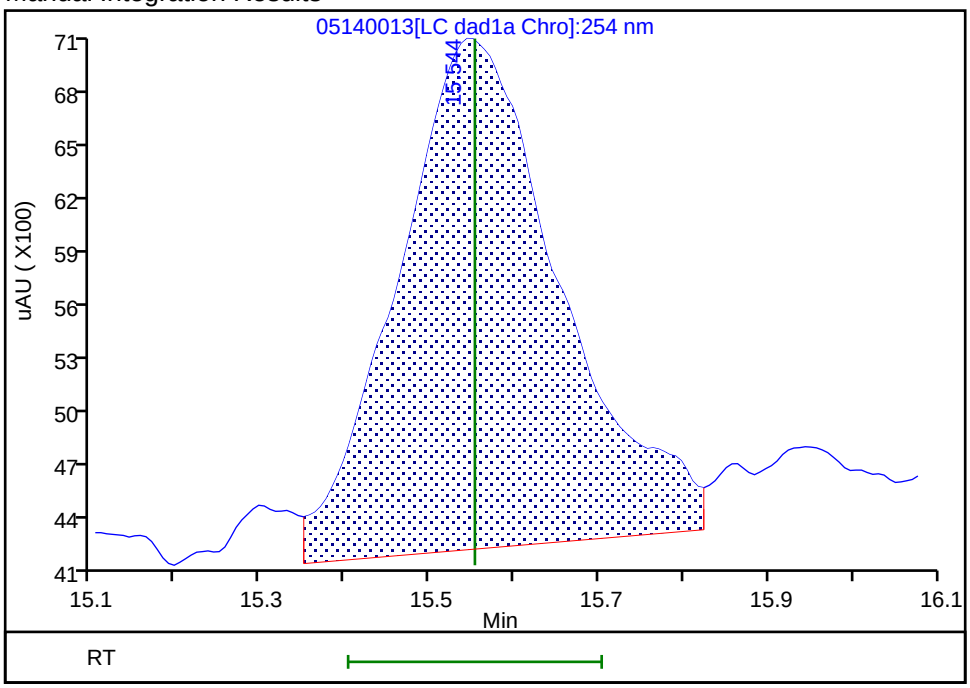
Processing Integration Results

RT: 15.54
Area: 33327
Amount: 0.049753
Amount Units: ug/ml



Manual Integration Results

RT: 15.54
Area: 37161
Amount: 0.055120
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

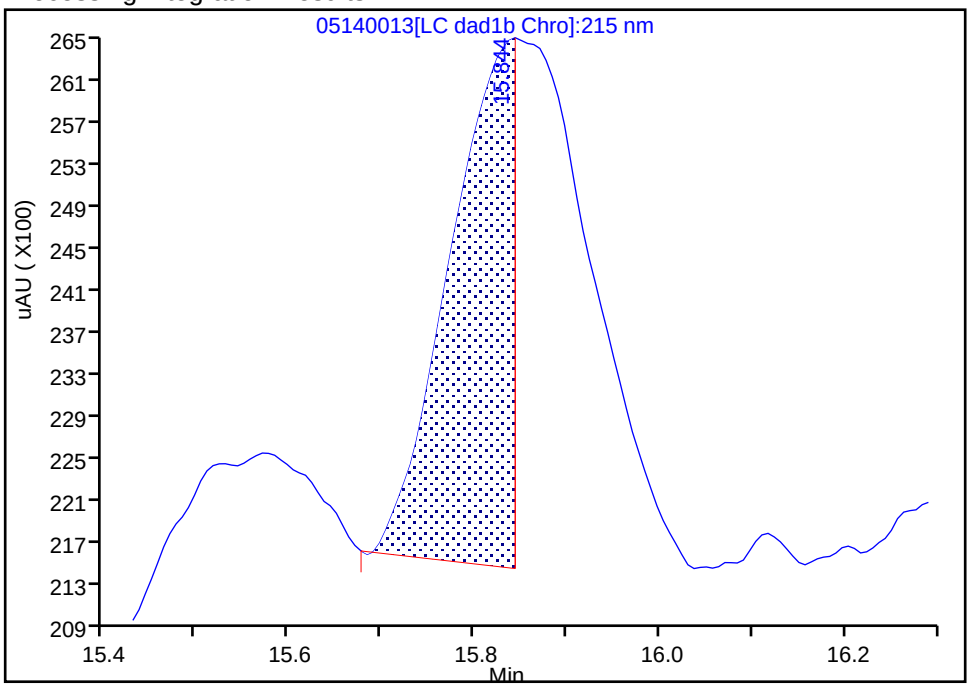
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

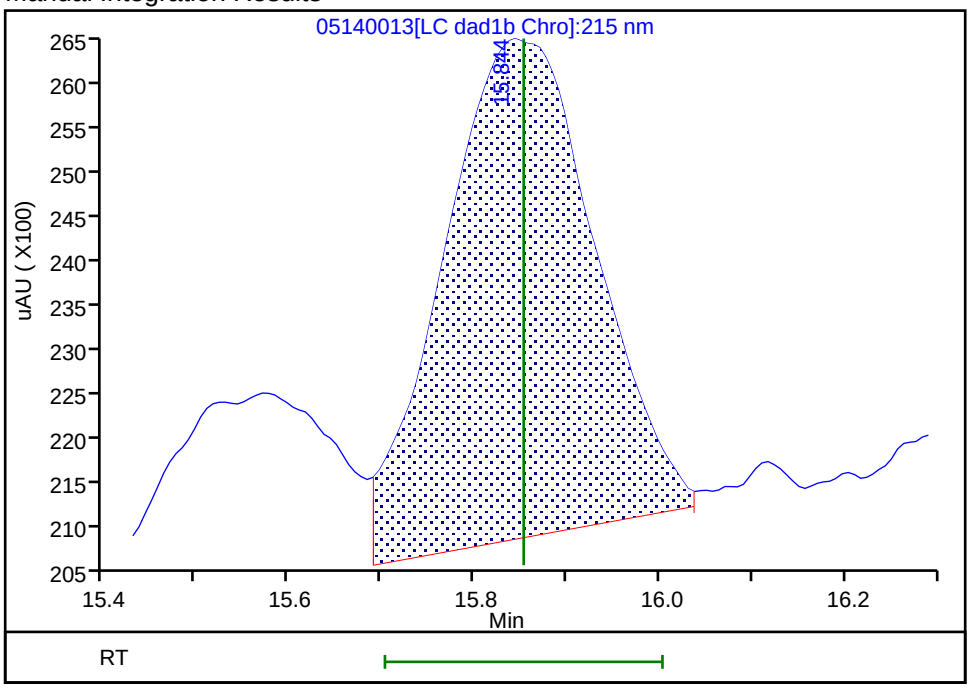
Processing Integration Results

RT: 15.84
Area: 23753
Amount: 0.203485
Amount Units: ug/ml



Manual Integration Results

RT: 15.84
Area: 64042
Amount: 0.505050
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

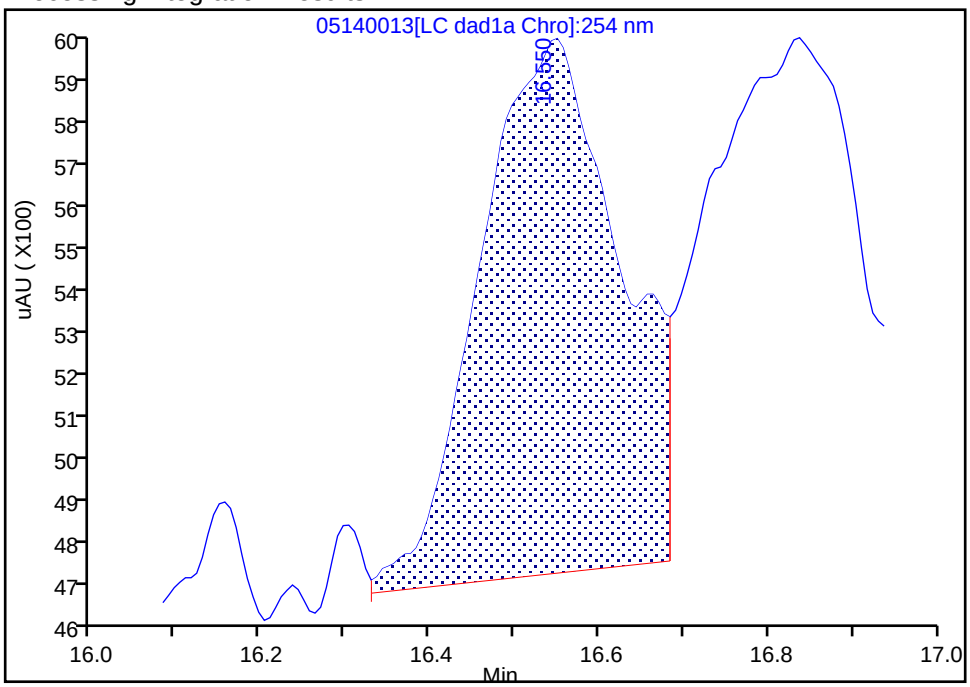
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

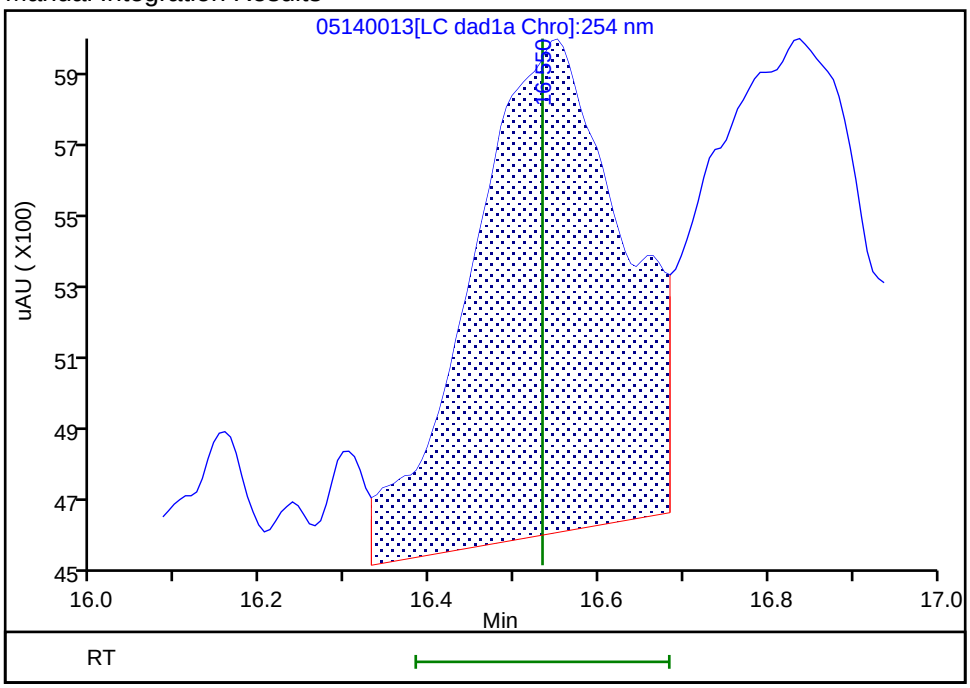
Processing Integration Results

RT: 16.55
Area: 13586
Amount: 0.049463
Amount Units: ug/ml



Manual Integration Results

RT: 16.55
Area: 16003
Amount: 0.058627
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

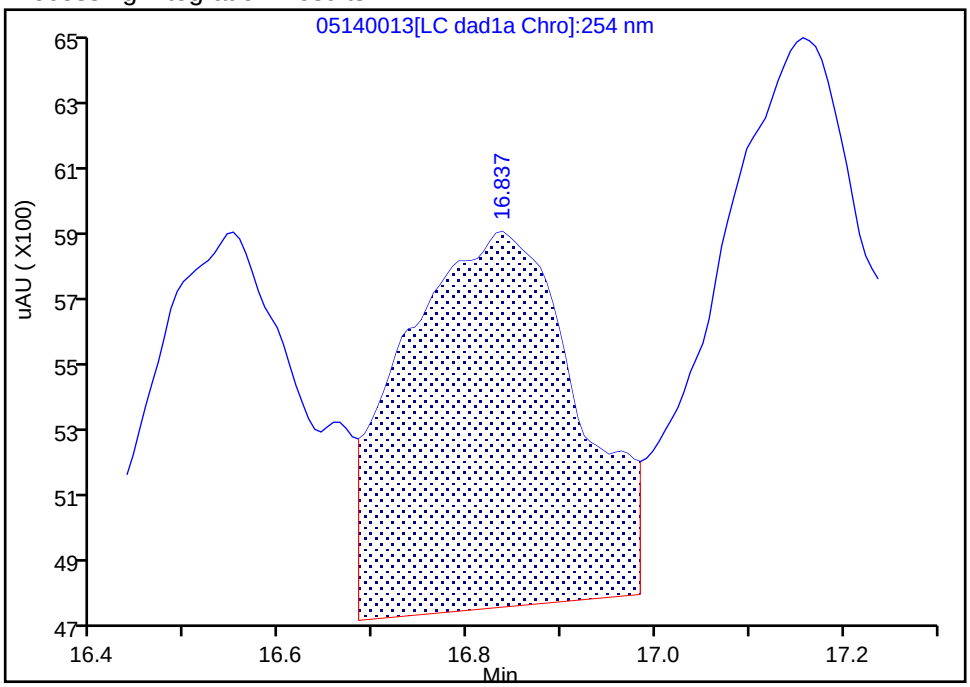
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

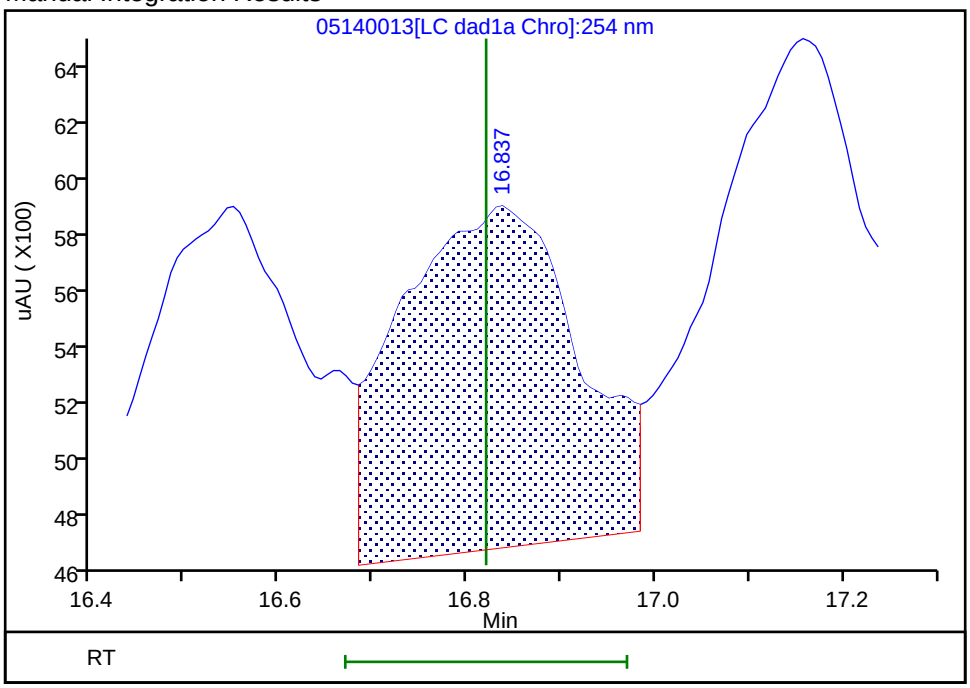
Processing Integration Results

RT: 16.84
Area: 14394
Amount: 0.057129
Amount Units: ug/ml



Manual Integration Results

RT: 16.84
Area: 15492
Amount: 0.064314
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

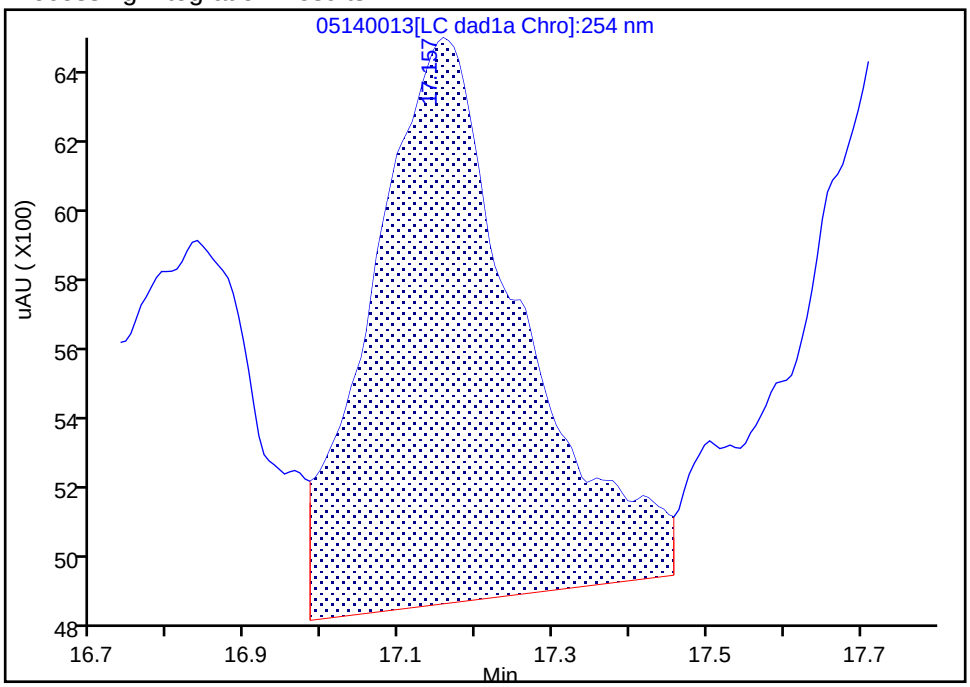
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

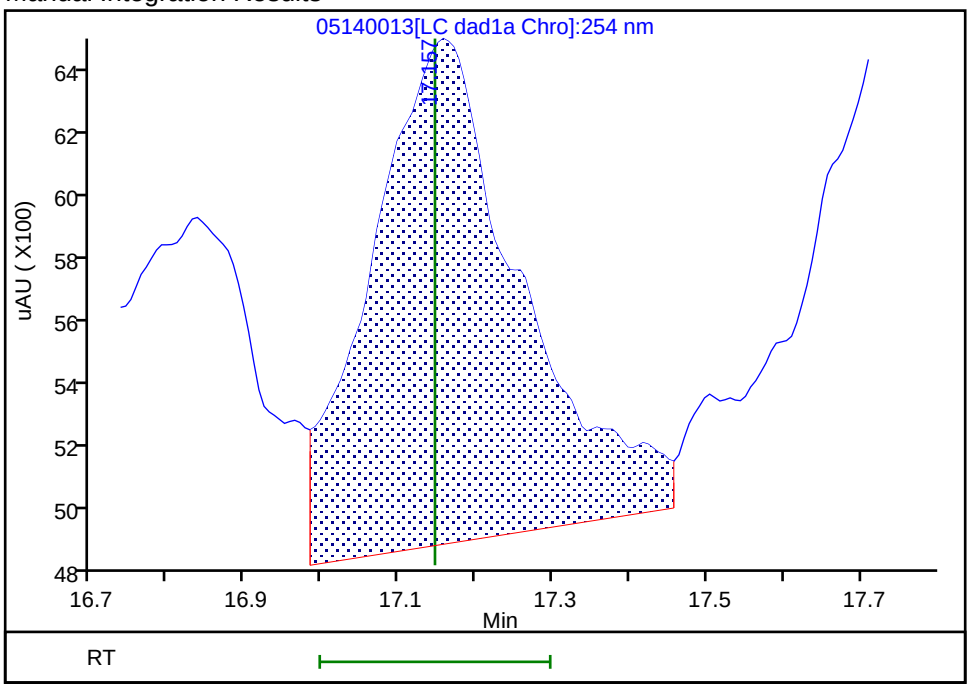
Processing Integration Results

RT: 17.16
Area: 21749
Amount: 0.062679
Amount Units: ug/ml



Manual Integration Results

RT: 17.16
Area: 22118
Amount: 0.064067
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

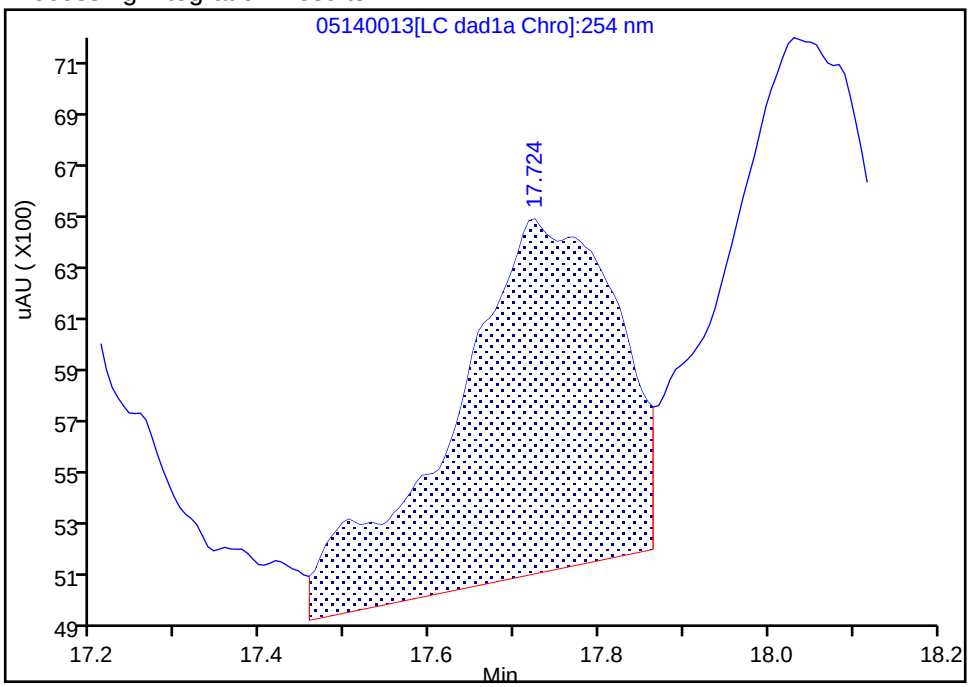
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

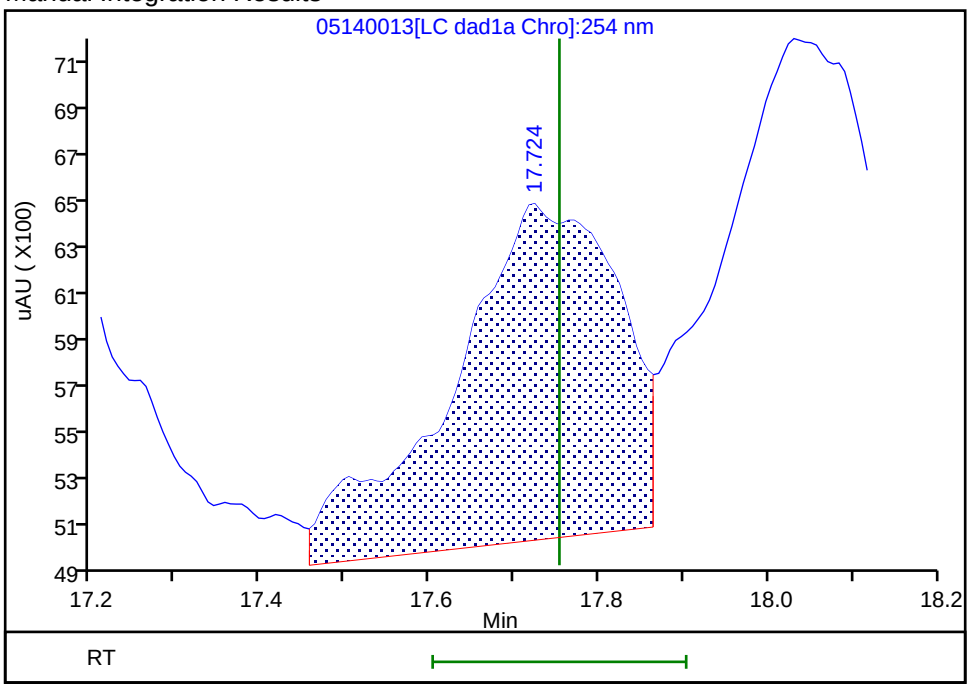
Processing Integration Results

RT: 17.72
Area: 18317
Amount: 0.062732
Amount Units: ug/ml



Manual Integration Results

RT: 17.72
Area: 19280
Amount: 0.064627
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

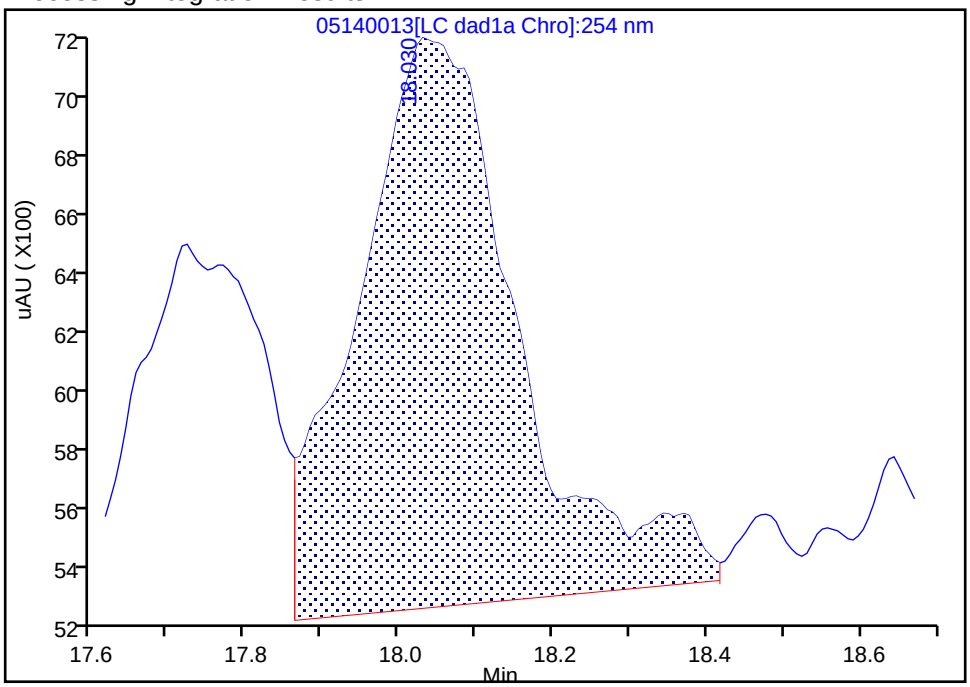
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

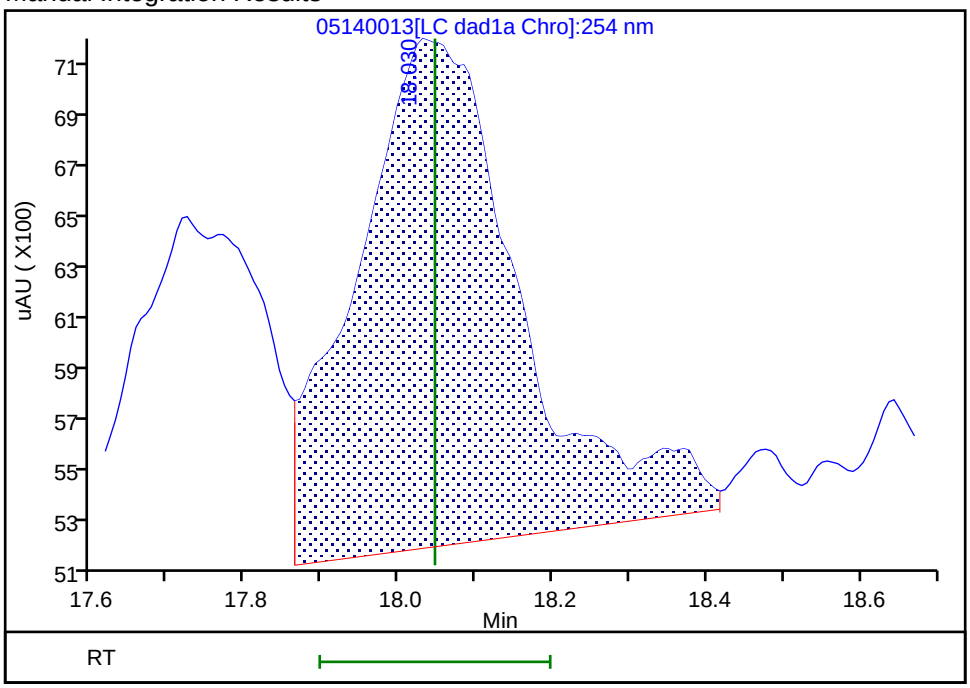
Processing Integration Results

RT: 18.03
Area: 27239
Amount: 0.055134
Amount Units: ug/ml



Manual Integration Results

RT: 18.03
Area: 28982
Amount: 0.062299
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

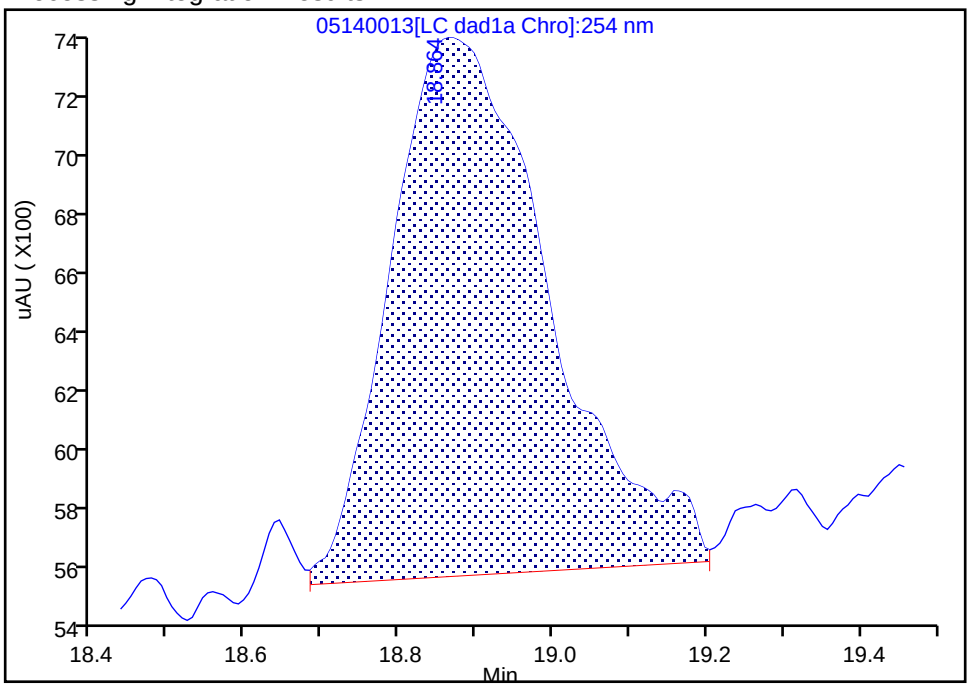
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

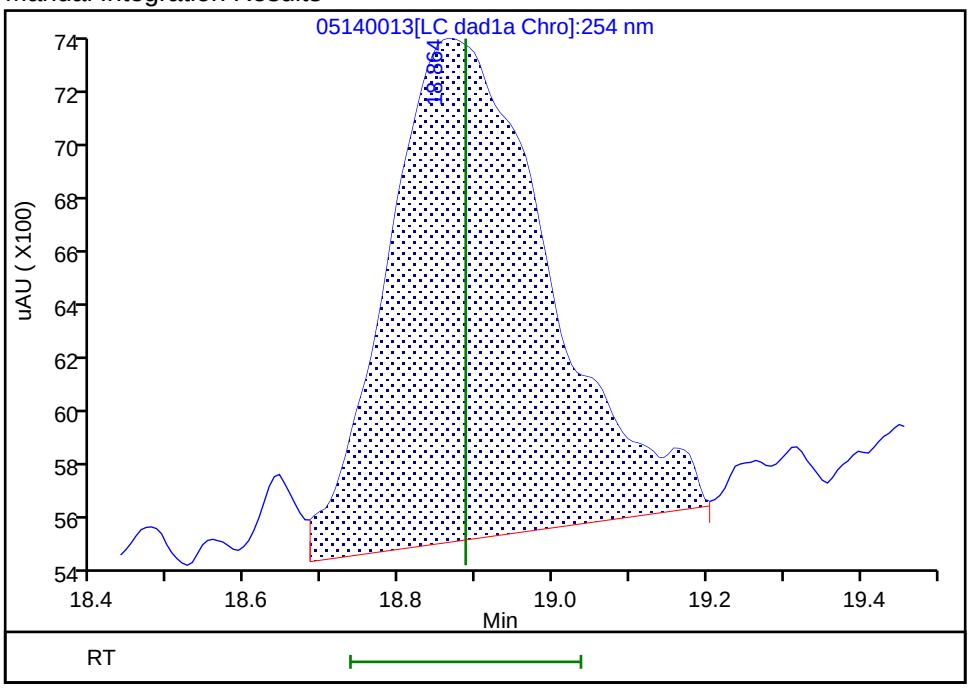
Processing Integration Results

RT: 18.86
Area: 25370
Amount: 0.053396
Amount Units: ug/ml



Manual Integration Results

RT: 18.86
Area: 26649
Amount: 0.056406
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

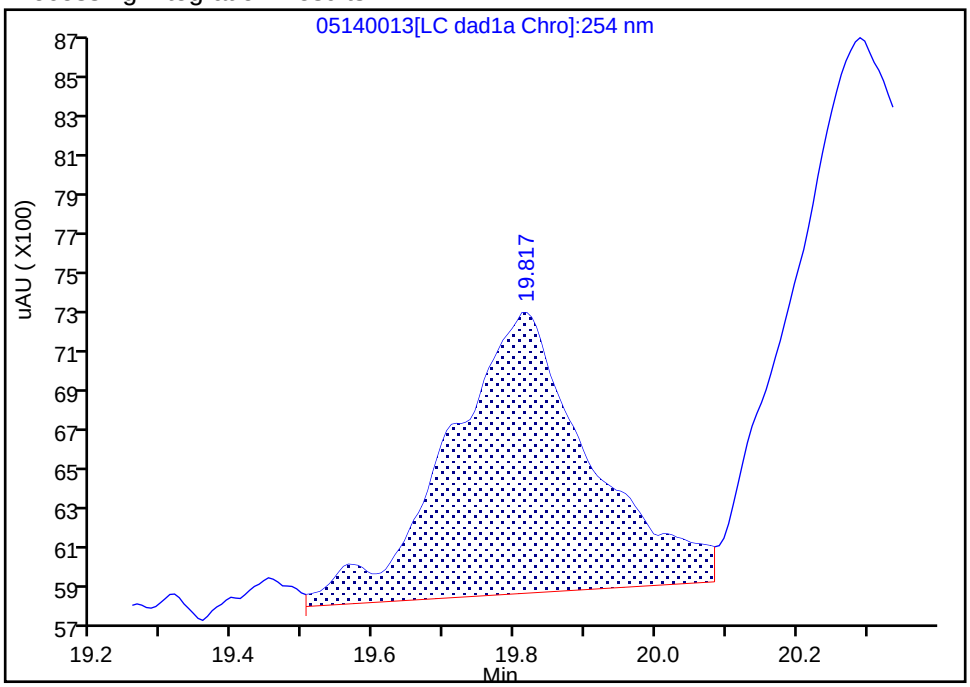
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

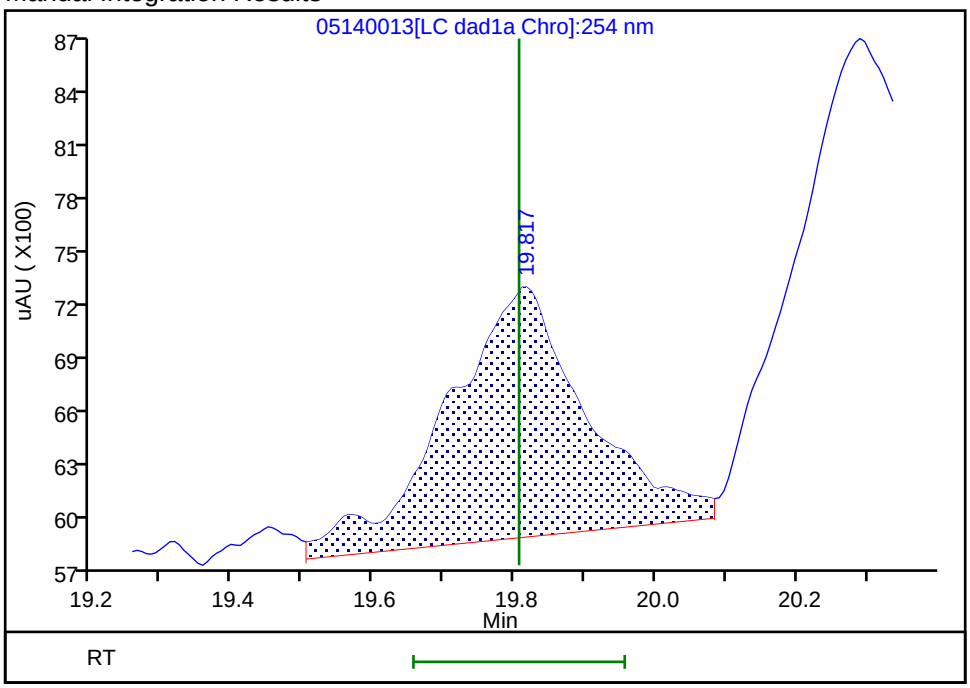
Processing Integration Results

RT: 19.82
Area: 19664
Amount: 0.057481
Amount Units: ug/ml



Manual Integration Results

RT: 19.82
Area: 19107
Amount: 0.050727
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

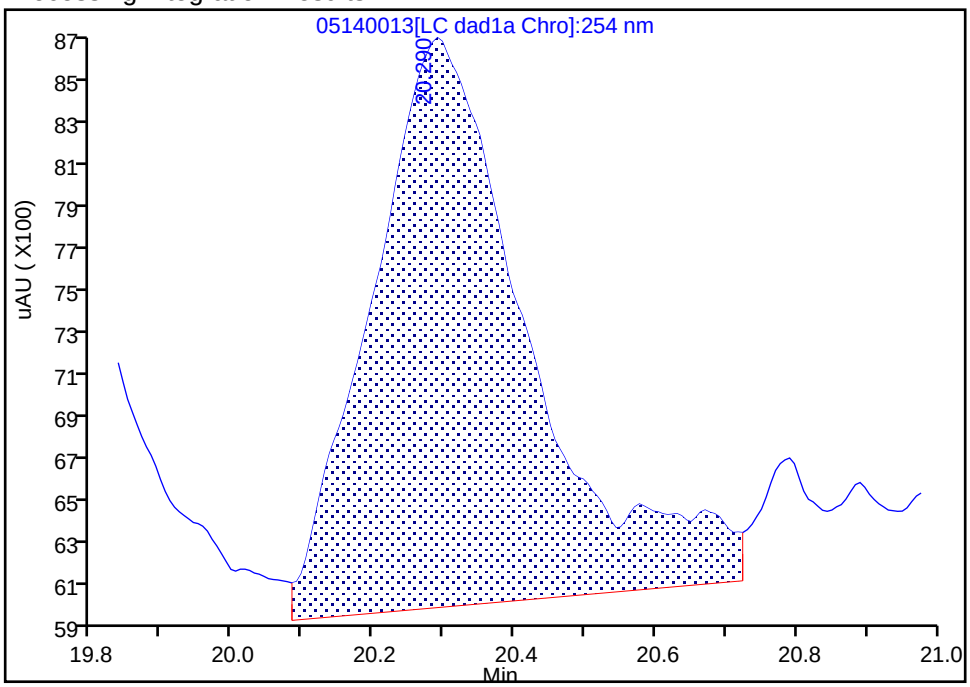
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

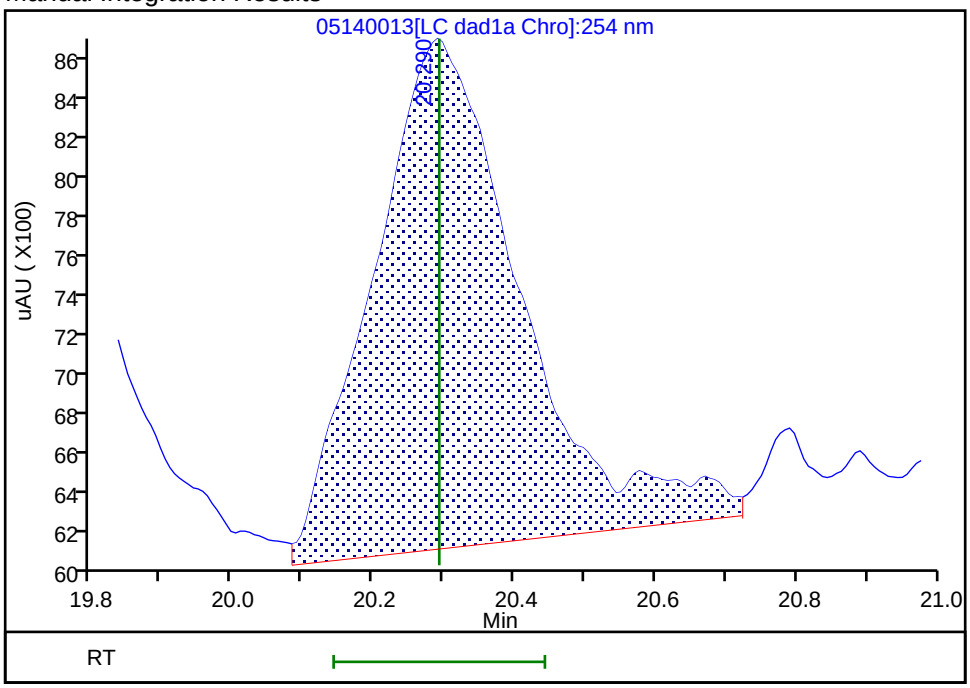
Processing Integration Results

RT: 20.29
Area: 41123
Amount: 0.062799
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 37302
Amount: 0.058274
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

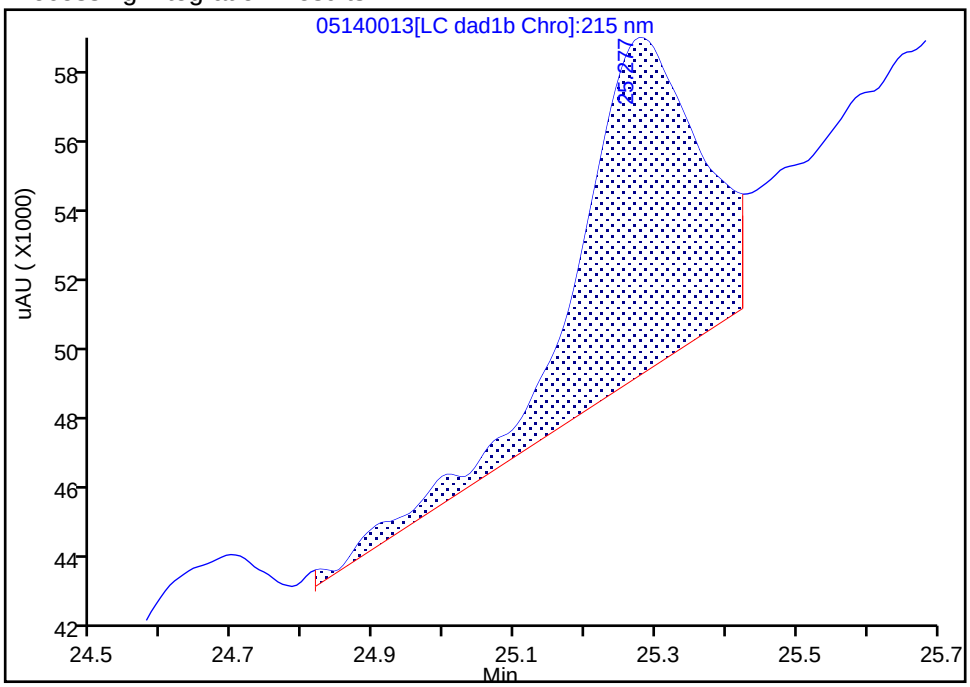
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

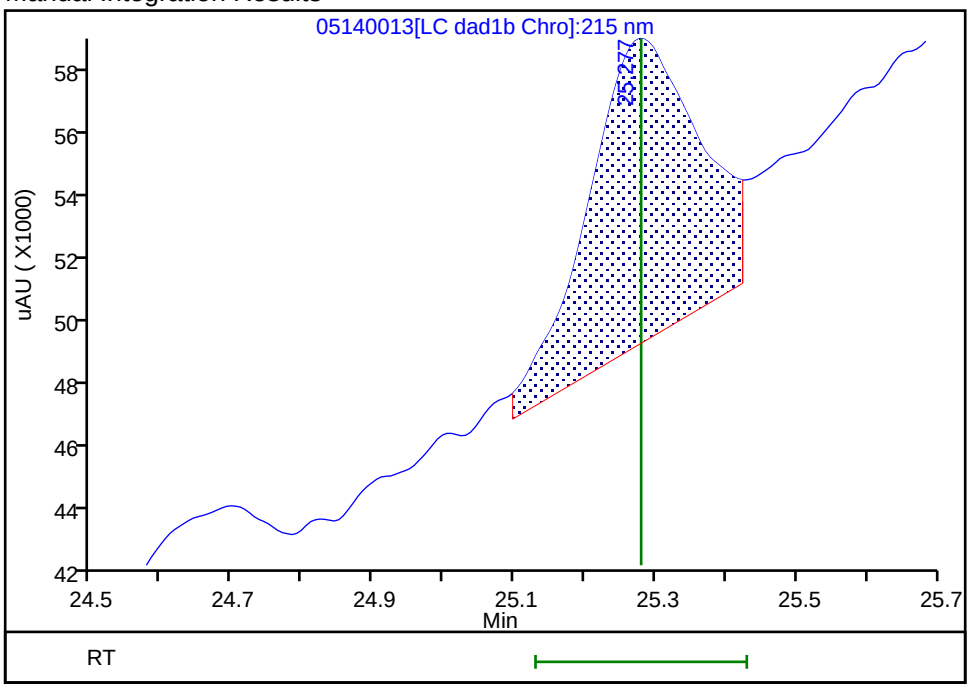
Processing Integration Results

RT: 25.28
Area: 109947
Amount: 0.773174
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 102120
Amount: 0.578199
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:48
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140014.D
Lims ID: IC FULL 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-May-2020 20:21:33 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 2
Misc. Info.: 280-0091518-014
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:58 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:22:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.375	4.366	0.009	10106	0.0200	0.0235	
2 2,4-diamino-6-nitrotoluene	1	4.855	4.880	-0.025	9147	0.0200	0.0152	
5 2,4,6-Trinitrophenol	1	6.322	6.300	0.022	5683	0.0250	0.0293	a
6 HMX	1	6.982	6.986	-0.004	10018	0.0250	0.0265	
8 RDX	1	9.095	9.173	-0.078	6286	0.0250	0.0257	
9 Nitrobenzene	1	12.095	12.106	-0.011	10325	0.0251	0.0235	
$ 10 1,2-Dinitrobenzene	1	13.022	13.040	-0.018	8436	0.0250	0.0238	M
11 3,5-Dinitroaniline	1	14.862	14.886	-0.024	12305	0.0200	0.0197	
12 1,3-Dinitrobenzene	1	15.542	15.553	-0.011	16280	0.0251	0.0241	
13 Nitroglycerin	2	15.855	15.853	0.002	26546	0.2500	0.2093	
14 o-Nitrotoluene	1	16.515	16.533	-0.018	6812	0.0250	0.0250	
15 p-Nitrotoluene	1	16.795	16.820	-0.025	5374	0.0251	0.0223	
16 4-Amino-2,6-dinitrotoluene	1	17.155	17.146	0.009	9369	0.0250	0.0271	
17 m-Nitrotoluene	1	17.748	17.753	-0.005	6920	0.0250	0.0232	
18 2-Amino-4,6-dinitrotoluene	1	18.048	18.046	0.002	10376	0.0251	0.0223	
19 1,3,5-Trinitrobenzene	1	18.855	18.886	-0.031	10822	0.0251	0.0229	
20 2,6-Dinitrotoluene	1	19.828	19.806	0.022	11618	0.0251	0.0248	
21 2,4-Dinitrotoluene	1	20.295	20.293	0.002	16811	0.0251	0.0263	
22 Tetryl	1	23.529	23.553	-0.024	9874	0.0251	0.0268	
23 2,4,6-Trinitrotoluene	1	24.682	24.653	0.029	11547	0.0251	0.0209	
24 PETN	2	25.282	25.280	0.002	20453	0.2500	-0.0535	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

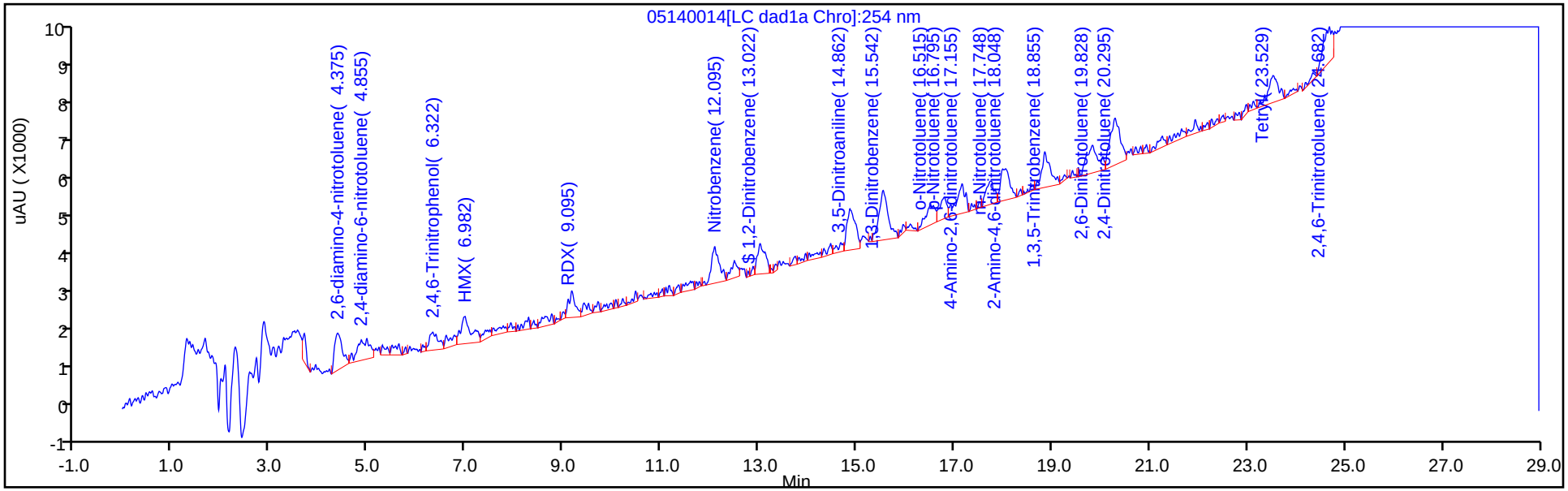
8330IntermStk_00064	Amount Added:	2.50	Units: uL
8330_ADDs_00026	Amount Added:	1.00	Units: uL

Report Date: 15-May-2020 12:00:59 Chrom Revision: 2.3 05-May-2020 17:48:18

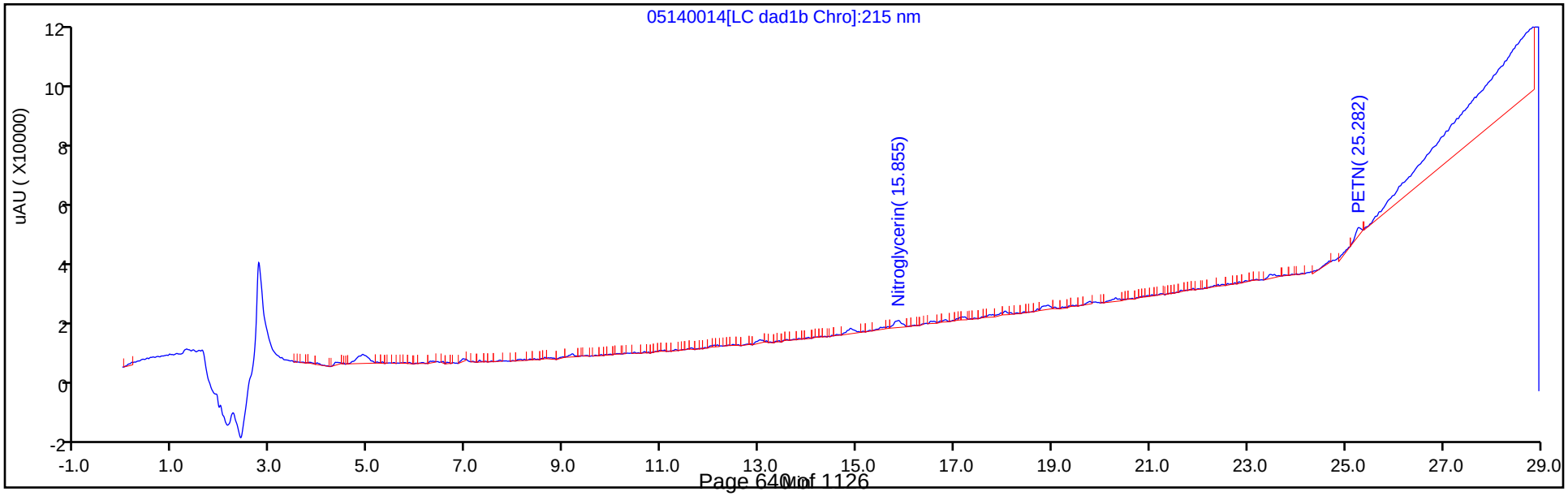
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 2			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

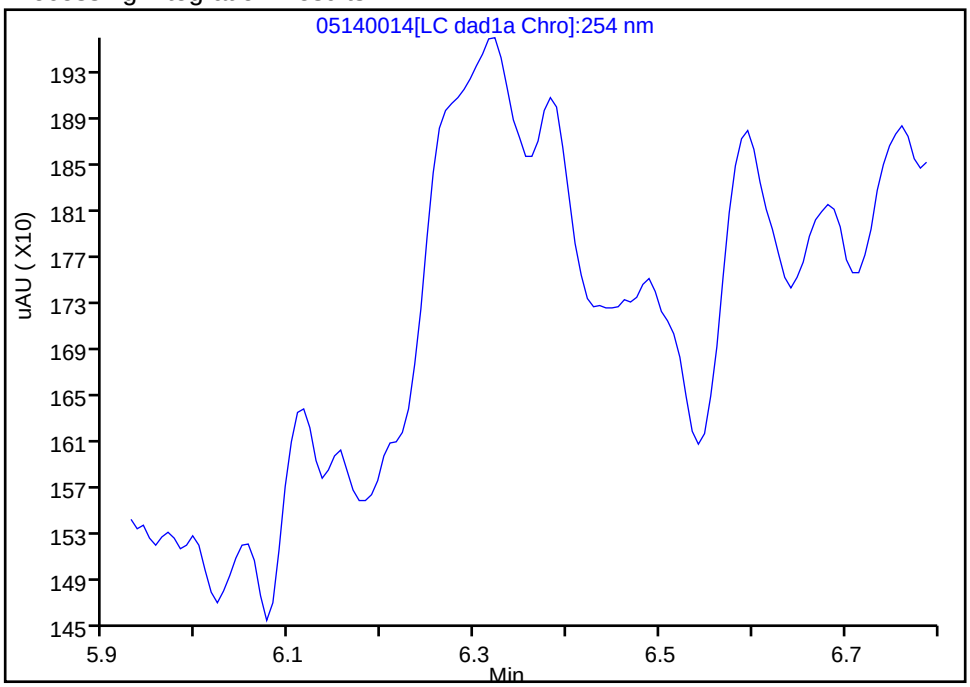
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

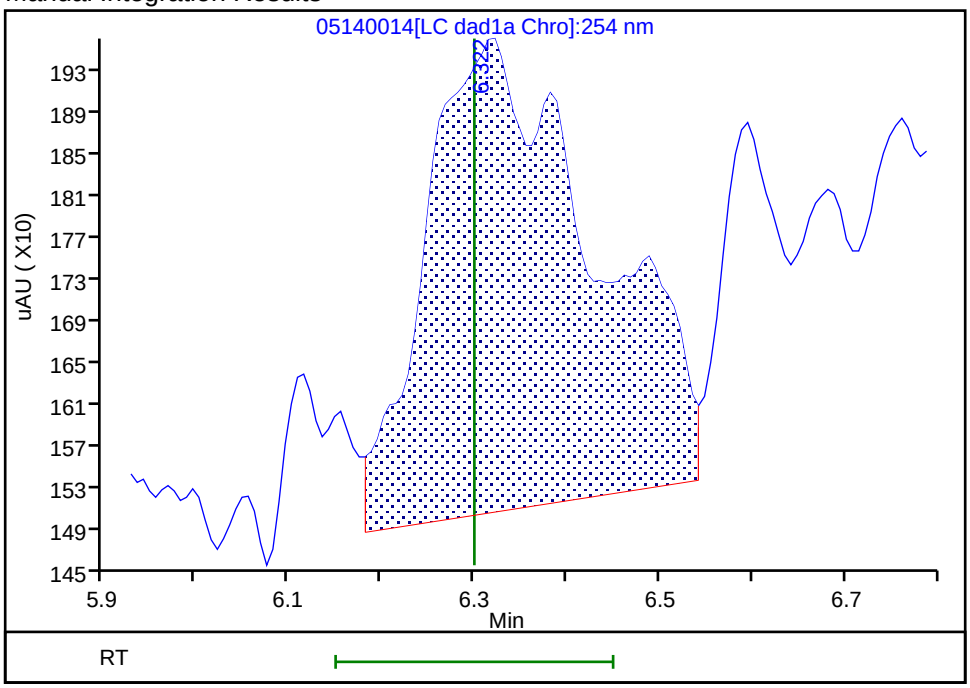
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.32
Area: 5683
Amount: 0.029323
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:29
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

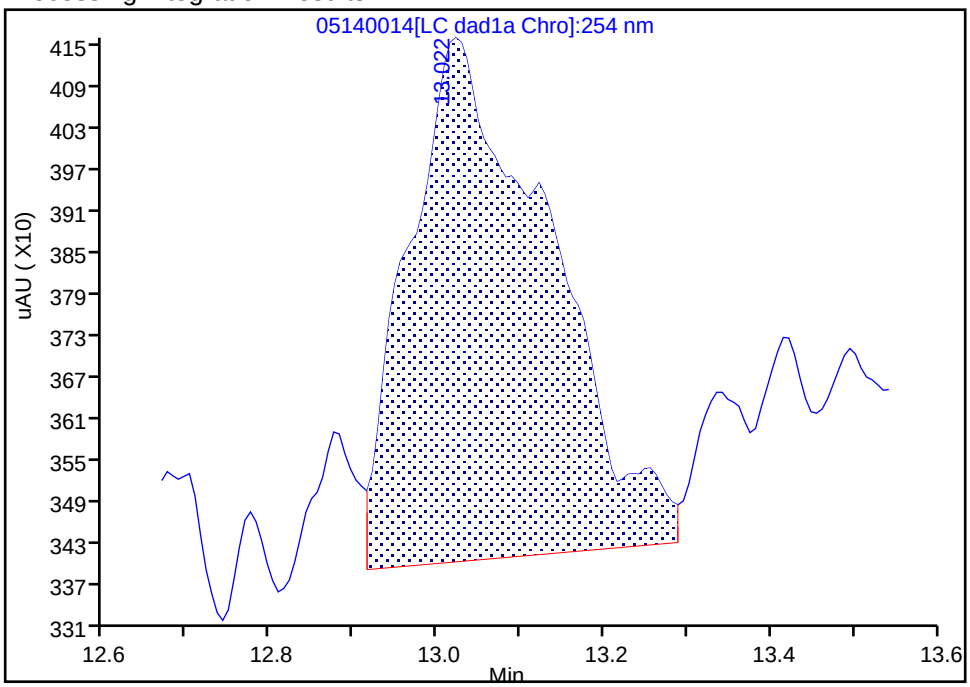
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

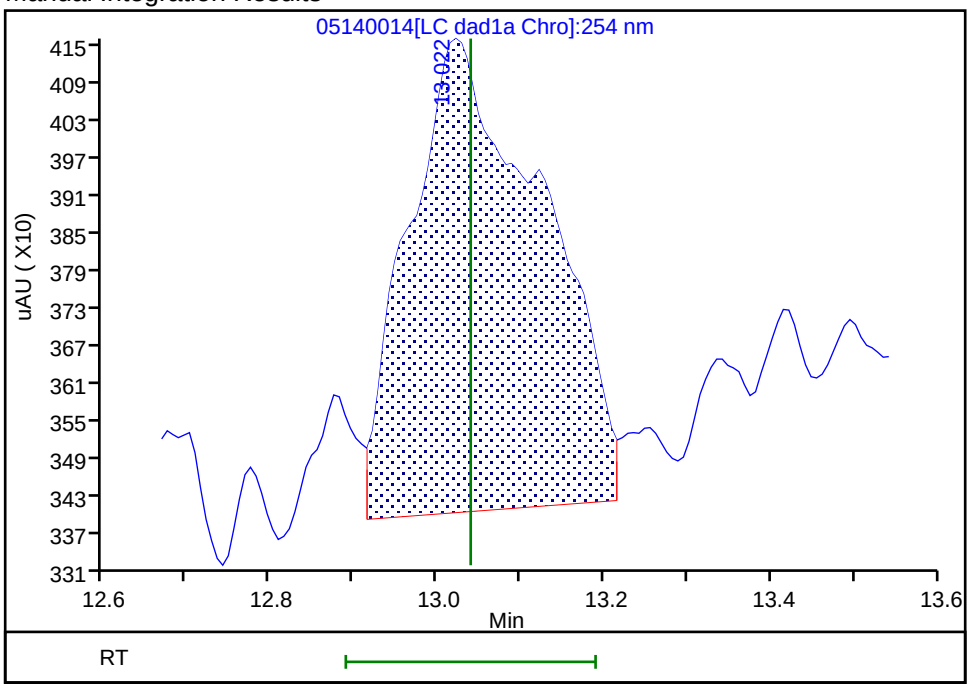
Processing Integration Results

RT: 13.02
Area: 8831
Amount: 0.029561
Amount Units: ug/ml



Manual Integration Results

RT: 13.02
Area: 8436
Amount: 0.023796
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:34

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

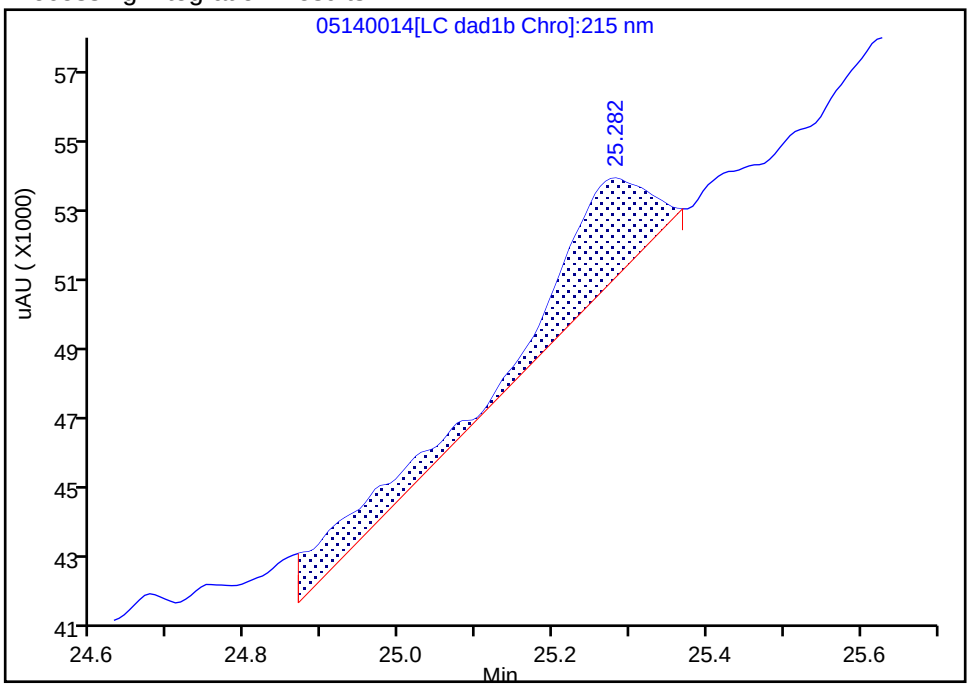
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

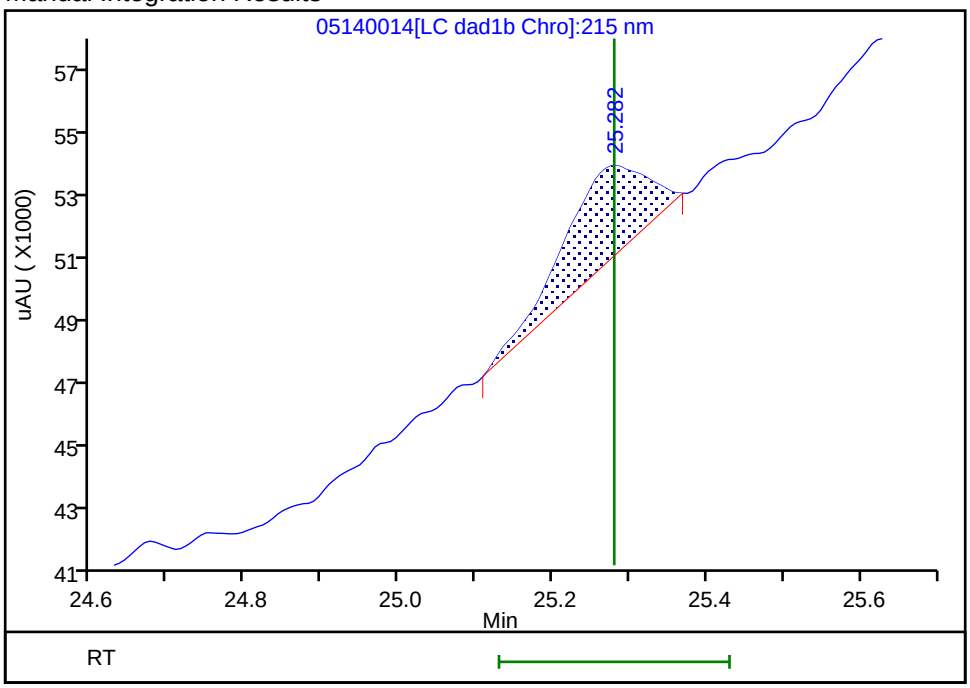
Processing Integration Results

RT: 25.28
Area: 31007
Amount: 0.129673
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 20453
Amount: -0.053470
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:34

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140015.D
Lims ID: IC FULL 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-May-2020 20:56:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 1
Misc. Info.: 280-0091518-015
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:59 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:24:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.366			ND	ND	U
2 2,4-diamino-6-nitrotoluene	1		4.880			ND	ND	U
5 2,4,6-Trinitrophenol	1		6.300			ND	ND	U
6 HMX	1		6.986			ND	ND	U
8 RDX	1		9.173			ND	ND	U
9 Nitrobenzene	1		12.106			ND	ND	U
$ 10 1,2-Dinitrobenzene	1		13.040			ND	ND	U
11 3,5-Dinitroaniline	1		14.886			ND	ND	U
12 1,3-Dinitrobenzene	1		15.553			ND	ND	U
13 Nitroglycerin	2		15.853			ND	ND	U
14 o-Nitrotoluene	1		16.533			ND	ND	U
15 p-Nitrotoluene	1		16.820			ND	ND	U
16 4-Amino-2,6-dinitrotoluene	1		17.146			ND	ND	U
17 m-Nitrotoluene	1		17.753			ND	ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.046			ND	ND	U
19 1,3,5-Trinitrobenzene	1		18.886			ND	ND	U
20 2,6-Dinitrotoluene	1	19.755	19.806	-0.051	4758	0.0126	0.001113	M
21 2,4-Dinitrotoluene	1	20.295	20.293	0.002	7990	0.0126	0.0125	M
22 Tetryl	1		23.553			ND	ND	U
23 2,4,6-Trinitrotoluene	1		24.653			ND	ND	U
24 PETN	2		25.280			ND	ND	U

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

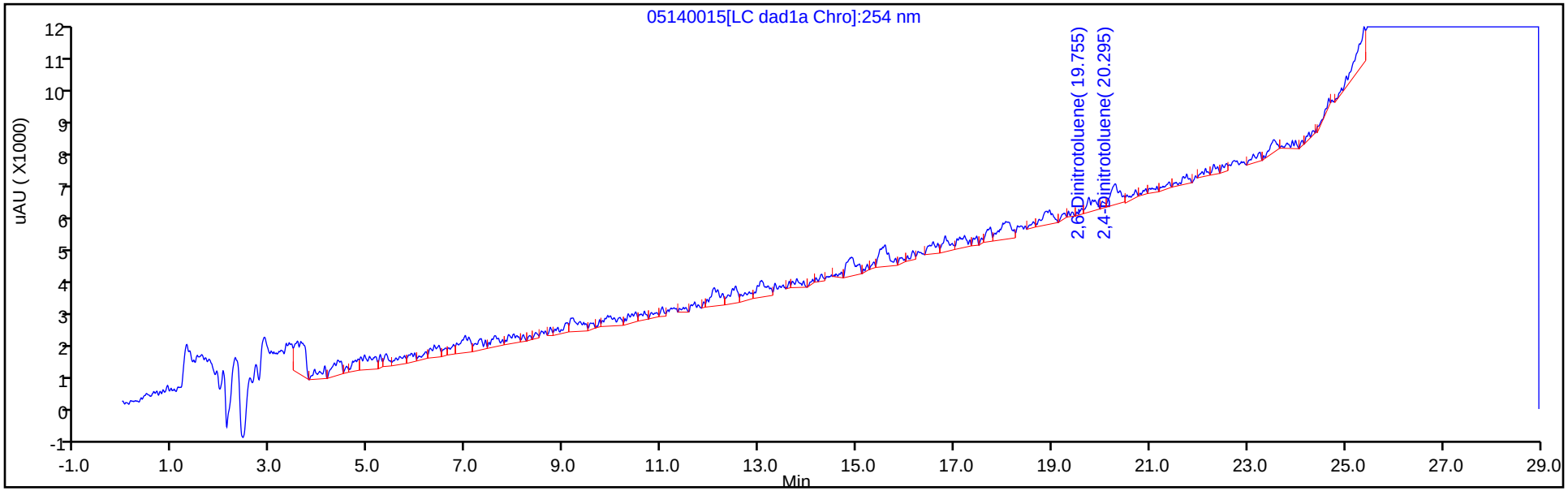
8330IntermStk_00064	Amount Added:	1.25	Units: uL
8330_ADDs_00026	Amount Added:	0.50	Units: uL

Report Date: 15-May-2020 12:00:59 Chrom Revision: 2.3 05-May-2020 17:48:18

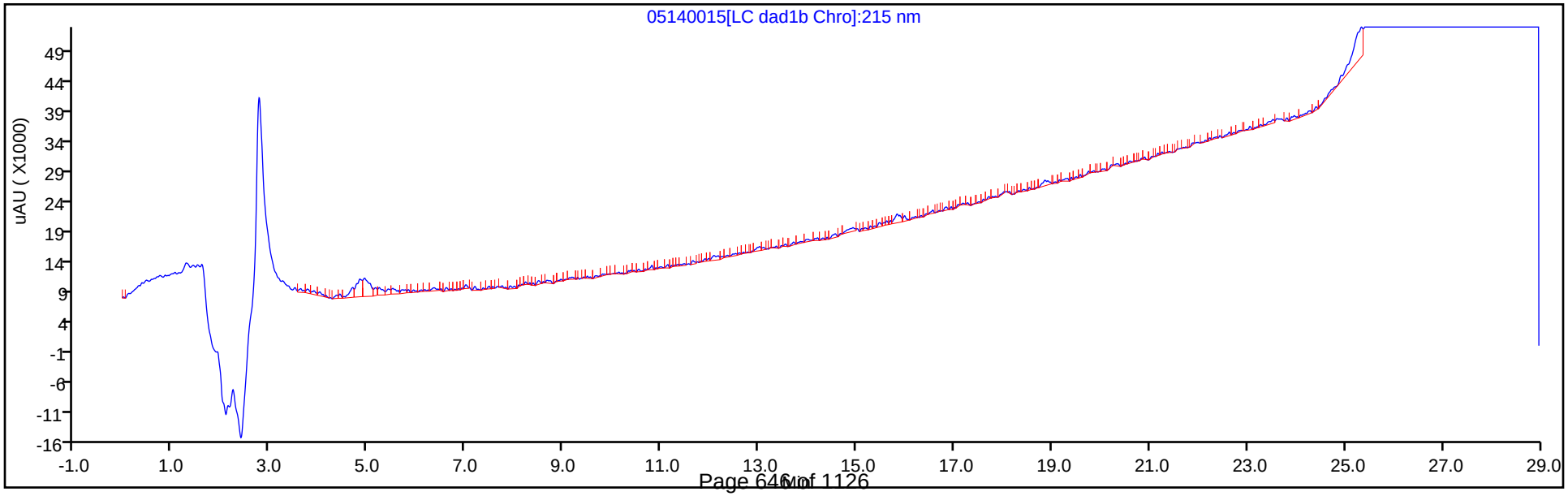
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d				
Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 1			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

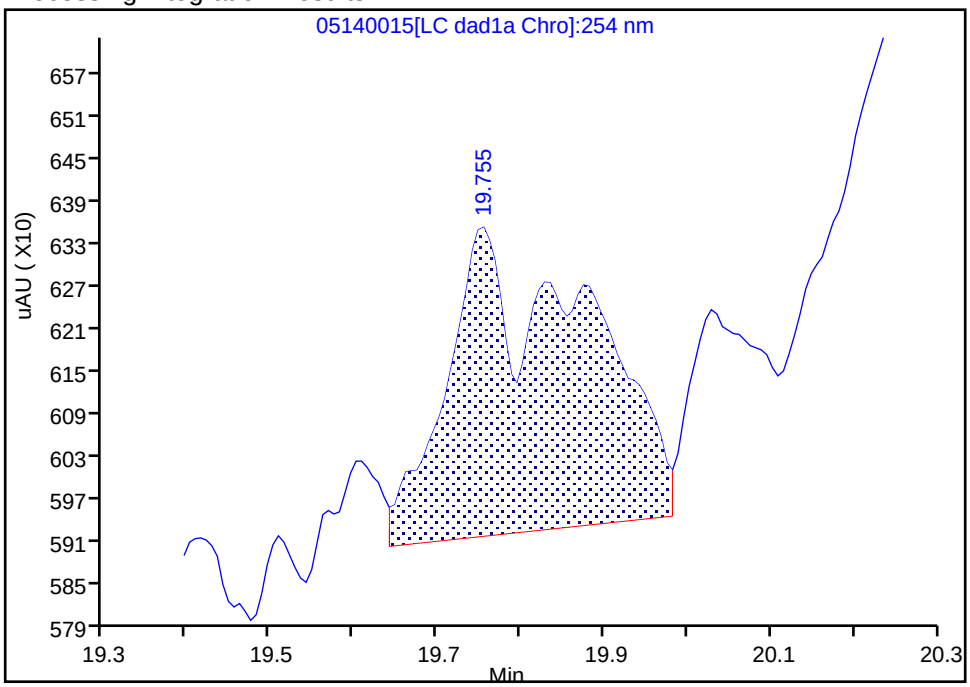
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d				
Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

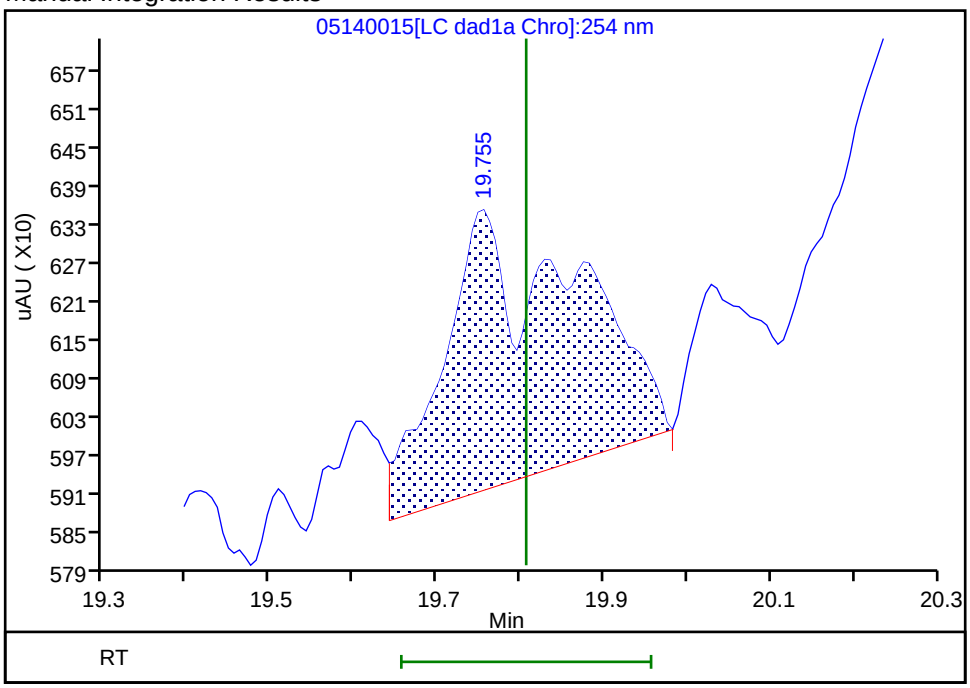
Processing Integration Results

RT: 19.76
Area: 5064
Amount: 0.014857
Amount Units: ug/ml



Manual Integration Results

RT: 19.76
Area: 4758
Amount: 0.001113
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:30:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

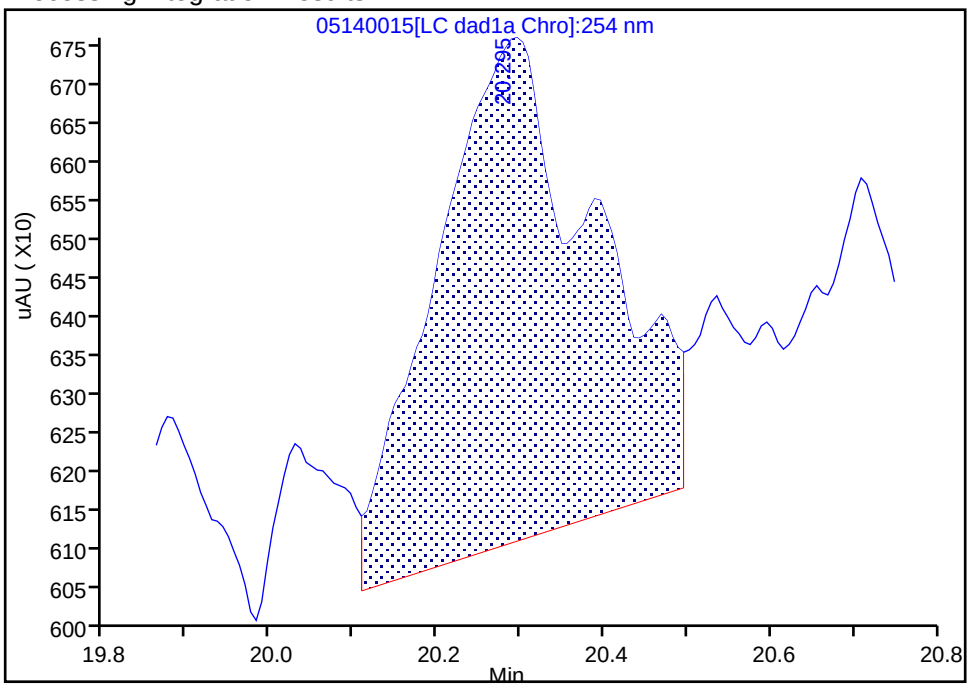
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d				
Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

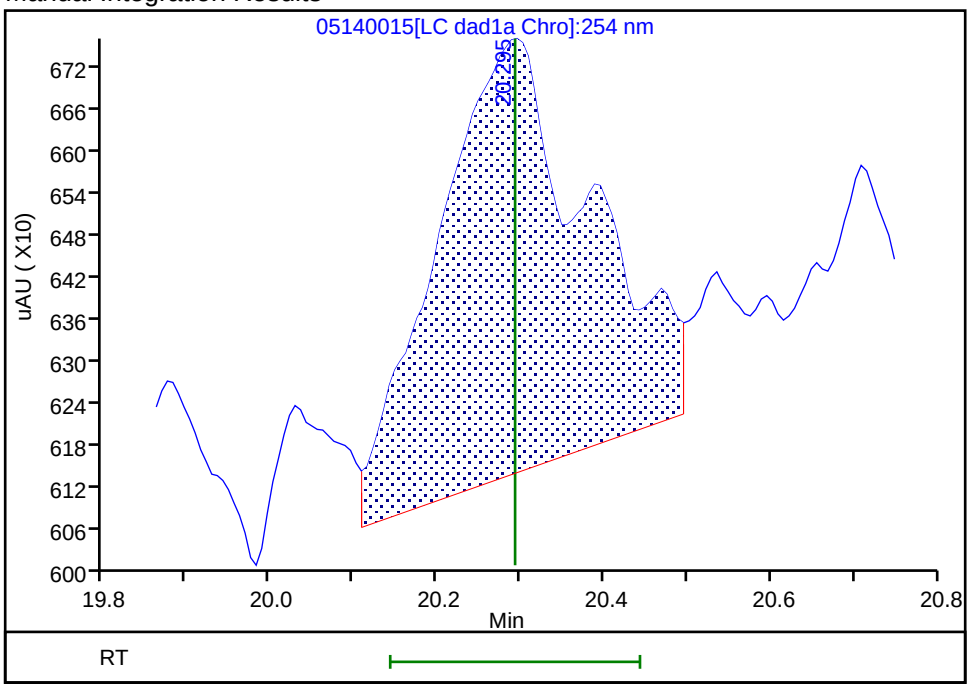
Processing Integration Results

RT: 20.30
Area: 8698
Amount: 0.013456
Amount Units: ug/ml



Manual Integration Results

RT: 20.30
Area: 7990
Amount: 0.012482
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:30:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 22:06 Calibration End Date: 05/15/2020 02:46 Calibration ID: 44235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/24	05140024.D
Level 2	IC 280-494886/23	05140023.D
Level 3	IC 280-494886/22	05140022.D
Level 4	IC 280-494886/21	05140021.D
Level 5	IC 280-494886/20	05140020.D
Level 6	IC 280-494886/19	05140019.D
Level 7	IC 280-494886/18	05140018.D
Level 8	IC 280-494886/17	05140017.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.430	5.411	5.420	5.417	5.419	5.416	5.408	5.395			5.267 - 5.567	5.415
DNX	6.217	6.224	6.226	6.231	6.226	6.223	6.214	6.202			6.081 - 6.381	6.220
MNX	7.737	7.744	7.740	7.744	7.739	7.736	7.728	7.709			7.594 - 7.894	7.735

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 22:06 Calibration End Date: 05/15/2020 02:46 Calibration ID: 44235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/24	05140024.D
Level 2	IC 280-494886/23	05140023.D
Level 3	IC 280-494886/22	05140022.D
Level 4	IC 280-494886/21	05140021.D
Level 5	IC 280-494886/20	05140020.D
Level 6	IC 280-494886/19	05140019.D
Level 7	IC 280-494886/18	05140018.D
Level 8	IC 280-494886/17	05140017.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	552048 411823	425974 414575	452338 409749	404831 415188	Ave		435815.884				11.3		20.0			
DNX	380619 318914	320939 302202	322807 308244	308000 307920	Ave		321205.643				7.8		20.0			
MNX	510454 287059	337087 281216	295227 270908	285954 281272	Lin2	5408.61434	266896.431							0.9970		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 22:06 Calibration End Date: 05/15/2020 02:46 Calibration ID: 44235

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/24	05140024.D
Level 2	IC 280-494886/23	05140023.D
Level 3	IC 280-494886/22	05140022.D
Level 4	IC 280-494886/21	05140021.D
Level 5	IC 280-494886/20	05140020.D
Level 6	IC 280-494886/19	05140019.D
Level 7	IC 280-494886/18	05140018.D
Level 8	IC 280-494886/17	05140017.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	11052 290493	21320 410159	45279 1039009	101309	164894	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	7620 211753	16063 308552	32313 770570	77077	127693	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Lin2	11914 229725	19669 316150	34453 820612	83427	133999	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140017.D				
Lims ID:	IC DMT 9				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	14-May-2020 22:06:26	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 9				
Misc. Info.:	280-0091518-017				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:02	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

First Level Reviewer: zhangji Date: 15-May-2020 11:36:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.395	5.417	-0.022	1039009	2.50	2.38	
4 DNX	1	6.202	6.231	-0.029	770570	2.50	2.40	
7 MNX	1	7.709	7.744	-0.035	820612	2.92	3.05	a

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

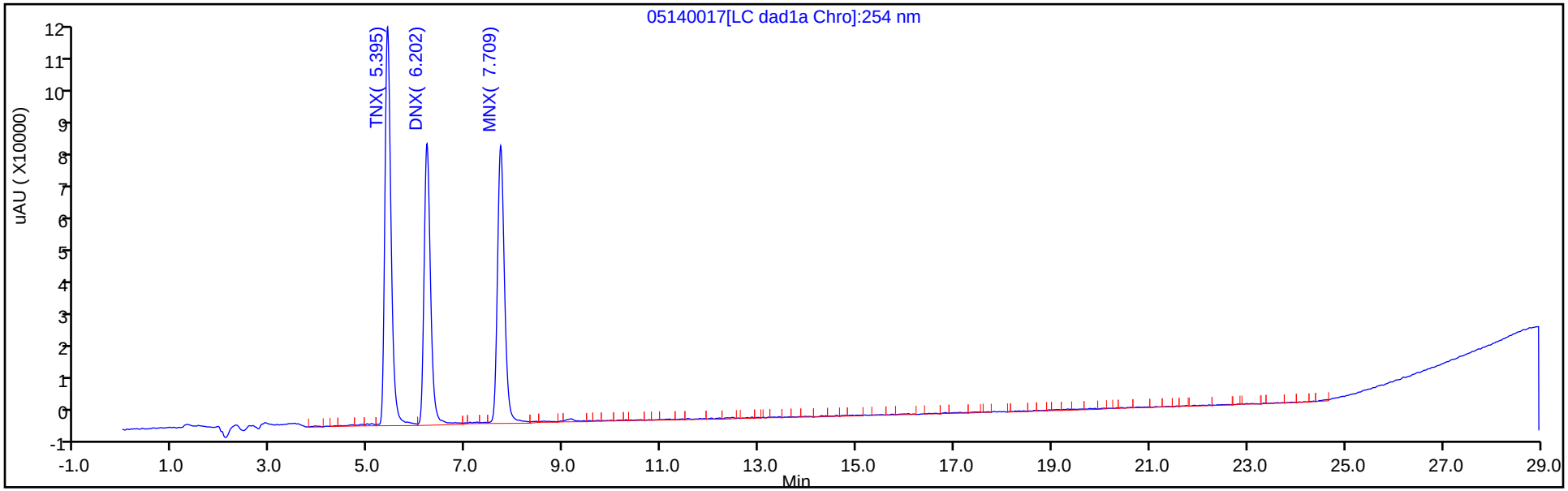
8330 DMT_00006 Amount Added: 125.00 Units: uL

Report Date: 15-May-2020 12:01:02 Chrom Revision: 2.3 05-May-2020 17:48:18

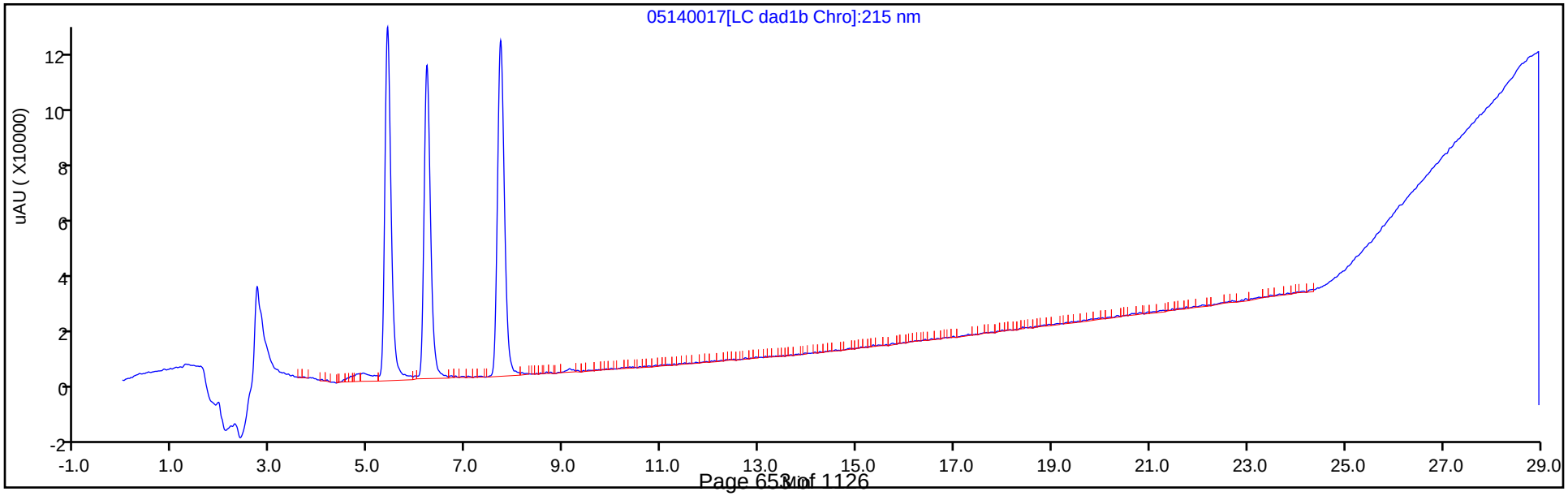
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140017.d				
Injection Date:	14-May-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 9			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

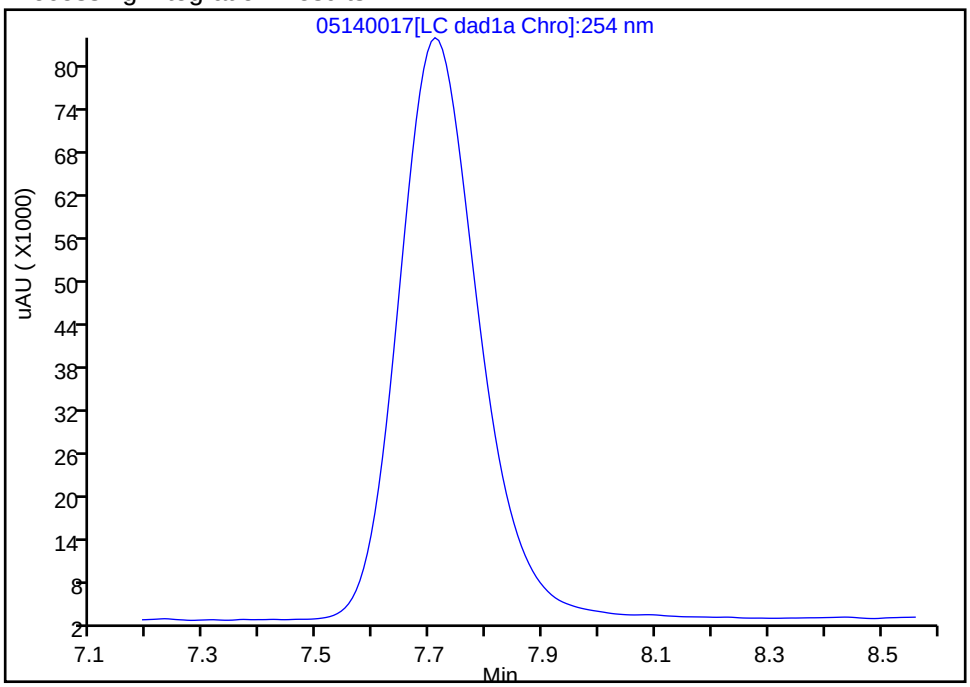
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140017.d				
Injection Date:	14-May-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

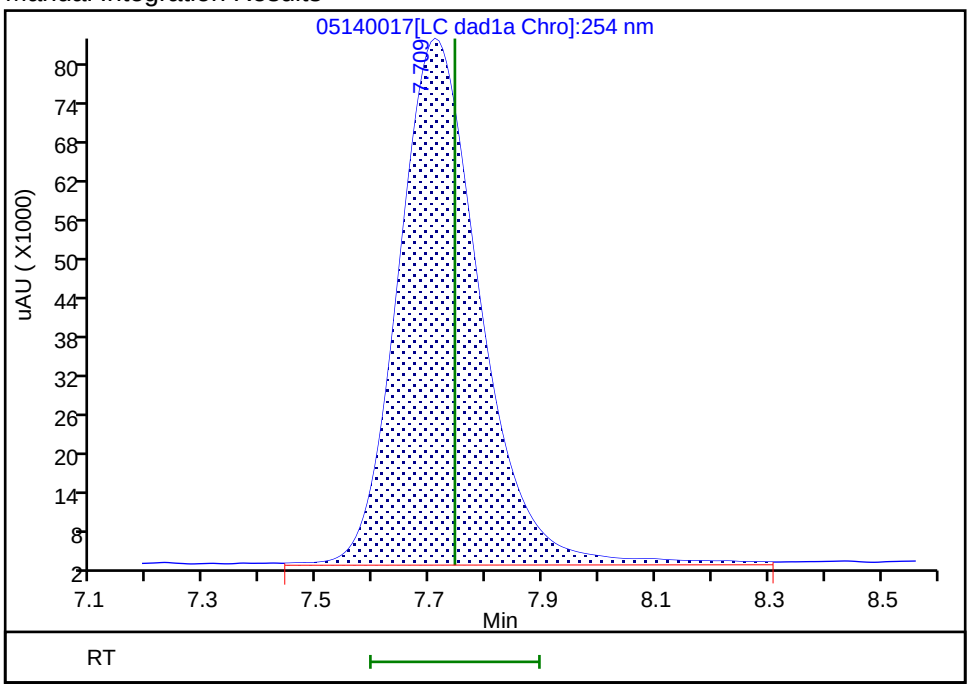
Not Detected
Expected RT: 7.74

Processing Integration Results



RT: 7.71
Area: 820612
Amount: 3.054381
Amount Units: ug/ml

Manual Integration Results



Reviewer: zhangji, 15-May-2020 11:36:42
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140018.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	14-May-2020 22:41:23	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0091518-018				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:02	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

First Level Reviewer: zhangji Date: 15-May-2020 11:36:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.408	5.417	-0.009	410159	1.00	0.9411	
4 DNX	1	6.214	6.231	-0.017	308552	1.00	0.9606	
7 MNX	1	7.728	7.744	-0.016	316150	1.17	1.16	a

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

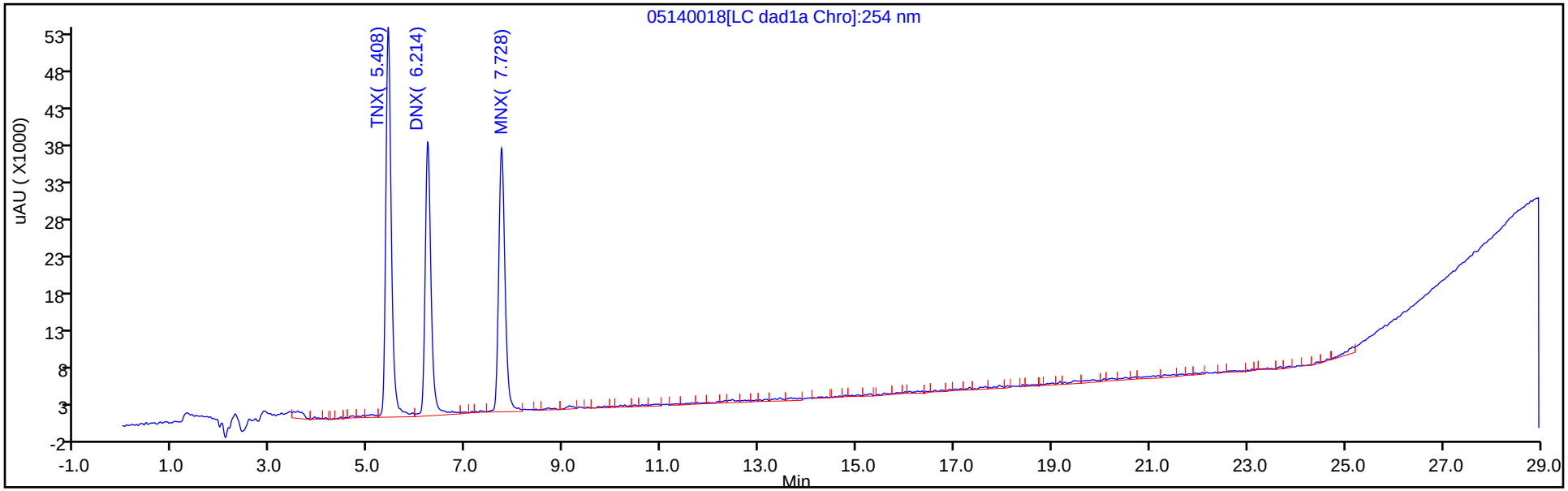
8330 DMT_00006 Amount Added: 50.00 Units: uL

Report Date: 15-May-2020 12:01:03 Chrom Revision: 2.3 05-May-2020 17:48:18

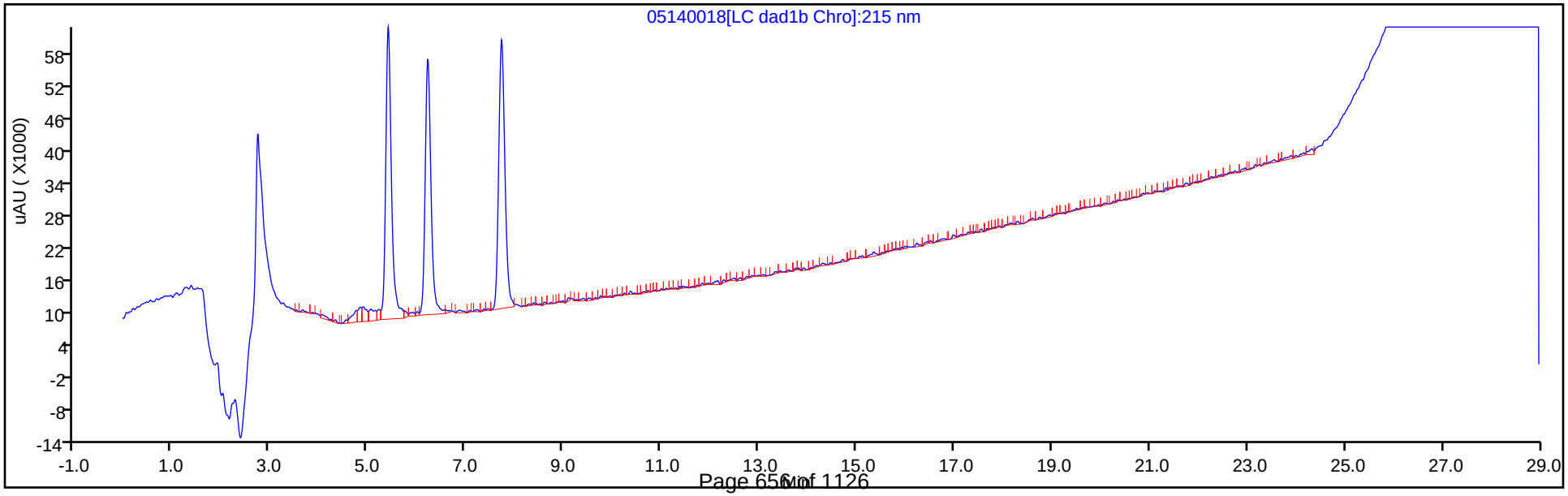
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140018.d				
Injection Date:	14-May-2020 22:41:23	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 8			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

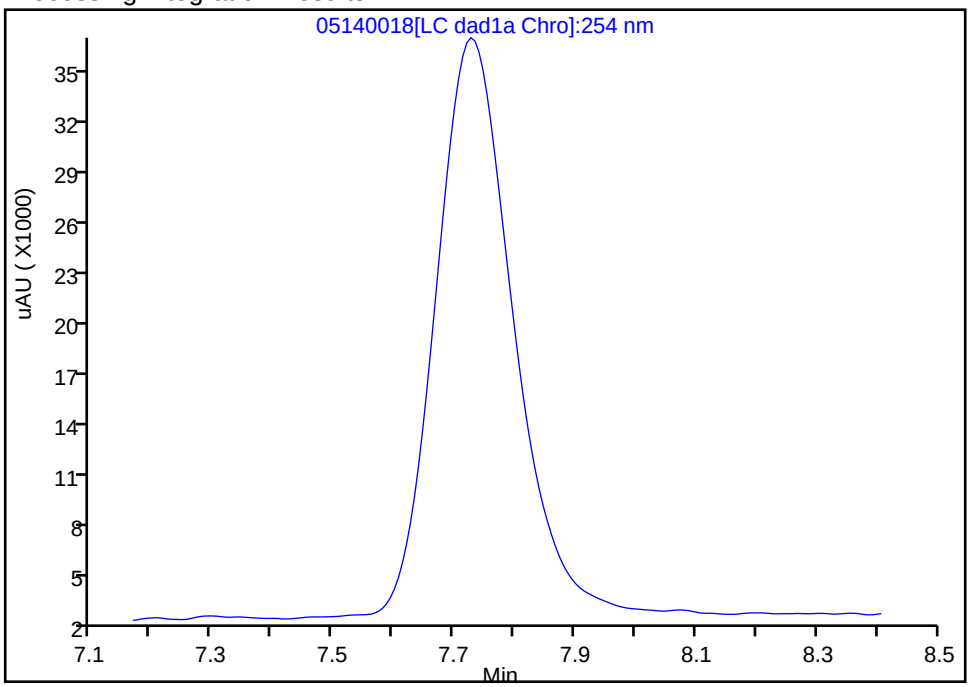
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140018.d				
Injection Date:	14-May-2020 22:41:23	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

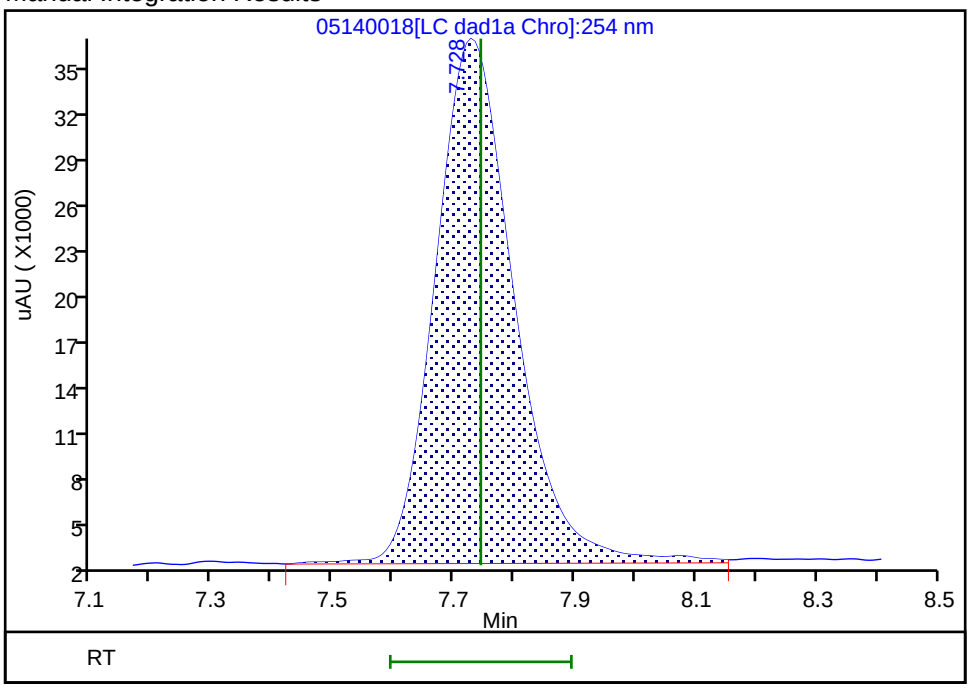
Not Detected
Expected RT: 7.74

Processing Integration Results



Manual Integration Results

RT: 7.73
Area: 316150
Amount: 1.164277
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:36:46
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140019.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	14-May-2020 23:16:26	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0091518-019				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:03	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

First Level Reviewer: zhangji Date: 15-May-2020 11:36:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.416	5.417	-0.001	290493	0.7007	0.6665	
4 DNX	1	6.223	6.231	-0.008	211753	0.7007	0.6592	
7 MNX	1	7.736	7.744	-0.008	229725	0.8169	0.8405	a

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

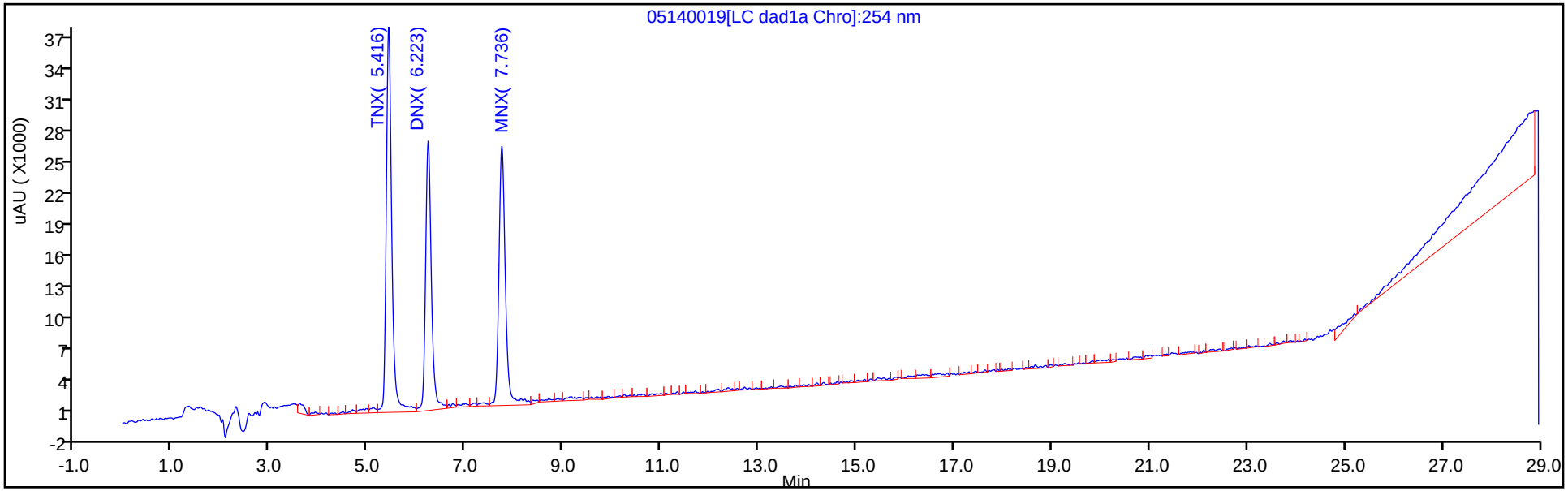
8330 DMT_00006 Amount Added: 35.00 Units: uL

Report Date: 15-May-2020 12:01:03 Chrom Revision: 2.3 05-May-2020 17:48:18

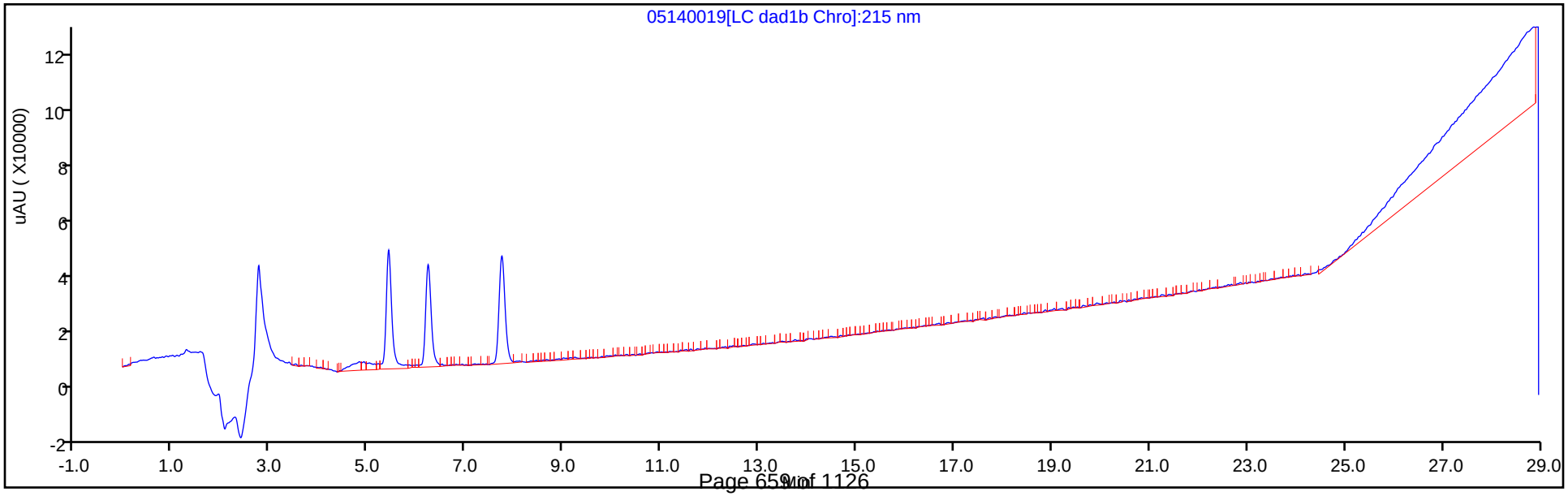
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140019.d				
Injection Date:	14-May-2020 23:16:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 7			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

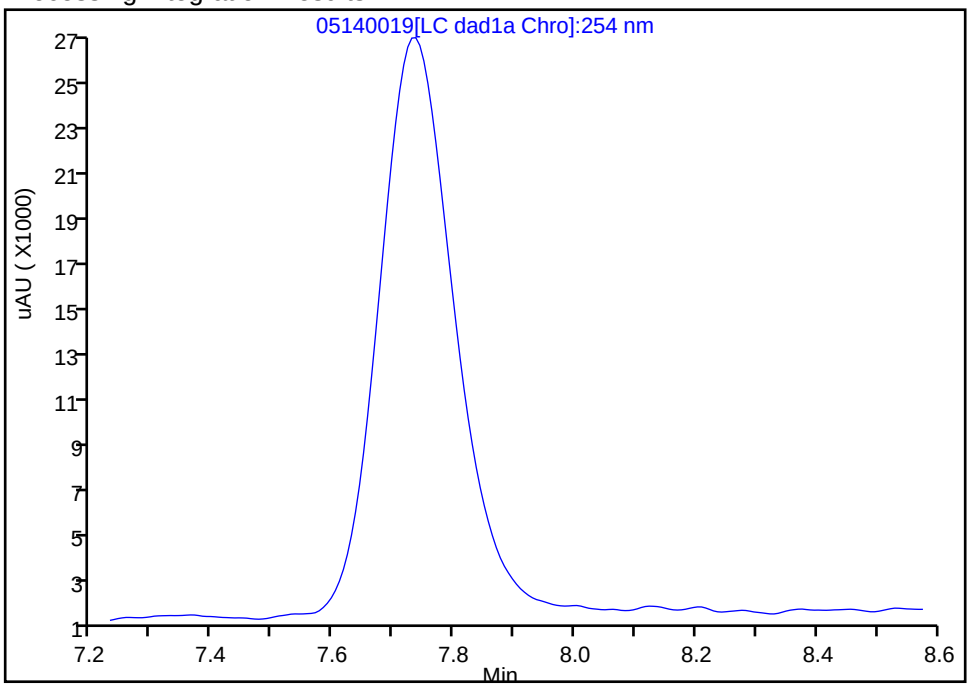
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140019.d				
Injection Date:	14-May-2020 23:16:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

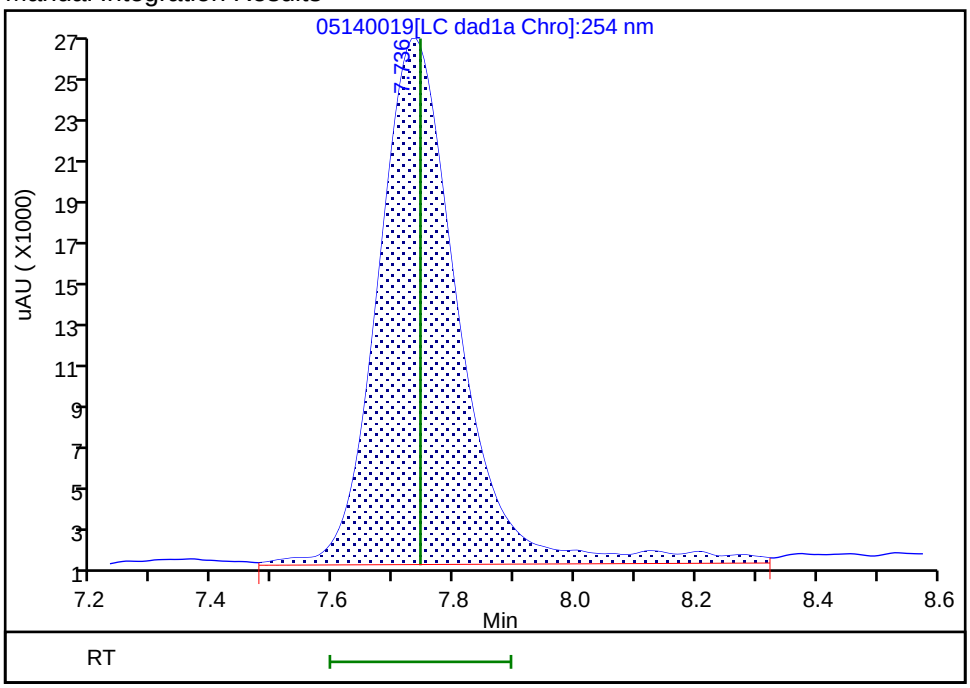
Processing Integration Results

Not Detected
Expected RT: 7.74



Manual Integration Results

RT: 7.74
Area: 229725
Amount: 0.840462
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:36:55
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140020.D				
Lims ID:	IC DMT 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	14-May-2020 23:51:28	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 6				
Misc. Info.:	280-0091518-020				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:03	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

First Level Reviewer: zhangji Date: 15-May-2020 11:37:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.419	5.417	0.002	164894	0.4004	0.3784	
4 DNX	1	6.226	6.231	-0.005	127693	0.4004	0.3975	
7 MNX	1	7.739	7.744	-0.005	133999	0.4668	0.4818	a

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

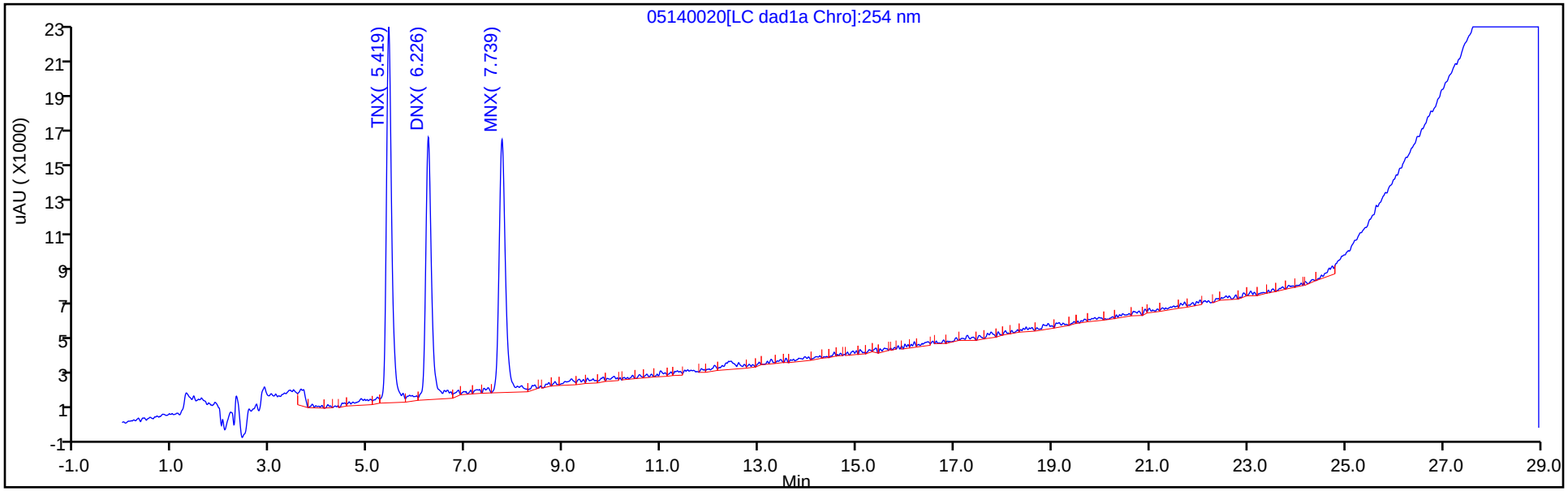
8330 DMT_00006 Amount Added: 20.00 Units: uL

Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

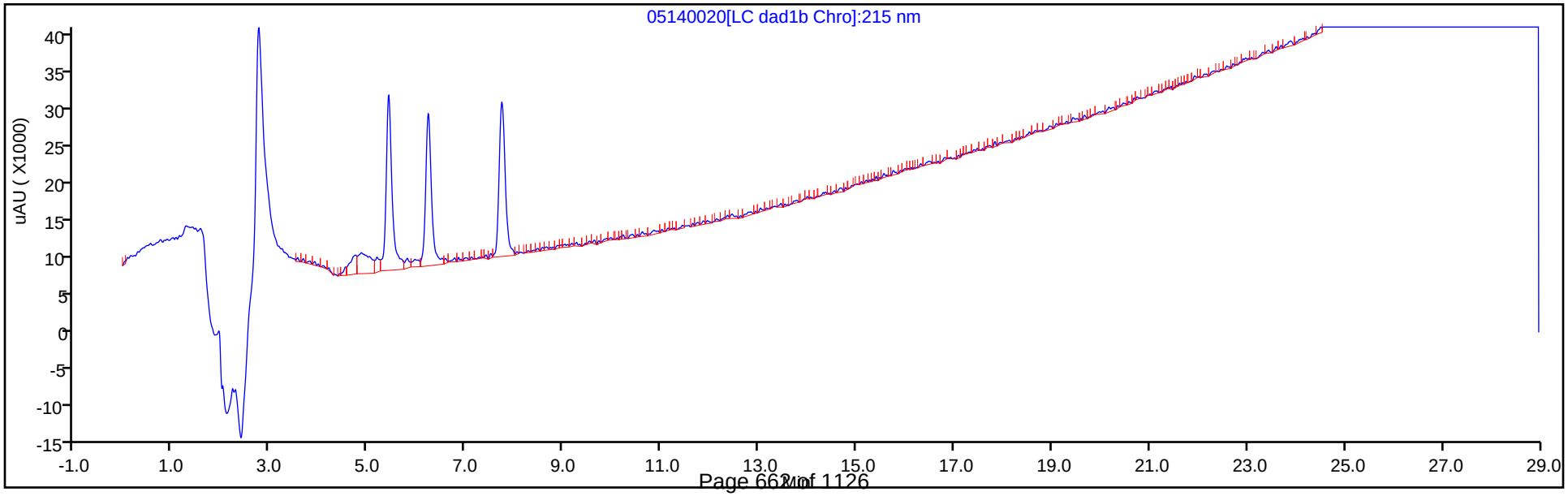
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140020.d				
Injection Date:	14-May-2020 23:51:28	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 6			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

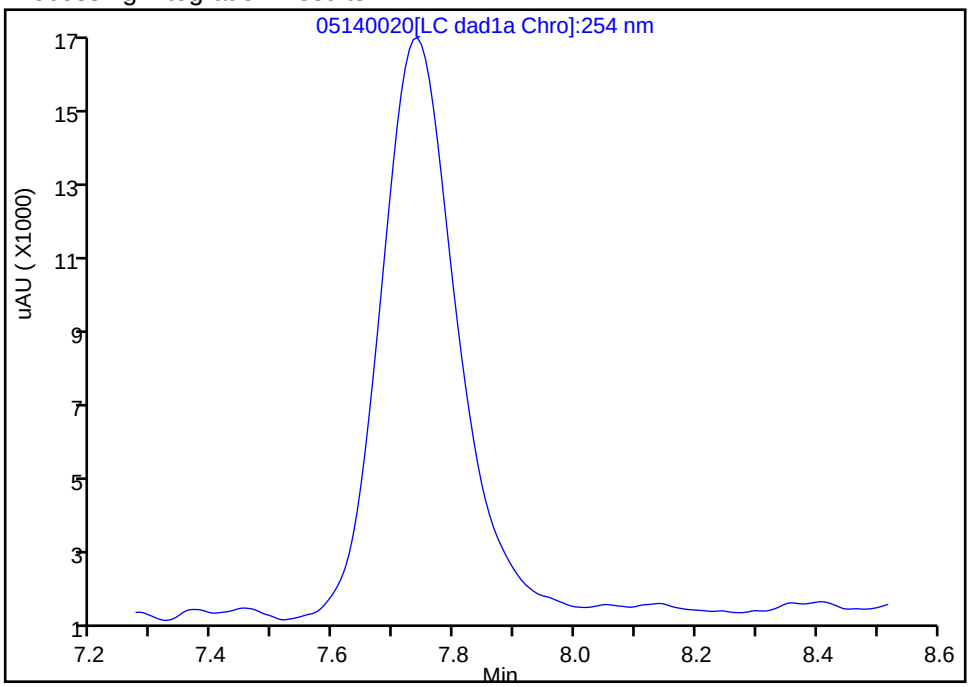
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140020.d				
Injection Date:	14-May-2020 23:51:28	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

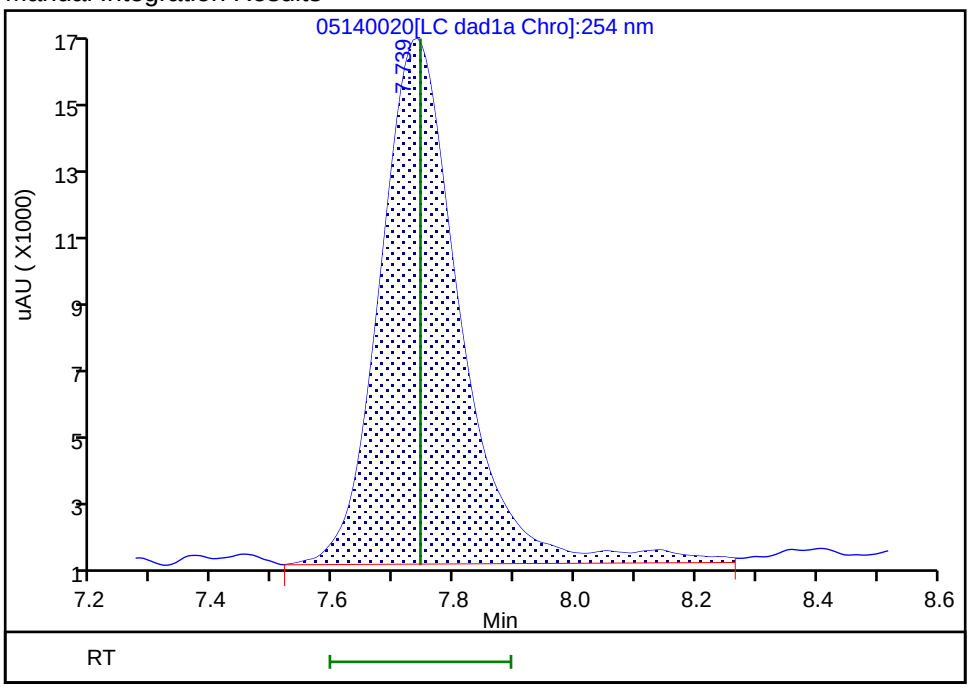
Not Detected
Expected RT: 7.74

Processing Integration Results



RT: 7.74
Area: 133999
Amount: 0.481799
Amount Units: ug/ml

Manual Integration Results



Reviewer: zhangji, 15-May-2020 11:36:59
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140021.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	15-May-2020 00:26:25	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Misc. Info.:	280-0091518-021				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:04	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.417	5.417	0.000	101309	0.2503	0.2325	
4 DNX	1	6.231	6.231	0.000	77077	0.2503	0.2400	
7 MNX	1	7.744	7.744	0.000	83427	0.2918	0.2923	

Reagents:

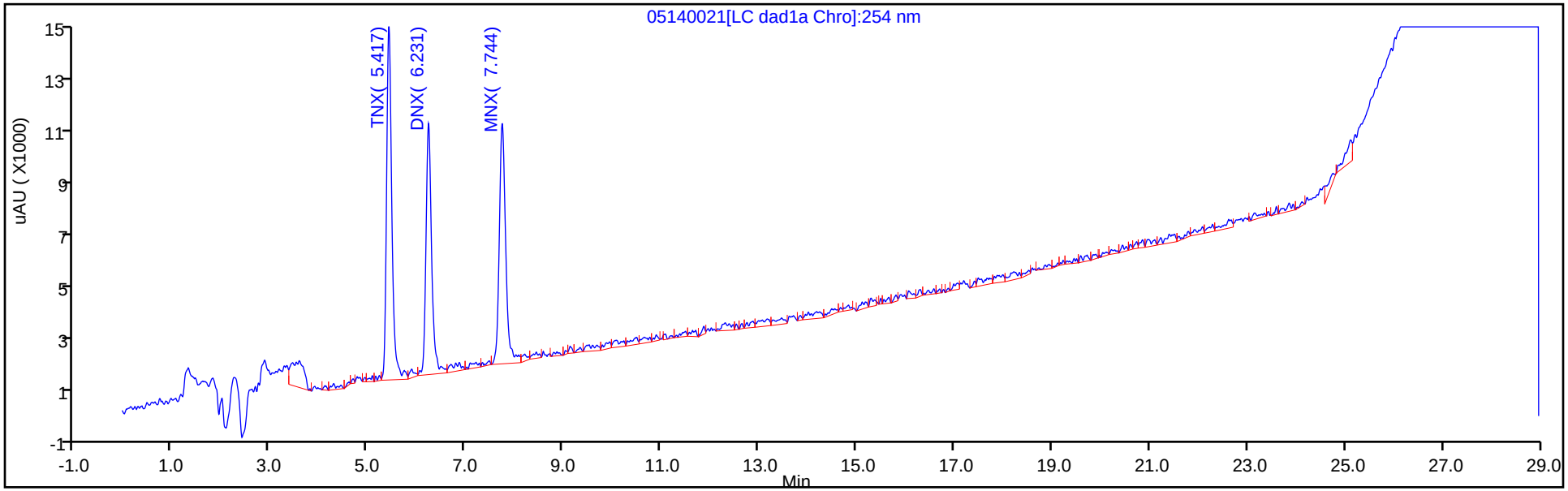
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

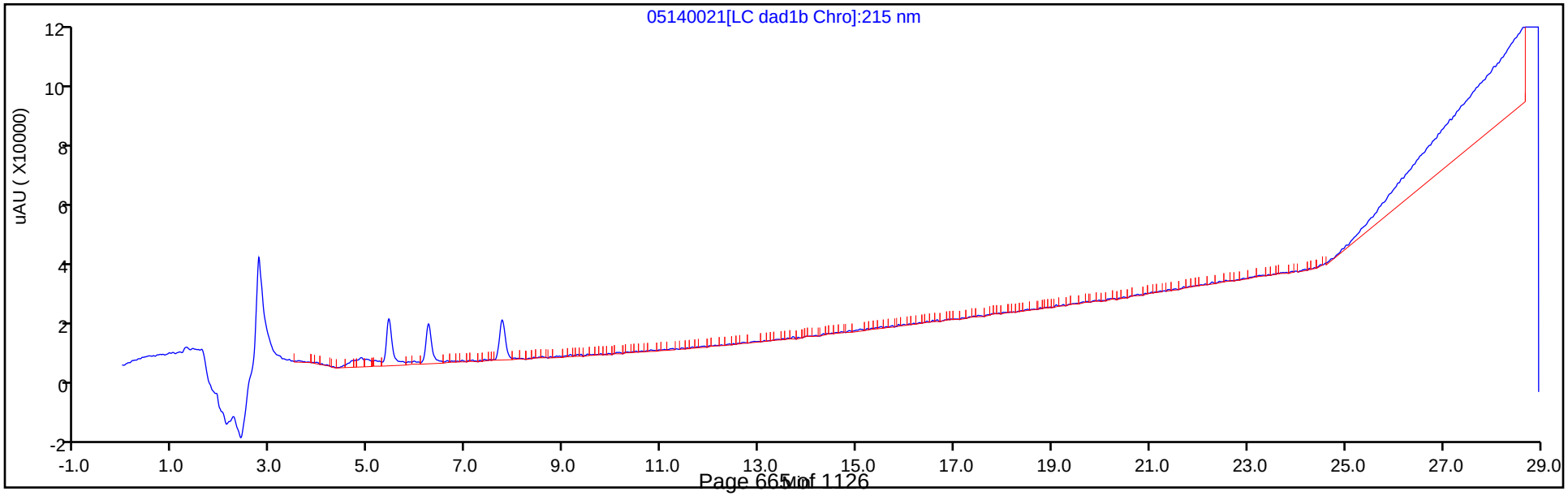
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140021.d				
Injection Date:	15-May-2020 00:26:25	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 5			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140022.D				
Lims ID:	IC DMT 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	15-May-2020 01:01:25	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 4				
Misc. Info.:	280-0091518-022				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:04	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.420	5.417	0.003	45279	0.1001	0.1039	
4 DNX	1	6.226	6.231	-0.005	32313	0.1001	0.1006	
7 MNX	1	7.740	7.744	-0.004	34453	0.1167	0.1088	

Reagents:

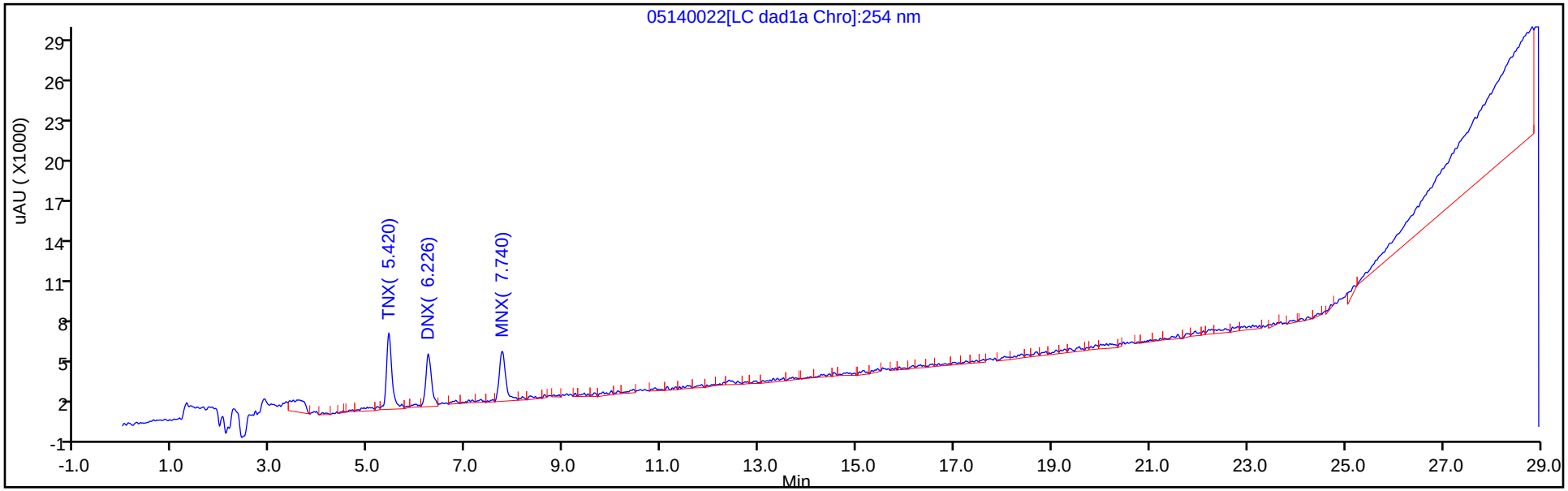
8330 DMT_00006 Amount Added: 5.00 Units: uL

Report Date: 15-May-2020 12:01:04 Chrom Revision: 2.3 05-May-2020 17:48:18

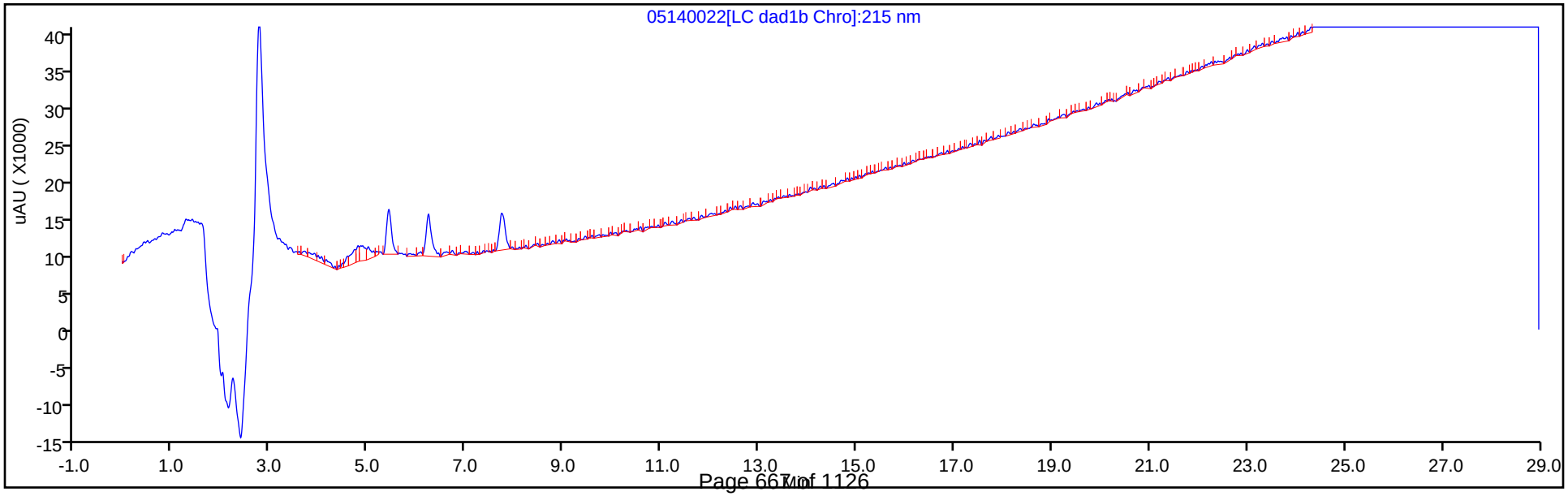
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140022.d				
Injection Date:	15-May-2020 01:01:25	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 4			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140023.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	15-May-2020 01:36:23	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Misc. Info.:	280-0091518-023				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:05	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.411	5.417	-0.006	21320	0.0501	0.0489	
4 DNX	1	6.224	6.231	-0.007	16063	0.0501	0.0500	
7 MNX	1	7.744	7.744	0.000	19669	0.0584	0.0534	

Reagents:

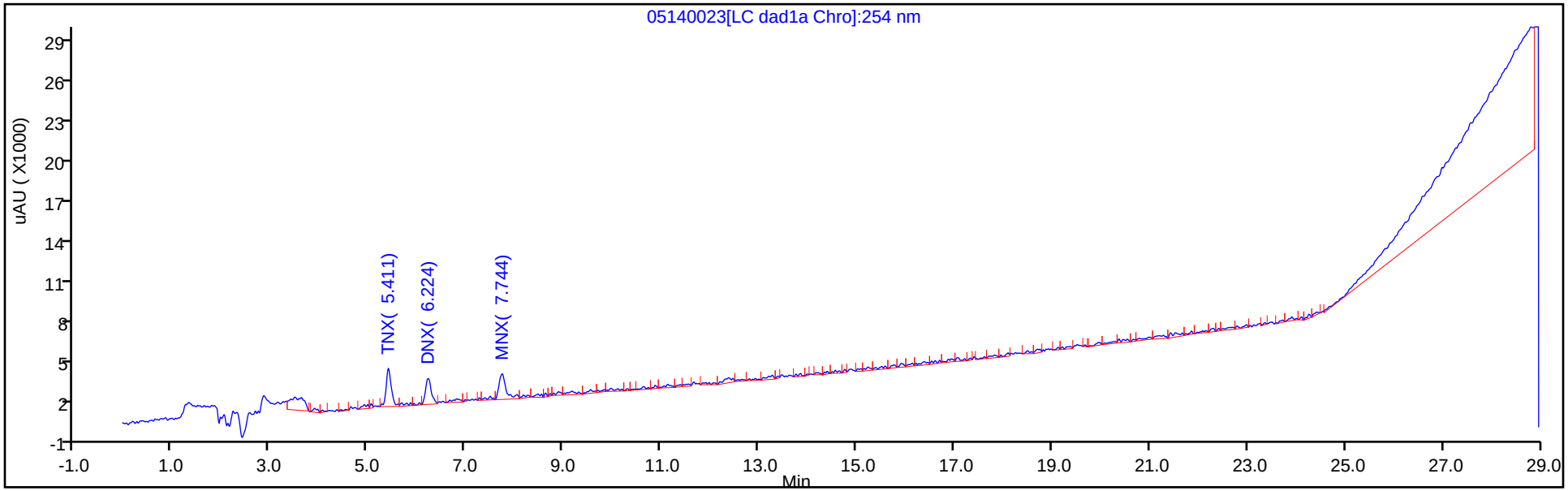
8330 DMT_00006 Amount Added: 2.50 Units: uL

Report Date: 15-May-2020 12:01:05 Chrom Revision: 2.3 05-May-2020 17:48:18

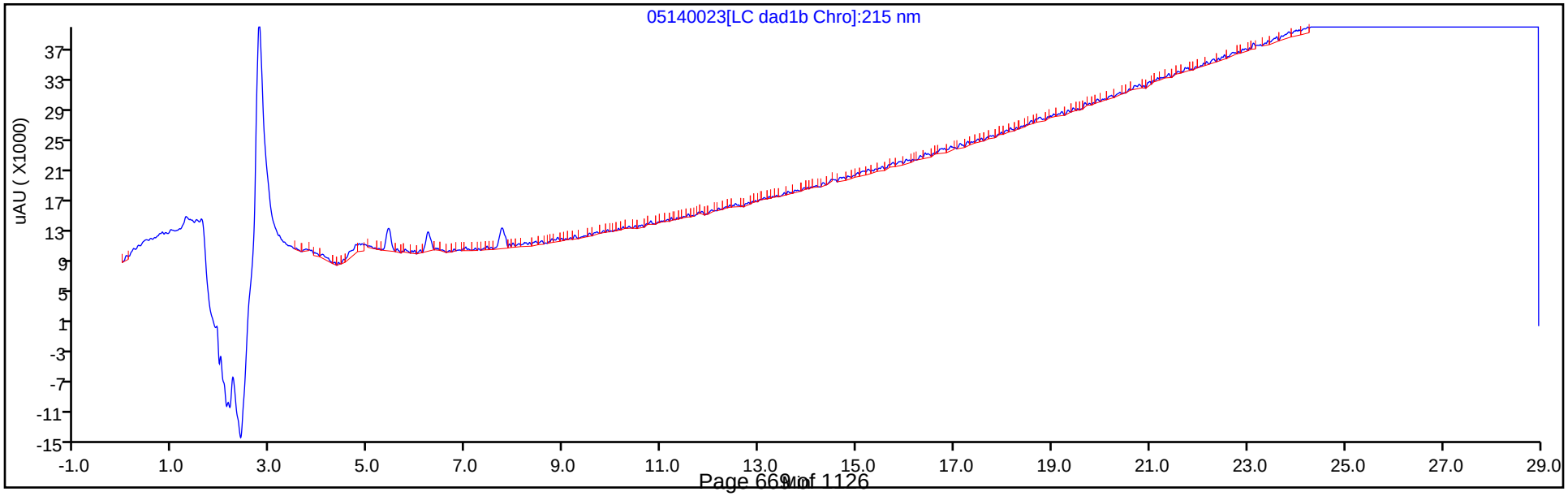
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140023.d				
Injection Date:	15-May-2020 01:36:23	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 3			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	15-May-2020 02:11:20	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0091518-024				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2020 12:01:05	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0318				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.430	5.417	0.013	11052	0.0200	0.0254	
4 DNX	1	6.217	6.231	-0.014	7620	0.0200	0.0237	
7 MNX	1	7.737	7.744	-0.007	11914	0.0233	0.0244	

Reagents:

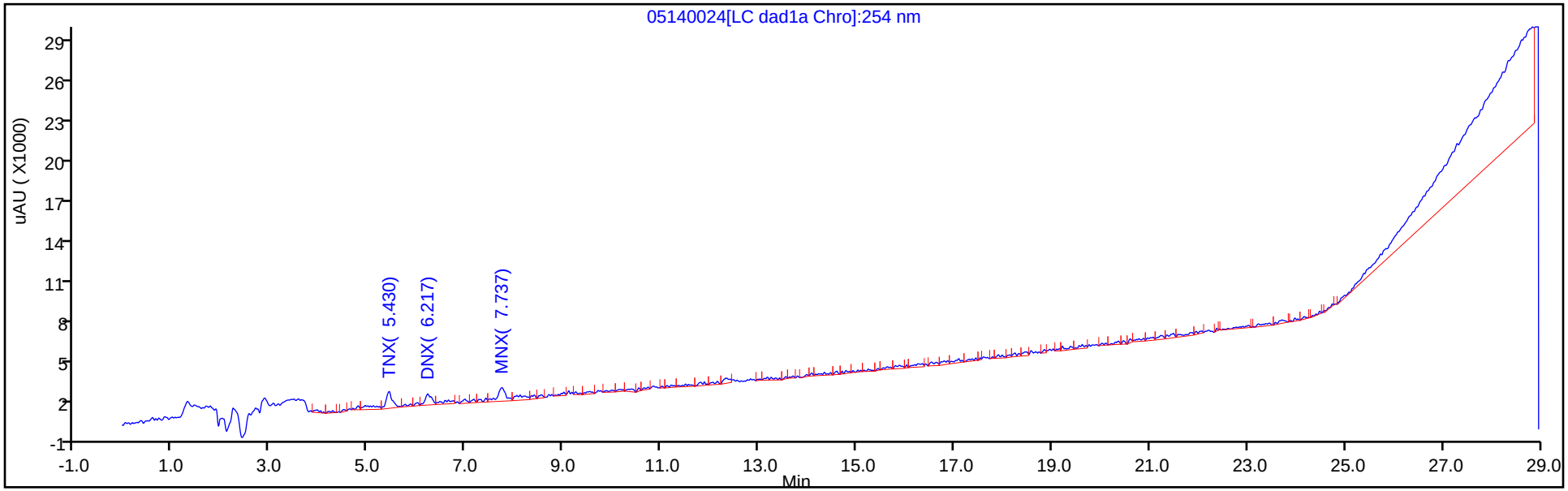
8330 DMT_00006 Amount Added: 1.00 Units: uL

Report Date: 15-May-2020 12:01:05 Chrom Revision: 2.3 05-May-2020 17:48:18

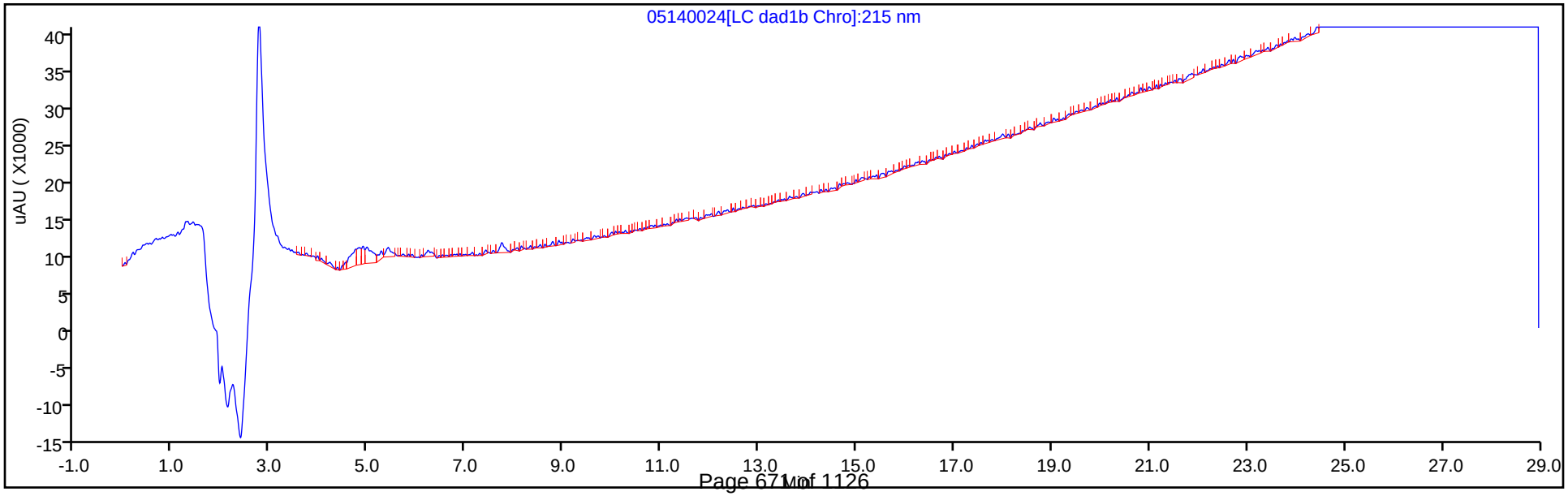
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140024.d				
Injection Date:	15-May-2020 02:11:20	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 2			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.592	6.588	6.589	6.591	6.591	6.591	6.591	6.590			6.491 - 6.691	6.590
DNX	6.912	6.914	6.915	6.918	6.917	6.918	6.918	6.916			6.818 - 7.018	6.916
MNX	7.359	7.354	7.355	7.358	7.357	7.358	7.358	7.356			7.208 - 7.508	7.357

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	216933 212722	213207 212002	209810 219067	231497 225632	Ave		217608.702				3.5		20.0			
DNX	117133 161214	137942 160624	149221 163997	167576 165720	Ave		152928.307				11.5		20.0			
MNX	175621 156707	161285 152355	156238 154895	157686 153564	Ave		158544.202				4.7		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	4343 148550	10671 219286	21002 564643	57932	85174	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2345 112549	6904 164161	14937 414714	41936	64550	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	4099 124459	9411 180763	18233 448024	46005	73151	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040025.D				
Lims ID:	IC DMT L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	04-Mar-2020 21:00:00	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L8				
Misc. Info.:	280-0089779-025				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:20	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.591	-0.001	564643	2.50	2.59	M
5 DNX	1	6.916	6.918	-0.002	414714	2.50	2.71	M
6 MNX	1	7.356	7.358	-0.002	448024	2.92	2.83	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

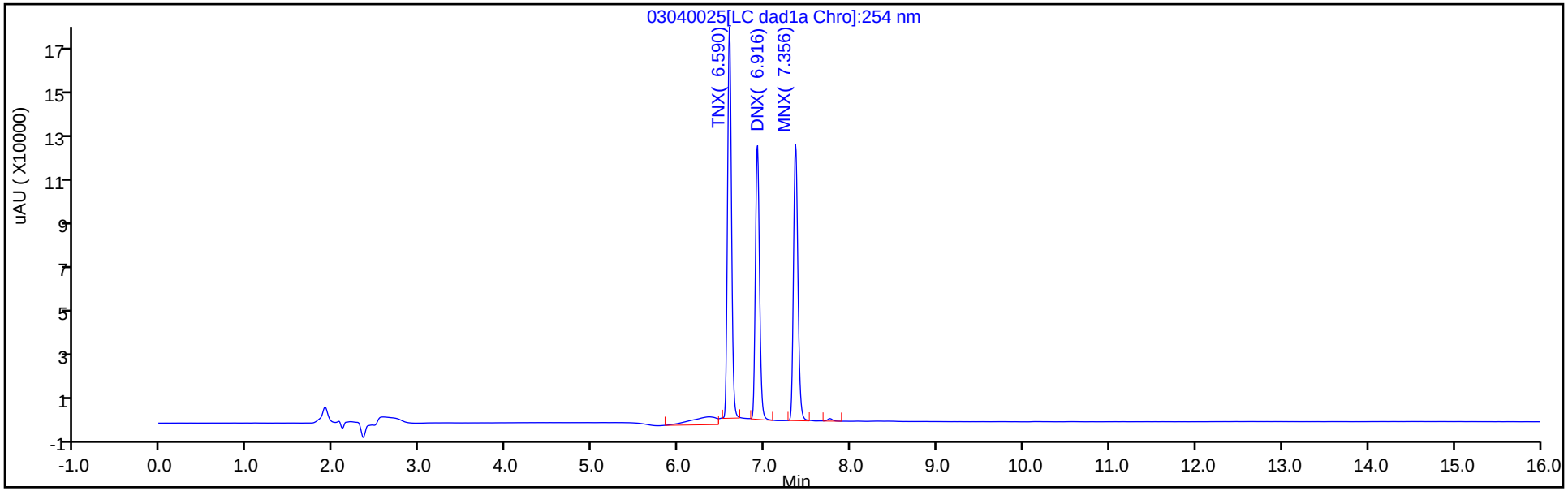
8330 DMT_00005 Amount Added: 125.00 Units: uL

Report Date: 06-Mar-2020 10:25:21 Chrom Revision: 2.3 19-Feb-2020 16:45:46

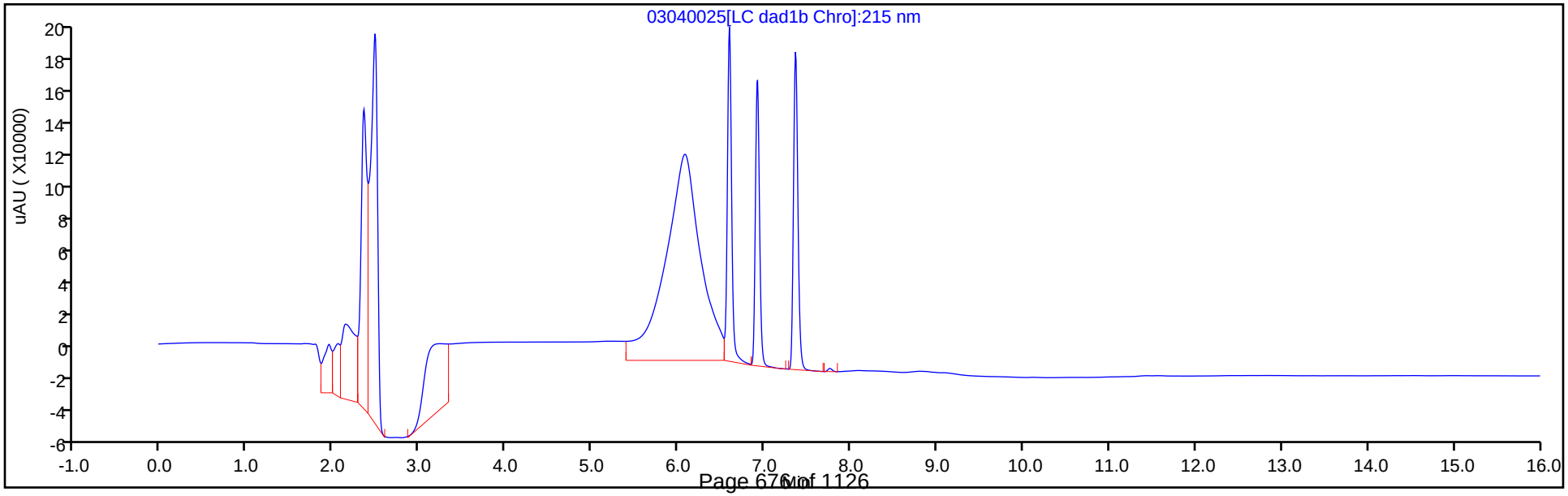
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L8			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

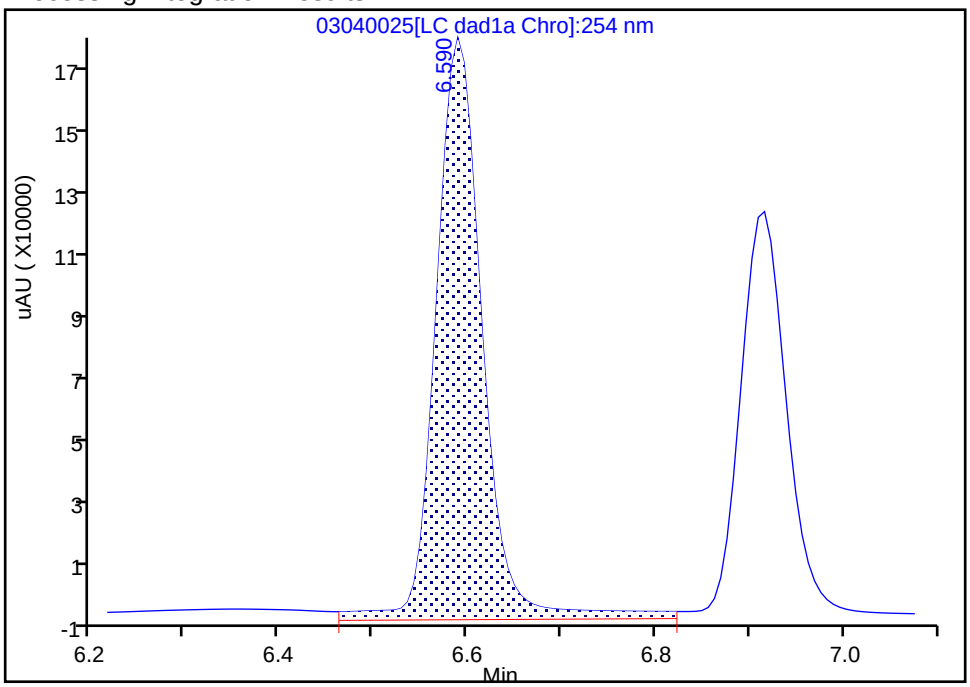
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

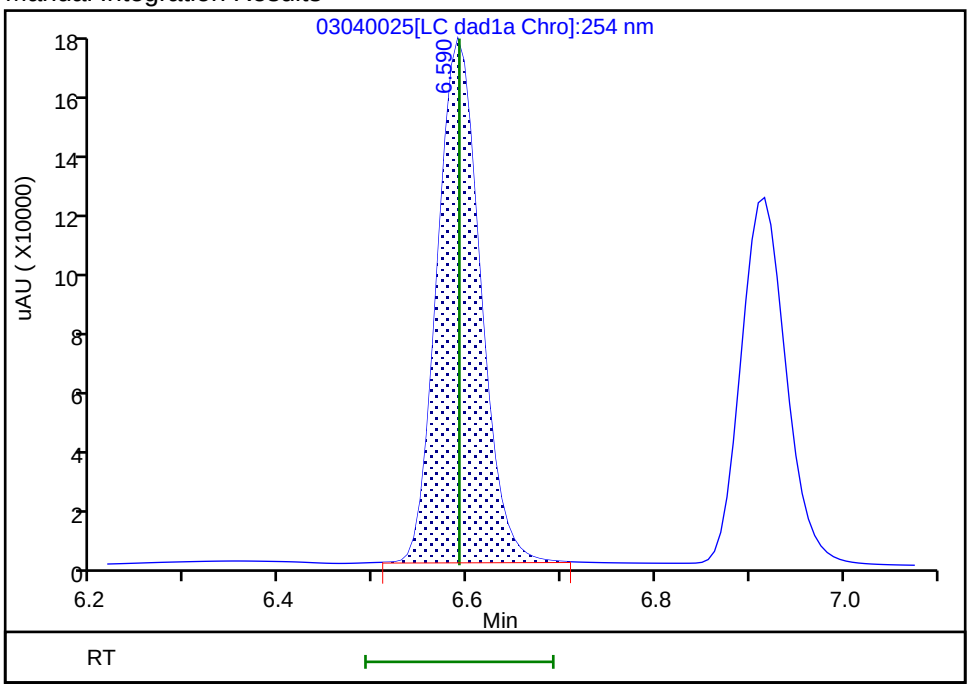
Processing Integration Results

RT: 6.59
Area: 620676
Amount: 2.450904
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 564643
Amount: 2.594763
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:29:45

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

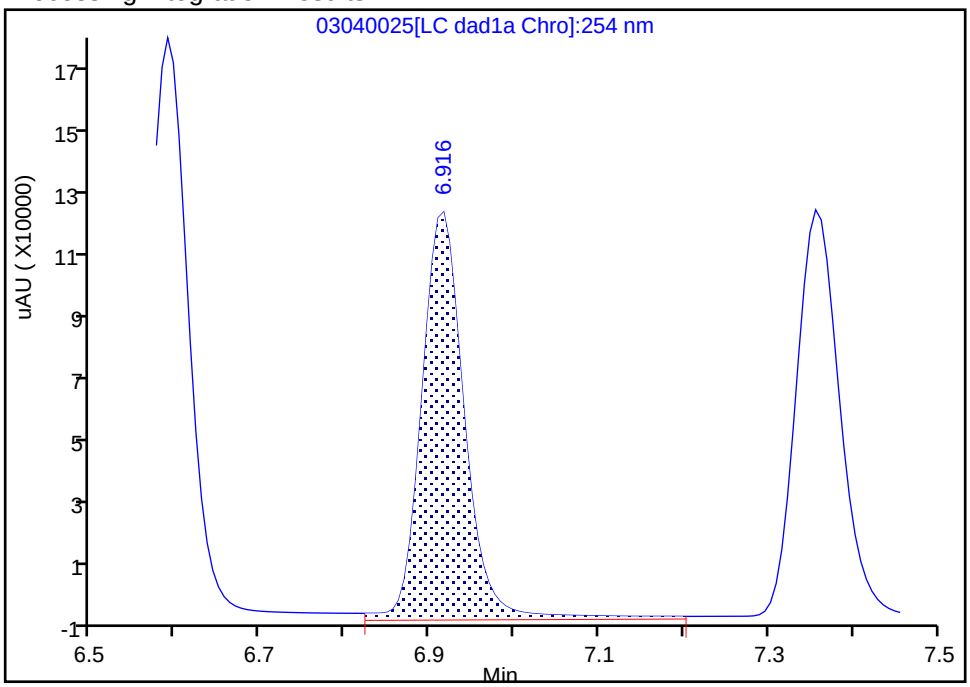
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

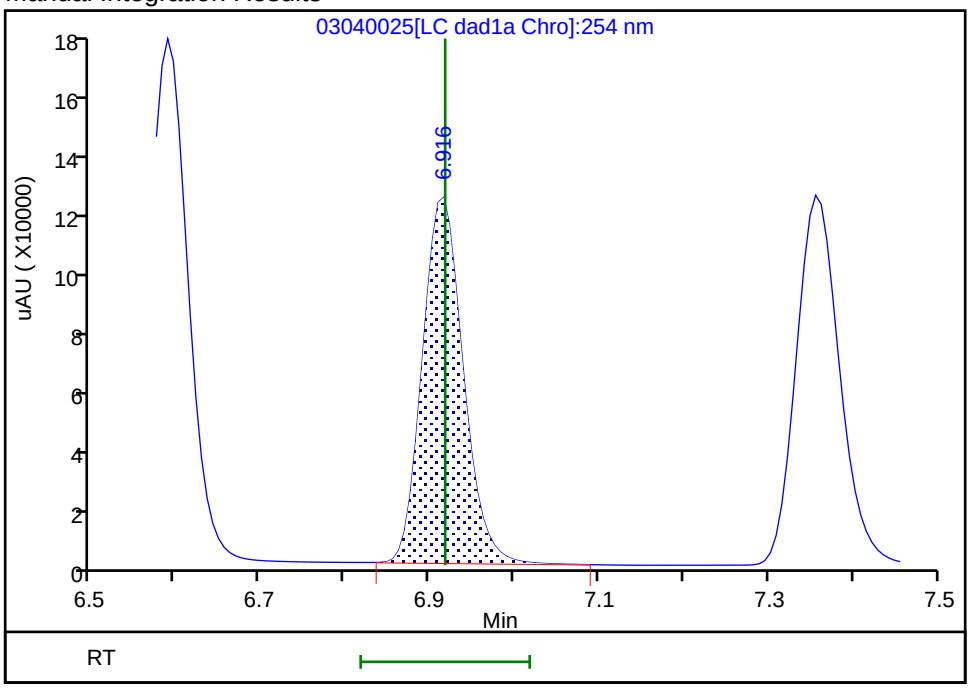
Processing Integration Results

RT: 6.92
Area: 445633
Amount: 2.254277
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 414714
Amount: 2.711820
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:29:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

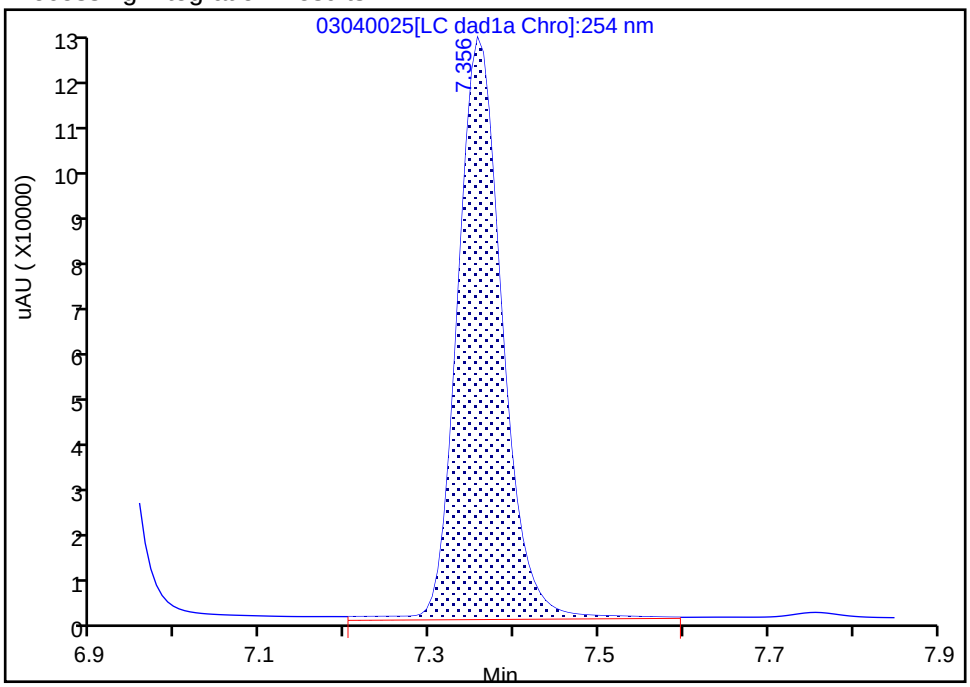
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

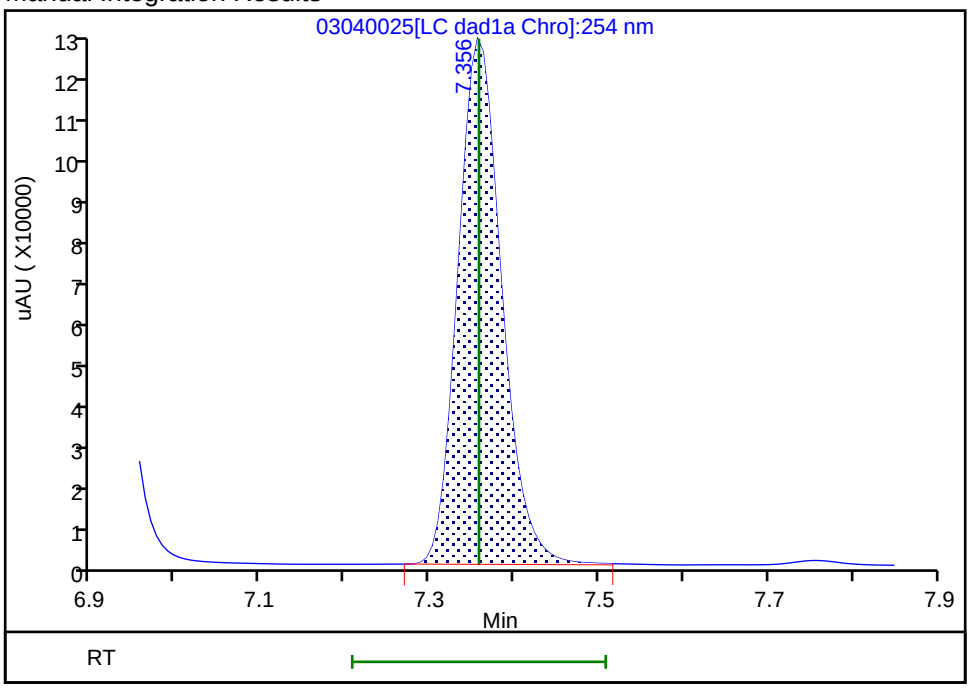
Processing Integration Results

RT: 7.36
Area: 461400
Amount: 2.899748
Amount Units: ug/mL



Manual Integration Results

RT: 7.36
Area: 448024
Amount: 2.825862
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:00
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040026.D				
Lims ID:	IC DMT L7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	04-Mar-2020 21:23:03	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L7				
Misc. Info.:	280-0089779-026				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:21	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	219286	1.00	1.01	M
5 DNX	1	6.918	6.918	0.000	164161	1.00	1.07	M
6 MNX	1	7.358	7.358	0.000	180763	1.17	1.14	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

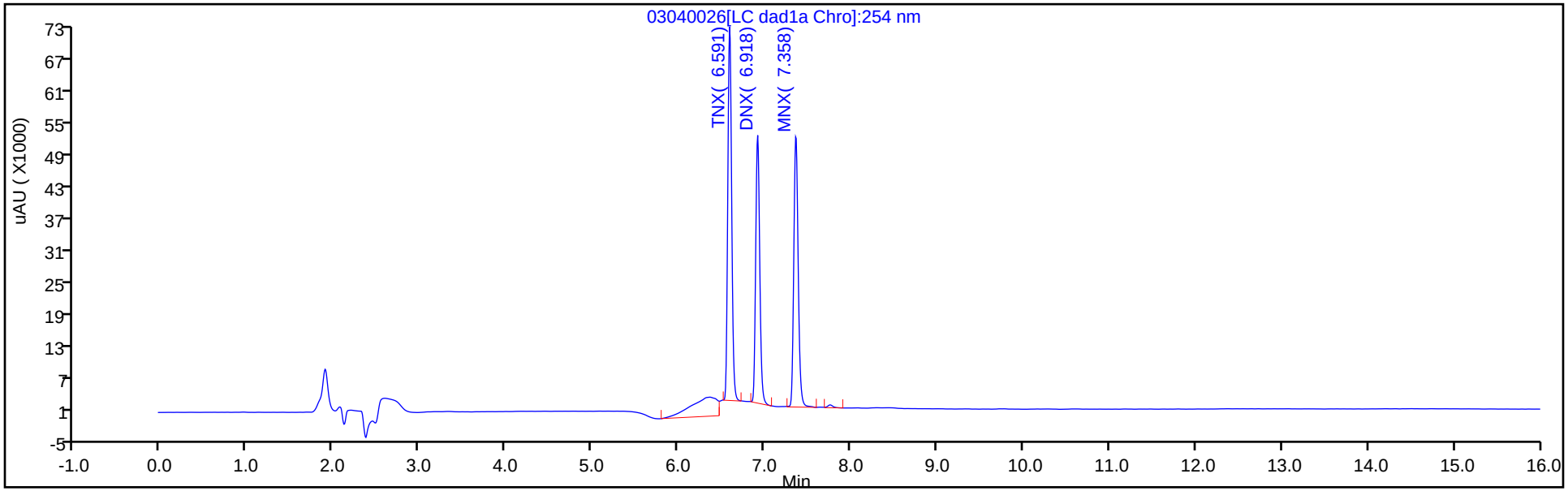
8330 DMT_00005 Amount Added: 50.00 Units: uL

Report Date: 06-Mar-2020 10:25:22 Chrom Revision: 2.3 19-Feb-2020 16:45:46

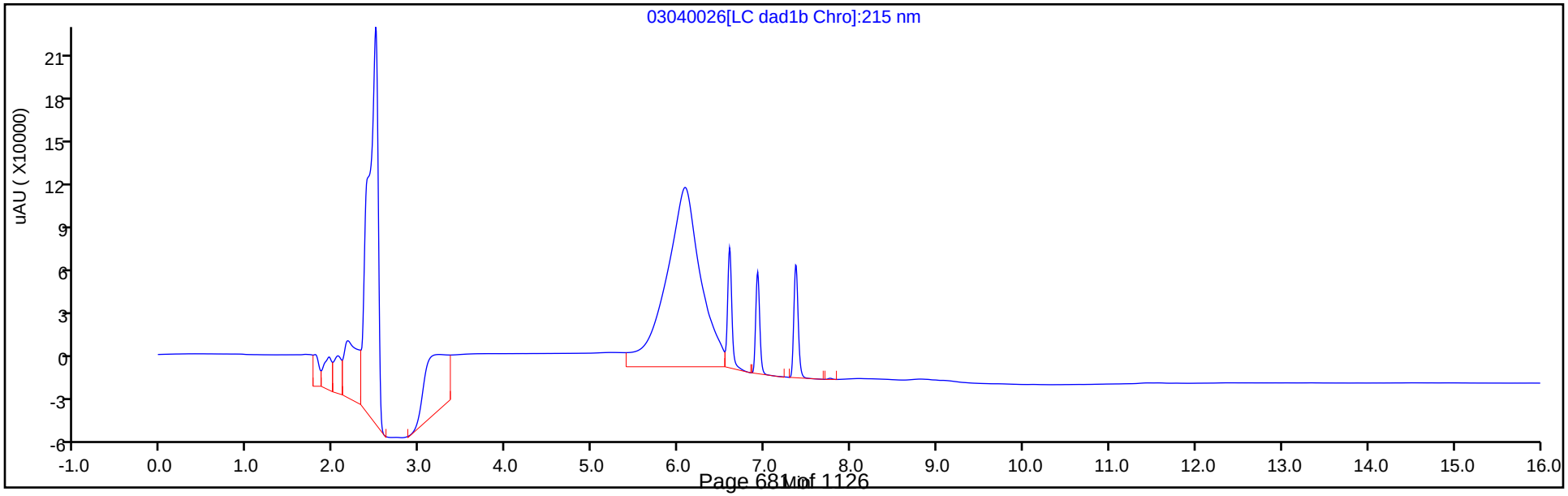
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d				
Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L7			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

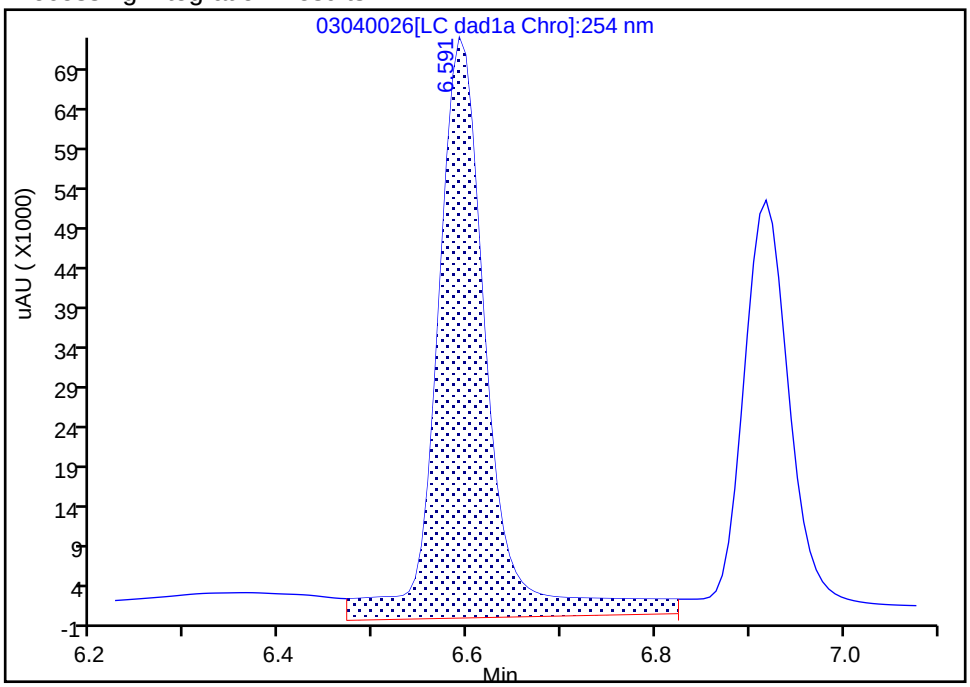
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d				
Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

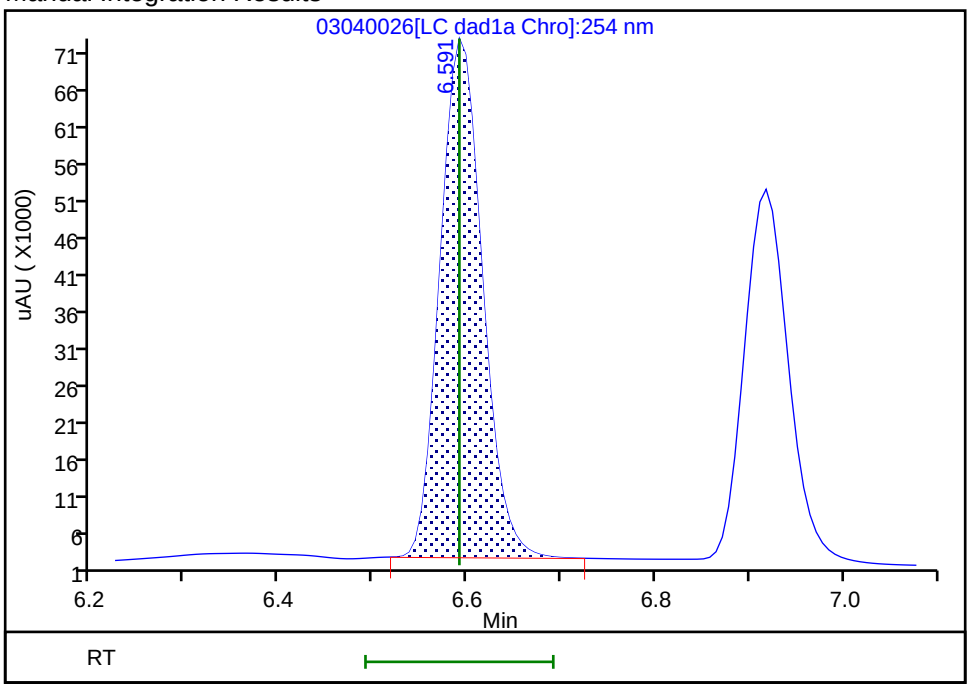
Processing Integration Results

RT: 6.59
Area: 269369
Amount: 1.068967
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 219286
Amount: 1.007708
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:20
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

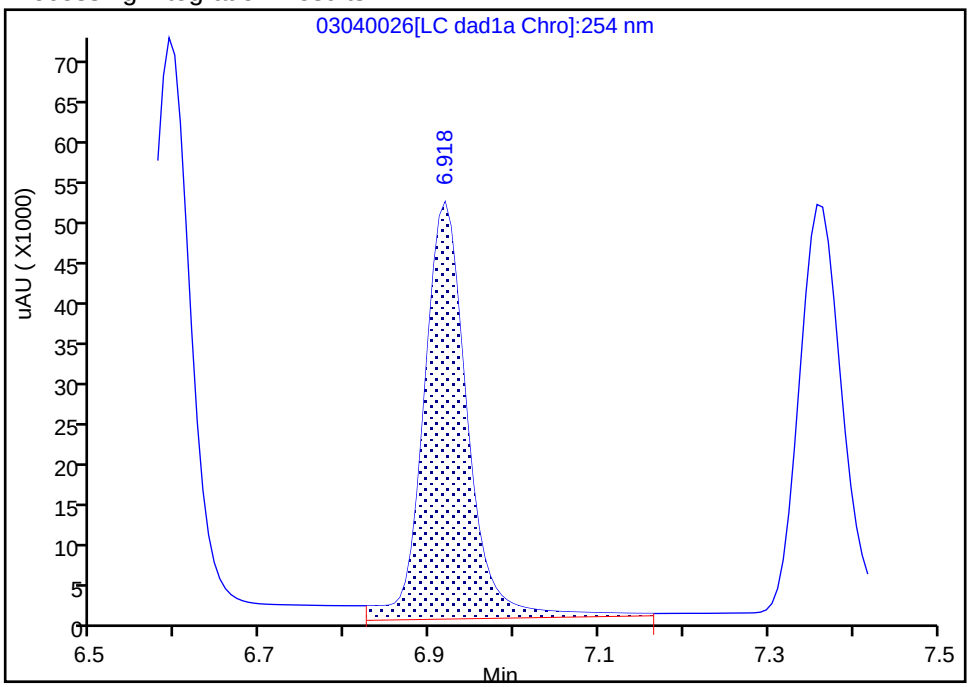
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d				
Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

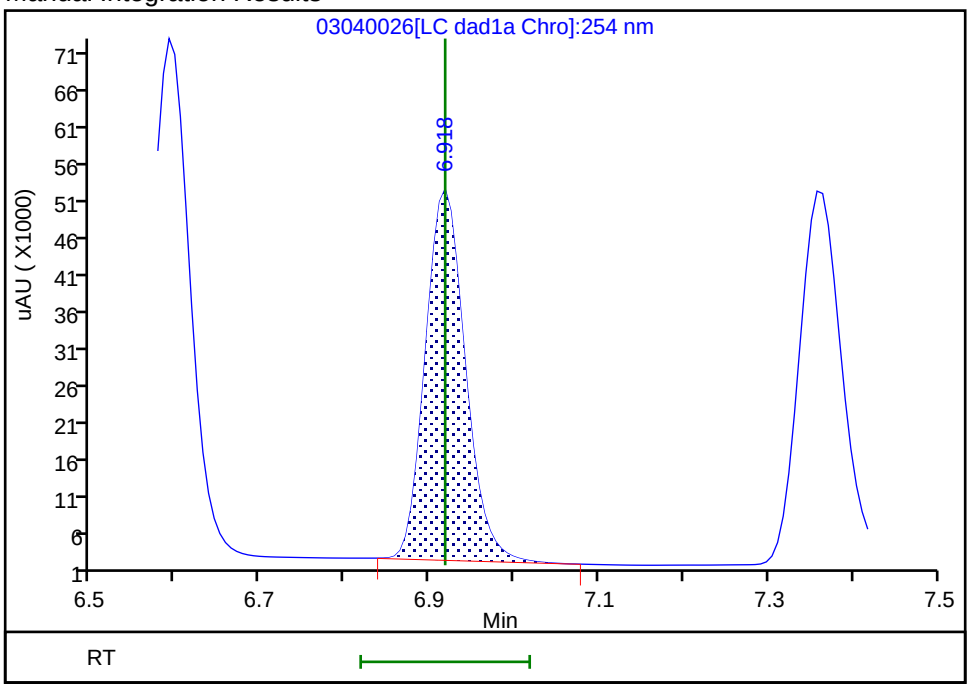
Processing Integration Results

RT: 6.92
Area: 184230
Amount: 0.939283
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 164161
Amount: 1.073451
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:26

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040027.D				
Lims ID:	IC DMT L6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	04-Mar-2020 21:45:58	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L6				
Misc. Info.:	280-0089779-027				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:23	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	148550	0.7007	0.6826	M
5 DNX	1	6.918	6.918	0.000	112549	0.7007	0.7360	M
6 MNX	1	7.358	7.358	0.000	124459	0.8169	0.7850	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

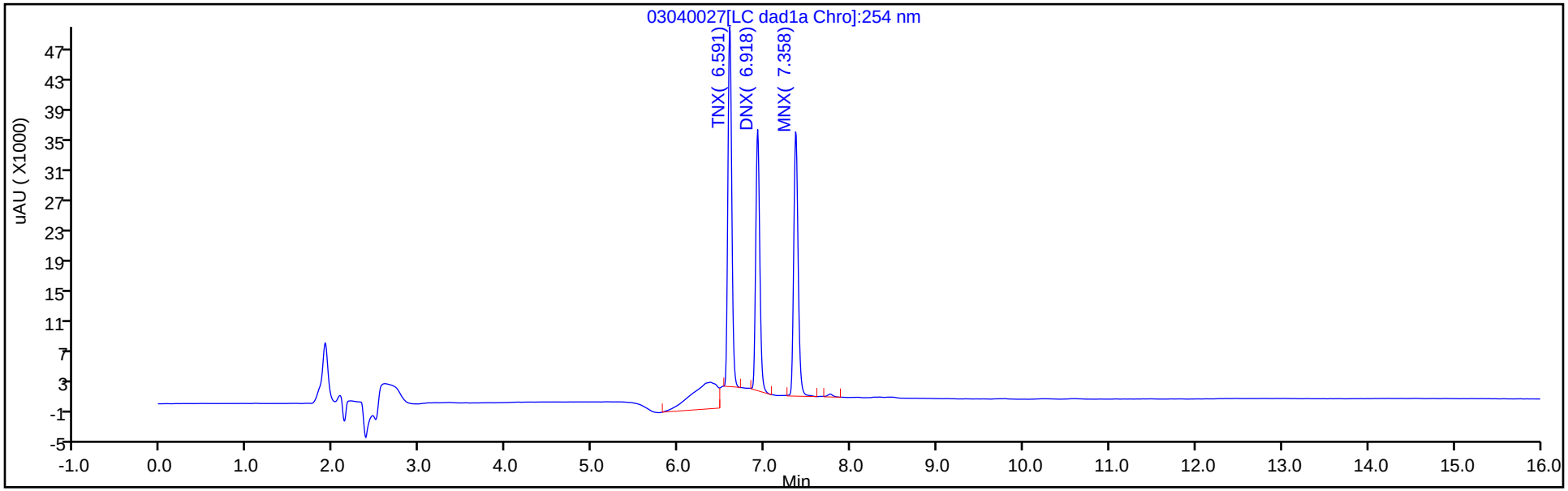
8330 DMT_00005 Amount Added: 35.00 Units: uL

Report Date: 06-Mar-2020 10:25:23 Chrom Revision: 2.3 19-Feb-2020 16:45:46

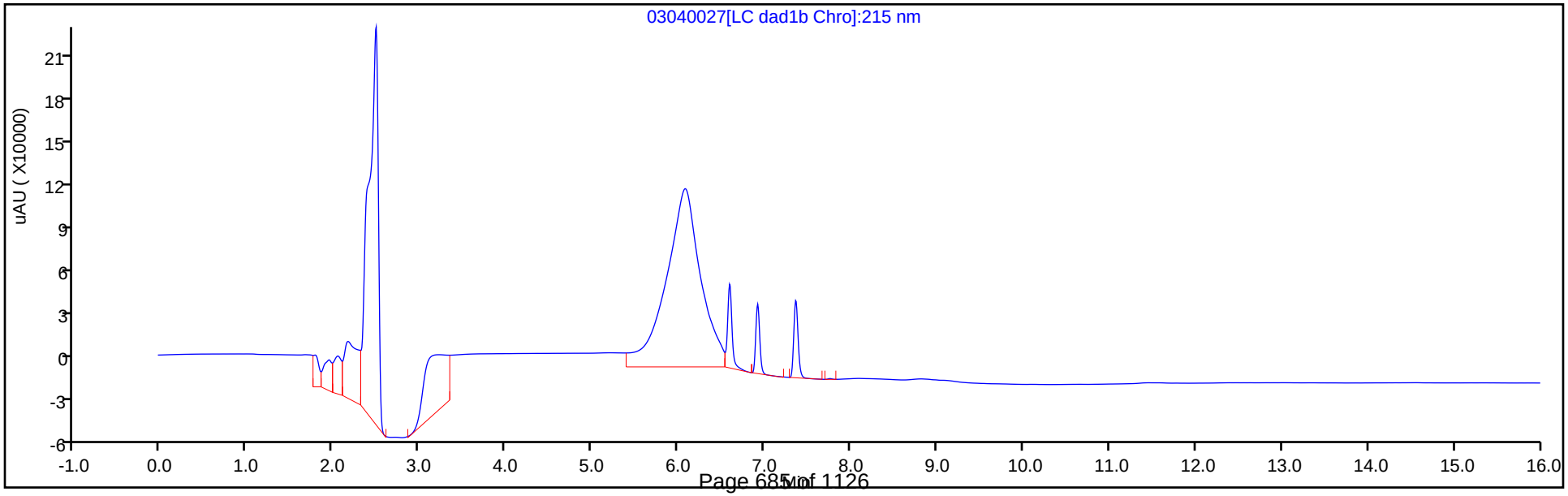
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L6			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

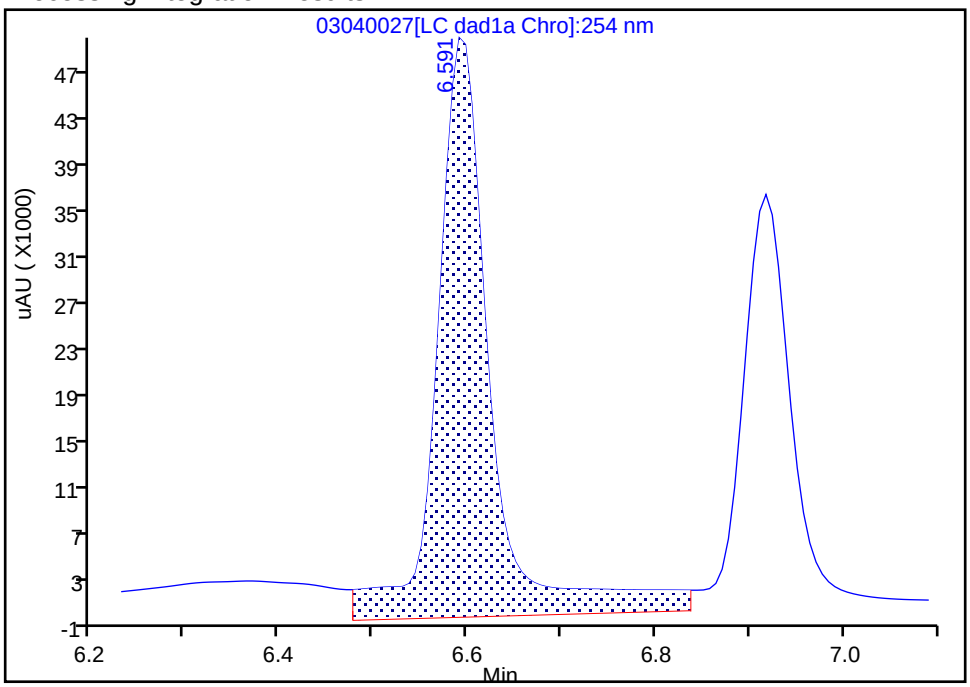
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

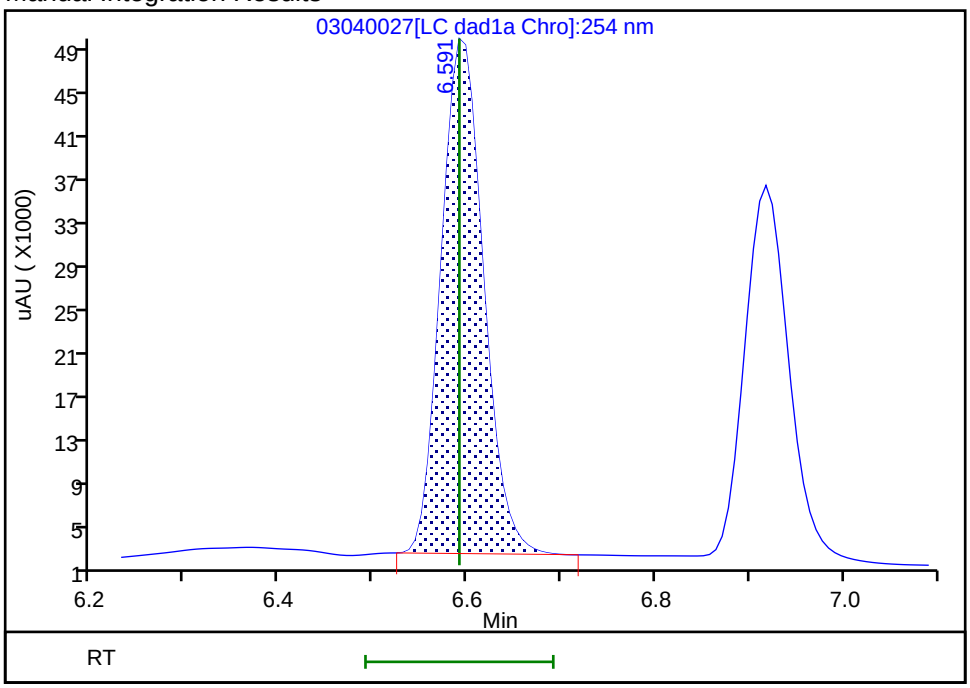
Processing Integration Results

RT: 6.59
Area: 198883
Amount: 0.812342
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 148550
Amount: 0.682647
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

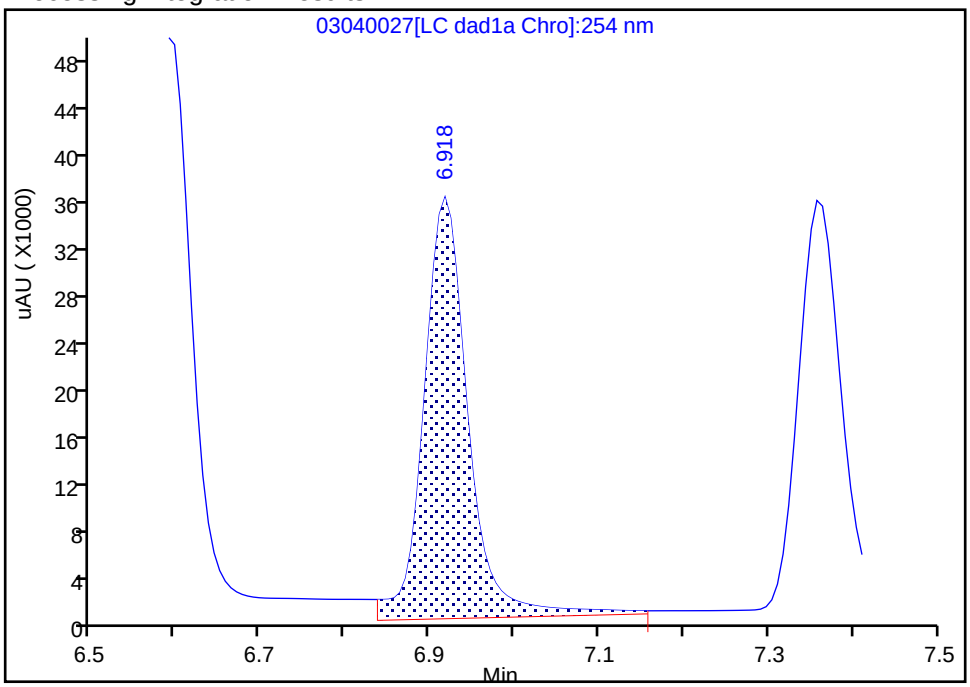
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

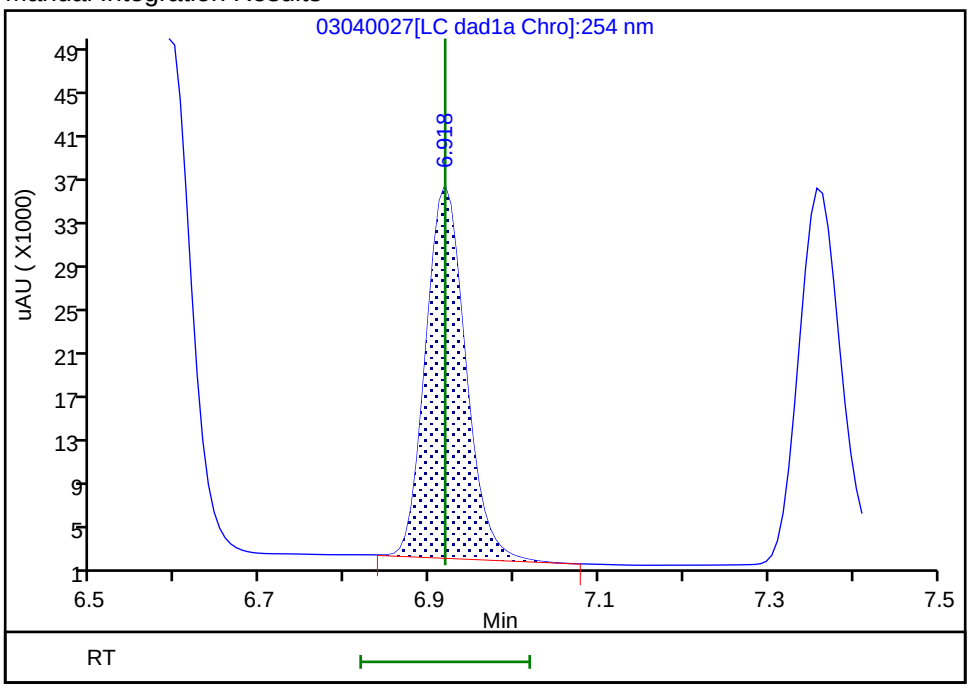
Processing Integration Results

RT: 6.92
Area: 130368
Amount: 0.673274
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 112549
Amount: 0.735959
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:49

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040028.D				
Lims ID:	IC DMT L5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	04-Mar-2020 22:09:00	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L5				
Misc. Info.:	280-0089779-028				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:24	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:31:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	85174	0.4004	0.3914	M
5 DNX	1	6.917	6.918	-0.001	64550	0.4004	0.4221	M
6 MNX	1	7.357	7.358	-0.001	73151	0.4668	0.4614	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

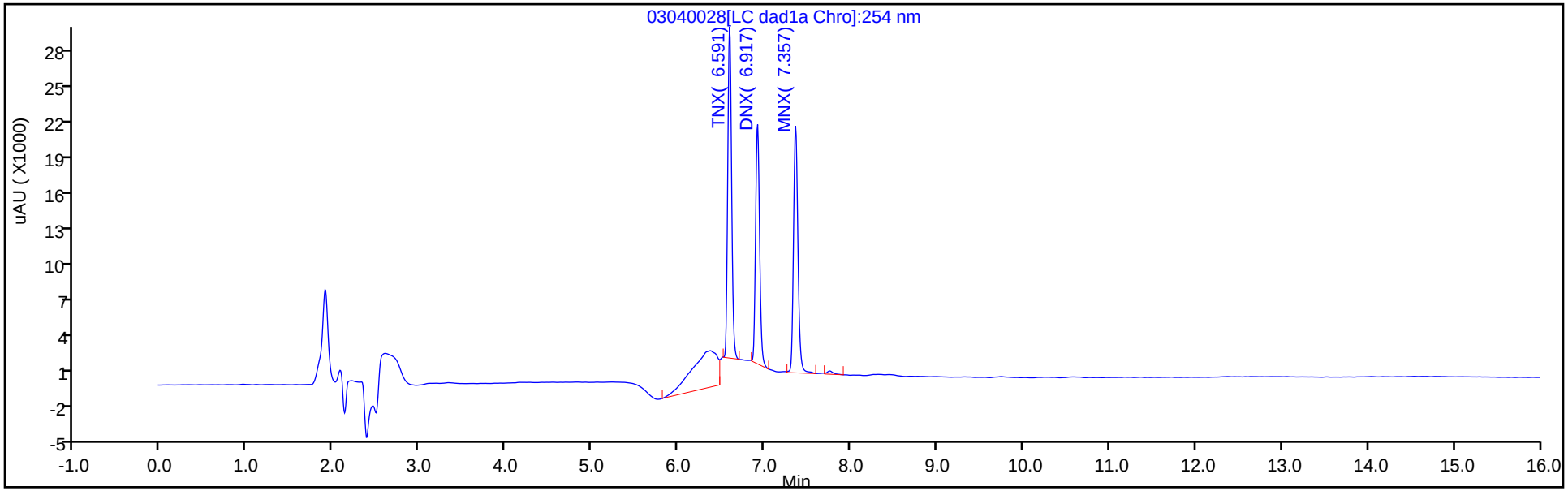
8330 DMT_00005 Amount Added: 20.00 Units: uL

Report Date: 06-Mar-2020 10:25:24 Chrom Revision: 2.3 19-Feb-2020 16:45:46

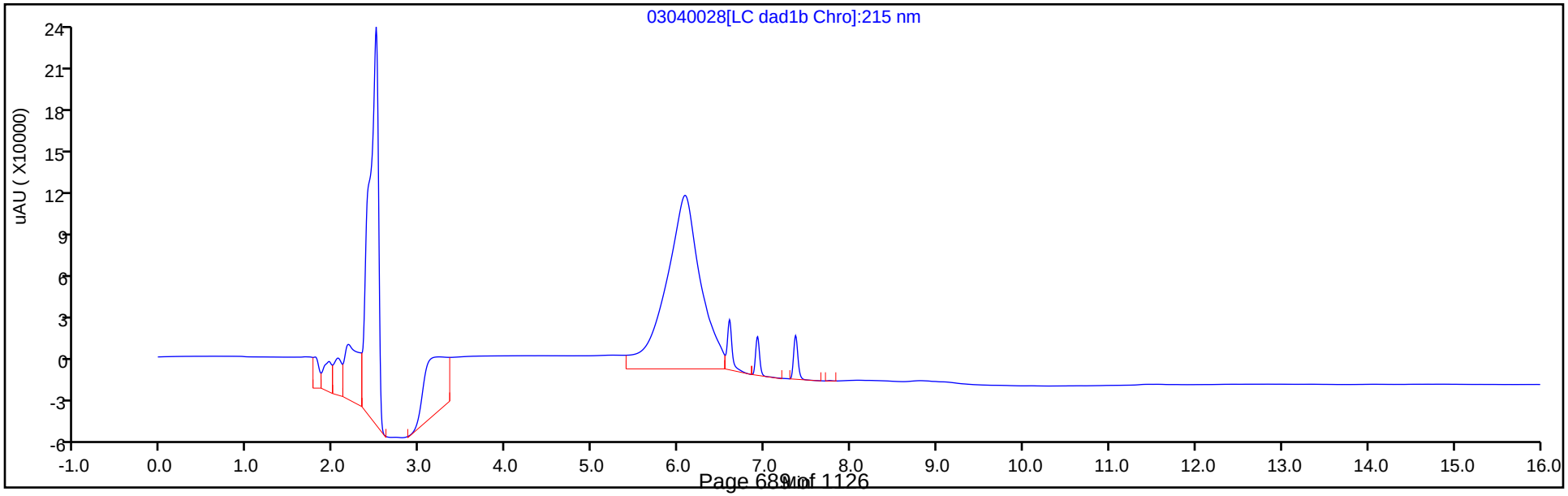
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d				
Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L5			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

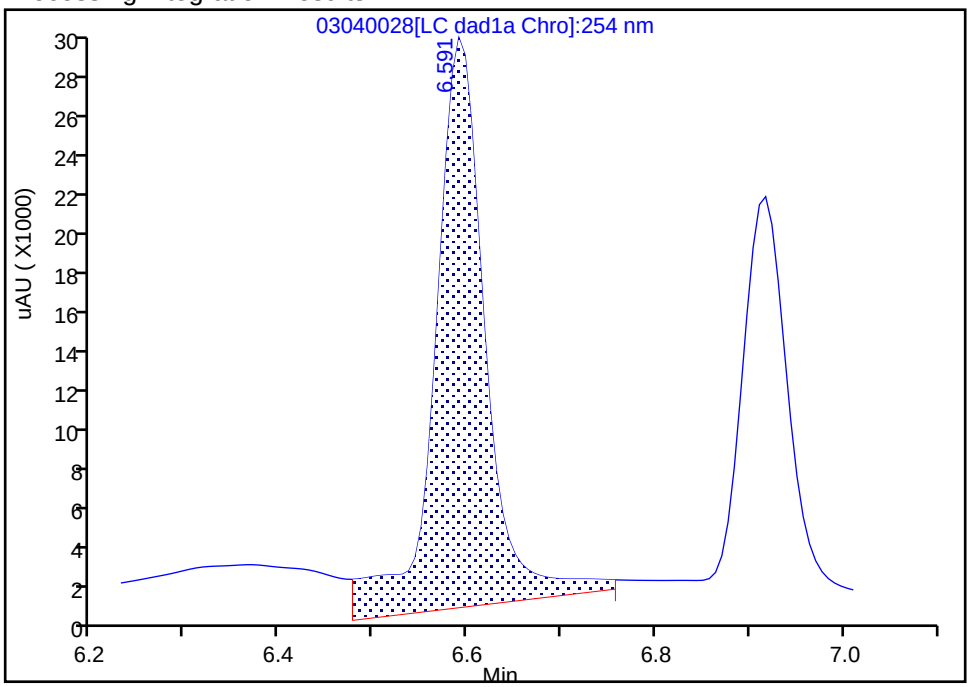
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d				
Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

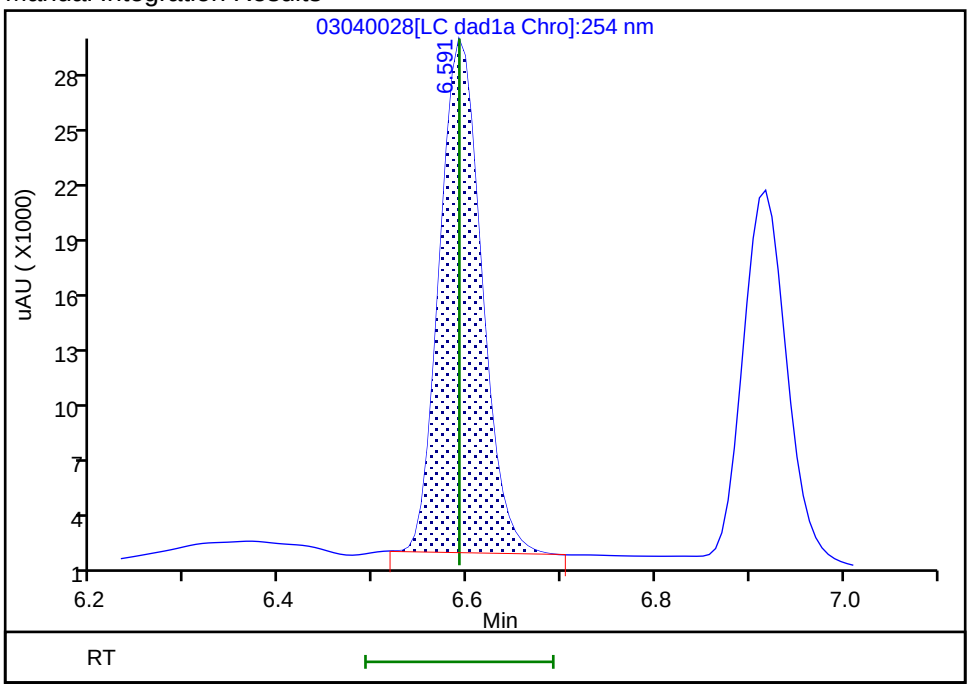
Processing Integration Results

RT: 6.59
Area: 108455
Amount: 0.455381
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 85174
Amount: 0.391409
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:08

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

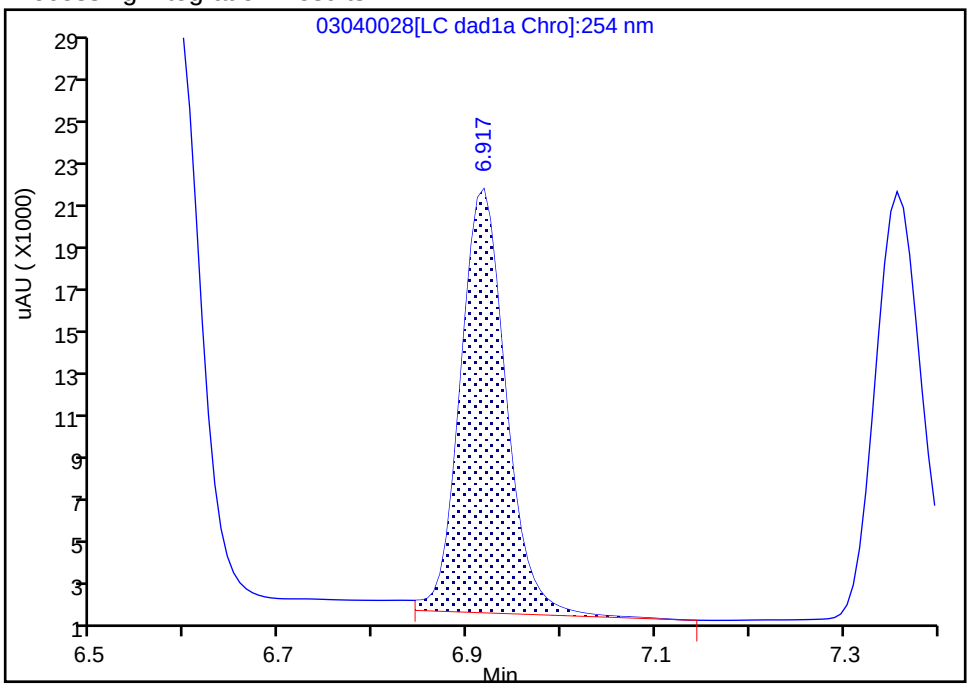
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d				
Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

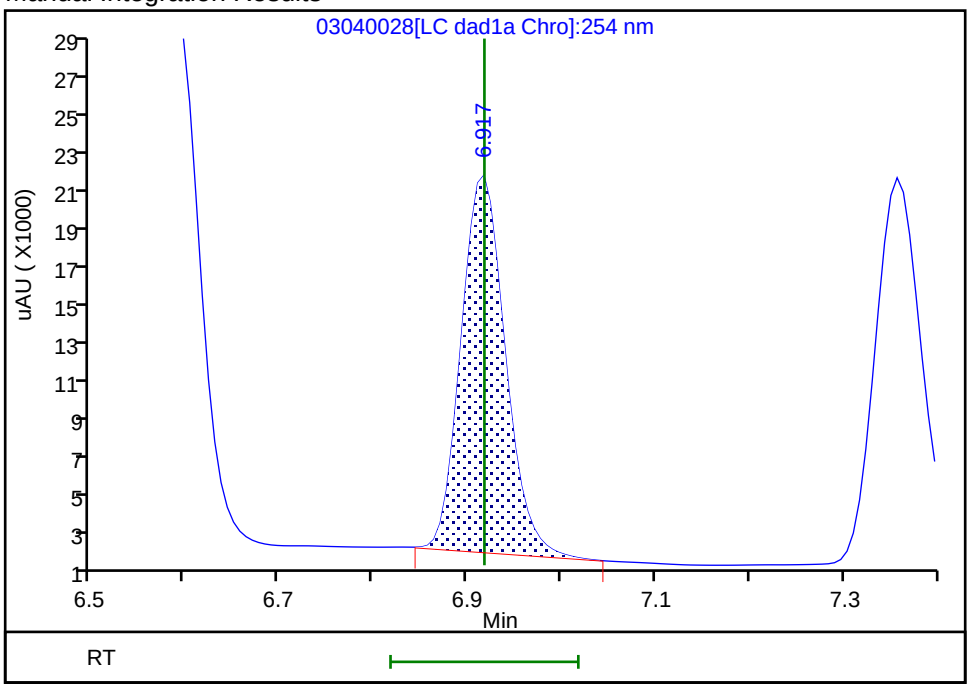
Processing Integration Results

RT: 6.92
Area: 67686
Amount: 0.396160
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 64550
Amount: 0.422093
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:13
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040029.D				
Lims ID:	IC DMT L4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	04-Mar-2020 22:31:57	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L4				
Misc. Info.:	280-0089779-029				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:24	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:31:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	57932	0.2503	0.2662	M
5 DNX	1	6.918	6.918	0.000	41936	0.2503	0.2742	M
6 MNX	1	7.358	7.358	0.000	46005	0.2918	0.2902	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

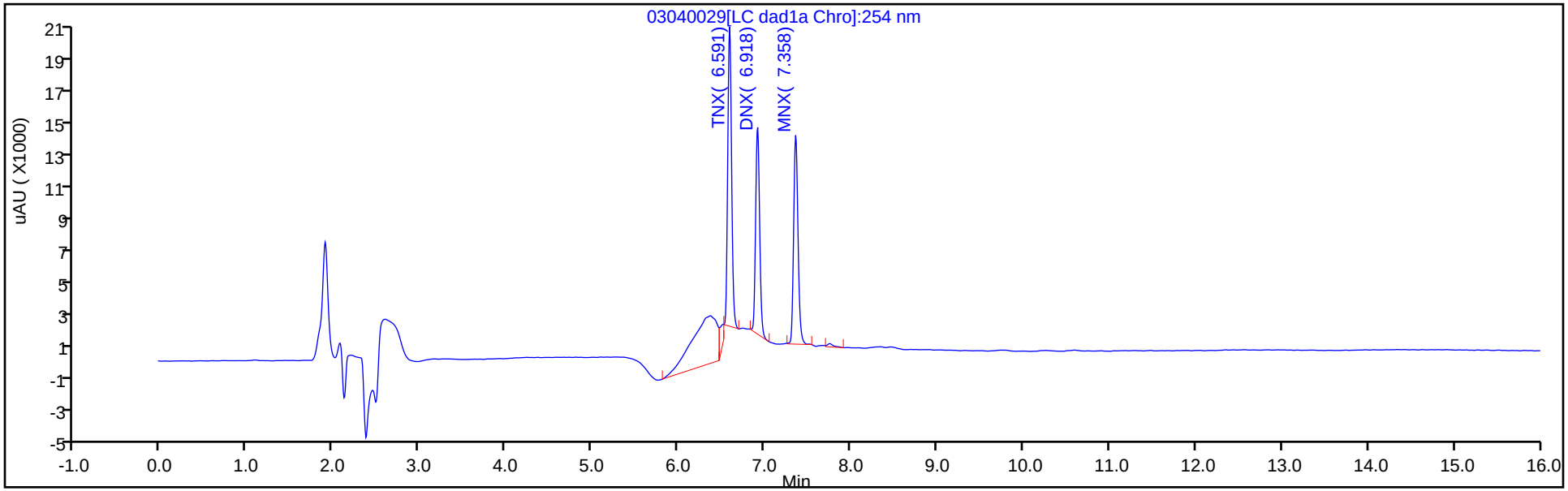
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 06-Mar-2020 10:25:25 Chrom Revision: 2.3 19-Feb-2020 16:45:46

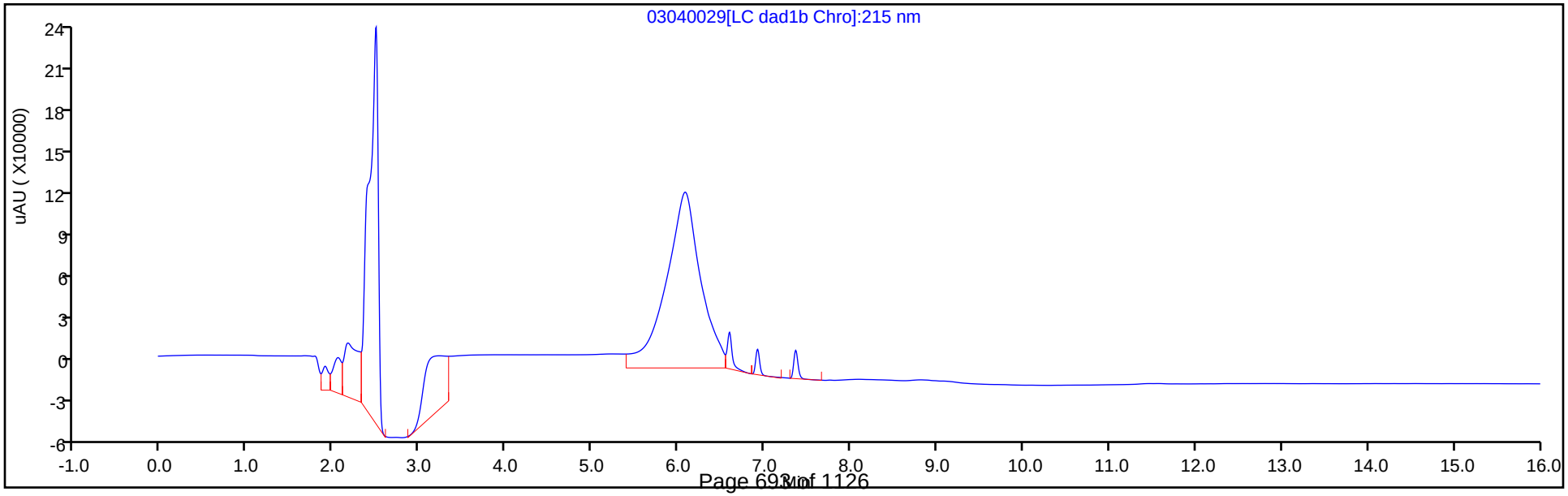
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L4			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

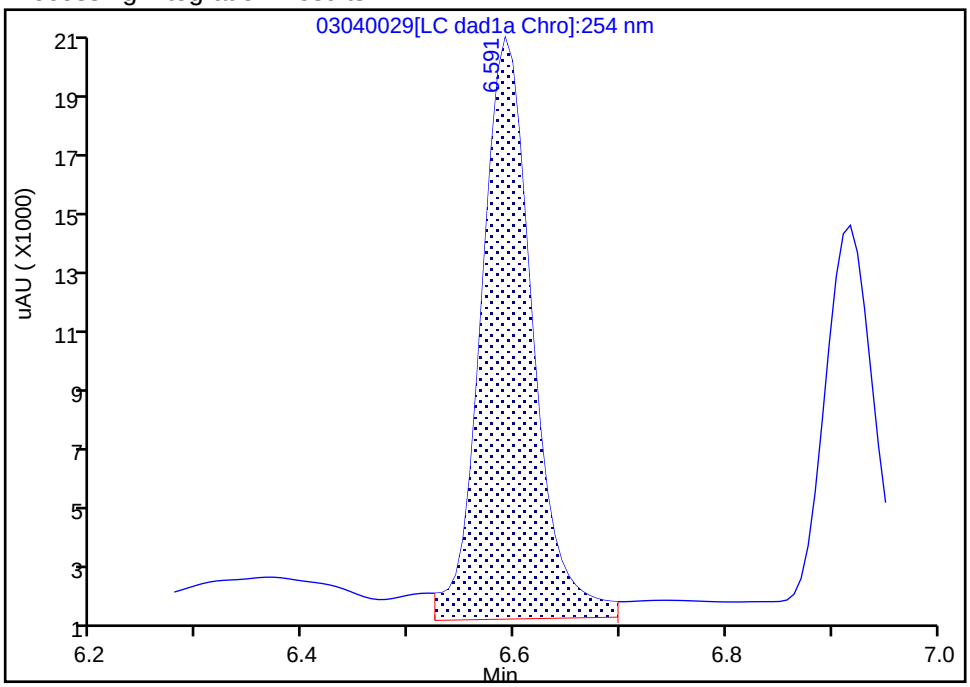
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

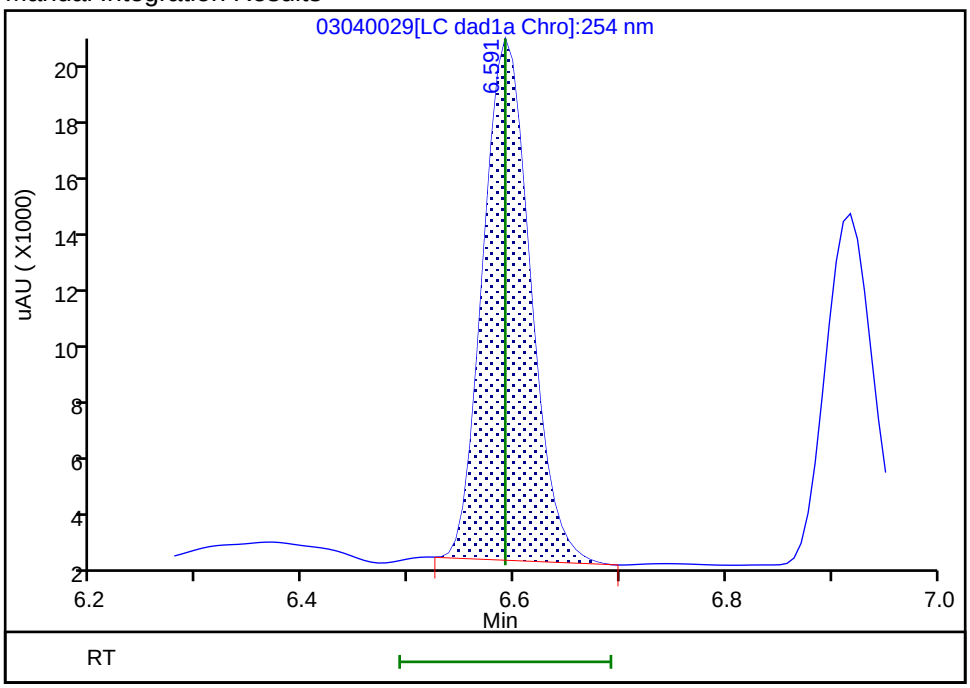
Processing Integration Results

RT: 6.59
Area: 65279
Amount: 0.274722
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 57932
Amount: 0.266221
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:35

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

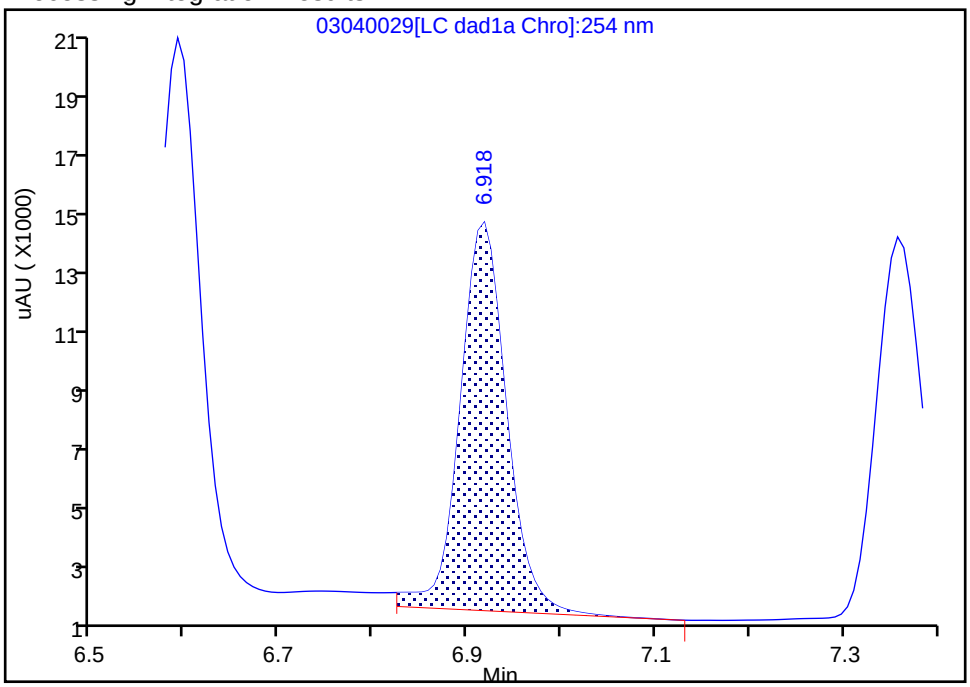
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

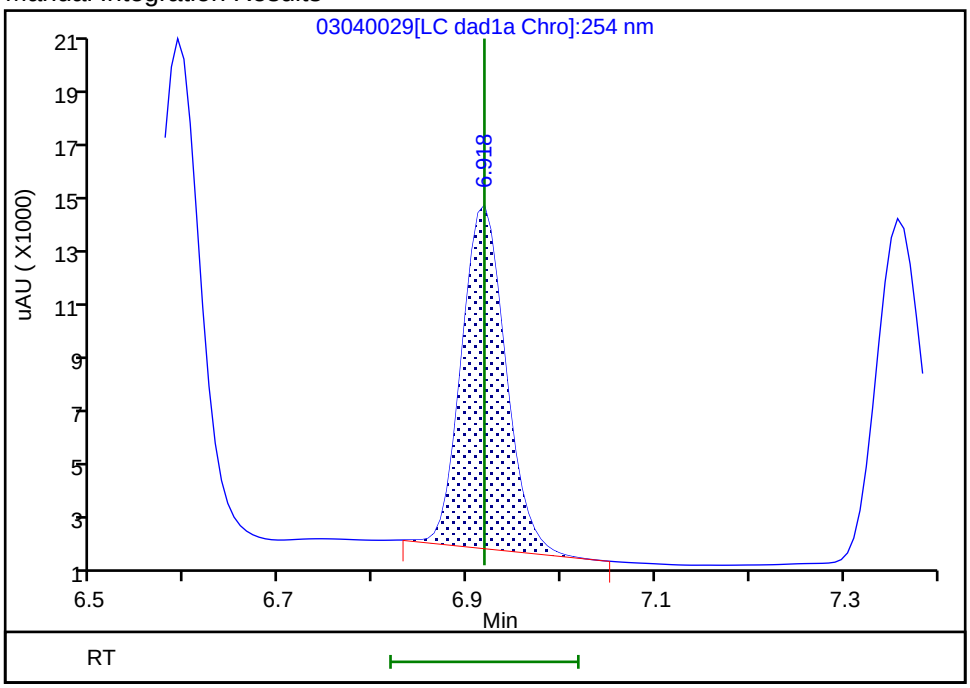
Processing Integration Results

RT: 6.92
Area: 45380
Amount: 0.263025
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 41936
Amount: 0.274220
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:40
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040030.D				
Lims ID:	IC DMT L3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	04-Mar-2020 22:54:53	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L3				
Misc. Info.:	280-0089779-030				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:25	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.589	6.591	-0.002	21002	0.1001	0.0965	M
5 DNX	1	6.915	6.918	-0.003	14937	0.1001	0.0977	M
6 MNX	1	7.355	7.358	-0.003	18233	0.1167	0.1150	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

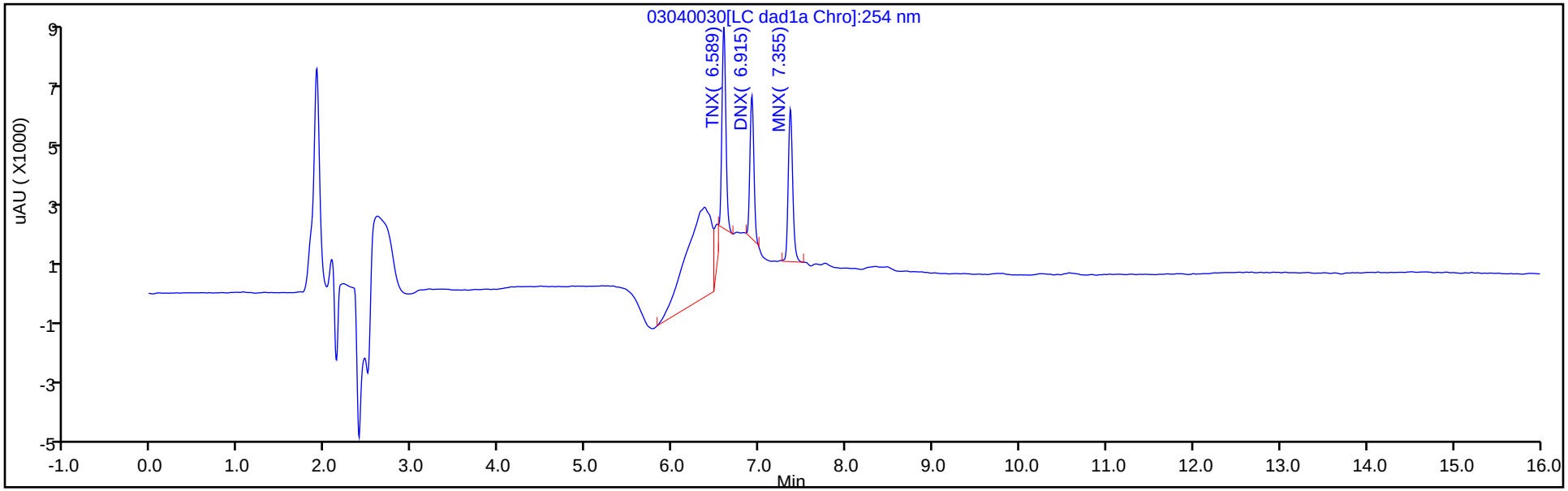
8330 DMT_00005 Amount Added: 5.00 Units: uL

Report Date: 06-Mar-2020 10:25:26 Chrom Revision: 2.3 19-Feb-2020 16:45:46

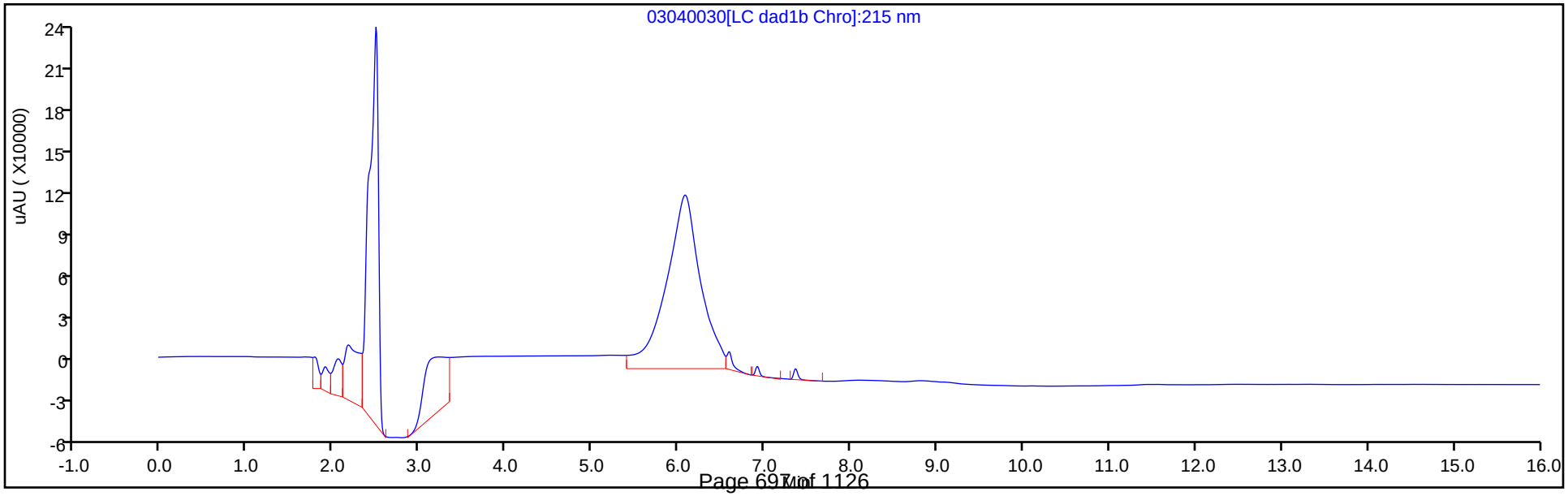
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L3			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

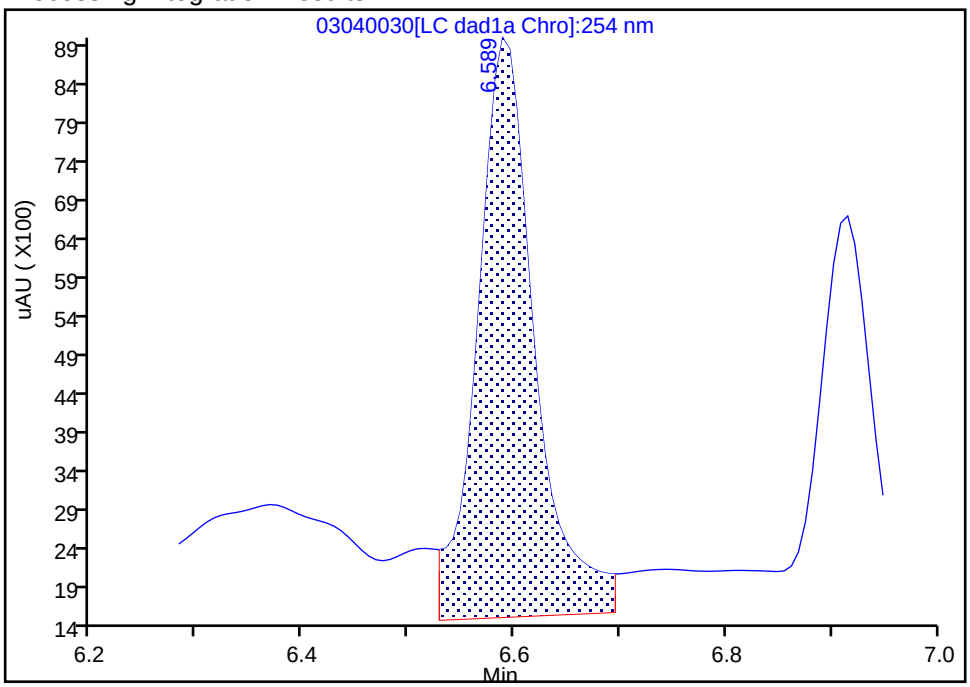
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

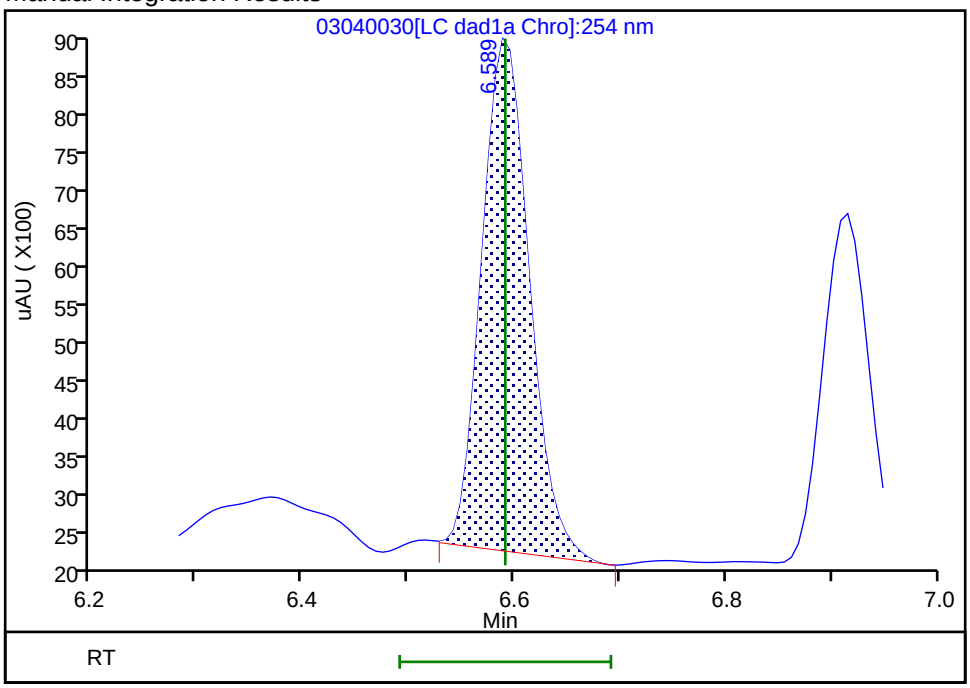
Processing Integration Results

RT: 6.59
Area: 27927
Amount: 0.102862
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 21002
Amount: 0.096513
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:59
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

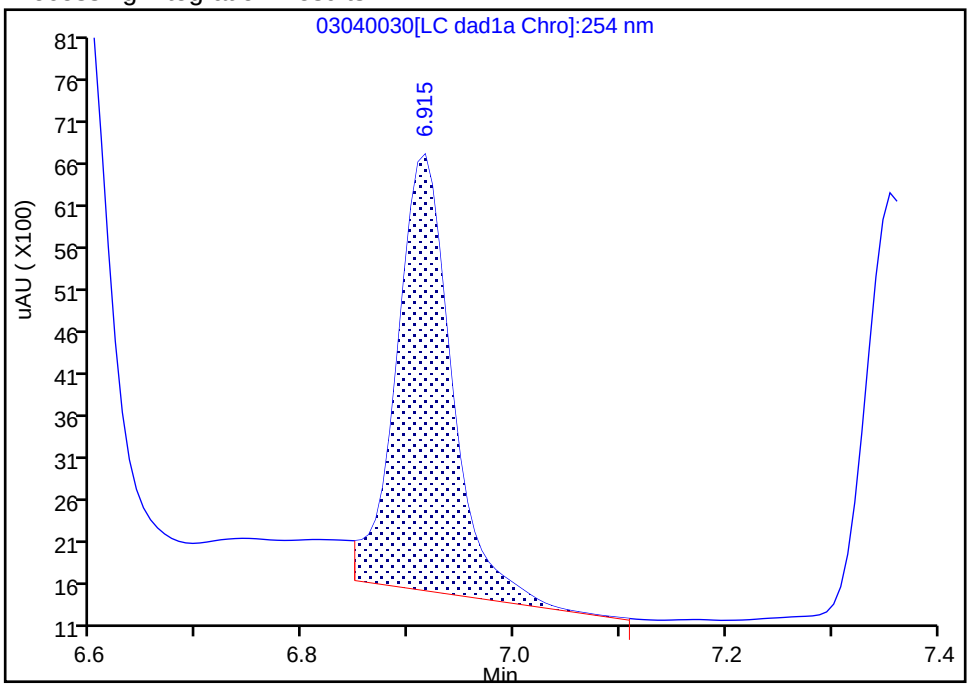
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

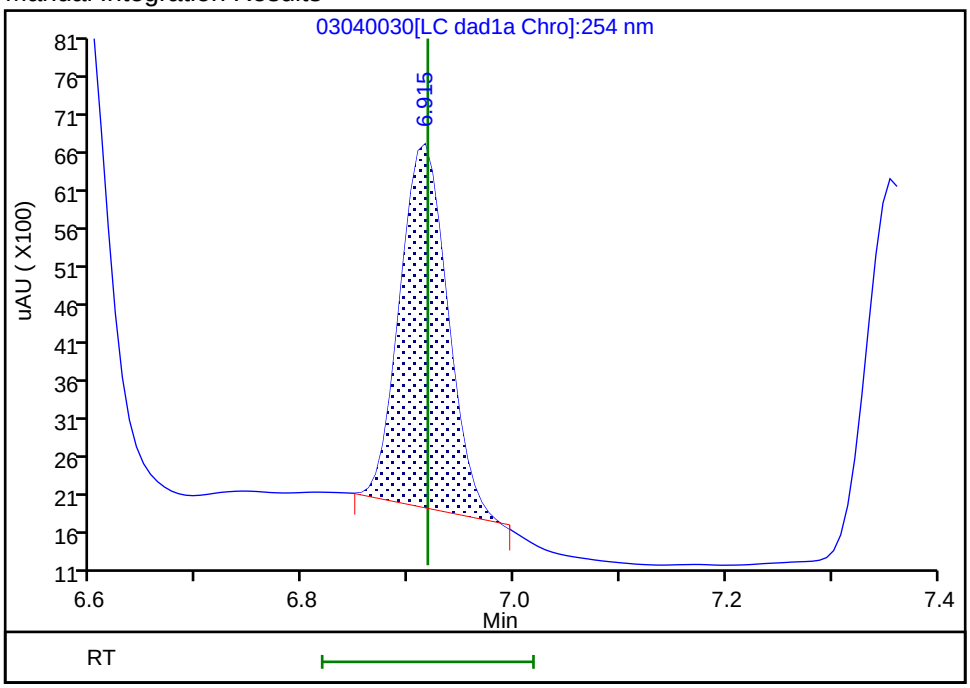
Processing Integration Results

RT: 6.92
Area: 18794
Amount: 0.101797
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 14937
Amount: 0.097673
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:04
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040031.D				
Lims ID:	IC DMT L2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	04-Mar-2020 23:17:52	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L2				
Misc. Info.:	280-0089779-031				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:26	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.588	6.591	-0.003	10671	0.0501	0.0490	M
5 DNX	1	6.914	6.918	-0.004	6904	0.0501	0.0451	M
6 MNX	1	7.354	7.358	-0.004	9411	0.0584	0.0594	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

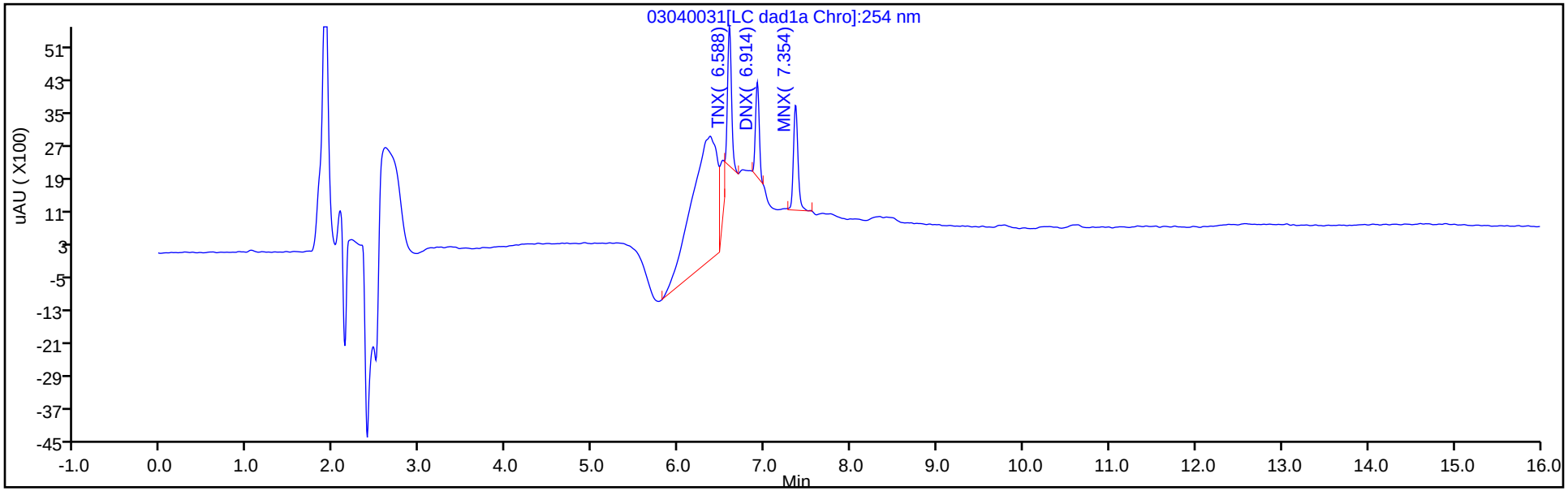
8330 DMT_00005 Amount Added: 2.50 Units: uL

Report Date: 06-Mar-2020 10:25:27 Chrom Revision: 2.3 19-Feb-2020 16:45:46

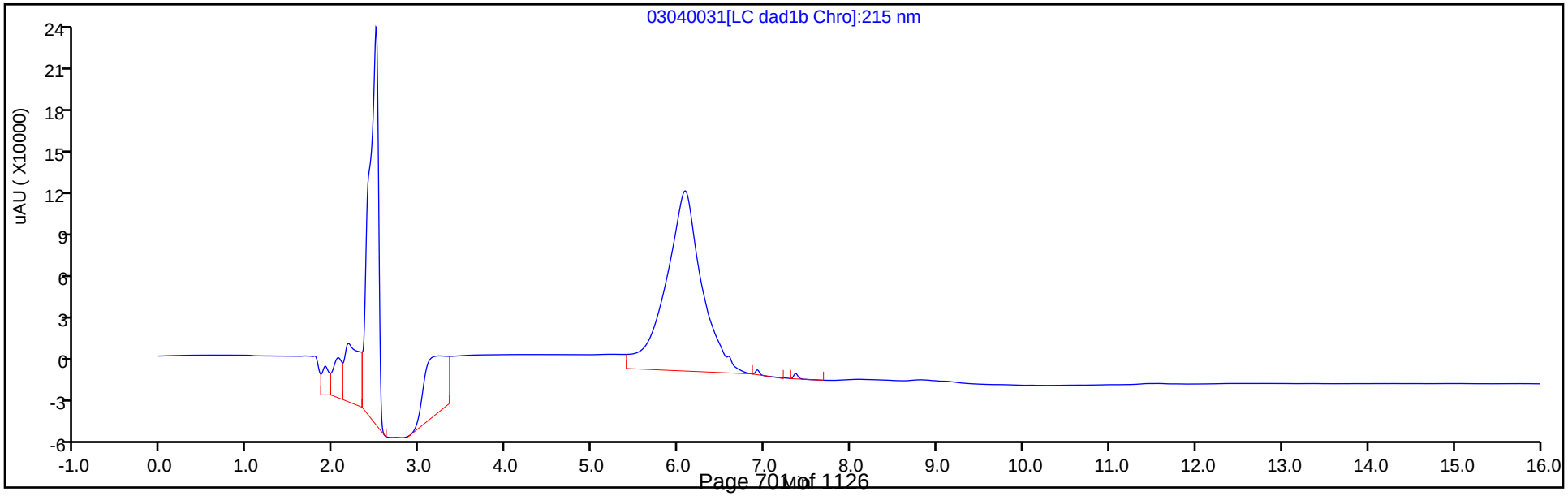
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L2			Worklist Smp#:	31
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

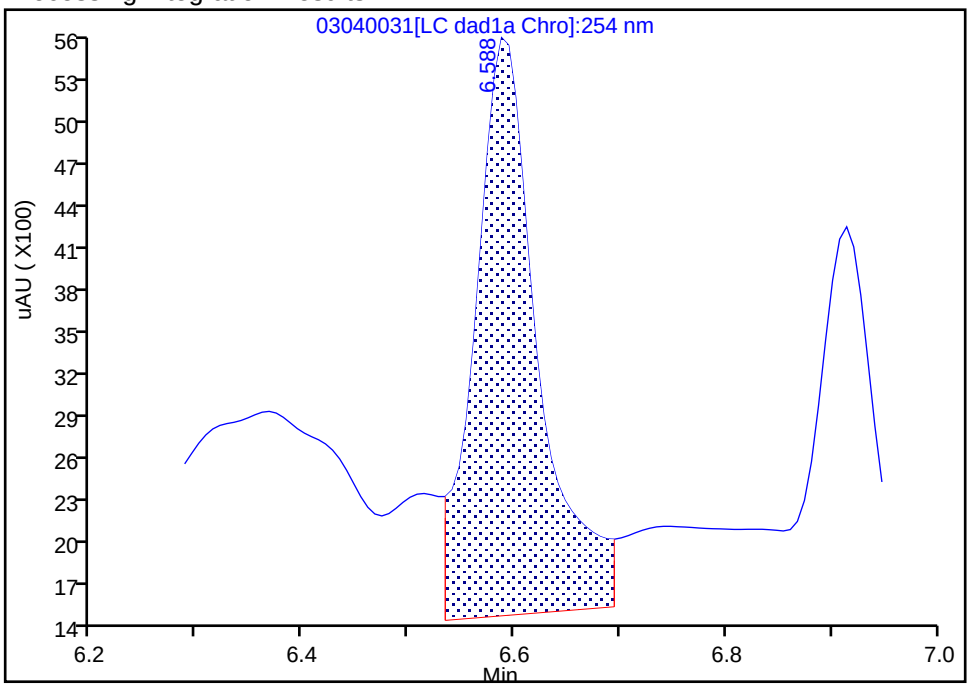
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

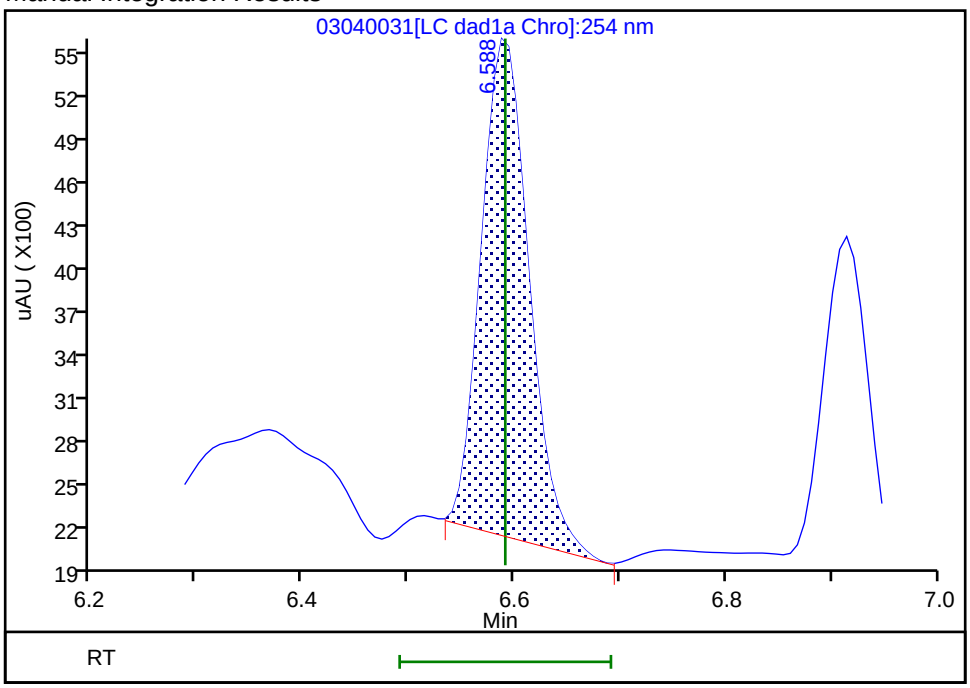
Processing Integration Results

RT: 6.59
Area: 17098
Amount: 0.055915
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 10671
Amount: 0.049038
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

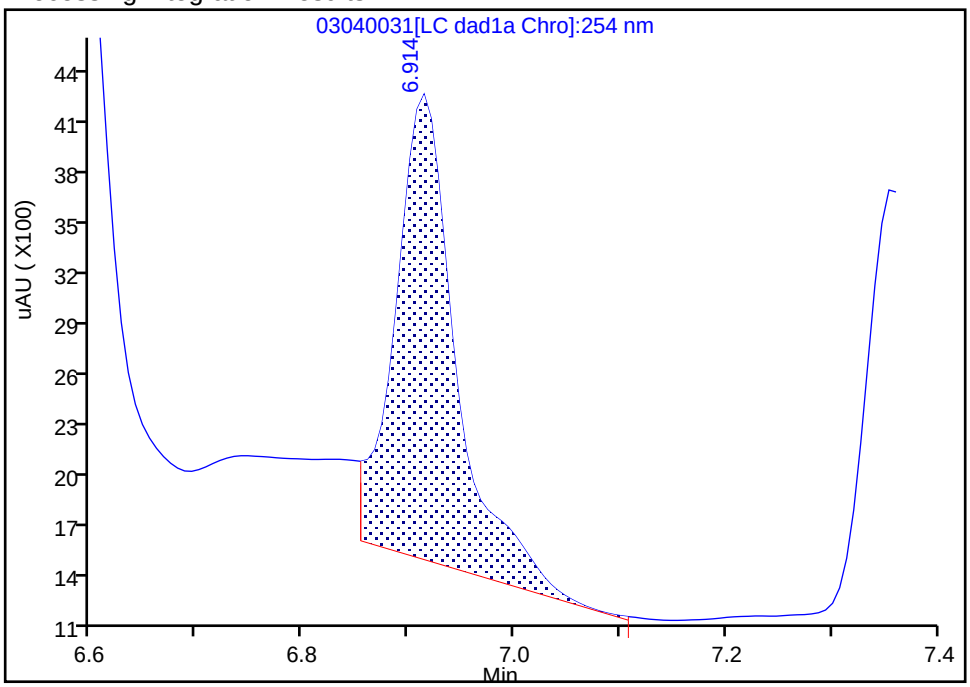
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

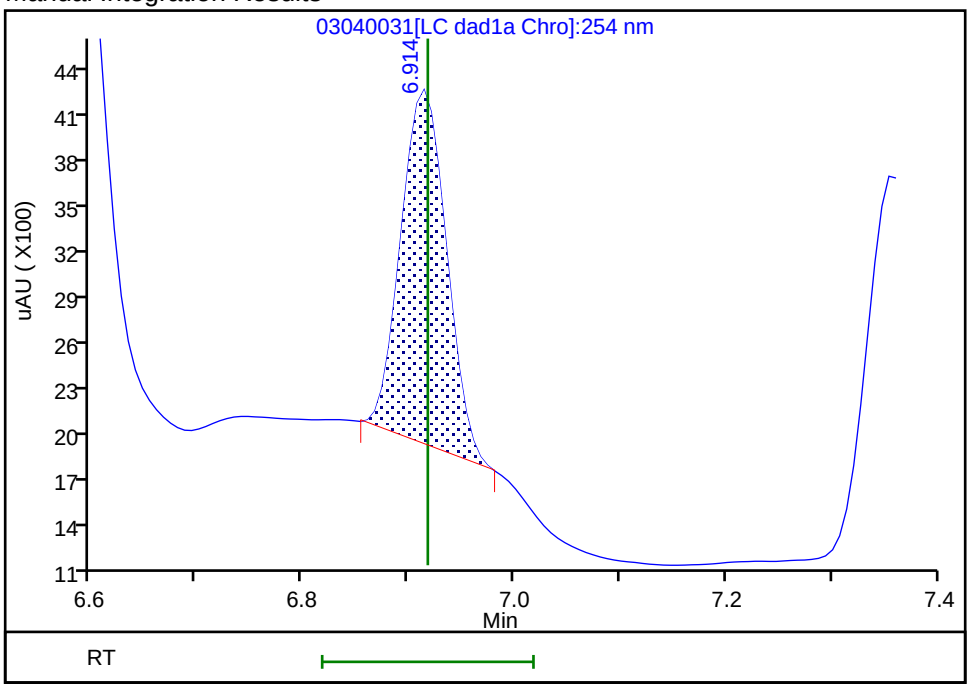
Processing Integration Results

RT: 6.91
Area: 11060
Amount: 0.055514
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 6904
Amount: 0.045145
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:28

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Lims ID:	IC DMT L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	04-Mar-2020 23:40:46	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L1				
Misc. Info.:	280-0089779-032				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:27	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.592	6.591	0.001	4343	0.0200	0.0200	M
5 DNX	1	6.912	6.918	-0.006	2345	0.0200	0.0153	M
6 MNX	1	7.359	7.358	0.001	4099	0.0233	0.0259	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

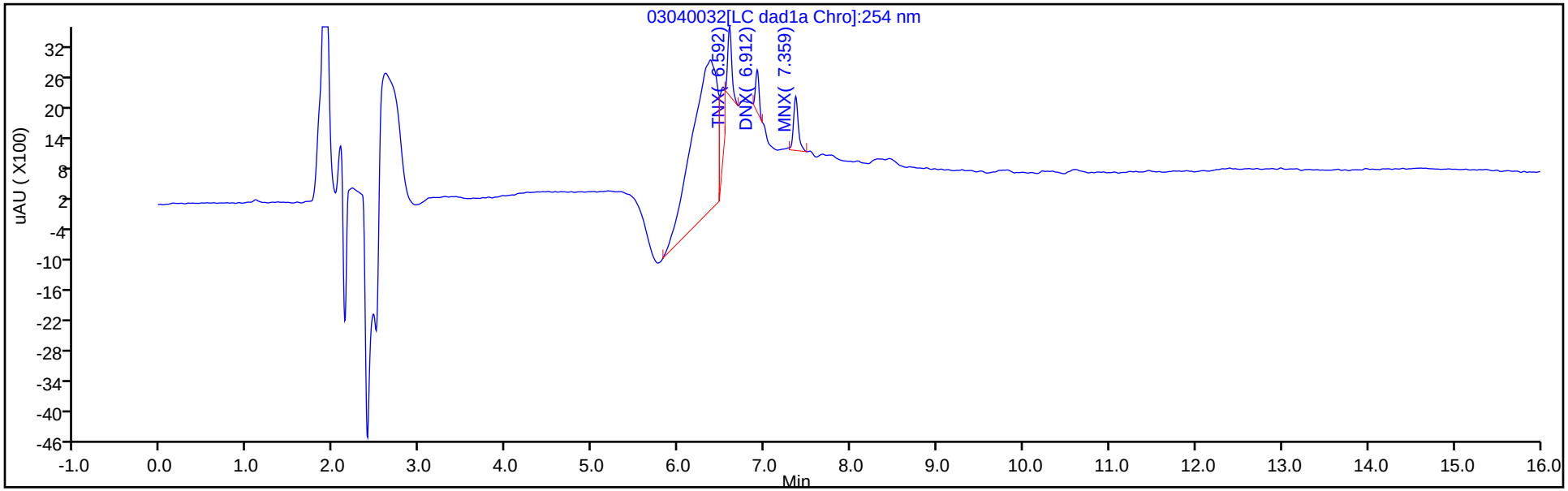
8330 DMT_00005 Amount Added: 1.00 Units: uL

Report Date: 06-Mar-2020 10:25:28 Chrom Revision: 2.3 19-Feb-2020 16:45:46

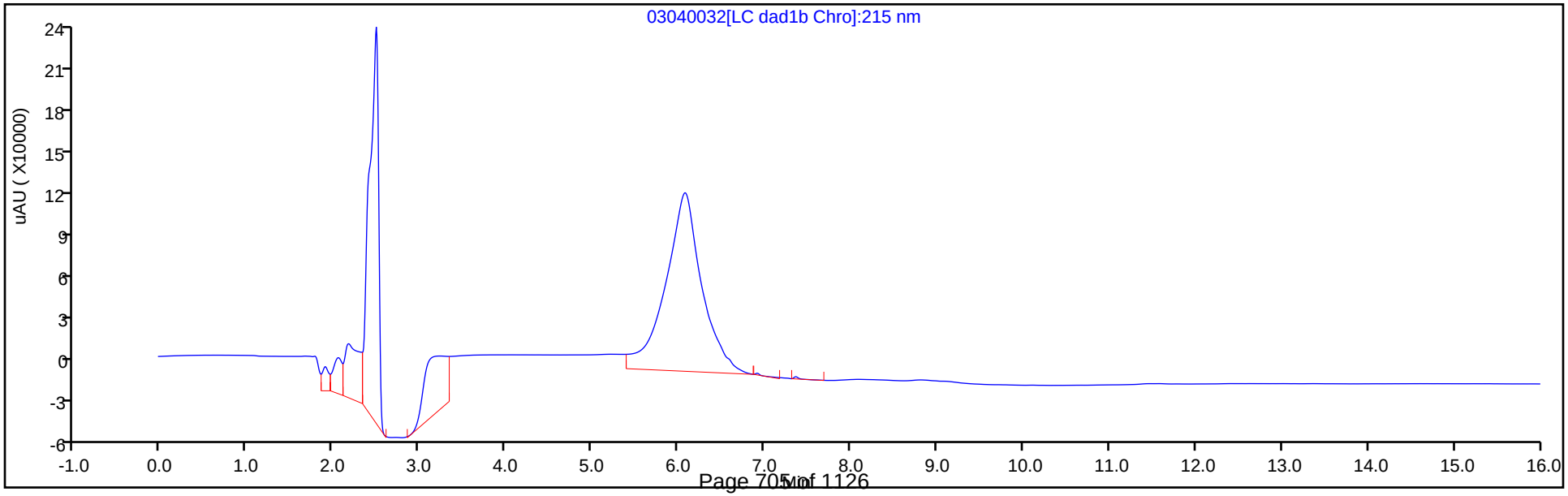
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L1			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

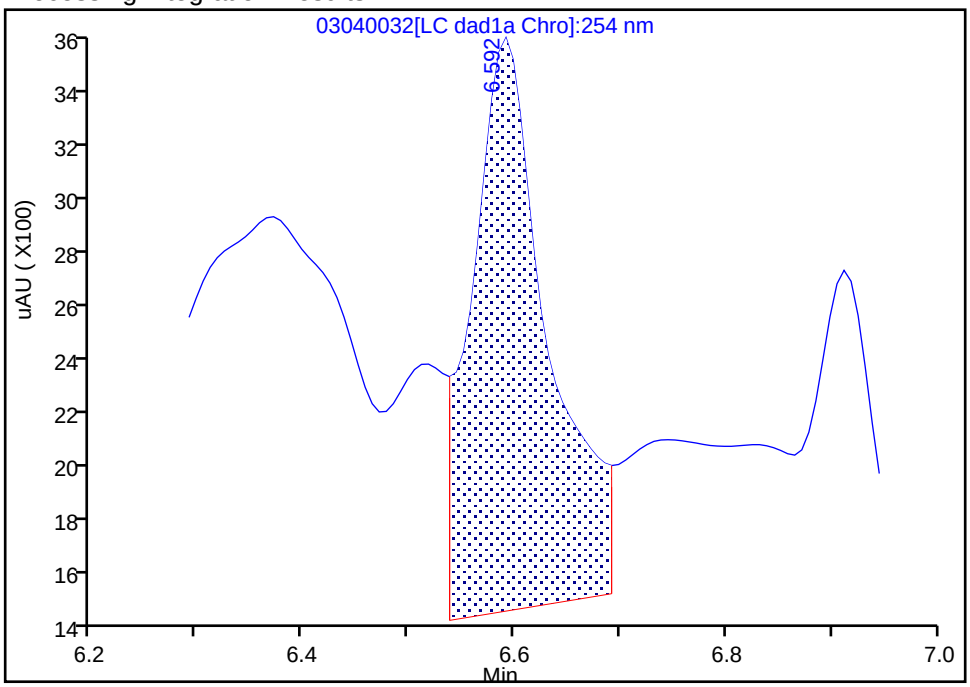
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

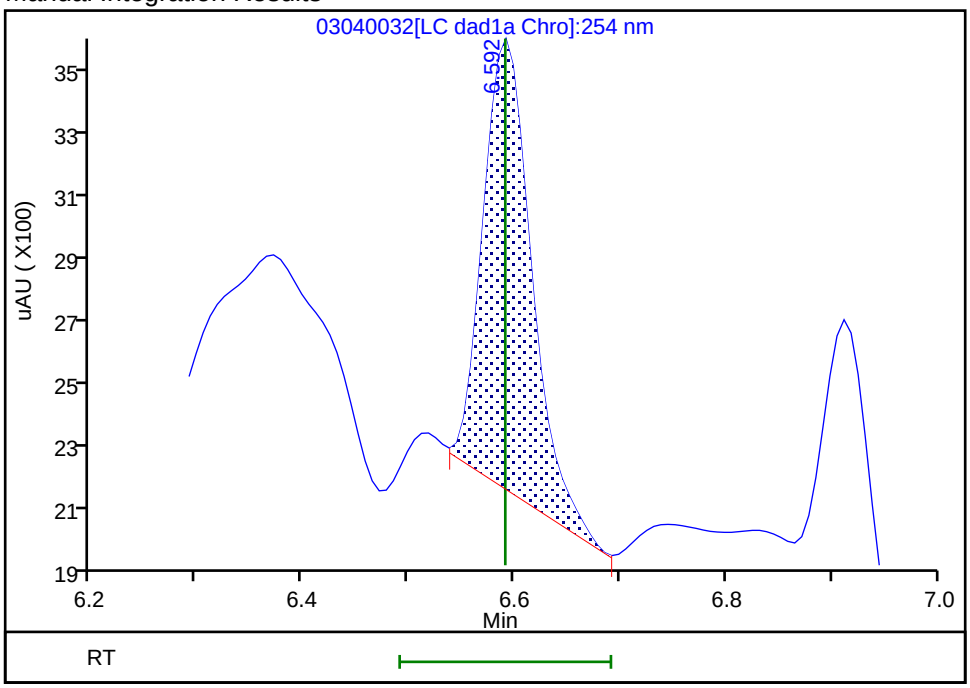
Processing Integration Results

RT: 6.59
Area: 10465
Amount: 0.032149
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 4343
Amount: 0.019958
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:43
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

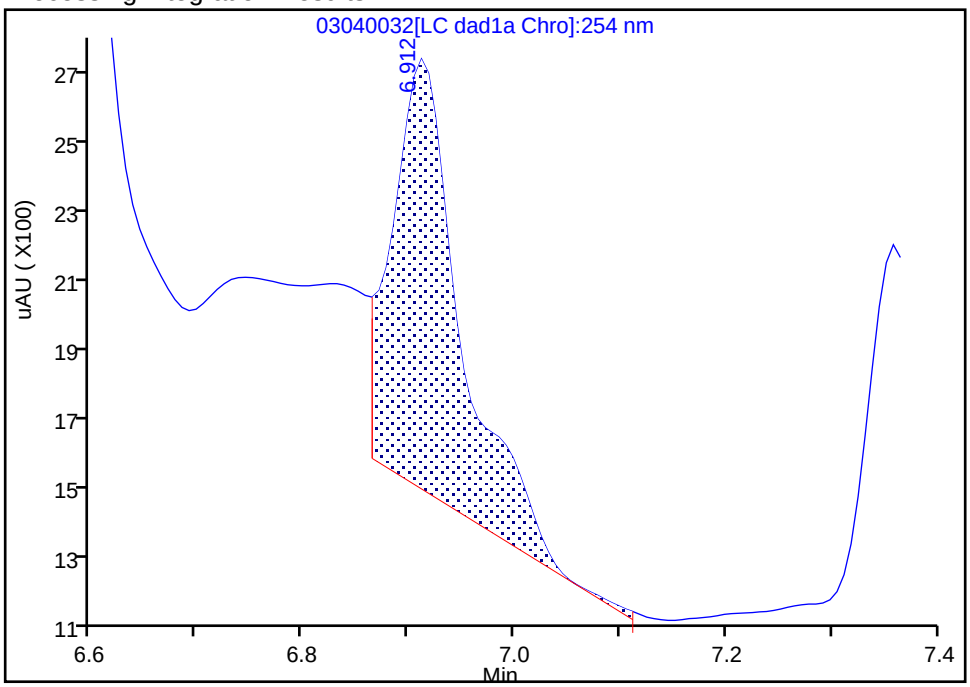
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

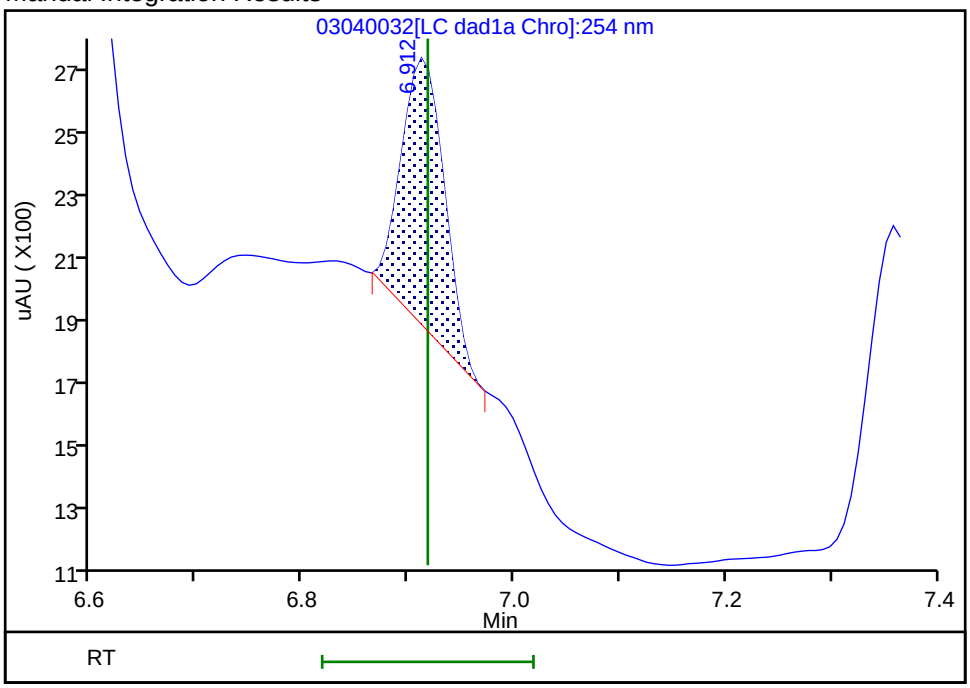
Processing Integration Results

RT: 6.91
Area: 5489
Amount: 0.028357
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 2345
Amount: 0.015334
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:46

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-489145/15	03180015.D
Level 2	IC 280-489145/14	03180014.D
Level 3	IC 280-489145/13	03180013.D
Level 4	IC 280-489145/12	03180012.D
Level 5	IC 280-489145/11	03180011.D
Level 6	IC 280-489145/10	03180010.D
Level 7	IC 280-489145/9	03180009.D
Level 8	IC 280-489145/8	03180008.D
Level 9	IC 280-489145/7	03180007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
HMX		6.689	6.687	6.689	6.688	6.687	6.687	6.687	6.678		6.539 - 6.839	6.687
RDX		7.755	7.753	7.749	7.754	7.754	7.754	7.754	7.745		7.599 - 7.899	7.752
Picric acid	8.082	8.082	8.080	8.076	8.068	8.054	8.041	8.034	7.978		7.926 - 8.226	8.055
1,3,5-Trinitrobenzene	8.888	8.889	8.887	8.883	8.888	8.887	8.881	8.887	8.878		8.733 - 9.033	8.885
1,3-Dinitrobenzene	9.535	9.535	9.533	9.529	9.534	9.527	9.527	9.534	9.525		9.379 - 9.679	9.531
Nitrobenzene	9.915	9.922	9.920	9.916	9.921	9.914	9.914	9.914	9.911		9.766 - 10.066	9.916
Tetryl	10.221	10.215	10.220	10.216	10.221	10.221	10.214	10.221	10.218		10.066 - 10.366	10.219
Nitroglycerin	10.735	10.735	10.733	10.729	10.734	10.734	10.727	10.727	10.725		10.579 - 10.879	10.731
2,4,6-Trinitrotoluene	11.195	11.189	11.186	11.183	11.194	11.187	11.181	11.187	11.185		11.083 - 11.283	11.187
4-Amino-2,6-dinitrotoluene	11.341	11.342	11.340	11.336	11.347	11.341	11.334	11.334	11.331		11.236 - 11.436	11.338
2-Amino-4,6-dinitrotoluene	11.635	11.629	11.633	11.623	11.634	11.627	11.621	11.621	11.618		11.523 - 11.723	11.627
2,6-Dinitrotoluene	11.795	11.789	11.793	11.783	11.794	11.787	11.781	11.787	11.785		11.683 - 11.883	11.788
2,4-Dinitrotoluene	11.995	11.989	11.986	11.983	11.987	11.987	11.981	11.981	11.978		11.883 - 12.083	11.985
2-Nitrotoluene	12.828	12.822	12.833	12.823	12.827	12.827	12.814	12.821	12.818		12.673 - 12.973	12.824
4-Nitrotoluene	13.268	13.269	13.260	13.256	13.261	13.261	13.254	13.254	13.251		13.106 - 13.406	13.259
3-Nitrotoluene	13.855	13.849	13.853	13.849	13.854	13.854	13.841	13.847	13.845		13.699 - 13.999	13.850
PETN		+++++	14.946	14.936	14.941	14.941	14.927	14.941	14.945		14.786 - 15.086	14.940
1,2-Dinitrobenzene	8.715	8.709	8.713	8.709	8.714	8.714	8.714	8.714	8.705		8.559 - 8.859	8.712

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-489145/15	03180015.D
Level 2	IC 280-489145/14	03180014.D
Level 3	IC 280-489145/13	03180013.D
Level 4	IC 280-489145/12	03180012.D
Level 5	IC 280-489145/11	03180011.D
Level 6	IC 280-489145/10	03180010.D
Level 7	IC 280-489145/9	03180009.D
Level 8	IC 280-489145/8	03180008.D
Level 9	IC 280-489145/7	03180007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	91008 92308	61440 91473	86460 91820	90800 92351	Ave		85962.1667				12.3		20.0			
RDX	112944 111897	112680 113215	121400 111841	117010 112730	Ave		116613.070				6.7		20.0			
Picric acid	86560 86468 88192	70960 86698	86100 86851	86470 87876	Ave		85130.5476				6.3		20.0			
1,3,5-Trinitrobenzene	192016 239677 242392	193413 242552	239242 242052	236826 244610	Ave		230308.873				9.3		20.0			
1,3-Dinitrobenzene	254770 321218 326628	250299 322290	322275 320369	318333 323988	Ave		306685.717				10.0		20.0			
Nitrobenzene	173386 209084 210856	165538 209462	208865 209202	207759 209472	Ave		200402.631				8.8		20.0			
Tetryl	132854 188850 191963	139401 190152	182355 189763	184900 193048	Ave		177031.954				13.3		20.0			
Nitroglycerin	54320 73708 72647	54804 73682	66982 72630	71269 73160	Ave		68133.4679				11.7		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
2,4,6-Trinitrotoluene	143984 216888 217948	171594 215762	214622 218499	217430 219552	Ave		204030.971				13.3		20.0			
4-Amino-2,6-dinitrotoluene	78402 173379 171541	137582 174883	169630 168893	172757 173075	Lin2	-1163.6365	178372.945							0.9980		0.9900
2-Amino-4,6-dinitrotoluene	169163 213685 217128	161195 213177	209223 213799	209592 218387	Ave		202816.698				10.7		20.0			
2,6-Dinitrotoluene	120159 159558 155029	119004 160244	157012 158940	158576 156549	Ave		149452.337				11.4		20.0			
2,4-Dinitrotoluene	250359 318972 321972	249960 319980	313566 317703	316753 322992	Ave		303584.095				10.0		20.0			
2-Nitrotoluene	129200 138416 134514	122720 134575	151060 133944	137330 133699	Ave		135050.876				5.6		20.0			
4-Nitrotoluene	86228 119058 116822	100160 116285	128064 116245	117874 116311	Ave		113005.083				10.9		20.0			
3-Nitrotoluene	112128 149894 149503	125035 150095	155005 148550	148232 148816	Ave		143028.635				10.0		20.0			
PETN	 80472 82059	+++++ 82077	74814 81281	78947 82446	Ave		78604.5748				6.9		20.0			
1,2-Dinitrobenzene	122480 142220 143478	119840 142918	144780 142683	141270 144242	Ave		138212.217				7.1		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-489145/15	03180015.D
Level 2	IC 280-489145/14	03180014.D
Level 3	IC 280-489145/13	03180013.D
Level 4	IC 280-489145/12	03180012.D
Level 5	IC 280-489145/11	03180011.D
Level 6	IC 280-489145/10	03180010.D
Level 7	IC 280-489145/9	03180009.D
Level 8	IC 280-489145/8	03180008.D
Level 9	IC 280-489145/7	03180007.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Ave	36589	1536 64274	4323 92351	9080 230770	22752	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	45286	2817 78289	6070 112730	11701 279743	28236	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	1082 34679	1774 60796	4305 87876	8647 220480	21617	0.0125 0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2405 97215	4845 169775	11986 245099	23730 607193	60039	0.0125 0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	3191 129174	6270 224707	16146 324636	31897 818202	80465	0.0125 0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
Nitrobenzene	Ave	2176 84120	4155 147027	10485 210310	20859 529249	52480	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	1664 76213	3492 133100	9136 193434	18527 480867	47307	0.0125 0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	6790 294728	13701 508407	33491 731600	71269 1816166	184270	0.125 4.00	0.250 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	1807 86650	4307 153561	10774 220430	21830 547050	54439	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Lin2	981 70023	3443 118343	8490 173248	17293 429281	43388	0.0125 0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2123 85612	4046 150258	10503 219261	21043 544991	53635	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	1508 64354	2987 111703	7882 157175	15921 389124	40049	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	3142 128504	6274 223282	15741 324284	31802 808149	80062	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2-Nitrotoluene	Ave	1615 53830	3068 93761	7553 133699	13733 336284	34604	0.0125 0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1 Analy Batch No.: 489145

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2020 11:35 Calibration End Date: 03/18/2020 14:39 Calibration ID: 42934

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Nitrotoluene	Ave	1080 46607	2509 81534	6416 116544	11811 292638	29824	0.0125 0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
3-Nitrotoluene	Ave	1403 60098	3129 104089	7758 148965	14838 374131	37511	0.0125 0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
PETN	Ave	 328307	+++++ 568970	37407 824461	78947 2051483	201180	 4.00	+++++ 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	1531 57167	2996 99878	7239 144242	14127 358694	35555	0.0125 0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180007.D				
Lims ID:	IC MAIN L9				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	18-Mar-2020 11:35:53	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L9				
Misc. Info.:	280-0090150-007				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	26-Mar-2020 15:45:39	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				
First Level Reviewer: beckerc		Date:	19-Mar-2020 08:41:44		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.678	6.689	-0.011	230770	2.50	2.68	M
7 RDX	1	7.745	7.749	-0.004	279743	2.50	2.40	
8 2,4,6-Trinitrophenol	1	7.978	8.076	-0.098	220480	2.50	2.59	
$ 9 1,2-Dinitrobenzene	1	8.705	8.709	-0.004	358694	2.50	2.60	
10 1,3,5-Trinitrobenzene	1	8.878	8.883	-0.005	607193	2.51	2.64	
11 1,3-Dinitrobenzene	1	9.525	9.529	-0.004	818202	2.51	2.67	M
12 Nitrobenzene	1	9.911	9.916	-0.005	529249	2.51	2.64	
14 Tetryl	1	10.218	10.216	0.002	480867	2.51	2.72	
15 Nitroglycerin	2	10.725	10.729	-0.004	1816166	25.0	26.7	
16 2,4,6-Trinitrotoluene	1	11.185	11.183	0.002	547050	2.51	2.68	
17 4-Amino-2,6-dinitrotoluene	1	11.331	11.336	-0.005	429281	2.50	2.41	
18 2-Amino-4,6-dinitrotoluene	1	11.618	11.623	-0.005	544991	2.51	2.69	
19 2,6-Dinitrotoluene	1	11.785	11.783	0.002	389124	2.51	2.60	
20 2,4-Dinitrotoluene	1	11.978	11.983	-0.005	808149	2.51	2.66	
21 o-Nitrotoluene	1	12.818	12.823	-0.005	336284	2.50	2.49	
22 p-Nitrotoluene	1	13.251	13.256	-0.005	292638	2.51	2.59	
23 m-Nitrotoluene	1	13.845	13.849	-0.004	374131	2.50	2.62	
24 PETN	2	14.945	14.936	0.009	2051483	25.0	26.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

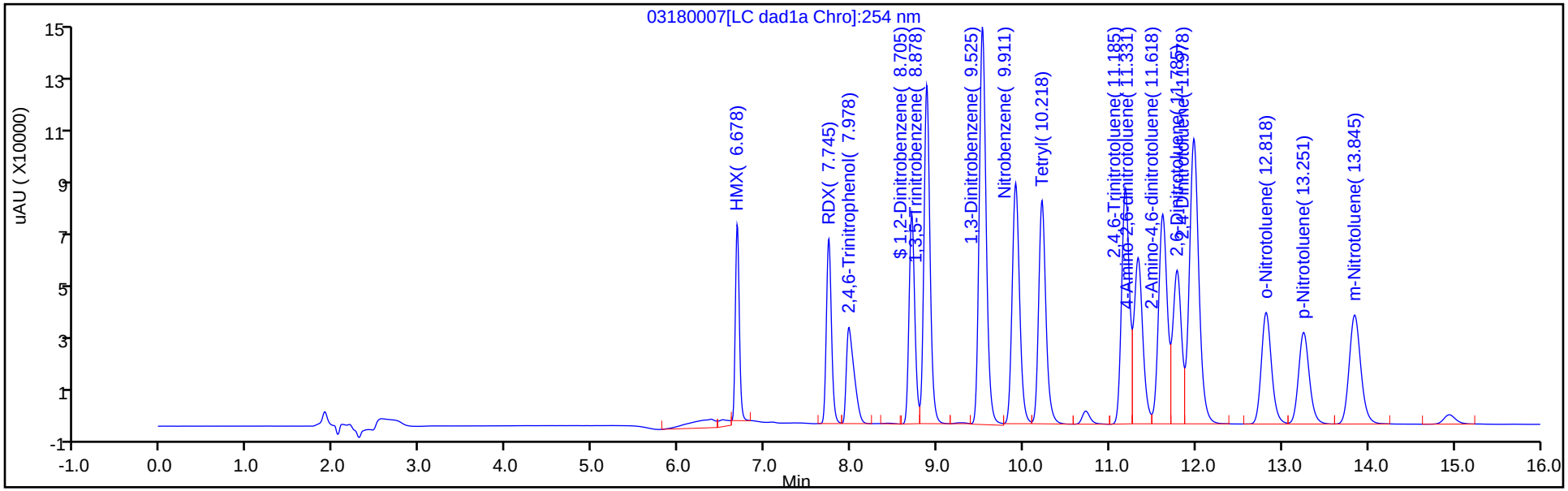
8330IntermStk_00061 Amount Added: 250.00 Units: uL

Report Date: 26-Mar-2020 15:45:39 Chrom Revision: 2.3 11-Mar-2020 18:53:20

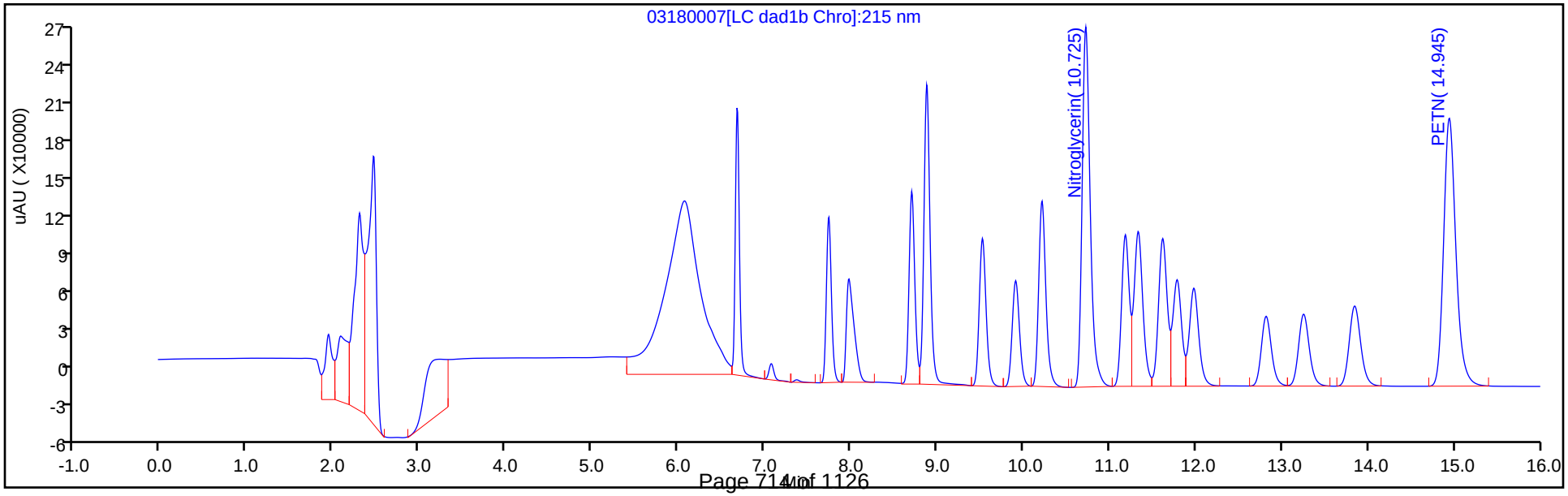
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d				
Injection Date:	18-Mar-2020 11:35:53	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L9			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

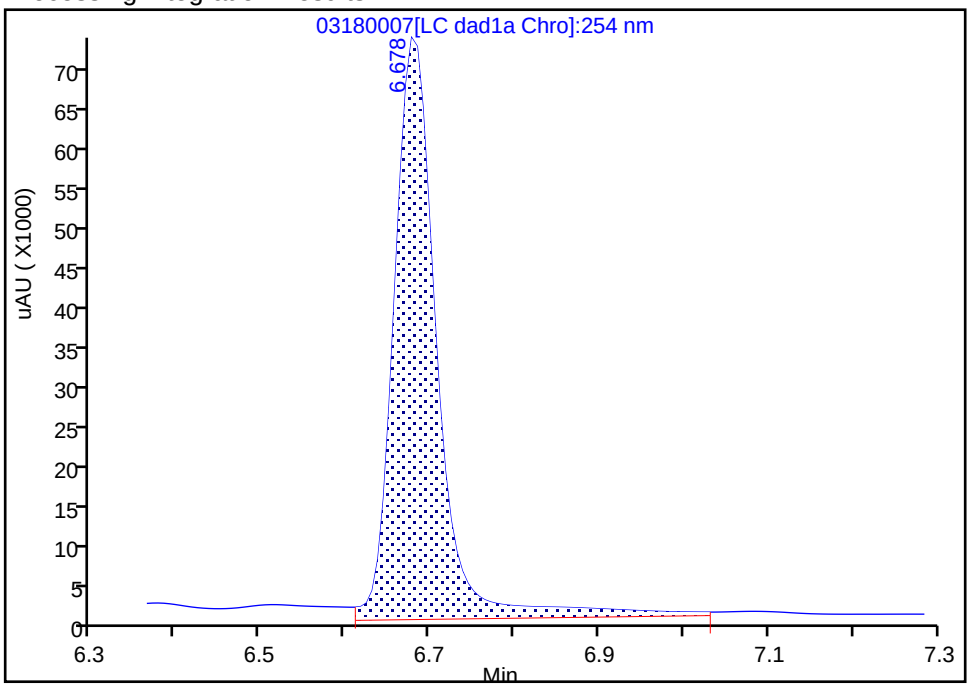
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d				
Injection Date:	18-Mar-2020 11:35:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

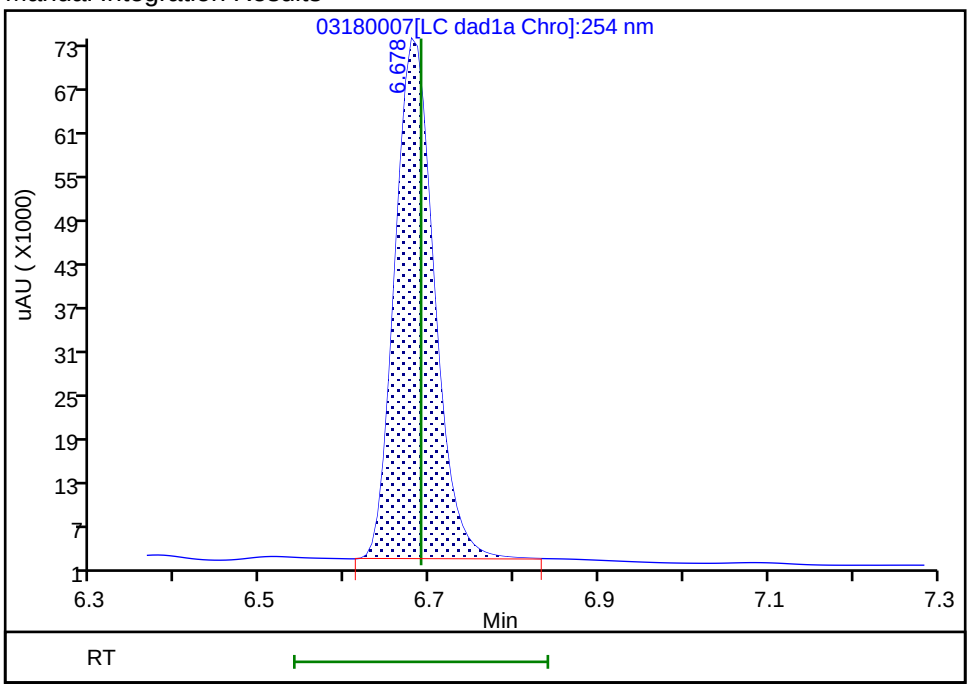
Processing Integration Results

RT: 6.68
Area: 261160
Amount: 2.488946
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 230770
Amount: 2.684553
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:41:25

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

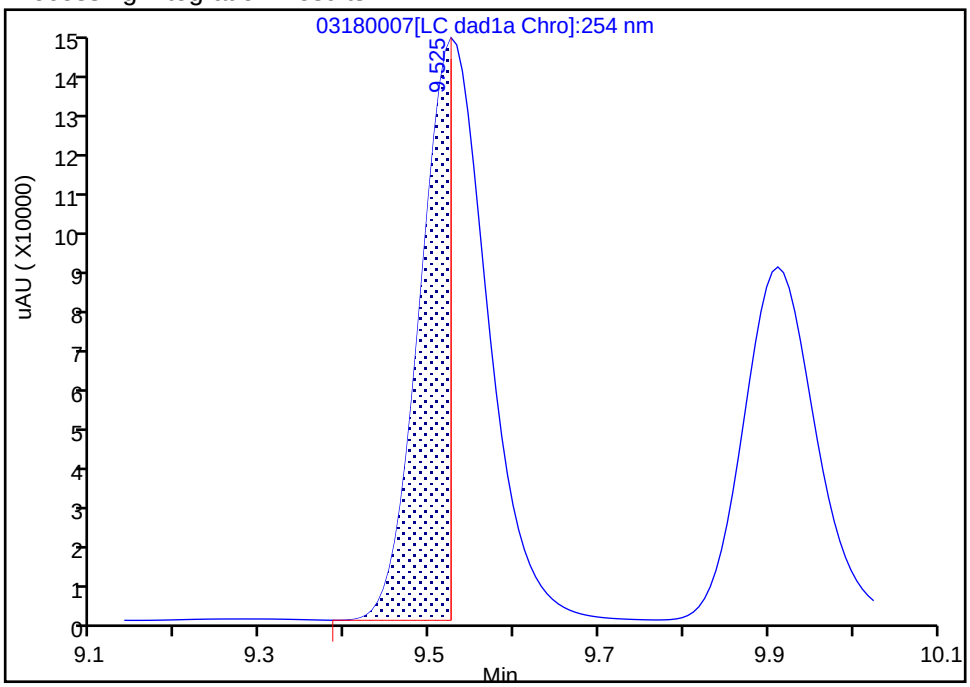
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180007.d				
Injection Date:	18-Mar-2020 11:35:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

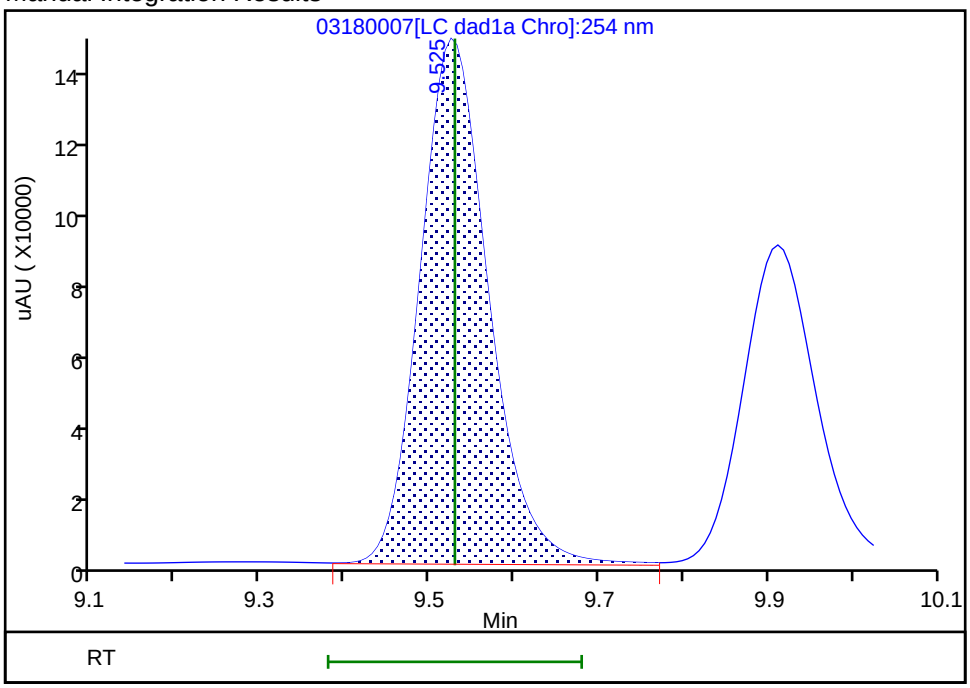
Processing Integration Results

RT: 9.52
Area: 362918
Amount: 1.345398
Amount Units: ug/mL



Manual Integration Results

RT: 9.52
Area: 818202
Amount: 2.667884
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:41:39
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180008.D
Lims ID: IC MAIN L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 18-Mar-2020 11:58:50 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L8
Misc. Info.: 280-0090150-008
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:40 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:42:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.687	6.689	-0.002	92351	1.00	1.07	M
7 RDX	1	7.754	7.749	0.005	112730	1.00	0.9667	
8 2,4,6-Trinitrophenol	1	8.034	8.076	-0.042	87876	1.00	1.03	
$ 9 1,2-Dinitrobenzene	1	8.714	8.709	0.005	144242	1.00	1.04	
10 1,3,5-Trinitrobenzene	1	8.887	8.883	0.004	245099	1.00	1.06	
11 1,3-Dinitrobenzene	1	9.534	9.529	0.005	324636	1.00	1.06	
12 Nitrobenzene	1	9.914	9.916	-0.002	210310	1.00	1.05	
14 Tetryl	1	10.221	10.216	0.005	193434	1.00	1.09	
15 Nitroglycerin	2	10.727	10.729	-0.002	731600	10.0	10.7	
16 2,4,6-Trinitrotoluene	1	11.187	11.183	0.004	220430	1.00	1.08	
17 4-Amino-2,6-dinitrotoluene	1	11.334	11.336	-0.002	173248	1.00	0.9778	
18 2-Amino-4,6-dinitrotoluene	1	11.621	11.623	-0.002	219261	1.00	1.08	
19 2,6-Dinitrotoluene	1	11.787	11.783	0.004	157175	1.00	1.05	
20 2,4-Dinitrotoluene	1	11.981	11.983	-0.002	324284	1.00	1.07	
21 o-Nitrotoluene	1	12.821	12.823	-0.002	133699	1.00	0.9900	
22 p-Nitrotoluene	1	13.254	13.256	-0.002	116544	1.00	1.03	
23 m-Nitrotoluene	1	13.847	13.849	-0.002	148965	1.00	1.04	
24 PETN	2	14.941	14.936	0.005	824461	10.0	10.5	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

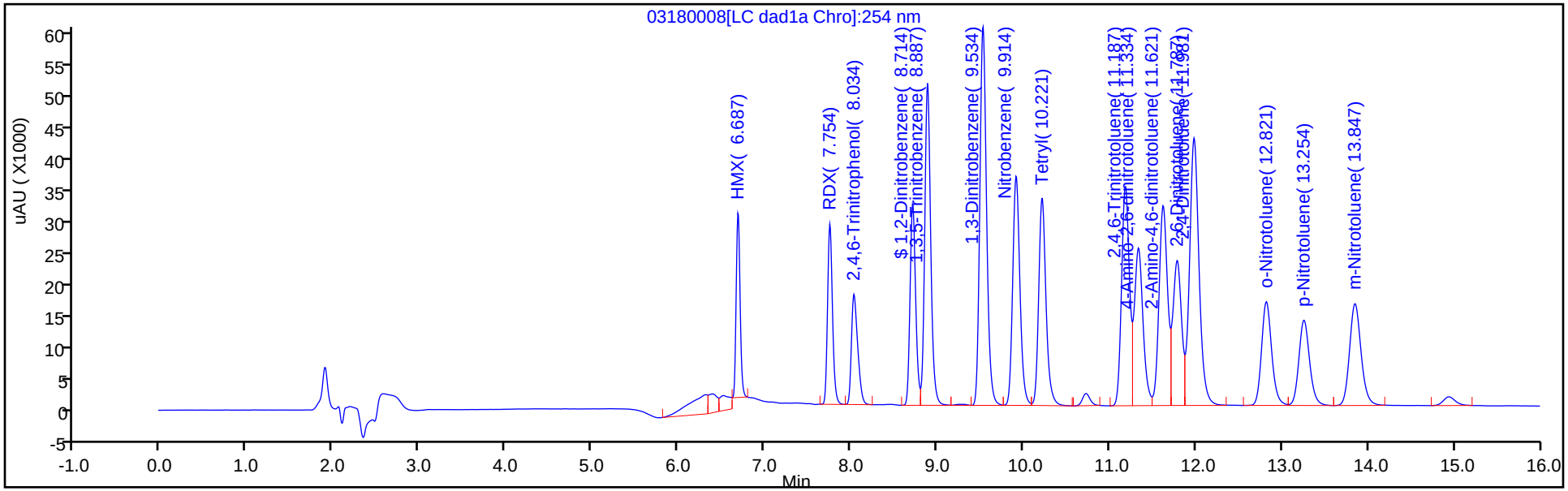
8330IntermStk_00061 Amount Added: 100.00 Units: uL

Report Date: 26-Mar-2020 15:45:40 Chrom Revision: 2.3 11-Mar-2020 18:53:20

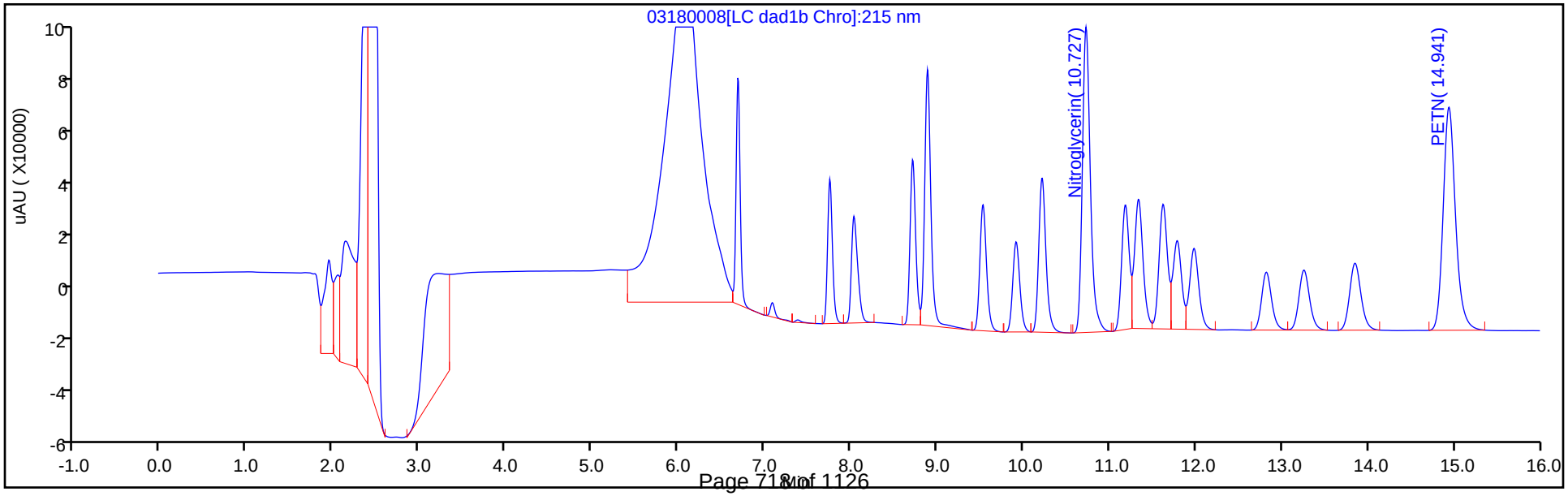
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180008.d				
Injection Date:	18-Mar-2020 11:58:50	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L8			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

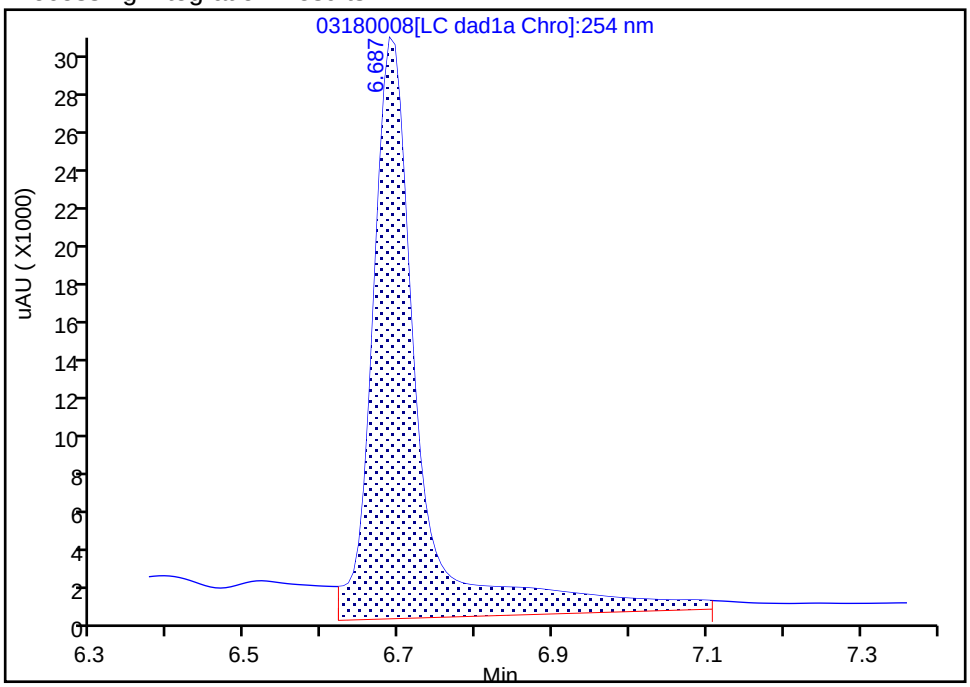
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180008.d				
Injection Date:	18-Mar-2020 11:58:50	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

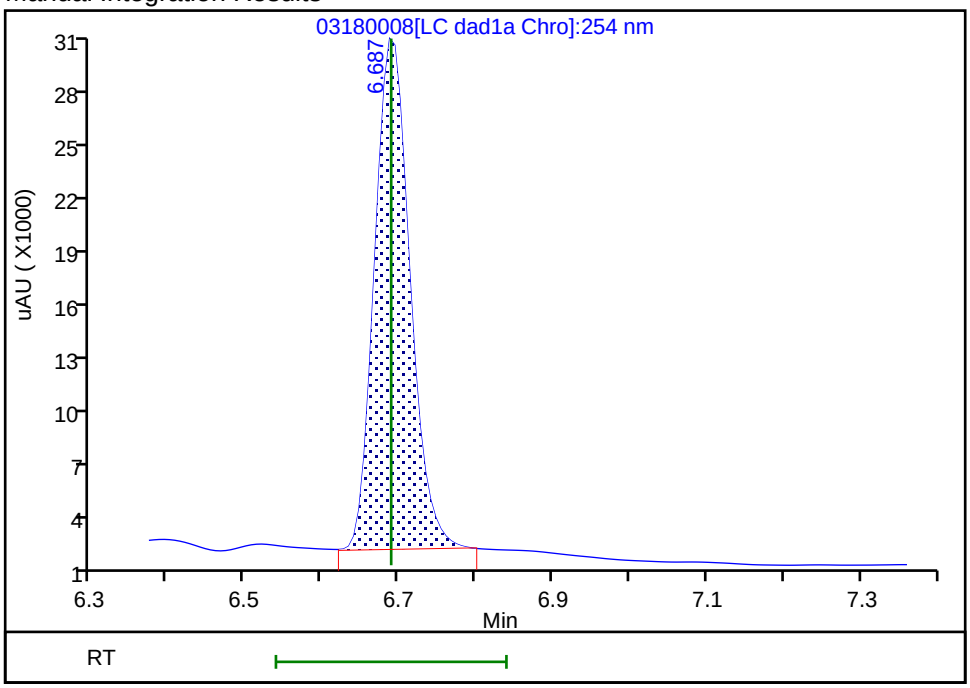
Processing Integration Results

RT: 6.69
Area: 128593
Amount: 1.149770
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 92351
Amount: 1.074321
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:41:59

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180009.D
Lims ID: IC MAIN L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Mar-2020 12:21:47 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L7
Misc. Info.: 280-0090150-009
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:41 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:42:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.687	6.689	-0.002	64274	0.7000	0.7477	M
7 RDX	1	7.754	7.749	0.005	78289	0.7000	0.6714	
8 2,4,6-Trinitrophenol	1	8.041	8.076	-0.035	60796	0.7000	0.7142	
$ 9 1,2-Dinitrobenzene	1	8.714	8.709	0.005	99878	0.7000	0.7226	
10 1,3,5-Trinitrobenzene	1	8.881	8.883	-0.002	169775	0.7014	0.7372	
11 1,3-Dinitrobenzene	1	9.527	9.529	-0.002	224707	0.7014	0.7327	
12 Nitrobenzene	1	9.914	9.916	-0.002	147027	0.7028	0.7337	
14 Tetryl	1	10.214	10.216	-0.002	133100	0.7014	0.7518	
15 Nitroglycerin	2	10.727	10.729	-0.002	508407	7.00	7.46	
16 2,4,6-Trinitrotoluene	1	11.181	11.183	-0.002	153561	0.7028	0.7526	
17 4-Amino-2,6-dinitrotoluene	1	11.334	11.336	-0.002	118343	0.7007	0.6700	
18 2-Amino-4,6-dinitrotoluene	1	11.621	11.623	-0.002	150258	0.7028	0.7409	
19 2,6-Dinitrotoluene	1	11.781	11.783	-0.002	111703	0.7028	0.7474	
20 2,4-Dinitrotoluene	1	11.981	11.983	-0.002	223282	0.7028	0.7355	
21 o-Nitrotoluene	1	12.814	12.823	-0.009	93761	0.7000	0.6943	
22 p-Nitrotoluene	1	13.254	13.256	-0.002	81534	0.7014	0.7215	
23 m-Nitrotoluene	1	13.841	13.849	-0.008	104089	0.7007	0.7277	
24 PETN	2	14.927	14.936	-0.009	568970	7.00	7.24	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

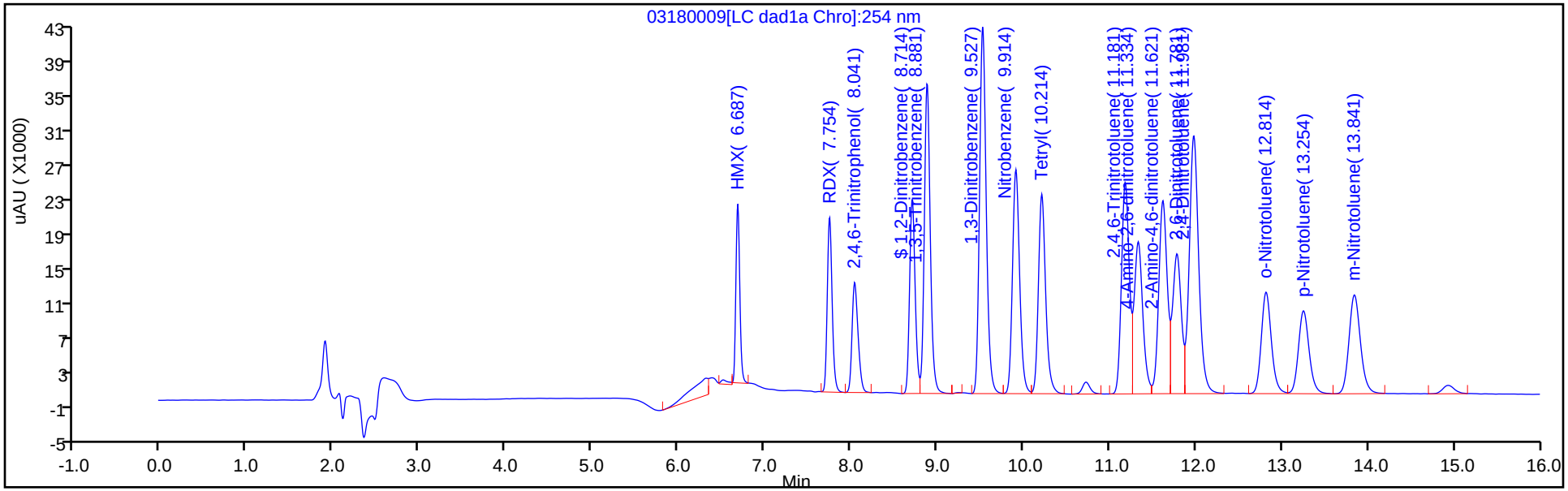
8330IntermStk_00061 Amount Added: 70.00 Units: uL

Report Date: 26-Mar-2020 15:45:41 Chrom Revision: 2.3 11-Mar-2020 18:53:20

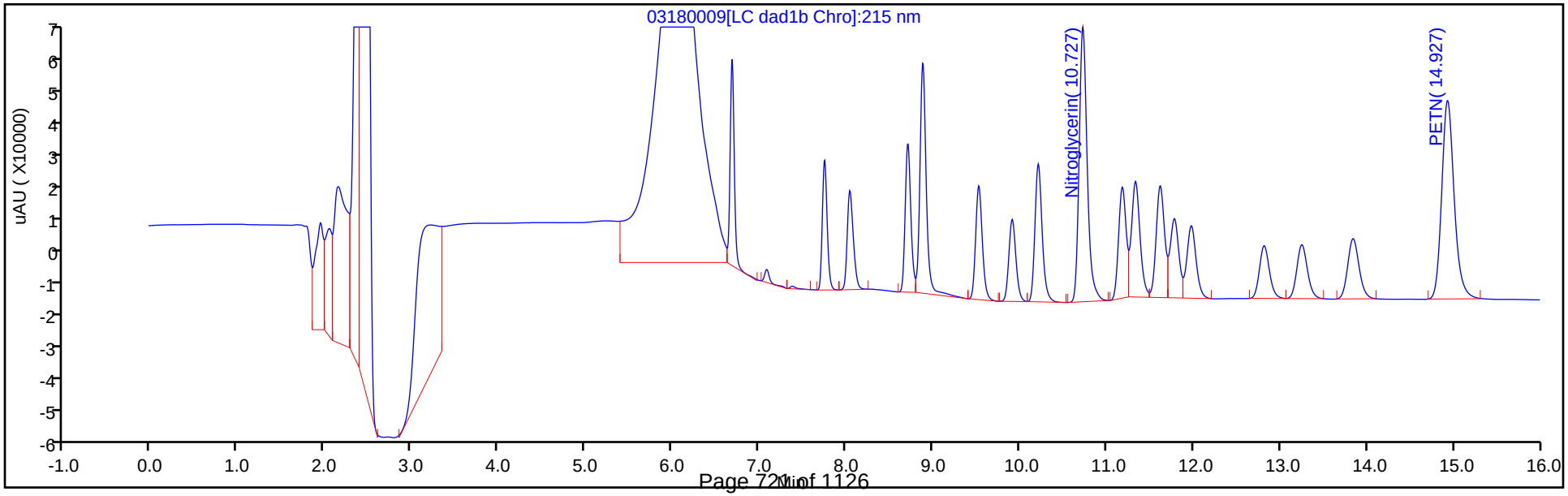
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180009.d				
Injection Date:	18-Mar-2020 12:21:47	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L7			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

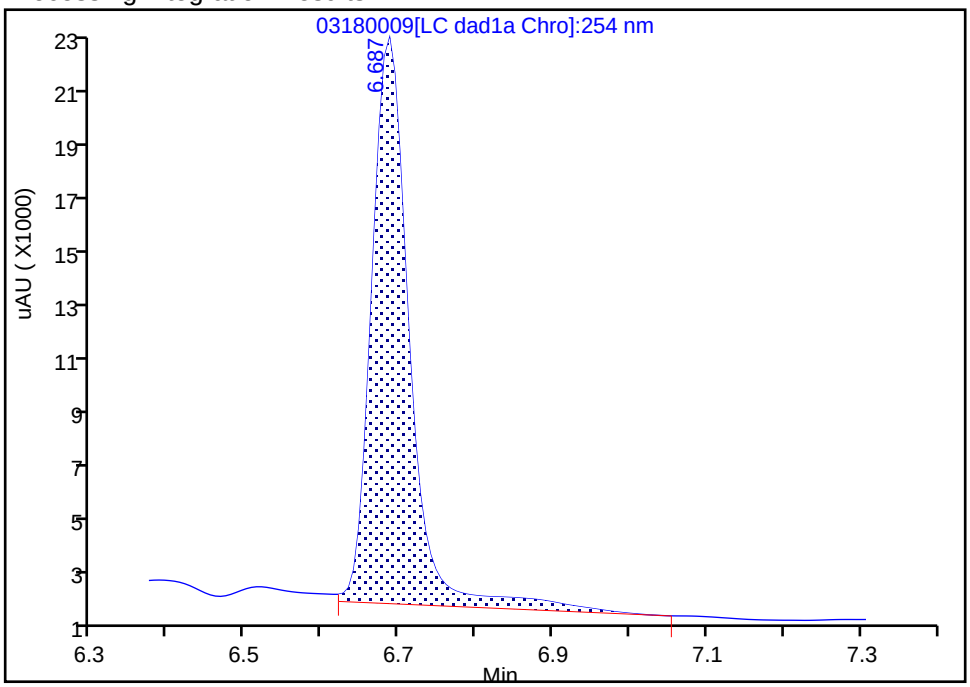
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180009.d				
Injection Date:	18-Mar-2020 12:21:47	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

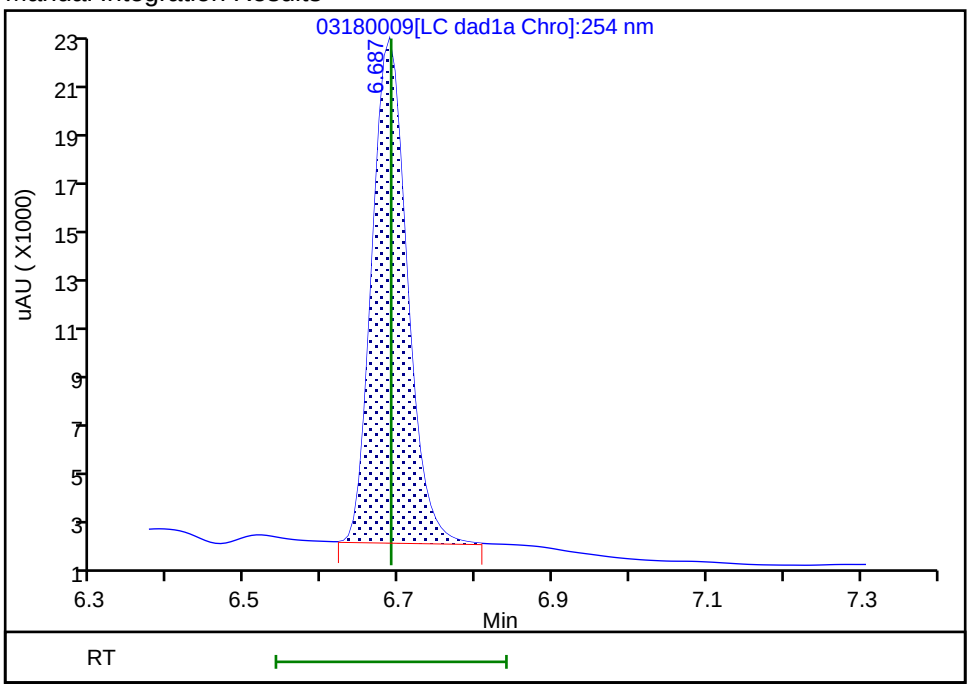
Processing Integration Results

RT: 6.69
Area: 70764
Amount: 0.364265
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 64274
Amount: 0.747701
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:42:26

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180010.D
Lims ID: IC MAIN L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-Mar-2020 12:44:45 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L6
Misc. Info.: 280-0090150-010
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:41 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:43:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.687	6.689	-0.002	36589	0.4000	0.4256	M
7 RDX	1	7.754	7.749	0.005	45286	0.4000	0.3883	
8 2,4,6-Trinitrophenol	1	8.054	8.076	-0.022	34679	0.4000	0.4074	
$ 9 1,2-Dinitrobenzene	1	8.714	8.709	0.005	57167	0.4000	0.4136	
10 1,3,5-Trinitrobenzene	1	8.887	8.883	0.004	97215	0.4008	0.4221	
11 1,3-Dinitrobenzene	1	9.527	9.529	-0.002	129174	0.4008	0.4212	
12 Nitrobenzene	1	9.914	9.916	-0.002	84120	0.4016	0.4198	
14 Tetryl	1	10.221	10.216	0.005	76213	0.4008	0.4305	
15 Nitroglycerin	2	10.734	10.729	0.005	294728	4.00	4.33	
16 2,4,6-Trinitrotoluene	1	11.187	11.183	0.004	86650	0.4016	0.4247	
17 4-Amino-2,6-dinitrotoluene	1	11.341	11.336	0.005	70023	0.4004	0.3991	
18 2-Amino-4,6-dinitrotoluene	1	11.627	11.623	0.004	85612	0.4016	0.4221	
19 2,6-Dinitrotoluene	1	11.787	11.783	0.004	64354	0.4016	0.4306	
20 2,4-Dinitrotoluene	1	11.987	11.983	0.004	128504	0.4016	0.4233	
21 o-Nitrotoluene	1	12.827	12.823	0.004	53830	0.4000	0.3986	
22 p-Nitrotoluene	1	13.261	13.256	0.005	46607	0.4008	0.4124	
23 m-Nitrotoluene	1	13.854	13.849	0.005	60098	0.4004	0.4202	
24 PETN	2	14.941	14.936	0.005	328307	4.00	4.18	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

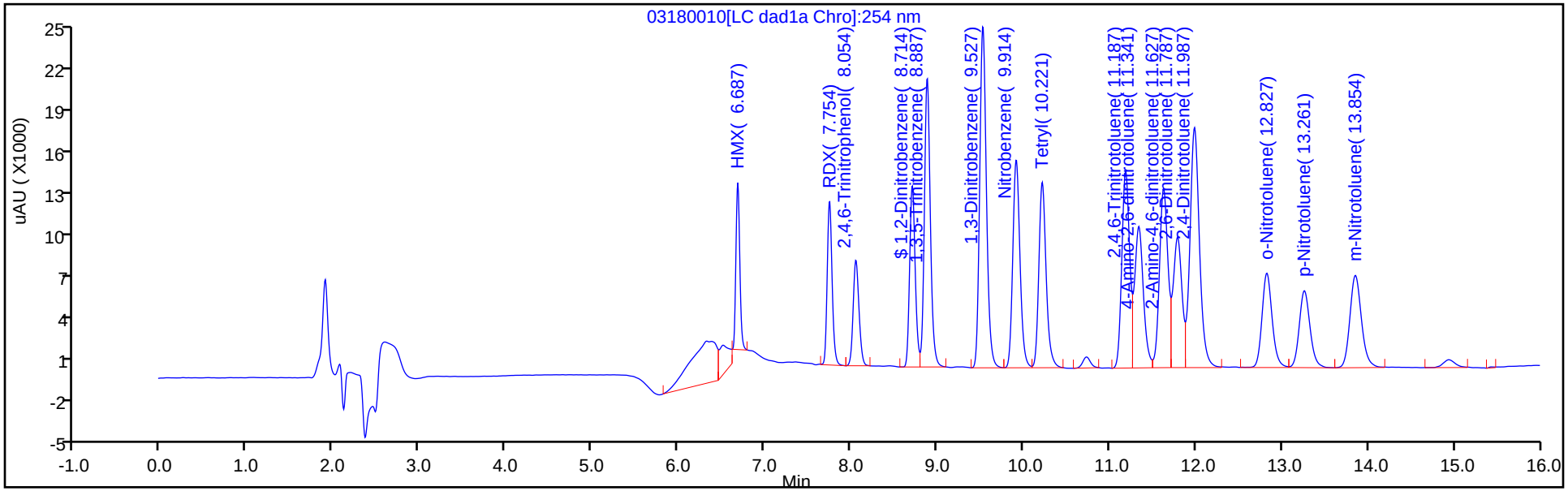
8330IntermStk_00061 Amount Added: 40.00 Units: uL

Report Date: 26-Mar-2020 15:45:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

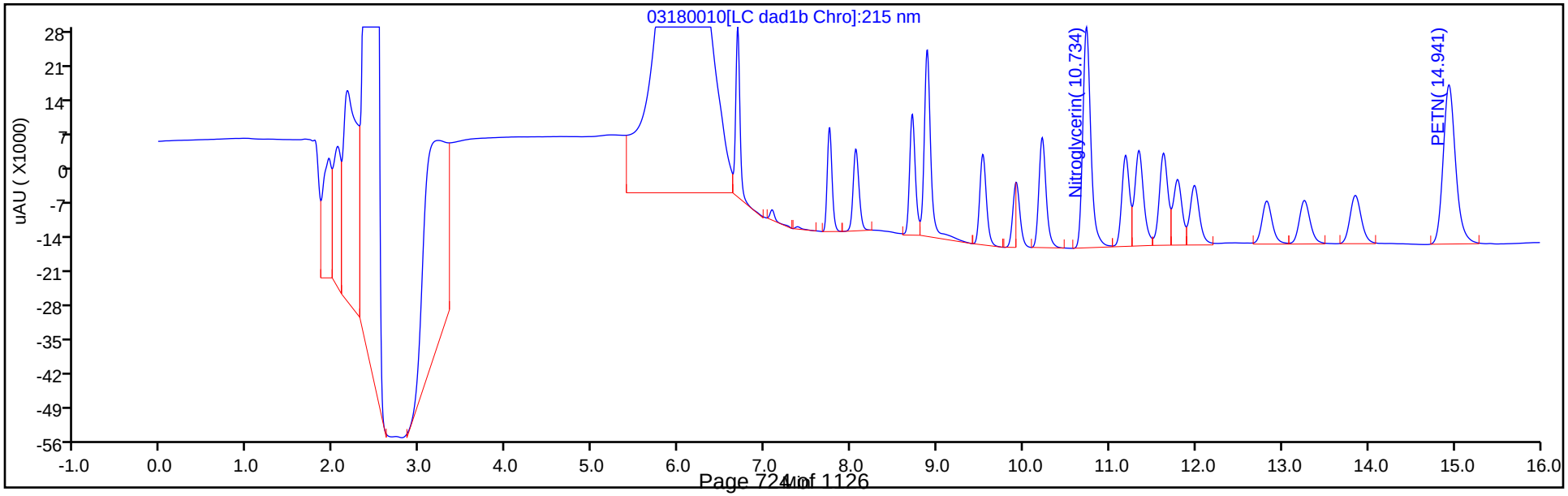
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180010.d				
Injection Date:	18-Mar-2020 12:44:45	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L6			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

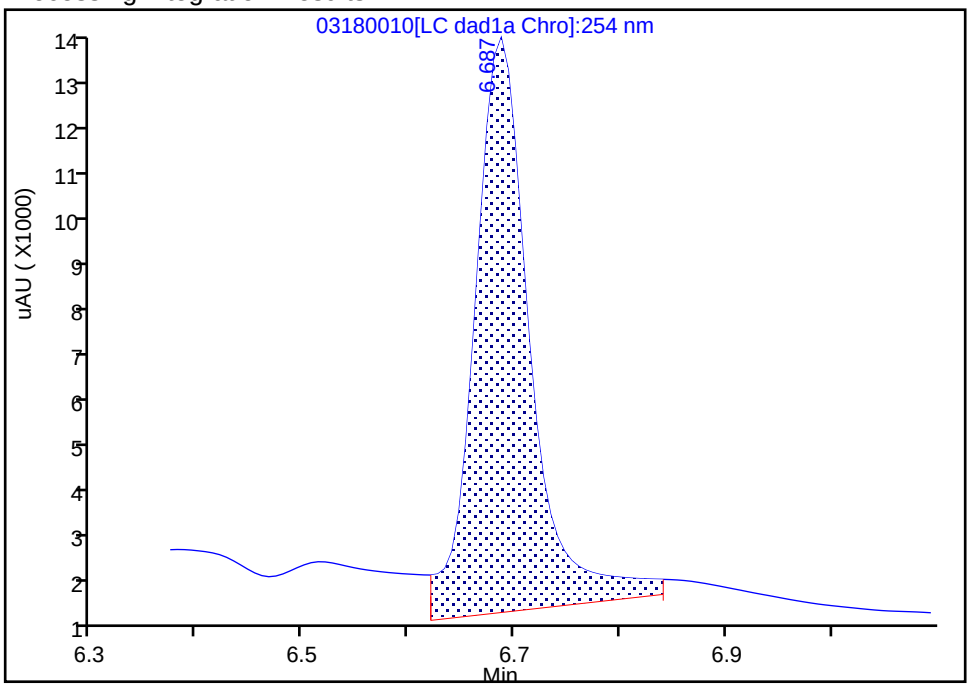
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180010.d				
Injection Date:	18-Mar-2020 12:44:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

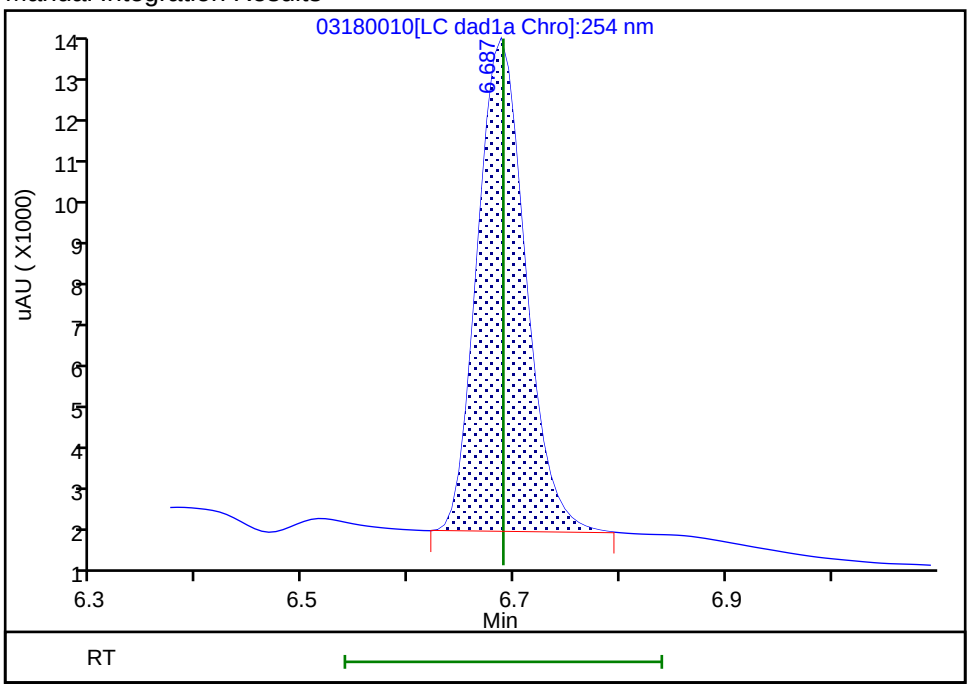
Processing Integration Results

RT: 6.69
Area: 45375
Amount: 0.234818
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 36589
Amount: 0.425641
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:42:54

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180011.D
Lims ID: IC MAIN L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Mar-2020 13:07:42 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L5
Misc. Info.: 280-0090150-011
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:42 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:43:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.688	6.689	-0.001	22752	0.2500	0.2647	M
7 RDX	1	7.754	7.749	0.005	28236	0.2500	0.2421	
8 2,4,6-Trinitrophenol	1	8.068	8.076	-0.008	21617	0.2500	0.2539	
$ 9 1,2-Dinitrobenzene	1	8.714	8.709	0.005	35555	0.2500	0.2572	
10 1,3,5-Trinitrobenzene	1	8.888	8.883	0.005	60039	0.2505	0.2607	
11 1,3-Dinitrobenzene	1	9.534	9.529	0.005	80465	0.2505	0.2624	
12 Nitrobenzene	1	9.921	9.916	0.005	52480	0.2510	0.2619	
14 Tetryl	1	10.221	10.216	0.005	47307	0.2505	0.2672	
15 Nitroglycerin	2	10.734	10.729	0.005	184270	2.50	2.70	
16 2,4,6-Trinitrotoluene	1	11.194	11.183	0.011	54439	0.2510	0.2668	
17 4-Amino-2,6-dinitrotoluene	1	11.347	11.336	0.011	43388	0.2503	0.2498	
18 2-Amino-4,6-dinitrotoluene	1	11.634	11.623	0.011	53635	0.2510	0.2645	
19 2,6-Dinitrotoluene	1	11.794	11.783	0.011	40049	0.2510	0.2680	
20 2,4-Dinitrotoluene	1	11.987	11.983	0.004	80062	0.2510	0.2637	
21 o-Nitrotoluene	1	12.827	12.823	0.004	34604	0.2500	0.2562	
22 p-Nitrotoluene	1	13.261	13.256	0.005	29824	0.2505	0.2639	
23 m-Nitrotoluene	1	13.854	13.849	0.005	37511	0.2503	0.2623	
24 PETN	2	14.941	14.936	0.005	201180	2.50	2.56	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

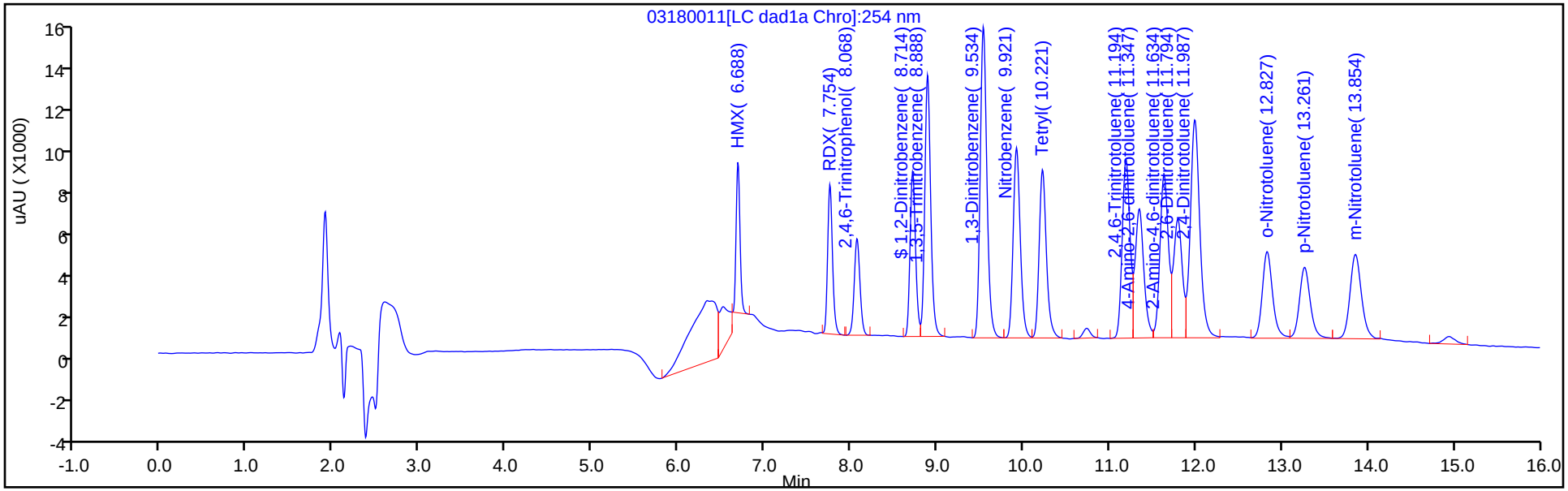
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 26-Mar-2020 15:45:42 Chrom Revision: 2.3 11-Mar-2020 18:53:20

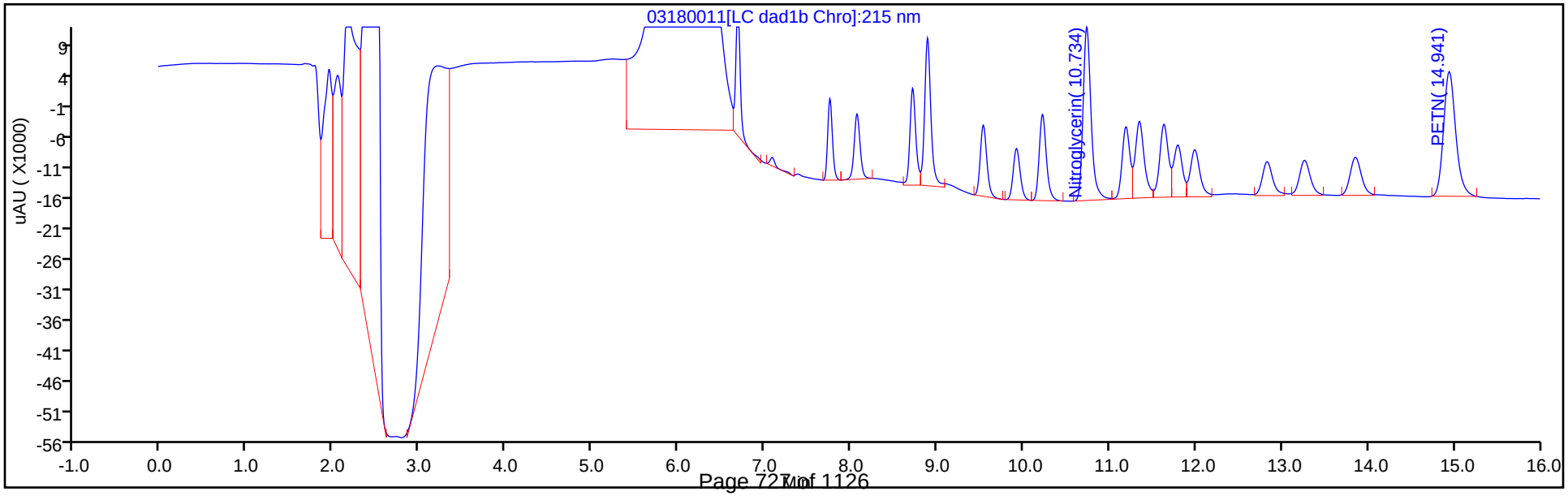
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180011.d				
Injection Date:	18-Mar-2020 13:07:42	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L5			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

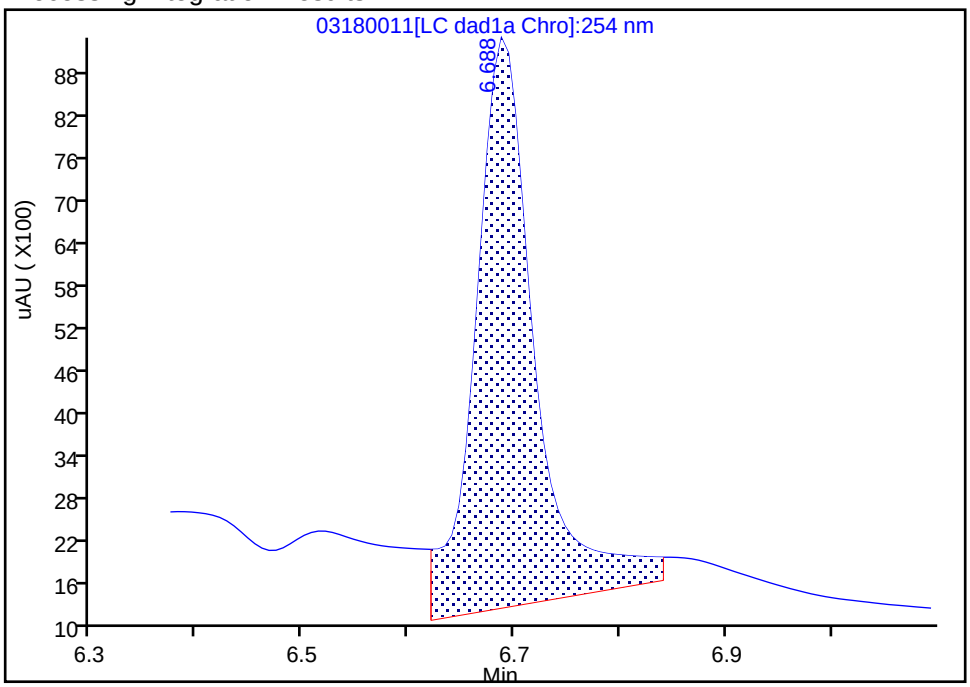
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180011.d				
Injection Date:	18-Mar-2020 13:07:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

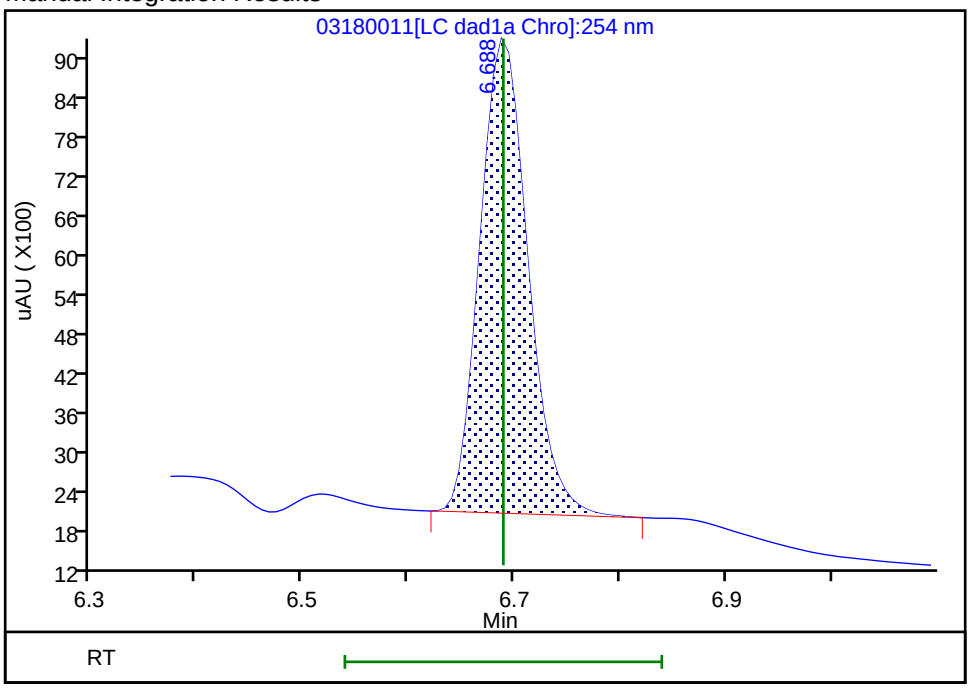
Processing Integration Results

RT: 6.69
Area: 31475
Amount: 0.164968
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 22752
Amount: 0.264675
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:43:23

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180012.D
Lims ID: IC MAIN L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-Mar-2020 13:30:35 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L4
Misc. Info.: 280-0090150-012
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:43 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:43:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.689	6.689	0.000	9080	0.1000	0.1056	M
7 RDX	1	7.749	7.749	0.000	11701	0.1000	0.1003	
8 2,4,6-Trinitrophenol	1	8.076	8.076	0.000	8647	0.1000	0.1016	
$ 9 1,2-Dinitrobenzene	1	8.709	8.709	0.000	14127	0.1000	0.1022	
10 1,3,5-Trinitrobenzene	1	8.883	8.883	0.000	23730	0.1002	0.1030	
11 1,3-Dinitrobenzene	1	9.529	9.529	0.000	31897	0.1002	0.1040	
12 Nitrobenzene	1	9.916	9.916	0.000	20859	0.1004	0.1041	
14 Tetryl	1	10.216	10.216	0.000	18527	0.1002	0.1047	
15 Nitroglycerin	2	10.729	10.729	0.000	71269	1.00	1.05	
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	21830	0.1004	0.1070	
17 4-Amino-2,6-dinitrotoluene	1	11.336	11.336	0.000	17293	0.1001	0.1035	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.623	0.000	21043	0.1004	0.1038	
19 2,6-Dinitrotoluene	1	11.783	11.783	0.000	15921	0.1004	0.1065	
20 2,4-Dinitrotoluene	1	11.983	11.983	0.000	31802	0.1004	0.1048	
21 o-Nitrotoluene	1	12.823	12.823	0.000	13733	0.1000	0.1017	
22 p-Nitrotoluene	1	13.256	13.256	0.000	11811	0.1002	0.1045	
23 m-Nitrotoluene	1	13.849	13.849	0.000	14838	0.1001	0.1037	
24 PETN	2	14.936	14.936	0.000	78947	1.00	1.00	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

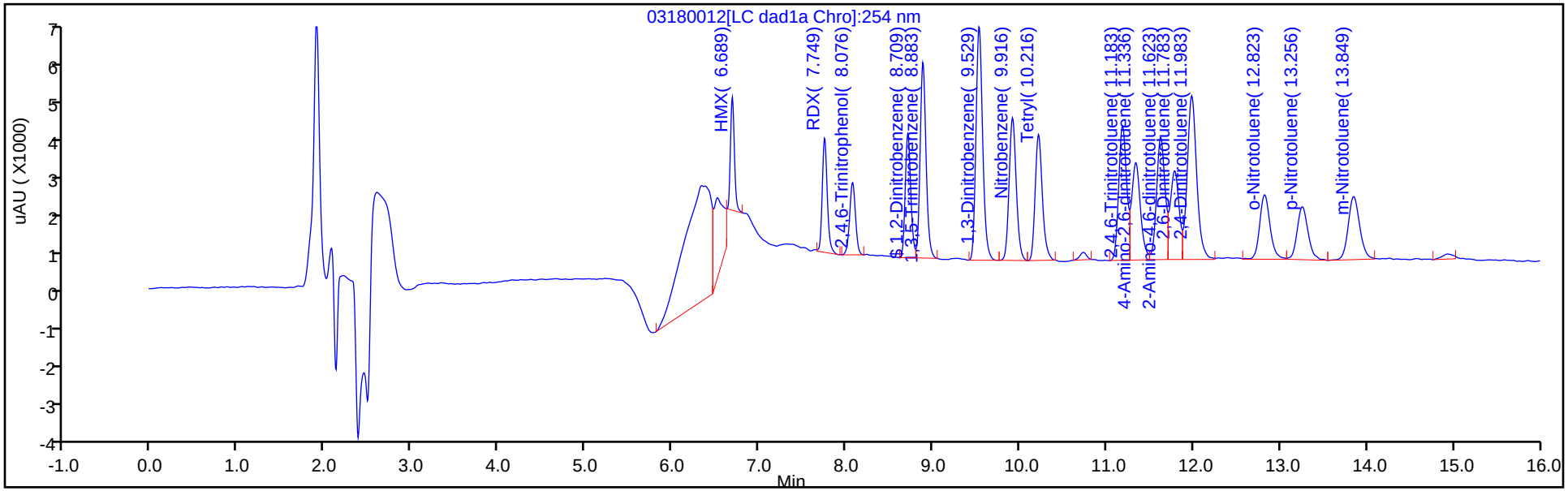
8330IntermStk_00061 Amount Added: 10.00 Units: uL

Report Date: 26-Mar-2020 15:45:43 Chrom Revision: 2.3 11-Mar-2020 18:53:20

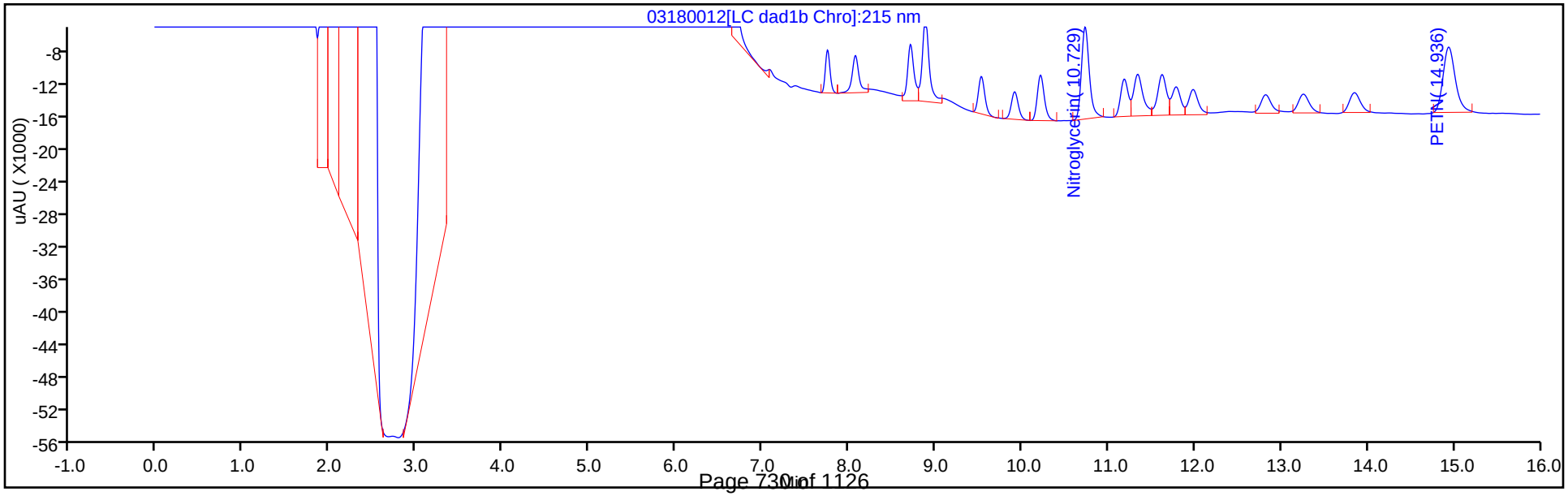
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180012.d				
Injection Date:	18-Mar-2020 13:30:35	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L4			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

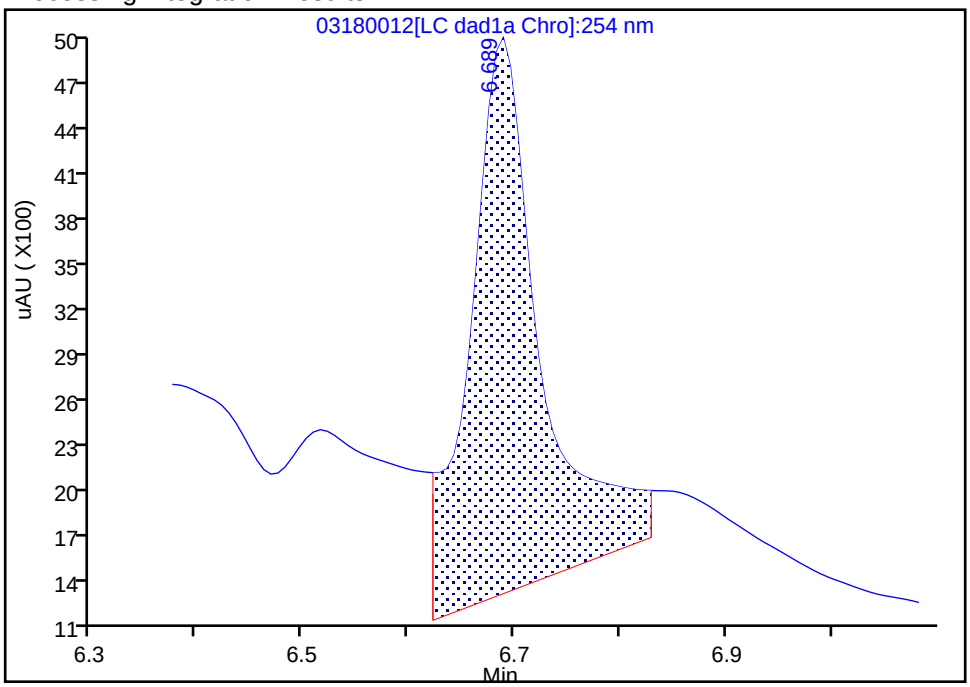
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180012.d				
Injection Date:	18-Mar-2020 13:30:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

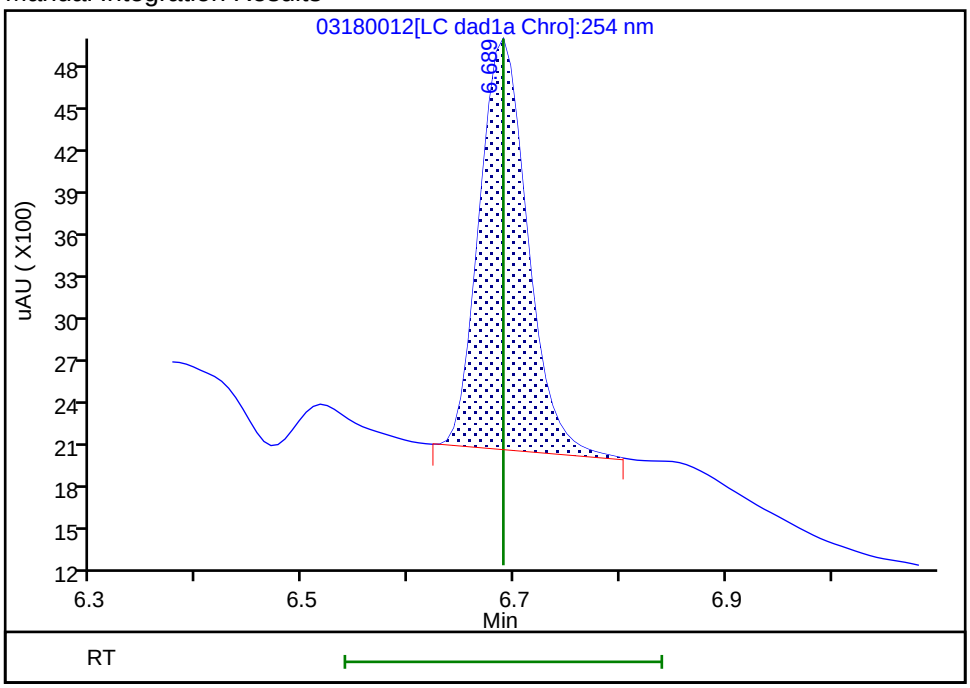
Processing Integration Results

RT: 6.69
Area: 16912
Amount: 0.090478
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 9080
Amount: 0.105628
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:43:42

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180013.D
Lims ID: IC MAIN L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Mar-2020 13:53:37 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L3
Misc. Info.: 280-0090150-013
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:44 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:44:05

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.687	6.689	-0.002	4323	0.0500	0.0503	M
7 RDX	1	7.753	7.749	0.004	6070	0.0500	0.0521	
8 2,4,6-Trinitrophenol	1	8.080	8.076	0.004	4305	0.0500	0.0506	
$ 9 1,2-Dinitrobenzene	1	8.713	8.709	0.004	7239	0.0500	0.0524	
10 1,3,5-Trinitrobenzene	1	8.887	8.883	0.004	11986	0.0501	0.0520	
11 1,3-Dinitrobenzene	1	9.533	9.529	0.004	16146	0.0501	0.0526	
12 Nitrobenzene	1	9.920	9.916	0.004	10485	0.0502	0.0523	
14 Tetryl	1	10.220	10.216	0.004	9136	0.0501	0.0516	
15 Nitroglycerin	2	10.733	10.729	0.004	33491	0.5000	0.4915	
16 2,4,6-Trinitrotoluene	1	11.186	11.183	0.003	10774	0.0502	0.0528	
17 4-Amino-2,6-dinitrotoluene	1	11.340	11.336	0.004	8490	0.0501	0.0541	
18 2-Amino-4,6-dinitrotoluene	1	11.633	11.623	0.010	10503	0.0502	0.0518	
19 2,6-Dinitrotoluene	1	11.793	11.783	0.010	7882	0.0502	0.0527	
20 2,4-Dinitrotoluene	1	11.986	11.983	0.003	15741	0.0502	0.0519	
21 o-Nitrotoluene	1	12.833	12.823	0.010	7553	0.0500	0.0559	
22 p-Nitrotoluene	1	13.260	13.256	0.004	6416	0.0501	0.0568	
23 m-Nitrotoluene	1	13.853	13.849	0.004	7758	0.0501	0.0542	
24 PETN	2	14.946	14.936	0.010	37407	0.5000	0.4759	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

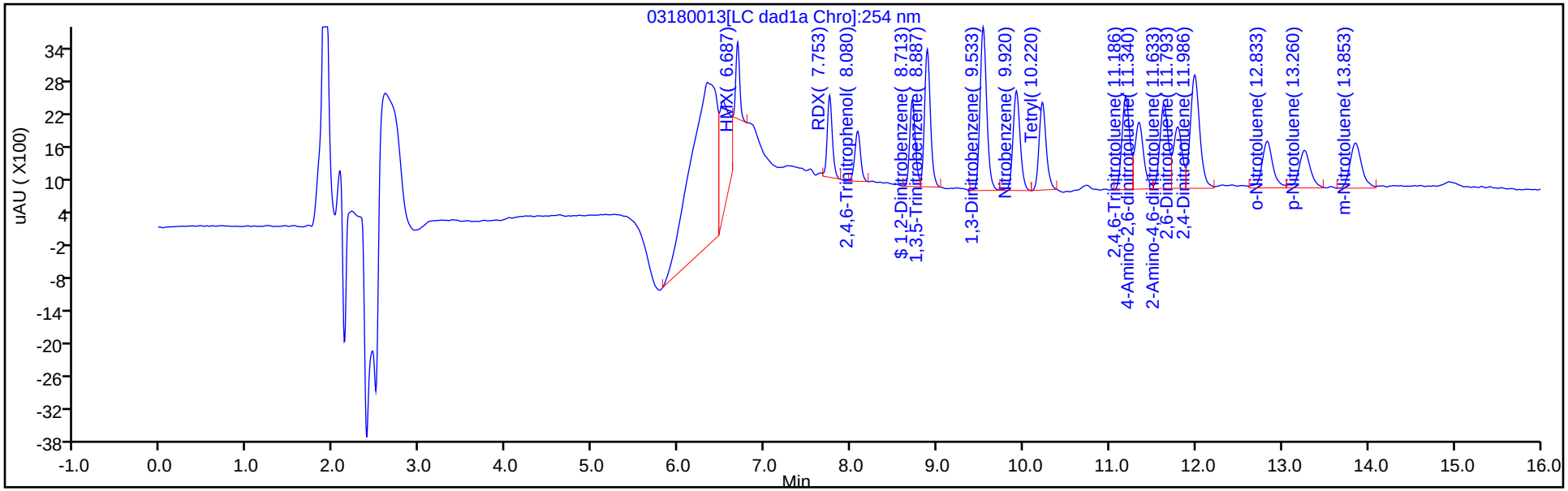
8330IntermStk_00061 Amount Added: 5.00 Units: uL

Report Date: 26-Mar-2020 15:45:44 Chrom Revision: 2.3 11-Mar-2020 18:53:20

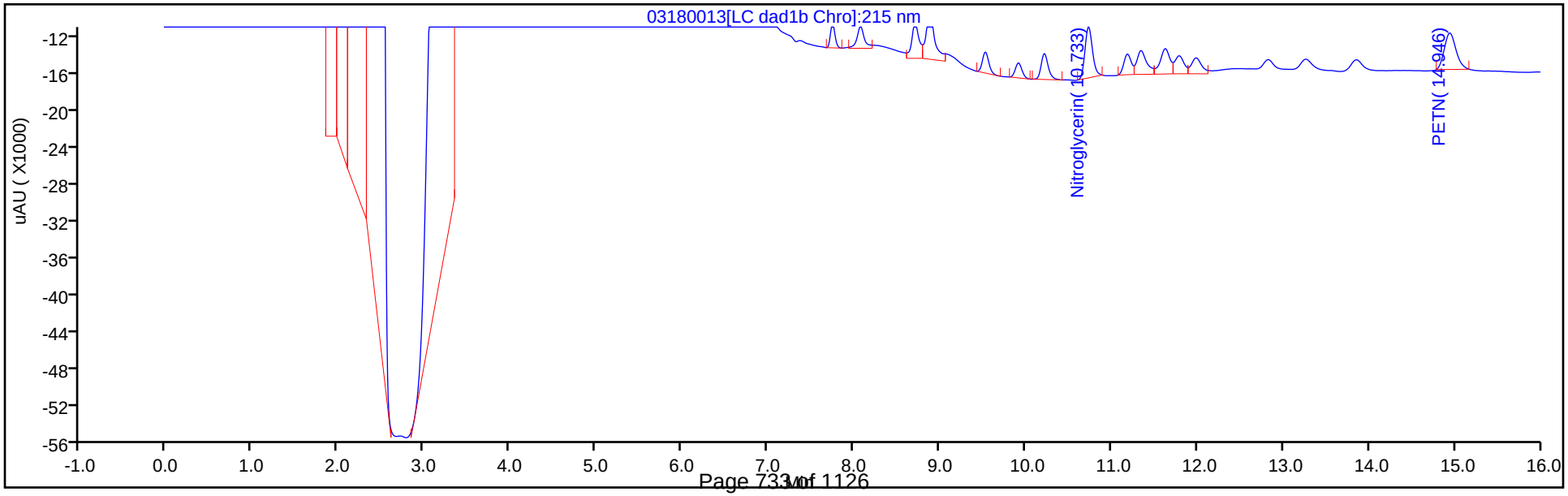
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180013.d				
Injection Date:	18-Mar-2020 13:53:37	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L3			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

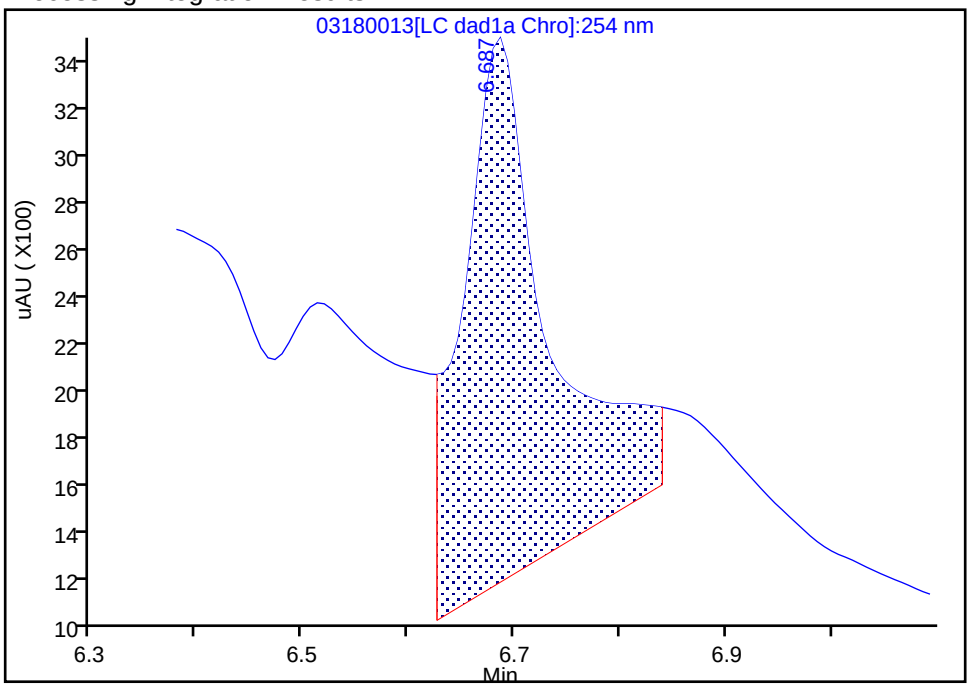
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180013.d				
Injection Date:	18-Mar-2020 13:53:37	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

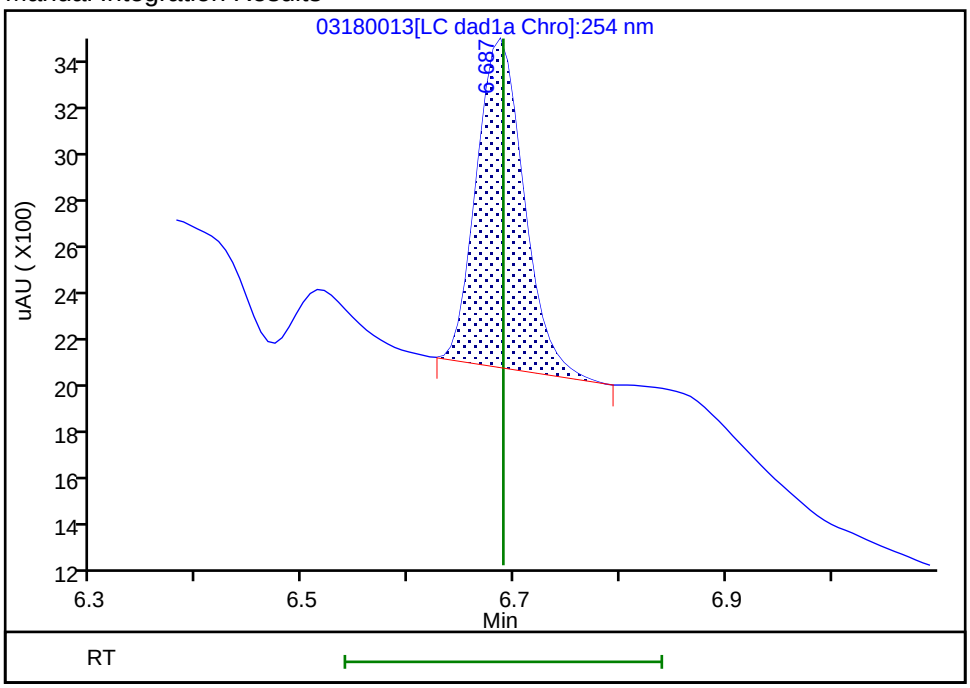
Processing Integration Results

RT: 6.69
Area: 12509
Amount: 0.070190
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 4323
Amount: 0.050290
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:44:00
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180014.D
Lims ID: IC MAIN L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Mar-2020 14:16:32 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L2
Misc. Info.: 280-0090150-014
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:44 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:44:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.689	6.689	0.000	1536	0.0250	0.0179	M
7 RDX	1	7.755	7.749	0.006	2817	0.0250	0.0242	
8 2,4,6-Trinitrophenol	1	8.082	8.076	0.006	1774	0.0250	0.0208	
$ 9 1,2-Dinitrobenzene	1	8.709	8.709	0.000	2996	0.0250	0.0217	
10 1,3,5-Trinitrobenzene	1	8.889	8.883	0.006	4845	0.0251	0.0210	
11 1,3-Dinitrobenzene	1	9.535	9.529	0.006	6270	0.0251	0.0204	
12 Nitrobenzene	1	9.922	9.916	0.006	4155	0.0251	0.0207	
14 Tetryl	1	10.215	10.216	-0.001	3492	0.0251	0.0197	
15 Nitroglycerin	2	10.735	10.729	0.006	13701	0.2500	0.2011	
16 2,4,6-Trinitrotoluene	1	11.189	11.183	0.006	4307	0.0251	0.0211	
17 4-Amino-2,6-dinitrotoluene	1	11.342	11.336	0.006	3443	0.0250	0.0258	
18 2-Amino-4,6-dinitrotoluene	1	11.629	11.623	0.006	4046	0.0251	0.0199	M
19 2,6-Dinitrotoluene	1	11.789	11.783	0.006	2987	0.0251	0.0200	M
20 2,4-Dinitrotoluene	1	11.989	11.983	0.006	6274	0.0251	0.0207	
21 o-Nitrotoluene	1	12.822	12.823	-0.001	3068	0.0250	0.0227	
22 p-Nitrotoluene	1	13.269	13.256	0.013	2509	0.0251	0.0222	
23 m-Nitrotoluene	1	13.849	13.849	0.000	3129	0.0250	0.0219	
24 PETN	2	14.942	14.936	0.006	11624	0.2500	0.1479	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

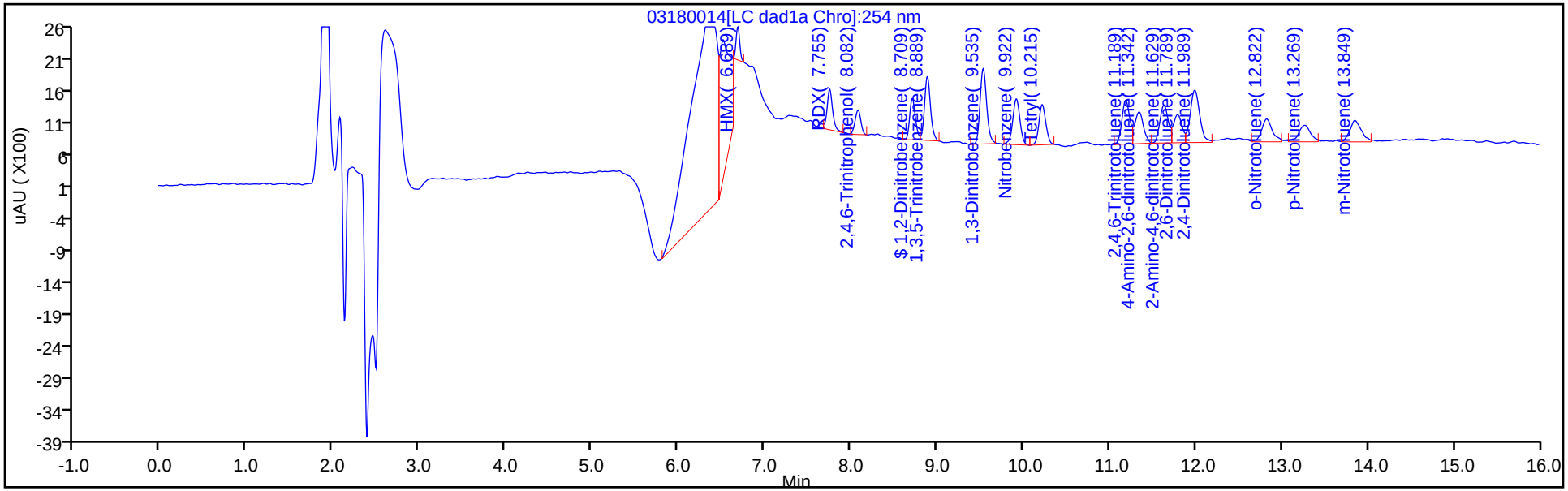
8330IntermStk_00061 Amount Added: 2.50 Units: uL

Report Date: 26-Mar-2020 15:45:45 Chrom Revision: 2.3 11-Mar-2020 18:53:20

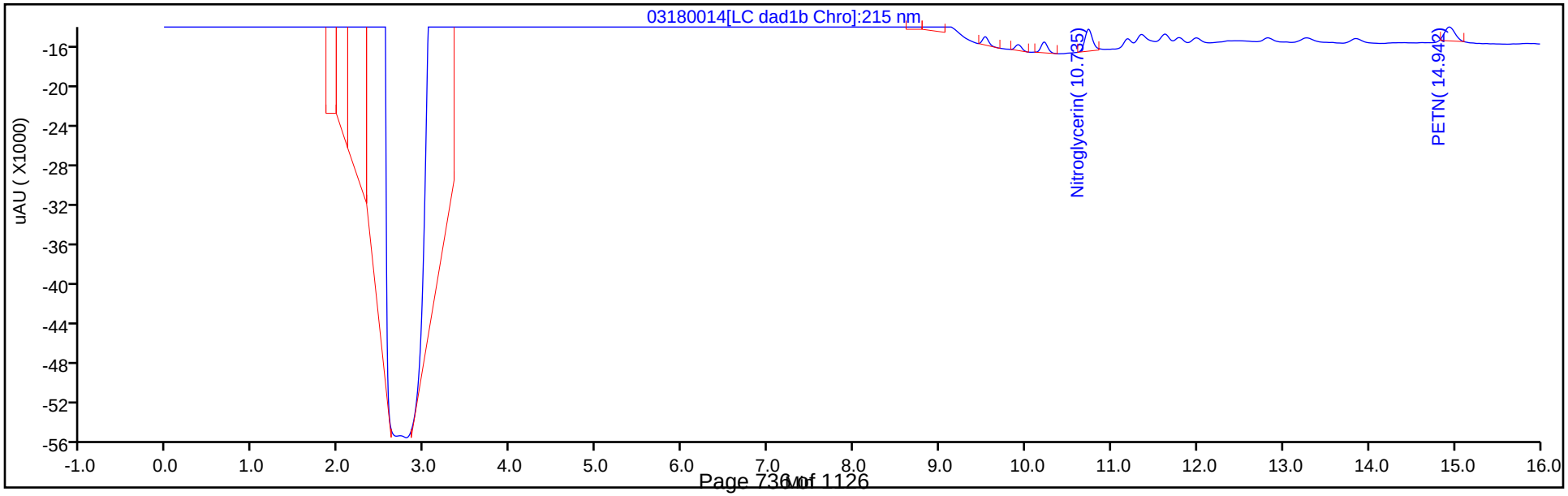
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d				
Injection Date:	18-Mar-2020 14:16:32	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L2			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

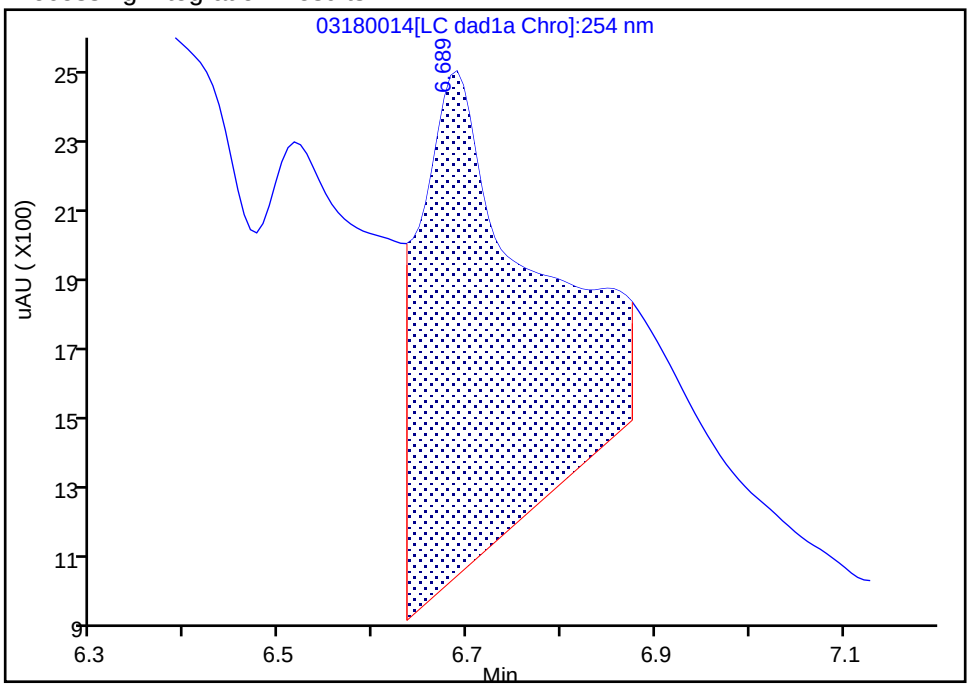
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d				
Injection Date:	18-Mar-2020 14:16:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

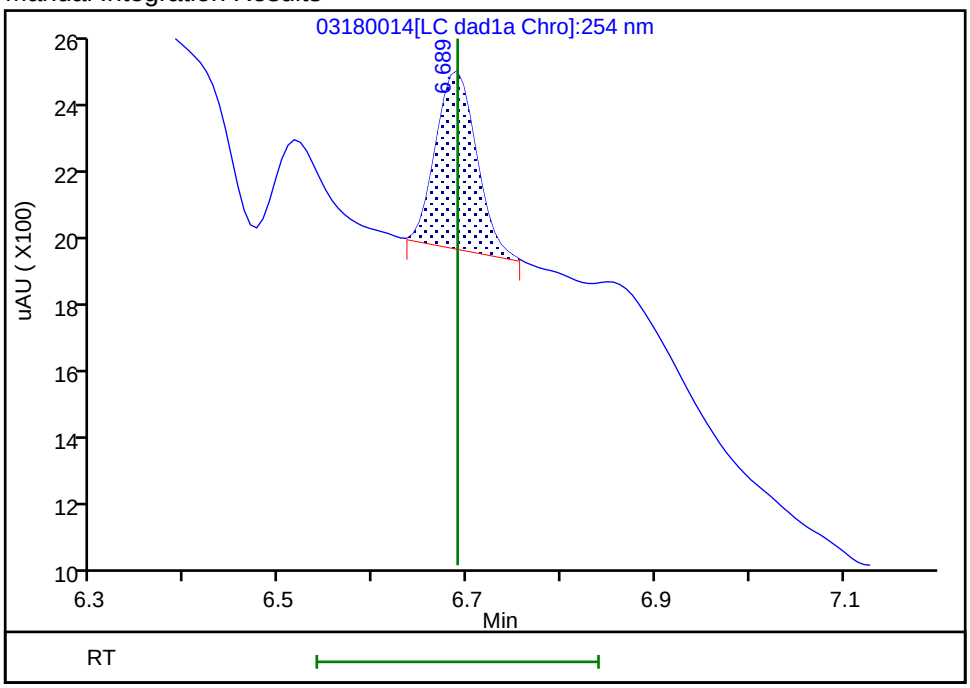
Processing Integration Results

RT: 6.69
Area: 11606
Amount: 0.072526
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 1536
Amount: 0.017868
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:44:20

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

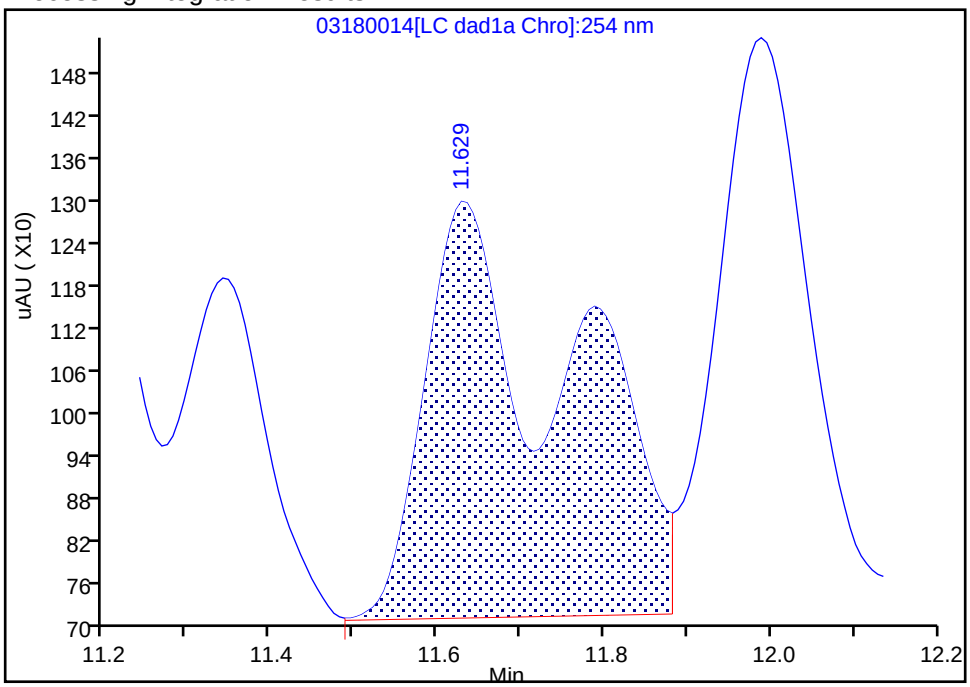
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180014.d				
Injection Date:	18-Mar-2020 14:16:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

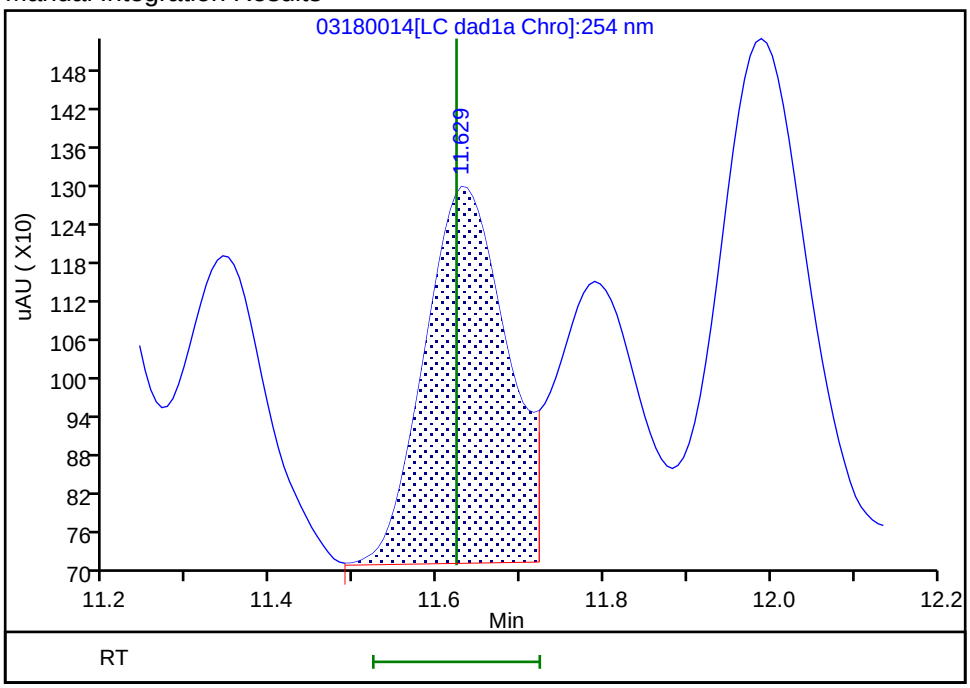
Processing Integration Results

RT: 11.63
Area: 7030
Amount: 0.030654
Amount Units: ug/mL



Manual Integration Results

RT: 11.63
Area: 4046
Amount: 0.019949
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:44:36
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D
Lims ID: IC MAIN L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Mar-2020 14:39:27 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L1
Misc. Info.: 280-0090150-015
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:45 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:46:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1		6.689			ND	ND	MU
7 RDX	1		7.749			ND	ND	MU
8 2,4,6-Trinitrophenol	1	8.082	8.076	0.006	1082	0.0125	0.0127	M
$ 9 1,2-Dinitrobenzene	1	8.715	8.709	0.006	1531	0.0125	0.0111	
10 1,3,5-Trinitrobenzene	1	8.888	8.883	0.005	2405	0.0125	0.0104	
11 1,3-Dinitrobenzene	1	9.535	9.529	0.006	3191	0.0125	0.0104	
12 Nitrobenzene	1	9.915	9.916	-0.001	2176	0.0126	0.0109	
14 Tetryl	1	10.221	10.216	0.005	1664	0.0125	0.009399	
15 Nitroglycerin	2	10.735	10.729	0.006	6790	0.1250	0.0997	
16 2,4,6-Trinitrotoluene	1	11.195	11.183	0.012	1807	0.0126	0.008856	
17 4-Amino-2,6-dinitrotoluene	1	11.341	11.336	0.005	981	0.0125	0.0120	
18 2-Amino-4,6-dinitrotoluene	1	11.635	11.623	0.012	2123	0.0126	0.0105	M
19 2,6-Dinitrotoluene	1	11.795	11.783	0.012	1508	0.0126	0.0101	M
20 2,4-Dinitrotoluene	1	11.995	11.983	0.012	3142	0.0126	0.0103	
21 o-Nitrotoluene	1	12.828	12.823	0.005	1615	0.0125	0.0120	
22 p-Nitrotoluene	1	13.268	13.256	0.012	1080	0.0125	0.009557	
23 m-Nitrotoluene	1	13.855	13.849	0.006	1403	0.0125	0.009809	
24 PETN	2		14.936			ND	ND	MU

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

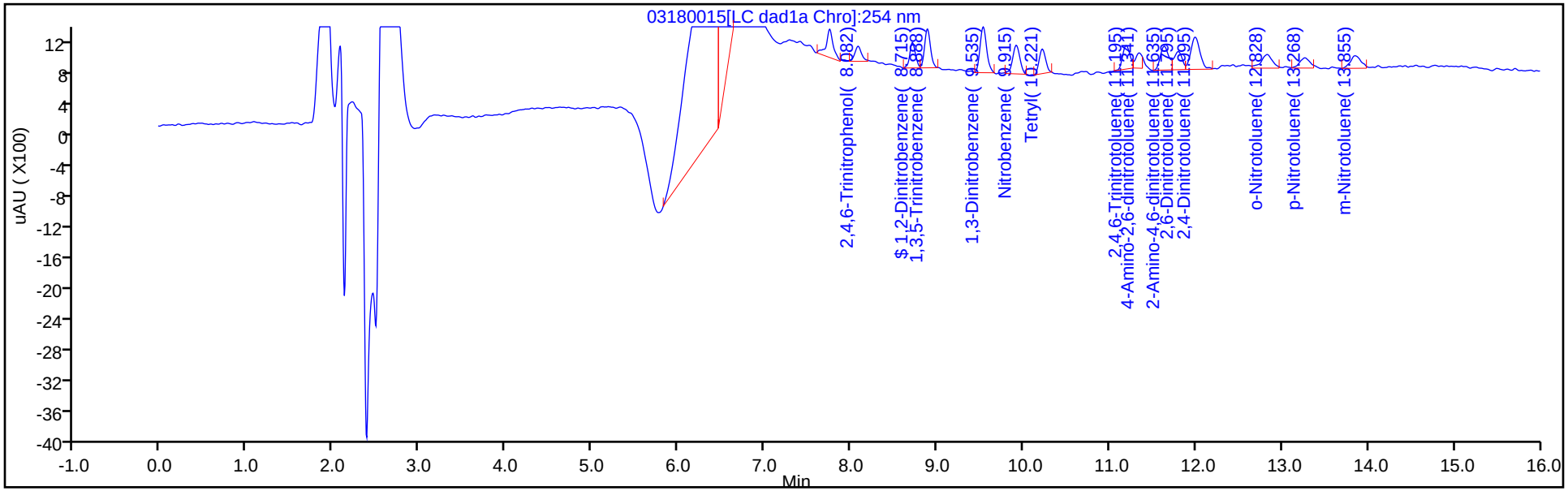
8330IntermStk_00061 Amount Added: 1.25 Units: uL

Report Date: 26-Mar-2020 15:45:46 Chrom Revision: 2.3 11-Mar-2020 18:53:20

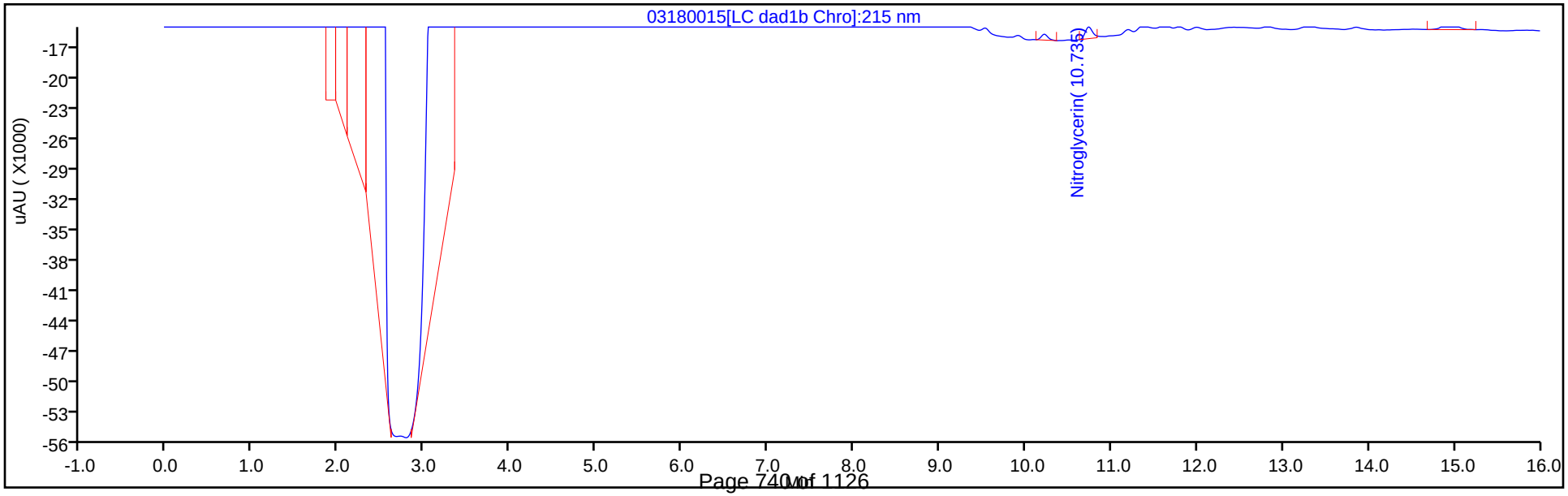
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180015.d				
Injection Date:	18-Mar-2020 14:39:27	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L1			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

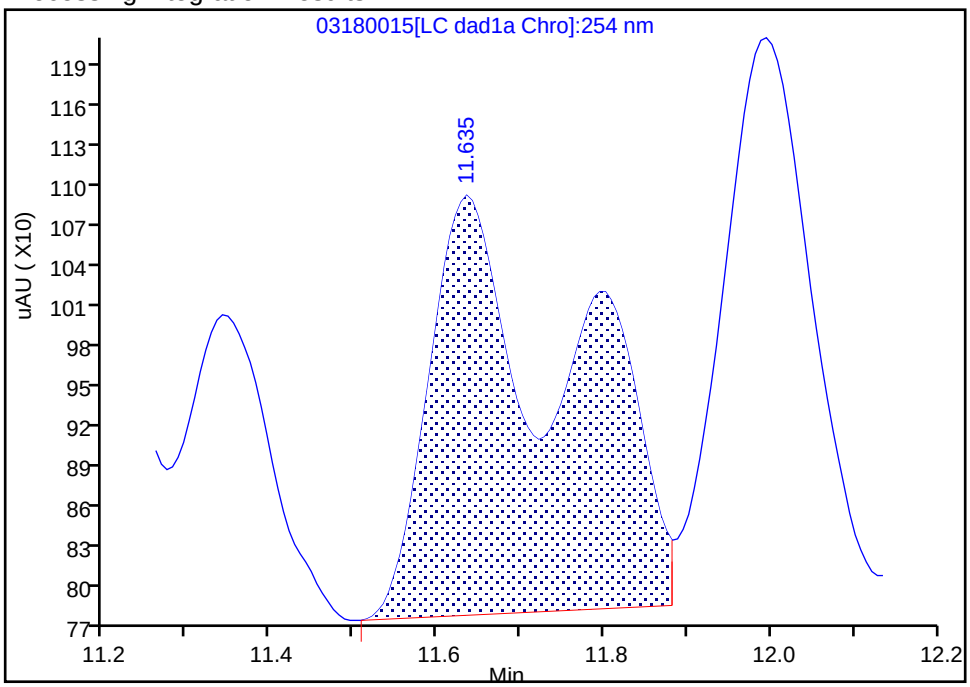
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180015.d				
Injection Date:	18-Mar-2020 14:39:27	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

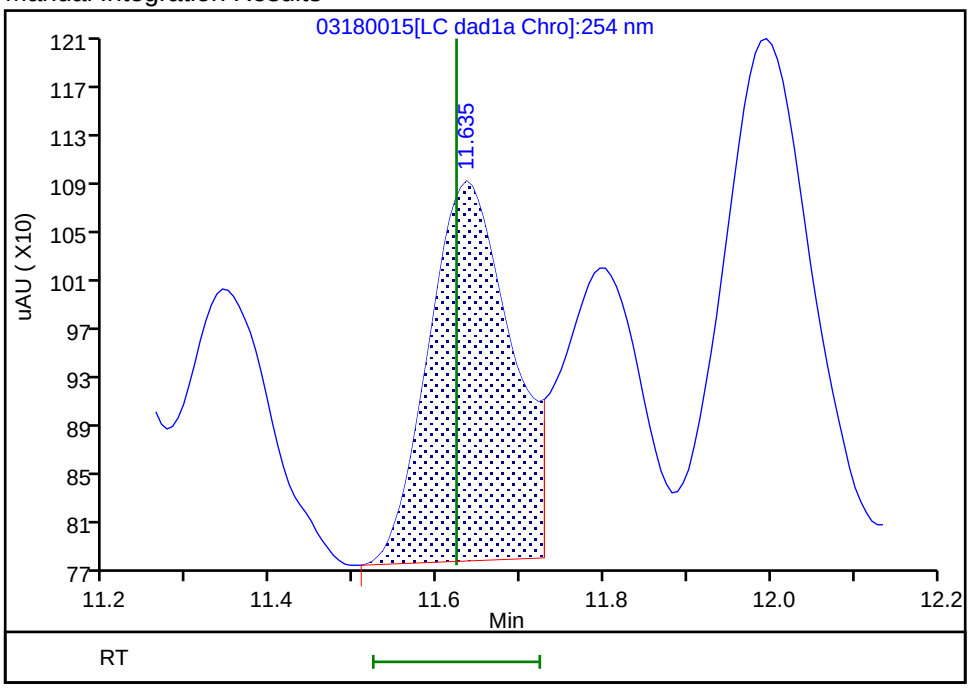
Processing Integration Results

RT: 11.63
Area: 3626
Amount: 0.016777
Amount Units: ug/mL



Manual Integration Results

RT: 11.63
Area: 2123
Amount: 0.010468
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:46:18
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-494886/16 Calibration Date: 05/14/2020 21:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 05140016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	193810	184585		381	400	-4.8	15.0
HMX	Lin2		178815		374	400	-6.5	15.0
RDX	Ave	244360	211628		346	400	-13.4	15.0
Nitrobenzene	Ave	439227	438053		399	400	-0.3	15.0
1,3-Dinitrobenzene	Ave	674189	636963		378	400	-5.5	15.0
Nitroglycerin	Ave	126803	122258		3860	4000	-3.6	15.0
2-Nitrotoluene	Ave	272965	263495		386	400	-3.5	15.0
4-Nitrotoluene	Ave	240881	229805		382	400	-4.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	318460		369	400	-7.8	15.0
3-Nitrotoluene	Ave	298327	286883		385	400	-3.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	446188		384	400	-4.1	15.0
1,3,5-Trinitrobenzene	Ave	472451	495920		420	400	5.0	15.0
2,6-Dinitrotoluene	Lin2		302720		403	400	0.8	15.0
2,4-Dinitrotoluene	Ave	640113	590383		369	400	-7.8	15.0
Tetryl	Ave	368678	347680		377	400	-5.7	15.0
2,4,6-Trinitrotoluene	Lin1		390228		381	400	-4.8	15.0
PETN	Lin1		124707		3650	4000	-8.8	15.0
1,2-Dinitrobenzene	Lin1		250760		355	400	-11.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-494886/16 Calibration Date: 05/14/2020 21:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 05140016.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.23	6.15	6.45
HMX	6.95	6.84	7.14
RDX	9.12	9.02	9.32
Nitrobenzene	12.05	11.96	12.26
1,3-Dinitrobenzene	15.50	15.40	15.70
Nitroglycerin	15.81	15.70	16.00
2-Nitrotoluene	16.49	16.38	16.68
4-Nitrotoluene	16.77	16.67	16.97
4-Amino-2,6-dinitrotoluene	17.10	17.00	17.30
3-Nitrotoluene	17.69	17.60	17.90
2-Amino-4,6-dinitrotoluene	17.99	17.90	18.20
1,3,5-Trinitrobenzene	18.83	18.74	19.04
2,6-Dinitrotoluene	19.75	19.66	19.96
2,4-Dinitrotoluene	20.24	20.14	20.44
Tetryl	23.51	23.40	23.70
2,4,6-Trinitrotoluene	24.61	24.50	24.80
PETN	25.25	25.13	25.43
1,2-Dinitrobenzene	12.99	12.89	13.19

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140016.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 14-May-2020 21:31:26 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 280-0091518-016
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:59 Calib Date: 14-May-2020 20:56:30
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140015.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:55:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.307	4.366	-0.059	179307	0.4000	0.4177	M
2 2,4-diamino-6-nitrotoluene	1	4.840	4.880	-0.040	97723	0.4000	0.3877	M
5 2,4,6-Trinitrophenol	1	6.234	6.300	-0.066	73834	0.4000	0.3810	a
6 HMX	1	6.954	6.986	-0.032	71526	0.4000	0.3740	
8 RDX	1	9.120	9.173	-0.053	84651	0.4000	0.3464	
9 Nitrobenzene	1	12.053	12.106	-0.053	175221	0.4000	0.3989	
$ 10 1,2-Dinitrobenzene	1	12.987	13.040	-0.053	100304	0.4000	0.3552	
11 3,5-Dinitroaniline	1	14.827	14.886	-0.059	185478	0.4000	0.3767	
12 1,3-Dinitrobenzene	1	15.500	15.553	-0.053	254785	0.4000	0.3779	
13 Nitroglycerin	2	15.807	15.853	-0.046	489033	4.00	3.86	
14 o-Nitrotoluene	1	16.493	16.533	-0.040	105398	0.4000	0.3861	M
15 p-Nitrotoluene	1	16.767	16.820	-0.053	91922	0.4000	0.3816	M
16 4-Amino-2,6-dinitrotoluene	1	17.100	17.146	-0.046	127384	0.4000	0.3690	M
17 m-Nitrotoluene	1	17.693	17.753	-0.060	114753	0.4000	0.3847	M
18 2-Amino-4,6-dinitrotoluene	1	17.987	18.046	-0.059	178475	0.4000	0.3836	M
19 1,3,5-Trinitrobenzene	1	18.833	18.886	-0.053	198368	0.4000	0.4199	M
20 2,6-Dinitrotoluene	1	19.753	19.806	-0.053	121088	0.4000	0.4033	M
21 2,4-Dinitrotoluene	1	20.240	20.293	-0.053	236153	0.4000	0.3689	M
22 Tetryl	1	23.507	23.553	-0.046	139072	0.4000	0.3772	
23 2,4,6-Trinitrotoluene	1	24.607	24.653	-0.046	156091	0.4000	0.3808	
24 PETN	2	25.254	25.280	-0.026	498829	4.00	3.65	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

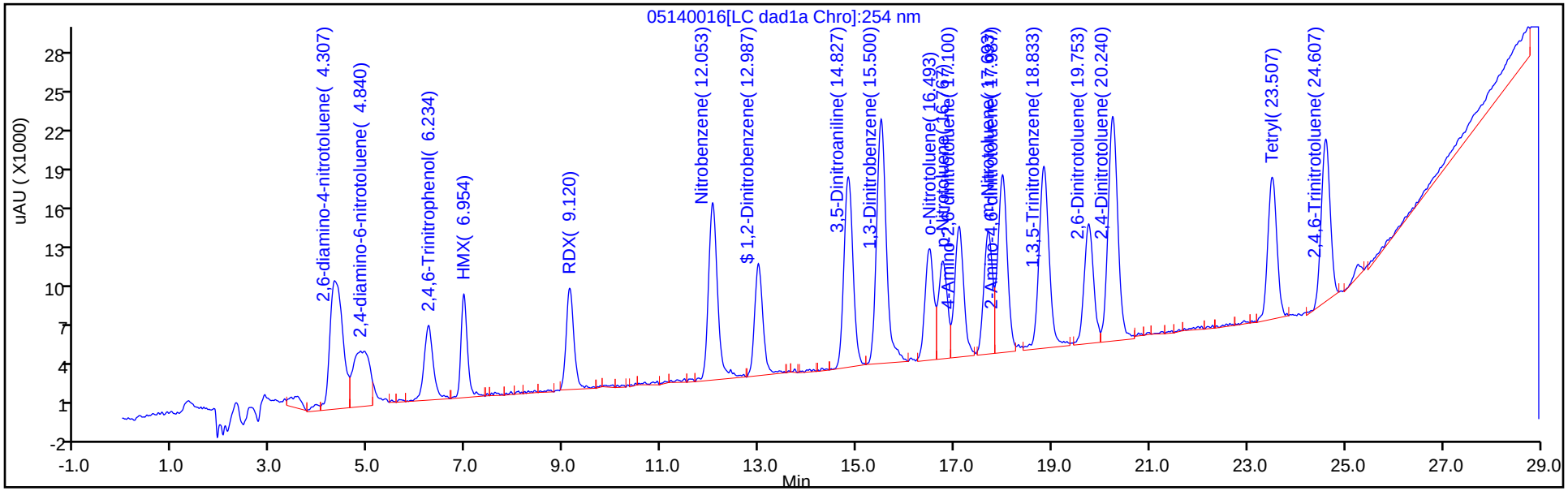
8330Surrogate_00114	Amount Added:	40.00	Units: uL
3,5-DNA LCS_00036	Amount Added:	40.00	Units: uL
8330 LCS_00098	Amount Added:	40.00	Units: uL
8330DiaminLCS_00038	Amount Added:	40.00	Units: uL

Report Date: 15-May-2020 12:01:01 Chrom Revision: 2.3 05-May-2020 17:48:18

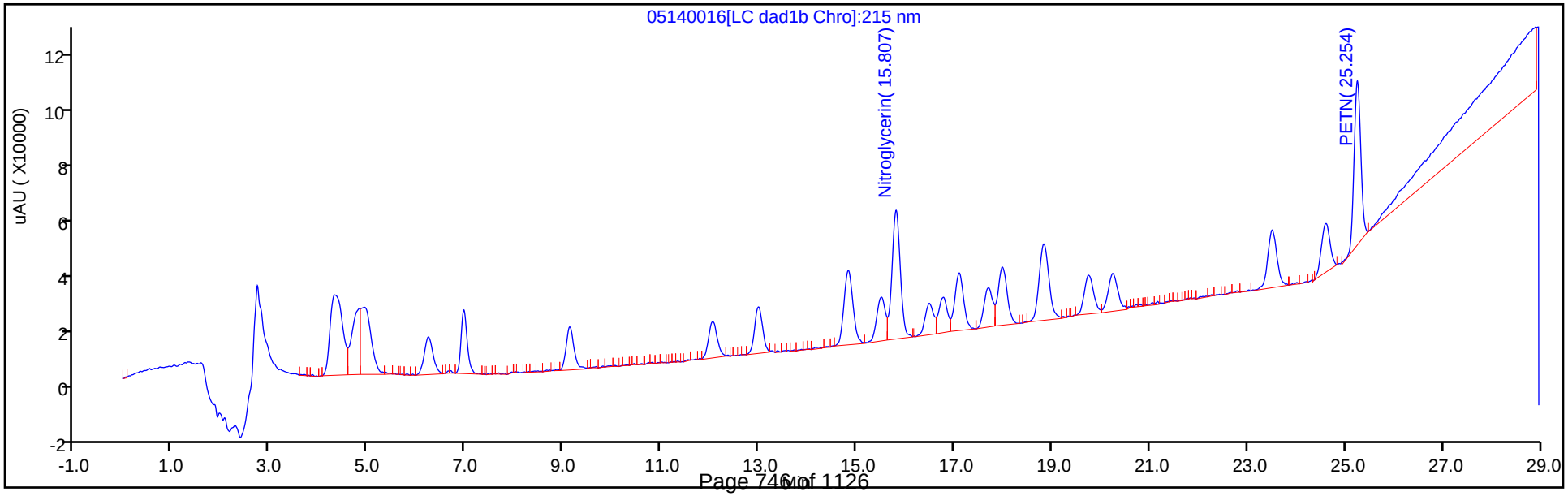
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	ICV FULL			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

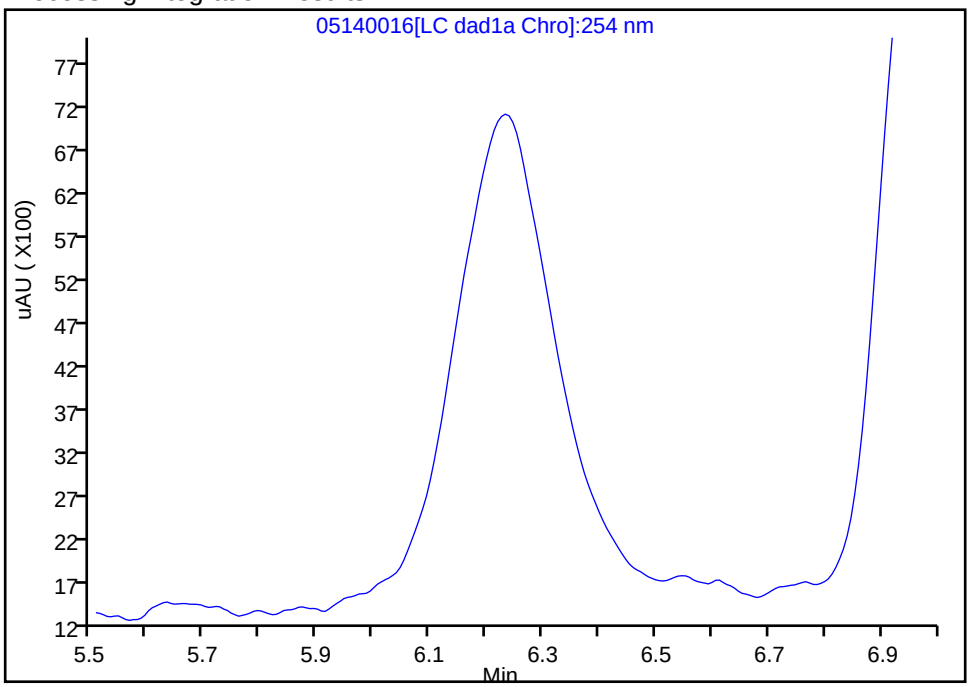
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

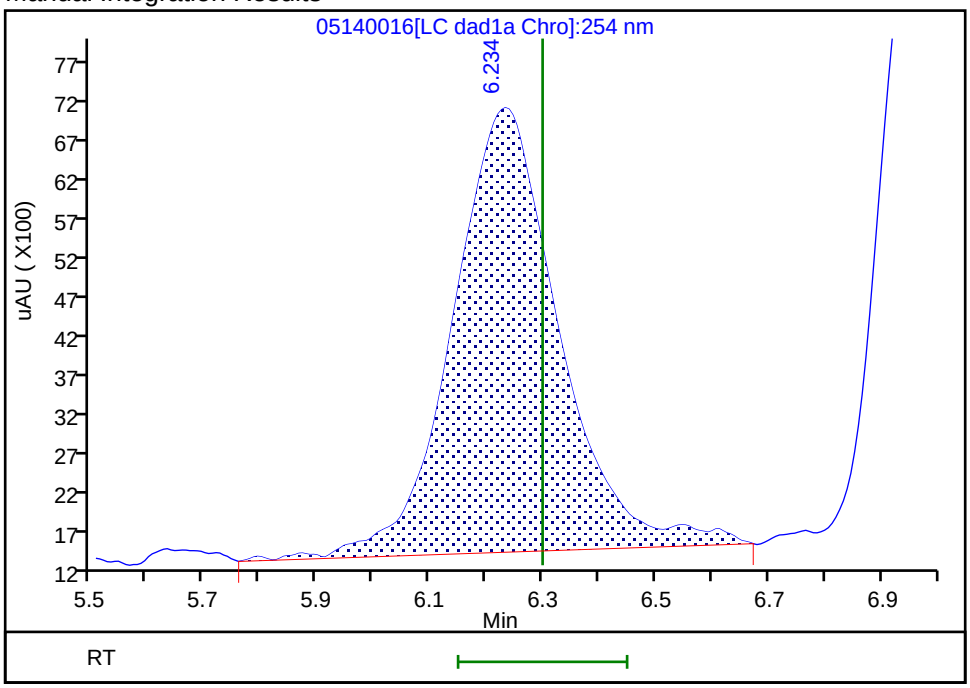
Not Detected
Expected RT: 6.30

Processing Integration Results



RT: 6.23
Area: 73834
Amount: 0.380960
Amount Units: ug/ml

Manual Integration Results



Reviewer: zhangji, 15-May-2020 11:14:55
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

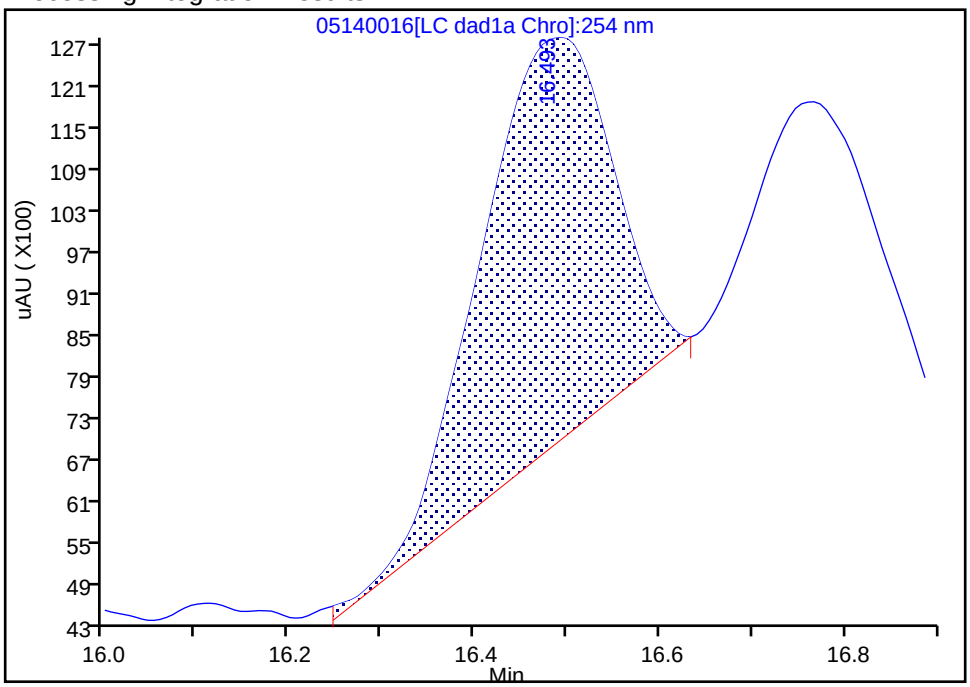
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

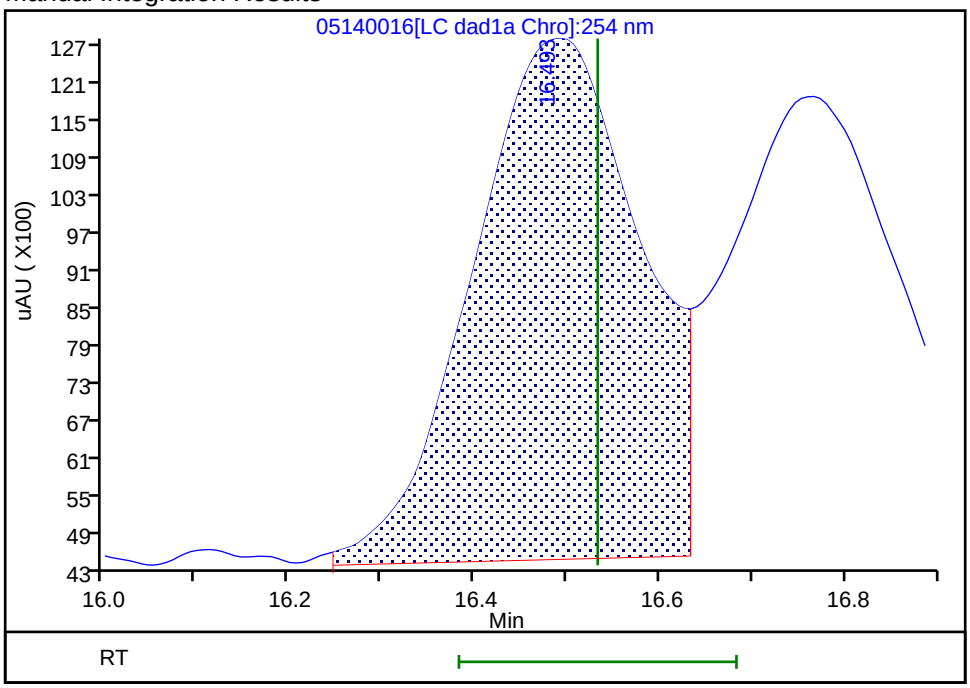
Processing Integration Results

RT: 16.49
Area: 59335
Amount: 0.217373
Amount Units: ug/ml



Manual Integration Results

RT: 16.49
Area: 105398
Amount: 0.386123
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

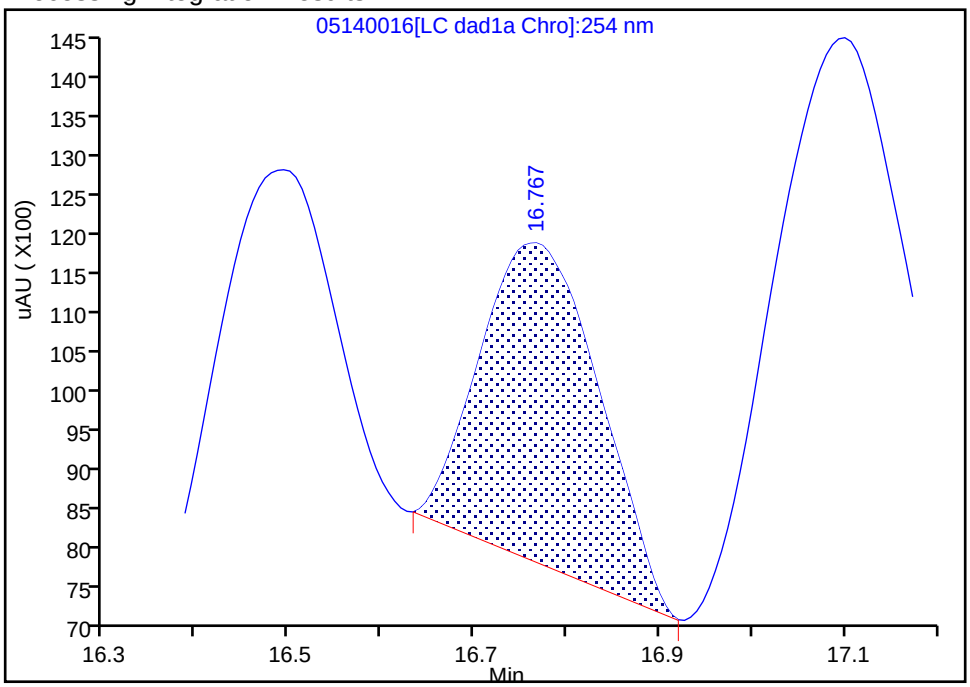
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

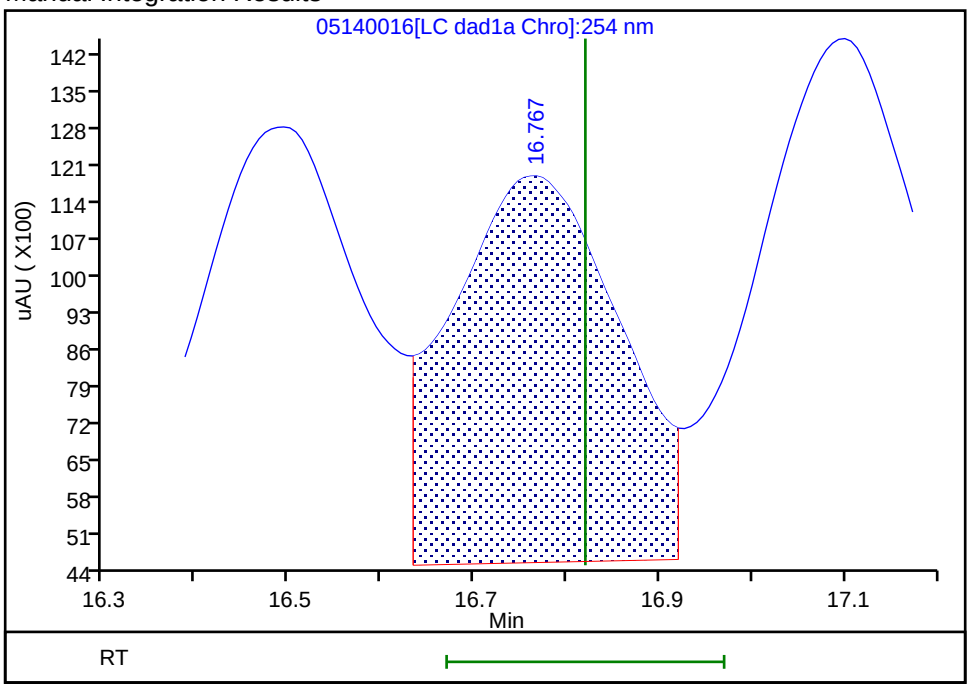
Processing Integration Results

RT: 16.77
Area: 36452
Amount: 0.151328
Amount Units: ug/ml



Manual Integration Results

RT: 16.77
Area: 91922
Amount: 0.381607
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

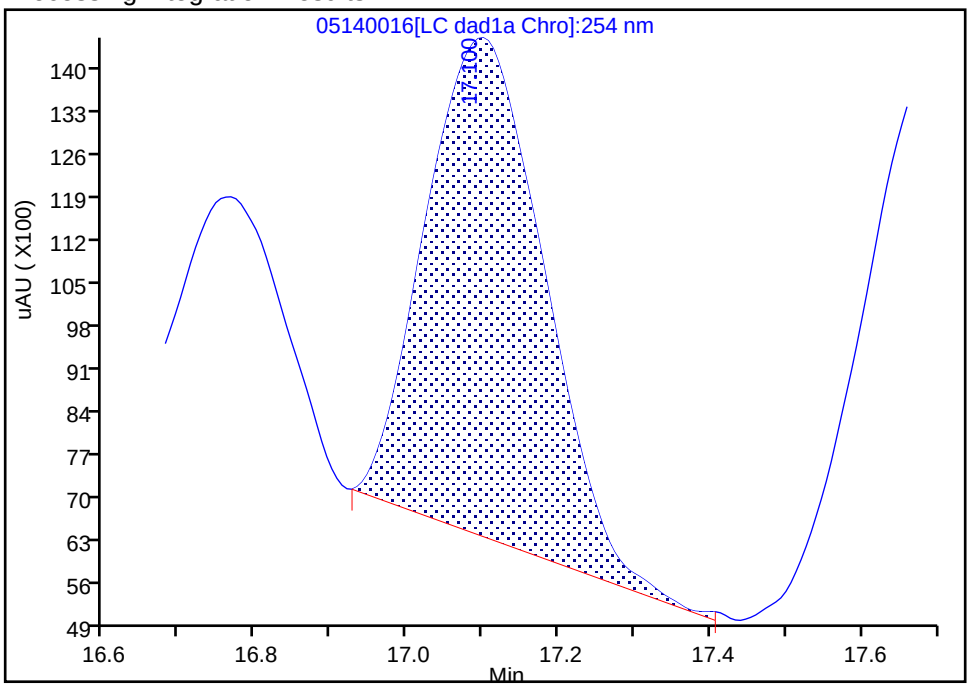
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

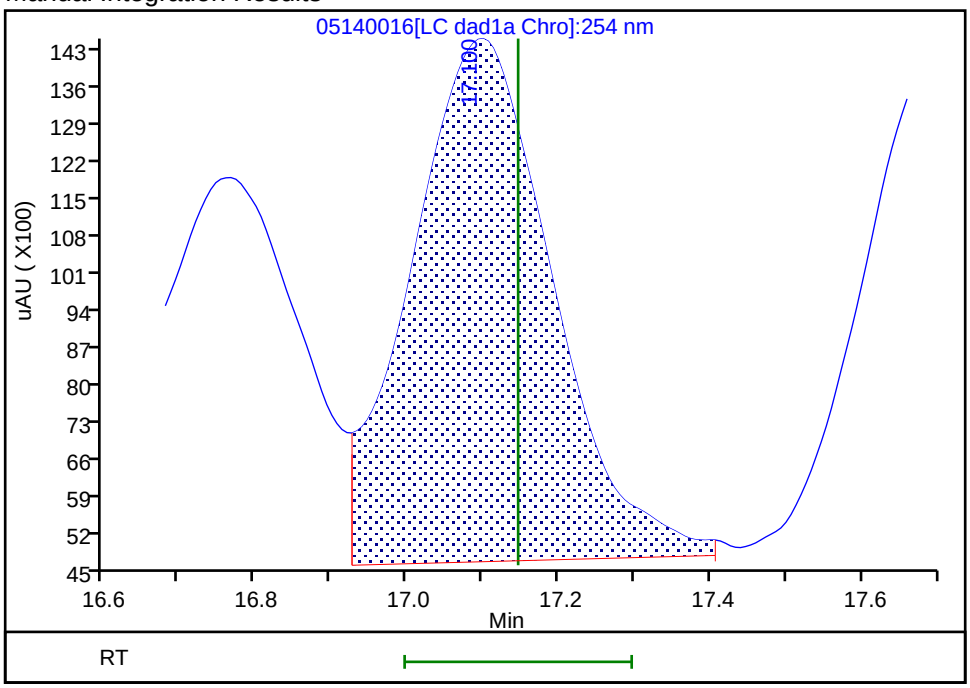
Processing Integration Results

RT: 17.10
Area: 89570
Amount: 0.259447
Amount Units: ug/ml



Manual Integration Results

RT: 17.10
Area: 127384
Amount: 0.368978
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

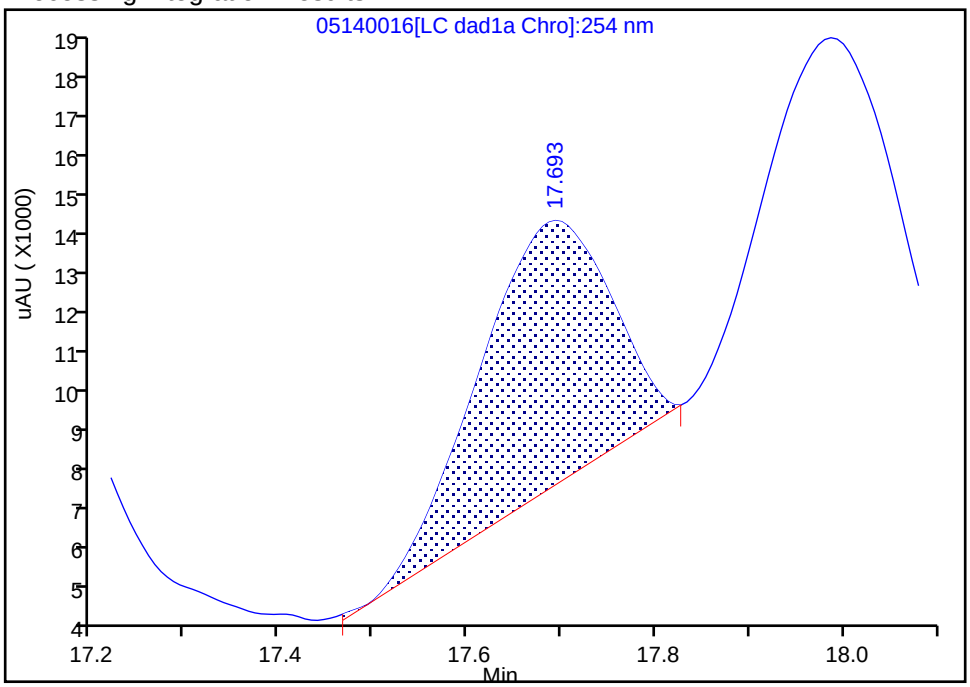
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

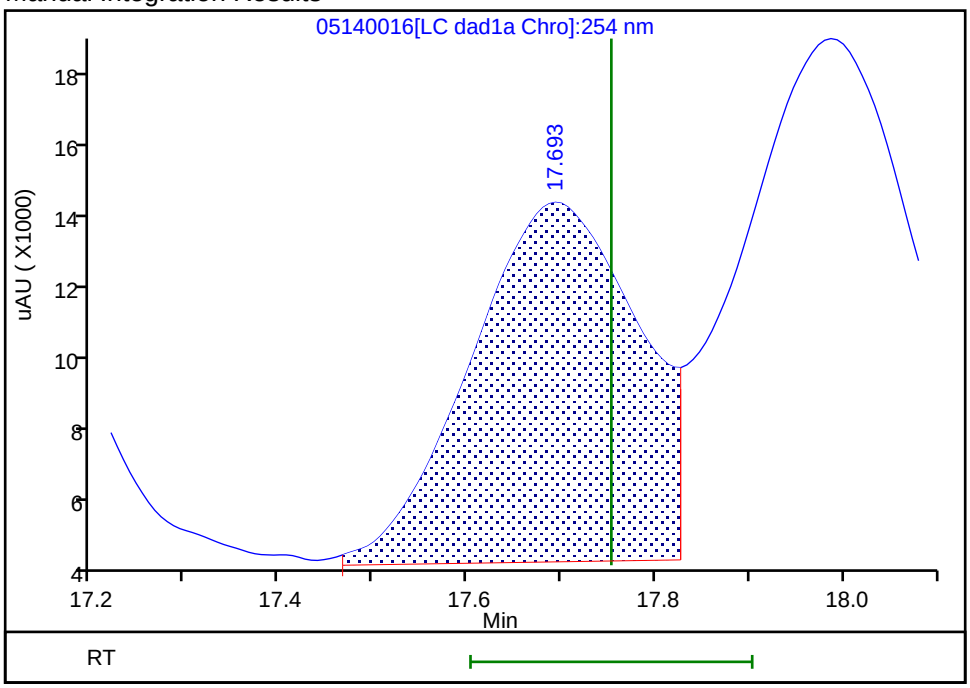
Processing Integration Results

RT: 17.69
Area: 60008
Amount: 0.201149
Amount Units: ug/ml



Manual Integration Results

RT: 17.69
Area: 114753
Amount: 0.384655
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

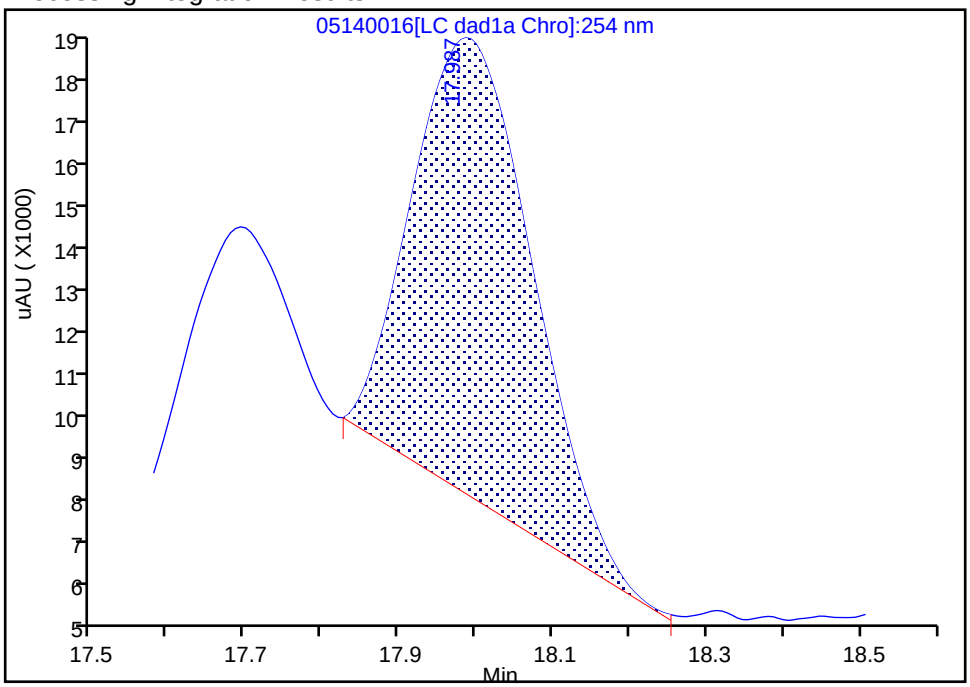
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

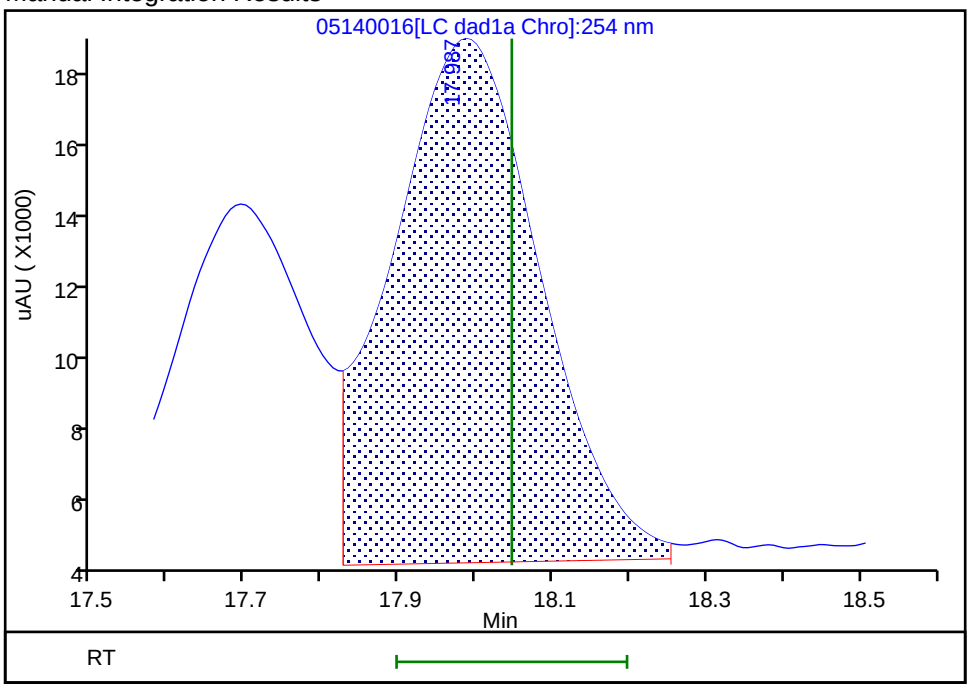
Processing Integration Results

RT: 17.99
Area: 111749
Amount: 0.240211
Amount Units: ug/ml



Manual Integration Results

RT: 17.99
Area: 178475
Amount: 0.383643
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

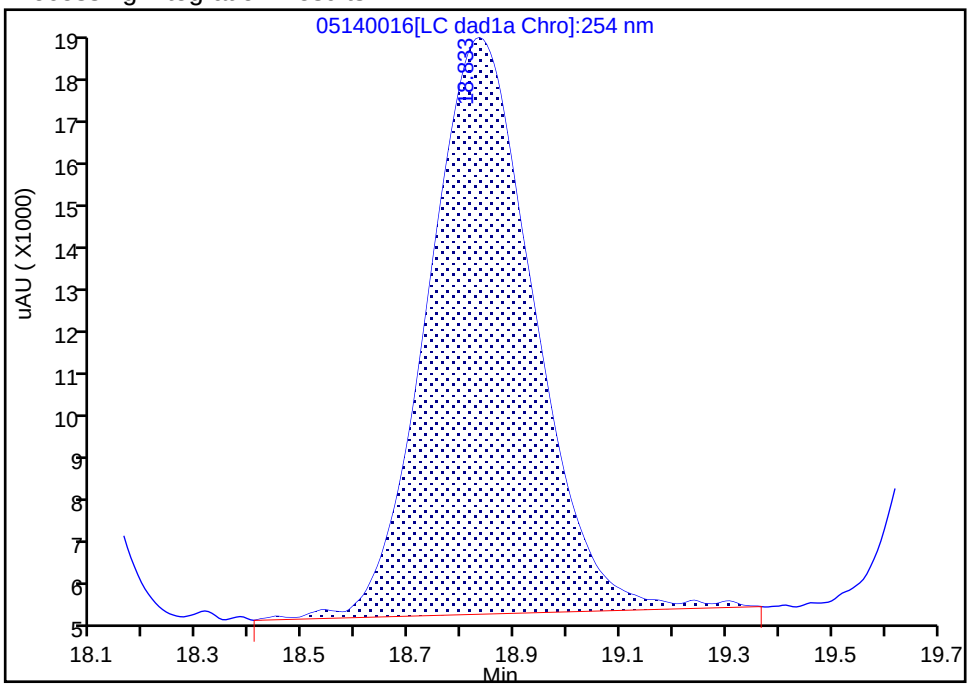
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

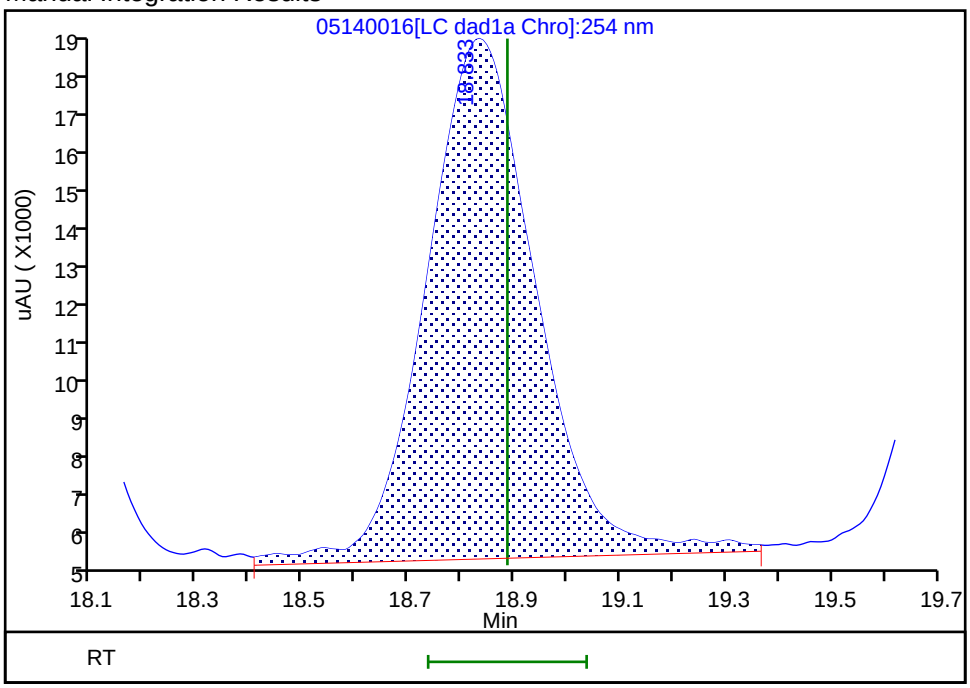
Processing Integration Results

RT: 18.83
Area: 187655
Amount: 0.397195
Amount Units: ug/ml



Manual Integration Results

RT: 18.83
Area: 198368
Amount: 0.419870
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

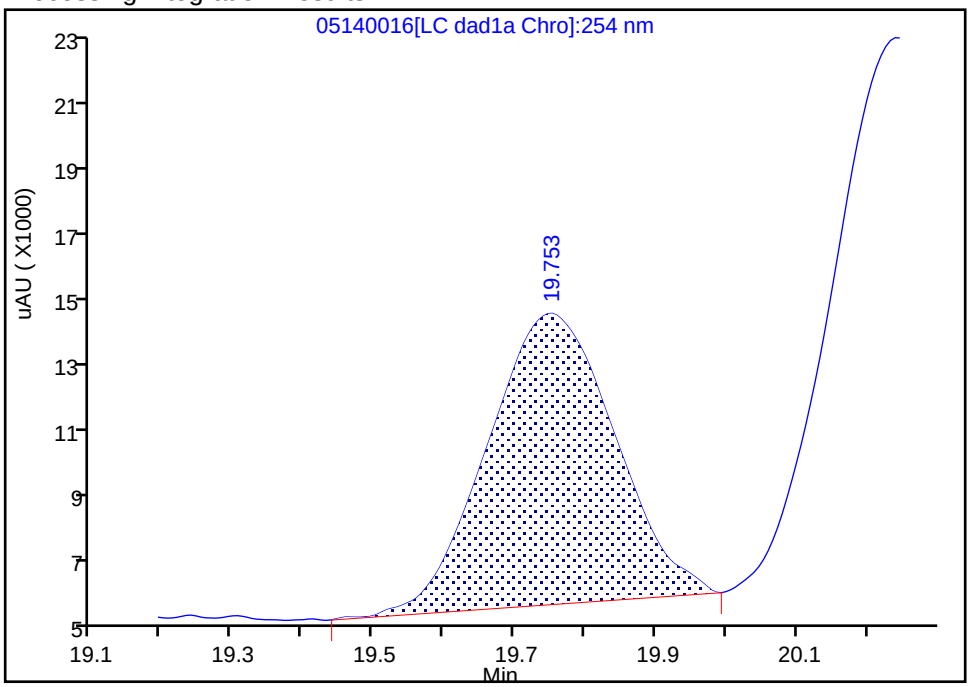
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

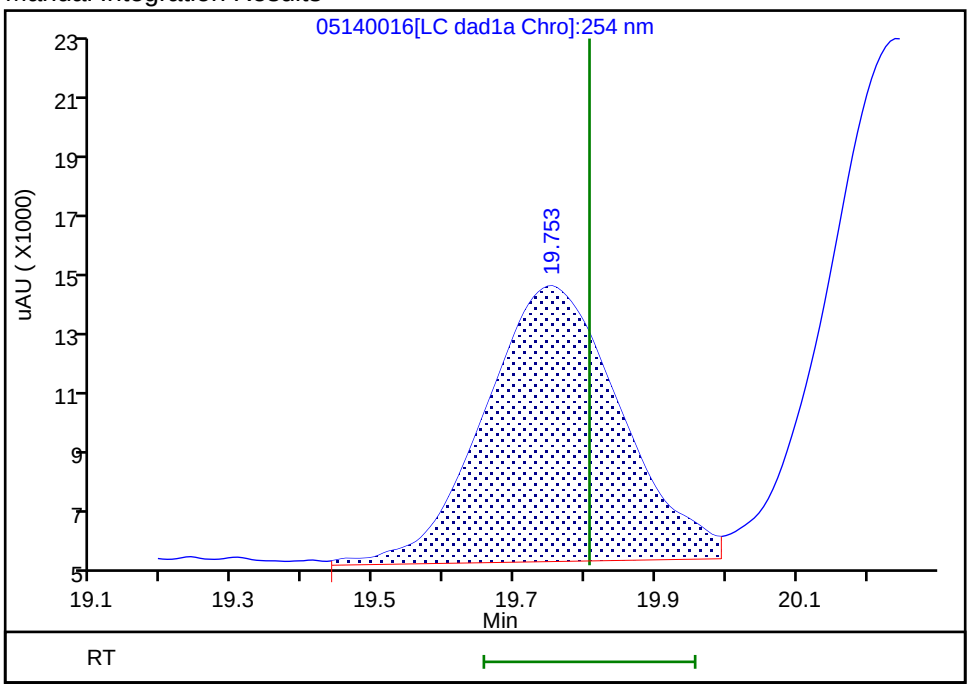
Processing Integration Results

RT: 19.75
Area: 106845
Amount: 0.315968
Amount Units: ug/ml



Manual Integration Results

RT: 19.75
Area: 121088
Amount: 0.403336
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

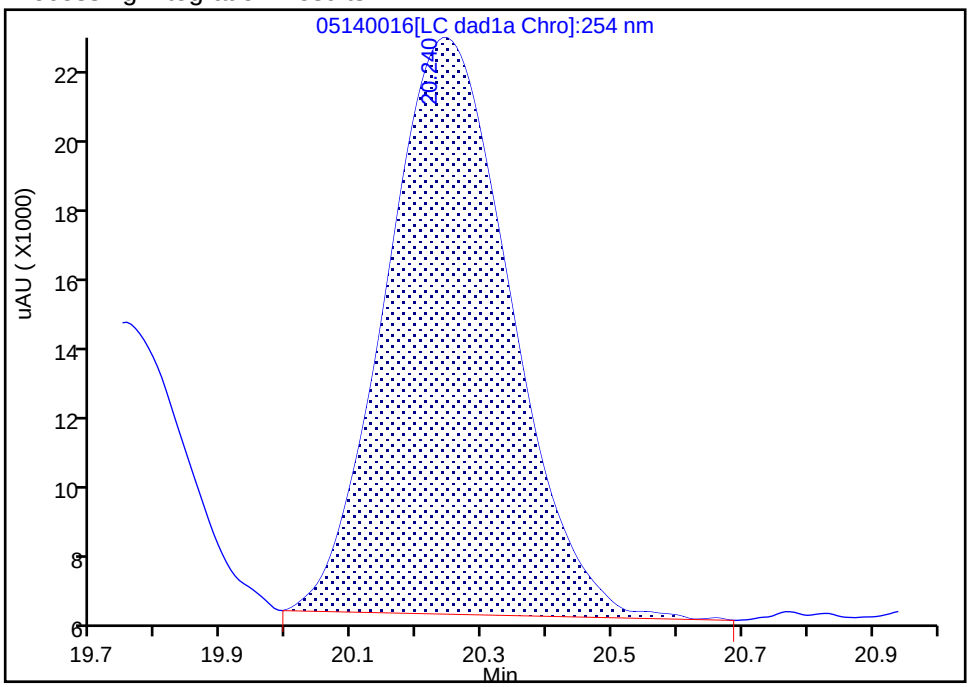
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140016.d				
Injection Date:	14-May-2020 21:31:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

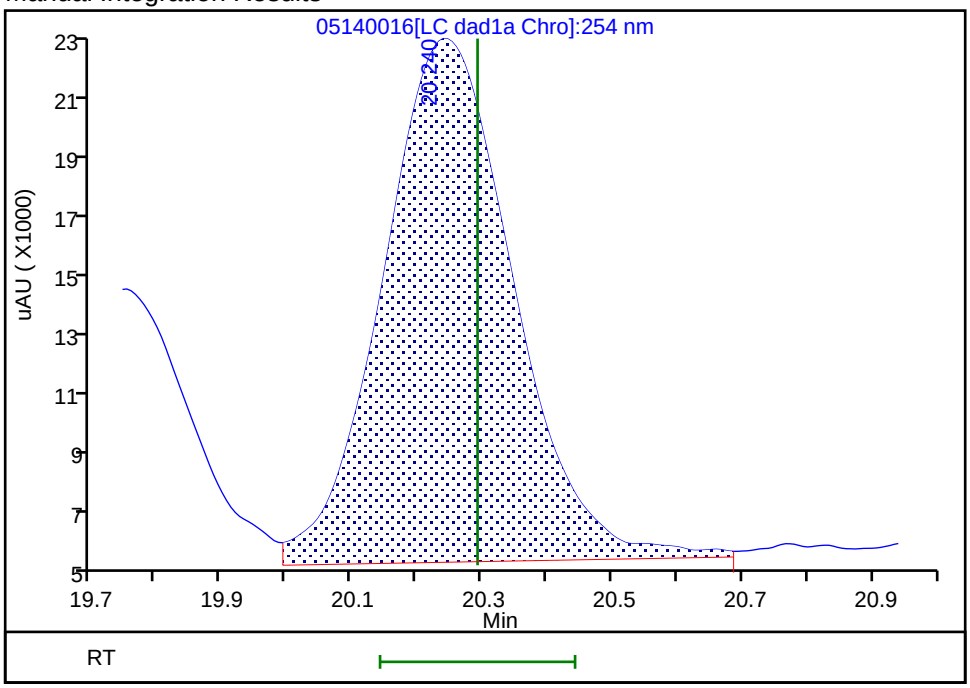
Processing Integration Results

RT: 20.24
Area: 217350
Amount: 0.339549
Amount Units: ug/ml



Manual Integration Results

RT: 20.24
Area: 236153
Amount: 0.368924
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:33:24

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-494886/26 Calibration Date: 05/15/2020 03:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 05140026.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	391496		360	400	-10.2	15.0
DNX	Ave	321206	289486		361	400	-9.9	15.0
MNX	Lin2		268209		449	467	-3.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-494886/26 Calibration Date: 05/15/2020 03:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 05140026.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.41	5.27	5.57
DNX	6.22	6.08	6.38
MNX	7.73	7.59	7.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140026.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 15-May-2020 03:21:17 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Misc. Info.: 280-0091518-026
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:01:05 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:38:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.408	5.417	-0.009	156755	0.4004	0.3597	
4 DNX	1	6.215	6.231	-0.016	115910	0.4004	0.3609	
7 MNX	1	7.728	7.744	-0.016	125200	0.4668	0.4488	

Reagents:

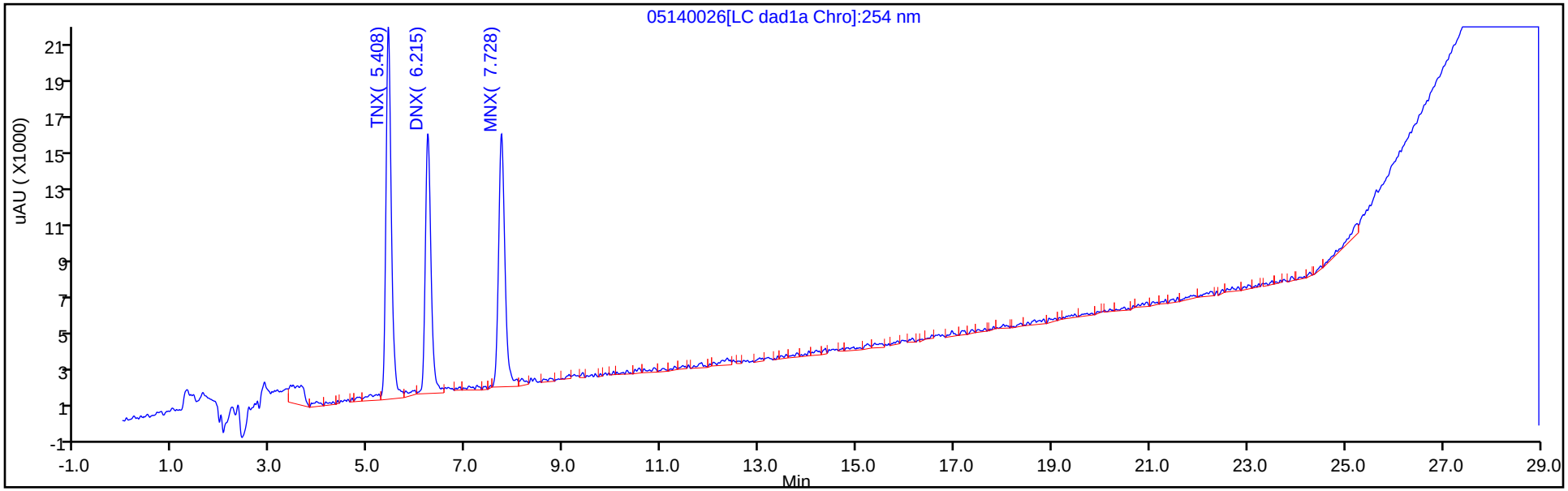
8330_OP_DMT_00008 Amount Added: 40.00 Units: uL

Report Date: 15-May-2020 12:01:06 Chrom Revision: 2.3 05-May-2020 17:48:18

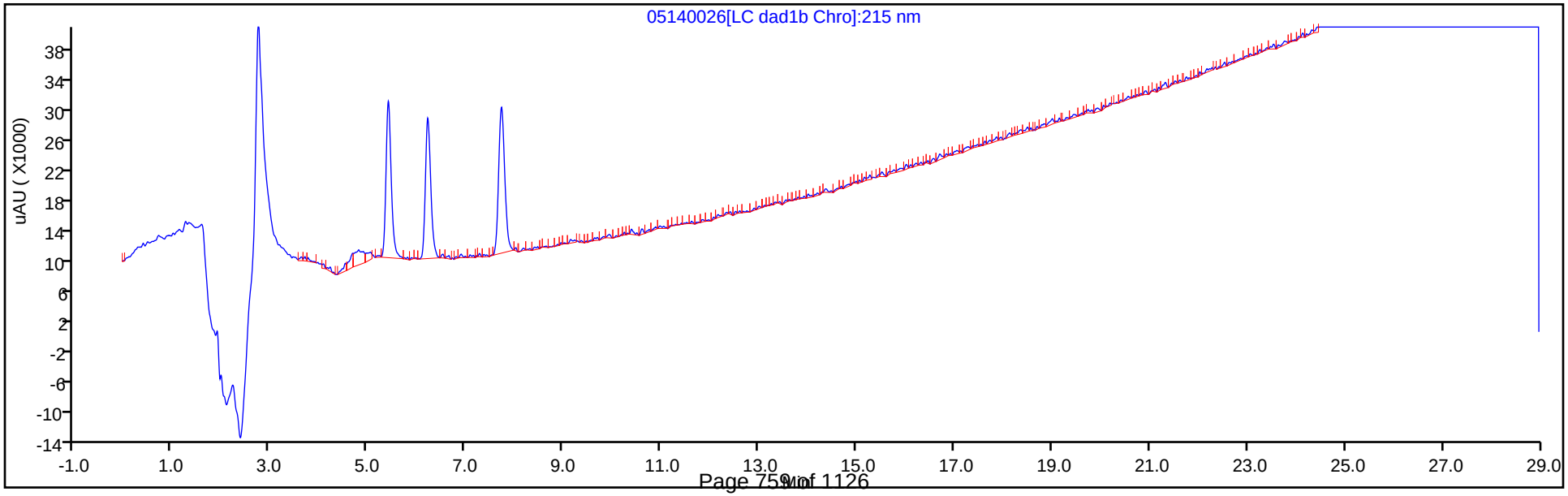
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140026.d				
Injection Date:	15-May-2020 03:21:17	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	ICV DMT			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498568/26 Calibration Date: 06/13/2020 04:22

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06120026.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		186156		233	250	-6.9	15.0
Picric acid	Ave	193810	188748		243	250	-2.6	15.0
RDX	Ave	244360	227920		233	250	-6.7	15.0
Nitrobenzene	Ave	439227	416498		238	251	-5.2	15.0
1,3-Dinitrobenzene	Ave	674189	654311		243	251	-2.9	15.0
Nitroglycerin	Ave	126803	143387		2830	2500	13.1	15.0
2-Nitrotoluene	Ave	272965	251064		230	250	-8.0	15.0
4-Nitrotoluene	Ave	240881	233106		242	251	-3.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	321550		233	250	-6.9	15.0
3-Nitrotoluene	Ave	298327	300188		252	250	0.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	460199		248	251	-1.1	15.0
1,3,5-Trinitrobenzene	Ave	472451	481972		256	251	2.0	15.0
2,6-Dinitrotoluene	Lin2		310801		254	251	1.4	15.0
2,4-Dinitrotoluene	Ave	640113	616442		242	251	-3.7	15.0
Tetryl	Ave	368678	351118		239	251	-4.8	15.0
2,4,6-Trinitrotoluene	Lin1		393171		238	251	-5.2	15.0
PETN	Lin1		141954		2530	2500	1.3	15.0
1,2-Dinitrobenzene	Lin1		293836		258	250	3.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498568/26 Calibration Date: 06/13/2020 04:22

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06120026.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	7.15	7.01	7.31
Picric acid	8.47	8.38	8.68
RDX	9.37	9.24	9.54
Nitrobenzene	12.26	12.13	12.43
1,3-Dinitrobenzene	15.80	15.68	15.98
Nitroglycerin	16.03	15.92	16.22
2-Nitrotoluene	16.73	16.60	16.90
4-Nitrotoluene	17.01	16.89	17.19
4-Amino-2,6-dinitrotoluene	17.47	17.34	17.64
3-Nitrotoluene	17.94	17.82	18.12
2-Amino-4,6-dinitrotoluene	18.41	18.28	18.58
1,3,5-Trinitrobenzene	19.14	19.00	19.30
2,6-Dinitrotoluene	20.07	19.93	20.23
2,4-Dinitrotoluene	20.58	20.45	20.75
Tetryl	23.89	23.76	24.06
2,4,6-Trinitrotoluene	24.90	24.76	25.06
PETN	25.43	25.30	25.60
1,2-Dinitrobenzene	13.27	13.14	13.44

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120026.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 13-Jun-2020 04:22:47 ALS Bottle#: 7 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092371-026
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Jun-2020 18:53:22 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1024

First Level Reviewer: zhangji Date: 16-Jun-2020 17:52:57

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	4.386	4.394	-0.008	106108	0.2500	0.2472	
2 2,4-diamino-6-nitrotoluene	1	4.986	5.008	-0.022	70199	0.2500	0.2720	
6 HMX	1	7.146	7.161	-0.015	46539	0.2500	0.2328	
5 2,4,6-Trinitrophenol	1	8.466	8.528	-0.062	47187	0.2500	0.2435	
8 RDX	1	9.372	9.387	-0.015	56980	0.2500	0.2332	
9 Nitrobenzene	1	12.259	12.281	-0.022	104541	0.2510	0.2380	
$ 10 1,2-Dinitrobenzene	1	13.266	13.294	-0.028	73459	0.2500	0.2583	
11 3,5-Dinitroaniline	1	15.212	15.241	-0.029	123477	0.2500	0.2489	M
12 1,3-Dinitrobenzene	1	15.799	15.827	-0.028	163905	0.2505	0.2431	M
13 Nitroglycerin	2	16.032	16.067	-0.035	358467	2.50	2.83	
14 o-Nitrotoluene	1	16.726	16.747	-0.021	62766	0.2500	0.2299	M
15 p-Nitrotoluene	1	17.006	17.041	-0.035	58393	0.2505	0.2424	M
16 4-Amino-2,6-dinitrotoluene	1	17.466	17.487	-0.021	80468	0.2503	0.2331	M
17 m-Nitrotoluene	1	17.939	17.967	-0.028	75122	0.2503	0.2518	M
18 2-Amino-4,6-dinitrotoluene	1	18.406	18.427	-0.021	115510	0.2510	0.2483	M
19 1,3,5-Trinitrobenzene	1	19.139	19.154	-0.015	120734	0.2505	0.2555	M
20 2,6-Dinitrotoluene	1	20.066	20.081	-0.015	78011	0.2510	0.2544	M
21 2,4-Dinitrotoluene	1	20.579	20.601	-0.022	154727	0.2510	0.2417	M
22 Tetryl	1	23.886	23.908	-0.022	87955	0.2505	0.2386	
23 2,4,6-Trinitrotoluene	1	24.899	24.914	-0.015	98686	0.2510	0.2379	
24 PETN	2	25.426	25.448	-0.022	354885	2.50	2.53	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

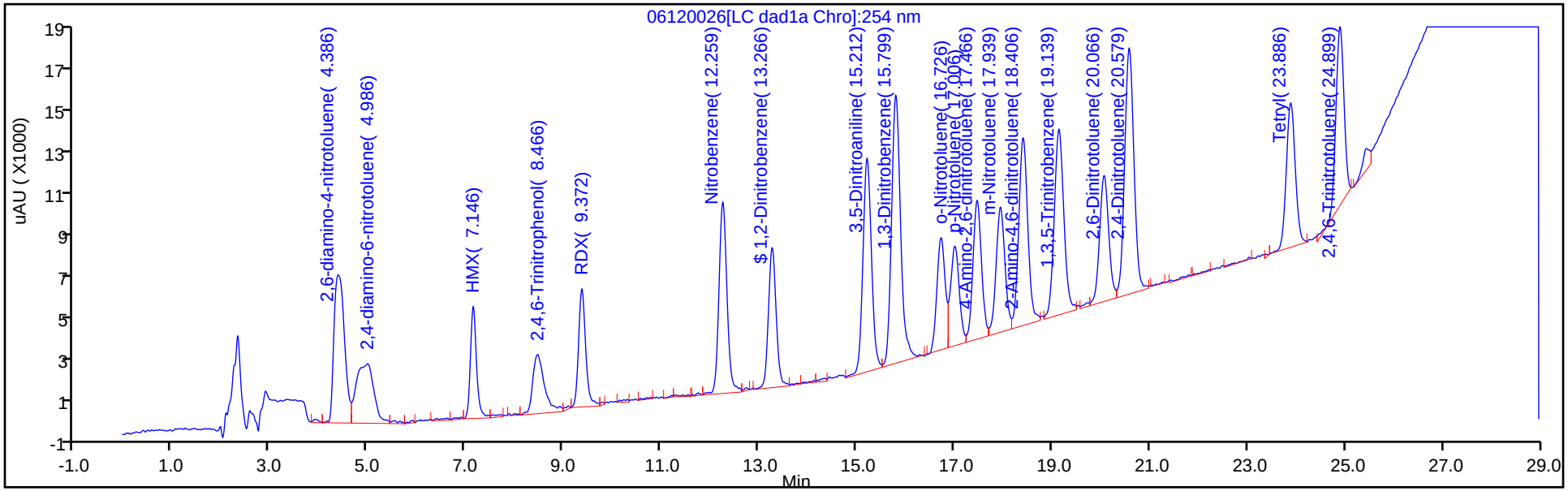
8330IntermStk_00064	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

Report Date: 16-Jun-2020 18:53:22 Chrom Revision: 2.3 10-Jun-2020 22:46:48

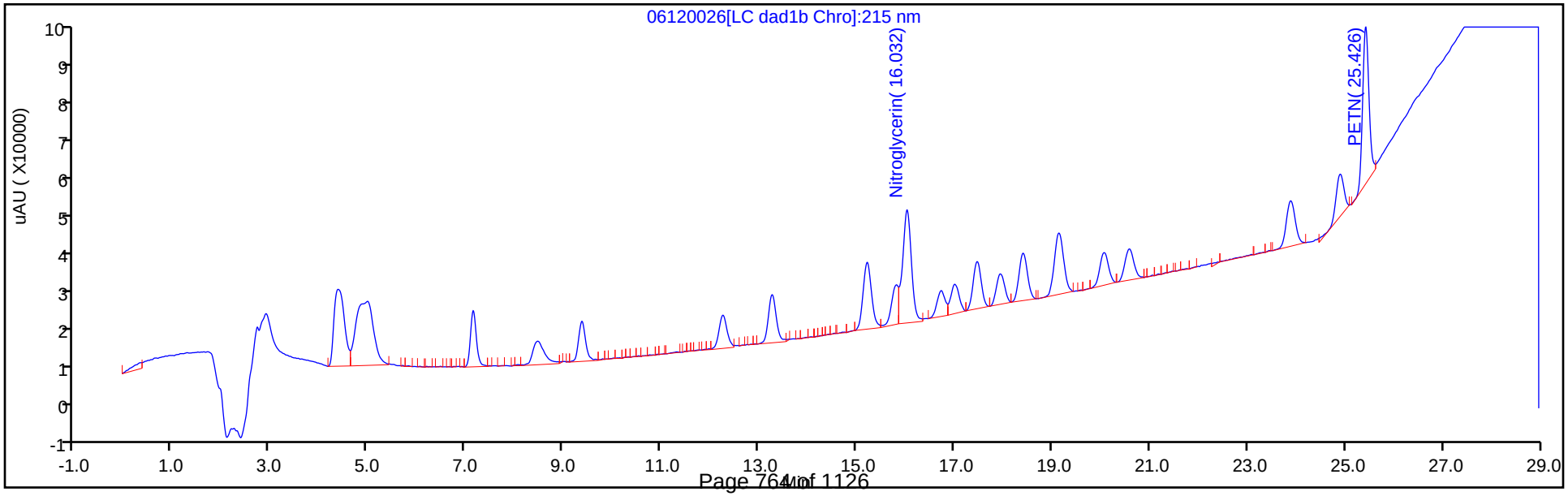
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

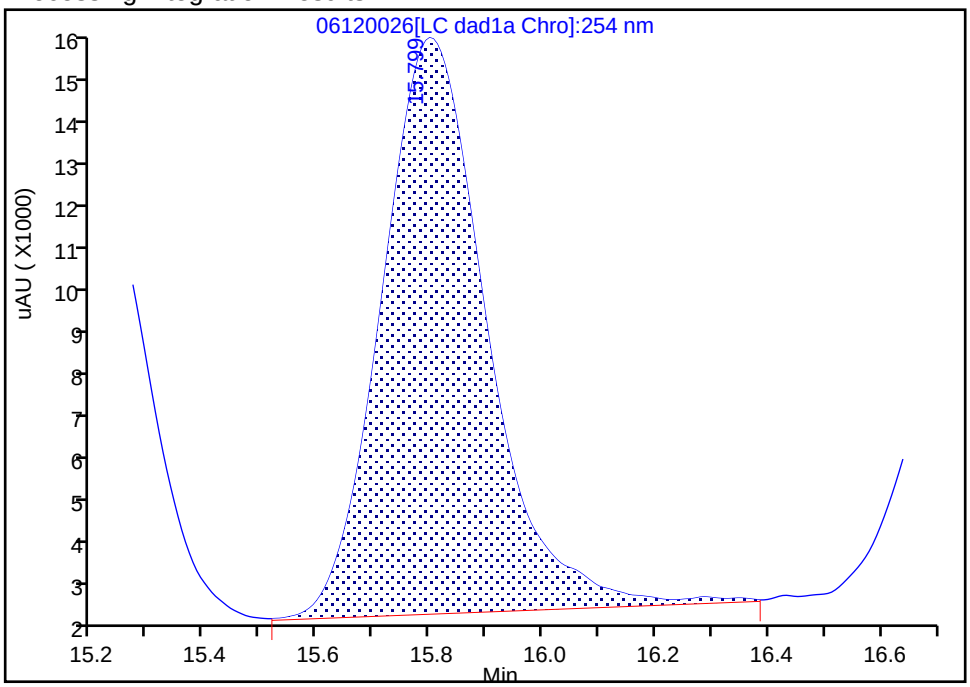
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

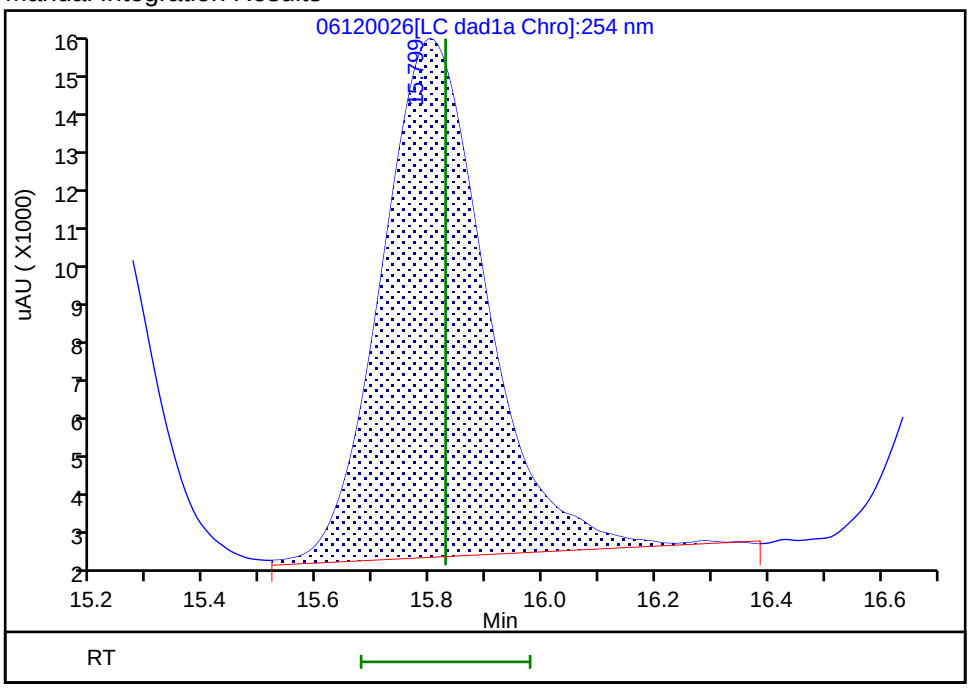
Processing Integration Results

RT: 15.80
Area: 164295
Amount: 0.243693
Amount Units: ug/ml



Manual Integration Results

RT: 15.80
Area: 163905
Amount: 0.243114
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

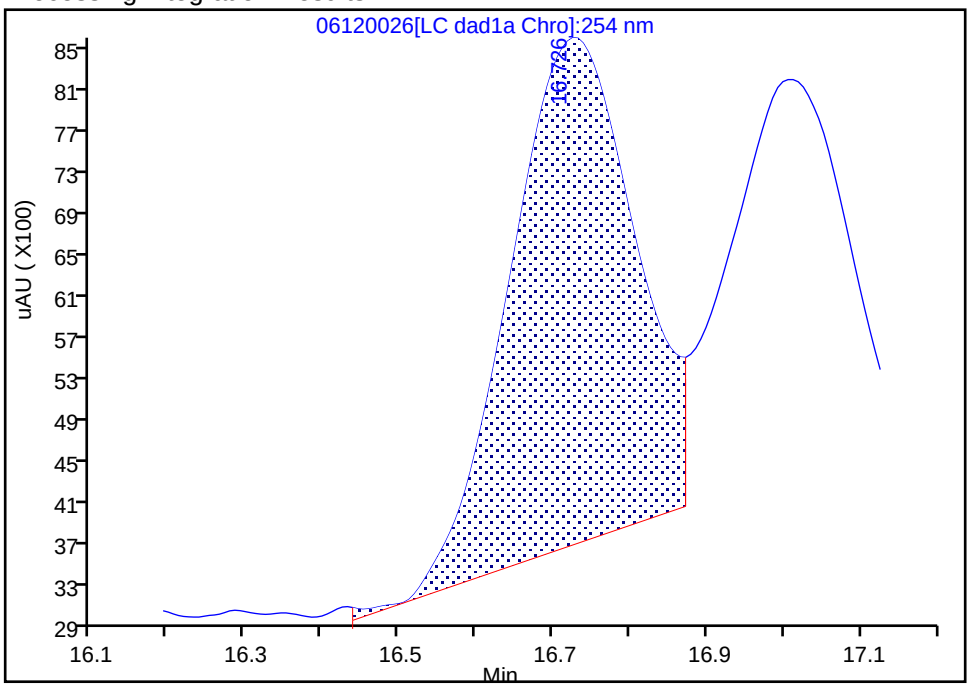
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

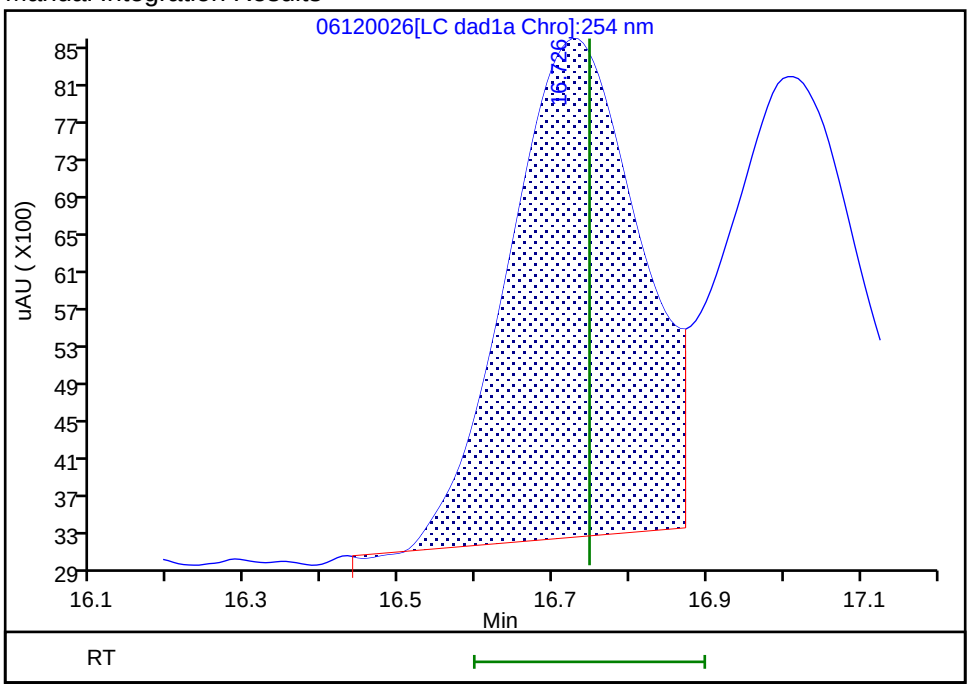
Processing Integration Results

RT: 16.73
Area: 55733
Amount: 0.204177
Amount Units: ug/ml



Manual Integration Results

RT: 16.73
Area: 62766
Amount: 0.229942
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

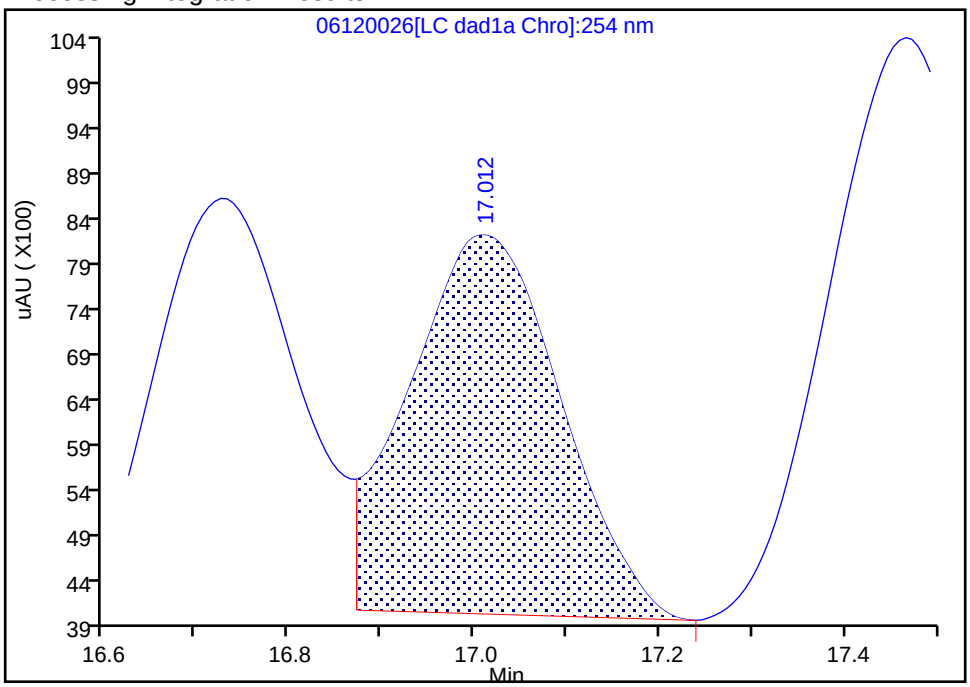
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

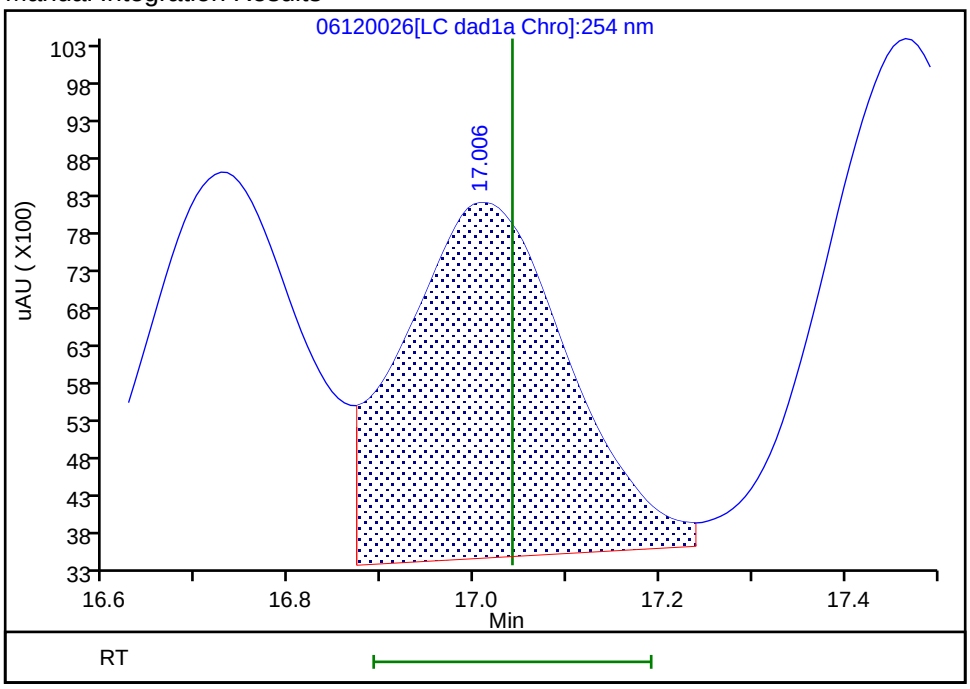
Processing Integration Results

RT: 17.01
Area: 47591
Amount: 0.197570
Amount Units: ug/ml



Manual Integration Results

RT: 17.01
Area: 58393
Amount: 0.242414
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

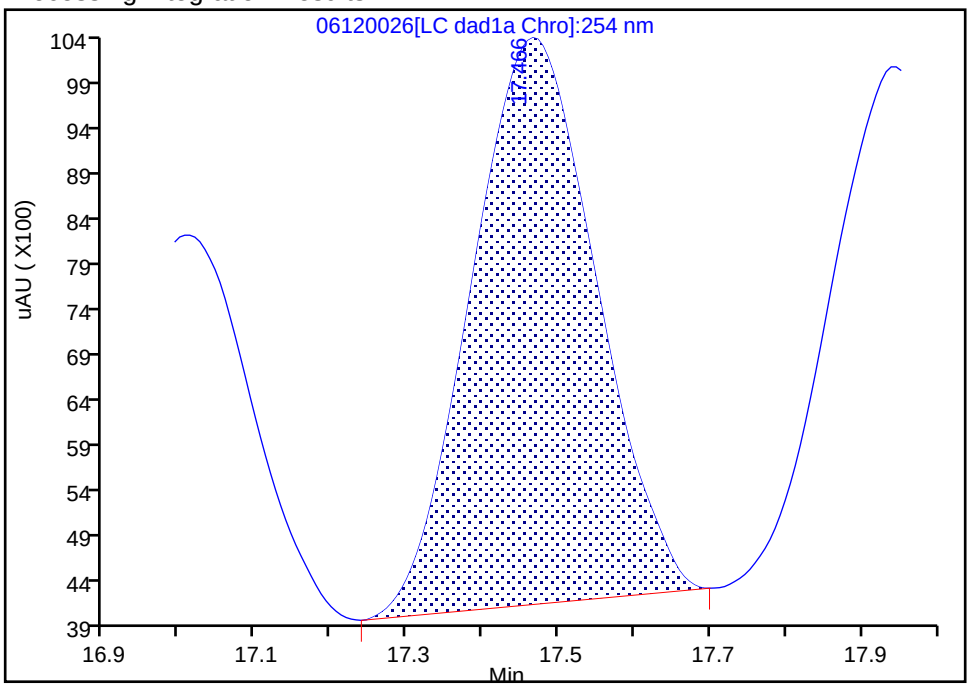
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

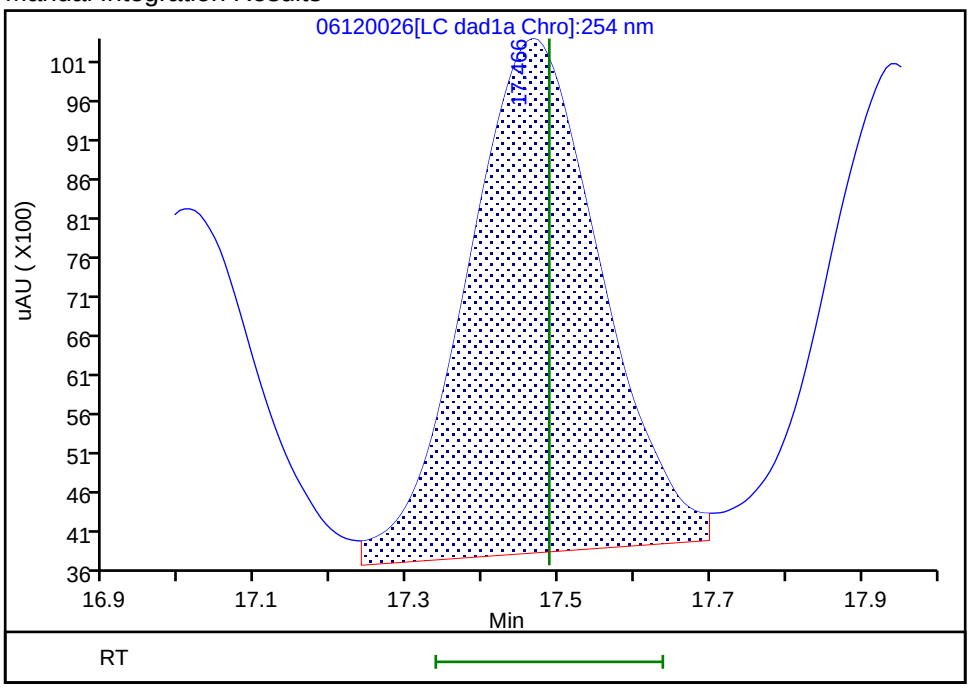
Processing Integration Results

RT: 17.47
Area: 71415
Amount: 0.206859
Amount Units: ug/ml



Manual Integration Results

RT: 17.47
Area: 80468
Amount: 0.233082
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

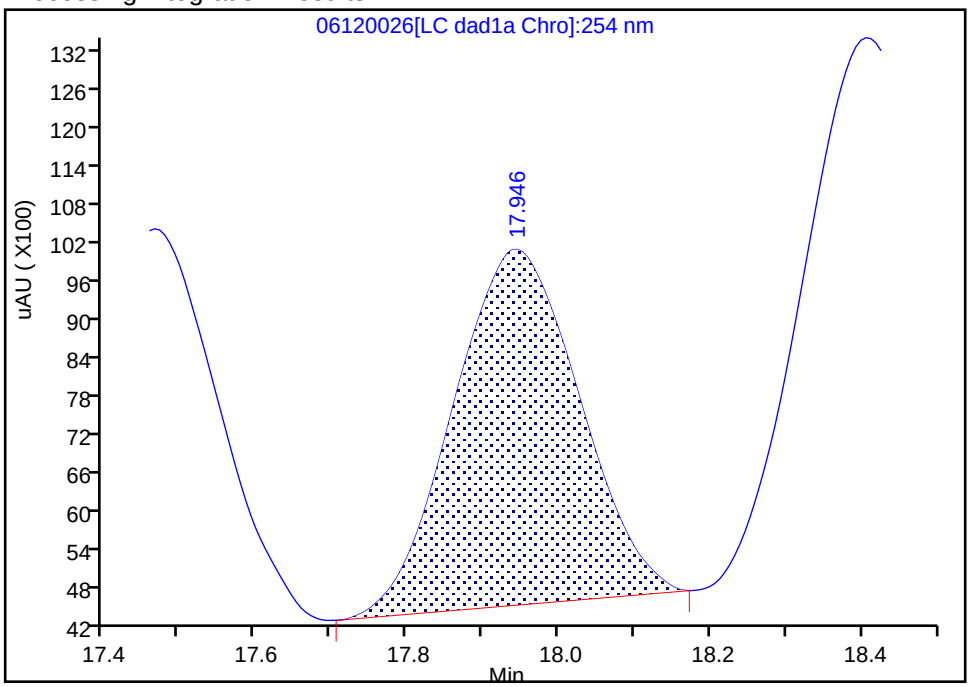
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

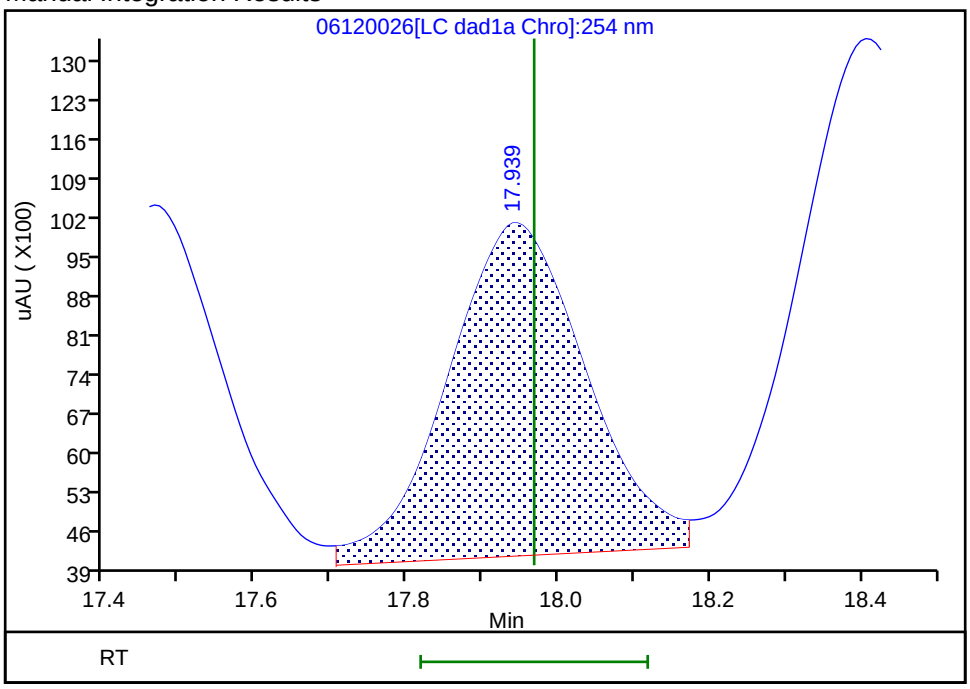
Processing Integration Results

RT: 17.95
Area: 63558
Amount: 0.213048
Amount Units: ug/ml



Manual Integration Results

RT: 17.94
Area: 75122
Amount: 0.251811
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

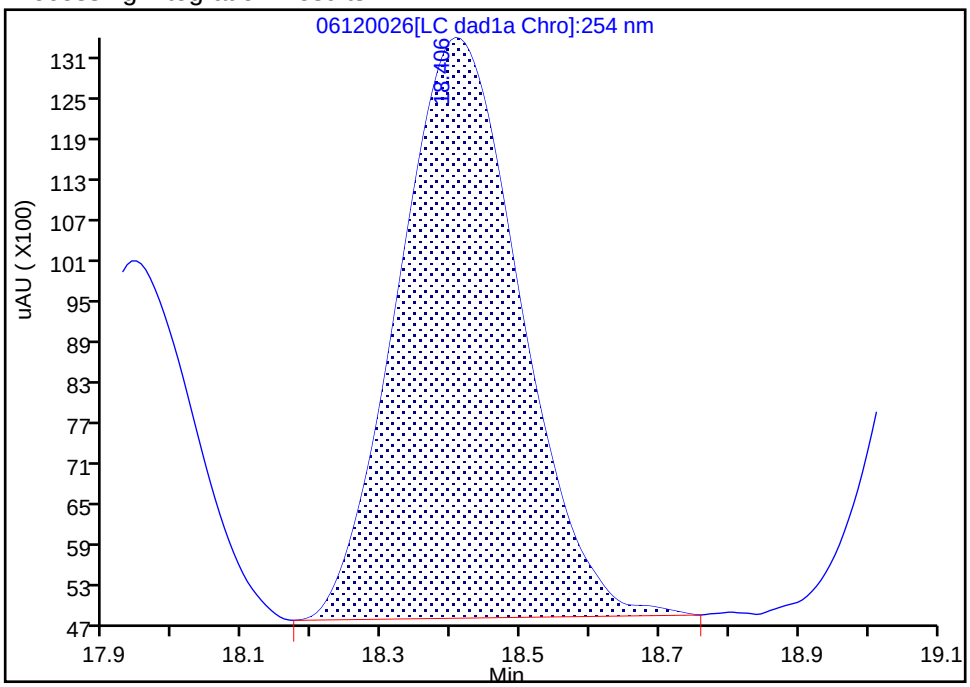
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

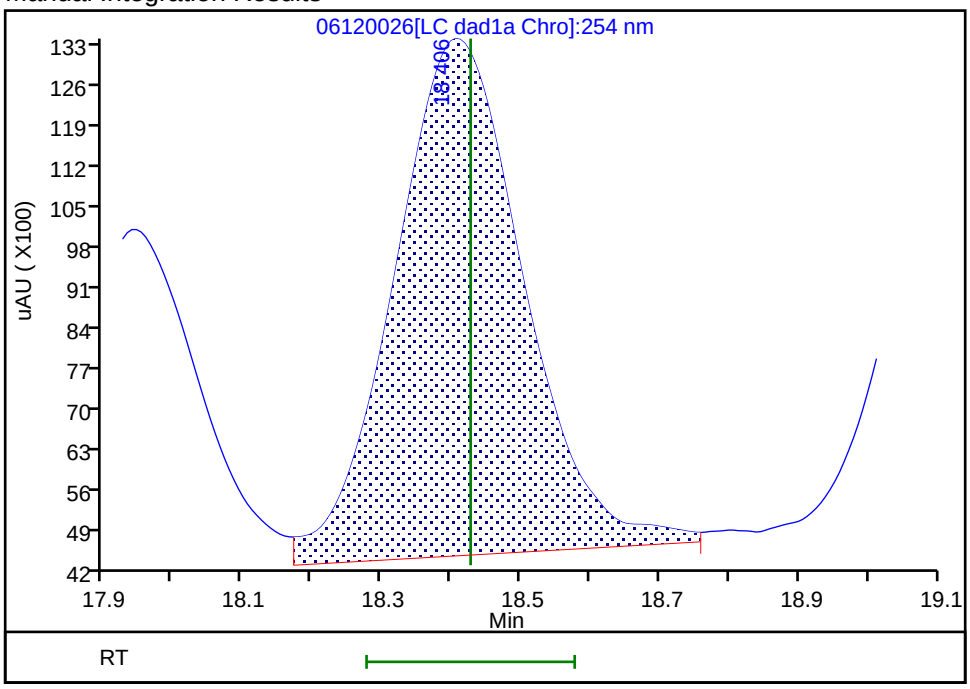
Processing Integration Results

RT: 18.41
Area: 104193
Amount: 0.223969
Amount Units: ug/ml



Manual Integration Results

RT: 18.41
Area: 115510
Amount: 0.248296
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

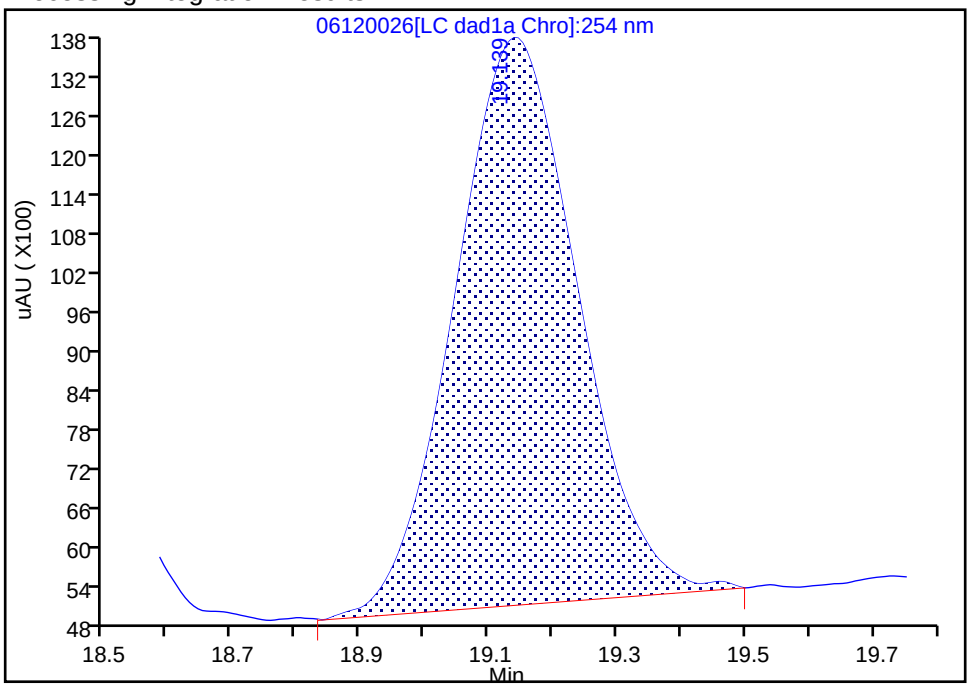
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

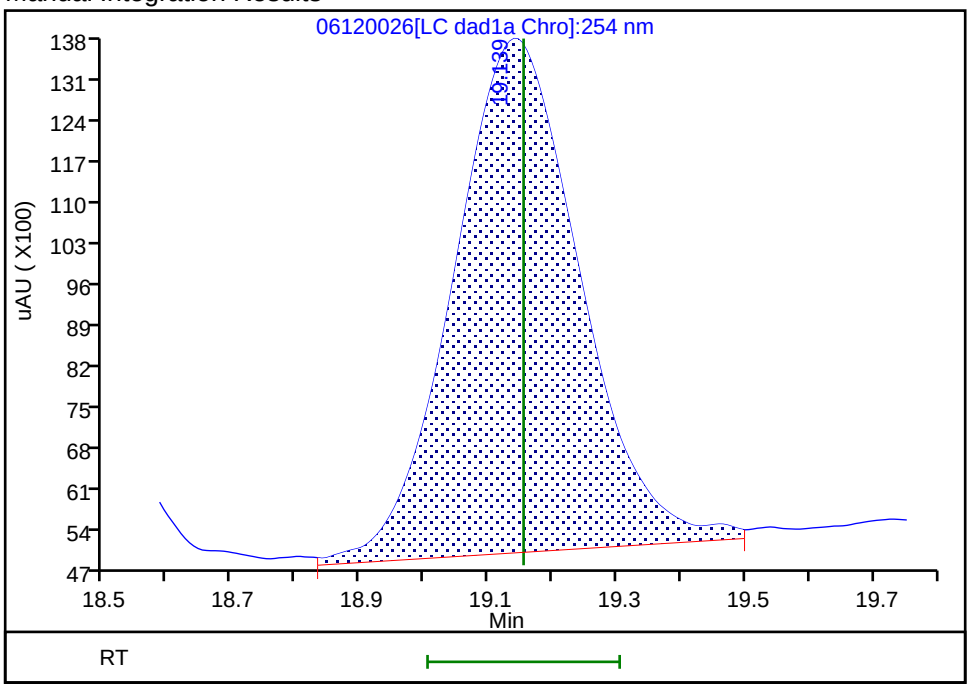
Processing Integration Results

RT: 19.14
Area: 115574
Amount: 0.244627
Amount Units: ug/ml



Manual Integration Results

RT: 19.14
Area: 120734
Amount: 0.255548
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

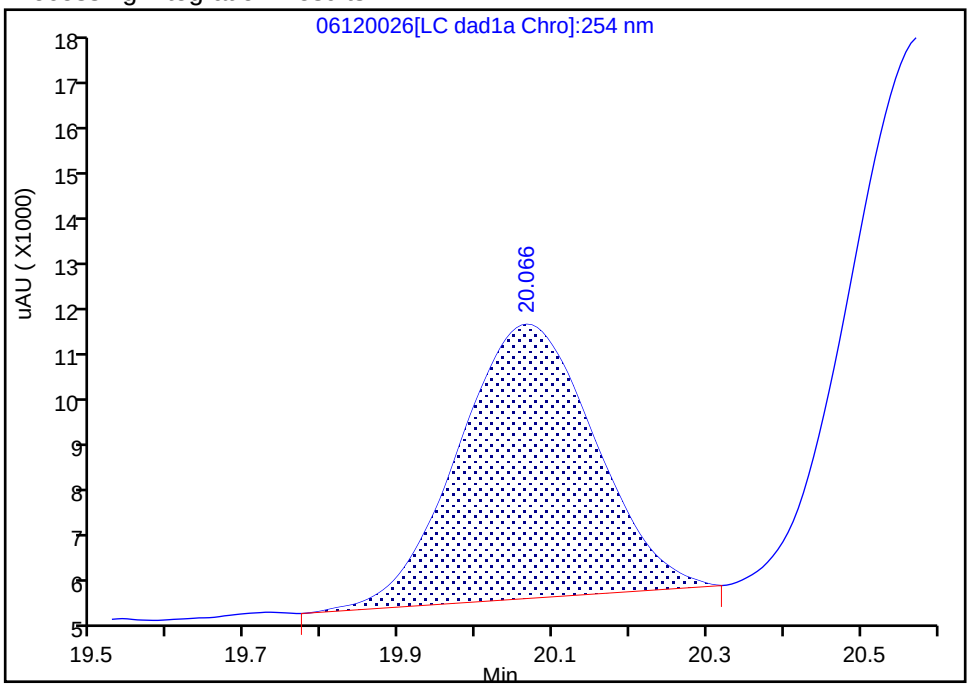
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

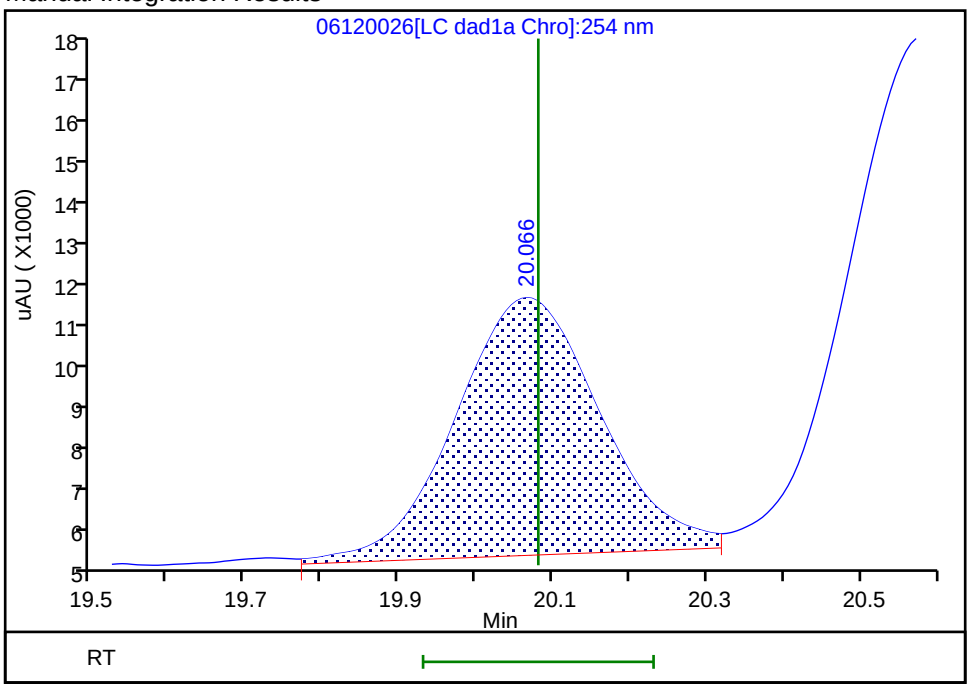
Processing Integration Results

RT: 20.07
Area: 70762
Amount: 0.229329
Amount Units: ug/ml



Manual Integration Results

RT: 20.07
Area: 78011
Amount: 0.254393
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

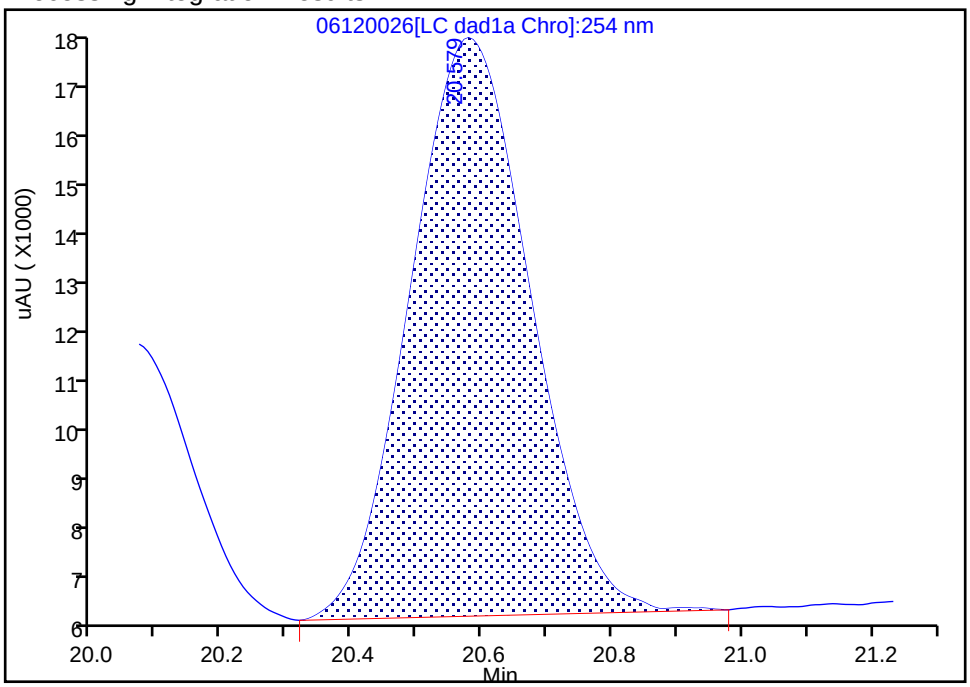
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120026.d				
Injection Date:	13-Jun-2020 04:22:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

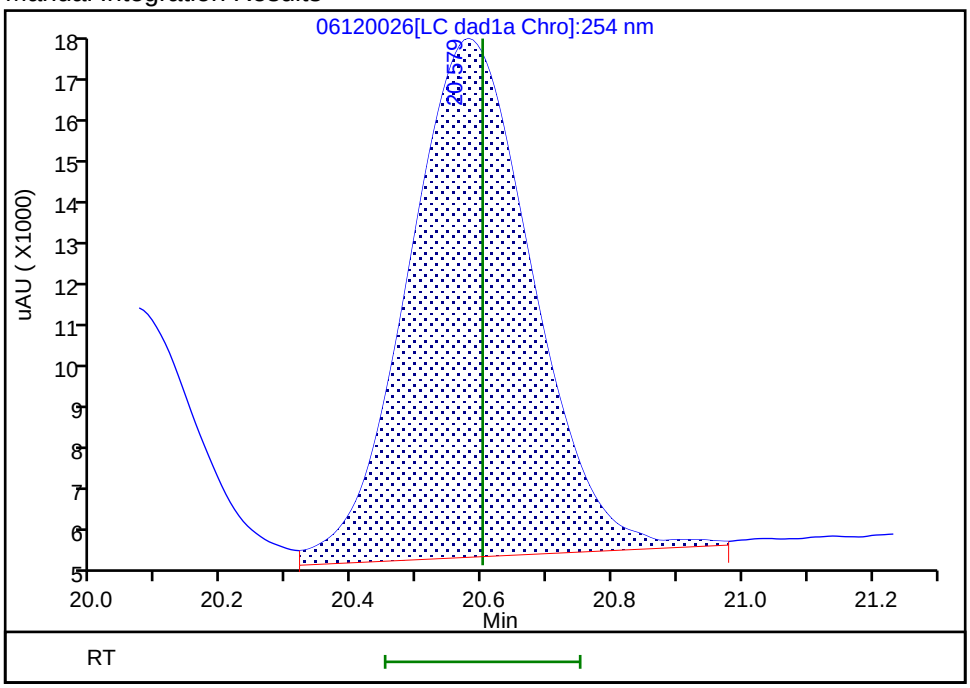
Processing Integration Results

RT: 20.58
Area: 146648
Amount: 0.229097
Amount Units: ug/ml



Manual Integration Results

RT: 20.58
Area: 154727
Amount: 0.241718
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:52:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498568/27 Calibration Date: 06/13/2020 04:57

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06120027.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	409770		235	250	-6.0	15.0
DNX	Ave	321206	307357		239	250	-4.3	15.0
MNX	Lin2		273878		279	292	-4.3	15.0

FORM VII 8330A

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498568/27 Calibration Date: 06/13/2020 04:57

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06120027.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.53	5.36	5.66
DNX	6.37	6.19	6.49
MNX	7.93	7.73	8.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120027.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	13-Jun-2020 04:57:45	ALS Bottle#:	8	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092371-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:22	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 17:53:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.527	5.509	0.018	102545	0.2503	0.2353	
4 DNX	1	6.367	6.336	0.031	76916	0.2503	0.2395	
7 MNX	1	7.927	7.876	0.051	79904	0.2918	0.2791	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

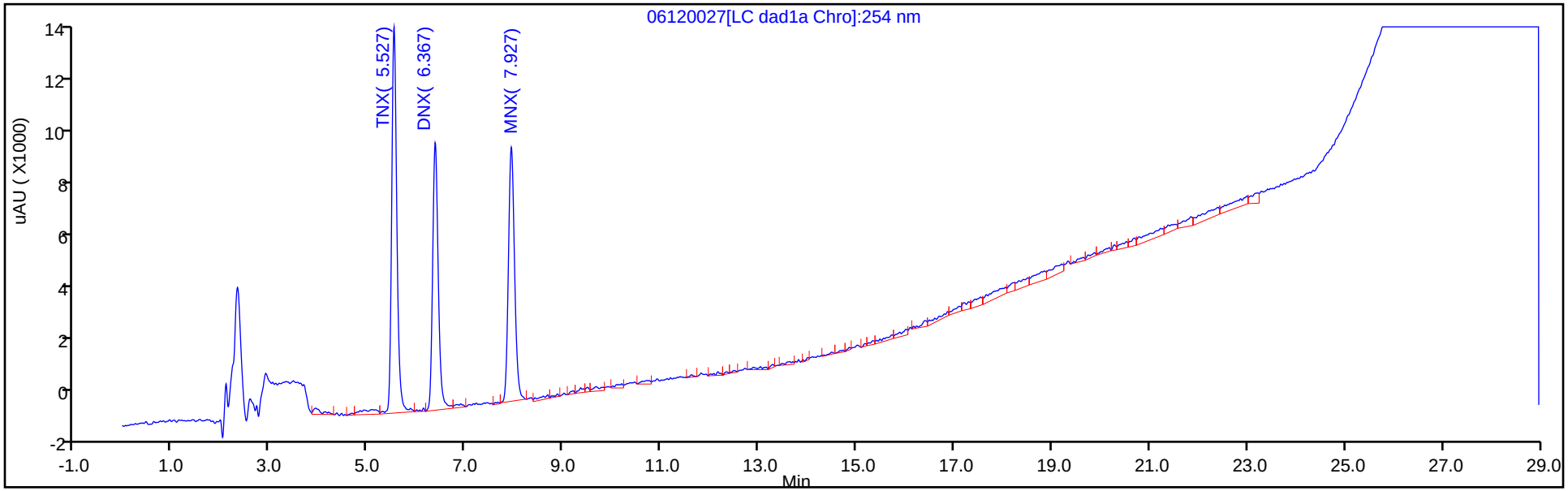
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 16-Jun-2020 18:53:22 Chrom Revision: 2.3 10-Jun-2020 22:46:48

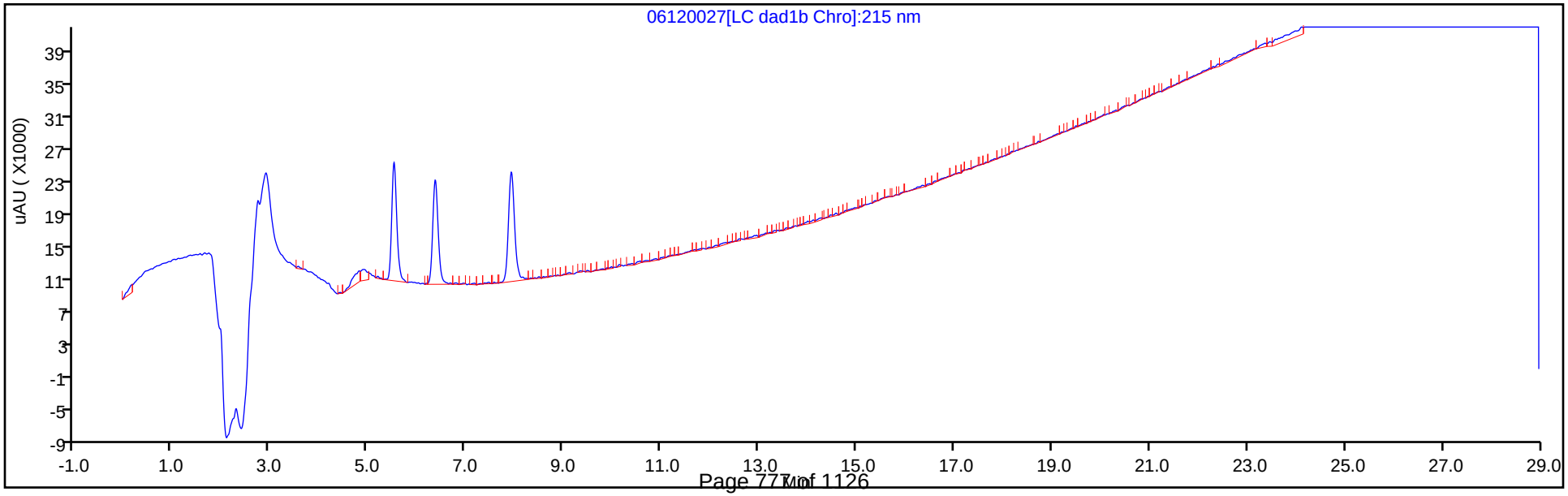
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120027.d				
Injection Date:	13-Jun-2020 04:57:45	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

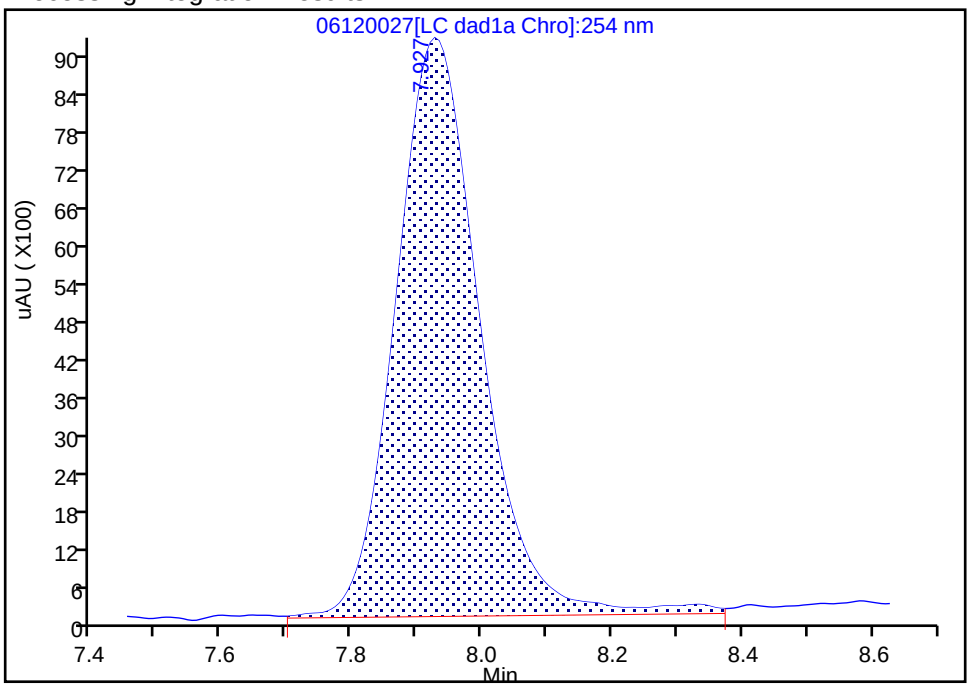
Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120027.d				
Injection Date:	13-Jun-2020 04:57:45	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	8	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

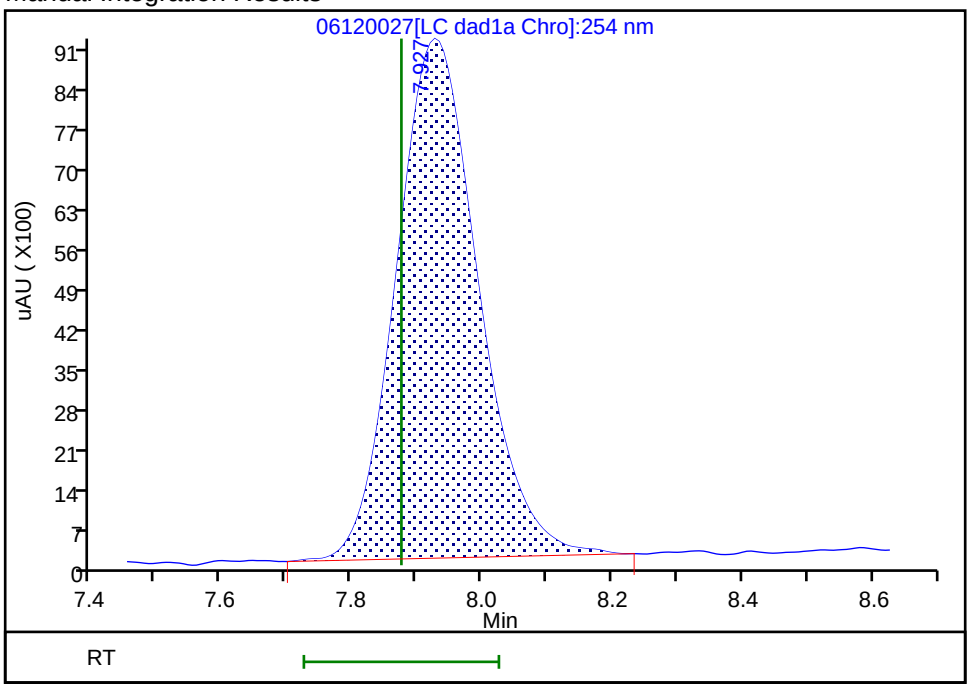
Processing Integration Results

RT: 7.93
Area: 83121
Amount: 0.291171
Amount Units: ug/ml



Manual Integration Results

RT: 7.93
Area: 79904
Amount: 0.279117
Amount Units: ug/ml



Reviewer: zhangji, 16-Jun-2020 17:53:05

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498568/35 Calibration Date: 06/13/2020 09:37

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06120035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		199880		252	250	0.9	15.0
Picric acid	Ave	193810	177068		228	250	-8.6	15.0
RDX	Ave	244360	225848		231	250	-7.6	15.0
Nitrobenzene	Ave	439227	415701		238	251	-5.4	15.0
1,3-Dinitrobenzene	Ave	674189	681968		253	251	1.2	15.0
Nitroglycerin	Ave	126803	126098		2490	2500	-0.6	15.0
2-Nitrotoluene	Ave	272965	249300		228	250	-8.7	15.0
4-Nitrotoluene	Ave	240881	221242		230	251	-8.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	345235	324476		235	250	-6.0	15.0
3-Nitrotoluene	Ave	298327	297982		250	250	-0.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	465211	471398		254	251	1.3	15.0
1,3,5-Trinitrobenzene	Ave	472451	513345		272	251	8.7	15.0
2,6-Dinitrotoluene	Lin2		303084		248	251	-1.3	15.0
2,4-Dinitrotoluene	Ave	640113	651625		256	251	1.8	15.0
Tetryl	Ave	368678	356862		242	251	-3.2	15.0
2,4,6-Trinitrotoluene	Lin1		398231		241	251	-4.0	15.0
PETN	Lin1		140033		2500	2500	-0.2	15.0
1,2-Dinitrobenzene	Lin1		300800		265	250	5.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498568/35 Calibration Date: 06/13/2020 09:37

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 16:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/14/2020 20:56

Lab File ID: 06120035.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	7.14	7.01	7.31
Picric acid	8.41	8.38	8.68
RDX	9.36	9.24	9.54
Nitrobenzene	12.25	12.13	12.43
1,3-Dinitrobenzene	15.79	15.68	15.98
Nitroglycerin	16.03	15.92	16.22
2-Nitrotoluene	16.72	16.60	16.90
4-Nitrotoluene	17.00	16.89	17.19
4-Amino-2,6-dinitrotoluene	17.44	17.34	17.64
3-Nitrotoluene	17.93	17.82	18.12
2-Amino-4,6-dinitrotoluene	18.38	18.28	18.58
1,3,5-Trinitrobenzene	19.12	19.00	19.30
2,6-Dinitrotoluene	20.04	19.93	20.23
2,4-Dinitrotoluene	20.56	20.45	20.75
Tetryl	23.86	23.76	24.06
2,4,6-Trinitrotoluene	24.88	24.76	25.06
PETN	25.42	25.30	25.60
1,2-Dinitrobenzene	13.26	13.14	13.44

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120035.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 13-Jun-2020 09:37:39 ALS Bottle#: 7 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0092371-035
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Jun-2020 18:53:19 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1024

	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	4.391	4.394	-0.003	107262	0.2500	0.2498	
2	2,4-diamino-6-nitrotoluene	1	4.984	5.008	-0.024	68278	0.2500	0.2639	
6	HMX	1	7.144	7.161	-0.017	49970	0.2500	0.2522	
5	2,4,6-Trinitrophenol	1	8.411	8.528	-0.117	44267	0.2500	0.2284	
8	RDX	1	9.364	9.387	-0.023	56462	0.2500	0.2311	
9	Nitrobenzene	1	12.251	12.281	-0.030	104341	0.2510	0.2376	
$ 10	1,2-Dinitrobenzene	1	13.257	13.294	-0.037	75200	0.2500	0.2646	
11	3,5-Dinitroaniline	1	15.197	15.241	-0.044	124993	0.2500	0.2520	
12	1,3-Dinitrobenzene	1	15.791	15.827	-0.036	170833	0.2505	0.2534	
13	Nitroglycerin	2	16.031	16.067	-0.036	315246	2.50	2.49	
14	o-Nitrotoluene	1	16.717	16.747	-0.030	62325	0.2500	0.2283	
15	p-Nitrotoluene	1	17.004	17.041	-0.037	55421	0.2505	0.2301	
16	4-Amino-2,6-dinitrotoluene	1	17.444	17.487	-0.043	81200	0.2503	0.2352	
17	m-Nitrotoluene	1	17.931	17.967	-0.036	74570	0.2503	0.2500	
18	2-Amino-4,6-dinitrotoluene	1	18.377	18.427	-0.050	118321	0.2510	0.2543	
19	1,3,5-Trinitrobenzene	1	19.117	19.154	-0.037	128593	0.2505	0.2722	
20	2,6-Dinitrotoluene	1	20.044	20.081	-0.037	76074	0.2510	0.2477	
21	2,4-Dinitrotoluene	1	20.557	20.601	-0.044	163558	0.2510	0.2555	
22	Tetryl	1	23.857	23.908	-0.051	89394	0.2505	0.2425	
23	2,4,6-Trinitrotoluene	1	24.877	24.914	-0.037	99956	0.2510	0.2410	
24	PETN	2	25.417	25.448	-0.031	350082	2.50	2.50	

Reagents:

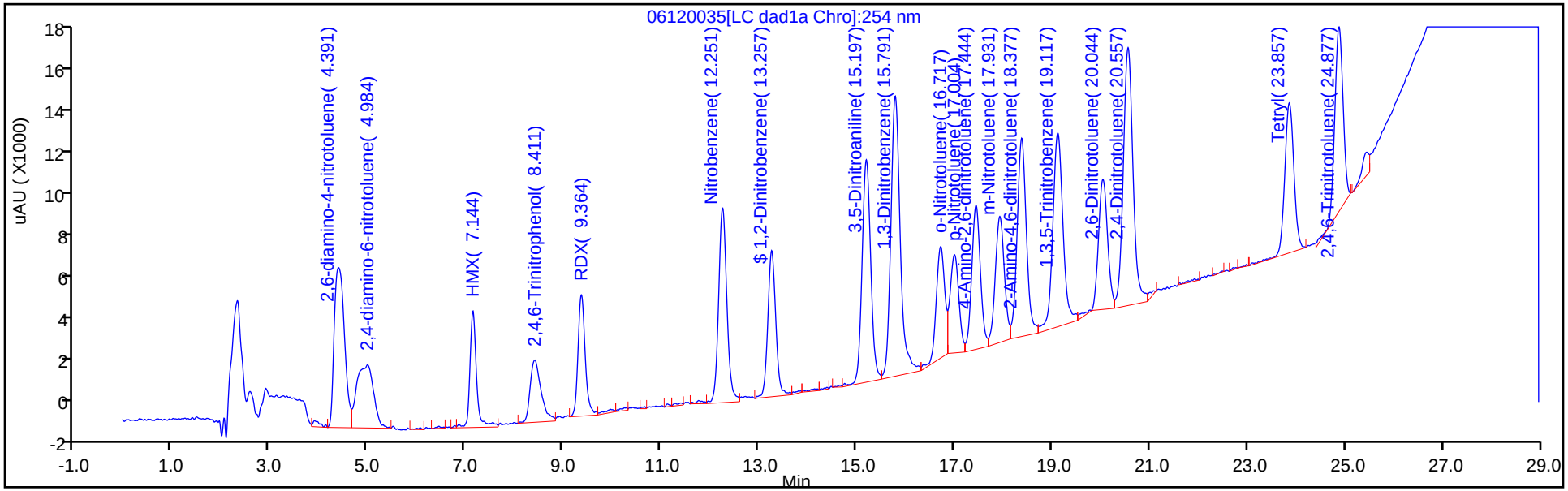
8330IntermStk_00064 Amount Added: 25.00 Units: uL
8330_ADDs_00027 Amount Added: 12.50 Units: uL

Report Date: 16-Jun-2020 18:53:19 Chrom Revision: 2.3 10-Jun-2020 22:46:48

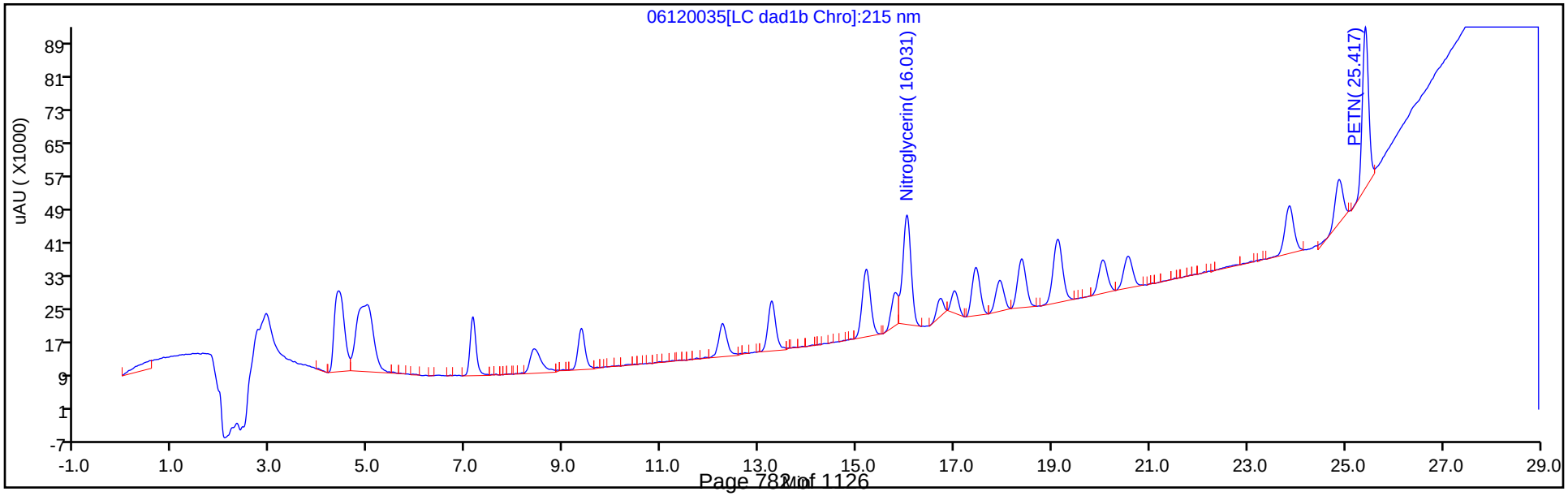
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120035.d				
Injection Date:	13-Jun-2020 09:37:39	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	35
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.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498568/36 Calibration Date: 06/13/2020 10:12

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06120036.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	435816	398937		229	250	-8.5	15.0
DNX	Ave	321206	307257		239	250	-4.3	15.0
MNX	Lin2		288884		296	292	1.3	15.0

FORM VII 8330A

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498568/36 Calibration Date: 06/13/2020 10:12

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/14/2020 22:06

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/15/2020 02:46

Lab File ID: 06120036.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.52	5.36	5.66
DNX	6.36	6.19	6.49
MNX	7.92	7.73	8.03

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\06120036.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	13-Jun-2020 10:12:35	ALS Bottle#:	8	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092371-036				
Operator ID:	JZ	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20200612-92371.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:53:18	Calib Date:	15-May-2020 02:11:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1024				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.522	5.509	0.013	99834	0.2503	0.2291	
4 DNX	1	6.362	6.336	0.026	76891	0.2503	0.2394	
7 MNX	1	7.922	7.876	0.046	84282	0.2918	0.2955	

Reagents:

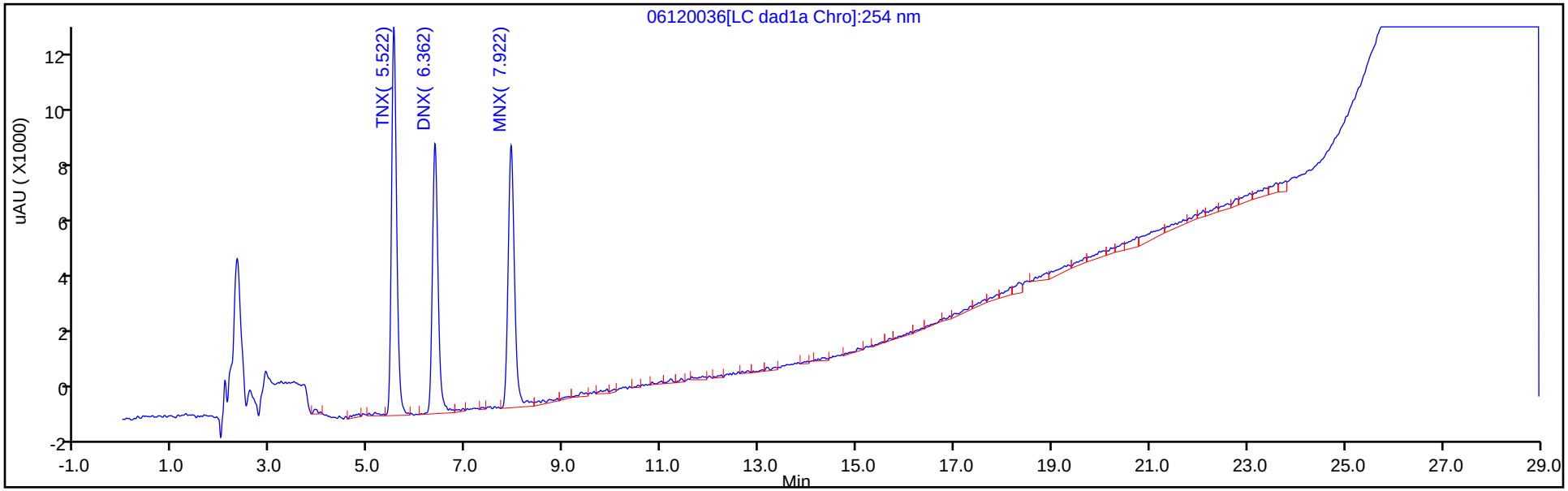
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 16-Jun-2020 18:53:18 Chrom Revision: 2.3 10-Jun-2020 22:46:48

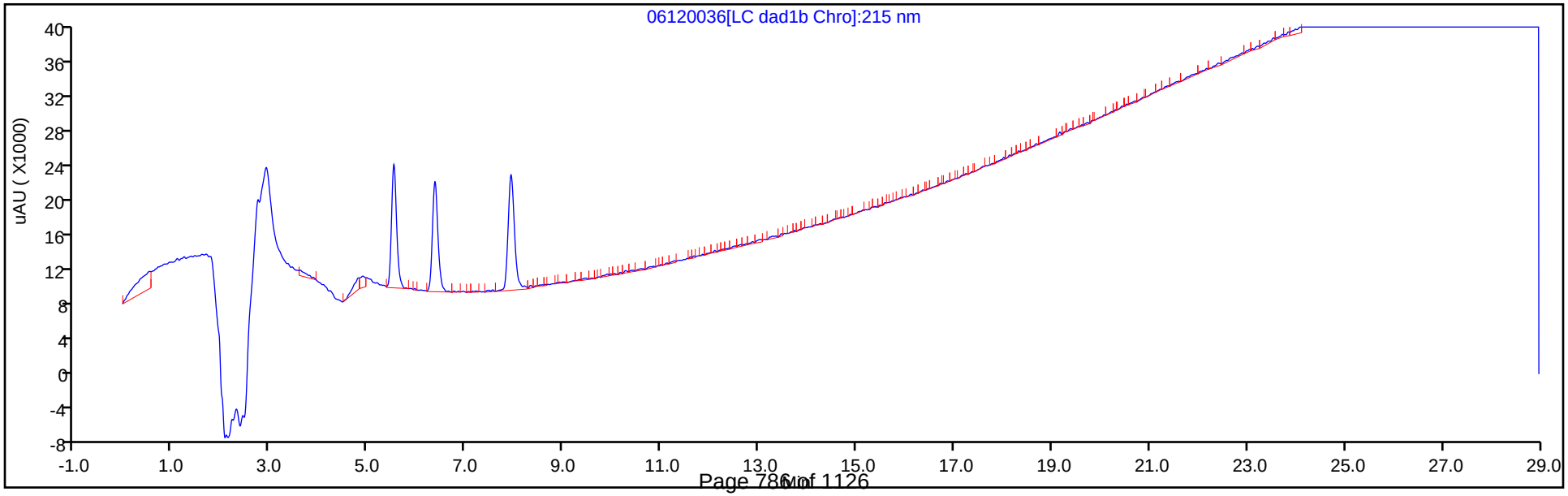
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20200612-92371.b\06120036.d				
Injection Date:	13-Jun-2020 10:12:35	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	36
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	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.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-487658/33 Calibration Date: 03/05/2020 00:03

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	189186		348	400	-13.1	15.0
DNX	Ave	152928	145270		380	400	-5.0	15.0
MNX	Ave	158544	136780		403	467	-13.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-487658/33 Calibration Date: 03/05/2020 00:03

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040033.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	05-Mar-2020 00:03:48	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0089779-033				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:					
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:28	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:37:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.594	6.594	0.000	75750	0.4004	0.3481	M
5 DNX	1	6.914	6.914	0.000	58166	0.4004	0.3803	M
6 MNX	1	7.361	7.361	0.000	63849	0.4668	0.4027	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

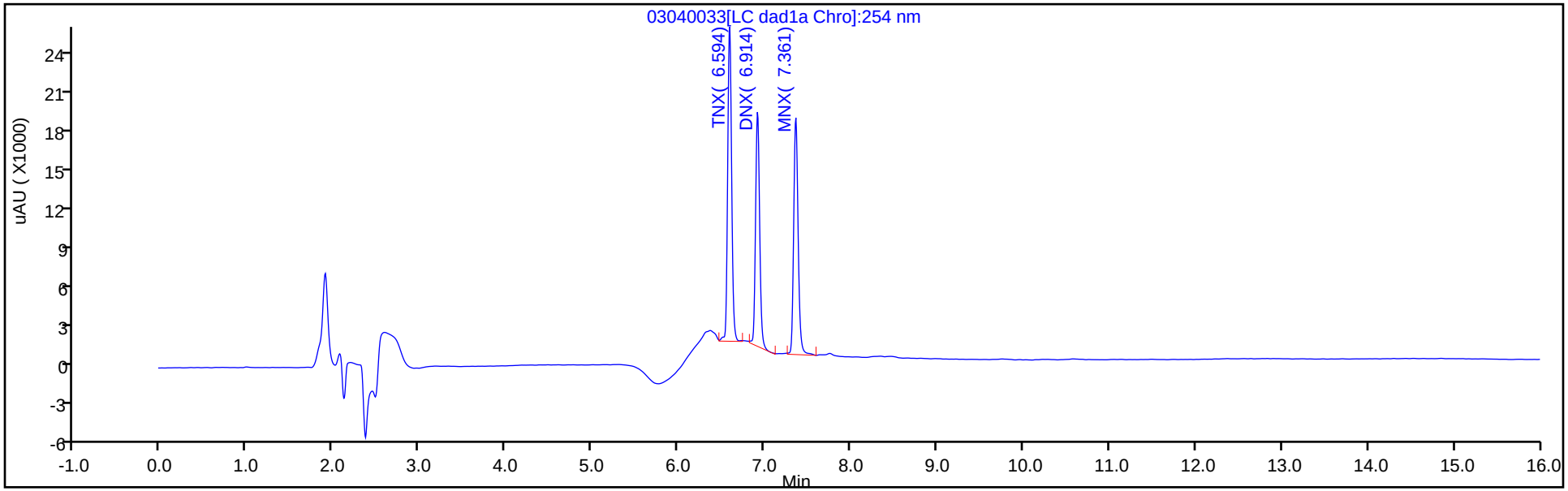
8330_OP_DMT_00006 Amount Added: 40.00 Units: uL

Report Date: 06-Mar-2020 10:25:29 Chrom Revision: 2.3 19-Feb-2020 16:45:46

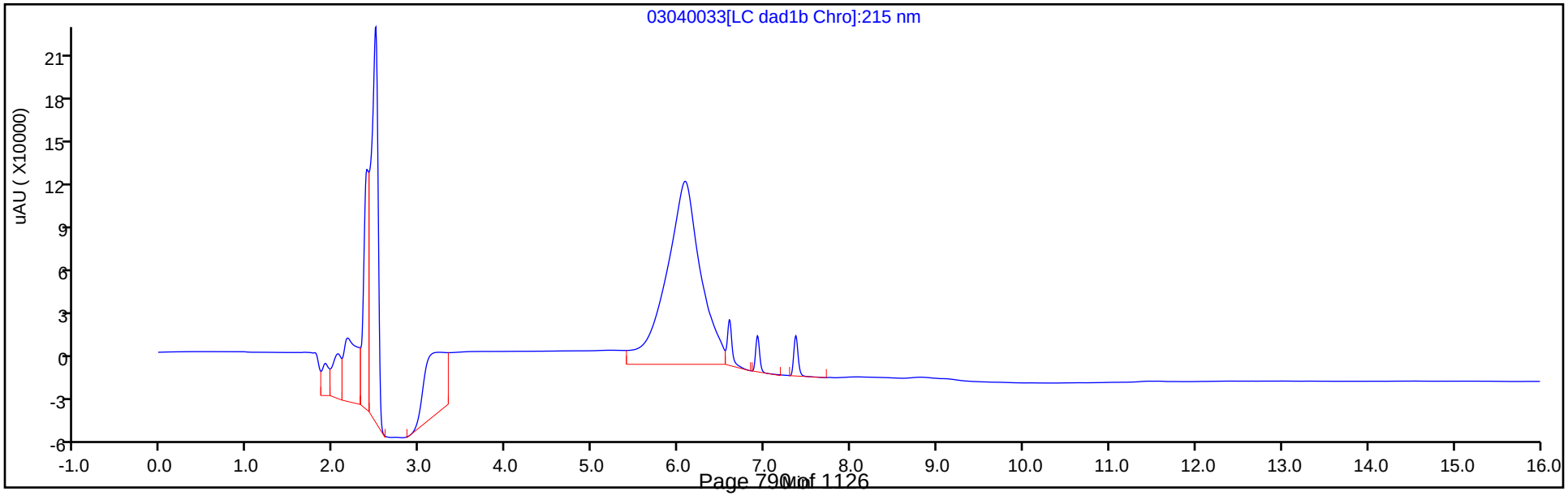
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	ICV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

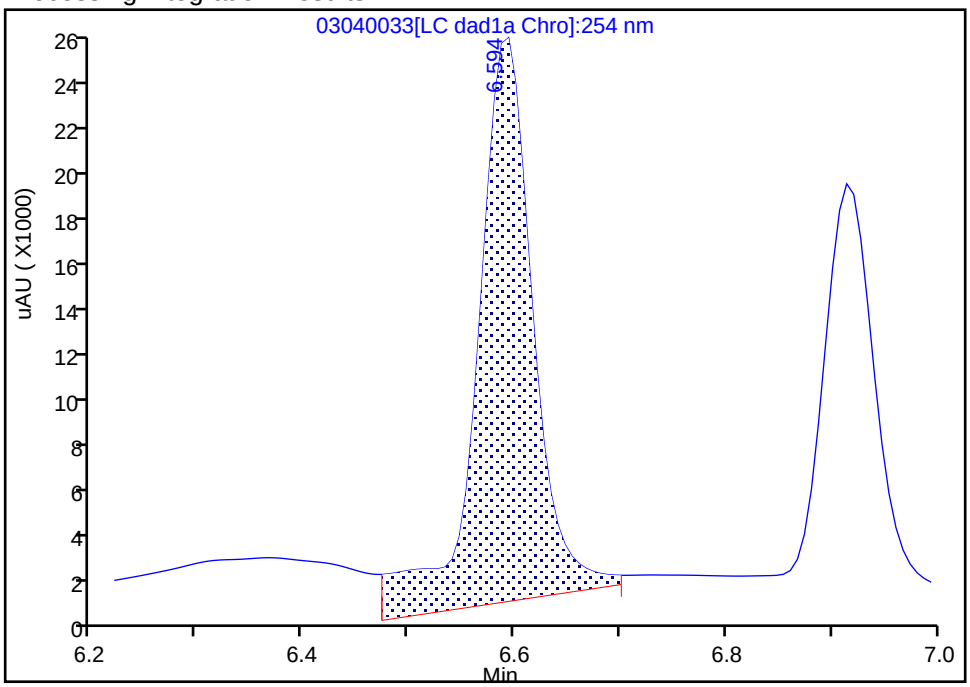
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

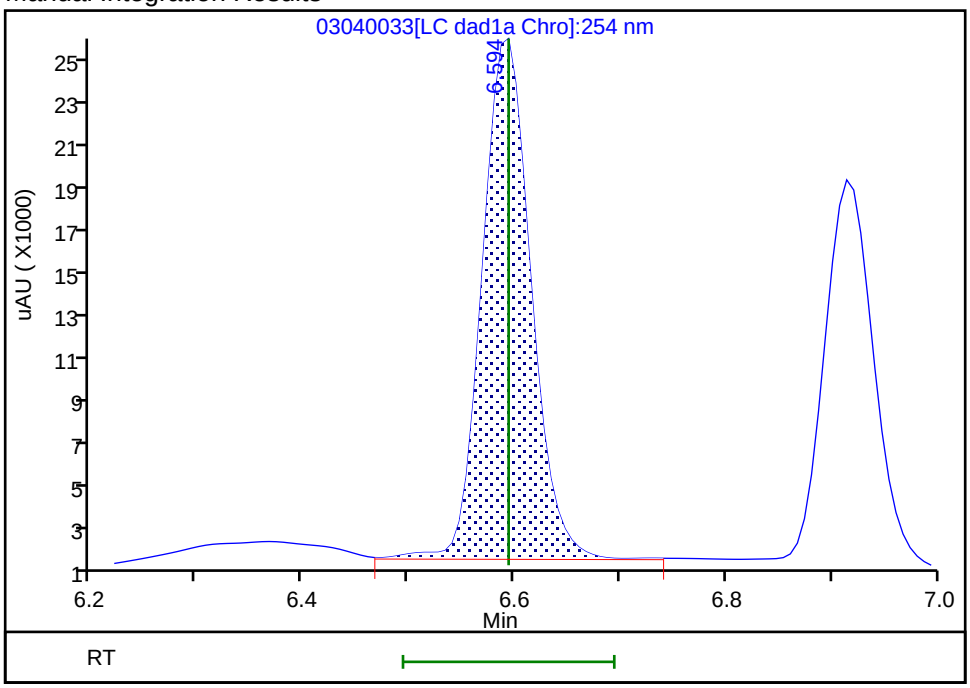
Processing Integration Results

RT: 6.59
Area: 91215
Amount: 0.419170
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 75750
Amount: 0.348102
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:37:32

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

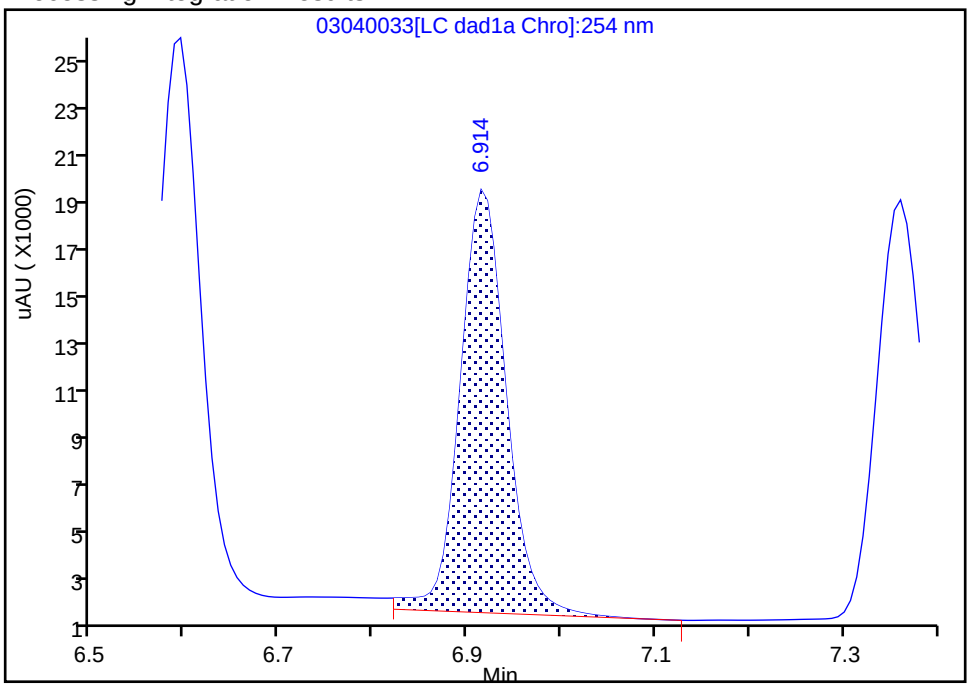
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

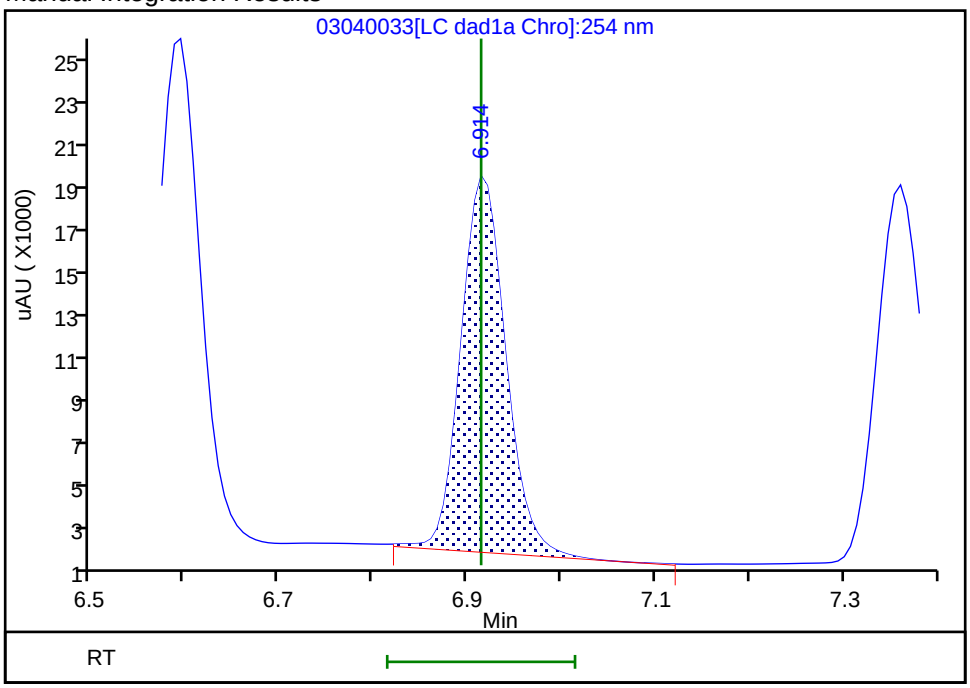
Processing Integration Results

RT: 6.91
Area: 60901
Amount: 0.398232
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 58166
Amount: 0.380348
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:37:39

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-489145/16 Calibration Date: 03/18/2020 15:02

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 03180016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	85080		396	400	-1.0	15.0
RDX	Ave	116613	105640		362	400	-9.4	15.0
Picric acid	Ave	85131	85323		401	400	0.2	15.0
1,3,5-Trinitrobenzene	Ave	230309	238740		415	400	3.7	15.0
1,3-Dinitrobenzene	Ave	306686	307370		401	400	0.2	15.0
Nitrobenzene	Ave	200403	202493		404	400	1.0	15.0
Tetryl	Ave	177032	175175		396	400	-1.0	15.0
Nitroglycerin	Ave	68133	67461		3960	4000	-1.0	15.0
2,4,6-Trinitrotoluene	Ave	204031	204823		402	400	0.4	15.0
4-Amino-2,6-dinitrotoluene	Lin2		159183		363	400	-9.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	202785		400	400	-0.0	15.0
2,6-Dinitrotoluene	Ave	149452	151720		406	400	1.5	15.0
2,4-Dinitrotoluene	Ave	303584	291863		385	400	-3.9	15.0
2-Nitrotoluene	Ave	135051	128890		382	400	-4.6	15.0
4-Nitrotoluene	Ave	113005	112495		398	400	-0.5	15.0
3-Nitrotoluene	Ave	143029	145235		406	400	1.5	15.0
PETN	Ave	78605	75679		3850	4000	-3.7	15.0
1,2-Dinitrobenzene	Ave	138212	136648		395	400	-1.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: ICV 280-489145/16 Calibration Date: 03/18/2020 15:02

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 03180016.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.54	6.84
RDX	7.75	7.60	7.90
Picric acid	8.06	7.91	8.21
1,3,5-Trinitrobenzene	8.89	8.74	9.04
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.22	10.07	10.37
Nitroglycerin	10.73	10.58	10.88
2,4,6-Trinitrotoluene	11.18	11.08	11.28
4-Amino-2,6-dinitrotoluene	11.34	11.24	11.44
2-Amino-4,6-dinitrotoluene	11.63	11.53	11.73
2,6-Dinitrotoluene	11.79	11.69	11.89
2,4-Dinitrotoluene	11.98	11.88	12.08
2-Nitrotoluene	12.82	12.67	12.97
4-Nitrotoluene	13.26	13.11	13.41
3-Nitrotoluene	13.85	13.70	14.00
PETN	14.94	14.79	15.09
1,2-Dinitrobenzene	8.71	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180016.D
Lims ID: ICV MAIN
Client ID:
Sample Type: ICV
Inject. Date: 18-Mar-2020 15:02:22 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV MAIN
Misc. Info.: 280-0090150-016
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 26-Mar-2020 15:45:46 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 19-Mar-2020 08:47:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.685	6.685	0.000	34032	0.4000	0.3959	M
7 RDX	1	7.751	7.751	0.000	42256	0.4000	0.3624	
8 2,4,6-Trinitrophenol	1	8.058	8.058	0.000	34129	0.4000	0.4009	
$ 9 1,2-Dinitrobenzene	1	8.711	8.711	0.000	54659	0.4000	0.3955	
10 1,3,5-Trinitrobenzene	1	8.885	8.885	0.000	95496	0.4000	0.4146	
11 1,3-Dinitrobenzene	1	9.531	9.531	0.000	122948	0.4000	0.4009	
12 Nitrobenzene	1	9.918	9.918	0.000	80997	0.4000	0.4042	
14 Tetryl	1	10.218	10.218	0.000	70070	0.4000	0.3958	
15 Nitroglycerin	2	10.731	10.731	0.000	269842	4.00	3.96	
16 2,4,6-Trinitrotoluene	1	11.184	11.184	0.000	81929	0.4000	0.4016	
17 4-Amino-2,6-dinitrotoluene	1	11.344	11.344	0.000	63673	0.4000	0.3635	
18 2-Amino-4,6-dinitrotoluene	1	11.631	11.631	0.000	81114	0.4000	0.3999	
19 2,6-Dinitrotoluene	1	11.791	11.791	0.000	60688	0.4000	0.4061	
20 2,4-Dinitrotoluene	1	11.984	11.984	0.000	116745	0.4000	0.3846	
21 o-Nitrotoluene	1	12.824	12.824	0.000	51556	0.4000	0.3818	
22 p-Nitrotoluene	1	13.264	13.264	0.000	44998	0.4000	0.3982	
23 m-Nitrotoluene	1	13.851	13.851	0.000	58094	0.4000	0.4062	
24 PETN	2	14.938	14.938	0.000	302716	4.00	3.85	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

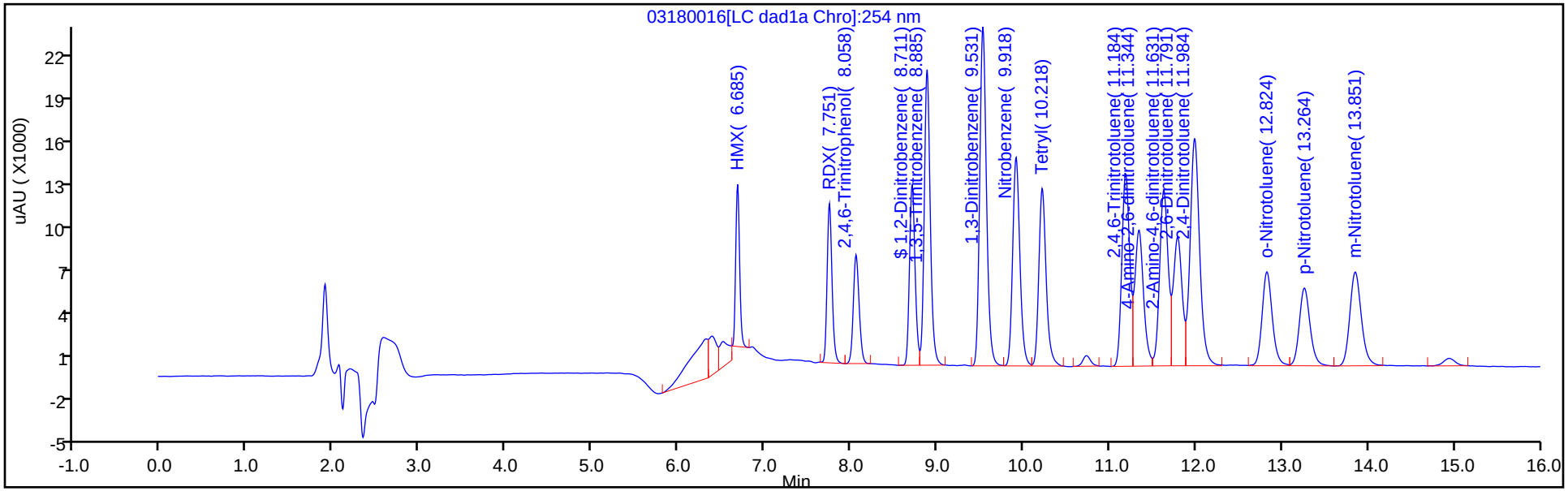
8330Surrogate_00110 Amount Added: 40.00 Units: uL
8330 LCS_00095 Amount Added: 40.00 Units: uL

Report Date: 26-Mar-2020 15:45:47 Chrom Revision: 2.3 11-Mar-2020 18:53:20

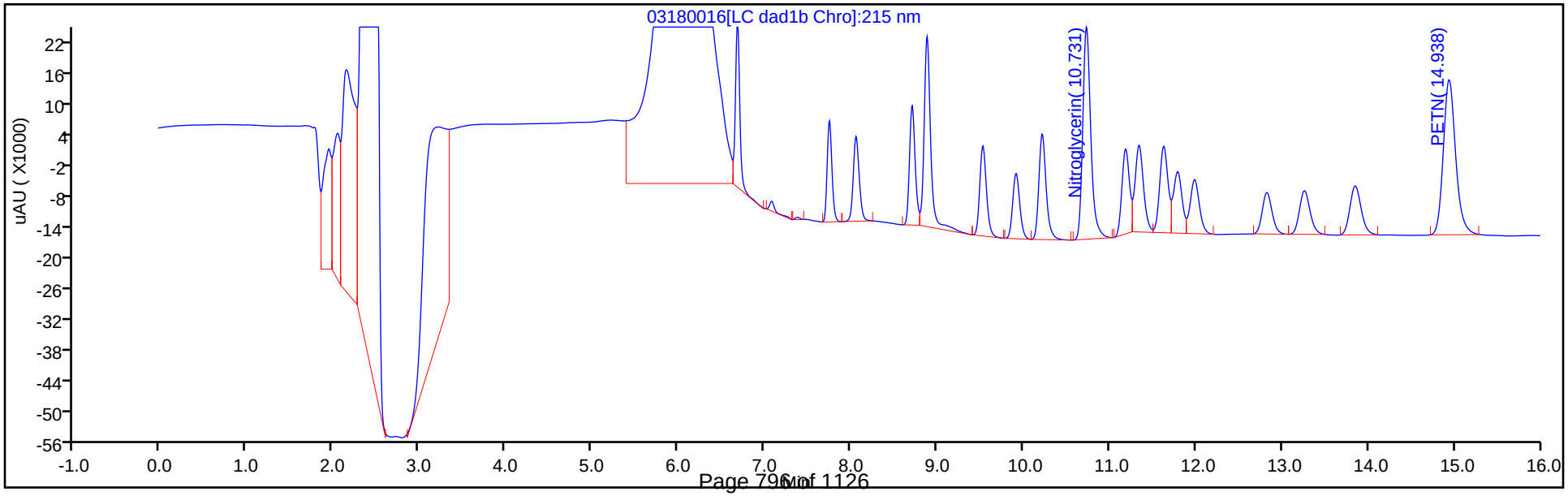
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180016.d				
Injection Date:	18-Mar-2020 15:02:22	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	ICV MAIN			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

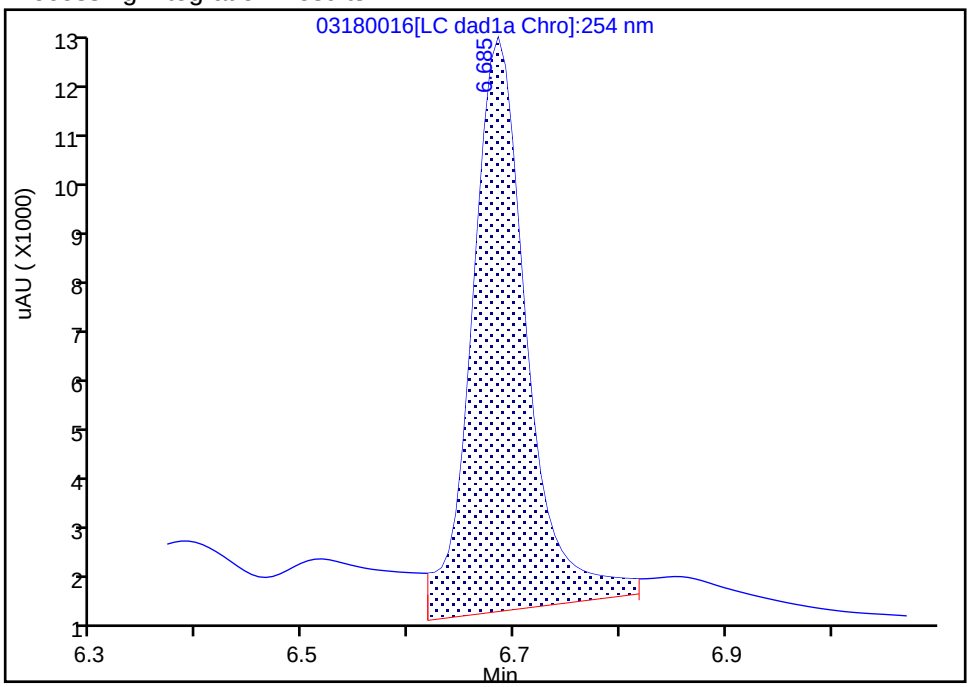
Data File:	\\chromna\denver\chromdata\chhplc_x\20200318-90159.b\03180016.d				
Injection Date:	18-Mar-2020 15:02:22	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	CB	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

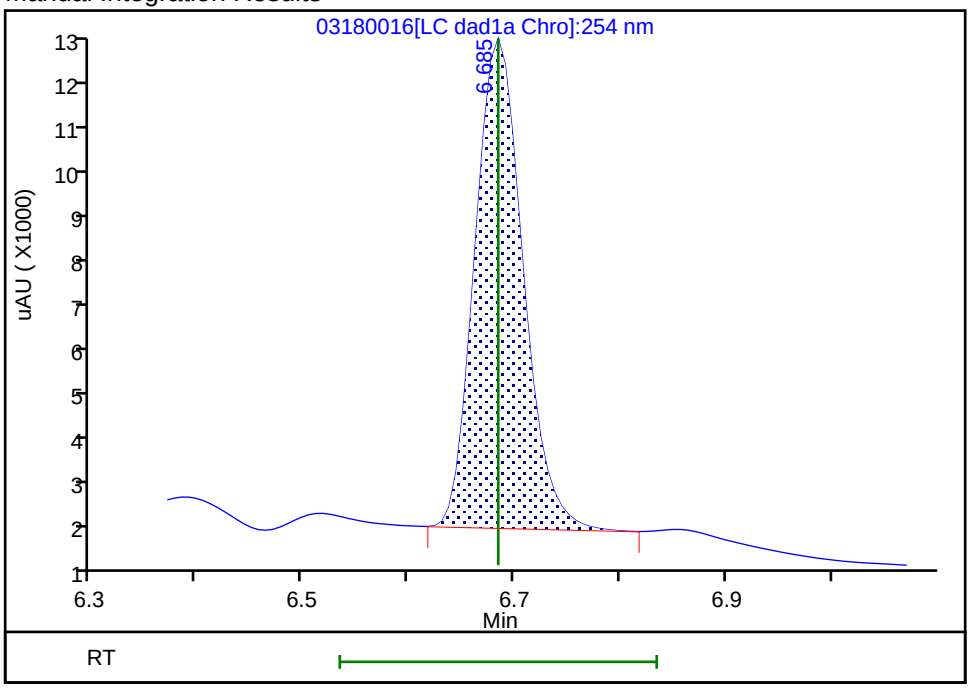
Processing Integration Results

RT: 6.68
Area: 41406
Amount: 0.494354
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 34032
Amount: 0.395895
Amount Units: ug/mL



Reviewer: beckerc, 19-Mar-2020 08:47:09

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/16 Calibration Date: 06/11/2020 18:25

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06110016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	89636		261	250	4.3	15.0
RDX	Ave	116613	112508		241	250	-3.5	15.0
Picric acid	Ave	85131	88508		260	250	4.0	15.0
1,3,5-Trinitrobenzene	Ave	230309	239924		261	251	4.2	15.0
1,3-Dinitrobenzene	Ave	306686	324196		265	251	5.7	15.0
Nitrobenzene	Ave	200403	207486		260	251	3.5	15.0
Tetryl	Ave	177032	183401		260	251	3.6	15.0
Nitroglycerin	Ave	68133	74447		2730	2500	9.3	15.0
2,4,6-Trinitrotoluene	Ave	204031	217434		267	251	6.6	15.0
4-Amino-2,6-dinitrotoluene	Lin2		170314		245	250	-1.9	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	214709		266	251	5.9	15.0
2,6-Dinitrotoluene	Ave	149452	157964		265	251	5.7	15.0
2,4-Dinitrotoluene	Ave	303584	319865		264	251	5.4	15.0
2-Nitrotoluene	Ave	135051	135492		251	250	0.3	15.0
4-Nitrotoluene	Ave	113005	116551		258	251	3.1	15.0
3-Nitrotoluene	Ave	143029	148056		259	250	3.5	15.0
PETN	Ave	78605	84888		2700	2500	8.0	15.0
1,2-Dinitrobenzene	Ave	138212	145228		263	250	5.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/16 Calibration Date: 06/11/2020 18:25

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06110016.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.72	6.55	6.85
RDX	7.80	7.63	7.93
Picric acid	8.10	7.92	8.22
1,3,5-Trinitrobenzene	8.94	8.77	9.07
1,3-Dinitrobenzene	9.60	9.42	9.72
Nitrobenzene	9.97	9.80	10.10
Tetryl	10.28	10.11	10.41
Nitroglycerin	10.80	10.61	10.91
2,4,6-Trinitrotoluene	11.26	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.42	11.28	11.48
2-Amino-4,6-dinitrotoluene	11.71	11.56	11.76
2,6-Dinitrotoluene	11.85	11.71	11.91
2,4-Dinitrotoluene	12.05	11.91	12.11
2-Nitrotoluene	12.88	12.69	12.99
4-Nitrotoluene	13.32	13.13	13.43
3-Nitrotoluene	13.90	13.71	14.01
PETN	14.97	14.82	15.12
1,2-Dinitrobenzene	8.76	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110016.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2020 18:25:15 ALS Bottle#: 7 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092324-016
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jun-2020 12:39:55 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1034

First Level Reviewer: zhangji Date: 11-Jun-2020 18:51:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.715	6.696	0.019	22409	0.2500	0.2607	M
7 RDX	1	7.802	7.776	0.026	28127	0.2500	0.2412	
8 2,4,6-Trinitrophenol	1	8.102	8.069	0.033	22127	0.2500	0.2599	
$ 9 1,2-Dinitrobenzene	1	8.762	8.743	0.019	36307	0.2500	0.2627	
10 1,3,5-Trinitrobenzene	1	8.942	8.916	0.026	60101	0.2505	0.2610	
11 1,3-Dinitrobenzene	1	9.595	9.569	0.026	81211	0.2505	0.2648	
12 Nitrobenzene	1	9.969	9.949	0.020	52079	0.2510	0.2599	
14 Tetryl	1	10.282	10.256	0.026	45942	0.2505	0.2595	
15 Nitroglycerin	2	10.795	10.762	0.033	186117	2.50	2.73	M
16 2,4,6-Trinitrotoluene	1	11.255	11.222	0.033	54576	0.2510	0.2675	
17 4-Amino-2,6-dinitrotoluene	1	11.415	11.376	0.039	42621	0.2503	0.2455	
18 2-Amino-4,6-dinitrotoluene	1	11.709	11.662	0.047	53892	0.2510	0.2657	
19 2,6-Dinitrotoluene	1	11.849	11.809	0.040	39649	0.2510	0.2653	
20 2,4-Dinitrotoluene	1	12.049	12.009	0.040	80286	0.2510	0.2645	
21 o-Nitrotoluene	1	12.875	12.842	0.033	33873	0.2500	0.2508	
22 p-Nitrotoluene	1	13.315	13.276	0.039	29196	0.2505	0.2584	
23 m-Nitrotoluene	1	13.902	13.862	0.040	37051	0.2503	0.2590	
24 PETN	2	14.969	14.969	0.000	212219	2.50	2.70	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

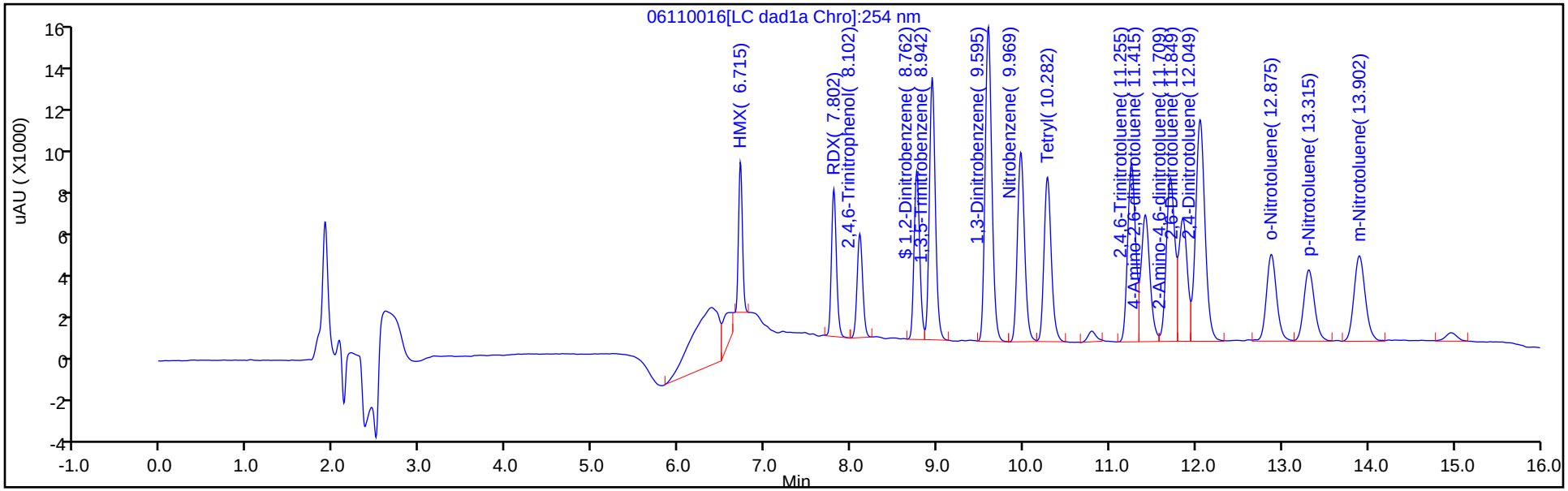
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 12-Jun-2020 12:39:56 Chrom Revision: 2.3 10-Jun-2020 22:46:48

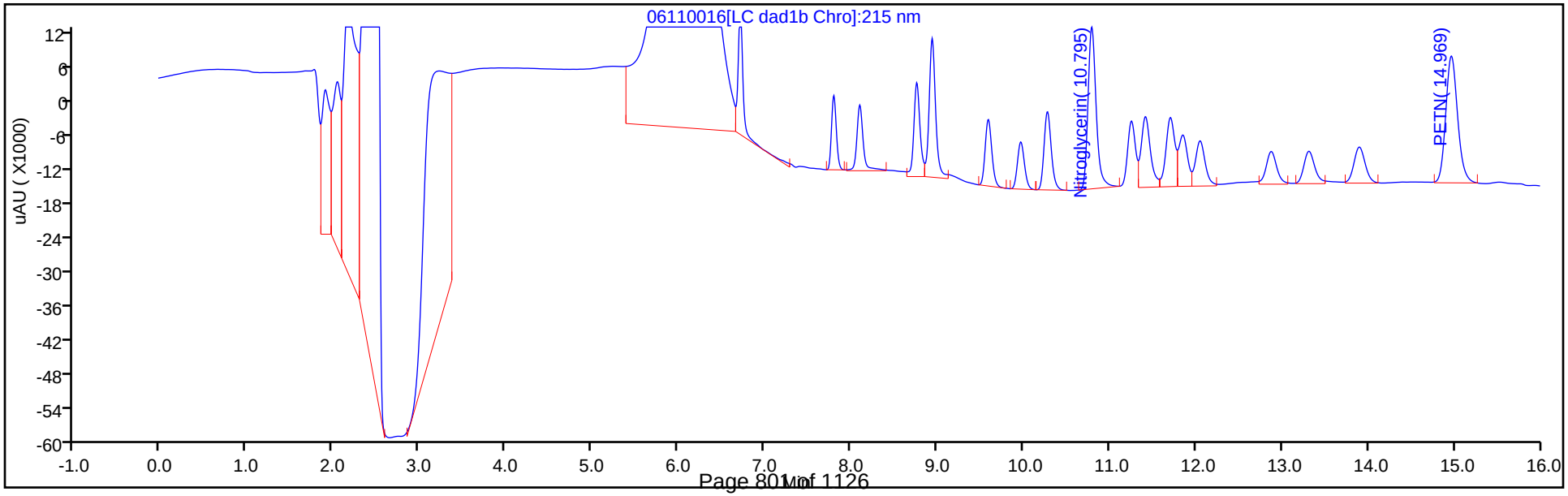
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110016.d				
Injection Date:	11-Jun-2020 18:25:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

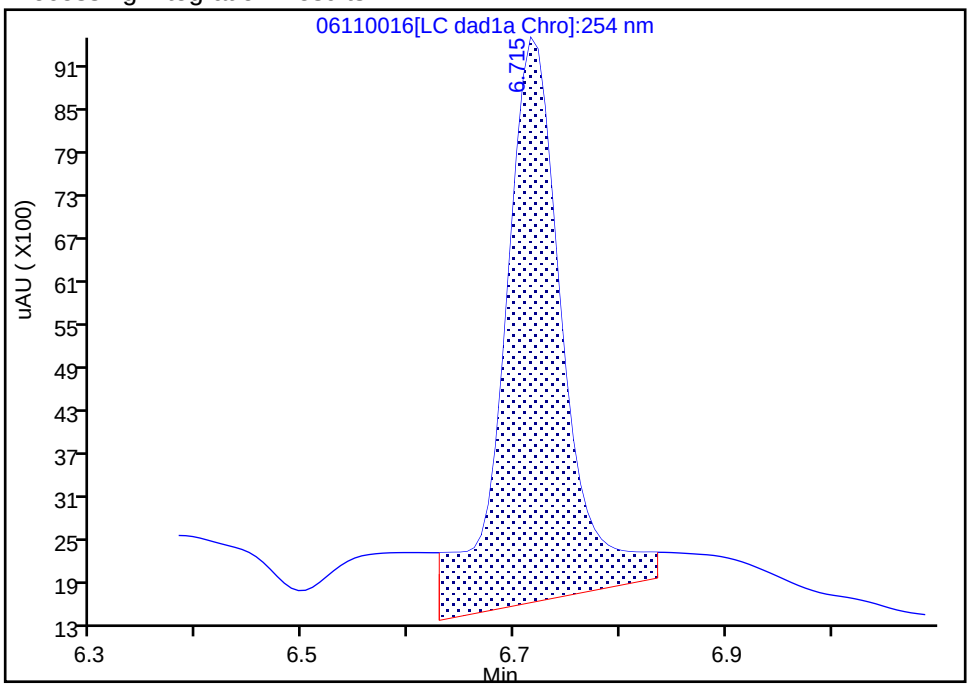
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110016.d				
Injection Date:	11-Jun-2020 18:25:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

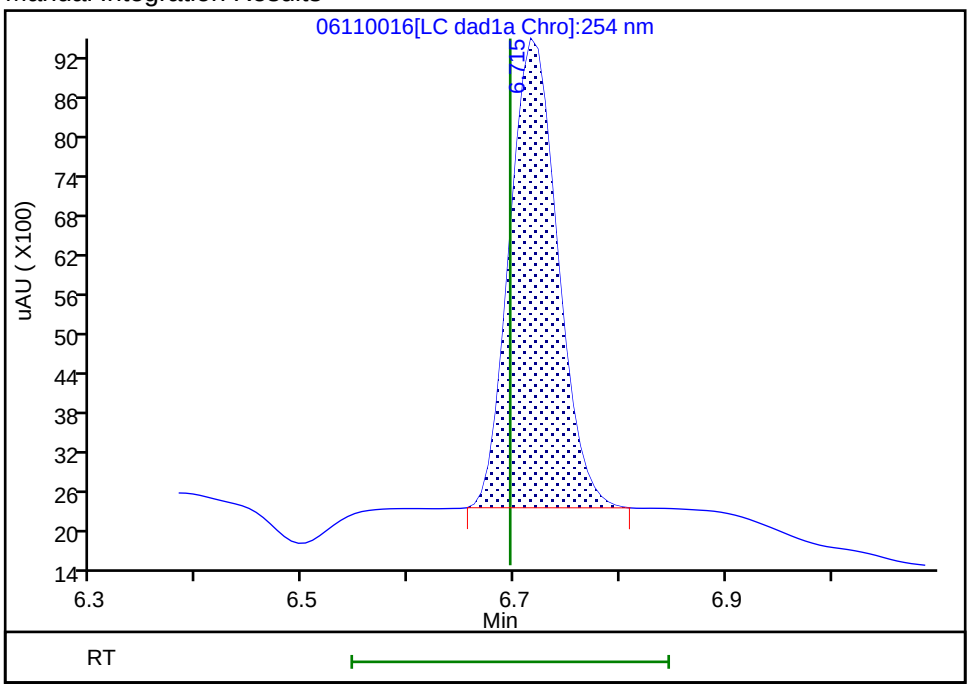
Processing Integration Results

RT: 6.72
Area: 30506
Amount: 0.354877
Amount Units: ug/mL



Manual Integration Results

RT: 6.72
Area: 22409
Amount: 0.260684
Amount Units: ug/mL



Reviewer: zhangji, 11-Jun-2020 18:51:24

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

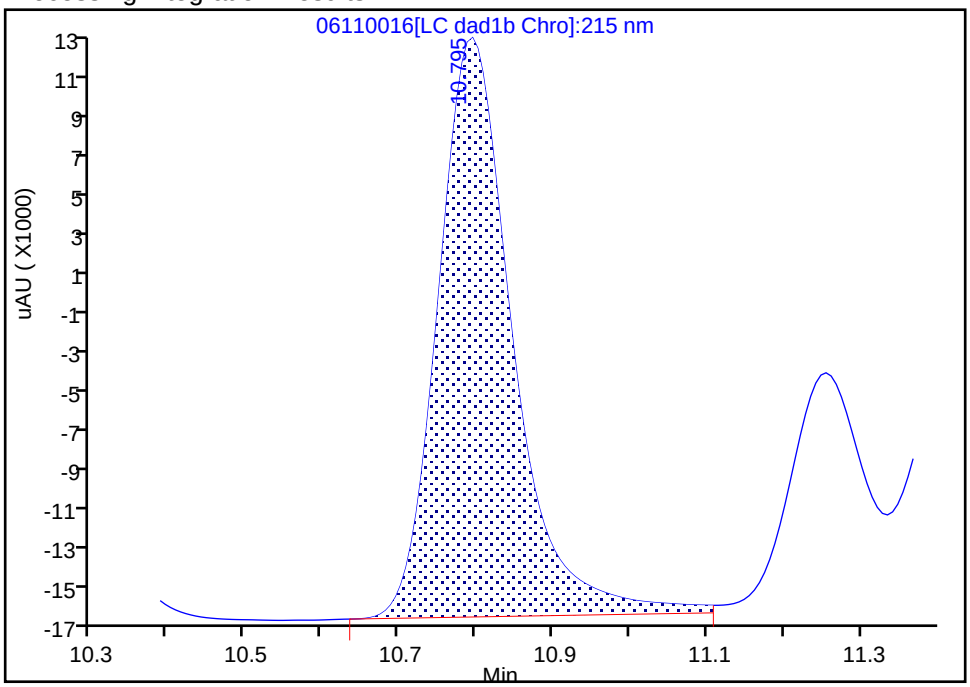
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110016.d				
Injection Date:	11-Jun-2020 18:25:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1C, 215 nm		

15 Nitroglycerin, CAS: 55-63-0

Signal: 1

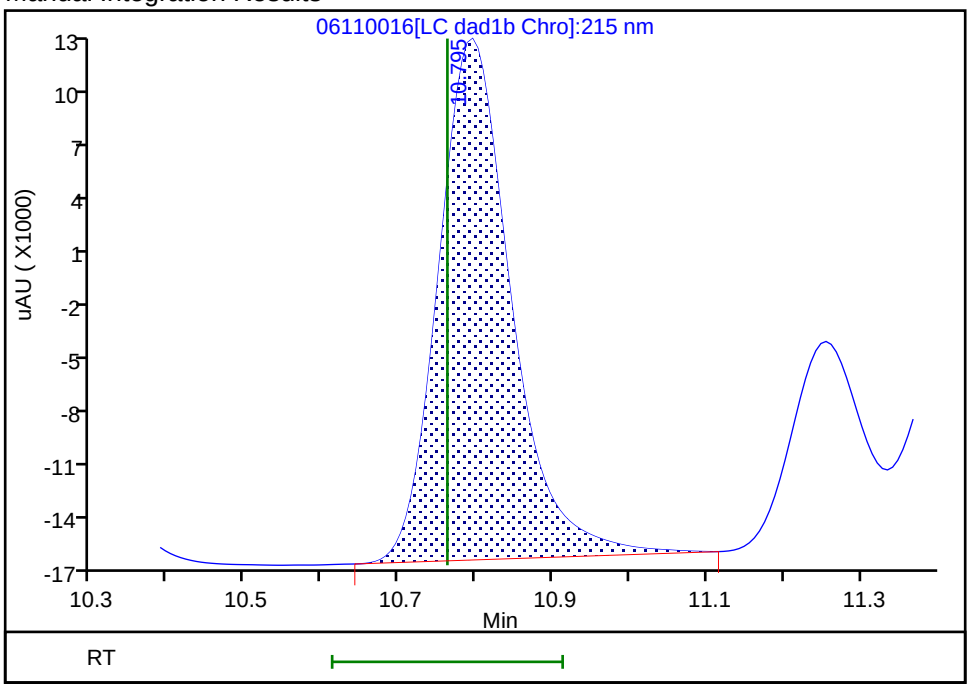
Processing Integration Results

RT: 10.80
Area: 191160
Amount: 2.805670
Amount Units: ug/mL



Manual Integration Results

RT: 10.80
Area: 186117
Amount: 2.731653
Amount Units: ug/mL



Reviewer: zhangji, 11-Jun-2020 18:51:32

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/17 Calibration Date: 06/11/2020 18:48

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06110017.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	205283		236	250	-5.7	15.0
DNX	Ave	152928	151393		248	250	-1.0	15.0
MNX	Ave	158544	138989		256	292	-12.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/17 Calibration Date: 06/11/2020 18:48

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06110017.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.62	6.53	6.73
DNX	6.95	6.85	7.05
MNX	7.39	7.26	7.56

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110017.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	11-Jun-2020 18:48:28	ALS Bottle#:	9	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092324-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Jun-2020 12:39:56	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1034				

First Level Reviewer: zhangji Date: 12-Jun-2020 11:34:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.619	6.627	-0.008	51372	0.2503	0.2361	M
5 DNX	1	6.946	6.954	-0.008	37886	0.2503	0.2477	M
6 MNX	1	7.393	7.407	-0.014	40550	0.2918	0.2558	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

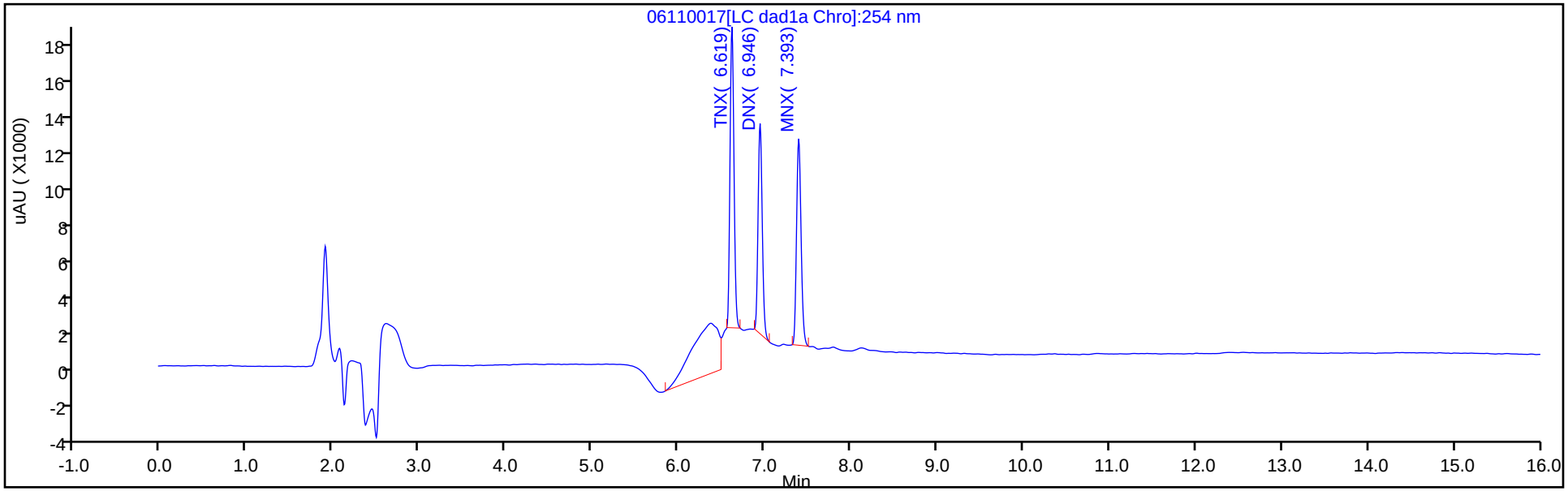
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 12-Jun-2020 12:39:56 Chrom Revision: 2.3 10-Jun-2020 22:46:48

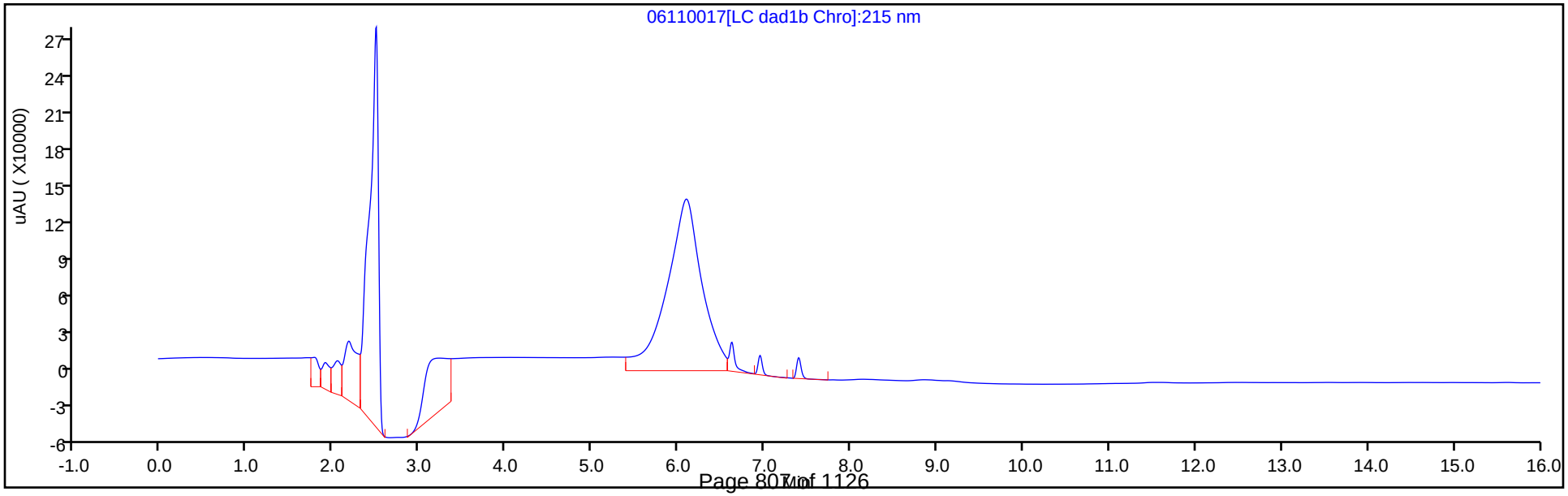
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110017.d				
Injection Date:	11-Jun-2020 18:48:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

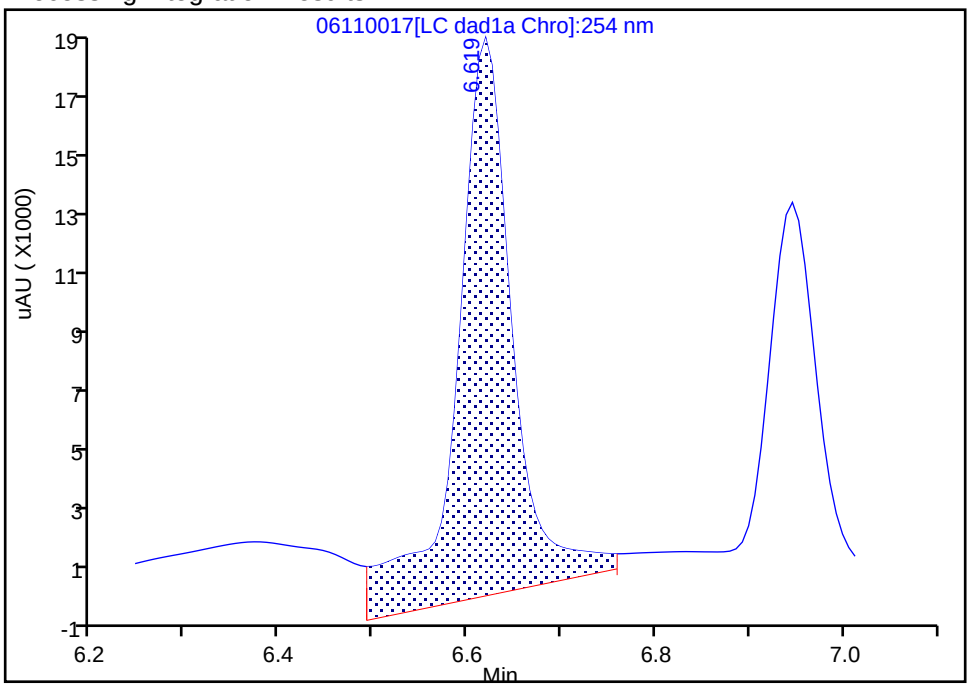
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110017.d				
Injection Date:	11-Jun-2020 18:48:28	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

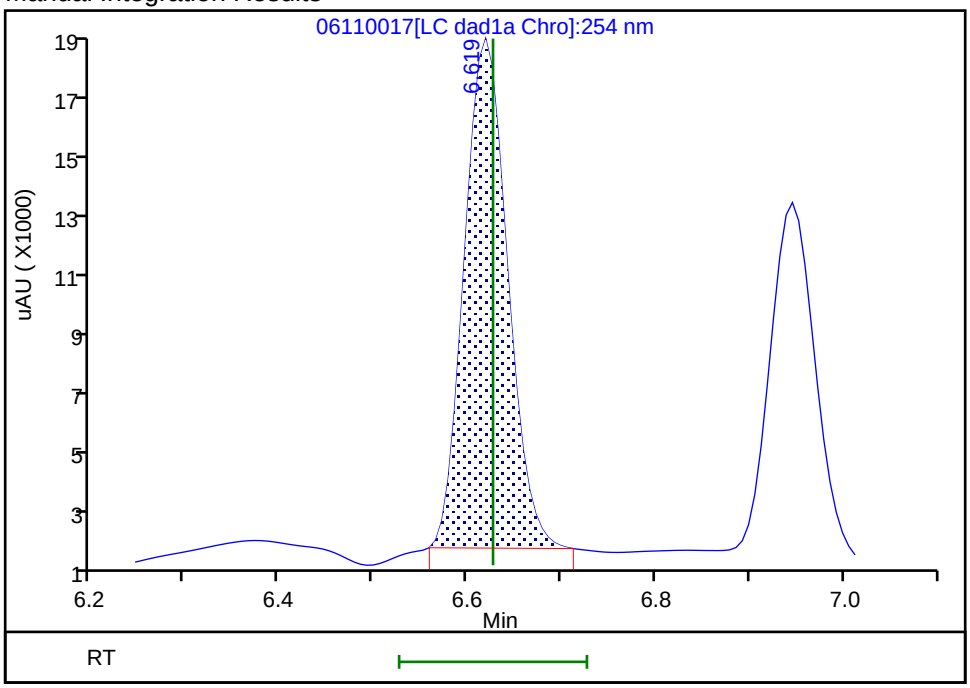
Processing Integration Results

RT: 6.62
Area: 72684
Amount: 0.334012
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 51372
Amount: 0.236075
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:33:49

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

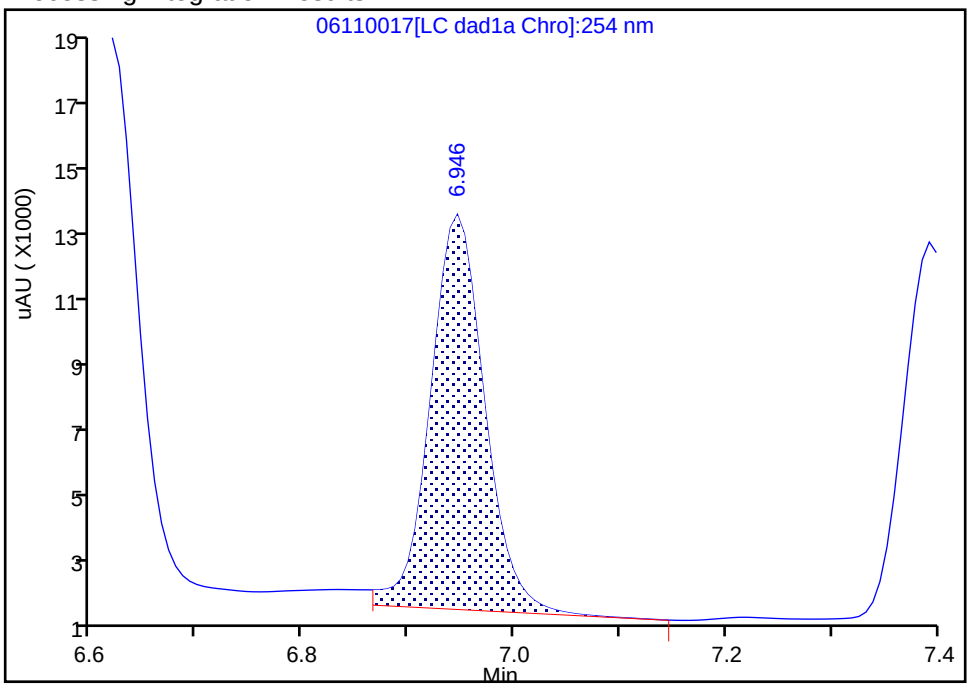
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110017.d				
Injection Date:	11-Jun-2020 18:48:28	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

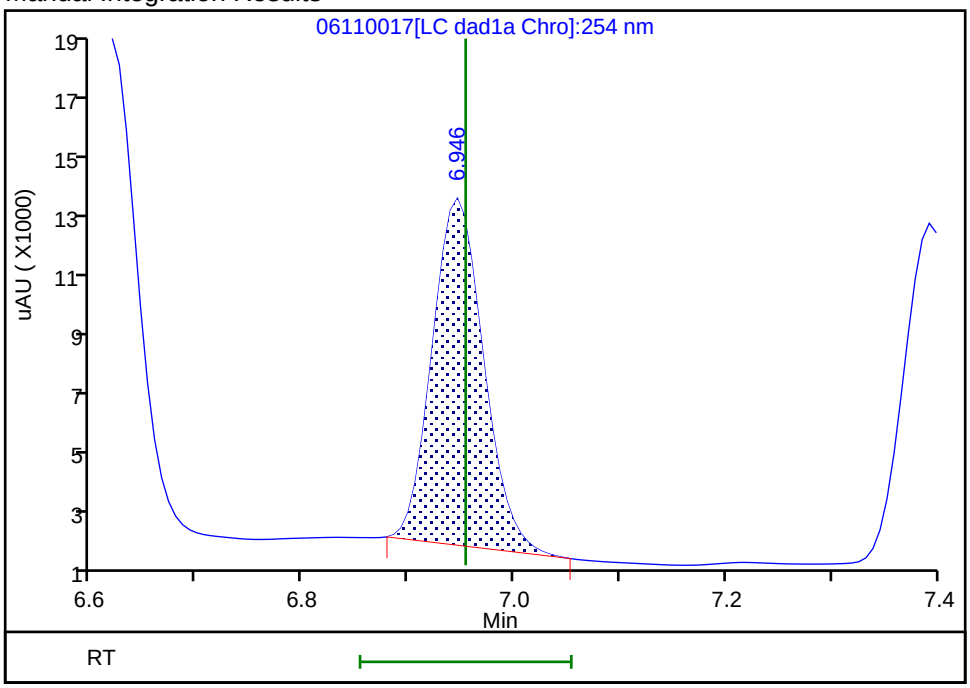
Processing Integration Results

RT: 6.95
Area: 41278
Amount: 0.269917
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 37886
Amount: 0.247737
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:33:53

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

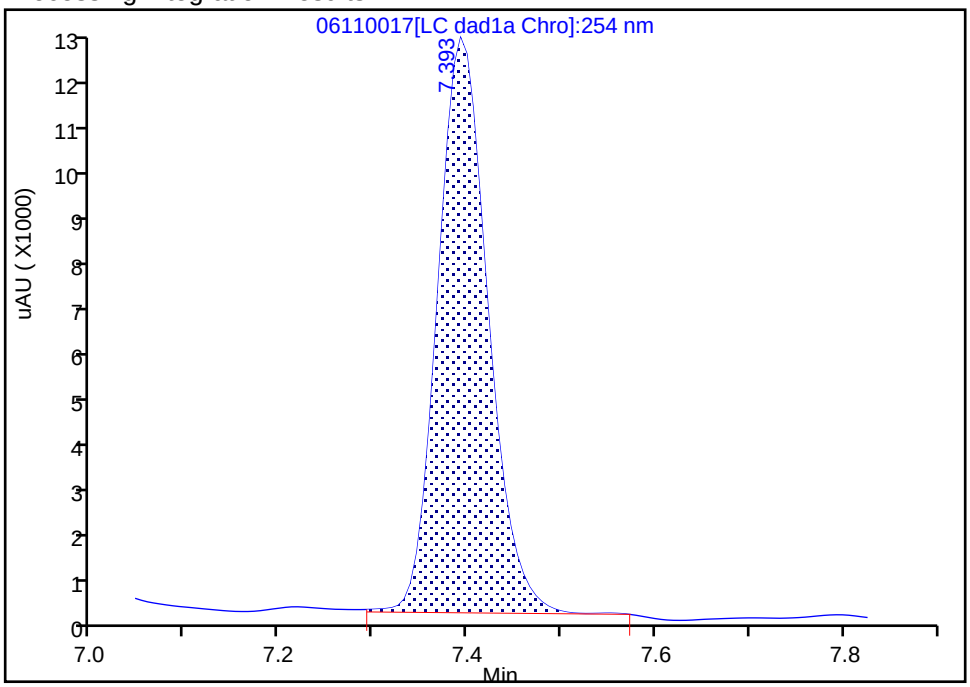
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110017.d				
Injection Date:	11-Jun-2020 18:48:28	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

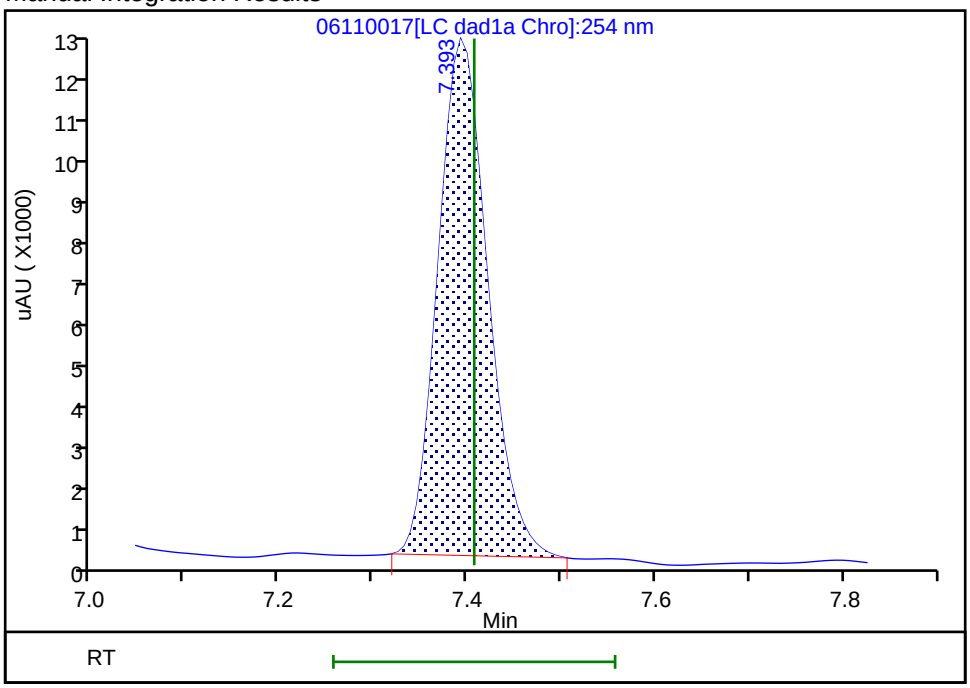
Processing Integration Results

RT: 7.39
Area: 41342
Amount: 0.260760
Amount Units: ug/mL



Manual Integration Results

RT: 7.39
Area: 40550
Amount: 0.255765
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:34:01
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/32 Calibration Date: 06/12/2020 00:33

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06110032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	89544		260	250	4.2	15.0
RDX	Ave	116613	111180		238	250	-4.7	15.0
Picric acid	Ave	85131	88212		259	250	3.6	15.0
1,3,5-Trinitrobenzene	Ave	230309	240379		261	251	4.4	15.0
1,3-Dinitrobenzene	Ave	306686	322715		264	251	5.2	15.0
Nitrobenzene	Ave	200403	201590		252	251	0.6	15.0
Tetryl	Ave	177032	181481		257	251	2.5	15.0
Nitroglycerin	Ave	68133	73021		2680	2500	7.2	15.0
2,4,6-Trinitrotoluene	Ave	204031	216335		266	251	6.0	15.0
4-Amino-2,6-dinitrotoluene	Lin2		171081		247	250	-1.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	208861		258	251	3.0	15.0
2,6-Dinitrotoluene	Ave	149452	163789		275	251	9.6	15.0
2,4-Dinitrotoluene	Ave	303584	323753		268	251	6.6	15.0
2-Nitrotoluene	Ave	135051	135284		250	250	0.2	15.0
4-Nitrotoluene	Ave	113005	118343		262	251	4.7	15.0
3-Nitrotoluene	Ave	143029	149091		261	250	4.2	15.0
PETN	Ave	78605	84345		2680	2500	7.3	15.0
1,2-Dinitrobenzene	Ave	138212	144720		262	250	4.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/32 Calibration Date: 06/12/2020 00:33

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06110032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.71	6.55	6.85
RDX	7.79	7.63	7.93
Picric acid	8.10	7.92	8.22
1,3,5-Trinitrobenzene	8.94	8.77	9.07
1,3-Dinitrobenzene	9.60	9.42	9.72
Nitrobenzene	9.97	9.80	10.10
Tetryl	10.28	10.11	10.41
Nitroglycerin	10.80	10.61	10.91
2,4,6-Trinitrotoluene	11.26	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.43	11.28	11.48
2-Amino-4,6-dinitrotoluene	11.72	11.56	11.76
2,6-Dinitrotoluene	11.86	11.71	11.91
2,4-Dinitrotoluene	12.06	11.91	12.11
2-Nitrotoluene	12.90	12.69	12.99
4-Nitrotoluene	13.33	13.13	13.43
3-Nitrotoluene	13.93	13.71	14.01
PETN	15.04	14.82	15.12
1,2-Dinitrobenzene	8.76	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110032.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2020 00:33:37 ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092324-032
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jun-2020 12:39:47 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1034

First Level Reviewer: zhangji Date: 12-Jun-2020 11:04:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.711	6.696	0.015	22386	0.2500	0.2604	M
7 RDX	1	7.791	7.776	0.015	27795	0.2500	0.2384	
8 2,4,6-Trinitrophenol	1	8.098	8.069	0.029	22053	0.2500	0.2590	
$ 9 1,2-Dinitrobenzene	1	8.764	8.743	0.021	36180	0.2500	0.2618	
10 1,3,5-Trinitrobenzene	1	8.944	8.916	0.028	60215	0.2505	0.2615	
11 1,3-Dinitrobenzene	1	9.598	9.569	0.029	80840	0.2505	0.2636	
12 Nitrobenzene	1	9.971	9.949	0.022	50599	0.2510	0.2525	
14 Tetryl	1	10.284	10.256	0.028	45461	0.2505	0.2568	
15 Nitroglycerin	2	10.798	10.762	0.036	182552	2.50	2.68	
16 2,4,6-Trinitrotoluene	1	11.264	11.222	0.042	54300	0.2510	0.2661	
17 4-Amino-2,6-dinitrotoluene	1	11.431	11.376	0.055	42813	0.2503	0.2465	
18 2-Amino-4,6-dinitrotoluene	1	11.724	11.662	0.062	52424	0.2510	0.2585	
19 2,6-Dinitrotoluene	1	11.864	11.809	0.055	41111	0.2510	0.2751	
20 2,4-Dinitrotoluene	1	12.064	12.009	0.055	81262	0.2510	0.2677	
21 o-Nitrotoluene	1	12.898	12.842	0.056	33821	0.2500	0.2504	
22 p-Nitrotoluene	1	13.331	13.276	0.055	29645	0.2505	0.2623	
23 m-Nitrotoluene	1	13.931	13.862	0.069	37310	0.2503	0.2609	
24 PETN	2	15.038	14.969	0.069	210862	2.50	2.68	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

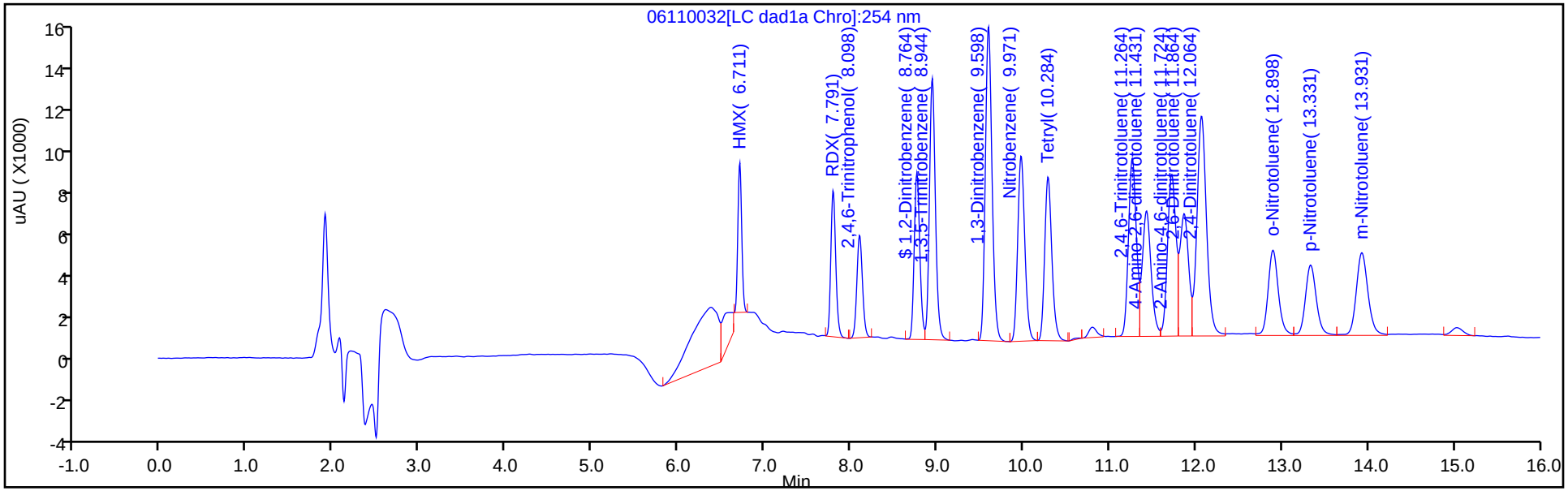
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 12-Jun-2020 12:39:47 Chrom Revision: 2.3 10-Jun-2020 22:46:48

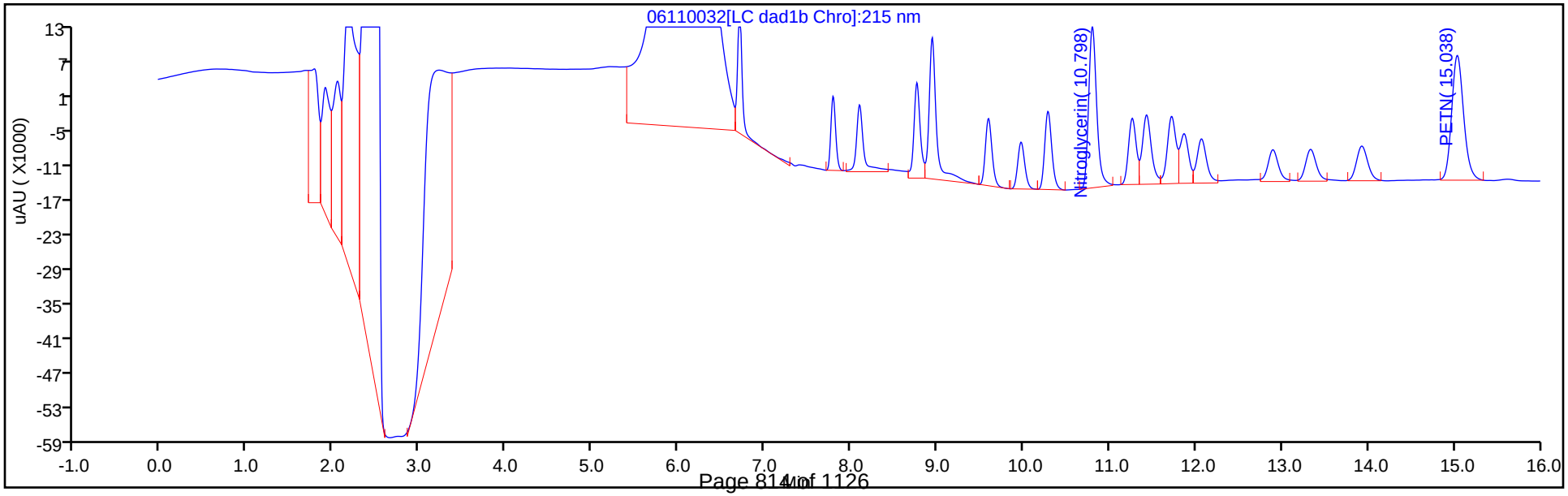
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110032.d				
Injection Date:	12-Jun-2020 00:33:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

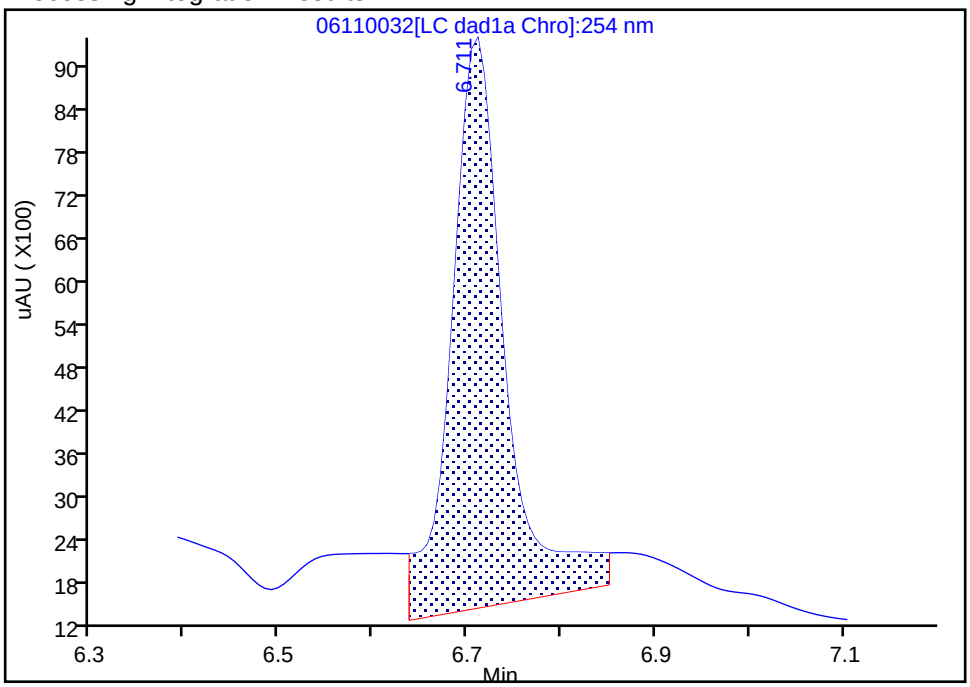
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110032.d				
Injection Date:	12-Jun-2020 00:33:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

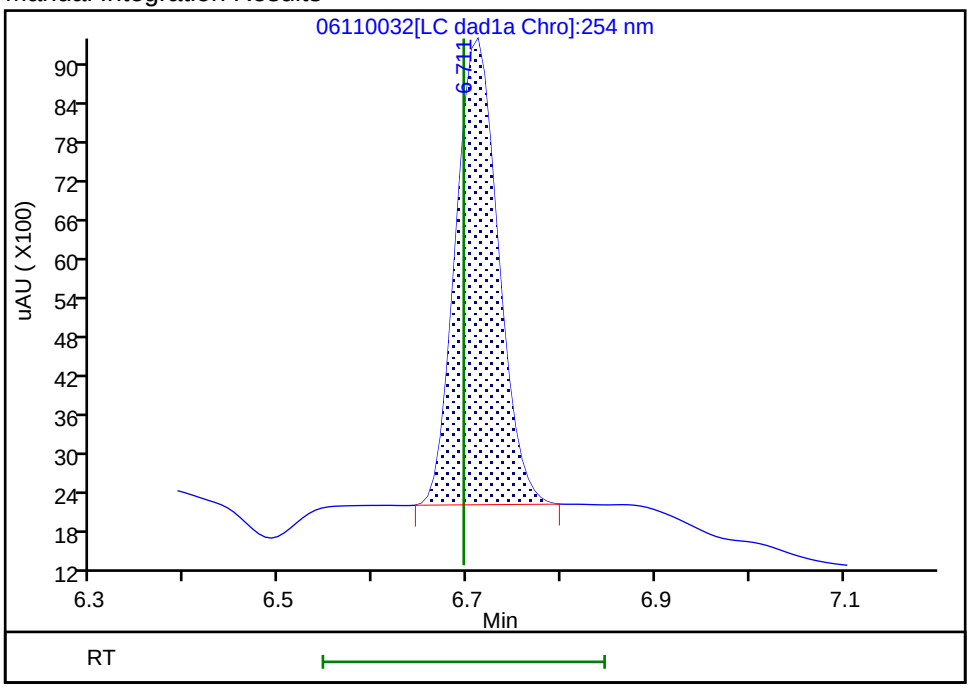
Processing Integration Results

RT: 6.71
Area: 31217
Amount: 0.363148
Amount Units: ug/mL



Manual Integration Results

RT: 6.71
Area: 22386
Amount: 0.260417
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:04:08

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/33 Calibration Date: 06/12/2020 00:56

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06110033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	201283		231	250	-7.5	15.0
DNX	Ave	152928	151684		248	250	-0.8	15.0
MNX	Ave	158544	138125		254	292	-12.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/33 Calibration Date: 06/12/2020 00:56

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06110033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.62	6.53	6.73
DNX	6.95	6.85	7.05
MNX	7.39	7.26	7.56

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110033.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	12-Jun-2020 00:56:36	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092324-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Jun-2020 12:39:47	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1034				

First Level Reviewer: zhangji Date: 12-Jun-2020 11:16:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.619	6.627	-0.008	50371	0.2503	0.2315	M
5 DNX	1	6.945	6.954	-0.009	37959	0.2503	0.2482	M
6 MNX	1	7.385	7.407	-0.022	40298	0.2918	0.2542	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

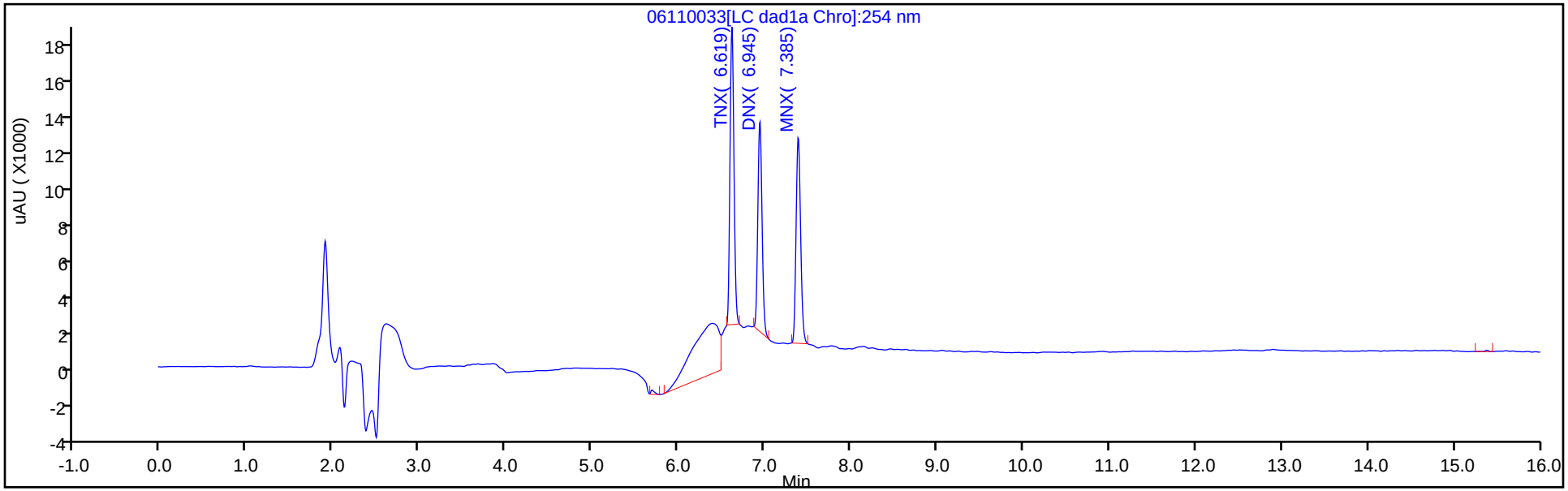
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 12-Jun-2020 12:39:47 Chrom Revision: 2.3 10-Jun-2020 22:46:48

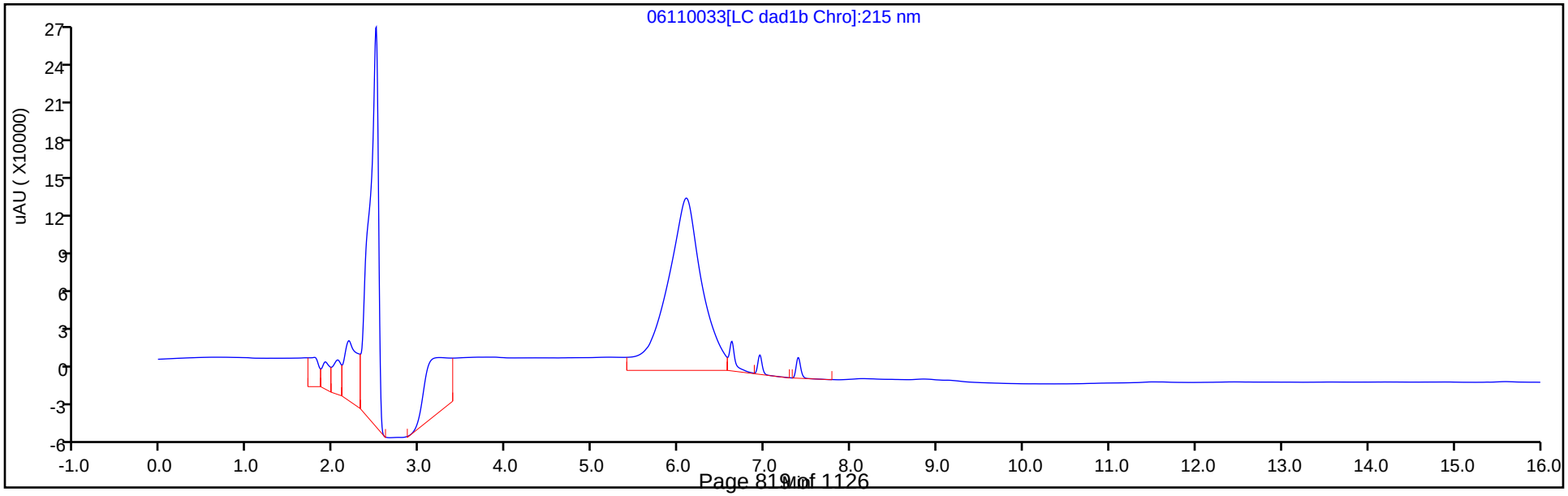
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110033.d				
Injection Date:	12-Jun-2020 00:56:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

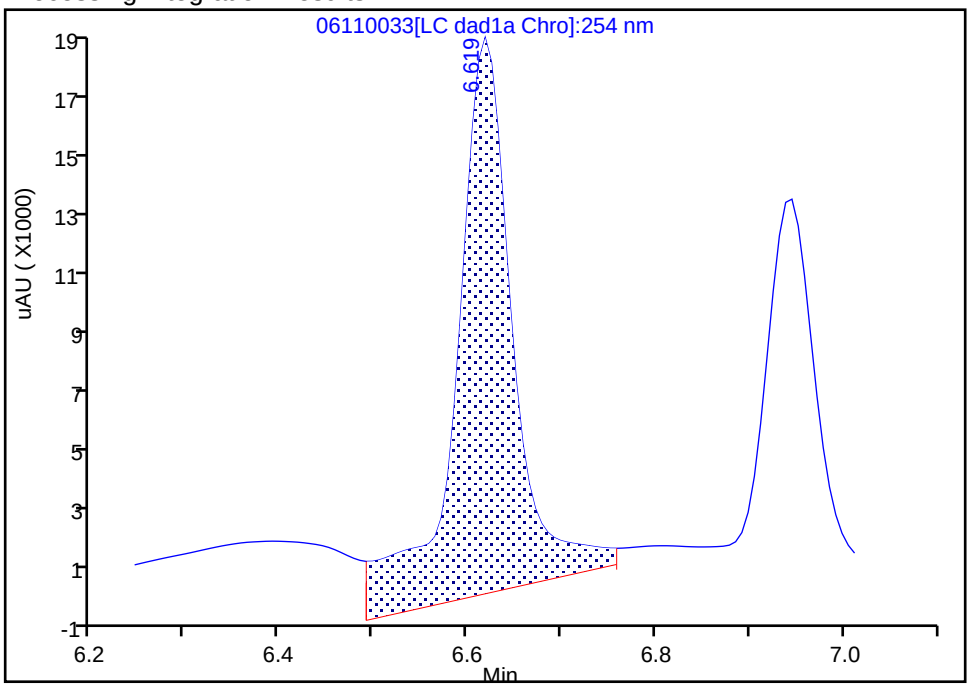
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110033.d				
Injection Date:	12-Jun-2020 00:56:36	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

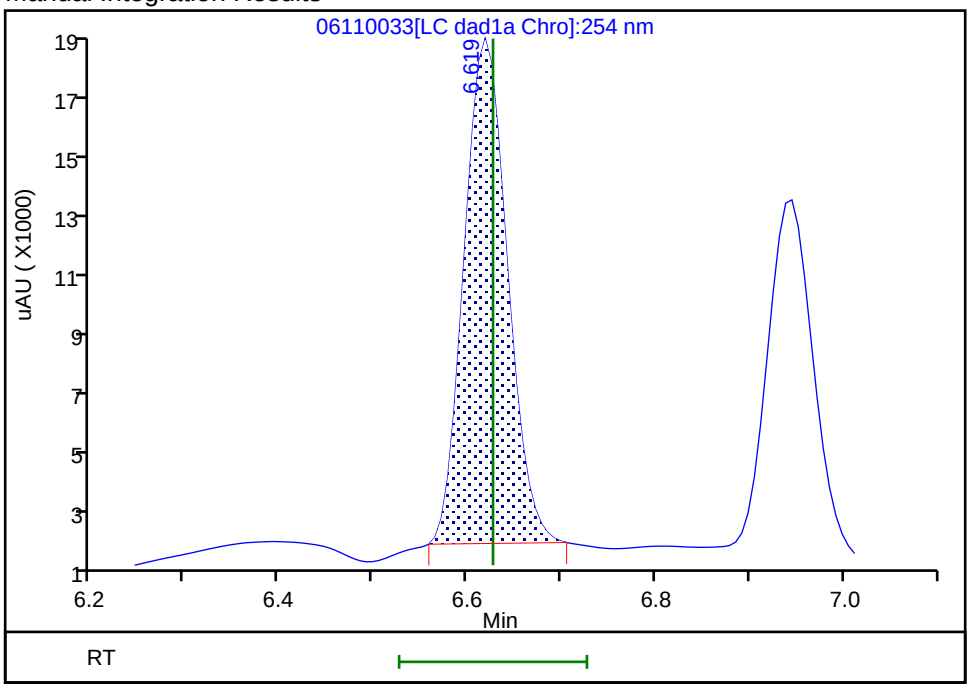
Processing Integration Results

RT: 6.62
Area: 73447
Amount: 0.337519
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 50371
Amount: 0.231475
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:16:23
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

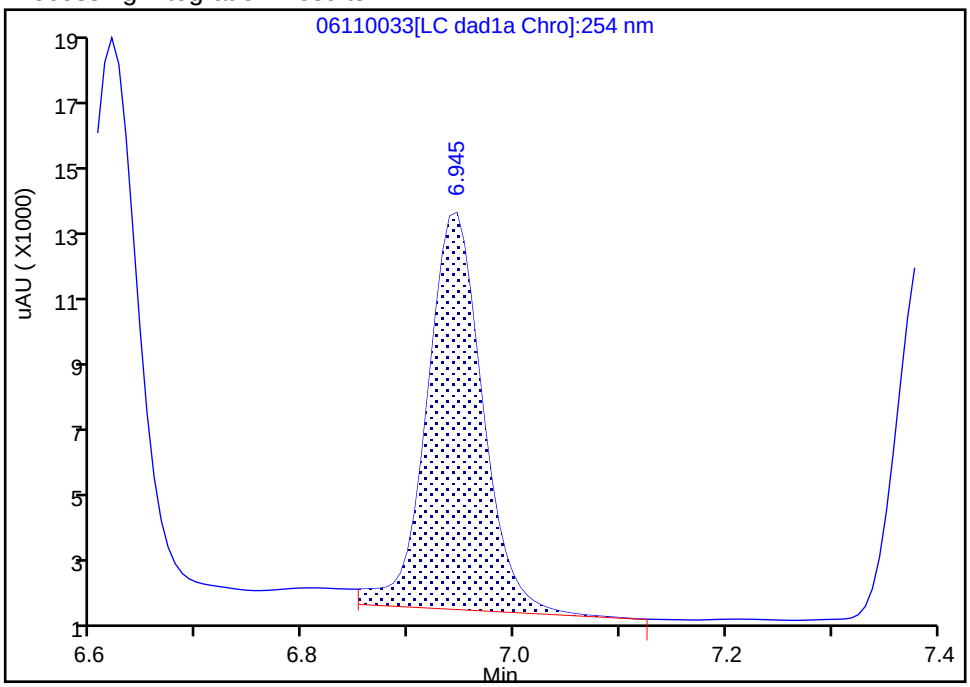
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110033.d				
Injection Date:	12-Jun-2020 00:56:36	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

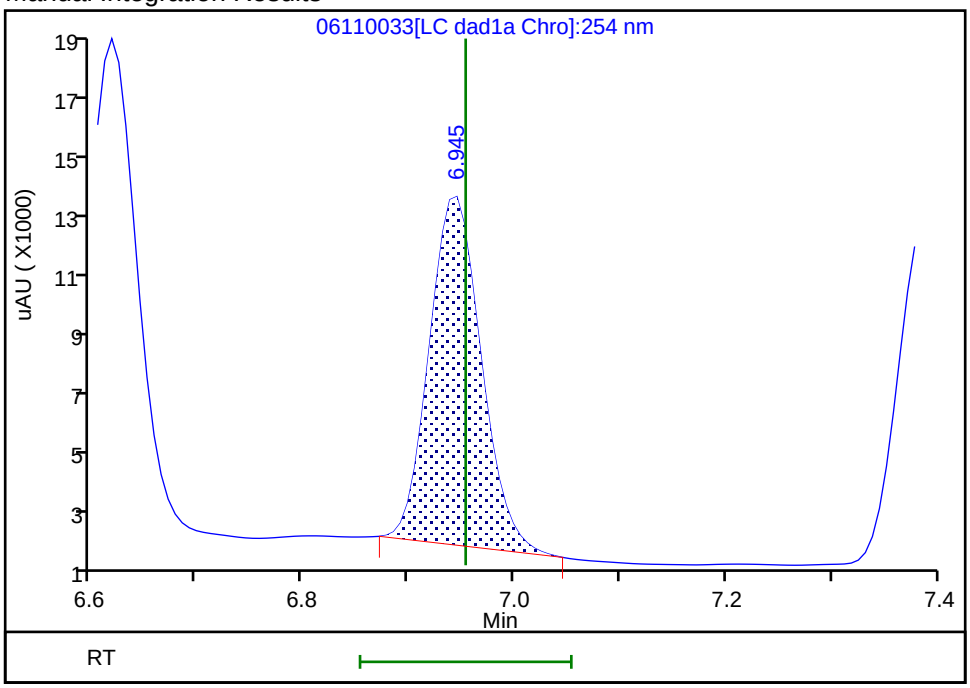
Processing Integration Results

RT: 6.95
Area: 41746
Amount: 0.272978
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 37959
Amount: 0.248214
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:16:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

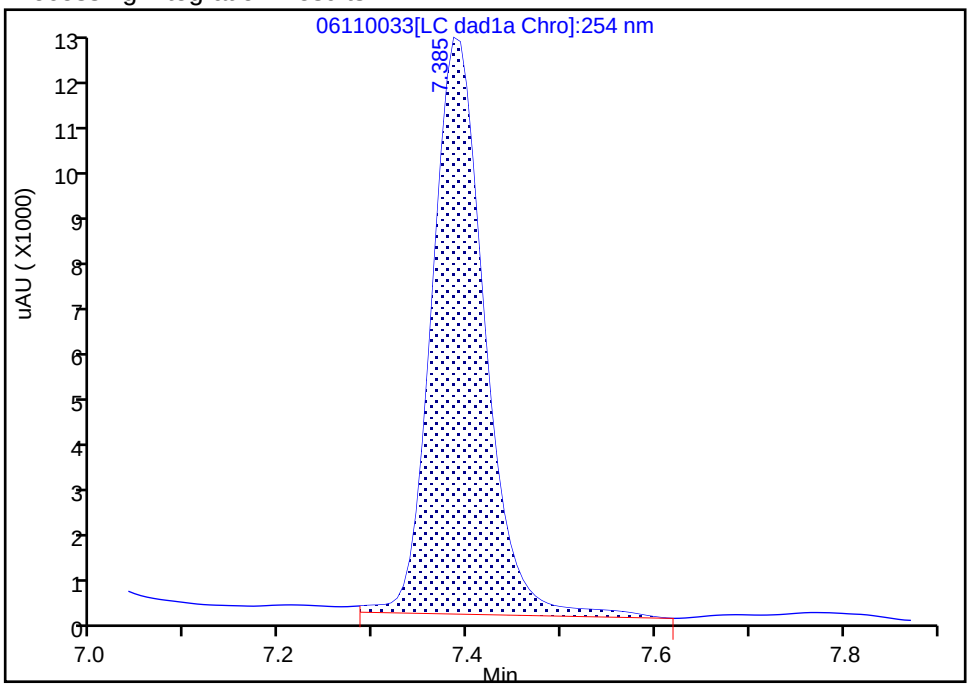
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110033.d				
Injection Date:	12-Jun-2020 00:56:36	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

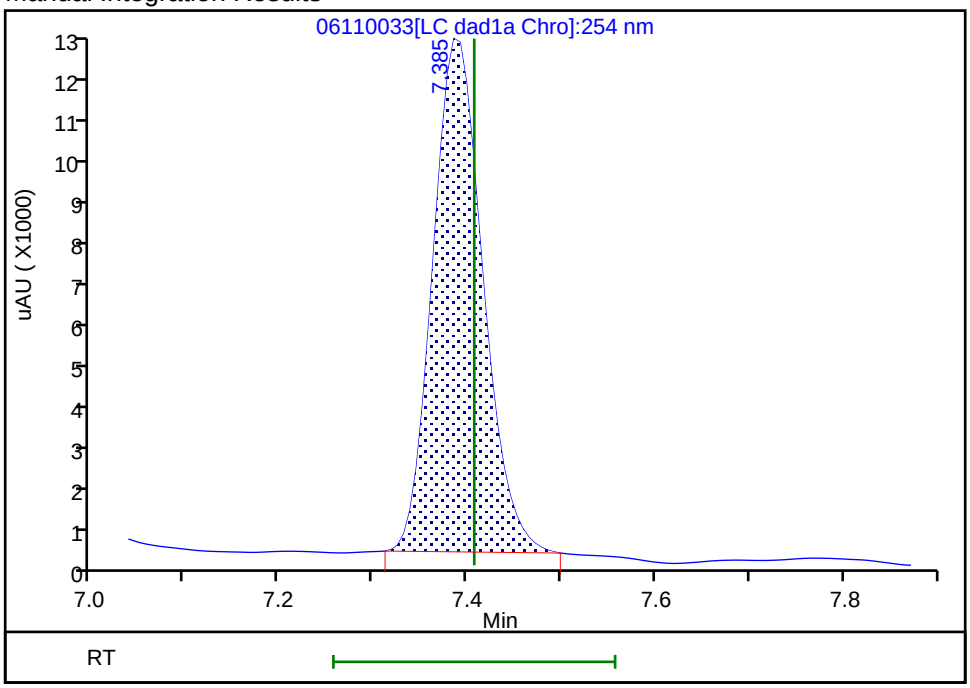
Processing Integration Results

RT: 7.39
Area: 43079
Amount: 0.271716
Amount Units: ug/mL



Manual Integration Results

RT: 7.39
Area: 40298
Amount: 0.254175
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:16:30
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/48 Calibration Date: 06/12/2020 06:41

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06110048.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	90740		264	250	5.6	15.0
RDX	Ave	116613	112104		240	250	-3.9	15.0
Picric acid	Ave	85131	90588		266	250	6.4	15.0
1,3,5-Trinitrobenzene	Ave	230309	244958		266	251	6.4	15.0
1,3-Dinitrobenzene	Ave	306686	325940		266	251	6.3	15.0
Nitrobenzene	Ave	200403	198430		249	251	-1.0	15.0
Tetryl	Ave	177032	183234		259	251	3.5	15.0
Nitroglycerin	Ave	68133	73979		2710	2500	8.6	15.0
2,4,6-Trinitrotoluene	Ave	204031	219032		269	251	7.4	15.0
4-Amino-2,6-dinitrotoluene	Lin2		171125		247	250	-1.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	210179		260	251	3.6	15.0
2,6-Dinitrotoluene	Ave	149452	165335		278	251	10.6	15.0
2,4-Dinitrotoluene	Ave	303584	321665		266	251	6.0	15.0
2-Nitrotoluene	Ave	135051	127756		236	250	-5.4	15.0
4-Nitrotoluene	Ave	113005	111553		247	251	-1.3	15.0
3-Nitrotoluene	Ave	143029	143417		251	250	0.3	15.0
PETN	Ave	78605	84275		2680	2500	7.2	15.0
1,2-Dinitrobenzene	Ave	138212	146900		266	250	6.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/48 Calibration Date: 06/12/2020 06:41

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06110048.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.72	6.55	6.85
RDX	7.80	7.63	7.93
Picric acid	8.11	7.92	8.22
1,3,5-Trinitrobenzene	8.96	8.77	9.07
1,3-Dinitrobenzene	9.61	9.42	9.72
Nitrobenzene	9.99	9.80	10.10
Tetryl	10.30	10.11	10.41
Nitroglycerin	10.82	10.61	10.91
2,4,6-Trinitrotoluene	11.28	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.45	11.28	11.48
2-Amino-4,6-dinitrotoluene	11.74	11.56	11.76
2,6-Dinitrotoluene	11.88	11.71	11.91
2,4-Dinitrotoluene	12.08	11.91	12.11
2-Nitrotoluene	12.91	12.69	12.99
4-Nitrotoluene	13.35	13.13	13.43
3-Nitrotoluene	13.95	13.71	14.01
PETN	15.06	14.82	15.12
1,2-Dinitrobenzene	8.78	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110048.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2020 06:41:46 ALS Bottle#: 7 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092324-048
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jun-2020 12:39:46 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1034

First Level Reviewer: zhangji Date: 12-Jun-2020 11:32:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.716	6.696	0.020	22685	0.2500	0.2639	
7 RDX	1	7.802	7.776	0.026	28026	0.2500	0.2403	
8 2,4,6-Trinitrophenol	1	8.109	8.069	0.040	22647	0.2500	0.2660	
$ 9 1,2-Dinitrobenzene	1	8.776	8.743	0.033	36725	0.2500	0.2657	
10 1,3,5-Trinitrobenzene	1	8.956	8.916	0.040	61362	0.2505	0.2664	
11 1,3-Dinitrobenzene	1	9.609	9.569	0.040	81648	0.2505	0.2662	
12 Nitrobenzene	1	9.989	9.949	0.040	49806	0.2510	0.2485	
14 Tetryl	1	10.302	10.256	0.046	45900	0.2505	0.2593	
15 Nitroglycerin	2	10.815	10.762	0.053	184947	2.50	2.71	
16 2,4,6-Trinitrotoluene	1	11.282	11.222	0.060	54977	0.2510	0.2695	
17 4-Amino-2,6-dinitrotoluene	1	11.449	11.376	0.073	42824	0.2503	0.2466	
18 2-Amino-4,6-dinitrotoluene	1	11.742	11.662	0.080	52755	0.2510	0.2601	a
19 2,6-Dinitrotoluene	1	11.882	11.809	0.073	41499	0.2510	0.2777	a
20 2,4-Dinitrotoluene	1	12.082	12.009	0.073	80738	0.2510	0.2659	
21 o-Nitrotoluene	1	12.909	12.842	0.067	31939	0.2500	0.2365	
22 p-Nitrotoluene	1	13.349	13.276	0.073	27944	0.2505	0.2473	
23 m-Nitrotoluene	1	13.949	13.862	0.087	35890	0.2503	0.2509	
24 PETN	2	15.055	14.969	0.086	210688	2.50	2.68	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

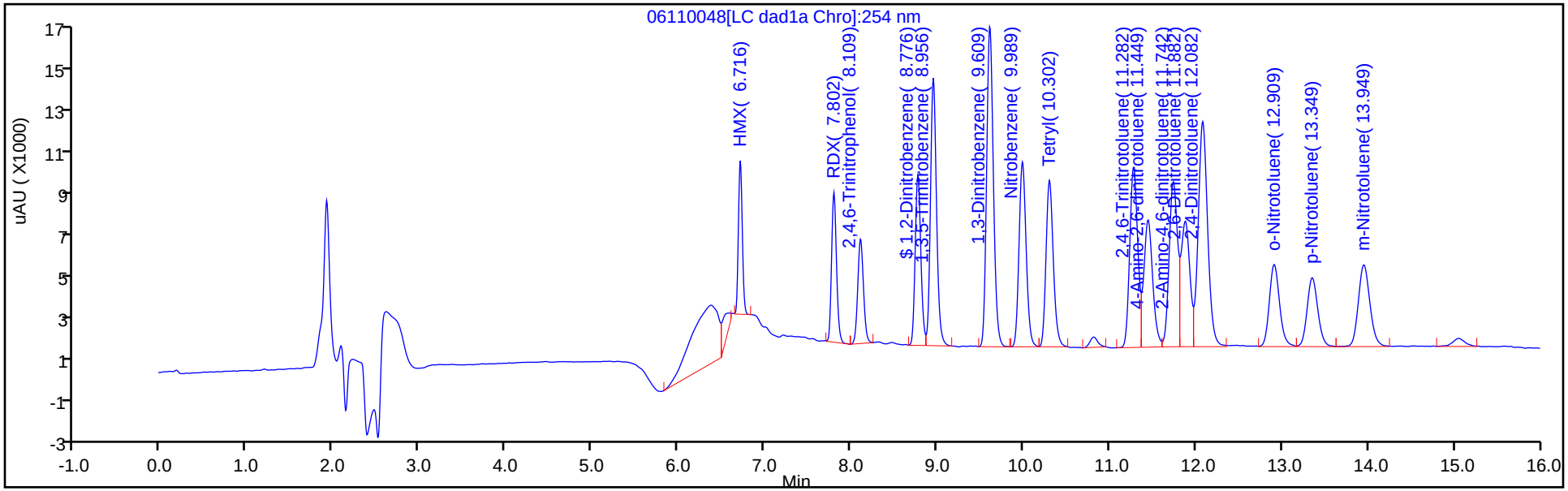
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 12-Jun-2020 12:39:46 Chrom Revision: 2.3 10-Jun-2020 22:46:48

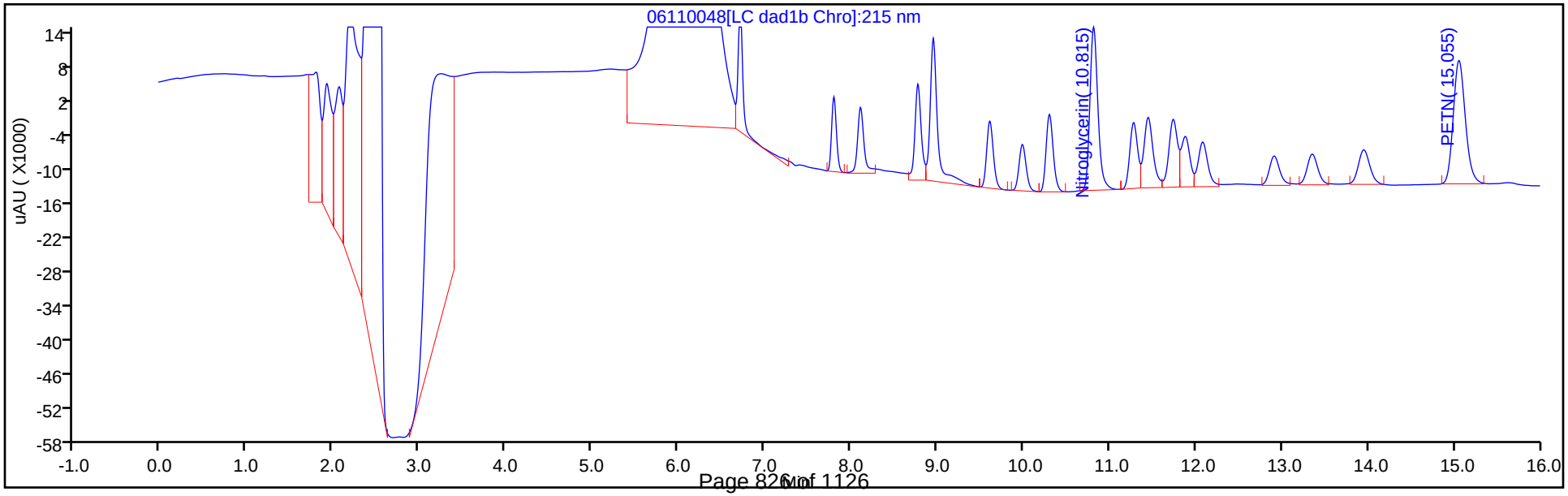
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110048.d				
Injection Date:	12-Jun-2020 06:41:46	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	48
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

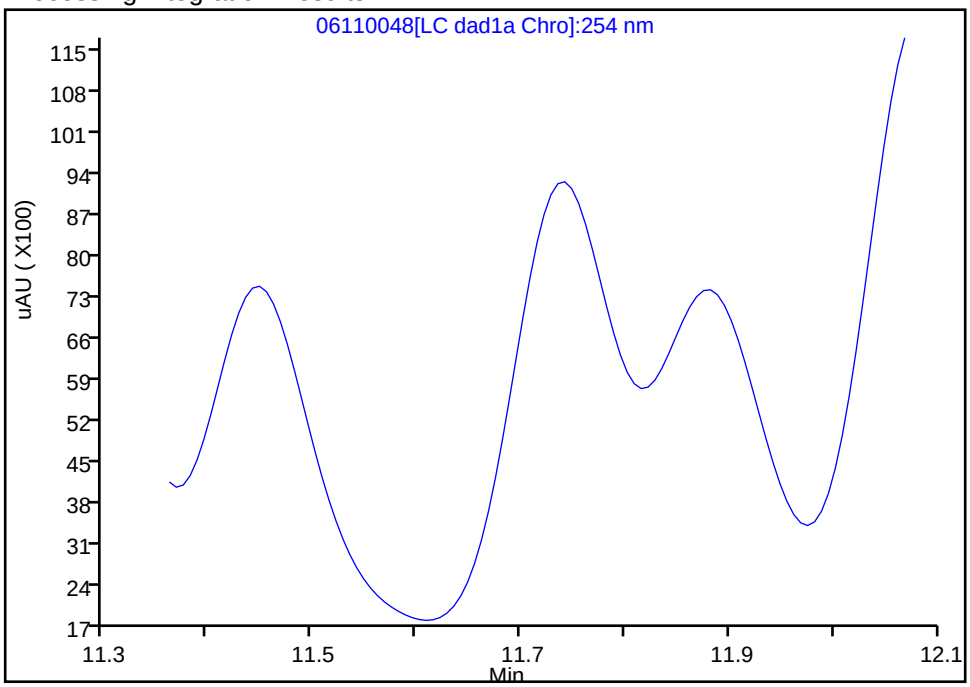
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110048.d				
Injection Date:	12-Jun-2020 06:41:46	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

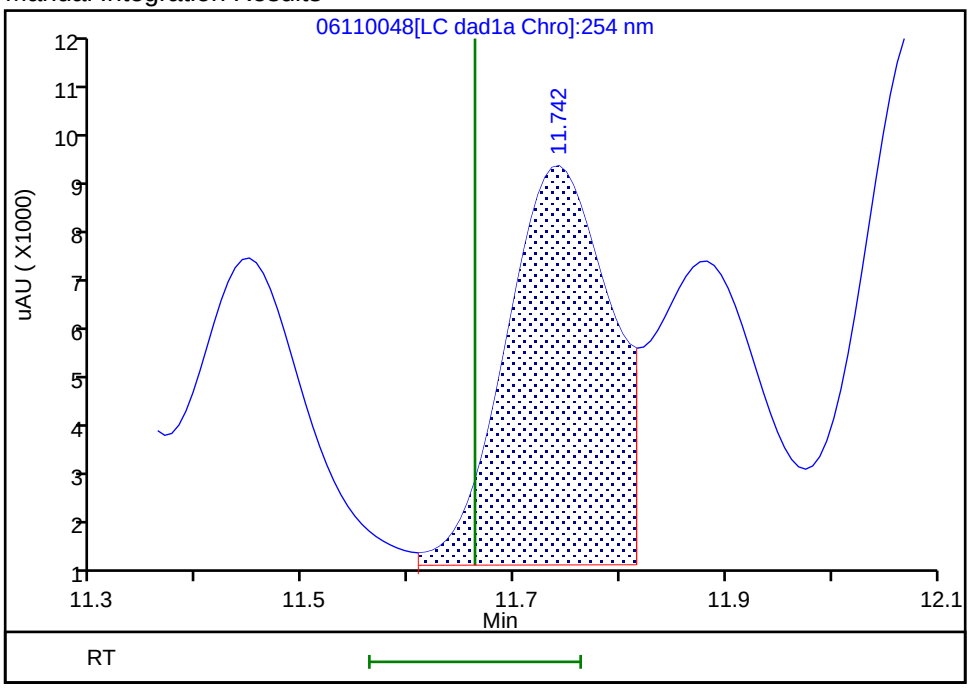
Not Detected
Expected RT: 11.66

Processing Integration Results



Manual Integration Results

RT: 11.74
Area: 52755
Amount: 0.260112
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:32:03
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

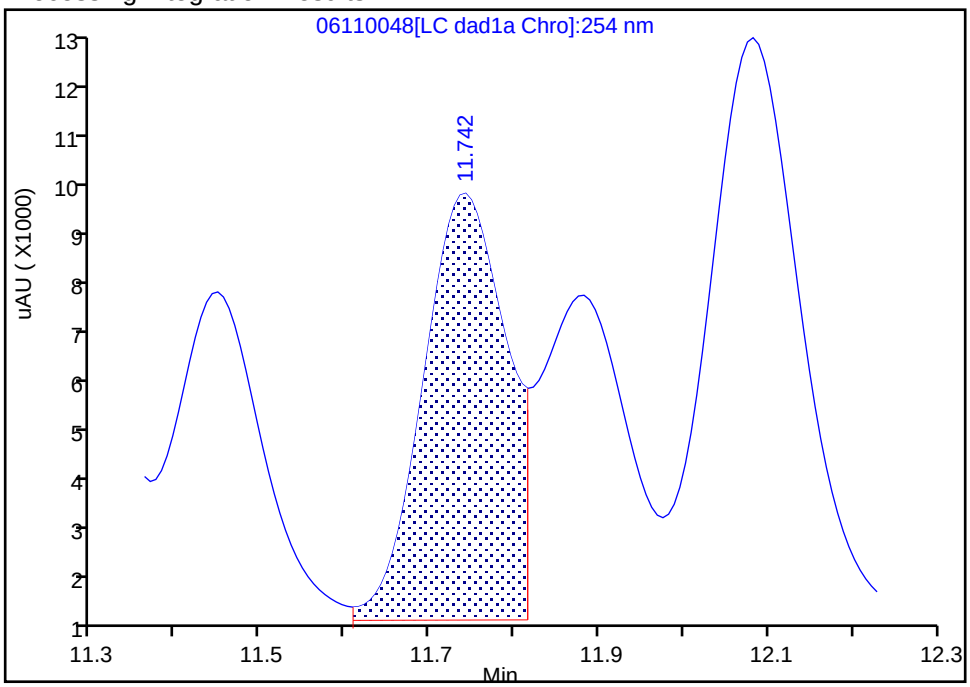
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110048.d				
Injection Date:	12-Jun-2020 06:41:46	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

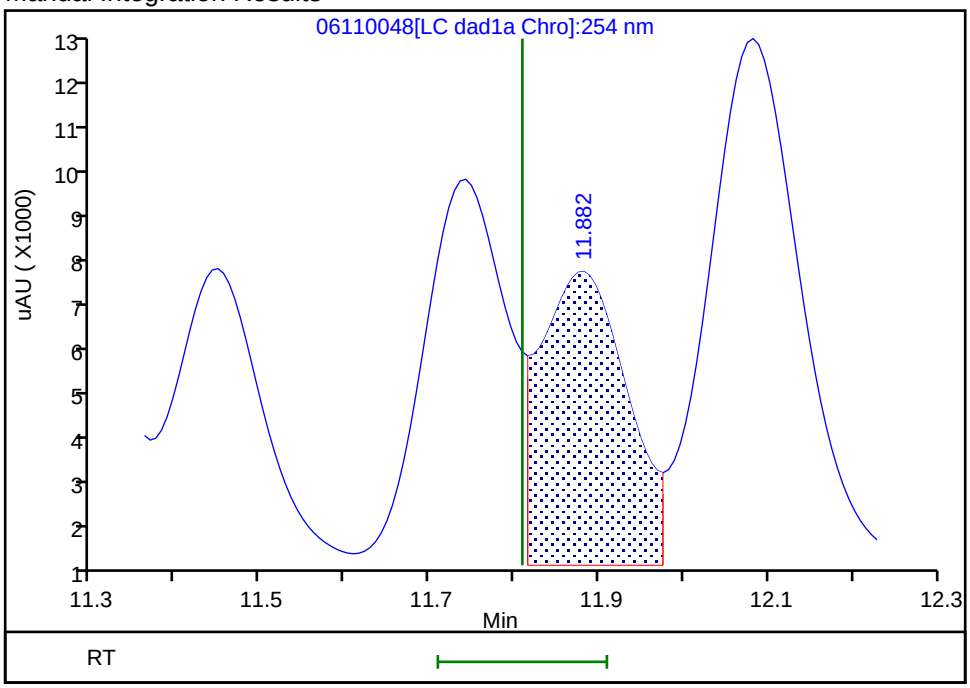
Processing Integration Results

RT: 11.74
Area: 52755
Amount: 0.352989
Amount Units: ug/mL



Manual Integration Results

RT: 11.88
Area: 41499
Amount: 0.277674
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:32:06
Audit Action: Assigned Compound ID Audit Reason:

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/49 Calibration Date: 06/12/2020 07:04

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06110049.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	199145		229	250	-8.5	15.0
DNX	Ave	152928	148324		243	250	-3.0	15.0
MNX	Ave	158544	138344		255	292	-12.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498360/49 Calibration Date: 06/12/2020 07:04

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06110049.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.62	6.53	6.73
DNX	6.95	6.85	7.05
MNX	7.40	7.26	7.56

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110049.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	12-Jun-2020 07:04:53	ALS Bottle#:	9	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092324-049				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Jun-2020 12:39:46	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1034				

First Level Reviewer: zhangji Date: 12-Jun-2020 11:32:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.622	6.627	-0.005	49836	0.2503	0.2290	M
5 DNX	1	6.949	6.954	-0.005	37118	0.2503	0.2427	M
6 MNX	1	7.395	7.407	-0.012	40362	0.2918	0.2546	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

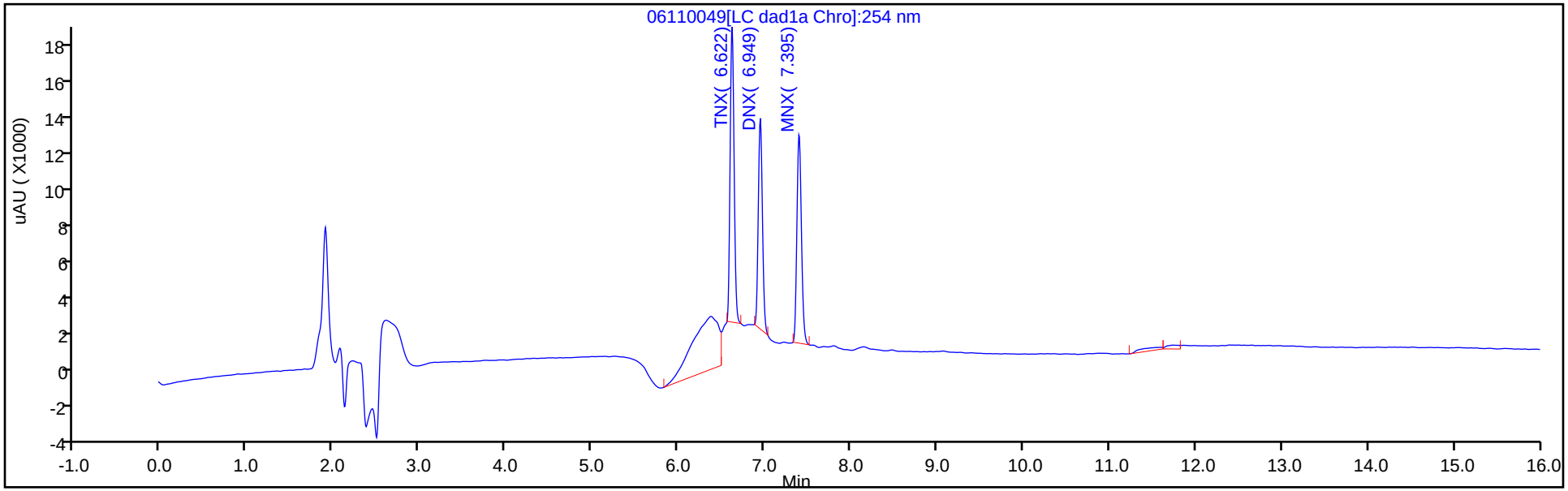
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 12-Jun-2020 12:39:46 Chrom Revision: 2.3 10-Jun-2020 22:46:48

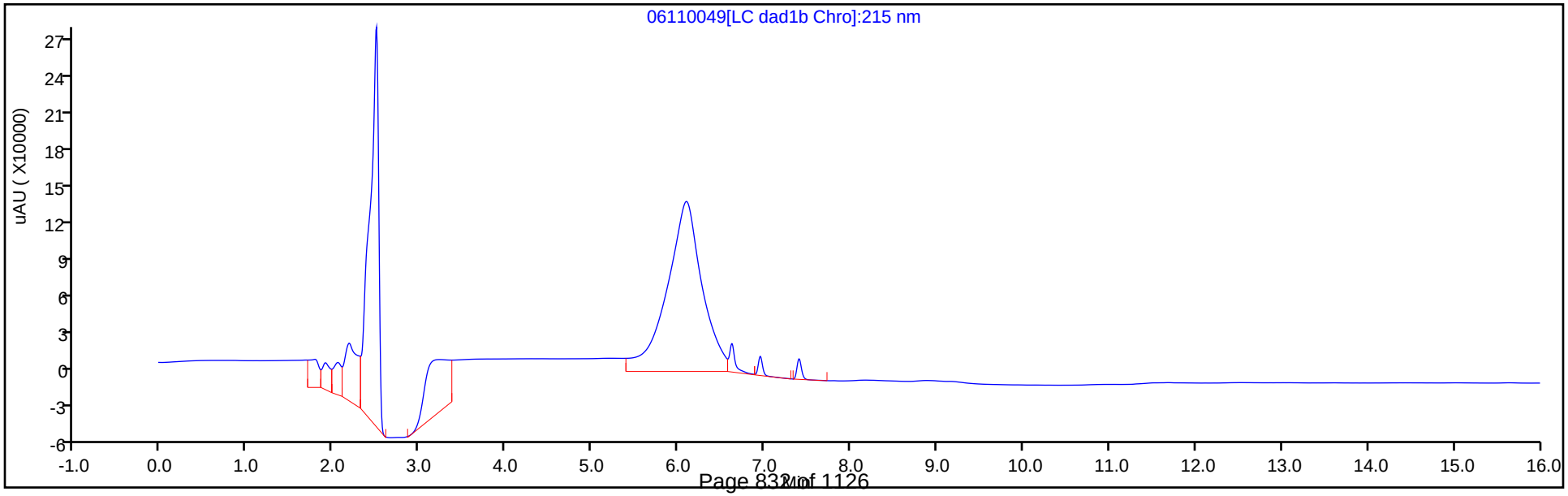
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110049.d				
Injection Date:	12-Jun-2020 07:04:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	49
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

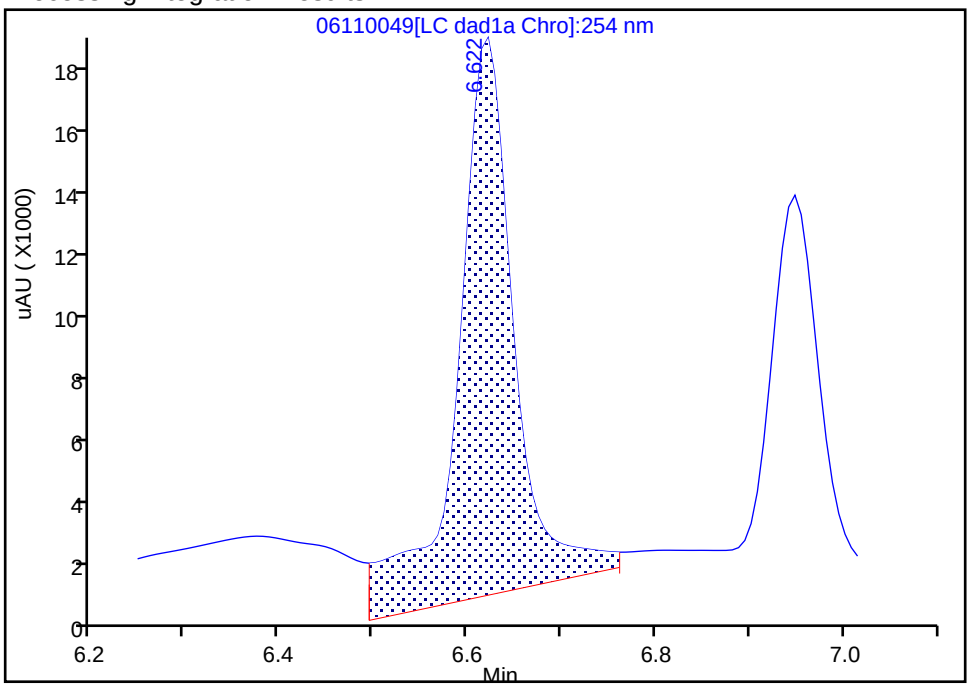
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110049.d				
Injection Date:	12-Jun-2020 07:04:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

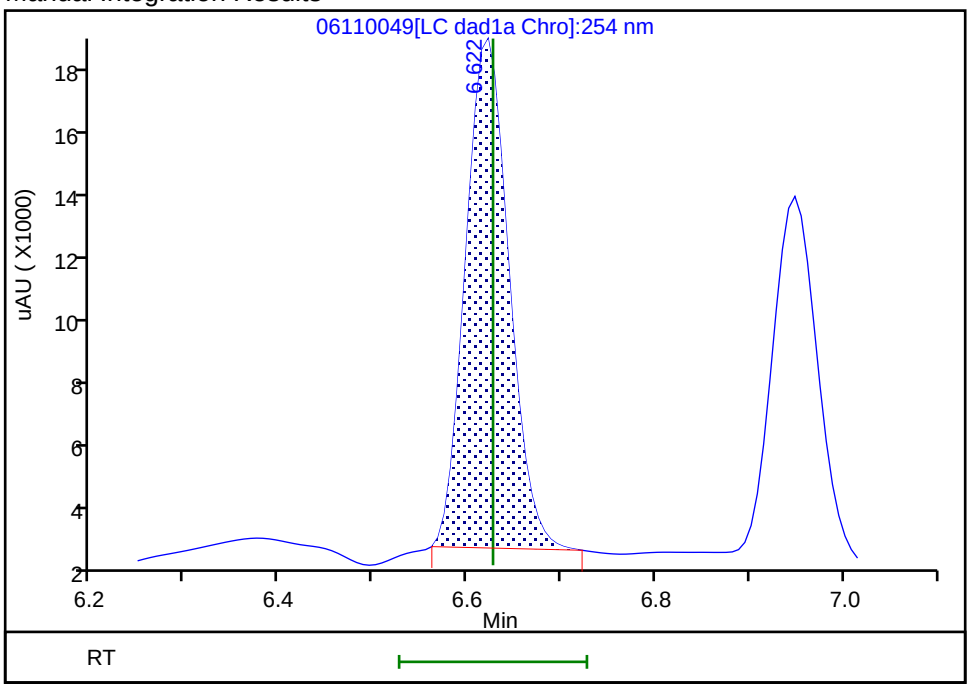
Processing Integration Results

RT: 6.62
Area: 71745
Amount: 0.329697
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 49836
Amount: 0.229017
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:32:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

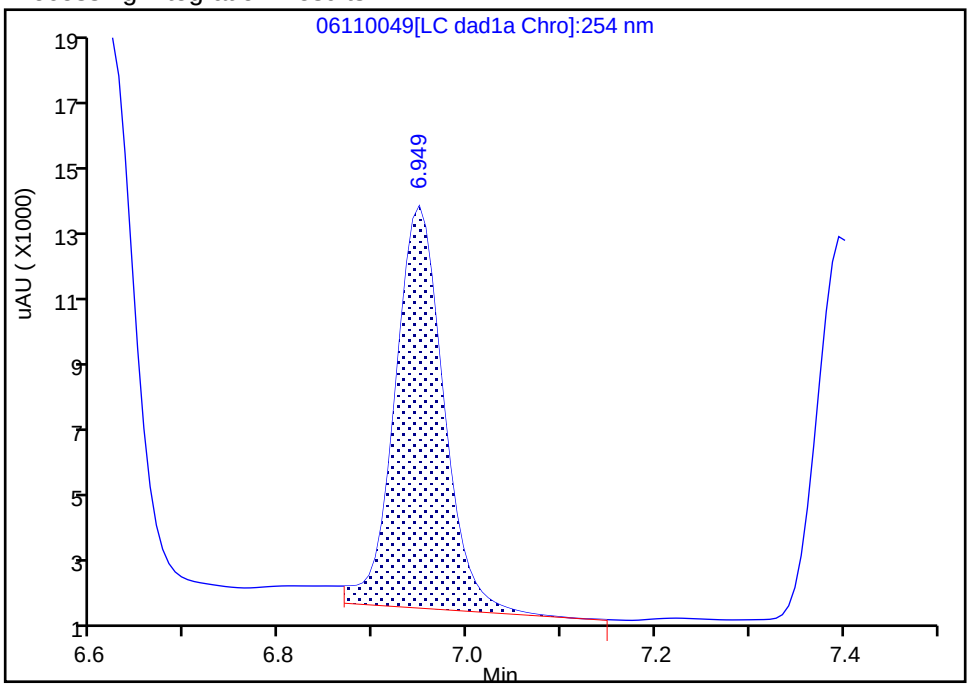
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110049.d				
Injection Date:	12-Jun-2020 07:04:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

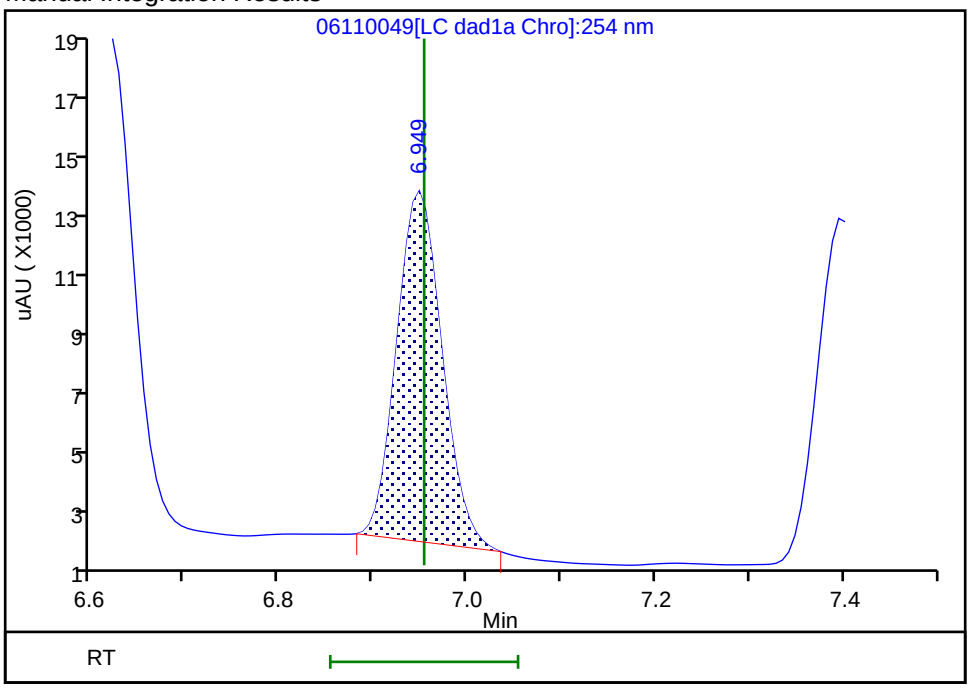
Processing Integration Results

RT: 6.95
Area: 41361
Amount: 0.270460
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 37118
Amount: 0.242715
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:32:25

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

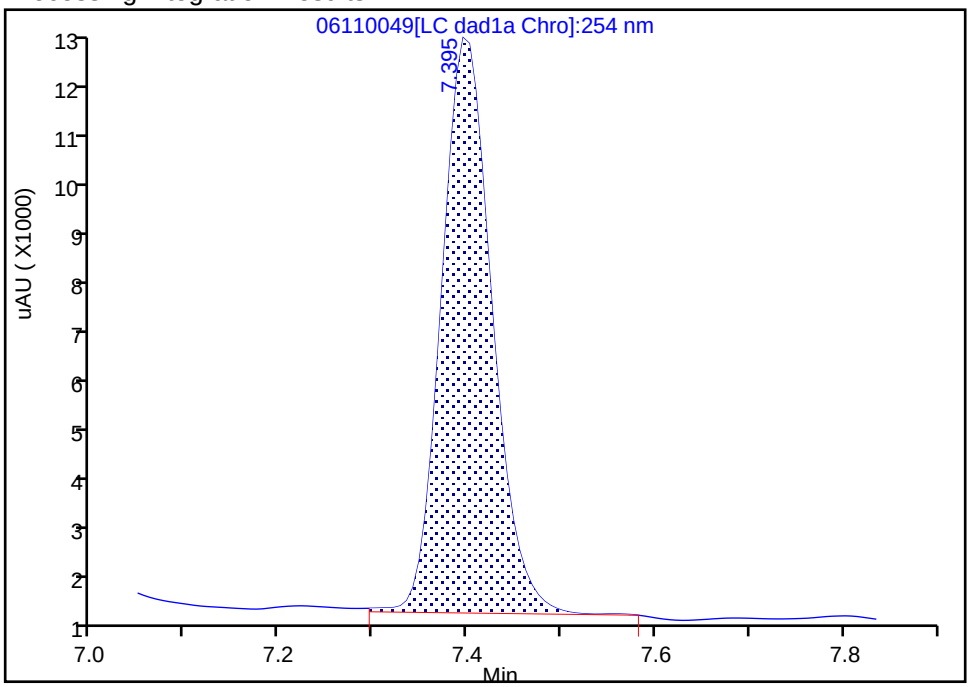
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110049.d				
Injection Date:	12-Jun-2020 07:04:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

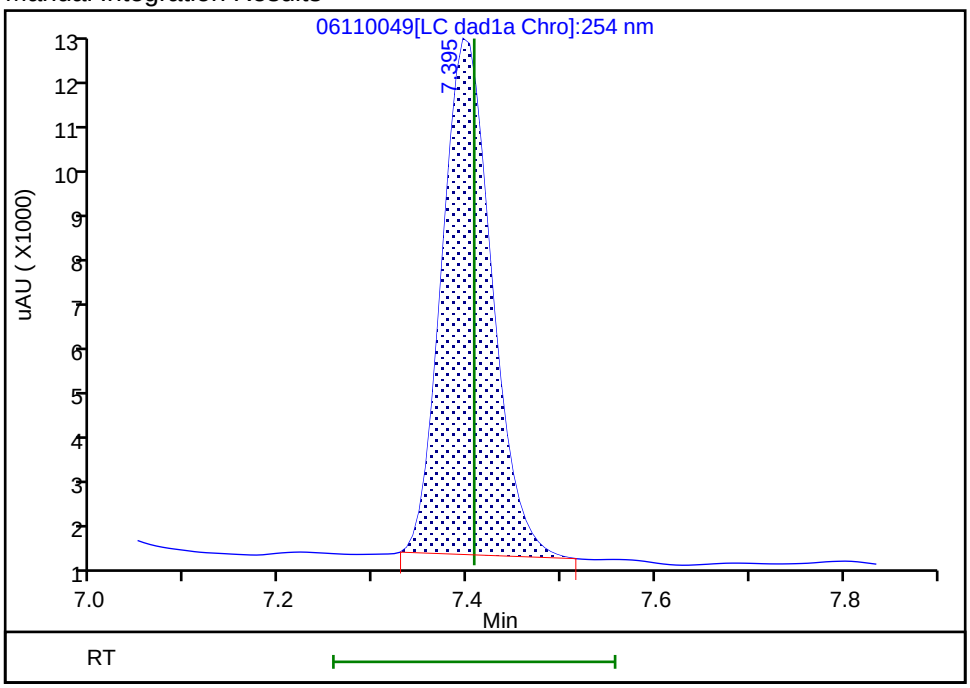
Processing Integration Results

RT: 7.40
Area: 41399
Amount: 0.261120
Amount Units: ug/mL



Manual Integration Results

RT: 7.40
Area: 40362
Amount: 0.254579
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:32:31
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498536/7 Calibration Date: 06/12/2020 13:26

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06120007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	90656		264	250	5.5	15.0
RDX	Ave	116613	112424		241	250	-3.6	15.0
Picric acid	Ave	85131	85172		250	250	0.0	15.0
1,3,5-Trinitrobenzene	Ave	230309	241501		263	251	4.9	15.0
1,3-Dinitrobenzene	Ave	306686	323537		264	251	5.5	15.0
Nitrobenzene	Ave	200403	209028		262	251	4.3	15.0
Tetryl	Ave	177032	181054		256	251	2.3	15.0
Nitroglycerin	Ave	68133	73750		2710	2500	8.2	15.0
2,4,6-Trinitrotoluene	Ave	204031	219518		270	251	7.6	15.0
4-Amino-2,6-dinitrotoluene	Lin2		171105		247	250	-1.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	213247		264	251	5.1	15.0
2,6-Dinitrotoluene	Ave	149452	168598		283	251	12.8	15.0
2,4-Dinitrotoluene	Ave	303584	331761		274	251	9.3	15.0
2-Nitrotoluene	Ave	135051	144592		268	250	7.1	15.0
4-Nitrotoluene	Ave	113005	123701		274	251	9.5	15.0
3-Nitrotoluene	Ave	143029	146641		257	250	2.5	15.0
PETN	Ave	78605	85964		2730	2500	9.4	15.0
1,2-Dinitrobenzene	Ave	138212	145316		263	250	5.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498536/7 Calibration Date: 06/12/2020 13:26

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06120007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.70	6.55	6.85
RDX	7.80	7.65	7.95
Picric acid	8.11	7.96	8.26
1,3,5-Trinitrobenzene	8.96	8.81	9.11
1,3-Dinitrobenzene	9.62	9.47	9.77
Nitrobenzene	10.00	9.85	10.15
Tetryl	10.33	10.18	10.48
Nitroglycerin	10.85	10.70	11.00
2,4,6-Trinitrotoluene	11.31	11.21	11.41
4-Amino-2,6-dinitrotoluene	11.48	11.38	11.58
2-Amino-4,6-dinitrotoluene	11.78	11.68	11.88
2,6-Dinitrotoluene	11.92	11.82	12.02
2,4-Dinitrotoluene	12.12	12.02	12.22
2-Nitrotoluene	12.98	12.83	13.13
4-Nitrotoluene	13.42	13.27	13.57
3-Nitrotoluene	14.03	13.88	14.18
PETN	15.16	15.01	15.31
1,2-Dinitrobenzene	8.78	8.63	8.93

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2020 13:26:15 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092367-007
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Jun-2020 18:11:21 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1024

First Level Reviewer: zhangji Date: 12-Jun-2020 13:52:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.704	6.704	0.000	22664	0.2500	0.2637	M
7 RDX	1	7.797	7.797	0.000	28106	0.2500	0.2410	
8 2,4,6-Trinitrophenol	1	8.111	8.111	0.000	21293	0.2500	0.2501	
$ 9 1,2-Dinitrobenzene	1	8.777	8.777	0.000	36329	0.2500	0.2628	
10 1,3,5-Trinitrobenzene	1	8.957	8.957	0.000	60496	0.2505	0.2627	
11 1,3-Dinitrobenzene	1	9.617	9.617	0.000	81046	0.2505	0.2643	
12 Nitrobenzene	1	10.004	10.004	0.000	52466	0.2510	0.2618	
14 Tetryl	1	10.330	10.330	0.000	45354	0.2505	0.2562	
15 Nitroglycerin	2	10.850	10.850	0.000	184376	2.50	2.71	
16 2,4,6-Trinitrotoluene	1	11.310	11.310	0.000	55099	0.2510	0.2701	
17 4-Amino-2,6-dinitrotoluene	1	11.484	11.484	0.000	42819	0.2503	0.2466	
18 2-Amino-4,6-dinitrotoluene	1	11.784	11.784	0.000	53525	0.2510	0.2639	
19 2,6-Dinitrotoluene	1	11.924	11.924	0.000	42318	0.2510	0.2832	
20 2,4-Dinitrotoluene	1	12.124	12.124	0.000	83272	0.2510	0.2743	
21 o-Nitrotoluene	1	12.977	12.977	0.000	36148	0.2500	0.2677	
22 p-Nitrotoluene	1	13.424	13.424	0.000	30987	0.2505	0.2742	
23 m-Nitrotoluene	1	14.030	14.030	0.000	36697	0.2503	0.2566	
24 PETN	2	15.164	15.164	0.000	214910	2.50	2.73	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

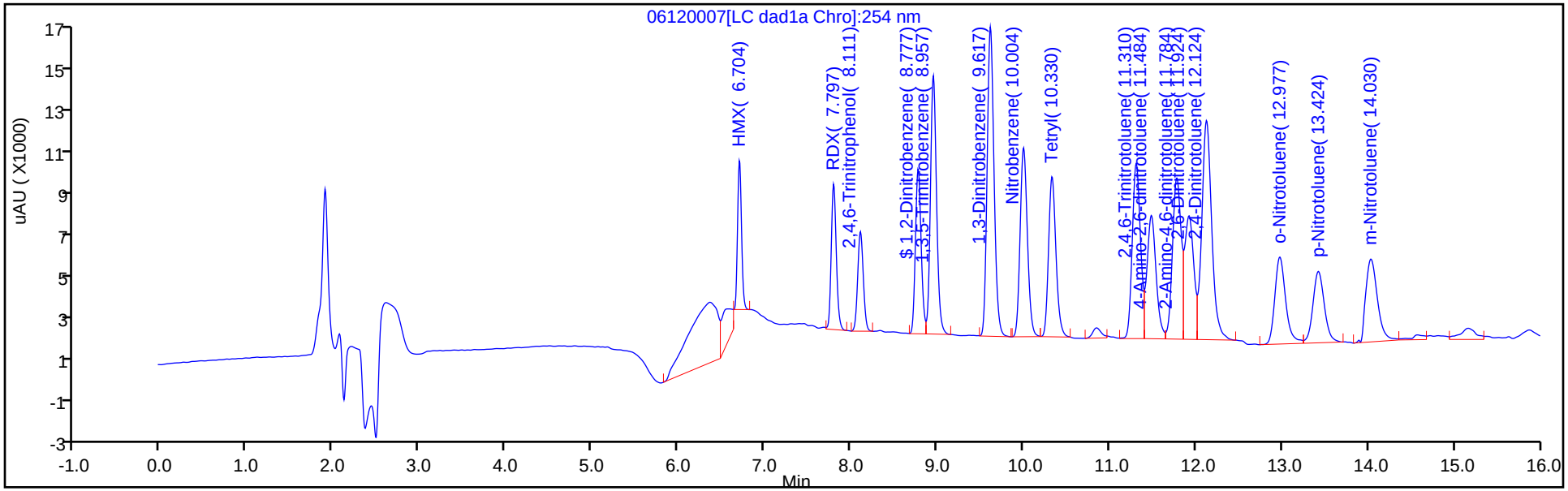
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 16-Jun-2020 18:11:21 Chrom Revision: 2.3 10-Jun-2020 22:46:48

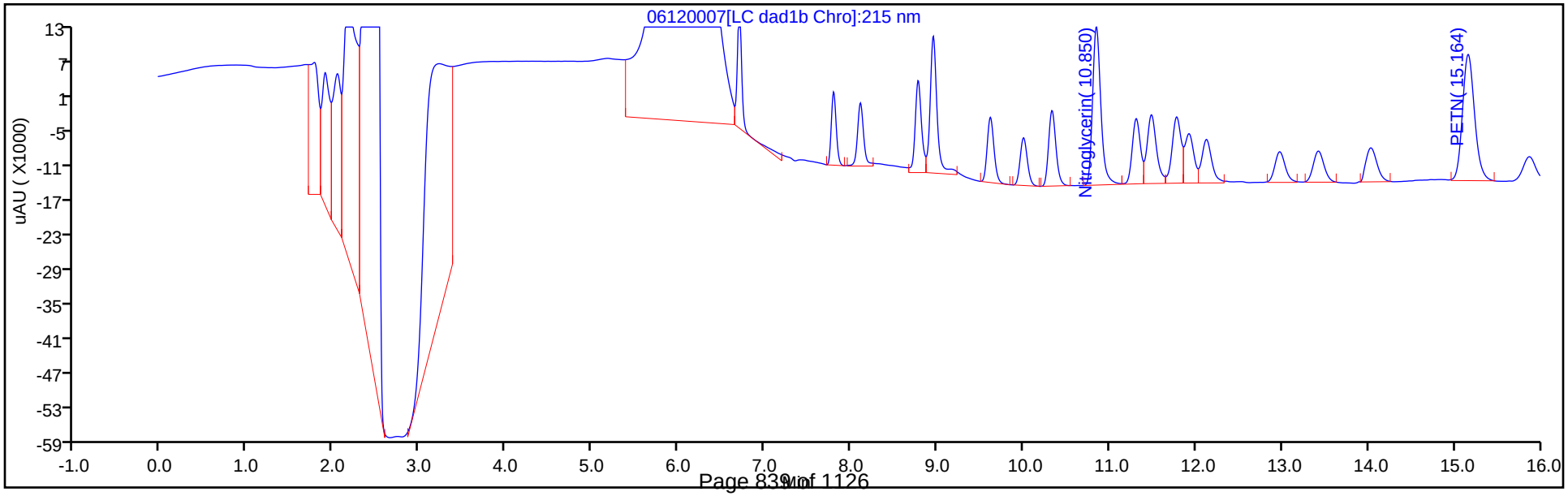
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120007.d				
Injection Date:	12-Jun-2020 13:26:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

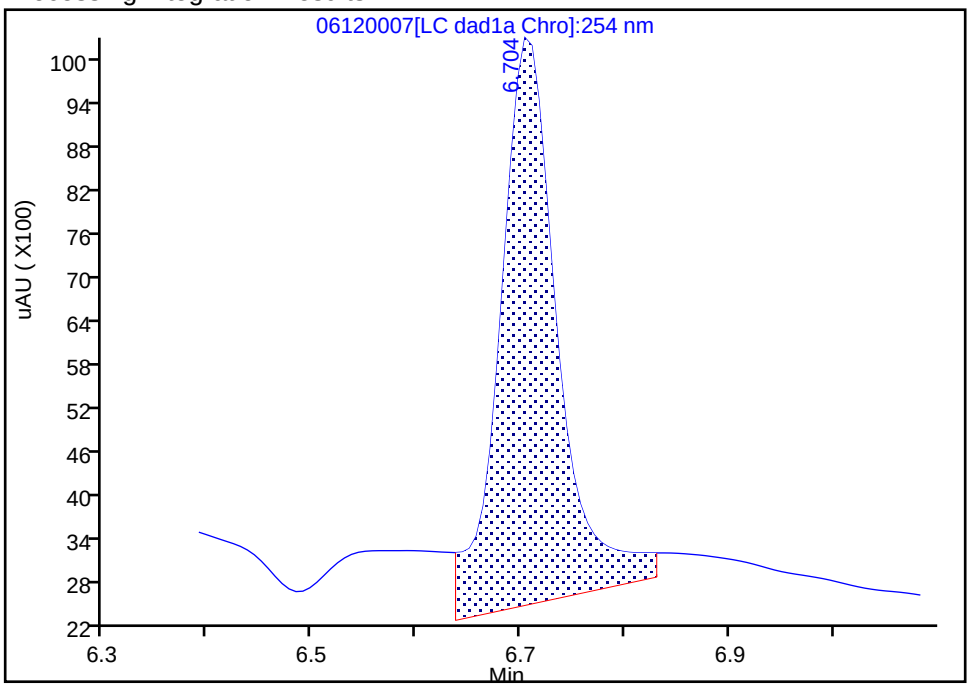
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120007.d				
Injection Date:	12-Jun-2020 13:26:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

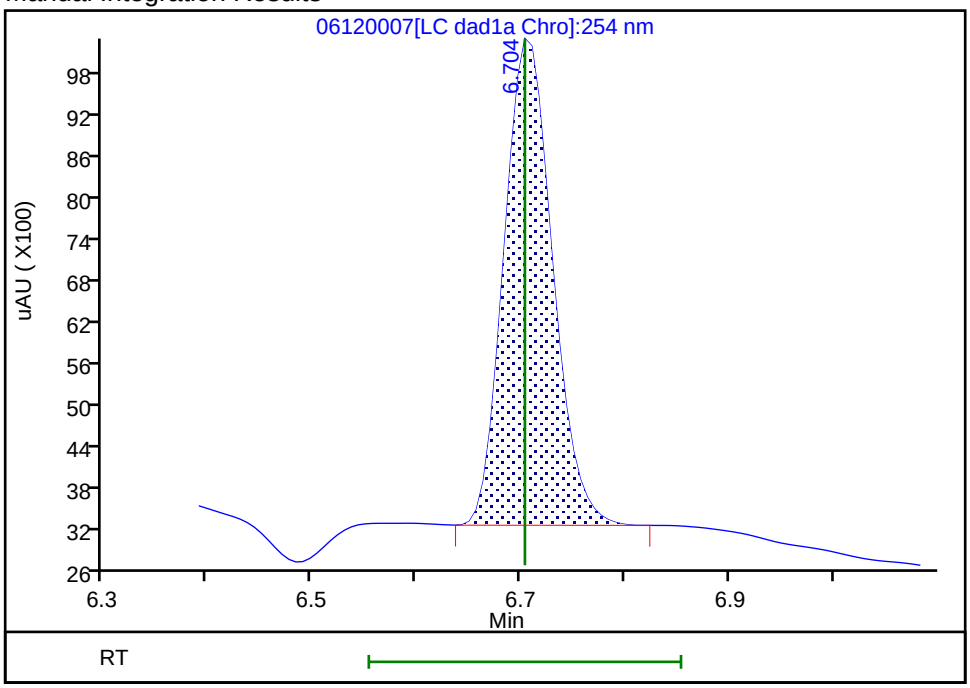
Processing Integration Results

RT: 6.70
Area: 29931
Amount: 0.348188
Amount Units: ug/mL



Manual Integration Results

RT: 6.70
Area: 22664
Amount: 0.263651
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 13:52:30
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498536/9 Calibration Date: 06/12/2020 14:12

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06120009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	205778		237	250	-5.4	15.0
DNX	Ave	152928	153646		251	250	0.5	15.0
MNX	Ave	158544	142958		263	292	-9.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498536/9 Calibration Date: 06/12/2020 14:12

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06120009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.62	6.52	6.72
DNX	6.95	6.85	7.05
MNX	7.39	7.24	7.54

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120009.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	12-Jun-2020 14:12:25	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092367-009				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:11:22	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 12-Jun-2020 14:39:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.621	6.621	0.000	51496	0.2503	0.2366	M
5 DNX	1	6.947	6.947	0.000	38450	0.2503	0.2514	M
6 MNX	1	7.394	7.394	0.000	41708	0.2918	0.2631	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

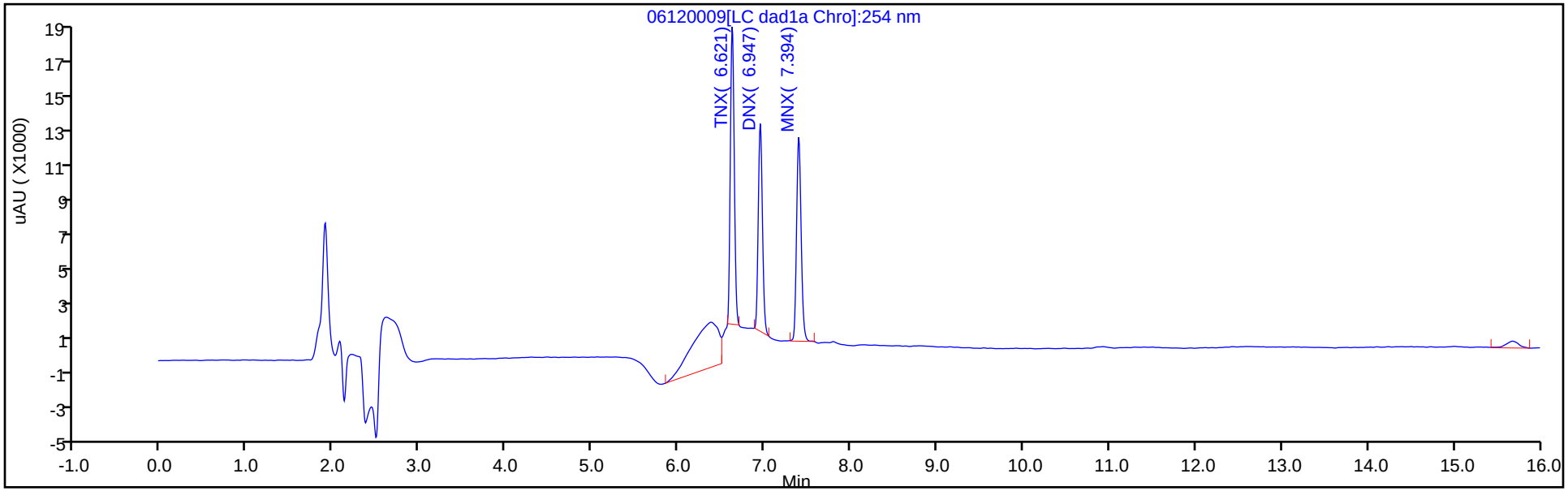
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 16-Jun-2020 18:11:22 Chrom Revision: 2.3 10-Jun-2020 22:46:48

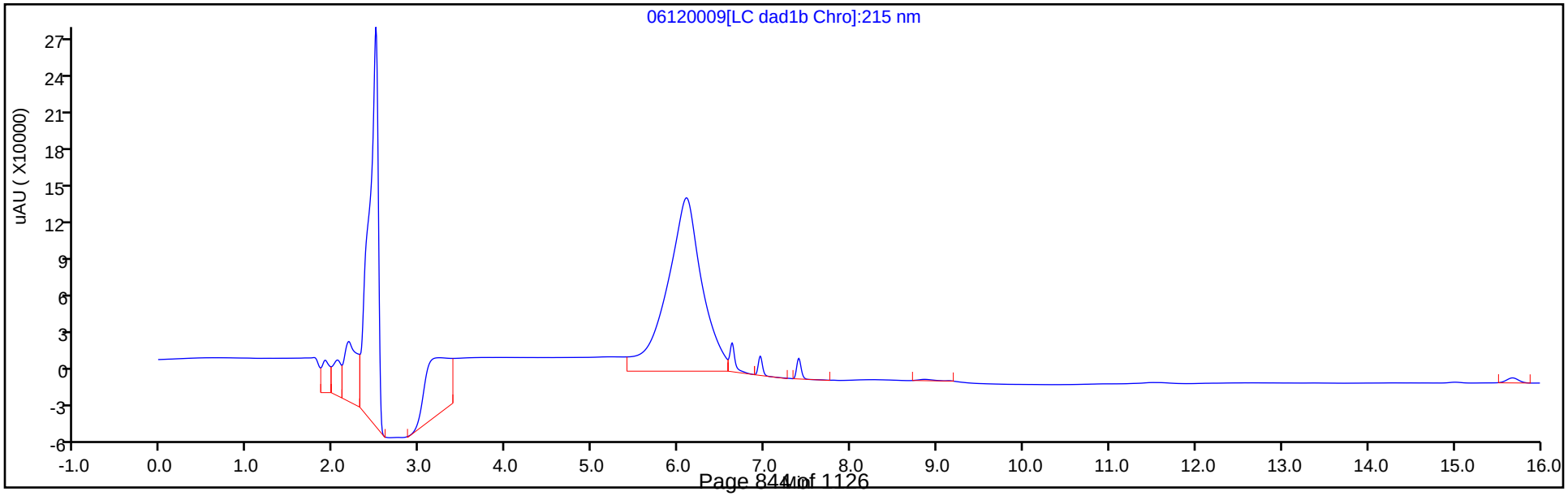
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120009.d				
Injection Date:	12-Jun-2020 14:12:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

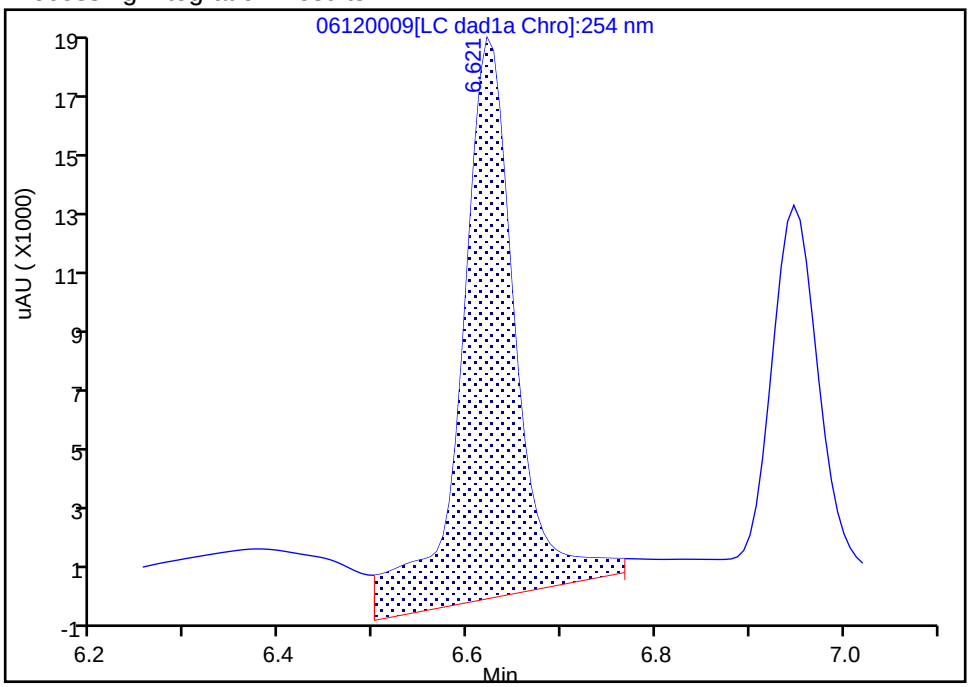
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120009.d				
Injection Date:	12-Jun-2020 14:12:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

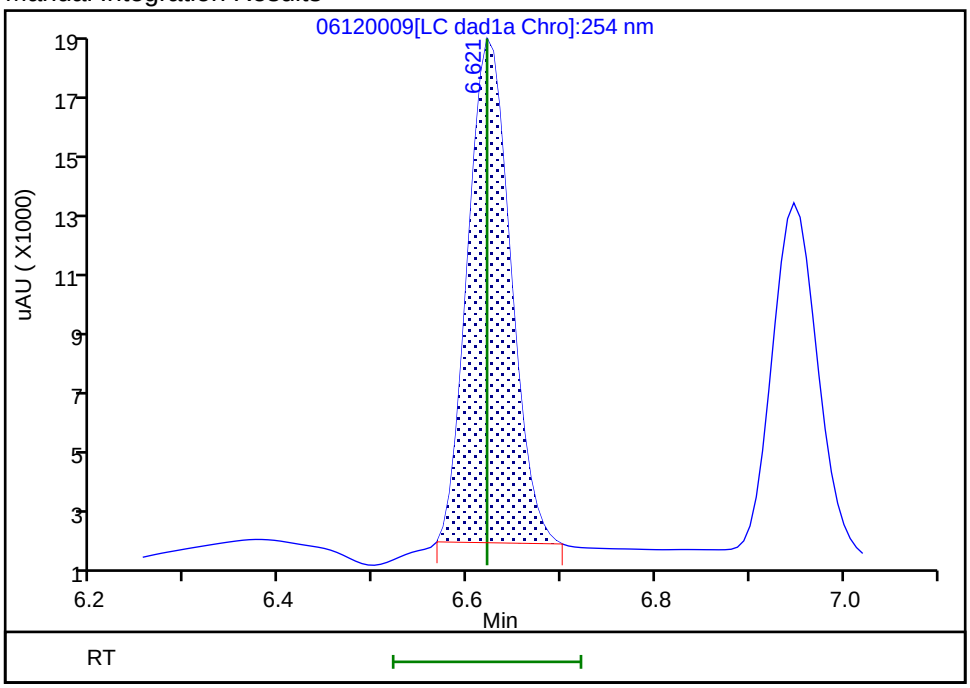
Processing Integration Results

RT: 6.62
Area: 71547
Amount: 0.328787
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 51496
Amount: 0.236645
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 14:39:37

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

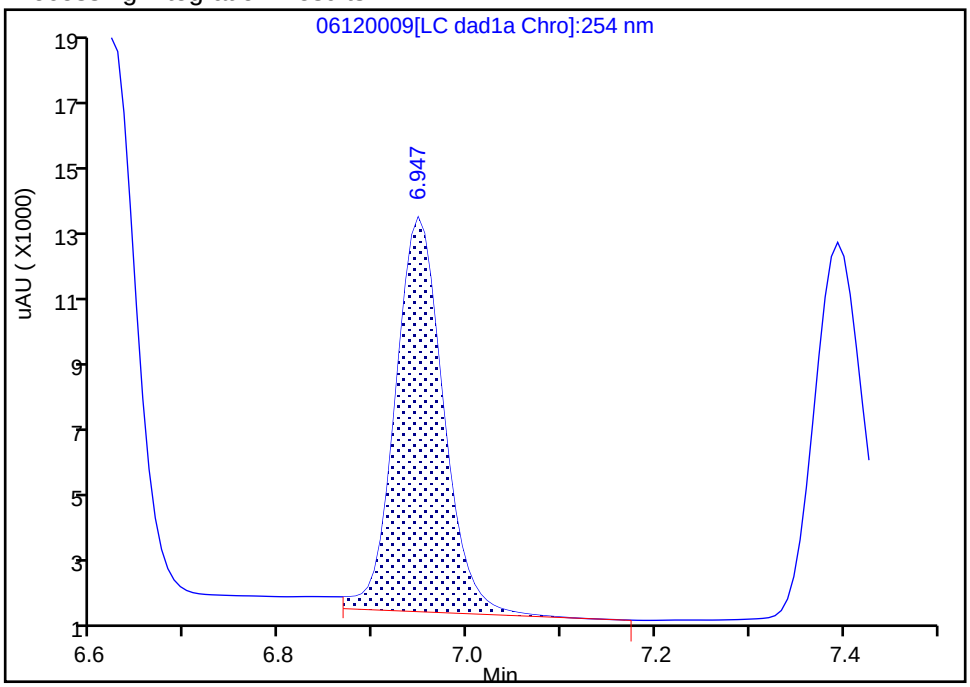
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120009.d				
Injection Date:	12-Jun-2020 14:12:25	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

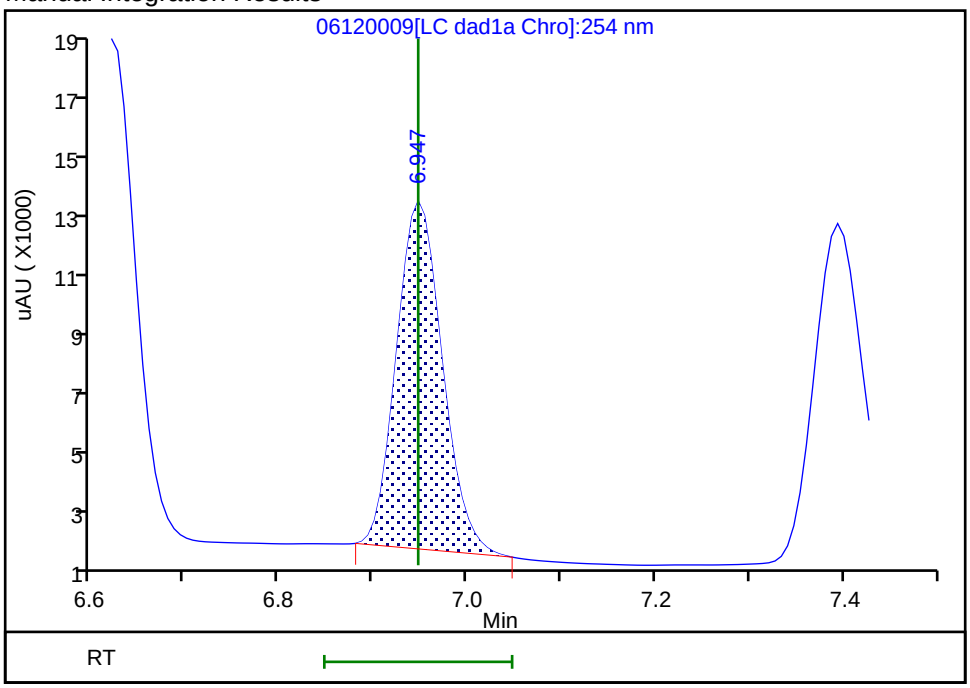
Processing Integration Results

RT: 6.95
Area: 41425
Amount: 0.270879
Amount Units: ug/mL



Manual Integration Results

RT: 6.95
Area: 38450
Amount: 0.251425
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 14:39:41

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498536/19 Calibration Date: 06/12/2020 18:02

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06120019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	85962	90768		264	250	5.6	15.0
RDX	Ave	116613	112836		242	250	-3.2	15.0
Picric acid	Ave	85131	86036		253	250	1.1	15.0
1,3,5-Trinitrobenzene	Ave	230309	242431		264	251	5.3	15.0
1,3-Dinitrobenzene	Ave	306686	324998		265	251	6.0	15.0
Nitrobenzene	Ave	200403	208538		261	251	4.1	15.0
Tetryl	Ave	177032	182727		259	251	3.2	15.0
Nitroglycerin	Ave	68133	75256		2760	2500	10.5	15.0
2,4,6-Trinitrotoluene	Ave	204031	219159		270	251	7.4	15.0
4-Amino-2,6-dinitrotoluene	Lin2		168727		243	250	-2.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	202817	212578		263	251	4.8	15.0
2,6-Dinitrotoluene	Ave	149452	159255		267	251	6.6	15.0
2,4-Dinitrotoluene	Ave	303584	320080		265	251	5.4	15.0
2-Nitrotoluene	Ave	135051	135168		250	250	0.0	15.0
4-Nitrotoluene	Ave	113005	118699		263	251	5.0	15.0
3-Nitrotoluene	Ave	143029	147888		259	250	3.4	15.0
PETN	Ave	78605	86217		2740	2500	9.7	15.0
1,2-Dinitrobenzene	Ave	138212	146312		265	250	5.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498536/19 Calibration Date: 06/12/2020 18:02

Instrument ID: CHHPLC_X3 Calib Start Date: 03/18/2020 11:35

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/18/2020 14:39

Lab File ID: 06120019.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.71	6.55	6.85
RDX	7.80	7.65	7.95
Picric acid	8.11	7.96	8.26
1,3,5-Trinitrobenzene	8.96	8.81	9.11
1,3-Dinitrobenzene	9.62	9.47	9.77
Nitrobenzene	10.00	9.85	10.15
Tetryl	10.33	10.18	10.48
Nitroglycerin	10.84	10.70	11.00
2,4,6-Trinitrotoluene	11.30	11.21	11.41
4-Amino-2,6-dinitrotoluene	11.47	11.38	11.58
2-Amino-4,6-dinitrotoluene	11.76	11.68	11.88
2,6-Dinitrotoluene	11.90	11.82	12.02
2,4-Dinitrotoluene	12.10	12.02	12.22
2-Nitrotoluene	12.94	12.83	13.13
4-Nitrotoluene	13.38	13.27	13.57
3-Nitrotoluene	13.98	13.88	14.18
PETN	15.10	15.01	15.31
1,2-Dinitrobenzene	8.78	8.63	8.93

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120019.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2020 18:02:33 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0092367-019
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Jun-2020 18:11:26 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1024

First Level Reviewer: zhangji Date: 16-Jun-2020 14:03:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.713	6.704	0.009	22692	0.2500	0.2640	
7 RDX	1	7.800	7.797	0.003	28209	0.2500	0.2419	
8 2,4,6-Trinitrophenol	1	8.113	8.111	0.002	21509	0.2500	0.2527	
$ 9 1,2-Dinitrobenzene	1	8.780	8.777	0.003	36578	0.2500	0.2647	
10 1,3,5-Trinitrobenzene	1	8.960	8.957	0.003	60729	0.2505	0.2637	
11 1,3-Dinitrobenzene	1	9.620	9.617	0.003	81412	0.2505	0.2655	
12 Nitrobenzene	1	10.000	10.004	-0.004	52343	0.2510	0.2612	
14 Tetryl	1	10.326	10.330	-0.004	45773	0.2505	0.2586	
15 Nitroglycerin	2	10.840	10.850	-0.010	188140	2.50	2.76	
16 2,4,6-Trinitrotoluene	1	11.300	11.310	-0.010	55009	0.2510	0.2696	
17 4-Amino-2,6-dinitrotoluene	1	11.473	11.484	-0.011	42224	0.2503	0.2432	
18 2-Amino-4,6-dinitrotoluene	1	11.760	11.784	-0.024	53357	0.2510	0.2631	
19 2,6-Dinitrotoluene	1	11.900	11.924	-0.024	39973	0.2510	0.2675	
20 2,4-Dinitrotoluene	1	12.100	12.124	-0.024	80340	0.2510	0.2646	
21 o-Nitrotoluene	1	12.940	12.977	-0.037	33792	0.2500	0.2502	
22 p-Nitrotoluene	1	13.380	13.424	-0.044	29734	0.2505	0.2631	
23 m-Nitrotoluene	1	13.980	14.030	-0.050	37009	0.2503	0.2588	
24 PETN	2	15.100	15.164	-0.064	215542	2.50	2.74	

Reagents:

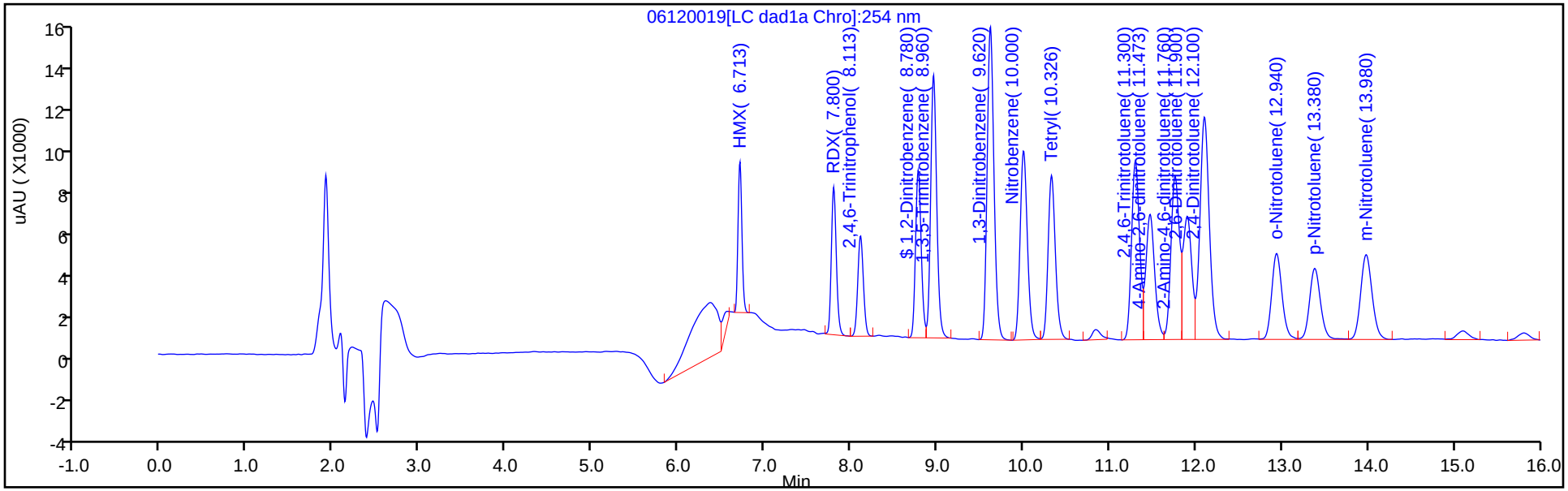
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 16-Jun-2020 18:11:26 Chrom Revision: 2.3 10-Jun-2020 22:46:48

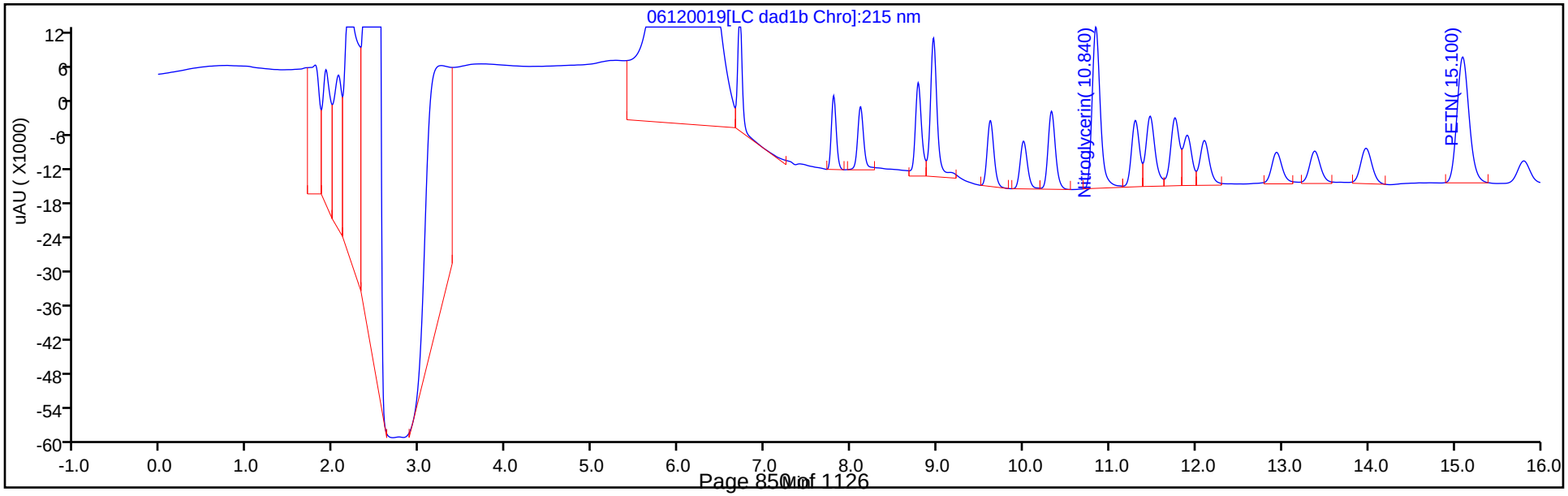
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120019.d				
Injection Date:	12-Jun-2020 18:02:33	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	19
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.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498536/20 Calibration Date: 06/12/2020 18:25

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06120020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	207341		238	250	-4.7	15.0
DNX	Ave	152928	153890		252	250	0.6	15.0
MNX	Ave	158544	141916		261	292	-10.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Lab Sample ID: CCV 280-498536/20 Calibration Date: 06/12/2020 18:25

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 06120020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.62	6.52	6.72
DNX	6.94	6.85	7.05
MNX	7.39	7.24	7.54

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120020.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	12-Jun-2020 18:25:30	ALS Bottle#:	9	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0092367-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:11:27	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 16-Jun-2020 14:03:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.621	6.621	0.000	51887	0.2503	0.2384	M
5 DNX	1	6.941	6.947	-0.006	38511	0.2503	0.2518	M
6 MNX	1	7.394	7.394	0.000	41404	0.2918	0.2612	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

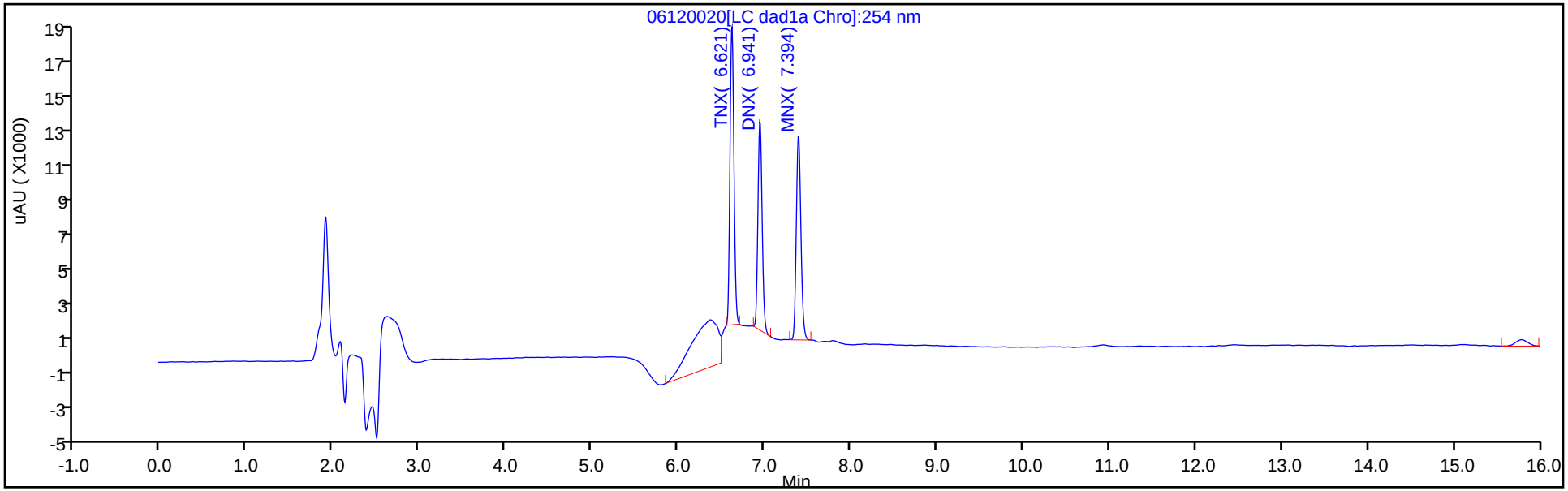
8330 DMT_00006 Amount Added: 12.50 Units: uL

Report Date: 16-Jun-2020 18:11:27 Chrom Revision: 2.3 10-Jun-2020 22:46:48

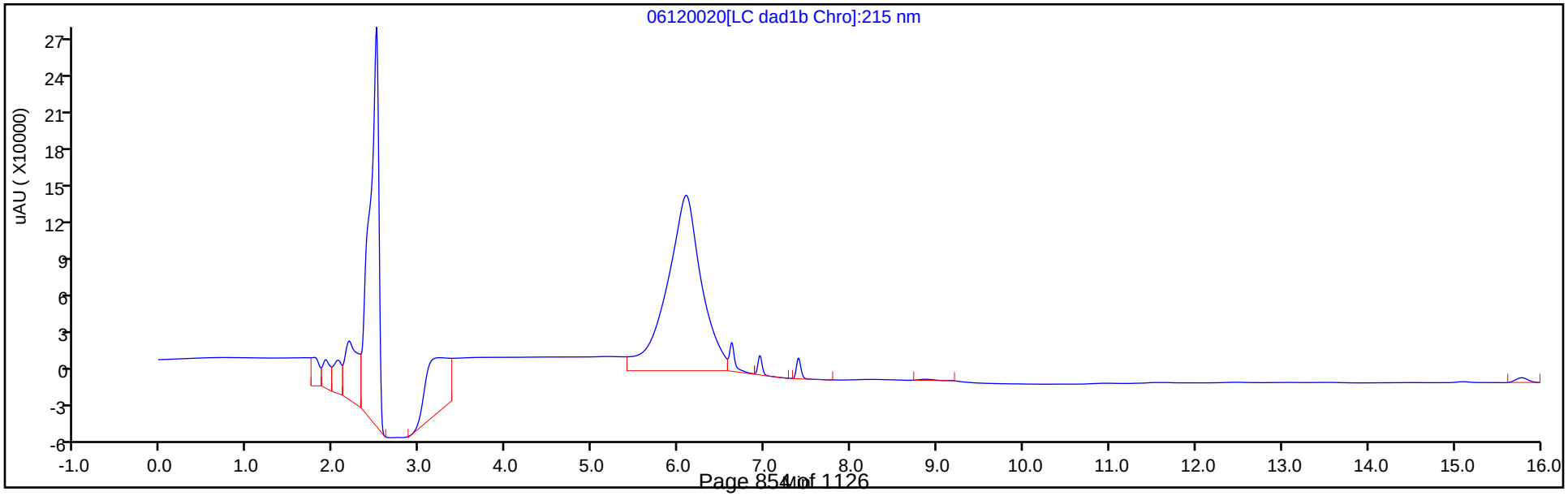
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120020.d				
Injection Date:	12-Jun-2020 18:25:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

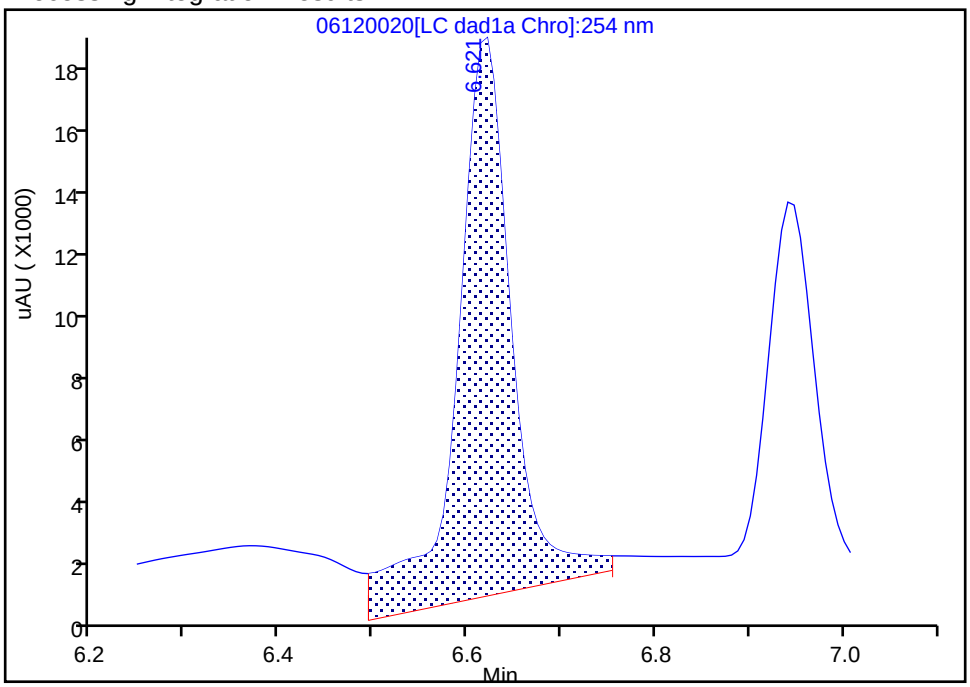
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120020.d				
Injection Date:	12-Jun-2020 18:25:30	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

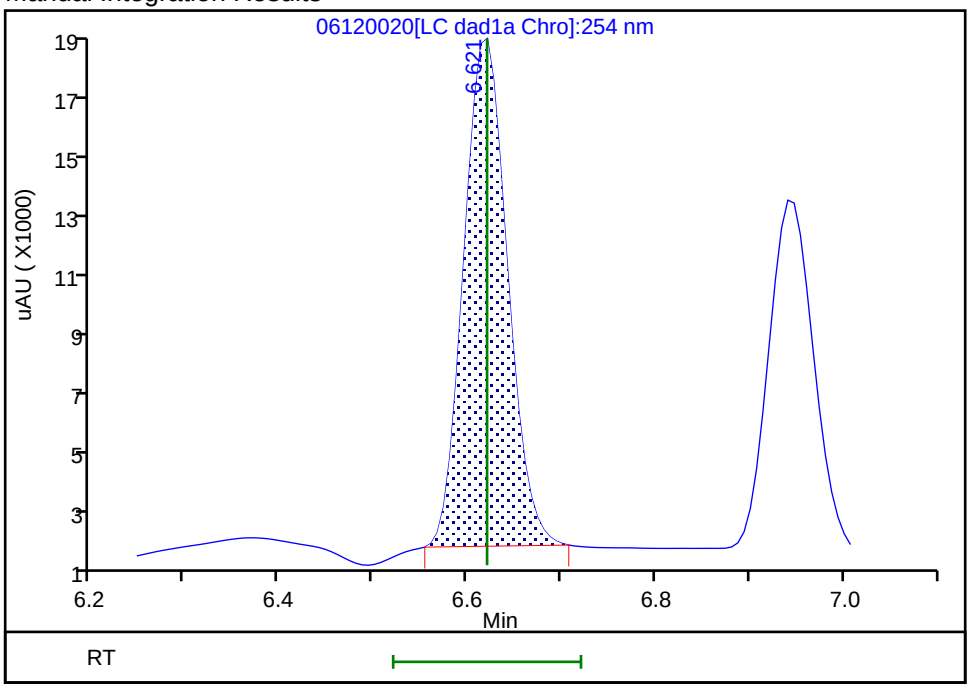
Processing Integration Results

RT: 6.62
Area: 70664
Amount: 0.324730
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 51887
Amount: 0.238442
Amount Units: ug/mL



Reviewer: zhangji, 16-Jun-2020 14:03:23
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

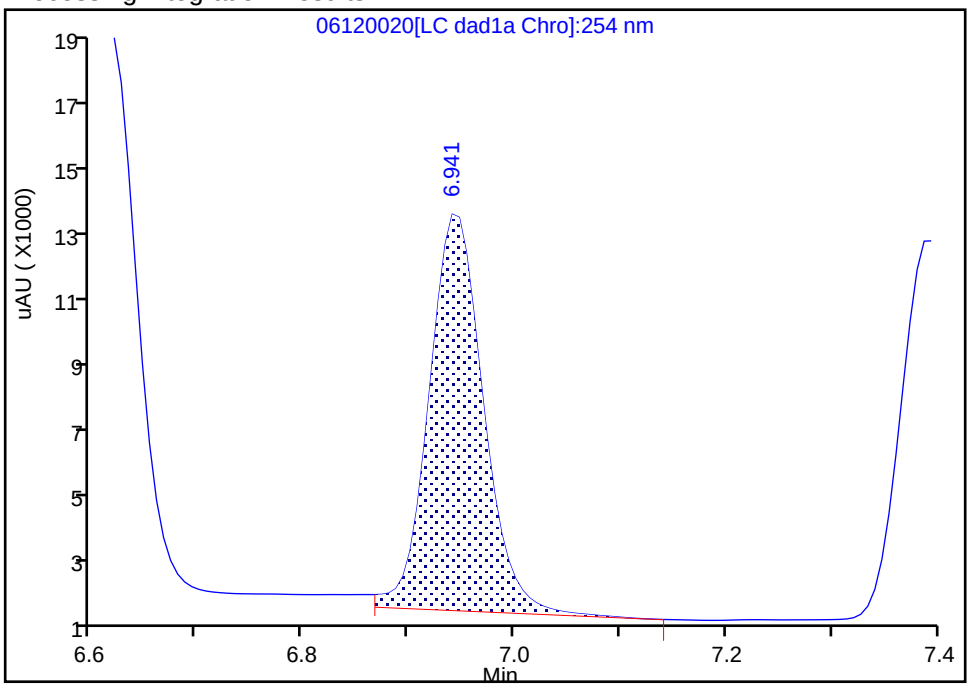
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120020.d				
Injection Date:	12-Jun-2020 18:25:30	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

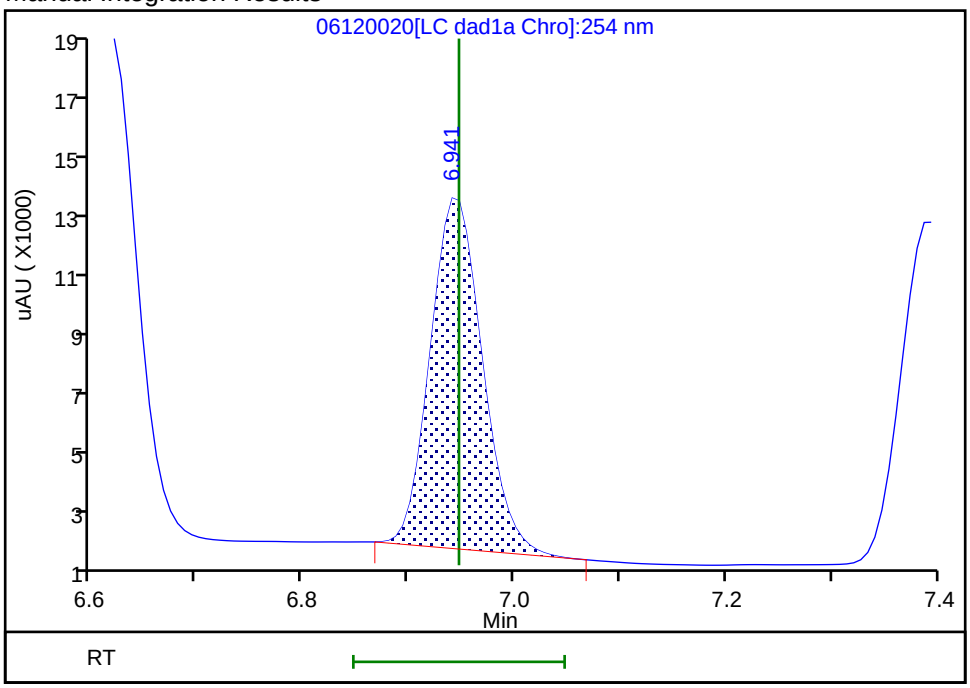
Processing Integration Results

RT: 6.94
Area: 41158
Amount: 0.269133
Amount Units: ug/mL



Manual Integration Results

RT: 6.94
Area: 38511
Amount: 0.251824
Amount Units: ug/mL



Reviewer: zhangji, 16-Jun-2020 14:03:28

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-496861/1-A
Matrix: Water
Lab File ID: 06120010.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 500(mL)
Date Analyzed: 06/12/2020 14:35
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.: 498536
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120010.D
Lims ID: MB 280-496861/1-A
Client ID:
Sample Type: MB
Inject. Date: 12-Jun-2020 14:35:32 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-496861/1-
Misc. Info.: 280-0092367-010
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Jun-2020 18:11:22 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1024

First Level Reviewer: zhangji Date: 12-Jun-2020 15:01:23

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 2,6-diamino-4-nitrotoluene	1		6.576				ND	U
	2 TNX	1		6.621				ND	
	3 HMX	1		6.704				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.762				ND	
	5 DNX	1		6.947				ND	
	6 MNX	1		7.394				ND	U
	7 RDX	1		7.797				ND	
	8 2,4,6-Trinitrophenol	1		8.111				ND	
$	9 1,2-Dinitrobenzene	1	8.744	8.777	-0.033	25990	0.2000	0.1880	
	10 1,3,5-Trinitrobenzene	1		8.957				ND	
	11 1,3-Dinitrobenzene	1		9.617				ND	
	12 Nitrobenzene	1		10.004				ND	
	13 3,5-Dinitroaniline	1		10.215				ND	
	14 Tetryl	1		10.330				ND	
	15 Nitroglycerin	2		10.850				ND	
	16 2,4,6-Trinitrotoluene	1		11.310				ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.484				ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.784				ND	
	19 2,6-Dinitrotoluene	1		11.924				ND	
	20 2,4-Dinitrotoluene	1		12.124				ND	
	21 o-Nitrotoluene	1		12.977				ND	
	22 p-Nitrotoluene	1		13.424				ND	
	23 m-Nitrotoluene	1	14.017	14.030	-0.013	1355		0.009474	
	24 PETN	2		15.164				ND	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

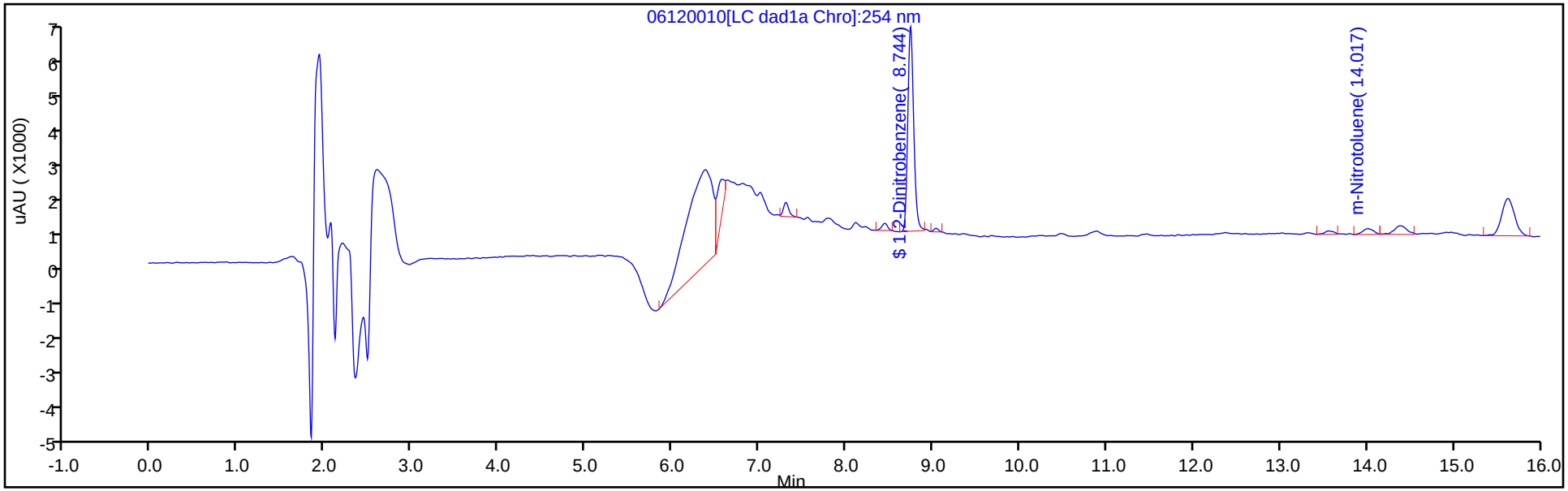
U - Marked Undetected

Report Date: 16-Jun-2020 18:11:22 Chrom Revision: 2.3 10-Jun-2020 22:46:48

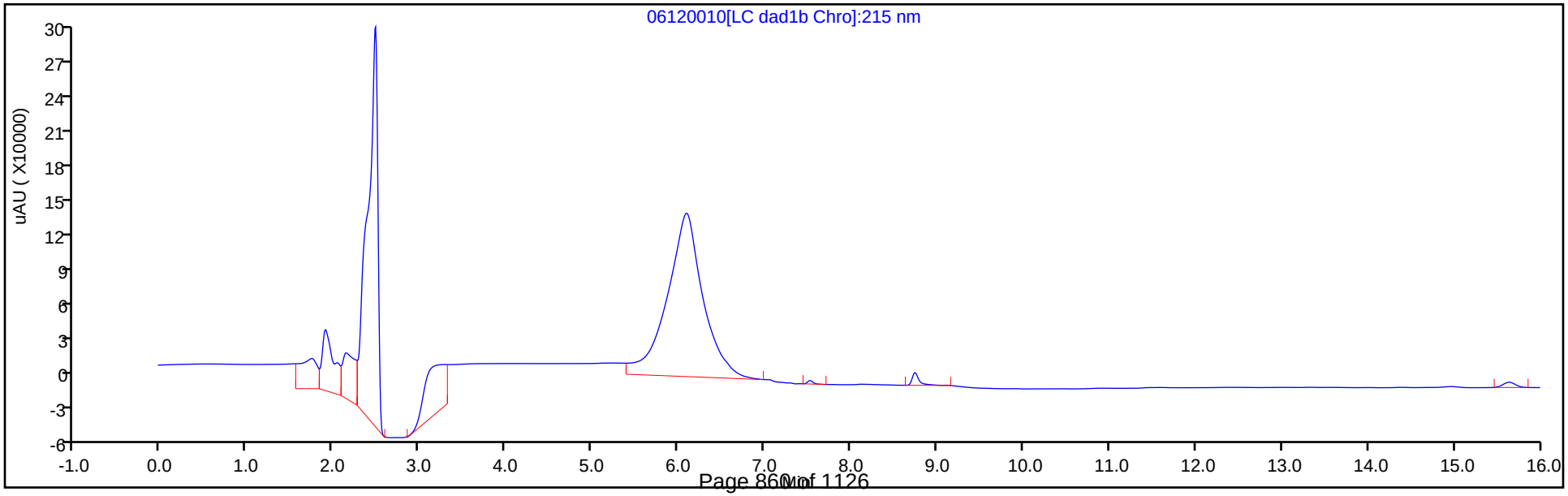
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120010.d				
Injection Date:	12-Jun-2020 14:35:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-496861/1-A			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\06120010.D				
Lims ID:	MB 280-496861/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	12-Jun-2020 14:35:32	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-496861/1-				
Misc. Info.:	280-0092367-010				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200612-92367.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Jun-2020 18:11:22	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1024				

First Level Reviewer: zhangji Date: 12-Jun-2020 15:01:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1880	94.02

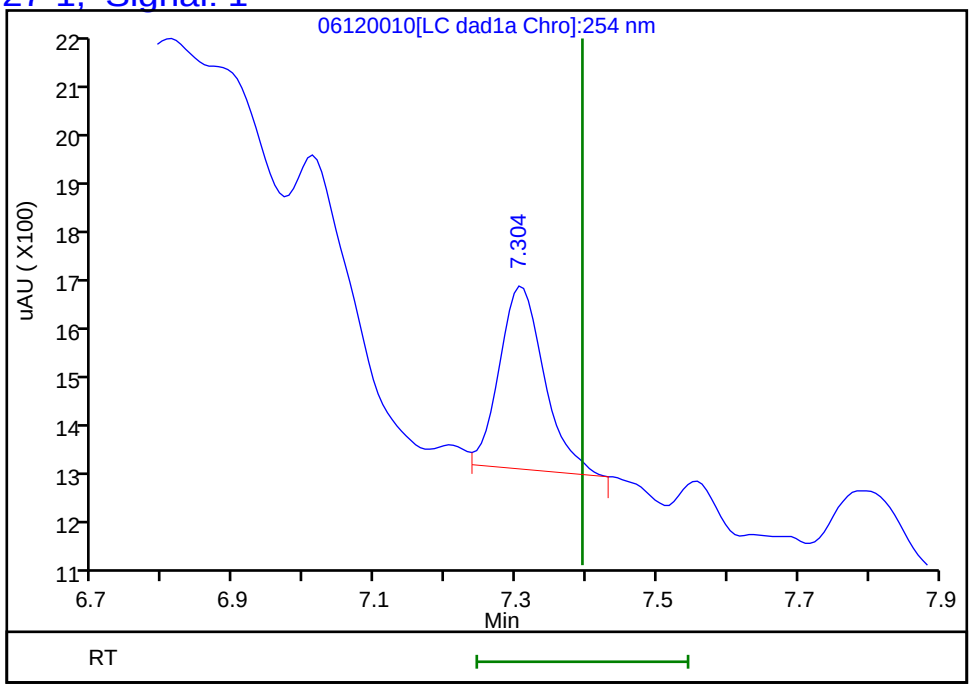
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200612-92367.b\06120010.d				
Injection Date:	12-Jun-2020 14:35:32	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-496861/1-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.30
Response: 1673
Amount: 0.010552



Reviewer: zhangji, 12-Jun-2020 15:02:50
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.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-496861/2-A
Matrix: Water
Lab File ID: 06110023.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 500(mL)
Date Analyzed: 06/11/2020 21:06
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.: 498360
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.11		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.00		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.09		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.85		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.03		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.81		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.62		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.80		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.68		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.58		0.41	0.40	0.10
2691-41-0	HMX	2.00		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.88		0.21	0.20	0.091
121-82-4	RDX	1.96		0.21	0.20	0.052
479-45-8	Tetryl	1.90		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110023.D
Lims ID: LCS 280-496861/2-A
Client ID:
Sample Type: LCS
Inject. Date: 11-Jun-2020 21:06:40 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-496861/2
Misc. Info.: 280-0092324-023
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jun-2020 12:39:47 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1034

First Level Reviewer: zhangji Date: 12-Jun-2020 11:09:18

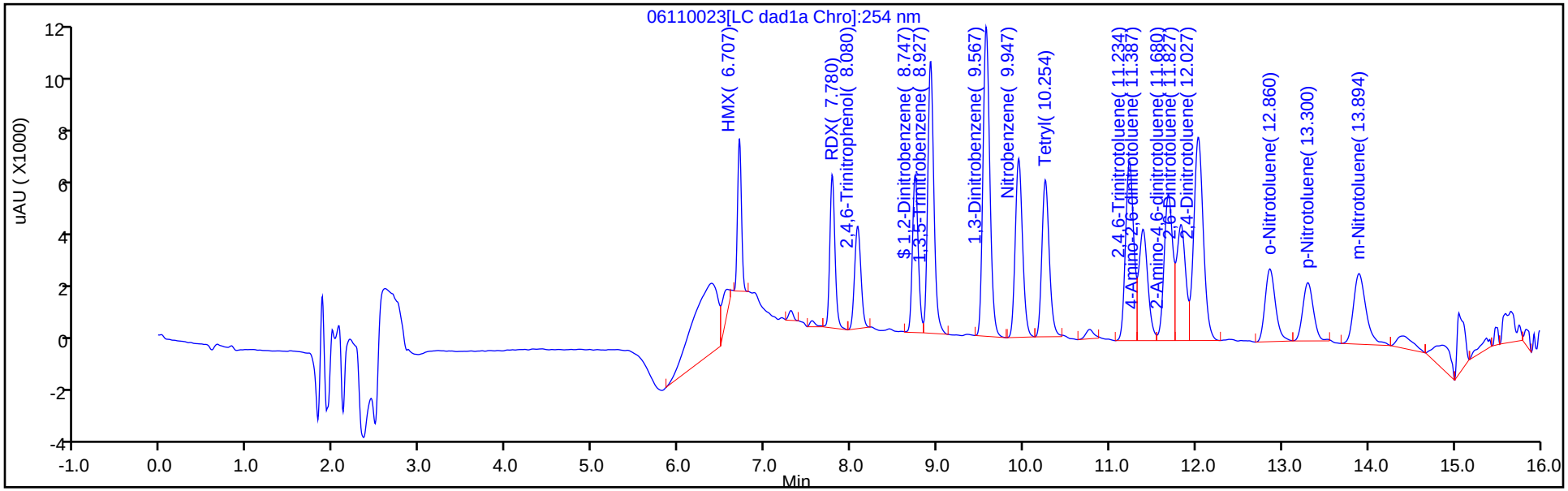
Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.707	6.696	0.011	17189	0.2000	0.2000	
7 RDX	1	7.780	7.776	0.004	22830	0.2000	0.1958	
8 2,4,6-Trinitrophenol	1	8.080	8.069	0.011	18741	0.2000	0.2201	
$ 9 1,2-Dinitrobenzene	1	8.747	8.743	0.004	26328	0.2000	0.1905	
10 1,3,5-Trinitrobenzene	1	8.927	8.916	0.011	48565	0.2000	0.2109	
11 1,3-Dinitrobenzene	1	9.567	9.569	-0.002	61293	0.2000	0.1999	
12 Nitrobenzene	1	9.947	9.949	-0.002	37701	0.2000	0.1881	
14 Tetryl	1	10.254	10.256	-0.002	33551	0.2000	0.1895	
15 Nitroglycerin	2	10.767	10.762	0.005	135979	2.00	2.00	
16 2,4,6-Trinitrotoluene	1	11.234	11.222	0.012	42672	0.2000	0.2091	
17 4-Amino-2,6-dinitrotoluene	1	11.387	11.376	0.011	28742	0.2000	0.1677	
18 2-Amino-4,6-dinitrotoluene	1	11.680	11.662	0.018	36618	0.2000	0.1805	
19 2,6-Dinitrotoluene	1	11.827	11.809	0.018	30316	0.2000	0.2028	
20 2,4-Dinitrotoluene	1	12.027	12.009	0.018	56258	0.2000	0.1853	
21 o-Nitrotoluene	1	12.860	12.842	0.018	21869	0.2000	0.1619	
22 p-Nitrotoluene	1	13.300	13.276	0.024	17890	0.2000	0.1583	
23 m-Nitrotoluene	1	13.894	13.862	0.032	25740	0.2000	0.1800	
24 PETN	2	14.987	14.969	0.018	149723	2.00	1.90	

Report Date: 12-Jun-2020 12:39:54 Chrom Revision: 2.3 10-Jun-2020 22:46:48

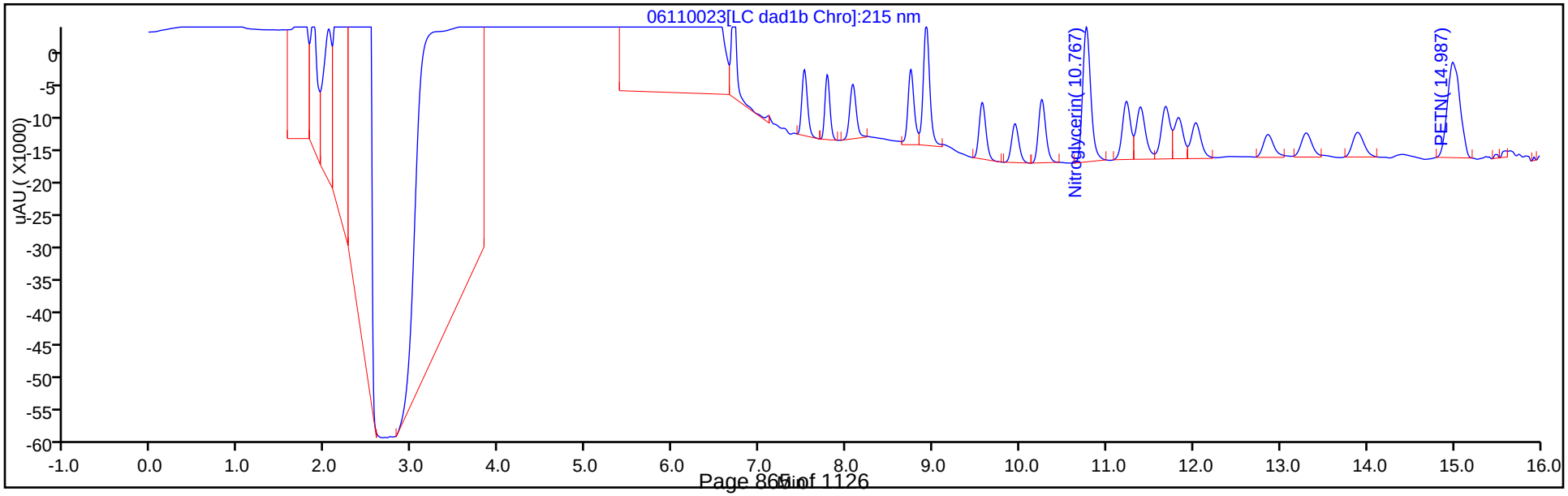
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110023.d				
Injection Date:	11-Jun-2020 21:06:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-496861/2-A			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110023.D				
Lims ID:	LCS 280-496861/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	11-Jun-2020 21:06:40	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-496861/2				
Misc. Info.:	280-0092324-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Jun-2020 12:39:47	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1034				
First Level Reviewer: zhangji		Date:	12-Jun-2020 11:09:18		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1905	95.24

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-496861/4-A
Matrix: Water
Lab File ID: 06110025.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 500(mL)
Date Analyzed: 06/11/2020 21:52
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.: 498360
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.11	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110025.D				
Lims ID:	LCS 280-496861/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	11-Jun-2020 21:52:37	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-496861/4				
Misc. Info.:	280-0092324-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		

Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m		
Limit Group:	GCSV - 8330		
Last Update:	12-Jun-2020 12:39:47	Calib Date:	18-Mar-2020 14:39:27
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D		

Column 1 :	UltraCarb5uODS (20) (4.60 mm)	Det: LC DAD1B, 254 nm
Process Host:	CTX1034	

First Level Reviewer: zhangji Date: 12-Jun-2020 11:05:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.612	6.627	-0.015	39466	0.2002	0.1814	M
5 DNX	1	6.932	6.954	-0.022	29727	0.2002	0.1944	M
6 MNX	1	7.378	7.407	-0.029	33492	0.2334	0.2112	M
$ 9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	26286	0.2000	0.1902	

QC Flag Legend

Review Flags

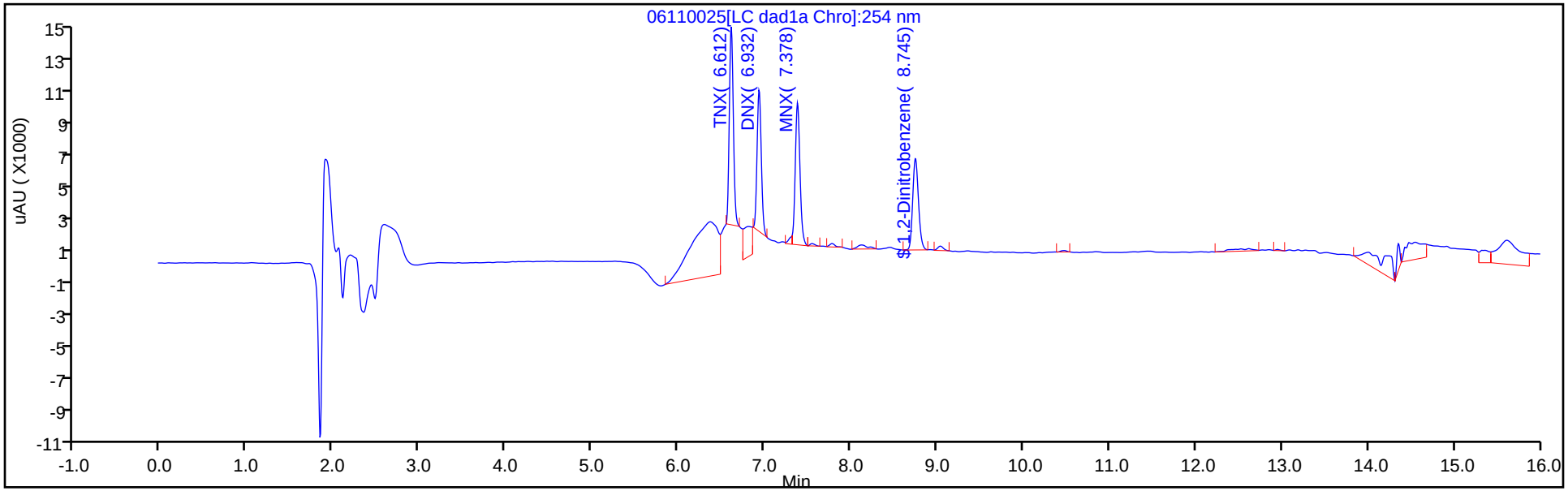
M - Manually Integrated

Report Date: 12-Jun-2020 12:39:54 Chrom Revision: 2.3 10-Jun-2020 22:46:48

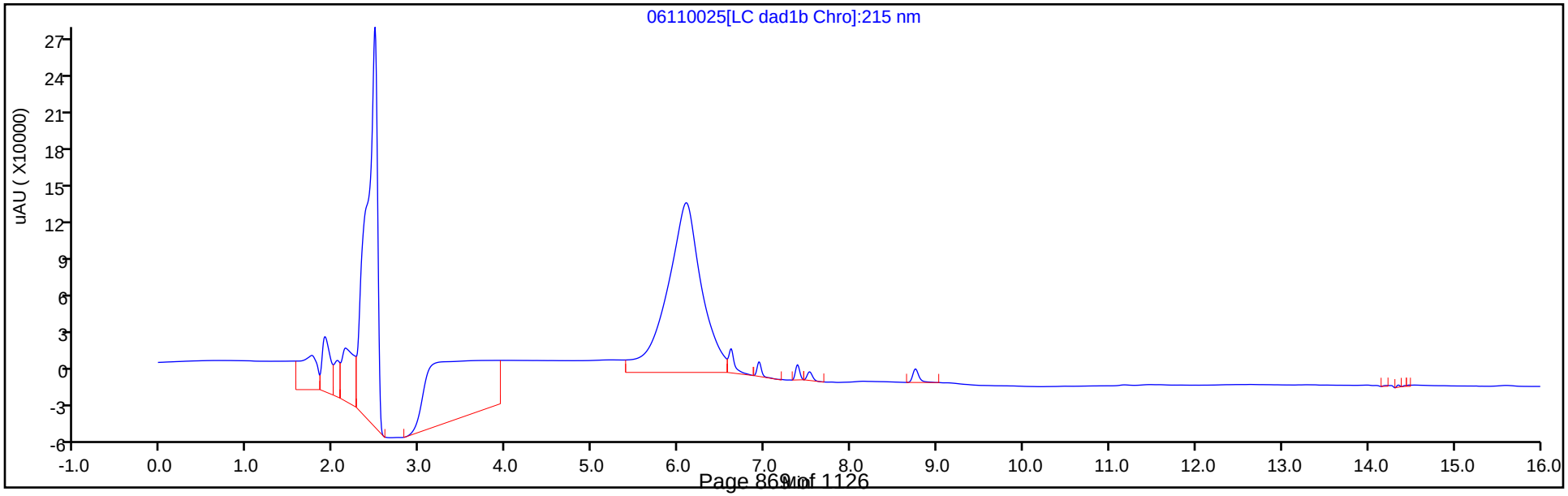
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110025.d				
Injection Date:	11-Jun-2020 21:52:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-496861/4-A			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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110025.D				
Lims ID:	LCS 280-496861/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	11-Jun-2020 21:52:37	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-496861/4				
Misc. Info.:	280-0092324-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Jun-2020 12:39:47	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1034				
First Level Reviewer: zhangji		Date:	12-Jun-2020 11:05:11		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1902	95.09

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

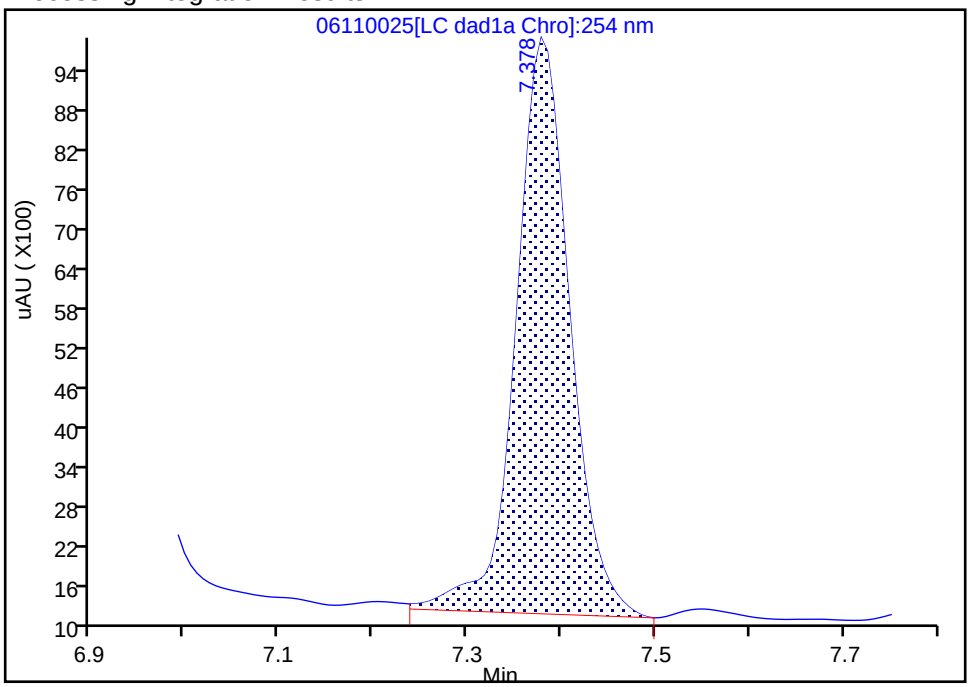
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110025.d				
Injection Date:	11-Jun-2020 21:52:37	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-496861/4-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

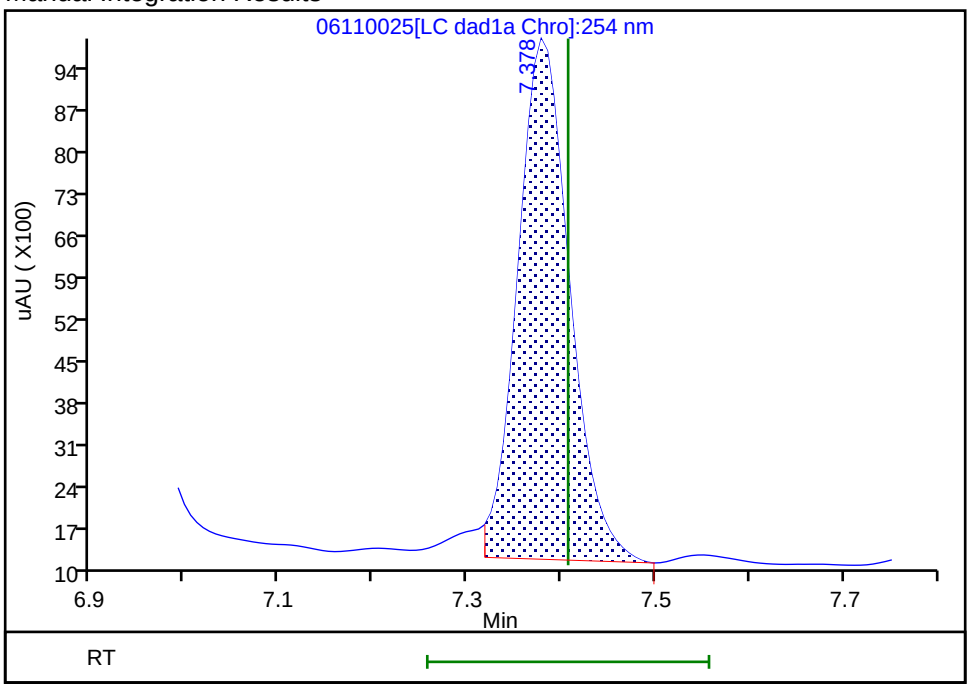
Processing Integration Results

RT: 7.38
Area: 34829
Amount: 0.219680
Amount Units: ug/mL



Manual Integration Results

RT: 7.38
Area: 33492
Amount: 0.211247
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:05:08
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 280-496861/3-A
Matrix: Water
Lab File ID: 06110024.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 06/01/2020 10:20
Sample wt/vol: 500(mL)
Date Analyzed: 06/11/2020 21:29
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.: 498360
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.18		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.05		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.11		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.93		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.03		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.91		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.74		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.94		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.75		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.83		0.41	0.40	0.10
2691-41-0	HMX	2.03	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.97		0.21	0.20	0.091
121-82-4	RDX	2.03		0.21	0.20	0.052
479-45-8	Tetryl	1.96		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110024.D
Lims ID: LCSD 280-496861/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 11-Jun-2020 21:29:42 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-496861/
Misc. Info.: 280-0092324-024
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jun-2020 12:39:47 Calib Date: 18-Mar-2020 14:39:27
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1034

First Level Reviewer: zhangji Date: 12-Jun-2020 11:09:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.706	6.696	0.010	17462	0.2000	0.2031	M
7 RDX	1	7.779	7.776	0.003	23685	0.2000	0.2031	
8 2,4,6-Trinitrophenol	1	8.073	8.069	0.004	18273	0.2000	0.2146	
$ 9 1,2-Dinitrobenzene	1	8.746	8.743	0.003	26467	0.2000	0.1915	
10 1,3,5-Trinitrobenzene	1	8.926	8.916	0.010	50275	0.2000	0.2183	
11 1,3-Dinitrobenzene	1	9.572	9.569	0.003	63021	0.2000	0.2055	
12 Nitrobenzene	1	9.952	9.949	0.003	39524	0.2000	0.1972	
14 Tetryl	1	10.259	10.256	0.003	34749	0.2000	0.1963	
15 Nitroglycerin	2	10.772	10.762	0.010	139668	2.00	2.05	
16 2,4,6-Trinitrotoluene	1	11.239	11.222	0.017	43107	0.2000	0.2113	
17 4-Amino-2,6-dinitrotoluene	1	11.392	11.376	0.016	30114	0.2000	0.1753	
18 2-Amino-4,6-dinitrotoluene	1	11.686	11.662	0.024	38708	0.2000	0.1909	
19 2,6-Dinitrotoluene	1	11.832	11.809	0.023	30285	0.2000	0.2026	
20 2,4-Dinitrotoluene	1	12.032	12.009	0.023	58556	0.2000	0.1929	
21 o-Nitrotoluene	1	12.859	12.842	0.017	23447	0.2000	0.1736	
22 p-Nitrotoluene	1	13.292	13.276	0.016	20732	0.2000	0.1835	
23 m-Nitrotoluene	1	13.886	13.862	0.024	27707	0.2000	0.1937	
24 PETN	2	14.992	14.969	0.023	154292	2.00	1.96	

QC Flag Legend

Review Flags

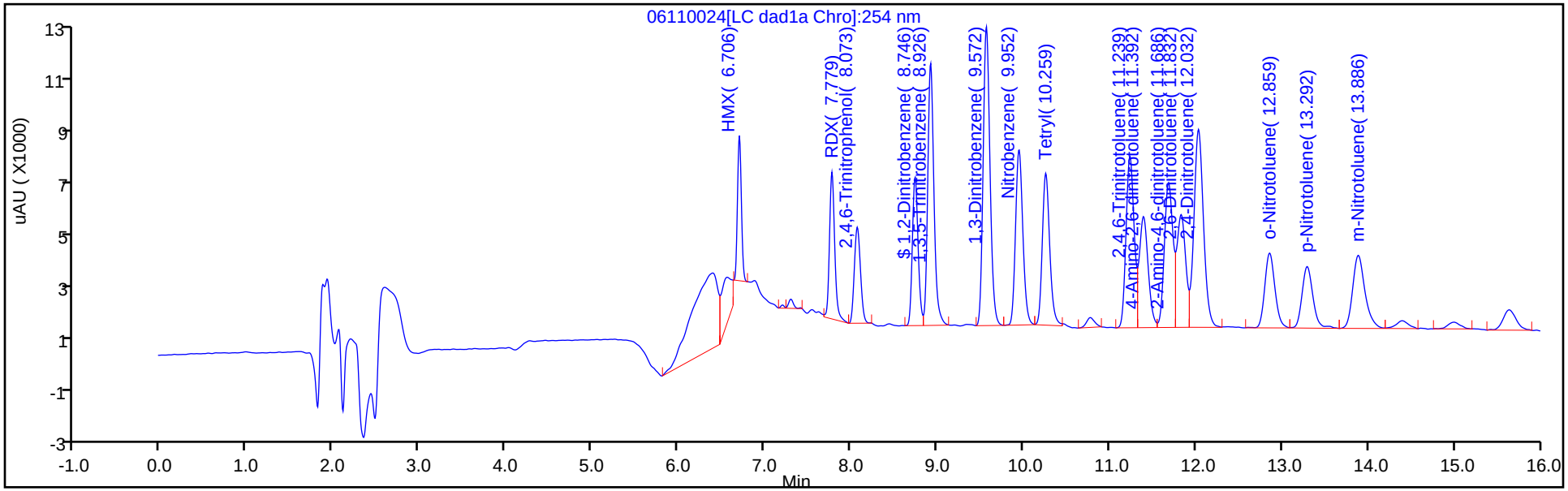
M - Manually Integrated

Report Date: 12-Jun-2020 12:39:54 Chrom Revision: 2.3 10-Jun-2020 22:46:48

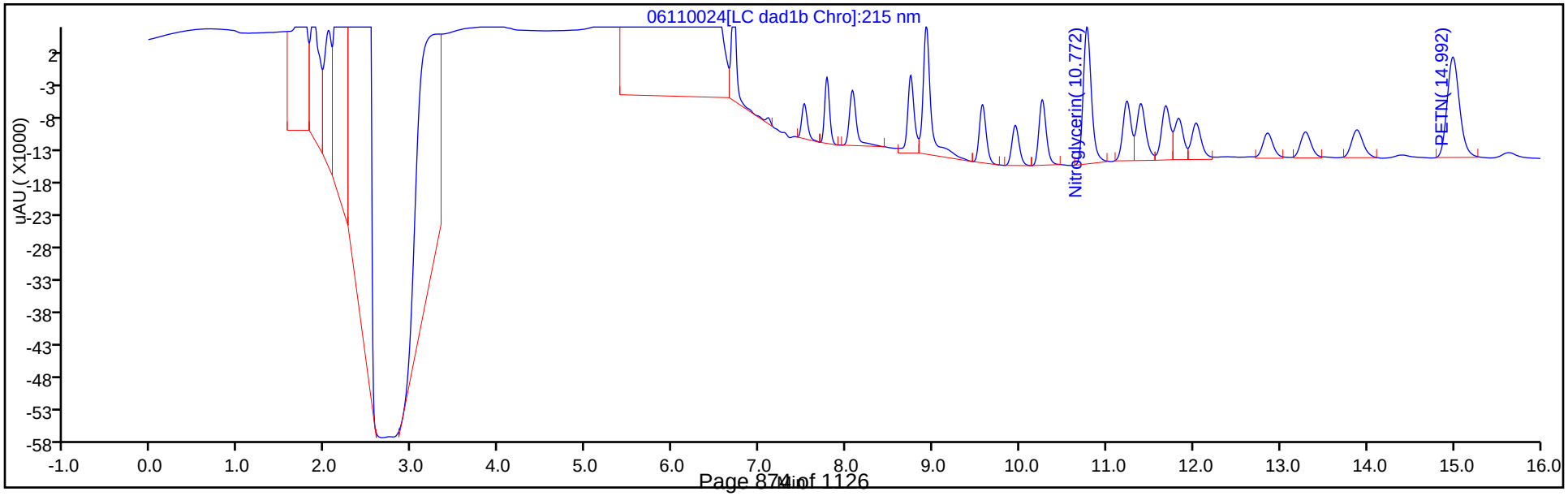
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110024.d				
Injection Date:	11-Jun-2020 21:29:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCSD 280-496861/3-A			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\06110024.D				
Lims ID:	LCSD 280-496861/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	11-Jun-2020 21:29:42	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-496861/				
Misc. Info.:	280-0092324-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20200611-92324.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Jun-2020 12:39:47	Calib Date:	18-Mar-2020 14:39:27		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200318-90159.b\03180015.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1034				

First Level Reviewer: zhangji Date: 12-Jun-2020 11:09:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1915	95.75

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

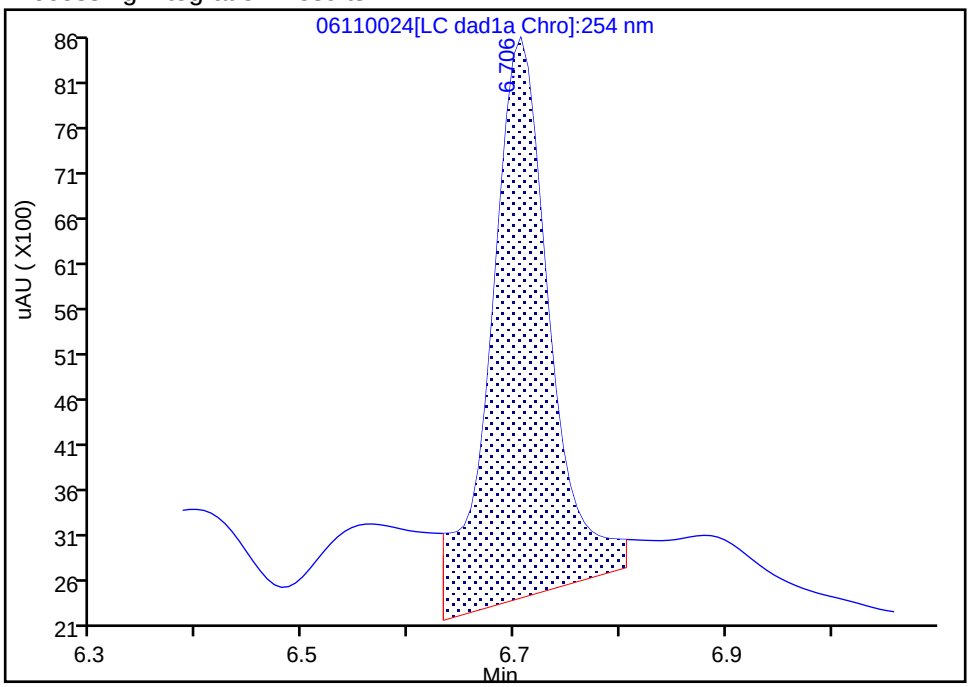
Data File:	\\chromfs\denver\chromdata\chhplc_x\20200611-92324.b\06110024.d				
Injection Date:	11-Jun-2020 21:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-496861/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

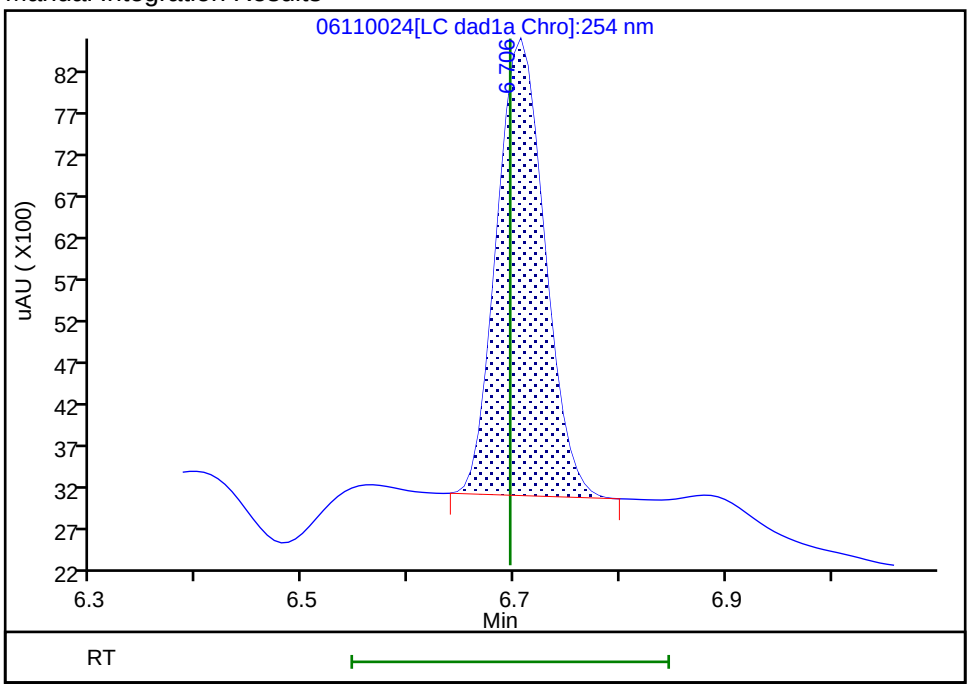
Processing Integration Results

RT: 6.71
Area: 24122
Amount: 0.280612
Amount Units: ug/mL



Manual Integration Results

RT: 6.71
Area: 17462
Amount: 0.203136
Amount Units: ug/mL



Reviewer: zhangji, 12-Jun-2020 11:09:27

Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/04/2020 14:07

Analysis Batch Number: 487658 End Date: 03/05/2020 00:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-487658/7		03/04/2020 14:07	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/8		03/04/2020 14:30	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/9		03/04/2020 14:53	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/10		03/04/2020 15:16	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/11		03/04/2020 15:39	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/12		03/04/2020 16:01	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/13		03/04/2020 16:24	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/14		03/04/2020 16:47	1		UltraCarb5uODS 4.6(mm)
ICV 280-487658/15		03/04/2020 17:10	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/16		03/04/2020 17:33	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/17		03/04/2020 17:56	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/18		03/04/2020 18:19	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/19		03/04/2020 18:42	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/20		03/04/2020 19:05	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/21		03/04/2020 19:28	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/22		03/04/2020 19:51	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/23		03/04/2020 20:14	1		UltraCarb5uODS 4.6(mm)
ICV 280-487658/24		03/04/2020 20:37	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/25		03/04/2020 21:00	1	03040025.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/26		03/04/2020 21:23	1	03040026.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/27		03/04/2020 21:45	1	03040027.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/28		03/04/2020 22:09	1	03040028.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/29		03/04/2020 22:31	1	03040029.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/30		03/04/2020 22:54	1	03040030.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/31		03/04/2020 23:17	1	03040031.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/32		03/04/2020 23:40	1	03040032.D	UltraCarb5uODS 4.6(mm)
ICV 280-487658/33		03/05/2020 00:03	1	03040033.D	UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/18/2020 11:35

Analysis Batch Number: 489145 End Date: 03/18/2020 15:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-489145/7		03/18/2020 11:35	1	03180007.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/8		03/18/2020 11:58	1	03180008.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/9		03/18/2020 12:21	1	03180009.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/10		03/18/2020 12:44	1	03180010.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/11		03/18/2020 13:07	1	03180011.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/12		03/18/2020 13:30	1	03180012.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/13		03/18/2020 13:53	1	03180013.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/14		03/18/2020 14:16	1	03180014.D	UltraCarb5uODS 4.6(mm)
IC 280-489145/15		03/18/2020 14:39	1	03180015.D	UltraCarb5uODS 4.6(mm)
ICV 280-489145/16		03/18/2020 15:02	1	03180016.D	UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/14/2020 16:16

Analysis Batch Number: 494886 End Date: 05/15/2020 20:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-494886/7		05/14/2020 16:16	1	05140007.D	Luna-phenylhex 4.6(mm)
IC 280-494886/8		05/14/2020 16:51	1	05140008.D	Luna-phenylhex 4.6(mm)
IC 280-494886/9		05/14/2020 17:26	1	05140009.D	Luna-phenylhex 4.6(mm)
IC 280-494886/10		05/14/2020 18:01	1	05140010.D	Luna-phenylhex 4.6(mm)
IC 280-494886/11		05/14/2020 18:36	1	05140011.D	Luna-phenylhex 4.6(mm)
IC 280-494886/12		05/14/2020 19:11	1	05140012.D	Luna-phenylhex 4.6(mm)
IC 280-494886/13		05/14/2020 19:46	1	05140013.D	Luna-phenylhex 4.6(mm)
IC 280-494886/14		05/14/2020 20:21	1	05140014.D	Luna-phenylhex 4.6(mm)
IC 280-494886/15		05/14/2020 20:56	1	05140015.D	Luna-phenylhex 4.6(mm)
ICV 280-494886/16		05/14/2020 21:31	1	05140016.D	Luna-phenylhex 4.6(mm)
IC 280-494886/17		05/14/2020 22:06	1	05140017.D	Luna-phenylhex 4.6(mm)
IC 280-494886/18		05/14/2020 22:41	1	05140018.D	Luna-phenylhex 4.6(mm)
IC 280-494886/19		05/14/2020 23:16	1	05140019.D	Luna-phenylhex 4.6(mm)
IC 280-494886/20		05/14/2020 23:51	1	05140020.D	Luna-phenylhex 4.6(mm)
IC 280-494886/21		05/15/2020 00:26	1	05140021.D	Luna-phenylhex 4.6(mm)
IC 280-494886/22		05/15/2020 01:01	1	05140022.D	Luna-phenylhex 4.6(mm)
IC 280-494886/23		05/15/2020 01:36	1	05140023.D	Luna-phenylhex 4.6(mm)
IC 280-494886/24		05/15/2020 02:11	1	05140024.D	Luna-phenylhex 4.6(mm)
IC 280-494886/25		05/15/2020 02:46	1		Luna-phenylhex 4.6(mm)
ICV 280-494886/26		05/15/2020 03:21	1	05140026.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 03:56	50		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 04:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 05:06	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/30		05/15/2020 05:41	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/31		05/15/2020 06:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 06:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 07:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 08:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 08:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 09:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 09:46	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 10:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 10:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 11:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 12:06	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/42		05/15/2020 12:40	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/43		05/15/2020 13:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 13:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 14:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 15:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 15:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 16:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 16:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 17:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 17:55	1		Luna-phenylhex 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/14/2020 16:16

Analysis Batch Number: 494886 End Date: 05/15/2020 20:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/15/2020 18:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 19:05	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/54		05/15/2020 19:40	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/55		05/15/2020 20:15	1		Luna-phenylhex 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/11/2020 18:25

Analysis Batch Number: 498360 End Date: 06/12/2020 07:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-498360/16		06/11/2020 18:25	1	06110016.D	UltraCarb5uODS 4.6(mm)
CCV 280-498360/17		06/11/2020 18:48	1	06110017.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/11/2020 19:11	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/11/2020 19:34	1		UltraCarb5uODS 4.6(mm)
LCS 280-496861/2-A		06/11/2020 21:06	1	06110023.D	UltraCarb5uODS 4.6(mm)
LCSD 280-496861/3-A		06/11/2020 21:29	1	06110024.D	UltraCarb5uODS 4.6(mm)
LCS 280-496861/4-A		06/11/2020 21:52	1	06110025.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/11/2020 23:01	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/11/2020 23:24	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/11/2020 23:47	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 00:10	1		UltraCarb5uODS 4.6(mm)
CCV 280-498360/32		06/12/2020 00:33	1	06110032.D	UltraCarb5uODS 4.6(mm)
CCV 280-498360/33		06/12/2020 00:56	1	06110033.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 01:19	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 01:42	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 02:05	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 02:28	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 02:51	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 03:14	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 03:37	1		UltraCarb5uODS 4.6(mm)
280-137084-1		06/12/2020 04:00	1	06110041.D	UltraCarb5uODS 4.6(mm)
280-137084-2		06/12/2020 04:23	1	06110042.D	UltraCarb5uODS 4.6(mm)
280-137084-3		06/12/2020 04:46	1	06110043.D	UltraCarb5uODS 4.6(mm)
CCV 280-498360/48		06/12/2020 06:41	1	06110048.D	UltraCarb5uODS 4.6(mm)
CCV 280-498360/49		06/12/2020 07:04	1	06110049.D	UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/12/2020 13:26

Analysis Batch Number: 498536 End Date: 06/12/2020 18:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-498536/7		06/12/2020 13:26	1	06120007.D	UltraCarb5uODS 4.6(mm)
CCV 280-498536/8		06/12/2020 13:49	1		UltraCarb5uODS 4.6(mm)
CCV 280-498536/9		06/12/2020 14:12	1	06120009.D	UltraCarb5uODS 4.6(mm)
MB 280-496861/1-A		06/12/2020 14:35	1	06120010.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 14:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 15:21	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 15:44	10		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 16:07	10		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 16:30	10		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/12/2020 16:53	10		UltraCarb5uODS 4.6(mm)
280-137084-4		06/12/2020 17:16	1	06120017.D	UltraCarb5uODS 4.6(mm)
280-137084-5		06/12/2020 17:39	1	06120018.D	UltraCarb5uODS 4.6(mm)
CCV 280-498536/19		06/12/2020 18:02	1	06120019.D	UltraCarb5uODS 4.6(mm)
CCV 280-498536/20		06/12/2020 18:25	1	06120020.D	UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 06/12/2020 17:18

Analysis Batch Number: 498568 End Date: 06/13/2020 10:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-498568/7		06/12/2020 17:18	1		Luna-phenylhex 4.6(mm)
CCV 280-498568/8		06/12/2020 17:53	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/12/2020 18:28	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/12/2020 19:03	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/12/2020 19:38	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/12/2020 20:13	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/12/2020 20:48	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/12/2020 21:23	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/12/2020 21:58	1		Luna-phenylhex 4.6(mm)
CCV 280-498568/16		06/12/2020 22:33	1		Luna-phenylhex 4.6(mm)
CCV 280-498568/17		06/12/2020 23:08	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/12/2020 23:42	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 00:17	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 00:53	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 01:27	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 02:02	10		Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 02:37	10		Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 03:12	10		Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 03:47	10		Luna-phenylhex 4.6(mm)
CCV 280-498568/26		06/13/2020 04:22	1	06120026.D	Luna-phenylhex 4.6(mm)
CCV 280-498568/27		06/13/2020 04:57	1	06120027.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 05:32	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/13/2020 06:07	1		Luna-phenylhex 4.6(mm)
280-137084-1		06/13/2020 06:42	1	06120030.D	Luna-phenylhex 4.6(mm)
280-137084-2		06/13/2020 07:17	1	06120031.D	Luna-phenylhex 4.6(mm)
280-137084-3		06/13/2020 07:52	1	06120032.D	Luna-phenylhex 4.6(mm)
280-137084-4		06/13/2020 08:27	1	06120033.D	Luna-phenylhex 4.6(mm)
280-137084-5		06/13/2020 09:02	1	06120034.D	Luna-phenylhex 4.6(mm)
CCV 280-498568/35		06/13/2020 09:37	1	06120035.D	Luna-phenylhex 4.6(mm)
CCV 280-498568/36		06/13/2020 10:12	1	06120036.D	Luna-phenylhex 4.6(mm)

8330A

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 496861 Batch Start Date: 06/01/20 10:20 Batch Analyst: Adams, Marisa L

Batch Method: 3535 Batch End Date: 06/01/20 13:55

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00098	8330_OP_DMT 00008
MB 280-496861/1		3535, 8330A				500 mL	5 mL		
LCS 280-496861/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCSD 280-496861/3		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-496861/4		3535, 8330A				500 mL	5 mL		0.1 mL
280-137084-A-1	EW7-PM27A-3-25	3535, 8330A	T	716.4 g	250.7 g	465.7 mL	5 mL		
280-137084-A-2	EW7-PM24A-3-25	3535, 8330A	T	717.0 g	249.3 g	467.7 mL	5 mL		
280-137084-A-3	EW7-PM24B-3-35	3535, 8330A	T	719.6 g	249.0 g	470.6 mL	5 mL		
280-137084-A-4	EW7-PM21B-3-35	3535, 8330A	T	715.4 g	250.0 g	465.4 mL	5 mL		
280-137084-A-5	EW7-PM22B-3-35	3535, 8330A	T	685.6 g	249.7 g	435.9 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00116	AnalysisComment				
MB 280-496861/1		3535, 8330A		0.1 mL					
LCS 280-496861/2		3535, 8330A		0.1 mL	8330				
LCSD 280-496861/3		3535, 8330A		0.1 mL	8330				
LCS 280-496861/4		3535, 8330A		0.1 mL	DMT				
280-137084-A-1	EW7-PM27A-3-25	3535, 8330A	T	0.1 mL					
280-137084-A-2	EW7-PM24A-3-25	3535, 8330A	T	0.1 mL					
280-137084-A-3	EW7-PM24B-3-35	3535, 8330A	T	0.1 mL					
280-137084-A-4	EW7-PM21B-3-35	3535, 8330A	T	0.1 mL					
280-137084-A-5	EW7-PM22B-3-35	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.: 280-137084-1

SDG No.:

Batch Number: 496861 Batch Start Date: 06/01/20 10:20 Batch Analyst: Adams, Marisa L

Batch Method: 3535 Batch End Date: 06/01/20 13:55

Batch Notes	
Acid ID	CaCl2_Sol_00071
Acid Name	CaCl2
Balance ID	24350888
Batch Comment	DV-OP-0017 Mantel:A/C
First End time	06/01/2020 13:30
Pipette/Syringe/Dispenser ID	Jiji, DOD, Soot
Rinse Solvent Lot	0.1%AAinACN_00138
Rinse Solvent Name	0.1%AAinACN
Solvent Lot #	ACN_00234
Solvent Name	Acetonitrile
SPE Cartridge Lot ID	005130024A
SPE Cartridge Type	Porapak RDX
Analyst ID - Spike Analyst	MA
Analyst ID - Spike Witness Analyst	Reviewer:self
First Start time	06/01/2020 10:26

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
EW7-PM27A-3-25	280-137084-1
EW7-PM24A-3-25	280-137084-2
EW7-PM24B-3-35	280-137084-3
EW7-PM21B-3-35	280-137084-4
EW7-PM22B-3-35	280-137084-5

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM27A-3-25

Lab Sample ID: 280-137084-1

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-137084-1

SDG ID.:

Matrix: Water

Date Sampled: 05/29/2020 15:55

Reporting Basis: WET

Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.1	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	3.6	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	4.2	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	47	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	440	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM27A-3-25
Lab Sample ID: 280-137084-1
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG ID.:
Matrix: Water
Date Sampled: 05/29/2020 15:55
Reporting Basis: WET
Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	42	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM24A-3-25
Lab Sample ID: 280-137084-2
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG ID.:
Matrix: Water
Date Sampled: 05/29/2020 12:50
Reporting Basis: WET
Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.20	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.1	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	6.9	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	40	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	480	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM24A-3-25
Lab Sample ID: 280-137084-2
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG ID.:
Matrix: Water
Date Sampled: 05/29/2020 12:50
Reporting Basis: WET
Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	20	1.0	1.0	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM24B-3-35
Lab Sample ID: 280-137084-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG ID.:
Matrix: Water
Date Sampled: 05/29/2020 14:30
Reporting Basis: WET
Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.7	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	8.2	2.5	2.5	1.7	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	6.0	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	500	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM24B-3-35
Lab Sample ID: 280-137084-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG ID.:
Matrix: Water
Date Sampled: 05/29/2020 14:30
Reporting Basis: WET
Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	150	4.2	4.2	1.4	mg/L			4.17	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM21B-3-35

Lab Sample ID: 280-137084-4

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-137084-1

SDG ID.:

Matrix: Water

Date Sampled: 05/29/2020 09:35

Reporting Basis: WET

Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.5	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	4.6	1.3	1.3	0.86	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	70	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	410	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM21B-3-35
Lab Sample ID: 280-137084-4
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG ID.:
Matrix: Water
Date Sampled: 05/29/2020 09:35
Reporting Basis: WET
Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	63	1.7	1.7	0.58	mg/L			1.67	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM22B-3-35

Lab Sample ID: 280-137084-5

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-137084-1

SDG ID.:

Matrix: Water

Date Sampled: 05/29/2020 11:25

Reporting Basis: WET

Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.0	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	6.4	2.5	2.5	1.7	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	14	5.0	3.0	1.0	mg/L		J1	1	9056A
Total Alkalinity as CaCO3	490	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM22B-3-35
Lab Sample ID: 280-137084-5
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-137084-1
SDG ID.:
Matrix: Water
Date Sampled: 05/29/2020 11:25
Reporting Basis: WET
Date Received: 05/30/2020 09:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	96	2.0	2.0	0.69	mg/L			2	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Analyst: BWH Batch Start Date: 06/02/2020

Reporting Units: mg/L Analytical Batch No.: 497077

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:51	Ammonia	0.531	0.501	106	90-110		350.1 ICV_00405
15	ICV	10:53	Ammonia	2.52	2.51	100	90-110		350.1 ICV_00405
16	ICB	10:55	Ammonia	0.050				U	
33	CCVL	11:29	Ammonia	0.525	0.500	105	90-110		350.1 cal_00417
34	CCV	11:31	Ammonia	2.38	2.50	95	90-110		350.1 cal_00417
35	CCB	11:33	Ammonia	0.050				U	
47	CCVL	12:02	Ammonia	0.520	0.500	104	90-110		350.1 cal_00417
48	CCV	12:04	Ammonia	2.45	2.50	98	90-110		350.1 cal_00417
49	CCB	12:06	Ammonia	0.050				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Analyst: SVC Batch Start Date: 06/04/2020

Reporting Units: mg/L Analytical Batch No.: 497506

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	ICV	16:45	Nitrogen, Total Kjeldahl	5.41	5.00	108	90-110		TKN ICV 25_00093
14	ICB	16:46	Nitrogen, Total Kjeldahl	1.0				U	
31	CCV	17:08	Nitrogen, Total Kjeldahl	5.20	5.00	104	90-110		TKN 25ppm_00808
32	CCB	17:09	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.: 280-137084-1

SDG No.:

Analyst: SVC Batch Start Date: 06/03/2020

Reporting Units: mg/L Analytical Batch No.: 497312

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	17:14	Nitrate Nitrite as N	4.75	5.00	95	90-110		NXN ICV INT_00514
18	ICVL	17:16	Nitrate Nitrite as N	2.15	2.00	107	90-110		NXN ICV INT_00514
19	ICB	17:18	Nitrate Nitrite as N	0.050				U	
51	CCV	18:22	Nitrate Nitrite as N	5.20	5.00	104	90-110		NXN CAL INT_00533
53	CCB	18:26	Nitrate Nitrite as N	0.050				U	
67	CCV	18:54	Nitrate Nitrite as N	5.08	5.00	102	90-110		NXN CAL INT_00533
68	CCVL	18:56	Nitrate Nitrite as N	1.04	1.00	104	90-110		NXN CAL INT_00533
69	CCB	18:58	Nitrate Nitrite as N	0.050				U	
83	CCV	19:26	Nitrate Nitrite as N	4.89	5.00	98	90-110		NXN CAL INT_00533
84	CCVL	19:28	Nitrate Nitrite as N	1.06	1.00	106	90-110		NXN CAL INT_00533
85	CCB	19:30	Nitrate Nitrite as N	0.050				U	
99	CCV	19:58	Nitrate Nitrite as N	4.95	5.00	99	90-110		NXN CAL INT_00533
100	CCVL	20:00	Nitrate Nitrite as N	1.02	1.00	102	90-110		NXN CAL INT_00533
101	CCB	20:02	Nitrate Nitrite as N	0.050				U	
116	CCV	20:32	Nitrate Nitrite as N	4.81	5.00	96	90-110		NXN CAL INT_00533
117	CCVL	20:34	Nitrate Nitrite as N	1.02	1.00	102	90-110		NXN CAL INT_00533
118	CCB	20:36	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.: 280-137084-1

SDG No.:

Analyst: JAP Batch Start Date: 05/07/2020

Reporting Units: mg/L Analytical Batch No.: 494020

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	13:36	Sulfate	78.3	80.0	98	90-110		IC SO4 ICV_00021
9	ICB	13:53	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.: 280-137084-1

SDG No.:

Analyst: JAP Batch Start Date: 06/01/2020

Reporting Units: mg/L Analytical Batch No.: 496899

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	14:01	Sulfate	95.8	100	96	90-110		IC LCS_01743
2	CCB	14:17	Sulfate	2.5				U	
17	CCV	18:24	Sulfate	96.3	100	96	90-110		IC LCS_01743
18	CCB	18:40	Sulfate	2.5				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Analyst: JMB Batch Start Date: 06/11/2020

Reporting Units: mg/L Analytical Batch No.: 498580

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	19:04	Dissolved Organic Carbon - Quad	19.8	20.0	99	90-110		TOC ICV Std_00043
3	ICB	19:18	Dissolved Organic Carbon - Quad	1.0				U	
16	CCV	22:55	Dissolved Organic Carbon - Quad	25.9	25.0	104	90-110		TOC LCS Std_00048
17	CCB	23:11	Dissolved Organic Carbon - Quad	1.0				U	
28	CCV	02:09	Dissolved Organic Carbon - Quad	26.2	25.0	105	90-110		TOC LCS Std_00048
29	CCB	02:26	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.: 280-137084-1

SDG No.:

Analyst: SPG Batch Start Date: 06/02/2020

Reporting Units: mg/L Analytical Batch No.: 497060

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
16	CCV	10:20	Total Alkalinity as CaCO3	204	200	102	90-110		Alk daily lcs 00905
17	CCB	10:24	Total Alkalinity as CaCO3	10				U	
25	CCV	11:21	Total Alkalinity as CaCO3	207	200	104	90-110		Alk daily lcs 00905
26	CCB	11:26	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.: 280-137084-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 497077 Date: 06/02/2020 11:03							
350.1	MB 280-497077/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 497506 Date: 06/04/2020 16:49 Prep Batch: 497115 Date: 06/02/2020 16:26							
351.2	MB 280-497115/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 497312 Date: 06/03/2020 18:40							
353.2	MB 280-497312/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 497312 Date: 06/03/2020 20:08							
353.2	MB 280-497312/104	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 497042 Date: 06/02/2020 10:59 Prep Batch: 497037 Date: 06/02/2020 10:53							
9034	MB 280-497037/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 496899 Date: 06/01/2020 15:23							
9056A	MB 280-496899/6	Sulfate	3.0	U	mg/L	5.0	1
Batch ID: 498580 Date: 06/11/2020 20:06							
9060A	MB 280-498352/3-A	Dissolved Organic Carbon - Quad	1.0	U	mg/L	1.0	1
Batch ID: 497060 Date: 06/02/2020 09:18							
SM 2320B	MB 280-497060/5	Total Alkalinity as CaCO3	10	U	mg/L	10	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 496899 Date: 06/01/2020 17:51											
9056A	280-137084-5	Sulfate	14		mg/L						J1
9056A	280-137084-5 MS	Sulfate	43.2		mg/L	50.0	58	87-112			J1

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.: 280-137084-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 496899 Date: 06/01/2020 18:07											
9056A	280-137084-5 MSD	Sulfate	66.0		mg/L	50.0	104	87-112	42	10	J1

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.: 280-137084-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 496899 Date: 06/01/2020 17:34								
9056A	EW7-PM22B-3-35	280-137084-5	Sulfate	14	mg/L			
9056A	EW7-PM22B-3-35	280-137084-5 DU	Sulfate	14.3	mg/L	0.9	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.: 280-137084-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 497077	Date: 06/02/2020 10:59										
						LCS Source: 350.1 cal_00417					
350.1	LCS 280-497077/18	Ammonia	2.44		mg/L	2.50	98	90-110	0	10	
Batch ID: 497506	Date: 06/04/2020 16:48	Prep Batch: 497115	Date: 06/02/2020 16:26								
						LCS Source: TKN 25ppm_00808					
351.2	LCS 280-497115/1-A	Nitrogen, Total Kjeldahl	6.06		mg/L	6.00	101	90-110			
Batch ID: 497312	Date: 06/03/2020 18:38										
						LCS Source: NXN CAL INT_00533					
353.2	LCS 280-497312/59	Nitrate Nitrite as N	5.11		mg/L	5.00	102	90-110			
Batch ID: 497312	Date: 06/03/2020 20:06										
						LCS Source: NXN CAL INT_00533					
353.2	LCS 280-497312/103	Nitrate Nitrite as N	4.93		mg/L	5.00	99	90-110			
Batch ID: 497042	Date: 06/02/2020 10:59	Prep Batch: 497037	Date: 06/02/2020 10:53								
						LCS Source: SFD CAL INT_01757					
9034	LCS 280-497037/1-A	Sulfide	12.0		mg/L	18.2	66	44-110			
Batch ID: 496899	Date: 06/01/2020 14:50										
						LCS Source: IC LCS_01743					
9056A	LCS 280-496899/4	Sulfate	95.6		mg/L	100	96	87-112	0	10	
Batch ID: 498580	Date: 06/11/2020 19:33										
						LCS Source: TOC LCS Std_00048					
9060A	LCS 280-498352/1-A	Dissolved Organic Carbon - Quad	25.8		mg/L	25.0	103	88-112	0	15	
Batch ID: 497060	Date: 06/02/2020 09:13										
						LCS Source: Alk daily lcs_00905					
SM 2320B	LCS 280-497060/4	Total Alkalinity as CaCO3	206		mg/L	200	103	89-109			

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 497077	Date: 06/02/2020 11:01										
						LCSD Source: 350.1 cal_00417					
350.1	LCSD 280-497077/19	Ammonia	2.44		mg/L	2.50	98	90-110	0	10	
Batch ID: 496899	Date: 06/01/2020 15:06										
						LCSD Source: IC LCS_01743					
9056A	LCSD 280-496899/5	Sulfate	95.5		mg/L	100	96	87-112	0	10	
Batch ID: 498580	Date: 06/11/2020 19:51										
						LCSD Source: TOC LCS Std_00048					
9060A	LCSD 280-498352/2-A	Dissolved Organic Carbon - Quad	25.7		mg/L	25.0	103	88-112	0	15	

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.: 280-137084-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 496899	Date: 06/01/2020 14:34										
						LCS Source: IC CAL cl/so4_00312					
9056A	MRL 280-496899/3	Sulfate	5.02		mg/L	5.00	100	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: 280-137084-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 DL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia		0.1	0.022

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia		0.1	0.0225

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

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

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

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

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

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

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

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: 280-137084-1

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

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

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

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom7

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom7

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

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

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

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

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

SDG Number:

Matrix: Water Instrument ID: WC-AT3

Method: SM 2320B DL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Alkalinity as CaCO3		10	3.08

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-137084-1

SDG Number:

Matrix: Water Instrument ID: WC-AT3

Method: SM 2320B XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Alkalinity as CaCO3		10	3.08

FORM IX - IN

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-497115/1-A	06/02/2020 16:26	497115		25	25
MB 280-497115/2-A	06/02/2020 16:26	497115		25	25
280-137084-1	06/02/2020 16:26	497115		25	25
280-137084-2	06/02/2020 16:26	497115		25	25
280-137084-3	06/02/2020 16:26	497115		10	25
280-137084-4	06/02/2020 16:26	497115		20	25
280-137084-5	06/02/2020 16:26	497115		10	25

FORM XII-IN

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-497037/1-A	06/02/2020 10:53	497037		50	50
MB 280-497037/2-A	06/02/2020 10:53	497037		50	50
280-137084-1	06/02/2020 10:53	497037		50	50
280-137084-2	06/02/2020 10:53	497037		50	50
280-137084-3	06/02/2020 10:53	497037		50	50
280-137084-4	06/02/2020 10:53	497037		50	50
280-137084-5	06/02/2020 10:53	497037		50	50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/02/2020 10:25 End Date: 06/02/2020 12:08

Lab Sample Id	D/F	Type	Time	Analytes																							
				NH3																							
ZZZZZZ			10:25																								
ZZZZZZ			10:27																								
ZZZZZZ			10:29																								
IC 280-497077/4			10:31	X																							
IC 280-497077/5			10:33	X																							
IC 280-497077/6			10:35	X																							
IC 280-497077/7			10:37	X																							
IC 280-497077/8			10:39	X																							
IC 280-497077/9			10:41	X																							
IC 280-497077/10			10:43	X																							
IC 280-497077/11			10:45	X																							
ZZZZZZ			10:47																								
ZZZZZZ			10:49																								
ICVL 280-497077/14	1		10:51	X																							
ICV 280-497077/15	1		10:53	X																							
ICB 280-497077/16	1		10:55	X																							
ZZZZZZ			10:57																								
LCS 280-497077/18	1	T	10:59	X																							
LCSD 280-497077/19	1	T	11:01	X																							
MB 280-497077/20	1	T	11:03	X																							
ZZZZZZ			11:05																								
ZZZZZZ			11:07																								
ZZZZZZ			11:09																								
ZZZZZZ			11:11																								
ZZZZZZ			11:13																								
280-137084-1	10	T	11:15	X																							
ZZZZZZ			11:17																								
280-137084-3	10	T	11:19	X																							
280-137084-4	10	T	11:21	X																							
280-137084-5	10	T	11:23	X																							
RINSE 280-497077/31			11:25																								
ZZZZZZ			11:27																								
CCVL 280-497077/33	1		11:29	X																							
CCV 280-497077/34	1		11:31	X																							
CCB 280-497077/35	1		11:33	X																							
ZZZZZZ			11:35																								
ZZZZZZ			11:37																								
ZZZZZZ			11:39																								
ZZZZZZ			11:41																								
ZZZZZZ			11:43																								
ZZZZZZ			11:45																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/02/2020 10:25 End Date: 06/02/2020 12:08

Lab Sample Id	D/F	Type	Time	Analytes																							
				NH3																							
ZZZZZZ			11:47																								
280-137084-2	1	T	11:54	X																							
ZZZZZZ			11:56																								
RINSE 280-497077/45			11:58																								
ZZZZZZ			12:00																								
CCVL 280-497077/47	1		12:02	X																							
CCV 280-497077/48	1		12:04	X																							
CCB 280-497077/49	1		12:06	X																							
ZZZZZZ			12:08																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/04/2020 16:31 End Date: 06/04/2020 17:50

Lab Sample Id	D/F	Type	Time	Analytes																							
				TKN																							
ZZZZZZ			16:31																								
ZZZZZZ			16:31																								
ZZZZZZ			16:33																								
ZZZZZZ			16:34																								
IC 280-494603/27-A			16:35	X																							
IC 280-494603/28-A			16:36	X																							
IC 280-494603/29-A			16:38	X																							
IC 280-494603/30-A			16:39	X																							
IC 280-494603/31-A			16:40	X																							
IC 280-494603/32-A			16:41	X																							
ZZZZZZ			16:43																								
ZZZZZZ			16:44																								
ICV 280-494603/33-A	1		16:45	X																							
ICB 280-494603/34-A	1		16:46	X																							
LCS 280-497115/1-A	1	T	16:48	X																							
MB 280-497115/2-A	1	T	16:49	X																							
ZZZZZZ			16:50																								
ZZZZZZ			16:51																								
ZZZZZZ			16:53																								
ZZZZZZ			16:54																								
280-137084-1	1	T	16:55	X																							
280-137084-2	1	T	16:56	X																							
ZZZZZZ			16:58																								
ZZZZZZ			16:59																								
280-137084-3	1	T	17:00	X																							
280-137084-4	1	T	17:01	X																							
280-137084-5	1	T	17:03	X																							
ZZZZZZ			17:04																								
ZZZZZZ			17:05																								
ZZZZZZ			17:06																								
CCV 280-494603/35-A	1		17:08	X																							
CCB 280-494603/36-A	1		17:09	X																							
ZZZZZZ			17:10																								
ZZZZZZ			17:11																								
ZZZZZZ			17:13																								
ZZZZZZ			17:14																								
ZZZZZZ			17:15																								
ZZZZZZ			17:16																								
ZZZZZZ			17:18																								
ZZZZZZ			17:19																								
ZZZZZZ			17:20																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/04/2020 16:31 End Date: 06/04/2020 17:50

Lab Sample Id	D/F	Type	Time	Analytes																							
				TKN																							
ZZZZZZ			17:21																								
ZZZZZZ			17:23																								
ZZZZZZ			17:24																								
ZZZZZZ			17:25																								
ZZZZZZ			17:26																								
ZZZZZZ			17:28																								
ZZZZZZ			17:29																								
CCV 280-494603/35-A			17:30																								
CCB 280-494603/36-A			17:31																								
ZZZZZZ			17:33																								
ZZZZZZ			17:34																								
ZZZZZZ			17:35																								
ZZZZZZ			17:36																								
ZZZZZZ			17:38																								
ZZZZZZ			17:39																								
ZZZZZZ			17:40																								
ZZZZZZ			17:41																								
ZZZZZZ			17:43																								
ZZZZZZ			17:44																								
ZZZZZZ			17:45																								
CCV 280-494603/35-A			17:46																								
CCB 280-494603/36-A			17:48																								
ZZZZZZ			17:49																								
ZZZZZZ			17:50																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/03/2020 16:42 End Date: 06/03/2020 20:38

Lab Sample Id	D/F	Type	Time	Analytes																							
				NNO32																							
ZZZZZZ			16:42																								
ZZZZZZ			16:44																								
ZZZZZZ			16:46																								
ZZZZZZ			16:48																								
IC 280-497312/5			16:50	X																							
IC 280-497312/6			16:52	X																							
IC 280-497312/7			16:54	X																							
IC 280-497312/8			16:56	X																							
IC 280-497312/9			16:58	X																							
IC 280-497312/10			17:00	X																							
IC 280-497312/11			17:02	X																							
IC 280-497312/12			17:04	X																							
IC 280-497312/13			17:06	X																							
ZZZZZZ			17:08																								
ZZZZZZ			17:10																								
ZZZZZZ			17:12																								
ICV 280-497312/17	1		17:14	X																							
ICVL 280-497312/18	1		17:16	X																							
ICB 280-497312/19	1		17:18	X																							
ZZZZZZ			17:20																								
ZZZZZZ			17:22																								
ZZZZZZ			17:24																								
ZZZZZZ			17:26																								
ZZZZZZ			17:28																								
ZZZZZZ			17:30																								
ZZZZZZ			17:32																								
ZZZZZZ			17:34																								
ZZZZZZ			17:36																								
ZZZZZZ			17:38																								
ZZZZZZ			17:40																								
ZZZZZZ			17:42																								
ZZZZZZ			17:44																								
RINSE 280-497312/33			17:46																								
ZZZZZZ			17:48																								
CCV 280-497312/35			17:50																								
CCVL 280-497312/36			17:52																								
CCB 280-497312/37			17:54																								
ZZZZZZ			17:56																								
ZZZZZZ			17:58																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/03/2020 16:42 End Date: 06/03/2020 20:38

Lab Sample Id	D/F	Type	Time	Analytes																							
				NNO32																							
ZZZZZZ			18:00																								
ZZZZZZ			18:02																								
ZZZZZZ			18:04																								
ZZZZZZ			18:06																								
ZZZZZZ			18:08																								
ZZZZZZ			18:10																								
ZZZZZZ			18:12																								
ZZZZZZ			18:14																								
ZZZZZZ			18:16																								
RINSE 280-497312/49			18:18																								
ZZZZZZ			18:20																								
CCV 280-497312/51	1		18:22	X																							
CCVL 280-497312/52			18:24																								
CCB 280-497312/53	1		18:26	X																							
ZZZZZZ			18:28																								
ZZZZZZ			18:30																								
ZZZZZZ			18:32																								
ZZZZZZ			18:34																								
ZZZZZZ			18:36																								
LCS 280-497312/59	1	T	18:38	X																							
MB 280-497312/60	1	T	18:40	X																							
ZZZZZZ			18:42																								
ZZZZZZ			18:44																								
ZZZZZZ			18:46																								
ZZZZZZ			18:48																								
RINSE 280-497312/65			18:50																								
ZZZZZZ			18:52																								
CCV 280-497312/67	1		18:54	X																							
CCVL 280-497312/68	1		18:56	X																							
CCB 280-497312/69	1		18:58	X																							
ZZZZZZ			19:00																								
ZZZZZZ			19:02																								
ZZZZZZ			19:04																								
ZZZZZZ			19:06																								
ZZZZZZ			19:08																								
ZZZZZZ			19:10																								
ZZZZZZ			19:12																								
ZZZZZZ			19:14																								
ZZZZZZ			19:16																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/03/2020 16:42 End Date: 06/03/2020 20:38

Lab Sample Id	D/F	Type	Time	Analytes																							
				NNO32																							
ZZZZZZ			19:18																								
ZZZZZZ			19:20																								
RINSE 280-497312/81			19:22																								
ZZZZZZ			19:24																								
CCV 280-497312/83	1		19:26	X																							
CCVL 280-497312/84	1		19:28	X																							
CCB 280-497312/85	1		19:30	X																							
ZZZZZZ			19:32																								
ZZZZZZ			19:34																								
ZZZZZZ			19:36																								
ZZZZZZ			19:38																								
ZZZZZZ			19:40																								
ZZZZZZ			19:42																								
ZZZZZZ			19:44																								
ZZZZZZ			19:46																								
ZZZZZZ			19:48																								
280-137084-1	1	T	19:50	X																							
280-137084-2	1	T	19:52	X																							
RINSE 280-497312/97			19:54																								
ZZZZZZ			19:56																								
CCV 280-497312/99	1		19:58	X																							
CCVL 280-497312/100	1		20:00	X																							
CCB 280-497312/101	1		20:02	X																							
ZZZZZZ			20:04																								
LCS 280-497312/103	1	T	20:06	X																							
MB 280-497312/104	1	T	20:08	X																							
ZZZZZZ			20:10																								
ZZZZZZ			20:12																								
ZZZZZZ			20:14																								
280-137084-3	1	T	20:16	X																							
280-137084-4	1	T	20:18	X																							
280-137084-5	1	T	20:20	X																							
ZZZZZZ			20:22																								
ZZZZZZ			20:24																								
ZZZZZZ			20:26																								
RINSE 280-497312/114			20:28																								
ZZZZZZ			20:30																								
CCV 280-497312/116	1		20:32	X																							
CCVL 280-497312/117	1		20:34	X																							

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/03/2020 16:42 End Date: 06/03/2020 20:38

Lab Sample Id	D/F	Type	Time	Analytes																							
				NNO32																							
CCB 280-497312/118	1		20:36	X																							
ZZZZZZ			20:38																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 06/02/2020 10:59 End Date: 06/02/2020 10:59

Lab Sample Id	D/F	Type	Time	Analytes																							
				S2																							
LCS 280-497037/1-A	1	T	10:59	X																							
MB 280-497037/2-A	1	T	10:59	X																							
ZZZZZZ			10:59																								
ZZZZZZ			10:59																								
ZZZZZZ			10:59																								
ZZZZZZ			10:59																								
ZZZZZZ			10:59																								
ZZZZZZ			10:59																								
ZZZZZZ			10:59																								
ZZZZZZ			10:59																								
ZZZZZZ			10:59																								
280-137084-1	1	T	10:59	X																							
280-137084-2	1	T	10:59	X																							
280-137084-3	1	T	10:59	X																							
280-137084-4	1	T	10:59	X																							
280-137084-5	1	T	10:59	X																							

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 05/07/2020 11:42 End Date: 05/08/2020 00:31

Lab Sample Id	D/F	Type	Time	Analytes																							
				SO4																							
RTC 280-494020/1			11:42																								
STD 280-494020/2 IC	1		11:58	X																							
STD 280-494020/3 IC	1		12:14	X																							
STD 280-494020/4 IC	1		12:30	X																							
STD 280-494020/5 IC	1		12:47	X																							
STD 280-494020/6 IC	1		13:03	X																							
STD 280-494020/7 IC	1		13:20	X																							
ICV 280-494020/8	1		13:36	X																							
ICB 280-494020/9	1		13:53	X																							
ZZZZZZ			14:09																								
ZZZZZZ			14:25																								
ZZZZZZ			14:42																								
ZZZZZZ			14:58																								
ZZZZZZ			16:50																								
ZZZZZZ			17:06																								
ZZZZZZ			17:23																								
ZZZZZZ			17:39																								
ZZZZZZ			17:56																								
ZZZZZZ			18:12																								
ZZZZZZ			18:29																								
ZZZZZZ			18:45																								
ZZZZZZ			19:01																								
ZZZZZZ			19:18																								
CCV 280-494020/24			19:34																								
CCB 280-494020/25			19:51																								
ZZZZZZ			20:07																								
ZZZZZZ			20:24																								
ZZZZZZ			20:40																								
ZZZZZZ			20:57																								
ZZZZZZ			21:14																								
ZZZZZZ			21:30																								
ZZZZZZ			21:46																								
ZZZZZZ			22:03																								
ZZZZZZ			22:19																								
ZZZZZZ			22:36																								
CCV 280-494020/36			22:52																								
CCB 280-494020/37			23:09																								
ZZZZZZ			23:25																								
ZZZZZZ			23:41																								
ZZZZZZ			23:58																								
CCV 280-494020/41			00:14																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 05/07/2020 11:42 End Date: 05/08/2020 00:31

Lab Sample Id	D/F	Type	Time	Analytes																							
				SO4																							
CCB 280-494020/42			00:31																								

Prep Types:
=

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_IonChrom7 Analysis Method: 9056A

Start Date: 06/01/2020 14:01 End Date: 06/01/2020 23:03

Lab Sample Id	D/F	Type	Time	Analytes																							
				SO4																							
CCV 280-496899/1	1		14:01	X																							
CCB 280-496899/2	1		14:17	X																							
MRL 280-496899/3	1	T	14:34	X																							
LCS 280-496899/4	1	T	14:50	X																							
LCSD 280-496899/5	1	T	15:06	X																							
MB 280-496899/6	1	T	15:23	X																							
ZZZZZZ			15:39																								
ZZZZZZ			15:56																								
280-137084-1	1	T	16:12	X																							
280-137084-2	1	T	16:29	X																							
280-137084-3	1	T	16:45	X																							
280-137084-4	1	T	17:01	X																							
280-137084-5	1	T	17:18	X																							
280-137084-5 DU	1	T	17:34	X																							
280-137084-5 MS	1	T	17:51	X																							
280-137084-5 MSD	1	T	18:07	X																							
CCV 280-496899/17	1		18:24	X																							
CCB 280-496899/18	1		18:40	X																							
ZZZZZZ			18:56																								
ZZZZZZ			19:13																								
ZZZZZZ			19:29																								
ZZZZZZ			19:46																								
ZZZZZZ			20:02																								
ZZZZZZ			20:18																								
ZZZZZZ			20:35																								
CCV 280-496899/26			20:51																								
CCB 280-496899/27			21:08																								
ZZZZZZ			21:24																								
ZZZZZZ			21:41																								
ZZZZZZ			21:57																								
ZZZZZZ			22:13																								
ZZZZZZ			22:30																								
CCV 280-496899/33			22:46																								
CCB 280-496899/34			23:03																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 06/11/2020 17:57 End Date: 06/12/2020 15:26

Lab Sample Id	D/F	Type	Time	Analytes																							
				DOCQ																							
ZZZZZZ			17:57																								
ICV 280-498580/2	1		19:04	X																							
ICB 280-498580/3	1		19:18	X																							
LCS 280-498352/1-A	1	D	19:33	X																							
LCSD 280-498352/2-A	1	D	19:51	X																							
MB 280-498352/3-A	1	D	20:06	X																							
ZZZZZZ			20:20																								
ZZZZZZ			20:39																								
ZZZZZZ			20:54																								
ZZZZZZ			21:09																								
ZZZZZZ			21:26																								
ZZZZZZ			21:44																								
ZZZZZZ			22:03																								
ZZZZZZ			22:22																								
280-137084-1	1	D	22:41	X																							
CCV 280-498580/16	1		22:55	X																							
CCB 280-498580/17	1		23:11	X																							
280-137084-2	1	D	23:32	X																							
280-137084-3	4.17	D	23:49	X																							
280-137084-4	1.67	D	00:06	X																							
280-137084-5	2	D	00:20	X																							
ZZZZZZ			00:37																								
ZZZZZZ			00:52																								
ZZZZZZ			01:09																								
ZZZZZZ			01:24																								
ZZZZZZ			01:39																								
ZZZZZZ			01:54																								
CCV 280-498580/28	1		02:09	X																							
CCB 280-498580/29	1		02:26	X																							
ZZZZZZ			02:41																								
ZZZZZZ			02:56																								
ZZZZZZ			03:11																								
ZZZZZZ			03:25																								
ZZZZZZ			03:40																								
ZZZZZZ			03:55																								
ZZZZZZ			04:10																								
ZZZZZZ			04:24																								
ZZZZZZ			04:39																								
ZZZZZZ			04:54																								
CCV 280-498580/40			05:09																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 06/11/2020 17:57 End Date: 06/12/2020 15:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				DOCQ																								
CCB 280-498580/41			05:26																									
ZZZZZZ			05:41																									
ZZZZZZ			05:59																									
ZZZZZZ			06:22																									
ZZZZZZ			06:37																									
ZZZZZZ			06:56																									
ZZZZZZ			07:15																									
ZZZZZZ			07:29																									
ZZZZZZ			07:44																									
ZZZZZZ			07:59																									
ZZZZZZ			08:14																									
CCV 280-498580/52			08:33																									
CCB 280-498580/53			08:47																									
ZZZZZZ			09:06																									
ZZZZZZ			09:25																									
ZZZZZZ			09:40																									
ZZZZZZ			09:59																									
ZZZZZZ			10:17																									
ZZZZZZ			10:32																									
ZZZZZZ			10:51																									
ZZZZZZ			11:06																									
ZZZZZZ			11:20																									
ZZZZZZ			11:39																									
CCV 280-498580/64			11:58																									
CCB 280-498580/65			12:13																									
ZZZZZZ			12:32																									
ZZZZZZ			12:47																									
ZZZZZZ			13:05																									
ZZZZZZ			13:20																									
ZZZZZZ			13:39																									
ZZZZZZ			13:54																									
ZZZZZZ			14:12																									
ZZZZZZ			14:33																									
ZZZZZZ			14:52																									
CCV 280-498580/75			15:11																									
CCB 280-498580/76			15:26																									

Prep Types:
D = Dissolved

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 06/02/2020 09:00 End Date: 06/02/2020 11:26

Lab Sample Id	D/F	Type	Time	Analytes																							
				Alk																							
RINSE 280-497060/1			09:00																								
ZZZZZZ			09:06																								
ZZZZZZ			09:08																								
LCS 280-497060/4	1	T	09:13	X																							
MB 280-497060/5	1	T	09:18	X																							
ZZZZZZ			09:23																								
ZZZZZZ			09:29																								
ZZZZZZ			09:35																								
ZZZZZZ			09:39																								
ZZZZZZ			09:44																								
ZZZZZZ			09:50																								
ZZZZZZ			09:56																								
ZZZZZZ			10:03																								
ZZZZZZ			10:09																								
ZZZZZZ			10:13																								
CCV 280-497060/16	1		10:20	X																							
CCB 280-497060/17	1		10:24	X																							
ZZZZZZ			10:31																								
ZZZZZZ			10:39																								
280-137084-5	1	T	10:46	X																							
280-137084-4	1	T	10:53	X																							
280-137084-3	1	T	11:00	X																							
280-137084-2	1	T	11:08	X																							
280-137084-1	1	T	11:15	X																							
CCV 280-497060/25	1		11:21	X																							
CCB 280-497060/26	1		11:26	X																							

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 497077 Batch Start Date: 06/02/20 10:25 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 00417	350.1 ICV 00405
ICVL 280-497077/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-497077/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-497077/16		350.1			10 mL	10 mL			
LCS 280-497077/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-497077/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-497077/20		350.1			10 mL	10 mL			
280-137084-C-1	EW7-PM27A-3-25	350.1	T	No	10 mL	10 mL	<2 SU		
280-137084-C-3	EW7-PM24B-3-35	350.1	T	No	10 mL	10 mL	<2 SU		
280-137084-C-4	EW7-PM21B-3-35	350.1	T	No	10 mL	10 mL	<2 SU		
280-137084-C-5	EW7-PM22B-3-35	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-497077/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-497077/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-497077/35		350.1			10 mL	10 mL			
280-137084-C-2	EW7-PM24A-3-25	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-497077/47		350.1			100 mL	100 mL		0.5 mL	
CCV 280-497077/48		350.1			100 mL	100 mL		2.5 mL	
CCB 280-497077/49		350.1			10 mL	10 mL			

Batch Notes	
Batch Comment	BWH
Carrier Identification	350.1 complex_00482
Hypochlorite ID	350.1 bleach_01254
Sodium Nitroprusside ID	350.1 color_00202
Pipette/Syringe/Dispenser ID	BWH100, BWH1000, BWH5000

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.: 280-137084-1

SDG No.:

Batch Number: 497077 Batch Start Date: 06/02/20 10:25 Batch Analyst: Hunter, Brandon W

Batch Method: 350.1 Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 494603 Batch Start Date: 05/12/20 17:15 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 00808	TKN ICV 25 00093		
ICV 280-494603/33		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-494603/34		351.2, 351.2		25 mL	25 mL				
CCV 280-494603/35		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-494603/36		351.2, 351.2		25 mL	25 mL				

Batch Notes	
Block Digestion End time	05/12/20 2330
Block Digestion Start time	05/12/20 1830
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00135
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.: 280-137084-1

SDG No.:

Batch Number: 497115 Batch Start Date: 06/02/20 16:25 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 00808		
LCS 280-497115/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-497115/2		351.2, 351.2			25 mL	25 mL			
280-137084-C-1	EW7-PM27A-3-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-137084-C-2	EW7-PM24A-3-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-137084-C-3	EW7-PM24B-3-35	351.2, 351.2	T	<2	10 mL	25 mL			
280-137084-C-4	EW7-PM21B-3-35	351.2, 351.2	T	<2	20 mL	25 mL			
280-137084-C-5	EW7-PM22B-3-35	351.2, 351.2	T	<2	10 mL	25 mL			

Batch Notes	
Block Digestion End time	06/02/20 2330
Block Digestion Start time	06/02/20 1730
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00135
Oven, Bath or Block Temperature 1	165 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 497506 Batch Start Date: 06/04/20 16:31 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-494603/33-A		351.2		4 mL					
ICB 280-494603/34-A		351.2		4 mL					
LCS 280-497115/1-A		351.2		4 mL					
MB 280-497115/2-A		351.2		4 mL					
280-137084-C-1-A	EW7-PM27A-3-25	351.2	T	4 mL					
280-137084-C-2-A	EW7-PM24A-3-25	351.2	T	4 mL					
280-137084-C-3-A	EW7-PM24B-3-35	351.2	T	4 mL					
280-137084-C-4-A	EW7-PM21B-3-35	351.2	T	4 mL					
280-137084-C-5-A	EW7-PM22B-3-35	351.2	T	4 mL					
CCV 280-494603/35-A		351.2		4 mL					
CCB 280-494603/36-A		351.2		4 mL					

Batch Notes	
Buffer Reagent ID	TKN buffer_00125
Hypochlorite ID	TKN hypo_00668
Sodium Nitroprusside ID	sodium nitro_0099
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.: 280-137084-1

SDG No.:

Batch Number: 497312 Batch Start Date: 06/03/20 16:42 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 00533	NXN ICV INT 00514		
ICV 280-497312/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-497312/18		353.2		100 mL	100 mL		2 mL		
ICB 280-497312/19		353.2		100 mL	100 mL				
CCV 280-497312/51		353.2		100 mL	100 mL	5 mL			
CCB 280-497312/53		353.2		100 mL	100 mL				
LCS 280-497312/59		353.2		100 mL	100 mL	5 mL			
MB 280-497312/60		353.2		100 mL	100 mL				
CCV 280-497312/67		353.2		100 mL	100 mL	5 mL			
CCVL 280-497312/68		353.2		100 mL	100 mL	1 mL			
CCB 280-497312/69		353.2		100 mL	100 mL				
CCV 280-497312/83		353.2		100 mL	100 mL	5 mL			
CCVL 280-497312/84		353.2		100 mL	100 mL	1 mL			
CCB 280-497312/85		353.2		100 mL	100 mL				
280-137084-C-1	EW7-PM27A-3-25	353.2	T	100 mL	100 mL				
280-137084-C-2	EW7-PM24A-3-25	353.2	T	100 mL	100 mL				
CCV 280-497312/99		353.2		100 mL	100 mL	5 mL			
CCVL 280-497312/100		353.2		100 mL	100 mL	1 mL			
CCB 280-497312/101		353.2		100 mL	100 mL				
LCS 280-497312/103		353.2		100 mL	100 mL	5 mL			
MB 280-497312/104		353.2		100 mL	100 mL				
280-137084-C-3	EW7-PM24B-3-35	353.2	T	100 mL	100 mL				
280-137084-C-4	EW7-PM21B-3-35	353.2	T	100 mL	100 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 497312 Batch Start Date: 06/03/20 16:42 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 00533	NXN ICV INT 00514		
280-137084-C-5	EW7-PM22B-3-35	353.2	T	100 mL	100 mL				
CCV 280-497312/116		353.2		100 mL	100 mL	5 mL			
CCVL 280-497312/117		353.2		100 mL	100 mL	1 mL			
CCB 280-497312/118		353.2		100 mL	100 mL				

Batch Notes	
Buffer Reagent ID	NOXT Buffer_00208
Color Reagent ID	NOXT CR_00107
Copper Sulfate ID	CuSO4 NOXT_0008
Hydrochloric Acid ID	0.5N HCl_0076
pH Indicator ID	hc989495
Pipette/Syringe/Dispenser ID	5000ad, 1000ad

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 497037 Batch Start Date: 06/02/20 10:53 Batch Analyst: David, Alexa A

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-497037/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-497037/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-137084-E-1	EW7-PM27A-3-25	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-137084-E-2	EW7-PM24A-3-25	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL
280-137084-E-3	EW7-PM24B-3-35	9030B, 9034	T	50 mL	50 mL	14	>9 SU	<2 SU	5 mL
280-137084-E-4	EW7-PM21B-3-35	9030B, 9034	T	50 mL	50 mL	15	>9 SU	<2 SU	5 mL
280-137084-E-5	EW7-PM22B-3-35	9030B, 9034	T	50 mL	50 mL	16	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01757					
LCS 280-497037/1		9030B, 9034		1 mL					
MB 280-497037/2		9030B, 9034							
280-137084-E-1	EW7-PM27A-3-25	9030B, 9034	T						
280-137084-E-2	EW7-PM24A-3-25	9030B, 9034	T						
280-137084-E-3	EW7-PM24B-3-35	9030B, 9034	T						
280-137084-E-4	EW7-PM21B-3-35	9030B, 9034	T						
280-137084-E-5	EW7-PM22B-3-35	9030B, 9034	T						

Batch Notes	
Distillation End Time	02/17/2020 19:09
Distillation Start Time	02/17/2020 18:03
Formaldehyde ID	Form_00117
pH Indicator ID	HC989495 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00203
Zinc Acetate Buffer ID	Znac_00115

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 497042 Batch Start Date: 06/02/20 10:59 Batch Analyst: David, Alexa A

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-497037/1-A		9034		0 mL	3.5 mL	5 mL	3.5 mL	50 mL	
MB 280-497037/2-A		9034		3.7 mL	4.7 mL	1 mL	1 mL	50 mL	
280-137084-E-1-A	EW7-PM27A-3-25	9034	T	21 mL	22 mL	1 mL	1 mL	50 mL	
280-137084-E-2-A	EW7-PM24A-3-25	9034	T	22 mL	23.4 mL	1 mL	1.4 mL	50 mL	
280-137084-E-3-A	EW7-PM24B-3-35	9034	T	23.4 mL	24.3 mL	1 mL	0.900000000000002 mL	50 mL	
280-137084-E-4-A	EW7-PM21B-3-35	9034	T	24.3 mL	25.5 mL	1 mL	1.2 mL	50 mL	
280-137084-E-5-A	EW7-PM22B-3-35	9034	T	0 mL	1 mL	1 mL	1 mL	50 mL	

Batch Notes	
Batch Comment	AD trained by SAH
Hydrochloric Acid ID	HClsol_00181
Iodine ID	iod_00257
Normality of Iodine Solution	.025 N
Sodium Thiosulfate ID	Nathio_00166
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Starch Reagent ID	starchind_00062
Normality of First Titrant	.025 N

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.: 280-137084-1

SDG No.:

Batch Number: 494020 Batch Start Date: 05/07/20 11:42 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 00309	IC Cal low 00523	IC CL ICV 00018	IC ICV 5 00269
STD 280-494020/2 IC		9056A		5 mL	5 mL	0.02 mL	0.02 mL		
STD 280-494020/3 IC		9056A		5 mL	5 mL	0.05 mL	0.05 mL		
STD 280-494020/4 IC		9056A		5 mL	5 mL	0.1 mL	0.1 mL		
STD 280-494020/5 IC		9056A		5 mL	5 mL	1.2 mL	0.4 mL		
STD 280-494020/6 IC		9056A		5 mL	5 mL	2.4 mL	0.8 mL		
STD 280-494020/7 IC		9056A		5 mL	5 mL	4 mL	1 mL		
ICV 280-494020/8		9056A		5 mL	5 mL			0.4 mL	0.4 mL
ICB 280-494020/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00021					
STD 280-494020/2 IC		9056A							
STD 280-494020/3 IC		9056A							
STD 280-494020/4 IC		9056A							
STD 280-494020/5 IC		9056A							
STD 280-494020/6 IC		9056A							
STD 280-494020/7 IC		9056A							
ICV 280-494020/8		9056A		0.4 mL					
ICB 280-494020/9		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.: 280-137084-1

SDG No.:

Batch Number: 494020 Batch Start Date: 05/07/20 11:42 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Batch Notes	
Eluent 1 ID	Water
Filter ID	R7MA61819
Pipette/Syringe/Dispenser ID	ic100, wc-1000d, 5000ics
Regeneration Solution ID	191251298017
Sufficient Volume for Batch QC	Yes

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 496899 Batch Start Date: 06/01/20 14:01 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00312	IC Cal low 00527	IC LCS 01743	ICMS/MSD WEEK 00650
CCV 280-496899/1		9056A		5 mL	5 mL			5 mL	
CCB 280-496899/2		9056A		5 mL	5 mL				
MRL 280-496899/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-496899/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-496899/5		9056A		5 mL	5 mL			5 mL	
MB 280-496899/6		9056A		5 mL	5 mL				
280-137084-F-1	EW7-PM27A-3-25	9056A	T	5 mL	5 mL				
280-137084-F-2	EW7-PM24A-3-25	9056A	T	5 mL	5 mL				
280-137084-F-3	EW7-PM24B-3-35	9056A	T	5 mL	5 mL				
280-137084-F-4	EW7-PM21B-3-35	9056A	T	5 mL	5 mL				
280-137084-F-5	EW7-PM22B-3-35	9056A	T	5 mL	5 mL				
280-137084-F-5 DU	EW7-PM22B-3-35	9056A	T	5 mL	5 mL				
280-137084-F-5 MS	EW7-PM22B-3-35	9056A	T	5 mL	5 mL				0.05 mL
280-137084-F-5 MSD	EW7-PM22B-3-35	9056A	T	5 mL	5 mL				0.05 mL
CCV 280-496899/17		9056A		5 mL	5 mL			5 mL	
CCB 280-496899/18		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	191251298017
Sufficient Volume for Batch QC	Yes

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.: 280-137084-1

SDG No.:

Batch Number: 496899 Batch Start Date: 06/01/20 14:01 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-137084-1

SDG No.:

Batch Number: 498579 Batch Start Date: 06/11/20 17:57 Batch Analyst: Battillo, Jenna M

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC LCS Std 00048		
LCS 280-498352/1-A		9060A		200 mL	200 mL	<2 SU	5 mL		
LCSD 280-498352/2-A		9060A		200 mL	200 mL	<2 SU	5 mL		
MB 280-498352/3-A		9060A		20 mL	20 mL	<2 SU			
280-137084-D-1-B	EW7-PM27A-3-25	9060A	D	20 mL	20 mL	6 SU			
280-137084-D-2-B	EW7-PM24A-3-25	9060A	D	20 mL	20 mL	6 SU			
280-137084-D-3-B	EW7-PM24B-3-35	9060A	D	20 mL	20 mL	6 SU			
280-137084-D-4-D	EW7-PM21B-3-35	9060A	D	20 mL	20 mL	6 SU			
280-137084-D-5-B	EW7-PM22B-3-35	9060A	D	20 mL	20 mL	6 SU			

Batch Notes	
Acid ID	H2SO4_00205, 0.2% H2SO4_0-0348
Combustion Catylyst ID	18003D-01
Pipette/Syringe/Dispenser ID	BMF 5000, BMF 1000

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.: 280-137084-1

SDG No.:

Batch Number: 498580 Batch Start Date: 06/11/20 17:57 Batch Analyst: Battillo, Jenna M

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00043	TOC LCS Std 00048	
ICV 280-498580/2		9060A		50 mL	50 mL	<2 SU	1 mL		
ICB 280-498580/3		9060A		20 mL	20 mL	<2 SU			
LCS 280-498352/1-A		9060A		200 mL	200 mL	<2 SU		5 mL	
LCSD 280-498352/2-A		9060A		200 mL	200 mL	<2 SU		5 mL	
MB 280-498352/3-A		9060A		20 mL	20 mL	<2 SU			
280-137084-D-1-B	EW7-PM27A-3-25	9060A	D	20 mL	20 mL	6 SU			
CCV 280-498580/16		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-498580/17		9060A		20 mL	20 mL	<2 SU			
280-137084-D-2-B	EW7-PM24A-3-25	9060A	D	20 mL	20 mL	6 SU			
280-137084-D-3-B	EW7-PM24B-3-35	9060A	D	20 mL	20 mL	6 SU			
280-137084-D-4-D	EW7-PM21B-3-35	9060A	D	20 mL	20 mL	6 SU			
280-137084-D-5-B	EW7-PM22B-3-35	9060A	D	20 mL	20 mL	6 SU			
CCV 280-498580/28		9060A		200 mL	200 mL	<2 SU		5 mL	
CCB 280-498580/29		9060A		20 mL	20 mL	<2 SU			

Batch Notes	
Acid ID	H2SO4_00205; 0.2% H2SO4_00348
Combustion Catylyst ID	18003D-01
Pipette/Syringe/Dispenser ID	BMF 5000, BMF 1000

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.: 280-137084-1

SDG No.:

Batch Number: 497060 Batch Start Date: 06/02/20 09:00 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 00905				
LCS 280-497060/4		SM 2320B		InitialAmount is blank	10 mL				
MB 280-497060/5		SM 2320B		InitialAmount is blank					
CCV 280-497060/16		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-497060/17		SM 2320B		InitialAmount is blank					
280-137084-F-5	EW7-PM22B-3-35	SM 2320B	T	InitialAmount is blank					
280-137084-F-4	EW7-PM21B-3-35	SM 2320B	T	InitialAmount is blank					
280-137084-F-3	EW7-PM24B-3-35	SM 2320B	T	InitialAmount is blank					
280-137084-F-2	EW7-PM24A-3-25	SM 2320B	T	InitialAmount is blank					
280-137084-F-1	EW7-PM27A-3-25	SM 2320B	T	InitialAmount is blank					
CCV 280-497060/25		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-497060/26		SM 2320B		InitialAmount is blank					

Batch Notes	
Acid ID	0.02 H2SO4_00273
pH Buffer 1 ID	pH 2.0 Buffer_00085
pH Buffer 2 ID	pH 4.0 Buffer_00188
pH Buffer 3 ID	pH 7.0 Buffer_00280
pH Buffer 4 ID	pH 10 Buffer_00147
pH Buffer 5 ID	pH 12 Buffer_00163
pH Buffer 6 ID	pH 7.0 Buffer_00281
Sodium Carbonate ID	alk stk std_00017
Nominal Amount Used	10 mL
Pipette/Syringe/Dispenser ID	5000SM
Probe ID	PCE 80 pH 1200C_6949
Normality of First Titrant	0.02 N

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.: 280-137084-1

SDG No.:

Batch Number: 497060 Batch Start Date: 06/02/20 09:00 Batch Analyst: Gonzalez, Sofie P

Batch Method: SM 2320B Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 02-Jun-20

BWH

Cup	Name	Type	R	Dil	Wt	Vial	Comment	pH	Cl⁻
106	Sync	SYNC	1	1	1	1			
~~0~~	~~Carry Over~~	~~CO~~	~~1~~	~~1~~	~~1~~	~~1~~	350.1 color_00202		
0	Blank	RB	1	1	1	1			
101	Cal 0 ppb	C	1	1	1	1	350.1 bleach_01254		
102	Cal 25 ppb	C	1	1	1	1	350.1 complex_00482		
103	Cal 50 ppb	C	1	1	1	1			
104	Cal 100 ppb	C	1	1	1	1			
105	Cal 500 ppb	C	1	1	1	1			
106	Cal 1000 ppb	C	1	1	1	1			
107	Cal 2500 ppb	C	1	1	1	1			
108	Cal 5000 ppb	C	1	1	1	1			
0	Blank	BLNK	1	1	1	1			
0	Read Baseline	RB	1	1	1	1			
109	ICVL 500.0 ppb	U	1	1	1	1			
110	ICV 2500.0 ppb	U	1	1	1	1			
111	ICB	U	1	1	1	1			
0	read baseline	RB	1	1	1	1			
107	LCS	U	1	1	1	1			
107	LCSD	U	1	1	1	1			
111	MB	U	1	1	1	1			
201	280-137047-a-1	U	1	1	1	1		L2	n
202	MS 280-137047-a-1	U	1	1	1	1		L2	n
203	MSD 280-137047-a-1	U	1	1	1	1		L2	n
204	580-94943-c-1	U	1	1	1	1		L2	n
205	280-137098-g-2	U	1	1	1	1		L2	n
206	280-137084-c-1	U	1	5	1	1		L2	n
207	280-137084-c-2	X U	1	10	1	1		L2	n
208	280-137084-c-3	U	1	10	1	1		L2	n
209	280-137084-c-4	U	1	10	1	1		L2	n
210	280-137084-c-5	U	1	10	1	1		L2	n
0	RINSE	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
105	CCVL 500.0 PPB	U	1	1	1	1			
107	CCV 2500.0 PPB	U	1	1	1	1			
111	CCB	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1		L2	n
211	280-137077-l-1	X U	1	10	1	1		L2	n
212	280-137023-c-1	U	1	1	1	1		L2	n
213	280-137023-c-2	U	1	1	1	1		L2	n
214	MS 280-137023-c-2	U	1	1	1	1		L2	n
215	MSD 280-137023-c-2	U	1	1	1	1		L2	n
216	280-137097-a-1	U	1	1	1	1		L2	n
217	280-137084-c-2	U	1	1	1	1		L2	n
218	280-137077-l-1	U	1	100	1	1		L2	n
0	RINSE	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			
105	CCVL 500.0 PPB	U	1	1	1	1			
107	CCV 2500.0 PPB	U	1	1	1	1			
111	CCB	U	1	1	1	1			
0	READ BASELINE	RB	1	1	1	1			

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	BWH
Operator ID	BWH
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	57
Result path	C:\FLOW_4\060220.RST
Sample table path	C:\FLOW_4\060220.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	02-Jun-20
Time acquired	12:14

Date	Time	Cup	Name
02-Jun-20	10:25	106	Sync
02-Jun-20	10:27	0	Carry Over
02-Jun-20	10:29	0	Blank
02-Jun-20	10:31	101	Cal 0 ppb
02-Jun-20	10:33	102	Cal 25 ppb
02-Jun-20	10:35	103	Cal 50 ppb
02-Jun-20	10:37	104	Cal 100 ppb
02-Jun-20	10:39	105	Cal 500 ppb
02-Jun-20	10:41	106	Cal 1000 ppb
02-Jun-20	10:43	107	Cal 2500 ppb
02-Jun-20	10:45	108	Cal 5000 ppb
02-Jun-20	10:47	0	Blank
02-Jun-20	10:49	0	Read Baseline
02-Jun-20	10:51	109	ICVL 500.0 ppb
02-Jun-20	10:53	110	ICV 2500.0 ppb
02-Jun-20	10:55	111	ICB
02-Jun-20	10:57	0	read baseline
02-Jun-20	10:59	107	LCS
02-Jun-20	11:01	107	LCSD
02-Jun-20	11:03	111	MB
02-Jun-20	11:05	201	280-137047-a-1
02-Jun-20	11:07	202	MS 280-137047-a-1
02-Jun-20	11:09	203	MSD 280-137047-a-1
02-Jun-20	11:11	204	580-94943-c-1
02-Jun-20	11:13	205	280-137098-g-2
02-Jun-20	11:15	206	280-137084-c-1
02-Jun-20	11:17	207	280-137084-c-2 X
02-Jun-20	11:19	208	280-137084-c-3
02-Jun-20	11:21	209	280-137084-c-4
02-Jun-20	11:23	210	280-137084-c-5
02-Jun-20	11:25	0	RINSE
02-Jun-20	11:27	0	READ BASELINE
02-Jun-20	11:29	105	CCVL 500.0 PPB
02-Jun-20	11:31	107	CCV 2500.0 PPB
02-Jun-20	11:33	111	CCB
02-Jun-20	11:35	0	READ BASELINE
02-Jun-20	11:37	211	280-137077-l-1 X
02-Jun-20	11:39	212	280-137023-c-1
02-Jun-20	11:41	213	280-137023-c-2
02-Jun-20	11:43	214	MS 280-137023-c-2
02-Jun-20	11:45	215	MSD 280-137023-c-2
02-Jun-20	11:47	216	280-137097-a-1
02-Jun-20	11:54	217	280-137084-c-2
02-Jun-20	11:56	218	280-137077-l-1
02-Jun-20	11:58	0	RINSE

Result path	C:\FLOW_4\060220.RST
Sample table path	C:\FLOW_4\060220.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	02-Jun-20
Time acquired	12:14

Date	Time	Cup	Name
02-Jun-20	12:00	0	READ BASELINE
02-Jun-20	12:02	105	CCVL 500.0 PPB
02-Jun-20	12:04	107	CCV 2500.0 PPB
02-Jun-20	12:06	111	CCB
02-Jun-20	12:08	0	READ BASELINE

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	BWH
Operator ID	BWH
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	57
Result path	C:\FLOW_4\060220.RST
Sample table path	C:\FLOW_4\060220.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	02-Jun-20
Time acquired	12:14

	NH3				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Sync	17634	1039.108			
Carry Over	32	-20.842	LO		
Blank	0	-22.475	BL		
Cal 0 ppb	897	23.201			
Cal 25 ppb	913	24.013			
Cal 50 ppb	940	25.407			
Cal 100 ppb	1914	76.043			
Cal 500 ppb	10101	543.364			
Cal 1000 ppb	17009	995.547			
Cal 2500 ppb	35669	2481.867			
Cal 5000 ppb	60043	5005.546	HI		
Blank	-74	-26.182	LO		
Read Baseline	0	-22.475	BL		
ICVL 500.0 ppb	9893	530.553			
ICV 2500.0 ppb	36039	2515.273			
ICB	31	-20.913	LO		
read baseline	0	-22.475	BL		
LCS	35247	2443.981			
LCSD	35174	2437.511			
MB	24	-21.247	LO		
280-137047-a-1	6908	352.235			
MS 280-137047-a-1	22245	1373.591			
MSD 280-137047-a-1	21944	1351.063			
580-94943-c-1	443	-0.022	LO		
280-137098-g-2	49	-19.983	LO		
280-137084-c-1	4417	1055.185			
280-137084-c-2 X	479	18.174			
280-137084-c-3	3716	1725.044			
280-137084-c-4	3287	1492.021			
280-137084-c-5	2427	1031.545			
RINSE	-14	-23.172	LO		
READ BASELINE	0	-22.475	BL		
CCVL 500.0 PPB	9803	525.043			
CCV 2500.0 PPB	34493	2376.804			
CCB	34	-20.759	LO		
READ BASELINE	0	-22.475	BL		
280-137077-l-1 X	125798	151034.172	HI		
280-137023-c-1	907	23.683	FL		
280-137023-c-2	272	-8.714	LO FL		
MS 280-137023-c-2	16306	947.132			
MSD 280-137023-c-2	16396	953.271			
280-137097-a-1	49	-20.027	LO		
280-137084-c-2	4186	198.251			
280-137077-l-1	25787	164663.234			
RINSE	-14	-23.197	LO		

Result path	C:\FLOW_4\060220.RST
Sample table path	C:\FLOW_4\060220.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	02-Jun-20
Time acquired	12:14

	NH3				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
READ BASELINE	0	-22.475	BL		
CCVL 500.0 PPB	9720	519.983			
CCV 2500.0 PPB	35287	2447.587			
CCB	45	-20.181	LO		
READ BASELINE	0	-22.475	BL		

Peak Table:NH3

File name: C:\FLOW_4\060220.RST
Date: 02-Jun-20
Operator: BWH

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	17634	1039.108398	
2	0	Carry Over	1	CO	1	1	32	-20.841938	LO
B	0	Blank	1	RB	1	1	0	-22.474968	BL
4	101	Cal 0 ppb	1	C	1	1	897	23.201298	
5	102	Cal 25 ppb	1	C	1	1	913	24.013165	
6	103	Cal 50 ppb	1	C	1	1	940	25.406597	
7	104	Cal 100 ppb	1	C	1	1	1914	76.043053	
8	105	Cal 500 ppb	1	C	1	1	10101	543.364014	
9	106	Cal 1000 ppb	1	C	1	1	17009	995.547302	
10	107	Cal 2500 ppb	1	C	1	1	35669	2481.866943	
11	108	Cal 5000 ppb	1	C	1	1	60043	5005.545898	HI
12	0	Blank	1	BLNK	1	1	-74	-26.182251	LO
B	0	Read Baseline	1	RB	1	1	0	-22.474968	BL
14	109	ICVL 500.0 ppb	1	U	1	1	9893	530.553162	
15	110	ICV 2500.0 ppb	1	U	1	1	36039	2515.273193	
16	111	ICB	1	U	1	1	31	-20.912643	LO
B	0	read baseline	1	RB	1	1	0	-22.474968	BL
18	107	LCS	1	U	1	1	35247	2443.981445	
19	107	LCSD	1	U	1	1	35174	2437.510986	
20	111	MB	1	U	1	1	24	-21.246916	LO
21	201	280-137047-a-1	1	U	1	1	6908	352.234558	
22	202	MS 280-137047-a-1	1	U	1	1	22245	1373.591309	
23	203	MSD 280-137047-a-1	1	U	1	1	21944	1351.062866	
24	204	580-94943-c-1	1	U	1	1	443	-0.021899	LO
25	205	280-137098-g-2	1	U	1	1	49	-19.983347	LO
26	206	280-137084-c-1	1	U	5	1	4417	1055.185425	
27	207	280-137084-c-2 X	1	U	10	1	479	18.173775	
28	208	280-137084-c-3	1	U	10	1	3716	1725.043701	
29	209	280-137084-c-4	1	U	10	1	3287	1492.020752	
30	210	280-137084-c-5	1	U	10	1	2427	1031.545044	
31	0	RINSE	1	U	1	1	-14	-23.172016	LO
B	0	READ BASELINE	1	RB	1	1	0	-22.474968	BL
33	105	CCVL 500.0 PPB	1	U	1	1	9803	525.043274	
34	107	CCV 2500.0 PPB	1	U	1	1	34493	2376.804199	
35	111	CCB	1	U	1	1	34	-20.759487	LO
B	0	READ BASELINE	1	RB	1	1	0	-22.474968	BL
37	211	280-137077-l-1 X	1	U	10	1	125798	151034.171875	HI
38	212	280-137023-c-1	1	U	1	1	907	23.682901	FL
39	213	280-137023-c-2	1	U	1	1	272	-8.714125	LO FL
40	214	MS 280-137023-c-2	1	U	1	1	16306	947.131714	
41	215	MSD 280-137023-c-2	1	U	1	1	16396	953.271423	
42	216	280-137097-a-1	1	U	1	1	49	-20.027328	LO
43	217	280-137084-c-2	1	U	1	1	4186	198.251053	
44	218	280-137077-l-1	1	U	100	1	25787	164663.234375	
45	0	RINSE	1	U	1	1	-14	-23.196863	LO
B	0	READ BASELINE	1	RB	1	1	0	-22.474968	BL
47	105	CCVL 500.0 PPB	1	U	1	1	9720	519.982666	
48	107	CCV 2500.0 PPB	1	U	1	1	35287	2447.587402	
49	111	CCB	1	U	1	1	45	-20.180691	LO
B	0	READ BASELINE	1	RB	1	1	0	-22.474968	BL

NH3:Calibration 1: Peak 4-50

File name: C:\FLOW_4\060220.RST
Date: 02-Jun-20
Operator: BWH

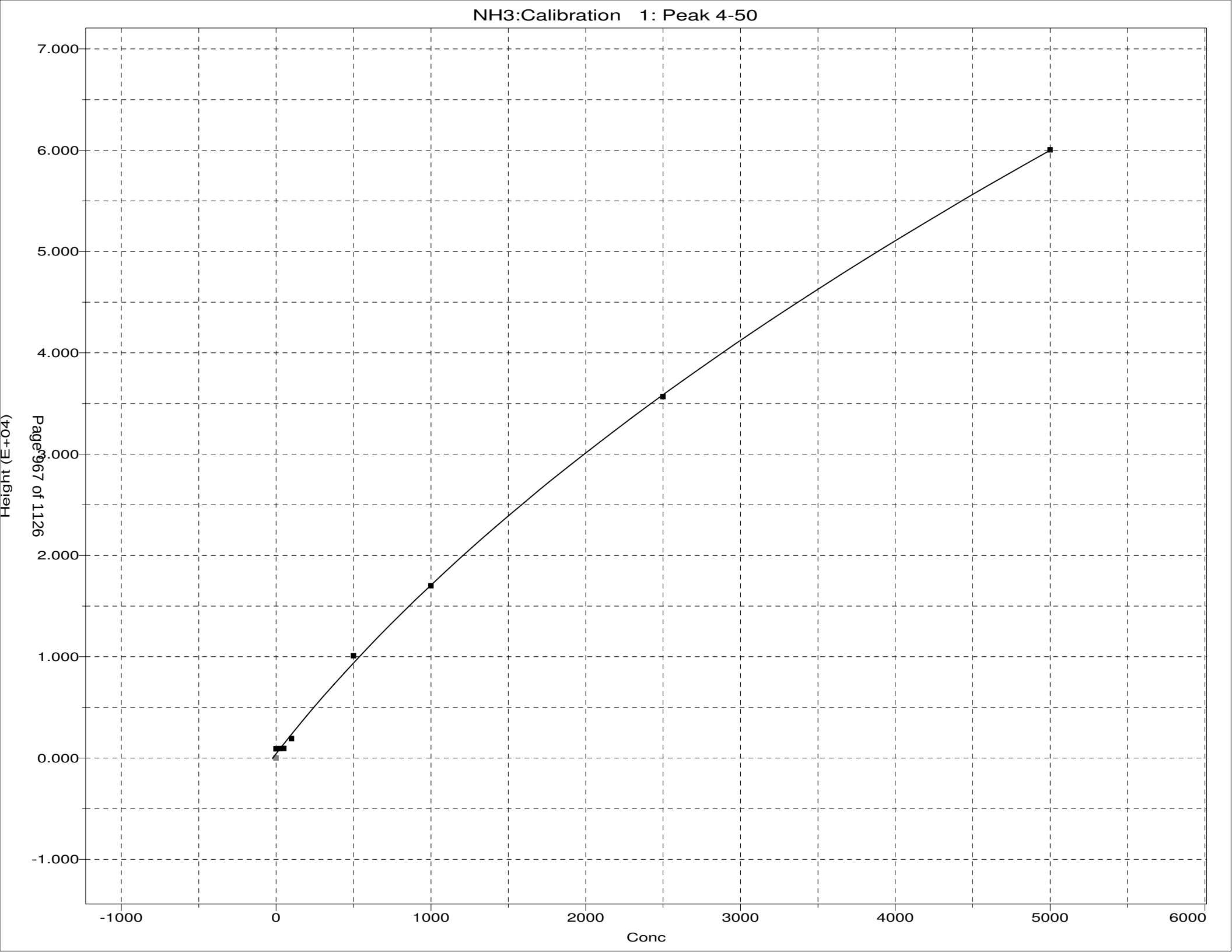
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	897.190308
*	Cal 25 ppb	25.000000	912.980042
*	Cal 50 ppb	50.000000	940.068115
*	Cal 100 ppb	100.000000	1913.911499
*	Cal 500 ppb	500.000000	10100.835938
*	Cal 1000 ppb	1000.000000	17008.613281
*	Cal 2500 ppb	2500.000000	35668.769531
*	Cal 5000 ppb	5000.000000	60042.917969

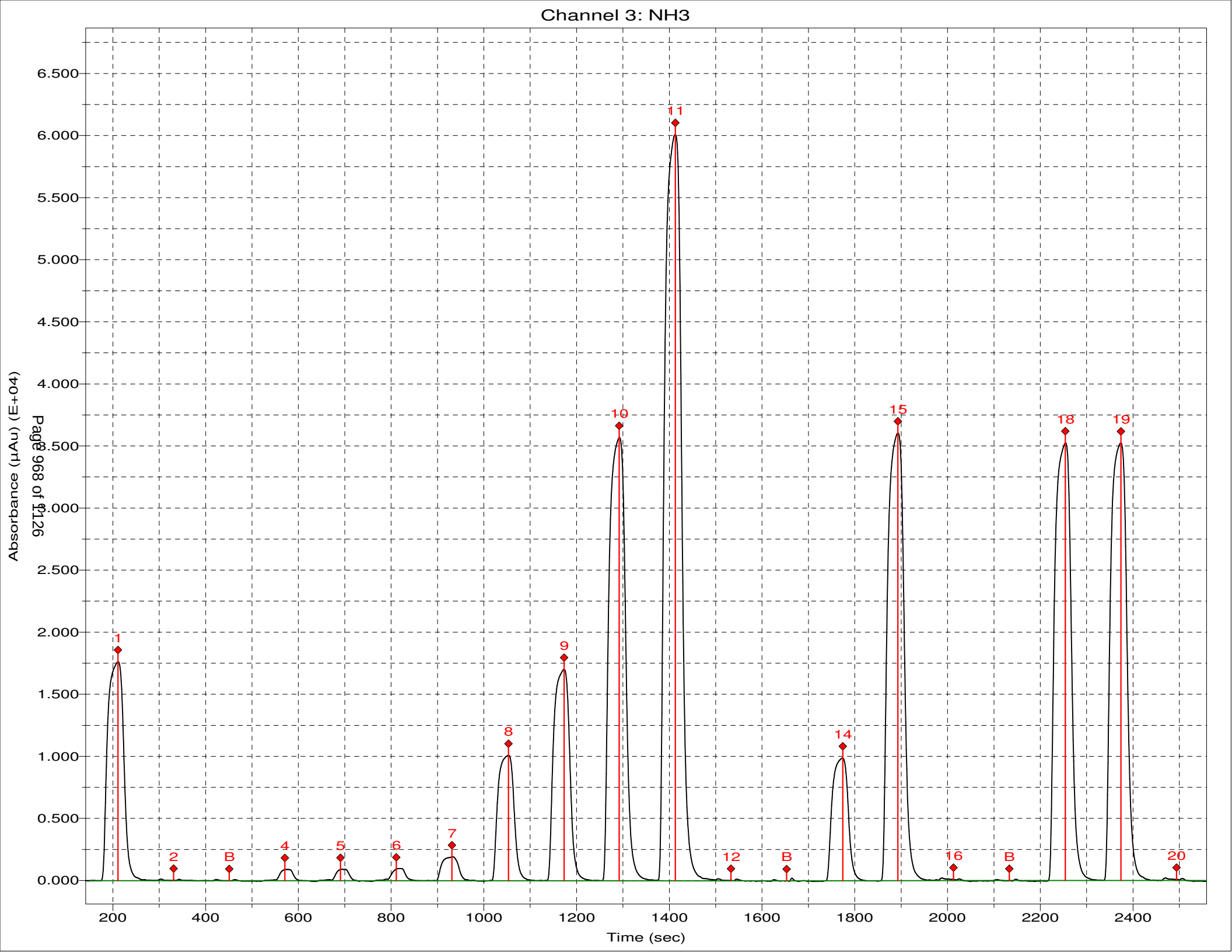
Calib Coef:
x=cyy+by+a
a: (intercept) -2.2475e+01
b: 5.0412e-02
c: 5.5507e-07

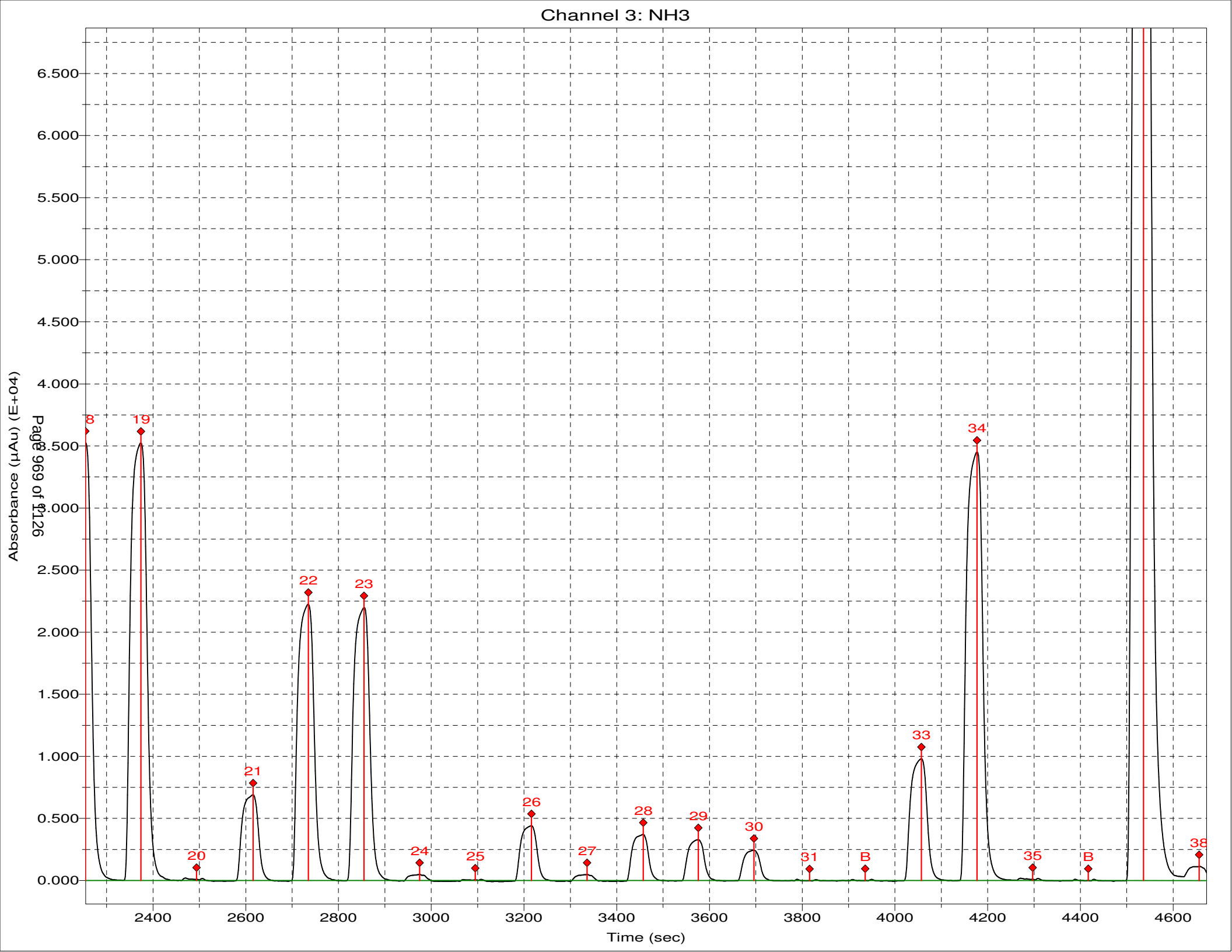
Corr Coef: 0.999910

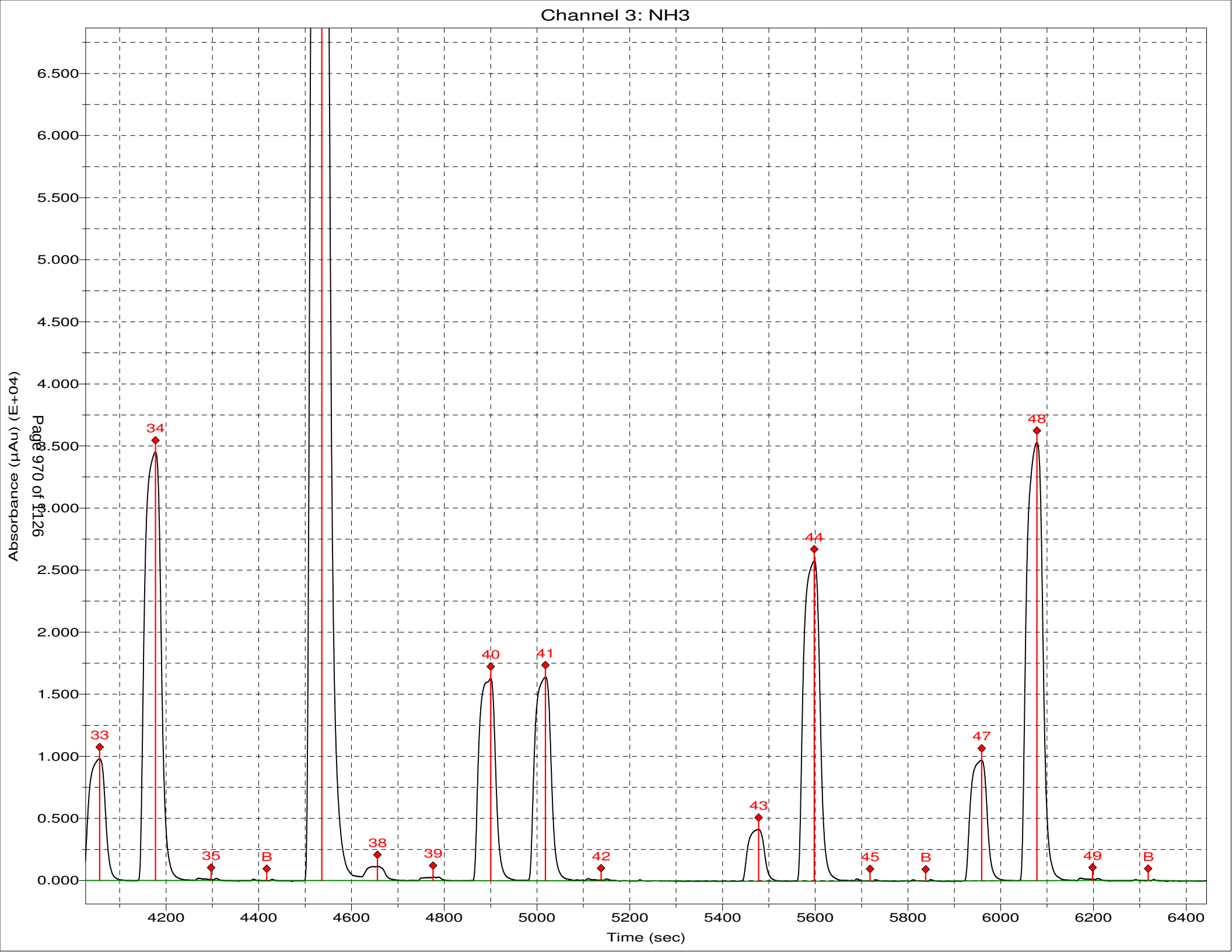
Carryover: 0.184%

No Drift Peaks


NH3:Calibration 1: Peak 4-50
Height (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-1000
0
1000
2000
3000
4000
5000
6000
Conc


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
1
2
B
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20


Channel 3: NH3
Absorbance (µAu) (E+04)
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
Time (sec)
8
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
38


Channel 3: NH3
Absorbance (µAu) (E+04)
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
33
34
35
B
38
39
40
41
42
43
44
45
B
47
48
49
B
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
Time (sec)

Sample Table for 060420

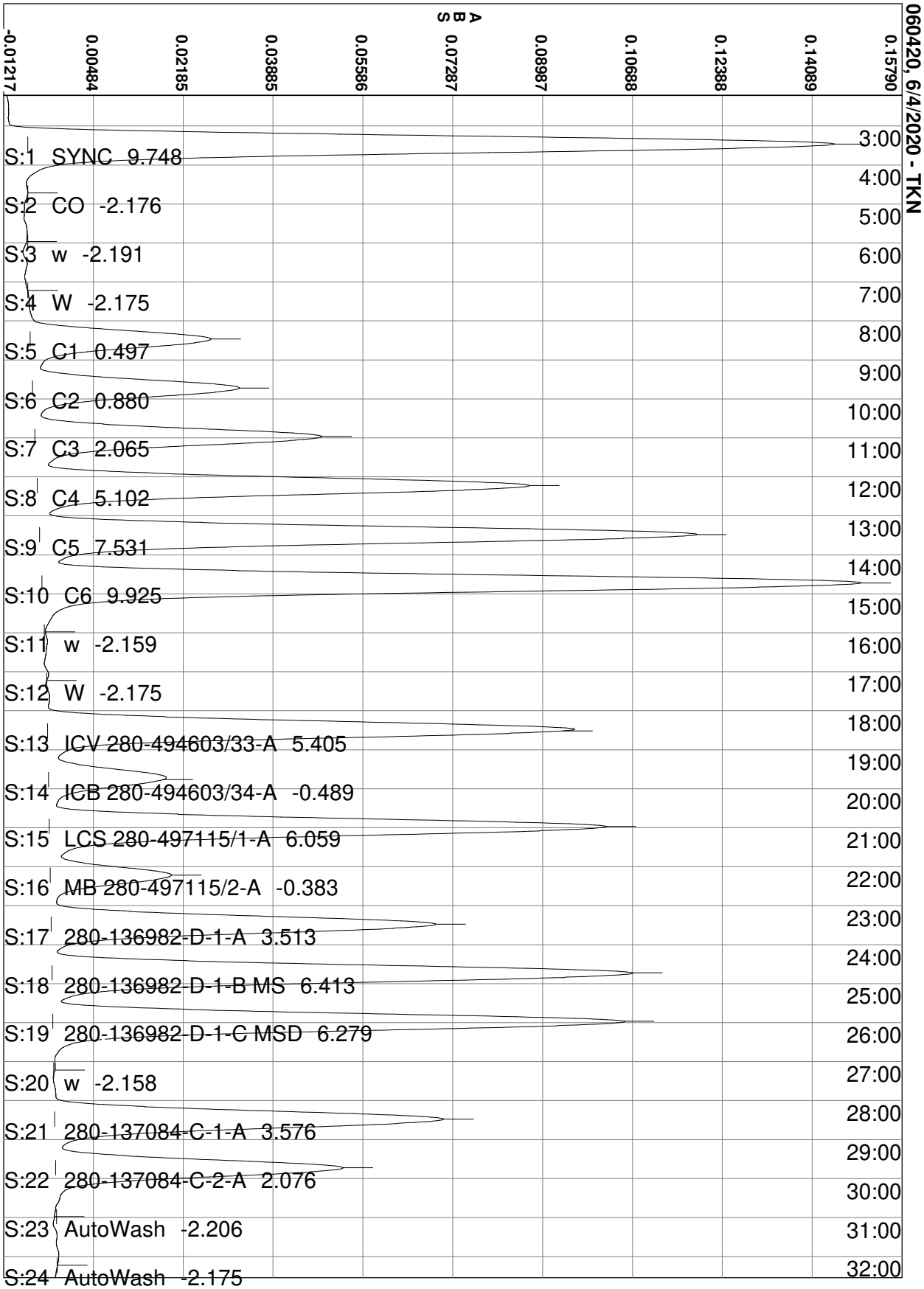
	Position	Identifier	Type	Cup Type
1	1:1	SYNC	SYNC	4 ml
2	1:2	CO	Carry over	4 ml
3	1:3	w	Blank	4 ml
4	1:4	W	Wash	4 ml
5	1:5	C1	Calibrant	4 ml
6	1:6	C2	Calibrant	4 ml
7	1:7	C3	Calibrant	4 ml
8	1:8	C4	Calibrant	4 ml
9	1:9	C5	Calibrant	4 ml
10	1:10	C6	Calibrant	4 ml
11	1:13	w	Blank	4 ml
12	1:14	W	Wash	4 ml
13	1:15	ICV 280-494603/33-A	Unknown	4 ml
14	1:16	ICB 280-494603/34-A	Unknown	4 ml
15	1:17	LCS 280-497115/1-A	Unknown	4 ml
16	1:18	MB 280-497115/2-A	Unknown	4 ml
17	1:19	280-136982-D-1-A	Unknown	4 ml
18	1:20	280-136982-D-1-B MS	Unknown	4 ml
19	1:21	280-136982-D-1-C MSD	Unknown	4 ml
20	1:22	w	Blank	4 ml
21	1:23	280-137084-C-1-A	Unknown	4 ml
22	1:24	280-137084-C-2-A	Unknown	4 ml
23	1:25	280-137084-C-3-A	Unknown	4 ml
24	1:26	280-137084-C-4-A	Unknown	4 ml
25	1:27	280-137084-C-5-A	Unknown	4 ml
26	1:28	580-94973-A-1-A	Unknown	4 ml
27	1:29	580-94973-A-2-A	Unknown	4 ml
28	1:30	w	Blank	4 ml
29	1:31	CCV 280-494603/35-A	Unknown	4 ml
30	1:32	CCB 280-494603/36-A	Unknown	4 ml
31	1:33	580-94973-A-3-A	Unknown	4 ml
32	1:34	580-94973-A-4-A	Unknown	4 ml
33	1:35	280-137048-C-1-A	Unknown	4 ml
34	1:36	280-137048-C-1-B MS	Unknown	4 ml
35	1:37	280-137048-C-1-C MSD	Unknown	4 ml
36	1:38	w	Blank	4 ml
37	1:39	280-137048-C-2-A	Unknown	4 ml
38	1:40	580-94973-A-5-A	Unknown	4 ml
39	1:41	580-94973-A-6-A	Unknown	4 ml
40	1:42	580-94973-A-7-A	Unknown	4 ml
41	1:43	580-94973-A-8-A	Unknown	4 ml
42	1:44	w	Blank	4 ml
43	1:45	CCV 280-494603/35-A	Unknown	4 ml
44	1:46	CCB 280-494603/36-A	Unknown	4 ml

	Position	Identifier	Type	Cup Type
45	1:47	580-94973-A-9-A	Unknown	4 ml
46	1:48	580-94973-A-10-A	Unknown	4 ml
47	1:49	580-94973-A-11-A	Unknown	4 ml
48	1:50	580-94973-A-12-A	Unknown	4 ml
49	1:51	w	Blank	4 ml
50	1:52	w	Blank	4 ml
51	1:53	w	Blank	4 ml
52	1:54	w	Blank	4 ml
53	1:55	w	Blank	4 ml
54	1:56	CCV 280-494603/35-A	Unknown	4 ml
55	1:57	CCB 280-494603/36-A	Unknown	4 ml

Run Name: 060420
Configuration: TKN
Run date: 6/4/2020

	Position	Identifier	Type	Commei	Date	Time	otal	TKN Cor Ht	mg/l
1	1:1	SYNC	SYNC	50;351.2	6/4/2020	4:31:18 PM	1	0.15244	9.748
2	1:2	CO	Carry over		6/4/2020	4:31:47 PM	1	-0.00001	-2.176
3	1:3	w	Blank		6/4/2020	4:33:02 PM	1	-0.00021	-2.191
4	1:4	W	Wash		6/4/2020	4:34:17 PM	1	0.00000	-2.175
5	1:5	C1	Calibrant		6/4/2020	4:35:32 PM	1	0.03416	0.497
6	1:6	C2	Calibrant		6/4/2020	4:36:47 PM	1	0.03906	0.880
7	1:7	C3	Calibrant		6/4/2020	4:38:02 PM	1	0.05421	2.065
8	1:8	C4	Calibrant		6/4/2020	4:39:17 PM	1	0.09304	5.102
9	1:9	C5	Calibrant		6/4/2020	4:40:32 PM	1	0.12410	7.531
10	1:10	C6	Calibrant		6/4/2020	4:41:47 PM	1	0.15470	9.925
		Curve #:							1
		Curve Type:							Linear
		Correlation:							0.99976
		Intercept:							0.027807
		Linear coef:							0.012786
11	1:13	w	Blank		6/4/2020	4:43:02 PM	1	0.00021	-2.159
12	1:14	W	Wash		6/4/2020	4:44:18 PM	1	0.00000	-2.175
13	1:15	ICV 280-494603/33-A	Unknown		6/4/2020	4:45:33 PM	1	0.09691	5.405
14	1:16	ICB 280-494603/34-A	Unknown		6/4/2020	4:46:48 PM	1	0.02156	-0.489
15	1:17	LCS 280-497115/1-A	Unknown		6/4/2020	4:48:03 PM	1	0.10527	6.059
16	1:18	MB 280-497115/2-A	Unknown		6/4/2020	4:49:18 PM	1	0.02291	-0.383
17	1:19	280-136982-D-1-A	Unknown		6/4/2020	4:50:33 PM	1	0.07272	3.513
18	1:20	280-136982-D-1-B MS	Unknown		6/4/2020	4:51:48 PM	1	0.10980	6.413
19	1:21	280-136982-D-1-C MSD	Unknown		6/4/2020	4:53:03 PM	1	0.10809	6.279
20	1:22	w	Blank		6/4/2020	4:54:18 PM	1	0.00022	-2.158
21	1:23	280-137084-C-1-A	Unknown		6/4/2020	4:55:33 PM	1	0.07352	3.576
22	1:24	280-137084-C-2-A	Unknown		6/4/2020	4:56:48 PM	1	0.05435	2.076
23	0	AutoWash	AutoWash		6/4/2020	4:58:03 PM	1	-0.00040	-2.206
24	0	AutoWash	AutoWash		6/4/2020	4:59:18 PM	1	0.00000	-2.175
25	1:25	280-137084-C-3-A	Unknown		6/4/2020	5:00:32 PM	1	0.06956	3.265
26	1:26	280-137084-C-4-A	Unknown		6/4/2020	5:01:47 PM	1	0.07509	3.698
27	1:27	280-137084-C-5-A	Unknown		6/4/2020	5:03:02 PM	1	0.06071	2.574
28	1:28	580-94973-A-1-A	Unknown		6/4/2020	5:04:17 PM	1	0.05275	1.951
29	1:29	580-94973-A-2-A	Unknown		6/4/2020	5:05:32 PM	1	0.05327	1.992
30	1:30	w	Blank		6/4/2020	5:06:47 PM	1	0.00076	-2.116
31	1:31	CCV 280-494603/35-A	Unknown		6/4/2020	5:08:02 PM	1	0.09434	5.204
32	1:32	CCB 280-494603/36-A	Unknown		6/4/2020	5:09:17 PM	1	0.02324	-0.358
33	1:33	580-94973-A-3-A	Unknown		6/4/2020	5:10:32 PM	1	0.05104	1.817
34	1:34	580-94973-A-4-A	Unknown		6/4/2020	5:11:47 PM	1	0.05356	2.014
35	0	AutoWash	AutoWash		6/4/2020	5:13:02 PM	1	0.00086	-2.107
36	0	AutoWash	AutoWash		6/4/2020	5:14:17 PM	1	0.00000	-2.175
37	1:35	280-137048-C-1-A	Unknown		6/4/2020	5:15:32 PM	1	0.05089	1.805
38	1:36	280-137048-C-1-B MS	Unknown		6/4/2020	5:16:47 PM	1	0.08715	4.641

	Position	Identifier	Type	Commei	Date	Time	otal	Cor Ht	TKN mg/l
39	1:37	280-137048-C-1-C MSD	Unknown		6/4/2020	5:18:02 PM	1	0.08656	4.595
40	1:38	w	Blank		6/4/2020	5:19:18 PM	1	-0.00067	-2.227
41	1:39	280-137048-C-2-A	Unknown		6/4/2020	5:20:33 PM	1	0.06609	2.994
42	1:40	580-94973-A-5-A	Unknown		6/4/2020	5:21:48 PM	1	0.04236	1.138
43	1:41	580-94973-A-6-A	Unknown		6/4/2020	5:23:03 PM	1	0.04760	1.548
44	1:42	580-94973-A-7-A	Unknown		6/4/2020	5:24:18 PM	1	0.05195	1.888
45	1:43	580-94973-A-8-A	Unknown		6/4/2020	5:25:33 PM	1	0.05453	2.090
46	1:44	w	Blank		6/4/2020	5:26:48 PM	1	0.00249	-1.980
47	0	AutoWash	AutoWash		6/4/2020	5:28:03 PM	1	0.00280	-1.956
48	0	AutoWash	AutoWash		6/4/2020	5:29:18 PM	1	0.00000	-2.175
49	1:45	CCV 280-494603/35-A	Unknown		6/4/2020	5:30:33 PM	1	0.09392	5.171
50	1:46	CCB 280-494603/36-A	Unknown		6/4/2020	5:31:48 PM	1	0.02306	-0.371
51	1:47	580-94973-A-9-A	Unknown		6/4/2020	5:33:03 PM	1	0.05029	1.758
52	1:48	580-94973-A-10-A	Unknown		6/4/2020	5:34:17 PM	1	0.05021	1.752
53	1:49	580-94973-A-11-A	Unknown		6/4/2020	5:35:32 PM	1	0.05087	1.804
54	1:50	580-94973-A-12-A	Unknown		6/4/2020	5:36:47 PM	1	0.05143	1.847
55	1:51	w	Blank		6/4/2020	5:38:02 PM	1	-0.00200	-2.332
56	1:52	w	Blank		6/4/2020	5:39:17 PM	1	-0.00399	-2.487
57	1:53	w	Blank		6/4/2020	5:40:32 PM	1	0.09702	5.413
58	1:54	w	Blank		6/4/2020	5:41:47 PM	1	0.00035	-2.147
59	0	AutoWash	AutoWash		6/4/2020	5:43:02 PM	1	0.00156	-2.053
60	0	AutoWash	AutoWash		6/4/2020	5:44:17 PM	1	0.00000	-2.175
61	1:55	w	Blank		6/4/2020	5:45:32 PM	1	0.00347	-1.903
62	1:56	CCV 280-494603/35-A	Unknown		6/4/2020	5:46:47 PM	1	0.09758	5.457
63	1:57	CCB 280-494603/36-A	Unknown		6/4/2020	5:48:02 PM	1	0.02788	0.006
64	0	AutoWash	AutoWash		6/4/2020	5:49:17 PM	1	0.00167	-2.044
65	0	AutoWash	AutoWash		6/4/2020	5:50:32 PM	1	0.00000	-2.175


060420, 6/4/2020 - TKN
ABS
-0.01217
0.00484
0.02185
0.03885
0.05586
0.07287
0.08987
0.10688
0.12388
0.14089
0.15790
S:1 SYNC 9.748
S:2 CO -2.176
S:3 w -2.191
S:4 W -2.175
S:5 C1 0.497
S:6 C2 0.880
S:7 C3 2.065
S:8 C4 5.102
S:9 C5 7.531
S:10 C6 9.925
S:11 w -2.159
S:12 W -2.175
S:13 ICV 280-494603/33-A 5.405
S:14 ICB 280-494603/34-A -0.489
S:15 LCS 280-497115/1-A 6.059
S:16 MB 280-497115/2-A -0.383
S:17 280-136982-D-1-A 3.513
S:18 280-136982-D-1-B MS 6.413
S:19 280-136982-D-1-C MSD 6.279
S:20 w -2.158
S:21 280-137084-C-1-A 3.576
S:22 280-137084-C-2-A 2.076
S:23 AutoWash -2.206
S:24 AutoWash -2.175
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
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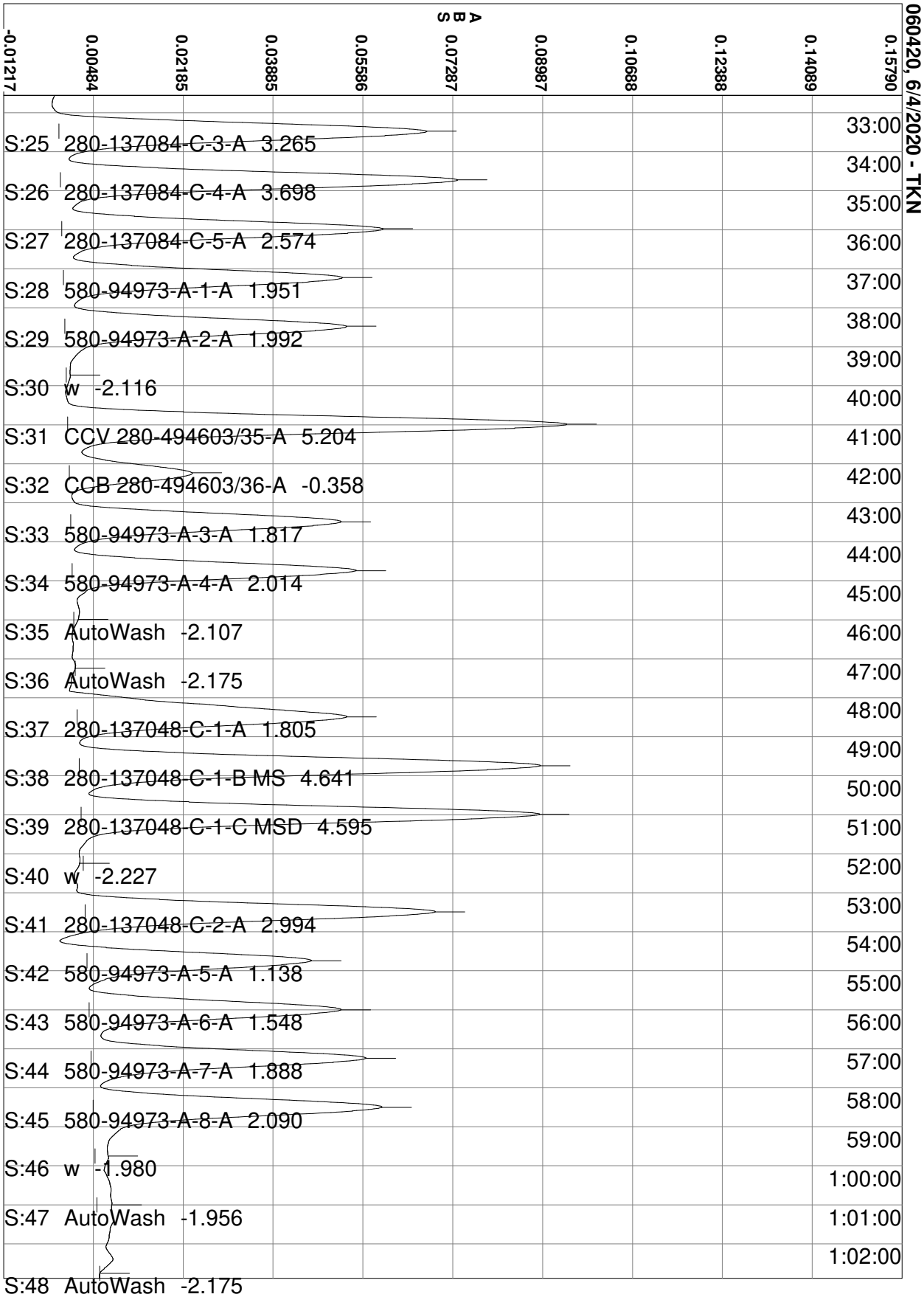
060420, 6/4/2020 - TKN
ABS
-0.01217
0.00484
0.02185
0.03885
0.05586
0.07287
0.08987
0.10688
0.12388
0.14089
0.15790
33:00
34:00
35:00
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
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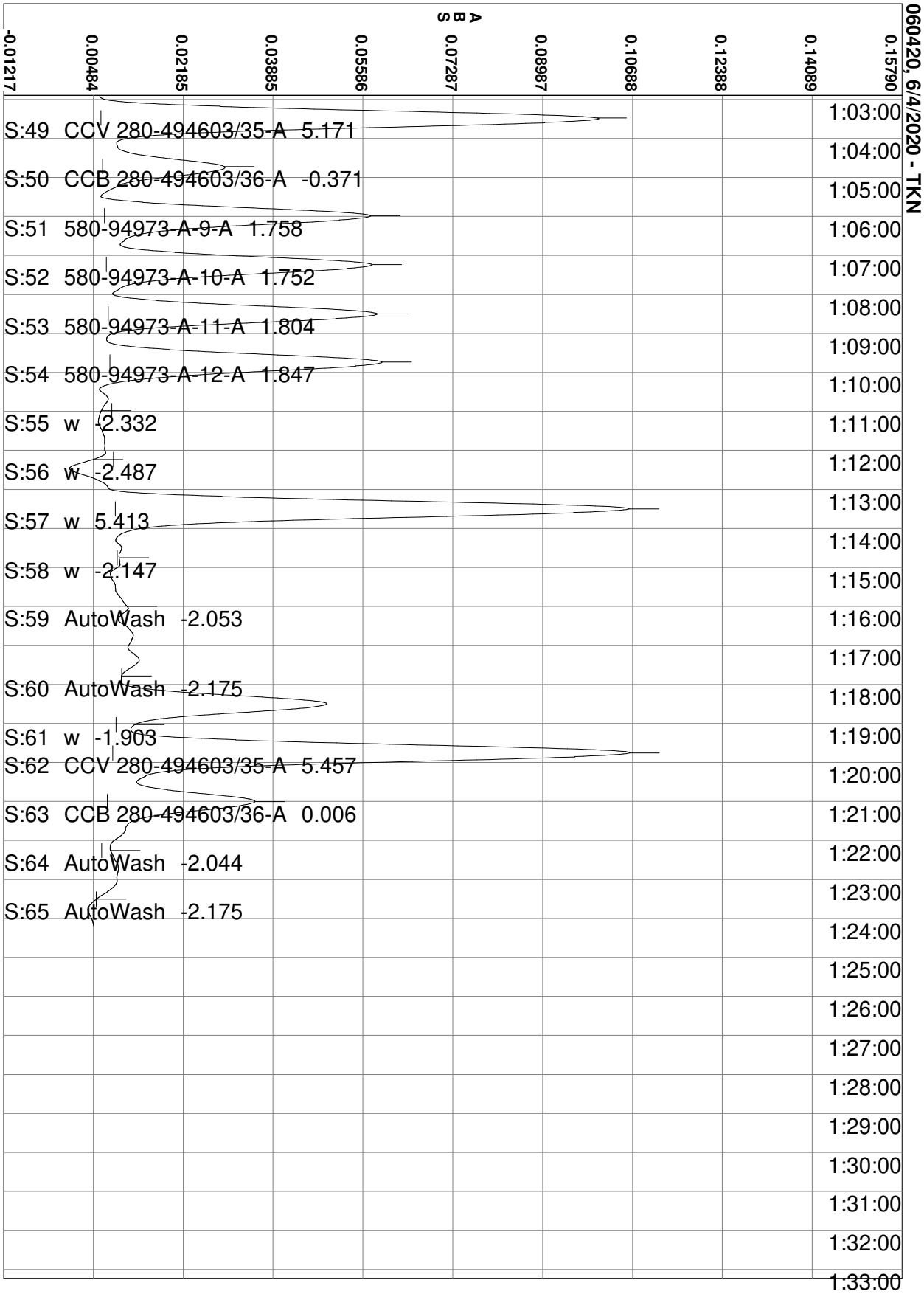
59:00
1:00:00
1:01:00
1:02:00
S:25 280-137084-C-3-A 3.265
S:26 280-137084-C-4-A 3.698
S:27 280-137084-C-5-A 2.574
S:28 580-94973-A-1-A 1.951
S:29 580-94973-A-2-A 1.992
S:30 w -2.116
S:31 CCV 280-494603/35-A 5.204
S:32 CCB 280-494603/36-A -0.358
S:33 580-94973-A-3-A 1.817
S:34 580-94973-A-4-A 2.014
S:35 AutoWash -2.107
S:36 AutoWash -2.175
S:37 280-137048-C-1-A 1.805
S:38 280-137048-C-1-B MS 4.641
S:39 280-137048-C-1-C MSD 4.595
S:40 w -2.227
S:41 280-137048-C-2-A 2.994
S:42 580-94973-A-5-A 1.138
S:43 580-94973-A-6-A 1.548
S:44 580-94973-A-7-A 1.888
S:45 580-94973-A-8-A 2.090
S:46 w -1.980
S:47 AutoWash -1.956
S:48 AutoWash -2.175


060420, 6/4/2020 - TKN
ABS
-0.01217
0.00484
0.02185
0.03885
0.05586
0.07287
0.08987
0.10688
0.12388
0.14089
0.15790
S:49 CCV 280-494603/35-A 5.171
S:50 CCB 280-494603/36-A -0.371
S:51 580-94973-A-9-A 1.758
S:52 580-94973-A-10-A 1.752
S:53 580-94973-A-11-A 1.804
S:54 580-94973-A-12-A 1.847
S:55 w -2.332
S:56 w -2.487
S:57 w 5.413
S:58 w -2.147
S:59 AutoWash -2.053
S:60 AutoWash -2.175
S:61 w -1.903
S:62 CCV 280-494603/35-A 5.457
S:63 CCB 280-494603/36-A 0.006
S:64 AutoWash -2.044
S:65 AutoWash -2.175
1:03:00
1:04:00
1:05:00
1:06:00
1:07:00
1:08:00
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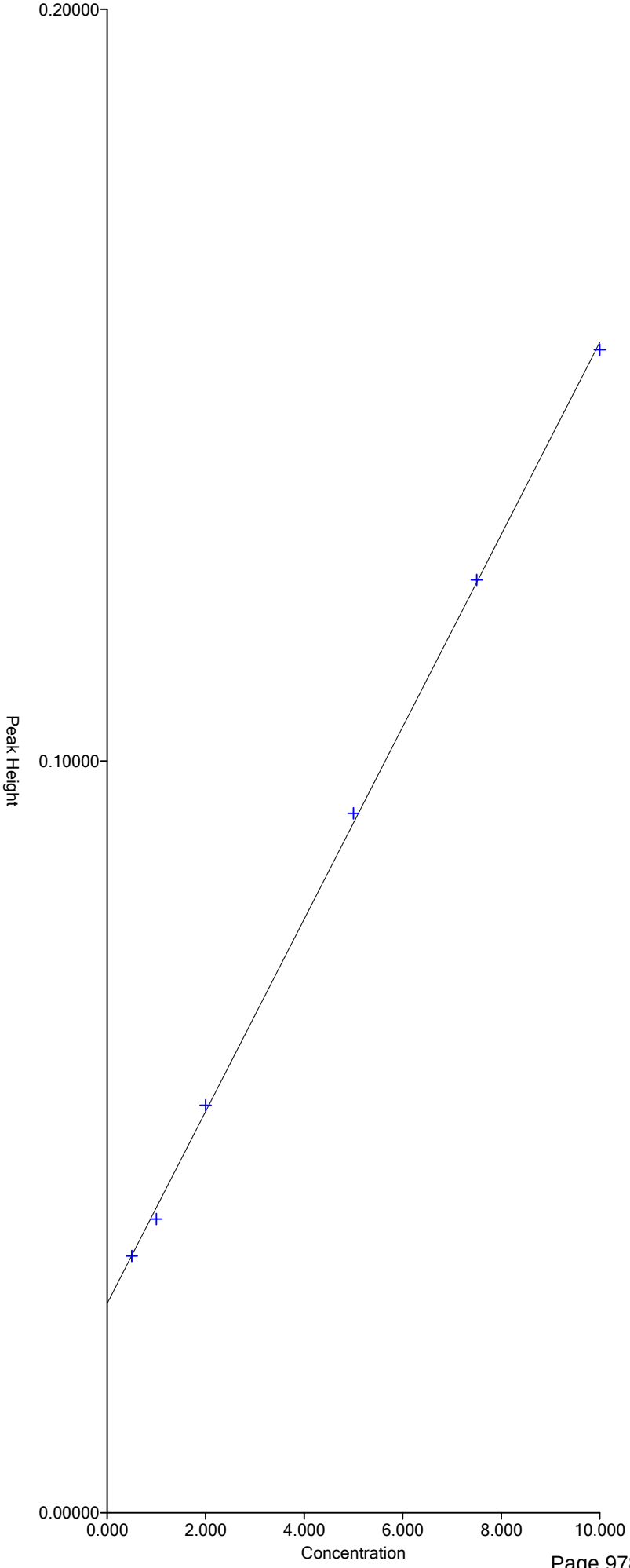
Calibration for TKN



Segment 1: Equation: y = 0.01279x + 0.02781
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\060320.RST
Sample table path	C:\FLOW_4\060320.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	03-Jun-20
Time acquired	20:45

Date	Time	Cup	Name
03-Jun-20	16:42	109	SYNC
03-Jun-20	16:44	0	Carryover
03-Jun-20	16:46	0	Carryover (Statistics)
03-Jun-20	16:48	0	read baseline
03-Jun-20	16:50	101	Cal 0.00 ppb
03-Jun-20	16:52	102	Cal 50.0 ppb
03-Jun-20	16:54	103	Cal 100 ppb
03-Jun-20	16:56	104	Cal 500 ppb
03-Jun-20	16:58	105	Cal 1000 ppb
03-Jun-20	17:00	106	Cal 2500 ppb
03-Jun-20	17:02	107	Cal 5000 ppb
03-Jun-20	17:04	108	Cal 7500 ppb
03-Jun-20	17:06	109	Cal 10000 ppb
03-Jun-20	17:08	0	Blank
03-Jun-20	17:10	0	Read Baseline
03-Jun-20	17:12	110	5000 PPB NO2
03-Jun-20	17:14	111	ICV 5000 PPB
03-Jun-20	17:16	112	ICV 2000 PPB
03-Jun-20	17:18	0	ICB
03-Jun-20	17:20	0	Read Baseline
03-Jun-20	17:22	107	LCS
03-Jun-20	17:24	0	MB
03-Jun-20	17:26	113	280-136985-C-1
03-Jun-20	17:28	114	ms 280-136985-C-1
03-Jun-20	17:30	115	msd 280-136985-C-1
03-Jun-20	17:32	116	280-136985-C-2
03-Jun-20	17:34	117	280-136985-C-3
03-Jun-20	17:36	118	280-136985-C-4
03-Jun-20	17:38	119	280-136985-C-5
03-Jun-20	17:40	120	280-136985-C-6
03-Jun-20	17:42	121	280-136936-C-2
03-Jun-20	17:44	122	280-136936-C-4
03-Jun-20	17:46	0	Rinse
03-Jun-20	17:48	0	Read Baseline
03-Jun-20	17:50	107	CCV 5000 ppb
03-Jun-20	17:52	105	CCVL 1000 ppb
03-Jun-20	17:54	0	CCB
03-Jun-20	17:56	0	Read Baseline
03-Jun-20	17:58	123	280-137113-E-1
03-Jun-20	18:00	124	280-137097-A-1
03-Jun-20	18:02	125	280-137023-C-1
03-Jun-20	18:04	126	ms 280-137023-C-1
03-Jun-20	18:06	127	msd 280-137023-C-1
03-Jun-20	18:08	128	280-137023-C-2

Result path	C:\FLOW_4\060320.RST
Sample table path	C:\FLOW_4\060320.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	03-Jun-20
Time acquired	20:45

Date	Time	Cup	Name
03-Jun-20	18:10	129	280-137025-D-15
03-Jun-20	18:12	130	280-137025-D-10
03-Jun-20	18:14	131	280-137025-D-14
03-Jun-20	18:16	132	280-137025-D-13
03-Jun-20	18:18	0	Rinse
03-Jun-20	18:20	0	Read Baseline
03-Jun-20	18:22	107	CCV 5000 ppb
03-Jun-20	18:24	105	CCVL 1000 ppb
03-Jun-20	18:26	0	CCB
03-Jun-20	18:28	0	Read Baseline
03-Jun-20	18:30	133	280-137025-D-5
03-Jun-20	18:32	134	280-137025-D-8
03-Jun-20	18:34	135	280-137025-D-6
03-Jun-20	18:36	136	280-137025-D-12
03-Jun-20	18:38	107	LCS
03-Jun-20	18:40	0	MB
03-Jun-20	18:42	137	280-137025-D-7
03-Jun-20	18:44	138	ms 280-137025-D-7
03-Jun-20	18:46	139	msd 280-137025-D-7
03-Jun-20	18:48	140	280-137025-D-2
03-Jun-20	18:50	0	Rinse
03-Jun-20	18:52	0	Read Baseline
03-Jun-20	18:54	107	CCV 5000 ppb
03-Jun-20	18:56	105	CCVL 1000 ppb
03-Jun-20	18:58	0	CCB
03-Jun-20	19:00	0	Read Baseline
03-Jun-20	19:02	141	280-137025-D-11
03-Jun-20	19:04	142	280-137025-D-4
03-Jun-20	19:06	143	280-137025-D-3
03-Jun-20	19:08	144	280-137025-D-9
03-Jun-20	19:10	145	280-137025-D-1
03-Jun-20	19:12	146	280-137166-B-1
03-Jun-20	19:14	147	280-137166-B-2
03-Jun-20	19:16	148	280-137166-B-3
03-Jun-20	19:18	149	280-137166-B-4
03-Jun-20	19:20	150	ms
03-Jun-20	19:22	0	Rinse
03-Jun-20	19:24	0	Read Baseline
03-Jun-20	19:26	107	CCV 5000 ppb
03-Jun-20	19:28	105	CCVL 1000 ppb
03-Jun-20	19:30	0	CCB
03-Jun-20	19:32	0	Read Baseline
03-Jun-20	19:34	151	msd 280-137166-B-4
03-Jun-20	19:36	152	280-137166-B-5
03-Jun-20	19:38	153	280-137166-B-6
03-Jun-20	19:40	154	280-137166-B-7
03-Jun-20	19:42	155	280-137166-B-8
03-Jun-20	19:44	156	280-137166-B-9
03-Jun-20	19:46	157	280-137166-B-10
03-Jun-20	19:48	158	280-137166-B-11
03-Jun-20	19:50	159	280-137084-C-1
03-Jun-20	19:52	160	280-137084-C-2
03-Jun-20	19:54	0	Rinse
03-Jun-20	19:56	0	Read Baseline
03-Jun-20	19:58	107	CCV 5000 ppb
03-Jun-20	20:00	105	CCVL 1000 ppb
03-Jun-20	20:02	0	CCB

Result path	C:\FLOW_4\060320.RST
Sample table path	C:\FLOW_4\060320.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	03-Jun-20
Time acquired	20:45

Date	Time	Cup	Name
03-Jun-20	20:04	0	Read Baseline
03-Jun-20	20:06	107	LCS
03-Jun-20	20:08	0	MB
03-Jun-20	20:10	201	160-38134-A-1
03-Jun-20	20:12	202	ms 160-38134-A-1
03-Jun-20	20:14	203	msd 160-38134-A-1
03-Jun-20	20:16	204	280-137084-C-3
03-Jun-20	20:18	205	280-137084-C-4
03-Jun-20	20:20	206	280-137084-C-5
03-Jun-20	20:22	207	d
03-Jun-20	20:24	208	d
03-Jun-20	20:26	209	d
03-Jun-20	20:28	0	Rinse
03-Jun-20	20:30	0	Read Baseline
03-Jun-20	20:32	107	CCV 5000 ppb
03-Jun-20	20:34	105	CCVL 1000 ppb
03-Jun-20	20:36	0	CCB
03-Jun-20	20:38	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\060320.RST
Sample table path	C:\FLOW_4\060320.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	03-Jun-20
Time acquired	20:45

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2443194	10137.570	HI			
Carryover	8501	4.484				
Carryover	2980	-21.616	LO			
(Statistics)				5741	-8.564	N
read baseline	0	-35.712	BL			
Cal 0.00 ppb	4483	-14.510	LO			
Cal 50.0 ppb	13314	27.224				
Cal 100 ppb	22462	70.425				
Cal 500 ppb	111380	488.278				
Cal 1000 ppb	226915	1025.740				
Cal 2500 ppb	583805	2646.880				
Cal 5000 ppb	1105252	4909.313				
Cal 7500 ppb	1734562	7471.848				
Cal 10000 ppb	2411911	10024.802	HI			
Blank	-2239	-46.307	LO			
Read Baseline	0	-35.712	BL			
5000 PPB NO2	1087368	4833.808				
ICV 5000 PPB	1067554	4749.980				
ICV 2000 PPB	472944	2149.625				
ICB	456	-33.556	LO			
Read Baseline	0	-35.712	BL			
LCS	1196835	5293.657				
MB	-1350	-42.097	LO			
280-136985-C-1	2852	-22.222	LO			
ms 280-136985-C-1	953884	4265.553				
msd 280-136985-C-1	933168	4176.621				
280-136985-C-2	2469	-24.033	LO			
280-136985-C-3	4153	-16.071	LO			
280-136985-C-4	4357	-15.104	LO			
280-136985-C-5	137586	610.730				
280-136985-C-6	4586	-14.026	LO			
280-136936-C-2	39510	150.821				
280-136936-C-4	36433	136.320				
Rinse	73	-35.369	LO			
Read Baseline	0	-35.712	BL			
CCV 5000 ppb	1177930	5214.636				
CCVL 1000 ppb	236902	1071.910				
CCB	-57	-35.983	LO			
Read Baseline	0	-35.712	BL			
280-137113-E-1	879897	7894.046				
280-137097-A-1	538016	4884.374				
280-137023-C-1	7570	0.082				
ms 280-137023-C-1	924117	4137.703				
msd 280-137023-C-1	942822	4218.087				
280-137023-C-2	-315	-37.202	LO			

Result path C:\FLOW_4\060320.RST
Sample table path C:\FLOW_4\060320.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 03-Jun-20
Time acquired 20:45

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-137025-D-15	519	-33.259	LO		
280-137025-D-10	128607	568.810			
280-137025-D-14	919924	4119.660			
280-137025-D-13	305287	1386.797			
Rinse	272	-34.424	LO		
Read Baseline	0	-35.712	BL		
CCV 5000 ppb	1175399	5204.044			
CCVL 1000 ppb	237652	1075.375			
CCB	36	-35.542	LO		
Read Baseline	0	-35.712	BL		
280-137025-D-5	1246966	5502.391			
280-137025-D-8	841033	37786.891			
280-137025-D-6	-364	-37.434	LO		
280-137025-D-12	871	-31.594	LO		
LCS	1152403	5107.678			
MB	-653	-38.800	LO		
280-137025-D-7	1473	-28.746	LO		
ms 280-137025-D-7	936569	4191.237			
msd 280-137025-D-7	934389	4181.868			
280-137025-D-2	564660	25614.109			
Rinse	-385	-37.535	LO		
Read Baseline	0	-35.712	BL		
CCV 5000 ppb	1145027	5076.716			
CCVL 1000 ppb	230878	1044.064			
CCB	175	-34.884	LO		
Read Baseline	0	-35.712	BL		
280-137025-D-11	956759	106946.922			
280-137025-D-4	1327822	145915.000			
280-137025-D-3	1943131	207015.500			
280-137025-D-9	1152660	51087.531			
280-137025-D-1	1224104	270367.156			
280-137166-B-1	12654	24.109			
280-137166-B-2	13173	26.561			
280-137166-B-3	1315	-29.494	LO		
280-137166-B-4	52764	213.236			
ms	836004	3756.854			
Rinse	-1770	-44.084	LO		
Read Baseline	0	-35.712	BL		
CCV 5000 ppb	1100908	4890.989			
CCVL 1000 ppb	234462	1060.633			
CCB	132	-35.086	LO		
Read Baseline	0	-35.712	BL		
msd 280-137166-B-4	844875	3795.362			
280-137166-B-5	2920	-21.903	LO		
280-137166-B-6	96	-35.259	LO		
280-137166-B-7	113189	496.743			
280-137166-B-8	120554	531.182			
280-137166-B-9	1035159	4612.533			
280-137166-B-10	1028385	4583.730			
280-137166-B-11	-2361	-46.884	LO		
280-137084-C-1	941986	4214.500			
280-137084-C-2	1596588	6925.741			
Rinse	-2621	-48.110	LO		
Read Baseline	0	-35.712	BL		
CCV 5000 ppb	1113720	4945.016			
CCVL 1000 ppb	226153	1022.216			
CCB	272	-34.428	LO		

Result path	C:\FLOW_4\060320.RST
Sample table path	C:\FLOW_4\060320.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	03-Jun-20
Time acquired	20:45

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Read Baseline	0	-35.712	BL		
LCS	1110645	4932.056			
MB	-1799	-44.224	LO		
160-38134-A-1	519607	2359.621			
ms 160-38134-A-1	1322719	5815.600			
msd 160-38134-A-1	1320656	5807.107			
280-137084-C-3	6154	-6.611	LO		
280-137084-C-4	3942	-17.070	LO		
280-137084-C-5	6392	-5.484	LO		
d	948	-31.229	LO		
d	879	-31.553	LO		
d	870	-31.596	LO		
Rinse	-100	-36.186	LO		
Read Baseline	0	-35.712	BL		
CCV 5000 ppb	1082195	4811.941			
CCVL 1000 ppb	226202	1022.444			
CCB	-608	-38.587	LO		
Read Baseline	0	-35.712	BL		

Nitrate as N:Calibration 1: Peak 5-119

File name: C:\FLOW_4\060320.RST
Date: 03-Jun-20
Operator: svc

*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	4483.083496
*	Cal 50.0 ppb	50.000000	13313.541992
*	Cal 100 ppb	100.000000	22462.273438
*	Cal 500 ppb	500.000000	111379.734375
*	Cal 1000 ppb	1000.000000	226914.953125
*	Cal 2500 ppb	2500.000000	583805.375000
*	Cal 5000 ppb	5000.000000	1105251.625000
*	Cal 7500 ppb	7500.000000	1734561.625000
*	Cal 10000 ppb	10000.000000	2411911.000000

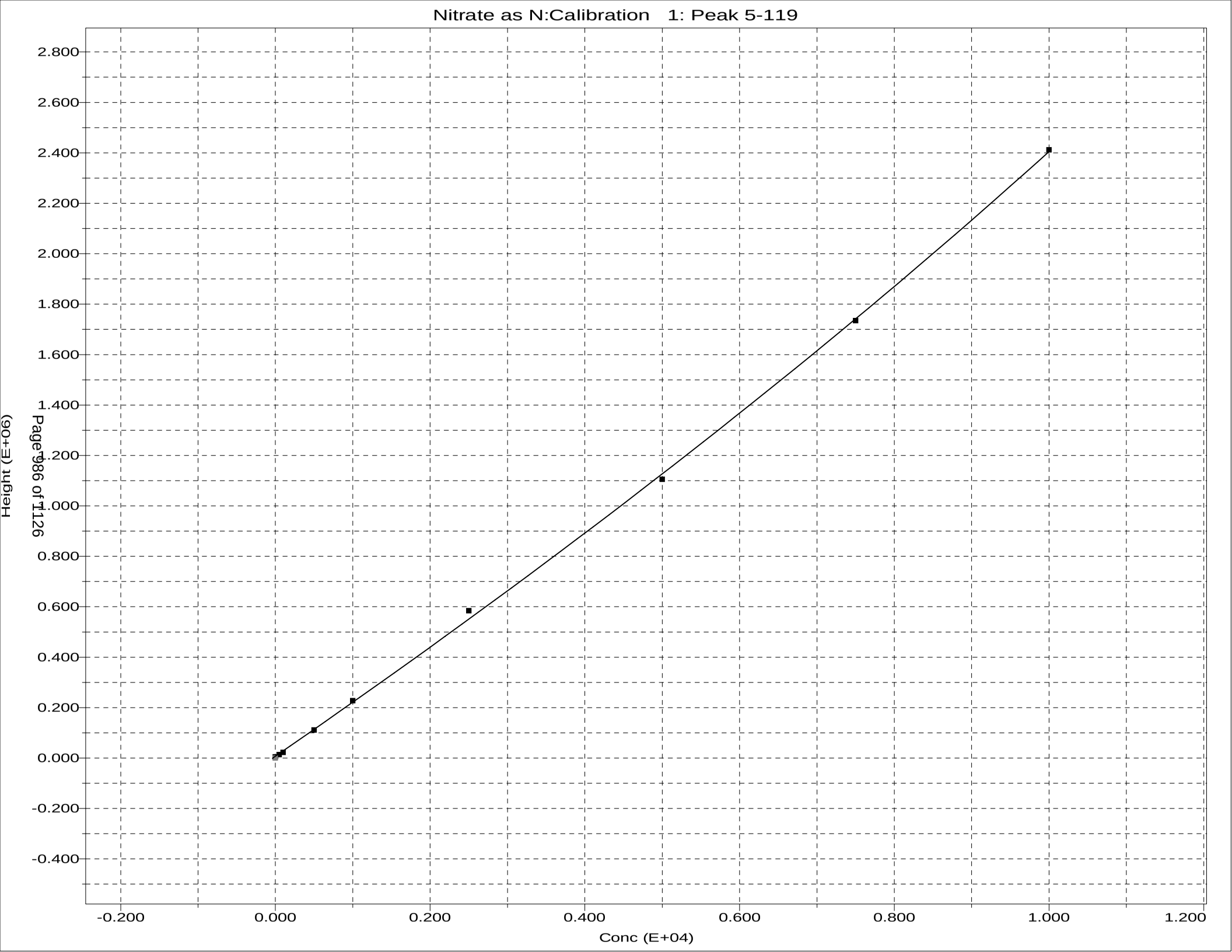
Calib Coef:
x=cyy+by+a

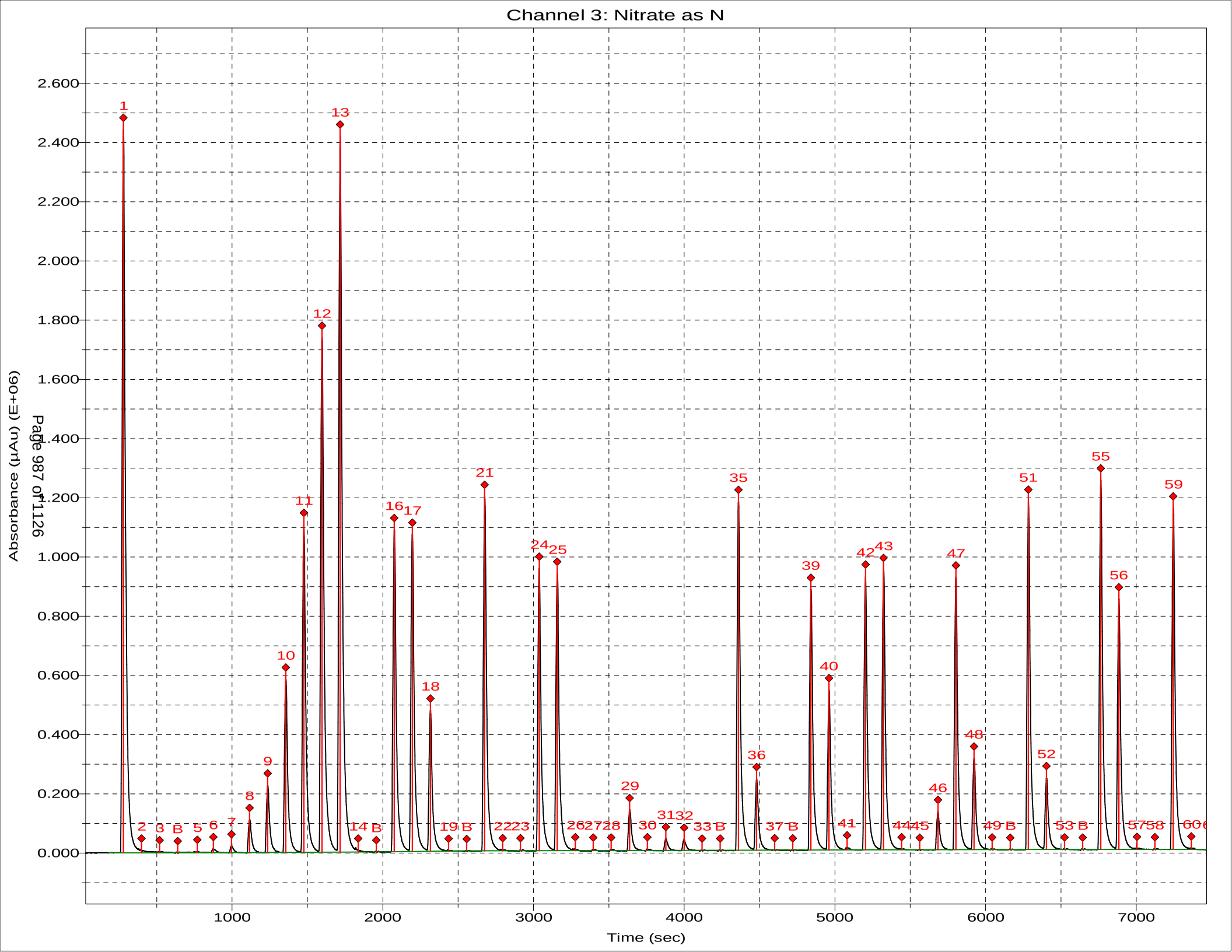
a: (intercept)	-3.5712e+01
b:	4.7304e-03
c:	-2.3184e-10

Corr Coef: 0.999847

Carryover: 0.348%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-119
Height (E+06)
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-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)
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
1000
2000
3000
4000
5000
6000
7000
1
2
3
B
5
6
7
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10
11
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13
14
B
16
17
18
19
B
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23
24
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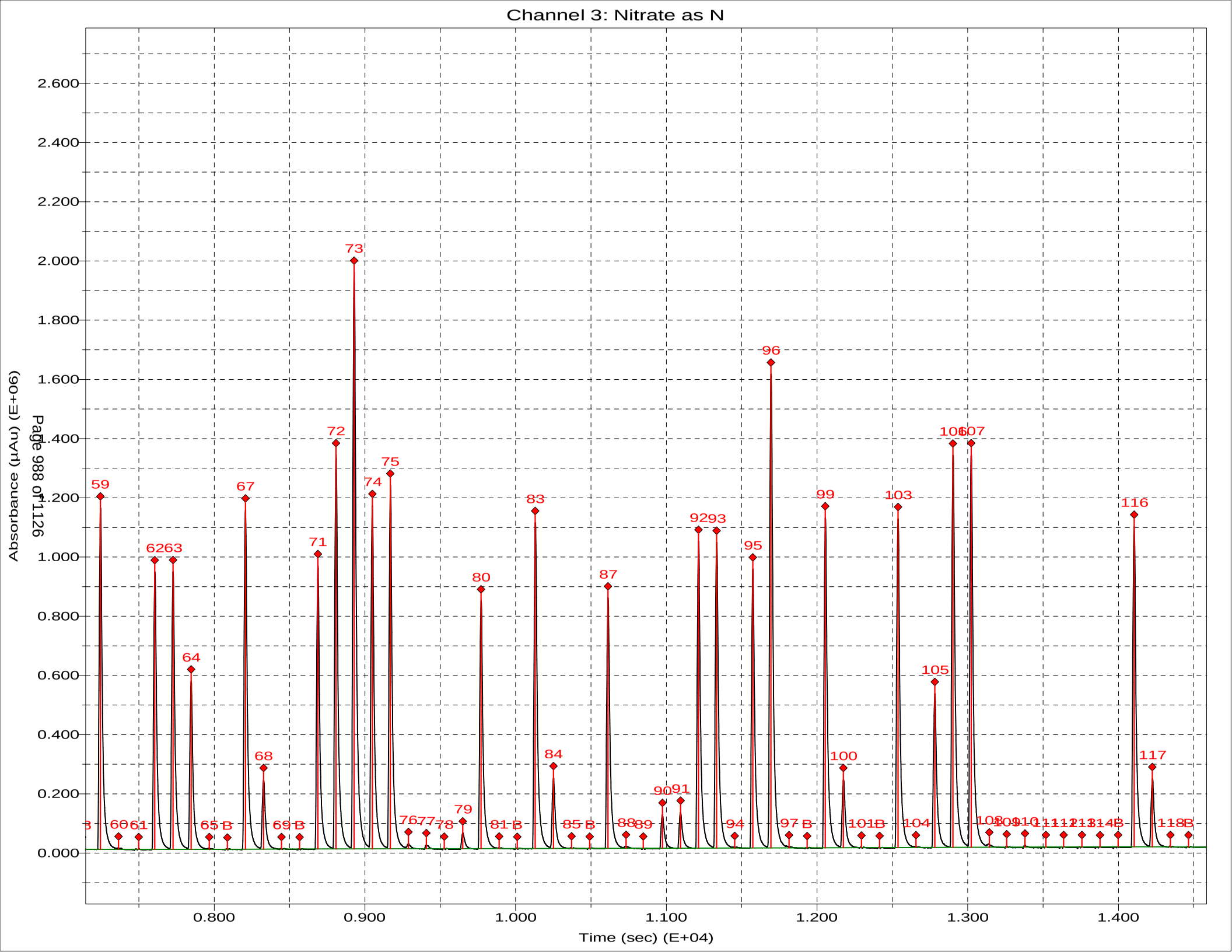
Page 987 of 1126


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
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
0.800
0.900
1.000
1.100
1.200
1.300
1.400
59
60
61
62
63
64
65 B
67
68
69 B
71
72
73
74
75
76
77
78
79
80
81 B
83
84
85 B
87
88
89
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91
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93
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95
96
97 B
99
100
101B
103
104
105
106
107
116
117
118B

Sample Table - 060320.tbl

File name: C:\FLOW_4\060320.TBL
Date: 03-Jun-20

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1	1	1		
0	Carryover	CO	1	1	1		
0	Carryover	CO	1	1	1		
0	read baseline	RB	1	1	1		
101	Cal 0.00 ppb	C	1	1	1		
102	Cal 50.0 ppb	C	1	1	1		
103	Cal 100 ppb	C	1	1	1		
104	Cal 500 ppb	C	1	1	1		
105	Cal 1000 ppb	C	1	1	1		
106	Cal 2500 ppb	C	1	1	1		
107	Cal 5000 ppb	C	1	1	1		
108	Cal 7500 ppb	C	1	1	1		
109	Cal 10000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
110	5000 PPB NO2	U	1	1	1		
111	ICV 5000 PPB	CCV	1	1	1		
112	ICV 2000 PPB	CCV	1	1	1		
0	ICB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		pH
0	MB	U	1	1	1		
113	280-136985-C-1	U	1	1	1		<2
114	ms 280-136985-C-1	U	1	1	1		<2
115	msd 280-136985-C-1	U	1	1	1		<2
116	280-136985-C-2	U	1	1	1		<2
117	280-136985-C-3	U	1	1	1		<2
118	280-136985-C-4	U	1	1	1		<2
119	280-136985-C-5	U	1	1	1		<2
120	280-136985-C-6	U	1	1	1		<2
121	280-136936-C-2	U	1	1	1		<2
122	280-136936-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		
123	~~280-136134-A-1~~ 280-137115-E-1	U	1	2 ~~1~~	1		<2
124	280-137097-A-1	U	1	2 ~~1~~	1		<2
125	280-137023-C-1	U	1	1	1		<2
126	ms 280-137023-C-1	U	1	1	1		<2
127	msd 280-137023-C-1	U	1	1	1		<2
128	280-137023-C-2	U	1	1	1		<2
129	280-137025-D-15	U	1	1	1		<2
130	280-137025-D-10	U	1	1	1		<2
131	280-137025-D-14	U	1	1	1		<2
132	280-137025-D-13	U	1	1	1		<2
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
133	280-137025-D-5	U	1	1	1		<2
134	280-137025-D-8	U	1	10 ~~1~~	1		<2

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-137025-D-6	U	1	1	1		
136	280-137025-D-12	U	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-137025-D-7	U	1	1	1		
~~138~~	~~ms 280-137025-D-7 U~~		~~1~~	~~1~~	~~1~~		
139	msd 280-137025-D-7 U		1	1	1		
140	280-137025-D-2	U	1	10 ~~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	280-137025-D-11	U	1	25 ~~1~~	1		
142	280-137025-D-4	U	1	25 ~~1~~	1		
143	280-137025-D-3	U	1	25 ~~1~~	1		
144	280-137025-D-9	U	1	10 ~~1~~	1		
145	280-137025-D-1	U	1	50 ~~25~~ ~~1~~	1		
146	280-137166-B-1	U	1	1	1		
147	280-137166-B-2	U	1	1	1		
148	280-137166-B-3	U	1	1	1		
149	280-137166-B-4	U	1	1	1		
150	ms	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
151	msd 280-137166-B-4 U		1	1	1		
152	280-137166-B-5	U	1	1	1		
153	280-137166-B-6	U	1	1	1		
154	280-137166-B-7	U	1	1	1		
155	280-137166-B-8	U	1	1	1		
156	280-137166-B-9	U	1	1	1		
157	280-137166-B-10	U	1	1	1		
158	280-137166-B-11	U	1	1	1		
159	280-137084-C-1	U	1	1	1		
160	280-137084-C-2	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 160-38134-A-1	U	1	1	1		
201	~~280-137113-E-1~~	U	1	1 ~~2~~ ~~1~~	1		
202	ms ~~280-137113-E-1~~ 160-38134-A-1	U	1	1 ~~2~~ ~~1~~	1		
203	msd ~~280-137113-E-1~~ 160-38139-A-1	U	1	1 ~~2~~ ~~1~~	1		
204	280-137084-C-3	U	1	1	1		
205	280-137084-C-4	U	1	1	1		
206	280-137084-C-5	U	1	1	1		
207	d	U	1	1	1		
208	d	U	1	1	1		
209	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		

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		

TALS Raw Data Report

Job Number: 280-137021-1
LIMS Batch: 497042
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-497037/1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	66	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-497037/2-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **580-94955-J-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-10.4 mg/L	mg/L				
Sulfide as H2S		-11.05 mg/L	mg/L				

RS# 4 Lab ID: **580-94955-J-1-B MS** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	61	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **580-94955-J-1-C MSD** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		8 mg/L	mg/L	44	44 110	33	20
Sulfide as H2S		8.5 mg/L	mg/L				

RS# 6 Lab ID: **280-137021-R-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-3.2 mg/L	mg/L				
Sulfide as H2S		-3.4 mg/L	mg/L				

RS# 7 Lab ID: **280-137021-R-2-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	mg/L				
Sulfide as H2S		-0.85 mg/L	mg/L				

RS# 8 Lab ID: **280-137021-R-5-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		)00000003 mg/L	1.6 J mg/L				
Sulfide as H2S		)00000003 mg/L	1.7 J mg/L				

TALS Raw Data Report

Job Number: 280-137048-1
LIMS Batch: 497042
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-497037/1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	66	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-497037/2-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **580-94955-J-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-10.4 mg/L	1.9 U mg/L				
Sulfide as H2S		-11.05 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **580-94955-J-1-B MS** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	61	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **580-94955-J-1-C MSD** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		8 mg/L	mg/L	44	44 110	33	20
Sulfide as H2S		8.5 mg/L	mg/L				

RS# 9 Lab ID: **280-137048-E-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 10 Lab ID: **280-137048-E-2-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-137074-1
LIMS Batch: 497042
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-497037/1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	66	44	110		
Sulfide as H2S		12.75 mg/L	mg/L					

RS# 2 Lab ID: **MB 280-497037/2-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L					
Sulfide as H2S		0 mg/L	mg/L					

RS# 3 Lab ID: **580-94955-J-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		-10.4 mg/L	mg/L					
Sulfide as H2S		-11.05 mg/L	mg/L					

RS# 4 Lab ID: **580-94955-J-1-B MS** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	61	44	110		
Sulfide as H2S		11.9 mg/L	mg/L					

RS# 5 Lab ID: **580-94955-J-1-C MSD** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		8 mg/L	mg/L	44	44	110	33	20
Sulfide as H2S		8.5 mg/L	mg/L					

RS# 11 Lab ID: **280-137074-Q-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L					
Sulfide as H2S		0 mg/L	mg/L					

TALS Raw Data Report

Job Number: 280-137084-1
LIMS Batch: 497042
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-497037/1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	66	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-497037/2-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **580-94955-J-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-10.4 mg/L	1.9 U mg/L				
Sulfide as H2S		-11.05 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **580-94955-J-1-B MS** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	61	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **580-94955-J-1-C MSD** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		8 mg/L	mg/L	44	44 110	33	20
Sulfide as H2S		8.5 mg/L	mg/L				

RS# 12 Lab ID: **280-137084-E-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-137084-E-2-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-3.2 mg/L	1.9 U mg/L				
Sulfide as H2S		-3.4 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-137084-E-3-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	0.80 J mg/L				
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				

RS# 15 Lab ID: **280-137084-E-4-A** Inj Date: 6/2/2020 10:59:00AM 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# 16 Lab ID: **280-137084-E-5-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-94955-1
LIMS Batch: 497042
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-497037/1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	66	44	110		
Sulfide as H2S		12.75 mg/L	mg/L					

RS# 2 Lab ID: **MB 280-497037/2-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L					
Sulfide as H2S		0 mg/L	2.0 U mg/L					

RS# 3 Lab ID: **580-94955-J-1-A** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		-10.4 mg/L	1.9 U mg/L					
Sulfide as H2S		-11.05 mg/L	2.0 U mg/L					

RS# 4 Lab ID: **580-94955-J-1-B MS** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	61	44	110		
Sulfide as H2S		11.9 mg/L	mg/L					

RS# 5 Lab ID: **580-94955-J-1-C MSD** Inj Date: 6/2/2020 10:59:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		8 mg/L	mg/L	44	44	110	33	20
Sulfide as H2S		8.5 mg/L	mg/L					

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Titration Data Review Checklist

LIMS Batch Number: 497042	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: Alexa David **Date:** 06/02/2020	**2310B 2320B 2340C** **4500 S2 F 4500 SO3 B 9030B/9034**	**Standard DoD QAPP Other**
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** **AT2 AT3**

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	N/A		✓	If no, list details:
3. Are samples analyzed within the required hold time?	✓		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	N/A		✓	
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.	N/A		✓	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	N/A		✓	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	N/A		✓	
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.	N/A		✓	□ 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)	N/A		✓	□ 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: [signature] **Review Date:** 6·3·2020

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\02.0000.d				
Lims ID:	std L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	07-May-2020 11:58:00	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091332-002				
Operator ID:		Instrument ID:	WC_IonChrom7		
Sublist:	chrom-Anions_IC7*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	08-May-2020 08:39:10	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX0309				
First Level Reviewer: pedrickj		Date:	07-May-2020 13:12:12		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.050	2.084	-0.034	5882717	0.2000	0.1740	M
2 Chloride	3.234	3.192	0.042	18857190	1.00	1.00	
3 Nitrite as N	3.717	3.700	0.017	8501922	NC	NC	
4 Bromide	5.867	5.750	0.117	1633909	0.2000	0.2040	
5 Nitrate as N	6.450	6.200	0.250	8681655	NC	NC	
6 Sulfate	9.759	9.275	0.484	11827594	1.00	0.9526	M
7 Orthophosphate as P	11.625	12.117	-0.492	7331962	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

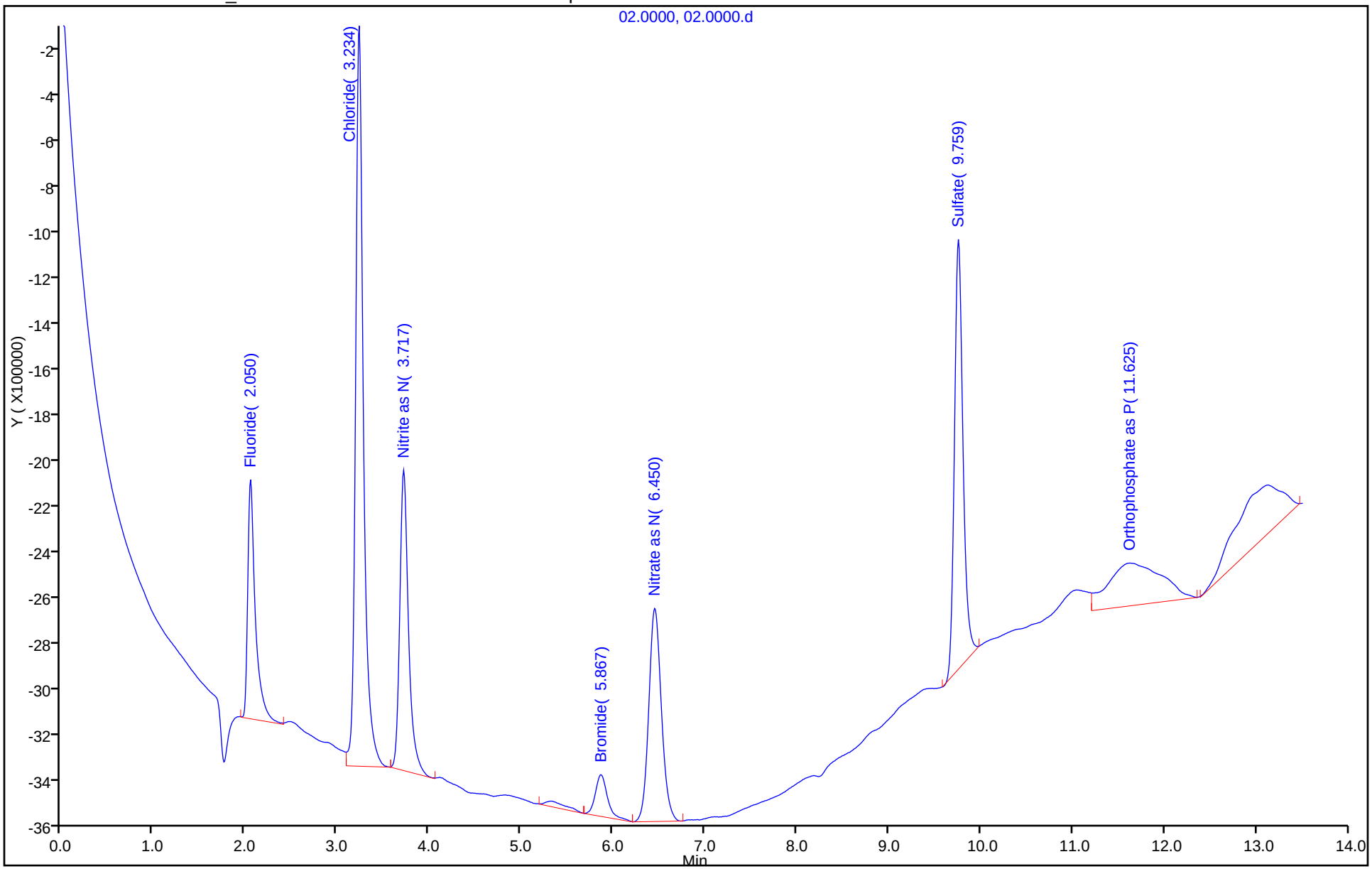
Reagents:

IC Cal low_00523	Amount Added:	0.02	Units: mL
IC CAL cl/so4_00309	Amount Added:	0.02	Units: mL

Report Date: 08-May-2020 08:39:10 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\02.0000.d				
Injection Date:	07-May-2020 11:58:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

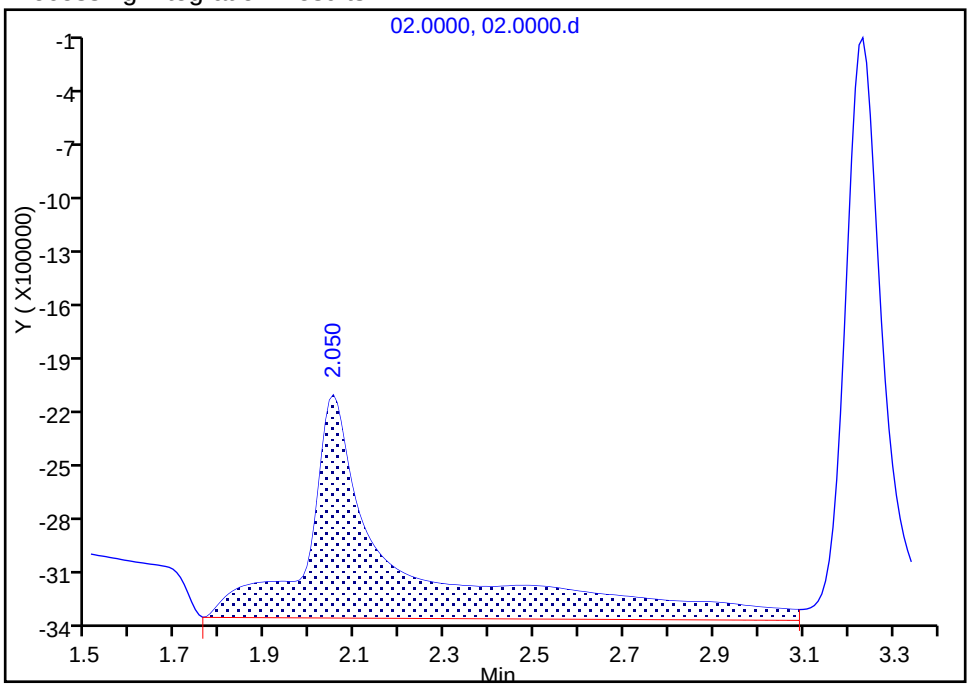
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\02.0000.d				
Injection Date:	07-May-2020 11:58:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

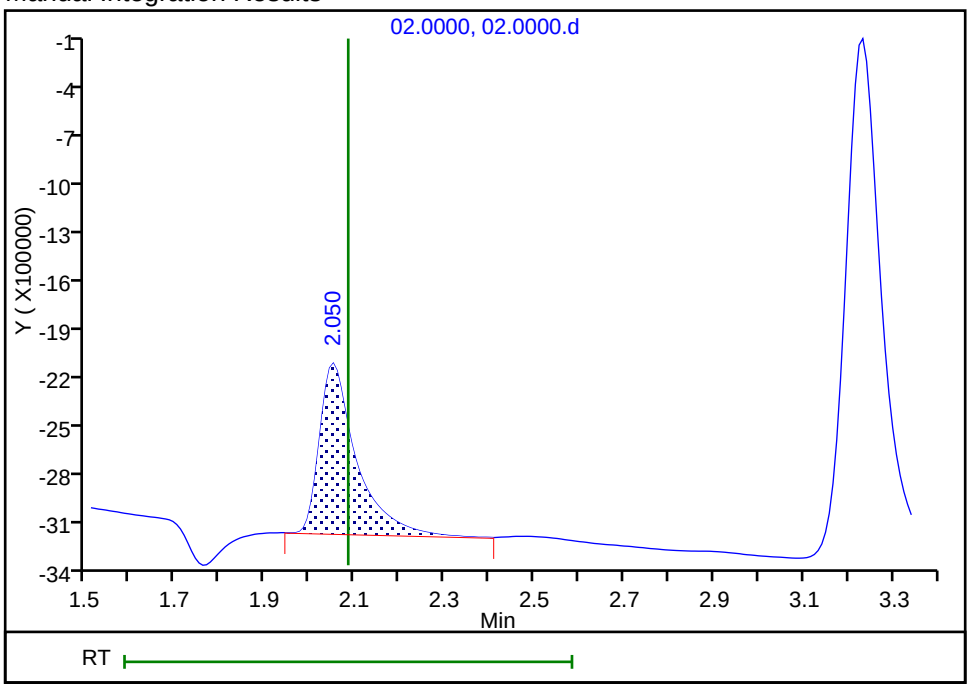
Processing Integration Results

RT: 2.05
Area: 17429046
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.05
Area: 5882717
Amount: 0.174042
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 15:01:42

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

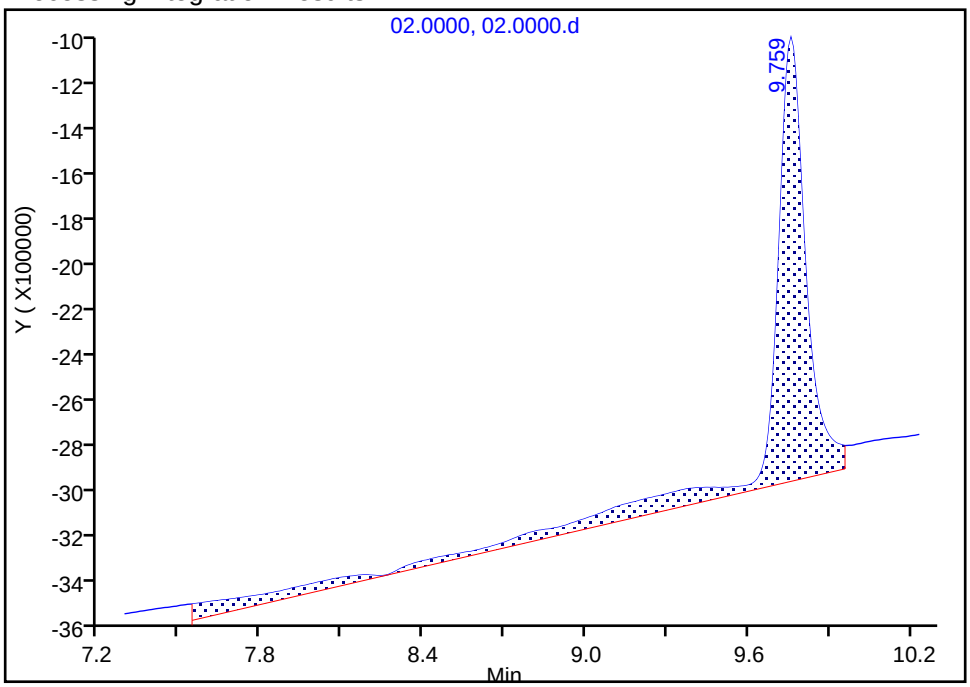
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\02.0000.d				
Injection Date:	07-May-2020 11:58:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

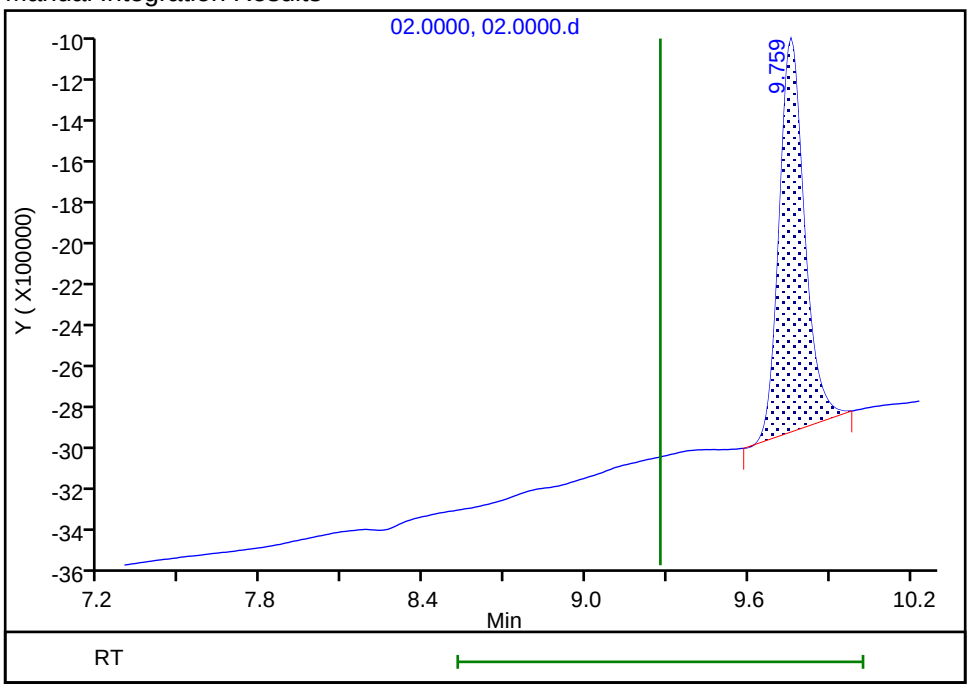
Processing Integration Results

RT: 9.76
Area: 18070547
Amount: 1.133863
Amount Units: ug/ml



Manual Integration Results

RT: 9.76
Area: 11827594
Amount: 0.952582
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 13:24:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d				
Lims ID:	std L2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	07-May-2020 12:14:00	ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091332-003				
Operator ID:		Instrument ID:	WC_IonChrom7		
Sublist:	chrom-Anions_IC7*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	08-May-2020 08:39:10	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX0309				
First Level Reviewer: pedrickj		Date:	07-May-2020 13:11:53		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.042	2.084	-0.042	15822168	0.5000	0.5076	M
2 Chloride	3.242	3.192	0.050	46215447	2.50	2.50	M
3 Nitrite as N	3.725	3.700	0.025	21487016	NC	NC	M
4 Bromide	5.917	5.750	0.167	4106184	0.5000	0.5120	
5 Nitrate as N	6.509	6.200	0.309	23438881	NC	NC	
6 Sulfate	9.884	9.275	0.609	32700242	2.50	2.49	a
7 Orthophosphate as P		12.117			ND	ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- a - User Assigned ID

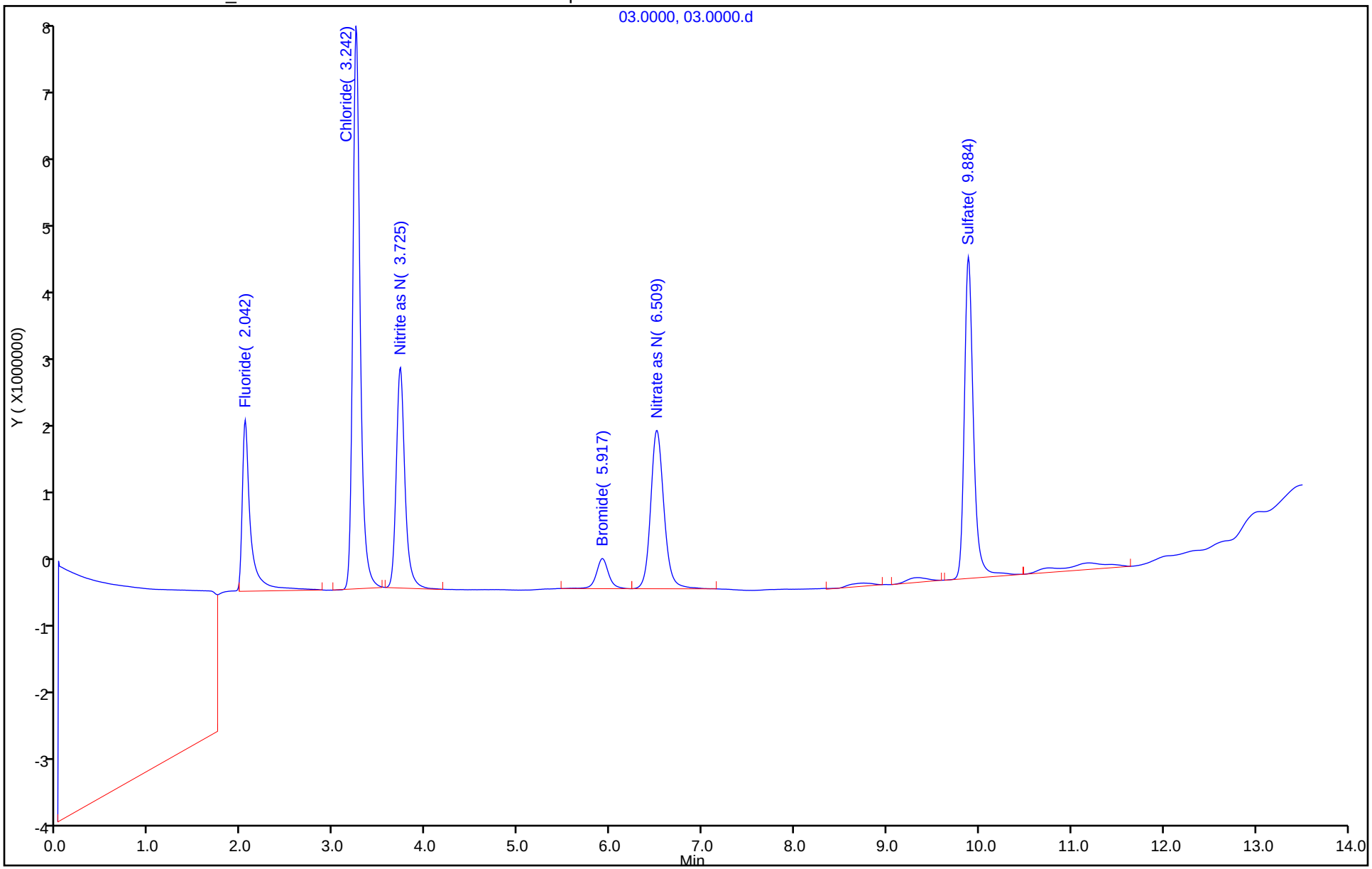
Reagents:

IC CAL cl/so4_00309	Amount Added:	0.05	Units: mL
IC Cal low_00523	Amount Added:	0.05	Units: mL

Report Date: 08-May-2020 08:39:10 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d				
Injection Date:	07-May-2020 12:14:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

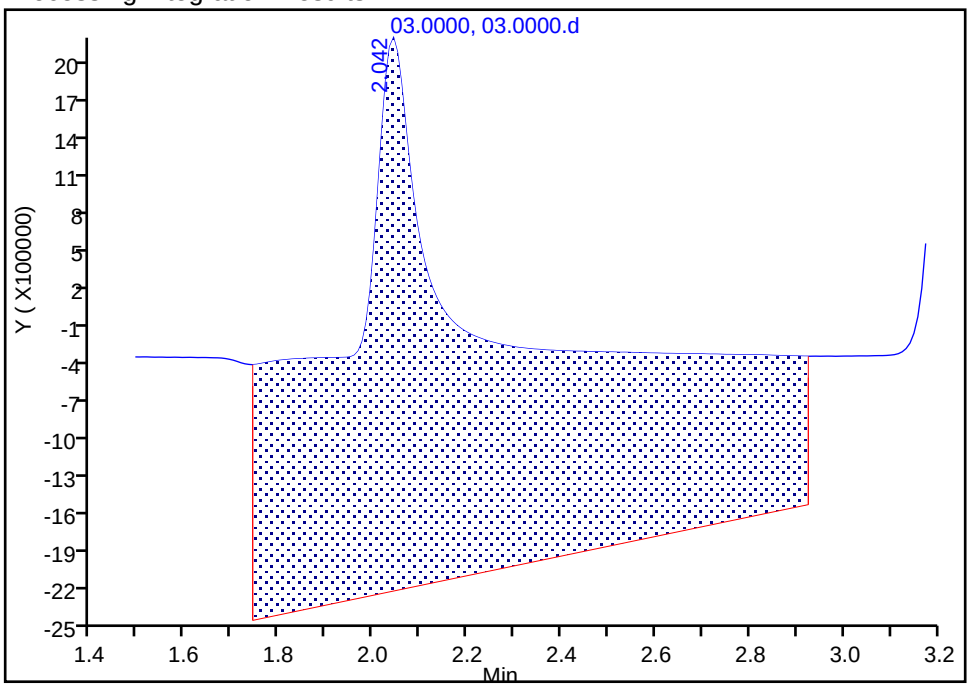
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d				
Injection Date:	07-May-2020 12:14:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

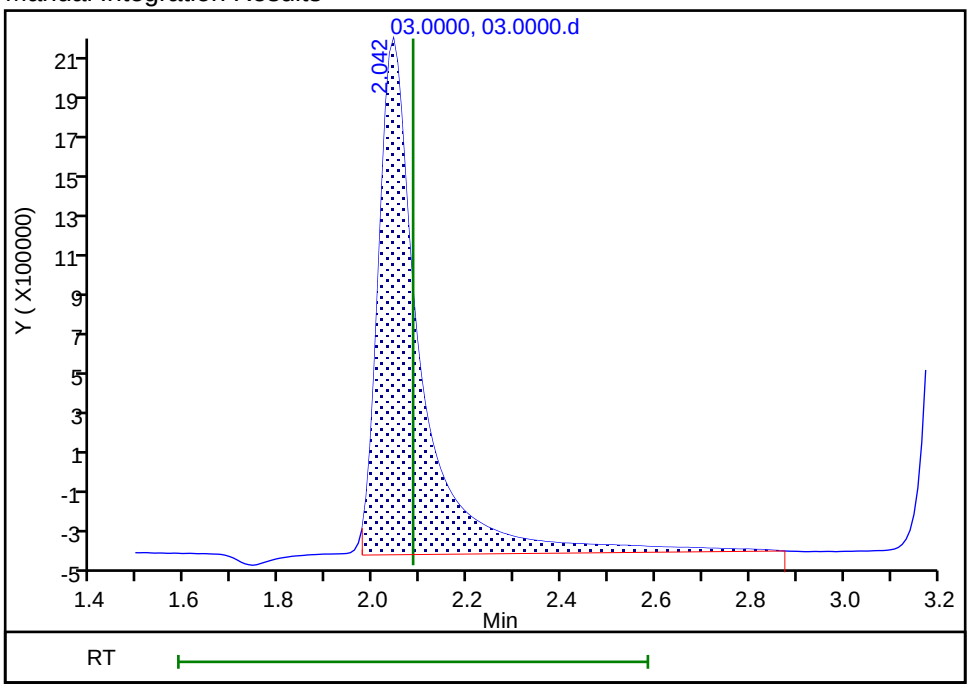
Processing Integration Results

RT: 2.04
Area: 130506855
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.04
Area: 15822168
Amount: 0.507568
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 13:11:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

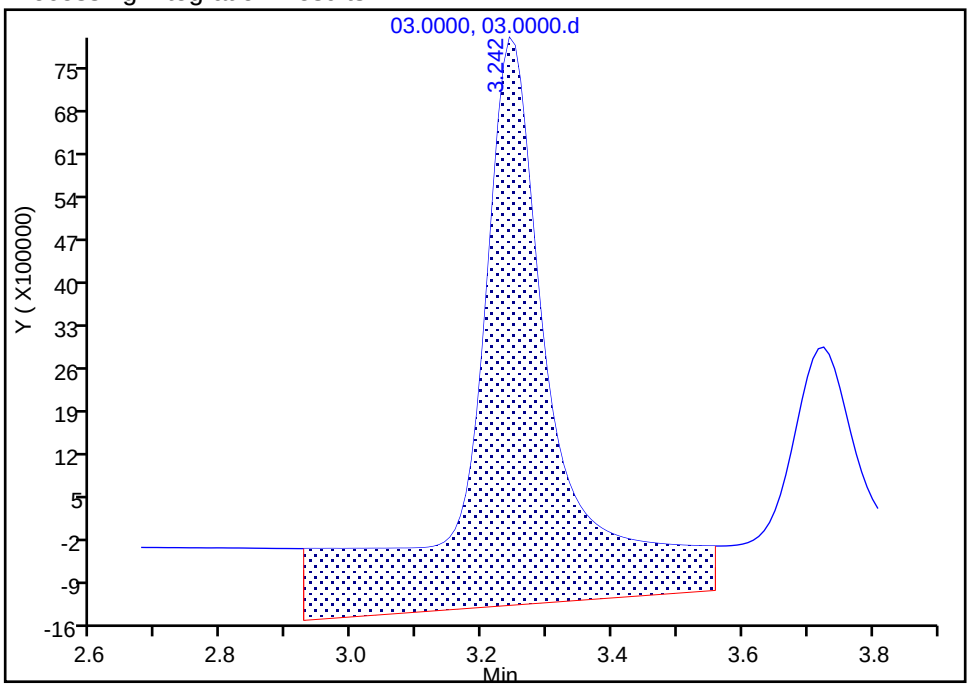
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d				
Injection Date:	07-May-2020 12:14:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

2 Chloride, CAS: 16887-00-6

Signal: 1

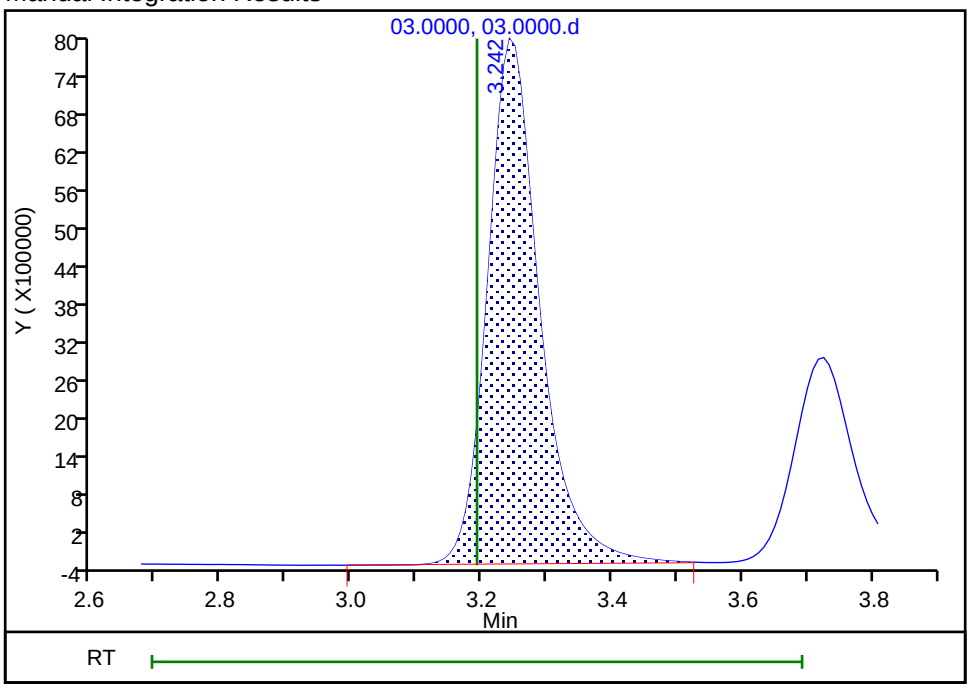
Processing Integration Results

RT: 3.24
Area: 82122679
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 3.24
Area: 46215447
Amount: 2.503458
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 13:11:45

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

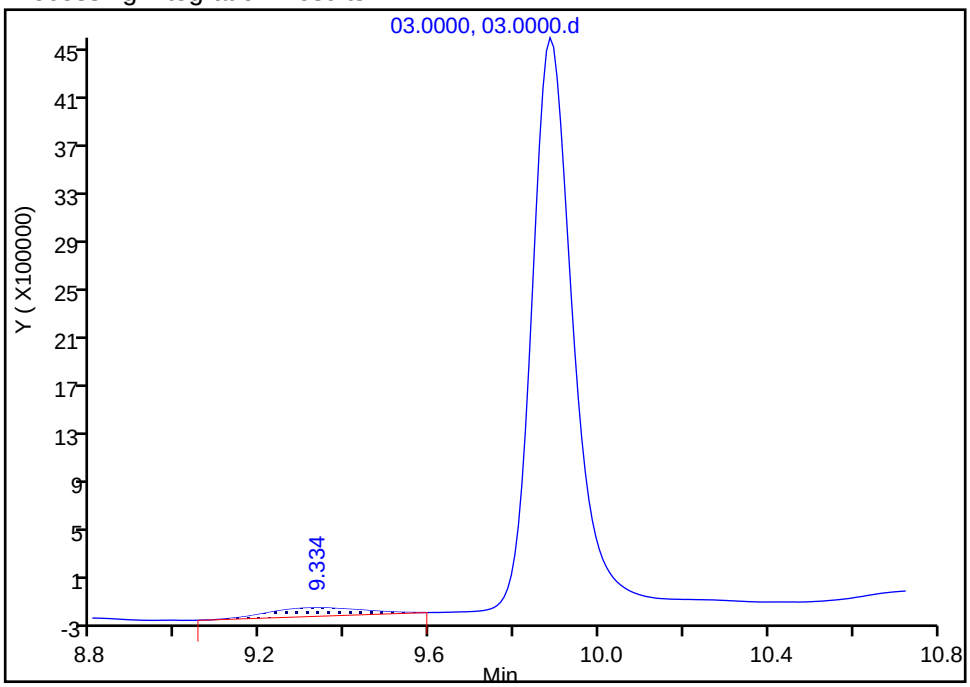
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d				
Injection Date:	07-May-2020 12:14:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

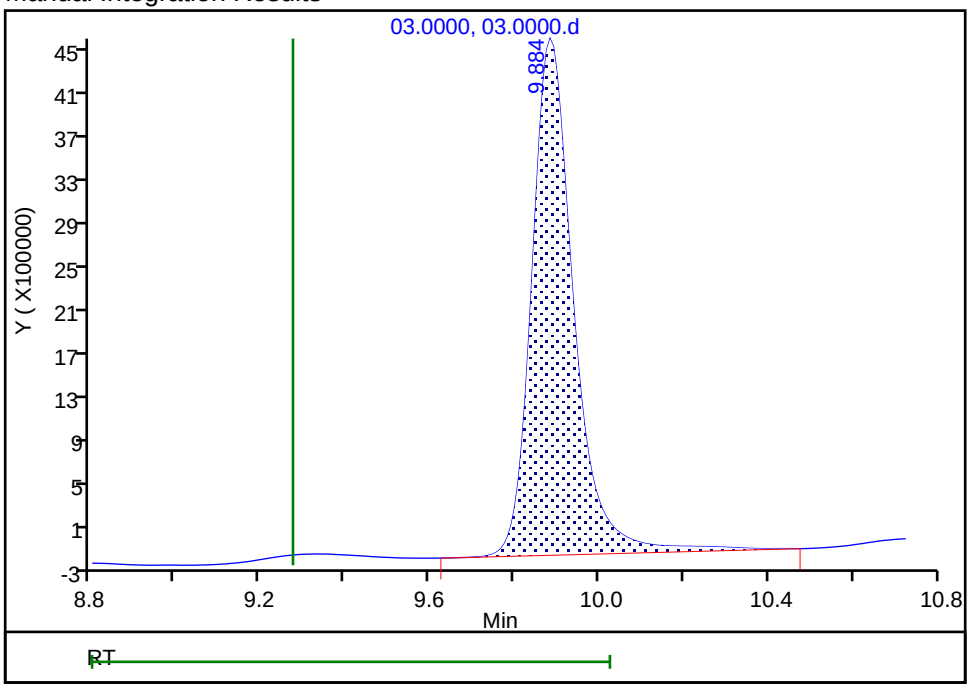
Processing Integration Results

RT: 9.33
Area: 1076483
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.88
Area: 32700242
Amount: 2.487990
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 13:11:51

Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\04.0000.d				
Lims ID:	std L3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	07-May-2020 12:30:00	ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091332-004				
Misc. Info.:	4 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Sublist:	chrom-Anions_IC7*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	08-May-2020 08:39:11	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX0309				
First Level Reviewer: pedrickj		Date:	07-May-2020 13:11:58		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.017	2.084	-0.067	33682613	1.00	1.11	
2 Chloride	3.125	3.192	-0.067	90527984	5.00	4.94	
3 Nitrite as N	3.609	3.700	-0.091	42481986	NC	NC	
4 Bromide	5.784	5.750	0.034	7686044	1.00	0.9580	
5 Nitrate as N	6.334	6.200	0.134	46202829	NC	NC	
6 Sulfate	9.984	9.275	0.709	69175218	5.00	5.17	a
7 Orthophosphate as P	12.334	12.117	0.217	12624677	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

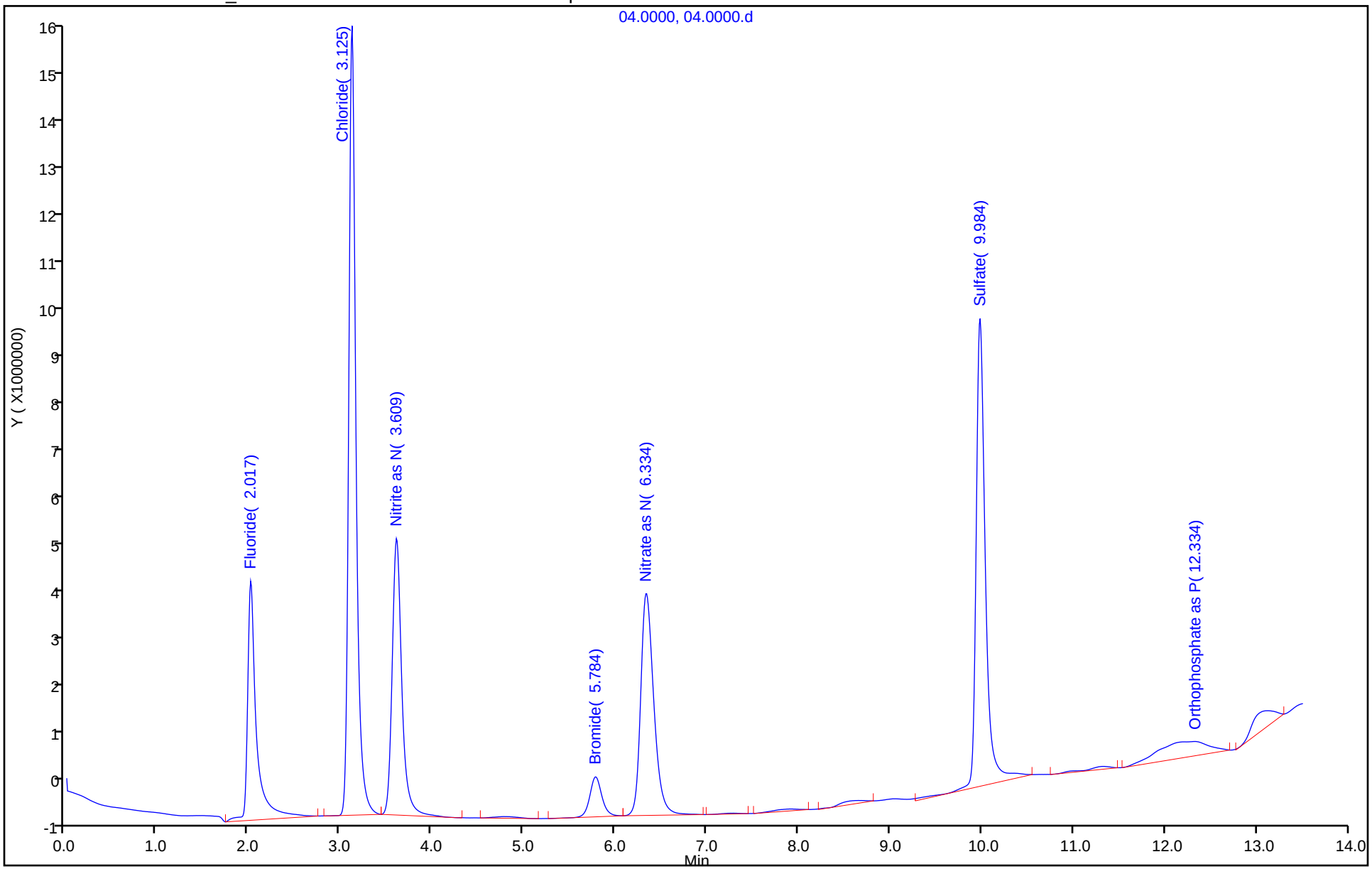
Reagents:

IC CAL cl/so4_00309	Amount Added:	0.10	Units: mL
IC Cal low_00523	Amount Added:	0.10	Units: mL

Report Date: 08-May-2020 08:39:11 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\04.0000.d				
Injection Date:	07-May-2020 12:30:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

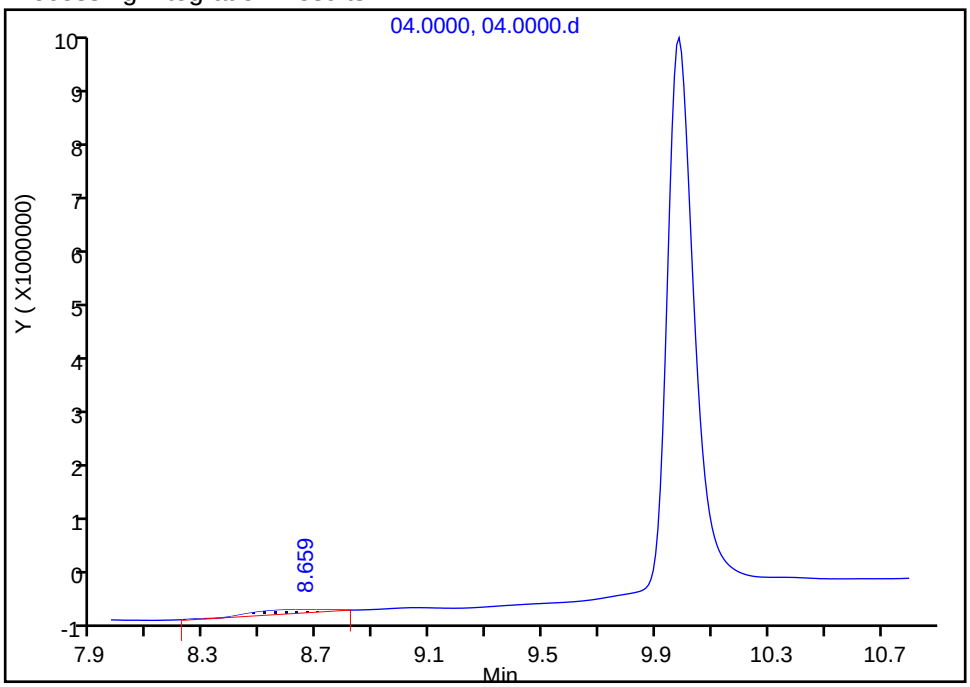
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\04.0000.d				
Injection Date:	07-May-2020 12:30:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

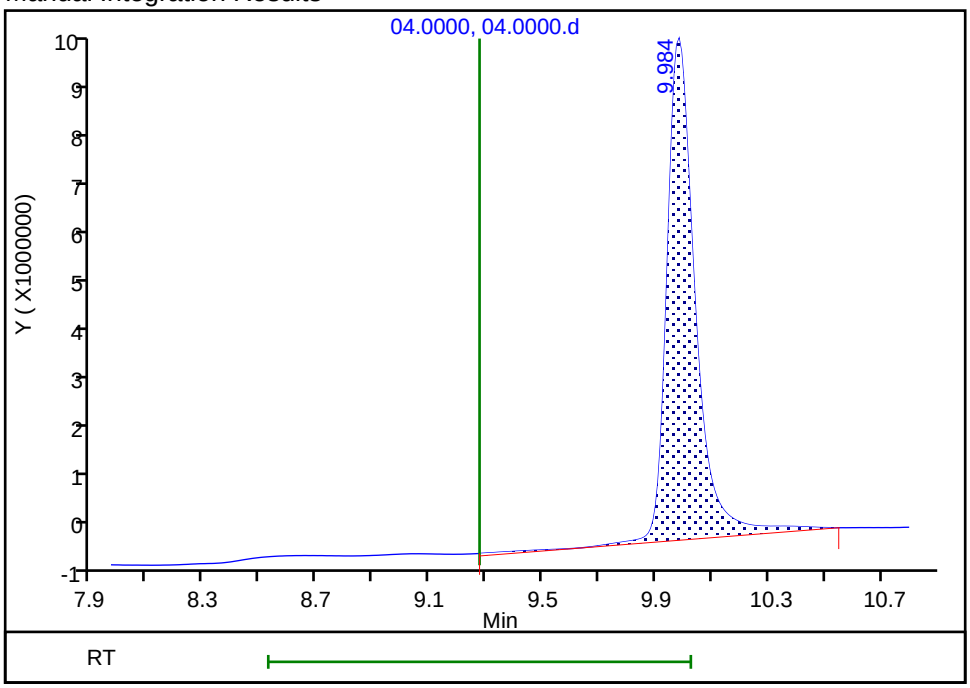
Processing Integration Results

RT: 8.66
Area: 1279551
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.98
Area: 69175218
Amount: 5.171119
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 13:11:56
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\05.0000.d				
Lims ID:	std L4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	07-May-2020 12:47:00	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091332-005				
Misc. Info.:	5 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Sublist:	chrom-Anions_IC7*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	08-May-2020 08:39:11	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX0309				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.059	2.059	0.000	122985429	4.00	4.10	
2 Chloride	3.167	3.167	0.000	1107587064	60.0	60.8	
3 Nitrite as N	3.651	3.651	0.000	176679481	NC	NC	
4 Bromide	5.726	5.726	0.000	31603024	4.00	3.94	
5 Nitrate as N	6.217	6.217	0.000	190280271	NC	NC	
6 Sulfate	9.876	9.876	0.000	834937138	60.0	61.5	
7 Orthophosphate as P	12.359	12.359	0.000	1929046	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

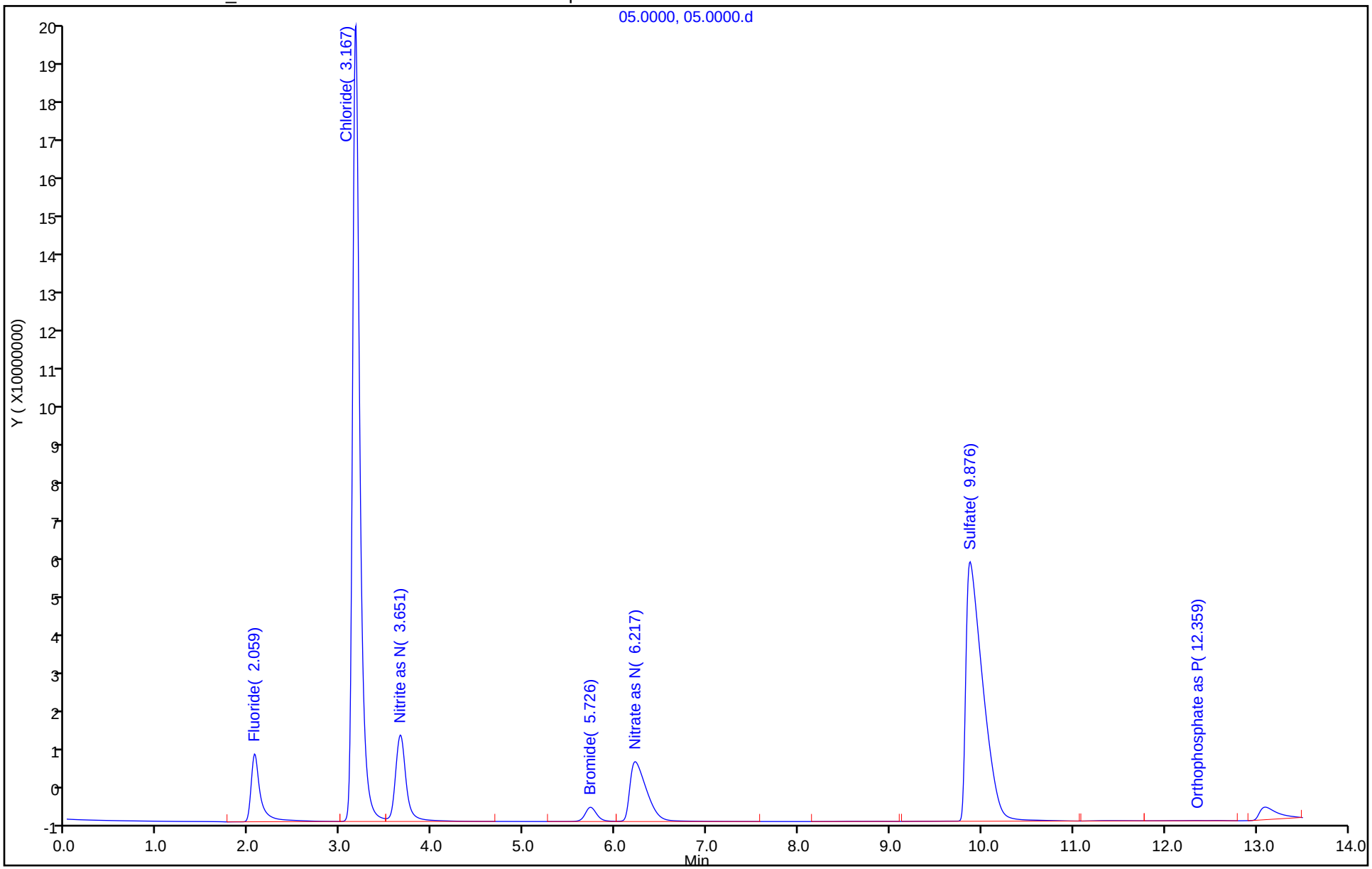
Reagents:

IC CAL cl/so4_00309	Amount Added:	1.20	Units: mL
IC Cal low_00523	Amount Added:	0.40	Units: mL

Report Date: 08-May-2020 08:39:11 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\05.0000.d				
Injection Date:	07-May-2020 12:47:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\06.0000.d				
Lims ID:	std L5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	07-May-2020 13:03:00	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091332-006				
Misc. Info.:	6 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Sublist:	chrom-Anions_IC7*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	08-May-2020 08:39:12	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX0309				
First Level Reviewer: pedrickj		Date:	07-May-2020 13:23:37		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.017	2.059	-0.042	240399126	8.00	8.04	
2 Chloride	3.059	3.167	-0.108	2189375779	120.0	120.2	
3 Nitrite as N	3.542	3.651	-0.109	353348809	NC	NC	
4 Bromide	5.509	5.726	-0.217	65773264	8.00	8.19	a
5 Nitrate as N	5.925	6.217	-0.292	383370392	NC	NC	a
6 Sulfate	9.767	9.876	-0.109	1634435215	120.0	120.3	
7 Orthophosphate as P	12.409	12.359	0.050	863223	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

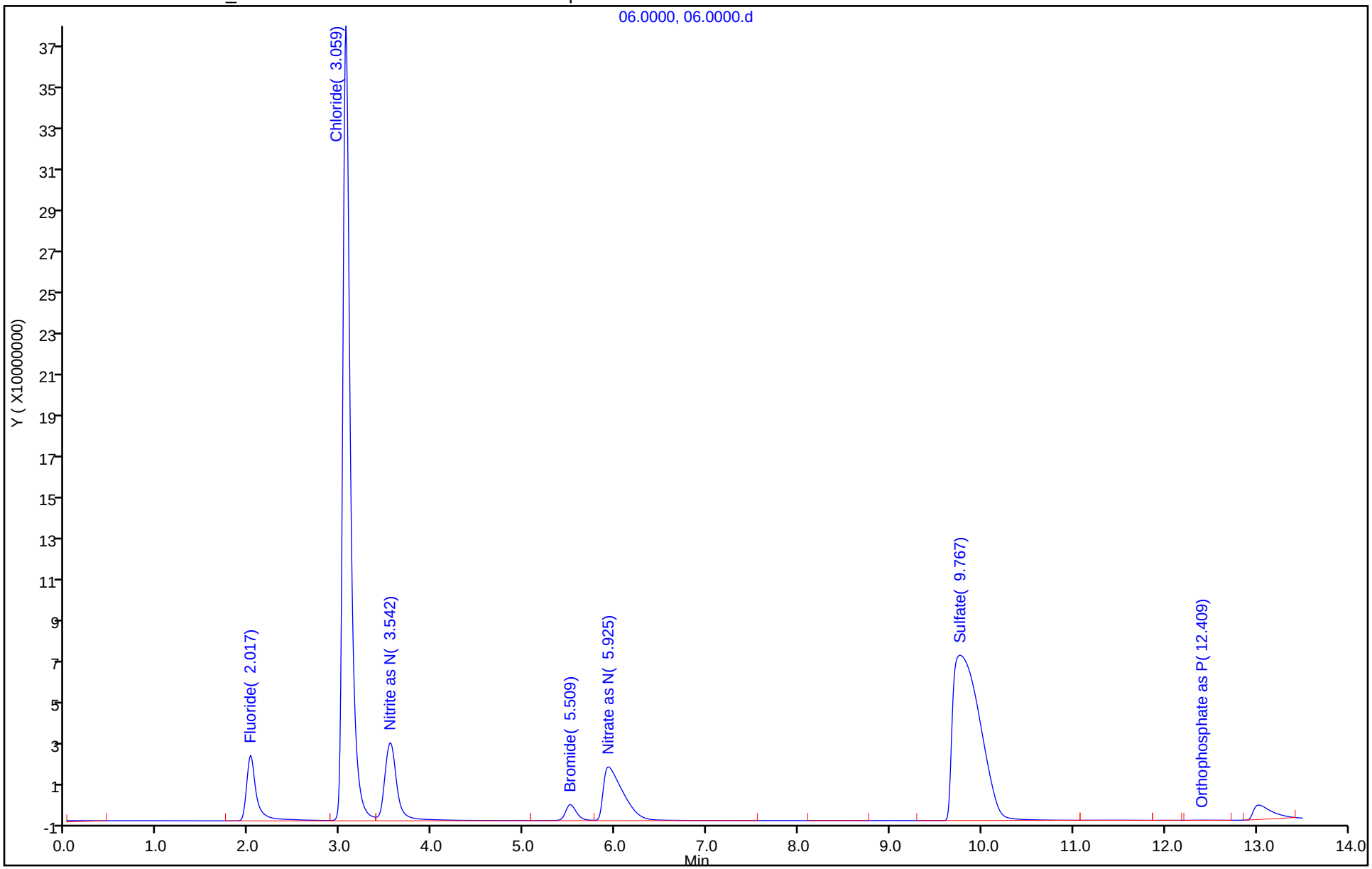
Reagents:

IC CAL cl/so4_00309	Amount Added:	2.40	Units: mL
IC Cal low_00523	Amount Added:	0.80	Units: mL

Report Date: 08-May-2020 08:39:12 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\06.0000.d				
Injection Date:	07-May-2020 13:03:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

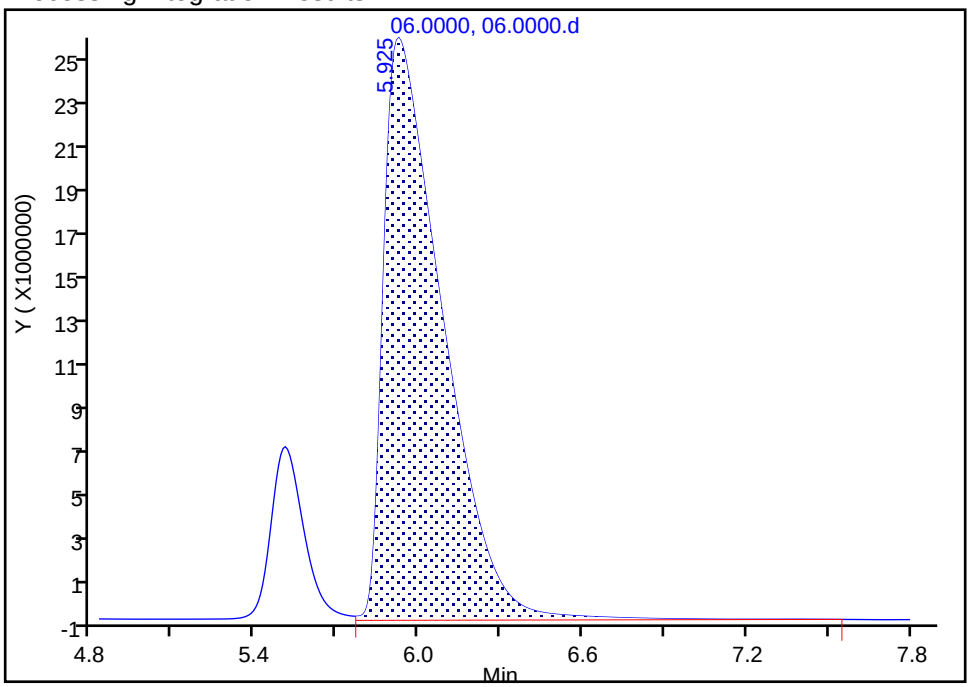
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\06.0000.d				
Injection Date:	07-May-2020 13:03:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

4 Bromide, CAS: 24959-67-9

Signal: 1

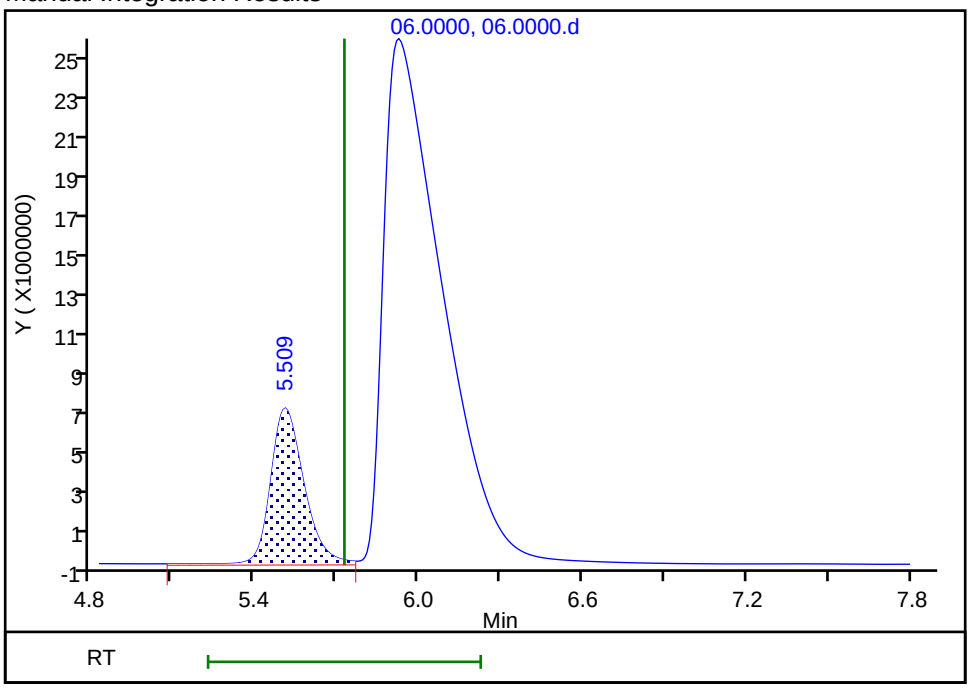
Processing Integration Results

RT: 5.93
Area: 383370392
Amount: 11.118507
Amount Units: ug/ml



Manual Integration Results

RT: 5.51
Area: 65773264
Amount: 8.194458
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 13:23:33
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Lims ID:	std L6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	07-May-2020 13:20:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091332-007				
Misc. Info.:	7 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Sublist:	chrom-Anions_IC7*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	08-May-2020 08:39:12	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX0309				
First Level Reviewer: pedrickj		Date:	07-May-2020 15:00:51		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.017	2.059	-0.042	291691166	10.0	9.76	
2 Chloride	3.017	3.167	-0.150	3623522651	200.0	199.0	
3 Nitrite as N	3.492	3.651	-0.159	437581152	NC	NC	
4 Bromide	5.350	5.726	-0.376	79415937	10.0	9.89	a
5 Nitrate as N	5.725	6.217	-0.492	480096138	NC	NC	a
6 Sulfate	9.309	9.876	-0.567	2691537753	200.0	198.1	
7 Orthophosphate as P	12.300	12.359	-0.059	666214	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

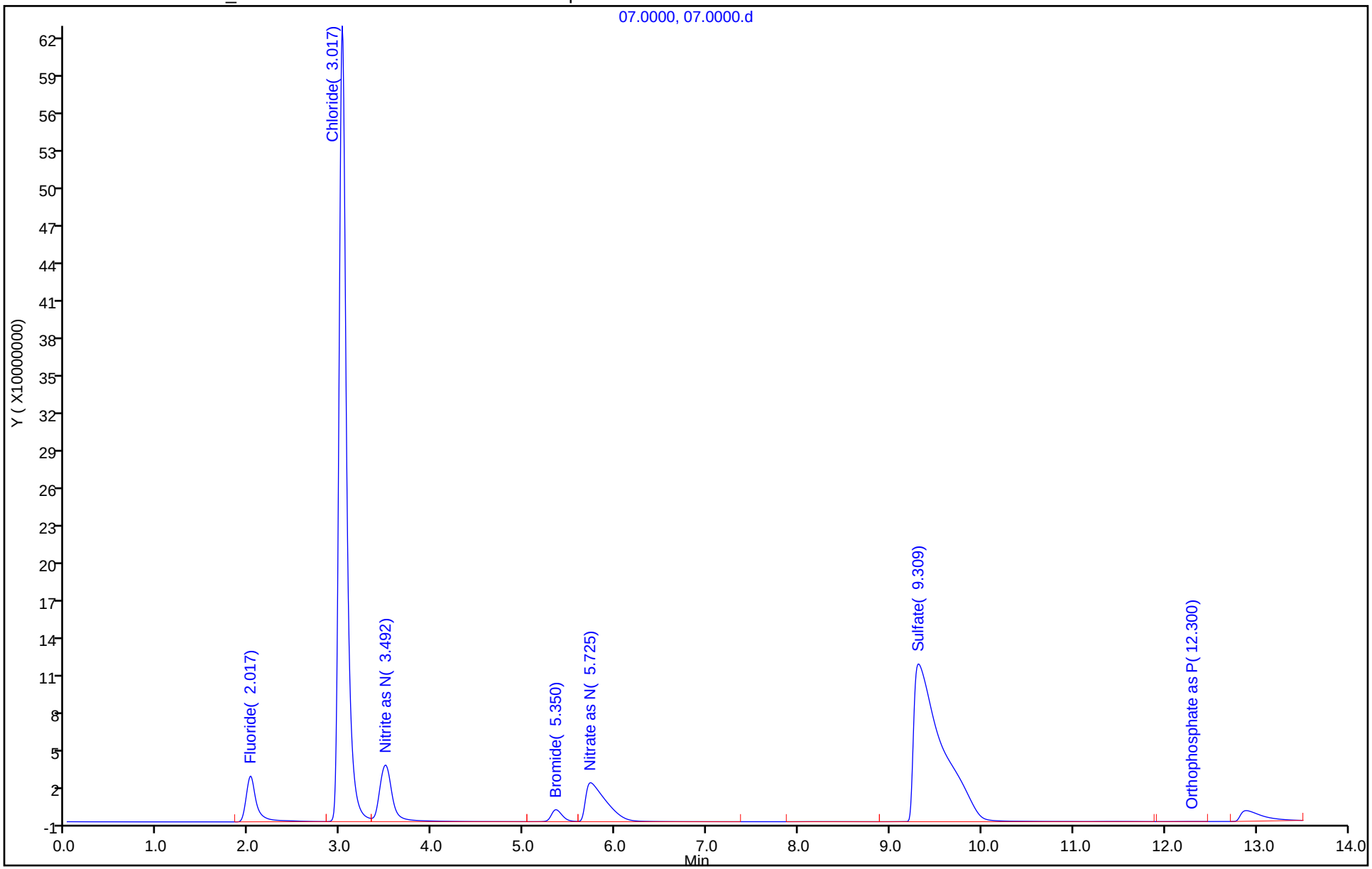
Reagents:

IC CAL cl/so4_00309	Amount Added:	4.00	Units: mL
IC Cal low_00523	Amount Added:	1.00	Units: mL

Report Date: 08-May-2020 08:39:12 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Injection Date:	07-May-2020 13:20:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

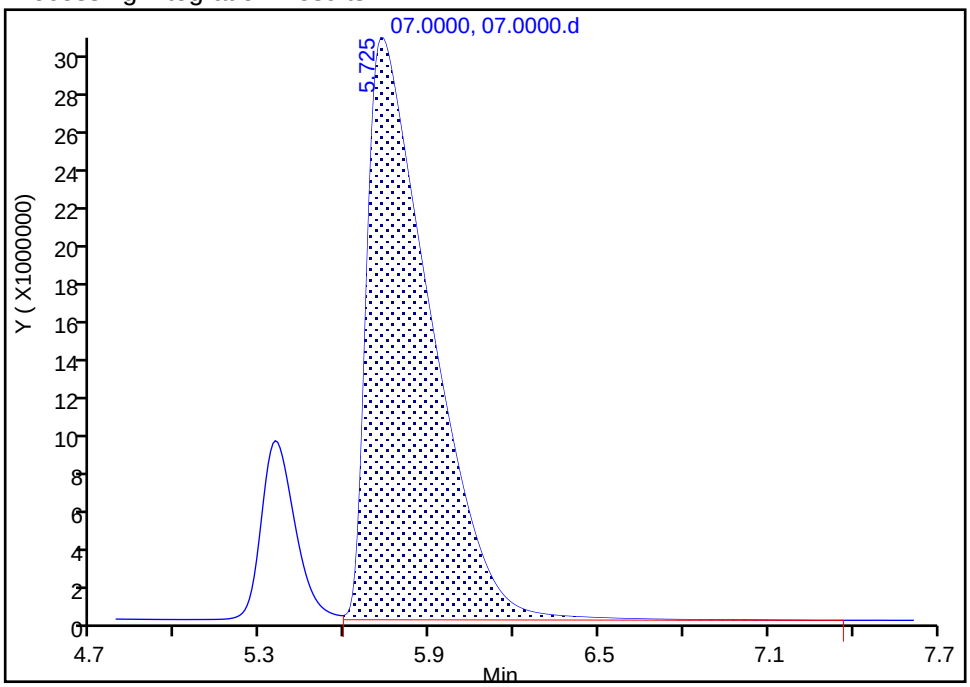
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Injection Date:	07-May-2020 13:20:00	Instrument ID:	WC_IonChrom7		
Lims ID:	std L6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

4 Bromide, CAS: 24959-67-9

Signal: 1

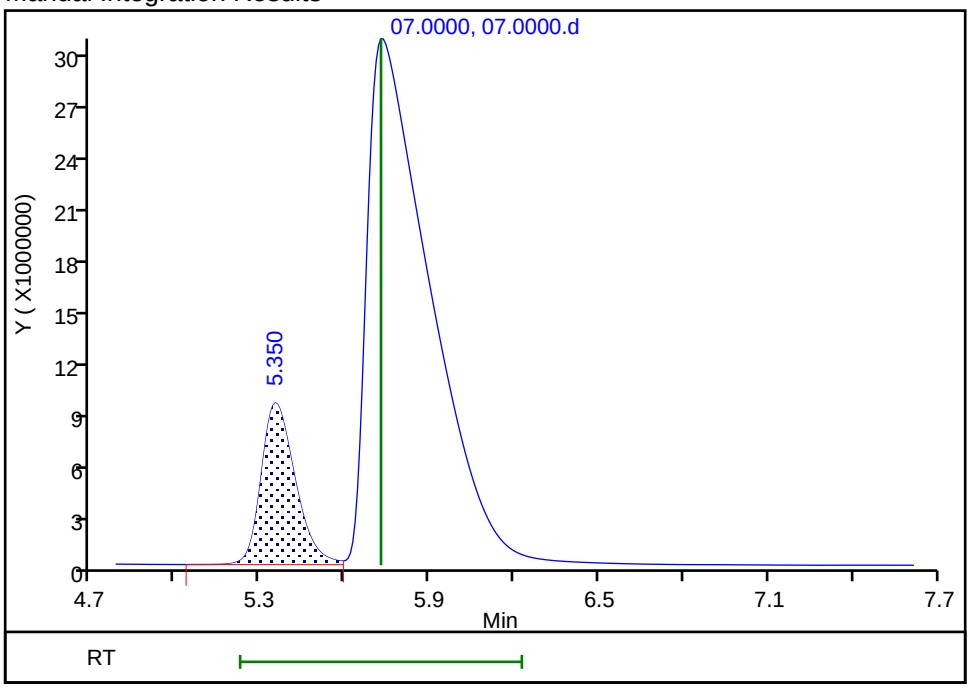
Processing Integration Results

RT: 5.73
Area: 480096138
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.35
Area: 79415937
Amount: 9.894059
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 15:00:47
Audit Action: Assigned Compound ID Audit Reason:

TestAmerica Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

IC Instrument Information

WL: 91332 **Inst ID:** 7 **Analysis Date:** 5/7/20 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	136299	4	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	136279	6	F Cl NO2 Br NO3 PO4 SO4	MS/D 1	
☐	136291	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	136295	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
295		F Cl NO2 Br NO3 PO4 SO4	5X	TEST.
291		F Cl NO2 Br NO3 PO4 SO4	5,10,20x	dirty / TEST
299		F Cl NO2 Br NO3 PO4 SO4	5X	TEST
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m

Instrument:	WC_IonChrom7	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	08-May-2020 00:49:04

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b
Inj Date : 07-May-2020 11:58:00, Sublist: chrom-Anions_IC7*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					696059	2980113		0.999
2 Chloride					642656	1820393		1.000
3 Nitrite as N	-467117	4400350		1.000				
4 Bromide					-3534	8026986		1.000
5 Nitrate as N	-950285	4800725		1.000				
6 Sulfate					-112198	1359419		1.000
7 Orthophosphate as P	8317856	-783369	R1, R4, R5	).269*				

ICalib Error Legend

R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m

Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 08-May-2020 00:49:04
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\02.0000.d
Inj Date: 07-May-2020 11:58:00 Worklist: 91332 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d
Inj Date: 07-May-2020 12:14:00 Worklist: 91332 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\04.0000.d
Inj Date: 07-May-2020 12:30:00 Worklist: 91332 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\05.0000.d
Inj Date: 07-May-2020 12:47:00 Worklist: 91332 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\06.0000.d
Inj Date: 07-May-2020 13:03:00 Worklist: 91332 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d
Inj Date: 07-May-2020 13:20:00 Worklist: 91332 Sample#: 7

Start Cal Date: 07-May-2020 11:58:00 End Cal Date: 07-May-2020 13:20:00

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					
29413585	31644336	33682613	30746357	30049891	29169117	**696059**			**0.999**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**29801134**		
M5882717	M15822168	33682613	122985429	240399126	291691166				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
2 Chloride				Signal: 1					
18857190	18486179	18105597	18459784	18244798	18117613	**642656**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**18203939**		
18857190	M46215447	90527984	1107587064	2189375779	3623522651				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
4 Bromide				Signal: 1					
8169545	8212368	7686044	7900756	8221658	7941594	**-3534.0**			**1.000**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8026986**		
1633909	4106184	7686044	31603024	M65773264	M79415937				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
6 Sulfate				Signal: 1					
11827594	13080097	13835044	13915619	13620293	13457689	**-1121987**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**13594196**		
M11827594	M32700242	M69175218	834937138	1634435215	2691537753				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m

Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 08-May-2020 00:49:04
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\02.0000.d
Inj Date: 07-May-2020 11:58:00 Worklist: 91332 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d
Inj Date: 07-May-2020 12:14:00 Worklist: 91332 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\04.0000.d
Inj Date: 07-May-2020 12:30:00 Worklist: 91332 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\05.0000.d
Inj Date: 07-May-2020 12:47:00 Worklist: 91332 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\06.0000.d
Inj Date: 07-May-2020 13:03:00 Worklist: 91332 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d
Inj Date: 07-May-2020 13:20:00 Worklist: 91332 Sample#: 7

Start Cal Date: 07-May-2020 11:58:00 End Cal Date: 07-May-2020 13:20:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
42509610	42974032	42481986	44169870	44168601	43758115	-467117			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		44003505		
8501922	M21487016	42481986	176679481	353348809	437581152				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
5 Nitrate as N				Signal: 1					
43408275	46877762	46202829	47570068	47921299	48009614	-950285			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		48007252		
8681655	23438881	46202829	190280271	M383370392	M480096138				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
7 Orthophosphate as P				Signal: 1			R1, R4, R5		
36659810	12624677	482262	107903	66621		8317856			*0.269
0.200000(1)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)			-783369		
7331962	12624677	1929046	863223	666214					
91332(2)	91332(4)	91332(5)	91332(6)	91332(7)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\08.0000.d
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 07-May-2020 13:36:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091332-008
Misc. Info.: 8 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 08-May-2020 08:39:12 Calib Date: 07-May-2020 13:20:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX0309

First Level Reviewer: pedrickj Date: 07-May-2020 15:01:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.000	2.000	0.000	130934546	4.00	4.37	
2 Chloride	3.100	3.100	0.000	1443233175	80.0	79.2	
3 Nitrite as N	3.567	3.567	0.000	192421681	NC	NC	
4 Bromide	5.450	5.450	0.000	35279914	4.00	4.40	a
5 Nitrate as N	5.925	5.925	0.000	200518355	NC	NC	a
6 Sulfate	9.575	9.575	0.000	1063596914	80.0	78.3	a
7 Orthophosphate as P	12.350	12.350	0.000	1805483	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

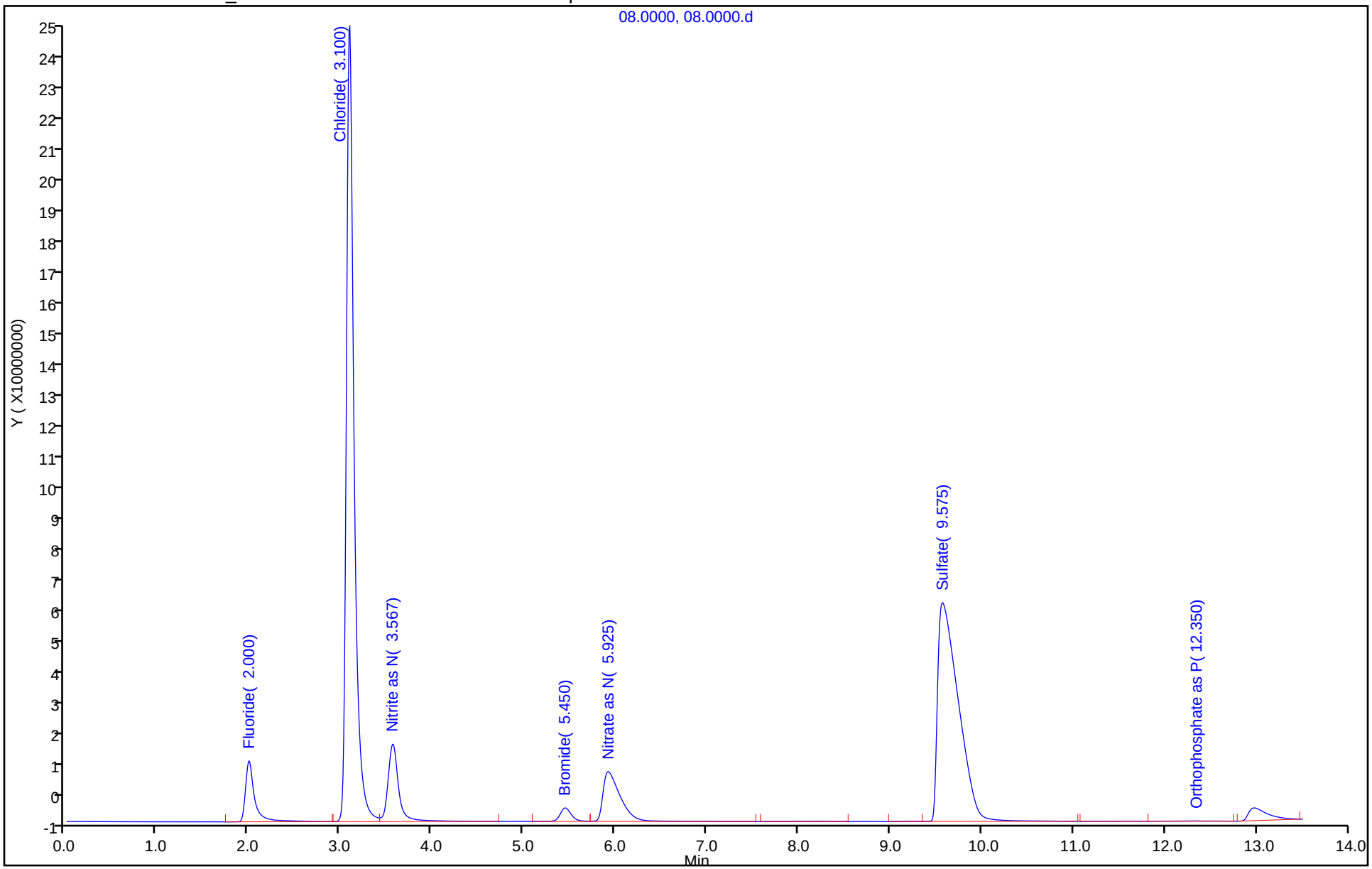
Reagents:

IC SO4 ICV_00021 Amount Added: 0.40 Units: mL
IC CL ICV_00018 Amount Added: 0.40 Units: mL
IC ICV 5_00269 Amount Added: 0.40 Units: mL

Report Date: 08-May-2020 08:39:13 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\08.0000.d				
Injection Date:	07-May-2020 13:36:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	icv			Worklist Smp#:	8
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

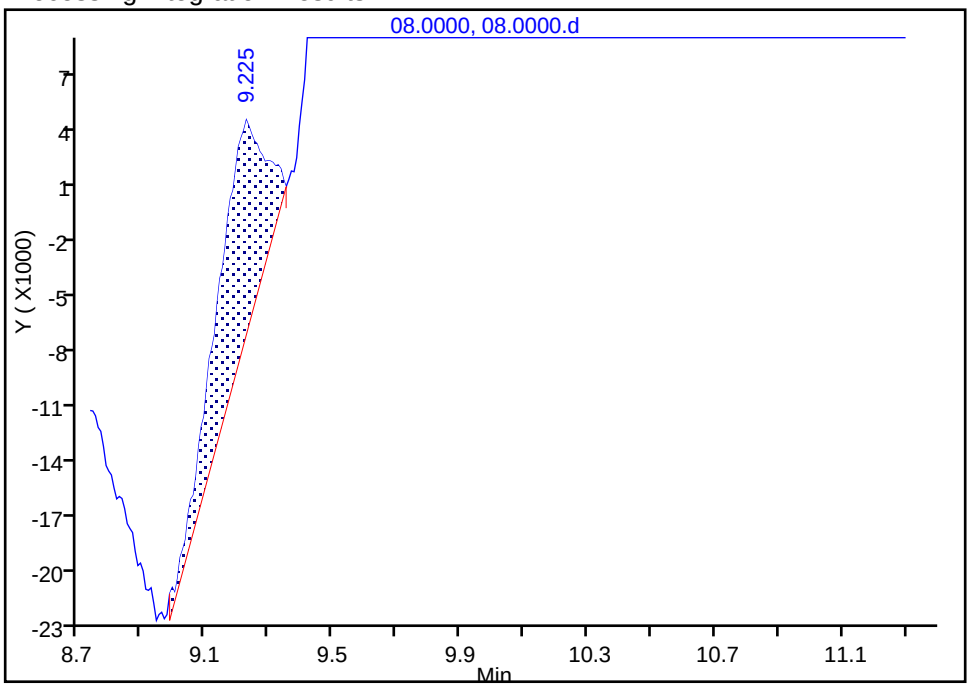
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\08.0000.d				
Injection Date:	07-May-2020 13:36:00	Instrument ID:	WC_IonChrom7		
Lims ID:	icv				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

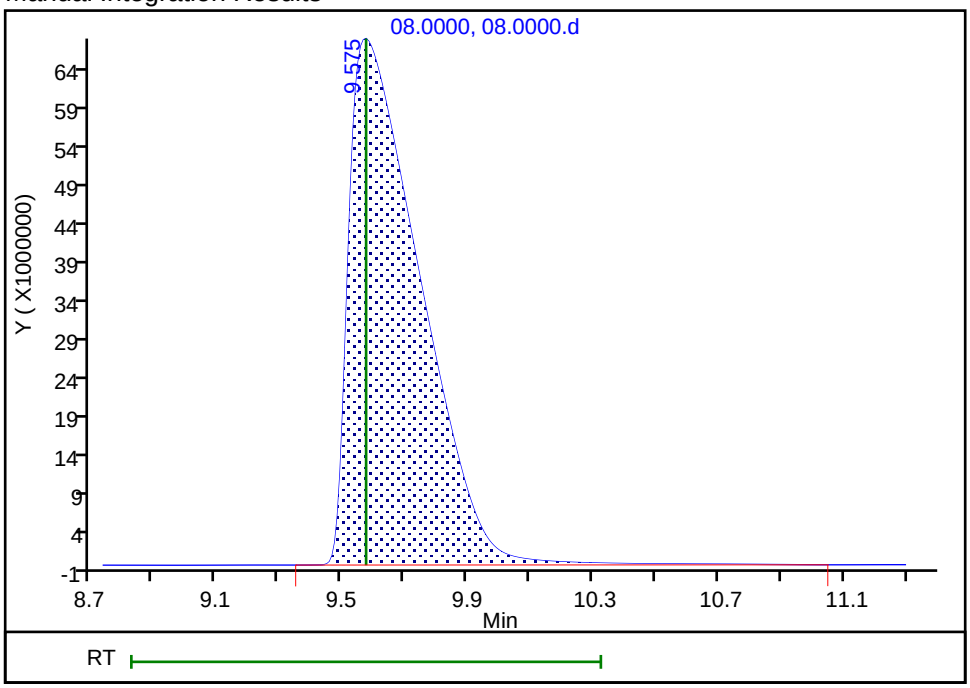
Processing Integration Results

RT: 9.23
Area: 127007
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.58
Area: 1063596914
Amount: 78.321580
Amount Units: ug/ml



Reviewer: pedrickj, 07-May-2020 15:01:01
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\09.0000.d				
Lims ID:	icb				
Client ID:					
Sample Type:	ICB				
Inject. Date:	07-May-2020 13:53:00	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091332-009				
Misc. Info.:	9 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	08-May-2020 08:39:12	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX0309				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.975	2.000	-0.025	384163		-0.0105	
2 Chloride	2.967	3.100	-0.133	93051		-0.0302	
3 Nitrite as N		3.567				ND	
4 Bromide		5.450				ND	
5 Nitrate as N		5.925				ND	
6 Sulfate		9.575				ND	
7 Orthophosphate as P	12.467	12.350	0.117	74549		NC	

QC Flag Legend

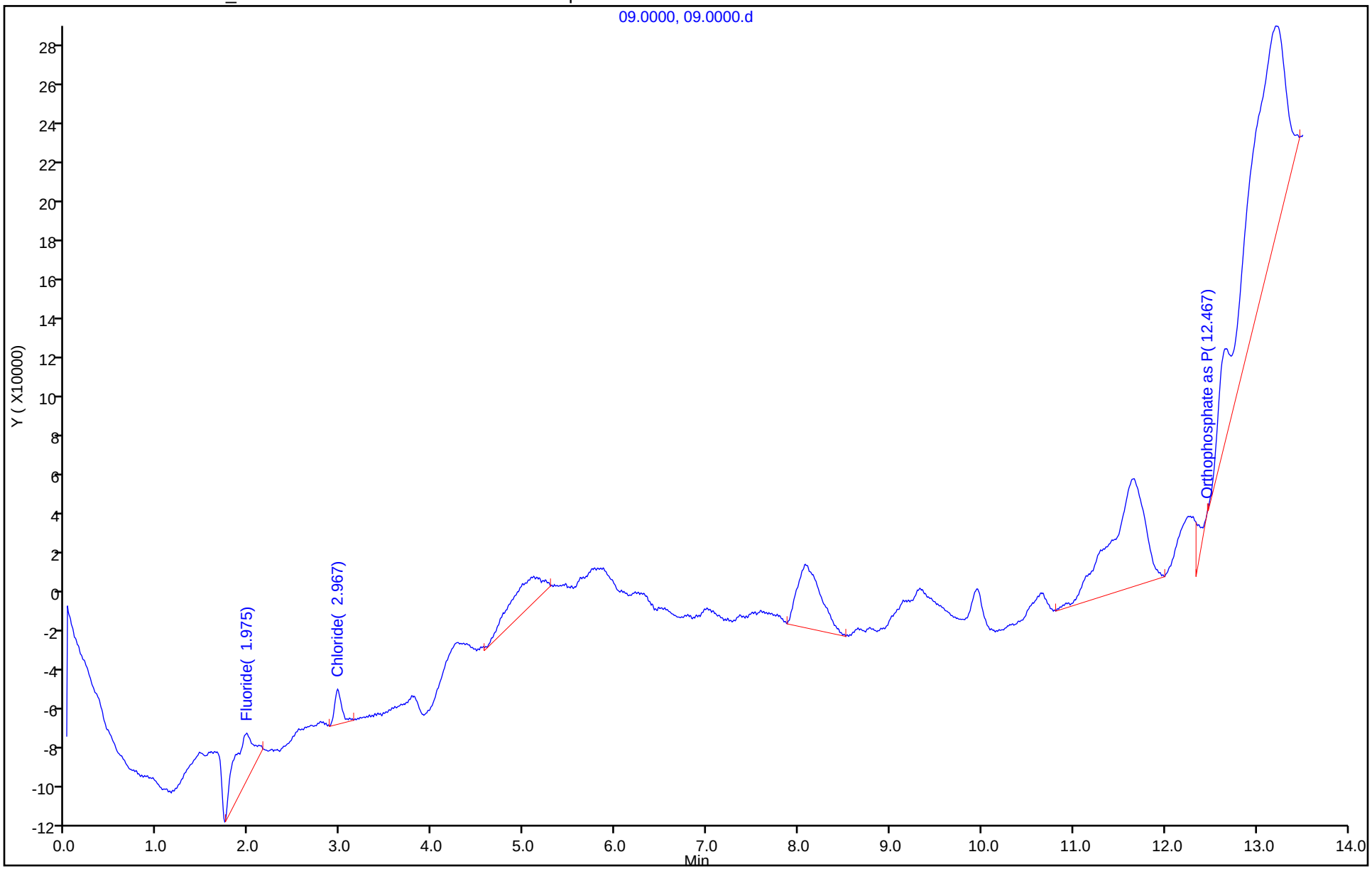
Processing Flags

NC - Not Calibrated

Report Date: 08-May-2020 08:39:13 Chrom Revision: 2.3 11-Mar-2020 18:53:20

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\09.0000.d				
Injection Date:	07-May-2020 13:53:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	icb			Worklist Smp#:	9
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

IC Instrument Information

WL: 91994 **Inst ID:** 7 **Analysis Date:** 6/1/2020 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	136983	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137019	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137038	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137040	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137076	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137086	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137098	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	137084	5	F Cl NO2 Br NO3 PO4 SO4	MS/D 5	
☐	136433	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	135018	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
-983		F Cl NO2 Br NO3 PO4 SO4	5X	Rerun
-019		F Cl NO2 Br NO3 PO4 SO4	5X	
-076		F Cl NO2 Br NO3 PO4 SO4	500X	
-086		F Cl NO2 Br NO3 PO4 SO4	20, 50X	
-098		F Cl NO2 Br NO3 PO4 SO4	5X	TEST.
~~-084~~ CJ 6/1/20.		F Cl NO2 Br NO3 PO4 SO4		
018		F Cl NO2 Br NO3 PO4 SO4	20, 100, 500X	
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m

Instrument:	WC_IonChrom7	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	08-May-2020 00:49:04

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b
Inj Date : 07-May-2020 11:58:00, Sublist: chrom-Anions_IC7*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					696059	2980113		0.999
2 Chloride					642656	1820393		1.000
3 Nitrite as N	-467117	4400350		1.000				
4 Bromide					-3534	8026986		1.000
5 Nitrate as N	-950285	4800725		1.000				
6 Sulfate					-112198	1359419		1.000
7 Orthophosphate as P	8317856	-783369	R1, R4, R5	).269*				

ICalib Error Legend

R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m

Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 08-May-2020 00:49:04
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\02.0000.d
Inj Date: 07-May-2020 11:58:00 Worklist: 91332 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d
Inj Date: 07-May-2020 12:14:00 Worklist: 91332 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\04.0000.d
Inj Date: 07-May-2020 12:30:00 Worklist: 91332 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\05.0000.d
Inj Date: 07-May-2020 12:47:00 Worklist: 91332 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\06.0000.d
Inj Date: 07-May-2020 13:03:00 Worklist: 91332 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d
Inj Date: 07-May-2020 13:20:00 Worklist: 91332 Sample#: 7

Start Cal Date: 07-May-2020 11:58:00 End Cal Date: 07-May-2020 13:20:00

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					
29413585	31644336	33682613	30746357	30049891	29169117	**696059**			**0.999**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**29801134**		
M5882717	M15822168	33682613	122985429	240399126	291691166				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
2 Chloride				Signal: 1					
18857190	18486179	18105597	18459784	18244798	18117613	**642656**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**18203939**		
18857190	M46215447	90527984	1107587064	2189375779	3623522651				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
4 Bromide				Signal: 1					
8169545	8212368	7686044	7900756	8221658	7941594	**-3534.0**			**1.000**
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		**8026986**		
1633909	4106184	7686044	31603024	M65773264	M79415937				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
6 Sulfate				Signal: 1					
11827594	13080097	13835044	13915619	13620293	13457689	**-1121987**			**1.000**
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		**13594196**		
M11827594	M32700242	M69175218	834937138	1634435215	2691537753				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\Anions_IC7.m

Instrument: WC_IonChrom7 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 08-May-2020 00:49:04
No.Compounds:7
Sublist: chrom-Anions_IC7*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\02.0000.d
Inj Date: 07-May-2020 11:58:00 Worklist: 91332 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\03.0000.d
Inj Date: 07-May-2020 12:14:00 Worklist: 91332 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\04.0000.d
Inj Date: 07-May-2020 12:30:00 Worklist: 91332 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\05.0000.d
Inj Date: 07-May-2020 12:47:00 Worklist: 91332 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\06.0000.d
Inj Date: 07-May-2020 13:03:00 Worklist: 91332 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d
Inj Date: 07-May-2020 13:20:00 Worklist: 91332 Sample#: 7

Start Cal Date: 07-May-2020 11:58:00 End Cal Date: 07-May-2020 13:20:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
42509610	42974032	42481986	44169870	44168601	43758115	-467117			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		44003505		
8501922	M21487016	42481986	176679481	353348809	437581152				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
5 Nitrate as N				Signal: 1					
43408275	46877762	46202829	47570068	47921299	48009614	-950285			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		48007252		
8681655	23438881	46202829	190280271	M383370392	M480096138				
91332(2)	91332(3)	91332(4)	91332(5)	91332(6)	91332(7)				
7 Orthophosphate as P				Signal: 1			R1, R4, R5		
36659810	12624677	482262	107903	66621		8317856			*0.269
0.200000(1)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)			-783369		
7331962	12624677	1929046	863223	666214					
91332(2)	91332(4)	91332(5)	91332(6)	91332(7)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test
R4, Curve Zero Intercept is > Reporting Limit
R5, Curve is not Monotonic

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\01.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2020 14:01:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091994-001
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:24:54 Calib Date: 07-May-2020 13:20:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.017	1.992	0.025	135030211	5.00	4.51	
2 Chloride	2.984	2.917	0.067	1739393242	100.0	95.5	
3 Nitrite as N	3.450	3.300	0.150	227890223	NC	NC	
4 Bromide	5.367	5.200	0.167	38798395	5.00	4.83	
5 Nitrate as N	5.800	5.609	0.191	233061296	NC	NC	
6 Sulfate	9.359	9.367	-0.008	1300669630	100.0	95.8	
7 Orthophosphate as P		13.084			ND	ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

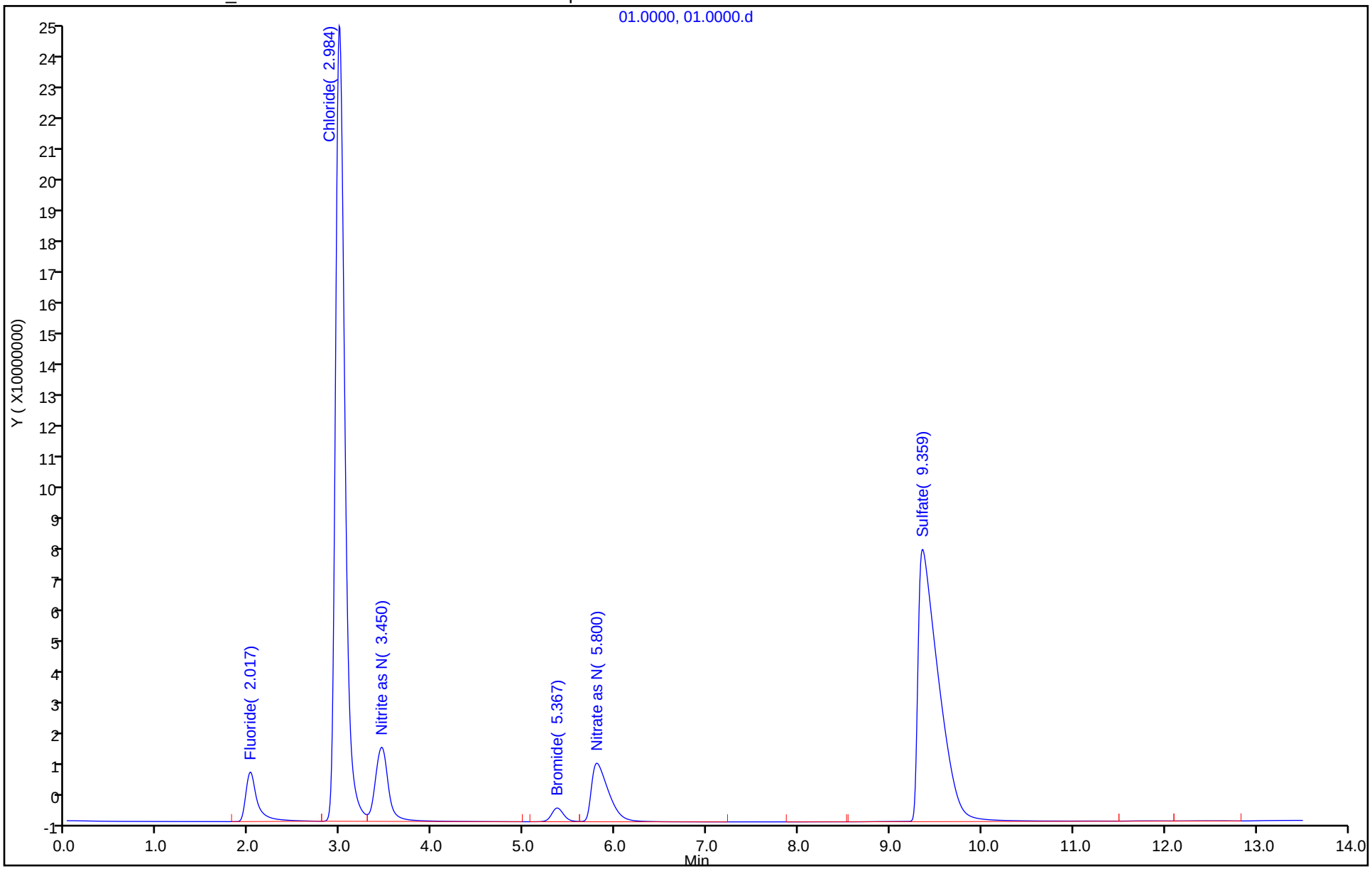
Reagents:

IC LCS_01743 Amount Added: 5.00 Units: mL

Report Date: 02-Jun-2020 12:24:54 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\01.0000.d				
Injection Date:	01-Jun-2020 14:01:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	1
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\02.0000.d				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	01-Jun-2020 14:17:00	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-002				
Operator ID:		Instrument ID:	WC_IonChrom7		

Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m		
Limit Group:	Wet - Anions 28D		
Last Update:	02-Jun-2020 12:24:54	Calib Date:	07-May-2020 13:20:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d		

Column 1 :		Det: 0005	
Process Host:	CTX1039		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.026	1.992	0.034	102471		-0.0199	
2 Chloride	2.959	2.917	0.042	1565653		0.0507	
3 Nitrite as N	3.392	3.300	0.092	504413		NC	
4 Bromide		5.200				ND	
5 Nitrate as N		5.609				ND	
6 Sulfate	9.751	9.367	0.384	2813166		0.2895	
7 Orthophosphate as P		13.084				ND	

QC Flag Legend

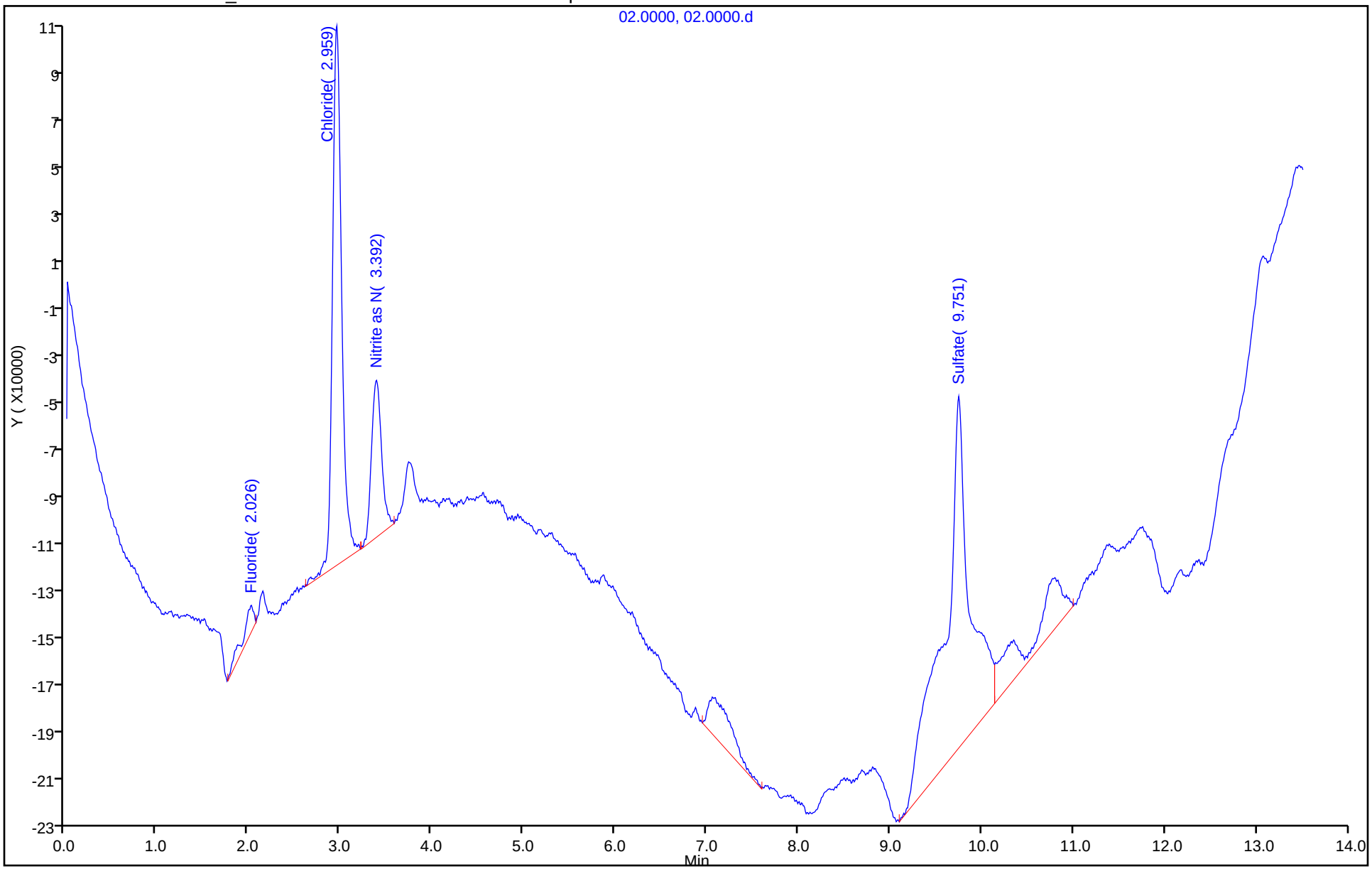
Processing Flags

NC - Not Calibrated

Report Date: 02-Jun-2020 12:24:54 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\02.0000.d				
Injection Date:	01-Jun-2020 14:17:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	2
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\03.0000.d
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 01-Jun-2020 14:34:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091994-003
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:24:54 Calib Date: 07-May-2020 13:20:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1039

First Level Reviewer: pedrickj Date: 02-Jun-2020 12:20:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.009	1.992	0.017	14942147	0.5000	0.4780	
2 Chloride	3.017	2.917	0.100	92898433	5.00	5.07	
3 Nitrite as N	3.467	3.300	0.167	24016374	NC	NC	
4 Bromide	5.400	5.200	0.200	4274773	0.5000	0.5330	a
5 Nitrate as N	5.892	5.609	0.283	24812504	NC	NC	a
6 Sulfate	9.867	9.367	0.500	67138881	5.00	5.02	
7 Orthophosphate as P	13.192	13.084	0.108	880873	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

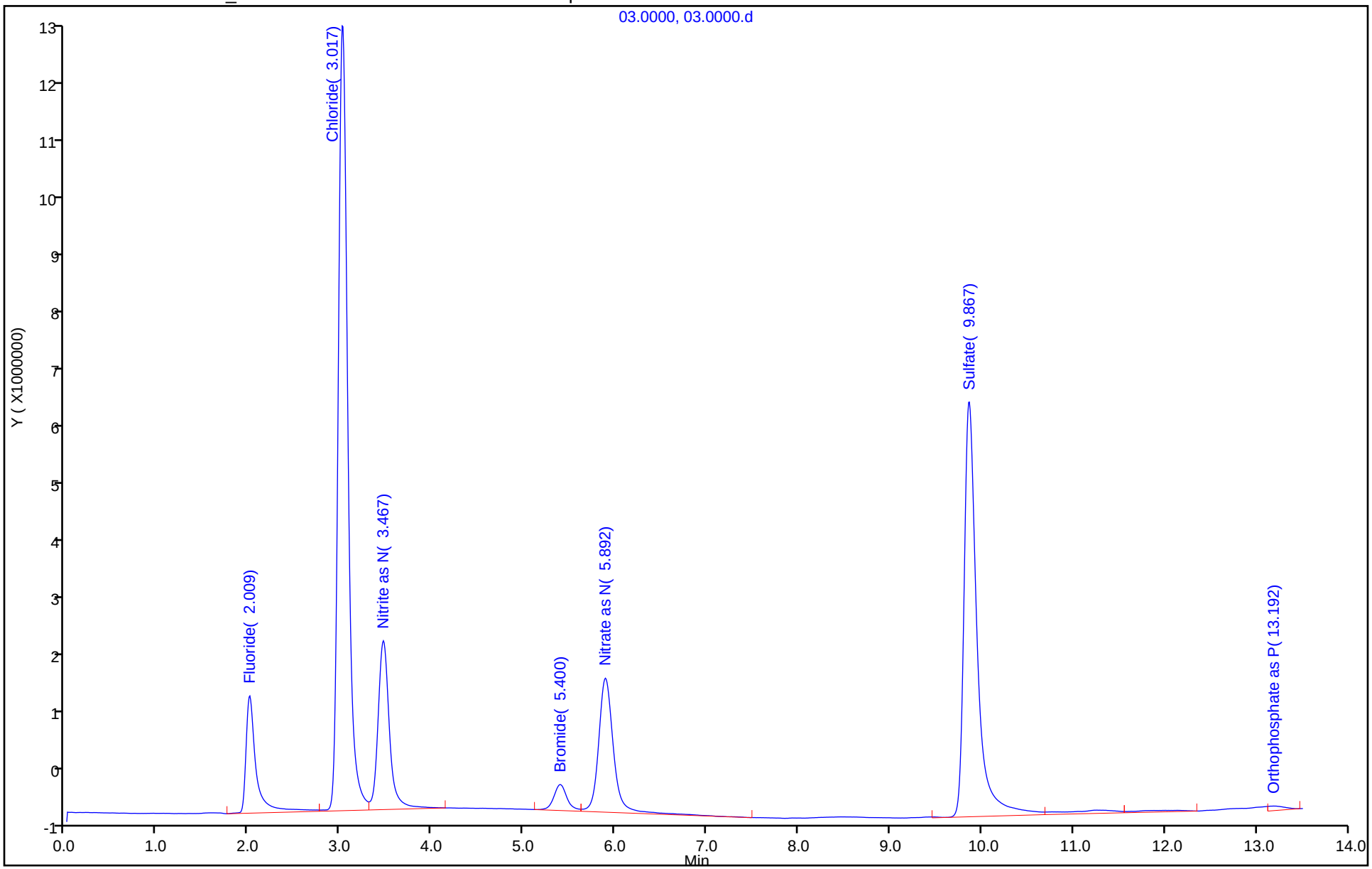
Reagents:

IC Cal low_00527 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00312 Amount Added: 0.10 Units: mL

Report Date: 02-Jun-2020 12:24:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\03.0000.d				
Injection Date:	01-Jun-2020 14:34:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\04.0000.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2020 14:50:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091994-004
Misc. Info.: 4 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:24:54 Calib Date: 07-May-2020 13:20:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1039

First Level Reviewer: pedrickj Date: 02-Jun-2020 12:21:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.034	1.992	0.042	136103736	5.00	4.54	M
2 Chloride	2.992	2.917	0.075	1744154647	100.0	95.8	M
3 Nitrite as N	3.417	3.300	0.117	227238127	NC	NC	M
4 Bromide	5.192	5.200	-0.008	38181341	5.00	4.76	M
5 Nitrate as N	5.609	5.609	0.000	230195139	NC	NC	M
6 Sulfate	9.209	9.367	-0.158	1298415185	100.0	95.6	
7 Orthophosphate as P	13.134	13.084	0.050	718483	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

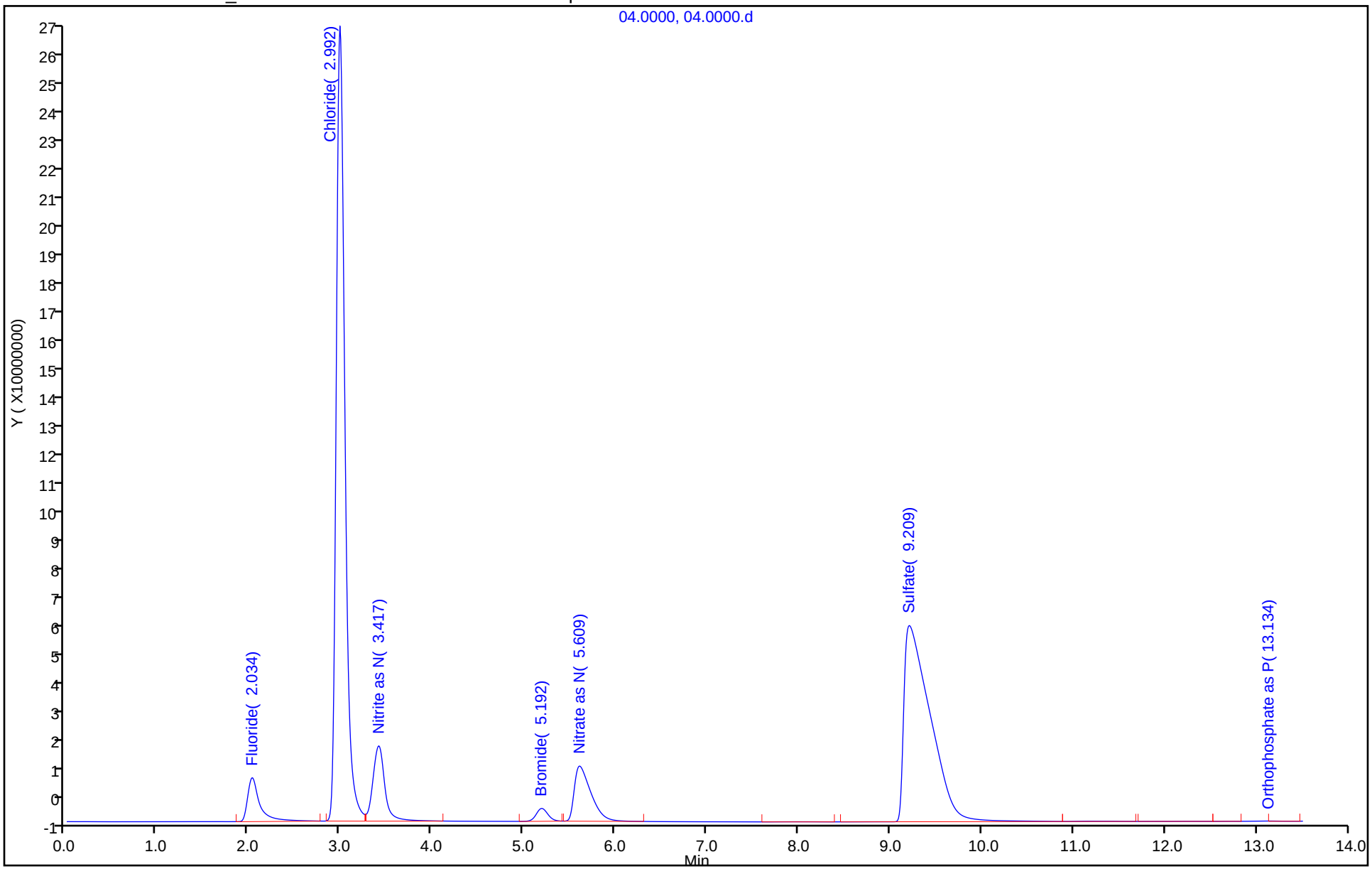
Reagents:

IC LCS_01743 Amount Added: 5.00 Units: mL

Report Date: 02-Jun-2020 12:24:56 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\04.0000.d				
Injection Date:	01-Jun-2020 14:50:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\05.0000.d
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jun-2020 15:06:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091994-005
Misc. Info.: 5 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:24:54 Calib Date: 07-May-2020 13:20:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1039

First Level Reviewer: pedrickj Date: 02-Jun-2020 12:22:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.025	1.992	0.033	136021468	5.00	4.54	M
2 Chloride	2.984	2.917	0.067	1747185146	100.0	95.9	M
3 Nitrite as N	3.425	3.300	0.125	227149406	NC	NC	M
4 Bromide	5.125	5.200	-0.075	37785808	5.00	4.71	M
5 Nitrate as N	5.509	5.609	-0.100	230355561	NC	NC	M
6 Sulfate	9.209	9.367	-0.158	1297250236	100.0	95.5	
7 Orthophosphate as P	13.200	13.084	0.116	1223280	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

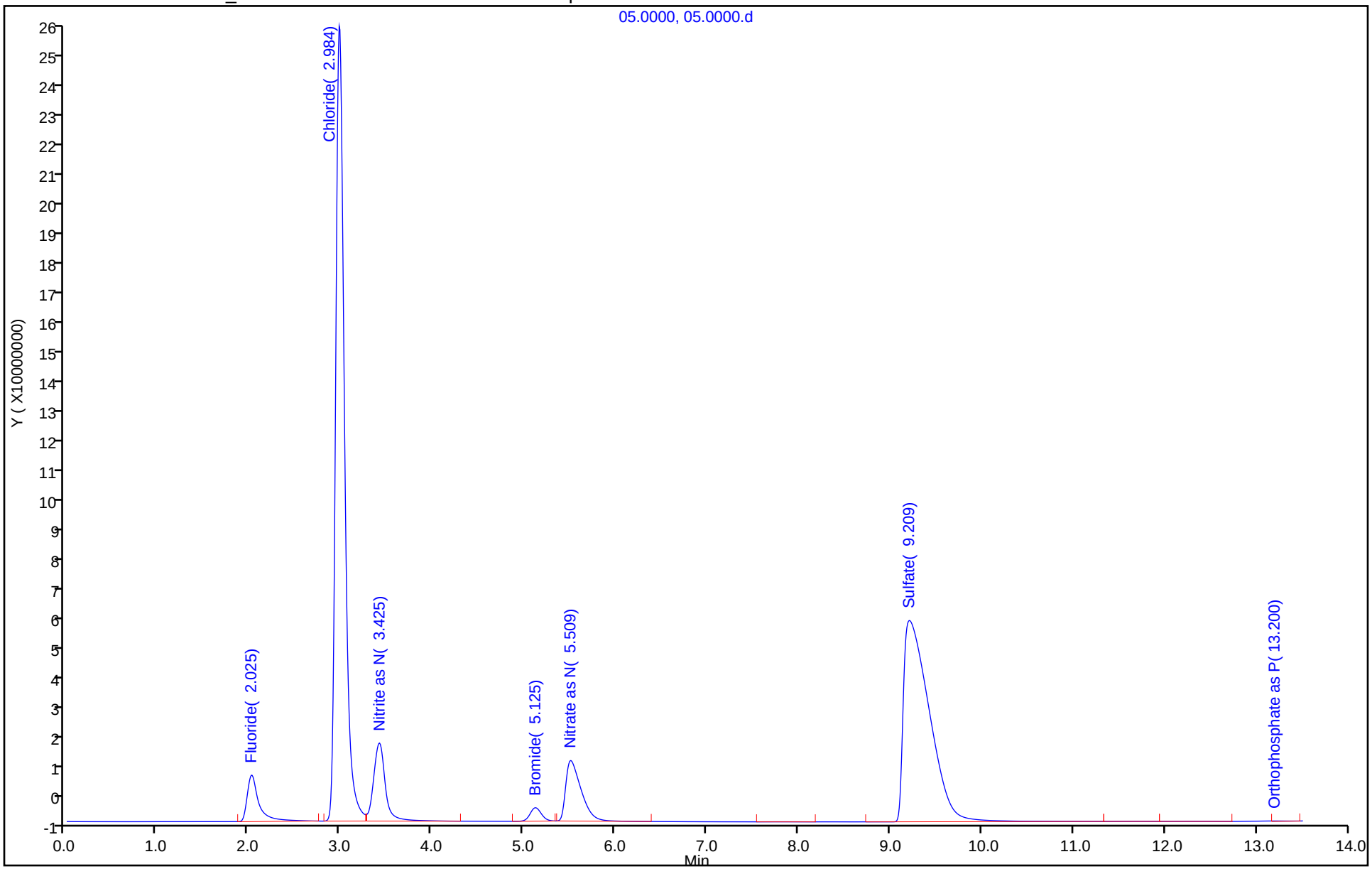
Reagents:

IC LCS_01743 Amount Added: 5.00 Units: mL

Report Date: 02-Jun-2020 12:24:56 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\05.0000.d				
Injection Date:	01-Jun-2020 15:06:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\06.0000.d				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	01-Jun-2020 15:23:00	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-006				
Misc. Info.:	6 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	02-Jun-2020 12:24:54	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX1039				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.959	1.992	-0.033	291366		-0.0136	
2 Chloride	2.825	2.917	-0.092	616122		-0.001458	
3 Nitrite as N		3.300				ND	
4 Bromide		5.200				ND	
5 Nitrate as N		5.609				ND	
6 Sulfate	9.617	9.367	0.250	382563		0.1107	
7 Orthophosphate as P	13.100	13.084	0.016	2229271		NC	

QC Flag Legend

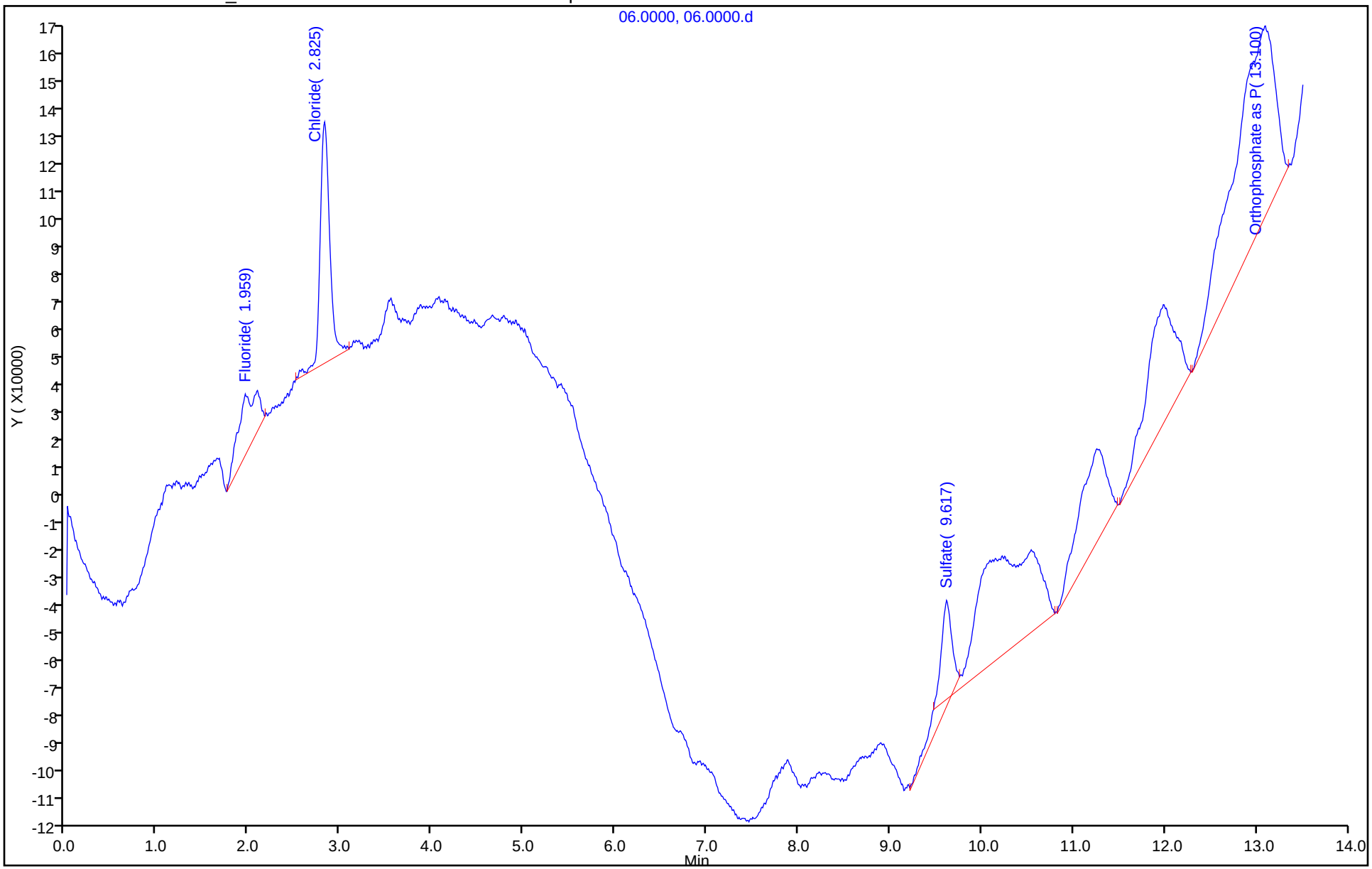
Processing Flags

NC - Not Calibrated

Report Date: 02-Jun-2020 12:24:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\06.0000.d				
Injection Date:	01-Jun-2020 15:23:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\09.0000.d				
Lims ID:	280-137084-F-1				
Client ID:	EW7-PM27A-3-25				
Sample Type:	Client				
Inject. Date:	01-Jun-2020 16:12:00	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-009				
Misc. Info.:	653 F				
Operator ID:		Instrument ID:	WC_IonChrom7		

Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m		
Limit Group:	Wet - Anions 28D		
Last Update:	02-Jun-2020 12:24:54	Calib Date:	07-May-2020 13:20:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d		

Column 1 :			Det: 0005
Process Host:	CTX1039		

First Level Reviewer: pedrickj Date: 02-Jun-2020 12:23:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.167	1.992	0.175	282585363	9.46	
2 Chloride	2.984	2.917	0.067	798148643	43.8	
3 Nitrite as N		3.300			ND	
4 Bromide	4.967	5.200	-0.233	1490604	0.1861	a
5 Nitrate as N	5.250	5.609	-0.359	207217249	NC	a
6 Sulfate	9.400	9.367	0.033	641464629	47.3	
7 Orthophosphate as P	13.042	13.084	-0.042	749023	NC	

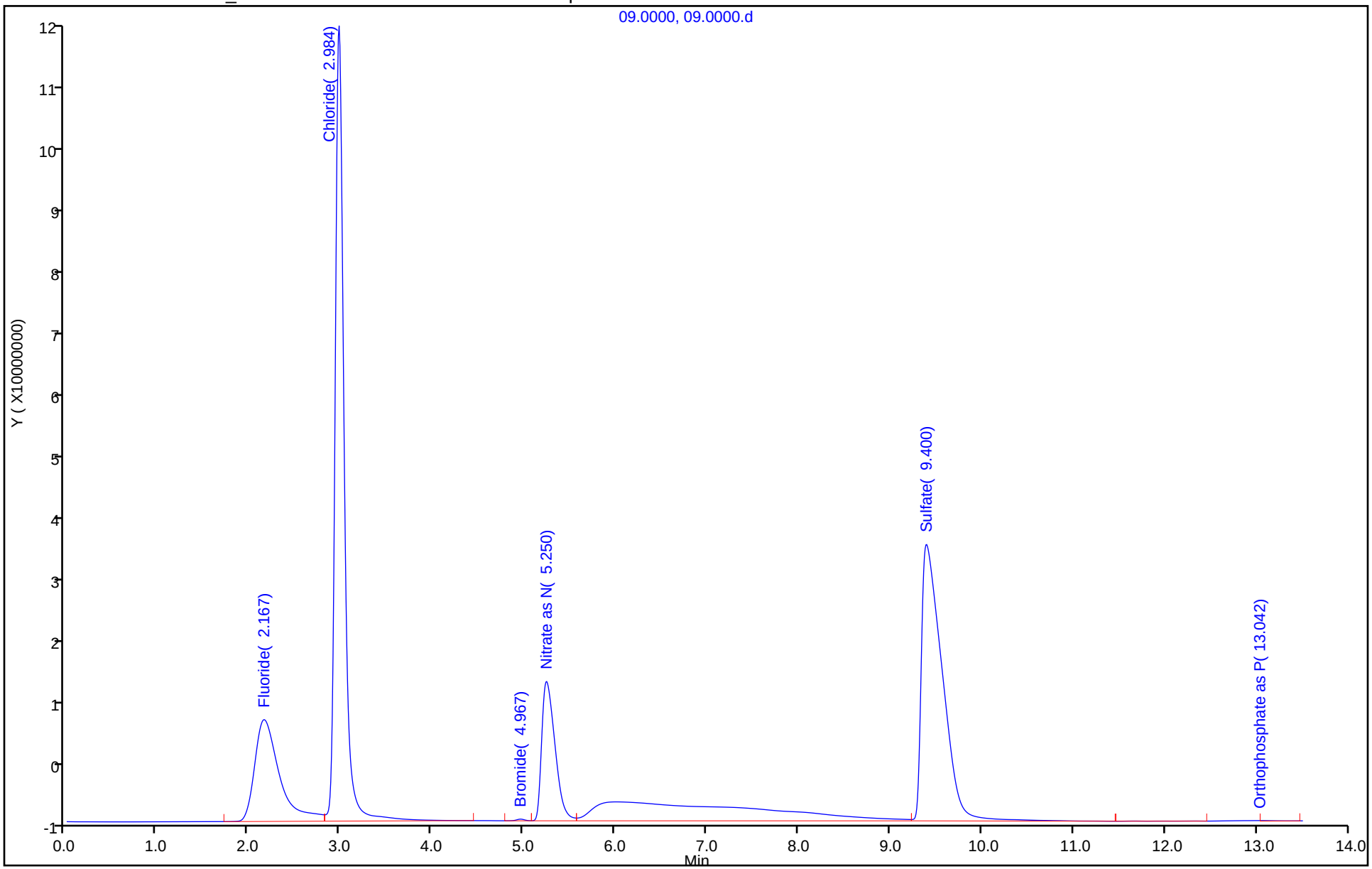
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 02-Jun-2020 12:24:58 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\09.0000.d				
Injection Date:	01-Jun-2020 16:12:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137084-F-1	Lab Sample ID:	280-137084-1	Worklist Smp#:	9
Client ID:	EW7-PM27A-3-25				
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\10.0000.d				
Lims ID:	280-137084-F-2				
Client ID:	EW7-PM24A-3-25				
Sample Type:	Client				
Inject. Date:	01-Jun-2020 16:29:00	ALS Bottle#:	0	Worklist Smp#:	10
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-010				
Misc. Info.:	8744 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	02-Jun-2020 12:24:54	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX1039				
First Level Reviewer: pedrickj		Date:	02-Jun-2020 12:23:10		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.167	1.992	0.175	296865901	9.94	
2 Chloride	3.001	2.917	0.084	765919825	42.0	
3 Nitrite as N		3.300			ND	
4 Bromide	4.876	5.200	-0.324	960388	0.1201	a
5 Nitrate as N	5.076	5.609	-0.533	345176054	NC	a
6 Sulfate	9.267	9.367	-0.100	546368068	40.3	
7 Orthophosphate as P	13.276	13.084	0.192	383428	NC	

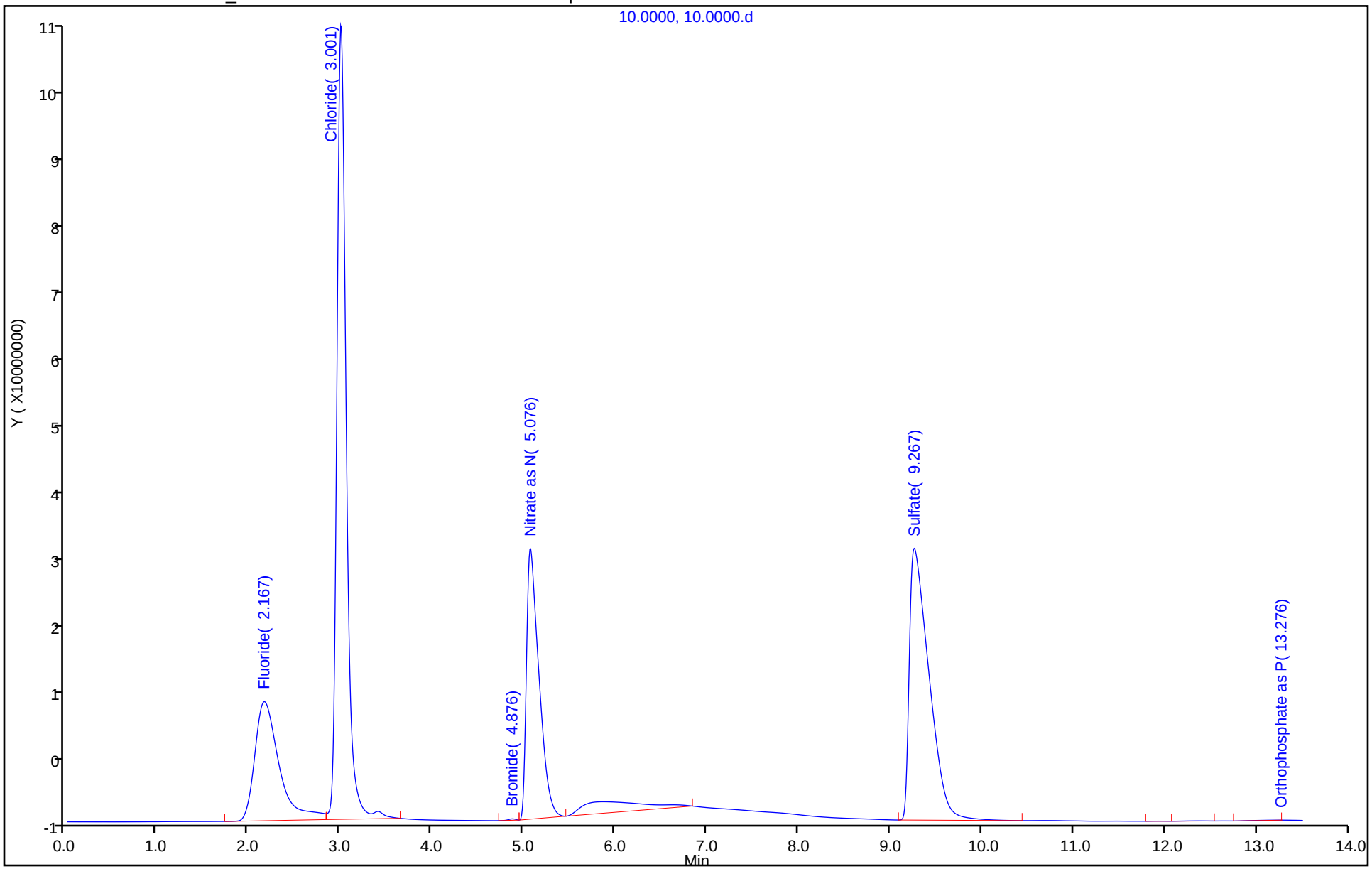
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 02-Jun-2020 12:24:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\10.0000.d				
Injection Date:	01-Jun-2020 16:29:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137084-F-2	Lab Sample ID:	280-137084-2	Worklist Smp#:	10
Client ID:	EW7-PM24A-3-25				
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\11.0000.d				
Lims ID:	280-137084-F-3				
Client ID:	EW7-PM24B-3-35				
Sample Type:	Client				
Inject. Date:	01-Jun-2020 16:45:00	ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-011				
Misc. Info.:	7987 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	02-Jun-2020 12:24:54	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX1039				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.209	1.992	0.217	560980021	18.8	E
2 Chloride	3.017	2.917	0.100	1232814569	67.7	
3 Nitrite as N		3.300			ND	
4 Bromide	4.967	5.200	-0.233	7715633	0.9617	
5 Nitrate as N	5.426	5.609	-0.183	5473450	NC	
6 Sulfate	9.576	9.367	0.209	80008857	5.97	
7 Orthophosphate as P	13.109	13.084	0.025	1354273	NC	

QC Flag Legend

Processing Flags

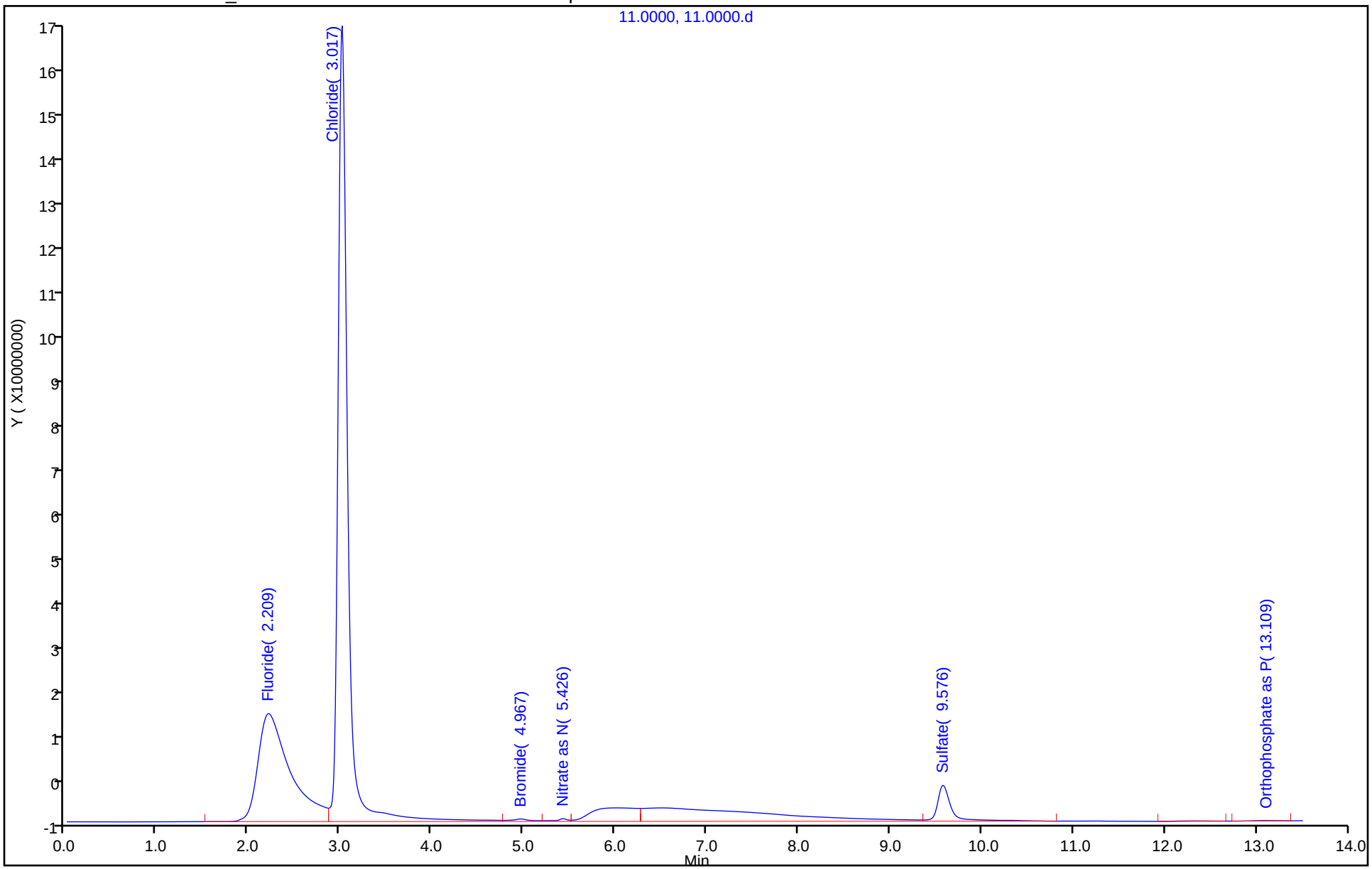
NC - Not Calibrated

E - Exceeded Maximum Amount

Report Date: 02-Jun-2020 12:24:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\11.0000.d				
Injection Date:	01-Jun-2020 16:45:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137084-F-3	Lab Sample ID:	280-137084-3	Worklist Smp#:	11
Client ID:	EW7-PM24B-3-35				
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\12.0000.d				
Lims ID:	280-137084-F-4				
Client ID:	EW7-PM21B-3-35				
Sample Type:	Client				
Inject. Date:	01-Jun-2020 17:01:00	ALS Bottle#:	0	Worklist Smp#:	12
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-012				
Misc. Info.:	11881 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	02-Jun-2020 12:24:54	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX1039				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.184	1.992	0.192	323732569	10.8	E
2 Chloride	3.026	2.917	0.109	738413898	40.5	
3 Nitrite as N		3.300			ND	
4 Bromide	5.126	5.200	-0.074	1971403	0.2460	
5 Nitrate as N	5.876	5.609	0.267	319832	NC	
6 Sulfate	9.401	9.367	0.034	954605643	70.3	
7 Orthophosphate as P	12.867	13.084	-0.217	1267313	NC	

QC Flag Legend

Processing Flags

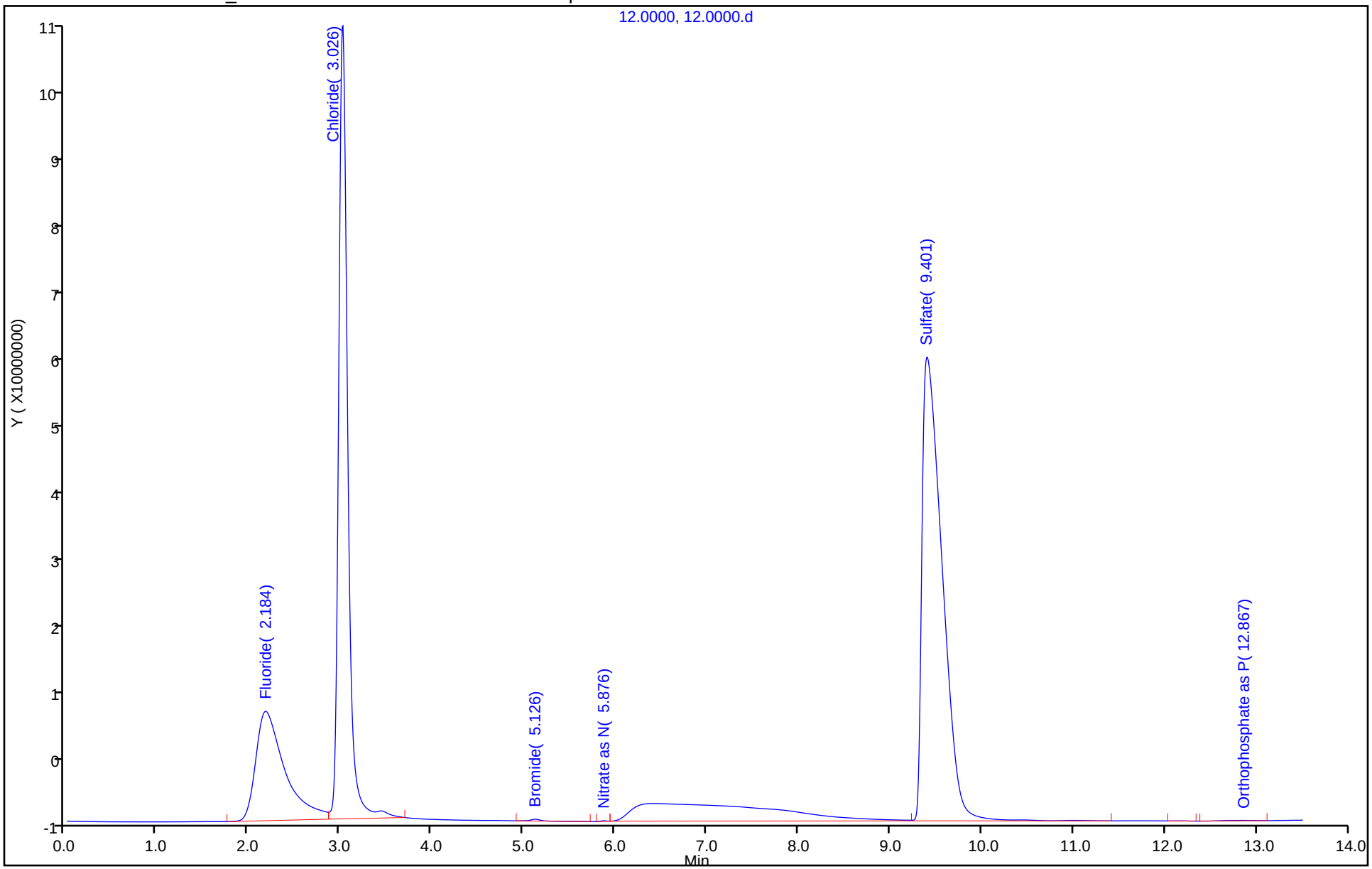
NC - Not Calibrated

E - Exceeded Maximum Amount

Report Date: 02-Jun-2020 12:25:00 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\12.0000.d				
Injection Date:	01-Jun-2020 17:01:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137084-F-4	Lab Sample ID:	280-137084-4	Worklist Smp#:	12
Client ID:	EW7-PM21B-3-35				
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\13.0000.d				
Lims ID:	280-137084-F-5				
Client ID:	EW7-PM22B-3-35				
Sample Type:	Client				
Inject. Date:	01-Jun-2020 17:18:00	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-013				
Misc. Info.:	24565 F				
Operator ID:		Instrument ID:	WC_IonChrom7		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m				
Limit Group:	Wet - Anions 28D				
Last Update:	02-Jun-2020 12:25:09	Calib Date:	07-May-2020 13:20:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d				
Column 1 :			Det: 0005		
Process Host:	CTX1039				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.217	1.992	0.225	383808916	12.9	E
2 Chloride	3.042	2.917	0.125	1080939169	59.3	
3 Nitrite as N		3.300			ND	
4 Bromide	5.067	5.200	-0.133	6442676	0.8031	
5 Nitrate as N	5.584	5.609	-0.025	2539745	NC	
6 Sulfate	9.617	9.367	0.250	191792936	14.2	
7 Orthophosphate as P		13.084			ND	

QC Flag Legend

Processing Flags

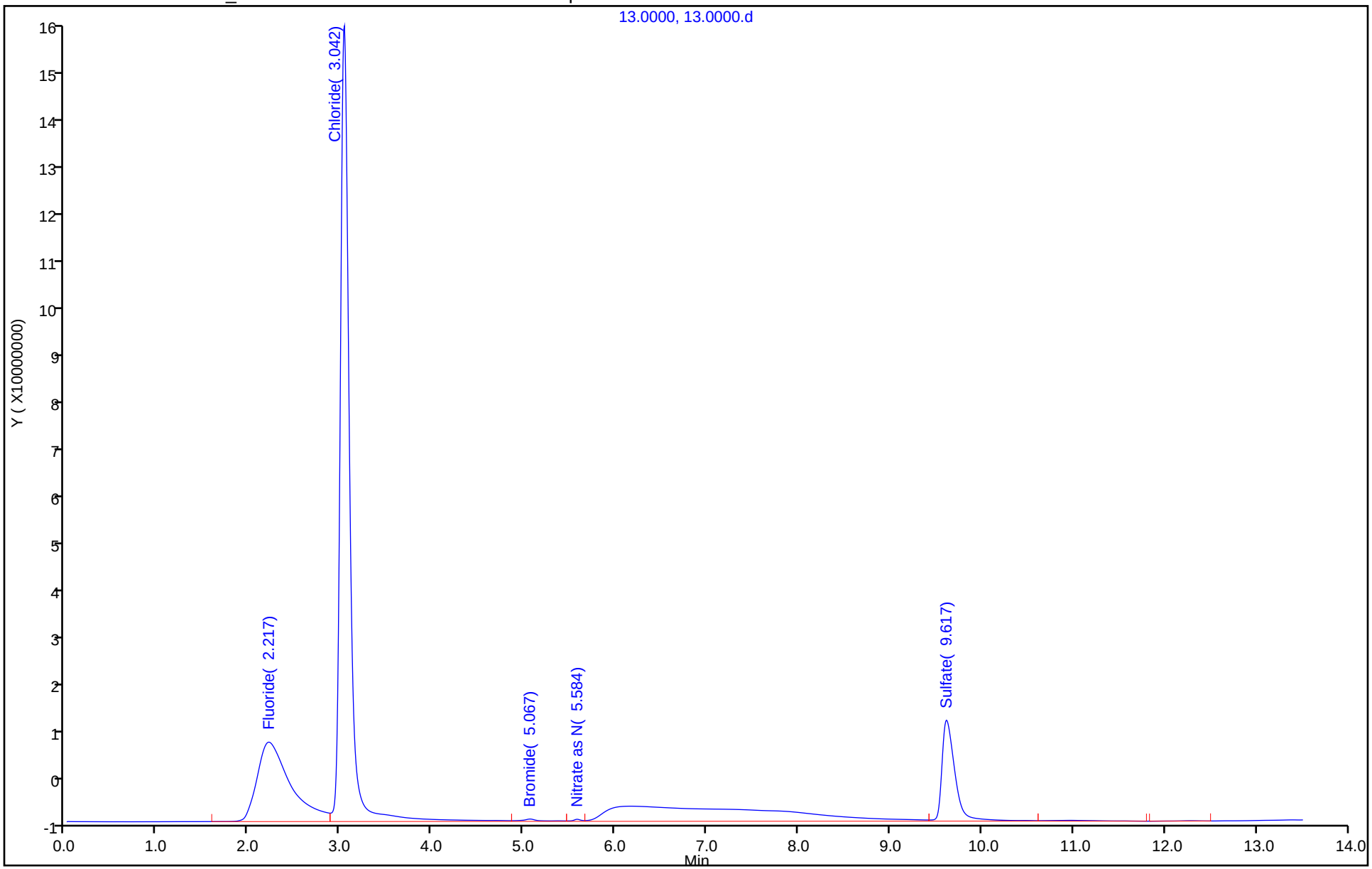
NC - Not Calibrated

E - Exceeded Maximum Amount

Report Date: 02-Jun-2020 12:28:34 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\13.0000.d				
Injection Date:	01-Jun-2020 17:18:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137084-F-5	Lab Sample ID:	280-137084-5	Worklist Smp#:	13
Client ID:	EW7-PM22B-3-35				
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\14.0000.d				
Lims ID:	280-137084-F-5 DU				
Client ID:					
Sample Type:	DU				
Inject. Date:	01-Jun-2020 17:34:00	ALS Bottle#:	0	Worklist Smp#:	14
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-014				
Misc. Info.:	5950 F				
Operator ID:		Instrument ID:	WC_IonChrom7		

Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m		
Limit Group:	Wet - Anions 28D		
Last Update:	02-Jun-2020 12:25:09	Calib Date:	07-May-2020 13:20:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d		

Column 1 :		Det: 0005	
Process Host:	CTX1039		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.200	1.992	0.208	381578759		12.8	E
2 Chloride	3.017	2.917	0.100	1082287408		59.4	
3 Nitrite as N		3.300				ND	
4 Bromide	5.042	5.200	-0.158	6714998		0.8370	
5 Nitrate as N	5.609	5.609	0.000	2681824		NC	
6 Sulfate	9.609	9.367	0.242	193443836		14.3	
7 Orthophosphate as P		13.084				ND	

QC Flag Legend

Processing Flags

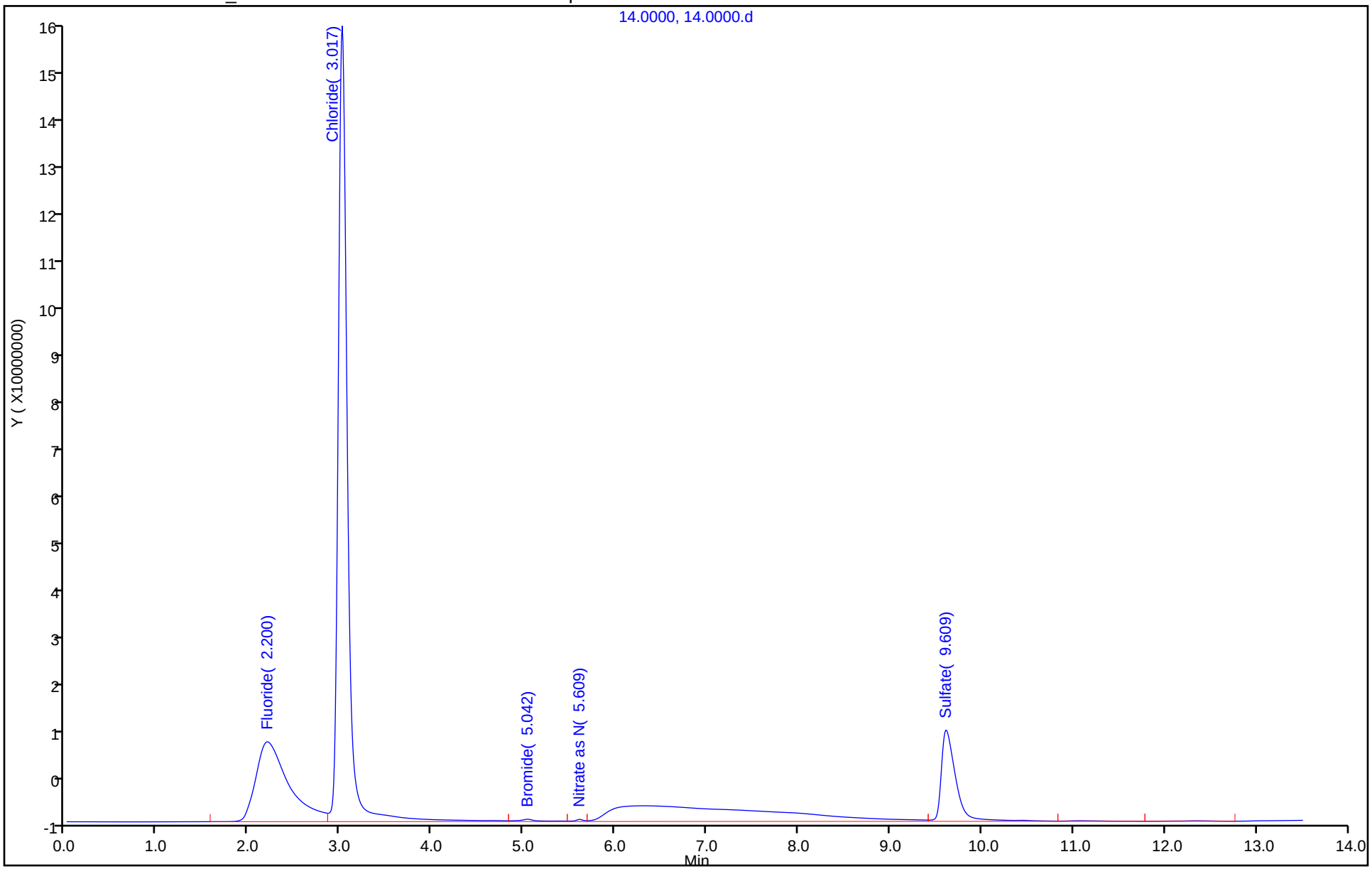
NC - Not Calibrated

E - Exceeded Maximum Amount

Report Date: 02-Jun-2020 12:28:35 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\14.0000.d				
Injection Date:	01-Jun-2020 17:34:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137084-F-5 DU			Worklist Smp#:	14
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\15.0000.d
Lims ID: 280-137084-F-5 MS
Client ID:
Sample Type: MS
Inject. Date: 01-Jun-2020 17:51:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091994-015
Misc. Info.: 4426 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:25:09 Calib Date: 07-May-2020 13:20:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1039

First Level Reviewer: pedrickj Date: 02-Jun-2020 12:23:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.184	1.992	0.192	328175718	5.00	11.0	E
2 Chloride	2.817	2.917	-0.100	1281170625	50.0	70.3	
3 Nitrite as N	3.142	3.300	-0.158	160002679	NC	NC	
4 Bromide	4.342	5.200	-0.858	23694026	5.00	2.95	a
5 Nitrate as N	4.817	5.609	-0.792	351415708	NC	NC	a
6 Sulfate	8.909	9.367	-0.458	585960235	50.0	43.2	
7 Orthophosphate as P	13.109	13.084	0.025	138445645	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount
Review Flags
a - User Assigned ID

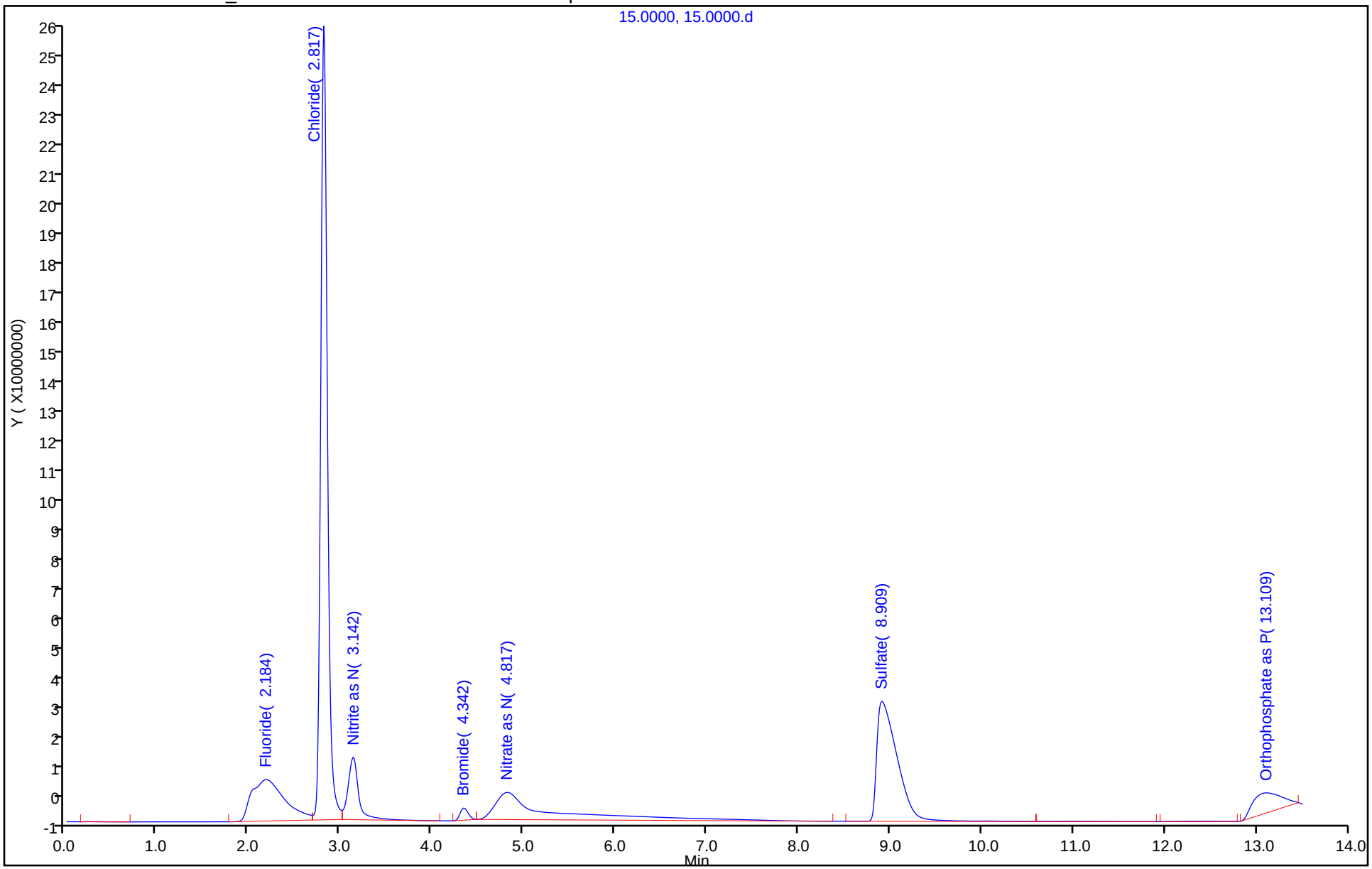
Reagents:

ICMS/MSD WEEK_00650 Amount Added: 0.05 Units: mL

Report Date: 02-Jun-2020 12:28:36 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\15.0000.d				
Injection Date:	01-Jun-2020 17:51:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137084-F-5 MS			Worklist Smp#:	15
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\16.0000.d
Lims ID: 280-137084-F-5 MSD
Client ID:
Sample Type: MSD
Inject. Date: 01-Jun-2020 18:07:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091994-016
Misc. Info.: 30813 F
Operator ID: Instrument ID: WC_IonChrom7

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:25:09 Calib Date: 07-May-2020 13:20:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1039

First Level Reviewer: pedrickj Date: 02-Jun-2020 12:23:40

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.192	1.992	0.200	483206406	5.00	16.2	E
2 Chloride	3.000	2.917	0.083	1998912213	50.0	109.8	
3 Nitrite as N	3.475	3.300	0.175	273212827	NC	NC	
4 Bromide	4.800	5.200	-0.400	44679283	5.00	5.57	a
5 Nitrate as N	4.975	5.609	-0.634	245234625	NC	NC	a
6 Sulfate	9.200	9.367	-0.167	896446678	50.0	66.0	
7 Orthophosphate as P		13.084			ND	ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
E - Exceeded Maximum Amount
Review Flags
a - User Assigned ID

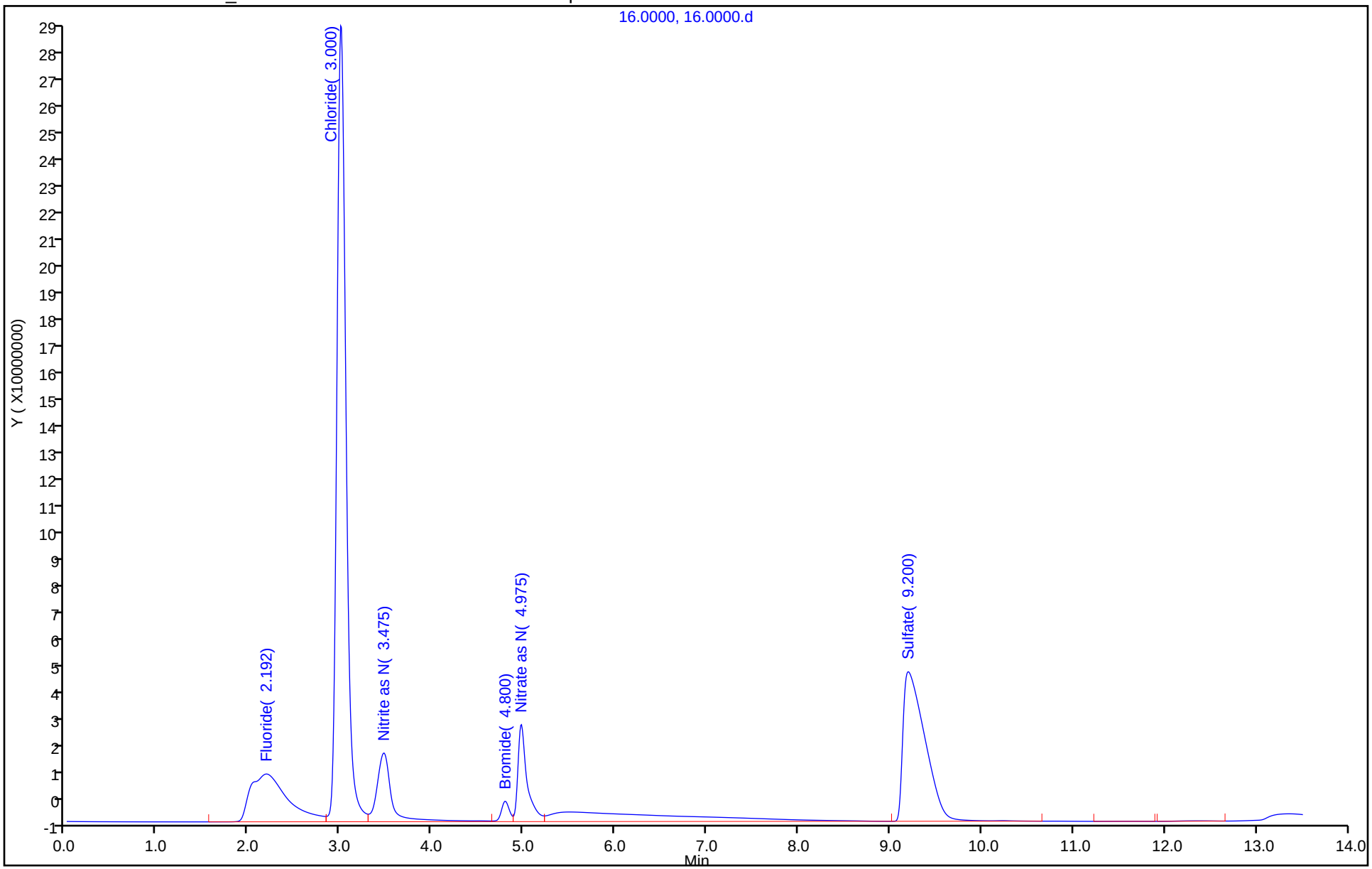
Reagents:

ICMS/MSD WEEK_00650 Amount Added: 0.05 Units: mL

Report Date: 02-Jun-2020 12:28:37 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\16.0000.d				
Injection Date:	01-Jun-2020 18:07:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	280-137084-F-5 MSD			Worklist Smp#:	16
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\17.0000.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2020 18:24:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 280-0091994-017
Misc. Info.: 25777 F
Operator ID: Instrument ID: WC_IonChrom7
Sublist: chrom-Anions_IC7*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2020 12:25:02 Calib Date: 07-May-2020 13:20:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d

Column 1 : Det: 0005
Process Host: CTX1039

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.000	1.992	0.008	138021192	5.00	4.61	
2 Chloride	2.967	2.917	0.050	1754683704	100.0	96.4	
3 Nitrite as N	3.425	3.300	0.125	233002999	NC	NC	
4 Bromide	5.292	5.200	0.092	37843212	5.00	4.71	
5 Nitrate as N	5.717	5.609	0.108	232168175	NC	NC	
6 Sulfate	9.234	9.367	-0.133	1307619708	100.0	96.3	
7 Orthophosphate as P		13.084			ND	ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

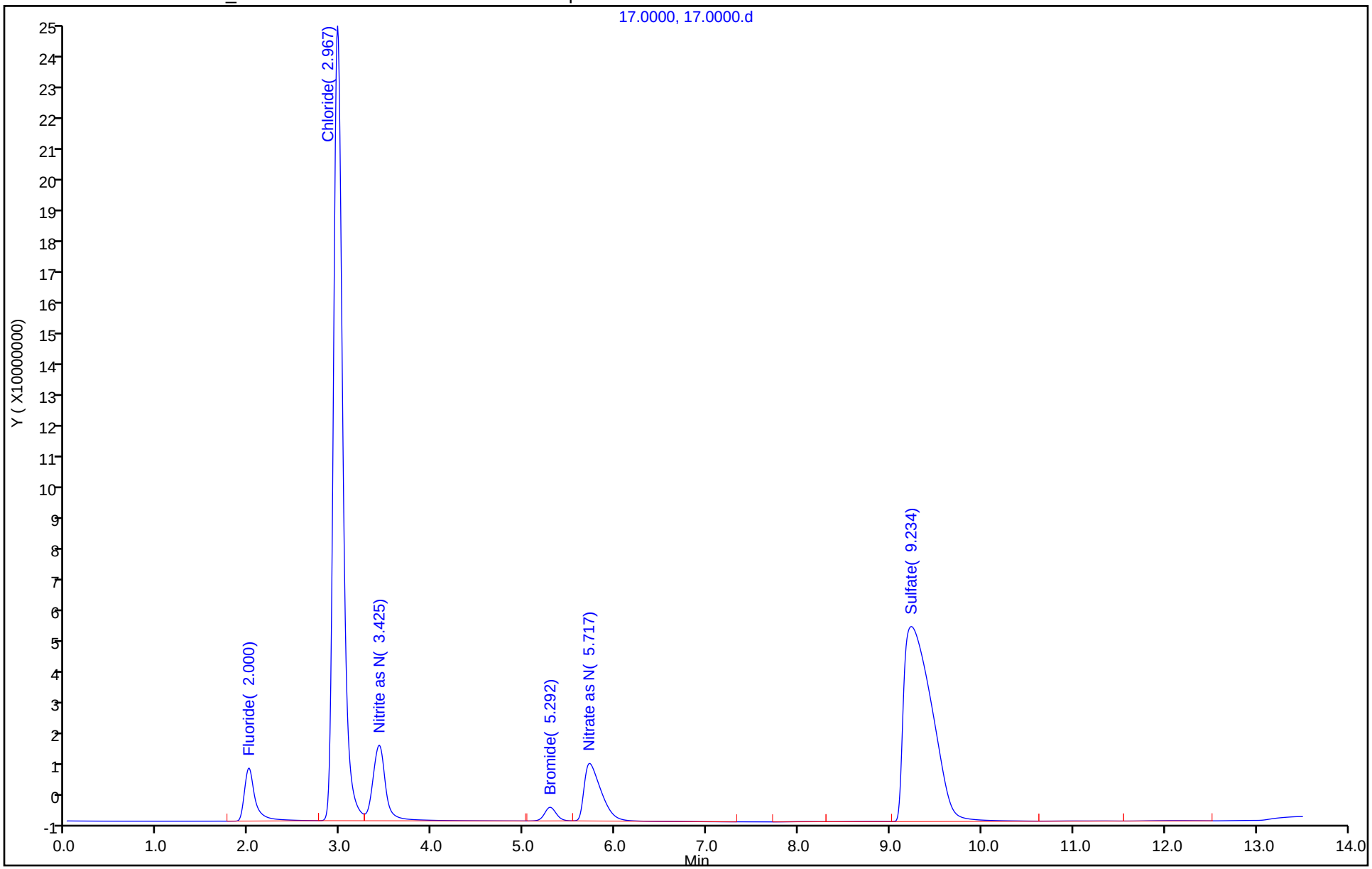
Reagents:

IC LCS_01743 Amount Added: 5.00 Units: mL

Report Date: 02-Jun-2020 12:25:02 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\17.0000.d				
Injection Date:	01-Jun-2020 18:24:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\18.0000.d				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	01-Jun-2020 18:40:00	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	25.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0091994-018				
Misc. Info.:	6016 F				
Operator ID:		Instrument ID:	WC_IonChrom7		

Method:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\Anions_IC7.m		
Limit Group:	Wet - Anions 28D		
Last Update:	02-Jun-2020 12:25:02	Calib Date:	07-May-2020 13:20:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200507-91332.b\07.0000.d		

Column 1 :		Det: 0005	
Process Host:	CTX1039		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.009	1.992	0.017	159887		-0.0180	
2 Chloride	3.001	2.917	0.084	1136604		0.0271	
3 Nitrite as N		3.300				ND	
4 Bromide		5.200				ND	
5 Nitrate as N		5.609				ND	
6 Sulfate	9.484	9.367	0.117	1231258		0.1731	
7 Orthophosphate as P	13.259	13.084	0.175	271866		NC	

QC Flag Legend

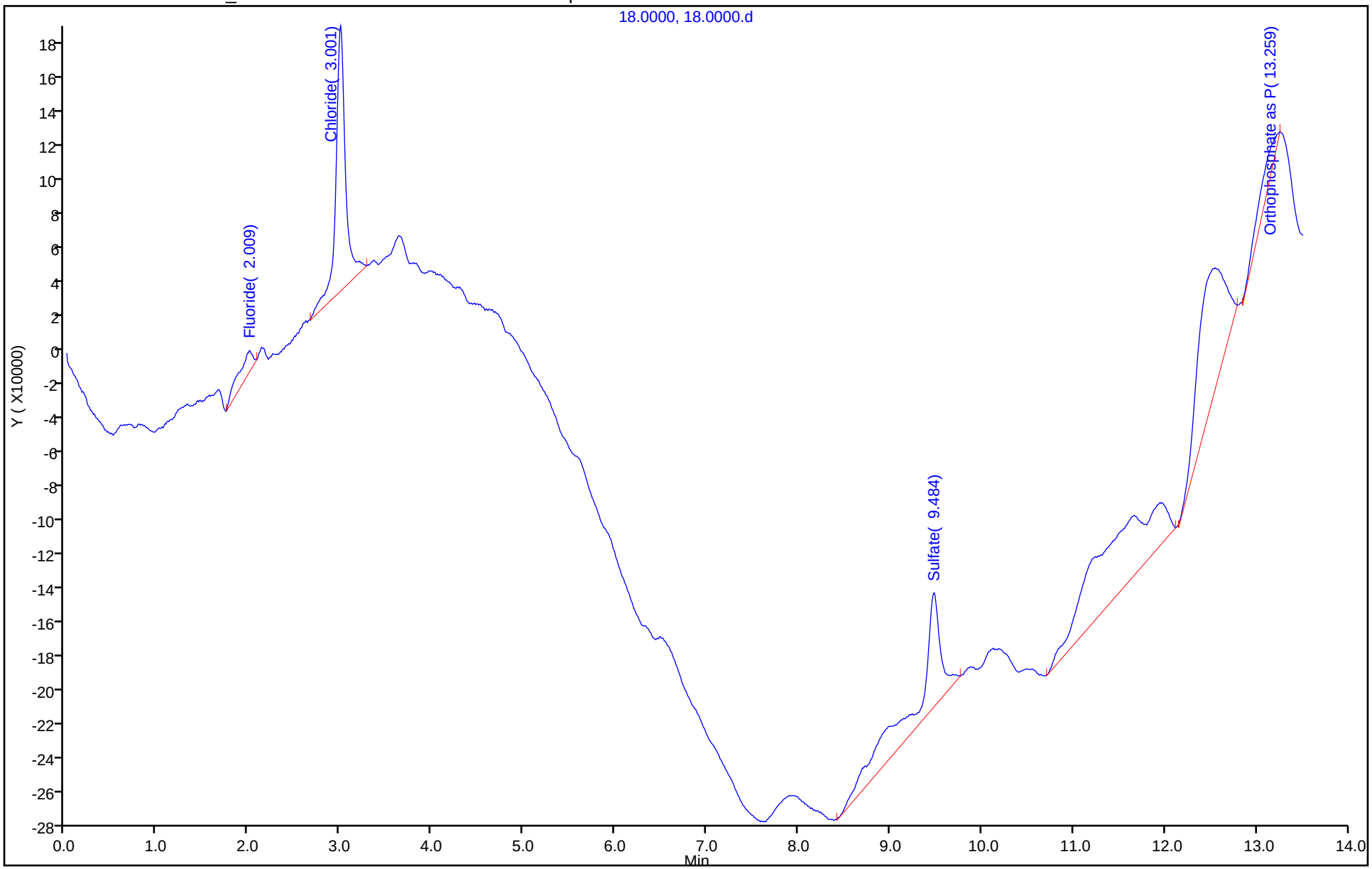
Processing Flags

NC - Not Calibrated

Report Date: 02-Jun-2020 12:25:03 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom7\20200601-91994.b\18.0000.d				
Injection Date:	01-Jun-2020 18:40:00	Instrument ID:	WC_IonChrom7	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	25.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC7	Limit Group:	Wet - Anions 28D		



	Analysis	Sample Name	Manua	Result	Notes	Status	Date / Time
1	NPOC	CAL 110716	1.000		Cal Curve OK	Complet	6/11/2020
2	NPOC	icv	1.000	NPOC:19.75mg		Complet	6/11/2020
3	NPOC	icb	1.000	NPOC:-0.00657		Complet	6/11/2020
4	NPOC	LCS 280-498352/1-A	1.000	NPOC:25.79mg		Complet	6/11/2020
5	NPOC	LCSD 280-498352/2-A	1.000	NPOC:25.70mg		Complet	6/11/2020
6	NPOC	MB 280-498352/3-A	1.000	NPOC:0.2144m		Complet	6/11/2020
7	NPOC	tic	1.000	NPOC:0.05763		Complet	6/11/2020
8	NPOC	280-136897-C-1-B	1.000	NPOC:4.709mg		Complet	6/11/2020
9	NPOC	280-136897-C-1-C MS	1.000	NPOC:30.14mg		Complet	6/11/2020
10	NPOC	280-136897-C-1-D MS	1.000	NPOC:30.30mg		Complet	6/11/2020
11	NPOC	280-136897-B-1-F DU	1.000	NPOC:4.735mg		Complet	6/11/2020
12	NPOC	280-136897-C-2-C	1.000	NPOC:4.734mg		Complet	6/11/2020
13	NPOC	280-136897-C-3-C	1.000	NPOC:5.155mg		Complet	6/11/2020
14	NPOC	280-136897-C-4-C	1.000	NPOC:5.028mg		Complet	6/11/2020
15	NPOC	280-137084-D-1-B	1.000	NPOC:41.99mg		Complet	6/11/2020
16	NPOC	ccv	1.000	NPOC:25.93mg		Complet	6/11/2020
17	NPOC	ccb	1.000	NPOC:0.03857		Complet	6/11/2020
18	NPOC	280-137084-D-2-B	1.000	NPOC:19.90mg		Complet	6/11/2020
19	NPOC	280-137084-D-3-B	2.000	NPOC:154.4mg		Complet	6/11/2020
20	NPOC	280-137084-D-4-D	1.000	NPOC:63.10mg		Complet	6/12/2020
21	NPOC	280-137084-D-5-B	2.000	NPOC:95.51mg		Complet	6/12/2020
22	NPOC	280-137048-D-1-B	1.000	NPOC:10.10mg		Complet	6/12/2020
23	NPOC	280-137048-D-1-C MS	1.000	NPOC:35.40mg		Complet	6/12/2020
24	NPOC	280-137048-D-1-D MS	1.000	NPOC:34.83mg		Complet	6/12/2020
25	NPOC	280-137048-D-2-B	2.000	NPOC:67.55mg		Complet	6/12/2020
26	NPOC	lcs	1.000	NPOC:26.22mg		Complet	6/12/2020
27	NPOC	lcsd	1.000	NPOC:25.70mg		Complet	6/12/2020
28	NPOC	ccv	1.000	NPOC:26.23mg		Complet	6/12/2020
29	NPOC	ccb	1.000	NPOC:0.02573		Complet	6/12/2020
30	NPOC	mb	1.000	NPOC:0.00698		Complet	6/12/2020
31	NPOC	tic	1.000	NPOC:0.06452		Complet	6/12/2020
32	NPOC	280-137199-B-8	1.000	NPOC:14.63mg		Complet	6/12/2020
33	NPOC	ms 280-137199-B-8	1.000	NPOC:40.59mg		Complet	6/12/2020
34	NPOC	msd 280-137199-B-8	1.000	NPOC:40.78mg		Complet	6/12/2020
35	NPOC	280-137199-C-2	1.000	NPOC:5.007mg		Complet	6/12/2020
36	NPOC	280-137199-B-4	1.000	NPOC:8.545mg		Complet	6/12/2020
37	NPOC	280-137199-C-6	1.000	NPOC:4.537mg		Complet	6/12/2020
38	NPOC	280-137173-B-1	1.000	NPOC:8.818mg		Complet	6/12/2020
39	NPOC	280-137173-B-2	1.000	NPOC:2.552mg		Complet	6/12/2020
40	NPOC	ccv	1.000	NPOC:26.36mg		Complet	6/12/2020
41	NPOC	ccb	1.000	NPOC:0.01510		Complet	6/12/2020
42	NPOC	280-137173-B-3	1.000	NPOC:3.704mg		Complet	6/12/2020
43	NPOC	280-137257-B-1	1.000	NPOC:3.436mg		Complet	6/12/2020
44	NPOC	280-137257-B-2	2.000	NPOC:611.1mg		Complet	6/12/2020
45	NPOC	280-137257-B-3	1.000	NPOC:3.443mg		Complet	6/12/2020
46	NPOC	280-137257-B-4	1.000	NPOC:9.711mg		Complet	6/12/2020
47	NPOC	ms 280-137257-B-4	1.000	NPOC:37.17mg		Complet	6/12/2020
48	NPOC	msd 280-137257-B-4	1.000	NPOC:36.25mg		Complet	6/12/2020
49	NPOC	280-137360-A-2	1.000	NPOC:9.238mg		Complet	6/12/2020
50	NPOC	280-137172-B-1	1.000	NPOC:2.504mg		Complet	6/12/2020
51	NPOC	280-137172-B-2	1.000	NPOC:2.594mg		Complet	6/12/2020
52	NPOC	ccv	1.000	NPOC:26.66mg		Complet	6/12/2020
53	NPOC	ccb	1.000	NPOC:0.02262		Complet	6/12/2020

	Vial
1	86, 87, 88, 89, 90, 91
2	1
3	2
4	3
5	4
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7	6
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52	51
53	52

	Analysis	Sample Name	Manua	Result	Notes	Status	Date / Time
54	NPOC	280-137172-B-3	1.000	NPOC:3.488mg		Complet	6/12/2020
55	NPOC	280-137172-B-4	1.000	NPOC:3.279mg		Complet	6/12/2020
56	NPOC	280-137172-B-5	1.000	NPOC:4.515mg		Complet	6/12/2020
57	NPOC	280-137172-B-6	1.000	NPOC:2.700mg		Complet	6/12/2020
58	NPOC	280-137172-B-7	1.000	NPOC:2.981mg		Complet	6/12/2020
59	NPOC	280-137172-B-8	1.000	NPOC:4.037mg		Complet	6/12/2020
60	NPOC	lcs	1.000	NPOC:27.07mg		Complet	6/12/2020
61	NPOC	mb	1.000	NPOC:0.02882		Complet	6/12/2020
62	NPOC	tic	1.000	NPOC:0.06648		Complet	6/12/2020
63	NPOC	280-137172-B-9	1.000	NPOC:3.429mg		Complet	6/12/2020
64	NPOC	ccv	1.000	NPOC:27.25mg		Complet	6/12/2020
65	NPOC	ccb	1.000	NPOC:0.06047		Complet	6/12/2020
66	NPOC	ms 280-137172-B-9	1.000	NPOC:30.81mg		Complet	6/12/2020
67	NPOC	msd 280-137172-B-9	1.000	NPOC:30.32mg		Complet	6/12/2020
68	NPOC	280-137172-B-10	1.000	NPOC:4.037mg		Complet	6/12/2020
69	NPOC	280-137172-B-11	1.000	NPOC:3.403mg		Complet	6/12/2020
70	NPOC	280-137172-B-12	1.000	NPOC:2.532mg		Complet	6/12/2020
71	NPOC	280-137172-B-13	1.000	NPOC:3.212mg		Complet	6/12/2020
72	NPOC	280-137172-B-14	1.000	NPOC:2.829mg		Complet	6/12/2020
73	NPOC	280-137172-B-15	1.000	NPOC:3.523mg		Complet	6/12/2020
74	NPOC	280-137172-B-16	1.000	NPOC:3.265mg		Complet	6/12/2020
75	NPOC	ccv	1.000	NPOC:27.24mg		Complet	6/12/2020
76	NPOC	ccb	1.000	NPOC:0.02878		Complet	6/12/2020

	Vial
54	53
55	54
56	55
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76	75

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2020_06_11_17_47_35.cal

Date of Creation 6:55:21 PM 6/11/2020
User jmb
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
Sample ID: Untitled
Object ID 0A-103108-04335027-1343CA32A814-0000
Cal. Curve: TOC3.2020_06_11_17_47_35.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2252	50uL	1	*******	E	6/11/2020 5:55:32 PM
2	0.6226	50uL	1	*******		6/11/2020 5:57:36 PM
3	0.5474	50uL	1	*******		6/11/2020 5:59:40 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.5850
SD Area 0.05317
CV Area 9.09%
Vial 86

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	5.134	50uL	1	*******	E	6/11/2020 6:08:12 PM
2	3.842	50uL	1	*******		6/11/2020 6:10:16 PM
3	3.845	50uL	1	*******		6/11/2020 6:12:20 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 3.844
SD Area 0.00212
CV Area 0.06%
Vial 87

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.65	50uL	1	*******		6/11/2020 6:20:53 PM
2	17.70	50uL	1	*******		6/11/2020 6:22:56 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 17.68
SD Area 0.03536
CV Area 0.20%
Vial 88

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	35.40	50uL	1	*******		6/11/2020 6:31:33 PM
2	35.38	50uL	1	*******		6/11/2020 6:33:37 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 35.39
SD Area 0.01414
CV Area 0.04%
Vial 89

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	87.83	50uL	1	*******		6/11/2020 6:42:16 PM
2	87.27	50uL	1	*******		6/11/2020 6:44:24 PM

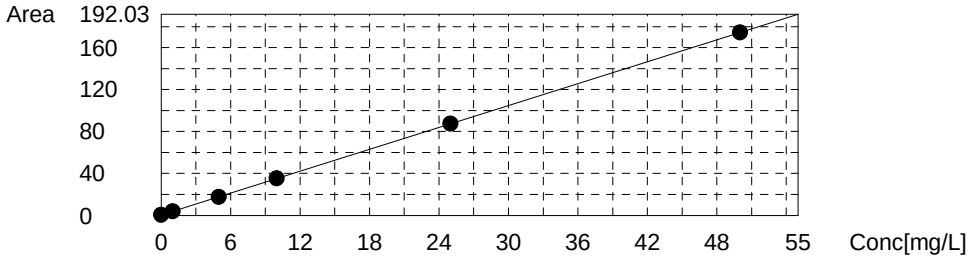
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 87.55
SD Area 0.3960
CV Area 0.45%
Vial 90

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	174.9	50uL	1	*******		6/11/2020 6:53:09 PM
2	174.2	50uL	1	*******		6/11/2020 6:55:21 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 174.6
SD Area 0.4950
CV Area 0.28%
Vial 91

Slope: 3.483
Intercept 0.4475
r^2 1.0000
r 1.0000
Zero Shift No



Instr.Information

System	TOC-V cpn 3
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Cal. Curve

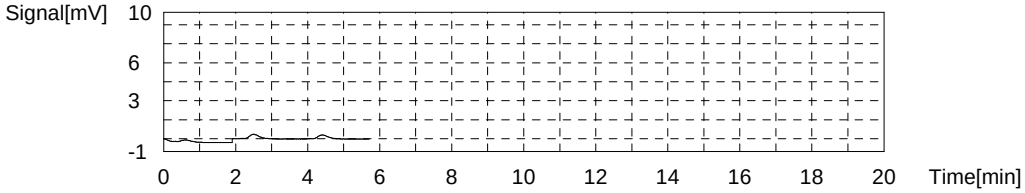
Sample Name:	CAL 110716
Sample ID:	Untitled
Cal. Curve:	TOC3.2020_06_11_17_47_35.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2252	50uL	1	*******	E	6/11/2020 5:55:32 PM
2	0.6226	50uL	1	*******		6/11/2020 5:57:36 PM
3	0.5474	50uL	1	*******		6/11/2020 5:59:40 PM

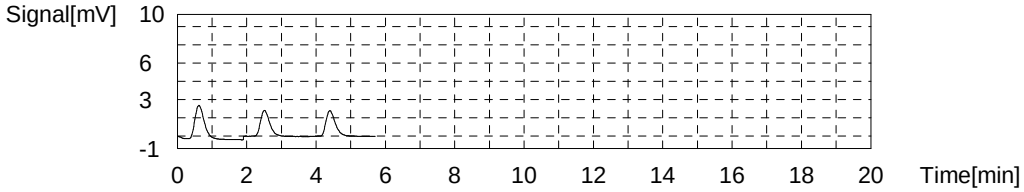
Acid Add.	0.000%
Sp. Time	90.00sec
Mean Area	0.5850



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	5.134	50uL	1	*******	E	6/11/2020 6:08:12 PM
2	3.842	50uL	1	*******		6/11/2020 6:10:16 PM
3	3.845	50uL	1	*******		6/11/2020 6:12:20 PM

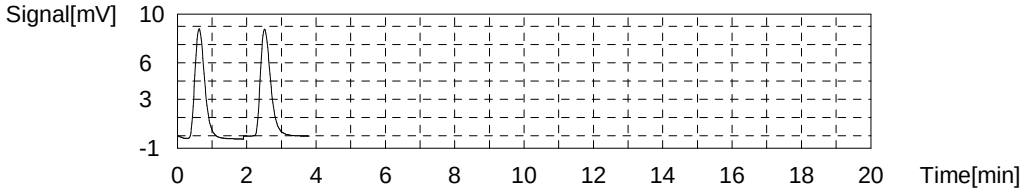
Acid Add.	0.000%
Sp. Time	90.00sec
Mean Area	3.844



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.65	50uL	1	*******		6/11/2020 6:20:53 PM
2	17.70	50uL	1	*******		6/11/2020 6:22:56 PM

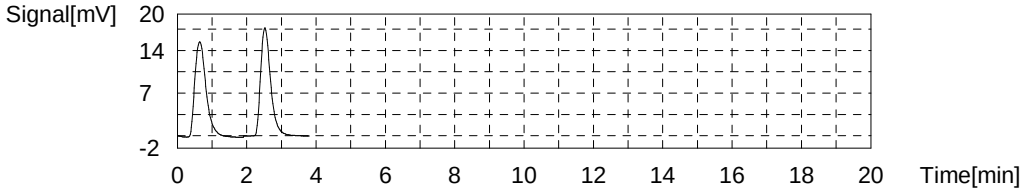
Acid Add.	0.000%
Sp. Time	90.00sec
Mean Area	17.68



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	35.40	50uL	1	*******		6/11/2020 6:31:33 PM
2	35.38	50uL	1	*******		6/11/2020 6:33:37 PM

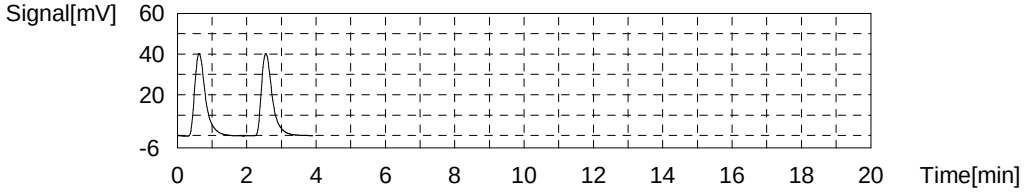
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 35.39



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	87.83	50uL	1	*******		6/11/2020 6:42:16 PM
2	87.27	50uL	1	*******		6/11/2020 6:44:24 PM

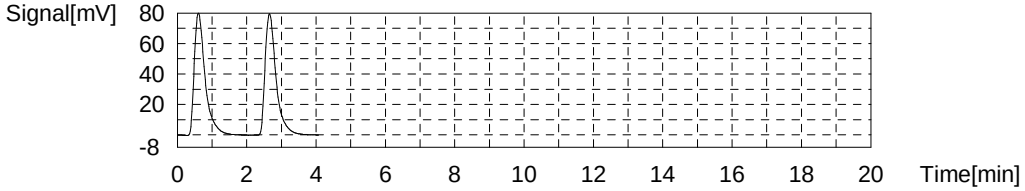
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 87.55



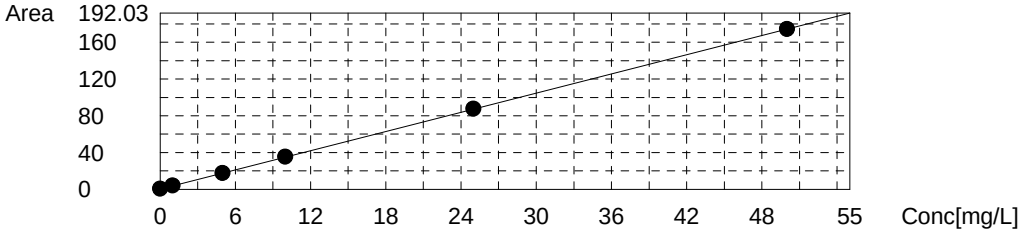
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	174.9	50uL	1	*******		6/11/2020 6:53:09 PM
2	174.2	50uL	1	*******		6/11/2020 6:55:21 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 174.6



Slope: 3.483
Intercept 0.4475
r^2 1.0000
r 1.0000
Zero Shift No



Sample

Sample Name: icv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

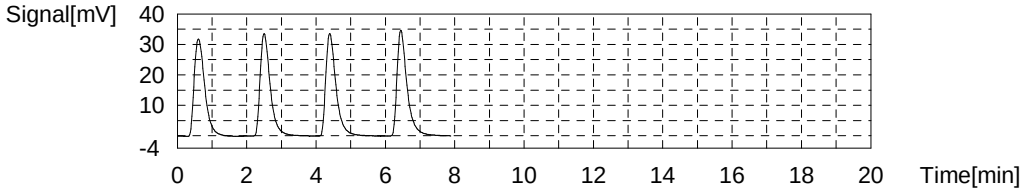
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.75mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.57	19.56mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:04:00 PM
2	68.27	19.48mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:06:03 PM
3	69.48	19.82mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:08:16 PM
4	70.60	20.14mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:10:28 PM

Mean Area 69.23
Mean Conc. 19.75mg/L



Sample

Sample Name: icb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

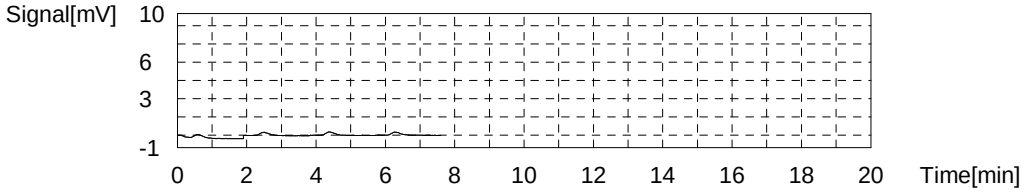
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.00657mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3989	-0.01395mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:18:59 PM
2	0.4363	-0.00321mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:21:03 PM
3	0.4581	0.00305mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:23:07 PM
4	0.4051	-0.01217mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:25:11 PM

Mean Area 0.4246
Mean Conc. -0.00657mg/L



Sample

Sample Name: LCS 280-498352/1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

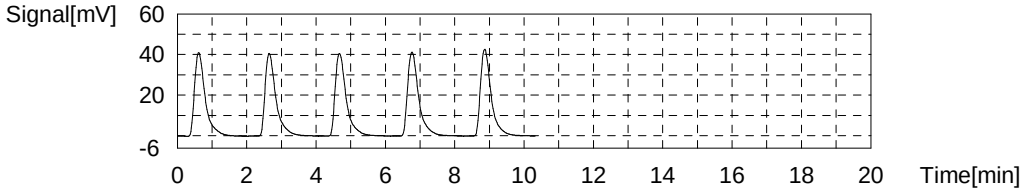
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.26	25.50mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:33:52 PM
2	88.89	25.40mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:36:02 PM
3	90.43	25.84mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:38:17 PM
4	92.95	26.56mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:40:33 PM
5	92.43	26.41mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:42:47 PM

Mean Area 90.25
Mean Conc. 25.79mg/L



Sample

Sample Name: LCSD 280-498352/2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

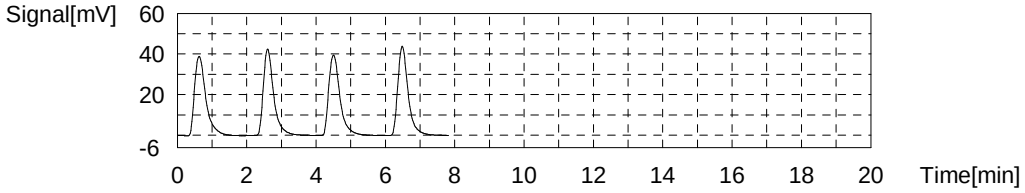
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.60	25.60mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:51:21 PM
2	88.46	25.27mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:53:25 PM
3	90.21	25.78mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:55:33 PM
4	91.51	26.15mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 7:57:42 PM

Mean Area 89.94
Mean Conc. 25.70mg/L



Sample

Sample Name: MB 280-498352/3-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

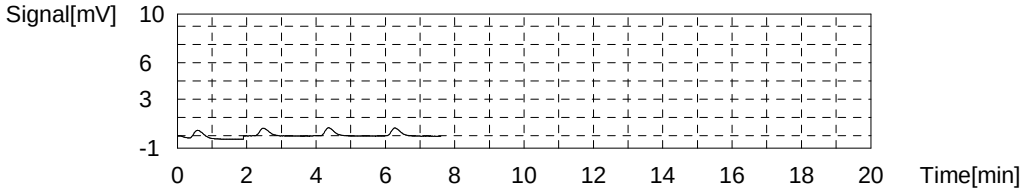
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2144mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.247	0.2296mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:06:13 PM
2	1.172	0.2080mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:08:17 PM
3	1.180	0.2103mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:10:21 PM
4	1.177	0.2095mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:12:25 PM

Mean Area 1.194
Mean Conc. 0.2144mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

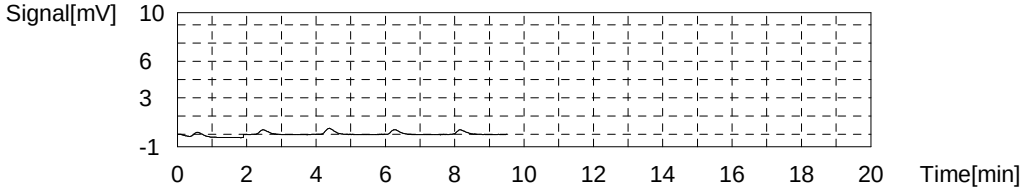
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05763mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5620	0.03289mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:20:56 PM
2	0.6654	0.06258mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:23:00 PM
3	0.8676	0.1206mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:25:04 PM
4	0.6989	0.07220mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:27:08 PM
5	0.6664	0.06286mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:29:12 PM

Mean Area 0.6482
Mean Conc. 0.05763mg/L



Sample

Sample Name: 280-136897-C-1-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

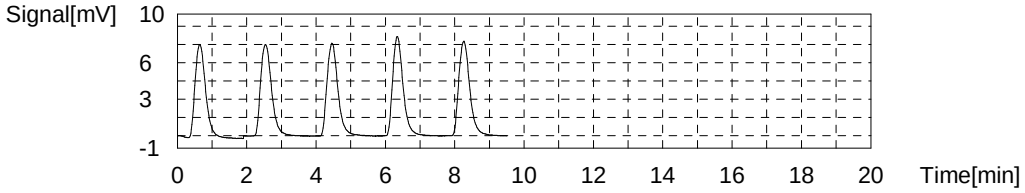
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.709mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.23	4.532mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:37:42 PM
2	16.53	4.618mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:39:46 PM
3	16.74	4.678mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:41:50 PM
4	17.03	4.762mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:43:54 PM
5	17.09	4.779mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:45:58 PM

Mean Area 16.85
Mean Conc. 4.709mg/L



Sample

Sample Name: 280-136897-C-1-C MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

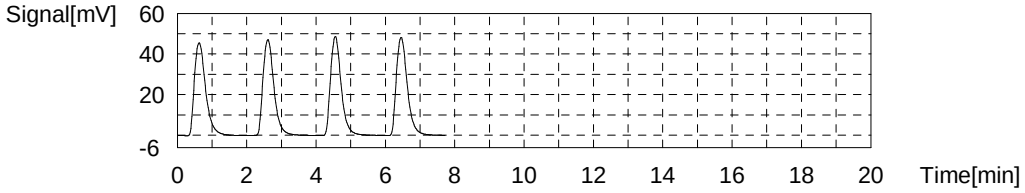
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.5	29.88mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:54:32 PM
2	104.4	29.85mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:56:39 PM
3	105.3	30.11mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 8:58:43 PM
4	107.4	30.71mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:00:47 PM

Mean Area 105.4
Mean Conc. 30.14mg/L



Sample

Sample Name: 280-136897-C-1-D MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

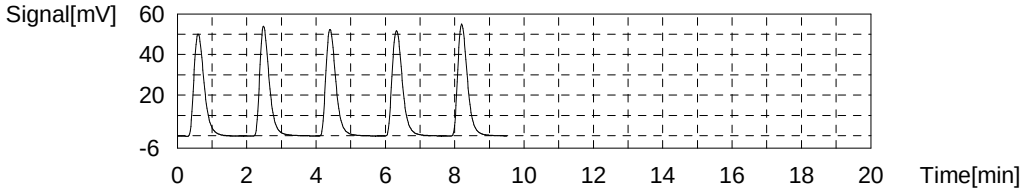
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.30mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	105.0	30.02mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:09:18 PM
2	104.2	29.79mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:11:22 PM
3	106.3	30.40mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:13:26 PM
4	109.3	31.26mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:15:30 PM
5	108.4	31.00mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:17:34 PM

Mean Area 106.0
Mean Conc. 30.30mg/L



Sample

Sample Name: 280-136897-B-1-F DU
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

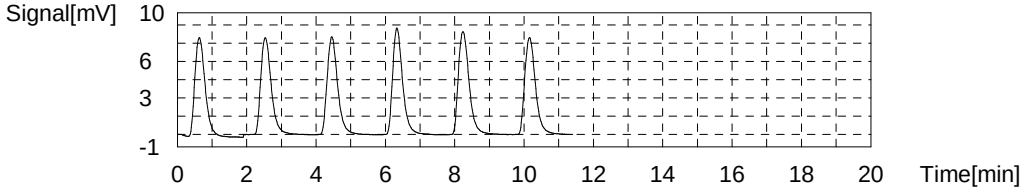
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.735mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.75	4.681mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:26:04 PM
2	16.69	4.664mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:28:08 PM
3	17.03	4.762mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:30:12 PM
4	17.54	4.908mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:32:16 PM
5	18.25	5.112mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:34:20 PM
6	17.28	4.833mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:36:24 PM

Mean Area 16.94
Mean Conc. 4.735mg/L



Sample

Sample Name: 280-136897-C-2-C
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

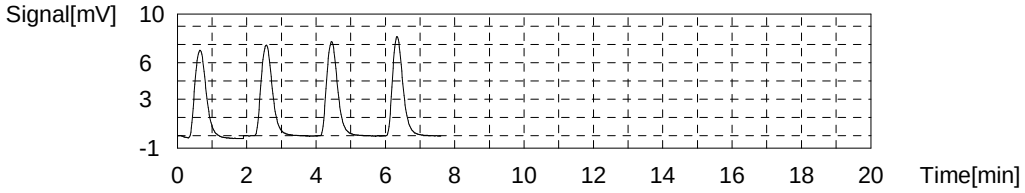
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.734mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.48	4.604mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:44:49 PM
2	16.90	4.724mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:46:53 PM
3	17.13	4.790mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:48:57 PM
4	17.23	4.819mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:51:01 PM

Mean Area 16.94
Mean Conc. 4.734mg/L



Sample

Sample Name: 280-136897-C-3-C
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

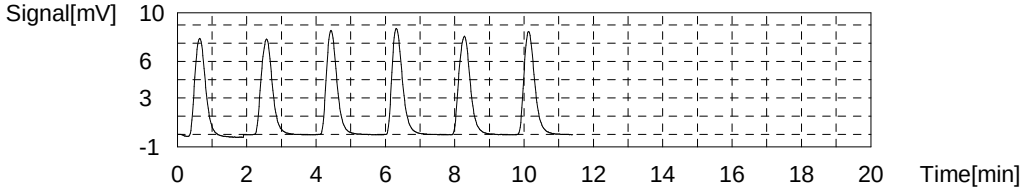
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.155mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.41	4.871mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 9:59:33 PM
2	17.75	4.968mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:01:36 PM
3	18.04	5.052mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:03:40 PM
4	18.53	5.192mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:05:44 PM
5	18.70	5.241mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:07:48 PM
6	18.33	5.135mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:09:52 PM

Mean Area 18.40
Mean Conc. 5.155mg/L



Sample

Sample Name: 280-136897-C-4-C
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

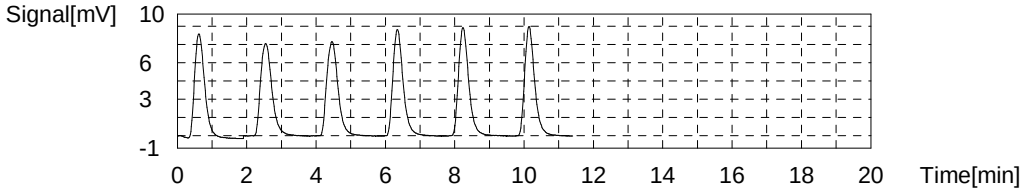
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.028mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.17	4.802mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:18:17 PM
2	17.31	4.842mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:20:21 PM
3	17.58	4.920mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:22:25 PM
4	18.09	5.066mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:24:29 PM
5	18.18	5.092mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:26:33 PM
6	17.98	5.034mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:28:37 PM

Mean Area 17.96
Mean Conc. 5.028mg/L



Sample

Sample Name: 280-137084-D-1-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

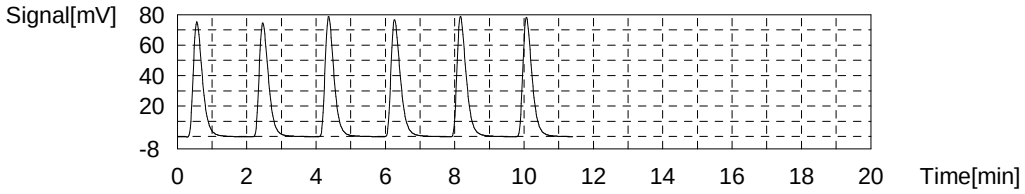
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:41.99mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	141.5	40.50mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:37:02 PM
2	141.3	40.45mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:39:06 PM
3	143.6	41.11mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:41:10 PM
4	147.9	42.34mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:43:14 PM
5	148.4	42.48mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:45:18 PM
6	146.8	42.02mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:47:22 PM

Mean Area 146.7
Mean Conc. 41.99mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

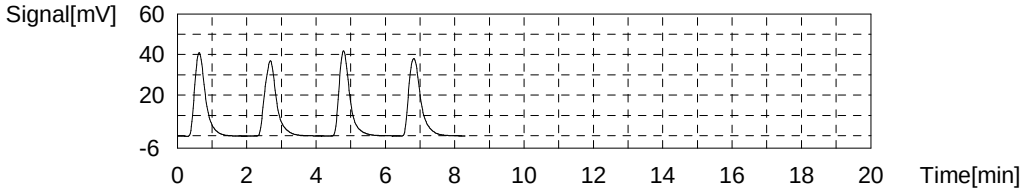
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.19	25.77mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:55:53 PM
2	88.88	25.39mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 10:58:13 PM
3	90.95	25.99mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:00:24 PM
4	92.92	26.55mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:02:41 PM

Mean Area 90.73
Mean Conc. 25.93mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

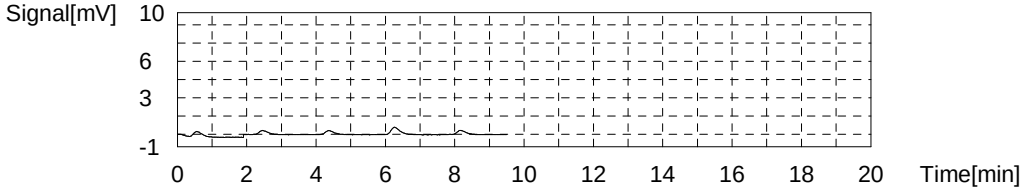
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03857mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6720	0.06447mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:11:12 PM
2	0.5617	0.03280mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:13:16 PM
3	0.5331	0.02459mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:15:20 PM
4	1.043	0.1710mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:17:24 PM
5	0.5604	0.03243mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:19:28 PM

Mean Area 0.5818
Mean Conc. 0.03857mg/L



Sample

Sample Name: 280-137084-D-2-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

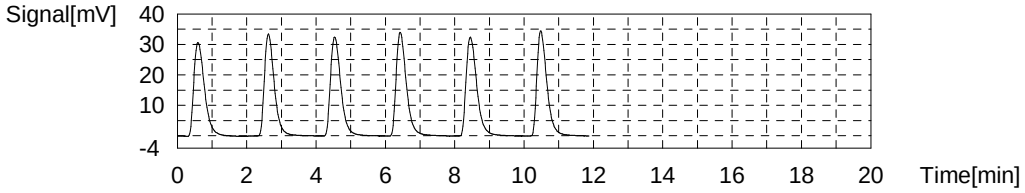
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.90mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	67.31	19.20mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:28:06 PM
2	66.64	19.01mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:30:10 PM
3	68.44	19.52mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:32:14 PM
4	70.49	20.11mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:34:25 PM
5	70.55	20.13mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:36:38 PM
6	69.56	19.85mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:38:46 PM

Mean Area 69.76
Mean Conc. 19.90mg/L



Sample

Sample Name: 280-137084-D-3-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

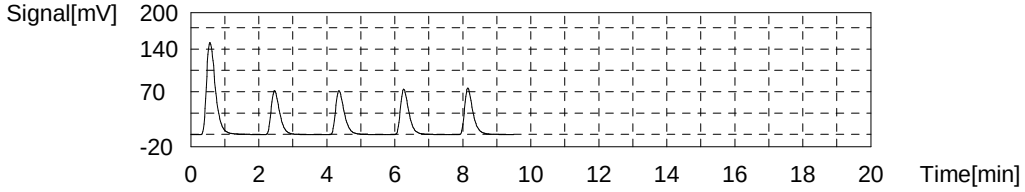
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:154.4mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	279.7	160.4mg/L	50uL	1	R	TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:47:11 PM
2	127.0	151.7mg/L	24uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:49:15 PM
3	129.3	154.4mg/L	24uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:51:19 PM
4	129.5	154.7mg/L	24uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:53:23 PM
5	131.1	156.6mg/L	24uL	1		TOC3.2020_06_11_17_47_35.cal	6/11/2020 11:55:27 PM

Mean Area 129.2
Mean Conc. 154.4mg/L



Sample

Sample Name: 280-137084-D-4-D
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

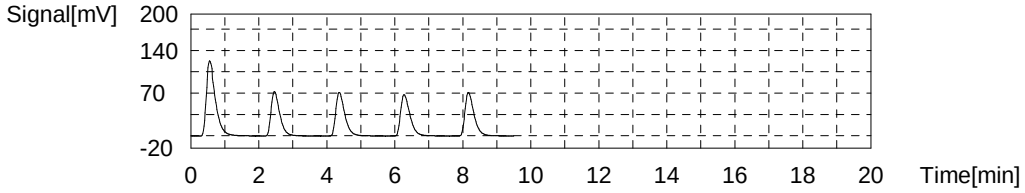
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:63.10mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	227.9	65.31mg/L	50uL	1	R	TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:03:57 AM
2	131.3	62.71mg/L	30uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:06:01 AM
3	133.2	63.62mg/L	30uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:08:05 AM
4	130.8	62.47mg/L	30uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:10:09 AM
5	133.2	63.62mg/L	30uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:12:13 AM

Mean Area 132.1
Mean Conc. 63.10mg/L



Sample

Sample Name: 280-137084-D-5-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

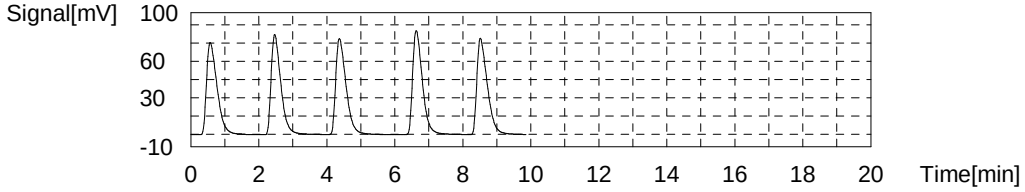
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:95.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	164.3	94.10mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:20:43 AM
2	164.3	94.10mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:22:47 AM
3	167.9	96.17mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:25:12 AM
4	171.6	98.29mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:27:16 AM
5	170.5	97.66mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:29:20 AM

Mean Area 166.8
Mean Conc. 95.51mg/L



Sample

Sample Name: 280-137048-D-1-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

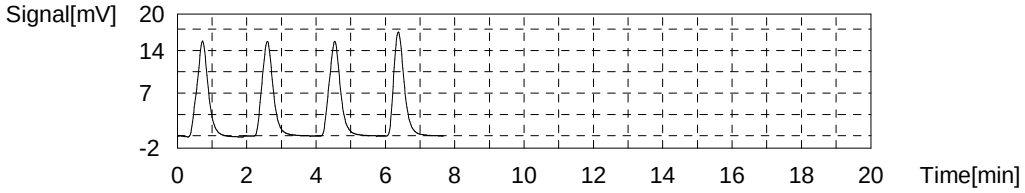
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.10mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.73	10.13mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:37:50 AM
2	34.97	9.913mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:39:56 AM
3	35.40	10.04mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:42:00 AM
4	36.36	10.31mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:44:06 AM

Mean Area 35.61
Mean Conc. 10.10mg/L



Sample

Sample Name: 280-137048-D-1-C MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

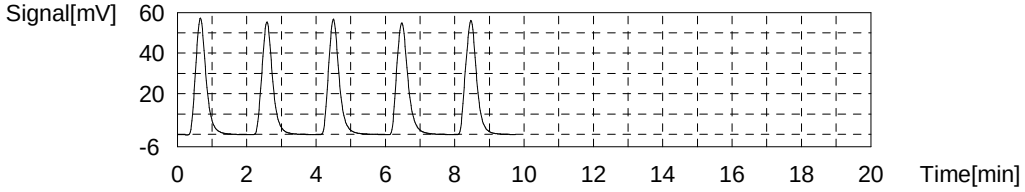
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:35.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	121.2	34.67mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:52:37 AM
2	119.6	34.21mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:54:43 AM
3	122.4	35.02mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:56:52 AM
4	125.6	35.94mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:59:00 AM
5	125.7	35.97mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:01:08 AM

Mean Area 123.7
Mean Conc. 35.40mg/L



Sample

Sample Name: 280-137048-D-1-D MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

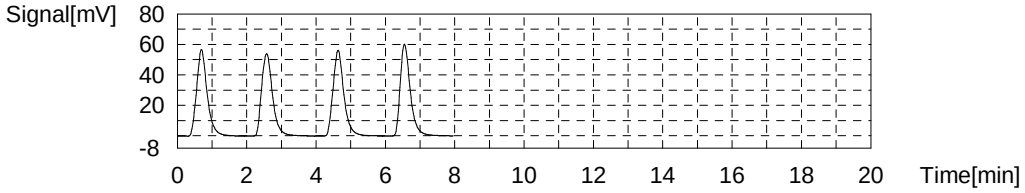
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:34.83mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	121.5	34.76mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:09:39 AM
2	119.4	34.16mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:11:51 AM
3	123.1	35.22mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:13:59 AM
4	123.0	35.19mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:16:11 AM

Mean Area 121.8
Mean Conc. 34.83mg/L



Sample

Sample Name: 280-137048-D-2-B
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

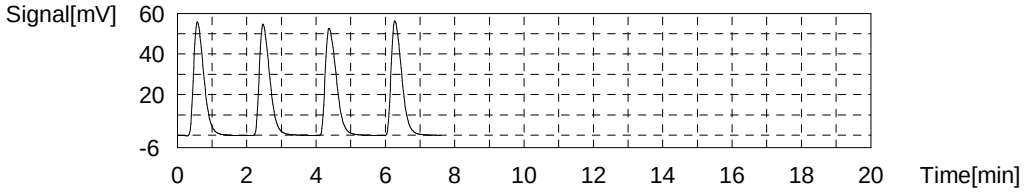
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:67.55mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	116.8	66.82mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:24:42 AM
2	116.0	66.36mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:26:46 AM
3	118.5	67.80mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:28:50 AM
4	121.0	69.23mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:30:54 AM

Mean Area 118.1
Mean Conc. 67.55mg/L



Sample

Sample Name: lcs
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

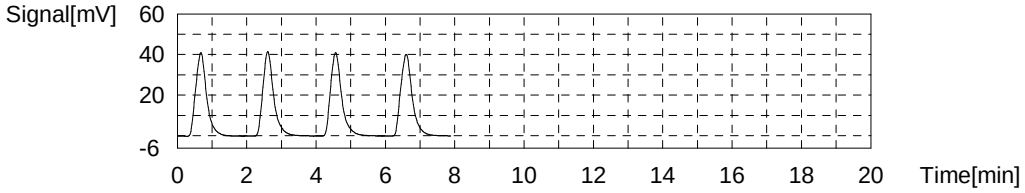
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.22mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.87	25.96mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:39:27 AM
2	90.47	25.85mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:41:35 AM
3	92.16	26.34mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:43:46 AM
4	93.56	26.74mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:45:54 AM

Mean Area 91.77
Mean Conc. 26.22mg/L



Sample

Sample Name: lcsd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

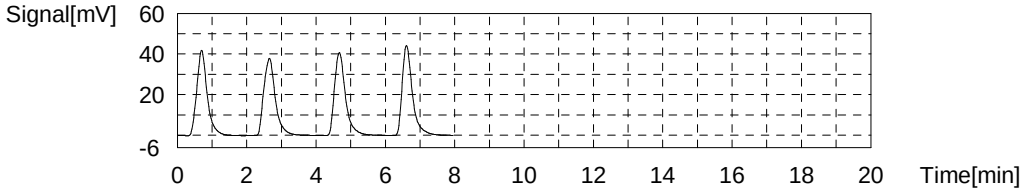
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.92	25.40mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:54:29 AM
2	88.61	25.32mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:56:42 AM
3	90.67	25.91mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:58:49 AM
4	91.62	26.18mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:00:58 AM

Mean Area 89.95
Mean Conc. 25.70mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

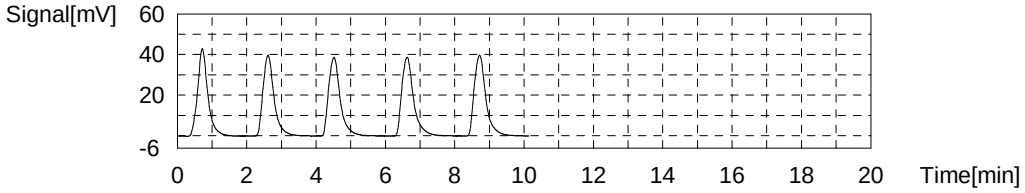
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.23mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.85	25.67mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:09:32 AM
2	88.37	25.25mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:11:36 AM
3	91.16	26.05mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:13:53 AM
4	92.64	26.47mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:16:08 AM
5	93.59	26.75mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:18:23 AM

Mean Area 91.81
Mean Conc. 26.23mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

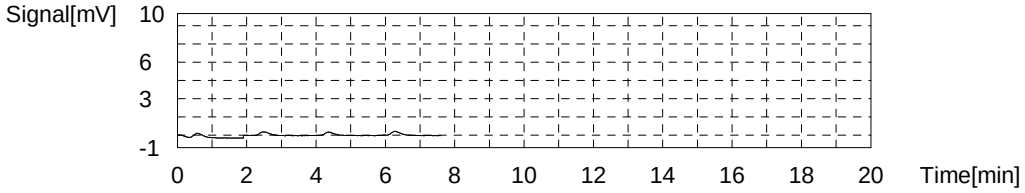
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.02573mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5448	0.02795mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:26:53 AM
2	0.5492	0.02921mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:28:57 AM
3	0.4743	0.00770mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:31:01 AM
4	0.5800	0.03805mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:33:05 AM

Mean Area 0.5371
Mean Conc. 0.02573mg/L



Sample

Sample Name: mb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

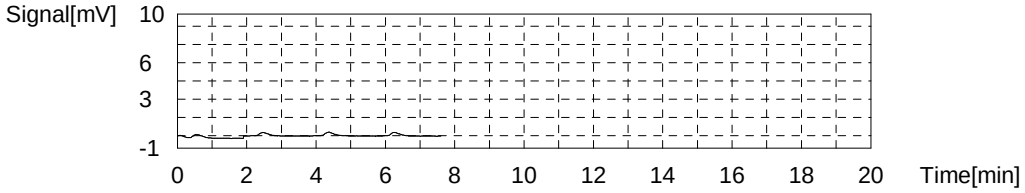
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.00698mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4376	-0.00284mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:41:36 AM
2	0.4775	0.00862mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:43:40 AM
3	0.4971	0.01425mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:45:44 AM
4	0.4749	0.00787mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:47:48 AM

Mean Area 0.4718
Mean Conc. 0.00698mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

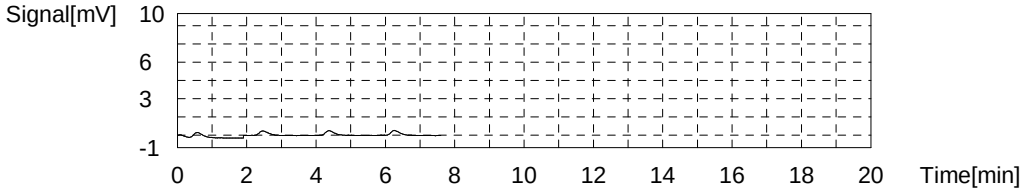
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06452mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6737	0.06496mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:56:19 AM
2	0.6408	0.05551mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:58:23 AM
3	0.6874	0.06889mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:00:27 AM
4	0.6868	0.06872mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:02:31 AM

Mean Area 0.6722
Mean Conc. 0.06452mg/L



Sample

Sample Name: 280-137199-B-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

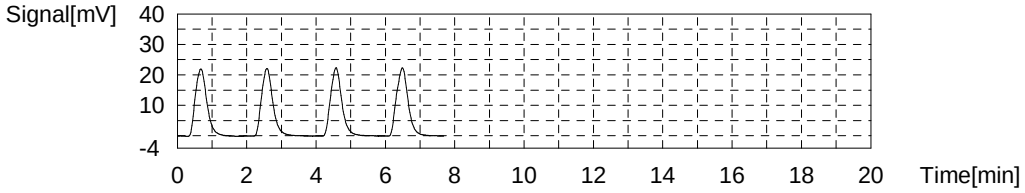
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.60	14.69mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:11:03 AM
2	50.52	14.38mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:13:12 AM
3	50.90	14.49mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:15:16 AM
4	52.53	14.96mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:17:20 AM

Mean Area 51.39
Mean Conc. 14.63mg/L



Sample

Sample Name: ms 280-137199-B-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

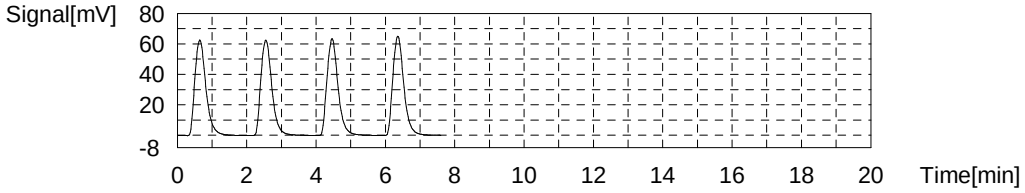
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:40.59mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	140.7	40.27mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:25:52 AM
2	139.3	39.87mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:27:56 AM
3	142.4	40.76mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:30:00 AM
4	144.8	41.45mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:32:04 AM

Mean Area 141.8
Mean Conc. 40.59mg/L



Sample

Sample Name: msd 280-137199-B-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

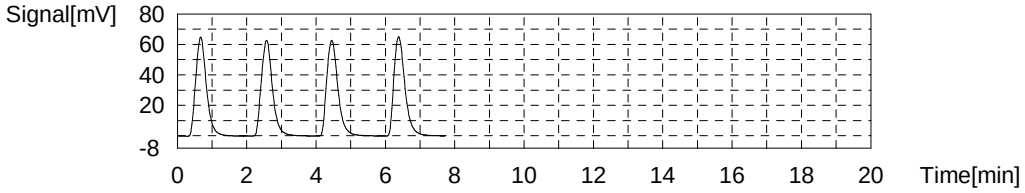
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:40.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	140.8	40.30mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:40:36 AM
2	140.6	40.24mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:42:40 AM
3	142.5	40.79mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:44:47 AM
4	145.9	41.77mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:46:55 AM

Mean Area 142.4
Mean Conc. 40.78mg/L



Sample

Sample Name: 280-137199-C-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

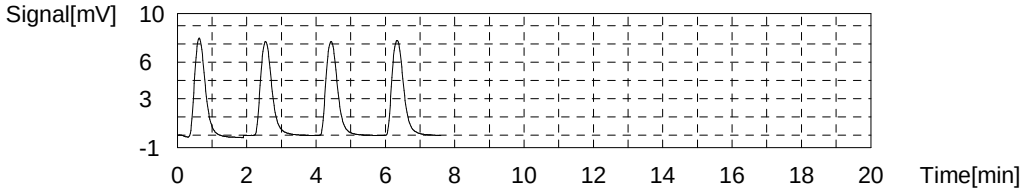
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.007mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.66	4.943mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:55:27 AM
2	17.64	4.937mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:57:31 AM
3	17.88	5.006mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:59:35 AM
4	18.36	5.144mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:01:39 AM

Mean Area 17.88
Mean Conc. 5.007mg/L



Sample

Sample Name: 280-137199-B-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

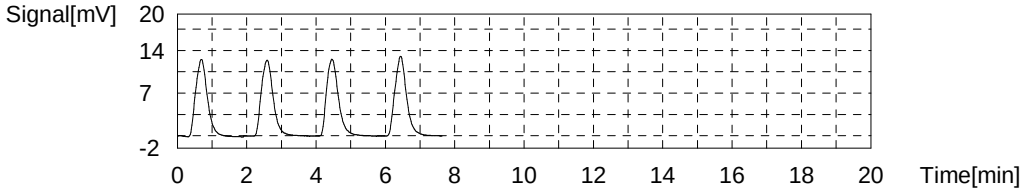
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.545mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.16	8.532mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:10:11 AM
2	29.68	8.394mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:12:15 AM
3	30.19	8.541mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:14:21 AM
4	30.79	8.713mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:16:25 AM

Mean Area 30.21
Mean Conc. 8.545mg/L



Sample

Sample Name: 280-137199-C-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

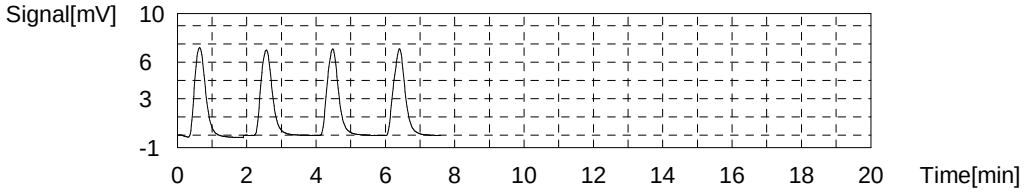
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.537mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.12	4.500mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:24:57 AM
2	16.03	4.475mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:27:01 AM
3	16.22	4.529mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:29:05 AM
4	16.62	4.644mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:31:09 AM

Mean Area 16.25
Mean Conc. 4.537mg/L



Sample

Sample Name: 280-137173-B-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

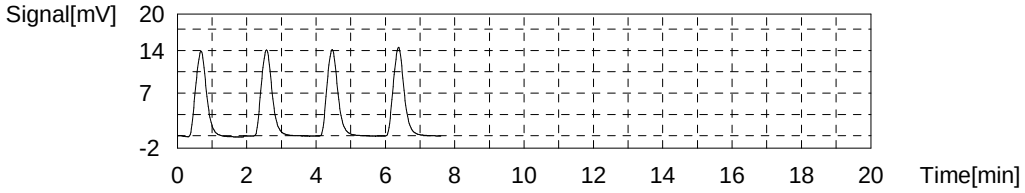
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.818mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.97	8.765mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:39:41 AM
2	30.82	8.721mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:41:45 AM
3	31.06	8.790mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:43:49 AM
4	31.77	8.994mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:45:53 AM

Mean Area 31.16
Mean Conc. 8.818mg/L



Sample

Sample Name: 280-137173-B-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

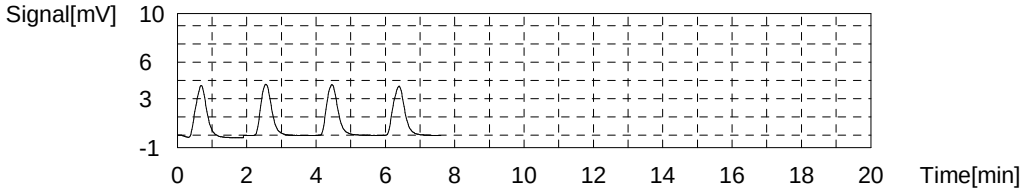
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.552mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.453	2.586mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:54:25 AM
2	9.150	2.499mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:56:29 AM
3	9.347	2.555mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 4:58:33 AM
4	9.391	2.568mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:00:37 AM

Mean Area 9.335
Mean Conc. 2.552mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

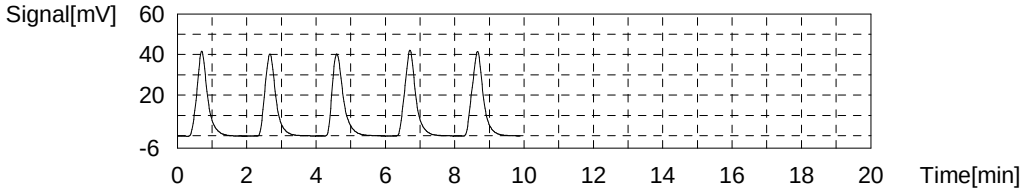
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.36mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.21	25.78mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:09:15 AM
2	88.55	25.30mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:11:23 AM
3	91.20	26.06mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:13:35 AM
4	93.47	26.71mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:15:42 AM
5	94.09	26.89mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:17:48 AM

Mean Area 92.24
Mean Conc. 26.36mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

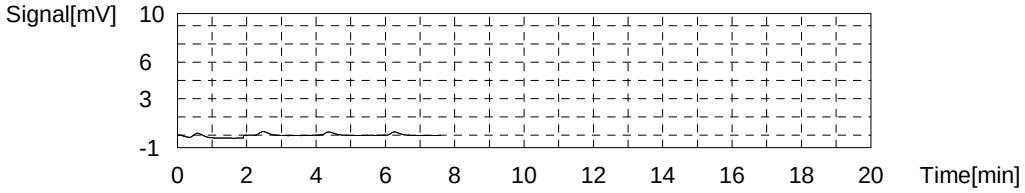
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.01510mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5477	0.02878mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:26:19 AM
2	0.5468	0.02852mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:28:23 AM
3	0.4476	0.00004mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:30:27 AM
4	0.4582	0.00308mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:32:31 AM

Mean Area 0.5001
Mean Conc. 0.01510mg/L



Sample

Sample Name: 280-137173-B-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

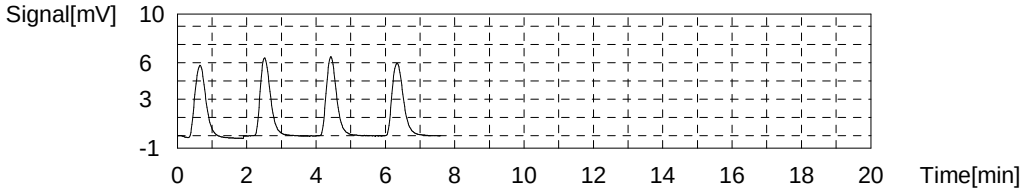
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.704mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.18	3.656mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:41:03 AM
2	13.14	3.645mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:43:07 AM
3	13.40	3.719mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:45:11 AM
4	13.67	3.797mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:47:15 AM

Mean Area 13.35
Mean Conc. 3.704mg/L



Sample

Sample Name: 280-137257-B-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

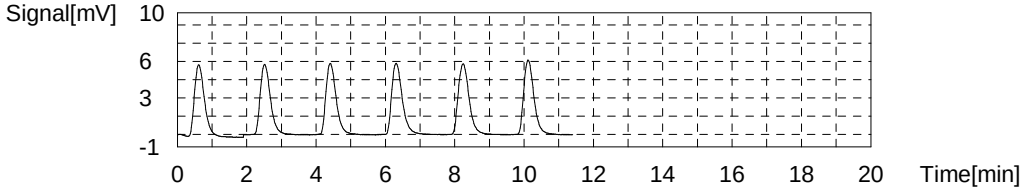
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.436mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.73	3.240mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:55:47 AM
2	11.76	3.248mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:57:51 AM
3	12.03	3.326mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 5:59:55 AM
4	12.44	3.444mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:01:59 AM
5	12.61	3.492mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:04:03 AM
6	12.58	3.484mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:06:07 AM

Mean Area 12.42
Mean Conc. 3.436mg/L



Sample

Sample Name: 280-137257-B-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

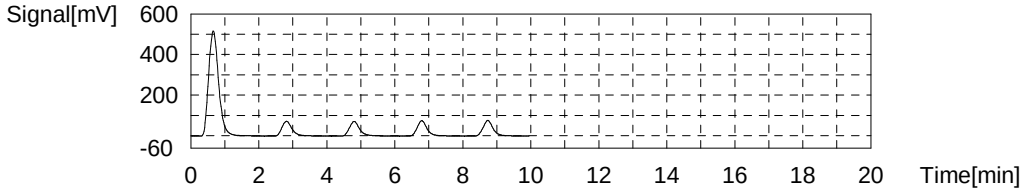
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:611.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1069	613.7mg/L	50uL	1	R	TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:14:47 AM
2	150.6	603.6mg/L	50uL	7		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:22:23 AM
3	151.0	605.2mg/L	50uL	7		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:24:32 AM
4	151.9	608.9mg/L	50uL	7		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:26:38 AM
5	156.3	626.5mg/L	50uL	7		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:28:42 AM

Mean Area 152.4
Mean Conc. 611.1mg/L



Sample

Sample Name: 280-137257-B-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

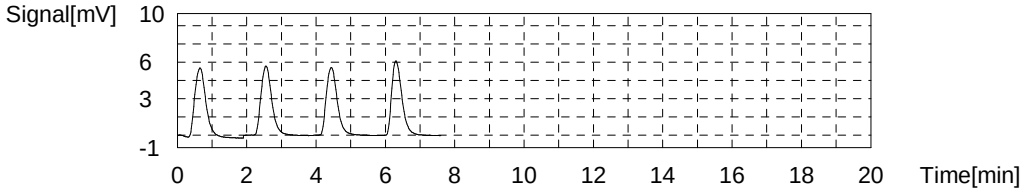
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.443mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.59	3.487mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:37:14 AM
2	12.33	3.412mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:39:18 AM
3	12.19	3.372mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:41:22 AM
4	12.64	3.501mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:43:26 AM

Mean Area 12.44
Mean Conc. 3.443mg/L



Sample

Sample Name: 280-137257-B-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

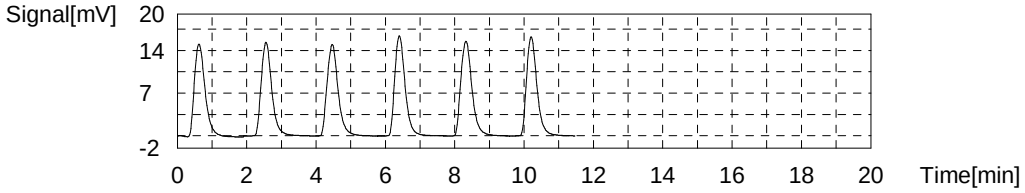
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.711mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.77	9.281mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:51:58 AM
2	32.63	9.241mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:54:02 AM
3	33.58	9.514mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:56:10 AM
4	34.31	9.724mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 6:58:14 AM
5	35.02	9.927mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:00:18 AM
6	34.16	9.681mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:02:22 AM

Mean Area 34.27
Mean Conc. 9.711mg/L



Sample

Sample Name: ms 280-137257-B-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

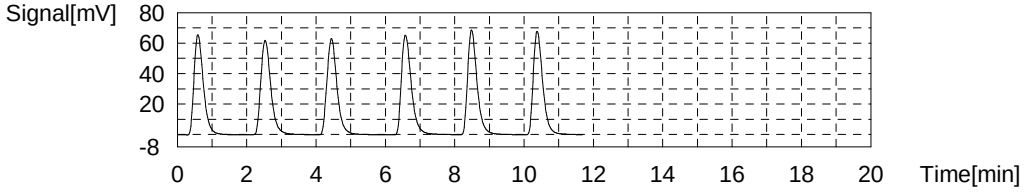
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:37.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	124.6	35.65mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:10:47 AM
2	125.3	35.85mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:12:51 AM
3	128.3	36.71mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:15:12 AM
4	130.6	37.37mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:17:16 AM
5	130.9	37.46mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:19:20 AM
6	129.8	37.14mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:21:24 AM

Mean Area 129.9
Mean Conc. 37.17mg/L



Sample

Sample Name: msd 280-137257-B-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

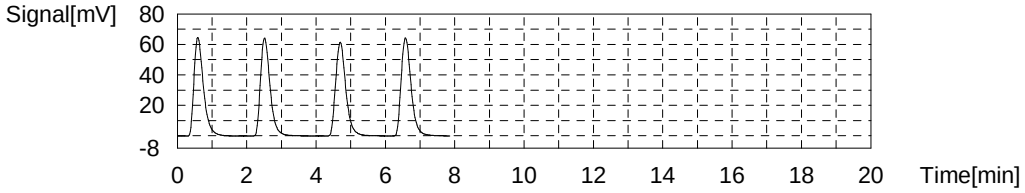
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:36.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	125.2	35.82mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:29:49 AM
2	124.6	35.65mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:32:08 AM
3	127.3	36.43mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:34:12 AM
4	129.6	37.09mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:36:16 AM

Mean Area 126.7
Mean Conc. 36.25mg/L



Sample

Sample Name: 280-137360-A-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

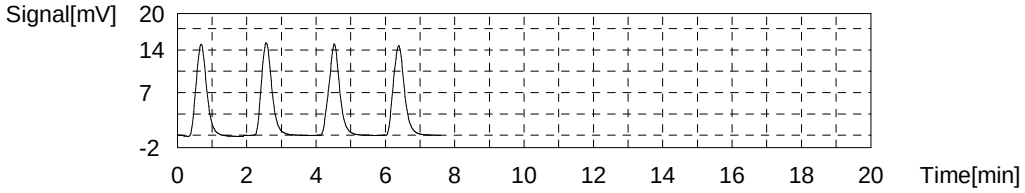
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.238mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.50	9.204mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:44:48 AM
2	32.10	9.089mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:46:52 AM
3	32.73	9.270mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:48:56 AM
4	33.15	9.390mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:51:00 AM

Mean Area 32.62
Mean Conc. 9.238mg/L



Sample

Sample Name: 280-137172-B-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

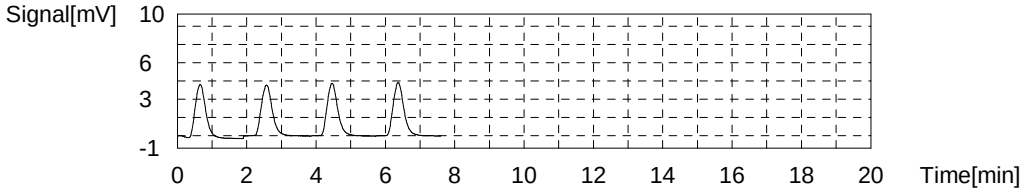
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.504mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.150	2.499mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 7:59:32 AM
2	9.033	2.465mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:01:36 AM
3	9.144	2.497mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:03:40 AM
4	9.337	2.553mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:05:44 AM

Mean Area 9.166
Mean Conc. 2.504mg/L



Sample

Sample Name: 280-137172-B-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

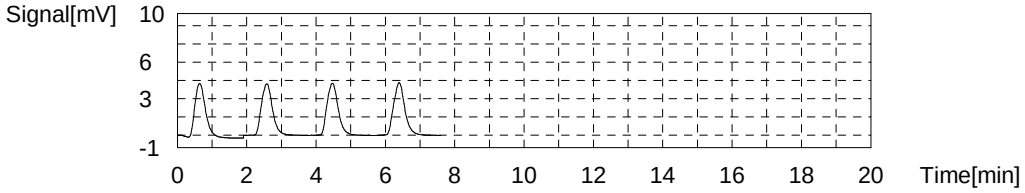
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.594mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.368	2.562mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:14:16 AM
2	9.330	2.551mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:16:20 AM
3	9.580	2.622mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:18:24 AM
4	9.640	2.640mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:20:28 AM

Mean Area 9.479
Mean Conc. 2.594mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

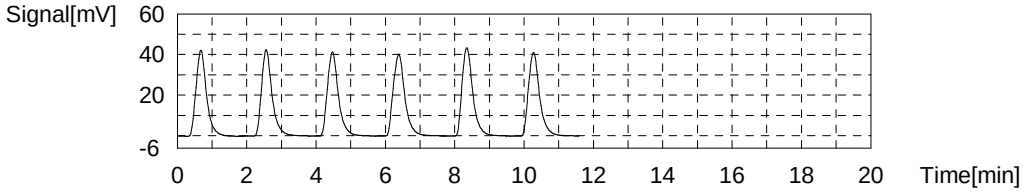
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.66mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.87	25.68mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:29:00 AM
2	89.83	25.67mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:31:04 AM
3	91.77	26.22mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:33:08 AM
4	94.53	27.02mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:35:18 AM
5	94.19	26.92mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:37:22 AM
6	92.71	26.49mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:39:31 AM

Mean Area 93.30
Mean Conc. 26.66mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

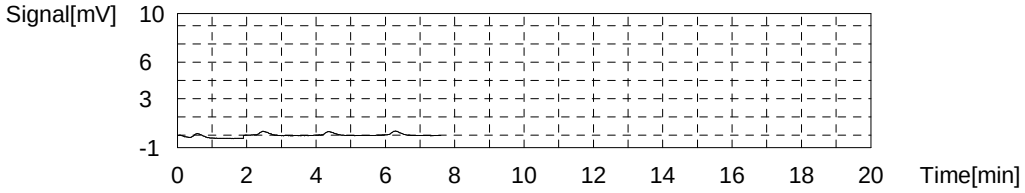
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.02262mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5020	0.01566mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:47:56 AM
2	0.5398	0.02651mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:50:00 AM
3	0.5105	0.01810mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:52:04 AM
4	0.5527	0.03021mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 8:54:08 AM

Mean Area 0.5263
Mean Conc. 0.02262mg/L



Sample

Sample Name: 280-137172-B-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

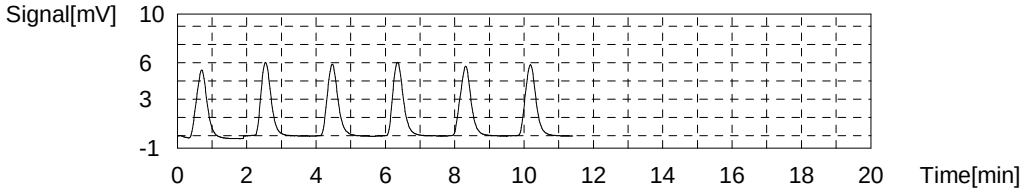
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.488mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.98	3.312mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:02:40 AM
2	12.12	3.352mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:04:44 AM
3	12.68	3.513mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:06:48 AM
4	12.77	3.538mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:08:52 AM
5	12.45	3.447mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:10:56 AM
6	12.48	3.455mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:13:00 AM

Mean Area 12.60
Mean Conc. 3.488mg/L



Sample

Sample Name: 280-137172-B-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

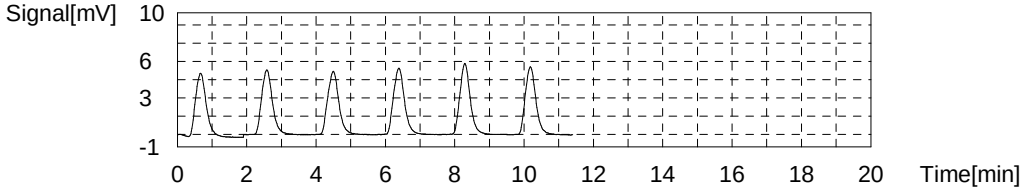
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.279mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.24	3.099mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:21:25 AM
2	11.46	3.162mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:23:29 AM
3	11.59	3.200mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:25:33 AM
4	11.98	3.312mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:27:37 AM
5	12.05	3.332mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:29:41 AM
6	11.84	3.271mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:31:45 AM

Mean Area 11.87
Mean Conc. 3.279mg/L



Sample

Sample Name: 280-137172-B-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

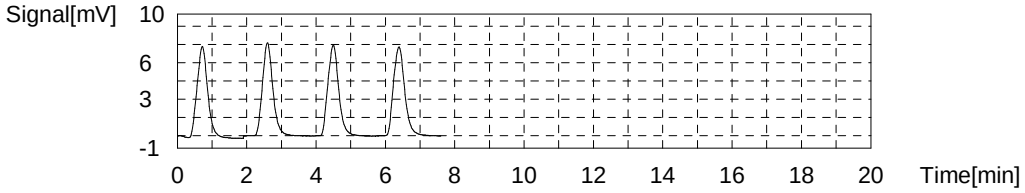
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.515mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.94	4.449mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:40:11 AM
2	15.91	4.440mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:42:15 AM
3	16.29	4.549mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:44:19 AM
4	16.54	4.621mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:46:23 AM

Mean Area 16.17
Mean Conc. 4.515mg/L



Sample

Sample Name: 280-137172-B-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

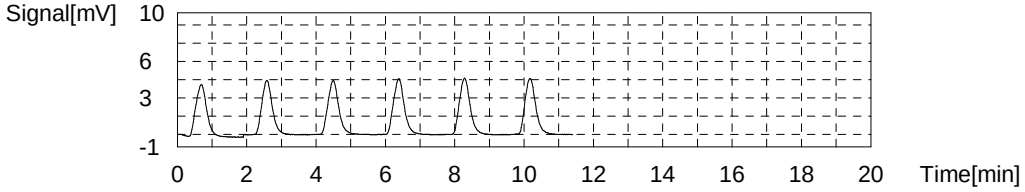
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.700mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.165	2.503mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:54:56 AM
2	9.353	2.557mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:57:00 AM
3	9.599	2.628mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 9:59:04 AM
4	9.965	2.733mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:01:08 AM
5	9.989	2.740mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:03:12 AM
6	9.848	2.699mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:05:16 AM

Mean Area 9.850
Mean Conc. 2.700mg/L



Sample

Sample Name: 280-137172-B-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

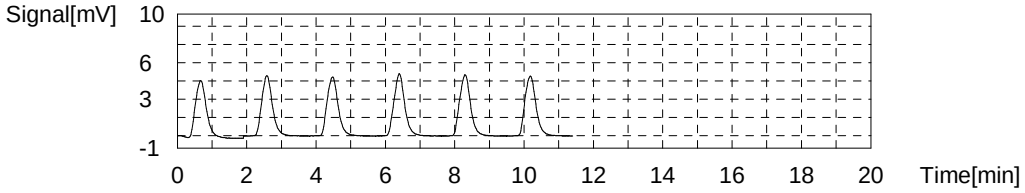
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.981mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.31	2.832mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:13:42 AM
2	10.50	2.887mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:15:46 AM
3	10.63	2.924mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:17:50 AM
4	10.91	3.004mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:19:54 AM
5	10.95	3.016mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:21:58 AM
6	10.83	2.981mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:24:02 AM

Mean Area 10.83
Mean Conc. 2.981mg/L



Sample

Sample Name: 280-137172-B-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

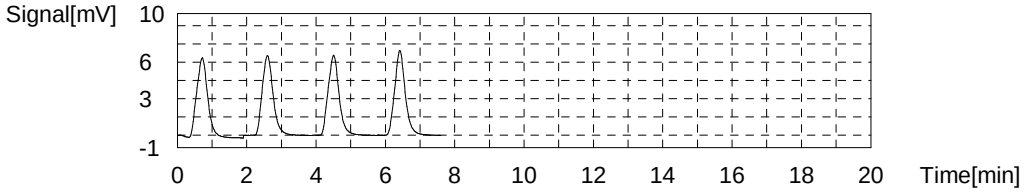
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.037mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.32	3.983mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:32:28 AM
2	14.30	3.978mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:34:32 AM
3	14.56	4.052mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:36:36 AM
4	14.84	4.133mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:38:40 AM

Mean Area 14.50
Mean Conc. 4.037mg/L



Sample

Sample Name: lcs
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

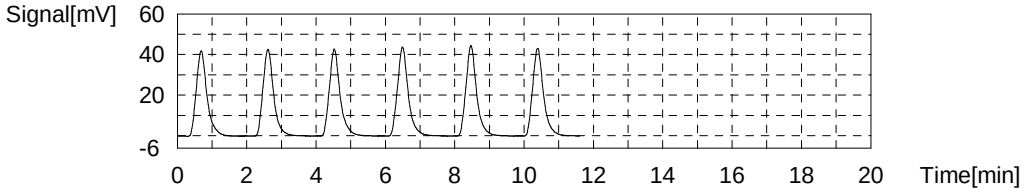
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.07mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.18	26.05mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:47:15 AM
2	90.99	26.00mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:49:19 AM
3	93.20	26.63mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:51:26 AM
4	95.38	27.26mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:53:35 AM
5	95.86	27.40mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:55:41 AM
6	94.50	27.01mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 10:57:45 AM

Mean Area 94.73
Mean Conc. 27.07mg/L



Sample

Sample Name: mb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

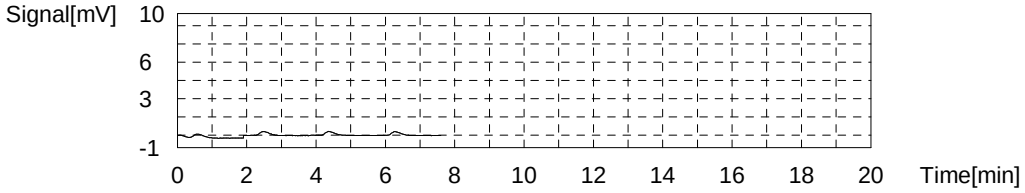
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.02882mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5128	0.01876mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:06:11 AM
2	0.5950	0.04236mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:08:15 AM
3	0.5475	0.02872mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:10:19 AM
4	0.5361	0.02545mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:12:23 AM

Mean Area 0.5478
Mean Conc. 0.02882mg/L



Sample

Sample Name: tic
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

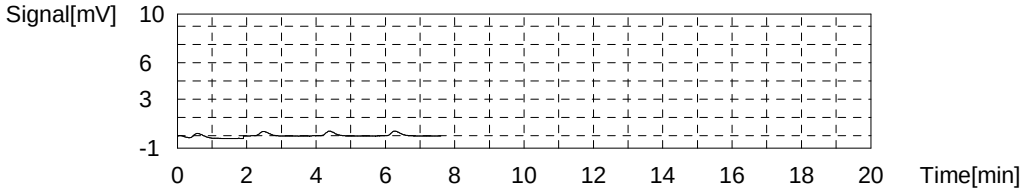
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06648mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6708	0.06413mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:20:56 AM
2	0.6742	0.06510mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:23:00 AM
3	0.6765	0.06576mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:25:04 AM
4	0.6945	0.07093mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:27:08 AM

Mean Area 0.6790
Mean Conc. 0.06648mg/L



Sample

Sample Name: 280-137172-B-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

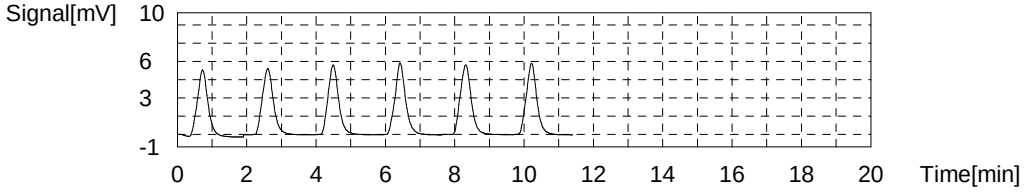
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.429mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.56	3.191mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:35:41 AM
2	11.99	3.314mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:37:45 AM
3	12.14	3.357mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:39:49 AM
4	12.53	3.469mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:41:53 AM
5	12.49	3.458mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:43:57 AM
6	12.39	3.429mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:46:01 AM

Mean Area 12.39
Mean Conc. 3.429mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

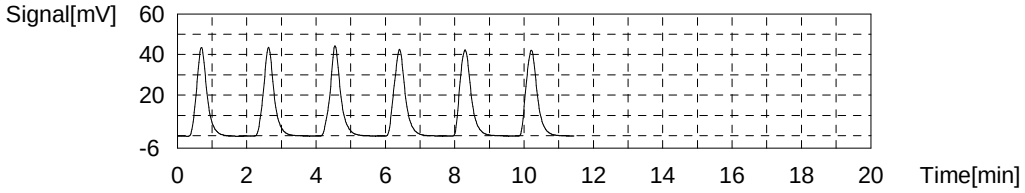
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.46	26.13mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:54:27 AM
2	91.86	26.25mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:56:31 AM
3	93.93	26.84mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 11:58:35 AM
4	96.26	27.51mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:00:41 PM
5	96.03	27.45mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:02:45 PM
6	95.23	27.22mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:04:49 PM

Mean Area 95.36
Mean Conc. 27.25mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

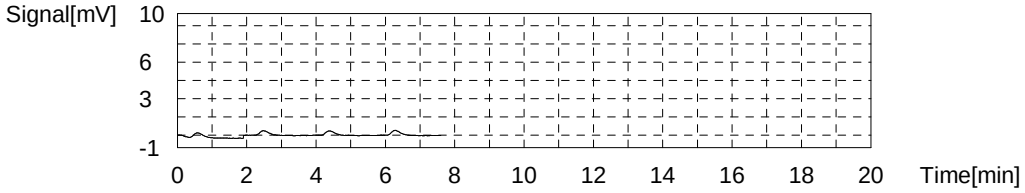
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06047mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6195	0.04940mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:13:15 PM
2	0.6789	0.06645mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:15:19 PM
3	0.6441	0.05646mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:17:23 PM
4	0.6898	0.06958mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:19:27 PM

Mean Area 0.6581
Mean Conc. 0.06047mg/L



Sample

Sample Name: ms 280-137172-B-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

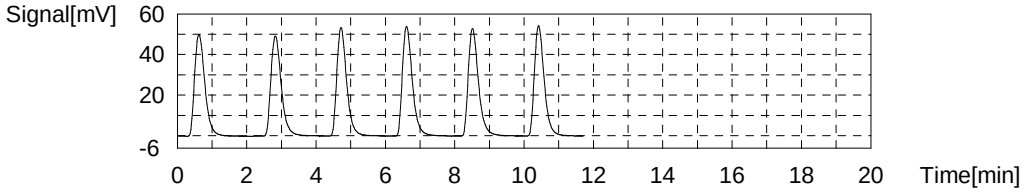
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.0	29.74mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:28:18 PM
2	103.5	29.59mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:30:22 PM
3	105.8	30.25mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:32:26 PM
4	108.4	31.00mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:34:30 PM
5	109.2	31.23mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:36:34 PM
6	107.6	30.77mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:38:38 PM

Mean Area 107.8
Mean Conc. 30.81mg/L



Sample

Sample Name: msd 280-137172-B-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

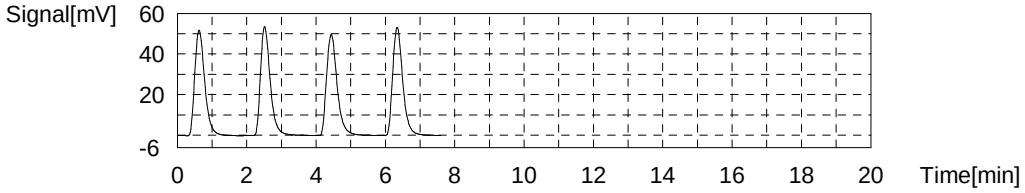
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.6	29.91mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:47:04 PM
2	104.7	29.94mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:49:08 PM
3	106.5	30.45mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:51:12 PM
4	108.4	31.00mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 12:53:16 PM

Mean Area 106.1
Mean Conc. 30.32mg/L



Sample

Sample Name: 280-137172-B-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

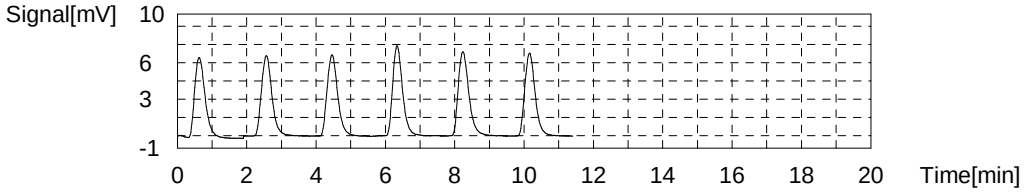
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.037mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.75	3.820mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:01:49 PM
2	13.89	3.860mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:03:53 PM
3	14.31	3.981mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:05:57 PM
4	14.66	4.081mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:08:01 PM
5	14.77	4.113mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:10:05 PM
6	14.28	3.972mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:12:09 PM

Mean Area 14.51
Mean Conc. 4.037mg/L



Sample

Sample Name: 280-137172-B-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

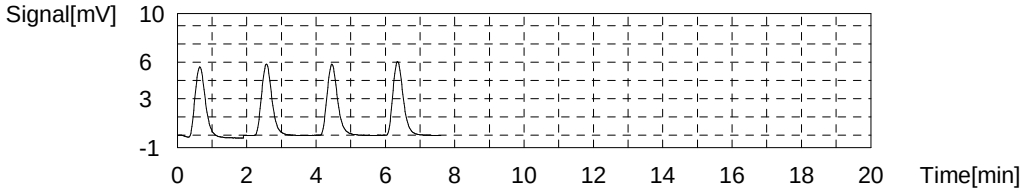
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.403mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.00	3.317mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:20:35 PM
2	12.26	3.392mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:22:39 PM
3	12.36	3.421mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:24:43 PM
4	12.57	3.481mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:26:47 PM

Mean Area 12.30
Mean Conc. 3.403mg/L



Sample

Sample Name: 280-137172-B-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

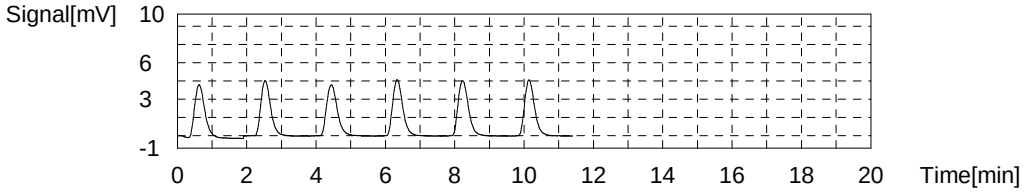
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.532mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.845	2.411mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:35:20 PM
2	8.881	2.422mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:37:24 PM
3	9.076	2.478mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:39:28 PM
4	9.384	2.566mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:41:32 PM
5	9.390	2.568mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:43:36 PM
6	9.204	2.514mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:45:40 PM

Mean Area 9.264
Mean Conc. 2.532mg/L



Sample

Sample Name: 280-137172-B-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

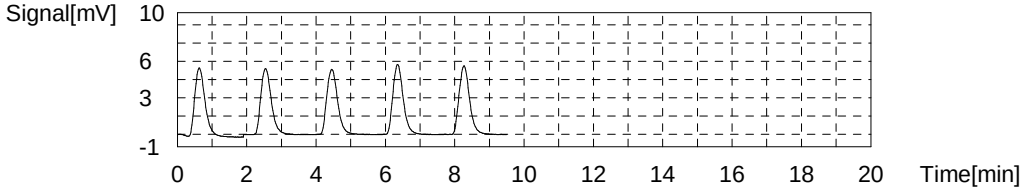
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.212mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.56	3.191mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:54:06 PM
2	11.46	3.162mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:56:10 PM
3	11.60	3.202mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 1:58:14 PM
4	12.00	3.317mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:00:18 PM
5	11.92	3.294mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:02:22 PM

Mean Area 11.64
Mean Conc. 3.212mg/L



Sample

Sample Name: 280-137172-B-14
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

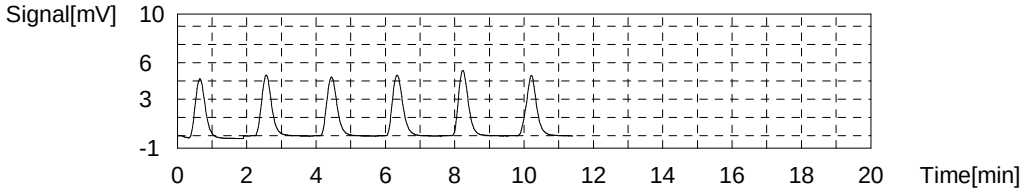
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.829mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.602	2.629mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:10:54 PM
2	10.01	2.746mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:12:58 PM
3	9.948	2.728mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:15:02 PM
4	10.49	2.884mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:17:06 PM
5	10.51	2.889mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:19:10 PM
6	10.19	2.798mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:21:14 PM

Mean Area 10.30
Mean Conc. 2.829mg/L



Sample

Sample Name: 280-137172-B-15
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

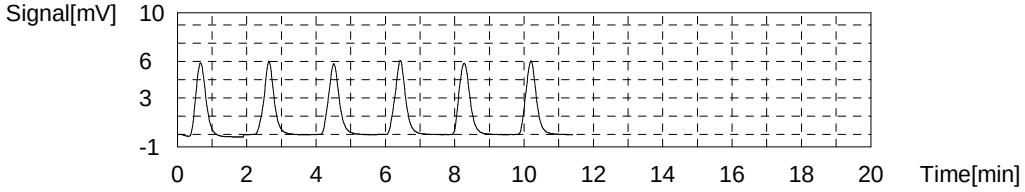
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.523mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.20	3.375mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:29:40 PM
2	12.15	3.360mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:31:44 PM
3	12.45	3.447mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:33:48 PM
4	12.82	3.553mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:35:52 PM
5	12.86	3.564mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:37:56 PM
6	12.73	3.527mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:40:00 PM

Mean Area 12.72
Mean Conc. 3.523mg/L



Sample

Sample Name: 280-137172-B-16
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

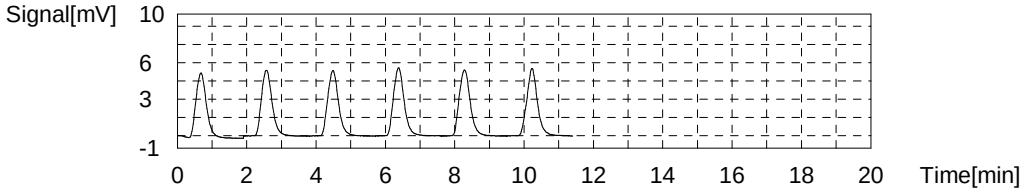
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.265mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.09	3.056mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:48:27 PM
2	11.45	3.159mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:50:31 PM
3	11.61	3.205mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:52:35 PM
4	11.99	3.314mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:54:39 PM
5	11.94	3.300mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:56:43 PM
6	11.73	3.240mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 2:58:47 PM

Mean Area 11.82
Mean Conc. 3.265mg/L



Sample

Sample Name: ccv
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

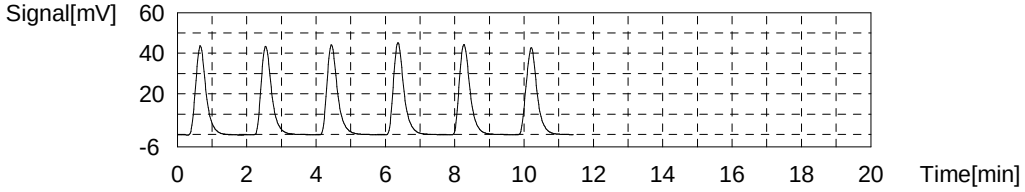
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.81	26.23mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:07:14 PM
2	91.98	26.28mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:09:18 PM
3	94.24	26.93mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:11:23 PM
4	95.85	27.39mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:13:27 PM
5	96.13	27.48mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:15:31 PM
6	95.06	27.17mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:17:35 PM

Mean Area 95.32
Mean Conc. 27.24mg/L



Sample

Sample Name: ccb
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

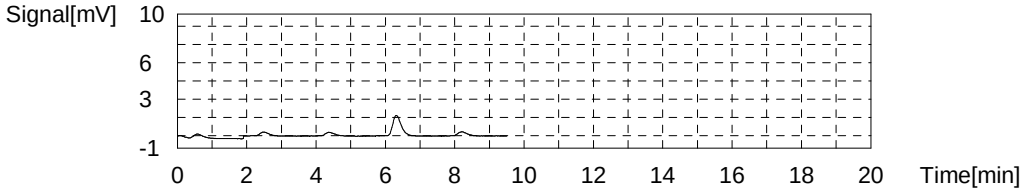
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.02878mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5714	0.03558mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:26:02 PM
2	0.5341	0.02487mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:28:06 PM
3	0.5120	0.01853mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:30:10 PM
4	2.869	0.6953mg/L	50uL	1	E	TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:32:14 PM
5	0.5733	0.03613mg/L	50uL	1		TOC3.2020_06_11_17_47_35.cal	6/12/2020 3:34:18 PM

Mean Area	0.5477
Mean Conc.	0.02878mg/L



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	Analysis	Sample Name	Manua	Result	Notes	Status	Date / Time
1*	NPOC	icv	1.000	✓		Defined	
2*	NPOC	icb	1.000	✓		Defined	
3*	NPOC	LCS 280-498352/1-A	1.000	✓		Defined	
4*	NPOC	LCSD 280-498352/2-A	1.000	✓		Defined	
5*	NPOC	MB 280-498352/3-A	1.000	✓		Defined	
6*	NPOC	tic	1.000	✓		Defined	
7*	NPOC	280-136897-C-1-B	1.000	5		Defined	
8*	NPOC	280-136897-C-1-C MS	1.000	5		Defined	
9*	NPOC	280-136897-C-1-D MS	1.000	5		Defined	
10*	NPOC	280-136897-B-1-F DU	1.000	5		Defined	
11*	NPOC	280-136897-C-2-C	1.000	5		Defined	
12*	NPOC	280-136897-C-3-C	1.000	5		Defined	
13*	NPOC	280-136897-C-4-C	1.000	5		Defined	
14*	NPOC	280-137084-D-1-B	1.000	6		Defined	
15*	NPOC	ccv	1.000	✓		Defined	
16*	NPOC	ccb	1.000	✓		Defined	
17*	NPOC	280-137084-D-2-B	1.000	6		Defined	
18*	NPOC	280-137084-D-3-B	1.000	6	2x Dil color	Defined	
19*	NPOC	280-137084-D-4-D	1.000	6		Defined	
20*	NPOC	280-137084-D-5-B	1.000	6	2x Dil color	Defined	
21*	NPOC	280-137048-D-1-B	1.000	6		Defined	
22*	NPOC	280-137048-D-1-C MS	1.000	6		Defined	
23*	NPOC	280-137048-D-1-D MS	1.000	6		Defined	
24*	NPOC	280-137048-D-2-B	1.000	6	2x Dil color	Defined	
25*	NPOC	lcs	1.000	✓		Defined	
26*	NPOC	lcsd	1.000	✓		Defined	
27*	NPOC	ccv	1.000	✓		Defined	
28*	NPOC	ccb	1.000	✓		Defined	
29*	NPOC	mb	1.000	✓		Defined	
30*	NPOC	tic	1.000	✓		Defined	
31*	NPOC	280-137199-B-8	1.000	✓		Defined	
32*	NPOC	ms 280-137199-B-8	1.000	✓		Defined	
33*	NPOC	msd 280-137199-B-8	1.000	✓		Defined	
34*	NPOC	280-137199-C-2	1.000	✓		Defined	
35*	NPOC	280-137199-B-4	1.000	✓		Defined	
36*	NPOC	280-137199-C-6	1.000	✓		Defined	
37*	NPOC	280-137173-B-1	1.000	✓		Defined	
38*	NPOC	280-137173-B-2	1.000	✓		Defined	
39*	NPOC	ccv	1.000	✓		Defined	
40*	NPOC	ccb	1.000	✓		Defined	
41*	NPOC	280-137173-B-3	1.000	✓		Defined	
42*	NPOC	280-137257-B-1	1.000	✓		Defined	
43*	NPOC	280-137257-B-2	1.000	✓	2x Dil cloudy	Defined	
44*	NPOC	280-137257-B-3	1.000	✓		Defined	
45*	NPOC	280-137257-B-4	1.000	✓		Defined	
46*	NPOC	ms 280-137257-B-4	1.000	✓		Defined	
47*	NPOC	msd 280-137257-B-4	1.000	✓		Defined	
48*	NPOC	280-137360-A-2	1.000	✓		Defined	
49*	NPOC	280-137172-B-1	1.000	✓		Defined	
50*	NPOC	280-137172-B-2	1.000	✓		Defined	
51*	NPOC	ccv	1.000	✓		Defined	

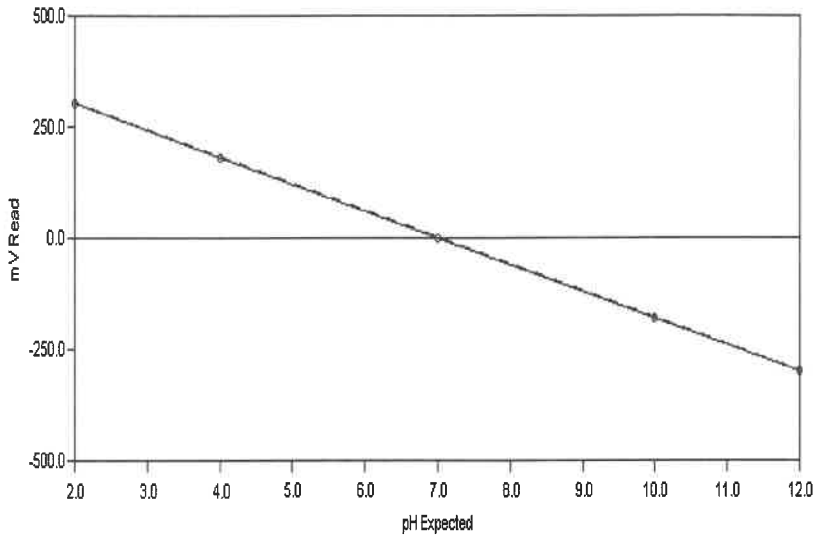
	Analysis	Sample Name	Manua	Result	Notes	Status	Date / Time
52*	NPOC	ccb	1.000	pH<2		Defined	
53*	NPOC	280-137172-B-3	1.000			Defined	
54*	NPOC	280-137172-B-4	1.000			Defined	
55*	NPOC	280-137172-B-5	1.000			Defined	
56*	NPOC	280-137172-B-6	1.000			Defined	
57*	NPOC	280-137172-B-7	1.000			Defined	
58*	NPOC	280-137172-B-8	1.000			Defined	
59*	NPOC	lcs	1.000			Defined	
60*	NPOC	mb	1.000			Defined	
61*	NPOC	tic	1.000			Defined	
62*	NPOC	280-137172-B-9	1.000			Defined	
63*	NPOC	ccv	1.000			Defined	
64*	NPOC	ccb	1.000			Defined	
65*	NPOC	ms 280-137172-B-9	1.000			Defined	
66*	NPOC	msd 280-137172-B-9	1.000			Defined	
67*	NPOC	280-137172-B-10	1.000			Defined	
68*	NPOC	280-137172-B-11	1.000			Defined	
69*	NPOC	280-137172-B-12	1.000			Defined	
70*	NPOC	280-137172-B-13	1.000			Defined	
71*	NPOC	280-137172-B-14	1.000			Defined	
72*	NPOC	280-137172-B-15	1.000			Defined	
73*	NPOC	280-137172-B-16	1.000			Defined	
74*	NPOC	ccv	1.000			Defined	
75*	NPOC	ccb	1.000			Defined	

MANTECH INC.

Calibration Report

Report Date: 6/2/2020 : 8:34 AM

Calibration Record # 705



Calibration Settings

Calibration ID	PH	Date	6/2/2020	
Channel	1	Time	8:29 AM	
Probe Type	pH	Temperature	296.14 K	22.99 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.151	CorrCoeff	1.0000
Intercept	1.342	Equation: Y = (-60.151) X + (1.342)	

Calibration Validity **True**

Operator

	Result	Minimum	Maximum
Slope	-60.151	-65.00	-54.00
Intercept	1.342	-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	302.49
	4.00	181.51
	7.00	0.85
	10.00	-178.71
	12.00	-299.43

Report Date: 6/2/2020 : 11:27 AM

Test America
Water Analysis Report

Analyst:_____

Run Number 2722 **Order Number** 20200602-3

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	6/2/2020	9:00 AM	23.28	-1.00	5.53	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	6/2/2020	9:06 AM	23.06	-1.00	10.63	-1.00	-1.00	-1.00	126.50	204.15	.00	155.30	48.85	1.26	2.04	-1.00	.02
BUFFER 7	6/2/2020	9:08 AM	22.84	-1.00	7.01	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	6/2/2020	9:13 AM	22.86	-1.00	10.63	-1.00	-1.00	-1.00	126.31	205.91	.00	159.19	46.71	1.26	2.06	-1.00	.02
MB	6/2/2020	9:18 AM	22.89	-1.00	7.81	-1.00	-1.00	-1.00	.00	1.61	1.61	.00	.00	.00	.03	.04	.02
280-137098-f-2	6/2/2020	9:23 AM	22.14	-1.00	8.05	-1.00	-1.00	-1.00	.00	195.56	195.56	.00	.00	.00	1.96	-1.00	.02
du 280-137098-f-2	6/2/2020	9:29 AM	21.89	-1.00	8.17	-1.00	-1.00	-1.00	.00	199.17	199.17	.00	.00	.00	1.99	-1.00	.02
280-137021-e-6	6/2/2020	9:35 AM	21.93	-1.00	7.06	-1.00	-1.00	-1.00	.00	219.02	219.02	.00	.00	.00	2.19	-1.00	.02
280-136985-a-3	6/2/2020	9:39 AM	22.13	-1.00	6.38	-1.00	-1.00	-1.00	.00	55.38	55.38	.00	.00	.00	.55	-1.00	.02
280-137028-a-4	6/2/2020	9:44 AM	22.31	-1.00	7.28	-1.00	-1.00	-1.00	.00	158.75	158.75	.00	.00	.00	1.59	-1.00	.02
280-137075-a-1	6/2/2020	9:50 AM	22.75	-1.00	7.49	-1.00	-1.00	-1.00	.00	213.18	213.18	.00	.00	.00	2.13	-1.00	.02
280-137075-a-2	6/2/2020	9:56 AM	22.78	-1.00	7.52	-1.00	-1.00	-1.00	.00	178.23	178.23	.00	.00	.00	1.78	-1.00	.02
280-137086-b-1	6/2/2020	10:03 AM	22.75	-1.00	7.86	-1.00	-1.00	-1.00	.00	427.08	427.08	.00	.00	.00	4.27	-1.00	.02
280-137086-b-2	6/2/2020	10:09 AM	22.92	-1.00	7.75	-1.00	-1.00	-1.00	.00	293.22	293.22	.00	.00	.00	2.93	-1.00	.02
280-137086-b-4	6/2/2020	10:13 AM	23.01	-1.00	6.53	-1.00	-1.00	-1.00	.00	2.51	2.51	.00	.00	.00	.04	.05	.02
CCV	6/2/2020	10:20 AM	23.06	-1.00	10.60	-1.00	-1.00	-1.00	125.31	203.78	.00	156.93	46.84	1.25	2.04	-1.00	.02
CCB	6/2/2020	10:24 AM	23.15	-1.00	7.66	-1.00	-1.00	-1.00	.00	1.79	1.79	.00	.00	.00	.03	.04	.02
280-137048-f-1	6/2/2020	10:31 AM	23.07	-1.00	6.95	-1.00	-1.00	-1.00	.00	390.58	390.58	.00	.00	.00	3.91	-1.00	.02
280-137048-f-2	6/2/2020	10:39 AM	23.12	-1.00	6.69	-1.00	-1.00	-1.00	.00	465.95	465.95	.00	.00	.00	4.66	-1.00	.02
280-137084-f-5	6/2/2020	10:46 AM	23.17	-1.00	6.73	-1.00	-1.00	-1.00	.00	485.52	485.52	.00	.00	.00	4.86	-1.00	.02
280-137084-f-4	6/2/2020	10:53 AM	23.15	-1.00	6.97	-1.00	-1.00	-1.00	.00	409.86	409.86	.00	.00	.00	4.10	-1.00	.02
280-137084-f-3	6/2/2020	11:00 AM	23.22	-1.00	6.73	-1.00	-1.00	-1.00	.00	499.68	499.68	.00	.00	.00	5.00	-1.00	.02
280-137084-f-2	6/2/2020	11:08 AM	23.47	-1.00	7.09	-1.00	-1.00	-1.00	.00	480.37	480.37	.00	.00	.00	4.80	-1.00	.02
280-137084-f-1	6/2/2020	11:15 AM	23.47	-1.00	6.82	-1.00	-1.00	-1.00	.00	439.02	439.02	.00	.00	.00	4.39	-1.00	.02
ccv	6/2/2020	11:21 AM	23.39	-1.00	10.49	-1.00	-1.00	-1.00	119.79	207.03	.00	174.48	32.55	1.20	2.07	-1.00	.02
ccb	6/2/2020	11:26 AM	23.36	-1.00	7.44	-1.00	-1.00	-1.00	.00	1.31	1.31	.00	.00	.00	.03	.05	.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
AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska
AECOM Project Manager: Dean Converse
Sampler(s): TY JO
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
5-29-20	1555		X	EW7-PM27A-3-25	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		6°C

280-137084 Chain of Custody

Signatures	Date	Time
Relinquished by:	5-29-20	1700
Received by:		
Relinquished by:		
Received for Laboratory by:	5-30-20	0910

Shipping Details
Method of Shipment: Federal Express
Airbill Number: 8156 5922 7623

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

2.9, 0.4, 4.0, IR8, +0.6, DS 5-30-20

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020048

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 JO
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)
5-29-20	1250		X	EW7-PM24A-3-25	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		6°C
5-29-20	1430		X	EW7-PM24B-3-35	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		6°C

Signatures	Date	Time
Relinquished by:	5-29-20	1200
Received by:		
Relinquished by:		
Received for Laboratory by:	5-29-20	0910

Shipping Details
Method of Shipment: Federal Express
Airbill Number: 8156 5922 7601

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

2019558

AECOM

12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP

AECOM Project Number: 60565355

Project Location: Grand Island, Nebraska

AECOM Project Manager: Dean Converse

Sampler(s): RH TY JO

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
5-29-20	0935		X	EW7-PM21B-3-35	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		6°C
5-29-20	1125		X	EW7-PM22B-3-35	AQ	9	A,B,C,D,E,F	X	X	X	X	X	X		

Signatures	Date	Time
Relinquished by:	5-29-20	1700
Received by:		
Relinquished by:		
Received for Laboratory by:	5-30-20	0910

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 8156 5922 7612

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

2020036

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SDR

FedEx Saturday Delivery

151967 REV 7/08 RRD

TO SAMPLE RECEIVING
TEST AMERICA DENVER
4955 YARROW ST

ARVADA CO 80002 – 4517 (US)

(999) 999 – 9999 REF:
INV#
PO:
DEPT:

SKBJ3/2925/F

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Shipments tendered on Friday are delivered on Saturday to most locations.

TRK# 0667 8156 5922 7623

SATURDAY 12:00P
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80002
CO – US DEN

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Number | Base Charges
Total Charges

Rev. 12/17 Form ID 0667

280-137084 Waybill

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SDR

FedEx Saturday Delivery

151967 REV 7/08 RRD

TO SAMPLE RECEIVING
TEST AMERICA
4955 YARROW ST

ARVADA CO 80002 – 4517 (US)

(999) 999 – 9999 REF:
INV:
PO: DEPT:

FedEx Express

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0687 8156 5922 7601

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80002
CO – US DEN

FedEx Express

SDR

FedEx Saturday Delivery

151967 REV 7/08 RRD

TO SAMPLE RECIEVING
TEST AMERICA
4955 YARROW ST

ARVADA CO 80002-4517 (US)

(999) 999-9999 REF:
INV:
PO: DEPT:

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E

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0667 8156 5922 7612

XO WHHA

80002
CO-US DEN

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-137084-1

Login Number: 137084
List Number: 1
Creator: Schade, Daniel B

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace larger than 1/4" in one or more vials, one vial with accpt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	