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ANALYTICAL REPORT

Job Number: 280-124928-1

Job Description: Cornhusker (CHAAP)

For:
Brice Environmental Services, Corp
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Attention: Scott Mann



Approved for release.
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8/1/2019 3:34 PM

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

The Lab Certification ID# is 4025.

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

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Qualifiers

GC/MS VOA

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

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-124928-1

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

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

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

RECEIPT

The samples were received on 6/7/2019 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.8º C, 1.2º C, 2.2º C and 2.9º C.

Receipt Exceptions

The following samples were received at the laboratory without a sample collection time documented on the COC: SHGW02-19A (280-124928-3), SHGW05-19A (280-124928-4), SAMW1-19A (280-124928-5) and G0053-19A (280-124928-6). The samples were logged per the collection time on the container labels.

The following samples were received with a headspace bubble >6mm in diameter in their sample container(s): SHGW03-19A (280-124928-10) and G0045-19A (280-124928-16).

SHGW03-19A: 1 of 6 VOAs with HCl
G0045-19A: 1 of 3 VOAs with HCl

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples TB060519 (280-124928-1), Source2019 (280-124928-2), SHGW02-19A (280-124928-3), SHGW05-19A (280-124928-4), SAMW1-19A (280-124928-5), G0053-19A (280-124928-6), SHGW03-19A (280-124928-10), G0069-19A (280-124928-11), SHGW04-19A (280-124928-12) and TB060619 (280-124928-13) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were analyzed on 06/18/2019, 06/19/2019 and 06/20/2019.

1,2,3-Trichlorobenzene failed the recovery criteria high for LCS 280-462165/3. Refer to the QC report for details. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 280-461956: Chloroethane @ -26.0%D and Chloromethane @ -20.2%D. The failing compounds are poor performers and allowed up to 30%D.

The continuing calibration verification (CCV) associated with batch 280-462165 recovered above the upper control limit for 1,2,3-Trichlorobenzene @ 21.5%D. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

DISSOLVED GASES (GC)

Samples SHGW02-19A (280-124928-3), SHGW05-19A (280-124928-4), SAMW1-19A (280-124928-5), G0053-19A (280-124928-6), G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), SHGW03-19A (280-124928-10), G0069-19A (280-124928-11), SHGW04-19A (280-124928-12), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 06/11/2019 and 06/12/2019.

In analytical batch 280-461087, the following volatile sample was analyzed with significant headspace in the sample container(s): SHGW03-19A (280-124928-10). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Samples SHGW02-19A (280-124928-3)[3X] and SHGW05-19A (280-124928-4)[3X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DIESEL RANGE ORGANICS (DRO)
Samples SHGW03-19A (280-124928-10), G0069-19A (280-124928-11) and SHGW04-19A (280-124928-12) were analyzed for Diesel Range Organics (DRO) in accordance with 8015C DRO. The samples were prepared on 06/17/2019 and analyzed on 07/17/2019.

The holding times were exceeded on the following samples due to an unanticipated high volume of sample receipts that exceeded analytical capacity: SHGW03-19A (280-124928-10), G0069-19A (280-124928-11) and SHGW04-19A (280-124928-12)

The closing continuous calibration verification (CCV) associated with preparation batch 280-461781 and analytical batch 280-464667 was above the upper control limits (limit 15%D) for n-Octacosane. The n-Octacosane recovery was within surrogate acceptance limits (limits 25-162%); Therefore, the data have been reported.

CCV/20 27.9%D, surr recovery 109%
CCV/38 26.7%D, Surr recovery 127%
CCV/52 47.7%D, surr recovery 148%

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

NITROAROMATICS AND NITRAMINES (HPLC)
Samples Source2019 (280-124928-2), G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 06/12/2019 and 07/10/2019 and analyzed on 06/15/2019, 06/18/2019, 06/21/2019, 07/13/2019, 07/15/2019 and 07/16/2019.

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

Surrogate recovery for the following samples associated with preparation batch 280-464162 and analytical batch 280-464537 were outside control limits: G0105-19A (280-124928-7), G0017-19A (280-124928-14) and PZ009-19A (280-124928-15). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Surrogate recovery for the following sample associated with preparation batch 280-461286 and analytical batch 280-461580 was outside control limits: G0105-19A (280-124928-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Surrogate recovery for the following sample associated with preparation batch 280-461286 and analytical batch 280-462205 was outside control limits: G0017-19A (280-124928-14). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

The following samples required filtration to reduce matrix interferences: G0107-19A (280-124928-8), G0106-19A (280-124928-9) and G0017-19A (280-124928-14).

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

ALKALINITY
Samples SHGW02-19A (280-124928-3), SHGW05-19A (280-124928-4), SAMW1-19A (280-124928-5), G0053-19A (280-124928-6), G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), SHGW03-19A (280-124928-10), G0069-19A (280-124928-11), SHGW04-19A (280-124928-12), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 06/15/2019.

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

AMMONIA
Samples G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/19/2019.

The following sample was received with insufficient preservation: The sample was in sulfuric preserved bottle with pH 7. Sample was lab preserved to pH <2.

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

TOTAL KJELDAHL NITROGEN
Samples G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 06/24/2019 and analyzed on 06/25/2019.

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

NITRATE-NITRITE AS NITROGEN

Samples SHGW02-19A (280-124928-3), SHGW05-19A (280-124928-4), SAMW1-19A (280-124928-5), G0053-19A (280-124928-6), G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), SHGW03-19A (280-124928-10), G0069-19A (280-124928-11), SHGW04-19A (280-124928-12), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 06/26/2019.

Samples SAMW1-19A (280-124928-5)[2X] and G0053-19A (280-124928-6)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE

Samples G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 06/11/2019 and 06/12/2019.

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

ANIONS (28 DAYS)

Samples SHGW02-19A (280-124928-3), SHGW05-19A (280-124928-4), SAMW1-19A (280-124928-5), G0053-19A (280-124928-6), G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), SHGW03-19A (280-124928-10), G0069-19A (280-124928-11), SHGW04-19A (280-124928-12), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for anions (28 days) in accordance with 9056A. The samples were analyzed on 07/04/2019 and 07/12/2019.

Due to analyst and operational oversight, the following samples were analyzed outside of holding time for Sulfate: G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16). The client was notified on July 15, 2019.

Sulfate failed the recovery criteria low for the MS of sample G0105-19AMS (280-124928-7) in batch 280-464281. Sulfate failed the recovery criteria low for the MSD of sample G0105-19AMSD (280-124928-7) in batch 280-464281. Refer to the QC report for details.

Samples G0105-19A (280-124928-7)[10X], G0107-19A (280-124928-8)[10X], G0106-19A (280-124928-9)[10X], G0017-19A (280-124928-14)[5X], PZ009-19A (280-124928-15)[5X] and G0045-19A (280-124928-16)[10X] 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.

DISSOLVED ORGANIC CARBON

Samples G0105-19A (280-124928-7), G0107-19A (280-124928-8), G0106-19A (280-124928-9), G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 07/03/2019 and 07/05/2019.

Due to analyst and operational oversight, the following samples were analyzed outside of holding time for DOC: G0017-19A (280-124928-14), PZ009-19A (280-124928-15) and G0045-19A (280-124928-16).

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: 280-124928-1

Client Sample ID: TB060519 — Lab Sample ID: 280-124928-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.3	J	10	6.4	1.9	ug/L	1		8260B	Total/NA

Client Sample ID: Source2019 — Lab Sample ID: 280-124928-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.7	J	10	6.4	1.9	ug/L	1		8260B	Total/NA
Bromodichloromethane	0.38	J	1.0	0.40	0.17	ug/L	1		8260B	Total/NA
Chloroform	0.21	J	1.0	0.40	0.16	ug/L	1		8260B	Total/NA
Dibromochloromethane	0.43	J	1.0	0.40	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: SHGW02-19A — Lab Sample ID: 280-124928-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	1.1		1.0	0.80	0.27	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	3.6		1.0	0.40	0.13	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	53		6.0	4.0	2.0	ug/L	1		8260B	Total/NA
2-Hexanone	160		5.0	4.0	1.7	ug/L	1		8260B	Total/NA
Acetone	55		10	6.4	1.9	ug/L	1		8260B	Total/NA
Chloroethane	0.43	J	2.0	1.6	0.41	ug/L	1		8260B	Total/NA
Methane - DL	3.8	D	0.015	0.0060	0.0019	mg/L	3		RSK-175	Total/NA
Nitrate Nitrite as N	0.033	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	15		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	85		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW05-19A — Lab Sample ID: 280-124928-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	1.1		1.0	0.80	0.27	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	3.4		1.0	0.40	0.13	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	56		6.0	4.0	2.0	ug/L	1		8260B	Total/NA
2-Hexanone	170		5.0	4.0	1.7	ug/L	1		8260B	Total/NA
Acetone	57		10	6.4	1.9	ug/L	1		8260B	Total/NA
Methane - DL	3.7	D	0.015	0.0060	0.0019	mg/L	3		RSK-175	Total/NA
Nitrate Nitrite as N	0.032	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	15		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	85		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SAMW1-19A — Lab Sample ID: 280-124928-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.1	J	10	6.4	1.9	ug/L	1		8260B	Total/NA
Nitrate Nitrite as N	8.4		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	25		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	92		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G0053-19A — Lab Sample ID: 280-124928-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.53	J M	3.0	0.40	0.18	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	4.3	J	6.0	4.0	2.0	ug/L	1		8260B	Total/NA
Acetone	5.1	J	10	6.4	1.9	ug/L	1		8260B	Total/NA
Nitrate Nitrite as N	16		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	27		5.0	3.0	1.0	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0053-19A (Continued) — Lab Sample ID: 280-124928-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3	76		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G0105-19A — Lab Sample ID: 280-124928-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.67		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	1.4		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.9		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfate	870	H J1 D	50	30	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	580		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.9		1.0	0.50	0.16	mg/L	1		9060A	Dissolved

Client Sample ID: G0107-19A — Lab Sample ID: 280-124928-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	5.6		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.17		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Sulfate	1000	H D	50	30	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	450		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.4		1.0	0.50	0.16	mg/L	1		9060A	Dissolved

Client Sample ID: G0106-19A — Lab Sample ID: 280-124928-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0034	J	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.074	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Sulfate	1000	H D	50	30	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	420		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.9		1.0	0.50	0.16	mg/L	1		9060A	Dissolved

Client Sample ID: SHGW03-19A — Lab Sample ID: 280-124928-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.76	J	3.0	0.40	0.18	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	3.9		1.0	0.40	0.13	ug/L	1		8260B	Total/NA
Acetone	4.4	J	10	6.4	1.9	ug/L	1		8260B	Total/NA
Ethylbenzene	0.79	J	1.0	0.40	0.16	ug/L	1		8260B	Total/NA
Xylenes, Total	1.3		1.0	0.80	0.19	ug/L	1		8260B	Total/NA
Methane	0.32		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
C10-C28	1100	H	290	140	37	ug/L	1		8015C DRO	Total/NA
Nitrate Nitrite as N	0.47		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	29		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	180		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G0069-19A — Lab Sample ID: 280-124928-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
C10-C28	91	J H	240	120	31	ug/L	1		8015C DRO	Total/NA
Nitrate Nitrite as N	1.6		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	21		5.0	3.0	1.0	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0069-19A (Continued) — Lab Sample ID: 280-124928-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3	130		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW04-19A — Lab Sample ID: 280-124928-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.4	J	10	6.4	1.9	ug/L	1		8260B	Total/NA
Methane	0.84		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
C10-C28	730	H	240	120	32	ug/L	1		8015C DRO	Total/NA
Nitrate Nitrite as N	0.032	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	13		5.0	3.0	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	190		10	10	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB060619 — Lab Sample ID: 280-124928-13

No Detections.

Client Sample ID: G0017-19A — Lab Sample ID: 280-124928-14

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	5.4		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Sulfide	8.0		4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	380	H D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	480		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.7	H	1.0	0.50	0.16	mg/L	1		9060A	Dissolved

Client Sample ID: PZ009-19A — Lab Sample ID: 280-124928-15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	1.2		1.0	0.40	0.20	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.55		0.40	0.40	0.16	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.71		0.20	0.12	0.051	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.50		0.20	0.12	0.058	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	4.2		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	530	H D	25	15	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	500		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.8	H	1.0	0.50	0.16	mg/L	1		9060A	Dissolved

Client Sample ID: G0045-19A — Lab Sample ID: 280-124928-16

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0017	J	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	3.9		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfate	1000	H D	50	30	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	440		10	10	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.5	H	1.0	0.50	0.16	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB060519

Date Collected: 06/05/19 07:00
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-1

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 23:52	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/18/19 23:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/18/19 23:52	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/18/19 23:52	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/18/19 23:52	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/18/19 23:52	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/18/19 23:52	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/18/19 23:52	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/18/19 23:52	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/18/19 23:52	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/18/19 23:52	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/18/19 23:52	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/18/19 23:52	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 23:52	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/18/19 23:52	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/18/19 23:52	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/18/19 23:52	1
Acetone	**7.3**	**J**	10	6.4	1.9	ug/L		06/18/19 23:52	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 23:52	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/18/19 23:52	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/18/19 23:52	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/18/19 23:52	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/18/19 23:52	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/18/19 23:52	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/18/19 23:52	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/18/19 23:52	1
Chloroethane	1.6	U Q	2.0	1.6	0.41	ug/L		06/18/19 23:52	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 23:52	1
Chloromethane	0.80	U Q	2.0	0.80	0.30	ug/L		06/18/19 23:52	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/18/19 23:52	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 23:52	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/18/19 23:52	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/18/19 23:52	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/18/19 23:52	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 23:52	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/18/19 23:52	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/18/19 23:52	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/18/19 23:52	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/18/19 23:52	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/18/19 23:52	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/18/19 23:52	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/18/19 23:52	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/18/19 23:52	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/18/19 23:52	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/18/19 23:52	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/18/19 23:52	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 23:52	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/18/19 23:52	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/18/19 23:52	1

Client Sample ID: TB060519
Lab Sample ID: 280-124928-1

Date Collected: 06/05/19 07:00
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/18/19 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*06/18/19 23:52*	*1*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*		*06/18/19 23:52*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*06/18/19 23:52*	*1*
Toluene-d8 (Surr)	*96*		*89 - 112*		*06/18/19 23:52*	*1*

Client Sample ID: Source2019
Lab Sample ID: 280-124928-2

Date Collected: 06/05/19 07:00
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/19/19 00:13	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/19/19 00:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/19/19 00:13	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/19/19 00:13	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/19/19 00:13	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/19/19 00:13	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/19/19 00:13	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/19/19 00:13	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/19/19 00:13	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/19/19 00:13	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/19/19 00:13	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/19/19 00:13	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/19/19 00:13	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/19/19 00:13	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/19/19 00:13	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/19/19 00:13	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/19/19 00:13	1
Acetone	**3.7**	**J**	10	6.4	1.9	ug/L		06/19/19 00:13	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/19/19 00:13	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/19/19 00:13	1
Bromodichloromethane	**0.38**	**J**	1.0	0.40	0.17	ug/L		06/19/19 00:13	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/19/19 00:13	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/19/19 00:13	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/19/19 00:13	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/19/19 00:13	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/19/19 00:13	1
Chloroethane	1.6	U Q	2.0	1.6	0.41	ug/L		06/19/19 00:13	1
Chloroform	**0.21**	**J**	1.0	0.40	0.16	ug/L		06/19/19 00:13	1
Chloromethane	0.80	U Q	2.0	0.80	0.30	ug/L		06/19/19 00:13	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/19/19 00:13	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/19/19 00:13	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/19/19 00:13	1
Dibromochloromethane	**0.43**	**J**	1.0	0.40	0.17	ug/L		06/19/19 00:13	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/19/19 00:13	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/19/19 00:13	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/19/19 00:13	1

Client Sample ID: Source2019

Date Collected: 06/05/19 07:00
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/19/19 00:13	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/19/19 00:13	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/19/19 00:13	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/19/19 00:13	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/19/19 00:13	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/19/19 00:13	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/19/19 00:13	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/19/19 00:13	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/19/19 00:13	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/19/19 00:13	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/19/19 00:13	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/19/19 00:13	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/19/19 00:13	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/19/19 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*06/19/19 00:13*	*1*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*06/19/19 00:13*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*06/19/19 00:13*	*1*
Toluene-d8 (Surr)	*95*		*89 - 112*		*06/19/19 00:13*	*1*

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.20	ug/L		06/15/19 13:48	1
1,3-Dinitrobenzene	0.20	U	0.41	0.20	0.090	ug/L		06/15/19 13:48	1
2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16	ug/L		06/15/19 13:48	1
2,4-Dinitrotoluene	0.20	U	0.41	0.20	0.085	ug/L		06/15/19 13:48	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		06/15/19 13:48	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		06/15/19 13:48	1
2-Nitrotoluene	0.20	U Q	0.41	0.20	0.087	ug/L		06/15/19 13:48	1
3-Nitrotoluene	0.41	U M	0.41	0.41	0.20	ug/L		06/15/19 13:48	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		06/15/19 13:48	1
4-Nitrotoluene	0.41	U	1.0	0.41	0.20	ug/L		06/15/19 13:48	1
HMX	0.20	U	0.41	0.20	0.089	ug/L		06/15/19 13:48	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		06/15/19 13:48	1
Nitrobenzene	0.20	U	0.41	0.20	0.092	ug/L		06/15/19 13:48	1
RDX	0.41	U	0.41	0.41	0.16	ug/L		06/15/19 13:48	1
Tetryl	0.20	U	0.24	0.20	0.080	ug/L		06/15/19 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*90*		*83 - 119*	*06/12/19 17:51*	*06/15/19 13:48*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U H	0.39	0.20	0.084	ug/L		07/15/19 14:13	1
MNX	0.39	U Q H	2.0	0.39	0.15	ug/L		07/15/19 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*85*		*83 - 119*	*07/10/19 16:51*	*07/15/19 14:13*	*1*

Client Sample ID: SHGW02-19A
Lab Sample ID: 280-124928-3

Date Collected: 06/06/19 13:25
Matrix: Water

Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:23	1
1,1,2,2-Tetrachloroethane	0.80	U M	1.0	0.80	0.21	ug/L		06/20/19 13:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/19 13:23	1
1,1,2-Trichloroethane	**1.1**		1.0	0.80	0.27	ug/L		06/20/19 13:23	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 13:23	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 13:23	1
1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21	ug/L		06/20/19 13:23	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 13:23	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 13:23	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 13:23	1
1,2-Dichloroethane	**3.6**		1.0	0.40	0.13	ug/L		06/20/19 13:23	1
1,2-Dichloropropane	0.40	U M	1.0	0.40	0.18	ug/L		06/20/19 13:23	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 13:23	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:23	1
2-Butanone (MEK)	**53**		6.0	4.0	2.0	ug/L		06/20/19 13:23	1
2-Hexanone	**160**		5.0	4.0	1.7	ug/L		06/20/19 13:23	1
4-Methyl-2-pentanone (MIBK)	3.2	U M	5.0	3.2	0.98	ug/L		06/20/19 13:23	1
Acetone	**55**		10	6.4	1.9	ug/L		06/20/19 13:23	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:23	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 13:23	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 13:23	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 13:23	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 13:23	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 13:23	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 13:23	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 13:23	1
Chloroethane	**0.43**	**J**	2.0	1.6	0.41	ug/L		06/20/19 13:23	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:23	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 13:23	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 13:23	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:23	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 13:23	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 13:23	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 13:23	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:23	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 13:23	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 13:23	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 13:23	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 13:23	1
Methylcyclohexane	0.40	U M	2.0	0.40	0.10	ug/L		06/20/19 13:23	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 13:23	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 13:23	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 13:23	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 13:23	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 13:23	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 13:23	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:23	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 13:23	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/19 13:23	1

Client Sample ID: SHGW02-19A

Date Collected: 06/06/19 13:25
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-3

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/19 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*		*06/20/19 13:23*	*1*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*06/20/19 13:23*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 119*		*06/20/19 13:23*	*1*
Toluene-d8 (Surr)	*95*		*89 - 112*		*06/20/19 13:23*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/12/19 12:19	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/12/19 12:19	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**3.8**	**D**	0.015	0.0060	0.0019	mg/L		06/12/19 13:25	3

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.033**	**J**	0.10	0.050	0.019	mg/L		06/26/19 18:56	1
Sulfate	**15**		5.0	3.0	1.0	mg/L		07/04/19 03:03	1
Total Alkalinity as CaCO3	**85**		10	10	3.1	mg/L		06/15/19 04:50	1

Client Sample ID: SHGW05-19A

Date Collected: 06/06/19 08:00
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-4

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:45	1
1,1,2,2-Tetrachloroethane	0.80	U M	1.0	0.80	0.21	ug/L		06/20/19 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/19 13:45	1
1,1,2-Trichloroethane	**1.1**		1.0	0.80	0.27	ug/L		06/20/19 13:45	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 13:45	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 13:45	1
1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21	ug/L		06/20/19 13:45	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 13:45	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 13:45	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 13:45	1
1,2-Dichloroethane	**3.4**		1.0	0.40	0.13	ug/L		06/20/19 13:45	1
1,2-Dichloropropane	0.40	U M	1.0	0.40	0.18	ug/L		06/20/19 13:45	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 13:45	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:45	1
2-Butanone (MEK)	**56**		6.0	4.0	2.0	ug/L		06/20/19 13:45	1
2-Hexanone	**170**		5.0	4.0	1.7	ug/L		06/20/19 13:45	1
4-Methyl-2-pentanone (MIBK)	3.2	U M	5.0	3.2	0.98	ug/L		06/20/19 13:45	1
Acetone	**57**		10	6.4	1.9	ug/L		06/20/19 13:45	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:45	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 13:45	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 13:45	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 13:45	1

Client Sample ID: SHGW05-19A

Date Collected: 06/06/19 08:00
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-4

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 13:45	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 13:45	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 13:45	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 13:45	1
Chloroethane	1.6	U M	2.0	1.6	0.41	ug/L		06/20/19 13:45	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:45	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 13:45	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 13:45	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:45	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 13:45	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 13:45	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 13:45	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:45	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 13:45	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 13:45	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 13:45	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 13:45	1
Methylcyclohexane	0.40	U M	2.0	0.40	0.10	ug/L		06/20/19 13:45	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 13:45	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 13:45	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 13:45	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 13:45	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 13:45	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 13:45	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 13:45	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 13:45	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/19 13:45	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/19 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*81 - 118*		*06/20/19 13:45*	*1*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*06/20/19 13:45*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*06/20/19 13:45*	*1*
Toluene-d8 (Surr)	*96*		*89 - 112*		*06/20/19 13:45*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/12/19 12:32	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/12/19 12:32	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**3.7**	**D**	0.015	0.0060	0.0019	mg/L		06/12/19 13:39	3

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.032**	**J**	0.10	0.050	0.019	mg/L		06/26/19 18:58	1
Sulfate	**15**		5.0	3.0	1.0	mg/L		07/04/19 04:13	1
Total Alkalinity as CaCO3	**85**		10	10	3.1	mg/L		06/15/19 05:06	1

Client Sample ID: SAMW1-19A

Date Collected: 06/06/19 10:55
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-5

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:06	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 14:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/19 14:06	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/19 14:06	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 14:06	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 14:06	1
1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21	ug/L		06/20/19 14:06	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 14:06	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 14:06	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:06	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 14:06	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 14:06	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 14:06	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:06	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/19 14:06	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/19 14:06	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/19 14:06	1
Acetone	**3.1**	**J**	10	6.4	1.9	ug/L		06/20/19 14:06	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:06	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 14:06	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:06	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 14:06	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 14:06	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 14:06	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 14:06	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:06	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/19 14:06	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:06	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 14:06	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:06	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:06	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 14:06	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:06	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 14:06	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:06	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 14:06	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 14:06	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 14:06	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 14:06	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/19 14:06	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 14:06	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 14:06	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 14:06	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:06	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:06	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 14:06	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:06	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 14:06	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/19 14:06	1

Client Sample ID: SAMW1-19A
Lab Sample ID: 280-124928-5

Date Collected: 06/06/19 10:55
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/19 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*06/20/19 14:06*	*1*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*		*06/20/19 14:06*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*06/20/19 14:06*	*1*
Toluene-d8 (Surr)	*96*		*89 - 112*		*06/20/19 14:06*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/12/19 12:45	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/12/19 12:45	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/12/19 12:45	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**8.4**		0.20	0.10	0.038	mg/L		06/26/19 19:12	2
Sulfate	**25**		5.0	3.0	1.0	mg/L		07/04/19 04:30	1
Total Alkalinity as CaCO3	**92**		10	10	3.1	mg/L		06/15/19 05:11	1

Client Sample ID: G0053-19A
Lab Sample ID: 280-124928-6

Date Collected: 06/06/19 12:10
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:27	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 14:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.53**	**J M**	3.0	0.40	0.18	ug/L		06/20/19 14:27	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/19 14:27	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 14:27	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 14:27	1
1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21	ug/L		06/20/19 14:27	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 14:27	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 14:27	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:27	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 14:27	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 14:27	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 14:27	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:27	1
2-Butanone (MEK)	**4.3**	**J**	6.0	4.0	2.0	ug/L		06/20/19 14:27	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/19 14:27	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/19 14:27	1
Acetone	**5.1**	**J**	10	6.4	1.9	ug/L		06/20/19 14:27	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:27	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 14:27	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:27	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 14:27	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 14:27	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 14:27	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 14:27	1

Client Sample ID: G0053-19A
Lab Sample ID: 280-124928-6

Date Collected: 06/06/19 12:10
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:27	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/19 14:27	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:27	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 14:27	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:27	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:27	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 14:27	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:27	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 14:27	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:27	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 14:27	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 14:27	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 14:27	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 14:27	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/19 14:27	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 14:27	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 14:27	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 14:27	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:27	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:27	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 14:27	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:27	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 14:27	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/19 14:27	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/19 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*06/20/19 14:27*	*1*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*06/20/19 14:27*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*06/20/19 14:27*	*1*
Toluene-d8 (Surr)	*97*		*89 - 112*		*06/20/19 14:27*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/12/19 12:59	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/12/19 12:59	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/12/19 12:59	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**16**		0.20	0.10	0.038	mg/L		06/26/19 19:14	2
Sulfate	**27**		5.0	3.0	1.0	mg/L		07/04/19 05:23	1
Total Alkalinity as CaCO3	**76**		10	10	3.1	mg/L		06/15/19 05:16	1

Client Sample ID: G0105-19A
Lab Sample ID: 280-124928-7

Date Collected: 06/05/19 12:35
Matrix: Water
Date Received: 06/07/19 08:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.67**		0.0050	0.0020	0.00063	mg/L		06/11/19 17:56	1

Client Sample ID: G0105-19A

Date Collected: 06/05/19 12:35
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-7

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.21	ug/L		06/15/19 14:11	1
1,3-Dinitrobenzene	0.21	U	0.41	0.21	0.091	ug/L		06/15/19 14:11	1
2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16	ug/L		07/16/19 17:53	1
2,4-Dinitrotoluene	0.21	U	0.41	0.21	0.086	ug/L		06/15/19 14:11	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.066	ug/L		07/16/19 17:53	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.21	0.12	0.052	ug/L		06/15/19 14:11	1
2-Nitrotoluene	0.21	U Q	0.41	0.21	0.088	ug/L		06/15/19 14:11	1
3-Nitrotoluene	0.41	U Q	0.41	0.41	0.20	ug/L		06/15/19 14:11	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.21	0.12	0.059	ug/L		06/15/19 14:11	1
4-Nitrotoluene	0.41	U	1.0	0.41	0.21	ug/L		06/15/19 14:11	1
HMX	0.21	U	0.41	0.21	0.090	ug/L		06/15/19 14:11	1
MNX	0.41	U	2.1	0.41	0.16	ug/L		07/16/19 17:53	1
Nitrobenzene	0.21	U	0.41	0.21	0.094	ug/L		07/16/19 17:53	1
RDX	0.41	U M	0.41	0.41	0.16	ug/L		06/15/19 14:11	1
Tetryl	0.21	U M	0.25	0.21	0.082	ug/L		06/15/19 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*142*	*M Q*	*83 - 119*	*06/12/19 17:51*	*06/15/19 14:11*	*1*
1,2-Dinitrobenzene	*93*		*83 - 119*	*06/12/19 17:51*	*07/16/19 17:53*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U H	0.40	0.20	0.085	ug/L		07/15/19 14:36	1
MNX	0.40	U M H	2.0	0.40	0.15	ug/L		07/13/19 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*88*		*83 - 119*	*07/10/19 16:51*	*07/13/19 04:15*	*1*
1,2-Dinitrobenzene	*153*	*M Q*	*83 - 119*	*07/10/19 16:51*	*07/15/19 14:36*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.4**		0.10	0.050	0.022	mg/L		06/19/19 15:13	1
Nitrogen, Total Kjeldahl	**1.9**		1.0	1.0	0.69	mg/L		06/25/19 19:36	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 19:16	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/11/19 15:04	1
Sulfate	**870**	**H J1 D**	50	30	10	mg/L		07/12/19 05:06	10
Total Alkalinity as CaCO3	**580**		10	10	3.1	mg/L		06/15/19 05:24	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.9**		1.0	0.50	0.16	mg/L		07/03/19 18:47	1

Client Sample ID: G0107-19A

Date Collected: 06/05/19 13:50
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-8

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**5.6**		0.0050	0.0020	0.00063	mg/L		06/11/19 18:10	1

Client Sample ID: G0107-19A
Lab Sample ID: 280-124928-8

Date Collected: 06/05/19 13:50
Matrix: Water
Date Received: 06/07/19 08:30

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.39	U	0.98	0.39	0.20	ug/L		06/15/19 14:35	1
1,3-Dinitrobenzene	0.20	U	0.39	0.20	0.087	ug/L		06/15/19 14:35	1
2,4,6-Trinitrotoluene	0.39	U	0.39	0.39	0.16	ug/L		06/15/19 14:35	1
2,4-Dinitrotoluene	0.20	U	0.39	0.20	0.082	ug/L		06/15/19 14:35	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.063	ug/L		06/15/19 14:35	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.050	ug/L		06/15/19 14:35	1
2-Nitrotoluene	0.20	U Q	0.39	0.20	0.084	ug/L		06/15/19 14:35	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		06/15/19 14:35	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.056	ug/L		06/15/19 14:35	1
4-Nitrotoluene	0.39	U M	0.98	0.39	0.20	ug/L		06/15/19 14:35	1
HMX	0.20	U	0.39	0.20	0.086	ug/L		06/15/19 14:35	1
MNX	0.39	U	2.0	0.39	0.15	ug/L		06/15/19 14:35	1
Nitrobenzene	0.20	U	0.39	0.20	0.089	ug/L		06/15/19 14:35	1
RDX	0.39	U	0.39	0.39	0.15	ug/L		06/15/19 14:35	1
Tetryl	0.20	U	0.23	0.20	0.077	ug/L		06/15/19 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*06/12/19 17:51*	*06/15/19 14:35*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.21	U H	0.42	0.21	0.091	ug/L		07/15/19 14:59	1
MNX	0.42	U Q H	2.1	0.42	0.16	ug/L		07/15/19 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*87*	*M*	*83 - 119*	*07/10/19 16:51*	*07/15/19 14:59*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.17**		0.10	0.050	0.022	mg/L		06/19/19 15:15	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:37	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 19:18	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/12/19 12:54	1
Sulfate	**1000**	**H D**	50	30	10	mg/L		07/12/19 06:51	10
Total Alkalinity as CaCO3	**450**		10	10	3.1	mg/L		06/15/19 05:31	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.4**		1.0	0.50	0.16	mg/L		07/03/19 20:03	1

Client Sample ID: G0106-19A
Lab Sample ID: 280-124928-9

Date Collected: 06/05/19 15:05
Matrix: Water
Date Received: 06/07/19 08:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0034**	**J**	0.0050	0.0020	0.00063	mg/L		06/11/19 18:36	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.39	U	0.98	0.39	0.20	ug/L		06/15/19 14:59	1

Client Sample ID: G0106-19A
Lab Sample ID: 280-124928-9
Date Collected: 06/05/19 15:05
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dinitrobenzene	0.20	U	0.39	0.20	0.087	ug/L		06/15/19 14:59	1
2,4,6-Trinitrotoluene	0.39	U	0.39	0.39	0.16	ug/L		06/15/19 14:59	1
2,4-Dinitrotoluene	0.20	U	0.39	0.20	0.082	ug/L		06/15/19 14:59	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.063	ug/L		06/15/19 14:59	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.049	ug/L		06/15/19 14:59	1
2-Nitrotoluene	0.20	U Q	0.39	0.20	0.083	ug/L		06/15/19 14:59	1
3-Nitrotoluene	0.39	U M	0.39	0.39	0.19	ug/L		06/15/19 14:59	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.056	ug/L		06/15/19 14:59	1
4-Nitrotoluene	0.39	U	0.98	0.39	0.20	ug/L		06/15/19 14:59	1
HMX	0.20	U	0.39	0.20	0.085	ug/L		06/15/19 14:59	1
MNX	0.39	U	2.0	0.39	0.15	ug/L		06/15/19 14:59	1
Nitrobenzene	0.20	U	0.39	0.20	0.089	ug/L		06/15/19 14:59	1
RDX	0.39	U	0.39	0.39	0.15	ug/L		06/15/19 14:59	1
Tetryl	0.20	U	0.23	0.20	0.077	ug/L		06/15/19 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*06/12/19 17:51*	*06/15/19 14:59*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.21	U H	0.43	0.21	0.091	ug/L		07/15/19 15:21	1
MNX	0.43	U Q H	2.1	0.43	0.16	ug/L		07/15/19 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*106*	*M*	*83 - 119*	*07/10/19 16:51*	*07/15/19 15:21*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.074**	**J**	0.10	0.050	0.022	mg/L		06/19/19 15:17	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:38	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 19:30	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/12/19 12:54	1
Sulfate	**1000**	**H D**	50	30	10	mg/L		07/12/19 07:08	10
Total Alkalinity as CaCO3	**420**		10	10	3.1	mg/L		06/15/19 05:38	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.9**		1.0	0.50	0.16	mg/L		07/03/19 20:18	1

Client Sample ID: SHGW03-19A
Lab Sample ID: 280-124928-10
Date Collected: 06/06/19 10:50
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:48	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.76**	**J**	3.0	0.40	0.18	ug/L		06/20/19 14:48	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/19 14:48	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 14:48	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 14:48	1

Client Sample ID: SHGW03-19A
Lab Sample ID: 280-124928-10

Date Collected: 06/06/19 10:50
Matrix: Water

Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21	ug/L		06/20/19 14:48	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 14:48	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 14:48	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:48	1
1,2-Dichloroethane	**3.9**		1.0	0.40	0.13	ug/L		06/20/19 14:48	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 14:48	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 14:48	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:48	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/19 14:48	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/19 14:48	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/19 14:48	1
Acetone	**4.4**	**J**	10	6.4	1.9	ug/L		06/20/19 14:48	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:48	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 14:48	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:48	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 14:48	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 14:48	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 14:48	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 14:48	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:48	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/19 14:48	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:48	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 14:48	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:48	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:48	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 14:48	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:48	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 14:48	1
Ethylbenzene	**0.79**	**J**	1.0	0.40	0.16	ug/L		06/20/19 14:48	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 14:48	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 14:48	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 14:48	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 14:48	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/19 14:48	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 14:48	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 14:48	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 14:48	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 14:48	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 14:48	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 14:48	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 14:48	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 14:48	1
Vinyl chloride	0.20	U M	1.5	0.20	0.10	ug/L		06/20/19 14:48	1
Xylenes, Total	**1.3**		1.0	0.80	0.19	ug/L		06/20/19 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*06/20/19 14:48*	*1*
4-Bromofluorobenzene (Surr)	*91*		*85 - 114*		*06/20/19 14:48*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*06/20/19 14:48*	*1*
Toluene-d8 (Surr)	*97*		*89 - 112*		*06/20/19 14:48*	*1*

Client Sample ID: SHGW03-19A
Lab Sample ID: 280-124928-10

Date Collected: 06/06/19 10:50
Matrix: Water
Date Received: 06/07/19 08:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/11/19 18:50	1
Methane	**0.32**		0.0050	0.0020	0.00063	mg/L		06/11/19 18:50	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/11/19 18:50	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	**1100**	**H**	290	140	37	ug/L		07/17/19 03:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*75*		*56 - 125*	*06/17/19 09:30*	*07/17/19 03:53*	*1*
n-Octacosane	*81*	*Q*	*60 - 142*	*06/17/19 09:30*	*07/17/19 03:53*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.47**		0.10	0.050	0.019	mg/L		06/26/19 19:44	1
Sulfate	**29**		5.0	3.0	1.0	mg/L		07/04/19 07:25	1
Total Alkalinity as CaCO3	**180**		10	10	3.1	mg/L		06/15/19 05:44	1

Client Sample ID: G0069-19A
Lab Sample ID: 280-124928-11

Date Collected: 06/06/19 12:10
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:09	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 15:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/19 15:09	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/19 15:09	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 15:09	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 15:09	1
1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21	ug/L		06/20/19 15:09	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 15:09	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 15:09	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:09	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 15:09	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 15:09	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 15:09	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:09	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/19 15:09	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/19 15:09	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/19 15:09	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/20/19 15:09	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:09	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 15:09	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:09	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 15:09	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 15:09	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 15:09	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 15:09	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:09	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/19 15:09	1

Client Sample ID: G0069-19A

Date Collected: 06/06/19 12:10
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-11

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:09	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 15:09	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:09	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:09	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 15:09	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:09	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 15:09	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:09	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 15:09	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 15:09	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 15:09	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 15:09	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/19 15:09	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 15:09	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 15:09	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 15:09	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:09	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:09	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 15:09	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:09	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 15:09	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/19 15:09	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/19 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*06/20/19 15:09*	*1*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*06/20/19 15:09*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/20/19 15:09*	*1*
Toluene-d8 (Surr)	*95*		*89 - 112*		*06/20/19 15:09*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/11/19 19:03	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/11/19 19:03	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/11/19 19:03	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	**91**	**J H**	240	120	31	ug/L		07/17/19 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*66*		*56 - 125*	*06/17/19 09:30*	*07/17/19 03:09*	*1*
n-Octacosane	*82*	*Q*	*60 - 142*	*06/17/19 09:30*	*07/17/19 03:09*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**1.6**		0.10	0.050	0.019	mg/L		06/26/19 19:46	1
Sulfate	**21**		5.0	3.0	1.0	mg/L		07/04/19 07:42	1
Total Alkalinity as CaCO3	**130**		10	10	3.1	mg/L		06/15/19 05:49	1

Client Sample ID: SHGW04-19A
Lab Sample ID: 280-124928-12

Date Collected: 06/06/19 13:35
Matrix: Water

Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:31	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 15:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/19 15:31	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/19 15:31	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 15:31	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 15:31	1
1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21	ug/L		06/20/19 15:31	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 15:31	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 15:31	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:31	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 15:31	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 15:31	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 15:31	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:31	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/19 15:31	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/19 15:31	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/19 15:31	1
Acetone	**6.4**	**J**	10	6.4	1.9	ug/L		06/20/19 15:31	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:31	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 15:31	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:31	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 15:31	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 15:31	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 15:31	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 15:31	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:31	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/19 15:31	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:31	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 15:31	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:31	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:31	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 15:31	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:31	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 15:31	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:31	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 15:31	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 15:31	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 15:31	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 15:31	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/19 15:31	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 15:31	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 15:31	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 15:31	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:31	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:31	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 15:31	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:31	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 15:31	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/19 15:31	1

Client Sample ID: SHGW04-19A
Lab Sample ID: 280-124928-12
Date Collected: 06/06/19 13:35
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/19 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*81 - 118*		*06/20/19 15:31*	*1*
4-Bromofluorobenzene (Surr)	*91*		*85 - 114*		*06/20/19 15:31*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/20/19 15:31*	*1*
Toluene-d8 (Surr)	*95*		*89 - 112*		*06/20/19 15:31*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/11/19 18:23	1
Methane	**0.84**		0.0050	0.0020	0.00063	mg/L		06/11/19 18:23	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/11/19 18:23	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	**730**	**H**	240	120	32	ug/L		07/17/19 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*80*		*56 - 125*	*06/17/19 09:30*	*07/17/19 03:31*	*1*
n-Octacosane	*88*	*Q*	*60 - 142*	*06/17/19 09:30*	*07/17/19 03:31*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.032**	**J**	0.10	0.050	0.019	mg/L		06/26/19 19:48	1
Sulfate	**13**		5.0	3.0	1.0	mg/L		07/04/19 09:27	1
Total Alkalinity as CaCO3	**190**		10	10	3.1	mg/L		06/15/19 05:54	1

Client Sample ID: TB060619
Lab Sample ID: 280-124928-13
Date Collected: 06/06/19 07:00
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:52	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 15:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/19 15:52	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/19 15:52	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 15:52	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 15:52	1
1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21	ug/L		06/20/19 15:52	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 15:52	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 15:52	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:52	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 15:52	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 15:52	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 15:52	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:52	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/19 15:52	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/19 15:52	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/19 15:52	1

Client Sample ID: TB060619
Lab Sample ID: 280-124928-13

Date Collected: 06/06/19 07:00
Matrix: Water
Date Received: 06/07/19 08:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Acetone	6.4	U	10	6.4	1.9	ug/L		06/20/19 15:52	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:52	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 15:52	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:52	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 15:52	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 15:52	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 15:52	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 15:52	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:52	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/19 15:52	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:52	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 15:52	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:52	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:52	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 15:52	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:52	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 15:52	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:52	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 15:52	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 15:52	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 15:52	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 15:52	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/19 15:52	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 15:52	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 15:52	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 15:52	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 15:52	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 15:52	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 15:52	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 15:52	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 15:52	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/19 15:52	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/19 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*81 - 118*		*06/20/19 15:52*	*1*
4-Bromofluorobenzene (Surr)	*92*		*85 - 114*		*06/20/19 15:52*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*06/20/19 15:52*	*1*
Toluene-d8 (Surr)	*94*		*89 - 112*		*06/20/19 15:52*	*1*

Client Sample ID: G0017-19A
Lab Sample ID: 280-124928-14

Date Collected: 06/05/19 16:15
Matrix: Water
Date Received: 06/07/19 08:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**5.4**		0.0050	0.0020	0.00063	mg/L		06/11/19 19:16	1

Client Sample ID: G0017-19A

Lab Sample ID: 280-124928-14

Date Collected: 06/05/19 16:15

Matrix: Water

Date Received: 06/07/19 08:30

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.39	U	0.98	0.39	0.20	ug/L		06/15/19 15:23	1
1,3-Dinitrobenzene	0.20	U	0.39	0.20	0.087	ug/L		06/21/19 12:48	1
2,4,6-Trinitrotoluene	0.39	U	0.39	0.39	0.16	ug/L		06/15/19 15:23	1
2,4-Dinitrotoluene	0.20	U	0.39	0.20	0.082	ug/L		06/15/19 15:23	1
2,6-Dinitrotoluene	0.20	U M	0.20	0.20	0.063	ug/L		06/15/19 15:23	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.050	ug/L		06/15/19 15:23	1
2-Nitrotoluene	0.20	U Q	0.39	0.20	0.084	ug/L		06/21/19 12:48	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		06/15/19 15:23	1
4-Amino-2,6-dinitrotoluene	0.12	U M	0.20	0.12	0.057	ug/L		06/15/19 15:23	1
4-Nitrotoluene	0.39	U	0.98	0.39	0.20	ug/L		06/15/19 15:23	1
HMX	0.20	U	0.39	0.20	0.086	ug/L		06/21/19 12:48	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		06/15/19 15:23	1
Nitrobenzene	0.20	U M	0.39	0.20	0.089	ug/L		06/15/19 15:23	1
RDX	0.39	U M	0.39	0.39	0.15	ug/L		06/21/19 12:48	1
Tetryl	0.20	U M	0.24	0.20	0.078	ug/L		06/15/19 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*85*		*83 - 119*	*06/12/19 17:51*	*06/15/19 15:23*	*1*
1,2-Dinitrobenzene	*235*	*Q*	*83 - 119*	*06/12/19 17:51*	*06/21/19 12:48*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.21	U H M	0.42	0.21	0.091	ug/L		07/15/19 15:44	1
MNX	0.42	U Q H M	2.1	0.42	0.16	ug/L		07/15/19 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*192*	*Q*	*83 - 119*	*07/10/19 16:51*	*07/15/19 15:44*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/19/19 15:19	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:40	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 19:50	1
Sulfide	**8.0**		4.0	1.9	0.79	mg/L		06/12/19 12:54	1
Sulfate	**380**	**H D**	25	15	5.2	mg/L		07/12/19 07:26	5
Total Alkalinity as CaCO3	**480**		10	10	3.1	mg/L		06/15/19 06:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.7**	**H**	1.0	0.50	0.16	mg/L		07/05/19 12:43	1

Client Sample ID: PZ009-19A

Lab Sample ID: 280-124928-15

Date Collected: 06/05/19 16:35

Matrix: Water

Date Received: 06/07/19 08:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/11/19 19:30	1

Client Sample ID: PZ009-19A
Lab Sample ID: 280-124928-15
Date Collected: 06/05/19 16:35
Matrix: Water
Date Received: 06/07/19 08:30

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.2**		1.0	0.40	0.20	ug/L		06/15/19 15:47	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		06/15/19 15:47	1
2,4,6-Trinitrotoluene	**0.55**		0.40	0.40	0.16	ug/L		06/15/19 15:47	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		06/15/19 15:47	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		06/15/19 15:47	1
2-Amino-4,6-dinitrotoluene	**0.71**		0.20	0.12	0.051	ug/L		06/15/19 15:47	1
2-Nitrotoluene	0.20	U Q	0.40	0.20	0.086	ug/L		06/15/19 15:47	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		06/15/19 15:47	1
4-Amino-2,6-dinitrotoluene	**0.50**		0.20	0.12	0.058	ug/L		06/15/19 15:47	1
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		06/15/19 15:47	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		06/15/19 15:47	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		06/15/19 15:47	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		06/15/19 15:47	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		06/15/19 15:47	1
Tetryl	0.20	U M	0.24	0.20	0.079	ug/L		06/15/19 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*		*83 - 119*	*06/12/19 17:51*	*06/15/19 15:47*	*1*
1,2-Dinitrobenzene	*91*		*83 - 119*	*06/12/19 17:51*	*06/18/19 14:34*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U H	0.41	0.20	0.087	ug/L		07/15/19 16:07	1
MNX	0.41	U Q H	2.0	0.41	0.16	ug/L		07/15/19 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*82*	*Q M*	*83 - 119*	*07/10/19 16:51*	*07/15/19 16:07*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/19/19 15:21	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/25/19 19:41	1
Nitrate Nitrite as N	**4.2**		0.10	0.050	0.019	mg/L		06/26/19 19:52	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/12/19 12:54	1
Sulfate	**530**	**H D**	25	15	5.2	mg/L		07/12/19 07:43	5
Total Alkalinity as CaCO3	**500**		10	10	3.1	mg/L		06/15/19 06:32	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.8**	**H**	1.0	0.50	0.16	mg/L		07/05/19 13:00	1

Client Sample ID: G0045-19A
Lab Sample ID: 280-124928-16
Date Collected: 06/06/19 08:55
Matrix: Water
Date Received: 06/07/19 08:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0017**	**J**	0.0050	0.0020	0.00063	mg/L		06/12/19 13:12	1

Client Sample ID: G0045-19A

Date Collected: 06/06/19 08:55
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-16

Matrix: Water

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.42	U	1.1	0.42	0.21	ug/L		06/15/19 16:10	1
1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.093	ug/L		06/15/19 16:10	1
2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17	ug/L		06/15/19 16:10	1
2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.088	ug/L		06/15/19 16:10	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068	ug/L		06/15/19 16:10	1
2-Amino-4,6-dinitrotoluene	0.13	U	0.21	0.13	0.053	ug/L		06/15/19 16:10	1
2-Nitrotoluene	0.21	U Q	0.42	0.21	0.090	ug/L		06/15/19 16:10	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		06/15/19 16:10	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.21	0.13	0.061	ug/L		06/15/19 16:10	1
4-Nitrotoluene	0.42	U	1.1	0.42	0.21	ug/L		06/15/19 16:10	1
HMX	0.21	U	0.42	0.21	0.092	ug/L		06/15/19 16:10	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/15/19 16:10	1
Nitrobenzene	0.21	U M	0.42	0.21	0.096	ug/L		06/15/19 16:10	1
RDX	0.42	U	0.42	0.42	0.17	ug/L		06/15/19 16:10	1
Tetryl	0.21	U	0.25	0.21	0.083	ug/L		06/15/19 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*06/12/19 17:51*	*06/15/19 16:10*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U H	0.41	0.20	0.087	ug/L		07/15/19 16:30	1
MNX	0.41	U Q H	2.0	0.41	0.16	ug/L		07/15/19 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*86*	*M*	*83 - 119*	*07/10/19 16:51*	*07/15/19 16:30*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**3.9**		0.10	0.050	0.022	mg/L		06/19/19 15:23	1
Nitrogen, Total Kjeldahl	**4.0**		1.0	1.0	0.69	mg/L		06/25/19 19:48	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/26/19 19:54	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/12/19 12:54	1
Sulfate	**1000**	**H D**	50	30	10	mg/L		07/12/19 08:00	10
Total Alkalinity as CaCO3	**440**		10	10	3.1	mg/L		06/15/19 06:46	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.5**	**H**	1.0	0.50	0.16	mg/L		07/05/19 00:48	1

Default Detection Limits

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

Job ID: 280-124928-1

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

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

Method: RSK-175 - Dissolved Gases (GC)

Method: RSK-175 - Dissolved Gases (GC)

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

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

Prep: 3510C

Analyte	LOQ	DL	Units
C10-C28	250	33	ug/L

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Prep: 3535

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

General Chemistry

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

General Chemistry

Prep: 351.2

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

General Chemistry

Prep: 9030B

Analyte	LOQ	DL	Units
Sulfide	4.0	0.79	mg/L

General Chemistry - Dissolved

Analyte	LOQ	DL	Units
Dissolved Organic Carbon - Quad	1.0	0.16	mg/L

Surrogate Summary

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

Job ID: 280-124928-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(81-118)	(85-114)	(80-119)	(89-112)
280-124928-1	TB060519	92	95	101	96
280-124928-2	Source2019	91	94	99	95
280-124928-3	SHGW02-19A	93	92	103	95
280-124928-4	SHGW05-19A	93	93	104	96
280-124928-5	SAMW1-19A	91	95	101	96
280-124928-6	G0053-19A	91	93	101	97
280-124928-10	SHGW03-19A	91	91	102	97
280-124928-11	G0069-19A	91	92	100	95
280-124928-12	SHGW04-19A	91	91	100	95
280-124928-13	TB060619	92	92	102	94
LCS 280-461956/3	Lab Control Sample	96	97	101	97
LCS 280-462165/3	Lab Control Sample	95	94	102	96
MB 280-461956/4	Method Blank	94	97	103	97
MB 280-462165/5	Method Blank	90	95	100	95

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		OTPH1	OTCN1
Lab Sample ID	Client Sample ID	(56-125)	(60-142)
280-124928-10	SHGW03-19A	75	81 Q
280-124928-11	G0069-19A	66	82 Q
280-124928-12	SHGW04-19A	80	88 Q
LCS 280-461781/2-A	Lab Control Sample	69	82
LCSD 280-461781/3-A	Lab Control Sample Dup	63	74
MB 280-461781/1-A	Method Blank	69	89

Surrogate Legend

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

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		12DNB1
Lab Sample ID	Client Sample ID	(83-119)
280-124928-2	Source2019	90
280-124928-2 - RE	Source2019	85
280-124928-7	G0105-19A	142 M Q
280-124928-7 - RE	G0105-19A	88
280-124928-7 - RE	G0105-19A	153 M Q
280-124928-7	G0105-19A	93
280-124928-8	G0107-19A	97 M

Surrogate Summary

Client: Brice Environmental Services, Corp
Job ID: 280-124928-1
Project/Site: Cornhusker (CHAAP)

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

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	**Client Sample ID**	**12DNB1 (83-119)**
280-124928-8 - RE	G0107-19A	87 M
280-124928-9	G0106-19A	98 M
280-124928-9 - RE	G0106-19A	106 M
280-124928-14	G0017-19A	85
280-124928-14	G0017-19A	235 Q
280-124928-14 - RE	G0017-19A	192 Q
280-124928-15	PZ009-19A	97
280-124928-15	PZ009-19A	91
280-124928-15 - RE	PZ009-19A	82 Q M
280-124928-16	G0045-19A	96 M
280-124928-16 - RE	G0045-19A	86 M
LCS 280-461286/2-A	Lab Control Sample	96
LCS 280-464162/2-A	Lab Control Sample	96
LCS 280-464162/4-A	Lab Control Sample	90
LCSD 280-464162/3-A	Lab Control Sample Dup	88
MB 280-461286/1-A	Method Blank	98
MB 280-464162/1-A	Method Blank	95

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

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

Lab Sample ID: MB 280-461956/4
Matrix: Water
Analysis Batch: 461956

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 14:42	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/18/19 14:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/18/19 14:42	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/18/19 14:42	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/18/19 14:42	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/18/19 14:42	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/18/19 14:42	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/18/19 14:42	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/18/19 14:42	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/18/19 14:42	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/18/19 14:42	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/18/19 14:42	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/18/19 14:42	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 14:42	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/18/19 14:42	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/18/19 14:42	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/18/19 14:42	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/18/19 14:42	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 14:42	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/18/19 14:42	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/18/19 14:42	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/18/19 14:42	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/18/19 14:42	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/18/19 14:42	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/18/19 14:42	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/18/19 14:42	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/18/19 14:42	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 14:42	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/18/19 14:42	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/18/19 14:42	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 14:42	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/18/19 14:42	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/18/19 14:42	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/18/19 14:42	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 14:42	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/18/19 14:42	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/18/19 14:42	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/18/19 14:42	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/18/19 14:42	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/18/19 14:42	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/18/19 14:42	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/18/19 14:42	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/18/19 14:42	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/18/19 14:42	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/18/19 14:42	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/18/19 14:42	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/18/19 14:42	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/18/19 14:42	1

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

Lab Sample ID: MB 280-461956/4
Matrix: Water
Analysis Batch: 461956

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/18/19 14:42	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/18/19 14:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*81 - 118*		*06/18/19 14:42*	*1*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*		*06/18/19 14:42*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 119*		*06/18/19 14:42*	*1*
Toluene-d8 (Surr)	*97*		*89 - 112*		*06/18/19 14:42*	*1*

Lab Sample ID: LCS 280-461956/3
Matrix: Water
Analysis Batch: 461956

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	74 - 131
1,1,2,2-Tetrachloroethane	25.0	23.8		ug/L		95	71 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.8		ug/L		115	70 - 136
1,1,2-Trichloroethane	25.0	25.9		ug/L		104	80 - 119
1,1-Dichloroethane	25.0	25.4		ug/L		102	77 - 125
1,1-Dichloroethene	25.0	27.5		ug/L		110	71 - 131
1,2,3-Trichlorobenzene	25.0	31.4		ug/L		126	69 - 129
1,2,4-Trichlorobenzene	25.0	26.6		ug/L		106	69 - 130
1,2-Dibromo-3-Chloropropane	25.0	26.9		ug/L		108	62 - 128
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	80 - 119
1,2-Dichloroethane	25.0	22.3		ug/L		89	73 - 128
1,2-Dichloropropane	25.0	25.8		ug/L		103	78 - 122
1,3-Dichlorobenzene	25.0	26.4		ug/L		106	80 - 119
1,4-Dichlorobenzene	25.0	26.3		ug/L		105	79 - 118
2-Butanone (MEK)	100	93.6		ug/L		94	56 - 143
2-Hexanone	100	89.3		ug/L		89	57 - 139
4-Methyl-2-pentanone (MIBK)	100	92.4		ug/L		92	67 - 130
Acetone	100	89.3		ug/L		89	39 - 160
Benzene	25.0	25.8		ug/L		103	79 - 120
Bromochloromethane	25.0	27.2		ug/L		109	78 - 123
Bromodichloromethane	25.0	25.9		ug/L		103	79 - 125
Bromoform	25.0	22.2		ug/L		89	66 - 130
Bromomethane	25.0	26.9		ug/L		108	53 - 141
Carbon disulfide	25.0	25.2		ug/L		101	64 - 133
Carbon tetrachloride	25.0	26.3		ug/L		105	72 - 136
Chlorobenzene	25.0	26.3		ug/L		105	82 - 118
Chloroethane	25.0	23.7		ug/L		95	60 - 138
Chloroform	25.0	25.6		ug/L		102	79 - 124
Chloromethane	25.0	23.2		ug/L		93	50 - 139
cis-1,2-Dichloroethene	25.0	27.4		ug/L		109	78 - 123
cis-1,3-Dichloropropene	25.0	24.9		ug/L		100	75 - 124
Cyclohexane	25.0	23.8		ug/L		95	71 - 130
Dibromochloromethane	25.0	26.7		ug/L		107	74 - 126
Dichlorodifluoromethane	25.0	21.4		ug/L		86	32 - 152

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

Lab Sample ID: LCS 280-461956/3
Matrix: Water
Analysis Batch: 461956

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	25.0	26.2		ug/L		105	79 - 121
Ethylene Dibromide	25.0	25.7		ug/L		103	77 - 121
Isopropylbenzene	25.0	26.3		ug/L		105	72 - 131
Methyl acetate	50.0	46.8		ug/L		94	56 - 136
Methyl tert-butyl ether	25.0	24.5		ug/L		98	71 - 124
Methylcyclohexane	25.0	23.8		ug/L		95	72 - 132
Methylene Chloride	25.0	25.8		ug/L		103	74 - 124
Styrene	25.0	27.0		ug/L		108	78 - 123
Tetrachloroethene	25.0	27.7		ug/L		111	74 - 129
Toluene	25.0	26.7		ug/L		107	80 - 121
trans-1,2-Dichloroethene	25.0	27.7		ug/L		111	75 - 124
trans-1,3-Dichloropropene	25.0	24.0		ug/L		96	73 - 127
Trichloroethene	25.0	25.6		ug/L		102	79 - 123
Trichlorofluoromethane	25.0	27.1		ug/L		108	65 - 141
Vinyl chloride	25.0	24.3		ug/L		97	58 - 137
Xylenes, Total	50.0	52.3		ug/L		105	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*
4-Bromofluorobenzene (Surr)	*97*		*85 - 114*
Dibromofluoromethane (Surr)	*101*		*80 - 119*
Toluene-d8 (Surr)	*97*		*89 - 112*

Lab Sample ID: MB 280-462165/5
Matrix: Water
Analysis Batch: 462165

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 10:54	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 10:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/20/19 10:54	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/20/19 10:54	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/20/19 10:54	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/20/19 10:54	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 10:54	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/20/19 10:54	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/20/19 10:54	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 10:54	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 10:54	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 10:54	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/20/19 10:54	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 10:54	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/20/19 10:54	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/20/19 10:54	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/20/19 10:54	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/20/19 10:54	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 10:54	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/20/19 10:54	1

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

Lab Sample ID: MB 280-462165/5
Matrix: Water
Analysis Batch: 462165

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 10:54	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/20/19 10:54	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/20/19 10:54	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/20/19 10:54	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/20/19 10:54	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 10:54	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/20/19 10:54	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 10:54	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/20/19 10:54	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 10:54	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 10:54	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/20/19 10:54	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 10:54	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/20/19 10:54	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 10:54	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/20/19 10:54	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 10:54	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/20/19 10:54	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/20/19 10:54	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/20/19 10:54	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/20/19 10:54	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/20/19 10:54	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/20/19 10:54	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/20/19 10:54	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/20/19 10:54	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/20/19 10:54	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/20/19 10:54	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/20/19 10:54	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/20/19 10:54	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/20/19 10:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*81 - 118*		*06/20/19 10:54*	*1*
4-Bromofluorobenzene (Surr)	*95*		*85 - 114*		*06/20/19 10:54*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/20/19 10:54*	*1*
Toluene-d8 (Surr)	*95*		*89 - 112*		*06/20/19 10:54*	*1*

Lab Sample ID: LCS 280-462165/3
Matrix: Water
Analysis Batch: 462165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	25.7		ug/L		103	74 - 131
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	71 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.8		ug/L		115	70 - 136
1,1,2-Trichloroethane	25.0	26.2		ug/L		105	80 - 119
1,1-Dichloroethane	25.0	25.3		ug/L		101	77 - 125
1,1-Dichloroethene	25.0	26.7		ug/L		107	71 - 131

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

Lab Sample ID: LCS 280-462165/3
Matrix: Water
Analysis Batch: 462165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichlorobenzene	25.0	33.3	Q	ug/L		133	69 - 129
1,2,4-Trichlorobenzene	25.0	28.0		ug/L		112	69 - 130
1,2-Dibromo-3-Chloropropane	25.0	27.0		ug/L		108	62 - 128
1,2-Dichlorobenzene	25.0	26.2		ug/L		105	80 - 119
1,2-Dichloroethane	25.0	23.3		ug/L		93	73 - 128
1,2-Dichloropropane	25.0	25.7		ug/L		103	78 - 122
1,3-Dichlorobenzene	25.0	26.5		ug/L		106	80 - 119
1,4-Dichlorobenzene	25.0	26.8		ug/L		107	79 - 118
2-Butanone (MEK)	100	90.8		ug/L		91	56 - 143
2-Hexanone	100	86.3		ug/L		86	57 - 139
4-Methyl-2-pentanone (MIBK)	100	87.9		ug/L		88	67 - 130
Acetone	100	86.0		ug/L		86	39 - 160
Benzene	25.0	25.8		ug/L		103	79 - 120
Bromochloromethane	25.0	28.8		ug/L		115	78 - 123
Bromodichloromethane	25.0	26.4		ug/L		106	79 - 125
Bromoform	25.0	24.2		ug/L		97	66 - 130
Bromomethane	25.0	22.1		ug/L		88	53 - 141
Carbon disulfide	25.0	23.2		ug/L		93	64 - 133
Carbon tetrachloride	25.0	26.4		ug/L		105	72 - 136
Chlorobenzene	25.0	26.6		ug/L		106	82 - 118
Chloroethane	25.0	19.4		ug/L		78	60 - 138
Chloroform	25.0	25.9		ug/L		103	79 - 124
Chloromethane	25.0	16.4		ug/L		66	50 - 139
cis-1,2-Dichloroethene	25.0	27.8		ug/L		111	78 - 123
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	75 - 124
Cyclohexane	25.0	22.7		ug/L		91	71 - 130
Dibromochloromethane	25.0	28.5		ug/L		114	74 - 126
Dichlorodifluoromethane	25.0	18.4		ug/L		74	32 - 152
Ethylbenzene	25.0	26.3		ug/L		105	79 - 121
Ethylene Dibromide	25.0	26.8		ug/L		107	77 - 121
Isopropylbenzene	25.0	25.3		ug/L		101	72 - 131
Methyl acetate	50.0	46.8		ug/L		94	56 - 136
Methyl tert-butyl ether	25.0	24.7		ug/L		99	71 - 124
Methylcyclohexane	25.0	22.7		ug/L		91	72 - 132
Methylene Chloride	25.0	25.9		ug/L		103	74 - 124
Styrene	25.0	27.4		ug/L		110	78 - 123
Tetrachloroethene	25.0	28.1		ug/L		113	74 - 129
Toluene	25.0	26.8		ug/L		107	80 - 121
trans-1,2-Dichloroethene	25.0	27.9		ug/L		112	75 - 124
trans-1,3-Dichloropropene	25.0	24.7		ug/L		99	73 - 127
Trichloroethene	25.0	25.5		ug/L		102	79 - 123
Trichlorofluoromethane	25.0	23.6		ug/L		94	65 - 141
Vinyl chloride	25.0	20.1		ug/L		81	58 - 137
Xylenes, Total	50.0	52.6		ug/L		105	79 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*81 - 118*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*

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

Lab Sample ID: LCS 280-462165/3
Matrix: Water
Analysis Batch: 462165

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*80 - 119*
Toluene-d8 (Surr)	*96*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-461087/31
Matrix: Water
Analysis Batch: 461087

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/11/19 13:01	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/11/19 13:01	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/11/19 13:01	1

Lab Sample ID: LCS 280-461087/29
Matrix: Water
Analysis Batch: 461087

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	0.123	0.152		mg/L		123	74 - 131
Methane	0.0657	0.0757		mg/L		115	73 - 125
Ethylene	0.115	0.139		mg/L		121	72 - 133

Lab Sample ID: LCSD 280-461087/30
Matrix: Water
Analysis Batch: 461087

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	0.123	0.161		mg/L		131	74 - 131	6	20
Methane	0.0657	0.0803		mg/L		122	73 - 125	6	20
Ethylene	0.115	0.145		mg/L		126	72 - 133	4	20

Lab Sample ID: MB 280-461235/4
Matrix: Water
Analysis Batch: 461235

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethane	0.0015	U	0.0050	0.0015	0.00057	mg/L		06/12/19 08:05	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/12/19 08:05	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/12/19 08:05	1

Lab Sample ID: LCS 280-461235/2
Matrix: Water
Analysis Batch: 461235

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	0.137	0.154		mg/L		112	74 - 131
Methane	0.0730	0.0756		mg/L		104	73 - 125
Ethylene	0.128	0.157		mg/L		123	72 - 133

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

Lab Sample ID: LCSD 280-461235/3
Matrix: Water
Analysis Batch: 461235

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane			0.137	0.152		mg/L		111	74 - 131	1	20
Methane			0.0730	0.0748		mg/L		103	73 - 125	1	20
Ethylene			0.128	0.150		mg/L		117	72 - 133	5	20

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

Lab Sample ID: MB 280-461781/1-A
Matrix: Water
Analysis Batch: 464667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461781

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	120	U	250	120	33	ug/L		07/17/19 02:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*56 - 125*	*06/17/19 09:30*	*07/17/19 02:04*	*1*
n-Octacosane	*89*		*60 - 142*	*06/17/19 09:30*	*07/17/19 02:04*	*1*

Lab Sample ID: LCS 280-461781/2-A
Matrix: Water
Analysis Batch: 464667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461781

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28			1980	1710		ug/L		86	36 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*69*		*56 - 125*
n-Octacosane	*82*		*60 - 142*

Lab Sample ID: LCSD 280-461781/3-A
Matrix: Water
Analysis Batch: 464667

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 461781

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28			1980	1430		ug/L		72	36 - 132	18	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*63*		*56 - 125*
n-Octacosane	*74*		*60 - 142*

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-461286/1-A
Matrix: Water
Analysis Batch: 461580

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461286

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		06/15/19 07:27	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		06/15/19 07:27	1

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

Lab Sample ID: MB 280-461286/1-A
Matrix: Water
Analysis Batch: 461580

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461286

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		06/15/19 07:27	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		06/15/19 07:27	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		06/15/19 07:27	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		06/15/19 07:27	1
2-Nitrotoluene	0.20	U	0.40	0.20	0.086	ug/L		06/15/19 07:27	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.20	ug/L		06/15/19 07:27	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		06/15/19 07:27	1
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		06/15/19 07:27	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		06/15/19 07:27	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		06/15/19 07:27	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		06/15/19 07:27	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		06/15/19 07:27	1
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		06/15/19 07:27	1

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

Lab Sample ID: LCS 280-461286/2-A
Matrix: Water
Analysis Batch: 461580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461286

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

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

Lab Sample ID: MB 280-464162/1-A
Matrix: Water
Analysis Batch: 464207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464162

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		07/12/19 00:48	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		07/12/19 00:48	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		07/12/19 00:48	1

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

Lab Sample ID: MB 280-464162/1-A
Matrix: Water
Analysis Batch: 464207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464162

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		07/12/19 00:48	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		07/12/19 00:48	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		07/12/19 00:48	1
2-Nitrotoluene	0.20	U	0.40	0.20	0.086	ug/L		07/12/19 00:48	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		07/12/19 00:48	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		07/12/19 00:48	1
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		07/12/19 00:48	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		07/12/19 00:48	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		07/12/19 00:48	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		07/12/19 00:48	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		07/12/19 00:48	1
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		07/12/19 00:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 119*	*07/10/19 16:51*	*07/12/19 00:48*	*1*

Lab Sample ID: LCS 280-464162/2-A
Matrix: Water
Analysis Batch: 464207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464162

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

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

Lab Sample ID: LCS 280-464162/4-A
Matrix: Water
Analysis Batch: 464207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464162

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
MNX			2.33	2.56		ug/L		110	57 - 132		

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

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: LCSD 280-464162/3-A
Matrix: Water
Analysis Batch: 464207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 464162

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	2.00	1.99		ug/L		99	73 - 125	7	30
1,3-Dinitrobenzene	2.00	1.95		ug/L		98	78 - 120	7	30
2,4,6-Trinitrotoluene	2.00	1.85		ug/L		92	71 - 123	6	30
2,4-Dinitrotoluene	2.00	1.87		ug/L		94	78 - 120	8	30
2,6-Dinitrotoluene	2.00	1.88		ug/L		94	77 - 127	7	30
2-Amino-4,6-dinitrotoluene	2.00	1.75		ug/L		87	79 - 120	9	30
2-Nitrotoluene	2.00	1.41		ug/L		71	70 - 127	2	30
3-Nitrotoluene	2.00	1.59		ug/L		80	73 - 125	6	30
4-Amino-2,6-dinitrotoluene	2.00	1.68		ug/L		84	76 - 125	8	30
4-Nitrotoluene	2.00	1.53		ug/L		76	71 - 127	7	30
HMX	2.00	1.80	M	ug/L		90	65 - 135	3	30
Nitrobenzene	2.00	1.66		ug/L		83	65 - 134	4	30
RDX	2.00	1.92		ug/L		96	68 - 130	6	30
Tetryl	2.00	2.08		ug/L		104	64 - 128	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*88*		*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-462115/141
Matrix: Water
Analysis Batch: 462115

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		06/19/19 15:05	1

Lab Sample ID: LCS 280-462115/138
Matrix: Water
Analysis Batch: 462115

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.49		mg/L		100	90 - 110

Lab Sample ID: LCSD 280-462115/140
Matrix: Water
Analysis Batch: 462115

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	2.50	2.31		mg/L		92	90 - 110	8	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-462534/2-A
Matrix: Water
Analysis Batch: 462702

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

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

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 280-462534/1-A
Matrix: Water
Analysis Batch: 462702

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

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

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-463103/22
Matrix: Water
Analysis Batch: 463103

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

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

Lab Sample ID: MB 280-463103/60
Matrix: Water
Analysis Batch: 463103

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

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

Lab Sample ID: LCS 280-463103/21
Matrix: Water
Analysis Batch: 463103

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

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

Lab Sample ID: LCS 280-463103/59
Matrix: Water
Analysis Batch: 463103

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

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

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

Lab Sample ID: MB 280-461159/2-A
Matrix: Water
Analysis Batch: 461193

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461159

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		06/11/19 15:04	1

Lab Sample ID: LCS 280-461159/1-A
Matrix: Water
Analysis Batch: 461193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461159

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	26.0	18.4		mg/L		71	44 - 110

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

Lab Sample ID: MB 280-461272/2-A
Matrix: Water
Analysis Batch: 461300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461272

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		06/12/19 12:54	1

Lab Sample ID: LCS 280-461272/1-A
Matrix: Water
Analysis Batch: 461300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	26.0	20.0		mg/L		77	44 - 110

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-463528/6
Matrix: Water
Analysis Batch: 463528

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	3.0	U	5.0	3.0	1.0	mg/L		07/03/19 13:49	1

Lab Sample ID: LCS 280-463528/4
Matrix: Water
Analysis Batch: 463528

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	97.3		mg/L		97	87 - 112

Lab Sample ID: LCSD 280-463528/5
Matrix: Water
Analysis Batch: 463528

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	97.3		mg/L		97	87 - 112	0	10

Lab Sample ID: MRL 280-463528/3
Matrix: Water
Analysis Batch: 463528

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.50	2.30	J	mg/L		92	50 - 150

Lab Sample ID: 280-124928-3 MS
Matrix: Water
Analysis Batch: 463528

Client Sample ID: SHGW02-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15		25.0	40.4		mg/L		103	87 - 112

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

Lab Sample ID: 280-124928-3 MSD — **Client Sample ID: SHGW02-19A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463528

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	15		25.0	40.7		mg/L		104	87 - 112	1	10

Lab Sample ID: 280-124928-6 MS — **Client Sample ID: G0053-19A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463528

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	27		25.0	54.3		mg/L		109	87 - 112

Lab Sample ID: 280-124928-6 MSD — **Client Sample ID: G0053-19A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463528

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	27		25.0	54.3		mg/L		109	87 - 112	0	10

Lab Sample ID: 280-124928-11 MS — **Client Sample ID: G0069-19A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463528

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	21		25.0	48.2		mg/L		107	87 - 112

Lab Sample ID: 280-124928-11 MSD — **Client Sample ID: G0069-19A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463528

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	21		25.0	48.7		mg/L		110	87 - 112	1	10

Lab Sample ID: 280-124928-3 DU — **Client Sample ID: SHGW02-19A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463528

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	15		14.5		mg/L		0.8	10

Lab Sample ID: 280-124928-6 DU — **Client Sample ID: G0053-19A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463528

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	27		27.1		mg/L		0.1	10

Lab Sample ID: 280-124928-11 DU — **Client Sample ID: G0069-19A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 463528

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	21		21.3		mg/L		0	10

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-464281/6
Matrix: Water
Analysis Batch: 464281

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	3.0	U	5.0	3.0	1.0	mg/L		07/11/19 22:41	1

Lab Sample ID: LCS 280-464281/4
Matrix: Water
Analysis Batch: 464281

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	98.5		mg/L		98	87 - 112

Lab Sample ID: LCSD 280-464281/5
Matrix: Water
Analysis Batch: 464281

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	98.4		mg/L		98	87 - 112	0	10

Lab Sample ID: MRL 280-464281/3
Matrix: Water
Analysis Batch: 464281

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.50	2.28	J	mg/L		91	50 - 150

Lab Sample ID: 280-124928-7 MS
Matrix: Water
Analysis Batch: 464281

Client Sample ID: G0105-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	870	H J1 D	250	1070	J1 D	mg/L		83	87 - 112

Lab Sample ID: 280-124928-7 MSD
Matrix: Water
Analysis Batch: 464281

Client Sample ID: G0105-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	870	H J1 D	250	1080	D J1	mg/L		84	87 - 112	0	10

Lab Sample ID: 280-124928-16 MS
Matrix: Water
Analysis Batch: 464281

Client Sample ID: G0045-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1000	H D	250	1270	4 D	mg/L		99	87 - 112

Lab Sample ID: 280-124928-16 MSD
Matrix: Water
Analysis Batch: 464281

Client Sample ID: G0045-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1000	H D	250	1260	4 D	mg/L		96	87 - 112	1	10

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: 280-124928-7 DU
Matrix: Water
Analysis Batch: 464281

Client Sample ID: G0105-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	870	H J1 D	836	D	mg/L		4	10

Lab Sample ID: 280-124928-16 DU
Matrix: Water
Analysis Batch: 464281

Client Sample ID: G0045-19A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	1000	H D	997	D	mg/L		2	10

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

Lab Sample ID: MB 280-463539/2-A
Matrix: Water
Analysis Batch: 463648

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	0.50	U	1.0	0.50	0.16	mg/L		07/03/19 18:18	1

Lab Sample ID: LCS 280-463539/1-A
Matrix: Water
Analysis Batch: 463648

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	25.0	24.1		mg/L		97	88 - 112

Lab Sample ID: 280-124928-7 MS
Matrix: Water
Analysis Batch: 463648

Client Sample ID: G0105-19A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	5.9		25.0	29.3		mg/L		93	88 - 112

Lab Sample ID: 280-124928-7 MSD
Matrix: Water
Analysis Batch: 463648

Client Sample ID: G0105-19A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	5.9		25.0	30.4		mg/L		98	88 - 112	4	15

Lab Sample ID: MB 280-463669/2-A
Matrix: Water
Analysis Batch: 463832

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	0.50	U	1.0	0.50	0.16	mg/L		07/05/19 12:13	1

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

Lab Sample ID: LCS 280-463669/1-A
Matrix: Water
Analysis Batch: 463832

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	25.0	24.6		mg/L		99	88 - 112

Lab Sample ID: 280-124928-15 MS
Matrix: Water
Analysis Batch: 463832

Client Sample ID: PZ009-19A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	4.8	H	25.0	29.2		mg/L		98	88 - 112

Lab Sample ID: 280-124928-15 MSD
Matrix: Water
Analysis Batch: 463832

Client Sample ID: PZ009-19A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	4.8	H	25.0	29.5		mg/L		99	88 - 112	1	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-461772/109
Matrix: Water
Analysis Batch: 461772

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	10	U	10	10	3.1	mg/L		06/15/19 06:24	1

Lab Sample ID: MB 280-461772/83
Matrix: Water
Analysis Batch: 461772

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	10	U	10	10	3.1	mg/L		06/15/19 03:40	1

Lab Sample ID: LCS 280-461772/108
Matrix: Water
Analysis Batch: 461772

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	200	207		mg/L		104	89 - 109

Lab Sample ID: LCS 280-461772/82
Matrix: Water
Analysis Batch: 461772

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	200	207		mg/L		104	89 - 109

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-124928-15 DU
Client Sample ID: PZ009-19A
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 461772

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity as CaCO3	500			491		mg/L				1	10

GC/MS VOA

Analysis Batch: 461956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-1	TB060519	Total/NA	Water	8260B	
280-124928-2	Source2019	Total/NA	Water	8260B	
MB 280-461956/4	Method Blank	Total/NA	Water	8260B	
LCS 280-461956/3	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 462165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-3	SHGW02-19A	Total/NA	Water	8260B	
280-124928-4	SHGW05-19A	Total/NA	Water	8260B	
280-124928-5	SAMW1-19A	Total/NA	Water	8260B	
280-124928-6	G0053-19A	Total/NA	Water	8260B	
280-124928-10	SHGW03-19A	Total/NA	Water	8260B	
280-124928-11	G0069-19A	Total/NA	Water	8260B	
280-124928-12	SHGW04-19A	Total/NA	Water	8260B	
280-124928-13	TB060619	Total/NA	Water	8260B	
MB 280-462165/5	Method Blank	Total/NA	Water	8260B	
LCS 280-462165/3	Lab Control Sample	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 461087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Total/NA	Water	RSK-175	
280-124928-8	G0107-19A	Total/NA	Water	RSK-175	
280-124928-9	G0106-19A	Total/NA	Water	RSK-175	
280-124928-10	SHGW03-19A	Total/NA	Water	RSK-175	
280-124928-11	G0069-19A	Total/NA	Water	RSK-175	
280-124928-12	SHGW04-19A	Total/NA	Water	RSK-175	
280-124928-14	G0017-19A	Total/NA	Water	RSK-175	
280-124928-15	PZ009-19A	Total/NA	Water	RSK-175	
MB 280-461087/31	Method Blank	Total/NA	Water	RSK-175	
LCS 280-461087/29	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-461087/30	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 461235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-3	SHGW02-19A	Total/NA	Water	RSK-175	
280-124928-3 - DL	SHGW02-19A	Total/NA	Water	RSK-175	
280-124928-4	SHGW05-19A	Total/NA	Water	RSK-175	
280-124928-4 - DL	SHGW05-19A	Total/NA	Water	RSK-175	
280-124928-5	SAMW1-19A	Total/NA	Water	RSK-175	
280-124928-6	G0053-19A	Total/NA	Water	RSK-175	
280-124928-16	G0045-19A	Total/NA	Water	RSK-175	
MB 280-461235/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-461235/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-461235/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

GC Semi VOA

Prep Batch: 461781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-10	SHGW03-19A	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Prep Batch: 461781 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-11	G0069-19A	Total/NA	Water	3510C	
280-124928-12	SHGW04-19A	Total/NA	Water	3510C	
MB 280-461781/1-A	Method Blank	Total/NA	Water	3510C	
LCS 280-461781/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 280-461781/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 464667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-10	SHGW03-19A	Total/NA	Water	8015C DRO	461781
280-124928-11	G0069-19A	Total/NA	Water	8015C DRO	461781
280-124928-12	SHGW04-19A	Total/NA	Water	8015C DRO	461781
MB 280-461781/1-A	Method Blank	Total/NA	Water	8015C DRO	461781
LCS 280-461781/2-A	Lab Control Sample	Total/NA	Water	8015C DRO	461781
LCSD 280-461781/3-A	Lab Control Sample Dup	Total/NA	Water	8015C DRO	461781

HPLC/IC

Prep Batch: 461286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-2	Source2019	Total/NA	Water	3535	
280-124928-7	G0105-19A	Total/NA	Water	3535	
280-124928-8	G0107-19A	Total/NA	Water	3535	
280-124928-9	G0106-19A	Total/NA	Water	3535	
280-124928-14	G0017-19A	Total/NA	Water	3535	
280-124928-15	PZ009-19A	Total/NA	Water	3535	
280-124928-16	G0045-19A	Total/NA	Water	3535	
MB 280-461286/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-461286/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 461580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-2	Source2019	Total/NA	Water	8330A	461286
280-124928-7	G0105-19A	Total/NA	Water	8330A	461286
280-124928-8	G0107-19A	Total/NA	Water	8330A	461286
280-124928-9	G0106-19A	Total/NA	Water	8330A	461286
280-124928-14	G0017-19A	Total/NA	Water	8330A	461286
280-124928-15	PZ009-19A	Total/NA	Water	8330A	461286
280-124928-16	G0045-19A	Total/NA	Water	8330A	461286
MB 280-461286/1-A	Method Blank	Total/NA	Water	8330A	461286
LCS 280-461286/2-A	Lab Control Sample	Total/NA	Water	8330A	461286

Analysis Batch: 461836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-15	PZ009-19A	Total/NA	Water	8330A	461286

Analysis Batch: 462205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-14	G0017-19A	Total/NA	Water	8330A	461286

HPLC/IC

Prep Batch: 464162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-2 - RE	Source2019	Total/NA	Water	3535	
280-124928-7 - RE	G0105-19A	Total/NA	Water	3535	
280-124928-8 - RE	G0107-19A	Total/NA	Water	3535	
280-124928-9 - RE	G0106-19A	Total/NA	Water	3535	
280-124928-14 - RE	G0017-19A	Total/NA	Water	3535	
280-124928-15 - RE	PZ009-19A	Total/NA	Water	3535	
280-124928-16 - RE	G0045-19A	Total/NA	Water	3535	
MB 280-464162/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-464162/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-464162/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-464162/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 464207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-464162/1-A	Method Blank	Total/NA	Water	8330A	464162
LCS 280-464162/2-A	Lab Control Sample	Total/NA	Water	8330A	464162
LCS 280-464162/4-A	Lab Control Sample	Total/NA	Water	8330A	464162
LCSD 280-464162/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	464162

Analysis Batch: 464373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7 - RE	G0105-19A	Total/NA	Water	8330A	464162

Analysis Batch: 464537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-2 - RE	Source2019	Total/NA	Water	8330A	464162
280-124928-7 - RE	G0105-19A	Total/NA	Water	8330A	464162
280-124928-8 - RE	G0107-19A	Total/NA	Water	8330A	464162
280-124928-9 - RE	G0106-19A	Total/NA	Water	8330A	464162
280-124928-14 - RE	G0017-19A	Total/NA	Water	8330A	464162
280-124928-15 - RE	PZ009-19A	Total/NA	Water	8330A	464162
280-124928-16 - RE	G0045-19A	Total/NA	Water	8330A	464162

Analysis Batch: 464736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Total/NA	Water	8330A	461286

General Chemistry

Prep Batch: 461159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Total/NA	Water	9030B	
MB 280-461159/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-461159/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 461193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Total/NA	Water	9034	461159
MB 280-461159/2-A	Method Blank	Total/NA	Water	9034	461159
LCS 280-461159/1-A	Lab Control Sample	Total/NA	Water	9034	461159

General Chemistry

Prep Batch: 461272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-8	G0107-19A	Total/NA	Water	9030B	
280-124928-9	G0106-19A	Total/NA	Water	9030B	
280-124928-14	G0017-19A	Total/NA	Water	9030B	
280-124928-15	PZ009-19A	Total/NA	Water	9030B	
280-124928-16	G0045-19A	Total/NA	Water	9030B	
MB 280-461272/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-461272/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 461300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-8	G0107-19A	Total/NA	Water	9034	461272
280-124928-9	G0106-19A	Total/NA	Water	9034	461272
280-124928-14	G0017-19A	Total/NA	Water	9034	461272
280-124928-15	PZ009-19A	Total/NA	Water	9034	461272
280-124928-16	G0045-19A	Total/NA	Water	9034	461272
MB 280-461272/2-A	Method Blank	Total/NA	Water	9034	461272
LCS 280-461272/1-A	Lab Control Sample	Total/NA	Water	9034	461272

Analysis Batch: 461772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-3	SHGW02-19A	Total/NA	Water	SM 2320B	
280-124928-4	SHGW05-19A	Total/NA	Water	SM 2320B	
280-124928-5	SAMW1-19A	Total/NA	Water	SM 2320B	
280-124928-6	G0053-19A	Total/NA	Water	SM 2320B	
280-124928-7	G0105-19A	Total/NA	Water	SM 2320B	
280-124928-8	G0107-19A	Total/NA	Water	SM 2320B	
280-124928-9	G0106-19A	Total/NA	Water	SM 2320B	
280-124928-10	SHGW03-19A	Total/NA	Water	SM 2320B	
280-124928-11	G0069-19A	Total/NA	Water	SM 2320B	
280-124928-12	SHGW04-19A	Total/NA	Water	SM 2320B	
280-124928-14	G0017-19A	Total/NA	Water	SM 2320B	
280-124928-15	PZ009-19A	Total/NA	Water	SM 2320B	
280-124928-16	G0045-19A	Total/NA	Water	SM 2320B	
MB 280-461772/109	Method Blank	Total/NA	Water	SM 2320B	
MB 280-461772/83	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-461772/108	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-461772/82	Lab Control Sample	Total/NA	Water	SM 2320B	
280-124928-15 DU	PZ009-19A	Total/NA	Water	SM 2320B	

Analysis Batch: 462115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Total/NA	Water	350.1	
280-124928-8	G0107-19A	Total/NA	Water	350.1	
280-124928-9	G0106-19A	Total/NA	Water	350.1	
280-124928-14	G0017-19A	Total/NA	Water	350.1	
280-124928-15	PZ009-19A	Total/NA	Water	350.1	
280-124928-16	G0045-19A	Total/NA	Water	350.1	
MB 280-462115/141	Method Blank	Total/NA	Water	350.1	
LCS 280-462115/138	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-462115/140	Lab Control Sample Dup	Total/NA	Water	350.1	

General Chemistry

Prep Batch: 462534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Total/NA	Water	351.2	
280-124928-8	G0107-19A	Total/NA	Water	351.2	
280-124928-9	G0106-19A	Total/NA	Water	351.2	
280-124928-14	G0017-19A	Total/NA	Water	351.2	
280-124928-15	PZ009-19A	Total/NA	Water	351.2	
280-124928-16	G0045-19A	Total/NA	Water	351.2	
MB 280-462534/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-462534/1-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 462702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Total/NA	Water	351.2	462534
280-124928-8	G0107-19A	Total/NA	Water	351.2	462534
280-124928-9	G0106-19A	Total/NA	Water	351.2	462534
280-124928-14	G0017-19A	Total/NA	Water	351.2	462534
280-124928-15	PZ009-19A	Total/NA	Water	351.2	462534
280-124928-16	G0045-19A	Total/NA	Water	351.2	462534
MB 280-462534/2-A	Method Blank	Total/NA	Water	351.2	462534
LCS 280-462534/1-A	Lab Control Sample	Total/NA	Water	351.2	462534

Analysis Batch: 463103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-3	SHGW02-19A	Total/NA	Water	353.2	
280-124928-4	SHGW05-19A	Total/NA	Water	353.2	
280-124928-5	SAMW1-19A	Total/NA	Water	353.2	
280-124928-6	G0053-19A	Total/NA	Water	353.2	
280-124928-7	G0105-19A	Total/NA	Water	353.2	
280-124928-8	G0107-19A	Total/NA	Water	353.2	
280-124928-9	G0106-19A	Total/NA	Water	353.2	
280-124928-10	SHGW03-19A	Total/NA	Water	353.2	
280-124928-11	G0069-19A	Total/NA	Water	353.2	
280-124928-12	SHGW04-19A	Total/NA	Water	353.2	
280-124928-14	G0017-19A	Total/NA	Water	353.2	
280-124928-15	PZ009-19A	Total/NA	Water	353.2	
280-124928-16	G0045-19A	Total/NA	Water	353.2	
MB 280-463103/22	Method Blank	Total/NA	Water	353.2	
MB 280-463103/60	Method Blank	Total/NA	Water	353.2	
LCS 280-463103/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-463103/59	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 463528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-3	SHGW02-19A	Total/NA	Water	9056A	
280-124928-4	SHGW05-19A	Total/NA	Water	9056A	
280-124928-5	SAMW1-19A	Total/NA	Water	9056A	
280-124928-6	G0053-19A	Total/NA	Water	9056A	
280-124928-10	SHGW03-19A	Total/NA	Water	9056A	
280-124928-11	G0069-19A	Total/NA	Water	9056A	
280-124928-12	SHGW04-19A	Total/NA	Water	9056A	
MB 280-463528/6	Method Blank	Total/NA	Water	9056A	
LCS 280-463528/4	Lab Control Sample	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 463528 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 280-463528/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-463528/3	Lab Control Sample	Total/NA	Water	9056A	
280-124928-3 MS	SHGW02-19A	Total/NA	Water	9056A	
280-124928-3 MSD	SHGW02-19A	Total/NA	Water	9056A	
280-124928-6 MS	G0053-19A	Total/NA	Water	9056A	
280-124928-6 MSD	G0053-19A	Total/NA	Water	9056A	
280-124928-11 MS	G0069-19A	Total/NA	Water	9056A	
280-124928-11 MSD	G0069-19A	Total/NA	Water	9056A	
280-124928-3 DU	SHGW02-19A	Total/NA	Water	9056A	
280-124928-6 DU	G0053-19A	Total/NA	Water	9056A	
280-124928-11 DU	G0069-19A	Total/NA	Water	9056A	

Filtration Batch: 463539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Dissolved	Water	FILTRATION	
280-124928-8	G0107-19A	Dissolved	Water	FILTRATION	
280-124928-9	G0106-19A	Dissolved	Water	FILTRATION	
280-124928-16	G0045-19A	Dissolved	Water	FILTRATION	
MB 280-463539/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-463539/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-124928-7 MS	G0105-19A	Dissolved	Water	FILTRATION	
280-124928-7 MSD	G0105-19A	Dissolved	Water	FILTRATION	

Analysis Batch: 463648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Dissolved	Water	9060A	463539
280-124928-8	G0107-19A	Dissolved	Water	9060A	463539
280-124928-9	G0106-19A	Dissolved	Water	9060A	463539
280-124928-16	G0045-19A	Dissolved	Water	9060A	463539
MB 280-463539/2-A	Method Blank	Dissolved	Water	9060A	463539
LCS 280-463539/1-A	Lab Control Sample	Dissolved	Water	9060A	463539
280-124928-7 MS	G0105-19A	Dissolved	Water	9060A	463539
280-124928-7 MSD	G0105-19A	Dissolved	Water	9060A	463539

Filtration Batch: 463669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-14	G0017-19A	Dissolved	Water	FILTRATION	
280-124928-15	PZ009-19A	Dissolved	Water	FILTRATION	
MB 280-463669/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-463669/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-124928-15 MS	PZ009-19A	Dissolved	Water	FILTRATION	
280-124928-15 MSD	PZ009-19A	Dissolved	Water	FILTRATION	

Analysis Batch: 463832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-14	G0017-19A	Dissolved	Water	9060A	463669
280-124928-15	PZ009-19A	Dissolved	Water	9060A	463669
MB 280-463669/2-A	Method Blank	Dissolved	Water	9060A	463669
LCS 280-463669/1-A	Lab Control Sample	Dissolved	Water	9060A	463669
280-124928-15 MS	PZ009-19A	Dissolved	Water	9060A	463669
280-124928-15 MSD	PZ009-19A	Dissolved	Water	9060A	463669

General Chemistry

Analysis Batch: 464281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124928-7	G0105-19A	Total/NA	Water	9056A	
280-124928-8	G0107-19A	Total/NA	Water	9056A	
280-124928-9	G0106-19A	Total/NA	Water	9056A	
280-124928-14	G0017-19A	Total/NA	Water	9056A	
280-124928-15	PZ009-19A	Total/NA	Water	9056A	
280-124928-16	G0045-19A	Total/NA	Water	9056A	
MB 280-464281/6	Method Blank	Total/NA	Water	9056A	
LCS 280-464281/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-464281/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-464281/3	Lab Control Sample	Total/NA	Water	9056A	
280-124928-7 MS	G0105-19A	Total/NA	Water	9056A	
280-124928-7 MSD	G0105-19A	Total/NA	Water	9056A	
280-124928-16 MS	G0045-19A	Total/NA	Water	9056A	
280-124928-16 MSD	G0045-19A	Total/NA	Water	9056A	
280-124928-7 DU	G0105-19A	Total/NA	Water	9056A	
280-124928-16 DU	G0045-19A	Total/NA	Water	9056A	

Client Sample ID: TB060519

Lab Sample ID: 280-124928-1

Date Collected: 06/05/19 07:00

Matrix: Water

Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	461956	06/18/19 23:52	GPM	TAL DEN

Client Sample ID: Source2019

Lab Sample ID: 280-124928-2

Date Collected: 06/05/19 07:00

Matrix: Water

Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	461956	06/19/19 00:13	GPM	TAL DEN
Total/NA	Prep	3535			493.7 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 13:48	HKF	TAL DEN
Total/NA	Prep	3535	RE		509.8 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464537	07/15/19 14:13	HKF	TAL DEN

Client Sample ID: SHGW02-19A

Lab Sample ID: 280-124928-3

Date Collected: 06/06/19 13:25

Matrix: Water

Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462165	06/20/19 13:23	GPM	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461235	06/12/19 12:19	MD	TAL DEN
Total/NA	Analysis	RSK-175	DL	3	18 mL	18 mL	461235	06/12/19 13:25	MD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:56	SVC	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	463528	07/04/19 03:03	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 04:50	SGB	TAL DEN

Client Sample ID: SHGW05-19A

Lab Sample ID: 280-124928-4

Date Collected: 06/06/19 08:00

Matrix: Water

Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462165	06/20/19 13:45	GPM	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461235	06/12/19 12:32	MD	TAL DEN
Total/NA	Analysis	RSK-175	DL	3	18 mL	18 mL	461235	06/12/19 13:39	MD	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 18:58	SVC	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	463528	07/04/19 04:13	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:06	SGB	TAL DEN

Client Sample ID: SAMW1-19A

Lab Sample ID: 280-124928-5

Date Collected: 06/06/19 10:55

Matrix: Water

Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462165	06/20/19 14:06	GPM	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461235	06/12/19 12:45	MD	TAL DEN

Client Sample ID: SAMW1-19A

Date Collected: 06/06/19 10:55
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		2	100 mL	100 mL	463103	06/26/19 19:12	SVC	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	463528	07/04/19 04:30	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:11	SGB	TAL DEN

Client Sample ID: G0053-19A

Date Collected: 06/06/19 12:10
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462165	06/20/19 14:27	GPM	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461235	06/12/19 12:59	MD	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	463103	06/26/19 19:14	SVC	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	463528	07/04/19 05:23	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:16	SGB	TAL DEN

Client Sample ID: G0105-19A

Date Collected: 06/05/19 12:35
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 17:56	MD	TAL DEN
Total/NA	Prep	3535	RE		503.2 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464373	07/13/19 04:15	HKF	TAL DEN
Total/NA	Prep	3535			486.3 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			464736	07/16/19 17:53	HKF	TAL DEN
Total/NA	Prep	3535			486.3 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 14:11	HKF	TAL DEN
Total/NA	Prep	3535	RE		503.2 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464537	07/15/19 14:36	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	462115	06/19/19 15:13	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:36	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:16	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461159	06/11/19 12:16	JLA	TAL DEN
Total/NA	Analysis	9034		1			461193	06/11/19 15:04	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	464281	07/12/19 05:06	TLP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463539	07/03/19 11:51	CCJ	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463648	07/03/19 18:47	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:24	SGB	TAL DEN

Client Sample ID: G0107-19A
Lab Sample ID: 280-124928-8

Date Collected: 06/05/19 13:50
Matrix: Water
Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 18:10	MD	TAL DEN
Total/NA	Prep	3535			511.9 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 14:35	HKF	TAL DEN
Total/NA	Prep	3535	RE		471.5 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464537	07/15/19 14:59	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	462115	06/19/19 15:15	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:37	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:18	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461272	06/12/19 09:51	JLA	TAL DEN
Total/NA	Analysis	9034		1			461300	06/12/19 12:54	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	464281	07/12/19 06:51	TLP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463539	07/03/19 11:51	CCJ	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463648	07/03/19 20:03	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:31	SGB	TAL DEN

Client Sample ID: G0106-19A
Lab Sample ID: 280-124928-9

Date Collected: 06/05/19 15:05
Matrix: Water
Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 18:36	MD	TAL DEN
Total/NA	Prep	3535			512.5 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 14:59	HKF	TAL DEN
Total/NA	Prep	3535	RE		469.9 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464537	07/15/19 15:21	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	462115	06/19/19 15:17	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:38	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:30	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461272	06/12/19 09:51	JLA	TAL DEN
Total/NA	Analysis	9034		1			461300	06/12/19 12:54	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	464281	07/12/19 07:08	TLP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463539	07/03/19 11:51	CCJ	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463648	07/03/19 20:18	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:38	SGB	TAL DEN

Client Sample ID: SHGW03-19A
Lab Sample ID: 280-124928-10

Date Collected: 06/06/19 10:50
Matrix: Water
Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462165	06/20/19 14:48	GPM	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 18:50	MD	TAL DEN

Client Sample ID: SHGW03-19A
Lab Sample ID: 280-124928-10
Date Collected: 06/06/19 10:50
Matrix: Water
Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			876.7 mL	1 mL	461781	06/17/19 09:30	AZG	TAL DEN
Total/NA	Analysis	8015C DRO		1			464667	07/17/19 03:53	MAM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:44	SVC	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	463528	07/04/19 07:25	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:44	SGB	TAL DEN

Client Sample ID: G0069-19A
Lab Sample ID: 280-124928-11
Date Collected: 06/06/19 12:10
Matrix: Water
Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462165	06/20/19 15:09	GPM	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 19:03	MD	TAL DEN
Total/NA	Prep	3510C			1036.5 mL	1 mL	461781	06/17/19 09:30	AZG	TAL DEN
Total/NA	Analysis	8015C DRO		1			464667	07/17/19 03:09	MAM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:46	SVC	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	463528	07/04/19 07:42	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:49	SGB	TAL DEN

Client Sample ID: SHGW04-19A
Lab Sample ID: 280-124928-12
Date Collected: 06/06/19 13:35
Matrix: Water
Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462165	06/20/19 15:31	GPM	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 18:23	MD	TAL DEN
Total/NA	Prep	3510C			1029.4 mL	1 mL	461781	06/17/19 09:30	AZG	TAL DEN
Total/NA	Analysis	8015C DRO		1			464667	07/17/19 03:31	MAM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:48	SVC	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	463528	07/04/19 09:27	JAP	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 05:54	SGB	TAL DEN

Client Sample ID: TB060619
Lab Sample ID: 280-124928-13
Date Collected: 06/06/19 07:00
Matrix: Water
Date Received: 06/07/19 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	462165	06/20/19 15:52	GPM	TAL DEN

Client Sample ID: G0017-19A

Date Collected: 06/05/19 16:15
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 19:16	MD	TAL DEN
Total/NA	Prep	3535			510.2 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			462205	06/21/19 12:48	HKF	TAL DEN
Total/NA	Prep	3535			510.2 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 15:23	HKF	TAL DEN
Total/NA	Prep	3535	RE		470.7 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464537	07/15/19 15:44	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	462115	06/19/19 15:19	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:40	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:50	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461272	06/12/19 09:51	JLA	TAL DEN
Total/NA	Analysis	9034		1			461300	06/12/19 12:54	JLA	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	464281	07/12/19 07:26	TLP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463669	07/05/19 09:14	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463832	07/05/19 12:43	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 06:03	SGB	TAL DEN

Client Sample ID: PZ009-19A

Date Collected: 06/05/19 16:35
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461087	06/11/19 19:30	MD	TAL DEN
Total/NA	Prep	3535			499.1 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461836	06/18/19 14:34	HKF	TAL DEN
Total/NA	Prep	3535			499.1 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 15:47	HKF	TAL DEN
Total/NA	Prep	3535	RE		488.6 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464537	07/15/19 16:07	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	462115	06/19/19 15:21	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:41	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:52	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461272	06/12/19 09:51	JLA	TAL DEN
Total/NA	Analysis	9034		1			461300	06/12/19 12:54	JLA	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	464281	07/12/19 07:43	TLP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463669	07/05/19 09:14	JAM	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463832	07/05/19 13:00	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 06:32	SGB	TAL DEN

Lab Chronicle

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

Job ID: 280-124928-1

Client Sample ID: G0045-19A

Date Collected: 06/06/19 08:55
Date Received: 06/07/19 08:30

Lab Sample ID: 280-124928-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	461235	06/12/19 13:12	MD	TAL DEN
Total/NA	Prep	3535			475 mL	5 mL	461286	06/12/19 17:51	KSA	TAL DEN
Total/NA	Analysis	8330A		1			461580	06/15/19 16:10	HKF	TAL DEN
Total/NA	Prep	3535	RE		489.1 mL	5 mL	464162	07/10/19 16:51	AJE	TAL DEN
Total/NA	Analysis	8330A	RE	1			464537	07/15/19 16:30	HKF	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	462115	06/19/19 15:23	MJS	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	462534	06/24/19 16:14	JDR	TAL DEN
Total/NA	Analysis	351.2		1			462702	06/25/19 19:48	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	463103	06/26/19 19:54	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	461272	06/12/19 09:51	JLA	TAL DEN
Total/NA	Analysis	9034		1			461300	06/12/19 12:54	JLA	TAL DEN
Total/NA	Analysis	9056A		10	5 mL	5 mL	464281	07/12/19 08:00	TLP	TAL DEN
Dissolved	Filtration	FILTRATION			20 mL	20 mL	463539	07/03/19 11:51	CCJ	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	463648	07/05/19 00:48	CCJ	TAL DEN
Total/NA	Analysis	SM 2320B		1			461772	06/15/19 06:46	SGB	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: Brice Environmental Services, Corp
Job ID: 280-124928-1
Project/Site: Cornhusker (CHAAP)

Laboratory: Eurofins TestAmerica, Denver

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

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

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

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

Method Summary

Client: Brice Environmental Services, Corp
Job ID: 280-124928-1
Project/Site: Cornhusker (CHAAP)

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
RSK-175	Dissolved Gases (GC)	RSK	TAL DEN
8015C DRO	Diesel Range Organics (DRO) (GC)	SW846	TAL DEN
8330A	Nitroaromatics and Nitramines (HPLC)	EPA	TAL DEN
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL DEN
9056A	Anions, Ion Chromatography	SW846	TAL DEN
9060A	Organic Carbon, Dissolved (DOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL DEN
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN
5030B	Purge and Trap	SW846	TAL DEN
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	TAL DEN
FILTRATION	Sample Filtration	None	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

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

None = None

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

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

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

Laboratory References:

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

Sample Summary

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

Job ID: 280-124928-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-124928-1	TB060519	Water	06/05/19 07:00	06/07/19 08:30	
280-124928-2	Source2019	Water	06/05/19 07:00	06/07/19 08:30	
280-124928-3	SHGW02-19A	Water	06/06/19 13:25	06/07/19 08:30	
280-124928-4	SHGW05-19A	Water	06/06/19 08:00	06/07/19 08:30	
280-124928-5	SAMW1-19A	Water	06/06/19 10:55	06/07/19 08:30	
280-124928-6	G0053-19A	Water	06/06/19 12:10	06/07/19 08:30	
280-124928-7	G0105-19A	Water	06/05/19 12:35	06/07/19 08:30	
280-124928-8	G0107-19A	Water	06/05/19 13:50	06/07/19 08:30	
280-124928-9	G0106-19A	Water	06/05/19 15:05	06/07/19 08:30	
280-124928-10	SHGW03-19A	Water	06/06/19 10:50	06/07/19 08:30	
280-124928-11	G0069-19A	Water	06/06/19 12:10	06/07/19 08:30	
280-124928-12	SHGW04-19A	Water	06/06/19 13:35	06/07/19 08:30	
280-124928-13	TB060619	Water	06/06/19 07:00	06/07/19 08:30	
280-124928-14	G0017-19A	Water	06/05/19 16:15	06/07/19 08:30	
280-124928-15	PZ009-19A	Water	06/05/19 16:35	06/07/19 08:30	
280-124928-16	G0045-19A	Water	06/06/19 08:55	06/07/19 08:30	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VMS_G2 Analysis Batch Number: 461853

Lab Sample ID: IC 280-461853/2 Client Sample ID:

Date Analyzed: 06/17/19 17:38 Lab File ID: g2_6448.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Hexane	3.48	Assign Peak	meierg	06/17/19 19:35
2-Chlorotoluene	8.75	Assign Peak	meierg	06/17/19 19:36

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VMS_G2 Analysis Batch Number: 462165

Lab Sample ID: 280-124928-3 Client Sample ID: SHGW02-19A

Date Analyzed: 06/20/19 13:23 Lab File ID: g2_6576.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2,2-Tetrachloroethane		Invalid Compound ID	meierg	06/22/19 13:22
1,2-Dichloropropane		Invalid Compound ID	meierg	06/22/19 13:22
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	meierg	06/22/19 13:22
Methylcyclohexane		Invalid Compound ID	meierg	06/22/19 13:22

Lab Sample ID: 280-124928-4 Client Sample ID: SHGW05-19A

Date Analyzed: 06/20/19 13:45 Lab File ID: g2_6577.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2,2-Tetrachloroethane		Invalid Compound ID	meierg	06/22/19 13:35
1,2-Dichloropropane		Invalid Compound ID	meierg	06/22/19 13:35
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	meierg	06/22/19 13:35
Chloroethane		Invalid Compound ID	meierg	06/22/19 13:35
Methylcyclohexane		Invalid Compound ID	meierg	06/22/19 13:35

Lab Sample ID: 280-124928-6 Client Sample ID: G0053-19A

Date Analyzed: 06/20/19 14:27 Lab File ID: g2_6579.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2-Trichloro-1,2,2-trifluoroethane	2.81	Split Peak	meierg	06/22/19 13:37

Lab Sample ID: 280-124928-10 Client Sample ID: SHGW03-19A

Date Analyzed: 06/20/19 14:48 Lab File ID: g2_6580.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride		Invalid Compound ID	meierg	06/22/19 13:36

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 454595

Lab Sample ID: IC 280-454595/6 Client Sample ID:

Date Analyzed: 04/15/19 11:30 Lab File ID: 04151906.D GC Column: Rt-Alumina KC ID: 0.53(mm)

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

Lab Sample ID: IC 280-454595/7 Client Sample ID:

Date Analyzed: 04/15/19 11:44 Lab File ID: 04151907.D GC Column: Rt-Alumina KC ID: 0.53(mm)

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 457315

Lab Sample ID: IC 280-457315/7 Client Sample ID:

Date Analyzed: 05/07/19 15:08 Lab File ID: 05070007.D GC Column: Luna-phenylhe ID: 4.6(mm)

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

Lab Sample ID: IC 280-457315/13 Client Sample ID:

Date Analyzed: 05/07/19 18:38 Lab File ID: 05070013.D GC Column: Luna-phenylhe ID: 4.6(mm)

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

Lab Sample ID: IC 280-457315/14 Client Sample ID:

Date Analyzed: 05/07/19 19:13 Lab File ID: 05070014.D GC Column: Luna-phenylhe ID: 4.6(mm)

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 461836

Lab Sample ID: 280-124928-15 Client Sample ID: PZ009-19A

Date Analyzed: 06/18/19 14:34 Lab File ID: 06170041.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl	23.86	Baseline Smoothing	fiedlerh	06/19/19 11:03
2,4,6-Trinitrotoluene	24.81	Baseline Smoothing	fiedlerh	06/19/19 11:03

Lab Sample ID: CCV 280-461836/49 Client Sample ID:

Date Analyzed: 06/18/19 19:14 Lab File ID: 06170049.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl	23.84	Baseline Smoothing	fiedlerh	06/19/19 11:08

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 462205

Lab Sample ID: CCV 280-462205/7 Client Sample ID:

Date Analyzed: 06/21/19 11:38 Lab File ID: 06210007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl	23.91	Baseline Smoothing	fiedlerh	06/28/19 10:49

Lab Sample ID: 280-124928-14 Client Sample ID: G0017-19A

Date Analyzed: 06/21/19 12:48 Lab File ID: 06210009.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	fiedlerh	06/24/19 10:25
4-Nitrotoluene		Invalid Compound ID	fiedlerh	06/24/19 10:25
RDX		Invalid Compound ID	fiedlerh	06/24/19 10:25
3-Nitrotoluene	17.97	Baseline Smoothing	fiedlerh	06/24/19 10:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 464373

Lab Sample ID: 280-124928-7 RE Client Sample ID: G0105-19A RE

Date Analyzed: 07/13/19 04:15 Lab File ID: 07120034.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 11:36
4-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 11:36
MNX		Invalid Compound ID	fiedlerh	07/15/19 11:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 464736

Lab Sample ID: 280-124928-7 Client Sample ID: G0105-19A

Date Analyzed: 07/16/19 17:53 Lab File ID: 07160009.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	fiedlerh	07/17/19 08:34
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/17/19 08:33
4-Nitrotoluene		Invalid Compound ID	fiedlerh	07/17/19 08:33

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 458150

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 458150

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461580

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

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

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

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

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

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

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

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

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

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461580

Lab Sample ID: 280-124928-2 Client Sample ID: Source2019

Date Analyzed: 06/15/19 13:48 Lab File ID: 06140059.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 10:25

Lab Sample ID: 280-124928-7 Client Sample ID: G0105-19A

Date Analyzed: 06/15/19 14:11 Lab File ID: 06140060.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.35	Baseline Smoothing	fiedlerh	06/17/19 10:25
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	06/17/19 10:25
RDX		Invalid Compound ID	fiedlerh	06/17/19 10:25
Tetryl		Invalid Compound ID	fiedlerh	06/17/19 10:26

Lab Sample ID: 280-124928-8 Client Sample ID: G0107-19A

Date Analyzed: 06/15/19 14:35 Lab File ID: 06140061.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/17/19 10:26
4-Nitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 10:26

Lab Sample ID: 280-124928-9 Client Sample ID: G0106-19A

Date Analyzed: 06/15/19 14:59 Lab File ID: 06140062.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/17/19 10:31
3-Nitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 10:31

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461580

Lab Sample ID: 280-124928-14 Client Sample ID: G0017-19A

Date Analyzed: 06/15/19 15:23 Lab File ID: 06140063.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline Smoothing	fiedlerh	06/17/19 10:31
RDX	7.75	Baseline Smoothing	fiedlerh	06/17/19 10:32
2,6-Dinitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 10:32
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	fiedlerh	06/17/19 10:32
MNX		Invalid Compound ID	fiedlerh	06/17/19 10:32
Nitrobenzene		Invalid Compound ID	fiedlerh	06/17/19 10:32
Tetryl		Invalid Compound ID	fiedlerh	06/17/19 10:32

Lab Sample ID: 280-124928-15 Client Sample ID: PZ009-19A

Date Analyzed: 06/15/19 15:47 Lab File ID: 06140064.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl		Invalid Compound ID	fiedlerh	06/17/19 10:32

Lab Sample ID: 280-124928-16 Client Sample ID: G0045-19A

Date Analyzed: 06/15/19 16:10 Lab File ID: 06140065.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	06/17/19 10:32
Nitrobenzene	9.96	Baseline Smoothing	fiedlerh	06/17/19 10:33

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

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

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

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 461580

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 463276

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

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

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

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

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

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

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

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

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

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 463276

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

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

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

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

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

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

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

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

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

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 463276

Lab Sample ID: IC 280-463276/30 Client Sample ID:

Date Analyzed: 07/01/19 23:32 Lab File ID: 07010030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

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

Lab Sample ID: IC 280-463276/31 Client Sample ID:

Date Analyzed: 07/01/19 23:55 Lab File ID: 07010031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

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

Lab Sample ID: ICV 280-463276/33 Client Sample ID:

Date Analyzed: 07/02/19 00:41 Lab File ID: 07010033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464207

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

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

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

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

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

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

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

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

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

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464207

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

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

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

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464537

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

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

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

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

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

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

Lab Sample ID: 280-124928-2 RE Client Sample ID: Source2019 RE

Date Analyzed: 07/15/19 14:13 Lab File ID: 07150012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:55

Lab Sample ID: 280-124928-7 RE Client Sample ID: G0105-19A RE

Date Analyzed: 07/15/19 14:36 Lab File ID: 07150013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.37	Baseline Smoothing	fiedlerh	07/15/19 16:55
1,2-Dinitrobenzene	8.73	Baseline Smoothing	fiedlerh	07/15/19 16:55
2,4,6-Trinitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:55

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464537

Lab Sample ID: 280-124928-8 RE Client Sample ID: G0107-19A RE

Date Analyzed: 07/15/19 14:59 Lab File ID: 07150014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.76	Baseline Smoothing	fiedlerh	07/15/19 16:55
1,2-Dinitrobenzene	8.75	Baseline Smoothing	fiedlerh	07/15/19 16:55
2,4-Dinitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:55
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:56
Tetryl		Invalid Compound ID	fiedlerh	07/15/19 16:55

Lab Sample ID: 280-124928-9 RE Client Sample ID: G0106-19A RE

Date Analyzed: 07/15/19 15:21 Lab File ID: 07150015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	07/15/19 16:56
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:56

Lab Sample ID: 280-124928-14 RE Client Sample ID: G0017-19A RE

Date Analyzed: 07/15/19 15:44 Lab File ID: 07150016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.66	Baseline Smoothing	fiedlerh	07/15/19 16:56
Nitrobenzene	9.91	Baseline Smoothing	fiedlerh	07/15/19 16:56
2,4,6-Trinitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:56
2-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:56
3-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:56
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:56
4-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:56
MNX		Invalid Compound ID	fiedlerh	07/15/19 16:56

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 464537

Lab Sample ID: 280-124928-15 RE Client Sample ID: PZ009-19A RE

Date Analyzed: 07/15/19 16:07 Lab File ID: 07150017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	07/15/19 16:57
Tetryl		Invalid Compound ID	fiedlerh	07/15/19 16:57

Lab Sample ID: 280-124928-16 RE Client Sample ID: G0045-19A RE

Date Analyzed: 07/15/19 16:30 Lab File ID: 07150018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.74	Baseline Smoothing	fiedlerh	07/15/19 16:57
4-Nitrotoluene		Invalid Compound ID	fiedlerh	07/15/19 16:57

Lab Sample ID: CCV 280-464537/20 Client Sample ID:

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

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

Lab Sample ID: CCV 280-464537/22 Client Sample ID:

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

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

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 463472

Lab Sample ID: STD1 280-463472/2 IC Client Sample ID:

Date Analyzed: 07/02/19 22:14 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	11.56	Peak assignment corrected	pedrickj	07/03/19 08:31

Lab Sample ID: STD2 280-463472/3 IC Client Sample ID:

Date Analyzed: 07/02/19 22:31 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	11.55	Peak assignment corrected	pedrickj	07/03/19 08:32

Lab Sample ID: STD3 280-463472/4 IC Client Sample ID:

Date Analyzed: 07/02/19 22:49 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	11.56	Peak assignment corrected	pedrickj	07/03/19 08:32

Lab Sample ID: STD4 280-463472/5 IC Client Sample ID:

Date Analyzed: 07/02/19 23:06 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	11.54	Peak assignment corrected	pedrickj	07/03/19 08:32

Lab Sample ID: STD5 280-463472/6 IC Client Sample ID:

Date Analyzed: 07/02/19 23:24 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	11.51	Peak assignment corrected	pedrickj	07/03/19 08:32

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 463472

Lab Sample ID: STD6 280-463472/7 IC Client Sample ID:

Date Analyzed: 07/02/19 23:41 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	11.50	Peak assignment corrected	pedrickj	07/03/19 08:32

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00370	06/24/19	06/17/19	Di Water, Lot na	100 mL	NH3 CAL STD_00030	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00030	02/28/20		Ricca, Lot 1808L28		(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV_00353	06/24/19	06/17/19	na, Lot na	100 mL	NH3 ICV STD_00026	10 mL	Ammonia	99.6 mg/L
.NH3 ICV STD_00026	04/01/20		Inorganic Ventures, Lot M2-NH662533		(Purchased Reagent)		Ammonia	996 mg/L
8015 LCS_00079	10/05/19	04/04/19	ACETONE, Lot Acetone_00267	200 mL	8015 DROStock_00627	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00628	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00629	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00630	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00631	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00632	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00633	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
					8015 DROStock_00654	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	1962 ug/mL
							C10-C28	1984 ug/mL
							C10-C32	1992 ug/mL
							C10-C36	2000 ug/mL
							C8-C34	2000 ug/mL
.8015 DROStock_00627	08/15/26		Accustandard, Lot 216081176		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00628	08/15/26		Accustandard, Lot 216081176		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00629	08/15/26		Accustandard, Lot 216081176		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00630	08/15/26		Accustandard, Lot 216081176		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00631	08/15/26	Accustandard, Lot 216081176			(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00632	08/15/26	Accustandard, Lot 216081176			(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00633	08/15/26	Accustandard, Lot 216081176			(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00654	08/15/26	Accustandard, Lot 216081176			(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
8015Surrogate_00165	11/06/19	06/03/19	90:10 Acetone:MeCl2, Lot 90Ace10MeCl2_00056	250 mL	DRO_SURR_00107	0.75 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
					DRO_SURR_00108	1 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
.DRO_SURR_00107	12/03/21	Accustandard, Lot 216111071-01			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_SURR_00108	12/03/21	Accustandard, Lot 216111071-01			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330 DMT_00002	12/31/19	03/13/19	Acetonitrile, Lot 184936	5 mL	MNX,TNX,DNX_00027	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00027	12/31/19	ULTRA Scientific, Lot CS-5628			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 LCS_00084	05/16/19	11/16/18	Acetonitrile, Lot ACN_00215	100 mL	8330 LCSMix2_00101	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_00104	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
.8330 LCSMix2_00101	11/16/19	Restek, Lot A0122699			(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
.8330LCSMix1_00104	11/16/19	Restek, Lot A0128688			(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
8330 LCS_00089	11/08/19	05/08/19	Acetonitrile, Lot ACN_00030	100 mL	8330_NG_Stk_00071	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00073	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00076	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00077	1 mL	PETN	100 ug/mL
					8330LCSMix1_00109	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330LCSmix2_00008	1 mL	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_00083	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00071	07/31/20		Restek, Lot A0129124		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00073	07/31/20		Restek, Lot A0129124		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00076	03/31/21		Restek, Lot A0136306		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00077	03/31/21		Restek, Lot A0136306		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00109	10/31/22		Restek, Lot A0131772		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00008	08/31/23		Restek, Lot A0141002		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.PicricARestek_00083	11/30/23		Restek, Lot A0143208		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00002	12/31/19	03/12/19	Acetonitrile, Lot 00222	10 mL	MNX,TNX,DNX_00026	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00026	12/31/19		ULTRA Scientific, Lot CS-5628		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00058	07/19/19	05/07/19	Acetonitrile, Lot 200488	5 mL	8330_NG_Stk_00052	200 uL	Nitroglycerin	200 ug/mL
					8330_PETN_Stk_00056	200 uL	PETN	200 ug/mL
					8330ICALStock_00029	1 mL	1,3,5-Trinitrobenzene	20 ug/mL
							1,3-Dinitrobenzene	20.02 ug/mL
							2,4,6-Trinitrotoluene	20.08 ug/mL
							2,4-Dinitrotoluene	20.04 ug/mL
							2,6-Dinitrotoluene	20.06 ug/mL
							2-Amino-4,6-dinitrotoluene	20.06 ug/mL
							2-Nitrotoluene	20.06 ug/mL
							3-Nitrotoluene	20.08 ug/mL
							4-Amino-2,6-dinitrotoluene	20.06 ug/mL
							4-Nitrotoluene	20.08 ug/mL
							HMX	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene	20.04 ug/mL
							RDX	20 ug/mL
							Tetryl	20 ug/mL
							1,2-Dinitrobenzene	20 ug/mL
					8330PAStkPS_00058	1 mL	2,4,6-Trinitrophenol	20 ug/mL
.8330_NG_Stk_00052	01/01/20		Restek, Lot A0124122		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00056	01/01/20		Restek, Lot A0124124		(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00029	11/30/19	11/30/18	Acetonitrile, Lot 200488	10 mL	8330 Stock_TS_00012	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100.1 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.2 ug/mL
							2,6-Dinitrotoluene	100.3 ug/mL
							2-Amino-4,6-dinitrotoluene	100.3 ug/mL
							2-Nitrotoluene	100.3 ug/mL
							3-Nitrotoluene	100.4 ug/mL
							4-Amino-2,6-dinitrotoluene	100.3 ug/mL
							4-Nitrotoluene	100.4 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.2 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00163	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00012	04/30/20		Ultra Scientific, Lot CR-1002		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1001 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1002 ug/mL
							2,6-Dinitrotoluene	1003 ug/mL
							2-Amino-4,6-dinitrotoluene	1003 ug/mL
							2-Nitrotoluene	1003 ug/mL
							3-Nitrotoluene	1004 ug/mL
							4-Amino-2,6-dinitrotoluene	1003 ug/mL
							4-Nitrotoluene	1004 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1002 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00163	08/15/24		AccuStandard, Lot 216071012		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00058	07/19/19		AccuStandard, Lot 216061376-01		(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00103	12/04/19	03/17/19	Acetonitrile, Lot ACN_00219	500 mL	8330SurrStkSS_00134	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00135	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00152	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00153	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00134	02/28/22		Restek, Lot A0124792		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00135	02/28/22		Restek, Lot A0124792		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00152	07/31/23		Restek, Lot A0139489		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00153	07/31/23		Restek, Lot A0139489		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330Surrogate_00105	11/28/19	05/28/19	Acetonitrile, Lot ACN_00033	500 mL	8330SurrStkSS_00142	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00145	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00146	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00149	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00150	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00142	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00145	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00146	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00149	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00150	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_00825	06/18/19	06/12/19	Di Water, Lot na	1000 mL	Alk stk std_00016	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00016	06/30/20	Fischer, Lot 182564			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
DRO_L4/CCV_00080	12/17/19	06/18/19	Methylene Chloride, Lot MeCl2_Cycl_00441	25 mL	DRO_Fuel2_00132	2.5 mL	C10-C28	4960 ug/mL
					DRO_SURR_00104	0.125 mL	n-Octacosane	25 ug/mL
							o-Terphenyl (Surr)	25 ug/mL
.DRO_Fuel2_00132	12/17/19	Restek, Lot A0138518			(Purchased Reagent)		C10-C28	49600 ug/mL
.DRO_SURR_00104	02/04/22	Accustandard, Lot 212111159-02			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_L6_00046	07/30/19	01/30/19	Methylene Chloride, Lot MeCl2_Cycl_00424	5 mL	8015 SurStock_00276	75 uL	n-Octacosane	75 ug/mL
							o-Terphenyl (Surr)	75 ug/mL
					DRO_Fuel2_00128	1.5 mL	C10-C28	14880 ug/mL
.8015 SurStock_00276	07/30/19	AccuStandard, Lot 216111071			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_Fuel2_00128	07/30/19	Restek, Lot A0138518			(Purchased Reagent)		C10-C28	49600 ug/mL
DRO_L7_00065	01/09/20	07/09/19	Methylene Chloride, Lot MeCl2 Cycl 00443	1 mL	DRO_Fuel2_00133	0.6 mL	C10-C28	29760 ug/mL
.DRO_Fuel2_00133	01/09/20	Restek, Lot A0138518			(Purchased Reagent)		C10-C28	49600 ug/mL
DRO_RTMKR2_00061	04/30/22	Ultra Scientific, Lot CT-1500			(Purchased Reagent)		n-Octacosane	1000 ug/mL
DRO_SS_00020	06/24/20	06/24/19	Methylene Chloride, Lot MeCl2_cycl_00437	25 mL	DRO_SURR_00104	100 uL	n-Octacosane	20 ug/mL
							o-Terphenyl (Surr)	20 ug/mL
.DRO_SURR_00104	02/04/22	Accustandard, Lot 212111159-02			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
DRO_SS_00020	06/24/20	06/24/19	Methylene Chloride, Lot MeCl2 cycl 00437	25 mL	DRO_Fuel2_SS_00035	1 mL	C10-C28	1984 ug/mL
.DRO_Fuel2_SS_00035	06/24/20	Accustandard, Lot 216081176			(Purchased Reagent)		C10-C28	49.6 mg/mL
IC CAL cl/so4_00263	07/05/19	06/28/19	Di Water, Lot na	100 mL	IC CL cal_00058	25 mL	Chloride	250 mg/L
					IC sulfatecal_00057	25 mL	Sulfate	250 mg/L
.IC CL cal_00058	04/30/20	SPEX CertiPrep, Lot 4-154CL-2X			(Purchased Reagent)		Chloride	1000 mg/L
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00264	07/12/19	07/05/19	Di Water, Lot na	100 mL	IC sulfatecal_00057	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00469	07/09/19	07/02/19	Di Water, Lot NA	100 mL	IC BR ICV_00012	5 mL	Bromide	50 mg/L
					IC FL cal_00013	5 mL	Fluoride	50 mg/L
.IC BR ICV_00012	09/30/19	ricca, Lot 1804F11			(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00013	10/31/19	Ricca, Lot 4805C89			(Purchased Reagent)		Fluoride	1000 mg/L
IC LCS_01622	07/04/19	07/03/19	Di Water, Lot 27	200 mL	IC sulfatecal_00057	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC LCS_01628	07/12/19	07/11/19	Di Water, Lot 27	200 mL	IC sulfatecal_00057	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00057	06/30/20	SPEX CertiPrep, Lot 4-197SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00602	07/09/19	07/02/19	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00021	5 mL	Sulfate	2500.26 mg/L
.IC SPK 6 ANIO_00021	10/01/19	10/01/18	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00005	9.0704 g	Sulfate	5000.51 mg/L
..IC MS/MSD S04_00005	09/29/20	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
ICMS/MSD WEEK_00603	07/16/19	07/09/19	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00021	5 mL	Sulfate	2500.26 mg/L
.IC SPK 6 ANIO_00021	10/01/19	10/01/18	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00005	9.0704 g	Sulfate	5000.51 mg/L
..IC MS/MSD S04_00005	09/29/20	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
MV-BFB_00028							1,2-Dichloroethene, Total	
							1,2-Dichloroethene, Total (URS)	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
							Xylenes, Total (URS)	
					MV-STS110N1_00066	1.25 mL	BFB	25 ug/mL
.MV-STS110N1_00066	10/31/19	Ultra Scientific, Lot CH-3248Z			(Purchased Reagent)		BFB	2000 ug/mL
mv-Cent IS/SS_00002	03/26/20	03/07/19	P&T Methanol, Lot 1996628	5 mL	mv-8260 IS/SS_00001	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							1,4-Dichlorobenzene-d4	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Fluorobenzene	50 ug/mL
							TBA-d9 (IS)	1000 ug/mL
							Toluene-d8 (Surr)	50 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.mv-8260 IS/SS_00001	10/31/22		Restek, Lot A0131478		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							1,4-Dichlorobenzene-d4	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
MV-Gas A_00028	06/24/19	06/09/19	P&T Methanol, Lot 198123	50 mL	MV-569722_00010	1000 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
					MV-569723_00005	1000 uL	2-Chloroethyl vinyl ether	50 ug/mL
.MV-569722_00010	11/30/21		RESTEK, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569723_00005	10/31/21		RESTEK, Lot A0142584		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas B_00031	06/24/19	06/09/19	P&T Methanol, Lot 198123	50 mL	MV-569722.sec_00010	1000 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MV-569722.sec_00010	10/31/21		RESTEK, Lot A0142594		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
MV-MegaMain B_00013	06/30/19	05/08/19	P&T Methanol, Lot 181124	50 mL	MV-569721.sec_00005	800 uL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					MV-571992.sec_00002	1000 uL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.MV-569721.sec_00005	01/31/20		RESTEK, Lot A0113880		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-571992.sec_00002	06/30/19		RESTEK, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
MV-MegaMainA_00015	06/30/19	05/08/19	P&T Methanol, Lot 181124	50 mL	MV-568720_00025	1250 uL	Acrolein	493.75 ug/mL
					MV-569721_00006	800 uL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					MV-569724_00019	1000 uL	Vinyl acetate	100 ug/mL
					MV-569727_00008	4000 uL	Cyclohexanone	2000 ug/mL
					MV-571992_00002	1000 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
					MV-CUS17739_00004	2500 uL	1-Chlorohexane	50 ug/mL
							2-Pentanone	200 ug/mL
							sec-Butyl Alcohol	1500 ug/mL
.MV-568720_00025	09/30/19		RESTEK, Lot A0146613		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569721_00006	10/31/20		RESTEK, Lot A0131486		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724_00019	07/31/19		RESTEK, Lot A0144661		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-569727_00008	08/31/21		RESTEK, Lot A0140237		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.MV-571992_00002	08/31/19		RESTEK, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.MV-CUS17739_00004	10/31/20	Ultra, Lot CS-4707			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMainA_00015	06/30/19	05/08/19	P&T Methanol, Lot 181124	50 mL	MV-571992_00002	1000 uL	Xylenes, Total	100 ug/mL
.MV-571992_00002	08/31/19	RESTEK, Lot A0123711			(Purchased Reagent)		Xylenes, Total	5000 ug/mL
NXN CAL INT_00499	07/03/19	06/25/19	Di Water, Lot NA	100 mL	NOXT Cal STD_00022	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00022	08/31/19	RICCA, Lot 2803904			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00480	07/03/19	06/25/19	Di Water, Lot NA	100 mL	NOXT ICV STD_00022	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00022	12/31/19	ERA, Lot 031217			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
RSK175methane_00009	05/18/19	Supelco Analytical, Lot 403-191386			(Purchased Reagent)		Methane	650500 ug/L
RSK7gasMathes_00025	12/01/19	Matheson, Lot 9307628511			(Purchased Reagent)		Methane	6570.3 ug/L
RSK7gasMathes_00026	04/03/20	Matheson, Lot 9308630516			(Purchased Reagent)		Acetylene	10667 ug/L
							Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
RSK7gasMathes_00027	10/24/20	Matheson, Lot 9308634170			(Purchased Reagent)		Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
SFD CAL INT_01659	08/28/19	05/28/19	Di Water, Lot NA	500 mL	50% NaOH_00017	2 mL	Sodium Hydroxide	2000 mg/L
					SFD CAL STK_00006	4.87 g	Sulfide	1300.29 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_00794	07/01/19	05/31/19	Di Water, Lot 1	100 mL	TKN 100PPM_00108	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00108	07/01/19	05/31/19	Di Water, Lot 1	500 mL	TKN CAL STD_00017	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN CAL STD_00017	01/31/21	nsi lab solutions, Lot 010617			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TKN ICV 25_00078	07/01/19	05/31/19	DI water, Lot 1	100 mL	TKN ICV 100_00070	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00070	07/01/19	05/31/19	Di Water, Lot 1	500 mL	TKN ICV_00011	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN ICV_00011	11/30/20	ERA, Lot 281018			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TOC ICV Std_00037	01/31/20	Ricca, Lot 1807G06			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm
							DOC Result 1	1000 ppm
							DOC Result 2	1000 ppm
							DOC Result 3	1000 ppm
							DOC Result 4	1000 ppm
TOC LCS Std_00046	03/31/21	Ultra Scientific, Lot CT-0920			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm

Reagent

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the 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.

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Certified By: Larry Decker, Organic QC Manager

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For use in routine laboratory analysis.

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Reagent

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the 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.

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the 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.

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Reagent

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the 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.

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Reagent

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the 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.

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Reagent

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the 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.

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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

Reagent

8015 DROStock_00633

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

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

Reagent

8015 DROStock_00654

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the 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.

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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

AccuStandard

Reagent

8015 LCS_00079



Reagent ID: 8015 LCS_00079

Description:	2000ug/mL DRO LCS	Expiration Date:	10/05/2019
No. of Bottles:	1	Laboratory:	Eurofins TestAmerica, Denver
Storage Location:	North Prep	Prepared By:	Becker, Chad B
Reagent Volume:	200.000 mL	Solvent:	ACETONE
Creation Date:	04/04/2019	Solvent Lot:	Acetone_00267
Open Date:			
Container(s):	5624495		

Comment: Take 8mL #2 Diesel Fuel (DRO-AK-102_LCS) and dilute to 200mL in acetone. 6 month expiration. No exchange needed for verification.
Same container as 8015 LCS_00074; relogged stock standards with new concentrations per TSO (narrower ranges are multiplied by ratio based on area).

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
#2 Diesel Fuel	8015 DROStock_00627	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
C10-C22	8015 DROStock_00627	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
C10-C24	8015 DROStock_00627	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
C10-C25	8015 DROStock_00627	08/15/2026	49050.00000	ug/mL	1962.00000	ug/mL
C10-C28	8015 DROStock_00627	08/15/2026	49600.00000	ug/mL	1984.00000	ug/mL
C10-C32	8015 DROStock_00627	08/15/2026	49800.00000	ug/mL	1992.00000	ug/mL
C10-C36	8015 DROStock_00627	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
C8-C34	8015 DROStock_00627	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
#2 Diesel Fuel	8015 DROStock_00628	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
C10-C22	8015 DROStock_00628	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
C10-C24	8015 DROStock_00628	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
C10-C25	8015 DROStock_00628	08/15/2026	49050.00000	ug/mL	1962.00000	ug/mL
C10-C28	8015 DROStock_00628	08/15/2026	49600.00000	ug/mL	1984.00000	ug/mL
C10-C32	8015 DROStock_00628	08/15/2026	49800.00000	ug/mL	1992.00000	ug/mL
C10-C36	8015 DROStock_00628	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
C8-C34	8015 DROStock_00628	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL
#2 Diesel Fuel	8015 DROStock_00629	08/15/2026	50000.00000	ug/mL	2000.00000	ug/mL

Report Date: 08-Apr-2019 09:14:21 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromna\Denver\ChromData\SGC_U2a\20190405-80628.b\04050008.D

Lims ID: 8015 LCS_00079 Inj. Date: 05-Apr-2019 15:52:06

Worklist ID: 280-0080628-008 Instrument: SGC_U2a

Method: DRO_U2a

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3510C
A 6 C10-C25	1962.0	2054.0	104.7	54-115
A 8 C10-C28	1984.0	2063.8	104.0	54-115
A 22 C10-C32	1992.0	2071.8	104.0	54-115
A 10 C10-C36	2000.0	2084.5	104.2	57-115

Samples for Limit Group: 1, Lims Prep Method: 3510C

280-121670-G-2-A 280-121799-B-5-A

OK MF 4/8/19

Reagent

8015 SurStock_00276

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 216111071-01
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Dec 3, 2018
Expiration: Dec 3, 2021
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO 17034 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
o-Terphenyl	84-15-1	100.0	5001	5001
n-Octacosane	630-02-4	99.0	5001	4951

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

8330 LCSMix2_00101

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0122699

Description : 8330 Calibration Mix #2

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

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

Expiration Date : November 30, 2021 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 479-45-8	(Lot 091120JLM)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
2	4-Amino-2,6-dinitrotoluene		1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 19406-51-0	(Lot ER070908-01)		+/- 54.8926	µg/mL	Unstressed
	Purity 99%			+/- 64.0101	µg/mL	Stressed
3	2-Amino-4,6-dinitrotoluene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 35572-78-2	(Lot 29550-55)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
4	2,6-Dinitrotoluene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
5	2-Nitrotoluene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 88-72-2	(Lot GA01)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed
6	4-Nitrotoluene		1,001.0 µg/mL	+/- 5.9459	µg/mL	Gravimetric
	CAS # 99-99-0	(Lot FAU01)		+/- 54.8400	µg/mL	Unstressed
	Purity 97%			+/- 63.9488	µg/mL	Stressed
7	3-Nitrotoluene		1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 99-08-1	(Lot 07329LG)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%			+/- 63.9463	µg/mL	Stressed

Reagent

8330 Stock_TS_00012

Certificate of Analysis

Agilent

Combined Stock Solution

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

Lot Number: CR-1002 **Lot Issue Date:** 10-Mar-2017 **Expiration Date:** 30-Apr-2020

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

Analyte	CAS#	Analyte Lot	True Value
HMX	002691-41-0	RM06237	1000 ± 5 µg/mL
RDX	000121-82-4	RM10915	1000 ± 5 µg/mL
1,3,5-trinitrobenzene	000099-35-4	RM06608	1000 ± 5 µg/mL
m-dinitrobenzene	000099-65-0	RM04448	1001 ± 5 µg/mL
nitrobenzene	000098-95-3	RM11472	1002 ± 5 µg/mL
2,4,6-trinitrotoluene (TNT)	000118-96-7	RM11972	1004 ± 5 µg/mL
2,4-dinitrotoluene	000121-14-2	RM01209	1002 ± 5 µg/mL
tetryl	000479-45-8	RM12295	1000 ± 5 µg/mL
2,6-dinitrotoluene	000606-20-2	RM10763	1003 ± 5 µg/mL
2-nitrotoluene	000088-72-2	NT01996	1003 ± 5 µg/mL
3-nitrotoluene	000099-08-1	NT02212	1004 ± 5 µg/mL
4-nitrotoluene	000099-99-0	NT02096	1004 ± 5 µg/mL
2-amino-4,6-dinitrotoluene	035572-78-2	RM04229	1003 ± 5 µg/mL
4-amino-2,6-dinitrotoluene	019406-51-0	RM04226	1003 ± 5 µg/mL

Matrix: acetonitrile

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

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

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 9001
Registered
TUV USA, Inc.

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

Reagent

8330_NG_Stk_00052

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom Nitroglycerin Standard

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

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

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

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitroglycerin	5,016.0 µg/mL	+/- 46.6461 µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 150612JLM)		+/- 277.1256 µg/mL	Unstressed
	Purity 99%		+/- 322.4378 µg/mL	Stressed

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

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

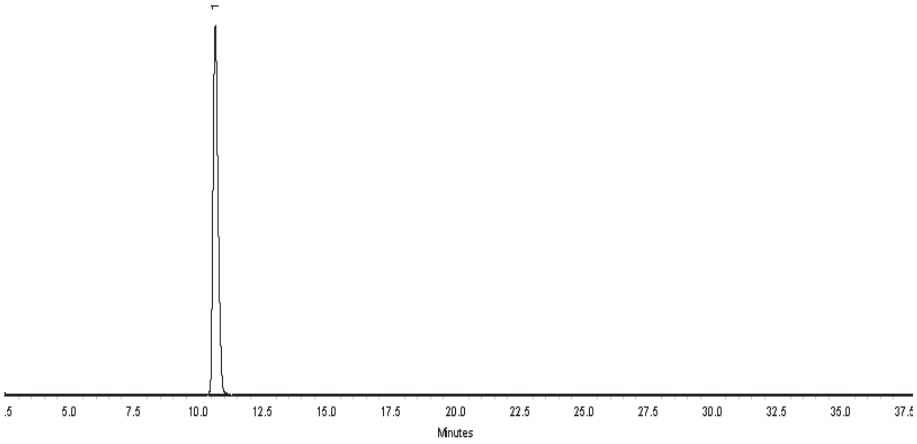
Flow Rate:
1.0 ml/min.

Mobile Phase A:
-

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

Mobile Phase Composition:
100%B

Det. Type:
Wavelength: 210 nm



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

Kendra Jozefick - Mix Technician **Date Mixed:** 12-Jan-2017 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jan-2017 REVIEWED

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG_Stk_00071

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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

Description : Custom Nitroglycerin Standard

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,008.0 µg/mL	+/- 46.5717	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 170616JLM)		+/- 276.6836	µg/mL	Unstressed
	Purity 99%		+/- 321.9236	µg/mL	Stressed

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

Reagent

8330_NG_Stk_00073

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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.

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

Description : Custom Nitroglycerin Standard

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,008.0 µg/mL	+/- 46.5717	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 170616JLM)		+/- 276.6836	µg/mL	Unstressed
	Purity 99%		+/- 321.9236	µg/mL	Stressed

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

Reagent

8330_OP_DMT_00002

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8330_OP_DMT_00002

Reagent ID: 8330_OP_DMT_00002

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

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
DNX	MNX,TNX,DNX_00026	12/31/2019	100.10000	ug/mL	10.01000	ug/mL
MNX	MNX,TNX,DNX_00026	12/31/2019	116.70000	ug/mL	11.67000	ug/mL
TNX	MNX,TNX,DNX_00026	12/31/2019	100.10000	ug/mL	10.01000	ug/mL

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
MNX,TNX,DNX_00026	Custom MNX,TNX,DNX 8321 exp ULTRA	ASTD	12/31/19	ULTRA Scientific	CS-5628	CUS-23984	1.00000	mL

HF 3/19/19

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

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

Page 1416 of 1398

08/01/2019

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0079923-039 Instrument: CHHPLC_G2_LUNA

Method: G2_8330_Luna

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

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

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

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

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

Reagent

8330_PETN_Stk_00056

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0124124

Description : Custom PETN Standard

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

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

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

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

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

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

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

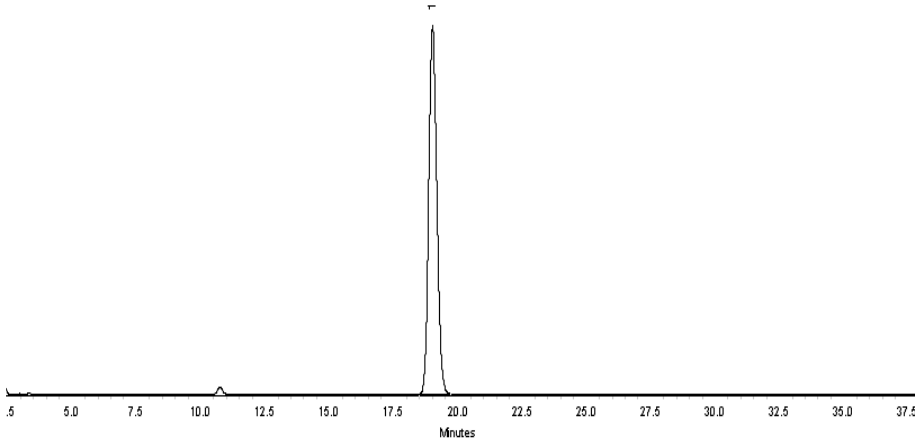
Flow Rate:
1.0 ml/min.

Mobile Phase A:
-

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

Mobile Phase Composition:
100%B

Det. Type:
Wavelength: 210 nm



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

Kendra Jozefick - Mix Technician

Date Mixed: 12-Jan-2017 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 17-Jan-2017 REVIEWED By Amanda Miller at 3:54 pm, Jan 17, 2017

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00076

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0136306

Description : Custom PETN Standard

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

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

Expiration Date : March 31, 2021 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	PETN	5,028.0 µg/mL	+/- 46.7577 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 277.7886 µg/mL	Unstressed
	Purity 99%		+/- 323.2092 µg/mL	Stressed

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

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

Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 19-Mar-2018 **Balance:** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-Mar-2018

REVIEWED

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00077

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 568872 **Lot No.:** A0136306

Description : Custom PETN Standard

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

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

Expiration Date : March 31, 2021 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	PETN **CAS #** 78-11-5 (Lot 051108JLM) **Purity** 99%	5,028.0 µg/mL	+/- 46.7577 µg/mL +/- 277.7886 µg/mL +/- 323.2092 µg/mL	Gravimetric Unstressed Stressed

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

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

Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 19-Mar-2018 **Balance:** 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-Mar-2018

REVIEWED

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 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.
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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

8330LCSMix1_00104

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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.:** A0128688

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

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

Reagent

8330LCSMix1_00109

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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.:** A0131772

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

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

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

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

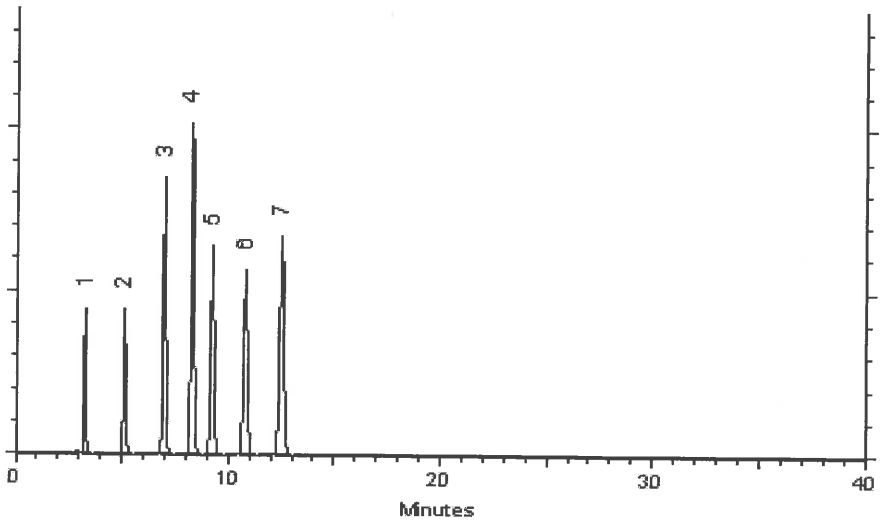
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

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

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 23-Oct-2017

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

Reagent

8330LCSmix2_00008

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Calibration Mix #2

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

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

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

CERTIFIED VALUES

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

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

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

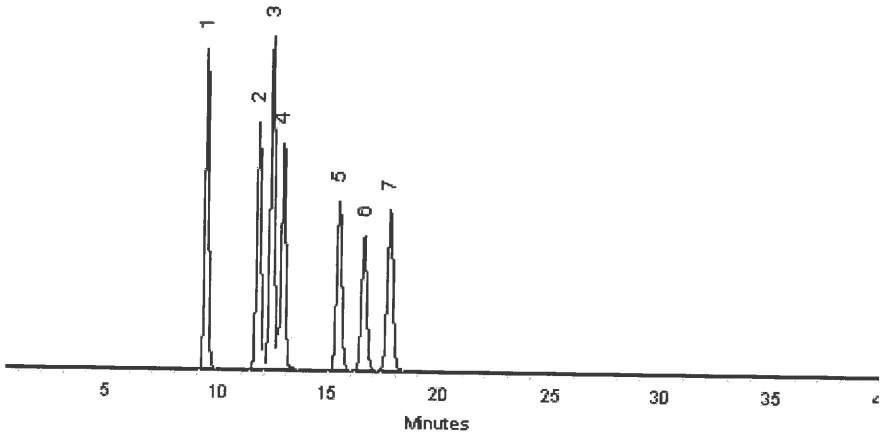
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

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

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

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

Reagent

8330PAStkPS_00058

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 216061376-01
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jun 19, 2017
Expiration: Jul 19, 2019
Sample Size: 1 mL
Components: 1

Storage Condition: Ambient (>5 °C)
Included on ISO/IEC 17025 Scope of Accreditation: Yes
Included on ISO Guide 34 Scope of Accreditation: Yes

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

Superseded

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

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

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

The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. This value is the expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

8330SurrStkSS_00134

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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.:** A0124792

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

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

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

Reagent

8330SurrStkSS_00135

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	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.4187	µg/mL	Unstressed
	Purity 99%		+/- 57.7382	µg/mL	Stressed

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

Reagent

8330SurrStkSS_00142

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

Catalog No. : 31453 **Lot No.:** 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)

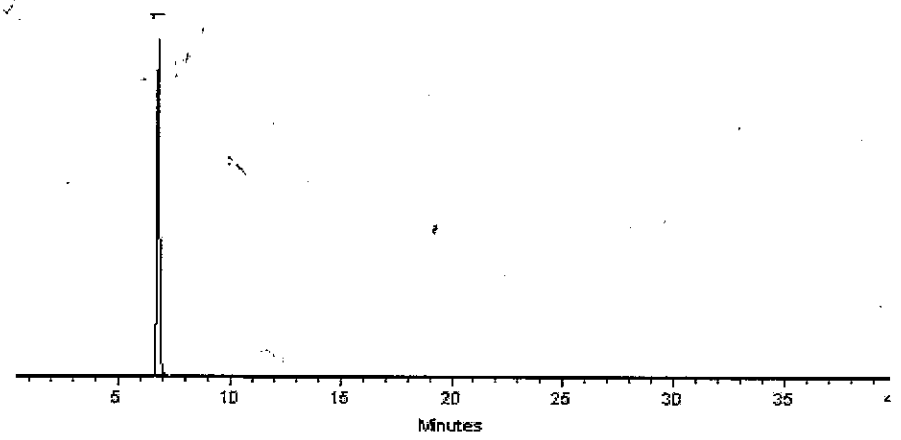
Flow Rate:
1.0 ml/min.

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_00145

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

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

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

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

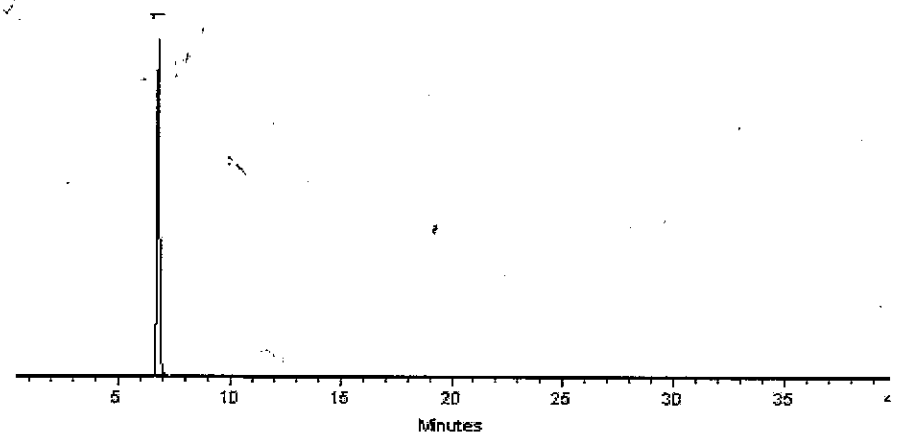
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dustin J Lidgett

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

Jennifer J Pollino

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity values are rounded to the nearest whole number.

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Manufacturing Notes:

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Handling Notes:

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Reagent

8330SurrStkSS_00146

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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)		
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	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)

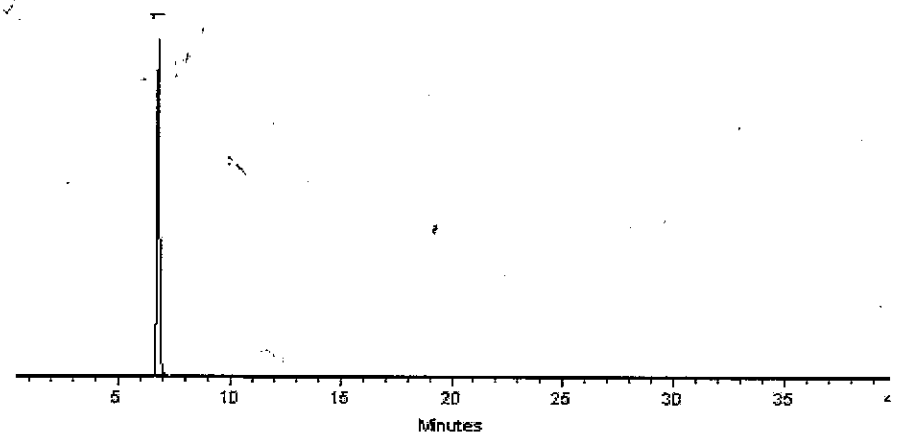
Flow Rate:
1.0 ml/min.

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:

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Reagent

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

Column:
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Ultra C18 (cat.# 9174575)

Flow Rate:
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Mobile Phase A:
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Mobile Phase Composition:
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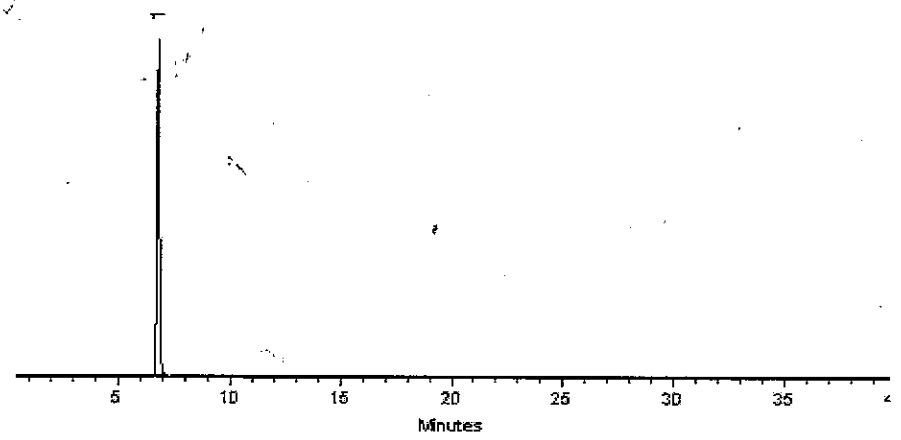
Det. Type:
Wavelength: 210 nm



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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

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- 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_00150

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

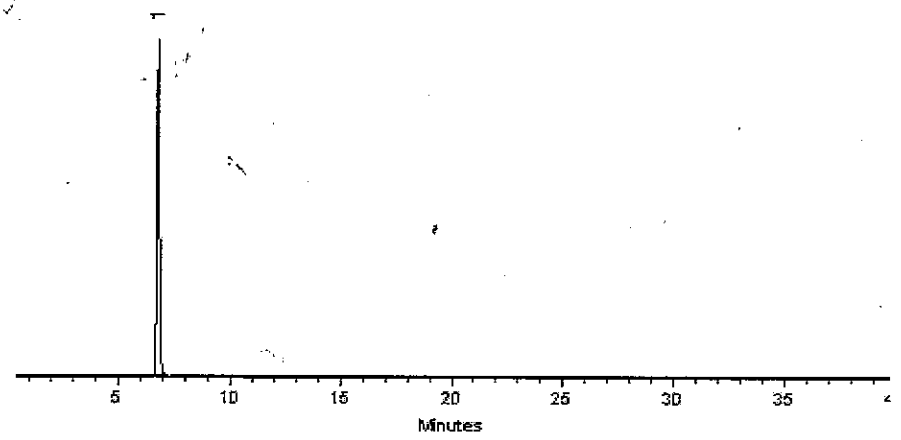
Flow Rate:
1.0 ml/min.

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00152

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0139489

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	1,2-Dinitrobenzene	1,001.0 µg/mL	+/- 5.9456 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.1383 µg/mL	Unstressed
	Purity 99%		+/- 57.4512 µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

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Manufacturing Notes:

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Handling Notes:

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

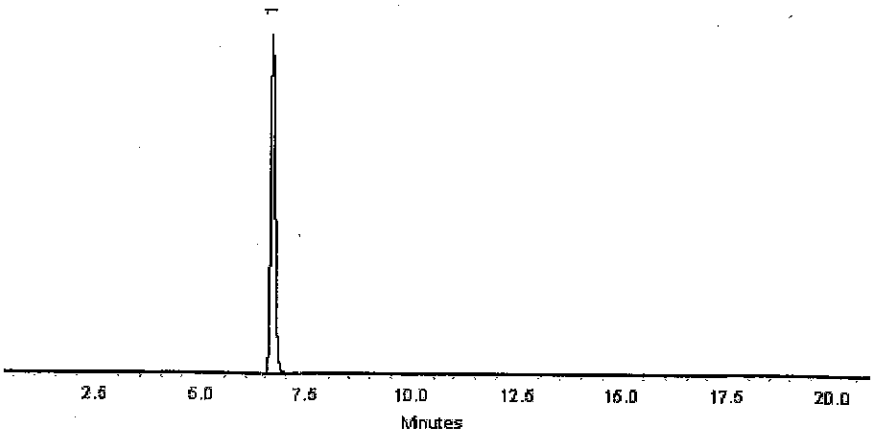
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 10-Jul-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jul-2018

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

Reagent

8330SurrStkSS_00153

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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Catalog No. : 31453 **Lot No.:** A0139489

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	1,2-Dinitrobenzene	1,001.0 µg/mL	+/- 5.9456 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.1383 µg/mL	Unstressed
	Purity 99%		+/- 57.4512 µg/mL	Stressed

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

General Certified Reference Material Notes

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Manufacturing Notes:

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Handling Notes:

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

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

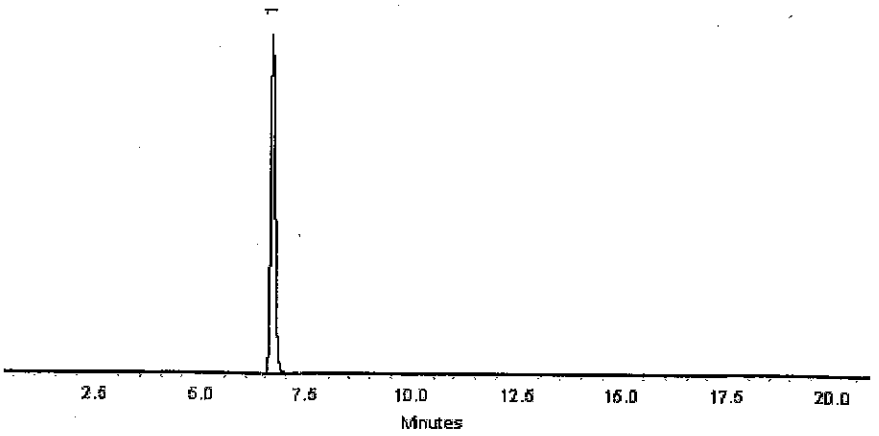
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 10-Jul-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jul-2018

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

Reagent

8330SurrStock_00163

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 216071012
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Jul 1, 2016
Expiration: Jul 1, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

ACCUSTANDARD

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

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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

See reverse side for additional information

Certified By: _____
Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

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

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

Reagent

Alk stk std_00016

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	SS148	Quality Test / Release Date	06/05/2018
Lot Number	182564	Expiration Date	Jun/2020
Description	SODIUM CARBONATE SOLUTION, 1N		
Country of Origin	United States		
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid
COLOR	APHA	<= 5	<5
NORMALITY		Inclusive Between 0.995 - 1.000	1.000
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Jerusa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

DRO_Fuel2_00128

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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. : 31259 **Lot No.:** A0138518

Description : Diesel Fuel #2 Composite Standard

Diesel Fuel #2 Composite Standard 50,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 25°C nominal

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diesel Fuel #2 Composite	50,011.6 µg/mL	+/- 290.7566 µg/mL	Gravimetric
	CAS # 68334-30-5.A (Lot A0138447)		+/- 1,489.0025 µg/mL	Unstressed
	Purity ----%		+/- 1,588.0724 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

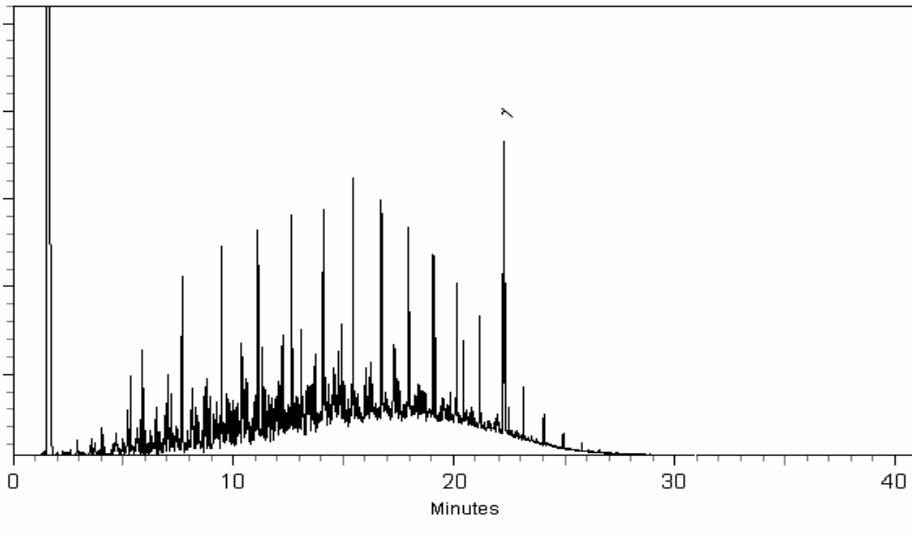
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Cathleen Soltis - Mix Technician

Date Mixed: 04-Jun-2018 **Balance:** B442140311

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 06-Jun-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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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

DRO_Fuel2_00132

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31259 **Lot No.:** A0138518

Description : Diesel Fuel #2 Composite Standard

Diesel Fuel #2 Composite Standard 50,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 25°C nominal

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diesel Fuel #2 Composite	50,011.6 µg/mL	+/- 290.7566 µg/mL	Gravimetric
	CAS # 68334-30-5.A (Lot A0138447)		+/- 1,489.0025 µg/mL	Unstressed
	Purity ----%		+/- 1,588.0724 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

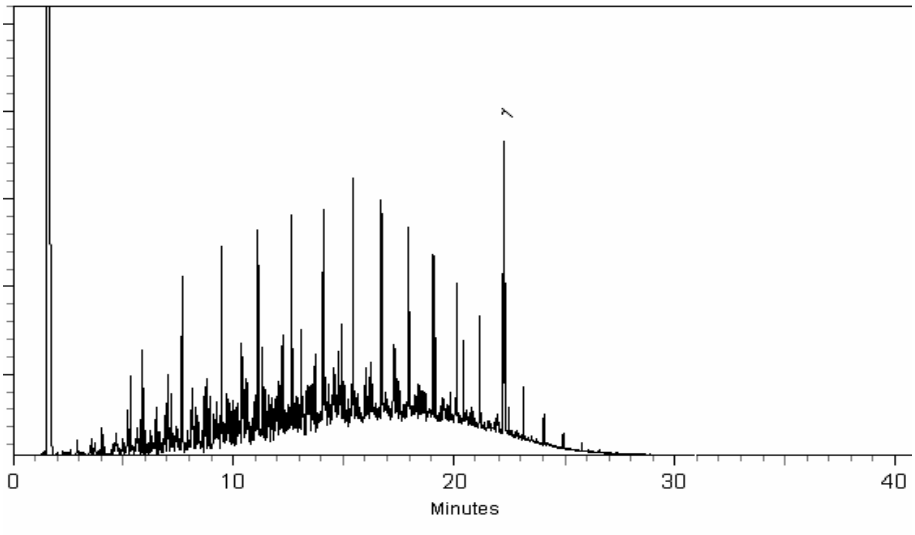
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Cathleen Soltis - Mix Technician

Date Mixed: 04-Jun-2018 **Balance:** B442140311

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 06-Jun-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ACCREDITED
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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. : 31259 **Lot No.:** A0138518

Description : Diesel Fuel #2 Composite Standard

Diesel Fuel #2 Composite Standard 50,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2025 **Storage:** 25°C nominal

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diesel Fuel #2 Composite	50,011.6 µg/mL	+/- 290.7566 µg/mL	Gravimetric
	CAS # 68334-30-5.A (Lot A0138447)		+/- 1,489.0025 µg/mL	Unstressed
	Purity ----%		+/- 1,588.0724 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

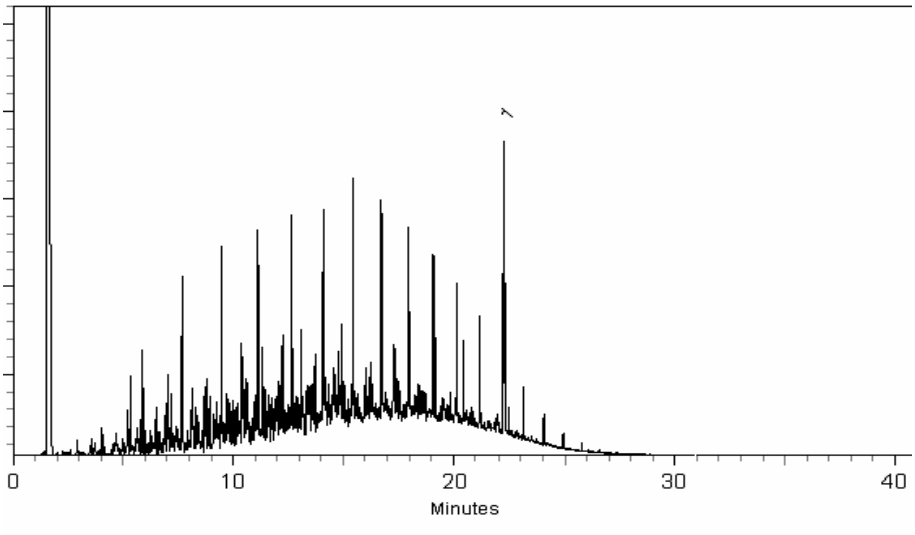
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Cathleen Soltis - Mix Technician

Date Mixed: 04-Jun-2018 **Balance:** B442140311

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 06-Jun-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Label Conditions	Standard Conditions	Non-Standard Conditions
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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

DRO_Fuel2_SS_00035

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

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

CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X
Description: #2 Diesel Fuel (Extra Low Sulfur)
Lot: 216081176
Solvent: Acetone
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Aug 15, 2016
Expiration: Aug 15, 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] (mg/mL)	Certified Analyte Concentration[2] (mg/mL)
#2 Diesel Fuel (Extra Low Sulfur)	68476-34-6	Tech Mix	50.03	50.03

AccuStandard

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.

Reagent

DRO_RTMKR2_00061

Agilent

Certificate of Analysis
ISO Guide 34

DRO Standard

Product Number: UST-210 **Page:** 1 of 2

Lot Number: CT-1500 **Lot Issue Date:** 03-Apr-2019 **Expiration Date:** 30-Apr-2022

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

Analyte	CAS#	Analyte Lot	True Value
n-decane	000124-18-5	RM00137	1003 ± 5 µg/mL
n-undecane	001120-21-4	RM04270	1001 ± 5 µg/mL
n-dodecane	000112-40-3	RM12672	1003 ± 5 µg/mL
n-tridecane	000629-50-5	RM13949	1002 ± 5 µg/mL
n-tetradecane	000629-59-4	RM09997	1004 ± 5 µg/mL
n-pentadecane	000629-62-9	RM01156	1003 ± 5 µg/mL
n-hexadecane	000544-76-3	RM13973	1002 ± 5 µg/mL
n-heptadecane	000629-78-7	RM04189	1002 ± 5 µg/mL
n-octadecane	000593-45-3	RM09995	1004 ± 5 µg/mL
n-nonadecane	000629-92-5	NT01739	1002 ± 5 µg/mL
n-eicosane	000112-95-8	RM04169	1002 ± 5 µg/mL
n-heneicosane	000629-94-7	RM04170	1004 ± 5 µg/mL
n-docosane	000629-97-0	RM12134	1002 ± 5 µg/mL
n-tricosane	000638-67-5	RM10887	1003 ± 5 µg/mL
n-tetracosane	000646-31-1	RM12272	1002 ± 5 µg/mL
n-pentacosane	000629-99-2	NT00444	1002 ± 5 µg/mL

Matrix: methylene chloride (dichloromethane)

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

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

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

MF 5/6/19

250 Smith Street North Kingstown, Rhode Island 02852 **www.agilent.com/quality**

Certificate of Analysis
ISO Guide 34

DRO Standard

Product Number: UST-210 **Page:** 2 of 2

Lot Number: CT-1500 **Lot Issue Date:** 03-Apr-2019 **Expiration Date:** 30-Apr-2022

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 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

Reagent

DRO_SURR_00104

125 Market Street
New Haven, CT 06513
USA

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 212111159-02
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Feb 4, 2019
Expiration: Feb 4, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO 17034 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
o-Terphenyl	84-15-1	100.0	5001	5001
n-Octacosane	630-02-4	99.9	5002	4997

5 x 1mL Vials
Received 2/7/19
AMB

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

DRO_SURR_00107

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USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 216111071-01
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Dec 3, 2018
Expiration: Dec 3, 2021
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO 17034 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
o-Terphenyl	84-15-1	100.0	5001	5001
n-Octacosane	630-02-4	99.0	5001	4951

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

DRO_SURR_00108

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

CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 216111071-01
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Dec 3, 2018
Expiration: Dec 3, 2021
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO 17034 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
o-Terphenyl	84-15-1	100.0	5001	5001
n-Octacosane	630-02-4	99.0	5001	4951

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

IC BR ICV_00012

RICCA CHEMICAL COMPANY®

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Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

Lot Number: 1804F11 **Product Number:** 1180

Manufacture Date: APR 06, 2018
Expiration Date: SEP 2019

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Bromide	7647-15-6	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Bromide (Br)	995-1005 ppm	1000 ppm

Specification	Reference
Bromide Solution, Standard (1 mL = 1 mg Br-)	ASTM (D 3869 D)
Standard Bromide Solution, 1000 mg/L	APHA (4110 B)
Bromide Stock Solution (1.00 mL = 1.00 mg Br-)	EPA (SW-846) (9056)
Sodium Bromide Standard Solution, 1000 mg/L	ASTM (D 1246)
Bromide Stock Solution (1.00 mL = 1.00 mg Br?)	ASTM (D 4327)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1180-16	500 mL natural poly	18 months
1180-4	120 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Israel Alamudun (04/06/2018)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

IC CL cal_00058

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-CL9-2X **Lot No.** 4-154CL-2X

Description: 1000 µg/mL Chloride

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 997 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3182*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Sodium Chloride, Lot# 07131A. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 998 µg/mL

Method: Precipitation using Silver Nitrate. Filter, dry and weigh as AgCl.

Instrumental Analysis by Ion Chromatography: 996 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.05	NO_3^-	<0.04
F^-	<0.006	$PO4^{-3}$	<0.06
NO_2^-	<0.03	$SO4^{-2}$	<0.05

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: APR - - 2019

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2018 SPEX CertiPrep, LLC

Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials -- Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001, ISO 17025, and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c=combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:

All certified values reported were derived from the Certification Report, SPEX CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

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www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
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Reagent

IC FL cal_00013

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1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Fluoride Standard, 1000 ppm F^-

Lot Number: 4805C89 **Product Number:** 3173

Manufacture Date: MAY 07, 2018
Expiration Date: OCT 2019

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.
The concentration is confirmed by Fluoride ISE and is certified traceable to NIST SRM 2203.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Fluoride	7681-49-4	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Fluoride (F)	995-1005 ppm	1000 ppm

Specification	Reference
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5542)
Fluoride Stock Solution (1.00 mL = 1.00 mg F^-)	EPA (SW-846) (9056)
Fluoride Calibration Stock Solution (1,000 mg/L F^-)	EPA (SW-846) (9214)
Stock Solution, 1.0 mL = 1.0 mg F	EPA (340.3)
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5996)
Fluoride Stock Solution (1.00 mL = 1.00 mg F?)	ASTM (D 4327)
Fluoride Stock Standard Solution (1 mg of F in 1 mL)	ACS (N/A)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
3173-16	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Jim Gibbs
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

IC MS/MSD S04_00005

Fisher Scientific

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

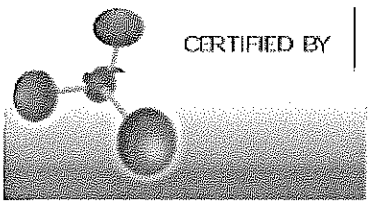
Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	**P304**	**Quality Test / Release Date**	**3/2/2015**
Lot Number	**147276**		
Description	**POTASSIUM SULFATE, CRYSTAL, CERTIFIED, A.C.S.**		
Country of Origin	**India**	*** Suggested Retest Date**	**Feb-2020**
Chemical Origin	**Inorganic-non animal**		
BSE/TSE Comment	This product is not manufactured from, or with, any type of animal product, nor any derivative of an animal product. As such, this product should not be considered a vector for BSE or TSE.		

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	FINE WHITE CRYSTALS
ASSAY	%	>= 99	99.4
CALCIUM	%	<= 0.01	<0.010
CHLORIDE	%	<= 0.001	<0.0010
HEAVY METALS (as Pb)	ppm	<= 5	<5.0
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.01	<0.010
IRON (Fe)	ppm	<= 5	<5.0
MAGNESIUM	%	<= 0.005	<0.0050
NITROGEN COMPOUNDS	ppm	<= 5	<5
PH 5% SOLUTION @ 25 DEG C		Inclusive Between 5.5 - 8.5	5.5
SODIUM (Na)	%	<= 0.02	<0.020



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 sulfatecal_00057

ACCREDITED
Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 4-197SO4-2X

Description: 1000 µg/mL Sulfate

EXPIRES JUN. 30, 2020

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1001 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3181*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# MAN1018SO4. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 1002 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 999 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.006	NO_2^-	<0.004
Cl^-	<0.01	NO_3^-	<0.006
F^-	<0.008	$PO4^{-3}$	<0.01

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: JUN -- 2019

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

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- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001, ISO 17025, and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Instructions for Use:

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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.

Reagent

MNX,TNX,DNX_00026

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number: CUS-23984 **Page:** 1 of 1

Lot Number: CS-5628 **Lot Issue Date:** 16-Nov-2018 **Expiration Date:** 31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

ORG ver 1.1

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

Reagent

MNX,TNX,DNX_00027

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number: CUS-23984 **Page:** 1 of 1

Lot Number: CS-5628 **Lot Issue Date:** 16-Nov-2018 **Expiration Date:** 31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

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

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

ORG ver 1.1

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

Reagent

MV-568720_00025

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568720 **Lot No.:** A0146613

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

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

Expiration Date : September 30, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,933.0 µg/mL	+/- 116.7121 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 0012014-D0218)		+/- 639.1146 µg/mL	Unstressed
	Purity 99%		+/- 742.9009 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

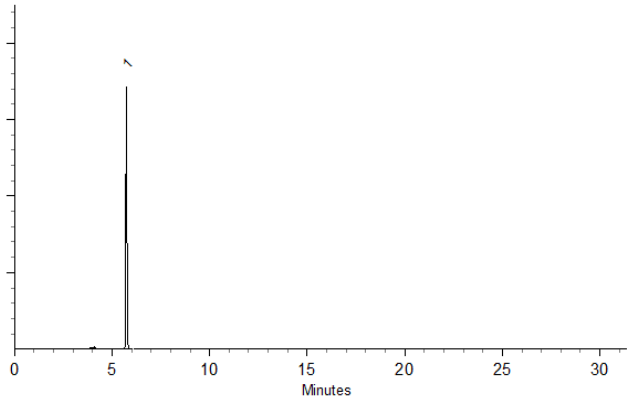
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 01-Mar-2019 **Balance:** B251644995

Justine Albertson - Operations Tech-ARM QC

Date Passed: 05-Mar-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MV-569721.sec_00005

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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721 **Lot No.:** A0123890

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

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

Expiration Date : January 31, 2020 **Storage:** 0°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,517.5 µg/mL	+/- 72.7778 µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBH0922V)		+/- 755.2362 µg/mL	Unstressed
	Purity 99%		+/- 757.0293 µg/mL	Stressed
2	2-Butanone (MEK)	12,521.8 µg/mL	+/- 72.8025 µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBF2461V)		+/- 755.4927 µg/mL	Unstressed
	Purity 99%		+/- 757.2863 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,519.8 µg/mL	+/- 72.7909 µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBG3630V)		+/- 755.3720 µg/mL	Unstressed
	Purity 99%		+/- 757.1654 µg/mL	Stressed
4	2-Hexanone	12,508.5 µg/mL	+/- 72.7255 µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKBW0198V)		+/- 754.6932 µg/mL	Unstressed
	Purity 99%		+/- 756.4850 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

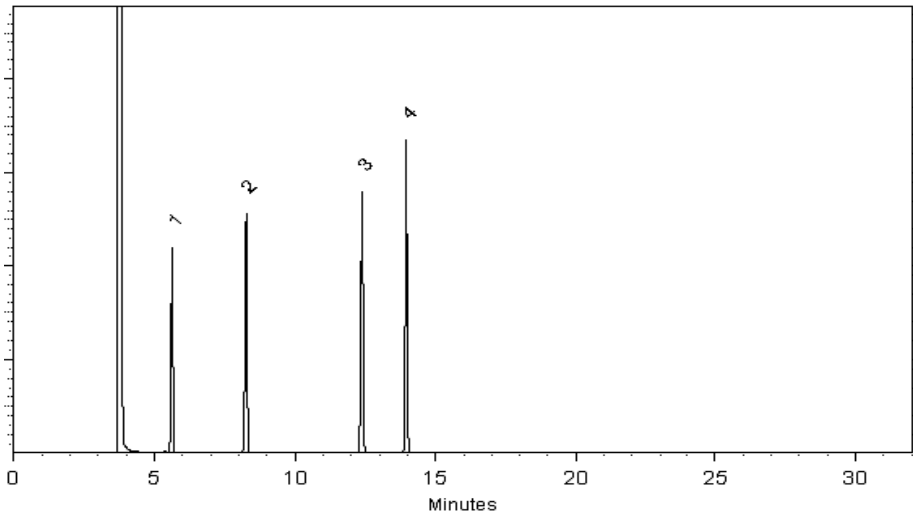
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

F. Joseph Tallon - Mix Technician

Date Mixed: 03-Jan-2017 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 05-Jan-2017

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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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. : 569721 **Lot No.:** A0131486

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

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

Expiration Date : October 31, 2020 **Storage:** 0°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,466.0 µg/mL	+/- 72.9912 µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBG8398V)		+/- 752.1786 µg/mL	Unstressed
	Purity 99%		+/- 753.9642 µg/mL	Stressed
2	2-Butanone (MEK)	12,475.5 µg/mL	+/- 73.0468 µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBF2461V)		+/- 752.7518 µg/mL	Unstressed
	Purity 99%		+/- 754.5387 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,539.0 µg/mL	+/- 73.4186 µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBG7318V)		+/- 756.5833 µg/mL	Unstressed
	Purity 99%		+/- 758.3793 µg/mL	Stressed
4	2-Hexanone	12,496.0 µg/mL	+/- 73.1668 µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKBW0198V)		+/- 753.9888 µg/mL	Unstressed
	Purity 99%		+/- 755.7786 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

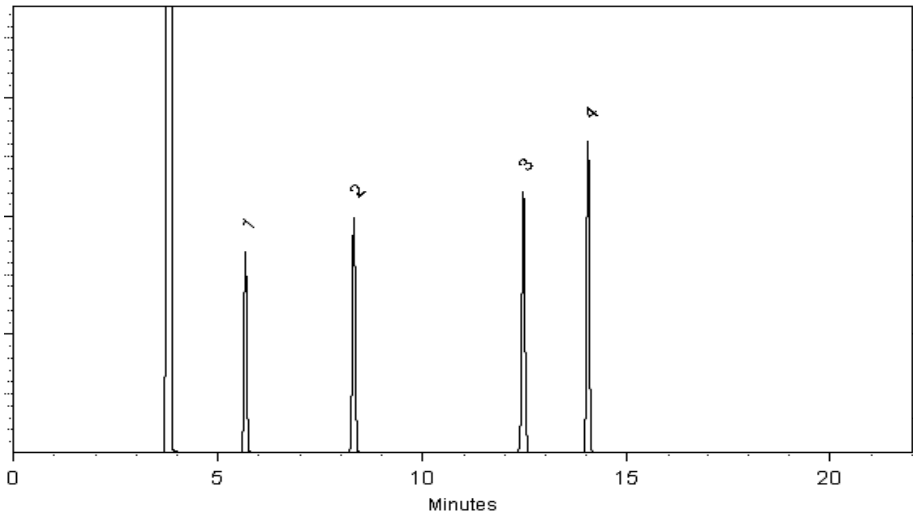
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cydnei L. Crust - Mix Technician

Date Mixed: 09-Oct-2017 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 11-Oct-2017

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722.SEC **Lot No.:** A0142594

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,499.3 µg/mL	+/- 25.7724 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 24847)		+/- 141.7384 µg/mL	Unstressed
	Purity 99%		+/- 144.9810 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,506.0 µg/mL	+/- 21.8612 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.4482 µg/mL	Unstressed
	Purity 99%		+/- 144.7145 µg/mL	Stressed
3	Vinyl chloride	2,505.4 µg/mL	+/- 25.4396 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 142.0168 µg/mL	Unstressed
	Purity 99%		+/- 145.2689 µg/mL	Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 22.0034 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 22331)		+/- 141.1491 µg/mL	Unstressed
	Purity 99%		+/- 144.4071 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,511.9 µg/mL	+/- 23.0453 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 141.9646 µg/mL	Unstressed
	Purity 99%		+/- 145.2346 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,498.5 µg/mL	+/- 23.5866 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 141.3133 µg/mL	Unstressed
	Purity 99%		+/- 144.5633 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,450.0 µg/mL	+/- 14.3780 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7766400)		+/- 137.3830 µg/mL	Unstressed
	Purity 97%		+/- 140.5969 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,502.5	µg/mL	+/-	22.2947	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)			+/-	141.3276	µg/mL	Unstressed
	Purity 99%				+/-	144.5877	µg/mL	Stressed

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

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

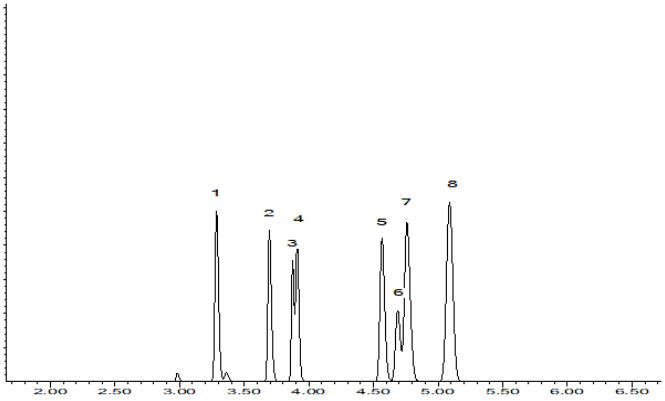
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Brandon Reish - Mix Technician

Date Mixed: 24-Oct-2018 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 05-Nov-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722 **Lot No.:** A0143158

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : November 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,500.9 µg/mL	+/- 17.2023 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.5234 µg/mL	Unstressed
	Purity 99%		+/- 143.7976 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.4 µg/mL	+/- 17.0791 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBJ6334)		+/- 140.4796 µg/mL	Unstressed
	Purity 99%		+/- 143.7534 µg/mL	Stressed
3	Vinyl chloride	2,500.4 µg/mL	+/- 16.5693 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00012557)		+/- 140.4224 µg/mL	Unstressed
	Purity 99%		+/- 143.6977 µg/mL	Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 17.0785 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 140.4623 µg/mL	Unstressed
	Purity 99%		+/- 143.7357 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.9 µg/mL	+/- 16.5511 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.4457 µg/mL	Unstressed
	Purity 99%		+/- 143.7217 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,502.0 µg/mL	+/- 16.0409 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 140.4480 µg/mL	Unstressed
	Purity 99%		+/- 143.7268 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 7766400)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,500.8	µg/mL	+/-	17.8012	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBH4155V)			+/-	140.5946	µg/mL	Unstressed
	Purity 99%				+/-	143.8670	µg/mL	Stressed

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

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

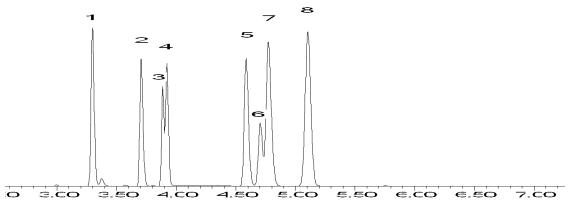
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Joseph Jaglowski - Mix Technician

Date Mixed: 12-Nov-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 11-Dec-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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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. : 569723 **Lot No.:** A0142584

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2021 **Storage:** 0°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,506.0 µg/mL	+/- 14.7066 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.6910 µg/mL	Unstressed
	Purity 99%		+/- 55.2497 µg/mL	Stressed

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

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

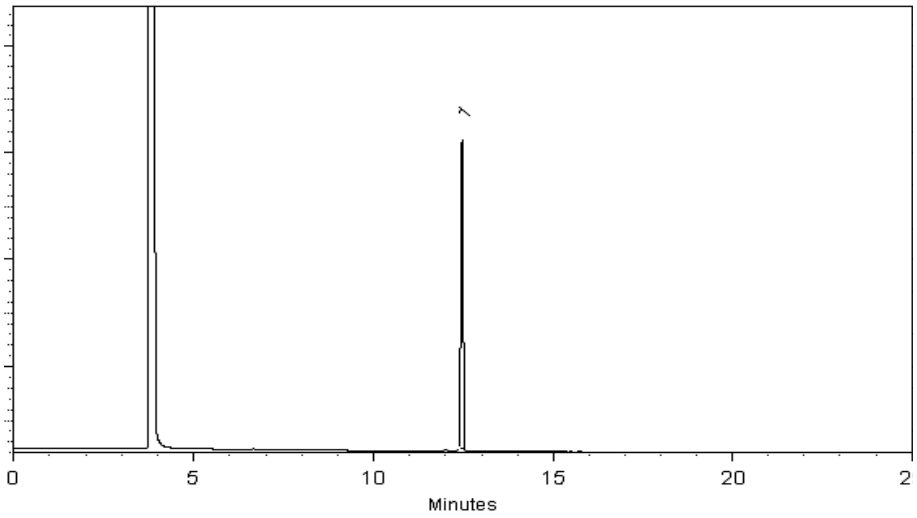
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 24-Oct-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Oct-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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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. : 569724 **Lot No.:** A0145775

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : August 31, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate	5,030.0 µg/mL	+/- 29.5189 µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 303.5087 µg/mL	Unstressed
	Purity 99%		+/- 304.2292 µg/mL	Stressed

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods . Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution , and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

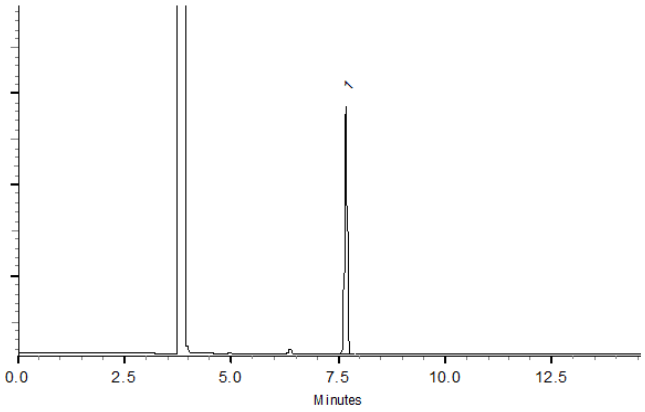
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Joseph Jaglowski - Mix Technician

Date Mixed: 06-Feb-2019 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 08-Feb-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MV-569727_00008

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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. : 569727 **Lot No.:** A0140237

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

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

Expiration Date : August 31, 2021 **Storage:** 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Cyclohexanone	25,148.7 µg/mL	+/- 147.2510 µg/mL	Gravimetric
	CAS # 108-94-1 (Lot MKBS9093V)		+/- 1,517.4305 µg/mL	Unstressed
	Purity 99%		+/- 1,521.0327 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

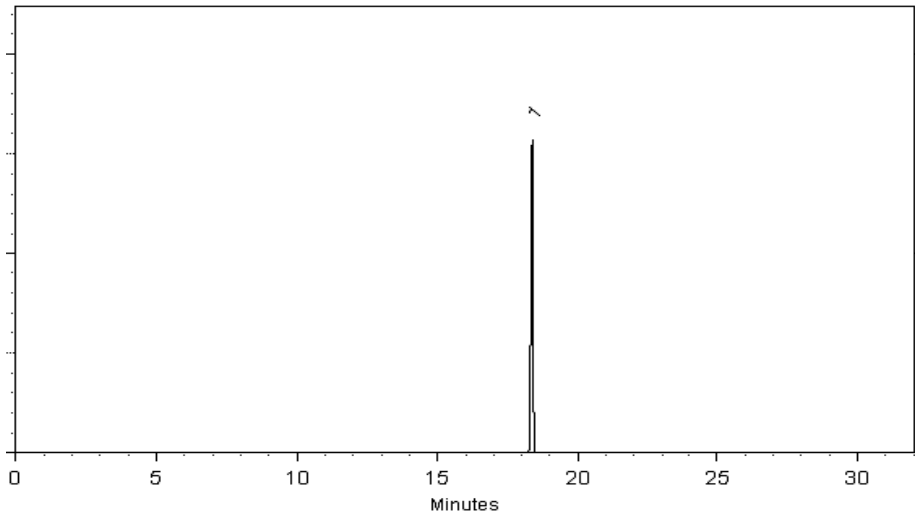
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 01-Aug-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 03-Aug-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MV-571992.sec_00002

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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. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
10	Acrylonitrile		25,000.9	µg/mL	+/-	145.3496	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4128	µg/mL	Unstressed
	Purity 99%				+/-	1,511.9941	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZAQTA-MS)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,500.7	µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.8792	µg/mL	Unstressed
	Purity 98%				+/-	151.2374	µg/mL	Stressed
13	n-Hexane (C6)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	150.8423	µg/mL	Unstressed
	Purity 98%				+/-	151.2004	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.8466	µg/mL	Unstressed
	Purity 97%				+/-	151.2048	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,506.9	µg/mL	+/-	363.4014	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot 83NHH)			+/-	3,771.3149	µg/mL	Unstressed
	Purity 99%				+/-	3,780.2687	µg/mL	Stressed
18	Chloroform		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
19	Bromochloromethane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
20	Tetrahydrofuran		5,002.3	µg/mL	+/-	29.0835	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot K3V7J-SJ)			+/-	301.8079	µg/mL	Unstressed
	Purity 99%				+/-	302.5245	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,500.7	µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot CS160712)			+/-	150.8792	µg/mL	Unstressed
	Purity 98%				+/-	151.2374	µg/mL	Stressed
22	Cyclohexane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
23	1,1-Dichloropropene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9133	µg/mL	Unstressed
	Purity 96%				+/-	151.2716	µg/mL	Stressed

24	Carbon tetrachloride		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
25	n-Heptane (C7)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
26	1,2-Dichloroethane		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
27	Benzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
28	Trichloroethene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
29	Methylcyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
30	1,2-Dichloropropane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
31	1,4-Dioxane		50,007.1	µg/mL	+/-	290.7305	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot MUFZH)			+/-	3,017.1500	µg/mL	Unstressed
	Purity 99%				+/-	3,024.3132	µg/mL	Stressed
32	Dibromomethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
34	Toluene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
35	Ethyl methacrylate		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 5034600)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
38	1,3-Dichloropropane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
39	Tetrachloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed

40	Dibromochloromethane		2,500.4	µg/mL	+/-	14.5376	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)			+/-	150.8613	µg/mL	Unstressed
	Purity 97%				+/-	151.2194	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
42	Chlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
43	m-Xylene		1,250.9	µg/mL	+/-	7.2727	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.4708	µg/mL	Unstressed
	Purity 99%				+/-	75.6500	µg/mL	Stressed
44	p-Xylene		1,250.5	µg/mL	+/-	7.2705	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	75.4482	µg/mL	Unstressed
	Purity 99%				+/-	75.6273	µg/mL	Stressed
45	Ethylbenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
47	o-Xylene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
48	Styrene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
50	Bromoform		2,502.3	µg/mL	+/-	14.5483	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5139000)			+/-	150.9718	µg/mL	Unstressed
	Purity 99%				+/-	151.3303	µg/mL	Stressed
51	Bromodichloromethane		2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	150.8423	µg/mL	Unstressed
	Purity 98%				+/-	151.2004	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	150.8423	µg/mL	Unstressed
	Purity 98%				+/-	151.2004	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,501.0	µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	150.8940	µg/mL	Unstressed
	Purity 98%				+/-	151.2522	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
58	2-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
59	4-Chlorotoluene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
62	sec-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
66	n-Butylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.5	µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.9869	µg/mL	Unstressed
	Purity 99%				+/-	151.3454	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.4	µg/mL	+/-	14.5433	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	150.9198	µg/mL	Unstressed
	Purity 97%				+/-	151.2781	µg/mL	Stressed
71	Naphthalene		2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.9417	µg/mL	Unstressed
	Purity 99%				+/-	151.3000	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

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

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

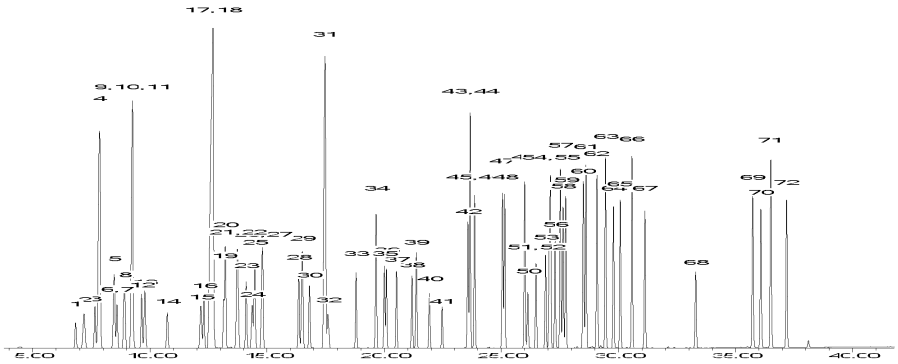
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Michael J Maye

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jan-2017

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MV-571992_00002

Reagent

mv-8260 IS/SS_00001

RESTEK®
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Fax: (814)353-1309

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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. : 570812 **Lot No.:** A0131478

Description : 8260 IS/Surrogate Mix (2016)

8260 IS/Surrogate Mix (2016) 250-5,000µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 **Purity** 98%	(Lot CD-107)	5,017.3 µg/mL	+/- 29.1695 µg/mL +/- 107.4207 µg/mL +/- 110.5436 µg/mL		Gravimetric Unstressed Stressed
2	Dibromofluoromethane **CAS #** 1868-53-7 **Purity** 99.8%	(Lot 0012017)	249.0 µg/mL	+/- 1.4511 µg/mL +/- 5.3320 µg/mL +/- 5.4870 µg/mL		Gravimetric Unstressed Stressed
3	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 **Purity** 99%	(Lot PR-26748)	249.6 µg/mL	+/- 1.4545 µg/mL +/- 5.3449 µg/mL +/- 5.5002 µg/mL		Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 **Purity** 99%	(Lot I-19942)	4,979.2 µg/mL	+/- 28.9478 µg/mL +/- 106.6041 µg/mL +/- 109.7033 µg/mL		Gravimetric Unstressed Stressed
5	Fluorobenzene **CAS #** 462-06-6 **Purity** 99%	(Lot BCBK8171V)	250.0 µg/mL	+/- 1.4567 µg/mL +/- 5.3527 µg/mL +/- 5.5083 µg/mL		Gravimetric Unstressed Stressed
6	Toluene-d8 **CAS #** 2037-26-5 **Purity** 99%	(Lot PR-26623)	249.2 µg/mL	+/- 1.4522 µg/mL +/- 5.3363 µg/mL +/- 5.4914 µg/mL		Gravimetric Unstressed Stressed
7	Chlorobenzene-d5 **CAS #** 3114-55-4 **Purity** 99%	(Lot PR-23926)	249.6 µg/mL	+/- 1.4545 µg/mL +/- 5.3449 µg/mL +/- 5.5002 µg/mL		Gravimetric Unstressed Stressed

8	1-Bromo-4-fluorobenzene (BFB)		248.5	µg/mL	+/-	1.4481	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)			+/-	5.3213	µg/mL	Unstressed
	Purity 99%				+/-	5.4760	µg/mL	Stressed
9	1,4-Dichlorobenzene-d4		249.5	µg/mL	+/-	1.4540	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/-	5.3427	µg/mL	Unstressed
	Purity 99%				+/-	5.4980	µg/mL	Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

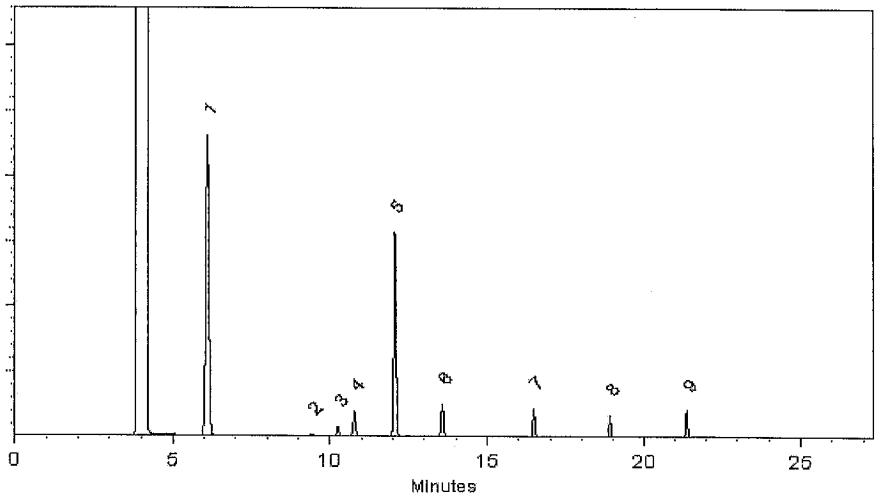
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 09-Oct-2017 **Balance:** B707717271

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 24-Oct-2017

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MV-CUS17739_00004

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number: CUS-17739 **Page:** 1 of 1

Lot Number: CS-4707 **Lot Issue Date:** 24-Sep-2018 **Expiration Date:** 31-Oct-2020

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-chlorohexane	000544-10-5	RM12893	1005 ± 5 µg/mL
2-pentanone	000107-87-9	RM03775	4016 ± 20 µg/mL
sec-butanol	000078-92-2	RM01299	30108 ± 151 µg/mL

Matrix: methanol (purge & trap grade)

Storage: Store Frozen (-25° to -10°C).

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

Monica Bourgeois
QMS Representative

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

ver 1.1

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

Reagent

MV-STS110N1_00066

Certificate of Analysis

4-Bromofluorobenzene Solution

Product Number: STS-110N **Page:** 1 of 1

Lot Number: CH-3248Z **Lot Issue Date:** 31-Aug-2016 **Expiration Date:** 31-Oct-2019

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

Analyte	CAS#	Analyte Lot	True Value
4-bromofluorobenzene	000460-00-4	RM03365	2005 ± 10 µg/mL

Matrix: methanol (methyl alcohol)

Storage: Store Frozen (-25° to -10°C).

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

John Russo
President

Vincent Wang, Ph.D.
Director of QA/RA

ISO 9001
Registered
TUV USA, Inc.

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Reagent

NH3 CAL STD_00030

RICCA CHEMICAL COMPANY®

448 West Fork Dr
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customerservice@riccachemical.com

Certificate of Analysis

Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH_3)

Lot Number: 1808L28 **Product Number:** 5455

Manufacture Date: AUG 29, 2018
Expiration Date: FEB 2020

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Chloride	12125-02-9	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonia nitrogen)	ASTM (D 3590 A)
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonium nitrogen)	ASTM (D 3590 B)
Stock Ammonium Chloride Solution	APHA (4500-CN- L)
Stock Ammonium Solution	APHA (4500-NH3 C)
Stock Ammonium chloride Solution	APHA (4500-NH3 D)
Stock Ammonium Solution	APHA (4500-NH3 F)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg 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

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Israel Alamudun (08/29/2018)

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

NH3 ICV STD_00026

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	M2-NH662533
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium Chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.8500%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 996 ± 3 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **993 ± 3 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

Assay Method #2 **997 ± 2 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

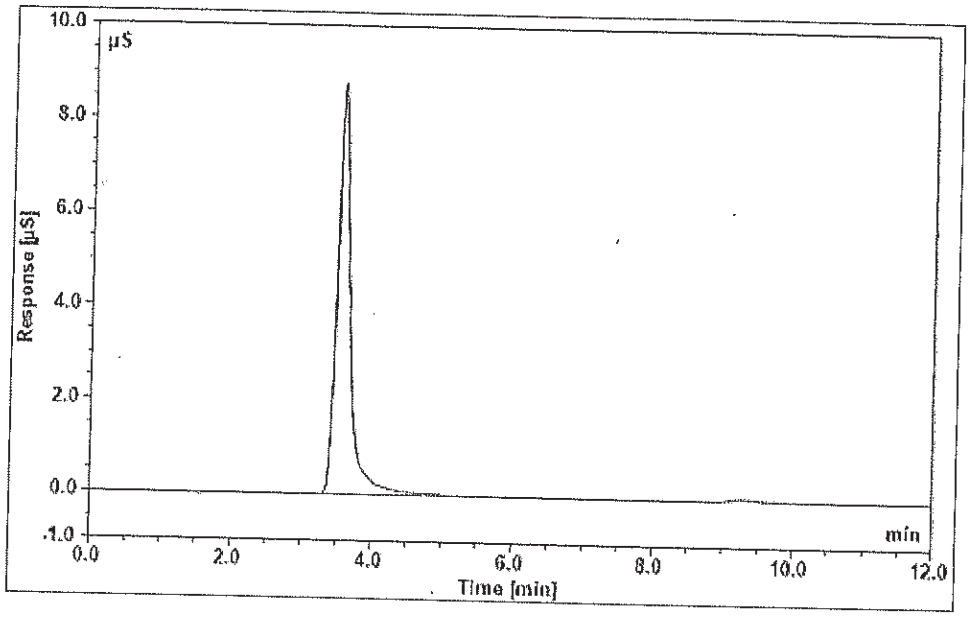
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS12A-5µm 3x150mm	**Eluent:**	20 mM MSA
Guard Column:	IonPac CG12A-5µm 3x30mm	**Eluent Flow Rate:**	0.50 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	35° C
		Cell Temp:	35° C
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale X-Axis:**	minutes
		Scale Y-Axis:	10 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	30 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 03, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- November 03, 2021

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

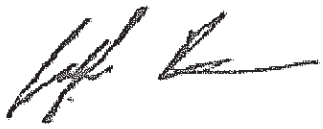
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

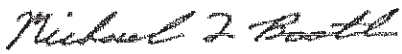
Certificate Prepared By:

Joseph Burns
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

NOXT Cal STD_00022

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Nitrate Nitrogen Standard, 1000 ppm N (4427 ppm NO_3)

Lot Number: 2803904 **Product Number:** 5459

Manufacture Date: MAR 13, 2018
Expiration Date: AUG 2019

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrate	7757-79-1	High Purity
Chloroform	67-66-3	

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 A)
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 B)
Stock Nitrate Solution: 1 mL = 1.0 mg NO3-N	EPA (353.2)
Stock Nitrate Solution: 1.0 mL = 1.00 mg NO3-N	EPA (353.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5459-16	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Andy Baumgartner
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

NOXT ICV STD_00022

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Nitrate as N (NO_3-N)
CATALOG NUMBER:	052 -125 mL; 991 - 500 mL
LOT NUMBER:	031217
ISSUE DATE:	January 8, 2018
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Nitrate (KNO_3)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	1.0028 ± 0.0008 g/mL at 21.5°C and 627 mm Hg
TRACEABILITY[3]:	102%
NIST/SRM:	3185 Nitrate
VERIFICATION METHOD:	Ion Chromatography
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 12/2019**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009
ACCREDITED
REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005
ACCREDITED
CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

PicricARestek_00083

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499 **Lot No.:** A0143208

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 : November 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%	1,003.0 µg/mL	+/- 5.9574 µg/mL +/- 54.9463 µg/mL +/- 64.0727 µg/mL		Gravimetric Unstressed 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)

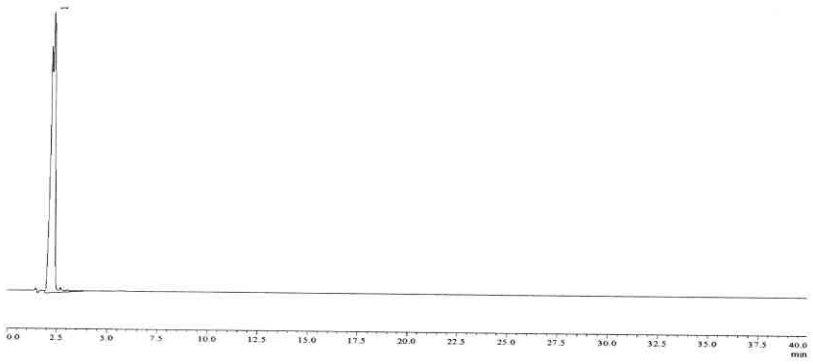
Flow Rate:
1.0 ml/min.

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.

Michael J Maye

Date Mixed: 13-Nov-2018 **Balance:** 1127510105

John Lidgett

John Lidgett - AD Chemist

Date Passed: 16-Nov-2018

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

Reagent

RSK7gasMathes_00025

MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture

Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS

Contents:
Net: 7.57 ft³; 0.21 m³

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)
*DM016894

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.00	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	0.995	%	±10%	±2%
Ethylene	1.00	0.973	%	±10%	±2%
Methane	1.00	1.00	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

*** Indicates the actual cylinder(s) analyzed.**

Lot No: 9307628511
Fill Date: 11/30/2017
Expiration Date: 12/01/2019

Analysis Date: 12/01/2017

Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Andrew L. Couch — 12/01/2017
Andrew Couch - Analyst — Date

Jesse Hayes — 12/04/2017
Jesse Hayes - QA Approval — Date

Reagent

SFD CAL STK_00006

ACROS ORGANICS

Version	02
Molecular weight	240.18
Quality Test / Release Date	09/06/2018
Molecular Formula	Na2 S . 9 H2 O
CAS No	1313-84-4
Linear Formula	Na2S.9H2O
Flash Point (°C)	

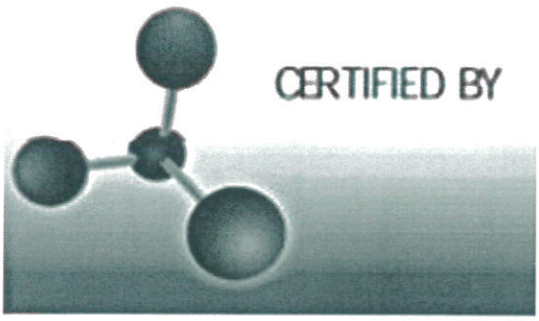
Certificate of Analysis

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties,expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Unless otherwise stated, these products are not intended for dialysis, parenteral, or injectable use without further processing. The following are the actual analytical results obtained:

Catalog Number	38706	**Quality Test / Release Date** 09/06/2018
Lot Number	A0390872	
Description	Sodium sulfide nonahydrate,98+%,extra pure	
Country of Origin	INDIA	
Declaration of Origin	synthetic	

BSE/TSE comment	
Chemical Comment	

Result name	Units	Specifications	Test Value
Appearance (Color)		Colorless to light yellow	Light yellow
Appearance (Form)		Adhering crystals and/or chunks	Adhering crystals and chunks
Titration Iodimetric		32.0 to 38.0 % (Na2S)	35.9 % (Na2S)
Total nitrogen (as N)		=<0.005 %	=<0.005 %
Sulfite (as SO2)		=<2000 ppm	=<2000 ppm
Thiosulphate (S2O3)		=<5000 ppm	=<5000 ppm



L. Van den Broek, QA Manager

Issued: 09-06-2018

Acros Organics
ENA23, zone1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Regent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

Reagent

TKN CAL STD_00017

nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Certificate of Analysis

TKN Calibration Standard - 1000 mg/L

Catalog Number: IS-009, IS-009-500
Lot Number: 010617
Manufacture Date: 01/06/17
Certified Date: 01/12/17

Expiration: 01/31/2021
Matrix: Water
Hazards: Irritant
(See MSDS)

Bulk Number	Analyte	CAS #	Purity	Certified Concentration (mg/L TKN)
W-1477-25	TKN from Glycine	56-40-6	99.4%	1000 ± 4.60

Packaging, Storage, Instructions For Use

Store at room temperature (15-30°C). After opening, this solution should be stored tightly capped at 2-8°C.

This certified reference material (CRM) is packaged in low density polyethylene. Allow to equilibrate to room temperature before use. Small aliquots should be poured out of the bottle rather than directly pipetted out of bottle in order to prevent contamination or premature degradation. A 1 mL sample size is recommended. Smaller sample volumes may negatively affect estimated uncertainty.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this CRM. The actual purity is referenced above. Analyte source material purity and associated uncertainty has been analytically verified against appropriate NIST SRMs, if available.

Method: Certified concentration confirmed by HPLC analysis against an independent reference standard with n=3.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

Catalog Number: IS-009, IS-009-500
Lot Number: 010617

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Uncertainty

The ± uncertainty associated with the certified concentration is the expanded uncertainty at 95% confidence interval (CI) with K=2. This expanded uncertainty incorporates contributions from manufacturing, homogeneity, and stability.

Homogeneity

This CRM was thoroughly mixed in production. Batch homogeneity was established through analysis of samples chosen at random. A minimum 1 mL sample size is recommended.

Stability/Expiration

The stability of this CRM is based on short-term and long-term monitoring of the certified concentration. The expiration date is guaranteed to be valid from the manufacture date and is based on results of long-term monitoring.

Ewart Morris

Ewart Morris, Inorganics Technical Manager

Mark Hammersla

Mark Hammersla, President

Reagent

TKN ICV_00011

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Total Kjeldahl Nitrogen (TKN)
CATALOG NUMBER:	043 -125 mL; 996 - 500 mL
LOT NUMBER:	281018
ISSUE DATE:	December 7, 2018
REVISION DATE:	Original
STARTING MATERIAL:	Glycine (NH_2CH_2COOH)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water and 1% (v/v) HCl
DENSITY:	1.0055 ± 0.0010 g/mL at 16.6°C and 754 mm Hg
TRACEABILITY[3]:	100%
NIST/SRM:	194a Ammonium Dihydrogen Phosphate
VERIFICATION METHOD:	Ion Selective Electrode (ISE)
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 10/2020**. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or email to info@eraqc.com

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1439.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

TOC ICV Std_00037

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Organic Carbon Standard, 1000 ppm C

Lot Number: 4901G09 **Product Number:** 1847

Manufacture Date: JAN 22, 2019
Expiration Date: JAN 2020

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Jim Gibbs (01/22/2019)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

TOC LCS Std_00046

Agilent

Certificate of Analysis
ISO Guide 34

Product Number: IQC-106
Lot Number: CT-0920

Lot Issue Date: 28 -Feb 2019
Expiration Date: 31-Mar 2021

Product Name: Total Organic Carbon (TOC) Standard

Description:
This Reference Material (RM) was gravimetrically prepared in accordance with ISO Guide 34 and under Agilent's ISO 9001 registered quality system. The neat materials used for this product have been verified by Agilent's ISO 17025 laboratory and under Agilent's ISO Guide 34 accreditation. The analyte concentrations were verified by Agilent's ISO 17025 accredited laboratory. For each analyte, the true value, with its uncertainty value calculated at the 95% confidence level, is reported below.

Analyte	Starting Material	Lot Number	Purity (%)	Analyte Concentration	Traceability & Method
TOC	potassium hydrogen phthalate	RM14067	99.97	1000 ± 5 µg/mL	NAA00089; TOC Analyzer

Solvent: water (low TOC, <50 ppb)

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

Traceability:
Traceability has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on appropriate physical or chemical measurements, including gravimetric or volumetric dilution, where the mass or volume of a solution before and after dilution is measured. The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1, ISO 9001, ISO 17025, and ISO Guide 34. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 819.

Estimation of Uncertainties:
The true value is reported, with its uncertainty value calculated at the 95% confidence level.

Homogeneity:
This RM was formulated and unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening and should be processed without delay for the true value to be valid within the stated uncertainties. Do not pipet from the bottle. Do not return any material removed for pipetting to the bottle. Tightly cap the bottle after removing any material and store according to the instructions noted above.

Hazards:
Refer to the Safety Data Sheet for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid, within the measurement uncertainty specified, until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

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: CT-0920

Lot Issue Date: 28 -Feb 2019
Expiration Date: 31-Mar 2021

Maintenance of Certification:
The real-time, long term stability of the RM may be monitored over the lifetime of the certification. If substantive changes occur that affect the certification before the expiration of this certificate, Agilent Technologies will notify the purchaser.

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

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

Page 2 of 2

ISO17025 Cert No.
AT-1937

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB060519	280-124928-1	101	92	96	95
Source2019	280-124928-2	99	91	95	94
SHGW02-19A	280-124928-3	103	93	95	92
SHGW05-19A	280-124928-4	104	93	96	93
SAMW1-19A	280-124928-5	101	91	96	95
G0053-19A	280-124928-6	101	91	97	93
SHGW03-19A	280-124928-10	102	91	97	91
G0069-19A	280-124928-11	100	91	95	92
SHGW04-19A	280-124928-12	100	91	95	91
TB060619	280-124928-13	102	92	94	92
	MB 280-461956/4	103	94	97	97
	MB 280-462165/5	100	90	95	95
	LCS 280-461956/3	101	96	97	97
	LCS 280-462165/3	102	95	96	94

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-119
DCA = 1,2-Dichloroethane-d4 (Surr)	81-118
TOL = Toluene-d8 (Surr)	89-112
BFB = 4-Bromofluorobenzene (Surr)	85-114

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: g2_6496.D

Lab ID: LCS 280-461956/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	25.5	102	74-131	
1,1,2,2-Tetrachloroethane	25.0	23.8	95	71-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.8	115	70-136	
1,1,2-Trichloroethane	25.0	25.9	104	80-119	
1,1-Dichloroethane	25.0	25.4	102	77-125	
1,1-Dichloroethene	25.0	27.5	110	71-131	
1,2,3-Trichlorobenzene	25.0	31.4	126	69-129	
1,2,4-Trichlorobenzene	25.0	26.6	106	69-130	
1,2-Dibromo-3-Chloropropane	25.0	26.9	108	62-128	
1,2-Dichlorobenzene	25.0	25.5	102	80-119	
1,2-Dichloroethane	25.0	22.3	89	73-128	
1,2-Dichloropropane	25.0	25.8	103	78-122	
1,3-Dichlorobenzene	25.0	26.4	106	80-119	
1,4-Dichlorobenzene	25.0	26.3	105	79-118	
2-Butanone (MEK)	100	93.6	94	56-143	
2-Hexanone	100	89.3	89	57-139	
4-Methyl-2-pentanone (MIBK)	100	92.4	92	67-130	
Acetone	100	89.3	89	39-160	
Benzene	25.0	25.8	103	79-120	
Bromochloromethane	25.0	27.2	109	78-123	
Bromodichloromethane	25.0	25.9	103	79-125	
Bromoform	25.0	22.2	89	66-130	
Bromomethane	25.0	26.9	108	53-141	
Carbon disulfide	25.0	25.2	101	64-133	
Carbon tetrachloride	25.0	26.3	105	72-136	
Chlorobenzene	25.0	26.3	105	82-118	
Chloroethane	25.0	23.7	95	60-138	
Chloroform	25.0	25.6	102	79-124	
Chloromethane	25.0	23.2	93	50-139	
cis-1,2-Dichloroethene	25.0	27.4	109	78-123	
cis-1,3-Dichloropropene	25.0	24.9	100	75-124	
Cyclohexane	25.0	23.8	95	71-130	
Dibromochloromethane	25.0	26.7	107	74-126	
Dichlorodifluoromethane	25.0	21.4	86	32-152	
Ethylbenzene	25.0	26.2	105	79-121	
Ethylene Dibromide	25.0	25.7	103	77-121	
Isopropylbenzene	25.0	26.3	105	72-131	
Methyl acetate	50.0	46.8	94	56-136	
Methyl tert-butyl ether	25.0	24.5	98	71-124	
Methylcyclohexane	25.0	23.8	95	72-132	
Methylene Chloride	25.0	25.8	103	74-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: g2_6496.D

Lab ID: LCS 280-461956/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	27.0	108	78-123	
Tetrachloroethene	25.0	27.7	111	74-129	
Toluene	25.0	26.7	107	80-121	
trans-1,2-Dichloroethene	25.0	27.7	111	75-124	
trans-1,3-Dichloropropene	25.0	24.0	96	73-127	
Trichloroethene	25.0	25.6	102	79-123	
Trichlorofluoromethane	25.0	27.1	108	65-141	
Vinyl chloride	25.0	24.3	97	58-137	
Xylenes, Total	50.0	52.3	105	79-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: g2_6567.D

Lab ID: LCS 280-462165/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	25.7	103	74-131	
1,1,2,2-Tetrachloroethane	25.0	23.7	95	71-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.8	115	70-136	
1,1,2-Trichloroethane	25.0	26.2	105	80-119	
1,1-Dichloroethane	25.0	25.3	101	77-125	
1,1-Dichloroethene	25.0	26.7	107	71-131	
1,2,3-Trichlorobenzene	25.0	33.3	133	69-129	Q
1,2,4-Trichlorobenzene	25.0	28.0	112	69-130	
1,2-Dibromo-3-Chloropropane	25.0	27.0	108	62-128	
1,2-Dichlorobenzene	25.0	26.2	105	80-119	
1,2-Dichloroethane	25.0	23.3	93	73-128	
1,2-Dichloropropane	25.0	25.7	103	78-122	
1,3-Dichlorobenzene	25.0	26.5	106	80-119	
1,4-Dichlorobenzene	25.0	26.8	107	79-118	
2-Butanone (MEK)	100	90.8	91	56-143	
2-Hexanone	100	86.3	86	57-139	
4-Methyl-2-pentanone (MIBK)	100	87.9	88	67-130	
Acetone	100	86.0	86	39-160	
Benzene	25.0	25.8	103	79-120	
Bromochloromethane	25.0	28.8	115	78-123	
Bromodichloromethane	25.0	26.4	106	79-125	
Bromoform	25.0	24.2	97	66-130	
Bromomethane	25.0	22.1	88	53-141	
Carbon disulfide	25.0	23.2	93	64-133	
Carbon tetrachloride	25.0	26.4	105	72-136	
Chlorobenzene	25.0	26.6	106	82-118	
Chloroethane	25.0	19.4	78	60-138	
Chloroform	25.0	25.9	103	79-124	
Chloromethane	25.0	16.4	66	50-139	
cis-1,2-Dichloroethene	25.0	27.8	111	78-123	
cis-1,3-Dichloropropene	25.0	25.1	100	75-124	
Cyclohexane	25.0	22.7	91	71-130	
Dibromochloromethane	25.0	28.5	114	74-126	
Dichlorodifluoromethane	25.0	18.4	74	32-152	
Ethylbenzene	25.0	26.3	105	79-121	
Ethylene Dibromide	25.0	26.8	107	77-121	
Isopropylbenzene	25.0	25.3	101	72-131	
Methyl acetate	50.0	46.8	94	56-136	
Methyl tert-butyl ether	25.0	24.7	99	71-124	
Methylcyclohexane	25.0	22.7	91	72-132	
Methylene Chloride	25.0	25.9	103	74-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: g2_6567.D

Lab ID: LCS 280-462165/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	27.4	110	78-123	
Tetrachloroethene	25.0	28.1	113	74-129	
Toluene	25.0	26.8	107	80-121	
trans-1,2-Dichloroethene	25.0	27.9	112	75-124	
trans-1,3-Dichloropropene	25.0	24.7	99	73-127	
Trichloroethene	25.0	25.5	102	79-123	
Trichlorofluoromethane	25.0	23.6	94	65-141	
Vinyl chloride	25.0	20.1	81	58-137	
Xylenes, Total	50.0	52.6	105	79-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab File ID: g2_6498.D Lab Sample ID: MB 280-461956/4

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_G2 Date Analyzed: 06/18/2019 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-461956/3	g2_6496.D	06/18/2019 13:59
TB060519	280-124928-1	g2_6524.D	06/18/2019 23:52
Source2019	280-124928-2	g2_6525.D	06/19/2019 00:13

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab File ID: g2_6569.D Lab Sample ID: MB 280-462165/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_G2 Date Analyzed: 06/20/2019 10:54

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-462165/3	g2_6567.D	06/20/2019 10:12
SHGW02-19A	280-124928-3	g2_6576.D	06/20/2019 13:23
SHGW05-19A	280-124928-4	g2_6577.D	06/20/2019 13:45
SAMW1-19A	280-124928-5	g2_6578.D	06/20/2019 14:06
G0053-19A	280-124928-6	g2_6579.D	06/20/2019 14:27
SHGW03-19A	280-124928-10	g2_6580.D	06/20/2019 14:48
G0069-19A	280-124928-11	g2_6581.D	06/20/2019 15:09
SHGW04-19A	280-124928-12	g2_6582.D	06/20/2019 15:31
TB060619	280-124928-13	g2_6583.D	06/20/2019 15:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab File ID: g2_6446.D BFB Injection Date: 06/17/2019

Instrument ID: VMS_G2 BFB Injection Time: 16:54

Analysis Batch No.: 461853

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.4	
75	30.0 - 60.0 % of mass 95	48.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	74.4	
175	5.0 - 9.0 % of mass 174	5.2	(7.0) 1
176	95.0 - 101.0 % of mass 174	71.6	(96.2) 1
177	5.0 - 9.0 % of mass 176	4.7	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-461853/2	g2_6448.D	06/17/2019	17:38
	IC 280-461853/3	g2_6449.D	06/17/2019	17:59
	ICIS 280-461853/4	g2_6450.D	06/17/2019	18:20
	IC 280-461853/5	g2_6451.D	06/17/2019	18:41
	IC 280-461853/6	g2_6452.D	06/17/2019	19:02
	IC 280-461853/7	g2_6453.D	06/17/2019	19:23
	IC 280-461853/8	g2_6454.D	06/17/2019	19:44
	ICV 280-461853/9	g2_6455.D	06/17/2019	20:05

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab File ID: g2_6494.D BFB Injection Date: 06/18/2019

Instrument ID: VMS_G2 BFB Injection Time: 13:14

Analysis Batch No.: 461956

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.3	
75	30.0 - 60.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	82.0	
175	5.0 - 9.0 % of mass 174	6.1	(7.4) 1
176	95.0 - 101.0 % of mass 174	79.1	(96.4) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-461956/2	g2_6495.D	06/18/2019	13:38
	LCS 280-461956/3	g2_6496.D	06/18/2019	13:59
	MB 280-461956/4	g2_6498.D	06/18/2019	14:42
TB060519	280-124928-1	g2_6524.D	06/18/2019	23:52
Source2019	280-124928-2	g2_6525.D	06/19/2019	00:13
	CCVC 280-461956/32	g2_6526.D	06/19/2019	00:35

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab File ID: g2_6565.D BFB Injection Date: 06/20/2019

Instrument ID: VMS_G2 BFB Injection Time: 09:29

Analysis Batch No.: 462165

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.9	
75	30.0 - 60.0 % of mass 95	46.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	83.6	
175	5.0 - 9.0 % of mass 174	6.0	(7.2) 1
176	95.0 - 101.0 % of mass 174	82.5	(98.7) 1
177	5.0 - 9.0 % of mass 176	5.1	(6.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-462165/2	g2_6566.D	06/20/2019	09:50
	LCS 280-462165/3	g2_6567.D	06/20/2019	10:12
	MB 280-462165/5	g2_6569.D	06/20/2019	10:54
SHGW02-19A	280-124928-3	g2_6576.D	06/20/2019	13:23
SHGW05-19A	280-124928-4	g2_6577.D	06/20/2019	13:45
SAMW1-19A	280-124928-5	g2_6578.D	06/20/2019	14:06
G0053-19A	280-124928-6	g2_6579.D	06/20/2019	14:27
SHGW03-19A	280-124928-10	g2_6580.D	06/20/2019	14:48
G0069-19A	280-124928-11	g2_6581.D	06/20/2019	15:09
SHGW04-19A	280-124928-12	g2_6582.D	06/20/2019	15:31
TB060619	280-124928-13	g2_6583.D	06/20/2019	15:52
	CCVC 280-462165/32	g2_6596.D	06/20/2019	20:23

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Sample No.: ICIS 280-461853/4 Date Analyzed: 06/17/2019 18:20

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): g2_6450.D Heated Purge: (Y/N) N

Calibration ID: 36837

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2780251	3.09	4033468	4.85	880472	7.35
UPPER LIMIT		5560502	3.59	8066936	5.35	1760944	7.85
LOWER LIMIT		1390126	2.59	2016734	4.35	440236	6.85
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-461853/9		2764069	3.09	4218599	4.85	885155	7.35
CCV 280-461956/2		3619957	3.09	5342946	4.85	1143236	7.35
LCS 280-461956/3		3266697	3.09	4762885	4.85	1081935	7.35
MB 280-461956/4		3232393	3.09	4647421	4.85	1064132	7.35
280-124928-1	TB060519	3084940	3.09	4660292	4.85	1079328	7.35
280-124928-2	Source2019	2963862	3.09	4526350	4.85	1042275	7.35
CCVC 280-461956/32		3081533	3.09	4734078	4.85	1092733	7.35
CCV 280-462165/2		2945214	3.09	4585735	4.85	1038842	7.35
LCS 280-462165/3		3055416	3.09	4420456	4.85	1008784	7.35
MB 280-462165/5		2990555	3.09	4343976	4.85	991554	7.35
280-124928-3	SHGW02-19A	3488818	3.09	4222805	4.85	979061	7.35
280-124928-4	SHGW05-19A	3692815	3.09	4449609	4.85	1027148	7.35
280-124928-5	SAMW1-19A	3490308	3.09	4406487	4.85	1007198	7.35
280-124928-6	G0053-19A	2998967	3.09	4183765	4.85	952186	7.35
280-124928-10	SHGW03-19A	2943051	3.09	4039187	4.85	919444	7.35
280-124928-11	G0069-19A	2805538	3.09	4037654	4.85	936235	7.35
280-124928-12	SHGW04-19A	2866464	3.09	4039551	4.85	926525	7.35
280-124928-13	TB060619	2965333	3.09	4164358	4.85	953421	7.35
CCVC 280-462165/32		2684132	3.09	4250950	4.85	1000984	7.35

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Sample No.: ICIS 280-461853/4 Date Analyzed: 06/17/2019 18:20

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): g2_6450.D Heated Purge: (Y/N) N

Calibration ID: 36837

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1459058	9.55				
UPPER LIMIT		2918116	10.05				
LOWER LIMIT		729529	9.05				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-461853/9		1469503	9.55				
CCV 280-461956/2		1943362	9.55				
LCS 280-461956/3		1776948	9.55				
MB 280-461956/4		1753631	9.55				
280-124928-1	TB060519	1754101	9.55				
280-124928-2	Source2019	1749963	9.55				
CCVC 280-461956/32		1883716	9.55				
CCV 280-462165/2		1784597	9.55				
LCS 280-462165/3		1695072	9.55				
MB 280-462165/5		1615584	9.55				
280-124928-3	SHGW02-19A	1662584	9.55				
280-124928-4	SHGW05-19A	1714275	9.55				
280-124928-5	SAMW1-19A	1644351	9.55				
280-124928-6	G0053-19A	1572023	9.55				
280-124928-10	SHGW03-19A	1565189	9.55				
280-124928-11	G0069-19A	1560016	9.55				
280-124928-12	SHGW04-19A	1542512	9.55				
280-124928-13	TB060619	1563027	9.55				
CCVC 280-462165/32		1731781	9.55				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: TB060519 Lab Sample ID: 280-124928-1

Matrix: Water Lab File ID: g2_6524.D

Analysis Method: 8260B Date Collected: 06/05/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 23:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461956 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	7.3	J	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U Q	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U Q	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: TB060519 Lab Sample ID: 280-124928-1

Matrix: Water Lab File ID: g2_6524.D

Analysis Method: 8260B Date Collected: 06/05/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 23:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461956 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		81-118
460-00-4	4-Bromofluorobenzene (Surr)	95		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	96		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6524.D
Lims ID: 280-124928-A-1
Client ID: TB060519
Sample Type: Client
Inject. Date: 18-Jun-2019 23:52:30 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-a-1
Misc. Info.: 280-0082979-030
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 21-Jun-2019 12:59:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	3084940	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4660292	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	84	1079328	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1754101	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	997719	50.4	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.609	4.610	-0.001	97	1157604	45.8	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4290545	47.8	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	91	1534469	47.4	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64		2.193				ND	
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43	2.766	2.766	0.000	99	64658	7.29	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780				ND	
30 Carbon disulfide	76		2.976				ND	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84	3.129	3.129	0.000	92	10598	0.3865	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43		3.981				ND	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83		4.233				ND	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62		4.665				ND	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	
72 1,2-Dichloropropane	63		5.322				ND	
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97		6.500				ND	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43		6.671				ND	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

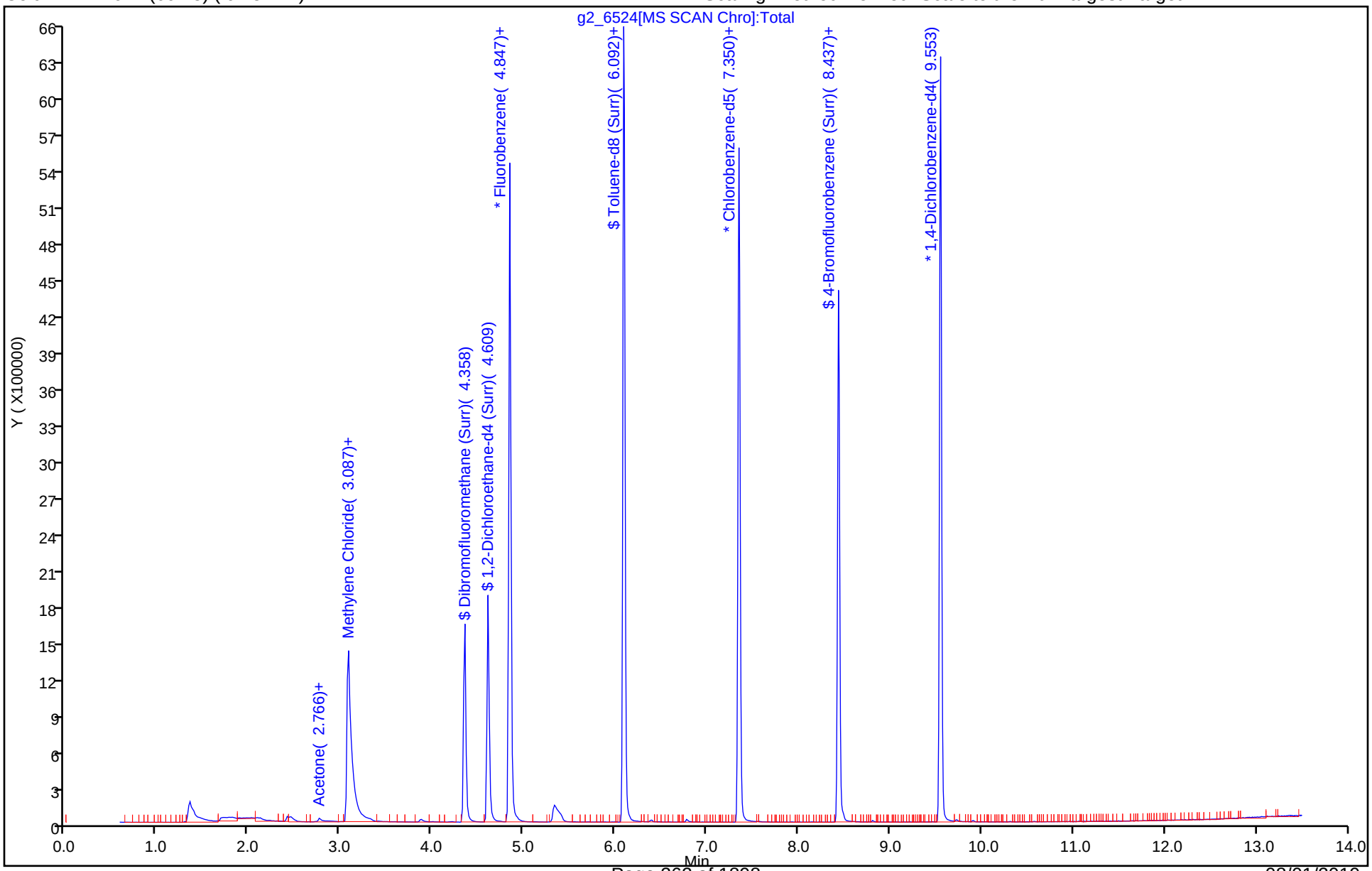
Report Date: 21-Jun-2019 13:03:58 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6524.D

Injection Date:	18-Jun-2019 23:52:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-A-1	Lab Sample ID:	280-124928-1	Worklist Smp#:	30
Client ID:	TB060519				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6524.D
Lims ID: 280-124928-A-1
Client ID: TB060519
Sample Type: Client
Inject. Date: 18-Jun-2019 23:52:30 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-a-1
Misc. Info.: 280-0082979-030
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

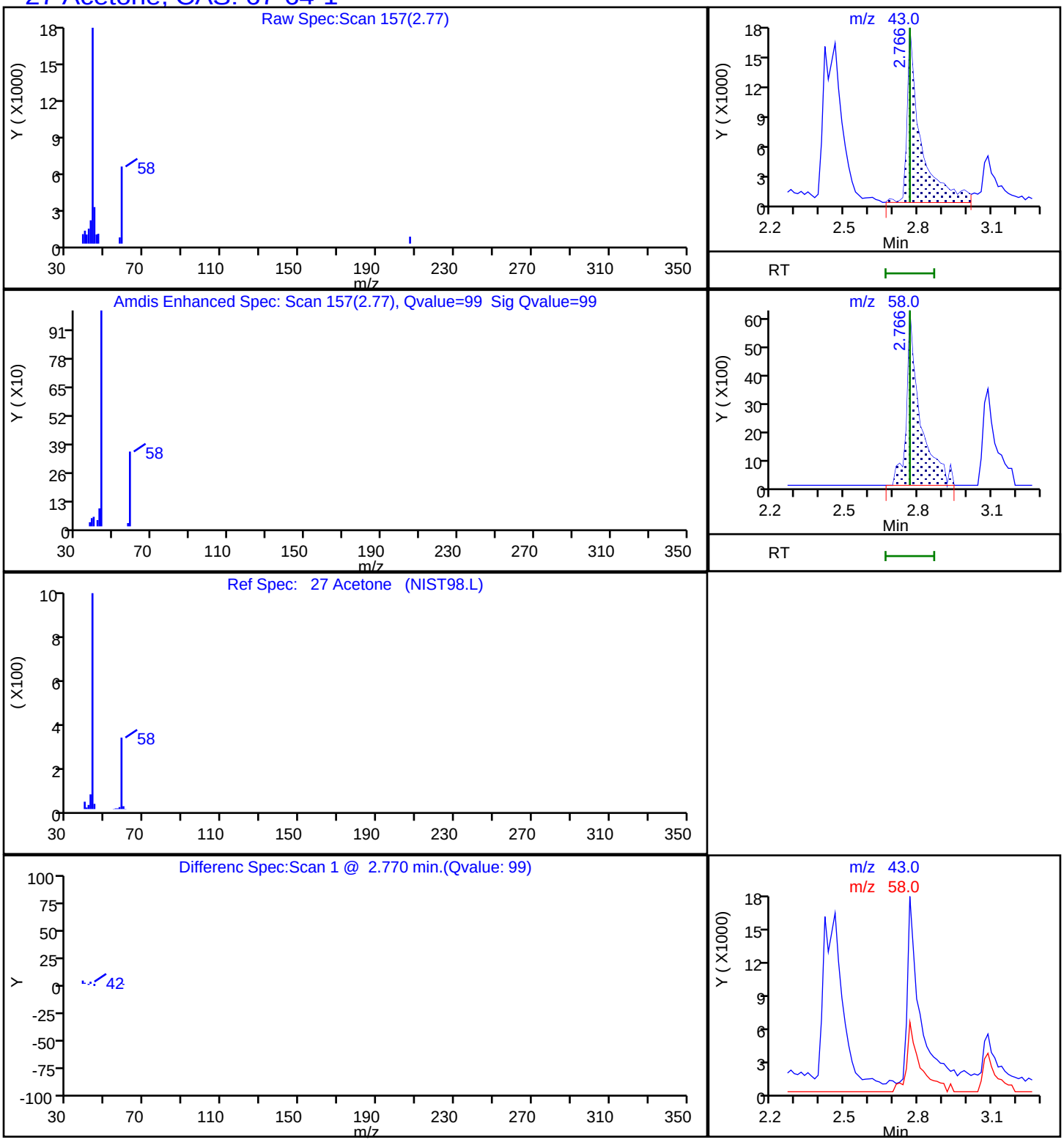
First Level Reviewer: meierg Date: 21-Jun-2019 12:59:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	50.4	100.90
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	45.8	91.52
$ 8 Toluene-d8 (Surr)	50.0	47.8	95.53
$ 9 4-Bromofluorobenzene (Surr)	50.0	47.4	94.72

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6524.D		
Injection Date:	18-Jun-2019 23:52:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-A-1	Lab Sample ID:	280-124928-1
Client ID:	TB060519		
Operator ID:	MEIERG	ALS Bottle#:	30 Worklist Smp#: 30
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

27 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Source2019 Lab Sample ID: 280-124928-2

Matrix: Water Lab File ID: g2_6525.D

Analysis Method: 8260B Date Collected: 06/05/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 00:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461956 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	3.7	J	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.38	J	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U Q	2.0	1.6	0.41
67-66-3	Chloroform	0.21	J	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U Q	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.43	J	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Source2019 Lab Sample ID: 280-124928-2

Matrix: Water Lab File ID: g2_6525.D

Analysis Method: 8260B Date Collected: 06/05/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 00:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461956 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	94		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	95		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6525.D
Lims ID: 280-124928-E-2
Client ID: Source2019
Sample Type: Client
Inject. Date: 19-Jun-2019 00:13:30 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-e-2
Misc. Info.: 280-0082979-031
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 21-Jun-2019 12:59:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2963862	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4526350	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	84	1042275	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1749963	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	955064	49.7	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	97	1113860	45.3	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4128977	47.6	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	91	1512694	46.8	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64		2.193				ND	
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43	2.766	2.766	0.000	98	37257	3.65	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780				ND	
30 Carbon disulfide	76		2.976				ND	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84	3.129	3.129	0.000	80	11237	0.4220	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43		3.981				ND	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83	4.232	4.233	0.000	92	7755	0.2072	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62		4.665				ND	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	
72 1,2-Dichloropropane	63		5.322				ND	
76 Dichlorobromomethane	83	5.517	5.517	0.000	96	10203	0.3831	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97		6.500				ND	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43		6.671				ND	
89 Chlorodibromomethane	129	6.843	6.836	0.007	86	7201	0.4299	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

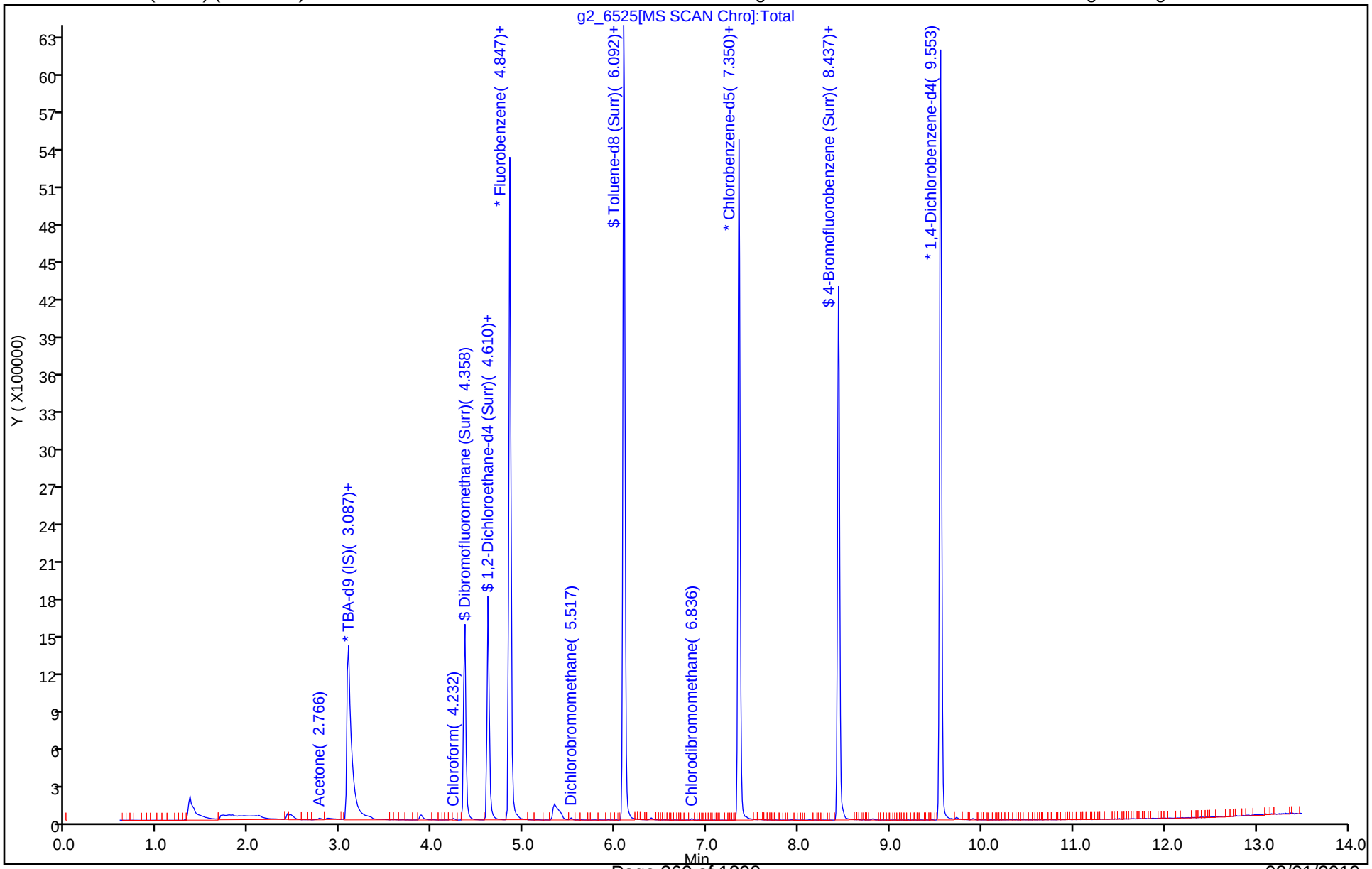
Report Date: 21-Jun-2019 13:04:02 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6525.D

Injection Date:	19-Jun-2019 00:13:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-E-2	Lab Sample ID:	280-124928-2	Worklist Smp#:	31
Client ID:	Source2019				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6525.D
Lims ID: 280-124928-E-2
Client ID: Source2019
Sample Type: Client
Inject. Date: 19-Jun-2019 00:13:30 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-e-2
Misc. Info.: 280-0082979-031
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 21-Jun-2019 12:59:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	49.7	99.44
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	45.3	90.67
$ 8 Toluene-d8 (Surr)	50.0	47.6	95.20
$ 9 4-Bromofluorobenzene (Surr)	50.0	46.8	93.60

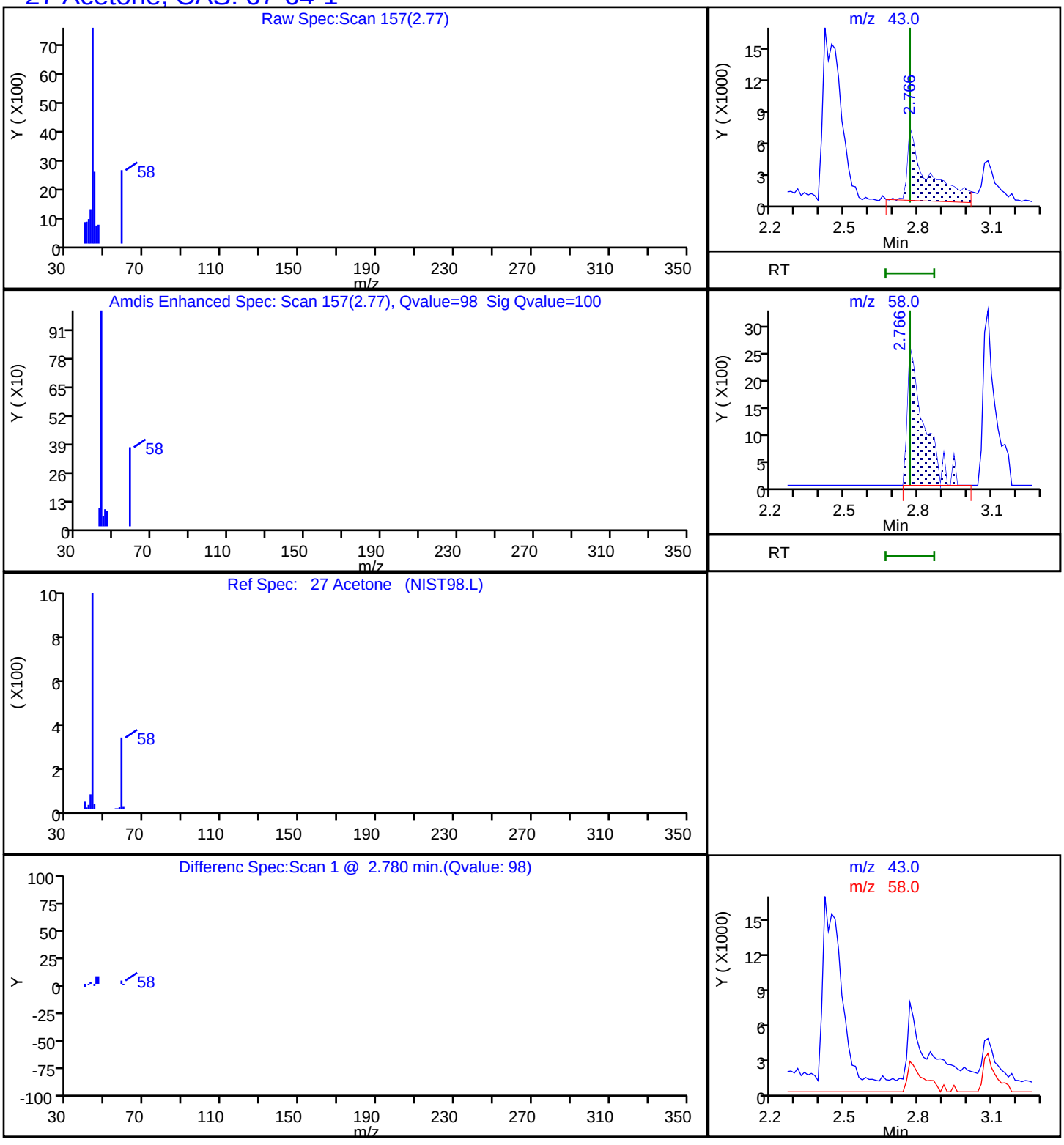
Report Date: 21-Jun-2019 13:04:02 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6525.D

Injection Date:	19-Jun-2019 00:13:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-E-2	Lab Sample ID:	280-124928-2
Client ID:	Source2019		
Operator ID:	MEIERG	ALS Bottle#:	31 Worklist Smp#: 31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

27 Acetone, CAS: 67-64-1



Report Date: 21-Jun-2019 13:04:03 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6525.D

Injection Date: 19-Jun-2019 00:13:30 Instrument ID: VMS_G2

Lims ID: 280-124928-E-2 Lab Sample ID: 280-124928-2

Client ID: Source2019

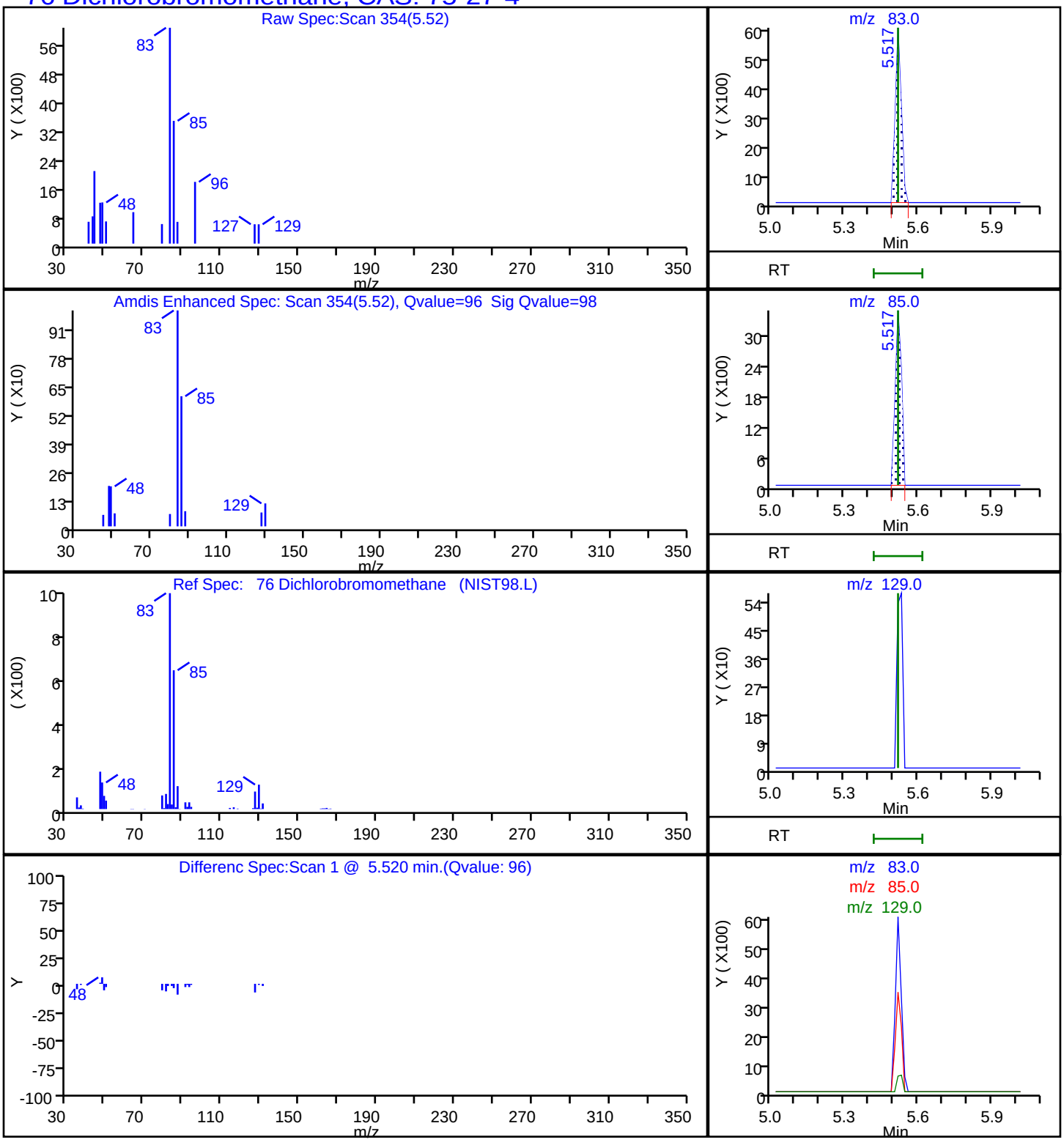
Operator ID: MEIERG ALS Bottle#: 31 Worklist Smp#: 31

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

76 Dichlorobromomethane, CAS: 75-27-4



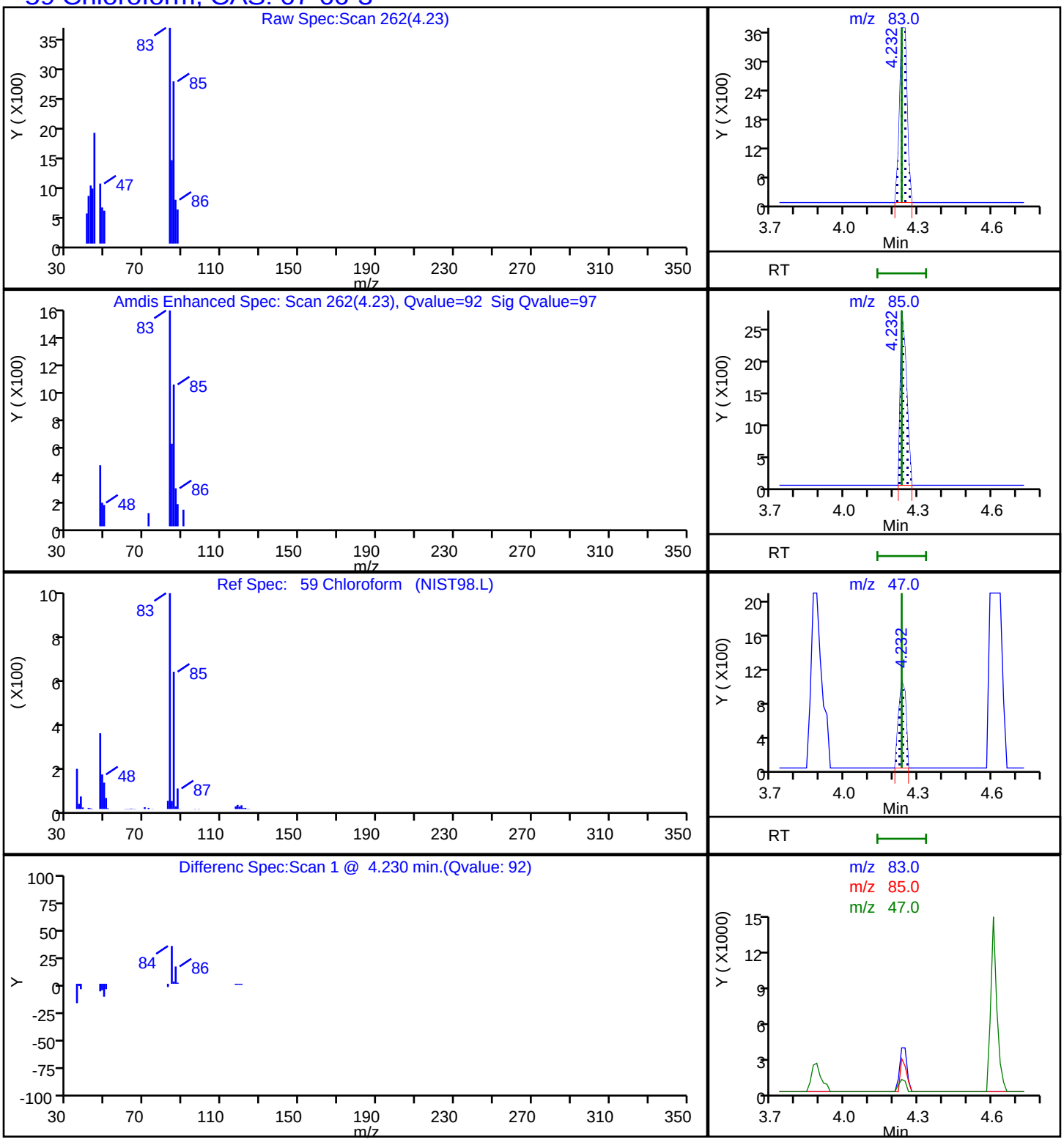
Report Date: 21-Jun-2019 13:04:02 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6525.D

Injection Date:	19-Jun-2019 00:13:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-E-2	Lab Sample ID:	280-124928-2		
Client ID:	Source2019				
Operator ID:	MEIERG	ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

59 Chloroform, CAS: 67-66-3



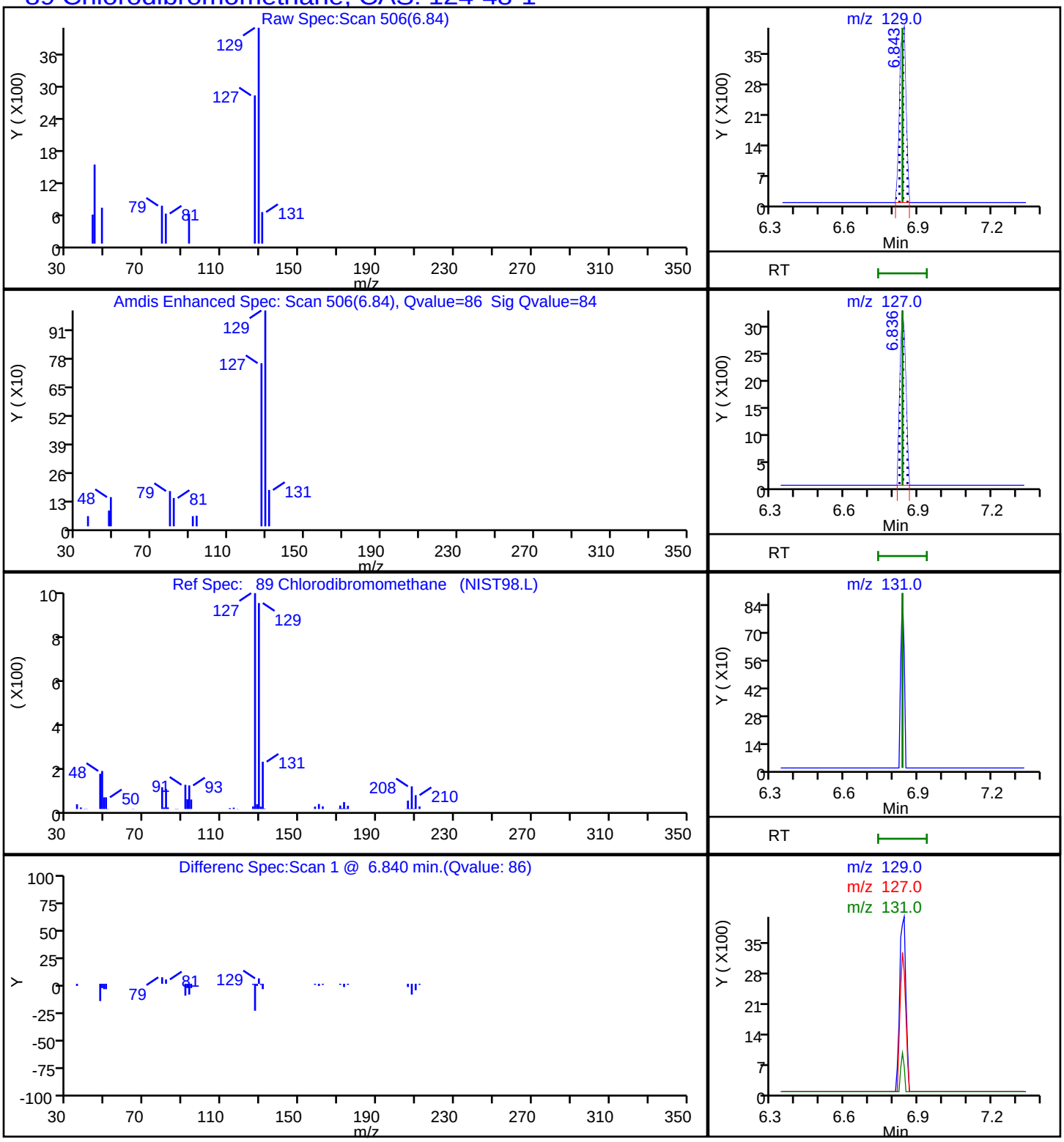
Report Date: 21-Jun-2019 13:04:03 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6525.D

Injection Date:	19-Jun-2019 00:13:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-E-2	Lab Sample ID:	280-124928-2		
Client ID:	Source2019				
Operator ID:	MEIERG	ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

89 Chlorodibromomethane, CAS: 124-48-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW02-19A Lab Sample ID: 280-124928-3

Matrix: Water Lab File ID: g2_6576.D

Analysis Method: 8260B Date Collected: 06/06/2019 13:25

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 13:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U M	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	1.1		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	3.6		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U M	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	53		6.0	4.0	2.0
591-78-6	2-Hexanone	160		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U M	5.0	3.2	0.98
67-64-1	Acetone	55		10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	0.43	J	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW02-19A Lab Sample ID: 280-124928-3

Matrix: Water Lab File ID: g2_6576.D

Analysis Method: 8260B Date Collected: 06/06/2019 13:25

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 13:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U M	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		81-118
460-00-4	4-Bromofluorobenzene (Surr)	92		85-114
1868-53-7	Dibromofluoromethane (Surr)	103		80-119
2037-26-5	Toluene-d8 (Surr)	95		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D
Lims ID: 280-124928-C-3
Client ID: SHGW02-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 13:23:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-c-3
Misc. Info.: 280-0083038-012
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 20-Jun-2019 13:57:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	3488818	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4222805	50.0	
* 3 Chlorobenzene-d5	119	7.351	7.350	0.001	84	979061	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1662584	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	926217	51.7	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	97	1066986	46.5	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3880569	47.6	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	92	1419460	46.2	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64	2.194	2.193	0.001	91	10234	0.4319	
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43	2.766	2.766	0.000	96	369214	54.7	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780				ND	
30 Carbon disulfide	76	2.976	2.976	0.000	94	10745	0.1440	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84		3.129				ND	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	533088	53.1	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83		4.233				ND	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62	4.666	4.665	0.001	97	104592	3.58	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	U
72 1,2-Dichloropropane	63		5.322				ND	U
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	U
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	90	19777	1.12	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43	6.671	6.671	0.000	93	2744045	164.9	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	U
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

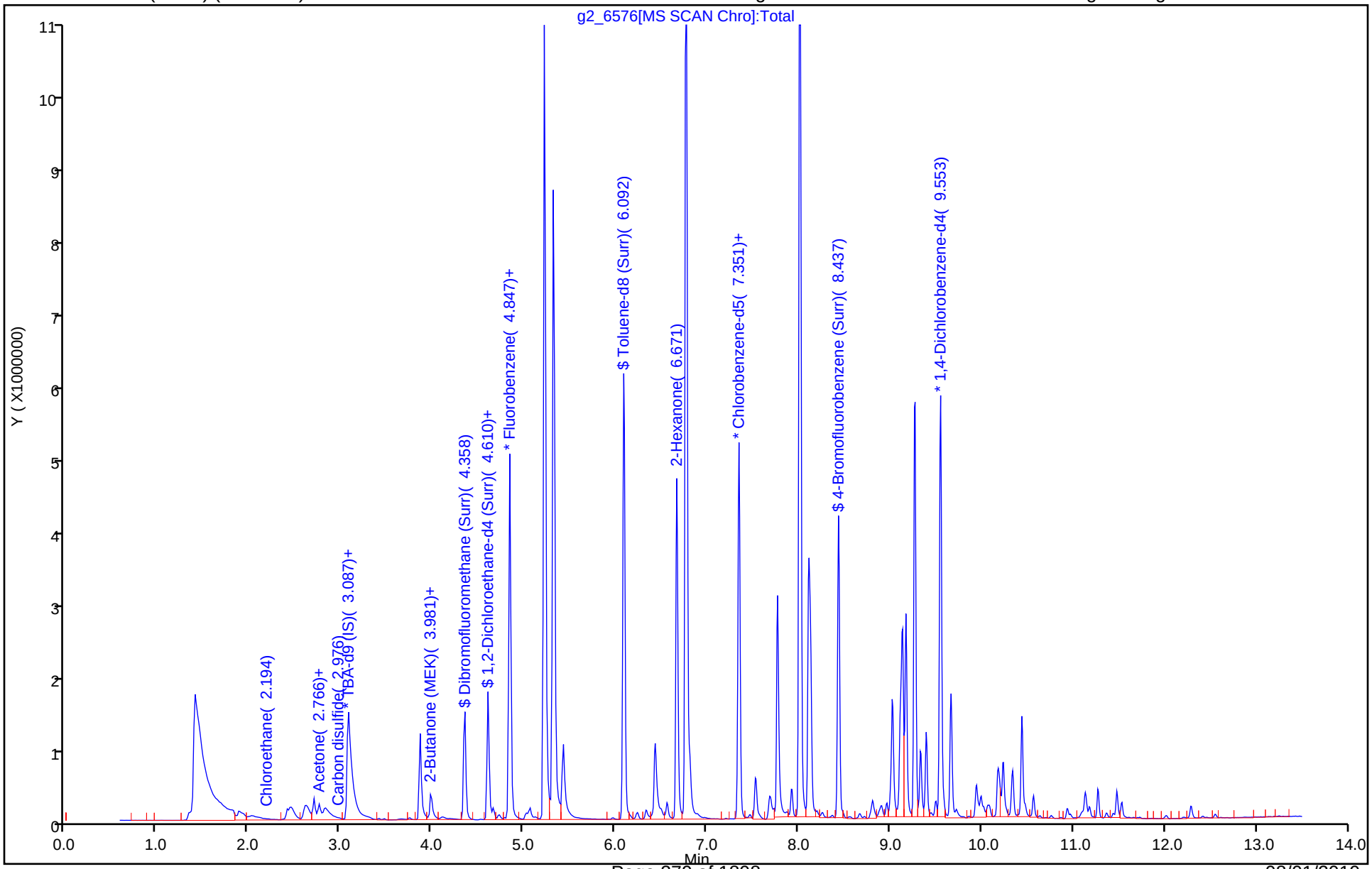
Report Date: 22-Jun-2019 13:42:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D

Injection Date:	20-Jun-2019 13:23:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-C-3	Lab Sample ID:	280-124928-3	Worklist Smp#:	12
Client ID:	SHGW02-19A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D
Lims ID: 280-124928-C-3
Client ID: SHGW02-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 13:23:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-c-3
Misc. Info.: 280-0083038-012
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 20-Jun-2019 13:57:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	51.7	103.37
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	46.5	93.10
$ 8 Toluene-d8 (Surr)	50.0	47.6	95.25
$ 9 4-Bromofluorobenzene (Surr)	50.0	46.2	92.45

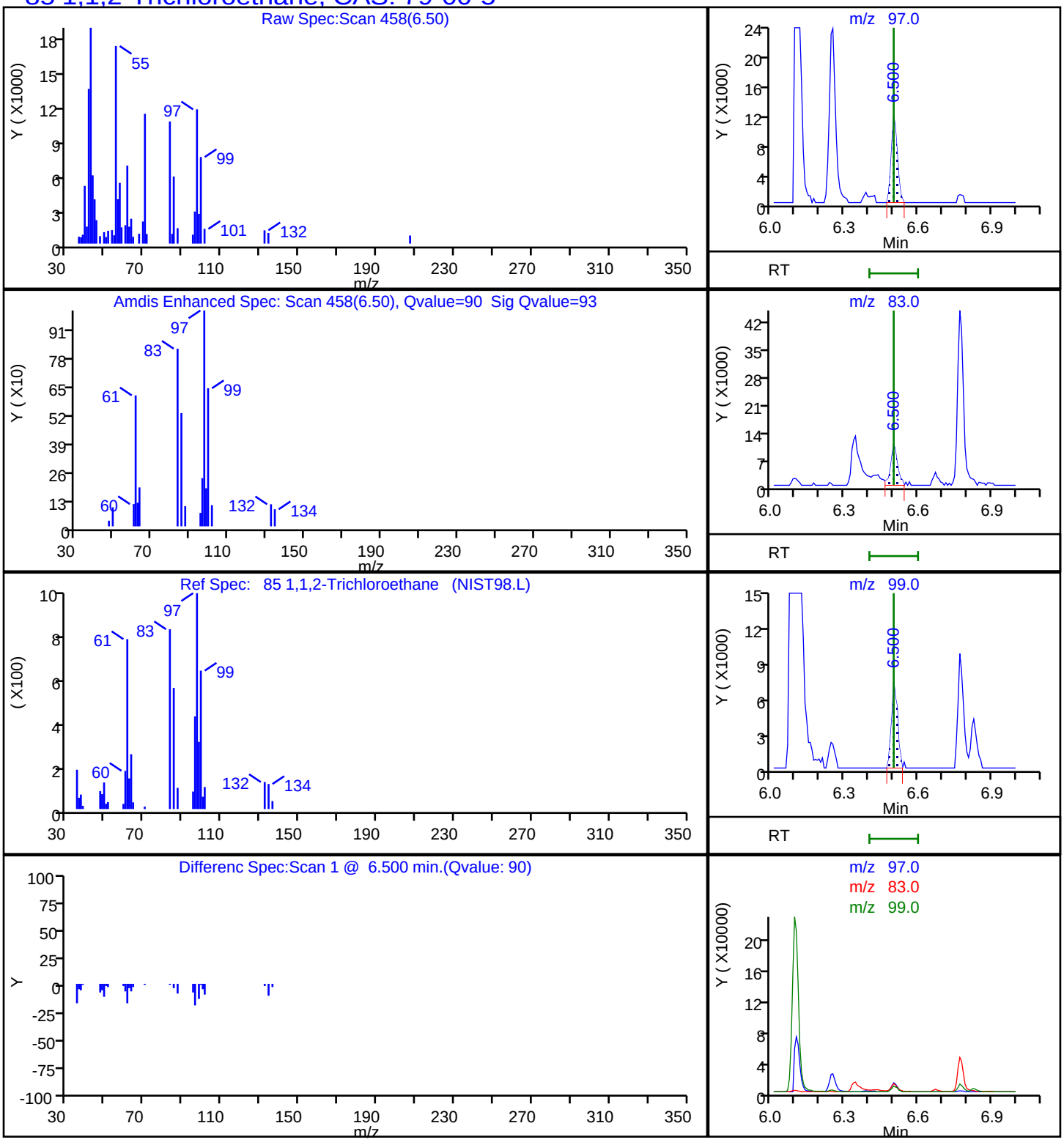
Report Date: 22-Jun-2019 13:42:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D

Injection Date:	20-Jun-2019 13:23:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-3	Lab Sample ID:	280-124928-3		
Client ID:	SHGW02-19A				
Operator ID:	MEIERG	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

85 1,1,2-Trichloroethane, CAS: 79-00-5



Report Date: 22-Jun-2019 13:42:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D

Injection Date: 20-Jun-2019 13:23:30 Instrument ID: VMS_G2

Lims ID: 280-124928-C-3 Lab Sample ID: 280-124928-3

Client ID: SHGW02-19A

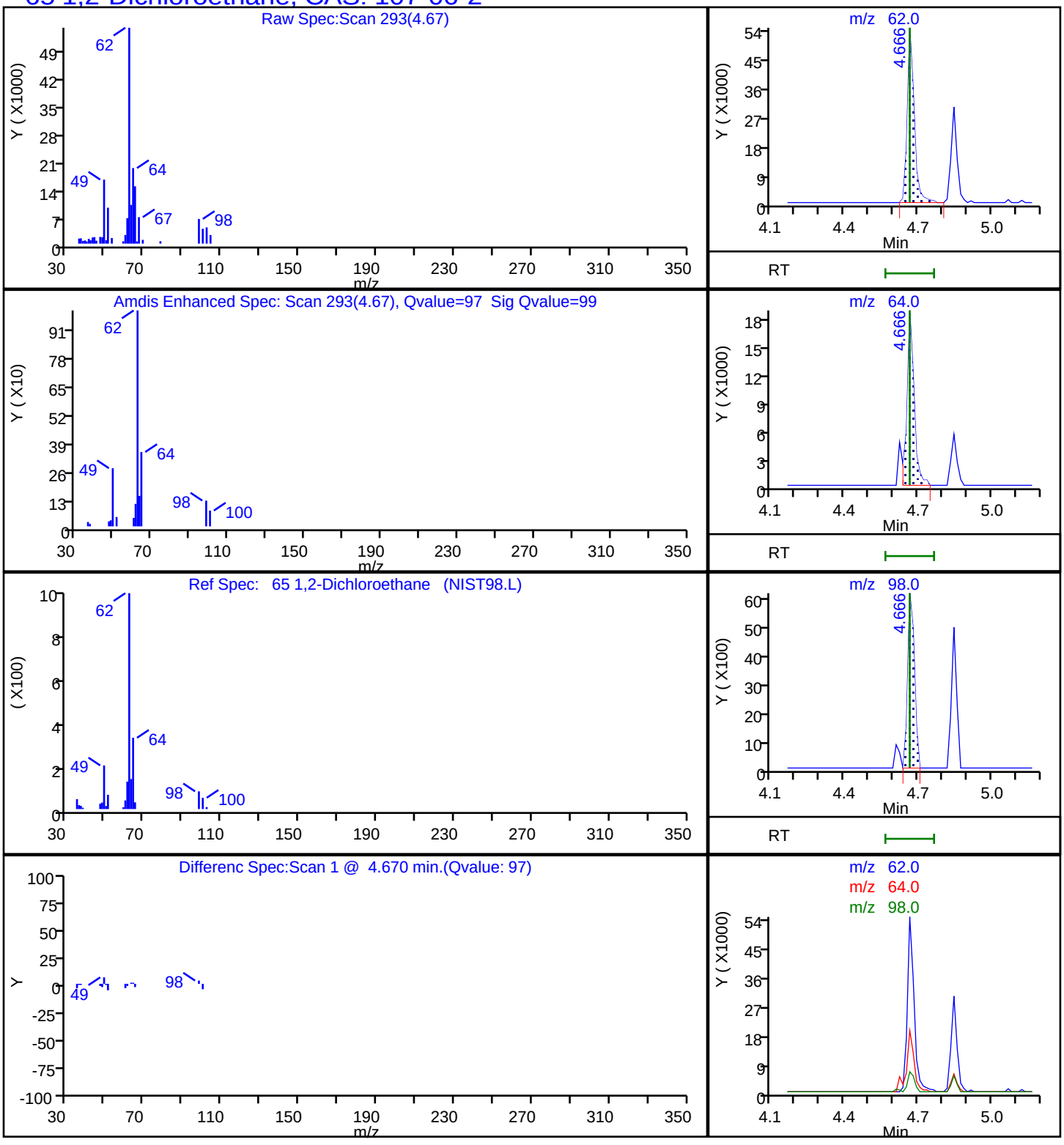
Operator ID: MEIERG ALS Bottle#: 11 Worklist Smp#: 12

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

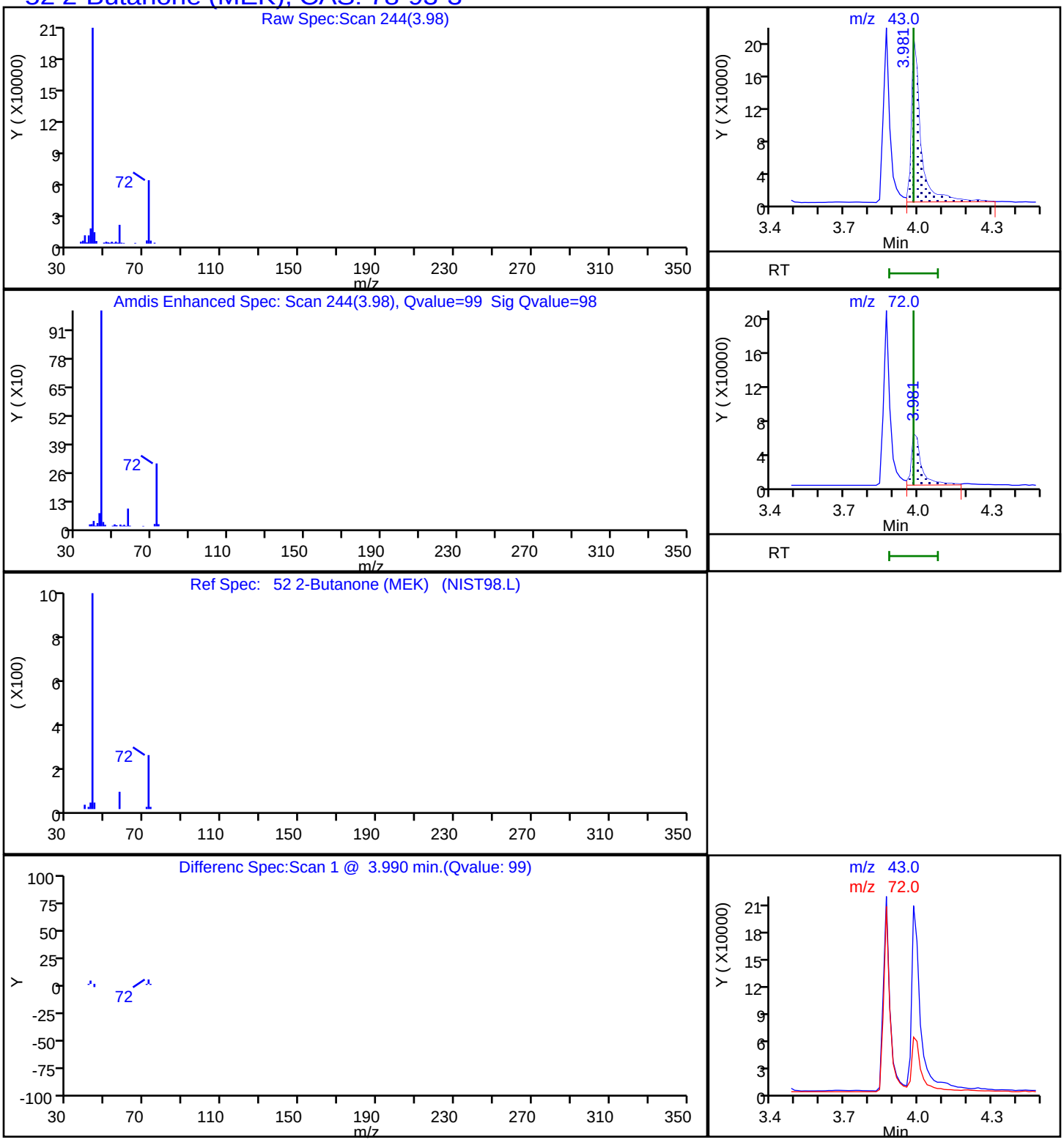
65 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D				
Injection Date:	20-Jun-2019 13:23:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-3	Lab Sample ID:	280-124928-3		
Client ID:	SHGW02-19A				
Operator ID:	MEIERG	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

52 2-Butanone (MEK), CAS: 78-93-3



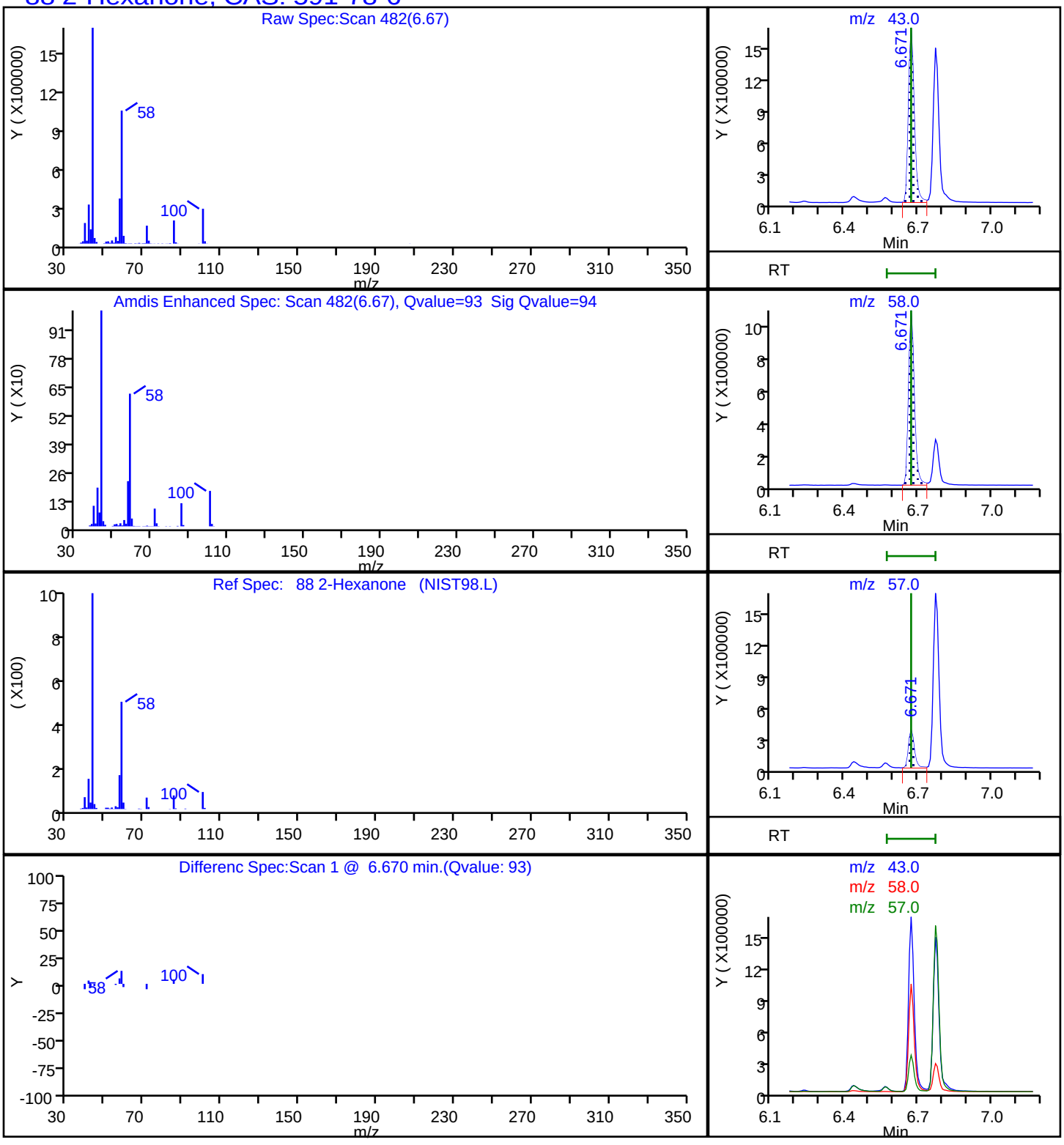
Report Date: 22-Jun-2019 13:42:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D

Injection Date:	20-Jun-2019 13:23:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-C-3	Lab Sample ID:	280-124928-3
Client ID:	SHGW02-19A		
Operator ID:	MEIERG	ALS Bottle#:	11 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

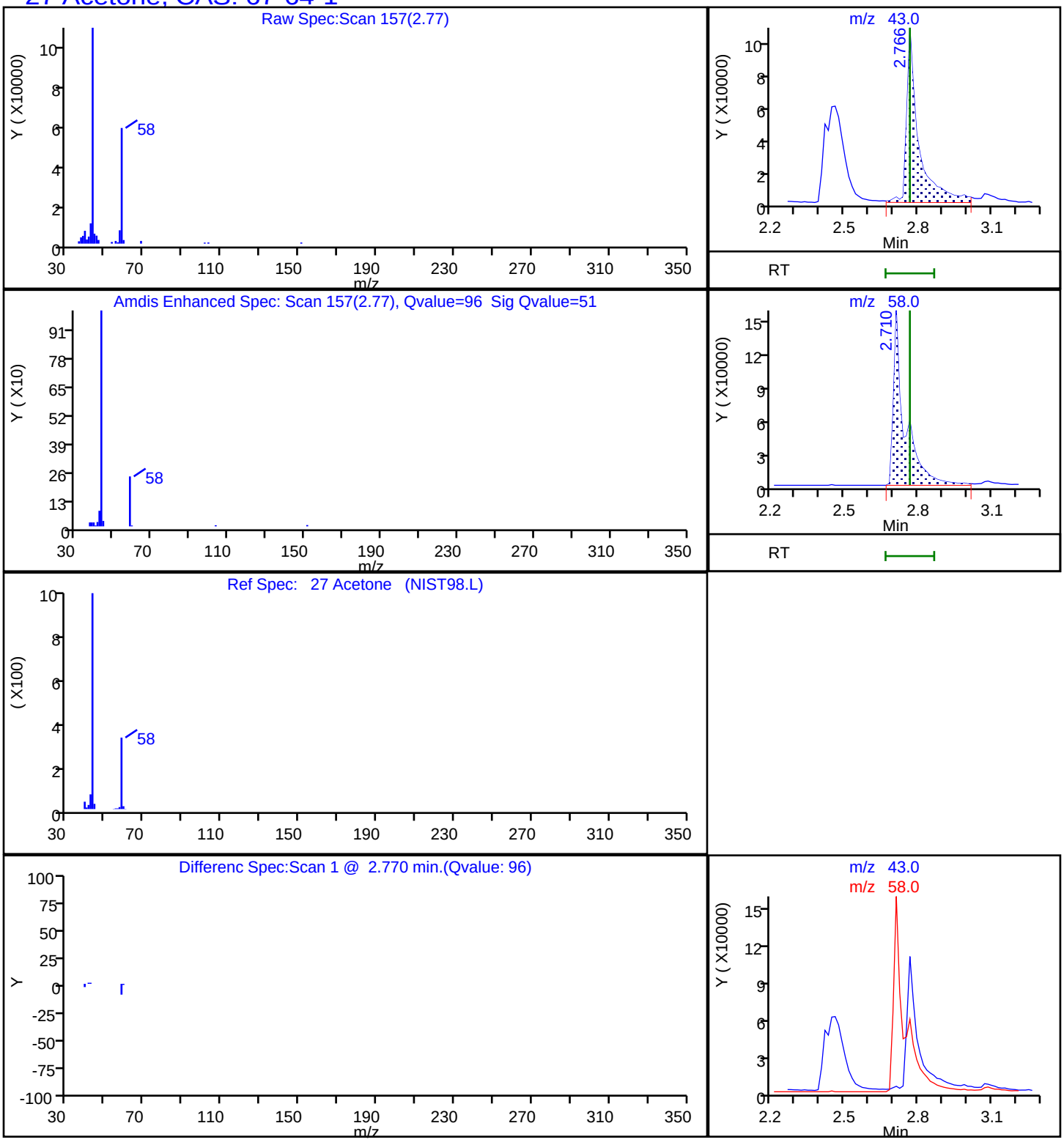
88 2-Hexanone, CAS: 591-78-6



Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D
Injection Date: 20-Jun-2019 13:23:30 Instrument ID: VMS_G2
Lims ID: 280-124928-C-3 Lab Sample ID: 280-124928-3
Client ID: SHGW02-19A
Operator ID: MEIERG ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Acetone, CAS: 67-64-1



Report Date: 22-Jun-2019 13:42:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D

Injection Date: 20-Jun-2019 13:23:30 Instrument ID: VMS_G2

Lims ID: 280-124928-C-3 Lab Sample ID: 280-124928-3

Client ID: SHGW02-19A

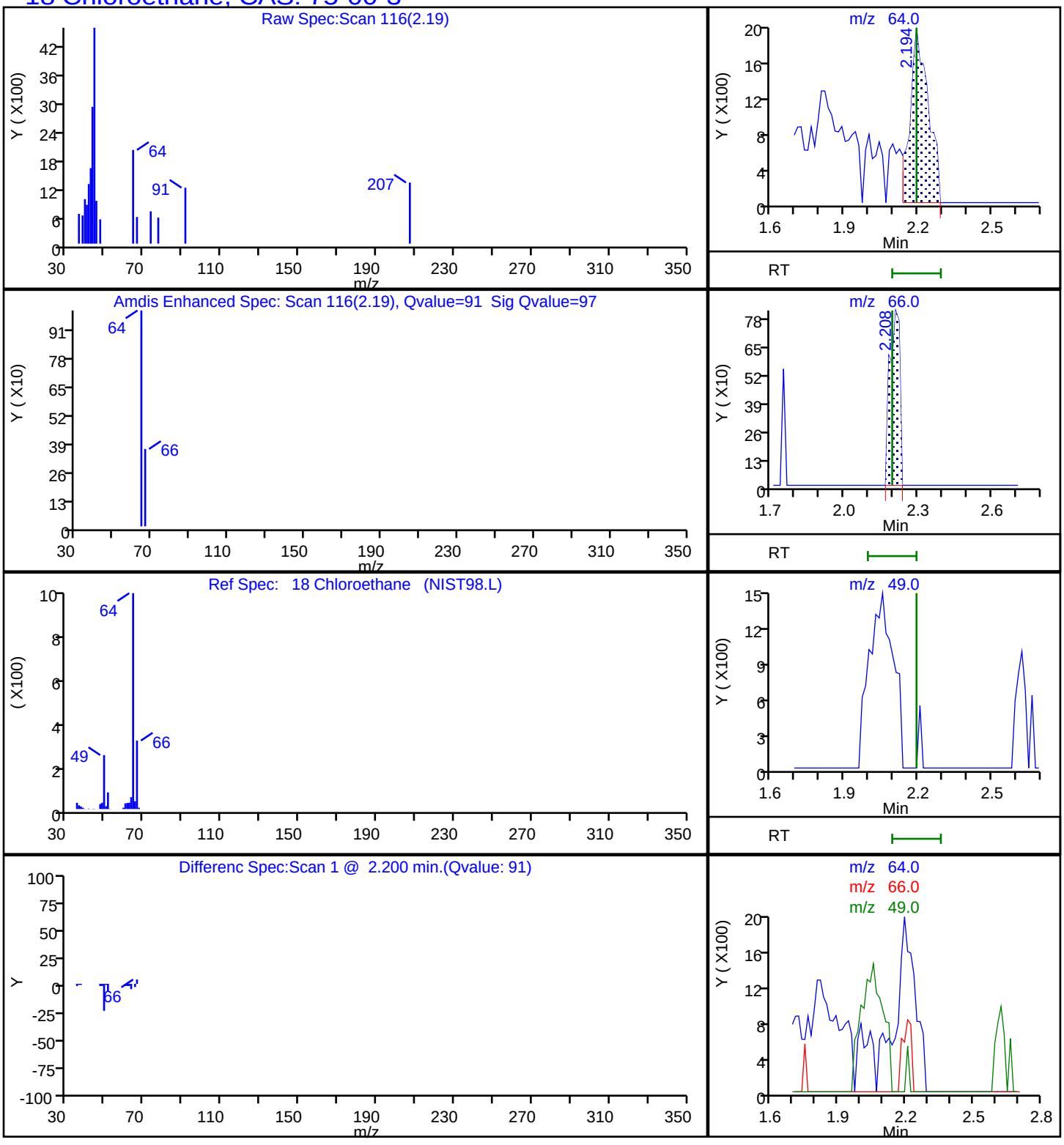
Operator ID: MEIERG ALS Bottle#: 11 Worklist Smp#: 12

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

18 Chloroethane, CAS: 75-00-3



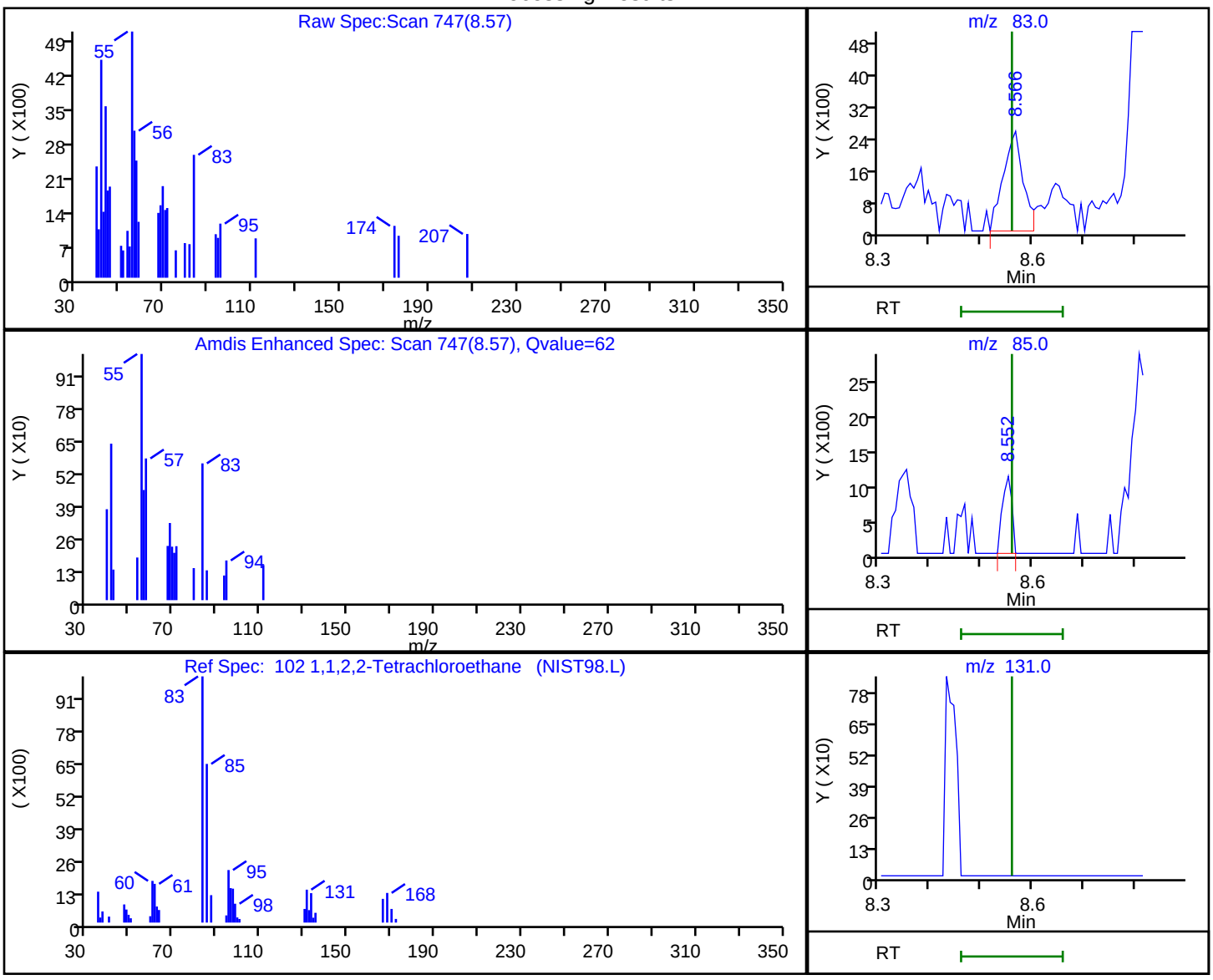
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D				
Injection Date:	20-Jun-2019 13:23:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-3	Lab Sample ID:	280-124928-3		
Client ID:	SHGW02-19A				
Operator ID:	MEIERG	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

102 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
8.57	83.00	6835	0.246913
8.55	85.00	1403	
8.56	131.00	0	

Reviewer: meierg, 22-Jun-2019 13:22:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

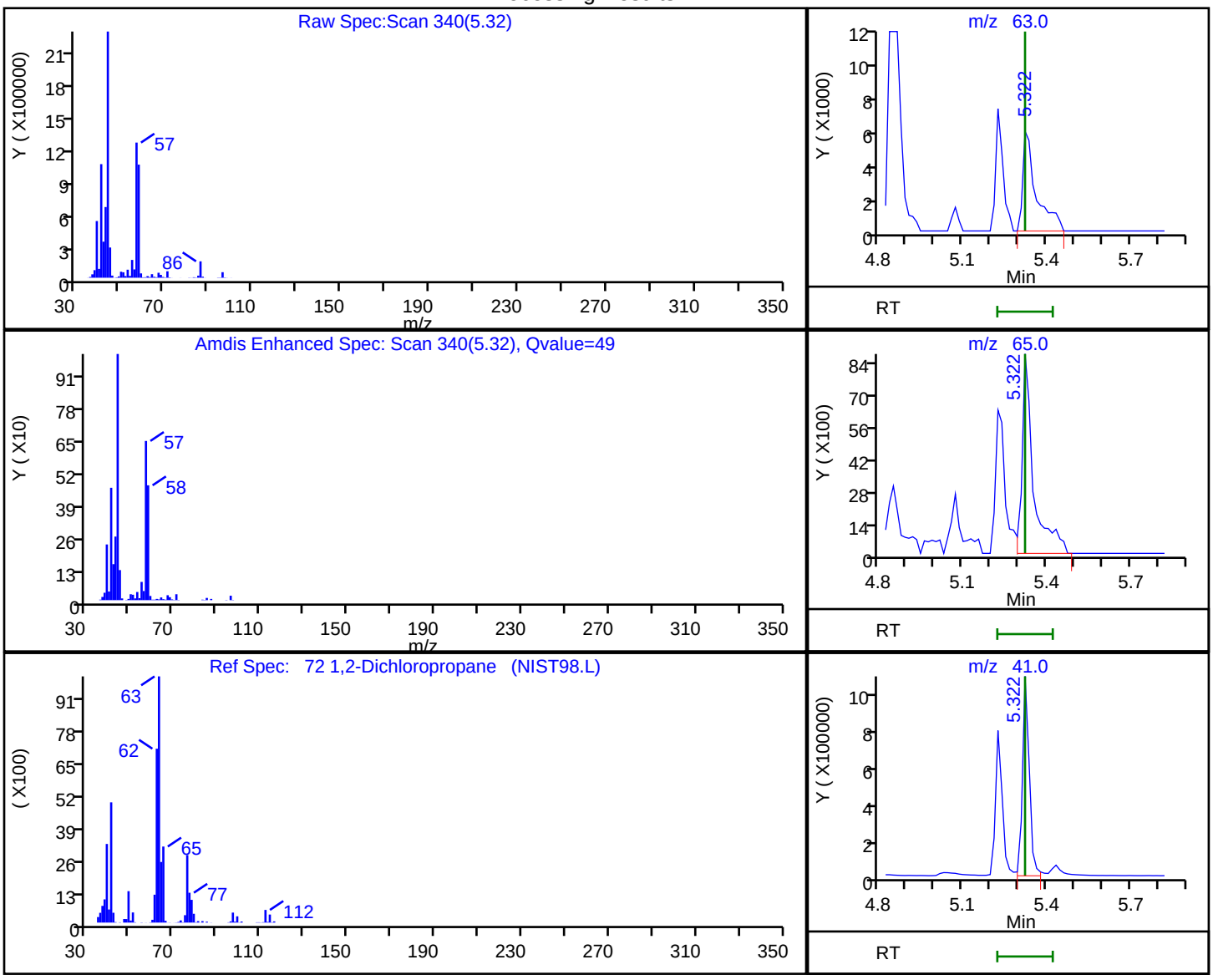
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D				
Injection Date:	20-Jun-2019 13:23:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-3	Lab Sample ID:	280-124928-3		
Client ID:	SHGW02-19A				
Operator ID:	MEIERG	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

72 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
5.32	63.00	19914	0.487288
5.32	65.00	24850	
5.32	41.00	1796923	

Reviewer: meierg, 22-Jun-2019 13:22:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

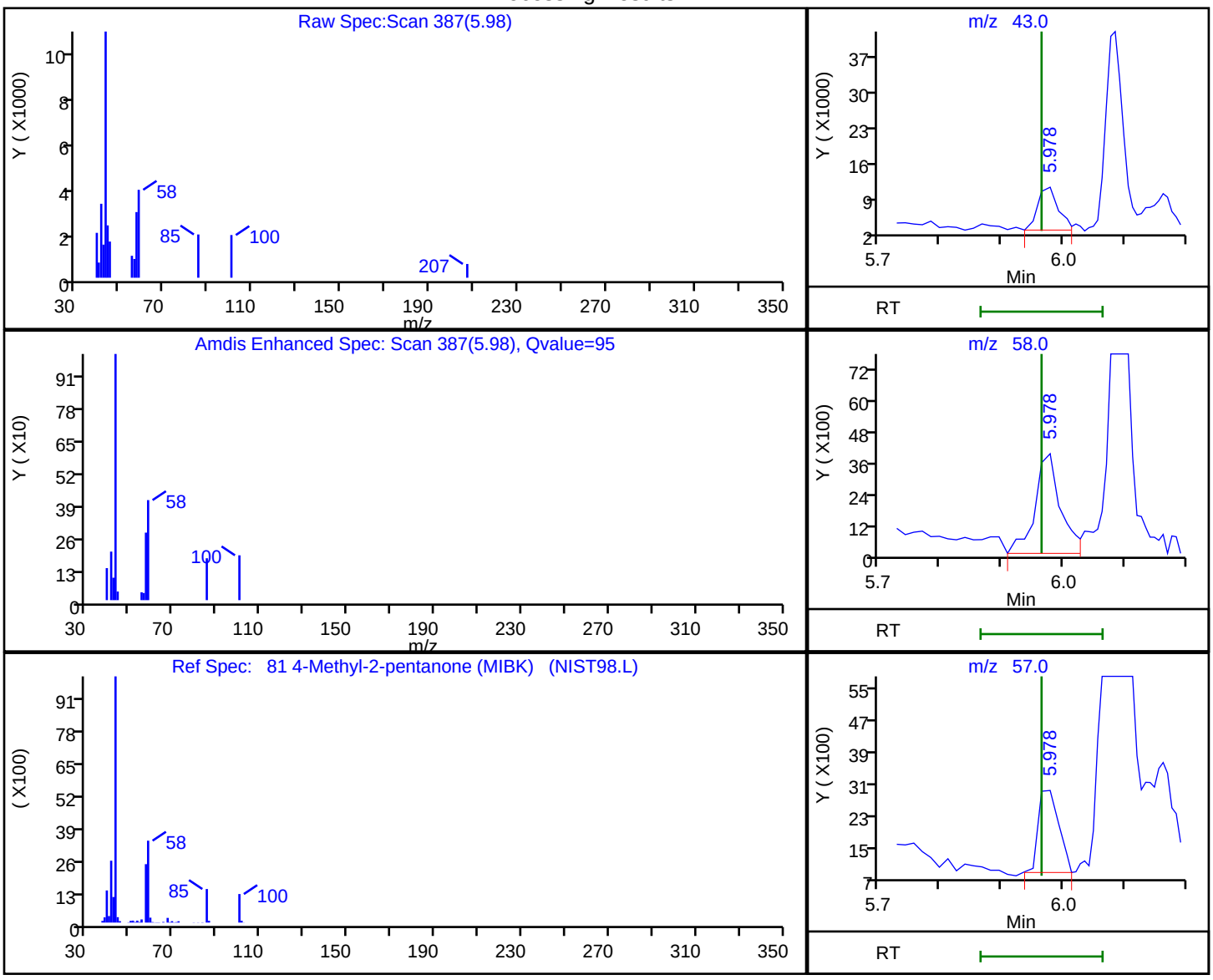
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D				
Injection Date:	20-Jun-2019 13:23:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-3	Lab Sample ID:	280-124928-3		
Client ID:	SHGW02-19A				
Operator ID:	MEIERG	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

81 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
5.98	43.00	19328	0.812205
5.98	58.00	11194	
5.98	57.00	4881	

Reviewer: meierg, 22-Jun-2019 13:22:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

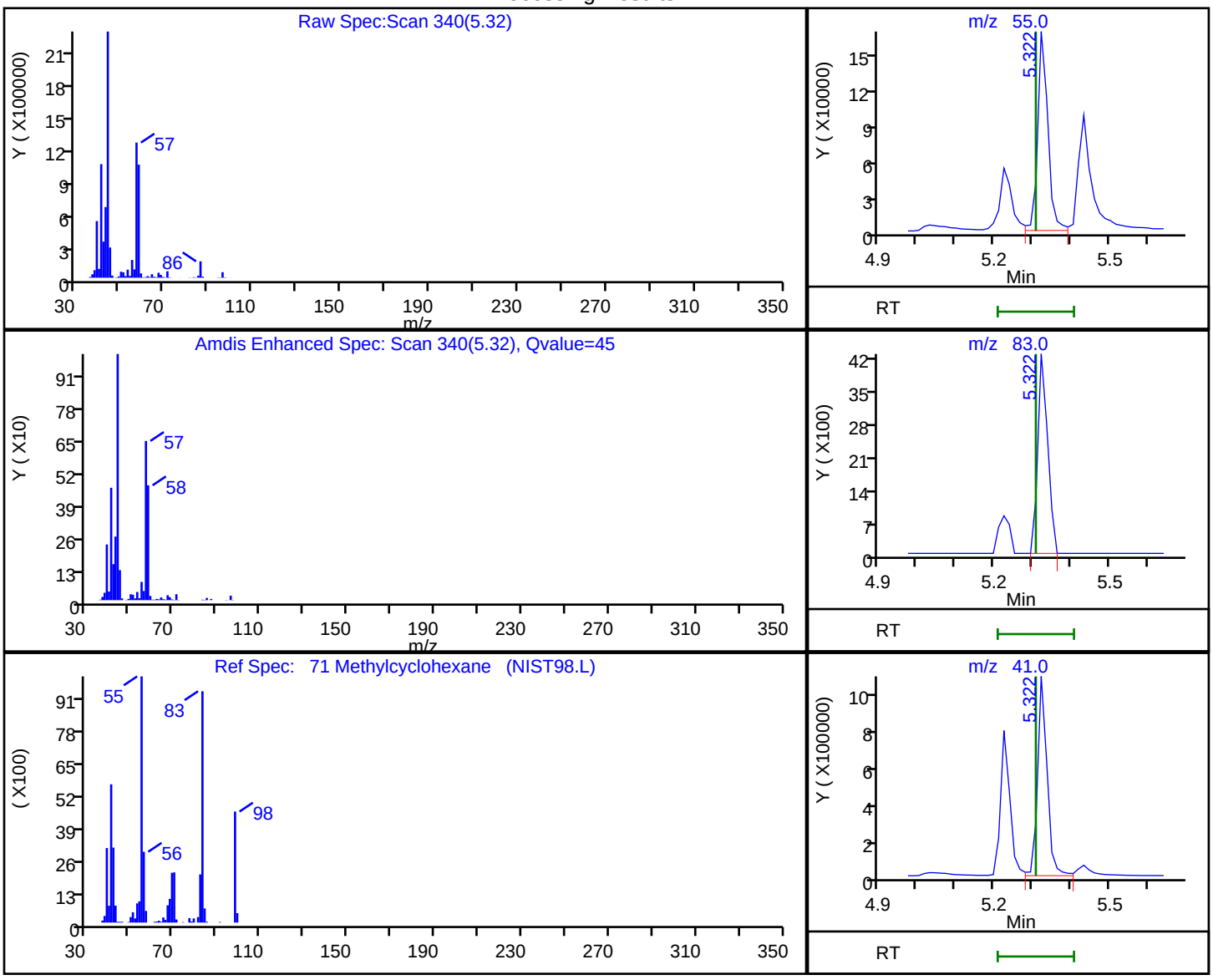
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6576.D				
Injection Date:	20-Jun-2019 13:23:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-3	Lab Sample ID:	280-124928-3		
Client ID:	SHGW02-19A				
Operator ID:	MEIERG	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

71 Methylcyclohexane, CAS: 108-87-2

Processing Results



RT	Mass	Response	Amount
5.32	55.00	304787	8.791178
5.32	83.00	7617	
5.32	41.00	1826752	

Reviewer: meierg, 22-Jun-2019 13:22:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW05-19A Lab Sample ID: 280-124928-4

Matrix: Water Lab File ID: g2_6577.D

Analysis Method: 8260B Date Collected: 06/06/2019 08:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 13:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U M	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	1.1		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	3.4		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U M	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	56		6.0	4.0	2.0
591-78-6	2-Hexanone	170		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U M	5.0	3.2	0.98
67-64-1	Acetone	57		10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U M	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW05-19A Lab Sample ID: 280-124928-4

Matrix: Water Lab File ID: g2_6577.D

Analysis Method: 8260B Date Collected: 06/06/2019 08:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 13:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U M	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		81-118
460-00-4	4-Bromofluorobenzene (Surr)	93		85-114
1868-53-7	Dibromofluoromethane (Surr)	104		80-119
2037-26-5	Toluene-d8 (Surr)	96		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D
Lims ID: 280-124928-D-4
Client ID: SHGW05-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 13:45:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-d-4
Misc. Info.: 280-0083038-013
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:35:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	3692815	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4449609	50.0	
* 3 Chlorobenzene-d5	119	7.351	7.350	0.001	84	1027148	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1714275	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	981166	52.0	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	96	1124558	46.6	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	94	4088077	47.8	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	92	1472171	46.5	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64		2.193				ND	U
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43	2.766	2.766	0.000	96	407466	57.4	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780				ND	
30 Carbon disulfide	76	2.976	2.976	0.000	97	12007	0.1527	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84		3.129				ND	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	588749	55.6	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83		4.233				ND	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62	4.666	4.665	0.001	98	105625	3.43	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	U
72 1,2-Dichloropropane	63		5.322				ND	U
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	U
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	89	20556	1.11	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43	6.671	6.671	0.000	94	2904920	166.4	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	U
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

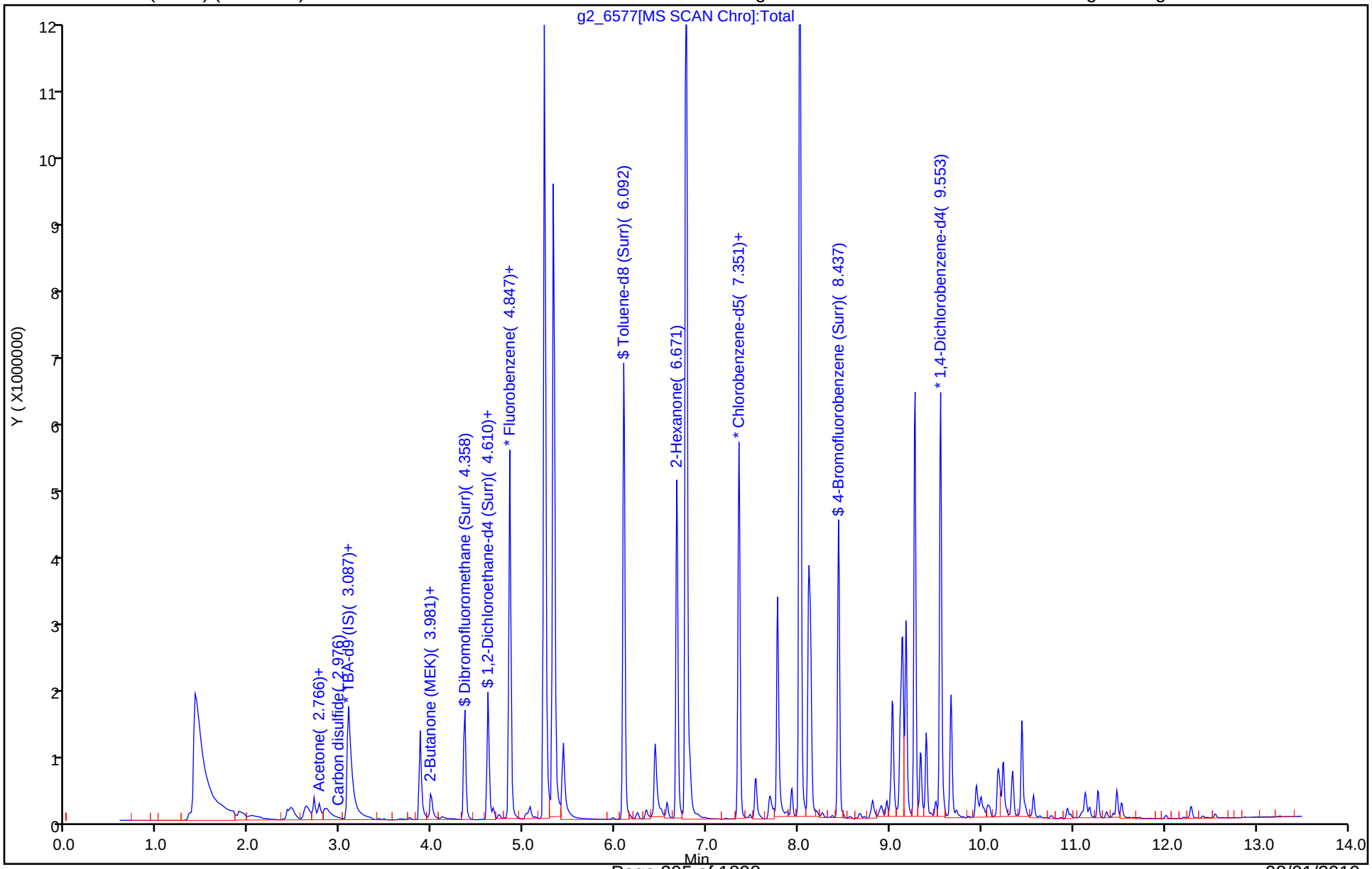
Report Date: 22-Jun-2019 13:42:31 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D

Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4	Worklist Smp#:	13
Client ID:	SHGW05-19A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D
Lims ID: 280-124928-D-4
Client ID: SHGW05-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 13:45:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-d-4
Misc. Info.: 280-0083038-013
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:35:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	52.0	103.92
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	46.6	93.12
$ 8 Toluene-d8 (Surr)	50.0	47.8	95.65
$ 9 4-Bromofluorobenzene (Surr)	50.0	46.5	92.99

Report Date: 22-Jun-2019 13:42:31 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D

Injection Date: 20-Jun-2019 13:45:30 Instrument ID: VMS_G2

Lims ID: 280-124928-D-4 Lab Sample ID: 280-124928-4

Client ID: SHGW05-19A

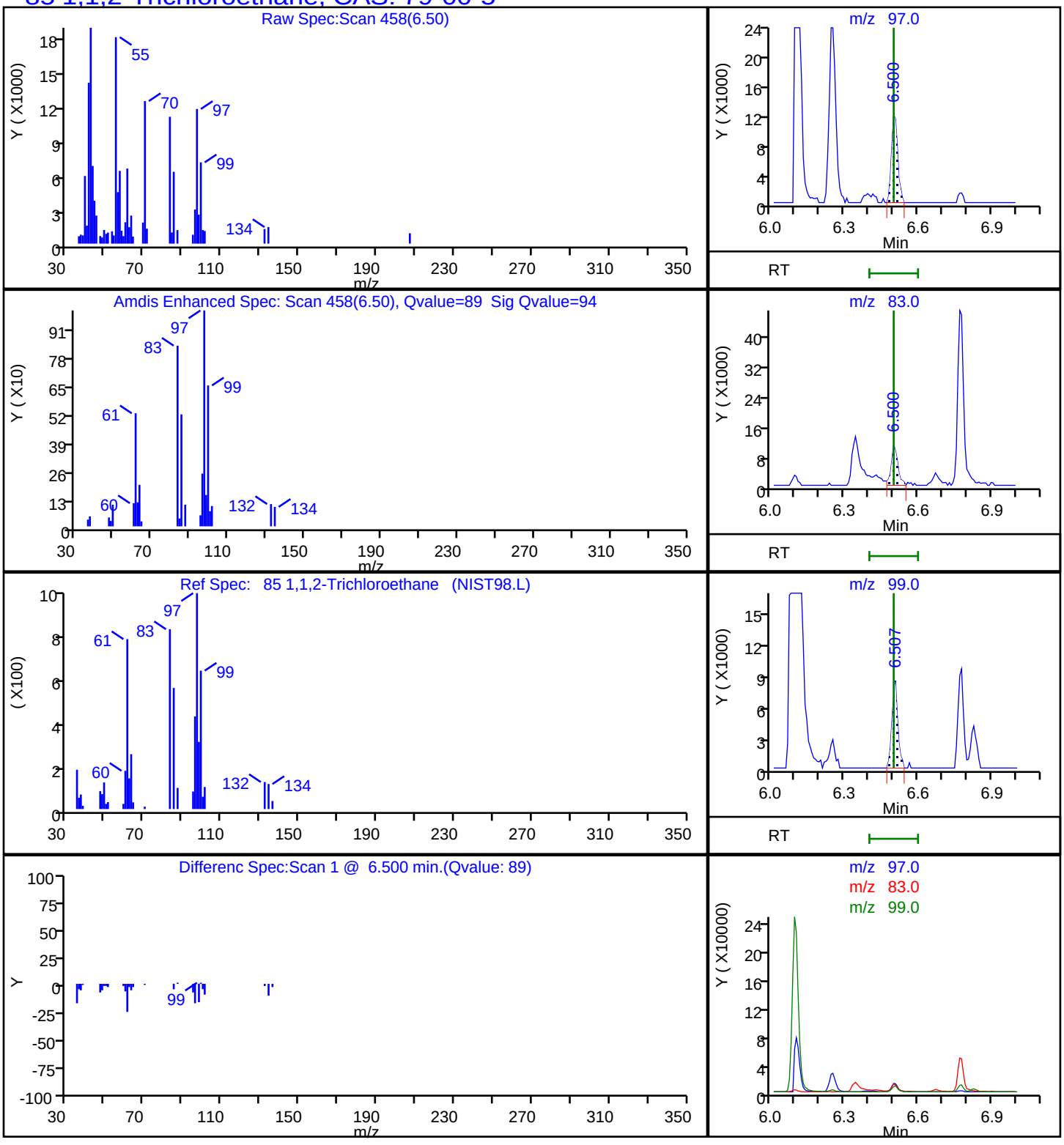
Operator ID: MEIERG ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

85 1,1,2-Trichloroethane, CAS: 79-00-5



Report Date: 22-Jun-2019 13:42:31 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D

Injection Date: 20-Jun-2019 13:45:30 Instrument ID: VMS_G2

Lims ID: 280-124928-D-4 Lab Sample ID: 280-124928-4

Client ID: SHGW05-19A

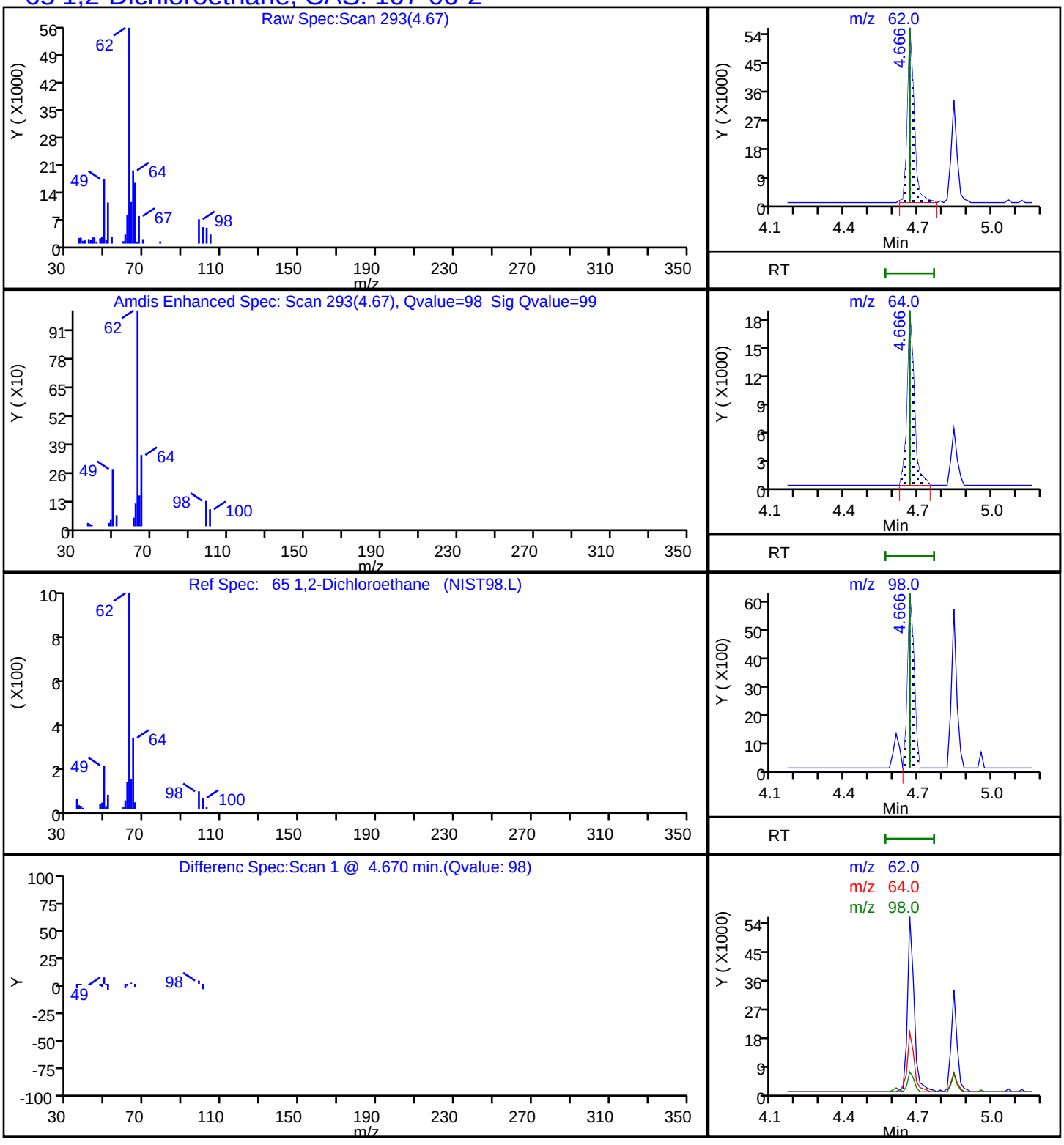
Operator ID: MEIERG ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

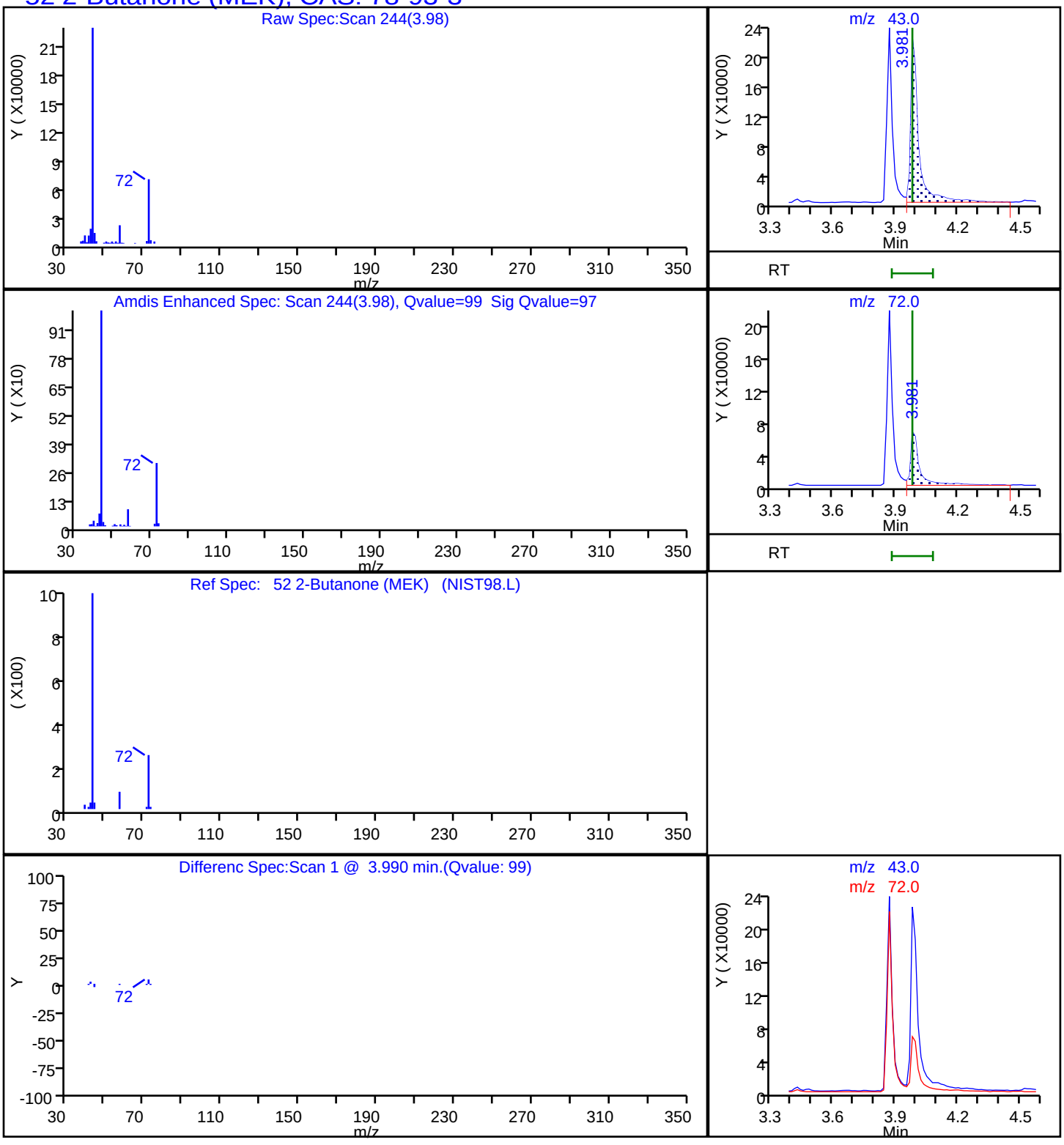
65 1,2-Dichloroethane, CAS: 107-06-2



Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D		
Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4
Client ID:	SHGW05-19A		
Operator ID:	MEIERG	ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

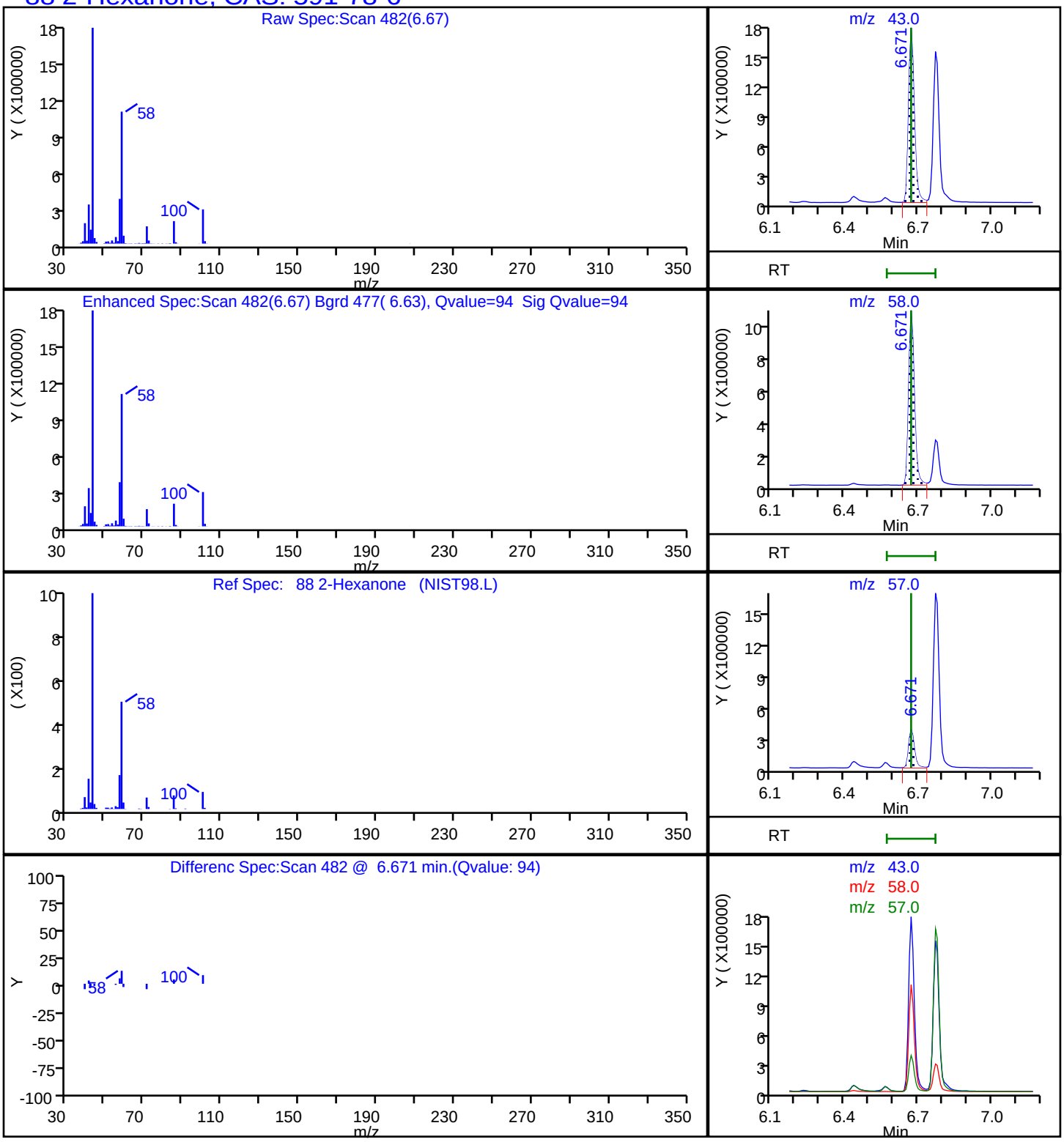
52 2-Butanone (MEK), CAS: 78-93-3



Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D		
Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4
Client ID:	SHGW05-19A		
Operator ID:	MEIERG	ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

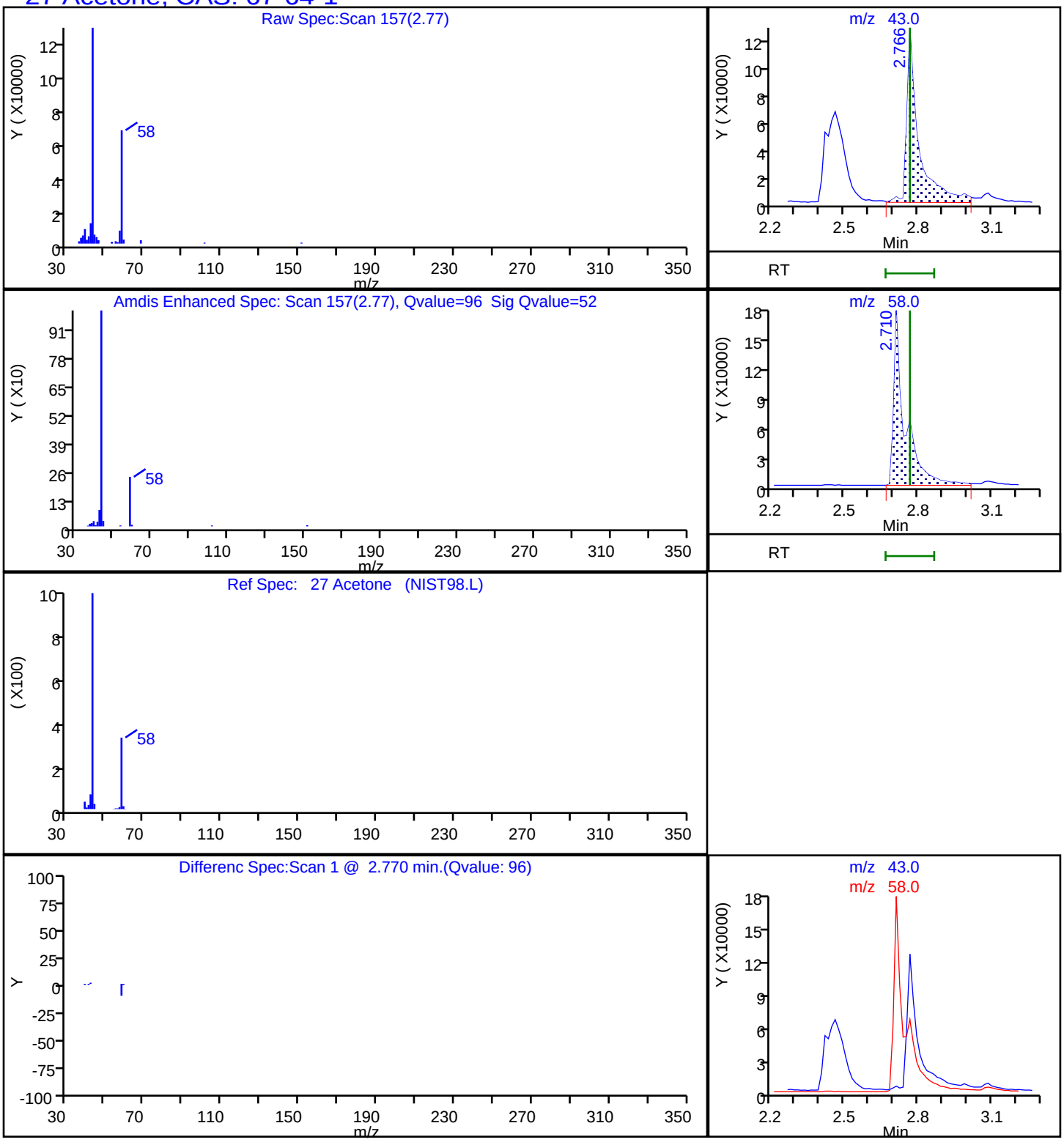
88 2-Hexanone, CAS: 591-78-6



Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D		
Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4
Client ID:	SHGW05-19A		
Operator ID:	MEIERG	ALS Bottle#:	12 Worklist Smp#: 13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

27 Acetone, CAS: 67-64-1



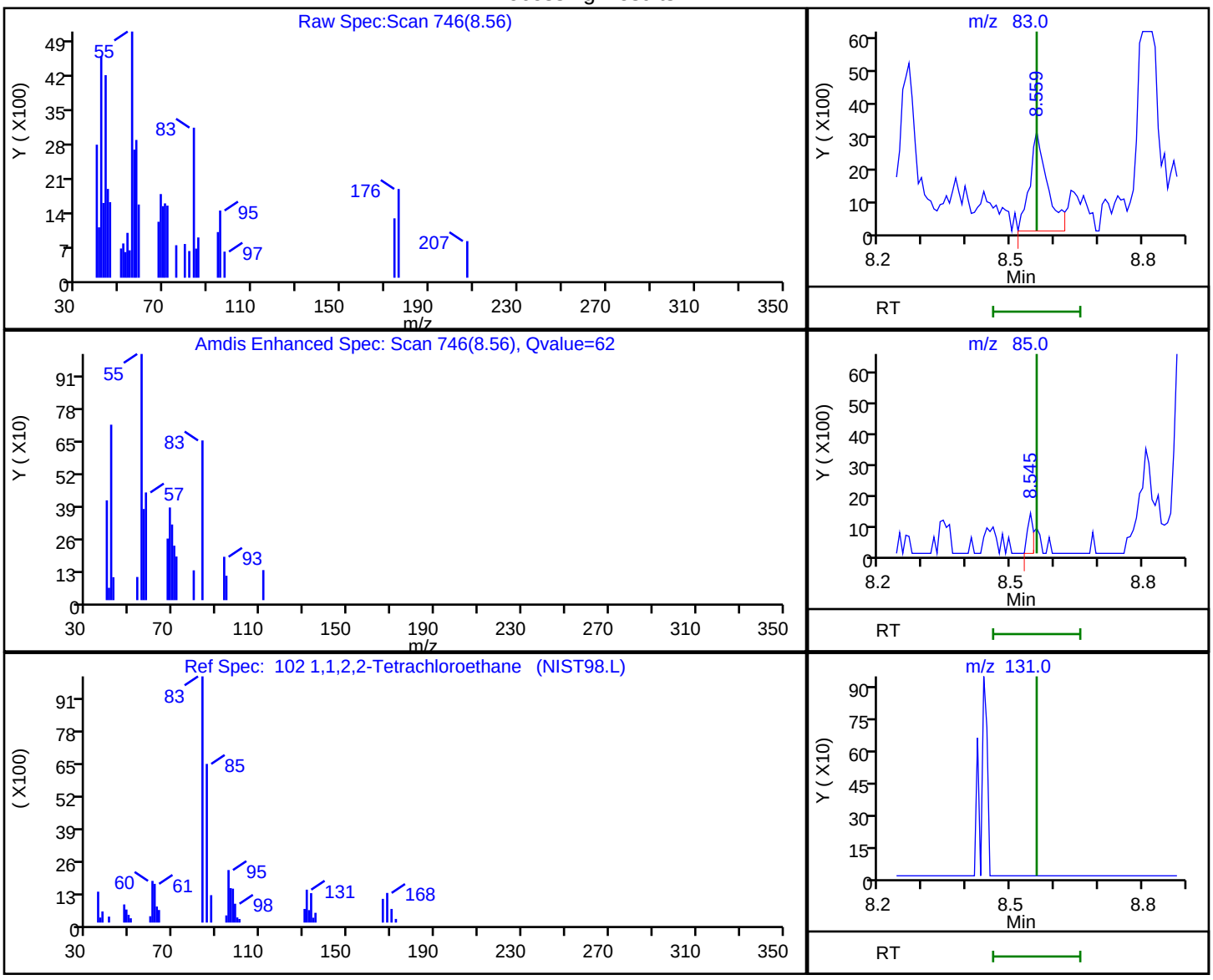
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D				
Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4		
Client ID:	SHGW05-19A				
Operator ID:	MEIERG	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

102 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Processing Results



RT	Mass	Response	Amount
8.56	83.00	8583	0.300710
8.54	85.00	1190	
8.56	131.00	0	

Reviewer: meierg, 22-Jun-2019 13:35:53

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

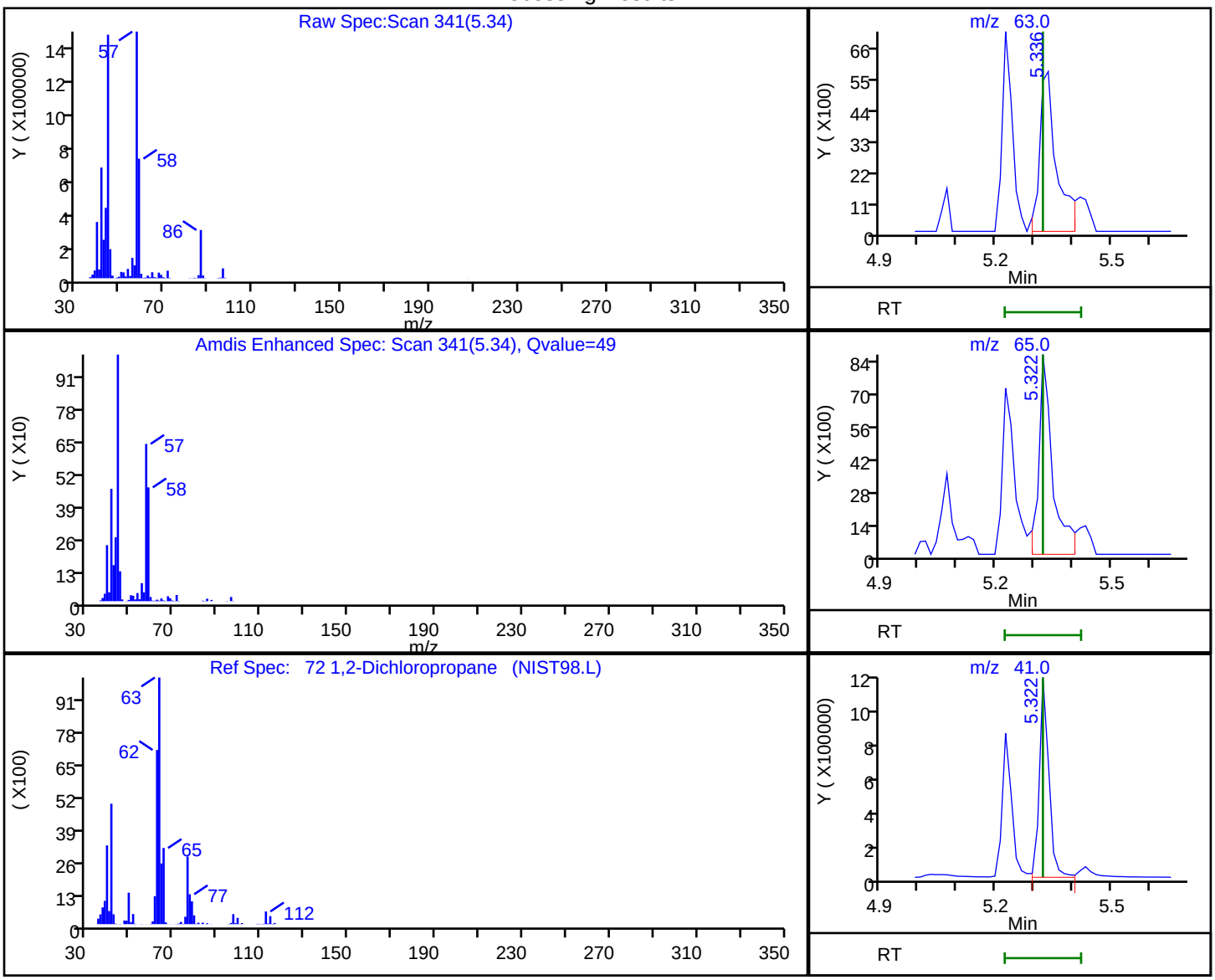
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D				
Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4		
Client ID:	SHGW05-19A				
Operator ID:	MEIERG	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

72 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
5.34	63.00	17667	0.347519
5.32	65.00	21794	
5.32	41.00	1932387	

Reviewer: meierg, 22-Jun-2019 13:35:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

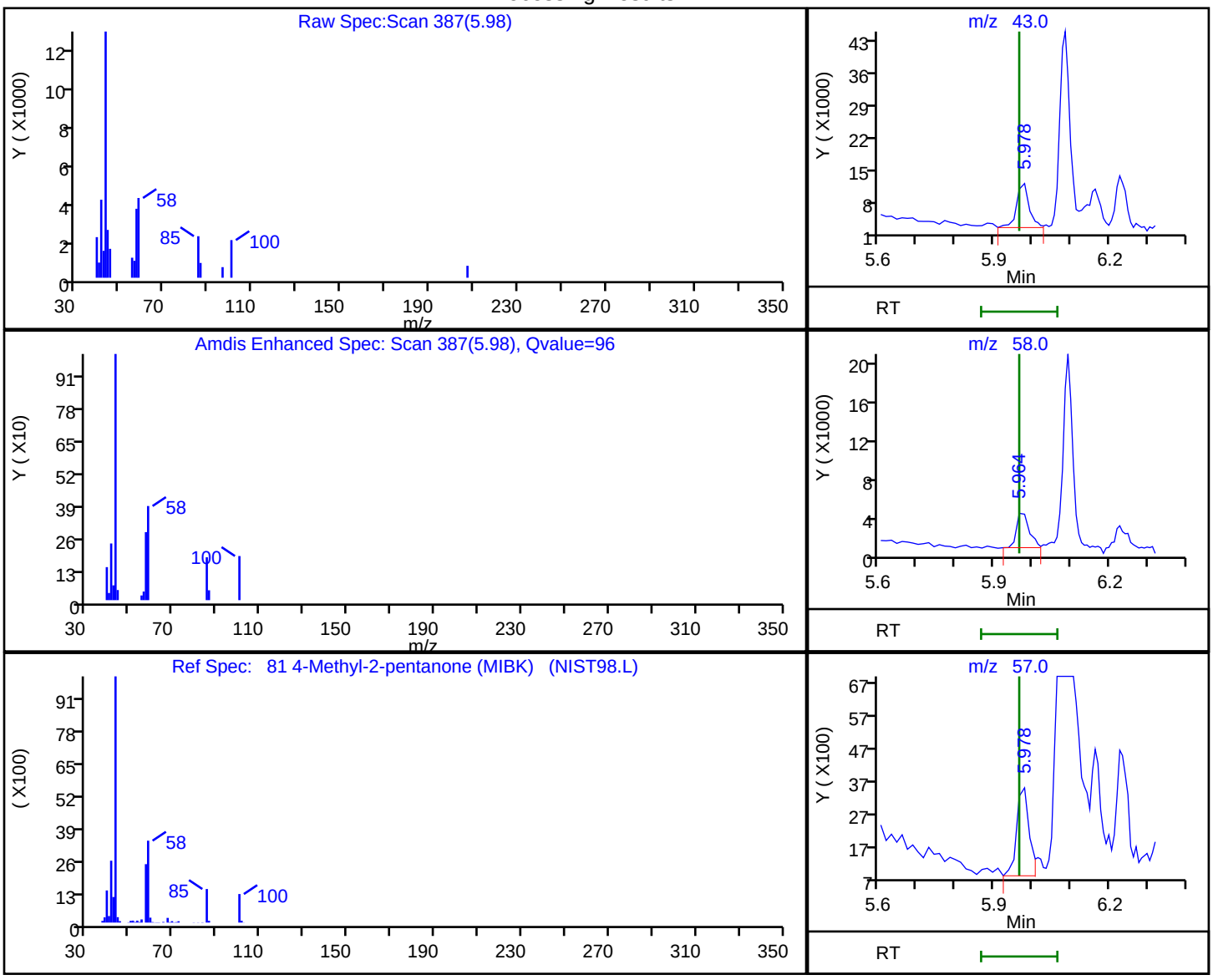
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D				
Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4		
Client ID:	SHGW05-19A				
Operator ID:	MEIERG	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

81 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
5.98	43.00	21780	0.868591
5.96	58.00	8125	
5.98	57.00	6264	

Reviewer: meierg, 22-Jun-2019 13:35:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

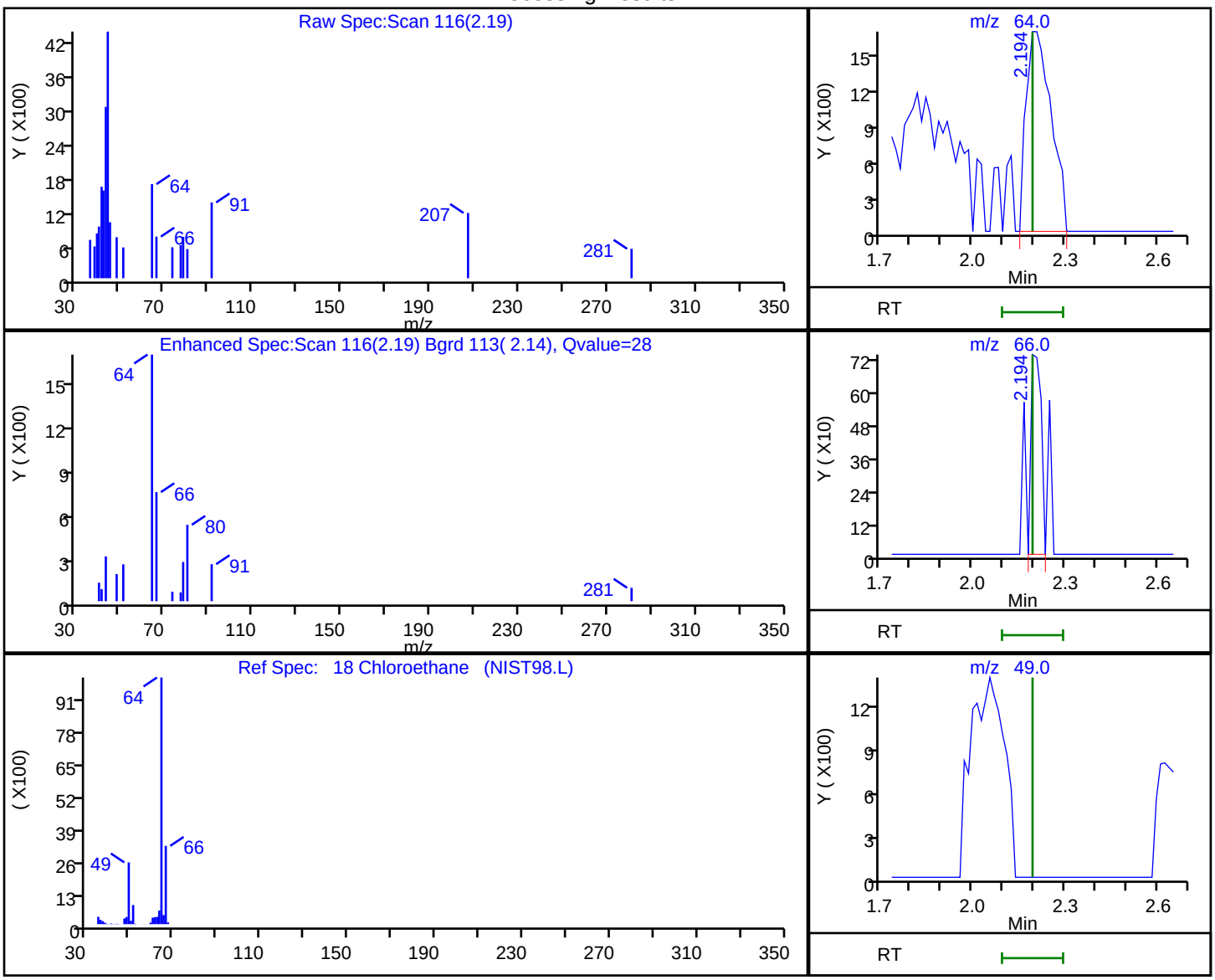
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D				
Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4		
Client ID:	SHGW05-19A				
Operator ID:	MEIERG	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

18 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
2.19	64.00	9467	0.376577
2.19	66.00	1700	
2.19	49.00	0	

Reviewer: meierg, 22-Jun-2019 13:35:35

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

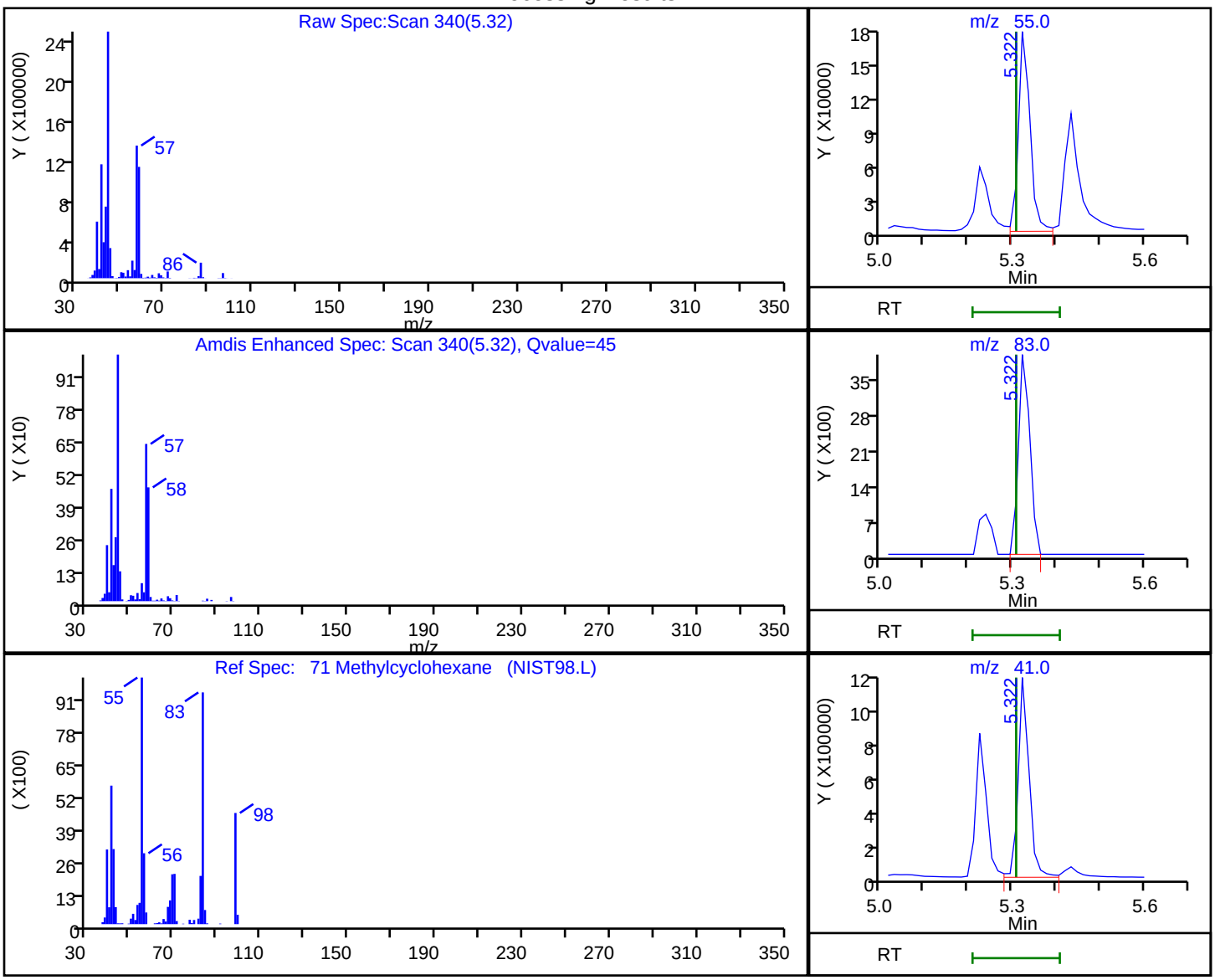
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6577.D				
Injection Date:	20-Jun-2019 13:45:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-D-4	Lab Sample ID:	280-124928-4		
Client ID:	SHGW05-19A				
Operator ID:	MEIERG	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

71 Methylcyclohexane, CAS: 108-87-2

Processing Results



RT	Mass	Response	Amount
5.32	55.00	317869	8.701176
5.32	83.00	7151	
5.32	41.00	1943906	

Reviewer: meierg, 22-Jun-2019 13:35:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SAMW1-19A Lab Sample ID: 280-124928-5

Matrix: Water Lab File ID: g2_6578.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:55

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 14:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	3.1	J	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SAMW1-19A Lab Sample ID: 280-124928-5

Matrix: Water Lab File ID: g2_6578.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:55

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 14:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	95		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	96		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6578.D
Lims ID: 280-124928-D-5
Client ID: SAMW1-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 14:06:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-d-5
Misc. Info.: 280-0083038-014
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 20-Jun-2019 15:07:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	3490308	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4406487	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	84	1007198	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1644351	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	942986	50.4	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.609	4.610	-0.001	96	1090836	45.6	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4023046	48.0	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	91	1445532	47.6	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64		2.193				ND	
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43	2.766	2.766	0.000	98	32839	3.15	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780				ND	
30 Carbon disulfide	76		2.976				ND	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84		3.129				ND	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43		3.981				ND	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83		4.233				ND	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62		4.665				ND	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	
72 1,2-Dichloropropane	63		5.322				ND	
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97		6.500				ND	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43		6.671				ND	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

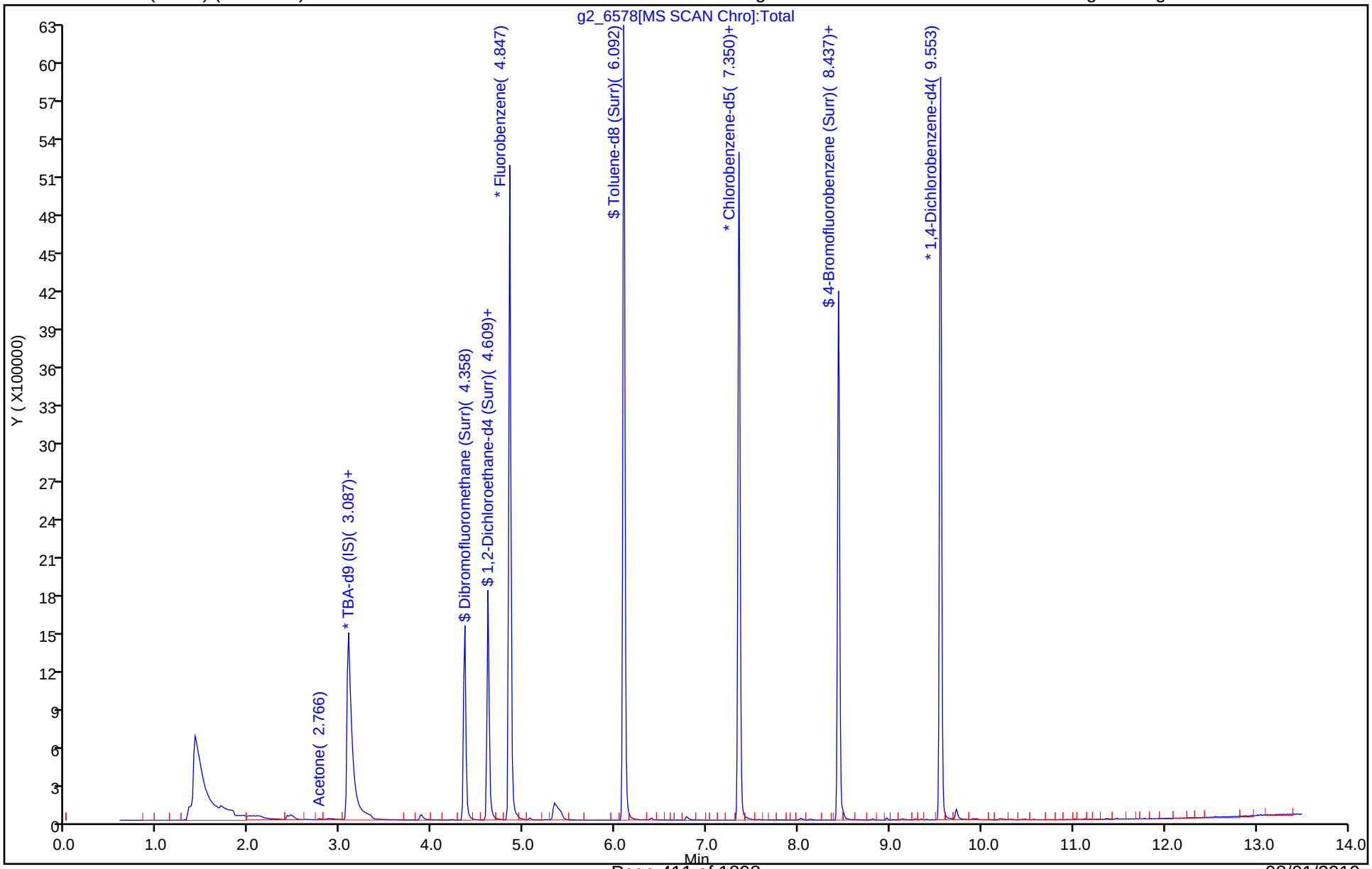
Report Date: 22-Jun-2019 13:42:32 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6578.D

Injection Date:	20-Jun-2019 14:06:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-D-5	Lab Sample ID:	280-124928-5	Worklist Smp#:	14
Client ID:	SAMW1-19A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6578.D
Lims ID: 280-124928-D-5
Client ID: SAMW1-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 14:06:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-d-5
Misc. Info.: 280-0083038-014
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

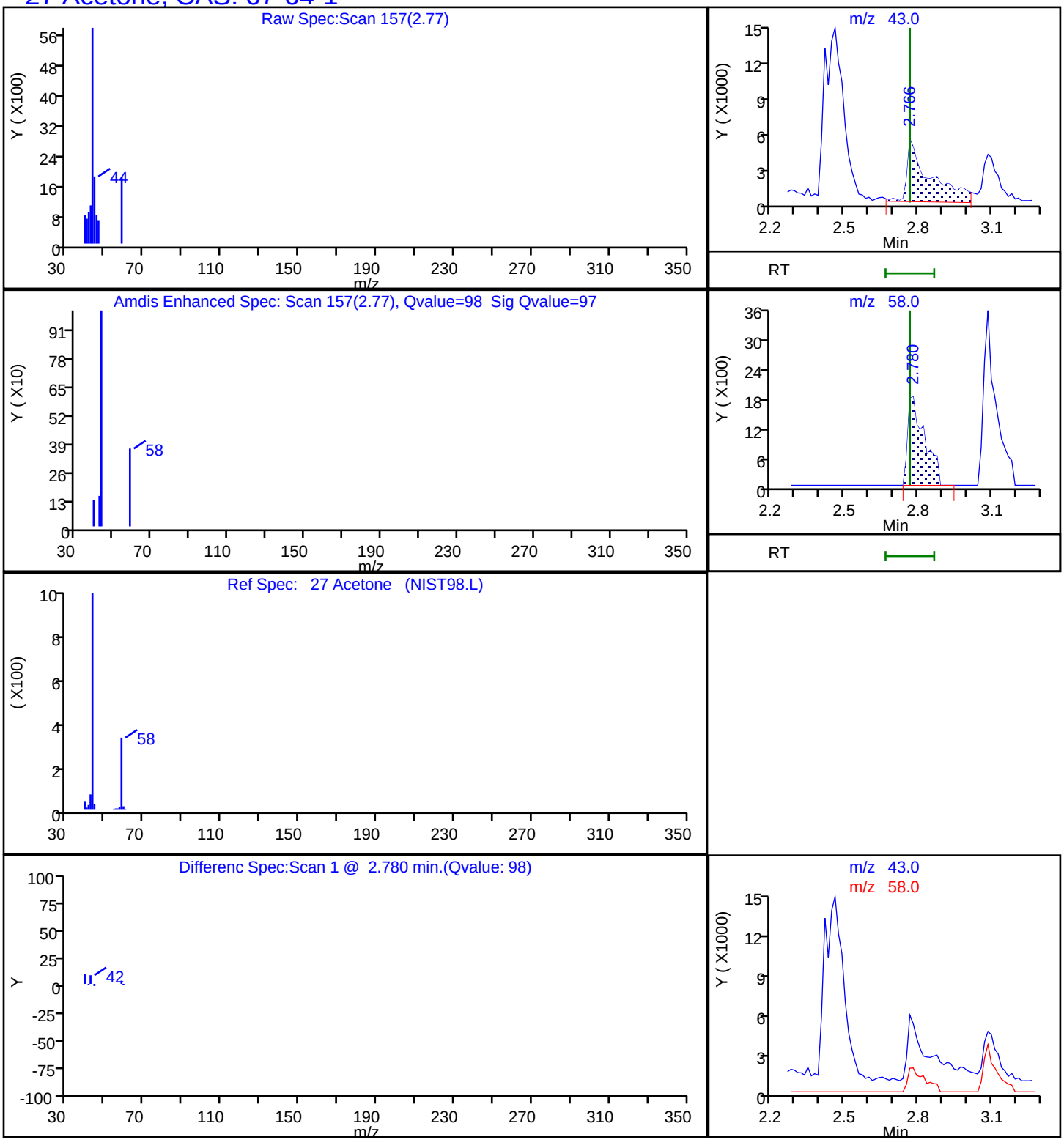
First Level Reviewer: meierg Date: 20-Jun-2019 15:07:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	50.4	100.86
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	45.6	91.21
$ 8 Toluene-d8 (Surr)	50.0	48.0	95.99
$ 9 4-Bromofluorobenzene (Surr)	50.0	47.6	95.19

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6578.D		
Injection Date:	20-Jun-2019 14:06:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-D-5	Lab Sample ID:	280-124928-5
Client ID:	SAMW1-19A		
Operator ID:	MEIERG	ALS Bottle#:	13 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

27 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0053-19A Lab Sample ID: 280-124928-6

Matrix: Water Lab File ID: g2_6579.D

Analysis Method: 8260B Date Collected: 06/06/2019 12:10

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 14:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.53	J M	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.3	J	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	5.1	J	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0053-19A Lab Sample ID: 280-124928-6

Matrix: Water Lab File ID: g2_6579.D

Analysis Method: 8260B Date Collected: 06/06/2019 12:10

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 14:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	93		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	97		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6579.D
Lims ID: 280-124928-C-6
Client ID: G0053-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 14:27:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-c-6
Misc. Info.: 280-0083038-015
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:36:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2998967	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4183765	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	84	952186	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1572023	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	896478	50.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.609	4.610	-0.001	97	1029936	45.4	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	3848122	48.6	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	91	1353762	46.6	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64		2.193				ND	
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43	2.766	2.766	0.000	99	43732	5.08	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151	2.808	2.780	0.028	53	8409	0.5275	M
30 Carbon disulfide	76		2.976				ND	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84		3.129				ND	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43	3.995	3.981	0.014	97	42863	4.31	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83		4.233				ND	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62		4.665				ND	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	
72 1,2-Dichloropropane	63		5.322				ND	
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97		6.500				ND	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43	6.678	6.671	0.007	93	8662	0.5351	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

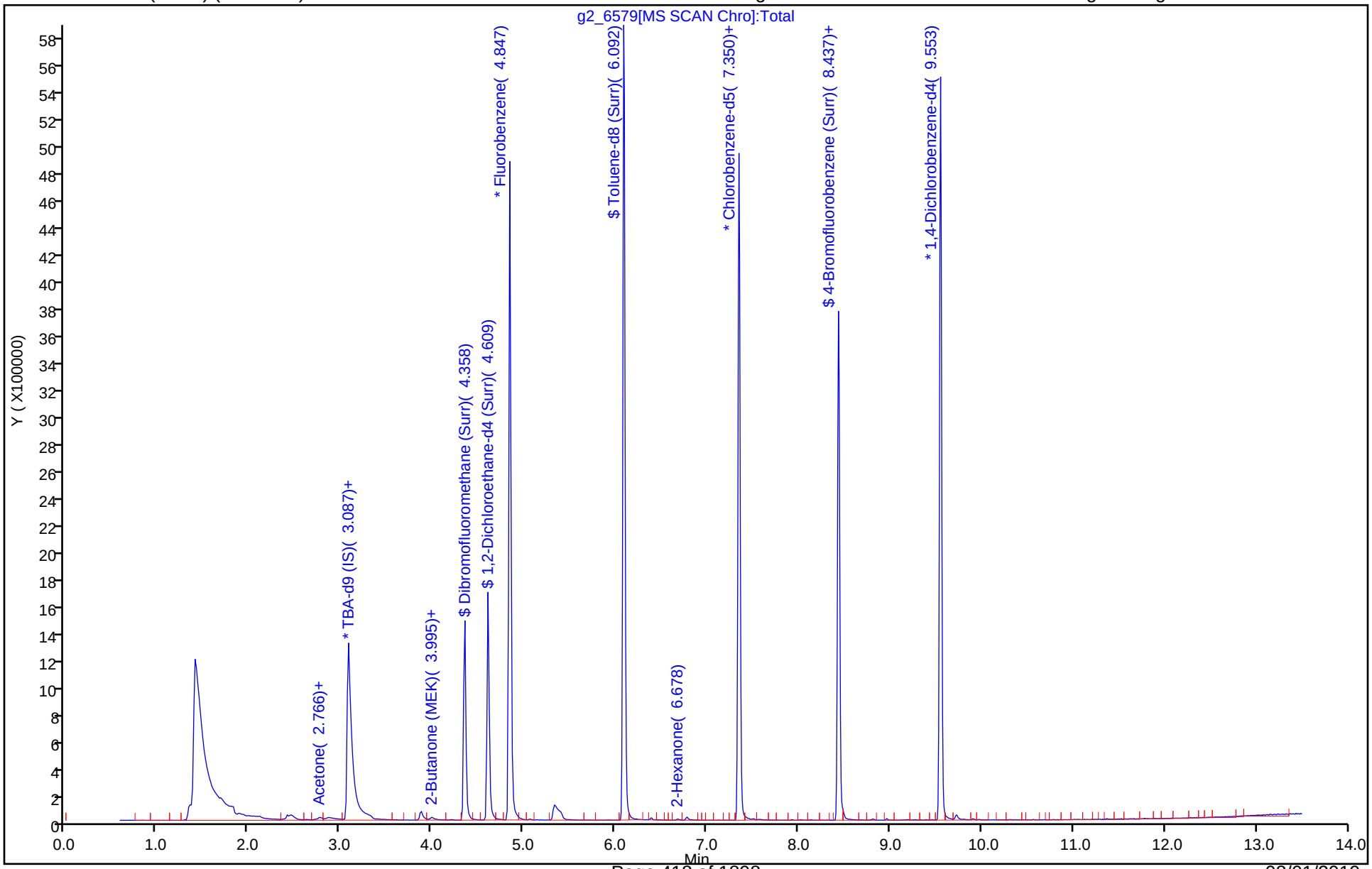
Report Date: 22-Jun-2019 13:42:33 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6579.D

Injection Date:	20-Jun-2019 14:27:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-C-6	Lab Sample ID:	280-124928-6	Worklist Smp#:	15
Client ID:	G0053-19A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6579.D
Lims ID: 280-124928-C-6
Client ID: G0053-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 14:27:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-c-6
Misc. Info.: 280-0083038-015
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:36:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	50.5	100.99
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	45.4	90.70
$ 8 Toluene-d8 (Surr)	50.0	48.6	97.12
$ 9 4-Bromofluorobenzene (Surr)	50.0	46.6	93.25

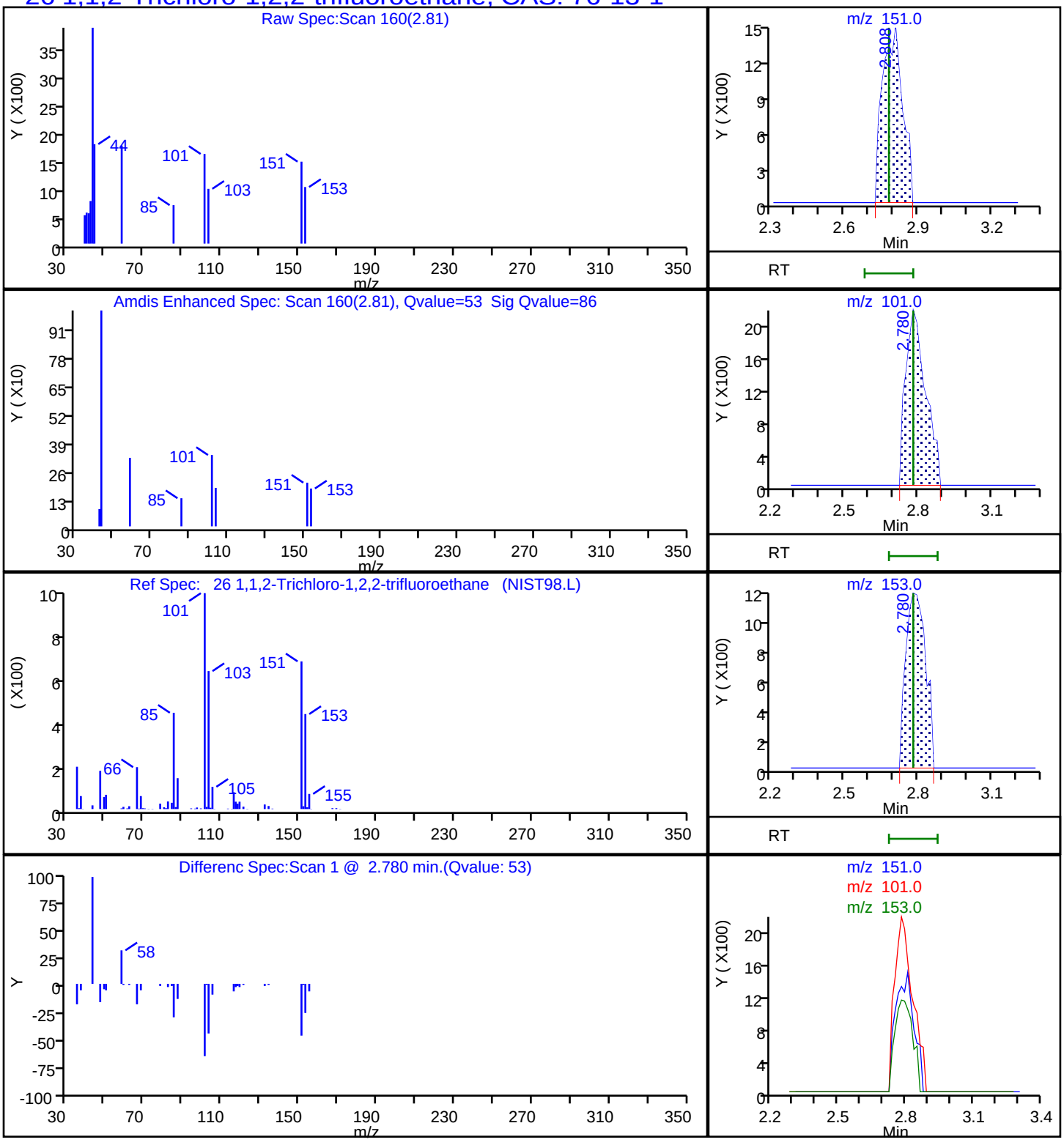
Report Date: 22-Jun-2019 13:42:33 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6579.D

Injection Date:	20-Jun-2019 14:27:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-6	Lab Sample ID:	280-124928-6		
Client ID:	G0053-19A				
Operator ID:	MEIERG	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

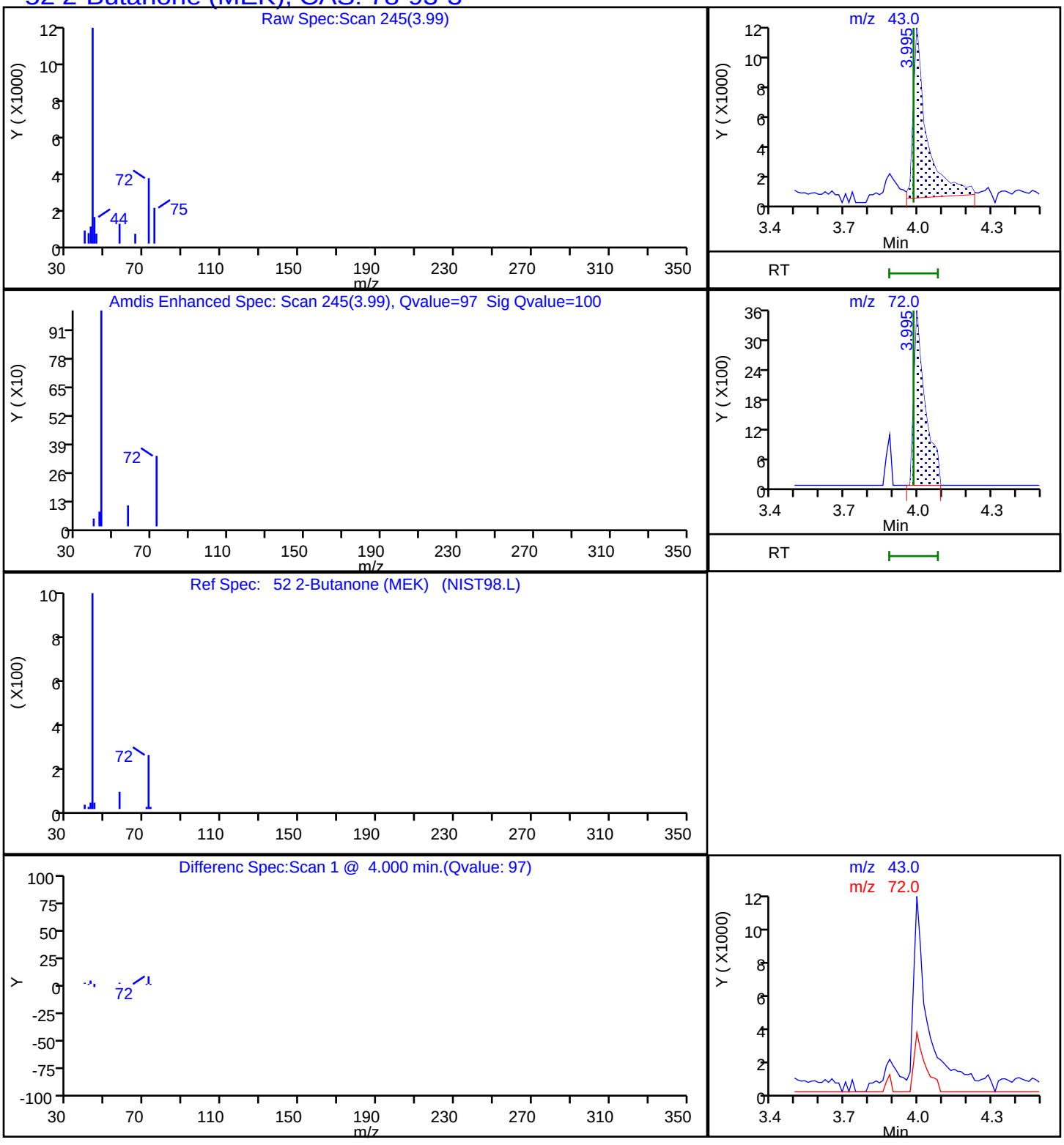
26 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6579.D				
Injection Date:	20-Jun-2019 14:27:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-6	Lab Sample ID:	280-124928-6		
Client ID:	G0053-19A				
Operator ID:	MEIERG	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

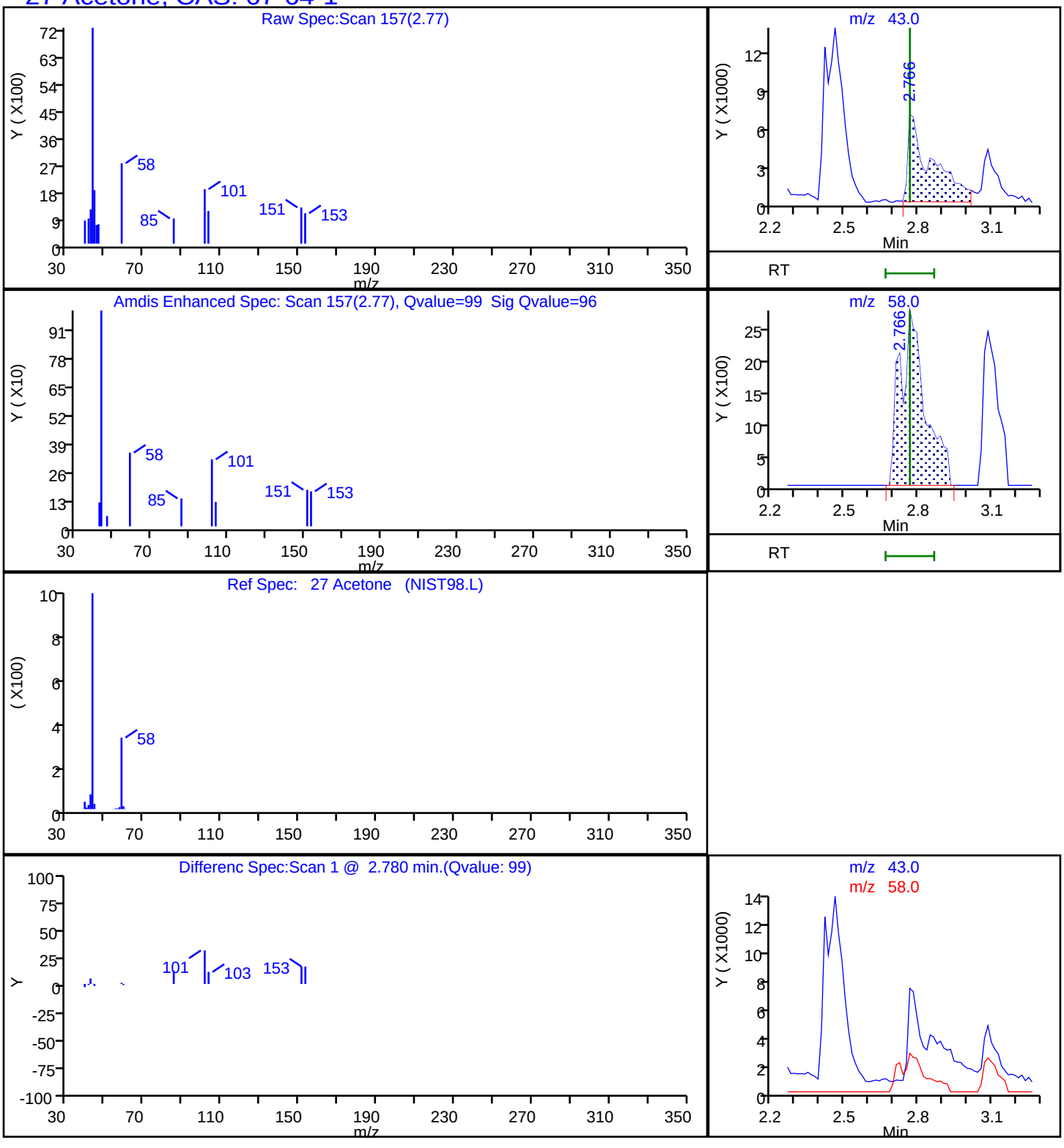
52 2-Butanone (MEK), CAS: 78-93-3



Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6579.D		
Injection Date:	20-Jun-2019 14:27:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-C-6	Lab Sample ID:	280-124928-6
Client ID:	G0053-19A		
Operator ID:	MEIERG	ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

27 Acetone, CAS: 67-64-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

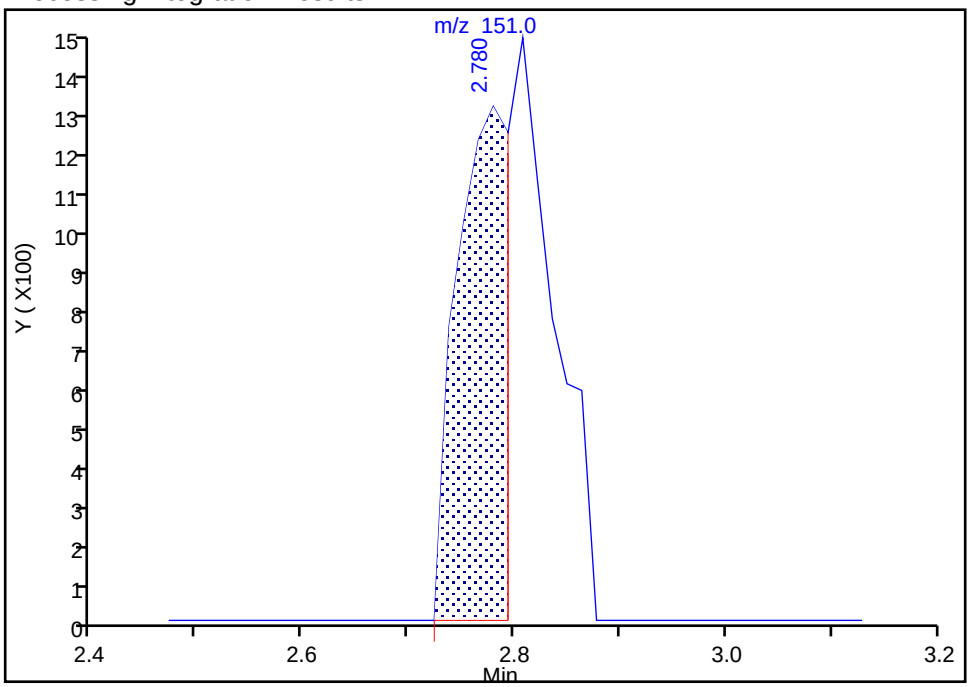
Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6579.D				
Injection Date:	20-Jun-2019 14:27:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-C-6	Lab Sample ID:	280-124928-6		
Client ID:	G0053-19A				
Operator ID:	MEIERG	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

26 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

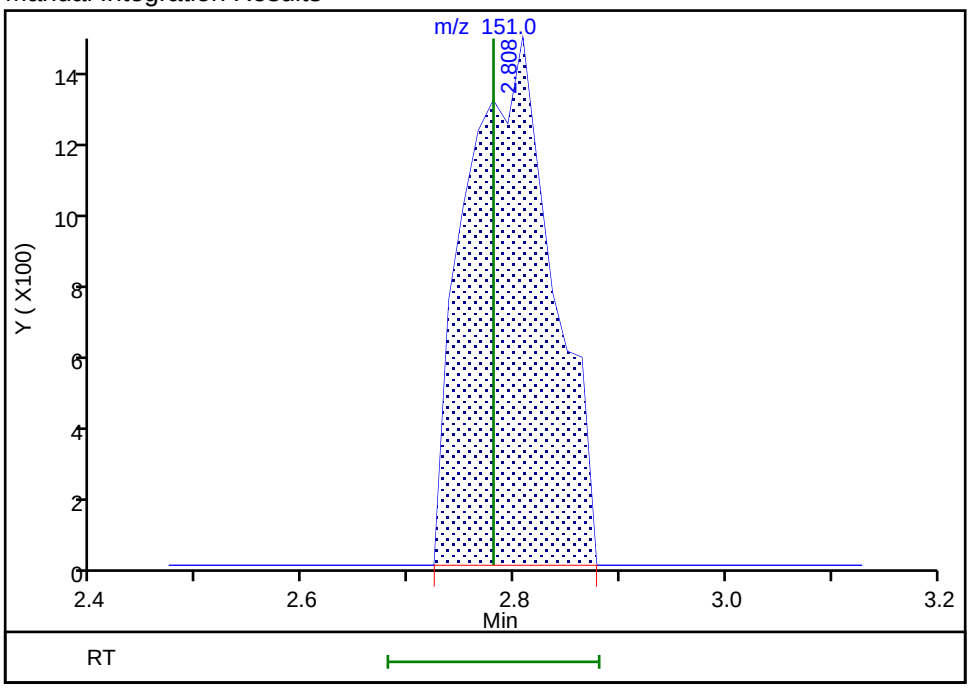
Processing Integration Results

RT: 2.78
Area: 4612
Amount: 0.289288
Amount Units: ug/l



Manual Integration Results

RT: 2.81
Area: 8409
Amount: 0.527454
Amount Units: ug/l



Reviewer: meierg, 22-Jun-2019 13:37:08

Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW03-19A Lab Sample ID: 280-124928-10

Matrix: Water Lab File ID: g2_6580.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:50

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 14:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.76	J	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	3.9		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	4.4	J	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.79	J	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW03-19A Lab Sample ID: 280-124928-10

Matrix: Water Lab File ID: g2_6580.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:50

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 14:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U M	1.5	0.20	0.10
1330-20-7	Xylenes, Total	1.3		1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	91		85-114
1868-53-7	Dibromofluoromethane (Surr)	102		80-119
2037-26-5	Toluene-d8 (Surr)	97		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D
Lims ID: 280-124928-F-10
Client ID: SHGW03-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 14:48:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-f-10
Misc. Info.: 280-0083038-016
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:36:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2943051	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4039187	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	84	919444	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1565189	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	872146	50.9	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.609	4.610	-0.001	96	994737	45.4	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	3695077	48.3	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	92	1308271	45.3	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	U
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64		2.193				ND	
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43	2.780	2.766	0.014	99	37798	4.38	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	61	11648	0.7568	
30 Carbon disulfide	76		2.976				ND	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84		3.129				ND	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43		3.981				ND	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83		4.233				ND	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62	4.665	4.665	0.000	96	109613	3.93	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	
72 1,2-Dichloropropane	63		5.322				ND	
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97	6.499	6.500	-0.001	85	4315	0.2559	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43		6.671				ND	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106	7.458	7.458	0.000	97	26058	0.7918	
95 m-Xylene & p-Xylene	106	7.579	7.572	0.007	98	40084	0.9858	
96 o-Xylene	106	7.929	7.930	-0.001	95	11130	0.2817	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106				0		1.27	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

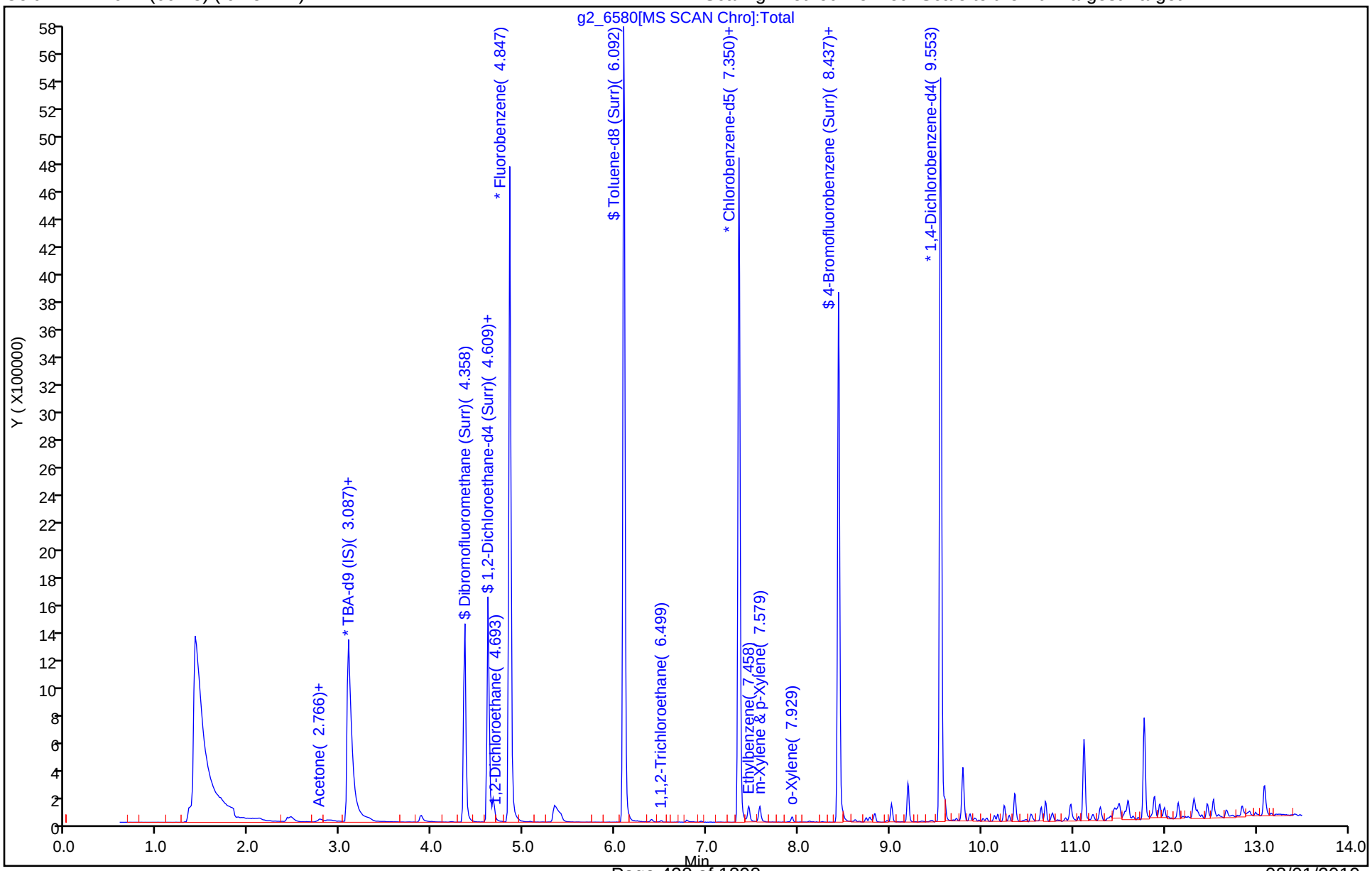
Report Date: 22-Jun-2019 13:42:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D

Injection Date:	20-Jun-2019 14:48:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-F-10	Lab Sample ID:	280-124928-10	Worklist Smp#:	16
Client ID:	SHGW03-19A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D
Lims ID: 280-124928-F-10
Client ID: SHGW03-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 14:48:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-f-10
Misc. Info.: 280-0083038-016
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

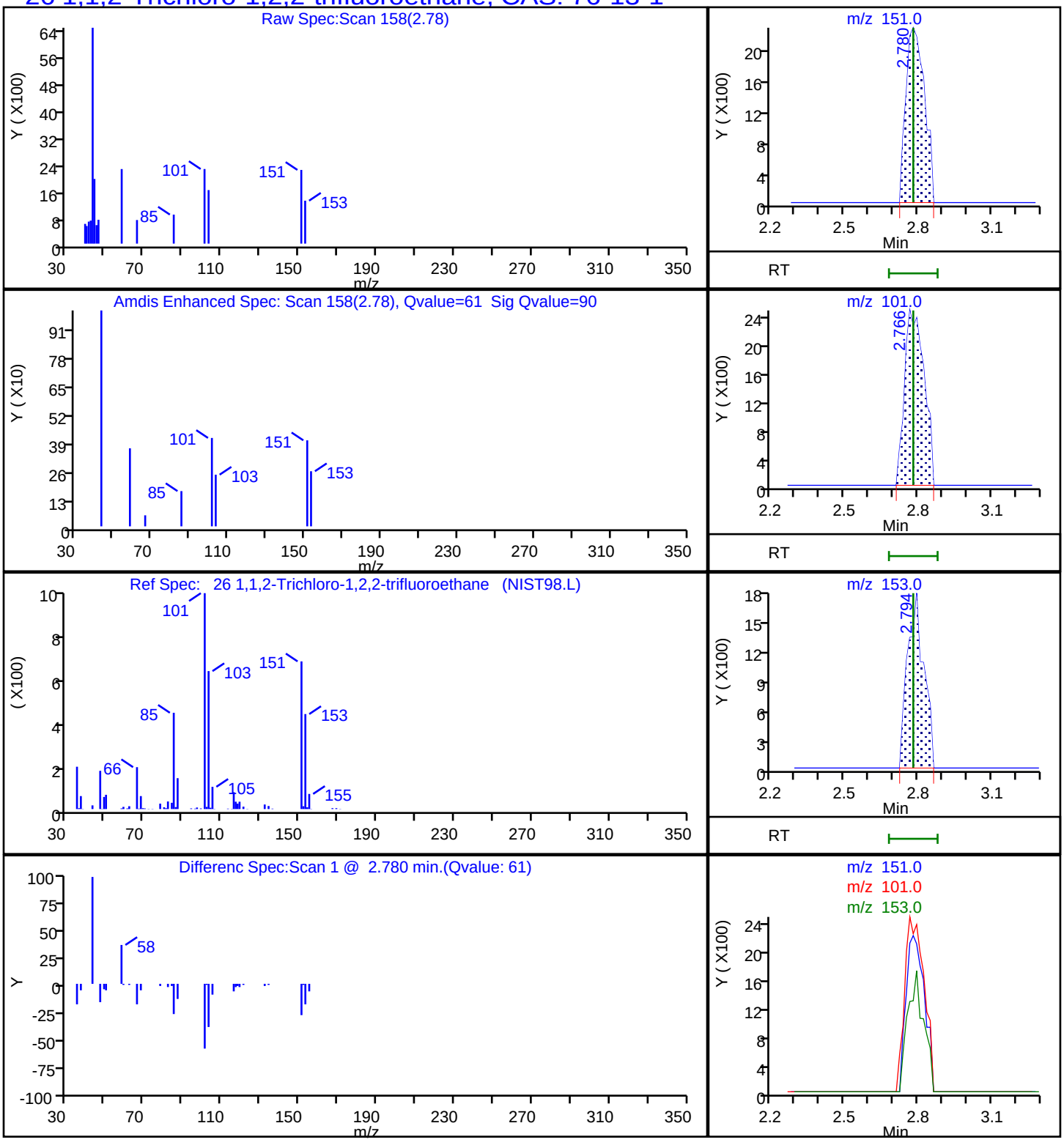
First Level Reviewer: meierg Date: 22-Jun-2019 13:36:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	50.9	101.76
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	45.4	90.74
$ 8 Toluene-d8 (Surr)	50.0	48.3	96.58
$ 9 4-Bromofluorobenzene (Surr)	50.0	45.3	90.51

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D
Injection Date: 20-Jun-2019 14:48:30 Instrument ID: VMS_G2
Lims ID: 280-124928-F-10 Lab Sample ID: 280-124928-10
Client ID: SHGW03-19A
Operator ID: MEIERG ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



Report Date: 22-Jun-2019 13:42:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D

Injection Date: 20-Jun-2019 14:48:30 Instrument ID: VMS_G2

Lims ID: 280-124928-F-10 Lab Sample ID: 280-124928-10

Client ID: SHGW03-19A

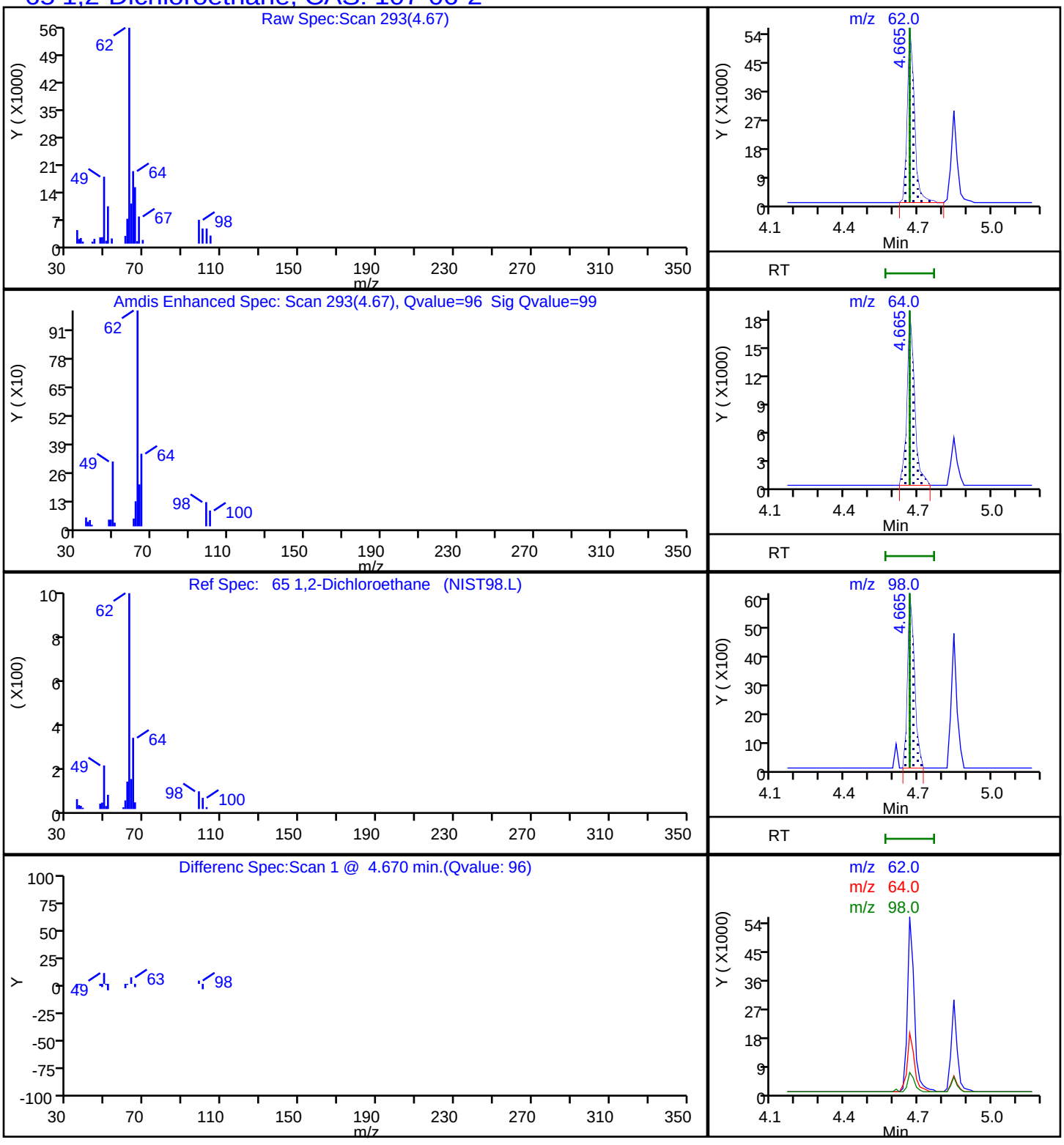
Operator ID: MEIERG ALS Bottle#: 15 Worklist Smp#: 16

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

65 1,2-Dichloroethane, CAS: 107-06-2



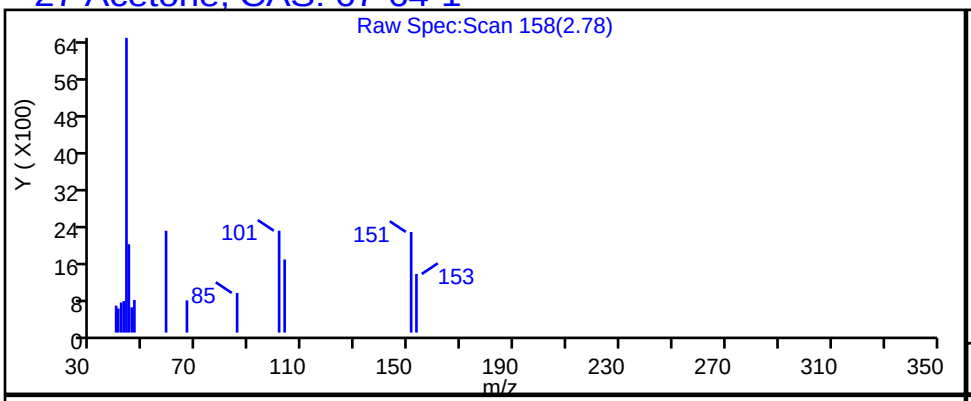
Report Date: 22-Jun-2019 13:42:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

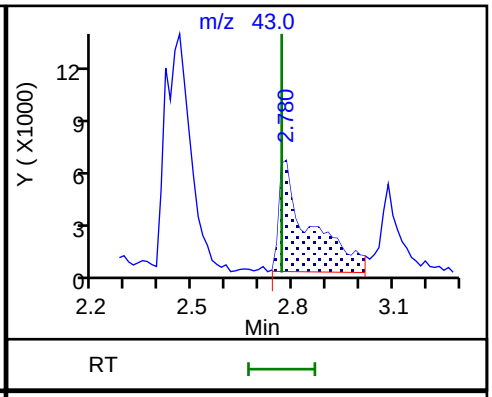
Eurofins TestAmerica, Denver

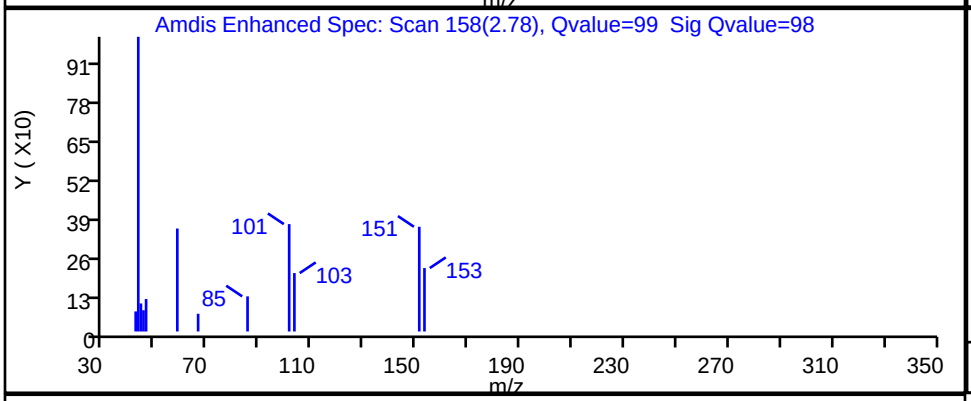
Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D

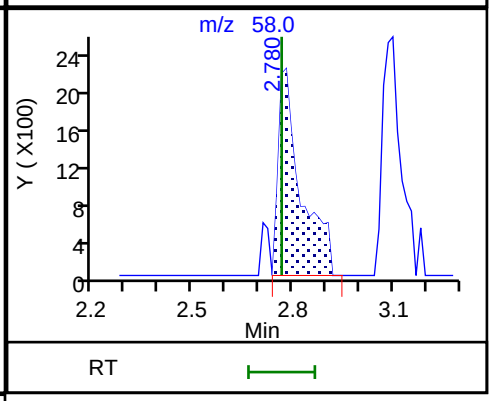
Injection Date:	20-Jun-2019 14:48:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-F-10	Lab Sample ID:	280-124928-10
Client ID:	SHGW03-19A		
Operator ID:	MEIERG	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

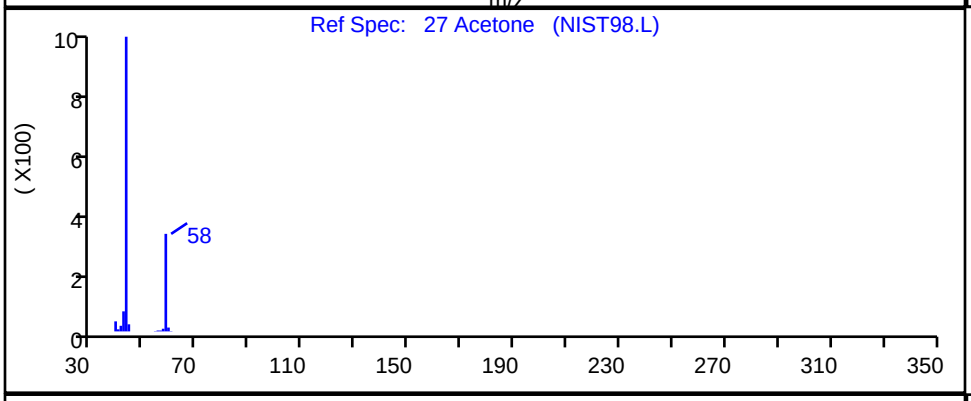
27 Acetone, CAS: 67-64-1

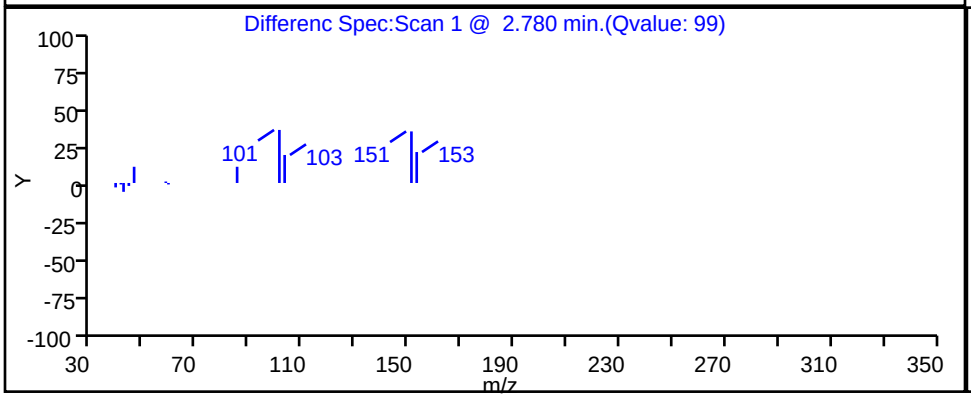


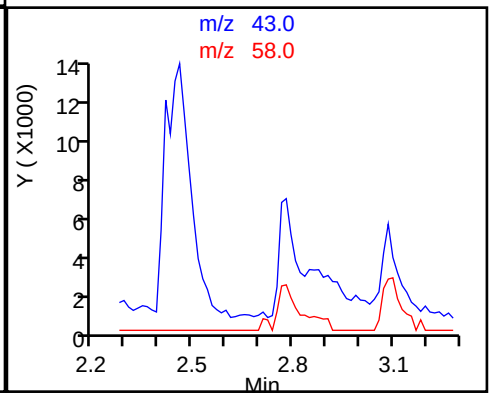












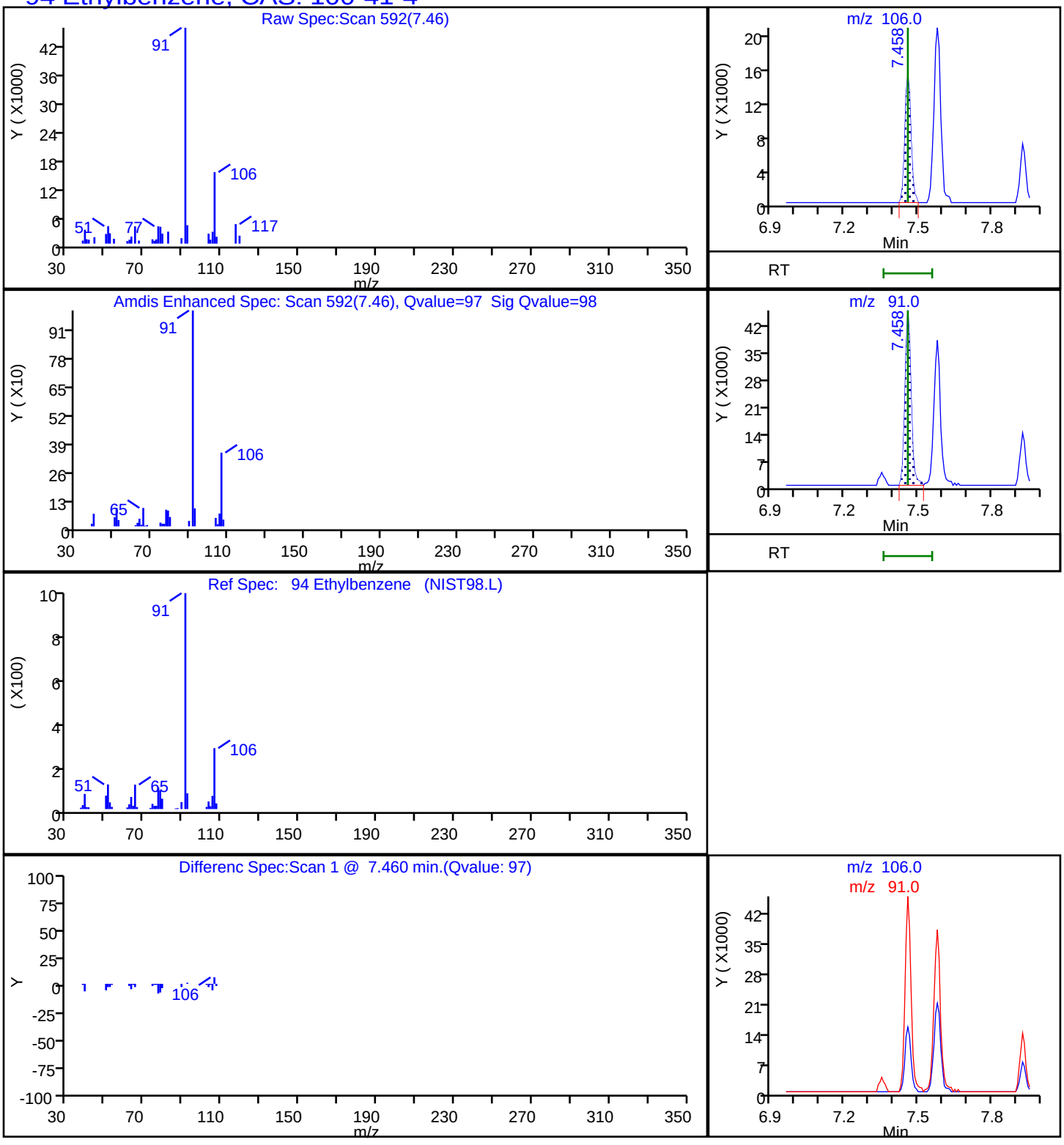
Report Date: 22-Jun-2019 13:42:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D

Injection Date:	20-Jun-2019 14:48:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-F-10	Lab Sample ID:	280-124928-10
Client ID:	SHGW03-19A		
Operator ID:	MEIERG	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

94 Ethylbenzene, CAS: 100-41-4



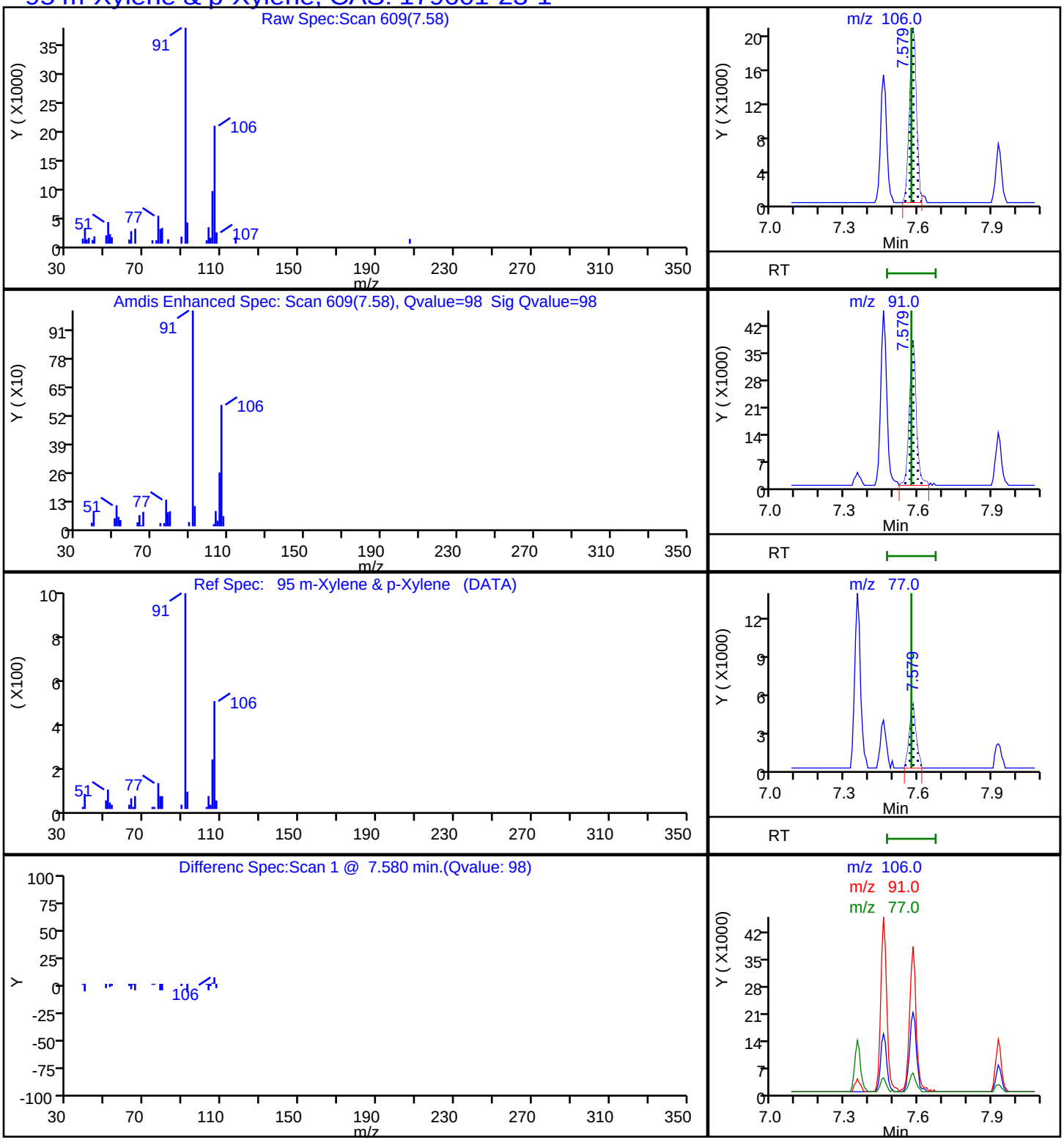
Report Date: 22-Jun-2019 13:42:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D

Injection Date:	20-Jun-2019 14:48:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-F-10	Lab Sample ID:	280-124928-10		
Client ID:	SHGW03-19A				
Operator ID:	MEIERG	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

95 m-Xylene & p-Xylene, CAS: 179601-23-1



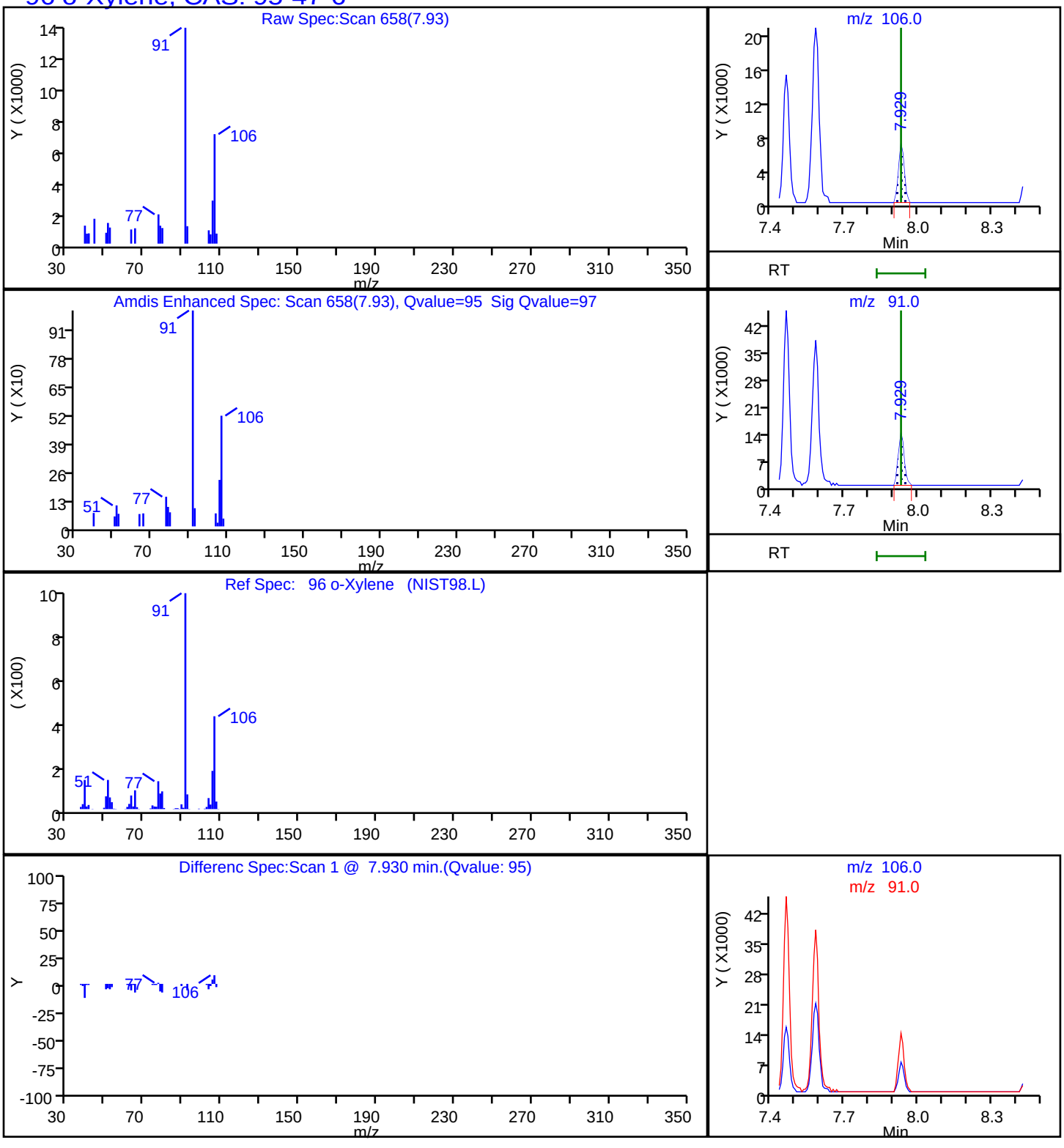
Report Date: 22-Jun-2019 13:42:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D

Injection Date:	20-Jun-2019 14:48:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-F-10	Lab Sample ID:	280-124928-10
Client ID:	SHGW03-19A		
Operator ID:	MEIERG	ALS Bottle#:	15 Worklist Smp#: 16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

96 o-Xylene, CAS: 95-47-6



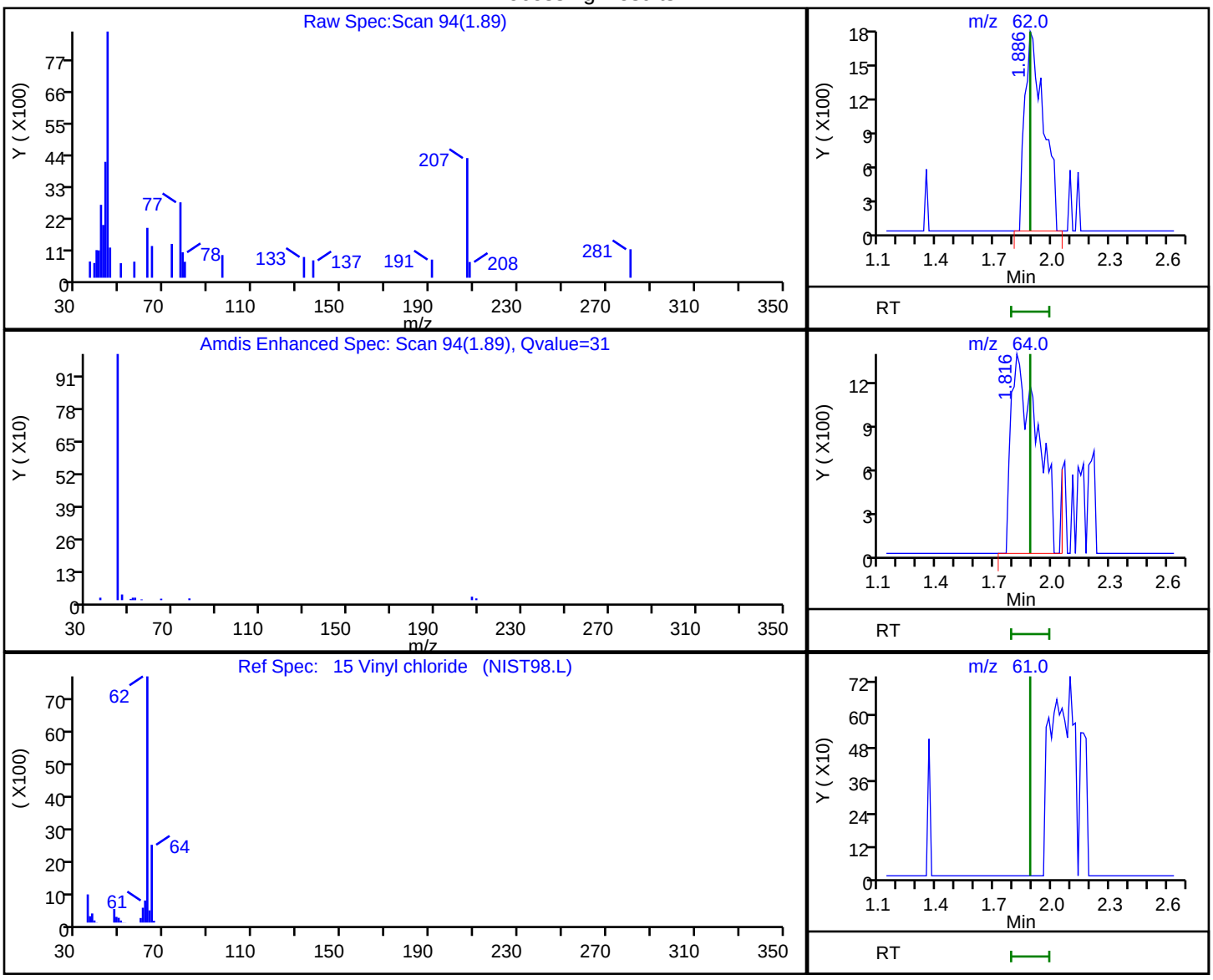
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6580.D				
Injection Date:	20-Jun-2019 14:48:30	Instrument ID:	VMS_G2		
Lims ID:	280-124928-F-10	Lab Sample ID:	280-124928-10		
Client ID:	SHGW03-19A				
Operator ID:	MEIERG	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

15 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.89	62.00	11967	0.176356
1.82	64.00	13076	
1.89	61.00	0	

Reviewer: meierg, 22-Jun-2019 13:36:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0069-19A Lab Sample ID: 280-124928-11

Matrix: Water Lab File ID: g2_6581.D

Analysis Method: 8260B Date Collected: 06/06/2019 12:10

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 15:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0069-19A Lab Sample ID: 280-124928-11

Matrix: Water Lab File ID: g2_6581.D

Analysis Method: 8260B Date Collected: 06/06/2019 12:10

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 15:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	92		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	95		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6581.D
Lims ID: 280-124928-E-11
Client ID: G0069-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 15:09:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-e-11
Misc. Info.: 280-0083038-017
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:37:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2805538	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4037654	50.0	
* 3 Chlorobenzene-d5	119	7.351	7.350	0.000	84	936235	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1560016	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	854838	49.9	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	96	999178	45.6	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	3719626	47.7	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	92	1325978	46.0	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64		2.193				ND	
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43		2.766				ND	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780				ND	
30 Carbon disulfide	76		2.976				ND	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84		3.129				ND	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43		3.981				ND	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83		4.233				ND	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62		4.665				ND	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	
72 1,2-Dichloropropane	63		5.322				ND	
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97		6.500				ND	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43		6.671				ND	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

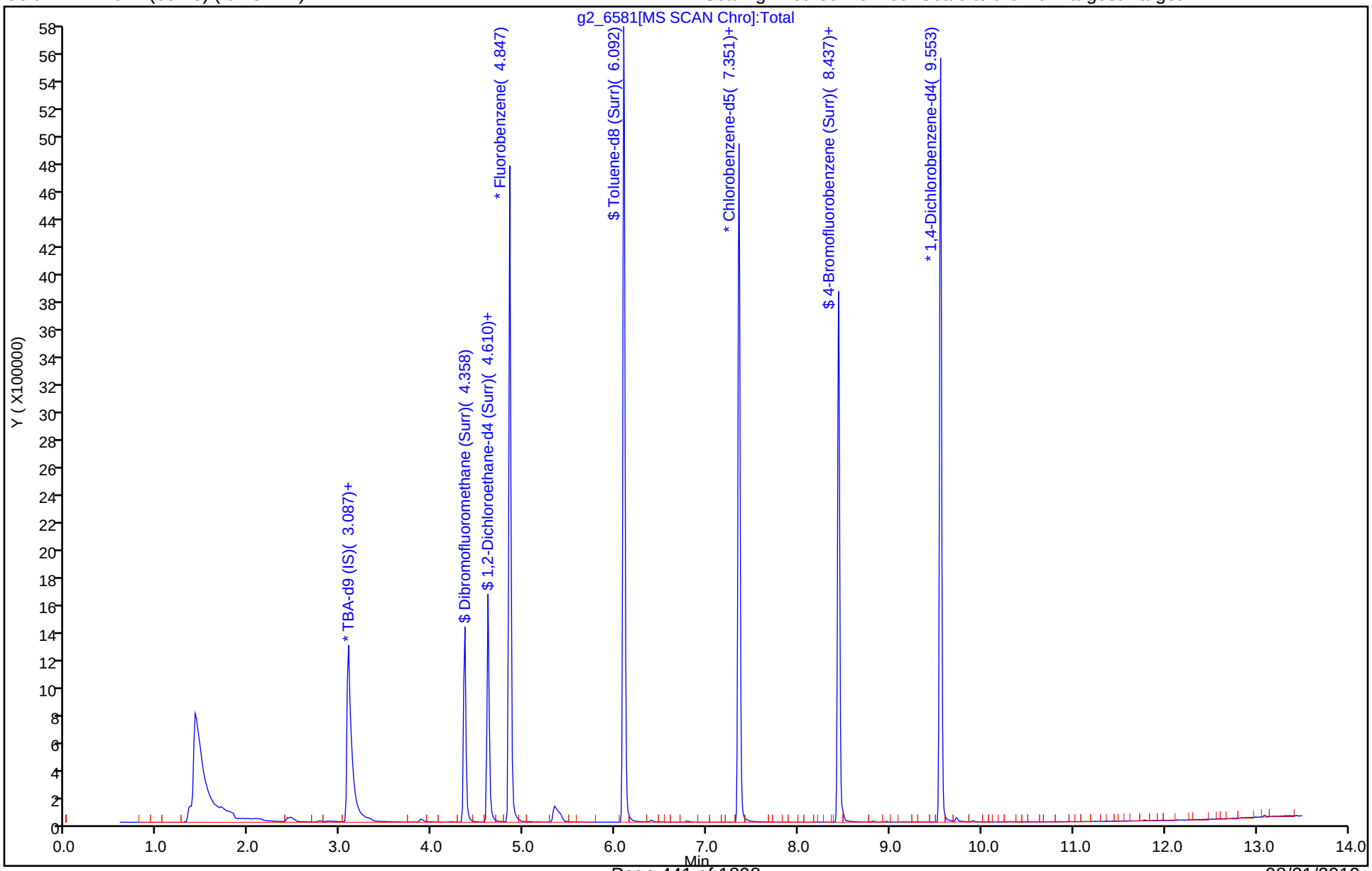
Report Date: 22-Jun-2019 13:42:35 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6581.D

Injection Date:	20-Jun-2019 15:09:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-E-11	Lab Sample ID:	280-124928-11	Worklist Smp#:	17
Client ID:	G0069-19A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6581.D
Lims ID: 280-124928-E-11
Client ID: G0069-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 15:09:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-e-11
Misc. Info.: 280-0083038-017
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:37:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	49.9	99.78
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	45.6	91.18
$ 8 Toluene-d8 (Surr)	50.0	47.7	95.48
$ 9 4-Bromofluorobenzene (Surr)	50.0	46.0	92.04

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW04-19A Lab Sample ID: 280-124928-12

Matrix: Water Lab File ID: g2_6582.D

Analysis Method: 8260B Date Collected: 06/06/2019 13:35

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 15:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	J	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW04-19A Lab Sample ID: 280-124928-12

Matrix: Water Lab File ID: g2_6582.D

Analysis Method: 8260B Date Collected: 06/06/2019 13:35

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 15:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		81-118
460-00-4	4-Bromofluorobenzene (Surr)	91		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	95		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6582.D
Lims ID: 280-124928-E-12
Client ID: SHGW04-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 15:31:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-e-12
Misc. Info.: 280-0083038-018
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:37:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2866464	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	100	4039551	50.0	
* 3 Chlorobenzene-d5	119	7.351	7.350	0.000	84	926525	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1542512	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	861168	50.2	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	97	999940	45.6	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	3670015	47.6	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	92	1301108	45.7	
12 Dichlorodifluoromethane	85		1.593				ND	
14 Chloromethane	50		1.886				ND	
15 Vinyl chloride	62		1.886				ND	
17 Bromomethane	94		2.152				ND	
18 Chloroethane	64		2.193				ND	
20 Trichlorofluoromethane	101		2.417				ND	
27 Acetone	43	2.766	2.766	0.000	98	50378	6.38	
25 1,1-Dichloroethene	96		2.780				ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780				ND	
30 Carbon disulfide	76		2.976				ND	
32 Methyl acetate	43		2.976				ND	
35 Methylene Chloride	84		3.129				ND	
41 Methyl tert-butyl ether	73		3.269				ND	
40 trans-1,2-Dichloroethene	96		3.297				ND	
45 1,1-Dichloroethane	63		3.604				ND	
52 2-Butanone (MEK)	43		3.981				ND	
51 cis-1,2-Dichloroethene	96		4.009				ND	
56 Chlorobromomethane	128		4.177				ND	
59 Chloroform	83		4.233				ND	
60 1,1,1-Trichloroethane	97		4.372				ND	
61 Cyclohexane	56		4.428				ND	
62 Carbon tetrachloride	117		4.498				ND	
64 Benzene	78		4.638				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
65 1,2-Dichloroethane	62		4.665				ND	
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	
72 1,2-Dichloropropane	63		5.322				ND	
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97		6.500				ND	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43		6.671				ND	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105	8.266	8.266	0.000	93	14682	0.1395	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

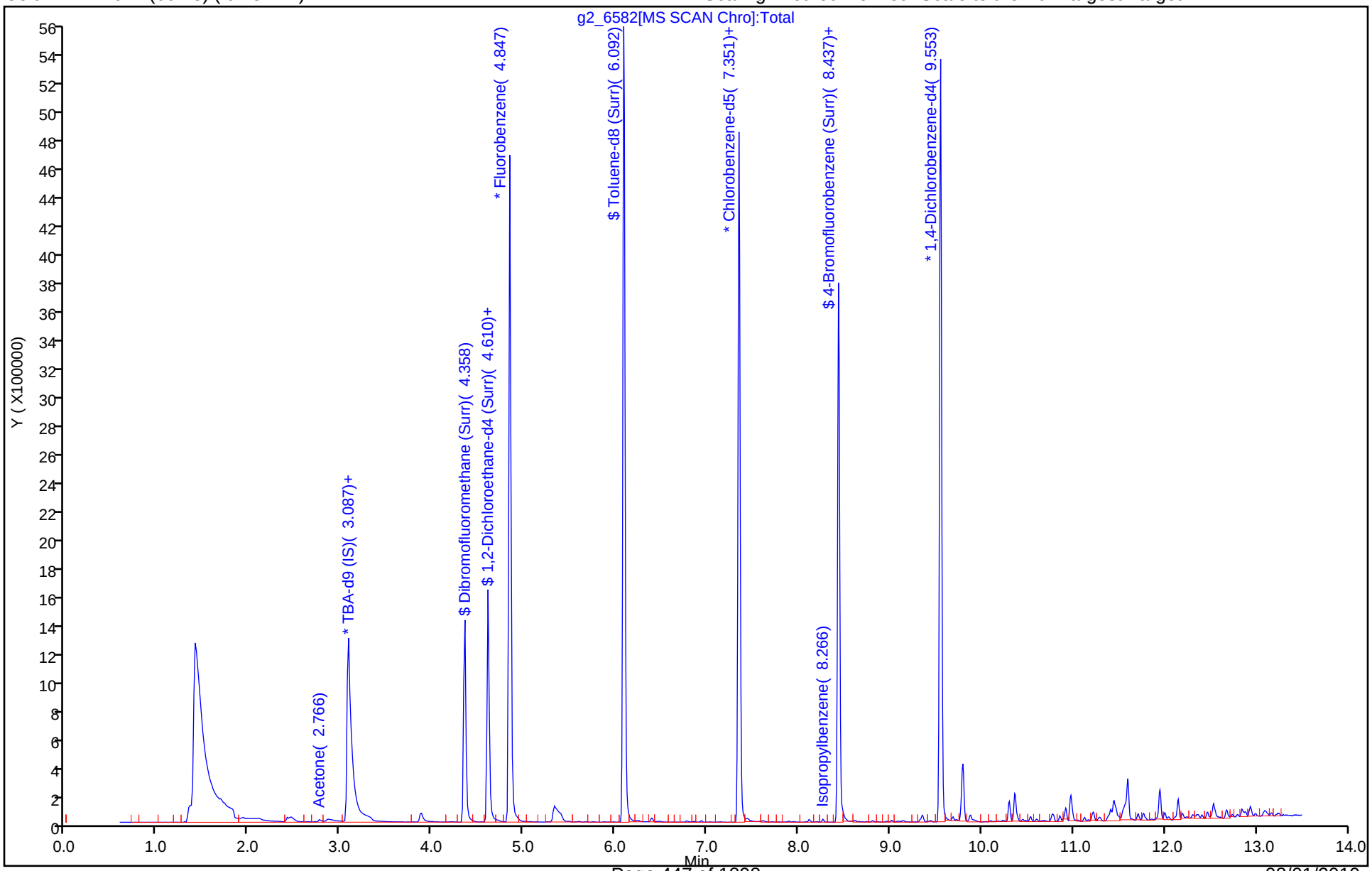
Report Date: 22-Jun-2019 13:42:36 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6582.D

Injection Date:	20-Jun-2019 15:31:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-E-12	Lab Sample ID:	280-124928-12	Worklist Smp#:	18
Client ID:	SHGW04-19A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6582.D
Lims ID: 280-124928-E-12
Client ID: SHGW04-19A
Sample Type: Client
Inject. Date: 20-Jun-2019 15:31:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-e-12
Misc. Info.: 280-0083038-018
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

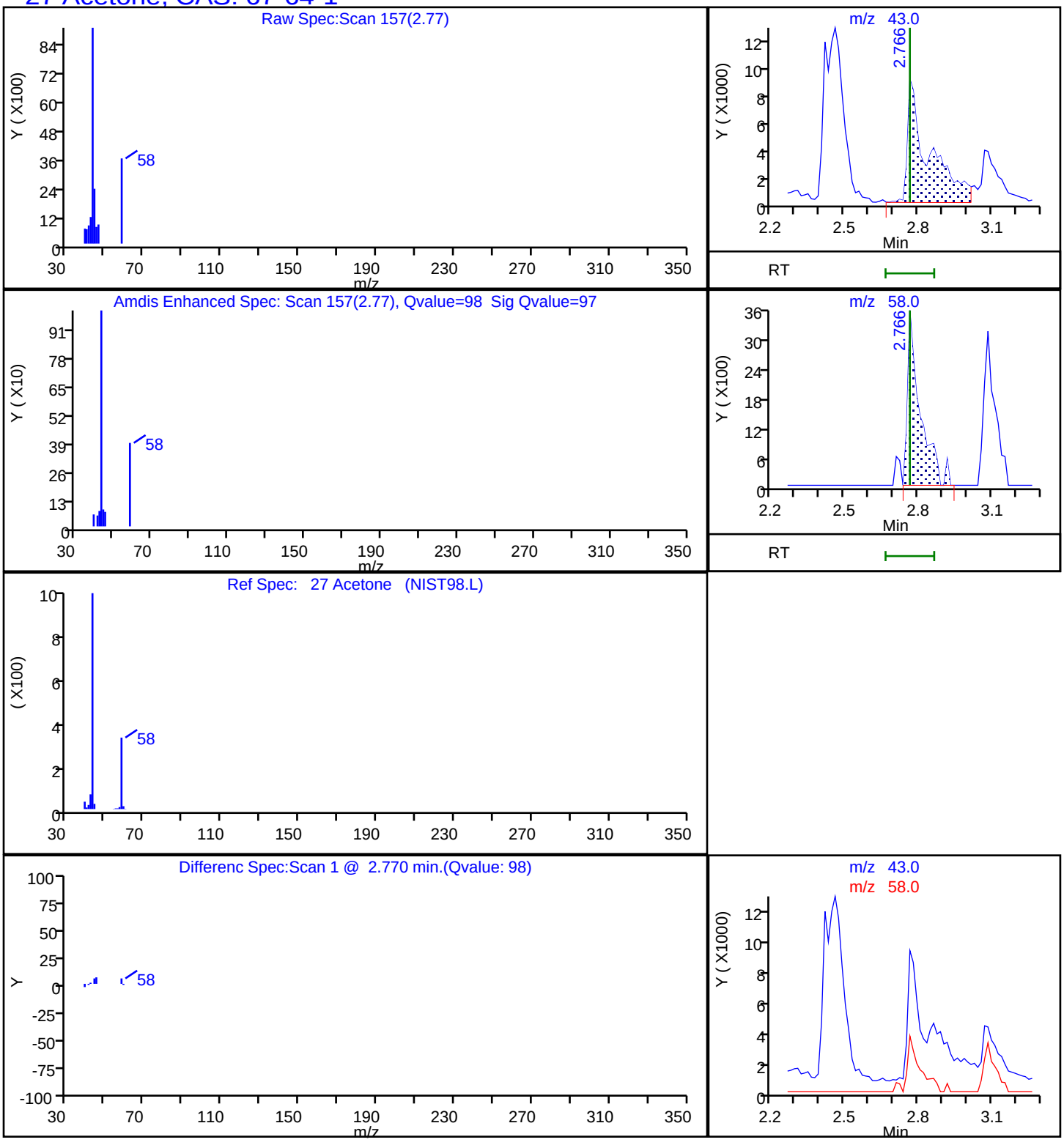
First Level Reviewer: meierg Date: 22-Jun-2019 13:37:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	50.2	100.47
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	45.6	91.20
$ 8 Toluene-d8 (Surr)	50.0	47.6	95.19
$ 9 4-Bromofluorobenzene (Surr)	50.0	45.7	91.33

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6582.D		
Injection Date:	20-Jun-2019 15:31:30	Instrument ID:	VMS_G2
Lims ID:	280-124928-E-12	Lab Sample ID:	280-124928-12
Client ID:	SHGW04-19A		
Operator ID:	MEIERG	ALS Bottle#:	17 Worklist Smp#: 18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

27 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: TB060619 Lab Sample ID: 280-124928-13

Matrix: Water Lab File ID: g2_6583.D

Analysis Method: 8260B Date Collected: 06/06/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 15:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: TB060619 Lab Sample ID: 280-124928-13

Matrix: Water Lab File ID: g2_6583.D

Analysis Method: 8260B Date Collected: 06/06/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 15:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		81-118
460-00-4	4-Bromofluorobenzene (Surr)	92		85-114
1868-53-7	Dibromofluoromethane (Surr)	102		80-119
2037-26-5	Toluene-d8 (Surr)	94		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6583.D
Lims ID: 280-124928-A-13
Client ID: TB060619
Sample Type: Client
Inject. Date: 20-Jun-2019 15:52:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-a-13
Misc. Info.: 280-0083038-019
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2965333	1000.0	
*	2 Fluorobenzene	96	4.847	4.847	0.000	99	4164358	50.0	
*	3 Chlorobenzene-d5	119	7.350	7.350	0.000	84	953421	50.0	
*	4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1563027	50.0	
$	6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	898924	50.9	
$	7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	96	1044065	46.2	
$	8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	3739004	47.1	
$	9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	93	1332851	46.2	
	12 Dichlorodifluoromethane	85		1.593				ND	
	14 Chloromethane	50		1.886				ND	
	15 Vinyl chloride	62		1.886				ND	
	17 Bromomethane	94		2.152				ND	
	18 Chloroethane	64		2.193				ND	
	20 Trichlorofluoromethane	101		2.417				ND	
	27 Acetone	43		2.766				ND	
	25 1,1-Dichloroethene	96		2.780				ND	
	26 1,1,2-Trichloro-1,2,2-trif	151		2.780				ND	
	30 Carbon disulfide	76		2.976				ND	
	32 Methyl acetate	43		2.976				ND	
	35 Methylene Chloride	84		3.129				ND	
	41 Methyl tert-butyl ether	73		3.269				ND	
	40 trans-1,2-Dichloroethene	96		3.297				ND	
	45 1,1-Dichloroethane	63		3.604				ND	
	52 2-Butanone (MEK)	43		3.981				ND	
	51 cis-1,2-Dichloroethene	96		4.009				ND	
	56 Chlorobromomethane	128		4.177				ND	
	59 Chloroform	83		4.233				ND	
	60 1,1,1-Trichloroethane	97		4.372				ND	
	61 Cyclohexane	56		4.428				ND	
	62 Carbon tetrachloride	117		4.498				ND	
	64 Benzene	78		4.638				ND	
	65 1,2-Dichloroethane	62		4.665				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
69 Trichloroethene	95		5.126				ND	
71 Methylcyclohexane	55		5.308				ND	
72 1,2-Dichloropropane	63		5.322				ND	
76 Dichlorobromomethane	83		5.517				ND	
79 cis-1,3-Dichloropropene	75		5.867				ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964				ND	
82 Toluene	91		6.149				ND	
83 trans-1,3-Dichloropropene	75		6.328				ND	
85 1,1,2-Trichloroethane	97		6.500				ND	
86 Tetrachloroethene	164		6.585				ND	
88 2-Hexanone	43		6.671				ND	
89 Chlorodibromomethane	129		6.836				ND	
90 Ethylene Dibromide	107		6.950				ND	
92 Chlorobenzene	112		7.379				ND	
94 Ethylbenzene	106		7.458				ND	
95 m-Xylene & p-Xylene	106		7.572				ND	
96 o-Xylene	106		7.930				ND	
97 Styrene	104		7.944				ND	
98 Bromoform	173		8.123				ND	
99 Isopropylbenzene	105		8.266				ND	
102 1,1,2,2-Tetrachloroethane	83		8.559				ND	
113 1,3-Dichlorobenzene	146		9.474				ND	
115 1,4-Dichlorobenzene	146		9.574				ND	
118 1,2-Dichlorobenzene	146		9.925				ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697				ND	
121 1,2,4-Trichlorobenzene	180		11.512				ND	
124 1,2,3-Trichlorobenzene	180		11.998				ND	
S 143 Xylenes, Total	106		0.000				ND	

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

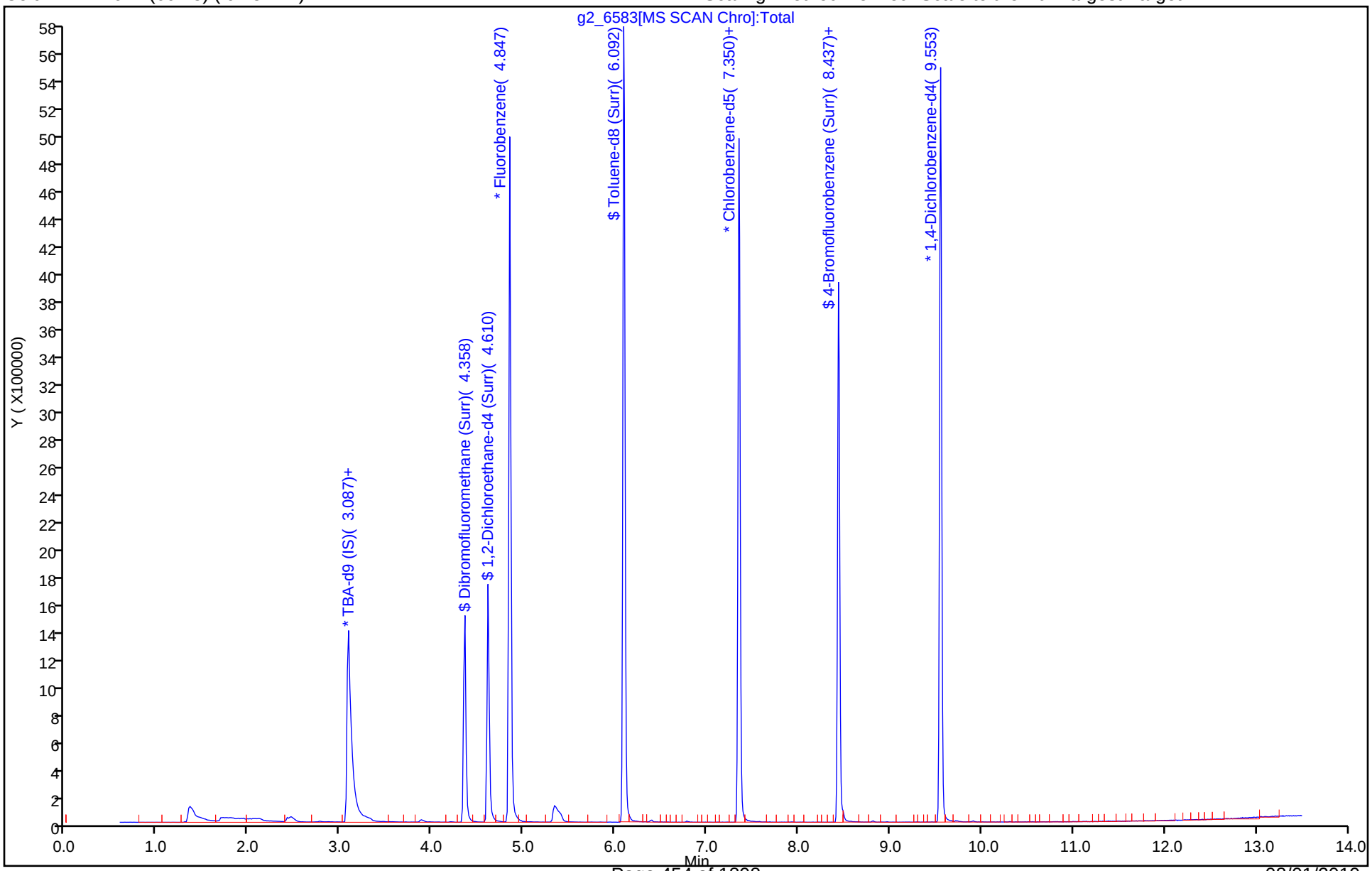
Report Date: 22-Jun-2019 13:42:37 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6583.D

Injection Date:	20-Jun-2019 15:52:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	280-124928-A-13	Lab Sample ID:	280-124928-13	Worklist Smp#:	19
Client ID:	TB060619				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6583.D
Lims ID: 280-124928-A-13
Client ID: TB060619
Sample Type: Client
Inject. Date: 20-Jun-2019 15:52:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-a-13
Misc. Info.: 280-0083038-019
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	50.9	101.73
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	46.2	92.38
$ 8 Toluene-d8 (Surr)	50.0	47.1	94.25
$ 9 4-Bromofluorobenzene (Surr)	50.0	46.2	92.33

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-461853/8	g2_6454.D
Level 2	IC 280-461853/7	g2_6453.D
Level 3	IC 280-461853/6	g2_6452.D
Level 4	IC 280-461853/5	g2_6451.D
Level 5	ICIS 280-461853/4	g2_6450.D
Level 6	IC 280-461853/3	g2_6449.D
Level 7	IC 280-461853/2	g2_6448.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.4173 0.3784	0.4279 0.3552	0.4183	0.3917	0.3865	Ave		0.3965				6.6		15.0			
Chloromethane	1.0810 0.4542	0.7931 0.4223	0.6557	0.5162	0.4636	Lin2	0.3181	0.4614			0.1000				0.9960		0.9900
Vinyl chloride	+++++ 0.1978	0.3111 0.1804	0.2533	0.2274	0.2077	Lin2	0.1131	0.1988							0.9950		0.9900
Bromomethane	0.3151 0.1230	0.2613 +++++	0.1872	0.2075	0.1562	Qua	0.0866	0.1890	-0.000671						1.0000		0.9900
Chloroethane	0.3076 0.1559	0.2695 +++++	0.3095	0.2454	0.2129	Qua	0.0055	0.2682	-0.001123						1.0000		0.9900
Dichlorofluoromethane	0.7557 0.5258	0.6571 0.4734	0.5641	0.5396	0.5283	Lin2	0.1253	0.5126							0.9980		0.9900
Trichlorofluoromethane	0.4077 0.4139	0.4027 0.3831	0.3982	0.4107	0.4170	Ave		0.4047				2.8		15.0			
Ethyl ether	0.2226 0.2287	0.2455 0.2191	0.2245	0.2289	0.2248	Ave		0.2277				3.7		15.0			
Acrolein	0.0454 0.0595	0.0699 0.0560	0.0518	0.0564	0.0581	Ave		0.0567				13.2		15.0			
Acetone	0.1420 0.0801	0.1080 0.0775	0.0962	0.0788	0.0771	Lin2	0.1282	0.0776							0.9990		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2014 0.1931	0.1897 0.1845	0.1803	0.1899	0.1948	Ave		0.1905				3.6		15.0			
1,1-Dichloroethene	0.2997 0.2480	0.2644 0.2374	0.2500	0.2460	0.2483	Ave		0.2563				8.1		30.0			
Iodomethane	0.3641 0.3501	0.3636 0.3313	0.3459	0.3499	0.3516	Ave		0.3509				3.2		15.0			
Carbon disulfide	0.9799 0.8701	0.9615 0.7939	0.8268	0.8943	0.8588	Ave		0.8836				7.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl acetate	0.2080 0.2153	0.1743 0.2042	0.1787	0.2065	0.2079	Ave		0.1993				8.0		15.0			
3-Chloro-1-propene	0.4244 0.4310	0.3837 0.4079	0.4294	0.4149	0.4241	Ave		0.4165				4.0		15.0			
Methylene Chloride	0.3299 0.2802	0.3267 0.2698	0.2835	0.2880	0.2810	Ave		0.2942				8.1		15.0			
t-Butyl alcohol	0.0364 0.0349	0.0375 0.0345	0.0354	0.0354	0.0336	Ave		0.0354				3.6		15.0			
Acrylonitrile	0.0760 0.1020	0.0890 0.0912	0.0900	0.0986	0.1001	Ave		0.0924				9.7		15.0			
Methyl tert-butyl ether	0.8528 0.7928	0.8484 0.7563	0.7667	0.8042	0.7784	Ave		0.7999				4.8		15.0			
trans-1,2-Dichloroethene	0.2684 0.2565	0.2659 0.2438	0.2383	0.2492	0.2526	Ave		0.2535				4.3		15.0			
Hexane	2.3887 2.0715	2.3057 1.9508	1.8667	1.9961	2.0721	Ave		2.0931				9.0		15.0			
Vinyl acetate	0.5292 0.5581	0.5371 0.4748	0.5054	0.5525	0.5609	Ave		0.5311				5.9		15.0			
1,1-Dichloroethane	0.4610 0.4513	0.4841 0.4259	0.4286	0.4566	0.4518	Ave		0.4513			0.1000	4.4		15.0			
2-Butanone (MEK)	0.1112 0.1302	0.1102 0.1249	0.1086	0.1225	0.1251	Ave		0.1189				7.3		15.0			
cis-1,2-Dichloroethene	0.2785 0.2747	0.2867 0.2552	0.2679	0.2750	0.2712	Ave		0.2727				3.6		15.0			
2,2-Dichloropropane	0.3802 0.3565	0.3835 0.3414	0.3420	0.3481	0.3548	Ave		0.3581				4.8		15.0			
sec-Butyl Alcohol	0.0228 0.0242	0.0234 0.0238	0.0229	0.0231	0.0229	Ave		0.0233				2.2		15.0			
Bromochloromethane	0.1140 0.1190	0.1165 0.1146	0.1093	0.1176	0.1167	Ave		0.1154				2.7		15.0			
Tetrahydrofuran	0.1021 0.0917	0.1003 0.0883	0.0827	0.0905	0.0884	Ave		0.0920				7.5		15.0			
Chloroform	0.4331 0.4125	0.4457 0.3859	0.3980	0.4103	0.4078	Ave		0.4133				4.9		30.0			
1,1,1-Trichloroethane	0.3711 0.3656	0.3786 0.3524	0.3426	0.3562	0.3616	Ave		0.3612				3.3		15.0			
Cyclohexane	0.6134 0.5526	0.5706 0.5376	0.5583	0.5440	0.5530	Ave		0.5614				4.5		15.0			
1,1-Dichloropropene	0.3738 0.3759	0.3824 0.3580	0.3526	0.3695	0.3739	Ave		0.3695				2.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2515 0.2955	0.2635 0.2893	0.2387	0.2689	0.2881	Ave		0.2708				7.8		15.0			
Isobutyl alcohol	0.0076 0.0106	0.0040 0.0106	0.0068	0.0093	0.0100	Lin1	-0.102	0.0105							0.9990		0.9900
Benzene	1.2398 1.0826	1.2071 0.9454	1.1288	1.1243	1.1028	Ave		1.1187				8.5		15.0			
1,2-Dichloroethane	0.3989 0.3258	0.3905 0.3173	0.3361	0.3302	0.3207	Ave		0.3456				9.9		15.0			
Trichloroethene	0.3059 0.2563	0.2806 0.2436	0.2490	0.2493	0.2534	Ave		0.2626				8.6		15.0			
2-Pentanone	0.2204 0.1995	0.1687 0.1871	0.2027	0.1893	0.1918	Ave		0.1942				8.2		15.0			
Methylcyclohexane	0.4503 0.4065	0.4147 0.3951	0.3986	0.3980	0.4103	Ave		0.4105				4.6		15.0			
1,2-Dichloropropane	0.4727 0.2754	0.3963 0.2595	0.2938	0.2794	0.2741	Lin2	0.1059	0.2666							0.9960		0.9900
1,4-Dioxane	0.0028 0.0029	0.0033 0.0029	0.0029	0.0032	0.0030	Ave		0.0030				5.7		15.0			
Dibromomethane	0.1565 0.1389	0.1506 0.1341	0.1285	0.1379	0.1345	Ave		0.1402				7.1		15.0			
Bromodichloromethane	0.2914 0.3068	0.3094 0.2967	0.2635	0.2932	0.2986	Ave		0.2942				5.1		15.0			
2-Chloroethyl vinyl ether	0.1880 0.1981	0.1816 0.1913	0.1854	0.1909	0.1904	Ave		0.1894				2.7		15.0			
cis-1,3-Dichloropropene	1.8504 1.9915	1.9425 1.8621	1.8013	1.9357	1.9455	Ave		1.9042				3.5		15.0			
4-Methyl-2-pentanone (MIBK)	0.2902 0.2870	0.2914 0.2542	0.2712	0.2931	0.2853	Ave		0.2818				5.0		15.0			
Toluene	1.2517 1.0586	1.1818 0.9198	1.0871	1.0965	1.0802	Ave		1.0965				9.4		30.0			
trans-1,3-Dichloropropene	0.3381 0.3733	0.3518 0.3631	0.3311	0.3574	0.3627	Ave		0.3539				4.2		15.0			
Ethyl methacrylate	1.6361 1.7011	1.8392 1.6481	1.5166	1.6552	1.6532	Ave		1.6642				5.8		15.0			
1,1,2-Trichloroethane	0.2185 0.2077	0.2222 0.2026	0.2000	0.2066	0.2037	Ave		0.2088				4.0		15.0			
Tetrachloroethene	0.8270 0.8649	0.9233 0.8170	0.8535	0.8578	0.8514	Ave		0.8564				4.0		15.0			
1,3-Dichloropropane	1.6322 1.7764	1.8000 1.6862	1.7224	1.7915	1.7645	Ave		1.7390				3.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.7523 0.9220	0.8205 0.8610	0.8068	0.8959	0.8911	Ave		0.8499				7.0		15.0			
Dibromochloromethane	0.6834 0.9063	0.8134 0.8960	0.6687	0.7877	0.8691	Ave		0.8035				12.1		15.0			
Ethylene Dibromide	0.8548 0.9223	0.8633 0.8898	0.8661	0.9145	0.8968	Ave		0.8868				3.0		15.0			
1-Chlorohexane	2.4259 1.6782	2.1674 1.5715	1.8229	1.7232	1.6724	Lin2	0.4087	1.6537							0.9980		0.9900
Chlorobenzene	3.4061 3.0894	3.3293 2.8400	3.1216	3.1664	3.0843	Ave		3.1482			0.3000	5.8		15.0			
1,1,1,2-Tetrachloroethane	0.8884 1.0362	1.0133 0.9794	0.8514	0.9484	1.0028	Ave		0.9600				7.1		15.0			
Ethylbenzene	1.8343 1.8179	1.8997 1.6724	1.7207	1.7842	1.7983	Ave		1.7897				4.2		30.0			
m-Xylene & p-Xylene	2.3089 2.2221	2.3368 2.1016	2.1000	2.1965	2.2118	Ave		2.2111				4.1		15.0			
o-Xylene	2.1775 2.1722	2.2523 2.0021	2.1096	2.1608	2.1642	Ave		2.1484				3.6		15.0			
Styrene	3.2909 3.5713	3.5864 3.2407	3.2985	3.4667	3.5443	Ave		3.4284				4.3		15.0			
Bromoform	0.3153 0.5837	0.4890 0.5963	0.3893	0.4691	0.5335	Lin1	-0.193	0.5826			0.1000				0.9980		0.9900
Isopropylbenzene	3.7811 3.2819	3.7653 2.5514	3.4517	3.6078	3.4343	Ave		3.4105				12.3		15.0			
Cyclohexanone	0.0510 0.0455	0.0535 0.0418	0.0473	0.0490	0.0446	Ave		0.0475				8.4		15.0			
1,1,2,2-Tetrachloroethane	0.9094 0.8238	0.8722 0.7795	0.8005	0.8312	0.8111	Ave		0.8325			0.3000	5.3		15.0			
Bromobenzene	0.7555 0.7093	0.7327 0.6564	0.6949	0.7387	0.7123	Ave		0.7143				4.6		15.0			
trans-1,4-Dichloro-2-butene	0.2797 0.2722	0.2698 0.2693	0.2443	0.2473	0.2518	Ave		0.2621				5.3		15.0			
1,2,3-Trichloropropane	0.2596 0.2436	0.2401 0.2342	0.2230	0.2431	0.2370	Ave		0.2401				4.6		15.0			
N-Propylbenzene	0.9838 0.9683	1.0050 0.8805	0.9344	0.9999	0.9720	Ave		0.9634				4.5		15.0			
2-Chlorotoluene	0.8096 0.7864	0.8712 0.7192	0.7761	0.8128	0.7796	Ave		0.7936				5.8		15.0			
1,3,5-Trimethylbenzene	3.0124 2.7973	2.9639 2.3176	2.7637	2.9151	2.8607	Ave		2.8044				8.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	0.8649 0.8061	0.8240 0.7428	0.7948	0.8037	0.8041	Ave		0.8058				4.5		15.0			
tert-Butylbenzene	2.6539 2.4711	2.7401 2.1248	2.4799	2.5739	2.4939	Ave		2.5054				7.8		15.0			
1,2,4-Trimethylbenzene	2.9484 2.8150	2.9988 2.3240	2.8378	2.9307	2.8455	Ave		2.8143				8.0		15.0			
sec-Butylbenzene	0.8259 0.8100	0.8313 0.7333	0.7917	0.8098	0.8141	Ave		0.8023				4.1		15.0			
1,3-Dichlorobenzene	1.6349 1.4969	1.6208 1.3616	1.4922	1.5242	1.4832	Ave		1.5162				6.1		15.0			
4-Isopropyltoluene	3.4707 3.2200	3.5278 2.4902	3.3021	3.4356	3.3312	Ave		3.2540				10.8		15.0			
1,4-Dichlorobenzene	1.7388 1.5343	1.7317 1.3966	1.5437	1.5426	1.5187	Ave		1.5724				7.8		15.0			
n-Butylbenzene	3.3163 3.0633	3.3901 2.4195	3.1302	3.2006	3.1559	Ave		3.0966				10.3		15.0			
1,2-Dichlorobenzene	1.6781 1.4934	1.5916 1.3718	1.4710	1.5337	1.4853	Ave		1.5178				6.4		15.0			
1,2-Dibromo-3-Chloropropane	0.1280 0.1764	0.1709 0.1659	0.1583	0.1673	0.1719	Ave		0.1627				10.0		15.0			
1,2,4-Trichlorobenzene	1.0548 0.9025	1.0866 0.7866	1.0629	1.0382	0.9355	Ave		0.9810				11.2		15.0			
Hexachlorobutadiene	0.4896 0.3911	0.4691 0.3624	0.4601	0.4530	0.4217	Ave		0.4353				10.5		15.0			
Naphthalene	3.4071 2.4101	3.1869 1.9882	3.1216	2.9856	2.5304	Qua	0.6020	2.7806	-0.003969						1.0000		0.9900
1,2,3-Trichlorobenzene	1.0196 0.7219	0.9636 0.6175	0.8963	0.8780	0.7606	Lin1	0.3213	0.6699							0.9900		0.9900
Dibromofluoromethane (Surr)	0.2099 0.2132	0.2101 0.2140	0.2108	0.2124	0.2149	Ave		0.2122				0.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2676 0.2756	0.2676 0.2687	0.2710	0.2764	0.2729	Ave		0.2714				1.4		15.0			
Toluene-d8 (Surr)	4.1344 4.1845	4.1430 4.1374	4.1858	4.1674	4.1748	Ave		4.1611				0.5		15.0			
4-Bromofluorobenzene (Surr)	0.9346 0.9123	0.9340 0.8852	0.9435	0.9376	0.9176	Ave		0.9235				2.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-461853/8	g2_6454.D
Level 2	IC 280-461853/7	g2_6453.D
Level 3	IC 280-461853/6	g2_6452.D
Level 4	IC 280-461853/5	g2_6451.D
Level 5	ICIS 280-461853/4	g2_6450.D
Level 6	IC 280-461853/3	g2_6449.D
Level 7	IC 280-461853/2	g2_6448.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	16268 3100146	33362 5854371	65378	309835	1558979	0.500 100	1.00 200	2.00	10.0	50.0
Chloromethane	FB	Lin2	42142 3720772	61827 6960697	102489	408310	1869945	0.500 100	1.00 200	2.00	10.0	50.0
Vinyl chloride	FB	Lin2	+++++ 1620002	24257 2973176	39586	179851	837599	+++++ 100	1.00 200	2.00	10.0	50.0
Bromomethane	FB	Qua	12285 1007377	20371 +++++	29257	164126	630118	0.500 100	1.00 +++++	2.00	10.0	50.0
Chloroethane	FB	Qua	11990 1277232	21012 +++++	48382	194089	858924	0.500 100	1.00 +++++	2.00	10.0	50.0
Dichlorofluoromethane	FB	Lin2	29461 4306945	51230 7803264	88168	426833	2131063	0.500 100	1.00 200	2.00	10.0	50.0
Trichlorofluoromethane	FB	Ave	15894 3390356	31391 6314157	62240	324893	1681838	0.500 100	1.00 200	2.00	10.0	50.0
Ethyl ether	FB	Ave	8679 1873185	19137 3611981	35086	181041	906796	0.500 100	1.00 200	2.00	10.0	50.0
Acrolein	FB	Ave	17473 4814571	53822 9121592	79944	440832	2313968	4.94 988	9.88 1975	19.8	98.8	494
Acetone	FB	Lin2	22137 2625113	33684 5110203	60166	249204	1243578	2.00 400	4.00 800	8.00	40.0	200
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	7850 1581979	14786 3041747	28190	150227	785582	0.500 100	1.00 200	2.00	10.0	50.0
1,1-Dichloroethene	FB	Ave	11683 2031737	20612 3912718	39083	194586	1001693	0.500 100	1.00 200	2.00	10.0	50.0
Iodomethane	FB	Ave	14195 2868008	28347 5460788	54071	276759	1418204	0.500 100	1.00 200	2.00	10.0	50.0
Carbon disulfide	FB	Ave	38202 7127712	74955 13085912	129229	707456	3463956	0.500 100	1.00 200	2.00	10.0	50.0
Methyl acetate	FB	Ave	16215 3526731	27174 6732604	55863	326678	1677492	1.00 200	2.00 400	4.00	20.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	16547 3531040	29912 6723783	67125	328185	1710617	0.500 100	1.00 200	2.00	10.0	50.0
Methylene Chloride	FB	Ave	12862 2295203	25468 4447108	44320	227818	1133516	0.500 100	1.00 200	2.00	10.0	50.0
t-Butyl alcohol	FB	Ave	14186 2861552	29266 5679865	55362	280208	1354763	5.00 1000	10.0 2000	20.0	100	500
Acrylonitrile	FB	Ave	29626 8354099	69349 15032404	140705	780186	4038576	5.00 1000	10.0 2000	20.0	100	500
Methyl tert-butyl ether	FB	Ave	33245 6494253	66143 12466237	119838	636158	3139819	0.500 100	1.00 200	2.00	10.0	50.0
trans-1,2-Dichloroethene	FB	Ave	10464 2101432	20727 4018875	37250	197113	1018890	0.500 100	1.00 200	2.00	10.0	50.0
Hexane	CBNZ d5	Ave	20660 3691874	39299 7087236	63551	343231	1824464	0.500 100	1.00 200	2.00	10.0	50.0
Vinyl acetate	FB	Ave	41263 9144272	83739 15651053	157991	874120	4525034	1.00 200	2.00 400	4.00	20.0	100
1,1-Dichloroethane	FB	Ave	17973 3697047	37742 7019804	66994	361186	1822276	0.500 100	1.00 200	2.00	10.0	50.0
2-Butanone (MEK)	FB	Ave	17337 4267357	34359 8235854	67869	387719	2017623	2.00 400	4.00 800	8.00	40.0	200
cis-1,2-Dichloroethene	FB	Ave	10858 2250064	22349 4206167	41875	217546	1093687	0.500 100	1.00 200	2.00	10.0	50.0
2,2-Dichloropropane	FB	Ave	14822 2920819	29900 5626478	53453	275336	1430889	0.500 100	1.00 200	2.00	10.0	50.0
sec-Butyl Alcohol	FB	Ave	26698 5951170	54681 11753285	107446	549371	2773778	15.0 3000	30.0 6000	60.0	300	1500
Bromochloromethane	FB	Ave	4443 975021	9080 1888725	17091	93040	470609	0.500 100	1.00 200	2.00	10.0	50.0
Tetrahydrofuran	FB	Ave	7958 1502147	15645 2911525	25861	143195	713153	1.00 200	2.00 400	4.00	20.0	100
Chloroform	FB	Ave	16885 3379506	34747 6361375	62207	324555	1645035	0.500 100	1.00 200	2.00	10.0	50.0
1,1,1-Trichloroethane	FB	Ave	14468 2995108	29514 5809132	53555	281805	1458695	0.500 100	1.00 200	2.00	10.0	50.0
Cyclohexane	FB	Ave	23915 4526802	44483 8861186	87265	430292	2230457	0.500 100	1.00 200	2.00	10.0	50.0
1,1-Dichloropropene	FB	Ave	14574 3079186	29813 5900425	55121	292330	1507931	0.500 100	1.00 200	2.00	10.0	50.0
Carbon tetrachloride	FB	Ave	9806 2421046	20546 4767959	37308	212697	1161878	0.500 100	1.00 200	2.00	10.0	50.0
Isobutyl alcohol	FB	Lin1	7414 2165745	7768 4387290	26732	184198	1012554	12.5 2500	25.0 5000	50.0	250	1250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	48333 8868672	94102 15582011	176448	889399	4447943	0.500 100	1.00 200	2.00	10.0	50.0
1,2-Dichloroethane	FB	Ave	15552 2668590	30441 5230227	52540	261183	1293512	0.500 100	1.00 200	2.00	10.0	50.0
Trichloroethene	FB	Ave	11926 2099913	21875 4015074	38925	197215	1021919	0.500 100	1.00 200	2.00	10.0	50.0
2-Pentanone	FB	Ave	34366 6538115	52603 12334358	126711	599036	3094958	2.00 400	4.00 800	8.00	40.0	200
Methylcyclohexane	FB	Ave	17554 3330095	32331 6512120	62298	314865	1655104	0.500 100	1.00 200	2.00	10.0	50.0
1,2-Dichloropropane	FB	Lin2	18429 2255856	30896 4277950	45924	221026	1105700	0.500 100	1.00 200	2.00	10.0	50.0
1,4-Dioxane	FB	Ave	2221 483170	5184 963294	9124	50505	242728	10.0 2000	20.0 4000	40.0	200	1000
Dibromomethane	FB	Ave	6102 1138182	11742 2210041	20081	109074	542632	0.500 100	1.00 200	2.00	10.0	50.0
Bromodichloromethane	FB	Ave	11359 2513273	24119 4889940	41184	231912	1204368	0.500 100	1.00 200	2.00	10.0	50.0
2-Chloroethyl vinyl ether	FB	Ave	7330 1622852	14161 3152580	28983	150985	767979	0.500 100	1.00 200	2.00	10.0	50.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	16004 3549307	33109 6765181	61327	332847	1712941	0.500 100	1.00 200	2.00	10.0	50.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	45255 9402977	90865 16762016	169565	927467	4602345	2.00 400	4.00 800	8.00	40.0	200
Toluene	FB	Ave	48797 8671569	92135 15159863	169921	867348	4356861	0.500 100	1.00 200	2.00	10.0	50.0
trans-1,3-Dichloropropene	FB	Ave	13182 3057745	27429 5985157	51754	282703	1463047	0.500 100	1.00 200	2.00	10.0	50.0
Ethyl methacrylate	CBNZ d5	Ave	14151 3031825	31347 5987425	51632	284607	1455573	0.500 100	1.00 200	2.00	10.0	50.0
1,1,2-Trichloroethane	FB	Ave	8519 1701151	17325 3338523	31267	163469	821777	0.500 100	1.00 200	2.00	10.0	50.0
Tetrachloroethene	CBNZ d5	Ave	7153 1541436	15737 2968020	29057	147498	749598	0.500 100	1.00 200	2.00	10.0	50.0
1,3-Dichloropropane	CBNZ d5	Ave	14117 3165929	30680 6126118	58640	308053	1553587	0.500 100	1.00 200	2.00	10.0	50.0
2-Hexanone	CBNZ d5	Ave	26027 6573057	55942 12511632	109866	616188	3138431	2.00 400	4.00 800	8.00	40.0	200
Dibromochloromethane	CBNZ d5	Ave	5911 1615273	13863 3255038	22767	135445	765249	0.500 100	1.00 200	2.00	10.0	50.0
Ethylene Dibromide	CBNZ d5	Ave	7393 1643671	14715 3232771	29488	157249	789632	0.500 100	1.00 200	2.00	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1-Chlorohexane	CBNZ d5	Lin2	20982 2990897	36942 5709449	62061	296304	1472510	0.500 100	1.00 200	2.00	10.0	50.0
Chlorobenzene	CBNZ d5	Ave	29459 5506069	56745 10317697	106275	544457	2715666	0.500 100	1.00 200	2.00	10.0	50.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	7684 1846754	17270 3558054	28986	163074	882930	0.500 100	1.00 200	2.00	10.0	50.0
Ethylbenzene	CBNZ d5	Ave	15865 3239947	32379 6075727	58583	306790	1583365	0.500 100	1.00 200	2.00	10.0	50.0
m-Xylene & p-Xylene	CBNZ d5	Ave	19970 3960371	39828 7635122	71496	377683	1947390	0.500 100	1.00 200	2.00	10.0	50.0
o-Xylene	CBNZ d5	Ave	18833 3871315	38388 7273653	71823	371538	1905476	0.500 100	1.00 200	2.00	10.0	50.0
Styrene	CBNZ d5	Ave	28463 6364850	61127 11773559	112297	596084	3120630	0.500 100	1.00 200	2.00	10.0	50.0
Bromoform	CBNZ d5	Lin1	2727 1040234	8335 2166397	13255	80666	469696	0.500 100	1.00 200	2.00	10.0	50.0
Isopropylbenzene	DCBd 4	Ave	51446 9908081	102543 16531310	187703	996180	5010868	0.500 100	1.00 200	2.00	10.0	50.0
Cyclohexanone	CBNZ d5	Ave	17637 3245937	36502 6078170	64480	336801	1569215	20.0 4000	40.0 8000	80.0	400	2000
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	12373 2486908	23752 5050361	43529	229504	1183405	0.500 100	1.00 200	2.00	10.0	50.0
Bromobenzene	DCBd 4	Ave	10280 2141306	19955 4252732	37788	203961	1039344	0.500 100	1.00 200	2.00	10.0	50.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	3805 821843	7348 1745124	13285	68284	367320	0.500 100	1.00 200	2.00	10.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	3532 735441	6540 1517221	12128	67124	345864	0.500 100	1.00 200	2.00	10.0	50.0
N-Propylbenzene	DCBd 4	Ave	13386 2923376	27370 5704747	50812	276095	1418139	0.500 100	1.00 200	2.00	10.0	50.0
2-Chlorotoluene	DCBd 4	Ave	11015 2374180	23727 4659866	42206	224427	1137441	0.500 100	1.00 200	2.00	10.0	50.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	40987 8445142	80718 15016574	150288	804928	4173934	0.500 100	1.00 200	2.00	10.0	50.0
4-Chlorotoluene	DCBd 4	Ave	11768 2433755	22440 4812938	43219	221905	1173219	0.500 100	1.00 200	2.00	10.0	50.0
tert-Butylbenzene	DCBd 4	Ave	36110 7460099	74622 13766867	134858	710702	3638762	0.500 100	1.00 200	2.00	10.0	50.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	40117 8498340	81667 15057881	154317	809214	4151714	0.500 100	1.00 200	2.00	10.0	50.0
sec-Butylbenzene	DCBd 4	Ave	11237 2445488	22640 4751287	43053	223600	1187891	0.500 100	1.00 200	2.00	10.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 461853

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/17/2019 17:38 Calibration End Date: 06/17/2019 19:44 Calibration ID: 36837

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,3-Dichlorobenzene	DCBd 4	Ave	22245 4518995	44140 8822408	81143	420856	2164025	0.500 100	1.00 200	2.00	10.0	50.0
4-Isopropyltoluene	DCBd 4	Ave	47223 9721132	96074 16134872	179569	948641	4860460	0.500 100	1.00 200	2.00	10.0	50.0
1,4-Dichlorobenzene	DCBd 4	Ave	23659 4632046	47161 9048834	83946	425944	2215934	0.500 100	1.00 200	2.00	10.0	50.0
n-Butylbenzene	DCBd 4	Ave	45122 9247951	92324 15676638	170221	883758	4604656	0.500 100	1.00 200	2.00	10.0	50.0
1,2-Dichlorobenzene	DCBd 4	Ave	22832 4508667	43345 8887922	79995	423492	2167174	0.500 100	1.00 200	2.00	10.0	50.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1742 532443	4653 1074998	8607	46190	250816	0.500 100	1.00 200	2.00	10.0	50.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	14352 2724711	29591 5096578	57799	286657	1364962	0.500 100	1.00 200	2.00	10.0	50.0
Hexachlorobutadiene	DCBd 4	Ave	6662 1180720	12776 2348367	25022	125079	615259	0.500 100	1.00 200	2.00	10.0	50.0
Naphthalene	DCBd 4	Qua	46358 7276182	86790 12881815	169751	824397	3691947	0.500 100	1.00 200	2.00	10.0	50.0
1,2,3-Trichlorobenzene	DCBd 4	Lin1	13873 2179324	26241 4000850	48739	242444	1109787	0.500 100	1.00 200	2.00	10.0	50.0
Dibromofluoromethane (Surr)	FB	Ave	818403 873084	818963 881846	823605	840090	866867	50.0 50.0	50.0 50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	1043317 1128646	1043286 1107301	1058802	1093355	1100874	50.0 50.0	50.0 50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	3575863 3728915	3530721 3757791	3562709	3582916	3675811	50.0 50.0	50.0 50.0	50.0	50.0	50.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	1271588 1377063	1271862 1433792	1282733	1294390	1338879	50.0 50.0	50.0 50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6448.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 17-Jun-2019 17:38:30 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 11:43:30 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2905340	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4120602	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	89	908253	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1619813	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	93	881846	50.0	50.4	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	91	1107301	50.0	49.5	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3757791	50.0	49.7	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	86	1433792	50.0	47.9	
12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	5854371	200.0	179.2	
14 Chloromethane	50	1.886	1.886	0.000	99	6960697	200.0	182.4	
15 Vinyl chloride	62	1.886	1.886	0.000	98	2973176	200.0	180.9	
17 Bromomethane	94	2.152	2.152	0.000	92	1581229	200.0	NQ	
18 Chloroethane	64	2.193	2.193	0.000	99	1995286	200.0	NQ	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	98	7803264	200.0	184.5	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	98	6314157	200.0	189.3	
22 Ethyl ether	59	2.557	2.557	0.000	90	3611981	200.0	192.5	
24 Acrolein	56	2.654	2.668	-0.014	100	9121592	1975.0	1950.7	
27 Acetone	43	2.766	2.766	0.000	100	5110203	800.0	797.5	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	97	3912718	200.0	185.3	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	84	3041747	200.0	193.7	
28 Iodomethane	142	2.892	2.892	0.000	98	5460788	200.0	188.8	
30 Carbon disulfide	76	2.976	2.976	0.000	72	13085912	200.0	179.7	
32 Methyl acetate	43	2.976	2.976	0.000	97	6732604	400.0	410.0	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	87	6723783	200.0	195.9	
35 Methylene Chloride	84	3.129	3.129	0.000	92	4447108	200.0	183.4	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	99	5679865	2000.0	1947.3	
39 Acrylonitrile	53	3.255	3.255	0.000	97	15032404	2000.0	1973.8	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	96	12466237	200.0	189.1	
40 trans-1,2-Dichloroethene	96	3.283	3.297	-0.014	98	4018875	200.0	192.3	
42 Hexane	57	3.478	3.478	0.000	92	7087236	200.0	186.4	a
46 Vinyl acetate	43	3.576	3.576	0.000	98	15651053	400.0	357.6	e
45 1,1-Dichloroethane	63	3.590	3.604	-0.014	96	7019804	200.0	188.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	8235854	800.0	840.1	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	82	4206167	200.0	187.1	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	89	5626478	200.0	190.7	
55 sec-Butyl Alcohol	45	4.107	4.093	0.014	99	11753285	6000.0	6117.9	
56 Chlorobromomethane	128	4.177	4.177	0.000	97	1888725	200.0	198.6	
57 Tetrahydrofuran	42	4.191	4.191	0.000	86	2911525	400.0	384.0	
59 Chloroform	83	4.233	4.233	0.000	94	6361375	200.0	186.7	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	99	5809132	200.0	195.2	
61 Cyclohexane	56	4.428	4.428	0.000	90	8861186	200.0	191.5	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	96	5900425	200.0	193.8	
62 Carbon tetrachloride	117	4.484	4.498	-0.014	95	4767959	200.0	213.7	
66 Isobutyl alcohol	41	4.526	4.512	0.014	94	4387290	5000.0	5059.4	
64 Benzene	78	4.638	4.638	0.000	98	15582011	200.0	169.0	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	5230227	200.0	183.6	
67 n-Heptane	43	4.819	4.819	0.000	90	7042190	200.0	190.7	
69 Trichloroethene	95	5.112	5.126	-0.014	98	4015074	200.0	185.5	
70 2-Pentanone	43	5.224	5.224	0.000	98	12334358	800.0	770.6	
71 Methylcyclohexane	55	5.308	5.308	0.000	91	6512120	200.0	192.5	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	95	4277950	200.0	194.3	
74 1,4-Dioxane	88	5.378	5.378	0.000	93	963294	4000.0	3866.0	
75 Dibromomethane	93	5.392	5.392	0.000	94	2210041	200.0	191.3	
76 Dichlorobromomethane	83	5.517	5.517	0.000	99	4889940	200.0	201.7	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	3152580	200.0	202.0	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	96	6765181	200.0	195.6	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	92	16762016	800.0	721.8	
82 Toluene	91	6.149	6.149	0.000	96	15159863	200.0	167.8	e
83 trans-1,3-Dichloropropene	75	6.328	6.328	0.000	96	5985157	200.0	205.2	
84 Ethyl methacrylate	69	6.357	6.357	0.000	89	5987425	200.0	198.1	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	91	3338523	200.0	194.0	
86 Tetrachloroethene	164	6.585	6.585	0.000	95	2968020	200.0	190.8	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	90	6126118	200.0	193.9	
88 2-Hexanone	43	6.671	6.671	0.000	94	12511632	800.0	810.4	
89 Chlorodibromomethane	129	6.836	6.836	0.000	91	3255038	200.0	223.0	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	3232771	200.0	200.7	
91 1-Chlorohexane	91	7.343	7.343	0.000	99	5709449	200.0	189.8	
92 Chlorobenzene	112	7.379	7.379	0.000	92	10317697	200.0	180.4	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	96	3558054	200.0	204.0	
94 Ethylbenzene	106	7.451	7.458	-0.007	97	6075727	200.0	186.9	e
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	96	7635122	200.0	190.1	
96 o-Xylene	106	7.930	7.930	0.000	95	7273653	200.0	186.4	
97 Styrene	104	7.944	7.944	0.000	94	11773559	200.0	189.1	
98 Bromoform	173	8.123	8.123	0.000	95	2166397	200.0	205.0	
99 Isopropylbenzene	105	8.266	8.266	0.000	97	16531310	200.0	149.6	e
100 Cyclohexanone	55	8.366	8.366	0.000	92	6078170	8000.0	7039.1	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	5050361	200.0	187.3	
103 Bromobenzene	156	8.580	8.580	0.000	96	4252732	200.0	183.8	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	91	1745124	200.0	205.6	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	82	1517221	200.0	195.1	
106 N-Propylbenzene	120	8.659	8.659	0.000	94	5704747	200.0	182.8	e
107 2-Chlorotoluene	126	8.752	8.752	0.000	96	4659866	200.0	181.3	a
108 1,3,5-Trimethylbenzene	105	8.831	8.831	0.000	97	15016574	200.0	165.3	e
109 4-Chlorotoluene	126	8.873	8.873	0.000	96	4812938	200.0	184.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	93	13766867	200.0	169.6	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	96	15057881	200.0	165.2	e
112 sec-Butylbenzene	134	9.353	9.353	0.000	95	4751287	200.0	182.8	
113 1,3-Dichlorobenzene	146	9.481	9.474	0.007	96	8822408	200.0	179.6	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	98	16134872	200.0	153.1	e
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	94	9048834	200.0	177.6	
117 n-Butylbenzene	91	9.896	9.903	-0.007	94	15676638	200.0	156.3	e
118 1,2-Dichlorobenzene	146	9.925	9.925	0.000	95	8887922	200.0	180.7	
119 1,2-Dibromo-3-Chloropropan	157	10.697	10.697	0.000	84	1074998	200.0	204.0	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	5096578	200.0	160.4	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	98	2348367	200.0	166.5	
123 Naphthalene	128	11.776	11.776	0.000	98	12881815	200.0	199.7	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	4000850	200.0	183.9	
S 137 1,2-Dichloroethene, Total	96				0		400.0	379.5	
S 139 Total BTEX	1				0			900.1	
S 143 Xylenes, Total	106				0		400.0	376.5	
S 144 1,2-Dichloroethene, Total	1				0		400.0	379.5	
S 138 Xylenes, Total (URS)	1				0		400.0	376.5	
S 142 Trihalomethanes, Total	1				0		800.0	816.5	
S 140 1,3-Dichloropropene, Total	1				0		400.0	400.8	

QC Flag Legend

Processing Flags
- NQ - Not Quantifiable
- e - Potential Peak Saturated

Review Flags
- a - User Assigned ID

Reagents:

MV-MegaMainA_00015	Amount Added: 200.00	Units: uL	
MV-Gas A_00028	Amount Added: 200.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added: 5.00	Units: uL	Run Reagent

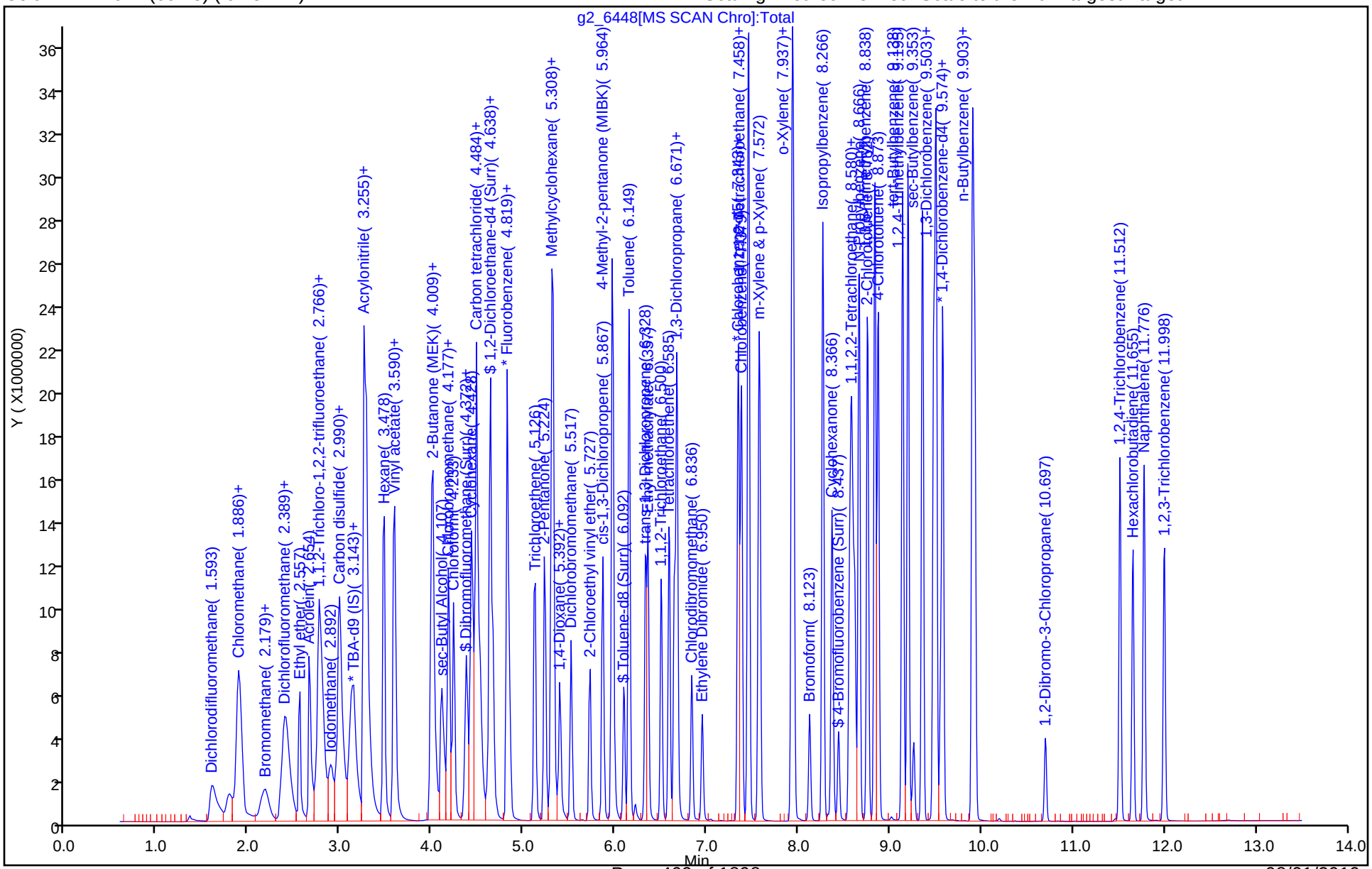
Report Date: 21-Jun-2019 11:43:33 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6448.D

Injection Date:	17-Jun-2019 17:38:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	ic			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

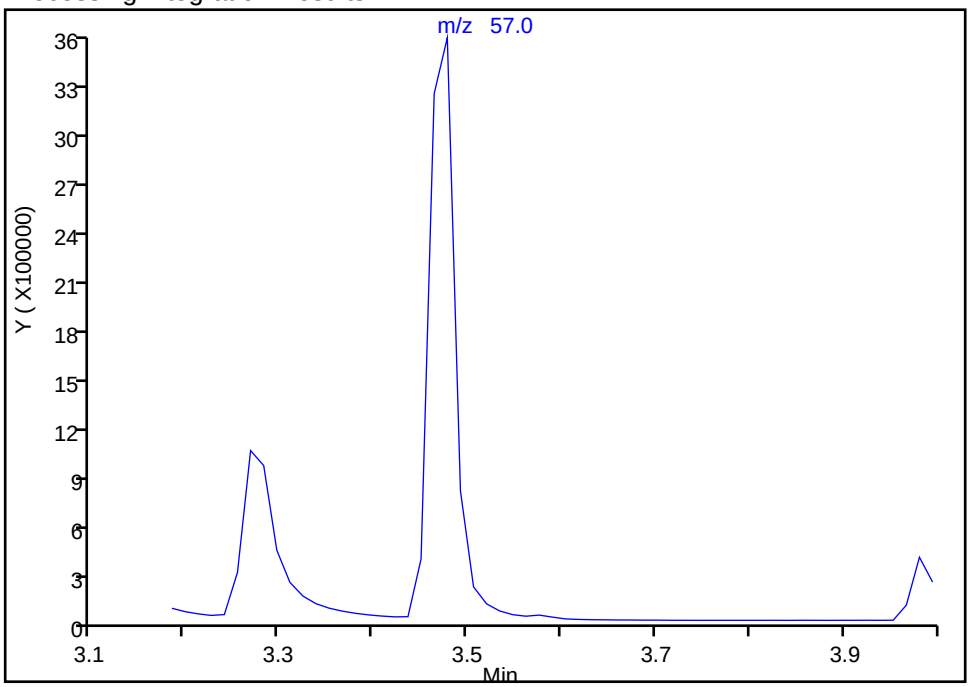
Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6448.D
Injection Date: 17-Jun-2019 17:38:30 Instrument ID: VMS_G2
Lims ID: ic
Client ID:
Operator ID: MEIERG ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

42 Hexane, CAS: 110-54-3

Signal: 1

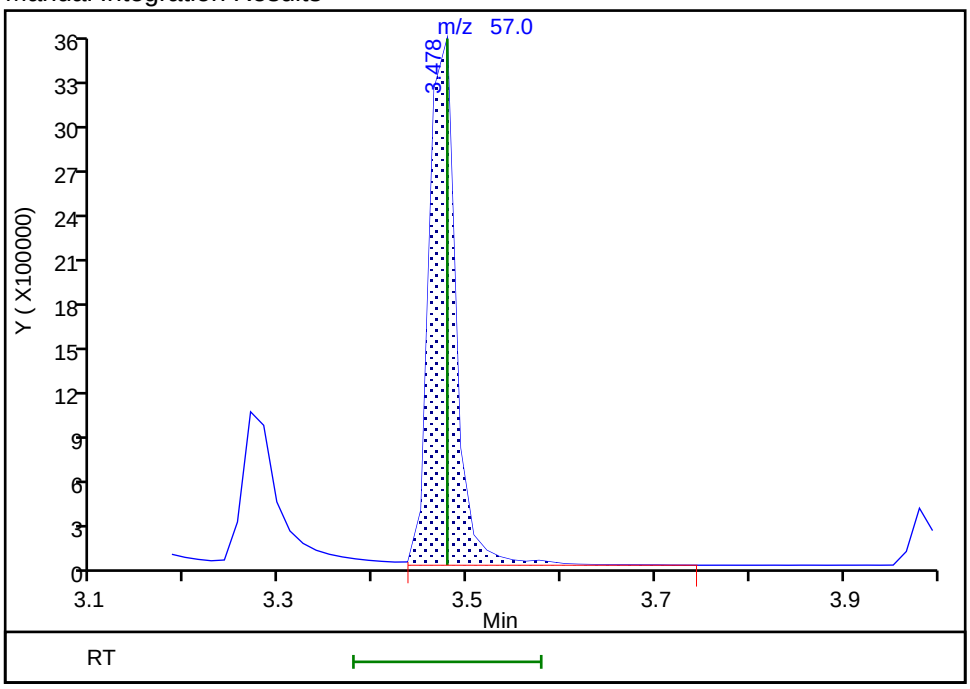
Not Detected
Expected RT: 3.48

Processing Integration Results



Manual Integration Results

RT: 3.48
Area: 7087236
Amount: 186.4025
Amount Units: ug/l



Reviewer: meierg, 17-Jun-2019 19:35:53
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

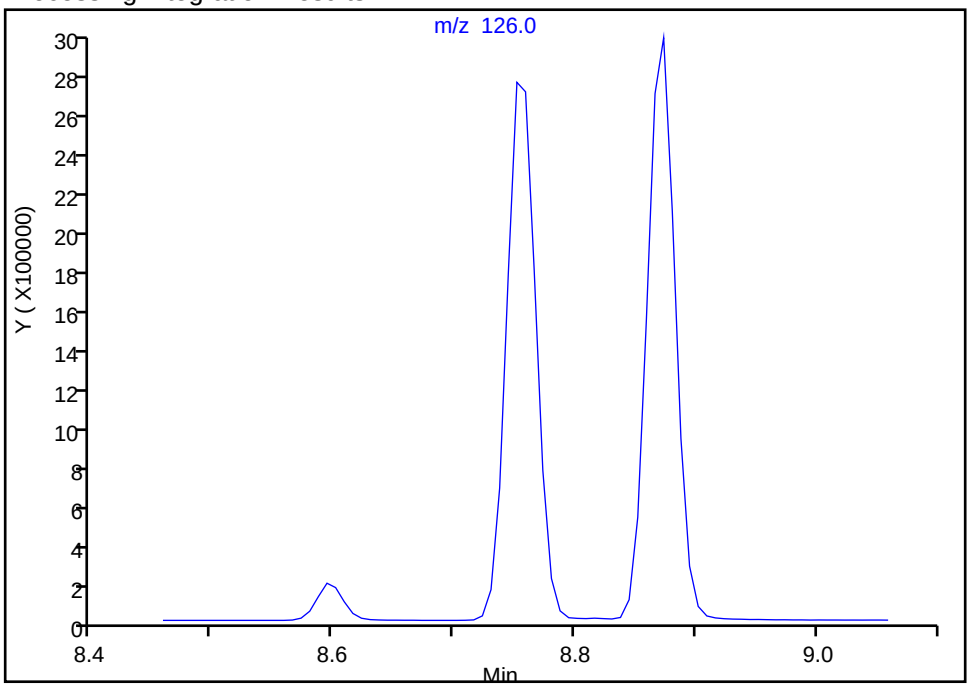
Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6448.D
Injection Date: 17-Jun-2019 17:38:30 Instrument ID: VMS_G2
Lims ID: ic
Client ID:
Operator ID: MEIERG ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

107 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

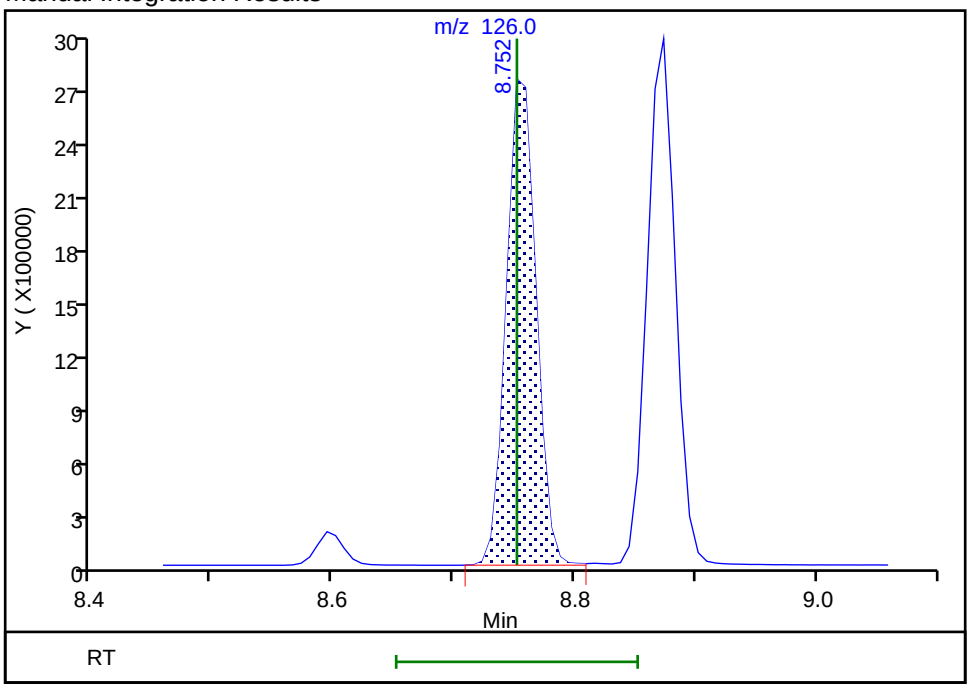
Not Detected
Expected RT: 8.75

Processing Integration Results



Manual Integration Results

RT: 8.75
Area: 4659866
Amount: 181.2591
Amount Units: ug/l



Reviewer: meierg, 17-Jun-2019 19:36:11
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6449.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 17-Jun-2019 17:59:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 11:43:47 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	3.087	3.087	0.000	93	2893441	1000.0	1000.0	
*	2 Fluorobenzene	96	4.847	4.847	0.000	99	4095956	50.0	50.0	
*	3 Chlorobenzene-d5	119	7.351	7.350	0.000	87	891116	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	96	1509494	50.0	50.0	
$	6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	93	873084	50.0	50.2	
$	7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	95	1128646	50.0	50.8	
$	8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3728915	50.0	50.3	
$	9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	86	1377063	50.0	49.4	
	12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	3100146	100.0	95.5	
	14 Chloromethane	50	1.886	1.886	0.000	99	3720772	100.0	97.7	
	15 Vinyl chloride	62	1.886	1.886	0.000	50	1620002	100.0	98.9	
	17 Bromomethane	94	2.152	2.152	0.000	92	1007377	100.0	100.2	
	18 Chloroethane	64	2.193	2.193	0.000	99	1277232	100.0	99.8	
	19 Dichlorofluoromethane	67	2.389	2.389	0.000	98	4306945	100.0	102.3	
	20 Trichlorofluoromethane	101	2.417	2.417	0.000	98	3390356	100.0	102.3	
	22 Ethyl ether	59	2.557	2.557	0.000	90	1873185	100.0	100.4	
	24 Acrolein	56	2.654	2.668	-0.014	99	4814571	987.5	1035.8	
	27 Acetone	43	2.766	2.766	0.000	100	2625113	400.0	411.3	
	25 1,1-Dichloroethene	96	2.780	2.780	0.000	97	2031737	100.0	96.8	
	26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	84	1581979	100.0	101.4	
	28 Iodomethane	142	2.892	2.892	0.000	97	2868008	100.0	99.8	
	30 Carbon disulfide	76	2.976	2.976	0.000	100	7127712	100.0	98.5	
	32 Methyl acetate	43	2.976	2.976	0.000	97	3526731	200.0	216.0	
	33 3-Chloro-1-propene	41	3.004	3.003	0.001	88	3531040	100.0	103.5	
	35 Methylene Chloride	84	3.115	3.129	-0.014	93	2295203	100.0	95.2	
	37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	2861552	1000.0	987.0	
	39 Acrylonitrile	53	3.255	3.255	0.000	99	8354099	1000.0	1103.5	
	41 Methyl tert-butyl ether	73	3.269	3.269	0.000	97	6494253	100.0	99.1	
	40 trans-1,2-Dichloroethene	96	3.283	3.297	-0.014	99	2101432	100.0	101.2	
	42 Hexane	57	3.478	3.478	0.000	91	3691874	100.0	99.0	
	46 Vinyl acetate	43	3.576	3.576	0.000	97	9144272	200.0	210.2	
	45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	3697047	100.0	100.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	4267357	400.0	437.9	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	82	2250064	100.0	100.7	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	90	2920819	100.0	99.6	
55 sec-Butyl Alcohol	45	4.093	4.093	0.000	98	5951170	3000.0	3116.4	
56 Chlorobromomethane	128	4.177	4.177	0.000	98	975021	100.0	103.2	
57 Tetrahydrofuran	42	4.191	4.191	0.000	87	1502147	200.0	199.3	
59 Chloroform	83	4.233	4.233	0.001	94	3379506	100.0	99.8	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	99	2995108	100.0	101.2	
61 Cyclohexane	56	4.428	4.428	0.000	90	4526802	100.0	98.4	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	97	3079186	100.0	101.7	
62 Carbon tetrachloride	117	4.484	4.498	-0.014	96	2421046	100.0	109.1	
66 Isobutyl alcohol	41	4.512	4.512	0.000	94	2165745	2500.0	2517.4	
64 Benzene	78	4.638	4.638	0.000	96	8868672	100.0	96.8	
65 1,2-Dichloroethane	62	4.666	4.665	0.001	97	2668590	100.0	94.2	
67 n-Heptane	43	4.819	4.819	0.000	91	3717817	100.0	101.3	
69 Trichloroethene	95	5.126	5.126	0.000	98	2099913	100.0	97.6	
70 2-Pentanone	43	5.224	5.224	0.000	98	6538115	400.0	411.0	
71 Methylcyclohexane	55	5.308	5.308	0.000	90	3330095	100.0	99.0	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	95	2255856	100.0	102.9	
74 1,4-Dioxane	88	5.378	5.378	0.000	91	483170	2000.0	1950.8	
75 Dibromomethane	93	5.392	5.392	0.000	94	1138182	100.0	99.1	
76 Dichlorobromomethane	83	5.517	5.517	0.000	99	2513273	100.0	104.3	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	1622852	100.0	104.6	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	95	3549307	100.0	104.6	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	96	9402977	400.0	407.4	
82 Toluene	91	6.149	6.149	0.000	99	8671569	100.0	96.5	
83 trans-1,3-Dichloropropene	75	6.328	6.328	0.000	95	3057745	100.0	105.5	
84 Ethyl methacrylate	69	6.357	6.357	0.000	89	3031825	100.0	102.2	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	91	1701151	100.0	99.5	
86 Tetrachloroethene	164	6.585	6.585	0.000	96	1541436	100.0	101.0	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	88	3165929	100.0	102.1	
88 2-Hexanone	43	6.671	6.671	0.000	95	6573057	400.0	433.9	
89 Chlorodibromomethane	129	6.836	6.836	0.000	91	1615273	100.0	112.8	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	1643671	100.0	104.0	
91 1-Chlorohexane	91	7.343	7.343	0.000	99	2990897	100.0	101.2	
92 Chlorobenzene	112	7.379	7.379	0.000	94	5506069	100.0	98.1	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	96	1846754	100.0	107.9	
94 Ethylbenzene	106	7.458	7.458	0.000	98	3239947	100.0	101.6	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	3960371	100.0	100.5	
96 o-Xylene	106	7.930	7.930	0.000	96	3871315	100.0	101.1	
97 Styrene	104	7.944	7.944	0.000	95	6364850	100.0	104.2	
98 Bromoform	173	8.123	8.123	0.000	95	1040234	100.0	100.5	
99 Isopropylbenzene	105	8.266	8.266	0.000	96	9908081	100.0	96.2	
100 Cyclohexanone	55	8.366	8.366	0.000	93	3245937	4000.0	3831.4	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	2486908	100.0	99.0	
103 Bromobenzene	156	8.580	8.580	0.000	96	2141306	100.0	99.3	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	81	821843	100.0	103.9	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	82	735441	100.0	101.5	
106 N-Propylbenzene	120	8.659	8.659	0.000	98	2923376	100.0	100.5	
107 2-Chlorotoluene	126	8.752	8.752	0.000	96	2374180	100.0	99.1	
108 1,3,5-Trimethylbenzene	105	8.831	8.831	0.000	95	8445142	100.0	99.7	
109 4-Chlorotoluene	126	8.874	8.873	0.001	97	2433755	100.0	100.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	94	7460099	100.0	98.6	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	97	8498340	100.0	100.0	
112 sec-Butylbenzene	134	9.353	9.353	0.000	95	2445488	100.0	101.0	
113 1,3-Dichlorobenzene	146	9.474	9.474	0.000	97	4518995	100.0	98.7	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	96	9721132	100.0	99.0	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	93	4632046	100.0	97.6	
117 n-Butylbenzene	91	9.903	9.903	0.000	97	9247951	100.0	98.9	
118 1,2-Dichlorobenzene	146	9.925	9.925	0.000	96	4508667	100.0	98.4	
119 1,2-Dibromo-3-Chloropropan	157	10.697	10.697	0.000	83	532443	100.0	108.4	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	2724711	100.0	92.0	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	98	1180720	100.0	89.8	
123 Naphthalene	128	11.777	11.776	0.000	97	7276182	100.0	101.0	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	2179324	100.0	107.3	
S 137 1,2-Dichloroethene, Total	96				0		200.0	201.9	
S 140 1,3-Dichloropropene, Total	1				0		200.0	210.0	
S 142 Trihalomethanes, Total	1				0		400.0	417.4	
S 138 Xylenes, Total (URS)	1				0		200.0	201.6	
S 144 1,2-Dichloroethene, Total	1				0		200.0	201.9	
S 143 Xylenes, Total	106				0		200.0	201.6	
S 139 Total BTEX	1				0			496.5	

Reagents:

MV-MegaMainA_00015	Amount Added: 100.00	Units: uL	
MV-Gas A_00028	Amount Added: 100.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added: 5.00	Units: uL	Run Reagent

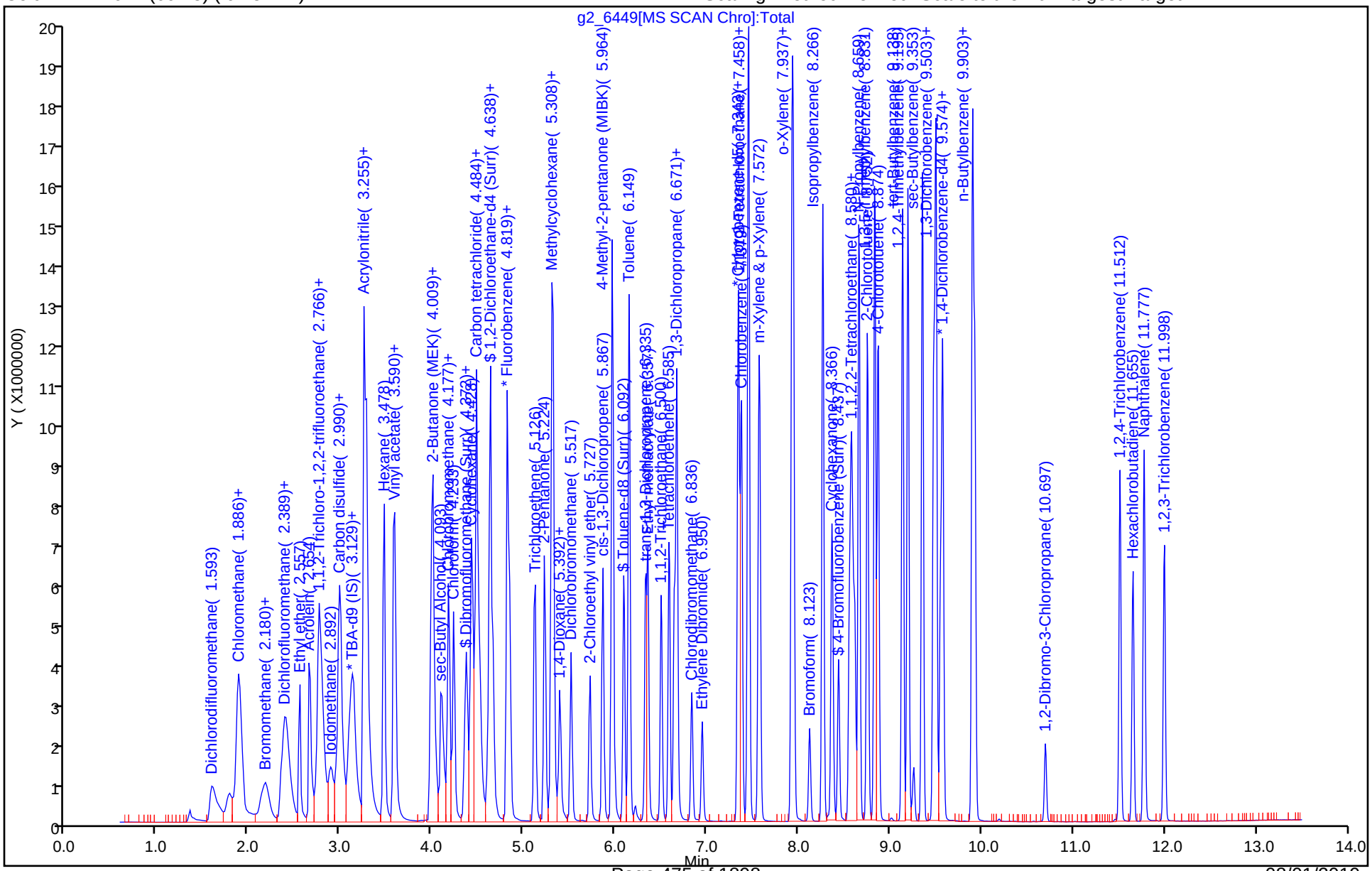
Report Date: 21-Jun-2019 11:43:51 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6449.D

Injection Date:	17-Jun-2019 17:59:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6450.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 17-Jun-2019 18:20:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 11:44:03 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	3.087	3.087	0.000	89	2780251	1000.0	1000.0	
*	2 Fluorobenzene	96	4.847	4.847	0.000	99	4033468	50.0	50.0	
*	3 Chlorobenzene-d5	119	7.350	7.350	0.000	87	880472	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1459058	50.0	50.0	
$	6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	866867	50.0	50.6	
$	7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	96	1100874	50.0	50.3	
$	8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3675811	50.0	50.2	
$	9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	87	1338879	50.0	49.7	
	12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	1558979	50.0	48.7	
	14 Chloromethane	50	1.886	1.886	0.000	98	1869945	50.0	49.5	
	15 Vinyl chloride	62	1.886	1.886	0.000	86	837599	50.0	51.7	
	17 Bromomethane	94	2.152	2.152	0.000	91	630118	50.0	49.6	
	18 Chloroethane	64	2.193	2.193	0.000	99	858924	50.0	50.2	
	19 Dichlorofluoromethane	67	2.389	2.389	0.000	98	2131063	50.0	51.3	
	20 Trichlorofluoromethane	101	2.417	2.417	0.000	98	1681838	50.0	51.5	
	22 Ethyl ether	59	2.557	2.557	0.000	90	906796	50.0	49.4	
	24 Acrolein	56	2.668	2.668	0.000	99	2313968	493.8	505.5	
	27 Acetone	43	2.766	2.766	0.000	100	1243578	200.0	197.0	
	25 1,1-Dichloroethene	96	2.780	2.780	0.000	97	1001693	50.0	48.5	
	26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	63	785582	50.0	51.1	
	28 Iodomethane	142	2.892	2.892	0.000	97	1418204	50.0	50.1	
	30 Carbon disulfide	76	2.976	2.976	0.000	100	3463956	50.0	48.6	
	32 Methyl acetate	43	2.976	2.976	0.000	97	1677492	100.0	104.4	
	33 3-Chloro-1-propene	41	3.003	3.003	0.000	89	1710617	50.0	50.9	
	35 Methylene Chloride	84	3.129	3.129	0.000	93	1133516	50.0	47.8	
	37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	1354763	500.0	474.5	
	39 Acrylonitrile	53	3.255	3.255	0.000	99	4038576	500.0	541.7	
	41 Methyl tert-butyl ether	73	3.269	3.269	0.000	96	3139819	50.0	48.7	
	40 trans-1,2-Dichloroethene	96	3.297	3.297	0.000	99	1018890	50.0	49.8	
	42 Hexane	57	3.478	3.478	0.000	91	1824464	50.0	49.5	
	46 Vinyl acetate	43	3.576	3.576	0.000	97	4525034	100.0	105.6	
	45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	1822276	50.0	50.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	2017623	200.0	210.3	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	82	1093687	50.0	49.7	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	89	1430889	50.0	49.5	
55 sec-Butyl Alcohol	45	4.093	4.093	0.000	99	2773778	1500.0	1475.0	
56 Chlorobromomethane	128	4.177	4.177	0.000	97	470609	50.0	50.6	
57 Tetrahydrofuran	42	4.191	4.191	0.000	87	713153	100.0	96.1	
59 Chloroform	83	4.233	4.233	0.000	95	1645035	50.0	49.3	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	99	1458695	50.0	50.1	
61 Cyclohexane	56	4.428	4.428	0.000	89	2230457	50.0	49.3	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	98	1507931	50.0	50.6	
62 Carbon tetrachloride	117	4.498	4.498	0.000	96	1161878	50.0	53.2	
66 Isobutyl alcohol	41	4.512	4.512	0.000	95	1012554	1250.0	1200.3	
64 Benzene	78	4.638	4.638	0.000	95	4447943	50.0	49.3	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	1293512	50.0	46.4	
67 n-Heptane	43	4.819	4.819	0.000	91	1853168	50.0	51.3	
69 Trichloroethene	95	5.126	5.126	0.000	98	1021919	50.0	48.2	
70 2-Pentanone	43	5.224	5.224	0.000	99	3094958	200.0	197.5	
71 Methylcyclohexane	55	5.308	5.308	0.000	91	1655104	50.0	50.0	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	96	1105700	50.0	51.0	
74 1,4-Dioxane	88	5.378	5.378	0.000	90	242728	1000.0	995.2	
75 Dibromomethane	93	5.392	5.392	0.000	94	542632	50.0	48.0	
76 Dichlorobromomethane	83	5.517	5.517	0.000	99	1204368	50.0	50.7	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	767979	50.0	50.3	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	95	1712941	50.0	51.1	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	96	4602345	200.0	202.5	
82 Toluene	91	6.149	6.149	0.000	99	4356861	50.0	49.3	
83 trans-1,3-Dichloropropene	75	6.328	6.328	0.000	95	1463047	50.0	51.2	
84 Ethyl methacrylate	69	6.357	6.357	0.000	89	1455573	50.0	49.7	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	91	821777	50.0	48.8	
86 Tetrachloroethene	164	6.585	6.585	0.000	96	749598	50.0	49.7	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	91	1553587	50.0	50.7	
88 2-Hexanone	43	6.671	6.671	0.000	96	3138431	200.0	209.7	
89 Chlorodibromomethane	129	6.836	6.836	0.000	90	765249	50.0	54.1	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	789632	50.0	50.6	
91 1-Chlorohexane	91	7.343	7.343	0.000	99	1472510	50.0	50.3	
92 Chlorobenzene	112	7.379	7.379	0.000	95	2715666	50.0	49.0	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	95	882930	50.0	52.2	
94 Ethylbenzene	106	7.458	7.458	0.000	98	1583365	50.0	50.2	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	1947390	50.0	50.0	
96 o-Xylene	106	7.930	7.930	0.000	94	1905476	50.0	50.4	
97 Styrene	104	7.944	7.944	0.000	95	3120630	50.0	51.7	
98 Bromoform	173	8.123	8.123	0.000	95	469696	50.0	46.1	
99 Isopropylbenzene	105	8.266	8.266	0.000	96	5010868	50.0	50.3	
100 Cyclohexanone	55	8.366	8.366	0.000	93	1569215	2000.0	1874.6	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	1183405	50.0	48.7	
103 Bromobenzene	156	8.580	8.580	0.000	96	1039344	50.0	49.9	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	92	367320	50.0	48.0	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	82	345864	50.0	49.4	
106 N-Propylbenzene	120	8.659	8.659	0.000	99	1418139	50.0	50.4	
107 2-Chlorotoluene	126	8.752	8.752	0.000	96	1137441	50.0	49.1	
108 1,3,5-Trimethylbenzene	105	8.831	8.831	0.000	95	4173934	50.0	51.0	
109 4-Chlorotoluene	126	8.873	8.873	0.000	97	1173219	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	94	3638762	50.0	49.8	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	97	4151714	50.0	50.6	
112 sec-Butylbenzene	134	9.353	9.353	0.000	94	1187891	50.0	50.7	
113 1,3-Dichlorobenzene	146	9.474	9.474	0.000	98	2164025	50.0	48.9	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	4860460	50.0	51.2	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	95	2215934	50.0	48.3	
117 n-Butylbenzene	91	9.903	9.903	0.000	98	4604656	50.0	51.0	
118 1,2-Dichlorobenzene	146	9.925	9.925	0.000	97	2167174	50.0	48.9	
119 1,2-Dibromo-3-Chloropropan	157	10.697	10.697	0.000	82	250816	50.0	52.8	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	1364962	50.0	47.7	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	98	615259	50.0	48.4	
123 Naphthalene	128	11.776	11.776	0.000	97	3691947	50.0	48.7	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	1109787	50.0	56.3	
S 137 1,2-Dichloroethene, Total	96				0		100.0	99.5	
S 143 Xylenes, Total	106				0		100.0	100.4	
S 144 1,2-Dichloroethene, Total	1				0		100.0	99.5	
S 138 Xylenes, Total (URS)	1				0		100.0	100.4	
S 142 Trihalomethanes, Total	1				0		200.0	200.3	
S 140 1,3-Dichloropropene, Total	1				0		100.0	102.3	

Reagents:

MV-MegaMainA_00015	Amount Added: 50.00	Units: uL	
MV-Gas A_00028	Amount Added: 50.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added: 5.00	Units: uL	Run Reagent

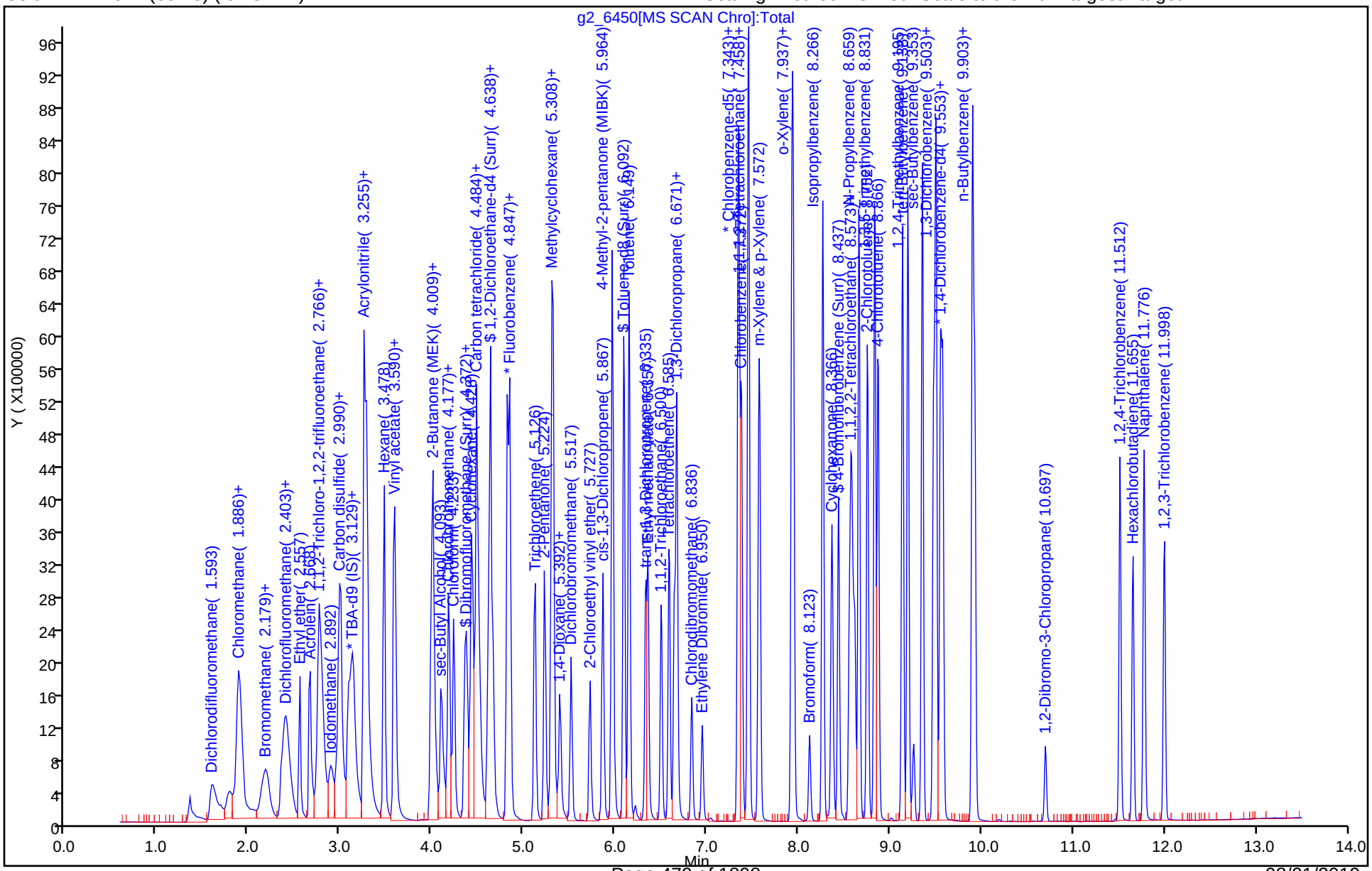
Report Date: 21-Jun-2019 11:44:07 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6450.D

Injection Date:	17-Jun-2019 18:20:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	icis			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6451.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 17-Jun-2019 18:41:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 11:44:20 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	98	2822094	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	3955216	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	87	859740	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	96	1380602	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	93	840090	50.0	50.1	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.609	4.610	-0.001	98	1093355	50.0	50.9	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3582916	50.0	50.1	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	86	1294390	50.0	50.8	
12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	309835	10.0	9.88	
14 Chloromethane	50	1.886	1.886	0.000	99	408310	10.0	10.5	
15 Vinyl chloride	62	1.886	1.886	0.000	50	179851	10.0	10.9	
17 Bromomethane	94	2.151	2.152	-0.001	90	164126	10.0	10.9	
18 Chloroethane	64	2.193	2.193	0.000	99	194089	10.0	9.50	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	98	426833	10.0	10.3	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	98	324893	10.0	10.1	
22 Ethyl ether	59	2.556	2.557	-0.001	90	181041	10.0	10.1	
24 Acrolein	56	2.668	2.668	0.000	100	440832	98.8	98.2	
27 Acetone	43	2.766	2.766	0.000	100	249204	40.0	38.9	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	98	194586	10.0	9.60	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	62	150227	10.0	9.97	
28 Iodomethane	142	2.892	2.892	0.000	97	276759	10.0	9.97	
30 Carbon disulfide	76	2.975	2.976	-0.001	100	707456	10.0	10.1	
32 Methyl acetate	43	2.989	2.976	0.013	97	326678	20.0	20.7	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	88	328185	10.0	9.96	
35 Methylene Chloride	84	3.129	3.129	0.000	92	227818	10.0	9.79	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	99	280208	100.0	100.1	
39 Acrylonitrile	53	3.255	3.255	0.000	99	780186	100.0	106.7	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	95	636158	10.0	10.1	
40 trans-1,2-Dichloroethene	96	3.297	3.297	0.000	98	197113	10.0	9.83	
42 Hexane	57	3.478	3.478	0.000	91	343231	10.0	9.54	
46 Vinyl acetate	43	3.590	3.576	0.014	97	874120	20.0	20.8	
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	361186	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.981	3.981	0.000	100	387719	40.0	41.2	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	83	217546	10.0	10.1	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	90	275336	10.0	9.72	
55 sec-Butyl Alcohol	45	4.107	4.093	0.014	99	549371	300.0	297.9	
56 Chlorobromomethane	128	4.177	4.177	0.000	97	93040	10.0	10.2	
57 Tetrahydrofuran	42	4.191	4.191	-0.001	88	143195	20.0	19.7	
59 Chloroform	83	4.232	4.233	0.000	94	324555	10.0	9.93	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	98	281805	10.0	9.86	
61 Cyclohexane	56	4.428	4.428	0.000	89	430292	10.0	9.69	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	97	292330	10.0	10.0	
62 Carbon tetrachloride	117	4.498	4.498	0.000	94	212697	10.0	9.93	
66 Isobutyl alcohol	41	4.512	4.512	0.000	95	184198	250.0	230.5	
64 Benzene	78	4.637	4.638	-0.001	95	889399	10.0	10.1	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	261183	10.0	9.55	
67 n-Heptane	43	4.819	4.819	0.000	92	345107	10.0	9.73	
69 Trichloroethene	95	5.126	5.126	0.000	98	197215	10.0	9.49	
70 2-Pentanone	43	5.224	5.224	0.000	99	599036	40.0	39.0	
71 Methylcyclohexane	55	5.308	5.308	0.000	91	314865	10.0	9.70	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	93	221026	10.0	10.1	
74 1,4-Dioxane	88	5.378	5.378	0.000	40	50505	200.0	211.2	
75 Dibromomethane	93	5.392	5.392	0.000	95	109074	10.0	9.84	
76 Dichlorobromomethane	83	5.517	5.517	0.000	99	231912	10.0	9.96	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	150985	10.0	10.1	
79 cis-1,3-Dichloropropene	75	5.866	5.867	-0.001	96	332847	10.0	10.2	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	97	927467	40.0	41.6	
82 Toluene	91	6.149	6.149	0.000	98	867348	10.0	10.0	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	95	282703	10.0	10.1	
84 Ethyl methacrylate	69	6.356	6.357	-0.001	89	284607	10.0	9.95	
85 1,1,2-Trichloroethane	97	6.499	6.500	-0.001	91	163469	10.0	9.90	
86 Tetrachloroethene	164	6.585	6.585	0.000	96	147498	10.0	10.0	
87 1,3-Dichloropropane	76	6.650	6.643	0.007	89	308053	10.0	10.3	
88 2-Hexanone	43	6.671	6.671	0.000	97	616188	40.0	42.2	
89 Chlorodibromomethane	129	6.836	6.836	0.000	92	135445	10.0	9.80	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	157249	10.0	10.3	
91 1-Chlorohexane	91	7.343	7.343	0.000	98	296304	10.0	10.2	
92 Chlorobenzene	112	7.379	7.379	0.000	98	544457	10.0	10.1	
93 1,1,1,2-Tetrachloroethane	131	7.450	7.451	-0.001	95	163074	10.0	9.88	
94 Ethylbenzene	106	7.458	7.458	0.000	98	306790	10.0	9.97	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	99	377683	10.0	9.93	
96 o-Xylene	106	7.930	7.930	0.000	96	371538	10.0	10.1	
97 Styrene	104	7.944	7.944	0.000	95	596084	10.0	10.1	
98 Bromoform	173	8.123	8.123	0.000	96	80666	10.0	8.38	
99 Isopropylbenzene	105	8.266	8.266	0.000	96	996180	10.0	10.6	
100 Cyclohexanone	55	8.366	8.366	0.000	93	336801	400.0	412.1	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	229504	10.0	9.98	
103 Bromobenzene	156	8.580	8.580	0.000	96	203961	10.0	10.3	
105 trans-1,4-Dichloro-2-buten	53	8.594	8.595	-0.001	79	68284	10.0	9.44	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	84	67124	10.0	10.1	
106 N-Propylbenzene	120	8.659	8.659	0.000	99	276095	10.0	10.4	
107 2-Chlorotoluene	126	8.759	8.752	0.007	96	224427	10.0	10.2	
108 1,3,5-Trimethylbenzene	105	8.838	8.831	0.007	95	804928	10.0	10.4	
109 4-Chlorotoluene	126	8.873	8.873	0.000	97	221905	10.0	9.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	93	710702	10.0	10.3	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	97	809214	10.0	10.4	
112 sec-Butylbenzene	134	9.352	9.353	-0.001	94	223600	10.0	10.1	
113 1,3-Dichlorobenzene	146	9.481	9.474	0.007	97	420856	10.0	10.1	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	948641	10.0	10.6	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	96	425944	10.0	9.81	
117 n-Butylbenzene	91	9.903	9.903	0.000	98	883758	10.0	10.3	
118 1,2-Dichlorobenzene	146	9.924	9.925	-0.001	97	423492	10.0	10.1	
119 1,2-Dibromo-3-Chloropropan	157	10.697	10.697	0.000	81	46190	10.0	10.3	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	286657	10.0	10.6	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	97	125079	10.0	10.4	
123 Naphthalene	128	11.776	11.776	0.000	97	824397	10.0	10.7	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	94	242444	10.0	12.6	
S 137 1,2-Dichloroethene, Total	96				0		20.0	19.9	
S 140 1,3-Dichloropropene, Total	1				0		20.0	20.3	
S 142 Trihalomethanes, Total	1				0		40.0	38.1	
S 138 Xylenes, Total (URS)	1				0		20.0	20.0	
S 144 1,2-Dichloroethene, Total	1				0		20.0	19.9	
S 143 Xylenes, Total	106				0		20.0	20.0	
S 139 Total BTEX	1				0			50.0	

Reagents:

MV-MegaMainA_00015	Amount Added:	10.00	Units: uL	
MV-Gas A_00028	Amount Added:	10.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added:	5.00	Units: uL	Run Reagent

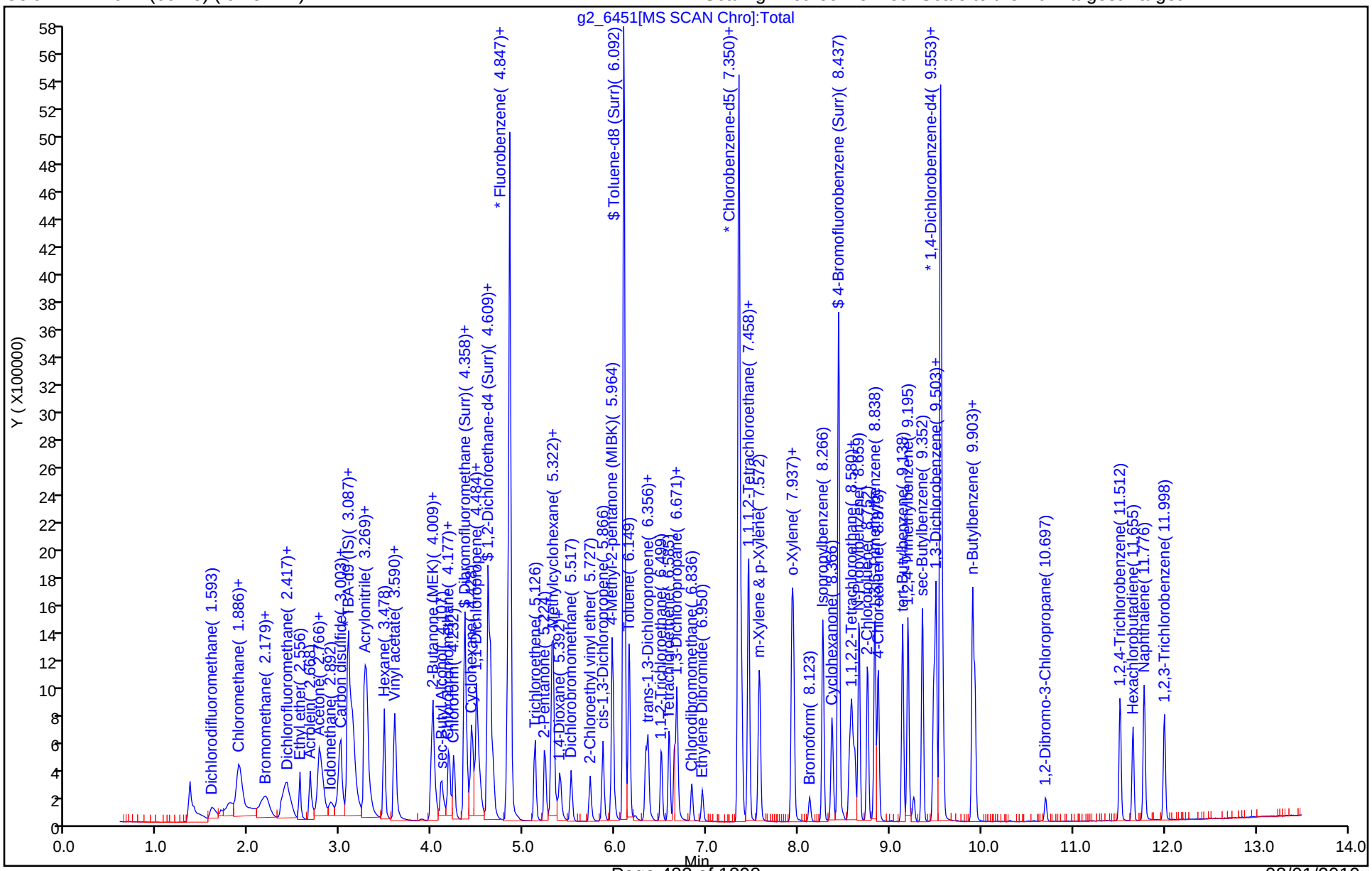
Report Date: 21-Jun-2019 11:44:23 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6451.D

Injection Date:	17-Jun-2019 18:41:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6452.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 17-Jun-2019 19:02:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 11:44:34 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	85	2814667	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	3907702	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	87	851133	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	96	1359497	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	93	823605	50.0	49.7	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.609	4.610	-0.001	97	1058802	50.0	49.9	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3562709	50.0	50.3	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	87	1282733	50.0	51.1	
12 Dichlorodifluoromethane	85	1.607	1.593	0.014	98	65378	2.00	2.11	
14 Chloromethane	50	1.886	1.886	0.000	96	102489	2.00	2.15	
15 Vinyl chloride	62	1.886	1.886	0.000	49	39586	2.00	1.98	
17 Bromomethane	94	2.151	2.152	-0.001	94	29257	2.00	1.53	
18 Chloroethane	64	2.193	2.193	0.000	98	48382	2.00	2.31	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	98	88168	2.00	1.96	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	94	62240	2.00	1.97	
22 Ethyl ether	59	2.556	2.557	-0.001	89	35086	2.00	1.97	
24 Acrolein	56	2.668	2.668	0.000	99	79944	19.8	18.0	
27 Acetone	43	2.766	2.766	0.000	99	60166	8.00	8.27	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	98	39083	2.00	1.95	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	64	28190	2.00	1.89	
28 Iodomethane	142	2.892	2.892	0.000	97	54071	2.00	1.97	
30 Carbon disulfide	76	2.975	2.976	-0.001	91	129229	2.00	1.87	
32 Methyl acetate	43	2.989	2.976	0.013	97	55863	4.00	3.59	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	90	67125	2.00	2.06	
35 Methylene Chloride	84	3.115	3.129	-0.014	94	44320	2.00	1.93	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	99	55362	20.0	20.0	
39 Acrylonitrile	53	3.269	3.255	0.014	100	140705	20.0	19.5	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	96	119838	2.00	1.92	
40 trans-1,2-Dichloroethene	96	3.297	3.297	0.000	99	37250	2.00	1.88	
42 Hexane	57	3.478	3.478	0.000	91	63551	2.00	1.78	
46 Vinyl acetate	43	3.590	3.576	0.014	97	157991	4.00	3.81	
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	66994	2.00	1.90	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.995	3.981	0.014	99	67869	8.00	7.30	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	83	41875	2.00	1.96	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	90	53453	2.00	1.91	
55 sec-Butyl Alcohol	45	4.107	4.093	0.014	99	107446	60.0	59.0	
56 Chlorobromomethane	128	4.176	4.177	-0.001	97	17091	2.00	1.90	
57 Tetrahydrofuran	42	4.190	4.191	-0.001	87	25861	4.00	3.60	
59 Chloroform	83	4.232	4.233	0.000	95	62207	2.00	1.93	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	98	53555	2.00	1.90	
61 Cyclohexane	56	4.428	4.428	0.000	87	87265	2.00	1.99	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	96	55121	2.00	1.91	
62 Carbon tetrachloride	117	4.498	4.498	0.000	94	37308	2.00	1.76	
66 Isobutyl alcohol	41	4.526	4.512	0.014	92	26732	50.0	42.1	
64 Benzene	78	4.637	4.638	-0.001	91	176448	2.00	2.02	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	52540	2.00	1.94	
67 n-Heptane	43	4.819	4.819	0.000	92	66190	2.00	1.89	
69 Trichloroethene	95	5.126	5.126	0.000	98	38925	2.00	1.90	
70 2-Pentanone	43	5.238	5.224	0.014	98	126711	8.00	8.35	
71 Methylcyclohexane	55	5.308	5.308	0.000	90	62298	2.00	1.94	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	78	45924	2.00	1.81	
74 1,4-Dioxane	88	5.378	5.378	0.000	33	9124	40.0	38.6	
75 Dibromomethane	93	5.392	5.392	0.000	95	20081	2.00	1.83	
76 Dichlorobromomethane	83	5.517	5.517	0.000	98	41184	2.00	1.79	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	90	28983	2.00	1.96	
79 cis-1,3-Dichloropropene	75	5.866	5.867	-0.001	95	61327	2.00	1.89	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	96	169565	8.00	7.70	
82 Toluene	91	6.149	6.149	0.000	98	169921	2.00	1.98	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	94	51754	2.00	1.87	
84 Ethyl methacrylate	69	6.356	6.357	-0.001	90	51632	2.00	1.82	
85 1,1,2-Trichloroethane	97	6.507	6.500	0.007	91	31267	2.00	1.92	
86 Tetrachloroethene	164	6.592	6.585	0.007	97	29057	2.00	1.99	
87 1,3-Dichloropropane	76	6.650	6.643	0.007	93	58640	2.00	1.98	
88 2-Hexanone	43	6.671	6.671	0.000	96	109866	8.00	7.59	
89 Chlorodibromomethane	129	6.835	6.836	-0.001	91	22767	2.00	1.66	
90 Ethylene Dibromide	107	6.950	6.950	0.000	98	29488	2.00	1.95	
91 1-Chlorohexane	91	7.343	7.343	0.000	96	62061	2.00	1.96	
92 Chlorobenzene	112	7.379	7.379	0.000	97	106275	2.00	1.98	
93 1,1,1,2-Tetrachloroethane	131	7.450	7.451	-0.001	93	28986	2.00	1.77	
94 Ethylbenzene	106	7.458	7.458	0.000	98	58583	2.00	1.92	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	99	71496	2.00	1.90	
96 o-Xylene	106	7.929	7.930	-0.001	95	71823	2.00	1.96	
97 Styrene	104	7.951	7.944	0.007	96	112297	2.00	1.92	
98 Bromoform	173	8.123	8.123	0.000	92	13255	2.00	1.67	
99 Isopropylbenzene	105	8.266	8.266	0.000	96	187703	2.00	2.02	
100 Cyclohexanone	55	8.366	8.366	0.000	93	64480	80.0	79.7	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	43529	2.00	1.92	
103 Bromobenzene	156	8.580	8.580	0.000	97	37788	2.00	1.95	
105 trans-1,4-Dichloro-2-buten	53	8.602	8.595	0.007	74	13285	2.00	1.86	
104 1,2,3-Trichloropropane	110	8.623	8.616	0.007	85	12128	2.00	1.86	
106 N-Propylbenzene	120	8.659	8.659	0.000	99	50812	2.00	1.94	
107 2-Chlorotoluene	126	8.759	8.752	0.007	96	42206	2.00	1.96	
108 1,3,5-Trimethylbenzene	105	8.838	8.831	0.007	95	150288	2.00	1.97	
109 4-Chlorotoluene	126	8.873	8.873	0.000	97	43219	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	93	134858	2.00	1.98	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	97	154317	2.00	2.02	
112 sec-Butylbenzene	134	9.360	9.353	0.007	94	43053	2.00	1.97	
113 1,3-Dichlorobenzene	146	9.481	9.474	0.007	97	81143	2.00	1.97	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	98	179569	2.00	2.03	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	95	83946	2.00	1.96	
117 n-Butylbenzene	91	9.903	9.903	0.000	98	170221	2.00	2.02	
118 1,2-Dichlorobenzene	146	9.924	9.925	-0.001	97	79995	2.00	1.94	
119 1,2-Dibromo-3-Chloropropan	157	10.704	10.697	0.007	79	8607	2.00	1.95	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	92	57799	2.00	2.17	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	97	25022	2.00	2.11	
123 Naphthalene	128	11.776	11.776	0.000	97	169751	2.00	2.03	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	48739	2.00	2.20	
S 137 1,2-Dichloroethene, Total	96				0		4.00	3.84	
S 139 Total BTEX	1				0			9.79	
S 143 Xylenes, Total	106				0		4.00	3.86	
S 144 1,2-Dichloroethene, Total	1				0		4.00	3.84	
S 138 Xylenes, Total (URS)	1				0		4.00	3.86	
S 142 Trihalomethanes, Total	1				0		8.00	7.05	
S 140 1,3-Dichloropropene, Total	1				0		4.00	3.76	

Reagents:

MV-MegaMainA_00015	Amount Added:	2.00	Units: uL		
MV-Gas A_00028	Amount Added:	2.00	Units: uL		
mv-Cent IS/SS_00002	Amount Added:	5.00	Units: uL	Run Reagent	

Report Date: 21-Jun-2019 11:44:37 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6452.D

Injection Date: 17-Jun-2019 19:02:30 Instrument ID: VMS_G2 Operator ID: MEIERG

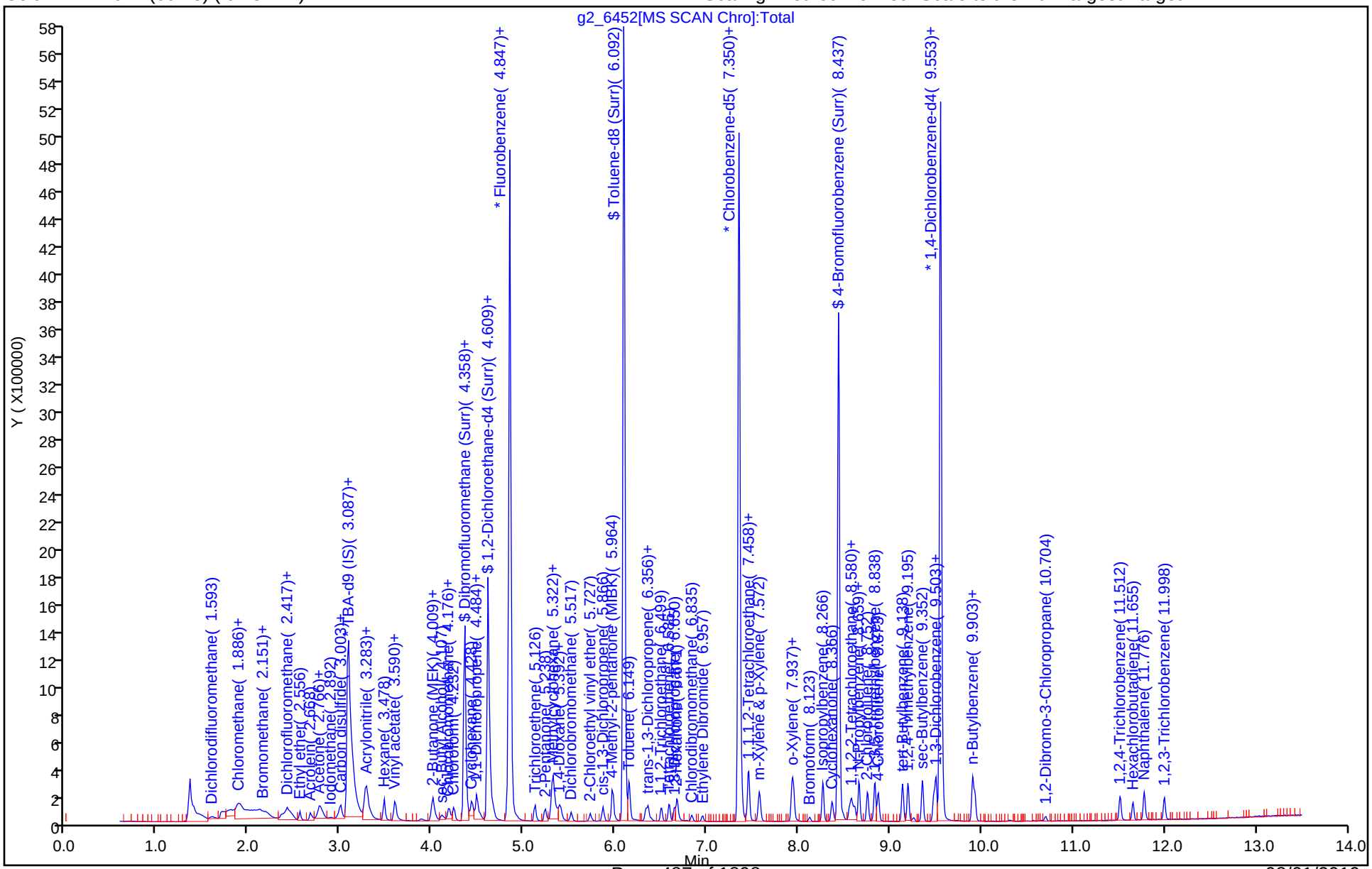
Lims ID: ic Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6453.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 17-Jun-2019 19:23:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 11:44:47 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	82	2764504	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	3897965	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	86	852207	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	96	1361669	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	93	818963	50.0	49.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	97	1043286	50.0	49.3	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3530721	50.0	49.8	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	87	1271862	50.0	50.6	
12 Dichlorodifluoromethane	85	1.607	1.593	0.014	97	33362	1.00	1.08	
14 Chloromethane	50	1.788	1.886	-0.098	93	61827	1.00	1.03	
15 Vinyl chloride	62	1.900	1.886	0.014	48	24257	1.00	1.00	
17 Bromomethane	94	2.151	2.152	-0.001	87	20371	1.00	0.9274	
18 Chloroethane	64	2.193	2.193	0.000	99	21012	1.00	0.9883	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	96	51230	1.00	1.04	
20 Trichlorofluoromethane	101	2.431	2.417	0.014	56	31391	1.00	0.99	
22 Ethyl ether	59	2.556	2.557	-0.001	91	19137	1.00	1.08	
24 Acrolein	56	2.668	2.668	0.000	97	53822	9.88	12.2	
27 Acetone	43	2.766	2.766	0.000	99	33684	4.00	3.92	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	88	20612	1.00	1.03	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	58	14786	1.00	1.00	
28 Iodomethane	142	2.892	2.892	0.000	98	28347	1.00	1.04	
30 Carbon disulfide	76	2.975	2.976	-0.001	90	74955	1.00	1.09	
32 Methyl acetate	43	2.989	2.976	0.013	98	27174	2.00	1.75	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	81	29912	1.00	0.9212	
35 Methylene Chloride	84	3.129	3.129	0.000	88	25468	1.00	1.11	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	79	29266	10.0	10.6	
39 Acrylonitrile	53	3.269	3.255	0.014	95	69349	10.0	9.63	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	97	66143	1.00	1.06	
40 trans-1,2-Dichloroethene	96	3.297	3.297	0.000	98	20727	1.00	1.05	
42 Hexane	57	3.478	3.478	0.000	91	39299	1.00	1.10	
46 Vinyl acetate	43	3.590	3.576	0.014	97	83739	2.00	2.02	
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	37742	1.00	1.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.995	3.981	0.014	100	34359	4.00	3.71	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	82	22349	1.00	1.05	
50 2,2-Dichloropropane	77	4.023	4.009	0.014	87	29900	1.00	1.07	
55 sec-Butyl Alcohol	45	4.107	4.093	0.014	98	54681	30.0	30.1	
56 Chlorobromomethane	128	4.177	4.177	0.000	97	9080	1.00	1.01	
57 Tetrahydrofuran	42	4.191	4.191	0.000	89	15645	2.00	2.18	
59 Chloroform	83	4.232	4.233	0.000	94	34747	1.00	1.08	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	98	29514	1.00	1.05	
61 Cyclohexane	56	4.428	4.428	0.000	87	44483	1.00	1.02	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	96	29813	1.00	1.04	
62 Carbon tetrachloride	117	4.498	4.498	0.000	91	20546	1.00	0.9733	
66 Isobutyl alcohol	41	4.526	4.512	0.014	93	7768	25.0	19.1	
64 Benzene	78	4.637	4.638	-0.001	95	94102	1.00	1.08	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	30441	1.00	1.13	
67 n-Heptane	43	4.819	4.819	0.000	89	36422	1.00	1.04	
69 Trichloroethene	95	5.126	5.126	0.000	97	21875	1.00	1.07	
70 2-Pentanone	43	5.238	5.224	0.014	98	52603	4.00	3.47	
71 Methylcyclohexane	55	5.308	5.308	0.000	90	32331	1.00	1.01	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	88	30896	1.00	1.09	
74 1,4-Dioxane	88	5.392	5.378	0.014	35	5184	20.0	22.0	
75 Dibromomethane	93	5.392	5.392	0.000	94	11742	1.00	1.07	
76 Dichlorobromomethane	83	5.517	5.517	0.000	98	24119	1.00	1.05	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	91	14161	1.00	0.9591	
79 cis-1,3-Dichloropropene	75	5.866	5.867	-0.001	95	33109	1.00	1.02	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	96	90865	4.00	4.14	
82 Toluene	91	6.149	6.149	0.000	98	92135	1.00	1.08	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	97	27429	1.00	0.99	
84 Ethyl methacrylate	69	6.356	6.357	-0.001	88	31347	1.00	1.11	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	89	17325	1.00	1.06	
86 Tetrachloroethene	164	6.592	6.585	0.007	96	15737	1.00	1.08	
87 1,3-Dichloropropane	76	6.650	6.643	0.007	93	30680	1.00	1.04	
88 2-Hexanone	43	6.678	6.671	0.007	95	55942	4.00	3.86	
89 Chlorodibromomethane	129	6.836	6.836	0.000	89	13863	1.00	1.01	
90 Ethylene Dibromide	107	6.950	6.950	0.000	97	14715	1.00	0.9735	
91 1-Chlorohexane	91	7.343	7.343	0.000	95	36942	1.00	1.06	
92 Chlorobenzene	112	7.379	7.379	0.000	94	56745	1.00	1.06	
93 1,1,1,2-Tetrachloroethane	131	7.450	7.451	-0.001	92	17270	1.00	1.06	
94 Ethylbenzene	106	7.458	7.458	0.000	99	32379	1.00	1.06	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	39828	1.00	1.06	
96 o-Xylene	106	7.930	7.930	0.000	96	38388	1.00	1.05	
97 Styrene	104	7.944	7.944	0.000	95	61127	1.00	1.05	
98 Bromoform	173	8.123	8.123	0.000	92	8335	1.00	1.17	
99 Isopropylbenzene	105	8.266	8.266	0.000	96	102543	1.00	1.10	
100 Cyclohexanone	55	8.366	8.366	0.000	92	36502	40.0	45.1	
102 1,1,2,2-Tetrachloroethane	83	8.552	8.559	-0.007	93	23752	1.00	1.05	
103 Bromobenzene	156	8.580	8.580	0.000	96	19955	1.00	1.03	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	70	7348	1.00	1.03	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	85	6540	1.00	1.00	
106 N-Propylbenzene	120	8.659	8.659	0.000	99	27370	1.00	1.04	
107 2-Chlorotoluene	126	8.759	8.752	0.007	97	23727	1.00	1.10	
108 1,3,5-Trimethylbenzene	105	8.838	8.831	0.007	95	80718	1.00	1.06	
109 4-Chlorotoluene	126	8.873	8.873	0.000	96	22440	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	93	74622	1.00	1.09	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	97	81667	1.00	1.07	
112 sec-Butylbenzene	134	9.360	9.353	0.007	94	22640	1.00	1.04	
113 1,3-Dichlorobenzene	146	9.481	9.474	0.007	97	44140	1.00	1.07	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	98	96074	1.00	1.08	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	97	47161	1.00	1.10	
117 n-Butylbenzene	91	9.903	9.903	0.000	98	92324	1.00	1.09	
118 1,2-Dichlorobenzene	146	9.932	9.925	0.007	97	43345	1.00	1.05	
119 1,2-Dibromo-3-Chloropropan	157	10.697	10.697	0.000	78	4653	1.00	1.05	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	93	29591	1.00	1.11	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	94	12776	1.00	1.08	
123 Naphthalene	128	11.776	11.776	0.000	97	86790	1.00	0.9309	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	94	26241	1.00	0.9587	
S 137 1,2-Dichloroethene, Total	96				0		2.00	2.10	
S 140 1,3-Dichloropropene, Total	1				0		2.00	2.01	
S 142 Trihalomethanes, Total	1				0		4.00	4.31	
S 138 Xylenes, Total (URS)	1				0		2.00	2.11	
S 144 1,2-Dichloroethene, Total	1				0		2.00	2.10	
S 143 Xylenes, Total	106				0		2.00	2.11	
S 139 Total BTEX	1				0			5.32	

Reagents:

MV-MegaMainA_00015	Amount Added:	1.00	Units: uL	
MV-Gas A_00028	Amount Added:	1.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added:	5.00	Units: uL	Run Reagent

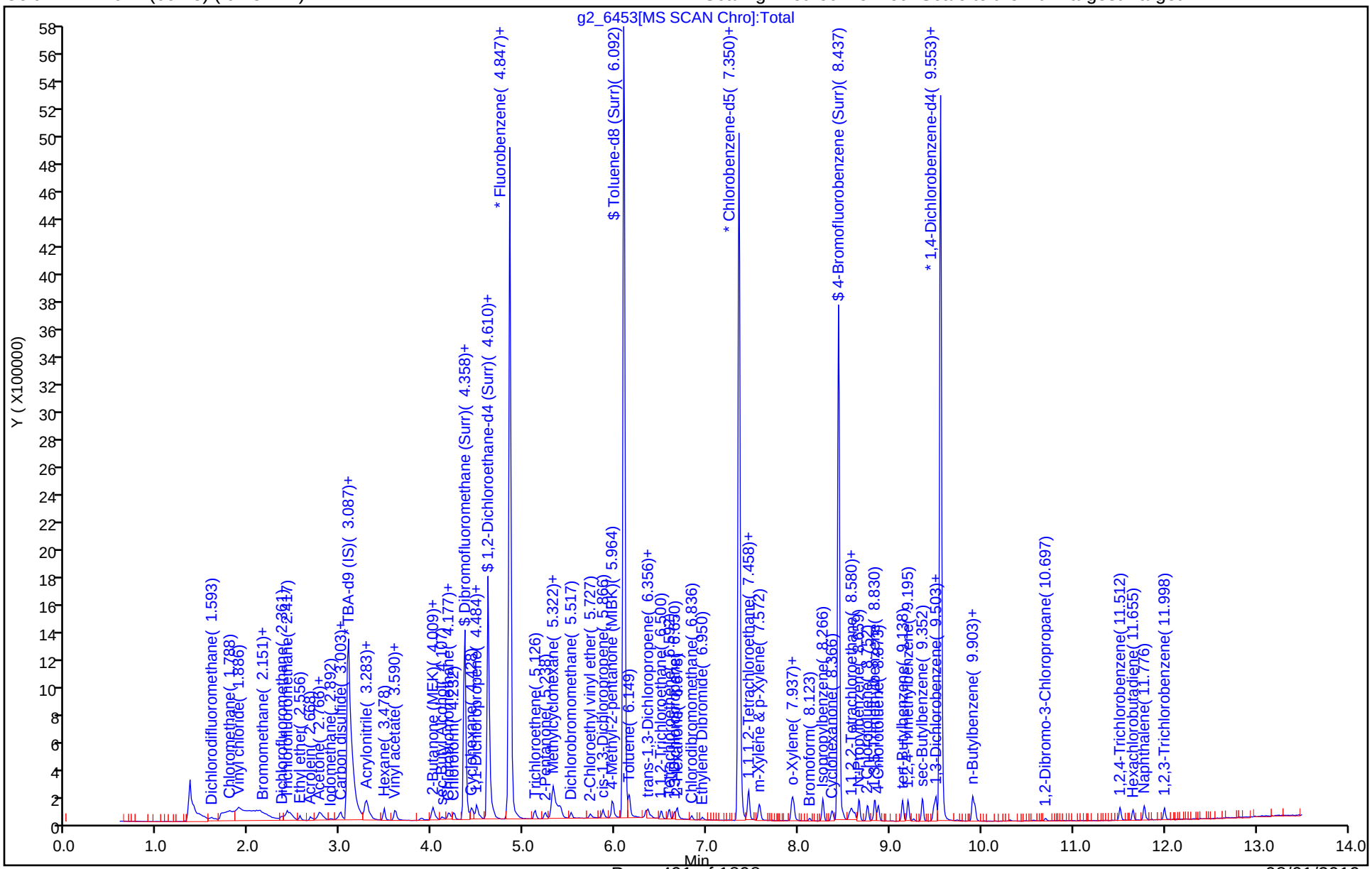
Report Date: 21-Jun-2019 11:44:50 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6453.D

Injection Date:	17-Jun-2019 19:23:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 17-Jun-2019 19:44:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 11:45:00 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2791649	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	3898521	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.351	7.350	0.000	86	864902	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	96	1360623	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	93	818403	50.0	49.5	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	97	1043317	50.0	49.3	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3575863	50.0	49.7	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	88	1271588	50.0	50.6	
12 Dichlorodifluoromethane	85	1.593	1.593	0.000	96	16268	0.5000	0.5262	
14 Chloromethane	50	1.788	1.886	-0.098	95	42142	0.5000	0.4821	
15 Vinyl chloride	62	1.900	1.886	0.014	49	15746	0.5000	0.4471	
17 Bromomethane	94	2.152	2.152	0.000	83	12285	0.5000	0.3761	
18 Chloroethane	64	2.193	2.193	0.000	95	11990	0.5000	0.5540	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	96	29461	0.5000	0.4926	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	54	15894	0.5000	0.5036	
22 Ethyl ether	59	2.557	2.557	0.000	87	8679	0.5000	0.4888	
24 Acrolein	56	2.668	2.668	0.000	98	17473	4.94	3.95	
27 Acetone	43	2.766	2.766	0.000	99	22137	2.00	2.01	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	75	11683	0.5000	0.5847	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	53	7850	0.5000	0.5284	
28 Iodomethane	142	2.892	2.892	0.000	95	14195	0.5000	0.5188	
30 Carbon disulfide	76	2.976	2.976	0.000	93	38202	0.5000	0.5545	
32 Methyl acetate	43	2.990	2.976	0.014	87	16215	1.00	1.04	
33 3-Chloro-1-propene	41	3.004	3.003	0.001	79	16547	0.5000	0.5095	
35 Methylene Chloride	84	3.129	3.129	0.000	47	12862	0.5000	0.5608	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	97	14186	5.00	5.14	
39 Acrylonitrile	53	3.269	3.255	0.014	76	29626	5.00	4.11	
41 Methyl tert-butyl ether	73	3.283	3.269	0.014	97	33245	0.5000	0.5330	
40 trans-1,2-Dichloroethene	96	3.297	3.297	0.000	98	10464	0.5000	0.5293	
42 Hexane	57	3.478	3.478	0.000	89	20660	0.5000	0.5706	
46 Vinyl acetate	43	3.590	3.576	0.014	96	41263	1.00	1.00	
45 1,1-Dichloroethane	63	3.604	3.604	0.000	91	17973	0.5000	0.5107	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.995	3.981	0.014	87	17337	2.00	1.87	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	81	10858	0.5000	0.5106	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	61	14822	0.5000	0.5309	
55 sec-Butyl Alcohol	45	4.107	4.093	0.014	95	26698	15.0	14.7	
56 Chlorobromomethane	128	4.177	4.177	0.000	94	4443	0.5000	0.4939	
57 Tetrahydrofuran	42	4.191	4.191	0.000	77	7958	1.00	1.11	
59 Chloroform	83	4.233	4.233	0.001	92	16885	0.5000	0.5239	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	95	14468	0.5000	0.5138	
61 Cyclohexane	56	4.428	4.428	0.000	90	23915	0.5000	0.5464	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	96	14574	0.5000	0.5059	
62 Carbon tetrachloride	117	4.498	4.498	0.000	89	9806	0.5000	0.4644	
66 Isobutyl alcohol	41	4.526	4.512	0.014	93	7414	12.5	18.7	
64 Benzene	78	4.638	4.638	0.000	94	48333	0.5000	0.5541	
65 1,2-Dichloroethane	62	4.666	4.665	0.001	94	15552	0.5000	0.5771	
67 n-Heptane	43	4.819	4.819	0.000	84	18308	0.5000	0.5239	
69 Trichloroethene	95	5.126	5.126	0.000	96	11926	0.5000	0.5825	
70 2-Pentanone	43	5.238	5.224	0.014	99	34366	2.00	2.27	
71 Methylcyclohexane	55	5.308	5.308	0.000	87	17554	0.5000	0.5484	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	85	18429	0.5000	0.4894	
74 1,4-Dioxane	88	5.378	5.378	0.000	31	2221	10.0	9.42	
75 Dibromomethane	93	5.392	5.392	0.000	80	6102	0.5000	0.5584	
76 Dichlorobromomethane	83	5.517	5.517	0.000	95	11359	0.5000	0.4952	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	90	7330	0.5000	0.4964	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	95	16004	0.5000	0.4859	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	96	45255	2.00	2.06	
82 Toluene	91	6.149	6.149	0.000	99	48797	0.5000	0.5708	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	91	13182	0.5000	0.4777	
84 Ethyl methacrylate	69	6.357	6.357	0.000	88	14151	0.5000	0.4916	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	89	8519	0.5000	0.5233	
86 Tetrachloroethene	164	6.593	6.585	0.008	94	7153	0.5000	0.4829	
87 1,3-Dichloropropane	76	6.650	6.643	0.007	94	14117	0.5000	0.4693	
88 2-Hexanone	43	6.678	6.671	0.007	96	26027	2.00	1.77	
89 Chlorodibromomethane	129	6.836	6.836	0.000	91	5911	0.5000	0.4253	
90 Ethylene Dibromide	107	6.950	6.950	0.000	98	7393	0.5000	0.4819	
91 1-Chlorohexane	91	7.343	7.343	0.000	33	20982	0.5000	0.4863	
92 Chlorobenzene	112	7.379	7.379	0.000	94	29459	0.5000	0.5410	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	80	7684	0.5000	0.4627	
94 Ethylbenzene	106	7.458	7.458	0.000	98	15865	0.5000	0.5125	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	99	19970	0.5000	0.5221	
96 o-Xylene	106	7.930	7.930	0.000	94	18833	0.5000	0.5068	
97 Styrene	104	7.951	7.944	0.007	93	28463	0.5000	0.4799	
98 Bromoform	173	8.116	8.123	-0.007	91	2727	0.5000	0.6020	
99 Isopropylbenzene	105	8.266	8.266	0.000	96	51446	0.5000	0.5543	
100 Cyclohexanone	55	8.366	8.366	0.000	90	17637	20.0	21.4	
102 1,1,2,2-Tetrachloroethane	83	8.552	8.559	-0.007	93	12373	0.5000	0.5462	
103 Bromobenzene	156	8.580	8.580	0.000	97	10280	0.5000	0.5289	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	60	3805	0.5000	0.5336	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	82	3532	0.5000	0.5406	
106 N-Propylbenzene	120	8.659	8.659	0.000	98	13386	0.5000	0.5106	
107 2-Chlorotoluene	126	8.752	8.752	0.000	96	11015	0.5000	0.5101	
108 1,3,5-Trimethylbenzene	105	8.838	8.831	0.007	95	40987	0.5000	0.5371	
109 4-Chlorotoluene	126	8.866	8.873	-0.007	96	11768	0.5000	0.5367	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	94	36110	0.5000	0.5296	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	97	40117	0.5000	0.5238	
112 sec-Butylbenzene	134	9.353	9.353	0.000	94	11237	0.5000	0.5147	
113 1,3-Dichlorobenzene	146	9.474	9.474	0.000	95	22245	0.5000	0.5391	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	47223	0.5000	0.5333	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	92	23659	0.5000	0.5529	
117 n-Butylbenzene	91	9.903	9.903	0.000	97	45122	0.5000	0.5355	
118 1,2-Dichlorobenzene	146	9.932	9.925	0.007	96	22832	0.5000	0.5528	
119 1,2-Dibromo-3-Chloropropan	157	10.704	10.697	0.007	76	1742	0.5000	0.3935	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	91	14352	0.5000	0.5376	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	93	6662	0.5000	0.5624	
123 Naphthalene	128	11.777	11.776	0.000	97	46358	0.5000	0.3964	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	93	13873	0.5000	0.2813	
S 137 1,2-Dichloroethene, Total	96				0		1.00	1.04	
S 139 Total BTEX	1				0			2.67	
S 143 Xylenes, Total	106				0		1.00	1.03	
S 144 1,2-Dichloroethene, Total	1				0		1.00	1.04	
S 138 Xylenes, Total (URS)	1				0		1.00	1.03	
S 142 Trihalomethanes, Total	1				0		2.00	2.05	
S 140 1,3-Dichloropropene, Total	1				0		1.00	0.9635	

Reagents:

MV-MegaMainA_00015	Amount Added:	0.50	Units: uL		
MV-Gas A_00028	Amount Added:	0.50	Units: uL		
mv-Cent IS/SS_00002	Amount Added:	5.00	Units: uL	Run Reagent	

Report Date: 21-Jun-2019 11:45:03 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Injection Date:	17-Jun-2019 19:44:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-461853/9 Calibration Date: 06/17/2019 20:05

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6455.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3965	0.3417		43.1	50.0	-13.8	20.0
Chloromethane	Lin2		0.4472	0.1000	47.8	50.0	-4.5	20.0
Vinyl chloride	Lin2		0.2031		50.5	50.0	1.0	20.0
Bromomethane	Qua		0.1596		51.0	50.0	2.0	20.0
Chloroethane	Qua		0.1997		46.1	50.0	-7.8	20.0
Dichlorofluoromethane	Lin2		0.4977		48.3	50.0	-3.4	20.0
Trichlorofluoromethane	Ave	0.4047	0.3932		48.6	50.0	-2.9	20.0
Ethyl ether	Ave	0.2277	0.2278		50.0	50.0	0.0	20.0
Acrolein	Ave	0.0567	0.0392		341	494	-30.9*	20.0
Acetone	Lin2		0.0726		185	200	-7.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1905	0.1998		52.4	50.0	4.8	20.0
1,1-Dichloroethene	Ave	0.2563	0.2576		50.3	50.0	0.5	20.0
Iodomethane	Ave	0.3509	0.3642		51.9	50.0	3.8	20.0
Carbon disulfide	Ave	0.8836	0.8888		50.3	50.0	0.6	20.0
Methyl acetate	Ave	0.1993	0.1942		97.4	100	-2.6	20.0
3-Chloro-1-propene	Ave	0.4165	0.3962		47.6	50.0	-4.9	20.0
Methylene Chloride	Ave	0.2942	0.2805		47.7	50.0	-4.6	20.0
t-Butyl alcohol	Ave	0.0354	0.0323		456	500	-8.9	20.0
Acrylonitrile	Ave	0.0924	0.0967		523	500	4.7	20.0
Methyl tert-butyl ether	Ave	0.7999	0.7670		47.9	50.0	-4.1	20.0
trans-1,2-Dichloroethene	Ave	0.2535	0.2564		50.6	50.0	1.1	20.0
Hexane	Ave	2.093	2.121		50.7	50.0	1.3	20.0
Vinyl acetate	Ave	0.5311	0.5437		102	100	2.4	20.0
1,1-Dichloroethane	Ave	0.4513	0.4383	0.1000	48.6	50.0	-2.9	20.0
2-Butanone (MEK)	Ave	0.1189	0.1183		199	200	-0.6	20.0
2,2-Dichloropropane	Ave	0.3581	0.3462		48.3	50.0	-3.3	20.0
cis-1,2-Dichloroethene	Ave	0.2727	0.2790		51.1	50.0	2.3	20.0
sec-Butyl Alcohol	Ave	0.0233	0.0226		1450	1500	-3.3	20.0
Bromochloromethane	Ave	0.1154	0.1181		51.2	50.0	2.3	20.0
Tetrahydrofuran	Ave	0.0920	0.0872		94.7	100	-5.3	20.0
Chloroform	Ave	0.4133	0.4037		48.8	50.0	-2.3	20.0
1,1,1-Trichloroethane	Ave	0.3612	0.3675		50.9	50.0	1.7	20.0
Cyclohexane	Ave	0.5614	0.5529		49.2	50.0	-1.5	20.0
1,1-Dichloropropene	Ave	0.3695	0.3625		49.1	50.0	-1.9	20.0
Carbon tetrachloride	Ave	0.2708	0.2832		52.3	50.0	4.6	20.0
Isobutyl alcohol	Lin1		0.0098		1170	1250	-6.2	20.0
Benzene	Ave	1.119	1.121		50.1	50.0	0.2	20.0
1,2-Dichloroethane	Ave	0.3456	0.3248		47.0	50.0	-6.0	20.0
Trichloroethene	Ave	0.2626	0.2542		48.4	50.0	-3.2	20.0
2-Pentanone	Ave	0.1942	0.1974		203	200	1.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-461853/9 Calibration Date: 06/17/2019 20:05

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6455.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4105	0.4134		50.4	50.0	0.7	20.0
1,2-Dichloropropane	Lin2		0.2848		53.0	50.0	6.0	20.0
1,4-Dioxane	Ave	0.0030	0.0032		1050	1000	5.1	20.0
Dibromomethane	Ave	0.1402	0.1436		51.2	50.0	2.5	20.0
Bromodichloromethane	Ave	0.2942	0.3123		53.1	50.0	6.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1894	0.1949		51.5	50.0	2.9	20.0
cis-1,3-Dichloropropene	Ave	1.904	1.995		52.4	50.0	4.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2818	0.2652		188	200	-5.9	20.0
Toluene	Ave	1.097	1.063		48.5	50.0	-3.1	20.0
trans-1,3-Dichloropropene	Ave	0.3539	0.3320		46.9	50.0	-6.2	20.0
Ethyl methacrylate	Ave	1.664	1.672		50.2	50.0	0.5	20.0
1,1,2-Trichloroethane	Ave	0.2088	0.2012		48.2	50.0	-3.7	20.0
Tetrachloroethene	Ave	0.8564	0.8847		51.7	50.0	3.3	20.0
1,3-Dichloropropane	Ave	1.739	1.767		50.8	50.0	1.6	20.0
2-Hexanone	Ave	0.8499	0.8333		196	200	-2.0	20.0
Dibromochloromethane	Ave	0.8035	0.8922		55.5	50.0	11.0	20.0
Ethylene Dibromide	Ave	0.8868	0.9252		52.2	50.0	4.3	20.0
1-Chlorohexane	Lin2		1.693		50.9	50.0	1.9	20.0
Chlorobenzene	Ave	3.148	3.165	0.3000	50.3	50.0	0.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9600	1.012		52.7	50.0	5.4	20.0
Ethylbenzene	Ave	1.790	1.831		51.2	50.0	2.3	20.0
m-Xylene & p-Xylene	Ave	2.211	2.224		50.3	50.0	0.6	20.0
o-Xylene	Ave	2.148	2.182		50.8	50.0	1.6	20.0
Styrene	Ave	3.428	3.631		53.0	50.0	5.9	20.0
Bromoform	Lin1		0.5521	0.1000	47.7	50.0	-4.6	20.0
Isopropylbenzene	Ave	3.411	3.445		50.5	50.0	1.0	20.0
Cyclohexanone	Ave	0.0475	0.0421		1770	2000	-11.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8325	0.8144	0.3000	48.9	50.0	-2.2	20.0
Bromobenzene	Ave	0.7143	0.7369		51.6	50.0	3.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2621	0.2535		48.4	50.0	-3.3	20.0
1,2,3-Trichloropropane	Ave	0.2401	0.2423		50.5	50.0	0.9	20.0
N-Propylbenzene	Ave	0.9634	0.9755		50.6	50.0	1.3	20.0
2-Chlorotoluene	Ave	0.7936	0.7906		49.8	50.0	-0.4	20.0
1,3,5-Trimethylbenzene	Ave	2.804	2.861		51.0	50.0	2.0	20.0
4-Chlorotoluene	Ave	0.8058	0.8006		49.7	50.0	-0.6	20.0
tert-Butylbenzene	Ave	2.505	2.522		50.3	50.0	0.7	20.0
1,2,4-Trimethylbenzene	Ave	2.814	2.866		50.9	50.0	1.8	20.0
sec-Butylbenzene	Ave	0.8023	0.8163		50.9	50.0	1.7	20.0
1,3-Dichlorobenzene	Ave	1.516	1.486		49.0	50.0	-2.0	20.0
4-Isopropyltoluene	Ave	3.254	3.333		51.2	50.0	2.4	20.0
1,4-Dichlorobenzene	Ave	1.572	1.538		48.9	50.0	-2.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-461853/9 Calibration Date: 06/17/2019 20:05

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6455.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	3.097	3.079		49.7	50.0	-0.6	20.0
1,2-Dichlorobenzene	Ave	1.518	1.477		48.7	50.0	-2.7	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1627	0.1828		56.2	50.0	12.4	20.0
1,2,4-Trichlorobenzene	Ave	0.9810	0.9858		50.2	50.0	0.5	20.0
Hexachlorobutadiene	Ave	0.4353	0.4360		50.1	50.0	0.2	20.0
Naphthalene	Qua		2.595		50.0	50.0	0.0	20.0
1,2,3-Trichlorobenzene	Lin1		0.7850		58.1	50.0	16.2	20.0
Dibromofluoromethane (Surr)	Ave	0.2122	0.2096		49.4	50.0	-1.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2714	0.2632		48.5	50.0	-3.0	20.0
Toluene-d8 (Surr)	Ave	4.161	4.213		50.6	50.0	1.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.9235	0.8968		48.6	50.0	-2.9	20.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6455.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 17-Jun-2019 20:05:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist:

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 12:09:19 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	82	2764069	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4218599	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	86	885155	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	96	1469503	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	884053	50.0	49.4	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	95	1110177	50.0	48.5	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	93	3729304	50.0	50.6	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	88	1317804	50.0	48.6	
12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	1441264	50.0	43.1	
14 Chloromethane	50	1.788	1.886	-0.098	99	1886402	50.0	47.8	
15 Vinyl chloride	62	1.886	1.886	0.000	52	856887	50.0	50.5	
17 Bromomethane	94	2.152	2.152	0.000	91	673380	50.0	51.0	
18 Chloroethane	64	2.193	2.193	0.000	100	842299	50.0	46.1	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	98	2099501	50.0	48.3	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	98	1658639	50.0	48.6	
22 Ethyl ether	59	2.557	2.557	0.000	89	960975	50.0	50.0	
24 Acrolein	56	2.668	2.668	0.000	99	1634095	493.8	341.3	
27 Acetone	43	2.766	2.766	0.000	100	1224976	200.0	185.5	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	97	1086540	50.0	50.3	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	64	842663	50.0	52.4	
28 Iodomethane	142	2.892	2.892	0.000	97	1536328	50.0	51.9	
30 Carbon disulfide	76	2.976	2.976	0.000	100	3749507	50.0	50.3	
32 Methyl acetate	43	2.976	2.976	0.000	97	1638153	100.0	97.4	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	89	1671445	50.0	47.6	
35 Methylene Chloride	84	3.129	3.129	0.000	91	1183339	50.0	47.7	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	1360614	500.0	455.6	
39 Acrylonitrile	53	3.255	3.255	0.000	99	4080343	500.0	523.3	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	95	3235802	50.0	47.9	
40 trans-1,2-Dichloroethene	96	3.283	3.297	-0.014	99	1081714	50.0	50.6	
42 Hexane	57	3.478	3.478	0.000	91	1877177	50.0	50.7	
46 Vinyl acetate	43	3.576	3.576	0.000	97	4587323	100.0	102.4	
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	1849127	50.0	48.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	1995543	200.0	198.8	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	82	1176930	50.0	51.1	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	89	1460566	50.0	48.3	
55 sec-Butyl Alcohol	45	4.093	4.093	0.000	98	2853446	1500.0	1450.8	
56 Chlorobromomethane	128	4.177	4.177	0.000	97	498029	50.0	51.2	
57 Tetrahydrofuran	42	4.191	4.191	0.000	86	735510	100.0	94.7	
59 Chloroform	83	4.232	4.233	0.000	93	1703032	50.0	48.8	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	99	1550316	50.0	50.9	
61 Cyclohexane	56	4.428	4.428	0.000	88	2332260	50.0	49.2	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	98	1529032	50.0	49.1	
62 Carbon tetrachloride	117	4.498	4.498	0.000	96	1194822	50.0	52.3	
66 Isobutyl alcohol	41	4.512	4.512	0.000	96	1034177	1250.0	1172.3	
64 Benzene	78	4.637	4.638	-0.001	94	4727365	50.0	50.1	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	1370003	50.0	47.0	
67 n-Heptane	43	4.819	4.819	0.000	91	1894168	50.0	50.1	
69 Trichloroethene	95	5.126	5.126	0.000	98	1072478	50.0	48.4	
70 2-Pentanone	43	5.224	5.224	0.000	98	3330346	200.0	203.2	
71 Methylcyclohexane	55	5.308	5.308	0.000	91	1744004	50.0	50.4	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	96	1201369	50.0	53.0	
74 1,4-Dioxane	88	5.378	5.378	0.000	91	268098	1000.0	1051.0	
75 Dibromomethane	93	5.392	5.392	0.000	95	605868	50.0	51.2	
76 Dichlorobromomethane	83	5.517	5.517	0.000	99	1317358	50.0	53.1	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	822228	50.0	51.5	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	96	1765960	50.0	52.4	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	96	4475770	200.0	188.3	
82 Toluene	91	6.149	6.149	0.000	99	4482839	50.0	48.5	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	94	1400734	50.0	46.9	
84 Ethyl methacrylate	69	6.357	6.357	0.000	88	1480249	50.0	50.2	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	91	848555	50.0	48.2	
86 Tetrachloroethene	164	6.585	6.585	0.000	97	783097	50.0	51.7	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	91	1564270	50.0	50.8	
88 2-Hexanone	43	6.671	6.671	0.000	95	2950422	200.0	196.1	
89 Chlorodibromomethane	129	6.836	6.836	0.000	91	789761	50.0	55.5	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	818947	50.0	52.2	
91 1-Chlorohexane	91	7.343	7.343	0.000	97	1498708	50.0	50.9	
92 Chlorobenzene	112	7.379	7.379	0.000	95	2801625	50.0	50.3	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	95	895697	50.0	52.7	
94 Ethylbenzene	106	7.458	7.458	0.000	98	1621072	50.0	51.2	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	1968167	50.0	50.3	
96 o-Xylene	106	7.930	7.930	0.000	94	1931287	50.0	50.8	
97 Styrene	104	7.944	7.944	0.000	95	3213724	50.0	53.0	
98 Bromoform	173	8.123	8.123	0.000	96	488688	50.0	47.7	
99 Isopropylbenzene	105	8.266	8.266	0.000	96	5061925	50.0	50.5	
100 Cyclohexanone	55	8.366	8.366	0.000	92	1488753	2000.0	1769.1	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	1196810	50.0	48.9	
103 Bromobenzene	156	8.580	8.580	0.000	96	1082885	50.0	51.6	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	77	372566	50.0	48.4	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	81	356088	50.0	50.5	
106 N-Propylbenzene	120	8.659	8.659	0.000	99	1433442	50.0	50.6	
107 2-Chlorotoluene	126	8.752	8.752	0.000	97	1161786	50.0	49.8	
108 1,3,5-Trimethylbenzene	105	8.831	8.831	0.000	95	4203830	50.0	51.0	
109 4-Chlorotoluene	126	8.873	8.873	0.000	97	1176534	50.0	49.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	93	3705992	50.0	50.3	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	97	4211107	50.0	50.9	
112 sec-Butylbenzene	134	9.352	9.353	-0.001	94	1199513	50.0	50.9	
113 1,3-Dichlorobenzene	146	9.474	9.474	0.000	98	2183053	50.0	49.0	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	4898069	50.0	51.2	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	94	2259796	50.0	48.9	
117 n-Butylbenzene	91	9.903	9.903	0.000	98	4525157	50.0	49.7	
118 1,2-Dichlorobenzene	146	9.925	9.925	-0.001	97	2171036	50.0	48.7	
119 1,2-Dibromo-3-Chloropropan	157	10.697	10.697	0.000	84	268651	50.0	56.2	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	1448666	50.0	50.2	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	98	640679	50.0	50.1	
123 Naphthalene	128	11.776	11.776	0.000	97	3813755	50.0	50.0	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	1153558	50.0	58.1	
S 137 1,2-Dichloroethene, Total	96				0		100.0	101.7	
S 140 1,3-Dichloropropene, Total	1				0		100.0	99.3	
S 142 Trihalomethanes, Total	1				0		200.0	205.1	
S 138 Xylenes, Total (URS)	1				0		100.0	101.1	
S 144 1,2-Dichloroethene, Total	1				0		100.0	101.7	
S 143 Xylenes, Total	106				0		100.0	101.1	

Reagents:

MV-MegaMain B_00013	Amount Added: 50.00	Units: uL	
MV-Gas B_00031	Amount Added: 50.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added: 5.00	Units: uL	Run Reagent

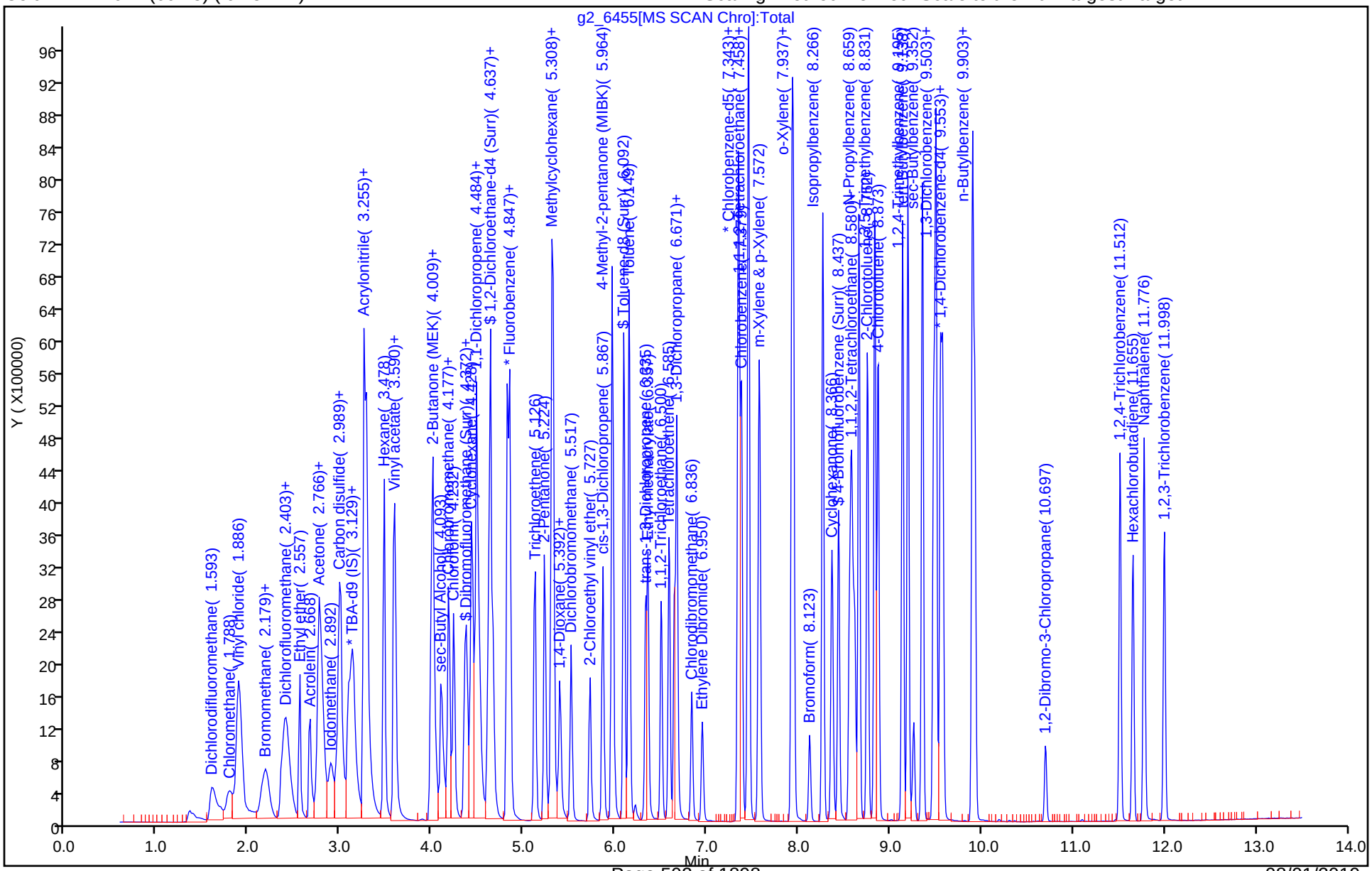
Report Date: 21-Jun-2019 12:09:23 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6455.D

Injection Date:	17-Jun-2019 20:05:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	icv			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461956/2 Calibration Date: 06/18/2019 13:38

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6495.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3965	0.3362		42.4	50.0	-15.2	20.0
Chloromethane	Lin2		0.3747	0.1000	39.9	50.0	-20.2*	20.0
Vinyl chloride	Lin2		0.1629		40.4	50.0	-19.2	20.0
Bromomethane	Qua		0.1326		40.4	50.0	-19.2	20.0
Chloroethane	Qua		0.1678		37.0	50.0	-26.0*	20.0
Dichlorofluoromethane	Lin2		0.4861		47.2	50.0	-5.7	20.0
Trichlorofluoromethane	Ave	0.4047	0.3881		47.9	50.0	-4.1	20.0
Ethyl ether	Ave	0.2277	0.2197		48.2	50.0	-3.5	20.0
Acrolein	Ave	0.0567	0.0560		487	494	-1.3	20.0
Acetone	Lin2		0.0719		184	200	-8.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1905	0.2077		54.5	50.0	9.0	20.0
1,1-Dichloroethene	Ave	0.2563	0.2520		49.2	50.0	-1.7	20.0
Iodomethane	Ave	0.3509	0.3736		53.2	50.0	6.5	20.0
Carbon disulfide	Ave	0.8836	0.8606		48.7	50.0	-2.6	20.0
Methyl acetate	Ave	0.1993	0.1968		98.7	100	-1.3	20.0
3-Chloro-1-propene	Ave	0.4165	0.3877		46.5	50.0	-6.9	20.0
Methylene Chloride	Ave	0.2942	0.2800		47.6	50.0	-4.8	20.0
t-Butyl alcohol	Ave	0.0354	0.0330		466	500	-6.7	20.0
Acrylonitrile	Ave	0.0924	0.0967		523	500	4.7	20.0
Methyl tert-butyl ether	Ave	0.7999	0.7605		47.5	50.0	-4.9	20.0
trans-1,2-Dichloroethene	Ave	0.2535	0.2563		50.5	50.0	1.1	20.0
Hexane	Ave	2.093	2.084		49.8	50.0	-0.4	20.0
Vinyl acetate	Ave	0.5311	0.5231		98.5	100	-1.5	20.0
1,1-Dichloroethane	Ave	0.4513	0.4332	0.1000	48.0	50.0	-4.0	20.0
2-Butanone (MEK)	Ave	0.1189	0.1180		198	200	-0.8	20.0
2,2-Dichloropropane	Ave	0.3581	0.3467		48.4	50.0	-3.2	20.0
cis-1,2-Dichloroethene	Ave	0.2727	0.2774		50.8	50.0	1.7	20.0
sec-Butyl Alcohol	Ave	0.0233	0.0224		1440	1500	-3.9	20.0
Bromochloromethane	Ave	0.1154	0.1235		53.5	50.0	7.1	20.0
Tetrahydrofuran	Ave	0.0920	0.0852		92.6	100	-7.4	20.0
Chloroform	Ave	0.4133	0.3937		47.6	50.0	-4.8	20.0
1,1,1-Trichloroethane	Ave	0.3612	0.3518		48.7	50.0	-2.6	20.0
Cyclohexane	Ave	0.5614	0.5381		47.9	50.0	-4.1	20.0
1,1-Dichloropropene	Ave	0.3695	0.3653		49.4	50.0	-1.1	20.0
Carbon tetrachloride	Ave	0.2708	0.2847		52.6	50.0	5.1	20.0
Isobutyl alcohol	Lin1		0.0098		1170	1250	-6.7	20.0
Benzene	Ave	1.119	1.085		48.5	50.0	-3.0	20.0
1,2-Dichloroethane	Ave	0.3456	0.3007		43.5	50.0	-13.0	20.0
Trichloroethene	Ave	0.2626	0.2524		48.1	50.0	-3.9	20.0
2-Pentanone	Ave	0.1942	0.1749		180	200	-9.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461956/2 Calibration Date: 06/18/2019 13:38

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6495.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4105	0.3741		45.6	50.0	-8.9	20.0
1,2-Dichloropropane	Lin2		0.2528		47.0	50.0	-6.0	20.0
1,4-Dioxane	Ave	0.0030	0.0030		999	1000	-0.0	20.0
Dibromomethane	Ave	0.1402	0.1342		47.9	50.0	-4.3	20.0
Bromodichloromethane	Ave	0.2942	0.2828		48.1	50.0	-3.9	20.0
2-Chloroethyl vinyl ether	Ave	0.1894	0.1773		46.8	50.0	-6.4	20.0
cis-1,3-Dichloropropene	Ave	1.904	1.889		49.6	50.0	-0.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2818	0.2509		178	200	-10.9	20.0
Toluene	Ave	1.097	1.053		48.0	50.0	-3.9	20.0
trans-1,3-Dichloropropene	Ave	0.3539	0.3455		48.8	50.0	-2.4	20.0
Ethyl methacrylate	Ave	1.664	1.612		48.4	50.0	-3.1	20.0
1,1,2-Trichloroethane	Ave	0.2088	0.2056		49.2	50.0	-1.5	20.0
Tetrachloroethene	Ave	0.8564	0.9337		54.5	50.0	9.0	20.0
1,3-Dichloropropane	Ave	1.739	1.751		50.3	50.0	0.7	20.0
2-Hexanone	Ave	0.8499	0.7920		186	200	-6.8	20.0
Dibromochloromethane	Ave	0.8035	0.8949		55.7	50.0	11.4	20.0
Ethylene Dibromide	Ave	0.8868	0.9460		53.3	50.0	6.7	20.0
1-Chlorohexane	Lin2		1.638		49.3	50.0	-1.4	20.0
Chlorobenzene	Ave	3.148	3.111	0.3000	49.4	50.0	-1.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9600	1.004		52.3	50.0	4.6	20.0
Ethylbenzene	Ave	1.790	1.794		50.1	50.0	0.3	20.0
m-Xylene & p-Xylene	Ave	2.211	2.217		50.1	50.0	0.3	20.0
o-Xylene	Ave	2.148	2.177		50.7	50.0	1.3	20.0
Styrene	Ave	3.428	3.560		51.9	50.0	3.8	20.0
Bromoform	Lin1		0.5628	0.1000	48.6	50.0	-2.7	20.0
Isopropylbenzene	Ave	3.411	3.337		48.9	50.0	-2.2	20.0
Cyclohexanone	Ave	0.0475	0.0431		1810	2000	-9.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8325	0.7918	0.3000	47.6	50.0	-4.9	20.0
Bromobenzene	Ave	0.7143	0.7326		51.3	50.0	2.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2621	0.2297		43.8	50.0	-12.3	20.0
1,2,3-Trichloropropane	Ave	0.2401	0.2374		49.4	50.0	-1.1	20.0
N-Propylbenzene	Ave	0.9634	0.9824		51.0	50.0	2.0	20.0
2-Chlorotoluene	Ave	0.7936	0.7933		50.0	50.0	-0.0	20.0
1,3,5-Trimethylbenzene	Ave	2.804	2.782		49.6	50.0	-0.8	20.0
4-Chlorotoluene	Ave	0.8058	0.8011		49.7	50.0	-0.6	20.0
tert-Butylbenzene	Ave	2.505	2.485		49.6	50.0	-0.8	20.0
1,2,4-Trimethylbenzene	Ave	2.814	2.781		49.4	50.0	-1.2	20.0
sec-Butylbenzene	Ave	0.8023	0.8210		51.2	50.0	2.3	20.0
1,3-Dichlorobenzene	Ave	1.516	1.519		50.1	50.0	0.2	20.0
4-Isopropyltoluene	Ave	3.254	3.278		50.4	50.0	0.7	20.0
1,4-Dichlorobenzene	Ave	1.572	1.564		49.7	50.0	-0.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461956/2 Calibration Date: 06/18/2019 13:38

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6495.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	3.097	2.991		48.3	50.0	-3.4	20.0
1,2-Dichlorobenzene	Ave	1.518	1.529		50.4	50.0	0.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1627	0.1697		52.1	50.0	4.3	20.0
1,2,4-Trichlorobenzene	Ave	0.9810	0.9514		48.5	50.0	-3.0	20.0
Hexachlorobutadiene	Ave	0.4353	0.4102		47.1	50.0	-5.8	20.0
Naphthalene	Qua		2.447		46.9	50.0	-6.1	20.0
1,2,3-Trichlorobenzene	Lin1		0.7696		57.0	50.0	13.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2122	0.2136		50.3	50.0	0.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2714	0.2532		46.6	50.0	-6.7	20.0
Toluene-d8 (Surr)	Ave	4.161	4.127		49.6	50.0	-0.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.9235	0.8813		47.7	50.0	-4.6	20.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6495.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2019 13:38:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 18-Jun-2019 13:56:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	82	3619957	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	5342946	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	86	1143236	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1943362	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	1141325	50.0	50.3	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	95	1352586	50.0	46.6	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4717902	50.0	49.6	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	89	1712757	50.0	47.7	
12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	1796517	50.0	42.4	
14 Chloromethane	50	1.886	1.886	0.000	99	2002114	50.0	39.9	
15 Vinyl chloride	62	1.886	1.886	0.000	50	870396	50.0	40.4	
17 Bromomethane	94	2.152	2.152	0.000	91	708414	50.0	40.4	
18 Chloroethane	64	2.193	2.193	0.000	99	896608	50.0	37.0	
19 Dichlorofluoromethane	67	2.375	2.375	0.000	97	2597280	50.0	47.2	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	99	2073540	50.0	47.9	
22 Ethyl ether	59	2.557	2.557	0.000	88	1173836	50.0	48.2	
24 Acrolein	56	2.668	2.668	0.000	100	2954016	493.8	487.2	
27 Acetone	43	2.766	2.766	0.000	99	1537010	200.0	183.7	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	98	1346376	50.0	49.2	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	91	1109572	50.0	54.5	
28 Iodomethane	142	2.892	2.892	0.000	97	1996156	50.0	53.2	
30 Carbon disulfide	76	2.976	2.976	0.000	100	4597921	50.0	48.7	
32 Methyl acetate	43	2.976	2.976	0.000	97	2102636	100.0	98.7	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	90	2071608	50.0	46.5	
35 Methylene Chloride	84	3.129	3.129	0.000	90	1495922	50.0	47.6	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	1764272	500.0	466.5	
39 Acrylonitrile	53	3.255	3.255	0.000	100	5168073	500.0	523.3	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	96	4063172	50.0	47.5	
40 trans-1,2-Dichloroethene	96	3.283	3.283	0.000	99	1369247	50.0	50.5	
42 Hexane	57	3.478	3.478	0.000	90	2382376	50.0	49.8	
46 Vinyl acetate	43	3.576	3.576	0.000	97	5589738	100.0	98.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	2314343	50.0	48.0	
52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	2522354	200.0	198.4	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	80	1481880	50.0	50.8	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	89	1852310	50.0	48.4	
55 sec-Butyl Alcohol	45	4.093	4.093	0.000	98	3591607	1500.0	1441.8	
56 Chlorobromomethane	128	4.177	4.177	0.000	94	660018	50.0	53.5	
57 Tetrahydrofuran	42	4.191	4.191	0.000	86	910790	100.0	92.6	
59 Chloroform	83	4.233	4.233	0.000	93	2103226	50.0	47.6	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	99	1879848	50.0	48.7	
61 Cyclohexane	56	4.428	4.428	0.000	88	2875258	50.0	47.9	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	98	1951869	50.0	49.4	
62 Carbon tetrachloride	117	4.498	4.498	0.000	94	1521135	50.0	52.6	
66 Isobutyl alcohol	41	4.512	4.512	0.000	96	1302470	1250.0	1165.8	
64 Benzene	78	4.638	4.638	0.000	94	5796264	50.0	48.5	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	1606678	50.0	43.5	
67 n-Heptane	43	4.819	4.819	0.000	90	2350713	50.0	49.1	
69 Trichloroethene	95	5.126	5.126	0.000	98	1348473	50.0	48.1	
70 2-Pentanone	43	5.224	5.224	0.000	98	3738688	200.0	180.1	
71 Methylcyclohexane	55	5.308	5.308	0.000	90	1998757	50.0	45.6	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	97	1350647	50.0	47.0	
74 1,4-Dioxane	88	5.378	5.378	0.000	89	322868	1000.0	999.3	
75 Dibromomethane	93	5.392	5.392	0.000	96	716861	50.0	47.9	
76 Dichlorobromomethane	83	5.517	5.517	0.000	100	1511181	50.0	48.1	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	947144	50.0	46.8	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	97	2159379	50.0	49.6	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	95	5362661	200.0	178.1	
82 Toluene	91	6.149	6.149	0.000	99	5628269	50.0	48.0	
83 trans-1,3-Dichloropropene	75	6.335	6.335	0.000	93	1845794	50.0	48.8	
84 Ethyl methacrylate	69	6.357	6.357	0.000	87	1843044	50.0	48.4	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	90	1098557	50.0	49.2	
86 Tetrachloroethene	164	6.585	6.585	0.000	97	1067473	50.0	54.5	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	90	2001381	50.0	50.3	
88 2-Hexanone	43	6.671	6.671	0.000	94	3621910	200.0	186.4	
89 Chlorodibromomethane	129	6.836	6.836	0.000	90	1023067	50.0	55.7	
90 Ethylene Dibromide	107	6.950	6.950	0.000	98	1081470	50.0	53.3	
91 1-Chlorohexane	91	7.343	7.343	0.000	96	1872533	50.0	49.3	
92 Chlorobenzene	112	7.379	7.379	0.000	96	3556463	50.0	49.4	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	97	1147849	50.0	52.3	
94 Ethylbenzene	106	7.458	7.458	0.000	98	2051395	50.0	50.1	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	2534863	50.0	50.1	
96 o-Xylene	106	7.930	7.930	0.000	95	2488377	50.0	50.7	
97 Styrene	104	7.944	7.944	0.000	95	4069519	50.0	51.9	
98 Bromoform	173	8.123	8.123	0.000	96	643400	50.0	48.6	
99 Isopropylbenzene	105	8.266	8.266	0.000	95	6484522	50.0	48.9	
100 Cyclohexanone	55	8.366	8.366	0.000	91	1970479	2000.0	1812.9	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	1538705	50.0	47.6	
103 Bromobenzene	156	8.580	8.580	0.000	95	1423707	50.0	51.3	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	77	446436	50.0	43.8	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	79	461347	50.0	49.4	
106 N-Propylbenzene	120	8.659	8.659	0.000	98	1909063	50.0	51.0	
107 2-Chlorotoluene	126	8.752	8.752	0.000	97	1541638	50.0	50.0	
108 1,3,5-Trimethylbenzene	105	8.838	8.838	0.000	95	5406964	50.0	49.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Chlorotoluene	126	8.873	8.873	0.000	96	1556765	50.0	49.7	
110 tert-Butylbenzene	119	9.138	9.138	0.000	92	4829805	50.0	49.6	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	97	5405155	50.0	49.4	
112 sec-Butylbenzene	134	9.353	9.353	0.000	94	1595453	50.0	51.2	
113 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	2951548	50.0	50.1	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	6369502	50.0	50.4	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	96	3039365	50.0	49.7	
117 n-Butylbenzene	91	9.903	9.903	0.000	97	5812657	50.0	48.3	
118 1,2-Dichlorobenzene	146	9.925	9.925	0.000	98	2971888	50.0	50.4	
119 1,2-Dibromo-3-Chloropropan	157	10.704	10.704	0.000	96	329692	50.0	52.1	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	1848840	50.0	48.5	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	98	797065	50.0	47.1	
123 Naphthalene	128	11.776	11.776	0.000	97	4755665	50.0	46.9	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	1495570	50.0	57.0	
S 137 1,2-Dichloroethene, Total	96				0		100.0	101.4	
S 140 1,3-Dichloropropene, Total	1				0		100.0	98.4	
S 142 Trihalomethanes, Total	1				0		200.0	200.0	
S 138 Xylenes, Total (URS)	1				0		100.0	100.8	
S 144 1,2-Dichloroethene, Total	1				0		100.0	101.4	
S 143 Xylenes, Total	106				0		100.0	100.8	

Reagents:

MV-MegaMainA_00015	Amount Added:	50.00	Units: uL	
MV-Gas A_00028	Amount Added:	50.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added:	5.00	Units: uL	Run Reagent

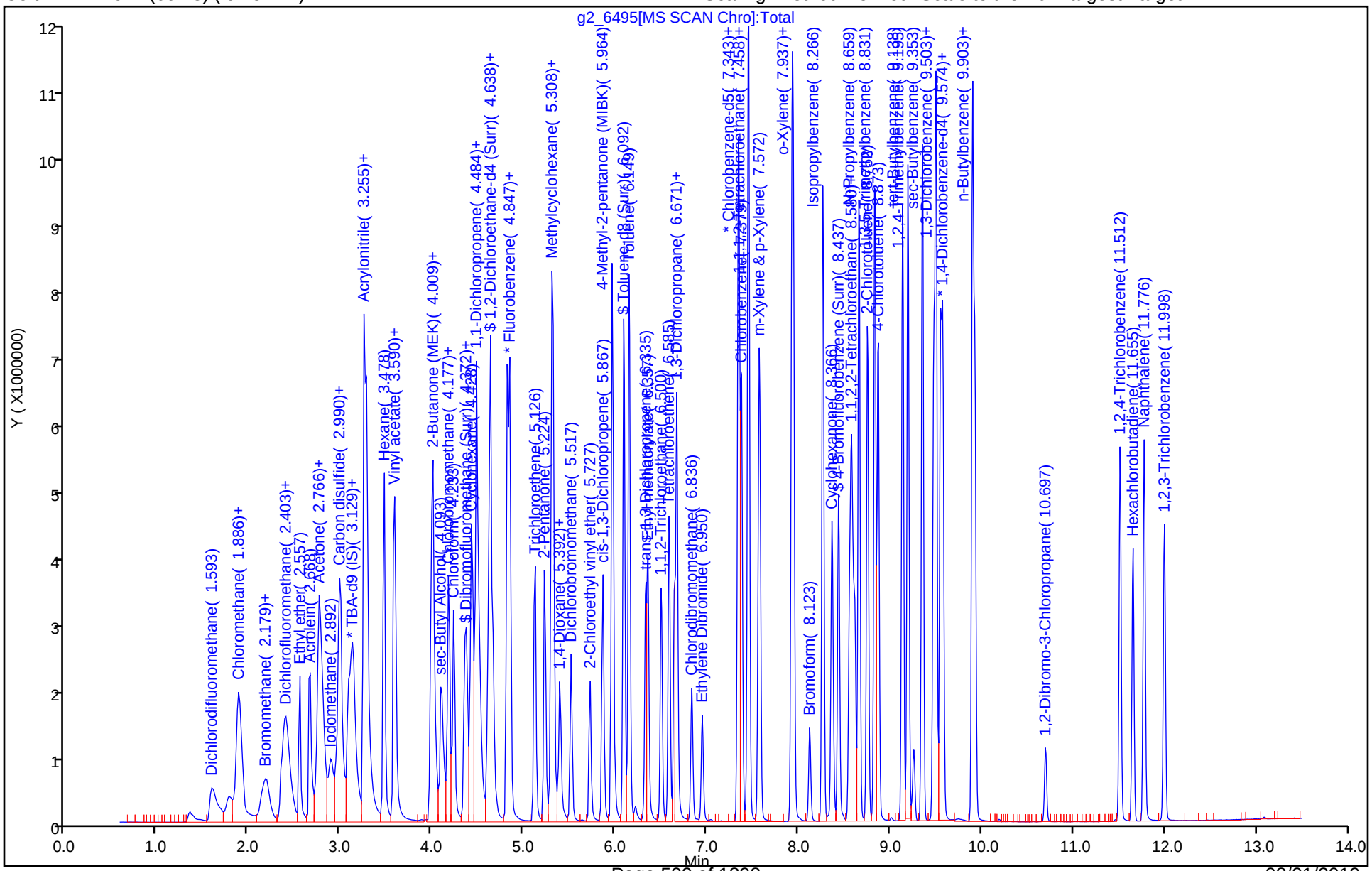
Report Date: 21-Jun-2019 13:00:32 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6495.D

Injection Date:	18-Jun-2019 13:38:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	ccv			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVC 280-461956/32 Calibration Date: 06/19/2019 00:35

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6526.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3965	0.3360		42.4	50.0	-15.2	50.0
Chloromethane	Lin2		0.3663	0.1000	39.0	50.0	-22.0	50.0
Vinyl chloride	Lin2		0.1636		40.6	50.0	-18.8	50.0
Bromomethane	Qua		0.1397		43.1	50.0	-13.9	50.0
Chloroethane	Qua		0.1776		39.7	50.0	-20.7	50.0
Dichlorofluoromethane	Lin2		0.4923		47.8	50.0	-4.5	50.0
Trichlorofluoromethane	Ave	0.4047	0.3923		48.5	50.0	-3.1	50.0
Ethyl ether	Ave	0.2277	0.2188		48.0	50.0	-3.9	50.0
Acrolein	Ave	0.0567	0.0521		454	494	-8.1	50.0
Acetone	Lin2		0.0734		188	200	-6.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1905	0.2065		54.2	50.0	8.4	50.0
1,1-Dichloroethene	Ave	0.2563	0.2515		49.1	50.0	-1.9	50.0
Iodomethane	Ave	0.3509	0.3949		56.3	50.0	12.5	50.0
Carbon disulfide	Ave	0.8836	0.7956		45.0	50.0	-10.0	50.0
Methyl acetate	Ave	0.1993	0.1936		97.2	100	-2.8	50.0
3-Chloro-1-propene	Ave	0.4165	0.3339		40.1	50.0	-19.8	50.0
Methylene Chloride	Ave	0.2942	0.2851		48.5	50.0	-3.1	50.0
t-Butyl alcohol	Ave	0.0354	0.0330		466	500	-6.8	50.0
Acrylonitrile	Ave	0.0924	0.0958		518	500	3.7	50.0
Methyl tert-butyl ether	Ave	0.7999	0.7787		48.7	50.0	-2.7	50.0
trans-1,2-Dichloroethene	Ave	0.2535	0.2525		49.8	50.0	-0.4	50.0
Hexane	Ave	2.093	1.569		37.5	50.0	-25.1	50.0
Vinyl acetate	Ave	0.5311	0.4815		90.7	100	-9.3	50.0
1,1-Dichloroethane	Ave	0.4513	0.4207	0.1000	46.6	50.0	-6.8	50.0
2-Butanone (MEK)	Ave	0.1189	0.1127		189	200	-5.3	50.0
2,2-Dichloropropane	Ave	0.3581	0.2722		38.0	50.0	-24.0	50.0
cis-1,2-Dichloroethene	Ave	0.2727	0.2747		50.4	50.0	0.7	50.0
sec-Butyl Alcohol	Ave	0.0233	0.0211		1360	1500	-9.4	50.0
Bromochloromethane	Ave	0.1154	0.1322		57.3	50.0	14.6	50.0
Tetrahydrofuran	Ave	0.0920	0.0818		88.9	100	-11.1	50.0
Chloroform	Ave	0.4133	0.3978		48.1	50.0	-3.8	50.0
1,1,1-Trichloroethane	Ave	0.3612	0.3509		48.6	50.0	-2.8	50.0
Cyclohexane	Ave	0.5614	0.4874		43.4	50.0	-13.2	50.0
1,1-Dichloropropene	Ave	0.3695	0.3482		47.1	50.0	-5.7	50.0
Carbon tetrachloride	Ave	0.2708	0.2758		50.9	50.0	1.8	50.0
Isobutyl alcohol	Lin1		0.0093		1110	1250	-11.3	50.0
Benzene	Ave	1.119	1.075		48.1	50.0	-3.9	50.0
1,2-Dichloroethane	Ave	0.3456	0.3072		44.4	50.0	-11.1	50.0
Trichloroethene	Ave	0.2626	0.2551		48.6	50.0	-2.8	50.0
2-Pentanone	Ave	0.1942	0.1733		178	200	-10.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVC 280-461956/32 Calibration Date: 06/19/2019 00:35

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6526.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4105	0.3509		42.7	50.0	-14.5	50.0
1,2-Dichloropropane	Lin2		0.2594		48.2	50.0	-3.5	50.0
1,4-Dioxane	Ave	0.0030	0.0033		1100	1000	10.4	50.0
Dibromomethane	Ave	0.1402	0.1441		51.4	50.0	2.8	50.0
Bromodichloromethane	Ave	0.2942	0.2891		49.1	50.0	-1.7	50.0
2-Chloroethyl vinyl ether	Ave	0.1894	0.1827		48.2	50.0	-3.6	50.0
cis-1,3-Dichloropropene	Ave	1.904	1.749		45.9	50.0	-8.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2818	0.2532		180	200	-10.2	50.0
Toluene	Ave	1.097	1.100		50.2	50.0	0.4	50.0
trans-1,3-Dichloropropene	Ave	0.3539	0.3450		48.7	50.0	-2.5	50.0
Ethyl methacrylate	Ave	1.664	1.527		45.9	50.0	-8.2	50.0
1,1,2-Trichloroethane	Ave	0.2088	0.2192		52.5	50.0	5.0	50.0
Tetrachloroethene	Ave	0.8564	0.8954		52.3	50.0	4.5	50.0
1,3-Dichloropropane	Ave	1.739	1.689		48.6	50.0	-2.9	50.0
2-Hexanone	Ave	0.8499	0.7333		173	200	-13.7	50.0
Dibromochloromethane	Ave	0.8035	0.8778		54.6	50.0	9.2	50.0
Ethylene Dibromide	Ave	0.8868	0.9424		53.1	50.0	6.3	50.0
1-Chlorohexane	Lin2		1.520		45.7	50.0	-8.6	50.0
Chlorobenzene	Ave	3.148	3.131	0.3000	49.7	50.0	-0.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.9600	1.013		52.8	50.0	5.6	50.0
Ethylbenzene	Ave	1.790	1.767		49.4	50.0	-1.3	50.0
m-Xylene & p-Xylene	Ave	2.211	2.194		49.6	50.0	-0.8	50.0
o-Xylene	Ave	2.148	2.125		49.5	50.0	-1.1	50.0
Styrene	Ave	3.428	3.472		50.6	50.0	1.3	50.0
Bromoform	Lin1		0.5490	0.1000	47.4	50.0	-5.1	50.0
Isopropylbenzene	Ave	3.411	3.179		46.6	50.0	-6.8	50.0
Cyclohexanone	Ave	0.0475	0.0421		1770	2000	-11.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8325	0.7689	0.3000	46.2	50.0	-7.6	50.0
Bromobenzene	Ave	0.7143	0.7388		51.7	50.0	3.4	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2621	0.1941		37.0	50.0	-25.9	50.0
1,2,3-Trichloropropane	Ave	0.2401	0.2397		49.9	50.0	-0.2	50.0
N-Propylbenzene	Ave	0.9634	0.9250		48.0	50.0	-4.0	50.0
2-Chlorotoluene	Ave	0.7936	0.7711		48.6	50.0	-2.8	50.0
1,3,5-Trimethylbenzene	Ave	2.804	2.673		47.7	50.0	-4.7	50.0
4-Chlorotoluene	Ave	0.8058	0.7872		48.8	50.0	-2.3	50.0
tert-Butylbenzene	Ave	2.505	2.384		47.6	50.0	-4.9	50.0
1,2,4-Trimethylbenzene	Ave	2.814	2.672		47.5	50.0	-5.1	50.0
sec-Butylbenzene	Ave	0.8023	0.7816		48.7	50.0	-2.6	50.0
1,3-Dichlorobenzene	Ave	1.516	1.510		49.8	50.0	-0.4	50.0
4-Isopropyltoluene	Ave	3.254	3.126		48.0	50.0	-3.9	50.0
1,4-Dichlorobenzene	Ave	1.572	1.541		49.0	50.0	-2.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVC 280-461956/32 Calibration Date: 06/19/2019 00:35

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6526.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	3.097	2.759		44.5	50.0	-10.9	50.0
1,2-Dichlorobenzene	Ave	1.518	1.523		50.2	50.0	0.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1627	0.1731		53.2	50.0	6.4	50.0
1,2,4-Trichlorobenzene	Ave	0.9810	0.9655		49.2	50.0	-1.6	50.0
Hexachlorobutadiene	Ave	0.4353	0.4013		46.1	50.0	-7.8	50.0
Naphthalene	Qua		2.493		47.9	50.0	-4.2	50.0
1,2,3-Trichlorobenzene	Lin1		0.7794		57.7	50.0	15.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2122	0.2161		50.9	50.0	1.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2714	0.2492		45.9	50.0	-8.2	50.0
Toluene-d8 (Surr)	Ave	4.161	3.990		47.9	50.0	-4.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.9235	0.8406		45.5	50.0	-9.0	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6526.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 19-Jun-2019 00:35:30 ALS Bottle#: 32 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Misc. Info.: 280-0082979-032
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:04:10 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	82	3081533	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4734078	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	85	1092733	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1883716	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	1022864	50.0	50.9	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	95	1179700	50.0	45.9	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4359572	50.0	47.9	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	91	1583421	50.0	45.5	
12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	1590830	50.0	42.4	
14 Chloromethane	50	1.886	1.886	0.000	99	1733842	50.0	39.0	
15 Vinyl chloride	62	1.886	1.886	0.000	98	774508	50.0	40.6	
17 Bromomethane	94	2.152	2.152	0.000	91	661399	50.0	43.1	
18 Chloroethane	64	2.193	2.193	0.000	100	840772	50.0	39.7	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	98	2330661	50.0	47.8	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	98	1857220	50.0	48.5	
22 Ethyl ether	59	2.557	2.557	0.000	87	1035841	50.0	48.0	
24 Acrolein	56	2.668	2.668	0.000	99	2436384	493.8	453.5	
27 Acetone	43	2.766	2.766	0.000	100	1390203	200.0	187.6	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	97	1190674	50.0	49.1	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	67	977331	50.0	54.2	
28 Iodomethane	142	2.892	2.892	0.000	96	1869230	50.0	56.3	
30 Carbon disulfide	76	2.976	2.976	0.000	100	3766381	50.0	45.0	
32 Methyl acetate	43	2.976	2.976	0.000	97	1833091	100.0	97.2	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	90	1580741	50.0	40.1	
35 Methylene Chloride	84	3.129	3.129	0.000	89	1349469	50.0	48.5	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	1562163	500.0	466.2	
39 Acrylonitrile	53	3.255	3.255	0.000	99	4535142	500.0	518.3	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	94	3686578	50.0	48.7	
40 trans-1,2-Dichloroethene	96	3.283	3.297	-0.014	97	1195181	50.0	49.8	
42 Hexane	57	3.478	3.478	0.000	89	1714018	50.0	37.5	
46 Vinyl acetate	43	3.576	3.576	0.000	97	4559048	100.0	90.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	1991742	50.0	46.6	
52 2-Butanone (MEK)	43	3.981	3.981	0.000	98	2134189	200.0	189.5	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	79	1300344	50.0	50.4	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	89	1288589	50.0	38.0	
55 sec-Butyl Alcohol	45	4.093	4.093	0.000	98	2999830	1500.0	1359.1	
56 Chlorobromomethane	128	4.177	4.177	0.000	91	625751	50.0	57.3	
57 Tetrahydrofuran	42	4.191	4.191	0.000	85	774028	100.0	88.9	
59 Chloroform	83	4.232	4.233	0.000	93	1883115	50.0	48.1	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	98	1661220	50.0	48.6	
61 Cyclohexane	56	4.428	4.428	0.000	87	2307197	50.0	43.4	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	98	1648496	50.0	47.1	
62 Carbon tetrachloride	117	4.498	4.498	0.000	95	1305516	50.0	50.9	
66 Isobutyl alcohol	41	4.512	4.512	0.000	94	1097367	1250.0	1109.0	
64 Benzene	78	4.637	4.638	-0.001	93	5091034	50.0	48.1	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	1454412	50.0	44.4	
67 n-Heptane	43	4.819	4.819	0.000	89	1595115	50.0	37.6	
69 Trichloroethene	95	5.126	5.126	0.000	97	1207753	50.0	48.6	
70 2-Pentanone	43	5.224	5.224	0.000	97	3281697	200.0	178.5	
71 Methylcyclohexane	55	5.308	5.308	0.000	90	1661312	50.0	42.7	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	96	1227973	50.0	48.2	
74 1,4-Dioxane	88	5.378	5.378	0.000	88	316007	1000.0	1103.9	
75 Dibromomethane	93	5.392	5.392	0.000	97	682145	50.0	51.4	
76 Dichlorobromomethane	83	5.517	5.517	0.000	100	1368778	50.0	49.1	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	864755	50.0	48.2	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	97	1911353	50.0	45.9	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	94	4793723	200.0	179.7	
82 Toluene	91	6.149	6.149	0.000	99	5209183	50.0	50.2	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	93	1633239	50.0	48.7	
84 Ethyl methacrylate	69	6.357	6.357	0.000	86	1668508	50.0	45.9	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	90	1037917	50.0	52.5	
86 Tetrachloroethene	164	6.585	6.585	0.000	98	978378	50.0	52.3	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	91	1845494	50.0	48.6	
88 2-Hexanone	43	6.671	6.671	0.000	94	3205064	200.0	172.5	
89 Chlorodibromomethane	129	6.836	6.836	0.000	90	959217	50.0	54.6	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	1029808	50.0	53.1	
91 1-Chlorohexane	91	7.343	7.343	0.000	94	1661226	50.0	45.7	
92 Chlorobenzene	112	7.379	7.379	0.000	96	3421317	50.0	49.7	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	96	1107348	50.0	52.8	
94 Ethylbenzene	106	7.458	7.458	0.000	98	1930455	50.0	49.4	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	2397071	50.0	49.6	
96 o-Xylene	106	7.930	7.930	0.000	97	2322559	50.0	49.5	
97 Styrene	104	7.944	7.944	0.000	95	3793861	50.0	50.6	
98 Bromoform	173	8.123	8.123	0.000	97	599853	50.0	47.4	
99 Isopropylbenzene	105	8.266	8.266	0.000	95	5987812	50.0	46.6	
100 Cyclohexanone	55	8.366	8.366	0.000	90	1838363	2000.0	1769.6	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	1448436	50.0	46.2	
103 Bromobenzene	156	8.580	8.580	0.000	93	1391641	50.0	51.7	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	72	365592	50.0	37.0	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	81	451453	50.0	49.9	
106 N-Propylbenzene	120	8.659	8.659	0.000	98	1742479	50.0	48.0	
107 2-Chlorotoluene	126	8.752	8.752	0.000	97	1452618	50.0	48.6	
108 1,3,5-Trimethylbenzene	105	8.831	8.831	0.000	95	5035223	50.0	47.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Chlorotoluene	126	8.873	8.873	0.000	96	1482798	50.0	48.8	
110 tert-Butylbenzene	119	9.138	9.138	0.000	92	4490407	50.0	47.6	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	96	5033176	50.0	47.5	
112 sec-Butylbenzene	134	9.352	9.353	-0.001	94	1472323	50.0	48.7	
113 1,3-Dichlorobenzene	146	9.474	9.474	0.000	98	2844335	50.0	49.8	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	5888000	50.0	48.0	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	95	2902530	50.0	49.0	
117 n-Butylbenzene	91	9.903	9.903	0.000	97	5196612	50.0	44.5	
118 1,2-Dichlorobenzene	146	9.925	9.925	0.000	98	2869786	50.0	50.2	
119 1,2-Dibromo-3-Chloropropan	157	10.697	10.697	0.000	87	326091	50.0	53.2	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	1818785	50.0	49.2	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	97	755931	50.0	46.1	
123 Naphthalene	128	11.776	11.776	0.000	97	4696039	50.0	47.9	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	96	1468248	50.0	57.7	
S 137 1,2-Dichloroethene, Total	96				0		100.0	100.1	
S 140 1,3-Dichloropropene, Total	1				0		100.0	94.7	
S 142 Trihalomethanes, Total	1				0		200.0	199.3	
S 138 Xylenes, Total (URS)	1				0		100.0	99.1	
S 144 1,2-Dichloroethene, Total	1				0		100.0	100.1	
S 143 Xylenes, Total	106				0		100.0	99.1	
S 139 Total BTEX	1				0			246.7	

Reagents:

MV-MegaMainA_00015	Amount Added: 50.00	Units: uL		
MV-Gas A_00028	Amount Added: 50.00	Units: uL		
mv-Cent IS/SS_00002	Amount Added: 5.00	Units: uL	Run Reagent	

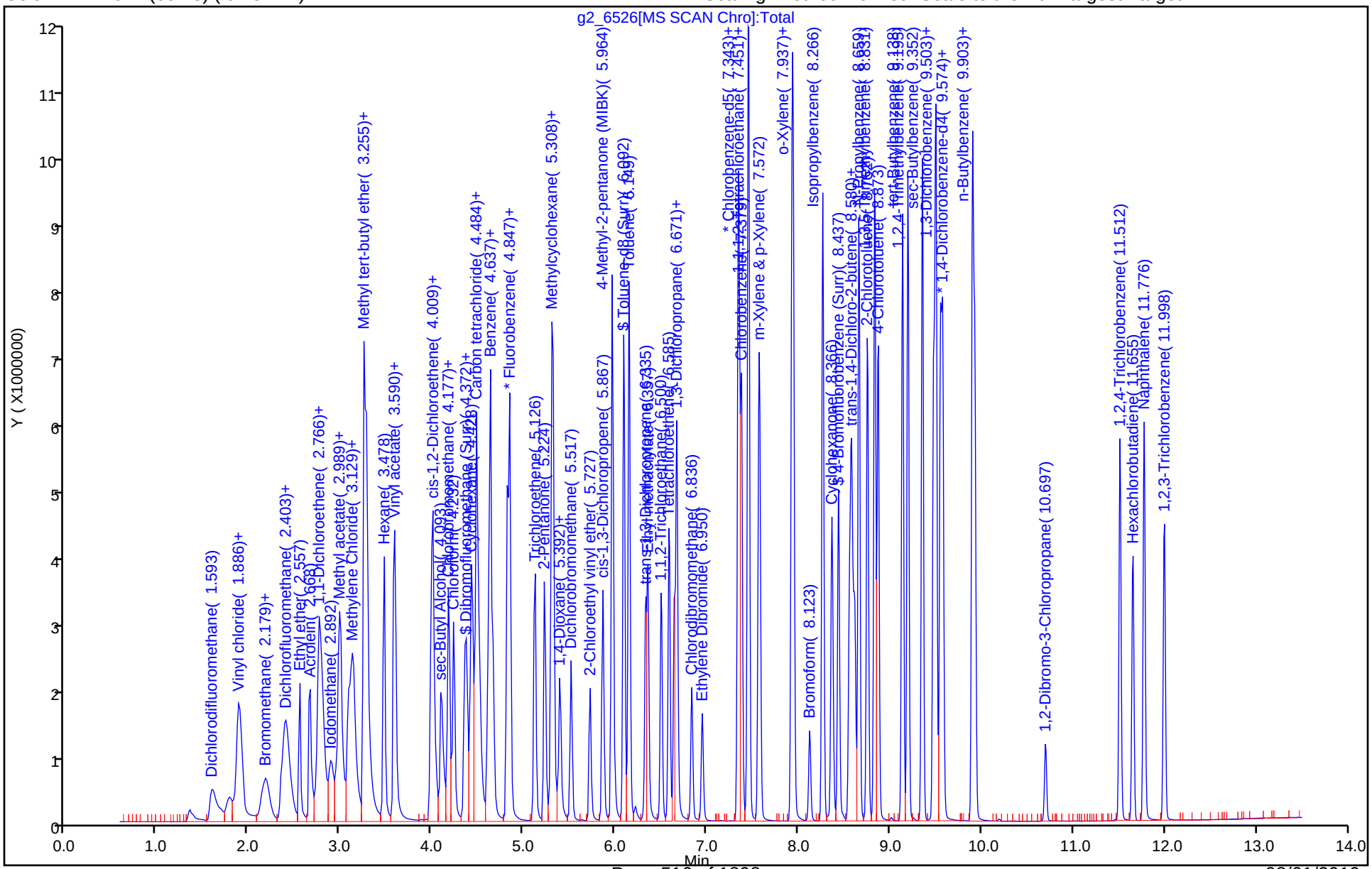
Report Date: 21-Jun-2019 13:04:14 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6526.D

Injection Date:	19-Jun-2019 00:35:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	ccvc			Worklist Smp#:	32
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462165/2 Calibration Date: 06/20/2019 09:50

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6566.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3965	0.3922		49.5	50.0	-1.1	20.0
Chloromethane	Lin2		0.4091	0.1000	43.6	50.0	-12.7	20.0
Vinyl chloride	Lin2		0.1781		44.2	50.0	-11.6	20.0
Bromomethane	Qua		0.1581		50.3	50.0	0.7	20.0
Chloroethane	Qua		0.1876		42.5	50.0	-14.9	20.0
Dichlorofluoromethane	Lin2		0.5397		52.4	50.0	4.8	20.0
Trichlorofluoromethane	Ave	0.4047	0.4441		54.9	50.0	9.7	20.0
Ethyl ether	Ave	0.2277	0.2168		47.6	50.0	-4.8	20.0
Acrolein	Ave	0.0567	0.0539		469	494	-5.1	20.0
Acetone	Lin2		0.0704		180	200	-10.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1905	0.2123		55.7	50.0	11.4	20.0
1,1-Dichloroethene	Ave	0.2563	0.2539		49.5	50.0	-0.9	20.0
Iodomethane	Ave	0.3509	0.3932		56.0	50.0	12.0	20.0
Carbon disulfide	Ave	0.8836	0.8291		46.9	50.0	-6.2	20.0
Methyl acetate	Ave	0.1993	0.1875		94.1	100	-5.9	20.0
3-Chloro-1-propene	Ave	0.4165	0.3704		44.5	50.0	-11.1	20.0
Methylene Chloride	Ave	0.2942	0.2844		48.3	50.0	-3.3	20.0
t-Butyl alcohol	Ave	0.0354	0.0325		459	500	-8.3	20.0
Acrylonitrile	Ave	0.0924	0.0938		507	500	1.5	20.0
Methyl tert-butyl ether	Ave	0.7999	0.7752		48.5	50.0	-3.1	20.0
trans-1,2-Dichloroethene	Ave	0.2535	0.2615		51.6	50.0	3.1	20.0
Hexane	Ave	2.093	1.892		45.2	50.0	-9.6	20.0
Vinyl acetate	Ave	0.5311	0.5131		96.6	100	-3.4	20.0
1,1-Dichloroethane	Ave	0.4513	0.4310	0.1000	47.7	50.0	-4.5	20.0
2-Butanone (MEK)	Ave	0.1189	0.1123		189	200	-5.6	20.0
2,2-Dichloropropane	Ave	0.3581	0.3462		48.3	50.0	-3.3	20.0
cis-1,2-Dichloroethene	Ave	0.2727	0.2791		51.2	50.0	2.3	20.0
sec-Butyl Alcohol	Ave	0.0233	0.0212		1360	1500	-9.3	20.0
Bromochloromethane	Ave	0.1154	0.1322		57.3	50.0	14.6	20.0
Tetrahydrofuran	Ave	0.0920	0.0782		85.0	100	-15.0	20.0
Chloroform	Ave	0.4133	0.4031		48.8	50.0	-2.5	20.0
1,1,1-Trichloroethane	Ave	0.3612	0.3590		49.7	50.0	-0.6	20.0
Cyclohexane	Ave	0.5614	0.5088		45.3	50.0	-9.4	20.0
1,1-Dichloropropene	Ave	0.3695	0.3645		49.3	50.0	-1.3	20.0
Carbon tetrachloride	Ave	0.2708	0.2891		53.4	50.0	6.8	20.0
Isobutyl alcohol	Lin1		0.0092		1110	1250	-11.6	20.0
Benzene	Ave	1.119	1.089		48.7	50.0	-2.6	20.0
1,2-Dichloroethane	Ave	0.3456	0.3098		44.8	50.0	-10.4	20.0
Trichloroethene	Ave	0.2626	0.2591		49.3	50.0	-1.3	20.0
2-Pentanone	Ave	0.1942	0.1725		178	200	-11.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462165/2 Calibration Date: 06/20/2019 09:50

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6566.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4105	0.3746		45.6	50.0	-8.7	20.0
1,2-Dichloropropane	Lin2		0.2625		48.8	50.0	-2.4	20.0
1,4-Dioxane	Ave	0.0030	0.0033		1080	1000	7.7	20.0
Dibromomethane	Ave	0.1402	0.1438		51.3	50.0	2.6	20.0
Bromodichloromethane	Ave	0.2942	0.2971		50.5	50.0	1.0	20.0
2-Chloroethyl vinyl ether	Ave	0.1894	0.2019		53.3	50.0	6.6	20.0
cis-1,3-Dichloropropene	Ave	1.904	1.847		48.5	50.0	-3.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2818	0.2491		177	200	-11.6	20.0
Toluene	Ave	1.097	1.096		50.0	50.0	-0.0	20.0
trans-1,3-Dichloropropene	Ave	0.3539	0.3632		51.3	50.0	2.6	20.0
Ethyl methacrylate	Ave	1.664	1.528		45.9	50.0	-8.2	20.0
1,1,2-Trichloroethane	Ave	0.2088	0.2191		52.5	50.0	4.9	20.0
Tetrachloroethene	Ave	0.8564	0.9514		55.5	50.0	11.1	20.0
1,3-Dichloropropane	Ave	1.739	1.711		49.2	50.0	-1.6	20.0
2-Hexanone	Ave	0.8499	0.7367		173	200	-13.3	20.0
Dibromochloromethane	Ave	0.8035	0.9183		57.1	50.0	14.3	20.0
Ethylene Dibromide	Ave	0.8868	0.9465		53.4	50.0	6.7	20.0
1-Chlorohexane	Lin2		1.619		48.7	50.0	-2.6	20.0
Chlorobenzene	Ave	3.148	3.163	0.3000	50.2	50.0	0.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9600	1.029		53.6	50.0	7.2	20.0
Ethylbenzene	Ave	1.790	1.804		50.4	50.0	0.8	20.0
m-Xylene & p-Xylene	Ave	2.211	2.221		50.2	50.0	0.4	20.0
o-Xylene	Ave	2.148	2.149		50.0	50.0	0.0	20.0
Styrene	Ave	3.428	3.537		51.6	50.0	3.2	20.0
Bromoform	Lin1		0.6000	0.1000	51.8	50.0	3.7	20.0
Isopropylbenzene	Ave	3.411	3.285		48.2	50.0	-3.7	20.0
Cyclohexanone	Ave	0.0475	0.0411		1730	2000	-13.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8325	0.7761	0.3000	46.6	50.0	-6.8	20.0
Bromobenzene	Ave	0.7143	0.7623		53.4	50.0	6.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2621	0.2180		41.6	50.0	-16.8	20.0
1,2,3-Trichloropropane	Ave	0.2401	0.2405		50.1	50.0	0.2	20.0
N-Propylbenzene	Ave	0.9634	0.9700		50.3	50.0	0.7	20.0
2-Chlorotoluene	Ave	0.7936	0.7908		49.8	50.0	-0.4	20.0
1,3,5-Trimethylbenzene	Ave	2.804	2.740		48.9	50.0	-2.3	20.0
4-Chlorotoluene	Ave	0.8058	0.8083		50.2	50.0	0.3	20.0
tert-Butylbenzene	Ave	2.505	2.453		49.0	50.0	-2.1	20.0
1,2,4-Trimethylbenzene	Ave	2.814	2.703		48.0	50.0	-4.0	20.0
sec-Butylbenzene	Ave	0.8023	0.8152		50.8	50.0	1.6	20.0
1,3-Dichlorobenzene	Ave	1.516	1.536		50.6	50.0	1.3	20.0
4-Isopropyltoluene	Ave	3.254	3.223		49.5	50.0	-1.0	20.0
1,4-Dichlorobenzene	Ave	1.572	1.572		50.0	50.0	-0.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462165/2 Calibration Date: 06/20/2019 09:50

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6566.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	3.097	2.925		47.2	50.0	-5.5	20.0
1,2-Dichlorobenzene	Ave	1.518	1.553		51.2	50.0	2.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1627	0.1751		53.8	50.0	7.7	20.0
1,2,4-Trichlorobenzene	Ave	0.9810	1.014		51.7	50.0	3.3	20.0
Hexachlorobutadiene	Ave	0.4353	0.4369		50.2	50.0	0.4	20.0
Naphthalene	Qua		2.518		48.4	50.0	-3.2	20.0
1,2,3-Trichlorobenzene	Lin1		0.8205		60.8	50.0	21.5*	20.0
Dibromofluoromethane (Surr)	Ave	0.2122	0.2173		51.2	50.0	2.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2714	0.2499		46.0	50.0	-7.9	20.0
Toluene-d8 (Surr)	Ave	4.161	4.011		48.2	50.0	-3.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.9235	0.8549		46.3	50.0	-7.4	20.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6566.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2019 09:50:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: coulterd Date: 20-Jun-2019 10:24:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	88	2945214	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4585735	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	85	1038842	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1784597	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	996679	50.0	51.2	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	94	1145828	50.0	46.0	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4166333	50.0	48.2	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	91	1525567	50.0	46.3	
12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	1798683	50.0	49.5	
14 Chloromethane	50	1.886	1.886	0.000	99	1876049	50.0	43.6	
15 Vinyl chloride	62	1.886	1.886	0.000	50	816613	50.0	44.2	
17 Bromomethane	94	2.152	2.152	0.000	91	724813	50.0	50.3	
18 Chloroethane	64	2.193	2.193	0.000	100	860489	50.0	42.5	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	97	2474685	50.0	52.4	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	99	2036334	50.0	54.9	
22 Ethyl ether	59	2.557	2.557	0.000	88	994295	50.0	47.6	
24 Acrolein	56	2.654	2.654	0.000	99	2439494	493.8	468.8	
27 Acetone	43	2.766	2.766	0.000	99	1291938	200.0	179.9	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	98	1164138	50.0	49.5	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	65	973700	50.0	55.7	
28 Iodomethane	142	2.892	2.892	0.000	96	1802928	50.0	56.0	
30 Carbon disulfide	76	2.976	2.976	0.000	88	3802231	50.0	46.9	
32 Methyl acetate	43	2.976	2.976	0.000	97	1719517	100.0	94.1	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	90	1698503	50.0	44.5	
35 Methylene Chloride	84	3.129	3.129	0.000	89	1304235	50.0	48.3	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	1489019	500.0	458.7	
39 Acrylonitrile	53	3.255	3.255	0.000	99	4301413	500.0	507.5	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	94	3554723	50.0	48.5	
40 trans-1,2-Dichloroethene	96	3.283	3.283	0.000	97	1199237	50.0	51.6	
42 Hexane	57	3.478	3.478	0.000	89	1964991	50.0	45.2	
46 Vinyl acetate	43	3.576	3.576	0.000	97	4705850	100.0	96.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	1976356	50.0	47.7	
52 2-Butanone (MEK)	43	3.981	3.981	0.000	98	2059871	200.0	188.8	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	80	1279691	50.0	51.2	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	88	1587428	50.0	48.3	
55 sec-Butyl Alcohol	45	4.093	4.093	0.000	98	2910069	1500.0	1361.1	
56 Chlorobromomethane	128	4.177	4.177	0.000	90	606274	50.0	57.3	
57 Tetrahydrofuran	42	4.191	4.191	0.000	85	717053	100.0	85.0	
59 Chloroform	83	4.232	4.232	0.000	93	1848414	50.0	48.8	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	99	1646169	50.0	49.7	
61 Cyclohexane	56	4.428	4.428	0.000	87	2333290	50.0	45.3	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	98	1671434	50.0	49.3	
62 Carbon tetrachloride	117	4.484	4.484	0.000	95	1325875	50.0	53.4	
66 Isobutyl alcohol	41	4.512	4.512	0.000	94	1059079	1250.0	1105.0	
64 Benzene	78	4.638	4.638	0.000	94	4994460	50.0	48.7	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	1420639	50.0	44.8	
67 n-Heptane	43	4.819	4.819	0.000	90	1862950	50.0	45.3	
69 Trichloroethene	95	5.126	5.126	0.000	97	1188152	50.0	49.3	
70 2-Pentanone	43	5.224	5.224	0.000	98	3164362	200.0	177.7	
71 Methylcyclohexane	55	5.308	5.308	0.000	90	1717905	50.0	45.6	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	97	1203573	50.0	48.8	
74 1,4-Dioxane	88	5.378	5.378	0.000	86	298736	1000.0	1077.3	
75 Dibromomethane	93	5.392	5.392	0.000	97	659409	50.0	51.3	
76 Dichlorobromomethane	83	5.517	5.517	0.000	100	1362611	50.0	50.5	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	925798	50.0	53.3	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	97	1918532	50.0	48.5	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	95	4568739	200.0	176.8	
82 Toluene	91	6.149	6.149	0.000	99	5026038	50.0	50.0	
83 trans-1,3-Dichloropropene	75	6.335	6.335	0.000	92	1665470	50.0	51.3	
84 Ethyl methacrylate	69	6.357	6.357	0.000	86	1587502	50.0	45.9	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	89	1004635	50.0	52.5	
86 Tetrachloroethene	164	6.585	6.585	0.000	97	988354	50.0	55.5	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	91	1777634	50.0	49.2	
88 2-Hexanone	43	6.671	6.671	0.000	94	3061329	200.0	173.4	
89 Chlorodibromomethane	129	6.836	6.836	0.000	90	953978	50.0	57.1	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	983209	50.0	53.4	
91 1-Chlorohexane	91	7.343	7.343	0.000	94	1681660	50.0	48.7	
92 Chlorobenzene	112	7.379	7.379	0.000	97	3286280	50.0	50.2	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	97	1069482	50.0	53.6	
94 Ethylbenzene	106	7.458	7.458	0.000	98	1874048	50.0	50.4	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	2307319	50.0	50.2	
96 o-Xylene	106	7.930	7.930	0.000	95	2232465	50.0	50.0	
97 Styrene	104	7.944	7.944	0.000	95	3674049	50.0	51.6	
98 Bromoform	173	8.123	8.123	0.000	97	623329	50.0	51.8	
99 Isopropylbenzene	105	8.266	8.266	0.000	95	5862079	50.0	48.2	
100 Cyclohexanone	55	8.366	8.366	0.000	90	1705574	2000.0	1726.9	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	1385105	50.0	46.6	
103 Bromobenzene	156	8.580	8.580	0.000	93	1360426	50.0	53.4	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	76	389110	50.0	41.6	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	81	429209	50.0	50.1	
106 N-Propylbenzene	120	8.666	8.666	0.000	98	1731064	50.0	50.3	
107 2-Chlorotoluene	126	8.752	8.752	0.000	97	1411185	50.0	49.8	
108 1,3,5-Trimethylbenzene	105	8.838	8.838	0.000	97	4890349	50.0	48.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Chlorotoluene	126	8.873	8.873	0.000	95	1442486	50.0	50.2	
110 tert-Butylbenzene	119	9.138	9.138	0.000	91	4377514	50.0	49.0	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	96	4823000	50.0	48.0	
112 sec-Butylbenzene	134	9.353	9.353	0.000	94	1454769	50.0	50.8	
113 1,3-Dichlorobenzene	146	9.481	9.481	0.000	98	2740260	50.0	50.6	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	5751000	50.0	49.5	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	95	2805368	50.0	50.0	
117 n-Butylbenzene	91	9.903	9.903	0.000	97	5219425	50.0	47.2	
118 1,2-Dichlorobenzene	146	9.925	9.925	0.000	98	2772189	50.0	51.2	
119 1,2-Dibromo-3-Chloropropan	157	10.704	10.704	0.000	87	312530	50.0	53.8	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	1809125	50.0	51.7	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	97	779616	50.0	50.2	
123 Naphthalene	128	11.776	11.776	0.000	97	4493032	50.0	48.4	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	96	1464174	50.0	60.8	
S 137 1,2-Dichloroethene, Total	96				0		100.0	102.7	
S 140 1,3-Dichloropropene, Total	1				0		100.0	99.8	
S 142 Trihalomethanes, Total	1				0		200.0	208.2	
S 138 Xylenes, Total (URS)	1				0		100.0	100.2	
S 144 1,2-Dichloroethene, Total	1				0		100.0	102.7	
S 143 Xylenes, Total	106				0		100.0	100.2	

Reagents:

MV-MegaMainA_00015	Amount Added: 50.00	Units: uL	
MV-Gas A_00028	Amount Added: 50.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 22-Jun-2019 13:41:39 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6566.D

Injection Date: 20-Jun-2019 09:50:30 Instrument ID: VMS_G2 Operator ID: MEIERG

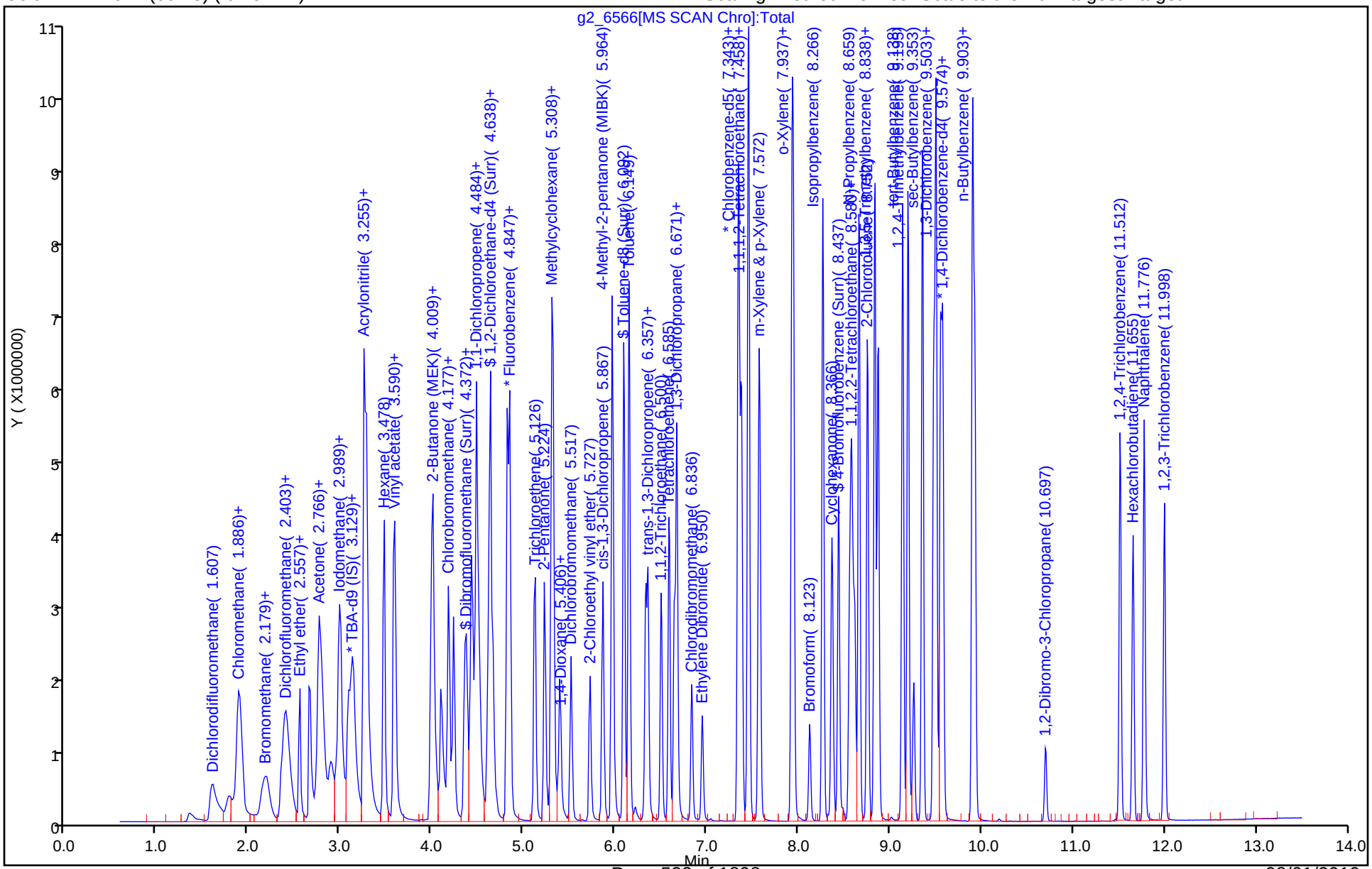
Lims ID: ccv Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVC 280-462165/32 Calibration Date: 06/20/2019 20:23

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6596.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3965	0.3701		46.7	50.0	-6.6	50.0
Chloromethane	Lin2		0.4064	0.1000	43.3	50.0	-13.3	50.0
Vinyl chloride	Lin2		0.1868		46.4	50.0	-7.2	50.0
Bromomethane	Qua		0.1612		51.6	50.0	3.3	50.0
Chloroethane	Qua		0.1967		45.2	50.0	-9.6	50.0
Dichlorofluoromethane	Lin2		0.5386		52.3	50.0	4.6	50.0
Trichlorofluoromethane	Ave	0.4047	0.4283		52.9	50.0	5.8	50.0
Ethyl ether	Ave	0.2277	0.2179		47.9	50.0	-4.3	50.0
Acrolein	Ave	0.0567	0.0500		435	494	-11.9	50.0
Acetone	Lin2		0.0717		183	200	-8.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1905	0.2085		54.7	50.0	9.4	50.0
1,1-Dichloroethene	Ave	0.2563	0.2529		49.4	50.0	-1.3	50.0
Iodomethane	Ave	0.3509	0.4066		57.9	50.0	15.9	50.0
Carbon disulfide	Ave	0.8836	0.8201		46.4	50.0	-7.2	50.0
Methyl acetate	Ave	0.1993	0.1880		94.3	100	-5.7	50.0
3-Chloro-1-propene	Ave	0.4165	0.3454		41.5	50.0	-17.1	50.0
Methylene Chloride	Ave	0.2942	0.2869		48.8	50.0	-2.5	50.0
t-Butyl alcohol	Ave	0.0354	0.0327		462	500	-7.6	50.0
Acrylonitrile	Ave	0.0924	0.0937		507	500	1.4	50.0
Methyl tert-butyl ether	Ave	0.7999	0.7941		49.6	50.0	-0.7	50.0
trans-1,2-Dichloroethene	Ave	0.2535	0.2627		51.8	50.0	3.6	50.0
Hexane	Ave	2.093	1.454		34.7	50.0	-30.5	50.0
Vinyl acetate	Ave	0.5311	0.4892		92.1	100	-7.9	50.0
1,1-Dichloroethane	Ave	0.4513	0.4382	0.1000	48.5	50.0	-2.9	50.0
2-Butanone (MEK)	Ave	0.1189	0.1130		190	200	-5.0	50.0
2,2-Dichloropropane	Ave	0.3581	0.2738		38.2	50.0	-23.5	50.0
cis-1,2-Dichloroethene	Ave	0.2727	0.2890		53.0	50.0	6.0	50.0
sec-Butyl Alcohol	Ave	0.0233	0.0211		1350	1500	-9.7	50.0
Bromochloromethane	Ave	0.1154	0.1401		60.7	50.0	21.5	50.0
Tetrahydrofuran	Ave	0.0920	0.0805		87.5	100	-12.5	50.0
Chloroform	Ave	0.4133	0.4172		50.5	50.0	0.9	50.0
1,1,1-Trichloroethane	Ave	0.3612	0.3627		50.2	50.0	0.4	50.0
Cyclohexane	Ave	0.5614	0.4834		43.1	50.0	-13.9	50.0
1,1-Dichloropropene	Ave	0.3695	0.3608		48.8	50.0	-2.4	50.0
Carbon tetrachloride	Ave	0.2708	0.2899		53.5	50.0	7.0	50.0
Isobutyl alcohol	Lin1		0.0090		1070	1250	-14.4	50.0
Benzene	Ave	1.119	1.095		49.0	50.0	-2.1	50.0
1,2-Dichloroethane	Ave	0.3456	0.3127		45.2	50.0	-9.5	50.0
Trichloroethene	Ave	0.2626	0.2648		50.4	50.0	0.8	50.0
2-Pentanone	Ave	0.1942	0.1727		178	200	-11.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVC 280-462165/32 Calibration Date: 06/20/2019 20:23

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6596.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4105	0.3385		41.2	50.0	-17.5	50.0
1,2-Dichloropropane	Lin2		0.2667		49.6	50.0	-0.8	50.0
1,4-Dioxane	Ave	0.0030	0.0032		1070	1000	7.0	50.0
Dibromomethane	Ave	0.1402	0.1480		52.8	50.0	5.6	50.0
Bromodichloromethane	Ave	0.2942	0.3027		51.4	50.0	2.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1894	0.2052		54.2	50.0	8.4	50.0
cis-1,3-Dichloropropene	Ave	1.904	1.735		45.6	50.0	-8.9	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2818	0.2523		179	200	-10.5	50.0
Toluene	Ave	1.097	1.129		51.5	50.0	2.9	50.0
trans-1,3-Dichloropropene	Ave	0.3539	0.3581		50.6	50.0	1.2	50.0
Ethyl methacrylate	Ave	1.664	1.533		46.0	50.0	-7.9	50.0
1,1,2-Trichloroethane	Ave	0.2088	0.2292		54.9	50.0	9.8	50.0
Tetrachloroethene	Ave	0.8564	0.9316		54.4	50.0	8.8	50.0
1,3-Dichloropropane	Ave	1.739	1.710		49.2	50.0	-1.7	50.0
2-Hexanone	Ave	0.8499	0.7262		171	200	-14.6	50.0
Dibromochloromethane	Ave	0.8035	0.9154		57.0	50.0	13.9	50.0
Ethylene Dibromide	Ave	0.8868	0.9607		54.2	50.0	8.3	50.0
1-Chlorohexane	Lin2		1.553		46.7	50.0	-6.6	50.0
Chlorobenzene	Ave	3.148	3.188	0.3000	50.6	50.0	1.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.9600	1.039		54.1	50.0	8.2	50.0
Ethylbenzene	Ave	1.790	1.783		49.8	50.0	-0.4	50.0
m-Xylene & p-Xylene	Ave	2.211	2.209		50.0	50.0	-0.0	50.0
o-Xylene	Ave	2.148	2.156		50.2	50.0	0.3	50.0
Styrene	Ave	3.428	3.527		51.4	50.0	2.9	50.0
Bromoform	Lin1		0.5830	0.1000	50.4	50.0	0.7	50.0
Isopropylbenzene	Ave	3.411	3.177		46.6	50.0	-6.9	50.0
Cyclohexanone	Ave	0.0475	0.0392		1650	2000	-17.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8325	0.7494	0.3000	45.0	50.0	-10.0	50.0
Bromobenzene	Ave	0.7143	0.7662		53.6	50.0	7.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2621	0.1865		35.6	50.0	-28.8	50.0
1,2,3-Trichloropropane	Ave	0.2401	0.2338		48.7	50.0	-2.6	50.0
N-Propylbenzene	Ave	0.9634	0.9317		48.4	50.0	-3.3	50.0
2-Chlorotoluene	Ave	0.7936	0.7837		49.4	50.0	-1.2	50.0
1,3,5-Trimethylbenzene	Ave	2.804	2.628		46.8	50.0	-6.3	50.0
4-Chlorotoluene	Ave	0.8058	0.7971		49.5	50.0	-1.1	50.0
tert-Butylbenzene	Ave	2.505	2.388		47.7	50.0	-4.7	50.0
1,2,4-Trimethylbenzene	Ave	2.814	2.645		47.0	50.0	-6.0	50.0
sec-Butylbenzene	Ave	0.8023	0.7935		49.5	50.0	-1.1	50.0
1,3-Dichlorobenzene	Ave	1.516	1.518		50.1	50.0	0.1	50.0
4-Isopropyltoluene	Ave	3.254	3.103		47.7	50.0	-4.6	50.0
1,4-Dichlorobenzene	Ave	1.572	1.541		49.0	50.0	-2.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVC 280-462165/32 Calibration Date: 06/20/2019 20:23

Instrument ID: VMS_G2 Calib Start Date: 06/17/2019 17:38

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/17/2019 19:44

Lab File ID: g2_6596.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Ave	3.097	2.685		43.4	50.0	-13.3	50.0
1,2-Dichlorobenzene	Ave	1.518	1.541		50.8	50.0	1.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1627	0.1684		51.8	50.0	3.6	50.0
1,2,4-Trichlorobenzene	Ave	0.9810	0.9786		49.9	50.0	-0.2	50.0
Hexachlorobutadiene	Ave	0.4353	0.4073		46.8	50.0	-6.4	50.0
Naphthalene	Qua		2.448		47.0	50.0	-6.1	50.0
1,2,3-Trichlorobenzene	Lin1		0.8061		59.7	50.0	19.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2122	0.2232		52.6	50.0	5.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2714	0.2477		45.6	50.0	-8.7	50.0
Toluene-d8 (Surr)	Ave	4.161	3.950		47.5	50.0	-5.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.9235	0.8278		44.8	50.0	-10.4	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6596.D
Lims ID: ccvc
Client ID:
Sample Type: CCVC
Inject. Date: 20-Jun-2019 20:23:30 ALS Bottle#: 31 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Misc. Info.: 280-0083038-032
Operator ID: MEIERG Instrument ID: VMS_G2
Sublist: chrom-AQ_VMSG2_8260*sub90

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:43:27 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	82	2684132	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4250950	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	84	1000984	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1731781	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	948980	50.0	52.6	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	95	1052859	50.0	45.6	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	3953489	50.0	47.5	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	92	1433501	50.0	44.8	
12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	1573428	50.0	46.7	
14 Chloromethane	50	1.886	1.886	0.000	99	1727374	50.0	43.3	
15 Vinyl chloride	62	1.886	1.886	0.000	98	793926	50.0	46.4	
17 Bromomethane	94	2.152	2.152	0.000	91	685412	50.0	51.6	
18 Chloroethane	64	2.193	2.193	0.000	99	836023	50.0	45.2	
19 Dichlorofluoromethane	67	2.375	2.389	-0.014	97	2289670	50.0	52.3	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	98	1820583	50.0	52.9	
22 Ethyl ether	59	2.557	2.557	0.000	87	926414	50.0	47.9	
24 Acrolein	56	2.668	2.668	0.000	100	2097647	493.8	434.8	
27 Acetone	43	2.766	2.766	0.000	99	1218676	200.0	183.1	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	97	1075234	50.0	49.4	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	67	886311	50.0	54.7	
28 Iodomethane	142	2.892	2.892	0.000	96	1728603	50.0	57.9	
30 Carbon disulfide	76	2.976	2.976	0.000	99	3486339	50.0	46.4	
32 Methyl acetate	43	2.976	2.976	0.000	96	1598207	100.0	94.3	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	88	1468354	50.0	41.5	
35 Methylene Chloride	84	3.129	3.129	0.000	89	1219370	50.0	48.8	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	1390343	500.0	462.1	
39 Acrylonitrile	53	3.255	3.255	0.000	99	3982558	500.0	506.9	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	94	3375551	50.0	49.6	
40 trans-1,2-Dichloroethene	96	3.283	3.297	-0.014	99	1116839	50.0	51.8	
42 Hexane	57	3.478	3.478	0.000	89	1455211	50.0	34.7	
46 Vinyl acetate	43	3.576	3.576	0.000	97	4158815	100.0	92.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	1862632	50.0	48.5	
52 2-Butanone (MEK)	43	3.981	3.981	0.000	98	1921511	200.0	190.0	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	78	1228435	50.0	53.0	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	88	1163810	50.0	38.2	
55 sec-Butyl Alcohol	45	4.093	4.093	0.000	99	2685356	1500.0	1354.9	
56 Chlorobromomethane	128	4.177	4.177	0.000	90	595708	50.0	60.7	
57 Tetrahydrofuran	42	4.191	4.191	0.000	84	684148	100.0	87.5	
59 Chloroform	83	4.233	4.233	0.000	93	1773516	50.0	50.5	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	98	1541925	50.0	50.2	
61 Cyclohexane	56	4.428	4.428	0.000	86	2055089	50.0	43.1	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	98	1533612	50.0	48.8	
62 Carbon tetrachloride	117	4.498	4.498	0.000	94	1232204	50.0	53.5	
66 Isobutyl alcohol	41	4.512	4.512	0.000	94	950877	1250.0	1070.5	
64 Benzene	78	4.638	4.638	0.000	94	4655777	50.0	49.0	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	1329280	50.0	45.2	
67 n-Heptane	43	4.819	4.819	0.000	88	1311943	50.0	34.4	
69 Trichloroethene	95	5.126	5.126	0.000	96	1125616	50.0	50.4	
70 2-Pentanone	43	5.224	5.224	0.000	98	2935913	200.0	177.8	
71 Methylcyclohexane	55	5.308	5.308	0.000	90	1438928	50.0	41.2	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	96	1133569	50.0	49.6	
74 1,4-Dioxane	88	5.378	5.378	0.000	86	274941	1000.0	1069.6	
75 Dibromomethane	93	5.392	5.392	0.000	96	628910	50.0	52.8	
76 Dichlorobromomethane	83	5.517	5.517	0.000	100	1286595	50.0	51.4	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	872316	50.0	54.2	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	97	1736946	50.0	45.6	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	95	4289705	200.0	179.1	
82 Toluene	91	6.149	6.149	0.000	99	4798058	50.0	51.5	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	92	1522166	50.0	50.6	
84 Ethyl methacrylate	69	6.357	6.357	0.000	87	1534075	50.0	46.0	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	89	974224	50.0	54.9	
86 Tetrachloroethene	164	6.585	6.585	0.000	98	932504	50.0	54.4	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	91	1711761	50.0	49.2	
88 2-Hexanone	43	6.671	6.671	0.000	95	2907783	200.0	170.9	
89 Chlorodibromomethane	129	6.836	6.836	0.000	90	916292	50.0	57.0	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	961617	50.0	54.2	
91 1-Chlorohexane	91	7.343	7.343	0.000	93	1554163	50.0	46.7	
92 Chlorobenzene	112	7.379	7.379	0.000	97	3190988	50.0	50.6	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	96	1039570	50.0	54.1	
94 Ethylbenzene	106	7.458	7.458	0.000	97	1784468	50.0	49.8	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	2211334	50.0	50.0	
96 o-Xylene	106	7.930	7.930	0.000	95	2157726	50.0	50.2	
97 Styrene	104	7.944	7.944	0.000	95	3530688	50.0	51.4	
98 Bromoform	173	8.123	8.123	0.000	97	583583	50.0	50.4	
99 Isopropylbenzene	105	8.266	8.266	0.000	95	5501248	50.0	46.6	
100 Cyclohexanone	55	8.366	8.366	0.000	90	1569763	2000.0	1649.5	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	1297836	50.0	45.0	
103 Bromobenzene	156	8.580	8.580	0.000	92	1326897	50.0	53.6	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	70	323001	50.0	35.6	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	80	404919	50.0	48.7	
106 N-Propylbenzene	120	8.659	8.659	0.000	98	1613422	50.0	48.4	
107 2-Chlorotoluene	126	8.752	8.752	0.000	98	1357248	50.0	49.4	
108 1,3,5-Trimethylbenzene	105	8.831	8.831	0.000	95	4550450	50.0	46.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 4-Chlorotoluene	126	8.873	8.873	0.000	95	1380322	50.0	49.5	
110 tert-Butylbenzene	119	9.138	9.138	0.000	91	4135181	50.0	47.7	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	96	4580370	50.0	47.0	
112 sec-Butylbenzene	134	9.353	9.353	0.000	93	1374178	50.0	49.5	
113 1,3-Dichlorobenzene	146	9.481	9.474	0.007	98	2628776	50.0	50.1	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	5373209	50.0	47.7	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	95	2667913	50.0	49.0	
117 n-Butylbenzene	91	9.903	9.903	0.000	97	4650558	50.0	43.4	
118 1,2-Dichlorobenzene	146	9.925	9.925	0.000	99	2668088	50.0	50.8	
119 1,2-Dibromo-3-Chloropropan	157	10.697	10.697	0.000	88	291693	50.0	51.8	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	1694701	50.0	49.9	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	97	705387	50.0	46.8	
123 Naphthalene	128	11.776	11.776	0.000	97	4239645	50.0	47.0	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	1396013	50.0	59.7	
S 137 1,2-Dichloroethene, Total	96				0		100.0	104.8	
S 140 1,3-Dichloropropene, Total	1				0		100.0	96.1	
S 142 Trihalomethanes, Total	1				0		200.0	209.2	
S 138 Xylenes, Total (URS)	1				0		100.0	100.1	
S 144 1,2-Dichloroethene, Total	1				0		100.0	104.8	
S 143 Xylenes, Total	106				0		100.0	100.1	
S 139 Total BTEX	1				0			250.4	

Reagents:

MV-Gas A_00028	Amount Added: 50.00	Units: uL		
MV-MegaMainA_00015	Amount Added: 50.00	Units: uL		
mv-Cent IS/SS_00002	Amount Added: 5.00	Units: uL	Run Reagent	

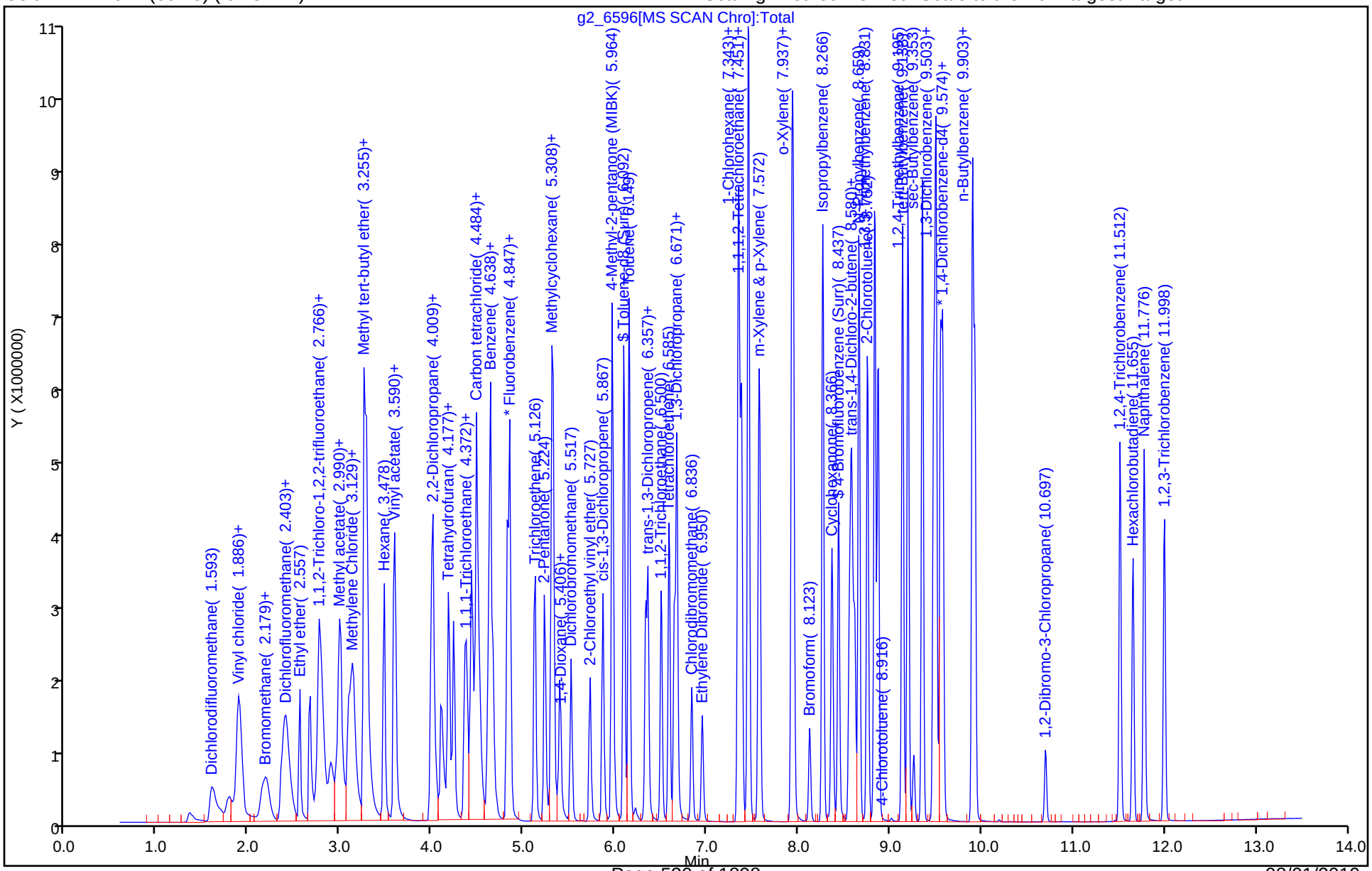
Report Date: 22-Jun-2019 13:43:31 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6596.D

Injection Date:	20-Jun-2019 20:23:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	ccvc			Worklist Smp#:	32
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6446.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 17-Jun-2019 16:54:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 12:34:16 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 21-Jun-2019 12:34:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 11 BFB	95	3.199	3.199	0.000	79	413808	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

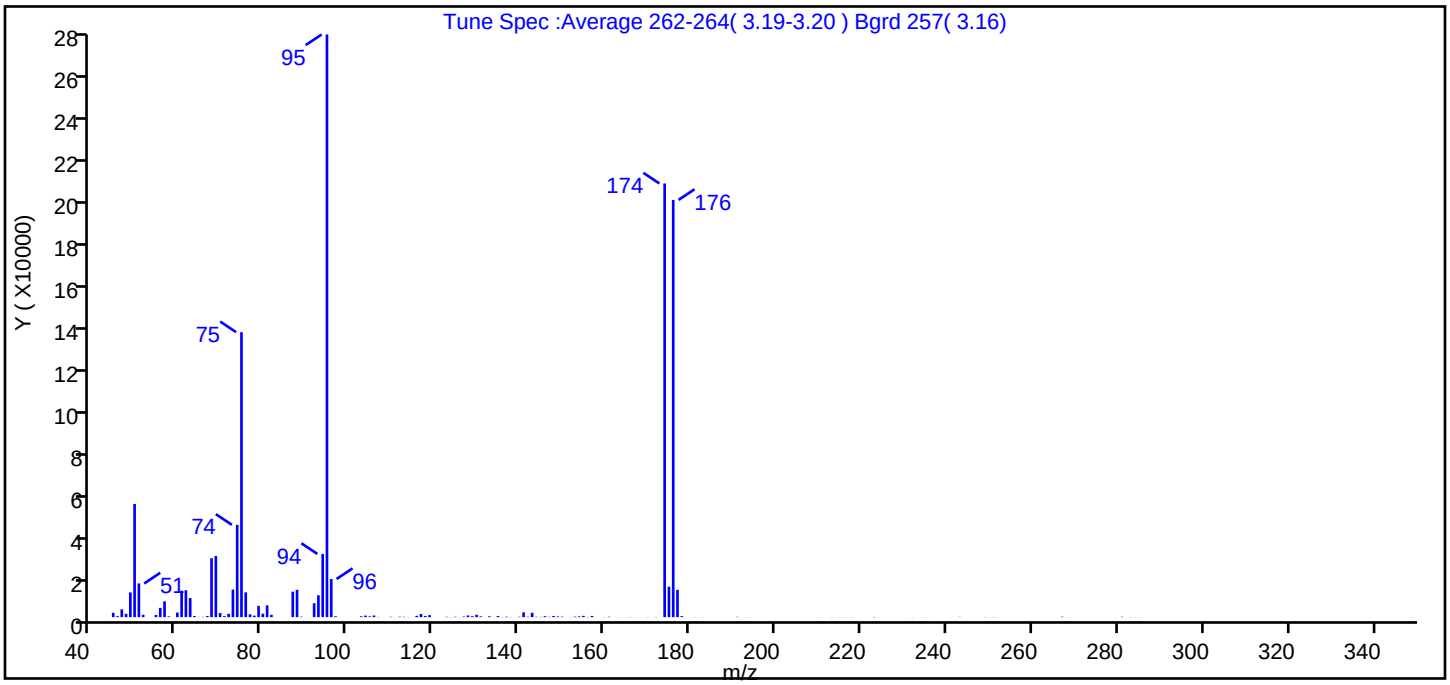
MV-BFB_00028 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6446.D
Injection Date: 17-Jun-2019 16:54:30 Instrument ID: VMS_G2
Lims ID: bfb
Client ID:
Operator ID: MEIERG ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.4
75	30 to 60% of m/z 95	48.9
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	74.4
175	5 to 9% of m/z 174	5.2 (7.0)
176	Greater than 95% but less than 101% of m/z 174	71.6 (96.2)
177	5 to 9% of m/z 176	4.7 (6.5)

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6446.D\AQ_VMSG2_8260.rslt\spectra.d
Injection Date: 17-Jun-2019 16:54:30
Spectrum: Tune Spec :Average 262-264(3.19-3.20) Bgrd 257(3.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	2090	81.00	5625	129.00	451	172.00	108
46.00	452	82.00	1096	130.00	1127	174.00	207360
47.00	3722	87.00	12178	131.00	364	175.00	14558
48.00	1594	88.00	13071	133.00	389	176.00	199488
49.00	11819	89.00	215	135.00	537	177.00	13041
50.00	54120	91.00	40	136.00	62	178.00	482
51.00	16097	92.00	6637	137.00	222	181.00	61
52.00	1144	93.00	10454	138.00	67	183.00	59
55.00	1053	94.00	30224	139.00	6	191.00	150
56.00	4434	95.00	278592	140.00	192	193.00	61
57.00	7567	96.00	18240	141.00	2285	194.00	59
58.00	348	97.00	412	142.00	209	210.00	63
60.00	2187	103.00	404	143.00	2106	213.00	54
61.00	12644	104.00	750	144.00	183	215.00	64
62.00	12874	105.00	358	145.00	127	216.00	51
63.00	9128	106.00	783	146.00	477	218.00	54
64.00	555	107.00	119	147.00	157	223.00	107
65.00	92	110.00	176	148.00	557	224.00	51
66.00	145	111.00	36	149.00	331	232.00	53
67.00	536	112.00	206	150.00	237	235.00	65
68.00	28160	113.00	158	152.00	55	243.00	122
69.00	29272	114.00	59	153.00	240	249.00	76
70.00	1962	115.00	5	154.00	355	251.00	81
71.00	489	116.00	624	155.00	622	267.00	215
72.00	1596	117.00	1520	156.00	115	269.00	54
73.00	13190	118.00	539	157.00	565	281.00	178
74.00	44136	119.00	967	159.00	9	283.00	75
75.00	136256	123.00	168	160.00	67	284.00	52
76.00	11848	124.00	64	161.00	205	285.00	51
77.00	1338	125.00	184	163.00	56	349.00	51
78.00	721	126.00	59	166.00	74		
79.00	5393	127.00	254	167.00	54		
80.00	1664	128.00	812	170.00	72		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	2090	81.00	5625	129.00	451	172.00	108
46.00	452	82.00	1096	130.00	1127	174.00	207360
47.00	3722	87.00	12178	131.00	364	175.00	14558
48.00	1594	88.00	13071	133.00	389	176.00	199488
49.00	11819	89.00	215	135.00	537	177.00	13041
50.00	54120	91.00	40	136.00	62	178.00	482
51.00	16097	92.00	6637	137.00	222	181.00	61
52.00	1144	93.00	10454	138.00	67	183.00	59
55.00	1053	94.00	30224	139.00	6	191.00	150
56.00	4434	95.00	278592	140.00	192	193.00	61
57.00	7567	96.00	18240	141.00	2285	194.00	59
58.00	348	97.00	412	142.00	209	210.00	63
60.00	2187	103.00	404	143.00	2106	213.00	54
61.00	12644	104.00	750	144.00	183	215.00	64
62.00	12874	105.00	358	145.00	127	216.00	51
63.00	9128	106.00	783	146.00	477	218.00	54
64.00	555	107.00	119	147.00	157	223.00	107
65.00	92	110.00	176	148.00	557	224.00	51
66.00	145	111.00	36	149.00	331	232.00	53
67.00	536	112.00	206	150.00	237	235.00	65
68.00	28160	113.00	158	152.00	55	243.00	122
69.00	29272	114.00	59	153.00	240	249.00	76
70.00	1962	115.00	5	154.00	355	251.00	81
71.00	489	116.00	624	155.00	622	267.00	215
72.00	1596	117.00	1520	156.00	115	269.00	54
73.00	13190	118.00	539	157.00	565	281.00	178
74.00	44136	119.00	967	159.00	9	283.00	75
75.00	136256	123.00	168	160.00	67	284.00	52
76.00	11848	124.00	64	161.00	205	285.00	51
77.00	1338	125.00	184	163.00	56	349.00	51
78.00	721	126.00	59	166.00	74		
79.00	5393	127.00	254	167.00	54		
80.00	1664	128.00	812	170.00	72		

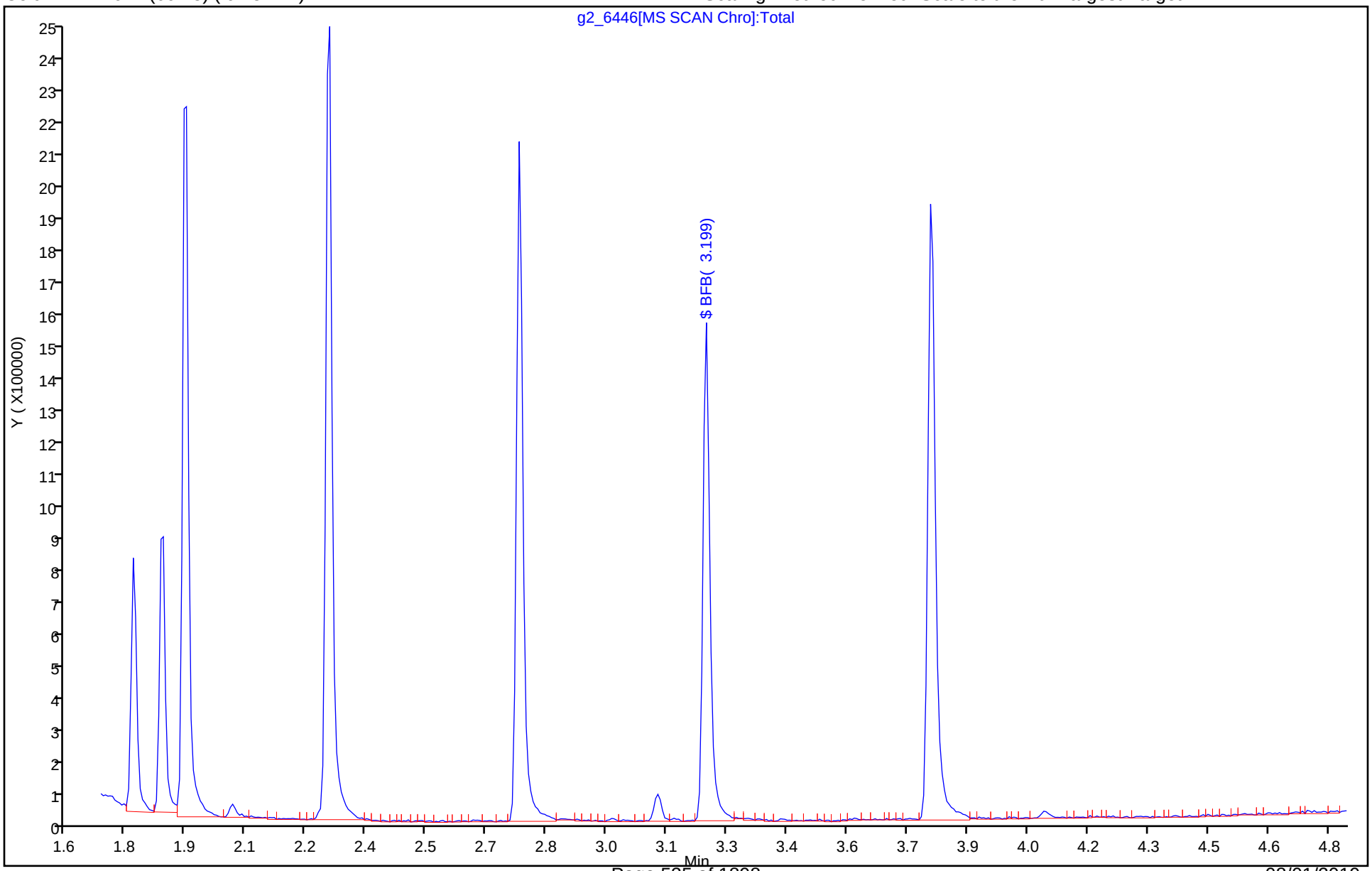
Report Date: 21-Jun-2019 12:34:18 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6446.D

Injection Date:	17-Jun-2019 16:54:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6494.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 18-Jun-2019 13:14:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:18 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 18-Jun-2019 13:54:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 11 BFB	95	3.199	3.199	0.000	84	488542	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

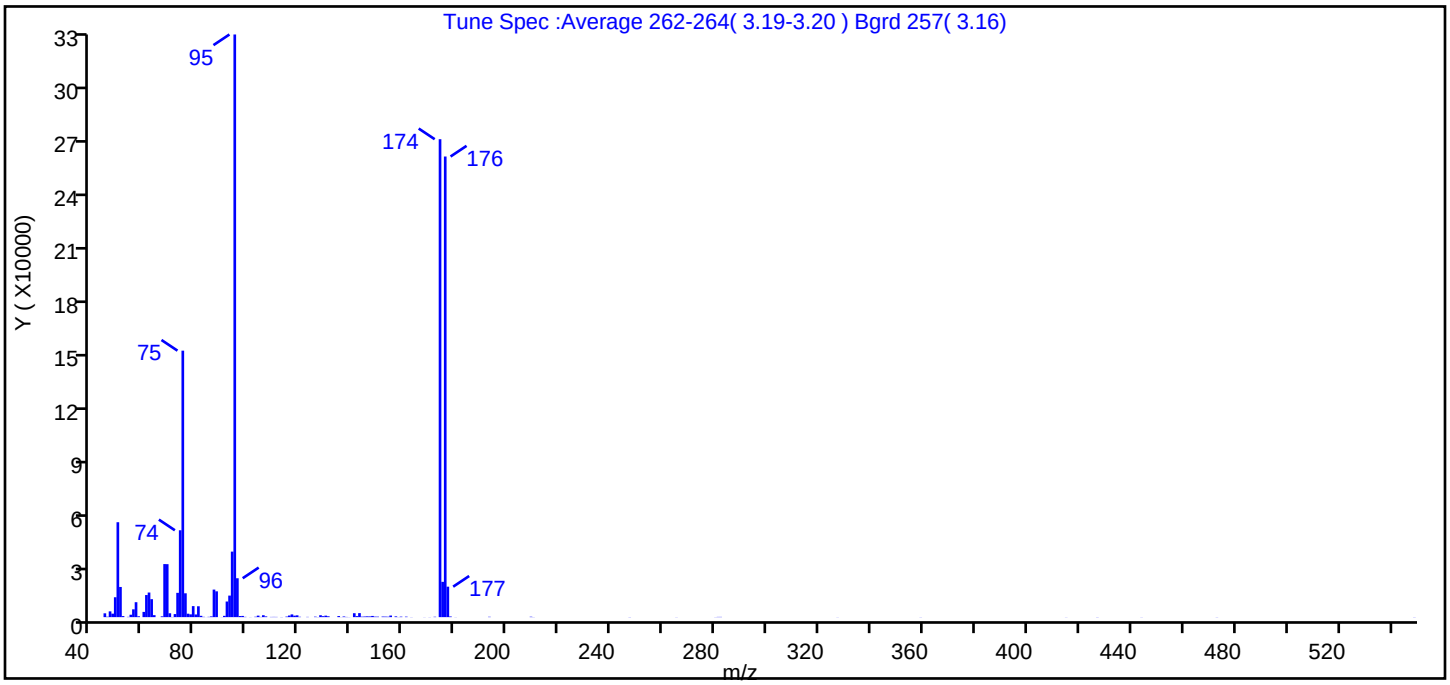
MV-BFB_00028 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6494.D
Injection Date: 18-Jun-2019 13:14:30 Instrument ID: VMS_G2
Lims ID: bfb
Client ID:
Operator ID: MEIERG ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.3
75	30 to 60% of m/z 95	45.7
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	82.0
175	5 to 9% of m/z 174	6.1 (7.4)
176	Greater than 95% but less than 101% of m/z 174	79.1 (96.4)
177	5 to 9% of m/z 176	5.2 (6.6)

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6494.D\AQ_VMSG2_8260.rslt\spectra.d
Injection Date: 18-Jun-2019 13:14:30
Spectrum: Tune Spec :Average 262-264(3.19-3.20) Bgrd 257(3.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	2108	80.00	1476	117.00	1514	158.00	52
46.00	235	81.00	5996	118.00	817	159.00	279
47.00	3185	82.00	726	119.00	999	161.00	277
48.00	1920	83.00	167	120.00	197	163.00	65
49.00	10961	84.00	30	123.00	141	168.00	53
50.00	52320	85.00	166	126.00	268	170.00	60
51.00	16632	86.00	409	127.00	69	172.00	212
52.00	583	87.00	15188	128.00	1051	174.00	263424
54.00	151	88.00	14227	129.00	530	175.00	19464
55.00	1337	90.00	52	130.00	828	176.00	253888
56.00	4313	91.00	715	131.00	467	177.00	16792
57.00	8235	92.00	8616	135.00	590	178.00	360
58.00	479	93.00	11876	136.00	51	180.00	50
60.00	2892	94.00	36120	137.00	362	193.00	198
61.00	12180	95.00	321152	138.00	120	209.00	226
62.00	13565	96.00	21440	139.00	56	210.00	62
63.00	9909	97.00	610	141.00	2166	247.00	79
64.00	1088	98.00	677	142.00	563	265.00	56
67.00	437	99.00	157	143.00	2218	280.00	60
68.00	29248	101.00	54	144.00	267	281.00	132
69.00	29200	103.00	225	145.00	344	282.00	137
70.00	2134	104.00	837	146.00	430	327.00	51
71.00	94	105.00	137	147.00	392	359.00	64
72.00	1688	106.00	1056	148.00	663	415.00	52
73.00	13390	107.00	403	149.00	285	427.00	77
74.00	47880	109.00	123	150.00	271	444.00	56
75.00	146880	110.00	145	152.00	322	473.00	66
76.00	13144	111.00	131	153.00	296	549.00	76
77.00	1894	113.00	78	154.00	231		
78.00	1540	115.00	304	155.00	877		
79.00	6077	116.00	887	157.00	421		

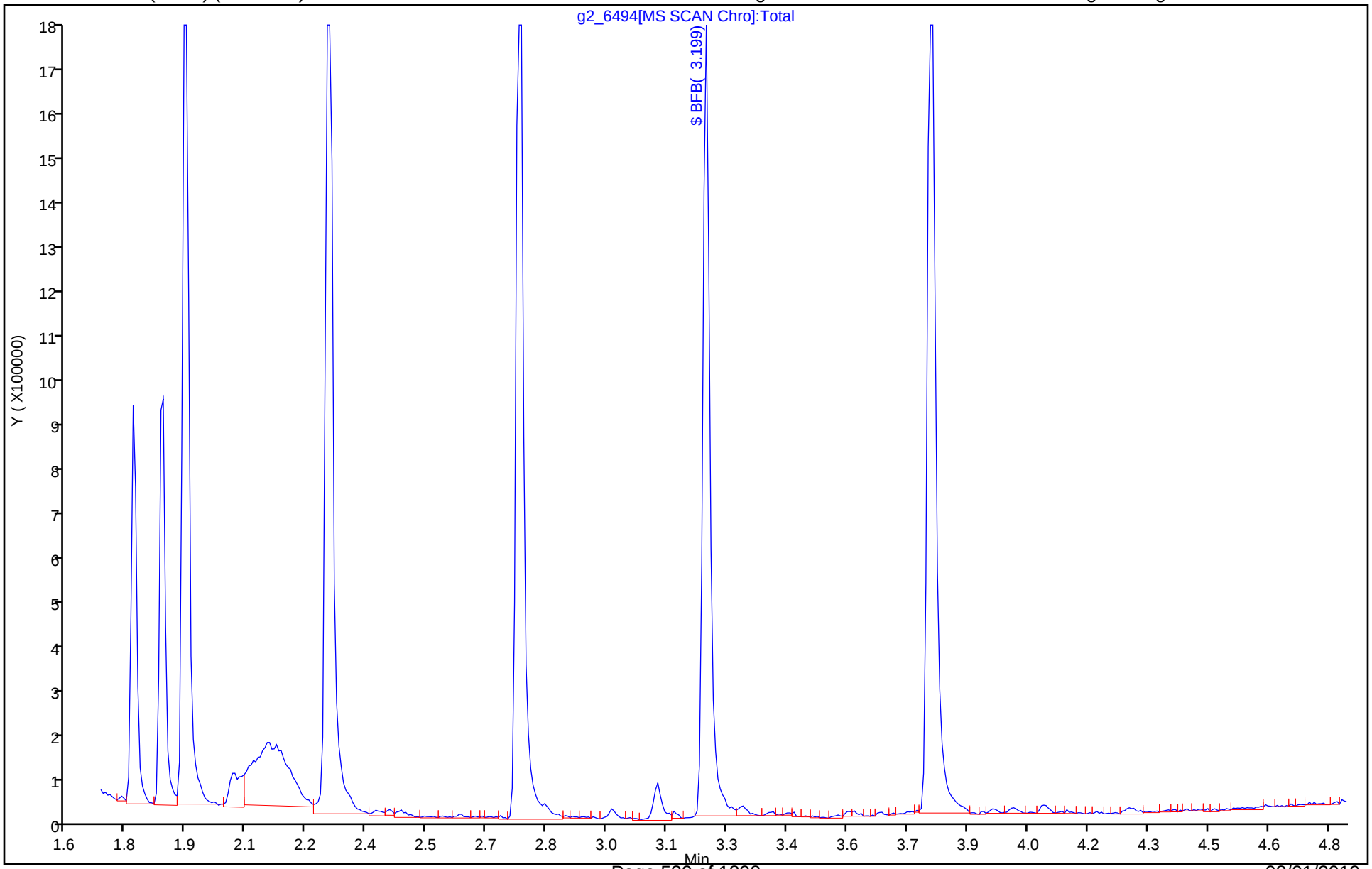
Report Date: 21-Jun-2019 13:00:20 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6494.D

Injection Date:	18-Jun-2019 13:14:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6565.D
Lims ID: bfb
Client ID:
Sample Type: BFB
Inject. Date: 20-Jun-2019 09:29:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:31 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: coulterd Date: 20-Jun-2019 09:53:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 11 BFB	95	3.199	3.199	0.000	86	420911	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

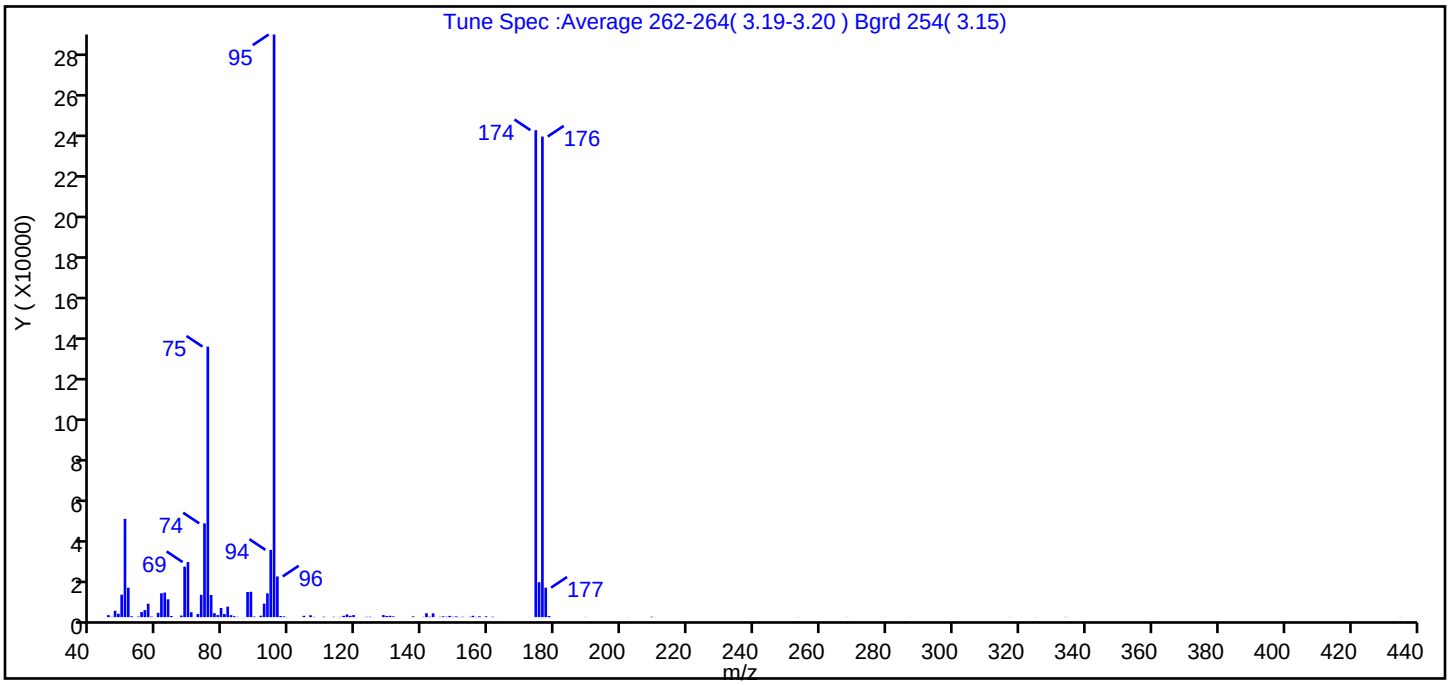
MV-BFB_00028 Amount Added: 2.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6565.D
Injection Date: 20-Jun-2019 09:29:30 Instrument ID: VMS_G2
Lims ID: bfb
Client ID:
Operator ID: MEIERG ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 11 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.9
75	30 to 60% of m/z 95	46.4
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	83.6
175	5 to 9% of m/z 174	6.0 (7.2)
176	Greater than 95% but less than 101% of m/z 174	82.5 (98.7)
177	5 to 9% of m/z 176	5.1 (6.1)

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6565.D\AQ_VMSG2_8260.rslt\spectra.d
Injection Date: 20-Jun-2019 09:29:30
Spectrum: Tune Spec :Average 262-264(3.19-3.20) Bgrd 254(3.15)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 107

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	992	76.00	10927	115.00	128	151.00	65
46.00	163	77.00	1943	116.00	642	152.00	172
47.00	3169	78.00	1022	117.00	1342	154.00	145
48.00	1666	79.00	4521	118.00	681	155.00	657
49.00	11099	80.00	1556	119.00	1018	156.00	109
50.00	48512	81.00	5167	120.00	52	157.00	431
51.00	14532	82.00	974	122.00	65	159.00	399
52.00	433	83.00	467	123.00	163	161.00	220
54.00	281	84.00	147	124.00	197	163.00	33
55.00	2510	86.00	60	125.00	57	172.00	80
56.00	3495	87.00	12401	128.00	1028	174.00	240320
57.00	6636	88.00	12509	129.00	599	175.00	17208
58.00	274	89.00	303	130.00	656	176.00	237184
60.00	2146	91.00	689	131.00	379	177.00	14551
61.00	11799	92.00	6667	132.00	52	178.00	564
62.00	12133	93.00	11743	135.00	28	189.00	89
63.00	8812	94.00	33200	137.00	395	202.00	50
64.00	554	95.00	287552	140.00	150	209.00	223
67.00	785	96.00	20088	141.00	1932	210.00	51
68.00	24912	97.00	550	142.00	227	253.00	65
69.00	27168	98.00	384	143.00	1873	268.00	77
70.00	2448	99.00	52	145.00	134	287.00	50
71.00	24	104.00	660	146.00	402	317.00	53
72.00	1580	106.00	938	147.00	194	325.00	57
73.00	11046	107.00	160	148.00	630	334.00	115
74.00	46280	110.00	235	149.00	181	435.00	65
75.00	133504	113.00	189	150.00	379		

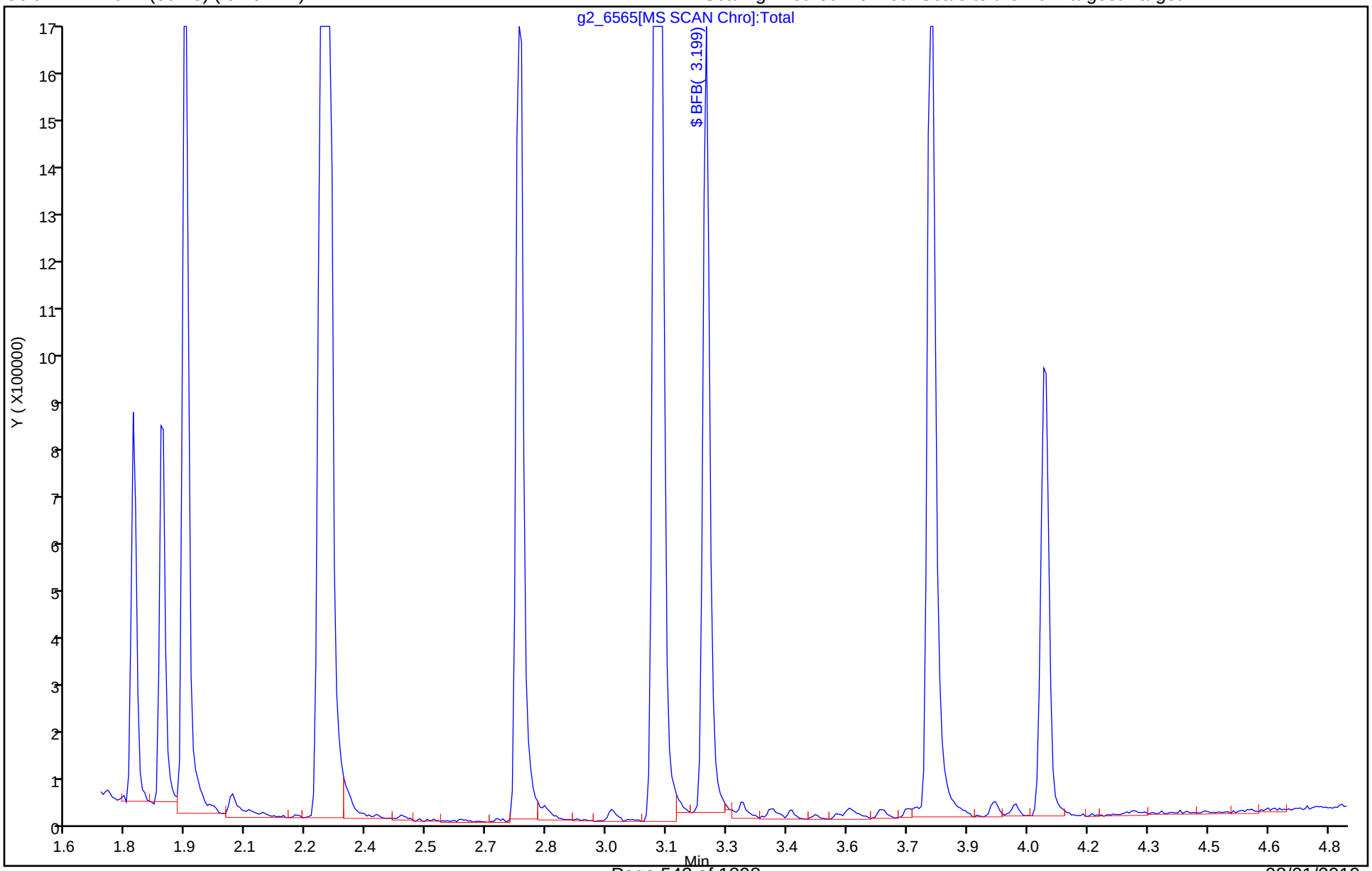
Report Date: 22-Jun-2019 13:41:31 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6565.D

Injection Date:	20-Jun-2019 09:29:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-461956/4

Matrix: Water Lab File ID: g2_6498.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 14:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461956 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-461956/4

Matrix: Water Lab File ID: g2_6498.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 14:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461956 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		81-118
460-00-4	4-Bromofluorobenzene (Surr)	97		85-114
1868-53-7	Dibromofluoromethane (Surr)	103		80-119
2037-26-5	Toluene-d8 (Surr)	97		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6498.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 18-Jun-2019 14:42:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 21-Jun-2019 12:46:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	3232393	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4647421	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.351	7.350	0.000	85	1064132	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1753631	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	1011831	50.0	51.3	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	96	1181618	50.0	46.8	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4313825	50.0	48.7	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	89	1565434	50.0	48.3	
$ 10 Trifluorotoluene (Surr)	1		0.000					ND	
$ 11 BFB	95		3.199					ND	
12 Dichlorodifluoromethane	85		1.593					ND	
34 Chlorotrifluoroethene	116		1.677					ND	
36 1,2-Dichloro-1,1,2,2-tetra	85		1.830					ND	
14 Chloromethane	50		1.886					ND	
15 Vinyl chloride	62		1.886					ND	
16 Ethylene oxide	43		2.054					ND	
38 2-Chloro-1,1,1-Trifluoroet	118		2.110					ND	
17 Bromomethane	94		2.152					ND	
18 Chloroethane	64		2.193					ND	
19 Dichlorofluoromethane	67		2.389					ND	
20 Trichlorofluoromethane	101		2.417					ND	
21 Ethanol	45		2.473					ND	
22 Ethyl ether	59		2.557					ND	
23 Propene oxide	58		2.598					ND	
24 Acrolein	56		2.668					ND	
27 Acetone	43		2.766					ND	
25 1,1-Dichloroethene	96		2.780					ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780					ND	
29 Isopropyl alcohol	45		2.850					ND	U
28 Iodomethane	142		2.892					ND	
31 Acetonitrile	41		2.976					ND	
30 Carbon disulfide	76		2.976					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Methyl acetate	43		2.976					ND	
33 3-Chloro-1-propene	41		3.003					ND	U
35 Methylene Chloride	84		3.129					ND	
43 1,2-Dichloro-1,1,2-trifluo	117		3.129					ND	
37 2-Methyl-2-propanol	59		3.143					ND	
44 1,1,1-Trifluoro-2,2-dichlo	83		3.213					ND	
39 Acrylonitrile	53		3.255					ND	
41 Methyl tert-butyl ether	73		3.269					ND	
40 trans-1,2-Dichloroethene	96		3.297					ND	
42 Hexane	57		3.478					ND	
46 Vinyl acetate	43		3.576					ND	
45 1,1-Dichloroethane	63		3.604					ND	
47 Isopropyl ether	87		3.604					ND	
48 2-Chloro-1,3-butadiene	53		3.660					ND	
49 Tert-butyl ethyl ether	59		3.869					ND	
52 2-Butanone (MEK)	43		3.981					ND	
53 Ethyl acetate	43		4.009					ND	
51 cis-1,2-Dichloroethene	96		4.009					ND	
50 2,2-Dichloropropane	77		4.009					ND	
54 Propionitrile	54		4.037					ND	
55 sec-Butyl Alcohol	45		4.093					ND	
58 Methacrylonitrile	41		4.149					ND	
56 Chlorobromomethane	128		4.177					ND	
57 Tetrahydrofuran	42		4.191					ND	
59 Chloroform	83		4.233					ND	
60 1,1,1-Trichloroethane	97		4.372					ND	
61 Cyclohexane	56		4.428					ND	
63 1,1-Dichloropropene	75		4.484					ND	
62 Carbon tetrachloride	117		4.498					ND	
66 Isobutyl alcohol	41		4.512					ND	U
64 Benzene	78		4.638					ND	
65 1,2-Dichloroethane	62		4.665					ND	
68 Tert-amyl methyl ether	73		4.707					ND	
67 n-Heptane	43		4.819					ND	
73 n-Butanol	56		5.015					ND	U
69 Trichloroethene	95		5.126					ND	
70 2-Pentanone	43		5.224					ND	
71 Methylcyclohexane	55		5.308					ND	
72 1,2-Dichloropropane	63		5.322					ND	
77 Methyl methacrylate	100		5.336					ND	
74 1,4-Dioxane	88		5.378					ND	
75 Dibromomethane	93		5.392					ND	
76 Dichlorobromomethane	83		5.517					ND	
80 2-Nitropropane	41		5.685					ND	U
78 2-Chloroethyl vinyl ether	63		5.727					ND	
79 cis-1,3-Dichloropropene	75		5.867					ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964					ND	
82 Toluene	91		6.149					ND	
83 trans-1,3-Dichloropropene	75		6.328					ND	
84 Ethyl methacrylate	69		6.357					ND	
85 1,1,2-Trichloroethane	97		6.500					ND	
86 Tetrachloroethene	164		6.585					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 1,3-Dichloropropane	76		6.643					ND	
88 2-Hexanone	43		6.671					ND	
13 Tetrahydrothiophene	60		6.836					ND	
89 Chlorodibromomethane	129		6.836					ND	
90 Ethylene Dibromide	107		6.950					ND	
91 1-Chlorohexane	91		7.343					ND	
92 Chlorobenzene	112		7.379					ND	
93 1,1,1,2-Tetrachloroethane	131		7.451					ND	
94 Ethylbenzene	106		7.458					ND	
95 m-Xylene & p-Xylene	106		7.572					ND	
96 o-Xylene	106		7.930					ND	
97 Styrene	104		7.944					ND	
98 Bromoform	173		8.123					ND	
99 Isopropylbenzene	105		8.266					ND	
101 cis-1,4-Dichloro-2-butene	53		8.330					ND	
100 Cyclohexanone	55		8.366					ND	
102 1,1,2,2-Tetrachloroethane	83		8.559					ND	
103 Bromobenzene	156		8.580					ND	
105 trans-1,4-Dichloro-2-buten	53		8.595					ND	
104 1,2,3-Trichloropropane	110		8.616					ND	
106 N-Propylbenzene	120		8.659					ND	
107 2-Chlorotoluene	126		8.752					ND	
108 1,3,5-Trimethylbenzene	105		8.831					ND	
109 4-Chlorotoluene	126		8.873					ND	
110 tert-Butylbenzene	119		9.138					ND	
111 1,2,4-Trimethylbenzene	105		9.195					ND	
112 sec-Butylbenzene	134		9.353					ND	
113 1,3-Dichlorobenzene	146		9.474					ND	
114 4-Isopropyltoluene	119		9.503					ND	
115 1,4-Dichlorobenzene	146		9.574					ND	
116 1,2,3-Trimethylbenzene	105		9.603					ND	
117 n-Butylbenzene	91		9.903					ND	
118 1,2-Dichlorobenzene	146		9.925					ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697					ND	
120 1,3,5-Trichlorobenzene	180		10.890					ND	
121 1,2,4-Trichlorobenzene	180		11.512					ND	
122 Hexachlorobutadiene	225		11.655					ND	
123 Naphthalene	128		11.776					ND	
124 1,2,3-Trichlorobenzene	180		11.998					ND	
127 n-Nonyl Aldehyde	1		0.000					ND	
161 1-Chloro-1-fluoroethane TI	1		0.000					ND	
131 2-Methylhexane	1		0.000					ND	
125 1-Chlorohexane TIC	1		0.000					ND	
135 3,3-Dimethylpentane	1		0.000					ND	
134 3-Methylhexane	1		0.000					ND	
130 2,2,3-Trimethylbutane	1		0.000					ND	
126 2,2-Dimethylpentane	1		0.000					ND	
133 2,3-Dimethylpentane	1		0.000					ND	
132 Pentachloroethane	167		0.000					ND	
129 Dimethyl disulfide	1		0.000					ND	
136 2,4-Dimethylpentane	1		0.000					ND	
128 3-Ethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 1,2-Dichloroethene, Total	96		2.000				ND		
S 140 1,3-Dichloropropene, Total	1		0.000				ND		
S 141 TAH	1				0			0	7
S 142 Trihalomethanes, Total	1		0.000				ND		
S 138 Xylenes, Total (URS)	1		0.000				ND		
S 144 1,2-Dichloroethene, Total	1		0.000				ND		
S 143 Xylenes, Total	106		0.000				ND		
S 139 Total BTEX	1		0.000				ND		

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

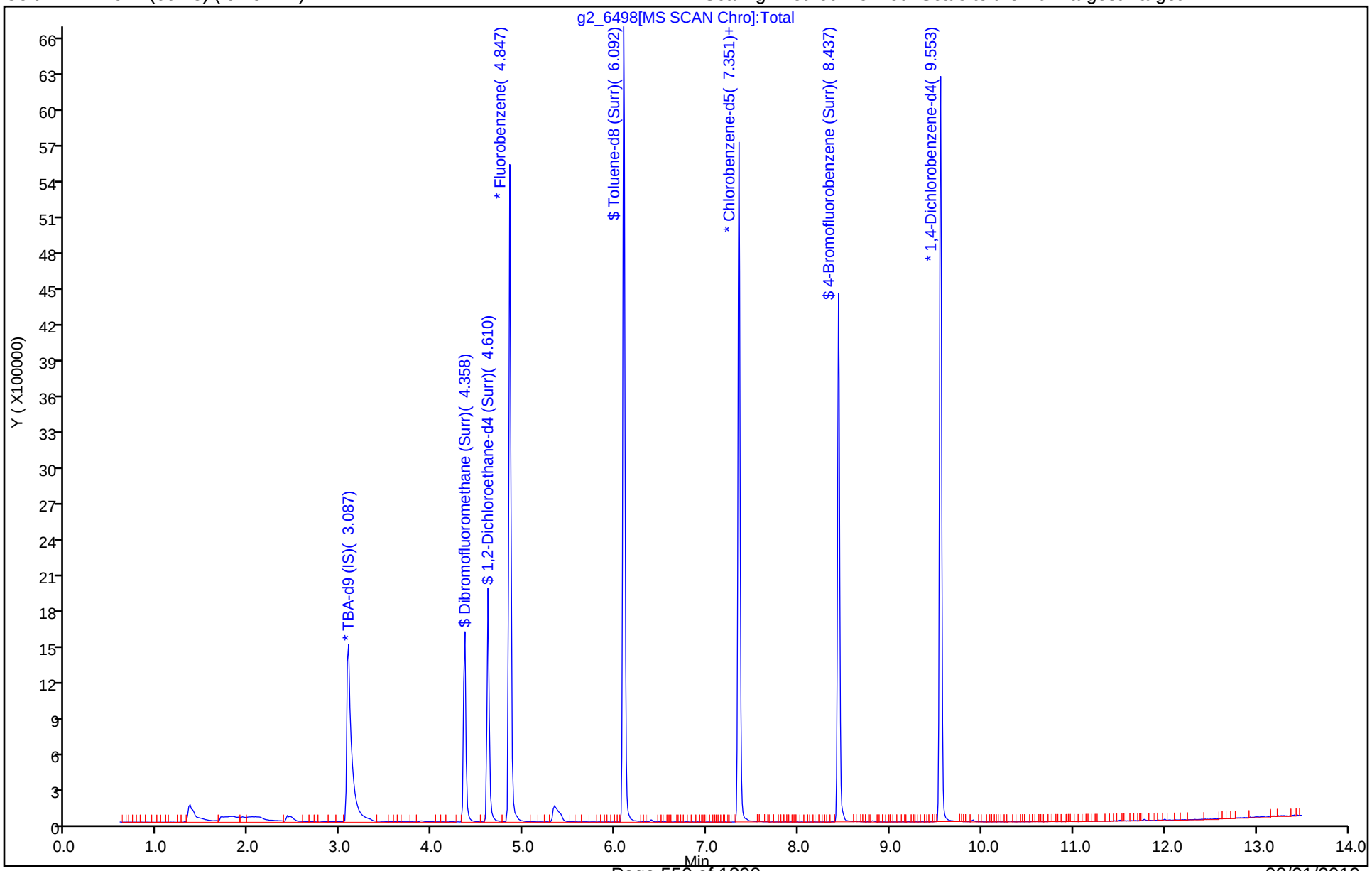
Report Date: 21-Jun-2019 13:01:11 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6498.D

Injection Date:	18-Jun-2019 14:42:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	mb			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6498.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 18-Jun-2019 14:42:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 21-Jun-2019 12:46:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	51.3	102.61
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	46.8	93.68
$ 8 Toluene-d8 (Surr)	50.0	48.7	97.42
$ 9 4-Bromofluorobenzene (Surr)	50.0	48.3	96.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-462165/5

Matrix: Water Lab File ID: g2_6569.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 10:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	0.40	U	1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	6.4	U	10	6.4	1.9
71-43-2	Benzene	0.40	U	1.0	0.40	0.16
74-97-5	Bromochloromethane	0.20	U	1.0	0.20	0.10
75-27-4	Bromodichloromethane	0.40	U	1.0	0.40	0.17
75-25-2	Bromoform	1.0	U	1.0	1.0	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U	2.0	0.80	0.17
56-23-5	Carbon tetrachloride	0.40	U	2.0	0.40	0.19
108-90-7	Chlorobenzene	0.40	U	1.0	0.40	0.17
75-00-3	Chloroethane	1.6	U	2.0	1.6	0.41
67-66-3	Chloroform	0.40	U	1.0	0.40	0.16
74-87-3	Chloromethane	0.80	U	2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16
110-82-7	Cyclohexane	0.80	U	2.0	0.80	0.28
124-48-1	Dibromochloromethane	0.40	U	1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-462165/5

Matrix: Water Lab File ID: g2_6569.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 10:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		81-118
460-00-4	4-Bromofluorobenzene (Surr)	95		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	95		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6569.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 20-Jun-2019 10:54:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:18:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	83	2990555	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4343976	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	84	991554	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1615584	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	926289	50.0	50.2	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	96	1066812	50.0	45.2	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	3926285	50.0	47.6	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	91	1417567	50.0	47.5	
$ 10 Trifluorotoluene (Surr)	1		0.000					ND	
$ 11 BFB	95		3.199					ND	
12 Dichlorodifluoromethane	85		1.593					ND	
34 Chlorotrifluoroethene	116		1.677					ND	
36 1,2-Dichloro-1,1,2,2-tetra	85		1.830					ND	
14 Chloromethane	50		1.886					ND	
15 Vinyl chloride	62		1.886					ND	
16 Ethylene oxide	43		2.054					ND	
38 2-Chloro-1,1,1-Trifluoroet	118		2.110					ND	
17 Bromomethane	94		2.152					ND	
18 Chloroethane	64		2.193					ND	
19 Dichlorofluoromethane	67		2.389					ND	
20 Trichlorofluoromethane	101		2.417					ND	
21 Ethanol	45		2.473					ND	
22 Ethyl ether	59		2.557					ND	
23 Propene oxide	58		2.598					ND	
24 Acrolein	56		2.668					ND	
27 Acetone	43		2.766					ND	
25 1,1-Dichloroethene	96		2.780					ND	
26 1,1,2-Trichloro-1,2,2-trif	151		2.780					ND	
29 Isopropyl alcohol	45		2.850					ND	
28 Iodomethane	142		2.892					ND	
31 Acetonitrile	41		2.976					ND	U
30 Carbon disulfide	76		2.976					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Methyl acetate	43		2.976					ND	
33 3-Chloro-1-propene	41		3.003					ND	U
35 Methylene Chloride	84		3.129					ND	
43 1,2-Dichloro-1,1,2-trifluo	117		3.129					ND	
37 2-Methyl-2-propanol	59		3.143					ND	
44 1,1,1-Trifluoro-2,2-dichlo	83		3.213					ND	
39 Acrylonitrile	53		3.255					ND	
41 Methyl tert-butyl ether	73		3.269					ND	
40 trans-1,2-Dichloroethene	96		3.297					ND	
42 Hexane	57		3.478					ND	
46 Vinyl acetate	43		3.576					ND	
45 1,1-Dichloroethane	63		3.604					ND	
47 Isopropyl ether	87		3.604					ND	
48 2-Chloro-1,3-butadiene	53		3.660					ND	
49 Tert-butyl ethyl ether	59		3.869					ND	
52 2-Butanone (MEK)	43		3.981					ND	
53 Ethyl acetate	43		4.009					ND	U
51 cis-1,2-Dichloroethene	96		4.009					ND	
50 2,2-Dichloropropane	77		4.009					ND	
54 Propionitrile	54		4.037					ND	
55 sec-Butyl Alcohol	45		4.093					ND	
58 Methacrylonitrile	41		4.149					ND	
56 Chlorobromomethane	128		4.177					ND	
57 Tetrahydrofuran	42		4.191					ND	
59 Chloroform	83		4.233					ND	
60 1,1,1-Trichloroethane	97		4.372					ND	
61 Cyclohexane	56		4.428					ND	
63 1,1-Dichloropropene	75		4.484					ND	
62 Carbon tetrachloride	117		4.498					ND	
66 Isobutyl alcohol	41		4.512					ND	U
64 Benzene	78		4.638					ND	
65 1,2-Dichloroethane	62		4.665					ND	
68 Tert-amyl methyl ether	73		4.707					ND	
67 n-Heptane	43		4.819					ND	
73 n-Butanol	56		5.015					ND	
69 Trichloroethene	95		5.126					ND	
70 2-Pentanone	43		5.224					ND	
71 Methylcyclohexane	55		5.308					ND	
72 1,2-Dichloropropane	63		5.322					ND	
77 Methyl methacrylate	100		5.336					ND	
74 1,4-Dioxane	88		5.378					ND	
75 Dibromomethane	93		5.392					ND	
76 Dichlorobromomethane	83		5.517					ND	
80 2-Nitropropane	41		5.685					ND	
78 2-Chloroethyl vinyl ether	63		5.727					ND	
79 cis-1,3-Dichloropropene	75		5.867					ND	
81 4-Methyl-2-pentanone (MIBK	43		5.964					ND	
82 Toluene	91		6.149					ND	
83 trans-1,3-Dichloropropene	75		6.328					ND	
84 Ethyl methacrylate	69		6.357					ND	
85 1,1,2-Trichloroethane	97		6.500					ND	
86 Tetrachloroethene	164		6.585					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
87 1,3-Dichloropropane	76		6.643					ND	
88 2-Hexanone	43		6.671					ND	
13 Tetrahydrothiophene	60		6.836					ND	
89 Chlorodibromomethane	129		6.836					ND	
90 Ethylene Dibromide	107		6.950					ND	
91 1-Chlorohexane	91		7.343					ND	
92 Chlorobenzene	112		7.379					ND	
93 1,1,1,2-Tetrachloroethane	131		7.451					ND	
94 Ethylbenzene	106		7.458					ND	
95 m-Xylene & p-Xylene	106		7.572					ND	
96 o-Xylene	106		7.930					ND	
97 Styrene	104		7.944					ND	
98 Bromoform	173		8.123					ND	
99 Isopropylbenzene	105		8.266					ND	
101 cis-1,4-Dichloro-2-butene	53		8.330					ND	
100 Cyclohexanone	55		8.366					ND	U
102 1,1,2,2-Tetrachloroethane	83		8.559					ND	
103 Bromobenzene	156		8.580					ND	
105 trans-1,4-Dichloro-2-buten	53		8.595					ND	
104 1,2,3-Trichloropropane	110		8.616					ND	
106 N-Propylbenzene	120		8.659					ND	
107 2-Chlorotoluene	126		8.752					ND	
108 1,3,5-Trimethylbenzene	105		8.831					ND	
109 4-Chlorotoluene	126		8.873					ND	
110 tert-Butylbenzene	119		9.138					ND	
111 1,2,4-Trimethylbenzene	105		9.195					ND	
112 sec-Butylbenzene	134		9.353					ND	
113 1,3-Dichlorobenzene	146		9.474					ND	
114 4-Isopropyltoluene	119		9.503					ND	
115 1,4-Dichlorobenzene	146		9.574					ND	
116 1,2,3-Trimethylbenzene	105		9.603					ND	
117 n-Butylbenzene	91		9.903					ND	
118 1,2-Dichlorobenzene	146		9.925					ND	
119 1,2-Dibromo-3-Chloropropan	157		10.697					ND	
120 1,3,5-Trichlorobenzene	180		10.890					ND	
121 1,2,4-Trichlorobenzene	180		11.512					ND	
122 Hexachlorobutadiene	225		11.655					ND	
123 Naphthalene	128		11.776					ND	
124 1,2,3-Trichlorobenzene	180		11.998					ND	
127 n-Nonyl Aldehyde	1		0.000					ND	
161 1-Chloro-1-fluoroethane TI	1		0.000					ND	
131 2-Methylhexane	1		0.000					ND	
125 1-Chlorohexane TIC	1		0.000					ND	
135 3,3-Dimethylpentane	1		0.000					ND	
134 3-Methylhexane	1		0.000					ND	
130 2,2,3-Trimethylbutane	1		0.000					ND	
126 2,2-Dimethylpentane	1		0.000					ND	
133 2,3-Dimethylpentane	1		0.000					ND	
132 Pentachloroethane	167		0.000					ND	
129 Dimethyl disulfide	1		0.000					ND	
136 2,4-Dimethylpentane	1		0.000					ND	
128 3-Ethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 1,2-Dichloroethene, Total	96		2.000				ND		
S 140 1,3-Dichloropropene, Total	1		0.000				ND		
S 141 TAH	1				0			0	7
S 142 Trihalomethanes, Total	1		0.000				ND		
S 138 Xylenes, Total (URS)	1		0.000				ND		
S 144 1,2-Dichloroethene, Total	1		0.000				ND		
S 143 Xylenes, Total	106		0.000				ND		
S 139 Total BTEX	1		0.000				ND		

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-Cent IS/SS_00002 Amount Added: 5.00 Units: uL Run Reagent

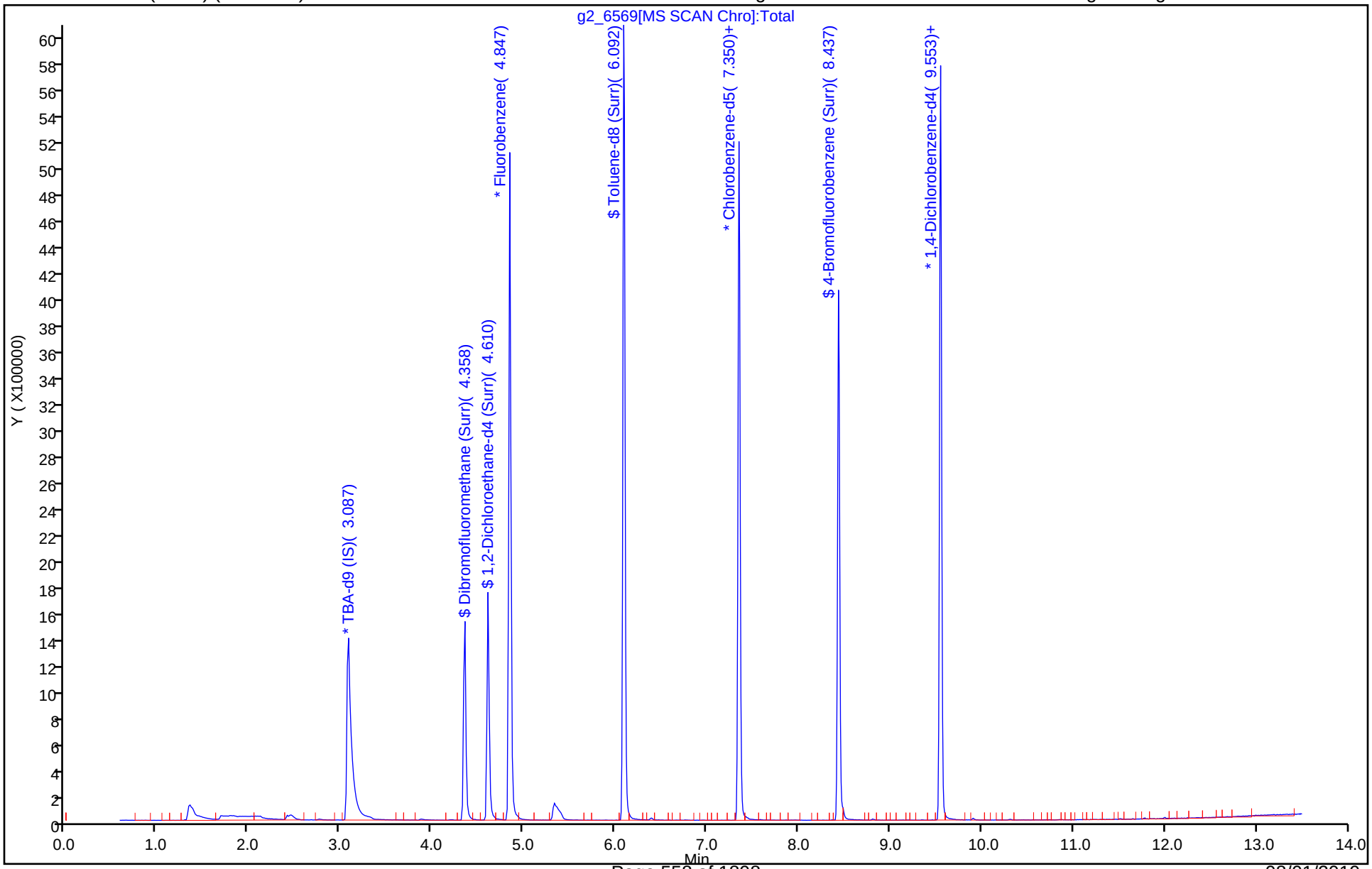
Report Date: 22-Jun-2019 13:42:02 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6569.D

Injection Date:	20-Jun-2019 10:54:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6569.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 20-Jun-2019 10:54:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

First Level Reviewer: meierg Date: 22-Jun-2019 13:18:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	50.2	100.50
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	45.2	90.48
$ 8 Toluene-d8 (Surr)	50.0	47.6	95.16
$ 9 4-Bromofluorobenzene (Surr)	50.0	47.5	95.01

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-461956/3

Matrix: Water Lab File ID: g2_6496.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 13:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461956 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	25.5		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	23.8		1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	28.8		3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	25.9		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	25.4		1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	27.5		1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	31.4		1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	26.6		1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	26.9		5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	25.5		1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	22.3		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	25.8		1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	26.4		1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	26.3		1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	93.6		6.0	4.0	2.0
591-78-6	2-Hexanone	89.3		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	92.4		5.0	3.2	0.98
67-64-1	Acetone	89.3		10	6.4	1.9
71-43-2	Benzene	25.8		1.0	0.40	0.16
74-97-5	Bromochloromethane	27.2		1.0	0.20	0.10
75-27-4	Bromodichloromethane	25.9		1.0	0.40	0.17
75-25-2	Bromoform	22.2		1.0	1.0	0.46
74-83-9	Bromomethane	26.9		2.0	0.80	0.21
75-15-0	Carbon disulfide	25.2		2.0	0.80	0.17
56-23-5	Carbon tetrachloride	26.3		2.0	0.40	0.19
108-90-7	Chlorobenzene	26.3		1.0	0.40	0.17
75-00-3	Chloroethane	23.7		2.0	1.6	0.41
67-66-3	Chloroform	25.6		1.0	0.40	0.16
74-87-3	Chloromethane	23.2		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	27.4		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	24.9		1.0	0.40	0.16
110-82-7	Cyclohexane	23.8		2.0	0.80	0.28
124-48-1	Dibromochloromethane	26.7		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	21.4		2.0	0.80	0.31
100-41-4	Ethylbenzene	26.2		1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-461956/3

Matrix: Water Lab File ID: g2_6496.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 13:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461956 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	25.7		1.0	0.40	0.18
98-82-8	Isopropylbenzene	26.3		1.0	0.40	0.19
79-20-9	Methyl acetate	46.8		5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	24.5		5.0	0.80	0.25
108-87-2	Methylcyclohexane	23.8		2.0	0.40	0.10
75-09-2	Methylene Chloride	25.8		5.0	2.0	0.94
100-42-5	Styrene	27.0		1.0	0.80	0.36
127-18-4	Tetrachloroethene	27.7		1.0	0.40	0.20
108-88-3	Toluene	26.7		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	27.7		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	24.0		1.0	0.40	0.19
79-01-6	Trichloroethene	25.6		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	27.1		2.0	0.80	0.29
75-01-4	Vinyl chloride	24.3		1.5	0.20	0.10
1330-20-7	Xylenes, Total	52.3		1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		81-118
460-00-4	4-Bromofluorobenzene (Surr)	97		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	97		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6496.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 18-Jun-2019 13:59:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 18-Jun-2019 14:21:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	3.087	3.087	0.000	82	3266697	1000.0	1000.0	
* 2 Fluorobenzene	96	4.847	4.847	0.000	99	4762885	50.0	50.0	
* 3 Chlorobenzene-d5	119	7.350	7.350	0.000	85	1081935	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	95	1776948	50.0	50.0	
$ 6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	1016164	50.0	50.3	
$ 7 1,2-Dichloroethane-d4 (Sur	65	4.610	4.610	0.000	96	1236735	50.0	47.8	
$ 8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4377517	50.0	48.6	
$ 9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	89	1583776	50.0	48.3	
12 Dichlorodifluoromethane	85	1.607	1.593	0.014	99	809573	25.0	21.4	
14 Chloromethane	50	1.788	1.886	-0.098	99	1049365	25.0	23.2	
15 Vinyl chloride	62	1.886	1.886	0.000	97	471299	25.0	24.3	
17 Bromomethane	94	2.152	2.152	0.000	91	446562	25.0	26.9	
18 Chloroethane	64	2.193	2.193	0.000	100	546745	25.0	23.7	
19 Dichlorofluoromethane	67	2.389	2.389	0.000	97	1337504	25.0	27.1	
20 Trichlorofluoromethane	101	2.417	2.417	0.000	98	1043707	25.0	27.1	
22 Ethyl ether	59	2.557	2.557	0.000	88	561607	25.0	25.9	
24 Acrolein	56	2.668	2.668	0.000	100	929536	246.9	172.0	
27 Acetone	43	2.766	2.766	0.000	100	672562	100.0	89.3	
25 1,1-Dichloroethene	96	2.780	2.780	0.000	98	671281	25.0	27.5	
26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	94	523429	25.0	28.8	
28 Iodomethane	142	2.892	2.892	0.000	96	989239	25.0	29.6	
30 Carbon disulfide	76	2.976	2.976	0.000	99	2116927	25.0	25.2	
32 Methyl acetate	43	2.990	2.976	0.014	97	888577	50.0	46.8	
33 3-Chloro-1-propene	41	3.003	3.003	0.000	90	964860	25.0	24.3	
35 Methylene Chloride	84	3.129	3.129	0.000	90	722900	25.0	25.8	
37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	817582	250.0	242.5	
39 Acrylonitrile	53	3.255	3.255	0.000	99	2299664	250.0	261.2	
41 Methyl tert-butyl ether	73	3.269	3.269	0.000	94	1863987	25.0	24.5	
40 trans-1,2-Dichloroethene	96	3.297	3.297	0.000	98	668741	25.0	27.7	
42 Hexane	57	3.478	3.478	0.000	90	1115253	25.0	24.6	
46 Vinyl acetate	43	3.576	3.576	0.000	97	2530312	50.0	50.0	
45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	1091601	25.0	25.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	1060543	100.0	93.6	
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	81	710778	25.0	27.4	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	87	880057	25.0	25.8	
55 sec-Butyl Alcohol	45	4.107	4.093	0.014	98	1581230	750.0	712.1	
56 Chlorobromomethane	128	4.177	4.177	0.000	95	299463	25.0	27.2	
57 Tetrahydrofuran	42	4.191	4.191	0.000	85	397582	50.0	45.4	
59 Chloroform	83	4.232	4.233	0.000	93	1006874	25.0	25.6	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	98	876710	25.0	25.5	
61 Cyclohexane	56	4.428	4.428	0.000	87	1270079	25.0	23.8	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	99	871120	25.0	24.8	
62 Carbon tetrachloride	117	4.498	4.498	0.000	94	677807	25.0	26.3	
66 Isobutyl alcohol	41	4.512	4.512	0.000	97	554384	625.0	561.7	
64 Benzene	78	4.638	4.638	0.000	96	2753056	25.0	25.8	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	734322	25.0	22.3	
67 n-Heptane	43	4.819	4.819	0.000	91	1063949	25.0	24.9	
69 Trichloroethene	95	5.126	5.126	0.000	98	640116	25.0	25.6	
70 2-Pentanone	43	5.224	5.224	0.000	98	1706096	100.0	92.2	
71 Methylcyclohexane	55	5.308	5.308	0.000	91	932545	25.0	23.8	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	96	665090	25.0	25.8	
74 1,4-Dioxane	88	5.378	5.378	0.000	82	155146	500.0	538.7	
75 Dibromomethane	93	5.392	5.392	0.000	98	334523	25.0	25.1	
76 Dichlorobromomethane	83	5.517	5.517	0.000	100	725000	25.0	25.9	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	91	464719	25.0	25.8	
79 cis-1,3-Dichloropropene	75	5.867	5.867	0.000	97	1027230	25.0	24.9	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	96	2479708	100.0	92.4	
82 Toluene	91	6.149	6.149	0.000	99	2790682	25.0	26.7	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	93	808272	25.0	24.0	
84 Ethyl methacrylate	69	6.357	6.357	0.000	88	857477	25.0	23.8	
85 1,1,2-Trichloroethane	97	6.500	6.500	0.000	90	514931	25.0	25.9	
86 Tetrachloroethene	164	6.585	6.585	0.000	97	512655	25.0	27.7	
87 1,3-Dichloropropane	76	6.643	6.643	0.000	93	918666	25.0	24.4	
88 2-Hexanone	43	6.671	6.671	0.000	94	1642557	100.0	89.3	
89 Chlorodibromomethane	129	6.836	6.836	0.000	91	464660	25.0	26.7	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	493727	25.0	25.7	
91 1-Chlorohexane	91	7.343	7.343	0.000	96	919748	25.0	25.5	
92 Chlorobenzene	112	7.379	7.379	0.000	96	1794267	25.0	26.3	
93 1,1,1,2-Tetrachloroethane	131	7.451	7.451	0.000	96	551199	25.0	26.5	
94 Ethylbenzene	106	7.458	7.458	0.000	98	1014702	25.0	26.2	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	99	1247015	25.0	26.1	
96 o-Xylene	106	7.930	7.930	0.000	95	1220033	25.0	26.2	
97 Styrene	104	7.944	7.944	0.000	95	2004131	25.0	27.0	
98 Bromoform	173	8.123	8.123	0.000	96	275832	25.0	22.2	
99 Isopropylbenzene	105	8.266	8.266	0.000	95	3189521	25.0	26.3	
100 Cyclohexanone	55	8.366	8.366	0.000	91	921778	1000.0	896.1	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	704754	25.0	23.8	
103 Bromobenzene	156	8.580	8.580	0.000	95	687572	25.0	27.1	
105 trans-1,4-Dichloro-2-buten	53	8.595	8.595	0.000	74	208310	25.0	22.4	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	81	213606	25.0	25.0	
106 N-Propylbenzene	120	8.659	8.659	0.000	98	905004	25.0	26.4	
107 2-Chlorotoluene	126	8.752	8.752	0.000	97	745369	25.0	26.4	
108 1,3,5-Trimethylbenzene	105	8.831	8.831	0.000	95	2623640	25.0	26.3	
109 4-Chlorotoluene	126	8.873	8.873	0.000	96	755169	25.0	26.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
110 tert-Butylbenzene	119	9.138	9.138	0.000	92	2323956	25.0	26.1	
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	96	2665848	25.0	26.7	
112 sec-Butylbenzene	134	9.353	9.353	0.000	94	761129	25.0	26.7	
113 1,3-Dichlorobenzene	146	9.481	9.474	0.007	98	1424189	25.0	26.4	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	3074403	25.0	26.6	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	95	1467573	25.0	26.3	
117 n-Butylbenzene	91	9.903	9.903	0.000	98	2812311	25.0	25.6	
118 1,2-Dichlorobenzene	146	9.925	9.925	0.000	98	1378095	25.0	25.5	
119 1,2-Dibromo-3-Chloropropan	157	10.704	10.697	0.007	92	155558	25.0	26.9	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	94	927502	25.0	26.6	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	98	405441	25.0	26.2	
123 Naphthalene	128	11.776	11.776	0.000	97	2387992	25.0	24.8	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	759011	25.0	31.4	
S 137 1,2-Dichloroethene, Total	96				0		50.0	55.0	
S 140 1,3-Dichloropropene, Total	1				0		50.0	48.9	
S 142 Trihalomethanes, Total	1				0		100.0	100.4	
S 138 Xylenes, Total (URS)	1				0		50.0	52.3	
S 144 1,2-Dichloroethene, Total	1				0		50.0	55.0	
S 143 Xylenes, Total	106				0		50.0	52.3	

Reagents:

MV-MegaMain B_00013	Amount Added:	25.00	Units: uL	
MV-Gas B_00031	Amount Added:	25.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added:	5.00	Units: uL	Run Reagent

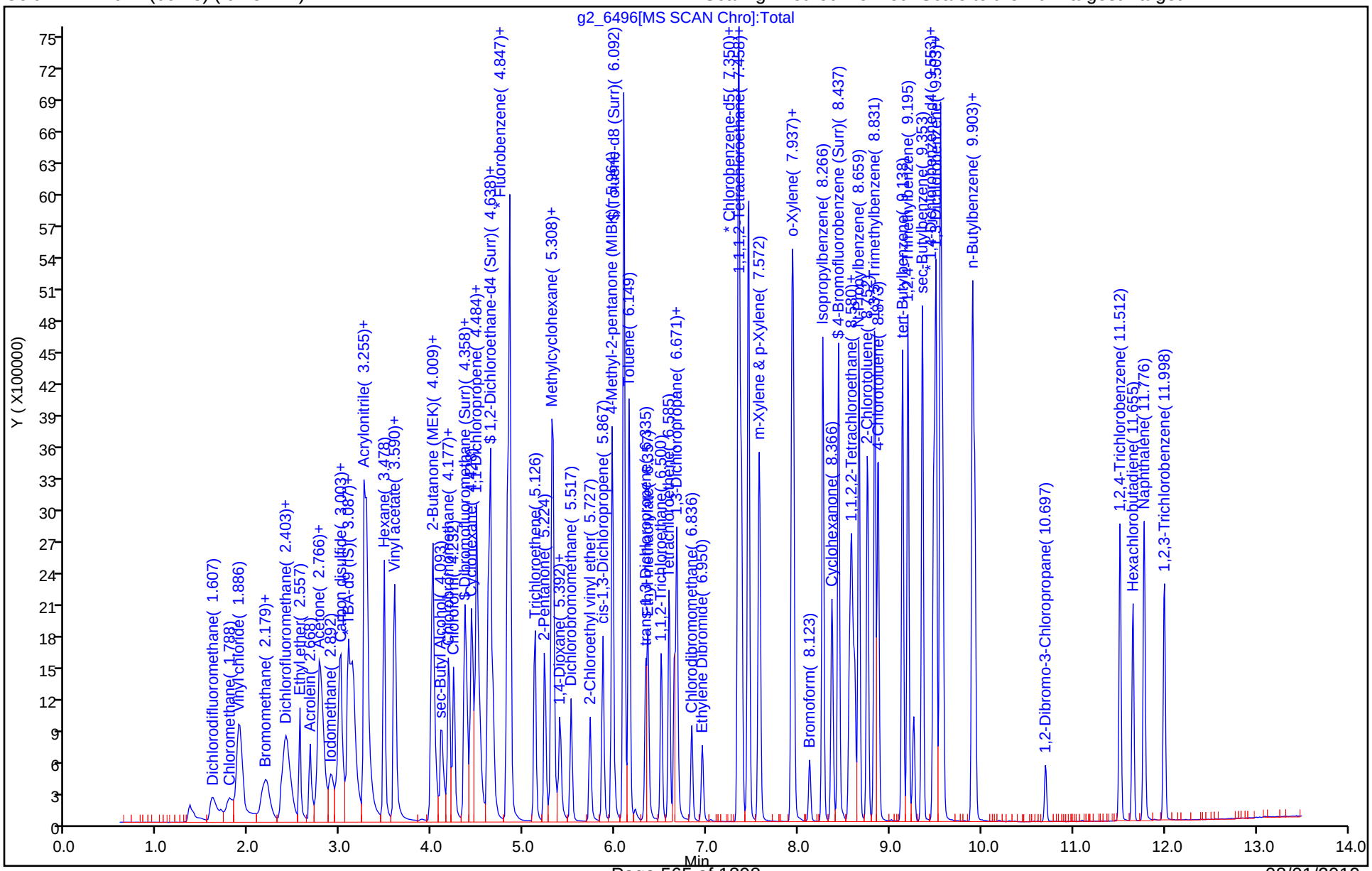
Report Date: 21-Jun-2019 13:00:57 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6496.D

Injection Date:	18-Jun-2019 13:59:30	Instrument ID:	VMS_G2	Operator ID:	MEIERG
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\g2_6496.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 18-Jun-2019 13:59:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 21-Jun-2019 13:00:28 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0320

First Level Reviewer: meierg Date: 18-Jun-2019 14:21:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	50.3	100.55
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	47.8	95.67
$ 8 Toluene-d8 (Surr)	50.0	48.6	97.23
$ 9 4-Bromofluorobenzene (Surr)	50.0	48.3	96.51

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-462165/3

Matrix: Water Lab File ID: g2_6567.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 10:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	25.7		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	23.7		1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	28.8		3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	26.2		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	25.3		1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	26.7		1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	33.3	Q	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	28.0		1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	27.0		5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	26.2		1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	23.3		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	25.7		1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	26.5		1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	26.8		1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	90.8		6.0	4.0	2.0
591-78-6	2-Hexanone	86.3		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	87.9		5.0	3.2	0.98
67-64-1	Acetone	86.0		10	6.4	1.9
71-43-2	Benzene	25.8		1.0	0.40	0.16
74-97-5	Bromochloromethane	28.8		1.0	0.20	0.10
75-27-4	Bromodichloromethane	26.4		1.0	0.40	0.17
75-25-2	Bromoform	24.2		1.0	1.0	0.46
74-83-9	Bromomethane	22.1		2.0	0.80	0.21
75-15-0	Carbon disulfide	23.2		2.0	0.80	0.17
56-23-5	Carbon tetrachloride	26.4		2.0	0.40	0.19
108-90-7	Chlorobenzene	26.6		1.0	0.40	0.17
75-00-3	Chloroethane	19.4		2.0	1.6	0.41
67-66-3	Chloroform	25.9		1.0	0.40	0.16
74-87-3	Chloromethane	16.4		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	27.8		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	25.1		1.0	0.40	0.16
110-82-7	Cyclohexane	22.7		2.0	0.80	0.28
124-48-1	Dibromochloromethane	28.5		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	18.4		2.0	0.80	0.31
100-41-4	Ethylbenzene	26.3		1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-462165/3

Matrix: Water Lab File ID: g2_6567.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/20/2019 10:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 462165 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	26.8		1.0	0.40	0.18
98-82-8	Isopropylbenzene	25.3		1.0	0.40	0.19
79-20-9	Methyl acetate	46.8		5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	24.7		5.0	0.80	0.25
108-87-2	Methylcyclohexane	22.7		2.0	0.40	0.10
75-09-2	Methylene Chloride	25.9		5.0	2.0	0.94
100-42-5	Styrene	27.4		1.0	0.80	0.36
127-18-4	Tetrachloroethene	28.1		1.0	0.40	0.20
108-88-3	Toluene	26.8		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	27.9		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	24.7		1.0	0.40	0.19
79-01-6	Trichloroethene	25.5		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	23.6		2.0	0.80	0.29
75-01-4	Vinyl chloride	20.1		1.5	0.20	0.10
1330-20-7	Xylenes, Total	52.6		1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		81-118
460-00-4	4-Bromofluorobenzene (Surr)	94		85-114
1868-53-7	Dibromofluoromethane (Surr)	102		80-119
2037-26-5	Toluene-d8 (Surr)	96		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6567.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2019 10:12:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	3.087	3.087	0.000	82	3055416	1000.0	1000.0	
*	2 Fluorobenzene	96	4.847	4.847	0.000	99	4420456	50.0	50.0	
*	3 Chlorobenzene-d5	119	7.350	7.350	0.000	85	1008784	50.0	50.0	
*	4 1,4-Dichlorobenzene-d4	152	9.553	9.553	0.000	94	1695072	50.0	50.0	
$	6 Dibromofluoromethane (Surr	111	4.358	4.358	0.000	94	956844	50.0	51.0	
$	7 1,2-Dichloroethane-d4 (Sur	65	4.609	4.610	-0.001	96	1138183	50.0	47.4	
$	8 Toluene-d8 (Surr)	98	6.092	6.092	0.000	92	4044581	50.0	48.2	
$	9 4-Bromofluorobenzene (Surr	95	8.437	8.437	0.000	91	1465571	50.0	46.8	
	12 Dichlorodifluoromethane	85	1.593	1.593	0.000	99	645727	25.0	18.4	
	14 Chloromethane	50	1.788	1.886	-0.098	100	696258	25.0	16.4	
	15 Vinyl chloride	62	1.886	1.886	0.000	97	363961	25.0	20.1	
	17 Bromomethane	94	2.151	2.152	-0.001	90	347822	25.0	22.1	
	18 Chloroethane	64	2.193	2.193	0.000	99	422795	25.0	19.4	
	19 Dichlorofluoromethane	67	2.389	2.389	0.000	98	1104012	25.0	24.1	
	20 Trichlorofluoromethane	101	2.417	2.417	0.000	99	844631	25.0	23.6	
	22 Ethyl ether	59	2.556	2.557	-0.001	88	508108	25.0	25.2	
	24 Acrolein	56	2.668	2.668	0.000	100	847841	246.9	169.0	
	27 Acetone	43	2.766	2.766	0.000	100	601337	100.0	86.0	
	25 1,1-Dichloroethene	96	2.780	2.780	0.000	97	605714	25.0	26.7	
	26 1,1,2-Trichloro-1,2,2-trif	151	2.780	2.780	0.000	93	484692	25.0	28.8	
	28 Iodomethane	142	2.906	2.892	0.014	96	945907	25.0	30.5	
	30 Carbon disulfide	76	2.975	2.976	-0.001	98	1812704	25.0	23.2	
	32 Methyl acetate	43	2.989	2.976	0.013	96	824781	50.0	46.8	
	33 3-Chloro-1-propene	41	3.003	3.003	0.000	89	870860	25.0	23.7	
	35 Methylene Chloride	84	3.129	3.129	0.000	90	672507	25.0	25.9	
	37 2-Methyl-2-propanol	59	3.143	3.143	0.000	100	771148	250.0	246.4	
	39 Acrylonitrile	53	3.255	3.255	0.000	100	2135805	250.0	261.4	
	41 Methyl tert-butyl ether	73	3.269	3.269	0.000	94	1748967	25.0	24.7	
	40 trans-1,2-Dichloroethene	96	3.297	3.297	0.000	97	626019	25.0	27.9	
	42 Hexane	57	3.478	3.478	0.000	89	989548	25.0	23.4	
	46 Vinyl acetate	43	3.576	3.576	0.000	97	2335535	50.0	49.7	
	45 1,1-Dichloroethane	63	3.604	3.604	0.000	96	1011353	25.0	25.3	
	52 2-Butanone (MEK)	43	3.981	3.981	0.000	99	954893	100.0	90.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
51 cis-1,2-Dichloroethene	96	4.009	4.009	0.000	80	670317	25.0	27.8	
50 2,2-Dichloropropane	77	4.009	4.009	0.000	87	784597	25.0	24.8	
55 sec-Butyl Alcohol	45	4.107	4.093	0.014	98	1426144	750.0	692.0	
56 Chlorobromomethane	128	4.177	4.177	-0.001	92	293934	25.0	28.8	
57 Tetrahydrofuran	42	4.190	4.191	-0.001	85	361622	50.0	44.5	
59 Chloroform	83	4.232	4.233	0.000	94	944693	25.0	25.9	
60 1,1,1-Trichloroethane	97	4.372	4.372	0.000	99	819057	25.0	25.7	
61 Cyclohexane	56	4.428	4.428	0.000	86	1128108	25.0	22.7	
63 1,1-Dichloropropene	75	4.484	4.484	0.000	98	810857	25.0	24.8	
62 Carbon tetrachloride	117	4.498	4.498	0.000	94	631174	25.0	26.4	
66 Isobutyl alcohol	41	4.512	4.512	0.000	97	501198	625.0	547.4	
64 Benzene	78	4.637	4.638	-0.001	95	2555648	25.0	25.8	
65 1,2-Dichloroethane	62	4.665	4.665	0.000	97	712393	25.0	23.3	
67 n-Heptane	43	4.819	4.819	0.000	89	901256	25.0	22.7	
69 Trichloroethene	95	5.126	5.126	0.000	96	591072	25.0	25.5	
70 2-Pentanone	43	5.224	5.224	0.000	98	1549121	100.0	90.2	
71 Methylcyclohexane	55	5.308	5.308	0.000	89	822649	25.0	22.7	
72 1,2-Dichloropropane	63	5.322	5.322	0.000	97	614792	25.0	25.7	
74 1,4-Dioxane	88	5.378	5.378	0.000	85	142517	500.0	533.2	
75 Dibromomethane	93	5.392	5.392	0.000	98	325576	25.0	26.3	
76 Dichlorobromomethane	83	5.517	5.517	0.000	100	687033	25.0	26.4	
78 2-Chloroethyl vinyl ether	63	5.727	5.727	0.000	92	396582	25.0	23.7	
79 cis-1,3-Dichloropropene	75	5.866	5.867	-0.001	97	963349	25.0	25.1	
81 4-Methyl-2-pentanone (MIBK	43	5.964	5.964	0.000	95	2189906	100.0	87.9	
82 Toluene	91	6.149	6.149	0.000	99	2596183	25.0	26.8	
83 trans-1,3-Dichloropropene	75	6.335	6.328	0.007	92	772307	25.0	24.7	
84 Ethyl methacrylate	69	6.356	6.357	-0.001	87	781159	25.0	23.3	
85 1,1,2-Trichloroethane	97	6.499	6.500	-0.001	90	484367	25.0	26.2	
86 Tetrachloroethene	164	6.585	6.585	0.000	98	486056	25.0	28.1	
87 1,3-Dichloropropane	76	6.642	6.643	-0.001	94	866633	25.0	24.7	
88 2-Hexanone	43	6.671	6.671	0.000	94	1480120	100.0	86.3	
89 Chlorodibromomethane	129	6.836	6.836	0.000	90	461652	25.0	28.5	
90 Ethylene Dibromide	107	6.950	6.950	0.000	99	479958	25.0	26.8	
91 1-Chlorohexane	91	7.343	7.343	0.000	95	836166	25.0	24.8	
92 Chlorobenzene	112	7.379	7.379	0.000	96	1689155	25.0	26.6	
93 1,1,1,2-Tetrachloroethane	131	7.450	7.451	-0.001	96	522060	25.0	27.0	
94 Ethylbenzene	106	7.458	7.458	0.000	97	947901	25.0	26.3	
95 m-Xylene & p-Xylene	106	7.572	7.572	0.000	98	1163463	25.0	26.1	
96 o-Xylene	106	7.929	7.930	-0.001	95	1150405	25.0	26.5	
97 Styrene	104	7.944	7.944	0.000	96	1897183	25.0	27.4	
98 Bromoform	173	8.123	8.123	0.000	97	280882	25.0	24.2	
99 Isopropylbenzene	105	8.266	8.266	0.000	95	2929333	25.0	25.3	
100 Cyclohexanone	55	8.366	8.366	0.000	90	821293	1000.0	856.3	
102 1,1,2,2-Tetrachloroethane	83	8.559	8.559	0.000	94	668014	25.0	23.7	
103 Bromobenzene	156	8.580	8.580	0.000	93	681068	25.0	28.1	
105 trans-1,4-Dichloro-2-buten	53	8.594	8.595	-0.001	77	188698	25.0	21.2	
104 1,2,3-Trichloropropane	110	8.616	8.616	0.000	80	209123	25.0	25.7	
106 N-Propylbenzene	120	8.659	8.659	0.000	98	846345	25.0	25.9	
107 2-Chlorotoluene	126	8.759	8.752	0.007	98	706569	25.0	26.3	
108 1,3,5-Trimethylbenzene	105	8.838	8.831	0.007	95	2439925	25.0	25.7	
109 4-Chlorotoluene	126	8.873	8.873	0.000	95	729113	25.0	26.7	
110 tert-Butylbenzene	119	9.138	9.138	0.000	92	2168319	25.0	25.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 1,2,4-Trimethylbenzene	105	9.195	9.195	0.000	96	2477388	25.0	26.0	
112 sec-Butylbenzene	134	9.352	9.353	-0.001	94	713863	25.0	26.2	
113 1,3-Dichlorobenzene	146	9.481	9.474	0.007	98	1360009	25.0	26.5	
114 4-Isopropyltoluene	119	9.503	9.503	0.000	97	2864446	25.0	26.0	
115 1,4-Dichlorobenzene	146	9.574	9.574	0.000	96	1427014	25.0	26.8	
117 n-Butylbenzene	91	9.903	9.903	0.000	97	2568903	25.0	24.5	
118 1,2-Dichlorobenzene	146	9.924	9.925	-0.001	99	1347663	25.0	26.2	
119 1,2-Dibromo-3-Chloropropan	157	10.704	10.697	0.007	87	149114	25.0	27.0	
121 1,2,4-Trichlorobenzene	180	11.512	11.512	0.000	93	931135	25.0	28.0	
122 Hexachlorobutadiene	225	11.655	11.655	0.000	97	399220	25.0	27.1	
123 Naphthalene	128	11.776	11.776	0.000	97	2324832	25.0	25.4	
124 1,2,3-Trichlorobenzene	180	11.998	11.998	0.000	95	766277	25.0	33.3	
S 137 1,2-Dichloroethene, Total	96				0		50.0	55.7	
S 140 1,3-Dichloropropene, Total	1				0		50.0	49.8	
S 142 Trihalomethanes, Total	1				0		100.0	105.0	
S 138 Xylenes, Total (URS)	1				0		50.0	52.6	
S 144 1,2-Dichloroethene, Total	1				0		50.0	55.7	
S 143 Xylenes, Total	106				0		50.0	52.6	

Reagents:

MV-MegaMain B_00013	Amount Added:	25.00	Units: uL	
MV-Gas B_00031	Amount Added:	25.00	Units: uL	
mv-Cent IS/SS_00002	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 22-Jun-2019 13:41:53 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6567.D

Injection Date: 20-Jun-2019 10:12:30 Instrument ID: VMS_G2 Operator ID: MEIERG

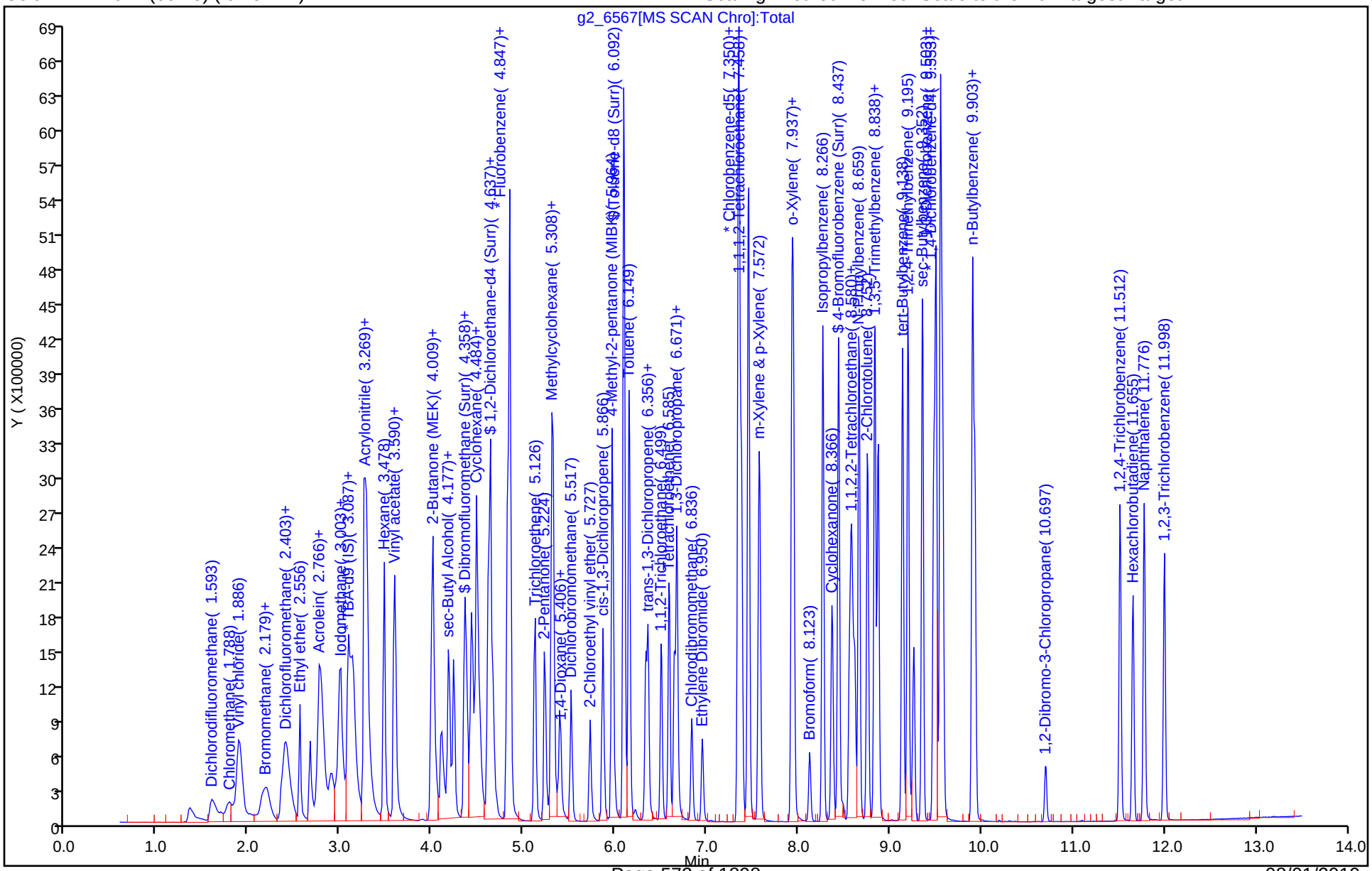
Lims ID: lcs Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: AQ_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\g2_6567.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2019 10:12:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: MEIERG Instrument ID: VMS_G2

Method: \\chromna\Denver\ChromData\VMS_G2\20190620-83038.b\AQ_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 22-Jun-2019 13:41:35 Calib Date: 17-Jun-2019 19:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b\g2_6454.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX0329

Compound	Amount Added	Amount Recovered	% Rec.
$ 6 Dibromofluoromethane (Surr)	50.0	51.0	102.02
$ 7 1,2-Dichloroethane-d4 (Surr)	50.0	47.4	94.87
$ 8 Toluene-d8 (Surr)	50.0	48.2	96.35
$ 9 4-Bromofluorobenzene (Surr)	50.0	46.8	93.62

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/17/2019 16:54

Analysis Batch Number: 461853 End Date: 06/17/2019 20:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-461853/1		06/17/2019 16:54	1	g2_6446.D	DB-624 (60.25) 0.25(mm)
IC 280-461853/2		06/17/2019 17:38	1	g2_6448.D	DB-624 (60.25) 0.25(mm)
IC 280-461853/3		06/17/2019 17:59	1	g2_6449.D	DB-624 (60.25) 0.25(mm)
ICIS 280-461853/4		06/17/2019 18:20	1	g2_6450.D	DB-624 (60.25) 0.25(mm)
IC 280-461853/5		06/17/2019 18:41	1	g2_6451.D	DB-624 (60.25) 0.25(mm)
IC 280-461853/6		06/17/2019 19:02	1	g2_6452.D	DB-624 (60.25) 0.25(mm)
IC 280-461853/7		06/17/2019 19:23	1	g2_6453.D	DB-624 (60.25) 0.25(mm)
IC 280-461853/8		06/17/2019 19:44	1	g2_6454.D	DB-624 (60.25) 0.25(mm)
ICV 280-461853/9		06/17/2019 20:05	1	g2_6455.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/18/2019 13:14

Analysis Batch Number: 461956 End Date: 06/19/2019 00:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-461956/1		06/18/2019 13:14	1	g2_6494.D	DB-624 (60.25) 0.25(mm)
CCV 280-461956/2		06/18/2019 13:38	1	g2_6495.D	DB-624 (60.25) 0.25(mm)
LCS 280-461956/3		06/18/2019 13:59	1	g2_6496.D	DB-624 (60.25) 0.25(mm)
MB 280-461956/4		06/18/2019 14:42	1	g2_6498.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 15:03	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 15:24	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 15:45	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 16:06	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 16:28	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 16:49	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 17:10	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 17:31	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 17:52	5		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 18:13	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 18:35	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 18:56	5		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 19:17	5		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 19:38	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 19:59	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 20:21	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 20:42	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 21:03	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 21:24	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 21:45	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 22:06	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 22:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 22:49	1000		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 23:10	500		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/18/2019 23:31	500		DB-624 (60.25) 0.25(mm)
280-124928-1		06/18/2019 23:52	1	g2_6524.D	DB-624 (60.25) 0.25(mm)
280-124928-2		06/19/2019 00:13	1	g2_6525.D	DB-624 (60.25) 0.25(mm)
CCVC 280-461956/32		06/19/2019 00:35	1	g2_6526.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/20/2019 09:29

Analysis Batch Number: 462165 End Date: 06/20/2019 20:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-462165/1		06/20/2019 09:29	1	g2_6565.D	DB-624 (60.25) 0.25(mm)
CCV 280-462165/2		06/20/2019 09:50	1	g2_6566.D	DB-624 (60.25) 0.25(mm)
LCS 280-462165/3		06/20/2019 10:12	1	g2_6567.D	DB-624 (60.25) 0.25(mm)
MB 280-462165/5		06/20/2019 10:54	1	g2_6569.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 11:15	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 11:37	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 11:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 12:19	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 12:41	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 13:02	1		DB-624 (60.25) 0.25(mm)
280-124928-3		06/20/2019 13:23	1	g2_6576.D	DB-624 (60.25) 0.25(mm)
280-124928-4		06/20/2019 13:45	1	g2_6577.D	DB-624 (60.25) 0.25(mm)
280-124928-5		06/20/2019 14:06	1	g2_6578.D	DB-624 (60.25) 0.25(mm)
280-124928-6		06/20/2019 14:27	1	g2_6579.D	DB-624 (60.25) 0.25(mm)
280-124928-10		06/20/2019 14:48	1	g2_6580.D	DB-624 (60.25) 0.25(mm)
280-124928-11		06/20/2019 15:09	1	g2_6581.D	DB-624 (60.25) 0.25(mm)
280-124928-12		06/20/2019 15:31	1	g2_6582.D	DB-624 (60.25) 0.25(mm)
280-124928-13		06/20/2019 15:52	1	g2_6583.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 16:13	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 16:35	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 16:56	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 17:17	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 17:38	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 17:59	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 18:21	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 18:42	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 19:02	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 19:21	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 19:42	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/20/2019 20:03	1		DB-624 (60.25) 0.25(mm)
CCVC 280-462165/32		06/20/2019 20:23	1	g2_6596.D	DB-624 (60.25) 0.25(mm)

Sequence Name: C:¥msdchem¥1¥sequence¥061719.s
Comment:
Operator: MEIERG
Data Path: C:¥MSDCHEM¥1¥DATA¥061819¥
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Test America Denver
Instrument: G2
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 1314-0035
Lims Batch: 461956

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

pH

GM 6/20/19

Line					Sample Name/Misc Info	
1)	Sample	100	g2_6494	BFB	BFB	
2)	Sample	1	g2_6495	8260	CCV	
3)	Sample	2	g2_6496	8260	LCS	
4)	Sample	3	g2_6497	8260	BLK	
5)	Sample	4	g2_6498	8260	MB	
6)	Sample	5	g2_6499	8260	280-124711-g-1	<2
7)	Sample	6	g2_6500	8260	280-124711-g-2	<2
8)	Sample	7	g2_6501	8260	280-124711-h-3	<2
9)	Sample	8	g2_6502	8260	280-124711-g-4	<2
10)	Sample	9	g2_6503	8260	280-124711-c-5	<2
11)	Sample	10	g2_6504	8260	280-124711-b-6	<2
12)	Sample	11	g2_6505	8260	280-124711-c-7	<2
13)	Sample	12	g2_6506	8260	280-124733-f-2	<2
14)	Sample	13	g2_6507	8260	280-124805-b-2 5X PH<2	
15)	Sample	14	g2_6508	8260	280-124733-f-2 ms	<2
16)	Sample	15	g2_6509	8260	280-124733-e-2 msd	<2
17)	Sample	16	g2_6510	8260	280-124805-b-2 ms 5X PH<2	
18)	Sample	17	g2_6511	8260	280-124805-b-2 msd 5X PH<2	
19)	Sample	18	g2_6512	8260	280-124703-c-1	<2
20)	Sample	19	g2_6513	8260	280-124703-d-2	<2
21)	Sample	20	g2_6514	8260	280-124703-c-2 ms	<2
22)	Sample	21	g2_6515	8260	280-124703-b-2 msd	<2
23)	Sample	22	g2_6516	8260	280-124703-c-3	<2
24)	Sample	23	g2_6517	8260	280-124703-c-4	<2
25)	Sample	24	g2_6518	8260	280-124703-a-5	<2
26)	Sample	25	g2_6519	8260	280-124733-e-1	<2
27)	Sample	26	g2_6520	8260	280-124805-a-5	<2
28)	Sample	27	g2_6521	8260	280-124805-c-1 1000X PH<2	
29)	Sample	28	g2_6522	8260	280-124805-c-3 500X PH<2	
30)	Sample	29	g2_6523	8260	280-124805-b-4 500X PH<2	
31)	Sample	30	g2_6524	8260	280-124928-a-1	<2
32)	Sample	31	g2_6525	8260	280-124928-e-2	<2
33)	Sample	32	g2_6526	8260	ccvc	

Last Modified: Tue Jun 18 16:18:22 2019 Page: 1

TestAmerica Laboratories
Worklist Report

Worklist Name: 061819 Worklist Number: 82979
Instrument Name: VMS_G2 Chrom Method: AQ_VMSG2_8260
Purge Volume: 5.000 Units: mL
Analysis Type: VOA
Batch Directory: \\chromna\Denver\ChromData\VMS_G2\20190618-82979.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: mv-Cent IS/SS_00002 Amount Added: 5.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0082979-001	# 1 bfb	MV-BFB_00028	BFB	voaWater	1.000	uL	1.000
280-0082979-002	# 2 ccv	MV-MegaMainA_00015 MV-Gas A_00028	CCV	voaWater	5.000	mL	1.000
280-0082979-003	# 3 lcs	MV-MegaMain B_00013 MV-Gas B_00031	LCS	voaWater	5.000	mL	1.000
280-0082979-004	# 4 mb		MB	voaWater	5.000	mL	1.000
280-0082979-005	# 5 280-124711-G-1		Client	voaWater	5.000	mL	1.000
280-0082979-006	# 6 280-124711-G-2		Client	voaWater	5.000	mL	1.000
280-0082979-007	# 7 280-124711-H-3		Client	voaWater	5.000	mL	1.000
280-0082979-008	# 8 280-124711-G-4		Client	voaWater	5.000	mL	1.000
280-0082979-009	# 9 280-124711-C-5		Client	voaWater	5.000	mL	1.000
280-0082979-010	#10 280-124711-B-6		Client	voaWater	5.000	mL	1.000
280-0082979-011	#11 280-124711-C-7		Client	voaWater	5.000	mL	1.000
280-0082979-012	#12 280-124733-F-2		Client	voaWater	5.000	mL	1.000
280-0082979-013	#13 280-124805-B-2		Client	voaWater	5.000	mL	5.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0082979-014	#14 280-124733-F-2 MS	MV-MegaMain B_00013 MV-Gas B_00031	MS	voaWater	5.000	mL	1.000
280-0082979-015	#15 280-124733-E-2 MSD	MV-Gas B_00031 MV-MegaMain B_00013	MSD	voaWater	5.000	mL	1.000
280-0082979-016	#16 280-124805-B-2 MS	MV-Gas B_00031 MV-MegaMain B_00013	MS	voaWater	5.000	mL	5.000
280-0082979-017	#17 280-124805-B-2 MSD	MV-Gas B_00031 MV-MegaMain B_00013	MSD	voaWater	5.000	mL	5.000
280-0082979-018	#18 280-124703-C-1		Client	voaWater	5.000	mL	1.000
280-0082979-019	#19 280-124703-D-2		Client	voaWater	5.000	mL	1.000
280-0082979-020	#20 280-124703-C-2 MS	MV-Gas B_00031 MV-MegaMain B_00013	MS	voaWater	5.000	mL	1.000
280-0082979-021	#21 280-124703-B-2 MSD	MV-Gas B_00031 MV-MegaMain B_00013	MSD	voaWater	5.000	mL	1.000
280-0082979-022	#22 280-124703-C-3		Client	voaWater	5.000	mL	1.000
280-0082979-023	#23 280-124703-C-4		Client	voaWater	5.000	mL	1.000
280-0082979-024	#24 280-124703-A-5		Client	voaWater	5.000	mL	1.000
280-0082979-025	#25 280-124733-E-1		Client	voaWater	5.000	mL	1.000
280-0082979-026	#26 280-124805-A-5		Client	voaWater	5.000	mL	1.000
280-0082979-027	#27 280-124805-C-1		Client	voaWater	5.000	mL	1000.0
280-0082979-028	#28 280-124805-C-3		Client	voaWater	5.000	mL	500.0
280-0082979-029	#29 280-124805-B-4		Client	voaWater	5.000	mL	500.0
280-0082979-030	#30 280-124928-A-1		Client	voaWater	5.000	mL	1.000
280-0082979-031	#31 280-124928-E-2		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0082979-032	#32 ccvc	MV-MegaMainA_00015 MV-Gas A_00028	CCVC	voaWater	5.000	mL	1.000

Sample Request Form: 56690

den_msvoa_totalbacklog 6/18/2019 2:28:13 PM Assigned to:Meier, Greg P

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-124703-1	DDMW04		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	203 & MS-Strge	Unconfirmed
M Q5.1/DIL3										
280-124703-2	DDMW16		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	MS-Strge & 203	Unconfirmed
M Q5.1/DIL3										
280-124703-2MS	DDMW16MS		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	MS-Strge & 203	Unconfirmed
M Q5.1/DIL3										
280-124703-2MSD	DDMW16MSD		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	203 & MS-Strge	Unconfirmed
M Q5.1/DIL3										
280-124703-3	DDMW03		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	MS-Strge & 203	Unconfirmed
M Q5.1/DIL3										
280-124703-4	DDPIEZ005		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	203 & MS-Strge	Unconfirmed
M Q5.1/DIL3										
280-124703-5	050619TB1		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	MS-Strge	Unconfirmed
M Q5.1/DIL3										
280-124711-1 6/7	FTKX02-MW7S-060519		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRB	KY	204 & Mtls-Strge & MS-Strge & WC Dpt	Unconfirmed
M Q5.1										
280-124711-2	FTKX02-MW2S-060519		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRB	KY	WC Dpt & MS-Strge & Mtls-Strge & 204	Unconfirmed
M Q5.1										
280-124711-3	FTKX02-MW1S-060519		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRB	KY	MS-Strge & WC Dpt & 204 & Mtls-Strge	Unconfirmed
M Q5.1										

Sample Request Form: 56690

den_msvoa_totalbacklog 6/18/2019 2:28:13 PM Assigned to:Meier, Greg P

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-124711-4	FTKX02-DUP01-060519		8260B_DOD5	8260B_DOD5	06/18 23:59	06/24/19	DRB	KY	204 & MS-Strge & Mtls-Strge & WC Dpt	Unconfirmed
M Q5.1										
280-124711-5	060519-TB		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRB	KY	MS-Strge	Unconfirmed
M Q5.1										
280-124711-6	060519-AB		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRB	KY	MS-Strge	Unconfirmed
M Q5.1										
280-124711-7	060519-EB		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRB	KY	MS-Strge	Unconfirmed
M Q5.1										
280-124733-1 6/9	TNTMW35FD		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	204 & MS-Strge & Mtls-Strge	Unconfirmed
M Q5.1/DIL3										
280-124733-2	TNTMW35		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	Mtls-Strge & MS-Strge & 204	Unconfirmed
M Q5.1/DIL3										
280-124733-2MS	TNTMW35MS		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	Mtls-Strge & MS-Strge	Unconfirmed
M Q5.1/DIL3										
280-124733-2MSD	TNTMW35MSD		8260B_DOD5	8260B_DOD5	06/19 23:59	06/24/19	DRR	CO	MS-Strge & Mtls-Strge	Unconfirmed
M Q5.1/DIL3										
280-124805-1 G 6/11	U2ZVR1119001	100X	8260B_DOD5	8260B_DOD5	06/19 23:59	06/18/19	DFB	UT	MS-Strge	Unconfirmed
S CAUTION: HIGH CONC. VOCs > 100,000 ug/L, mostly cis-1,2-DCE										
280-124805-2	U2ZVR1119002	5X	8260B_DOD5	8260B_DOD5	06/19 23:59	06/18/19	DFB	UT	MS-Strge	Unconfirmed
CAUTION: HIGH CONC. VOCs > 100,000 ug/L, mostly cis-1,2-DCE										

Sample Request Form: 56690

den_msvoa_totalbacklog 6/18/2019 2:28:13 PM Assigned to:Meier, Greg P

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-124805-2MS	U2ZVR1119002MS	5X	8260B_DOD5	8260B_DOD5	06/19 23:59	06/18/19	DFB	UT	MS-Strge	Unconfirmed
S CAUTION: HIGH CONC. VOCs > 100,000 ug/L, mostly cis-1,2-DCE										
280-124805-2MSD	U2ZVR1119002SD	5X	8260B_DOD5	8260B_DOD5	06/19 23:59	06/18/19	DFB	UT	MS-Strge	Unconfirmed
S CAUTION: HIGH CONC. VOCs > 100,000 ug/L, mostly cis-1,2-DCE										
280-124805-3	U2ZVR1119003	500X	8260B_DOD5	8260B_DOD5	06/19 23:59	06/18/19	DFB	UT	MS-Strge	Unconfirmed
S CAUTION: HIGH CONC. VOCs > 100,000 ug/L, mostly cis-1,2-DCE										
280-124805-4	U2ZVR1119103	500X	8260B_DOD5	8260B_DOD5	06/19 23:59	06/18/19	DFB	UT	MS-Strge	Unconfirmed
S CAUTION: HIGH CONC. VOCs > 100,000 ug/L, mostly cis-1,2-DCE										
280-124805-5	U2ZVR1119301		8260B_DOD5	8260B_DOD5	06/19 23:59	06/18/19	DFB	UT	MS-Strge	Unconfirmed
280-124928-1 6/14	TB060519		8260B_DOD5	8260B_DOD5	06/19 23:59	06/23/19	PJM	NE	MS-Strge	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-124928-2	Source2019		8260B_DOD5	8260B_DOD5	06/19 23:59	06/23/19	PJM	NE	226 & MS-Strge	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										

Sequence Name: C:¥msdchem¥1¥sequence¥061619I.s
Comment:
Operator: MEIERG
Data Path: C:¥MSDCHEM¥1¥DATA¥061619I¥
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Test America Denver
Instrument: G2
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 1654 - 2005
Lims Batch: 461853
461854
461855

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	g2_6446	BFB	BFB
2)	Sample	1	g2_6447	8260	IC
3)	Sample	2	g2_6448	8260	IC
4)	Sample	3	g2_6449	8260	IC
5)	Sample	4	g2_6450	8260	ICIS
6)	Sample	5	g2_6451	8260	IC
7)	Sample	6	g2_6452	8260	IC
8)	Sample	7	g2_6453	8260	IC
9)	Sample	8	g2_6454	8260	IC
10)	Sample	9	g2_6455	8260	ICV

GM 6/20/19

Last Modified: Mon Jun 17 19:06:35 2019 Page: 1

TestAmerica Laboratories
Worklist Report

Worklist Name: 061719i
Worklist Number: 82944
Instrument Name: VMS_G2
Chrom Method: AQ_VMSG2_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromna\Denver\ChromData\VMS_G2\20190617-82944.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: mv-Cent IS/SS_00002
Amount Added: 5.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0082944-001	# 1 bfb	MV-BFB_00028	BFB		voaWater	1.000	uL	1.000
280-0082944-002	# 2 ic	MV-MegaMainA_00015 MV-Gas A_00028	IC	7	voaWater	5.000	mL	1.000
280-0082944-003	# 3 ic	MV-MegaMainA_00015 MV-Gas A_00028	IC	6	voaWater	5.000	mL	1.000
280-0082944-004	# 4 icis	MV-MegaMainA_00015 MV-Gas A_00028	ICIS	5	voaWater	5.000	mL	1.000
280-0082944-005	# 5 ic	MV-MegaMainA_00015 MV-Gas A_00028	IC	4	voaWater	5.000	mL	1.000
280-0082944-006	# 6 ic	MV-MegaMainA_00015 MV-Gas A_00028	IC	3	voaWater	5.000	mL	1.000
280-0082944-007	# 7 ic	MV-MegaMainA_00015 MV-Gas A_00028	IC	2	voaWater	5.000	mL	1.000
280-0082944-008	# 8 ic	MV-MegaMainA_00015 MV-Gas A_00028	IC	1	voaWater	5.000	mL	1.000
280-0082944-009	# 9 icv	MV-MegaMain B_00013 MV-Gas B_00031	ICV		voaWater	5.000	mL	1.000

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461853 Batch Start Date: 06/17/19 16:54 Batch Analyst: Meier, Greg P

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MV-BFB 00028	mv-Cent IS/SS 00002	MV-Gas A 00028	MV-Gas B 00031
BFB 280-461853/1		8260B		1 uL	1 uL	2 uL			
IC 280-461853/2		8260B		5 mL	5 mL		5 uL	200 uL	
IC 280-461853/3		8260B		5 mL	5 mL		5 uL	100 uL	
ICIS 280-461853/4		8260B		5 mL	5 mL		5 uL	50 uL	
IC 280-461853/5		8260B		5 mL	5 mL		5 uL	10 uL	
IC 280-461853/6		8260B		5 mL	5 mL		5 uL	2 uL	
IC 280-461853/7		8260B		5 mL	5 mL		5 uL	1 uL	
IC 280-461853/8		8260B		5 mL	5 mL		5 uL	0.5 uL	
ICV 280-461853/9		8260B		5 mL	5 mL		5 uL		50 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00013	MV-MegaMainA 00015				
BFB 280-461853/1		8260B							
IC 280-461853/2		8260B			200 uL				
IC 280-461853/3		8260B			100 uL				
ICIS 280-461853/4		8260B			50 uL				
IC 280-461853/5		8260B			10 uL				
IC 280-461853/6		8260B			2 uL				
IC 280-461853/7		8260B			1 uL				
IC 280-461853/8		8260B			0.5 uL				
ICV 280-461853/9		8260B		50 uL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461956 Batch Start Date: 06/18/19 13:14 Batch Analyst: Meier, Greg P

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MV-BFB 00028	mv-Cent IS/SS 00002	MV-Gas A 00028	MV-Gas B 00031
BFB 280-461956/1		8260B		1 uL	1 uL	2 uL			
CCV 280-461956/2		8260B		5 mL	5 mL		5 uL	50 uL	
LCS 280-461956/3		8260B		5 mL	5 mL		5 uL		25 uL
MB 280-461956/4		8260B		5 mL	5 mL		5 uL		
280-124928-A-1	TB060519	8260B	T	5 mL	5 mL		5 uL		
280-124928-E-2	Source2019	8260B	T	5 mL	5 mL		5 uL		
CCVC 280-461956/32		8260B		5 mL	5 mL		5 uL	50 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00013	MV-MegaMainA 00015				
BFB 280-461956/1		8260B							
CCV 280-461956/2		8260B			50 uL				
LCS 280-461956/3		8260B		25 uL					
MB 280-461956/4		8260B							
280-124928-A-1	TB060519	8260B	T						
280-124928-E-2	Source2019	8260B	T						
CCVC 280-461956/32		8260B			50 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/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 462165 Batch Start Date: 06/20/19 09:29 Batch Analyst: Meier, Greg P

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MV-BFB 00028	mv-Cent IS/SS 00002	MV-Gas A 00028	MV-Gas B 00031
BFB 280-462165/1		8260B		1 uL	1 uL	2 uL			
CCV 280-462165/2		8260B		5 mL	5 mL		5 uL	50 uL	
LCS 280-462165/3		8260B		5 mL	5 mL		5 uL		25 uL
MB 280-462165/5		8260B		5 mL	5 mL		5 uL		
280-124928-C-3	SHGW02-19A	8260B	T	5 mL	5 mL		5 uL		
280-124928-D-4	SHGW05-19A	8260B	T	5 mL	5 mL		5 uL		
280-124928-D-5	SAMW1-19A	8260B	T	5 mL	5 mL		5 uL		
280-124928-C-6	G0053-19A	8260B	T	5 mL	5 mL		5 uL		
280-124928-F-10	SHGW03-19A	8260B	T	5 mL	5 mL		5 uL		
280-124928-E-11	G0069-19A	8260B	T	5 mL	5 mL		5 uL		
280-124928-E-12	SHGW04-19A	8260B	T	5 mL	5 mL		5 uL		
280-124928-A-13	TB060619	8260B	T	5 mL	5 mL		5 uL		
CCVC 280-462165/32		8260B		5 mL	5 mL		5 uL	50 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00013	MV-MegaMainA 00015				
BFB 280-462165/1		8260B							
CCV 280-462165/2		8260B			50 uL				
LCS 280-462165/3		8260B		25 uL					
MB 280-462165/5		8260B							
280-124928-C-3	SHGW02-19A	8260B	T						
280-124928-D-4	SHGW05-19A	8260B	T						
280-124928-D-5	SAMW1-19A	8260B	T						
280-124928-C-6	G0053-19A	8260B	T						
280-124928-F-10	SHGW03-19A	8260B	T						
280-124928-E-11	G0069-19A	8260B	T						
280-124928-E-12	SHGW04-19A	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 462165 Batch Start Date: 06/20/19 09:29 Batch Analyst: Meier, Greg P

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMain B 00013	MV-MegaMainA 00015				
280-124928-A-13	TB060619	8260B	T						
CCVC 280-462165/32		8260B			50 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06111929.D

Lab ID: LCS 280-461087/29 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Ethane	0.123	0.152	123	74-131	
Methane	0.0657	0.0757	115	73-125	
Ethylene	0.115	0.139	121	72-133	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06121902.D

Lab ID: LCS 280-461235/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Ethane	0.137	0.154	112	74-131	
Methane	0.0730	0.0756	104	73-125	
Ethylene	0.128	0.157	123	72-133	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06111930.D

Lab ID: LCSD 280-461087/30 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethane	0.123	0.161	131	6	20	74-131	
Methane	0.0657	0.0803	122	6	20	73-125	
Ethylene	0.115	0.145	126	4	20	72-133	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06121903.D

Lab ID: LCSD 280-461235/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethane	0.137	0.152	111	1	20	74-131	
Methane	0.0730	0.0748	103	1	20	73-125	
Ethylene	0.128	0.150	117	5	20	72-133	

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.: 280-124928-1

SDG No.:

Lab Sample ID: MB 280-461087/31

Matrix: Water Date Extracted:

Lab File ID:(1) 06111931.D Lab File ID:(2) 06111931.D

Date Analyzed:(1) 06/11/2019 13:01 Date Analyzed:(2) 06/11/2019 13:01

Instrument ID:(1) VGC_J Instrument ID:(2) VGC_J

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
G0105-19A	280-124928-7	06/11/2019 17:56	06/11/2019 17:56
G0107-19A	280-124928-8	06/11/2019 18:10	06/11/2019 18:10
SHGW04-19A	280-124928-12	06/11/2019 18:23	06/11/2019 18:23
G0106-19A	280-124928-9	06/11/2019 18:36	06/11/2019 18:36
SHGW03-19A	280-124928-10	06/11/2019 18:50	06/11/2019 18:50
G0069-19A	280-124928-11	06/11/2019 19:03	06/11/2019 19:03
G0017-19A	280-124928-14	06/11/2019 19:16	06/11/2019 19:16
PZ009-19A	280-124928-15	06/11/2019 19:30	06/11/2019 19:30

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: MB 280-461235/4

Matrix: Water Date Extracted:

Lab File ID:(1) 06121904.D Lab File ID:(2) 06121904.D

Date Analyzed:(1) 06/12/2019 08:05 Date Analyzed:(2) 06/12/2019 08:05

Instrument ID:(1) VGC_J Instrument ID:(2) VGC_J

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-461235/2	06/12/2019 07:39	06/12/2019 07:39
	LCSD 280-461235/3	06/12/2019 07:52	06/12/2019 07:52
SHGW02-19A	280-124928-3	06/12/2019 12:19	06/12/2019 12:19
SHGW05-19A	280-124928-4	06/12/2019 12:32	06/12/2019 12:32
SAMW1-19A	280-124928-5	06/12/2019 12:45	06/12/2019 12:45
G0053-19A	280-124928-6	06/12/2019 12:59	06/12/2019 12:59
G0045-19A	280-124928-16	06/12/2019 13:12	06/12/2019 13:12
SHGW02-19A DL	280-124928-3 DL	06/12/2019 13:25	06/12/2019 13:25
SHGW05-19A DL	280-124928-4 DL	06/12/2019 13:39	06/12/2019 13:39

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW02-19A Lab Sample ID: 280-124928-3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/12/2019 12:19 Date Analyzed (2): 06/12/2019 12:19

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	7.6		2.4
	2		1.25	1.24	1.32	7.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW02-19A DL Lab Sample ID: 280-124928-3 DL

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/12/2019 13:25 Date Analyzed (2): 06/12/2019 13:25

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	3.8		0.2
	2		1.26	1.24	1.32	3.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW05-19A Lab Sample ID: 280-124928-4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/12/2019 12:32 Date Analyzed (2): 06/12/2019 12:32

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	7.6		1.7
	2		1.26	1.24	1.32	7.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW05-19A DL Lab Sample ID: 280-124928-4 DL

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/12/2019 13:39 Date Analyzed (2): 06/12/2019 13:39

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.69	1.66	1.74	3.7		0.2
	2		1.26	1.24	1.32	3.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0105-19A Lab Sample ID: 280-124928-7

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/11/2019 17:56 Date Analyzed (2): 06/11/2019 17:56

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		1.68	1.66	1.74	0.67		2.8
	2		1.26	1.25	1.33	0.69		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0107-19A Lab Sample ID: 280-124928-8

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/11/2019 18:10 Date Analyzed (2): 06/11/2019 18:10

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	5.6		1.3
	2		1.26	1.25	1.33	5.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0106-19A Lab Sample ID: 280-124928-9

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/11/2019 18:36 Date Analyzed (2): 06/11/2019 18:36

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0034		3.0
	2		1.26	1.25	1.33	0.0035		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW03-19A Lab Sample ID: 280-124928-10

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/11/2019 18:50 Date Analyzed (2): 06/11/2019 18:50

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.32		1.3
	2		1.26	1.25	1.33	0.32		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW04-19A Lab Sample ID: 280-124928-12

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/11/2019 18:23 Date Analyzed (2): 06/11/2019 18:23

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.69	1.66	1.74	0.84		1.2
	2		1.27	1.25	1.33	0.85		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0017-19A Lab Sample ID: 280-124928-14

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/11/2019 19:16 Date Analyzed (2): 06/11/2019 19:16

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.66	1.74	5.4		2.2
	2		1.26	1.25	1.33	5.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0045-19A Lab Sample ID: 280-124928-16

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/12/2019 13:12 Date Analyzed (2): 06/12/2019 13:12

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.69	1.66	1.74	0.0017		1.7
	2		1.26	1.24	1.32	0.0017		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-461087/29

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/11/2019 12:34 Date Analyzed (2): 06/11/2019 12:34

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0757		0.3
	2		1.26	1.25	1.33	0.0755		
Ethylene	1		2.50	2.48	2.58	0.139		0.3
	2		1.86	1.84	1.94	0.139		
Ethane	1		2.87	2.86	2.96	0.152		0.8
	2		1.53	1.52	1.62	0.150		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-461087/30

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/11/2019 12:48 Date Analyzed (2): 06/11/2019 12:48

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.66	1.74	0.0803		0.4
	2		1.26	1.25	1.33	0.0800		
Ethylene	1		2.50	2.48	2.58	0.145		19.1
	2		1.84	1.84	1.94	0.120		
Ethane	1		2.87	2.86	2.96	0.161		0.7
	2		1.54	1.52	1.62	0.160		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-461235/2

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/12/2019 07:39 Date Analyzed (2): 06/12/2019 07:39

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.70	1.66	1.74	0.0756		0.1
	2		1.28	1.24	1.32	0.0755		
Ethylene	1		2.52	2.47	2.57	0.157		0.0
	2		1.88	1.84	1.94	0.157		
Ethane	1		2.90	2.85	2.95	0.154		0.6
	2		1.56	1.51	1.61	0.153		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-461235/3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/12/2019 07:52 Date Analyzed (2): 06/12/2019 07:52

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.70	1.66	1.74	0.0748		0.2
	2		1.28	1.24	1.32	0.0747		
Ethylene	1		2.52	2.47	2.57	0.150		0.1
	2		1.88	1.84	1.94	0.150		
Ethane	1		2.90	2.85	2.95	0.152		0.6
	2		1.56	1.51	1.61	0.151		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW02-19A Lab Sample ID: 280-124928-3

Matrix: Water Lab File ID: 06121923.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 13:25

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 12:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121923.D				
Lims ID:	280-124928-F-3				
Client ID:	SHGW02-19A				
Sample Type:	Client				
Inject. Date:	12-Jun-2019 12:19:00	ALS Bottle#:	23	Worklist Smp#:	23
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-F-3				
Misc. Info.:	280-0082760-023				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	13-Jun-2019 10:16:00	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0315				

First Level Reviewer: dobranskym Date: 12-Jun-2019 12:31:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.254	1.280	-0.026	1038580623	7753.9	E
2	1.667	1.703	-0.036	867359247	7571.7	E
					RPD = 2.38	
2 Ethane						
1		1.562			ND	
2		2.896				
3 Ethylene						
1		1.885			ND	
2		2.524				
4 Propane						
1		2.633			ND	
2		4.690				
5 Acetylene						
1		4.064			ND	
2		2.669				
6 Butane						
1		4.377			ND	
2		6.149				
7 isobutylene						
1		5.303			ND	
2		6.000				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

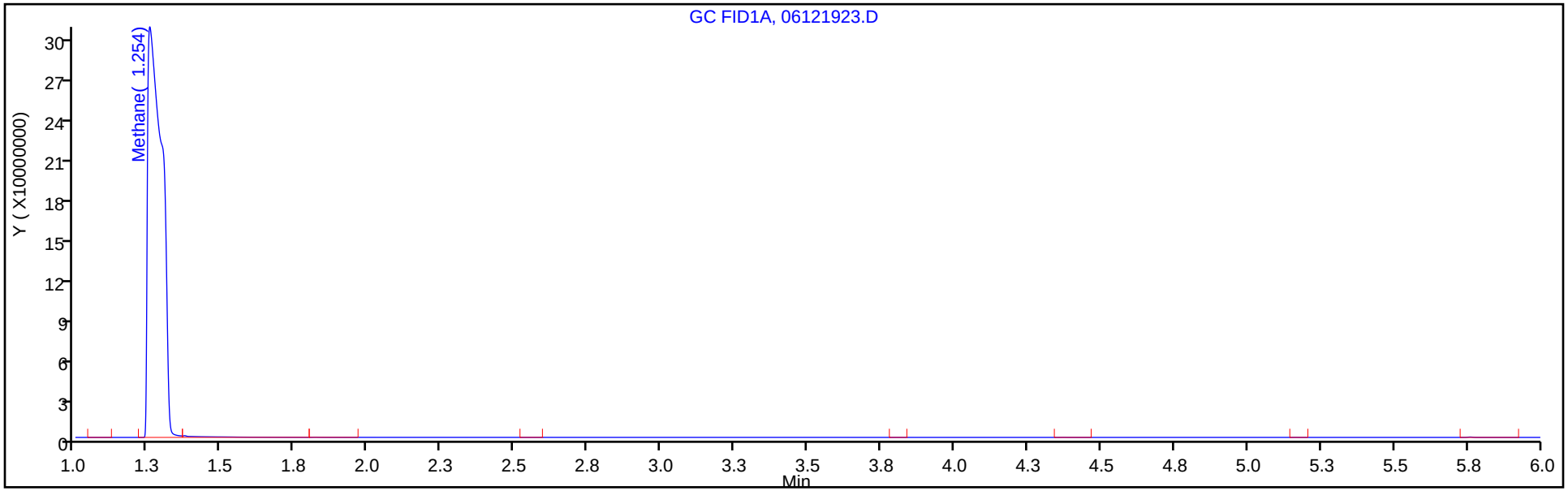
Report Date: 13-Jun-2019 10:16:12 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

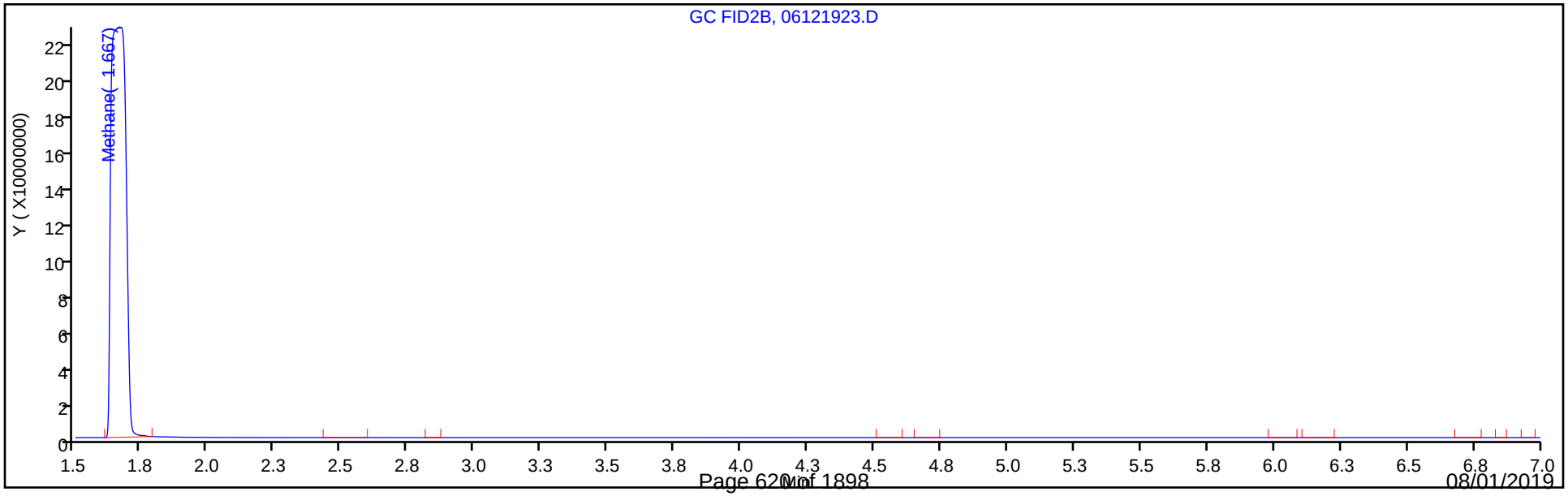
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121923.D

Injection Date:	12-Jun-2019 12:19:00	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-F-3	Lab Sample ID:	280-124928-3	Worklist Smp#:	23
Client ID:	SHGW02-19A				
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.: 280-124928-1

SDG No.:

Client Sample ID: SHGW02-19A DL Lab Sample ID: 280-124928-3 DL

Matrix: Water Lab File ID: 028F2801.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 13:25

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 13:25

Soil Aliquot Vol: Dilution Factor: 3

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	3.8	D	0.015	0.0060	0.0019

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\028F2801.D
Lims ID: 280-124928-F-3
Client ID: SHGW02-19A
Sample Type: Client
Inject. Date: 12-Jun-2019 13:25:55 ALS Bottle#: 28 Worklist Smp#: 59
Purge Vol: 18.000 mL Dil. Factor: 3.0000
Sample Info: 280-124928-F-3 x
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:16:00 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 14:03:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.260	1.280	-0.020	169625266	1266.2	
2	1.672	1.703	-0.031	144763945	1263.5	
					RPD = 0.21	
2 Ethane						
1		1.562			ND	
2		2.896				
3 Ethylene						
1		1.885			ND	
2		2.524				
4 Propane						
1		2.633			ND	
2		4.690				
5 Acetylene						
1		4.064			ND	
2		2.669				
6 Butane						
1		4.377			ND	
2		6.149				
7 isobutylene						
1		5.303			ND	
2		6.000				

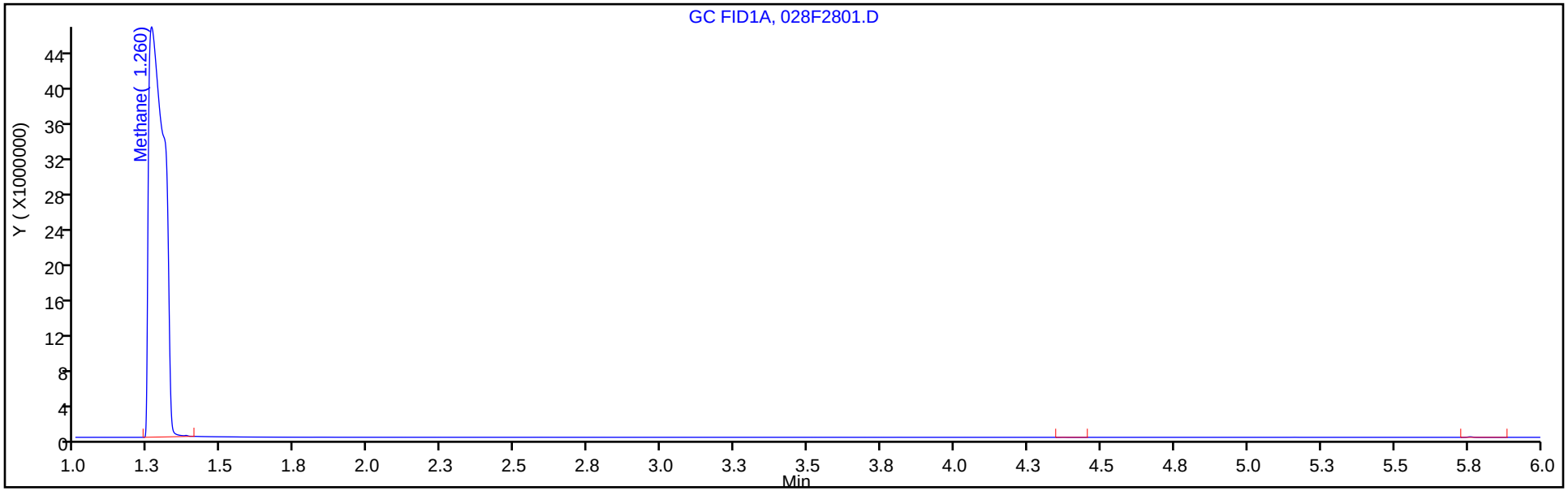
Report Date: 13-Jun-2019 10:16:20 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

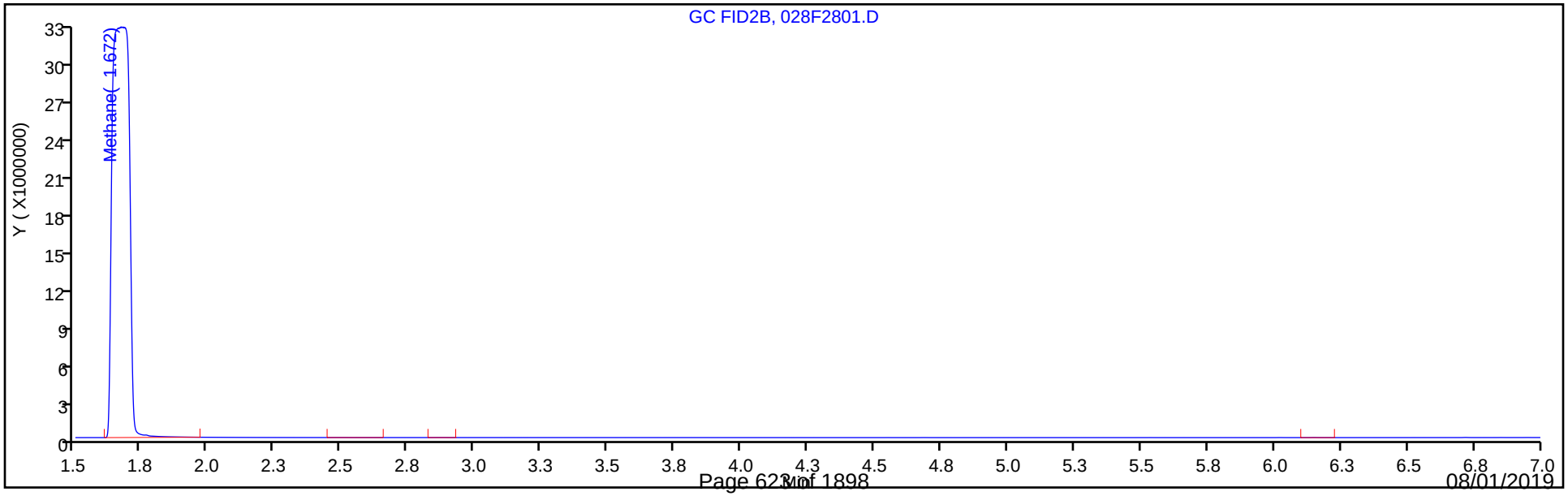
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\028F2801.D

Injection Date:	12-Jun-2019 13:25:55	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-F-3	Lab Sample ID:	280-124928-3	Worklist Smp#:	59
Client ID:	SHGW02-19A				
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW05-19A Lab Sample ID: 280-124928-4

Matrix: Water Lab File ID: 06121924.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 08:00

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 12:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121924.D
Lims ID: 280-124928-F-4
Client ID: SHGW05-19A
Sample Type: Client
Inject. Date: 12-Jun-2019 12:32:16 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-F-4
Misc. Info.: 280-0082760-024
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:16:00 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 12:47:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.257	1.280	-0.023	1032238294	7706.6	E
2	1.669	1.703	-0.034	868036157	7577.6	E
					RPD = 1.69	
2 Ethane						
1		1.562			ND	
2		2.896				
3 Ethylene						
1		1.885			ND	
2		2.524				
4 Propane						
1		2.633			ND	
2		4.690				
5 Acetylene						
1		4.064			ND	
2		2.669				
6 Butane						
1		4.377			ND	
2		6.149				
7 isobutylene						
1		5.303			ND	
2		6.000				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

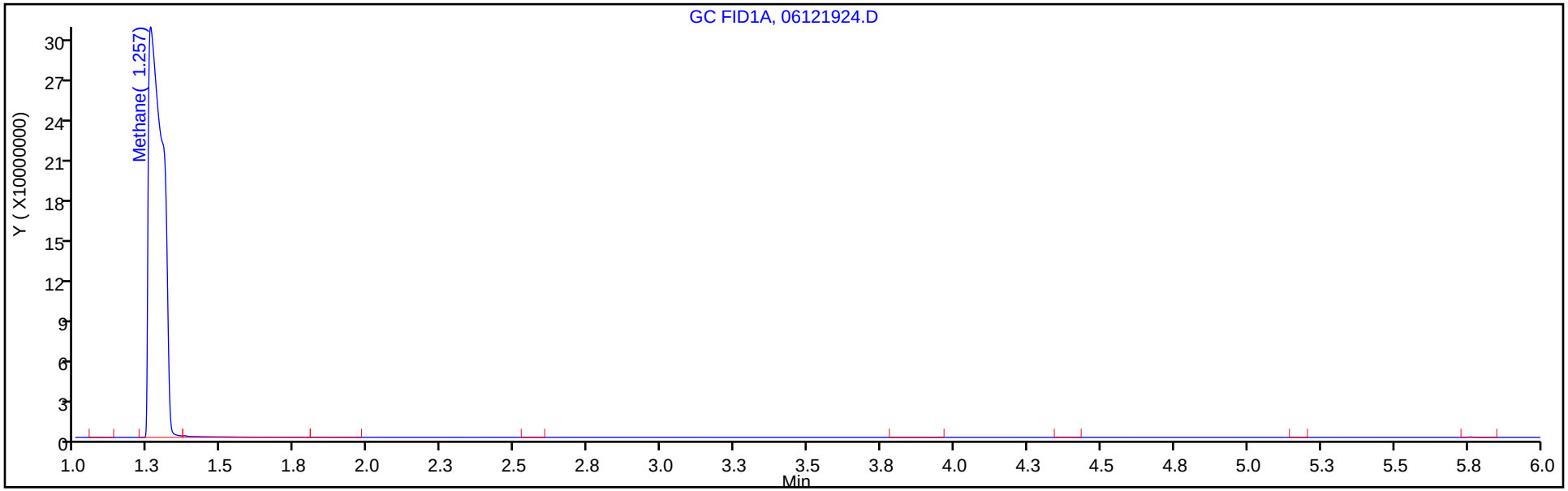
Report Date: 13-Jun-2019 10:16:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

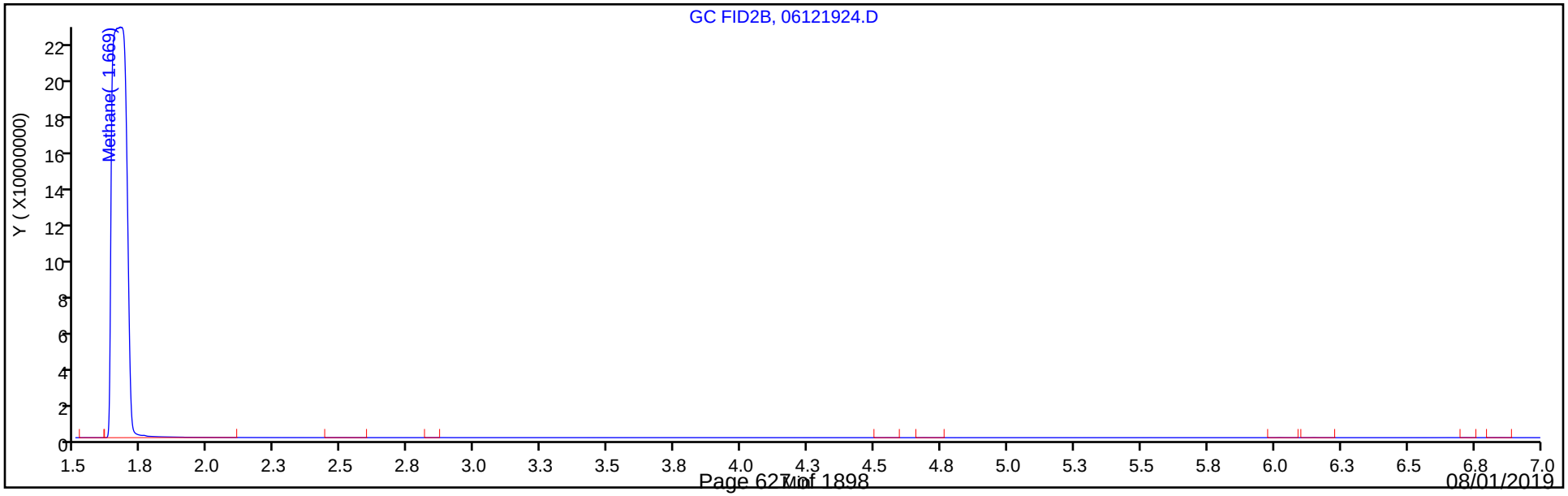
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121924.D

Injection Date:	12-Jun-2019 12:32:16	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-F-4	Lab Sample ID:	280-124928-4	Worklist Smp#:	24
Client ID:	SHGW05-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW05-19A DL Lab Sample ID: 280-124928-4 DL

Matrix: Water Lab File ID: 029F2901.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 08:00

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 13:39

Soil Aliquot Vol: Dilution Factor: 3

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	3.7	D	0.015	0.0060	0.0019

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\029F2901.D				
Lims ID:	280-124928-F-4				
Client ID:	SHGW05-19A				
Sample Type:	Client				
Inject. Date:	12-Jun-2019 13:39:21	ALS Bottle#:	29	Worklist Smp#:	60
Purge Vol:	18.000 mL	Dil. Factor:	3.0000		
Sample Info:	280-124928-F-4 x				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	13-Jun-2019 10:16:00	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0315				

First Level Reviewer: dobranskym Date: 12-Jun-2019 14:03:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.263	1.280	-0.017	166612272	1243.7	
2	1.686	1.703	-0.017	142216656	1241.3	
					RPD = 0.19	
2 Ethane						
1		1.562			ND	
2		2.896				
3 Ethylene						
1		1.885			ND	
2		2.524				
4 Propane						
1		2.633			ND	
2		4.690				
5 Acetylene						
1		4.064			ND	
2		2.669				
6 Butane						
1		4.377			ND	
2		6.149				
7 isobutylene						
1		5.303			ND	
2		6.000				

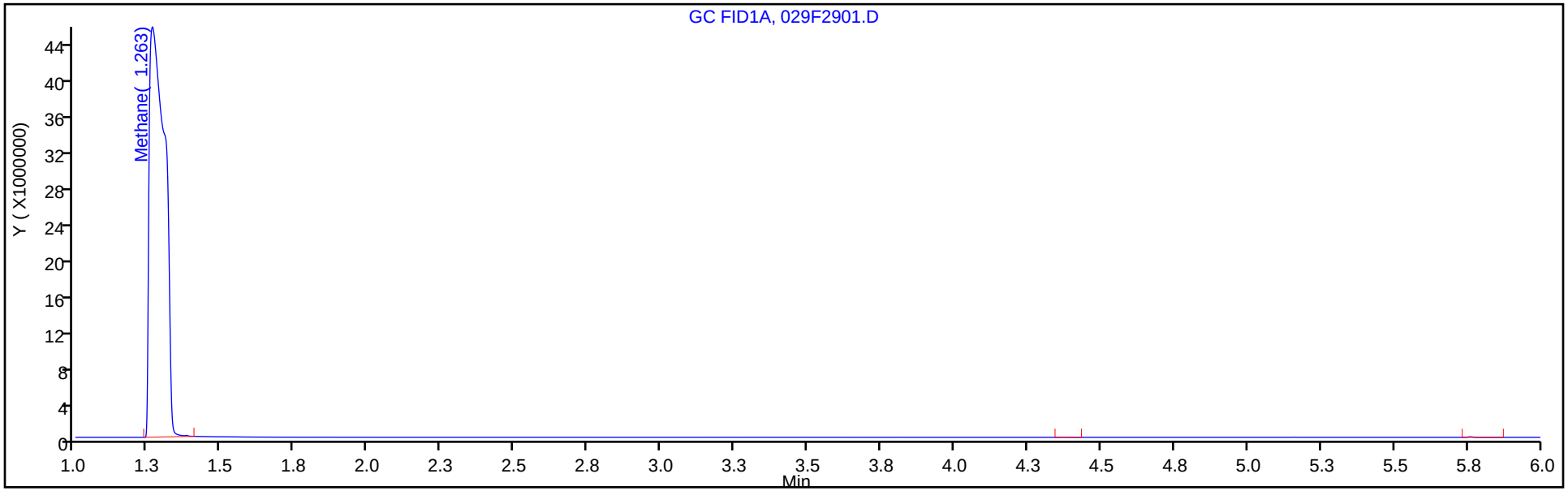
Report Date: 13-Jun-2019 10:16:21 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

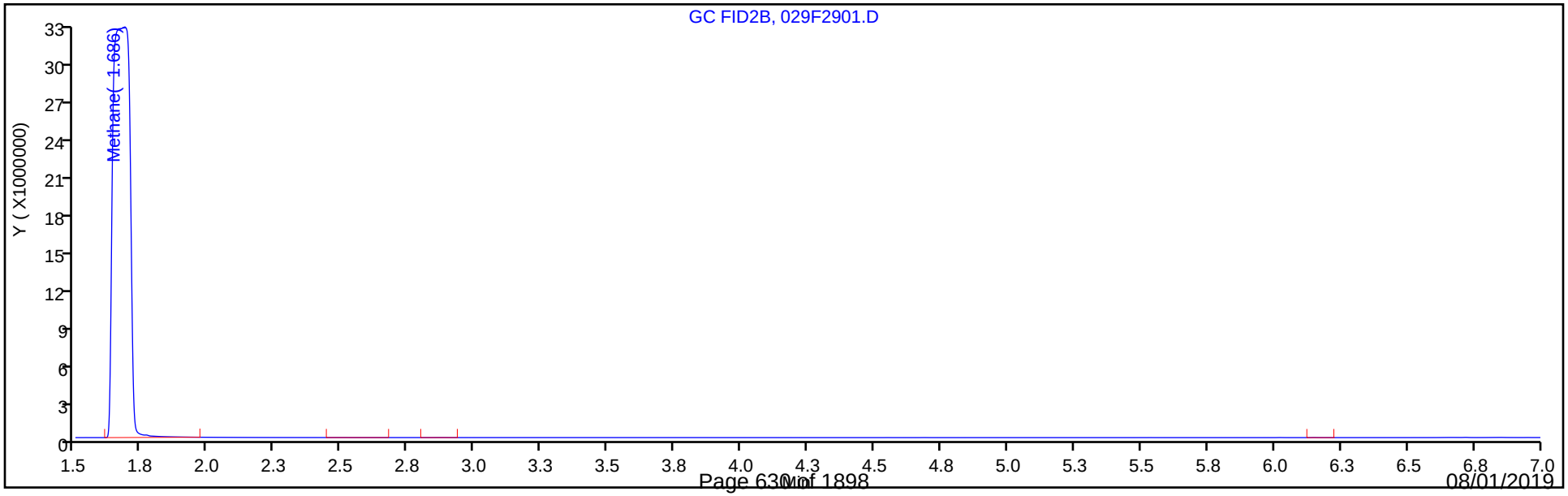
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\029F2901.D

Injection Date:	12-Jun-2019 13:39:21	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-F-4	Lab Sample ID:	280-124928-4	Worklist Smp#:	60
Client ID:	SHGW05-19A				
Purge Vol:	18.000 mL	Dil. Factor:	3.0000	ALS Bottle#:	29
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SAMW1-19A Lab Sample ID: 280-124928-5

Matrix: Water Lab File ID: 06121925.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 10:55

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 12:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121925.D				
Lims ID:	280-124928-F-5				
Client ID:	SAMW1-19A				
Sample Type:	Client				
Inject. Date:	12-Jun-2019 12:45:40	ALS Bottle#:	25	Worklist Smp#:	25
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-F-5				
Misc. Info.:	280-0082760-025				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	13-Jun-2019 10:16:00	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0315				
First Level Reviewer: dobranskym		Date:	12-Jun-2019 13:00:50		

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1		1.280			ND	
2		1.703				
2 Ethane						
1		1.562			ND	
2		2.896				
3 Ethylene						
1		1.885			ND	
2		2.524				
4 Propane						
1		2.633			ND	
2		4.690				
5 Acetylene						
1		4.064			ND	
2		2.669				
6 Butane						
1		4.377			ND	
2		6.149				
7 isobutylene						
1		5.303			ND	
2		6.000				

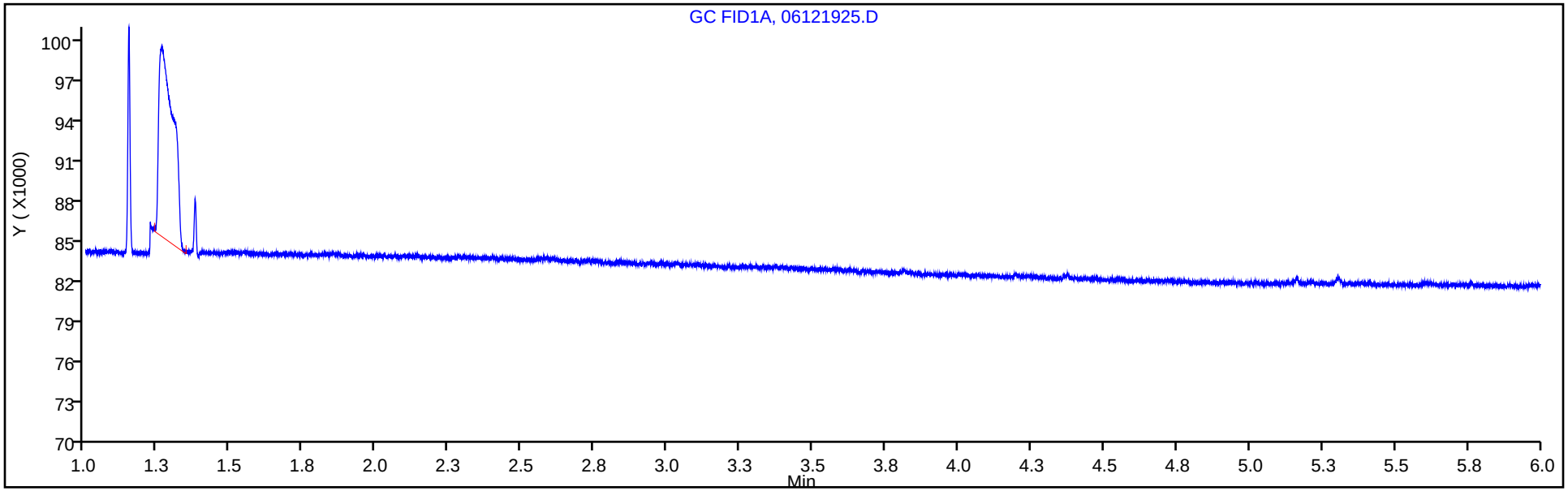
Report Date: 13-Jun-2019 10:16:15 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

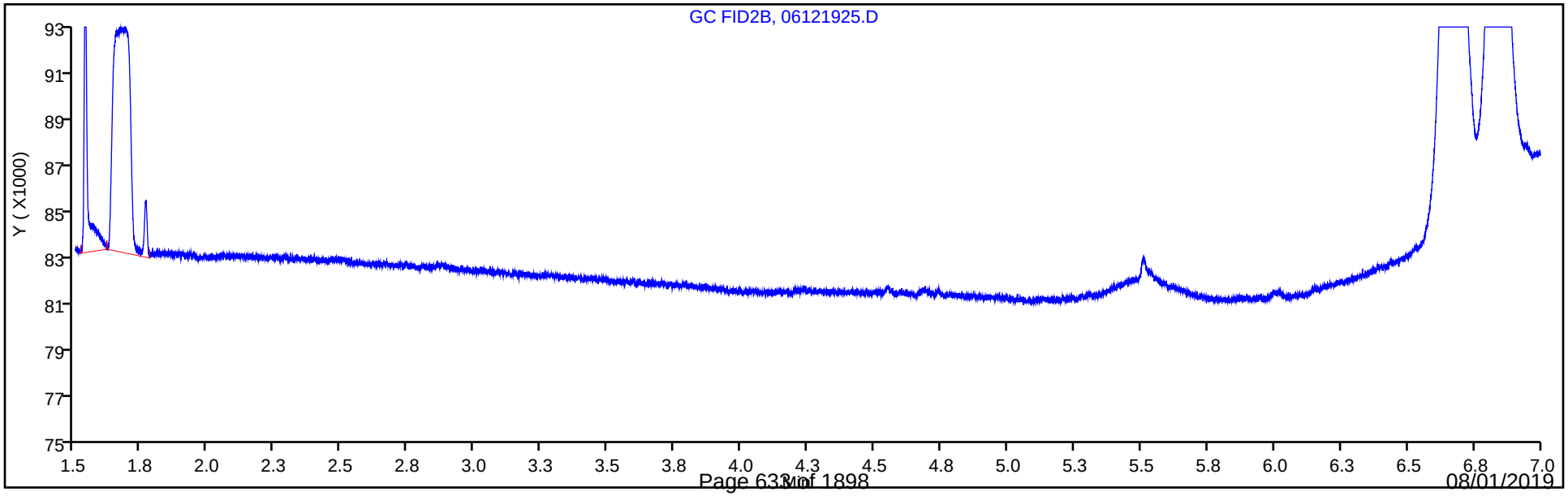
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121925.D

Injection Date:	12-Jun-2019 12:45:40	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-F-5	Lab Sample ID:	280-124928-5	Worklist Smp#:	25
Client ID:	SAMW1-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0053-19A Lab Sample ID: 280-124928-6

Matrix: Water Lab File ID: 06121926.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 12:10

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 12:59

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.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121926.D				
Lims ID:	280-124928-F-6				
Client ID:	G0053-19A				
Sample Type:	Client				
Inject. Date:	12-Jun-2019 12:59:05	ALS Bottle#:	26	Worklist Smp#:	26
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-F-6				
Misc. Info.:	280-0082760-026				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	13-Jun-2019 10:16:00	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0315				

First Level Reviewer: dobranskym Date: 12-Jun-2019 13:16:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1		1.280			ND	
2		1.703				
2 Ethane						
1		1.562			ND	
2		2.896				
3 Ethylene						
1		1.885			ND	
2		2.524				
4 Propane						
1		2.633			ND	
2		4.690				
5 Acetylene						
1		4.064			ND	
2		2.669				
6 Butane						
1		4.377			ND	
2		6.149				
7 isobutylene						
1		5.303			ND	
2		6.000				

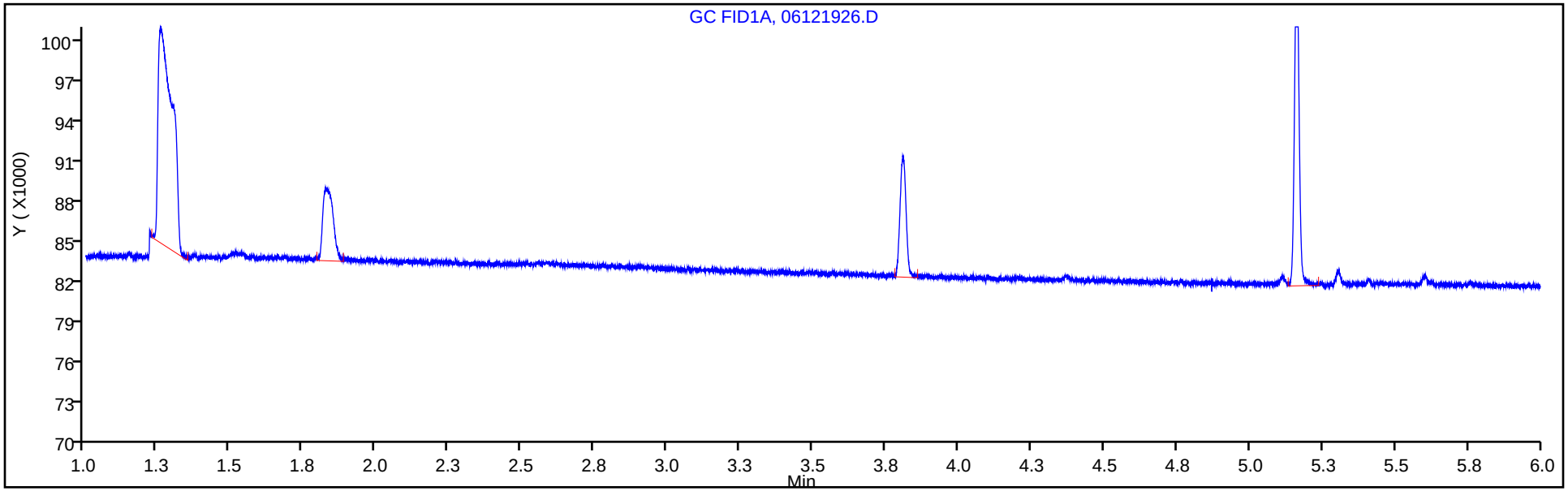
Report Date: 13-Jun-2019 10:16:16 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

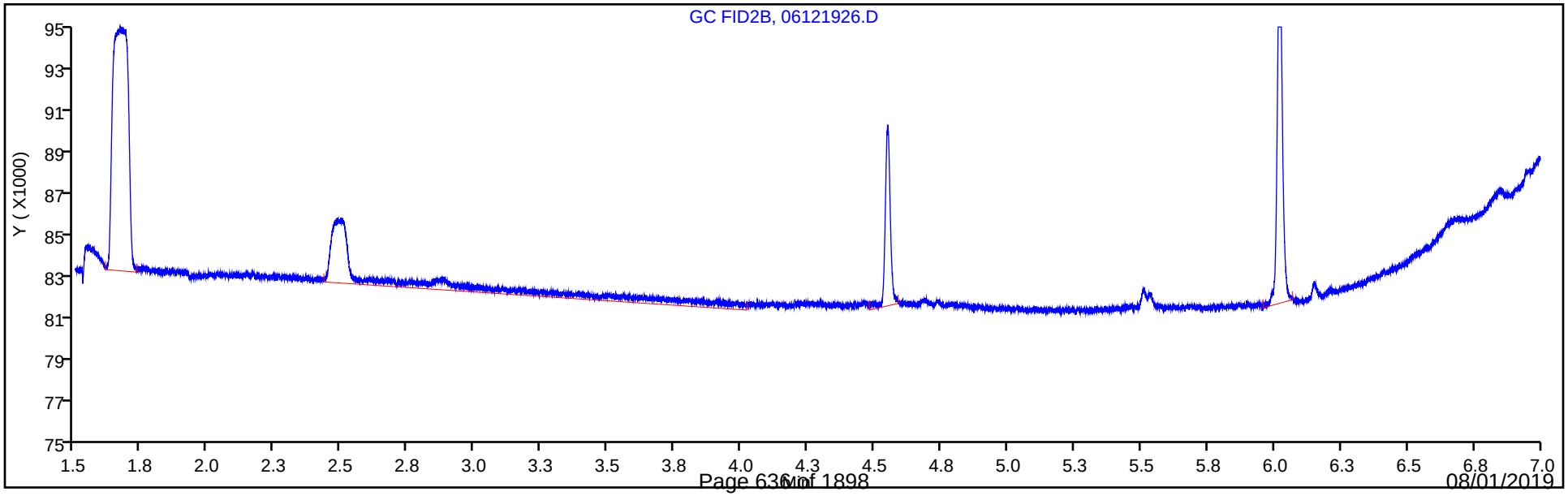
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121926.D

Injection Date:	12-Jun-2019 12:59:05	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-F-6	Lab Sample ID:	280-124928-6	Worklist Smp#:	26
Client ID:	G0053-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0105-19A Lab Sample ID: 280-124928-7

Matrix: Water Lab File ID: 06111953.D

Analysis Method: RSK-175 Date Collected: 06/05/2019 12:35

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 17:56

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.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.67		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111953.D
Lims ID: 280-124928-H-7
Client ID: G0105-19A
Sample Type: Client
Inject. Date: 11-Jun-2019 17:56:37 ALS Bottle#: 53 Worklist Smp#: 53
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-H-7
Misc. Info.: 280-0082723-053
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:47:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.262	1.285	-0.023	92248275	688.5	
2	1.681	1.703	-0.022	76694635	669.3	
					RPD = 2.82	
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

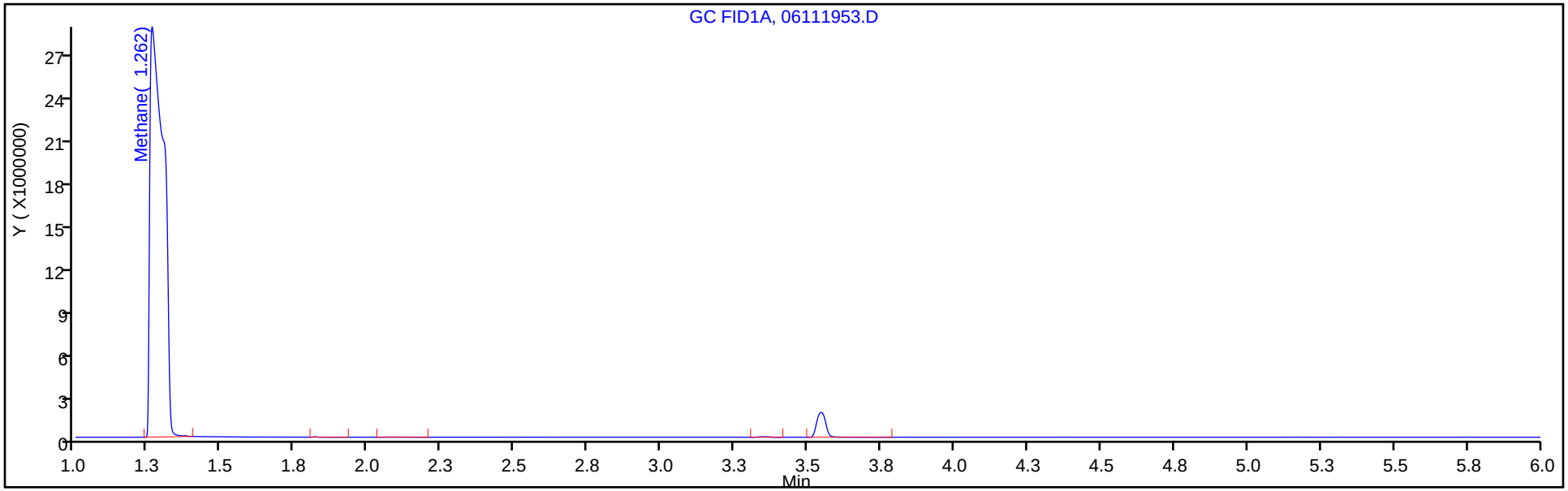
Report Date: 12-Jun-2019 12:00:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

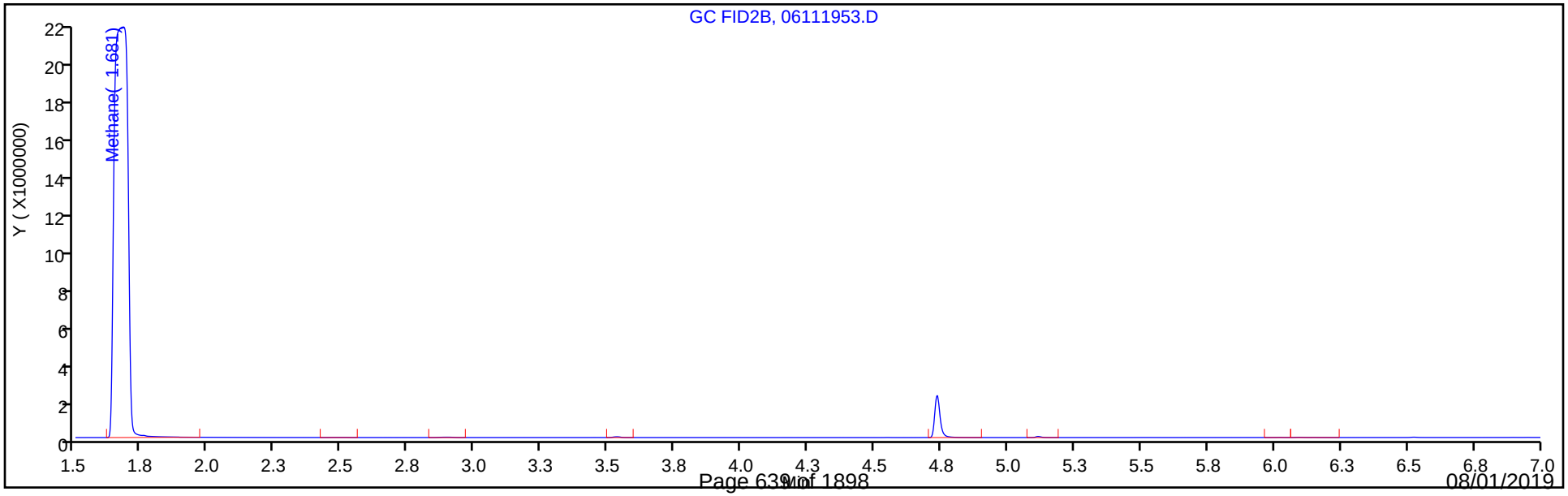
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111953.D

Injection Date:	11-Jun-2019 17:56:37	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-H-7	Lab Sample ID:	280-124928-7	Worklist Smp#:	53
Client ID:	G0105-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	53
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-124928-1

SDG No.:

Client Sample ID: G0107-19A Lab Sample ID: 280-124928-8

Matrix: Water Lab File ID: 06111954.D

Analysis Method: RSK-175 Date Collected: 06/05/2019 13:50

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 18:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	5.6		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111954.D				
Lims ID:	280-124928-H-8				
Client ID:	G0107-19A				
Sample Type:	Client				
Inject. Date:	11-Jun-2019 18:10:01	ALS Bottle#:	54	Worklist Smp#:	54
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-H-8				
Misc. Info.:	280-0082723-054				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	12-Jun-2019 11:59:51	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0334				

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:47:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.263	1.285	-0.022	760311680	5676.3	
2	1.672	1.703	-0.031	641819288	5602.7	
					RPD = 1.30	
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

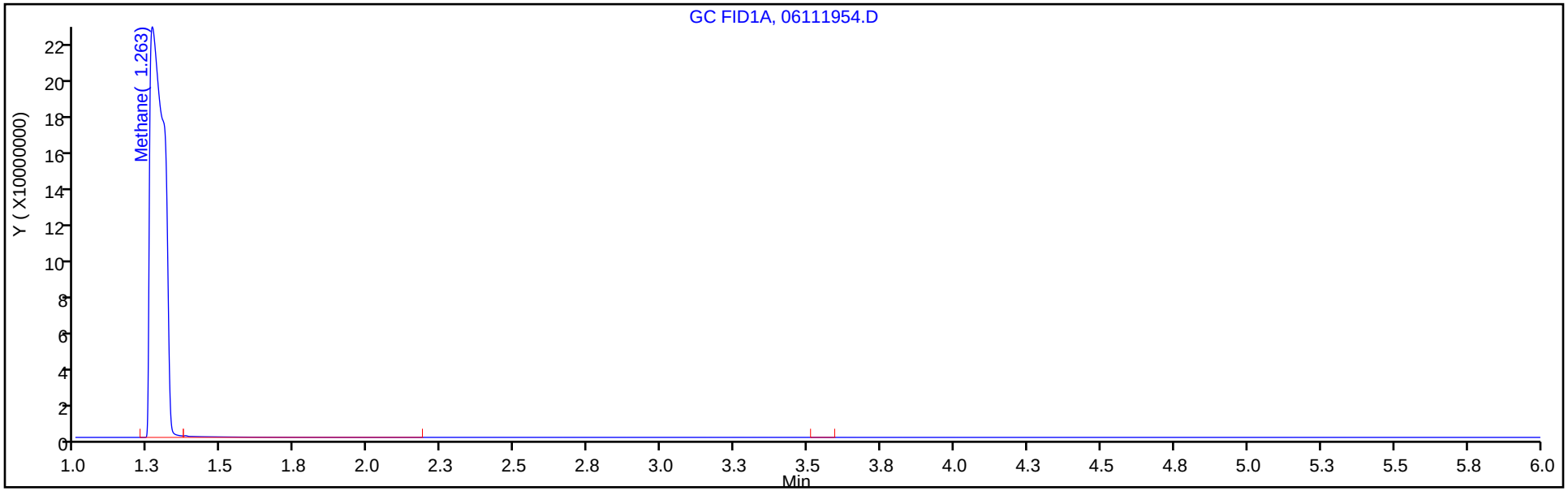
Report Date: 12-Jun-2019 12:00:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

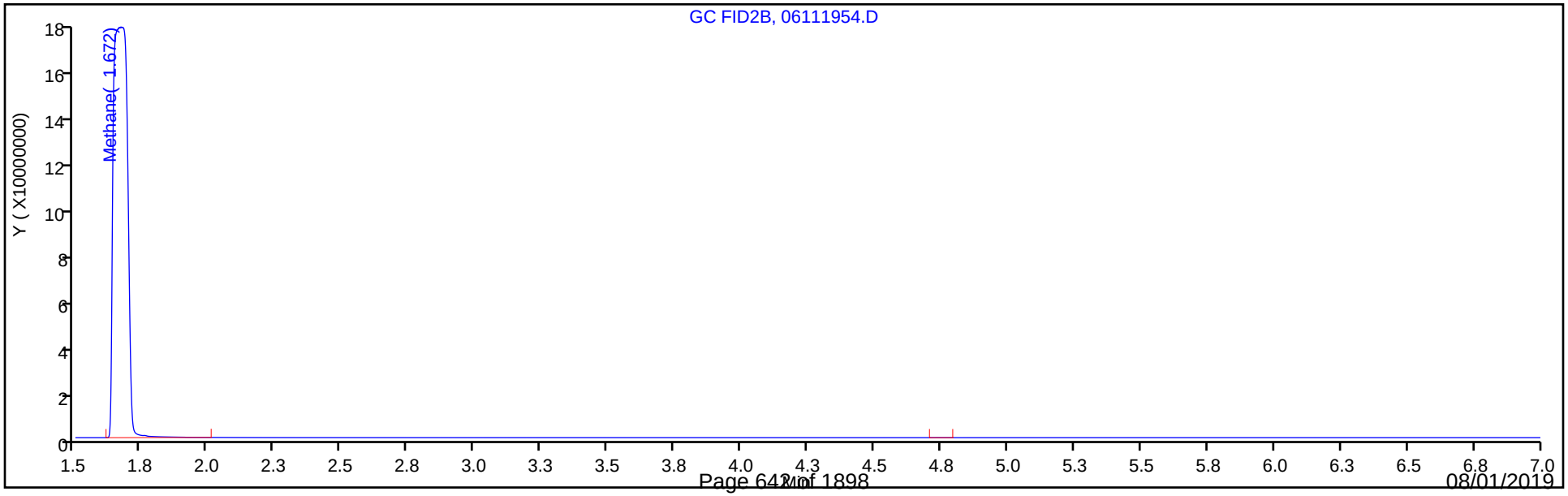
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111954.D

Injection Date:	11-Jun-2019 18:10:01	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-H-8	Lab Sample ID:	280-124928-8	Worklist Smp#:	54
Client ID:	G0107-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	54
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-124928-1

SDG No.:

Client Sample ID: G0106-19A Lab Sample ID: 280-124928-9

Matrix: Water Lab File ID: 06111956.D

Analysis Method: RSK-175 Date Collected: 06/05/2019 15:05

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 18:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0034	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111956.D				
Lims ID:	280-124928-H-9				
Client ID:	G0106-19A				
Sample Type:	Client				
Inject. Date:	11-Jun-2019 18:36:43	ALS Bottle#:	56	Worklist Smp#:	56
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-H-9				
Misc. Info.:	280-0082723-056				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	12-Jun-2019 11:59:51	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0334				

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:47:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.260	1.285	-0.025	500414	3.47	
2	1.681	1.703	-0.022	411839	3.37	
					RPD = 3.00	
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

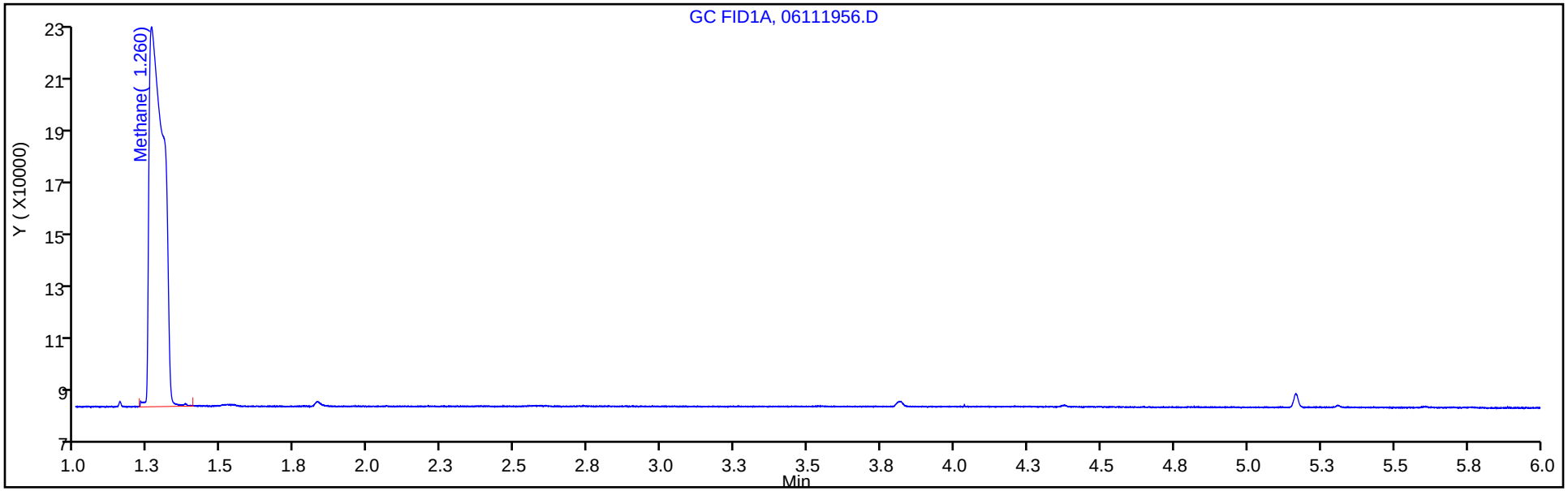
Report Date: 12-Jun-2019 12:00:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

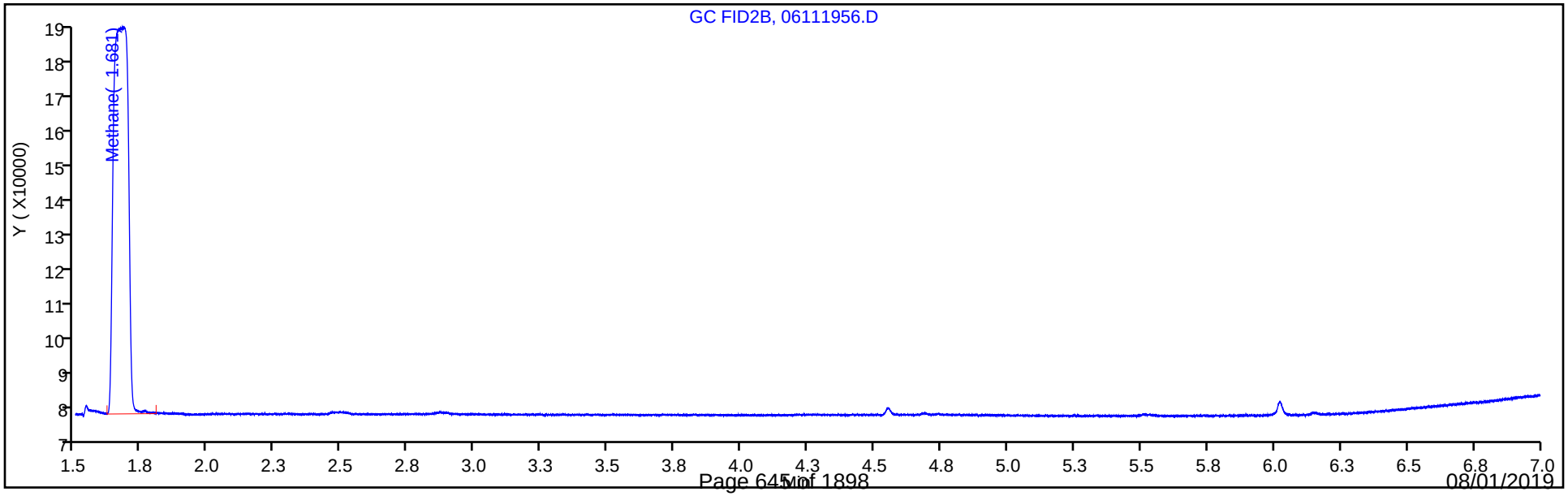
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111956.D

Injection Date:	11-Jun-2019 18:36:43	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-H-9	Lab Sample ID:	280-124928-9	Worklist Smp#:	56
Client ID:	G0106-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	56
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-124928-1

SDG No.:

Client Sample ID: SHGW03-19A Lab Sample ID: 280-124928-10

Matrix: Water Lab File ID: 06111957.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 10:50

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 18:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.32		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111957.D				
Lims ID:	280-124928-I-10				
Client ID:	SHGW03-19A				
Sample Type:	Client				
Inject. Date:	11-Jun-2019 18:50:07	ALS Bottle#:	57	Worklist Smp#:	57
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-I-10				
Misc. Info.:	280-0082723-057				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	12-Jun-2019 11:59:51	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0334				

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:47:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.264	1.285	-0.021	42799776	319.3	
2	1.675	1.703	-0.028	36122808	315.1	
					RPD = 1.31	
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

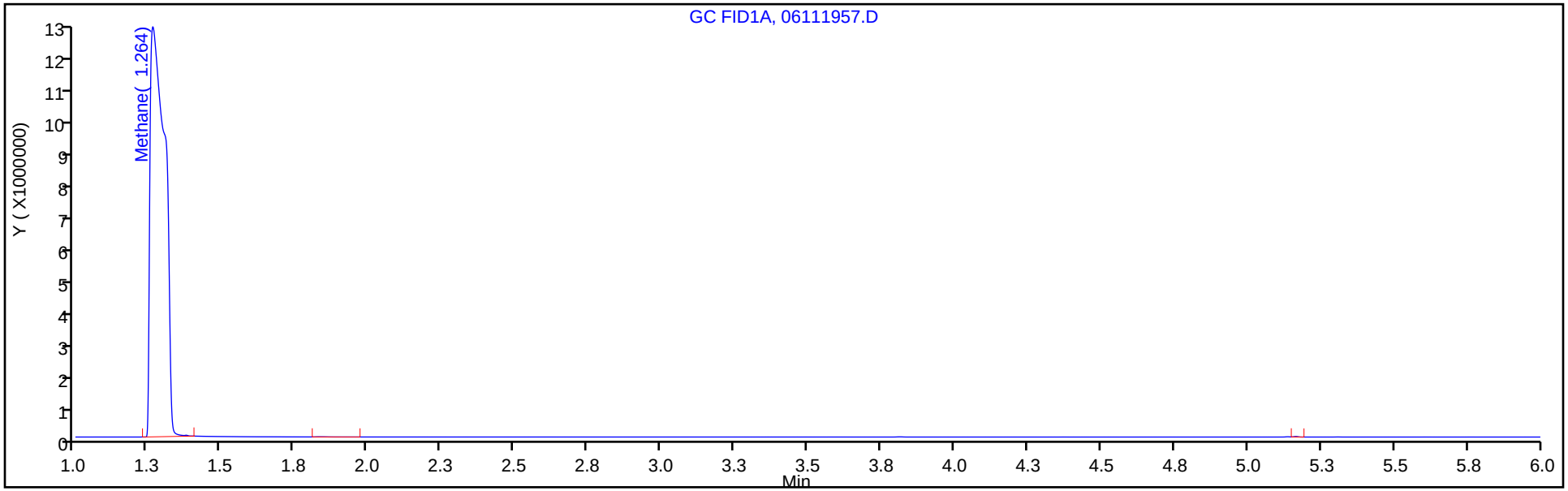
Report Date: 12-Jun-2019 12:00:16 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

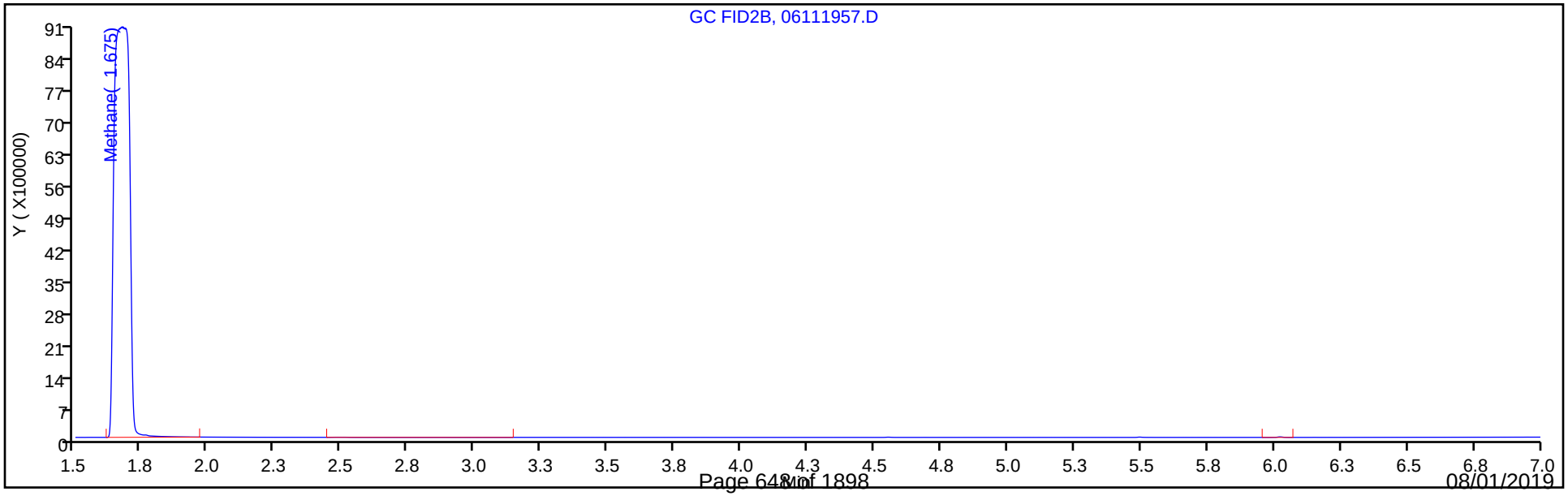
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111957.D

Injection Date:	11-Jun-2019 18:50:07	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-I-10	Lab Sample ID:	280-124928-10	Worklist Smp#:	57
Client ID:	SHGW03-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	57
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-124928-1

SDG No.:

Client Sample ID: G0069-19A Lab Sample ID: 280-124928-11

Matrix: Water Lab File ID: 06111958.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 12:10

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 19:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111958.D				
Lims ID:	280-124928-H-11				
Client ID:	G0069-19A				
Sample Type:	Client				
Inject. Date:	11-Jun-2019 19:03:22	ALS Bottle#:	58	Worklist Smp#:	58
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-H-11				
Misc. Info.:	280-0082723-058				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	12-Jun-2019 11:59:51	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0334				

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:48:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1		1.285			ND	
2		1.703				
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

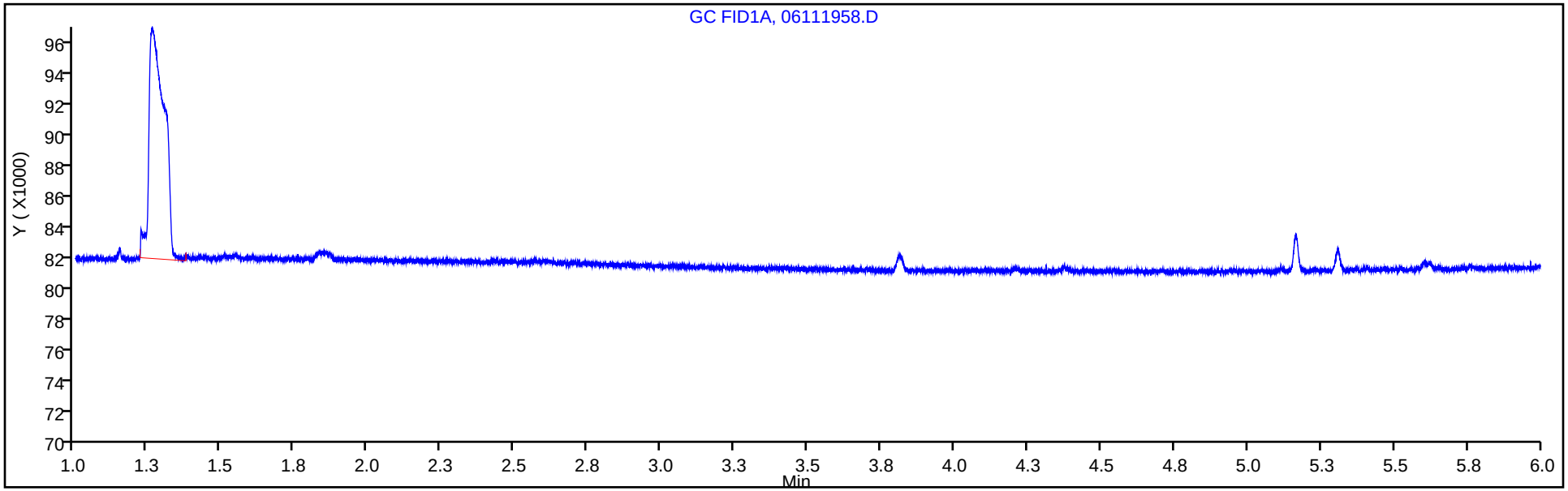
Report Date: 12-Jun-2019 12:00:20 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

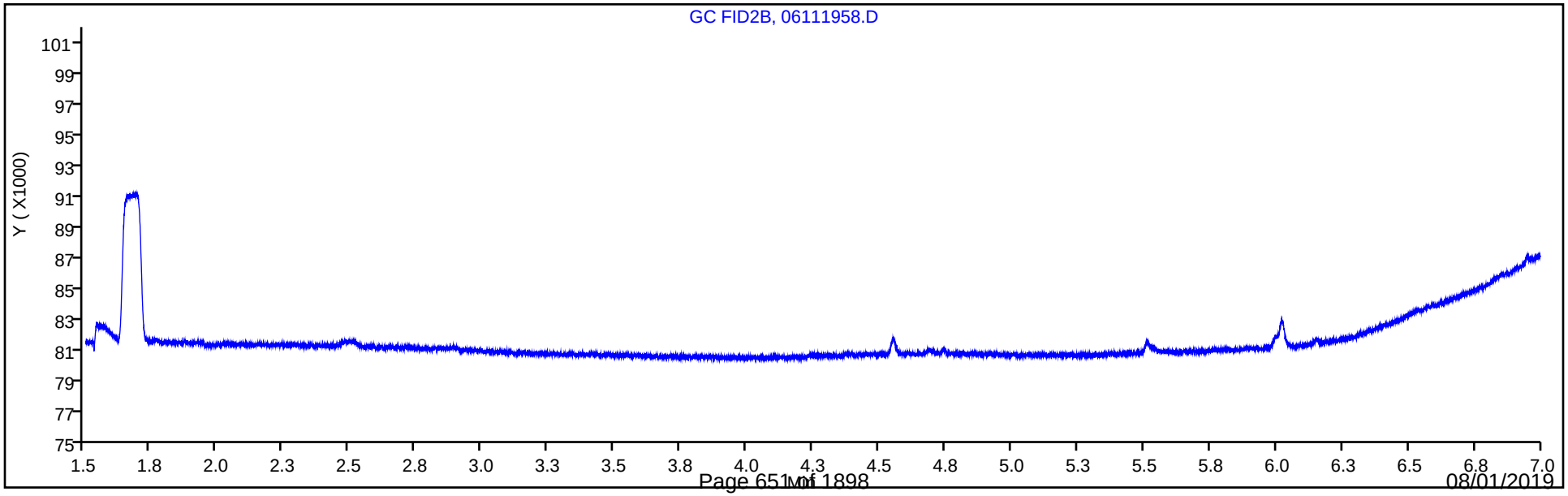
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111958.D

Injection Date:	11-Jun-2019 19:03:22	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-H-11	Lab Sample ID:	280-124928-11	Worklist Smp#:	58
Client ID:	G0069-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-124928-1

SDG No.:

Client Sample ID: SHGW04-19A Lab Sample ID: 280-124928-12

Matrix: Water Lab File ID: 06111955.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 13:35

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 18:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.84		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111955.D
Lims ID: 280-124928-H-12
Client ID: SHGW04-19A
Sample Type: Client
Inject. Date: 11-Jun-2019 18:23:26 ALS Bottle#: 55 Worklist Smp#: 55
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-H-12
Misc. Info.: 280-0082723-055
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:47:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.267	1.285	-0.018	113857601	849.8	
2	1.689	1.703	-0.014	96182917	839.4	
					RPD = 1.23	
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

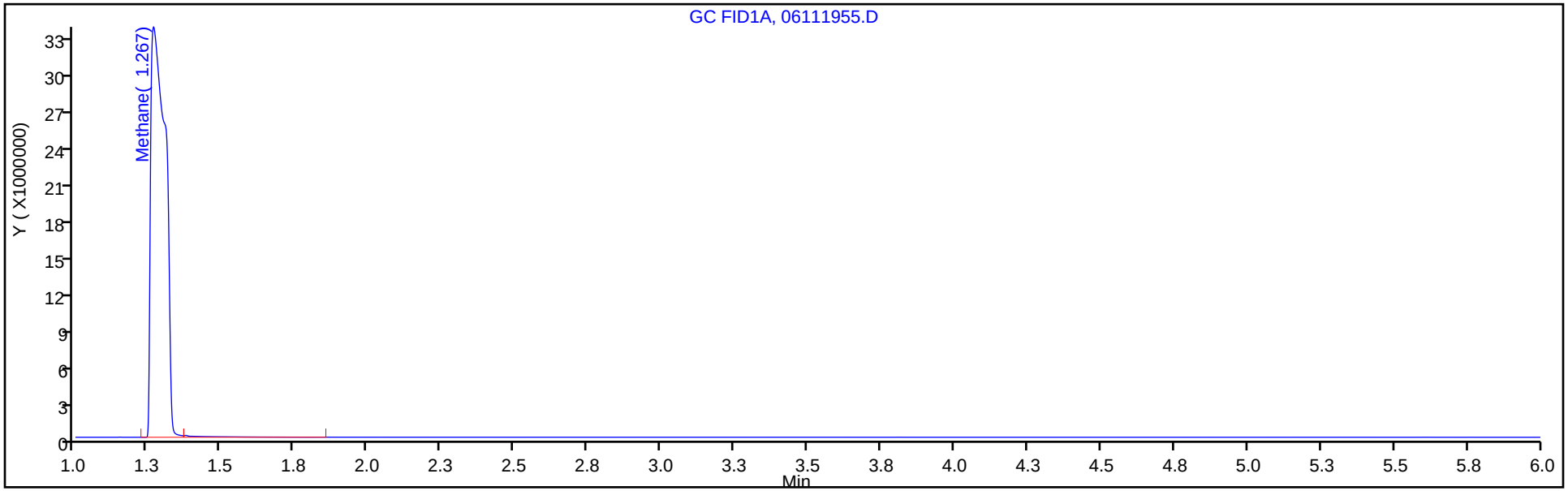
Report Date: 12-Jun-2019 12:00:07 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

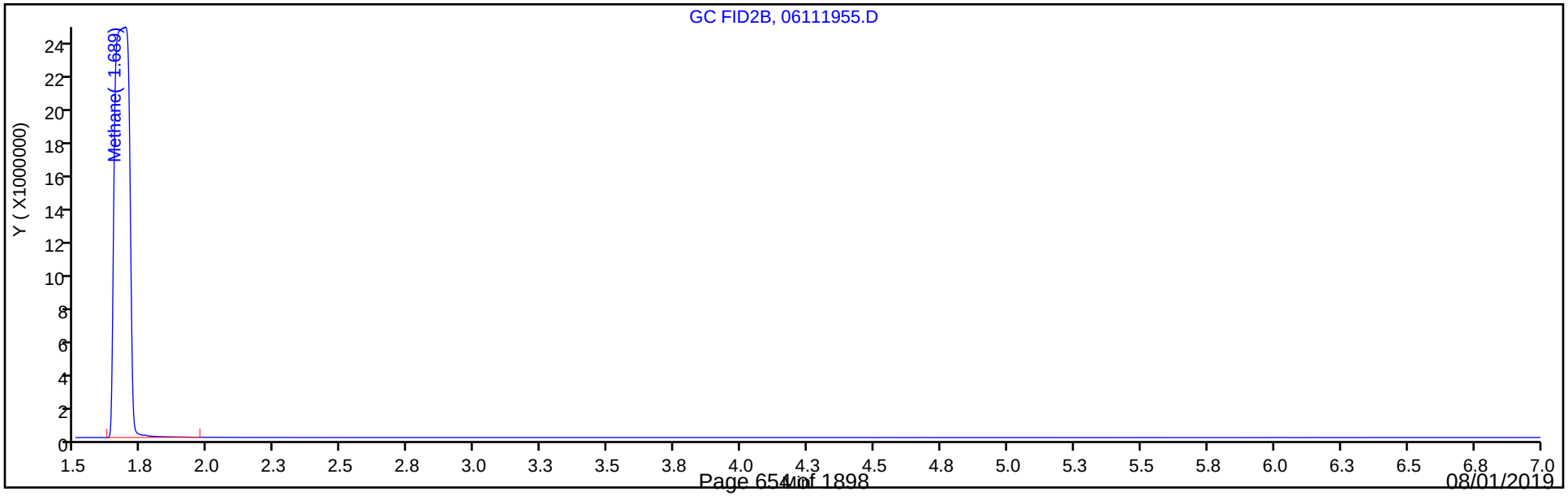
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111955.D

Injection Date:	11-Jun-2019 18:23:26	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-H-12	Lab Sample ID:	280-124928-12	Worklist Smp#:	55
Client ID:	SHGW04-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	55
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-124928-1

SDG No.:

Client Sample ID: G0017-19A Lab Sample ID: 280-124928-14

Matrix: Water Lab File ID: 06111959.D

Analysis Method: RSK-175 Date Collected: 06/05/2019 16:15

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 19:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	5.4		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111959.D
Lims ID: 280-124928-G-14
Client ID: G0017-19A
Sample Type: Client
Inject. Date: 11-Jun-2019 19:16:38 ALS Bottle#: 59 Worklist Smp#: 59
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-124928-G-14
Misc. Info.: 280-0082723-059
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:48:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.257	1.285	-0.028	735411630	5490.4	
2	1.670	1.703	-0.033	615053046	5369.1	
					RPD = 2.23	
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

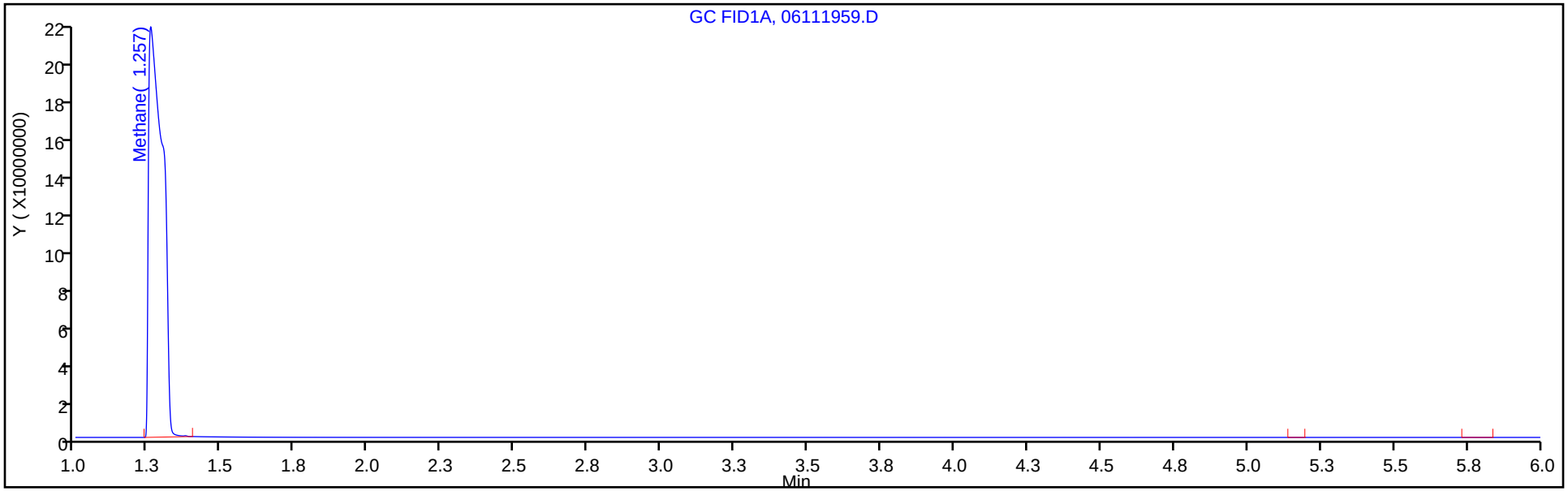
Report Date: 12-Jun-2019 12:00:24 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

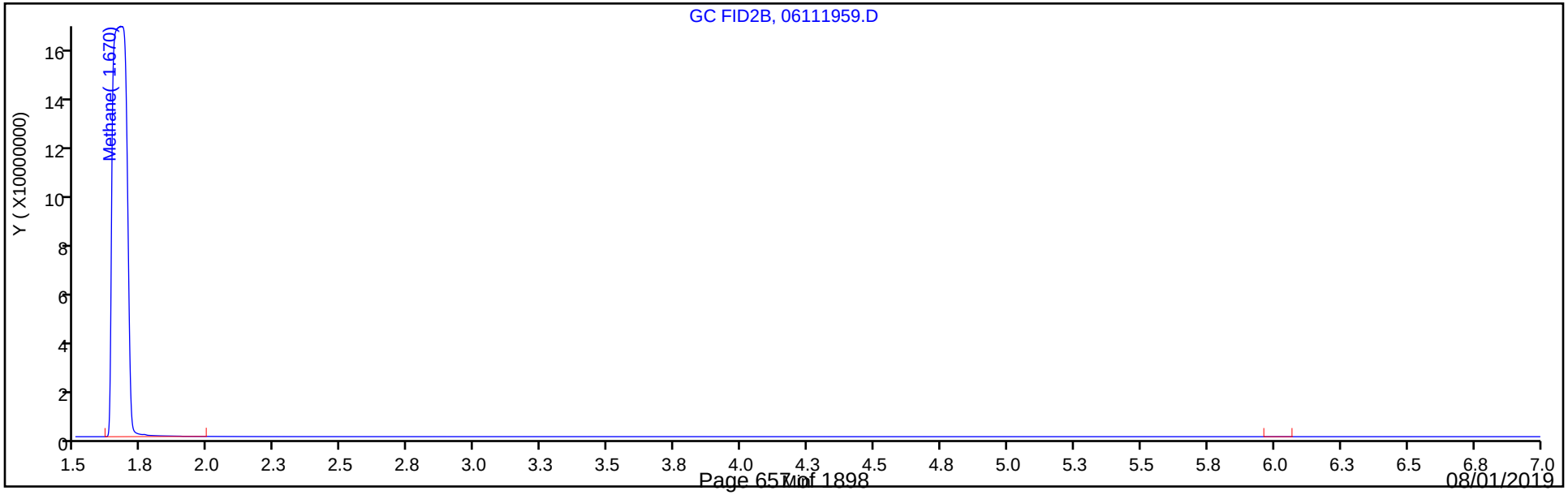
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111959.D

Injection Date:	11-Jun-2019 19:16:38	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-G-14	Lab Sample ID:	280-124928-14	Worklist Smp#:	59
Client ID:	G0017-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	59
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-124928-1

SDG No.:

Client Sample ID: PZ009-19A Lab Sample ID: 280-124928-15

Matrix: Water Lab File ID: 06111960.D

Analysis Method: RSK-175 Date Collected: 06/05/2019 16:35

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 19:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111960.D				
Lims ID:	280-124928-H-15				
Client ID:	PZ009-19A				
Sample Type:	Client				
Inject. Date:	11-Jun-2019 19:30:00	ALS Bottle#:	60	Worklist Smp#:	60
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-H-15				
Misc. Info.:	280-0082723-060				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	12-Jun-2019 11:59:51	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0334				

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:48:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1		1.285			ND	
2		1.703				
2 Ethane						
1		1.568			ND	
2		2.907				
3 Ethylene						
1		1.888			ND	
2		2.530				
4 Propane						
1		2.640			ND	
2		4.694				
5 Acetylene						
1		4.064			ND	
2		2.675				
6 Butane						
1		4.379			ND	
2		6.152				
7 isobutylene						
1		5.303			ND	
2		6.002				

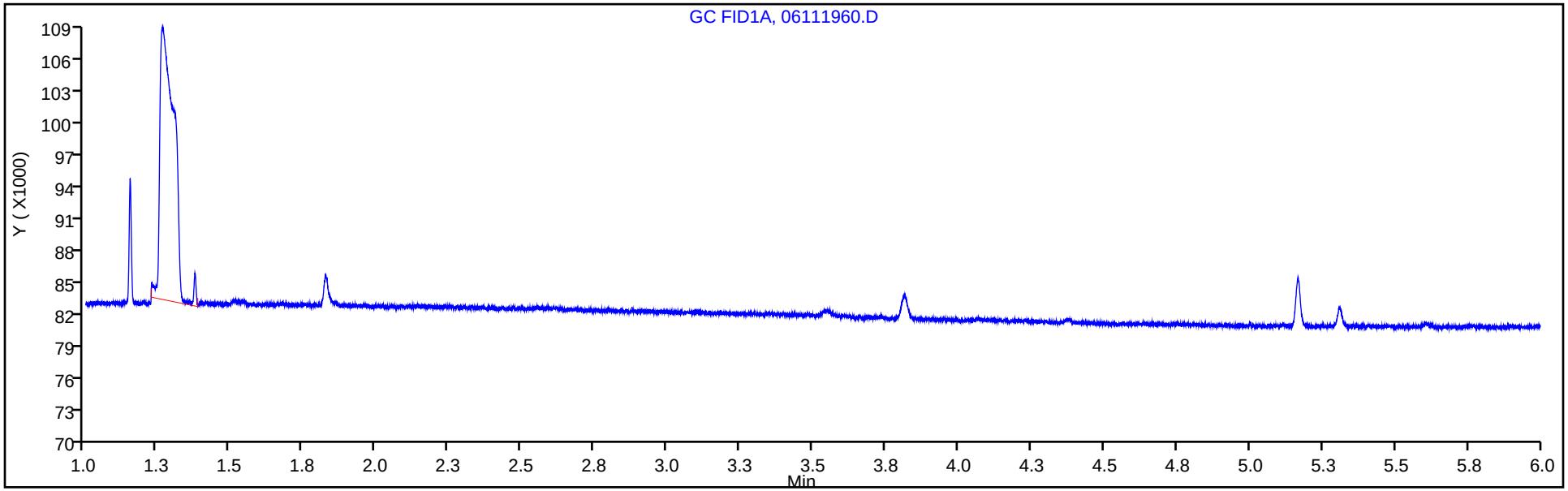
Report Date: 12-Jun-2019 12:00:26 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

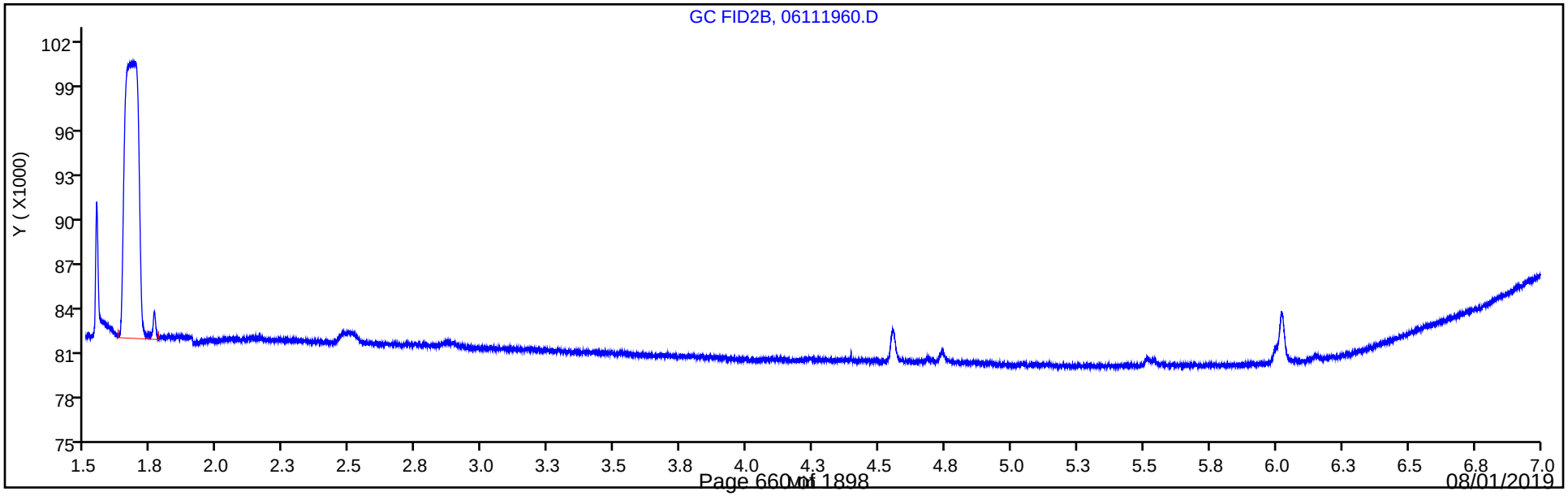
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111960.D

Injection Date:	11-Jun-2019 19:30:00	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-H-15	Lab Sample ID:	280-124928-15	Worklist Smp#:	60
Client ID:	PZ009-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	60
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale 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.: 280-124928-1

SDG No.:

Client Sample ID: G0045-19A Lab Sample ID: 280-124928-16

Matrix: Water Lab File ID: 06121927.D

Analysis Method: RSK-175 Date Collected: 06/06/2019 08:55

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 13:12

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.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0017	J	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121927.D				
Lims ID:	280-124928-H-16				
Client ID:	G0045-19A				
Sample Type:	Client				
Inject. Date:	12-Jun-2019 13:12:28	ALS Bottle#:	27	Worklist Smp#:	27
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-124928-H-16				
Misc. Info.:	280-0082760-027				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	13-Jun-2019 10:16:00	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0315				

First Level Reviewer: dobranskym Date: 12-Jun-2019 13:46:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Methane						
1	1.262	1.280	-0.018	261001	1.68	
2	1.686	1.703	-0.017	215551	1.65	
					RPD = 1.71	
2 Ethane						
1		1.562			ND	
2		2.896				
3 Ethylene						
1		1.885			ND	
2		2.524				
4 Propane						
1		2.633			ND	
2		4.690				
5 Acetylene						
1		4.064			ND	
2		2.669				
6 Butane						
1		4.377			ND	
2		6.149				
7 isobutylene						
1		5.303			ND	
2		6.000				

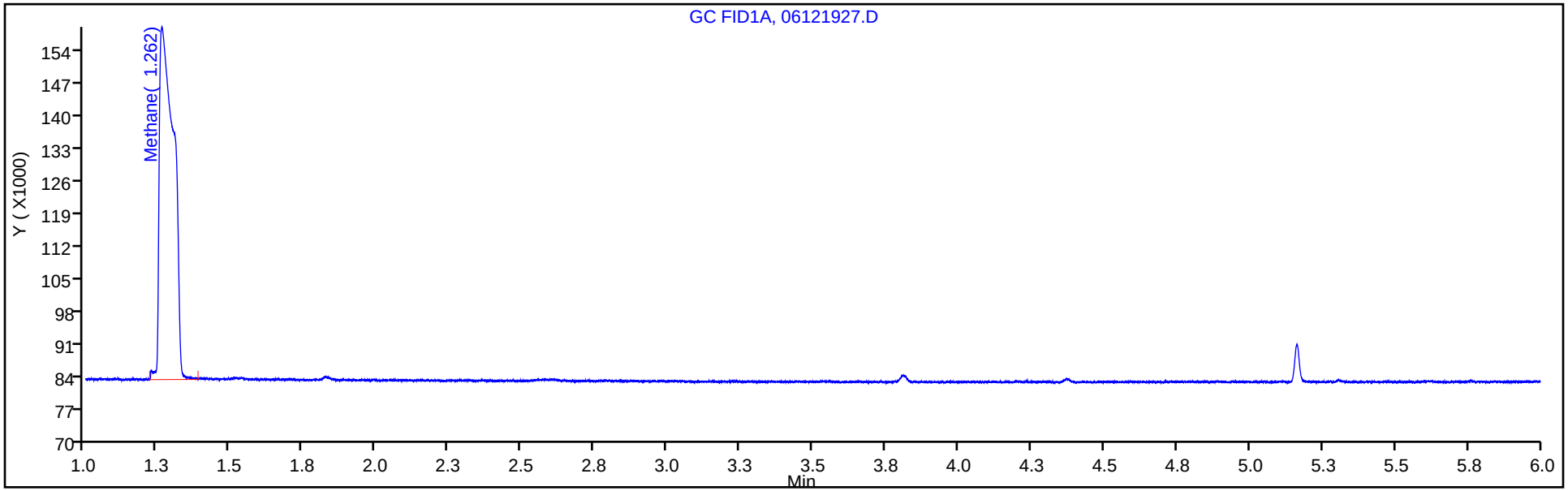
Report Date: 13-Jun-2019 10:16:18 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

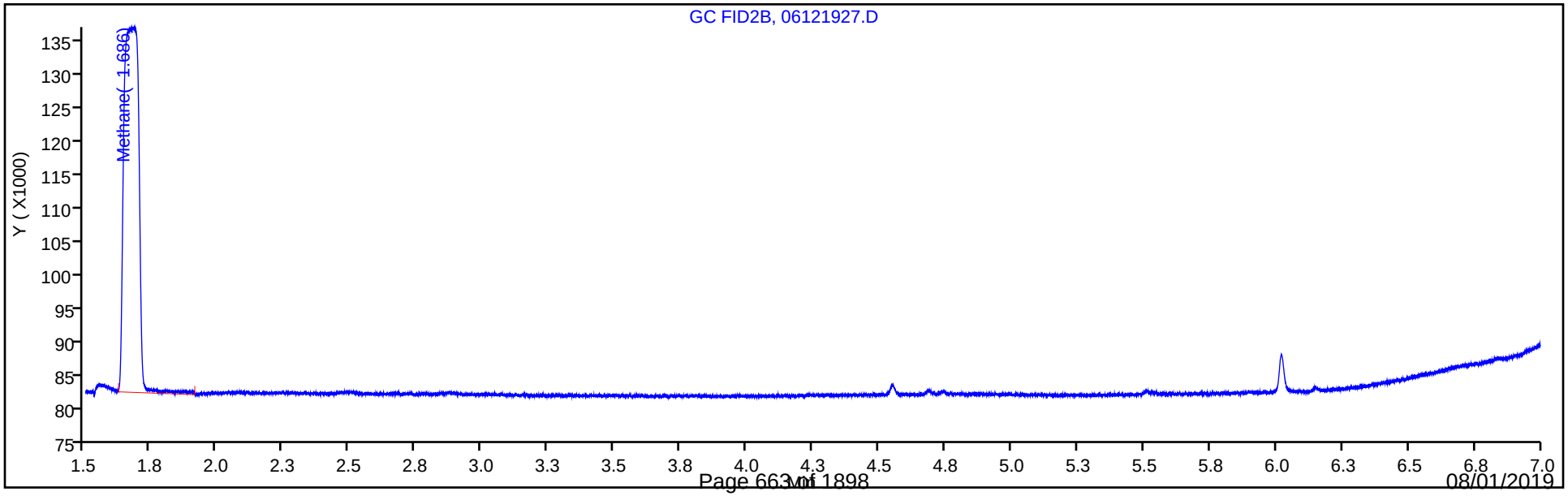
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121927.D

Injection Date:	12-Jun-2019 13:12:28	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	280-124928-H-16	Lab Sample ID:	280-124928-16	Worklist Smp#:	27
Client ID:	G0045-19A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 454595

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36051

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Methane	1.278	1.279	1.278	1.275	1.271	1.267	1.263	1.265	1.263		1.231 - 1.311	1.271
Ethane	1.543	1.556	1.563	1.544	1.556	1.549	1.549				1.506 - 1.606	1.551
Ethylene	1.877	1.890	1.889	1.885	1.880	1.866	1.870				1.830 - 1.930	1.880
Acetylene	4.091	4.095	4.094	4.089	4.078	4.070	4.057				3.998 - 4.158	4.082

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 454595

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36051

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Methane	204398 131881 131842	184432 123000	160460 138803	145282 125426	Lin2	35657.0530	133937.900							0.9950		0.9900
Ethane	106648 126474	133252 117971	131481 131045	137677	Ave		126364.118				8.4		20.0			
Ethylene	92446 106296	109949 99762	109227 107387	115582	Ave		105806.995				7.1		20.0			
Acetylene	26743 33864	32134 32487	32468 33051	34153	Ave		32128.5566				7.8		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 454595

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36051

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methane	Lin2	93261 17958876	168302 40532226	292852 226637342	2121207 952923785	9627756	0.456 146	0.913 292	1.83 1807	14.6 7228	73.0
Ethane	Ave	91221 32290083	227953 71736807	449849	3768385	17308693	0.855 274	1.71 547	3.42	27.4	137
Ethylene	Ave	73764 25472652	175461 54838846	348615	2951189	13570482	0.798 255	1.60 511	3.19	25.5	128
Acetylene	Ave	19810 7700889	47607 15668916	96205	809586	4013672	0.741 237	1.48 474	2.96	23.7	119

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Apr-2019 10:23:57 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 280-0080933-001
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:50 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.278	1.271	0.007	93261	0.4563	0.4301	
2	1.692	1.692	0.000	75515	0.4563	0.4314	
						RPD = 0.31	
2 Ethane							
1	1.543	1.556	-0.013	91221	0.8553	0.7219	
2	2.890	2.889	0.001	77042	0.8553	0.7173	
						RPD = 0.64	
3 Ethylene							
1	1.877	1.880	-0.003	73764	0.7979	0.6972	
2	2.514	2.512	0.002	61480	0.7979	0.6831	
						RPD = 2.04	
4 Propane							
1	2.651	2.632	0.019	147932	1.25	1.09	
2	4.691	4.687	0.004	125161	1.25	1.09	
						RPD = 0.25	
5 Acetylene							
1	4.091	4.078	0.013	19810	0.7408	0.6166	
2	2.667	2.652	0.015	18179	0.7408	0.6418	
						RPD = 4.01	
6 Butane							M
1	4.410	4.381	0.029	211953	1.65	1.51	
2	6.155	6.146	0.009	195662	1.65	1.63	M
						RPD = 7.68	
7 isobutylene							
1	5.333	5.311	0.022	147116	1.60	1.52	
2	6.003	5.998	0.005	121709	1.60	1.50	
						RPD = 1.22	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026 Amount Added: 1.25 Units: uL

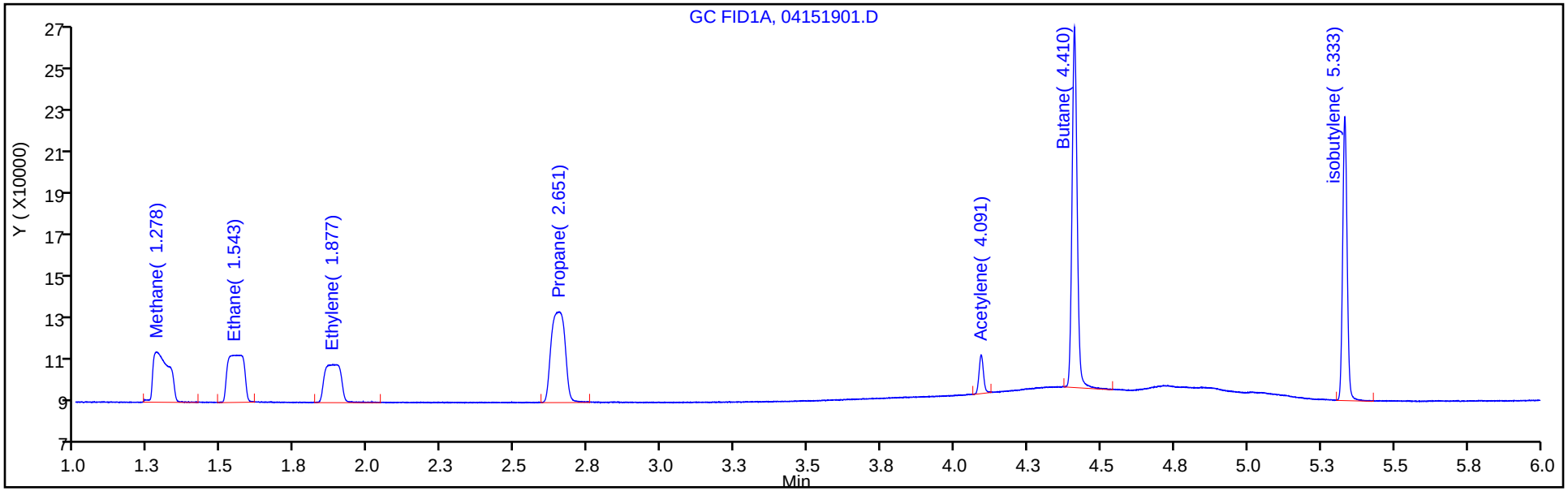
Report Date: 15-May-2019 11:57:50 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

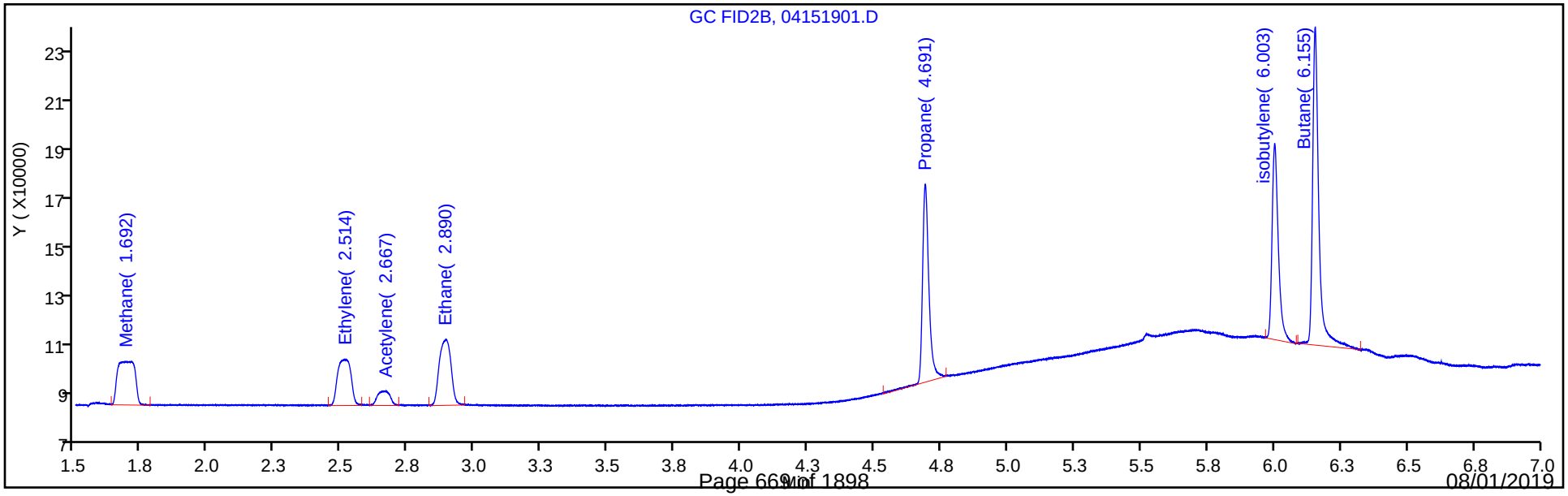
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D

Injection Date:	15-Apr-2019 10:23:57	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L1			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Apr-2019 10:37:05 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 280-0080933-002
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:51 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.279	1.271	0.008	168302	0.9125	0.99	
2	1.699	1.692	0.007	139116	0.9125	0.9867	
						RPD = 0.37	
2 Ethane							
1	1.556	1.556	0.000	227953	1.71	1.80	
2	2.899	2.889	0.010	191594	1.71	1.78	
						RPD = 1.12	
3 Ethylene							
1	1.890	1.880	0.010	175461	1.60	1.66	
2	2.524	2.512	0.012	149728	1.60	1.66	
						RPD = 0.31	
4 Propane							
1	2.645	2.632	0.013	363474	2.51	2.69	
2	4.696	4.687	0.009	306879	2.51	2.67	
						RPD = 0.46	
5 Acetylene							
1	4.095	4.078	0.017	47607	1.48	1.48	
2	2.667	2.652	0.015	41972	1.48	1.48	
						RPD = 0.00	
6 Butane							
1	4.401	4.381	0.020	519750	3.31	3.69	
2	6.158	6.146	0.012	435009	3.31	3.61	
						RPD = 2.11	
7 isobutylene							
1	5.327	5.311	0.016	344778	3.19	3.56	
2	6.006	5.998	0.008	288028	3.19	3.55	
						RPD = 0.25	

Reagents:

RSK7gasMathes_00026 Amount Added: 2.50 Units: uL

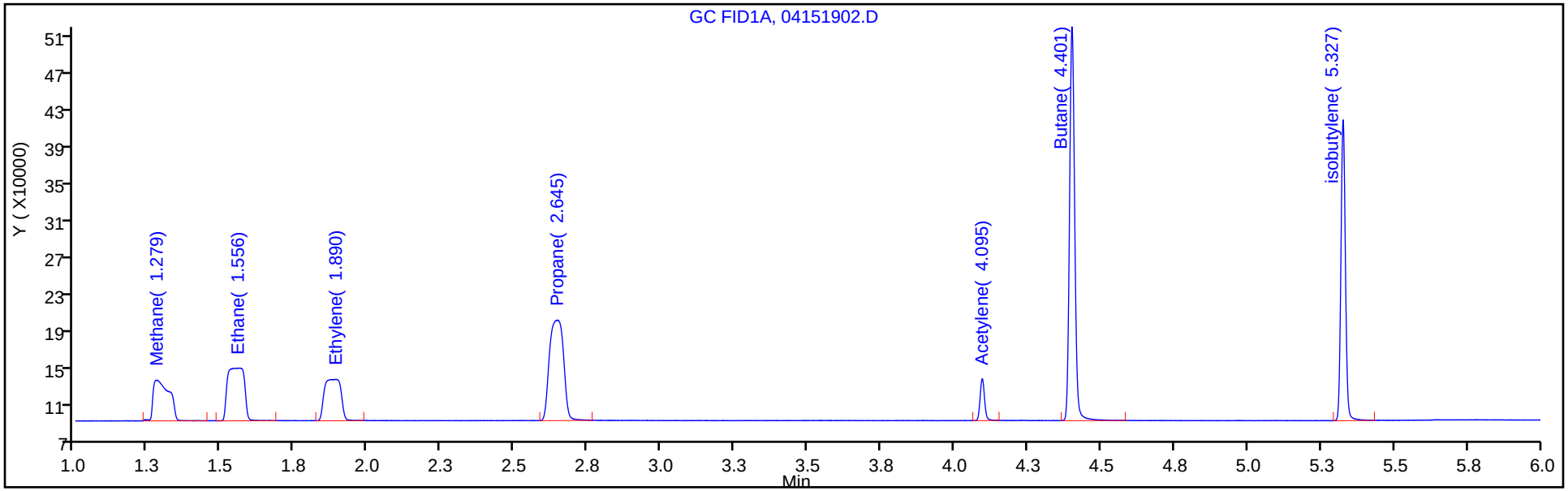
Report Date: 15-May-2019 11:57:51 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

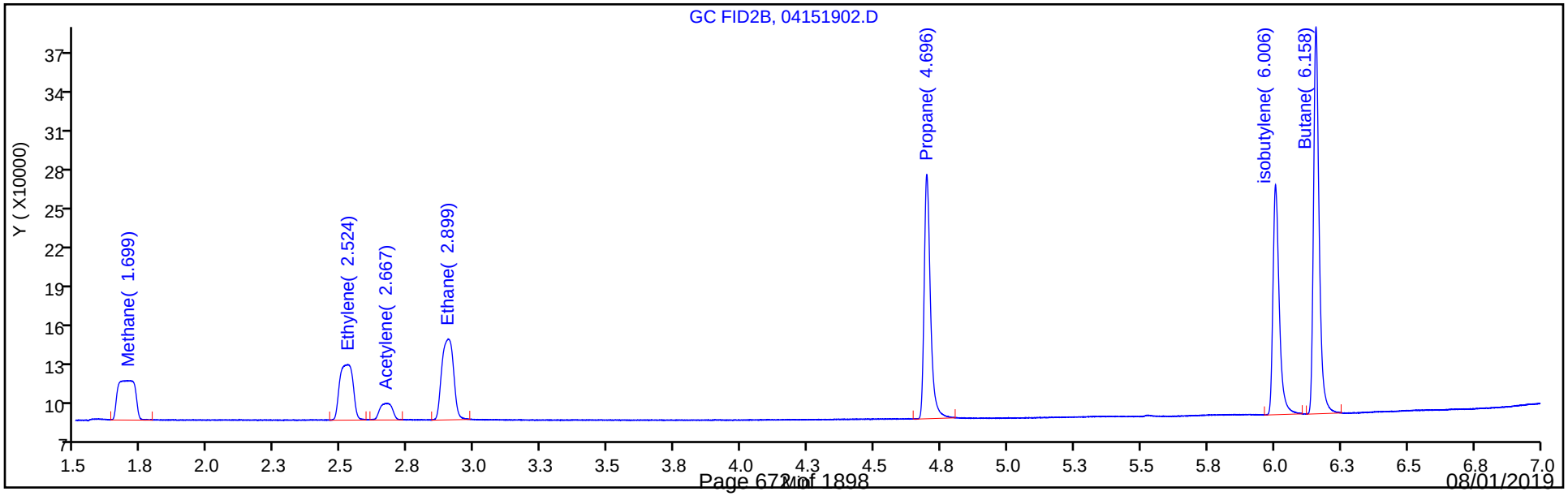
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D

Injection Date:	15-Apr-2019 10:37:05	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L2			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151903.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Apr-2019 10:50:22 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 280-0080933-003
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:52 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.278	1.271	0.007	292852	1.83	1.92	
2	1.688	1.692	-0.004	245139	1.83	1.91	
						RPD = 0.42	
2 Ethane							
1	1.563	1.556	0.007	449849	3.42	3.56	
2	2.900	2.889	0.011	380840	3.42	3.55	
						RPD = 0.40	
3 Ethylene							
1	1.889	1.880	0.009	348615	3.19	3.29	
2	2.516	2.512	0.004	297902	3.19	3.31	
						RPD = 0.45	
4 Propane							
1	2.645	2.632	0.013	706582	5.02	5.22	
2	4.696	4.687	0.009	601744	5.02	5.24	
						RPD = 0.40	
5 Acetylene							
1	4.094	4.078	0.016	96205	2.96	2.99	
2	2.674	2.652	0.022	82868	2.96	2.93	
						RPD = 2.32	
6 Butane							
1	4.400	4.381	0.019	993917	6.61	7.06	
2	6.157	6.146	0.011	836646	6.61	6.95	
						RPD = 1.54	
7 isobutylene							
1	5.326	5.311	0.015	655607	6.38	6.78	
2	6.005	5.998	0.007	552886	6.38	6.82	
						RPD = 0.70	

Reagents:

RSK7gasMathes_00026 Amount Added: 5.00 Units: uL

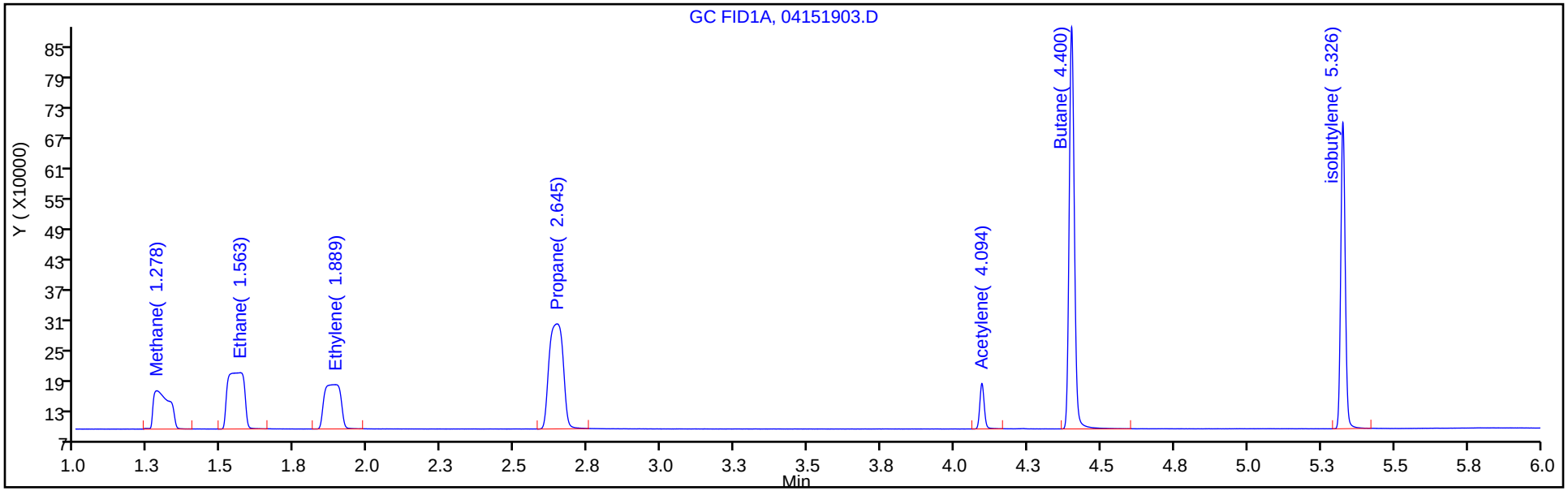
Report Date: 15-May-2019 11:57:53 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

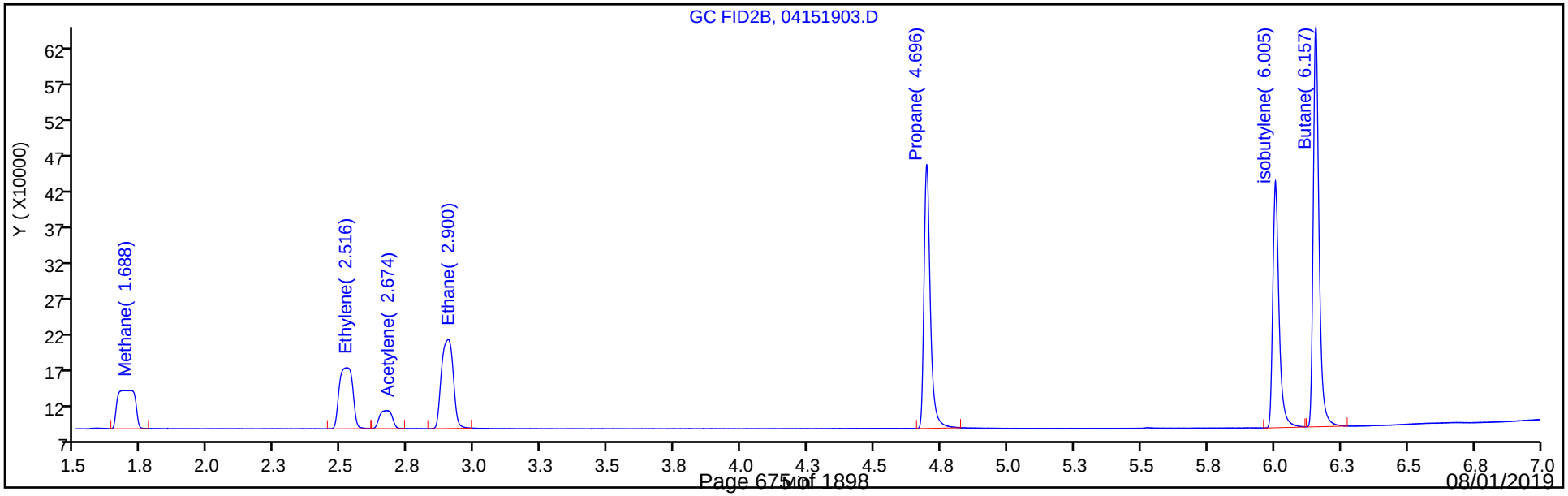
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151903.D

Injection Date:	15-Apr-2019 10:50:22	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L3			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-Apr-2019 11:03:41 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L4
Misc. Info.: 280-0080933-004
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:54 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.275	1.271	0.004	2121207	14.6	15.6	
2	1.701	1.692	0.009	1817240	14.6	15.6	
						RPD = 0.42	
2 Ethane							
1	1.544	1.556	-0.012	3768385	27.4	29.8	
2	2.896	2.889	0.007	3198231	27.4	29.8	
						RPD = 0.15	
3 Ethylene							
1	1.885	1.880	0.005	2951189	25.5	27.9	
2	2.516	2.512	0.004	2513192	25.5	27.9	
						RPD = 0.11	
4 Propane							
1	2.641	2.632	0.009	5812465	40.1	43.0	
2	4.694	4.687	0.007	4940027	40.1	43.1	
						RPD = 0.20	
5 Acetylene							
1	4.089	4.078	0.011	809586	23.7	25.2	
2	2.668	2.652	0.016	709490	23.7	25.0	
						RPD = 0.60	
6 Butane							
1	4.395	4.381	0.014	7767068	52.9	55.2	
2	6.155	6.146	0.009	6590566	52.9	54.7	
						RPD = 0.74	
7 isobutylene							
1	5.322	5.311	0.011	5189017	51.1	53.6	
2	6.004	5.998	0.006	4363220	51.1	53.8	
						RPD = 0.40	

Reagents:

RSK7gasMathes_00026 Amount Added: 40.00 Units: uL

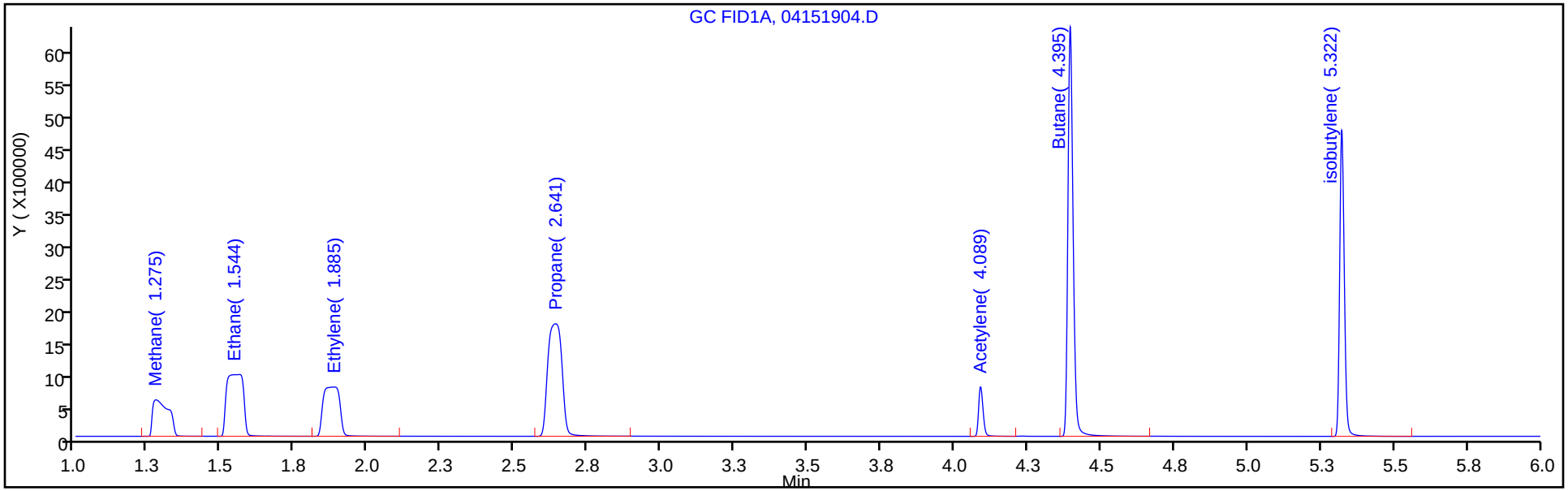
Report Date: 15-May-2019 11:57:55 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

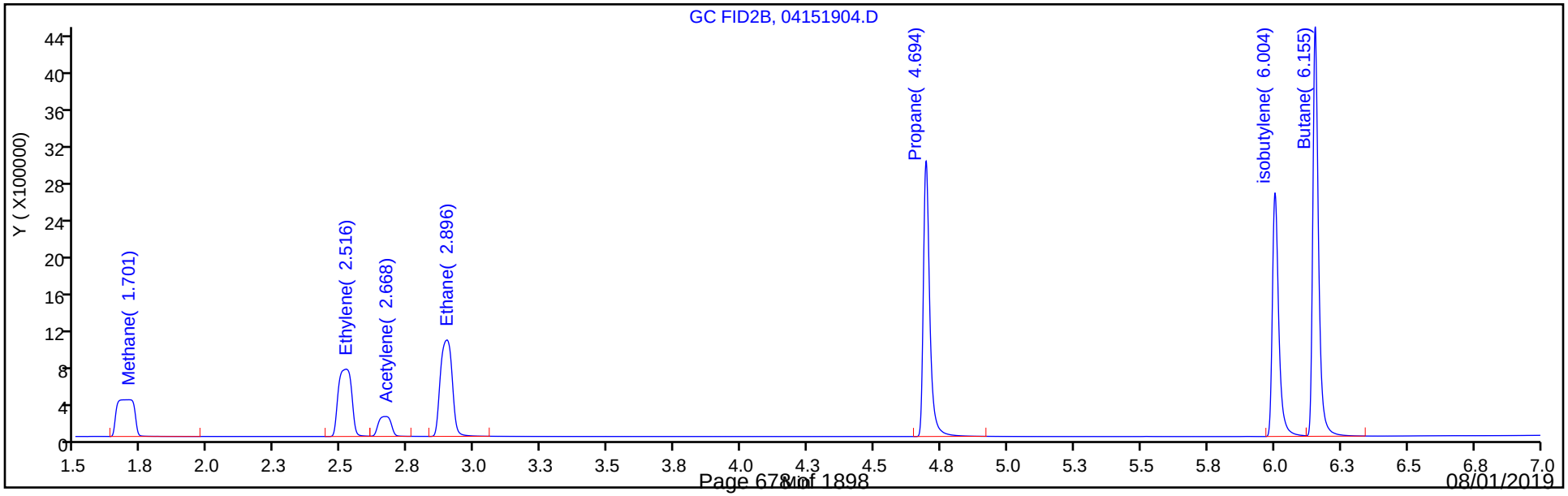
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D

Injection Date:	15-Apr-2019 11:03:41	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D
Lims ID: ICRT L5
Client ID:
Sample Type: ICRT Calib Level: 5
Inject. Date: 15-Apr-2019 11:17:11 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT L5
Misc. Info.: 280-0080933-005
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:56 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.271	1.271	0.000	9627756	73.0	71.6	
2	1.692	1.692	0.000	8233442	73.0	71.6	
						RPD = 0.05	
2 Ethane							
1	1.556	1.556	0.000	17308693	136.9	137.0	
2	2.889	2.889	0.000	14756883	136.9	137.4	
						RPD = 0.30	
3 Ethylene							
1	1.880	1.880	0.000	13570482	127.7	128.3	
2	2.512	2.512	0.000	11530864	127.7	128.1	
						RPD = 0.11	
4 Propane							
1	2.632	2.632	0.000	26866377	200.7	198.6	
2	4.687	4.687	0.000	22779443	200.7	198.5	
						RPD = 0.04	
5 Acetylene							
1	4.078	4.078	0.000	4013672	118.5	124.9	
2	2.652	2.652	0.000	3536969	118.5	124.9	
						RPD = 0.04	
6 Butane							
1	4.381	4.381	0.000	35922157	264.5	255.1	
2	6.146	6.146	0.000	30367524	264.5	252.3	
						RPD = 1.11	
7 isobutylene							
1	5.311	5.311	0.000	23677727	255.4	244.7	
2	5.998	5.998	0.000	19852679	255.4	245.0	
						RPD = 0.12	

Reagents:

RSK7gasMathes_00026 Amount Added: 200.00 Units: uL

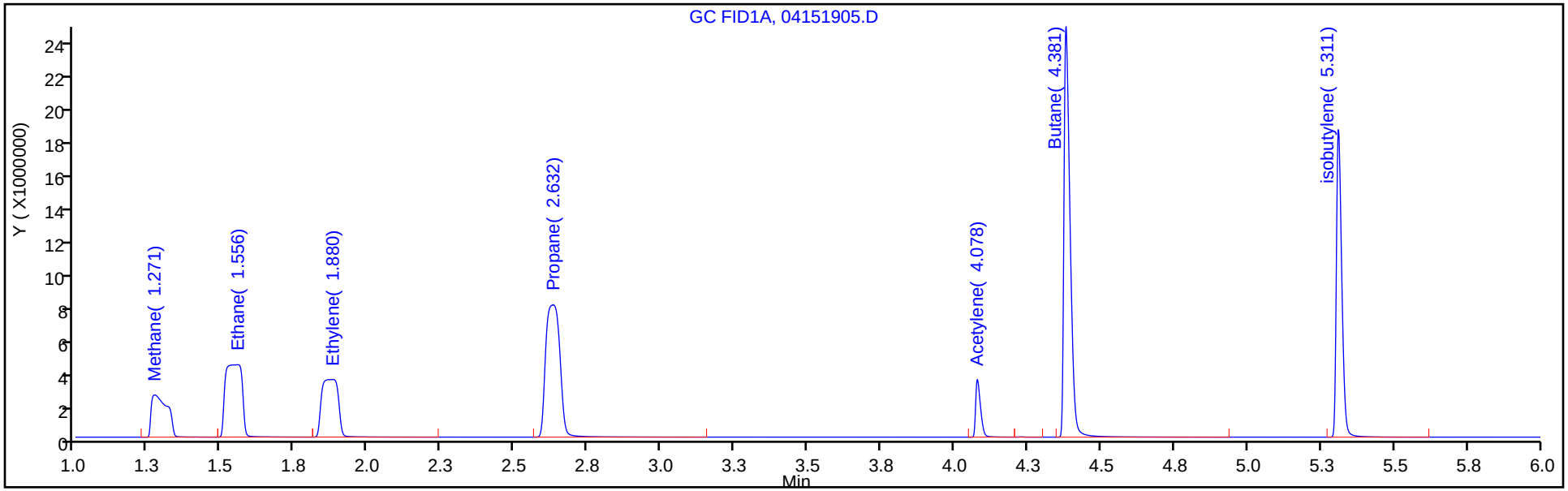
Report Date: 15-May-2019 11:57:56 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

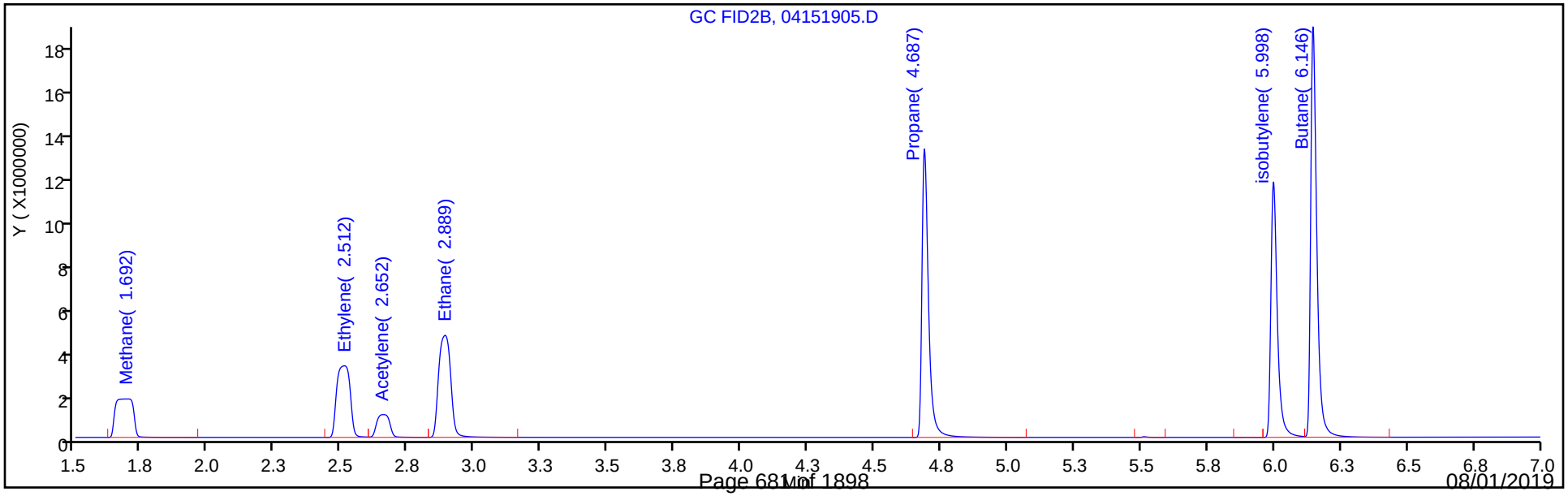
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D

Injection Date:	15-Apr-2019 11:17:11	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	ICRT L5			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Apr-2019 11:30:32 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L6
Misc. Info.: 280-0080933-006
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:57 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.267	1.271	-0.004	17958876	146.0	133.8	
2	1.681	1.692	-0.011	15386436	146.0	134.1	
						RPD = 0.21	
2 Ethane							
1	1.549	1.556	-0.007	32290083	273.7	255.5	
2	2.882	2.889	-0.007	27708010	273.7	258.0	
						RPD = 0.95	
3 Ethylene							M
1	1.866	1.880	-0.014	25472652	255.3	240.7	M
2	2.503	2.512	-0.009	21746052	255.3	241.6	
						RPD = 0.36	
4 Propane							
1	2.625	2.632	-0.007	50278684	401.4	371.7	
2	4.683	4.687	-0.004	42698075	401.4	372.2	
						RPD = 0.12	
5 Acetylene							
1	4.070	4.078	-0.008	7700889	237.0	239.7	
2	2.656	2.652	0.004	6771875	237.0	239.1	
						RPD = 0.25	
6 Butane							
1	4.370	4.381	-0.011	67375523	529.0	478.5	
2	6.140	6.146	-0.006	57174968	529.0	475.0	
						RPD = 0.73	
7 isobutylene							
1	5.302	5.311	-0.009	44689590	510.8	461.9	
2	5.992	5.998	-0.006	37488004	510.8	462.6	
						RPD = 0.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026 Amount Added: 400.00 Units: uL

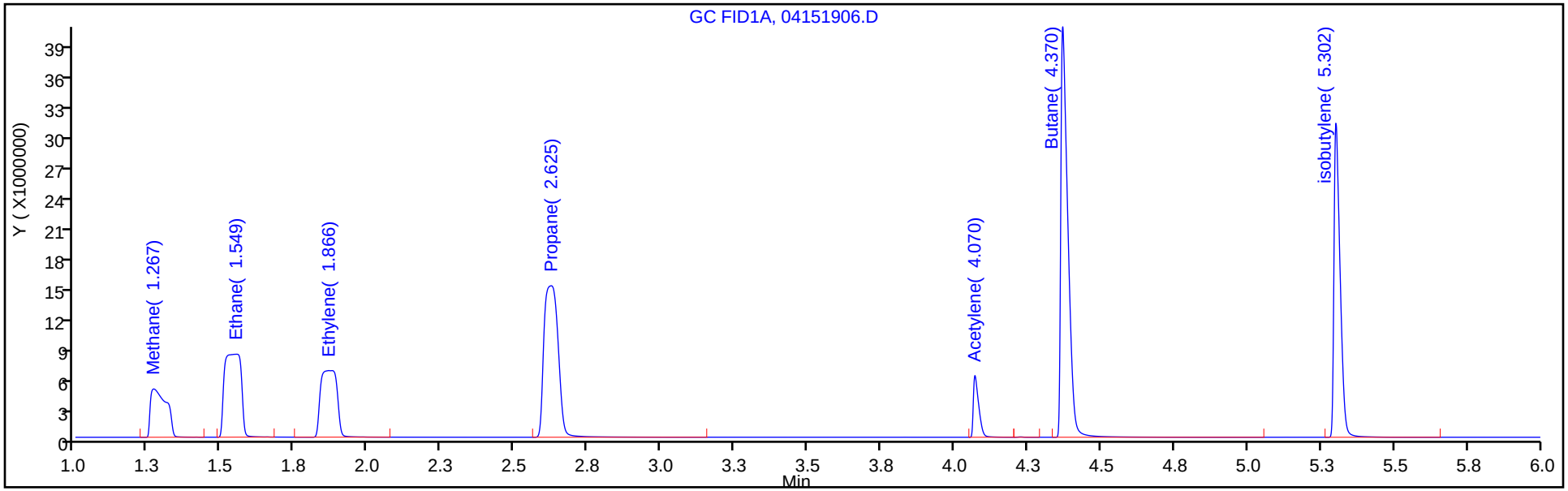
Report Date: 15-May-2019 11:57:57 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

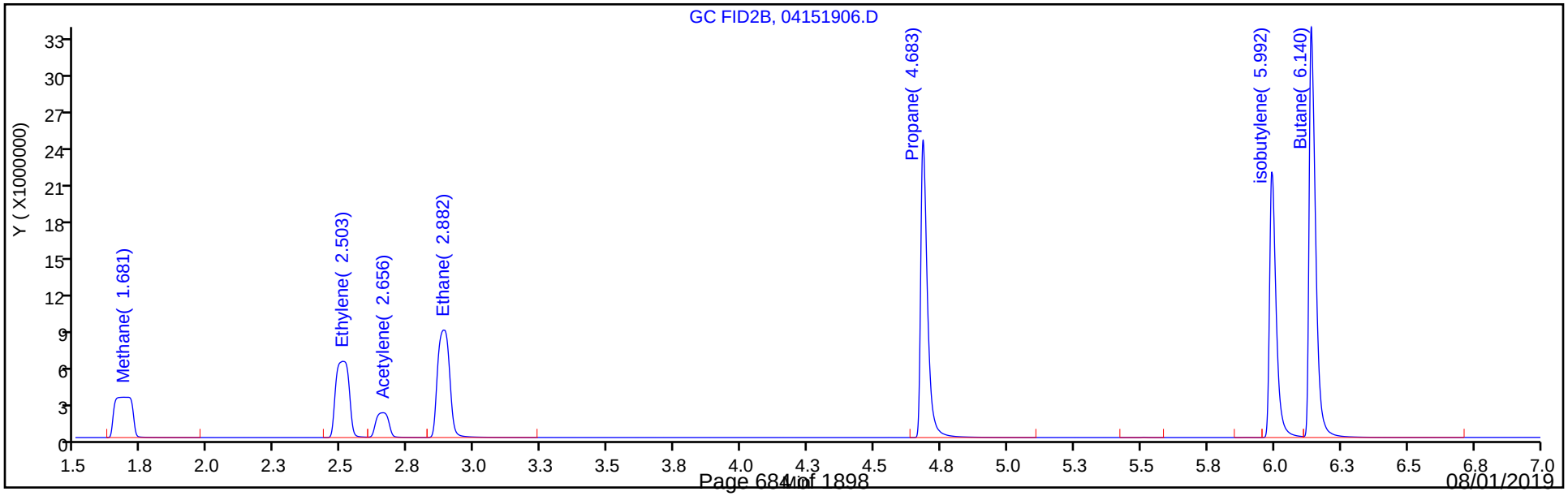
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D

Injection Date:	15-Apr-2019 11:30:32	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L6			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

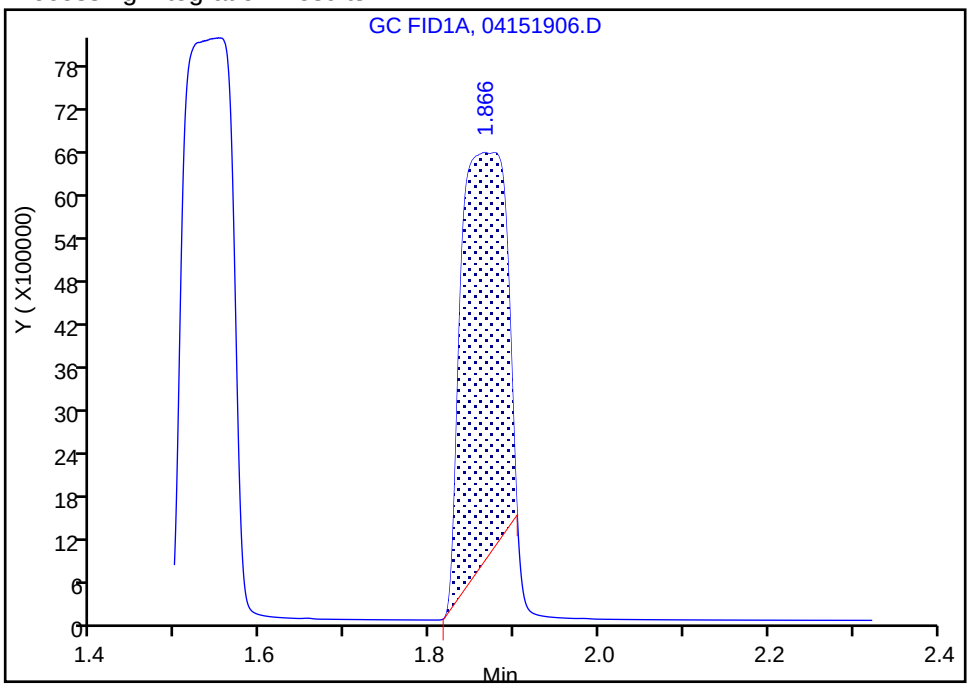
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D
Injection Date: 15-Apr-2019 11:30:32 Instrument ID: VGC_J
Lims ID: IC L6
Client ID:
Operator ID: ms ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

3 Ethylene, CAS: 74-85-1

Signal: 1

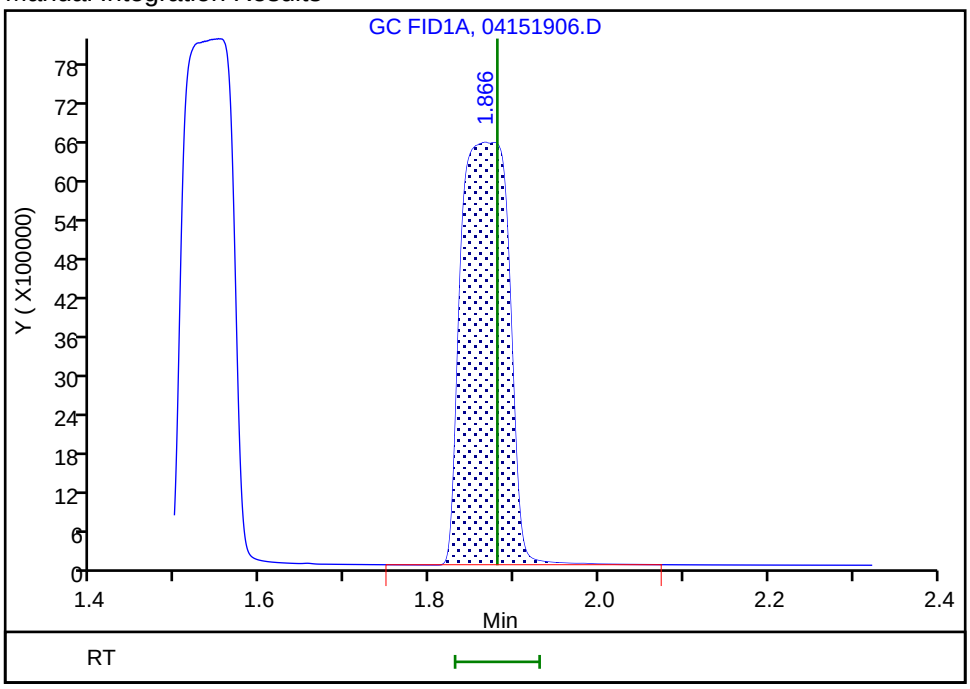
Processing Integration Results

RT: 1.87
Area: 21017489
Amount: 203.4324
Amount Units: ug/l



Manual Integration Results

RT: 1.87
Area: 25472652
Amount: 240.7464
Amount Units: ug/l



Reviewer: meierg, 15-Apr-2019 13:21:06
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 15-Apr-2019 11:44:06 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 280-0080933-007
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:58 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.263	1.271	-0.008	40532226	292.0	302.4	
2	1.686	1.692	-0.006	34652624	292.0	302.3	
						RPD = 0.02	
2 Ethane							
1	1.549	1.556	-0.007	71736807	547.4	567.7	
2	2.876	2.889	-0.013	61621639	547.4	573.7	
						RPD = 1.05	
3 Ethylene							M
1	1.870	1.880	-0.010	54838846	510.7	518.3	M
2	2.503	2.512	-0.009	46940879	510.7	521.5	
						RPD = 0.62	
4 Propane							
1	2.611	2.632	-0.021	111846125	802.8	826.9	
2	4.672	4.687	-0.015	94884692	802.8	827.0	
						RPD = 0.02	
5 Acetylene							
1	4.057	4.078	-0.021	15668916	474.1	487.7	
2	2.651	2.652	-0.001	13791861	474.1	486.9	
						RPD = 0.16	
6 Butane							
1	4.350	4.381	-0.031	148225690	1058.1	1052.6	
2	6.128	6.146	-0.018	125686225	1058.1	1044.1	
						RPD = 0.81	
7 isobutylene							
1	5.288	5.311	-0.023	94615791	1021.5	977.9	
2	5.984	5.998	-0.014	79245111	1021.5	978.0	
						RPD = 0.01	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026 Amount Added: 800.00 Units: uL

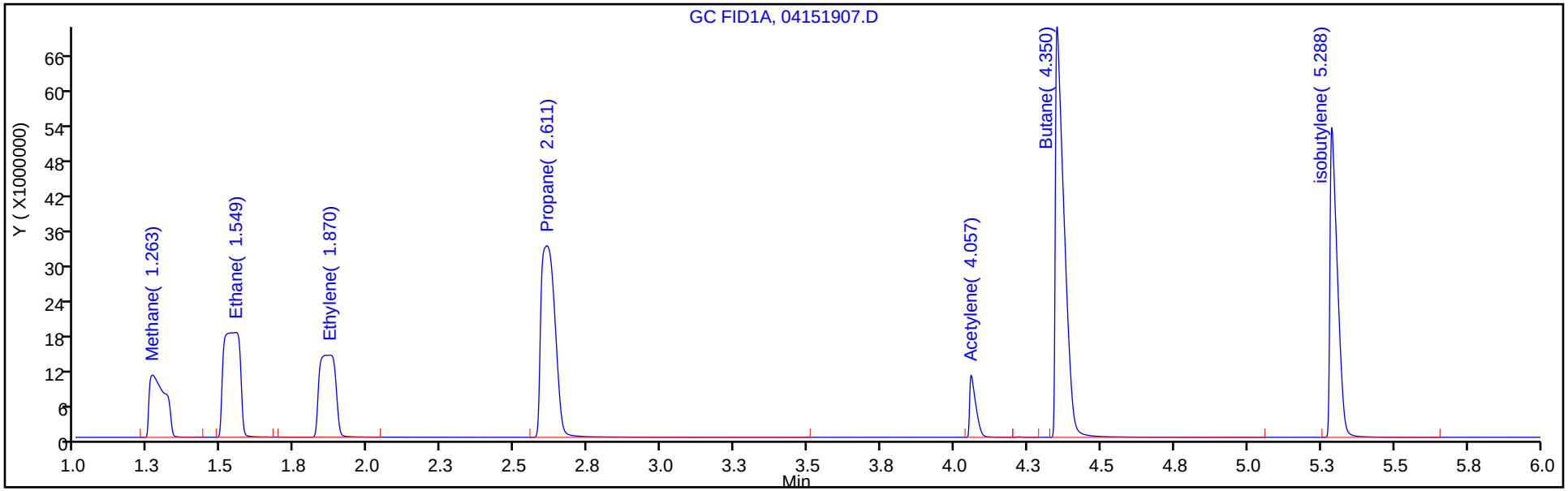
Report Date: 15-May-2019 11:57:59 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

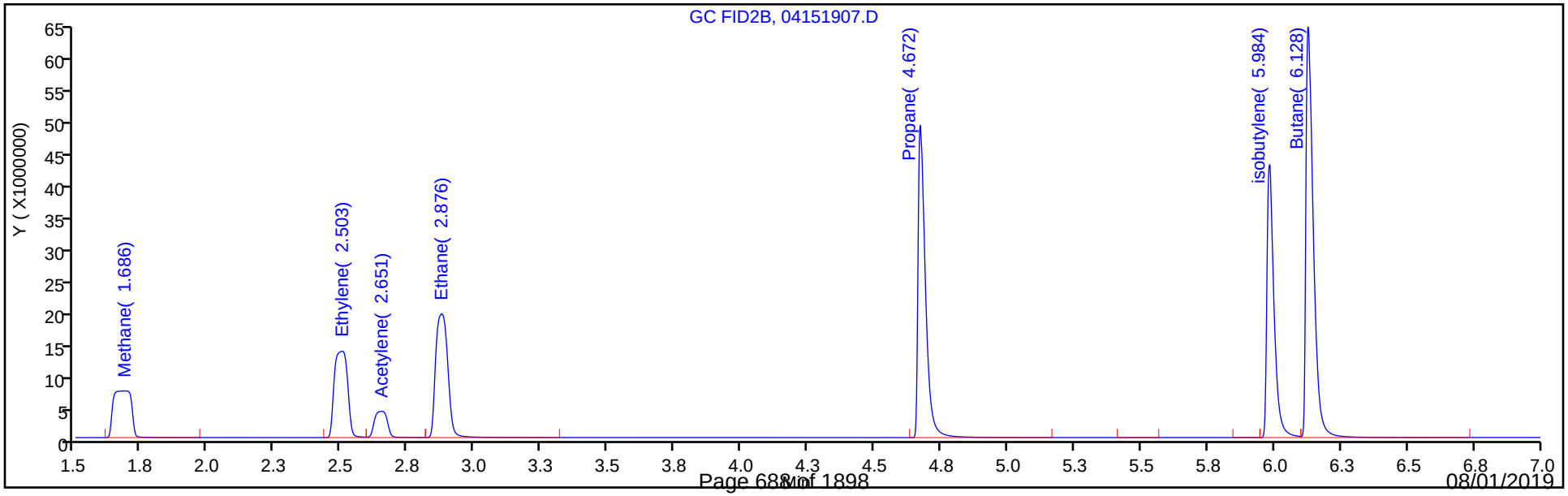
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D

Injection Date:	15-Apr-2019 11:44:06	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L7			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

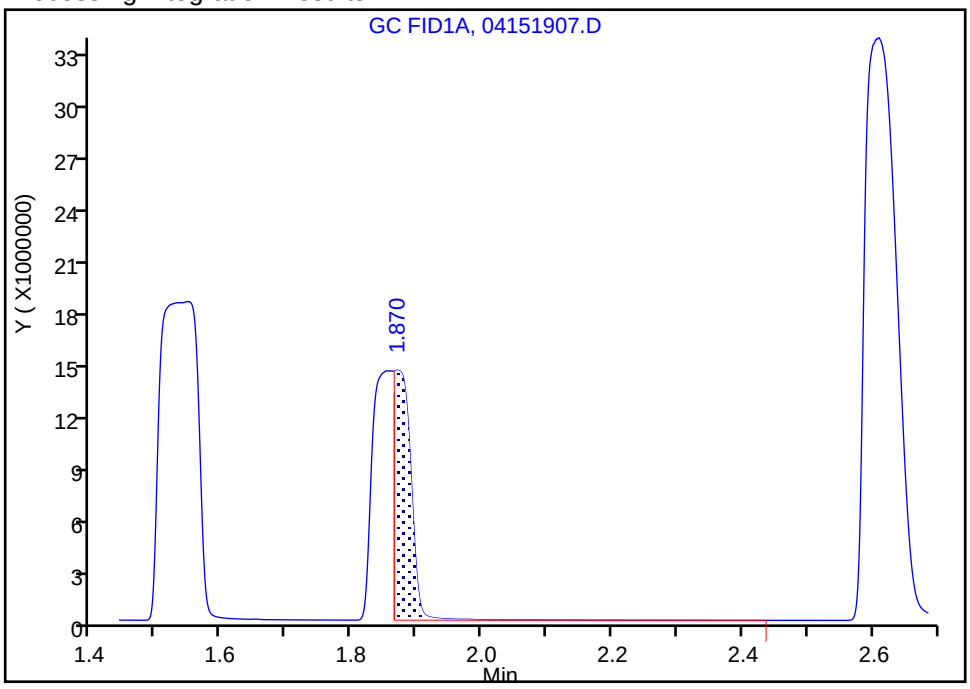
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D
Injection Date: 15-Apr-2019 11:44:06 Instrument ID: VGC_J
Lims ID: IC L7
Client ID:
Operator ID: ms ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

3 Ethylene, CAS: 74-85-1

Signal: 1

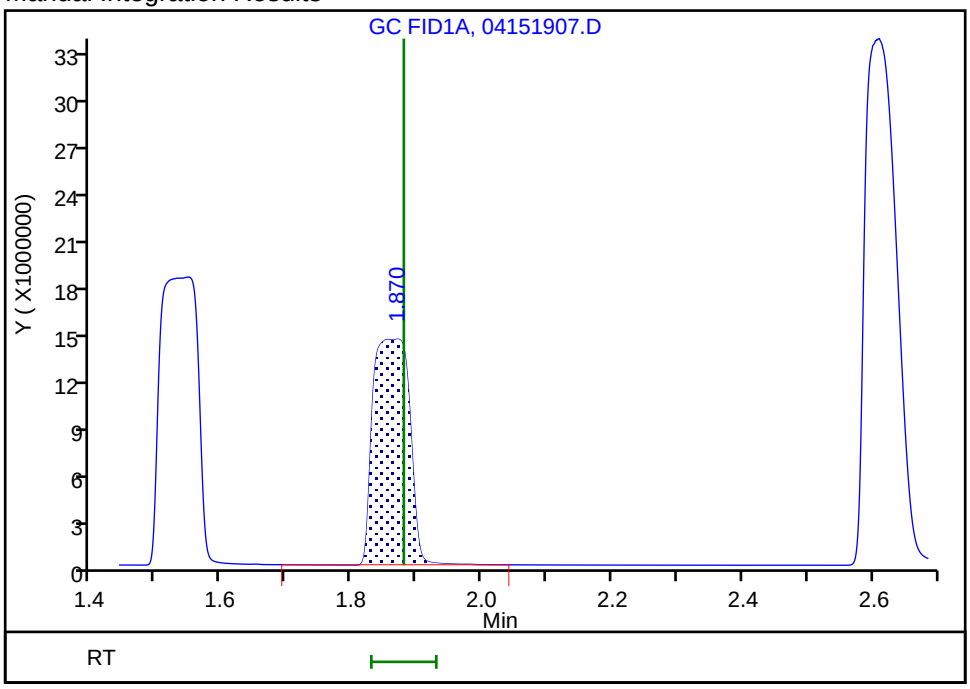
Processing Integration Results

RT: 1.87
Area: 24366908
Amount: 337.8607
Amount Units: ug/l



Manual Integration Results

RT: 1.87
Area: 54838846
Amount: 518.2913
Amount Units: ug/l



Reviewer: meierg, 15-Apr-2019 13:20:30
Audit Action: Manually Integrated Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 15-Apr-2019 11:57:32 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 280-0080933-008
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:58:00 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.265	1.271	-0.006	226637342	1806.9	1691.8	
2	1.692	1.692	0.000	193042781	1806.9	1685.0	
						RPD = 0.41	

Reagents:

RSK175methane_00009 Amount Added: 50.00 Units: uL

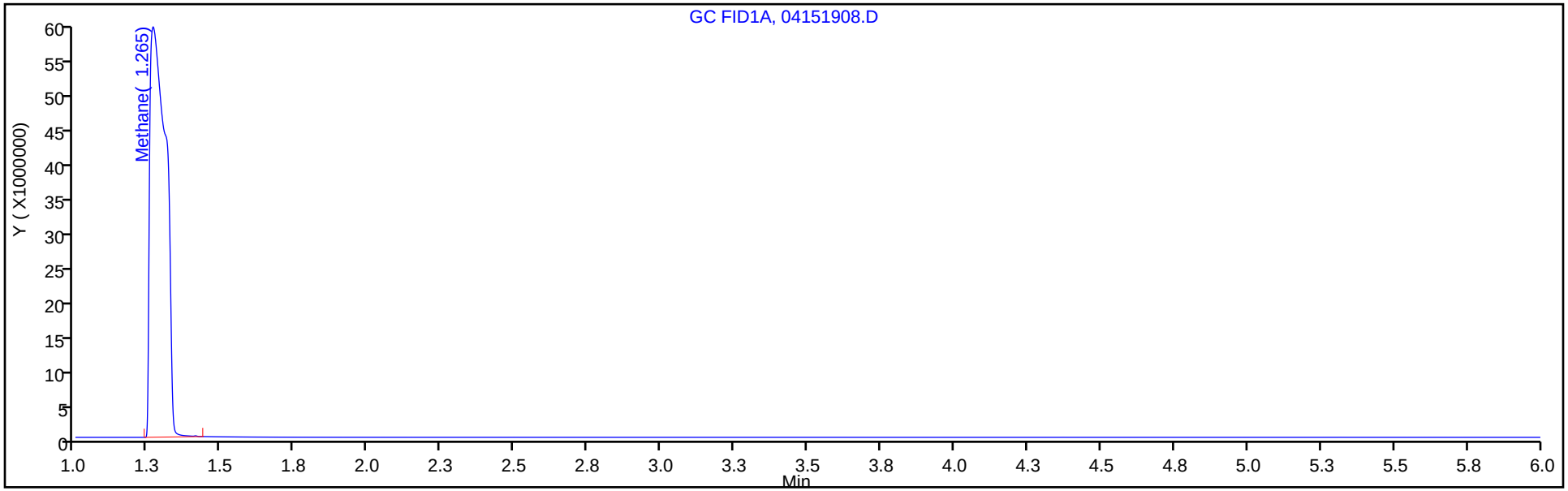
Report Date: 15-May-2019 11:58:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

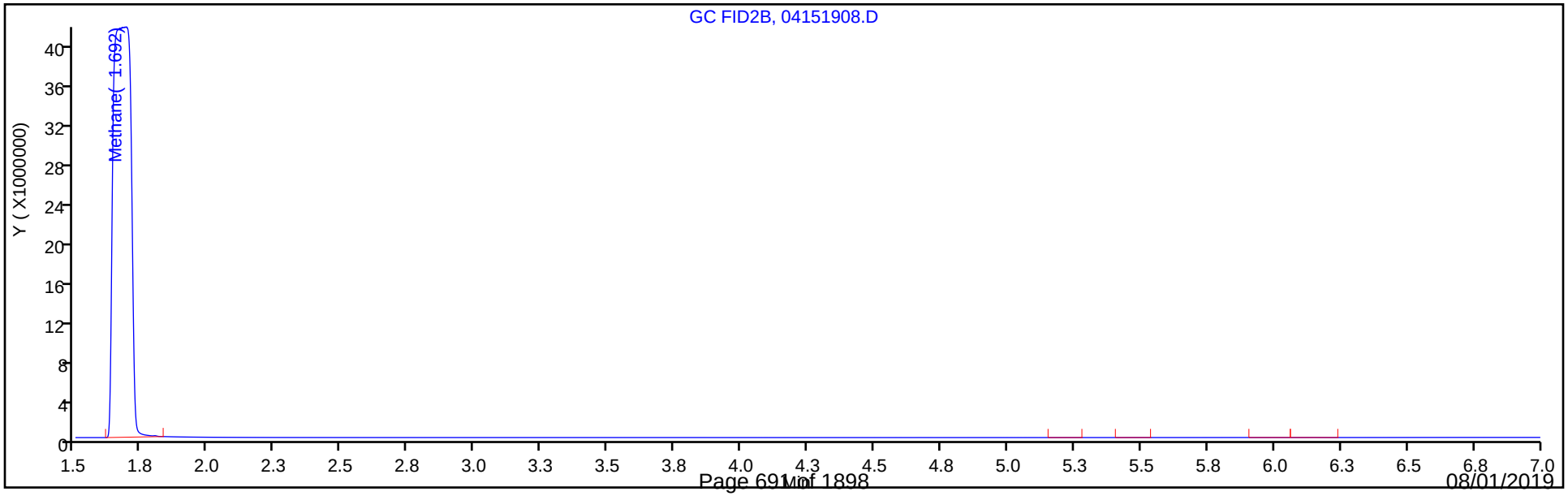
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D

Injection Date:	15-Apr-2019 11:57:32	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L8			Worklist Smp#:	8
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 15-Apr-2019 12:11:08 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L9
Misc. Info.: 280-0080933-009
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:58:02 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.263	1.271	-0.008	952923785	7227.8	7114.4	
2	1.668	1.692	-0.024	817202335	7227.8	7133.8	
						RPD = 0.27	

Reagents:

RSK175methane_00009 Amount Added: 200.00 Units: uL

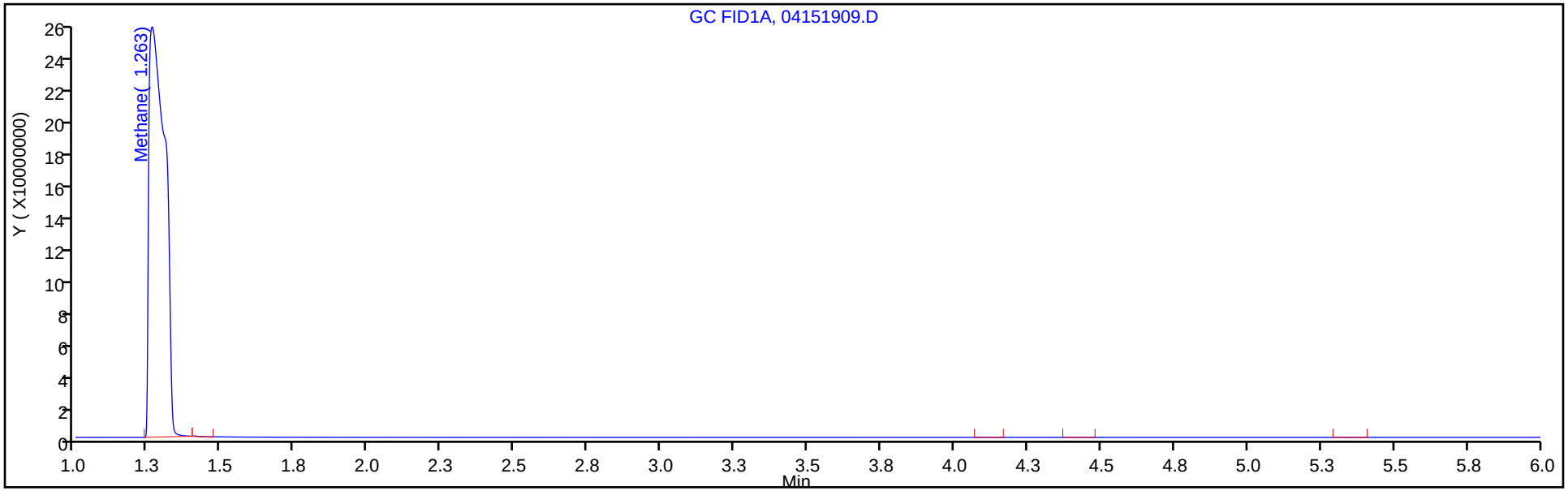
Report Date: 15-May-2019 11:58:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

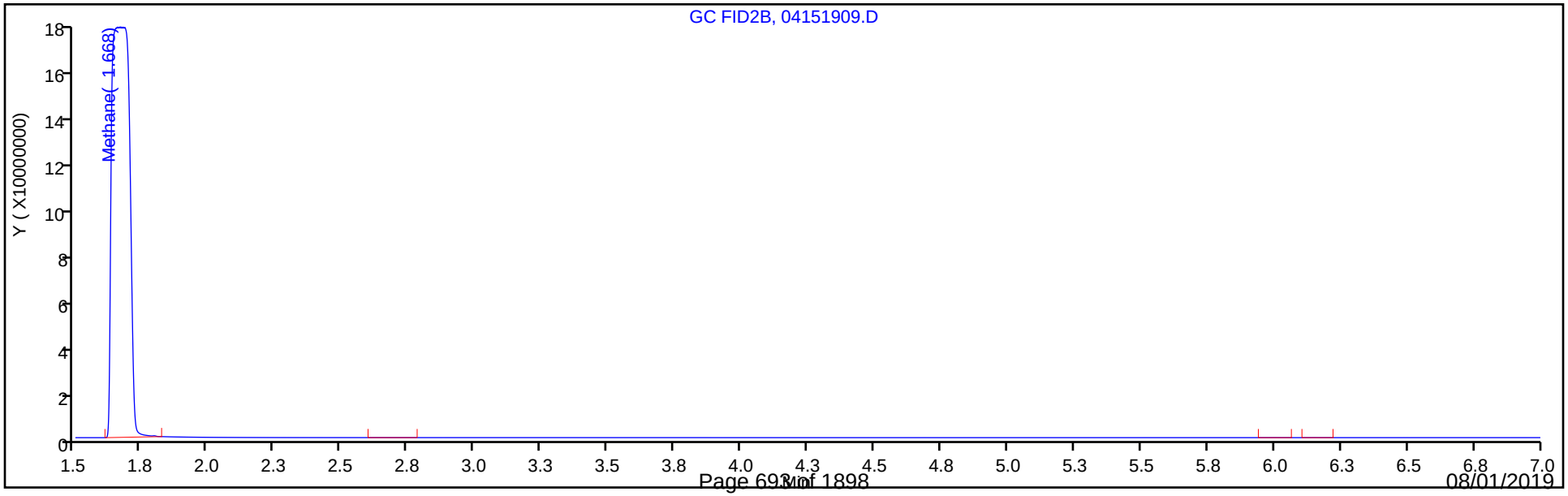
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Injection Date:	15-Apr-2019 12:11:08	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L9			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 454595

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36052

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Methane	1.692	1.699	1.688	1.701	1.692	1.681	1.686	1.692	1.668		1.652 - 1.732	1.689
Ethylene	2.514	2.524	2.516	2.516	2.512	2.503	2.503				2.462 - 2.562	2.513
Acetylene	2.667	2.667	2.674	2.668	2.652	2.656	2.651				2.572 - 2.732	2.662
Ethane	2.890	2.899	2.900	2.896	2.889	2.882	2.876				2.839 - 2.939	2.890

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 454595

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36052

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Methane	165505 112782 113064	152449 105382	134317 118668	124463 106834	Lin2	26094.0563	114549.945							0.9950		0.9900
Ethylene	77051 90320	93824 85167	93337 91921	98428	Ave		90006.9262				7.7		20.0			
Acetylene	24541 29842	28330 28568	27967 29091	29931	Ave		28324.3348				6.4		20.0			
Ethane	90071 107828	111998 101231	111312 112567	116847	Ave		107407.606				8.4		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 454595

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2019 10:23 Calibration End Date: 04/15/2019 12:11 Calibration ID: 36052

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-454595/1	04151901.D
Level 2	IC 280-454595/2	04151902.D
Level 3	IC 280-454595/3	04151903.D
Level 4	IC 280-454595/4	04151904.D
Level 5	ICRT 280-454595/5	04151905.D
Level 6	IC 280-454595/6	04151906.D
Level 7	IC 280-454595/7	04151907.D
Level 8	IC 280-454595/8	04151908.D
Level 9	IC 280-454595/9	04151909.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methane	Lin2	75515 15386436	139116 34652624	245139 193042781	1817240 817202335	8233442	0.456 146	0.913 292	1.83 1807	14.6 7228	73.0
Ethylene	Ave	61480 21746052	149728 46940879	297902	2513192	11530864	0.798 255	1.60 511	3.19	25.5	128
Acetylene	Ave	18179 6771875	41972 13791861	82868	709490	3536969	0.741 237	1.48 474	2.96	23.7	119
Ethane	Ave	77042 27708010	191594 61621639	380840	3198231	14756883	0.855 274	1.71 547	3.42	27.4	137

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Apr-2019 10:23:57 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 280-0080933-001
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:50 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.278	1.271	0.007	93261	0.4563	0.4301	
2	1.692	1.692	0.000	75515	0.4563	0.4314	
						RPD = 0.31	
2 Ethane							
1	1.543	1.556	-0.013	91221	0.8553	0.7219	
2	2.890	2.889	0.001	77042	0.8553	0.7173	
						RPD = 0.64	
3 Ethylene							
1	1.877	1.880	-0.003	73764	0.7979	0.6972	
2	2.514	2.512	0.002	61480	0.7979	0.6831	
						RPD = 2.04	
4 Propane							
1	2.651	2.632	0.019	147932	1.25	1.09	
2	4.691	4.687	0.004	125161	1.25	1.09	
						RPD = 0.25	
5 Acetylene							
1	4.091	4.078	0.013	19810	0.7408	0.6166	
2	2.667	2.652	0.015	18179	0.7408	0.6418	
						RPD = 4.01	
6 Butane							M
1	4.410	4.381	0.029	211953	1.65	1.51	
2	6.155	6.146	0.009	195662	1.65	1.63	M
						RPD = 7.68	
7 isobutylene							
1	5.333	5.311	0.022	147116	1.60	1.52	
2	6.003	5.998	0.005	121709	1.60	1.50	
						RPD = 1.22	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026 Amount Added: 1.25 Units: uL

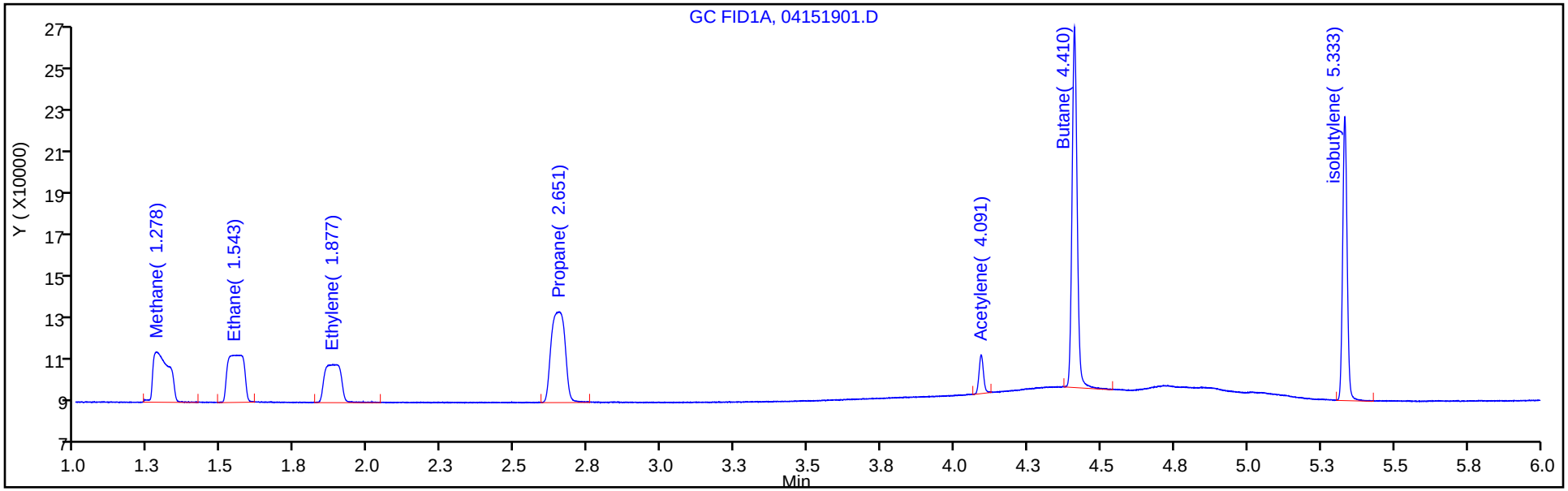
Report Date: 15-May-2019 11:57:50 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

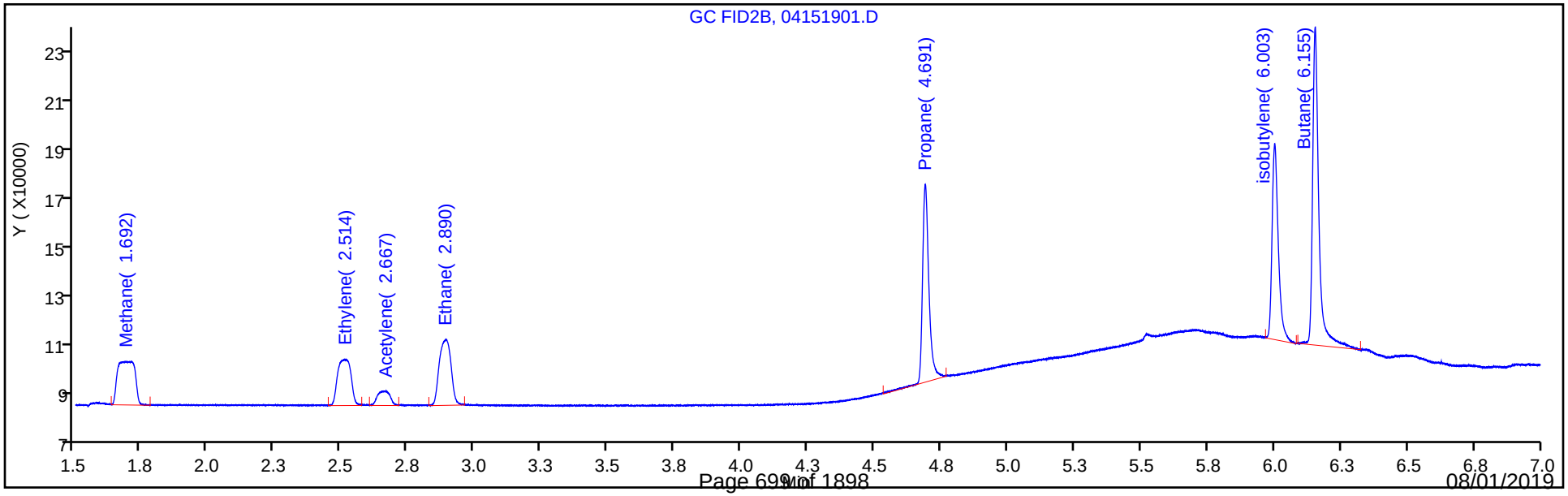
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151901.D

Injection Date:	15-Apr-2019 10:23:57	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L1			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Apr-2019 10:37:05 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 280-0080933-002
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:51 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.279	1.271	0.008	168302	0.9125	0.99	
2	1.699	1.692	0.007	139116	0.9125	0.9867	
						RPD = 0.37	
2 Ethane							
1	1.556	1.556	0.000	227953	1.71	1.80	
2	2.899	2.889	0.010	191594	1.71	1.78	
						RPD = 1.12	
3 Ethylene							
1	1.890	1.880	0.010	175461	1.60	1.66	
2	2.524	2.512	0.012	149728	1.60	1.66	
						RPD = 0.31	
4 Propane							
1	2.645	2.632	0.013	363474	2.51	2.69	
2	4.696	4.687	0.009	306879	2.51	2.67	
						RPD = 0.46	
5 Acetylene							
1	4.095	4.078	0.017	47607	1.48	1.48	
2	2.667	2.652	0.015	41972	1.48	1.48	
						RPD = 0.00	
6 Butane							
1	4.401	4.381	0.020	519750	3.31	3.69	
2	6.158	6.146	0.012	435009	3.31	3.61	
						RPD = 2.11	
7 isobutylene							
1	5.327	5.311	0.016	344778	3.19	3.56	
2	6.006	5.998	0.008	288028	3.19	3.55	
						RPD = 0.25	

Reagents:

RSK7gasMathes_00026 Amount Added: 2.50 Units: uL

Report Date: 15-May-2019 11:57:52 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151902.D

Injection Date: 15-Apr-2019 10:37:05 Instrument ID: VGC_J Operator ID: ms

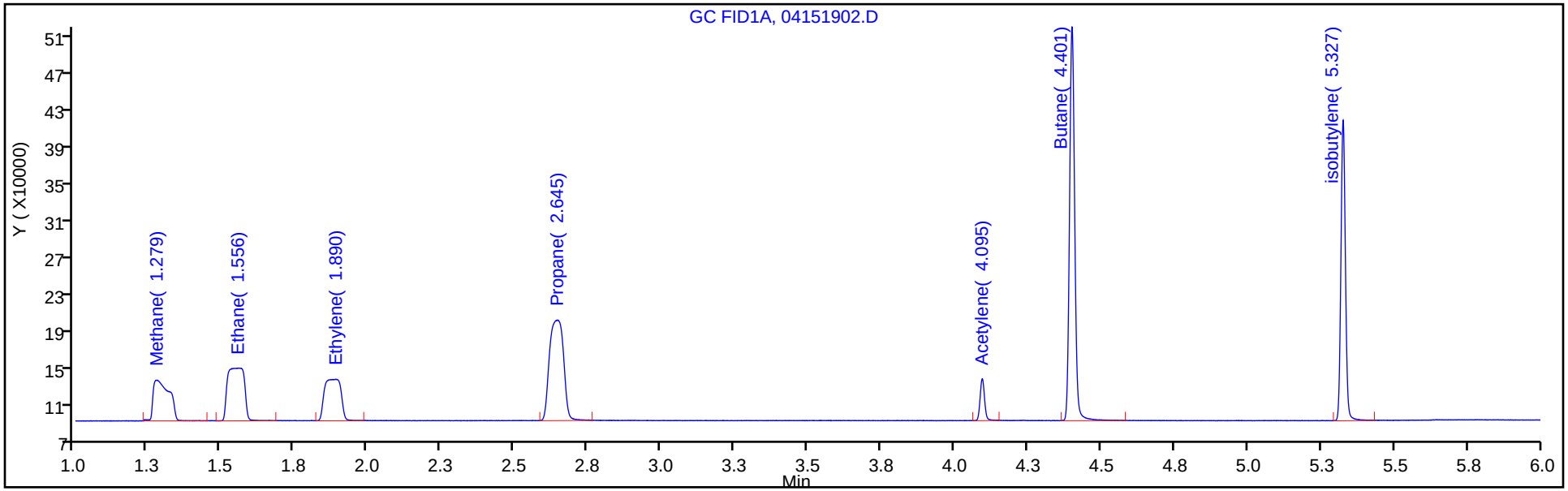
Lims ID: IC L2 Worklist Smp#: 2

Client ID:

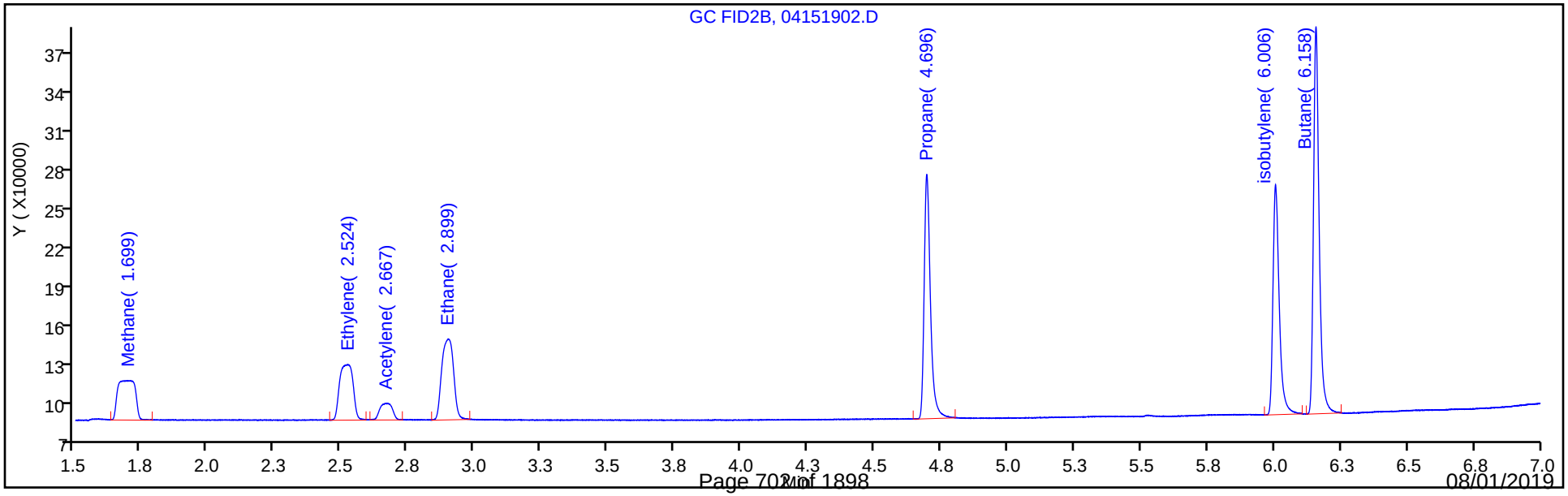
Purge Vol: 18.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: RSK_J Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151903.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Apr-2019 10:50:22 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 280-0080933-003
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:52 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.278	1.271	0.007	292852	1.83	1.92	
2	1.688	1.692	-0.004	245139	1.83	1.91	
						RPD = 0.42	
2 Ethane							
1	1.563	1.556	0.007	449849	3.42	3.56	
2	2.900	2.889	0.011	380840	3.42	3.55	
						RPD = 0.40	
3 Ethylene							
1	1.889	1.880	0.009	348615	3.19	3.29	
2	2.516	2.512	0.004	297902	3.19	3.31	
						RPD = 0.45	
4 Propane							
1	2.645	2.632	0.013	706582	5.02	5.22	
2	4.696	4.687	0.009	601744	5.02	5.24	
						RPD = 0.40	
5 Acetylene							
1	4.094	4.078	0.016	96205	2.96	2.99	
2	2.674	2.652	0.022	82868	2.96	2.93	
						RPD = 2.32	
6 Butane							
1	4.400	4.381	0.019	993917	6.61	7.06	
2	6.157	6.146	0.011	836646	6.61	6.95	
						RPD = 1.54	
7 isobutylene							
1	5.326	5.311	0.015	655607	6.38	6.78	
2	6.005	5.998	0.007	552886	6.38	6.82	
						RPD = 0.70	

Reagents:

RSK7gasMathes_00026 Amount Added: 5.00 Units: uL

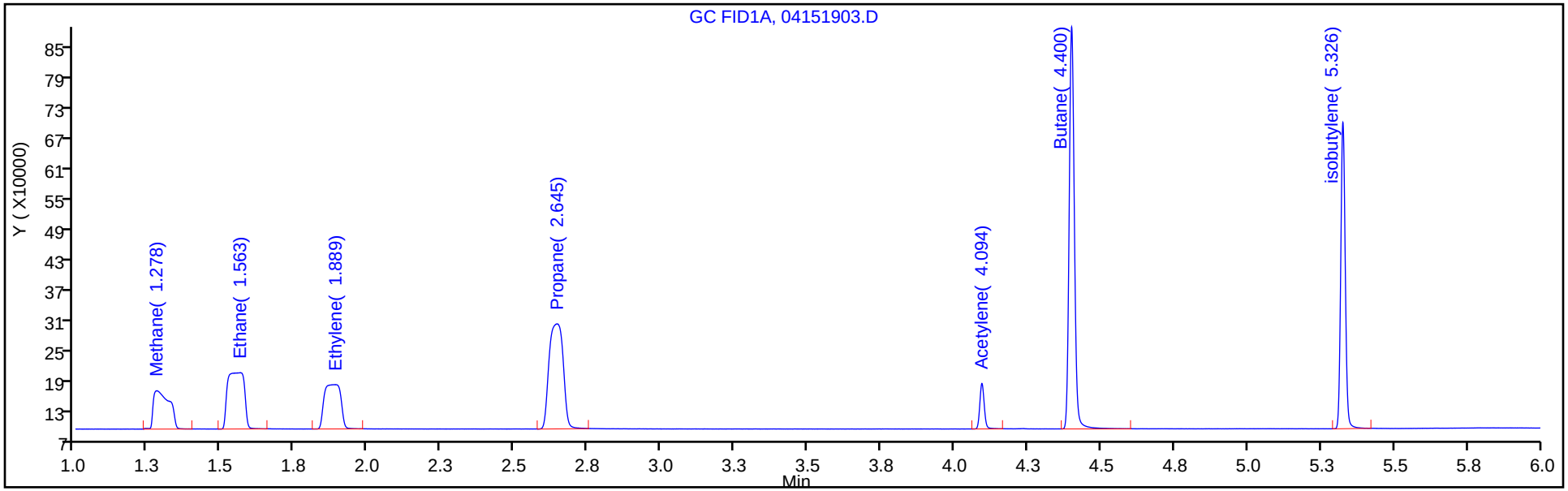
Report Date: 15-May-2019 11:57:53 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

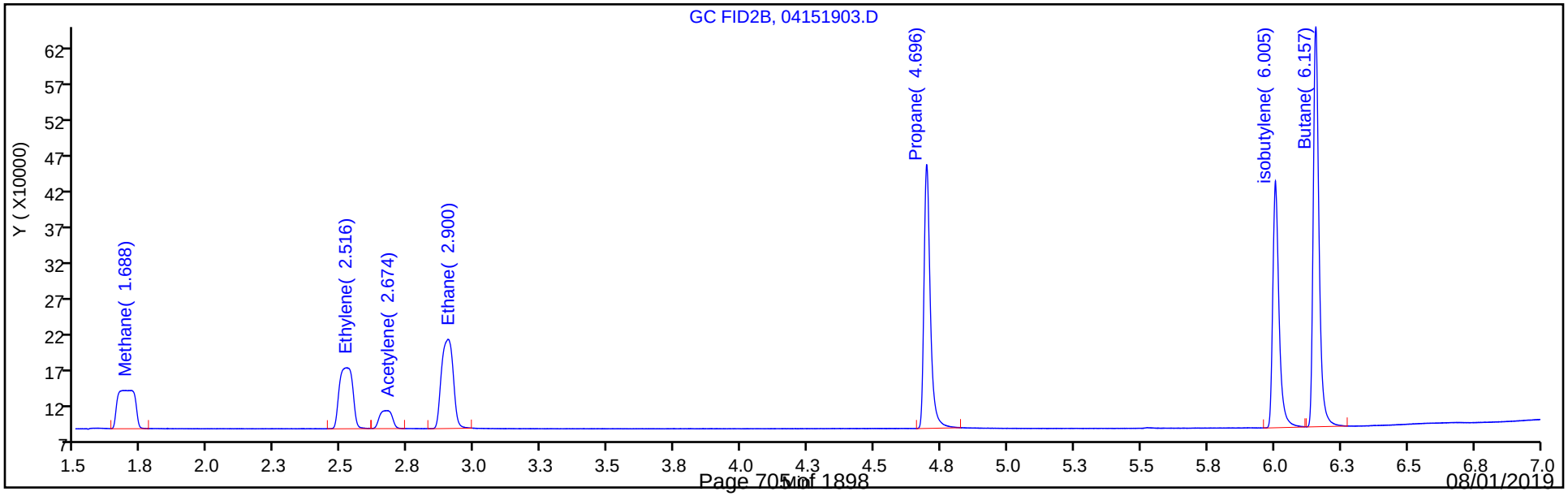
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151903.D

Injection Date:	15-Apr-2019 10:50:22	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L3			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D
Lims ID: IC L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-Apr-2019 11:03:41 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L4
Misc. Info.: 280-0080933-004
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:54 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.275	1.271	0.004	2121207	14.6	15.6	
2	1.701	1.692	0.009	1817240	14.6	15.6	
						RPD = 0.42	
2 Ethane							
1	1.544	1.556	-0.012	3768385	27.4	29.8	
2	2.896	2.889	0.007	3198231	27.4	29.8	
						RPD = 0.15	
3 Ethylene							
1	1.885	1.880	0.005	2951189	25.5	27.9	
2	2.516	2.512	0.004	2513192	25.5	27.9	
						RPD = 0.11	
4 Propane							
1	2.641	2.632	0.009	5812465	40.1	43.0	
2	4.694	4.687	0.007	4940027	40.1	43.1	
						RPD = 0.20	
5 Acetylene							
1	4.089	4.078	0.011	809586	23.7	25.2	
2	2.668	2.652	0.016	709490	23.7	25.0	
						RPD = 0.60	
6 Butane							
1	4.395	4.381	0.014	7767068	52.9	55.2	
2	6.155	6.146	0.009	6590566	52.9	54.7	
						RPD = 0.74	
7 isobutylene							
1	5.322	5.311	0.011	5189017	51.1	53.6	
2	6.004	5.998	0.006	4363220	51.1	53.8	
						RPD = 0.40	

Reagents:

RSK7gasMathes_00026 Amount Added: 40.00 Units: uL

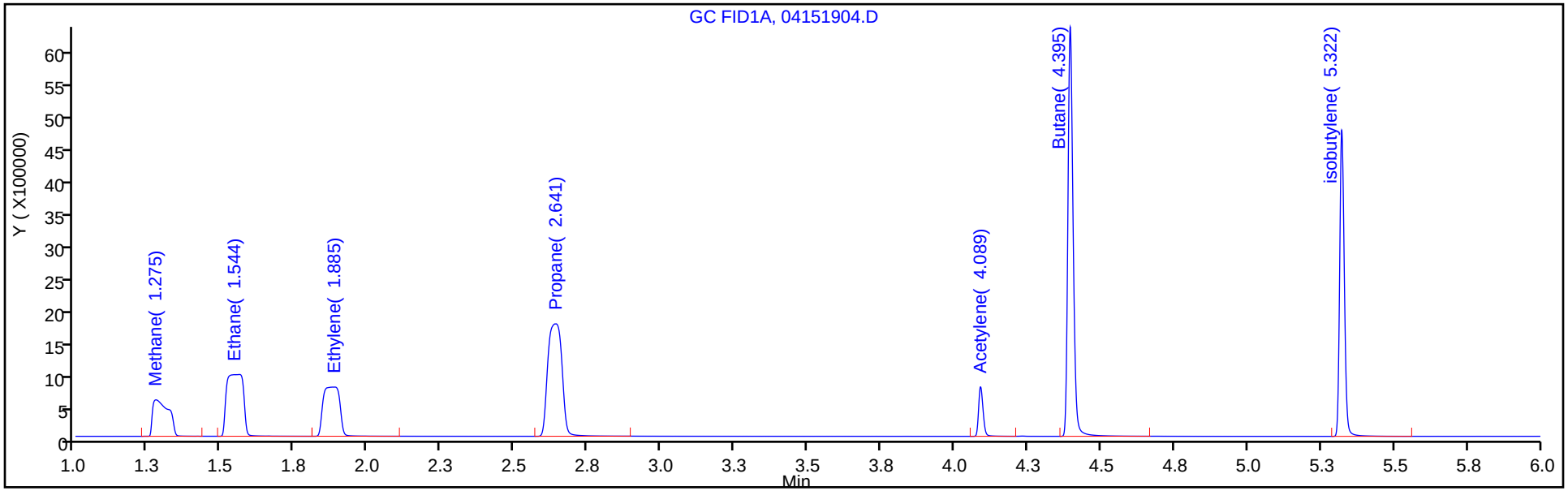
Report Date: 15-May-2019 11:57:55 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

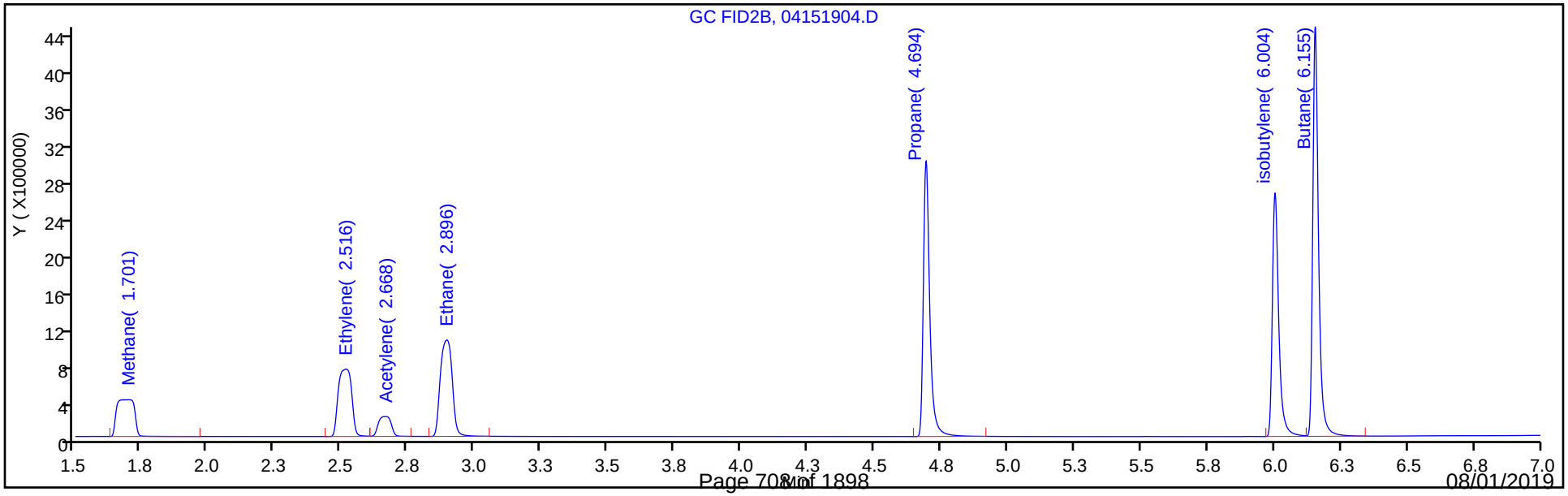
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151904.D

Injection Date:	15-Apr-2019 11:03:41	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D
Lims ID: ICRT L5
Client ID:
Sample Type: ICRT Calib Level: 5
Inject. Date: 15-Apr-2019 11:17:11 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT L5
Misc. Info.: 280-0080933-005
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:56 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.271	1.271	0.000	9627756	73.0	71.6	
2	1.692	1.692	0.000	8233442	73.0	71.6	
						RPD = 0.05	
2 Ethane							
1	1.556	1.556	0.000	17308693	136.9	137.0	
2	2.889	2.889	0.000	14756883	136.9	137.4	
						RPD = 0.30	
3 Ethylene							
1	1.880	1.880	0.000	13570482	127.7	128.3	
2	2.512	2.512	0.000	11530864	127.7	128.1	
						RPD = 0.11	
4 Propane							
1	2.632	2.632	0.000	26866377	200.7	198.6	
2	4.687	4.687	0.000	22779443	200.7	198.5	
						RPD = 0.04	
5 Acetylene							
1	4.078	4.078	0.000	4013672	118.5	124.9	
2	2.652	2.652	0.000	3536969	118.5	124.9	
						RPD = 0.04	
6 Butane							
1	4.381	4.381	0.000	35922157	264.5	255.1	
2	6.146	6.146	0.000	30367524	264.5	252.3	
						RPD = 1.11	
7 isobutylene							
1	5.311	5.311	0.000	23677727	255.4	244.7	
2	5.998	5.998	0.000	19852679	255.4	245.0	
						RPD = 0.12	

Reagents:

RSK7gasMathes_00026 Amount Added: 200.00 Units: uL

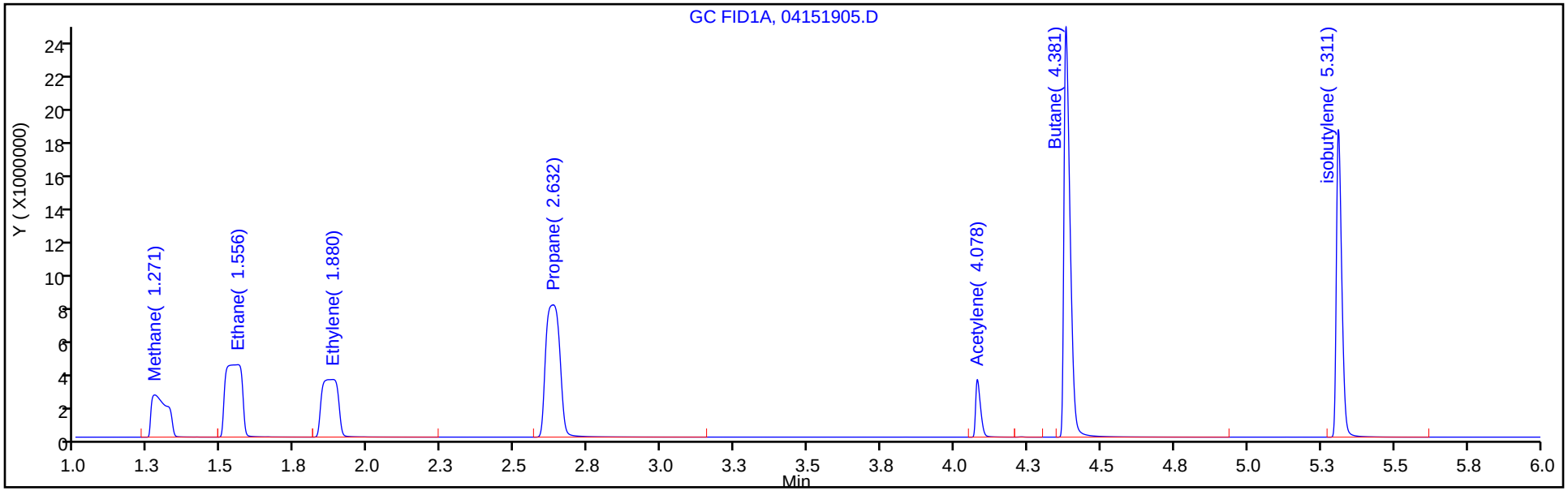
Report Date: 15-May-2019 11:57:56 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

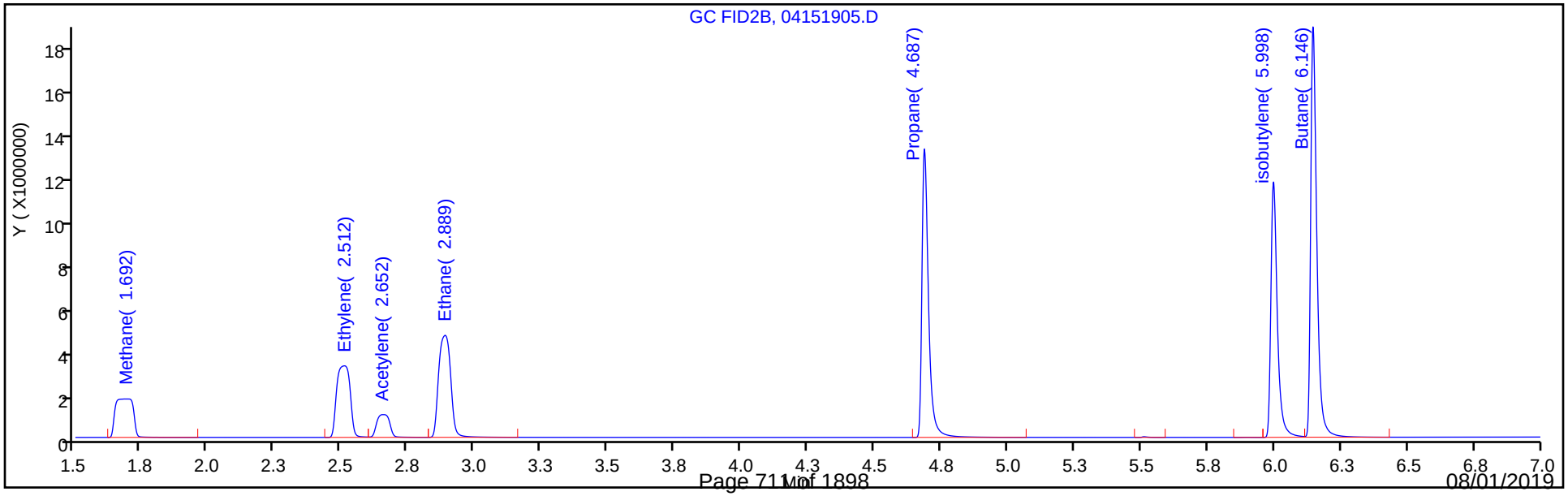
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151905.D

Injection Date:	15-Apr-2019 11:17:11	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	ICRT L5			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 15-Apr-2019 11:30:32 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L6
Misc. Info.: 280-0080933-006
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:57 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.267	1.271	-0.004	17958876	146.0	133.8	
2	1.681	1.692	-0.011	15386436	146.0	134.1	
						RPD = 0.21	
2 Ethane							
1	1.549	1.556	-0.007	32290083	273.7	255.5	
2	2.882	2.889	-0.007	27708010	273.7	258.0	
						RPD = 0.95	
3 Ethylene							M
1	1.866	1.880	-0.014	25472652	255.3	240.7	M
2	2.503	2.512	-0.009	21746052	255.3	241.6	
						RPD = 0.36	
4 Propane							
1	2.625	2.632	-0.007	50278684	401.4	371.7	
2	4.683	4.687	-0.004	42698075	401.4	372.2	
						RPD = 0.12	
5 Acetylene							
1	4.070	4.078	-0.008	7700889	237.0	239.7	
2	2.656	2.652	0.004	6771875	237.0	239.1	
						RPD = 0.25	
6 Butane							
1	4.370	4.381	-0.011	67375523	529.0	478.5	
2	6.140	6.146	-0.006	57174968	529.0	475.0	
						RPD = 0.73	
7 isobutylene							
1	5.302	5.311	-0.009	44689590	510.8	461.9	
2	5.992	5.998	-0.006	37488004	510.8	462.6	
						RPD = 0.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026 Amount Added: 400.00 Units: uL

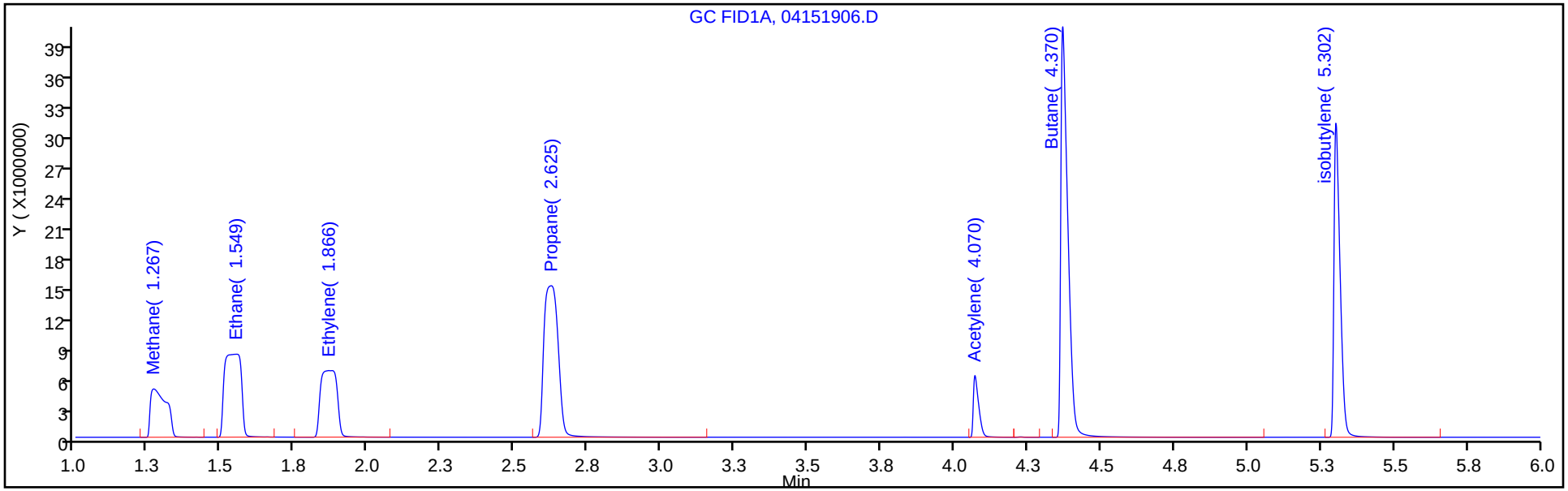
Report Date: 15-May-2019 11:57:58 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

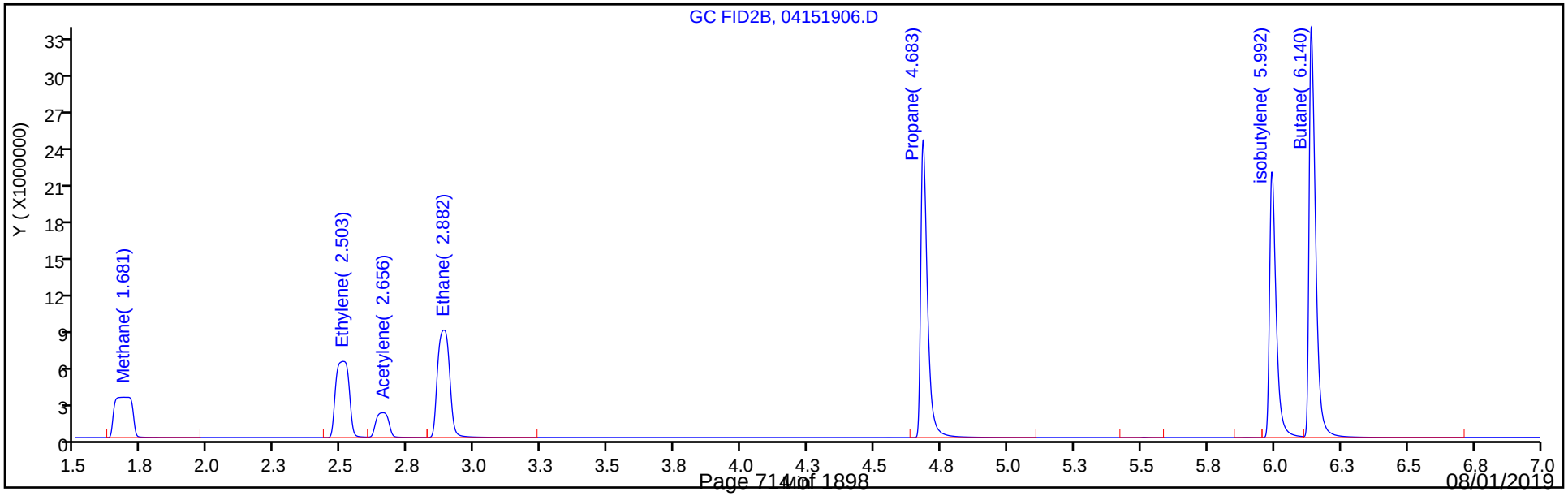
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151906.D

Injection Date:	15-Apr-2019 11:30:32	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L6			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 15-Apr-2019 11:44:06 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 280-0080933-007
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:57:58 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.263	1.271	-0.008	40532226	292.0	302.4	
2	1.686	1.692	-0.006	34652624	292.0	302.3	
						RPD = 0.02	
2 Ethane							
1	1.549	1.556	-0.007	71736807	547.4	567.7	
2	2.876	2.889	-0.013	61621639	547.4	573.7	
						RPD = 1.05	
3 Ethylene							M
1	1.870	1.880	-0.010	54838846	510.7	518.3	M
2	2.503	2.512	-0.009	46940879	510.7	521.5	
						RPD = 0.62	
4 Propane							
1	2.611	2.632	-0.021	111846125	802.8	826.9	
2	4.672	4.687	-0.015	94884692	802.8	827.0	
						RPD = 0.02	
5 Acetylene							
1	4.057	4.078	-0.021	15668916	474.1	487.7	
2	2.651	2.652	-0.001	13791861	474.1	486.9	
						RPD = 0.16	
6 Butane							
1	4.350	4.381	-0.031	148225690	1058.1	1052.6	
2	6.128	6.146	-0.018	125686225	1058.1	1044.1	
						RPD = 0.81	
7 isobutylene							
1	5.288	5.311	-0.023	94615791	1021.5	977.9	
2	5.984	5.998	-0.014	79245111	1021.5	978.0	
						RPD = 0.01	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00026 Amount Added: 800.00 Units: uL

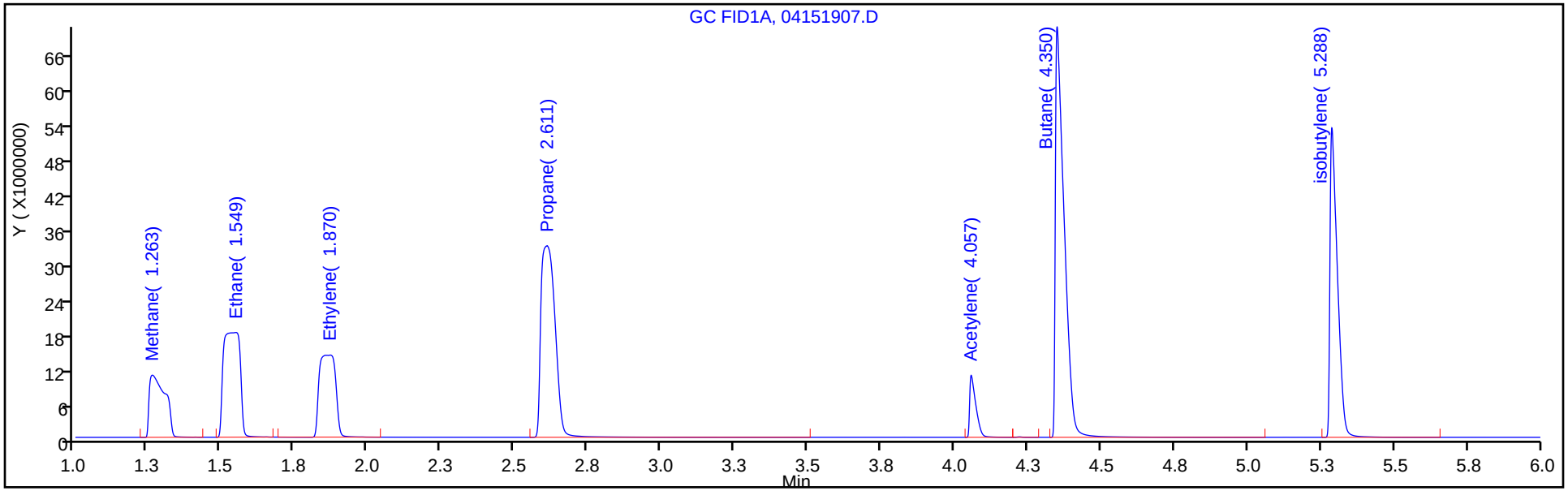
Report Date: 15-May-2019 11:57:59 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

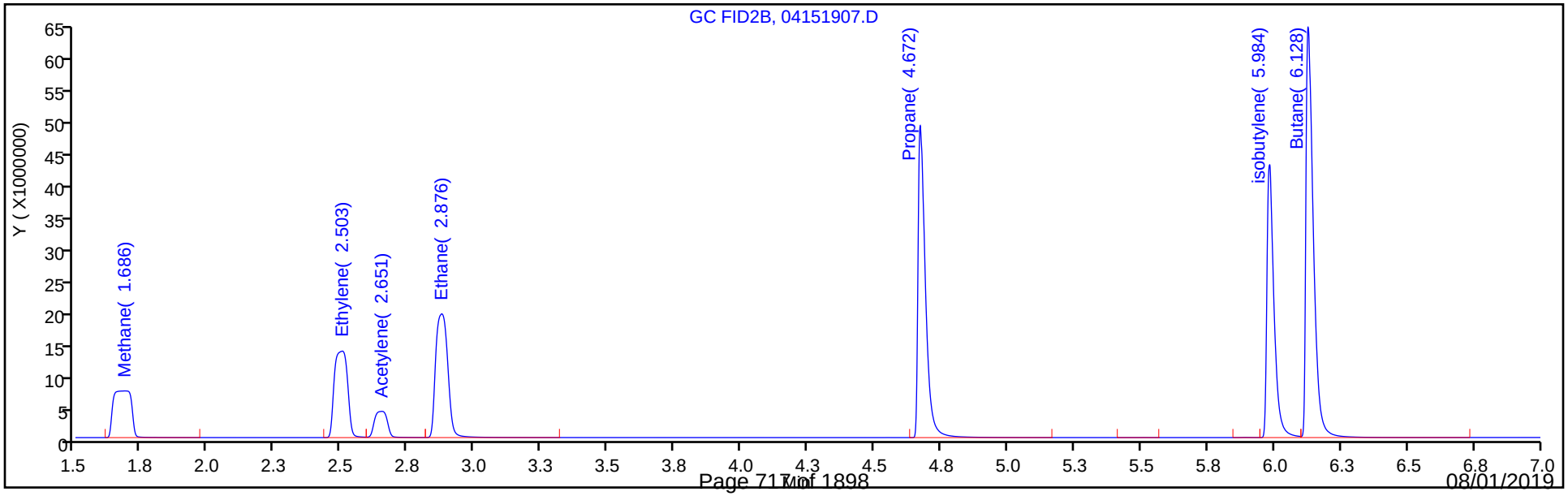
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151907.D

Injection Date:	15-Apr-2019 11:44:06	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L7			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 15-Apr-2019 11:57:32 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 280-0080933-008
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:58:00 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.265	1.271	-0.006	226637342	1806.9	1691.8	
2	1.692	1.692	0.000	193042781	1806.9	1685.0	
						RPD = 0.41	

Reagents:

RSK175methane_00009 Amount Added: 50.00 Units: uL

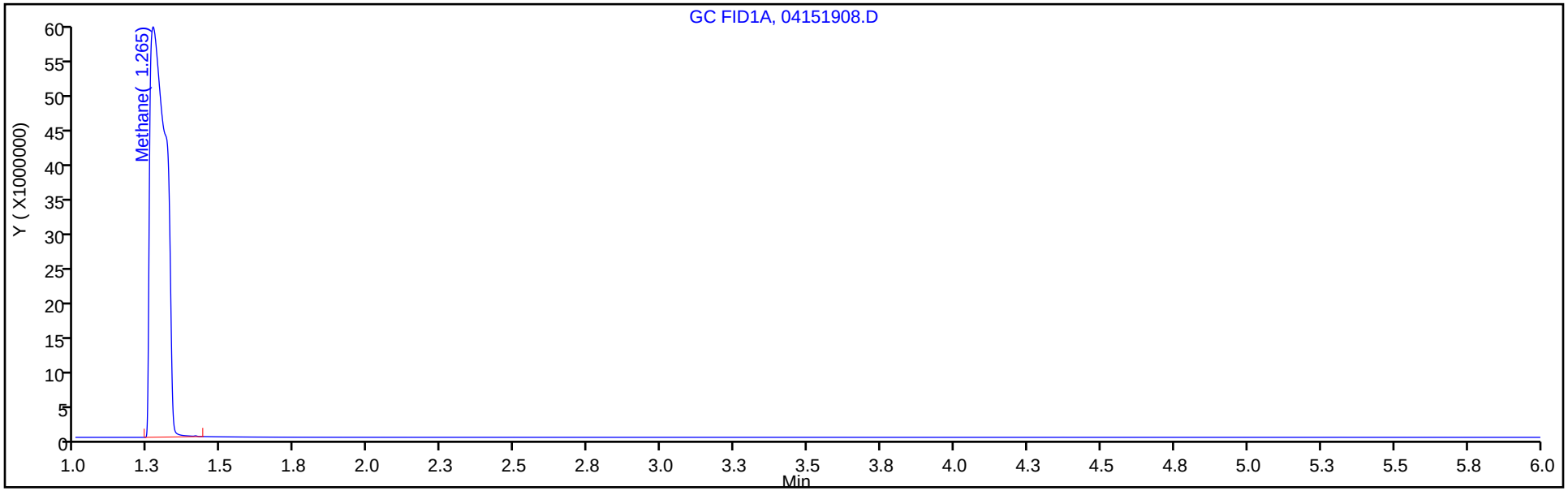
Report Date: 15-May-2019 11:58:01 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

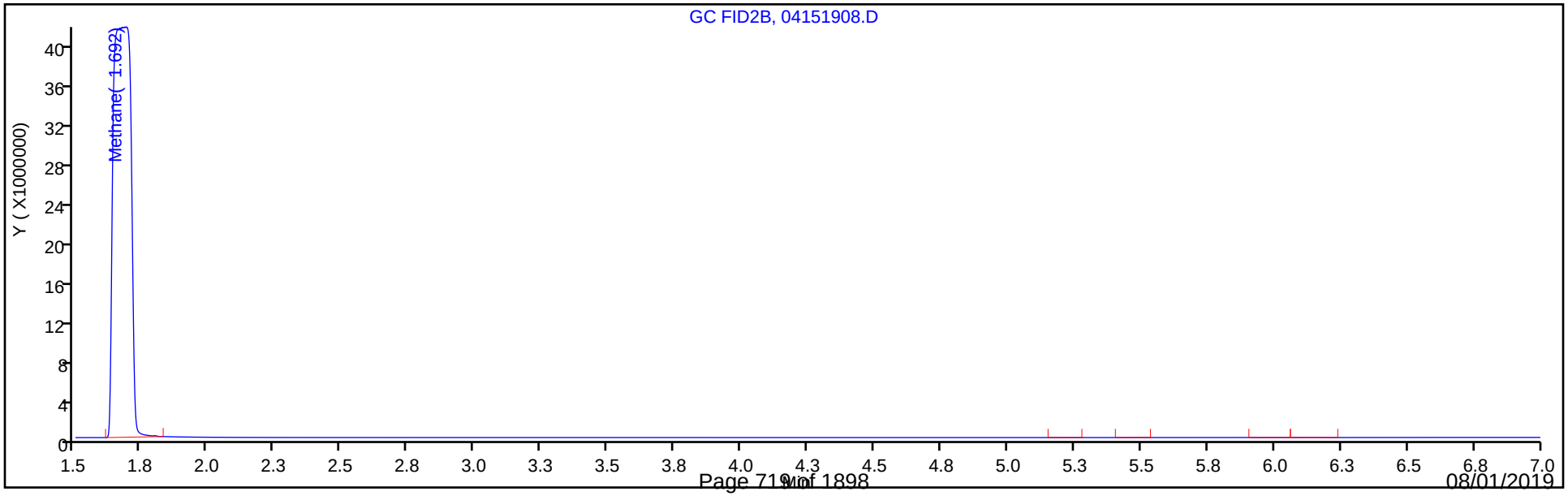
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151908.D

Injection Date:	15-Apr-2019 11:57:32	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L8			Worklist Smp#:	8
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 15-Apr-2019 12:11:08 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L9
Misc. Info.: 280-0080933-009
Operator ID: ms Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:58:02 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.263	1.271	-0.008	952923785	7227.8	7114.4	
2	1.668	1.692	-0.024	817202335	7227.8	7133.8	
						RPD = 0.27	

Reagents:

RSK175methane_00009 Amount Added: 200.00 Units: uL

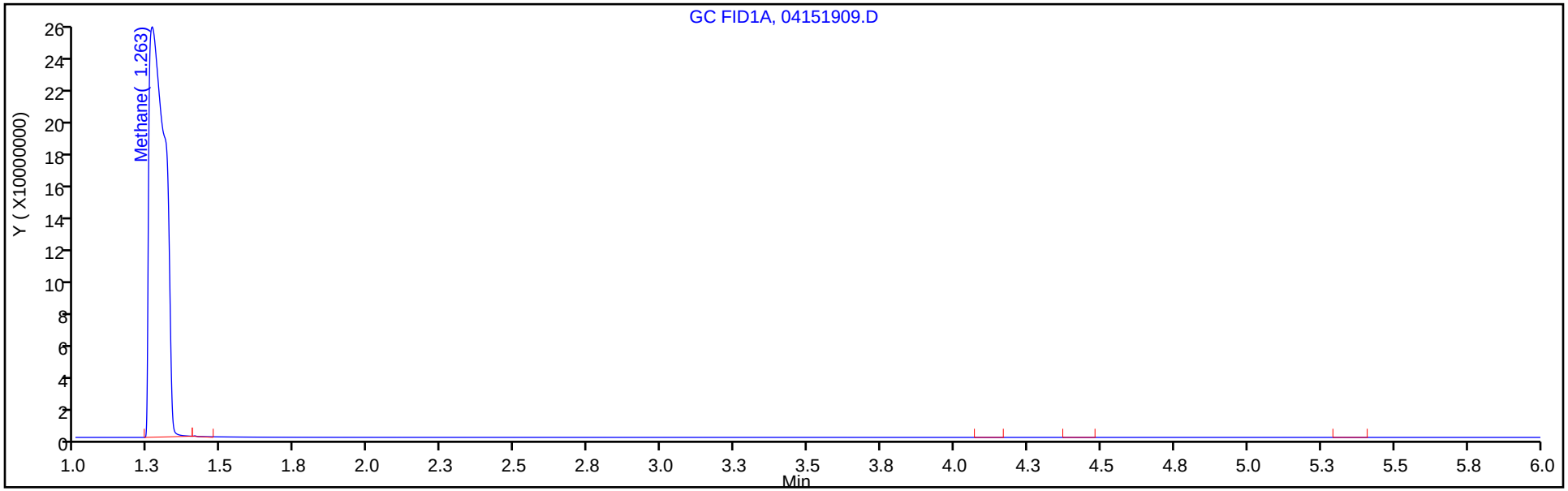
Report Date: 15-May-2019 11:58:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

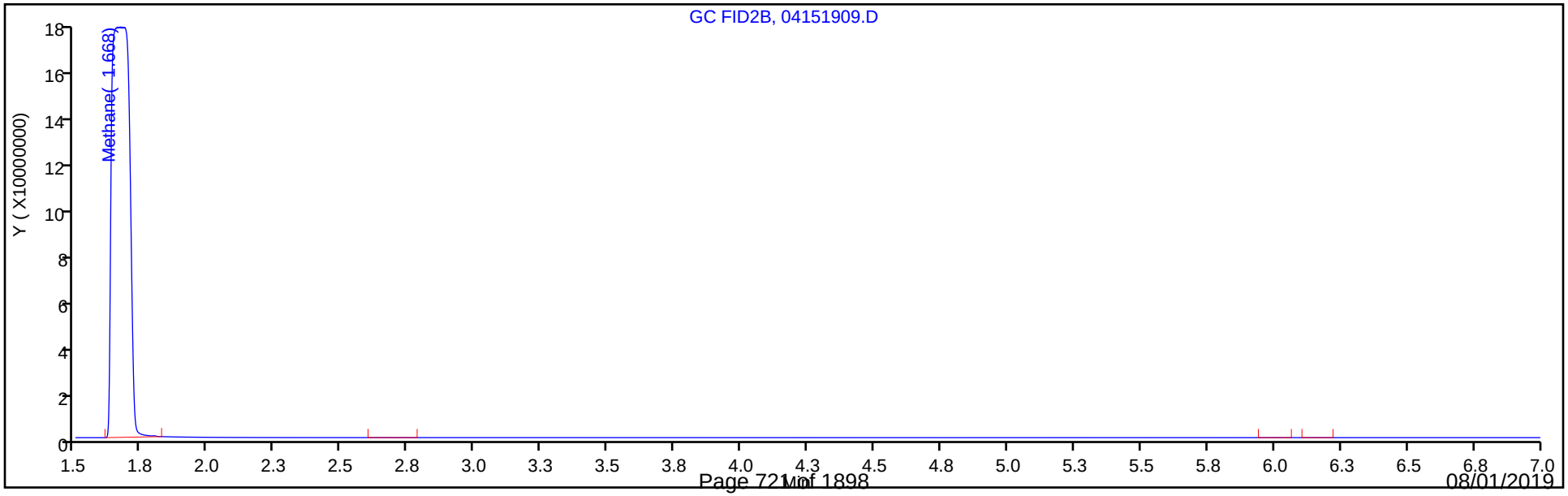
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Injection Date:	15-Apr-2019 12:11:08	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	IC L9			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-454595/11 Calibration Date: 04/15/2019 12:38

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 04151911.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		128138		139	146	-4.5	20.0
Ethane	Ave	126364	121882		264	274	-3.5	20.0
Ethylene	Ave	105807	101365		245	255	-4.2	20.0
Acetylene	Ave	32129	31404		232	237	-2.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-454595/11 Calibration Date: 04/15/2019 12:38

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 04151911.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.55	1.51	1.61
Ethylene	1.86	1.83	1.93
Acetylene	4.07	4.00	4.16

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 15-Apr-2019 12:38:15 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0080933-011
Operator ID: ms Instrument ID: VGC_J
Sublist:

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:58:03 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.264	1.271	-0.007	18709056	146.0	139.4	
2	1.678	1.692	-0.014	16025653	146.0	139.7	
						RPD = 0.18	
2 Ethane							
1	1.546	1.556	-0.010	33360415	273.7	264.0	
2	2.873	2.889	-0.016	28632577	273.7	266.6	
						RPD = 0.97	
3 Ethylene							
1	1.857	1.880	-0.023	25881738	255.3	244.6	
2	2.496	2.512	-0.016	21995109	255.3	244.4	
						RPD = 0.10	
4 Propane							
1	2.616	2.632	-0.016	51982286	401.4	384.3	
2	4.678	4.687	-0.009	44136454	401.4	384.7	
						RPD = 0.10	
5 Acetylene							
1	4.068	4.078	-0.010	7444173	237.0	231.7	
2	2.646	2.652	-0.006	6535820	237.0	230.7	
						RPD = 0.41	
6 Butane							
1	4.367	4.381	-0.014	69174084	529.0	491.2	
2	6.136	6.146	-0.010	58709409	529.0	487.7	
						RPD = 0.72	
7 isobutylene							
1	5.301	5.311	-0.010	44288925	510.8	457.7	
2	5.989	5.998	-0.009	37131909	510.8	458.2	
						RPD = 0.11	

Reagents:

RSK7gasMathes_00025 Amount Added: 400.00 Units: uL

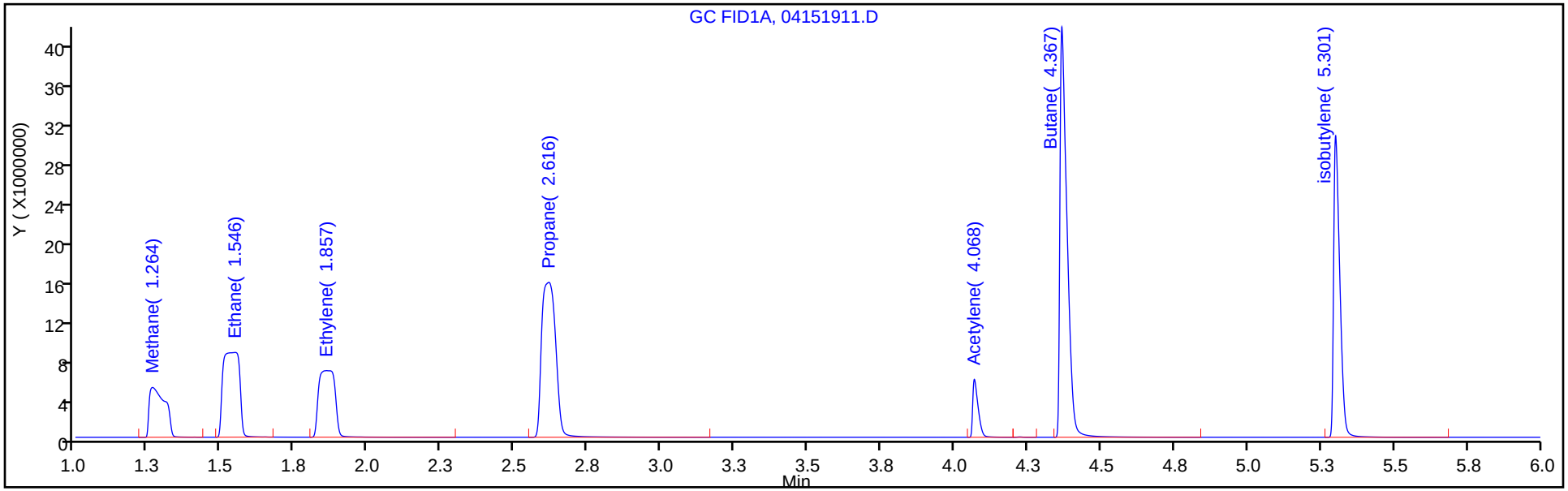
Report Date: 15-May-2019 11:58:04 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

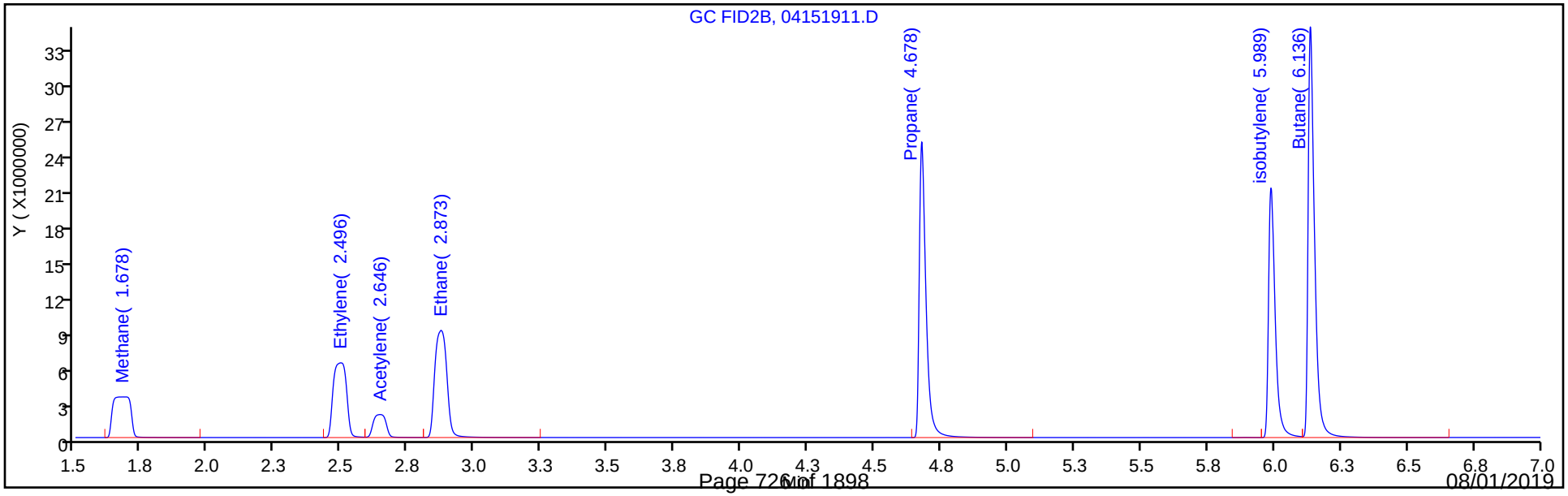
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D

Injection Date:	15-Apr-2019 12:38:15	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	ICV			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-454595/11 Calibration Date: 04/15/2019 12:38

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 04151911.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		109760		140	146	-4.3	20.0
Ethylene	Ave	90007	86143		244	255	-4.3	20.0
Acetylene	Ave	28324	27572		231	237	-2.7	20.0
Ethane	Ave	107408	104609		267	274	-2.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-454595/11 Calibration Date: 04/15/2019 12:38

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 04151911.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.65	1.73
Ethylene	2.50	2.46	2.56
Acetylene	2.65	2.57	2.73
Ethane	2.87	2.84	2.94

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 15-Apr-2019 12:38:15 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0080933-011
Operator ID: ms Instrument ID: VGC_J
Sublist:

Method: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-May-2019 11:58:03 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0333

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.264	1.271	-0.007	18709056	146.0	139.4	
2	1.678	1.692	-0.014	16025653	146.0	139.7	
						RPD = 0.18	
2 Ethane							
1	1.546	1.556	-0.010	33360415	273.7	264.0	
2	2.873	2.889	-0.016	28632577	273.7	266.6	
						RPD = 0.97	
3 Ethylene							
1	1.857	1.880	-0.023	25881738	255.3	244.6	
2	2.496	2.512	-0.016	21995109	255.3	244.4	
						RPD = 0.10	
4 Propane							
1	2.616	2.632	-0.016	51982286	401.4	384.3	
2	4.678	4.687	-0.009	44136454	401.4	384.7	
						RPD = 0.10	
5 Acetylene							
1	4.068	4.078	-0.010	7444173	237.0	231.7	
2	2.646	2.652	-0.006	6535820	237.0	230.7	
						RPD = 0.41	
6 Butane							
1	4.367	4.381	-0.014	69174084	529.0	491.2	
2	6.136	6.146	-0.010	58709409	529.0	487.7	
						RPD = 0.72	
7 isobutylene							
1	5.301	5.311	-0.010	44288925	510.8	457.7	
2	5.989	5.998	-0.009	37131909	510.8	458.2	
						RPD = 0.11	

Reagents:

RSK7gasMathes_00025 Amount Added: 400.00 Units: uL

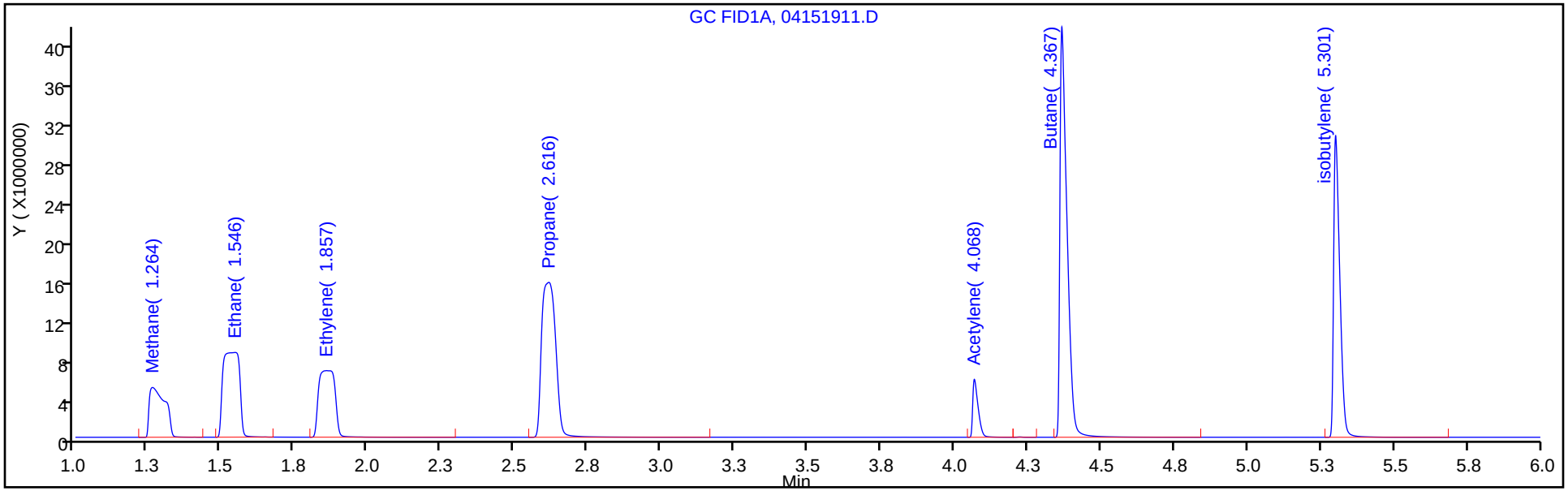
Report Date: 15-May-2019 11:58:04 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

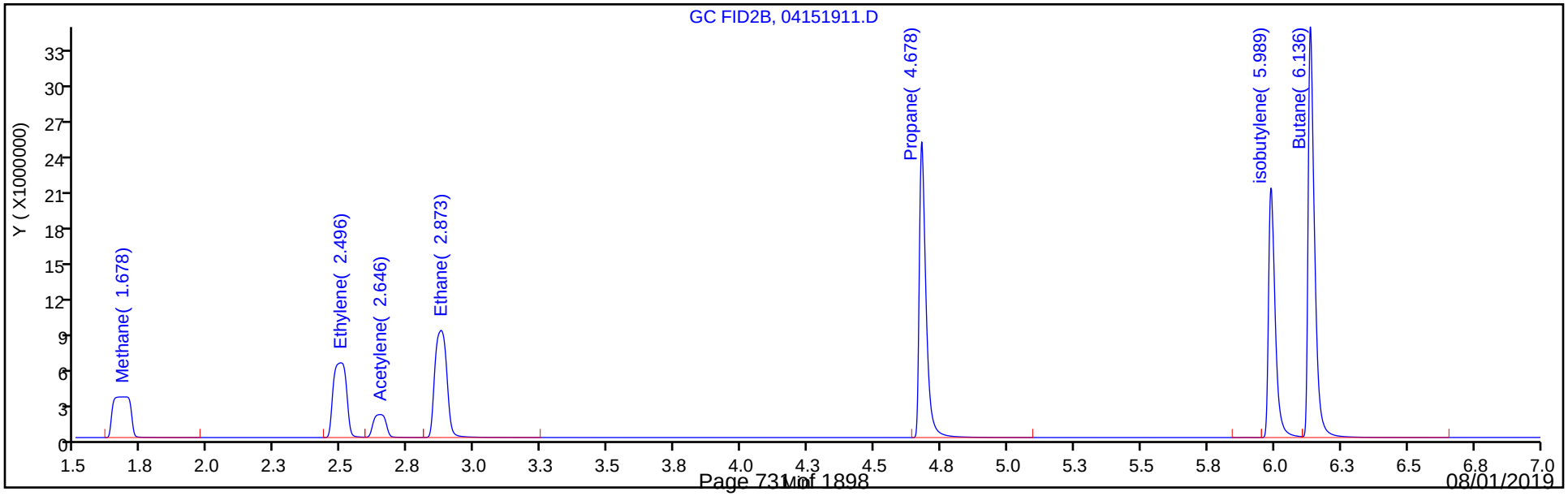
Data File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151911.D

Injection Date:	15-Apr-2019 12:38:15	Instrument ID:	VGC_J	Operator ID:	ms
Lims ID:	ICV			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-461087/1 Calibration Date: 06/11/2019 05:41

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111901.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		107919		58.6	73.0	-19.8	20.0
Ethane	Ave	126364	107166		116	137	-15.2	20.0
Ethylene	Ave	105807	96569		117	128	-8.7	20.0
Acetylene	Ave	32129	29390		108	119	-8.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-461087/1 Calibration Date: 06/11/2019 05:41

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.25	1.33
Ethane	1.57	1.52	1.62
Ethylene	1.89	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111901.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 11-Jun-2019 05:41:22 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCVRT
Misc. Info.: 280-0082723-001
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 11-Jun-2019 12:57:35 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0340

First Level Reviewer: dobranskym Date: 11-Jun-2019 07:21:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.285	1.285	0.000	7878418	73.0	58.6	
2	1.703	1.703	0.000	6733578	73.0	58.6	
						RPD = 0.00	
2 Ethane							
1	1.568	1.568	0.000	14666207	136.9	116.1	
2	2.907	2.907	0.000	12498112	136.9	116.4	
						RPD = 0.26	
3 Ethylene							
1	1.888	1.888	0.000	12328579	127.7	116.5	
2	2.530	2.530	0.000	10462577	127.7	116.2	
						RPD = 0.24	
4 Propane							
1	2.640	2.640	0.000	22937893	200.7	169.6	
2	4.694	4.694	0.000	19444384	200.7	169.5	
						RPD = 0.06	
5 Acetylene							
1	4.064	4.064	0.000	3483398	118.5	108.4	
2	2.675	2.675	0.000	3081626	118.5	108.8	
						RPD = 0.35	
6 Butane							
1	4.379	4.379	0.000	31340151	264.5	222.6	
2	6.152	6.152	0.000	26565733	264.5	220.7	
						RPD = 0.84	
7 isobutylene							
1	5.303	5.303	0.000	22930681	255.4	237.0	
2	6.002	6.002	0.000	19224066	255.4	237.2	
						RPD = 0.11	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

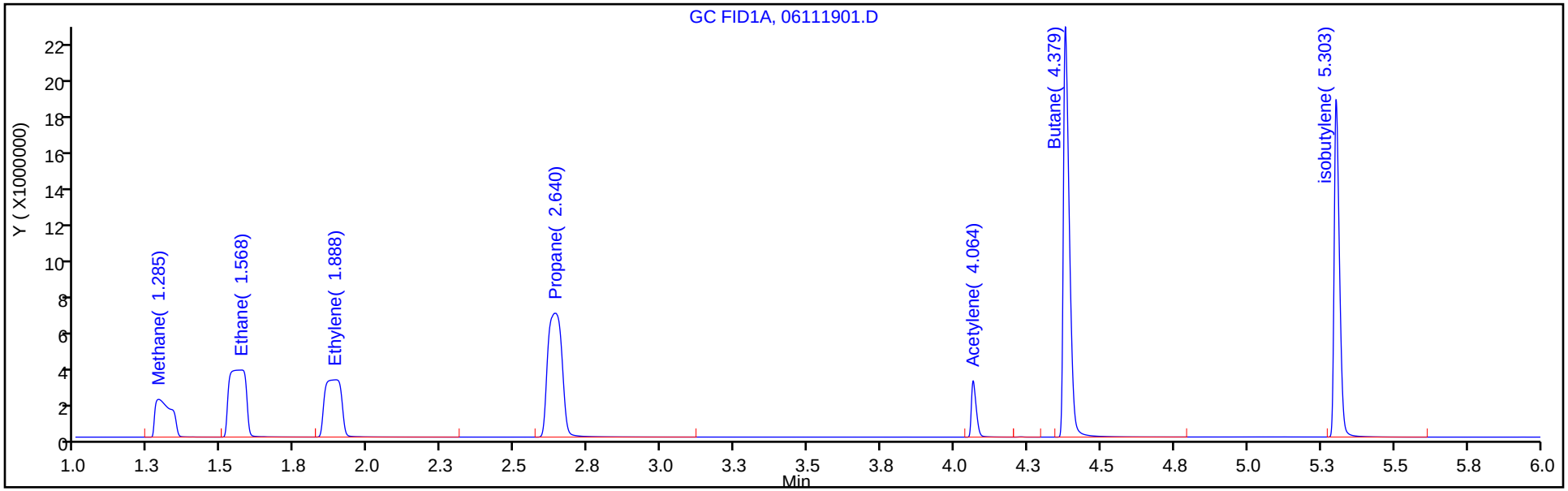
Report Date: 11-Jun-2019 12:57:35 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

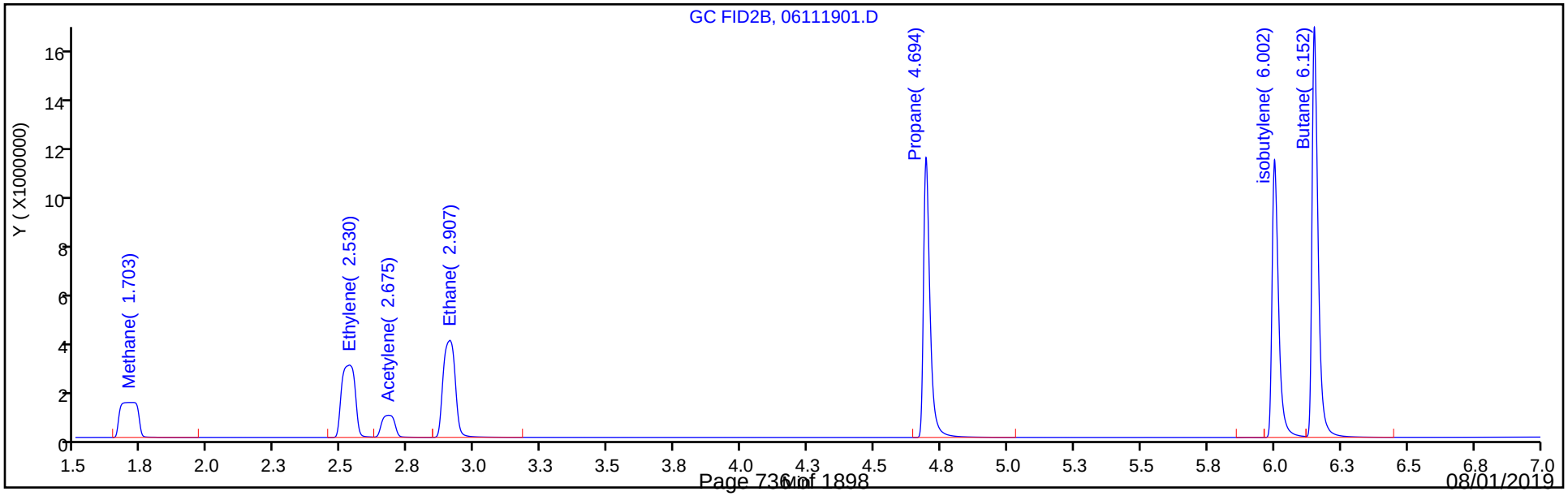
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111901.D

Injection Date:	11-Jun-2019 05:41:22	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCVRT			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-461087/1 Calibration Date: 06/11/2019 05:41

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111901.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		92237		58.6	73.0	-19.8	20.0
Ethylene	Ave	90007	81952		116	128	-8.9	20.0
Acetylene	Ave	28324	26000		109	119	-8.2	20.0
Ethane	Ave	107408	91323		116	137	-15.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-461087/1 Calibration Date: 06/11/2019 05:41

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.70	1.66	1.74
Ethylene	2.53	2.48	2.58
Acetylene	2.68	2.60	2.76
Ethane	2.91	2.86	2.96

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111901.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 11-Jun-2019 05:41:22 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCVRT
Misc. Info.: 280-0082723-001
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 11-Jun-2019 12:57:35 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0340

First Level Reviewer: dobranskym Date: 11-Jun-2019 07:21:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.285	1.285	0.000	7878418	73.0	58.6	
2	1.703	1.703	0.000	6733578	73.0	58.6	
						RPD = 0.00	
2 Ethane							
1	1.568	1.568	0.000	14666207	136.9	116.1	
2	2.907	2.907	0.000	12498112	136.9	116.4	
						RPD = 0.26	
3 Ethylene							
1	1.888	1.888	0.000	12328579	127.7	116.5	
2	2.530	2.530	0.000	10462577	127.7	116.2	
						RPD = 0.24	
4 Propane							
1	2.640	2.640	0.000	22937893	200.7	169.6	
2	4.694	4.694	0.000	19444384	200.7	169.5	
						RPD = 0.06	
5 Acetylene							
1	4.064	4.064	0.000	3483398	118.5	108.4	
2	2.675	2.675	0.000	3081626	118.5	108.8	
						RPD = 0.35	
6 Butane							
1	4.379	4.379	0.000	31340151	264.5	222.6	
2	6.152	6.152	0.000	26565733	264.5	220.7	
						RPD = 0.84	
7 isobutylene							
1	5.303	5.303	0.000	22930681	255.4	237.0	
2	6.002	6.002	0.000	19224066	255.4	237.2	
						RPD = 0.11	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

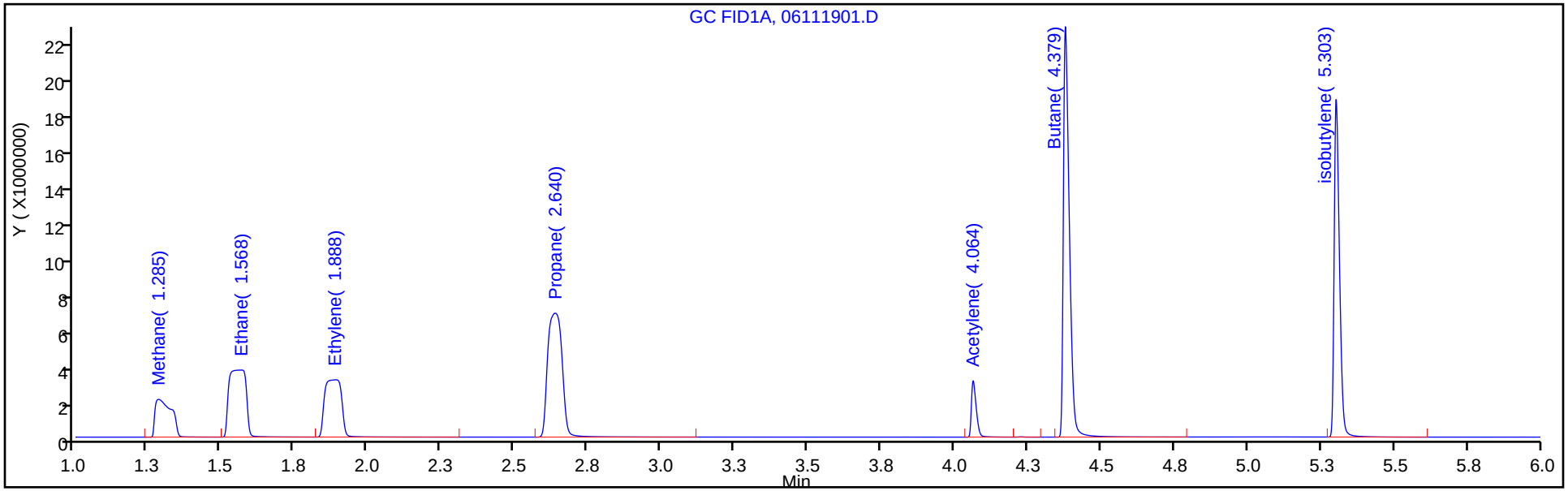
Report Date: 11-Jun-2019 12:57:35 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

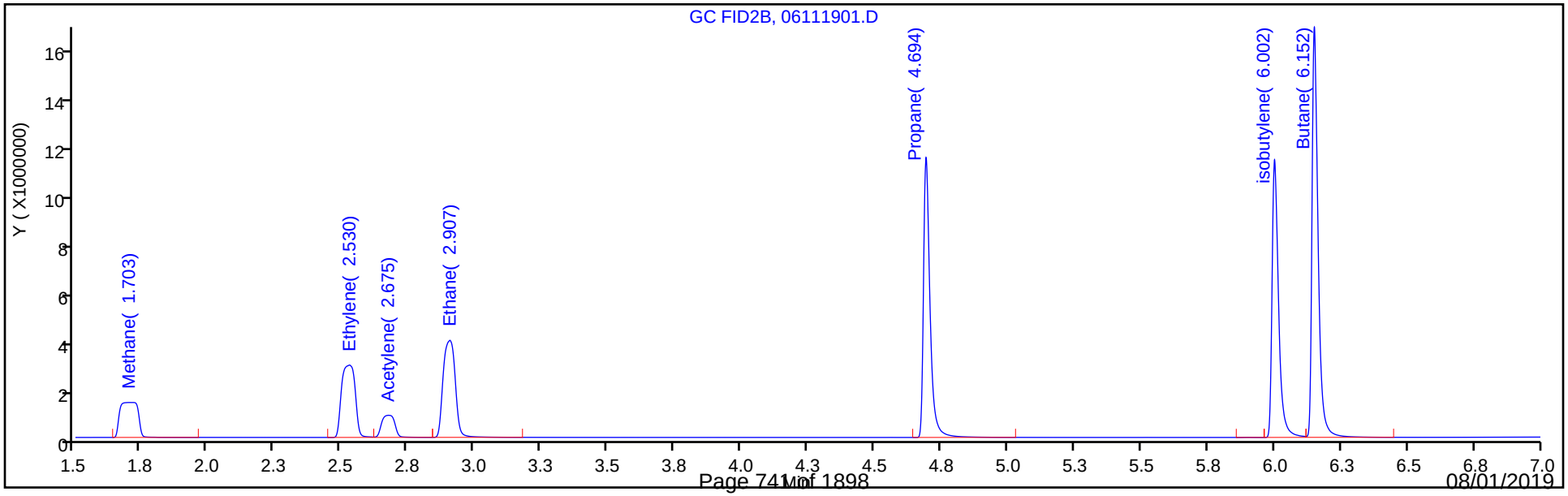
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111901.D

Injection Date:	11-Jun-2019 05:41:22	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCVRT			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/28 Calibration Date: 06/11/2019 12:21

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111928.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		132049		71.7	73.0	-1.8	20.0
Ethane	Ave	126364	131808		143	137	4.3	20.0
Ethylene	Ave	105807	108779		131	128	2.8	20.0
Acetylene	Ave	32129	30904		114	119	-3.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/28 Calibration Date: 06/11/2019 12:21

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111928.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.25	1.33
Ethane	1.54	1.52	1.62
Ethylene	1.85	1.84	1.94
Acetylene	4.05	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111928.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2019 12:21:22 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082723-028
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 11-Jun-2019 12:58:07 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0340

First Level Reviewer: dobranskym Date: 11-Jun-2019 12:32:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.259	1.285	-0.026	9640034	73.0	71.7	
2	1.685	1.703	-0.018	8252855	73.0	71.8	
						RPD = 0.15	
2 Ethane							
1	1.536	1.568	-0.032	18038718	136.9	142.8	
2	2.870	2.907	-0.037	15409455	136.9	143.5	
						RPD = 0.50	
3 Ethylene							
1	1.850	1.888	-0.038	13887473	127.7	131.3	
2	2.490	2.530	-0.040	11816586	127.7	131.3	
						RPD = 0.02	
4 Propane							
1	2.594	2.640	-0.046	29956311	200.7	221.5	
2	4.679	4.694	-0.015	25494743	200.7	222.2	
						RPD = 0.33	
5 Acetylene							
1	4.054	4.064	-0.010	3662859	118.5	114.0	
2	2.640	2.675	-0.035	3192174	118.5	112.7	
						RPD = 1.15	
6 Butane							
1	4.353	4.379	-0.026	45961508	264.5	326.4	
2	6.137	6.152	-0.015	39073253	264.5	324.6	
						RPD = 0.55	
7 isobutylene							
1	5.288	5.303	-0.015	29779662	255.4	307.8	
2	5.990	6.002	-0.012	25015424	255.4	308.7	
						RPD = 0.30	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

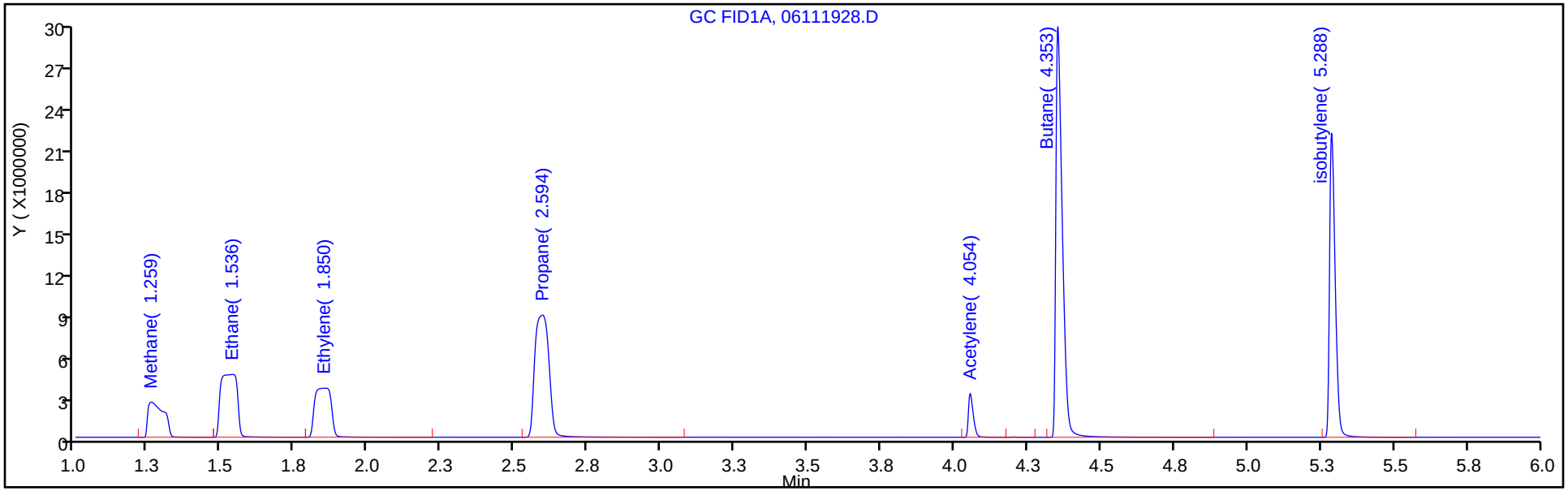
Report Date: 11-Jun-2019 12:58:07 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

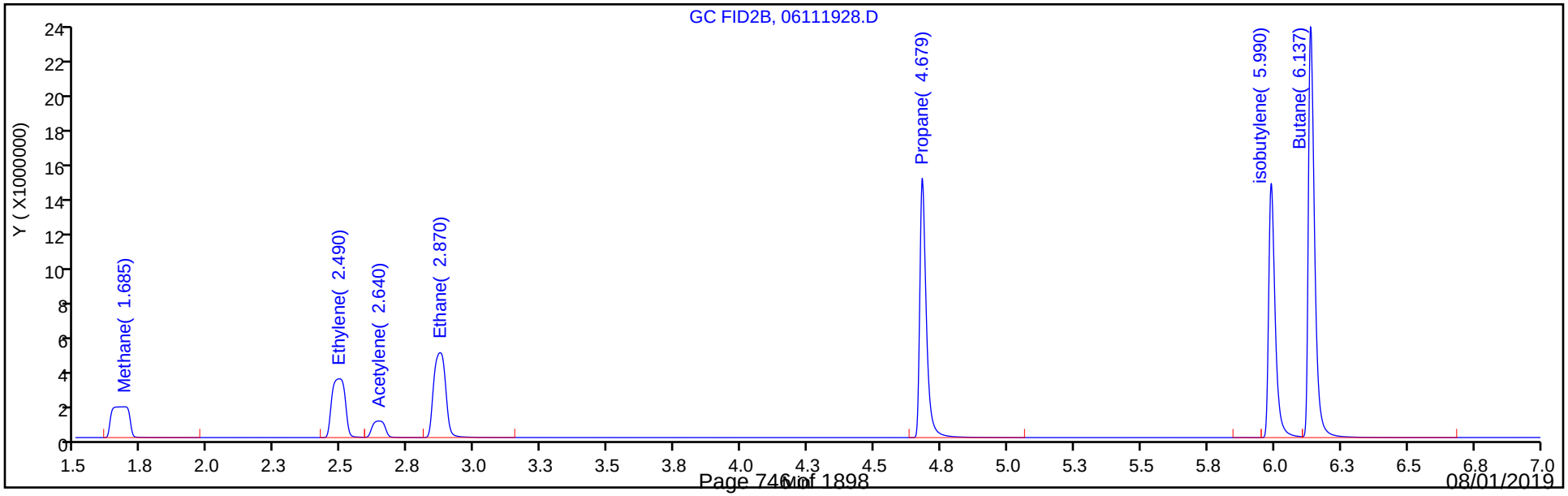
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111928.D

Injection Date:	11-Jun-2019 12:21:22	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	28
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/28 Calibration Date: 06/11/2019 12:21

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111928.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		113048		71.8	73.0	-1.6	20.0
Ethylene	Ave	90007	92558		131	128	2.8	20.0
Acetylene	Ave	28324	26933		113	119	-4.9	20.0
Ethane	Ave	107408	112596		143	137	4.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/28 Calibration Date: 06/11/2019 12:21

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111928.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.66	1.74
Ethylene	2.49	2.48	2.58
Acetylene	2.64	2.60	2.76
Ethane	2.87	2.86	2.96

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111928.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2019 12:21:22 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082723-028
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 11-Jun-2019 12:58:07 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0340

First Level Reviewer: dobranskym Date: 11-Jun-2019 12:32:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.259	1.285	-0.026	9640034	73.0	71.7	
2	1.685	1.703	-0.018	8252855	73.0	71.8	
						RPD = 0.15	
2 Ethane							
1	1.536	1.568	-0.032	18038718	136.9	142.8	
2	2.870	2.907	-0.037	15409455	136.9	143.5	
						RPD = 0.50	
3 Ethylene							
1	1.850	1.888	-0.038	13887473	127.7	131.3	
2	2.490	2.530	-0.040	11816586	127.7	131.3	
						RPD = 0.02	
4 Propane							
1	2.594	2.640	-0.046	29956311	200.7	221.5	
2	4.679	4.694	-0.015	25494743	200.7	222.2	
						RPD = 0.33	
5 Acetylene							
1	4.054	4.064	-0.010	3662859	118.5	114.0	
2	2.640	2.675	-0.035	3192174	118.5	112.7	
						RPD = 1.15	
6 Butane							
1	4.353	4.379	-0.026	45961508	264.5	326.4	
2	6.137	6.152	-0.015	39073253	264.5	324.6	
						RPD = 0.55	
7 isobutylene							
1	5.288	5.303	-0.015	29779662	255.4	307.8	
2	5.990	6.002	-0.012	25015424	255.4	308.7	
						RPD = 0.30	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

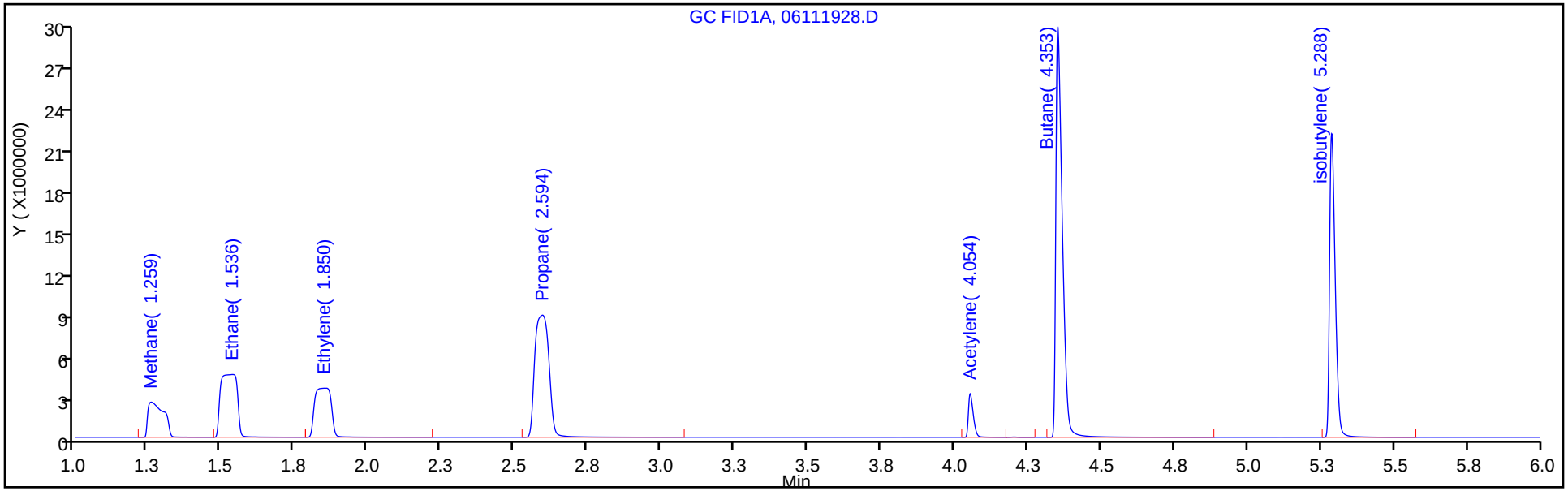
Report Date: 11-Jun-2019 12:58:08 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

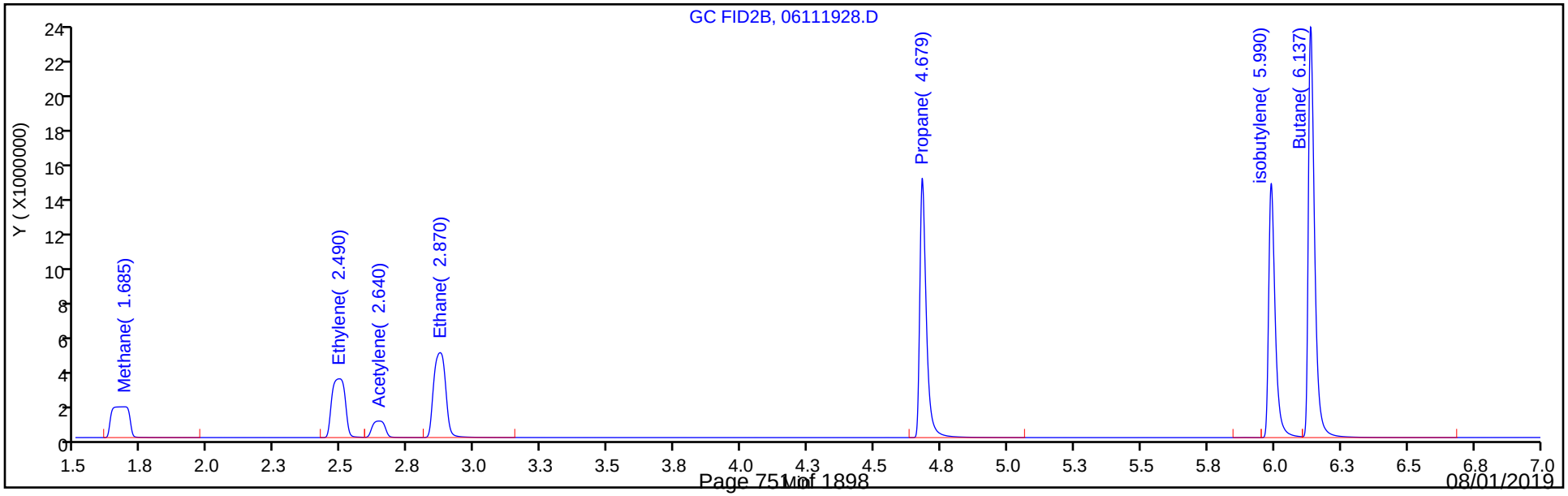
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111928.D

Injection Date:	11-Jun-2019 12:21:22	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	28
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/47 Calibration Date: 06/11/2019 16:36

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111947.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		146884		71.8	65.7	9.3	20.0
Ethane	Ave	126364	146829		143	123	16.2	20.0
Ethylene	Ave	105807	118019		128	115	11.5	20.0
Acetylene	Ave	32129	35071		116	107	9.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/47 Calibration Date: 06/11/2019 16:36

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111947.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.25	1.33
Ethane	1.54	1.52	1.62
Ethylene	1.85	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111947.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2019 16:36:34 ALS Bottle#: 47 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082723-047
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:46:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.262	1.285	-0.023	9650726	65.7	71.8	
2	1.671	1.703	-0.032	8258935	65.7	71.9	
						RPD = 0.12	
2 Ethane							
1	1.541	1.568	-0.027	18084892	123.2	143.1	
2	2.876	2.907	-0.031	15453270	123.2	143.9	
						RPD = 0.53	
3 Ethylene							
1	1.852	1.888	-0.036	13560401	114.9	128.2	
2	2.500	2.530	-0.030	11548953	114.9	128.3	
						RPD = 0.12	
4 Propane							
1	2.601	2.640	-0.039	30583970	180.6	226.1	
2	4.683	4.694	-0.011	25985546	180.6	226.5	
						RPD = 0.17	
5 Acetylene							
1	4.055	4.064	-0.009	3740982	106.7	116.4	
2	2.651	2.675	-0.024	3307581	106.7	116.8	
						RPD = 0.29	
6 Butane							
1	4.355	4.379	-0.024	47869597	238.1	339.9	
2	6.139	6.152	-0.013	40647405	238.1	337.7	
						RPD = 0.67	
7 isobutylene							
1	5.289	5.303	-0.014	29741622	229.8	307.4	
2	5.992	6.002	-0.010	25011941	229.8	308.7	
						RPD = 0.42	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

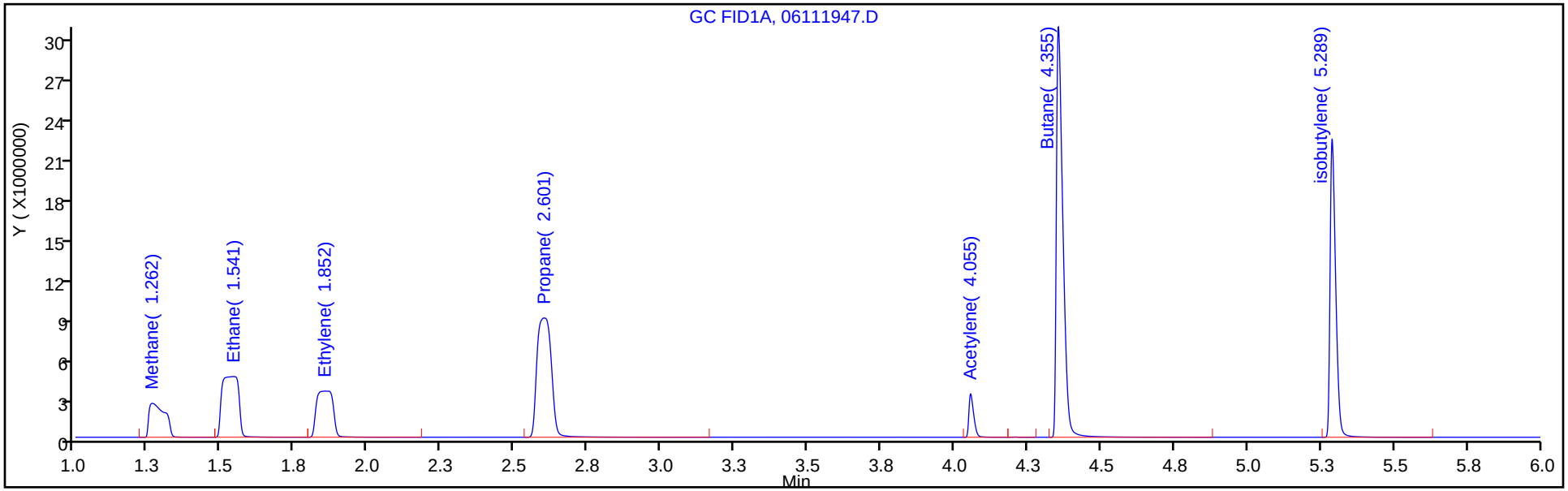
Report Date: 12-Jun-2019 11:59:52 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

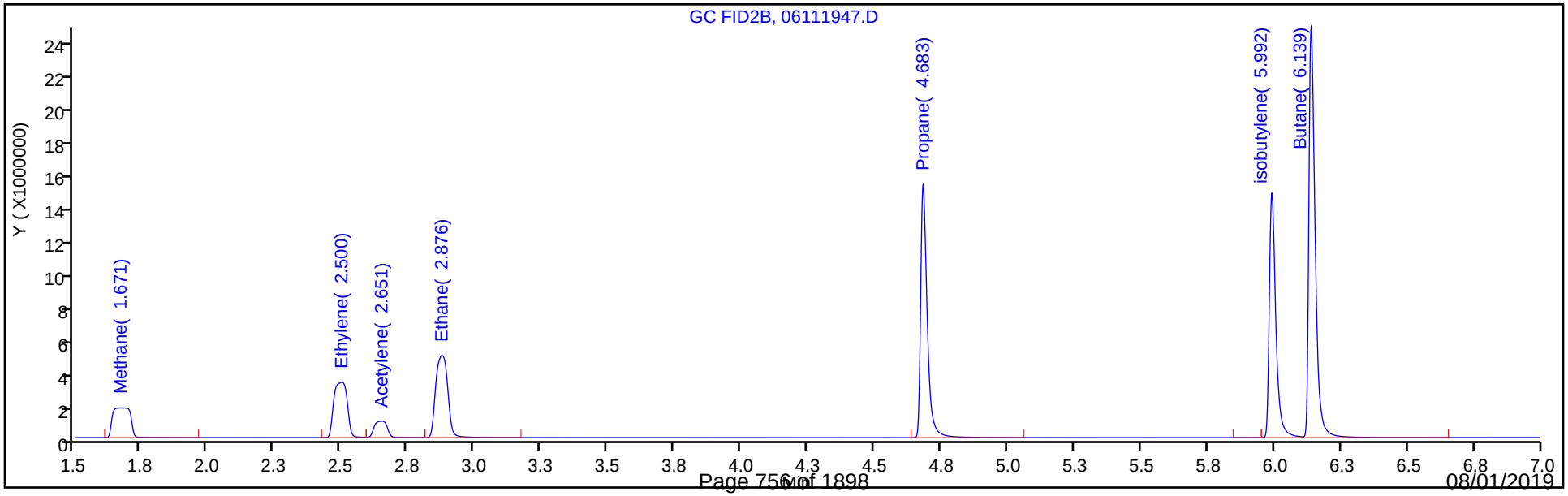
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111947.D

Injection Date:	11-Jun-2019 16:36:34	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	47
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/47 Calibration Date: 06/11/2019 16:36

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111947.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		125701		71.9	65.7	9.4	20.0
Ethylene	Ave	90007	100513		128	115	11.7	20.0
Acetylene	Ave	28324	31008		117	107	9.5	20.0
Ethane	Ave	107408	125463		144	123	16.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/47 Calibration Date: 06/11/2019 16:36

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111947.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.66	1.74
Ethylene	2.50	2.48	2.58
Acetylene	2.65	2.60	2.76
Ethane	2.88	2.86	2.96

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111947.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2019 16:36:34 ALS Bottle#: 47 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082723-047
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 11:59:51 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:46:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.262	1.285	-0.023	9650726	65.7	71.8	
2	1.671	1.703	-0.032	8258935	65.7	71.9	
						RPD = 0.12	
2 Ethane							
1	1.541	1.568	-0.027	18084892	123.2	143.1	
2	2.876	2.907	-0.031	15453270	123.2	143.9	
						RPD = 0.53	
3 Ethylene							
1	1.852	1.888	-0.036	13560401	114.9	128.2	
2	2.500	2.530	-0.030	11548953	114.9	128.3	
						RPD = 0.12	
4 Propane							
1	2.601	2.640	-0.039	30583970	180.6	226.1	
2	4.683	4.694	-0.011	25985546	180.6	226.5	
						RPD = 0.17	
5 Acetylene							
1	4.055	4.064	-0.009	3740982	106.7	116.4	
2	2.651	2.675	-0.024	3307581	106.7	116.8	
						RPD = 0.29	
6 Butane							
1	4.355	4.379	-0.024	47869597	238.1	339.9	
2	6.139	6.152	-0.013	40647405	238.1	337.7	
						RPD = 0.67	
7 isobutylene							
1	5.289	5.303	-0.014	29741622	229.8	307.4	
2	5.992	6.002	-0.010	25011941	229.8	308.7	
						RPD = 0.42	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

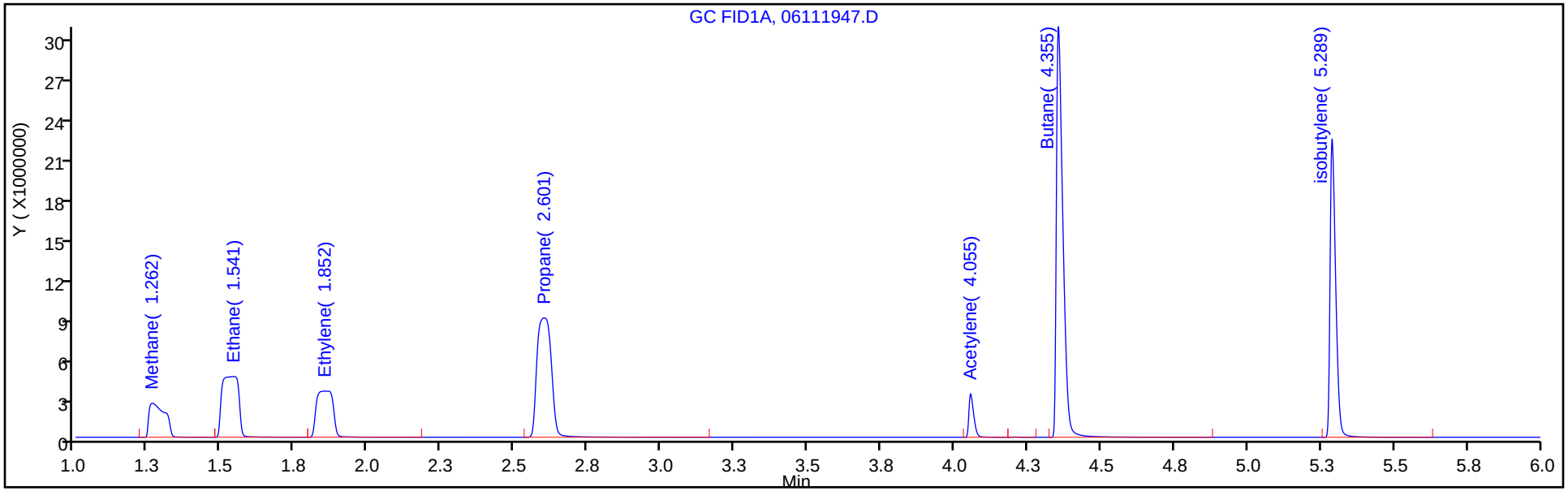
Report Date: 12-Jun-2019 11:59:52 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

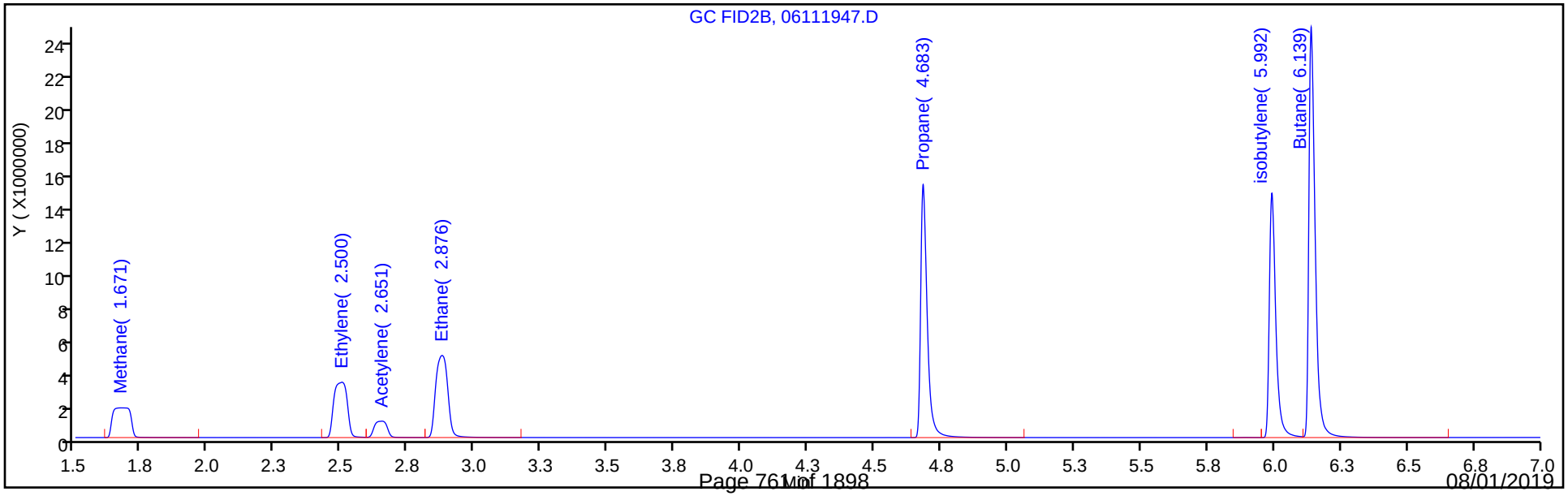
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111947.D

Injection Date:	11-Jun-2019 16:36:34	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	47
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/61 Calibration Date: 06/11/2019 19:43

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111961.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		149112		72.9	65.7	10.9	20.0
Ethane	Ave	126364	146776		143	123	16.2	20.0
Ethylene	Ave	105807	116884		127	115	10.5	20.0
Acetylene	Ave	32129	34788		115	107	8.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/61 Calibration Date: 06/11/2019 19:43

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111961.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.25	1.33
Ethane	1.54	1.52	1.62
Ethylene	1.86	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111961.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2019 19:43:22 ALS Bottle#: 61 Worklist Smp#: 61
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082723-061
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 12:00:28 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:48:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.264	1.285	-0.021	9797085	65.7	72.9	
2	1.669	1.703	-0.034	8391412	65.7	73.0	
						RPD = 0.20	
2 Ethane							
1	1.542	1.568	-0.026	18078359	123.2	143.1	
2	2.879	2.907	-0.028	15454351	123.2	143.9	
						RPD = 0.57	
3 Ethylene							
1	1.862	1.888	-0.026	13429917	114.9	126.9	
2	2.503	2.530	-0.027	11440172	114.9	127.1	
						RPD = 0.14	
4 Propane							
1	2.600	2.640	-0.040	30324645	180.6	224.2	
2	4.684	4.694	-0.010	25766577	180.6	224.6	
						RPD = 0.17	
5 Acetylene							
1	4.055	4.064	-0.009	3710812	106.7	115.5	
2	2.653	2.675	-0.022	3271715	106.7	115.5	
						RPD = 0.01	
6 Butane							
1	4.356	4.379	-0.023	46566728	238.1	330.7	
2	6.141	6.152	-0.011	39581141	238.1	328.8	
						RPD = 0.57	
7 isobutylene							
1	5.290	5.303	-0.013	28382173	229.8	293.3	
2	5.994	6.002	-0.008	23850866	229.8	294.3	
						RPD = 0.34	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

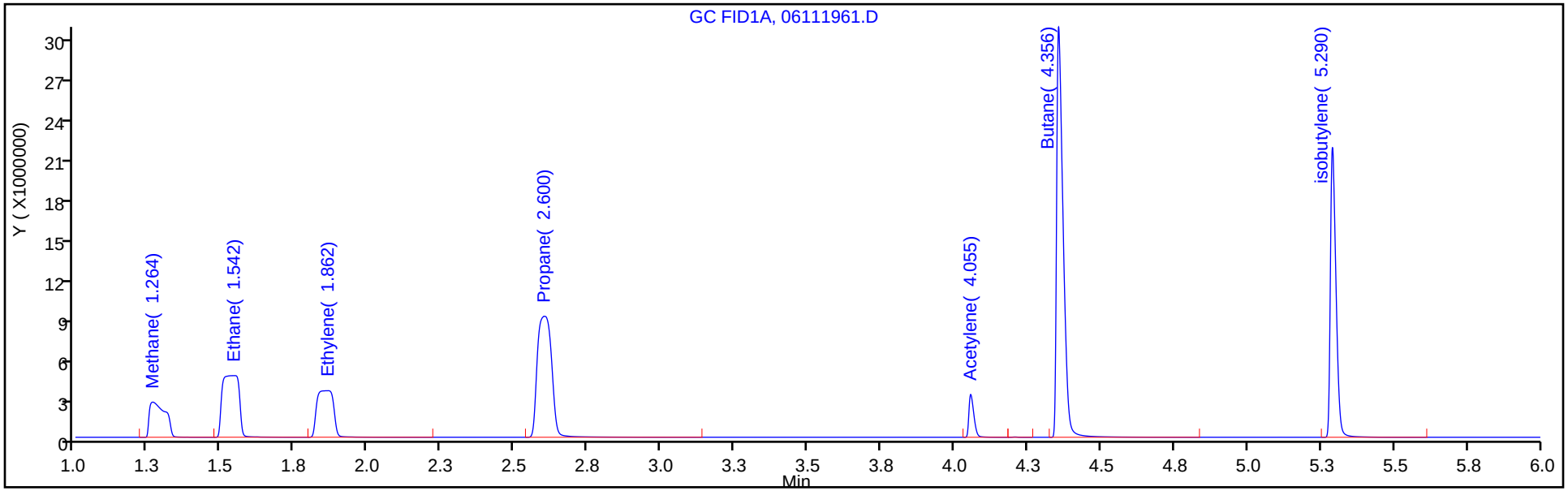
Report Date: 12-Jun-2019 12:00:28 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

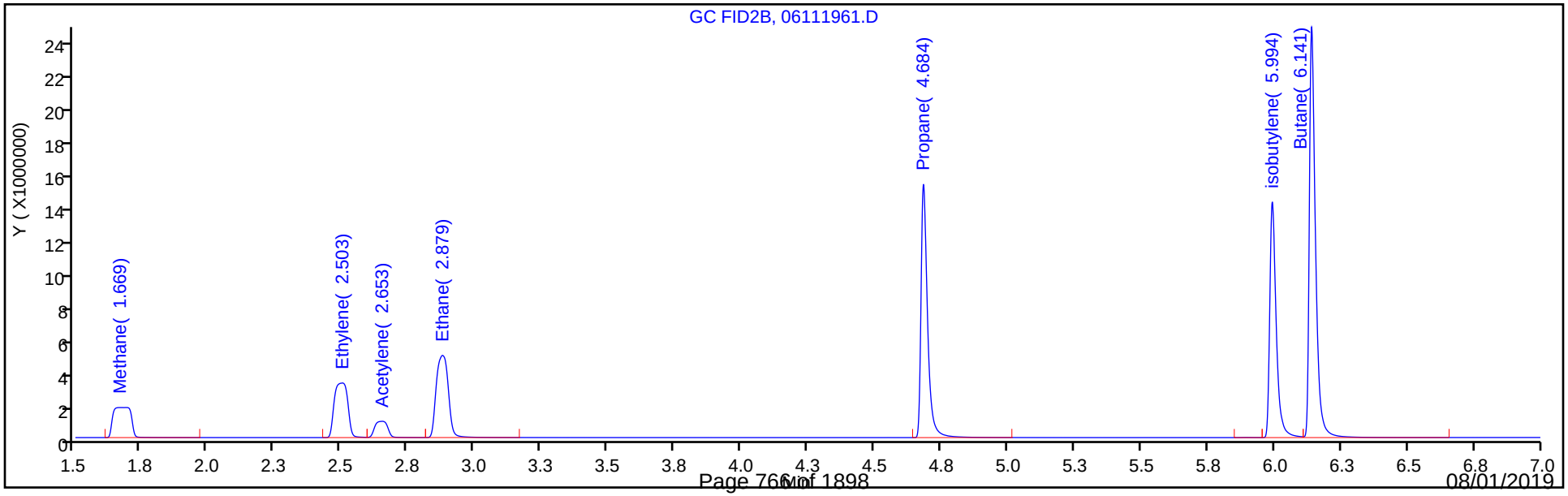
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111961.D

Injection Date:	11-Jun-2019 19:43:22	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	61
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	61
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/61 Calibration Date: 06/11/2019 19:43

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111961.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		127717		73.0	65.7	11.1	20.0
Ethylene	Ave	90007	99566		127	115	10.6	20.0
Acetylene	Ave	28324	30671		116	107	8.3	20.0
Ethane	Ave	107408	125472		144	123	16.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461087/61 Calibration Date: 06/11/2019 19:43

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06111961.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.66	1.74
Ethylene	2.50	2.48	2.58
Acetylene	2.65	2.60	2.76
Ethane	2.88	2.86	2.96

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111961.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Jun-2019 19:43:22 ALS Bottle#: 61 Worklist Smp#: 61
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082723-061
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 12:00:28 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 12-Jun-2019 05:48:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.264	1.285	-0.021	9797085	65.7	72.9	
2	1.669	1.703	-0.034	8391412	65.7	73.0	
						RPD = 0.20	
2 Ethane							
1	1.542	1.568	-0.026	18078359	123.2	143.1	
2	2.879	2.907	-0.028	15454351	123.2	143.9	
						RPD = 0.57	
3 Ethylene							
1	1.862	1.888	-0.026	13429917	114.9	126.9	
2	2.503	2.530	-0.027	11440172	114.9	127.1	
						RPD = 0.14	
4 Propane							
1	2.600	2.640	-0.040	30324645	180.6	224.2	
2	4.684	4.694	-0.010	25766577	180.6	224.6	
						RPD = 0.17	
5 Acetylene							
1	4.055	4.064	-0.009	3710812	106.7	115.5	
2	2.653	2.675	-0.022	3271715	106.7	115.5	
						RPD = 0.01	
6 Butane							
1	4.356	4.379	-0.023	46566728	238.1	330.7	
2	6.141	6.152	-0.011	39581141	238.1	328.8	
						RPD = 0.57	
7 isobutylene							
1	5.290	5.303	-0.013	28382173	229.8	293.3	
2	5.994	6.002	-0.008	23850866	229.8	294.3	
						RPD = 0.34	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

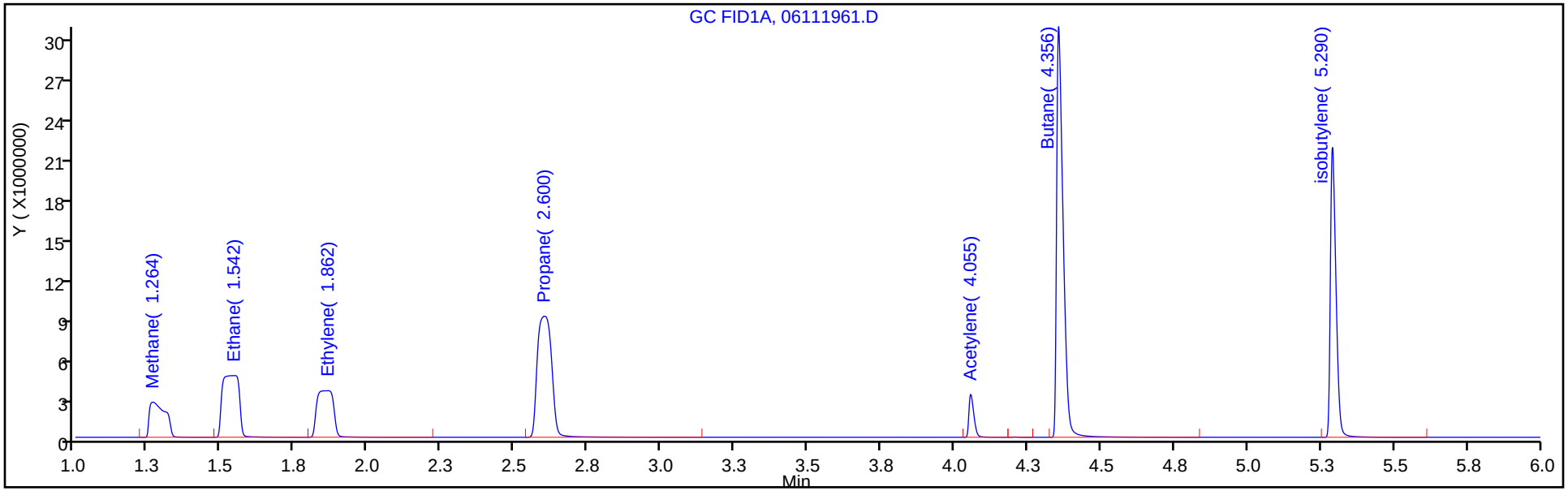
Report Date: 12-Jun-2019 12:00:29 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

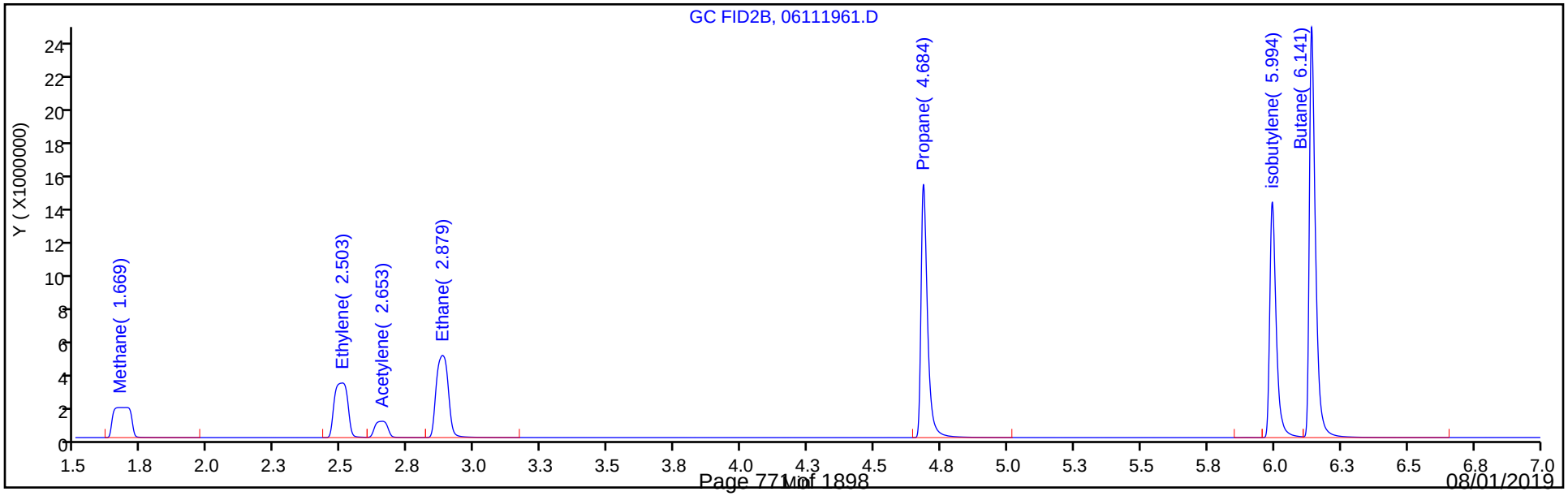
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111961.D

Injection Date:	11-Jun-2019 19:43:22	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	61
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	61
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-461235/1 Calibration Date: 06/12/2019 07:14

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121901.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		117905		64.0	73.0	-12.3	20.0
Ethane	Ave	126364	116692		126	137	-7.7	20.0
Ethylene	Ave	105807	103839		125	128	-1.9	20.0
Acetylene	Ave	32129	29980		111	119	-6.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-461235/1 Calibration Date: 06/12/2019 07:14

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.28	1.24	1.32
Ethane	1.56	1.51	1.61
Ethylene	1.89	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121901.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 12-Jun-2019 07:14:26 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCVRT
Misc. Info.: 280-0082760-001
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 07:26:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.280	1.280	0.000	8607436	73.0	64.0	
2	1.703	1.703	0.000	7368227	73.0	64.1	
						RPD = 0.15	
2 Ethane							
1	1.562	1.562	0.000	15969985	136.9	126.4	
2	2.896	2.896	0.000	13648440	136.9	127.1	
						RPD = 0.55	
3 Ethylene							
1	1.885	1.885	0.000	13256832	127.7	125.3	
2	2.524	2.524	0.000	11266883	127.7	125.2	
						RPD = 0.09	
4 Propane							
1	2.633	2.633	0.000	25026807	200.7	185.0	
2	4.690	4.690	0.000	21227348	200.7	185.0	
						RPD = 0.00	
5 Acetylene							
1	4.064	4.064	0.000	3553265	118.5	110.6	
2	2.669	2.669	0.000	3147259	118.5	111.1	
						RPD = 0.47	
6 Butane							
1	4.377	4.377	0.000	34726503	264.5	246.6	
2	6.149	6.149	0.000	29500740	264.5	245.1	
						RPD = 0.63	
7 isobutylene							
1	5.303	5.303	0.000	24935737	255.4	257.7	
2	6.000	6.000	0.000	20928596	255.4	258.3	
						RPD = 0.22	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

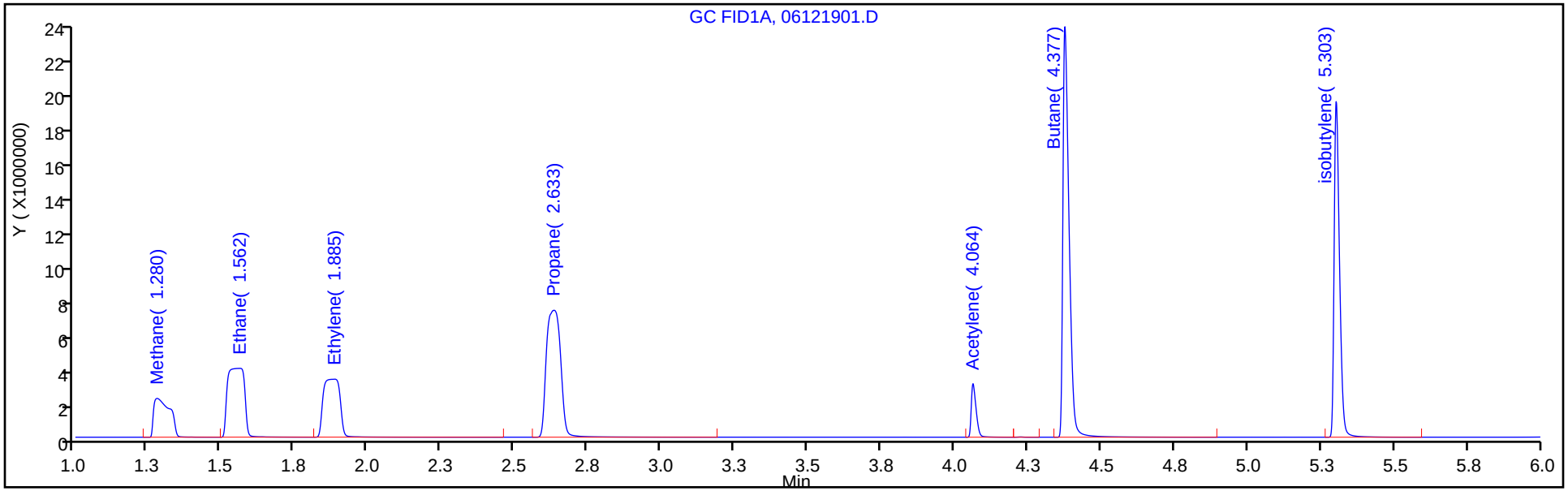
Report Date: 13-Jun-2019 10:15:25 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

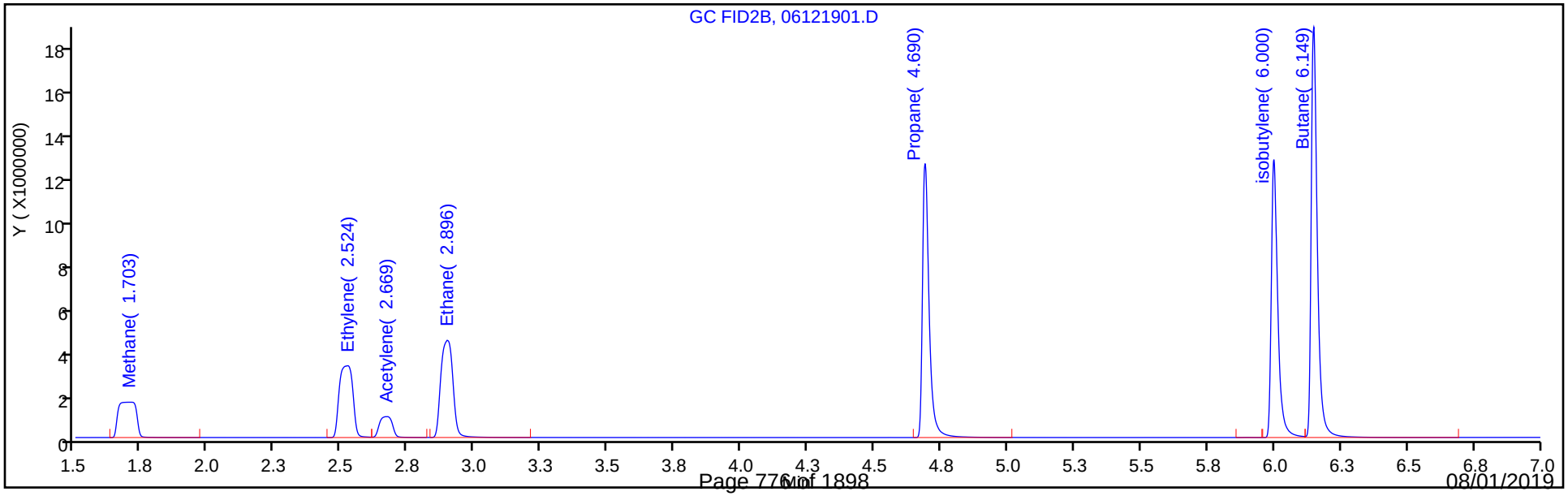
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121901.D

Injection Date:	12-Jun-2019 07:14:26	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCVRT			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-461235/1 Calibration Date: 06/12/2019 07:14

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121901.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		100930		64.1	73.0	-12.2	20.0
Ethylene	Ave	90007	88252		125	128	-1.9	20.0
Acetylene	Ave	28324	26554		111	119	-6.2	20.0
Ethane	Ave	107408	99729		127	137	-7.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-461235/1 Calibration Date: 06/12/2019 07:14

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.70	1.66	1.74
Ethylene	2.52	2.47	2.57
Acetylene	2.67	2.59	2.75
Ethane	2.90	2.85	2.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121901.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 12-Jun-2019 07:14:26 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCVRT
Misc. Info.: 280-0082760-001
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 07:26:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.280	1.280	0.000	8607436	73.0	64.0	
2	1.703	1.703	0.000	7368227	73.0	64.1	
						RPD = 0.15	
2 Ethane							
1	1.562	1.562	0.000	15969985	136.9	126.4	
2	2.896	2.896	0.000	13648440	136.9	127.1	
						RPD = 0.55	
3 Ethylene							
1	1.885	1.885	0.000	13256832	127.7	125.3	
2	2.524	2.524	0.000	11266883	127.7	125.2	
						RPD = 0.09	
4 Propane							
1	2.633	2.633	0.000	25026807	200.7	185.0	
2	4.690	4.690	0.000	21227348	200.7	185.0	
						RPD = 0.00	
5 Acetylene							
1	4.064	4.064	0.000	3553265	118.5	110.6	
2	2.669	2.669	0.000	3147259	118.5	111.1	
						RPD = 0.47	
6 Butane							
1	4.377	4.377	0.000	34726503	264.5	246.6	
2	6.149	6.149	0.000	29500740	264.5	245.1	
						RPD = 0.63	
7 isobutylene							
1	5.303	5.303	0.000	24935737	255.4	257.7	
2	6.000	6.000	0.000	20928596	255.4	258.3	
						RPD = 0.22	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

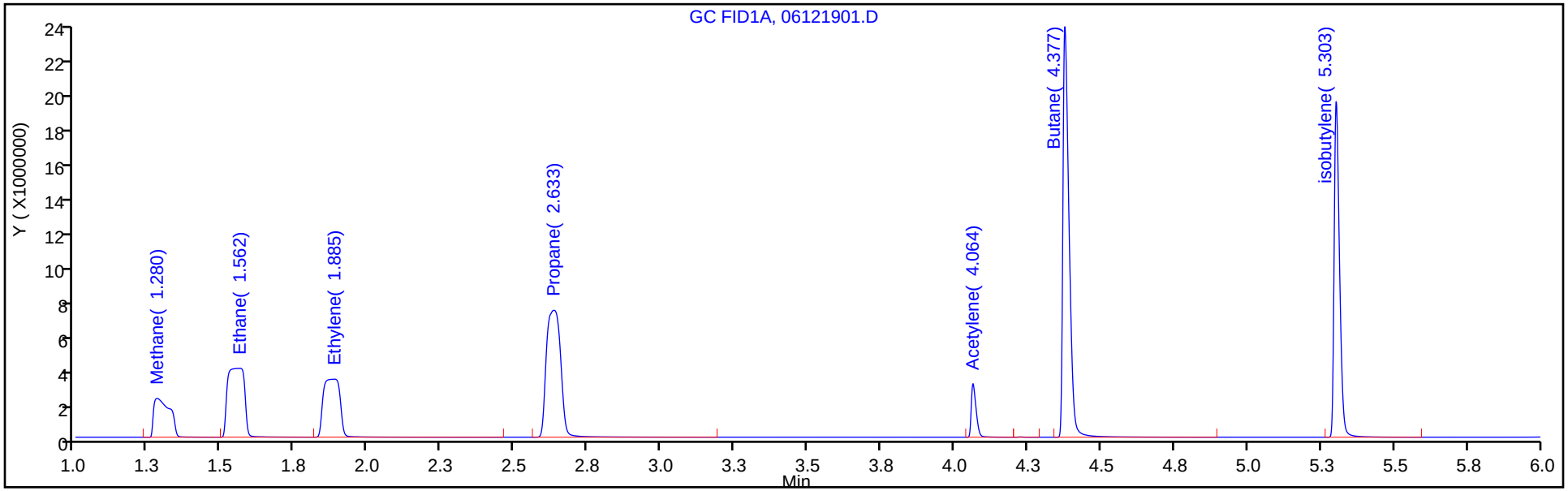
Report Date: 13-Jun-2019 10:15:25 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

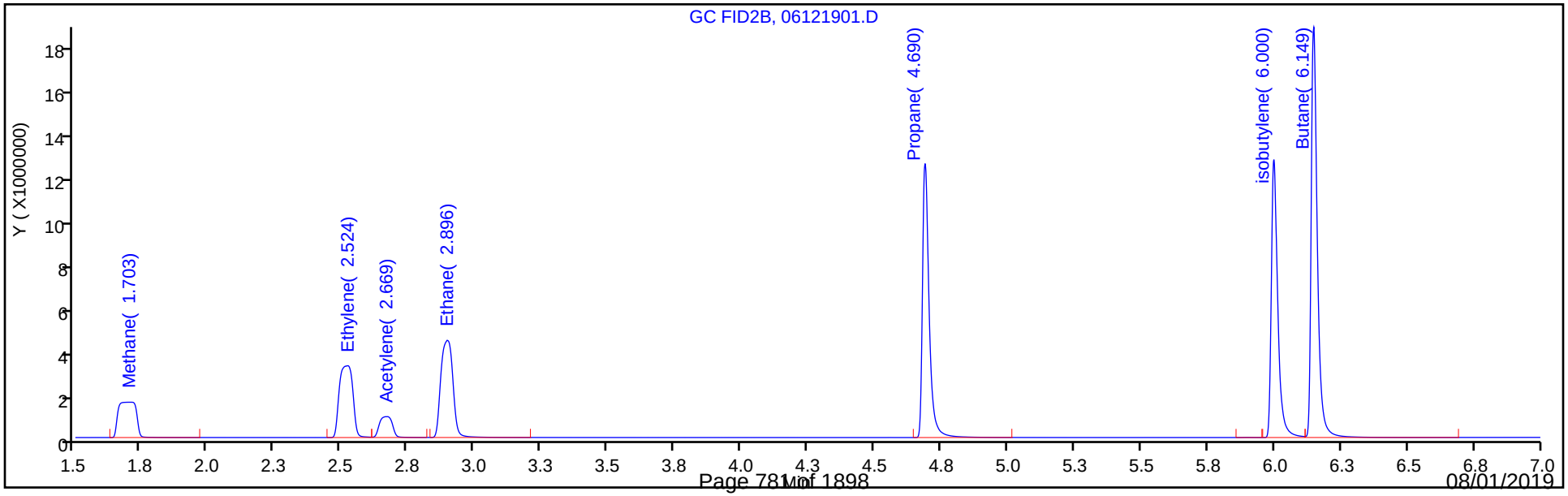
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121901.D

Injection Date:	12-Jun-2019 07:14:26	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCVRT			Worklist Smp#:	1
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461235/16 Calibration Date: 06/12/2019 10:45

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121916.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		133139		72.3	73.0	-1.0	20.0
Ethane	Ave	126364	132406		143	137	4.8	20.0
Ethylene	Ave	105807	112194		135	128	6.0	20.0
Acetylene	Ave	32129	30693		113	119	-4.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461235/16 Calibration Date: 06/12/2019 10:45

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121916.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.24	1.32
Ethane	1.54	1.51	1.61
Ethylene	1.86	1.84	1.94
Acetylene	4.06	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121916.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2019 10:45:14 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082760-016
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:16:00 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 10:55:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.265	1.280	-0.015	9719602	73.0	72.3	
2	1.688	1.703	-0.015	8351495	73.0	72.7	
						RPD = 0.52	
2 Ethane							
1	1.543	1.562	-0.019	18120499	136.9	143.4	
2	2.881	2.896	-0.015	15503365	136.9	144.3	
						RPD = 0.65	
3 Ethylene							
1	1.862	1.885	-0.023	14323376	127.7	135.4	
2	2.503	2.524	-0.021	12204011	127.7	135.6	
						RPD = 0.16	
4 Propane							
1	2.601	2.633	-0.032	29059122	200.7	214.8	
2	4.684	4.690	-0.006	24735462	200.7	215.6	
						RPD = 0.35	
5 Acetylene							
1	4.055	4.064	-0.009	3637834	118.5	113.2	
2	2.653	2.669	-0.016	3202930	118.5	113.1	
						RPD = 0.13	
6 Butane							
1	4.356	4.377	-0.021	42623299	264.5	302.7	
2	6.141	6.149	-0.008	36244828	264.5	301.1	
						RPD = 0.53	
7 isobutylene							
1	5.289	5.303	-0.014	28657229	255.4	296.2	
2	5.993	6.000	-0.007	24067401	255.4	297.0	
						RPD = 0.28	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

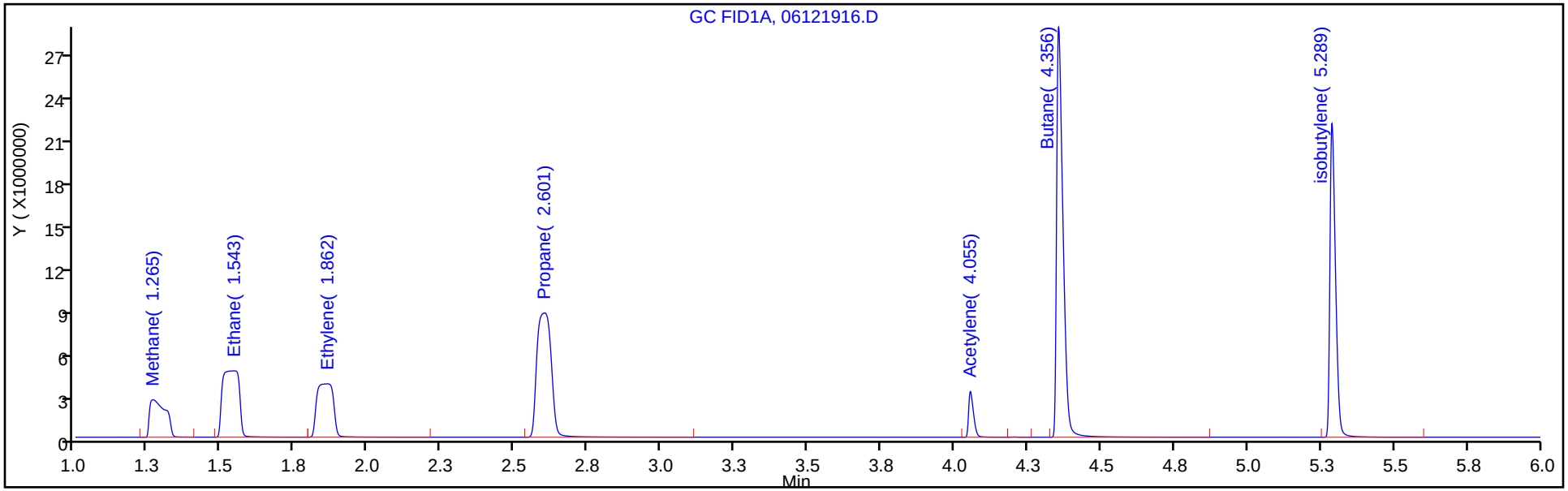
Report Date: 13-Jun-2019 10:16:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

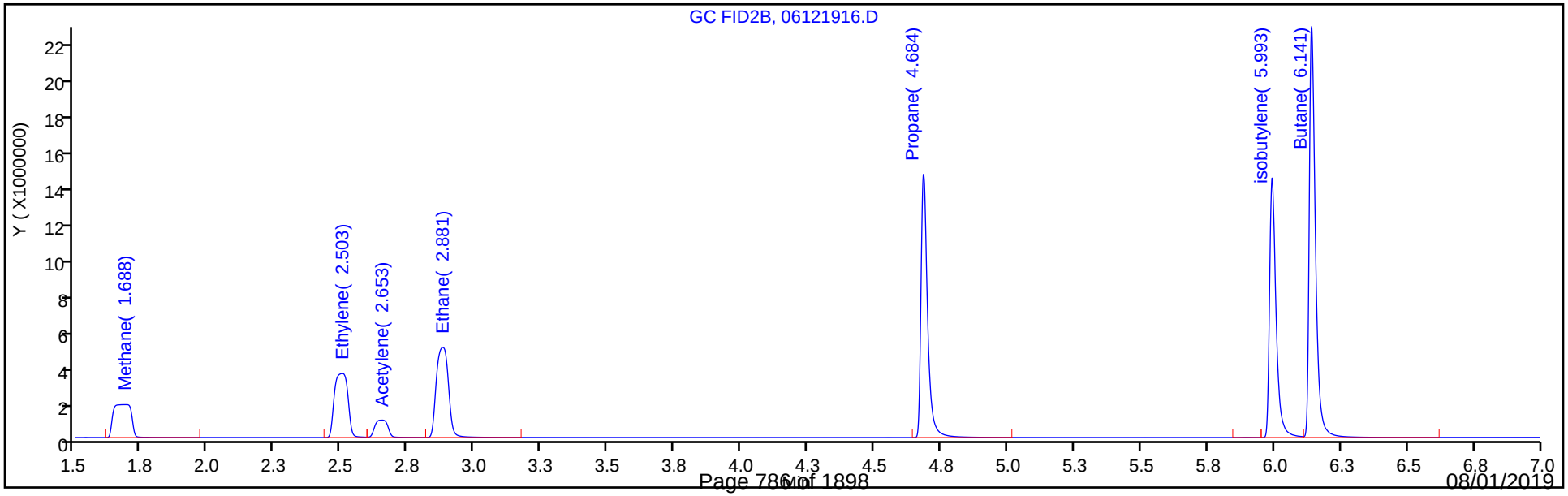
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121916.D

Injection Date:	12-Jun-2019 10:45:14	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	16
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461235/16 Calibration Date: 06/12/2019 10:45

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121916.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		114399		72.7	73.0	-0.4	20.0
Ethylene	Ave	90007	95593		136	128	6.2	20.0
Acetylene	Ave	28324	27024		113	119	-4.6	20.0
Ethane	Ave	107408	113283		144	137	5.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461235/16 Calibration Date: 06/12/2019 10:45

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121916.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.66	1.74
Ethylene	2.50	2.47	2.57
Acetylene	2.65	2.59	2.75
Ethane	2.88	2.85	2.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121916.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2019 10:45:14 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082760-016
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:16:00 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 10:55:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.265	1.280	-0.015	9719602	73.0	72.3	
2	1.688	1.703	-0.015	8351495	73.0	72.7	
						RPD = 0.52	
2 Ethane							
1	1.543	1.562	-0.019	18120499	136.9	143.4	
2	2.881	2.896	-0.015	15503365	136.9	144.3	
						RPD = 0.65	
3 Ethylene							
1	1.862	1.885	-0.023	14323376	127.7	135.4	
2	2.503	2.524	-0.021	12204011	127.7	135.6	
						RPD = 0.16	
4 Propane							
1	2.601	2.633	-0.032	29059122	200.7	214.8	
2	4.684	4.690	-0.006	24735462	200.7	215.6	
						RPD = 0.35	
5 Acetylene							
1	4.055	4.064	-0.009	3637834	118.5	113.2	
2	2.653	2.669	-0.016	3202930	118.5	113.1	
						RPD = 0.13	
6 Butane							
1	4.356	4.377	-0.021	42623299	264.5	302.7	
2	6.141	6.149	-0.008	36244828	264.5	301.1	
						RPD = 0.53	
7 isobutylene							
1	5.289	5.303	-0.014	28657229	255.4	296.2	
2	5.993	6.000	-0.007	24067401	255.4	297.0	
						RPD = 0.28	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

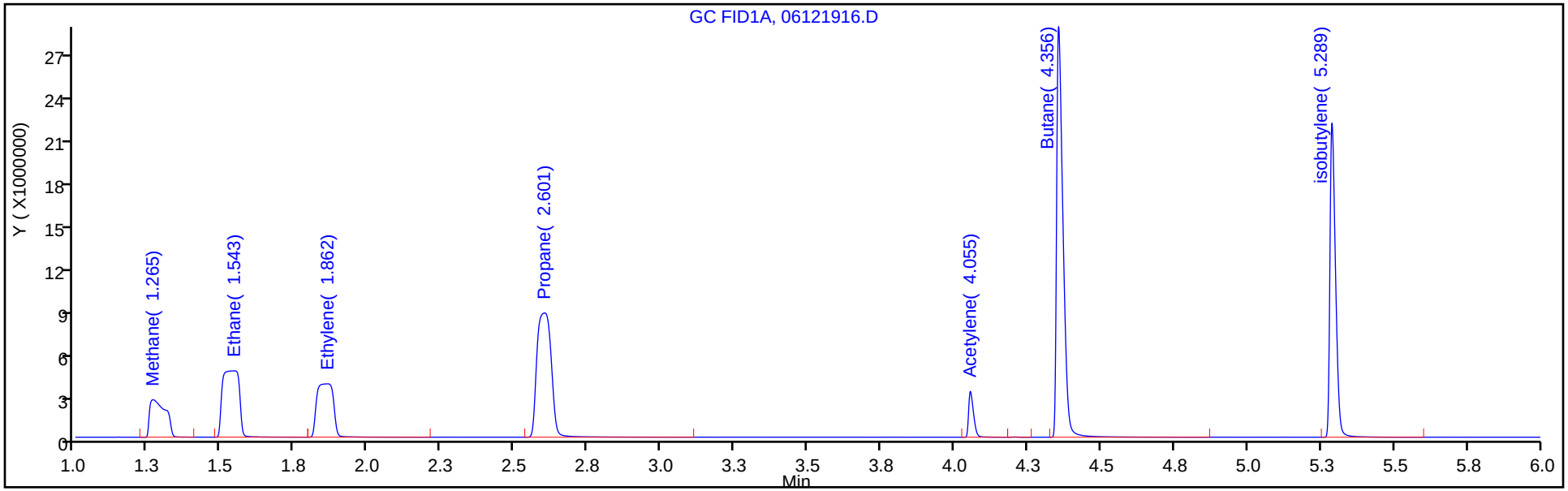
Report Date: 13-Jun-2019 10:16:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

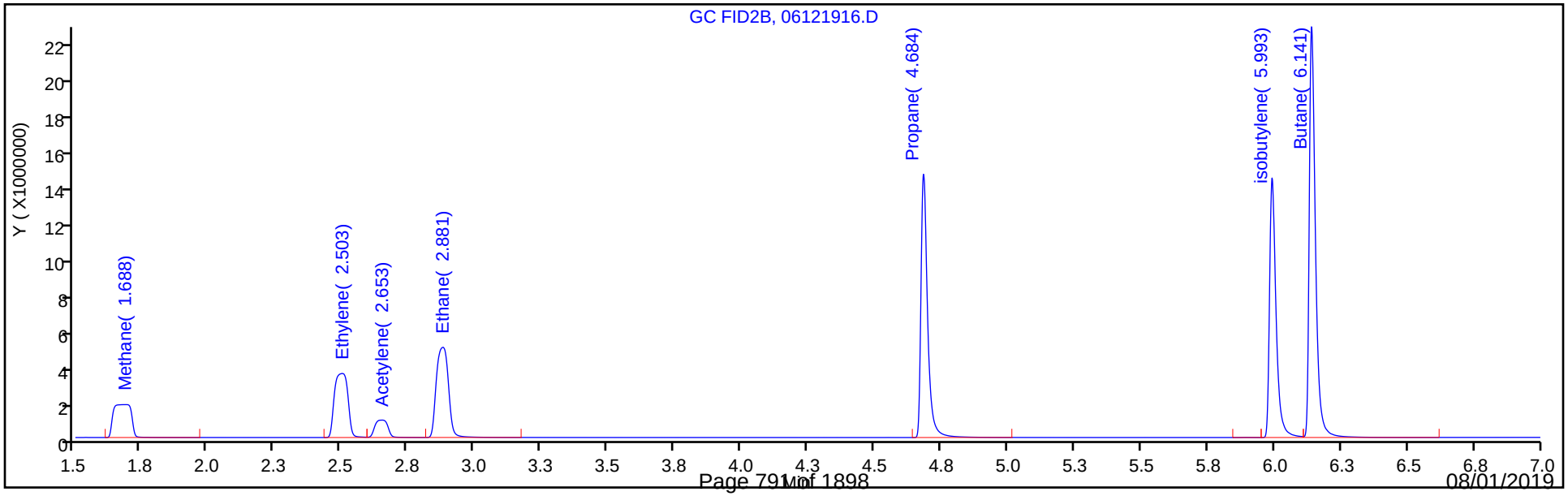
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121916.D

Injection Date:	12-Jun-2019 10:45:14	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	16
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461235/28 Calibration Date: 06/12/2019 13:52

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121928.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		134555		73.1	73.0	0.1	20.0
Ethane	Ave	126364	133490		145	137	5.6	20.0
Ethylene	Ave	105807	109914		133	128	3.9	20.0
Acetylene	Ave	32129	30127		111	119	-6.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461235/28 Calibration Date: 06/12/2019 13:52

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121928.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.24	1.32
Ethane	1.54	1.51	1.61
Ethylene	1.86	1.84	1.94
Acetylene	4.05	3.98	4.14

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121928.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2019 13:52:38 ALS Bottle#: 30 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082760-028
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:16:22 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 14:04:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.264	1.280	-0.016	9822968	73.0	73.1	
2	1.694	1.703	-0.009	8409929	73.0	73.2	
						RPD = 0.16	
2 Ethane							
1	1.540	1.562	-0.022	18268911	136.9	144.6	
2	2.879	2.896	-0.017	15609652	136.9	145.3	
						RPD = 0.52	
3 Ethylene							
1	1.858	1.885	-0.027	14032376	127.7	132.6	
2	2.502	2.524	-0.022	11948026	127.7	132.7	
						RPD = 0.09	
4 Propane							
1	2.596	2.633	-0.037	29936076	200.7	221.3	
2	4.683	4.690	-0.007	25456655	200.7	221.9	
						RPD = 0.25	
5 Acetylene							
1	4.053	4.064	-0.011	3570713	118.5	111.1	
2	2.647	2.669	-0.022	3146564	118.5	111.1	
						RPD = 0.04	
6 Butane							
1	4.353	4.377	-0.024	45764452	264.5	325.0	
2	6.140	6.149	-0.009	38816473	264.5	322.5	
						RPD = 0.78	
7 isobutylene							
1	5.287	5.303	-0.016	29507633	255.4	305.0	
2	5.992	6.000	-0.008	24768469	255.4	305.7	
						RPD = 0.23	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

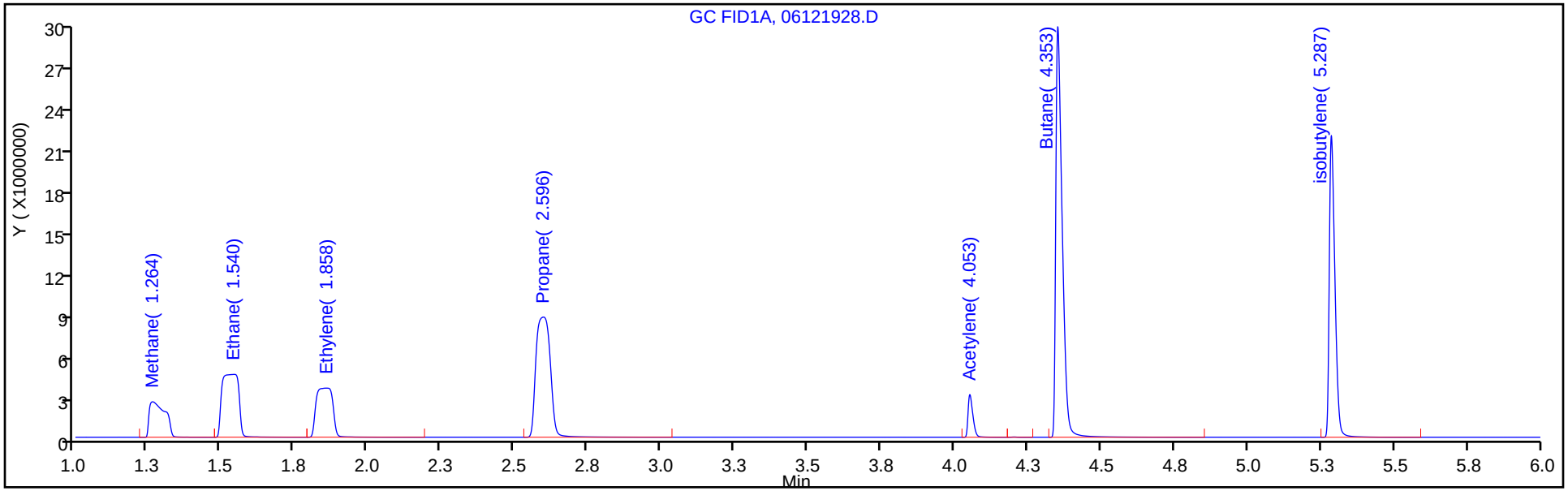
Report Date: 13-Jun-2019 10:16:23 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

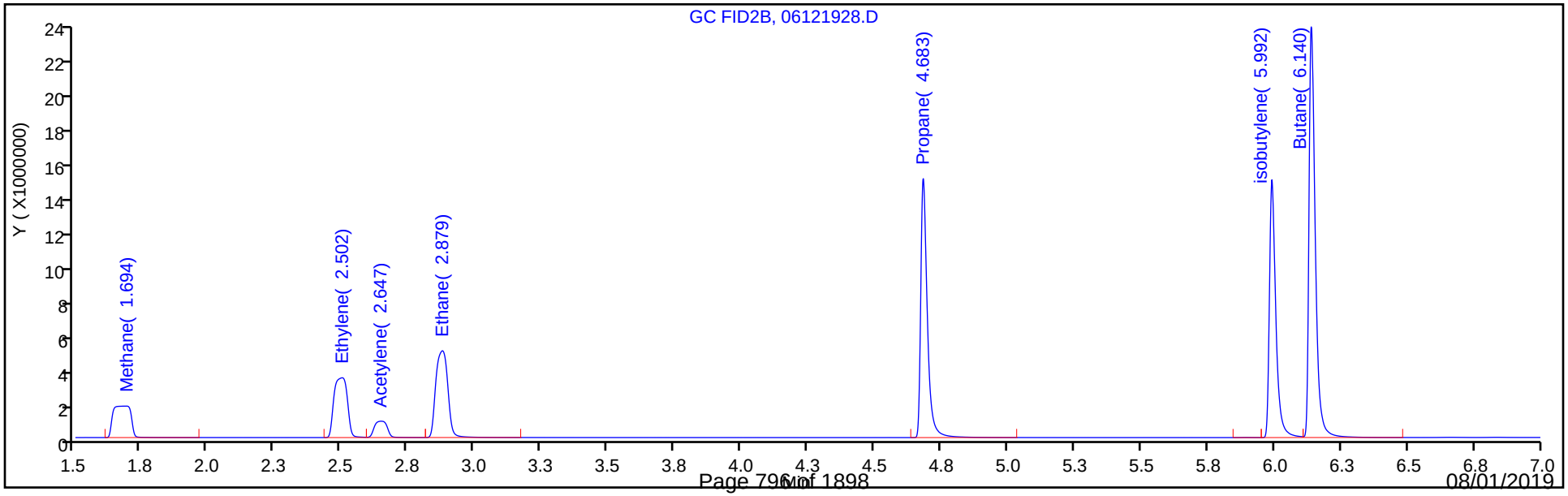
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121928.D

Injection Date:	12-Jun-2019 13:52:38	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	28
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461235/28 Calibration Date: 06/12/2019 13:52

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121928.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		115199		73.2	73.0	0.3	20.0
Ethylene	Ave	90007	93588		133	128	4.0	20.0
Acetylene	Ave	28324	26548		111	119	-6.3	20.0
Ethane	Ave	107408	114059		145	137	6.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461235/28 Calibration Date: 06/12/2019 13:52

Instrument ID: VGC_J Calib Start Date: 04/15/2019 10:23

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 04/15/2019 12:11

Lab File ID: 06121928.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.66	1.74
Ethylene	2.50	2.47	2.57
Acetylene	2.65	2.59	2.75
Ethane	2.88	2.85	2.95

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121928.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2019 13:52:38 ALS Bottle#: 30 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0082760-028
Operator ID: MD Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:16:22 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 14:04:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.264	1.280	-0.016	9822968	73.0	73.1	
2	1.694	1.703	-0.009	8409929	73.0	73.2	
						RPD = 0.16	
2 Ethane							
1	1.540	1.562	-0.022	18268911	136.9	144.6	
2	2.879	2.896	-0.017	15609652	136.9	145.3	
						RPD = 0.52	
3 Ethylene							
1	1.858	1.885	-0.027	14032376	127.7	132.6	
2	2.502	2.524	-0.022	11948026	127.7	132.7	
						RPD = 0.09	
4 Propane							
1	2.596	2.633	-0.037	29936076	200.7	221.3	
2	4.683	4.690	-0.007	25456655	200.7	221.9	
						RPD = 0.25	
5 Acetylene							
1	4.053	4.064	-0.011	3570713	118.5	111.1	
2	2.647	2.669	-0.022	3146564	118.5	111.1	
						RPD = 0.04	
6 Butane							
1	4.353	4.377	-0.024	45764452	264.5	325.0	
2	6.140	6.149	-0.009	38816473	264.5	322.5	
						RPD = 0.78	
7 isobutylene							
1	5.287	5.303	-0.016	29507633	255.4	305.0	
2	5.992	6.000	-0.008	24768469	255.4	305.7	
						RPD = 0.23	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

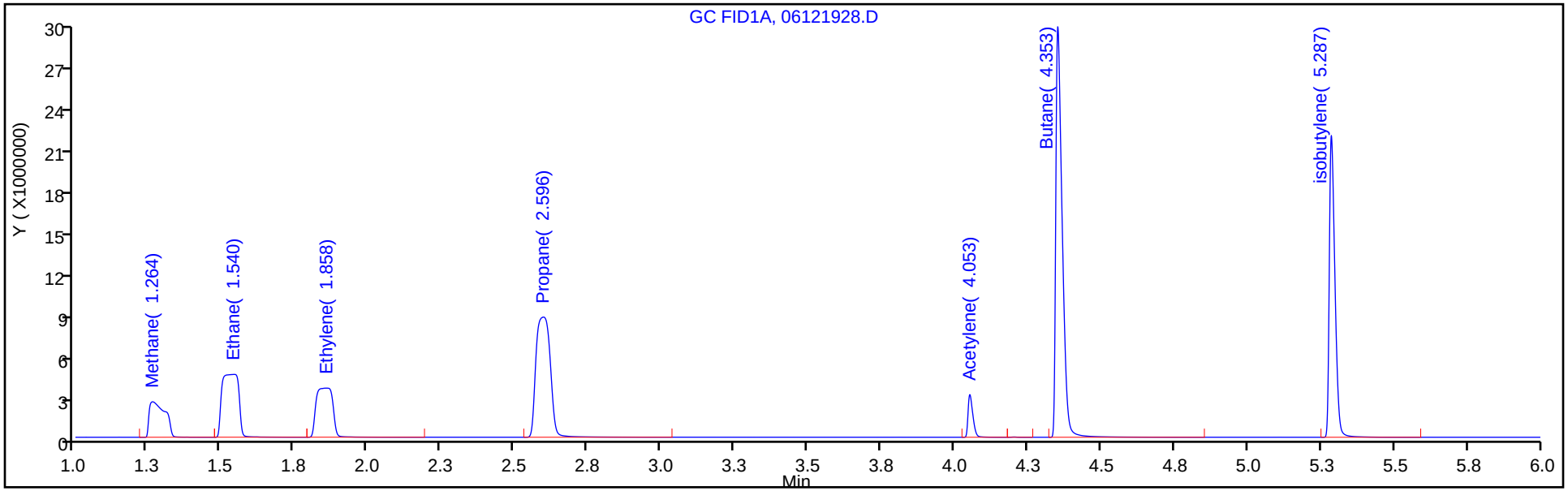
Report Date: 13-Jun-2019 10:16:23 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

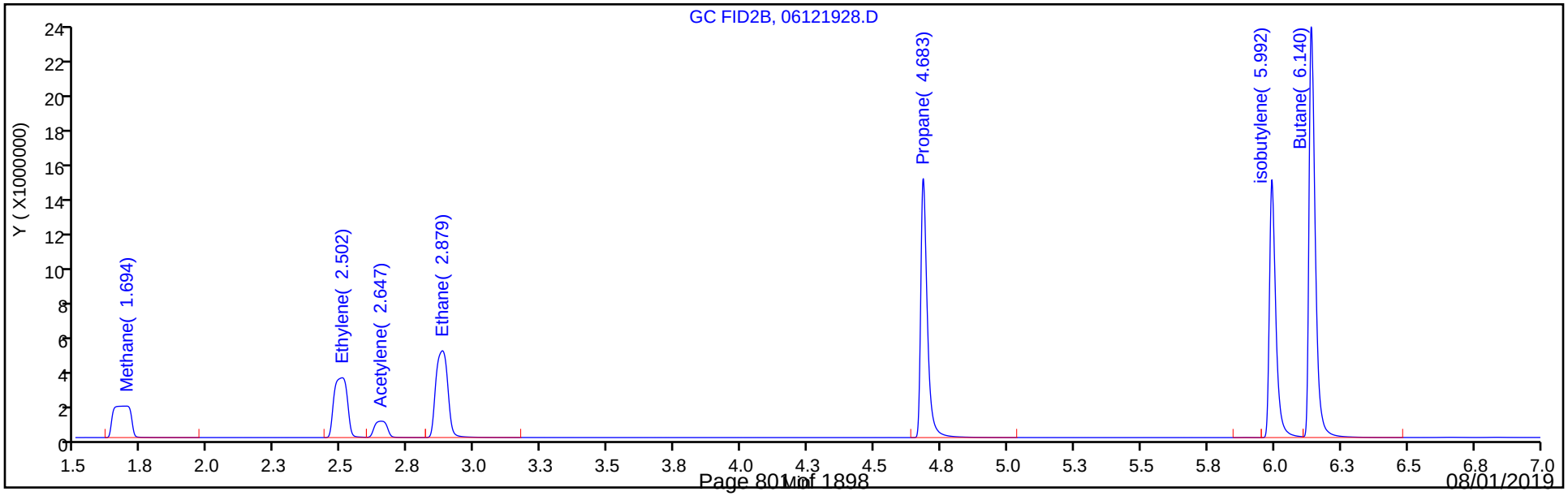
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121928.D

Injection Date:	12-Jun-2019 13:52:38	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	CCV			Worklist Smp#:	28
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-461087/31

Matrix: Water Lab File ID: 06111931.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 13:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111931.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	11-Jun-2019 13:01:34	ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	MB				
Misc. Info.:	280-0082723-031				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	12-Jun-2019 05:52:22	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0334				
First Level Reviewer: dobranskym		Date:	11-Jun-2019 13:54:36		

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1		1.285				ND	
2		1.703					
2 Ethane							
1		1.568				ND	
2		2.907					
3 Ethylene							
1		1.888				ND	
2		2.530					
4 Propane							
1		2.640				ND	
2		4.694					
5 Acetylene							
1		4.064				ND	
2		2.675					
6 Butane							
1		4.379				ND	
2		6.152					
7 isobutylene							
1		5.303				ND	
2		6.002					

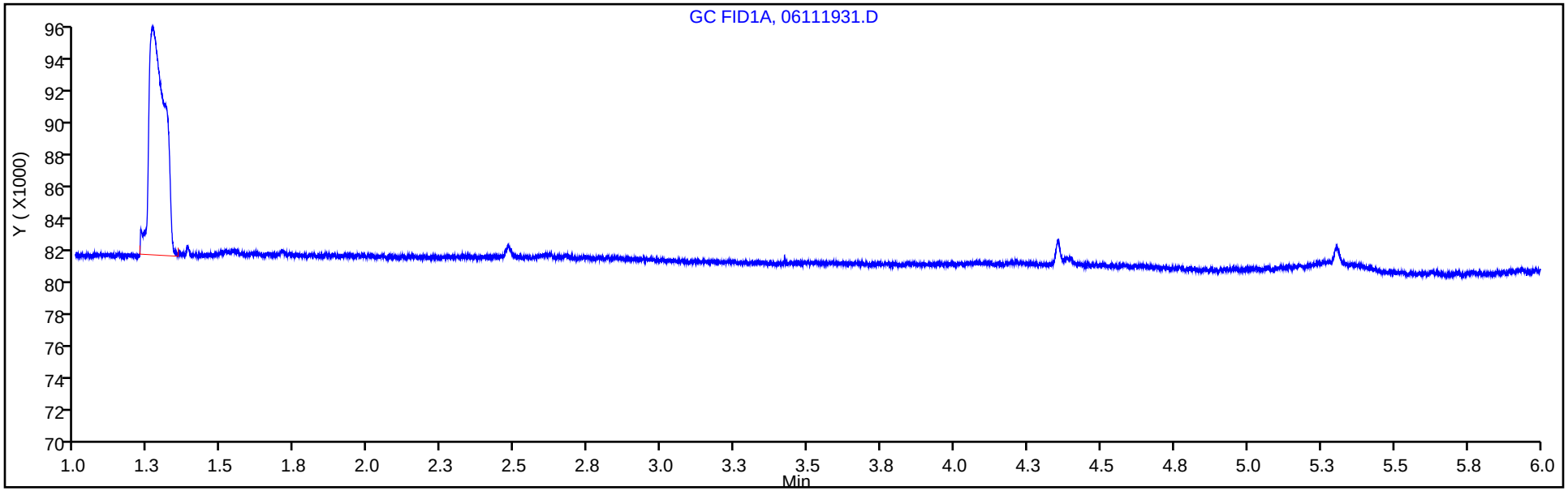
Report Date: 12-Jun-2019 11:59:31 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

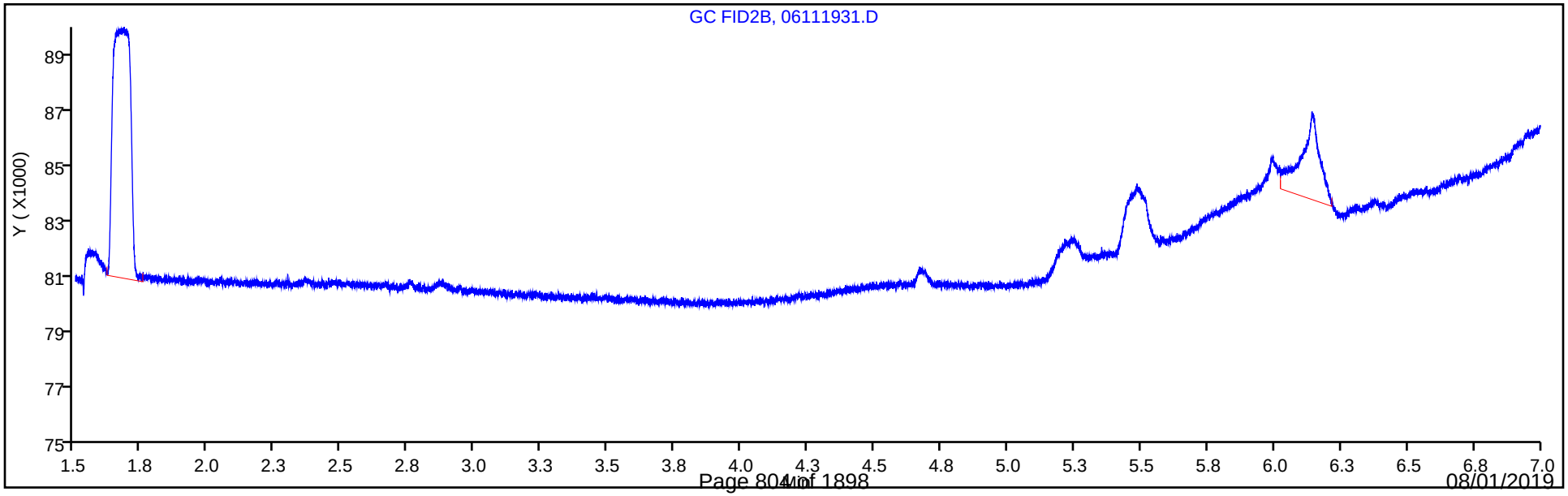
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111931.D

Injection Date:	11-Jun-2019 13:01:34	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	MB			Worklist Smp#:	31
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-461235/4

Matrix: Water Lab File ID: 06121904.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 08:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121904.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	12-Jun-2019 08:05:37	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	MB				
Misc. Info.:	280-0082760-004				
Operator ID:	MD	Instrument ID:	VGC_J		
Method:	\\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	13-Jun-2019 10:15:24	Calib Date:	15-Apr-2019 12:11:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX0315				
First Level Reviewer: dobranskym		Date:	12-Jun-2019 09:14:54		

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1		1.280				ND	
2		1.703					
2 Ethane							
1		1.562				ND	
2		2.896					
3 Ethylene							
1		1.885				ND	
2		2.524					
4 Propane							
1		2.633				ND	
2		4.690					
5 Acetylene							
1		4.064				ND	
2		2.669					
6 Butane							
1		4.377				ND	
2		6.149					
7 isobutylene							
1		5.303				ND	
2		6.000					

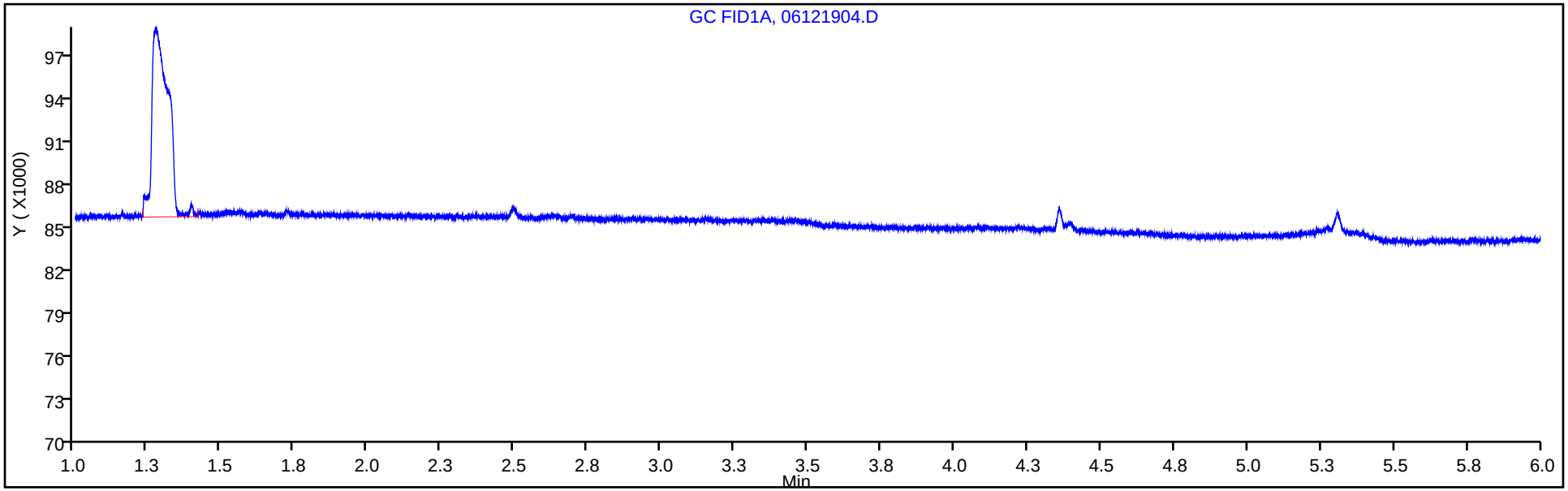
Report Date: 13-Jun-2019 10:15:36 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

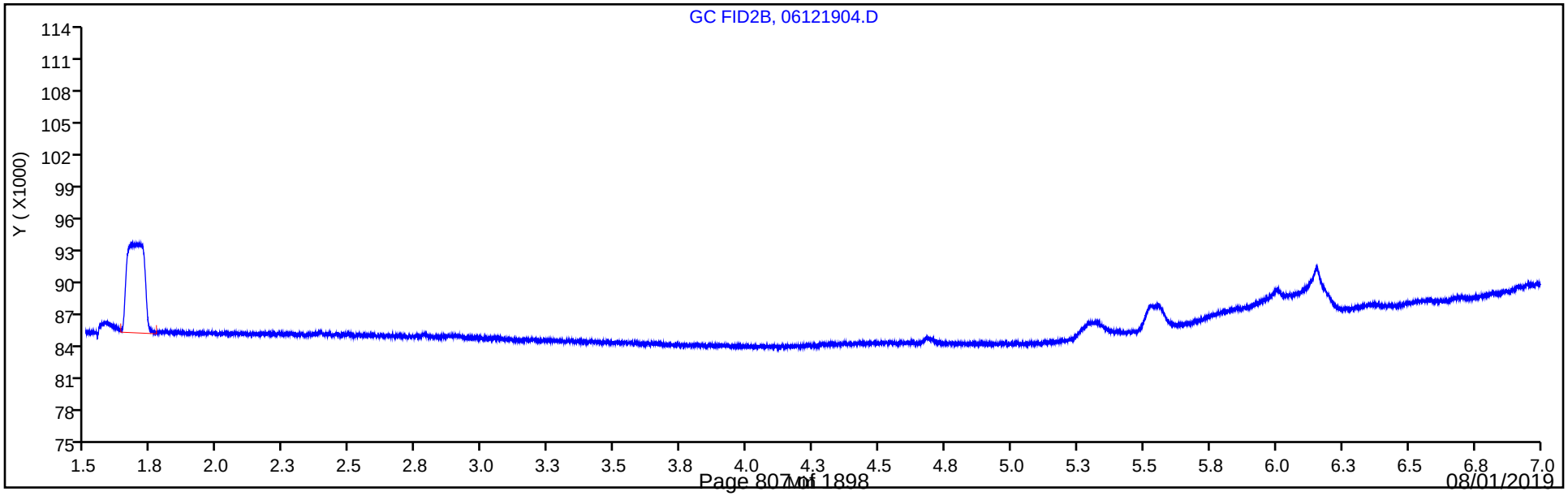
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121904.D

Injection Date:	12-Jun-2019 08:05:37	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-461087/29

Matrix: Water Lab File ID: 06111929.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 12:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.152		0.0050	0.0015	0.00057
74-82-8	Methane	0.0757		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.139		0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111929.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 11-Jun-2019 12:34:43 ALS Bottle#: 29 Worklist Smp#: 29
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 280-0082723-029
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 11-Jun-2019 13:53:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.262	1.285	-0.023	10146272	65.7	75.5	
2	1.676	1.703	-0.027	8701221	65.7	75.7	
						RPD = 0.32	
2 Ethane							
1	1.533	1.568	-0.035	19017160	123.2	150.5	
2	2.874	2.907	-0.033	16301276	123.2	151.8	
						RPD = 0.84	
3 Ethylene							
1	1.855	1.888	-0.033	14695165	114.9	138.9	
2	2.495	2.530	-0.035	12537014	114.9	139.3	
						RPD = 0.29	
4 Propane							
1	2.593	2.640	-0.047	31494679	180.6	232.8	
2	4.681	4.694	-0.013	26748420	180.6	233.1	
						RPD = 0.13	
5 Acetylene							
1	4.055	4.064	-0.009	3767360	106.7	117.3	
2	2.647	2.675	-0.028	3303162	106.7	116.6	
						RPD = 0.55	
6 Butane							
1	4.354	4.379	-0.025	47431418	238.1	336.8	
2	6.139	6.152	-0.013	40383374	238.1	335.5	
						RPD = 0.40	
7 isobutylene							
1	5.288	5.303	-0.015	31228115	229.8	322.7	
2	5.990	6.002	-0.012	26258775	229.8	324.1	
						RPD = 0.40	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

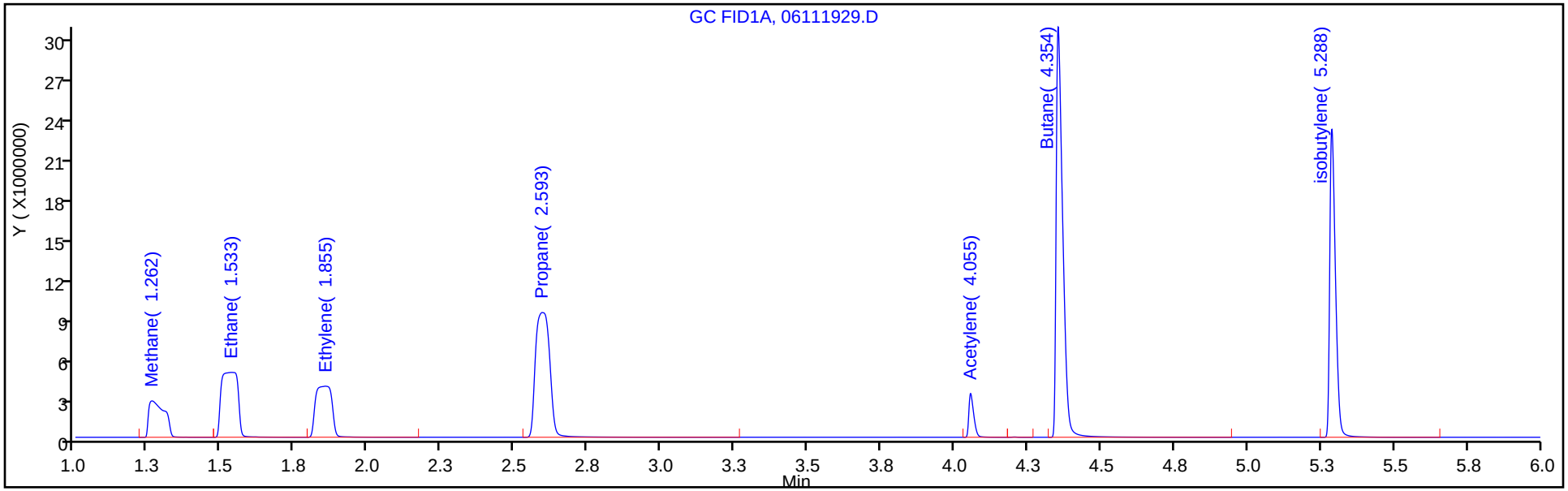
Report Date: 12-Jun-2019 11:59:28 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

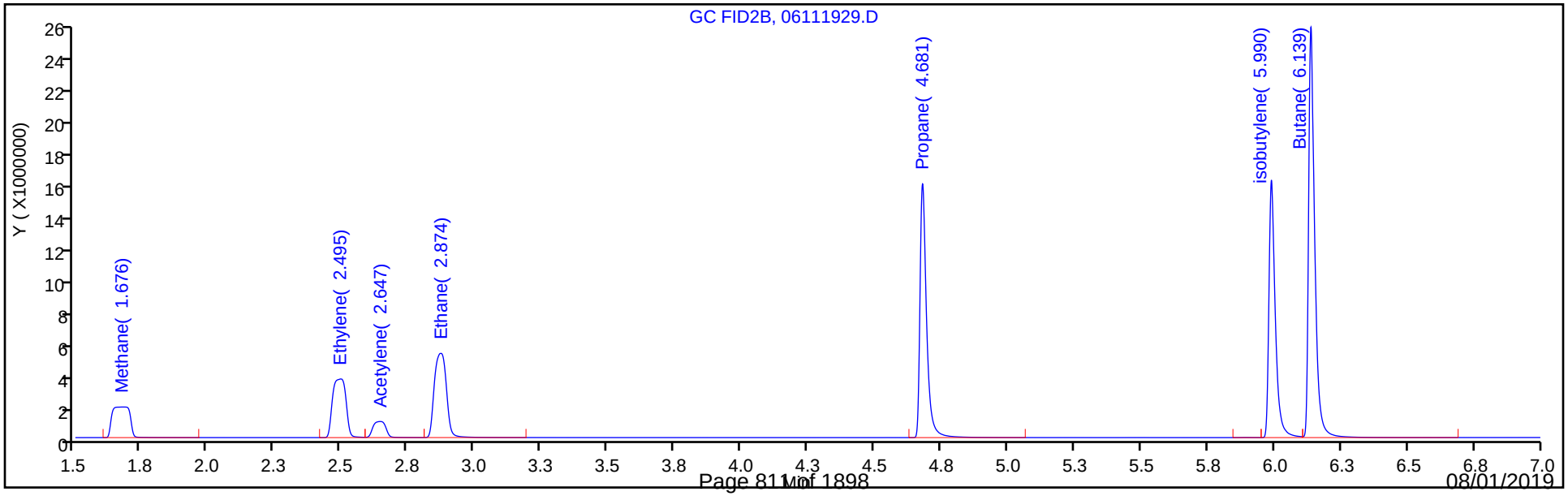
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111929.D

Injection Date:	11-Jun-2019 12:34:43	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	LCS			Worklist Smp#:	29
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-461235/2

Matrix: Water Lab File ID: 06121902.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 07:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.154		0.0050	0.0015	0.00057
74-82-8	Methane	0.0756		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.157		0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121902.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 12-Jun-2019 07:39:26 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 280-0082760-002
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 09:12:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.276	1.280	-0.004	10146419	73.0	75.5	
2	1.702	1.703	-0.001	8685978	73.0	75.6	
						RPD = 0.15	
2 Ethane							
1	1.561	1.562	-0.001	19320106	136.9	152.9	
2	2.895	2.896	-0.001	16521635	136.9	153.8	
						RPD = 0.61	
3 Ethylene							
1	1.878	1.885	-0.007	16636905	127.7	157.2	
2	2.519	2.524	-0.005	14156340	127.7	157.3	
						RPD = 0.03	
4 Propane							
1	2.625	2.633	-0.008	31228308	200.7	230.9	
2	4.689	4.690	-0.001	26494702	200.7	230.9	
						RPD = 0.02	
5 Acetylene							
1	4.065	4.064	0.001	4267945	118.5	132.8	
2	2.667	2.669	-0.002	3766795	118.5	133.0	
						RPD = 0.11	
6 Butane							
1	4.368	4.377	-0.009	47348294	264.5	336.2	
2	6.146	6.149	-0.003	40215354	264.5	334.1	
						RPD = 0.64	
7 isobutylene							
1	5.296	5.303	-0.007	35946712	255.4	371.5	
2	5.997	6.000	-0.003	30149101	255.4	372.1	
						RPD = 0.15	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

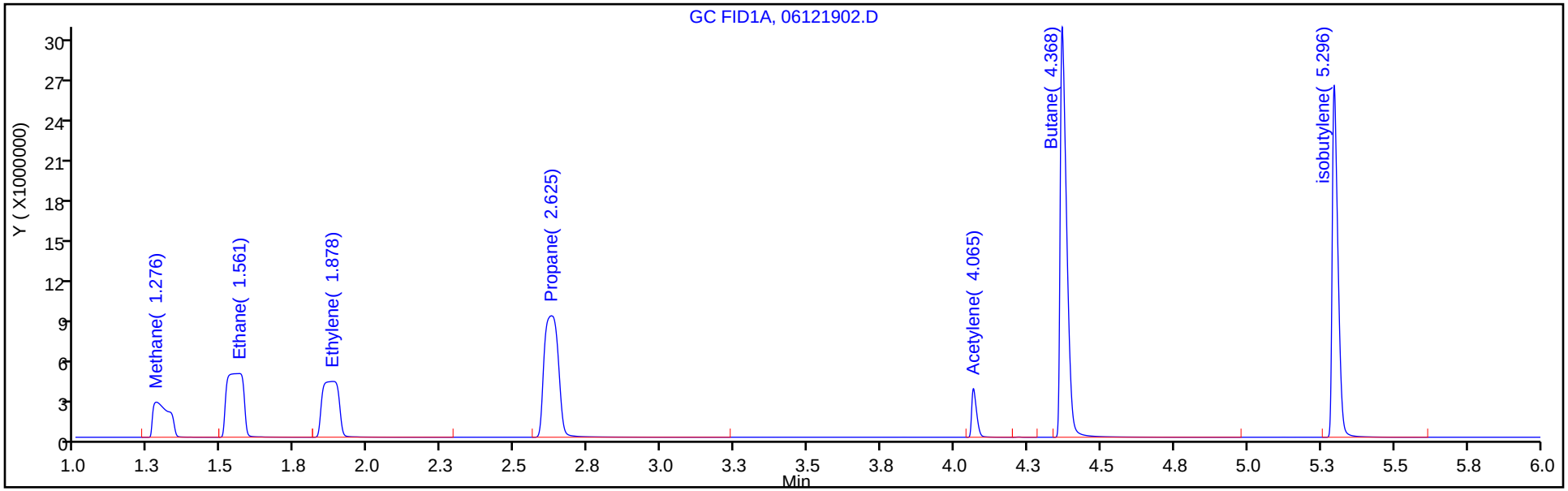
Report Date: 13-Jun-2019 10:15:29 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

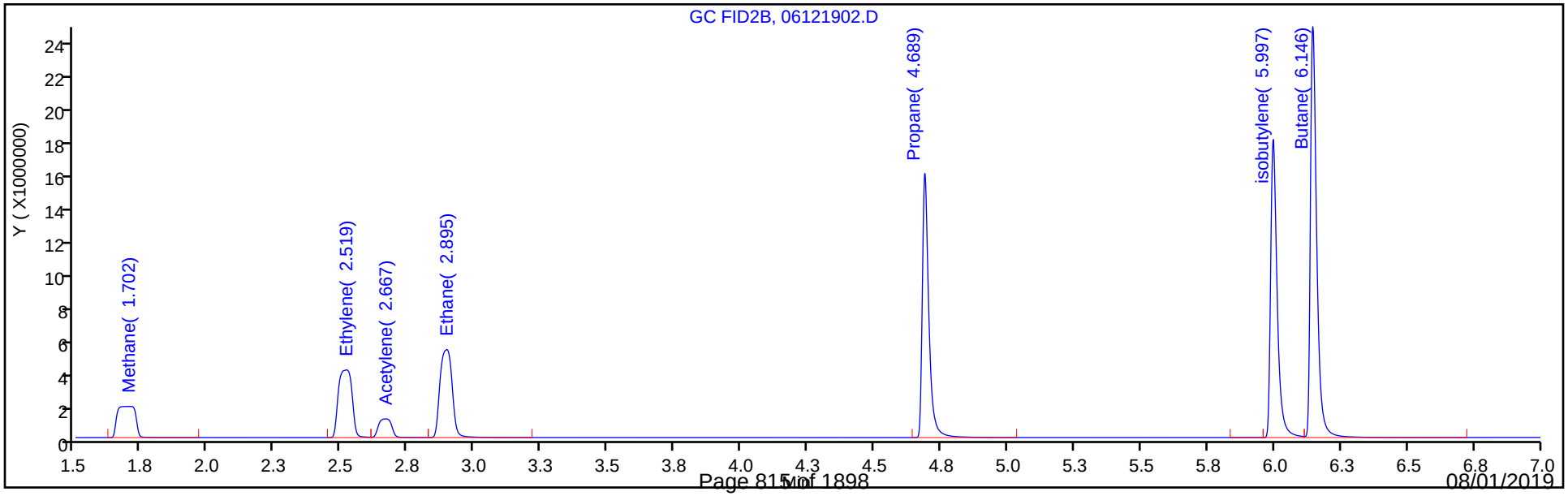
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121902.D

Injection Date:	12-Jun-2019 07:39:26	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	LCS			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-461087/30

Matrix: Water Lab File ID: 06111930.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/11/2019 12:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.161		0.0050	0.0015	0.00057
74-82-8	Methane	0.0803		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.145		0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111930.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 11-Jun-2019 12:48:05 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 280-0082723-030
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 12-Jun-2019 05:52:22 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0334

First Level Reviewer: dobranskym Date: 11-Jun-2019 13:54:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.260	1.285	-0.025	10746537	65.7	80.0	
2	1.678	1.703	-0.025	9225778	65.7	80.3	
						RPD = 0.43	
2 Ethane							
1	1.542	1.568	-0.026	20259177	123.2	160.3	
2	2.873	2.907	-0.034	17332344	123.2	161.4	
						RPD = 0.65	
3 Ethylene							
1	1.844	1.888	-0.044	12684716	114.9	119.9	
2	2.495	2.530	-0.035	13064692	114.9	145.2	
						RPD = 19.07	
4 Propane							
1	2.596	2.640	-0.044	34032206	180.6	251.6	
2	4.681	4.694	-0.013	28969381	180.6	252.5	
						RPD = 0.35	
5 Acetylene							
1	4.057	4.064	-0.007	3770102	106.7	117.3	
2	2.643	2.675	-0.032	3296003	106.7	116.4	
						RPD = 0.84	
6 Butane							
1	4.354	4.379	-0.025	52643106	238.1	373.8	
2	6.138	6.152	-0.014	44804172	238.1	372.2	
						RPD = 0.44	
7 isobutylene							
1	5.289	5.303	-0.014	33735111	229.8	348.7	
2	5.991	6.002	-0.011	28330826	229.8	349.6	
						RPD = 0.28	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

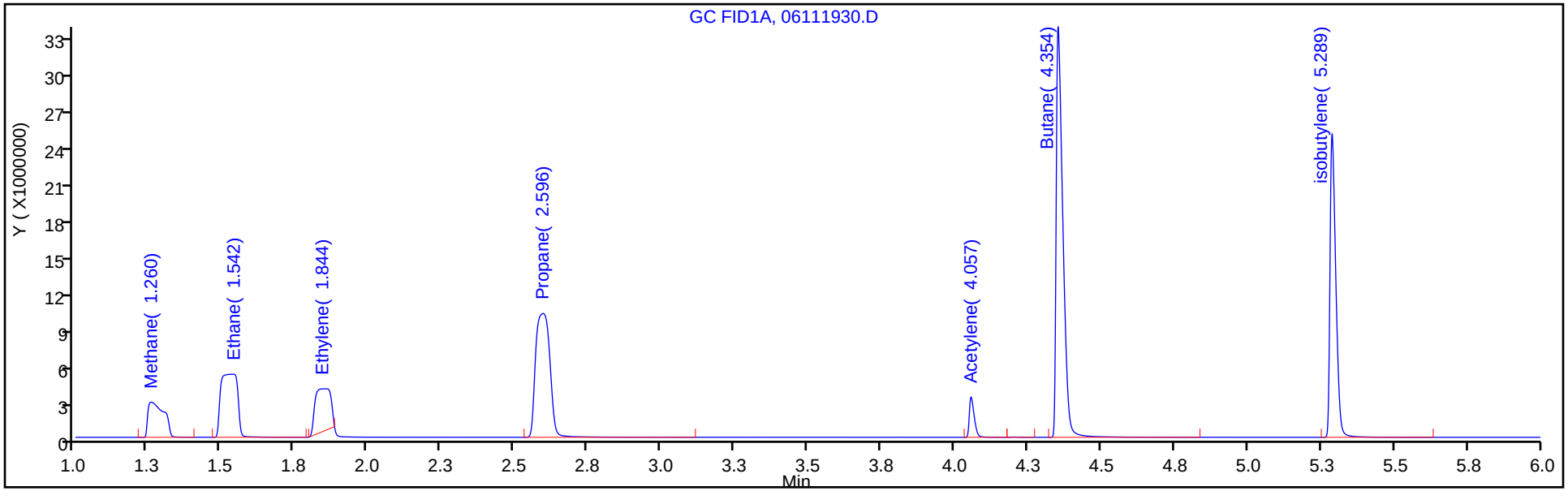
Report Date: 12-Jun-2019 11:59:30 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

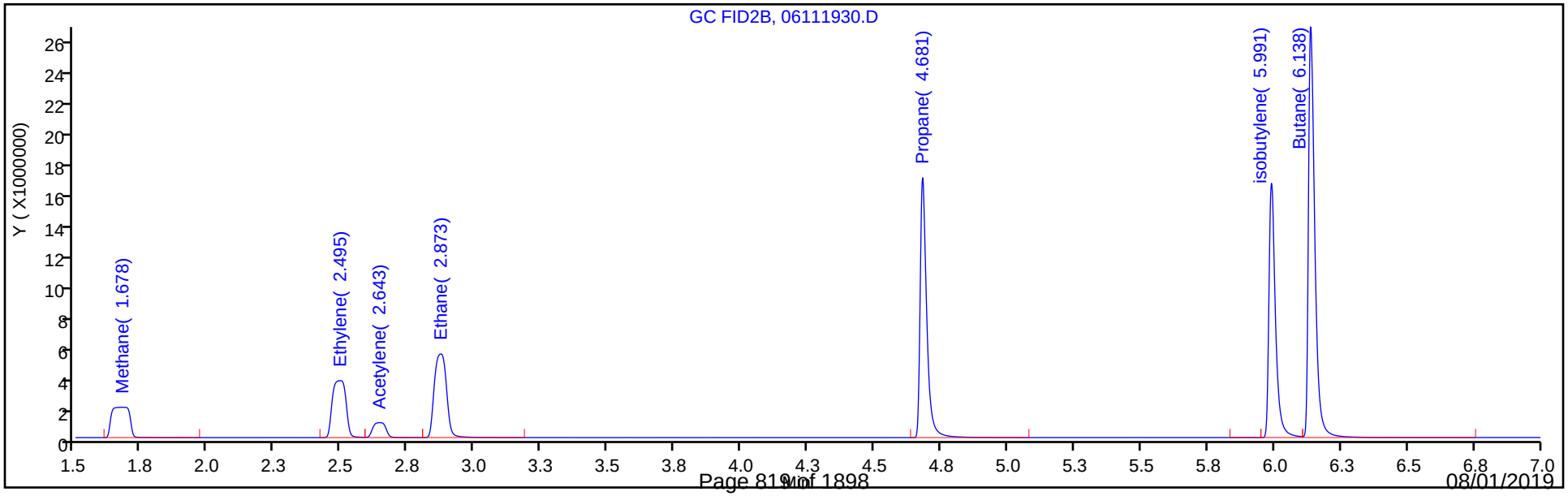
Data File: \\chromna\Denver\ChromData\VGC_J\20190611-82723.b\06111930.D

Injection Date:	11-Jun-2019 12:48:05	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	LCSD			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-461235/3

Matrix: Water Lab File ID: 06121903.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/12/2019 07:52

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 461235 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.152		0.0050	0.0015	0.00057
74-82-8	Methane	0.0748		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.150		0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121903.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 12-Jun-2019 07:52:31 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 280-0082760-003
Operator ID: MD Instrument ID: VGC_J

Method: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 13-Jun-2019 10:15:24 Calib Date: 15-Apr-2019 12:11:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\VGC_J\20190415-80933.b\04151909.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX0315

First Level Reviewer: dobranskym Date: 12-Jun-2019 09:14:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Methane							
1	1.278	1.280	-0.002	10042835	73.0	74.7	
2	1.697	1.703	-0.006	8599160	73.0	74.8	
						RPD = 0.17	
2 Ethane							
1	1.558	1.562	-0.004	19073390	136.9	150.9	
2	2.902	2.896	0.006	16310566	136.9	151.9	
						RPD = 0.61	
3 Ethylene							
1	1.880	1.885	-0.005	15853419	127.7	149.8	
2	2.524	2.524	0.000	13495367	127.7	149.9	
						RPD = 0.07	
4 Propane							
1	2.624	2.633	-0.009	31337952	200.7	231.7	
2	4.693	4.690	0.003	26640266	200.7	232.2	
						RPD = 0.22	
5 Acetylene							
1	4.064	4.064	0.000	3854253	118.5	120.0	
2	2.673	2.669	0.004	3399806	118.5	120.0	
						RPD = 0.06	
6 Butane							
1	4.364	4.377	-0.013	48263840	264.5	342.7	
2	6.148	6.149	-0.001	41044154	264.5	341.0	
						RPD = 0.52	
7 isobutylene							
1	5.294	5.303	-0.009	34987676	255.4	361.6	
2	5.999	6.000	-0.001	29386891	255.4	362.7	
						RPD = 0.29	

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

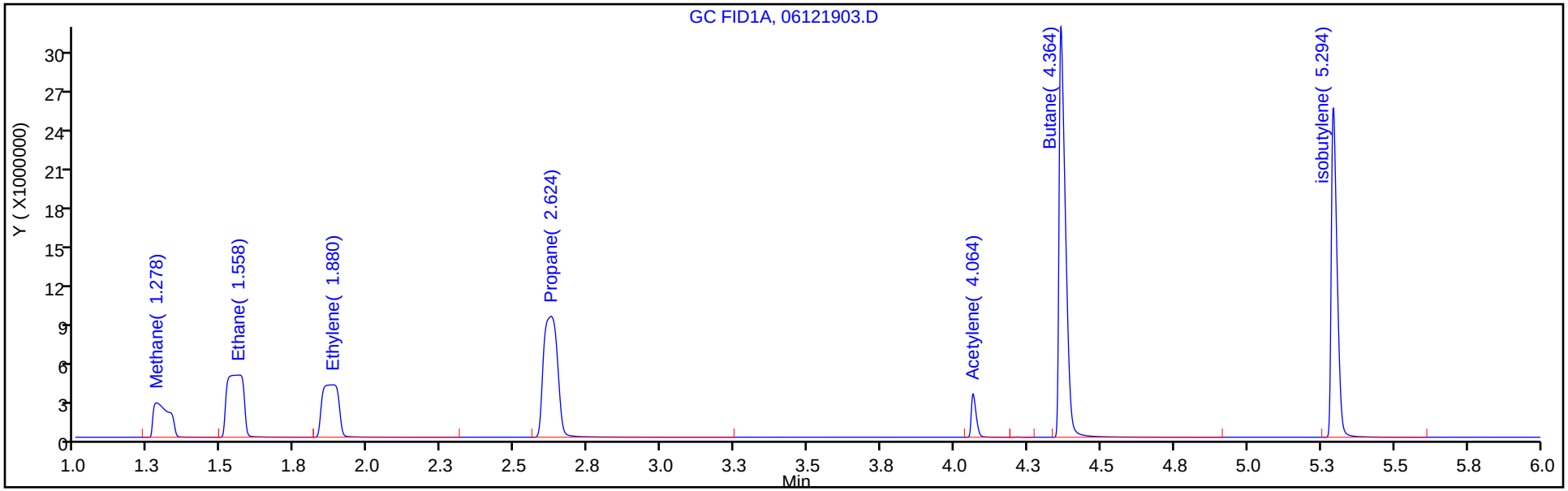
Report Date: 13-Jun-2019 10:15:32 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

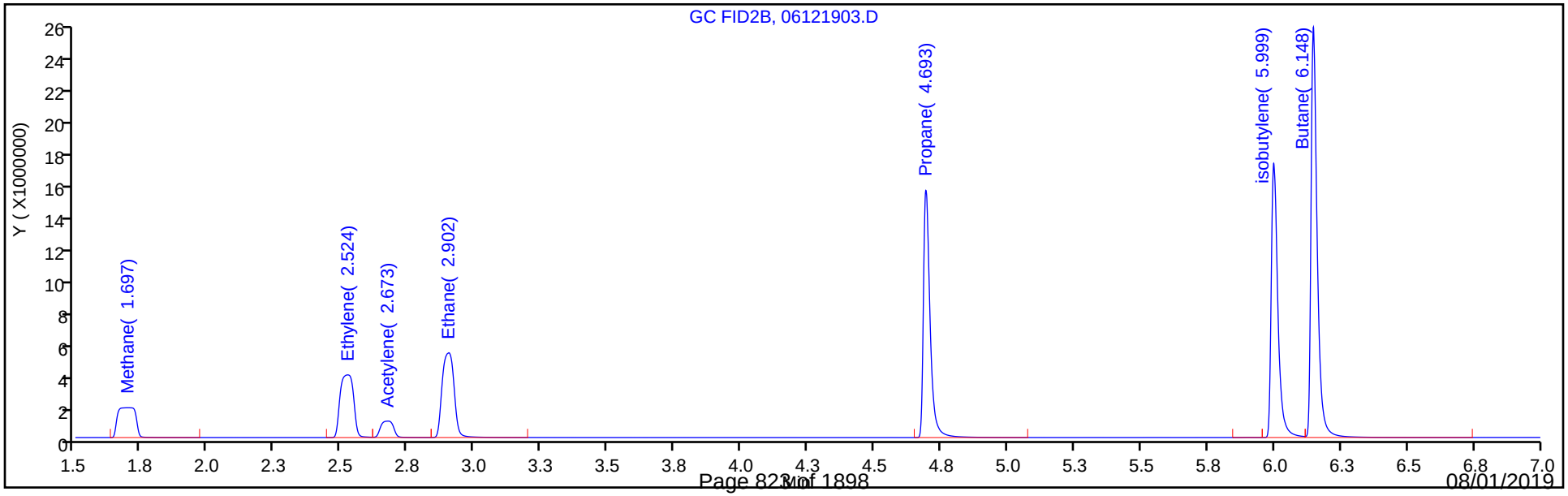
Data File: \\chromna\Denver\ChromData\VGC_J\20190612-82760.b\06121903.D

Injection Date:	12-Jun-2019 07:52:31	Instrument ID:	VGC_J	Operator ID:	MD
Lims ID:	LCSD			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Start Date: 04/15/2019 10:23

Analysis Batch Number: 454595 End Date: 04/15/2019 22:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-454595/1		04/15/2019 10:23	1	04151901.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/1		04/15/2019 10:23	1	04151901.D	HP-Plot Q 0.53(mm)
IC 280-454595/2		04/15/2019 10:37	1	04151902.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/2		04/15/2019 10:37	1	04151902.D	HP-Plot Q 0.53(mm)
IC 280-454595/3		04/15/2019 10:50	1	04151903.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/3		04/15/2019 10:50	1	04151903.D	HP-Plot Q 0.53(mm)
IC 280-454595/4		04/15/2019 11:03	1	04151904.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/4		04/15/2019 11:03	1	04151904.D	HP-Plot Q 0.53(mm)
ICRT 280-454595/5		04/15/2019 11:17	1	04151905.D	Rt-Alumina KCl 0.53(mm)
ICRT 280-454595/5		04/15/2019 11:17	1	04151905.D	HP-Plot Q 0.53(mm)
IC 280-454595/6		04/15/2019 11:30	1	04151906.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/6		04/15/2019 11:30	1	04151906.D	HP-Plot Q 0.53(mm)
IC 280-454595/7		04/15/2019 11:44	1	04151907.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/7		04/15/2019 11:44	1	04151907.D	HP-Plot Q 0.53(mm)
IC 280-454595/8		04/15/2019 11:57	1	04151908.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/8		04/15/2019 11:57	1	04151908.D	HP-Plot Q 0.53(mm)
IC 280-454595/9		04/15/2019 12:11	1	04151909.D	Rt-Alumina KCl 0.53(mm)
IC 280-454595/9		04/15/2019 12:11	1	04151909.D	HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 12:24	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 12:24	1		HP-Plot Q 0.53(mm)
ICV 280-454595/11		04/15/2019 12:38	1	04151911.D	Rt-Alumina KCl 0.53(mm)
ICV 280-454595/11		04/15/2019 12:38	1	04151911.D	HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 15:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 15:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 16:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 16:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 16:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 16:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 16:38	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 16:38	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 16:51	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 16:51	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:05	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:05	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:18	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:18	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:32	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:32	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 17:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 17:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 18:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 18:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 18:26	1		Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Start Date: 04/15/2019 10:23

Analysis Batch Number: 454595 End Date: 04/15/2019 22:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/15/2019 18:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 18:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 18:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 18:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 18:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 19:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 19:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 19:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 19:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 19:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 19:32	1		HP-Plot Q 0.53(mm)
CCV 280-454595/29		04/15/2019 19:46	1		Rt-Alumina KCl 0.53(mm)
CCV 280-454595/29		04/15/2019 19:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 19:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 19:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 20:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 20:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 21:04	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 21:04	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 21:17	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 21:17	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 21:58	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 21:58	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 22:12	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 22:12	3		HP-Plot Q 0.53(mm)
ZZZZZ		04/15/2019 22:25	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		04/15/2019 22:25	3		HP-Plot Q 0.53(mm)
CCV 280-454595/37		04/15/2019 22:38	1		Rt-Alumina KCl 0.53(mm)
CCV 280-454595/37		04/15/2019 22:38	1		HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/11/2019 05:41

Analysis Batch Number: 461087 End Date: 06/11/2019 19:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-461087/1		06/11/2019 05:41	1	06111901.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-461087/1		06/11/2019 05:41	1	06111901.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 06:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 06:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 06:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 06:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 06:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 06:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 07:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 07:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 07:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 07:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 07:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 07:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 07:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 07:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 08:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 08:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 08:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 08:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 08:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 08:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 08:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 08:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 08:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 08:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 09:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 09:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 09:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 09:26	1		HP-Plot Q 0.53(mm)
CCV 280-461087/16		06/11/2019 09:39	1		Rt-Alumina KCl 0.53(mm)
CCV 280-461087/16		06/11/2019 09:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 09:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 09:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 10:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 10:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 10:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 10:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 10:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 10:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 10:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 10:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 11:00	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 11:00	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 11:13	1		Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/11/2019 05:41

Analysis Batch Number: 461087 End Date: 06/11/2019 19:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/11/2019 11:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 11:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 11:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 11:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 11:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 11:54	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 11:54	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 12:07	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 12:07	1		HP-Plot Q 0.53(mm)
CCV 280-461087/28		06/11/2019 12:21	1	06111928.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461087/28		06/11/2019 12:21	1	06111928.D	HP-Plot Q 0.53(mm)
LCS 280-461087/29		06/11/2019 12:34	1	06111929.D	Rt-Alumina KCl 0.53(mm)
LCS 280-461087/29		06/11/2019 12:34	1	06111929.D	HP-Plot Q 0.53(mm)
LCSD 280-461087/30		06/11/2019 12:48	1	06111930.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-461087/30		06/11/2019 12:48	1	06111930.D	HP-Plot Q 0.53(mm)
MB 280-461087/31		06/11/2019 13:01	1	06111931.D	Rt-Alumina KCl 0.53(mm)
MB 280-461087/31		06/11/2019 13:01	1	06111931.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 13:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 13:15	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 13:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 13:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 13:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 13:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 13:55	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 13:55	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 14:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 14:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 14:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 14:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 14:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 14:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 14:49	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 14:49	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 15:02	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 15:02	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 15:16	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 15:16	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 15:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 15:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 15:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 15:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 15:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 15:56	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 16:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 16:09	1		HP-Plot Q 0.53(mm)

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GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/11/2019 05:41

Analysis Batch Number: 461087 End Date: 06/11/2019 19:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/11/2019 16:23	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 16:23	1		HP-Plot Q 0.53(mm)
CCV 280-461087/47		06/11/2019 16:36	1	06111947.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461087/47		06/11/2019 16:36	1	06111947.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 16:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 16:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 17:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 17:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 17:16	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 17:16	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 17:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 17:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/11/2019 17:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/11/2019 17:43	1		HP-Plot Q 0.53(mm)
280-124928-7		06/11/2019 17:56	1	06111953.D	Rt-Alumina KCl 0.53(mm)
280-124928-7		06/11/2019 17:56	1	06111953.D	HP-Plot Q 0.53(mm)
280-124928-8		06/11/2019 18:10	1	06111954.D	Rt-Alumina KCl 0.53(mm)
280-124928-8		06/11/2019 18:10	1	06111954.D	HP-Plot Q 0.53(mm)
280-124928-12		06/11/2019 18:23	1	06111955.D	Rt-Alumina KCl 0.53(mm)
280-124928-12		06/11/2019 18:23	1	06111955.D	HP-Plot Q 0.53(mm)
280-124928-9		06/11/2019 18:36	1	06111956.D	Rt-Alumina KCl 0.53(mm)
280-124928-9		06/11/2019 18:36	1	06111956.D	HP-Plot Q 0.53(mm)
280-124928-10		06/11/2019 18:50	1	06111957.D	Rt-Alumina KCl 0.53(mm)
280-124928-10		06/11/2019 18:50	1	06111957.D	HP-Plot Q 0.53(mm)
280-124928-11		06/11/2019 19:03	1	06111958.D	Rt-Alumina KCl 0.53(mm)
280-124928-11		06/11/2019 19:03	1	06111958.D	HP-Plot Q 0.53(mm)
280-124928-14		06/11/2019 19:16	1	06111959.D	Rt-Alumina KCl 0.53(mm)
280-124928-14		06/11/2019 19:16	1	06111959.D	HP-Plot Q 0.53(mm)
280-124928-15		06/11/2019 19:30	1	06111960.D	Rt-Alumina KCl 0.53(mm)
280-124928-15		06/11/2019 19:30	1	06111960.D	HP-Plot Q 0.53(mm)
CCV 280-461087/61		06/11/2019 19:43	1	06111961.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461087/61		06/11/2019 19:43	1	06111961.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/12/2019 07:14

Analysis Batch Number: 461235 End Date: 06/13/2019 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-461235/1		06/12/2019 07:14	1	06121901.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-461235/1		06/12/2019 07:14	1	06121901.D	HP-Plot Q 0.53(mm)
LCS 280-461235/2		06/12/2019 07:39	1	06121902.D	Rt-Alumina KCl 0.53(mm)
LCS 280-461235/2		06/12/2019 07:39	1	06121902.D	HP-Plot Q 0.53(mm)
LCSD 280-461235/3		06/12/2019 07:52	1	06121903.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-461235/3		06/12/2019 07:52	1	06121903.D	HP-Plot Q 0.53(mm)
MB 280-461235/4		06/12/2019 08:05	1	06121904.D	Rt-Alumina KCl 0.53(mm)
MB 280-461235/4		06/12/2019 08:05	1	06121904.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 08:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 08:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 08:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 08:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 08:45	3		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 08:45	3		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 08:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 08:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 09:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 09:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 09:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 09:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 09:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 09:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 09:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 09:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 10:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 10:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 10:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 10:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 10:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 10:32	1		HP-Plot Q 0.53(mm)
CCV 280-461235/16		06/12/2019 10:45	1	06121916.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461235/16		06/12/2019 10:45	1	06121916.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 10:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 10:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 11:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 11:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 11:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 11:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 11:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 11:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 11:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 11:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 12:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 12:05	1		HP-Plot Q 0.53(mm)
280-124928-3		06/12/2019 12:19	1	06121923.D	Rt-Alumina KCl 0.53(mm)

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GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/12/2019 07:14

Analysis Batch Number: 461235 End Date: 06/13/2019 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-124928-3		06/12/2019 12:19	1	06121923.D	HP-Plot Q 0.53(mm)
280-124928-4		06/12/2019 12:32	1	06121924.D	Rt-Alumina KCl 0.53(mm)
280-124928-4		06/12/2019 12:32	1	06121924.D	HP-Plot Q 0.53(mm)
280-124928-5		06/12/2019 12:45	1	06121925.D	Rt-Alumina KCl 0.53(mm)
280-124928-5		06/12/2019 12:45	1	06121925.D	HP-Plot Q 0.53(mm)
280-124928-6		06/12/2019 12:59	1	06121926.D	Rt-Alumina KCl 0.53(mm)
280-124928-6		06/12/2019 12:59	1	06121926.D	HP-Plot Q 0.53(mm)
280-124928-16		06/12/2019 13:12	1	06121927.D	Rt-Alumina KCl 0.53(mm)
280-124928-16		06/12/2019 13:12	1	06121927.D	HP-Plot Q 0.53(mm)
280-124928-3 DL		06/12/2019 13:25	3	028F2801.D	Rt-Alumina KCl 0.53(mm)
280-124928-3 DL		06/12/2019 13:25	3	028F2801.D	HP-Plot Q 0.53(mm)
280-124928-4 DL		06/12/2019 13:39	3	029F2901.D	Rt-Alumina KCl 0.53(mm)
280-124928-4 DL		06/12/2019 13:39	3	029F2901.D	HP-Plot Q 0.53(mm)
CCV 280-461235/28		06/12/2019 13:52	1	06121928.D	Rt-Alumina KCl 0.53(mm)
CCV 280-461235/28		06/12/2019 13:52	1	06121928.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 14:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 14:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 15:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 15:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 15:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 15:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 15:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 15:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 15:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 15:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 16:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 16:59	1		HP-Plot Q 0.53(mm)
CCV 280-461235/43		06/12/2019 17:13	1		Rt-Alumina KCl 0.53(mm)
CCV 280-461235/43		06/12/2019 17:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 17:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 17:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 17:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 17:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 17:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 17:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 18:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:05	1		HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/12/2019 07:14

Analysis Batch Number: 461235 End Date: 06/13/2019 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/12/2019 18:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 18:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 18:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 18:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 18:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 19:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 19:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 19:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 19:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 19:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 19:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 19:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 19:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 20:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 20:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/12/2019 20:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/12/2019 20:18	1		HP-Plot Q 0.53(mm)
CCV 280-461235/58		06/12/2019 20:31	1		Rt-Alumina KCl 0.53(mm)
CCV 280-461235/58		06/12/2019 20:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/13/2019 05:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/13/2019 05:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/13/2019 05:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/13/2019 05:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/13/2019 06:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/13/2019 06:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/13/2019 06:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/13/2019 06:17	1		HP-Plot Q 0.53(mm)
CCV 280-461235/65		06/13/2019 06:30	1		Rt-Alumina KCl 0.53(mm)
CCV 280-461235/65		06/13/2019 06:30	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461087 Batch Start Date: 06/11/19 05:41 Batch Analyst: Dobransky, Michael E

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00027		
CCVRT 280-461087/1		RSK-175		18 mL	18 mL	5 SU	200 uL		
CCV 280-461087/28		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-461087/29		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-461087/30		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-461087/31		RSK-175		18 mL	18 mL	5 SU			
CCV 280-461087/47		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-124928-H-7	G0105-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-H-8	G0107-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-H-12	SHGW04-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-H-9	G0106-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-I-10	SHGW03-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-H-11	G0069-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-G-14	G0017-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-H-15	PZ009-19A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-461087/61		RSK-175		18 mL	18 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461235 Batch Start Date: 06/12/19 07:14 Batch Analyst: Dobransky, Michael E

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00027		
CCVRT 280-461235/1		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-461235/2		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-461235/3		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-461235/4		RSK-175		18 mL	18 mL	5 SU			
CCV 280-461235/16		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-124928-F-3	SHGW02-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-F-4	SHGW05-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-F-5	SAMW1-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-F-6	G0053-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-H-16	G0045-19A	RSK-175	T	18 mL	18 mL	<2 SU			
CCV 280-461235/28		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-124928-F-3	SHGW02-19A	RSK-175	T	18 mL	18 mL	<2 SU			
280-124928-F-4	SHGW05-19A	RSK-175	T	18 mL	18 mL	<2 SU			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8015C_DRO_DOD5

Diesel Range Organics (DRO) (GC)

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-1 (30.3 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	OTPH1 #	OTCN1 #
SHGW03-19A	280-124928-10	75	81 Q
G0069-19A	280-124928-11	66	82 Q
SHGW04-19A	280-124928-12	80	88 Q
	MB 280-461781/1-A	69	89
	LCS 280-461781/2-A	69	82
	LCSD 280-461781/3-A	63	74

	QC LIMITS
OTPH = o-Terphenyl (Surr)	56-125
OTCN = n-Octacosane	60-142

Column to be used to flag recovery values

FORM II 8015C DRO

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 07160022.D

Lab ID: LCS 280-461781/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
C10-C28	1980	1710	86	36-132	

Column to be used to flag recovery and RPD values

FORM III 8015C DRO

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 07160023.D

Lab ID: LCSD 280-461781/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
C10-C28	1980	1430	72	18	30	36-132	

Column to be used to flag recovery and RPD values

FORM III 8015C DRO

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: MB 280-461781/1-A

Matrix: Water Date Extracted: 06/17/2019 09:30

Lab File ID:(1) 07160024.D Lab File ID:(2)

Date Analyzed:(1) 07/17/2019 02:04 Date Analyzed:(2)

Instrument ID:(1) SGC_U2a Instrument ID:(2)

GC Column:(1) RTX-1 (30.32 ID: 0.25(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-461781/2-A	07/17/2019 01:21	
	LCSD 280-461781/3-A	07/17/2019 01:42	
G0069-19A	280-124928-11	07/17/2019 03:09	
SHGW04-19A	280-124928-12	07/17/2019 03:31	
SHGW03-19A	280-124928-10	07/17/2019 03:53	

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Sample No.: STD4 280-464041/7 Date Analyzed: 07/09/2019 20:00

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID (Standard): 07090007.D Heated Purge: (Y/N) N

Calibration ID: 37099

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH	OTCN	
				RT #	RT #	
INITIAL CALIBRATION SURROGATE				7.13	9.75	
UPPER LIMIT				7.18	9.80	
LOWER LIMIT				7.08	9.70	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD4 280-464041/7 ICRT		07/09/2019 20:00	07090007.D	7.13	9.75	
ICV 280-464041/11		07/09/2019 21:27	07090011.D	7.13	9.75	

OTPH = o-Terphenyl
OTCN = n-Octacosane

OTPH RT Limit = ± 0.05 minutes of surrogate RT
OTCN RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C DRO

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Sample No.: CCVRT 280-464667/4 Date Analyzed: 07/16/2019 18:50

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID (Standard): 07160004.D Heated Purge: (Y/N) N

Calibration ID: 37099

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH	OTCN	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				7.13	9.75	
UPPER LIMIT				7.18	9.80	
LOWER LIMIT				7.08	9.70	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 280-464667/4		07/16/2019 18:50	07160004.D	7.13	9.75	
CCV 280-464667/20		07/17/2019 00:37	07160020.D	7.13	9.74	
LCS 280-461781/2-A		07/17/2019 01:21	07160022.D	7.12	9.74	
LCSD 280-461781/3-A		07/17/2019 01:42	07160023.D	7.12	9.74	
MB 280-461781/1-A		07/17/2019 02:04	07160024.D	7.12	9.74	
280-124928-11	G0069-19A	07/17/2019 03:09	07160027.D	7.13	9.74	
280-124928-12	SHGW04-19A	07/17/2019 03:31	07160028.D	7.12	9.74	
280-124928-10	SHGW03-19A	07/17/2019 03:53	07160029.D	7.13	9.74	
CCV 280-464667/38		07/17/2019 07:08	07160038.D	7.13	9.74	

OTPH = o-Terphenyl
OTCN = n-Octacosane

OTPH RT Limit = ± 0.05 minutes of surrogate RT
OTCN RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C DRO

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW03-19A Lab Sample ID: 280-124928-10

Matrix: Water Lab File ID: 07160029.D

Analysis Method: 8015C DRO Date Collected: 06/06/2019 10:50

Extraction Method: 3510C Date Extracted: 06/17/2019 09:30

Sample wt/vol: 876.7(mL) Date Analyzed: 07/17/2019 03:53

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464667 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	1100	H	290	140	37

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	75		56-125
630-02-4	n-Octacosane	81	Q	60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160029.D
Lims ID: 280-124928-B-10-A
Client ID: SHGW03-19A
Sample Type: Client
Inject. Date: 17-Jul-2019 03:53:01 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-10-A
Misc. Info.: 280-0083727-029
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	4 C8-C12					
	4.297	(1.208-7.385)		89007982	649.5	
A	6 C10-C25					
	6.065	(3.185-8.945)		116348793	908.5	
	23 Hexadecane					
	6.258	6.235	0.023	2603151	NC	
A	8 C10-C28					
	6.568	(3.185-9.951)		121019174	942.6	
A	22 C10-C32					
	7.018	(3.185-10.852)		123719020	960.3	
$	9 o-Terphenyl					
	7.126	7.127	-0.001	5093667	26.3	
A	10 C10-C36					
	7.662	(3.185-12.138)		126308353	973.4	
$	14 n-Octacosane					
	9.742	9.748	-0.006	3502756	28.4	
A	13 C20-C38					
	10.352	(7.550-13.154)		35658749	248.9	
A	15 C25-C36					
	10.542	(8.945-12.138)		10517459	60.3	
	18 Dotriacontane					
	10.660	10.664	-0.004	146056	NC	
$	21 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

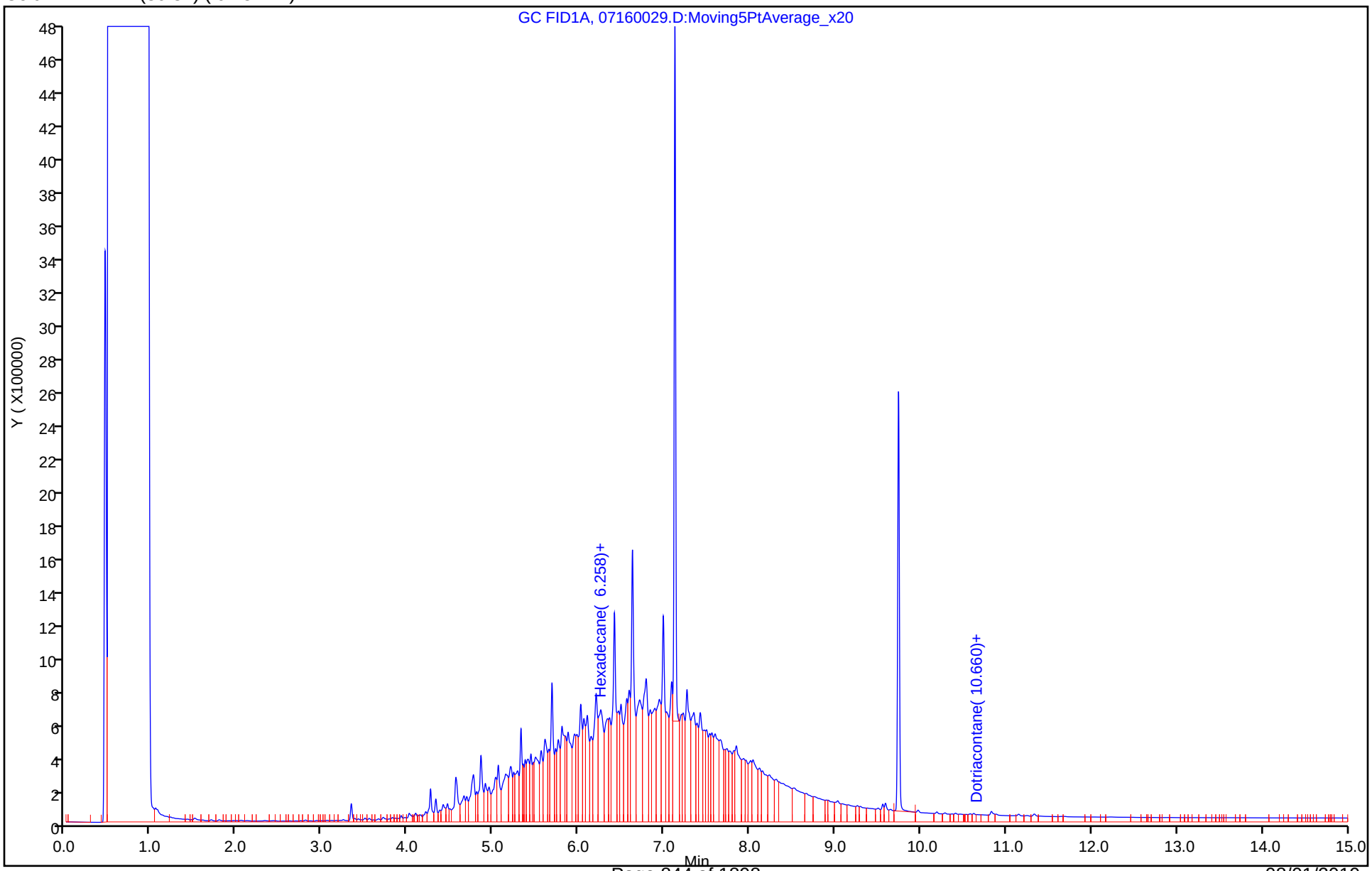
Report Date: 17-Jul-2019 11:29:09 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160029.D

Injection Date:	17-Jul-2019 03:53:01	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	280-124928-B-10-A	Lab Sample ID:	280-124928-10	Worklist Smp#:	29
Client ID:	SHGW03-19A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160029.D				
Lims ID:	280-124928-B-10-A				
Client ID:	SHGW03-19A				
Sample Type:	Client				
Inject. Date:	17-Jul-2019 03:53:01	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-B-10-A				
Misc. Info.:	280-0083727-029				
Operator ID:	MM	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	17-Jul-2019 11:28:53	Calib Date:	09-Jul-2019 23:59:12		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX0309				

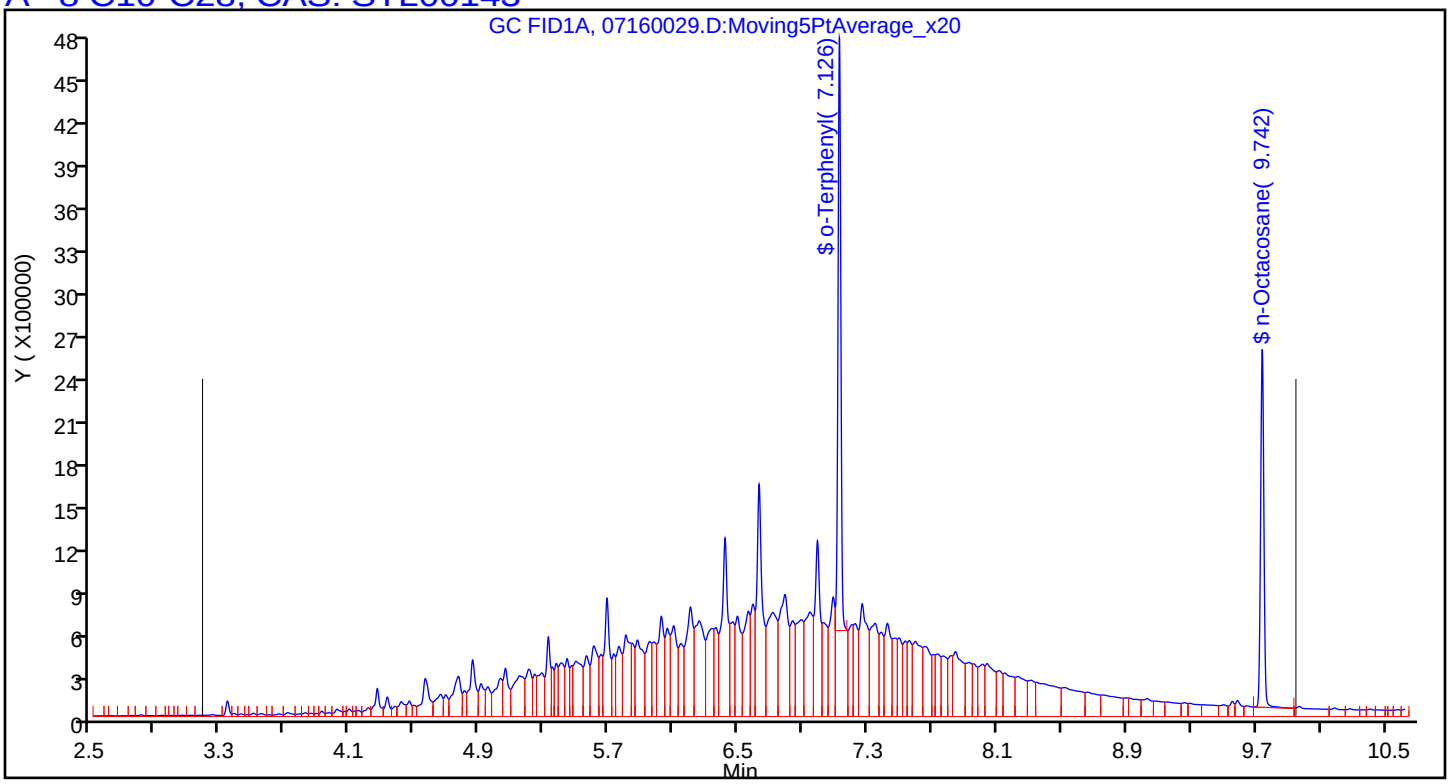
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	26.3	75.20
$ 14 n-Octacosane	35.0	28.4	81.24

Report Date: 17-Jul-2019 11:29:09 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160029.D				
Injection Date:	17-Jul-2019 03:53:01	Instrument ID:	SGC_U2a		
Lims ID:	280-124928-B-10-A	Lab Sample ID:	280-124928-10		
Client ID:	SHGW03-19A				
Operator ID:	MM	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0069-19A Lab Sample ID: 280-124928-11

Matrix: Water Lab File ID: 07160027.D

Analysis Method: 8015C DRO Date Collected: 06/06/2019 12:10

Extraction Method: 3510C Date Extracted: 06/17/2019 09:30

Sample wt/vol: 1036.5(mL) Date Analyzed: 07/17/2019 03:09

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464667 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	91	J H	240	120	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	66		56-125
630-02-4	n-Octacosane	82	Q	60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160027.D
Lims ID: 280-124928-B-11-A
Client ID: G0069-19A
Sample Type: Client
Inject. Date: 17-Jul-2019 03:09:38 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-11-A
Misc. Info.: 280-0083727-027
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 10:04:43

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	4 C8-C12					
	4.297	(1.208-7.385)		6897416	50.3	
A	6 C10-C25					
	6.065	(3.185-8.945)		11061207	77.3	
	23 Hexadecane					
	6.229	6.235	-0.006	45190	NC	
A	8 C10-C28					
	6.568	(3.185-9.951)		13663211	94.2	
A	22 C10-C32					
	7.018	(3.185-10.852)		15625769	104.5	
$	9 o-Terphenyl					
	7.125	7.127	-0.002	4483298	23.1	
A	10 C10-C36					
	7.662	(3.185-12.138)		18114767	114.4	
$	14 n-Octacosane					
	9.742	9.748	-0.006	3536354	28.7	
A	13 C20-C38					
	10.352	(7.550-13.154)		13987615	74.5	
A	15 C25-C36					
	10.542	(8.945-12.138)		7285435	35.7	
	18 Dotriacontane					
	10.682	10.664	0.018	254388	NC	
$	21 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

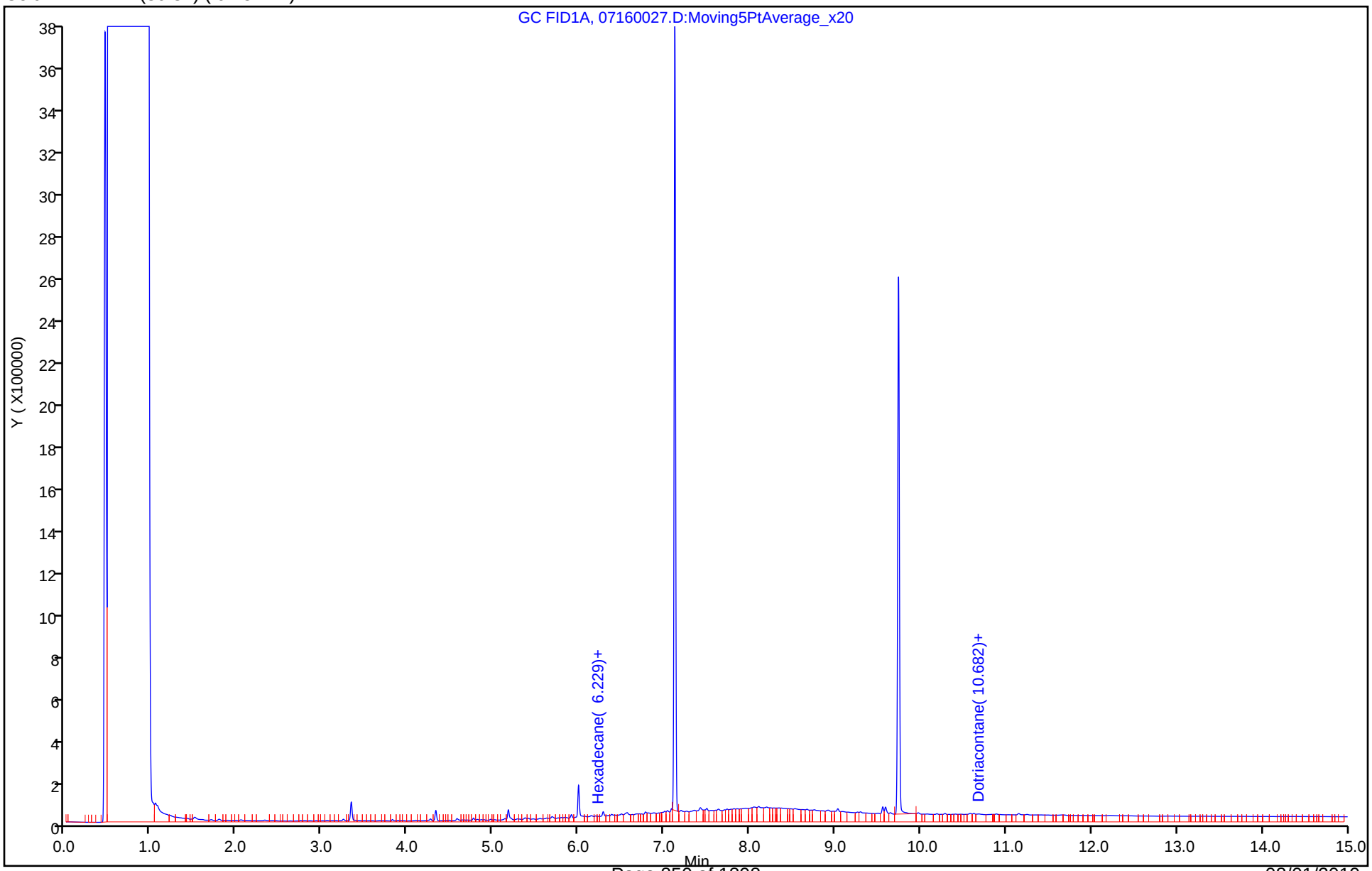
Report Date: 17-Jul-2019 11:29:12 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160027.D

Injection Date:	17-Jul-2019 03:09:38	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	280-124928-B-11-A	Lab Sample ID:	280-124928-11	Worklist Smp#:	27
Client ID:	G0069-19A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160027.D
Lims ID: 280-124928-B-11-A
Client ID: G0069-19A
Sample Type: Client
Inject. Date: 17-Jul-2019 03:09:38 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-11-A
Misc. Info.: 280-0083727-027
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 10:04:43

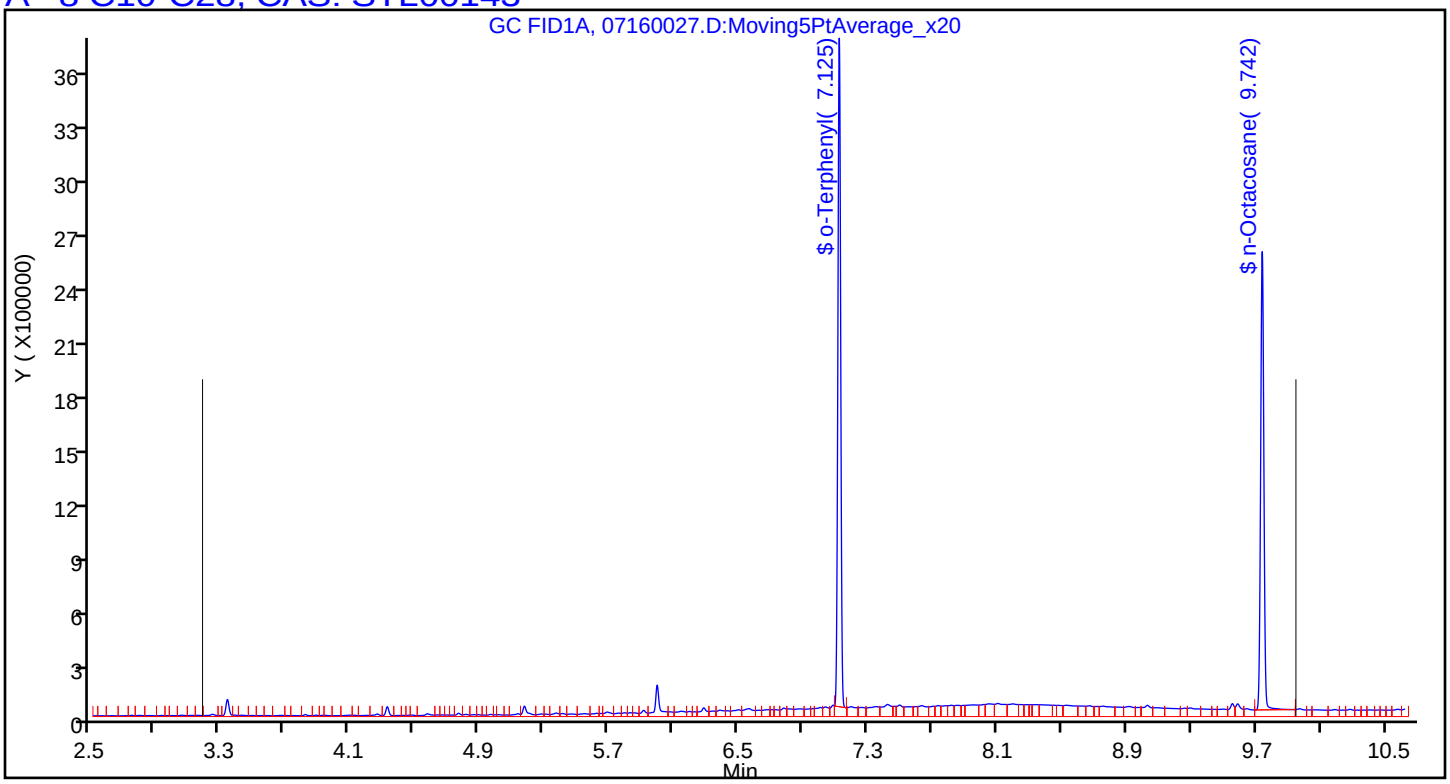
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	23.1	66.04
$ 14 n-Octacosane	35.0	28.7	82.02

Report Date: 17-Jul-2019 11:29:12 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160027.D				
Injection Date:	17-Jul-2019 03:09:38	Instrument ID:	SGC_U2a		
Lims ID:	280-124928-B-11-A	Lab Sample ID:	280-124928-11		
Client ID:	G0069-19A				
Operator ID:	MM	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: SHGW04-19A Lab Sample ID: 280-124928-12

Matrix: Water Lab File ID: 07160028.D

Analysis Method: 8015C DRO Date Collected: 06/06/2019 13:35

Extraction Method: 3510C Date Extracted: 06/17/2019 09:30

Sample wt/vol: 1029.4(mL) Date Analyzed: 07/17/2019 03:31

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464667 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	730	H	240	120	32

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	80		56-125
630-02-4	n-Octacosane	88	Q	60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160028.D
Lims ID: 280-124928-B-12-A
Client ID: SHGW04-19A
Sample Type: Client
Inject. Date: 17-Jul-2019 03:31:23 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-12-A
Misc. Info.: 280-0083727-028
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 10:05:10

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	4 C8-C12					
	4.297	(1.208-7.385)		65421553	477.4	
A	6 C10-C25					
	6.065	(3.185-8.945)		90814591	706.9	
	23 Hexadecane					
	6.237	6.235	0.002	950154	NC	
A	8 C10-C28					
	6.568	(3.185-9.951)		96875588	751.8	
A	22 C10-C32					
	7.018	(3.185-10.852)		100338782	775.2	
$	9 o-Terphenyl					
	7.123	7.127	-0.004	5412394	28.0	
A	10 C10-C36					
	7.662	(3.185-12.138)		103340398	791.1	
$	14 n-Octacosane					
	9.742	9.748	-0.006	3802450	30.9	
A	13 C20-C38					
	10.352	(7.550-13.154)		37081121	260.3	
A	15 C25-C36					
	10.542	(8.945-12.138)		13182170	80.6	
	18 Dotriacontane					
	10.675	10.664	0.011	259518	NC	
$	21 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

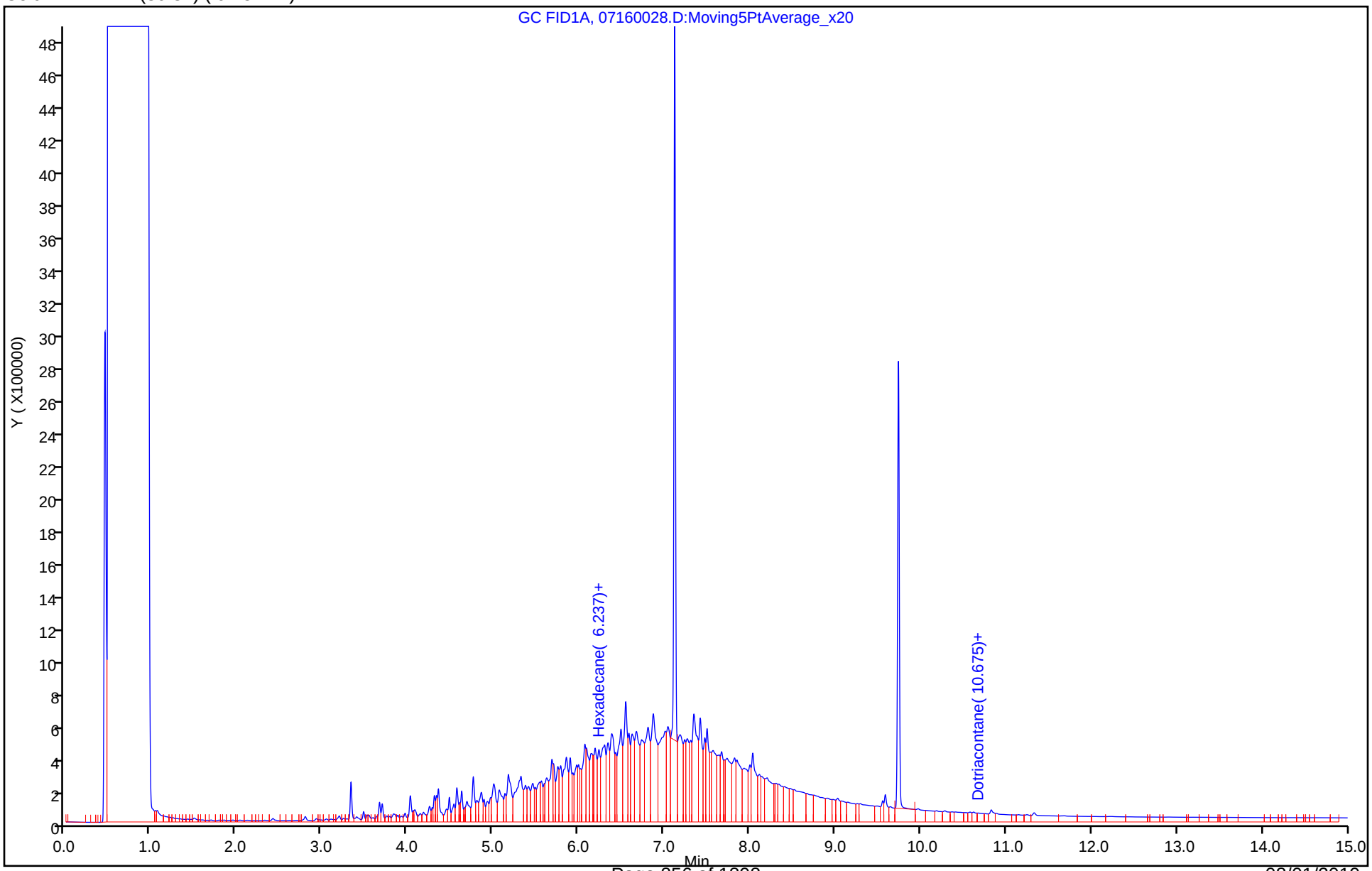
Report Date: 17-Jul-2019 11:29:10 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160028.D

Injection Date:	17-Jul-2019 03:31:23	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	280-124928-B-12-A	Lab Sample ID:	280-124928-12	Worklist Smp#:	28
Client ID:	SHGW04-19A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160028.D
Lims ID: 280-124928-B-12-A
Client ID: SHGW04-19A
Sample Type: Client
Inject. Date: 17-Jul-2019 03:31:23 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-12-A
Misc. Info.: 280-0083727-028
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 10:05:10

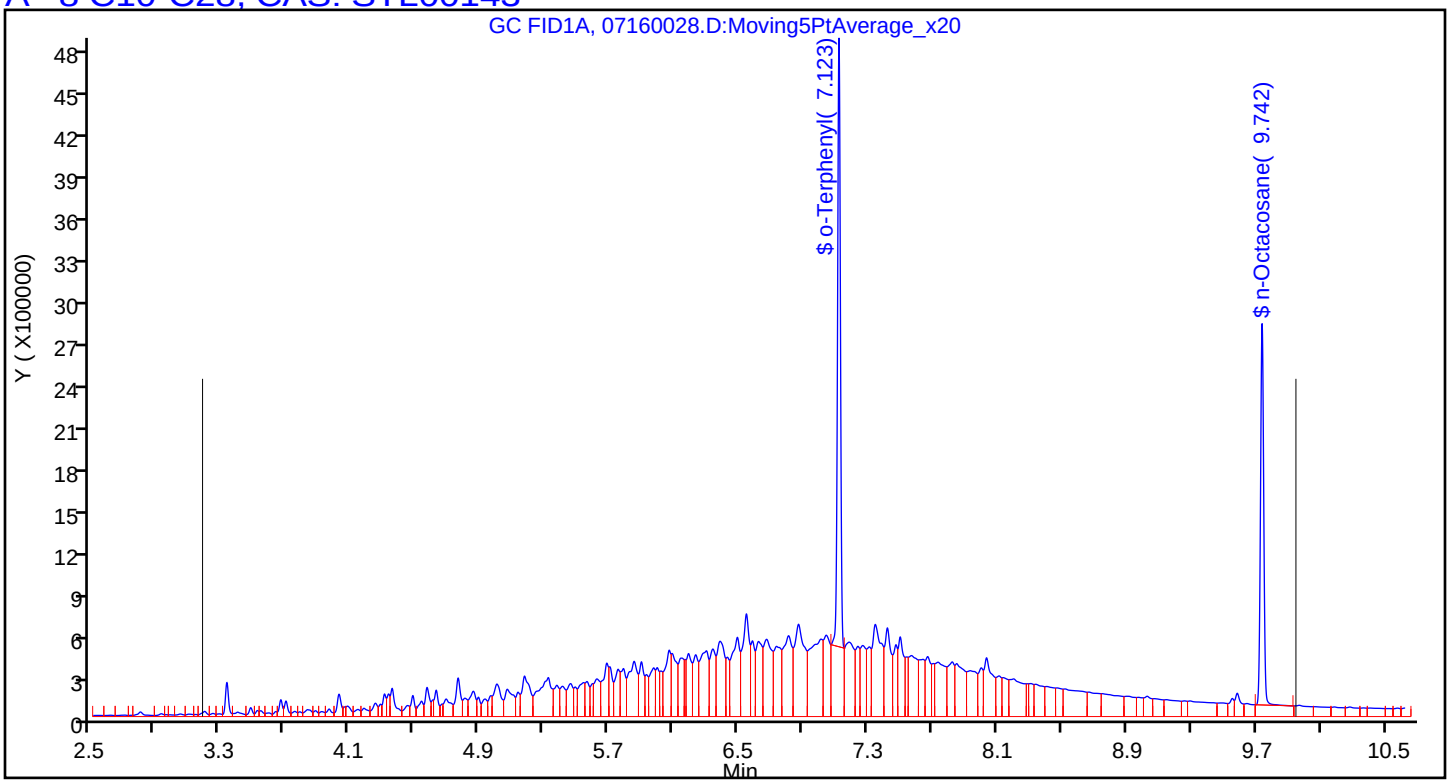
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	28.0	79.99
$ 14 n-Octacosane	35.0	30.9	88.19

Report Date: 17-Jul-2019 11:29:10 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160028.D				
Injection Date:	17-Jul-2019 03:31:23	Instrument ID:	SGC_U2a		
Lims ID:	280-124928-B-12-A	Lab Sample ID:	280-124928-12		
Client ID:	SHGW04-19A				
Operator ID:	MM	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 464041

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2019 18:55 Calibration End Date: 07/09/2019 21:05 Calibration ID: 37099

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-464041/10	07090010.D
Level 2	STD2 280-464041/9	07090009.D
Level 3	STD3 280-464041/8	07090008.D
Level 4	STD4 280-464041/7	07090007.D
Level 5	STD5 280-464041/6	07090006.D
Level 6	STD6 280-464041/5	07090005.D
Level 7	STD7 280-464041/4	07090004.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
C10-C28	6.567	6.567	6.567	6.567	6.567	6.567	6.567				3.180 - 9.954	6.567
o-Terphenyl (Surr)	7.127	7.126	7.125	7.133	7.135	7.143					7.083 - 7.183	7.132
n-Octacosane	9.751	9.750	9.751	9.752	9.753	9.757					9.710 - 9.810	9.752

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 464041

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2019 18:55 Calibration End Date: 07/09/2019 21:05 Calibration ID: 37099

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-464041/10	07090010.D
Level 2	STD2 280-464041/9	07090009.D
Level 3	STD3 280-464041/8	07090008.D
Level 4	STD4 280-464041/7	07090007.D
Level 5	STD5 280-464041/6	07090006.D
Level 6	STD6 280-464041/5	07090005.D
Level 7	STD7 280-464041/4	07090004.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
C10-C28	142414 127437	137575 127657	129116 118237	130513	Lin2	1747389.93	126537.514							0.9990		0.9900
o-Terphenyl (Surr)	360084 194398	252621 186654	212650	204492	Lin1	87585.4100	190189.314							0.9990		0.9900
n-Octacosane	103484 121861	116248 124268	130990	142255	Ave		123184.356				10.7		15.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 464041

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2019 18:55 Calibration End Date: 07/09/2019 21:05 Calibration ID: 37099

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-464041/10	07090010.D
Level 2	STD2 280-464041/9	07090009.D
Level 3	STD3 280-464041/8	07090008.D
Level 4	STD4 280-464041/7	07090007.D
Level 5	STD5 280-464041/6	07090006.D
Level 6	STD6 280-464041/5	07090005.D
Level 7	STD7 280-464041/4	07090004.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
C10-C28	Lin2	14127449 1899534983	34118650 3518734381	128083064	647342455	948128188	99.2 14880	248 29760	992	4960	7440
o-Terphenyl (Surr)	Lin1	180042 13999018	315776	1063252	5112297	7289936	0.500 75.0	1.25	5.00	25.0	37.5
n-Octacosane	Ave	51742 9320098	145310	654950	3556374	4569795	0.500 75.0	1.25	5.00	25.0	37.5

Curve Type Legend:

Ave = Average
Lin1 = Linear 1/conc
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090004.D
Lims ID: STD7 DRO
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-Jul-2019 18:55:50 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD7 DRO
Misc. Info.: 280-0083576-004
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jul-2019 09:26:01 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0307

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.180-8.949)		3486812250	29430	27514	
A	8 C10-C28						
	6.567	(3.180-9.954)		3518734381	29760	27794	
A	22 C10-C32						
	7.014	(3.180-10.847)		3525468513	29880	27893	
A	10 C10-C36						
	7.650	(3.180-12.121)		3529110497	30000	27991	

Reagents:

DRO_L7_00065 Amount Added: 200.00 Units: uL

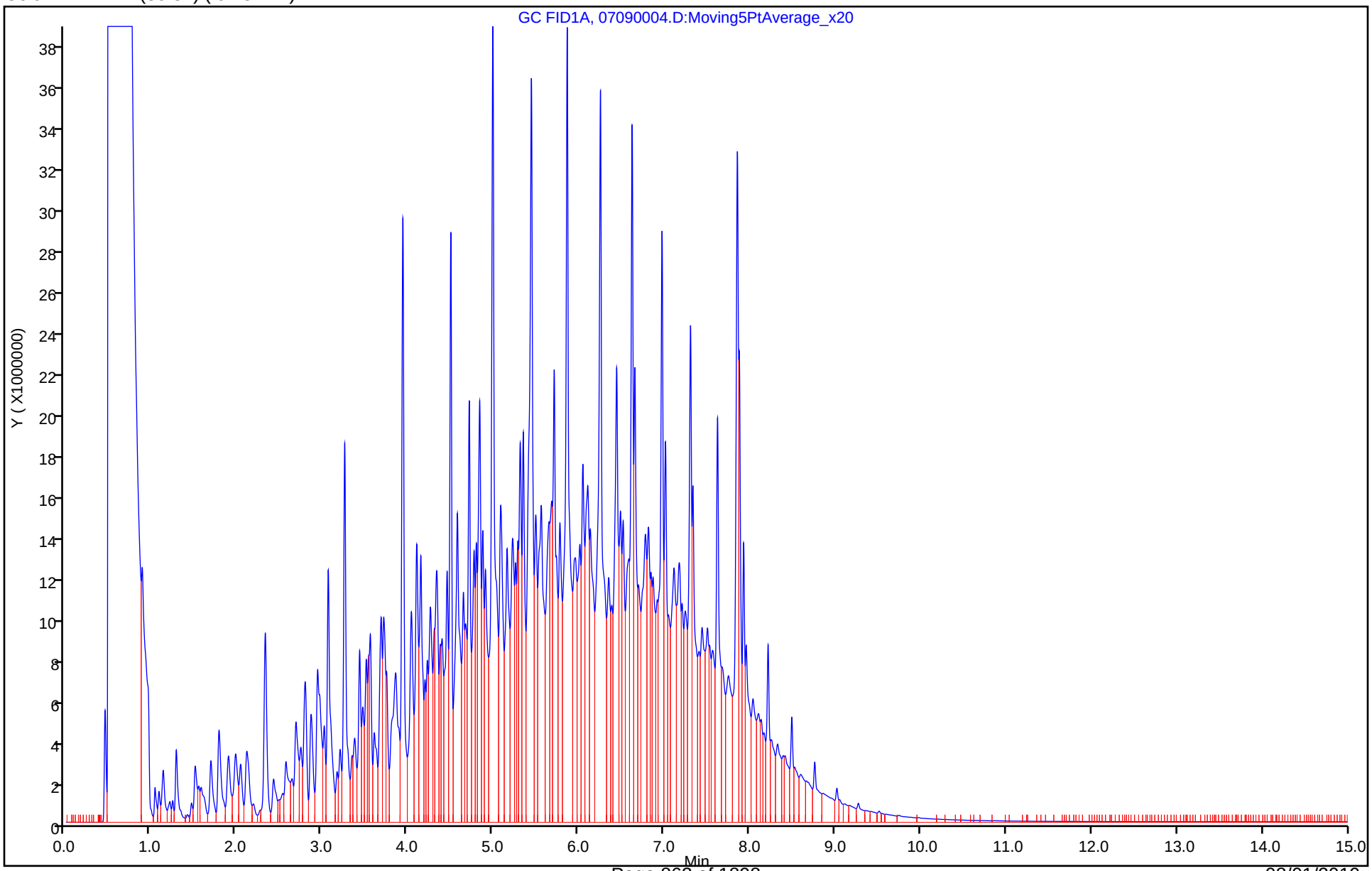
Report Date: 10-Jul-2019 09:26:02 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090004.D

Injection Date:	09-Jul-2019 18:55:50	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	STD7 DRO			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

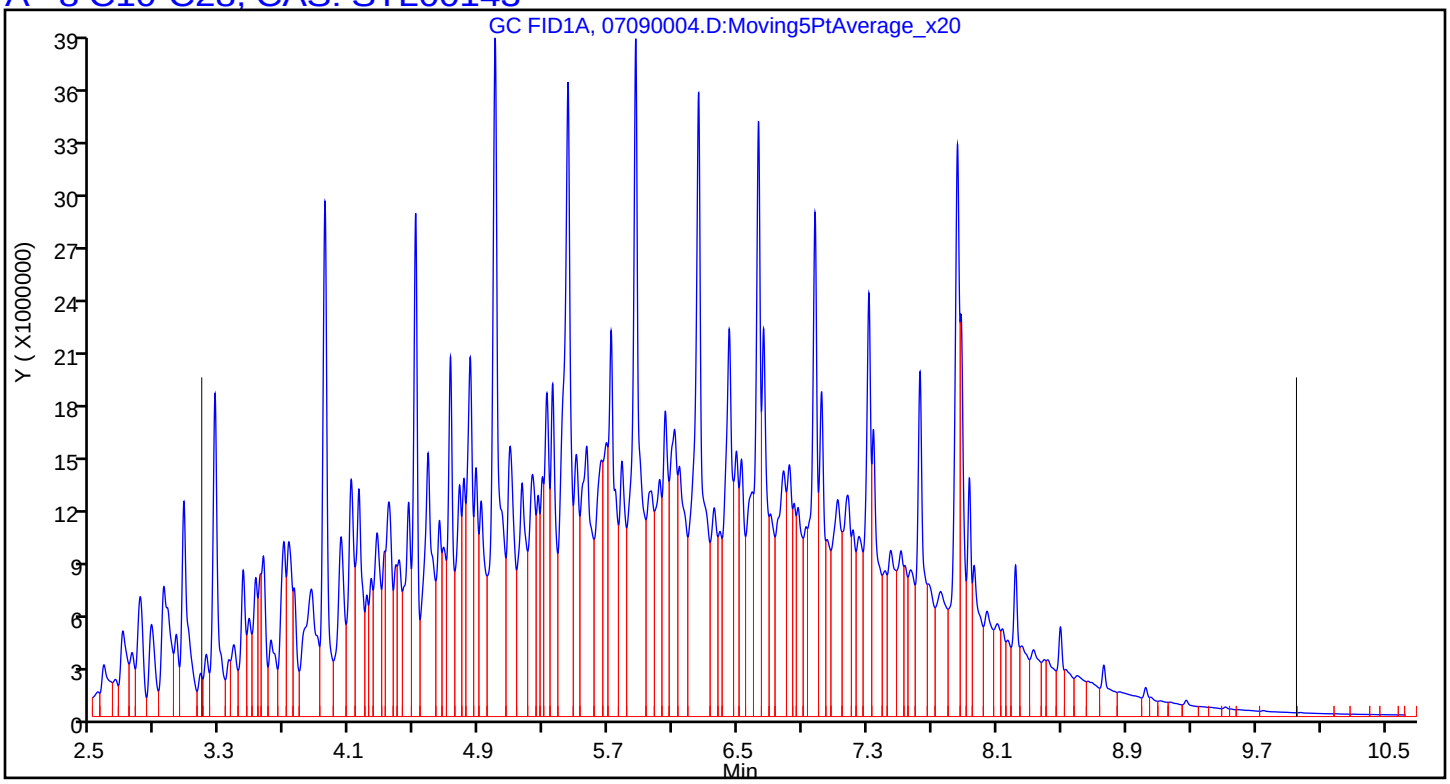


Report Date: 10-Jul-2019 09:26:02 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090004.D				
Injection Date:	09-Jul-2019 18:55:50	Instrument ID:	SGC_U2a		
Lims ID:	STD7 DRO				
Client ID:					
Operator ID:	MM	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090005.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 09-Jul-2019 19:17:22 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6
Misc. Info.: 280-0083576-005
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jul-2019 09:26:03 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0307

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.058	(3.180-8.949)		1879151525	14715	14823	
A	8 C10-C28						
	6.567	(3.180-9.954)		1899534983	14880	14998	
A	22 C10-C32						
	7.014	(3.180-10.847)		1903889549	14940	15054	
$	9 o-Terphenyl						
	7.143	7.133	0.010	13999018	75.0	73.1	
A	10 C10-C36						
	7.650	(3.180-12.121)		1906790283	15000	15110	
$	14 n-Octacosane						
	9.757	9.760	-0.003	9320098	75.0	75.7	

Reagents:

DRO_L6_00046 Amount Added: 200.00 Units: uL

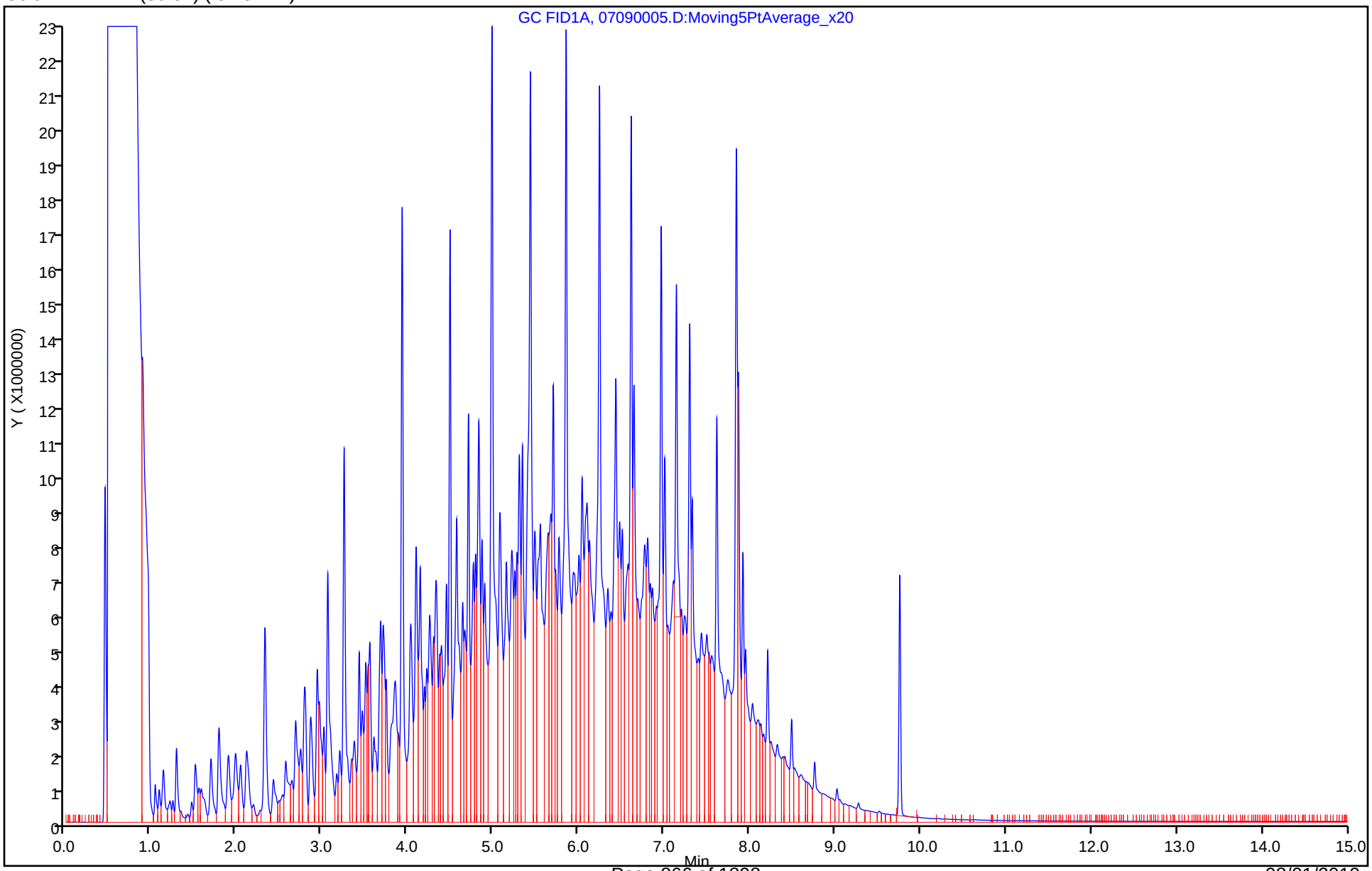
Report Date: 10-Jul-2019 09:26:04 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090005.D

Injection Date:	09-Jul-2019 19:17:22	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	STD6			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



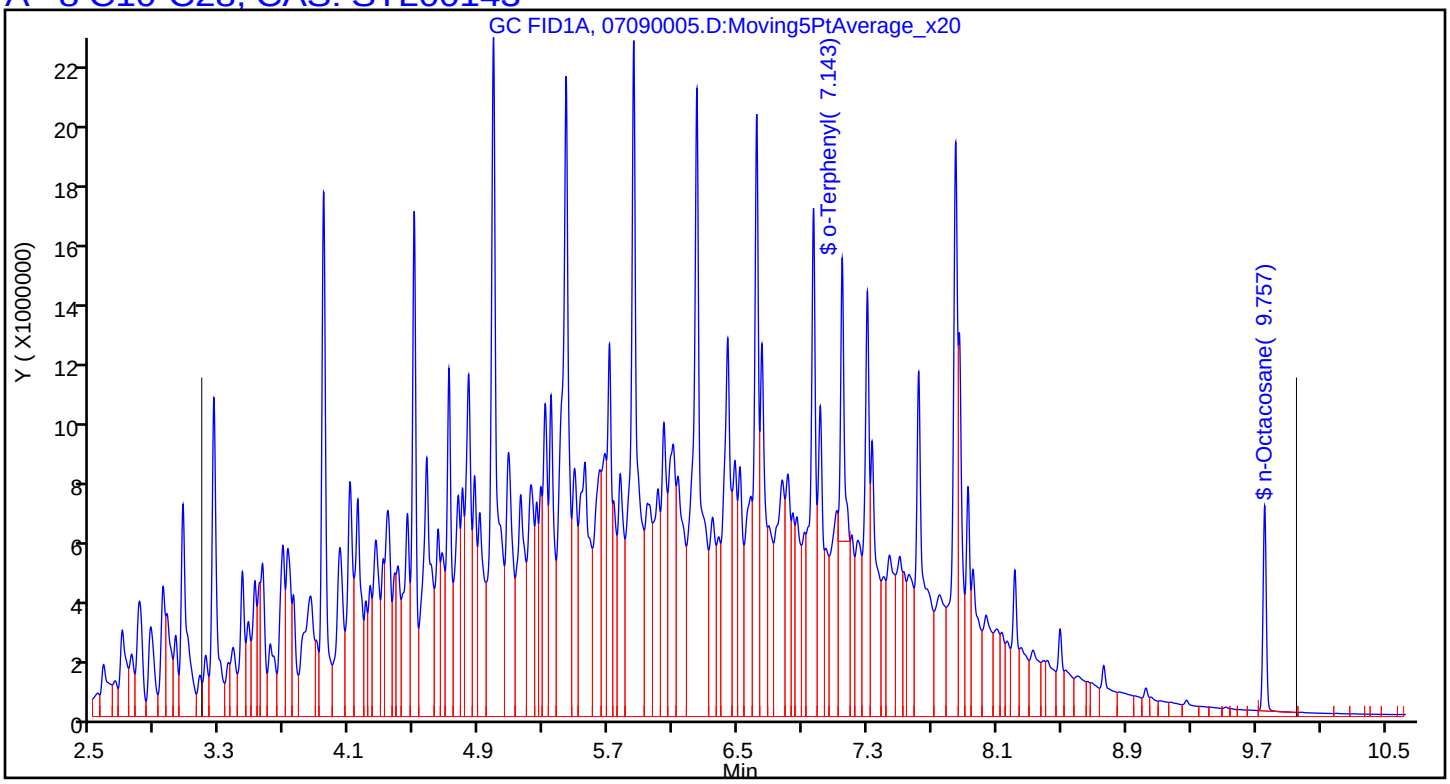
Report Date: 10-Jul-2019 09:26:04 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090005.D

Injection Date:	09-Jul-2019 19:17:22	Instrument ID:	SGC_U2a		
Lims ID:	STD6				
Client ID:					
Operator ID:	MM	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090006.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 09-Jul-2019 19:38:55 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 280-0083576-006
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jul-2019 09:26:05 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0307

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.180-8.949)		938483396	7357.5	7398.1	
A	8 C10-C28						
	6.567	(3.180-9.954)		948128188	7440.0	7479.1	
A	22 C10-C32						
	7.014	(3.180-10.847)		950881898	7470.0	7509.2	
$	9 o-Terphenyl						
	7.135	7.133	0.002	7289936	37.5	37.9	
A	10 C10-C36						
	7.650	(3.180-12.121)		953141480	7500.0	7538.3	
$	14 n-Octacosane						
	9.753	9.760	-0.007	4569795	37.5	37.1	

Reagents:

DRO_L6_00046 Amount Added: 100.00 Units: uL

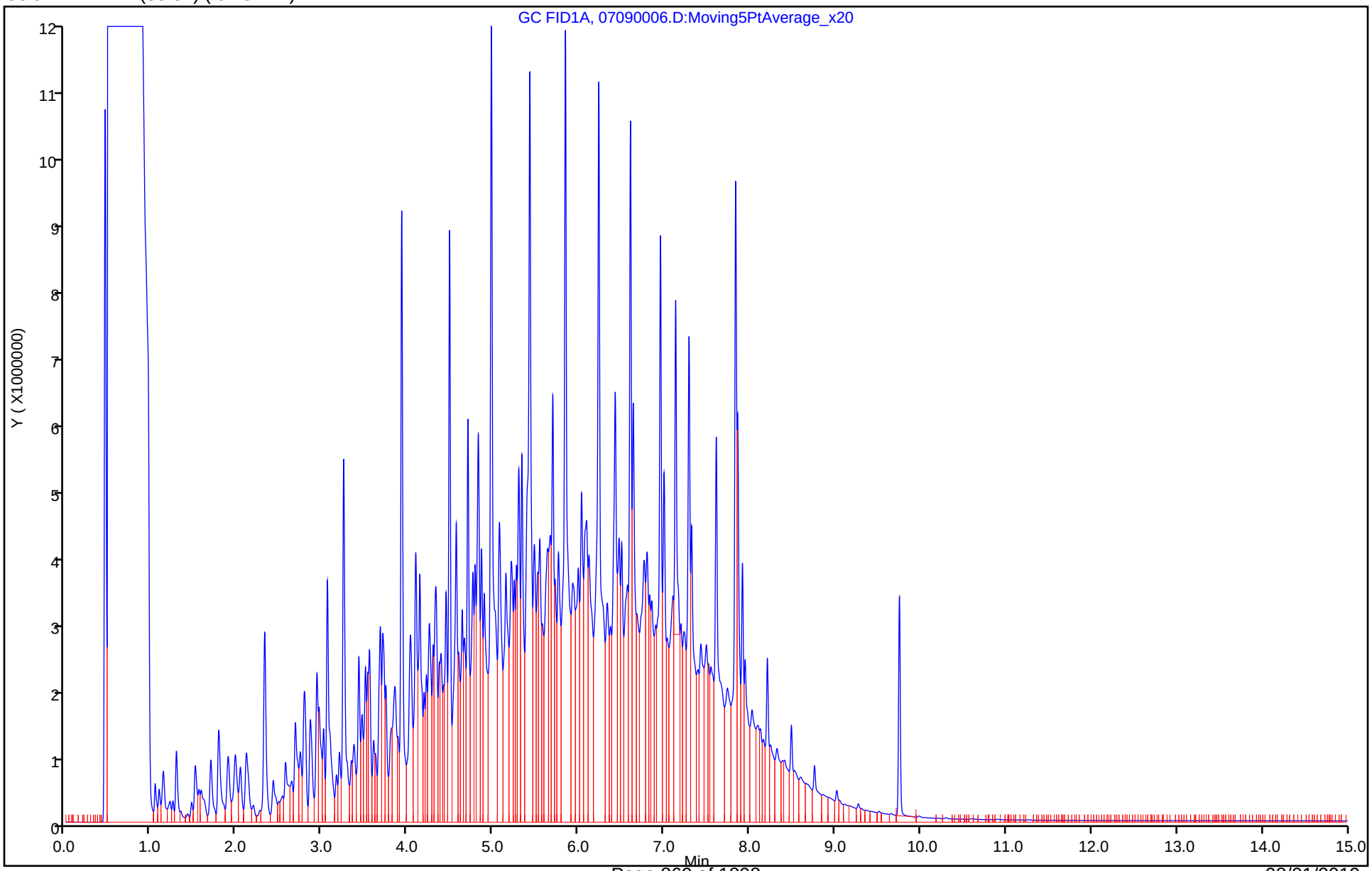
Report Date: 10-Jul-2019 09:26:06 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090006.D

Injection Date:	09-Jul-2019 19:38:55	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

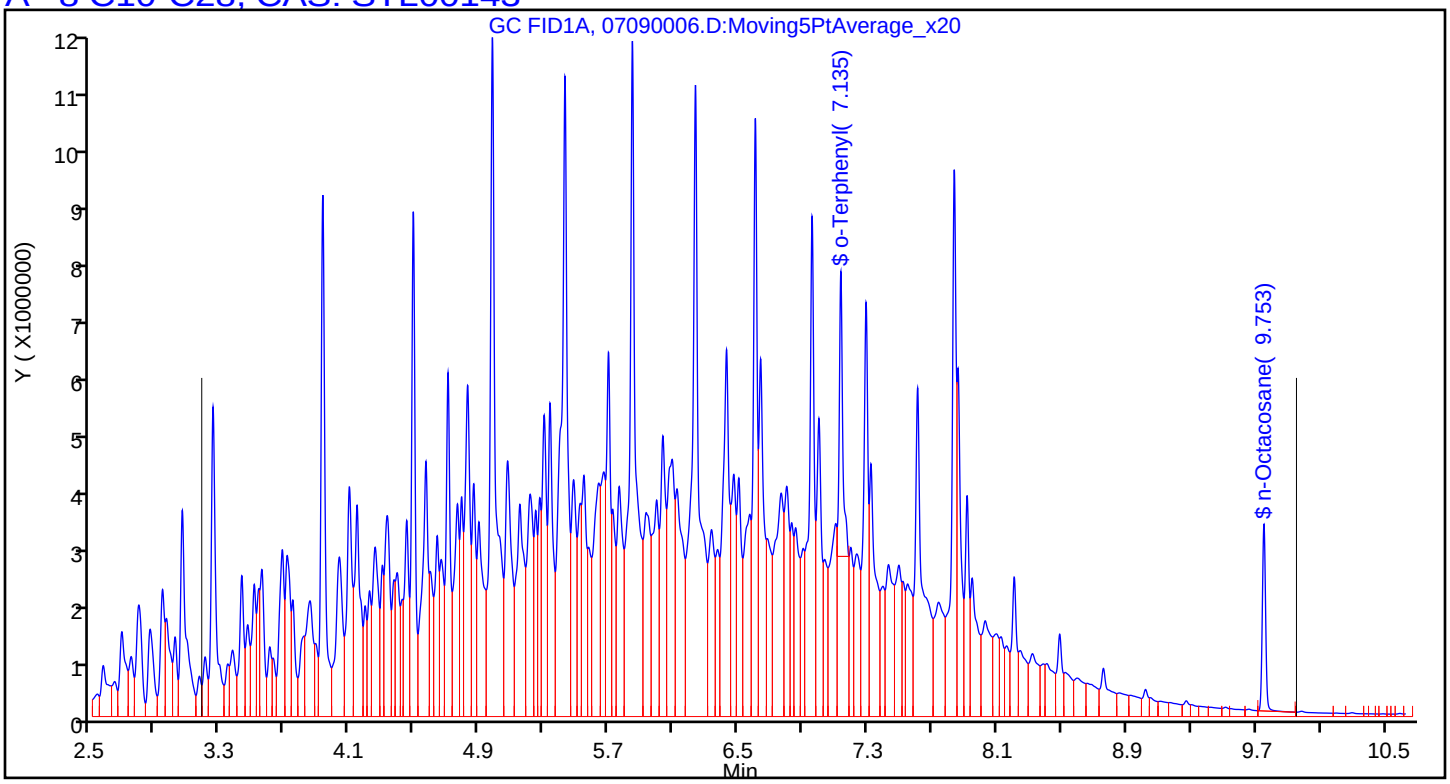


Report Date: 10-Jul-2019 09:26:06 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090006.D				
Injection Date:	09-Jul-2019 19:38:55	Instrument ID:	SGC_U2a		
Lims ID:	STD5				
Client ID:					
Operator ID:	MM	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090007.D
Lims ID: STD4
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 09-Jul-2019 20:00:36 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4
Misc. Info.: 280-0083576-007
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jul-2019 09:26:07 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0307

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.180-8.949)		640719069	4905.0	5047.7	
A	8 C10-C28						
	6.567	(3.180-9.955)		647342455	4960.0	5102.0	
A	22 C10-C32						
	7.014	(3.180-10.847)		649177714	4980.0	5120.5	
$	9 o-Terphenyl						
	7.133	7.133	0.000	5112297	25.0	26.4	
A	10 C10-C36						
	7.650	(3.180-12.121)		651086383	5000.0	5140.1	
$	14 n-Octacosane						
	9.752	9.752	0.000	3556374	25.0	28.9	

Reagents:

DRO_L4/CCV_00080 Amount Added: 200.00 Units: uL

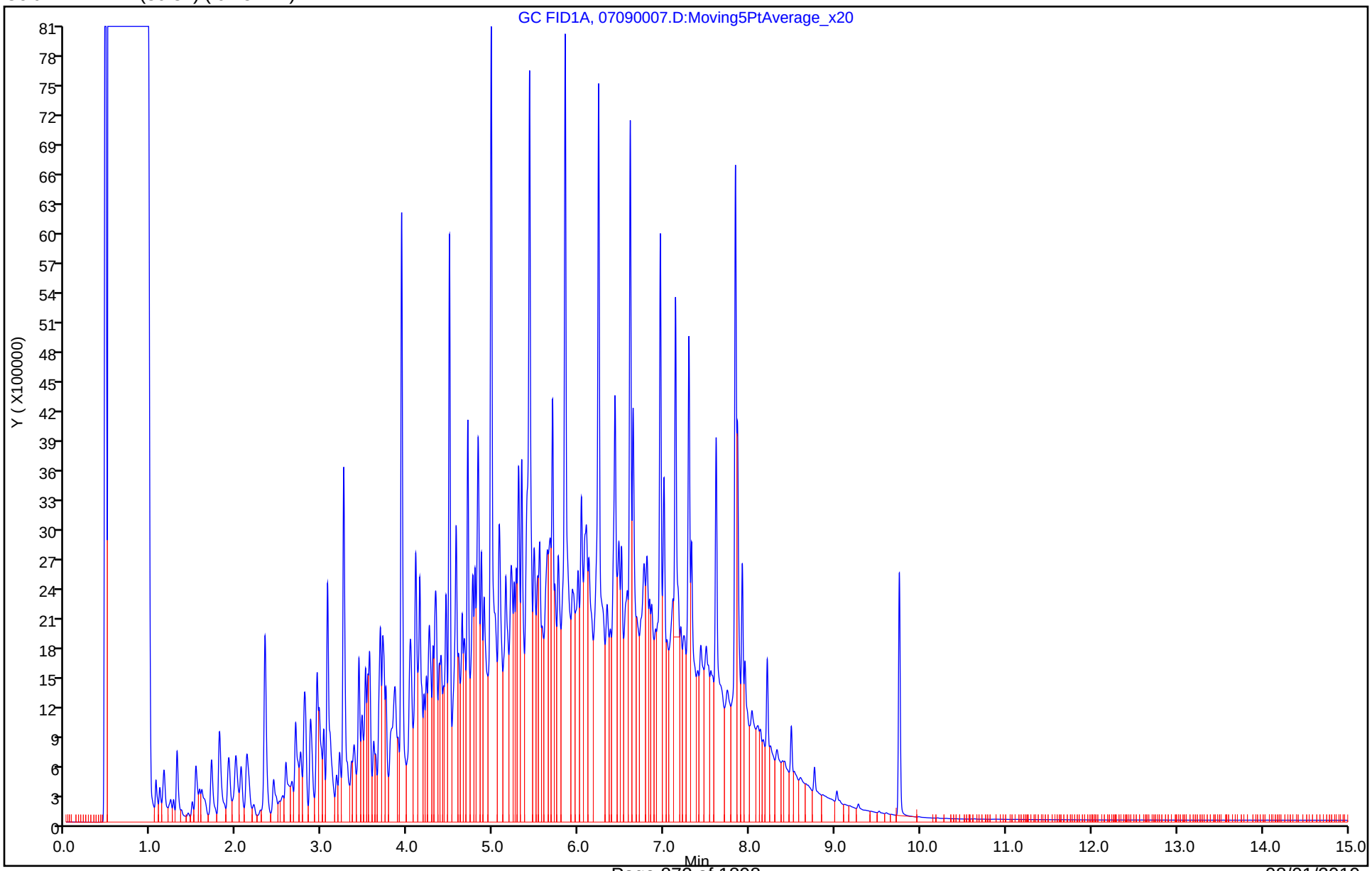
Report Date: 10-Jul-2019 09:26:07 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090007.D

Injection Date:	09-Jul-2019 20:00:36	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	STD4			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

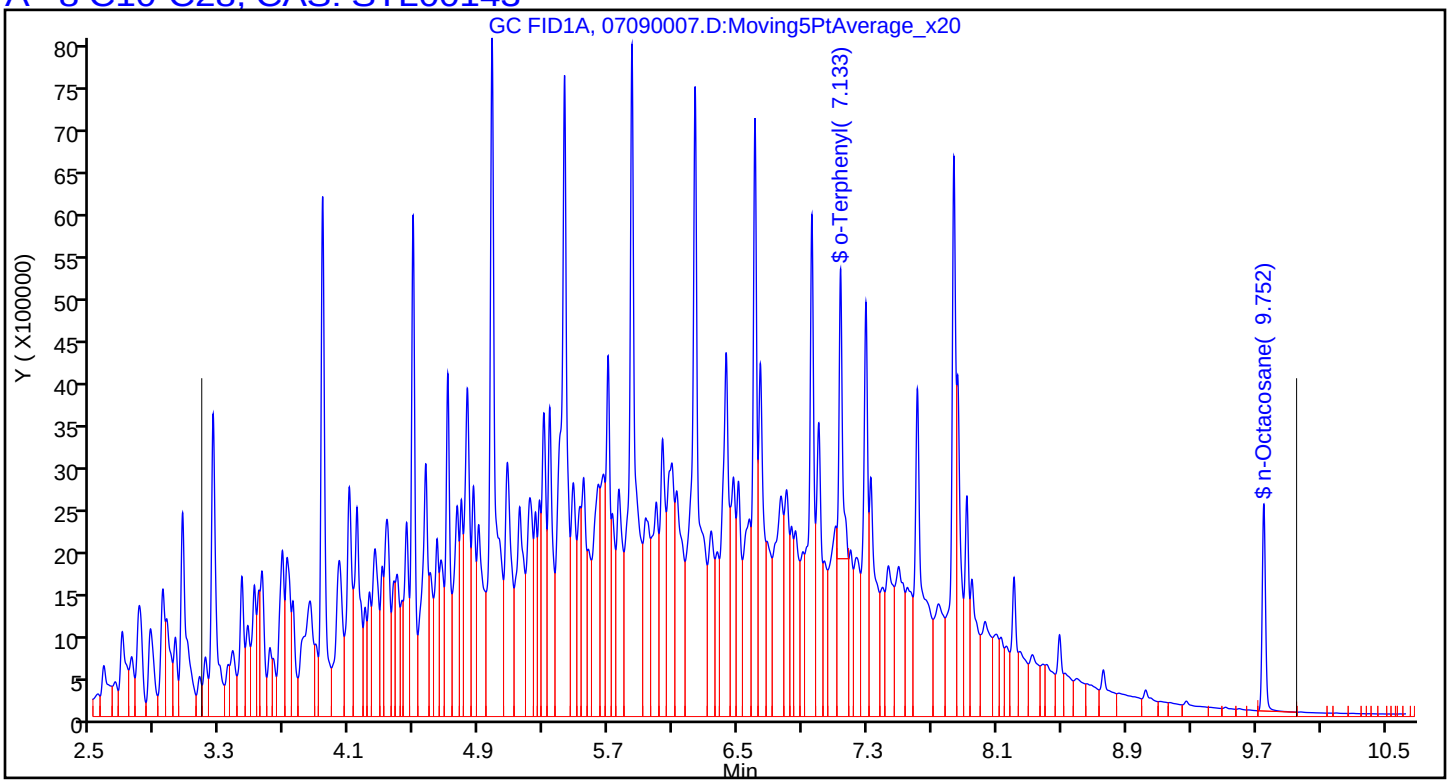


Report Date: 10-Jul-2019 09:26:07 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090007.D				
Injection Date:	09-Jul-2019 20:00:36	Instrument ID:	SGC_U2a		
Lims ID:	STD4				
Client ID:					
Operator ID:	MM	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090008.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-Jul-2019 20:22:13 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3
Misc. Info.: 280-0083576-008
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jul-2019 09:26:08 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0307

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.180-8.949)		126270306	981.0	986.8	
A	8 C10-C28						
	6.567	(3.180-9.955)		128083064	992.0	998.4	
A	22 C10-C32						
	7.014	(3.180-10.847)		129085095	996.0	1002.8	
$	9 o-Terphenyl						
	7.125	7.133	-0.008	1063252	5.00	5.13	
A	10 C10-C36						
	7.650	(3.180-12.121)		130614160	1000.0	1007.6	
$	14 n-Octacosane						
	9.751	9.752	-0.001	654950	5.00	5.32	

Reagents:

DRO_L4/CCV_00080 Amount Added: 40.00 Units: uL

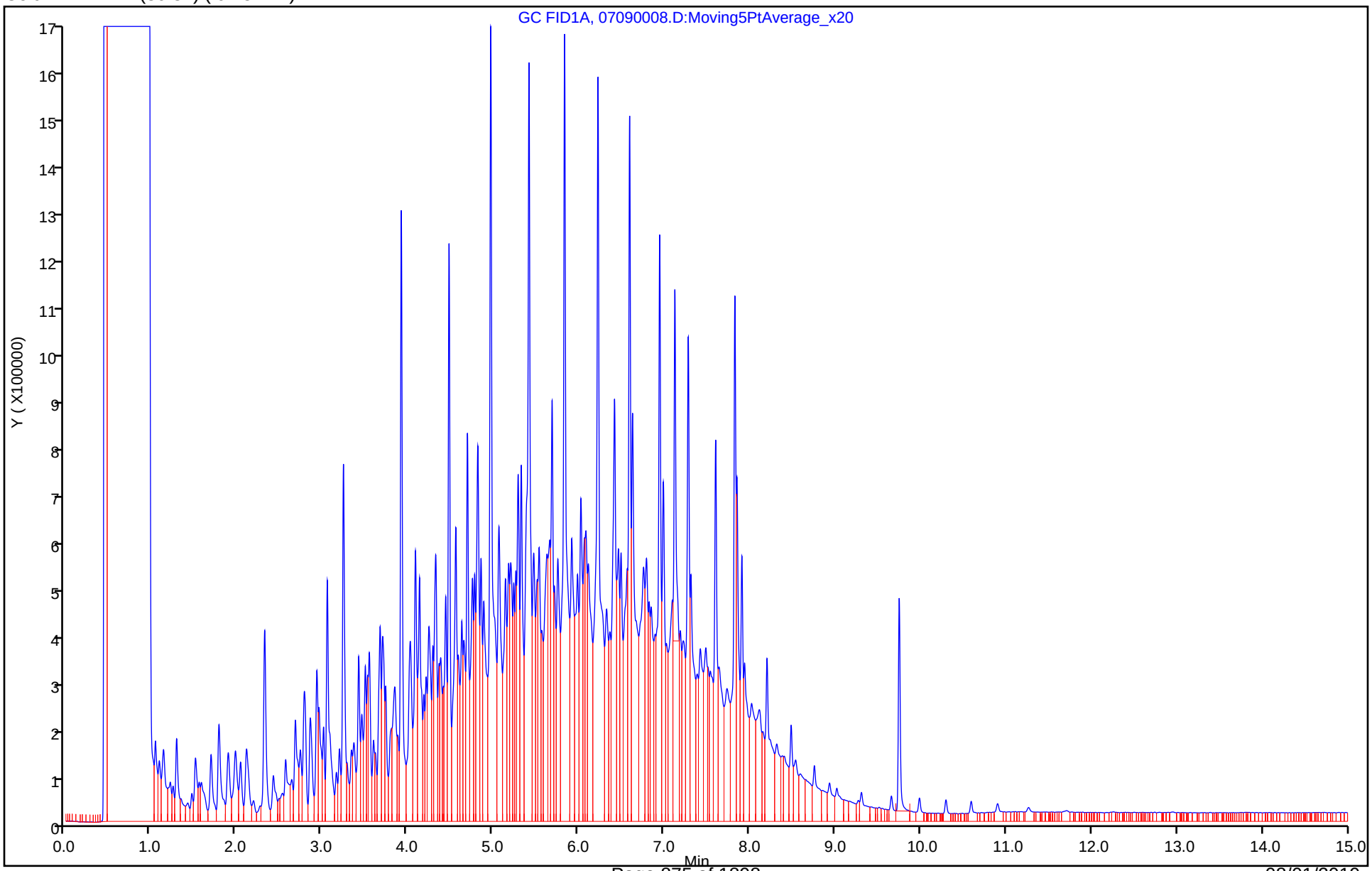
Report Date: 10-Jul-2019 09:26:09 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090008.D

Injection Date:	09-Jul-2019 20:22:13	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	STD3			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

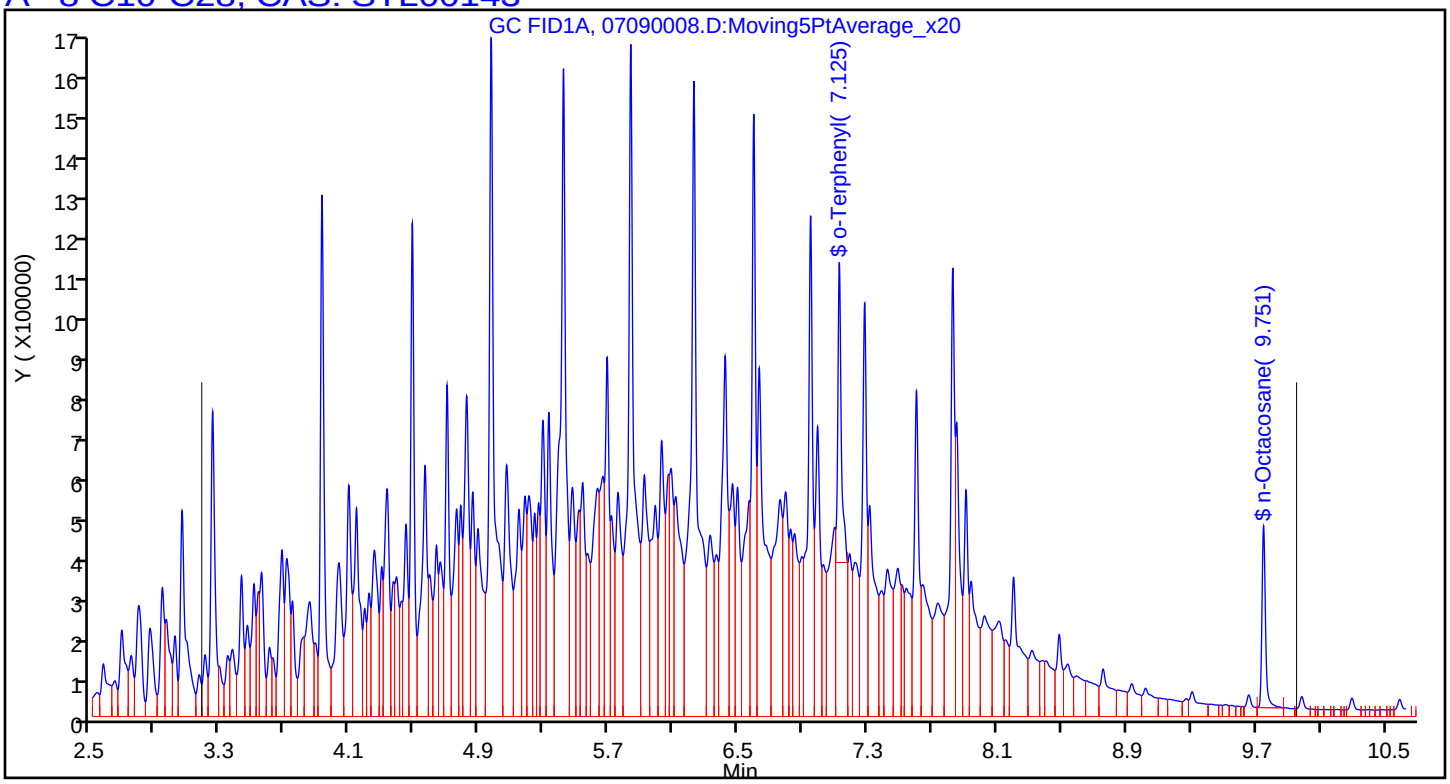


Report Date: 10-Jul-2019 09:26:09 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090008.D				
Injection Date:	09-Jul-2019 20:22:13	Instrument ID:	SGC_U2a		
Lims ID:	STD3				
Client ID:					
Operator ID:	MM	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090009.D				
Lims ID:	STD2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	09-Jul-2019 20:43:54	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	STD2				
Misc. Info.:	280-0083576-009				
Operator ID:	MM	Instrument ID:	SGC_U2a		
Sublist:	chrom-DRO_U2a*sub19				
Raw Data:	Smoothed				
Method:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	10-Jul-2019 09:27:04	Calib Date:	09-Jul-2019 23:59:12		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX0307				

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.180-8.949)		33280809	245.3	252.7	
A	8 C10-C28						
	6.567	(3.180-9.955)		34118650	248.0	255.8	
A	22 C10-C32						
	7.014	(3.180-10.847)		34908020	249.0	257.2	
$	9 o-Terphenyl						
	7.126	7.133	-0.007	315776	1.25	1.20	
A	10 C10-C36						
	7.650	(3.180-12.121)		36248915	250.0	258.4	
$	14 n-Octacosane						
	9.750	9.752	-0.002	145310	1.25	1.18	

Reagents:

DRO_L4/CCV_00080 Amount Added: 10.00 Units: uL

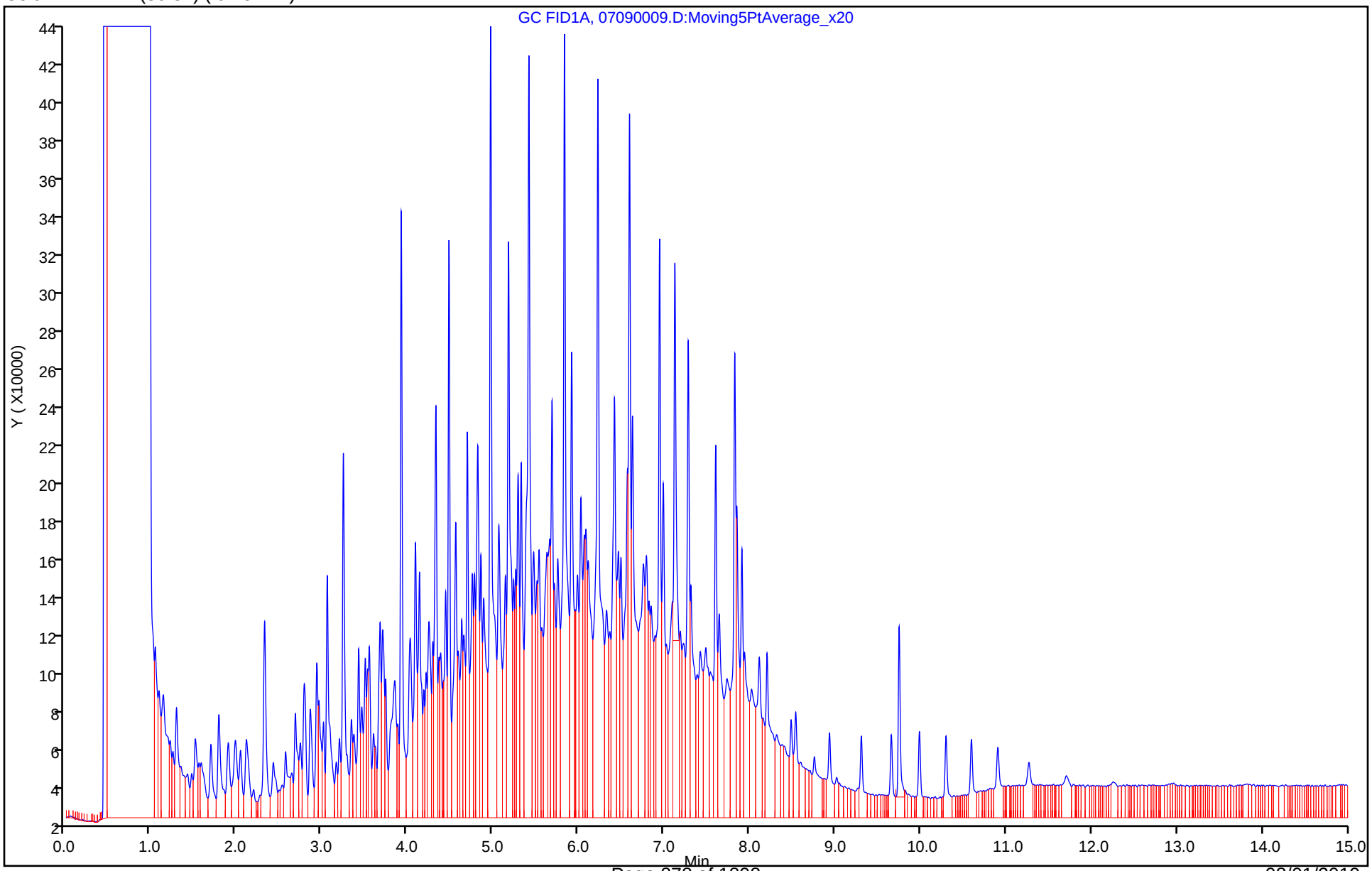
Report Date: 10-Jul-2019 09:27:05 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090009.D

Injection Date:	09-Jul-2019 20:43:54	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	STD2			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

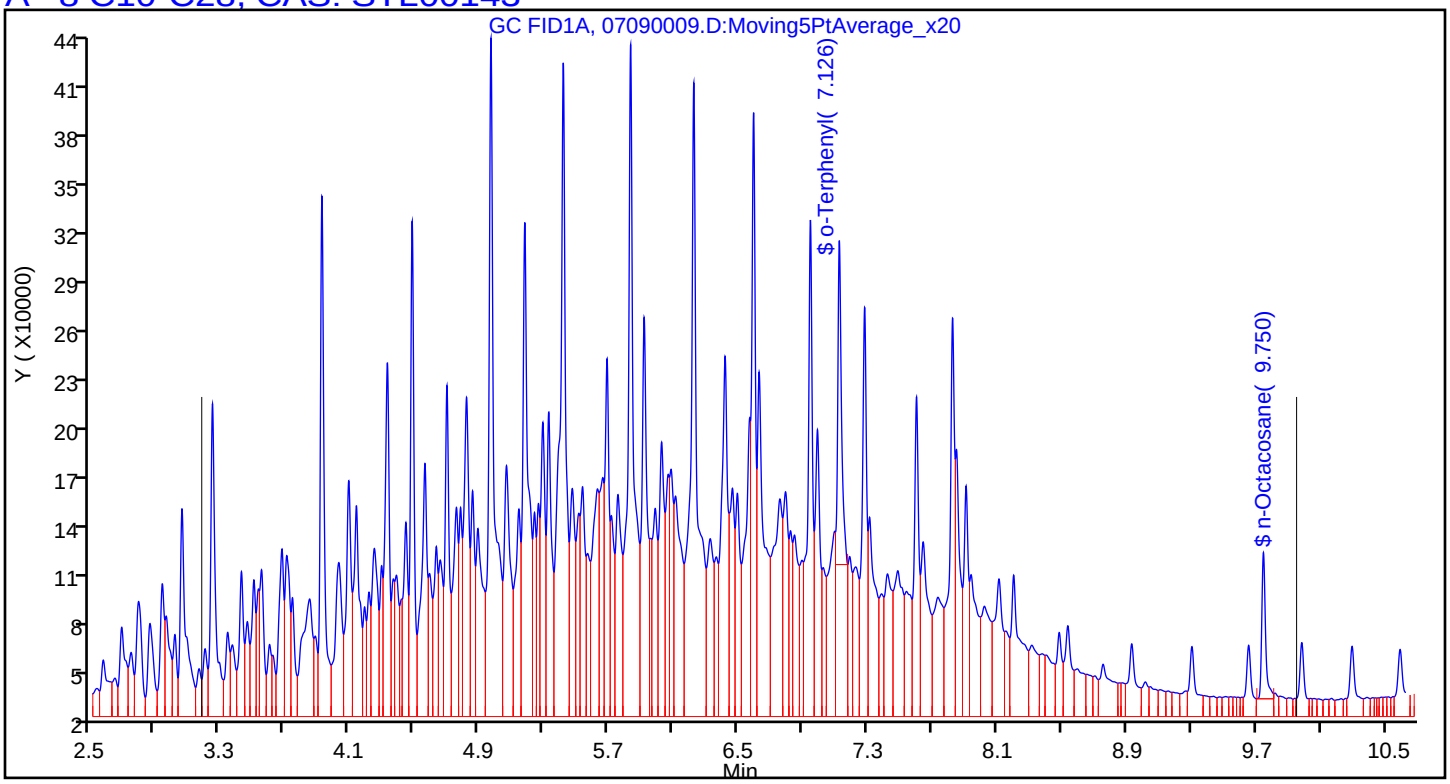


Report Date: 10-Jul-2019 09:27:05 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090009.D				
Injection Date:	09-Jul-2019 20:43:54	Instrument ID:	SGC_U2a		
Lims ID:	STD2				
Client ID:					
Operator ID:	MM	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090010.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 09-Jul-2019 21:05:35 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 280-0083576-010
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jul-2019 09:27:06 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0307

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.180-8.949)		13524799	98.1	96.8	
A	8 C10-C28						
	6.567	(3.180-9.955)		14127449	99.2	97.8	
A	22 C10-C32						
	7.014	(3.180-10.847)		14826293	99.6	98.2	
$	9 o-Terphenyl						
	7.127	7.133	-0.006	180042	0.5000	0.4861	
A	10 C10-C36						
	7.650	(3.180-12.121)		16118528	100.0	98.5	
$	14 n-Octacosane						
	9.751	9.752	-0.001	51742	0.5000	0.4200	

Reagents:

DRO_L4/CCV_00080 Amount Added: 4.00 Units: uL

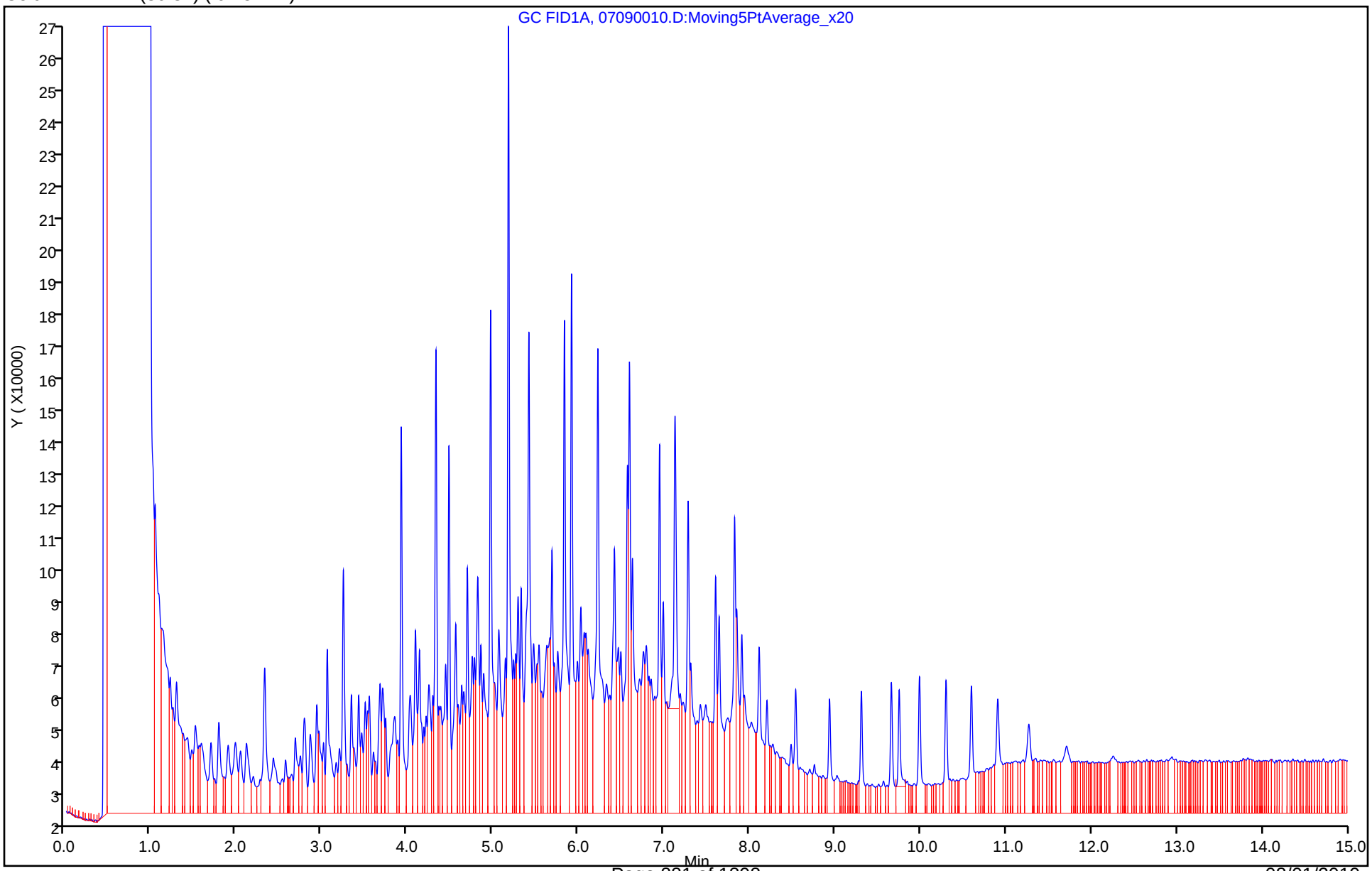
Report Date: 10-Jul-2019 09:27:06 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090010.D

Injection Date:	09-Jul-2019 21:05:35	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	STD1			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

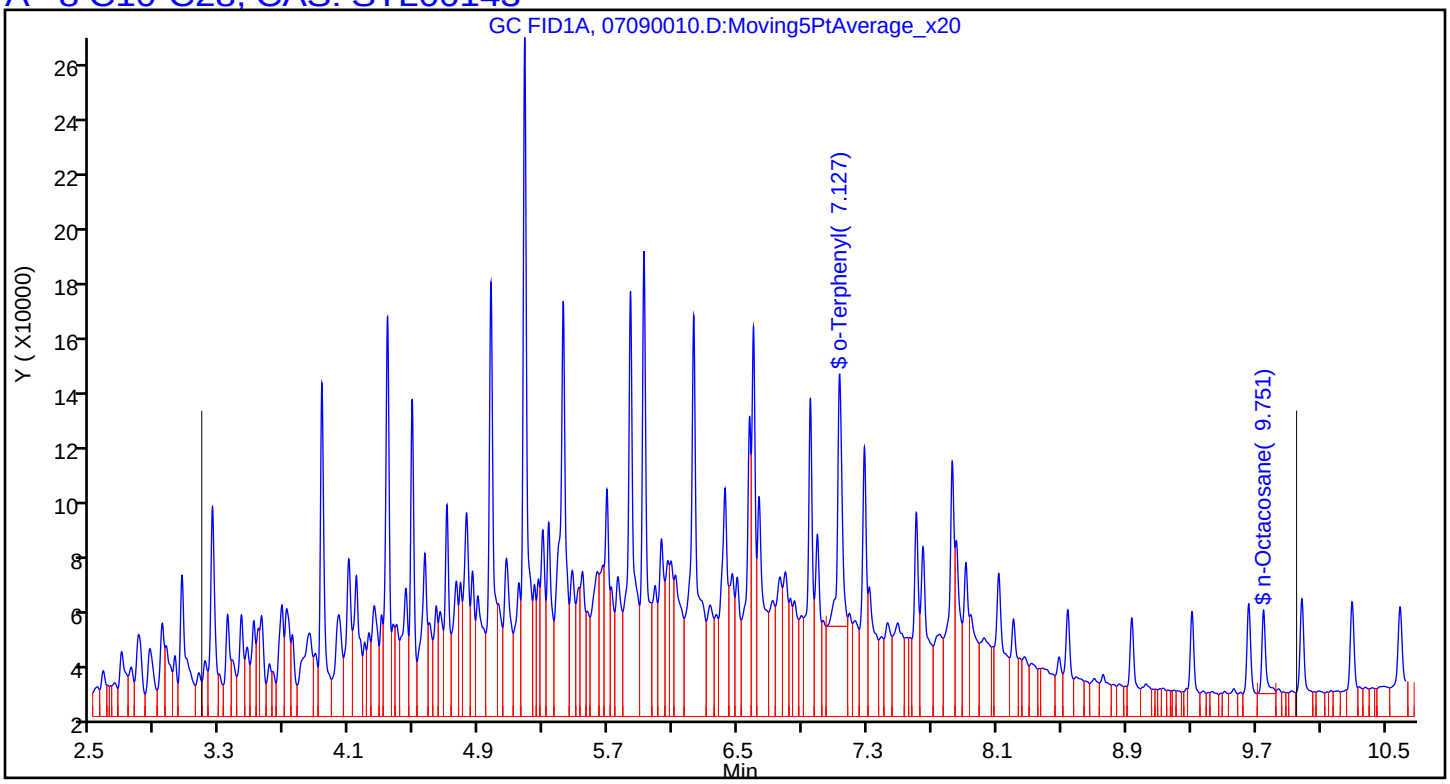


Report Date: 10-Jul-2019 09:27:06 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090010.D				
Injection Date:	09-Jul-2019 21:05:35	Instrument ID:	SGC_U2a		
Lims ID:	STD1				
Client ID:					
Operator ID:	MM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-464041/11 Calibration Date: 07/09/2019 21:27

Instrument ID: SGC_U2a Calib Start Date: 07/09/2019 18:55

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 07/09/2019 21:05

Lab File ID: 07090011.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin2		127807		1990	1980	0.3	20.0
o-Terphenyl (Surr)	Lin1		168675		17.3	20.0	-13.6	20.0
n-Octacosane	Ave	123184	144752		23.5	20.0	17.5	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-464041/11 Calibration Date: 07/09/2019 21:27

Instrument ID: SGC_U2a Calib Start Date: 07/09/2019 18:55

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 07/09/2019 21:05

Lab File ID: 07090011.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.57	3.18	9.96
o-Terphenyl (Surr)	7.13	7.08	7.18
n-Octacosane	9.75	9.70	9.80

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090011.D
Lims ID: ICV DRO
Client ID:
Sample Type: ICV
Inject. Date: 09-Jul-2019 21:27:18 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV DRO
Misc. Info.: 280-0083576-011
Operator ID: MM Instrument ID: SGC_U2a
Sublist:
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jul-2019 09:27:06 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0307

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.180-8.949)		252397253	1962.0	1982.4	
A	8 C10-C28						
	6.567	(3.180-9.955)		253568292	1984.0	1990.1	
A	22 C10-C32						
	7.014	(3.180-10.847)		254207419	1992.0	1993.4	
$	9 o-Terphenyl						
	7.127	7.133	-0.006	3373500	20.0	17.3	
A	10 C10-C36						
	7.650	(3.180-12.121)		255444298	2000.0	1998.7	
$	14 n-Octacosane						
	9.749	9.752	-0.003	2895030	20.0	23.5	

Reagents:

DRO_SS_00020 Amount Added: 200.00 Units: uL

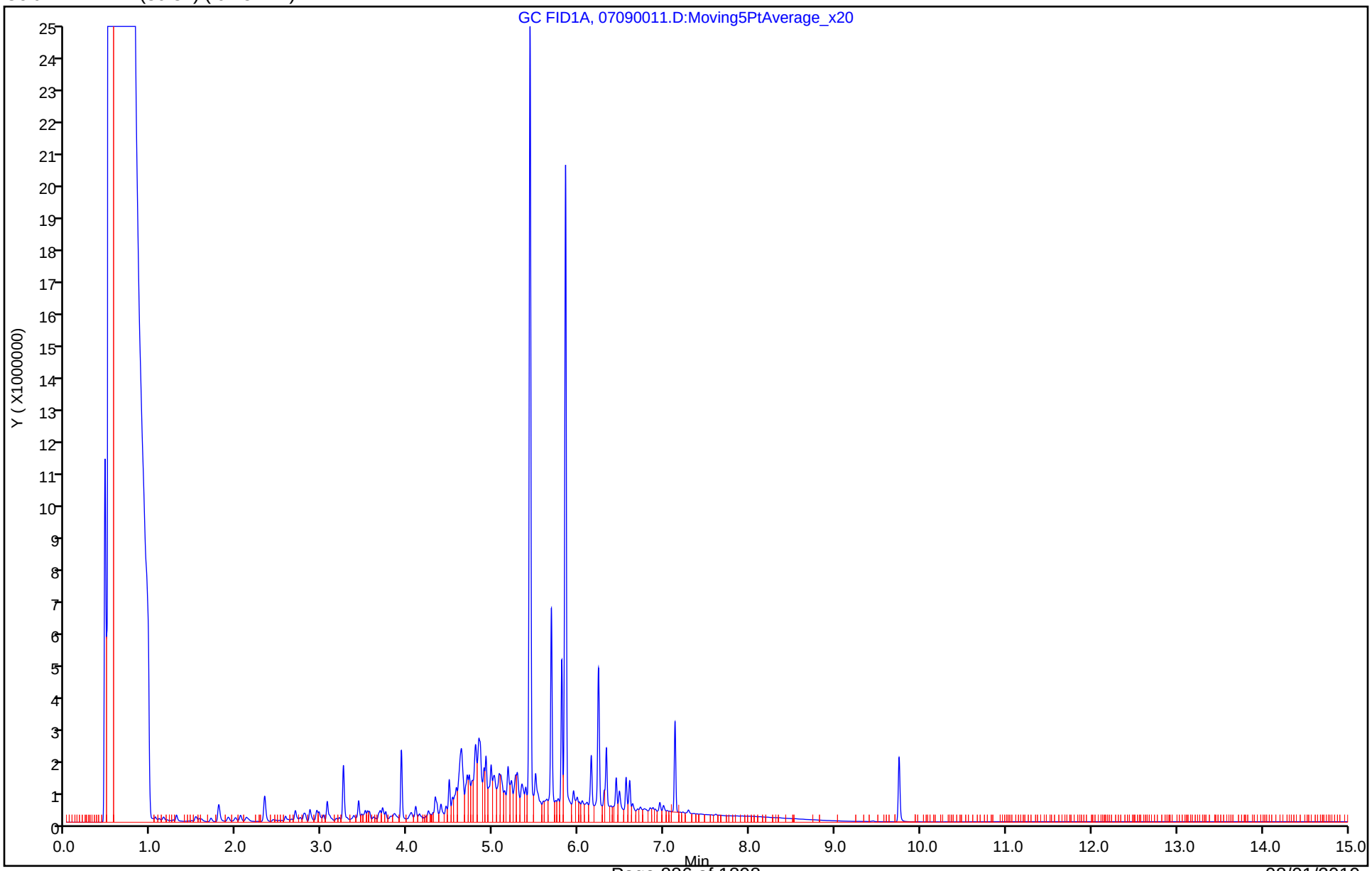
Report Date: 10-Jul-2019 09:27:08 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090011.D

Injection Date:	09-Jul-2019 21:27:18	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	ICV DRO			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

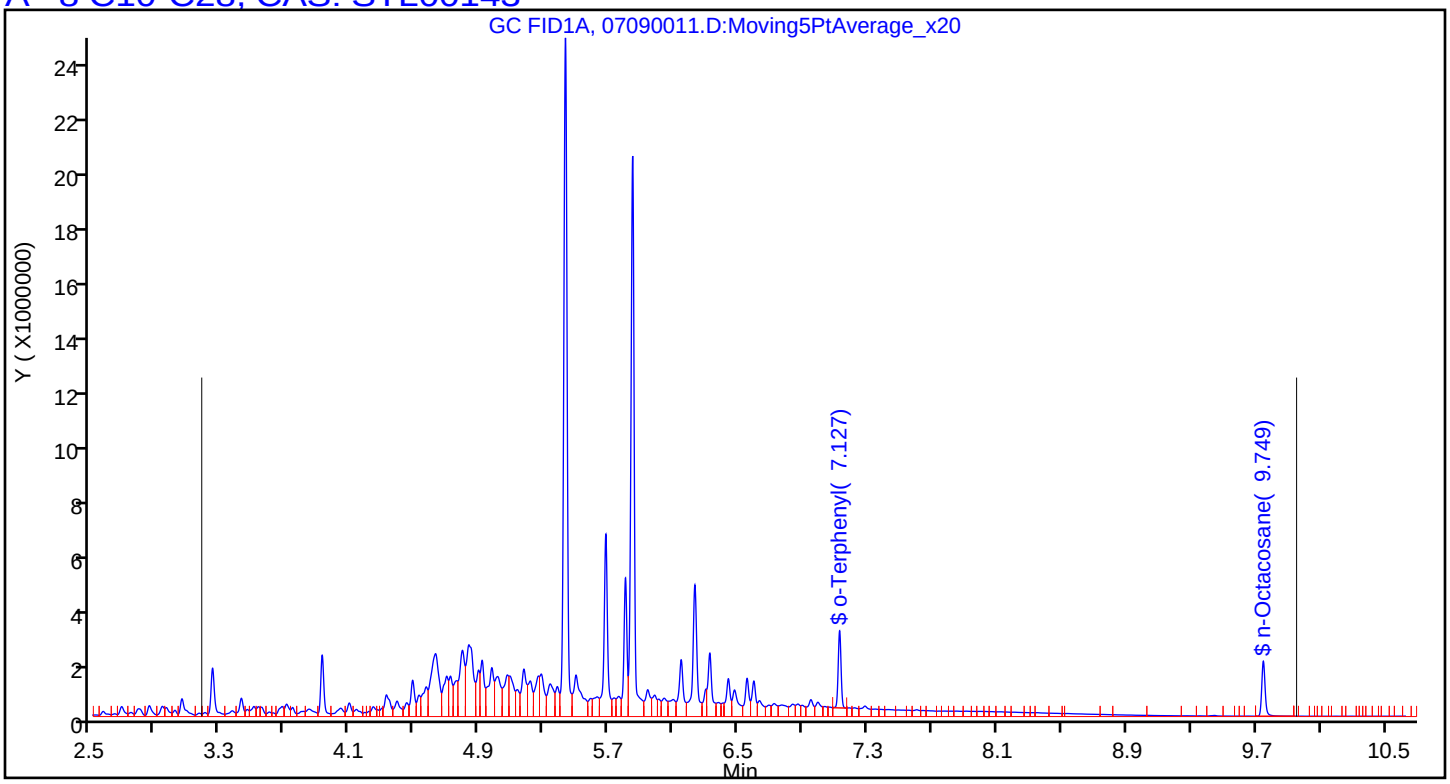


Report Date: 10-Jul-2019 09:27:08 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090011.D				
Injection Date:	09-Jul-2019 21:27:18	Instrument ID:	SGC_U2a		
Lims ID:	ICV DRO				
Client ID:					
Operator ID:	MM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-464667/4 Calibration Date: 07/16/2019 18:50

Instrument ID: SGC_U2a Calib Start Date: 07/09/2019 18:55

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 07/09/2019 21:05

Lab File ID: 07160004.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin2		129106		5050	4960	1.8	20.0
o-Terphenyl (Surr)	Lin1		197706		25.5	25.0	2.1	20.0
n-Octacosane	Ave	123184	134691		27.3	25.0	9.3	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCVRT 280-464667/4 Calibration Date: 07/16/2019 18:50

Instrument ID: SGC_U2a Calib Start Date: 07/09/2019 18:55

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 07/09/2019 21:05

Lab File ID: 07160004.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.57	3.19	9.95
o-Terphenyl (Surr)	7.13	7.08	7.18
n-Octacosane	9.75	9.70	9.80

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160004.D
Lims ID: CCVRT DRO
Client ID:
Sample Type: CCVRT
Inject. Date: 16-Jul-2019 18:50:07 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVRT DRO
Misc. Info.: 280-0083727-004
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:29:48 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 09:26:19

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.185-8.945)		633947486	4905.0	4994.2	
A	8 C10-C28						
	6.568	(3.185-9.951)		640366163	4960.0	5046.9	
A	22 C10-C32						
	7.018	(3.185-10.852)		641941875	4980.0	5063.2	
$	9 o-Terphenyl						
	7.127	7.127	0.000	4942639	25.0	25.5	
A	10 C10-C36						
	7.662	(3.185-12.138)		643717247	5000.0	5081.6	
$	14 n-Octacosane						
	9.748	9.748	0.000	3367277	25.0	27.3	

Reagents:

DRO_L4/CCV_00080 Amount Added: 1.00 Units: mL

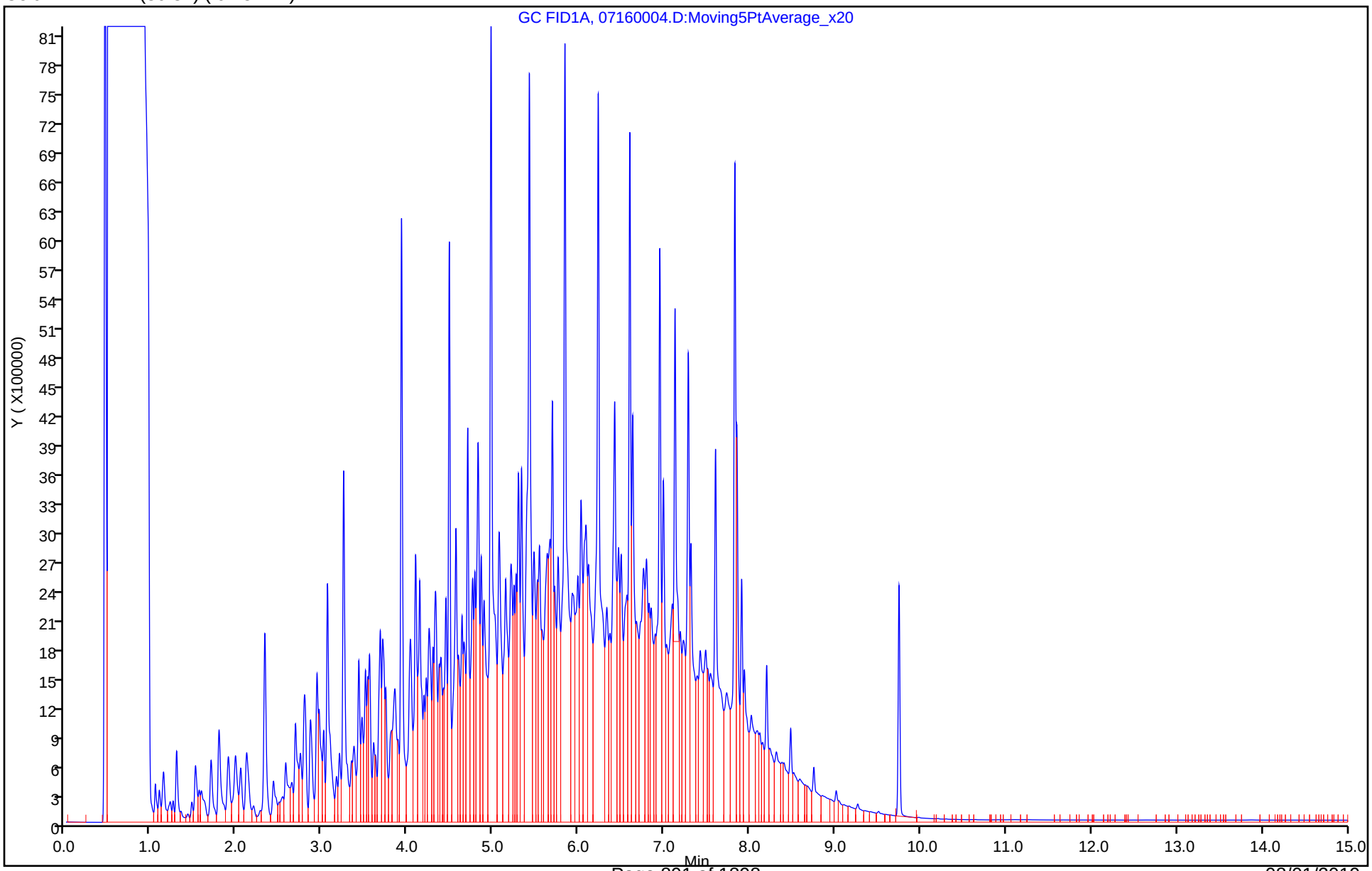
Report Date: 17-Jul-2019 11:29:48 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160004.D

Injection Date:	16-Jul-2019 18:50:07	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	CCVRT DRO			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

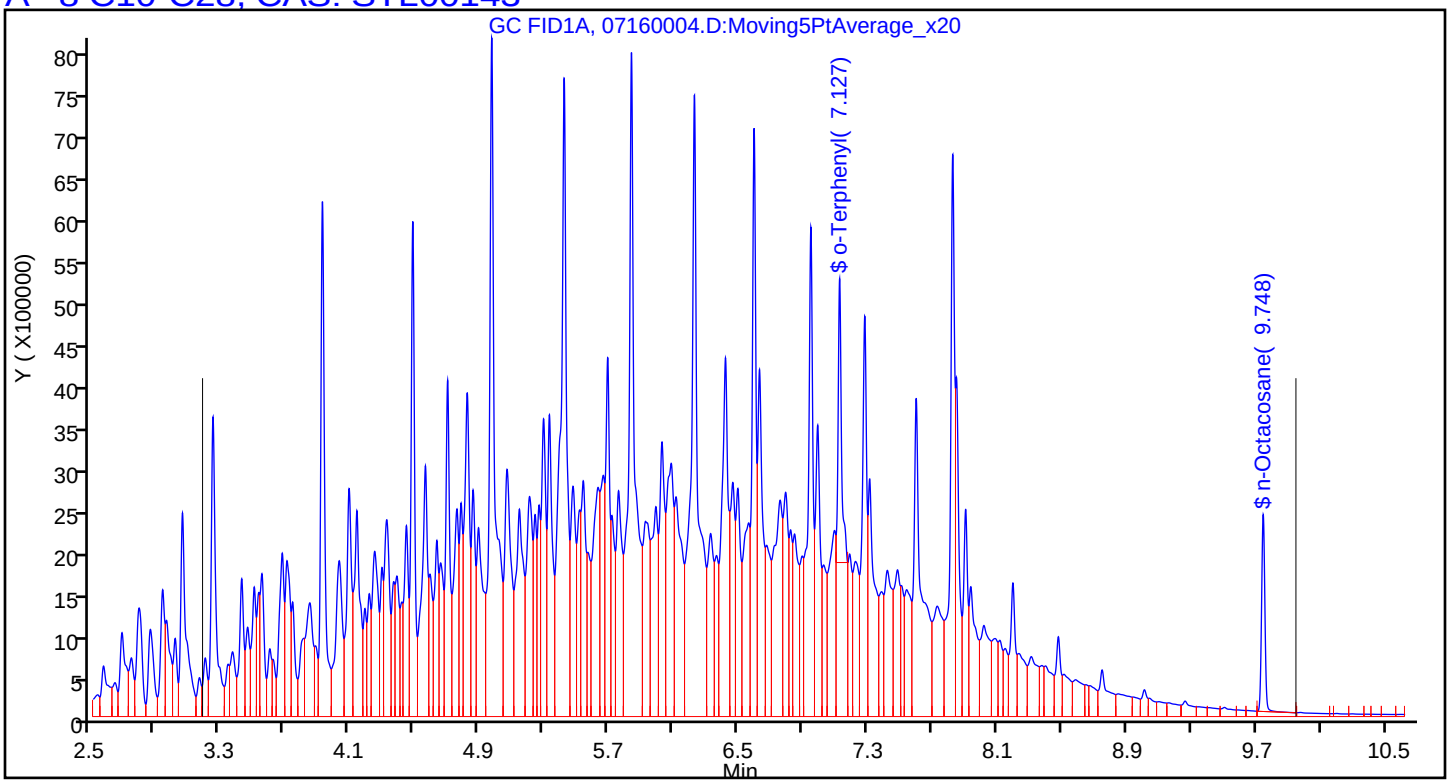


Report Date: 17-Jul-2019 11:29:49 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160004.D				
Injection Date:	16-Jul-2019 18:50:07	Instrument ID:	SGC_U2a		
Lims ID:	CCVRT DRO				
Client ID:					
Operator ID:	MM	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464667/20 Calibration Date: 07/17/2019 00:37

Instrument ID: SGC_U2a Calib Start Date: 07/09/2019 18:55

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 07/09/2019 21:05

Lab File ID: 07160020.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin2		129603		5070	4960	2.1	20.0
o-Terphenyl (Surr)	Lin1		198486		25.6	25.0	2.5	20.0
n-Octacosane	Ave	123184	157590		32.0	25.0	27.9*	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464667/20 Calibration Date: 07/17/2019 00:37

Instrument ID: SGC_U2a Calib Start Date: 07/09/2019 18:55

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 07/09/2019 21:05

Lab File ID: 07160020.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.57	3.19	9.95
o-Terphenyl (Surr)	7.13	7.08	7.18
n-Octacosane	9.74	9.70	9.80

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160020.D
Lims ID: CCV DRO
Client ID:
Sample Type: CCV
Inject. Date: 17-Jul-2019 00:37:45 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV DRO
Misc. Info.: 280-0083727-020
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:29:22 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 09:47:58

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.185-8.945)		636005154	4905.0	5010.4	
A	8 C10-C28						
	6.568	(3.185-9.951)		642830895	4960.0	5066.4	
A	22 C10-C32						
	7.018	(3.185-10.852)		645066739	4980.0	5088.0	
$	9 o-Terphenyl						
	7.129	7.127	0.002	4962147	25.0	25.6	
A	10 C10-C36						
	7.662	(3.185-12.138)		647195406	5000.0	5109.2	
$	14 n-Octacosane						
	9.743	9.748	-0.005	3939740	25.0	32.0	

Reagents:

DRO_L4/CCV_00080 Amount Added: 1.00 Units: mL

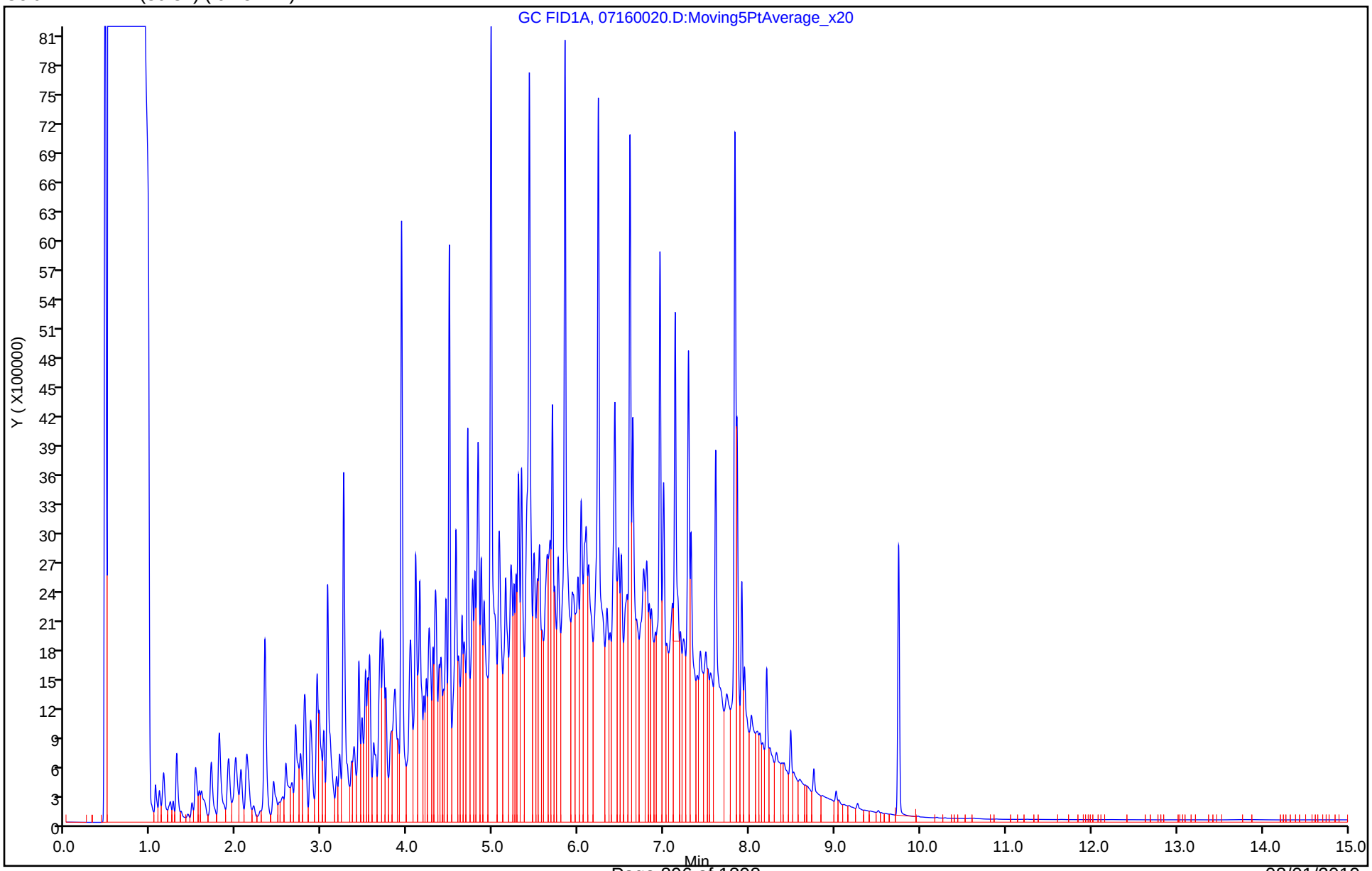
Report Date: 17-Jul-2019 11:29:23 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160020.D

Injection Date:	17-Jul-2019 00:37:45	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	CCV DRO			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

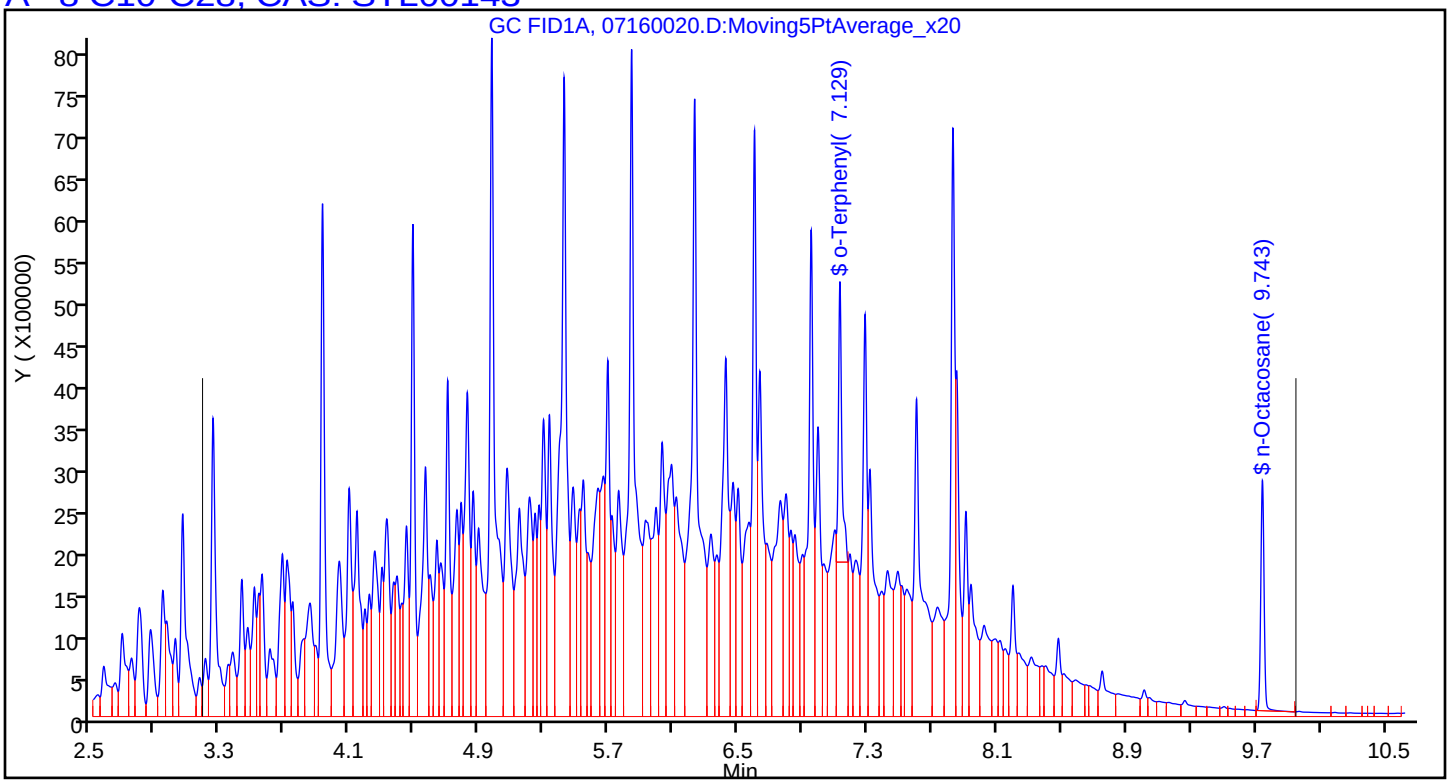


Report Date: 17-Jul-2019 11:29:23 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160020.D				
Injection Date:	17-Jul-2019 00:37:45	Instrument ID:	SGC_U2a		
Lims ID:	CCV DRO				
Client ID:					
Operator ID:	MM	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464667/38 Calibration Date: 07/17/2019 07:08

Instrument ID: SGC_U2a Calib Start Date: 07/09/2019 18:55

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 07/09/2019 21:05

Lab File ID: 07160038.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin2		129301		5050	4960	1.9	20.0
o-Terphenyl (Surr)	Lin1		199131		25.7	25.0	2.9	20.0
n-Octacosane	Ave	123184	156112		31.7	25.0	26.7*	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464667/38 Calibration Date: 07/17/2019 07:08

Instrument ID: SGC_U2a Calib Start Date: 07/09/2019 18:55

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 07/09/2019 21:05

Lab File ID: 07160038.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.57	3.19	9.95
o-Terphenyl (Surr)	7.13	7.08	7.18
n-Octacosane	9.74	9.70	9.80

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160038.D
Lims ID: CCV DRO
Client ID:
Sample Type: CCV
Inject. Date: 17-Jul-2019 07:08:23 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV DRO
Misc. Info.: 280-0083727-038
Operator ID: MM Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 10:08:10

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.185-8.945)		633877076	4905.0	4993.7	
A	8 C10-C28						
	6.568	(3.185-9.951)		641333657	4960.0	5054.5	
A	22 C10-C32						
	7.018	(3.185-10.852)		644657140	4980.0	5084.7	
$	9 o-Terphenyl						
	7.126	7.127	-0.001	4978276	25.0	25.7	
A	10 C10-C36						
	7.662	(3.185-12.138)		648714784	5000.0	5121.2	
$	14 n-Octacosane						
	9.742	9.748	-0.006	3902796	25.0	31.7	

Reagents:

DRO_L4/CCV_00080 Amount Added: 1.00 Units: mL

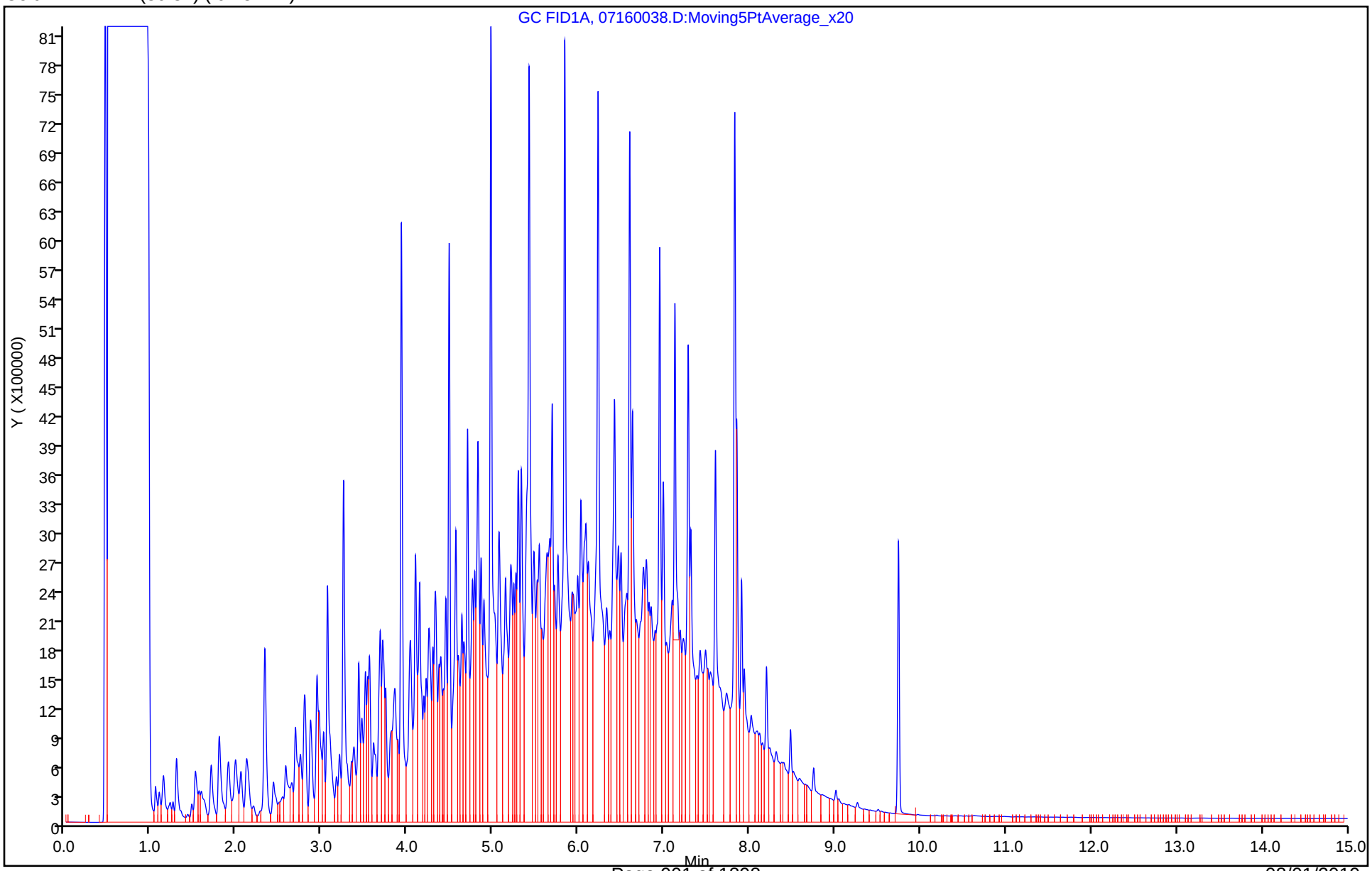
Report Date: 17-Jul-2019 11:28:54 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160038.D

Injection Date:	17-Jul-2019 07:08:23	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	CCV DRO			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

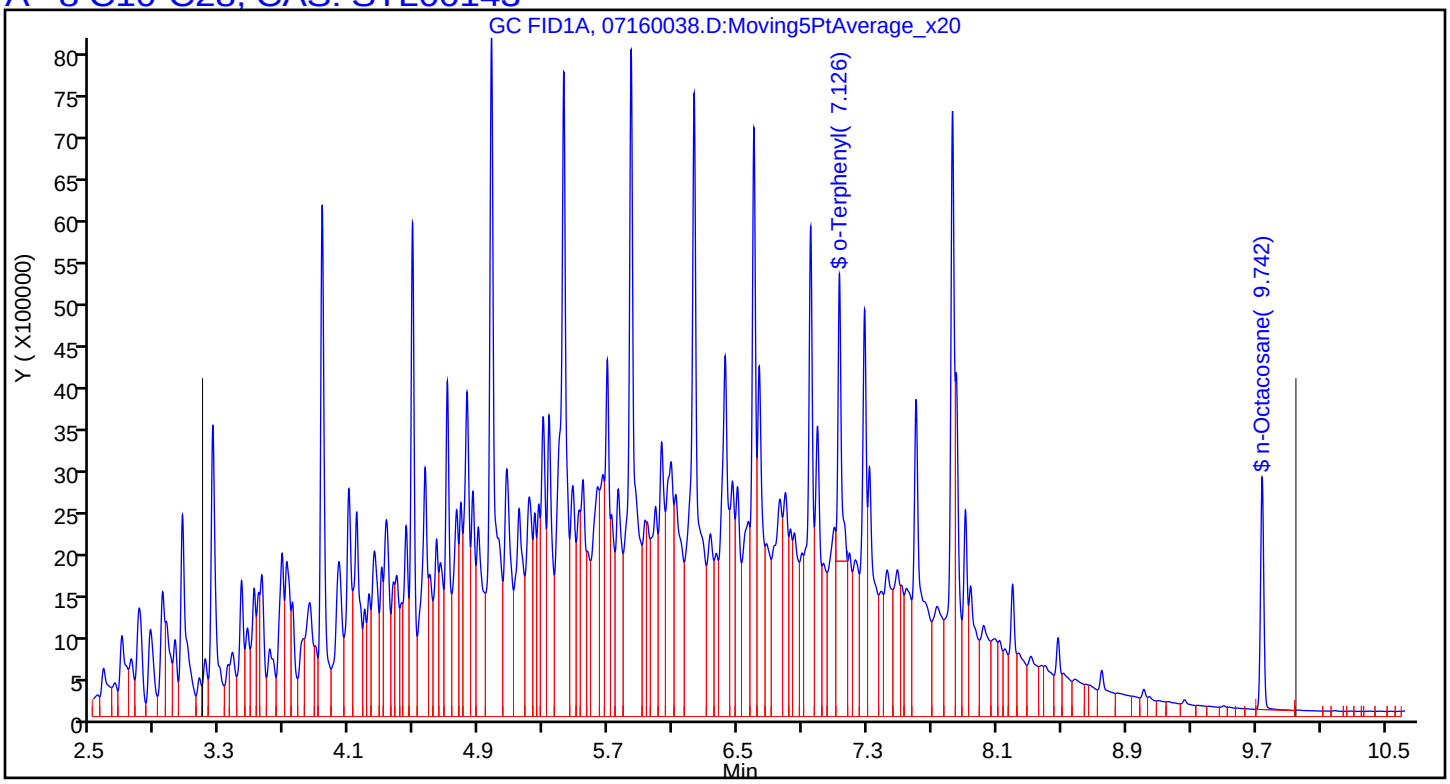


Report Date: 17-Jul-2019 11:28:54 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160038.D				
Injection Date:	17-Jul-2019 07:08:23	Instrument ID:	SGC_U2a		
Lims ID:	CCV DRO				
Client ID:					
Operator ID:	MM	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-461781/1-A

Matrix: Water Lab File ID: 07160024.D

Analysis Method: 8015C DRO Date Collected:

Extraction Method: 3510C Date Extracted: 06/17/2019 09:30

Sample wt/vol: 1000(mL) Date Analyzed: 07/17/2019 02:04

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464667 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	120	U	250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	69		56-125
630-02-4	n-Octacosane	89		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160024.D
Lims ID: MB 280-461781/1-A
Client ID:
Sample Type: MB
Inject. Date: 17-Jul-2019 02:04:33 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-461781/1-A
Misc. Info.: 280-0083727-024
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 09:49:17

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	4 C8-C12						
	4.297	(1.208-7.385)		2490667		18.2	
A	6 C10-C25						
	6.065	(3.185-8.945)		1990566		5.75	
	23 Hexadecane						
	6.222	6.235	-0.013	11511		NC	
A	8 C10-C28						
	6.568	(3.185-9.951)		2862965		8.82	
A	22 C10-C32						
	7.018	(3.185-10.852)		3847067		11.3	
$	9 o-Terphenyl						
	7.122	7.127	-0.005	4681207	35.0	24.2	
A	10 C10-C36						
	7.662	(3.185-12.138)		5463863		13.9	
$	14 n-Octacosane						
	9.742	9.748	-0.006	3841113	35.0	31.2	
A	13 C20-C38						
	10.352	(7.550-13.154)		5649167		7.37	
A	15 C25-C36						
	10.542	(8.945-12.138)		3535729		7.17	
	18 Dotriacontane						
	10.687	10.664	0.023	62106		NC	
$	21 n-Decanoic Acid (Surr)						
	0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

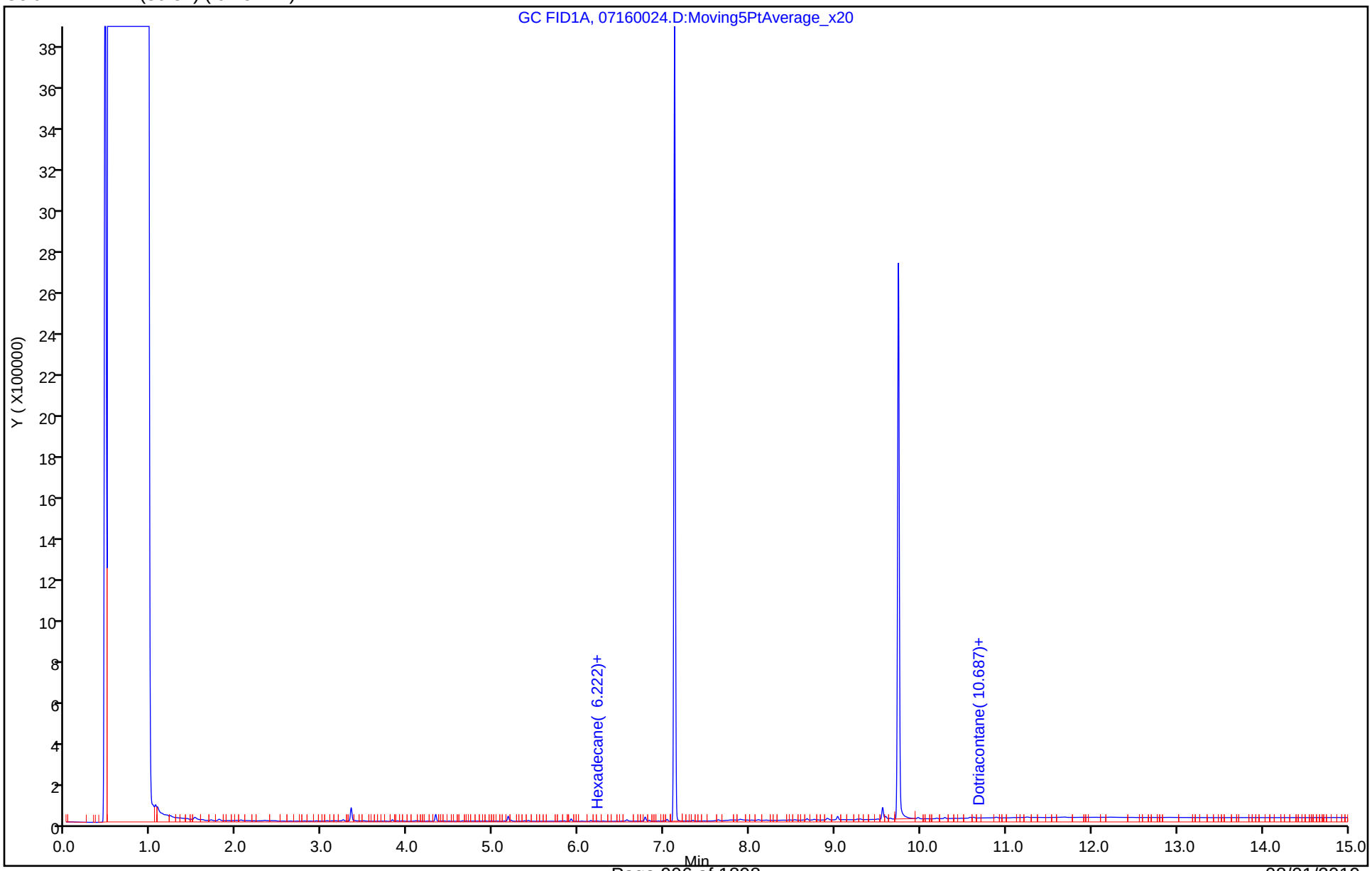
Report Date: 17-Jul-2019 11:29:17 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160024.D

Injection Date:	17-Jul-2019 02:04:33	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	MB 280-461781/1-A			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160024.D
Lims ID: MB 280-461781/1-A
Client ID:
Sample Type: MB
Inject. Date: 17-Jul-2019 02:04:33 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-461781/1-A
Misc. Info.: 280-0083727-024
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 09:49:17

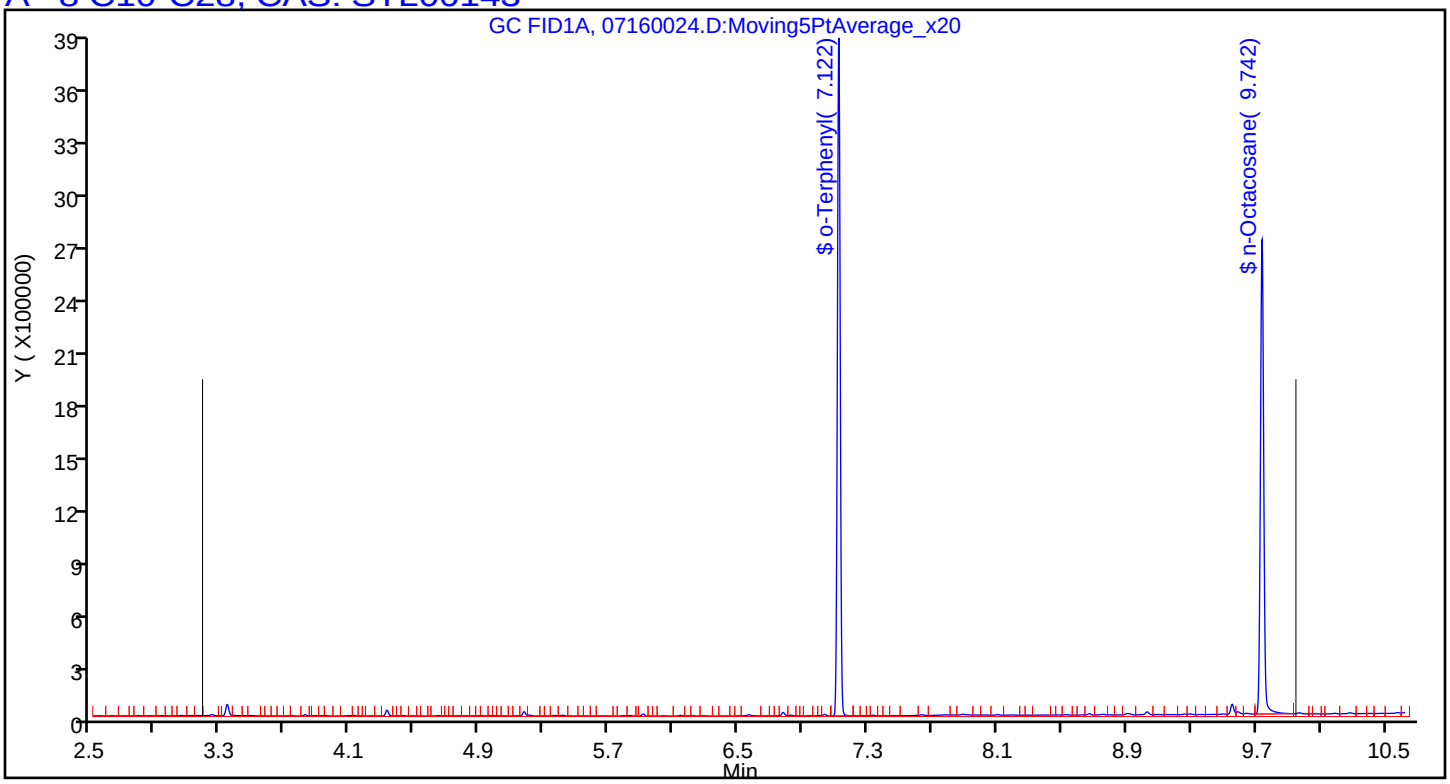
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	24.2	69.01
$ 14 n-Octacosane	35.0	31.2	89.09

Report Date: 17-Jul-2019 11:29:17 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160024.D				
Injection Date:	17-Jul-2019 02:04:33	Instrument ID:	SGC_U2a		
Lims ID:	MB 280-461781/1-A				
Client ID:					
Operator ID:	MM	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-461781/2-A

Matrix: Water Lab File ID: 07160022.D

Analysis Method: 8015C DRO Date Collected:

Extraction Method: 3510C Date Extracted: 06/17/2019 09:30

Sample wt/vol: 1000(mL) Date Analyzed: 07/17/2019 01:21

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464667 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	1710		250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	69		56-125
630-02-4	n-Octacosane	82		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160022.D
Lims ID: LCS 280-461781/2-A
Client ID:
Sample Type: LCS
Inject. Date: 17-Jul-2019 01:21:11 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-461781/2-A
Misc. Info.: 280-0083727-022
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 09:48:58

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.185-8.945)		215964579	1962.0	1694.8	
A	8 C10-C28						
	6.568	(3.185-9.951)		218077972	1984.0	1709.6	
A	22 C10-C32						
	7.018	(3.185-10.852)		219484590	1992.0	1718.5	
$	9 o-Terphenyl						
	7.122	7.127	-0.005	4674043	35.0	24.1	
A	10 C10-C36						
	7.662	(3.185-12.138)		221661111	2000.0	1730.5	
$	14 n-Octacosane						
	9.742	9.748	-0.006	3515421	35.0	28.5	

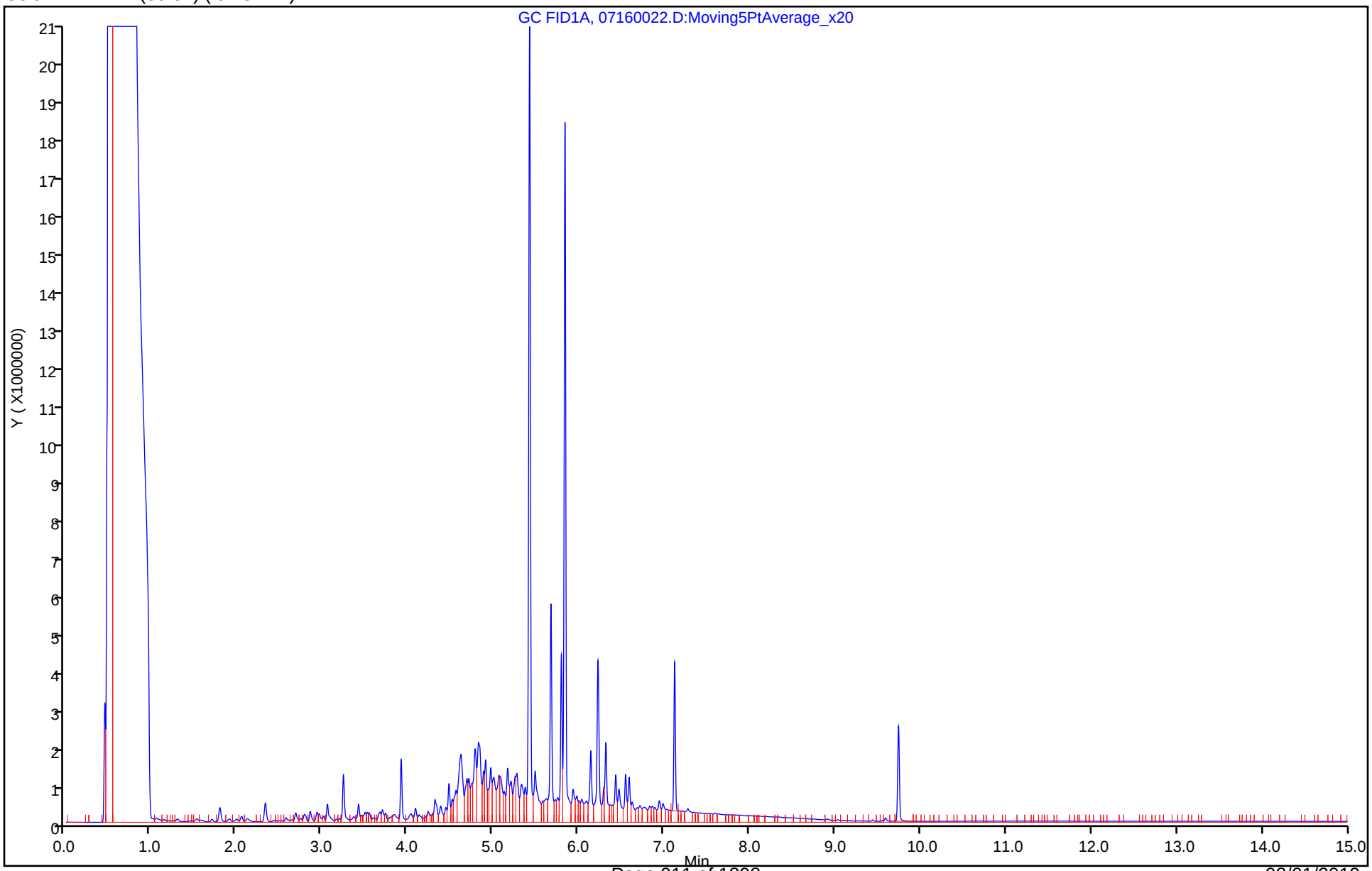
Report Date: 17-Jul-2019 11:29:20 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160022.D

Injection Date:	17-Jul-2019 01:21:11	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	LCS 280-461781/2-A			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160022.D
Lims ID: LCS 280-461781/2-A
Client ID:
Sample Type: LCS
Inject. Date: 17-Jul-2019 01:21:11 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-461781/2-A
Misc. Info.: 280-0083727-022
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 09:48:58

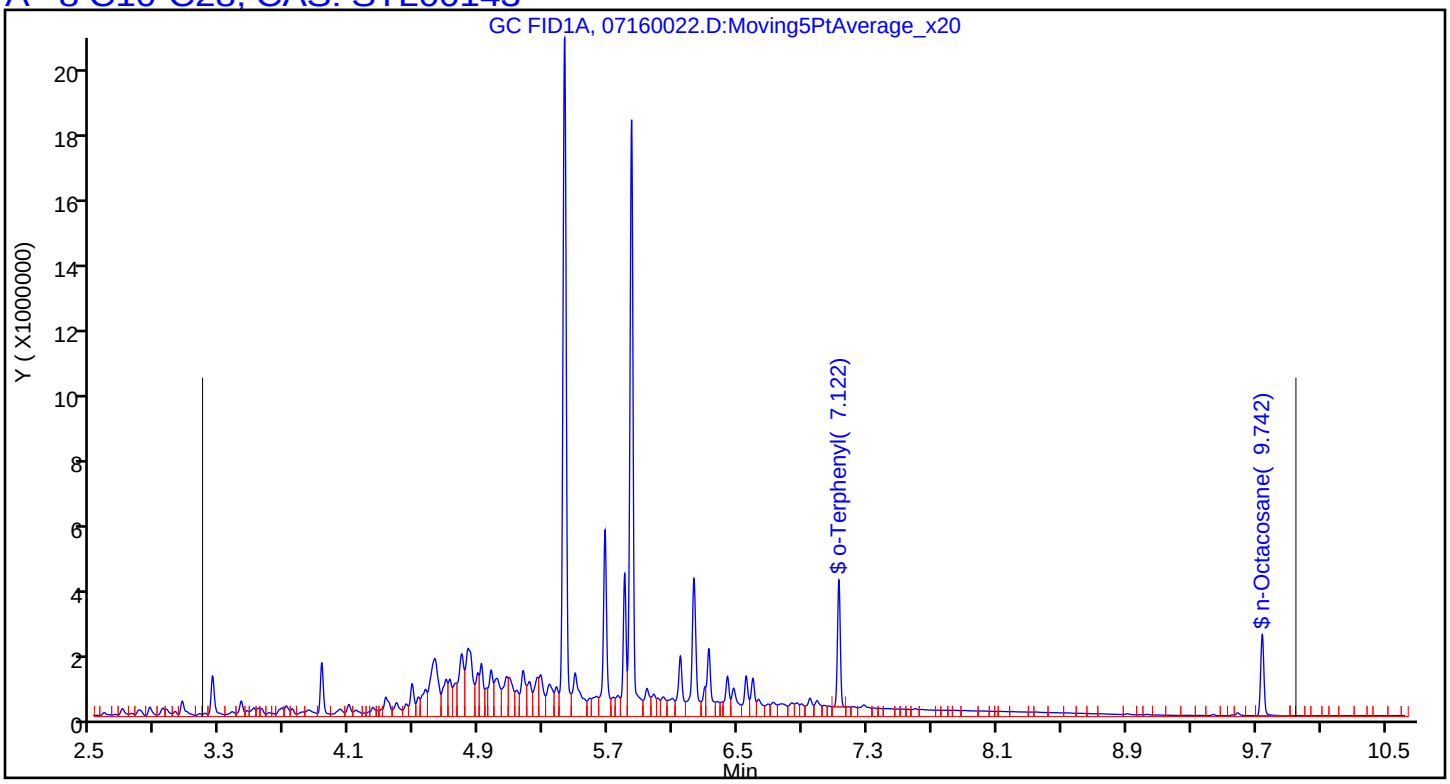
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	24.1	68.90
$ 14 n-Octacosane	35.0	28.5	81.54

Report Date: 17-Jul-2019 11:29:20 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160022.D				
Injection Date:	17-Jul-2019 01:21:11	Instrument ID:	SGC_U2a		
Lims ID:	LCS 280-461781/2-A				
Client ID:					
Operator ID:	MM	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-461781/3-A

Matrix: Water Lab File ID: 07160023.D

Analysis Method: 8015C DRO Date Collected:

Extraction Method: 3510C Date Extracted: 06/17/2019 09:30

Sample wt/vol: 1000(mL) Date Analyzed: 07/17/2019 01:42

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464667 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	1430		250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	63		56-125
630-02-4	n-Octacosane	74		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160023.D
Lims ID: LCSD 280-461781/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 17-Jul-2019 01:42:54 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-461781/3-A
Misc. Info.: 280-0083727-023
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 09:49:07

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.065	(3.185-8.945)		180846025	1962.0	1417.6	
A	8 C10-C28						
	6.568	(3.185-9.951)		182593932	1984.0	1429.2	
A	22 C10-C32						
	7.018	(3.185-10.852)		183672474	1992.0	1435.0	
$	9 o-Terphenyl						
	7.123	7.127	-0.004	4290689	35.0	22.1	
A	10 C10-C36						
	7.662	(3.185-12.138)		185398362	2000.0	1442.6	
$	14 n-Octacosane						
	9.742	9.748	-0.006	3174197	35.0	25.8	

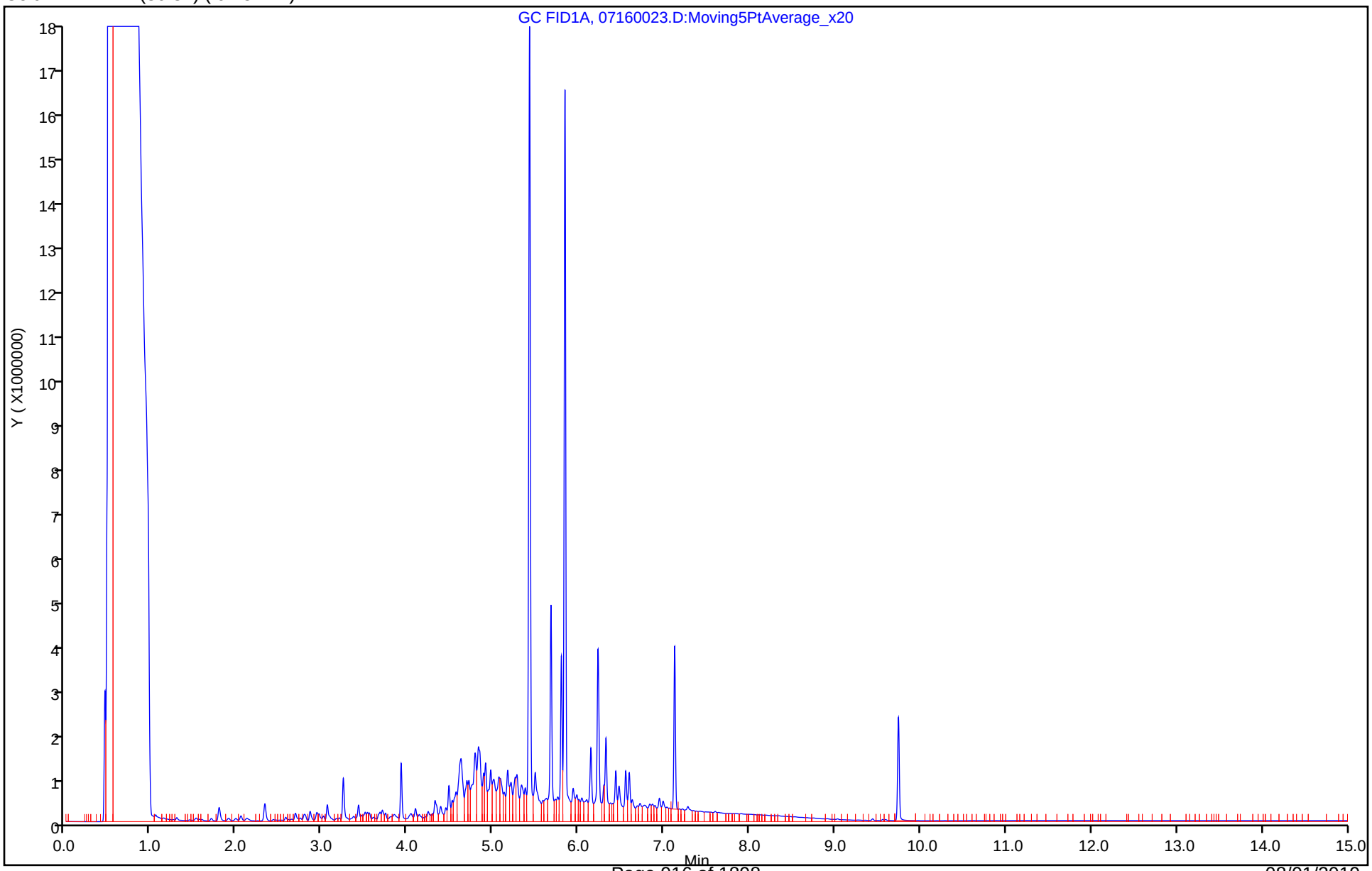
Report Date: 17-Jul-2019 11:29:18 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160023.D

Injection Date:	17-Jul-2019 01:42:54	Instrument ID:	SGC_U2a	Operator ID:	MM
Lims ID:	LCSD 280-461781/3-A			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160023.D
Lims ID: LCSD 280-461781/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 17-Jul-2019 01:42:54 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-461781/3-A
Misc. Info.: 280-0083727-023
Operator ID: MM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 17-Jul-2019 11:28:53 Calib Date: 09-Jul-2019 23:59:12
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\SGC_U2a\20190709-83576.b\07090018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: mcaleesem Date: 17-Jul-2019 09:49:07

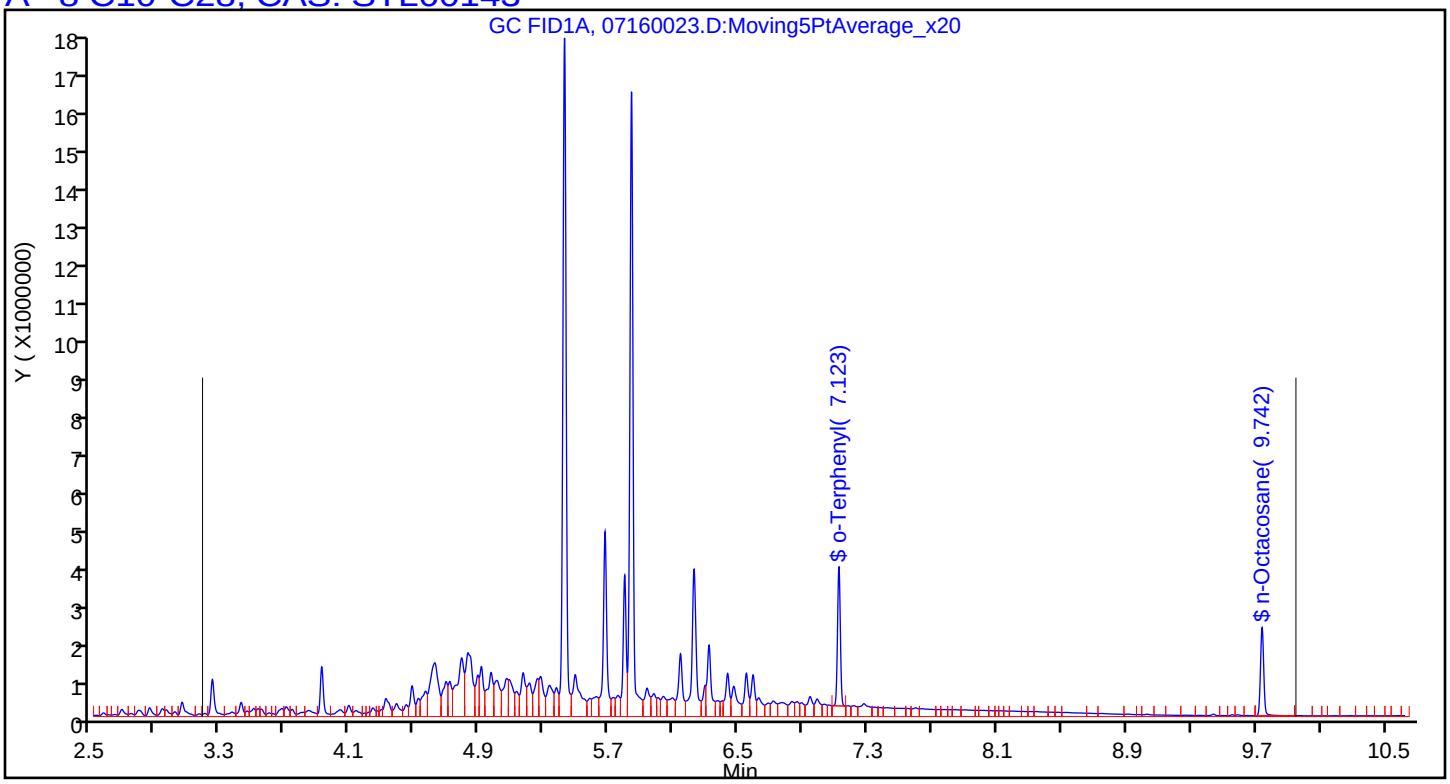
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	22.1	63.14
$ 14 n-Octacosane	35.0	25.8	73.62

Report Date: 17-Jul-2019 11:29:18 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\SGC_U2a\20190716-83727.b\07160023.D				
Injection Date:	17-Jul-2019 01:42:54	Instrument ID:	SGC_U2a		
Lims ID:	LCSD 280-461781/3-A				
Client ID:					
Operator ID:	MM	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 07/09/2019 18:34

Analysis Batch Number: 464041 End Date: 07/10/2019 00:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-464041/3		07/09/2019 18:34	1		RTX-1 (30.32) 0.25(mm)
STD7 280-464041/4 IC		07/09/2019 18:55	1	07090004.D	RTX-1 (30.32) 0.25(mm)
STD6 280-464041/5 IC		07/09/2019 19:17	1	07090005.D	RTX-1 (30.32) 0.25(mm)
STD5 280-464041/6 IC		07/09/2019 19:38	1	07090006.D	RTX-1 (30.32) 0.25(mm)
STD4 280-464041/7 ICRT		07/09/2019 20:00	1	07090007.D	RTX-1 (30.32) 0.25(mm)
STD3 280-464041/8 IC		07/09/2019 20:22	1	07090008.D	RTX-1 (30.32) 0.25(mm)
STD2 280-464041/9 IC		07/09/2019 20:43	1	07090009.D	RTX-1 (30.32) 0.25(mm)
STD1 280-464041/10 IC		07/09/2019 21:05	1	07090010.D	RTX-1 (30.32) 0.25(mm)
ICV 280-464041/11		07/09/2019 21:27	1	07090011.D	RTX-1 (30.32) 0.25(mm)
STD7 280-464041/12 IC		07/09/2019 21:48	1		RTX-1 (30.32) 0.25(mm)
STD6 280-464041/13 IC		07/09/2019 22:10	1		RTX-1 (30.32) 0.25(mm)
STD5 280-464041/14 IC		07/09/2019 22:32	1		RTX-1 (30.32) 0.25(mm)
STD4 280-464041/15 IC		07/09/2019 22:54	1		RTX-1 (30.32) 0.25(mm)
STD3 280-464041/16 IC		07/09/2019 23:15	1		RTX-1 (30.32) 0.25(mm)
STD2 280-464041/17 IC		07/09/2019 23:37	1		RTX-1 (30.32) 0.25(mm)
STD1 280-464041/18 IC		07/09/2019 23:59	1		RTX-1 (30.32) 0.25(mm)
ICV 280-464041/19		07/10/2019 00:20	1		RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 07/16/2019 18:28

Analysis Batch Number: 464667 End Date: 07/17/2019 17:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-464667/3		07/16/2019 18:28	1	07160003.D	RTX-1 (30.32) 0.25(mm)
CCVRT 280-464667/4		07/16/2019 18:50	1	07160004.D	RTX-1 (30.32) 0.25(mm)
CCV 280-464667/5		07/16/2019 19:11	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 19:33	100		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 19:55	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 20:16	2		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 20:38	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 21:00	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 21:21	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 21:43	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 22:05	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 22:27	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 22:49	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 23:10	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 23:32	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/16/2019 23:54	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 00:16	1		RTX-1 (30.32) 0.25(mm)
CCV 280-464667/20		07/17/2019 00:37	1	07160020.D	RTX-1 (30.32) 0.25(mm)
CCV 280-464667/21		07/17/2019 00:59	1		RTX-1 (30.32) 0.25(mm)
LCS 280-461781/2-A		07/17/2019 01:21	1	07160022.D	RTX-1 (30.32) 0.25(mm)
LCSD 280-461781/3-A		07/17/2019 01:42	1	07160023.D	RTX-1 (30.32) 0.25(mm)
MB 280-461781/1-A		07/17/2019 02:04	1	07160024.D	RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 02:26	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 02:47	1		RTX-1 (30.32) 0.25(mm)
280-124928-11		07/17/2019 03:09	1	07160027.D	RTX-1 (30.32) 0.25(mm)
280-124928-12		07/17/2019 03:31	1	07160028.D	RTX-1 (30.32) 0.25(mm)
280-124928-10		07/17/2019 03:53	1	07160029.D	RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 04:14	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 04:36	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 04:58	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 05:19	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 05:41	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 06:03	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 06:25	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 06:46	1		RTX-1 (30.32) 0.25(mm)
CCV 280-464667/38		07/17/2019 07:08	1	07160038.D	RTX-1 (30.32) 0.25(mm)
CCV 280-464667/39		07/17/2019 07:30	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 07:51	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 08:13	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 08:35	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 08:57	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 09:18	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 09:40	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 10:02	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 10:24	1		RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 07/16/2019 18:28

Analysis Batch Number: 464667 End Date: 07/17/2019 17:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/17/2019 10:46	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 11:07	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 11:29	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 11:51	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 12:13	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 12:34	1		RTX-1 (30.32) 0.25(mm)
CCV 280-464667/52		07/17/2019 12:56	1		RTX-1 (30.32) 0.25(mm)
CCV 280-464667/53		07/17/2019 13:18	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 13:39	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 14:01	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 14:23	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 14:45	5		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 15:06	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 15:28	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 15:50	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 16:11	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 16:33	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		07/17/2019 16:55	1		RTX-1 (30.32) 0.25(mm)
CCV 280-464667/66		07/17/2019 17:17	1		RTX-1 (30.32) 0.25(mm)
CCV 280-464667/67		07/17/2019 17:38	1		RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461781 Batch Start Date: 06/17/19 11:53 Batch Analyst: Gupta, Amrita Z

Batch Method: 3510C Batch End Date: 06/18/19 18:11

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	8015 LCS 00079
MB 280-461781/1		3510C, 8015C DRO				1000 mL	1 mL	7 SU	
LCS 280-461781/2		3510C, 8015C DRO				1000 mL	1 mL	7 SU	1 mL
LCSD 280-461781/3		3510C, 8015C DRO				1000 mL	1 mL	7 SU	1 mL
280-124928-B-11	G0069-19A	3510C, 8015C DRO	T	1539.5 g	503.0 g	1036.5 mL	1 mL	7 SU	
280-124928-B-12	SHGW04-19A	3510C, 8015C DRO	T	1532.1 g	502.7 g	1029.4 mL	1 mL	7 SU	
280-124928-B-10	SHGW03-19A	3510C, 8015C DRO	T	1389.8 g	513.1 g	876.7 mL	1 mL	7 SU	

Lab Sample ID	Client Sample ID	Method Chain	Basis	8015Surrogate 00165					
MB 280-461781/1		3510C, 8015C DRO		1 mL					
LCS 280-461781/2		3510C, 8015C DRO		1 mL					
LCSD 280-461781/3		3510C, 8015C DRO		1 mL					
280-124928-B-11	G0069-19A	3510C, 8015C DRO	T	1 mL					
280-124928-B-12	SHGW04-19A	3510C, 8015C DRO	T	1 mL					
280-124928-B-10	SHGW03-19A	3510C, 8015C DRO	T	1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461781 Batch Start Date: 06/17/19 11:53 Batch Analyst: Gupta, Amrita Z

Batch Method: 3510C Batch End Date: 06/18/19 18:11

Batch Notes	
Balance ID	24750399
Batch Comment	DV-OP-0006/0007
Analyst ID - Concentration	VV/CR
Concentration 1 Corrected Temperature	84 Degrees C
Equipment ID - Concentration 1	C
Analyst ID - Extraction	JM (trainer)/ AG (trainee)
Method/Fraction	3510C/8015C_DRO_DOD5/815C_DRO_DOD
Na2SO4 ID	0000222767_00002
NaCl ID	189318
Pipette/Syringe/Dispenser ID	1n2s
Prep Solvent ID	MeCl2_Cycl_00441
Prep Solvent Volume Used	180 mL
Analyst ID - Spike Analyst	AG
Analyst ID - Spike Witness Analyst	Reviewer: CR
Sufficient Volume for Batch QC	No
Concentration 1 Uncorrected Temperature	83 Degrees C
Reagent Water ID	S. ELGA

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.: 280-124928-1

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 #
Source2019	280-124928-2	90	
Source2019 RE	280-124928-2 RE	85	
G0105-19A	280-124928-7		93
G0105-19A	280-124928-7	142 M Q	
G0105-19A RE	280-124928-7 RE		88
G0105-19A RE	280-124928-7 RE	153 M Q	
G0107-19A	280-124928-8	97 M	
G0107-19A RE	280-124928-8 RE	87 M	
G0106-19A	280-124928-9	98 M	
G0106-19A RE	280-124928-9 RE	106 M	
G0017-19A	280-124928-14		235 Q
G0017-19A	280-124928-14	85	
G0017-19A RE	280-124928-14 RE	192 Q	
PZ009-19A	280-124928-15		91
PZ009-19A	280-124928-15	97	
PZ009-19A RE	280-124928-15 RE	82 Q M	
G0045-19A	280-124928-16	96 M	
G0045-19A RE	280-124928-16 RE	86 M	
	MB 280-461286/1-A	98	
	MB 280-464162/1-A	95	
	LCS 280-461286/2-A	96	
	LCS 280-464162/2-A	96	
	LCS 280-464162/4-A	90	
	LCSD 280-464162/3-A	88	

	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.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06140044.D

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

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.07	104	73-125	
1,3-Dinitrobenzene	2.00	1.99	100	78-120	
2,4,6-Trinitrotoluene	2.00	1.81	91	71-123	
2,4-Dinitrotoluene	2.00	1.89	94	78-120	
2,6-Dinitrotoluene	2.00	1.90	95	77-127	M
2-Amino-4,6-dinitrotoluene	2.00	1.78	89	79-120	M
2-Nitrotoluene	2.00	1.28	64	70-127	Q
3-Nitrotoluene	2.00	1.45	73	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.66	83	76-125	
4-Nitrotoluene	2.00	1.42	71	71-127	
HMX	2.00	1.95	97	65-135	
Nitrobenzene	2.00	1.55	78	65-134	
RDX	2.00	1.99	99	68-130	
Tetryl	2.00	1.95	97	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 07110046.D

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

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.14	107	73-125	
1,3-Dinitrobenzene	2.00	2.09	105	78-120	
2,4,6-Trinitrotoluene	2.00	1.97	98	71-123	
2,4-Dinitrotoluene	2.00	2.02	101	78-120	
2,6-Dinitrotoluene	2.00	2.01	101	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.91	95	79-120	
2-Nitrotoluene	2.00	1.44	72	70-127	
3-Nitrotoluene	2.00	1.69	84	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.82	91	76-125	
4-Nitrotoluene	2.00	1.64	82	71-127	
HMX	2.00	1.87	93	65-135	M
Nitrobenzene	2.00	1.73	86	65-134	
RDX	2.00	2.03	102	68-130	
Tetryl	2.00	2.22	111	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 07110048.D

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

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.56	110	57-132	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 07110047.D

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

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.99	99	7	30	73-125	
1,3-Dinitrobenzene	2.00	1.95	98	7	30	78-120	
2,4,6-Trinitrotoluene	2.00	1.85	92	6	30	71-123	
2,4-Dinitrotoluene	2.00	1.87	94	8	30	78-120	
2,6-Dinitrotoluene	2.00	1.88	94	7	30	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.75	87	9	30	79-120	
2-Nitrotoluene	2.00	1.41	71	2	30	70-127	
3-Nitrotoluene	2.00	1.59	80	6	30	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.68	84	8	30	76-125	
4-Nitrotoluene	2.00	1.53	76	7	30	71-127	
HMX	2.00	1.80	90	3	30	65-135	M
Nitrobenzene	2.00	1.66	83	4	30	65-134	
RDX	2.00	1.92	96	6	30	68-130	
Tetryl	2.00	2.08	104	6	30	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

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

Matrix: Water Date Extracted: 06/12/2019 17:51

Lab File ID:(1) 06140043.D Lab File ID:(2)

Date Analyzed:(1) 06/15/2019 07:27 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 280-461286/2-A	06/15/2019 07:51	
Source2019	280-124928-2	06/15/2019 13:48	
G0105-19A	280-124928-7	06/15/2019 14:11	07/16/2019 17:53
G0107-19A	280-124928-8	06/15/2019 14:35	
G0106-19A	280-124928-9	06/15/2019 14:59	
G0017-19A	280-124928-14	06/15/2019 15:23	06/21/2019 12:48
PZ009-19A	280-124928-15	06/15/2019 15:47	06/18/2019 14:34
G0045-19A	280-124928-16	06/15/2019 16:10	

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

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

Matrix: Water Date Extracted: 07/10/2019 16:51

Lab File ID:(1) 07110045.D Lab File ID:(2)

Date Analyzed:(1) 07/12/2019 00:48 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2)

GC Column:(1) UltraCarb5uO ID: 4.6(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-464162/2-A	07/12/2019 01:10	
	LCSD 280-464162/3-A	07/12/2019 01:33	
	LCS 280-464162/4-A	07/12/2019 01:56	
Source2019 RE	280-124928-2 RE	07/15/2019 14:13	
G0105-19A RE	280-124928-7 RE	07/15/2019 14:36	07/13/2019 04:15
G0107-19A RE	280-124928-8 RE	07/15/2019 14:59	
G0106-19A RE	280-124928-9 RE	07/15/2019 15:21	
G0017-19A RE	280-124928-14 RE	07/15/2019 15:44	
PZ009-19A RE	280-124928-15 RE	07/15/2019 16:07	
G0045-19A RE	280-124928-16 RE	07/15/2019 16:30	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: PZ009-19A Lab Sample ID: 280-124928-15

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 06/15/2019 15:47 Date Analyzed (2): 06/18/2019 14:34

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.90	8.75	9.05	1.2		3.1
	2		19.08	18.96	19.26	1.2		
2,4,6-Trinitrotoluene	1		11.23	11.13	11.33	0.55		2.7
	2		24.81	24.67	24.97	0.57		
4-Amino-2,6-dinitrotoluene	1		11.43	11.33	11.53	0.50		6.4
	2		17.32	17.21	17.51	0.53		
2-Amino-4,6-dinitrotoluene	1		11.72	11.62	11.82	0.71		0.2
	2		18.35	18.24	18.54	0.71		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Source2019 Lab Sample ID: 280-124928-2

Matrix: Water Lab File ID: 06140059.D

Analysis Method: 8330A Date Collected: 06/05/2019 07:00

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 493.7(mL) Date Analyzed: 06/15/2019 13:48

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.41	0.20	0.090
118-96-7	2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.41	0.20	0.085
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U Q	0.41	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U M	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.41	U	1.0	0.41	0.20
2691-41-0	HMX	0.20	U	0.41	0.20	0.089
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.41	0.20	0.092
121-82-4	RDX	0.41	U	0.41	0.41	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140059.D
Lims ID: 280-124928-A-2-A
Client ID: Source2019
Sample Type: Client
Inject. Date: 15-Jun-2019 13:48:10 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-2-A
Misc. Info.: 280-0082867-059
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:25:26

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.643			ND	
	6 MNX	1		7.359			ND	
	7 RDX	1		7.763			ND	
$	9 1,2-Dinitrobenzene	1	8.740	8.743	-0.003	23360	0.1795	
	10 1,3,5-Trinitrobenzene	1		8.896			ND	
	11 1,3-Dinitrobenzene	1		9.563			ND	
	12 Nitrobenzene	1		9.949			ND	
	14 Tetryl	1		10.276			ND	
	16 2,4,6-Trinitrotoluene	1		11.229			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.429			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.716			ND	
	19 2,6-Dinitrotoluene	1		11.843			ND	
	20 2,4-Dinitrotoluene	1		12.043			ND	
	21 o-Nitrotoluene	1		12.883			ND	
	22 p-Nitrotoluene	1		13.323			ND	
	23 m-Nitrotoluene	1		13.923			ND	U

QC Flag Legend

Review Flags
U - Marked Undetected

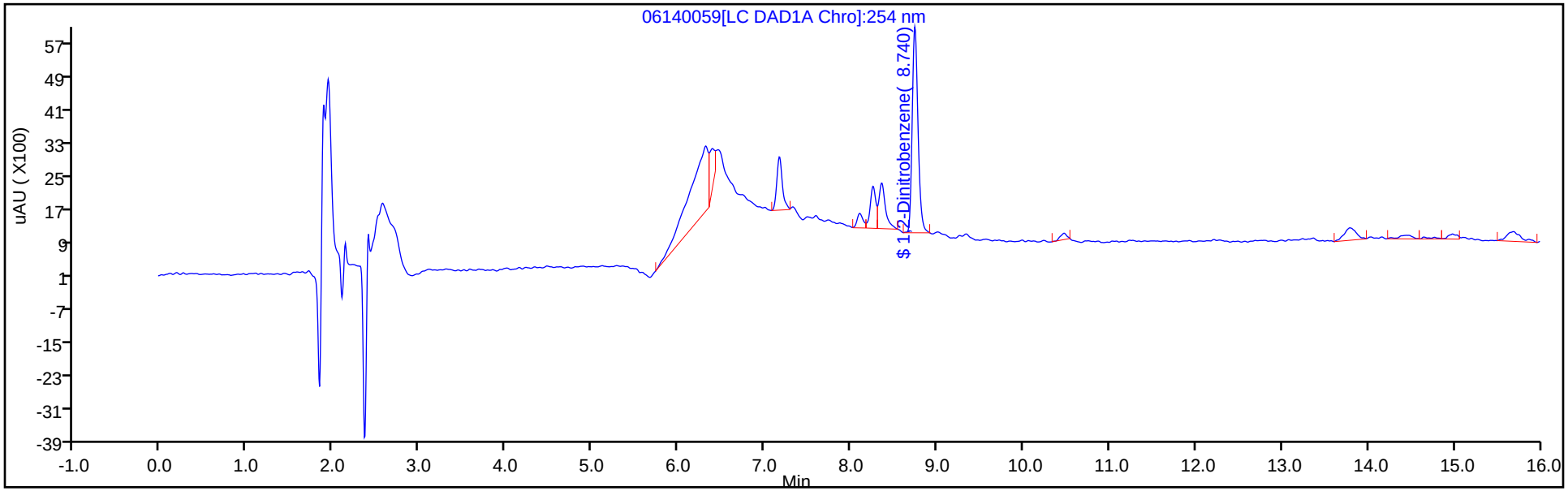
Report Date: 17-Jun-2019 10:45:59 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

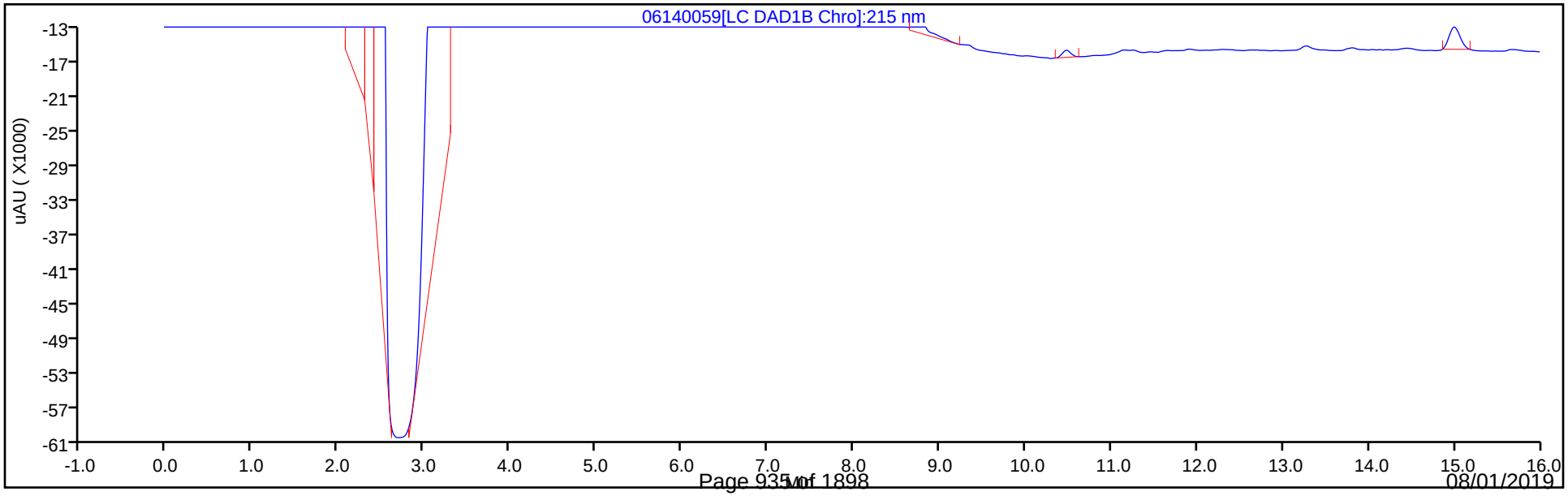
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140059.D

Injection Date:	15-Jun-2019 13:48:10	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-A-2-A	Lab Sample ID:	280-124928-2	Worklist Smp#:	59
Client ID:	Source2019				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	59
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140059.D
Lims ID: 280-124928-A-2-A
Client ID: Source2019
Sample Type: Client
Inject. Date: 15-Jun-2019 13:48:10 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-2-A
Misc. Info.: 280-0082867-059
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:25:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1795	89.77

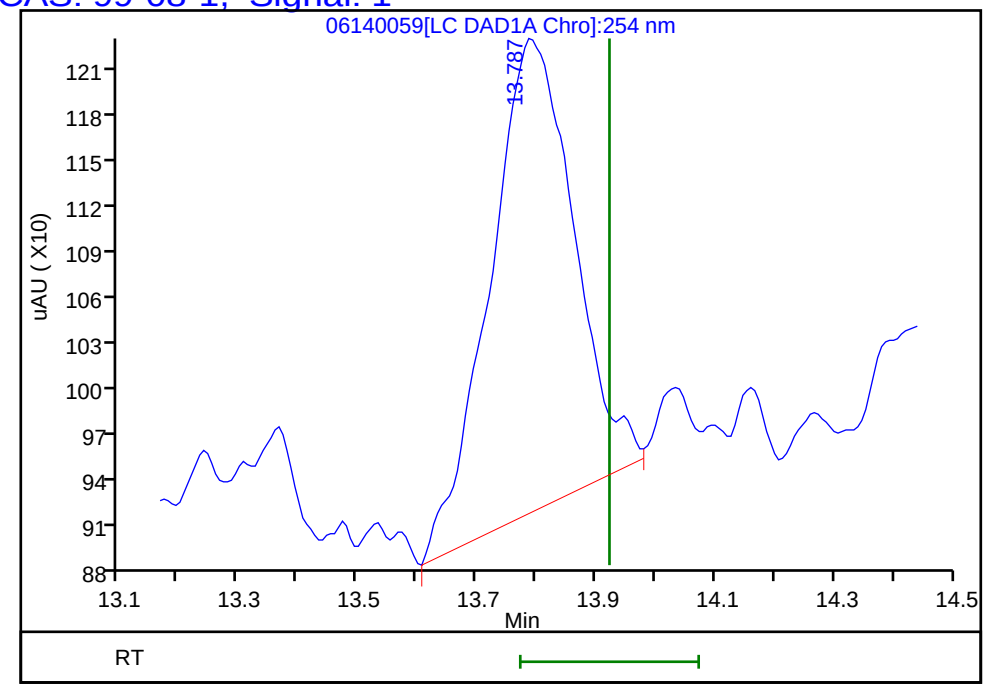
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140059.D				
Injection Date:	15-Jun-2019 13:48:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-2-A	Lab Sample ID:	280-124928-2		
Client ID:	Source2019				
Operator ID:	hkf	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.79
Response: 2960
Amount: 0.019959



Reviewer: fiedlerh, 17-Jun-2019 10:25:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: Source2019 RE Lab Sample ID: 280-124928-2 RE

Matrix: Water Lab File ID: 07150012.D

Analysis Method: 8330A Date Collected: 06/05/2019 07:00

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 509.8(mL) Date Analyzed: 07/15/2019 14:13

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.20*	*U H*	*0.39*	0.20	*0.084*
5755-27-1	*MNX*	*0.39*	*U Q H*	*2.0*	0.39	*0.15*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150012.D
Lims ID: 280-124928-B-2-A
Client ID: Source2019
Sample Type: Client
Inject. Date: 15-Jul-2019 14:13:08 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-2-A
Misc. Info.: 280-0083692-012
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:55:05

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.680			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.774			ND	
$	9 1,2-Dinitrobenzene	1	8.740	8.734	0.006	23807	0.1709	
	10 1,3,5-Trinitrobenzene	1		8.900			ND	
	11 1,3-Dinitrobenzene	1		9.560			ND	
	12 Nitrobenzene	1		9.947			ND	
	14 Tetryl	1		10.267			ND	
	16 2,4,6-Trinitrotoluene	1		11.240			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.427			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.720			ND	
	19 2,6-Dinitrotoluene	1		11.860			ND	
	20 2,4-Dinitrotoluene	1		12.060			ND	
	21 o-Nitrotoluene	1		12.907			ND	
	22 p-Nitrotoluene	1		13.354			ND	
	23 m-Nitrotoluene	1		13.960			ND	U

QC Flag Legend

Review Flags
U - Marked Undetected

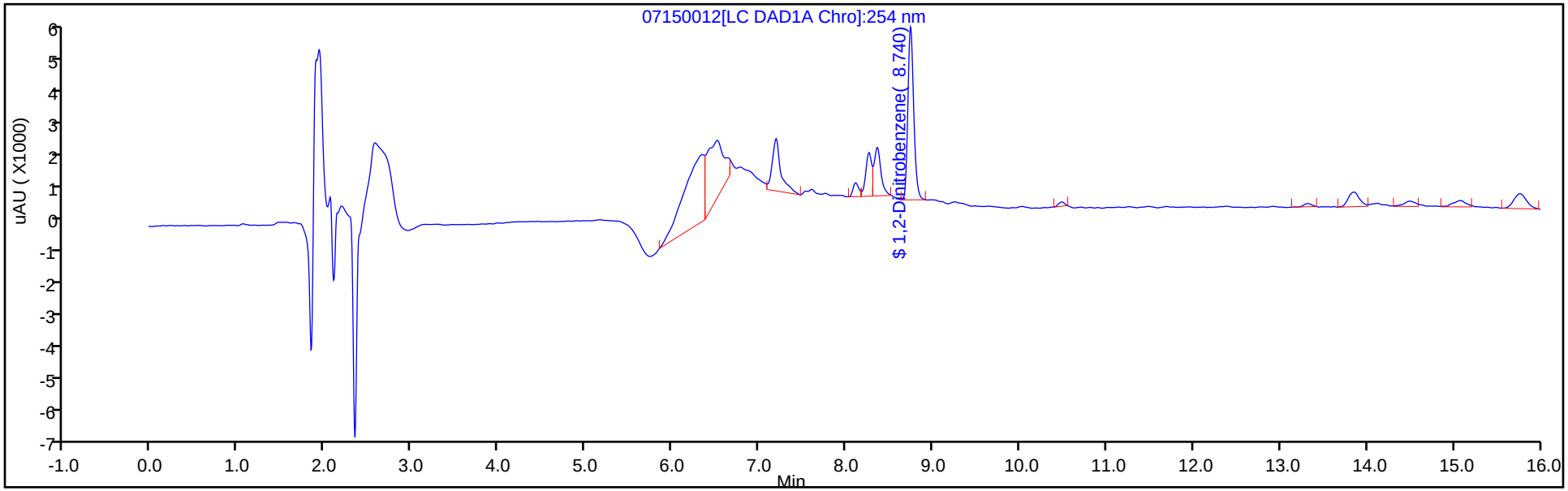
Report Date: 15-Jul-2019 17:53:59 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

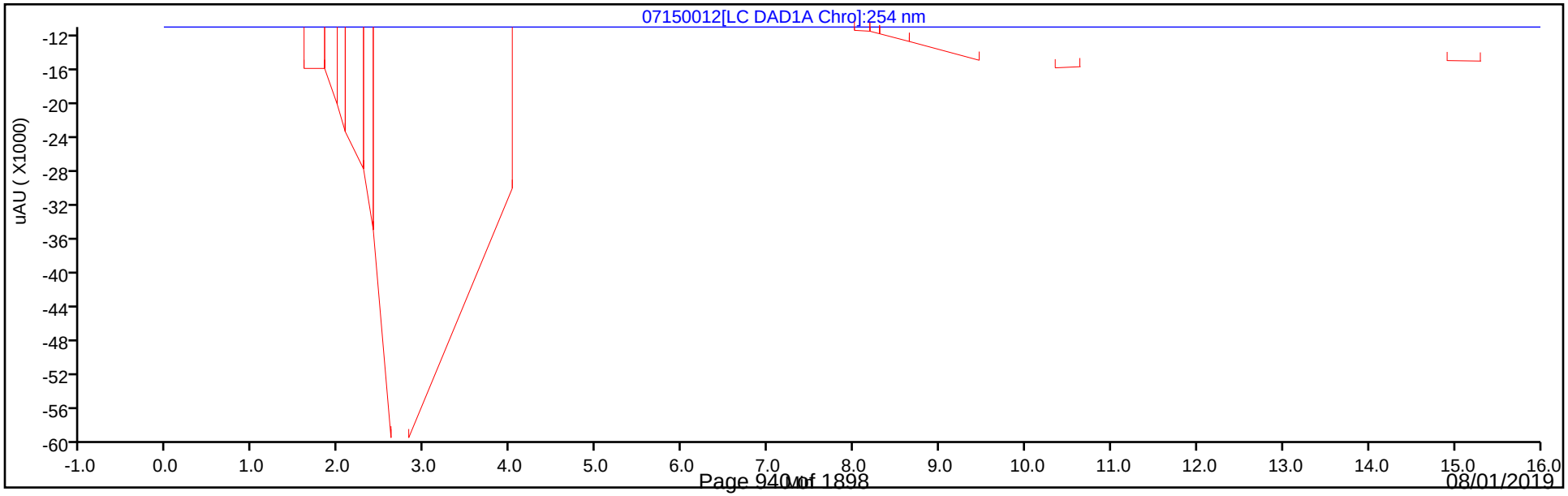
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150012.D

Injection Date:	15-Jul-2019 14:13:08	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-B-2-A	Lab Sample ID:	280-124928-2	Worklist Smp#:	12
Client ID:	Source2019				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150012.D
Lims ID: 280-124928-B-2-A
Client ID: Source2019
Sample Type: Client
Inject. Date: 15-Jul-2019 14:13:08 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-2-A
Misc. Info.: 280-0083692-012
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:55:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1709	85.43

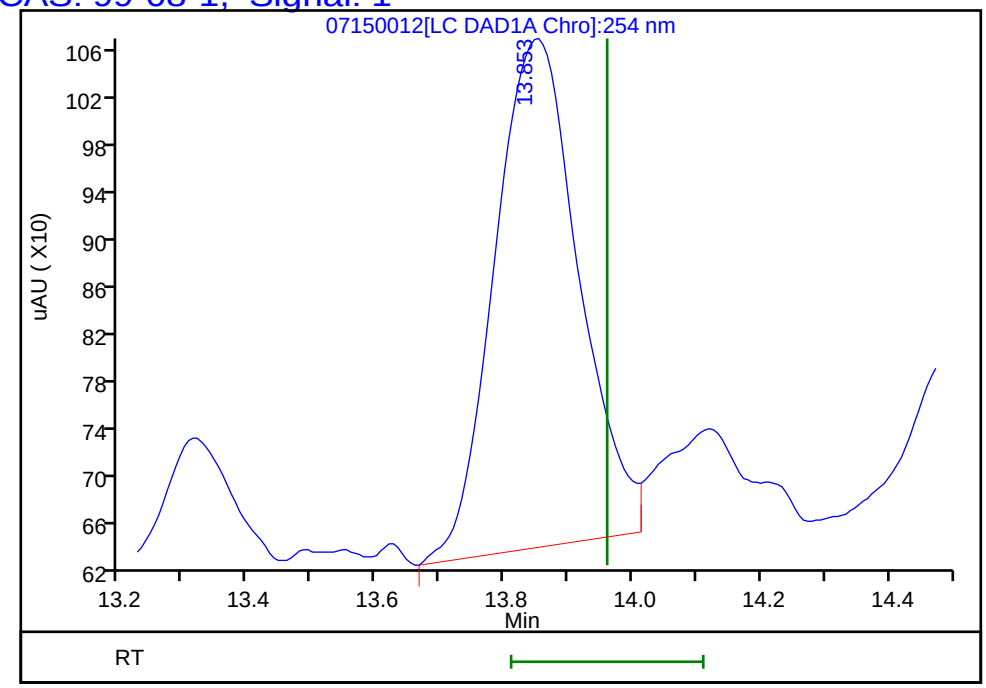
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150012.D				
Injection Date:	15-Jul-2019 14:13:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-2-A	Lab Sample ID:	280-124928-2		
Client ID:	Source2019				
Operator ID:	hkf	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.85
Response: 3930
Amount: 0.027081



Reviewer: fiedlerh, 15-Jul-2019 16:55:05
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.: 280-124928-1

SDG No.:

Client Sample ID: G0105-19A Lab Sample ID: 280-124928-7

Matrix: Water Lab File ID: 06140060.D

Analysis Method: 8330A Date Collected: 06/05/2019 12:35

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 486.3(mL) Date Analyzed: 06/15/2019 14:11

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.41	U	1.0	0.41	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.41	0.21	0.091
121-14-2	2,4-Dinitrotoluene	0.21	U	0.41	0.21	0.086
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.21	0.12	0.052
88-72-2	2-Nitrotoluene	0.21	U Q	0.41	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U Q	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.21	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	1.0	0.41	0.21
2691-41-0	HMX	0.21	U	0.41	0.21	0.090
121-82-4	RDX	0.41	U M	0.41	0.41	0.16
479-45-8	Tetryl	0.21	U M	0.25	0.21	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	142	M Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140060.D
Lims ID: 280-124928-A-7-A
Client ID: G0105-19A
Sample Type: Client
Inject. Date: 15-Jun-2019 14:11:59 ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-7-A
Misc. Info.: 280-0082867-060
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:26:07

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.643			ND	
	6 MNX	1	7.345	7.359	-0.014	55632	0.4074	M
	7 RDX	1		7.763			ND	MU
$	9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	36955	0.2840	M
	10 1,3,5-Trinitrobenzene	1		8.896			ND	
	11 1,3-Dinitrobenzene	1		9.563			ND	
	12 Nitrobenzene	1	9.932	9.949	-0.017	1641	0.008337	
	14 Tetryl	1		10.276			ND	U
	16 2,4,6-Trinitrotoluene	1	11.245	11.229	0.016	14172	0.0634	
	17 4-Amino-2,6-dinitrotoluene	1		11.429			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.716			ND	
	19 2,6-Dinitrotoluene	1	11.812	11.843	-0.031	7306	0.0467	
	20 2,4-Dinitrotoluene	1		12.043			ND	
	21 o-Nitrotoluene	1		12.883			ND	
	22 p-Nitrotoluene	1		13.323			ND	
	23 m-Nitrotoluene	1		13.923			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

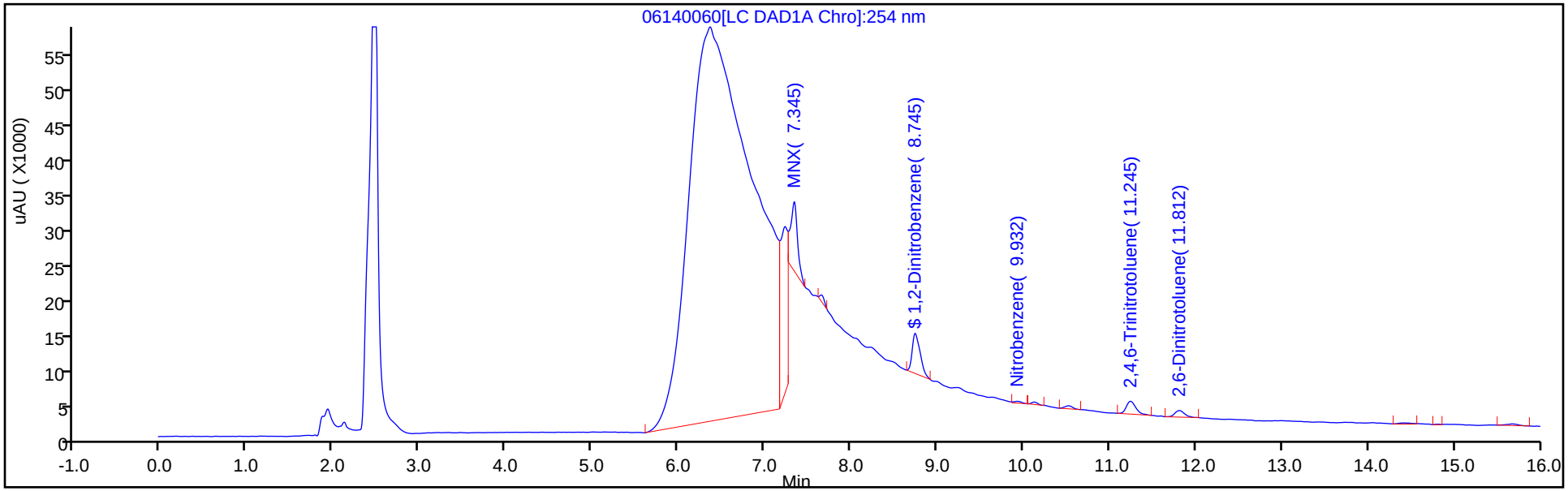
Report Date: 17-Jun-2019 10:46:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

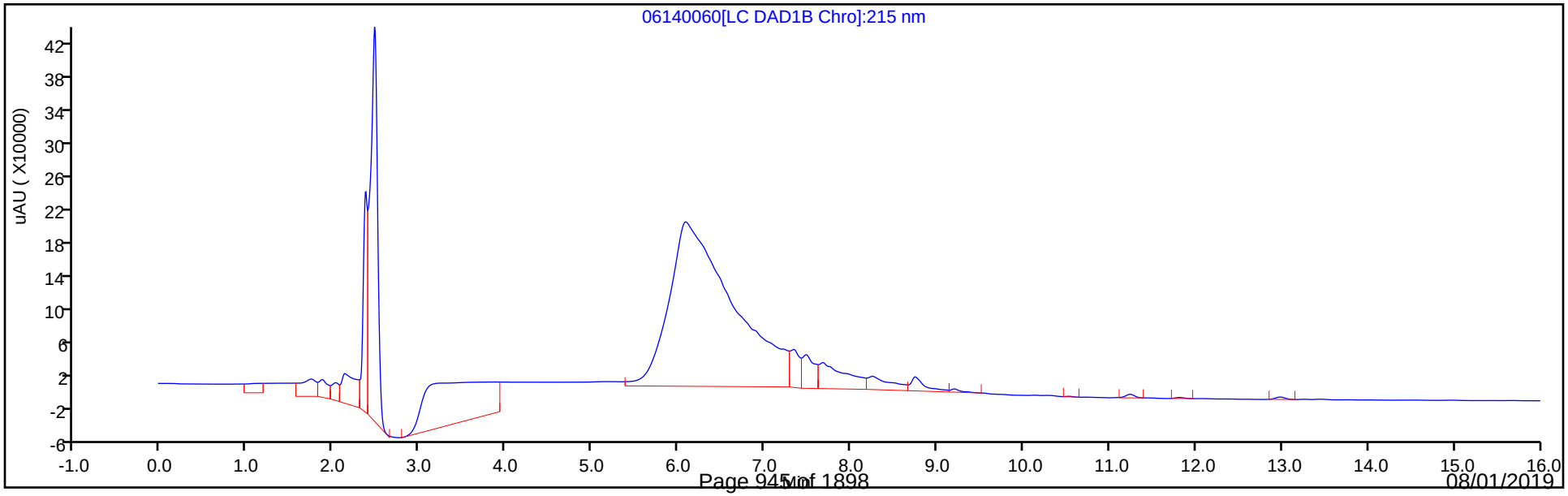
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140060.D

Injection Date:	15-Jun-2019 14:11:59	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7	Worklist Smp#:	60
Client ID:	G0105-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	60
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140060.D				
Lims ID:	280-124928-A-7-A				
Client ID:	G0105-19A				
Sample Type:	Client				
Inject. Date:	15-Jun-2019 14:11:59	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-7-A				
Misc. Info.:	280-0082867-060				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jun-2019 10:45:47	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0334				
First Level Reviewer: fiedlerh		Date:	17-Jun-2019 10:26:07		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2840	142.01

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

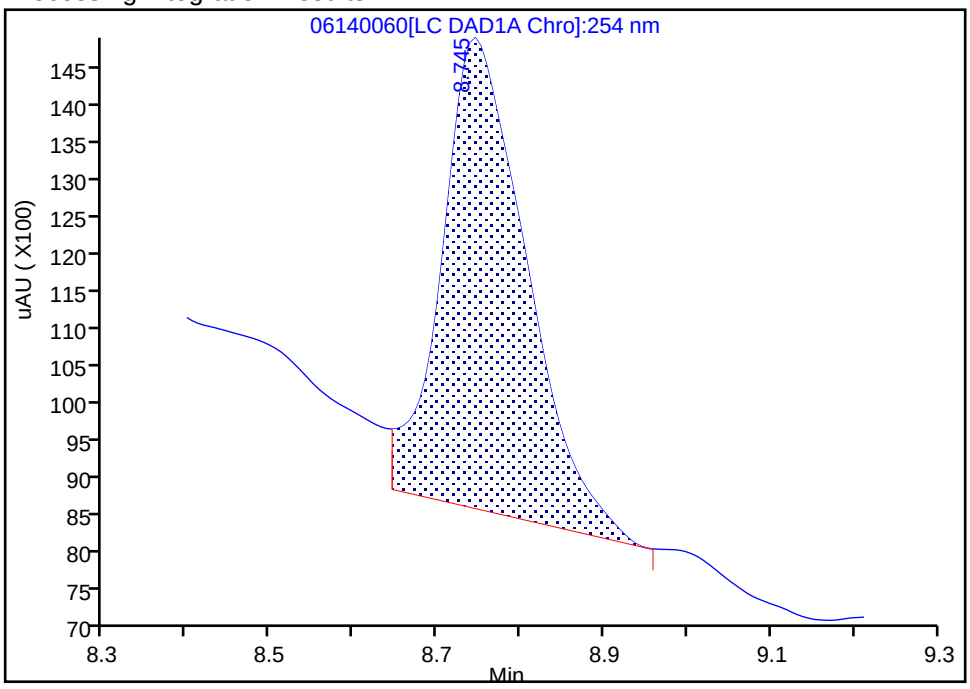
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140060.D				
Injection Date:	15-Jun-2019 14:11:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	hkf	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

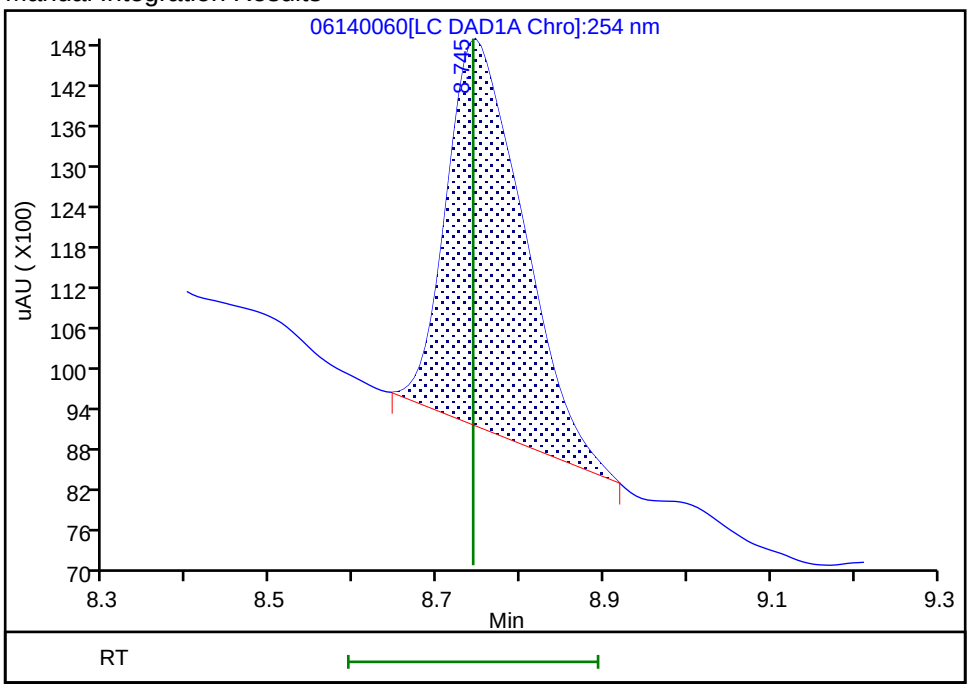
Processing Integration Results

RT: 8.75
Area: 44991
Amount: 0.345790
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 36955
Amount: 0.284028
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:25:37
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

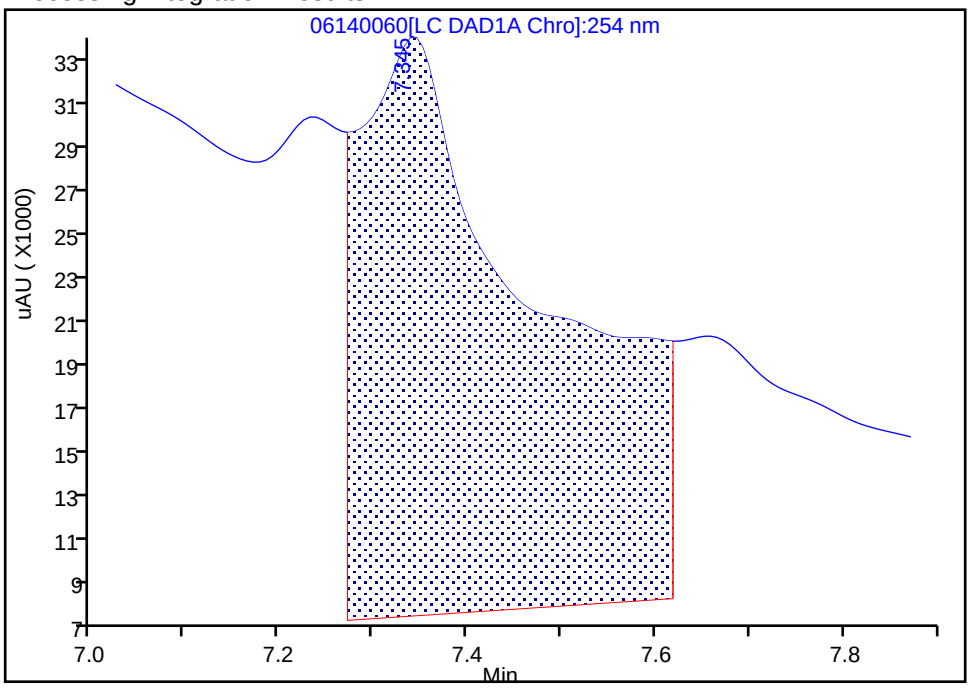
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140060.D				
Injection Date:	15-Jun-2019 14:11:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	hkf	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

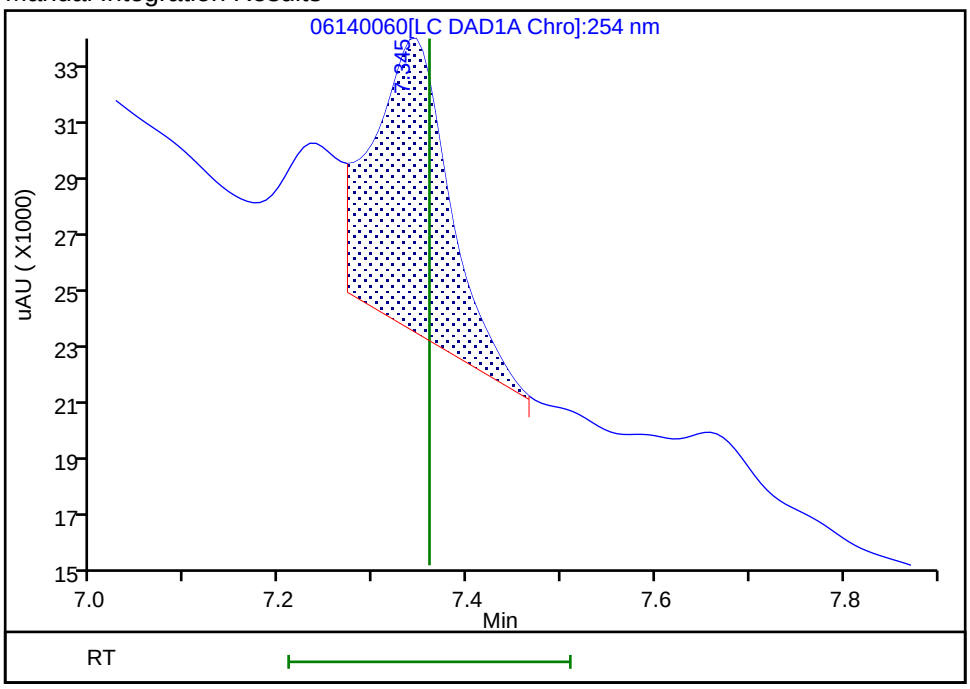
Processing Integration Results

RT: 7.35
Area: 346358
Amount: 2.536715
Amount Units: ug/mL



Manual Integration Results

RT: 7.35
Area: 55632
Amount: 0.407447
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:25:51

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

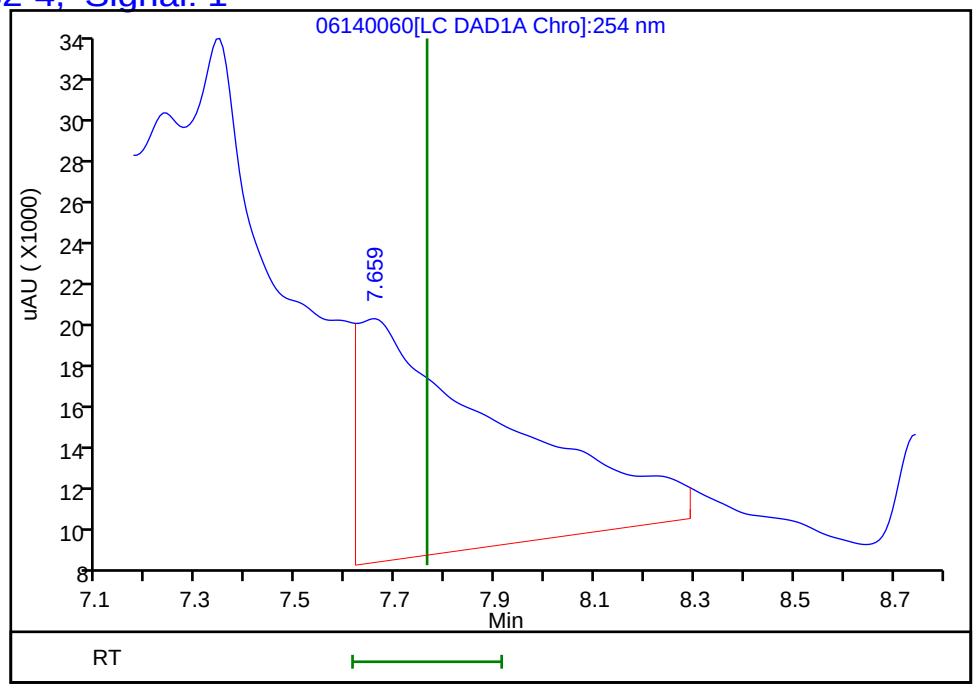
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140060.D				
Injection Date:	15-Jun-2019 14:11:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	hkf	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.66
Response: 231068
Amount: 2.166816



Reviewer: fiedlerh, 17-Jun-2019 10:26:07
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

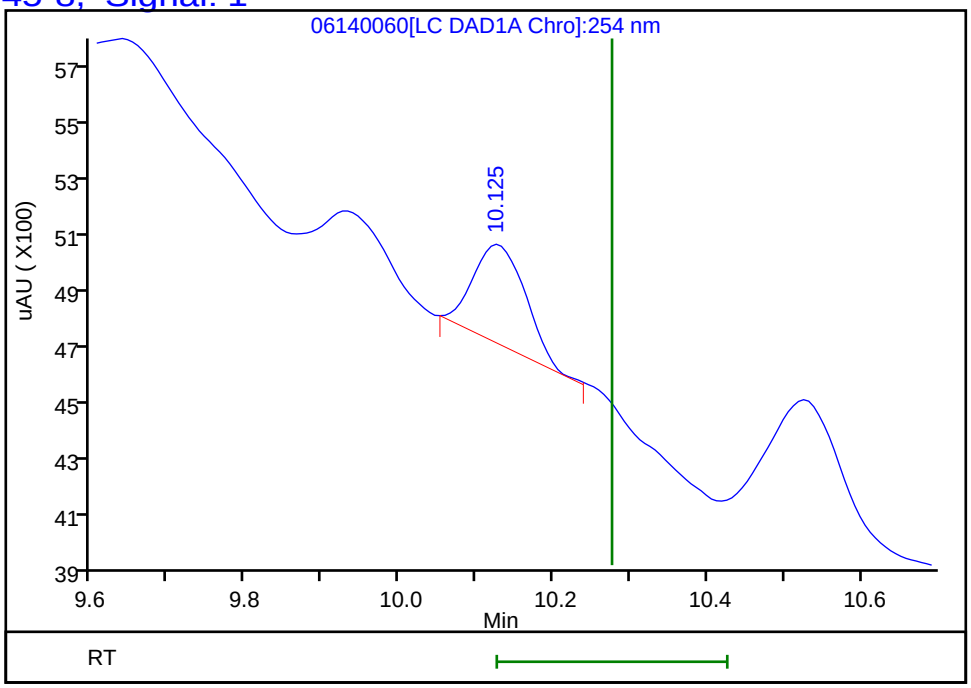
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140060.D				
Injection Date:	15-Jun-2019 14:11:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	hkf	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.13
Response: 1596
Amount: 0.009503



Reviewer: fiedlerh, 17-Jun-2019 10:26:07
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.: 280-124928-1

SDG No.:

Client Sample ID: G0105-19A RE Lab Sample ID: 280-124928-7 RE

Matrix: Water Lab File ID: 07120034.D

Analysis Method: 8330A Date Collected: 06/05/2019 12:35

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 503.2(mL) Date Analyzed: 07/13/2019 04:15

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464373 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	*MNX*	*0.40*	*U M H*	*2.0*	0.40	*0.15*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120034.D
Lims ID: 280-124928-B-7-A
Client ID: G0105-19A
Sample Type: Client
Inject. Date: 13-Jul-2019 04:15:59 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-7-A
Misc. Info.: 280-0083659-034
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 11:38:50 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 11:36:24

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.201			ND	
	7 MNX	1		7.866			ND	U
	8 RDX	1	9.320	9.267	0.053	2977	0.0143	
	9 Nitrobenzene	1		12.254			ND	
$	10 1,2-Dinitrobenzene	1	13.280	13.294	-0.014	48870	0.1765	
	12 1,3-Dinitrobenzene	1		15.814			ND	
	14 o-Nitrotoluene	1		16.627			ND	
	15 p-Nitrotoluene	1		16.960			ND	U
	16 4-Amino-2,6-dinitrotoluene	1		17.374			ND	
	17 m-Nitrotoluene	1	17.907	17.874	0.033	7042	0.0241	
	18 2-Amino-4,6-dinitrotoluene	1		18.400			ND	
	19 1,3,5-Trinitrobenzene	1		19.120			ND	
	20 2,6-Dinitrotoluene	1		19.974			ND	
	21 2,4-Dinitrotoluene	1		20.534			ND	U
	22 Tetryl	1		23.867			ND	
	23 2,4,6-Trinitrotoluene	1		24.854			ND	

QC Flag Legend

Review Flags
U - Marked Undetected

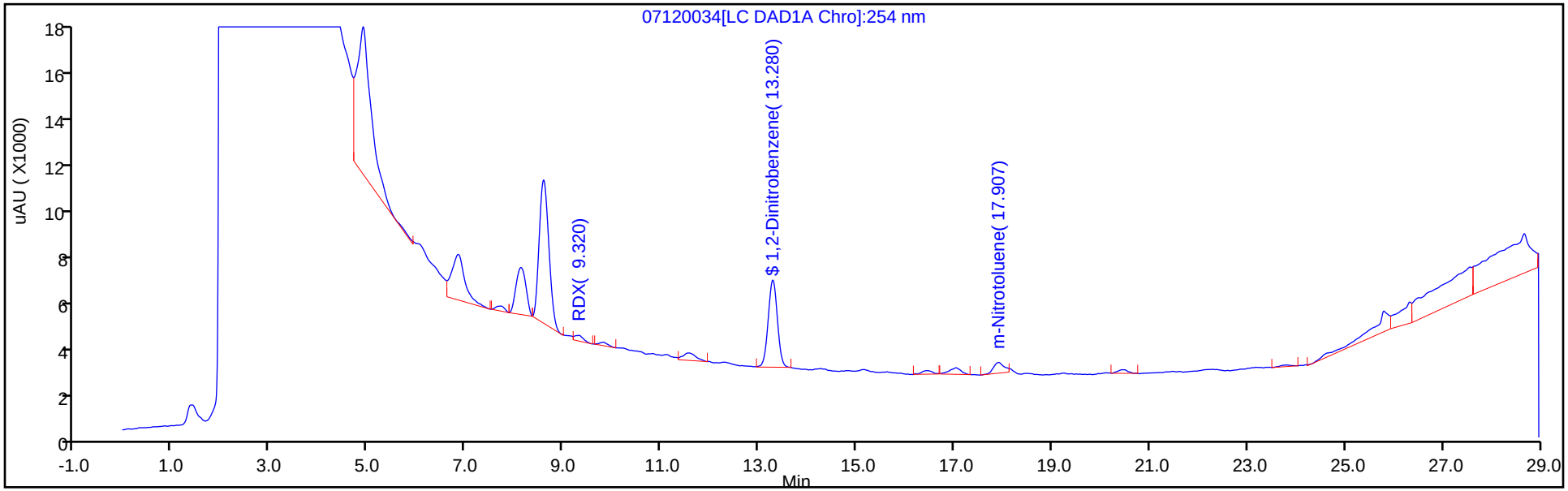
Report Date: 15-Jul-2019 11:38:52 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

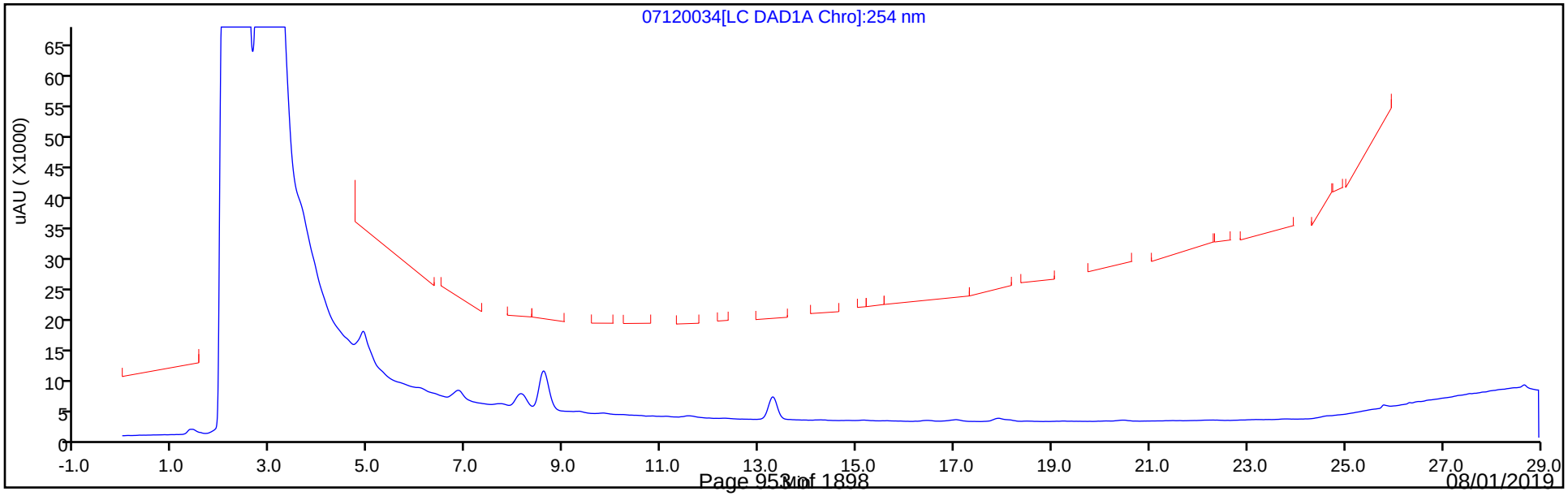
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120034.D

Injection Date:	13-Jul-2019 04:15:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	280-124928-B-7-A	Lab Sample ID:	280-124928-7	Worklist Smp#:	34
Client ID:	G0105-19A				
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:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120034.D				
Lims ID:	280-124928-B-7-A				
Client ID:	G0105-19A				
Sample Type:	Client				
Inject. Date:	13-Jul-2019 04:15:59	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-B-7-A				
Misc. Info.:	280-0083659-034				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 11:38:50	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0331				
First Level Reviewer: fiedlerh		Date:	15-Jul-2019 11:36:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1765	88.26

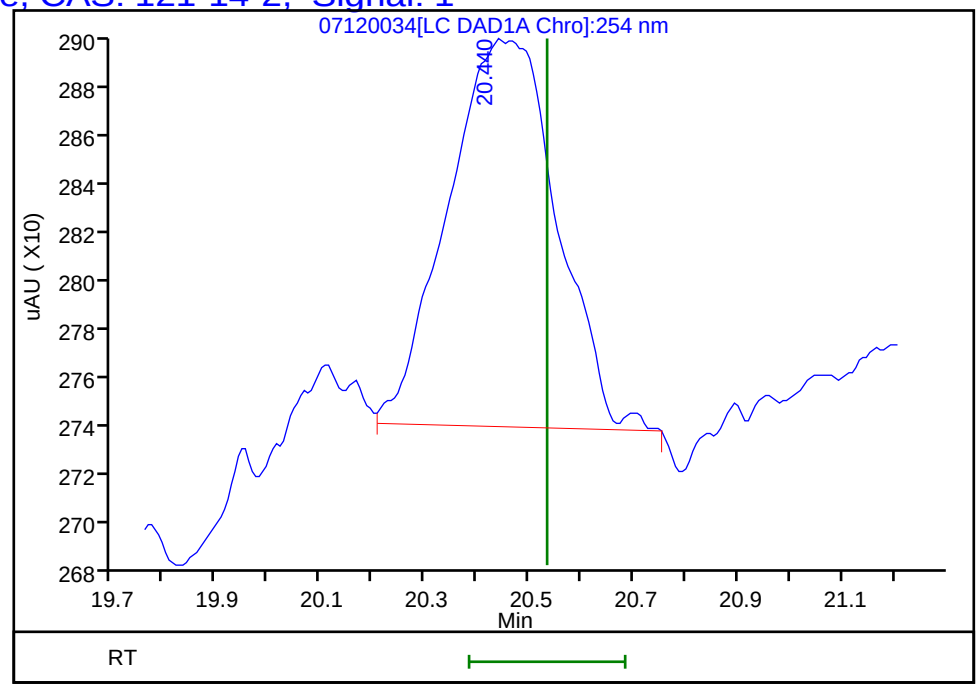
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120034.D				
Injection Date:	13-Jul-2019 04:15:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-B-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	HKF	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.44
Response: 2235
Amount: 0.003925



Reviewer: fiedlerh, 15-Jul-2019 11:36:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

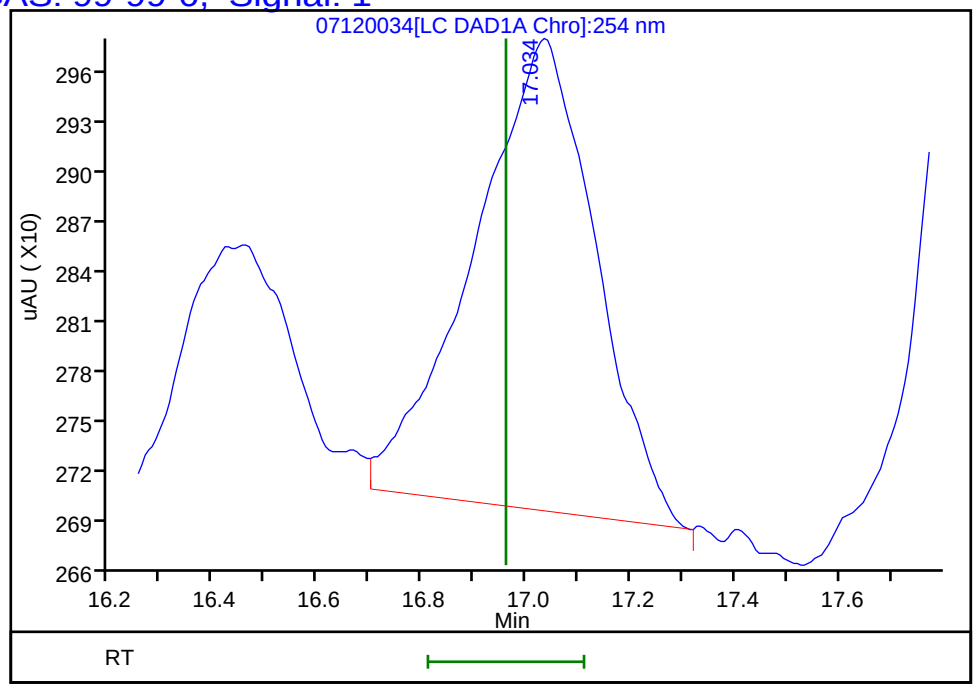
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120034.D				
Injection Date:	13-Jul-2019 04:15:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-B-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	HKF	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 17.03
Response: 4552
Amount: 0.020084



Reviewer: fiedlerh, 15-Jul-2019 11:36:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

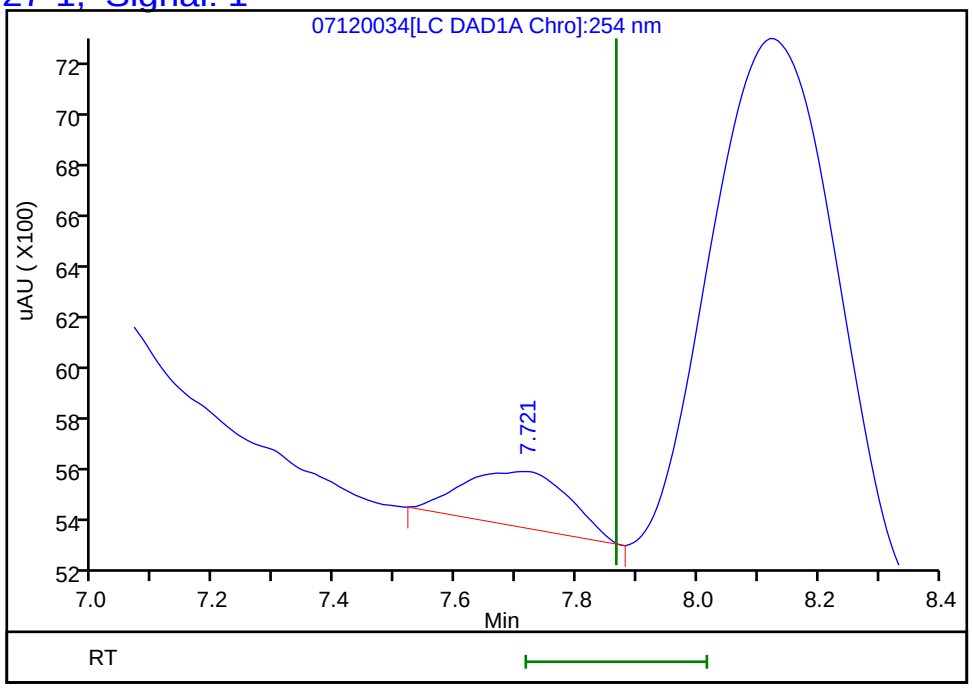
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120034.D				
Injection Date:	13-Jul-2019 04:15:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-B-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	HKF	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.72
Response: 2577
Amount: 0.009561



Reviewer: fiedlerh, 15-Jul-2019 11:36:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0105-19A RE Lab Sample ID: 280-124928-7 RE

Matrix: Water Lab File ID: 07150013.D

Analysis Method: 8330A Date Collected: 06/05/2019 12:35

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 503.2(mL) Date Analyzed: 07/15/2019 14:36

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.20*	*U H*	*0.40*	0.20	*0.085*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	153	*M Q*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150013.D
Lims ID: 280-124928-B-7-A
Client ID: G0105-19A
Sample Type: Client
Inject. Date: 15-Jul-2019 14:36:07 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-7-A
Misc. Info.: 280-0083692-013
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:55:41

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.680			ND	
	6 MNX	1	7.369	7.367	0.002	28101	0.2007	M
	7 RDX	1		7.774			ND	
$	9 1,2-Dinitrobenzene	1	8.729	8.734	-0.005	42568	0.3055	M
	10 1,3,5-Trinitrobenzene	1		8.900			ND	
	11 1,3-Dinitrobenzene	1		9.560			ND	
	12 Nitrobenzene	1		9.947			ND	
	14 Tetryl	1		10.267			ND	
	16 2,4,6-Trinitrotoluene	1		11.240			ND	U
	17 4-Amino-2,6-dinitrotoluene	1		11.427			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.720			ND	
	19 2,6-Dinitrotoluene	1	11.849	11.860	-0.011	9673	0.0607	
	20 2,4-Dinitrotoluene	1		12.060			ND	
	21 o-Nitrotoluene	1		12.907			ND	
	22 p-Nitrotoluene	1		13.354			ND	
	23 m-Nitrotoluene	1		13.960			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

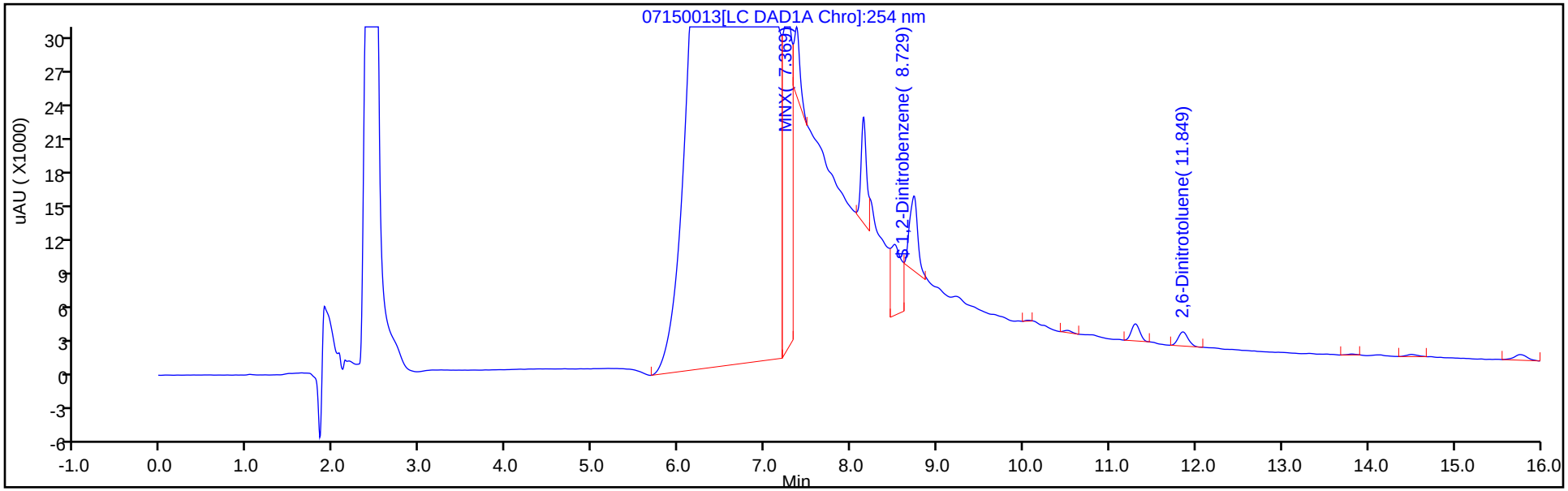
Report Date: 15-Jul-2019 17:54:00 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

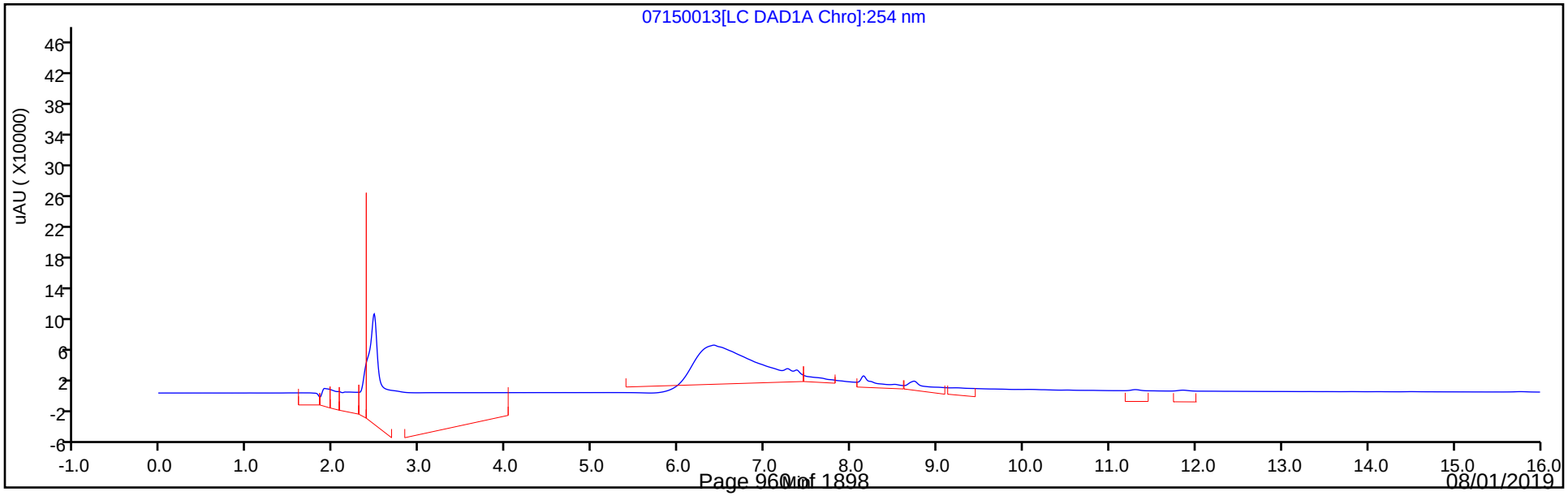
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150013.D

Injection Date:	15-Jul-2019 14:36:07	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-B-7-A	Lab Sample ID:	280-124928-7	Worklist Smp#:	13
Client ID:	G0105-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150013.D				
Lims ID:	280-124928-B-7-A				
Client ID:	G0105-19A				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 14:36:07	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-B-7-A				
Misc. Info.:	280-0083692-013				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 17:53:56	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				
First Level Reviewer: fiedlerh		Date:	15-Jul-2019 16:55:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.3055	152.76

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

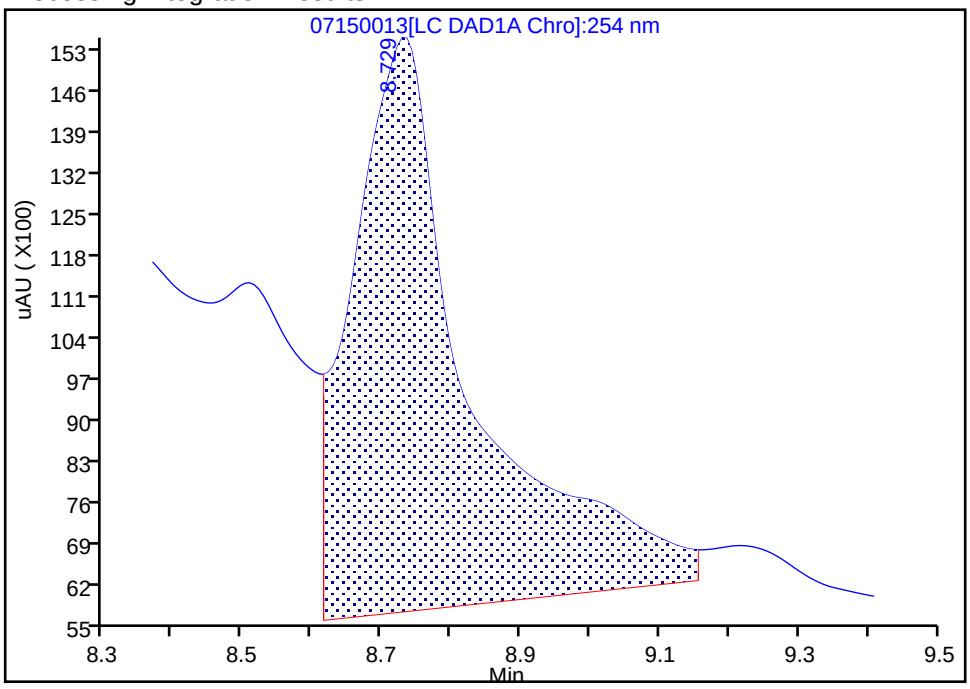
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150013.D				
Injection Date:	15-Jul-2019 14:36:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	hkf	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

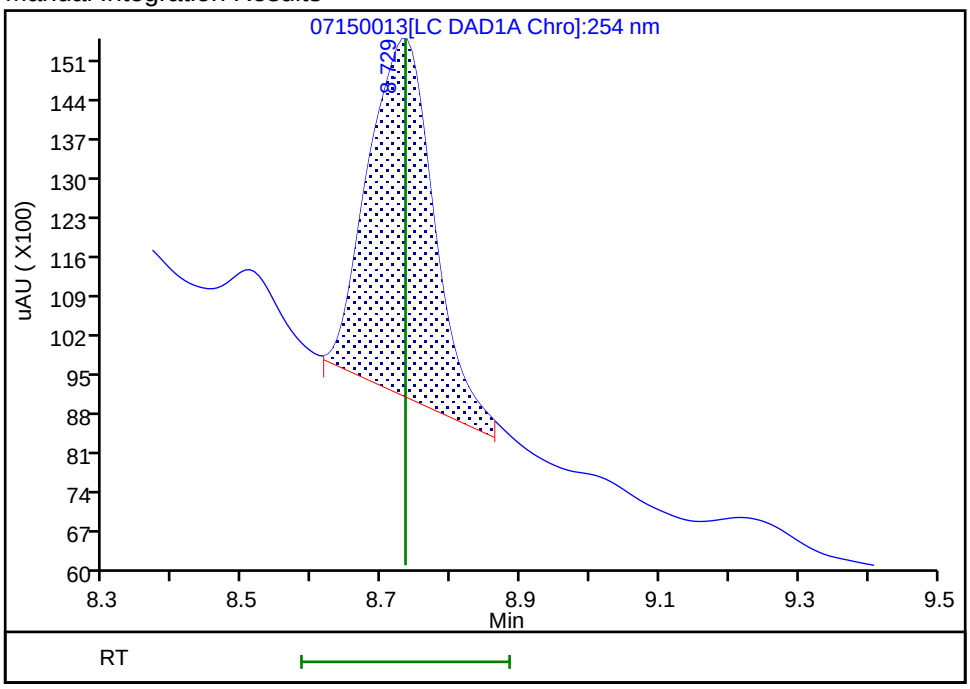
Processing Integration Results

RT: 8.73
Area: 116634
Amount: 0.837115
Amount Units: ug/mL



Manual Integration Results

RT: 8.73
Area: 42568
Amount: 0.305523
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:55:36

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

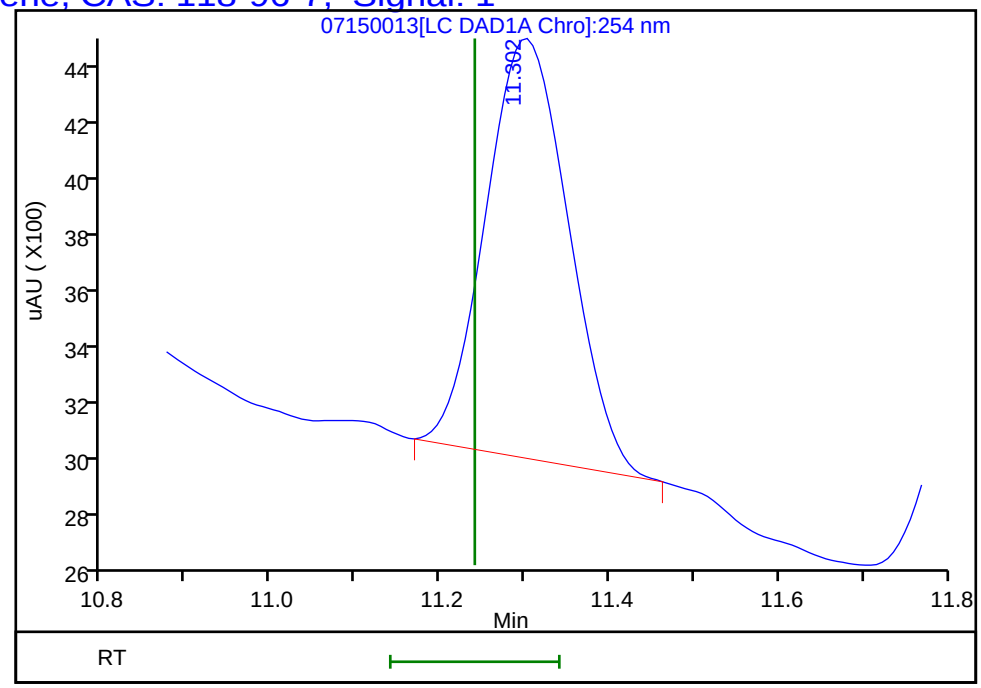
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150013.D

Injection Date:	15-Jul-2019 14:36:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	hkf	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.30
Response: 10025
Amount: 0.044109



Reviewer: fiedlerh, 15-Jul-2019 16:55:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

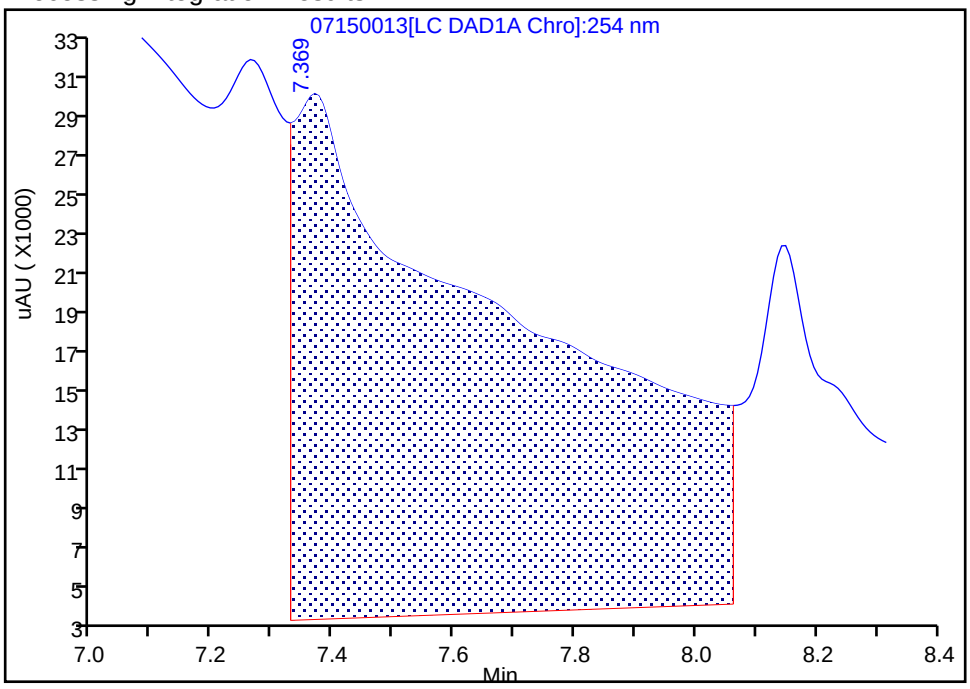
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150013.D				
Injection Date:	15-Jul-2019 14:36:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	hkf	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

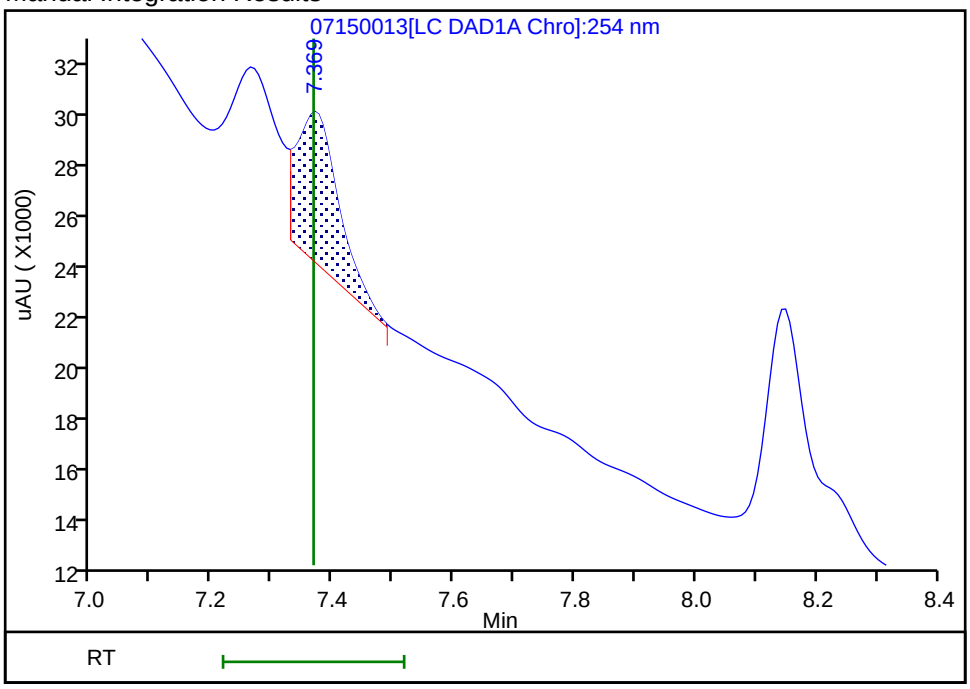
Processing Integration Results

RT: 7.37
Area: 698651
Amount: 4.988904
Amount Units: ug/mL



Manual Integration Results

RT: 7.37
Area: 28101
Amount: 0.200663
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:55:24

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0105-19A Lab Sample ID: 280-124928-7

Matrix: Water Lab File ID: 07160009.D

Analysis Method: 8330A Date Collected: 06/05/2019 12:35

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 486.3(mL) Date Analyzed: 07/16/2019 17:53

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.: 464736 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	0.41	U	0.41	0.41	0.16
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.066
5755-27-1	MNX	0.41	U	2.1	0.41	0.16
98-95-3	Nitrobenzene	0.21	U	0.41	0.21	0.094

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160009.D
Lims ID: 280-124928-A-7-A
Client ID: G0105-19A
Sample Type: Client
Inject. Date: 16-Jul-2019 17:53:33 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-7-A
Misc. Info.: 280-0083752-009
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-Jul-2019 09:22:56 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0305

First Level Reviewer: fiedlerh Date: 17-Jul-2019 08:34:01

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.198			ND	
	7 MNX	1		7.866			ND	
	8 RDX	1	9.325	9.271	0.054	3171	0.0152	
	9 Nitrobenzene	1		12.258			ND	
$	10 1,2-Dinitrobenzene	1	13.285	13.291	-0.006	51436	0.1858	
	12 1,3-Dinitrobenzene	1		15.811			ND	
	14 o-Nitrotoluene	1		16.631			ND	
	15 p-Nitrotoluene	1		16.958			ND	U
	16 4-Amino-2,6-dinitrotoluene	1		17.371			ND	
	17 m-Nitrotoluene	1		17.871			ND	U
	18 2-Amino-4,6-dinitrotoluene	1		18.398			ND	
	19 1,3,5-Trinitrobenzene	1		19.118			ND	
	20 2,6-Dinitrotoluene	1		19.971			ND	
	21 2,4-Dinitrotoluene	1		20.525			ND	U
	22 Tetryl	1		23.852			ND	
	23 2,4,6-Trinitrotoluene	1		24.838			ND	

QC Flag Legend

Review Flags
U - Marked Undetected

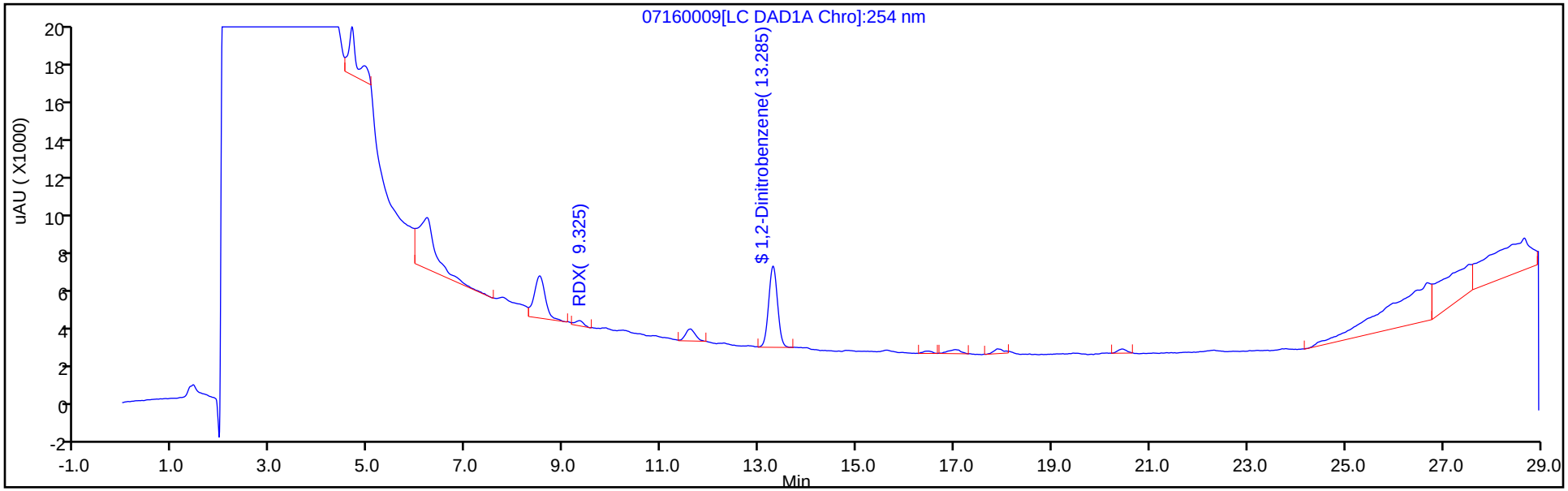
Report Date: 17-Jul-2019 09:22:58 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

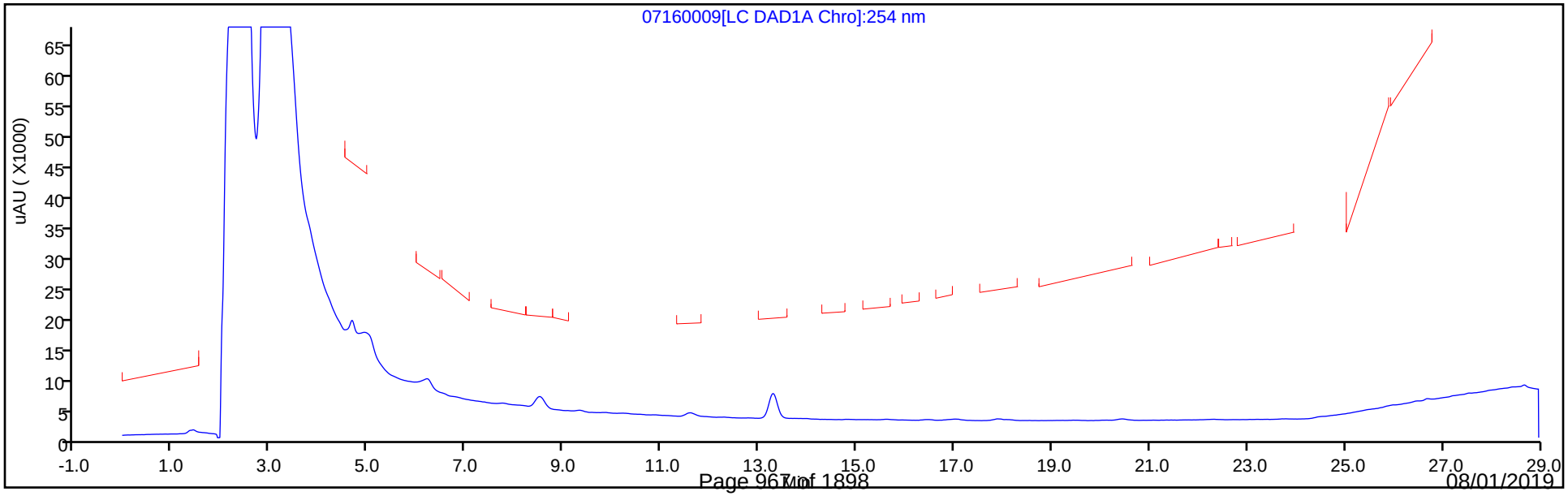
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160009.D

Injection Date:	16-Jul-2019 17:53:33	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7	Worklist Smp#:	9
Client ID:	G0105-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160009.D				
Lims ID:	280-124928-A-7-A				
Client ID:	G0105-19A				
Sample Type:	Client				
Inject. Date:	16-Jul-2019 17:53:33	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-7-A				
Misc. Info.:	280-0083752-009				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jul-2019 09:22:56	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0305				
First Level Reviewer: fiedlerh		Date:	17-Jul-2019 08:34:01		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1858	92.89

User Disabled Compound Report

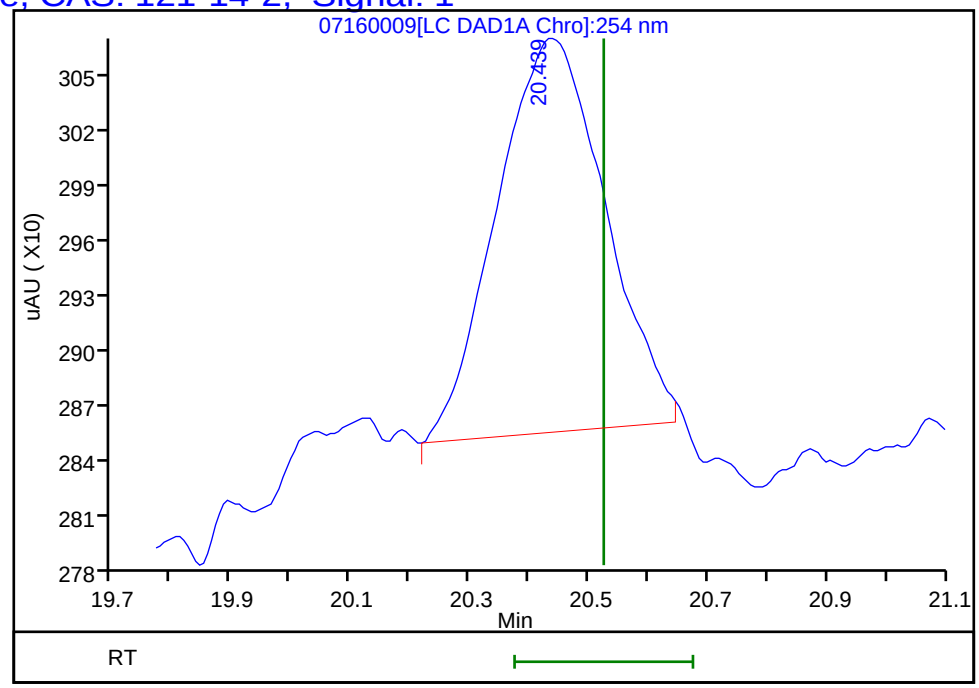
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160009.D

Injection Date:	16-Jul-2019 17:53:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	HKF	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		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.44
Response: 2613
Amount: 0.004589



Reviewer: fiedlerh, 17-Jul-2019 08:34:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

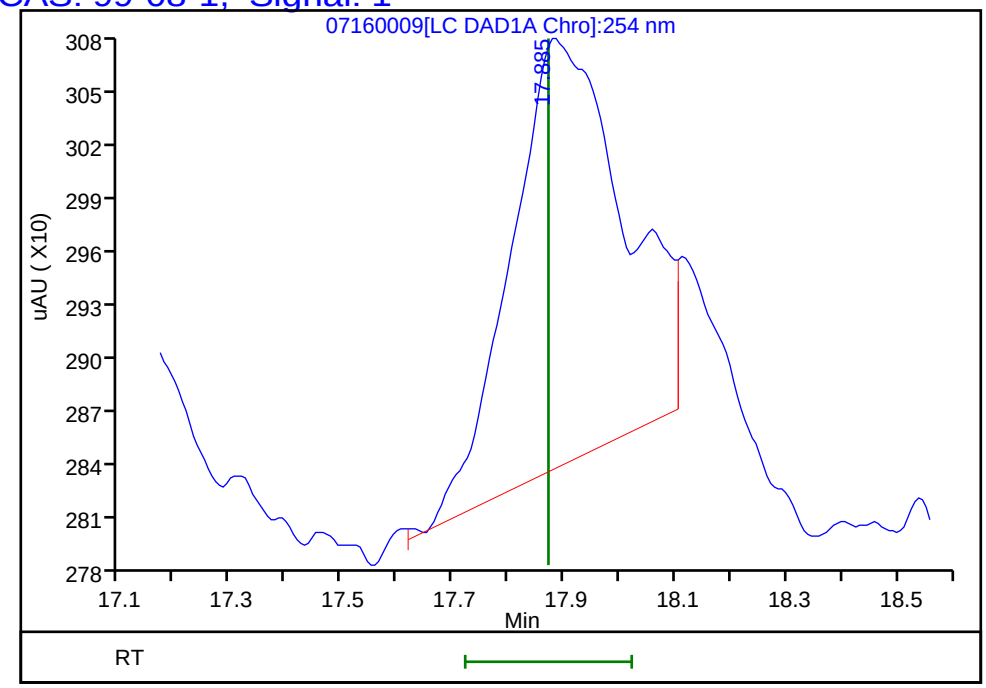
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160009.D				
Injection Date:	16-Jul-2019 17:53:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	HKF	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		

17 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.89
Response: 3325
Amount: 0.011360



Reviewer: fiedlerh, 17-Jul-2019 08:34:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

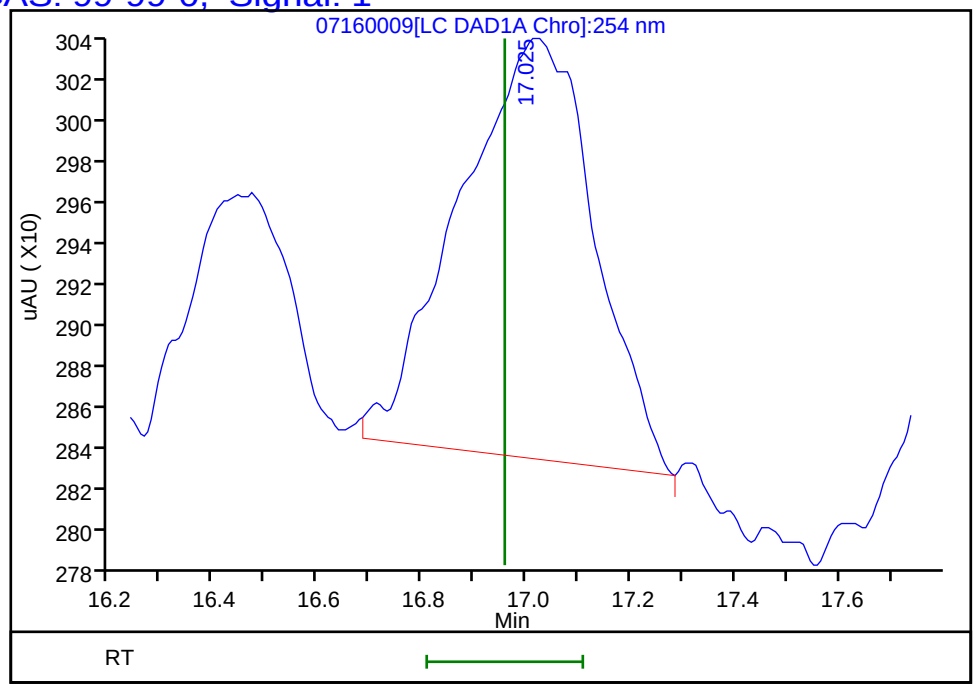
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160009.D				
Injection Date:	16-Jul-2019 17:53:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-A-7-A	Lab Sample ID:	280-124928-7		
Client ID:	G0105-19A				
Operator ID:	HKF	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		

15 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 17.03
Response: 3655
Amount: 0.016126



Reviewer: fiedlerh, 17-Jul-2019 08:34:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0107-19A Lab Sample ID: 280-124928-8

Matrix: Water Lab File ID: 06140061.D

Analysis Method: 8330A Date Collected: 06/05/2019 13:50

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 511.9(mL) Date Analyzed: 06/15/2019 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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.39	U	0.98	0.39	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.39	0.20	0.087
118-96-7	2,4,6-Trinitrotoluene	0.39	U	0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.39	0.20	0.082
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.050
88-72-2	2-Nitrotoluene	0.20	U Q	0.39	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U M	0.98	0.39	0.20
2691-41-0	HMX	0.20	U	0.39	0.20	0.086
5755-27-1	MNX	0.39	U	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U	0.39	0.20	0.089
121-82-4	RDX	0.39	U	0.39	0.39	0.15
479-45-8	Tetryl	0.20	U	0.23	0.20	0.077

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140061.D				
Lims ID:	280-124928-A-8-A				
Client ID:	G0107-19A				
Sample Type:	Client				
Inject. Date:	15-Jun-2019 14:35:45	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-8-A				
Misc. Info.:	280-0082867-061				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jun-2019 10:45:47	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0334				
First Level Reviewer: fiedlerh		Date:	17-Jun-2019 10:26:20		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.643			ND	
6 MNX	1		7.359			ND	
7 RDX	1		7.763			ND	
$ 9 1,2-Dinitrobenzene	1	8.737	8.743	-0.006	25356	0.1949	M
10 1,3,5-Trinitrobenzene	1		8.896			ND	
11 1,3-Dinitrobenzene	1		9.563			ND	
12 Nitrobenzene	1		9.949			ND	
14 Tetryl	1		10.276			ND	
16 2,4,6-Trinitrotoluene	1		11.229			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.429			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.716			ND	
19 2,6-Dinitrotoluene	1		11.843			ND	
20 2,4-Dinitrotoluene	1		12.043			ND	
21 o-Nitrotoluene	1		12.883			ND	
22 p-Nitrotoluene	1		13.323			ND	U
23 m-Nitrotoluene	1		13.923			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

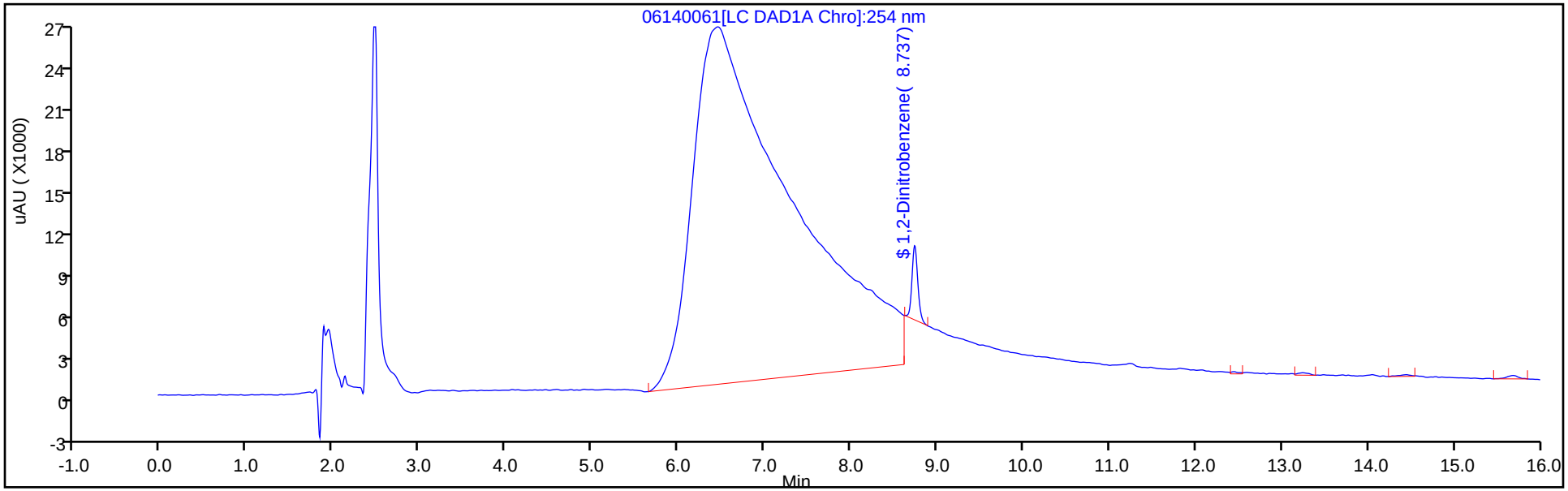
U - Marked Undetected

Report Date: 17-Jun-2019 10:46:05 Chrom Revision: 2.3 03-May-2019 15:52:00

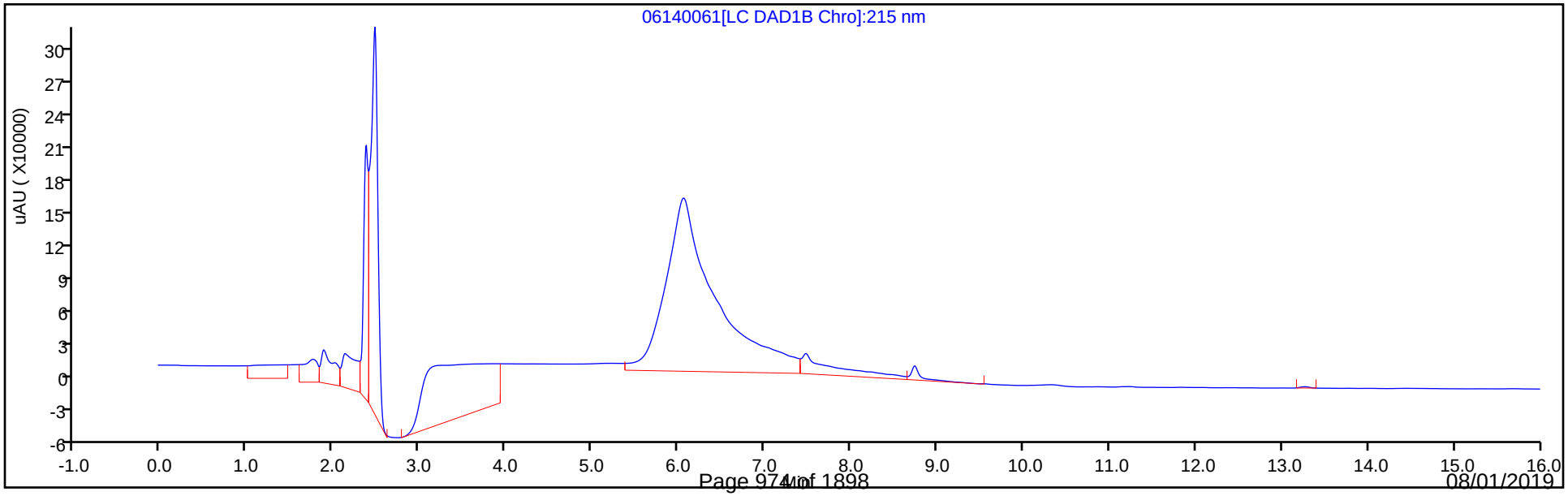
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140061.D				
Injection Date:	15-Jun-2019 14:35:45	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-A-8-A	Lab Sample ID:	280-124928-8	Worklist Smp#:	61
Client ID:	G0107-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	61
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140061.D				
Lims ID:	280-124928-A-8-A				
Client ID:	G0107-19A				
Sample Type:	Client				
Inject. Date:	15-Jun-2019 14:35:45	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-8-A				
Misc. Info.:	280-0082867-061				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jun-2019 10:45:47	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0334				
First Level Reviewer: fiedlerh		Date:	17-Jun-2019 10:26:20		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1949	97.44

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

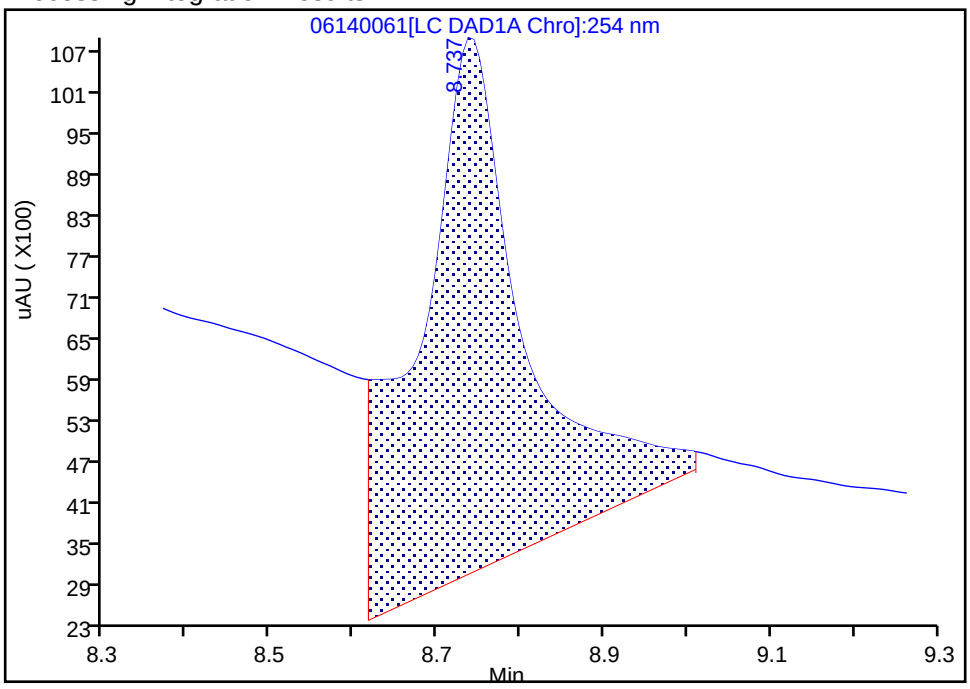
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140061.D				
Injection Date:	15-Jun-2019 14:35:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-8-A	Lab Sample ID:	280-124928-8		
Client ID:	G0107-19A				
Operator ID:	hkf	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

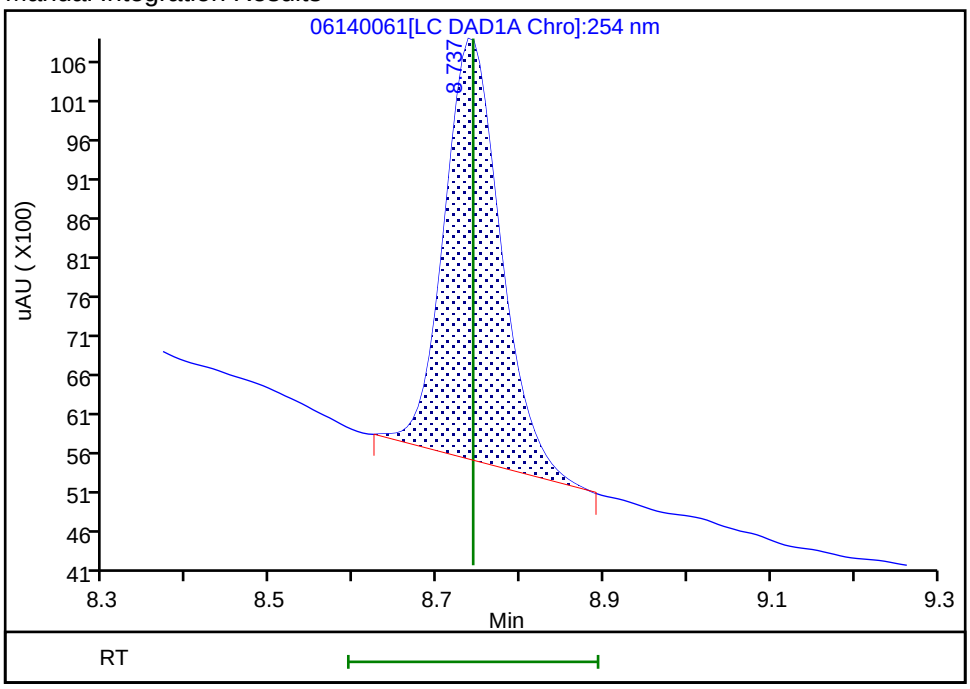
Processing Integration Results

RT: 8.74
Area: 70099
Amount: 0.538765
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 25356
Amount: 0.194880
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:26:17

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

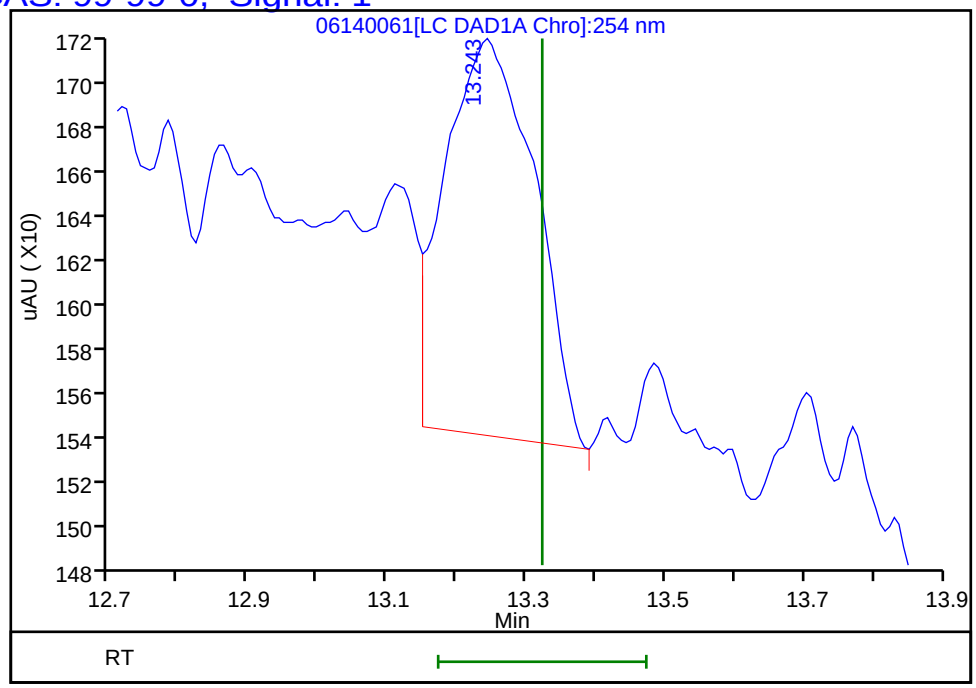
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140061.D				
Injection Date:	15-Jun-2019 14:35:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-8-A	Lab Sample ID:	280-124928-8		
Client ID:	G0107-19A				
Operator ID:	hkf	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.24
Response: 1570
Amount: 0.013929



Reviewer: fiedlerh, 17-Jun-2019 10:26:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0107-19A RE Lab Sample ID: 280-124928-8 RE

Matrix: Water Lab File ID: 07150014.D

Analysis Method: 8330A Date Collected: 06/05/2019 13:50

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 471.5(mL) Date Analyzed: 07/15/2019 14:59

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.21*	*U H*	*0.42*	0.21	*0.091*
5755-27-1	*MNX*	*0.42*	*U Q H*	*2.1*	0.42	*0.16*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	87	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150014.D
Lims ID: 280-124928-B-8-A
Client ID: G0107-19A
Sample Type: Client
Inject. Date: 15-Jul-2019 14:59:02 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-8-A
Misc. Info.: 280-0083692-014
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:56:00

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.680			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1	7.761	7.774	-0.013	4581	0.0412	M
$	9 1,2-Dinitrobenzene	1	8.748	8.734	0.014	24294	0.1744	M
	10 1,3,5-Trinitrobenzene	1		8.900			ND	
	11 1,3-Dinitrobenzene	1		9.560			ND	
	12 Nitrobenzene	1		9.947			ND	
	14 Tetryl	1		10.267			ND	U
	16 2,4,6-Trinitrotoluene	1		11.240			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.427			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.720			ND	
	19 2,6-Dinitrotoluene	1		11.860			ND	
	20 2,4-Dinitrotoluene	1		12.060			ND	U
	21 o-Nitrotoluene	1		12.907			ND	
	22 p-Nitrotoluene	1		13.354			ND	
	23 m-Nitrotoluene	1		13.960			ND	U

QC Flag Legend

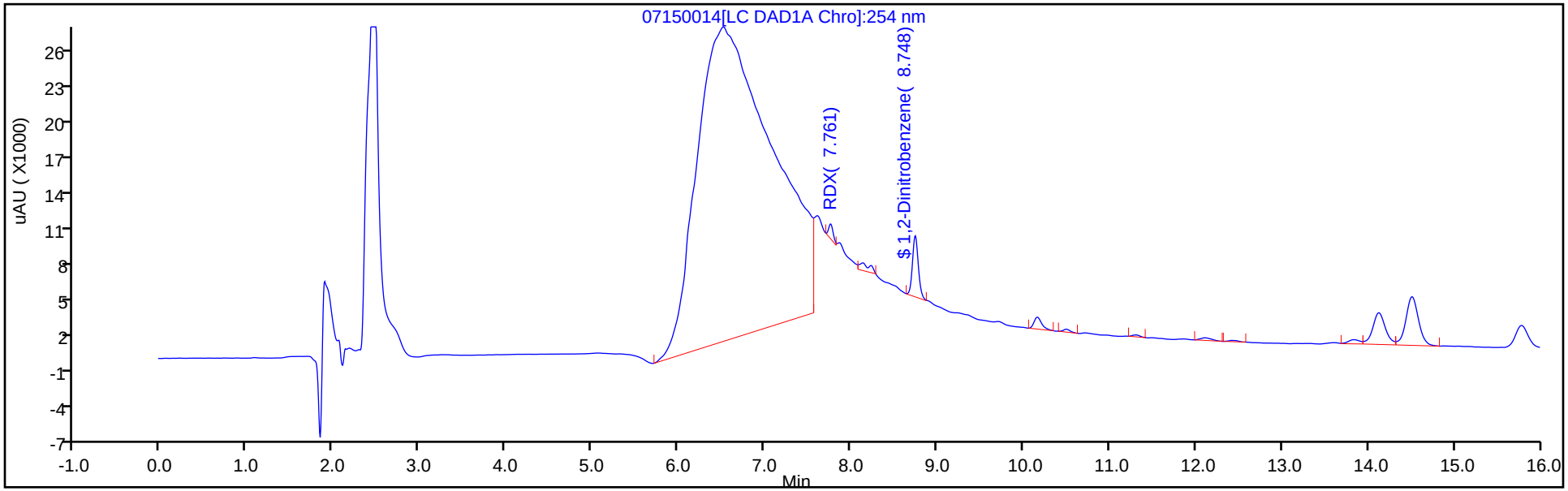
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 15-Jul-2019 17:54:02 Chrom Revision: 2.3 20-Jun-2019 20:50:56

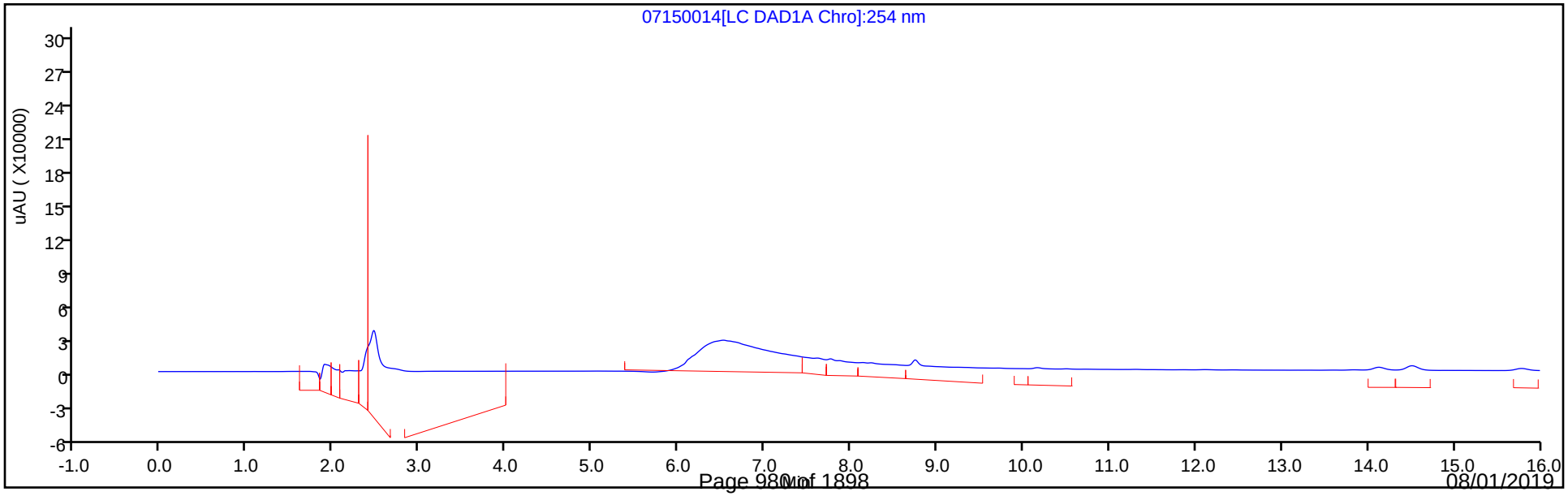
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150014.D				
Injection Date:	15-Jul-2019 14:59:02	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-B-8-A	Lab Sample ID:	280-124928-8	Worklist Smp#:	14
Client ID:	G0107-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150014.D				
Lims ID:	280-124928-B-8-A				
Client ID:	G0107-19A				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 14:59:02	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-B-8-A				
Misc. Info.:	280-0083692-014				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 17:53:56	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				
First Level Reviewer: fiedlerh		Date:	15-Jul-2019 16:56:00		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1744	87.18

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

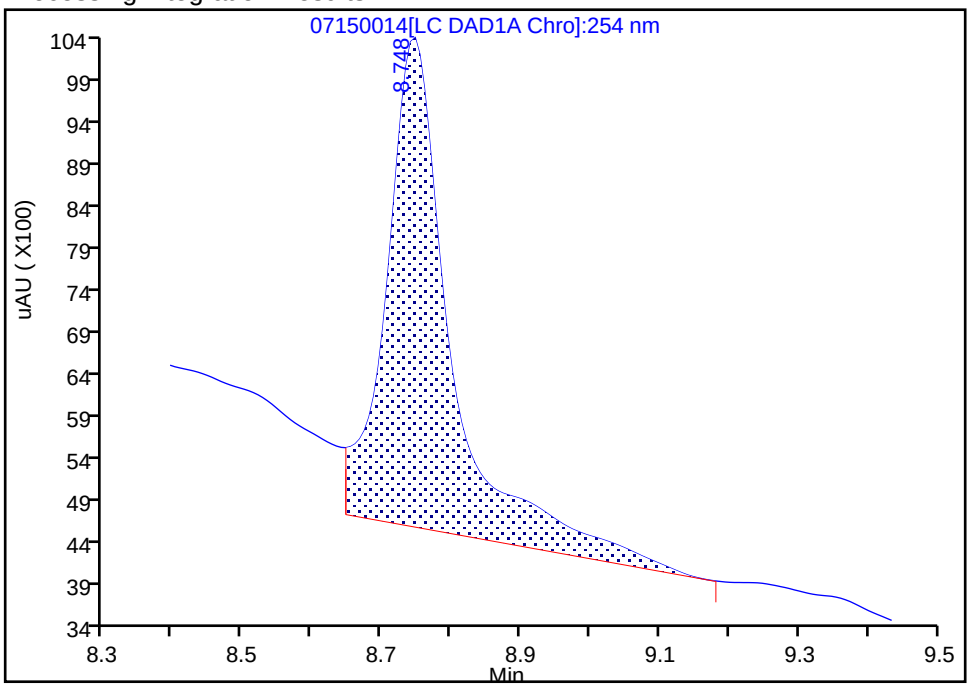
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150014.D				
Injection Date:	15-Jul-2019 14:59:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-8-A	Lab Sample ID:	280-124928-8		
Client ID:	G0107-19A				
Operator ID:	hkf	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

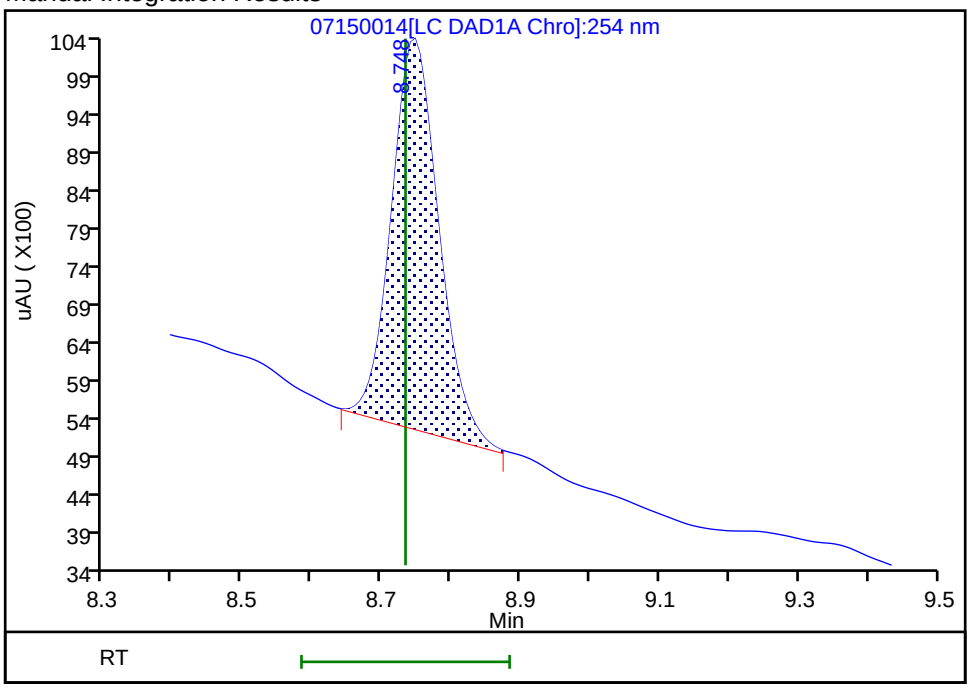
Processing Integration Results

RT: 8.75
Area: 37847
Amount: 0.271639
Amount Units: ug/mL



Manual Integration Results

RT: 8.75
Area: 24294
Amount: 0.174365
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:55:50
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

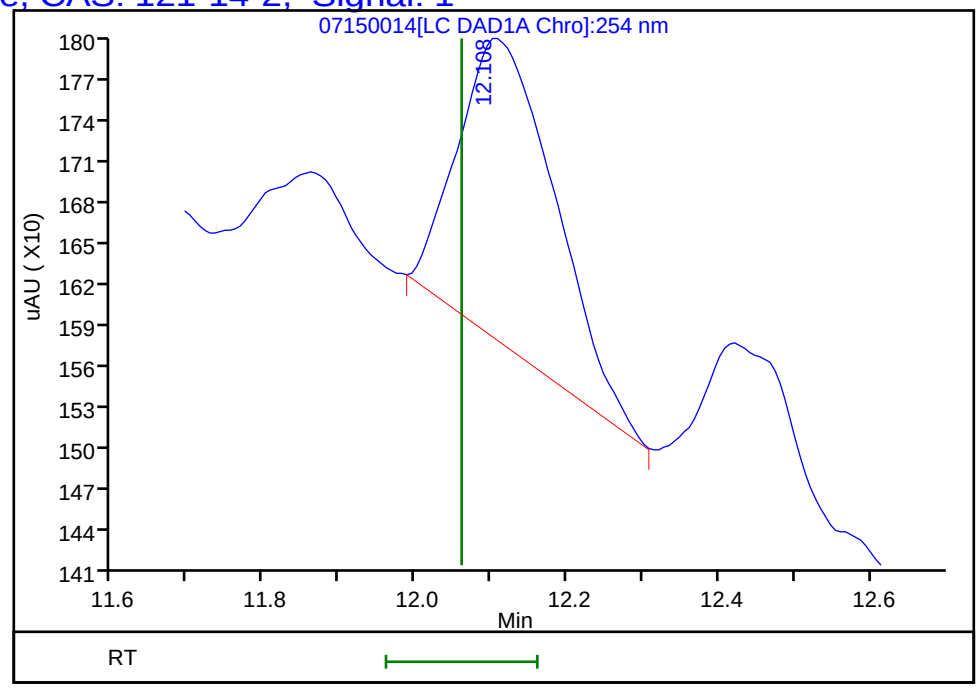
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150014.D

Injection Date:	15-Jul-2019 14:59:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-8-A	Lab Sample ID:	280-124928-8		
Client ID:	G0107-19A				
Operator ID:	hkf	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 12.11
Response: 1974
Amount: 0.006570



Reviewer: fiedlerh, 15-Jul-2019 16:56:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

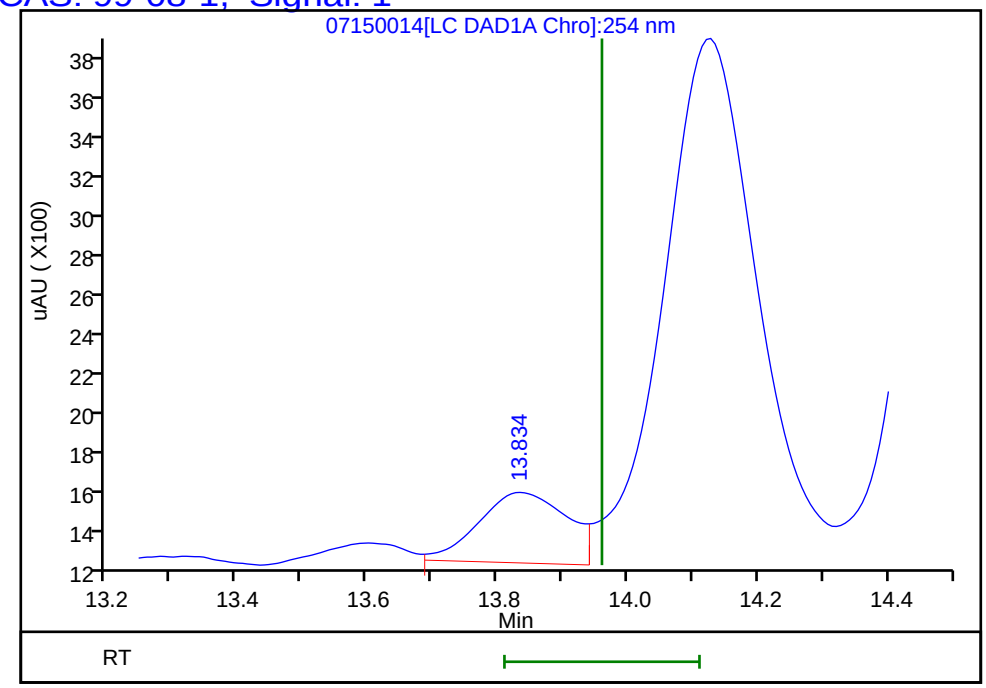
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150014.D				
Injection Date:	15-Jul-2019 14:59:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-8-A	Lab Sample ID:	280-124928-8		
Client ID:	G0107-19A				
Operator ID:	hkf	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.83
Response: 3308
Amount: 0.022795



Reviewer: fiedlerh, 15-Jul-2019 16:56:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

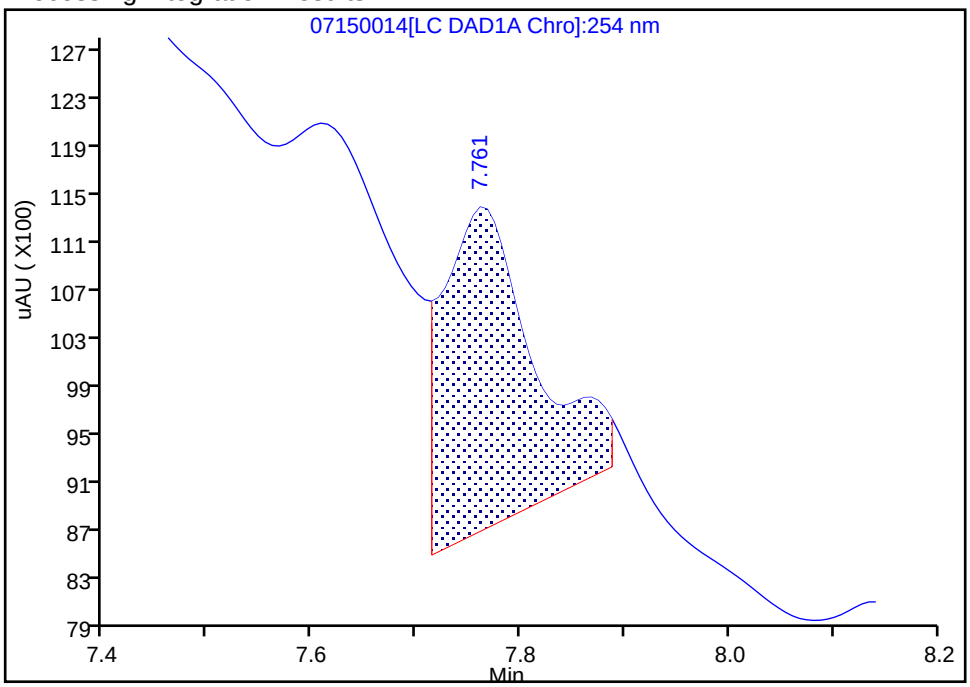
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150014.D				
Injection Date:	15-Jul-2019 14:59:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-8-A	Lab Sample ID:	280-124928-8		
Client ID:	G0107-19A				
Operator ID:	hkf	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

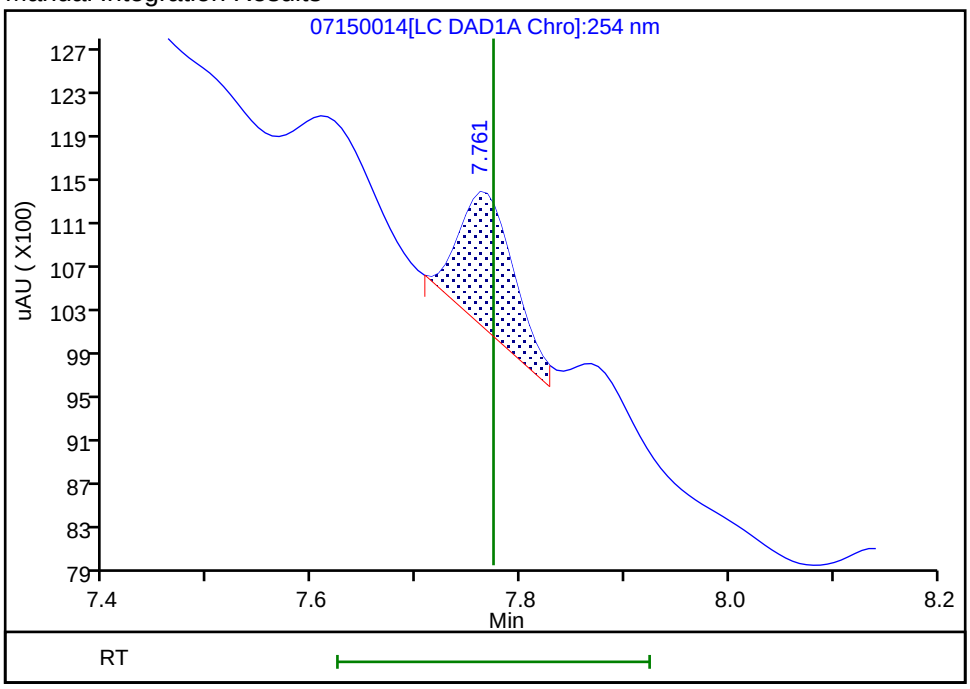
Processing Integration Results

RT: 7.76
Area: 15987
Amount: 0.143871
Amount Units: ug/mL



Manual Integration Results

RT: 7.76
Area: 4581
Amount: 0.041226
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:55:54
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

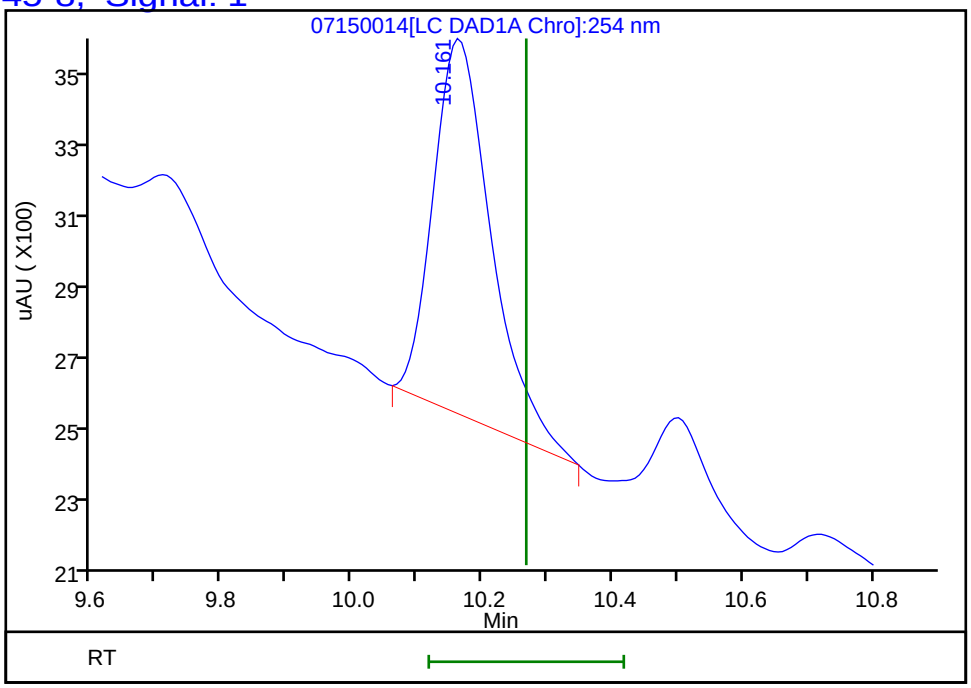
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150014.D				
Injection Date:	15-Jul-2019 14:59:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-8-A	Lab Sample ID:	280-124928-8		
Client ID:	G0107-19A				
Operator ID:	hkf	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.16
Response: 6216
Amount: 0.038381



Reviewer: fiedlerh, 15-Jul-2019 16:56:00
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0106-19A Lab Sample ID: 280-124928-9

Matrix: Water Lab File ID: 06140062.D

Analysis Method: 8330A Date Collected: 06/05/2019 15:05

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 512.5(mL) Date Analyzed: 06/15/2019 14:59

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.39	U	0.98	0.39	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.39	0.20	0.087
118-96-7	2,4,6-Trinitrotoluene	0.39	U	0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.39	0.20	0.082
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.049
88-72-2	2-Nitrotoluene	0.20	U Q	0.39	0.20	0.083
99-08-1	3-Nitrotoluene	0.39	U M	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U	0.98	0.39	0.20
2691-41-0	HMX	0.20	U	0.39	0.20	0.085
5755-27-1	MNX	0.39	U	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U	0.39	0.20	0.089
121-82-4	RDX	0.39	U	0.39	0.39	0.15
479-45-8	Tetryl	0.20	U	0.23	0.20	0.077

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140062.D
Lims ID: 280-124928-A-9-A
Client ID: G0106-19A
Sample Type: Client
Inject. Date: 15-Jun-2019 14:59:31 ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-9-A
Misc. Info.: 280-0082867-062
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:31:48

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.643			ND	
	6 MNX	1		7.359			ND	
	7 RDX	1		7.763			ND	
$	9 1,2-Dinitrobenzene	1	8.741	8.743	-0.002	25623	0.1969	M
	10 1,3,5-Trinitrobenzene	1		8.896			ND	
	11 1,3-Dinitrobenzene	1		9.563			ND	
	12 Nitrobenzene	1		9.949			ND	
	14 Tetryl	1		10.276			ND	
	16 2,4,6-Trinitrotoluene	1		11.229			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.429			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.716			ND	
	19 2,6-Dinitrotoluene	1		11.843			ND	
	20 2,4-Dinitrotoluene	1		12.043			ND	
	21 o-Nitrotoluene	1		12.883			ND	
	22 p-Nitrotoluene	1		13.323			ND	
	23 m-Nitrotoluene	1		13.923			ND	U

QC Flag Legend

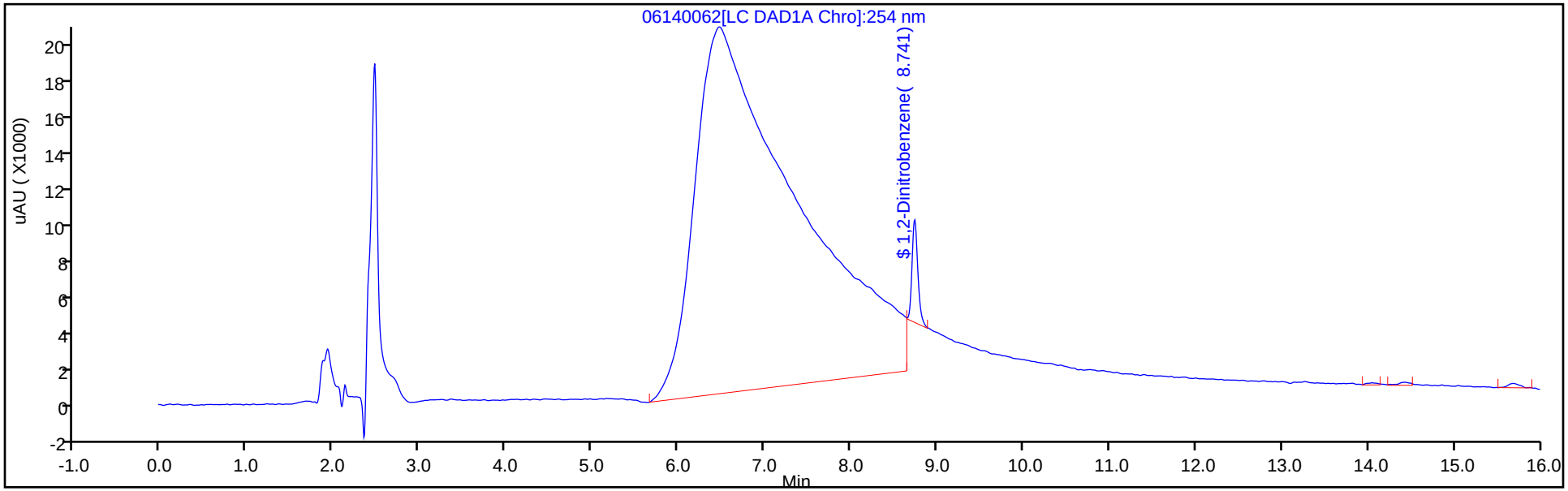
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 17-Jun-2019 10:46:08 Chrom Revision: 2.3 03-May-2019 15:52:00

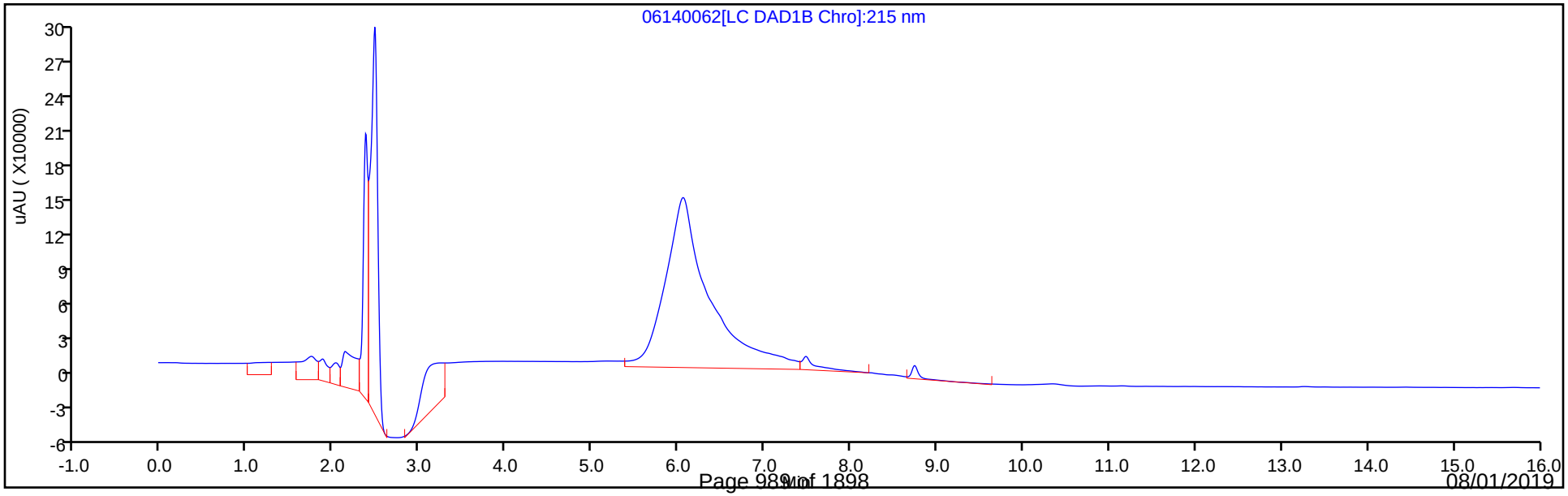
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140062.D				
Injection Date:	15-Jun-2019 14:59:31	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-A-9-A	Lab Sample ID:	280-124928-9	Worklist Smp#:	62
Client ID:	G0106-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	62
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140062.D				
Lims ID:	280-124928-A-9-A				
Client ID:	G0106-19A				
Sample Type:	Client				
Inject. Date:	15-Jun-2019 14:59:31	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-9-A				
Misc. Info.:	280-0082867-062				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jun-2019 10:45:47	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0334				
First Level Reviewer: fiedlerh		Date:	17-Jun-2019 10:31:48		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1969	98.47

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

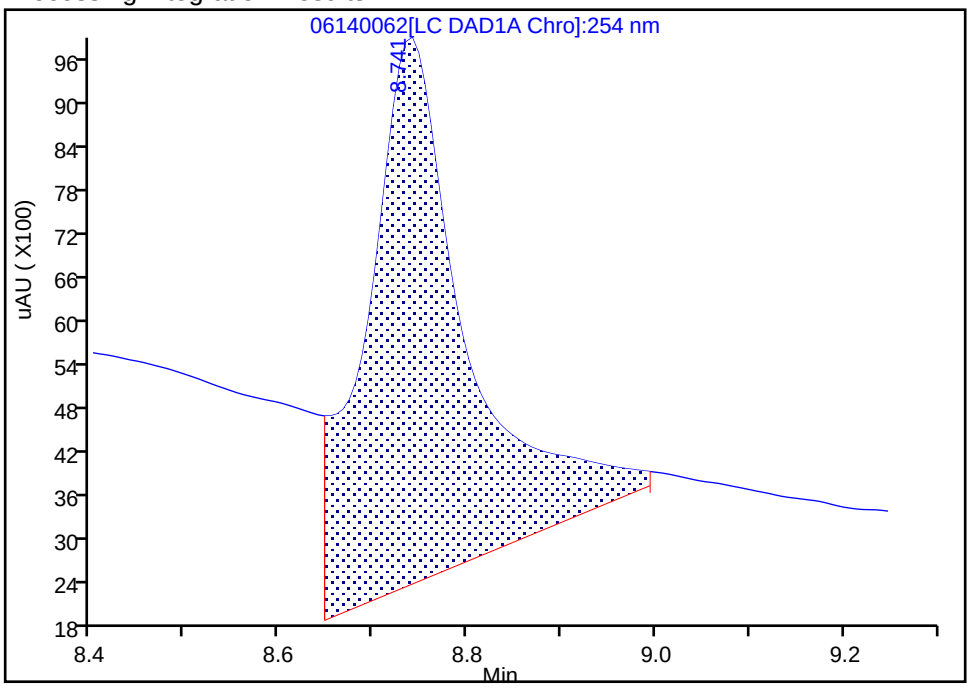
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140062.D				
Injection Date:	15-Jun-2019 14:59:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-9-A	Lab Sample ID:	280-124928-9		
Client ID:	G0106-19A				
Operator ID:	hkf	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

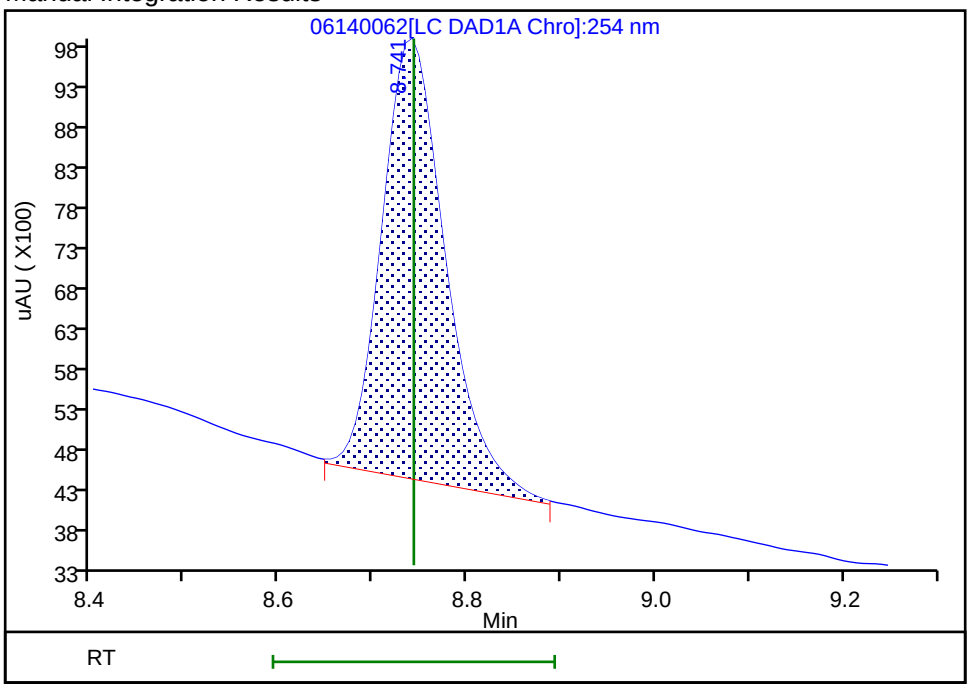
Processing Integration Results

RT: 8.74
Area: 56159
Amount: 0.431625
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 25623
Amount: 0.196932
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:31:45

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

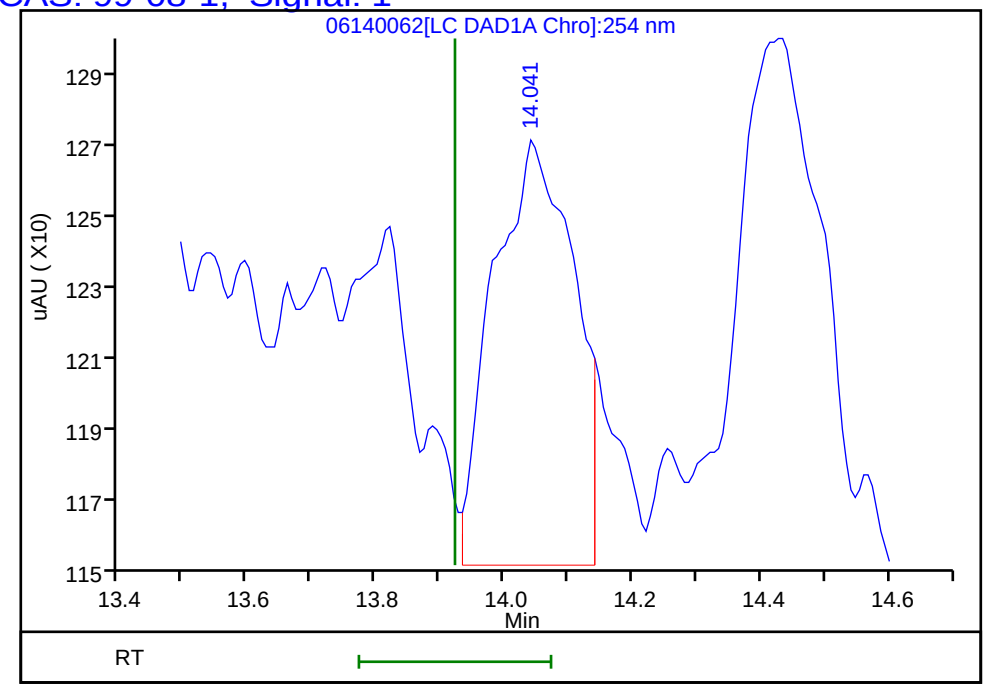
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140062.D				
Injection Date:	15-Jun-2019 14:59:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-9-A	Lab Sample ID:	280-124928-9		
Client ID:	G0106-19A				
Operator ID:	hkf	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.04
Response: 982
Amount: 0.006621



Reviewer: fiedlerh, 17-Jun-2019 10:31:48
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.: 280-124928-1

SDG No.:

Client Sample ID: G0106-19A RE Lab Sample ID: 280-124928-9 RE

Matrix: Water Lab File ID: 07150015.D

Analysis Method: 8330A Date Collected: 06/05/2019 15:05

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 469.9(mL) Date Analyzed: 07/15/2019 15:21

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.21*	*U H*	*0.43*	0.21	*0.091*
5755-27-1	*MNX*	*0.43*	*U Q H*	*2.1*	0.43	*0.16*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150015.D
Lims ID: 280-124928-B-9-A
Client ID: G0106-19A
Sample Type: Client
Inject. Date: 15-Jul-2019 15:21:58 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-9-A
Misc. Info.: 280-0083692-015
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:56:12

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.680			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.774			ND	
$	9 1,2-Dinitrobenzene	1	8.743	8.734	0.009	29570	0.2122	M
	10 1,3,5-Trinitrobenzene	1		8.900			ND	
	11 1,3-Dinitrobenzene	1		9.560			ND	
	12 Nitrobenzene	1		9.947			ND	
	14 Tetryl	1		10.267			ND	
	16 2,4,6-Trinitrotoluene	1		11.240			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.427			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.720			ND	
	19 2,6-Dinitrotoluene	1		11.860			ND	
	20 2,4-Dinitrotoluene	1		12.060			ND	
	21 o-Nitrotoluene	1		12.907			ND	
	22 p-Nitrotoluene	1		13.354			ND	
	23 m-Nitrotoluene	1		13.960			ND	U

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

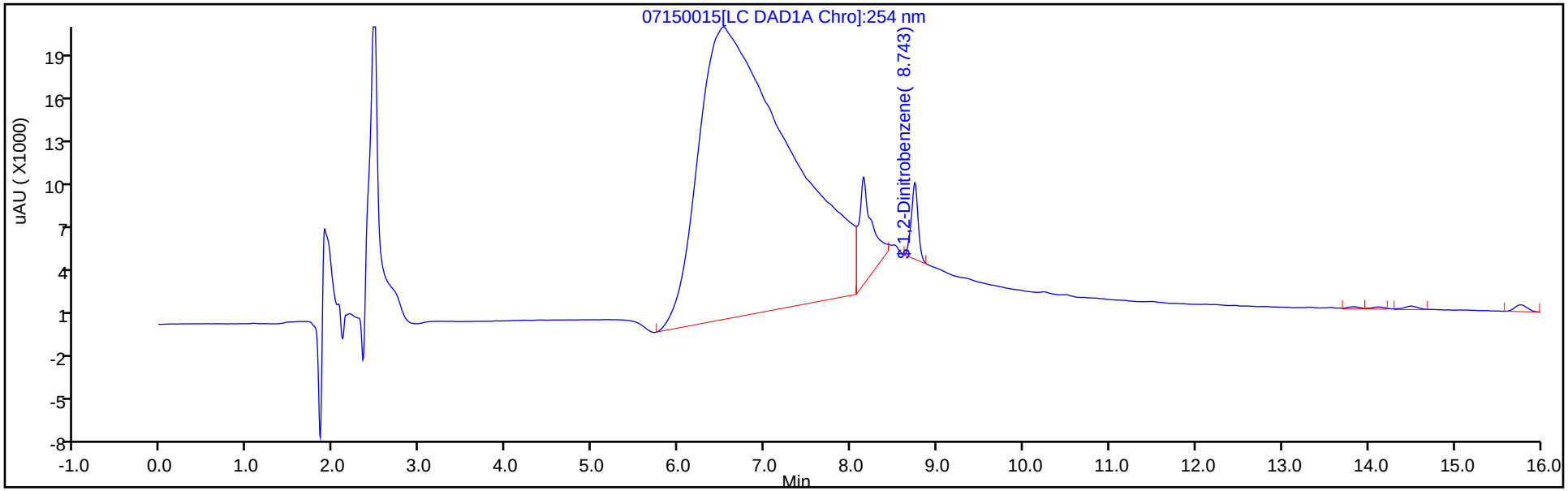
Report Date: 15-Jul-2019 17:54:03 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

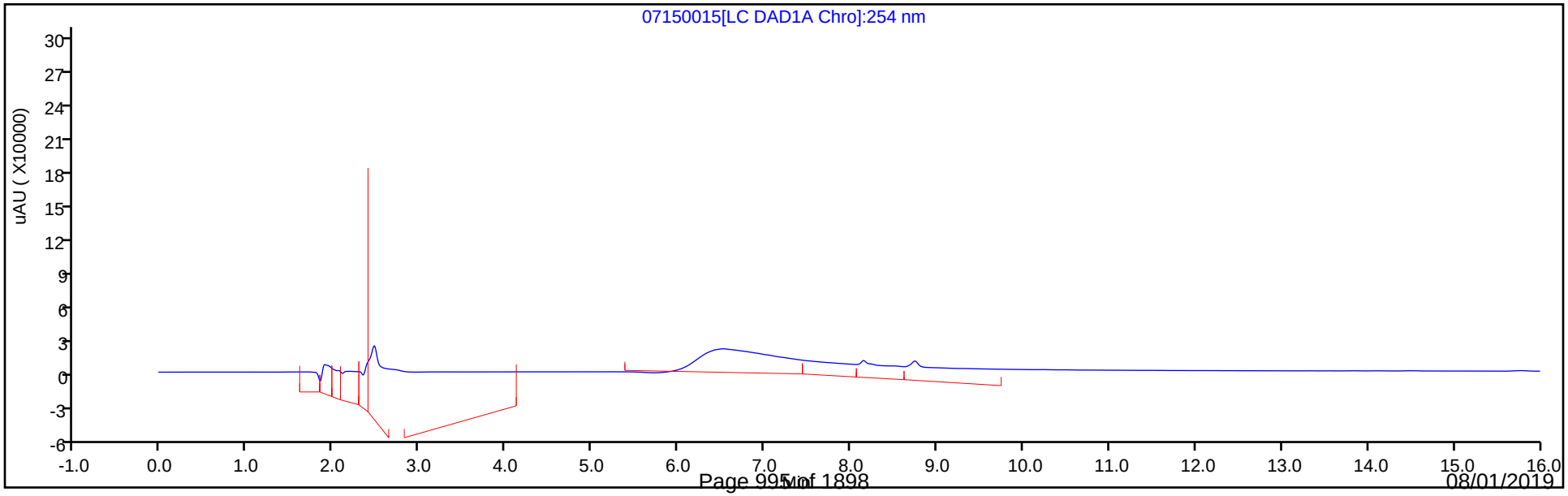
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150015.D

Injection Date:	15-Jul-2019 15:21:58	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-B-9-A	Lab Sample ID:	280-124928-9	Worklist Smp#:	15
Client ID:	G0106-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150015.D				
Lims ID:	280-124928-B-9-A				
Client ID:	G0106-19A				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 15:21:58	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-B-9-A				
Misc. Info.:	280-0083692-015				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 17:53:56	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				
First Level Reviewer: fiedlerh		Date:	15-Jul-2019 16:56:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2122	106.12

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

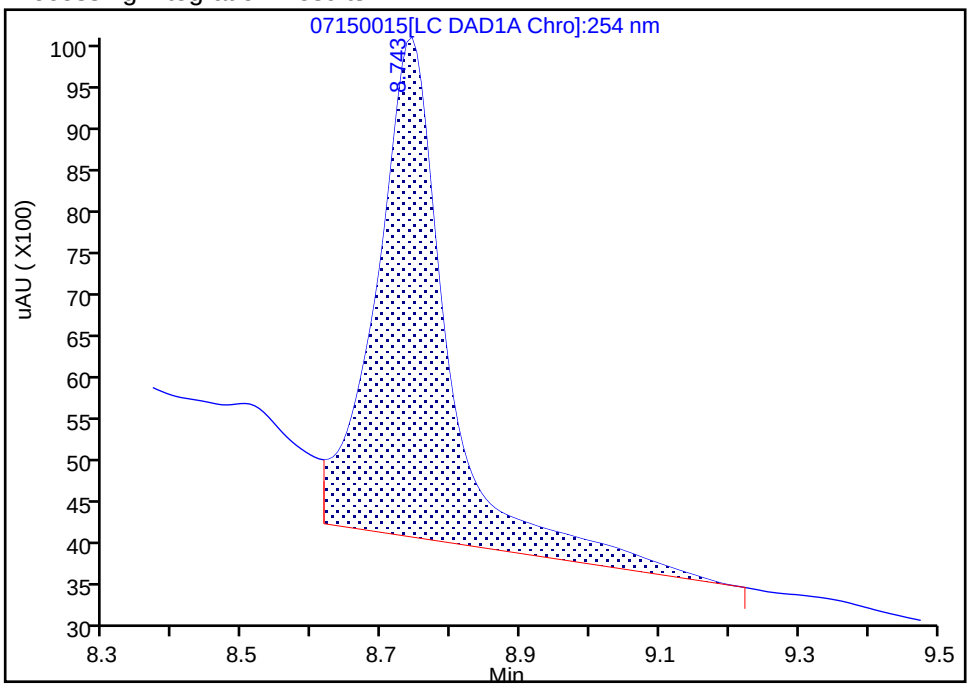
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150015.D				
Injection Date:	15-Jul-2019 15:21:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-9-A	Lab Sample ID:	280-124928-9		
Client ID:	G0106-19A				
Operator ID:	hkf	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

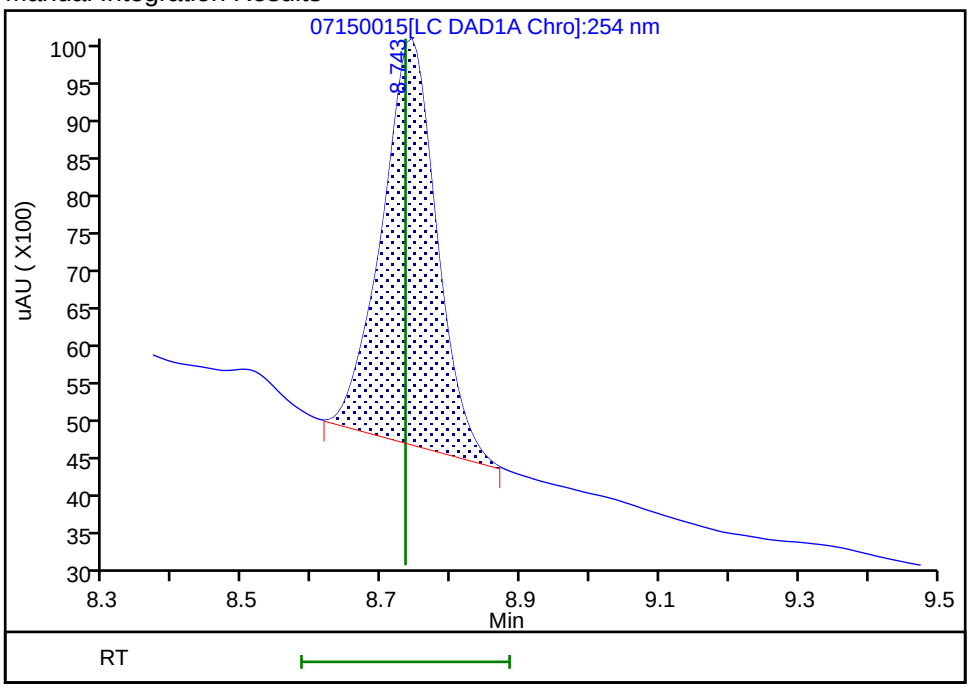
Processing Integration Results

RT: 8.74
Area: 42963
Amount: 0.308358
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 29570
Amount: 0.212232
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:56:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

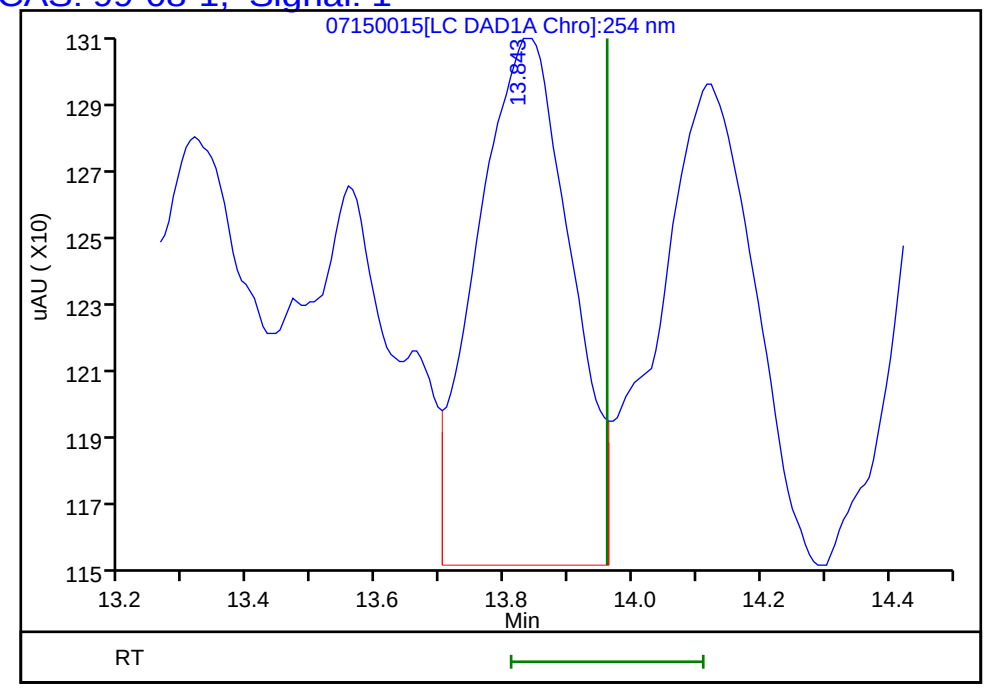
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150015.D				
Injection Date:	15-Jul-2019 15:21:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-9-A	Lab Sample ID:	280-124928-9		
Client ID:	G0106-19A				
Operator ID:	hkf	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.84
Response: 1531
Amount: 0.010550



Reviewer: fiedlerh, 15-Jul-2019 16:56:12
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.: 280-124928-1

SDG No.:

Client Sample ID: G0017-19A Lab Sample ID: 280-124928-14

Matrix: Water Lab File ID: 06140063.D

Analysis Method: 8330A Date Collected: 06/05/2019 16:15

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 510.2(mL) Date Analyzed: 06/15/2019 15:23

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.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.39	U	0.98	0.39	0.20
118-96-7	2,4,6-Trinitrotoluene	0.39	U	0.39	0.39	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.39	0.20	0.082
606-20-2	2,6-Dinitrotoluene	0.20	U M	0.20	0.20	0.063
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.050
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U M	0.20	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U	0.98	0.39	0.20
5755-27-1	MNX	0.39	U M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U M	0.39	0.20	0.089
479-45-8	Tetryl	0.20	U M	0.24	0.20	0.078

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D
Lims ID: 280-124928-A-14-A
Client ID: G0017-19A
Sample Type: Client
Inject. Date: 15-Jun-2019 15:23:19 ALS Bottle#: 63 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-14-
Misc. Info.: 280-0082867-063
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:32:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.612	6.643	-0.031	6605	0.0740	M
6 MNX	1		7.359			ND	U
7 RDX	1	7.745	7.763	-0.018	2586	0.0242	M
$ 9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	22247	0.1710	
10 1,3,5-Trinitrobenzene	1		8.896			ND	
11 1,3-Dinitrobenzene	1	9.572	9.563	0.009	1287	0.004278	
12 Nitrobenzene	1		9.949			ND	U
14 Tetryl	1		10.276			ND	U
16 2,4,6-Trinitrotoluene	1		11.229			ND	
17 4-Amino-2,6-dinitrotoluene	1		11.429			ND	U
18 2-Amino-4,6-dinitrotoluene	1		11.716			ND	
19 2,6-Dinitrotoluene	1		11.843			ND	U
20 2,4-Dinitrotoluene	1		12.043			ND	
21 o-Nitrotoluene	1	12.912	12.883	0.029	9345	0.0711	
22 p-Nitrotoluene	1		13.323			ND	
23 m-Nitrotoluene	1		13.923			ND	

QC Flag Legend

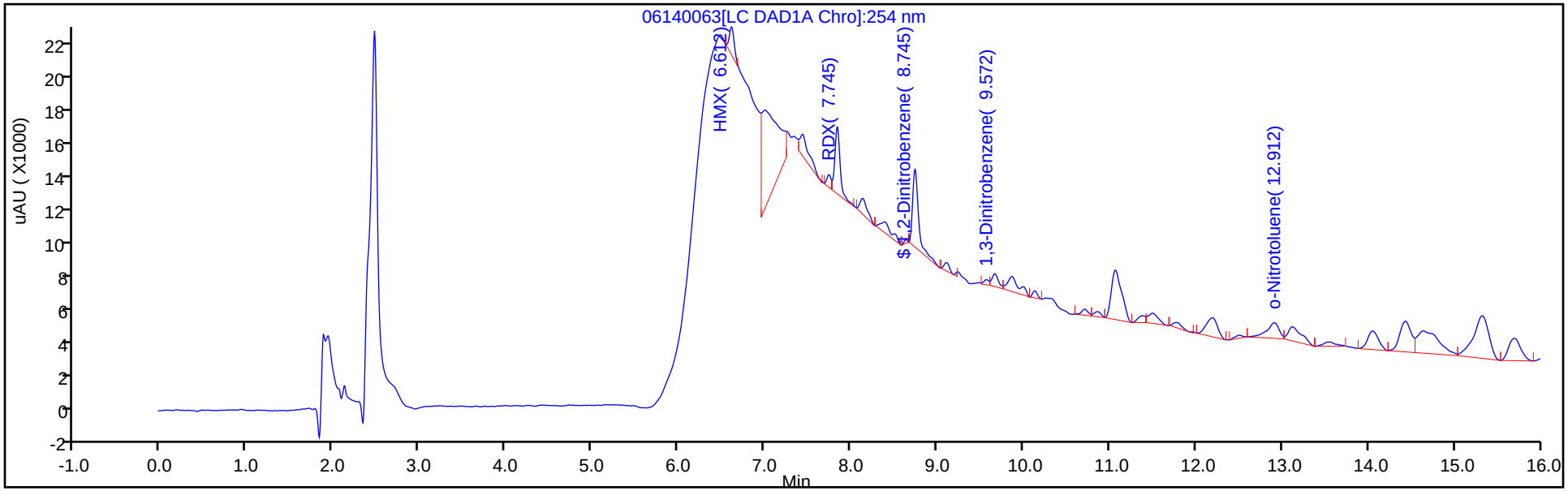
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 17-Jun-2019 10:46:11 Chrom Revision: 2.3 03-May-2019 15:52:00

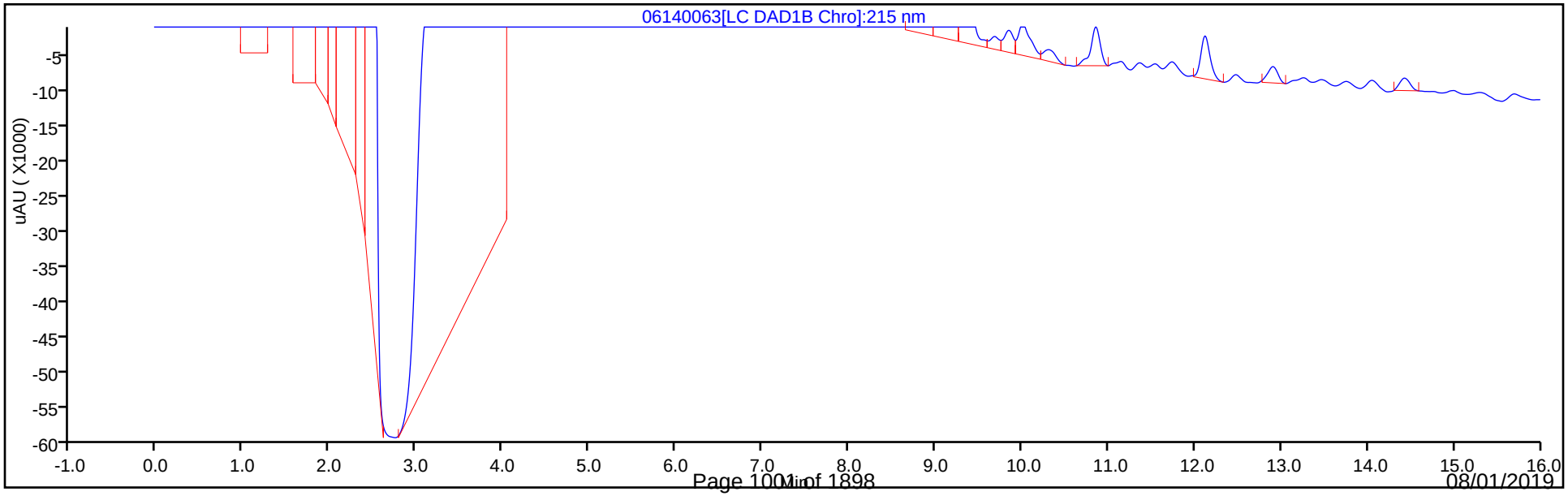
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Injection Date:	15-Jun-2019 15:23:19	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14	Worklist Smp#:	63
Client ID:	G0017-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	63
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Lims ID:	280-124928-A-14-A				
Client ID:	G0017-19A				
Sample Type:	Client				
Inject. Date:	15-Jun-2019 15:23:19	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-14-				
Misc. Info.:	280-0082867-063				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jun-2019 10:45:47	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0334				

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:32:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1710	85.49

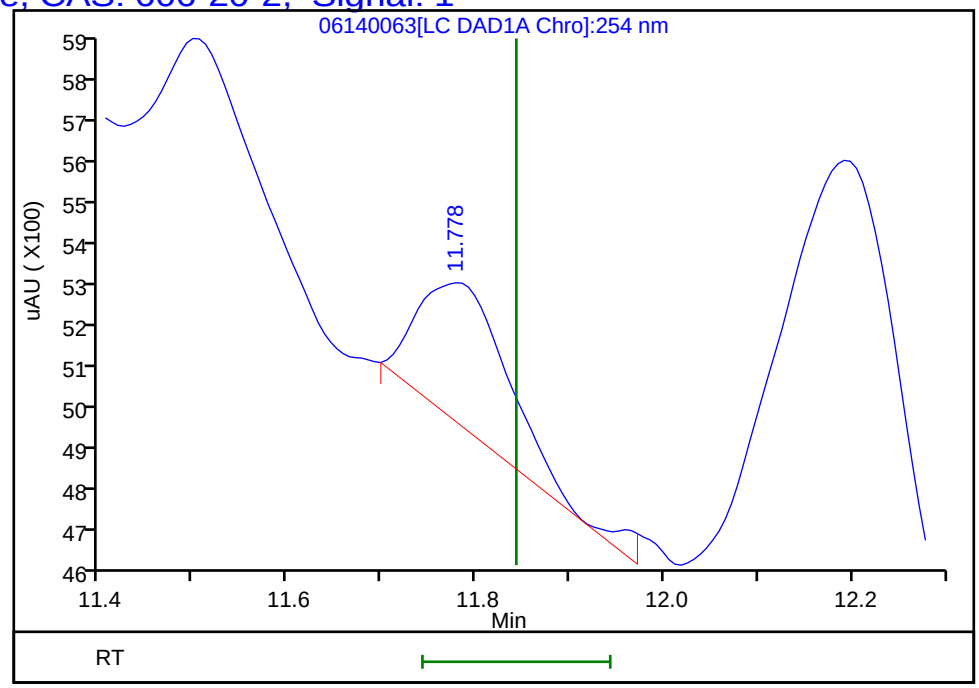
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Injection Date:	15-Jun-2019 15:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.78
Response: 2236
Amount: 0.014279



Reviewer: fiedlerh, 17-Jun-2019 10:32:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

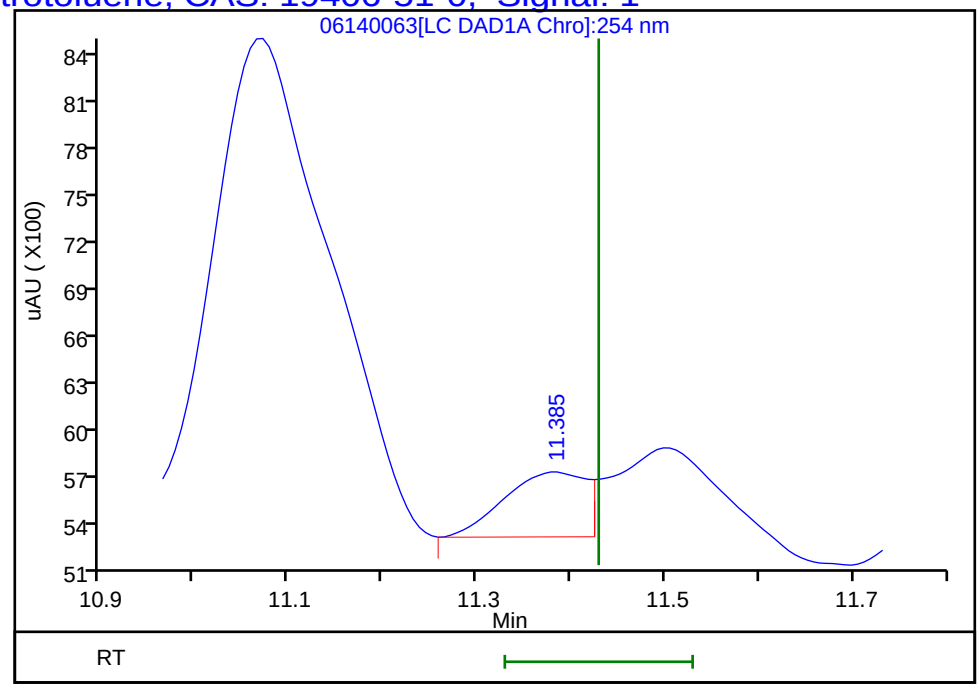
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Injection Date:	15-Jun-2019 15:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.38
Response: 2455
Amount: 0.015114



Reviewer: fiedlerh, 17-Jun-2019 10:32:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

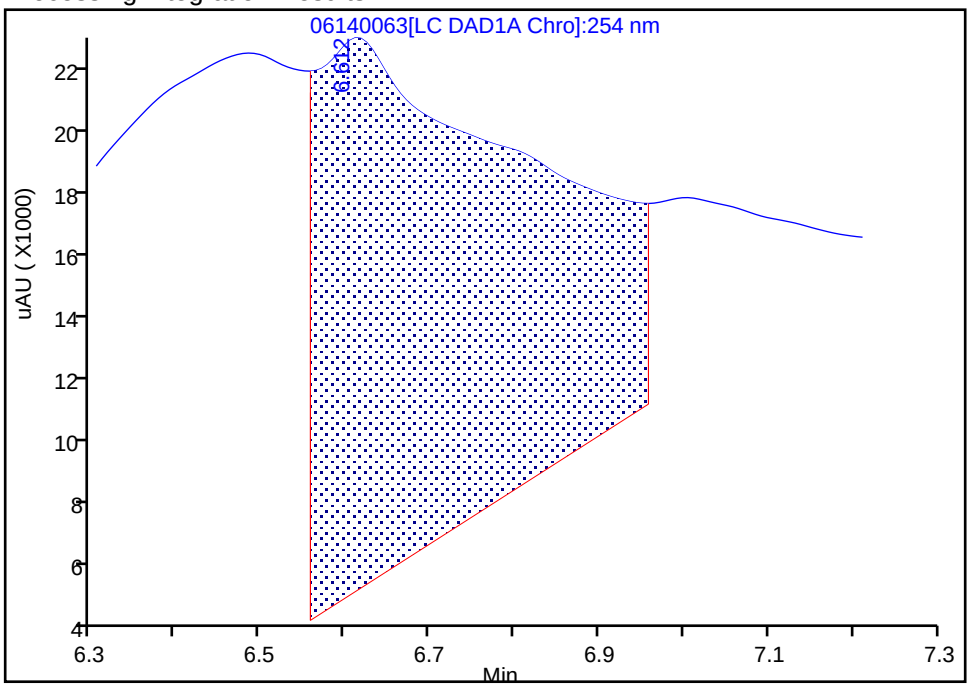
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Injection Date:	15-Jun-2019 15:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

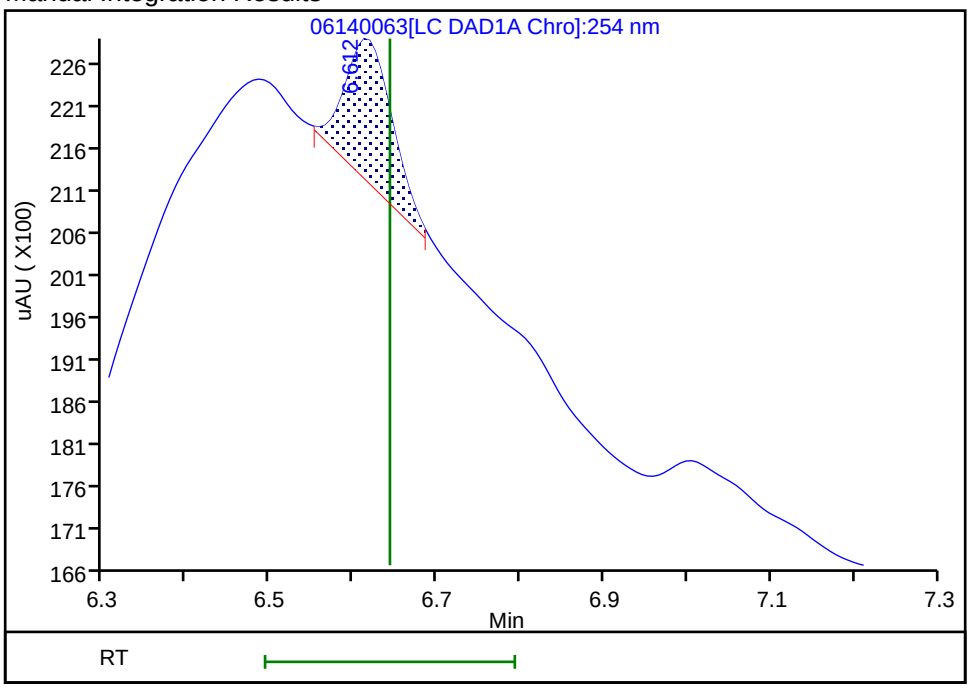
Processing Integration Results

RT: 6.61
Area: 282011
Amount: 3.161340
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 6605
Amount: 0.074042
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:31:59

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

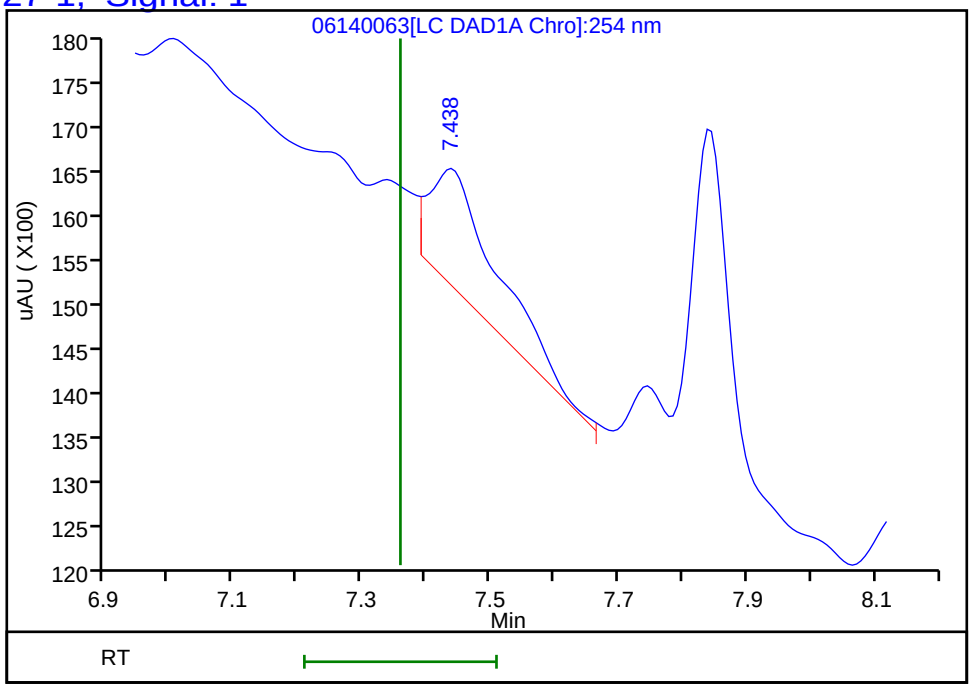
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Injection Date:	15-Jun-2019 15:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.44
Response: 9576
Amount: 0.070134



Reviewer: fiedlerh, 17-Jun-2019 10:32:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

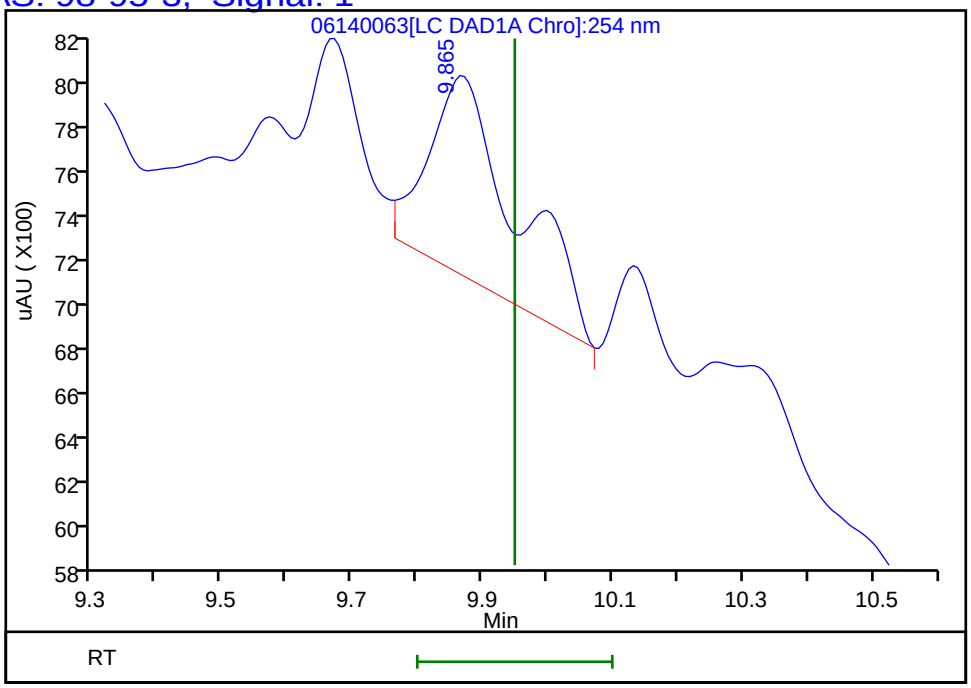
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Injection Date:	15-Jun-2019 15:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.86
Response: 8278
Amount: 0.042057



Reviewer: fiedlerh, 17-Jun-2019 10:32:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

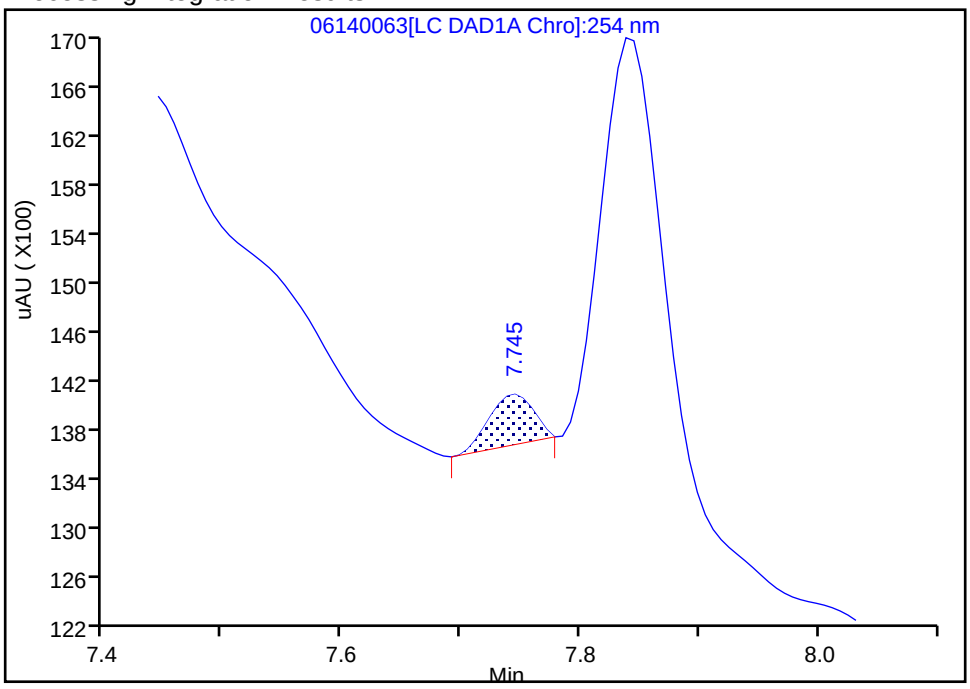
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Injection Date:	15-Jun-2019 15:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

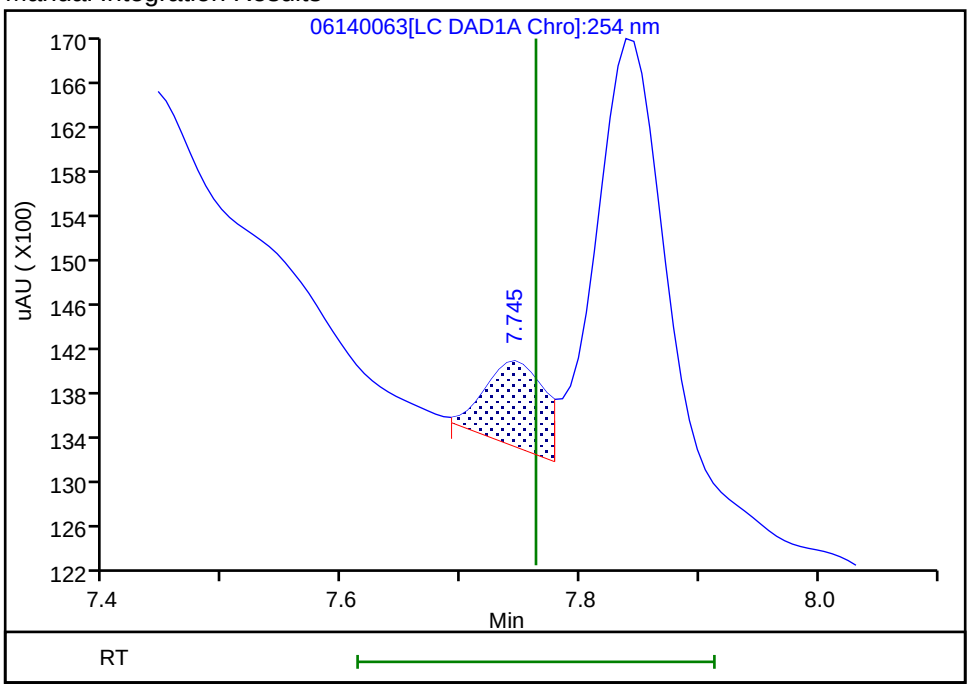
Processing Integration Results

RT: 7.75
Area: 1042
Amount: 0.009771
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 2586
Amount: 0.024250
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:32:12
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

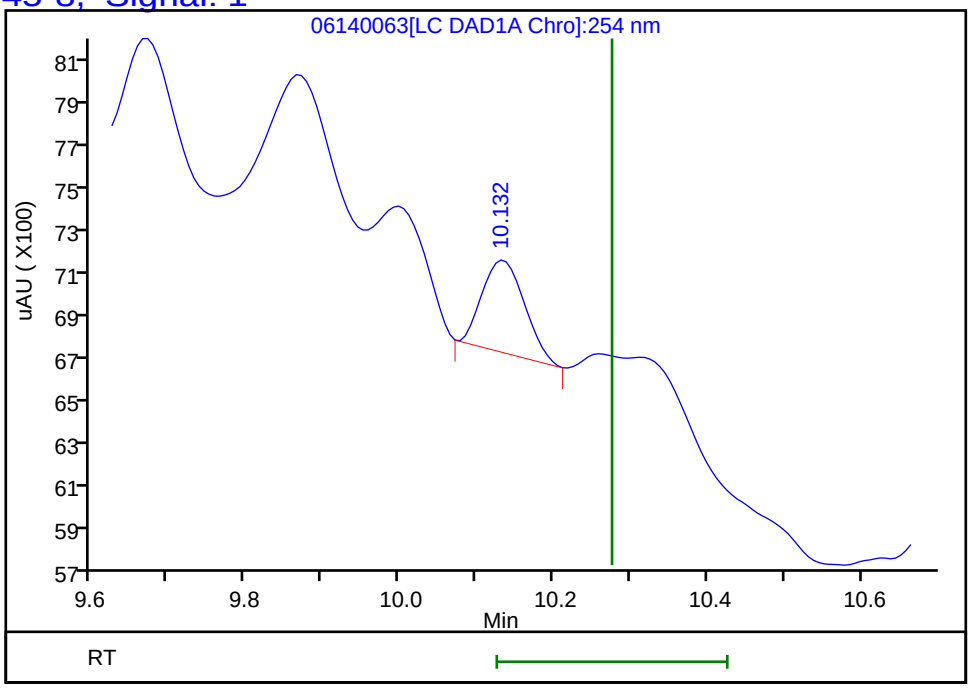
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140063.D				
Injection Date:	15-Jun-2019 15:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.13
Response: 1613
Amount: 0.009604



Reviewer: fiedlerh, 17-Jun-2019 10:32:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0017-19A Lab Sample ID: 280-124928-14

Matrix: Water Lab File ID: 06210009.D

Analysis Method: 8330A Date Collected: 06/05/2019 16:15

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 510.2(mL) Date Analyzed: 06/21/2019 12:48

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.: 462205 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.20	U	0.39	0.20	0.087
88-72-2	2-Nitrotoluene	0.20	U Q	0.39	0.20	0.084
2691-41-0	HMX	0.20	U	0.39	0.20	0.086
121-82-4	RDX	0.39	U M	0.39	0.39	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	235	*Q*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210009.D
Lims ID: 280-124928-A-14-A
Client ID: G0017-19A
Sample Type: Client
Inject. Date: 21-Jun-2019 12:48:27 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-14-
Misc. Info.: 280-0083049-009
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2019 10:51:24 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0327

First Level Reviewer: fiedlerh Date: 24-Jun-2019 10:25:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		7.225			ND	
7 MNX	1		7.848			ND	
8 RDX	1		9.312			ND	U
9 Nitrobenzene	1	12.285	12.305	-0.020	9474	0.0234	
$ 10 1,2-Dinitrobenzene	1	13.312	13.338	-0.026	130227	0.4704	
12 1,3-Dinitrobenzene	1		15.858			ND	
14 o-Nitrotoluene	1		16.678			ND	
15 p-Nitrotoluene	1		17.005			ND	U
16 4-Amino-2,6-dinitrotoluene	1		17.412			ND	U
17 m-Nitrotoluene	1	17.972	17.918	0.054	9611	0.0328	M
18 2-Amino-4,6-dinitrotoluene	1	18.452	18.445	0.007	12939	0.0301	
19 1,3,5-Trinitrobenzene	1		19.158			ND	
20 2,6-Dinitrotoluene	1		20.018			ND	
21 2,4-Dinitrotoluene	1	20.512	20.579	-0.066	4905	0.008613	
22 Tetryl	1	23.805	23.905	-0.100	6952	0.0221	
23 2,4,6-Trinitrotoluene	1		24.885			ND	

QC Flag Legend

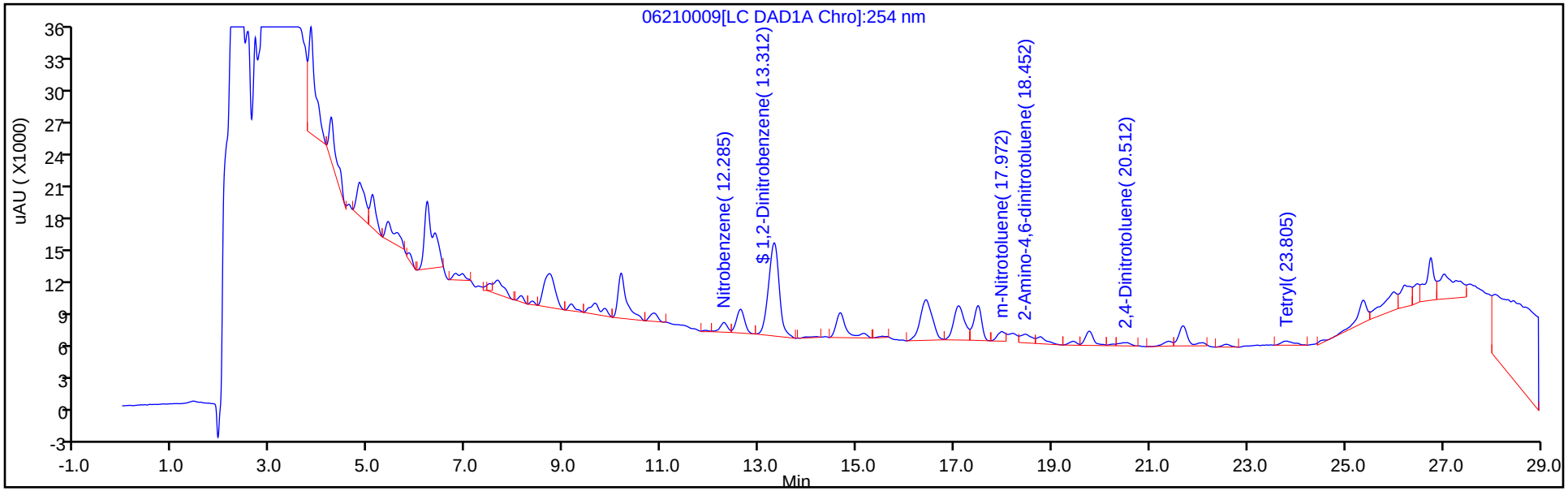
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 24-Jun-2019 10:51:25 Chrom Revision: 2.3 20-Jun-2019 20:50:56

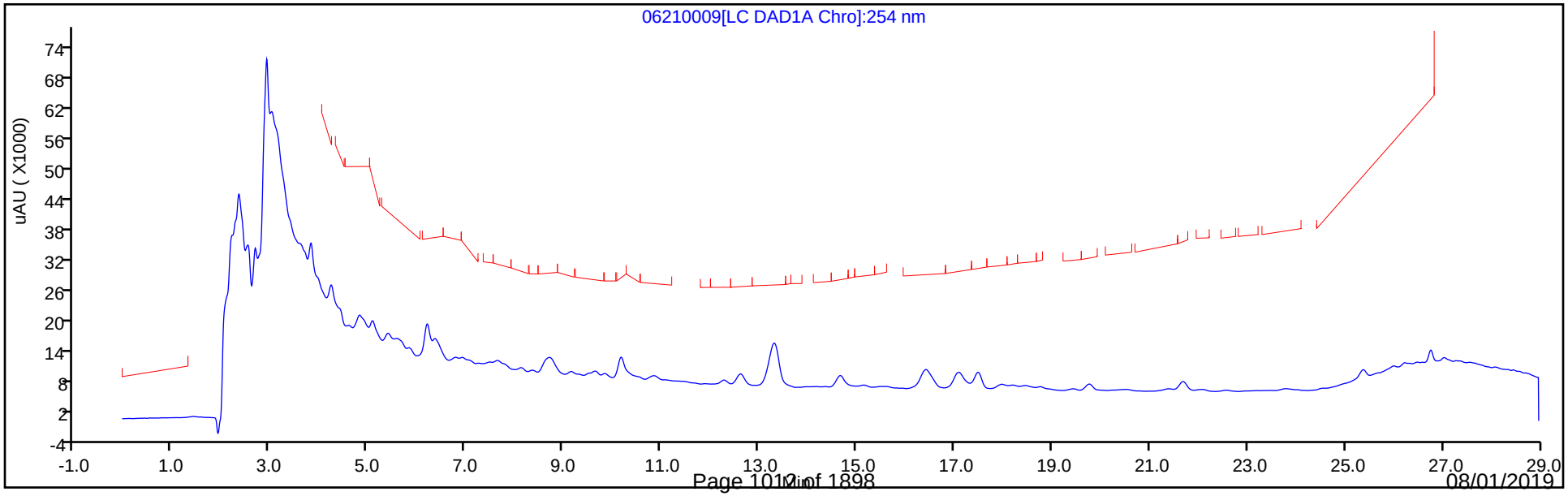
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210009.D				
Injection Date:	21-Jun-2019 12:48:27	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14	Worklist Smp#:	9
Client ID:	G0017-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210009.D				
Lims ID:	280-124928-A-14-A				
Client ID:	G0017-19A				
Sample Type:	Client				
Inject. Date:	21-Jun-2019 12:48:27	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-14-				
Misc. Info.:	280-0083049-009				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2019 10:51:24	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0327				
First Level Reviewer: fiedlerh		Date:	24-Jun-2019 10:25:49		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.4704	235.19

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

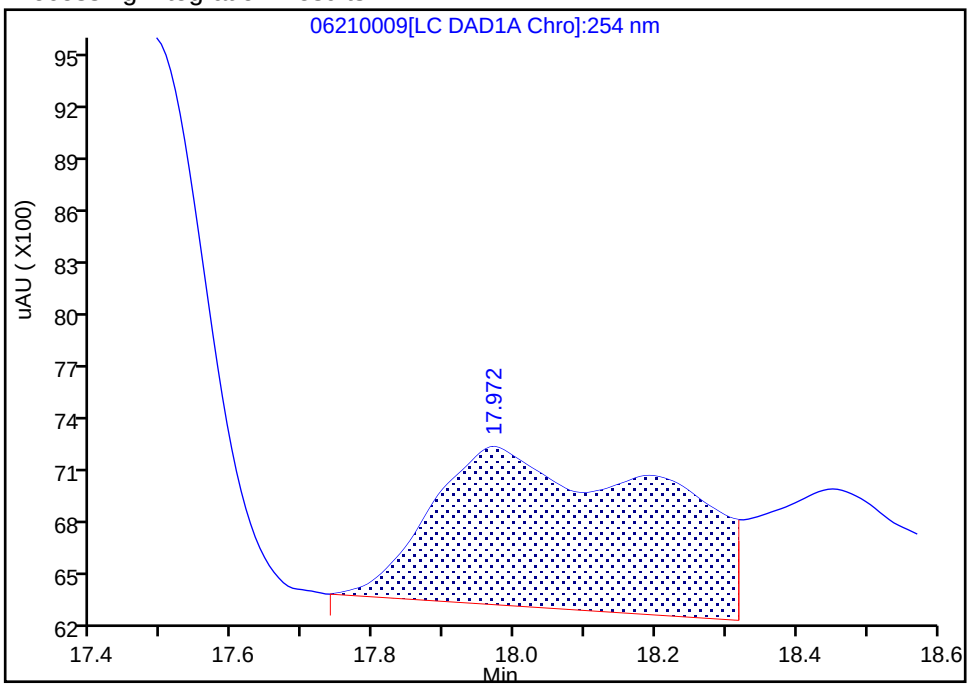
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210009.D				
Injection Date:	21-Jun-2019 12:48:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	HKF	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

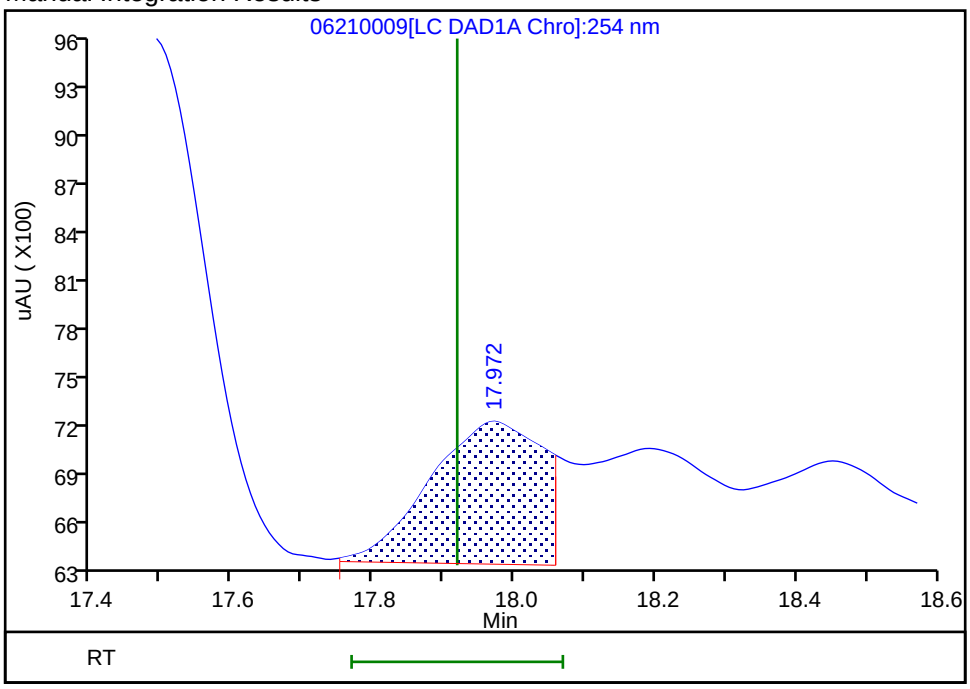
Processing Integration Results

RT: 17.97
Area: 21075
Amount: 0.072004
Amount Units: ug/ml



Manual Integration Results

RT: 17.97
Area: 9611
Amount: 0.032837
Amount Units: ug/ml



Reviewer: fiedlerh, 24-Jun-2019 10:25:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

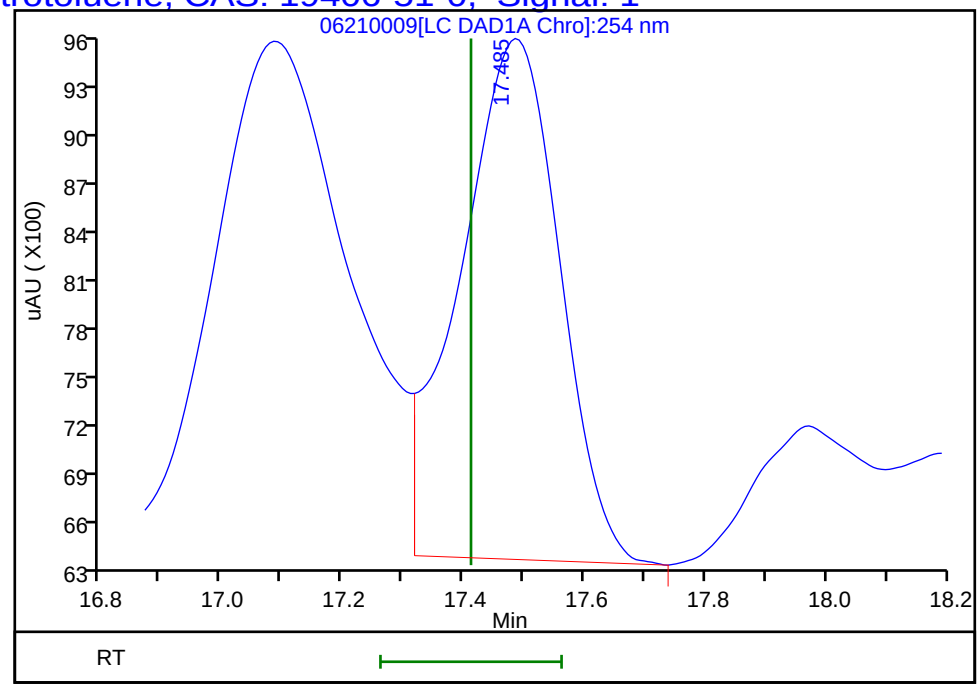
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210009.D
Injection Date: 21-Jun-2019 12:48:27 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-124928-A-14-A Lab Sample ID: 280-124928-14
Client ID: G0017-19A
Operator ID: HKF 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

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.48
Response: 36318
Amount: 0.122128



Reviewer: fiedlerh, 24-Jun-2019 10:25:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

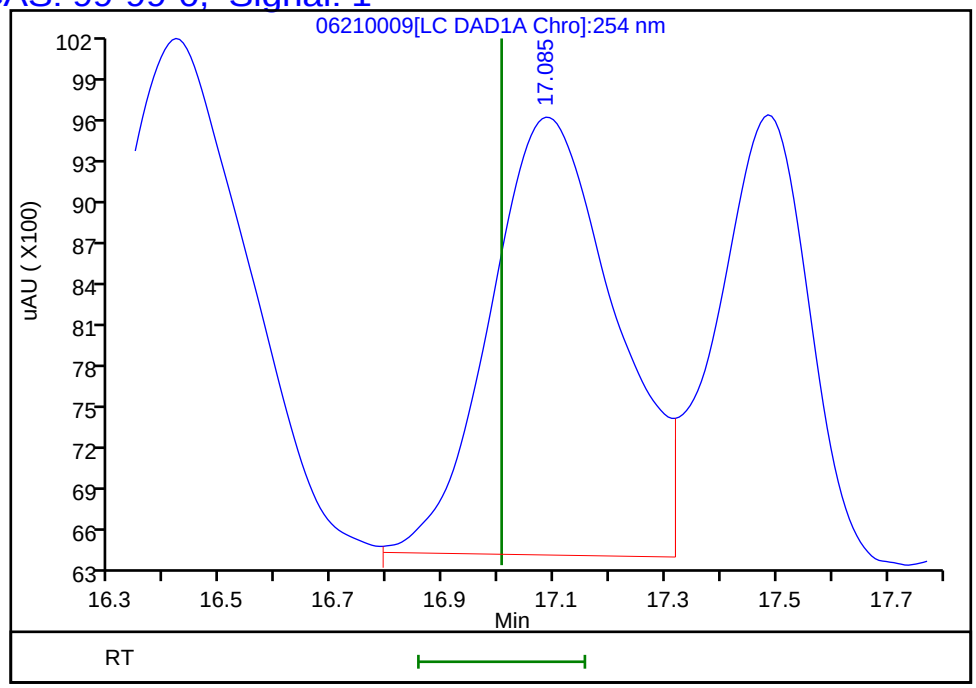
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210009.D				
Injection Date:	21-Jun-2019 12:48:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-A-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	HKF	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		

15 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 17.08
Response: 49165
Amount: 0.216924



Reviewer: fiedlerh, 24-Jun-2019 10:25:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

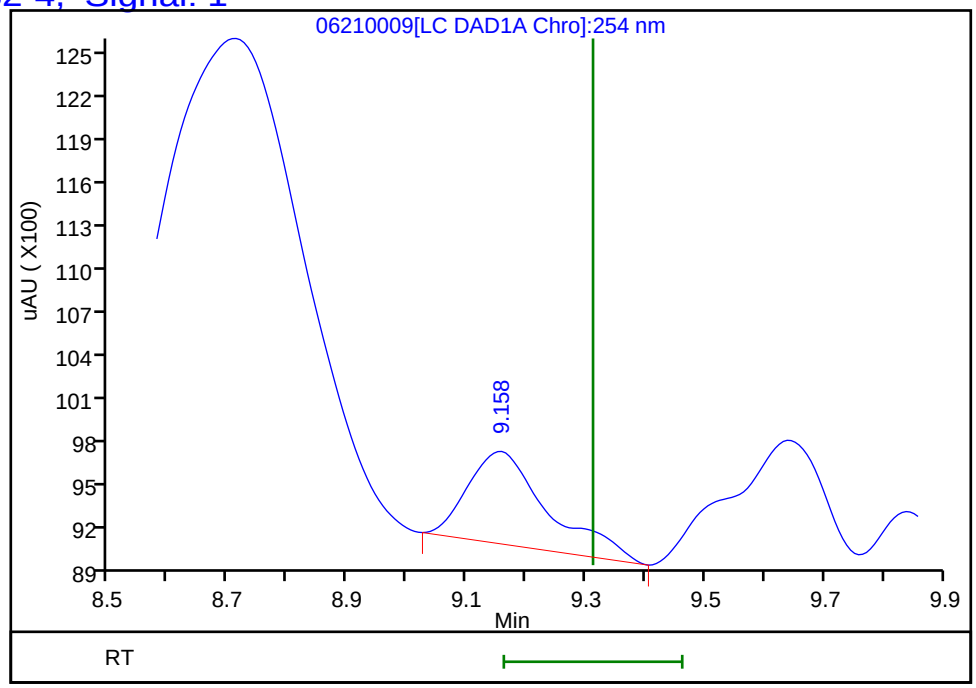
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210009.D
Injection Date: 21-Jun-2019 12:48:27 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-124928-A-14-A Lab Sample ID: 280-124928-14
Client ID: G0017-19A
Operator ID: HKF 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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 9.16
Response: 5827
Amount: 0.027955



Reviewer: fiedlerh, 24-Jun-2019 10:25:49
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.: 280-124928-1

SDG No.:

Client Sample ID: G0017-19A RE Lab Sample ID: 280-124928-14 RE

Matrix: Water Lab File ID: 07150016.D

Analysis Method: 8330A Date Collected: 06/05/2019 16:15

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 470.7(mL) Date Analyzed: 07/15/2019 15:44

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.21*	*U H M*	*0.42*	0.21	*0.091*
5755-27-1	*MNX*	*0.42*	*U Q H M*	*2.1*	0.42	*0.16*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	192	*Q*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D
Lims ID: 280-124928-B-14-A
Client ID: G0017-19A
Sample Type: Client
Inject. Date: 15-Jul-2019 15:44:55 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-14-
Misc. Info.: 280-0083692-016
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:56:55

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.658	6.680	-0.022	11436	0.1245	M
	6 MNX	1		7.367			ND	U
	7 RDX	1		7.774			ND	
$	9 1,2-Dinitrobenzene	1	8.718	8.734	-0.016	53514	0.3841	
	10 1,3,5-Trinitrobenzene	1		8.900			ND	
	11 1,3-Dinitrobenzene	1	9.572	9.560	0.012	1323	0.004252	
	12 Nitrobenzene	1	9.905	9.947	-0.042	2333	0.0117	M
	14 Tetryl	1		10.267			ND	
	16 2,4,6-Trinitrotoluene	1		11.240			ND	U
	17 4-Amino-2,6-dinitrotoluene	1		11.427			ND	U
	18 2-Amino-4,6-dinitrotoluene	1		11.720			ND	
	19 2,6-Dinitrotoluene	1	11.818	11.860	-0.042	2963	0.0186	
	20 2,4-Dinitrotoluene	1		12.060			ND	
	21 o-Nitrotoluene	1		12.907			ND	U
	22 p-Nitrotoluene	1		13.354			ND	U
	23 m-Nitrotoluene	1		13.960			ND	U

QC Flag Legend

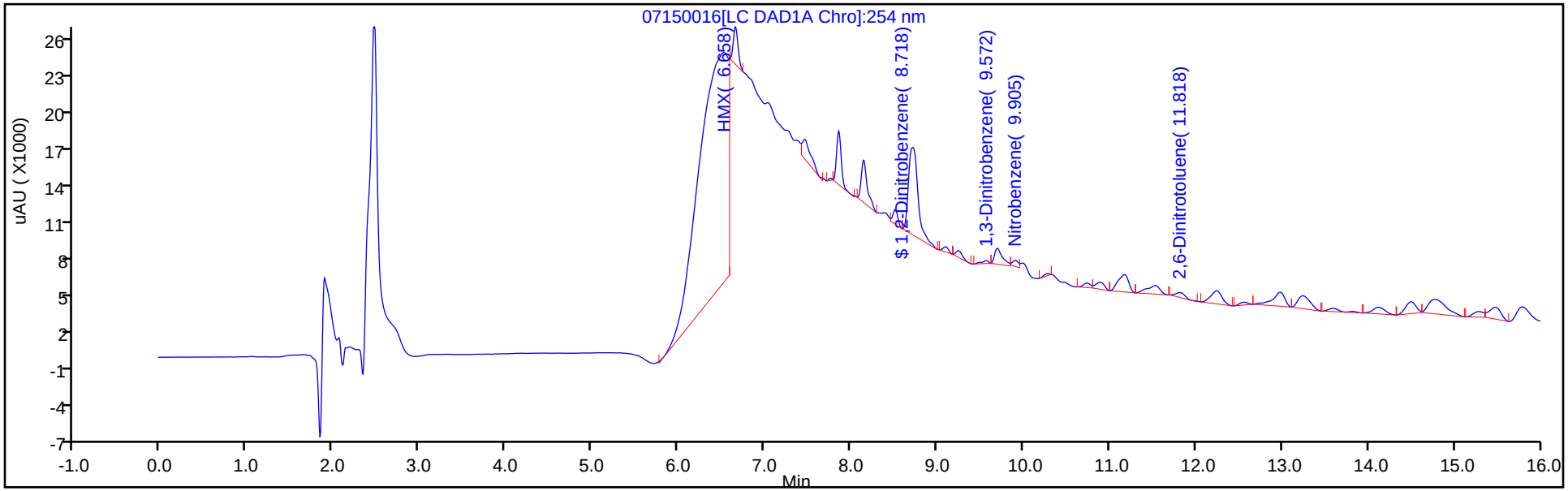
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 15-Jul-2019 17:54:04 Chrom Revision: 2.3 20-Jun-2019 20:50:56

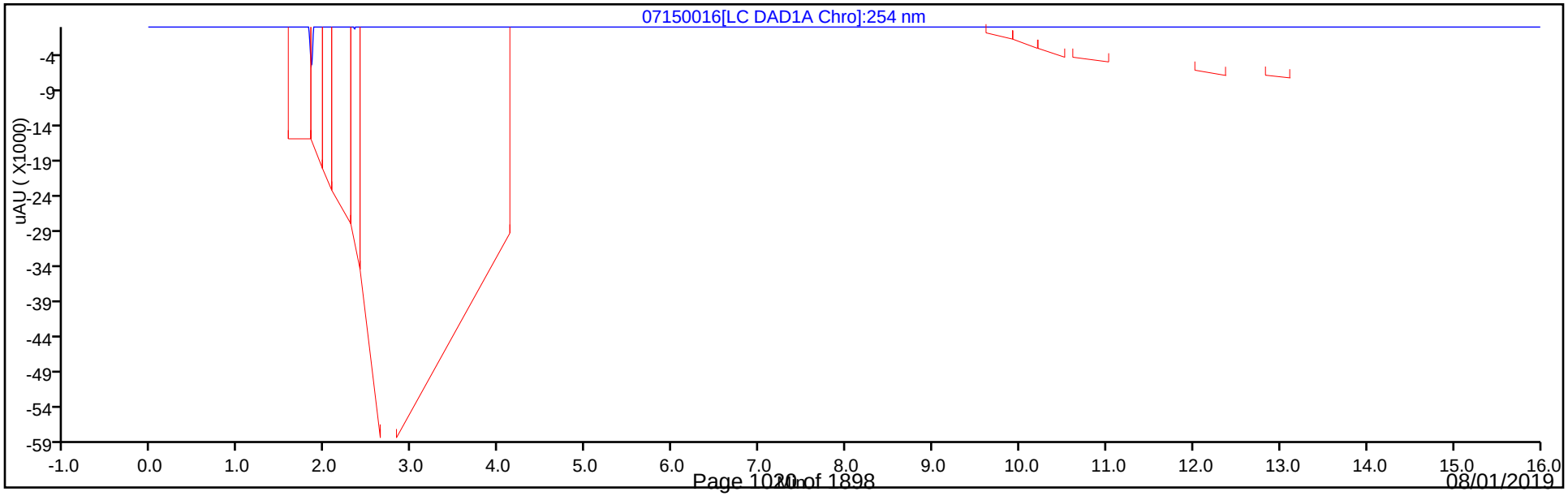
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D				
Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14	Worklist Smp#:	16
Client ID:	G0017-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D				
Lims ID:	280-124928-B-14-A				
Client ID:	G0017-19A				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 15:44:55	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-B-14-				
Misc. Info.:	280-0083692-016				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 17:53:56	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:56:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.3841	192.04

User Disabled Compound Report

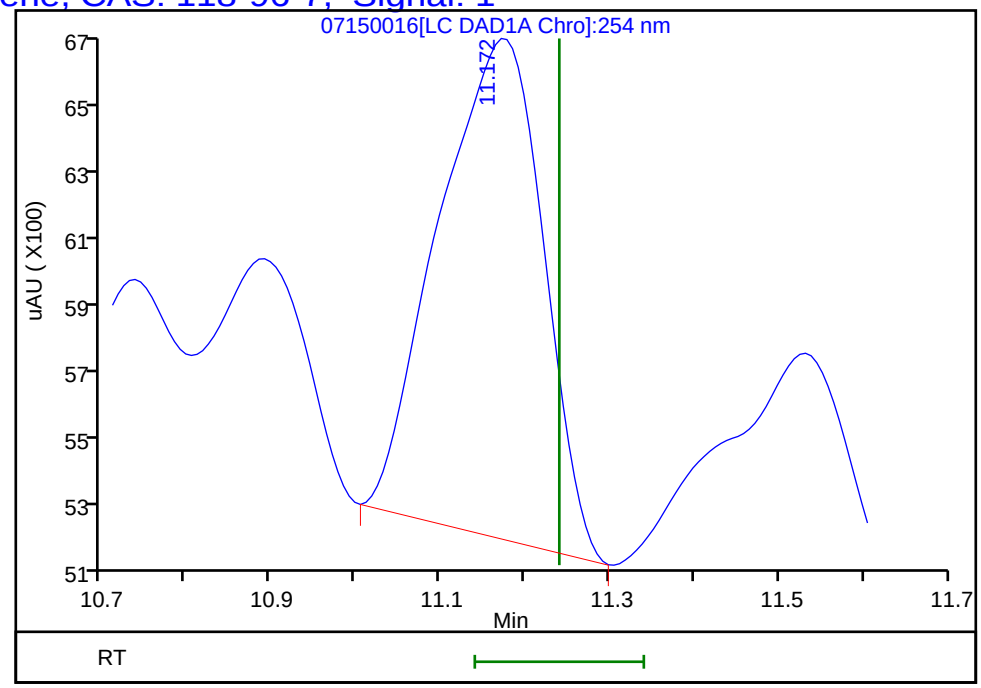
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D

Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	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		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.17
Response: 11844
Amount: 0.052113



Reviewer: fiedlerh, 15-Jul-2019 16:56:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

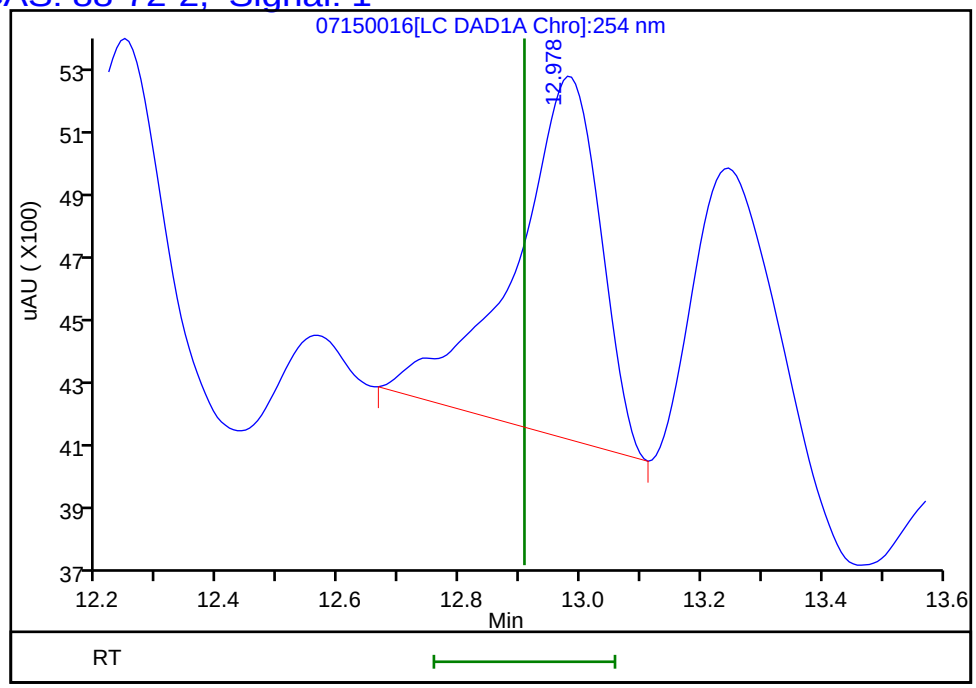
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D

Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	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		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.98
Response: 11059
Amount: 0.085211



Reviewer: fiedlerh, 15-Jul-2019 16:56:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

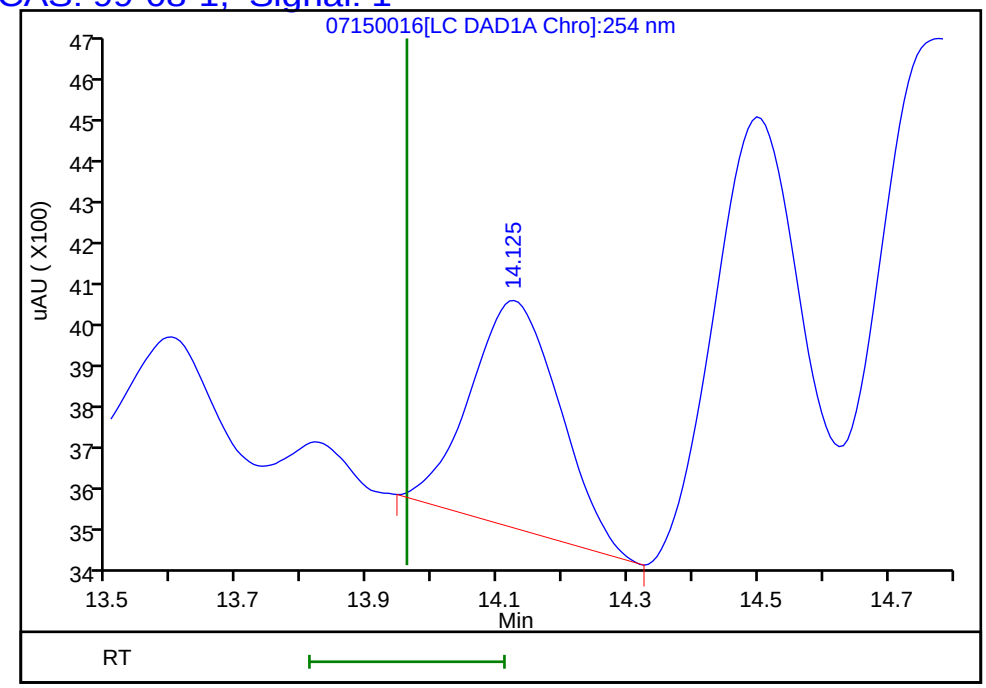
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D

Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.12
Response: 5108
Amount: 0.035198



Reviewer: fiedlerh, 15-Jul-2019 16:56:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

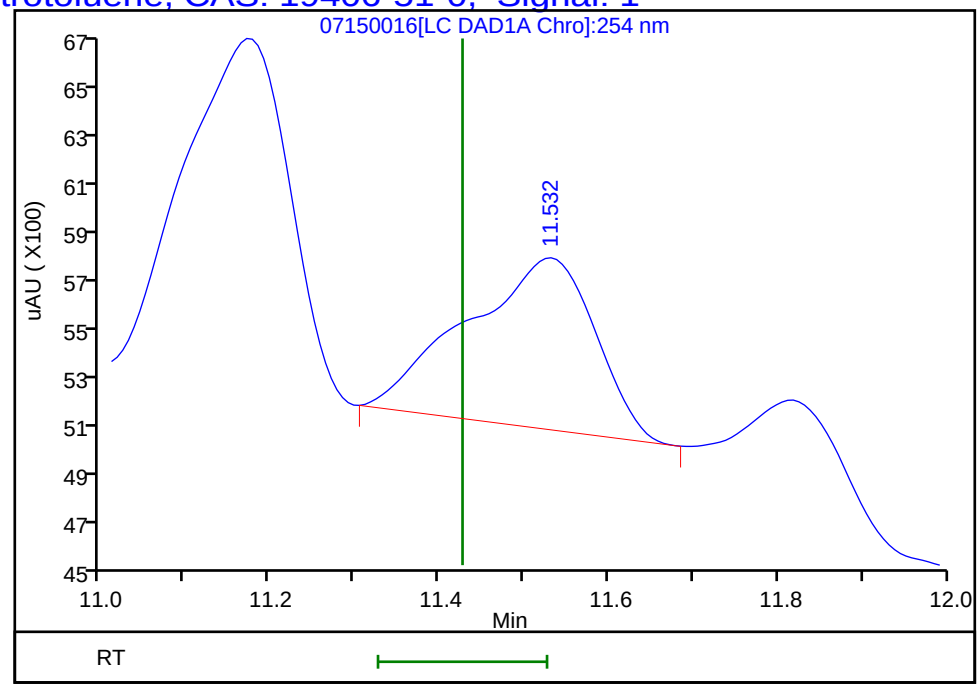
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D

Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	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		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.53
Response: 7116
Amount: 0.042770



Reviewer: fiedlerh, 15-Jul-2019 16:56:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

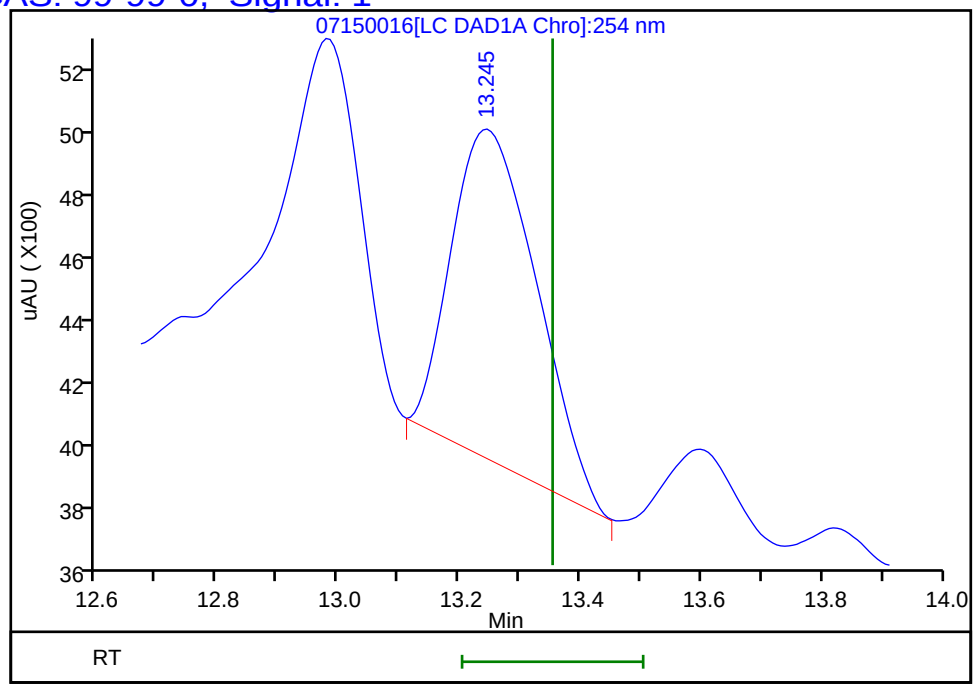
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D

Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	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		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.24
Response: 10157
Amount: 0.092123



Reviewer: fiedlerh, 15-Jul-2019 16:56:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

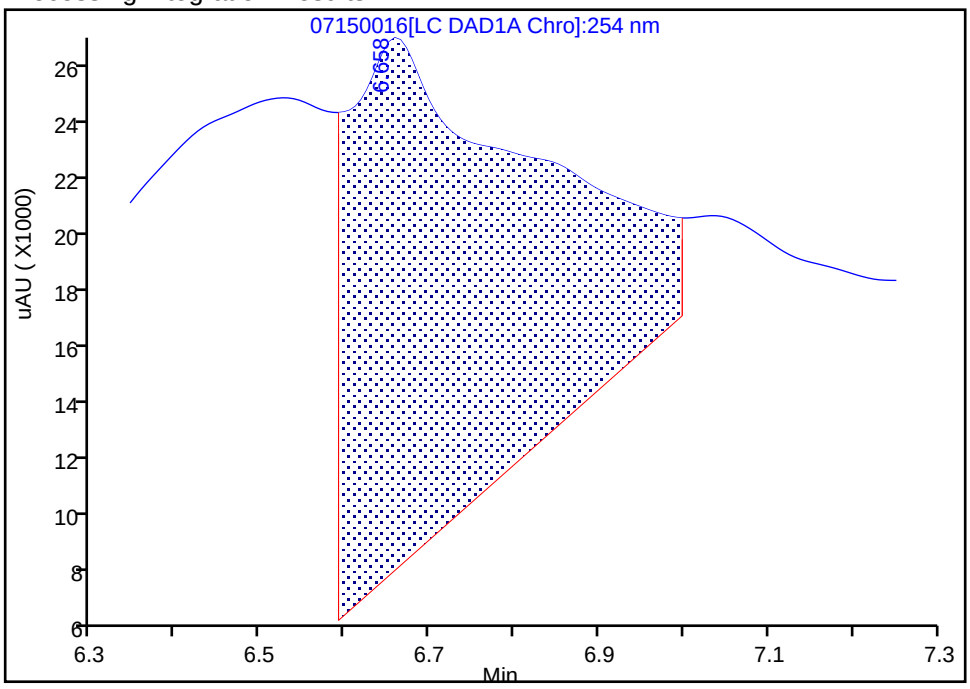
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D				
Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	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

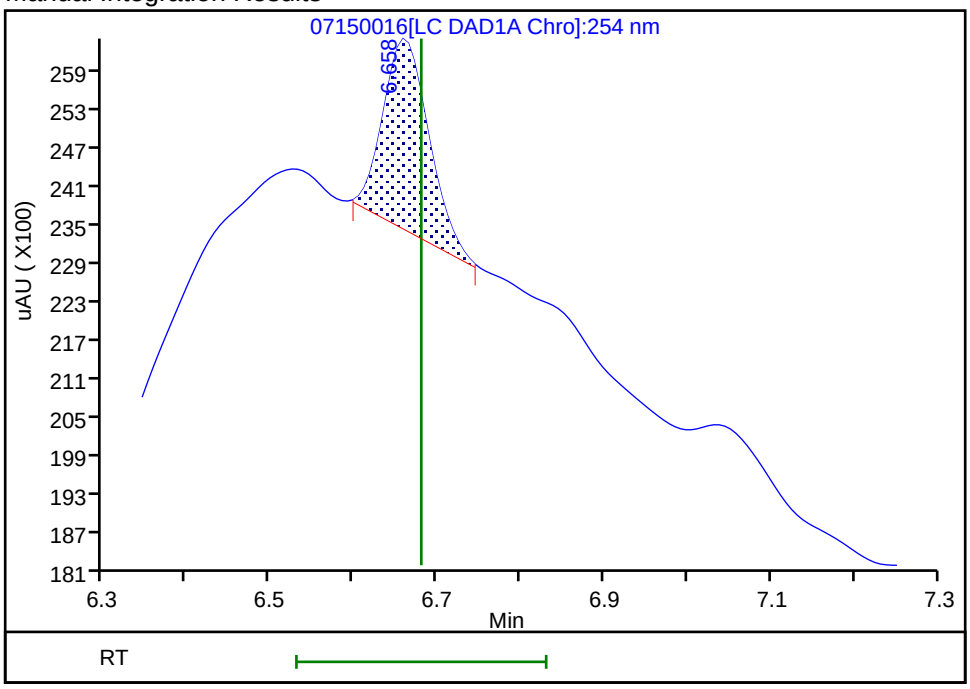
Processing Integration Results

RT: 6.66
Area: 266704
Amount: 2.904221
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 11436
Amount: 0.124530
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:56:24

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

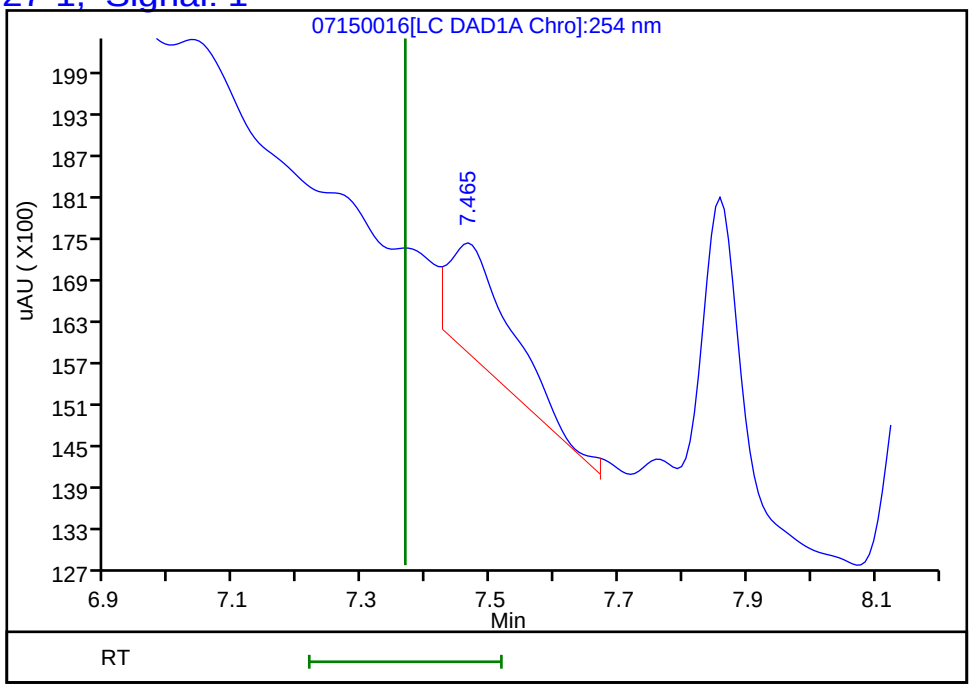
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D

Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14
Client ID:	G0017-19A		
Operator ID:	hkf	ALS Bottle#:	16 Worklist Smp#: 16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.47
Response: 11074
Amount: 0.079077



Reviewer: fiedlerh, 15-Jul-2019 16:56:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

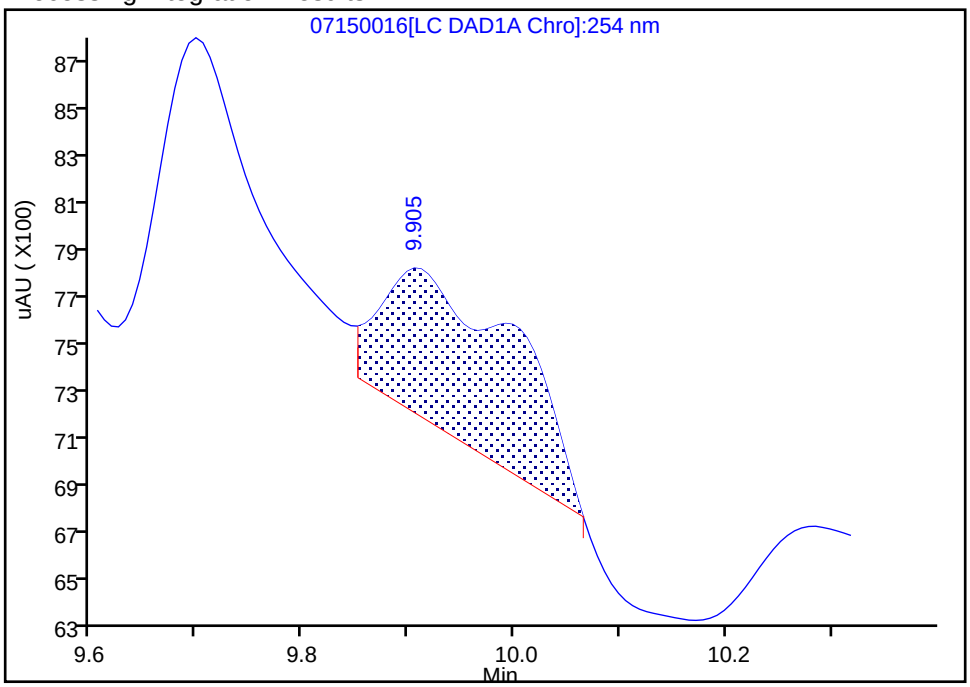
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150016.D				
Injection Date:	15-Jul-2019 15:44:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-14-A	Lab Sample ID:	280-124928-14		
Client ID:	G0017-19A				
Operator ID:	hkf	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

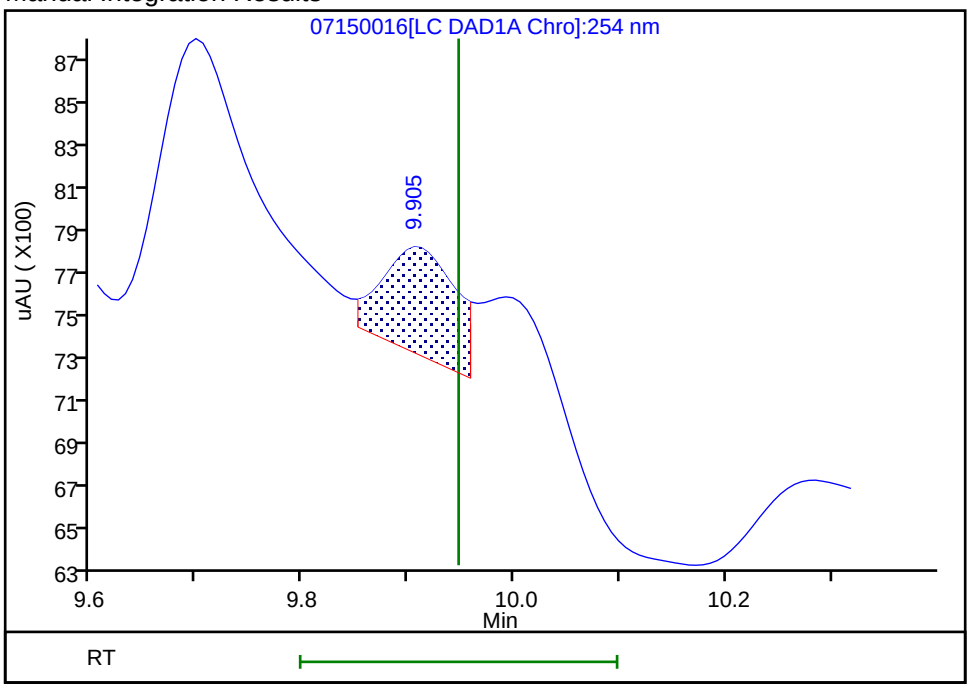
Processing Integration Results

RT: 9.90
Area: 5918
Amount: 0.029753
Amount Units: ug/mL



Manual Integration Results

RT: 9.90
Area: 2333
Amount: 0.011729
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:56:37

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: PZ009-19A Lab Sample ID: 280-124928-15

Matrix: Water Lab File ID: 06140064.D

Analysis Method: 8330A Date Collected: 06/05/2019 16:35

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 499.1(mL) Date Analyzed: 06/15/2019 15:47

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.2		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.55		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.71		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U Q	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.50		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.40	0.20	0.091
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U M	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140064.D
Lims ID: 280-124928-A-15-A
Client ID: PZ009-19A
Sample Type: Client
Inject. Date: 15-Jun-2019 15:47:08 ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-15-
Misc. Info.: 280-0082867-064
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:32:45

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.643			ND	
	6 MNX	1		7.359			ND	
	7 RDX	1		7.763			ND	
$	9 1,2-Dinitrobenzene	1	8.740	8.743	-0.003	25337	0.1947	
	10 1,3,5-Trinitrobenzene	1	8.900	8.896	0.004	28034	0.1223	
	11 1,3-Dinitrobenzene	1		9.563			ND	
	12 Nitrobenzene	1		9.949			ND	
	14 Tetryl	1		10.276			ND	U
	16 2,4,6-Trinitrotoluene	1	11.234	11.229	0.005	12332	0.0552	
	17 4-Amino-2,6-dinitrotoluene	1	11.427	11.429	-0.002	8114	0.0500	
	18 2-Amino-4,6-dinitrotoluene	1	11.720	11.716	0.004	13972	0.0707	
	19 2,6-Dinitrotoluene	1		11.843			ND	
	20 2,4-Dinitrotoluene	1		12.043			ND	
	21 o-Nitrotoluene	1		12.883			ND	
	22 p-Nitrotoluene	1		13.323			ND	
	23 m-Nitrotoluene	1		13.923			ND	

QC Flag Legend

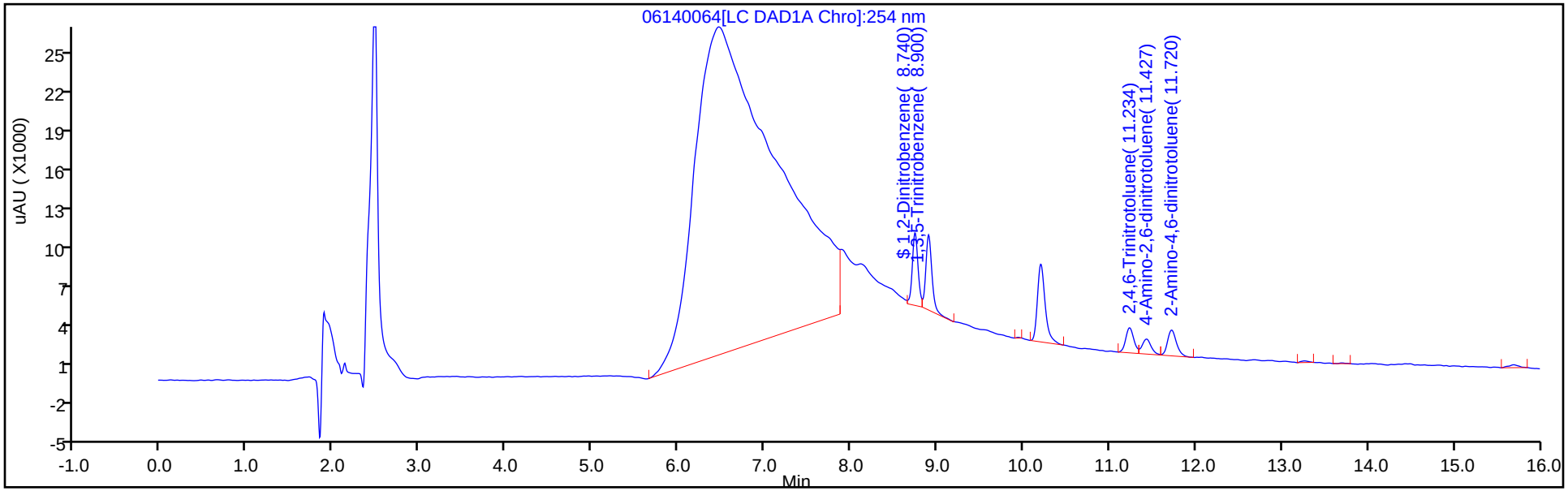
Review Flags
U - Marked Undetected

Report Date: 17-Jun-2019 10:46:14 Chrom Revision: 2.3 03-May-2019 15:52:00

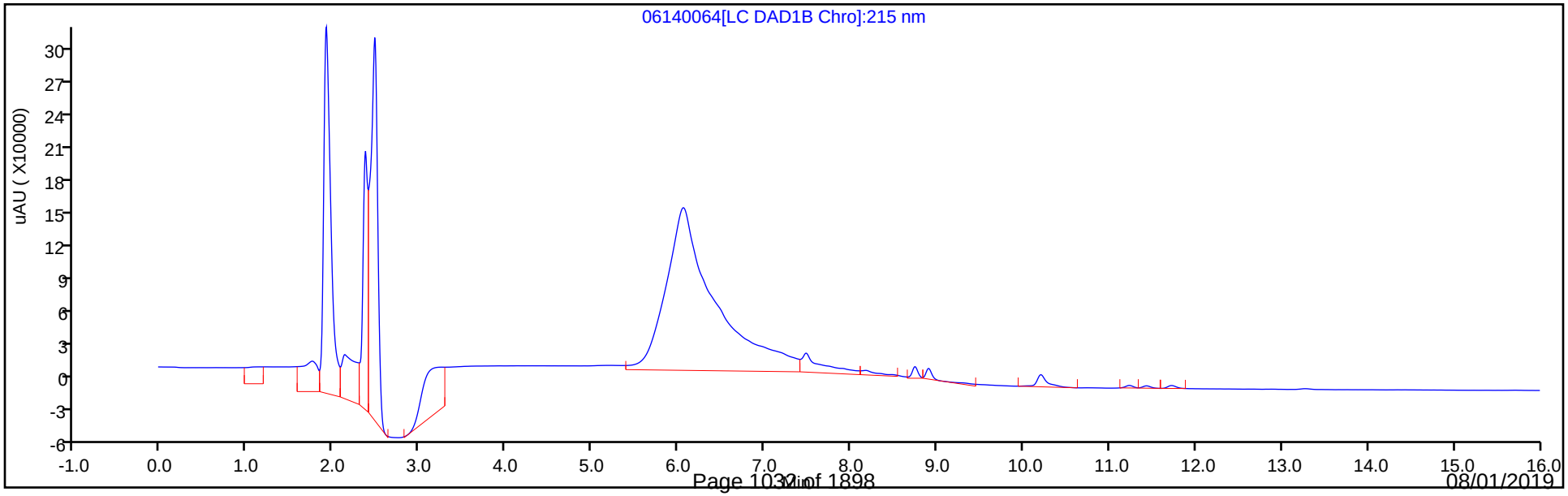
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140064.D				
Injection Date:	15-Jun-2019 15:47:08	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-A-15-A	Lab Sample ID:	280-124928-15	Worklist Smp#:	64
Client ID:	PZ009-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	64
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140064.D				
Lims ID:	280-124928-A-15-A				
Client ID:	PZ009-19A				
Sample Type:	Client				
Inject. Date:	15-Jun-2019 15:47:08	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-15-				
Misc. Info.:	280-0082867-064				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jun-2019 10:45:47	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0334				
First Level Reviewer: fiedlerh		Date:	17-Jun-2019 10:32:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1947	97.37

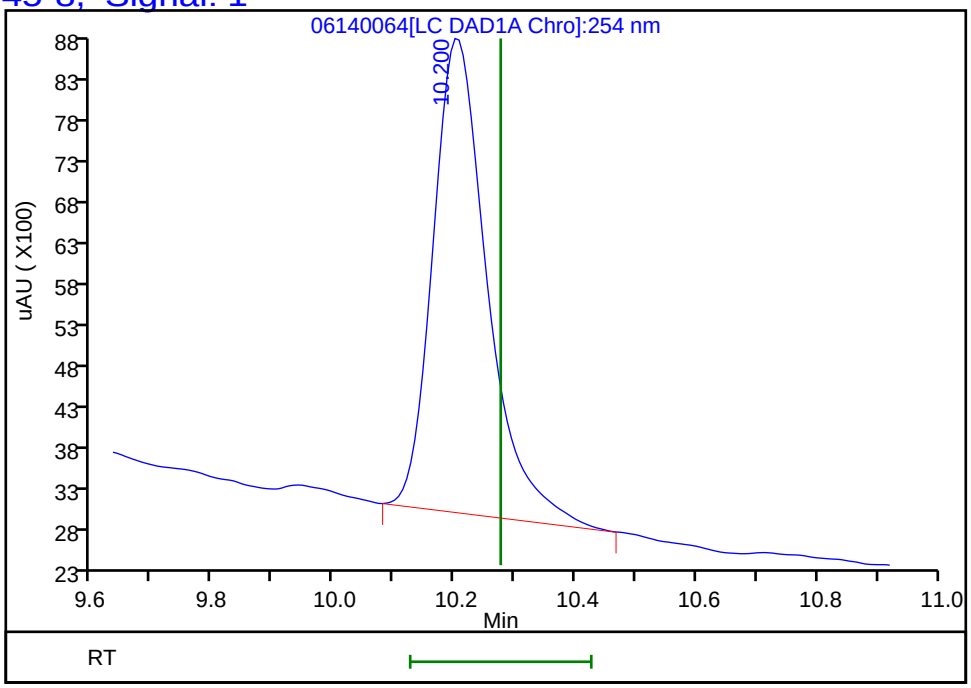
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140064.D				
Injection Date:	15-Jun-2019 15:47:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-15-A	Lab Sample ID:	280-124928-15		
Client ID:	PZ009-19A				
Operator ID:	hkf	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.20
Response: 36553
Amount: 0.217635



Reviewer: fiedlerh, 17-Jun-2019 10:32:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: PZ009-19A Lab Sample ID: 280-124928-15

Matrix: Water Lab File ID: 06170041.D

Analysis Method: 8330A Date Collected: 06/05/2019 16:35

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 499.1(mL) Date Analyzed: 06/18/2019 14:34

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 461836 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170041.D
Lims ID: 280-124928-A-15-A
Client ID: PZ009-19A
Sample Type: Client
Inject. Date: 18-Jun-2019 14:34:22 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-15-
Misc. Info.: 280-0082939-041
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-Jun-2019 11:10:04 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0312

First Level Reviewer: fiedlerh Date: 18-Jun-2019 17:53:50

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		7.187			ND	
	7 MNX	1		7.848			ND	
	8 RDX	1		9.267			ND	
	9 Nitrobenzene	1		12.247			ND	
$	10 1,2-Dinitrobenzene	1	13.258	13.281	-0.023	50319	0.1818	
	12 1,3-Dinitrobenzene	1		15.801			ND	
	14 o-Nitrotoluene	1		16.614			ND	
	15 p-Nitrotoluene	1	16.958	16.947	0.011	3138	0.0138	
	16 4-Amino-2,6-dinitrotoluene	1	17.324	17.361	-0.037	15842	0.0533	
	17 m-Nitrotoluene	1	17.871	17.854	0.017	3084	0.0105	
	18 2-Amino-4,6-dinitrotoluene	1	18.351	18.394	-0.043	30495	0.0709	
	19 1,3,5-Trinitrobenzene	1	19.084	19.107	-0.023	54250	0.1186	
	20 2,6-Dinitrotoluene	1		19.954			ND	
	21 2,4-Dinitrotoluene	1		20.514			ND	
	22 Tetryl	1	23.864	23.847	0.017	6878	0.0219	M
	23 2,4,6-Trinitrotoluene	1	24.811	24.821	-0.010	23082	0.0567	M

QC Flag Legend

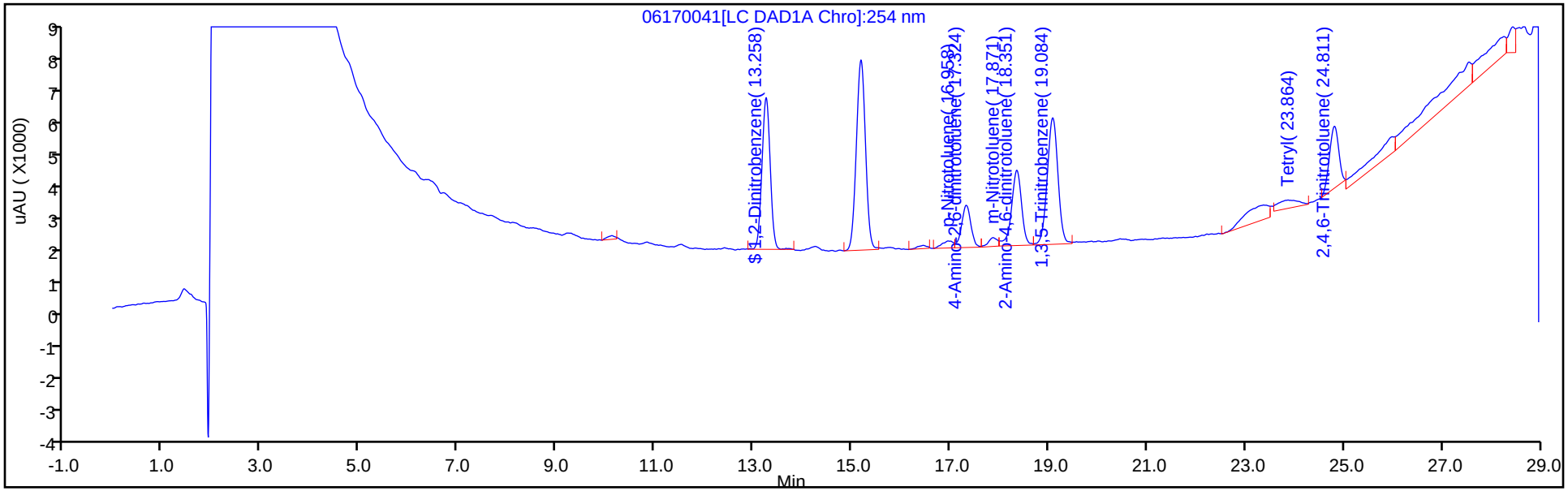
Review Flags
M - Manually Integrated

Report Date: 19-Jun-2019 11:10:23 Chrom Revision: 2.3 02-Jun-2019 10:27:32

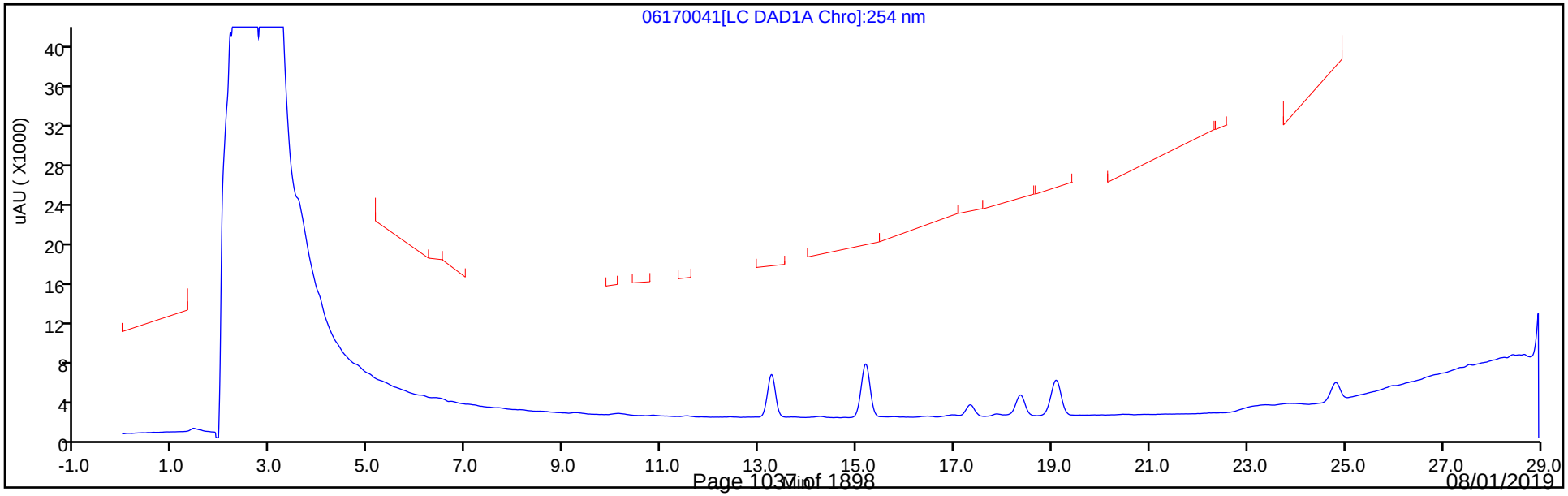
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170041.D				
Injection Date:	18-Jun-2019 14:34:22	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	280-124928-A-15-A	Lab Sample ID:	280-124928-15	Worklist Smp#:	41
Client ID:	PZ009-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170041.D
Lims ID: 280-124928-A-15-A
Client ID: PZ009-19A
Sample Type: Client
Inject. Date: 18-Jun-2019 14:34:22 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-15-
Misc. Info.: 280-0082939-041
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA

Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-Jun-2019 11:10:04 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0312

First Level Reviewer: fiedlerh Date: 18-Jun-2019 17:53:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1818	90.88

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

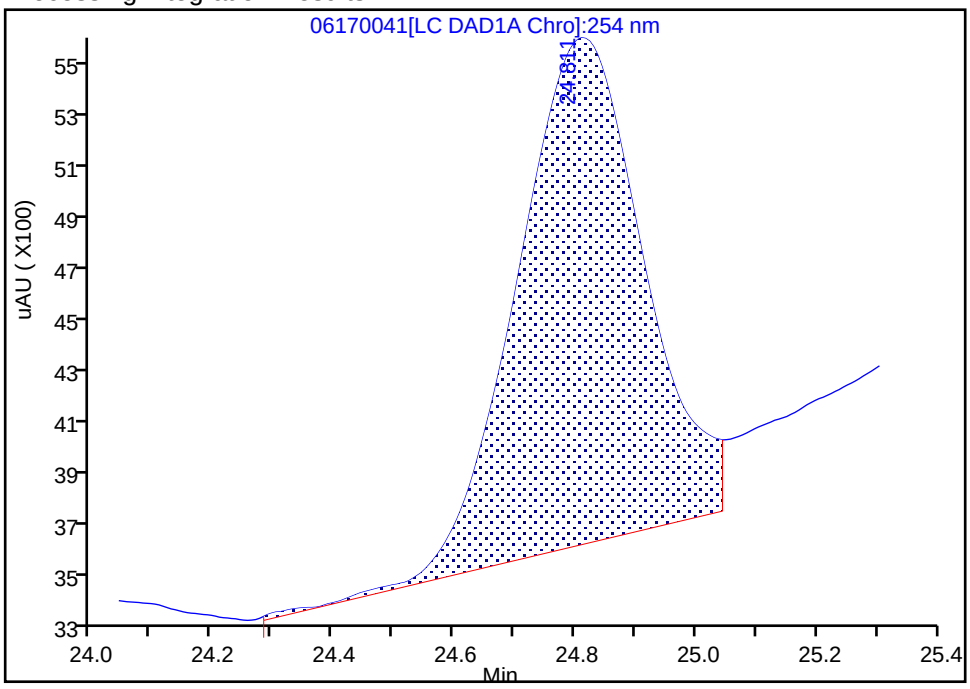
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170041.D				
Injection Date:	18-Jun-2019 14:34:22	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-A-15-A	Lab Sample ID:	280-124928-15		
Client ID:	PZ009-19A				
Operator ID:	HKF	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

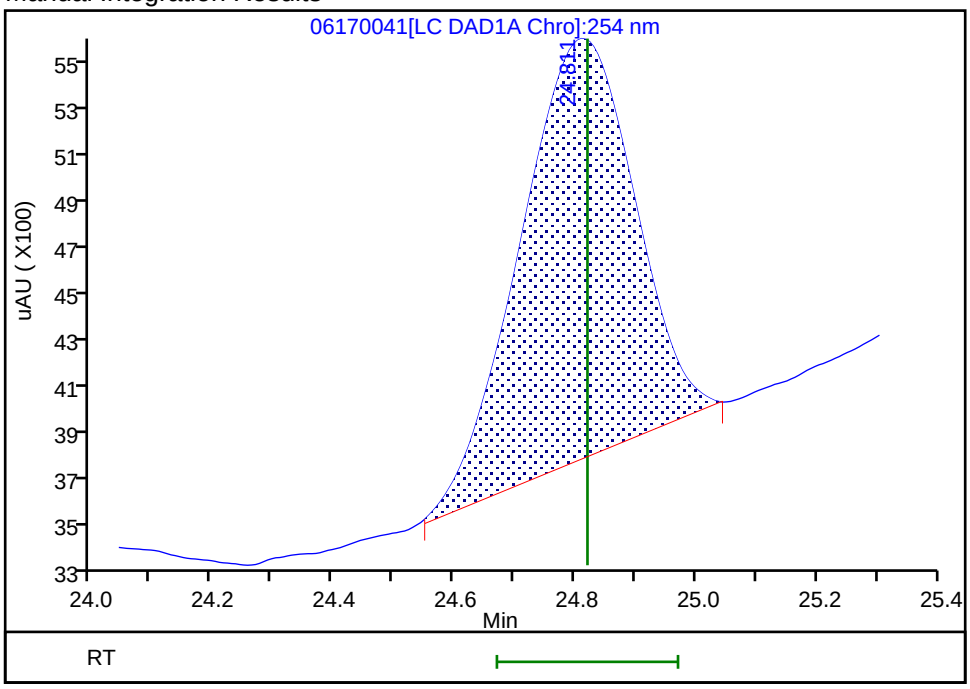
Processing Integration Results

RT: 24.81
Area: 27763
Amount: 0.068167
Amount Units: ug/ml



Manual Integration Results

RT: 24.81
Area: 23082
Amount: 0.056673
Amount Units: ug/ml



Reviewer: fiedlerh, 19-Jun-2019 11:03:42

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

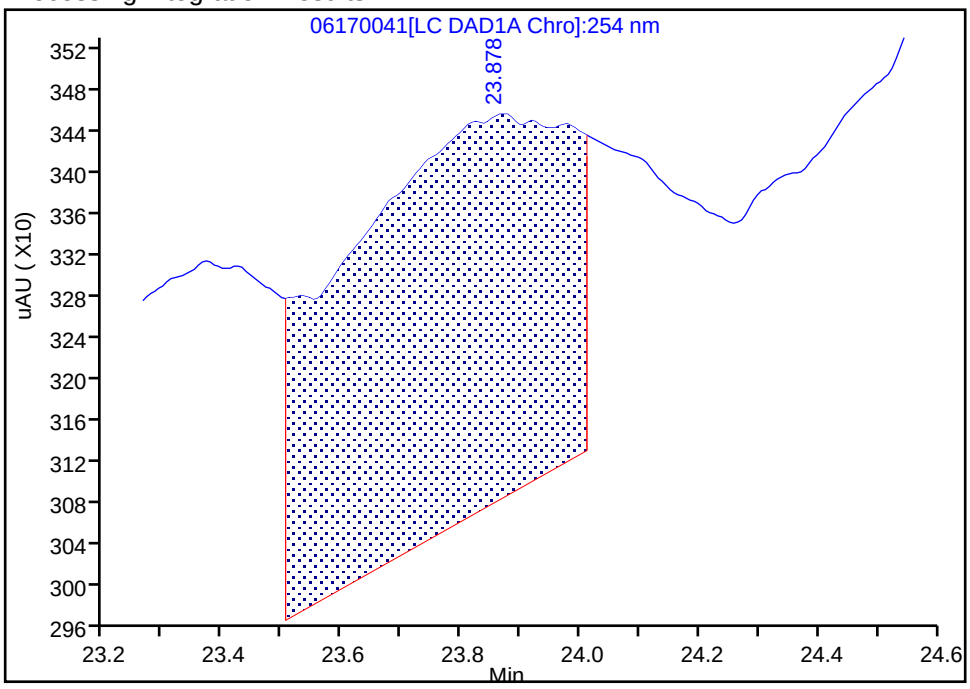
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170041.D				
Injection Date:	18-Jun-2019 14:34:22	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-124928-A-15-A	Lab Sample ID:	280-124928-15		
Client ID:	PZ009-19A				
Operator ID:	HKF	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

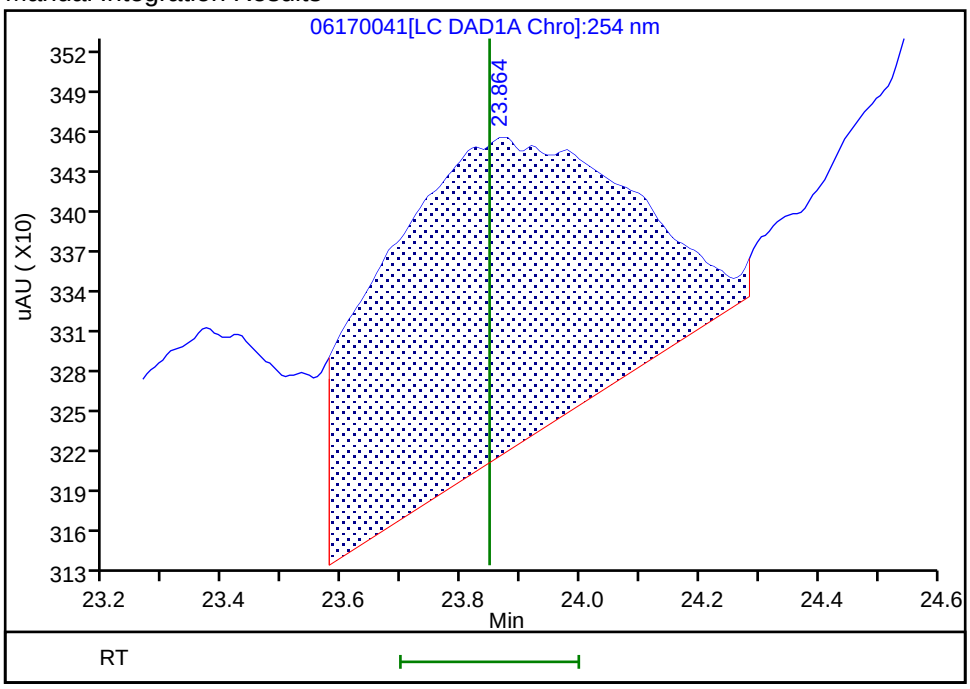
Processing Integration Results

RT: 23.88
Area: 10246
Amount: 0.032581
Amount Units: ug/ml



Manual Integration Results

RT: 23.86
Area: 6878
Amount: 0.021871
Amount Units: ug/ml



Reviewer: fiedlerh, 19-Jun-2019 11:03:37

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: PZ009-19A RE Lab Sample ID: 280-124928-15 RE

Matrix: Water Lab File ID: 07150017.D

Analysis Method: 8330A Date Collected: 06/05/2019 16:35

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 488.6(mL) Date Analyzed: 07/15/2019 16:07

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.20*	*U H*	*0.41*	0.20	*0.087*
5755-27-1	*MNX*	*0.41*	*U Q H*	*2.0*	0.41	*0.16*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	82	*Q M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150017.D
Lims ID: 280-124928-B-15-A
Client ID: PZ009-19A
Sample Type: Client
Inject. Date: 15-Jul-2019 16:07:50 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-15-
Misc. Info.: 280-0083692-017
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:57:25

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.680			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.774			ND	
$	9 1,2-Dinitrobenzene	1	8.743	8.734	0.009	22986	0.1650	M
	10 1,3,5-Trinitrobenzene	1	8.903	8.900	0.003	17997	0.0734	
	11 1,3-Dinitrobenzene	1		9.560			ND	
	12 Nitrobenzene	1		9.947			ND	
	14 Tetryl	1		10.267			ND	U
	16 2,4,6-Trinitrotoluene	1	11.243	11.240	0.003	8839	0.0389	
	17 4-Amino-2,6-dinitrotoluene	1	11.429	11.427	0.002	8155	0.0490	
	18 2-Amino-4,6-dinitrotoluene	1	11.723	11.720	0.003	13047	0.0636	
	19 2,6-Dinitrotoluene	1		11.860			ND	
	20 2,4-Dinitrotoluene	1		12.060			ND	
	21 o-Nitrotoluene	1		12.907			ND	
	22 p-Nitrotoluene	1		13.354			ND	
	23 m-Nitrotoluene	1		13.960			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

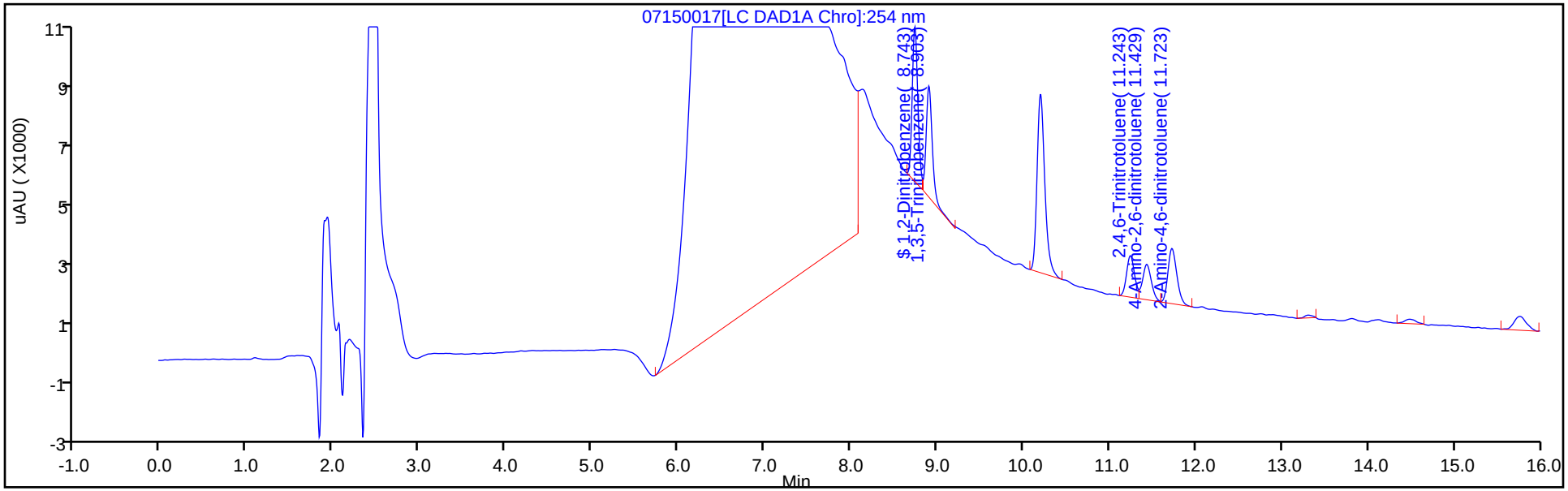
Report Date: 15-Jul-2019 17:54:05 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

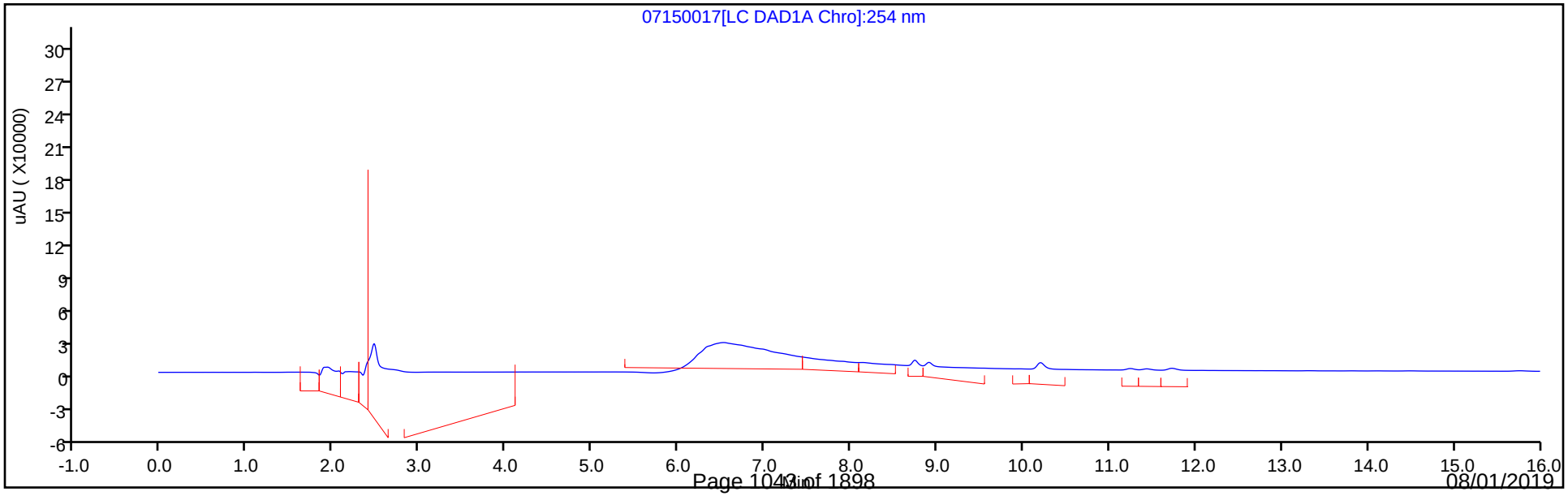
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150017.D

Injection Date:	15-Jul-2019 16:07:50	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-B-15-A	Lab Sample ID:	280-124928-15	Worklist Smp#:	17
Client ID:	PZ009-19A				
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:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150017.D				
Lims ID:	280-124928-B-15-A				
Client ID:	PZ009-19A				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 16:07:50	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-B-15-				
Misc. Info.:	280-0083692-017				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 17:53:56	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				
First Level Reviewer: fiedlerh		Date:	15-Jul-2019 16:57:25		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1650	82.49

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

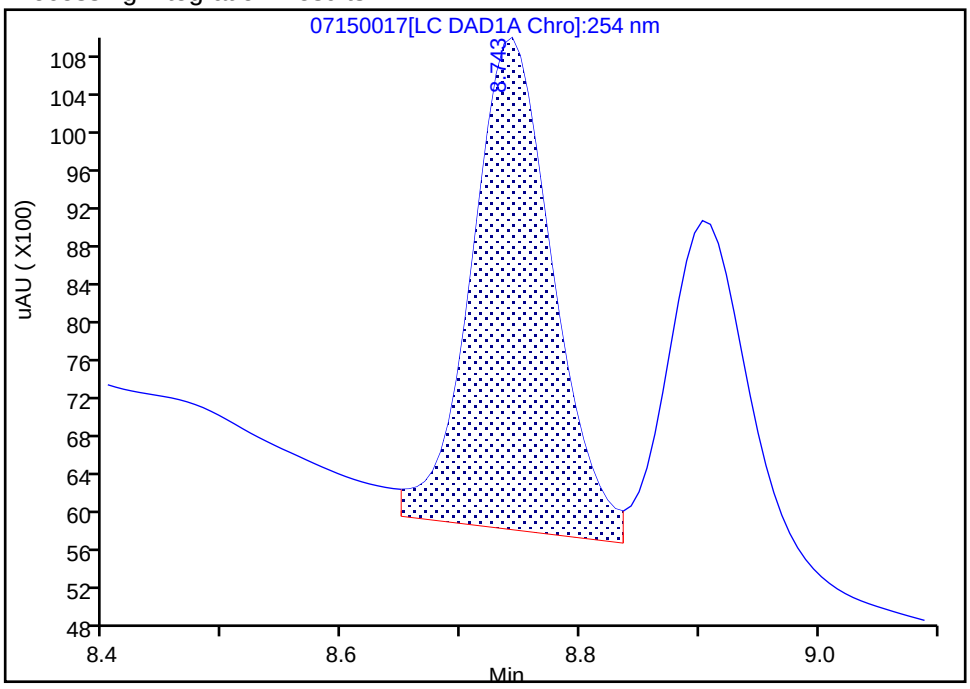
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150017.D				
Injection Date:	15-Jul-2019 16:07:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-15-A	Lab Sample ID:	280-124928-15		
Client ID:	PZ009-19A				
Operator ID:	hkf	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	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

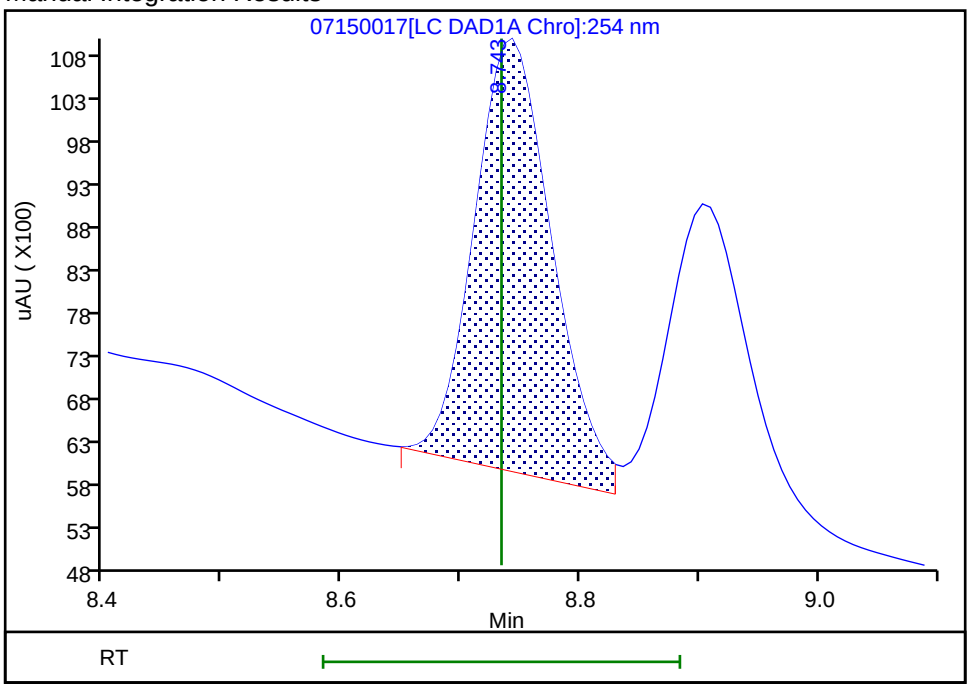
Processing Integration Results

RT: 8.74
Area: 24651
Amount: 0.176927
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 22986
Amount: 0.164977
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:57:07

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

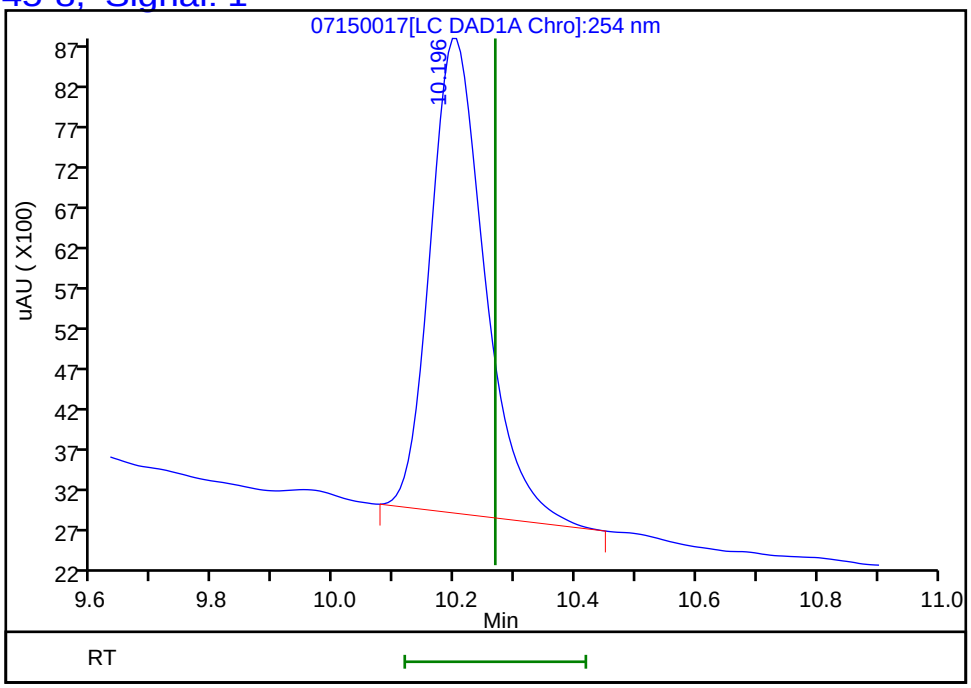
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150017.D

Injection Date:	15-Jul-2019 16:07:50	Instrument ID:	CHHPLC_X3
Lims ID:	280-124928-B-15-A	Lab Sample ID:	280-124928-15
Client ID:	PZ009-19A		
Operator ID:	hkf	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

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.20
Response: 36670
Amount: 0.226418



Reviewer: fiedlerh, 15-Jul-2019 16:57:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0045-19A Lab Sample ID: 280-124928-16

Matrix: Water Lab File ID: 06140065.D

Analysis Method: 8330A Date Collected: 06/06/2019 08:55

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 475(mL) Date Analyzed: 06/15/2019 16:10

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.42	U	1.1	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.093
118-96-7	2,4,6-Trinitrotoluene	0.42	U	0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.088
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	U	0.21	0.13	0.053
88-72-2	2-Nitrotoluene	0.21	U Q	0.42	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.21	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	1.1	0.42	0.21
2691-41-0	HMX	0.21	U	0.42	0.21	0.092
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U M	0.42	0.21	0.096
121-82-4	RDX	0.42	U	0.42	0.42	0.17
479-45-8	Tetryl	0.21	U	0.25	0.21	0.083

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140065.D
Lims ID: 280-124928-A-16-A
Client ID: G0045-19A
Sample Type: Client
Inject. Date: 15-Jun-2019 16:10:54 ALS Bottle#: 65 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-A-16-
Misc. Info.: 280-0082867-065
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:33:05

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.643			ND	
	6 MNX	1		7.359			ND	
	7 RDX	1		7.763			ND	
$	9 1,2-Dinitrobenzene	1	8.742	8.743	-0.001	24970	0.1919	M
	10 1,3,5-Trinitrobenzene	1		8.896			ND	
	11 1,3-Dinitrobenzene	1		9.563			ND	
	12 Nitrobenzene	1	9.962	9.949	0.013	707	0.003592	7M
	14 Tetryl	1		10.276			ND	
	16 2,4,6-Trinitrotoluene	1		11.229			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.429			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.716			ND	
	19 2,6-Dinitrotoluene	1		11.843			ND	
	20 2,4-Dinitrotoluene	1		12.043			ND	
	21 o-Nitrotoluene	1		12.883			ND	
	22 p-Nitrotoluene	1		13.323			ND	
	23 m-Nitrotoluene	1		13.923			ND	

QC Flag Legend

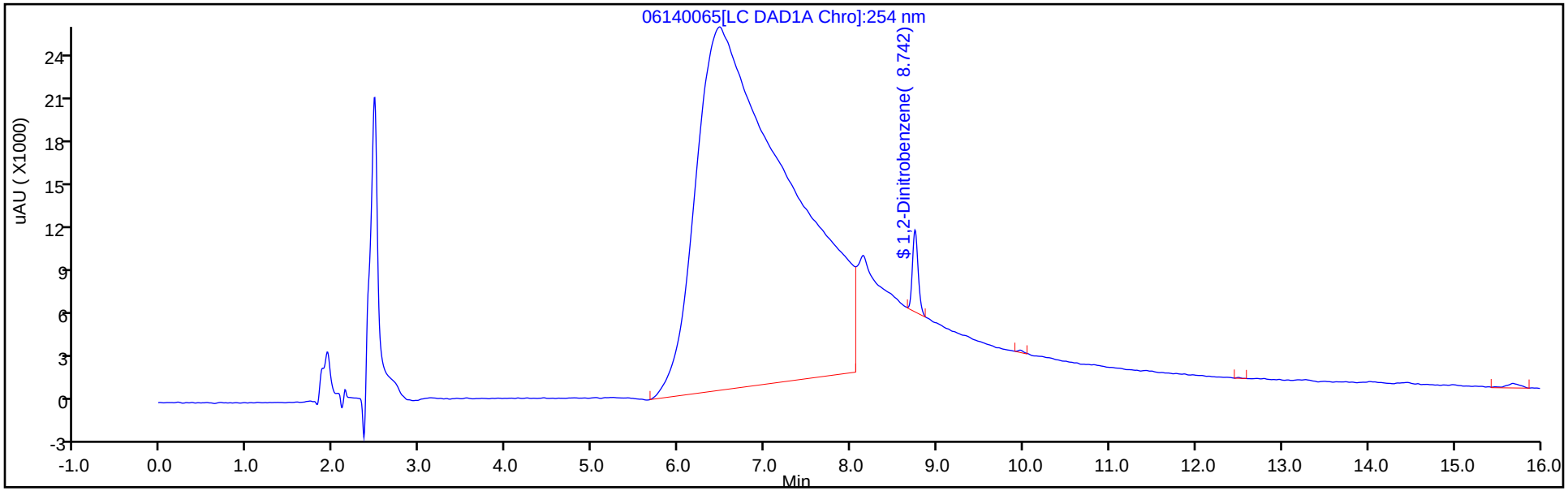
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Report Date: 17-Jun-2019 10:46:17 Chrom Revision: 2.3 03-May-2019 15:52:00

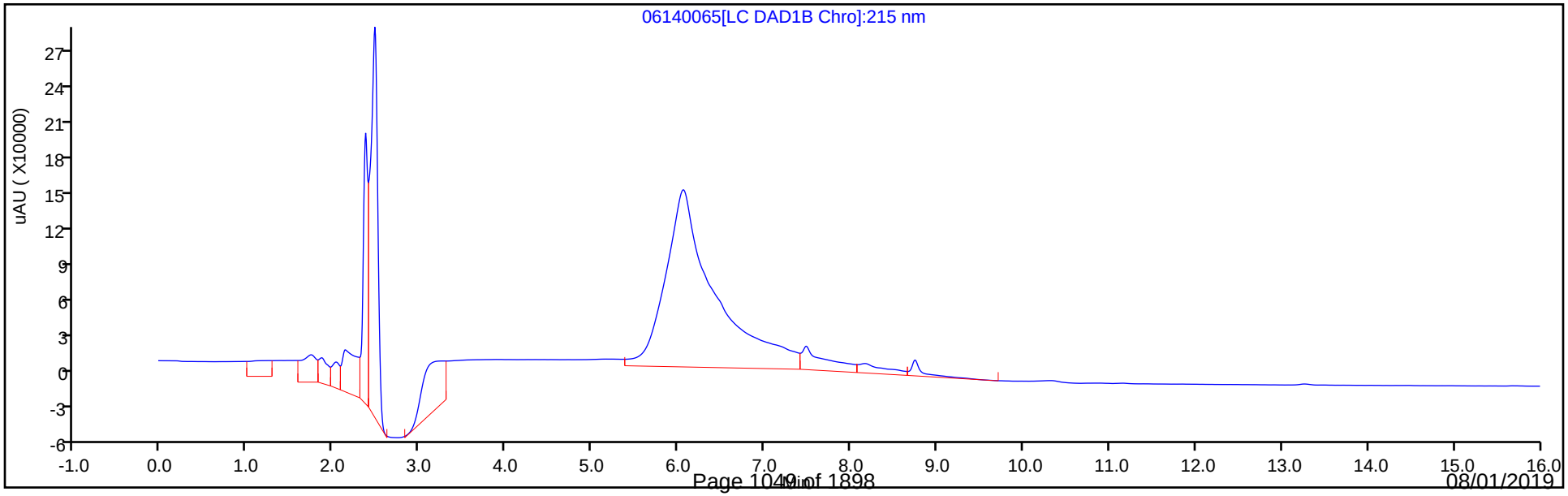
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140065.D				
Injection Date:	15-Jun-2019 16:10:54	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-A-16-A	Lab Sample ID:	280-124928-16	Worklist Smp#:	65
Client ID:	G0045-19A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	65
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140065.D				
Lims ID:	280-124928-A-16-A				
Client ID:	G0045-19A				
Sample Type:	Client				
Inject. Date:	15-Jun-2019 16:10:54	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-A-16-				
Misc. Info.:	280-0082867-065				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jun-2019 10:45:47	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0334				

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:33:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1919	95.96

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

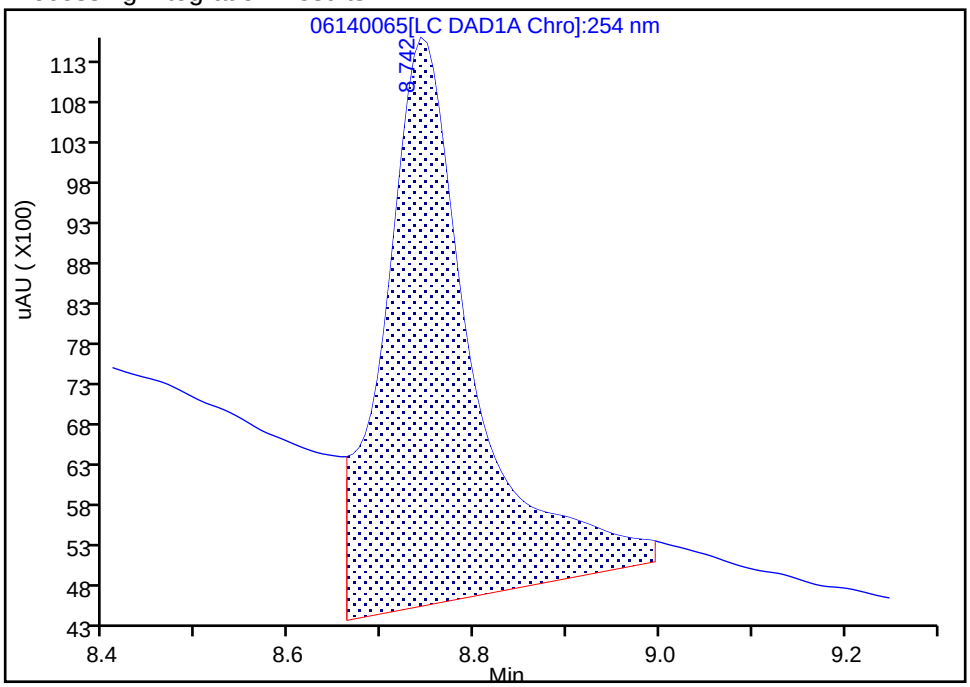
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140065.D				
Injection Date:	15-Jun-2019 16:10:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-16-A	Lab Sample ID:	280-124928-16		
Client ID:	G0045-19A				
Operator ID:	hkf	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

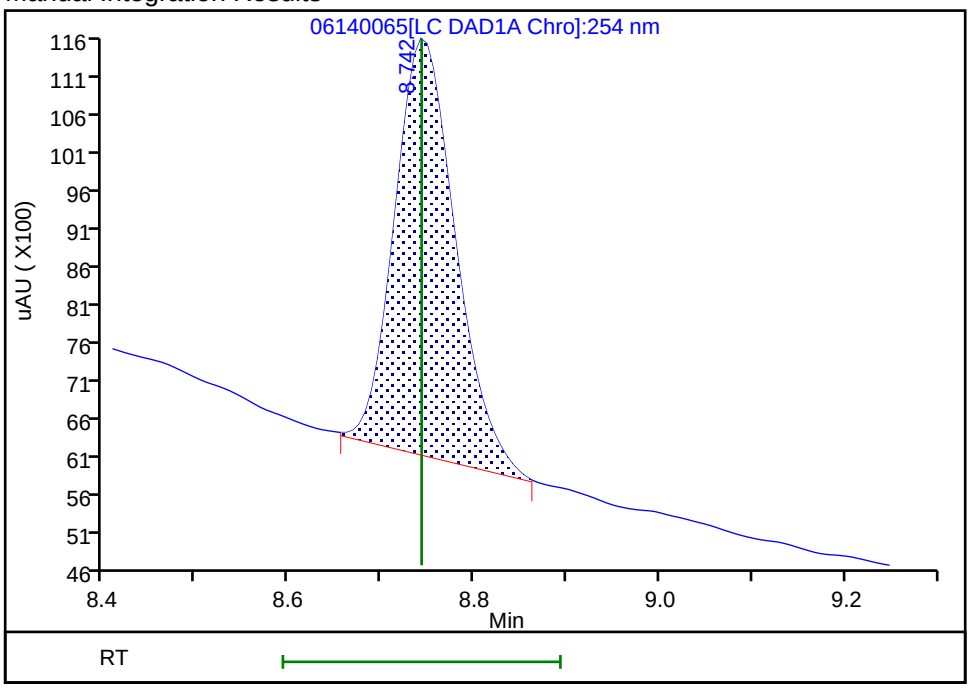
Processing Integration Results

RT: 8.74
Area: 46857
Amount: 0.360132
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 24970
Amount: 0.191914
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:32:57

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

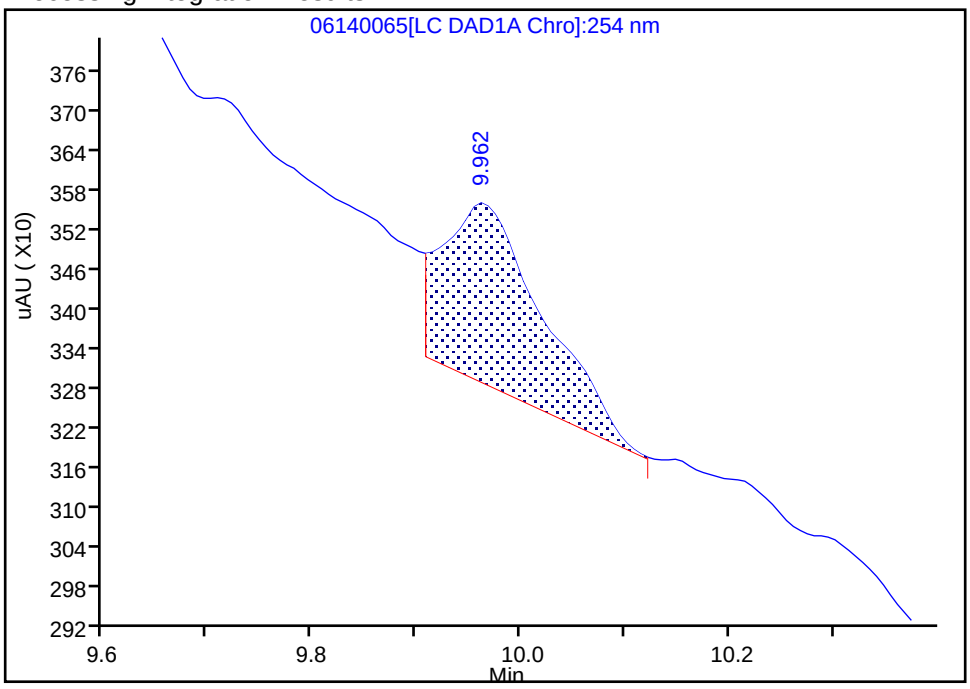
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140065.D				
Injection Date:	15-Jun-2019 16:10:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-A-16-A	Lab Sample ID:	280-124928-16		
Client ID:	G0045-19A				
Operator ID:	hkf	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3

Signal: 1

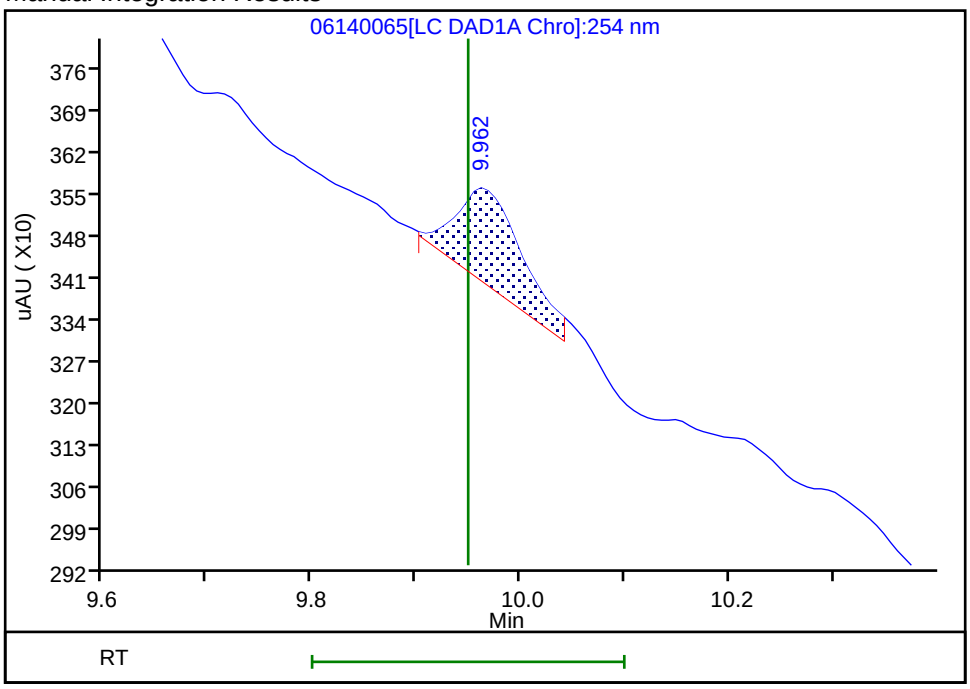
Processing Integration Results

RT: 9.96
Area: 1803
Amount: 0.009160
Amount Units: ug/mL



Manual Integration Results

RT: 9.96
Area: 707
Amount: 0.003592
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:33:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Client Sample ID: G0045-19A RE Lab Sample ID: 280-124928-16 RE

Matrix: Water Lab File ID: 07150018.D

Analysis Method: 8330A Date Collected: 06/06/2019 08:55

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 489.1(mL) Date Analyzed: 07/15/2019 16:30

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.20*	*U H*	*0.41*	0.20	*0.087*
5755-27-1	*MNX*	*0.41*	*U Q H*	*2.0*	0.41	*0.16*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150018.D
Lims ID: 280-124928-B-16-A
Client ID: G0045-19A
Sample Type: Client
Inject. Date: 15-Jul-2019 16:30:45 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-124928-B-16-
Misc. Info.: 280-0083692-018
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:56 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:57:39

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.680			ND	
	6 MNX	1		7.367			ND	
	7 RDX	1		7.774			ND	
$	9 1,2-Dinitrobenzene	1	8.739	8.734	0.005	23950	0.1719	M
	10 1,3,5-Trinitrobenzene	1		8.900			ND	
	11 1,3-Dinitrobenzene	1		9.560			ND	
	12 Nitrobenzene	1		9.947			ND	
	14 Tetryl	1		10.267			ND	
	16 2,4,6-Trinitrotoluene	1		11.240			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.427			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.720			ND	
	19 2,6-Dinitrotoluene	1		11.860			ND	
	20 2,4-Dinitrotoluene	1		12.060			ND	
	21 o-Nitrotoluene	1		12.907			ND	
	22 p-Nitrotoluene	1		13.354			ND	U
	23 m-Nitrotoluene	1		13.960			ND	

QC Flag Legend

Review Flags
M - Manually Integrated
U - Marked Undetected

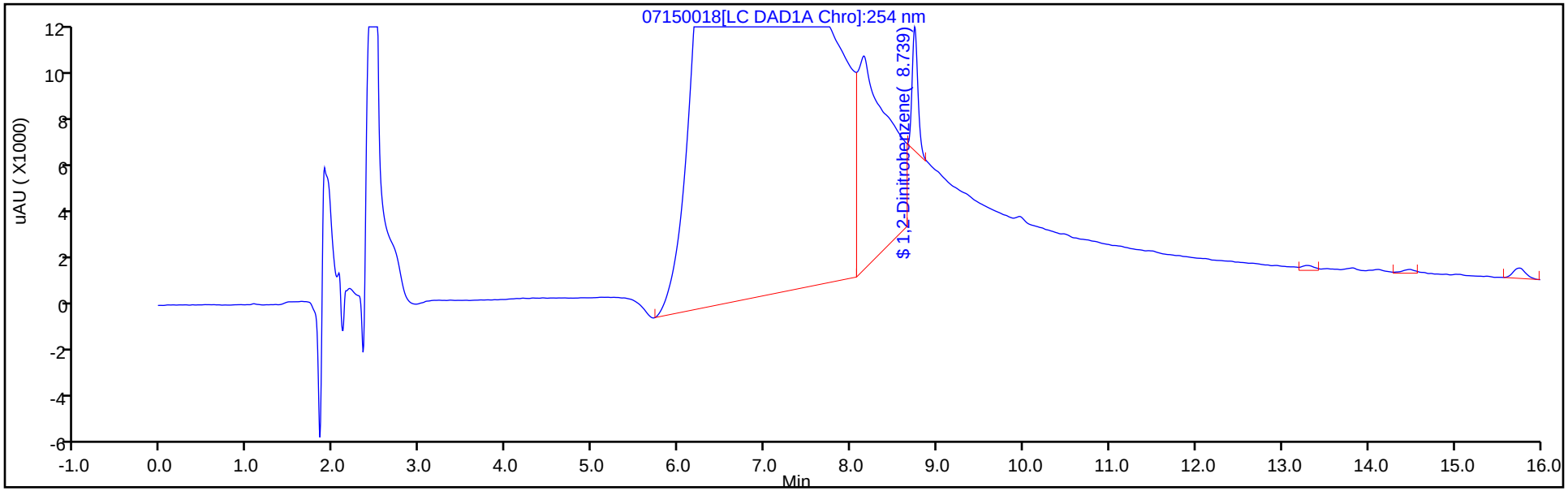
Report Date: 15-Jul-2019 17:54:06 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

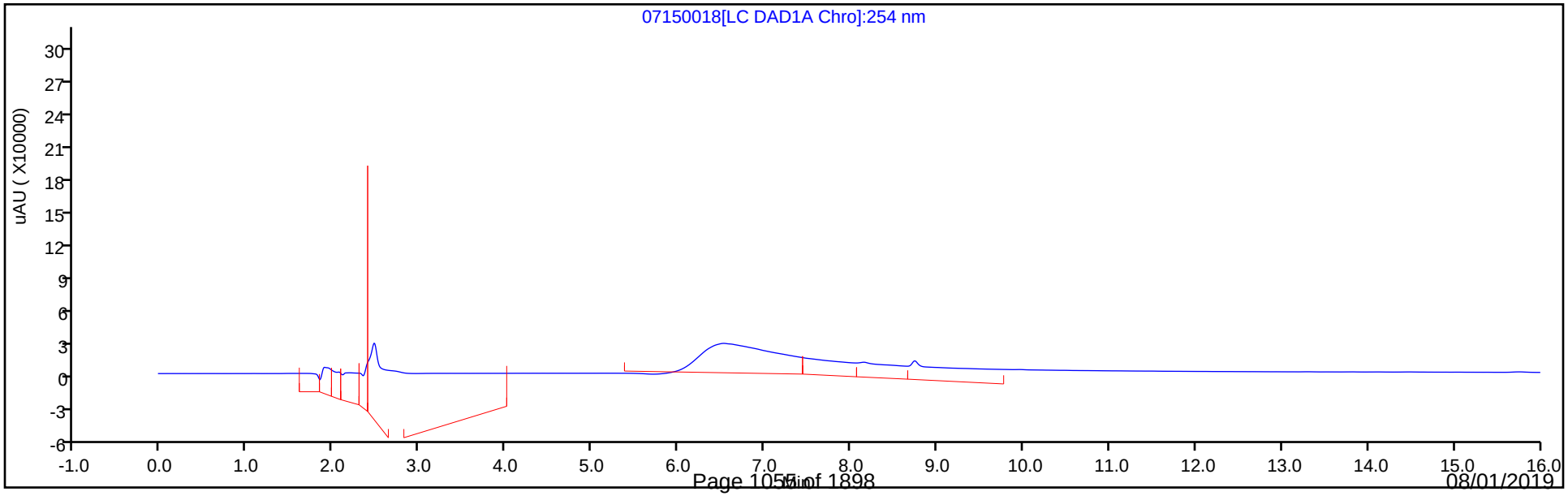
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150018.D

Injection Date:	15-Jul-2019 16:30:45	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	280-124928-B-16-A	Lab Sample ID:	280-124928-16	Worklist Smp#:	18
Client ID:	G0045-19A				
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:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150018.D				
Lims ID:	280-124928-B-16-A				
Client ID:	G0045-19A				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 16:30:45	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-124928-B-16-				
Misc. Info.:	280-0083692-018				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 17:53:56	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				
First Level Reviewer: fiedlerh		Date:	15-Jul-2019 16:57:39		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1719	85.95

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

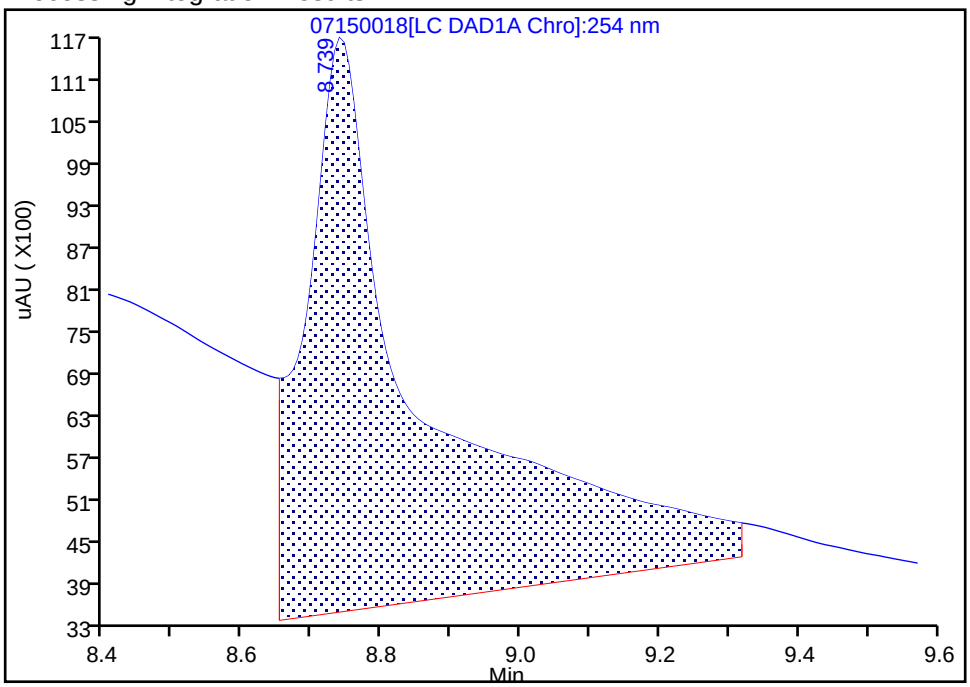
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150018.D				
Injection Date:	15-Jul-2019 16:30:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-16-A	Lab Sample ID:	280-124928-16		
Client ID:	G0045-19A				
Operator ID:	hkf	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	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

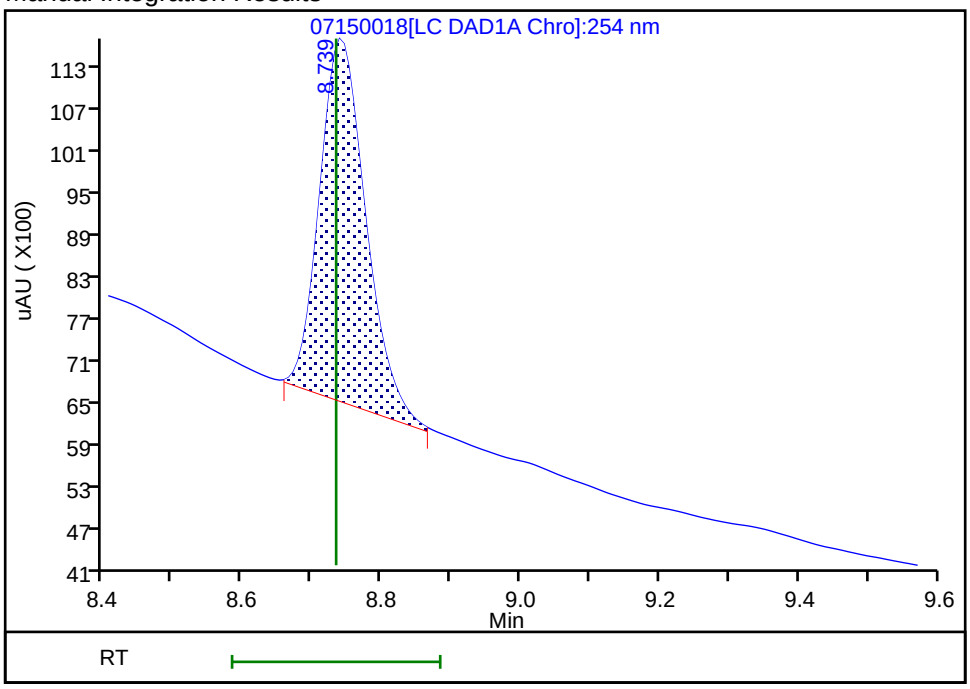
Processing Integration Results

RT: 8.74
Area: 99826
Amount: 0.716480
Amount Units: ug/mL



Manual Integration Results

RT: 8.74
Area: 23950
Amount: 0.171896
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:57:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

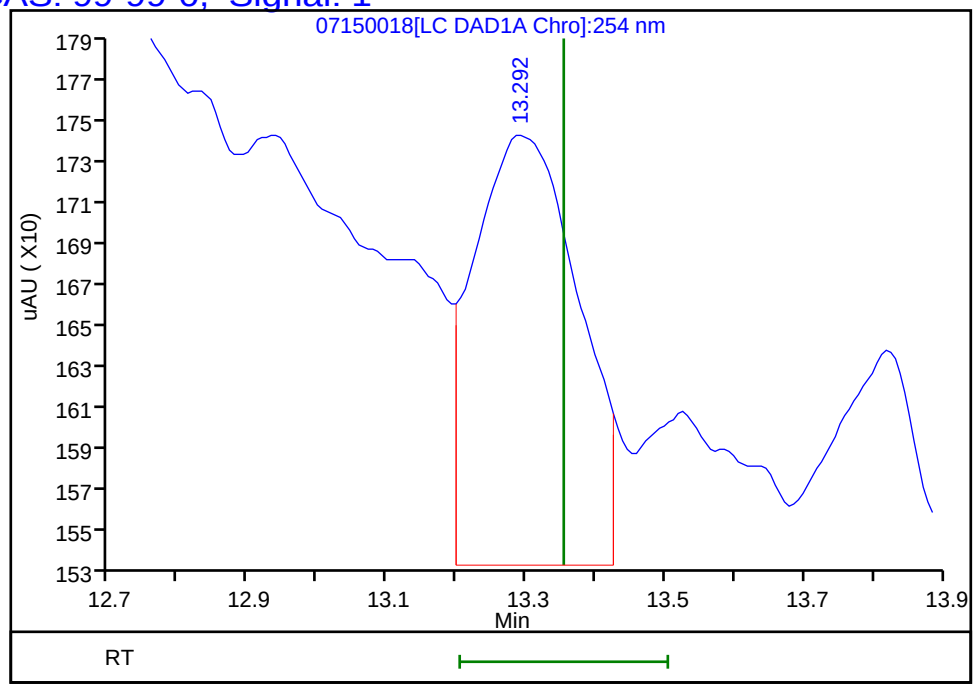
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150018.D

Injection Date:	15-Jul-2019 16:30:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-124928-B-16-A	Lab Sample ID:	280-124928-16		
Client ID:	G0045-19A				
Operator ID:	hkf	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: 13.29
Response: 2125
Amount: 0.019274



Reviewer: fiedlerh, 15-Jul-2019 16:57:39
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.: 280-124928-1 Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/14	05070014.D
Level 2	IC 280-457315/13	05070013.D
Level 3	IC 280-457315/12	05070012.D
Level 4	IC 280-457315/11	05070011.D
Level 5	IC 280-457315/10	05070010.D
Level 6	IC 280-457315/9	05070009.D
Level 7	IC 280-457315/8	05070008.D
Level 8	IC 280-457315/7	05070007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Picric acid	6.206	6.147	6.091	6.007	5.940	5.877	5.793	5.636			5.790 - 6.090	5.962
HMX	7.232	7.220	7.224	7.207	7.200	7.197	7.186	7.169			7.050 - 7.350	7.204
RDX	9.326	9.314	9.324	9.300	9.300	9.291	9.273	9.242			9.150 - 9.450	9.296
Nitrobenzene	12.332	12.334	12.344	12.320	12.326	12.324	12.293	12.269			12.176 - 12.476	12.318
Nitroglycerin	15.892	15.900	15.904	15.880	15.873	15.877	15.853	15.822			15.723 - 16.023	15.875
1,3-Dinitrobenzene	15.899	15.907	15.911	15.887	15.880	15.884	15.860	15.822			15.730 - 16.030	15.881
2-Nitrotoluene	16.732	16.740	16.751	16.727	16.720	16.731	16.713	16.682			16.570 - 16.870	16.725
4-Nitrotoluene	17.066	17.067	17.078	17.054	17.053	17.057	17.040	17.002			16.903 - 17.203	17.052
4-Amino-2,6-dinitrotoluene	17.459	17.467	17.478	17.447	17.440	17.444	17.420	17.382			17.290 - 17.590	17.442
3-Nitrotoluene	17.979	17.980	17.991	17.967	17.966	17.977	17.960	17.922			17.816 - 18.116	17.968
2-Amino-4,6-dinitrotoluene	18.479	18.480	18.484	18.454	18.446	18.451	18.426	18.382			18.296 - 18.596	18.450
1,3,5-Trinitrobenzene	19.226	19.227	19.238	19.214	19.213	19.217	19.200	19.169			19.063 - 19.363	19.213
2,6-Dinitrotoluene	20.086	20.087	20.091	20.074	20.073	20.084	20.060	20.029			19.923 - 20.223	20.073
2,4-Dinitrotoluene	20.632	20.634	20.638	20.621	20.620	20.624	20.606	20.569			20.470 - 20.770	20.618
Tetryl	23.972	23.974	23.964	23.954	23.966	23.957	23.946	23.916			23.816 - 24.116	23.956
2,4,6-Trinitrotoluene	24.952	24.960	24.951	24.947	24.953	24.951	24.946	24.923			24.803 - 25.103	24.948
PETN	25.366	25.360	25.351	25.347	25.353	25.351	25.346	25.329			25.203 - 25.503	25.350
1,2-Dinitrobenzene	13.359	13.360	13.378	13.347	13.346	13.344	13.313	13.289			13.196 - 13.496	13.342

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/14	05070014.D
Level 2	IC 280-457315/13	05070013.D
Level 3	IC 280-457315/12	05070012.D
Level 4	IC 280-457315/11	05070011.D
Level 5	IC 280-457315/10	05070010.D
Level 6	IC 280-457315/9	05070009.D
Level 7	IC 280-457315/8	05070008.D
Level 8	IC 280-457315/7	05070007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Picric acid	143200 158295	152000 154761	148660 160018	147288 175135	Ave		154919.654				6.4		20.0			
HMX	186700 170538	170160 166396	163480 167514	162388 182412	Ave		171198.452				5.1		20.0			
RDX	208850 209973	214300 203474	204000 205258	199228 222468	Ave		208443.798				3.5		20.0			
Nitrobenzene	397355 410773	411317 399424	395868 400807	389110 438928	Ave		405447.961				3.8		20.0			
Nitroglycerin	230695 182930	206262 178504	190583 179150	179764 195591	Ave		192934.972				9.4		20.0			
1,3-Dinitrobenzene	675275 635292	633007 617101	624346 620589	607960 670941	Ave		635563.995				3.9		20.0			
2-Nitrotoluene	258724 264803	258624 258557	258684 257667	254022 283836	Ave		261864.701				3.6		20.0			
4-Nitrotoluene	226594 230254	224761 224437	220080 225659	217853 243537	Ave		226646.674				3.5		20.0			
4-Amino-2,6-dinitrotoluene	299153 300965	294955 291538	293200 294109	285815 319270	Ave		297375.493				3.4		20.0			
3-Nitrotoluene	297012 294945	290857 287782	288088 288231	280554 314057	Ave		292690.570				3.4		20.0			
2-Amino-4,6-dinitrotoluene	466899 430032	425503 416844	419412 419959	407159 456077	Ave		430235.716				4.8		20.0			
1,3,5-Trinitrobenzene	509350 452540	454000 437647	455080 441599	432684 477467	Ave		457545.868				5.5		20.0			
2,6-Dinitrotoluene	331406 289240	293280 280508	287368 282894	276275 306747	Ave		293464.768				6.1		20.0			
2,4-Dinitrotoluene	603892 566425	582874 550905	553952 555029	540878 601773	Ave		569466.073				4.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Tetryl	267700 327900	305600 320959	307270 324996	308636 352779	Ave		314479.971				7.7		20.0			
2,4,6-Trinitrotoluene	401444 417263	397052 400117	394731 407163	389534 450941	Ave		407280.633				4.8		20.0			
PETN	118365 133438	144766 129380	134056 128638	128655 141615	Ave		132364.136				6.2		20.0			
1,2-Dinitrobenzene	290800 275953	279400 269164	272150 270248	264504 292628	Ave		276855.798				3.7		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/14	05070014.D
Level 2	IC 280-457315/13	05070013.D
Level 3	IC 280-457315/12	05070012.D
Level 4	IC 280-457315/11	05070011.D
Level 5	IC 280-457315/10	05070010.D
Level 6	IC 280-457315/9	05070009.D
Level 7	IC 280-457315/8	05070008.D
Level 8	IC 280-457315/7	05070007.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Picric acid	Ave	2864 108333	7600 160018	14866 437837	36822	63318	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
HMX	Ave	3734 116477	8508 167514	16348 456031	40597	68215	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	4177 142432	10715 205258	20400 556169	49807	83989	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Ave	7963 280156	20607 401609	39666 1099515	97472	164638	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Nitroglycerin	Ave	46139 1249529	103131 1791502	190583 4889782	449411	731719	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,3-Dinitrobenzene	Ave	13519 432403	31682 621210	62497 1679031	152142	254371	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
2-Nitrotoluene	Ave	5190 181533	12970 258440	25946 711720	63696	106239	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
4-Nitrotoluene	Ave	4550 157734	11283 226562	22096 611277	54681	92470	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	6001 204689	14792 294991	29408 800569	71668	120747	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
3-Nitrotoluene	Ave	5964 202253	14601 289384	28924 788282	70419	118450	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2-Amino-4,6-dinitrotoluene	Ave	9366 292666	21339 421219	42067 1143614	102095	172529	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
1,3,5-Trinitrobenzene	Ave	10187 306353	22700 441599	45508 1193667	108171	181016	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
2,6-Dinitrotoluene	Ave	6648 196945	14708 283743	28823 769167	69276	116043	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,4-Dinitrotoluene	Ave	12102 386405	29202 556139	55506 1507441	135490	227023	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Tetryl	Ave	5354 224671	15280 324996	30727 881948	77159	131160	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 15:08 Calibration End Date: 05/07/2019 19:13 Calibration ID: 36292

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,4,6-Trinitrotoluene	Ave	8061 281202	19932 408792	39631 1131861	97773	167573	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Ave	23673 905663	72383 1286384	134056 3540364	321638	533750	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	5816 188415	13970 270248	27215 731569	66126	110381	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070007.D
Lims ID: IC FULL LV 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 07-May-2019 15:08:19 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 8
Misc. Info.: 280-0081649-007
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 09-May-2019 08:13:33 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0337

First Level Reviewer: fiedlerh Date: 08-May-2019 09:04:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.403	4.446	-0.043	676801	2.50	1.72	
2 2,4-diamino-6-nitrotoluene	1	4.996	4.993	0.003	406734	2.50	1.59	
5 2,4,6-Trinitrophenol	1	5.636	5.940	-0.304	437837	2.50	2.83	a
6 HMX	1	7.169	7.200	-0.031	456031	2.50	2.66	
8 RDX	1	9.242	9.300	-0.058	556169	2.50	2.67	
9 Nitrobenzene	1	12.269	12.326	-0.057	1099515	2.51	2.71	
$ 10 1,2-Dinitrobenzene	1	13.289	13.346	-0.057	731569	2.50	2.64	
11 3,5-Dinitroaniline	1	15.196	15.266	-0.070	789313	2.50	1.68	
13 Nitroglycerin	2	15.822	15.873	-0.051	4889782	25.0	25.3	
12 1,3-Dinitrobenzene	1	15.822	15.880	-0.058	1679031	2.50	2.64	
14 o-Nitrotoluene	1	16.682	16.720	-0.038	711720	2.51	2.72	
15 p-Nitrotoluene	1	17.002	17.053	-0.051	611277	2.51	2.70	
16 4-Amino-2,6-dinitrotoluene	1	17.382	17.440	-0.058	800569	2.51	2.69	
17 m-Nitrotoluene	1	17.922	17.966	-0.044	788282	2.51	2.69	
18 2-Amino-4,6-dinitrotoluene	1	18.382	18.446	-0.064	1143614	2.51	2.66	
19 1,3,5-Trinitrobenzene	1	19.169	19.213	-0.044	1193667	2.50	2.61	
20 2,6-Dinitrotoluene	1	20.029	20.073	-0.044	769167	2.51	2.62	
21 2,4-Dinitrotoluene	1	20.569	20.620	-0.051	1507441	2.51	2.65	
22 Tetryl	1	23.916	23.966	-0.050	881948	2.50	2.80	
23 2,4,6-Trinitrotoluene	1	24.923	24.953	-0.030	1131861	2.51	2.78	
24 PETN	2	25.329	25.353	-0.024	3540364	25.0	26.7	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

8330IntermStk_00058	Amount Added: 125.00	Units: uL
8330_ADDs_00021	Amount Added: 125.00	Units: uL

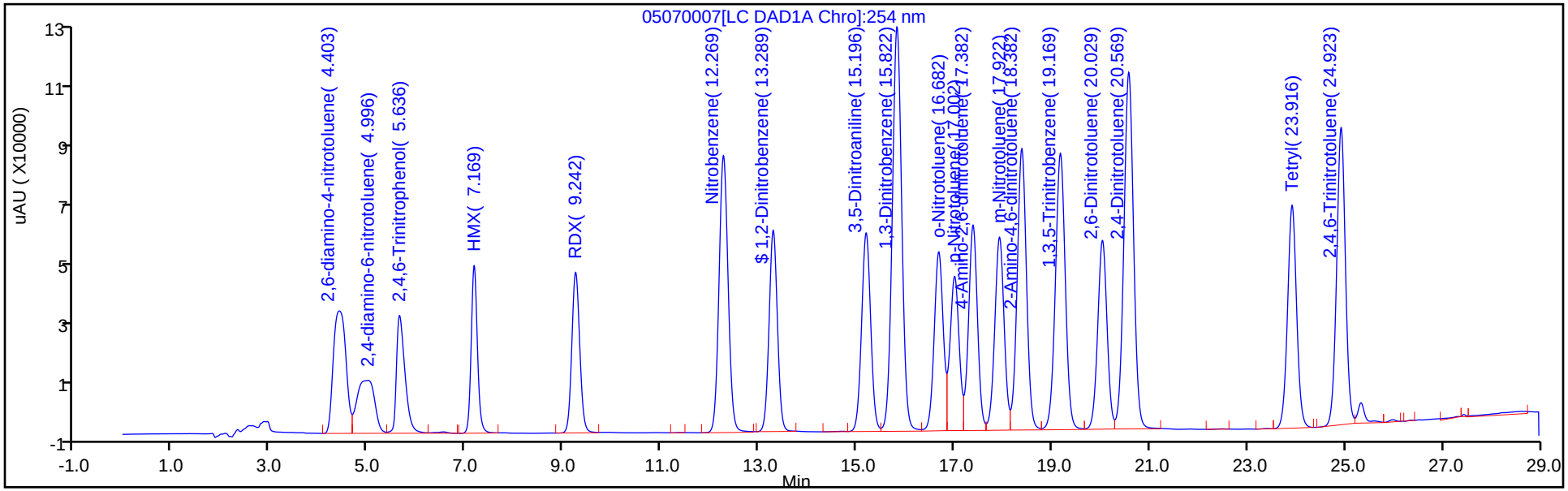
Report Date: 09-May-2019 08:13:33 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

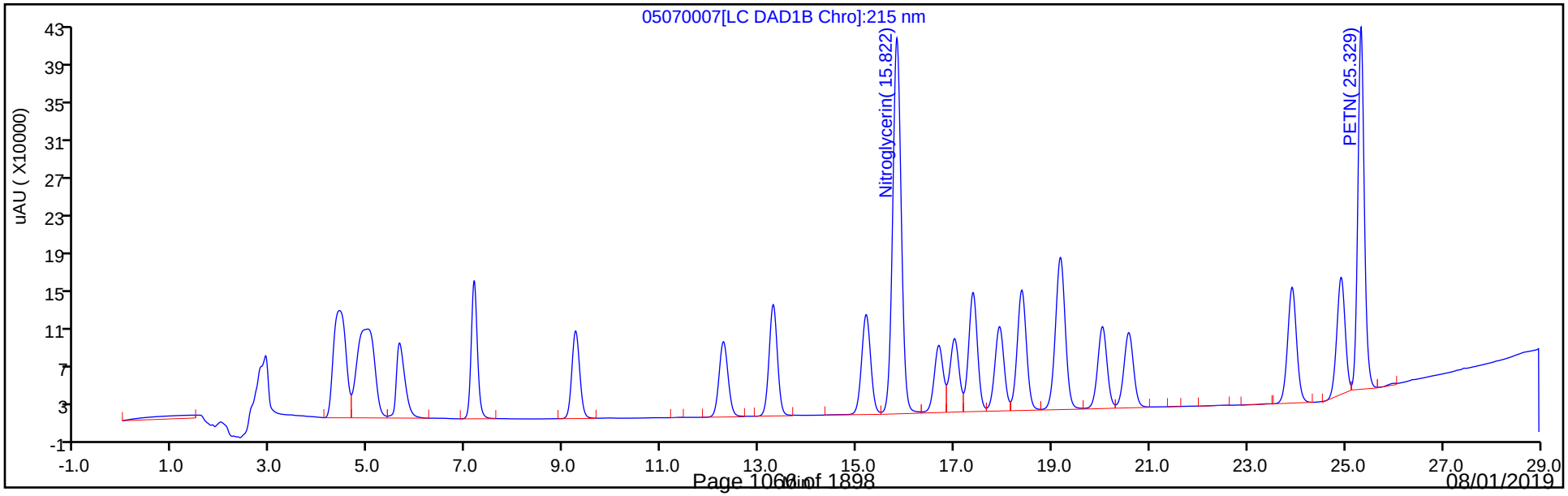
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070007.D

Injection Date:	07-May-2019 15:08:19	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC FULL LV 8			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

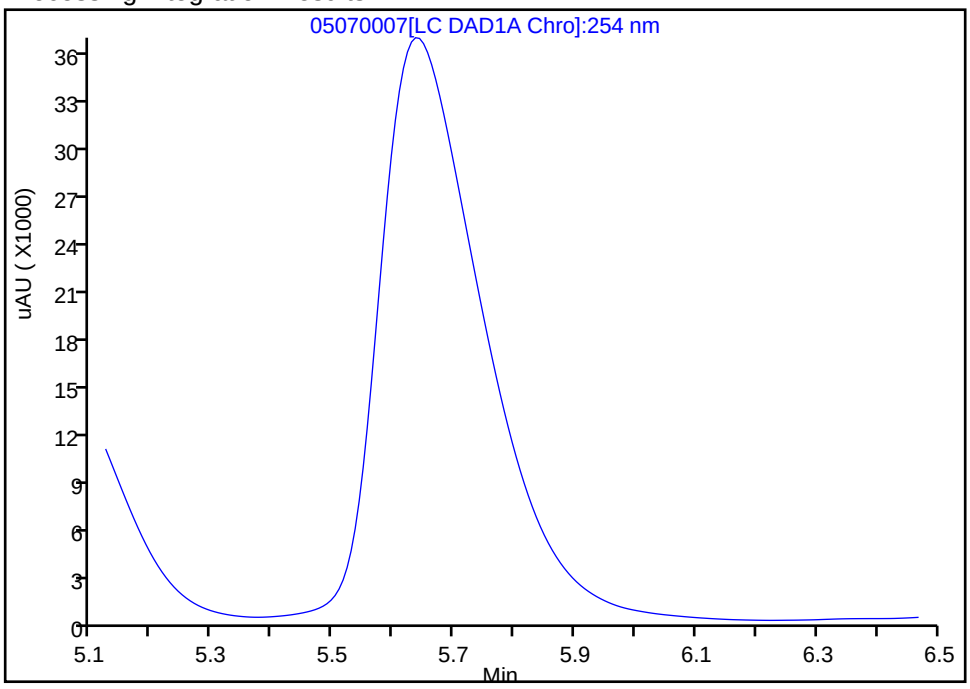
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070007.D				
Injection Date:	07-May-2019 15:08:19	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 8				
Client ID:					
Operator ID:	HKF	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

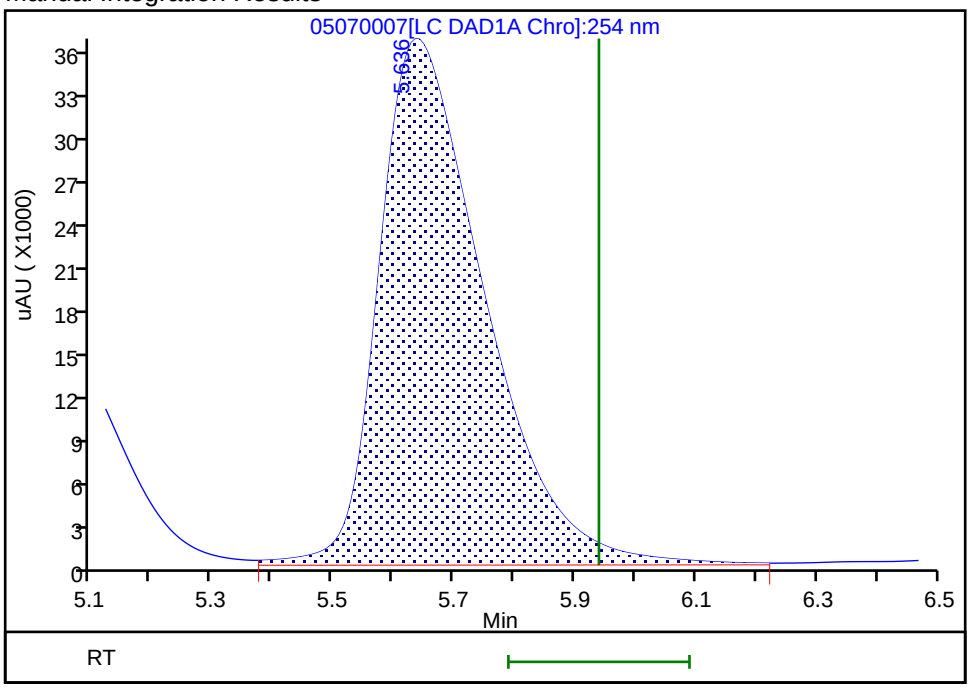
Processing Integration Results

Not Detected
Expected RT: 5.94



Manual Integration Results

RT: 5.64
Area: 437837
Amount: 2.826220
Amount Units: ug/ml



Reviewer: fiedlerh, 08-May-2019 09:04:18
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070008.D
Lims ID: IC FULL LV 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 07-May-2019 15:43:22 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 7
Misc. Info.: 280-0081649-008
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 09-May-2019 08:13:33 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0337

First Level Reviewer: fiedlerh Date: 08-May-2019 09:01:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.426	4.446	-0.020	403610	1.00	1.02	
2 2,4-diamino-6-nitrotoluene	1	4.953	4.993	-0.040	242342	1.00	0.9472	
5 2,4,6-Trinitrophenol	1	5.793	5.940	-0.147	160018	1.00	1.03	
6 HMX	1	7.186	7.200	-0.014	167514	1.00	0.9785	
8 RDX	1	9.273	9.300	-0.027	205258	1.00	0.9847	
9 Nitrobenzene	1	12.293	12.326	-0.033	401609	1.00	0.99	
$ 10 1,2-Dinitrobenzene	1	13.313	13.346	-0.033	270248	1.00	0.9761	
11 3,5-Dinitroaniline	1	15.233	15.266	-0.033	471598	1.00	1.01	
13 Nitroglycerin	2	15.853	15.873	-0.020	1791502	10.0	9.29	
12 1,3-Dinitrobenzene	1	15.860	15.880	-0.020	621210	1.00	0.9774	
14 o-Nitrotoluene	1	16.713	16.720	-0.007	258440	1.00	0.9869	
15 p-Nitrotoluene	1	17.040	17.053	-0.013	226562	1.00	1.00	
16 4-Amino-2,6-dinitrotoluene	1	17.420	17.440	-0.020	294991	1.00	0.99	
17 m-Nitrotoluene	1	17.960	17.966	-0.006	289384	1.00	0.9887	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.446	-0.020	421219	1.00	0.9790	
19 1,3,5-Trinitrobenzene	1	19.200	19.213	-0.013	441599	1.00	0.9651	
20 2,6-Dinitrotoluene	1	20.060	20.073	-0.013	283743	1.00	0.9669	
21 2,4-Dinitrotoluene	1	20.606	20.620	-0.014	556139	1.00	0.9766	
22 Tetryl	1	23.946	23.966	-0.020	324996	1.00	1.03	
23 2,4,6-Trinitrotoluene	1	24.946	24.953	-0.007	408792	1.00	1.00	
24 PETN	2	25.346	25.353	-0.007	1286384	10.0	9.72	

Reagents:

8330IntermStk_00058 Amount Added: 50.00 Units: uL
8330_ADDs_00021 Amount Added: 50.00 Units: uL

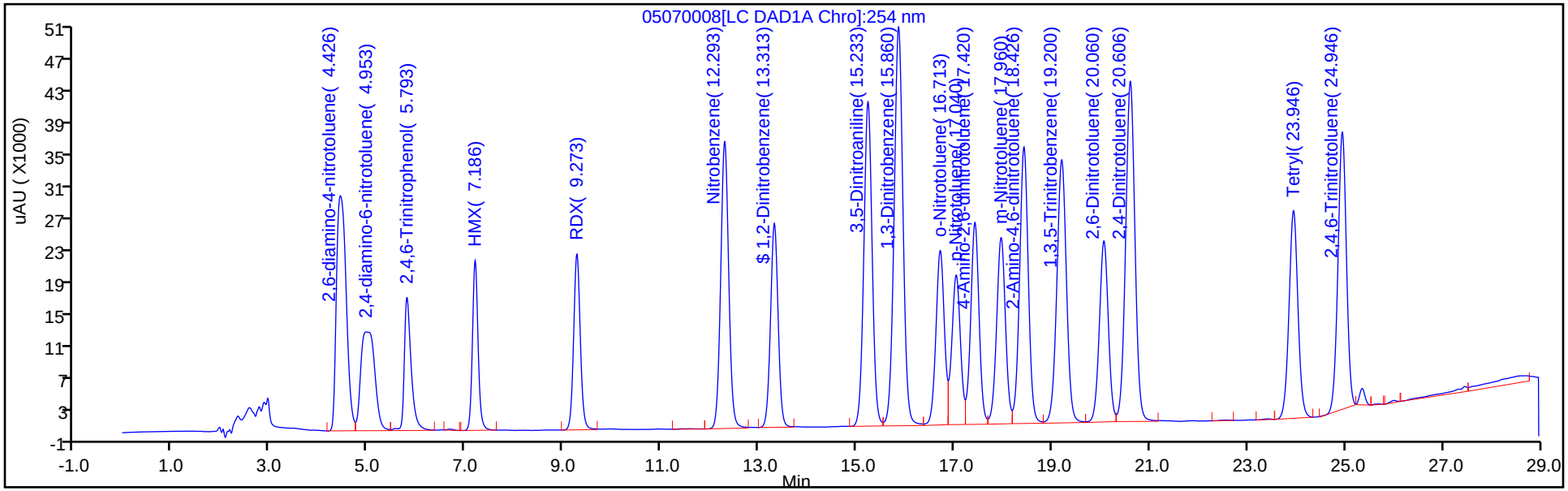
Report Date: 09-May-2019 08:13:33 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

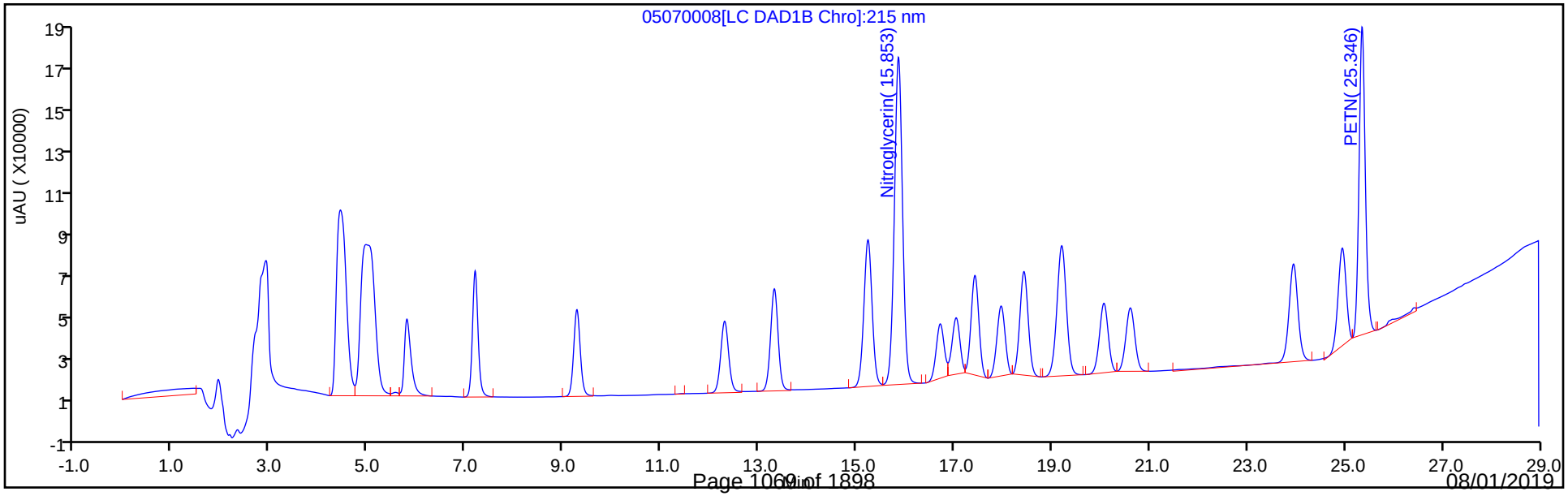
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070008.D

Injection Date:	07-May-2019 15:43:22	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC FULL LV 7			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070009.D
Lims ID: IC FULL LV 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-May-2019 16:18:20 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 6
Misc. Info.: 280-0081649-009
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 09-May-2019 08:13:34 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0337

First Level Reviewer: fiedlerh Date: 08-May-2019 09:00:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.437	4.446	-0.009	282422	0.7000	0.7157	
2 2,4-diamino-6-nitrotoluene	1	5.004	4.993	0.011	170308	0.7000	0.6657	
5 2,4,6-Trinitrophenol	1	5.877	5.940	-0.063	108333	0.7000	0.6993	
6 HMX	1	7.197	7.200	-0.003	116477	0.7000	0.6804	
8 RDX	1	9.291	9.300	-0.009	142432	0.7000	0.6833	
9 Nitrobenzene	1	12.324	12.326	-0.002	280156	0.7014	0.6910	
$ 10 1,2-Dinitrobenzene	1	13.344	13.346	-0.002	188415	0.7000	0.6806	
11 3,5-Dinitroaniline	1	15.264	15.266	-0.002	330264	0.7000	0.7039	
13 Nitroglycerin	2	15.877	15.873	0.004	1249529	7.00	6.48	
12 1,3-Dinitrobenzene	1	15.884	15.880	0.004	432403	0.7007	0.6803	
14 o-Nitrotoluene	1	16.731	16.720	0.011	181533	0.7021	0.6932	
15 p-Nitrotoluene	1	17.057	17.053	0.004	157734	0.7028	0.6959	
16 4-Amino-2,6-dinitrotoluene	1	17.444	17.440	0.004	204689	0.7021	0.6883	
17 m-Nitrotoluene	1	17.977	17.966	0.011	202253	0.7028	0.6910	
18 2-Amino-4,6-dinitrotoluene	1	18.451	18.446	0.005	292666	0.7021	0.6802	
19 1,3,5-Trinitrobenzene	1	19.217	19.213	0.004	306353	0.7000	0.6696	
20 2,6-Dinitrotoluene	1	20.084	20.073	0.011	196945	0.7021	0.6711	
21 2,4-Dinitrotoluene	1	20.624	20.620	0.004	386405	0.7014	0.6785	
22 Tetryl	1	23.957	23.966	-0.009	224671	0.7000	0.7144	
23 2,4,6-Trinitrotoluene	1	24.951	24.953	-0.002	281202	0.7028	0.6904	
24 PETN	2	25.351	25.353	-0.002	905663	7.00	6.84	

Reagents:

8330IntermStk_00058 Amount Added: 35.00 Units: uL
8330_ADDs_00021 Amount Added: 35.00 Units: uL

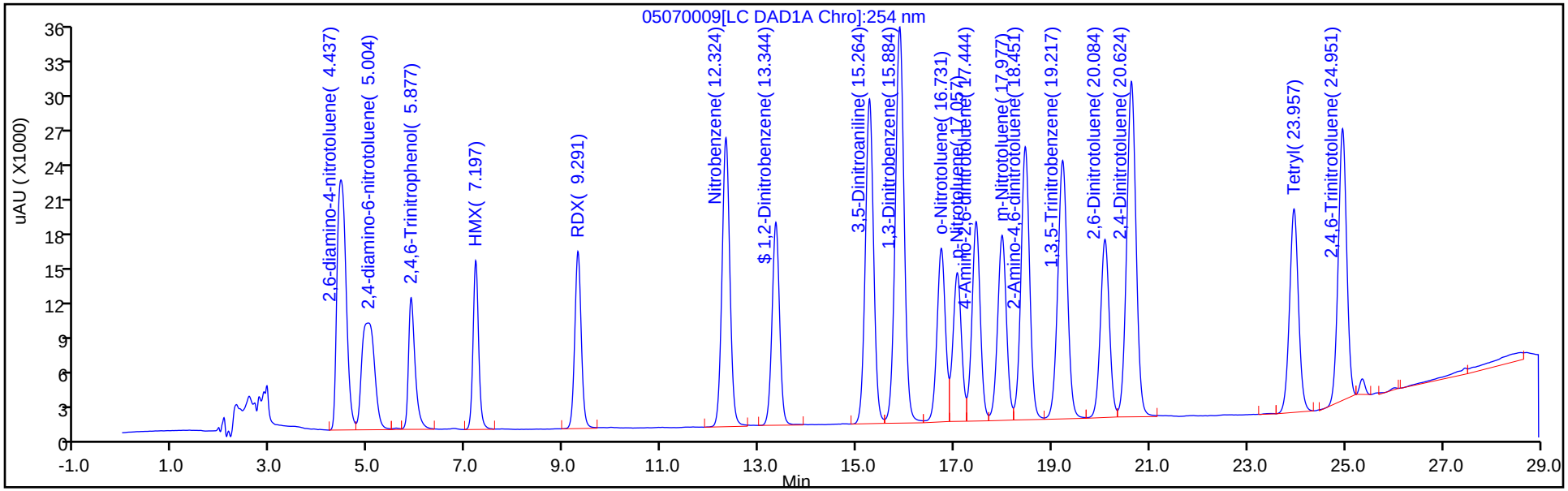
Report Date: 09-May-2019 08:13:34 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

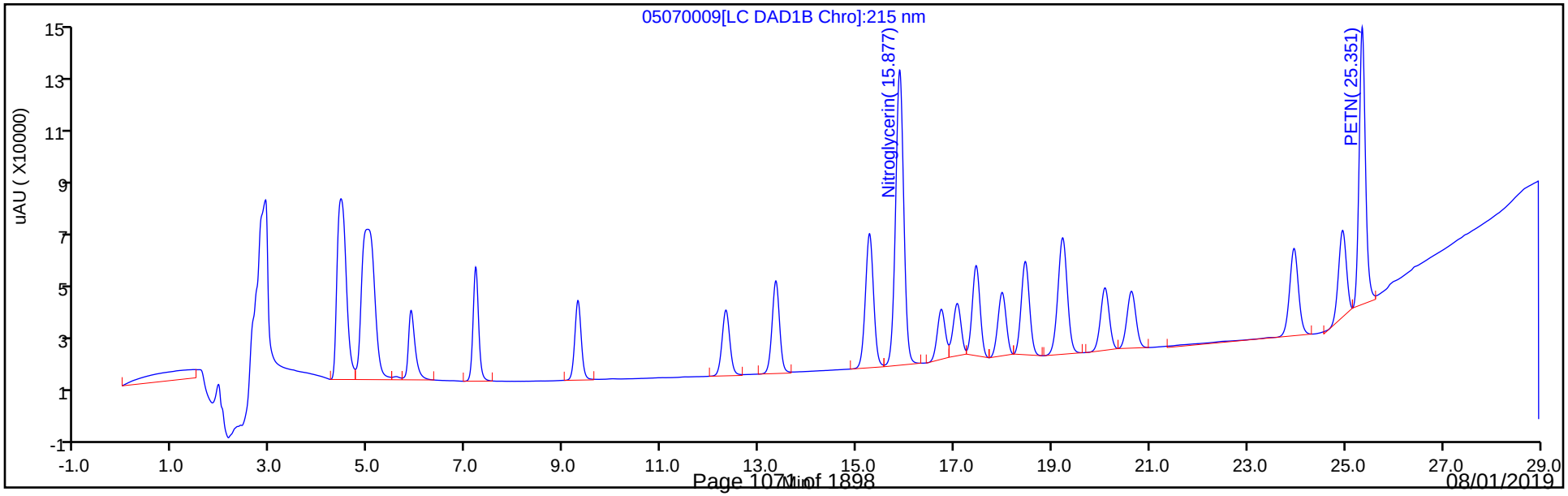
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070009.D

Injection Date:	07-May-2019 16:18:20	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC FULL LV 6			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070010.D
Lims ID: IC FULL LV 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-May-2019 16:53:23 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 5
Misc. Info.: 280-0081649-010
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 09-May-2019 08:13:35 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0337

First Level Reviewer: fiedlerh Date: 08-May-2019 09:00:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.446	4.446	0.000	154442	0.4000	0.3914	
2 2,4-diamino-6-nitrotoluene	1	4.993	4.993	0.000	92869	0.4000	0.3630	
5 2,4,6-Trinitrophenol	1	5.940	5.940	0.000	63318	0.4000	0.4087	
6 HMX	1	7.200	7.200	0.000	68215	0.4000	0.3985	
8 RDX	1	9.300	9.300	0.000	83989	0.4000	0.4029	
9 Nitrobenzene	1	12.326	12.326	0.000	164638	0.4008	0.4061	
$ 10 1,2-Dinitrobenzene	1	13.346	13.346	0.000	110381	0.4000	0.3987	
11 3,5-Dinitroaniline	1	15.266	15.266	0.000	181912	0.4000	0.3873	
13 Nitroglycerin	2	15.873	15.873	0.000	731719	4.00	3.79	
12 1,3-Dinitrobenzene	1	15.880	15.880	0.000	254371	0.4004	0.4002	
14 o-Nitrotoluene	1	16.720	16.720	0.000	106239	0.4012	0.4057	
15 p-Nitrotoluene	1	17.053	17.053	0.000	92470	0.4016	0.4080	
16 4-Amino-2,6-dinitrotoluene	1	17.440	17.440	0.000	120747	0.4012	0.4060	
17 m-Nitrotoluene	1	17.966	17.966	0.000	118450	0.4016	0.4047	
18 2-Amino-4,6-dinitrotoluene	1	18.446	18.446	0.000	172529	0.4012	0.4010	
19 1,3,5-Trinitrobenzene	1	19.213	19.213	0.000	181016	0.4000	0.3956	
20 2,6-Dinitrotoluene	1	20.073	20.073	0.000	116043	0.4012	0.3954	
21 2,4-Dinitrotoluene	1	20.620	20.620	0.000	227023	0.4008	0.3987	
22 Tetryl	1	23.966	23.966	0.000	131160	0.4000	0.4171	
23 2,4,6-Trinitrotoluene	1	24.953	24.953	0.000	167573	0.4016	0.4114	
24 PETN	2	25.353	25.353	0.000	533750	4.00	4.03	

Reagents:

8330IntermStk_00058 Amount Added: 20.00 Units: uL
8330_ADDs_00021 Amount Added: 20.00 Units: uL

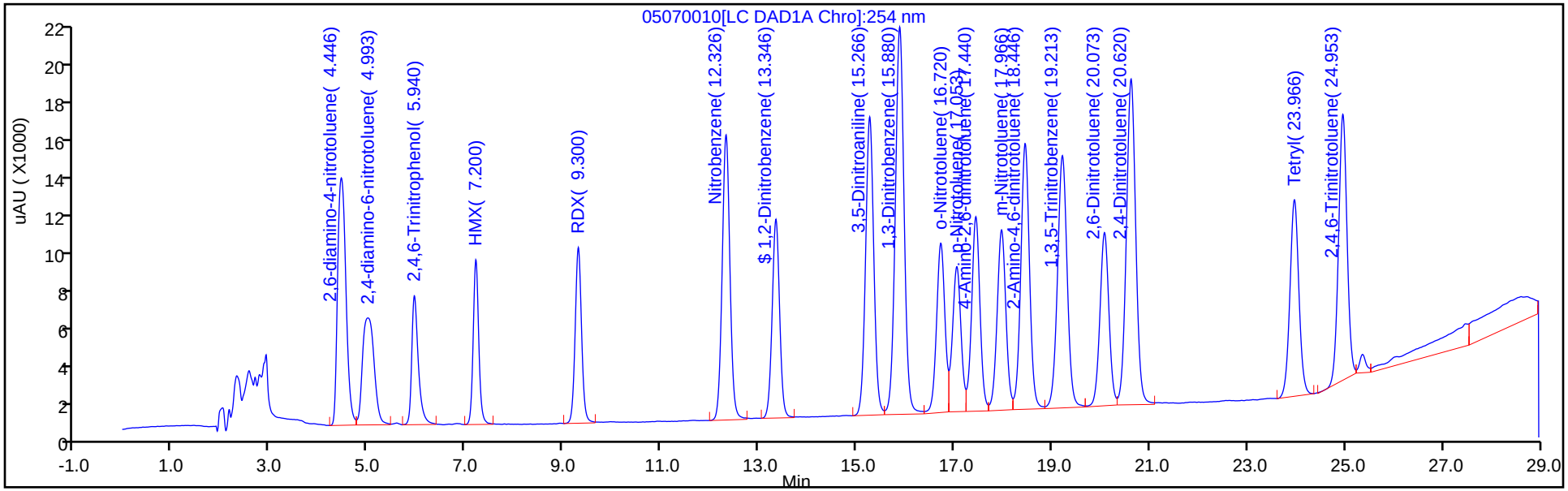
Report Date: 09-May-2019 08:13:35 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

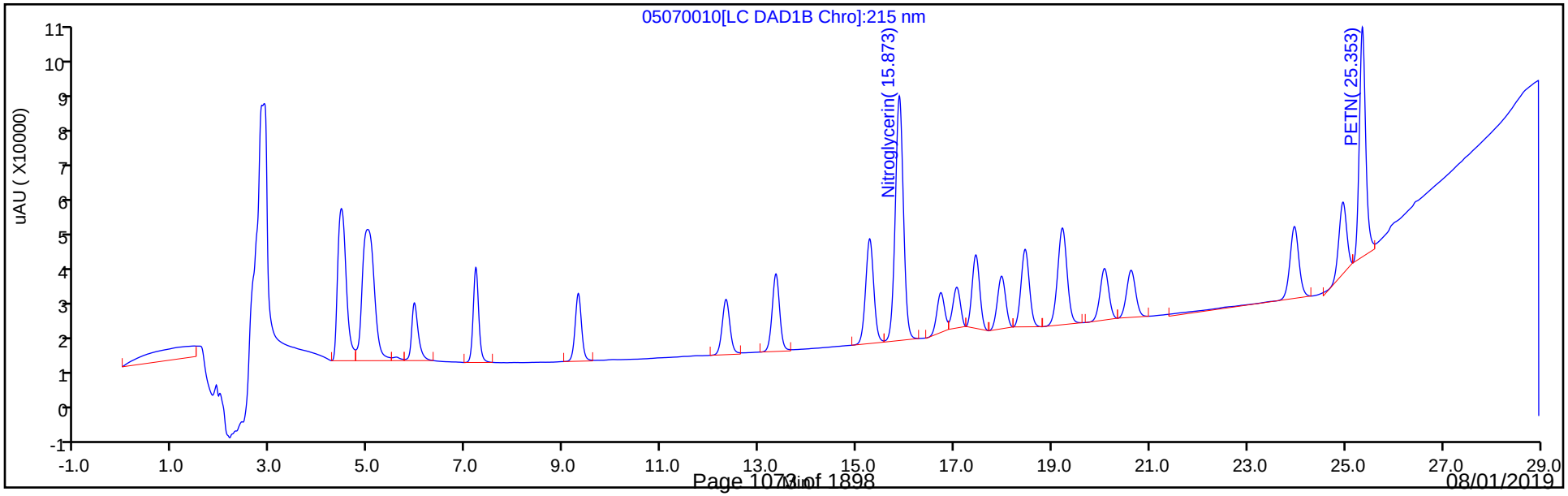
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070010.D

Injection Date:	07-May-2019 16:53:23	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC FULL LV 5			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070011.D
Lims ID: IC FULL LV 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-May-2019 17:28:26 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 4
Misc. Info.: 280-0081649-011
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 09-May-2019 08:13:35 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0337

First Level Reviewer: fiedlerh Date: 08-May-2019 09:00:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.447	4.446	0.001	100901	0.2500	0.2557	
2 2,4-diamino-6-nitrotoluene	1	5.001	4.993	0.008	60668	0.2500	0.2371	
5 2,4,6-Trinitrophenol	1	6.007	5.940	0.067	36822	0.2500	0.2377	
6 HMX	1	7.207	7.200	0.007	40597	0.2500	0.2371	
8 RDX	1	9.300	9.300	0.000	49807	0.2500	0.2389	
9 Nitrobenzene	1	12.320	12.326	-0.006	97472	0.2505	0.2404	
$ 10 1,2-Dinitrobenzene	1	13.347	13.346	0.001	66126	0.2500	0.2388	
11 3,5-Dinitroaniline	1	15.274	15.266	0.008	119322	0.2500	0.2538	
13 Nitroglycerin	2	15.880	15.873	0.007	449411	2.50	2.33	
12 1,3-Dinitrobenzene	1	15.887	15.880	0.007	152142	0.2503	0.2394	
14 o-Nitrotoluene	1	16.727	16.720	0.007	63696	0.2508	0.2432	
15 p-Nitrotoluene	1	17.054	17.053	0.001	54681	0.2510	0.2413	
16 4-Amino-2,6-dinitrotoluene	1	17.447	17.440	0.007	71668	0.2508	0.2410	
17 m-Nitrotoluene	1	17.967	17.966	0.001	70419	0.2510	0.2406	
18 2-Amino-4,6-dinitrotoluene	1	18.454	18.446	0.008	102095	0.2508	0.2373	
19 1,3,5-Trinitrobenzene	1	19.214	19.213	0.001	108171	0.2500	0.2364	
20 2,6-Dinitrotoluene	1	20.074	20.073	0.001	69276	0.2508	0.2361	
21 2,4-Dinitrotoluene	1	20.621	20.620	0.000	135490	0.2505	0.2379	
22 Tetryl	1	23.954	23.966	-0.012	77159	0.2500	0.2454	
23 2,4,6-Trinitrotoluene	1	24.947	24.953	-0.006	97773	0.2510	0.2401	
24 PETN	2	25.347	25.353	-0.006	321638	2.50	2.43	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL
8330_ADDs_00021 Amount Added: 12.50 Units: uL

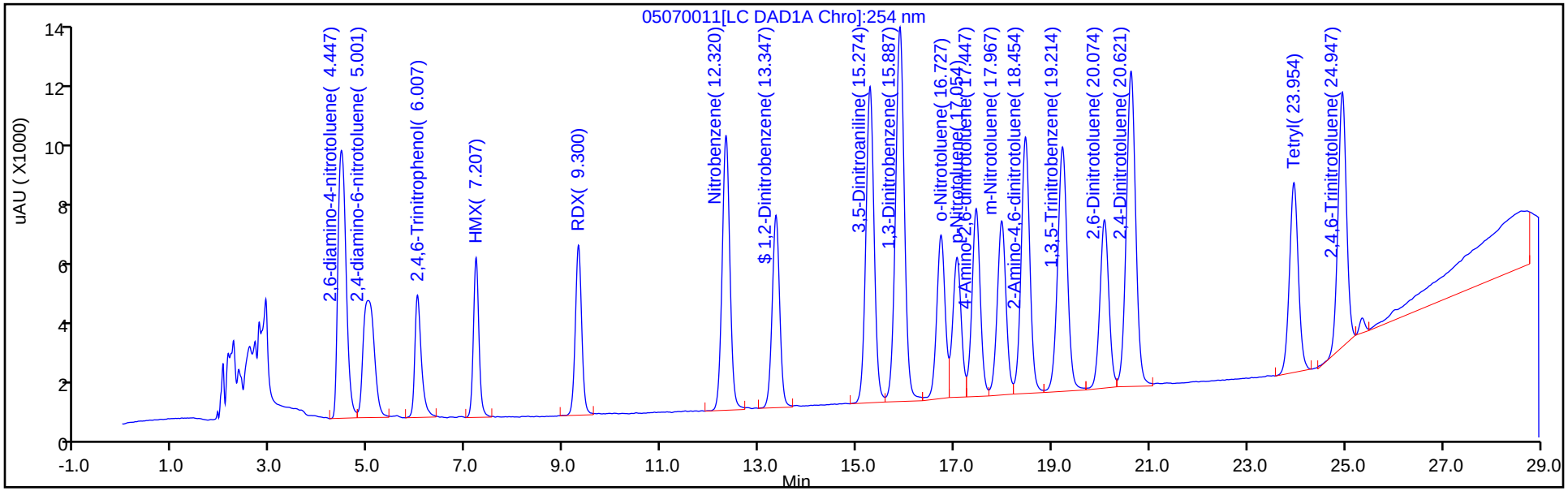
Report Date: 09-May-2019 08:13:36 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

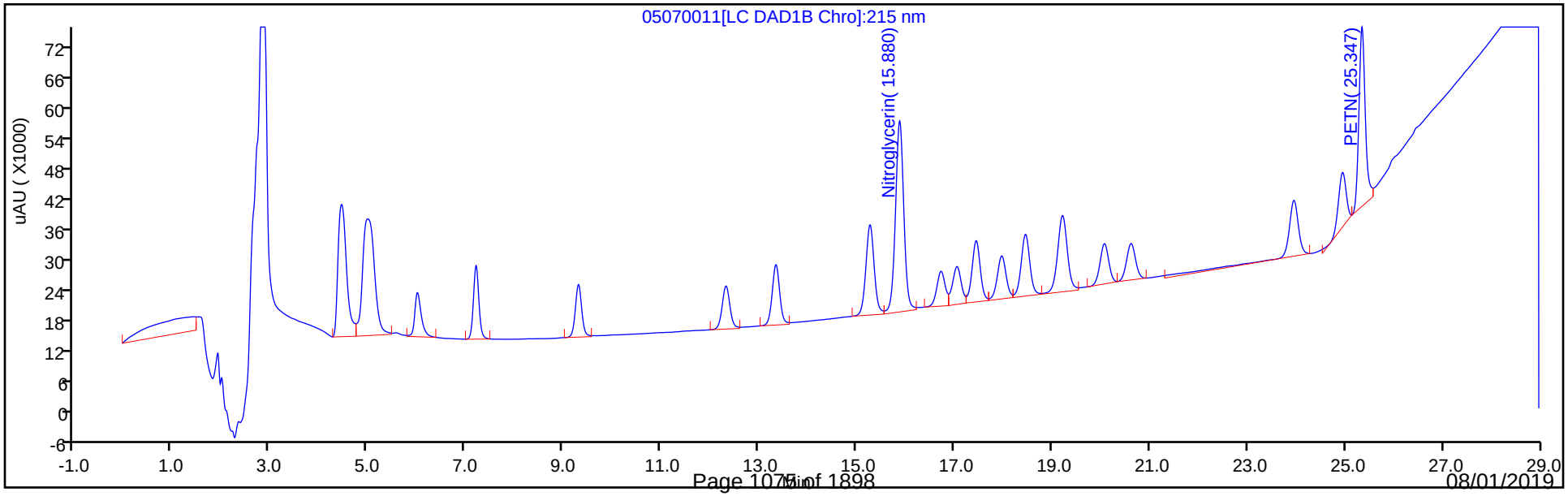
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070011.D

Injection Date:	07-May-2019 17:28:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC FULL LV 4			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070012.D
Lims ID: IC FULL LV 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-May-2019 18:03:28 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 3
Misc. Info.: 280-0081649-012
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 09-May-2019 08:13:36 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0337

First Level Reviewer: fiedlerh Date: 08-May-2019 09:00:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.458	4.446	0.012	39527	0.1000	0.1002	
2 2,4-diamino-6-nitrotoluene	1	4.998	4.993	0.005	24748	0.1000	0.0967	
5 2,4,6-Trinitrophenol	1	6.091	5.940	0.151	14866	0.1000	0.0960	
6 HMX	1	7.224	7.200	0.024	16348	0.1000	0.0955	
8 RDX	1	9.324	9.300	0.024	20400	0.1000	0.0979	
9 Nitrobenzene	1	12.344	12.326	0.018	39666	0.1002	0.0978	
$ 10 1,2-Dinitrobenzene	1	13.378	13.346	0.032	27215	0.1000	0.0983	
11 3,5-Dinitroaniline	1	15.304	15.266	0.038	46736	0.1000	0.0989	
13 Nitroglycerin	2	15.904	15.873	0.031	190583	1.00	0.9878	
12 1,3-Dinitrobenzene	1	15.911	15.880	0.031	62497	0.1001	0.0983	
14 o-Nitrotoluene	1	16.751	16.720	0.031	25946	0.1003	0.0991	
15 p-Nitrotoluene	1	17.078	17.053	0.025	22096	0.1004	0.0975	
16 4-Amino-2,6-dinitrotoluene	1	17.478	17.440	0.038	29408	0.1003	0.0989	
17 m-Nitrotoluene	1	17.991	17.966	0.025	28924	0.1004	0.0988	
18 2-Amino-4,6-dinitrotoluene	1	18.484	18.446	0.038	42067	0.1003	0.0978	
19 1,3,5-Trinitrobenzene	1	19.238	19.213	0.025	45508	0.1000	0.0995	
20 2,6-Dinitrotoluene	1	20.091	20.073	0.018	28823	0.1003	0.0982	
21 2,4-Dinitrotoluene	1	20.638	20.620	0.018	55506	0.1002	0.0975	
22 Tetryl	1	23.964	23.966	-0.002	30727	0.1000	0.0977	
23 2,4,6-Trinitrotoluene	1	24.951	24.953	-0.002	39631	0.1004	0.0973	
24 PETN	2	25.351	25.353	-0.002	134056	1.00	1.01	

Reagents:

8330IntermStk_00058 Amount Added: 5.00 Units: uL
8330_ADDs_00021 Amount Added: 5.00 Units: uL

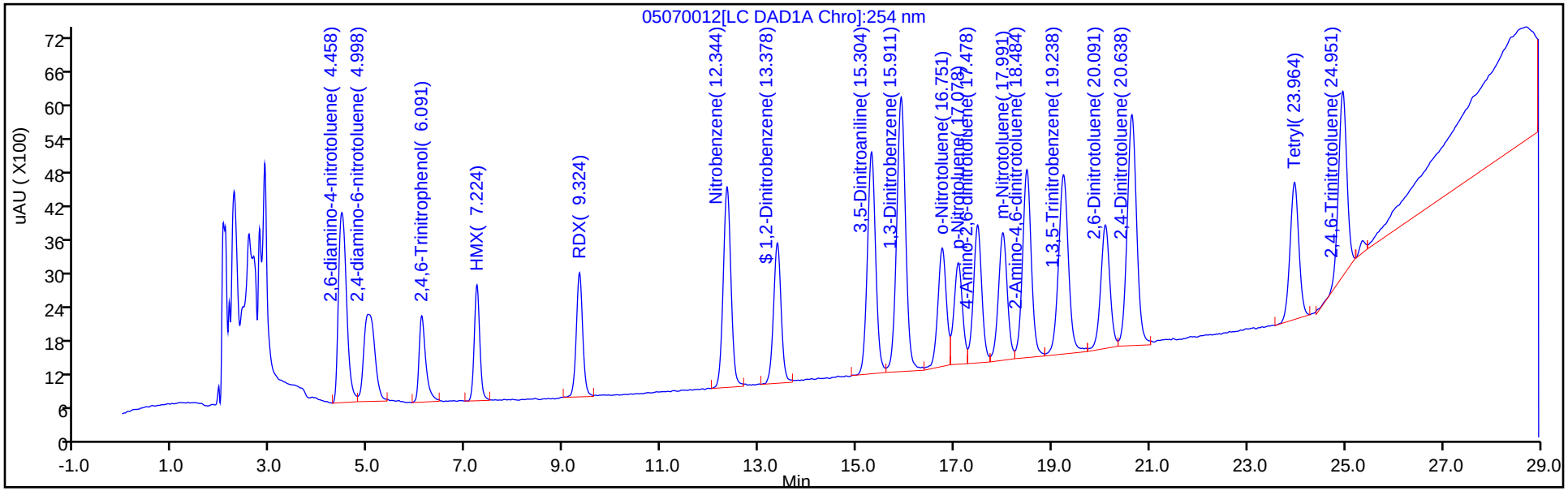
Report Date: 09-May-2019 08:13:36 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

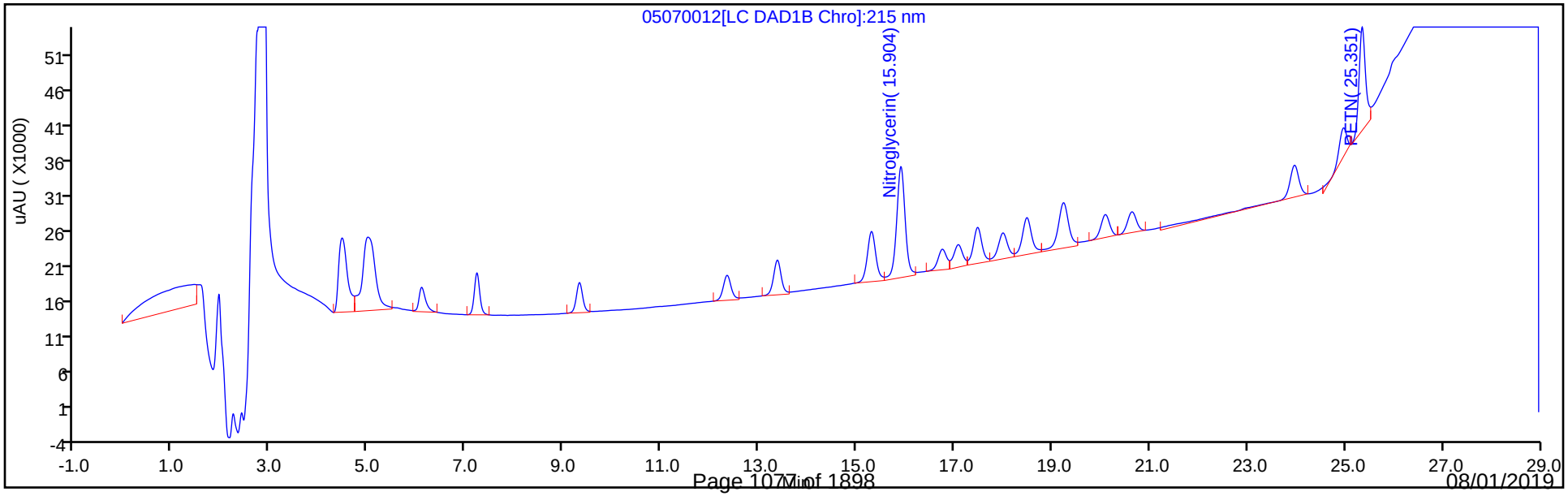
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070012.D

Injection Date:	07-May-2019 18:03:28	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC FULL LV 3			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070013.D
Lims ID: IC FULL LV 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-May-2019 18:38:27 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 2
Misc. Info.: 280-0081649-013
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 09-May-2019 08:13:37 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0337

First Level Reviewer: fiedlerh Date: 08-May-2019 09:04:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.460	4.446	0.014	20307	0.0500	0.0515	
2 2,4-diamino-6-nitrotoluene	1	5.007	4.993	0.014	13871	0.0500	0.0542	
5 2,4,6-Trinitrophenol	1	6.147	5.940	0.207	7600	0.0500	0.0491	a
6 HMX	1	7.220	7.200	0.020	8508	0.0500	0.0497	
8 RDX	1	9.314	9.300	0.014	10715	0.0500	0.0514	
9 Nitrobenzene	1	12.334	12.326	0.008	20607	0.0501	0.0508	
$ 10 1,2-Dinitrobenzene	1	13.360	13.346	0.014	13970	0.0500	0.0505	
11 3,5-Dinitroaniline	1	15.300	15.266	0.034	24136	0.0500	0.0507	
13 Nitroglycerin	2	15.900	15.873	0.027	103131	0.5000	0.5345	
12 1,3-Dinitrobenzene	1	15.907	15.880	0.027	31682	0.0501	0.0498	
14 o-Nitrotoluene	1	16.740	16.720	0.020	12970	0.0502	0.0495	
15 p-Nitrotoluene	1	17.067	17.053	0.014	11283	0.0502	0.0498	
16 4-Amino-2,6-dinitrotoluene	1	17.467	17.440	0.027	14792	0.0502	0.0497	
17 m-Nitrotoluene	1	17.980	17.966	0.014	14601	0.0502	0.0499	
18 2-Amino-4,6-dinitrotoluene	1	18.480	18.446	0.034	21339	0.0502	0.0496	
19 1,3,5-Trinitrobenzene	1	19.227	19.213	0.014	22700	0.0500	0.0496	
20 2,6-Dinitrotoluene	1	20.087	20.073	0.014	14708	0.0502	0.0501	
21 2,4-Dinitrotoluene	1	20.634	20.620	0.014	29202	0.0501	0.0513	
22 Tetryl	1	23.974	23.966	0.008	15280	0.0500	0.0486	
23 2,4,6-Trinitrotoluene	1	24.960	24.953	0.007	19932	0.0502	0.0489	
24 PETN	2	25.360	25.353	0.007	72383	0.5000	0.5468	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

8330IntermStk_00058	Amount Added:	2.50	Units: uL
8330_ADDs_00021	Amount Added:	2.50	Units: uL

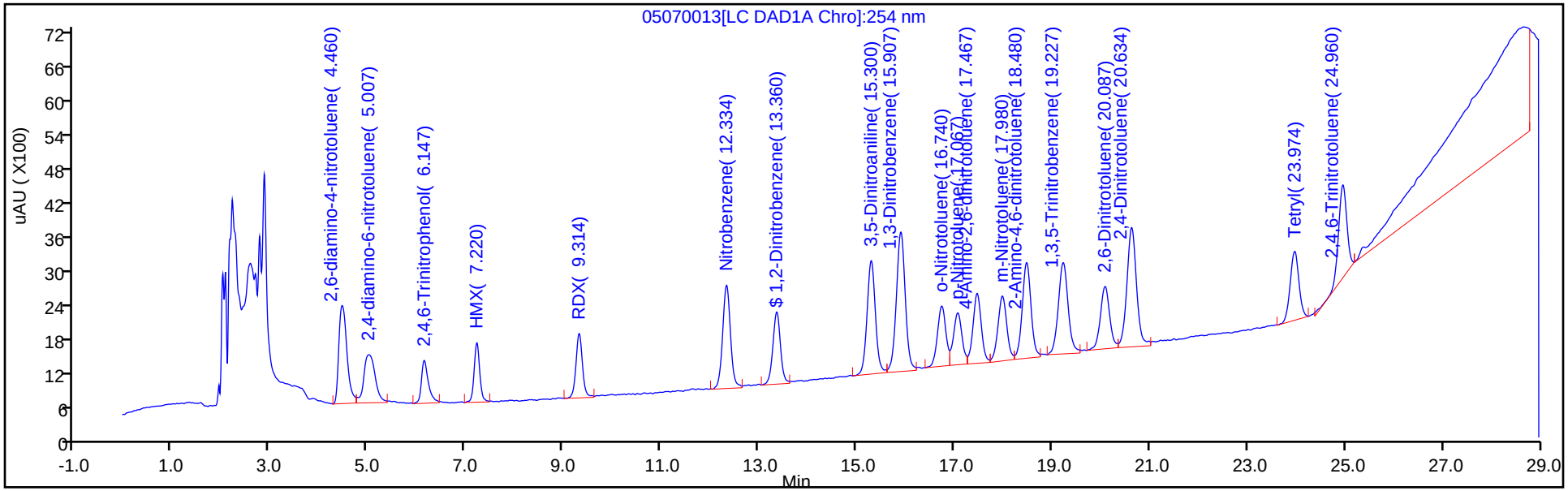
Report Date: 09-May-2019 08:13:37 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

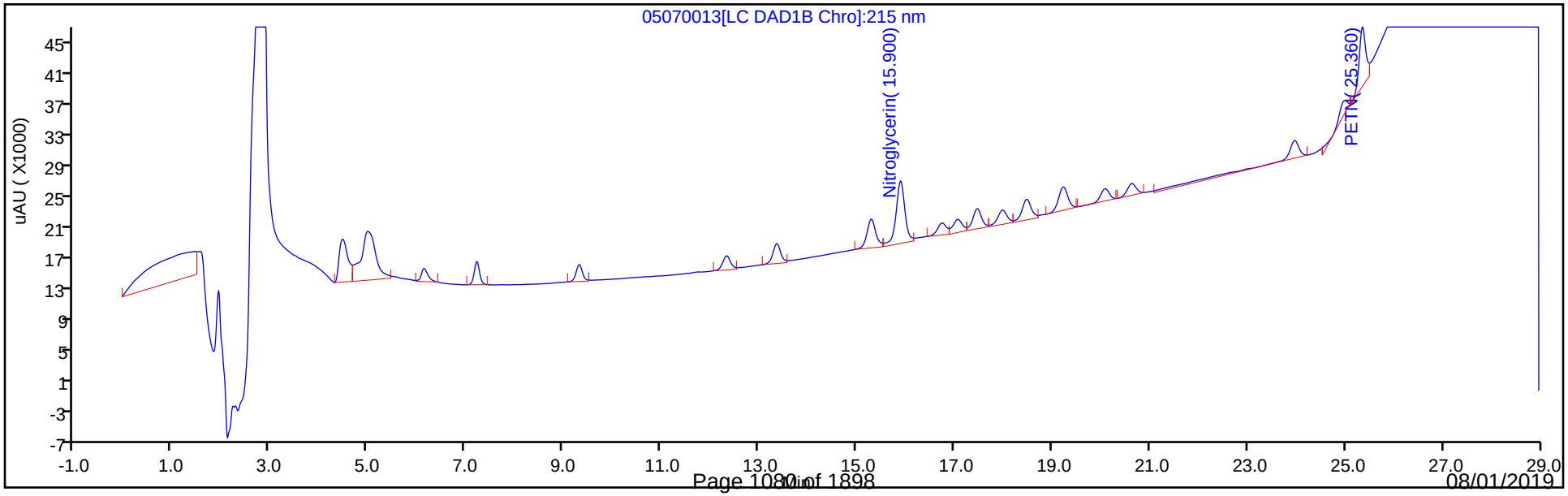
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070013.D

Injection Date:	07-May-2019 18:38:27	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC FULL LV 2			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

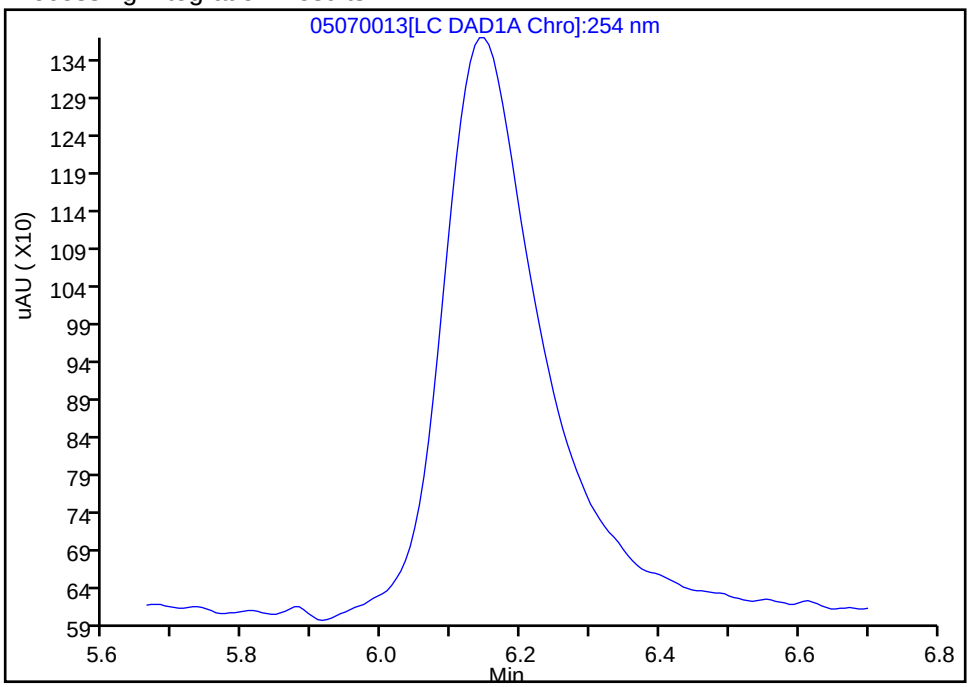
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070013.D				
Injection Date:	07-May-2019 18:38:27	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 2				
Client ID:					
Operator ID:	HKF	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

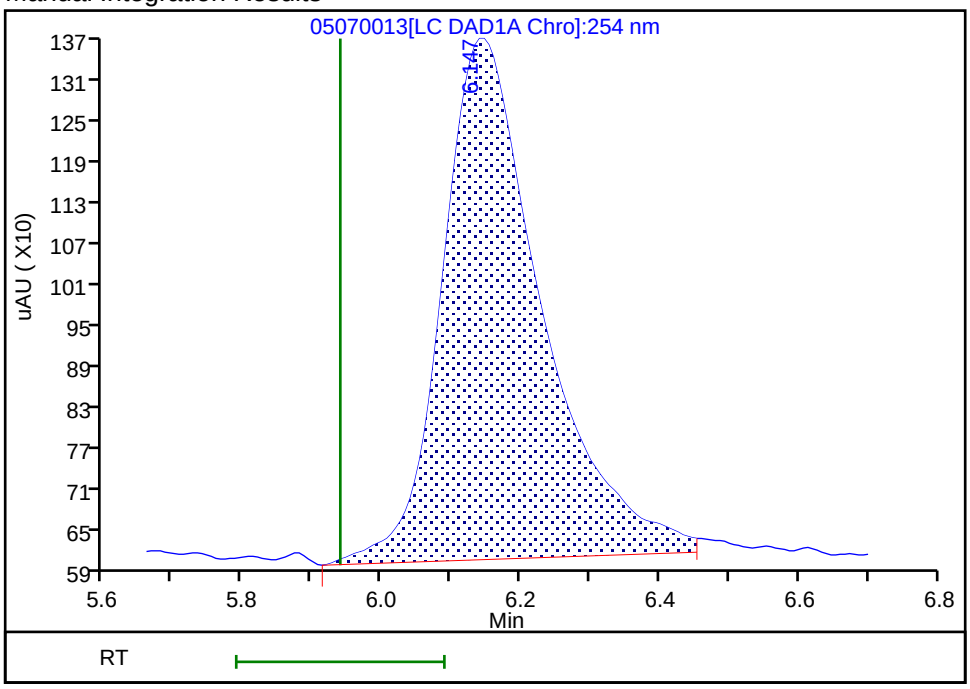
Not Detected
Expected RT: 5.94

Processing Integration Results



Manual Integration Results

RT: 6.15
Area: 7600
Amount: 0.049058
Amount Units: ug/ml



Reviewer: fiedlerh, 08-May-2019 09:04:38
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D
Lims ID: IC FULL LV 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-May-2019 19:13:24 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL LV 1
Misc. Info.: 280-0081649-014
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 09-May-2019 08:13:38 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0337

First Level Reviewer: fiedlerh Date: 08-May-2019 09:04:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.466	4.446	0.020	9763	0.0200	0.0247	
2 2,4-diamino-6-nitrotoluene	1	5.006	4.993	0.013	6110	0.0200	0.0239	
5 2,4,6-Trinitrophenol	1	6.206	5.940	0.266	2864	0.0200	0.0185	a
6 HMX	1	7.232	7.200	0.032	3734	0.0200	0.0218	
8 RDX	1	9.326	9.300	0.026	4177	0.0200	0.0200	
9 Nitrobenzene	1	12.332	12.326	0.006	7963	0.0200	0.0196	
$ 10 1,2-Dinitrobenzene	1	13.359	13.346	0.013	5816	0.0200	0.0210	
11 3,5-Dinitroaniline	1	15.292	15.266	0.026	9783	0.0200	0.0201	
13 Nitroglycerin	2	15.892	15.873	0.019	46139	0.2000	0.2391	
12 1,3-Dinitrobenzene	1	15.899	15.880	0.019	13519	0.0200	0.0213	
14 o-Nitrotoluene	1	16.732	16.720	0.012	5190	0.0201	0.0198	
15 p-Nitrotoluene	1	17.066	17.053	0.013	4550	0.0201	0.0201	
16 4-Amino-2,6-dinitrotoluene	1	17.459	17.440	0.019	6001	0.0201	0.0202	
17 m-Nitrotoluene	1	17.979	17.966	0.013	5964	0.0201	0.0204	
18 2-Amino-4,6-dinitrotoluene	1	18.479	18.446	0.033	9366	0.0201	0.0218	
19 1,3,5-Trinitrobenzene	1	19.226	19.213	0.013	10187	0.0200	0.0223	
20 2,6-Dinitrotoluene	1	20.086	20.073	0.013	6648	0.0201	0.0227	
21 2,4-Dinitrotoluene	1	20.632	20.620	0.012	12102	0.0200	0.0213	
22 Tetryl	1	23.972	23.966	0.006	5354	0.0200	0.0170	
23 2,4,6-Trinitrotoluene	1	24.952	24.953	-0.001	8061	0.0201	0.0198	
24 PETN	2	25.366	25.353	0.013	23673	0.2000	0.1788	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00058	Amount Added:	1.00	Units: uL
8330_ADDs_00021	Amount Added:	1.00	Units: uL

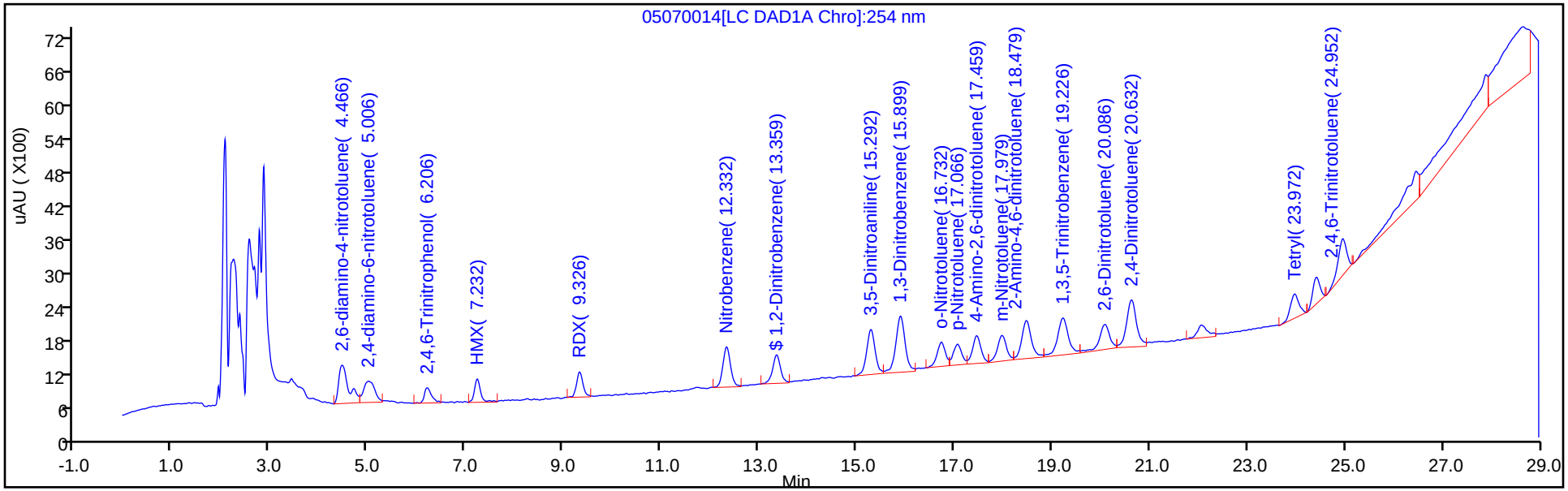
Report Date: 09-May-2019 08:13:38 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

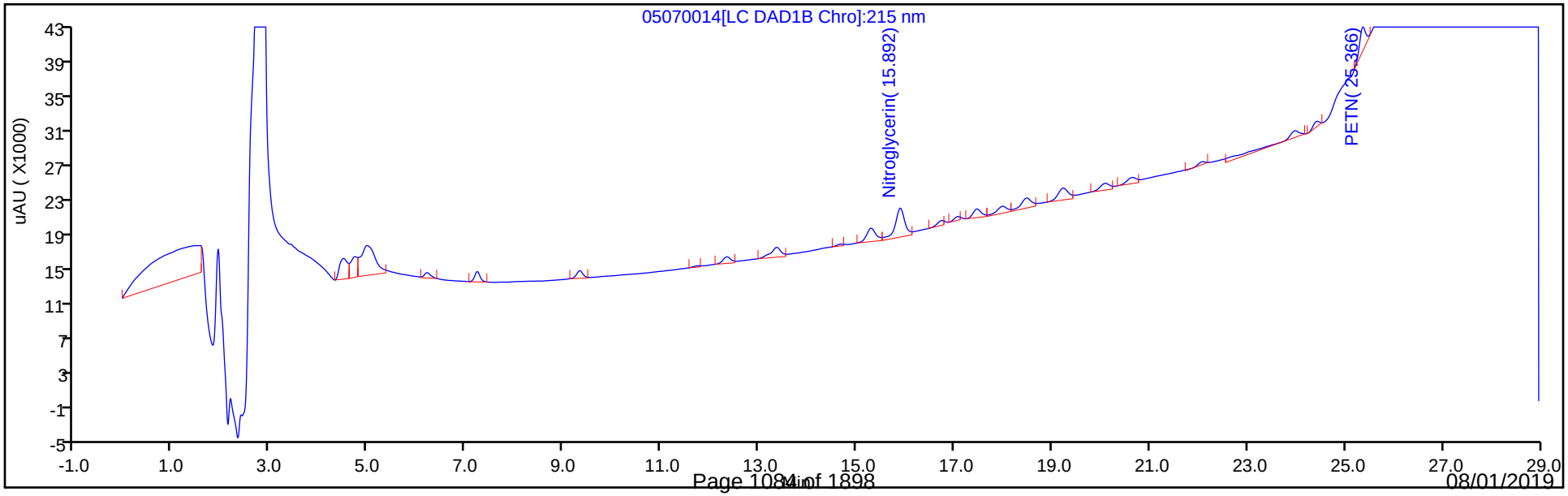
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D

Injection Date:	07-May-2019 19:13:24	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC FULL LV 1			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

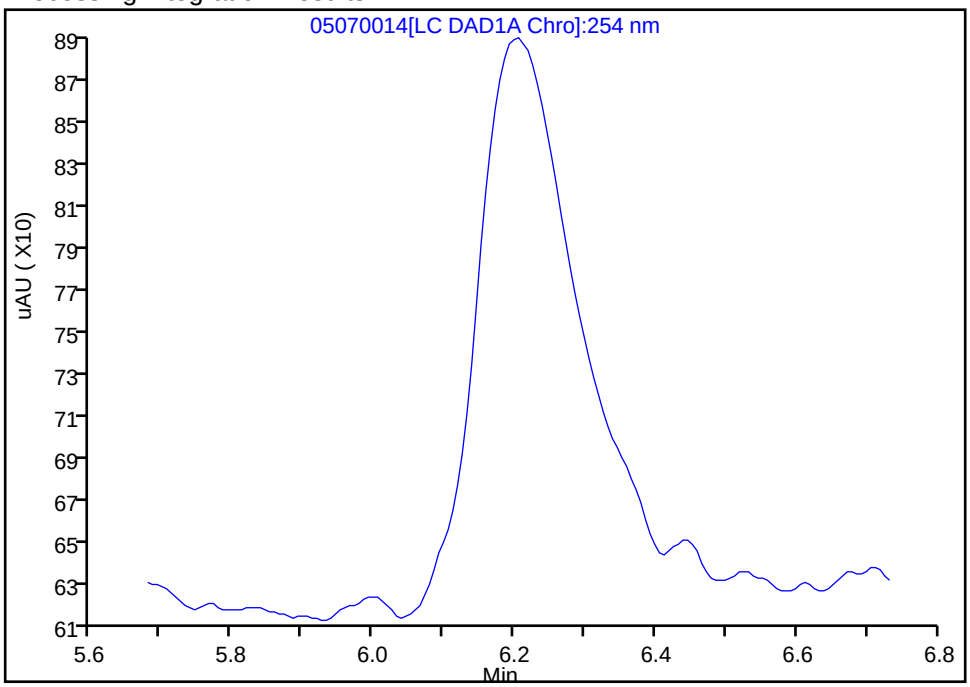
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D				
Injection Date:	07-May-2019 19:13:24	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 1				
Client ID:					
Operator ID:	HKF	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

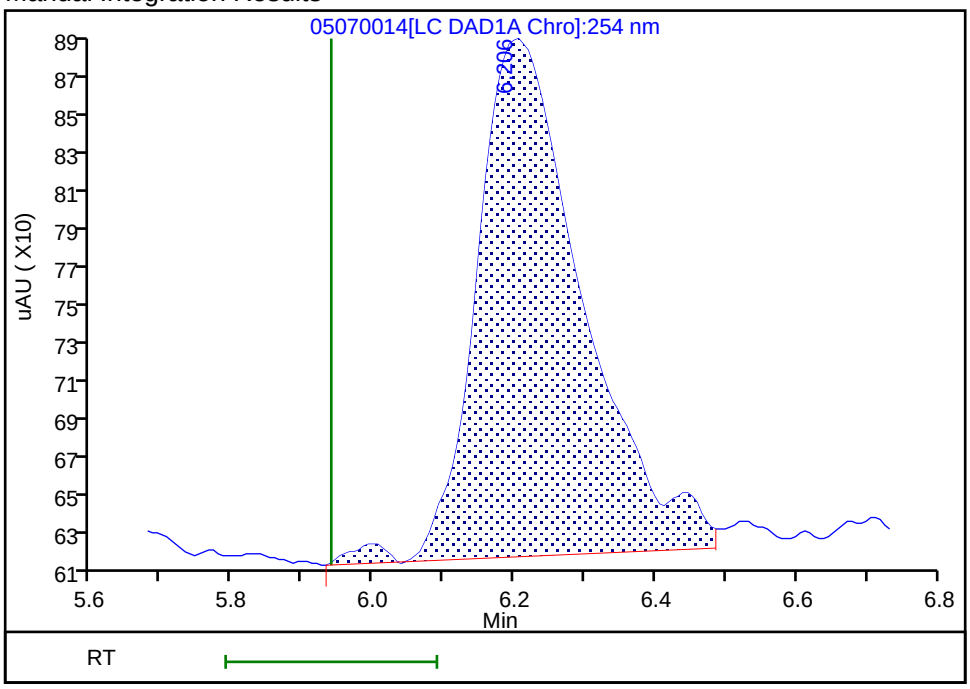
Not Detected
Expected RT: 5.94

Processing Integration Results



Manual Integration Results

RT: 6.21
Area: 2864
Amount: 0.018487
Amount Units: ug/ml



Reviewer: fiedlerh, 08-May-2019 09:04:54
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

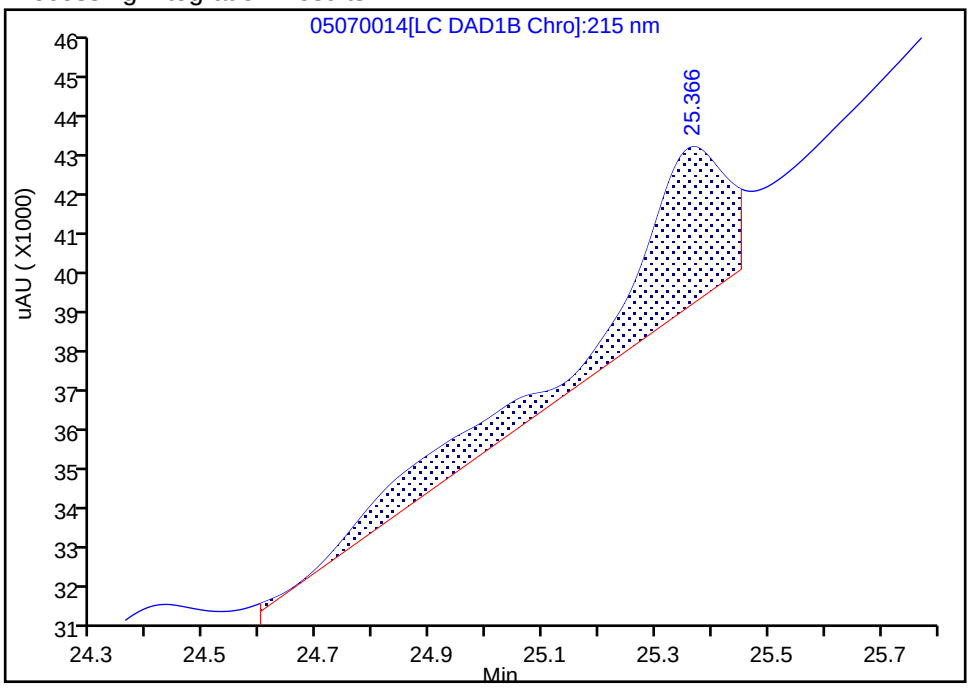
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D				
Injection Date:	07-May-2019 19:13:24	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL LV 1				
Client ID:					
Operator ID:	HKF	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

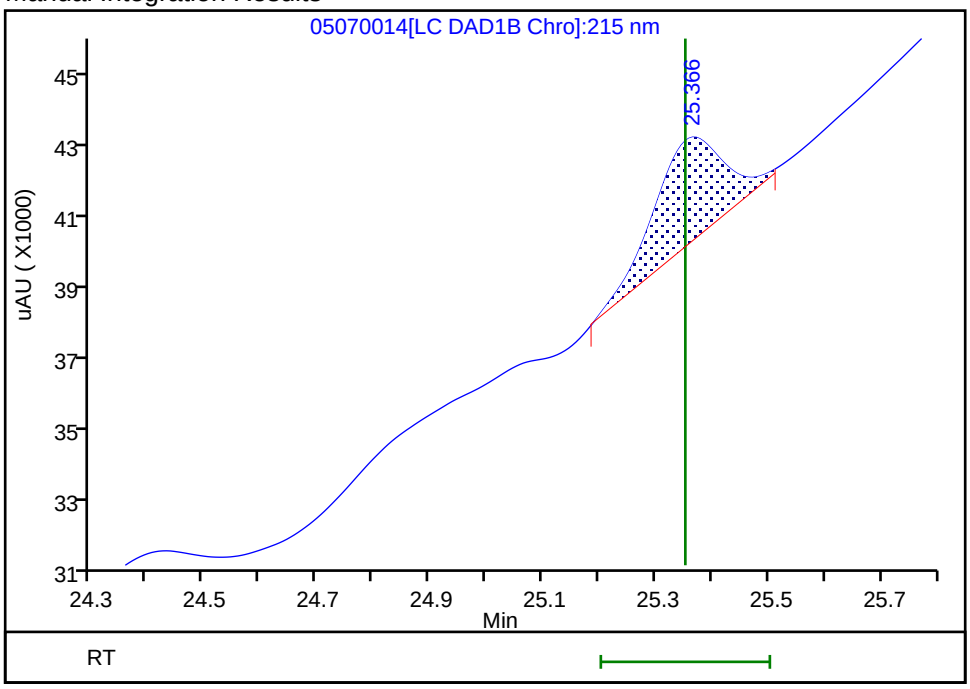
Processing Integration Results

RT: 25.37
Area: 54813
Amount: 0.289335
Amount Units: ug/ml



Manual Integration Results

RT: 25.37
Area: 23673
Amount: 0.178848
Amount Units: ug/ml



Reviewer: fiedlerh, 08-May-2019 09:10:18

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 20:23 Calibration End Date: 05/08/2019 00:28 Calibration ID: 36293

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/23	05070023.D
Level 2	IC 280-457315/22	05070022.D
Level 3	IC 280-457315/21	05070021.D
Level 4	IC 280-457315/20	05070020.D
Level 5	IC 280-457315/19	05070019.D
Level 6	IC 280-457315/18	05070018.D
Level 7	IC 280-457315/17	05070017.D
Level 8	IC 280-457315/16	05070016.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.515	5.513	5.515	5.509	5.512	5.508	5.504	5.487			5.362 - 5.662	5.508
DNX	6.342	6.340	6.342	6.336	6.338	6.335	6.331	6.307			6.188 - 6.488	6.334
MNX	7.895	7.893	7.895	7.889	7.892	7.888	7.878	7.854			7.742 - 8.042	7.886

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 20:23 Calibration End Date: 05/08/2019 00:28 Calibration ID: 36293

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/23	05070023.D
Level 2	IC 280-457315/22	05070022.D
Level 3	IC 280-457315/21	05070021.D
Level 4	IC 280-457315/20	05070020.D
Level 5	IC 280-457315/19	05070019.D
Level 6	IC 280-457315/18	05070018.D
Level 7	IC 280-457315/17	05070017.D
Level 8	IC 280-457315/16	05070016.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	422128 395292	396723 399087	396094 407781	387469 422841	Ave		403426.800				3.2		20.0			
DNX	298701 284323	290450 286481	286064 291186	280803 301043	Ave		289881.274				2.4		20.0			
MNX	284961 262230	268672 264920	268115 269398	261049 276853	Ave		269524.800				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 457315

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/07/2019 20:23 Calibration End Date: 05/08/2019 00:28 Calibration ID: 36293

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-457315/23	05070023.D
Level 2	IC 280-457315/22	05070022.D
Level 3	IC 280-457315/21	05070021.D
Level 4	IC 280-457315/20	05070020.D
Level 5	IC 280-457315/19	05070019.D
Level 6	IC 280-457315/18	05070018.D
Level 7	IC 280-457315/17	05070017.D
Level 8	IC 280-457315/16	05070016.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	8451 279640	19856 408189	39649 1058159	96964	158275	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	5980 200737	14537 291477	28635 753359	70271	113843	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	6651 216413	15677 314388	31289 807719	76161	122409	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070016.D				
Lims ID:	IC DMT L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	07-May-2019 20:23:21	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L8				
Misc. Info.:	280-0081649-016				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-May-2019 09:13:55	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0325				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.487	5.512	-0.025	1058159	2.50	2.62	
4 DNX	1	6.307	6.338	-0.031	753359	2.50	2.60	
7 MNX	1	7.854	7.892	-0.038	807719	2.92	3.00	

Reagents:

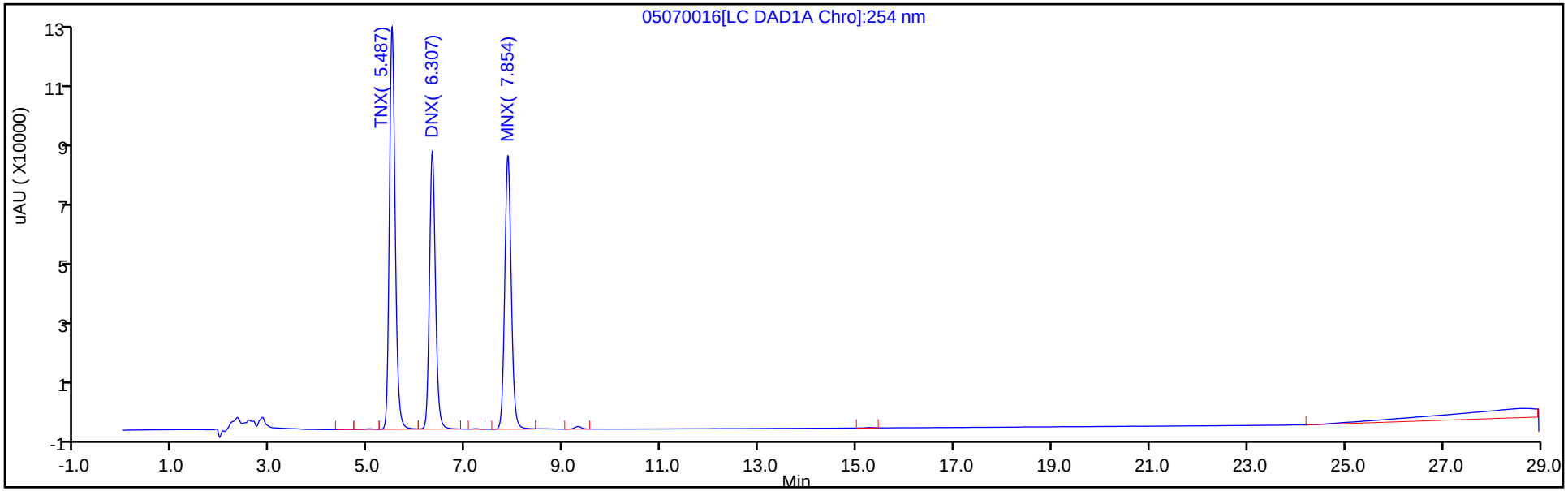
8330 DMT_00002 Amount Added: 125.00 Units: uL

Report Date: 08-May-2019 09:13:56 Chrom Revision: 2.3 03-May-2019 15:52:00

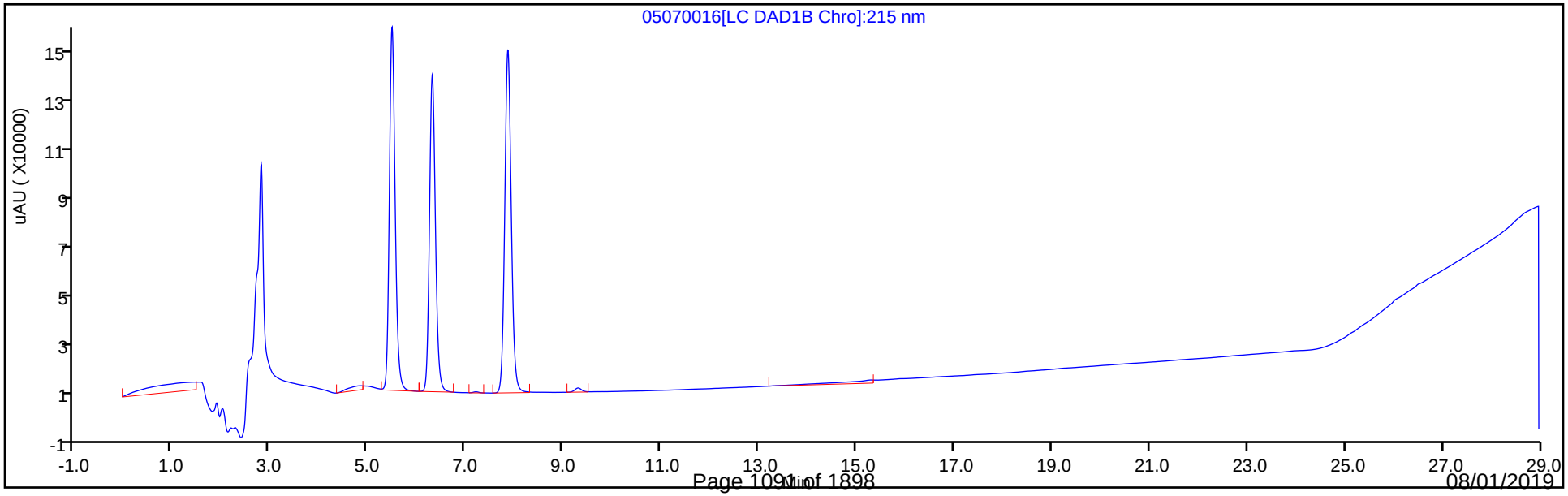
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070016.D				
Injection Date:	07-May-2019 20:23:21	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC DMT L8			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070017.D				
Lims ID:	IC DMT L7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	07-May-2019 20:58:21	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L7				
Misc. Info.:	280-0081649-017				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-May-2019 09:13:56	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0325				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.504	5.512	-0.008	408189	1.00	1.01	
4 DNX	1	6.331	6.338	-0.007	291477	1.00	1.01	
7 MNX	1	7.878	7.892	-0.014	314388	1.17	1.17	

Reagents:

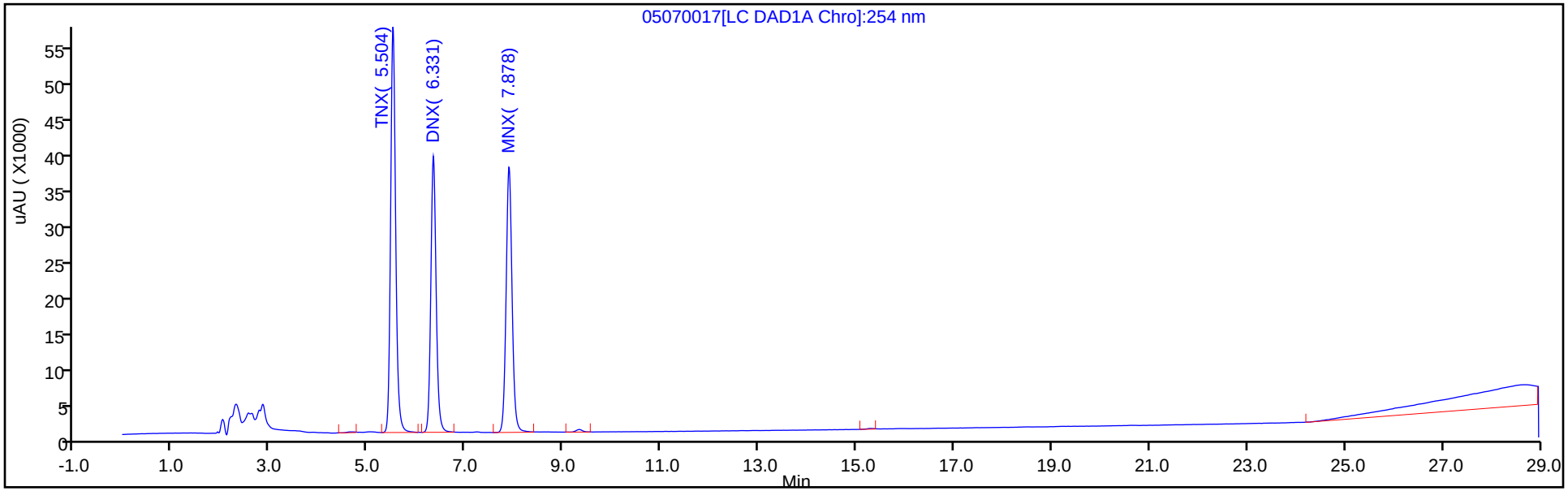
8330 DMT_00002 Amount Added: 50.00 Units: uL

Report Date: 08-May-2019 09:13:57 Chrom Revision: 2.3 03-May-2019 15:52:00

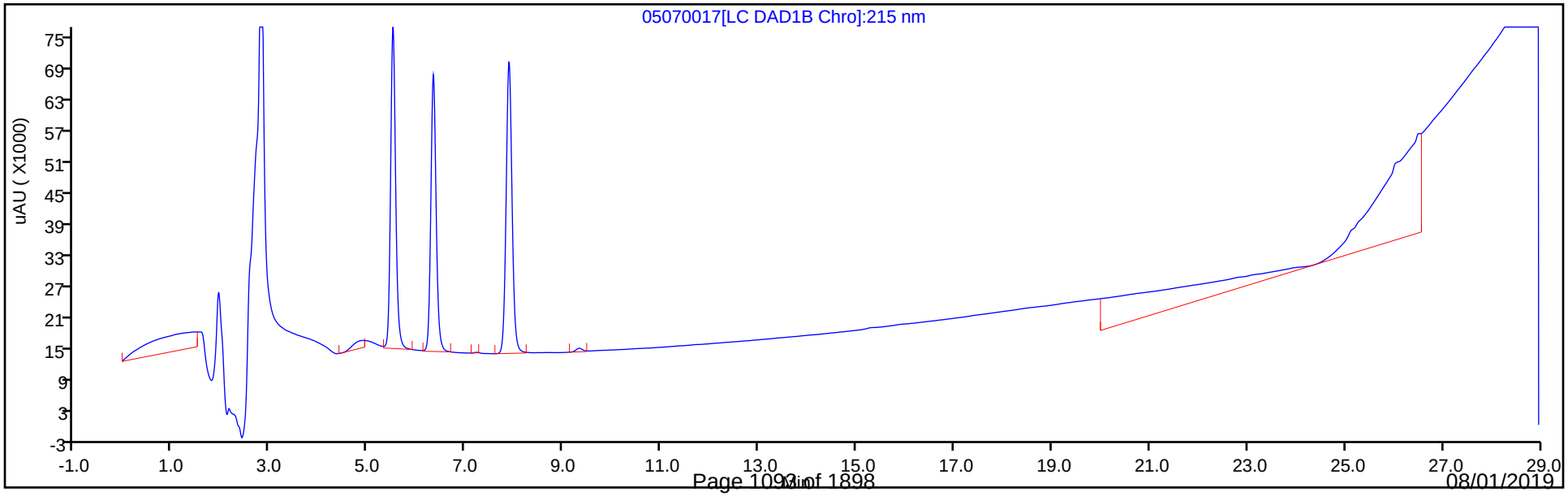
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070017.D				
Injection Date:	07-May-2019 20:58:21	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC DMT L7			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070018.D				
Lims ID:	IC DMT L6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	07-May-2019 21:33:21	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L6				
Misc. Info.:	280-0081649-018				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-May-2019 09:13:58	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0325				
First Level Reviewer: fiedlerh		Date:	08-May-2019 09:07:18		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.508	5.512	-0.004	279640	0.7007	0.6932	
4 DNX	1	6.335	6.338	-0.003	200737	0.7007	0.6925	
7 MNX	1	7.888	7.892	-0.004	216413	0.8169	0.8029	

Reagents:

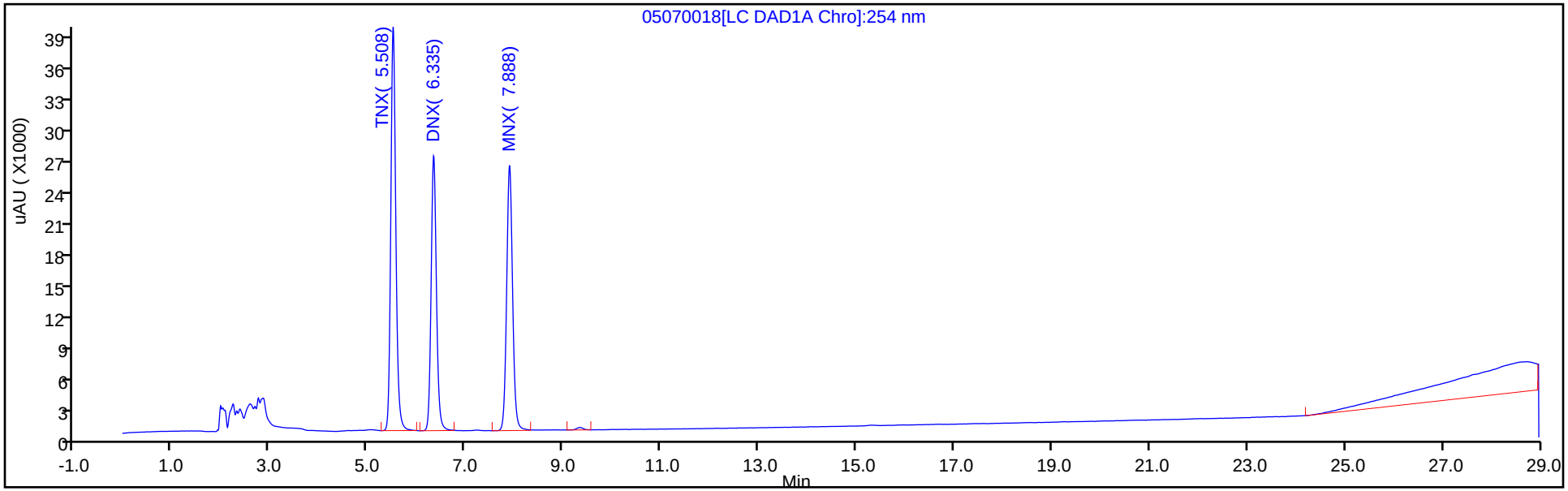
8330 DMT_00002 Amount Added: 35.00 Units: uL

Report Date: 08-May-2019 09:13:58 Chrom Revision: 2.3 03-May-2019 15:52:00

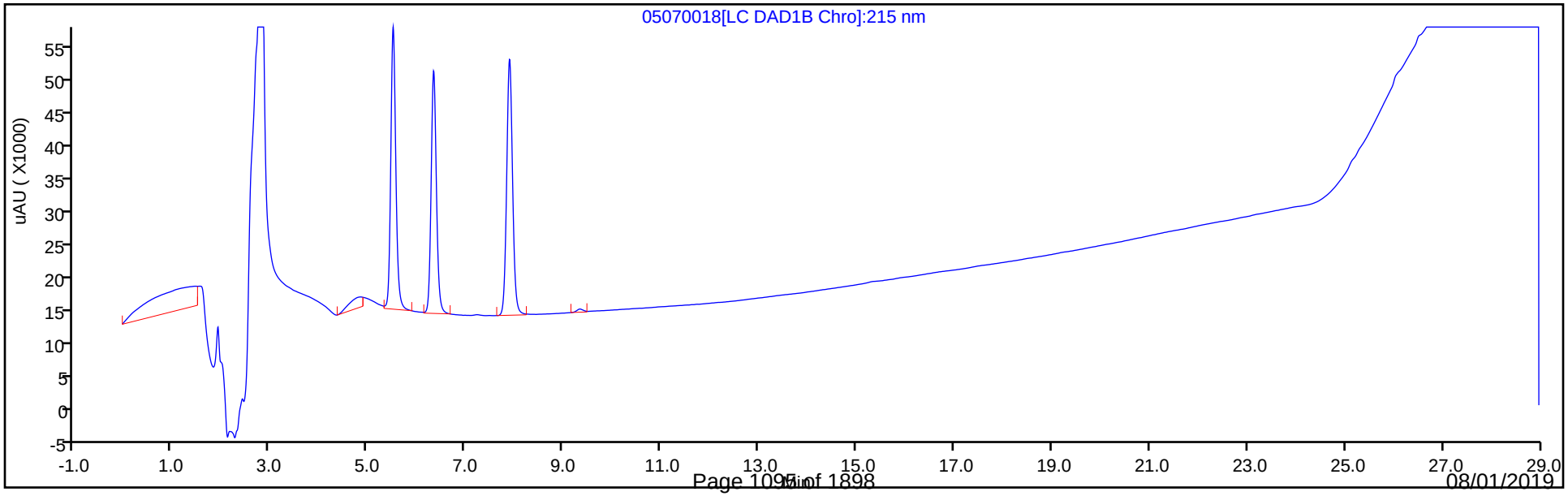
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070018.D				
Injection Date:	07-May-2019 21:33:21	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC DMT L6			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070019.D				
Lims ID:	IC DMT L5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	07-May-2019 22:08:20	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L5				
Misc. Info.:	280-0081649-019				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-May-2019 09:13:59	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0325				
First Level Reviewer: fiedlerh		Date:	08-May-2019 09:07:14		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.512	5.512	0.000	158275	0.4004	0.3923	
4 DNX	1	6.338	6.338	0.000	113843	0.4004	0.3927	
7 MNX	1	7.892	7.892	0.000	122409	0.4668	0.4542	

Reagents:

8330 DMT_00002 Amount Added: 20.00 Units: uL

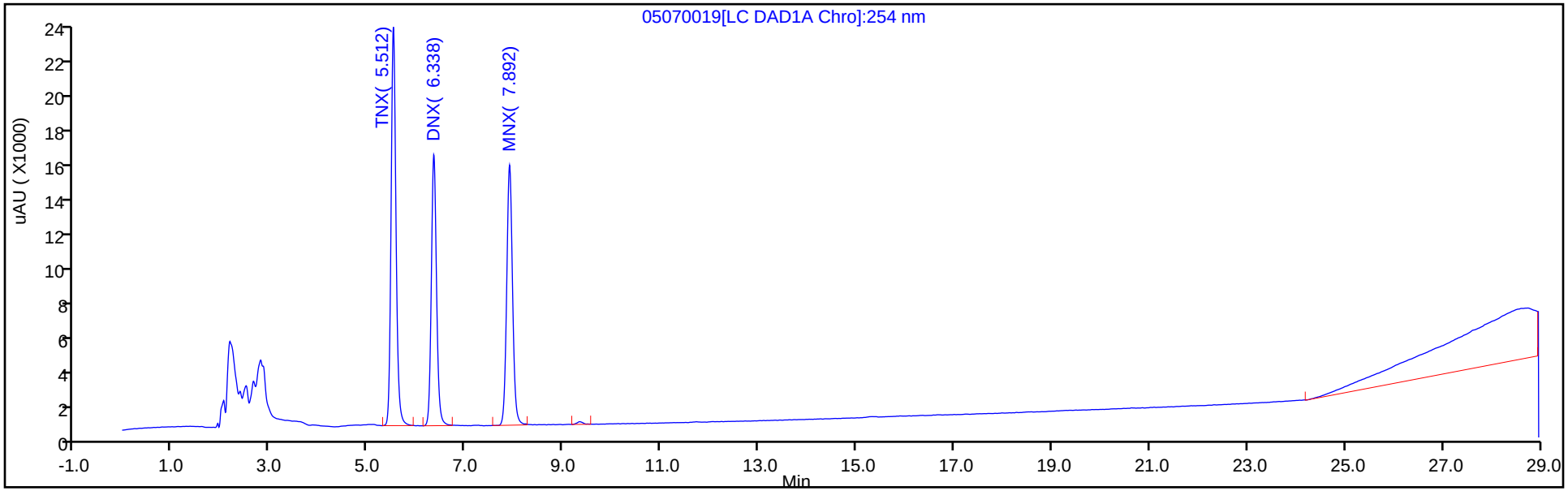
Report Date: 08-May-2019 09:13:59 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

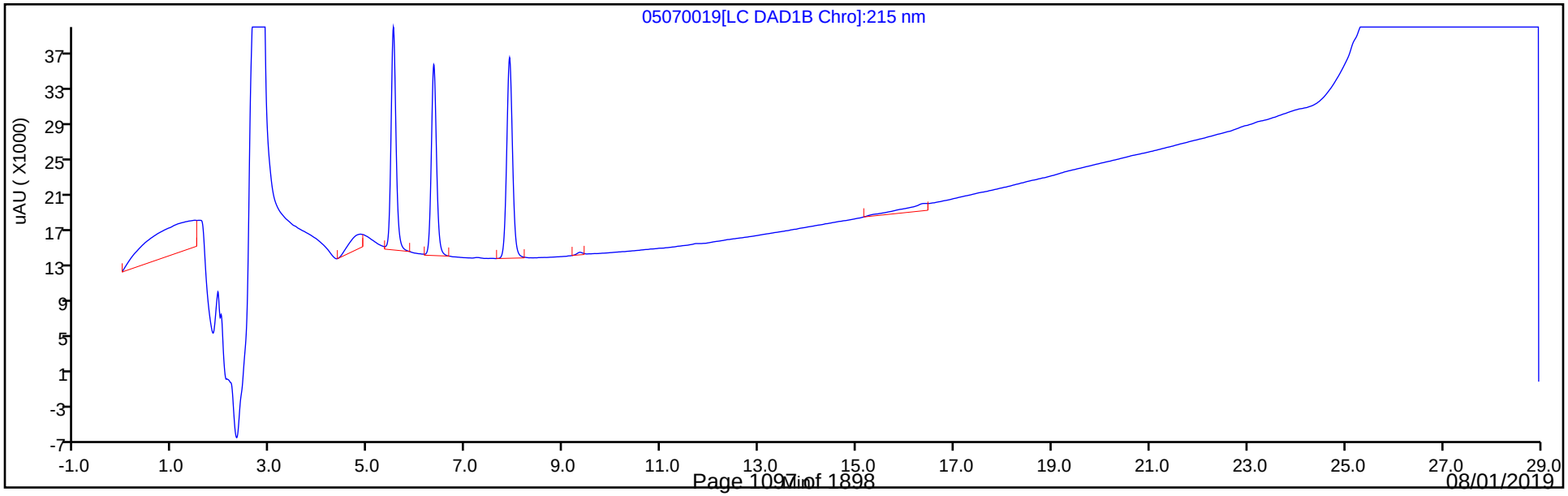
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070019.D

Injection Date:	07-May-2019 22:08:20	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC DMT L5			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070020.D
Lims ID: IC DMT L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-May-2019 22:43:18 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L4
Misc. Info.: 280-0081649-020
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub13

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-May-2019 09:14:00 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0325

First Level Reviewer: fiedlerh Date: 08-May-2019 09:07:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.509	5.512	-0.003	96964	0.2503	0.2404	
4 DNX	1	6.336	6.338	-0.002	70271	0.2503	0.2424	
7 MNX	1	7.889	7.892	-0.003	76161	0.2918	0.2826	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

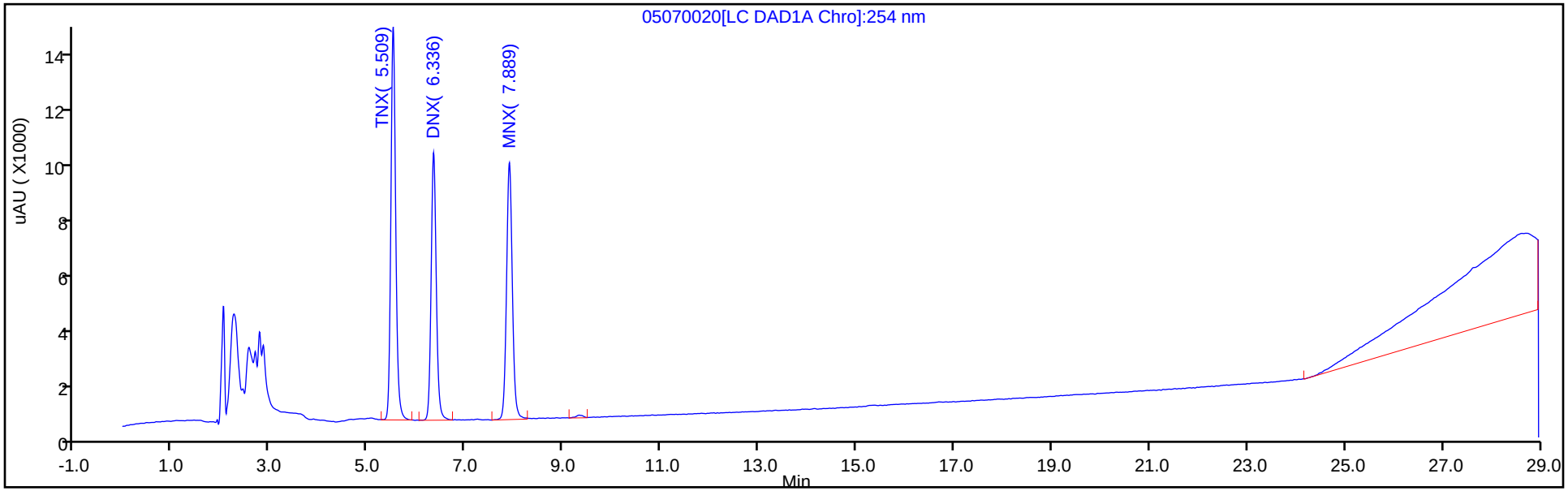
Report Date: 08-May-2019 09:14:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

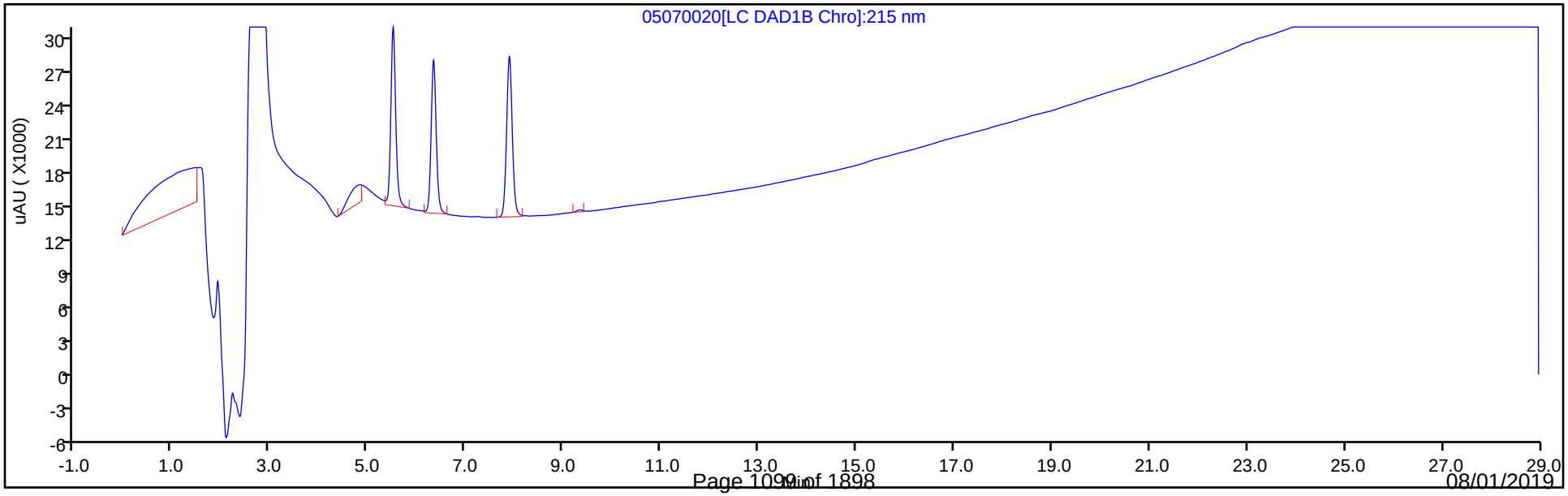
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070020.D

Injection Date:	07-May-2019 22:43:18	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC DMT L4			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070021.D				
Lims ID:	IC DMT L3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	07-May-2019 23:18:20	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L3				
Misc. Info.:	280-0081649-021				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-May-2019 09:14:01	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0325				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.515	5.512	0.003	39649	0.1001	0.0983	
4 DNX	1	6.342	6.338	0.004	28635	0.1001	0.0988	
7 MNX	1	7.895	7.892	0.003	31289	0.1167	0.1161	

Reagents:

8330 DMT_00002 Amount Added: 5.00 Units: uL

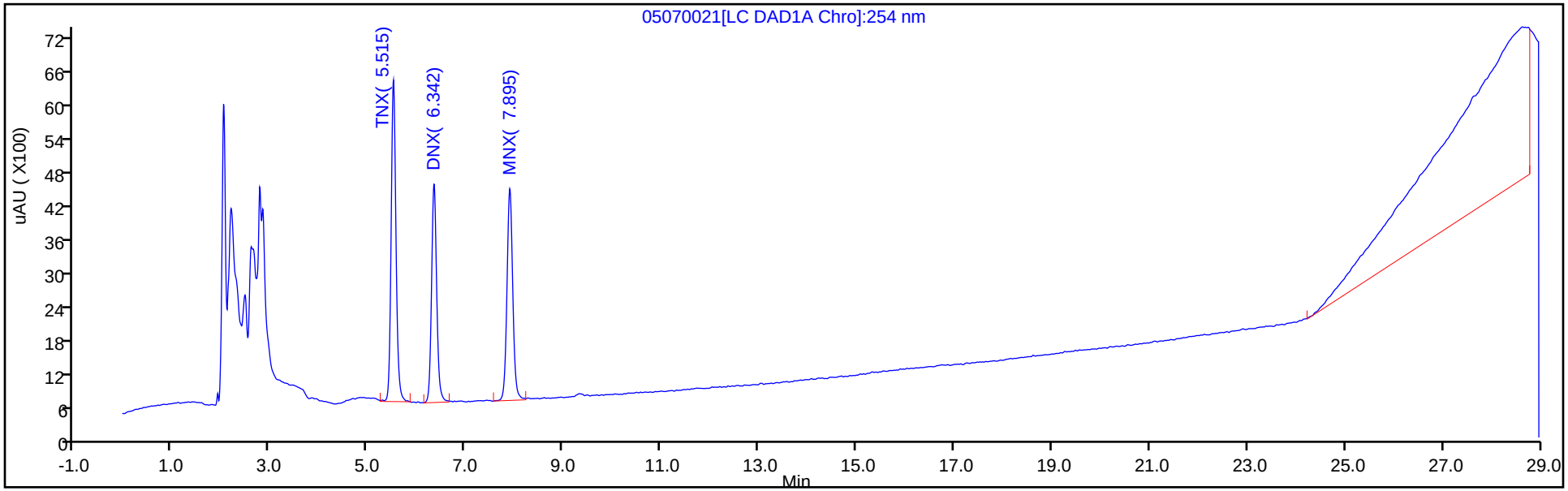
Report Date: 08-May-2019 09:14:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

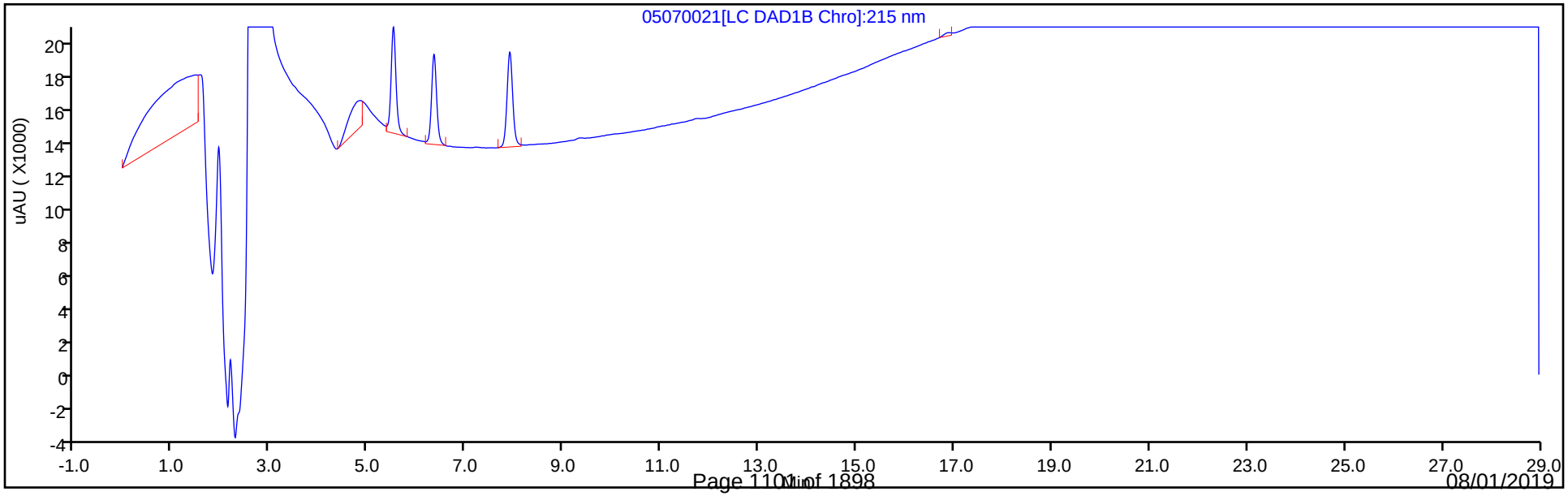
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070021.D

Injection Date:	07-May-2019 23:18:20	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC DMT L3			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070022.D				
Lims ID:	IC DMT L2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	07-May-2019 23:53:26	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L2				
Misc. Info.:	280-0081649-022				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-May-2019 09:14:03	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0325				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.513	5.512	0.001	19856	0.0501	0.0492	
4 DNX	1	6.340	6.338	0.002	14537	0.0501	0.0501	
7 MNX	1	7.893	7.892	0.001	15677	0.0584	0.0582	

Reagents:

8330 DMT_00002 Amount Added: 2.50 Units: uL

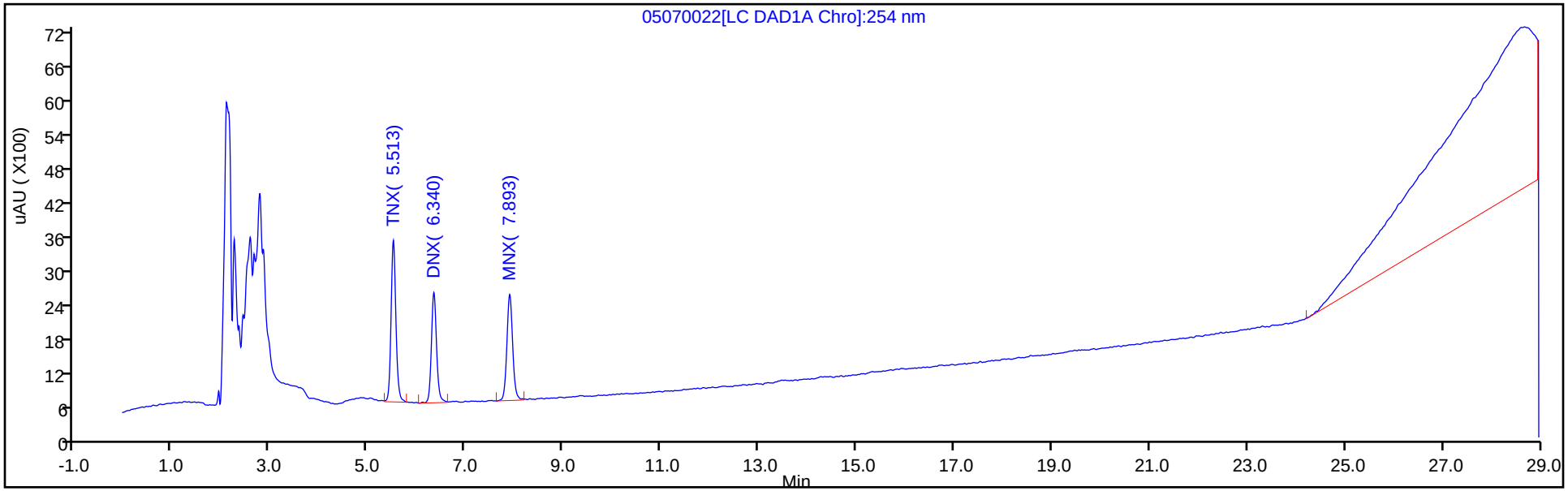
Report Date: 08-May-2019 09:14:03 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

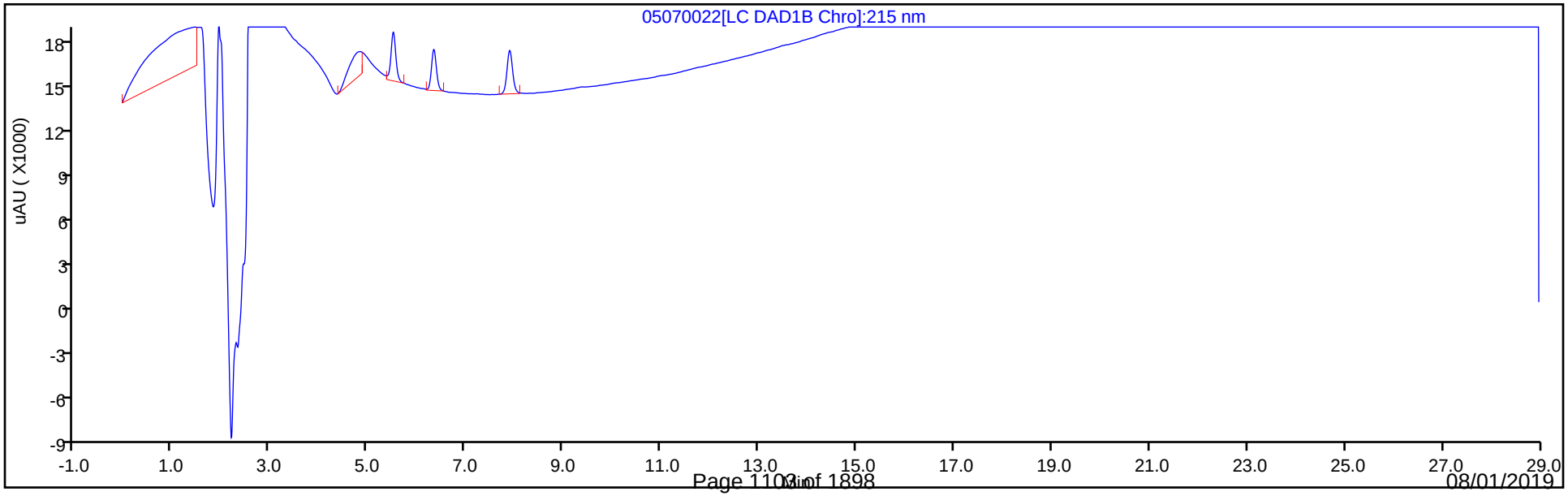
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070022.D

Injection Date:	07-May-2019 23:53:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC DMT L2			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Lims ID:	IC DMT L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	08-May-2019 00:28:23	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L1				
Misc. Info.:	280-0081649-023				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-May-2019 09:14:04	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0325				
First Level Reviewer: fiedlerh		Date:	08-May-2019 09:08:14		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.515	5.512	0.003	8451	0.0200	0.0209	
4 DNX	1	6.342	6.338	0.004	5980	0.0200	0.0206	
7 MNX	1	7.895	7.892	0.003	6651	0.0233	0.0247	

Reagents:

8330 DMT_00002 Amount Added: 1.00 Units: uL

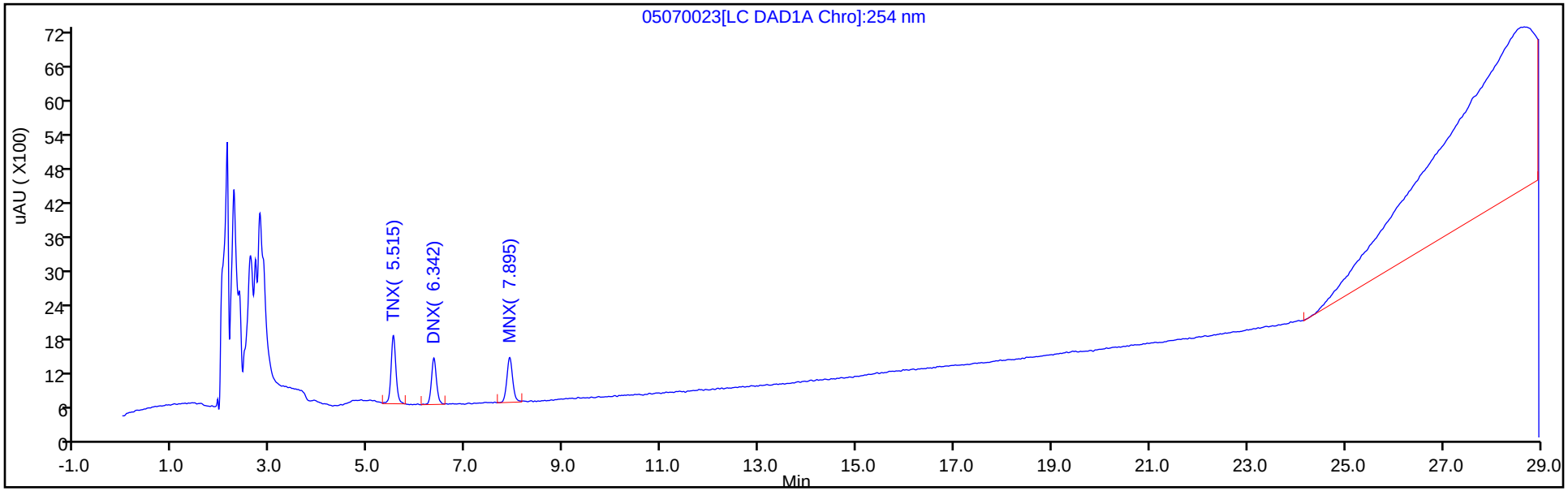
Report Date: 08-May-2019 09:14:04 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

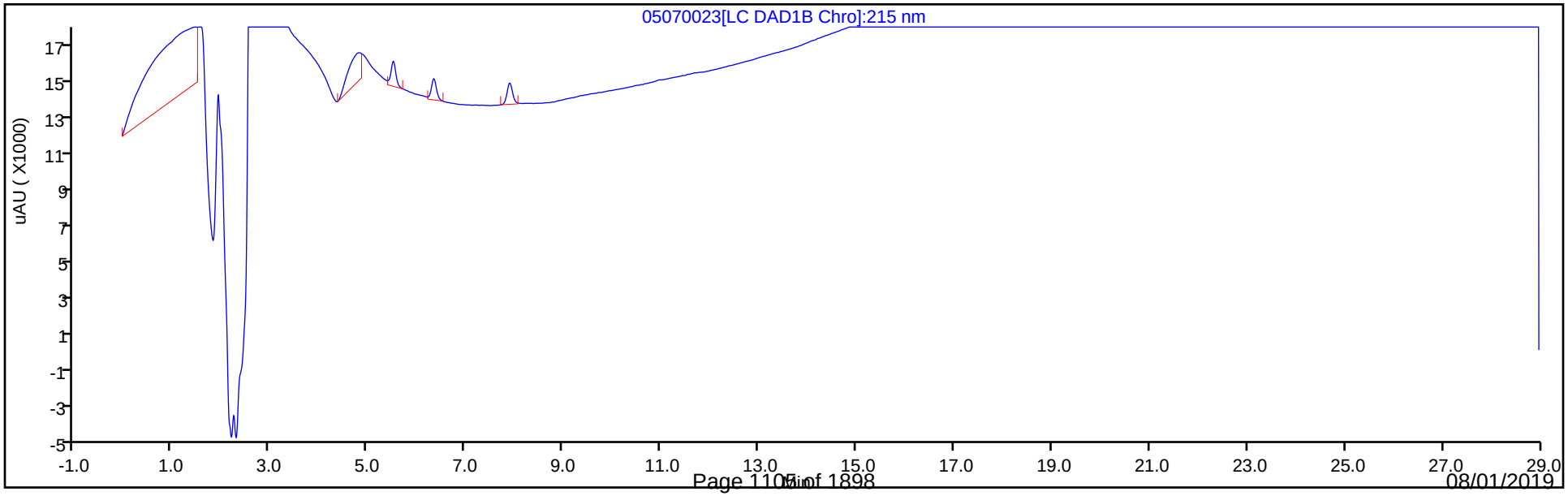
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Injection Date:	08-May-2019 00:28:23	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	IC DMT L1			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 458150

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/14	0514B014.D
Level 2	IC 280-458150/13	0514B013.D
Level 3	IC 280-458150/12	0514B012.D
Level 4	IC 280-458150/11	0514B011.D
Level 5	IC 280-458150/10	0514B010.D
Level 6	IC 280-458150/9	0514B009.D
Level 7	IC 280-458150/8	0514B008.D
Level 8	IC 280-458150/7	0514B007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
HMX	6.657	6.655	6.656	6.661	6.658	6.653	6.654	6.654			6.500 - 6.800	6.656
RDX	7.763	7.768	7.769	7.774	7.771	7.767	7.767	7.761			7.614 - 7.914	7.768
Picric acid	8.157	8.155	8.149	8.147	8.138	8.120	8.107	8.054			7.980 - 8.280	8.128
1,3,5-Trinitrobenzene	8.910	8.908	8.909	8.914	8.911	8.907	8.901	8.901			8.754 - 9.054	8.908
1,3-Dinitrobenzene	9.576	9.568	9.569	9.581	9.577	9.567	9.567	9.567			9.414 - 9.714	9.572
Nitrobenzene	9.963	9.955	9.956	9.967	9.964	9.953	9.954	9.954			9.800 - 10.100	9.958
Tetryl	10.296	10.281	10.283	10.301	10.291	10.280	10.280	10.287			10.134 - 10.434	10.287
Nitroglycerin	10.803	10.788	10.789	10.807	10.797	10.780	10.780	10.781			10.634 - 10.934	10.791
2,4,6-Trinitrotoluene	11.256	11.241	11.243	11.261	11.251	11.240	11.240	11.241			11.137 - 11.337	11.247
4-Amino-2,6-dinitrotoluene	11.443	11.435	11.429	11.454	11.444	11.427	11.427	11.434			11.330 - 11.530	11.437
2-Amino-4,6-dinitrotoluene	11.736	11.721	11.723	11.747	11.737	11.720	11.720	11.721			11.617 - 11.817	11.728
2,6-Dinitrotoluene	11.870	11.848	11.856	11.874	11.864	11.853	11.854	11.854			11.750 - 11.950	11.859
2,4-Dinitrotoluene	12.070	12.055	12.056	12.081	12.064	12.047	12.054	12.054			11.950 - 12.150	12.060
2-Nitrotoluene	12.916	12.895	12.889	12.921	12.904	12.887	12.894	12.887			12.740 - 13.040	12.899
4-Nitrotoluene	13.330	13.341	13.329	13.361	13.344	13.327	13.334	13.327			13.180 - 13.480	13.337
3-Nitrotoluene	13.943	13.935	13.929	13.961	13.944	13.920	13.934	13.927			13.780 - 14.080	13.937
PETN	15.036	15.021	15.016	15.061	15.037	15.007	15.027	15.021			14.874 - 15.174	15.028
1,2-Dinitrobenzene	8.750	8.748	8.749	8.754	8.751	8.747	8.741	8.741			8.594 - 8.894	8.748

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 458150

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/14	0514B014.D
Level 2	IC 280-458150/13	0514B013.D
Level 3	IC 280-458150/12	0514B012.D
Level 4	IC 280-458150/11	0514B011.D
Level 5	IC 280-458150/10	0514B010.D
Level 6	IC 280-458150/9	0514B009.D
Level 7	IC 280-458150/8	0514B008.D
Level 8	IC 280-458150/7	0514B007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	101150 87813	91100 86537	85040 87520	89540 84950	Ave		89206.1554				5.9		20.0			
RDX	114450 106500	109200 104197	101900 106825	108632 101411	Ave		106639.418				4.0		20.0			
Picric acid	95550 81538	84360 80240	81330 83745	84012 79571	Ave		83793.1625				6.1		20.0			
1,3,5-Trinitrobenzene	225250 240935	213340 236247	217640 235773	241580 223445	Ave		229276.293				4.7		20.0			
1,3-Dinitrobenzene	300799 304296	297682 301636	297453 303625	309858 291245	Ave		300824.194				1.8		20.0			
Nitrobenzene	192515 195881	194032 195955	194052 202210	203876 196095	Ave		196826.951				2.1		20.0			
Tetryl	161150 171098	160480 167927	168380 175552	172804 166254	Ave		167955.580				3.2		20.0			
Nitroglycerin	76640 70756	66784 69235	68189 69251	73513 65450	Ave		69977.1309				5.2		20.0			
2,4,6-Trinitrotoluene	235508 224482	230199 219408	223247 219991	226602 209307	Ave		223592.967				3.5		20.0			
4-Amino-2,6-dinitrotoluene	171236 161304	170688 159365	161555 159595	164650 151045	Ave		162429.755				4.0		20.0			
2-Amino-4,6-dinitrotoluene	195763 202094	198385 199393	197338 198295	201212 187801	Ave		197535.173				2.2		20.0			
2,6-Dinitrotoluene	162512 156633	159182 153450	157737 154332	160160 148773	Ave		156597.345				2.8		20.0			
2,4-Dinitrotoluene	295559 298897	301437 296449	297056 297932	305066 286981	Ave		297422.109				1.8		20.0			
2-Nitrotoluene	144467 129100	131625 127144	134088 127658	133109 123603	Ave		131349.229				4.8		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 458150

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
4-Nitrotoluene	115837 111566	120697 109078	113406 110796	113076 107275	Ave		112716.408				3.7		20.0			
3-Nitrotoluene	172958 144086	152131 142446	146673 138729	151183 138243	Ave		148306.351				7.6		20.0			
PETN	67805 76433	70610 75180	73478 75418	76547 70058	Ave		73191.2127				4.5		20.0			
1,2-Dinitrobenzene	121600 135710	122220 134553	124840 135315	137172 129475	Ave		130110.582				5.0		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 458150

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/14	0514B014.D
Level 2	IC 280-458150/13	0514B013.D
Level 3	IC 280-458150/12	0514B012.D
Level 4	IC 280-458150/11	0514B011.D
Level 5	IC 280-458150/10	0514B010.D
Level 6	IC 280-458150/9	0514B009.D
Level 7	IC 280-458150/8	0514B008.D
Level 8	IC 280-458150/7	0514B007.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
HMX	Ave	2023 60576	4555 87520	8504 212374	22385	35125	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	2289 72938	5460 106825	10190 253528	27158	42600	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Picric acid	Ave	1911 56168	4218 83745	8133 198927	21003	32615	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3,5-Trinitrobenzene	Ave	4505 165373	10667 235773	21764 558613	60395	96374	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3-Dinitrobenzene	Ave	6022 211356	14899 303929	29775 728840	77542	121840	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Ave	3858 137443	9721 202614	19444 491218	51071	78509	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Tetryl	Ave	3223 117549	8024 175552	16838 415635	43201	68439	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitroglycerin	Ave	15328 484644	33392 692505	68189 1636241	183782	283025	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2,4,6-Trinitrotoluene	Ave	4729 154200	11556 220871	22414 525360	56877	90152	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	3435 111890	8560 160074	16204 378745	41286	64715	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2-Amino-4,6-dinitrotoluene	Ave	3927 139994	9949 198890	19793 470912	50454	81080	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,6-Dinitrotoluene	Ave	3260 107737	7983 154795	15821 373049	40160	62841	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,4-Dinitrotoluene	Ave	5923 207929	15102 298528	29765 718888	76419	119798	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
2-Nitrotoluene	Ave	2898 89268	6601 128041	13449 309935	33377	51795	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
4-Nitrotoluene	Ave	2326 76660	6059 111239	11386 269261	28382	44805	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 458150

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 15:49 Calibration End Date: 05/14/2019 18:35 Calibration ID: 36354

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3-Nitrotoluene	Ave	3473 100111	7637 139284	14726 346991	37947	57865	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Ave	13561 526257	35305 754182	73478 1751462	191368	305733	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	2432 94187	6111 135315	12484 323687	34293	54284	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B007.D
Lims ID: IC MAIN L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 14-May-2019 15:49:27 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L8
Misc. Info.: 280-0081869-007
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:03 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:09:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.654	6.650	0.004	212374	2.50	2.38	
7 RDX	1	7.761	7.764	-0.003	253528	2.50	2.38	
8 2,4,6-Trinitrophenol	1	8.054	8.130	-0.076	198927	2.50	2.37	
$ 9 1,2-Dinitrobenzene	1	8.741	8.744	-0.003	323687	2.50	2.49	
10 1,3,5-Trinitrobenzene	1	8.901	8.904	-0.003	558613	2.50	2.44	
11 1,3-Dinitrobenzene	1	9.567	9.564	0.003	728840	2.50	2.42	
12 Nitrobenzene	1	9.954	9.950	0.004	491218	2.51	2.50	
14 Tetryl	1	10.287	10.284	0.003	415635	2.50	2.47	
15 Nitroglycerin	2	10.781	10.784	-0.003	1636241	25.0	23.4	
16 2,4,6-Trinitrotoluene	1	11.241	11.237	0.004	525360	2.51	2.35	M
17 4-Amino-2,6-dinitrotoluene	1	11.434	11.430	0.004	378745	2.51	2.33	
18 2-Amino-4,6-dinitrotoluene	1	11.721	11.717	0.004	470912	2.51	2.38	
19 2,6-Dinitrotoluene	1	11.854	11.850	0.004	373049	2.51	2.38	
20 2,4-Dinitrotoluene	1	12.054	12.050	0.004	718888	2.51	2.42	
21 o-Nitrotoluene	1	12.887	12.890	-0.003	309935	2.51	2.36	
22 p-Nitrotoluene	1	13.327	13.330	-0.003	269261	2.51	2.39	
23 m-Nitrotoluene	1	13.927	13.930	-0.003	346991	2.51	2.34	
24 PETN	2	15.021	15.024	-0.003	1751462	25.0	23.9	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 125.00 Units: uL

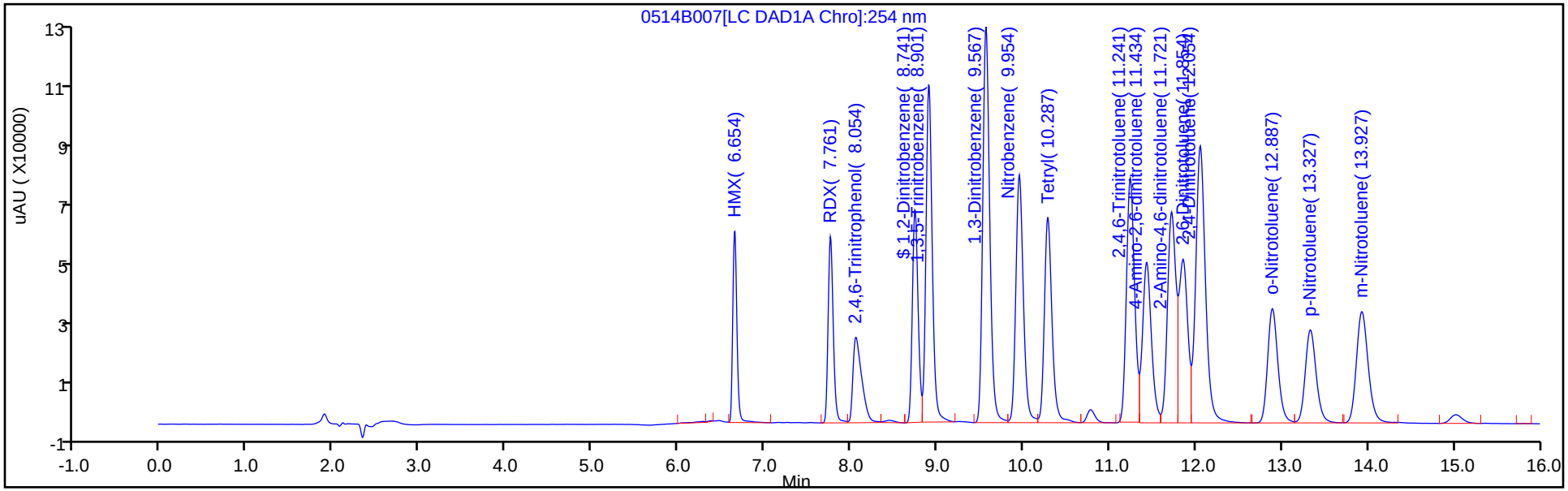
Report Date: 15-May-2019 10:58:03 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

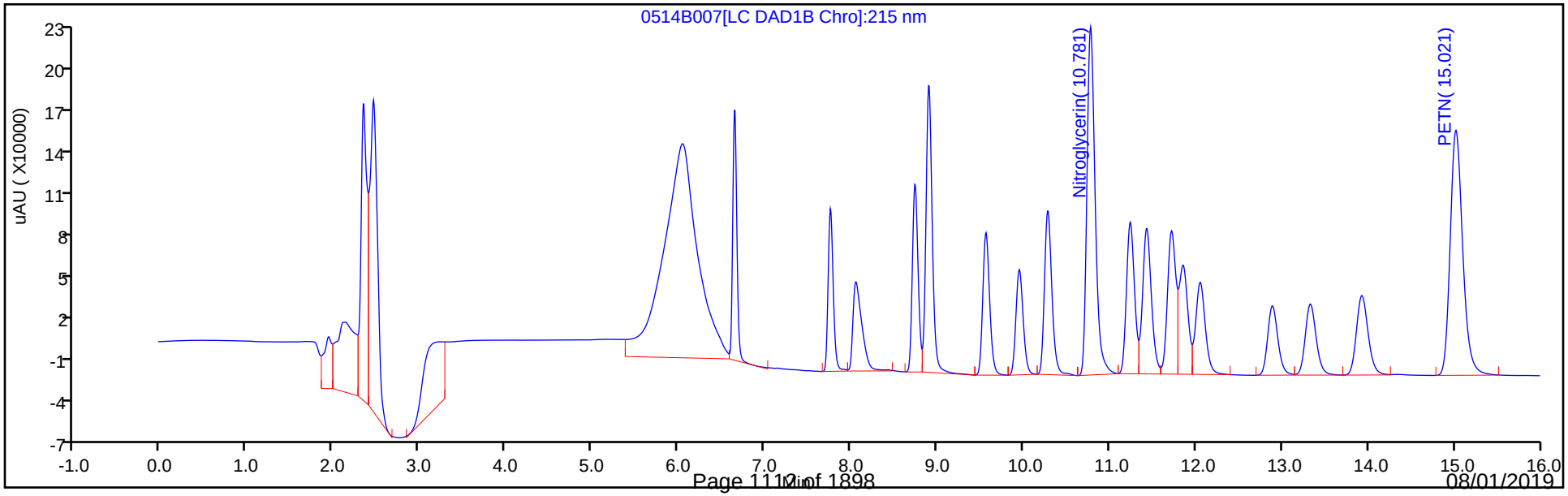
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B007.D

Injection Date:	14-May-2019 15:49:27	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L8			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

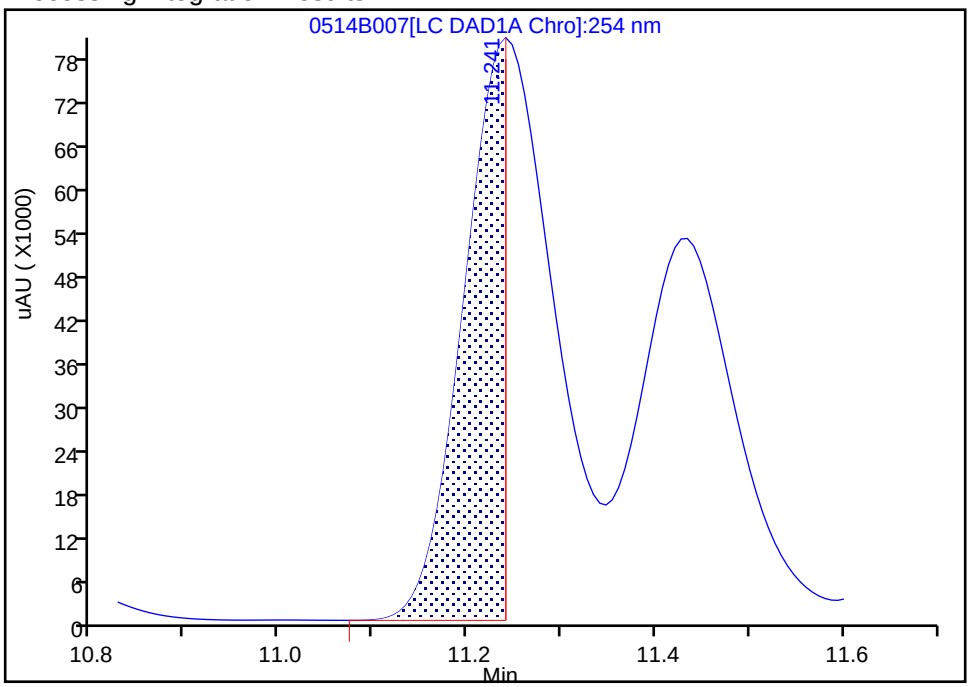
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B007.D				
Injection Date:	14-May-2019 15:49:27	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L8				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

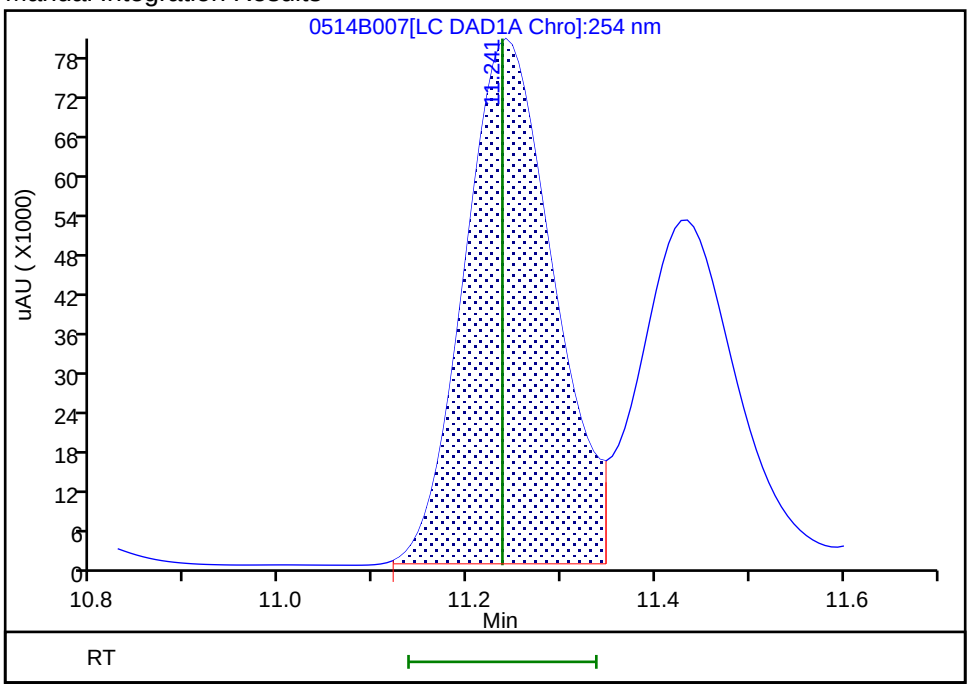
Processing Integration Results

RT: 11.24
Area: 243340
Amount: 1.296794
Amount Units: ug/mL



Manual Integration Results

RT: 11.24
Area: 525360
Amount: 2.349627
Amount Units: ug/mL



Reviewer: fiedlerh, 15-May-2019 10:08:56

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B008.D
Lims ID: IC MAIN L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-May-2019 16:13:10 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L7
Misc. Info.: 280-0081869-008
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:04 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:09:26

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.654	6.650	0.004	87520	1.00	0.9811	
	7 RDX	1	7.767	7.764	0.003	106825	1.00	1.00	
	8 2,4,6-Trinitrophenol	1	8.107	8.130	-0.023	83745	1.00	1.00	
$	9 1,2-Dinitrobenzene	1	8.741	8.744	-0.003	135315	1.00	1.04	
	10 1,3,5-Trinitrobenzene	1	8.901	8.904	-0.003	235773	1.00	1.03	
	11 1,3-Dinitrobenzene	1	9.567	9.564	0.003	303929	1.00	1.01	
	12 Nitrobenzene	1	9.954	9.950	0.004	202614	1.00	1.03	
	14 Tetryl	1	10.280	10.284	-0.004	175552	1.00	1.05	
	15 Nitroglycerin	2	10.780	10.784	-0.004	692505	10.0	9.90	
	16 2,4,6-Trinitrotoluene	1	11.240	11.237	0.003	220871	1.00	0.9878	
	17 4-Amino-2,6-dinitrotoluene	1	11.427	11.430	-0.003	160074	1.00	0.9855	
	18 2-Amino-4,6-dinitrotoluene	1	11.720	11.717	0.003	198890	1.00	1.01	
	19 2,6-Dinitrotoluene	1	11.854	11.850	0.004	154795	1.00	0.9885	
	20 2,4-Dinitrotoluene	1	12.054	12.050	0.004	298528	1.00	1.00	
	21 o-Nitrotoluene	1	12.894	12.890	0.004	128041	1.00	0.9748	
	22 p-Nitrotoluene	1	13.334	13.330	0.004	111239	1.00	0.9869	
	23 m-Nitrotoluene	1	13.934	13.930	0.004	139284	1.00	0.9392	M
	24 PETN	2	15.027	15.024	0.003	754182	10.0	10.3	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 50.00 Units: uL

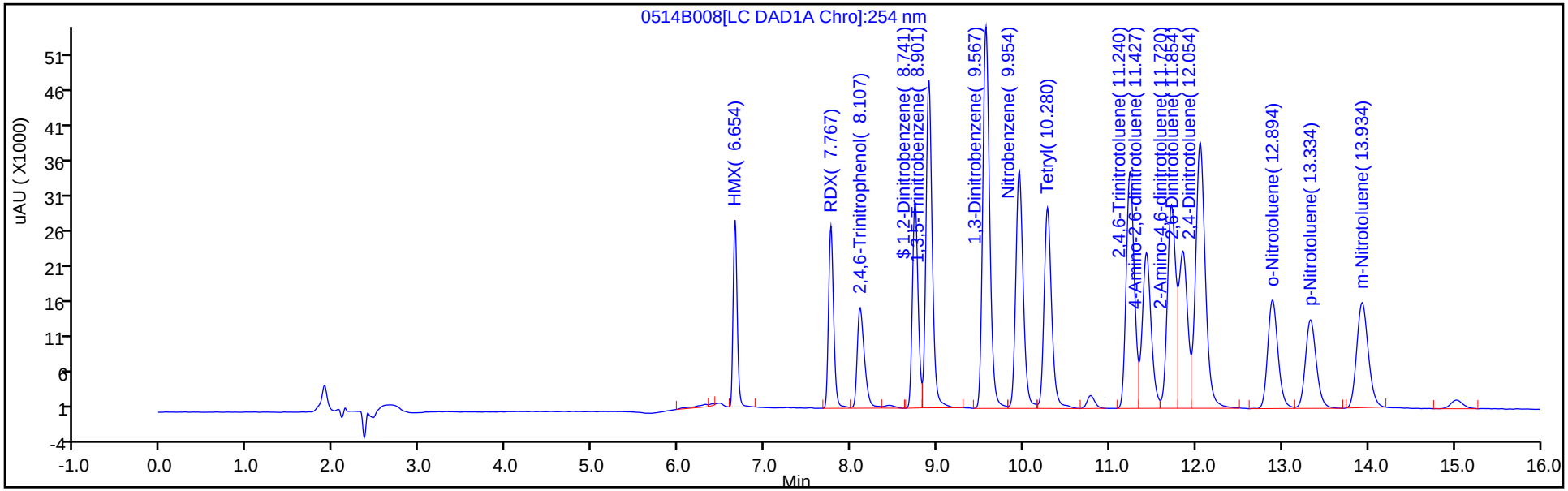
Report Date: 15-May-2019 10:58:05 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

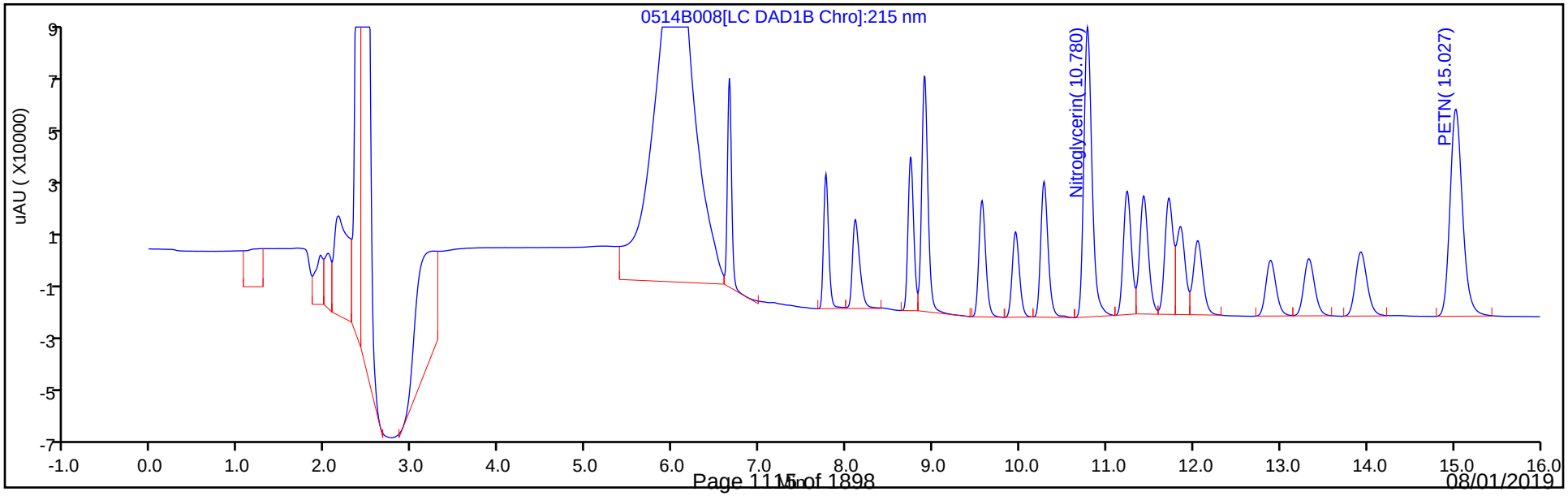
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B008.D

Injection Date:	14-May-2019 16:13:10	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L7			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

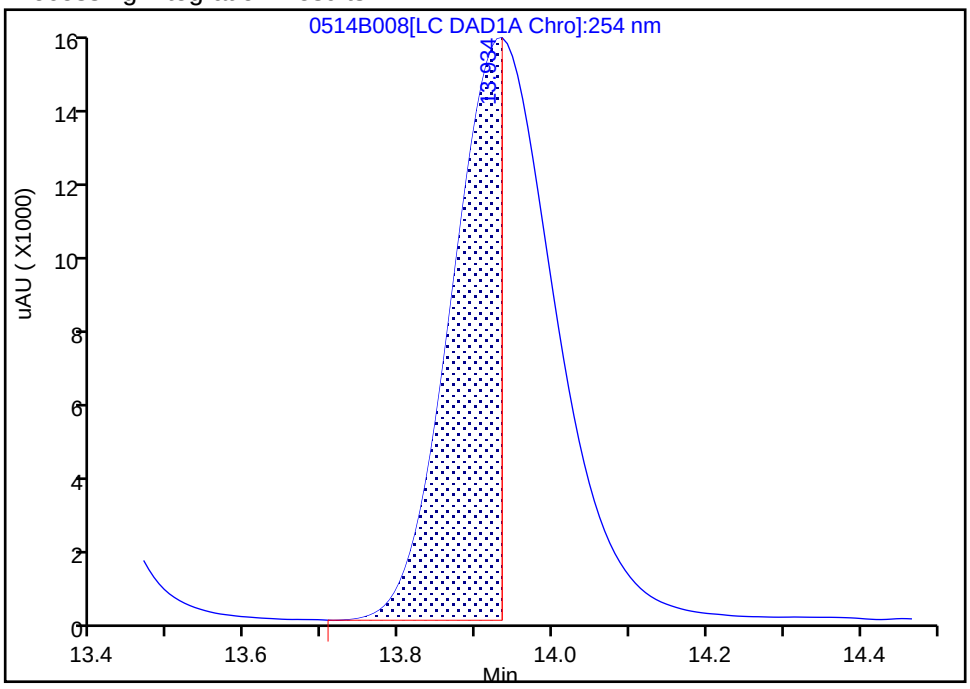
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B008.D				
Injection Date:	14-May-2019 16:13:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L7				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

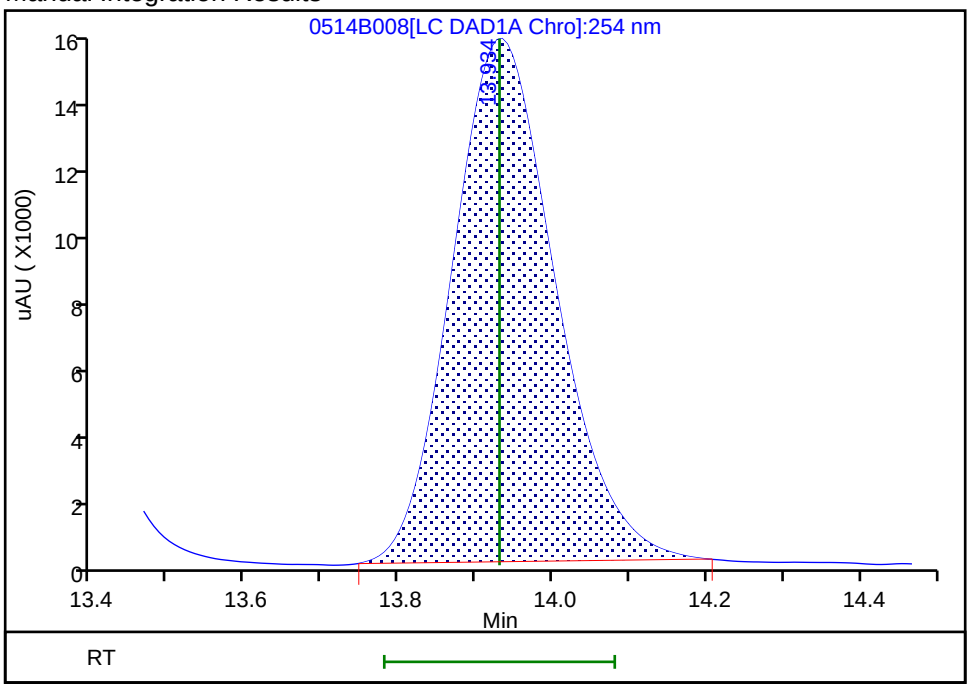
Processing Integration Results

RT: 13.93
Area: 67128
Amount: 0.481816
Amount Units: ug/mL



Manual Integration Results

RT: 13.93
Area: 139284
Amount: 0.939164
Amount Units: ug/mL



Reviewer: fiedlerh, 15-May-2019 10:09:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B009.D
Lims ID: IC MAIN L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-May-2019 16:36:52 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L6
Misc. Info.: 280-0081869-009
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:05 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.653	6.650	0.003	60576	0.7000	0.6791	
	7 RDX	1	7.767	7.764	0.003	72938	0.7000	0.6840	
	8 2,4,6-Trinitrophenol	1	8.120	8.130	-0.010	56168	0.7000	0.6703	
$	9 1,2-Dinitrobenzene	1	8.747	8.744	0.003	94187	0.7000	0.7239	
	10 1,3,5-Trinitrobenzene	1	8.907	8.904	0.003	165373	0.7000	0.7213	
	11 1,3-Dinitrobenzene	1	9.567	9.564	0.003	211356	0.7007	0.7026	
	12 Nitrobenzene	1	9.953	9.950	0.003	137443	0.7014	0.6983	
	14 Tetryl	1	10.280	10.284	-0.004	117549	0.7000	0.6999	
	15 Nitroglycerin	2	10.780	10.784	-0.004	484644	7.00	6.93	
	16 2,4,6-Trinitrotoluene	1	11.240	11.237	0.003	154200	0.7028	0.6896	
	17 4-Amino-2,6-dinitrotoluene	1	11.427	11.430	-0.003	111890	0.7021	0.6889	
	18 2-Amino-4,6-dinitrotoluene	1	11.720	11.717	0.003	139994	0.7021	0.7087	
	19 2,6-Dinitrotoluene	1	11.853	11.850	0.003	107737	0.7021	0.6880	
	20 2,4-Dinitrotoluene	1	12.047	12.050	-0.003	207929	0.7014	0.6991	
	21 o-Nitrotoluene	1	12.887	12.890	-0.003	89268	0.7021	0.6796	
	22 p-Nitrotoluene	1	13.327	13.330	-0.003	76660	0.7028	0.6801	
	23 m-Nitrotoluene	1	13.920	13.930	-0.010	100111	0.7028	0.6750	
	24 PETN	2	15.007	15.024	-0.017	526257	7.00	7.19	

Reagents:

8330IntermStk_00058 Amount Added: 35.00 Units: uL

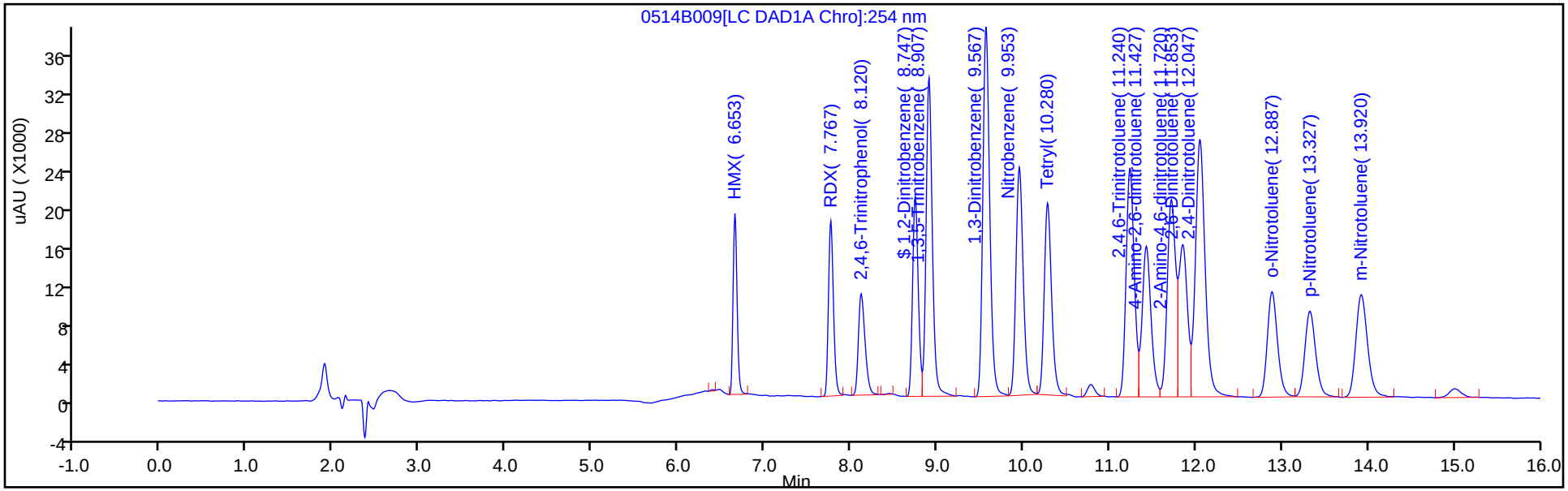
Report Date: 15-May-2019 10:58:06 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

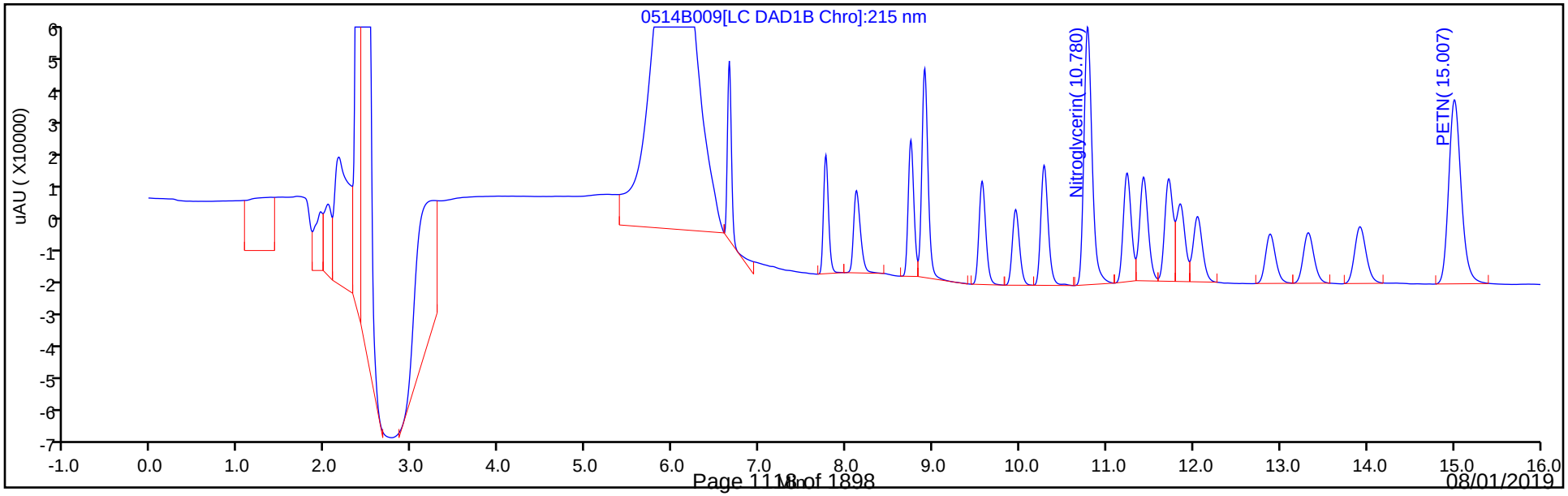
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B009.D

Injection Date:	14-May-2019 16:36:52	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L6			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B010.D
Lims ID: IC MAIN L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-May-2019 17:00:38 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L5
Misc. Info.: 280-0081869-010
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:07 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.658	6.650	0.008	35125	0.4000	0.3938	
	7 RDX	1	7.771	7.764	0.007	42600	0.4000	0.3995	
	8 2,4,6-Trinitrophenol	1	8.138	8.130	0.008	32615	0.4000	0.3892	
$	9 1,2-Dinitrobenzene	1	8.751	8.744	0.007	54284	0.4000	0.4172	
	10 1,3,5-Trinitrobenzene	1	8.911	8.904	0.007	96374	0.4000	0.4203	
	11 1,3-Dinitrobenzene	1	9.577	9.564	0.013	121840	0.4004	0.4050	
	12 Nitrobenzene	1	9.964	9.950	0.014	78509	0.4008	0.3989	
	14 Tetryl	1	10.291	10.284	0.007	68439	0.4000	0.4075	
	15 Nitroglycerin	2	10.797	10.784	0.013	283025	4.00	4.04	
	16 2,4,6-Trinitrotoluene	1	11.251	11.237	0.014	90152	0.4016	0.4032	
	17 4-Amino-2,6-dinitrotoluene	1	11.444	11.430	0.014	64715	0.4012	0.3984	
	18 2-Amino-4,6-dinitrotoluene	1	11.737	11.717	0.020	81080	0.4012	0.4105	
	19 2,6-Dinitrotoluene	1	11.864	11.850	0.014	62841	0.4012	0.4013	
	20 2,4-Dinitrotoluene	1	12.064	12.050	0.014	119798	0.4008	0.4028	
	21 o-Nitrotoluene	1	12.904	12.890	0.014	51795	0.4012	0.3943	
	22 p-Nitrotoluene	1	13.344	13.330	0.014	44805	0.4016	0.3975	
	23 m-Nitrotoluene	1	13.944	13.930	0.014	57865	0.4016	0.3902	
	24 PETN	2	15.037	15.024	0.013	305733	4.00	4.18	

Reagents:

8330IntermStk_00058 Amount Added: 20.00 Units: uL

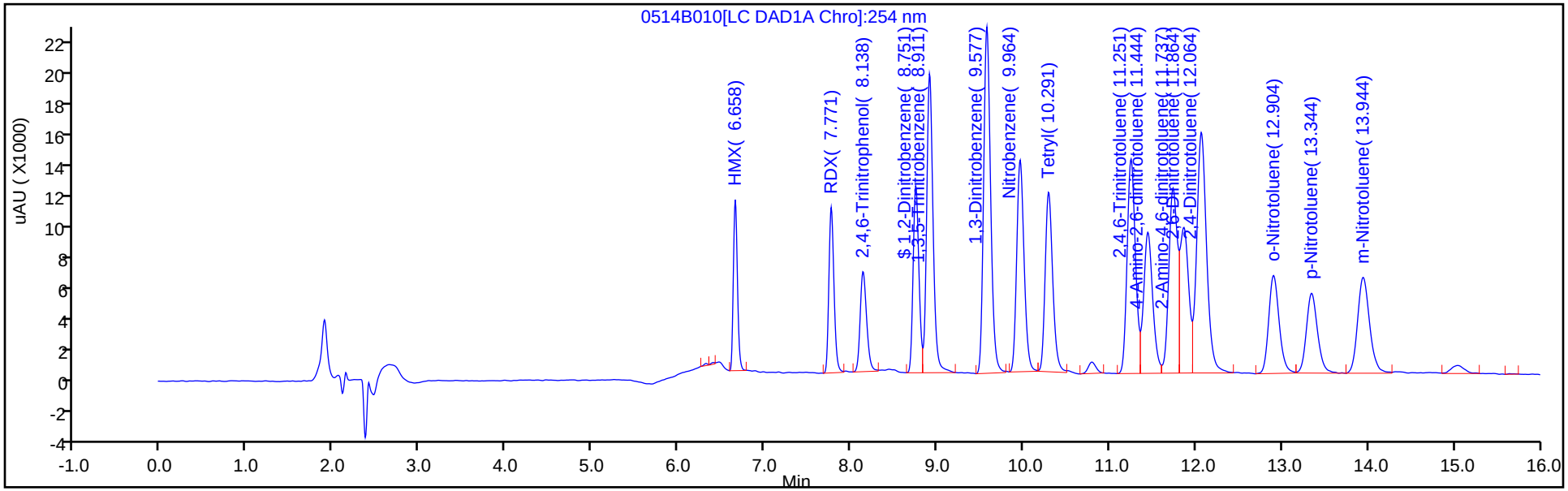
Report Date: 15-May-2019 10:58:07 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

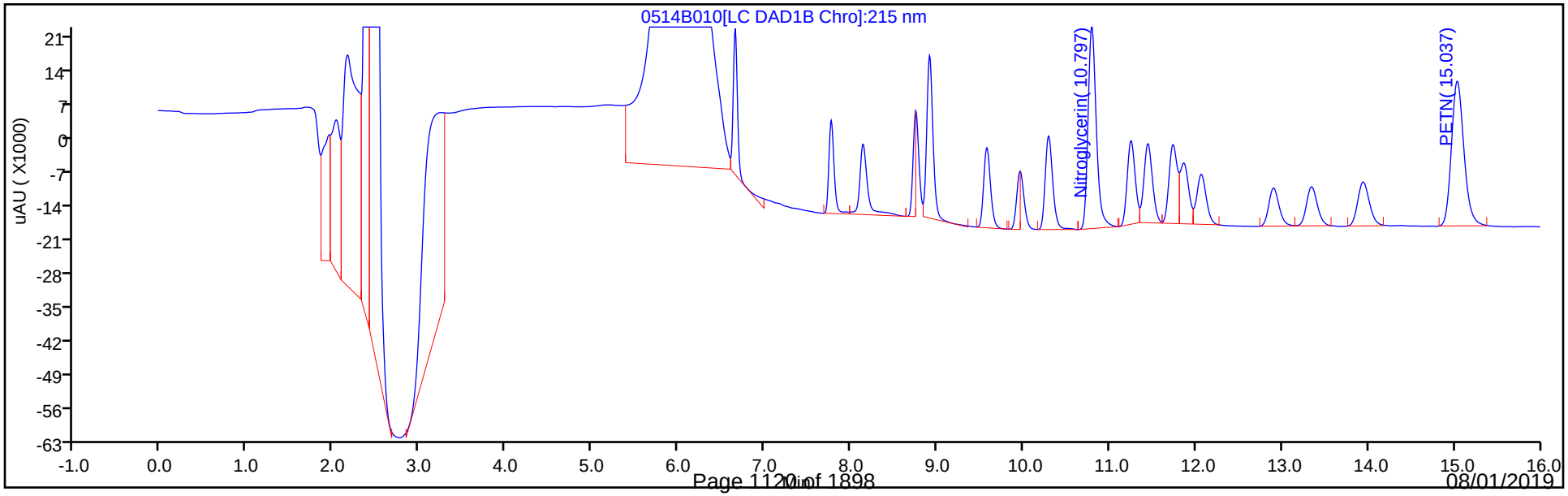
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B010.D

Injection Date:	14-May-2019 17:00:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L5			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B011.D
Lims ID: IC MAIN L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-May-2019 17:24:22 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L4
Misc. Info.: 280-0081869-011
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:08 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 08:51:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.661	6.650	0.011	22385	0.2500	0.2509	
7 RDX	1	7.774	7.764	0.010	27158	0.2500	0.2547	
8 2,4,6-Trinitrophenol	1	8.147	8.130	0.017	21003	0.2500	0.2507	
$ 9 1,2-Dinitrobenzene	1	8.754	8.744	0.010	34293	0.2500	0.2636	
10 1,3,5-Trinitrobenzene	1	8.914	8.904	0.010	60395	0.2500	0.2634	
11 1,3-Dinitrobenzene	1	9.581	9.564	0.017	77542	0.2503	0.2578	
12 Nitrobenzene	1	9.967	9.950	0.017	51071	0.2505	0.2595	
14 Tetryl	1	10.301	10.284	0.017	43201	0.2500	0.2572	
15 Nitroglycerin	2	10.807	10.784	0.023	183782	2.50	2.63	
16 2,4,6-Trinitrotoluene	1	11.261	11.237	0.024	56877	0.2510	0.2544	
17 4-Amino-2,6-dinitrotoluene	1	11.454	11.430	0.024	41286	0.2508	0.2542	
18 2-Amino-4,6-dinitrotoluene	1	11.747	11.717	0.030	50454	0.2508	0.2554	
19 2,6-Dinitrotoluene	1	11.874	11.850	0.024	40160	0.2508	0.2565	
20 2,4-Dinitrotoluene	1	12.081	12.050	0.031	76419	0.2505	0.2569	
21 o-Nitrotoluene	1	12.921	12.890	0.031	33377	0.2508	0.2541	
22 p-Nitrotoluene	1	13.361	13.330	0.031	28382	0.2510	0.2518	
23 m-Nitrotoluene	1	13.961	13.930	0.031	37947	0.2510	0.2559	
24 PETN	2	15.061	15.024	0.037	191368	2.50	2.61	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

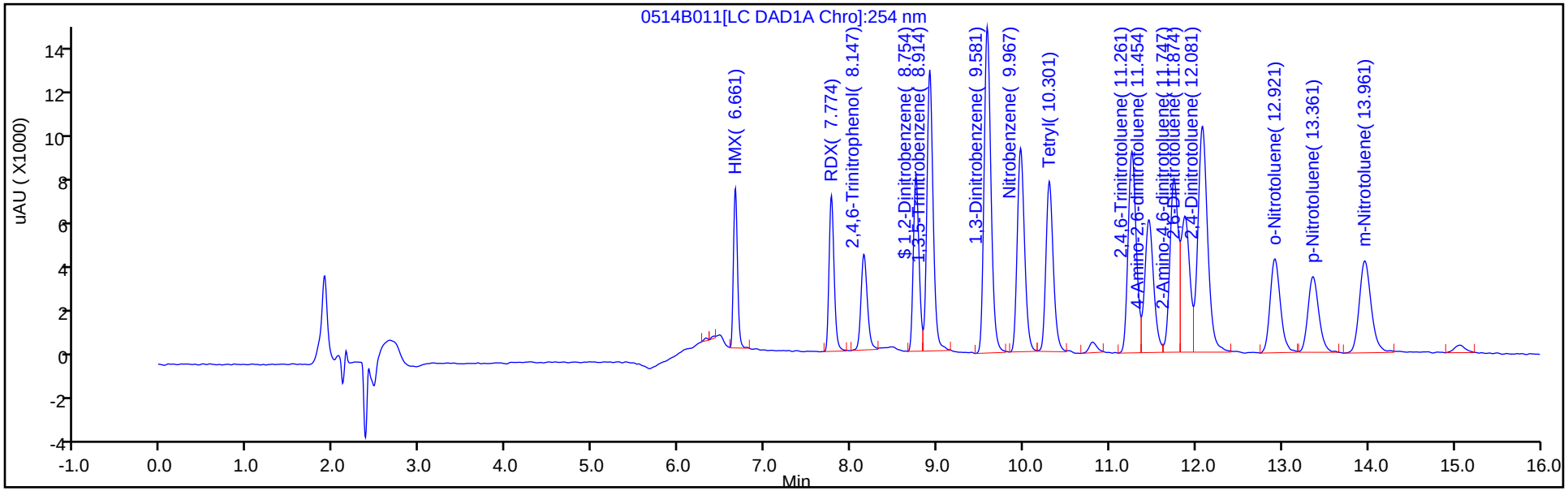
Report Date: 15-May-2019 10:58:08 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

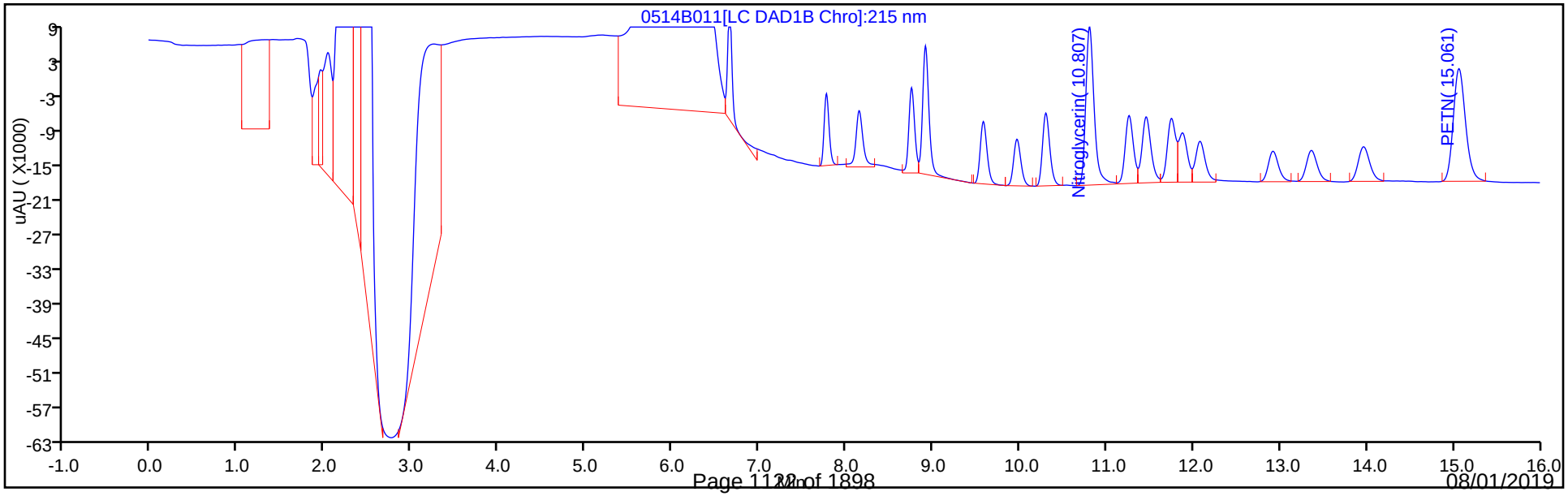
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B011.D

Injection Date:	14-May-2019 17:24:22	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L4			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B012.D
Lims ID: IC MAIN L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-May-2019 17:48:04 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L3
Misc. Info.: 280-0081869-012
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:09 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.656	6.650	0.006	8504	0.1000	0.0953	
	7 RDX	1	7.769	7.764	0.005	10190	0.1000	0.0956	
	8 2,4,6-Trinitrophenol	1	8.149	8.130	0.019	8133	0.1000	0.0971	
$	9 1,2-Dinitrobenzene	1	8.749	8.744	0.005	12484	0.1000	0.0959	
	10 1,3,5-Trinitrobenzene	1	8.909	8.904	0.005	21764	0.1000	0.0949	
	11 1,3-Dinitrobenzene	1	9.569	9.564	0.005	29775	0.1001	0.0990	
	12 Nitrobenzene	1	9.956	9.950	0.006	19444	0.1002	0.0988	
	14 Tetryl	1	10.283	10.284	-0.001	16838	0.1000	0.1003	
	15 Nitroglycerin	2	10.789	10.784	0.005	68189	1.00	0.9744	
	16 2,4,6-Trinitrotoluene	1	11.243	11.237	0.006	22414	0.1004	0.1002	
	17 4-Amino-2,6-dinitrotoluene	1	11.429	11.430	-0.001	16204	0.1003	0.0998	
	18 2-Amino-4,6-dinitrotoluene	1	11.723	11.717	0.006	19793	0.1003	0.1002	
	19 2,6-Dinitrotoluene	1	11.856	11.850	0.006	15821	0.1003	0.1010	
	20 2,4-Dinitrotoluene	1	12.056	12.050	0.006	29765	0.1002	0.1001	
	21 o-Nitrotoluene	1	12.889	12.890	-0.001	13449	0.1003	0.1024	
	22 p-Nitrotoluene	1	13.329	13.330	-0.001	11386	0.1004	0.1010	
	23 m-Nitrotoluene	1	13.929	13.930	-0.001	14726	0.1004	0.0993	
	24 PETN	2	15.016	15.024	-0.008	73478	1.00	1.00	

Reagents:

8330IntermStk_00058 Amount Added: 5.00 Units: uL

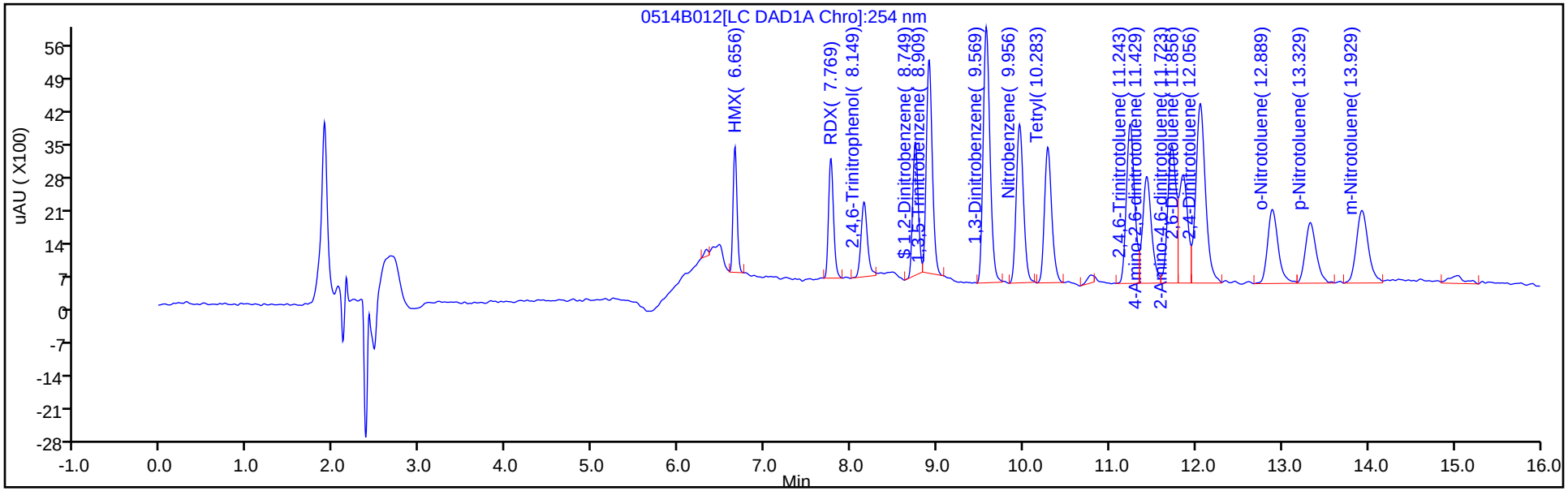
Report Date: 15-May-2019 10:58:09 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

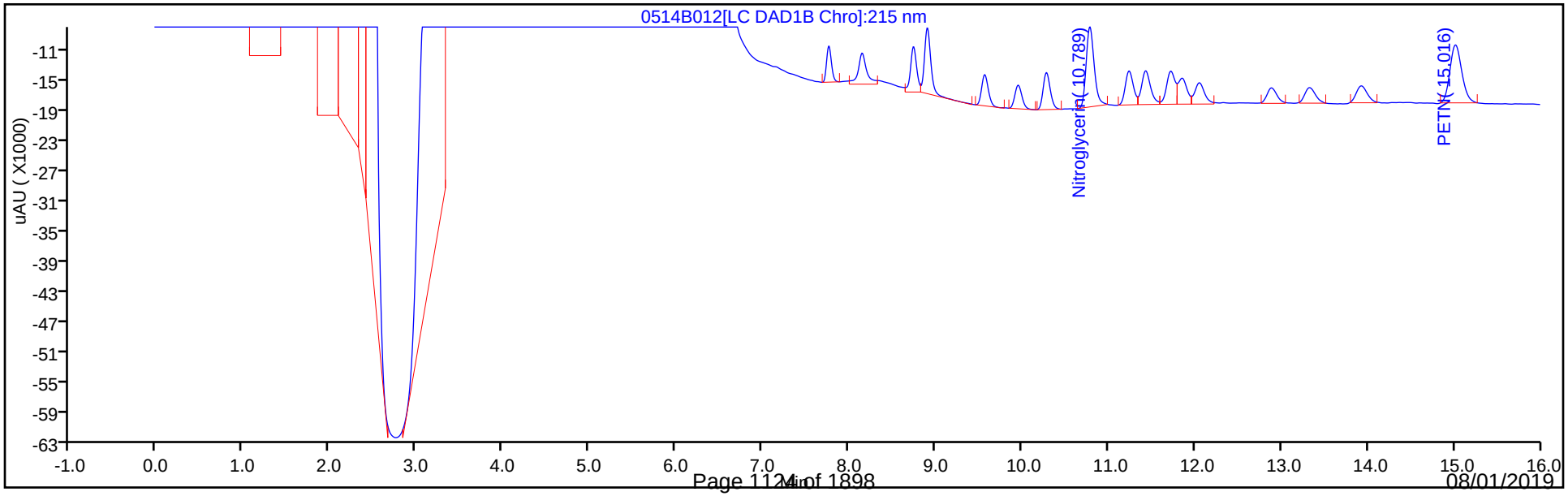
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B012.D

Injection Date:	14-May-2019 17:48:04	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L3			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B013.D
Lims ID: IC MAIN L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-May-2019 18:11:46 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L2
Misc. Info.: 280-0081869-013
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:10 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:11:37

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.655	6.650	0.005	4555	0.0500	0.0511	
	7 RDX	1	7.768	7.764	0.004	5460	0.0500	0.0512	
	8 2,4,6-Trinitrophenol	1	8.155	8.130	0.025	4218	0.0500	0.0503	
$	9 1,2-Dinitrobenzene	1	8.748	8.744	0.004	6111	0.0500	0.0470	
	10 1,3,5-Trinitrobenzene	1	8.908	8.904	0.004	10667	0.0500	0.0465	
	11 1,3-Dinitrobenzene	1	9.568	9.564	0.004	14899	0.0501	0.0495	
	12 Nitrobenzene	1	9.955	9.950	0.005	9721	0.0501	0.0494	
	14 Tetryl	1	10.281	10.284	-0.003	8024	0.0500	0.0478	
	15 Nitroglycerin	2	10.788	10.784	0.004	33392	0.5000	0.4772	
	16 2,4,6-Trinitrotoluene	1	11.241	11.237	0.004	11556	0.0502	0.0517	
	17 4-Amino-2,6-dinitrotoluene	1	11.435	11.430	0.005	8560	0.0502	0.0527	
	18 2-Amino-4,6-dinitrotoluene	1	11.721	11.717	0.004	9949	0.0502	0.0504	M
	19 2,6-Dinitrotoluene	1	11.848	11.850	-0.002	7983	0.0502	0.0510	M
	20 2,4-Dinitrotoluene	1	12.055	12.050	0.005	15102	0.0501	0.0508	
	21 o-Nitrotoluene	1	12.895	12.890	0.005	6601	0.0502	0.0503	
	22 p-Nitrotoluene	1	13.341	13.330	0.011	6059	0.0502	0.0538	
	23 m-Nitrotoluene	1	13.935	13.930	0.005	7637	0.0502	0.0515	
	24 PETN	2	15.021	15.024	-0.003	35305	0.5000	0.4824	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

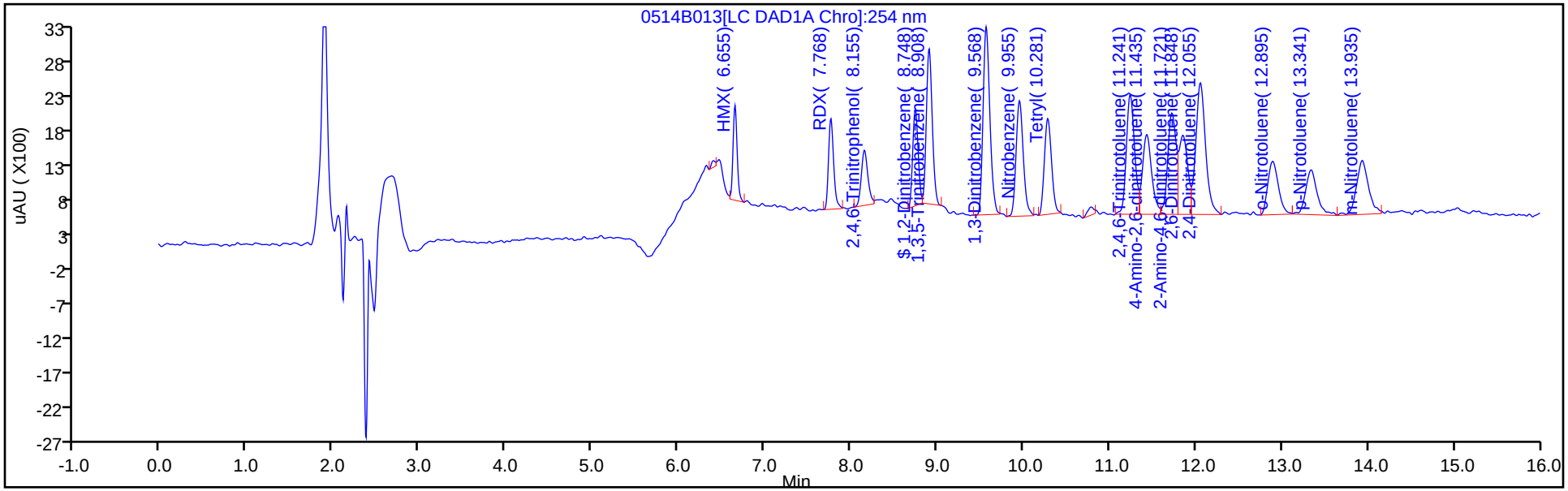
8330IntermStk_00058 Amount Added: 2.50 Units: uL

Report Date: 15-May-2019 10:58:10 Chrom Revision: 2.3 03-May-2019 15:52:00

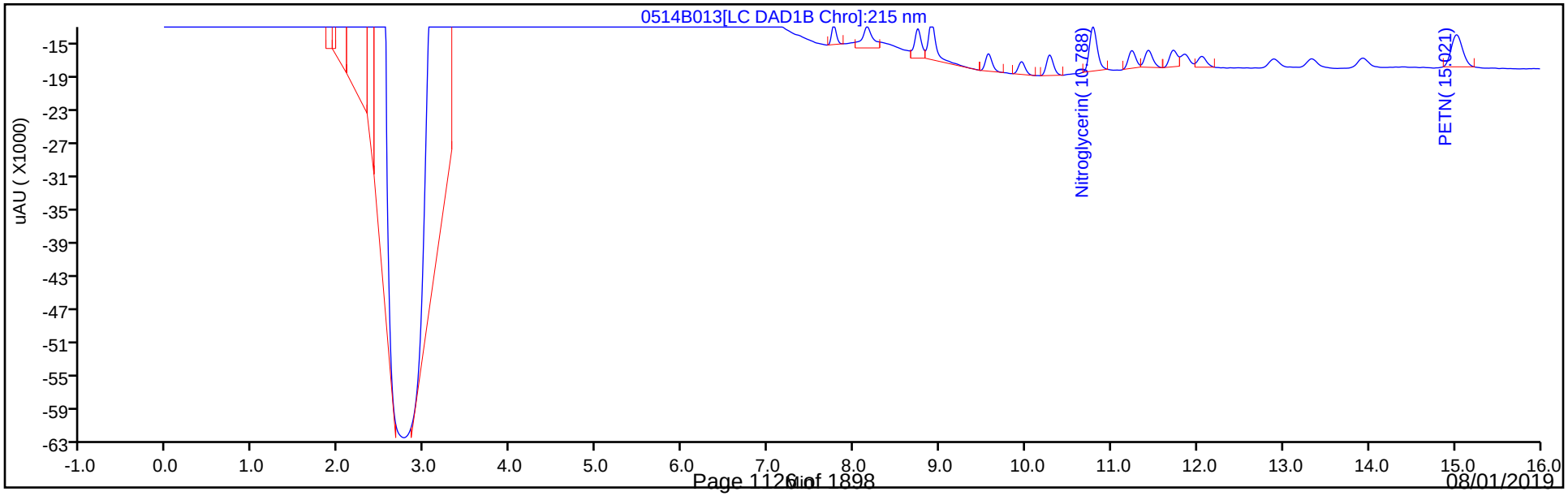
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B013.D				
Injection Date:	14-May-2019 18:11:46	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L2			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B014.D
Lims ID: IC MAIN L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-May-2019 18:35:34 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L1
Misc. Info.: 280-0081869-014
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:11 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:12:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.657	6.650	0.007	2023	0.0200	0.0227	
7 RDX	1	7.763	7.764	-0.001	2289	0.0200	0.0215	
8 2,4,6-Trinitrophenol	1	8.157	8.130	0.027	1911	0.0200	0.0228	
$ 9 1,2-Dinitrobenzene	1	8.750	8.744	0.006	2432	0.0200	0.0187	
10 1,3,5-Trinitrobenzene	1	8.910	8.904	0.006	4505	0.0200	0.0196	
11 1,3-Dinitrobenzene	1	9.576	9.564	0.012	6022	0.0200	0.0200	
12 Nitrobenzene	1	9.963	9.950	0.013	3858	0.0200	0.0196	
14 Tetryl	1	10.296	10.284	0.012	3223	0.0200	0.0192	
15 Nitroglycerin	2	10.803	10.784	0.019	15328	0.2000	0.2190	
16 2,4,6-Trinitrotoluene	1	11.256	11.237	0.019	4729	0.0201	0.0212	
17 4-Amino-2,6-dinitrotoluene	1	11.443	11.430	0.013	3435	0.0201	0.0211	
18 2-Amino-4,6-dinitrotoluene	1	11.736	11.717	0.019	3927	0.0201	0.0199	M
19 2,6-Dinitrotoluene	1	11.870	11.850	0.020	3260	0.0201	0.0208	M
20 2,4-Dinitrotoluene	1	12.070	12.050	0.020	5923	0.0200	0.0199	
21 o-Nitrotoluene	1	12.916	12.890	0.026	2898	0.0201	0.0221	
22 p-Nitrotoluene	1	13.330	13.330	0.000	2326	0.0201	0.0206	
23 m-Nitrotoluene	1	13.943	13.930	0.013	3473	0.0201	0.0234	
24 PETN	2	15.036	15.024	0.012	13561	0.2000	0.1853	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 1.00 Units: uL

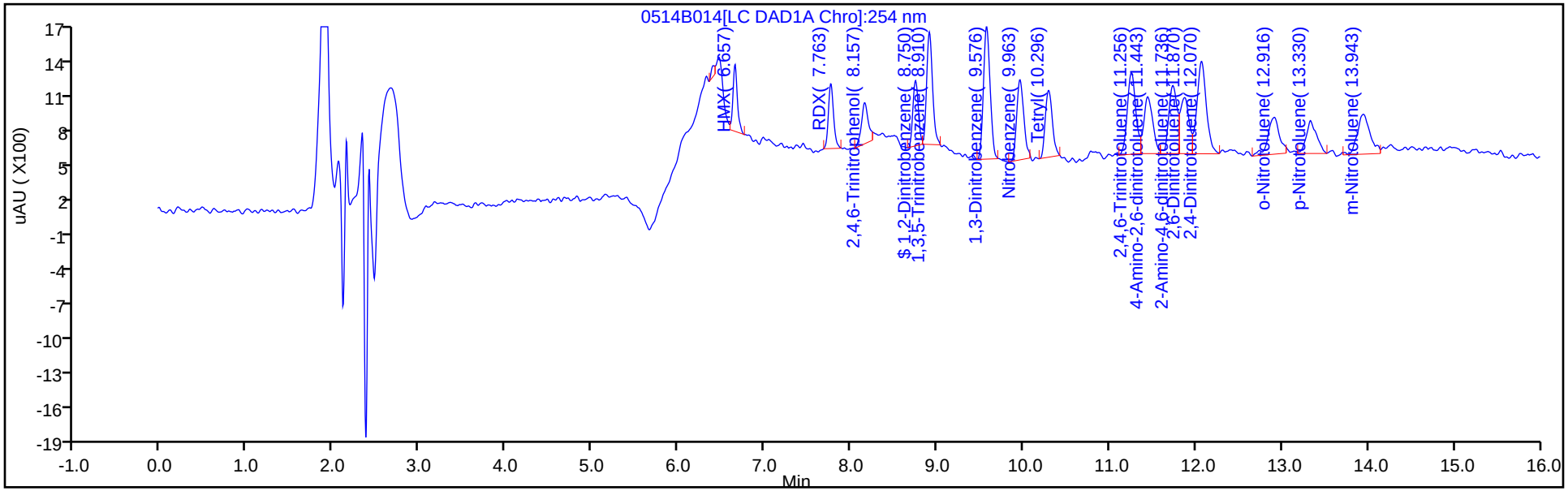
Report Date: 15-May-2019 10:58:11 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

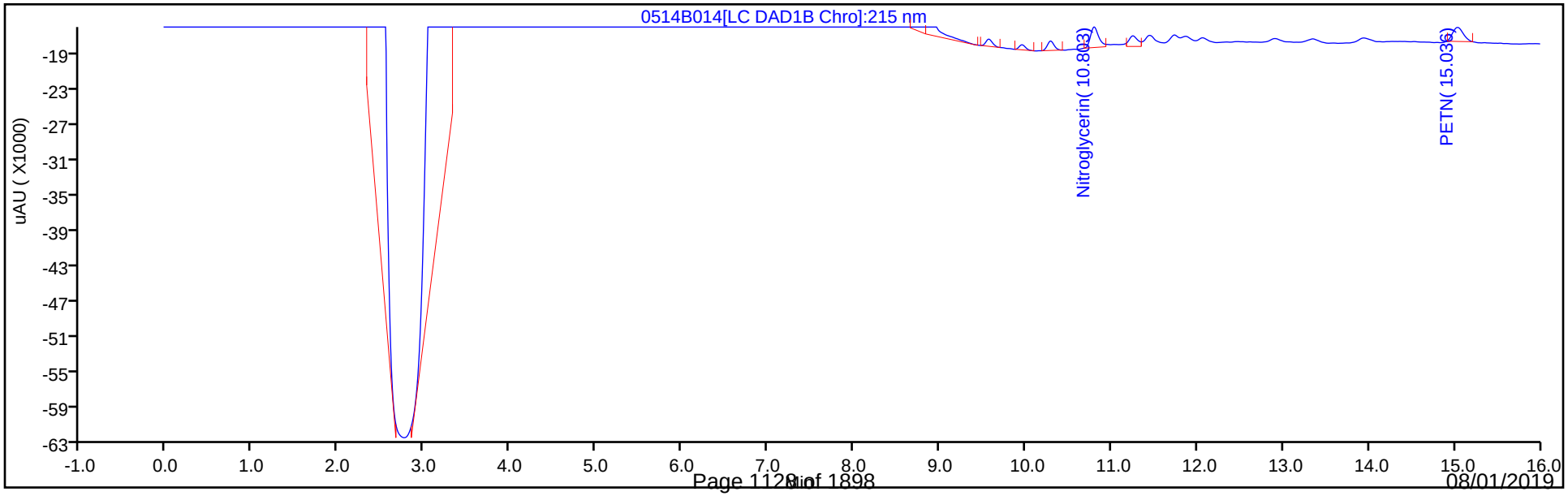
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B014.D

Injection Date:	14-May-2019 18:35:34	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L1			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

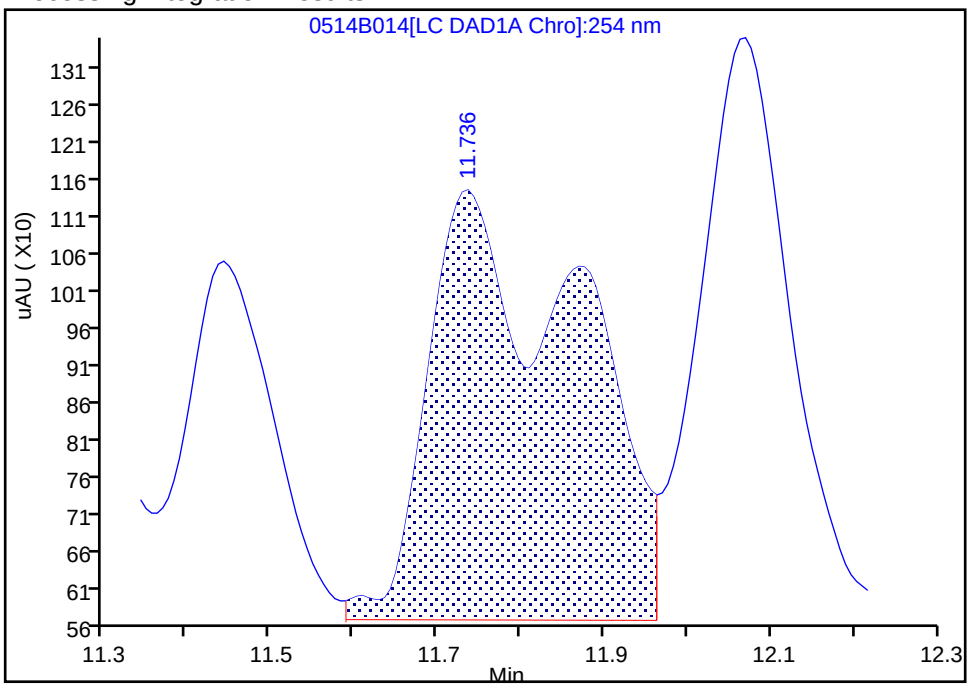
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B014.D				
Injection Date:	14-May-2019 18:35:34	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

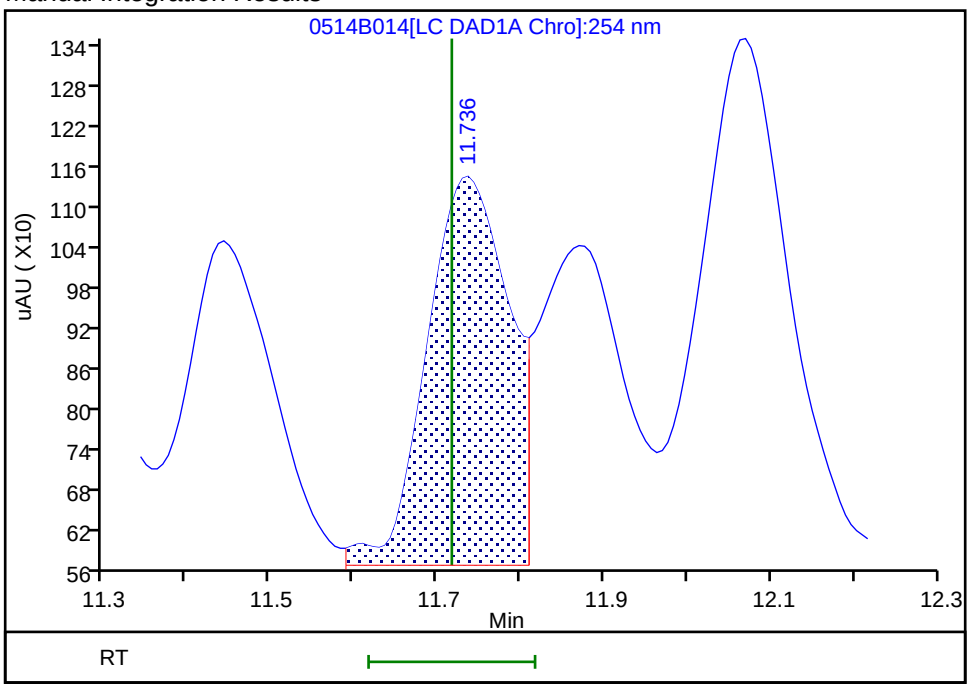
Processing Integration Results

RT: 11.74
Area: 7194
Amount: 0.024800
Amount Units: ug/mL



Manual Integration Results

RT: 11.74
Area: 3927
Amount: 0.019880
Amount Units: ug/mL



Reviewer: fiedlerh, 15-May-2019 10:11:49
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 458150

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 22:56 Calibration End Date: 05/15/2019 01:42 Calibration ID: 36356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/32	0514B032.D
Level 2	IC 280-458150/31	0514B031.D
Level 3	IC 280-458150/30	0514B030.D
Level 4	IC 280-458150/29	0514B029.D
Level 5	IC 280-458150/28	0514B028.D
Level 6	IC 280-458150/27	0514B027.D
Level 7	IC 280-458150/26	0514B026.D
Level 8	IC 280-458150/25	0514B025.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.554	6.555	6.559	6.556	6.556	6.556	6.556	6.557			6.456 - 6.656	6.556
DNX	6.894	6.888	6.893	6.889	6.889	6.889	6.890	6.884			6.789 - 6.989	6.890
MNX	7.354	7.355	7.353	7.356	7.349	7.349	7.350	7.344			7.206 - 7.506	7.351

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 458150

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 22:56 Calibration End Date: 05/15/2019 01:42 Calibration ID: 36356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/32	0514B032.D
Level 2	IC 280-458150/31	0514B031.D
Level 3	IC 280-458150/30	0514B030.D
Level 4	IC 280-458150/29	0514B029.D
Level 5	IC 280-458150/28	0514B028.D
Level 6	IC 280-458150/27	0514B027.D
Level 7	IC 280-458150/26	0514B026.D
Level 8	IC 280-458150/25	0514B025.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	154545 212972	183816 205213	207013 212865	204416 213938	Ave		199347.299				10.3		20.0			
DNX	144406 148329	148032 146825	156114 149647	143688 150054	Ave		148386.904				2.6		20.0			
MNX	132005 138565	138440 135687	136264 137584	135685 138073	Ave		136537.997				1.6		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 458150

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2019 22:56 Calibration End Date: 05/15/2019 01:42 Calibration ID: 36356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-458150/32	0514B032.D
Level 2	IC 280-458150/31	0514B031.D
Level 3	IC 280-458150/30	0514B030.D
Level 4	IC 280-458150/29	0514B029.D
Level 5	IC 280-458150/28	0514B028.D
Level 6	IC 280-458150/27	0514B027.D
Level 7	IC 280-458150/26	0514B026.D
Level 8	IC 280-458150/25	0514B025.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	3094 143793	9200 213078	20722 535379	51155	85274	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2891 102880	7409 149797	15627 375511	35958	59391	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3081 110843	8078 160561	15902 402829	39586	64682	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B025.D				
Lims ID:	IC DMT L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	14-May-2019 22:56:27	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L8				
Misc. Info.:	280-0081869-025				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2019 10:58:22	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.557	6.556	0.001	535379	2.50	2.69	
5 DNX	1	6.884	6.889	-0.005	375511	2.50	2.53	
6 MNX	1	7.344	7.356	-0.012	402829	2.92	2.95	

Reagents:

8330 DMT_00002 Amount Added: 125.00 Units: uL

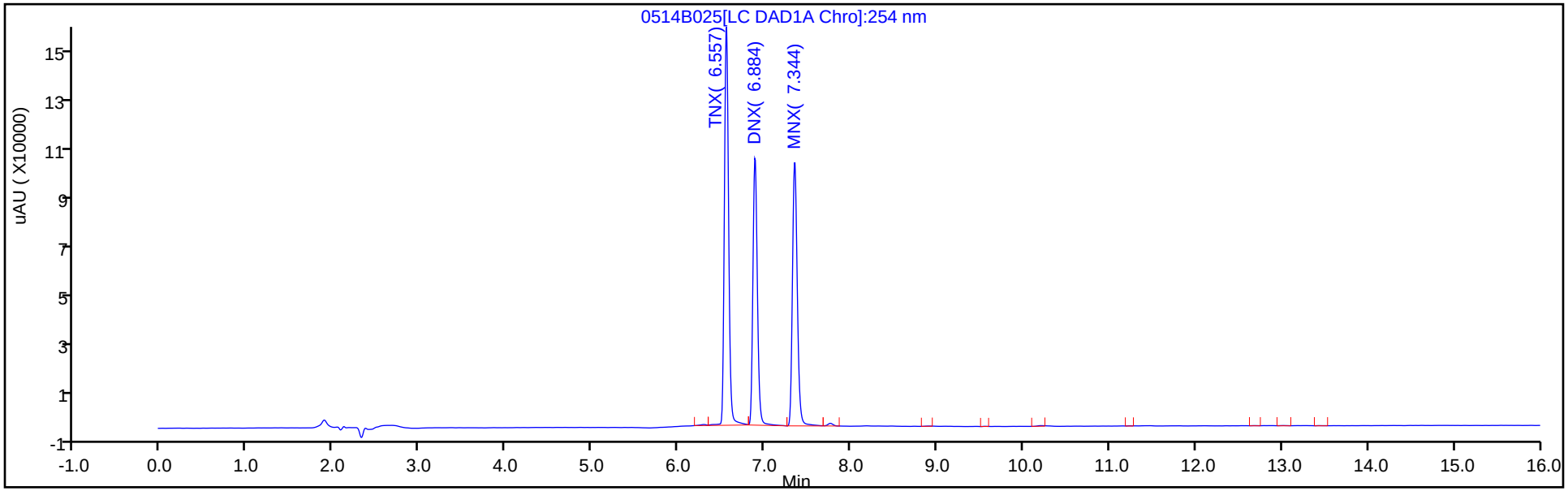
Report Date: 15-May-2019 10:58:23 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

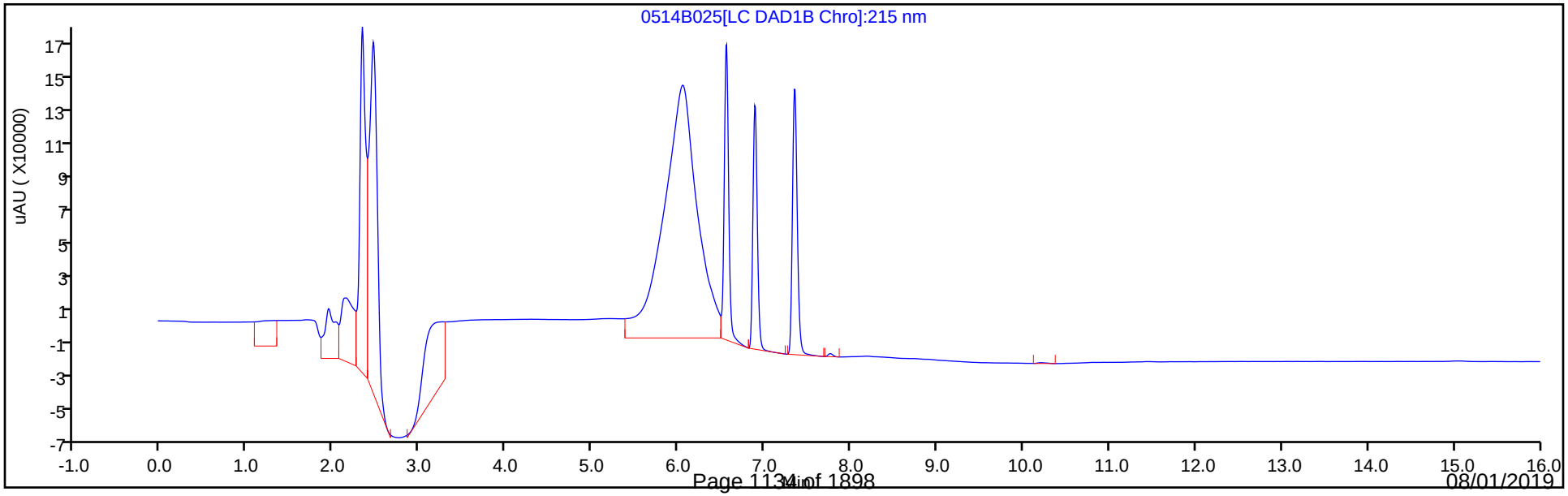
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B025.D

Injection Date:	14-May-2019 22:56:27	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L8			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B026.D				
Lims ID:	IC DMT L7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	14-May-2019 23:20:08	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L7				
Misc. Info.:	280-0081869-026				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2019 10:58:24	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.556	0.000	213078	1.00	1.07	
5 DNX	1	6.890	6.889	0.001	149797	1.00	1.01	
6 MNX	1	7.350	7.356	-0.006	160561	1.17	1.18	

Reagents:

8330 DMT_00002 Amount Added: 50.00 Units: uL

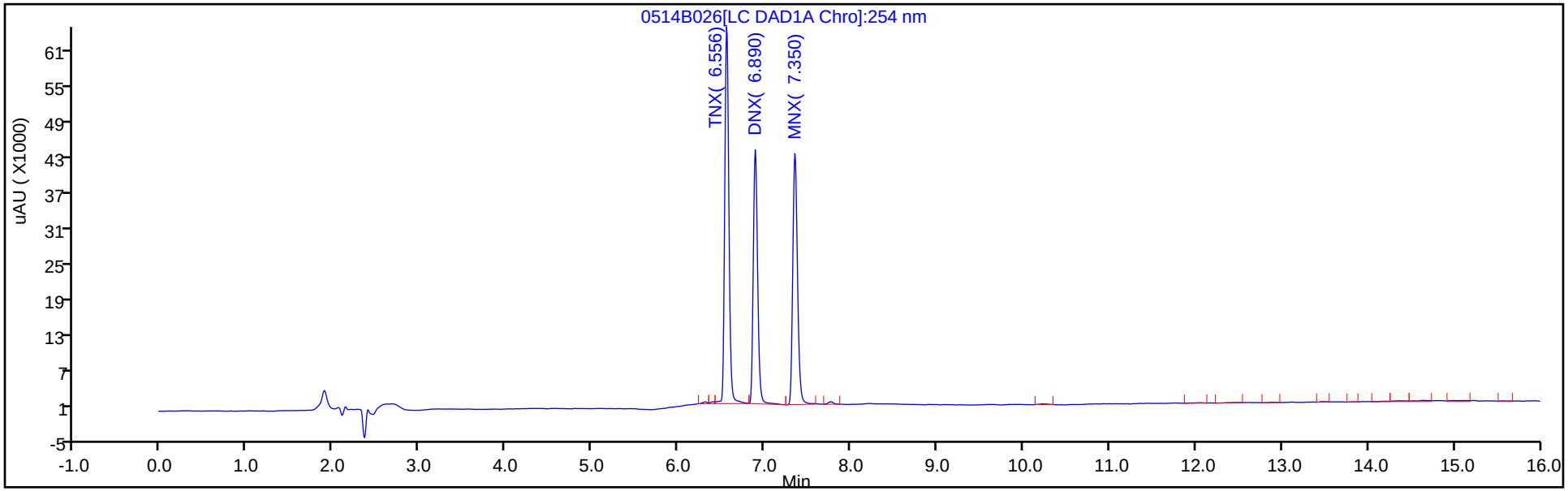
Report Date: 15-May-2019 10:58:24 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

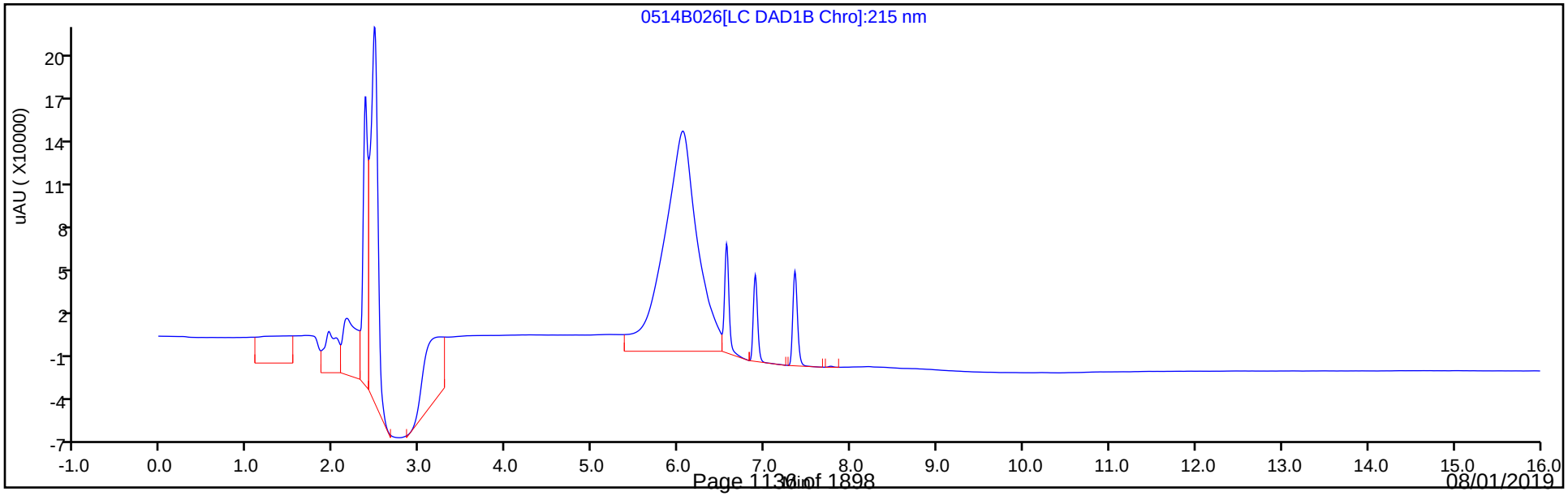
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B026.D

Injection Date:	14-May-2019 23:20:08	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L7			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B027.D
Lims ID: IC DMT L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-May-2019 23:43:50 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L6
Misc. Info.: 280-0081869-027
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:25 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.556	0.000	143793	0.7007	0.7213	
5 DNX	1	6.889	6.889	0.000	102880	0.7007	0.6933	
6 MNX	1	7.349	7.356	-0.007	110843	0.8169	0.8118	

Reagents:

8330 DMT_00002 Amount Added: 35.00 Units: uL

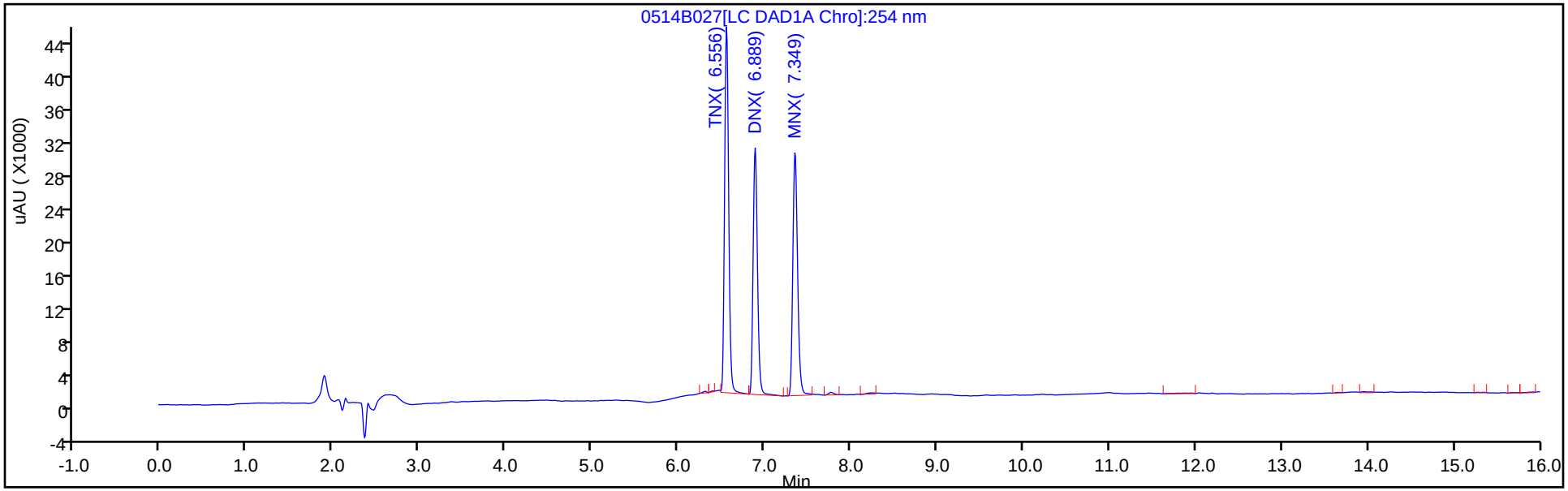
Report Date: 15-May-2019 10:58:26 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

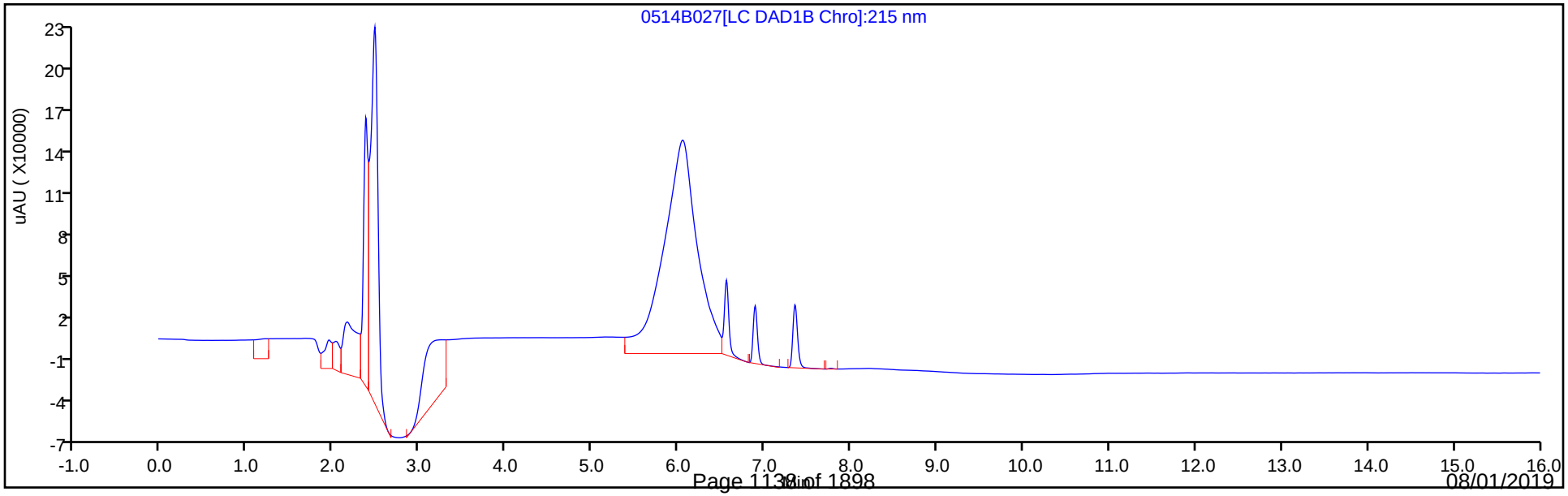
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B027.D

Injection Date:	14-May-2019 23:43:50	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L6			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B028.D				
Lims ID:	IC DMT L5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	15-May-2019 00:07:31	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L5				
Misc. Info.:	280-0081869-028				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2019 10:58:26	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.556	0.000	85274	0.4004	0.4278	
5 DNX	1	6.889	6.889	0.000	59391	0.4004	0.4002	
6 MNX	1	7.349	7.356	-0.007	64682	0.4668	0.4737	

Reagents:

8330 DMT_00002 Amount Added: 20.00 Units: uL

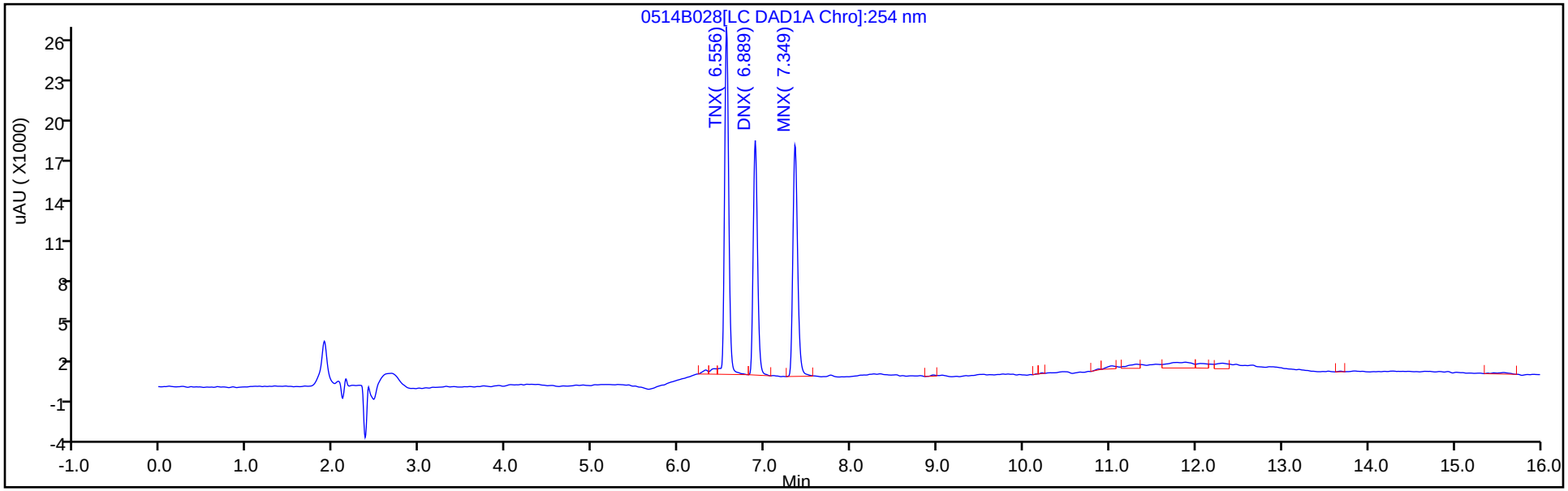
Report Date: 15-May-2019 10:58:27 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

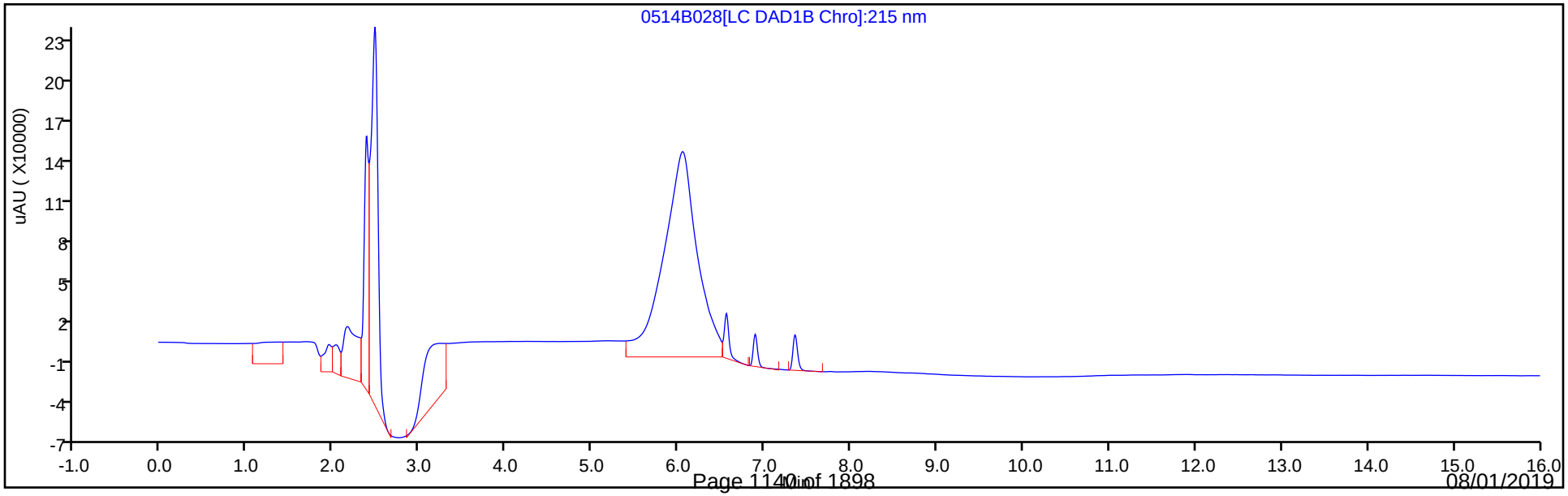
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B028.D

Injection Date:	15-May-2019 00:07:31	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L5			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B029.D
Lims ID: IC DMT L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-May-2019 00:31:14 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L4
Misc. Info.: 280-0081869-029
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:27 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:08:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.556	0.000	51155	0.2503	0.2566	
5 DNX	1	6.889	6.889	0.000	35958	0.2503	0.2423	
6 MNX	1	7.356	7.356	0.000	39586	0.2918	0.2899	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

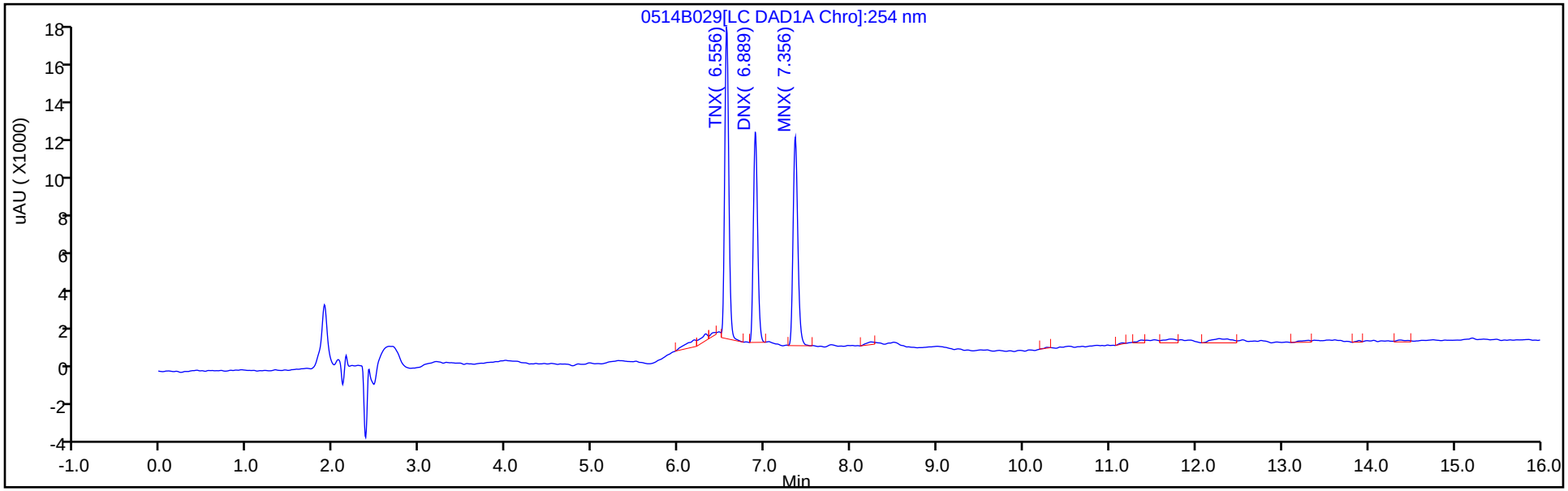
Report Date: 15-May-2019 10:58:28 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

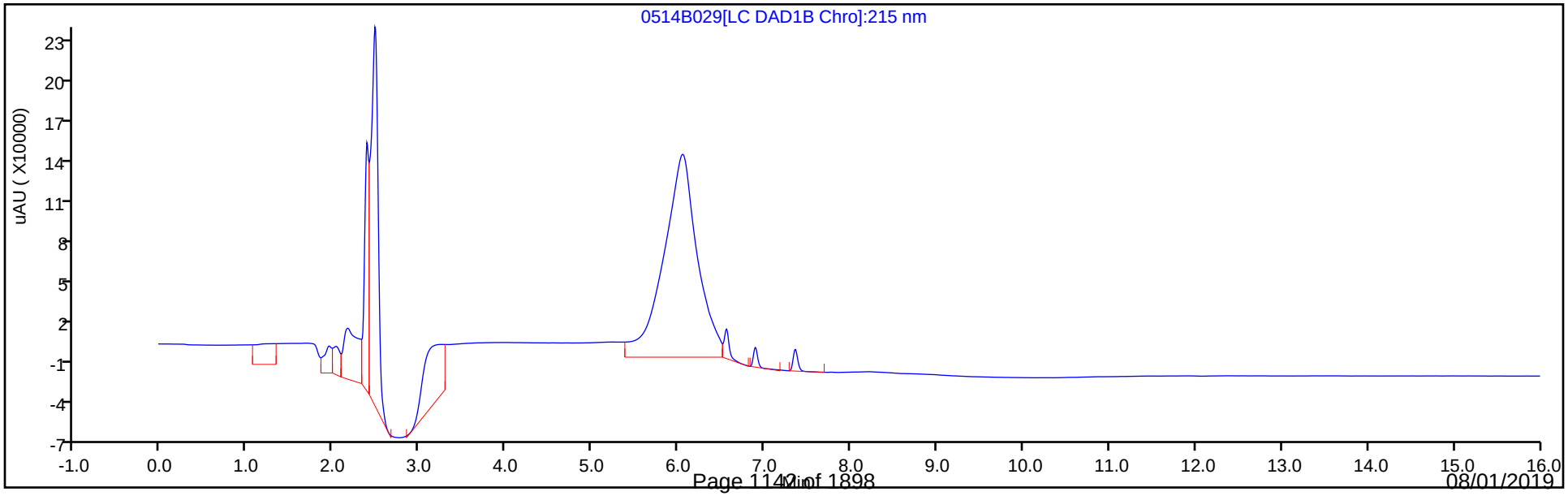
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B029.D

Injection Date:	15-May-2019 00:31:14	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L4			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B030.D				
Lims ID:	IC DMT L3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	15-May-2019 00:54:58	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L3				
Misc. Info.:	280-0081869-030				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2019 10:58:28	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.559	6.556	0.003	20722	0.1001	0.1039	
5 DNX	1	6.893	6.889	0.004	15627	0.1001	0.1053	
6 MNX	1	7.353	7.356	-0.003	15902	0.1167	0.1165	

Reagents:

8330 DMT_00002 Amount Added: 5.00 Units: uL

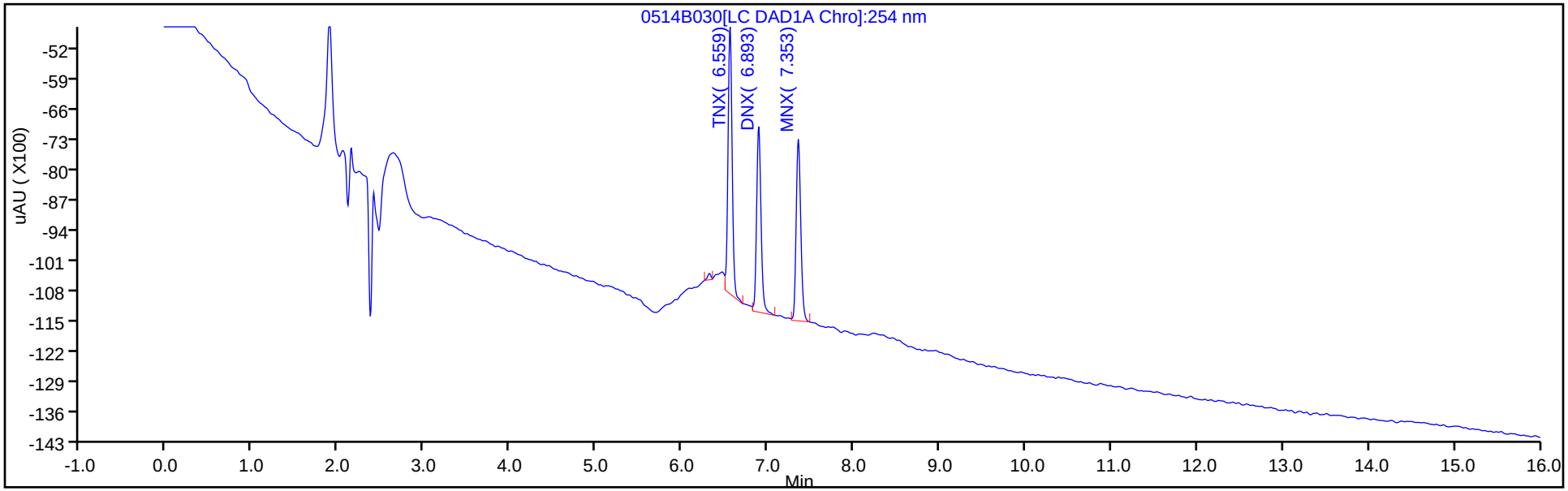
Report Date: 15-May-2019 10:58:29 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

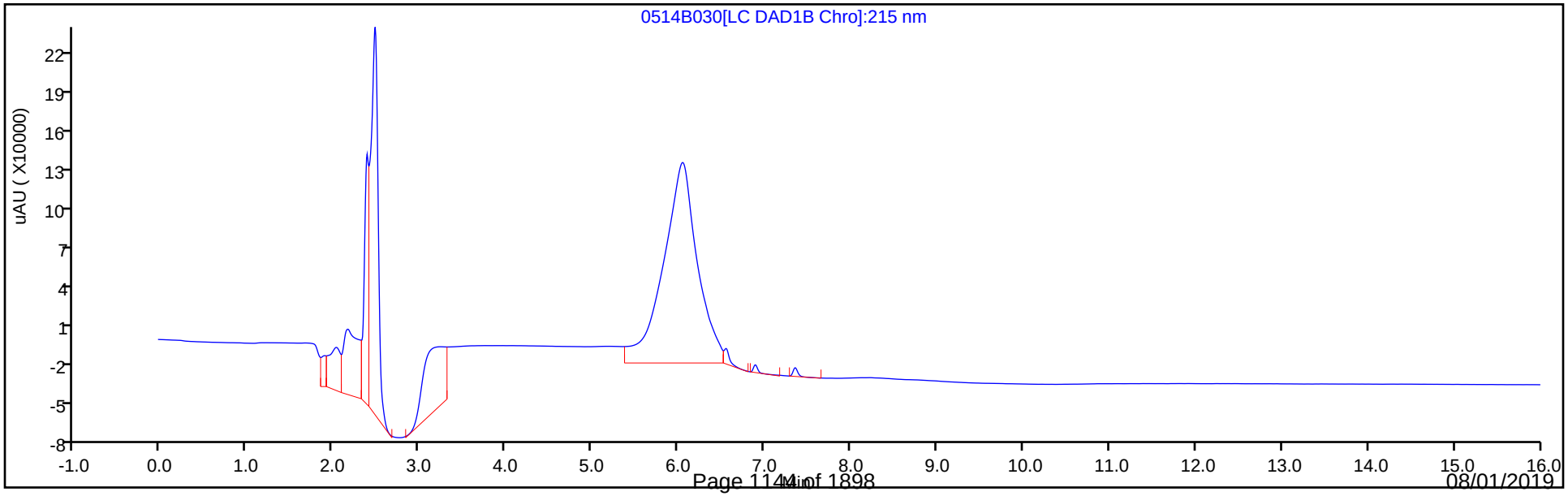
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B030.D

Injection Date:	15-May-2019 00:54:58	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L3			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B031.D
Lims ID: IC DMT L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-May-2019 01:18:42 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L2
Misc. Info.: 280-0081869-031
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:29 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:23:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.555	6.556	-0.001	9200	0.0501	0.0462	M
5 DNX	1	6.888	6.889	-0.001	7409	0.0501	0.0499	
6 MNX	1	7.355	7.356	-0.001	8078	0.0584	0.0592	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 2.50 Units: uL

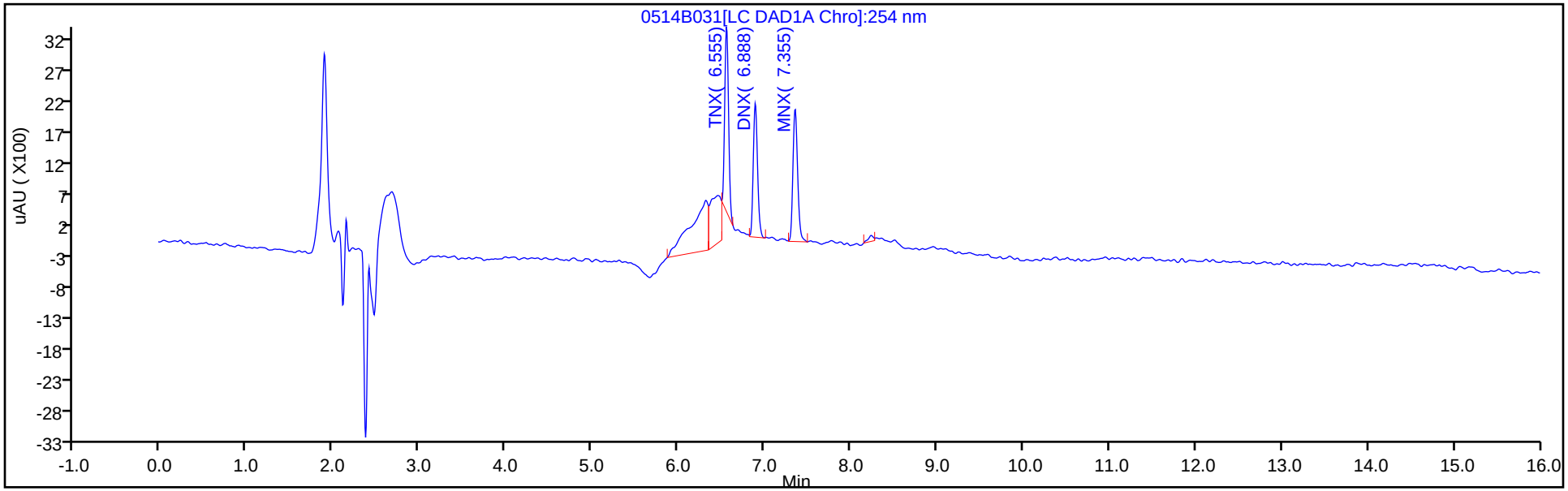
Report Date: 15-May-2019 10:58:30 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

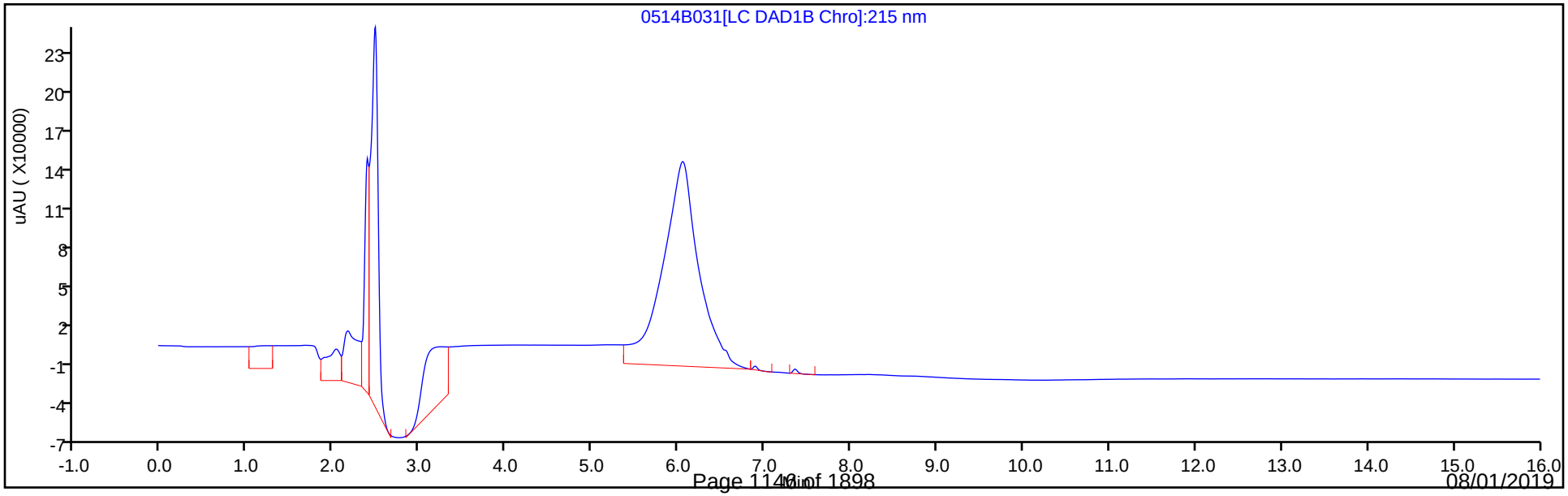
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B031.D

Injection Date:	15-May-2019 01:18:42	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L2			Worklist Smp#:	31
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

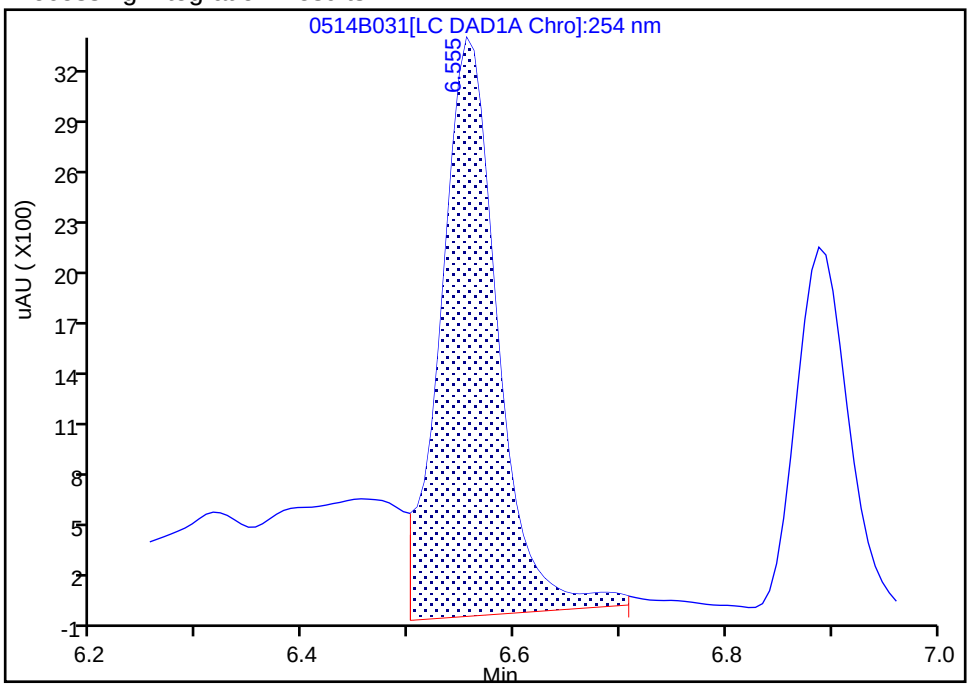
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B031.D				
Injection Date:	15-May-2019 01:18:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

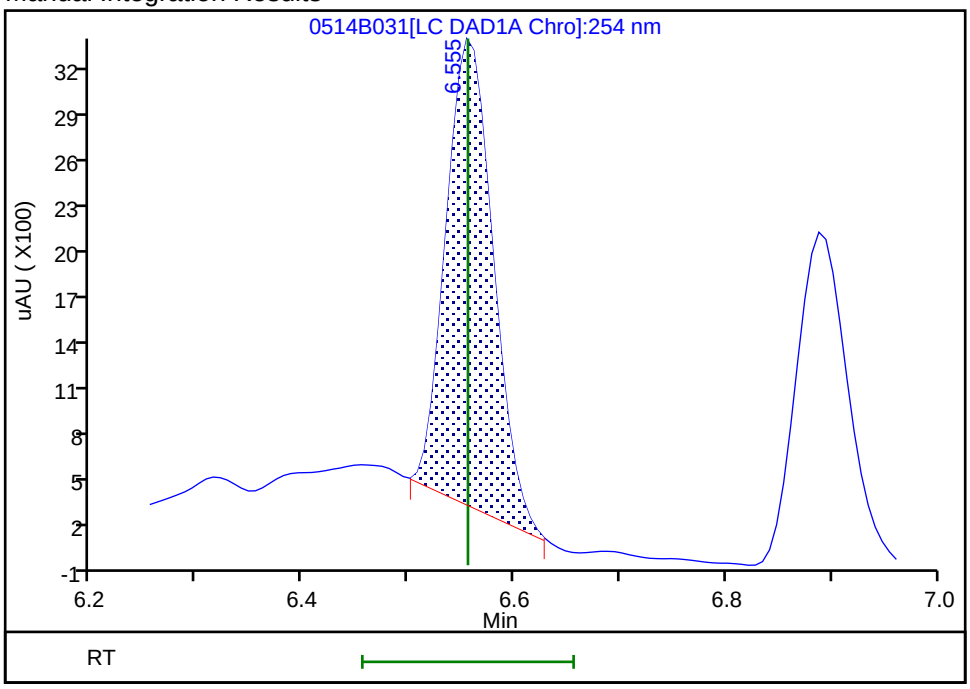
Processing Integration Results

RT: 6.55
Area: 12685
Amount: 0.059795
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 9200
Amount: 0.046151
Amount Units: ug/mL



Reviewer: fiedlerh, 15-May-2019 10:23:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D
Lims ID: IC DMT L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-May-2019 01:42:24 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L1
Misc. Info.: 280-0081869-032
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:30 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-May-2019 10:24:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.554	6.556	-0.002	3094	0.0200	0.0155	M
5 DNX	1	6.894	6.889	0.005	2891	0.0200	0.0195	
6 MNX	1	7.354	7.356	-0.002	3081	0.0233	0.0226	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 1.00 Units: uL

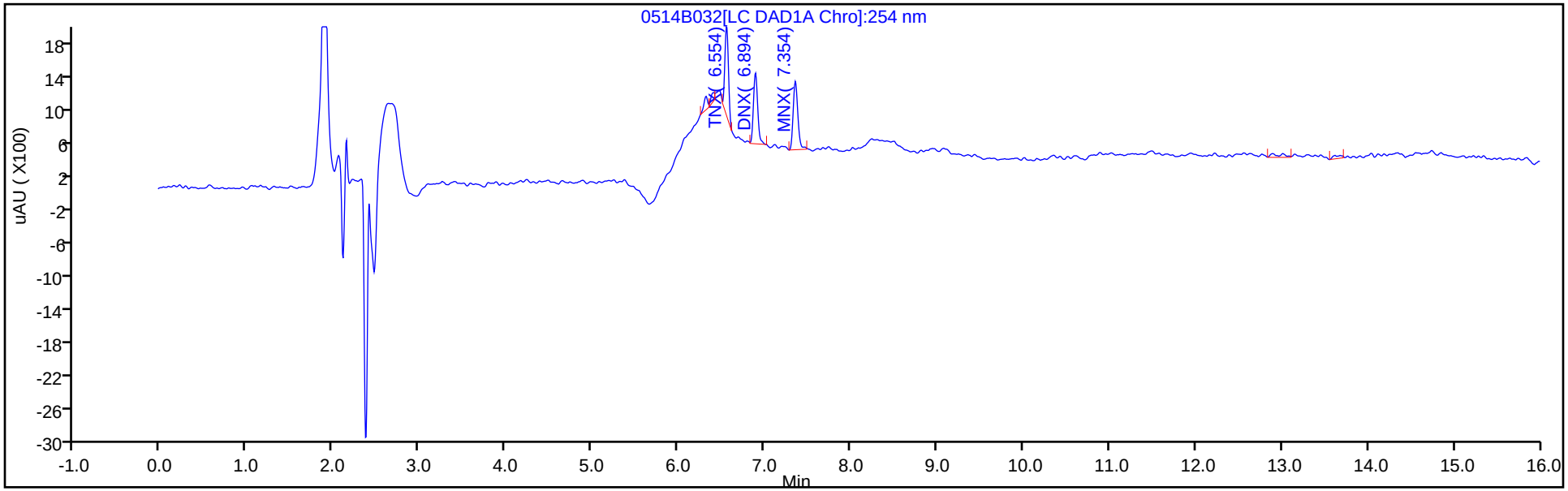
Report Date: 15-May-2019 10:58:31 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

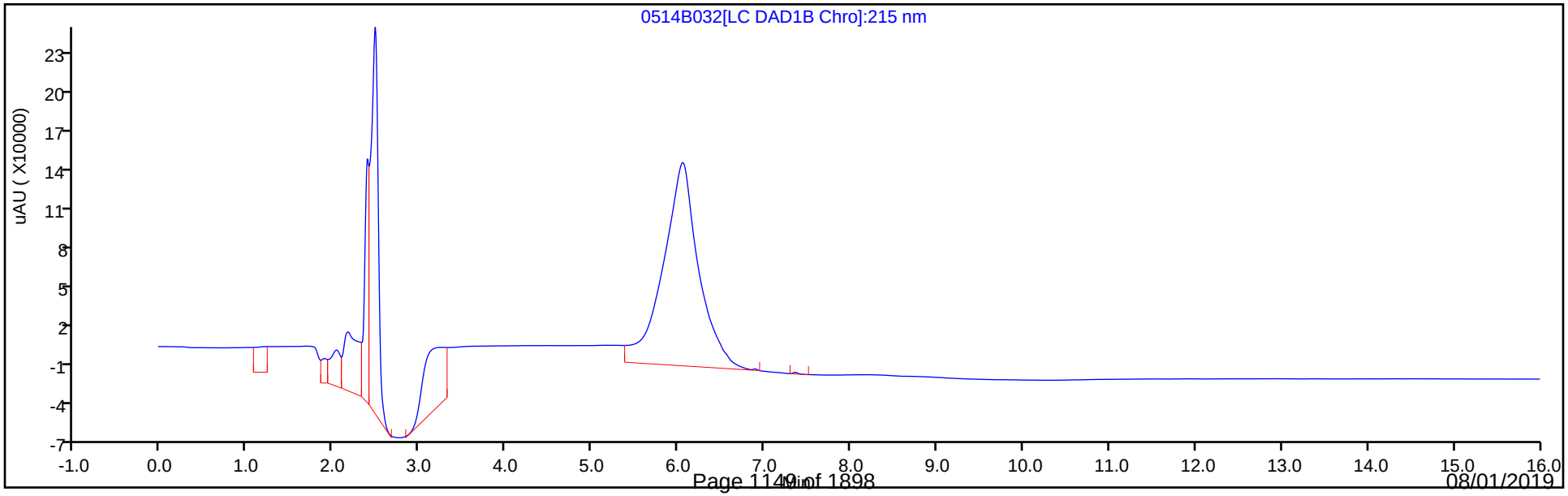
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Injection Date:	15-May-2019 01:42:24	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L1			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

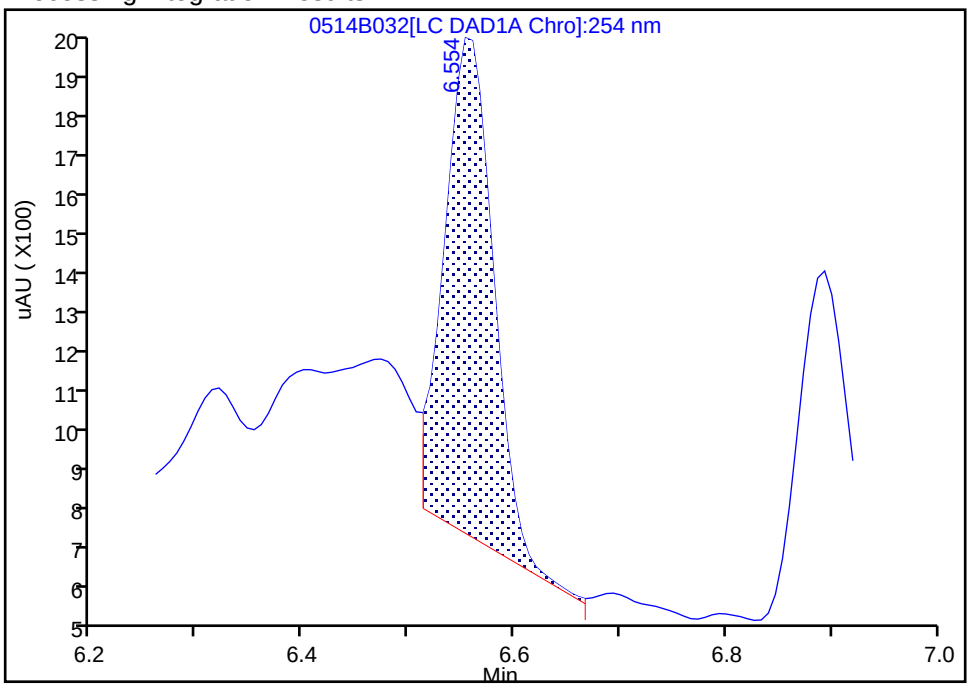
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Injection Date:	15-May-2019 01:42:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

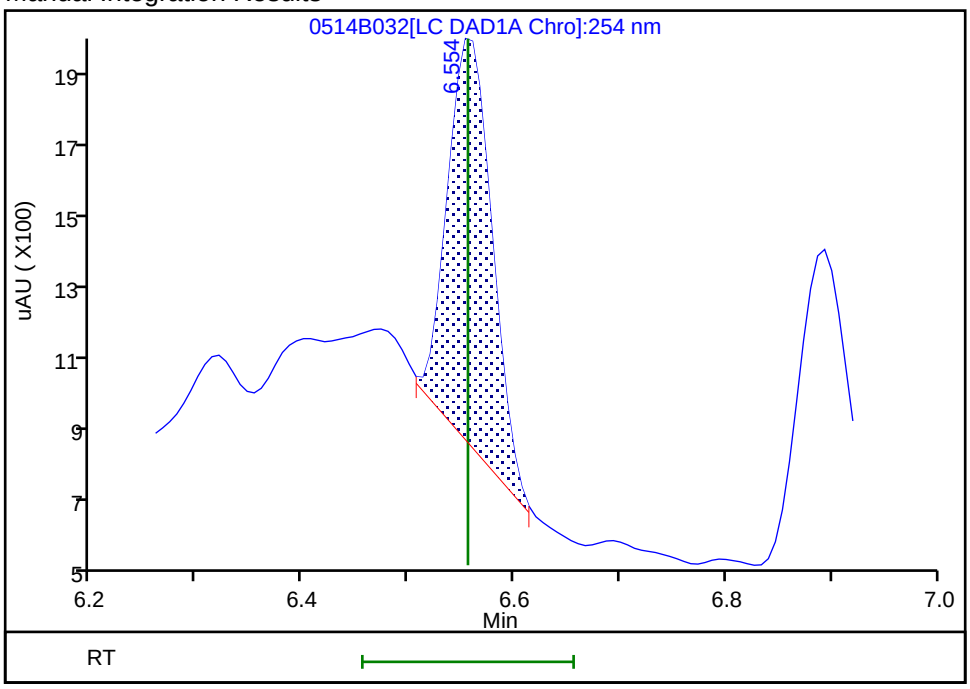
Processing Integration Results

RT: 6.55
Area: 3749
Amount: 0.018428
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 3094
Amount: 0.015521
Amount Units: ug/mL



Reviewer: fiedlerh, 15-May-2019 10:24:03
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
HMX	6.642	6.648	6.645	6.638	6.646	6.644	6.645	6.639			6.493 - 6.793	6.643
RDX	7.762	7.768	7.759	7.758	7.759	7.764	7.772	7.759			7.607 - 7.907	7.763
Picric acid	8.209	8.215	8.199	8.191	8.179	8.171	8.158	8.085			8.027 - 8.327	8.176
1,3,5-Trinitrobenzene	8.902	8.908	8.899	8.898	8.899	8.904	8.912	8.899			8.747 - 9.047	8.903
1,3-Dinitrobenzene	9.562	9.568	9.565	9.565	9.559	9.571	9.578	9.565			9.407 - 9.707	9.567
Nitrobenzene	9.949	9.954	9.952	9.951	9.945	9.957	9.965	9.952			9.793 - 10.093	9.953
Tetryl	10.275	10.288	10.279	10.278	10.272	10.291	10.298	10.285			10.120 - 10.420	10.283
Nitroglycerin	10.775	10.788	10.779	10.785	10.779	10.791	10.798	10.778			10.620 - 10.920	10.784
2,4,6-Trinitrotoluene	11.229	11.241	11.232	11.238	11.232	11.244	11.252	11.238			11.123 - 11.323	11.238
4-Amino-2,6-dinitrotoluene	11.422	11.434	11.425	11.425	11.419	11.437	11.452	11.432			11.317 - 11.517	11.431
2-Amino-4,6-dinitrotoluene	11.715	11.721	11.712	11.718	11.705	11.731	11.738	11.718			11.603 - 11.803	11.720
2,6-Dinitrotoluene	11.842	11.854	11.852	11.851	11.845	11.864	11.872	11.858			11.737 - 11.937	11.855
2,4-Dinitrotoluene	12.042	12.054	12.045	12.051	12.039	12.064	12.072	12.052			11.937 - 12.137	12.052
2-Nitrotoluene	12.882	12.894	12.892	12.891	12.879	12.904	12.912	12.898			12.727 - 13.027	12.894
4-Nitrotoluene	13.329	13.334	13.332	13.331	13.325	13.344	13.358	13.338			13.167 - 13.467	13.336
3-Nitrotoluene	13.915	13.934	13.932	13.925	13.919	13.944	13.958	13.938			13.767 - 14.067	13.933
PETN	15.015	15.041	15.032	15.025	15.019	15.051	15.058	15.045			14.860 - 15.160	15.036
1,2-Dinitrobenzene	8.742	8.748	8.739	8.745	8.739	8.751	8.752	8.745			8.587 - 8.887	8.745

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	89750 95318	89840 97413	85950 97946	87784 90666	Ave		91833.2446				4.9		20.0			
RDX	116900 107183	113880 113994	106270 115333	106608 108796	Ave		111120.423				3.9		20.0			
Picric acid	115100 83438	96140 88936	86330 89601	83168 83162	Ave		90734.2268				11.9		20.0			
1,3,5-Trinitrobenzene	231900 245955	252720 254053	234380 258481	241100 242023	Ave		245076.507				3.9		20.0			
1,3-Dinitrobenzene	296204 306151	323277 320835	303966 325162	304951 308858	Ave		311175.451				3.4		20.0			
Nitrobenzene	186976 193580	206567 204311	194850 209370	195944 199625	Ave		198903.056				3.8		20.0			
Tetryl	140150 162025	164180 169667	159520 173034	159276 167806	Ave		161957.218				6.2		20.0			
Nitroglycerin	63150 71560	71662 74671	69583 75926	70987 71328	Ave		71108.3505				5.4		20.0			
2,4,6-Trinitrotoluene	226295 222398	236315 231917	222122 235332	219442 224394	Ave		227276.691				2.8		20.0			
4-Amino-2,6-dinitrotoluene	176471 161515	171785 167985	161715 170409	160291 160853	Ave		166377.838				3.7		20.0			
2-Amino-4,6-dinitrotoluene	191476 204177	207458 212138	203998 213209	201440 207996	Ave		205236.402				3.3		20.0			
2,6-Dinitrotoluene	168594 153719	165942 161295	152672 165239	153236 153578	Ave		159284.393				4.2		20.0			
2,4-Dinitrotoluene	290669 296722	305549 310537	292715 315315	293844 298227	Ave		300447.252				3.0		20.0			
2-Nitrotoluene	127617 124990	135872 132549	127368 134538	127386 127948	Ave		129783.617				3.1		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
4-Nitrotoluene	107669 107174	111693 114057	107371 115455	108558 110063	Ave		110254.875				2.9		20.0			
3-Nitrotoluene	144721 139472	152410 147486	142161 150123	141510 143094	Ave		145122.200				3.1		20.0			
PETN	55530 76267	76864 79871	73030 80847	75248 76653	Ave		74288.8082				10.7		20.0			
1,2-Dinitrobenzene	130450 137375	142700 144760	136320 145938	137532 139553	Ave		139328.475				3.6		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
HMX	Ave	1795 68189	4492 97946	8595 226664	21946	38127	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	2338 79796	5694 115333	10627 271989	26652	42873	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Picric acid	Ave	2302 62255	4807 89601	8633 207904	20792	33375	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3,5-Trinitrobenzene	Ave	4638 177837	12636 258481	23438 605058	60275	98382	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3-Dinitrobenzene	Ave	5930 224809	16180 325487	30427 772917	76314	122583	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Ave	3747 143304	10349 209789	19524 500061	49084	77587	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Tetryl	Ave	2803 118767	8209 173034	15952 419514	39819	64810	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitroglycerin	Ave	12630 522695	35831 759263	69583 1783196	177468	286239	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2,4,6-Trinitrotoluene	Ave	4544 162991	11863 236273	22301 563229	55080	89315	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	3540 117942	8615 170920	16220 403338	40193	64800	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2-Amino-4,6-dinitrotoluene	Ave	3841 148942	10404 213849	20461 521549	50511	81916	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,6-Dinitrotoluene	Ave	3382 113245	8322 165735	15313 385096	38424	61672	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,4-Dinitrotoluene	Ave	5825 217811	15308 315946	29330 747059	73608	118926	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
2-Nitrotoluene	Ave	2560 93063	6814 134942	12775 320829	31942	50146	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
4-Nitrotoluene	Ave	2162 80159	5607 115917	10780 276257	27248	43041	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3-Nitrotoluene	Ave	2906 103653	7651 150723	14273 359167	35519	56012	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Ave	11106 559099	38432 808473	73030 1916332	188119	305068	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	2609 101332	7135 145938	13632 348882	34383	54950	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010007.D
Lims ID: IC MAIN L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Jul-2019 14:40:42 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L8
Misc. Info.: 280-0083376-007
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:43 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.639	6.643	-0.004	226664	2.50	2.47	
	7 RDX	1	7.759	7.757	0.002	271989	2.50	2.45	
	8 2,4,6-Trinitrophenol	1	8.085	8.177	-0.092	207904	2.50	2.29	
$	9 1,2-Dinitrobenzene	1	8.745	8.737	0.008	348882	2.50	2.50	
	10 1,3,5-Trinitrobenzene	1	8.899	8.897	0.002	605058	2.50	2.47	
	11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	772917	2.50	2.48	
	12 Nitrobenzene	1	9.952	9.943	0.009	500061	2.51	2.51	
	14 Tetryl	1	10.285	10.270	0.015	419514	2.50	2.59	
	15 Nitroglycerin	2	10.778	10.770	0.008	1783196	25.0	25.1	
	16 2,4,6-Trinitrotoluene	1	11.238	11.223	0.015	563229	2.51	2.48	
	17 4-Amino-2,6-dinitrotoluene	1	11.432	11.417	0.015	403338	2.51	2.42	
	18 2-Amino-4,6-dinitrotoluene	1	11.718	11.703	0.015	521549	2.51	2.54	
	19 2,6-Dinitrotoluene	1	11.858	11.837	0.021	385096	2.51	2.42	
	20 2,4-Dinitrotoluene	1	12.052	12.037	0.015	747059	2.51	2.49	
	21 o-Nitrotoluene	1	12.898	12.877	0.021	320829	2.51	2.47	
	22 p-Nitrotoluene	1	13.338	13.317	0.021	276257	2.51	2.51	
	23 m-Nitrotoluene	1	13.938	13.917	0.021	359167	2.51	2.47	
	24 PETN	2	15.045	15.010	0.035	1916332	25.0	25.8	

Reagents:

8330IntermStk_00058 Amount Added: 125.00 Units: uL

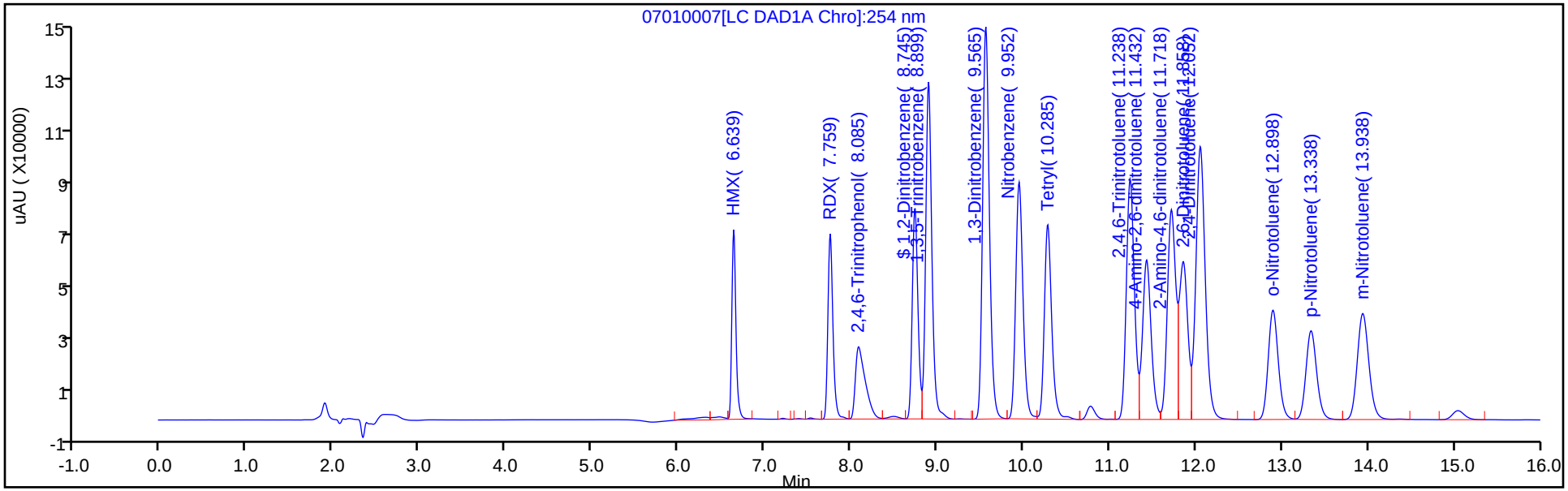
Report Date: 02-Jul-2019 11:34:44 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

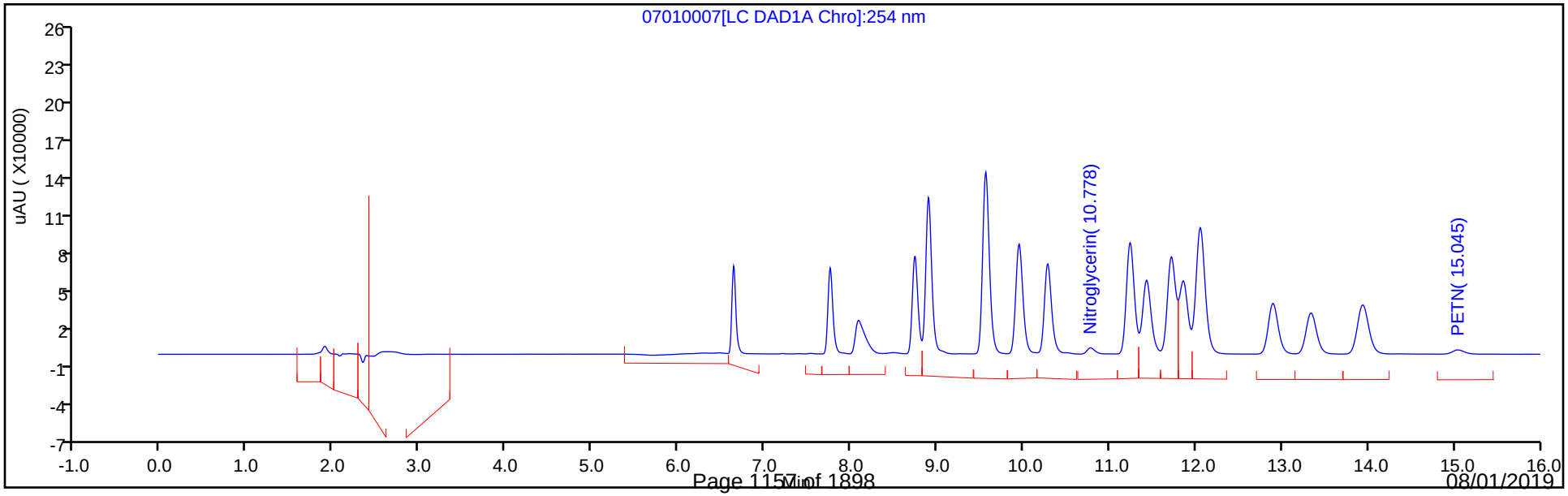
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010007.D

Injection Date:	01-Jul-2019 14:40:42	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L8			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010008.D
Lims ID: IC MAIN L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Jul-2019 15:04:44 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L7
Misc. Info.: 280-0083376-008
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:46 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.645	6.638	0.007	97946	1.00	1.07	
7 RDX	1	7.772	7.758	0.014	115333	1.00	1.04	
8 2,4,6-Trinitrophenol	1	8.158	8.191	-0.033	89601	1.00	0.9875	
$ 9 1,2-Dinitrobenzene	1	8.752	8.745	0.007	145938	1.00	1.05	
10 1,3,5-Trinitrobenzene	1	8.912	8.898	0.014	258481	1.00	1.05	
11 1,3-Dinitrobenzene	1	9.578	9.565	0.013	325487	1.00	1.05	
12 Nitrobenzene	1	9.965	9.951	0.014	209789	1.00	1.05	
14 Tetryl	1	10.298	10.278	0.020	173034	1.00	1.07	
15 Nitroglycerin	2	10.798	10.785	0.013	759263	10.0	10.7	
16 2,4,6-Trinitrotoluene	1	11.252	11.238	0.014	236273	1.00	1.04	
17 4-Amino-2,6-dinitrotoluene	1	11.452	11.425	0.027	170920	1.00	1.03	
18 2-Amino-4,6-dinitrotoluene	1	11.738	11.718	0.020	213849	1.00	1.04	
19 2,6-Dinitrotoluene	1	11.872	11.851	0.021	165735	1.00	1.04	
20 2,4-Dinitrotoluene	1	12.072	12.051	0.021	315946	1.00	1.05	
21 o-Nitrotoluene	1	12.912	12.891	0.021	134942	1.00	1.04	
22 p-Nitrotoluene	1	13.358	13.331	0.027	115917	1.00	1.05	
23 m-Nitrotoluene	1	13.958	13.925	0.033	150723	1.00	1.04	
24 PETN	2	15.058	15.025	0.033	808473	10.0	10.9	

Reagents:

8330IntermStk_00058 Amount Added: 50.00 Units: uL

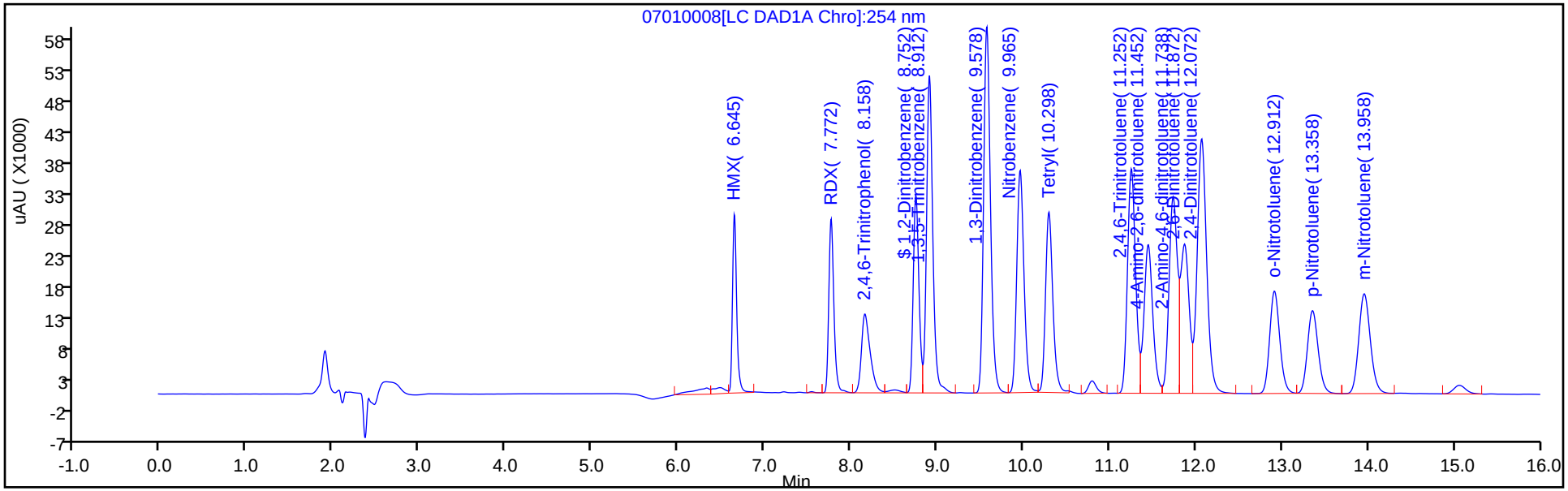
Report Date: 02-Jul-2019 11:34:46 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

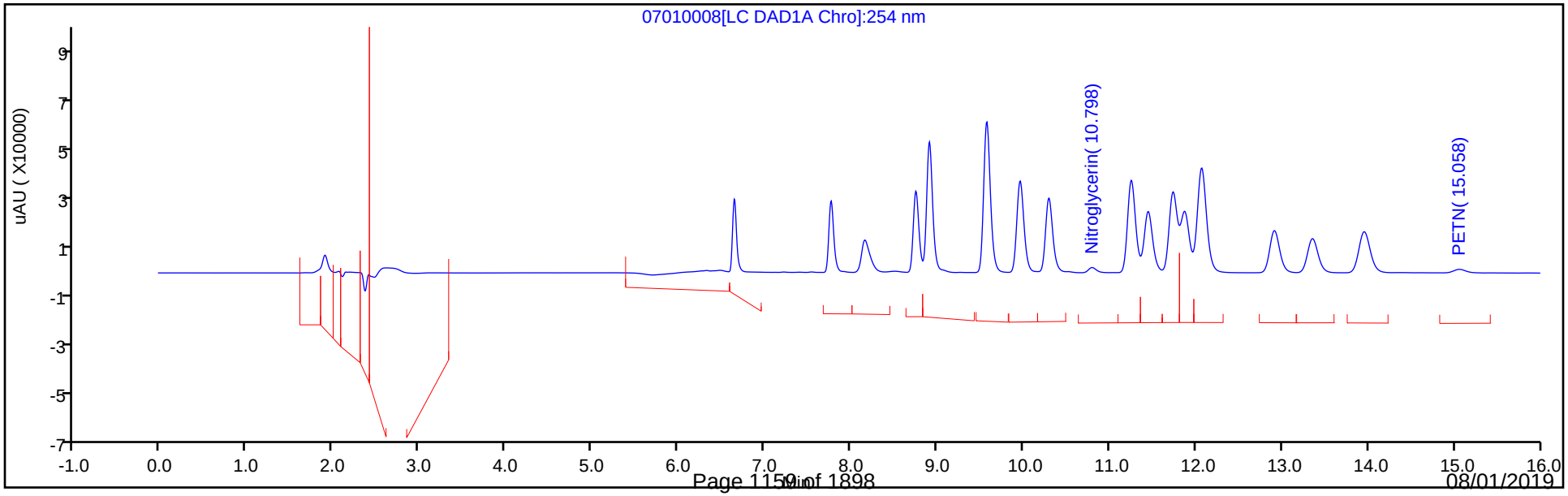
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010008.D

Injection Date:	01-Jul-2019 15:04:44	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L7			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010009.D
Lims ID: IC MAIN L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Jul-2019 15:27:41 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L6
Misc. Info.: 280-0083376-009
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:47 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.644	6.643	0.001	68189	0.7000	0.7425	
7 RDX	1	7.764	7.757	0.007	79796	0.7000	0.7181	
8 2,4,6-Trinitrophenol	1	8.171	8.177	-0.006	62255	0.7000	0.6861	
$ 9 1,2-Dinitrobenzene	1	8.751	8.737	0.014	101332	0.7000	0.7273	
10 1,3,5-Trinitrobenzene	1	8.904	8.897	0.007	177837	0.7000	0.7256	
11 1,3-Dinitrobenzene	1	9.571	9.557	0.014	224809	0.7007	0.7225	
12 Nitrobenzene	1	9.957	9.943	0.014	143304	0.7014	0.7205	
14 Tetryl	1	10.291	10.270	0.021	118767	0.7000	0.7333	
15 Nitroglycerin	2	10.791	10.770	0.021	522695	7.00	7.35	
16 2,4,6-Trinitrotoluene	1	11.244	11.223	0.021	162991	0.7028	0.7171	
17 4-Amino-2,6-dinitrotoluene	1	11.437	11.417	0.020	117942	0.7021	0.7089	
18 2-Amino-4,6-dinitrotoluene	1	11.731	11.703	0.028	148942	0.7021	0.7257	
19 2,6-Dinitrotoluene	1	11.864	11.837	0.027	113245	0.7021	0.7110	
20 2,4-Dinitrotoluene	1	12.064	12.037	0.027	217811	0.7014	0.7250	
21 o-Nitrotoluene	1	12.904	12.877	0.027	93063	0.7021	0.7171	
22 p-Nitrotoluene	1	13.344	13.317	0.027	80159	0.7028	0.7270	
23 m-Nitrotoluene	1	13.944	13.917	0.027	103653	0.7028	0.7142	
24 PETN	2	15.051	15.010	0.041	559099	7.00	7.53	

Reagents:

8330IntermStk_00058 Amount Added: 35.00 Units: uL

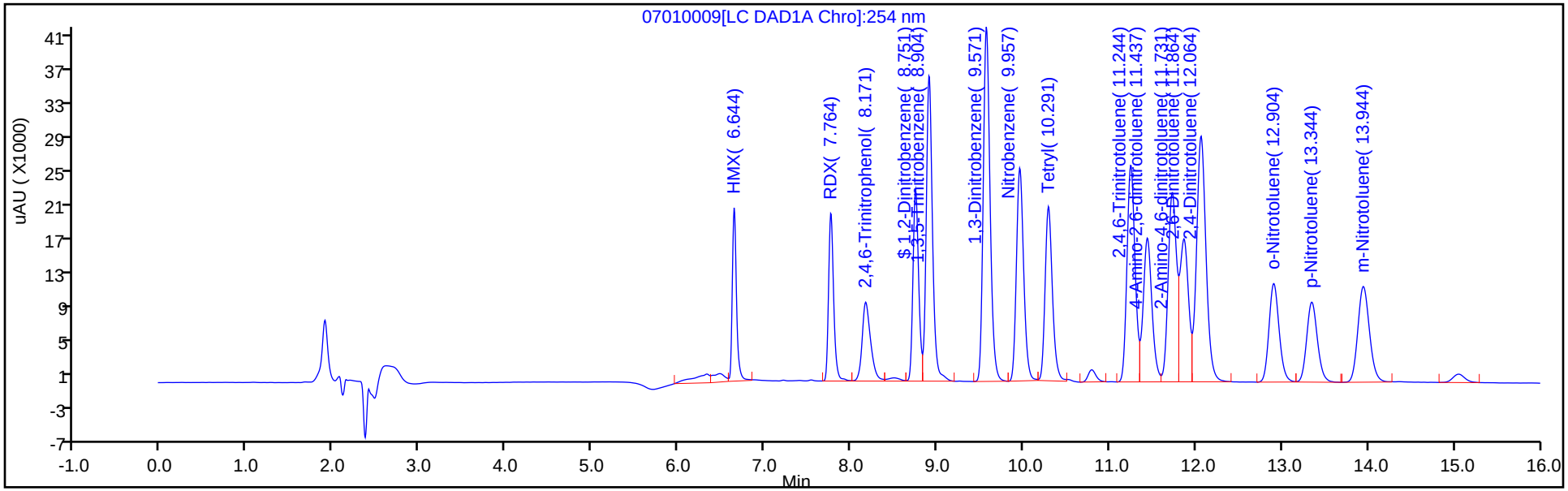
Report Date: 02-Jul-2019 11:34:48 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

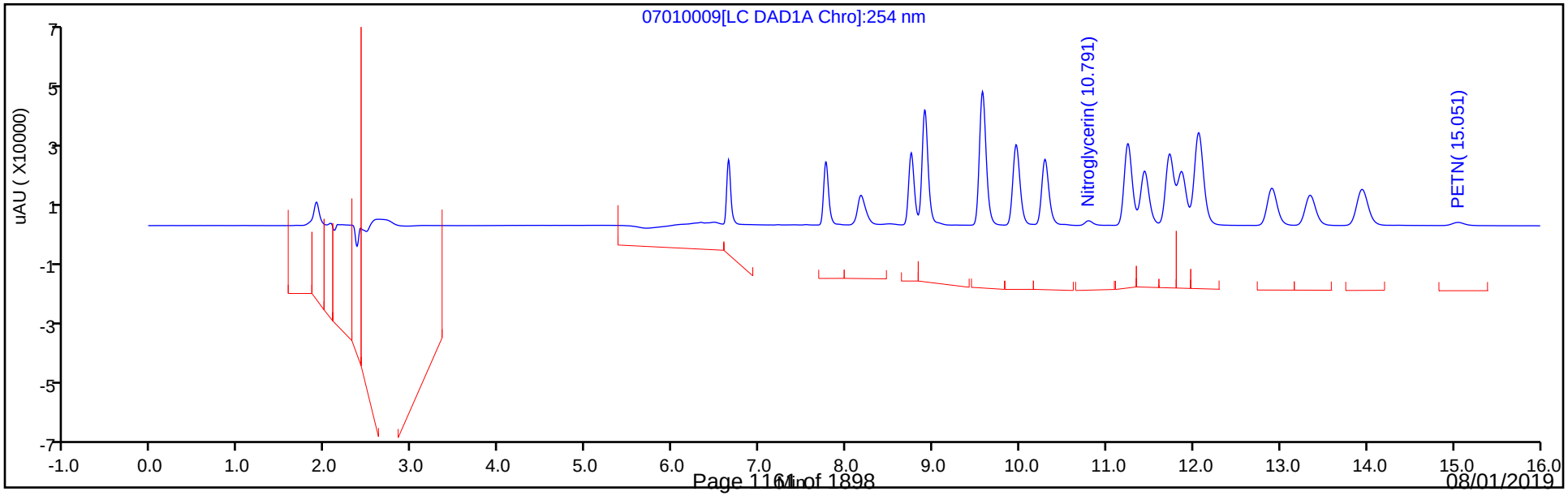
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010009.D

Injection Date:	01-Jul-2019 15:27:41	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L6			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010010.D
Lims ID: IC MAIN L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Jul-2019 15:50:38 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L5
Misc. Info.: 280-0083376-010
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:49 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.646	6.638	0.008	38127	0.4000	0.4152	
	7 RDX	1	7.759	7.758	0.001	42873	0.4000	0.3858	
	8 2,4,6-Trinitrophenol	1	8.179	8.191	-0.012	33375	0.4000	0.3678	
$	9 1,2-Dinitrobenzene	1	8.739	8.745	-0.006	54950	0.4000	0.3944	
	10 1,3,5-Trinitrobenzene	1	8.899	8.898	0.001	98382	0.4000	0.4014	
	11 1,3-Dinitrobenzene	1	9.559	9.565	-0.006	122583	0.4004	0.3939	
	12 Nitrobenzene	1	9.945	9.951	-0.006	77587	0.4008	0.3901	
	14 Tetryl	1	10.272	10.278	-0.006	64810	0.4000	0.4002	
	15 Nitroglycerin	2	10.779	10.785	-0.006	286239	4.00	4.03	
	16 2,4,6-Trinitrotoluene	1	11.232	11.238	-0.006	89315	0.4016	0.3930	
	17 4-Amino-2,6-dinitrotoluene	1	11.419	11.425	-0.006	64800	0.4012	0.3895	
	18 2-Amino-4,6-dinitrotoluene	1	11.705	11.718	-0.013	81916	0.4012	0.3991	
	19 2,6-Dinitrotoluene	1	11.845	11.851	-0.006	61672	0.4012	0.3872	
	20 2,4-Dinitrotoluene	1	12.039	12.051	-0.012	118926	0.4008	0.3958	
	21 o-Nitrotoluene	1	12.879	12.891	-0.012	50146	0.4012	0.3864	
	22 p-Nitrotoluene	1	13.325	13.331	-0.006	43041	0.4016	0.3904	
	23 m-Nitrotoluene	1	13.919	13.925	-0.006	56012	0.4016	0.3860	
	24 PETN	2	15.019	15.025	-0.006	305068	4.00	4.11	

Reagents:

8330IntermStk_00058 Amount Added: 20.00 Units: uL

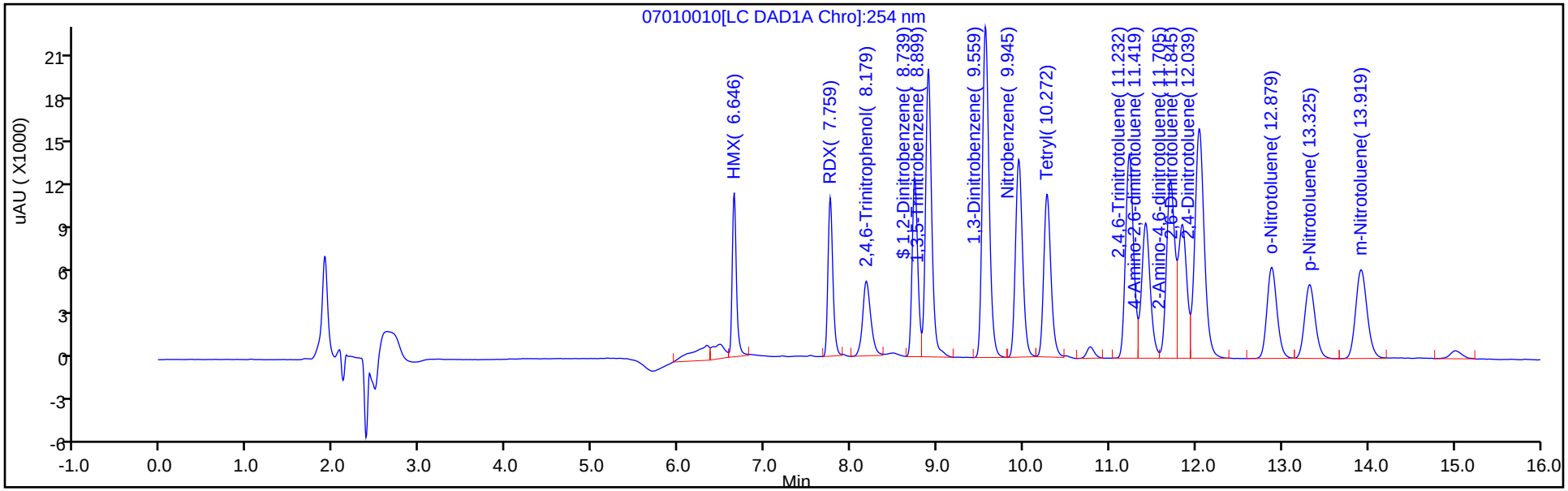
Report Date: 02-Jul-2019 11:34:50 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

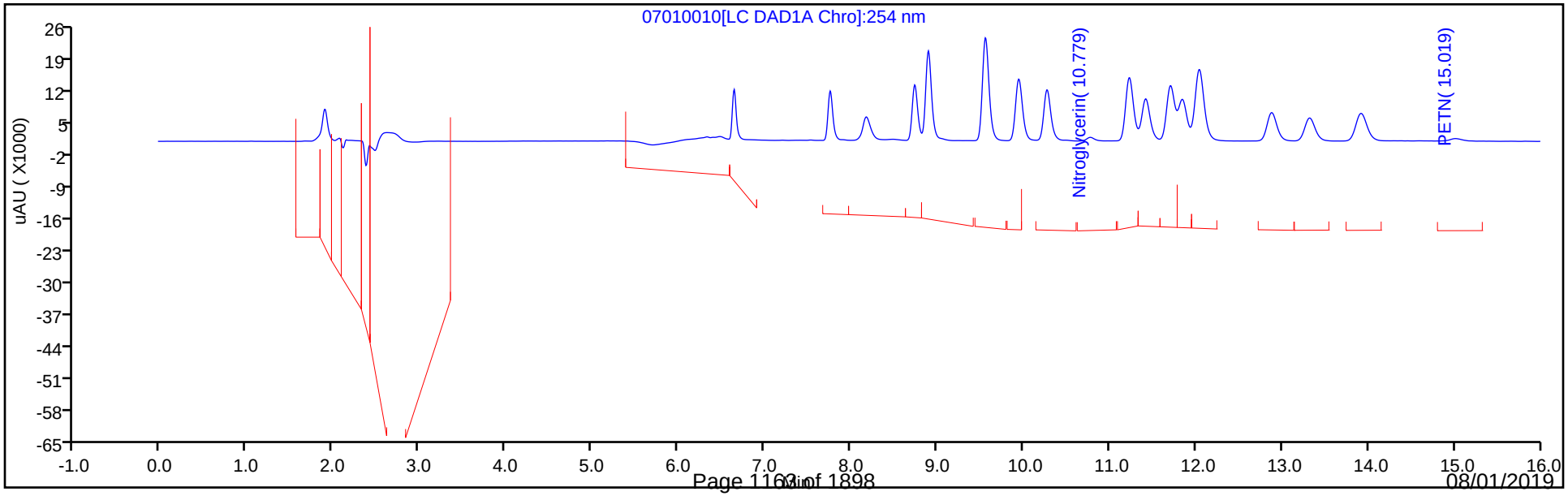
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010010.D

Injection Date:	01-Jul-2019 15:50:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L5			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010011.D
Lims ID: IC MAIN L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Jul-2019 16:13:37 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L4
Misc. Info.: 280-0083376-011
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:51 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 01-Jul-2019 16:40:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.638	6.643	-0.005	21946	0.2500	0.2390	
7 RDX	1	7.758	7.757	0.001	26652	0.2500	0.2398	
8 2,4,6-Trinitrophenol	1	8.191	8.177	0.014	20792	0.2500	0.2292	
$ 9 1,2-Dinitrobenzene	1	8.745	8.737	0.008	34383	0.2500	0.2468	
10 1,3,5-Trinitrobenzene	1	8.898	8.897	0.001	60275	0.2500	0.2459	
11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	76314	0.2503	0.2452	
12 Nitrobenzene	1	9.951	9.943	0.008	49084	0.2505	0.2468	
14 Tetryl	1	10.278	10.270	0.008	39819	0.2500	0.2459	
15 Nitroglycerin	2	10.785	10.770	0.015	177468	2.50	2.50	
16 2,4,6-Trinitrotoluene	1	11.238	11.223	0.015	55080	0.2510	0.2423	
17 4-Amino-2,6-dinitrotoluene	1	11.425	11.417	0.008	40193	0.2508	0.2416	
18 2-Amino-4,6-dinitrotoluene	1	11.718	11.703	0.015	50511	0.2508	0.2461	
19 2,6-Dinitrotoluene	1	11.851	11.837	0.014	38424	0.2508	0.2412	
20 2,4-Dinitrotoluene	1	12.051	12.037	0.014	73608	0.2505	0.2450	
21 o-Nitrotoluene	1	12.891	12.877	0.014	31942	0.2508	0.2461	
22 p-Nitrotoluene	1	13.331	13.317	0.014	27248	0.2510	0.2471	
23 m-Nitrotoluene	1	13.925	13.917	0.008	35519	0.2510	0.2448	
24 PETN	2	15.025	15.010	0.015	188119	2.50	2.53	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

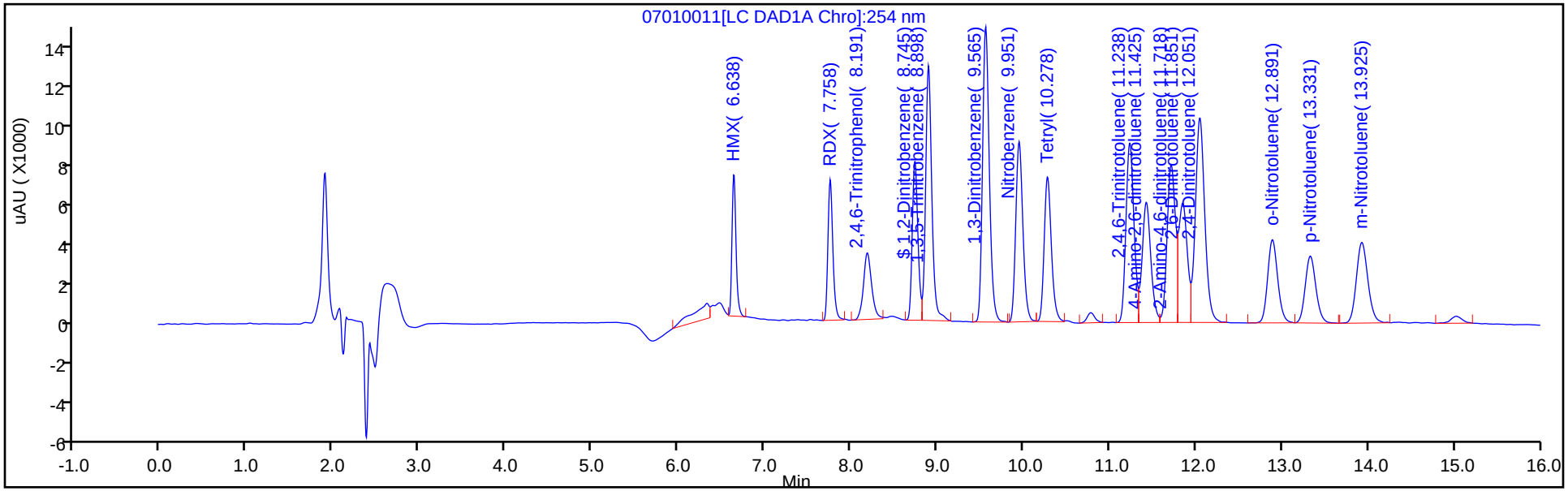
Report Date: 02-Jul-2019 11:34:51 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

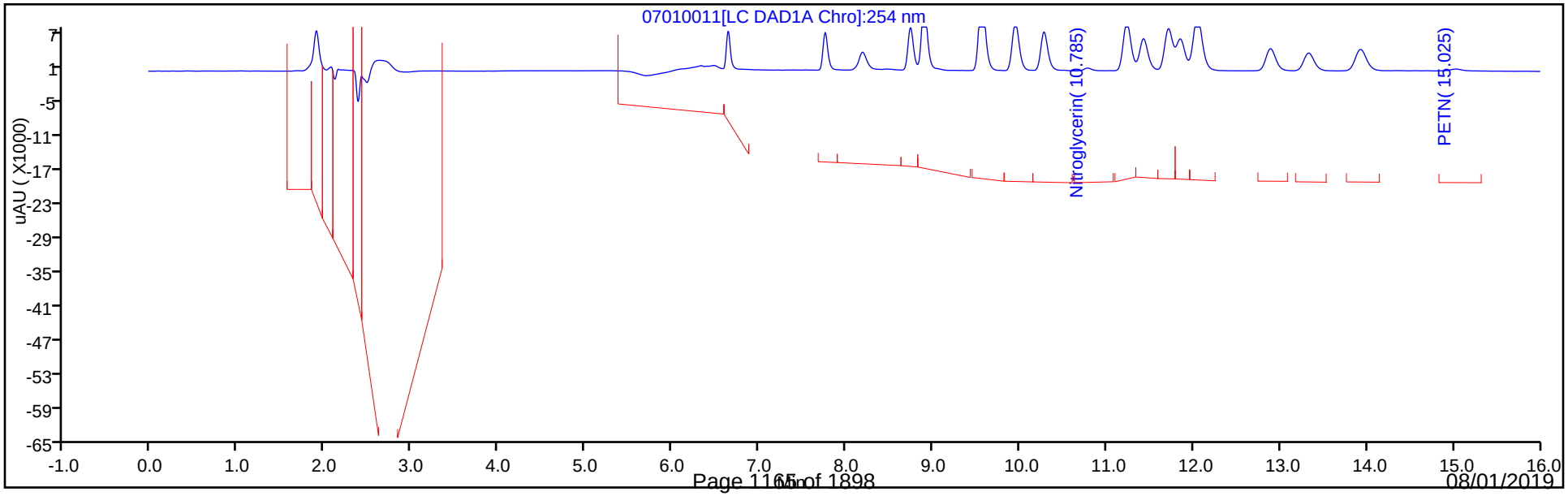
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010011.D

Injection Date:	01-Jul-2019 16:13:37	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L4			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D
Lims ID: IC MAIN L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Jul-2019 16:36:33 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L3
Misc. Info.: 280-0083376-012
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:53 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 01-Jul-2019 18:30:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.645	6.643	0.002	8595	0.1000	0.0936	M
7 RDX	1	7.759	7.757	0.002	10627	0.1000	0.0956	
8 2,4,6-Trinitrophenol	1	8.199	8.177	0.022	8633	0.1000	0.0951	
$ 9 1,2-Dinitrobenzene	1	8.739	8.737	0.002	13632	0.1000	0.0978	
10 1,3,5-Trinitrobenzene	1	8.899	8.897	0.002	23438	0.1000	0.0956	
11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	30427	0.1001	0.0978	
12 Nitrobenzene	1	9.952	9.943	0.009	19524	0.1002	0.0982	
14 Tetryl	1	10.279	10.270	0.009	15952	0.1000	0.0985	
15 Nitroglycerin	2	10.779	10.770	0.009	69583	1.00	0.9785	
16 2,4,6-Trinitrotoluene	1	11.232	11.223	0.009	22301	0.1004	0.0981	
17 4-Amino-2,6-dinitrotoluene	1	11.425	11.417	0.008	16220	0.1003	0.0975	
18 2-Amino-4,6-dinitrotoluene	1	11.712	11.703	0.009	20461	0.1003	0.0997	
19 2,6-Dinitrotoluene	1	11.852	11.837	0.015	15313	0.1003	0.0961	
20 2,4-Dinitrotoluene	1	12.045	12.037	0.008	29330	0.1002	0.0976	
21 o-Nitrotoluene	1	12.892	12.877	0.015	12775	0.1003	0.0984	
22 p-Nitrotoluene	1	13.332	13.317	0.015	10780	0.1004	0.0978	
23 m-Nitrotoluene	1	13.932	13.917	0.015	14273	0.1004	0.0984	
24 PETN	2	15.032	15.010	0.022	73030	1.00	0.9831	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 5.00 Units: uL

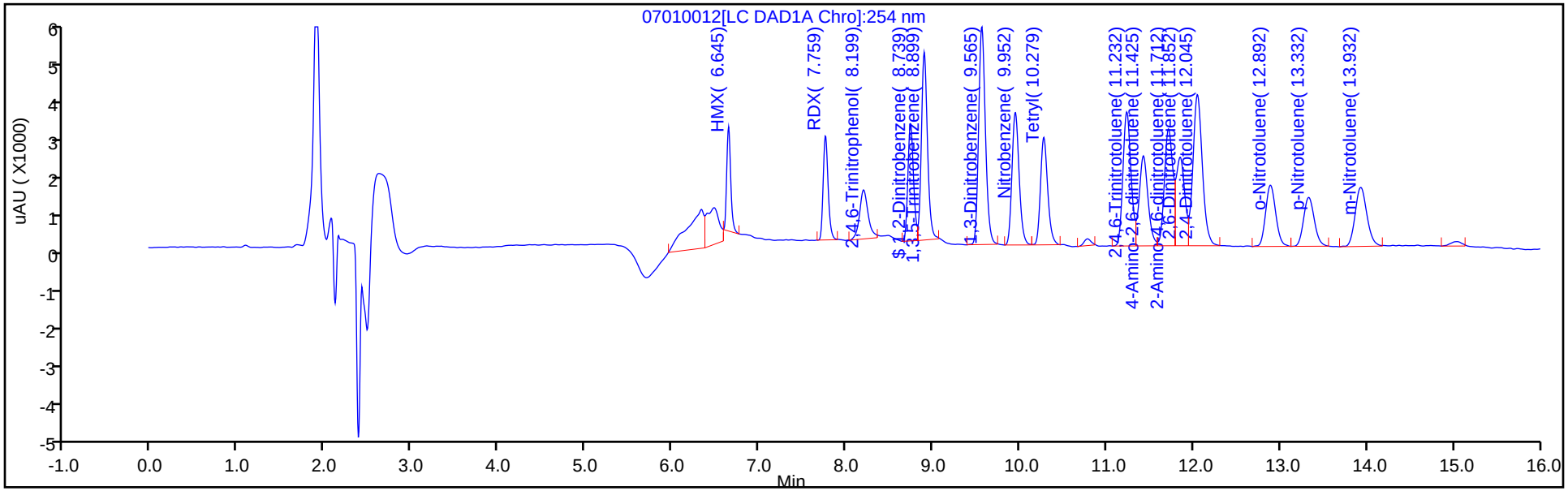
Report Date: 02-Jul-2019 11:34:53 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

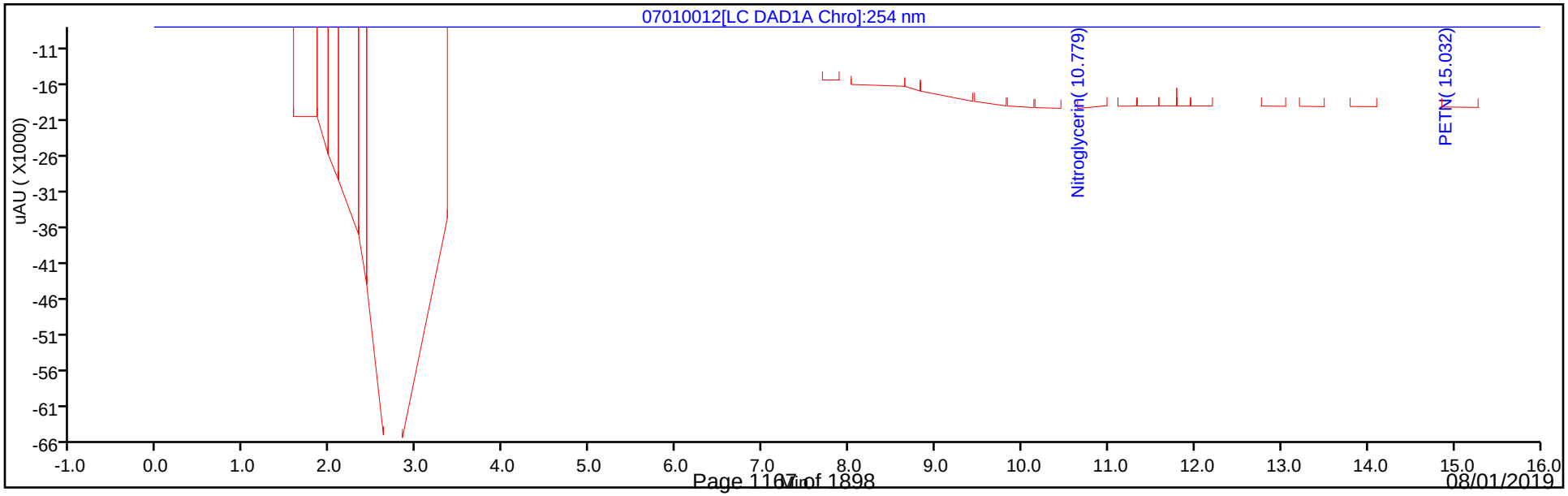
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D

Injection Date:	01-Jul-2019 16:36:33	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L3			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

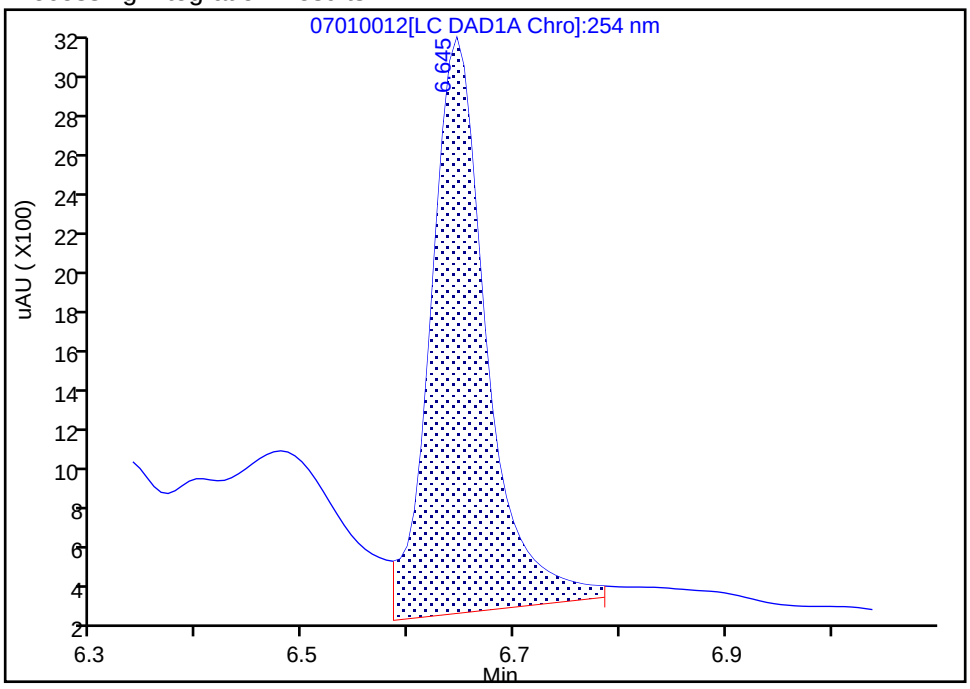
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D				
Injection Date:	01-Jul-2019 16:36:33	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L3				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

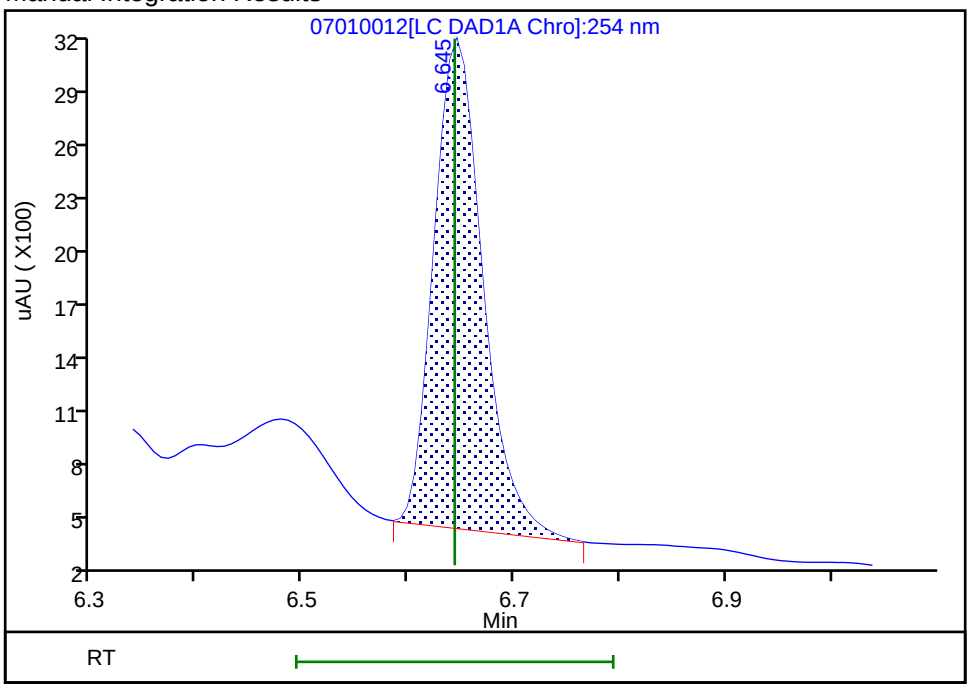
Processing Integration Results

RT: 6.65
Area: 10637
Amount: 0.107460
Amount Units: ug/mL



Manual Integration Results

RT: 6.65
Area: 8595
Amount: 0.093594
Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:30:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D
Lims ID: IC MAIN L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jul-2019 17:00:38 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L2
Misc. Info.: 280-0083376-013
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:55 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 01-Jul-2019 18:30:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.648	6.643	0.005	4492	0.0500	0.0489	M
7 RDX	1	7.768	7.757	0.011	5694	0.0500	0.0512	
8 2,4,6-Trinitrophenol	1	8.215	8.177	0.038	4807	0.0500	0.0530	
$ 9 1,2-Dinitrobenzene	1	8.748	8.737	0.011	7135	0.0500	0.0512	
10 1,3,5-Trinitrobenzene	1	8.908	8.897	0.011	12636	0.0500	0.0516	
11 1,3-Dinitrobenzene	1	9.568	9.557	0.011	16180	0.0501	0.0520	
12 Nitrobenzene	1	9.954	9.943	0.011	10349	0.0501	0.0520	
14 Tetryl	1	10.288	10.270	0.018	8209	0.0500	0.0507	
15 Nitroglycerin	2	10.788	10.770	0.018	35831	0.5000	0.5039	
16 2,4,6-Trinitrotoluene	1	11.241	11.223	0.018	11863	0.0502	0.0522	
17 4-Amino-2,6-dinitrotoluene	1	11.434	11.417	0.017	8615	0.0502	0.0518	
18 2-Amino-4,6-dinitrotoluene	1	11.721	11.703	0.018	10404	0.0502	0.0507	M
19 2,6-Dinitrotoluene	1	11.854	11.837	0.017	8322	0.0502	0.0522	M
20 2,4-Dinitrotoluene	1	12.054	12.037	0.017	15308	0.0501	0.0510	
21 o-Nitrotoluene	1	12.894	12.877	0.017	6814	0.0502	0.0525	
22 p-Nitrotoluene	1	13.334	13.317	0.017	5607	0.0502	0.0509	
23 m-Nitrotoluene	1	13.934	13.917	0.017	7651	0.0502	0.0527	
24 PETN	2	15.041	15.010	0.031	38432	0.5000	0.5173	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 2.50 Units: uL

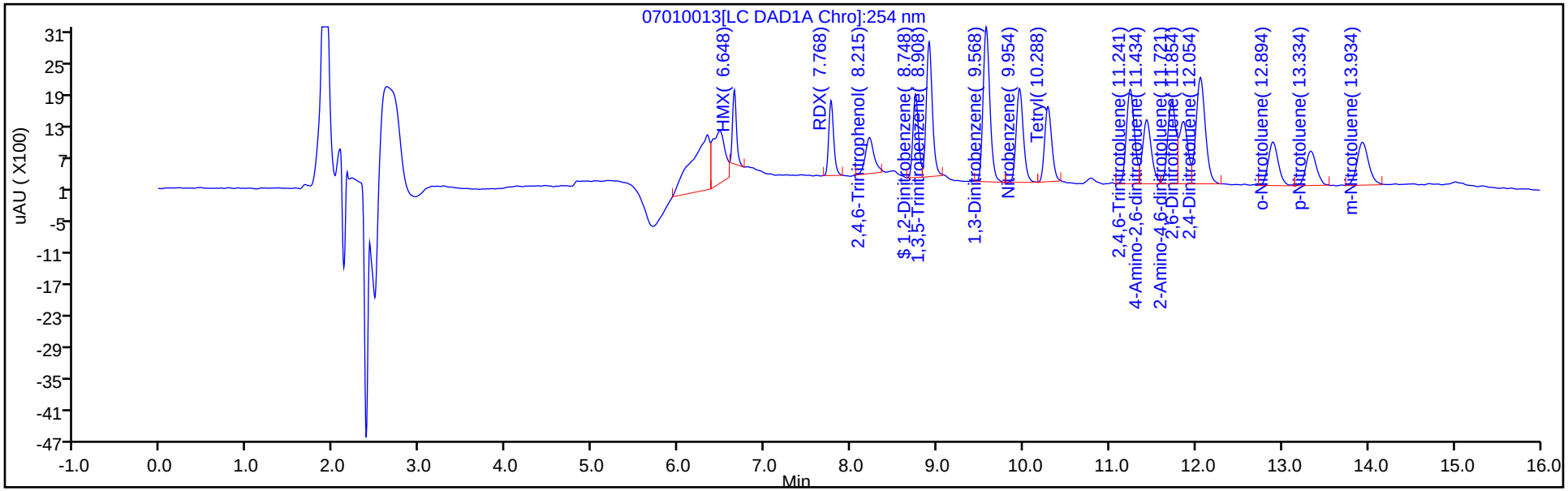
Report Date: 02-Jul-2019 11:34:55 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

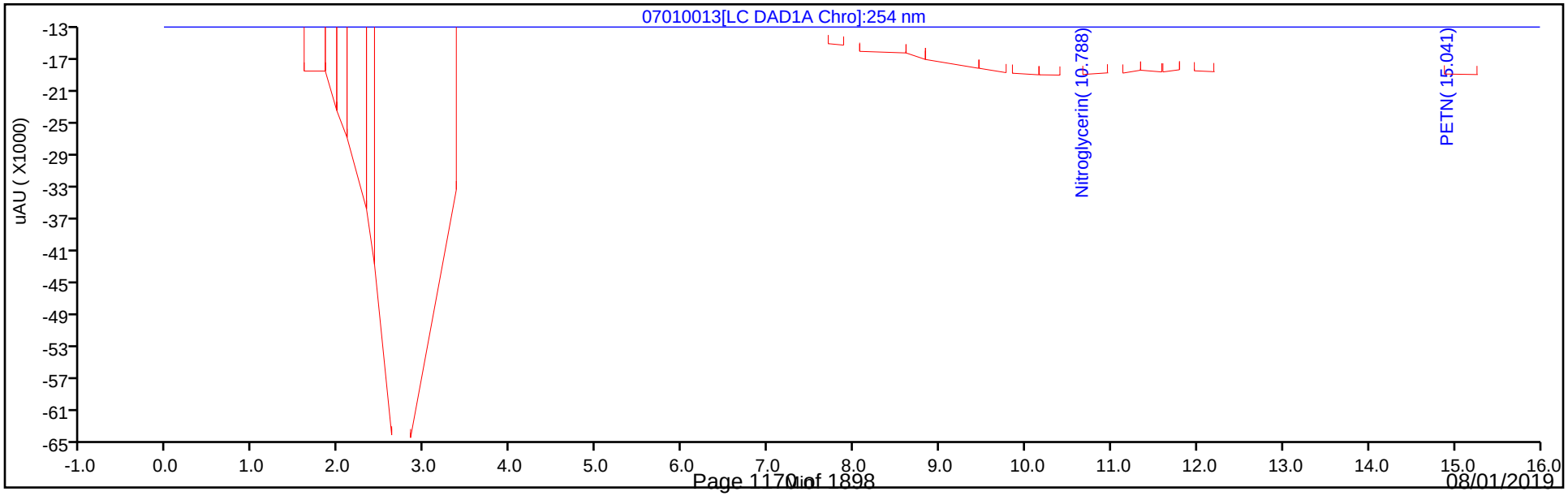
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D

Injection Date:	01-Jul-2019 17:00:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L2			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

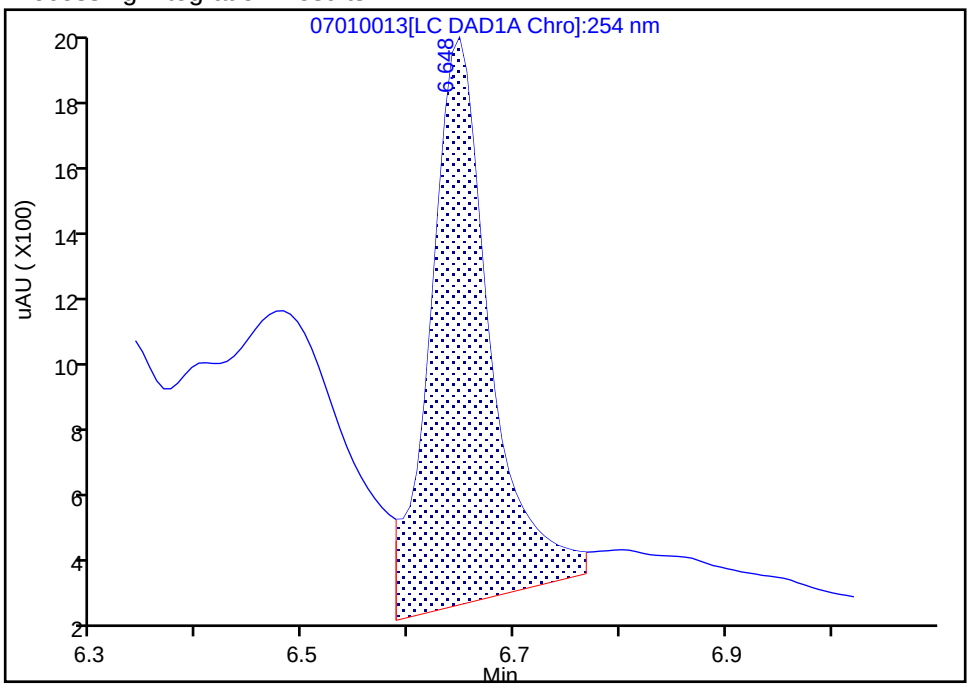
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D				
Injection Date:	01-Jul-2019 17:00:38	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

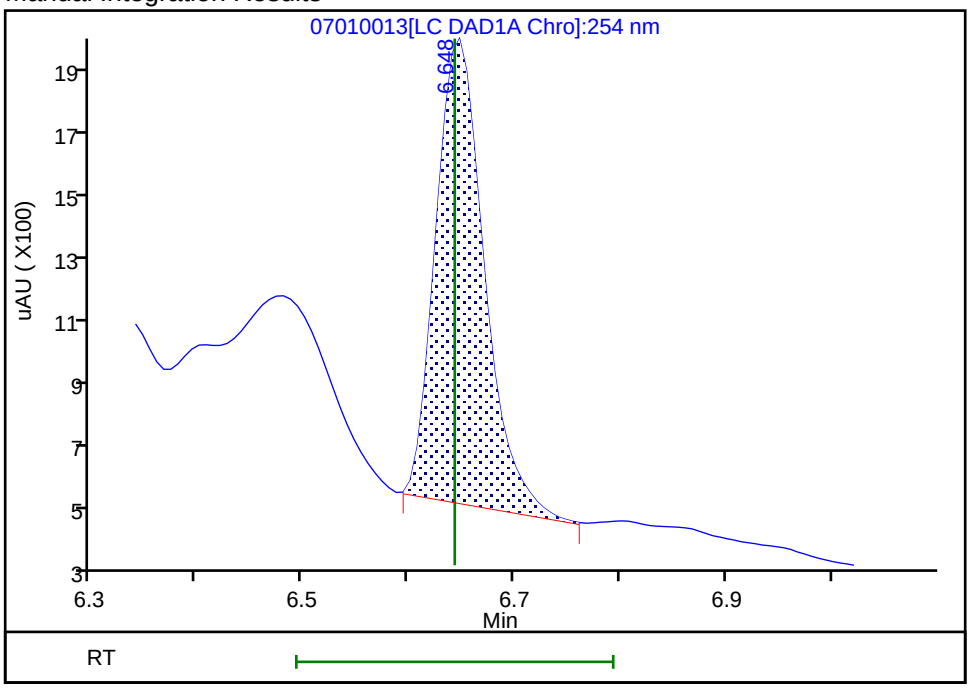
Processing Integration Results

RT: 6.65
Area: 6332
Amount: 0.065662
Amount Units: ug/mL



Manual Integration Results

RT: 6.65
Area: 4492
Amount: 0.048915
Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:30:57

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D
Lims ID: IC MAIN L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Jul-2019 17:23:38 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L1
Misc. Info.: 280-0083376-014
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:57 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 01-Jul-2019 18:31:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.642	6.643	-0.001	1795	0.0200	0.0195	
7 RDX	1	7.762	7.757	0.005	2338	0.0200	0.0210	
8 2,4,6-Trinitrophenol	1	8.209	8.177	0.032	2302	0.0200	0.0254	M
$ 9 1,2-Dinitrobenzene	1	8.742	8.737	0.005	2609	0.0200	0.0187	
10 1,3,5-Trinitrobenzene	1	8.902	8.897	0.005	4638	0.0200	0.0189	
11 1,3-Dinitrobenzene	1	9.562	9.557	0.005	5930	0.0200	0.0191	
12 Nitrobenzene	1	9.949	9.943	0.006	3747	0.0200	0.0188	
14 Tetryl	1	10.275	10.270	0.005	2803	0.0200	0.0173	
15 Nitroglycerin	2	10.775	10.770	0.005	12630	0.2000	0.1776	
16 2,4,6-Trinitrotoluene	1	11.229	11.223	0.006	4544	0.0201	0.0200	
17 4-Amino-2,6-dinitrotoluene	1	11.422	11.417	0.005	3540	0.0201	0.0213	
18 2-Amino-4,6-dinitrotoluene	1	11.715	11.703	0.012	3841	0.0201	0.0187	M
19 2,6-Dinitrotoluene	1	11.842	11.837	0.005	3382	0.0201	0.0212	M
20 2,4-Dinitrotoluene	1	12.042	12.037	0.005	5825	0.0200	0.0194	
21 o-Nitrotoluene	1	12.882	12.877	0.005	2560	0.0201	0.0197	
22 p-Nitrotoluene	1	13.329	13.317	0.012	2162	0.0201	0.0196	
23 m-Nitrotoluene	1	13.915	13.917	-0.002	2906	0.0201	0.0200	
24 PETN	2	15.015	15.010	0.005	11106	0.2000	0.1495	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 1.00 Units: uL

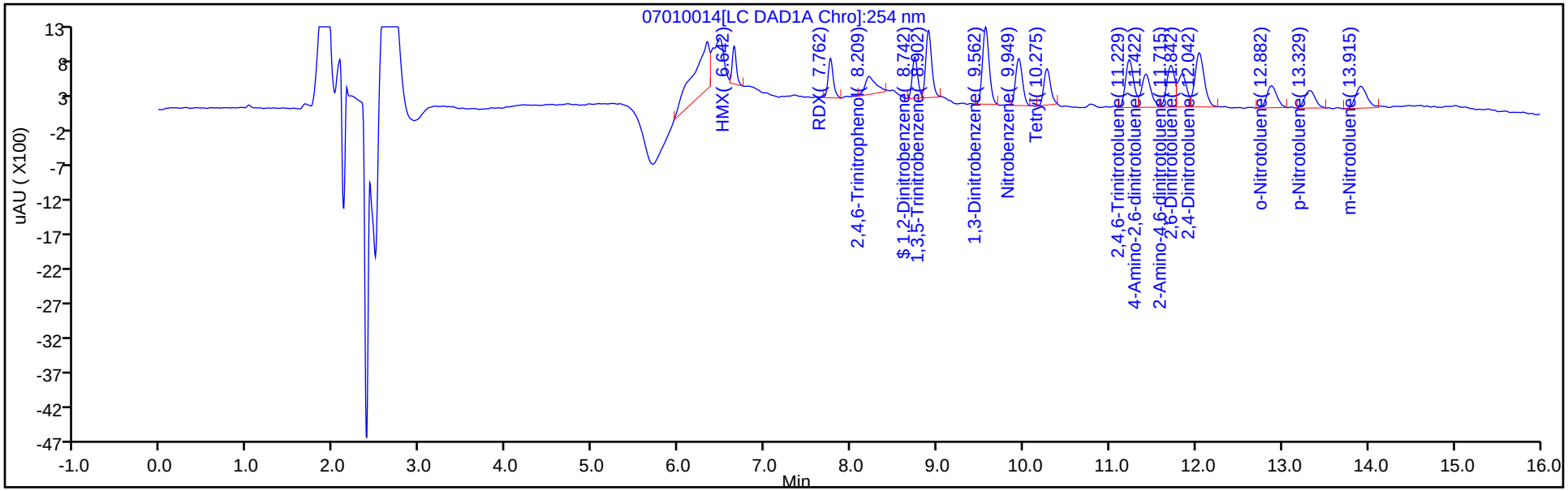
Report Date: 02-Jul-2019 11:34:58 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

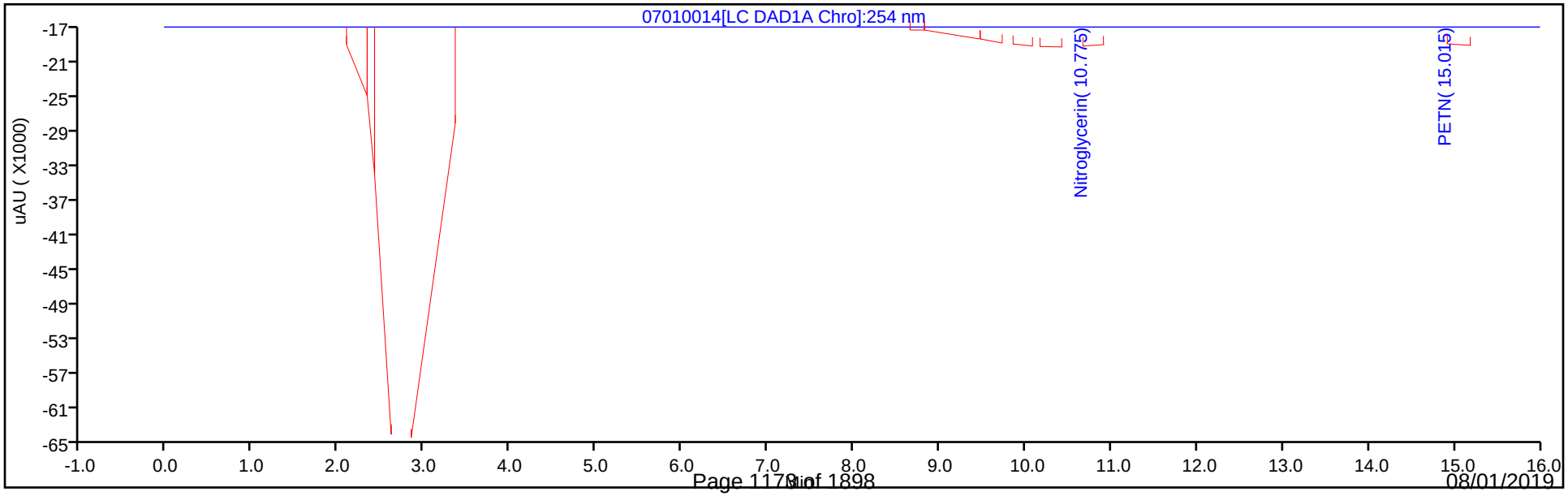
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D

Injection Date:	01-Jul-2019 17:23:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L1			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

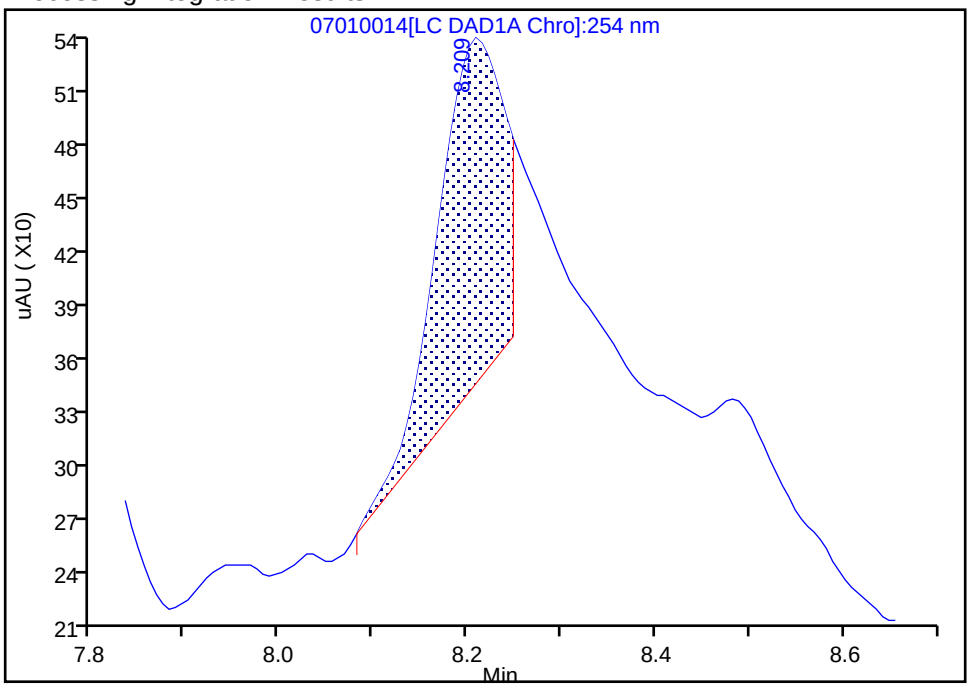
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D
Injection Date: 01-Jul-2019 17:23:38 Instrument ID: CHHPLC_X3
Lims ID: IC MAIN L1
Client ID:
Operator ID: hkf ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

8 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

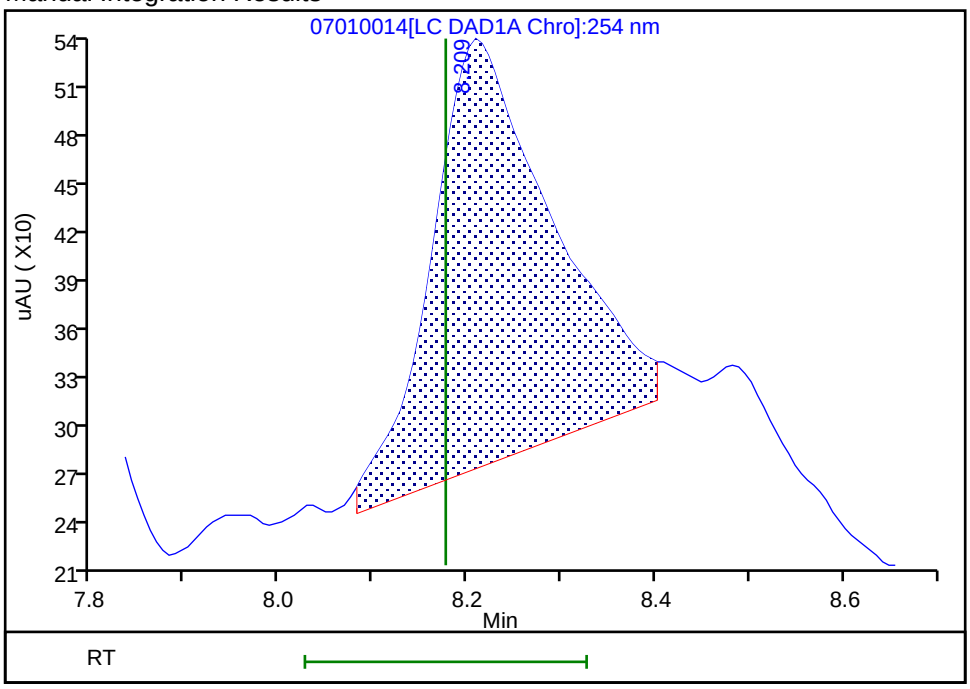
Processing Integration Results

RT: 8.21
Area: 906
Amount: 0.011048
Amount Units: ug/mL



Manual Integration Results

RT: 8.21
Area: 2302
Amount: 0.025371
Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:33:21
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 21:36 Calibration End Date: 07/02/2019 00:18 Calibration ID: 37013

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/32	07010032.D
Level 2	IC 280-463276/31	07010031.D
Level 3	IC 280-463276/30	07010030.D
Level 4	IC 280-463276/29	07010029.D
Level 5	IC 280-463276/28	07010028.D
Level 6	IC 280-463276/27	07010027.D
Level 7	IC 280-463276/26	07010026.D
Level 8	IC 280-463276/25	07010025.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.550	6.545	6.549	6.550	6.548	6.552	6.556	6.547			6.450 - 6.650	6.550
DNX	6.883	6.878	6.882	6.883	6.882	6.885	6.890	6.880			6.783 - 6.983	6.883
MNX	7.350	7.345	7.342	7.343	7.348	7.352	7.356	7.340			7.193 - 7.493	7.347

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 21:36 Calibration End Date: 07/02/2019 00:18 Calibration ID: 37013

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/32	07010032.D
Level 2	IC 280-463276/31	07010031.D
Level 3	IC 280-463276/30	07010030.D
Level 4	IC 280-463276/29	07010029.D
Level 5	IC 280-463276/28	07010028.D
Level 6	IC 280-463276/27	07010027.D
Level 7	IC 280-463276/26	07010026.D
Level 8	IC 280-463276/25	07010025.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	210589 222797	208352 218948	210300 221984	212915 213827	Ave		214964.079				2.6		20.0			
DNX	170629 158132	155125 156499	151928 157632	151201 147859	Ave		156125.739				4.4		20.0			
MNX	140231 145495	137018 144045	134996 144473	138841 135229	Ave		140040.970				3.0		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 21:36 Calibration End Date: 07/02/2019 00:18 Calibration ID: 37013

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/32	07010032.D
Level 2	IC 280-463276/31	07010031.D
Level 3	IC 280-463276/30	07010030.D
Level 4	IC 280-463276/29	07010029.D
Level 5	IC 280-463276/28	07010028.D
Level 6	IC 280-463276/27	07010027.D
Level 7	IC 280-463276/26	07010026.D
Level 8	IC 280-463276/25	07010025.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	4216 153417	10428 222206	21051 535103	53282	89208	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	3416 109659	7764 157790	15208 370018	37838	63316	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3273 117670	7995 168600	15754 394530	40507	67917	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010025.D				
Lims ID:	IC DMT L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	01-Jul-2019 21:36:10	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L8				
Misc. Info.:	280-0083376-025				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:35:19	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.547	6.550	-0.003	535103	2.50	2.49	
5 DNX	1	6.880	6.883	-0.003	370018	2.50	2.37	
6 MNX	1	7.340	7.343	-0.003	394530	2.92	2.82	

Reagents:

8330 DMT_00002 Amount Added: 125.00 Units: uL

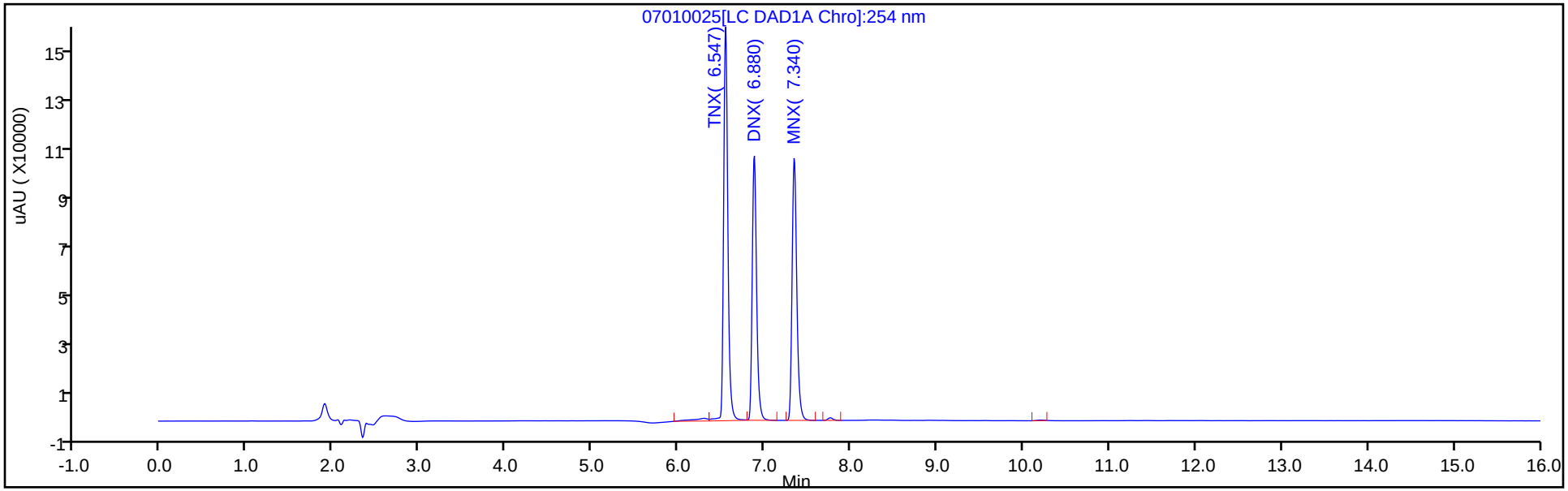
Report Date: 02-Jul-2019 11:35:19 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

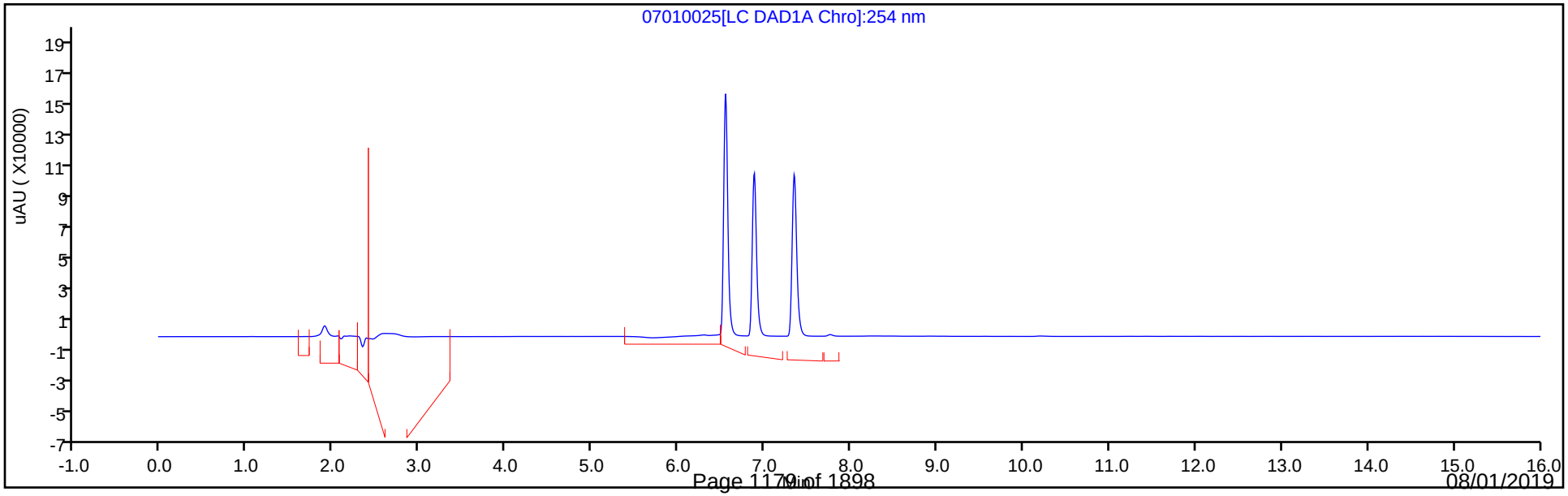
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010025.D

Injection Date:	01-Jul-2019 21:36:10	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L8			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D
Lims ID: IC DMT L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Jul-2019 22:00:21 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L7
Misc. Info.: 280-0083376-026
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:35:21 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:04:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.556	6.550	0.006	222206	1.00	1.03	M
5 DNX	1	6.890	6.883	0.007	157790	1.00	1.01	M
6 MNX	1	7.356	7.343	0.013	168600	1.17	1.20	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 50.00 Units: uL

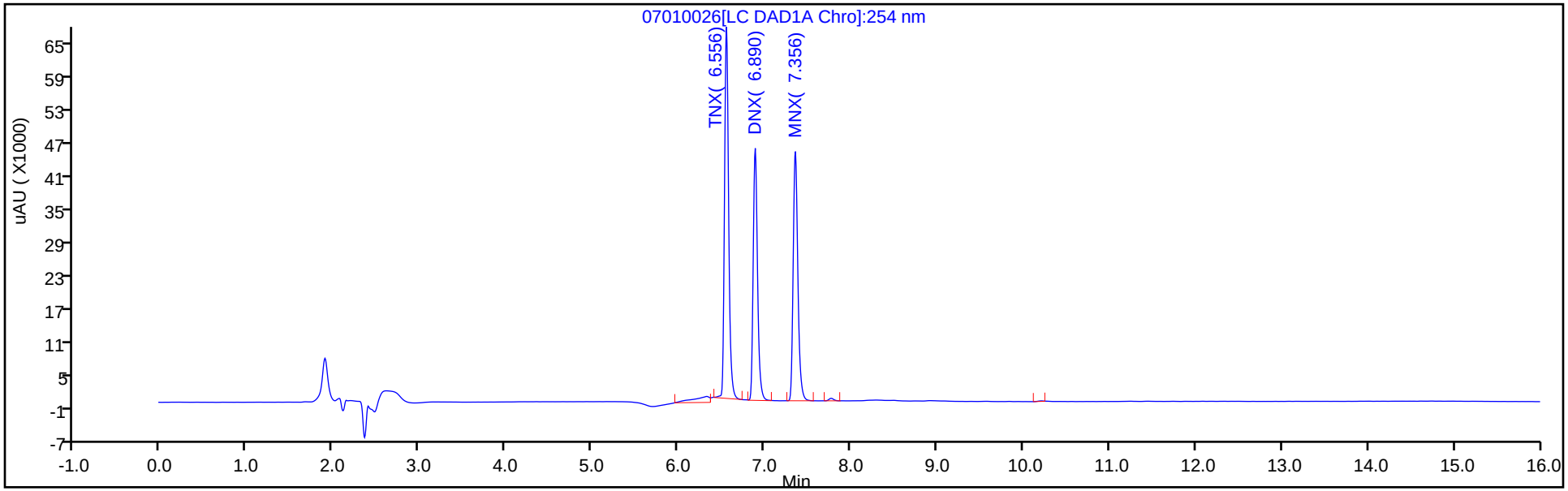
Report Date: 02-Jul-2019 11:35:21 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

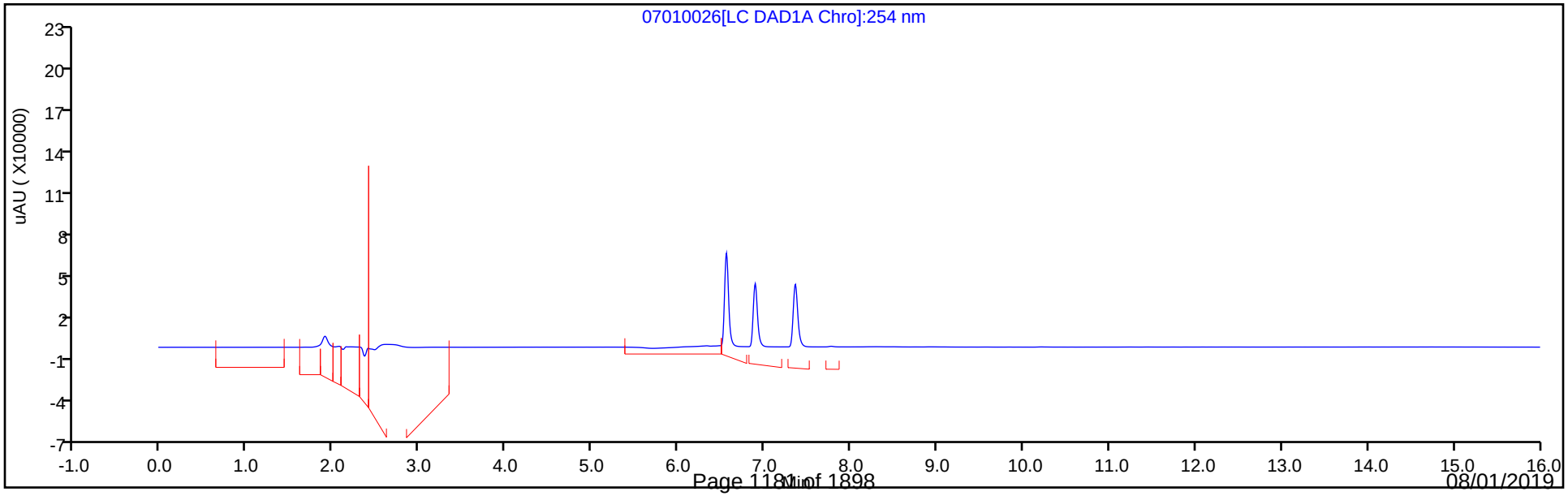
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D

Injection Date:	01-Jul-2019 22:00:21	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L7			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

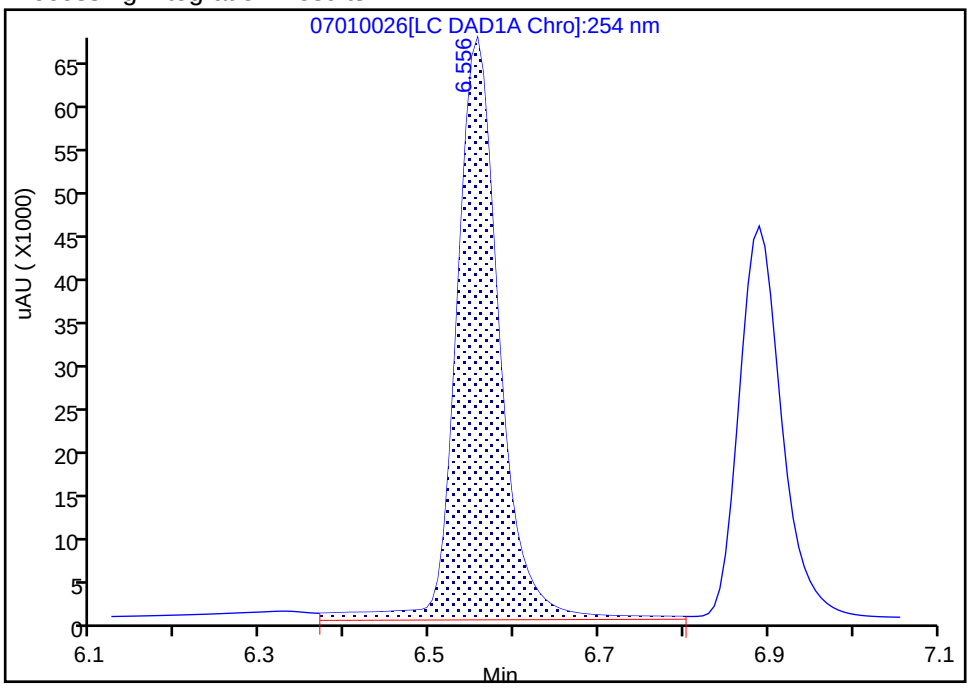
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D				
Injection Date:	01-Jul-2019 22:00:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

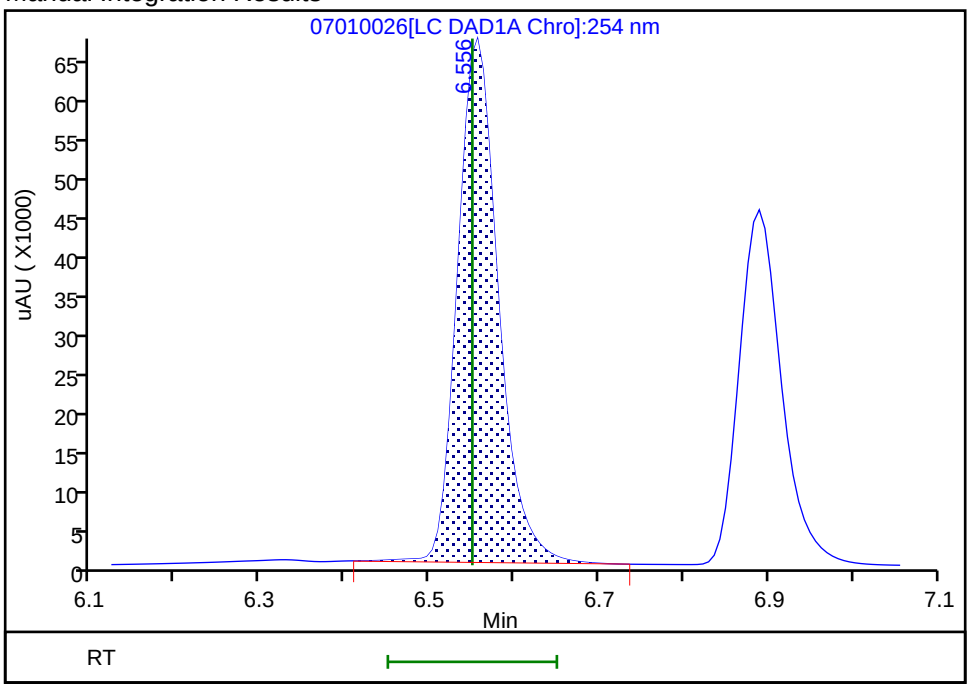
Processing Integration Results

RT: 6.56
Area: 238054
Amount: 0.989410
Amount Units: ug/mL



Manual Integration Results

RT: 6.56
Area: 222206
Amount: 1.033689
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:04:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

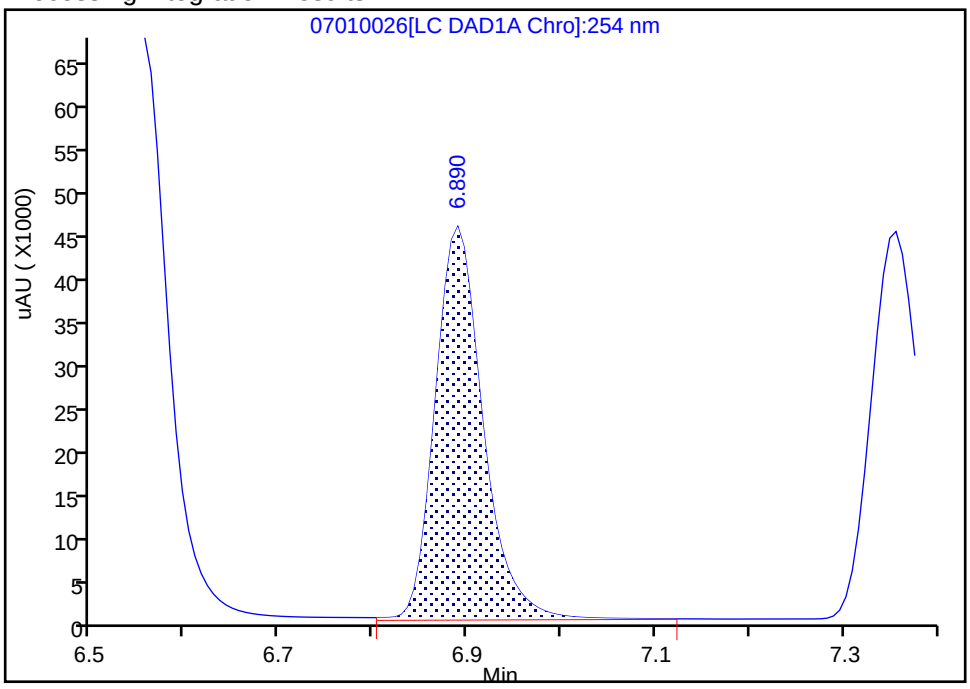
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010026.D				
Injection Date:	01-Jul-2019 22:00:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

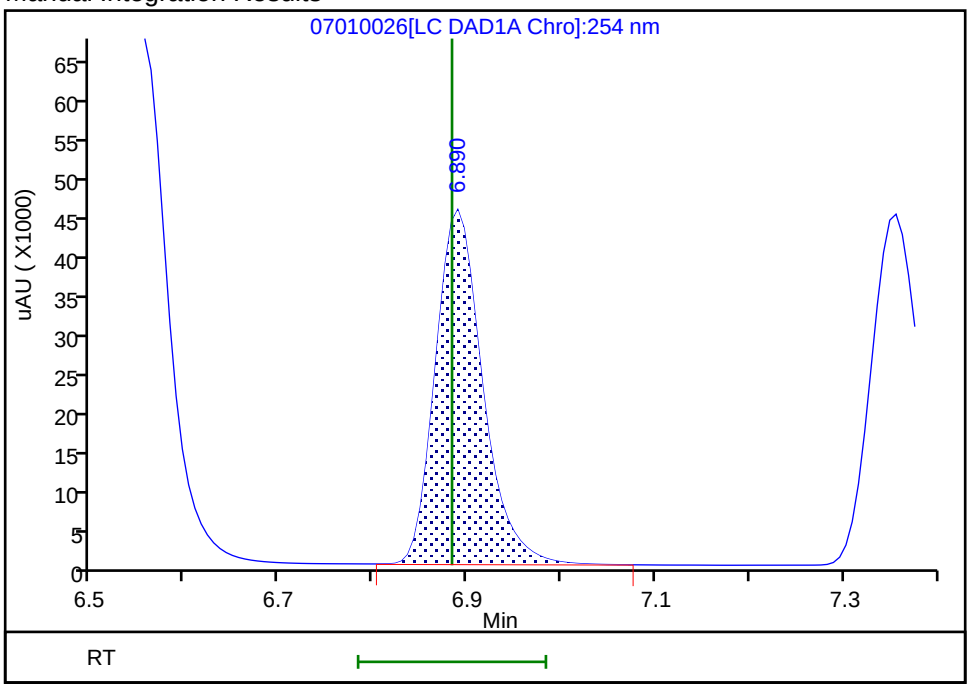
Processing Integration Results

RT: 6.89
Area: 160640
Amount: 1.026574
Amount Units: ug/mL



Manual Integration Results

RT: 6.89
Area: 157790
Amount: 1.010660
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:04:15
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D
Lims ID: IC DMT L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Jul-2019 22:23:20 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L6
Misc. Info.: 280-0083376-027
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:35:22 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:03:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.552	6.550	0.002	153417	0.7007	0.7137	M
5 DNX	1	6.885	6.883	0.002	109659	0.7007	0.7024	M
6 MNX	1	7.352	7.343	0.009	117670	0.8169	0.8403	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 35.00 Units: uL

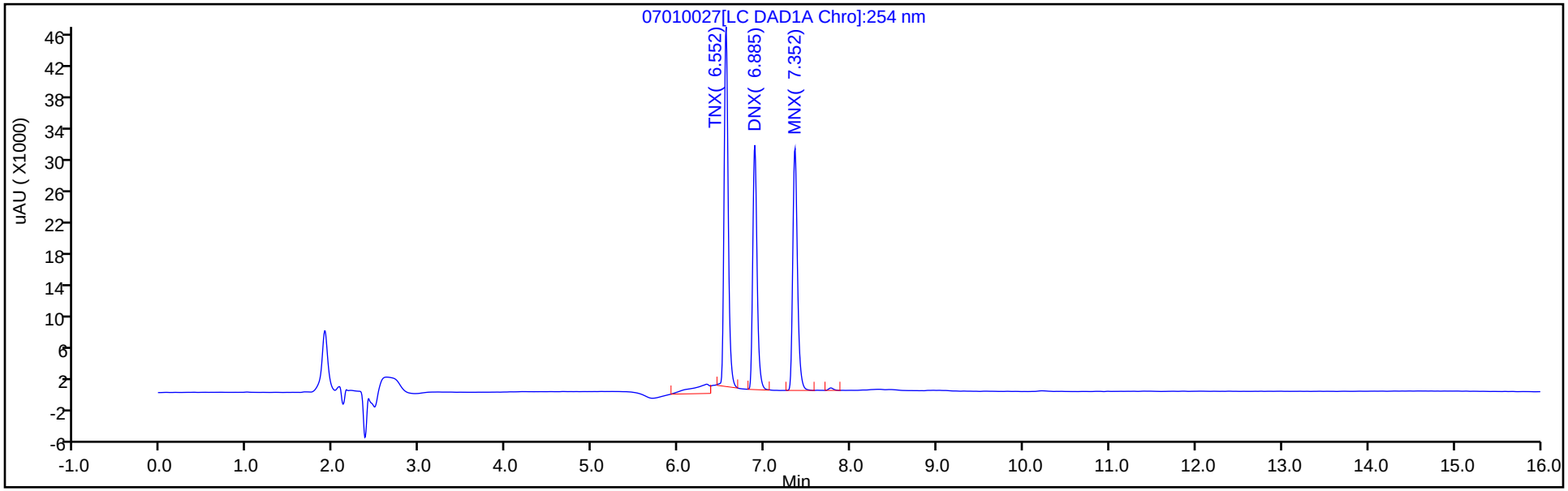
Report Date: 02-Jul-2019 11:35:23 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

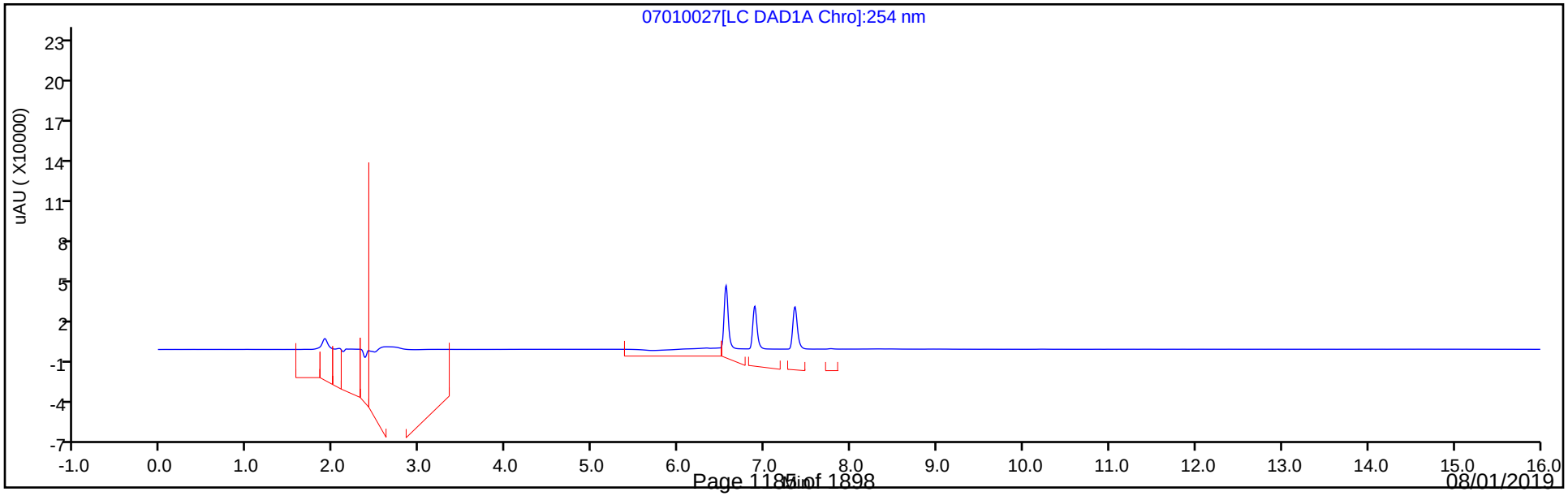
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D

Injection Date:	01-Jul-2019 22:23:20	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L6			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

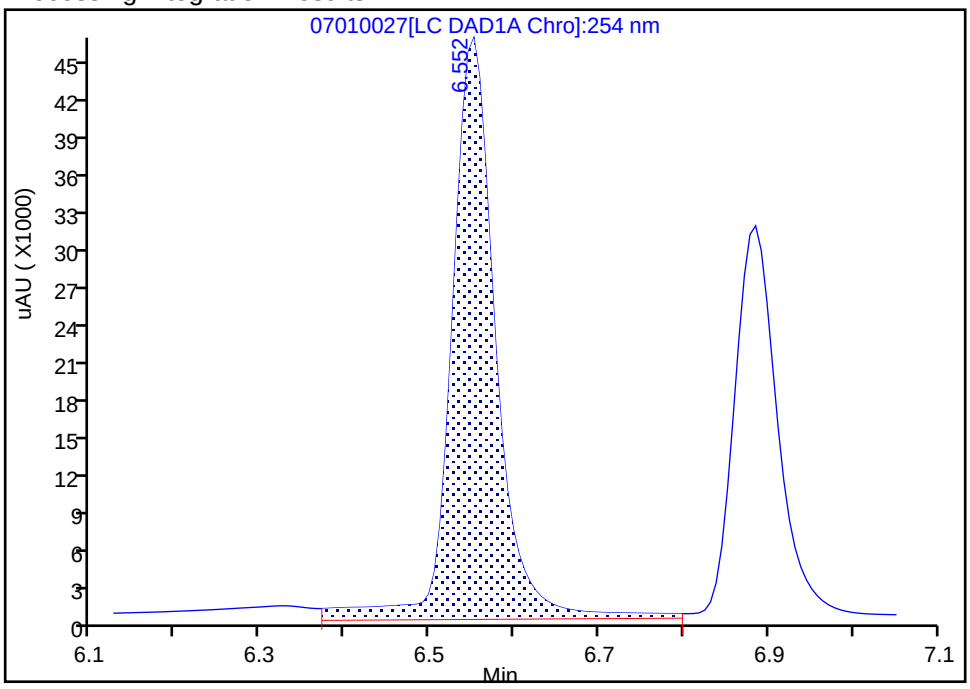
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D				
Injection Date:	01-Jul-2019 22:23:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

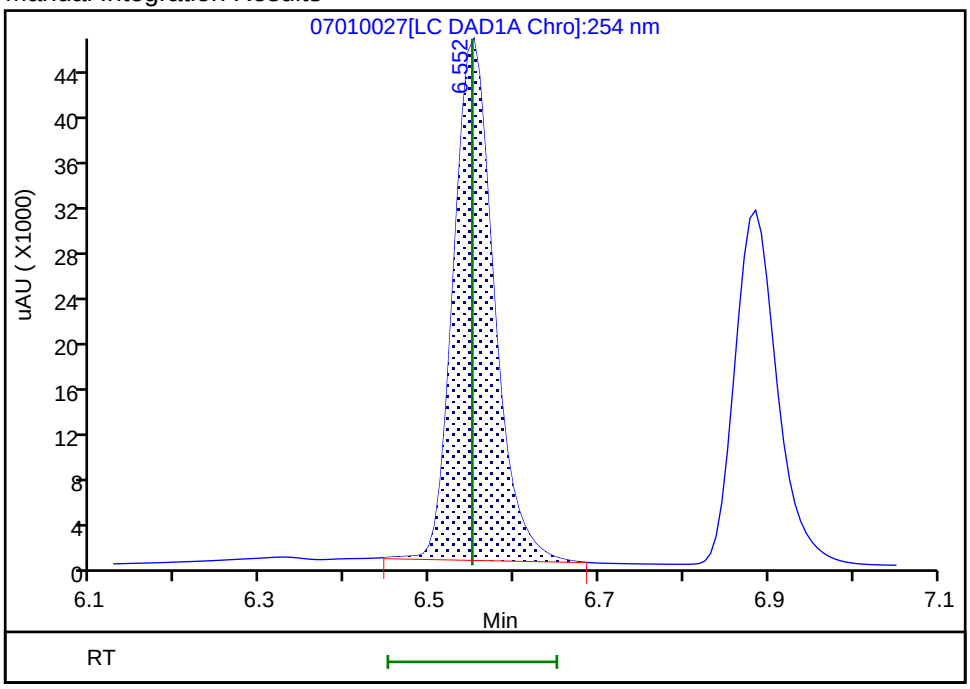
Processing Integration Results

RT: 6.55
Area: 172073
Amount: 0.705419
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 153417
Amount: 0.713687
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:43
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

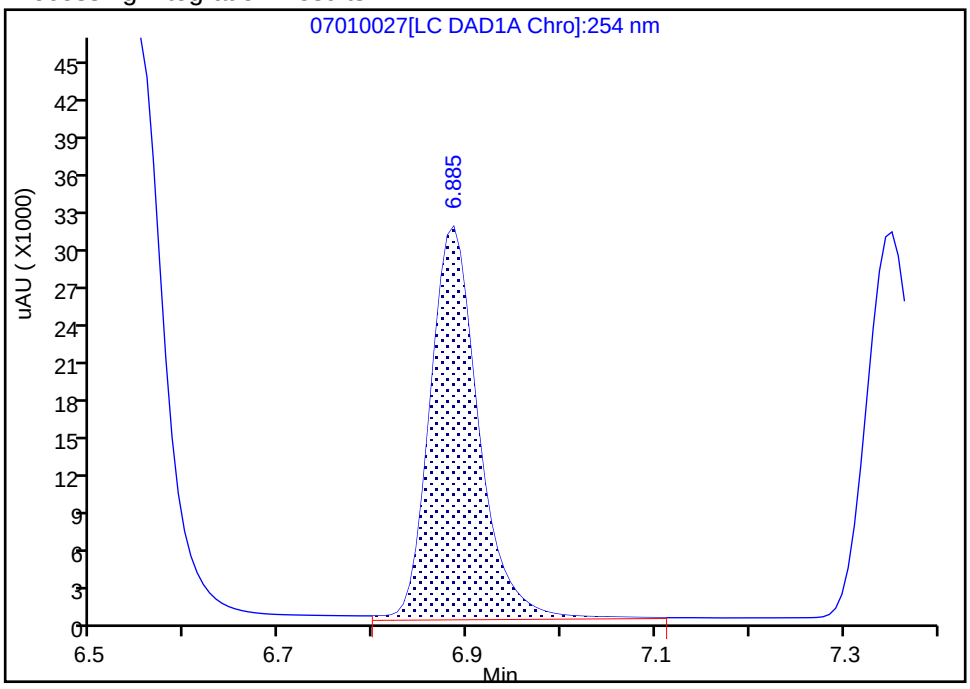
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010027.D				
Injection Date:	01-Jul-2019 22:23:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

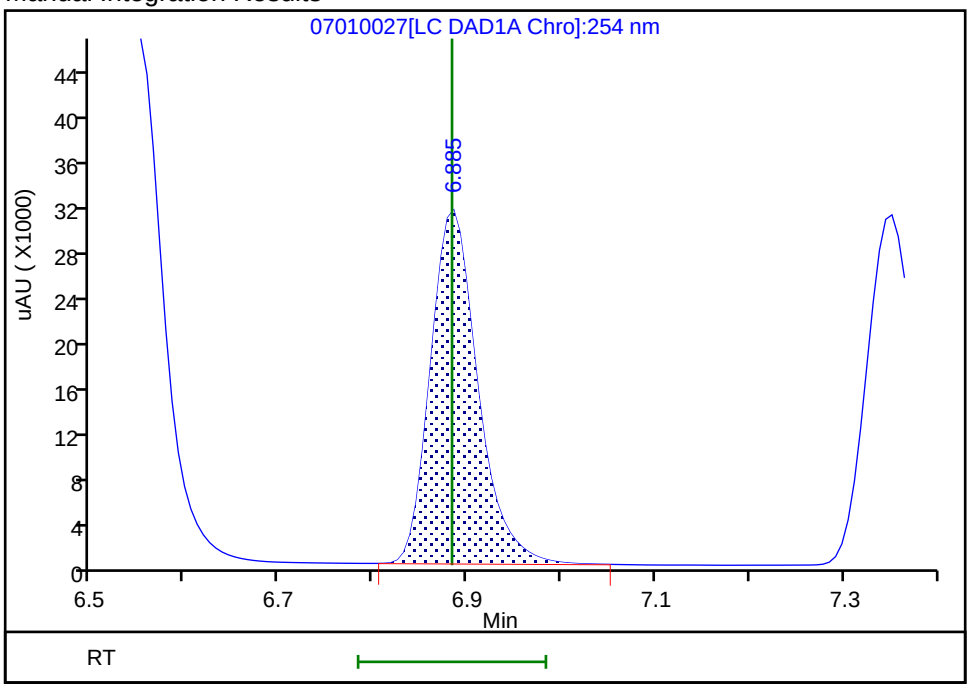
Processing Integration Results

RT: 6.89
Area: 113520
Amount: 0.722273
Amount Units: ug/mL



Manual Integration Results

RT: 6.89
Area: 109659
Amount: 0.702376
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:57
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D
Lims ID: IC DMT L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Jul-2019 22:46:18 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L5
Misc. Info.: 280-0083376-028
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:35:24 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:03:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.548	6.550	-0.002	89208	0.4004	0.4150	M
5 DNX	1	6.882	6.883	-0.001	63316	0.4004	0.4055	M
6 MNX	1	7.348	7.343	0.005	67917	0.4668	0.4850	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 20.00 Units: uL

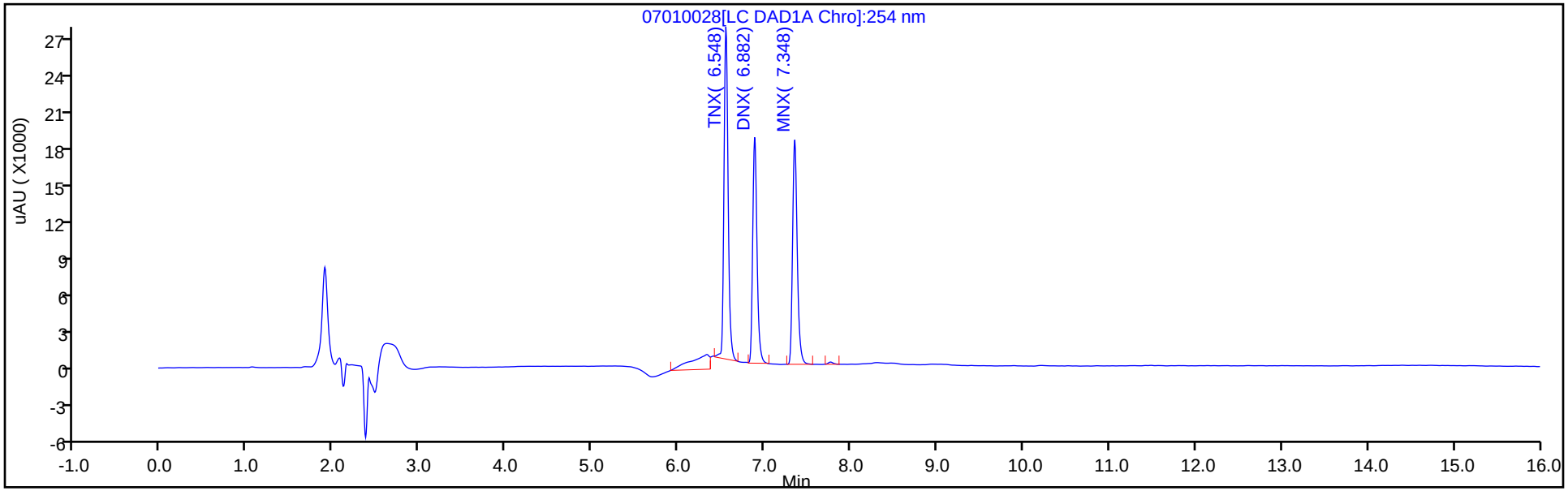
Report Date: 02-Jul-2019 11:35:24 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

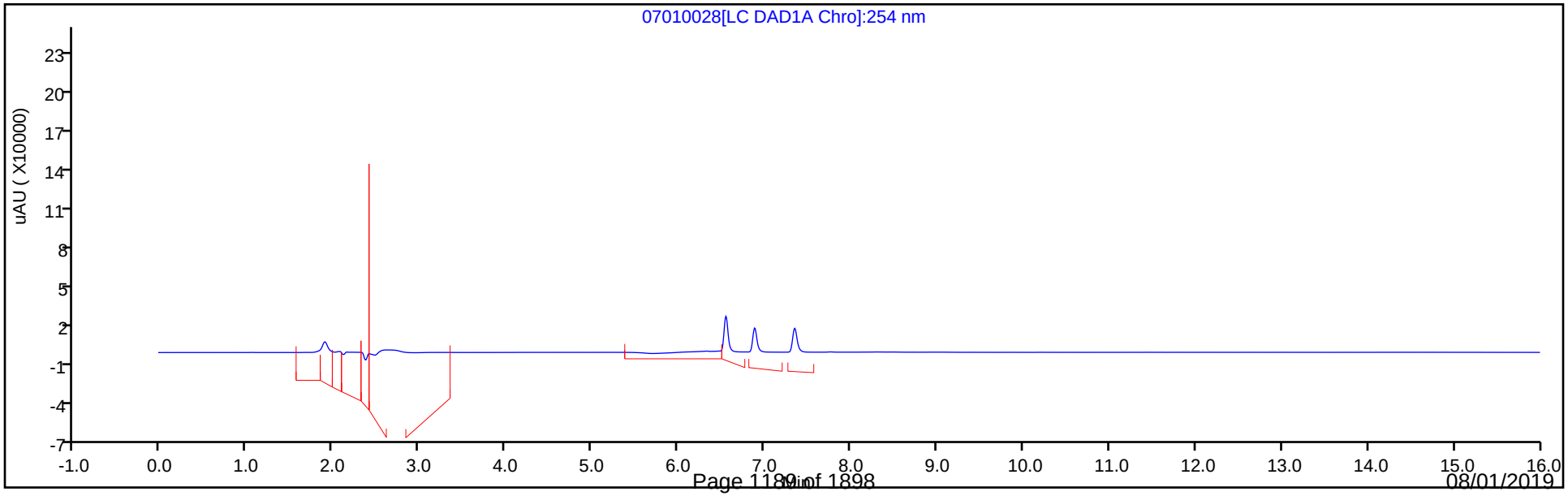
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D

Injection Date:	01-Jul-2019 22:46:18	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L5			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

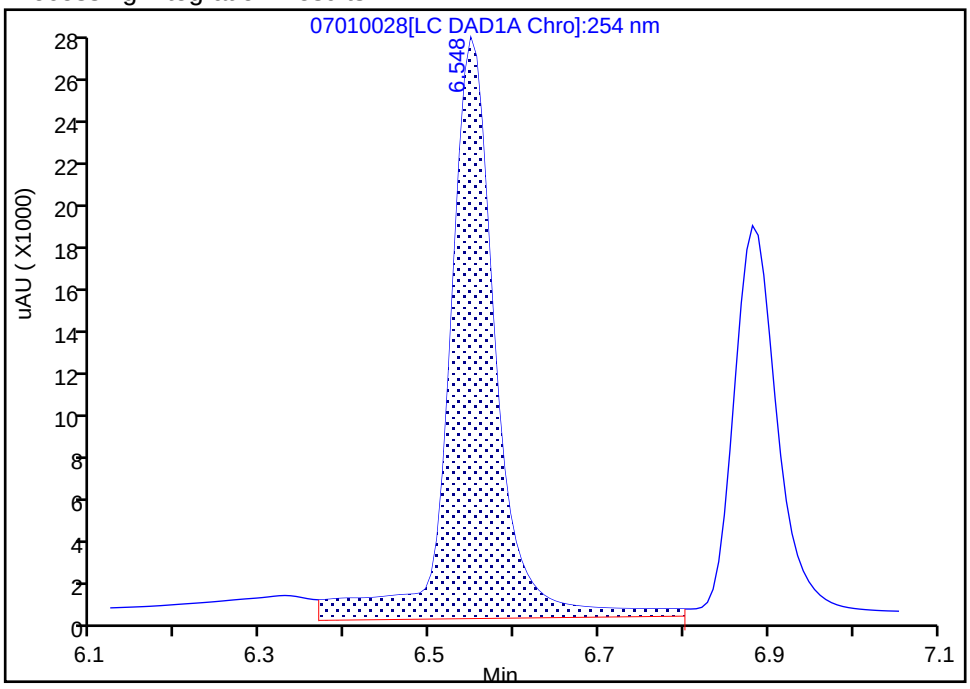
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D				
Injection Date:	01-Jul-2019 22:46:18	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

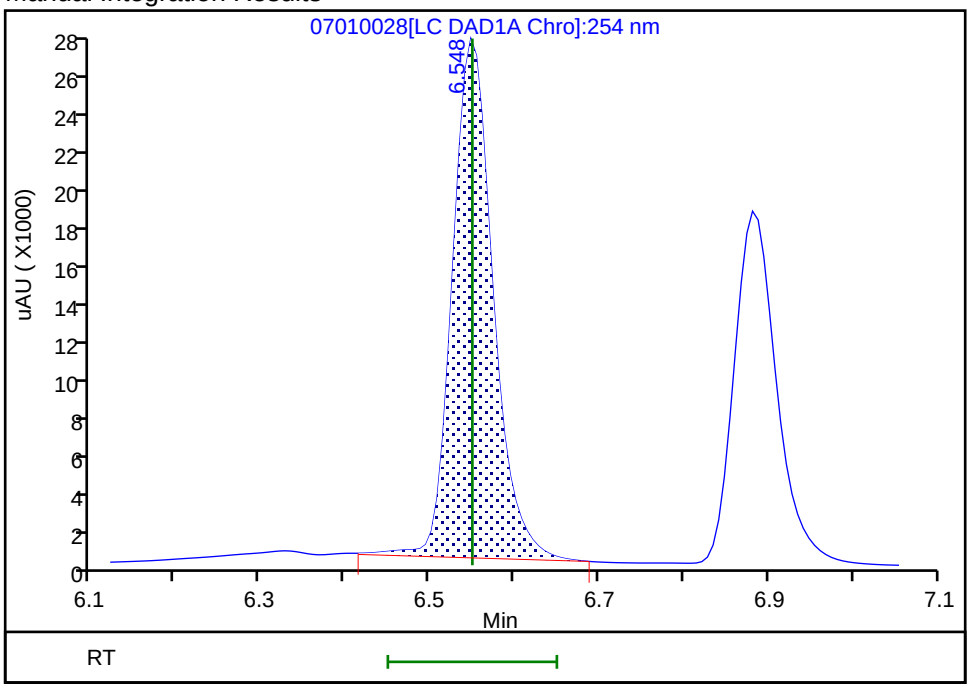
Processing Integration Results

RT: 6.55
Area: 106504
Amount: 0.427161
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 89208
Amount: 0.414990
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

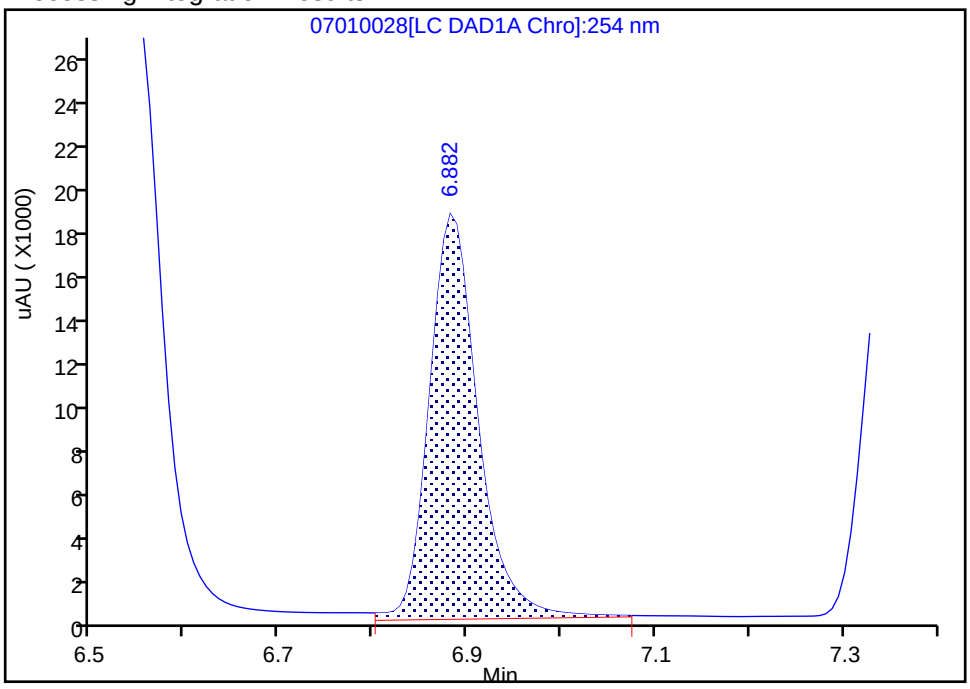
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010028.D
Injection Date: 01-Jul-2019 22:46:18 Instrument ID: CHHPLC_X3
Lims ID: IC DMT L5
Client ID:
Operator ID: hkf ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

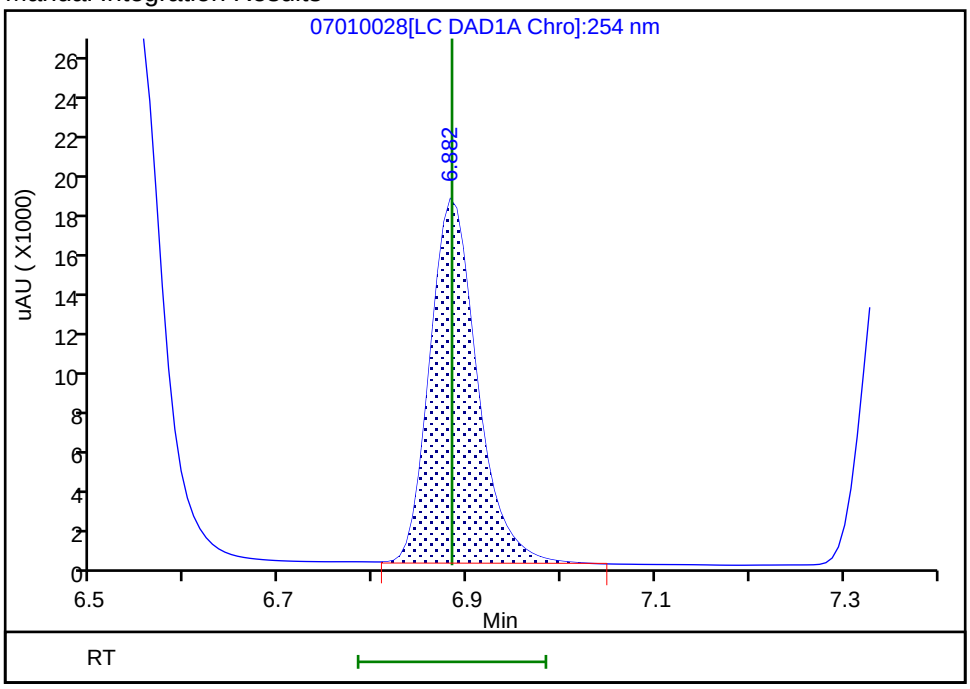
Processing Integration Results

RT: 6.88
Area: 66458
Amount: 0.420218
Amount Units: ug/mL



Manual Integration Results

RT: 6.88
Area: 63316
Amount: 0.405545
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:30
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010029.D				
Lims ID:	IC DMT L4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	01-Jul-2019 23:09:14	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L4				
Misc. Info.:	280-0083376-029				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:35:26	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				
First Level Reviewer: fiedlerh		Date:	02-Jul-2019 09:03:16		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.550	6.550	0.000	53282	0.2503	0.2479	M
5 DNX	1	6.883	6.883	0.000	37838	0.2503	0.2424	
6 MNX	1	7.343	7.343	0.000	40507	0.2918	0.2893	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

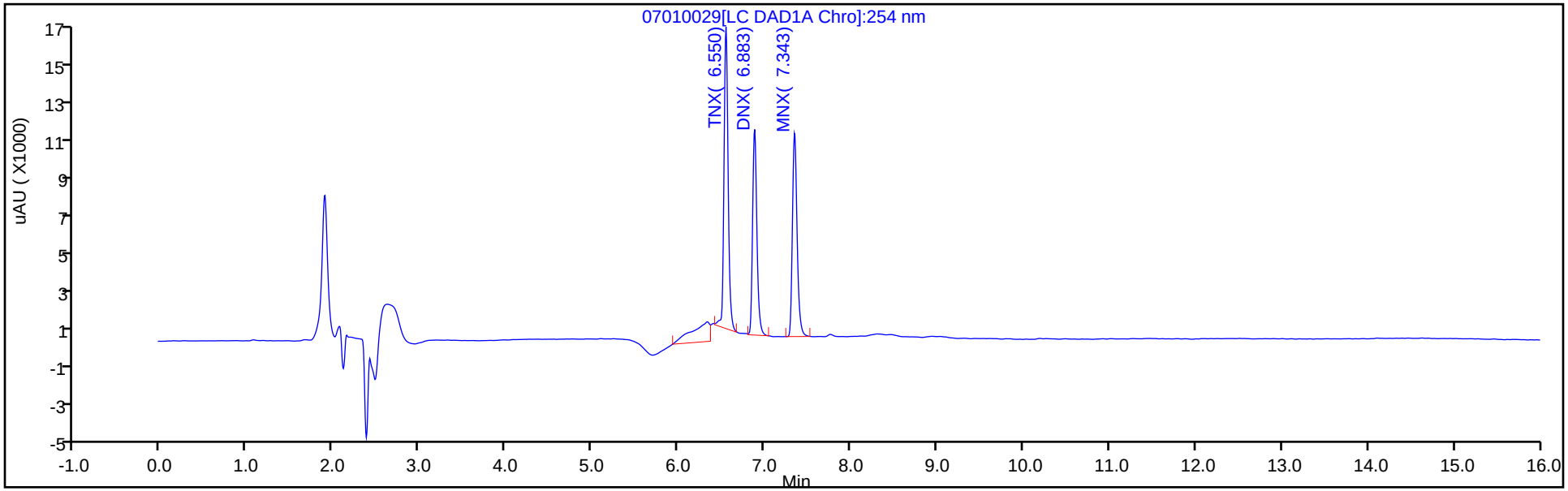
Report Date: 02-Jul-2019 11:35:26 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

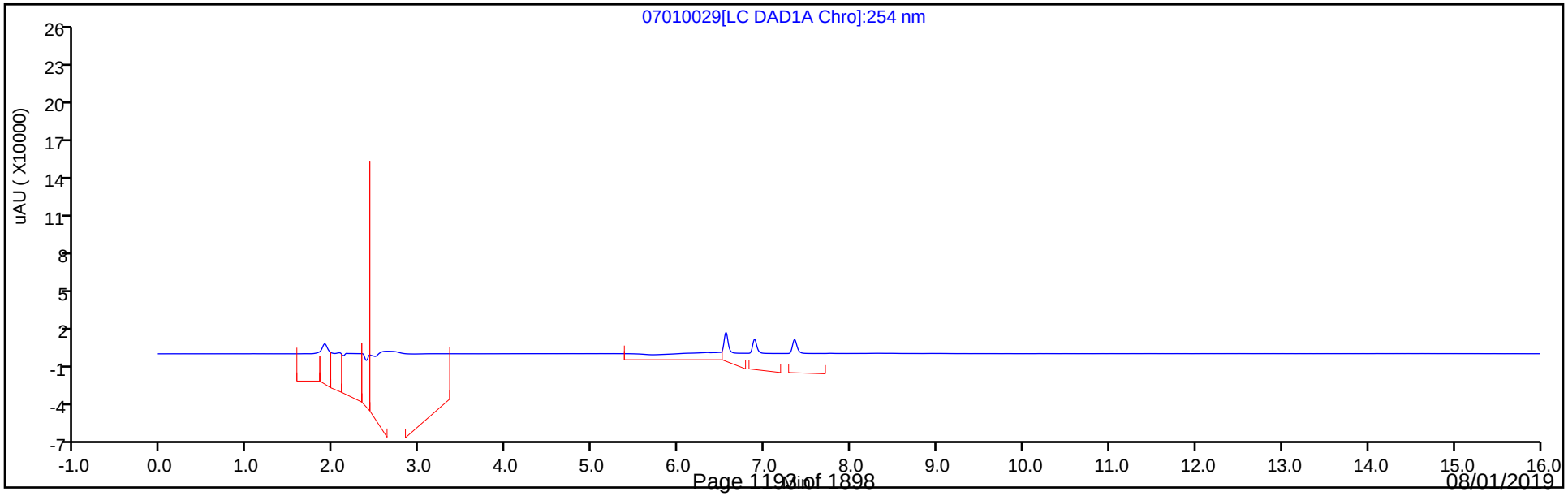
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010029.D

Injection Date:	01-Jul-2019 23:09:14	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L4			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

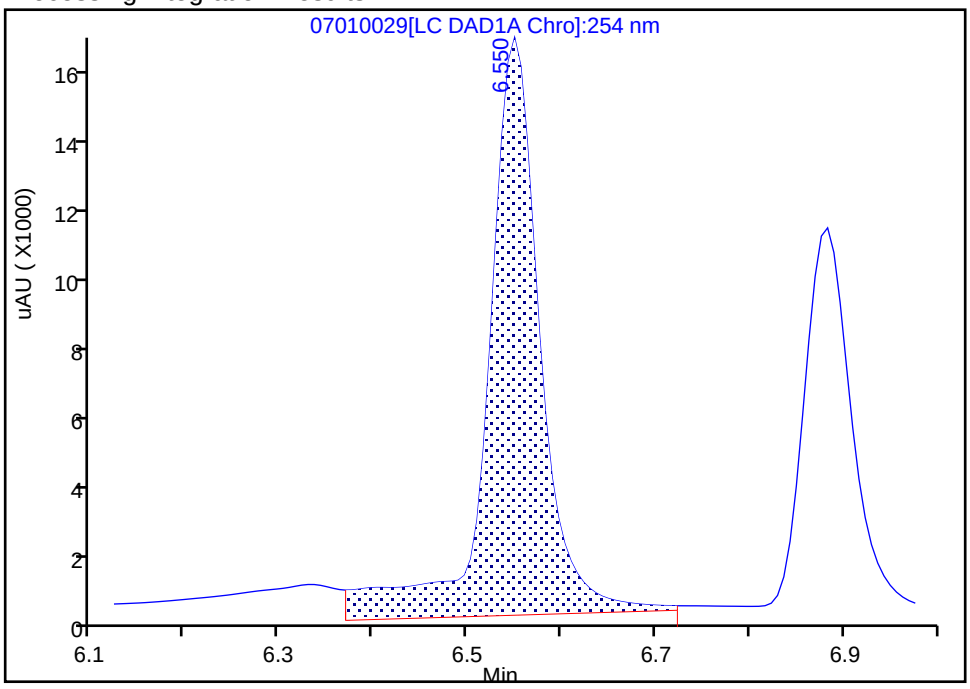
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010029.D				
Injection Date:	01-Jul-2019 23:09:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

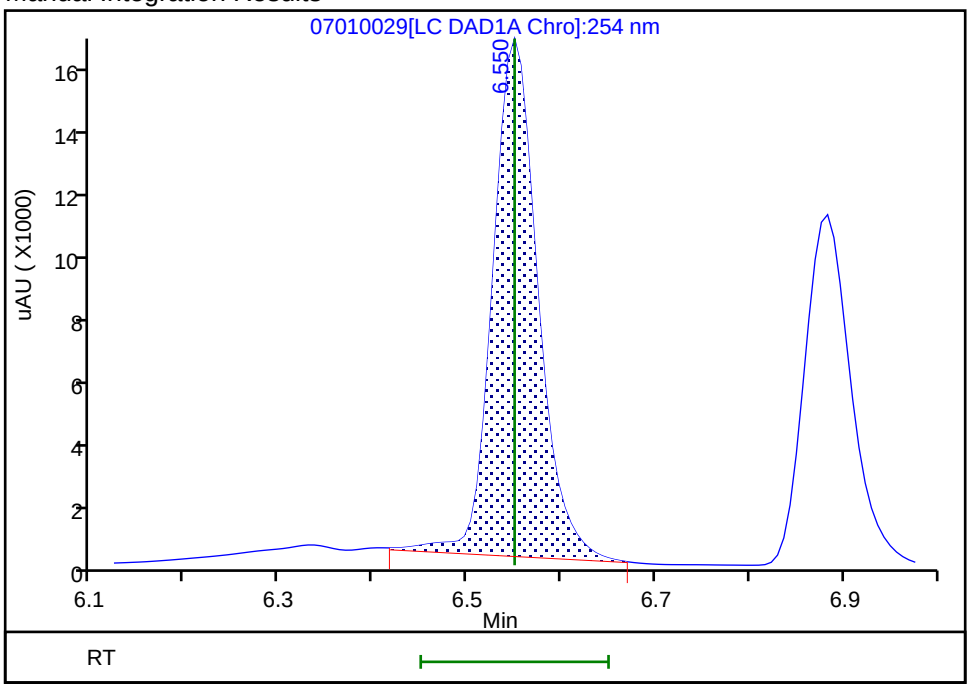
Processing Integration Results

RT: 6.55
Area: 64440
Amount: 0.252802
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 53282
Amount: 0.247865
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:03:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010030.D
Lims ID: IC DMT L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Jul-2019 23:32:12 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L3
Misc. Info.: 280-0083376-030
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:35:27 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:04:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.549	6.550	-0.001	21051	0.1001	0.0979	M
5 DNX	1	6.882	6.883	-0.001	15208	0.1001	0.0974	
6 MNX	1	7.342	7.343	-0.001	15754	0.1167	0.1125	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 5.00 Units: uL

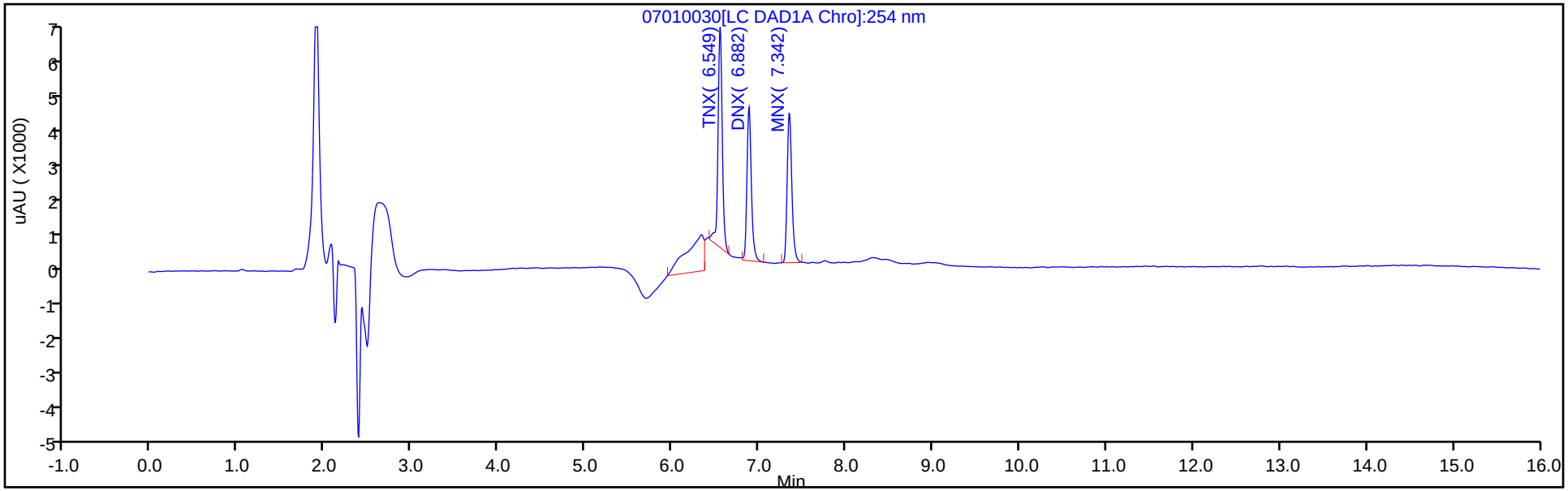
Report Date: 02-Jul-2019 11:35:28 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

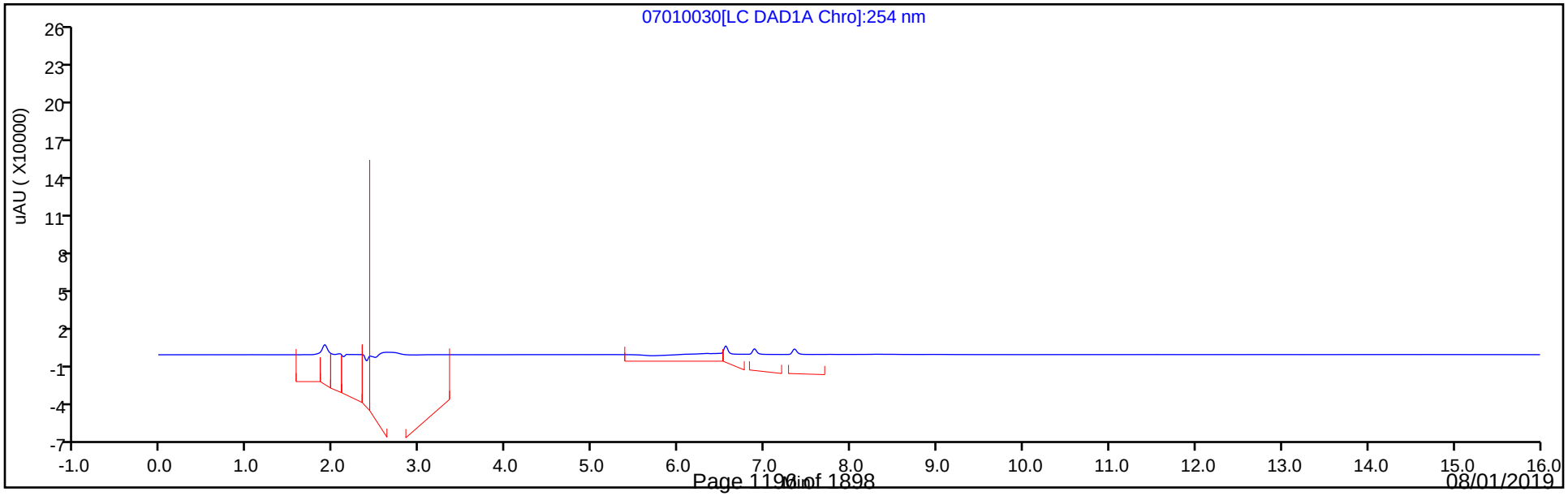
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010030.D

Injection Date:	01-Jul-2019 23:32:12	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L3			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

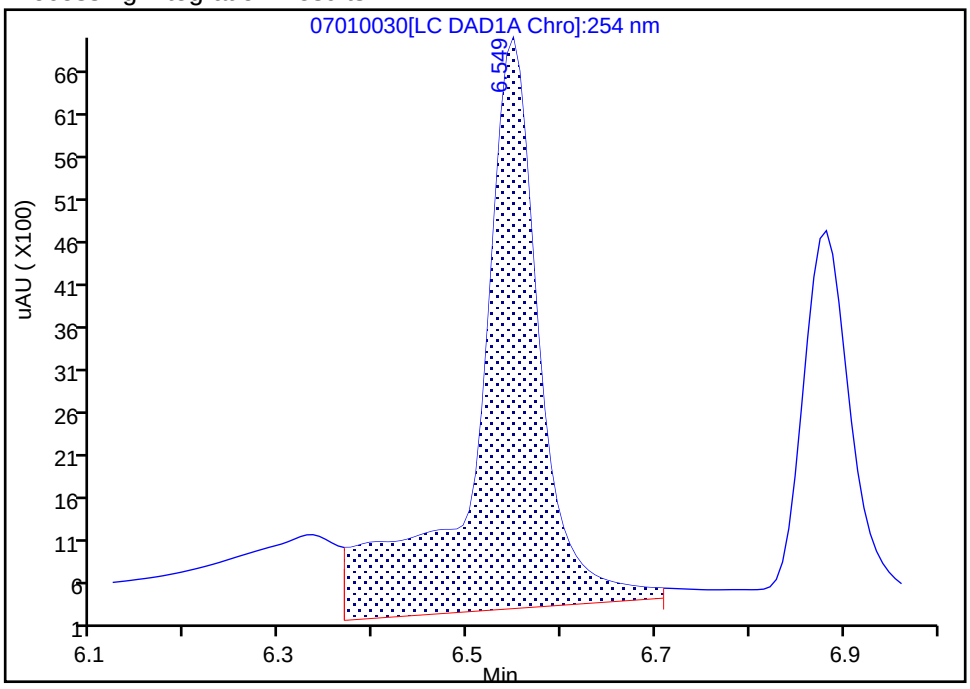
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010030.D				
Injection Date:	01-Jul-2019 23:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

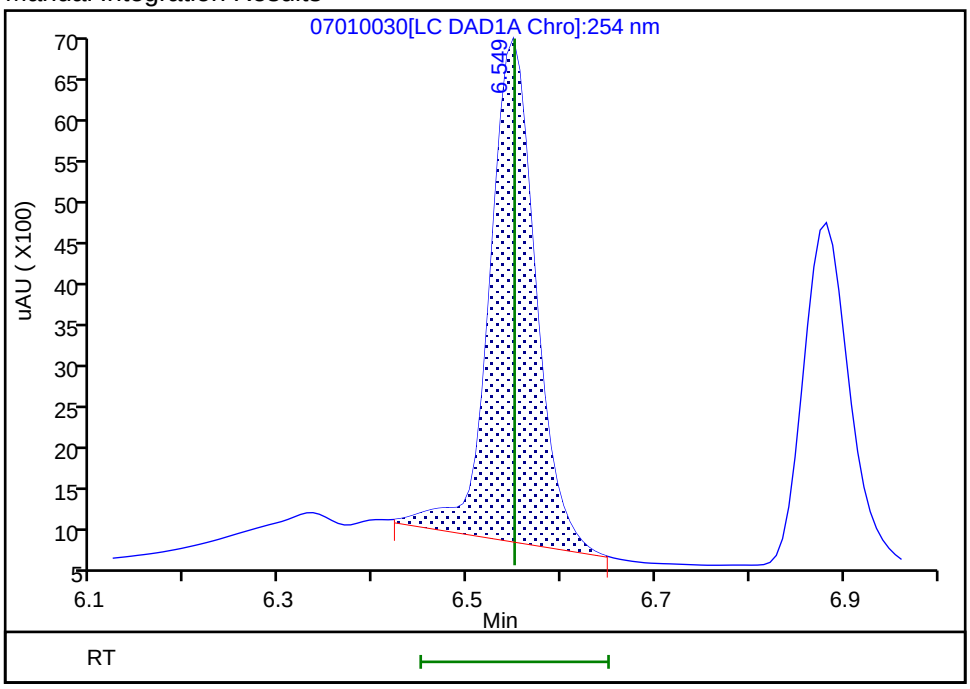
Processing Integration Results

RT: 6.55
Area: 31755
Amount: 0.133076
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 21051
Amount: 0.097928
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:04:34
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010031.D
Lims ID: IC DMT L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jul-2019 23:55:10 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT L2
Misc. Info.: 280-0083376-031
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:35:29 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:04:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.545	6.550	-0.005	10428	0.0501	0.0485	M
5 DNX	1	6.878	6.883	-0.005	7764	0.0501	0.0497	
6 MNX	1	7.345	7.343	0.002	7995	0.0584	0.0571	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 2.50 Units: uL

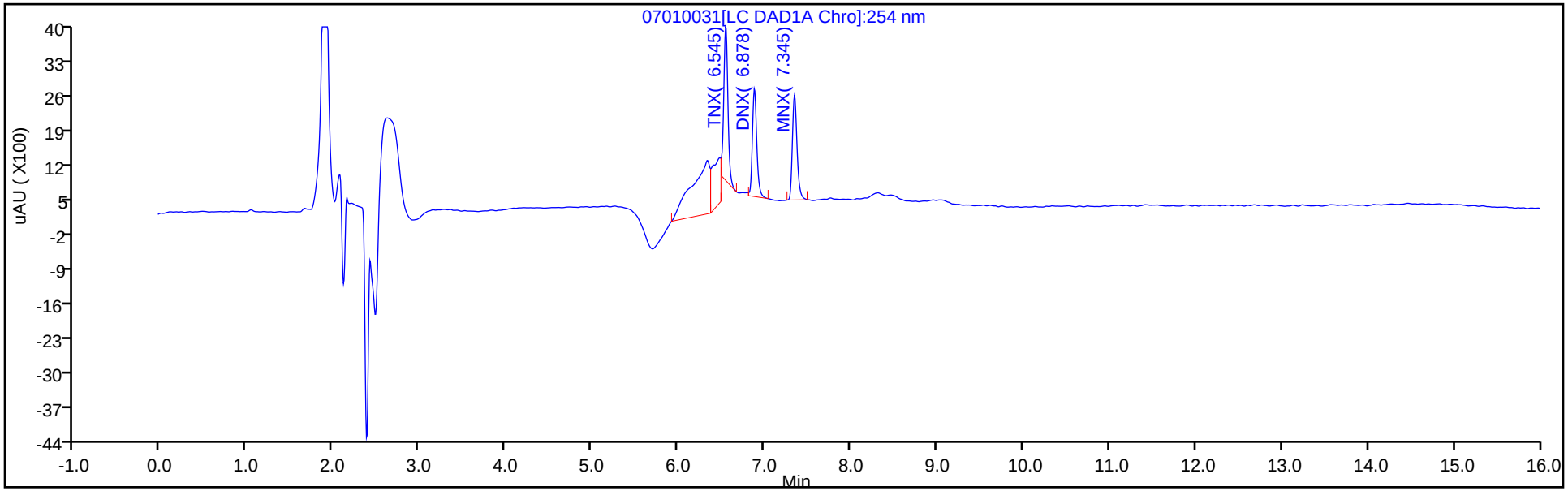
Report Date: 02-Jul-2019 11:35:29 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

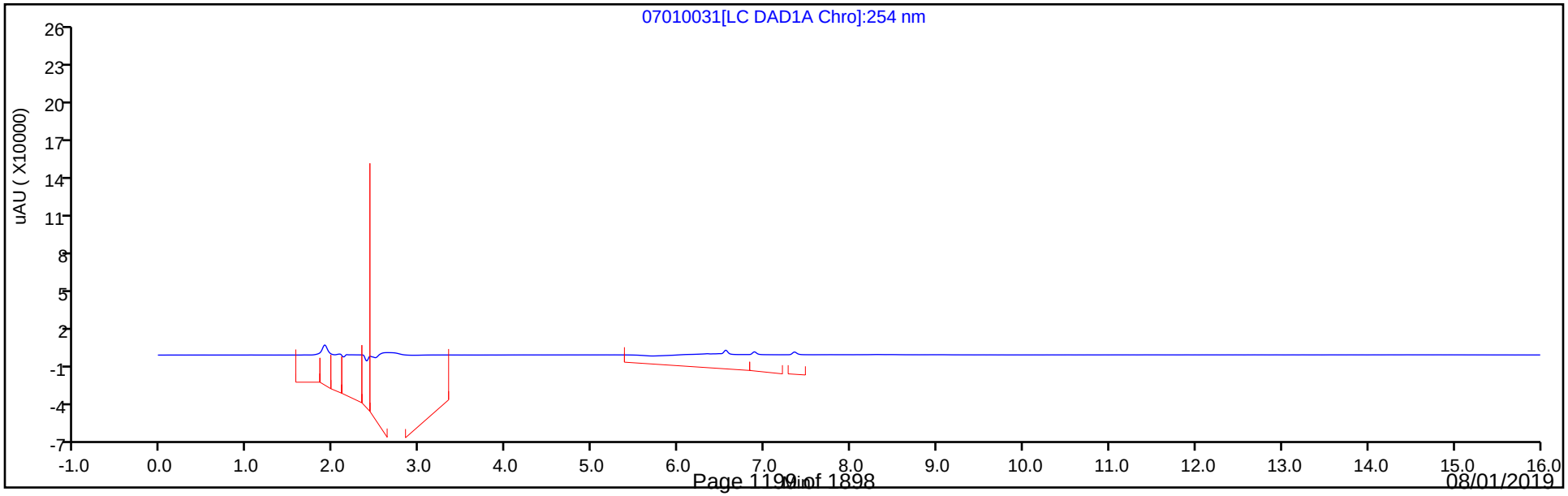
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010031.D

Injection Date:	01-Jul-2019 23:55:10	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L2			Worklist Smp#:	31
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

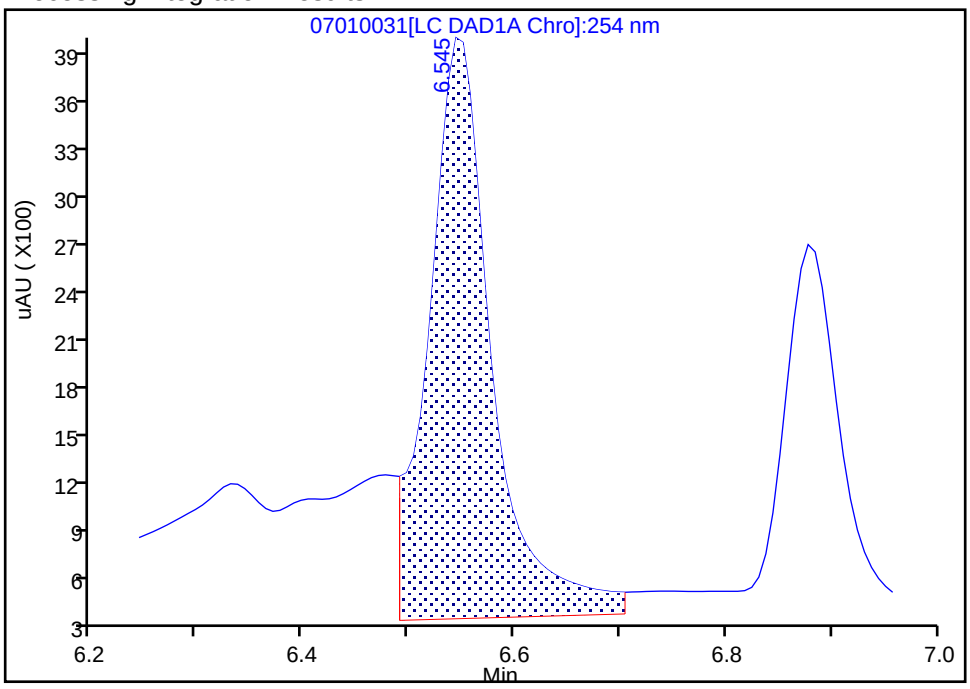
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010031.D				
Injection Date:	01-Jul-2019 23:55:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

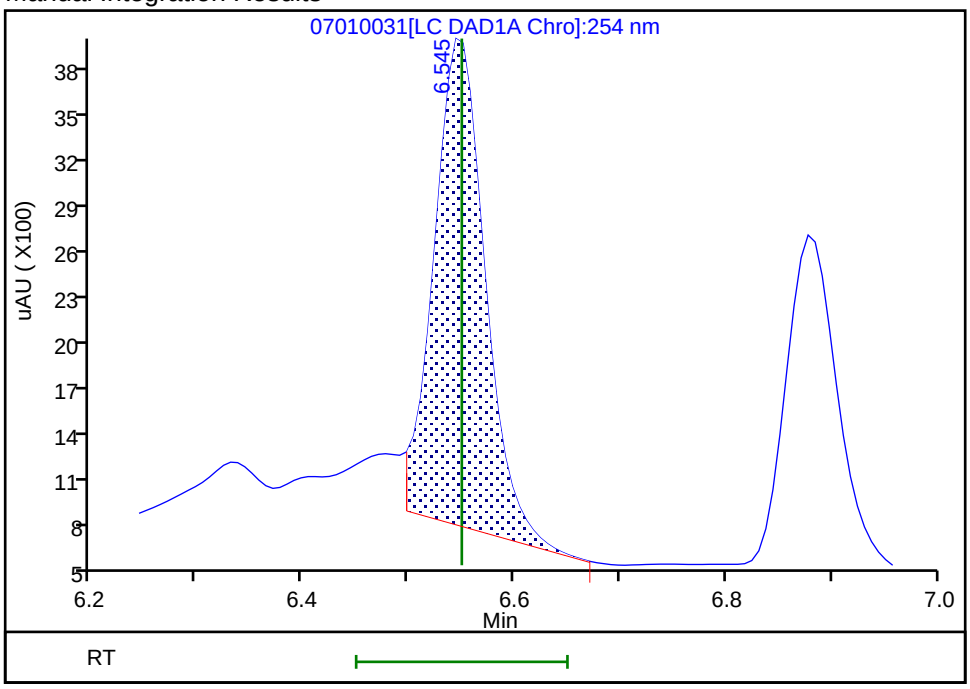
Processing Integration Results

RT: 6.54
Area: 14549
Amount: 0.064589
Amount Units: ug/mL



Manual Integration Results

RT: 6.54
Area: 10428
Amount: 0.048510
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:04:49
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Lims ID:	IC DMT L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	02-Jul-2019 00:18:07	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L1				
Misc. Info.:	280-0083376-032				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:35:30	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.550	6.550	0.000	4216	0.0200	0.0196	
5 DNX	1	6.883	6.883	0.000	3416	0.0200	0.0219	
6 MNX	1	7.350	7.343	0.007	3273	0.0233	0.0234	

Reagents:

8330 DMT_00002 Amount Added: 1.00 Units: uL

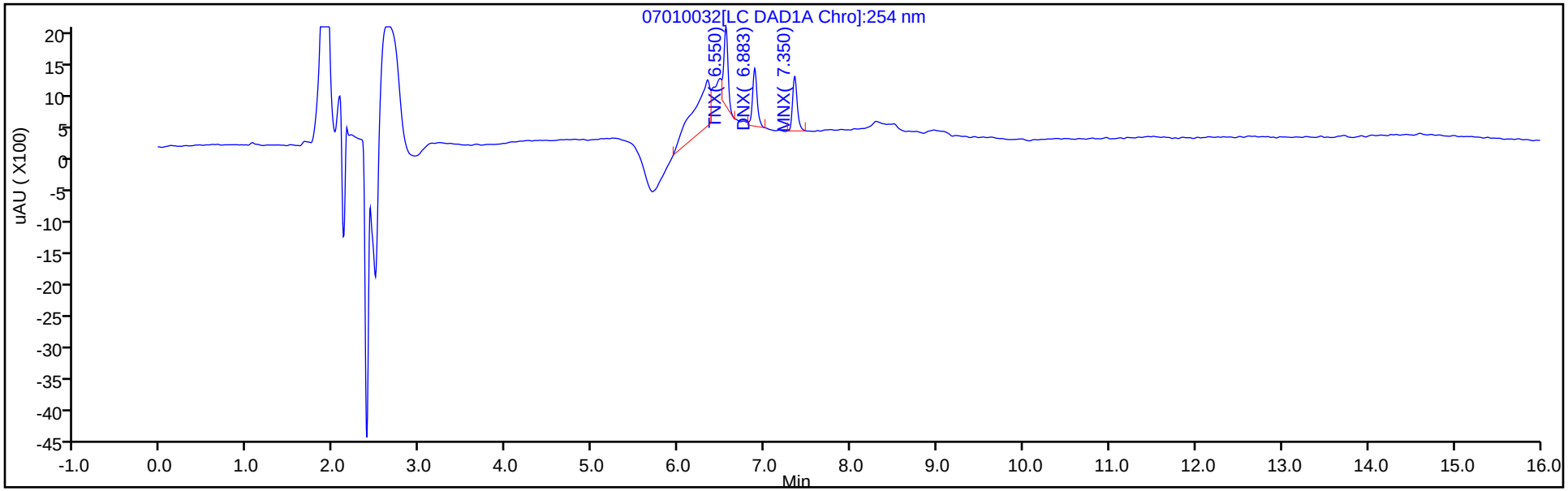
Report Date: 02-Jul-2019 11:35:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

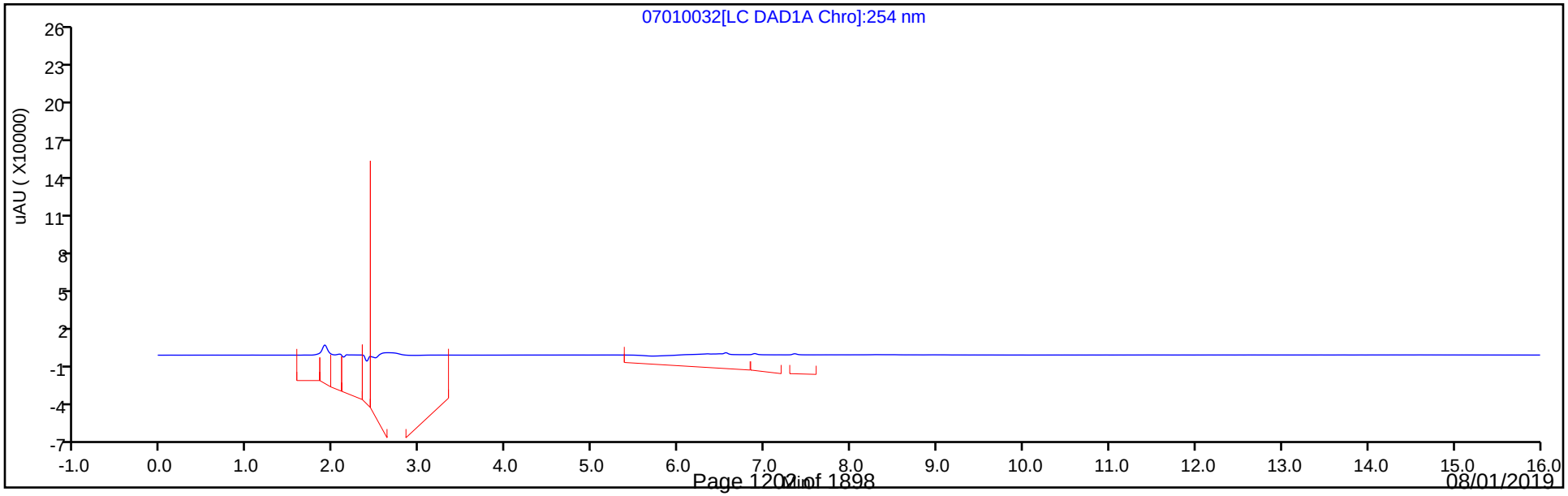
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Injection Date:	02-Jul-2019 00:18:07	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC DMT L1			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-457315/15 Calibration Date: 05/07/2019 19:48

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 05070015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	167918		434	400	8.4	15.0
HMX	Ave	171198	162118		379	400	-5.3	15.0
RDX	Ave	208444	201700		387	400	-3.2	15.0
Nitrobenzene	Ave	405448	399908		395	400	-1.4	15.0
1,3-Dinitrobenzene	Ave	635564	627893		395	400	-1.2	15.0
Nitroglycerin	Ave	192935	175353		3640	4000	-9.1	15.0
2-Nitrotoluene	Ave	261865	254708		389	400	-2.7	15.0
4-Nitrotoluene	Ave	226647	225693		398	400	-0.4	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	294185		396	400	-1.1	15.0
3-Nitrotoluene	Ave	292691	283468		387	400	-3.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	422210		393	400	-1.9	15.0
1,3,5-Trinitrobenzene	Ave	457546	454625		397	400	-0.6	15.0
2,6-Dinitrotoluene	Ave	293465	278643		380	400	-5.1	15.0
2,4-Dinitrotoluene	Ave	569466	552483		388	400	-3.0	15.0
Tetryl	Ave	314480	326443		415	400	3.8	15.0
2,4,6-Trinitrotoluene	Ave	407281	373723		367	400	-8.2	15.0
PETN	Ave	132364	127215		3840	4000	-3.9	15.0
1,2-Dinitrobenzene	Ave	276856	252750		365	400	-8.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-457315/15 Calibration Date: 05/07/2019 19:48

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 05070015.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.08	5.79	6.09
HMX	7.20	7.05	7.35
RDX	9.28	9.15	9.45
Nitrobenzene	12.30	12.18	12.48
1,3-Dinitrobenzene	15.88	15.73	16.03
Nitroglycerin	15.88	15.72	16.02
2-Nitrotoluene	16.71	16.57	16.87
4-Nitrotoluene	17.04	16.90	17.20
4-Amino-2,6-dinitrotoluene	17.44	17.29	17.59
3-Nitrotoluene	17.96	17.82	18.12
2-Amino-4,6-dinitrotoluene	18.46	18.30	18.60
1,3,5-Trinitrobenzene	19.22	19.06	19.36
2,6-Dinitrotoluene	20.08	19.92	20.22
2,4-Dinitrotoluene	20.62	20.47	20.77
Tetryl	23.98	23.82	24.12
2,4,6-Trinitrotoluene	24.96	24.80	25.10
PETN	25.36	25.20	25.50
1,2-Dinitrobenzene	13.34	13.20	13.50

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070015.D
Lims ID: ICV FULL 8330
Client ID:
Sample Type: ICV
Inject. Date: 07-May-2019 19:48:22 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL 8330
Misc. Info.: 280-0081649-015
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-May-2019 09:13:52 Calib Date: 07-May-2019 19:13:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0325

First Level Reviewer: fiedlerh Date: 08-May-2019 09:05:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.430	4.446	-0.016	161383	0.4000	0.4089	
2 2,4-diamino-6-nitrotoluene	1	5.030	4.993	0.037	94666	0.4000	0.3700	
5 2,4,6-Trinitrophenol	1	6.077	5.940	0.137	67167	0.4000	0.4336	
6 HMX	1	7.203	7.200	0.003	64847	0.4000	0.3788	
8 RDX	1	9.283	9.300	-0.017	80680	0.4000	0.3871	
9 Nitrobenzene	1	12.296	12.326	-0.030	159963	0.4000	0.3945	
$ 10 1,2-Dinitrobenzene	1	13.336	13.346	-0.010	101100	0.4000	0.3652	
11 3,5-Dinitroaniline	1	15.263	15.266	-0.003	190443	0.4000	0.4055	
13 Nitroglycerin	2	15.883	15.873	0.010	701412	4.00	3.64	
12 1,3-Dinitrobenzene	1	15.876	15.880	-0.004	251157	0.4000	0.3952	
14 o-Nitrotoluene	1	16.710	16.720	-0.010	101883	0.4000	0.3891	
15 p-Nitrotoluene	1	17.043	17.053	-0.010	90277	0.4000	0.3983	
16 4-Amino-2,6-dinitrotoluene	1	17.443	17.440	0.003	117674	0.4000	0.3957	
17 m-Nitrotoluene	1	17.956	17.966	-0.010	113387	0.4000	0.3874	
18 2-Amino-4,6-dinitrotoluene	1	18.463	18.446	0.017	168884	0.4000	0.3925	
19 1,3,5-Trinitrobenzene	1	19.216	19.213	0.003	181850	0.4000	0.3974	
20 2,6-Dinitrotoluene	1	20.076	20.073	0.003	111457	0.4000	0.3798	
21 2,4-Dinitrotoluene	1	20.623	20.620	0.003	220993	0.4000	0.3881	
22 Tetryl	1	23.977	23.966	0.011	130577	0.4000	0.4152	
23 2,4,6-Trinitrotoluene	1	24.957	24.953	0.004	149489	0.4000	0.3670	
24 PETN	2	25.363	25.353	0.010	508858	4.00	3.84	

Reagents:

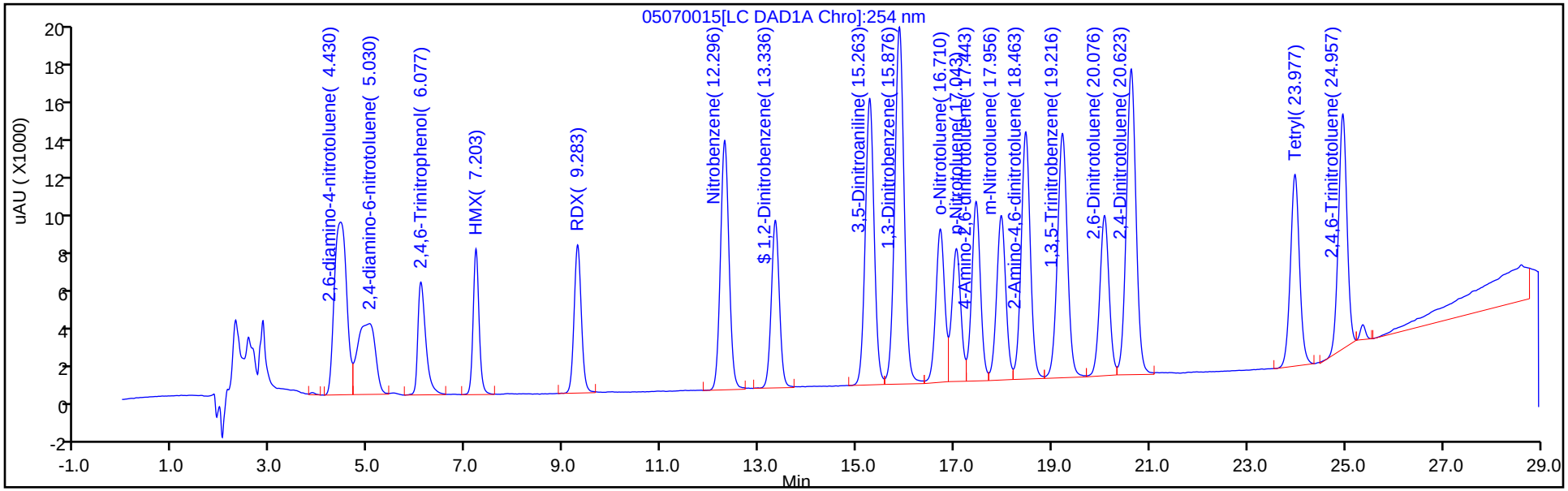
3,5-DNA LCS_00033	Amount Added:	40.00	Units: uL
8330Surrogate_00103	Amount Added:	40.00	Units: uL
8330DiaminLCS_00032	Amount Added:	40.00	Units: uL
8330 LCS_00084	Amount Added:	40.00	Units: uL

Report Date: 08-May-2019 09:13:54 Chrom Revision: 2.3 03-May-2019 15:52:00

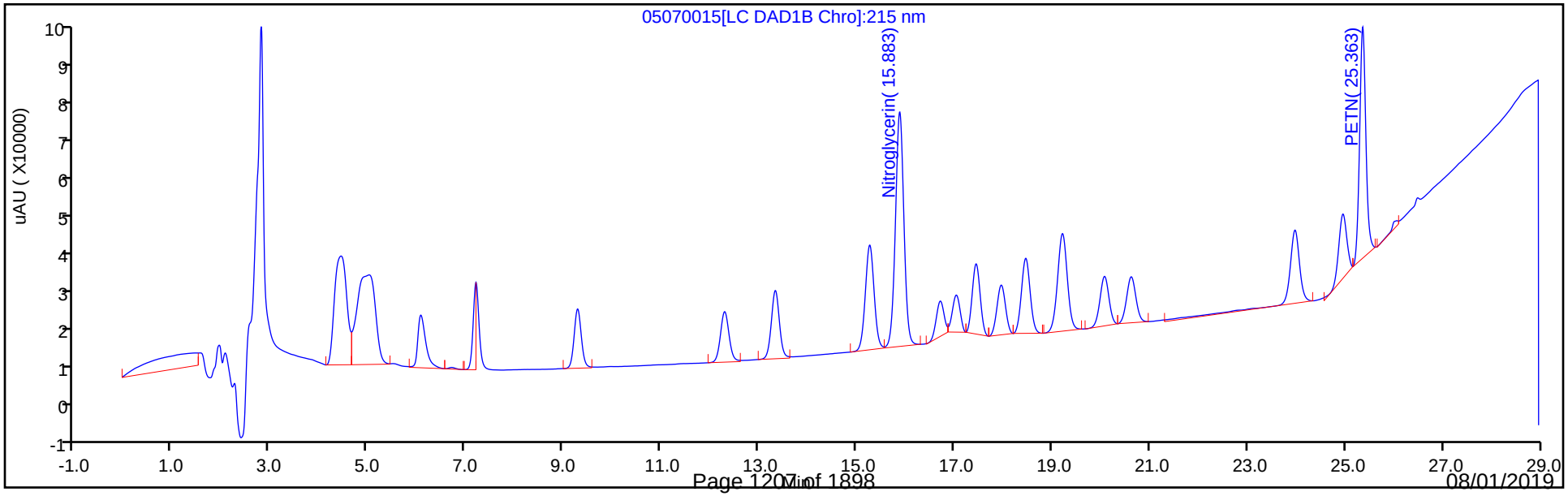
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070015.D				
Injection Date:	07-May-2019 19:48:22	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	ICV FULL 8330			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-457315/24 Calibration Date: 05/08/2019 01:03

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 05070024.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	320604		318	400	-20.5*	15.0
DNX	Ave	289881	231993		320	400	-20.0*	15.0
MNX	Ave	269525	215047		372	467	-20.2*	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-457315/24 Calibration Date: 05/08/2019 01:03

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 05070024.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.52	5.36	5.66
DNX	6.34	6.19	6.49
MNX	7.90	7.74	8.04

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070024.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	08-May-2019 01:03:25	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0081649-024				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:					
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-May-2019 09:14:04	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0325				
First Level Reviewer: fiedlerh		Date:	08-May-2019 09:07:46		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.516	5.512	0.004	128370	0.4004	0.3182	
4 DNX	1	6.343	6.338	0.005	92890	0.4004	0.3204	
7 MNX	1	7.896	7.892	0.004	100384	0.4668	0.3724	

Reagents:

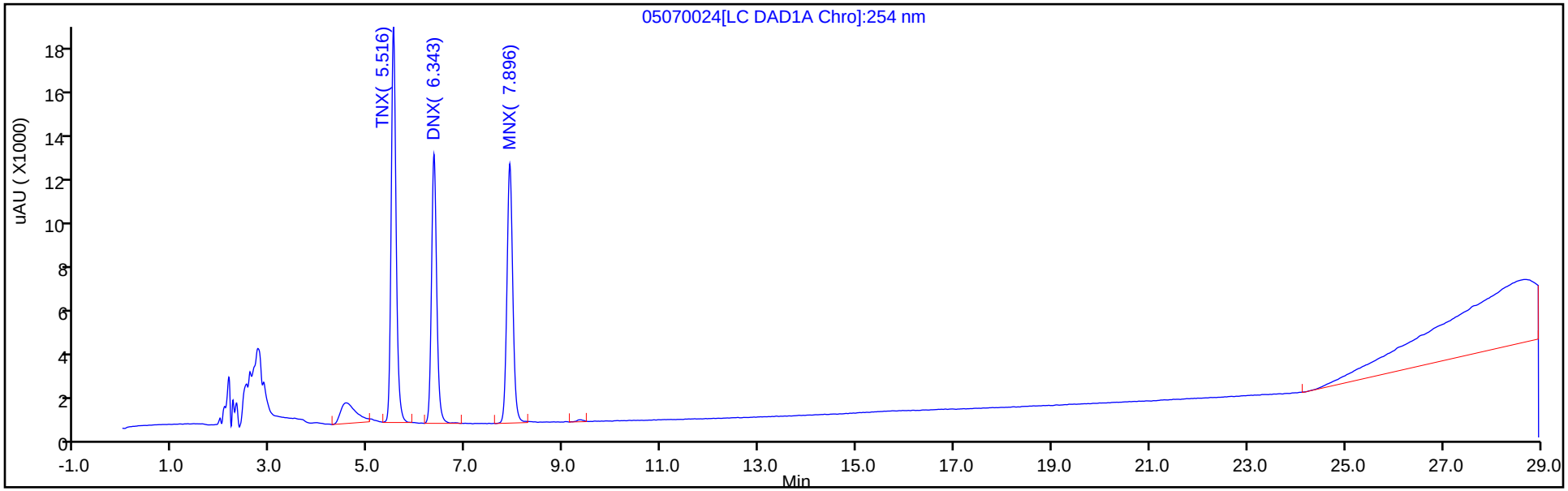
8330_OP_DMT_00002 Amount Added: 40.00 Units: uL

Report Date: 08-May-2019 09:14:06 Chrom Revision: 2.3 03-May-2019 15:52:00

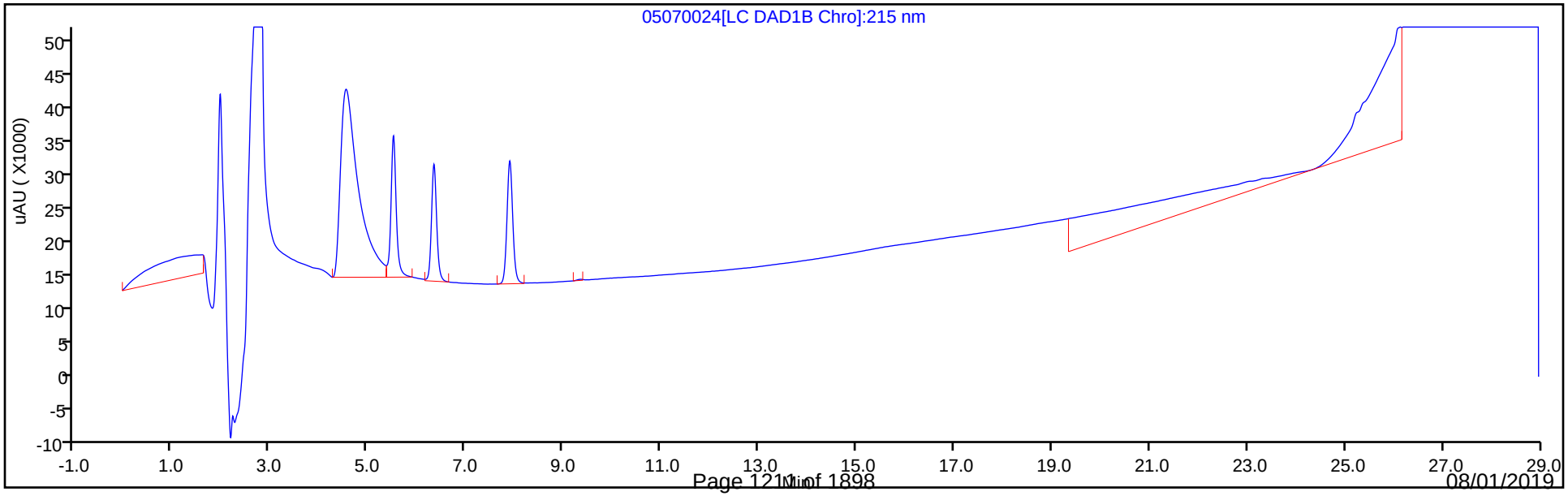
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070024.D				
Injection Date:	08-May-2019 01:03:25	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	ICV DMT			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-457456/7 Calibration Date: 05/08/2019 12:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 05080007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	391751		389	400	-2.9	15.0
DNX	Ave	289881	287488		397	400	-0.8	15.0
MNX	Ave	269525	267778		464	467	-0.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-457456/7 Calibration Date: 05/08/2019 12:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 05080007.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.52	5.36	5.66
DNX	6.35	6.19	6.49
MNX	7.91	7.74	8.04

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190508-81686.b\05080007.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	08-May-2019 12:21:28	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0081686-007				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:					
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190508-81686.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	09-May-2019 08:52:46	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0337				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.516	5.512	0.004	156857	0.4004	0.3888	
4 DNX	1	6.349	6.338	0.011	115110	0.4004	0.3971	
7 MNX	1	7.909	7.892	0.017	124999	0.4668	0.4638	

Reagents:

8330_OP_DMT_00002 Amount Added: 40.00 Units: uL

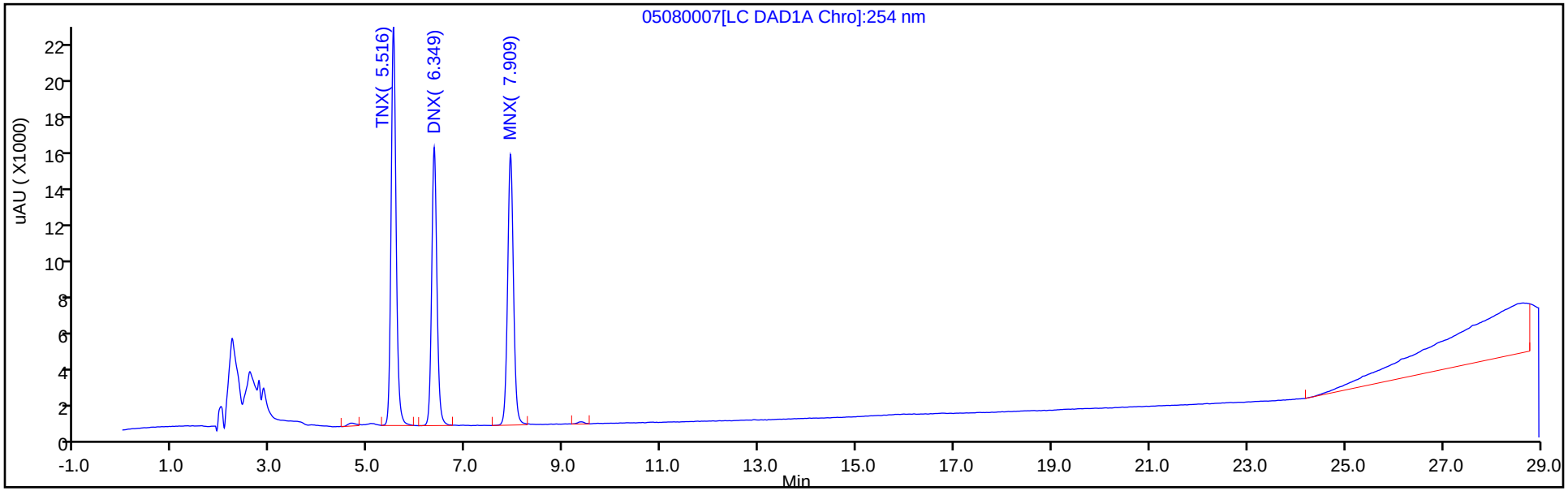
Report Date: 09-May-2019 08:53:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

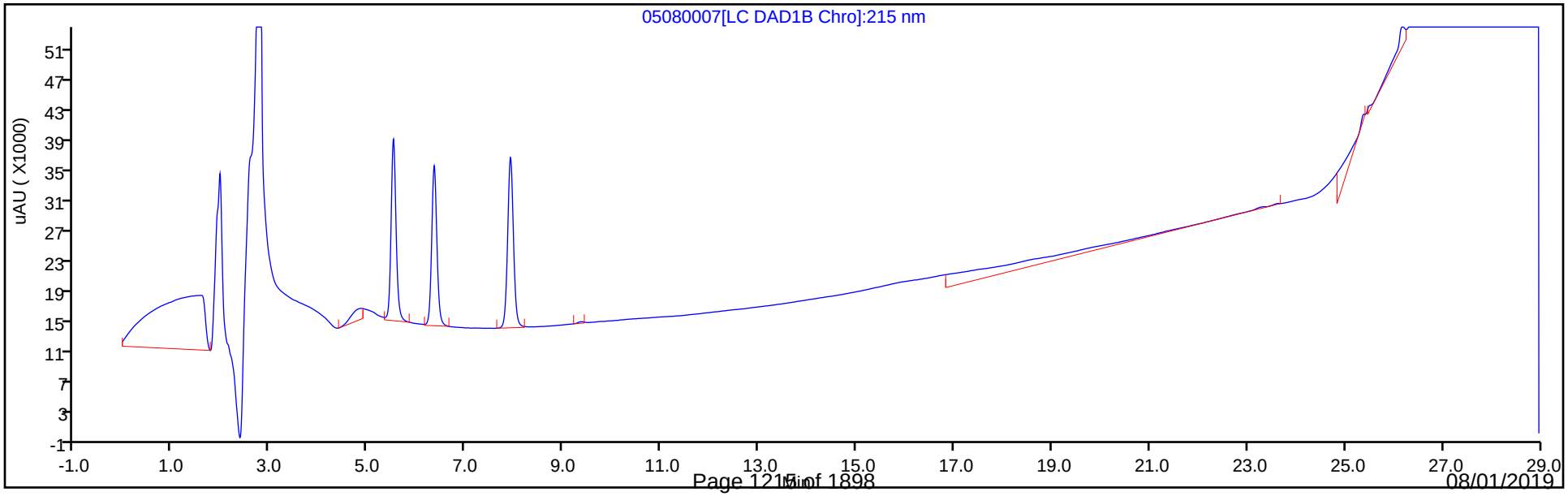
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190508-81686.b\05080007.D

Injection Date:	08-May-2019 12:21:28	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	ICV DMT			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461836/37 Calibration Date: 06/18/2019 13:24

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 007-3801.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	174460		282	250	12.6	15.0
HMX	Ave	171198	182060		266	250	6.3	15.0
RDX	Ave	208444	226592		272	250	8.7	15.0
Nitrobenzene	Ave	405448	402040		248	251	-0.8	15.0
Nitroglycerin	Ave	192935	196648		2550	2500	1.9	15.0
1,3-Dinitrobenzene	Ave	635564	672655		265	250	5.8	15.0
2-Nitrotoluene	Ave	261865	247270		237	251	-5.6	15.0
4-Nitrotoluene	Ave	226647	213259		236	251	-5.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	305531		258	251	2.7	15.0
3-Nitrotoluene	Ave	292691	268988		231	251	-8.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	440219		257	251	2.3	15.0
1,3,5-Trinitrobenzene	Ave	457546	473044		258	250	3.4	15.0
2,6-Dinitrotoluene	Ave	293465	290209		248	251	-1.1	15.0
2,4-Dinitrotoluene	Ave	569466	583996		257	251	2.6	15.0
Tetryl	Ave	314480	346968		276	250	10.3	15.0
2,4,6-Trinitrotoluene	Ave	407281	437434		270	251	7.4	15.0
PETN	Ave	132364	145601		2750	2500	10.0	15.0
1,2-Dinitrobenzene	Ave	276856	298220		269	250	7.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461836/37 Calibration Date: 06/18/2019 13:24

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 007-3801.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.99	5.91	6.21
HMX	7.20	7.04	7.34
RDX	9.27	9.12	9.42
Nitrobenzene	12.26	12.10	12.40
Nitroglycerin	15.79	15.64	15.94
1,3-Dinitrobenzene	15.80	15.65	15.95
2-Nitrotoluene	16.62	16.46	16.76
4-Nitrotoluene	16.94	16.80	17.10
4-Amino-2,6-dinitrotoluene	17.35	17.21	17.51
3-Nitrotoluene	17.86	17.70	18.00
2-Amino-4,6-dinitrotoluene	18.38	18.24	18.54
1,3,5-Trinitrobenzene	19.10	18.96	19.26
2,6-Dinitrotoluene	19.95	19.80	20.10
2,4-Dinitrotoluene	20.51	20.36	20.66
Tetryl	23.82	23.70	24.00
2,4,6-Trinitrotoluene	24.82	24.67	24.97
PETN	25.25	25.11	25.41
1,2-Dinitrobenzene	13.28	13.13	13.43

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\007-3801.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2019 13:24:17 ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: BufferStk_00002
Misc. Info.: 280-0082939-037
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-Jun-2019 11:10:46 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0312

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.456	4.441	0.015	108545	0.2500	0.2751	
2 2,4-diamino-6-nitrotoluene	1	5.010	4.987	0.023	67043	0.2500	0.2620	
5 2,4,6-Trinitrophenol	1	5.990	6.061	-0.071	43615	0.2500	0.2815	
6 HMX	1	7.196	7.187	0.009	45515	0.2500	0.2659	
8 RDX	1	9.270	9.267	0.003	56648	0.2500	0.2718	
9 Nitrobenzene	1	12.256	12.247	0.009	100711	0.2505	0.2484	
$ 10 1,2-Dinitrobenzene	1	13.283	13.281	0.002	74555	0.2500	0.2693	
11 3,5-Dinitroaniline	1	15.210	15.221	-0.011	130479	0.2500	0.2776	
13 Nitroglycerin	2	15.790	15.794	-0.004	491619	2.50	2.55	
12 1,3-Dinitrobenzene	1	15.803	15.801	0.002	168332	0.2503	0.2649	
14 o-Nitrotoluene	1	16.616	16.614	0.002	62003	0.2508	0.2368	
15 p-Nitrotoluene	1	16.943	16.947	-0.004	53528	0.2510	0.2362	
16 4-Amino-2,6-dinitrotoluene	1	17.350	17.361	-0.011	76612	0.2508	0.2576	
17 m-Nitrotoluene	1	17.856	17.854	0.002	67516	0.2510	0.2307	
18 2-Amino-4,6-dinitrotoluene	1	18.376	18.394	-0.018	110385	0.2508	0.2566	
19 1,3,5-Trinitrobenzene	1	19.103	19.107	-0.004	118261	0.2500	0.2585	
20 2,6-Dinitrotoluene	1	19.950	19.954	-0.004	72770	0.2508	0.2480	
21 2,4-Dinitrotoluene	1	20.510	20.514	-0.004	146291	0.2505	0.2569	
22 Tetryl	1	23.823	23.847	-0.024	86742	0.2500	0.2758	
23 2,4,6-Trinitrotoluene	1	24.816	24.821	-0.005	109796	0.2510	0.2696	
24 PETN	2	25.250	25.261	-0.011	364002	2.50	2.75	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL
8330_ADDs_00022 Amount Added: 12.50 Units: uL

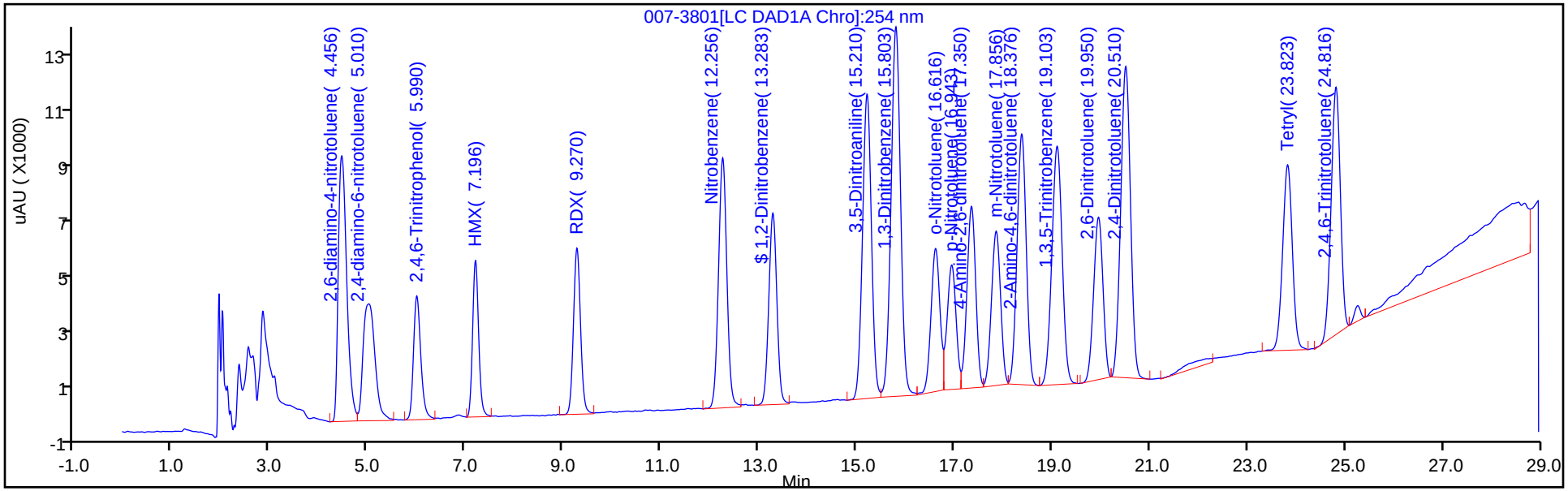
Report Date: 19-Jun-2019 11:10:46 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

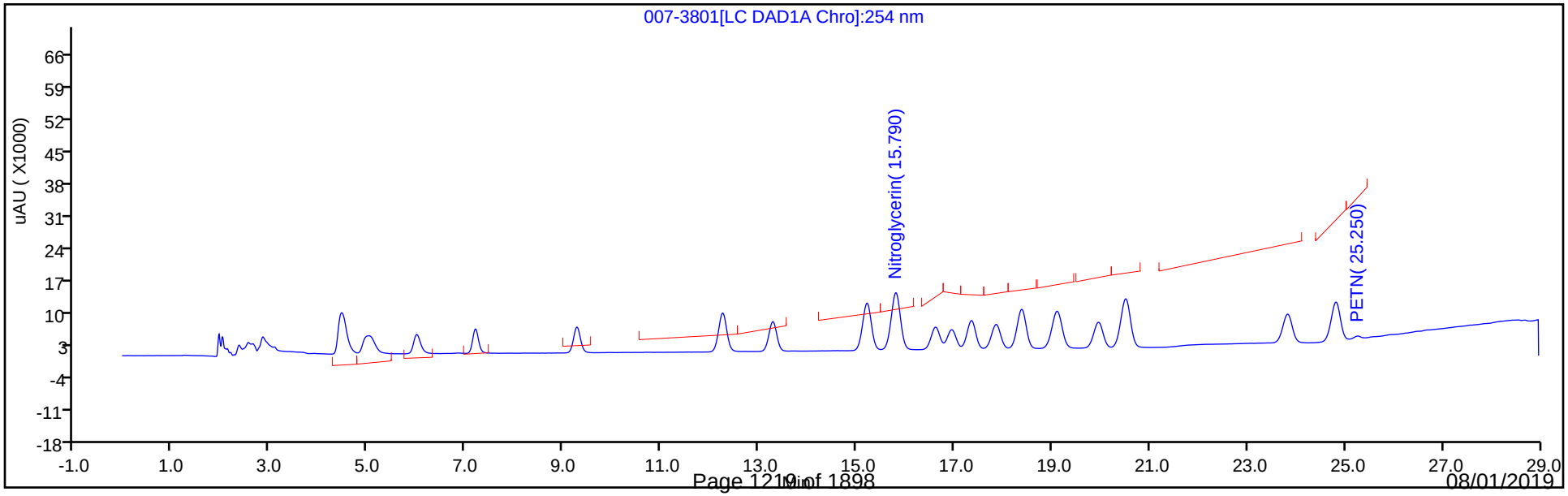
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\007-3801.D

Injection Date:	18-Jun-2019 13:24:17	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461836/49 Calibration Date: 06/18/2019 19:14

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 06170049.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	171288		276	250	10.6	15.0
HMX	Ave	171198	187832		274	250	9.7	15.0
RDX	Ave	208444	266616		320	250	27.9*	15.0
Nitrobenzene	Ave	405448	389473		241	251	-3.9	15.0
Nitroglycerin	Ave	192935	197400		2560	2500	2.3	15.0
1,3-Dinitrobenzene	Ave	635564	683876		269	250	7.6	15.0
2-Nitrotoluene	Ave	261865	249970		239	251	-4.5	15.0
4-Nitrotoluene	Ave	226647	222028		246	251	-2.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	326026		275	251	9.6	15.0
3-Nitrotoluene	Ave	292691	287964		247	251	-1.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	469671		274	251	9.2	15.0
1,3,5-Trinitrobenzene	Ave	457546	497112		272	250	8.6	15.0
2,6-Dinitrotoluene	Ave	293465	312841		267	251	6.6	15.0
2,4-Dinitrotoluene	Ave	569466	612563		269	251	7.6	15.0
Tetryl	Ave	314480	345884		275	250	10.0	15.0
2,4,6-Trinitrotoluene	Ave	407281	453717		280	251	11.4	15.0
PETN	Ave	132364	146058		2760	2500	10.3	15.0
1,2-Dinitrobenzene	Ave	276856	296916		268	250	7.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461836/49 Calibration Date: 06/18/2019 19:14

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 06170049.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.96	5.91	6.21
HMX	7.17	7.04	7.34
RDX	9.25	9.12	9.42
Nitrobenzene	12.25	12.10	12.40
Nitroglycerin	15.79	15.64	15.94
1,3-Dinitrobenzene	15.80	15.65	15.95
2-Nitrotoluene	16.61	16.46	16.76
4-Nitrotoluene	16.95	16.80	17.10
4-Amino-2,6-dinitrotoluene	17.35	17.21	17.51
3-Nitrotoluene	17.86	17.70	18.00
2-Amino-4,6-dinitrotoluene	18.38	18.24	18.54
1,3,5-Trinitrobenzene	19.11	18.96	19.26
2,6-Dinitrotoluene	19.95	19.80	20.10
2,4-Dinitrotoluene	20.51	20.36	20.66
Tetryl	23.84	23.70	24.00
2,4,6-Trinitrotoluene	24.83	24.67	24.97
PETN	25.27	25.11	25.41
1,2-Dinitrobenzene	13.27	13.13	13.43

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170049.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 18-Jun-2019 19:14:16 ALS Bottle#: 7 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV 8330
Misc. Info.: 280-0082939-049
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-Jun-2019 11:10:29 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0312

First Level Reviewer: fiedlerh Date: 19-Jun-2019 11:08:25

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	4.441	4.441	0.000	109181	0.2500	0.2767	
2 2,4-diamino-6-nitrotoluene	1	4.981	4.987	-0.006	68745	0.2500	0.2687	
5 2,4,6-Trinitrophenol	1	5.961	6.061	-0.100	42822	0.2500	0.2764	
6 HMX	1	7.174	7.187	-0.013	46958	0.2500	0.2743	
8 RDX	1	9.254	9.267	-0.013	66654	0.2500	0.3198	
9 Nitrobenzene	1	12.247	12.247	0.000	97563	0.2505	0.2406	
$ 10 1,2-Dinitrobenzene	1	13.274	13.281	-0.007	74229	0.2500	0.2681	
11 3,5-Dinitroaniline	1	15.207	15.221	-0.014	130740	0.2500	0.2781	
13 Nitroglycerin	2	15.787	15.794	-0.007	493501	2.50	2.56	
12 1,3-Dinitrobenzene	1	15.800	15.801	-0.001	171140	0.2503	0.2693	
14 o-Nitrotoluene	1	16.614	16.614	0.000	62680	0.2508	0.2394	
15 p-Nitrotoluene	1	16.947	16.947	0.000	55729	0.2510	0.2459	
16 4-Amino-2,6-dinitrotoluene	1	17.354	17.361	-0.007	81751	0.2508	0.2749	
17 m-Nitrotoluene	1	17.860	17.854	0.006	72279	0.2510	0.2469	
18 2-Amino-4,6-dinitrotoluene	1	18.380	18.394	-0.014	117770	0.2508	0.2737	
19 1,3,5-Trinitrobenzene	1	19.107	19.107	0.000	124278	0.2500	0.2716	
20 2,6-Dinitrotoluene	1	19.954	19.954	0.000	78445	0.2508	0.2673	
21 2,4-Dinitrotoluene	1	20.514	20.514	0.000	153447	0.2505	0.2695	
22 Tetryl	1	23.841	23.847	-0.006	86471	0.2500	0.2750	M
23 2,4,6-Trinitrotoluene	1	24.827	24.821	0.006	113883	0.2510	0.2796	
24 PETN	2	25.267	25.261	0.006	365144	2.50	2.76	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058	Amount Added:	12.50	Units: uL
8330_ADDs_00022	Amount Added:	12.50	Units: uL

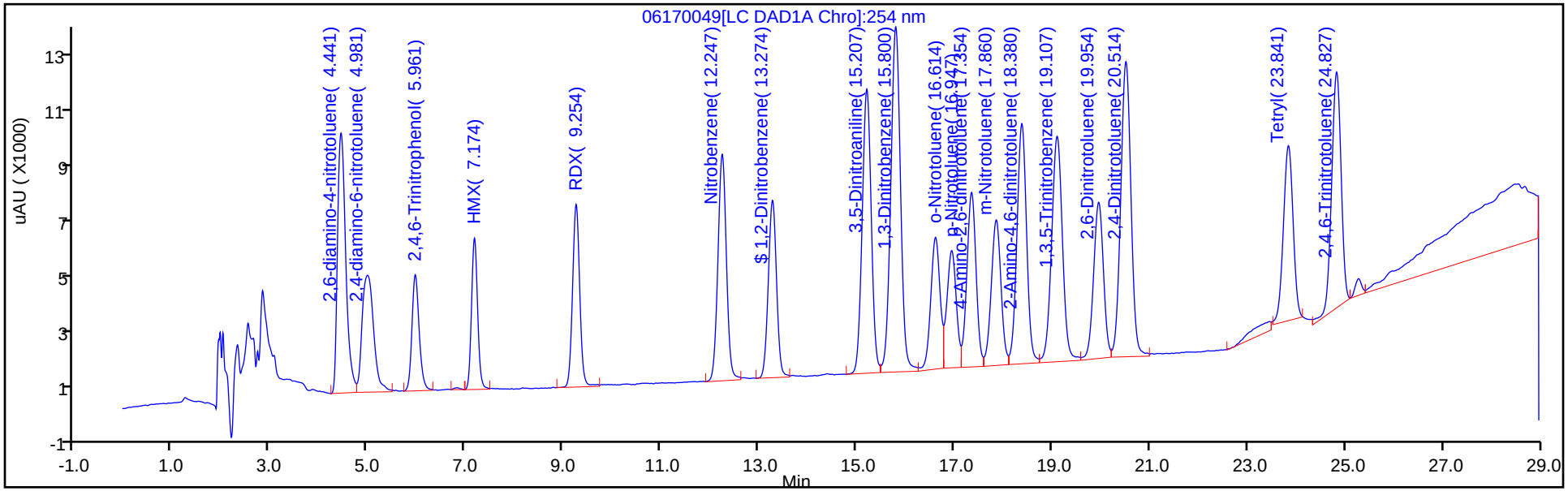
Report Date: 19-Jun-2019 11:10:30 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

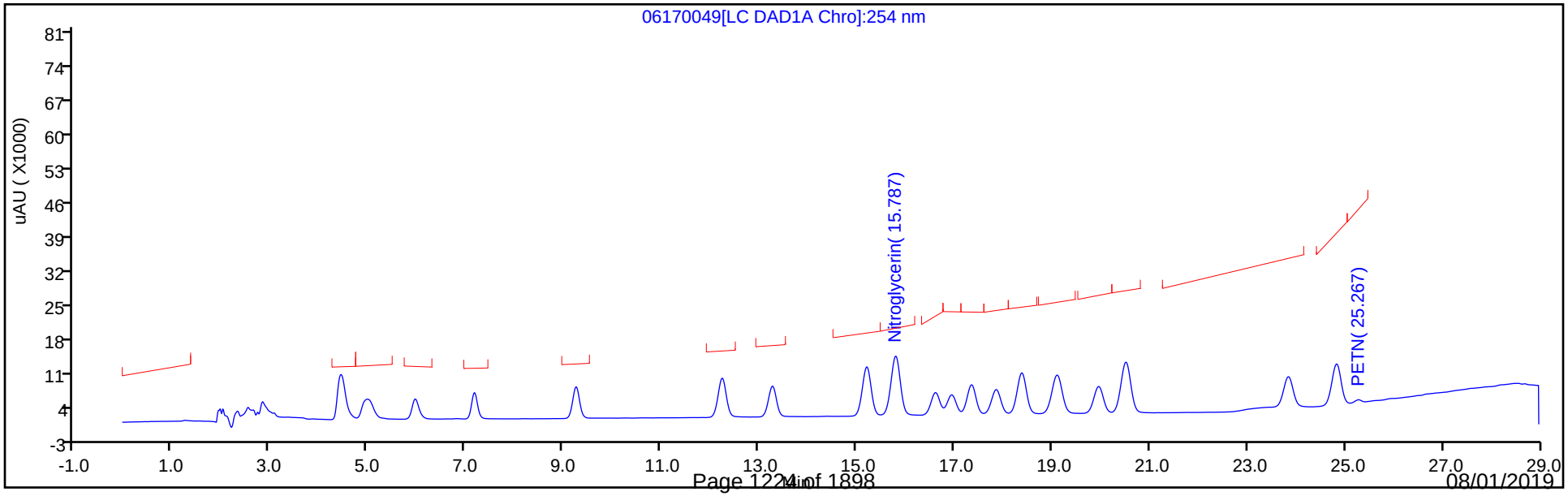
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170049.D

Injection Date:	18-Jun-2019 19:14:16	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	49
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

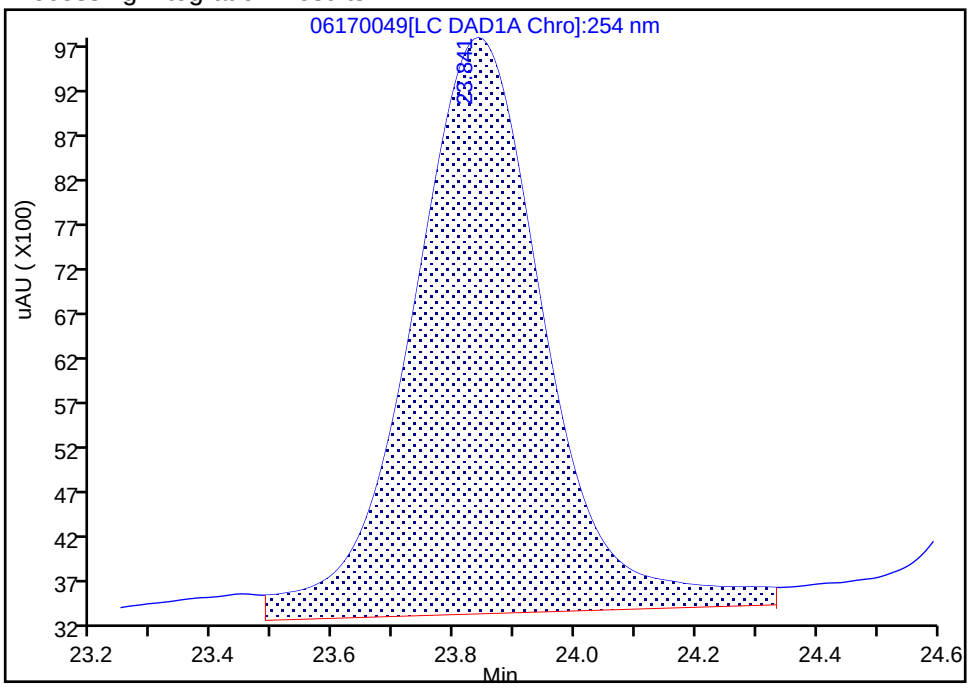
Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170049.D				
Injection Date:	18-Jun-2019 19:14:16	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV 8330				
Client ID:					
Operator ID:	HKF	ALS Bottle#:	7	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

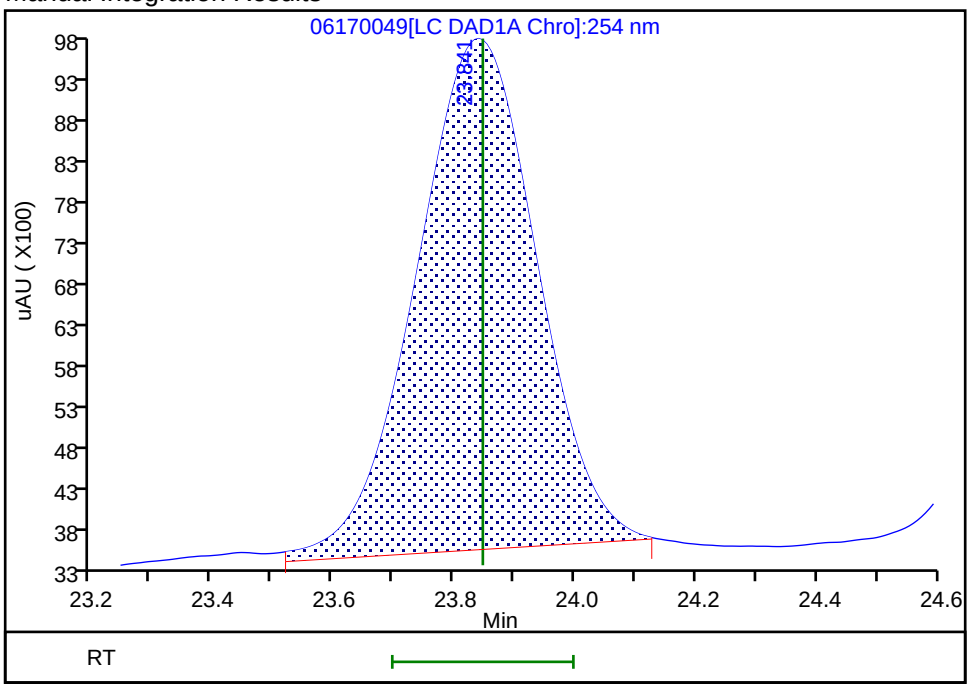
Processing Integration Results

RT: 23.84
Area: 99366
Amount: 0.315969
Amount Units: ug/ml



Manual Integration Results

RT: 23.84
Area: 86471
Amount: 0.274965
Amount Units: ug/ml



Reviewer: fiedlerh, 19-Jun-2019 11:08:20

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461836/50 Calibration Date: 06/18/2019 19:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06170050.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	404348		251	250	0.2	15.0
DNX	Ave	289881	303764		262	250	4.8	15.0
MNX	Ave	269525	285326		309	292	5.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461836/50 Calibration Date: 06/18/2019 19:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06170050.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.49	5.34	5.64
DNX	6.30	6.16	6.46
MNX	7.84	7.70	8.00

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170050.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-Jun-2019 19:49:15	ALS Bottle#:	8	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0082939-050				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	19-Jun-2019 11:10:30	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0312				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.486	5.488	-0.002	101188	0.2503	0.2508	
4 DNX	1	6.300	6.308	-0.008	76017	0.2503	0.2622	
7 MNX	1	7.840	7.848	-0.008	83244	0.2918	0.3089	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

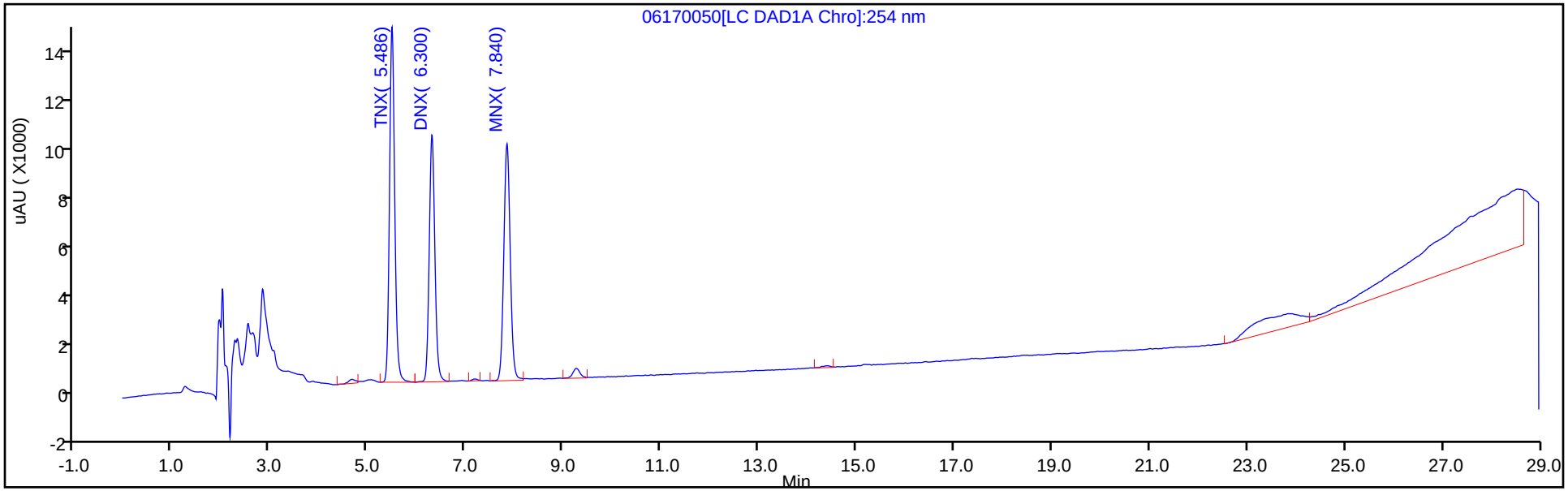
Report Date: 19-Jun-2019 11:10:31 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Denver

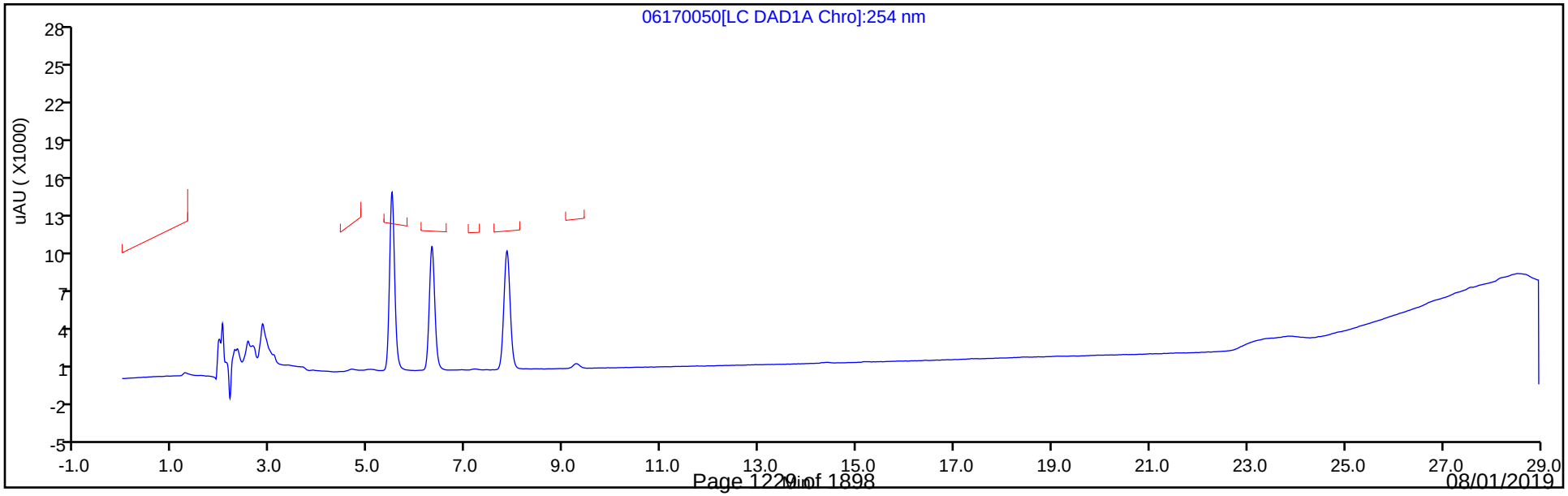
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190617-82939.b\06170050.D

Injection Date:	18-Jun-2019 19:49:15	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV DMT			Worklist Smp#:	50
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462205/7 Calibration Date: 06/21/2019 11:38

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 06210007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	174348		281	250	12.5	15.0
HMX	Ave	171198	181672		265	250	6.1	15.0
RDX	Ave	208444	226204		271	250	8.5	15.0
Nitrobenzene	Ave	405448	427369		264	251	5.4	15.0
Nitroglycerin	Ave	192935	203508		2640	2500	5.5	15.0
1,3-Dinitrobenzene	Ave	635564	676899		267	250	6.5	15.0
2-Nitrotoluene	Ave	261865	281468		270	251	7.5	15.0
4-Nitrotoluene	Ave	226647	237283		263	251	4.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	326142		275	251	9.7	15.0
3-Nitrotoluene	Ave	292691	316179		271	251	8.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	467856		273	251	8.7	15.0
1,3,5-Trinitrobenzene	Ave	457546	494988		270	250	8.2	15.0
2,6-Dinitrotoluene	Ave	293465	311936		267	251	6.3	15.0
2,4-Dinitrotoluene	Ave	569466	605597		266	251	6.3	15.0
Tetryl	Ave	314480	338748		269	250	7.7	15.0
2,4,6-Trinitrotoluene	Ave	407281	439211		271	251	7.8	15.0
PETN	Ave	132364	147397		2780	2500	11.4	15.0
1,2-Dinitrobenzene	Ave	276856	296352		268	250	7.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462205/7 Calibration Date: 06/21/2019 11:38

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 06210007.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.13	5.98	6.28
HMX	7.23	7.08	7.38
RDX	9.31	9.16	9.46
Nitrobenzene	12.31	12.16	12.46
Nitroglycerin	15.85	15.70	16.00
1,3-Dinitrobenzene	15.86	15.71	16.01
2-Nitrotoluene	16.68	16.53	16.83
4-Nitrotoluene	17.01	16.86	17.16
4-Amino-2,6-dinitrotoluene	17.41	17.26	17.56
3-Nitrotoluene	17.92	17.77	18.07
2-Amino-4,6-dinitrotoluene	18.45	18.30	18.60
1,3,5-Trinitrobenzene	19.16	19.01	19.31
2,6-Dinitrotoluene	20.02	19.87	20.17
2,4-Dinitrotoluene	20.58	20.43	20.73
Tetryl	23.91	23.76	24.06
2,4,6-Trinitrotoluene	24.89	24.74	25.04
PETN	25.32	25.17	25.47
1,2-Dinitrobenzene	13.34	13.19	13.49

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210007.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 21-Jun-2019 11:38:28 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV 8330
Misc. Info.: 280-0083049-007
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-Jun-2019 10:49:34 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0317

First Level Reviewer: fiedlerh Date: 24-Jun-2019 10:19:15

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.465	4.465	0.000	111309	0.2500	0.2821	
	2 2,4-diamino-6-nitrotoluene	1	5.019	5.019	0.000	70299	0.2500	0.2748	
	5 2,4,6-Trinitrophenol	1	6.132	6.132	0.000	43587	0.2500	0.2814	
	6 HMX	1	7.225	7.225	0.000	45418	0.2500	0.2653	
	8 RDX	1	9.312	9.312	0.000	56551	0.2500	0.2713	
	9 Nitrobenzene	1	12.305	12.305	0.000	107056	0.2505	0.2640	
$	10 1,2-Dinitrobenzene	1	13.338	13.338	0.000	74088	0.2500	0.2676	
	11 3,5-Dinitroaniline	1	15.265	15.265	0.000	131219	0.2500	0.2792	
	13 Nitroglycerin	2	15.852	15.852	0.000	508770	2.50	2.64	
	12 1,3-Dinitrobenzene	1	15.858	15.858	0.000	169394	0.2503	0.2665	
	14 o-Nitrotoluene	1	16.678	16.678	0.000	70578	0.2508	0.2695	
	15 p-Nitrotoluene	1	17.005	17.005	0.000	59558	0.2510	0.2628	
	16 4-Amino-2,6-dinitrotoluene	1	17.412	17.412	0.000	81780	0.2508	0.2750	
	17 m-Nitrotoluene	1	17.918	17.918	0.000	79361	0.2510	0.2711	
	18 2-Amino-4,6-dinitrotoluene	1	18.445	18.445	0.000	117315	0.2508	0.2727	
	19 1,3,5-Trinitrobenzene	1	19.158	19.158	0.000	123747	0.2500	0.2705	
	20 2,6-Dinitrotoluene	1	20.018	20.018	0.000	78218	0.2508	0.2665	
	21 2,4-Dinitrotoluene	1	20.579	20.579	0.000	151702	0.2505	0.2664	
	22 Tetryl	1	23.905	23.905	0.000	84687	0.2500	0.2693	M
	23 2,4,6-Trinitrotoluene	1	24.885	24.885	0.000	110242	0.2510	0.2707	
	24 PETN	2	25.319	25.319	0.000	368493	2.50	2.78	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058	Amount Added:	12.50	Units: uL
8330_ADDs_00022	Amount Added:	12.50	Units: uL

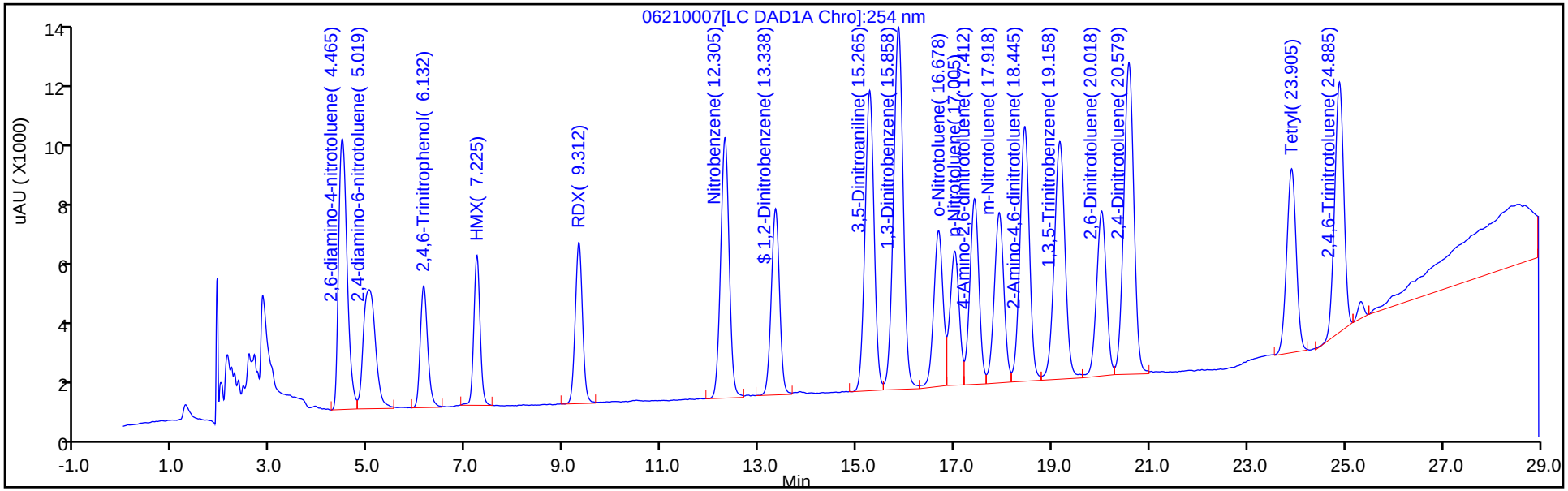
Report Date: 28-Jun-2019 10:49:36 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

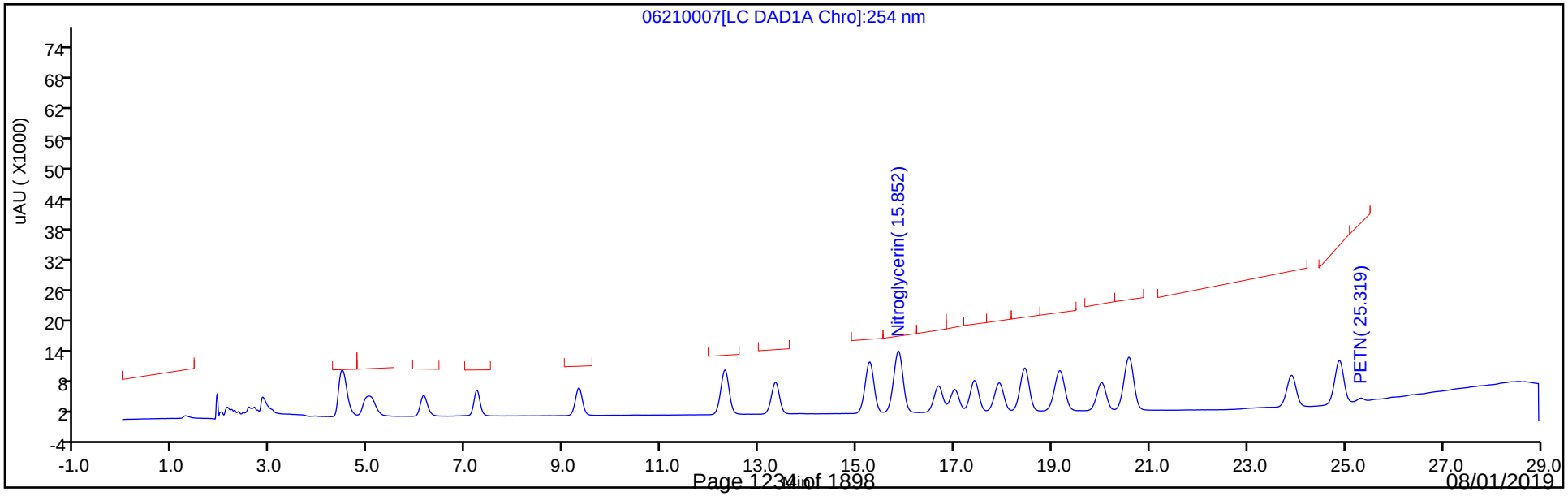
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210007.D

Injection Date:	21-Jun-2019 11:38:28	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

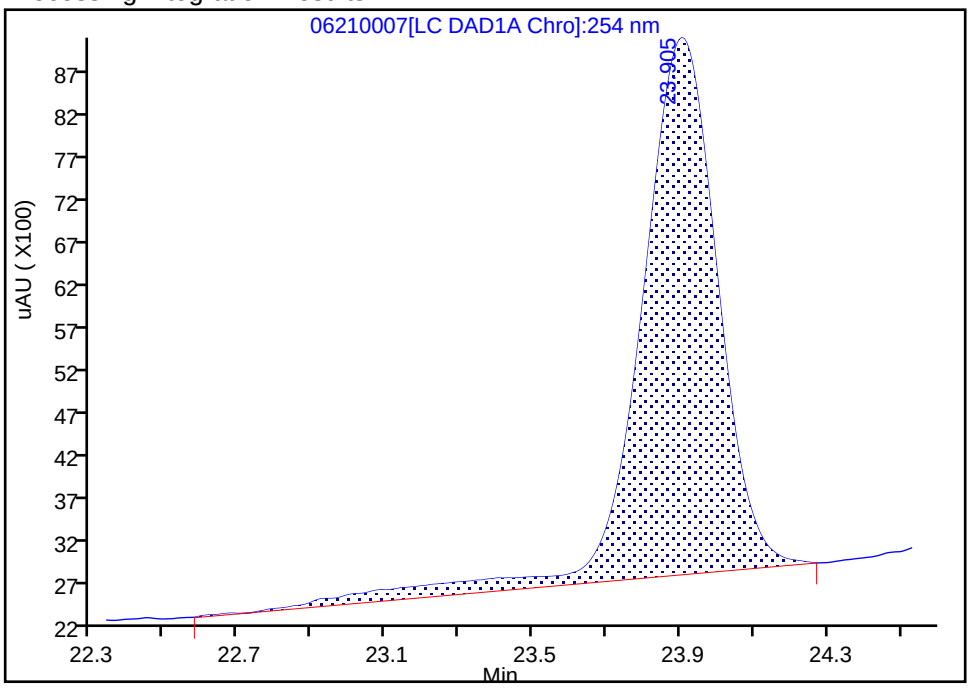
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210007.D
Injection Date: 21-Jun-2019 11:38:28 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV 8330
Client ID:
Operator ID: HKF ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

22 Tetryl, CAS: 479-45-8

Signal: 1

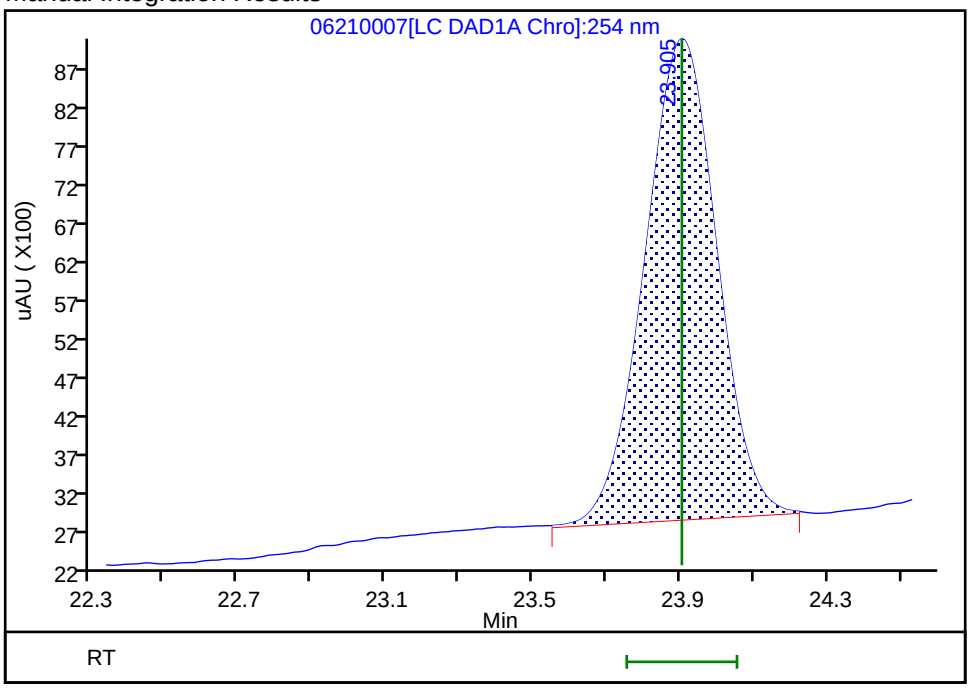
Processing Integration Results

RT: 23.91
Area: 92142
Amount: 0.292998
Amount Units: ug/ml



Manual Integration Results

RT: 23.91
Area: 84687
Amount: 0.269292
Amount Units: ug/ml



Reviewer: fiedlerh, 28-Jun-2019 10:49:31
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462205/8 Calibration Date: 06/21/2019 12:13

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06210008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	440851		273	250	9.3	15.0
DNX	Ave	289881	314178		271	250	8.4	15.0
MNX	Ave	269525	289018		313	292	7.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462205/8 Calibration Date: 06/21/2019 12:13

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06210008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.51	5.34	5.64
DNX	6.33	6.16	6.46
MNX	7.87	7.70	8.00

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210008.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 21-Jun-2019 12:13:26 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0083049-008
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub13

Method: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2019 10:51:24 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0327

First Level Reviewer: fiedlerh Date: 24-Jun-2019 10:24:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.506	5.488	0.018	110323	0.2503	0.2735	
4 DNX	1	6.332	6.308	0.024	78623	0.2503	0.2712	
7 MNX	1	7.872	7.848	0.024	84321	0.2918	0.3129	

Reagents:

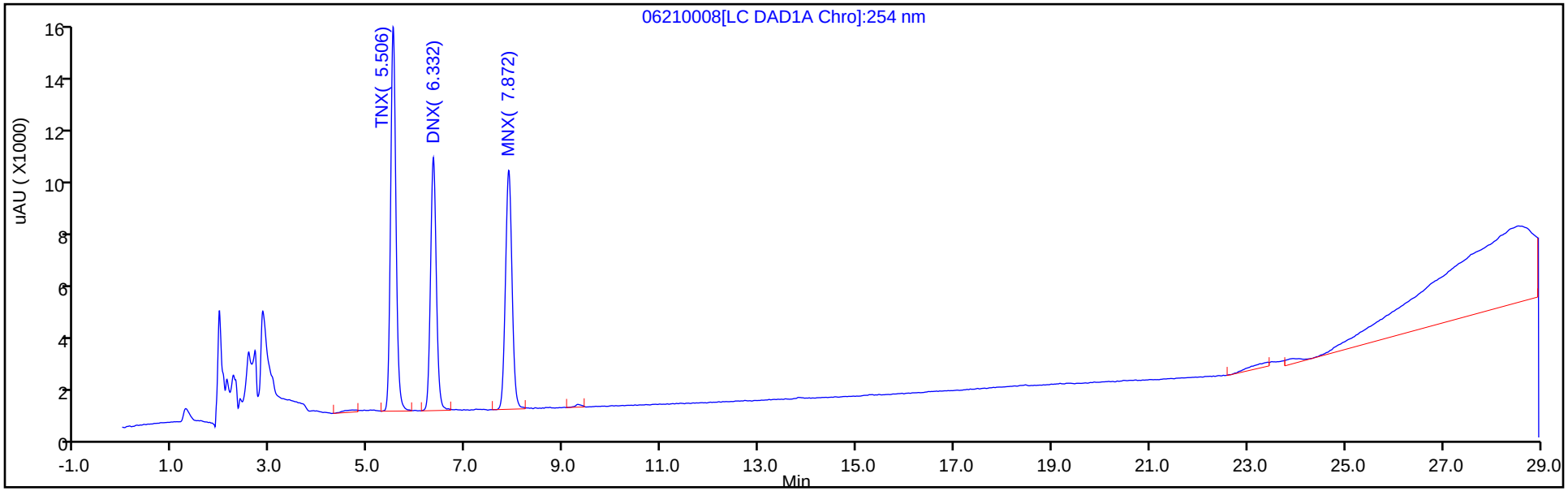
8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 24-Jun-2019 10:51:24 Chrom Revision: 2.3 20-Jun-2019 20:50:56

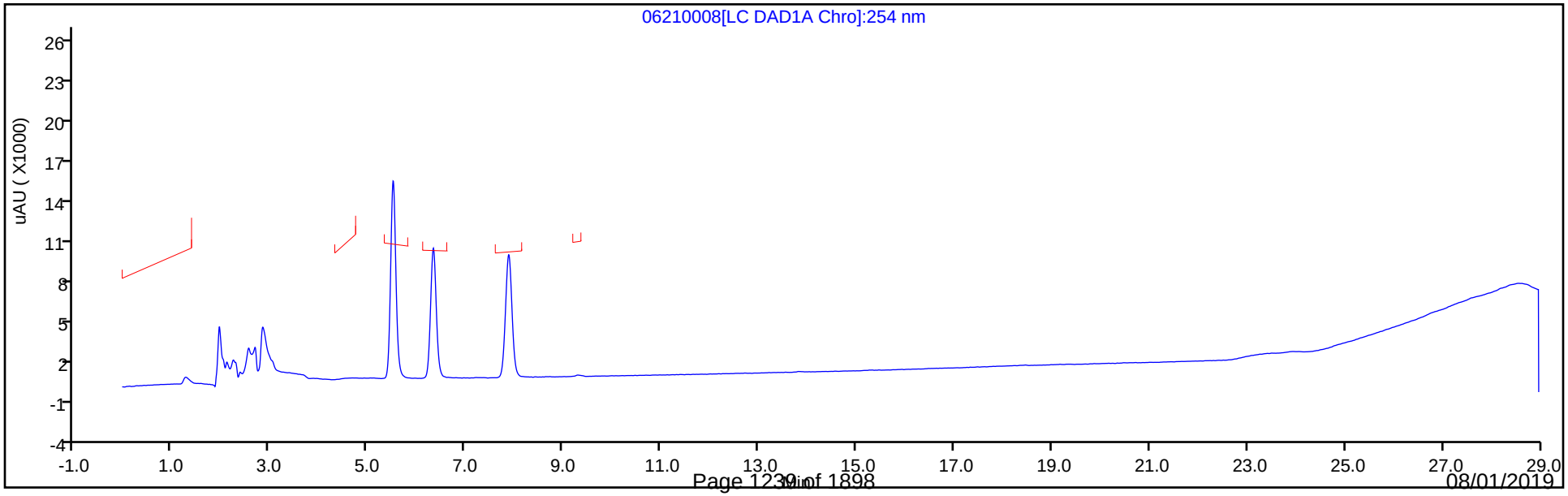
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210008.D				
Injection Date:	21-Jun-2019 12:13:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV DMT			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462205/11 Calibration Date: 06/21/2019 13:58

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 06210011.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	174256		281	250	12.5	15.0
HMX	Ave	171198	179352		262	250	4.8	15.0
RDX	Ave	208444	225368		270	250	8.1	15.0
Nitrobenzene	Ave	405448	424112		262	251	4.6	15.0
1,3-Dinitrobenzene	Ave	635564	677391		267	250	6.6	15.0
Nitroglycerin	Ave	192935	196606		2550	2500	1.9	15.0
2-Nitrotoluene	Ave	261865	278281		266	251	6.3	15.0
4-Nitrotoluene	Ave	226647	237940		264	251	5.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	325866		275	251	9.6	15.0
3-Nitrotoluene	Ave	292691	313522		269	251	7.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	465643		271	251	8.2	15.0
1,3,5-Trinitrobenzene	Ave	457546	497756		272	250	8.8	15.0
2,6-Dinitrotoluene	Ave	293465	310947		266	251	6.0	15.0
2,4-Dinitrotoluene	Ave	569466	607725		267	251	6.7	15.0
Tetryl	Ave	314480	339528		270	250	8.0	15.0
2,4,6-Trinitrotoluene	Ave	407281	435263		268	251	6.9	15.0
PETN	Ave	132364	143926		2720	2500	8.7	15.0
1,2-Dinitrobenzene	Ave	276856	298780		270	250	7.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462205/11 Calibration Date: 06/21/2019 13:58

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 06210011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.08	5.98	6.28
HMX	7.22	7.08	7.38
RDX	9.30	9.16	9.46
Nitrobenzene	12.30	12.16	12.46
1,3-Dinitrobenzene	15.85	15.71	16.01
Nitroglycerin	15.85	15.70	16.00
2-Nitrotoluene	16.68	16.53	16.83
4-Nitrotoluene	17.00	16.86	17.16
4-Amino-2,6-dinitrotoluene	17.41	17.26	17.56
3-Nitrotoluene	17.92	17.77	18.07
2-Amino-4,6-dinitrotoluene	18.44	18.30	18.60
1,3,5-Trinitrobenzene	19.16	19.01	19.31
2,6-Dinitrotoluene	20.01	19.87	20.17
2,4-Dinitrotoluene	20.56	20.43	20.73
Tetryl	23.88	23.76	24.06
2,4,6-Trinitrotoluene	24.87	24.74	25.04
PETN	25.30	25.17	25.47
1,2-Dinitrobenzene	13.34	13.19	13.49

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210011.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 21-Jun-2019 13:58:24 ALS Bottle#: 7 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV 8330
Misc. Info.: 280-0083049-011
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2019 10:51:27 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0327

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	4.462	4.465	-0.003	110966	0.2500	0.2812	
2 2,4-diamino-6-nitrotoluene	1	5.015	5.019	-0.004	68500	0.2500	0.2677	
5 2,4,6-Trinitrophenol	1	6.075	6.132	-0.057	43564	0.2500	0.2812	
6 HMX	1	7.215	7.225	-0.010	44838	0.2500	0.2619	
8 RDX	1	9.302	9.312	-0.010	56342	0.2500	0.2703	
9 Nitrobenzene	1	12.302	12.305	-0.003	106240	0.2505	0.2620	
$ 10 1,2-Dinitrobenzene	1	13.335	13.338	-0.003	74695	0.2500	0.2698	
11 3,5-Dinitroaniline	1	15.262	15.265	-0.003	131568	0.2500	0.2799	
13 Nitroglycerin	2	15.848	15.852	-0.004	491515	2.50	2.55	
12 1,3-Dinitrobenzene	1	15.848	15.858	-0.010	169517	0.2503	0.2667	
14 o-Nitrotoluene	1	16.675	16.678	-0.003	69779	0.2508	0.2665	
15 p-Nitrotoluene	1	17.002	17.005	-0.003	59723	0.2510	0.2635	
16 4-Amino-2,6-dinitrotoluene	1	17.408	17.412	-0.004	81711	0.2508	0.2748	
17 m-Nitrotoluene	1	17.915	17.918	-0.003	78694	0.2510	0.2689	
18 2-Amino-4,6-dinitrotoluene	1	18.435	18.445	-0.010	116760	0.2508	0.2714	
19 1,3,5-Trinitrobenzene	1	19.155	19.158	-0.003	124439	0.2500	0.2720	
20 2,6-Dinitrotoluene	1	20.008	20.018	-0.010	77970	0.2508	0.2657	
21 2,4-Dinitrotoluene	1	20.562	20.579	-0.016	152235	0.2505	0.2673	
22 Tetryl	1	23.882	23.905	-0.023	84882	0.2500	0.2699	
23 2,4,6-Trinitrotoluene	1	24.868	24.885	-0.017	109251	0.2510	0.2682	
24 PETN	2	25.302	25.319	-0.017	359814	2.50	2.72	

Reagents:

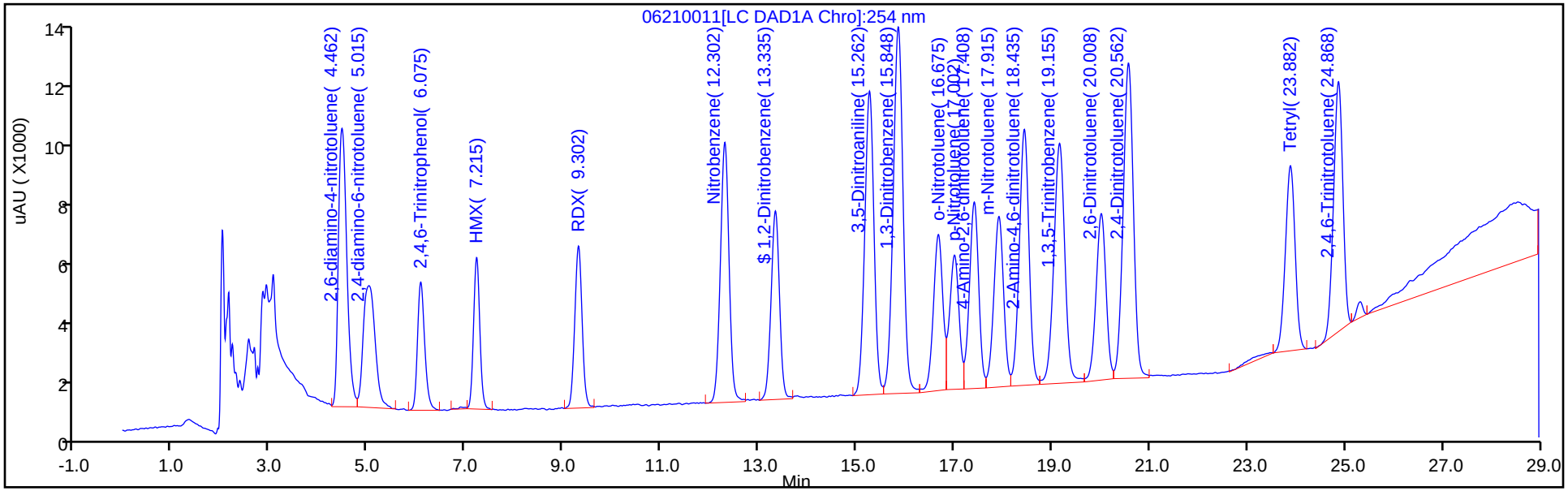
8330IntermStk_00058 Amount Added: 12.50 Units: uL
8330_ADDs_00022 Amount Added: 12.50 Units: uL

Report Date: 24-Jun-2019 10:51:28 Chrom Revision: 2.3 20-Jun-2019 20:50:56

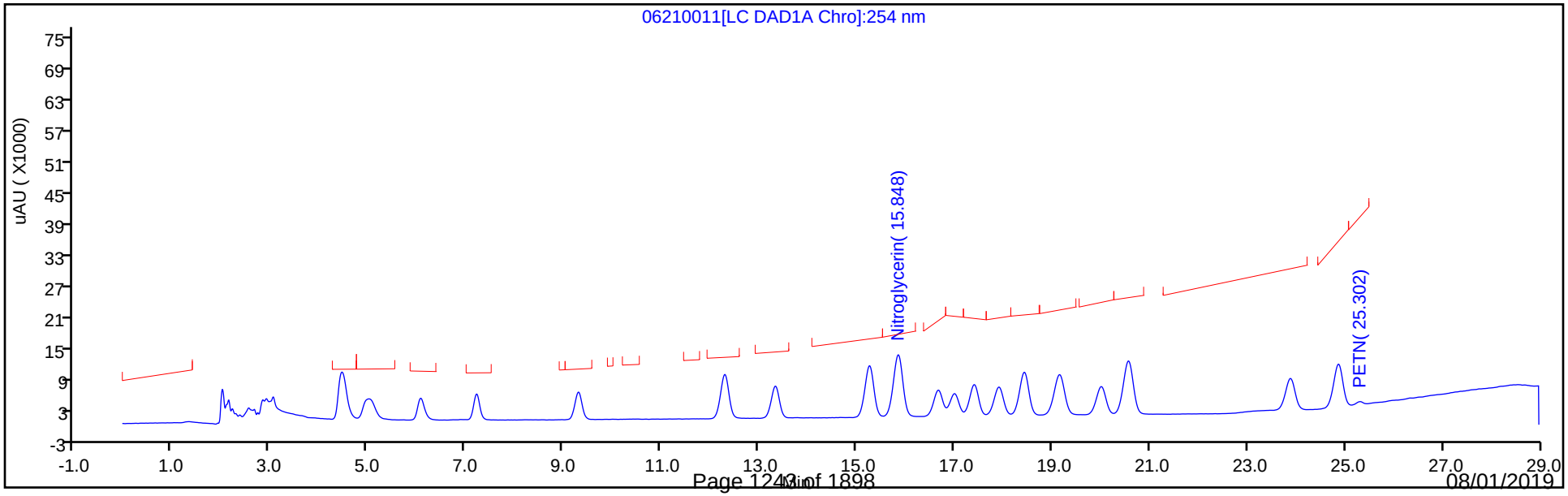
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210011.D				
Injection Date:	21-Jun-2019 13:58:24	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	11
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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462205/12 Calibration Date: 06/21/2019 14:33

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06210012.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	435489		270	250	7.9	15.0
DNX	Ave	289881	312176		269	250	7.7	15.0
MNX	Ave	269525	288898		313	292	7.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-462205/12 Calibration Date: 06/21/2019 14:33

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 06210012.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.50	5.34	5.64
DNX	6.33	6.16	6.46
MNX	7.88	7.70	8.00

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210012.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	21-Jun-2019 14:33:22	ALS Bottle#:	8	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0083049-012				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2019 10:51:29	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0327				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.504	5.488	0.016	108981	0.2503	0.2701	
4 DNX	1	6.331	6.308	0.023	78122	0.2503	0.2695	
7 MNX	1	7.877	7.848	0.029	84286	0.2918	0.3127	

Reagents:

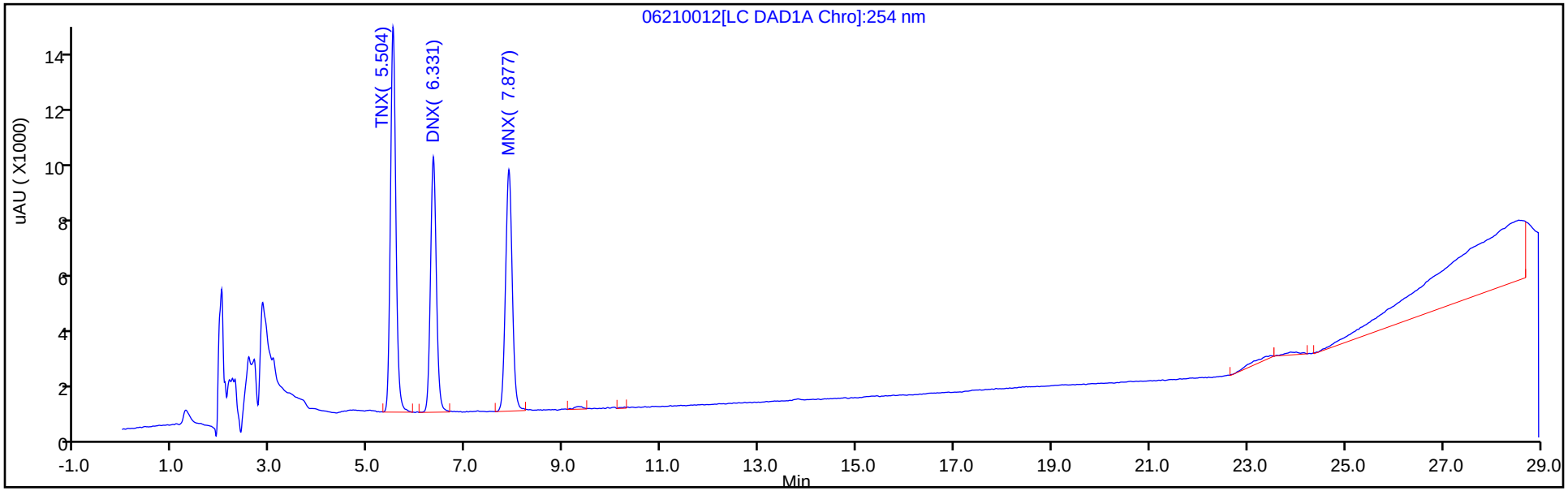
8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 24-Jun-2019 10:51:29 Chrom Revision: 2.3 20-Jun-2019 20:50:56

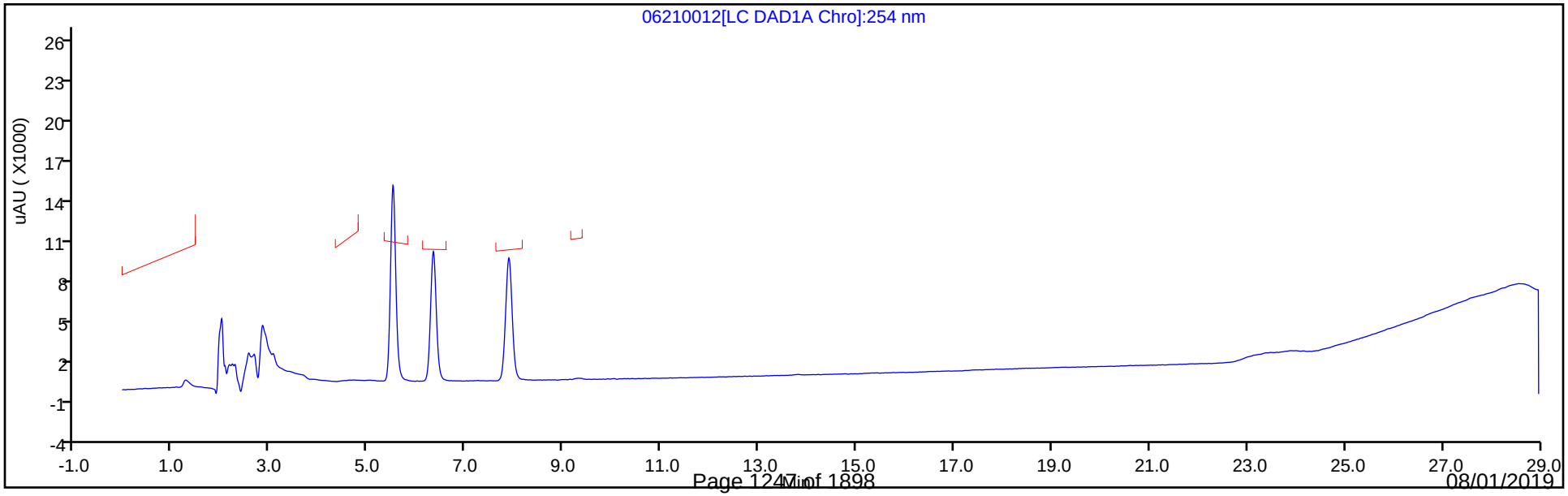
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190620-83049.b\06210012.D				
Injection Date:	21-Jun-2019 14:33:22	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV DMT			Worklist Smp#:	12
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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/18 Calibration Date: 07/12/2019 18:56

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07120018.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	175812		284	250	13.5	15.0
HMX	Ave	171198	186588		272	250	9.0	15.0
RDX	Ave	208444	232284		279	250	11.4	15.0
Nitrobenzene	Ave	405448	420579		260	251	3.7	15.0
Nitroglycerin	Ave	192935	201887		2620	2500	4.6	15.0
1,3-Dinitrobenzene	Ave	635564	691485		272	250	8.8	15.0
2-Nitrotoluene	Ave	261865	271298		260	251	3.6	15.0
4-Nitrotoluene	Ave	226647	234462		260	251	3.4	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	331003		279	251	11.3	15.0
3-Nitrotoluene	Ave	292691	308004		264	251	5.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	473356		276	251	10.0	15.0
1,3,5-Trinitrobenzene	Ave	457546	500144		273	250	9.3	15.0
2,6-Dinitrotoluene	Ave	293465	313101		268	251	6.7	15.0
2,4-Dinitrotoluene	Ave	569466	619457		272	251	8.8	15.0
Tetryl	Ave	314480	329984		262	250	4.9	15.0
2,4,6-Trinitrotoluene	Ave	407281	434697		268	251	6.7	15.0
PETN	Ave	132364	143156		2700	2500	8.2	15.0
1,2-Dinitrobenzene	Ave	276856	309156		279	250	11.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/18 Calibration Date: 07/12/2019 18:56

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07120018.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.05	5.94	6.24
HMX	7.19	7.05	7.35
RDX	9.27	9.12	9.42
Nitrobenzene	12.25	12.10	12.40
Nitroglycerin	15.78	15.65	15.95
1,3-Dinitrobenzene	15.80	15.66	15.96
2-Nitrotoluene	16.61	16.48	16.78
4-Nitrotoluene	16.95	16.81	17.11
4-Amino-2,6-dinitrotoluene	17.36	17.22	17.52
3-Nitrotoluene	17.85	17.72	18.02
2-Amino-4,6-dinitrotoluene	18.39	18.25	18.55
1,3,5-Trinitrobenzene	19.11	18.97	19.27
2,6-Dinitrotoluene	19.96	19.82	20.12
2,4-Dinitrotoluene	20.52	20.38	20.68
Tetryl	23.85	23.72	24.02
2,4,6-Trinitrotoluene	24.83	24.70	25.00
PETN	25.27	25.14	25.44
1,2-Dinitrobenzene	13.29	13.14	13.44

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120018.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 12-Jul-2019 18:56:04 ALS Bottle#: 7 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV 8330
Misc. Info.: 280-0083659-018
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 11:38:38 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0331

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	4.434	4.434	0.000	107534	0.2500	0.2725	
2 2,4-diamino-6-nitrotoluene	1	4.981	4.994	-0.013	68841	0.2500	0.2691	
5 2,4,6-Trinitrophenol	1	6.054	6.094	-0.040	43953	0.2500	0.2837	
6 HMX	1	7.194	7.201	-0.007	46647	0.2500	0.2725	
8 RDX	1	9.267	9.267	0.000	58071	0.2500	0.2786	
9 Nitrobenzene	1	12.247	12.254	-0.007	105355	0.2505	0.2598	
$ 10 1,2-Dinitrobenzene	1	13.287	13.294	-0.007	77289	0.2500	0.2792	
11 3,5-Dinitroaniline	1	15.214	15.227	-0.013	129929	0.2500	0.2764	
13 Nitroglycerin	2	15.780	15.800	-0.020	504717	2.50	2.62	
12 1,3-Dinitrobenzene	1	15.800	15.814	-0.014	173044	0.2503	0.2723	
14 o-Nitrotoluene	1	16.614	16.627	-0.013	68028	0.2508	0.2598	
15 p-Nitrotoluene	1	16.947	16.960	-0.013	58850	0.2510	0.2597	
16 4-Amino-2,6-dinitrotoluene	1	17.360	17.374	-0.014	82999	0.2508	0.2791	
17 m-Nitrotoluene	1	17.854	17.874	-0.020	77309	0.2510	0.2641	
18 2-Amino-4,6-dinitrotoluene	1	18.387	18.400	-0.013	118694	0.2508	0.2759	
19 1,3,5-Trinitrobenzene	1	19.107	19.120	-0.013	125036	0.2500	0.2733	
20 2,6-Dinitrotoluene	1	19.960	19.974	-0.014	78510	0.2508	0.2675	
21 2,4-Dinitrotoluene	1	20.521	20.534	-0.014	155174	0.2505	0.2725	
22 Tetryl	1	23.854	23.867	-0.013	82496	0.2500	0.2623	
23 2,4,6-Trinitrotoluene	1	24.834	24.854	-0.020	109109	0.2510	0.2679	
24 PETN	2	25.267	25.287	-0.020	357890	2.50	2.70	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL
8330_ADDs_00022 Amount Added: 12.50 Units: uL

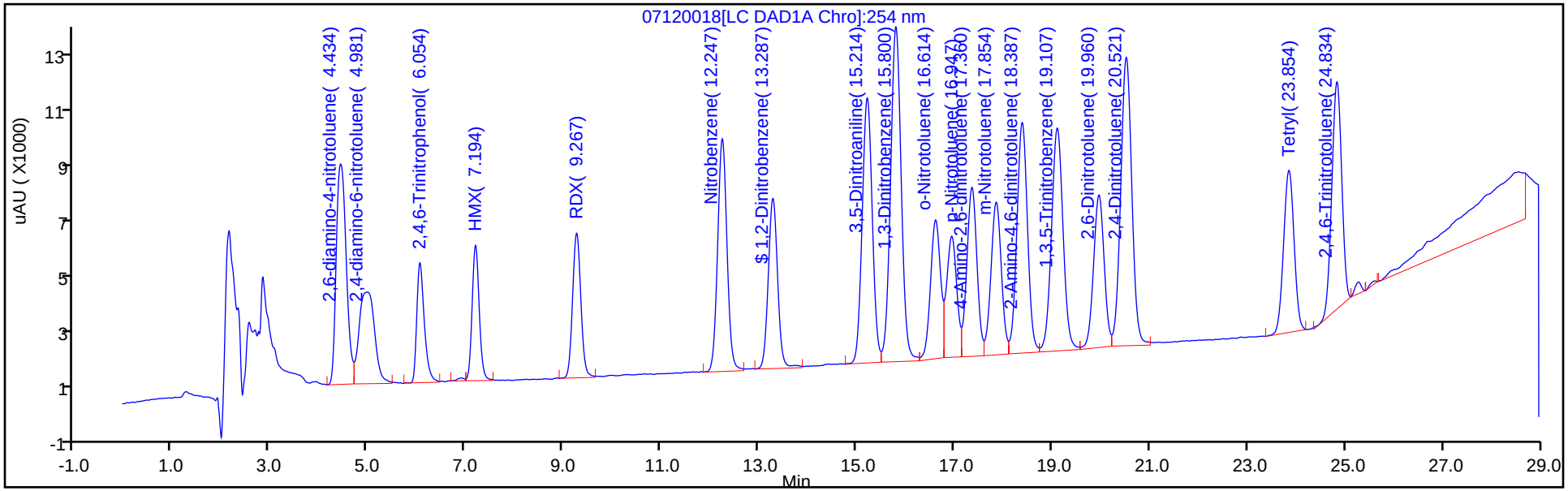
Report Date: 15-Jul-2019 11:38:38 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

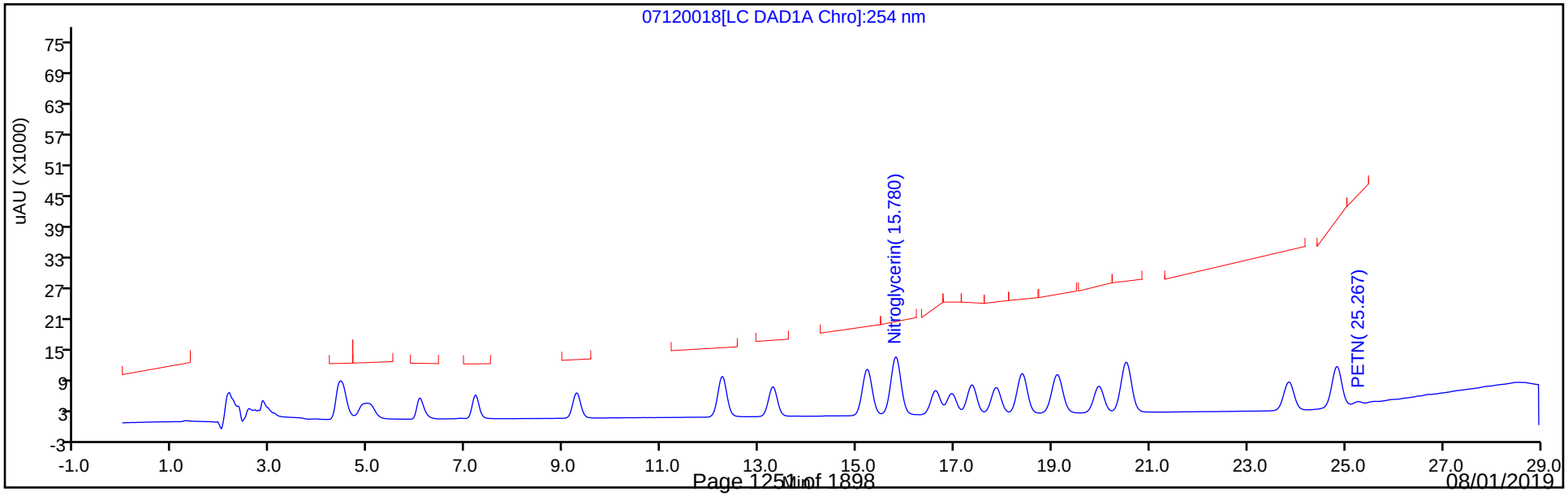
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120018.D

Injection Date:	12-Jul-2019 18:56:04	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	18
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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/19 Calibration Date: 07/12/2019 19:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07120019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	436551		271	250	8.2	15.0
DNX	Ave	289881	320088		276	250	10.4	15.0
MNX	Ave	269525	293988		318	292	9.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/19 Calibration Date: 07/12/2019 19:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07120019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.49	5.35	5.65
DNX	6.31	6.18	6.48
MNX	7.85	7.72	8.02

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120019.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	12-Jul-2019 19:31:05	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0083659-019				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 11:38:39	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0331				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.485	5.499	-0.014	109247	0.2503	0.2708	
4 DNX	1	6.305	6.326	-0.021	80102	0.2503	0.2763	
7 MNX	1	7.845	7.866	-0.021	85771	0.2918	0.3182	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

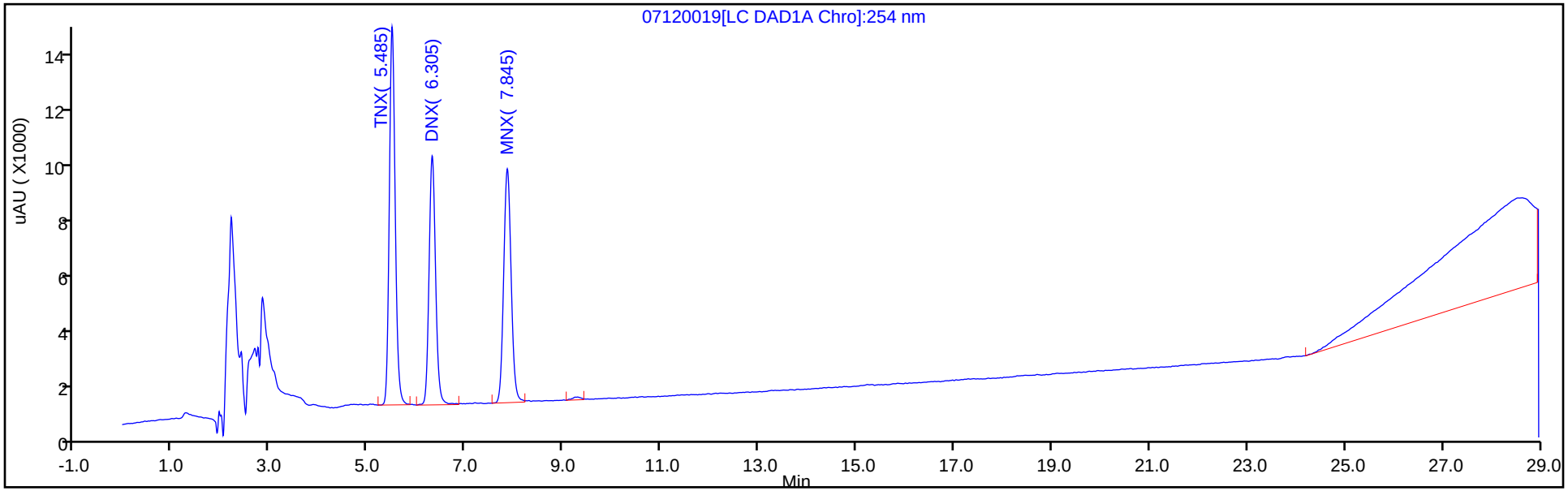
Report Date: 15-Jul-2019 11:38:40 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

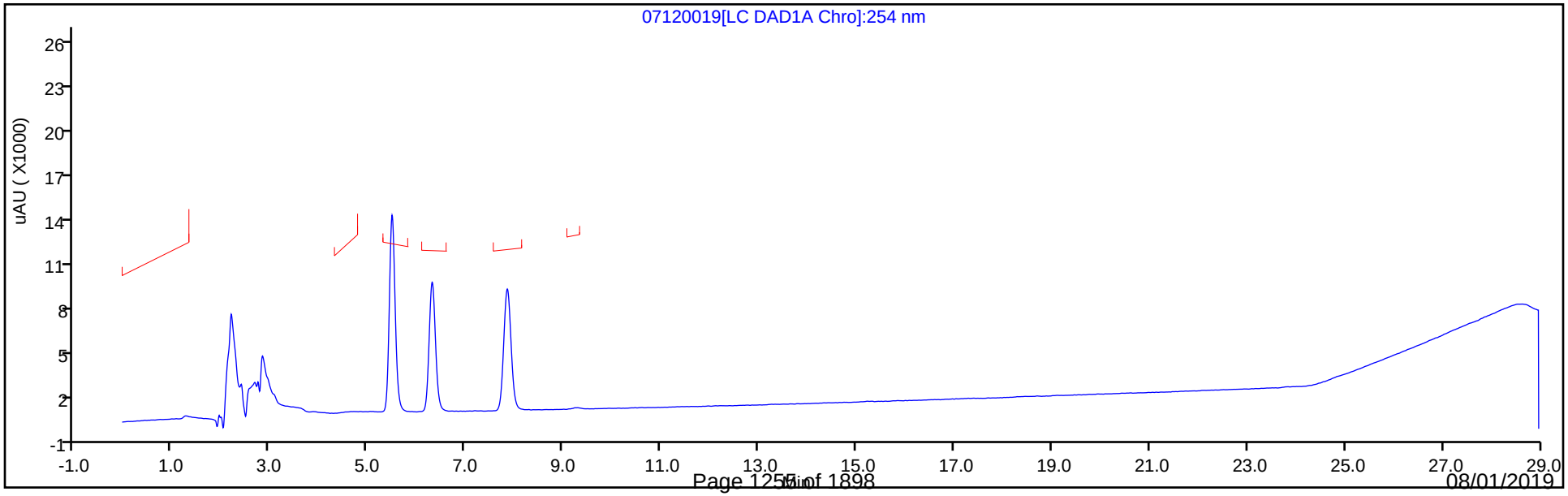
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120019.D

Injection Date:	12-Jul-2019 19:31:05	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV DMT			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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/30 Calibration Date: 07/13/2019 01:55

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07120030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	175592		283	250	13.3	15.0
HMX	Ave	171198	187660		274	250	9.6	15.0
RDX	Ave	208444	232544		279	250	11.6	15.0
Nitrobenzene	Ave	405448	413194		255	251	1.9	15.0
Nitroglycerin	Ave	192935	201139		2610	2500	4.3	15.0
1,3-Dinitrobenzene	Ave	635564	691321		272	250	8.8	15.0
2-Nitrotoluene	Ave	261865	263218		252	251	0.5	15.0
4-Nitrotoluene	Ave	226647	230279		255	251	1.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	331107		279	251	11.3	15.0
3-Nitrotoluene	Ave	292691	300988		258	251	2.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	473101		276	251	10.0	15.0
1,3,5-Trinitrobenzene	Ave	457546	500320		273	250	9.3	15.0
2,6-Dinitrotoluene	Ave	293465	314971		269	251	7.3	15.0
2,4-Dinitrotoluene	Ave	569466	622655		274	251	9.3	15.0
Tetryl	Ave	314480	332616		264	250	5.8	15.0
2,4,6-Trinitrotoluene	Ave	407281	434665		268	251	6.7	15.0
PETN	Ave	132364	143331		2710	2500	8.3	15.0
1,2-Dinitrobenzene	Ave	276856	304184		275	250	9.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/30 Calibration Date: 07/13/2019 01:55

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07120030.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.00	5.94	6.24
HMX	7.19	7.05	7.35
RDX	9.27	9.12	9.42
Nitrobenzene	12.25	12.10	12.40
Nitroglycerin	15.79	15.65	15.95
1,3-Dinitrobenzene	15.81	15.66	15.96
2-Nitrotoluene	16.63	16.48	16.78
4-Nitrotoluene	16.95	16.81	17.11
4-Amino-2,6-dinitrotoluene	17.37	17.22	17.52
3-Nitrotoluene	17.87	17.72	18.02
2-Amino-4,6-dinitrotoluene	18.40	18.25	18.55
1,3,5-Trinitrobenzene	19.12	18.97	19.27
2,6-Dinitrotoluene	19.97	19.82	20.12
2,4-Dinitrotoluene	20.53	20.38	20.68
Tetryl	23.86	23.72	24.02
2,4,6-Trinitrotoluene	24.85	24.70	25.00
PETN	25.27	25.14	25.44
1,2-Dinitrobenzene	13.29	13.14	13.44

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120030.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 13-Jul-2019 01:55:55 ALS Bottle#: 7 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV 8330
Misc. Info.: 280-0083659-030
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 11:38:49 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.426	4.434	-0.008	106788	0.2500	0.2706	
2 2,4-diamino-6-nitrotoluene	1	4.952	4.994	-0.042	68264	0.2500	0.2668	
5 2,4,6-Trinitrophenol	1	5.999	6.094	-0.095	43898	0.2500	0.2834	
6 HMX	1	7.192	7.201	-0.009	46915	0.2500	0.2740	
8 RDX	1	9.266	9.267	-0.001	58136	0.2500	0.2789	
9 Nitrobenzene	1	12.246	12.254	-0.008	103505	0.2505	0.2553	
$ 10 1,2-Dinitrobenzene	1	13.286	13.294	-0.008	76046	0.2500	0.2747	
11 3,5-Dinitroaniline	1	15.226	15.227	-0.001	129979	0.2500	0.2765	
13 Nitroglycerin	2	15.786	15.800	-0.014	502848	2.50	2.61	
12 1,3-Dinitrobenzene	1	15.812	15.814	-0.002	173003	0.2503	0.2722	
14 o-Nitrotoluene	1	16.626	16.627	-0.001	66002	0.2508	0.2520	
15 p-Nitrotoluene	1	16.952	16.960	-0.008	57800	0.2510	0.2550	
16 4-Amino-2,6-dinitrotoluene	1	17.372	17.374	-0.002	83025	0.2508	0.2792	
17 m-Nitrotoluene	1	17.866	17.874	-0.008	75548	0.2510	0.2581	
18 2-Amino-4,6-dinitrotoluene	1	18.399	18.400	-0.001	118630	0.2508	0.2757	
19 1,3,5-Trinitrobenzene	1	19.119	19.120	-0.001	125080	0.2500	0.2734	
20 2,6-Dinitrotoluene	1	19.972	19.974	-0.002	78979	0.2508	0.2691	
21 2,4-Dinitrotoluene	1	20.526	20.534	-0.008	155975	0.2505	0.2739	
22 Tetryl	1	23.859	23.867	-0.008	83154	0.2500	0.2644	
23 2,4,6-Trinitrotoluene	1	24.846	24.854	-0.008	109101	0.2510	0.2679	
24 PETN	2	25.266	25.287	-0.021	358327	2.50	2.71	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL
8330_ADDs_00022 Amount Added: 12.50 Units: uL

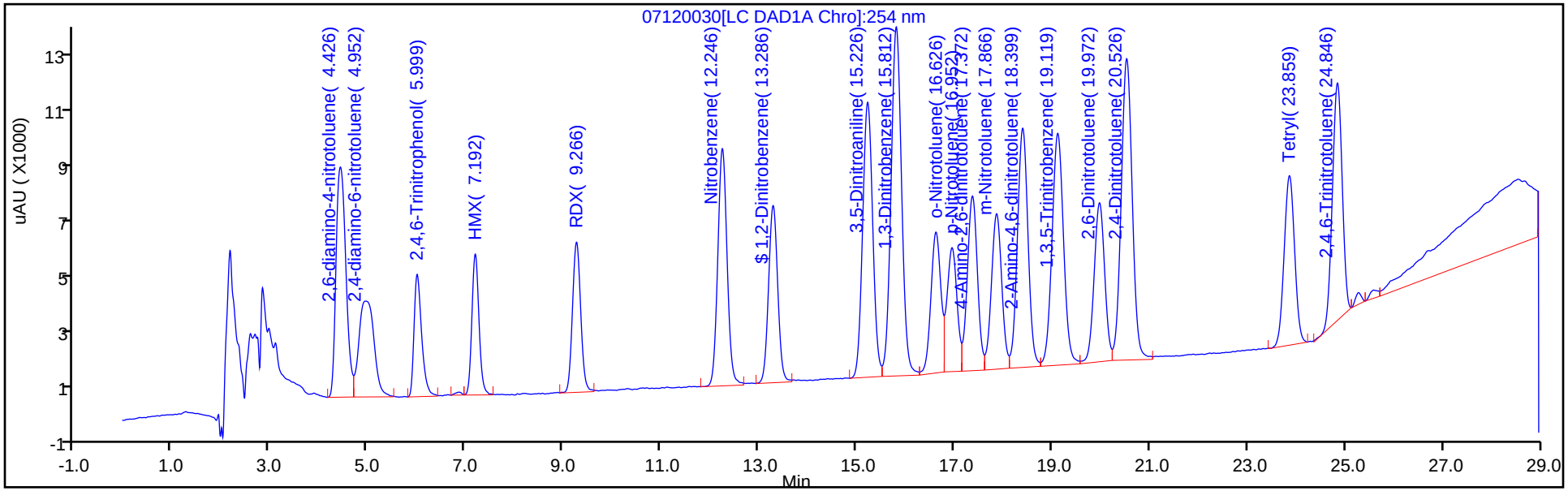
Report Date: 15-Jul-2019 11:38:49 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

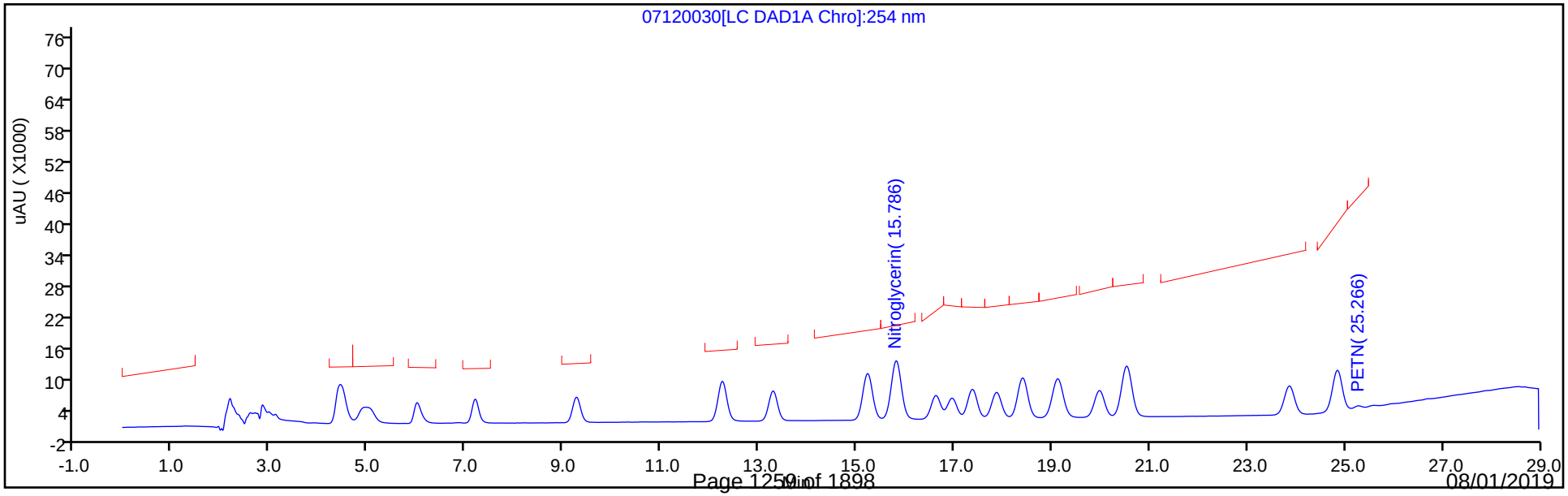
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120030.D

Injection Date:	13-Jul-2019 01:55:55	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	30
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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/31 Calibration Date: 07/13/2019 02:30

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07120031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	429574		266	250	6.5	15.0
DNX	Ave	289881	314705		272	250	8.6	15.0
MNX	Ave	269525	293765		318	292	9.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/31 Calibration Date: 07/13/2019 02:30

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07120031.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.49	5.35	5.65
DNX	6.31	6.18	6.48
MNX	7.85	7.72	8.02

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120031.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	13-Jul-2019 02:30:57	ALS Bottle#:	19	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0083659-031				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 11:38:50	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0331				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.488	5.499	-0.011	107501	0.2503	0.2665	
4 DNX	1	6.308	6.326	-0.018	78755	0.2503	0.2717	
7 MNX	1	7.848	7.866	-0.018	85706	0.2918	0.3180	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

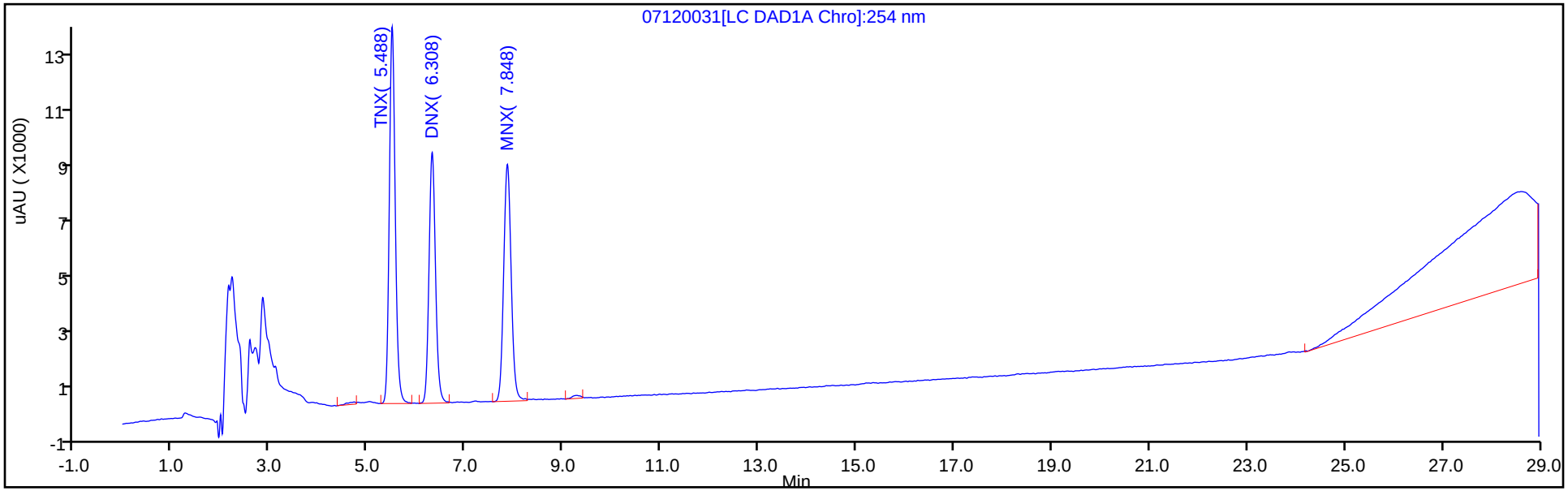
Report Date: 15-Jul-2019 11:38:50 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

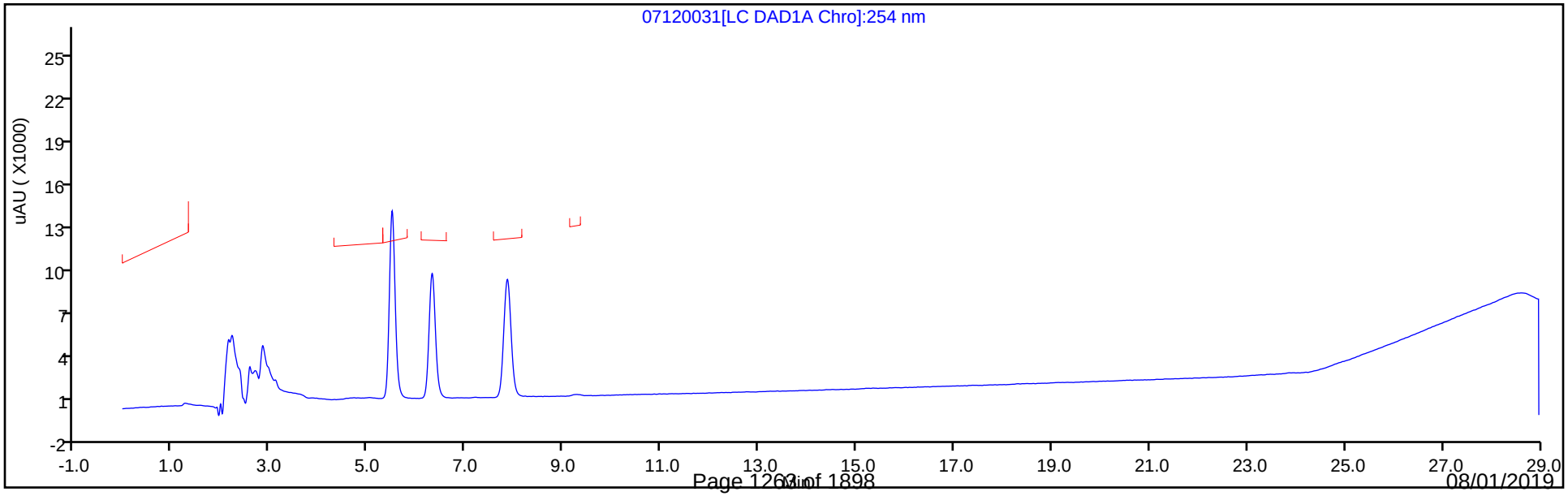
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120031.D

Injection Date:	13-Jul-2019 02:30:57	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV DMT			Worklist Smp#:	31
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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/41 Calibration Date: 07/13/2019 08:20

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07120041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	176576		285	250	14.0	15.0
HMX	Ave	171198	187008		273	250	9.2	15.0
RDX	Ave	208444	234020		281	250	12.3	15.0
Nitrobenzene	Ave	405448	407058		251	251	0.4	15.0
Nitroglycerin	Ave	192935	201768		2610	2500	4.6	15.0
1,3-Dinitrobenzene	Ave	635564	694621		274	250	9.3	15.0
2-Nitrotoluene	Ave	261865	257165		246	251	-1.8	15.0
4-Nitrotoluene	Ave	226647	224932		249	251	-0.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	332343		280	251	11.8	15.0
3-Nitrotoluene	Ave	292691	294462		253	251	0.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	473631		276	251	10.1	15.0
1,3,5-Trinitrobenzene	Ave	457546	500512		273	250	9.4	15.0
2,6-Dinitrotoluene	Ave	293465	312849		267	251	6.6	15.0
2,4-Dinitrotoluene	Ave	569466	619537		273	251	8.8	15.0
Tetryl	Ave	314480	351880		280	250	11.9	15.0
2,4,6-Trinitrotoluene	Ave	407281	431785		266	251	6.0	15.0
PETN	Ave	132364	142535		2690	2500	7.7	15.0
1,2-Dinitrobenzene	Ave	276856	306952		277	250	10.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/41 Calibration Date: 07/13/2019 08:20

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07120041.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.00	5.94	6.24
HMX	7.19	7.05	7.35
RDX	9.26	9.12	9.42
Nitrobenzene	12.25	12.10	12.40
Nitroglycerin	15.78	15.65	15.95
1,3-Dinitrobenzene	15.80	15.66	15.96
2-Nitrotoluene	16.61	16.48	16.78
4-Nitrotoluene	16.94	16.81	17.11
4-Amino-2,6-dinitrotoluene	17.36	17.22	17.52
3-Nitrotoluene	17.86	17.72	18.02
2-Amino-4,6-dinitrotoluene	18.38	18.25	18.55
1,3,5-Trinitrobenzene	19.10	18.97	19.27
2,6-Dinitrotoluene	19.96	19.82	20.12
2,4-Dinitrotoluene	20.52	20.38	20.68
Tetryl	23.85	23.72	24.02
2,4,6-Trinitrotoluene	24.84	24.70	25.00
PETN	25.26	25.14	25.44
1,2-Dinitrobenzene	13.28	13.14	13.44

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120041.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 13-Jul-2019 08:20:40 ALS Bottle#: 7 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV 8330
Misc. Info.: 280-0083659-041
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 11:38:55 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0331

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.430	4.434	-0.004	107030	0.2500	0.2712	
2 2,4-diamino-6-nitrotoluene	1	4.977	4.994	-0.017	67923	0.2500	0.2655	
5 2,4,6-Trinitrophenol	1	5.997	6.094	-0.097	44144	0.2500	0.2849	
6 HMX	1	7.190	7.201	-0.011	46752	0.2500	0.2731	
8 RDX	1	9.264	9.267	-0.003	58505	0.2500	0.2807	
9 Nitrobenzene	1	12.250	12.254	-0.004	101968	0.2505	0.2515	
$ 10 1,2-Dinitrobenzene	1	13.284	13.294	-0.010	76738	0.2500	0.2772	
11 3,5-Dinitroaniline	1	15.210	15.227	-0.017	130107	0.2500	0.2768	
13 Nitroglycerin	2	15.777	15.800	-0.023	504420	2.50	2.61	
12 1,3-Dinitrobenzene	1	15.797	15.814	-0.017	173829	0.2503	0.2735	
14 o-Nitrotoluene	1	16.610	16.627	-0.017	64484	0.2508	0.2462	
15 p-Nitrotoluene	1	16.944	16.960	-0.016	56458	0.2510	0.2491	
16 4-Amino-2,6-dinitrotoluene	1	17.357	17.374	-0.017	83335	0.2508	0.2802	
17 m-Nitrotoluene	1	17.857	17.874	-0.017	73910	0.2510	0.2525	
18 2-Amino-4,6-dinitrotoluene	1	18.384	18.400	-0.016	118763	0.2508	0.2760	
19 1,3,5-Trinitrobenzene	1	19.104	19.120	-0.016	125128	0.2500	0.2735	
20 2,6-Dinitrotoluene	1	19.964	19.974	-0.010	78447	0.2508	0.2673	
21 2,4-Dinitrotoluene	1	20.524	20.534	-0.010	155194	0.2505	0.2725	
22 Tetryl	1	23.850	23.867	-0.017	87970	0.2500	0.2797	
23 2,4,6-Trinitrotoluene	1	24.837	24.854	-0.017	108378	0.2510	0.2661	
24 PETN	2	25.264	25.287	-0.023	356337	2.50	2.69	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL
8330_ADDs_00022 Amount Added: 12.50 Units: uL

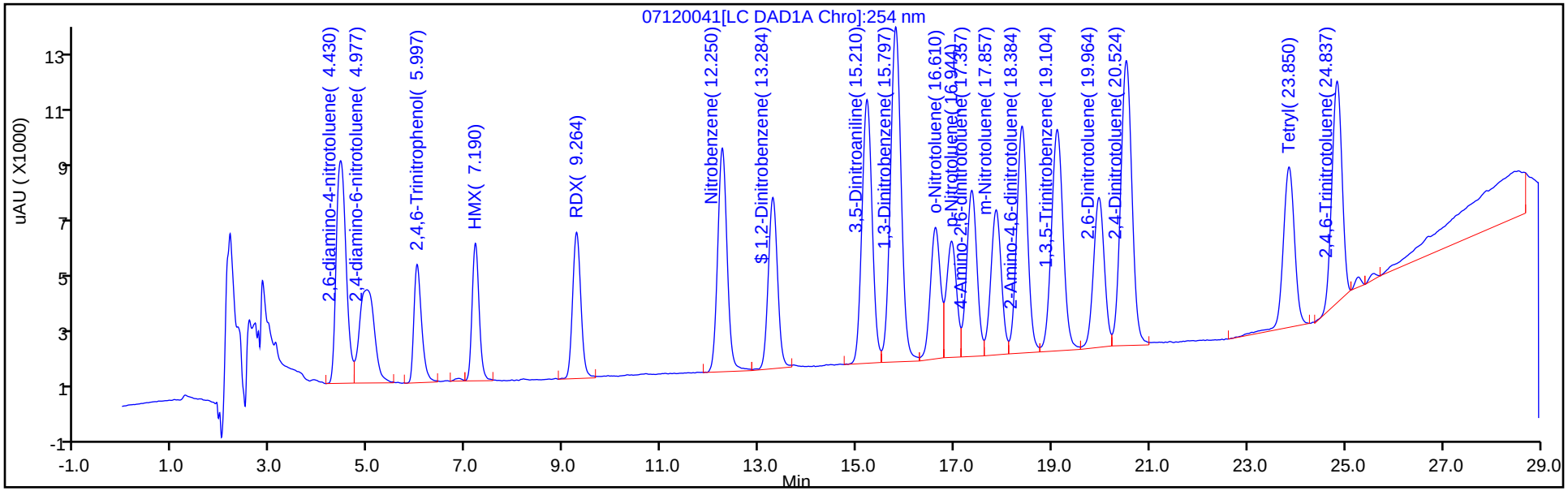
Report Date: 15-Jul-2019 11:38:55 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

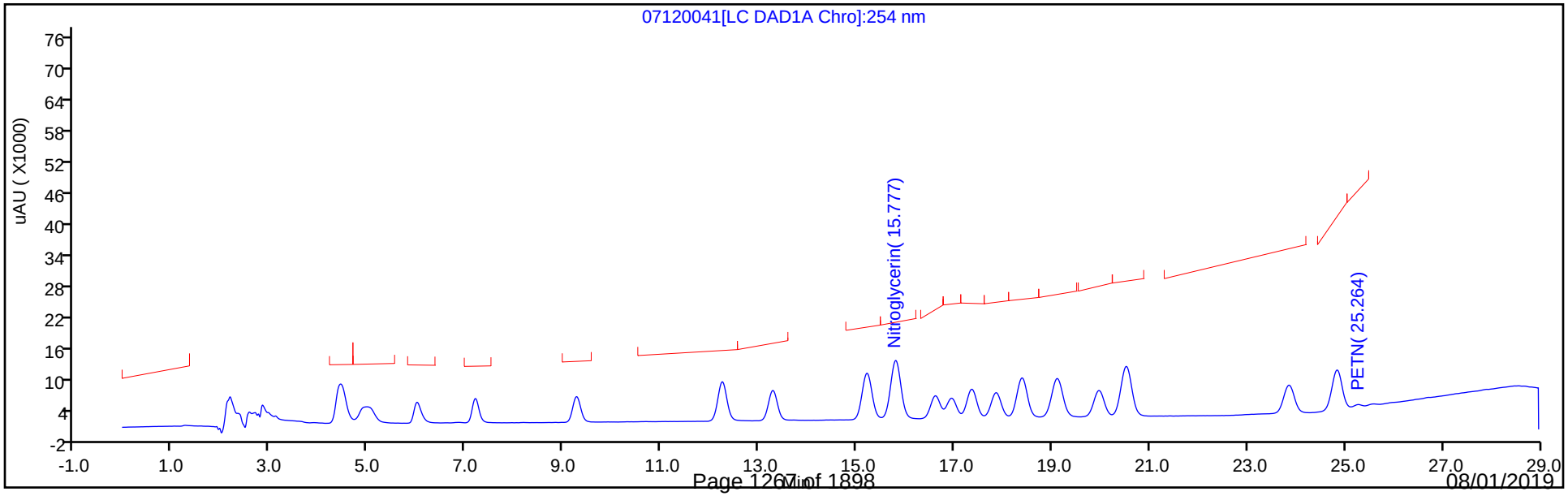
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120041.D

Injection Date:	13-Jul-2019 08:20:40	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	41
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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/42 Calibration Date: 07/13/2019 08:55

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07120042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	421902		262	250	4.6	15.0
DNX	Ave	289881	310366		268	250	7.1	15.0
MNX	Ave	269525	292226		316	292	8.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464373/42 Calibration Date: 07/13/2019 08:55

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07120042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.48	5.35	5.65
DNX	6.31	6.18	6.48
MNX	7.84	7.72	8.02

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120042.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	13-Jul-2019 08:55:42	ALS Bottle#:	19	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0083659-042				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Jul-2019 11:38:56	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0331				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.483	5.499	-0.016	105581	0.2503	0.2617	
4 DNX	1	6.310	6.326	-0.016	77669	0.2503	0.2679	
7 MNX	1	7.843	7.866	-0.023	85257	0.2918	0.3163	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

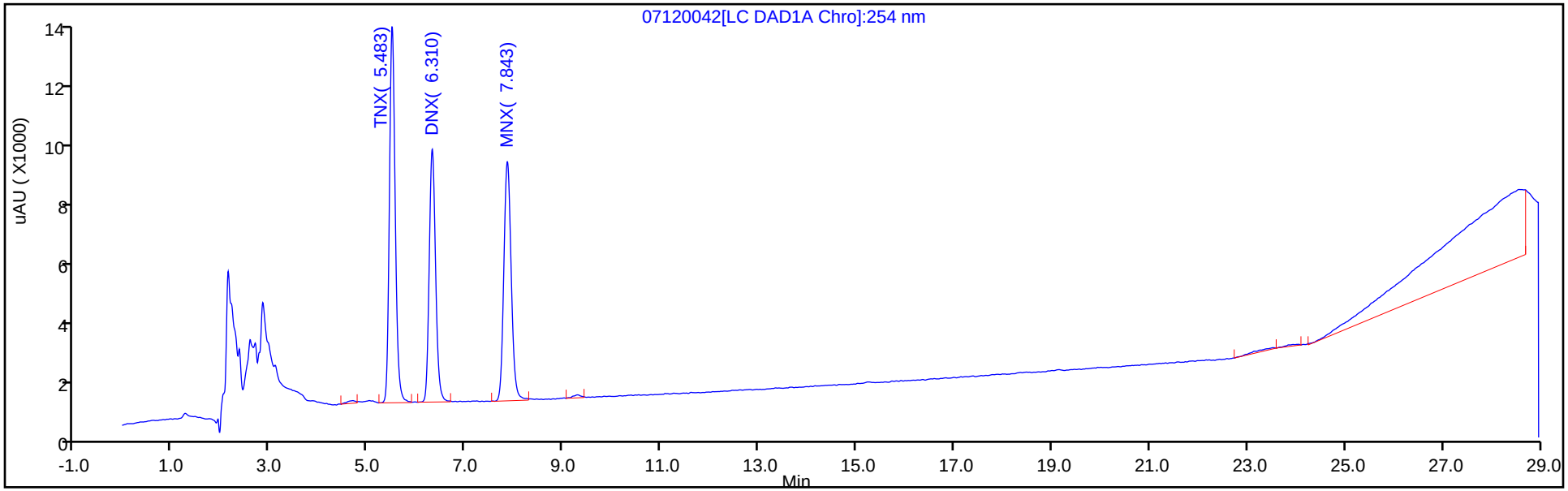
Report Date: 15-Jul-2019 11:38:56 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

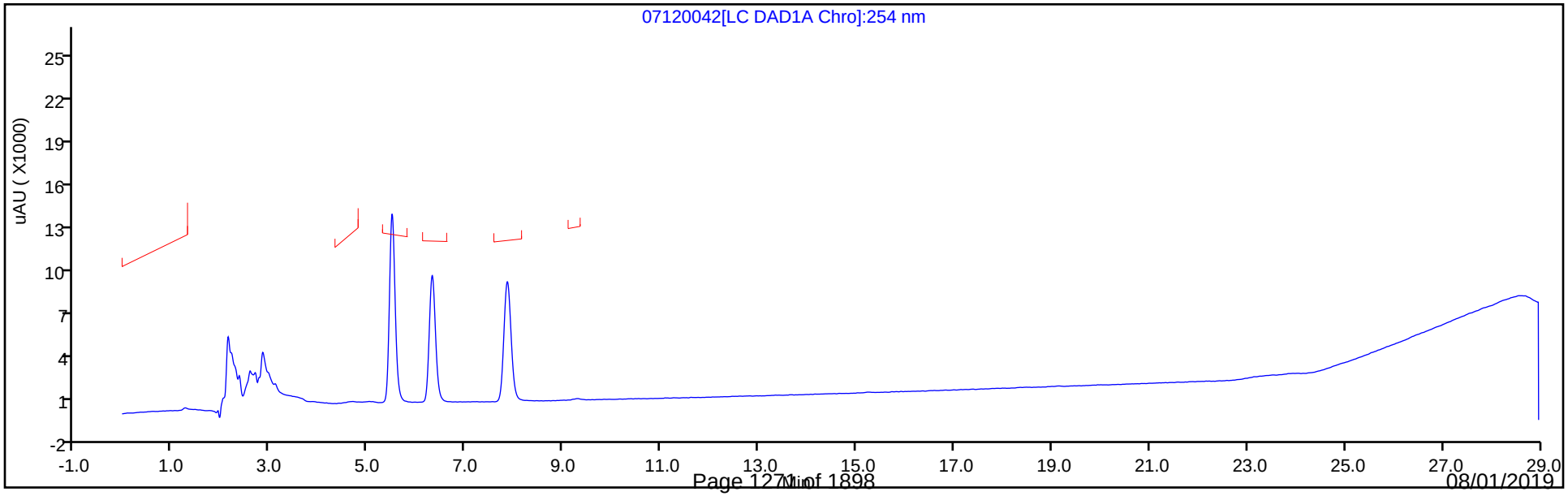
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190712-83659.b\07120042.D

Injection Date:	13-Jul-2019 08:55:42	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV DMT			Worklist Smp#:	42
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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464736/7 Calibration Date: 07/16/2019 16:43

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07160007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	179708		290	250	16.0*	15.0
HMX	Ave	171198	186296		272	250	8.8	15.0
RDX	Ave	208444	234352		281	250	12.4	15.0
Nitrobenzene	Ave	405448	426176		263	251	5.1	15.0
Nitroglycerin	Ave	192935	204468		2650	2500	6.0	15.0
1,3-Dinitrobenzene	Ave	635564	701407		276	250	10.4	15.0
2-Nitrotoluene	Ave	261865	274780		263	251	4.9	15.0
4-Nitrotoluene	Ave	226647	239701		265	251	5.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	339430		286	251	14.1	15.0
3-Nitrotoluene	Ave	292691	316020		271	251	8.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	484606		282	251	12.6	15.0
1,3,5-Trinitrobenzene	Ave	457546	514996		281	250	12.6	15.0
2,6-Dinitrotoluene	Ave	293465	318592		272	251	8.6	15.0
2,4-Dinitrotoluene	Ave	569466	633118		278	251	11.2	15.0
Tetryl	Ave	314480	339096		270	250	7.8	15.0
2,4,6-Trinitrotoluene	Ave	407281	444167		274	251	9.1	15.0
PETN	Ave	132364	147627		2790	2500	11.5	15.0
1,2-Dinitrobenzene	Ave	276856	311568		281	250	12.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464736/7 Calibration Date: 07/16/2019 16:43

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07160007.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.09	5.94	6.24
HMX	7.20	7.05	7.35
RDX	9.27	9.12	9.42
Nitrobenzene	12.26	12.11	12.41
Nitroglycerin	15.79	15.64	15.94
1,3-Dinitrobenzene	15.81	15.66	15.96
2-Nitrotoluene	16.63	16.48	16.78
4-Nitrotoluene	16.96	16.81	17.11
4-Amino-2,6-dinitrotoluene	17.37	17.22	17.52
3-Nitrotoluene	17.87	17.72	18.02
2-Amino-4,6-dinitrotoluene	18.40	18.25	18.55
1,3,5-Trinitrobenzene	19.12	18.97	19.27
2,6-Dinitrotoluene	19.97	19.82	20.12
2,4-Dinitrotoluene	20.53	20.38	20.68
Tetryl	23.85	23.70	24.00
2,4,6-Trinitrotoluene	24.84	24.69	24.99
PETN	25.27	25.12	25.42
1,2-Dinitrobenzene	13.29	13.14	13.44

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160007.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 16-Jul-2019 16:43:34 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV 8330
Misc. Info.: 280-0083752-007
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-Jul-2019 09:22:55 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0305

First Level Reviewer: fiedlerh Date: 16-Jul-2019 17:39:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.438	4.438	0.000	109077	0.2500	0.2764	
2 2,4-diamino-6-nitrotoluene	1	5.005	5.005	0.000	69891	0.2500	0.2732	
5 2,4,6-Trinitrophenol	1	6.085	6.085	0.000	44927	0.2500	0.2900	
6 HMX	1	7.198	7.198	0.000	46574	0.2500	0.2720	
8 RDX	1	9.271	9.271	0.000	58588	0.2500	0.2811	
9 Nitrobenzene	1	12.258	12.258	0.000	106757	0.2505	0.2633	
$ 10 1,2-Dinitrobenzene	1	13.291	13.291	0.000	77892	0.2500	0.2813	
11 3,5-Dinitroaniline	1	15.225	15.225	0.000	131627	0.2500	0.2800	
13 Nitroglycerin	2	15.791	15.791	0.000	511171	2.50	2.65	
12 1,3-Dinitrobenzene	1	15.811	15.811	0.000	175527	0.2503	0.2762	
14 o-Nitrotoluene	1	16.631	16.631	0.000	68901	0.2508	0.2631	
15 p-Nitrotoluene	1	16.958	16.958	0.000	60165	0.2510	0.2655	
16 4-Amino-2,6-dinitrotoluene	1	17.371	17.371	0.000	85112	0.2508	0.2862	
17 m-Nitrotoluene	1	17.871	17.871	0.000	79321	0.2510	0.2710	
18 2-Amino-4,6-dinitrotoluene	1	18.398	18.398	0.000	121515	0.2508	0.2824	
19 1,3,5-Trinitrobenzene	1	19.118	19.118	0.000	128749	0.2500	0.2814	
20 2,6-Dinitrotoluene	1	19.971	19.971	0.000	79887	0.2508	0.2722	
21 2,4-Dinitrotoluene	1	20.525	20.525	0.000	158596	0.2505	0.2785	
22 Tetryl	1	23.852	23.852	0.000	84774	0.2500	0.2696	
23 2,4,6-Trinitrotoluene	1	24.838	24.838	0.000	111486	0.2510	0.2737	
24 PETN	2	25.265	25.265	0.000	369067	2.50	2.79	

Reagents:

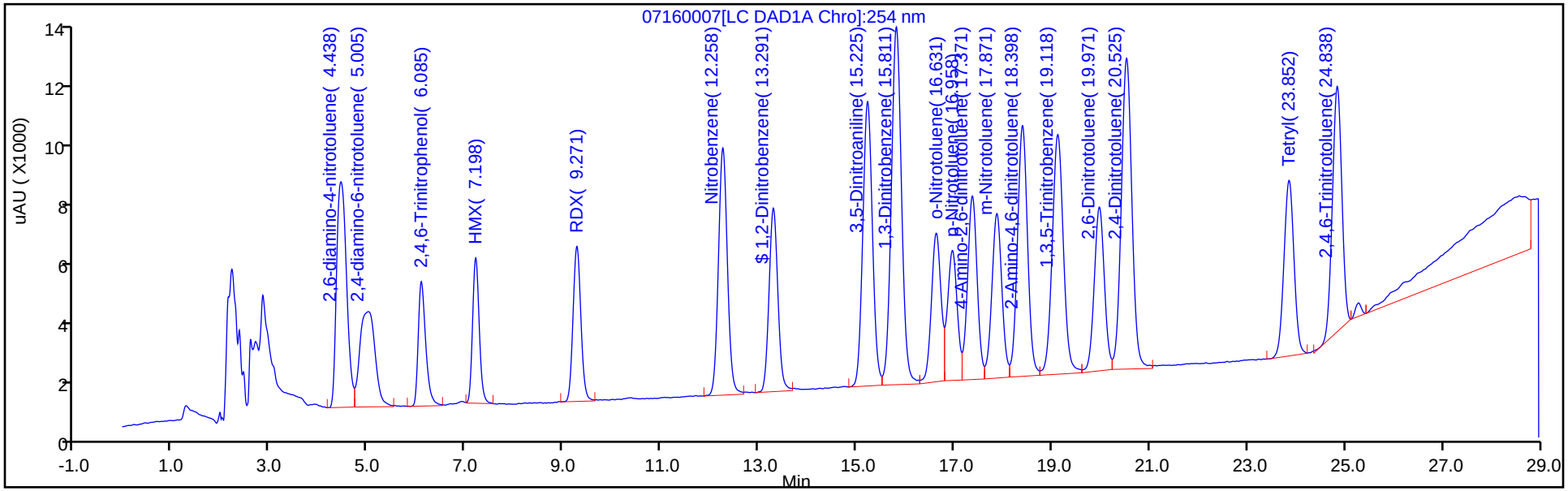
8330IntermStk_00058 Amount Added: 12.50 Units: uL
8330_ADDs_00022 Amount Added: 12.50 Units: uL

Report Date: 17-Jul-2019 09:22:56 Chrom Revision: 2.3 15-Jul-2019 06:58:08

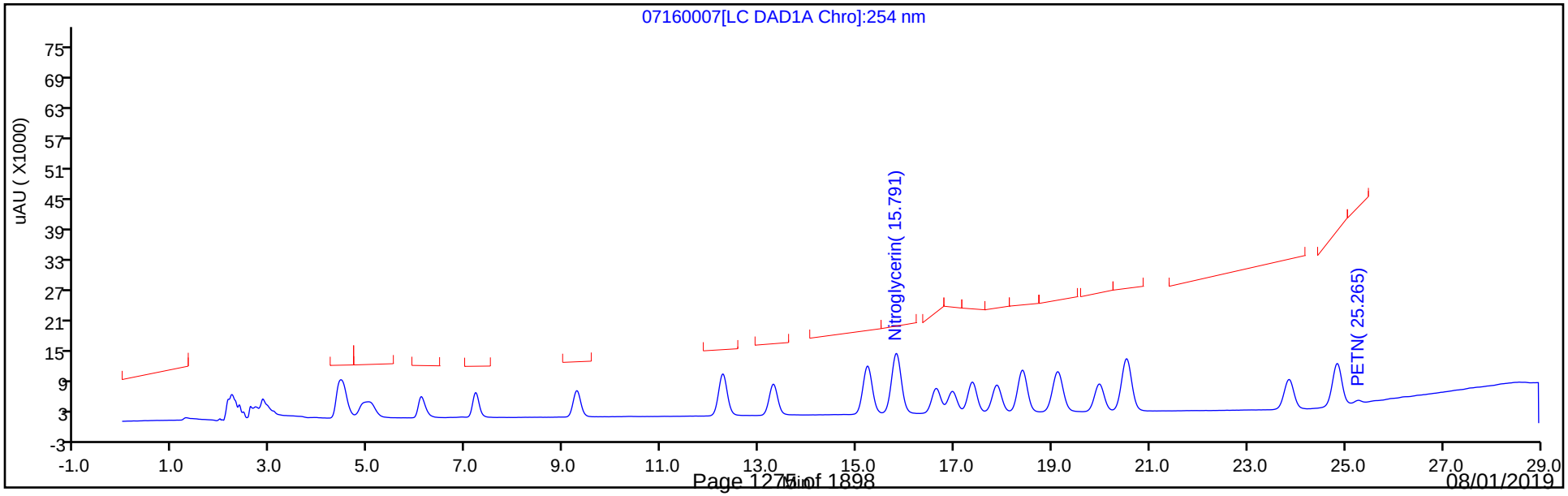
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160007.D				
Injection Date:	16-Jul-2019 16:43:34	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464736/8 Calibration Date: 07/16/2019 17:18

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07160008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	465207		289	250	15.3*	15.0
DNX	Ave	289881	330466		285	250	14.0	15.0
MNX	Ave	269525	304027		329	292	12.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464736/8 Calibration Date: 07/16/2019 17:18

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07160008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.49	5.35	5.65
DNX	6.31	6.18	6.48
MNX	7.84	7.72	8.02

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160008.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	16-Jul-2019 17:18:34	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0083752-008				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jul-2019 09:22:56	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0305				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.488	5.499	-0.011	116418	0.2503	0.2886	
4 DNX	1	6.308	6.326	-0.018	82699	0.2503	0.2853	
7 MNX	1	7.842	7.866	-0.024	88700	0.2918	0.3291	

Reagents:

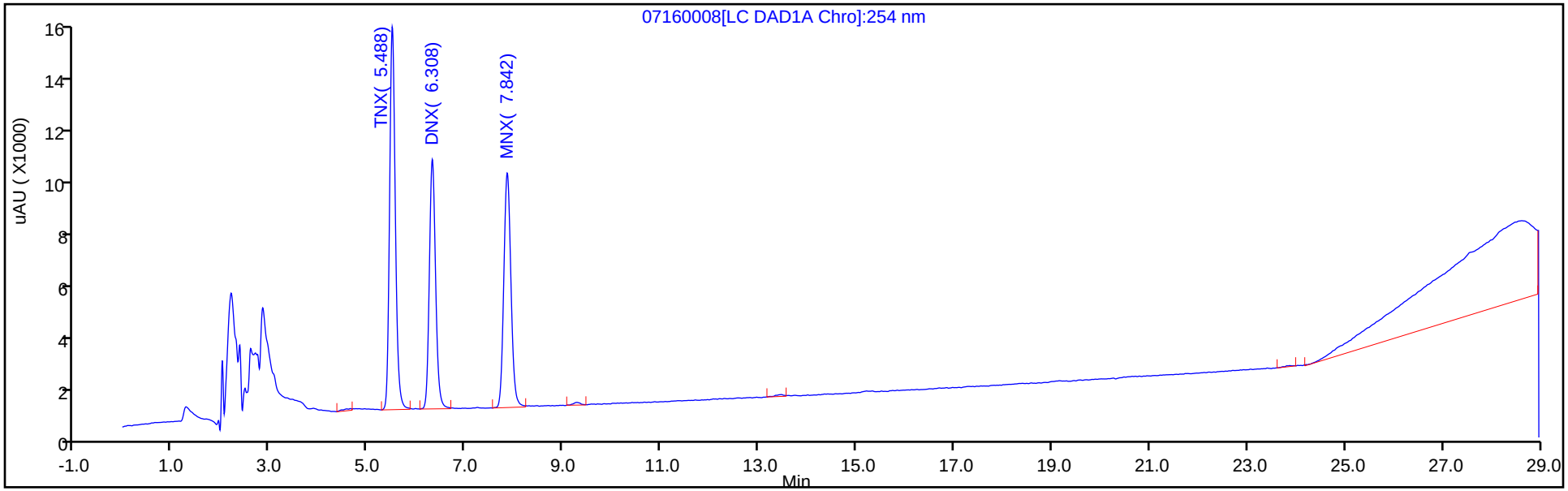
8330 DMT_00002 Amount Added: 12.50 Units: uL

Report Date: 17-Jul-2019 09:22:57 Chrom Revision: 2.3 15-Jul-2019 06:58:08

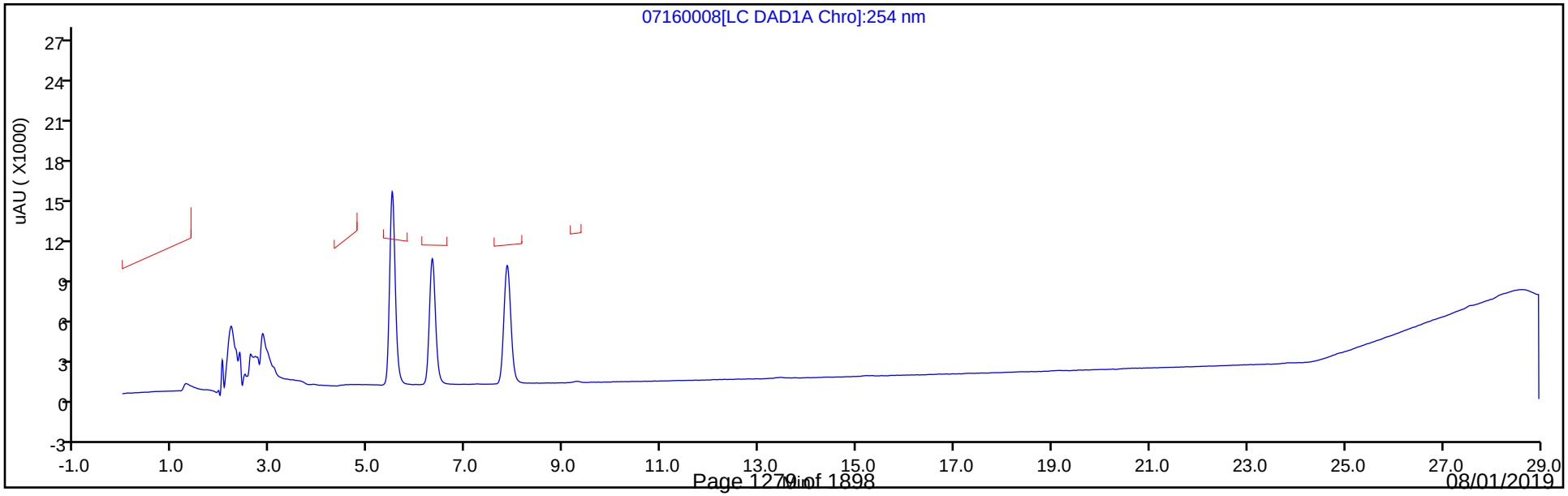
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160008.D				
Injection Date:	16-Jul-2019 17:18:34	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV DMT			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464736/10 Calibration Date: 07/16/2019 18:28

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07160010.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Ave	154920	177548		287	250	14.6	15.0
HMX	Ave	171198	187800		274	250	9.7	15.0
RDX	Ave	208444	237080		284	250	13.7	15.0
Nitrobenzene	Ave	405448	420571		260	251	3.7	15.0
Nitroglycerin	Ave	192935	198273		2570	2500	2.8	15.0
1,3-Dinitrobenzene	Ave	635564	701235		276	250	10.3	15.0
2-Nitrotoluene	Ave	261865	268311		257	251	2.5	15.0
4-Nitrotoluene	Ave	226647	237789		263	251	4.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	297375	337208		284	251	13.4	15.0
3-Nitrotoluene	Ave	292691	309781		266	251	5.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	430236	481137		280	251	11.8	15.0
1,3,5-Trinitrobenzene	Ave	457546	510160		279	250	11.5	15.0
2,6-Dinitrotoluene	Ave	293465	314205		268	251	7.1	15.0
2,4-Dinitrotoluene	Ave	569466	626683		276	251	10.0	15.0
Tetryl	Ave	314480	336668		268	250	7.1	15.0
2,4,6-Trinitrotoluene	Ave	407281	441048		272	251	8.3	15.0
PETN	Ave	132364	146513		2770	2500	10.7	15.0
1,2-Dinitrobenzene	Ave	276856	311352		281	250	12.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464736/10 Calibration Date: 07/16/2019 18:28

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 15:08

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/07/2019 19:13

Lab File ID: 07160010.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	6.03	5.94	6.24
HMX	7.18	7.05	7.35
RDX	9.25	9.12	9.42
Nitrobenzene	12.25	12.11	12.41
Nitroglycerin	15.78	15.64	15.94
1,3-Dinitrobenzene	15.80	15.66	15.96
2-Nitrotoluene	16.61	16.48	16.78
4-Nitrotoluene	16.94	16.81	17.11
4-Amino-2,6-dinitrotoluene	17.35	17.22	17.52
3-Nitrotoluene	17.85	17.72	18.02
2-Amino-4,6-dinitrotoluene	18.37	18.25	18.55
1,3,5-Trinitrobenzene	19.10	18.97	19.27
2,6-Dinitrotoluene	19.95	19.82	20.12
2,4-Dinitrotoluene	20.51	20.38	20.68
Tetryl	23.83	23.70	24.00
2,4,6-Trinitrotoluene	24.83	24.69	24.99
PETN	25.25	25.12	25.42
1,2-Dinitrobenzene	13.28	13.14	13.44

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160010.D
Lims ID: CCV 8330
Client ID:
Sample Type: CCV
Inject. Date: 16-Jul-2019 18:28:31 ALS Bottle#: 7 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV 8330
Misc. Info.: 280-0083752-010
Operator ID: HKF Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-Jul-2019 09:22:58 Calib Date: 08-May-2019 00:28:23
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0305

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.433	4.438	-0.005	108670	0.2500	0.2754	
2 2,4-diamino-6-nitrotoluene	1	4.986	5.005	-0.019	69272	0.2500	0.2708	
5 2,4,6-Trinitrophenol	1	6.026	6.085	-0.059	44387	0.2500	0.2865	
6 HMX	1	7.180	7.198	-0.018	46950	0.2500	0.2742	
8 RDX	1	9.246	9.271	-0.025	59270	0.2500	0.2843	
9 Nitrobenzene	1	12.246	12.258	-0.012	105353	0.2505	0.2598	
$ 10 1,2-Dinitrobenzene	1	13.280	13.291	-0.011	77838	0.2500	0.2811	
11 3,5-Dinitroaniline	1	15.206	15.225	-0.019	131448	0.2500	0.2796	
13 Nitroglycerin	2	15.780	15.791	-0.011	495682	2.50	2.57	
12 1,3-Dinitrobenzene	1	15.800	15.811	-0.011	175484	0.2503	0.2761	
14 o-Nitrotoluene	1	16.613	16.631	-0.018	67279	0.2508	0.2569	
15 p-Nitrotoluene	1	16.940	16.958	-0.018	59685	0.2510	0.2633	
16 4-Amino-2,6-dinitrotoluene	1	17.346	17.371	-0.025	84555	0.2508	0.2843	
17 m-Nitrotoluene	1	17.853	17.871	-0.018	77755	0.2510	0.2657	
18 2-Amino-4,6-dinitrotoluene	1	18.373	18.398	-0.025	120645	0.2508	0.2804	
19 1,3,5-Trinitrobenzene	1	19.100	19.118	-0.018	127540	0.2500	0.2787	
20 2,6-Dinitrotoluene	1	19.946	19.971	-0.025	78787	0.2508	0.2685	
21 2,4-Dinitrotoluene	1	20.506	20.525	-0.019	156984	0.2505	0.2757	
22 Tetryl	1	23.833	23.852	-0.019	84167	0.2500	0.2676	
23 2,4,6-Trinitrotoluene	1	24.826	24.838	-0.012	110703	0.2510	0.2718	
24 PETN	2	25.253	25.265	-0.012	366283	2.50	2.77	

Reagents:

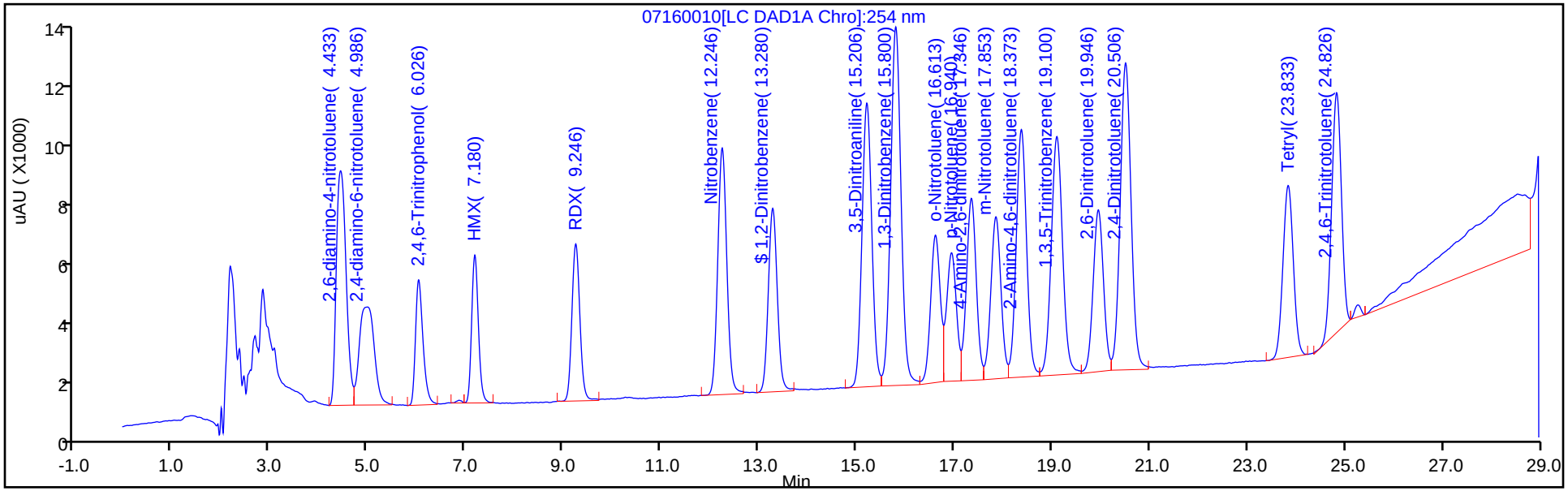
8330IntermStk_00058 Amount Added: 12.50 Units: uL
8330_ADDs_00022 Amount Added: 12.50 Units: uL

Report Date: 17-Jul-2019 09:22:59 Chrom Revision: 2.3 15-Jul-2019 06:58:08

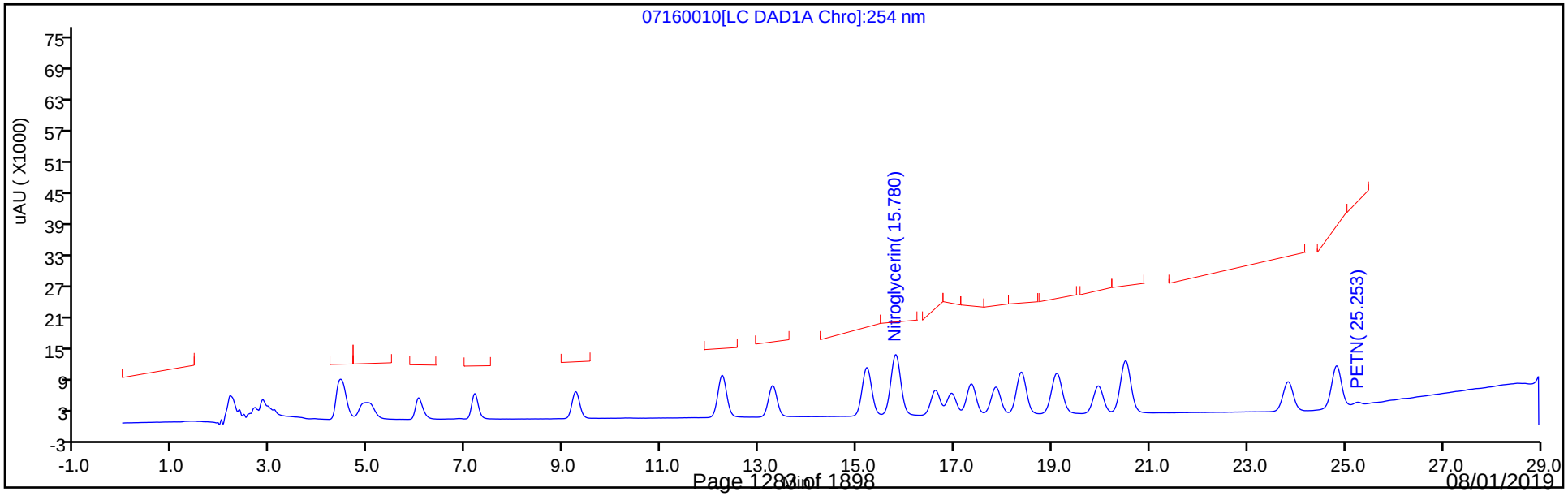
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160010.D				
Injection Date:	16-Jul-2019 18:28:31	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV 8330			Worklist Smp#:	10
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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464736/11 Calibration Date: 07/16/2019 19:03

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07160011.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	403427	461502		286	250	14.4	15.0
DNX	Ave	289881	327740		283	250	13.1	15.0
MNX	Ave	269525	304045		329	292	12.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464736/11 Calibration Date: 07/16/2019 19:03

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 05/07/2019 20:23

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/08/2019 00:28

Lab File ID: 07160011.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.49	5.35	5.65
DNX	6.31	6.18	6.48
MNX	7.84	7.72	8.02

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160011.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	16-Jul-2019 19:03:29	ALS Bottle#:	8	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0083752-011				
Operator ID:	HKF	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jul-2019 09:23:00	Calib Date:	08-May-2019 00:28:23		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20190507-81649.b\05070023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0305				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.488	5.499	-0.011	115491	0.2503	0.2863	
4 DNX	1	6.308	6.326	-0.018	82017	0.2503	0.2829	
7 MNX	1	7.842	7.866	-0.024	88705	0.2918	0.3291	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

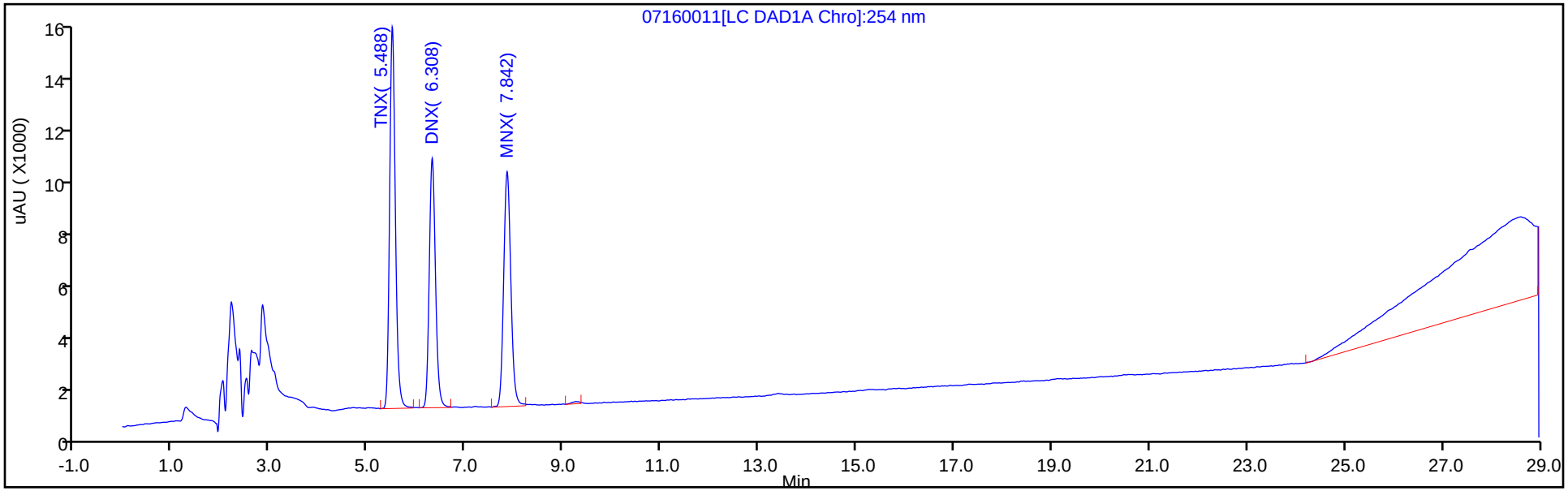
Report Date: 17-Jul-2019 09:23:00 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Denver

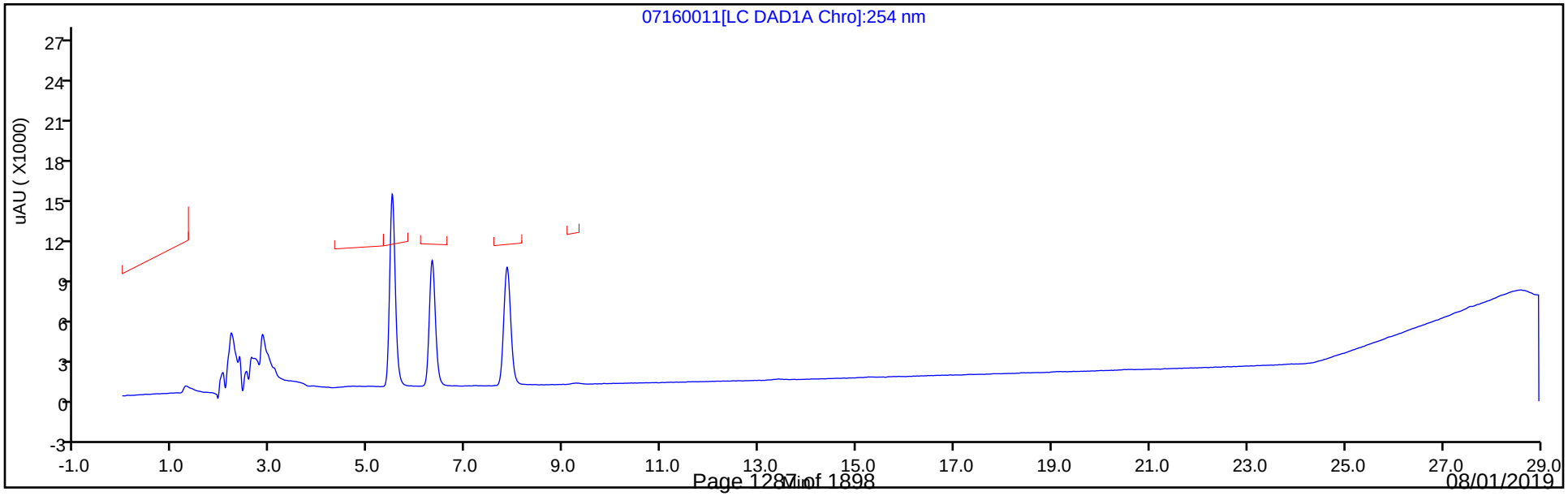
Data File: \\chromna\Denver\ChromData\G2_LUNA\20190716-83752.b\07160011.D

Injection Date:	16-Jul-2019 19:03:29	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	HKF
Lims ID:	CCV DMT			Worklist Smp#:	11
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.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-458150/15 Calibration Date: 05/14/2019 18:59

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/14/2019 18:35

Lab File ID: 0514B015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	82900		372	400	-7.1	15.0
RDX	Ave	106639	100395		377	400	-5.9	15.0
Picric acid	Ave	83793	85338		407	400	1.8	15.0
1,3,5-Trinitrobenzene	Ave	229276	235903		412	400	2.9	15.0
1,3-Dinitrobenzene	Ave	300824	300148		399	400	-0.2	15.0
Nitrobenzene	Ave	196827	189253		385	400	-3.8	15.0
Tetryl	Ave	167956	169570		404	400	1.0	15.0
Nitroglycerin	Ave	69977	65675		3750	4000	-6.1	15.0
2,4,6-Trinitrotoluene	Ave	223593	202438		362	400	-9.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	150340		370	400	-7.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	194685		394	400	-1.4	15.0
2,6-Dinitrotoluene	Ave	156597	144423		369	400	-7.8	15.0
2,4-Dinitrotoluene	Ave	297422	286083		385	400	-3.8	15.0
2-Nitrotoluene	Ave	131349	117393		357	400	-10.6	15.0
4-Nitrotoluene	Ave	112716	102238		363	400	-9.3	15.0
3-Nitrotoluene	Ave	148306	132263		357	400	-10.8	15.0
PETN	Ave	73191	73321		4010	4000	0.2	15.0
1,2-Dinitrobenzene	Ave	130111	125963		387	400	-3.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-458150/15 Calibration Date: 05/14/2019 18:59

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/14/2019 18:35

Lab File ID: 0514B015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.50	6.80
RDX	7.76	7.61	7.91
Picric acid	8.13	7.98	8.28
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.28	10.13	10.43
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.14	11.34
4-Amino-2,6-dinitrotoluene	11.43	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.72	11.62	11.82
2,6-Dinitrotoluene	11.85	11.75	11.95
2,4-Dinitrotoluene	12.05	11.95	12.15
2-Nitrotoluene	12.89	12.74	13.04
4-Nitrotoluene	13.33	13.18	13.48
3-Nitrotoluene	13.93	13.78	14.08
PETN	15.02	14.87	15.17
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B015.D
Lims ID: ICV MAIN
Client ID:
Sample Type: ICV
Inject. Date: 14-May-2019 18:59:15 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV MAIN
Misc. Info.: 280-0081869-015
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-May-2019 10:58:12 Calib Date: 14-May-2019 18:35:34
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.650	6.650	0.000	33160	0.4000	0.3717	
	7 RDX	1	7.764	7.764	0.000	40158	0.4000	0.3766	
	8 2,4,6-Trinitrophenol	1	8.130	8.130	0.000	34135	0.4000	0.4074	
$	9 1,2-Dinitrobenzene	1	8.744	8.744	0.000	50385	0.4000	0.3872	
	10 1,3,5-Trinitrobenzene	1	8.904	8.904	0.000	94361	0.4000	0.4116	
	11 1,3-Dinitrobenzene	1	9.564	9.564	0.000	120059	0.4000	0.3991	
	12 Nitrobenzene	1	9.950	9.950	0.000	75701	0.4000	0.3846	
	14 Tetryl	1	10.284	10.284	0.000	67828	0.4000	0.4038	
	15 Nitroglycerin	2	10.784	10.784	0.000	262700	4.00	3.75	
	16 2,4,6-Trinitrotoluene	1	11.237	11.237	0.000	80975	0.4000	0.3622	
	17 4-Amino-2,6-dinitrotoluene	1	11.430	11.430	0.000	60136	0.4000	0.3702	
	18 2-Amino-4,6-dinitrotoluene	1	11.717	11.717	0.000	77874	0.4000	0.3942	
	19 2,6-Dinitrotoluene	1	11.850	11.850	0.000	57769	0.4000	0.3689	
	20 2,4-Dinitrotoluene	1	12.050	12.050	0.000	114433	0.4000	0.3847	
	21 o-Nitrotoluene	1	12.890	12.890	0.000	46957	0.4000	0.3575	
	22 p-Nitrotoluene	1	13.330	13.330	0.000	40895	0.4000	0.3628	
	23 m-Nitrotoluene	1	13.930	13.930	0.000	52905	0.4000	0.3567	
	24 PETN	2	15.024	15.024	0.000	293284	4.00	4.01	

Reagents:

8330Surrogate_00103 Amount Added: 40.00 Units: uL
8330 LCS_00089 Amount Added: 40.00 Units: uL

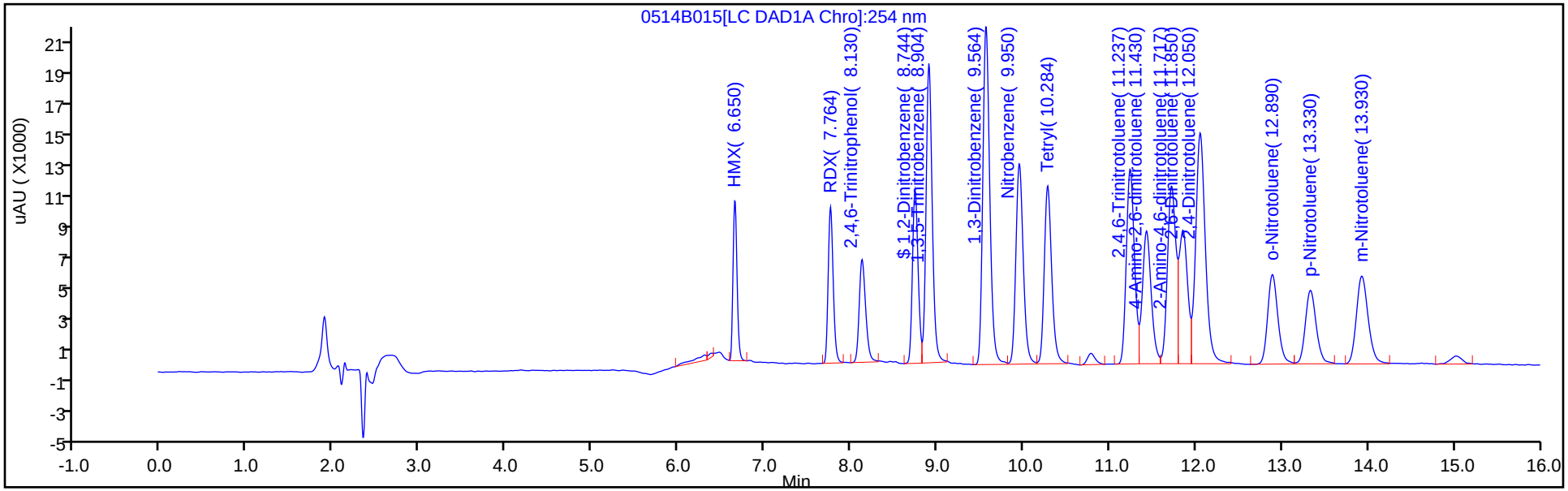
Report Date: 15-May-2019 10:58:12 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

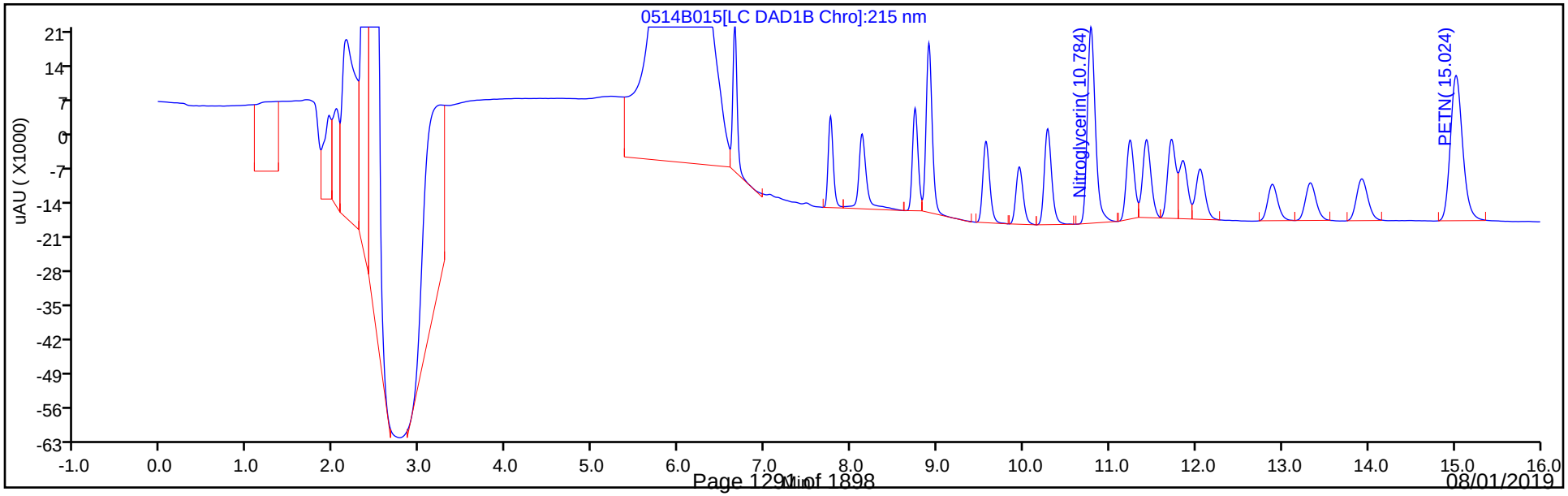
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B015.D

Injection Date:	14-May-2019 18:59:15	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	ICV MAIN			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-458150/33 Calibration Date: 05/15/2019 02:06

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 0514B033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	210297		422	400	5.5	15.0
DNX	Ave	148387	148357		400	400	-0.0	15.0
MNX	Ave	136538	137961		472	467	1.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-458150/33 Calibration Date: 05/15/2019 02:06

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 0514B033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.56	6.46	6.66
DNX	6.89	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B033.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	15-May-2019 02:06:16	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0081869-033				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:					
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	15-May-2019 10:58:30	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0331				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.557	6.556	0.001	84203	0.4004	0.4224	
5 DNX	1	6.891	6.889	0.002	59402	0.4004	0.4003	
6 MNX	1	7.351	7.356	-0.005	64400	0.4668	0.4717	

Reagents:

8330_OP_DMT_00002 Amount Added: 40.00 Units: uL

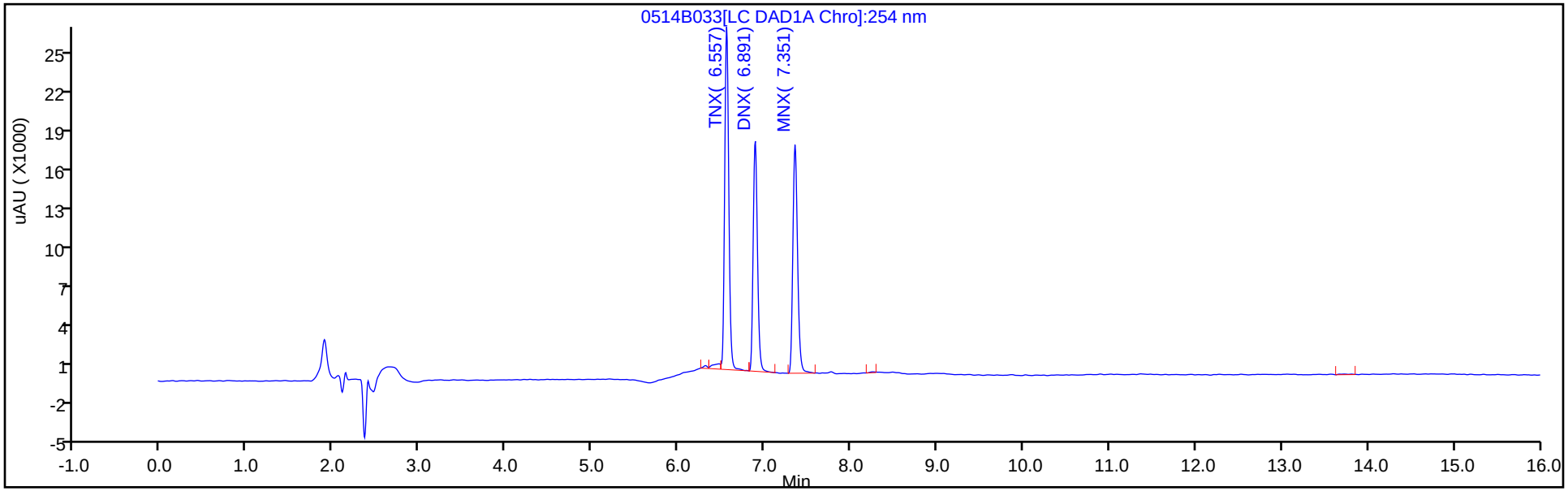
Report Date: 15-May-2019 10:58:32 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

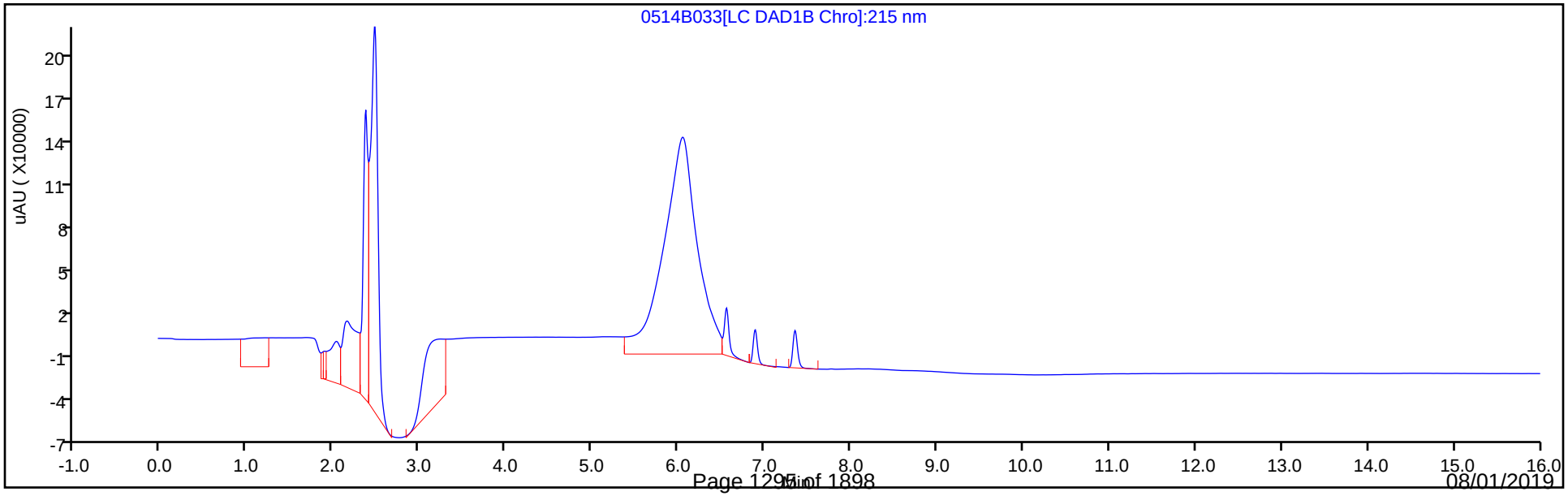
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B033.D

Injection Date:	15-May-2019 02:06:16	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	ICV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/40 Calibration Date: 06/15/2019 06:15

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/14/2019 18:35

Lab File ID: 06140040.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	93548		262	250	4.9	15.0
RDX	Ave	106639	113708		267	250	6.6	15.0
Picric acid	Ave	83793	87956		262	250	5.0	15.0
1,3,5-Trinitrobenzene	Ave	229276	250124		273	250	9.1	15.0
1,3-Dinitrobenzene	Ave	300824	320671		267	250	6.6	15.0
Nitrobenzene	Ave	196827	197876		252	251	0.5	15.0
Tetryl	Ave	167956	170148		253	250	1.3	15.0
Nitroglycerin	Ave	69977	74840		2670	2500	6.9	15.0
2,4,6-Trinitrotoluene	Ave	223593	234359		263	251	4.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	165603		256	251	2.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	208040		264	251	5.3	15.0
2,6-Dinitrotoluene	Ave	156597	166696		267	251	6.4	15.0
2,4-Dinitrotoluene	Ave	297422	310794		262	251	4.5	15.0
2-Nitrotoluene	Ave	131349	138046		264	251	5.1	15.0
4-Nitrotoluene	Ave	112716	119709		267	251	6.2	15.0
3-Nitrotoluene	Ave	148306	151367		256	251	2.1	15.0
PETN	Ave	73191	78203		2670	2500	6.8	15.0
1,2-Dinitrobenzene	Ave	130111	142832		274	250	9.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/40 Calibration Date: 06/15/2019 06:15

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/14/2019 18:35

Lab File ID: 06140040.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.49	6.79
RDX	7.77	7.61	7.91
Picric acid	8.20	8.05	8.35
1,3,5-Trinitrobenzene	8.91	8.75	9.05
1,3-Dinitrobenzene	9.58	9.41	9.71
Nitrobenzene	9.97	9.80	10.10
Tetryl	10.30	10.13	10.43
Nitroglycerin	10.80	10.63	10.93
2,4,6-Trinitrotoluene	11.26	11.13	11.33
4-Amino-2,6-dinitrotoluene	11.47	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.77	11.62	11.82
2,6-Dinitrotoluene	11.89	11.74	11.94
2,4-Dinitrotoluene	12.09	11.94	12.14
2-Nitrotoluene	12.93	12.73	13.03
4-Nitrotoluene	13.38	13.17	13.47
3-Nitrotoluene	13.98	13.77	14.07
PETN	15.07	14.87	15.17
1,2-Dinitrobenzene	8.75	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140040.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2019 06:15:52 ALS Bottle#: 7 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0082867-040
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:12 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.647	6.643	0.004	23387	0.2500	0.2622	
	7 RDX	1	7.774	7.763	0.011	28427	0.2500	0.2666	
	8 2,4,6-Trinitrophenol	1	8.200	8.196	0.004	21989	0.2500	0.2624	
$	9 1,2-Dinitrobenzene	1	8.747	8.743	0.004	35708	0.2500	0.2744	
	10 1,3,5-Trinitrobenzene	1	8.907	8.896	0.011	62531	0.2500	0.2727	
	11 1,3-Dinitrobenzene	1	9.580	9.563	0.017	80248	0.2503	0.2668	
	12 Nitrobenzene	1	9.967	9.949	0.018	49568	0.2505	0.2518	
	14 Tetryl	1	10.300	10.276	0.024	42537	0.2500	0.2533	
	15 Nitroglycerin	2	10.800	10.776	0.024	187101	2.50	2.67	
	16 2,4,6-Trinitrotoluene	1	11.260	11.229	0.031	58824	0.2510	0.2631	
	17 4-Amino-2,6-dinitrotoluene	1	11.467	11.429	0.038	41525	0.2508	0.2556	
	18 2-Amino-4,6-dinitrotoluene	1	11.767	11.716	0.051	52166	0.2508	0.2641	
	19 2,6-Dinitrotoluene	1	11.887	11.843	0.044	41799	0.2508	0.2669	
	20 2,4-Dinitrotoluene	1	12.087	12.043	0.044	77854	0.2505	0.2618	
	21 o-Nitrotoluene	1	12.933	12.883	0.050	34615	0.2508	0.2635	
	22 p-Nitrotoluene	1	13.380	13.323	0.057	30047	0.2510	0.2666	
	23 m-Nitrotoluene	1	13.980	13.923	0.057	37993	0.2510	0.2562	
	24 PETN	2	15.073	15.016	0.057	195508	2.50	2.67	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

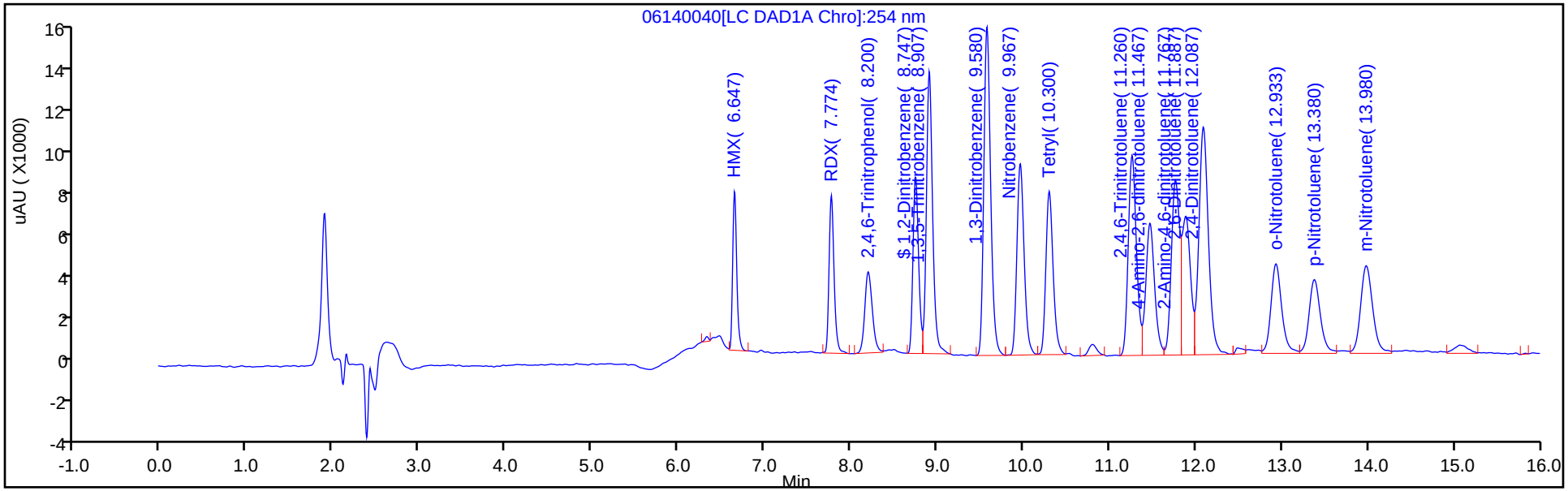
Report Date: 17-Jun-2019 10:45:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

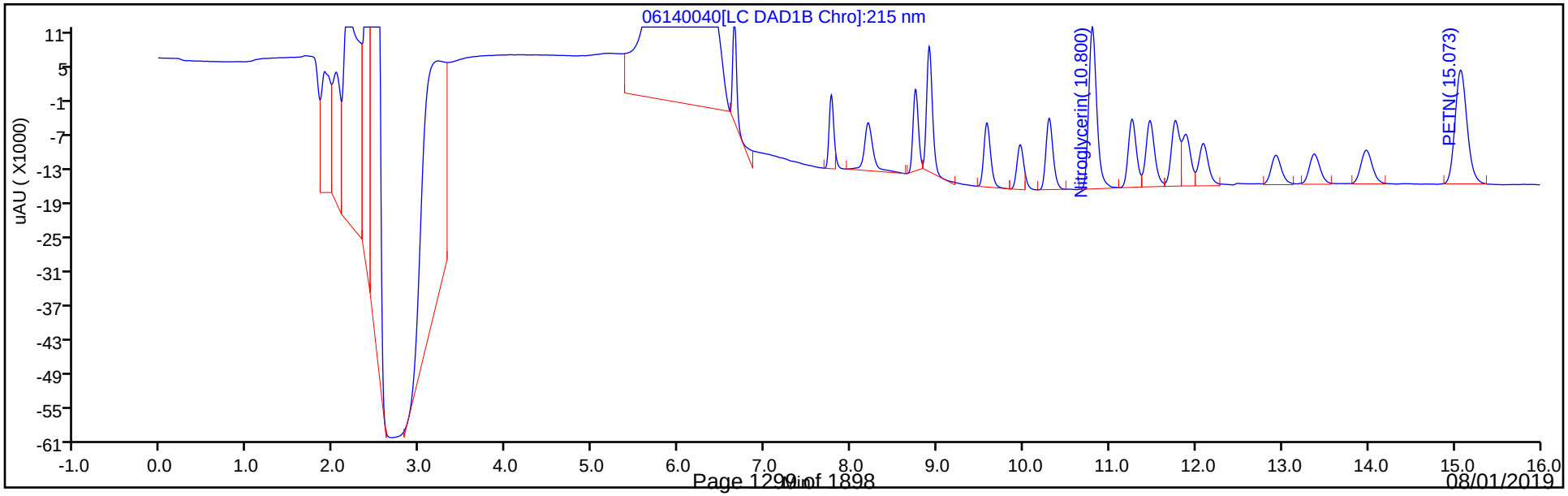
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140040.D

Injection Date:	15-Jun-2019 06:15:52	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV INT			Worklist Smp#:	40
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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/42 Calibration Date: 06/15/2019 07:03

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06140042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	216667		272	250	8.7	15.0
DNX	Ave	148387	155692		263	250	4.9	15.0
MNX	Ave	136538	145042		310	292	6.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/42 Calibration Date: 06/15/2019 07:03

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06140042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.56	6.47	6.67
DNX	6.89	6.79	6.99
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140042.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	15-Jun-2019 07:03:30	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0082867-042				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jun-2019 10:45:16	Calib Date:	15-May-2019 01:42:24		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0334				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.555	6.566	-0.011	54221	0.2503	0.2720	
5 DNX	1	6.888	6.893	-0.005	38962	0.2503	0.2626	
6 MNX	1	7.361	7.359	0.002	42316	0.2918	0.3099	

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

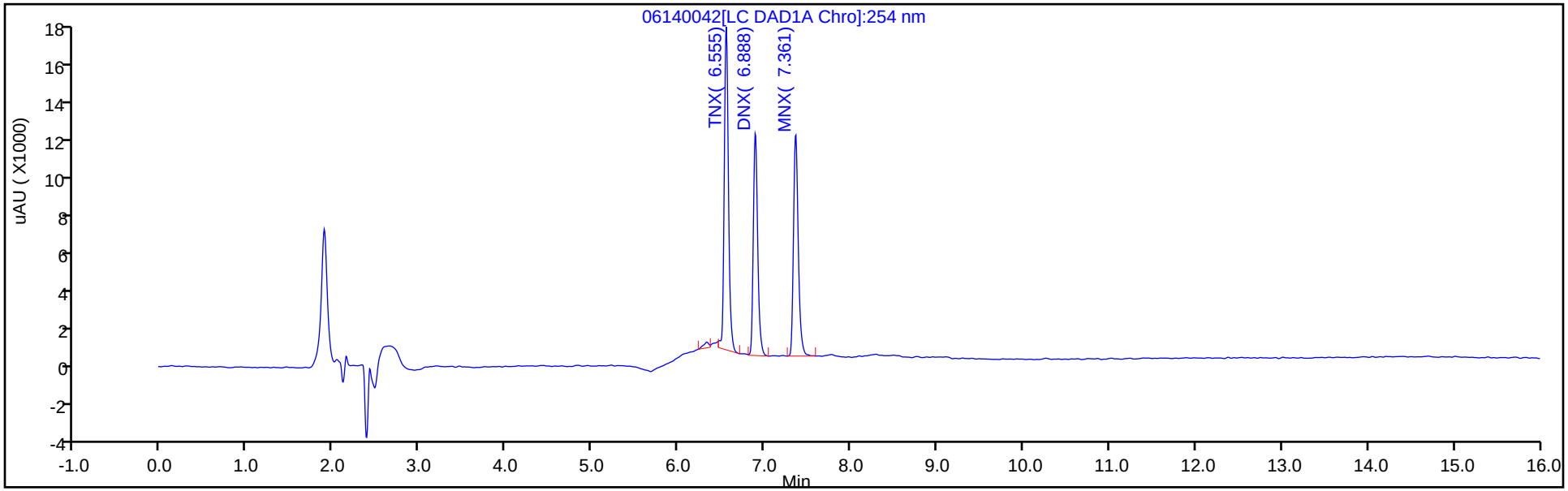
Report Date: 17-Jun-2019 10:45:18 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

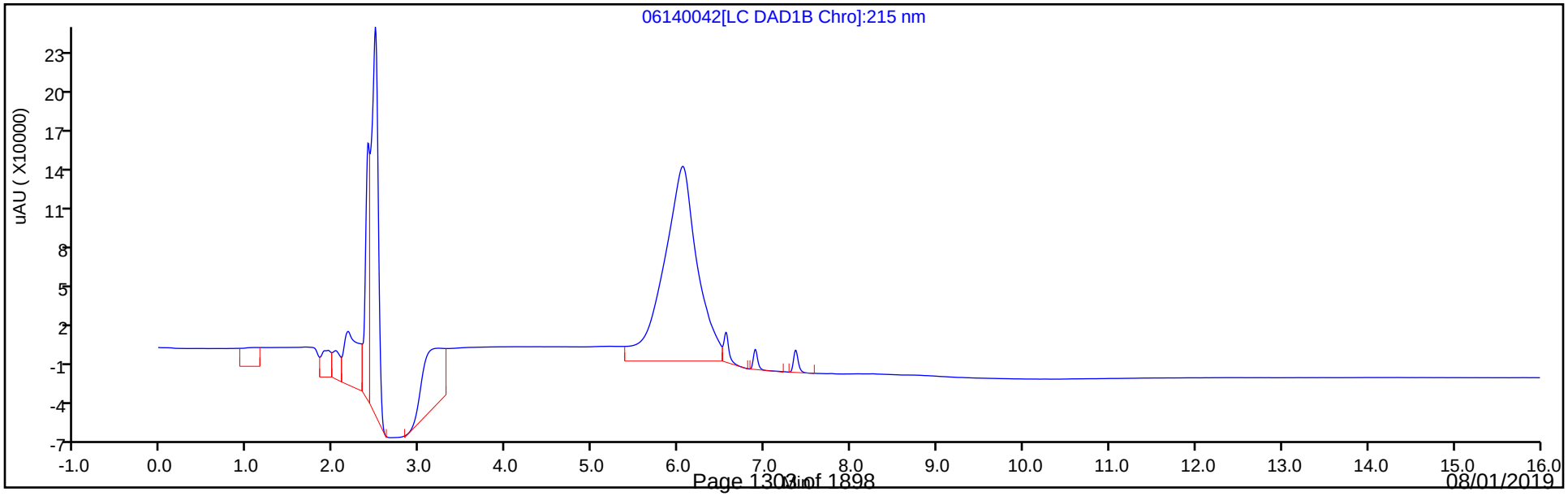
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140042.D

Injection Date:	15-Jun-2019 07:03:30	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV DMT			Worklist Smp#:	42
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/53 Calibration Date: 06/15/2019 11:25

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/14/2019 18:35

Lab File ID: 06140053.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	93008		261	250	4.3	15.0
RDX	Ave	106639	112712		264	250	5.7	15.0
Picric acid	Ave	83793	86036		257	250	2.7	15.0
1,3,5-Trinitrobenzene	Ave	229276	249920		273	250	9.0	15.0
1,3-Dinitrobenzene	Ave	300824	321598		268	250	6.9	15.0
Nitrobenzene	Ave	196827	194818		248	251	-1.0	15.0
Tetryl	Ave	167956	173824		259	250	3.5	15.0
Nitroglycerin	Ave	69977	75038		2680	2500	7.2	15.0
2,4,6-Trinitrotoluene	Ave	223593	233155		262	251	4.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	169172		261	251	4.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	214385		272	251	8.5	15.0
2,6-Dinitrotoluene	Ave	156597	159486		255	251	1.8	15.0
2,4-Dinitrotoluene	Ave	297422	312084		263	251	4.9	15.0
2-Nitrotoluene	Ave	131349	125304		239	251	-4.6	15.0
4-Nitrotoluene	Ave	112716	110685		246	251	-1.8	15.0
3-Nitrotoluene	Ave	148306	140865		238	251	-5.0	15.0
PETN	Ave	73191	78611		2690	2500	7.4	15.0
1,2-Dinitrobenzene	Ave	130111	143340		275	250	10.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/53 Calibration Date: 06/15/2019 11:25

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/14/2019 18:35

Lab File ID: 06140053.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.49	6.79
RDX	7.77	7.61	7.91
Picric acid	8.19	8.05	8.35
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.57	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.29	10.13	10.43
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.13	11.33
4-Amino-2,6-dinitrotoluene	11.44	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.73	11.62	11.82
2,6-Dinitrotoluene	11.85	11.74	11.94
2,4-Dinitrotoluene	12.06	11.94	12.14
2-Nitrotoluene	12.90	12.73	13.03
4-Nitrotoluene	13.34	13.17	13.47
3-Nitrotoluene	13.94	13.77	14.07
PETN	15.03	14.87	15.17
1,2-Dinitrobenzene	8.75	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140053.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2019 11:25:12 ALS Bottle#: 7 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0082867-053
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:42 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:21:07

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.645	6.643	0.002	23252	0.2500	0.2607	
7 RDX	1	7.765	7.763	0.002	28178	0.2500	0.2642	
8 2,4,6-Trinitrophenol	1	8.192	8.196	-0.004	21509	0.2500	0.2567	
$ 9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	35835	0.2500	0.2754	
10 1,3,5-Trinitrobenzene	1	8.899	8.896	0.003	62480	0.2500	0.2725	
11 1,3-Dinitrobenzene	1	9.565	9.563	0.002	80480	0.2503	0.2675	
12 Nitrobenzene	1	9.952	9.949	0.003	48802	0.2505	0.2479	
14 Tetryl	1	10.285	10.276	0.009	43456	0.2500	0.2587	
15 Nitroglycerin	2	10.779	10.776	0.003	187595	2.50	2.68	
16 2,4,6-Trinitrotoluene	1	11.239	11.229	0.010	58522	0.2510	0.2617	
17 4-Amino-2,6-dinitrotoluene	1	11.439	11.429	0.010	42420	0.2508	0.2612	
18 2-Amino-4,6-dinitrotoluene	1	11.732	11.716	0.016	53757	0.2508	0.2721	M
19 2,6-Dinitrotoluene	1	11.852	11.843	0.009	39991	0.2508	0.2554	M
20 2,4-Dinitrotoluene	1	12.059	12.043	0.016	78177	0.2505	0.2628	
21 o-Nitrotoluene	1	12.899	12.883	0.016	31420	0.2508	0.2392	
22 p-Nitrotoluene	1	13.339	13.323	0.016	27782	0.2510	0.2465	
23 m-Nitrotoluene	1	13.939	13.923	0.016	35357	0.2510	0.2384	
24 PETN	2	15.032	15.016	0.016	196528	2.50	2.69	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

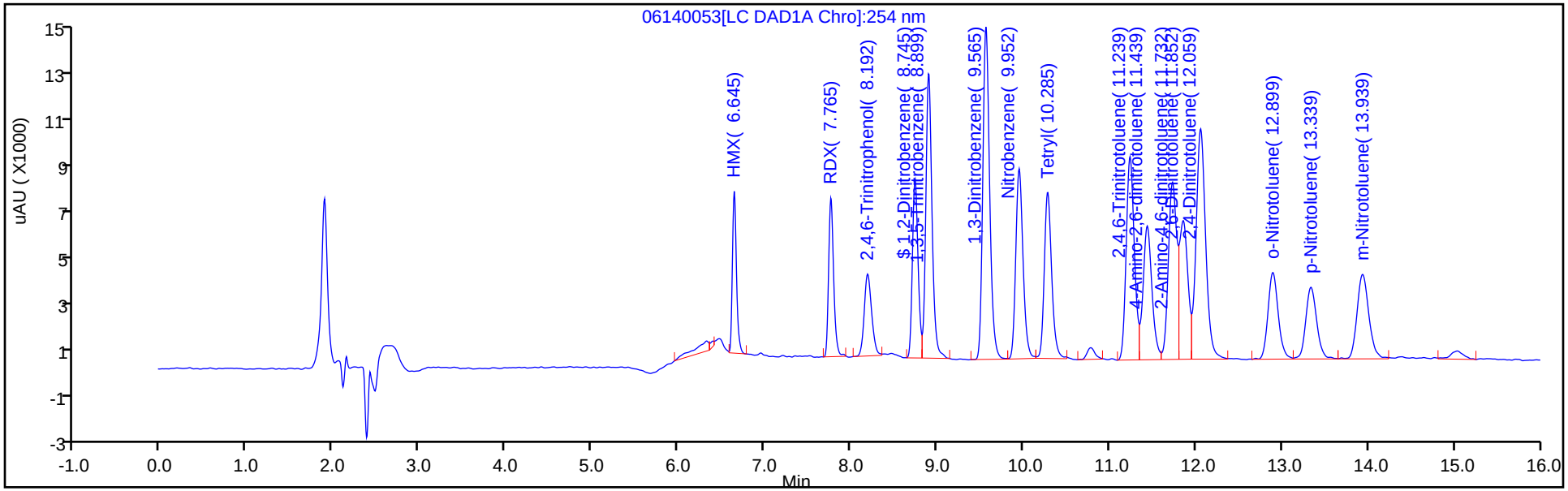
Report Date: 17-Jun-2019 10:45:43 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

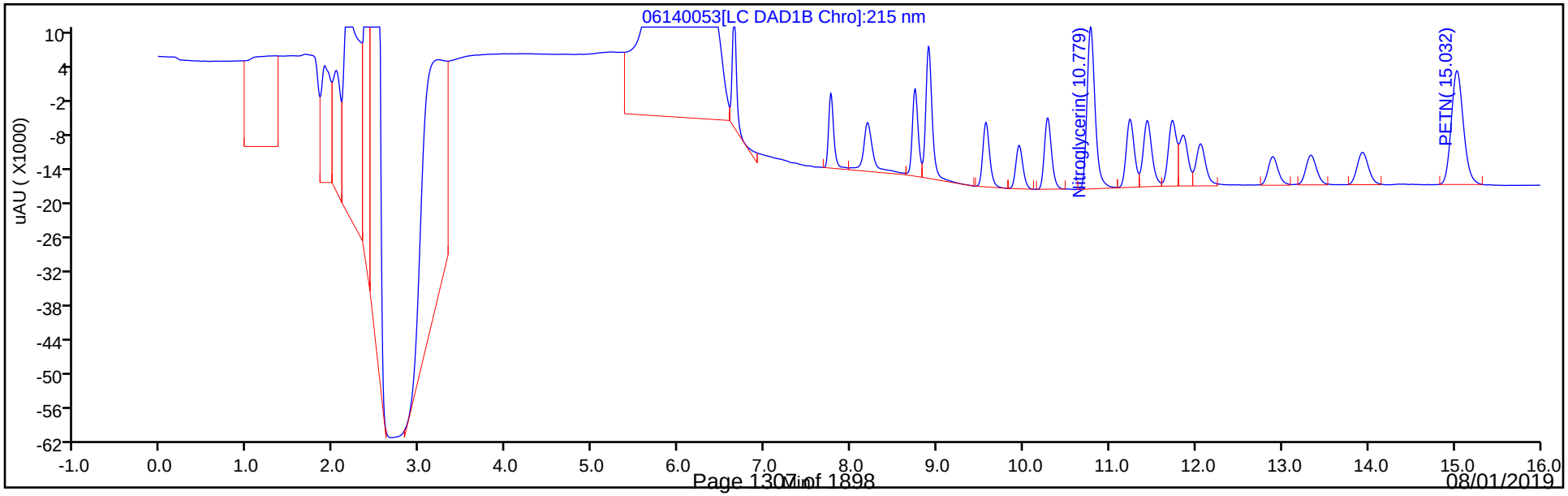
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140053.D

Injection Date:	15-Jun-2019 11:25:12	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV INT			Worklist Smp#:	53
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/55 Calibration Date: 06/15/2019 12:12

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06140055.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	207253		260	250	4.0	15.0
DNX	Ave	148387	155445		262	250	4.8	15.0
MNX	Ave	136538	144192		308	292	5.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/55 Calibration Date: 06/15/2019 12:12

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06140055.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.89	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140055.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2019 12:12:49 ALS Bottle#: 42 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0082867-055
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:47 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:21:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.547	6.566	-0.019	51865	0.2503	0.2602	M
5 DNX	1	6.887	6.893	-0.006	38900	0.2503	0.2622	M
6 MNX	1	7.353	7.359	-0.006	42068	0.2918	0.3081	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

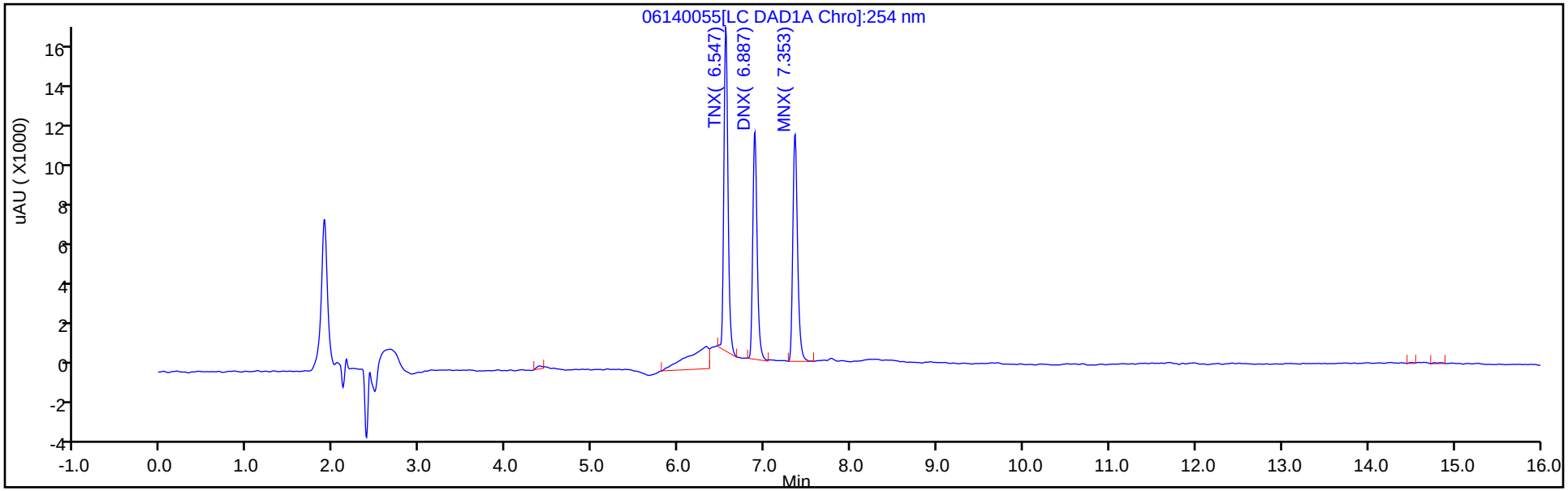
Report Date: 17-Jun-2019 10:45:47 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

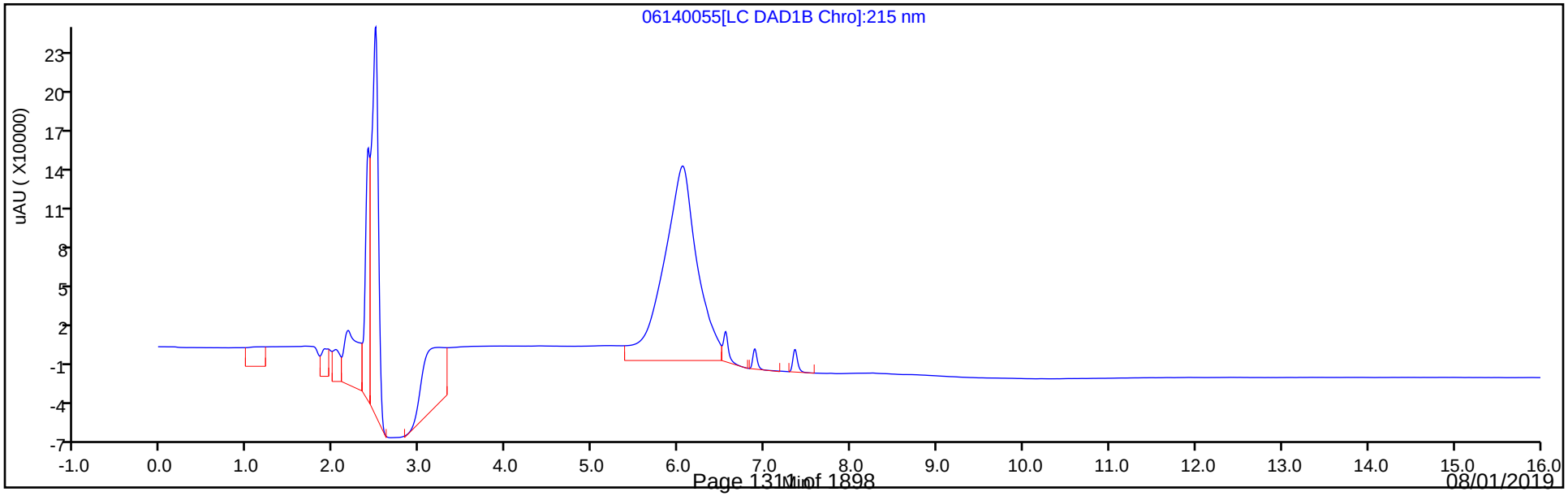
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140055.D

Injection Date:	15-Jun-2019 12:12:49	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV DMT			Worklist Smp#:	55
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

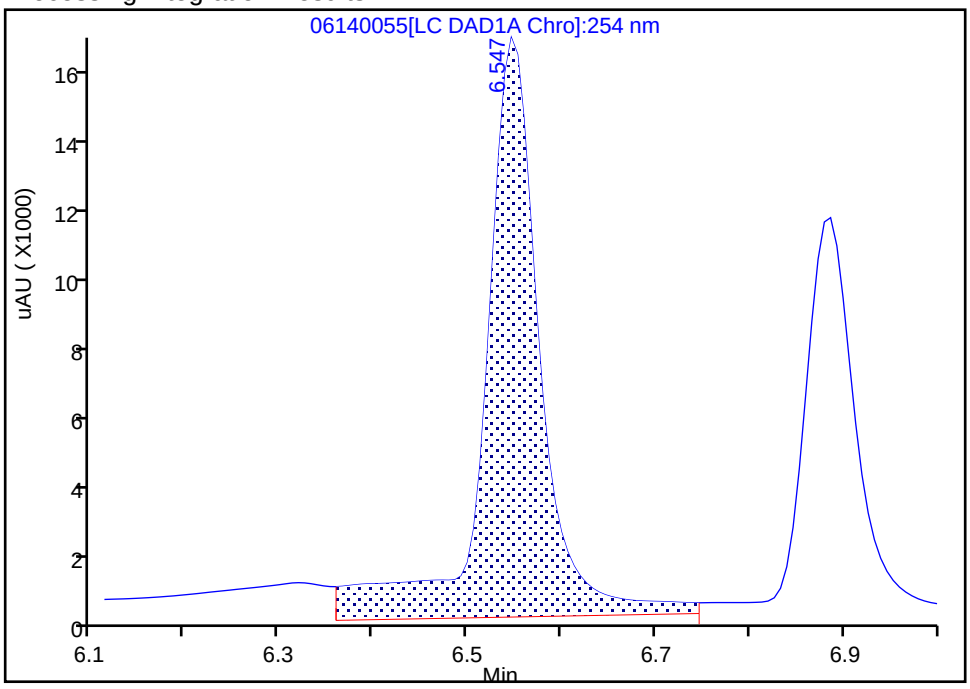
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140055.D				
Injection Date:	15-Jun-2019 12:12:49	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	42	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

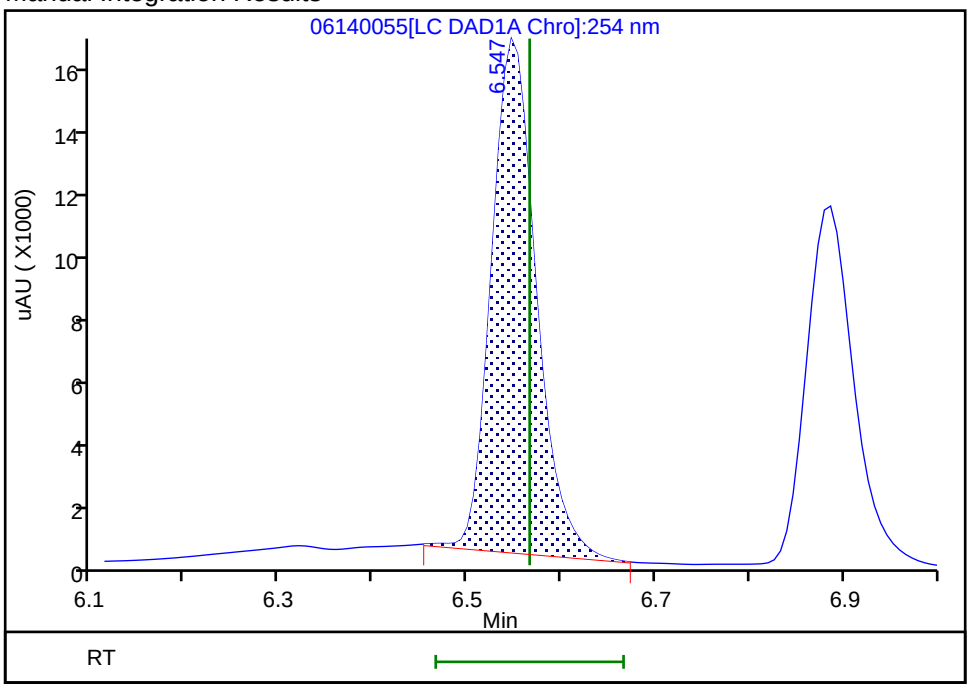
Processing Integration Results

RT: 6.55
Area: 68350
Amount: 0.342869
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 51865
Amount: 0.260174
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:21:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

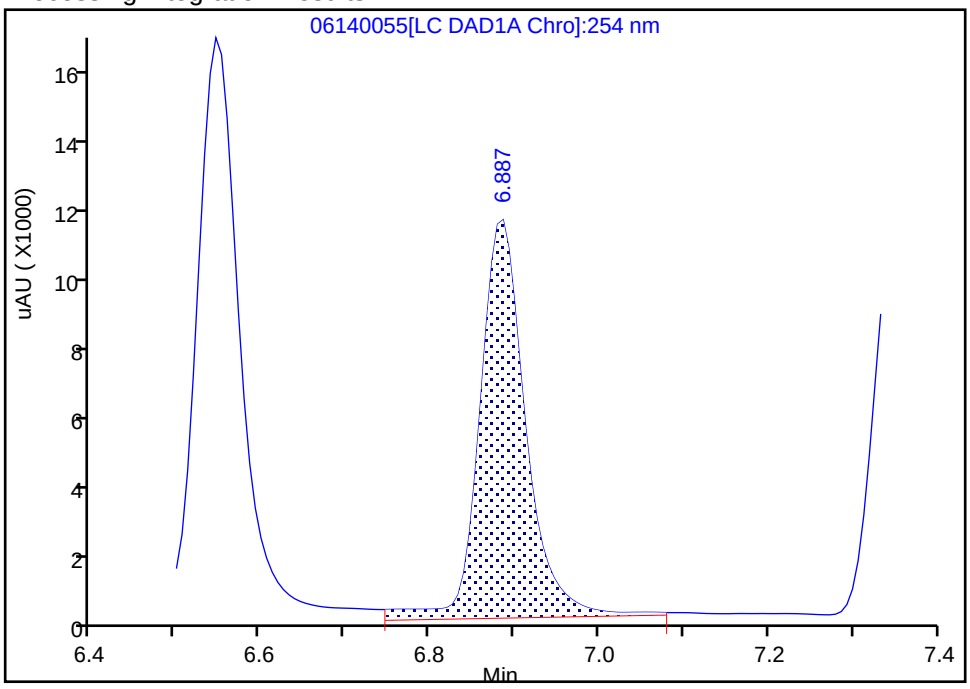
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140055.D				
Injection Date:	15-Jun-2019 12:12:49	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	42	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

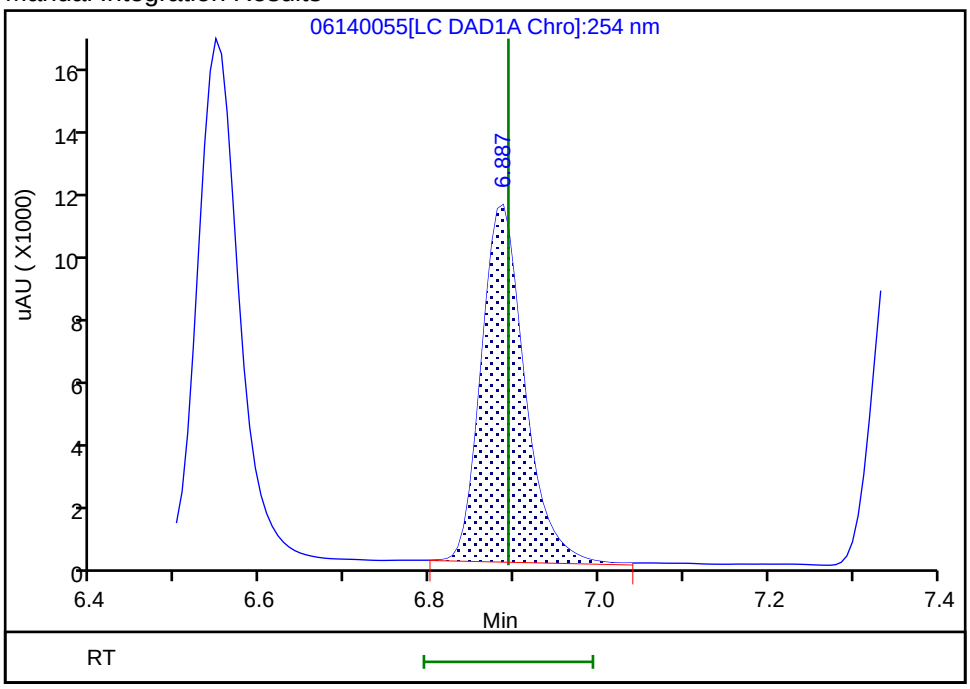
Processing Integration Results

RT: 6.89
Area: 42267
Amount: 0.284843
Amount Units: ug/mL



Manual Integration Results

RT: 6.89
Area: 38900
Amount: 0.262153
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:21:25

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/66 Calibration Date: 06/15/2019 16:34

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/14/2019 18:35

Lab File ID: 06140066.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89206	93820		263	250	5.2	15.0
RDX	Ave	106639	113652		266	250	6.6	15.0
Picric acid	Ave	83793	86596		258	250	3.3	15.0
1,3,5-Trinitrobenzene	Ave	229276	253112		276	250	10.4	15.0
1,3-Dinitrobenzene	Ave	300824	320396		267	250	6.5	15.0
Nitrobenzene	Ave	196827	189361		241	251	-3.8	15.0
Tetryl	Ave	167956	174908		260	250	4.1	15.0
Nitroglycerin	Ave	69977	74507		2660	2500	6.5	15.0
2,4,6-Trinitrotoluene	Ave	223593	234514		263	251	4.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	162430	166576		257	251	2.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	197535	207757		264	251	5.2	15.0
2,6-Dinitrotoluene	Ave	156597	166265		266	251	6.2	15.0
2,4-Dinitrotoluene	Ave	297422	312020		263	251	4.9	15.0
2-Nitrotoluene	Ave	131349	119721		229	251	-8.9	15.0
4-Nitrotoluene	Ave	112716	107606		240	251	-4.5	15.0
3-Nitrotoluene	Ave	148306	144135		244	251	-2.8	15.0
PETN	Ave	73191	79171		2700	2500	8.2	15.0
1,2-Dinitrobenzene	Ave	130111	143824		276	250	10.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/66 Calibration Date: 06/15/2019 16:34

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 15:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/14/2019 18:35

Lab File ID: 06140066.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.49	6.79
RDX	7.77	7.61	7.91
Picric acid	8.19	8.05	8.35
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.28	10.13	10.43
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.23	11.13	11.33
4-Amino-2,6-dinitrotoluene	11.43	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.72	11.62	11.82
2,6-Dinitrotoluene	11.85	11.74	11.94
2,4-Dinitrotoluene	12.05	11.94	12.14
2-Nitrotoluene	12.88	12.73	13.03
4-Nitrotoluene	13.32	13.17	13.47
3-Nitrotoluene	13.92	13.77	14.07
PETN	15.02	14.87	15.17
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140066.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2019 16:34:39 ALS Bottle#: 7 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0082867-066
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:46:18 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:33:32

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.649	6.643	0.006	23455	0.2500	0.2629	
	7 RDX	1	7.769	7.763	0.006	28413	0.2500	0.2664	
	8 2,4,6-Trinitrophenol	1	8.189	8.196	-0.007	21649	0.2500	0.2584	
$	9 1,2-Dinitrobenzene	1	8.742	8.743	-0.001	35956	0.2500	0.2763	
	10 1,3,5-Trinitrobenzene	1	8.902	8.896	0.006	63278	0.2500	0.2760	
	11 1,3-Dinitrobenzene	1	9.562	9.563	-0.001	80179	0.2503	0.2665	
	12 Nitrobenzene	1	9.949	9.949	0.000	47435	0.2505	0.2410	
	14 Tetryl	1	10.275	10.276	-0.001	43727	0.2500	0.2603	
	15 Nitroglycerin	2	10.775	10.776	-0.001	186267	2.50	2.66	
	16 2,4,6-Trinitrotoluene	1	11.229	11.229	0.000	58863	0.2510	0.2633	
	17 4-Amino-2,6-dinitrotoluene	1	11.429	11.429	0.000	41769	0.2508	0.2572	
	18 2-Amino-4,6-dinitrotoluene	1	11.722	11.716	0.006	52095	0.2508	0.2637	M
	19 2,6-Dinitrotoluene	1	11.849	11.843	0.006	41691	0.2508	0.2662	M
	20 2,4-Dinitrotoluene	1	12.049	12.043	0.006	78161	0.2505	0.2628	
	21 o-Nitrotoluene	1	12.882	12.883	-0.001	30020	0.2508	0.2286	
	22 p-Nitrotoluene	1	13.322	13.323	-0.001	27009	0.2510	0.2396	
	23 m-Nitrotoluene	1	13.922	13.923	-0.001	36178	0.2510	0.2439	
	24 PETN	2	15.015	15.016	-0.001	197928	2.50	2.70	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

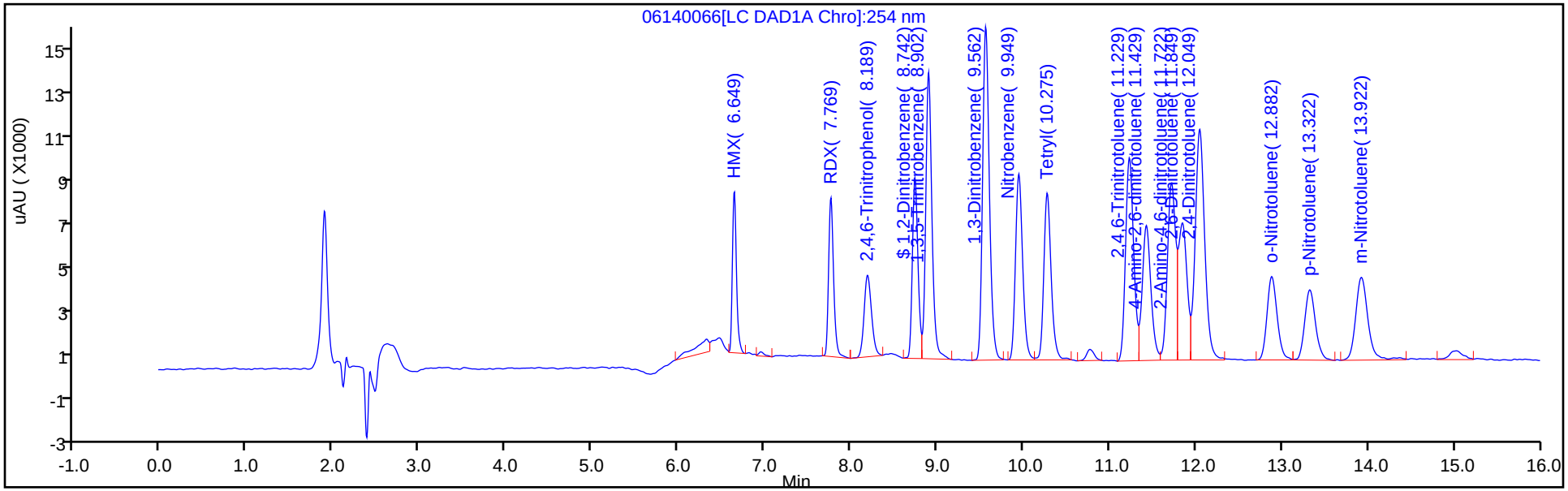
Report Date: 17-Jun-2019 10:46:19 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

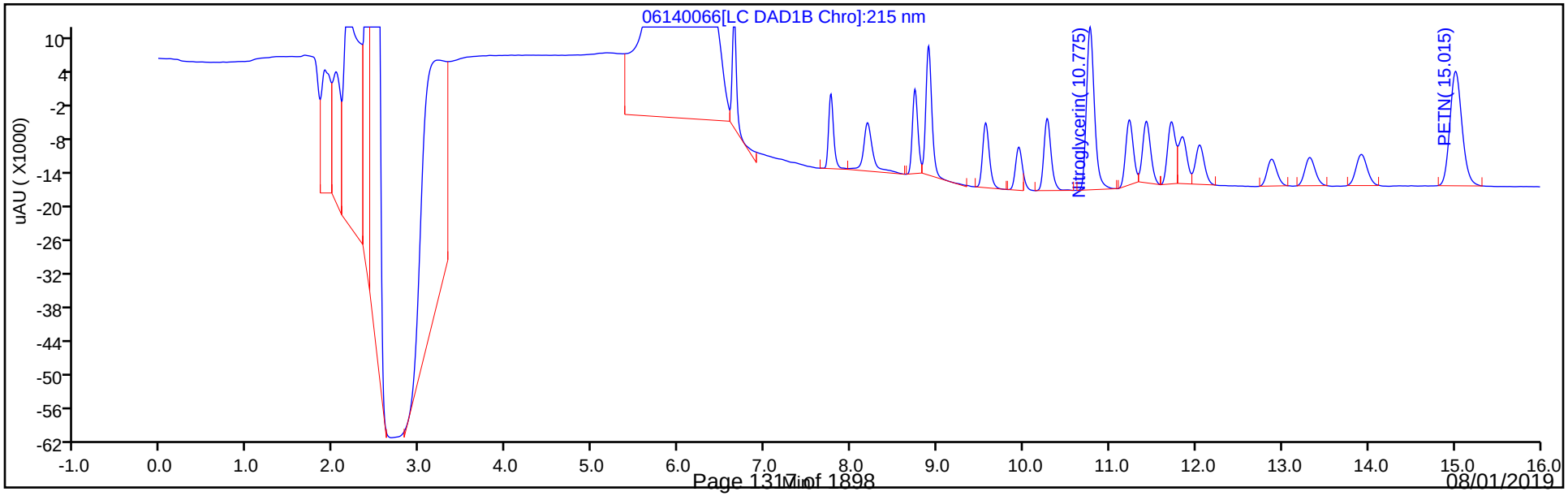
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140066.D

Injection Date:	15-Jun-2019 16:34:39	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV INT			Worklist Smp#:	66
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.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/68 Calibration Date: 06/15/2019 17:22

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06140068.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	199347	203145		255	250	1.9	15.0
DNX	Ave	148387	154693		261	250	4.2	15.0
MNX	Ave	136538	146245		312	292	7.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-461580/68 Calibration Date: 06/15/2019 17:22

Instrument ID: CHHPLC_X3 Calib Start Date: 05/14/2019 22:56

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/15/2019 01:42

Lab File ID: 06140068.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.47	6.67
DNX	6.88	6.79	6.99
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140068.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2019 17:22:20 ALS Bottle#: 42 Worklist Smp#: 68
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0082867-068
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:46:23 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:34:05

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.550	6.566	-0.016	50837	0.2503	0.2550	M
5 DNX	1	6.884	6.893	-0.009	38712	0.2503	0.2609	M
6 MNX	1	7.350	7.359	-0.009	42667	0.2918	0.3125	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

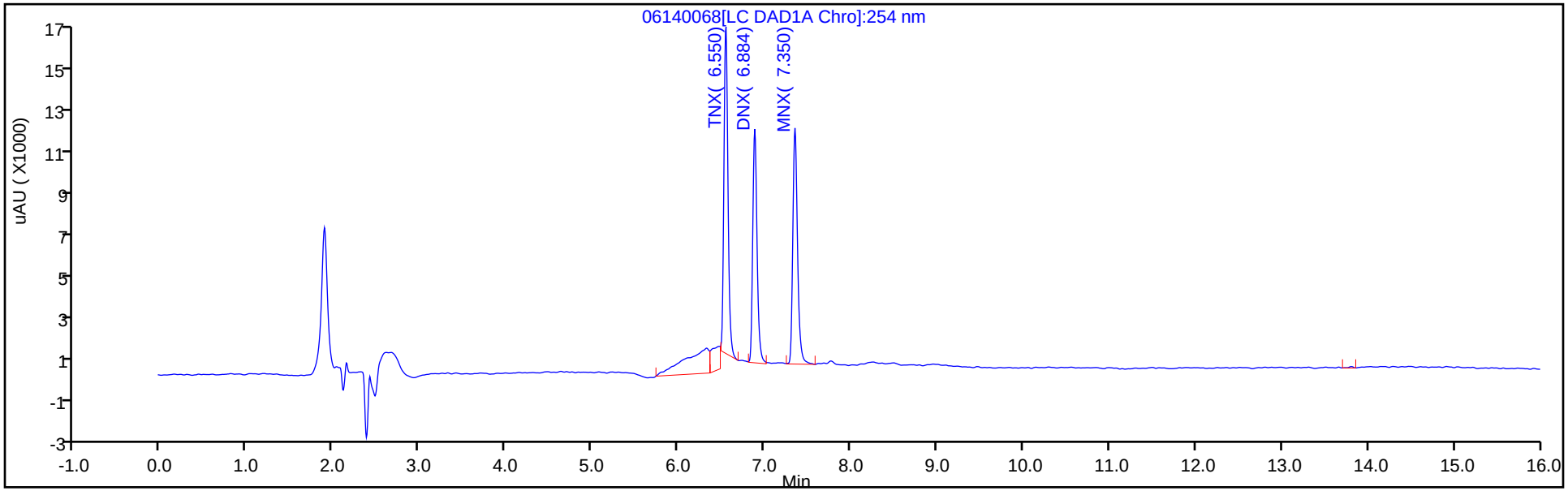
Report Date: 17-Jun-2019 10:46:24 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

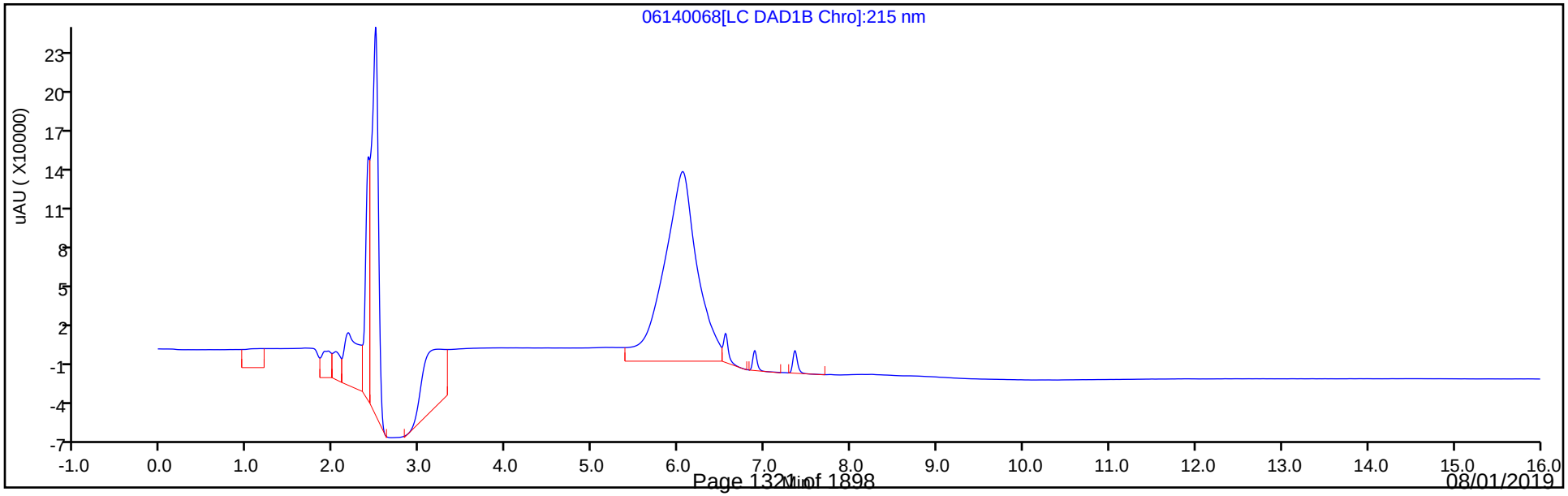
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140068.D

Injection Date:	15-Jun-2019 17:22:20	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV DMT			Worklist Smp#:	68
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

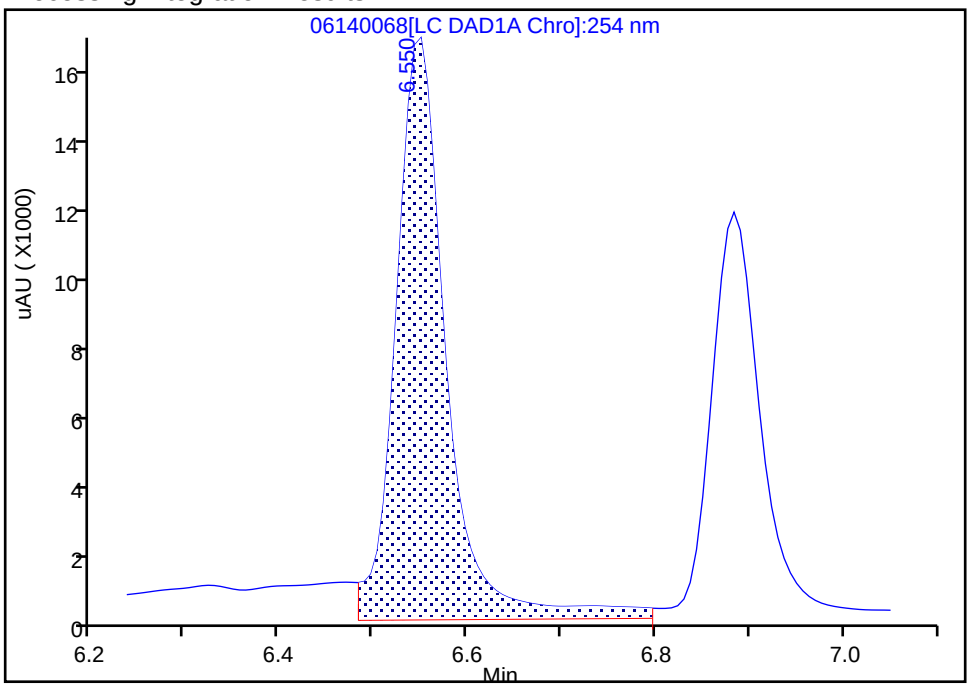
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140068.D				
Injection Date:	15-Jun-2019 17:22:20	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	42	Worklist Smp#:	68
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

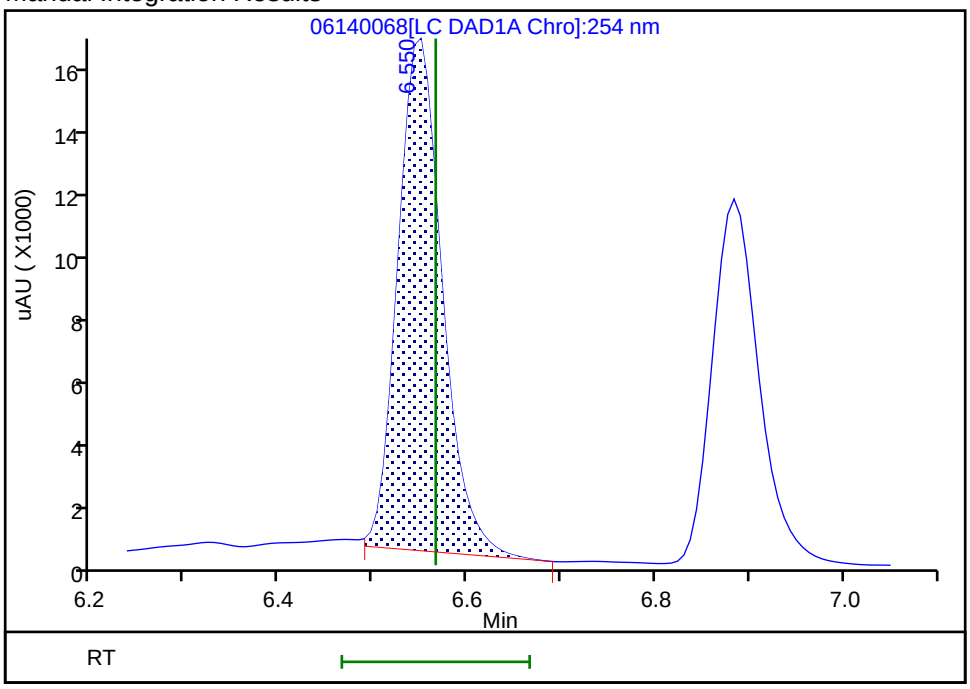
Processing Integration Results

RT: 6.55
Area: 60684
Amount: 0.304413
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 50837
Amount: 0.255017
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:33:59

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

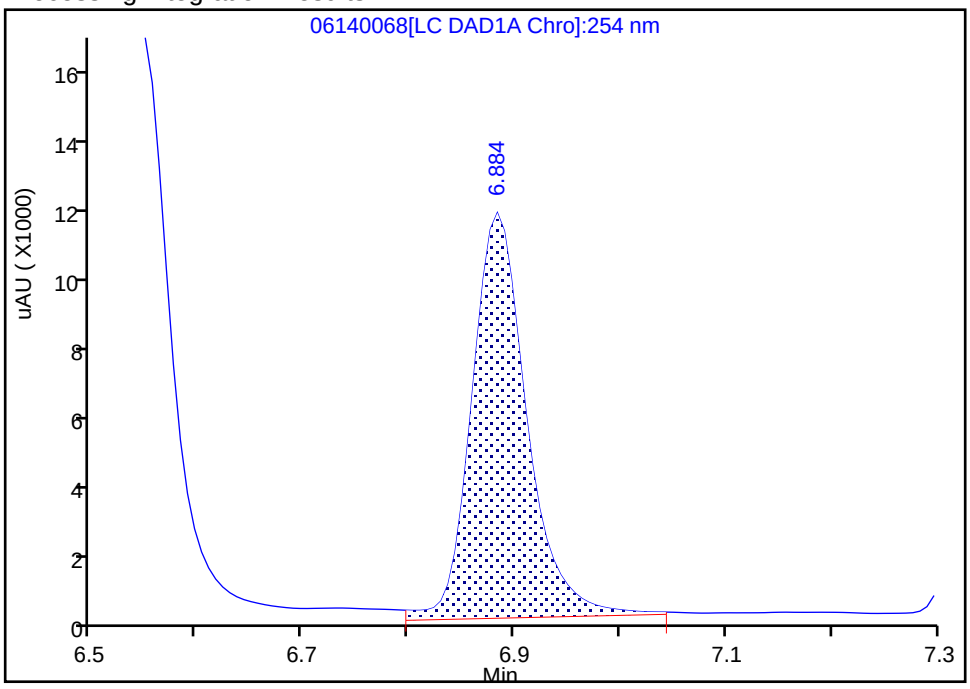
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140068.D				
Injection Date:	15-Jun-2019 17:22:20	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	42	Worklist Smp#:	68
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

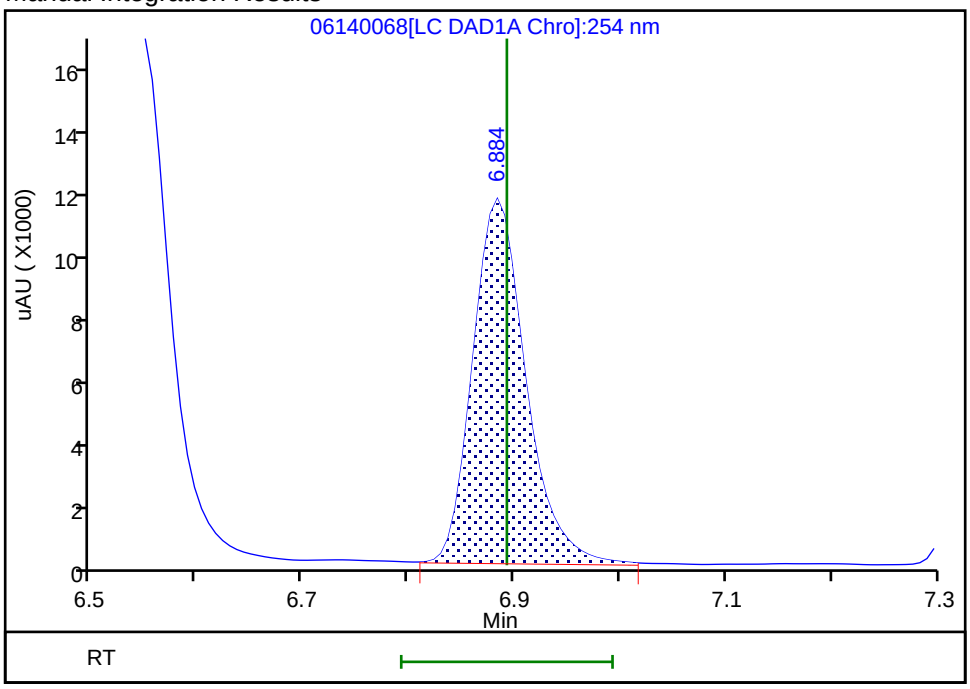
Processing Integration Results

RT: 6.88
Area: 40725
Amount: 0.274451
Amount Units: ug/mL



Manual Integration Results

RT: 6.88
Area: 38712
Amount: 0.260886
Amount Units: ug/mL



Reviewer: fiedlerh, 17-Jun-2019 10:34:02

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-463276/15 Calibration Date: 07/01/2019 17:46

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07010015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	83503		364	400	-9.1	15.0
RDX	Ave	111120	100688		362	400	-9.4	15.0
Picric acid	Ave	90734	85358		376	400	-5.9	15.0
1,3,5-Trinitrobenzene	Ave	245077	234935		383	400	-4.1	15.0
1,3-Dinitrobenzene	Ave	311175	300153		386	400	-3.5	15.0
Nitrobenzene	Ave	198903	196135		394	400	-1.4	15.0
Tetryl	Ave	161957	167540		414	400	3.4	15.0
Nitroglycerin	Ave	71108	66318		3730	4000	-6.7	15.0
2,4,6-Trinitrotoluene	Ave	227277	202738		357	400	-10.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	148768		358	400	-10.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	194233		379	400	-5.4	15.0
2,6-Dinitrotoluene	Ave	159284	144348		362	400	-9.4	15.0
2,4-Dinitrotoluene	Ave	300447	282300		376	400	-6.0	15.0
2-Nitrotoluene	Ave	129784	121650		375	400	-6.3	15.0
4-Nitrotoluene	Ave	110255	105768		384	400	-4.1	15.0
3-Nitrotoluene	Ave	145122	136635		377	400	-5.8	15.0
PETN	Ave	74289	73091		3940	4000	-1.6	15.0
1,2-Dinitrobenzene	Ave	139328	123173		354	400	-11.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-463276/15 Calibration Date: 07/01/2019 17:46

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07010015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.64	6.49	6.79
RDX	7.76	7.61	7.91
Picric acid	8.18	8.03	8.33
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.94	9.79	10.09
Tetryl	10.27	10.12	10.42
Nitroglycerin	10.77	10.62	10.92
2,4,6-Trinitrotoluene	11.22	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.42	11.32	11.52
2-Amino-4,6-dinitrotoluene	11.70	11.60	11.80
2,6-Dinitrotoluene	11.84	11.74	11.94
2,4-Dinitrotoluene	12.04	11.94	12.14
2-Nitrotoluene	12.88	12.73	13.03
4-Nitrotoluene	13.32	13.17	13.47
3-Nitrotoluene	13.92	13.77	14.07
PETN	15.01	14.86	15.16
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D
Lims ID: ICV MAIN
Client ID:
Sample Type: ICV
Inject. Date: 01-Jul-2019 17:46:34 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV MAIN
Misc. Info.: 280-0083376-015
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:59 Calib Date: 01-Jul-2019 17:23:38
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 01-Jul-2019 18:32:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.643	6.643	0.000	33401	0.4000	0.3637	M
7 RDX	1	7.757	7.757	0.000	40275	0.4000	0.3624	
8 2,4,6-Trinitrophenol	1	8.177	8.177	0.000	34143	0.4000	0.3763	
$ 9 1,2-Dinitrobenzene	1	8.737	8.737	0.000	49269	0.4000	0.3536	
10 1,3,5-Trinitrobenzene	1	8.897	8.897	0.000	93974	0.4000	0.3834	
11 1,3-Dinitrobenzene	1	9.557	9.557	0.000	120061	0.4000	0.3858	
12 Nitrobenzene	1	9.943	9.943	0.000	78454	0.4000	0.3944	
14 Tetryl	1	10.270	10.270	0.000	67016	0.4000	0.4138	
15 Nitroglycerin	2	10.770	10.770	0.000	265271	4.00	3.73	
16 2,4,6-Trinitrotoluene	1	11.223	11.223	0.000	81095	0.4000	0.3568	
17 4-Amino-2,6-dinitrotoluene	1	11.417	11.417	0.000	59507	0.4000	0.3577	
18 2-Amino-4,6-dinitrotoluene	1	11.703	11.703	0.000	77693	0.4000	0.3786	
19 2,6-Dinitrotoluene	1	11.837	11.837	0.000	57739	0.4000	0.3625	
20 2,4-Dinitrotoluene	1	12.037	12.037	0.000	112920	0.4000	0.3758	
21 o-Nitrotoluene	1	12.877	12.877	0.000	48660	0.4000	0.3749	
22 p-Nitrotoluene	1	13.317	13.317	0.000	42307	0.4000	0.3837	
23 m-Nitrotoluene	1	13.917	13.917	0.000	54654	0.4000	0.3766	
24 PETN	2	15.010	15.010	0.000	292363	4.00	3.94	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00103 Amount Added: 40.00 Units: uL
8330 LCS_00089 Amount Added: 40.00 Units: uL

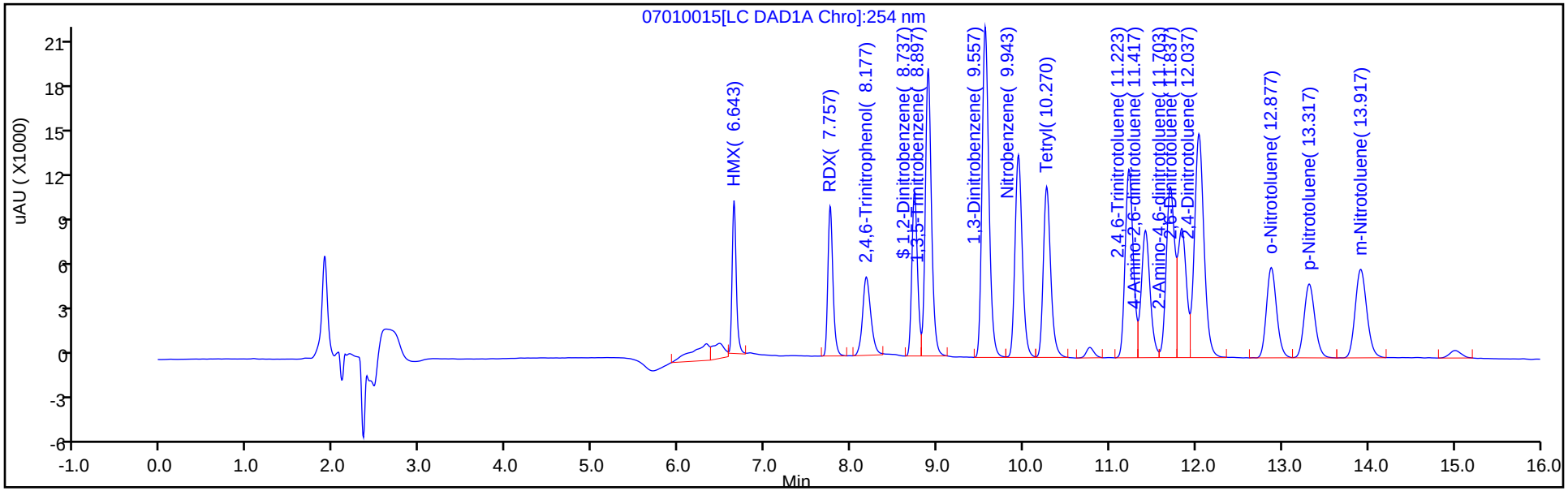
Report Date: 02-Jul-2019 11:34:59 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

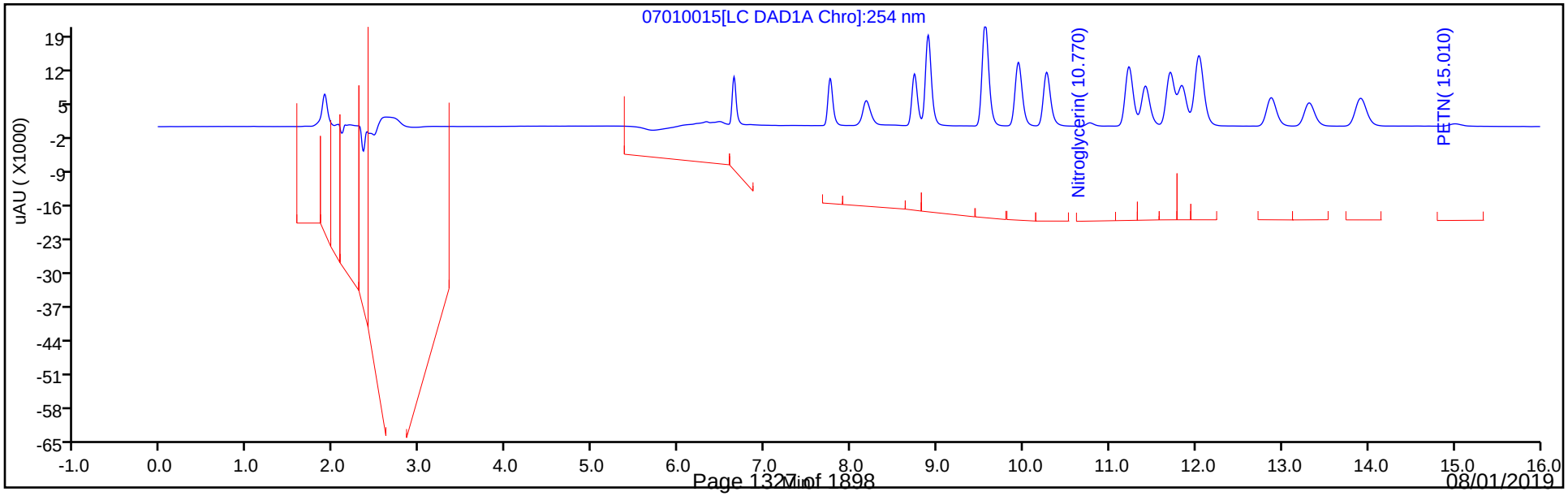
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D

Injection Date:	01-Jul-2019 17:46:34	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	ICV MAIN			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

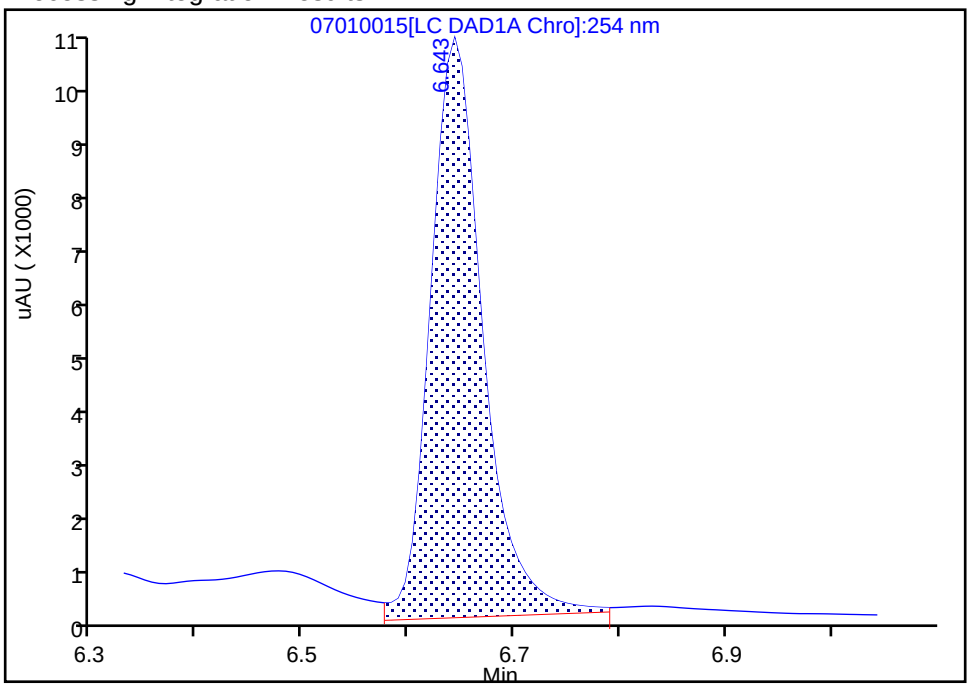
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D				
Injection Date:	01-Jul-2019 17:46:34	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

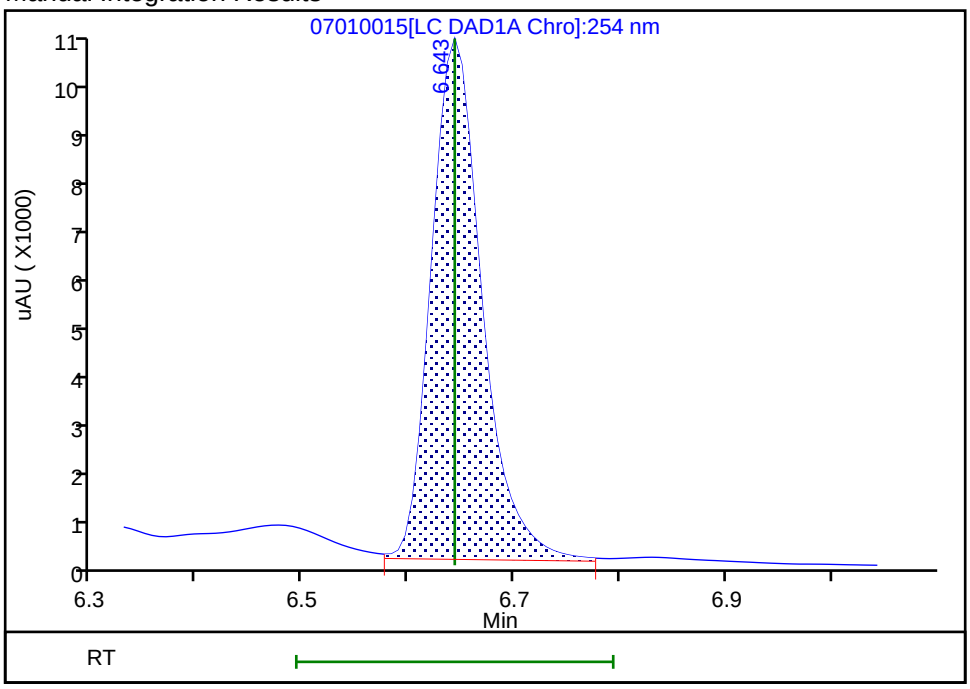
Processing Integration Results

RT: 6.64
Area: 35035
Amount: 0.381507
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 33401
Amount: 0.363714
Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:32:36
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-463276/33 Calibration Date: 07/02/2019 00:41

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07010033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	214136		399	400	-0.4	15.0
DNX	Ave	156126	152123		390	400	-2.6	15.0
MNX	Ave	140041	139925		466	467	-0.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: ICV 280-463276/33 Calibration Date: 07/02/2019 00:41

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07010033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.55	6.45	6.65
DNX	6.88	6.78	6.98
MNX	7.35	7.19	7.49

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 02-Jul-2019 00:41:04 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Misc. Info.: 280-0083376-033
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:35:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 02-Jul-2019 09:05:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.547	6.550	-0.003	85740	0.4004	0.3989	M
5 DNX	1	6.881	6.883	-0.002	60910	0.4004	0.3901	M
6 MNX	1	7.347	7.343	0.004	65317	0.4668	0.4664	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00002 Amount Added: 40.00 Units: uL

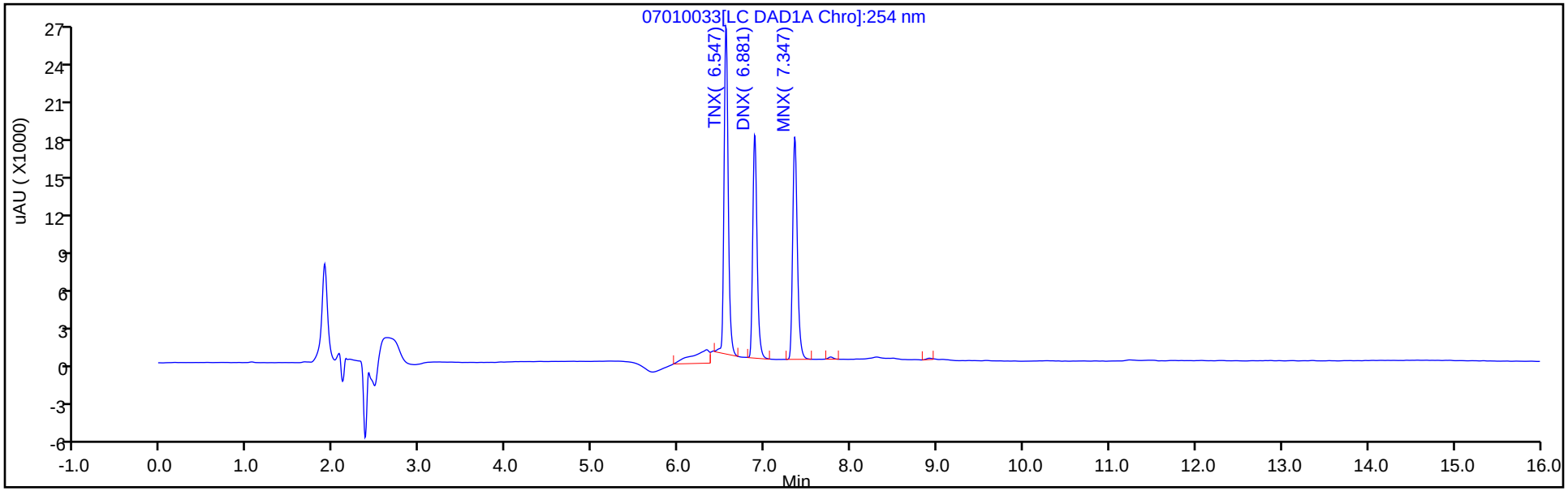
Report Date: 02-Jul-2019 11:35:32 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

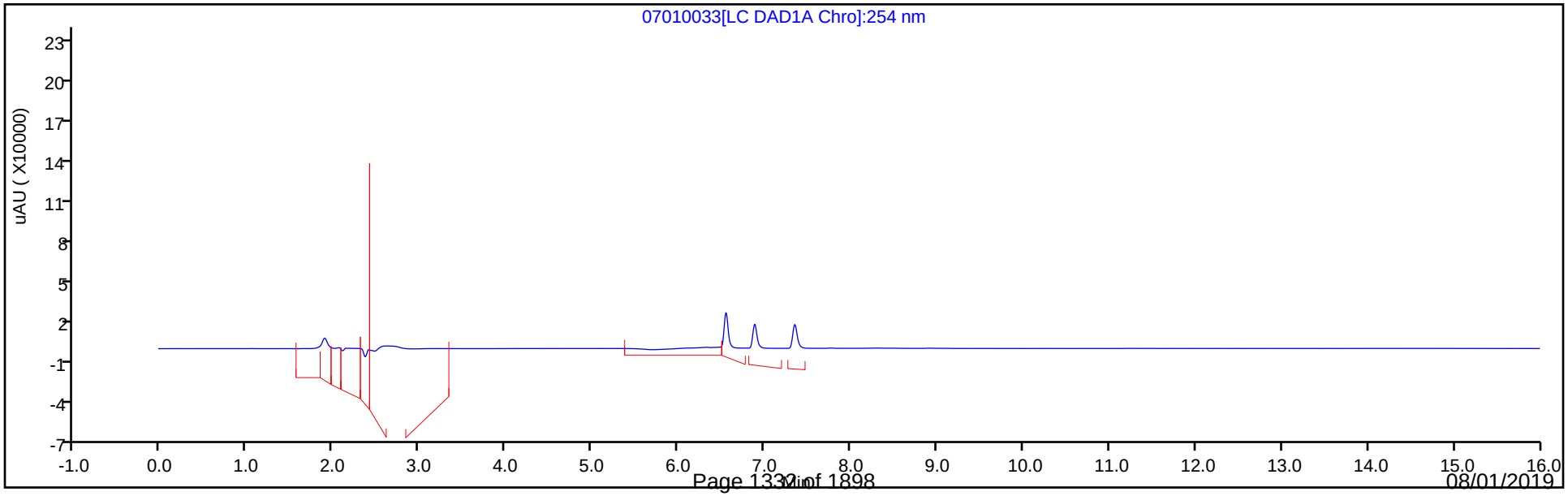
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D

Injection Date:	02-Jul-2019 00:41:04	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	ICV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

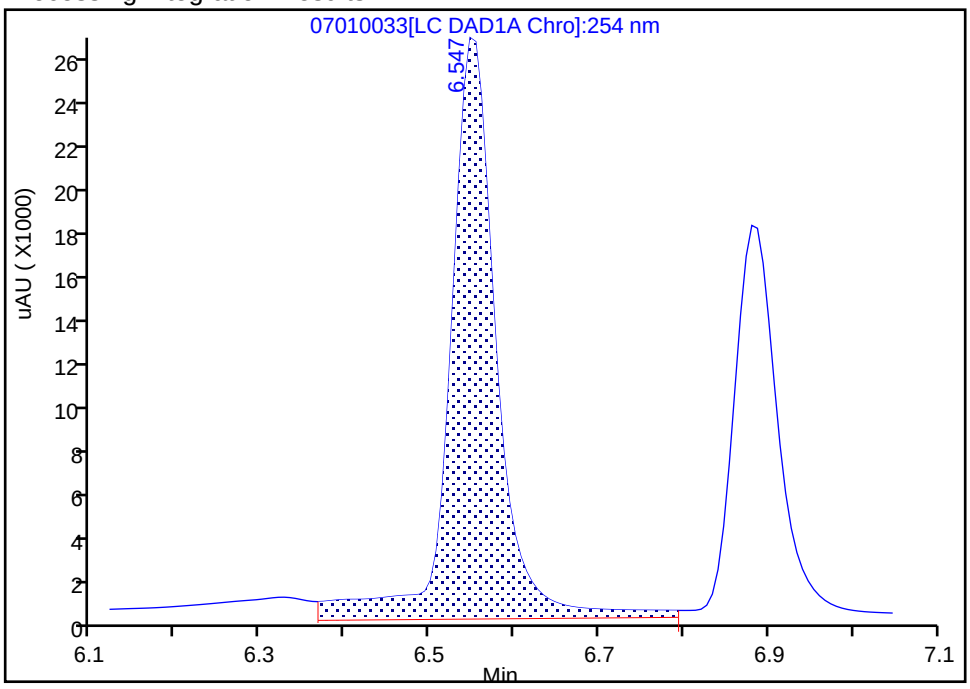
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D				
Injection Date:	02-Jul-2019 00:41:04	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

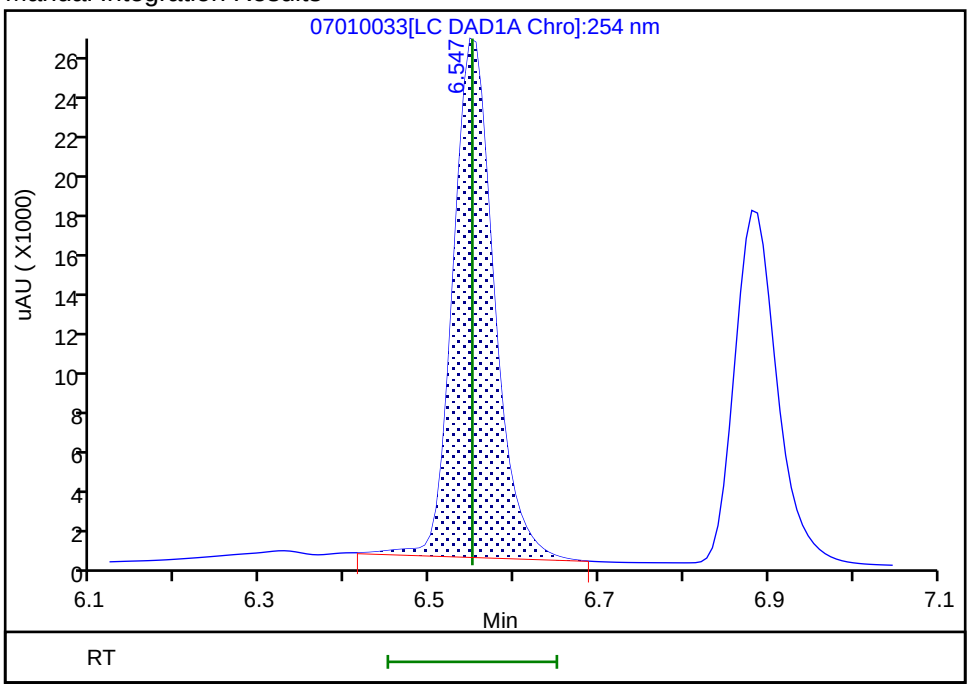
Processing Integration Results

RT: 6.55
Area: 101055
Amount: 0.470102
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 85740
Amount: 0.398857
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:05:27

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

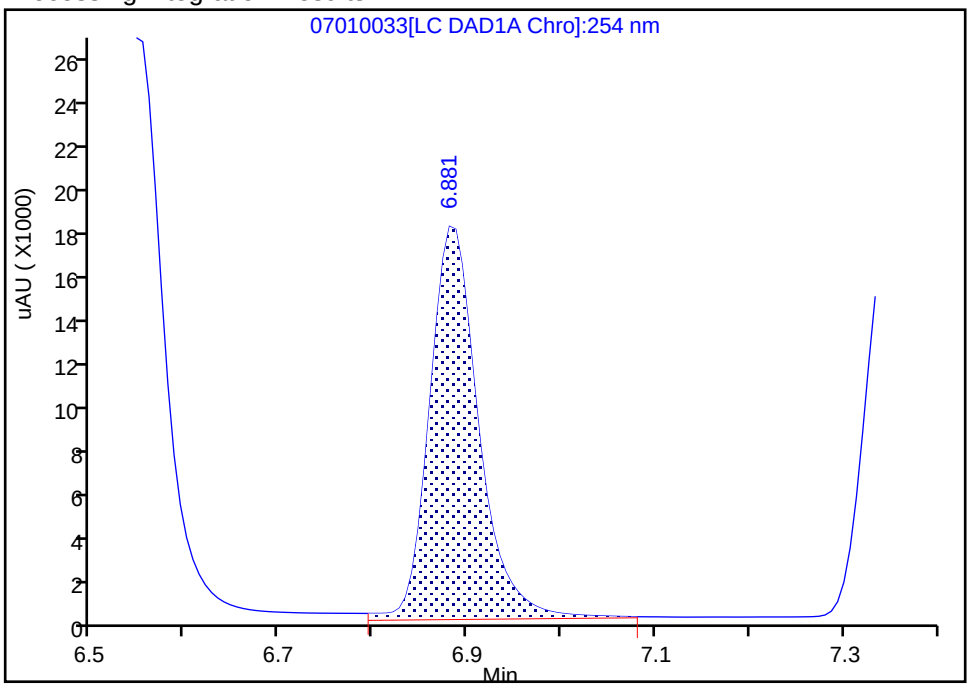
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010033.D				
Injection Date:	02-Jul-2019 00:41:04	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

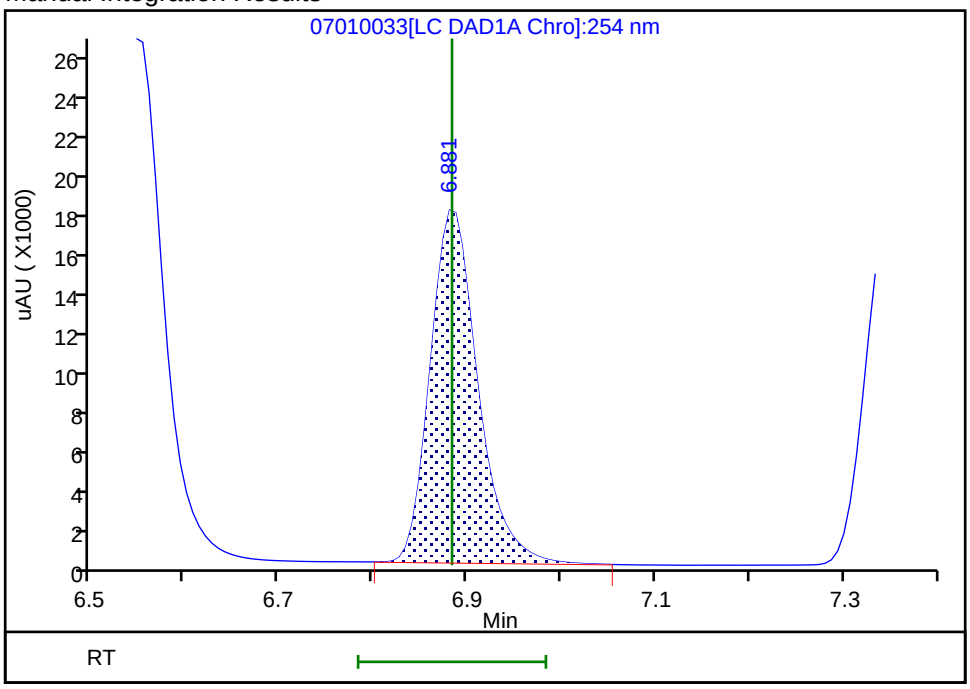
Processing Integration Results

RT: 6.88
Area: 63769
Amount: 0.408446
Amount Units: ug/mL



Manual Integration Results

RT: 6.88
Area: 60910
Amount: 0.390134
Amount Units: ug/mL



Reviewer: fiedlerh, 02-Jul-2019 09:05:30
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464207/42 Calibration Date: 07/11/2019 23:39

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07110042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	94776		258	250	3.2	15.0
RDX	Ave	111120	118572		267	250	6.7	15.0
Picric acid	Ave	90734	93308		257	250	2.8	15.0
1,3,5-Trinitrobenzene	Ave	245077	267424		273	250	9.1	15.0
1,3-Dinitrobenzene	Ave	311175	337075		271	250	8.3	15.0
Nitrobenzene	Ave	198903	208463		263	251	4.8	15.0
Tetryl	Ave	161957	170620		263	250	5.3	15.0
Nitroglycerin	Ave	71108	78829		2770	2500	10.9	15.0
2,4,6-Trinitrotoluene	Ave	227277	243382		269	251	7.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	177464		267	251	6.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	220881		270	251	7.6	15.0
2,6-Dinitrotoluene	Ave	159284	171350		270	251	7.6	15.0
2,4-Dinitrotoluene	Ave	300447	328275		274	251	9.3	15.0
2-Nitrotoluene	Ave	129784	135852		262	251	4.7	15.0
4-Nitrotoluene	Ave	110255	117625		268	251	6.7	15.0
3-Nitrotoluene	Ave	145122	153916		266	251	6.1	15.0
PETN	Ave	74289	83500		2810	2500	12.4	15.0
1,2-Dinitrobenzene	Ave	139328	152688		274	250	9.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464207/42 Calibration Date: 07/11/2019 23:39

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07110042.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.70	6.54	6.84
RDX	7.79	7.65	7.95
Picric acid	8.19	8.05	8.35
1,3,5-Trinitrobenzene	8.92	8.77	9.07
1,3-Dinitrobenzene	9.57	9.43	9.73
Nitrobenzene	9.96	9.82	10.12
Tetryl	10.29	10.14	10.44
Nitroglycerin	10.79	10.64	10.94
2,4,6-Trinitrotoluene	11.25	11.16	11.36
4-Amino-2,6-dinitrotoluene	11.45	11.35	11.55
2-Amino-4,6-dinitrotoluene	11.75	11.64	11.84
2,6-Dinitrotoluene	11.88	11.78	11.98
2,4-Dinitrotoluene	12.08	11.98	12.18
2-Nitrotoluene	12.93	12.78	13.08
4-Nitrotoluene	13.38	13.22	13.52
3-Nitrotoluene	13.99	13.83	14.13
PETN	15.10	14.95	15.25
1,2-Dinitrobenzene	8.75	8.61	8.91

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110042.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 11-Jul-2019 23:39:06 ALS Bottle#: 7 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0083617-042
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:26 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:58:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.695	6.692	0.003	23694	0.2500	0.2580	M
7 RDX	1	7.788	7.799	-0.011	29643	0.2500	0.2668	
8 2,4,6-Trinitrophenol	1	8.188	8.199	-0.011	23327	0.2500	0.2571	
$ 9 1,2-Dinitrobenzene	1	8.748	8.759	-0.011	38172	0.2500	0.2740	
10 1,3,5-Trinitrobenzene	1	8.915	8.919	-0.004	66856	0.2500	0.2728	
11 1,3-Dinitrobenzene	1	9.574	9.578	-0.004	84353	0.2503	0.2711	
12 Nitrobenzene	1	9.961	9.965	-0.004	52220	0.2505	0.2625	
14 Tetryl	1	10.288	10.285	0.003	42655	0.2500	0.2634	M
15 Nitroglycerin	2	10.794	10.792	0.002	197073	2.50	2.77	
16 2,4,6-Trinitrotoluene	1	11.254	11.258	-0.004	61089	0.2510	0.2688	
17 4-Amino-2,6-dinitrotoluene	1	11.454	11.445	0.009	44499	0.2508	0.2675	
18 2-Amino-4,6-dinitrotoluene	1	11.748	11.738	0.010	55386	0.2508	0.2699	
19 2,6-Dinitrotoluene	1	11.881	11.878	0.003	42966	0.2508	0.2697	
20 2,4-Dinitrotoluene	1	12.081	12.078	0.003	82233	0.2505	0.2737	
21 o-Nitrotoluene	1	12.928	12.925	0.003	34065	0.2508	0.2625	
22 p-Nitrotoluene	1	13.381	13.372	0.009	29524	0.2510	0.2678	
23 m-Nitrotoluene	1	13.988	13.978	0.010	38633	0.2510	0.2662	
24 PETN	2	15.101	15.098	0.003	208750	2.50	2.81	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

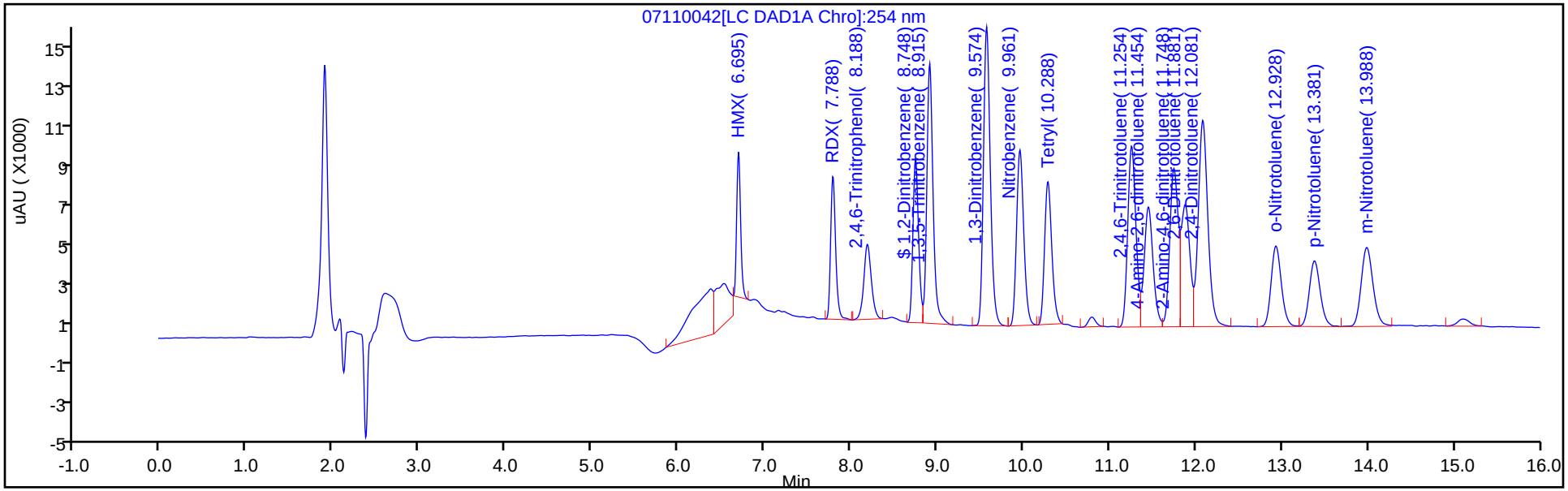
Report Date: 12-Jul-2019 09:20:27 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

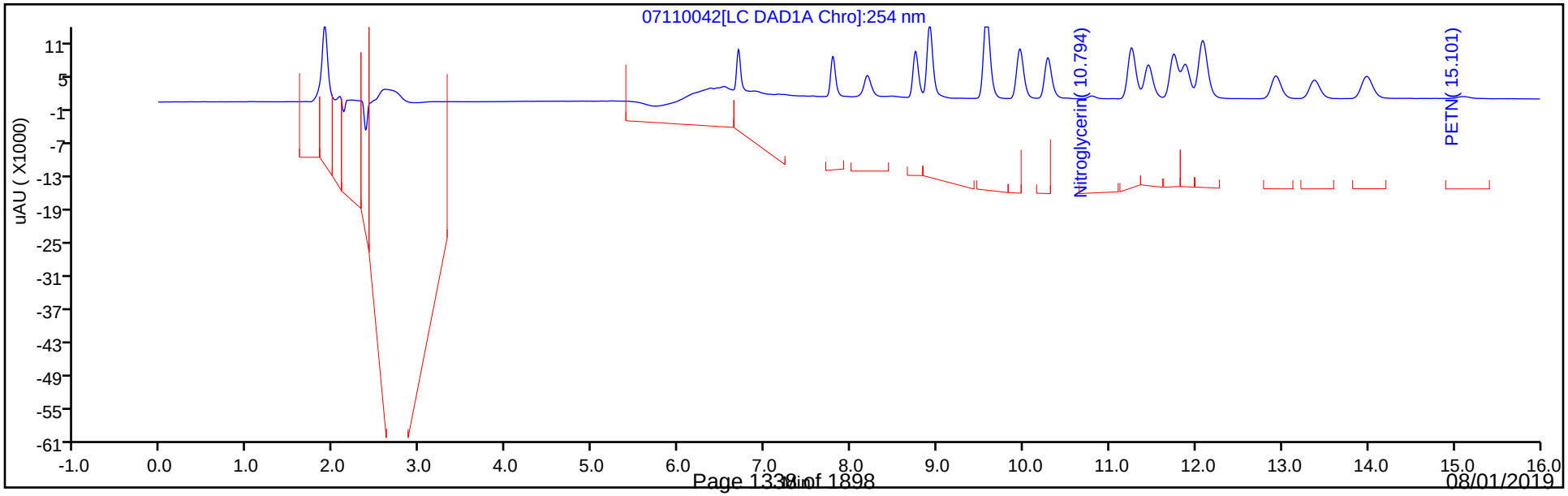
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110042.D

Injection Date:	11-Jul-2019 23:39:06	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV INT			Worklist Smp#:	42
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

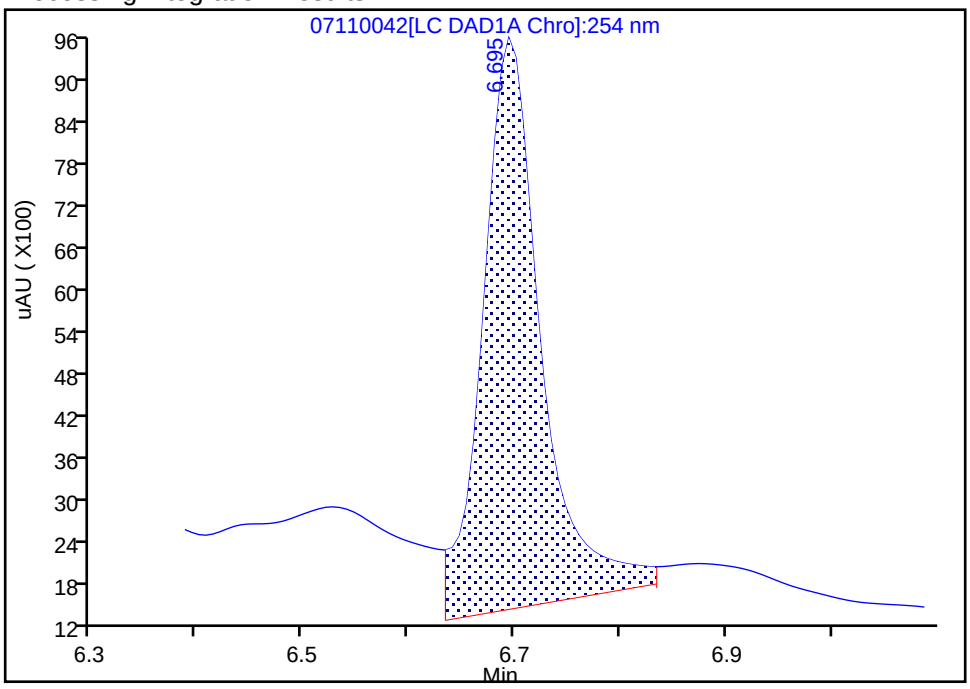
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110042.D				
Injection Date:	11-Jul-2019 23:39:06	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	7	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

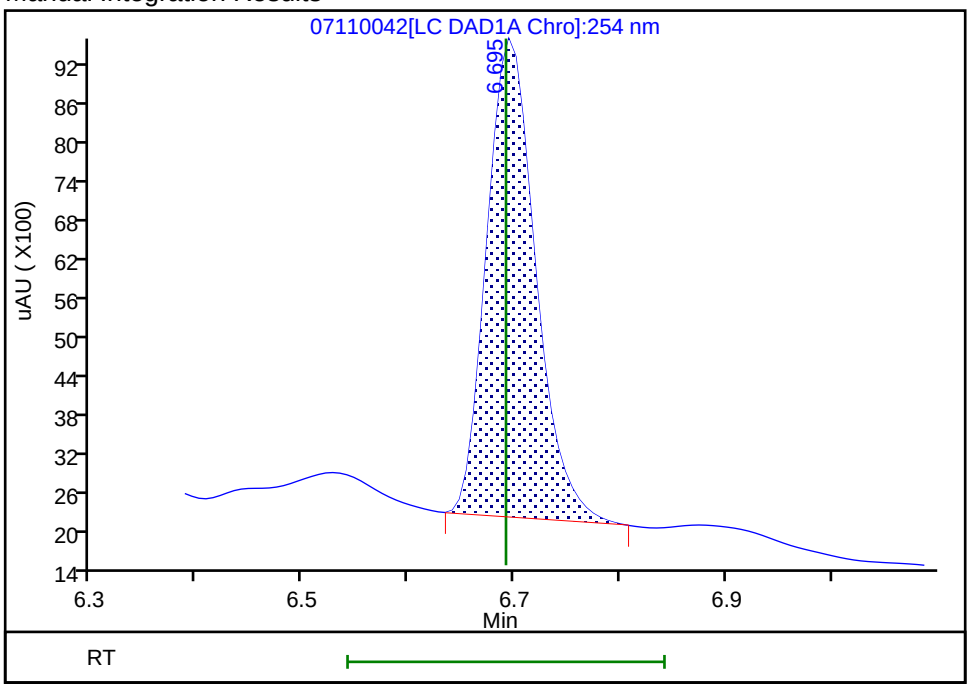
Processing Integration Results

RT: 6.69
Area: 31226
Amount: 0.340029
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 23694
Amount: 0.258011
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 08:58:14
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

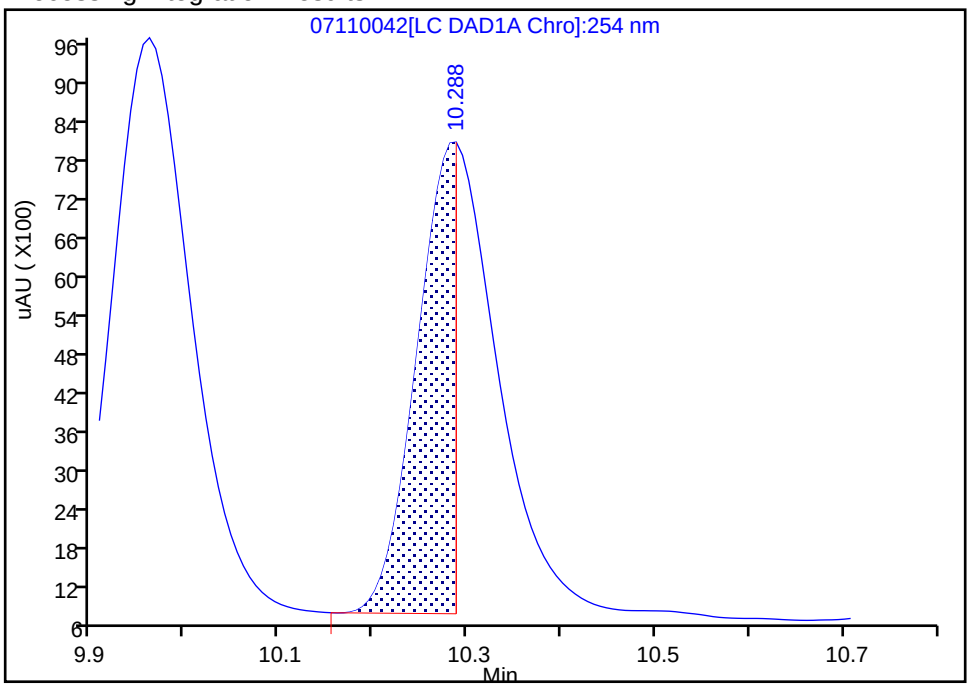
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110042.D				
Injection Date:	11-Jul-2019 23:39:06	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	7	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

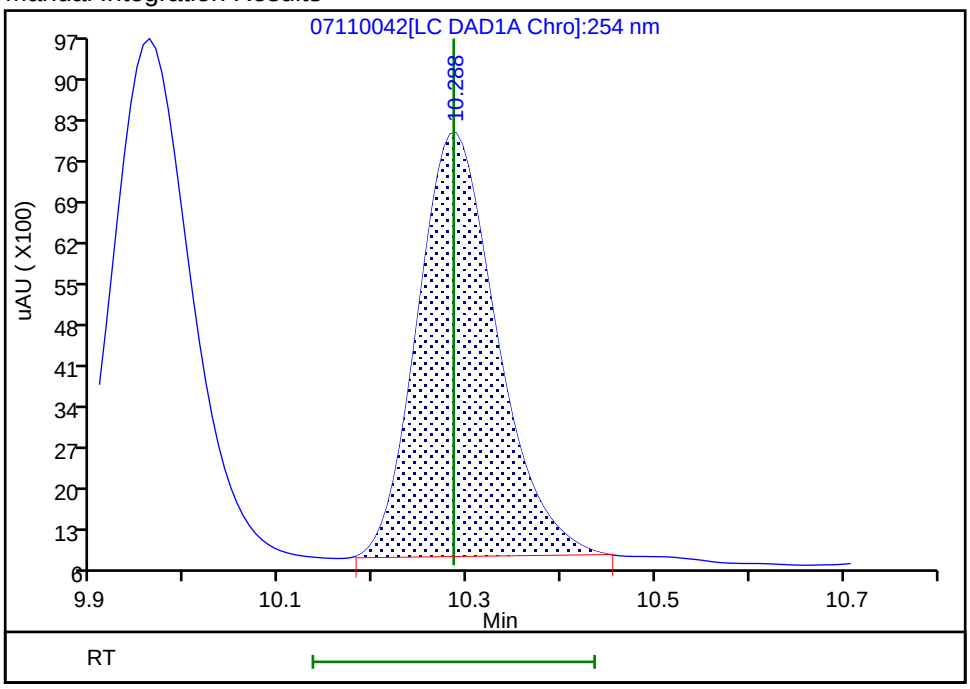
Processing Integration Results

RT: 10.29
Area: 20559
Amount: 0.126941
Amount Units: ug/mL



Manual Integration Results

RT: 10.29
Area: 42655
Amount: 0.263372
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 08:58:07
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464207/44 Calibration Date: 07/12/2019 00:25

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07110044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	218745		255	250	1.8	15.0
DNX	Ave	156126	164759		264	250	5.5	15.0
MNX	Ave	140041	143726		299	292	2.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464207/44 Calibration Date: 07/12/2019 00:25

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07110044.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.60	6.50	6.70
DNX	6.92	6.82	7.02
MNX	7.38	7.23	7.53

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110044.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 12-Jul-2019 00:25:05 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0083617-044
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.598	6.598	0.000	54741	0.2503	0.2547	M
5 DNX	1	6.924	6.924	0.000	41231	0.2503	0.2641	
6 MNX	1	7.378	7.378	0.000	41932	0.2918	0.2994	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

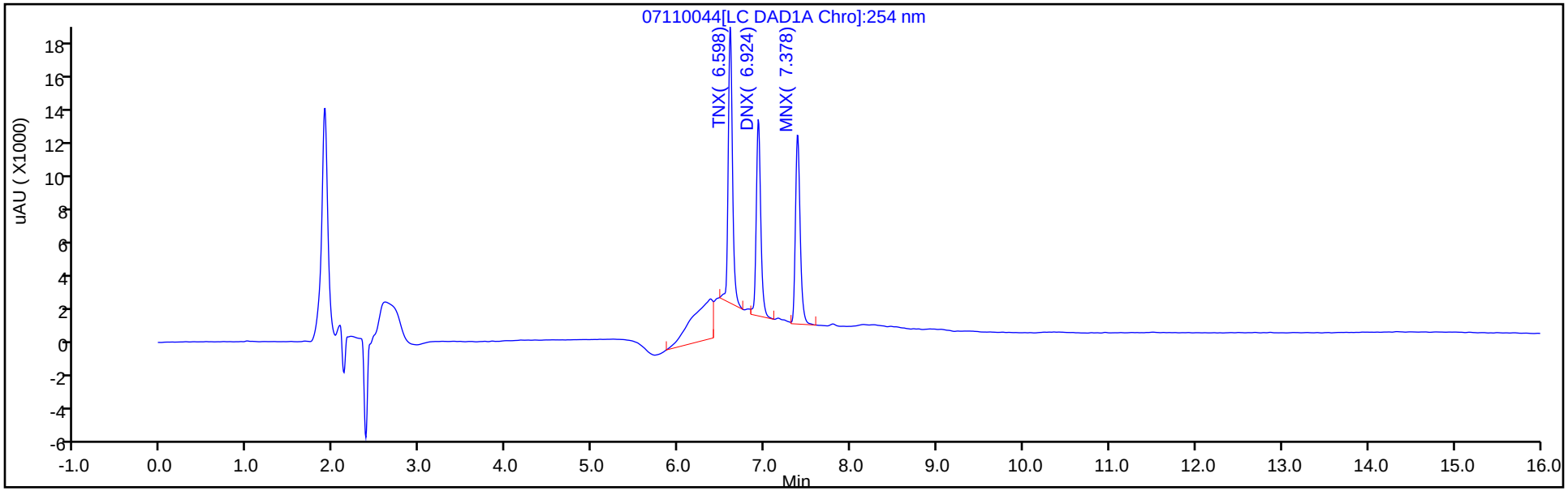
Report Date: 12-Jul-2019 09:20:31 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

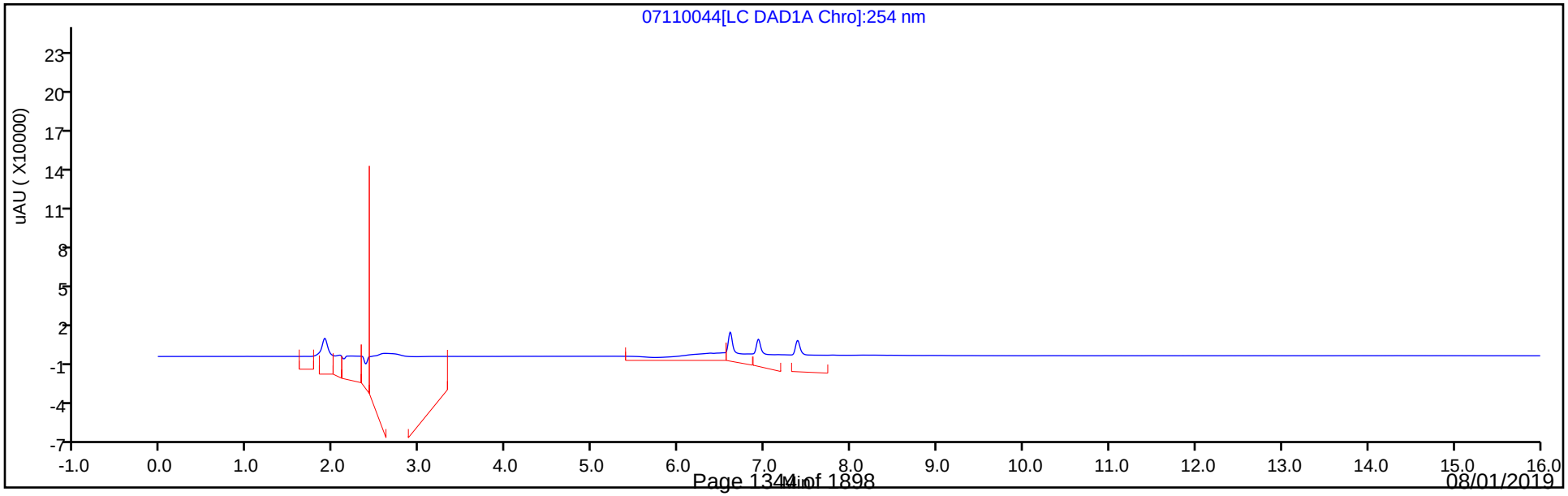
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110044.D

Injection Date:	12-Jul-2019 00:25:05	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV DMT			Worklist Smp#:	44
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

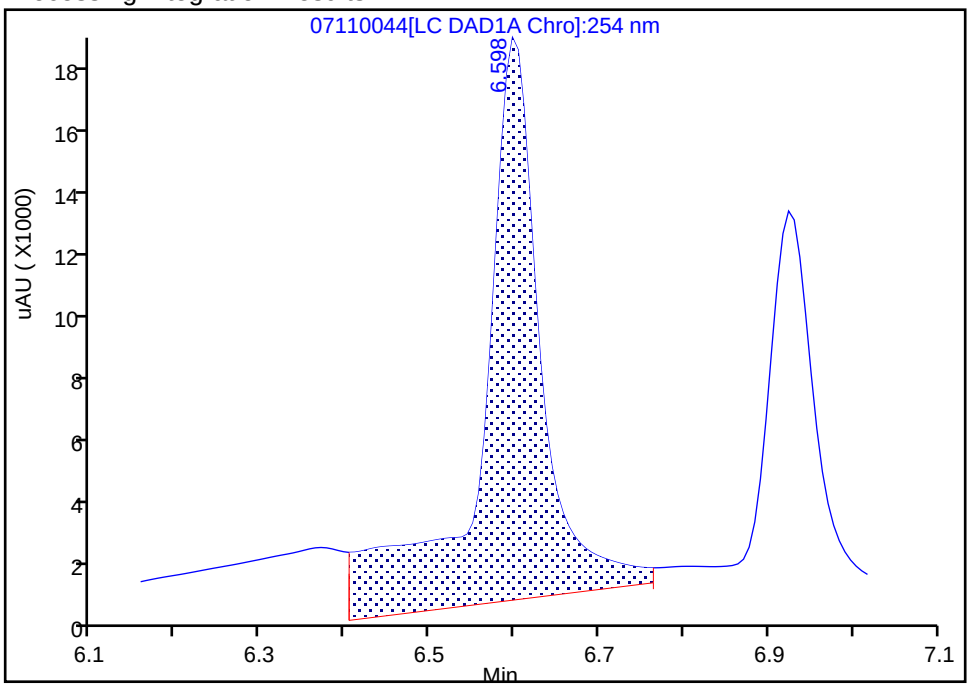
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110044.D				
Injection Date:	12-Jul-2019 00:25:05	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

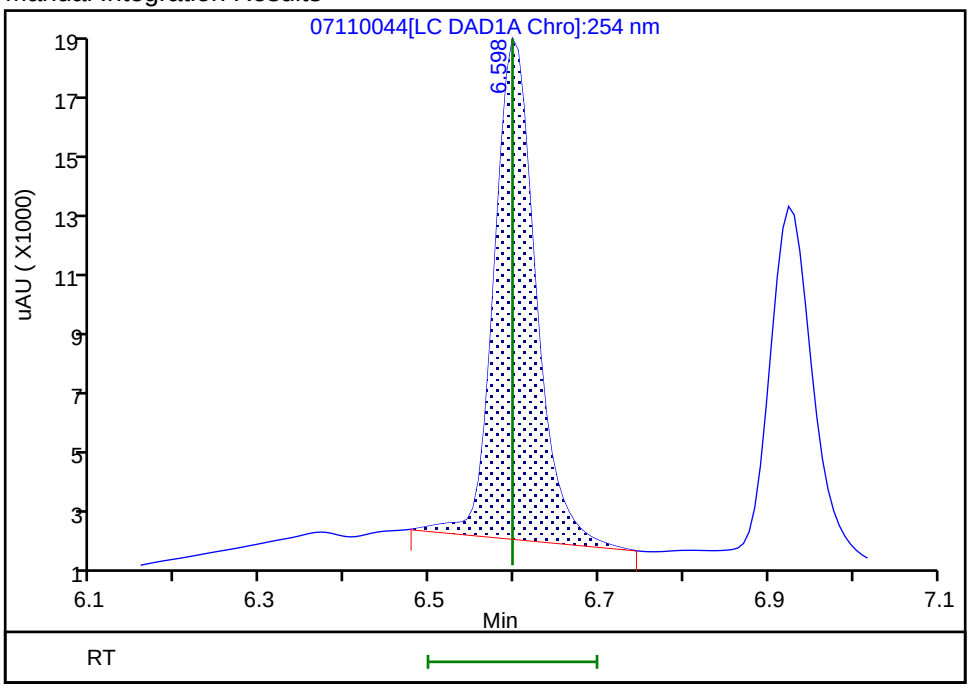
Processing Integration Results

RT: 6.60
Area: 85624
Amount: 0.398318
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 54741
Amount: 0.254652
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 08:59:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464207/55 Calibration Date: 07/12/2019 04:37

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07110055.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	95108		259	250	3.6	15.0
RDX	Ave	111120	118092		266	250	6.3	15.0
Picric acid	Ave	90734	92368		255	250	1.8	15.0
1,3,5-Trinitrobenzene	Ave	245077	267204		273	250	9.0	15.0
1,3-Dinitrobenzene	Ave	311175	338010		272	250	8.6	15.0
Nitrobenzene	Ave	198903	207749		262	251	4.4	15.0
Tetryl	Ave	161957	175436		271	250	8.3	15.0
Nitroglycerin	Ave	71108	79299		2790	2500	11.5	15.0
2,4,6-Trinitrotoluene	Ave	227277	245466		271	251	8.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	176283		266	251	6.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	220175		269	251	7.3	15.0
2,6-Dinitrotoluene	Ave	159284	171537		270	251	7.7	15.0
2,4-Dinitrotoluene	Ave	300447	327980		273	251	9.2	15.0
2-Nitrotoluene	Ave	129784	134213		259	251	3.4	15.0
4-Nitrotoluene	Ave	110255	115514		263	251	4.8	15.0
3-Nitrotoluene	Ave	145122	151649		262	251	4.5	15.0
PETN	Ave	74289	83204		2800	2500	12.0	15.0
1,2-Dinitrobenzene	Ave	139328	152908		274	250	9.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464207/55 Calibration Date: 07/12/2019 04:37

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07110055.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.54	6.84
RDX	7.79	7.65	7.95
Picric acid	8.19	8.05	8.35
1,3,5-Trinitrobenzene	8.91	8.77	9.07
1,3-Dinitrobenzene	9.58	9.43	9.73
Nitrobenzene	9.97	9.82	10.12
Tetryl	10.29	10.14	10.44
Nitroglycerin	10.80	10.64	10.94
2,4,6-Trinitrotoluene	11.27	11.16	11.36
4-Amino-2,6-dinitrotoluene	11.46	11.35	11.55
2-Amino-4,6-dinitrotoluene	11.76	11.64	11.84
2,6-Dinitrotoluene	11.89	11.78	11.98
2,4-Dinitrotoluene	12.09	11.98	12.18
2-Nitrotoluene	12.95	12.78	13.08
4-Nitrotoluene	13.39	13.22	13.52
3-Nitrotoluene	14.00	13.83	14.13
PETN	15.11	14.95	15.25
1,2-Dinitrobenzene	8.75	8.61	8.91

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110055.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 12-Jul-2019 04:37:41 ALS Bottle#: 7 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0083617-055
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:47 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:03:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.693	6.692	0.001	23777	0.2500	0.2589	M
	7 RDX	1	7.786	7.799	-0.013	29523	0.2500	0.2657	
	8 2,4,6-Trinitrophenol	1	8.193	8.199	-0.006	23092	0.2500	0.2545	
$	9 1,2-Dinitrobenzene	1	8.753	8.759	-0.006	38227	0.2500	0.2744	
	10 1,3,5-Trinitrobenzene	1	8.913	8.919	-0.006	66801	0.2500	0.2726	
	11 1,3-Dinitrobenzene	1	9.579	9.578	0.001	84587	0.2503	0.2718	
	12 Nitrobenzene	1	9.966	9.965	0.001	52041	0.2505	0.2616	
	14 Tetryl	1	10.293	10.285	0.008	43859	0.2500	0.2708	
	15 Nitroglycerin	2	10.799	10.792	0.007	198247	2.50	2.79	
	16 2,4,6-Trinitrotoluene	1	11.266	11.258	0.008	61612	0.2510	0.2711	
	17 4-Amino-2,6-dinitrotoluene	1	11.459	11.445	0.014	44203	0.2508	0.2657	
	18 2-Amino-4,6-dinitrotoluene	1	11.759	11.738	0.021	55209	0.2508	0.2690	M
	19 2,6-Dinitrotoluene	1	11.886	11.878	0.008	43013	0.2508	0.2700	M
	20 2,4-Dinitrotoluene	1	12.093	12.078	0.015	82159	0.2505	0.2735	
	21 o-Nitrotoluene	1	12.946	12.925	0.021	33654	0.2508	0.2593	
	22 p-Nitrotoluene	1	13.393	13.372	0.021	28994	0.2510	0.2630	
	23 m-Nitrotoluene	1	13.999	13.978	0.021	38064	0.2510	0.2623	
	24 PETN	2	15.113	15.098	0.015	208009	2.50	2.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

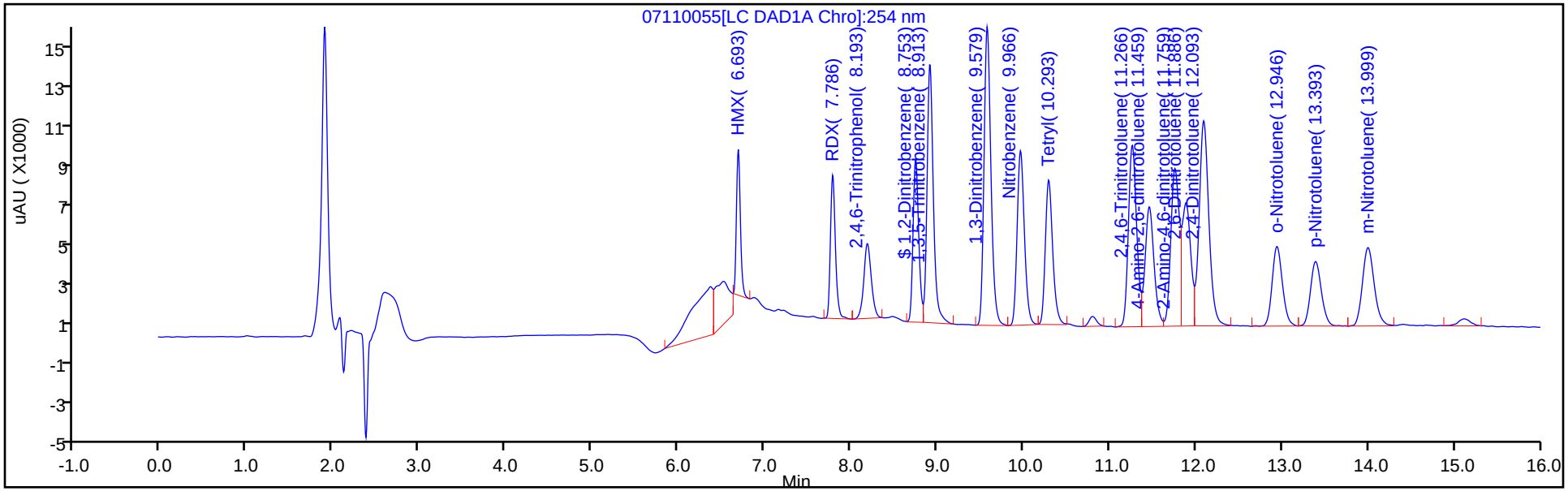
Report Date: 12-Jul-2019 09:20:48 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

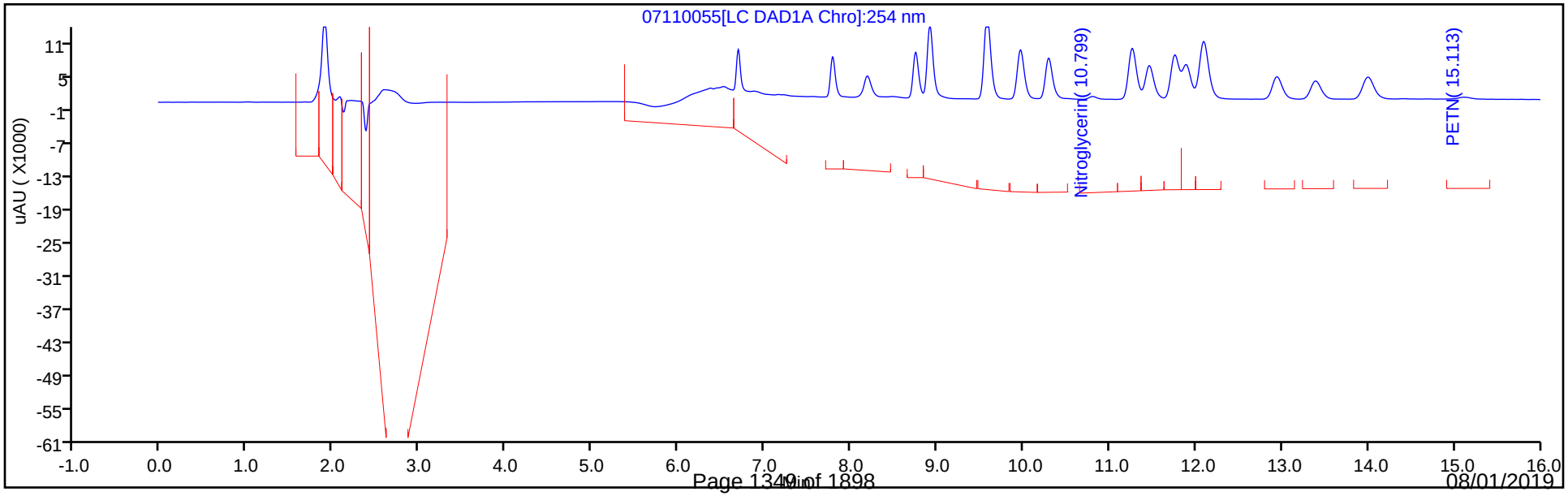
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110055.D

Injection Date:	12-Jul-2019 04:37:41	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV INT			Worklist Smp#:	55
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

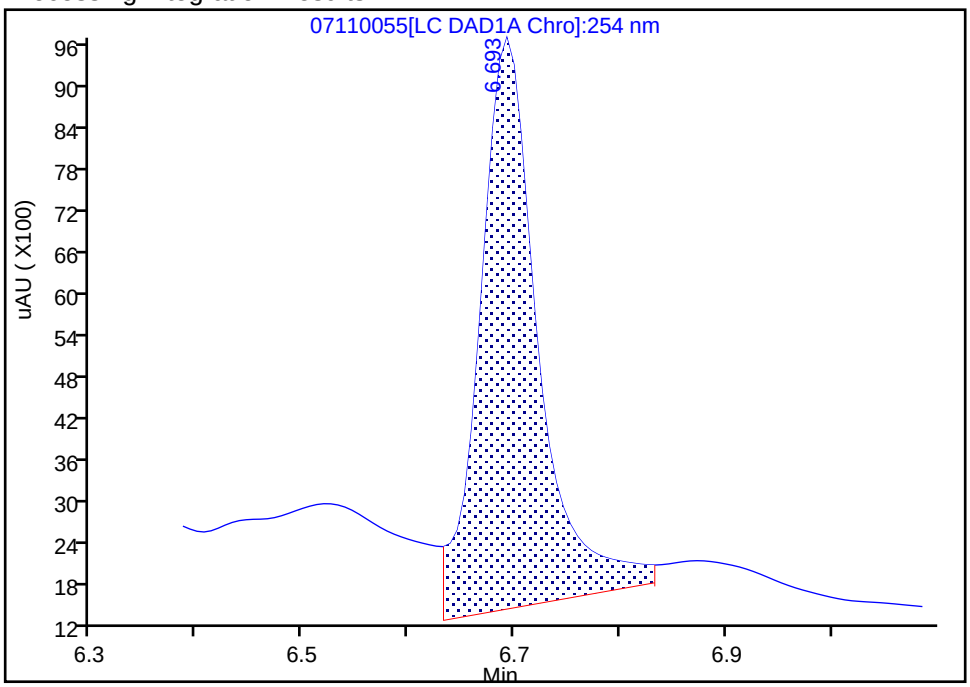
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110055.D				
Injection Date:	12-Jul-2019 04:37:41	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	7	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

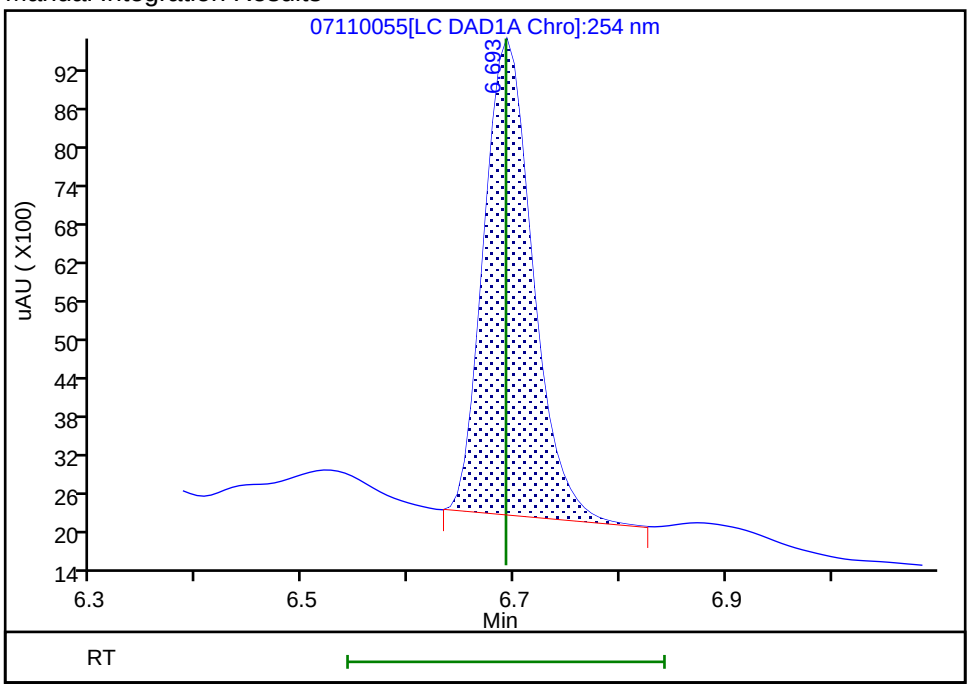
Processing Integration Results

RT: 6.69
Area: 31574
Amount: 0.343819
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 23777
Amount: 0.258915
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:03:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

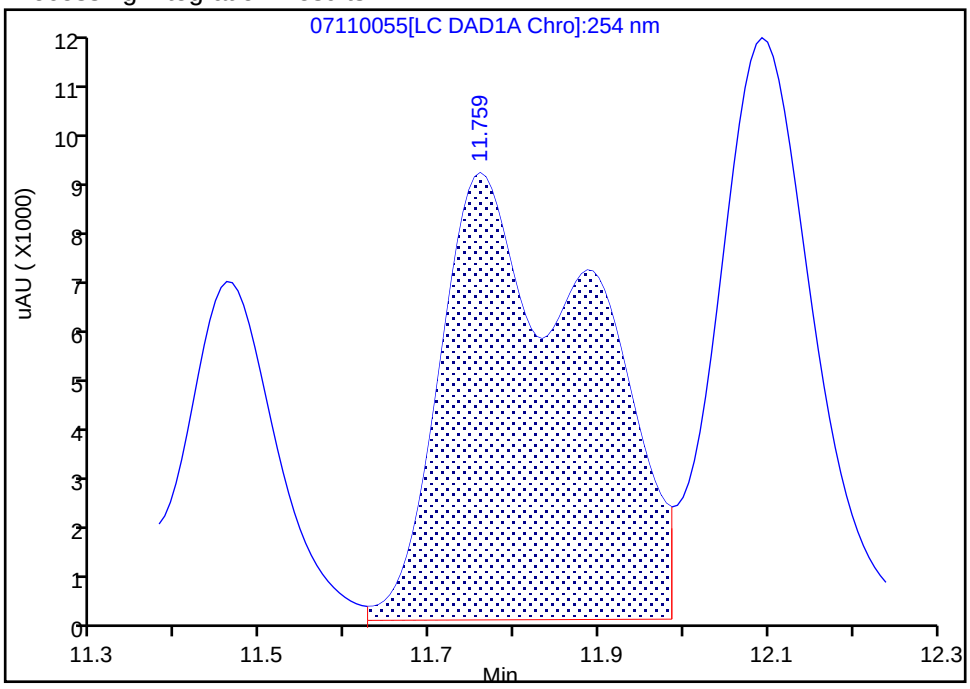
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110055.D				
Injection Date:	12-Jul-2019 04:37:41	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	7	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

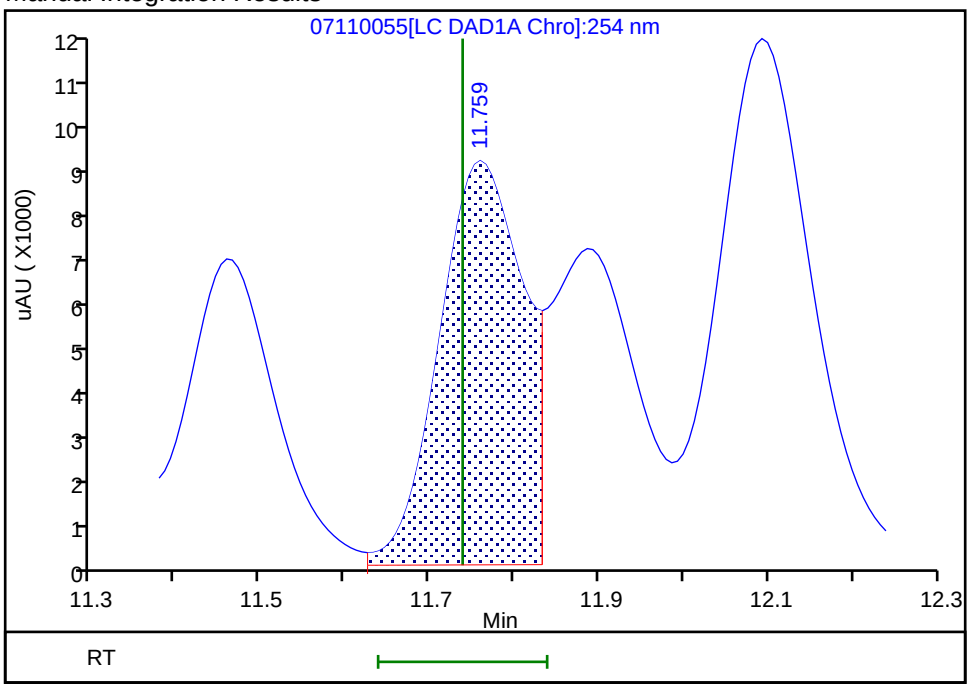
Processing Integration Results

RT: 11.76
Area: 98216
Amount: 0.478551
Amount Units: ug/mL



Manual Integration Results

RT: 11.76
Area: 55209
Amount: 0.269002
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:03:29
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464207/57 Calibration Date: 07/12/2019 05:23

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07110057.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	219269		255	250	2.0	15.0
DNX	Ave	156126	154885		248	250	-0.8	15.0
MNX	Ave	140041	143222		298	292	2.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464207/57 Calibration Date: 07/12/2019 05:23

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07110057.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.60	6.50	6.70
DNX	6.93	6.82	7.02
MNX	7.38	7.23	7.53

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110057.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 12-Jul-2019 05:23:38 ALS Bottle#: 44 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0083617-057
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:50 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:11:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.598	6.598	0.000	54872	0.2503	0.2553	M
5 DNX	1	6.925	6.924	0.001	38760	0.2503	0.2483	M
6 MNX	1	7.378	7.378	0.000	41785	0.2918	0.2984	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

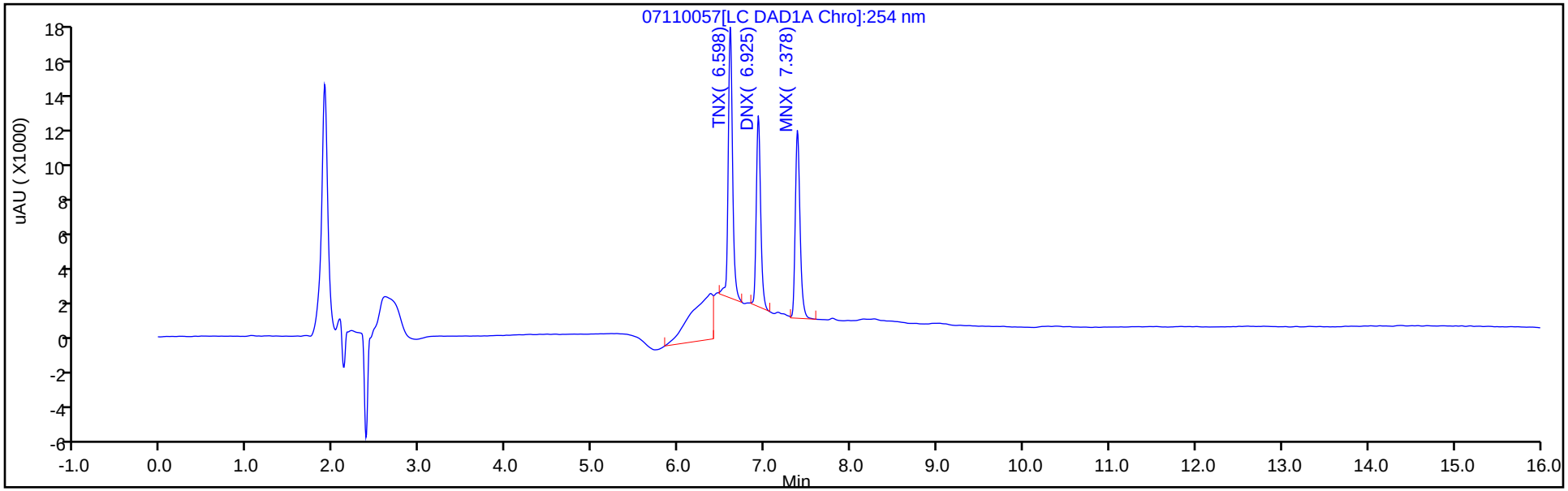
Report Date: 12-Jul-2019 09:20:50 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

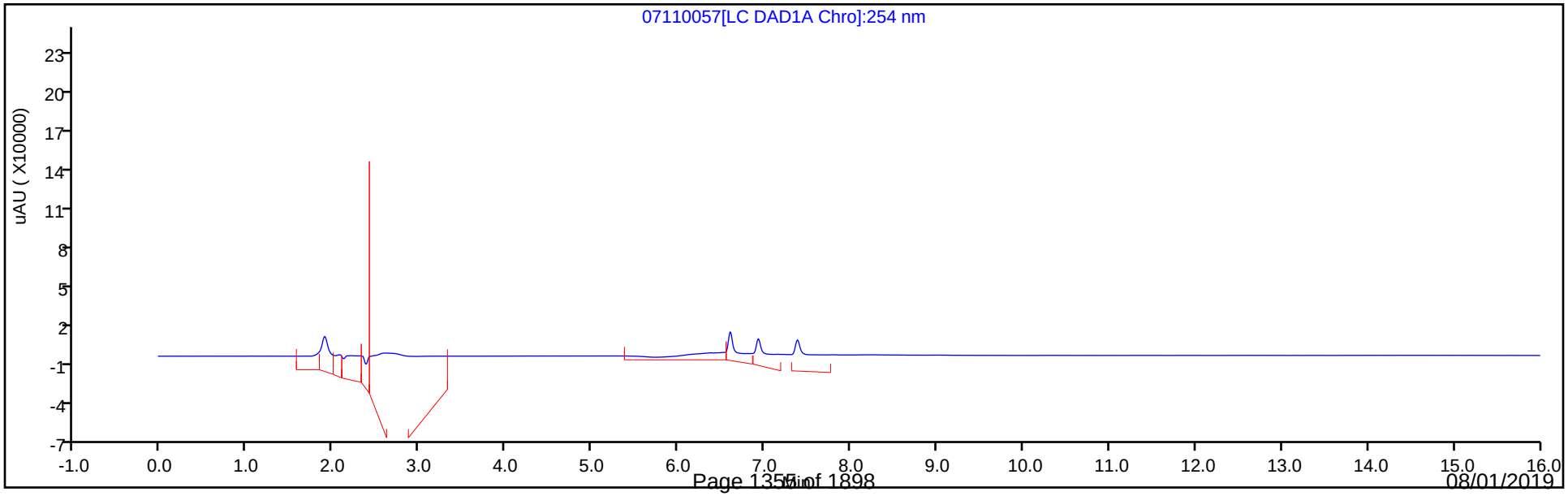
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110057.D

Injection Date:	12-Jul-2019 05:23:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV DMT			Worklist Smp#:	57
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

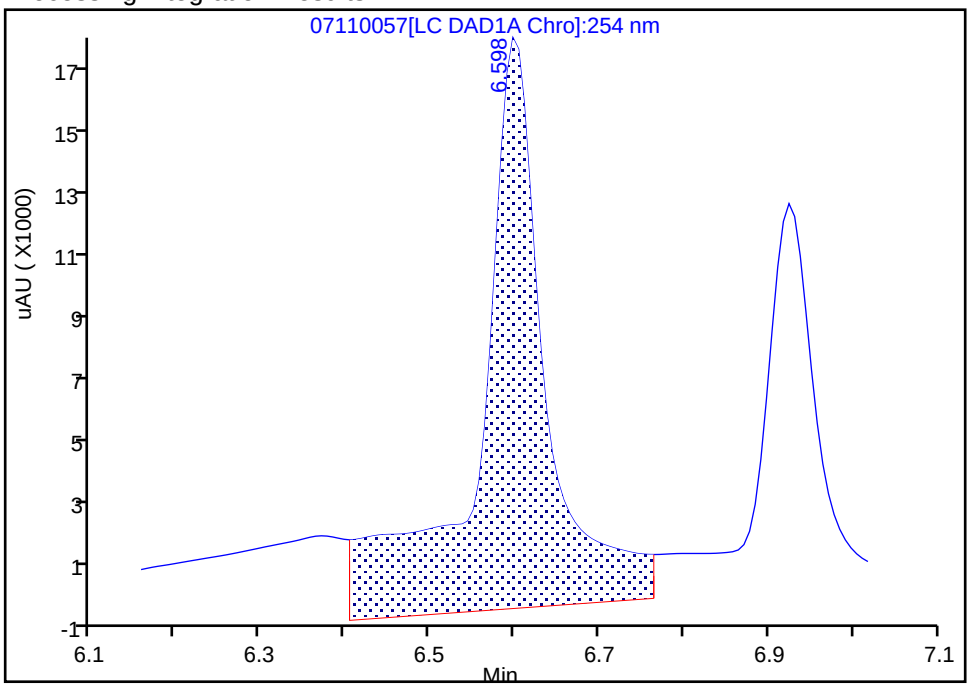
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110057.D				
Injection Date:	12-Jul-2019 05:23:38	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	44	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

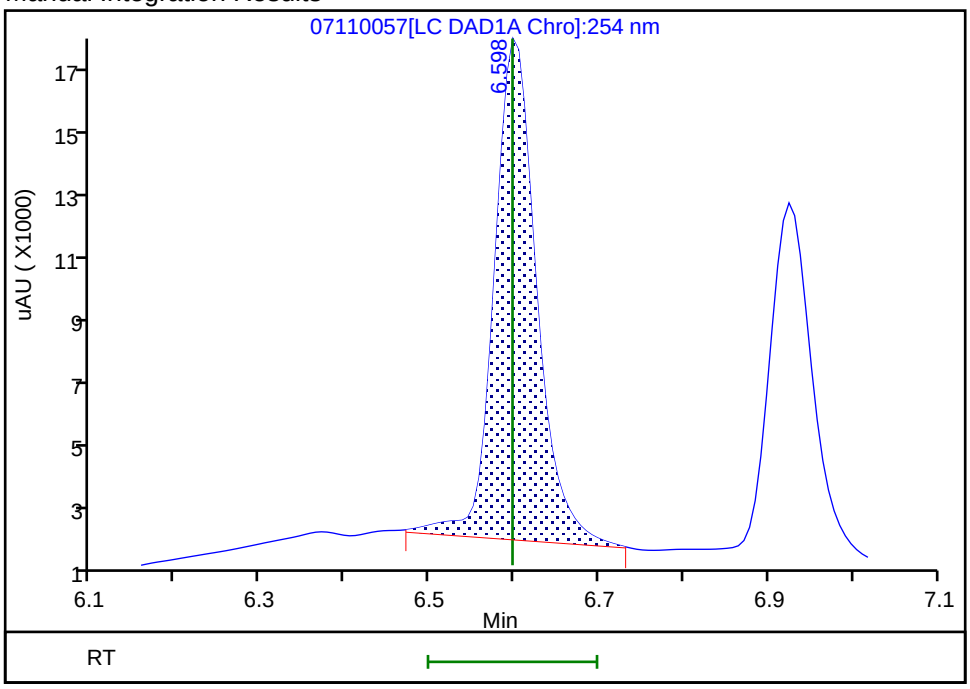
Processing Integration Results

RT: 6.60
Area: 98808
Amount: 0.459649
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 54872
Amount: 0.255261
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:10:55
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

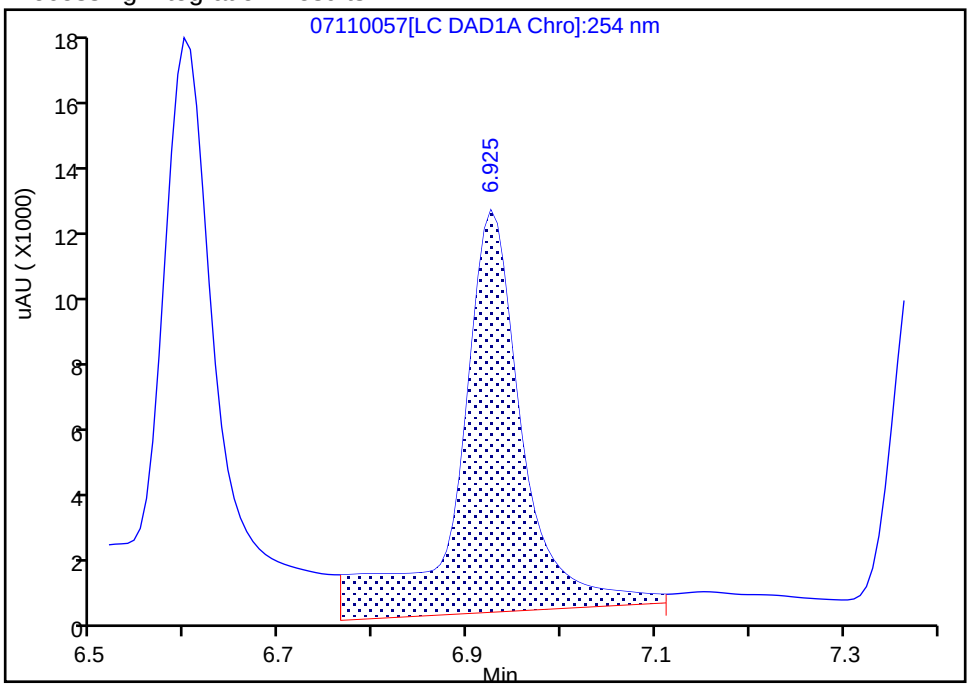
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110057.D
Injection Date: 12-Jul-2019 05:23:38 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: hkf ALS Bottle#: 44 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

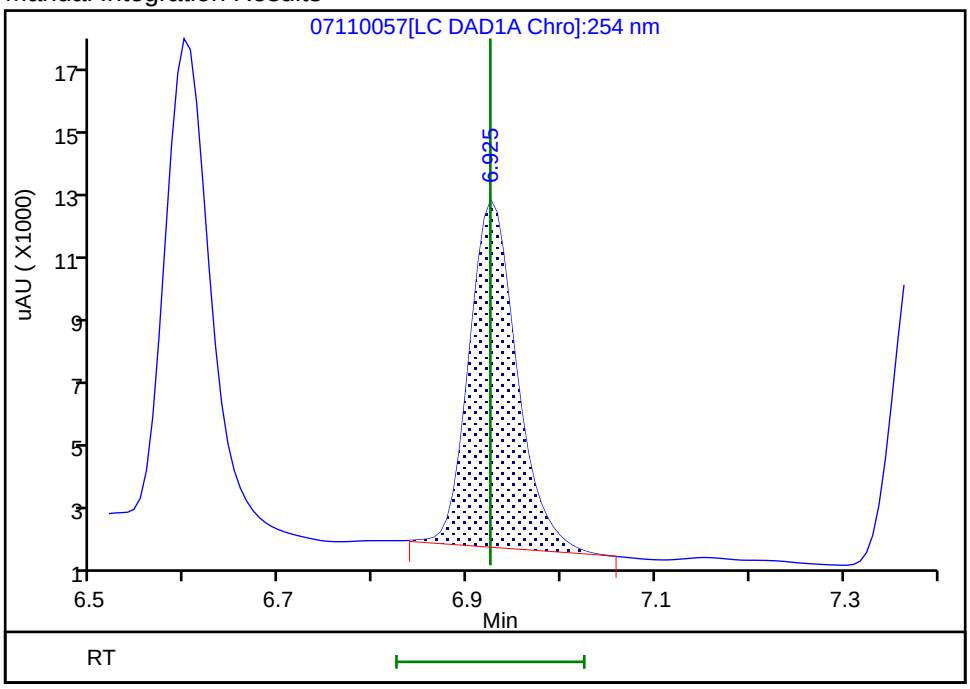
Processing Integration Results

RT: 6.92
Area: 56958
Amount: 0.364821
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 38760
Amount: 0.248261
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 09:10:59
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464537/7 Calibration Date: 07/15/2019 12:18

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07150007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	93032		253	250	1.3	15.0
RDX	Ave	111120	111840		252	250	0.6	15.0
Picric acid	Ave	90734	88836		245	250	-2.1	15.0
1,3,5-Trinitrobenzene	Ave	245077	257928		263	250	5.2	15.0
1,3-Dinitrobenzene	Ave	311175	321287		258	250	3.2	15.0
Nitrobenzene	Ave	198903	195609		246	251	-1.7	15.0
Tetryl	Ave	161957	167172		258	250	3.2	15.0
Nitroglycerin	Ave	71108	75437		2650	2500	6.1	15.0
2,4,6-Trinitrotoluene	Ave	227277	231096		255	251	1.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	171486		258	251	3.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	215143		263	251	4.8	15.0
2,6-Dinitrotoluene	Ave	159284	159314		251	251	0.0	15.0
2,4-Dinitrotoluene	Ave	300447	312279		260	251	3.9	15.0
2-Nitrotoluene	Ave	129784	127155		246	251	-2.0	15.0
4-Nitrotoluene	Ave	110255	109247		249	251	-0.9	15.0
3-Nitrotoluene	Ave	145122	143048		247	251	-1.4	15.0
PETN	Ave	74289	79890		2690	2500	7.5	15.0
1,2-Dinitrobenzene	Ave	139328	146352		263	250	5.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464537/7 Calibration Date: 07/15/2019 12:18

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07150007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.77	7.62	7.92
Picric acid	8.15	8.00	8.30
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.95	9.80	10.10
Tetryl	10.27	10.12	10.42
Nitroglycerin	10.78	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.14	11.34
4-Amino-2,6-dinitrotoluene	11.43	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.72	11.62	11.82
2,6-Dinitrotoluene	11.86	11.76	11.96
2,4-Dinitrotoluene	12.06	11.96	12.16
2-Nitrotoluene	12.91	12.76	13.06
4-Nitrotoluene	13.35	13.20	13.50
3-Nitrotoluene	13.96	13.81	14.11
PETN	15.08	14.93	15.23
1,2-Dinitrobenzene	8.73	8.58	8.88

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jul-2019 12:18:20 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0083692-007
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:53:54 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 16:41:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.680	6.680	0.000	23258	0.2500	0.2533	M
7 RDX	1	7.774	7.774	0.000	27960	0.2500	0.2516	
8 2,4,6-Trinitrophenol	1	8.147	8.147	0.000	22209	0.2500	0.2448	
$ 9 1,2-Dinitrobenzene	1	8.734	8.734	0.000	36588	0.2500	0.2626	
10 1,3,5-Trinitrobenzene	1	8.900	8.900	0.000	64482	0.2500	0.2631	
11 1,3-Dinitrobenzene	1	9.560	9.560	0.000	80402	0.2503	0.2584	
12 Nitrobenzene	1	9.947	9.947	0.000	49000	0.2505	0.2464	
14 Tetryl	1	10.267	10.267	0.000	41793	0.2500	0.2580	
15 Nitroglycerin	2	10.780	10.780	0.000	188592	2.50	2.65	
16 2,4,6-Trinitrotoluene	1	11.240	11.240	0.000	58005	0.2510	0.2552	
17 4-Amino-2,6-dinitrotoluene	1	11.427	11.427	0.000	43000	0.2508	0.2584	
18 2-Amino-4,6-dinitrotoluene	1	11.720	11.720	0.000	53947	0.2508	0.2629	
19 2,6-Dinitrotoluene	1	11.860	11.860	0.000	39948	0.2508	0.2508	
20 2,4-Dinitrotoluene	1	12.060	12.060	0.000	78226	0.2505	0.2604	
21 o-Nitrotoluene	1	12.907	12.907	0.000	31884	0.2508	0.2457	
22 p-Nitrotoluene	1	13.354	13.354	0.000	27421	0.2510	0.2487	
23 m-Nitrotoluene	1	13.960	13.960	0.000	35905	0.2510	0.2474	
24 PETN	2	15.080	15.080	0.000	199724	2.50	2.69	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

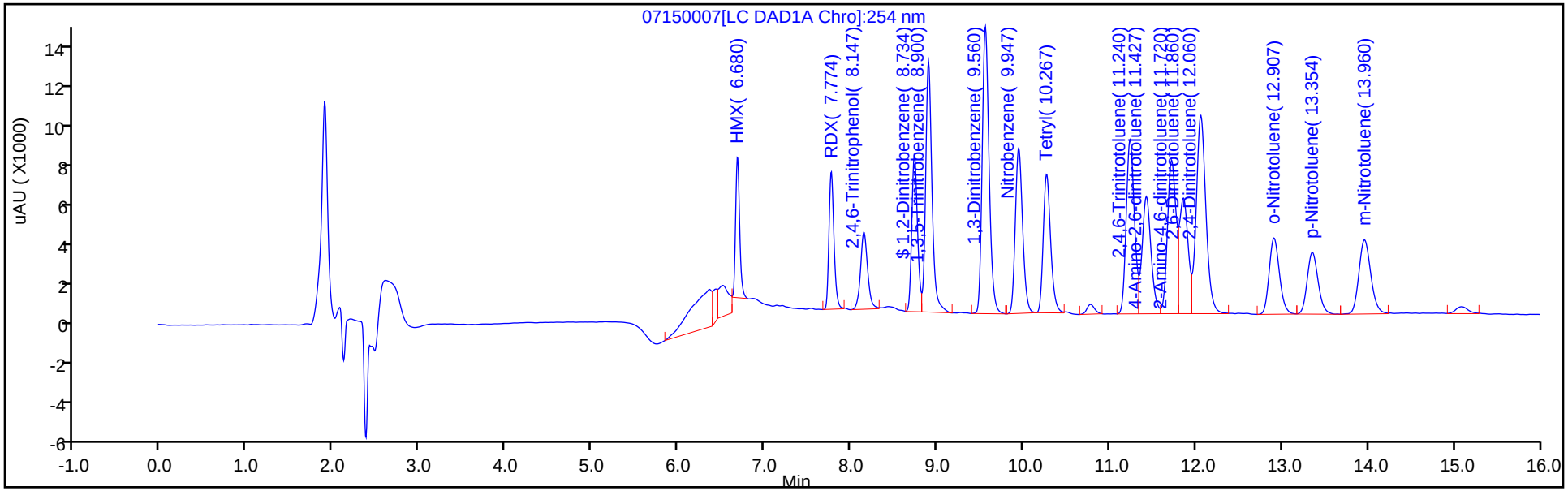
Report Date: 15-Jul-2019 17:53:55 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

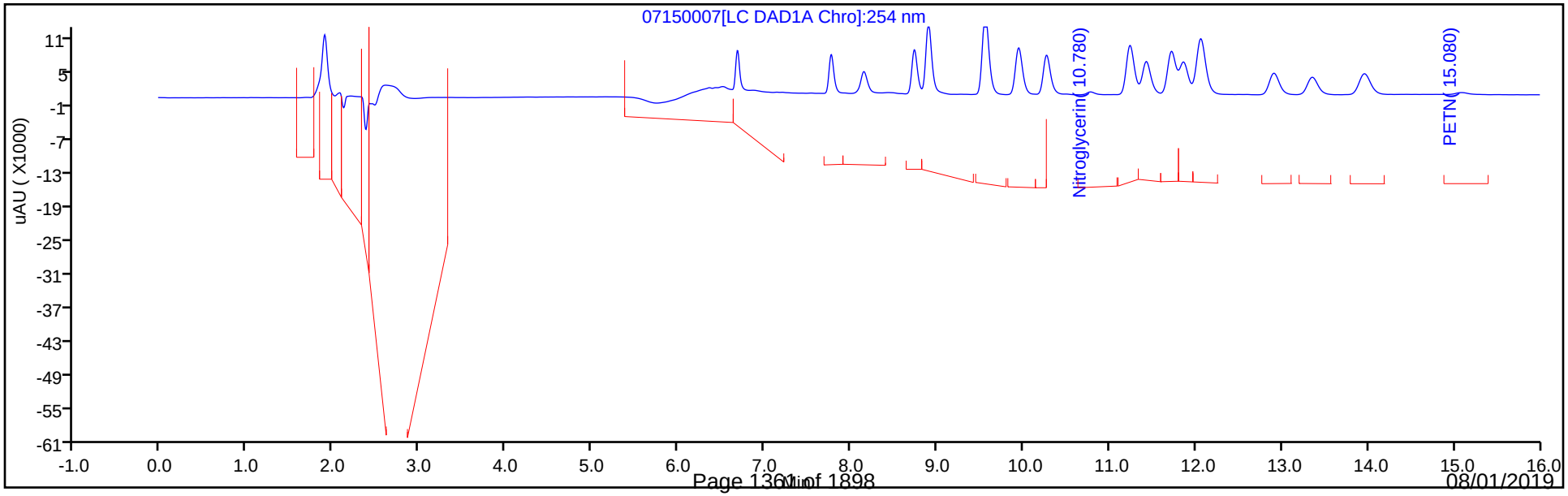
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150007.D

Injection Date:	15-Jul-2019 12:18:20	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV INT			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

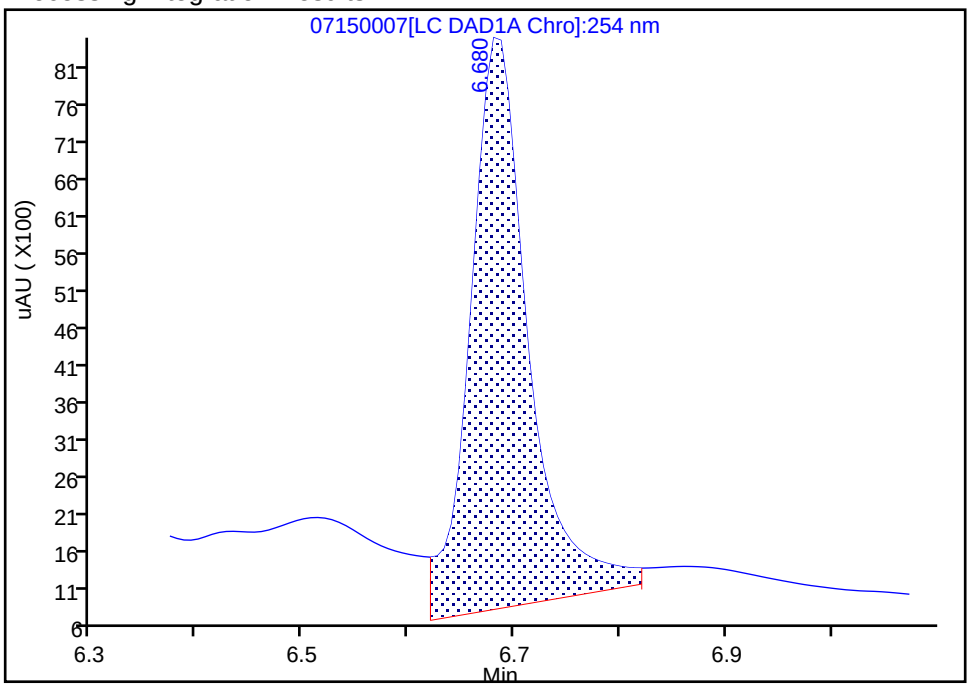
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150007.D				
Injection Date:	15-Jul-2019 12:18:20	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

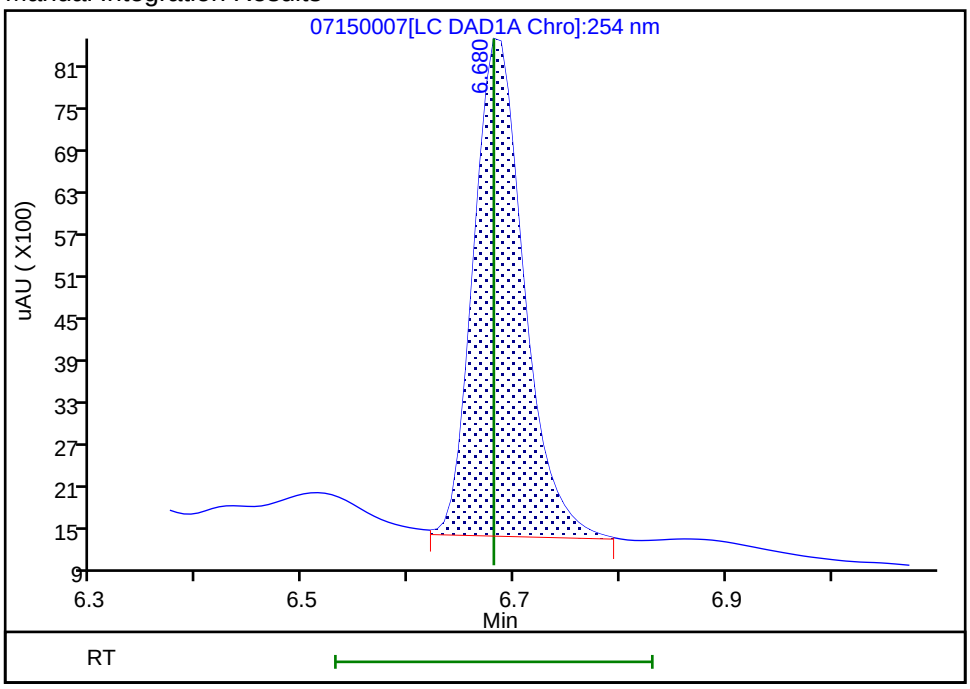
Processing Integration Results

RT: 6.68
Area: 29303
Amount: 0.319089
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 23258
Amount: 0.253263
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:41:02

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464537/9 Calibration Date: 07/15/2019 13:04

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07150009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	231640		270	250	7.8	15.0
DNX	Ave	156126	174230		279	250	11.6	15.0
MNX	Ave	140041	159304		332	292	13.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464537/9 Calibration Date: 07/15/2019 13:04

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07150009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.37	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150009.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jul-2019 13:04:15 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0083692-009
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 18:44:00 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 18:43:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.587	6.587	0.000	57968	0.2503	0.2697	M
5 DNX	1	6.907	6.907	0.000	43601	0.2503	0.2793	
6 MNX	1	7.367	7.367	0.000	46477	0.2918	0.3319	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

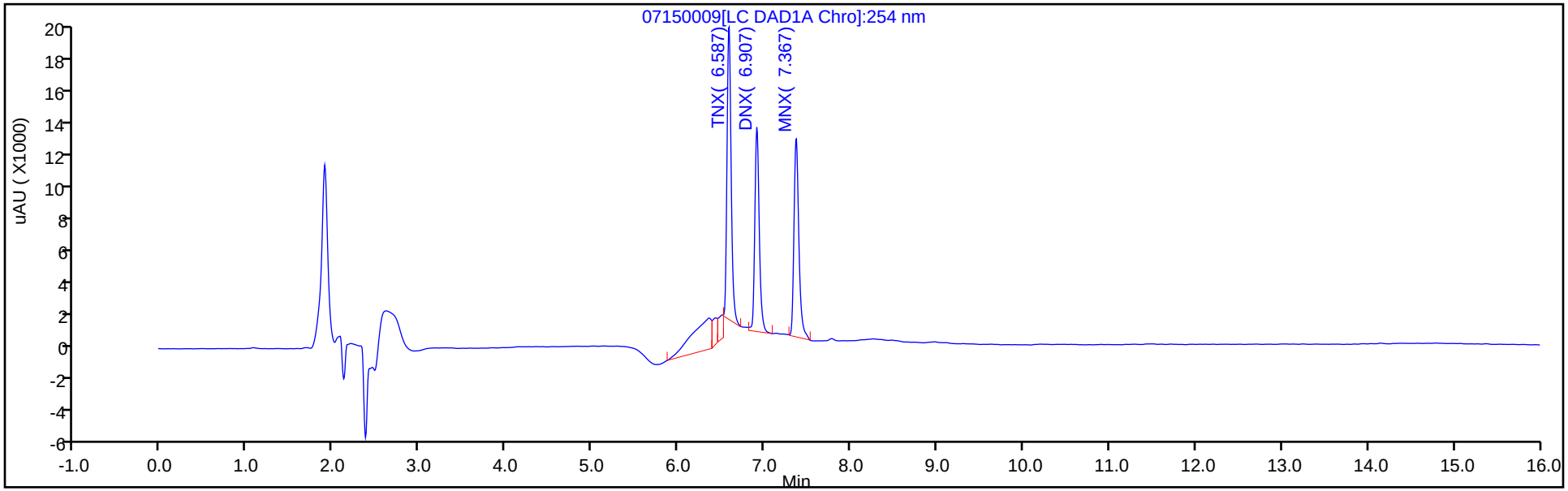
Report Date: 15-Jul-2019 18:44:01 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

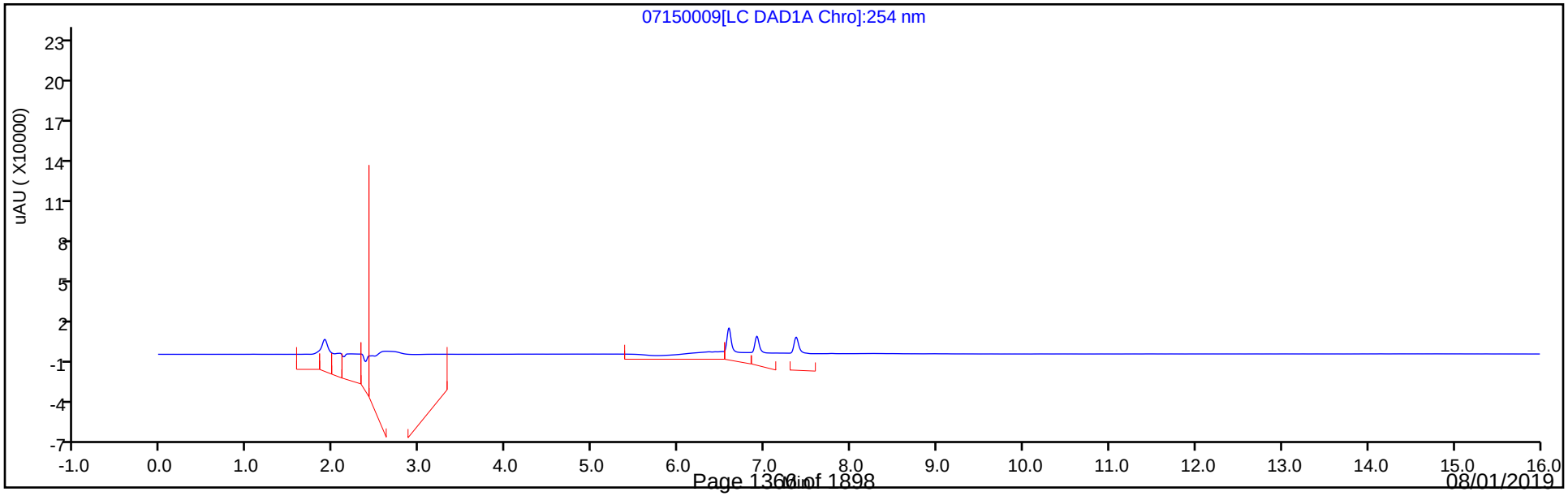
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150009.D

Injection Date:	15-Jul-2019 13:04:15	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV DMT			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

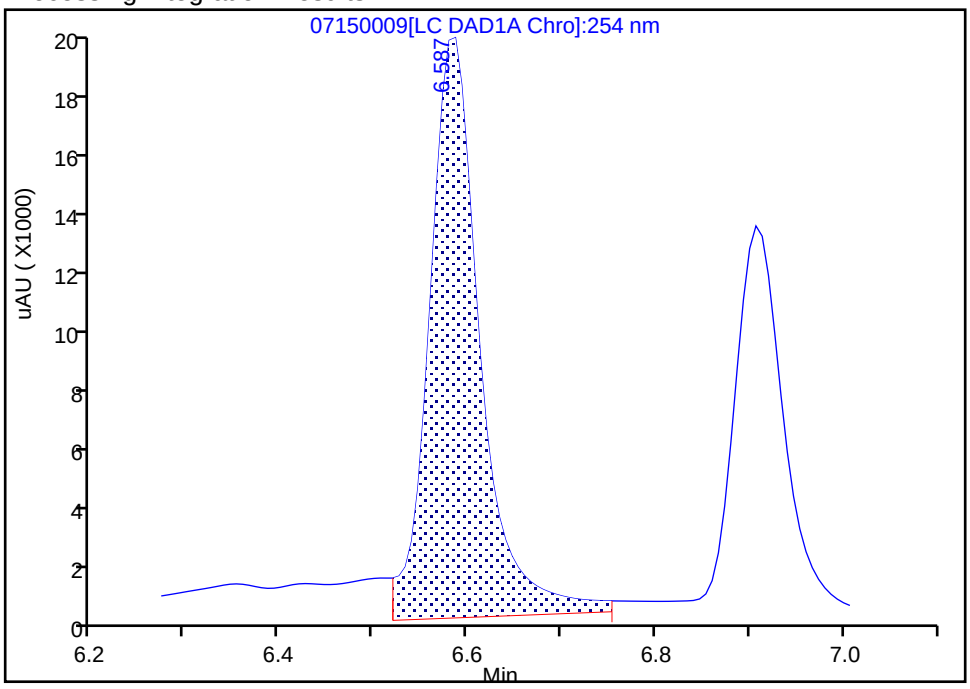
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150009.D				
Injection Date:	15-Jul-2019 13:04:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

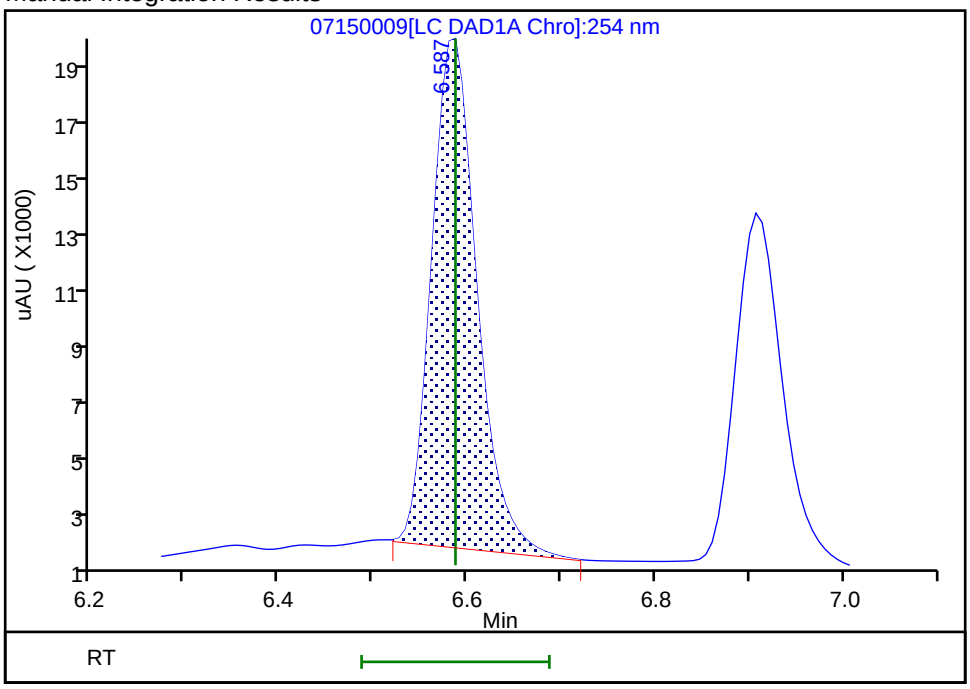
Processing Integration Results

RT: 6.59
Area: 68722
Amount: 0.319691
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 57968
Amount: 0.269664
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 16:41:34
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

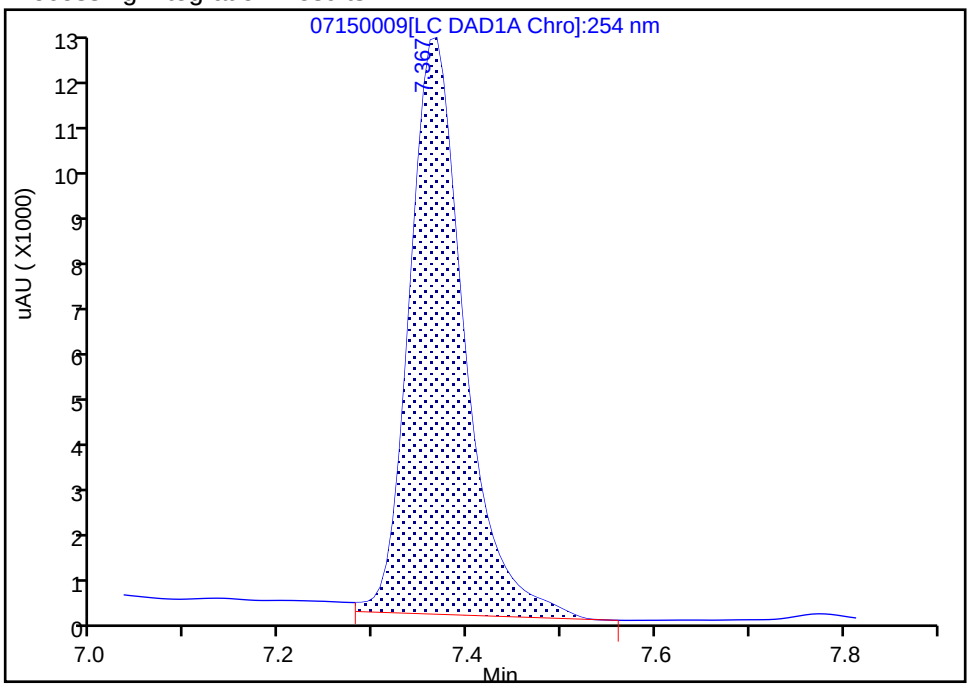
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150009.D				
Injection Date:	15-Jul-2019 13:04:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

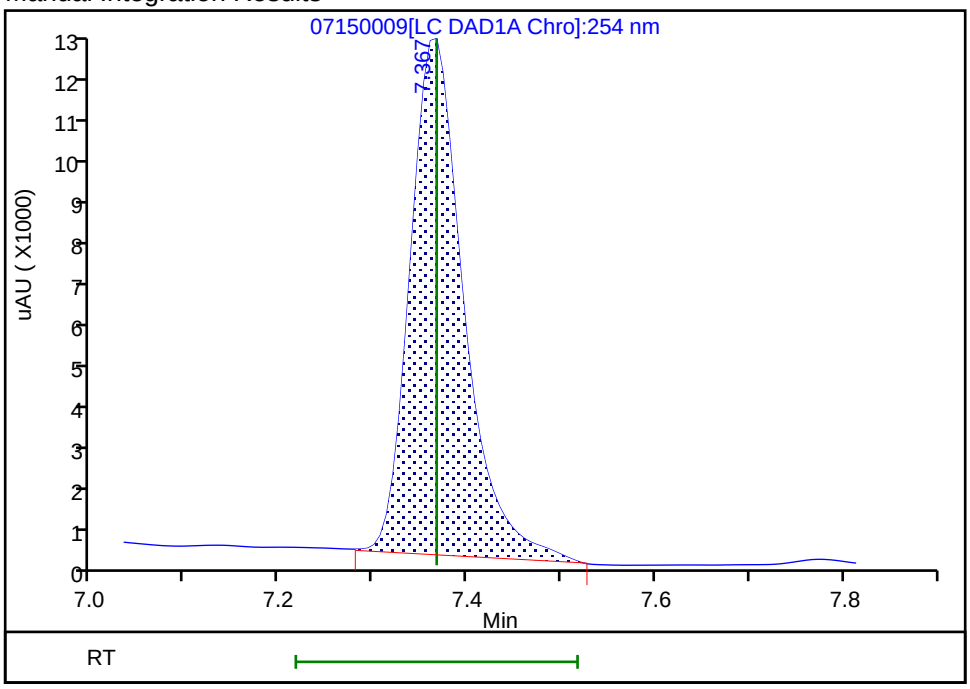
Processing Integration Results

RT: 7.37
Area: 47830
Amount: 0.341543
Amount Units: ug/mL



Manual Integration Results

RT: 7.37
Area: 46477
Amount: 0.331881
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 18:43:45

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464537/20 Calibration Date: 07/15/2019 17:16

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07150020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	93152		254	250	1.4	15.0
RDX	Ave	111120	112596		253	250	1.3	15.0
Picric acid	Ave	90734	89268		246	250	-1.6	15.0
1,3,5-Trinitrobenzene	Ave	245077	257404		263	250	5.0	15.0
1,3-Dinitrobenzene	Ave	311175	321678		259	250	3.4	15.0
Nitrobenzene	Ave	198903	194012		244	251	-2.5	15.0
Tetryl	Ave	161957	167384		258	250	3.4	15.0
Nitroglycerin	Ave	71108	75824		2670	2500	6.6	15.0
2,4,6-Trinitrotoluene	Ave	227277	232044		256	251	2.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	170636		257	251	2.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	215825		264	251	5.2	15.0
2,6-Dinitrotoluene	Ave	159284	160179		252	251	0.6	15.0
2,4-Dinitrotoluene	Ave	300447	311749		260	251	3.8	15.0
2-Nitrotoluene	Ave	129784	126935		245	251	-2.2	15.0
4-Nitrotoluene	Ave	110255	110231		251	251	-0.0	15.0
3-Nitrotoluene	Ave	145122	142821		247	251	-1.6	15.0
PETN	Ave	74289	80214		2700	2500	8.0	15.0
1,2-Dinitrobenzene	Ave	139328	145544		261	250	4.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464537/20 Calibration Date: 07/15/2019 17:16

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07150020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.53	6.83
RDX	7.78	7.62	7.92
Picric acid	8.17	8.00	8.30
1,3,5-Trinitrobenzene	8.91	8.75	9.05
1,3-Dinitrobenzene	9.57	9.41	9.71
Nitrobenzene	9.96	9.80	10.10
Tetryl	10.28	10.12	10.42
Nitroglycerin	10.79	10.63	10.93
2,4,6-Trinitrotoluene	11.24	11.14	11.34
4-Amino-2,6-dinitrotoluene	11.44	11.33	11.53
2-Amino-4,6-dinitrotoluene	11.73	11.62	11.82
2,6-Dinitrotoluene	11.86	11.76	11.96
2,4-Dinitrotoluene	12.07	11.96	12.16
2-Nitrotoluene	12.92	12.76	13.06
4-Nitrotoluene	13.36	13.20	13.50
3-Nitrotoluene	13.96	13.81	14.11
PETN	15.09	14.93	15.23
1,2-Dinitrobenzene	8.75	8.58	8.88

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150020.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jul-2019 17:16:36 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0083692-020
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 17:54:08 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 17:53:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.690	6.680	0.010	23288	0.2500	0.2536	M
7 RDX	1	7.783	7.774	0.009	28149	0.2500	0.2533	
8 2,4,6-Trinitrophenol	1	8.170	8.147	0.023	22317	0.2500	0.2460	
$ 9 1,2-Dinitrobenzene	1	8.750	8.734	0.016	36386	0.2500	0.2612	
10 1,3,5-Trinitrobenzene	1	8.910	8.900	0.010	64351	0.2500	0.2626	
11 1,3-Dinitrobenzene	1	9.570	9.560	0.010	80500	0.2503	0.2587	
12 Nitrobenzene	1	9.956	9.947	0.009	48600	0.2505	0.2443	
14 Tetryl	1	10.276	10.267	0.009	41846	0.2500	0.2584	
15 Nitroglycerin	2	10.790	10.780	0.010	189559	2.50	2.67	
16 2,4,6-Trinitrotoluene	1	11.243	11.240	0.003	58243	0.2510	0.2563	
17 4-Amino-2,6-dinitrotoluene	1	11.436	11.427	0.009	42787	0.2508	0.2572	
18 2-Amino-4,6-dinitrotoluene	1	11.730	11.720	0.010	54118	0.2508	0.2637	
19 2,6-Dinitrotoluene	1	11.863	11.860	0.003	40165	0.2508	0.2522	
20 2,4-Dinitrotoluene	1	12.070	12.060	0.010	78093	0.2505	0.2599	
21 o-Nitrotoluene	1	12.916	12.907	0.009	31829	0.2508	0.2452	
22 p-Nitrotoluene	1	13.363	13.354	0.009	27668	0.2510	0.2509	
23 m-Nitrotoluene	1	13.963	13.960	0.003	35848	0.2510	0.2470	
24 PETN	2	15.090	15.080	0.010	200534	2.50	2.70	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

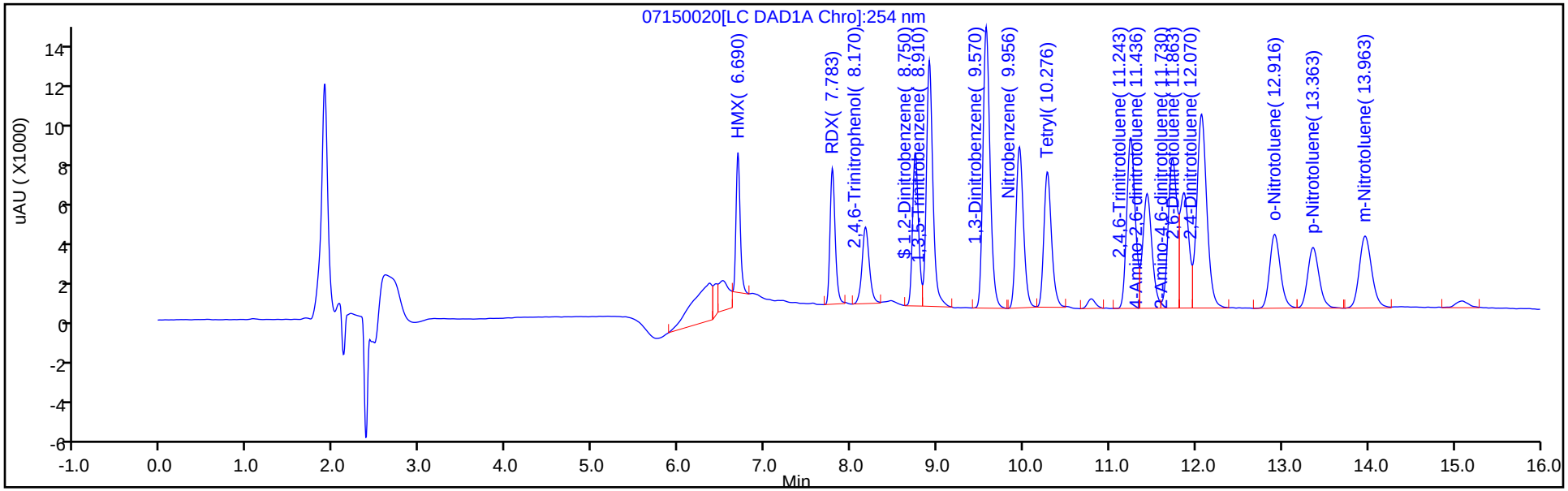
Report Date: 15-Jul-2019 17:54:08 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

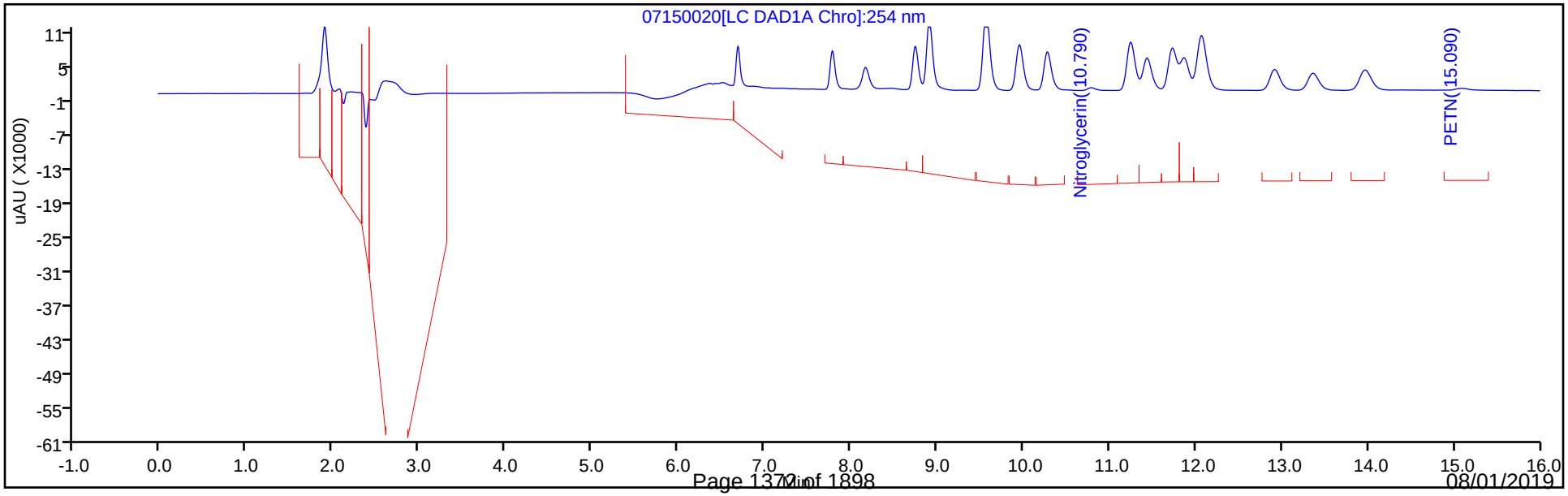
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150020.D

Injection Date:	15-Jul-2019 17:16:36	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV INT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

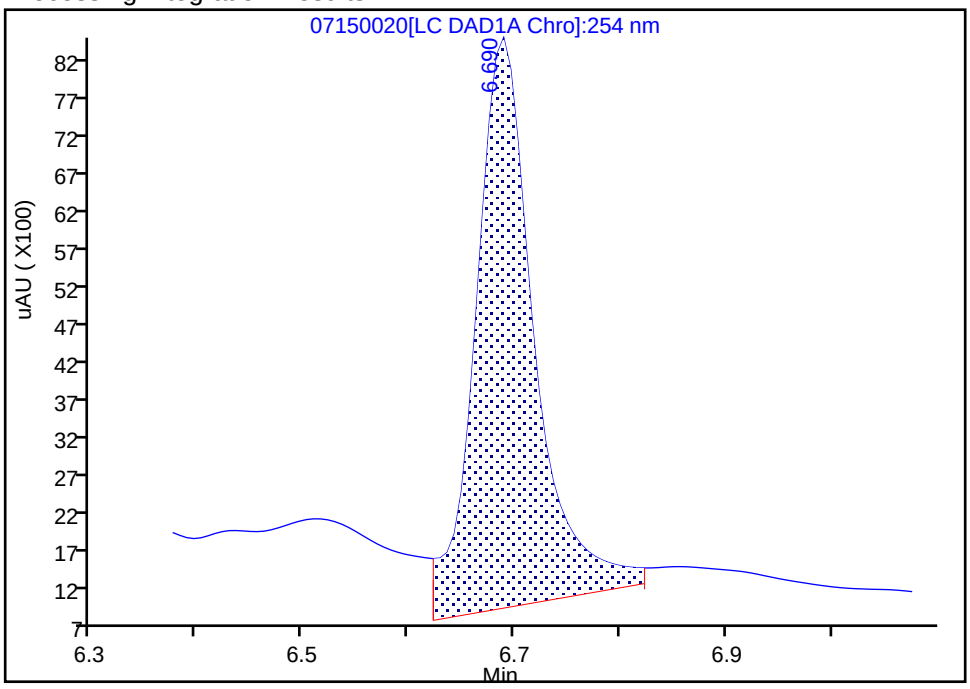
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150020.D				
Injection Date:	15-Jul-2019 17:16:36	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

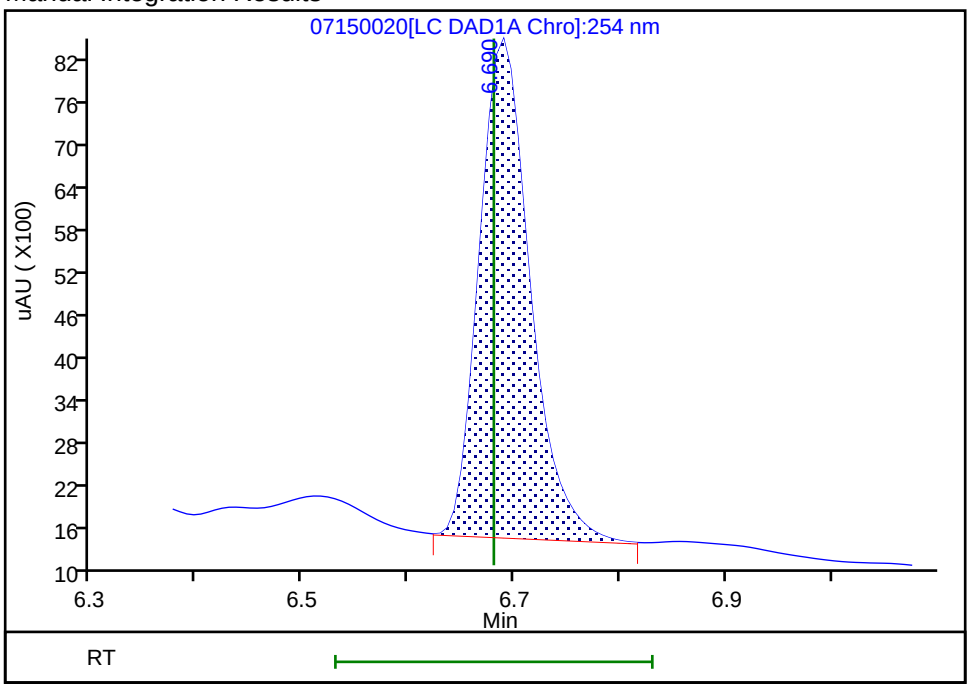
Processing Integration Results

RT: 6.69
Area: 29205
Amount: 0.318022
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 23288
Amount: 0.253590
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 17:53:43
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464537/22 Calibration Date: 07/15/2019 18:02

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07150022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	214964	225495		263	250	4.9	15.0
DNX	Ave	156126	171612		275	250	9.9	15.0
MNX	Ave	140041	153008		319	292	9.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Lab Sample ID: CCV 280-464537/22 Calibration Date: 07/15/2019 18:02

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 21:36

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/02/2019 00:18

Lab File ID: 07150022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.92	6.81	7.01
MNX	7.37	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150022.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 15-Jul-2019 18:02:36 ALS Bottle#: 9 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0083692-022
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 15-Jul-2019 18:34:24 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0331

First Level Reviewer: fiedlerh Date: 15-Jul-2019 18:34:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.594	6.587	0.007	56430	0.2503	0.2625	M
5 DNX	1	6.920	6.907	0.013	42946	0.2503	0.2751	
6 MNX	1	7.374	7.367	0.007	44640	0.2918	0.3188	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00002 Amount Added: 12.50 Units: uL

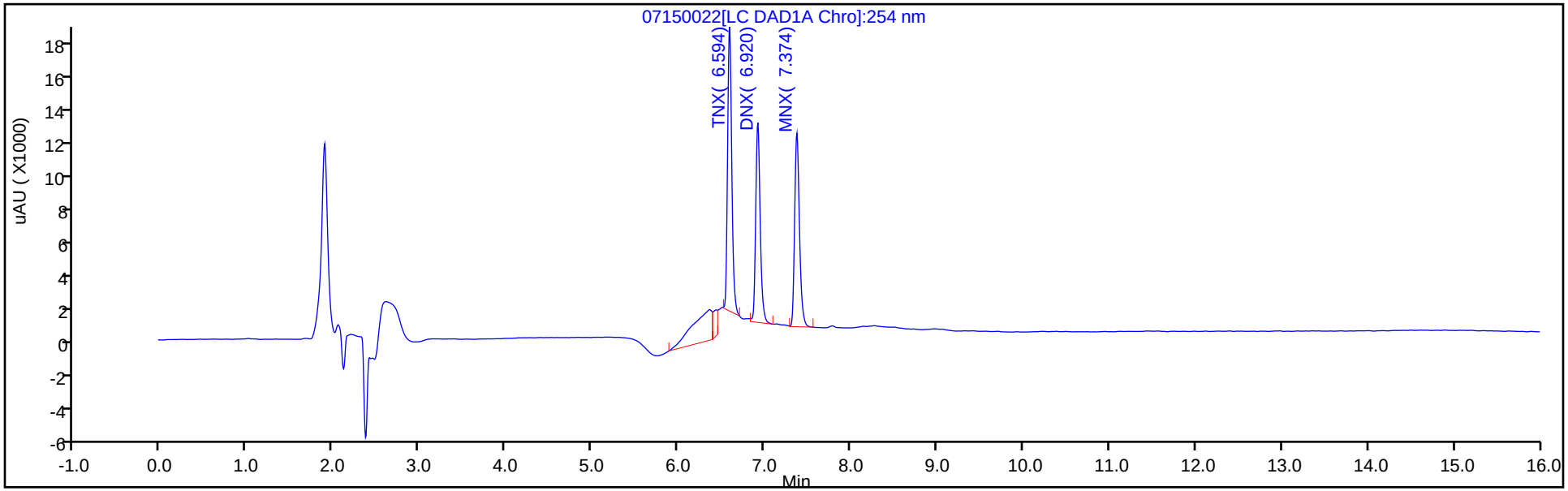
Report Date: 15-Jul-2019 18:34:25 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

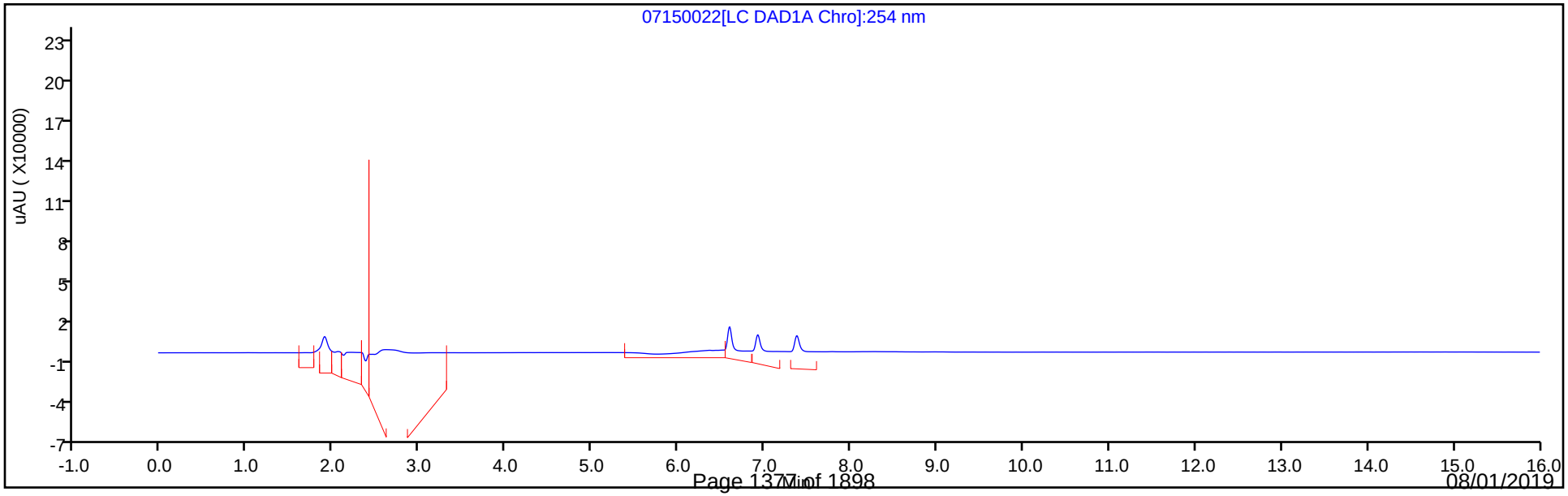
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150022.D

Injection Date:	15-Jul-2019 18:02:36	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	CCV DMT			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

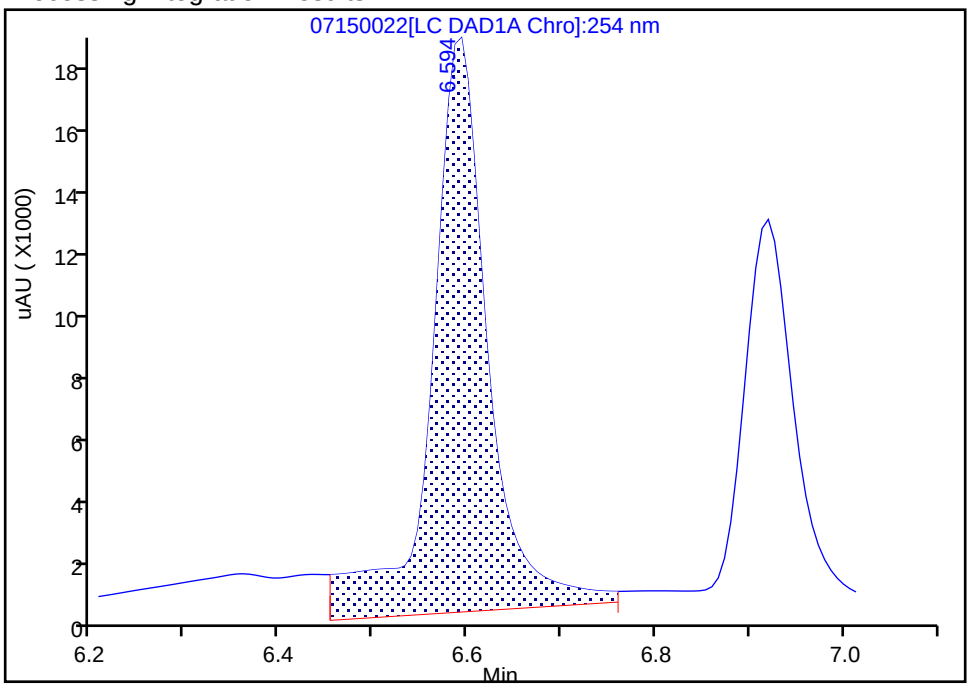
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190715-83692.b\07150022.D				
Injection Date:	15-Jul-2019 18:02:36	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

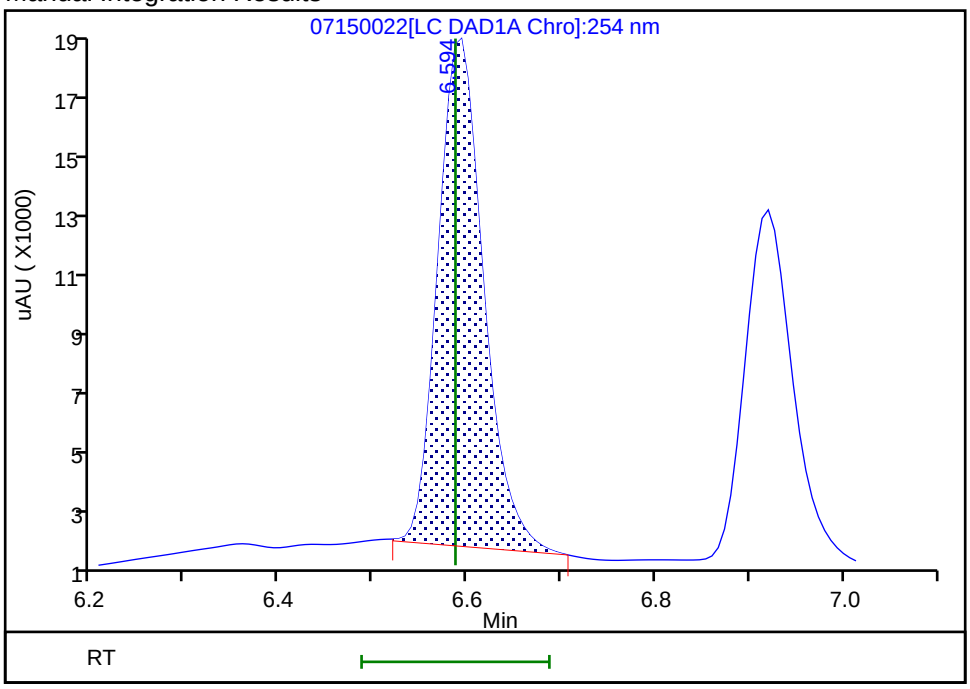
Processing Integration Results

RT: 6.59
Area: 74952
Amount: 0.348672
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 56430
Amount: 0.262509
Amount Units: ug/mL



Reviewer: fiedlerh, 15-Jul-2019 18:33:49

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

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

Matrix: Water Lab File ID: 06140043.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 500(mL) Date Analyzed: 06/15/2019 07:27

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U M	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.40	0.20	0.091
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D
Lims ID: MB 280-461286/1-A
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2019 07:27:19 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-461286/1-
Misc. Info.: 280-0082867-043
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:12:55

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1	2,6-diamino-4-nitrotoluene	1	6.479	6.500	-0.021	3508		0.0158	7M
2	TNX	1		6.566				ND	
3	HMX	1		6.643				ND	
4	2,4-diamino-6-nitrotoluene	1		6.687				ND	
5	DNX	1		6.893				ND	
6	MNX	1		7.359				ND	U
7	RDX	1		7.763				ND	
8	2,4,6-Trinitrophenol	1		8.196				ND	
$ 9	1,2-Dinitrobenzene	1	8.753	8.743	0.010	25626	0.2000	0.1970	
10	1,3,5-Trinitrobenzene	1		8.896				ND	
11	1,3-Dinitrobenzene	1		9.563				ND	
12	Nitrobenzene	1		9.949				ND	
13	3,5-Dinitroaniline	1		10.213				ND	
14	Tetryl	1		10.276				ND	
15	Nitroglycerin	2		10.776				ND	
16	2,4,6-Trinitrotoluene	1		11.229				ND	
17	4-Amino-2,6-dinitrotoluene	1		11.429				ND	
18	2-Amino-4,6-dinitrotoluene	1		11.716				ND	
19	2,6-Dinitrotoluene	1		11.843				ND	
20	2,4-Dinitrotoluene	1		12.043				ND	
21	o-Nitrotoluene	1		12.883				ND	
22	p-Nitrotoluene	1		13.323				ND	
23	m-Nitrotoluene	1		13.923				ND	U
24	PETN	2		15.016				ND	
25	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

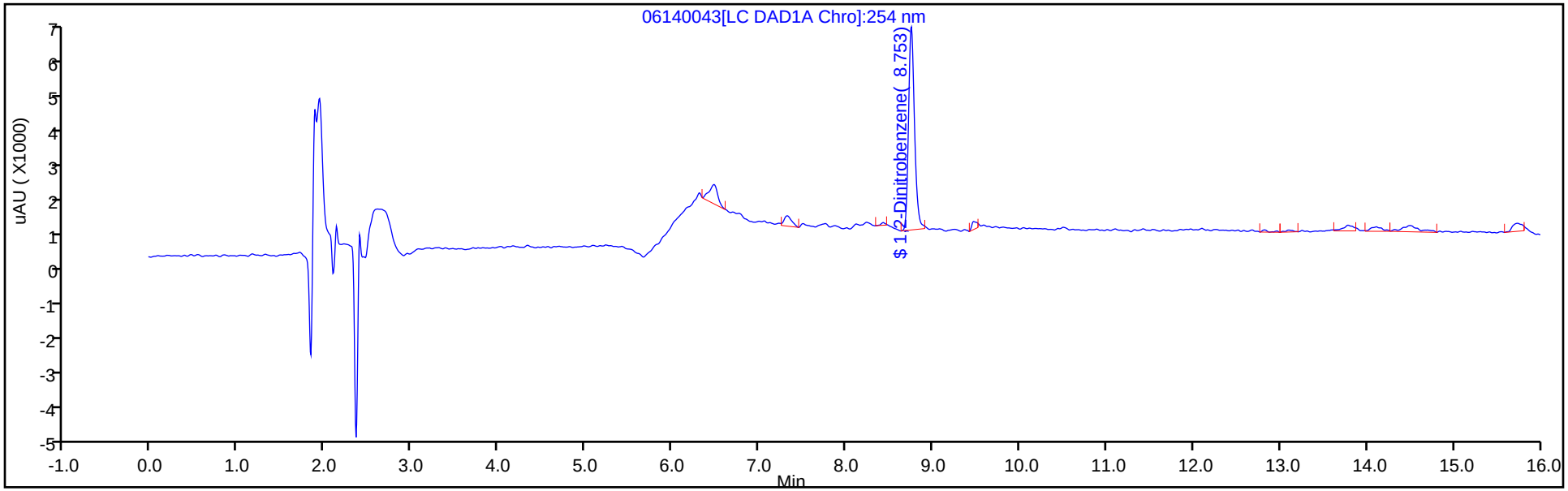
Report Date: 17-Jun-2019 10:45:21 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

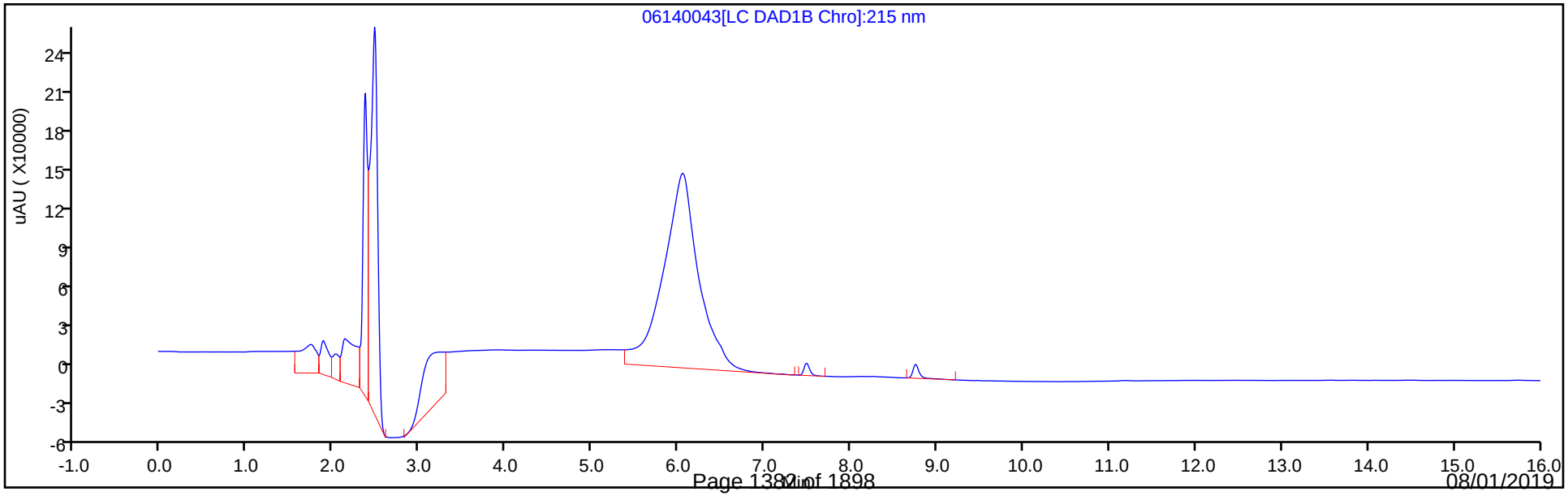
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D

Injection Date:	15-Jun-2019 07:27:19	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	MB 280-461286/1-A			Worklist Smp#:	43
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D
Lims ID: MB 280-461286/1-A
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2019 07:27:19 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-461286/1-
Misc. Info.: 280-0082867-043
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:12:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1970	98.48

User Disabled Compound Report

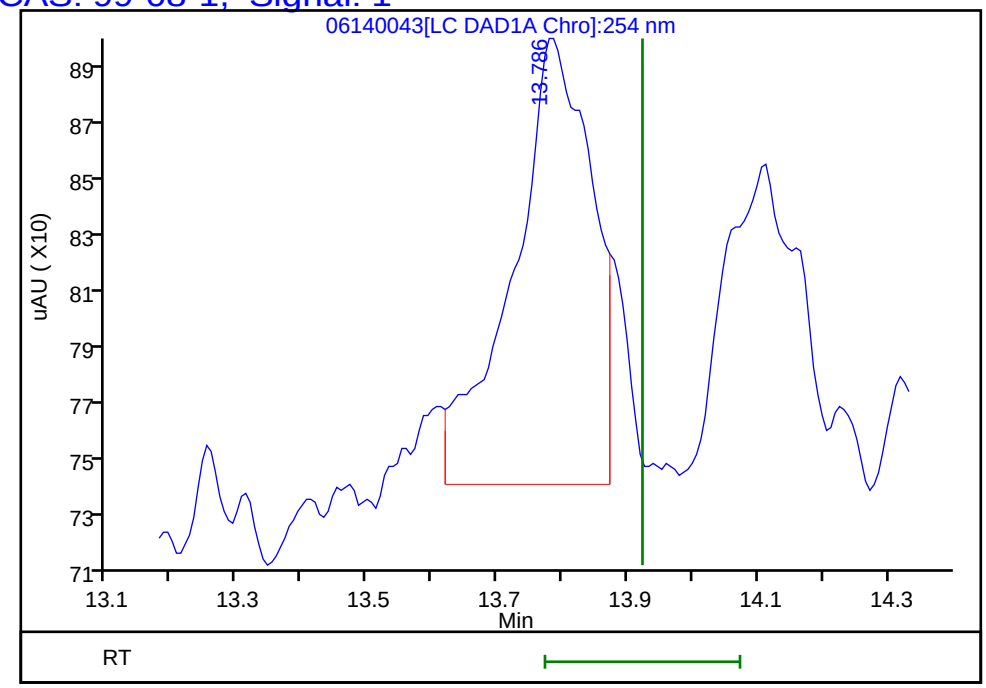
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D
Injection Date: 15-Jun-2019 07:27:19 Instrument ID: CHHPLC_X3
Lims ID: MB 280-461286/1-A
Client ID:
Operator ID: hkf ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.79
Response: 1253
Amount: 0.008449



Reviewer: fiedlerh, 17-Jun-2019 10:12:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

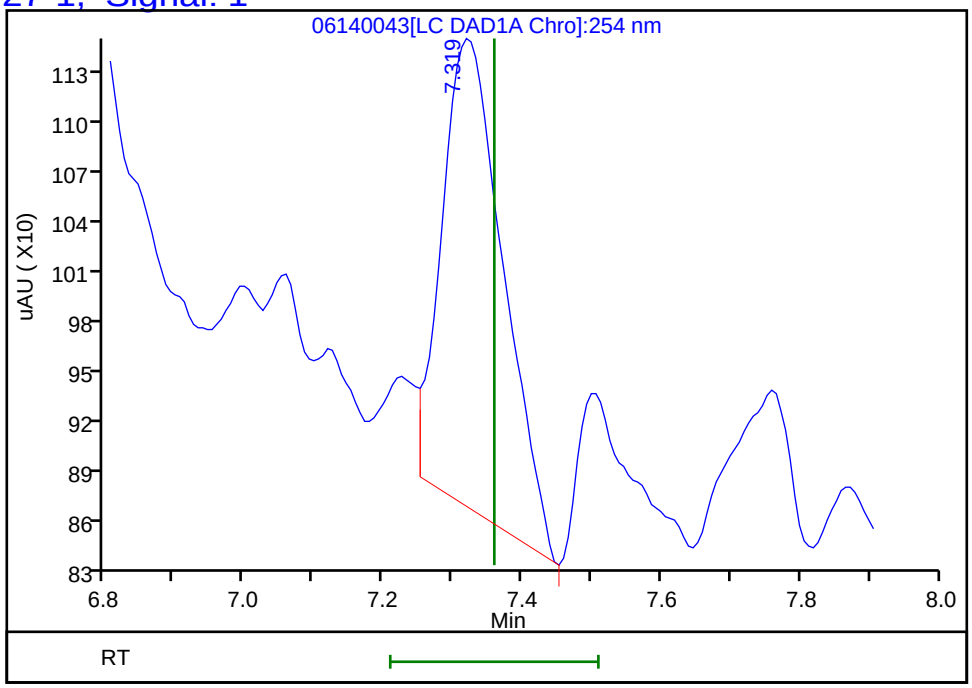
Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140043.D
Injection Date: 15-Jun-2019 07:27:19 Instrument ID: CHHPLC_X3
Lims ID: MB 280-461286/1-A
Client ID:
Operator ID: hkf ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.32
Response: 1666
Amount: 0.012202



Reviewer: fiedlerh, 17-Jun-2019 10:12:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

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

Matrix: Water Lab File ID: 07110045.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 500(mL) Date Analyzed: 07/12/2019 00:48

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.40	0.20	0.091
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110045.D
Lims ID: MB 280-464162/1-A
Client ID:
Sample Type: MB
Inject. Date: 12-Jul-2019 00:48:01 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-464162/1-
Misc. Info.: 280-0083617-045
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 2,6-diamino-4-nitrotoluene	1		6.539				ND	U
	2 TNX	1		6.598				ND	U
	3 HMX	1		6.692				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.719				ND	
	5 DNX	1		6.924				ND	
	6 MNX	1		7.378				ND	
	7 RDX	1		7.799				ND	
	8 2,4,6-Trinitrophenol	1		8.199				ND	U
$	9 1,2-Dinitrobenzene	1	8.746	8.759	-0.013	26462	0.2000	0.1899	
	10 1,3,5-Trinitrobenzene	1		8.919				ND	
	11 1,3-Dinitrobenzene	1		9.578				ND	
	12 Nitrobenzene	1		9.965				ND	
	13 3,5-Dinitroaniline	1		10.206				ND	
	14 Tetryl	1		10.285				ND	
	15 Nitroglycerin	2		10.792				ND	
	16 2,4,6-Trinitrotoluene	1		11.258				ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.445				ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.738				ND	
	19 2,6-Dinitrotoluene	1		11.878				ND	
	20 2,4-Dinitrotoluene	1		12.078				ND	
	21 o-Nitrotoluene	1		12.925				ND	
	22 p-Nitrotoluene	1		13.372				ND	
	23 m-Nitrotoluene	1		13.978				ND	
	24 PETN	2		15.098				ND	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

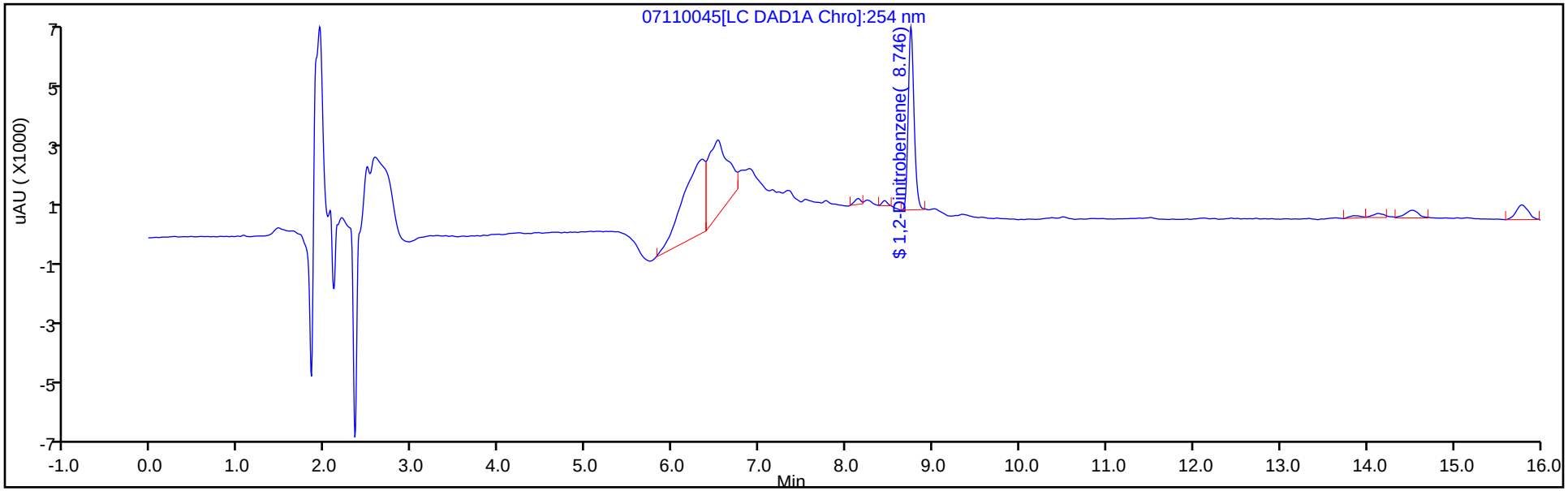
Report Date: 12-Jul-2019 09:20:32 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

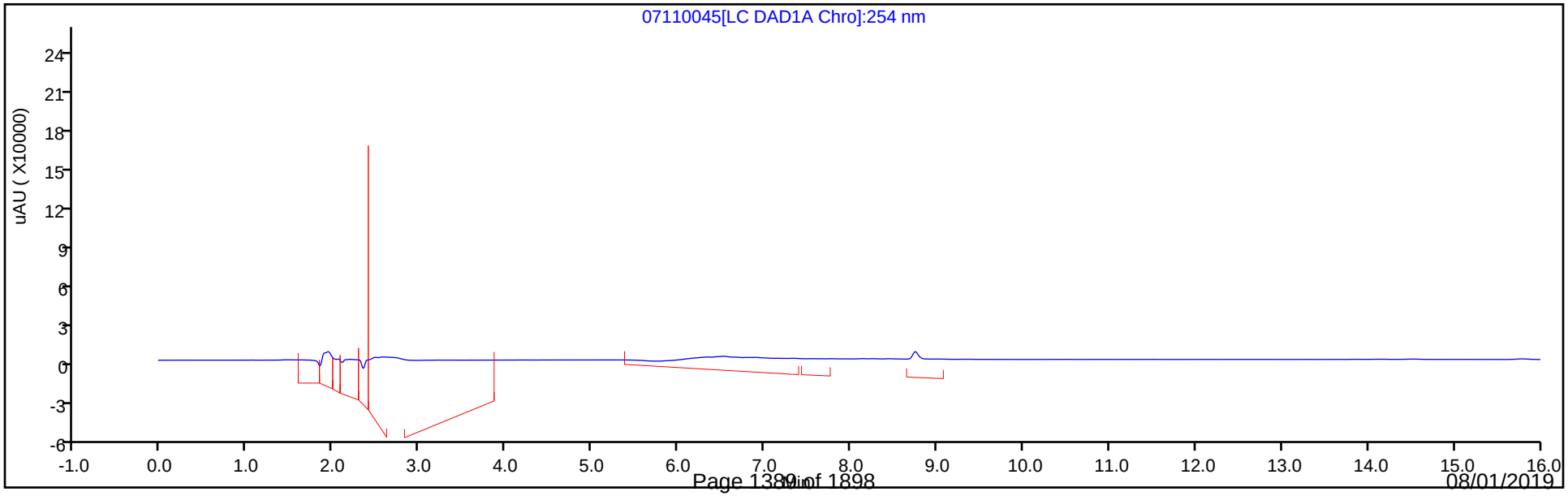
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110045.D

Injection Date:	12-Jul-2019 00:48:01	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	MB 280-464162/1-A			Worklist Smp#:	45
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110045.D
Lims ID: MB 280-464162/1-A
Client ID:
Sample Type: MB
Inject. Date: 12-Jul-2019 00:48:01 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-464162/1-
Misc. Info.: 280-0083617-045
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1899	94.96

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

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

Matrix: Water Lab File ID: 06140044.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/12/2019 17:51

Sample wt/vol: 500(mL) Date Analyzed: 06/15/2019 07:51

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 461580 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.07		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	1.99		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.81		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.89		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	1.90	M	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.78	M	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.28	Q	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.45		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.66		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.42		1.0	0.40	0.20
2691-41-0	HMX	1.95		0.40	0.20	0.088
98-95-3	Nitrobenzene	1.55		0.40	0.20	0.091
121-82-4	RDX	1.99		0.40	0.40	0.16
479-45-8	Tetryl	1.95		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140044.D
Lims ID: LCS 280-461286/2-A
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2019 07:51:07 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-461286/2
Misc. Info.: 280-0082867-044
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:13:16

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.645	6.643	0.002	17390	0.2000	0.1949	
	7 RDX	1	7.765	7.763	0.002	21187	0.2000	0.1987	
	8 2,4,6-Trinitrophenol	1	8.172	8.196	-0.024	19216	0.2000	0.2293	
$	9 1,2-Dinitrobenzene	1	8.745	8.743	0.002	25047	0.2000	0.1925	
	10 1,3,5-Trinitrobenzene	1	8.905	8.896	0.009	47528	0.2000	0.2073	
	11 1,3-Dinitrobenzene	1	9.578	9.563	0.015	59909	0.2000	0.1991	
	12 Nitrobenzene	1	9.965	9.949	0.016	30540	0.2000	0.1552	
	14 Tetryl	1	10.298	10.276	0.022	32692	0.2000	0.1946	
	15 Nitroglycerin	2	10.798	10.776	0.022	131290	2.00	1.88	
	16 2,4,6-Trinitrotoluene	1	11.258	11.229	0.029	40561	0.2000	0.1814	
	17 4-Amino-2,6-dinitrotoluene	1	11.465	11.429	0.036	27006	0.2000	0.1663	
	18 2-Amino-4,6-dinitrotoluene	1	11.758	11.716	0.042	35230	0.2000	0.1783	M
	19 2,6-Dinitrotoluene	1	11.878	11.843	0.035	29750	0.2000	0.1900	M
	20 2,4-Dinitrotoluene	1	12.085	12.043	0.042	56194	0.2000	0.1889	
	21 o-Nitrotoluene	1	12.925	12.883	0.042	16783	0.2000	0.1278	
	22 p-Nitrotoluene	1	13.371	13.323	0.048	15953	0.2000	0.1415	
	23 m-Nitrotoluene	1	13.971	13.923	0.048	21568	0.2000	0.1454	
	24 PETN	2	15.065	15.016	0.049	145283	2.00	1.98	

QC Flag Legend

Review Flags
M - Manually Integrated

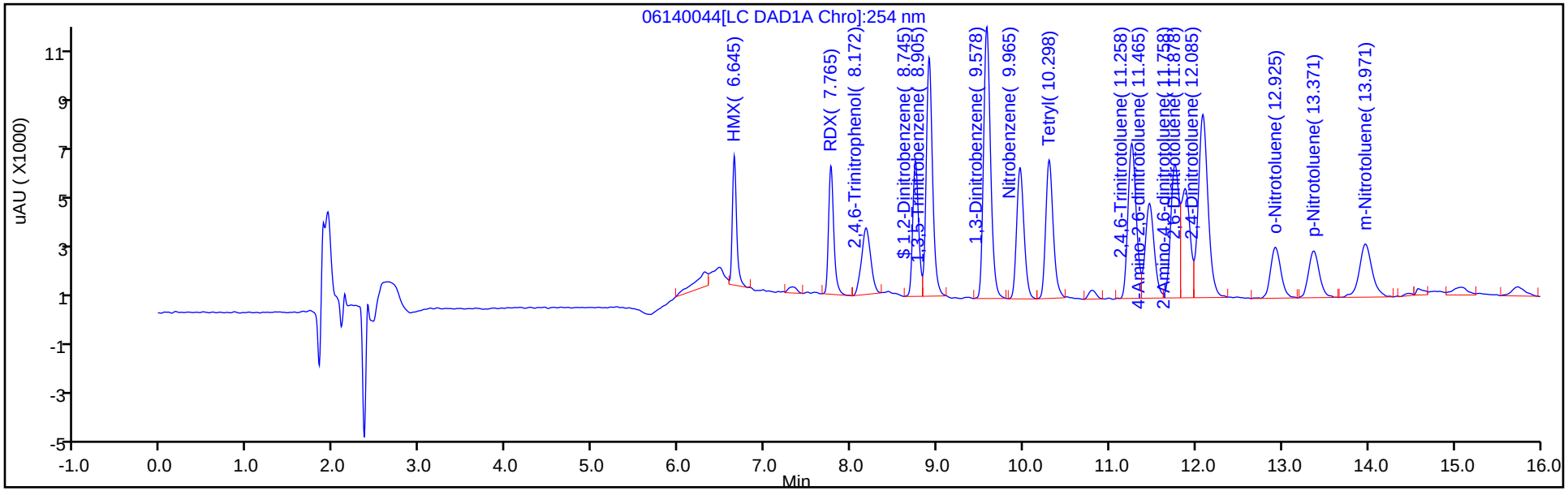
Report Date: 17-Jun-2019 10:45:23 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Denver

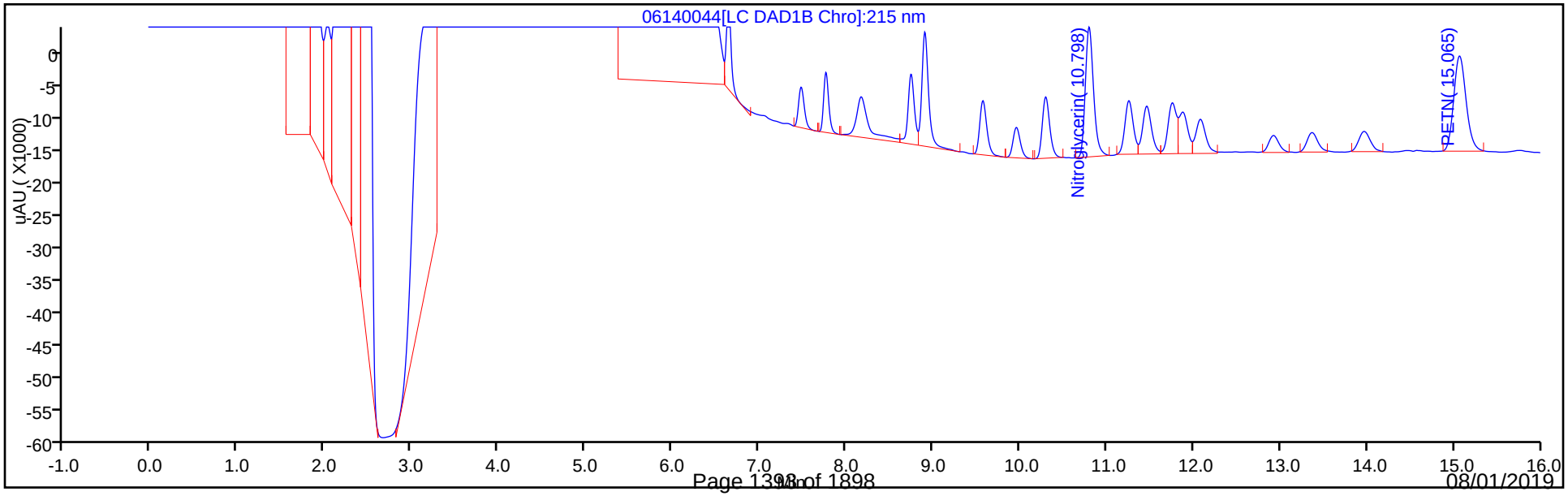
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140044.D

Injection Date:	15-Jun-2019 07:51:07	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	LCS 280-461286/2-A			Worklist Smp#:	44
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\06140044.D
Lims ID: LCS 280-461286/2-A
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2019 07:51:07 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-461286/2
Misc. Info.: 280-0082867-044
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190614-82867.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jun-2019 10:45:16 Calib Date: 15-May-2019 01:42:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190514-81869.b\0514B032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0334

First Level Reviewer: fiedlerh Date: 17-Jun-2019 10:13:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1925	96.25

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

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

Matrix: Water Lab File ID: 07110046.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 500(mL) Date Analyzed: 07/12/2019 01:10

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.14		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	2.09		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.97		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	2.02		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	2.01		0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.91		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.44		0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.69		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.82		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.64		1.0	0.40	0.20
2691-41-0	HMX	1.87	M	0.40	0.20	0.088
98-95-3	Nitrobenzene	1.73		0.40	0.20	0.091
121-82-4	RDX	2.03		0.40	0.40	0.16
479-45-8	Tetryl	2.22		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110046.D
Lims ID: LCS 280-464162/2-A
Client ID:
Sample Type: LCS
Inject. Date: 12-Jul-2019 01:10:56 ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-464162/2
Misc. Info.: 280-0083617-046
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:43

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.689	6.692	-0.003	17129	0.2000	0.1865	M
	7 RDX	1	7.789	7.799	-0.010	22584	0.2000	0.2032	
	8 2,4,6-Trinitrophenol	1	8.169	8.199	-0.030	20973	0.2000	0.2311	
$	9 1,2-Dinitrobenzene	1	8.749	8.759	-0.010	26706	0.2000	0.1917	
	10 1,3,5-Trinitrobenzene	1	8.916	8.919	-0.003	52438	0.2000	0.2140	
	11 1,3-Dinitrobenzene	1	9.576	9.578	-0.002	65146	0.2000	0.2094	
	12 Nitrobenzene	1	9.962	9.965	-0.003	34377	0.2000	0.1728	
	14 Tetryl	1	10.296	10.285	0.011	35918	0.2000	0.2218	
	15 Nitroglycerin	2	10.802	10.792	0.010	144724	2.00	2.04	
	16 2,4,6-Trinitrotoluene	1	11.262	11.258	0.004	44737	0.2000	0.1968	
	17 4-Amino-2,6-dinitrotoluene	1	11.462	11.445	0.017	30356	0.2000	0.1825	
	18 2-Amino-4,6-dinitrotoluene	1	11.756	11.738	0.018	39162	0.2000	0.1908	
	19 2,6-Dinitrotoluene	1	11.889	11.878	0.011	32085	0.2000	0.2014	
	20 2,4-Dinitrotoluene	1	12.096	12.078	0.018	60753	0.2000	0.2022	
	21 o-Nitrotoluene	1	12.942	12.925	0.017	18664	0.2000	0.1438	
	22 p-Nitrotoluene	1	13.396	13.372	0.024	18091	0.2000	0.1641	
	23 m-Nitrotoluene	1	14.002	13.978	0.024	24475	0.2000	0.1687	
	24 PETN	2	15.122	15.098	0.024	159984	2.00	2.15	

QC Flag Legend

Review Flags
M - Manually Integrated

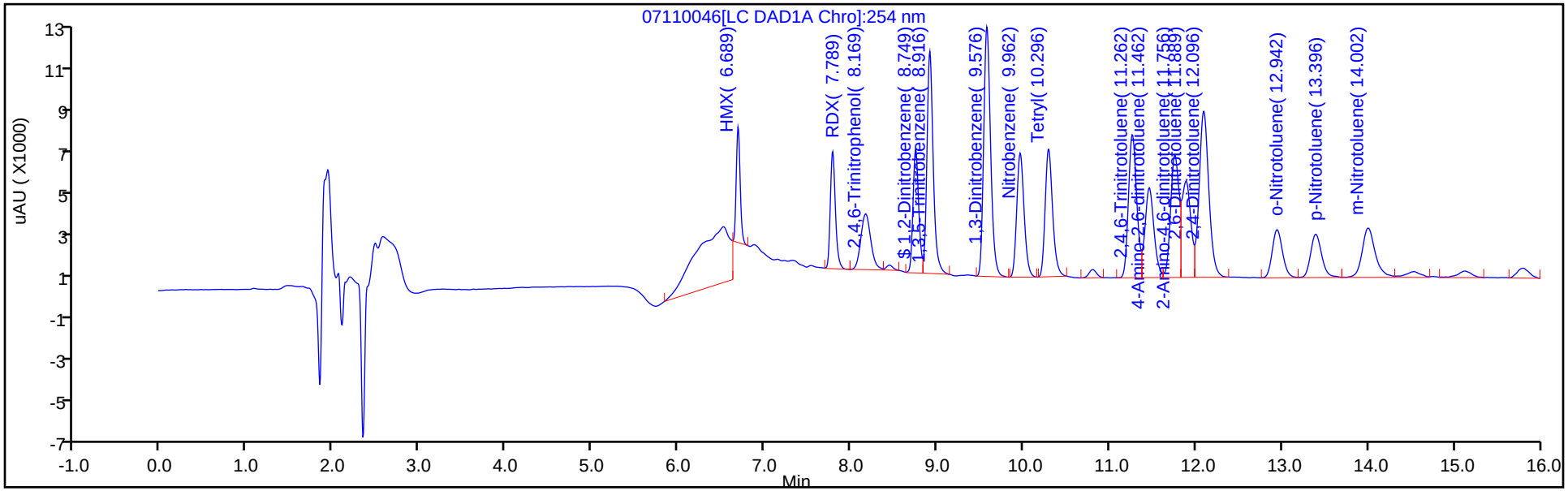
Report Date: 12-Jul-2019 09:20:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

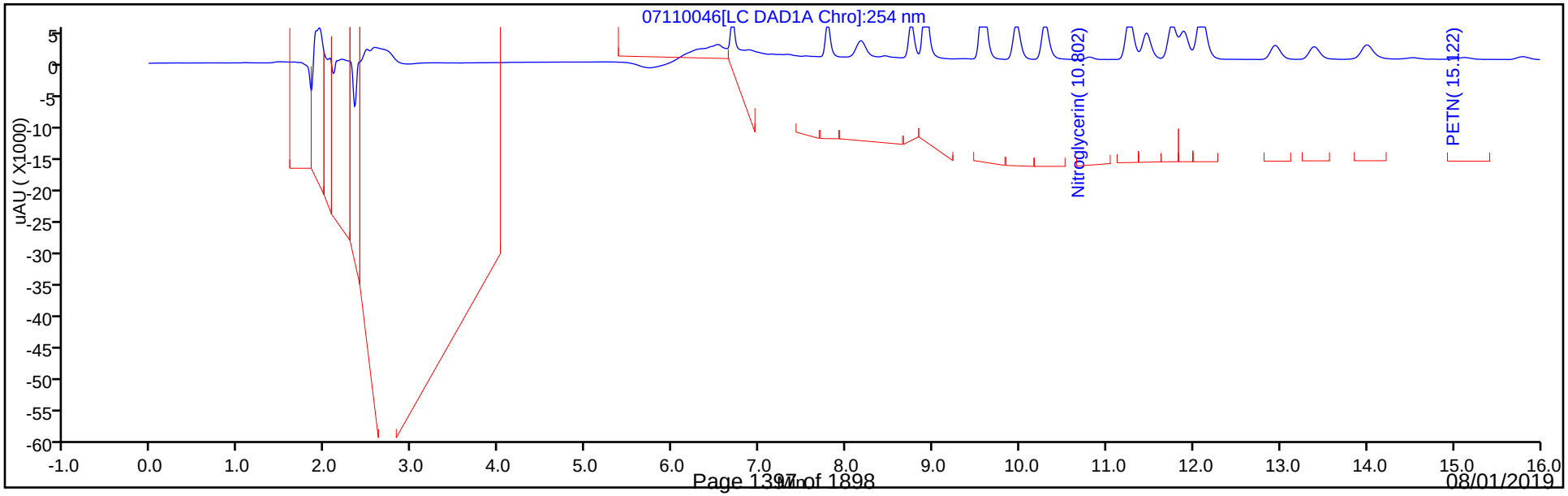
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110046.D

Injection Date:	12-Jul-2019 01:10:56	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	LCS 280-464162/2-A			Worklist Smp#:	46
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110046.D
Lims ID: LCS 280-464162/2-A
Client ID:
Sample Type: LCS
Inject. Date: 12-Jul-2019 01:10:56 ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-464162/2
Misc. Info.: 280-0083617-046
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1917	95.84

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

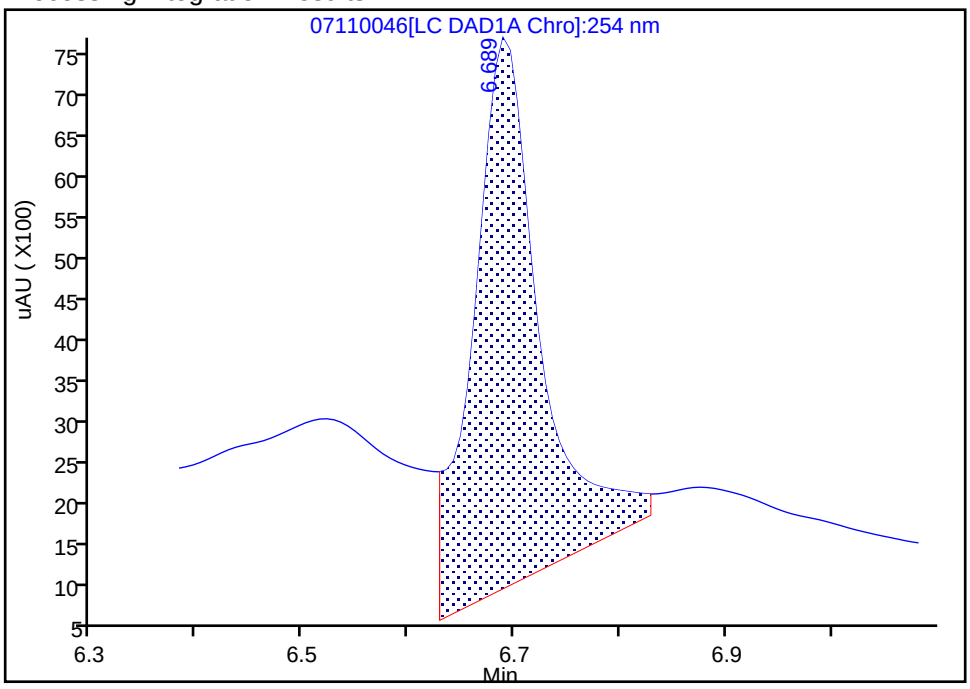
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110046.D				
Injection Date:	12-Jul-2019 01:10:56	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-464162/2-A				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

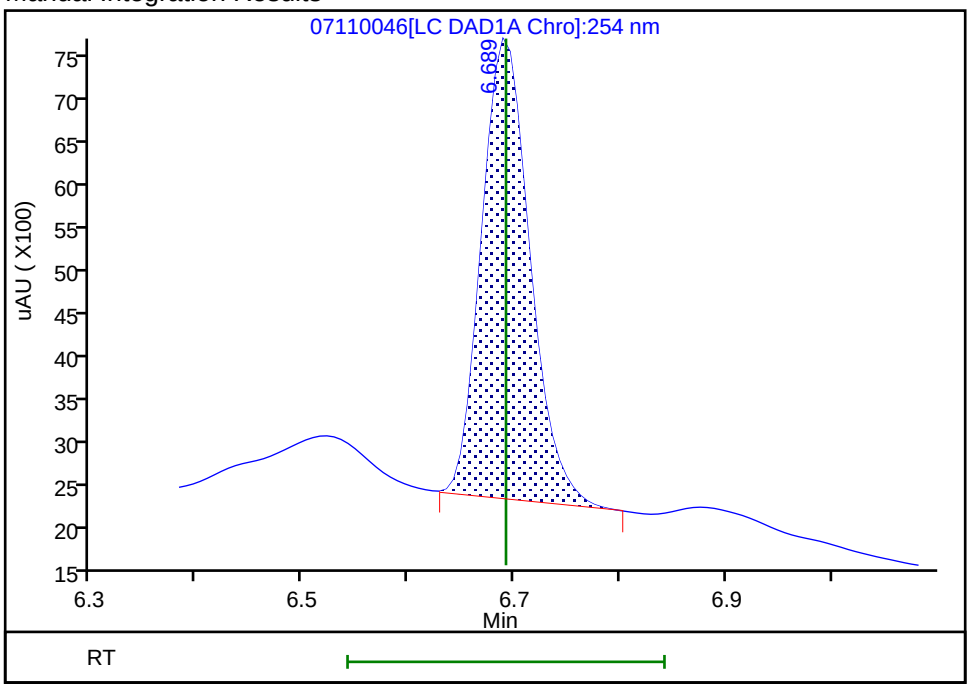
Processing Integration Results

RT: 6.69
Area: 29497
Amount: 0.321202
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 17129
Amount: 0.186523
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 08:59:42

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

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

Matrix: Water Lab File ID: 07110048.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 500(mL) Date Analyzed: 07/12/2019 01:56

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.56		2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110048.D
Lims ID: LCS 280-464162/4-A
Client ID:
Sample Type: LCS
Inject. Date: 12-Jul-2019 01:56:52 ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-464162/4
Misc. Info.: 280-0083617-048
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:00:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.598	-0.008	42145	0.2002	0.1961	M
5 DNX	1	6.924	6.924	0.000	36055	0.2002	0.2309	
6 MNX	1	7.377	7.378	-0.001	35855	0.2334	0.2560	
$ 9 1,2-Dinitrobenzene	1	8.750	8.759	-0.009	25166	0.2000	0.1806	

QC Flag Legend

Review Flags
M - Manually Integrated

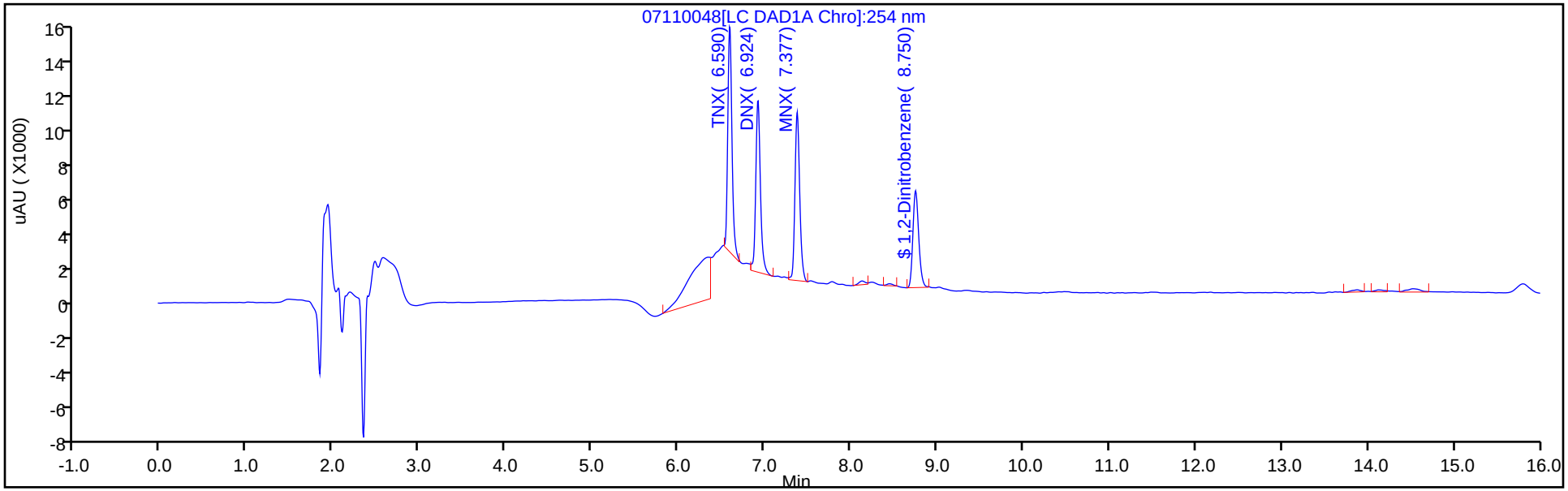
Report Date: 12-Jul-2019 09:20:37 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

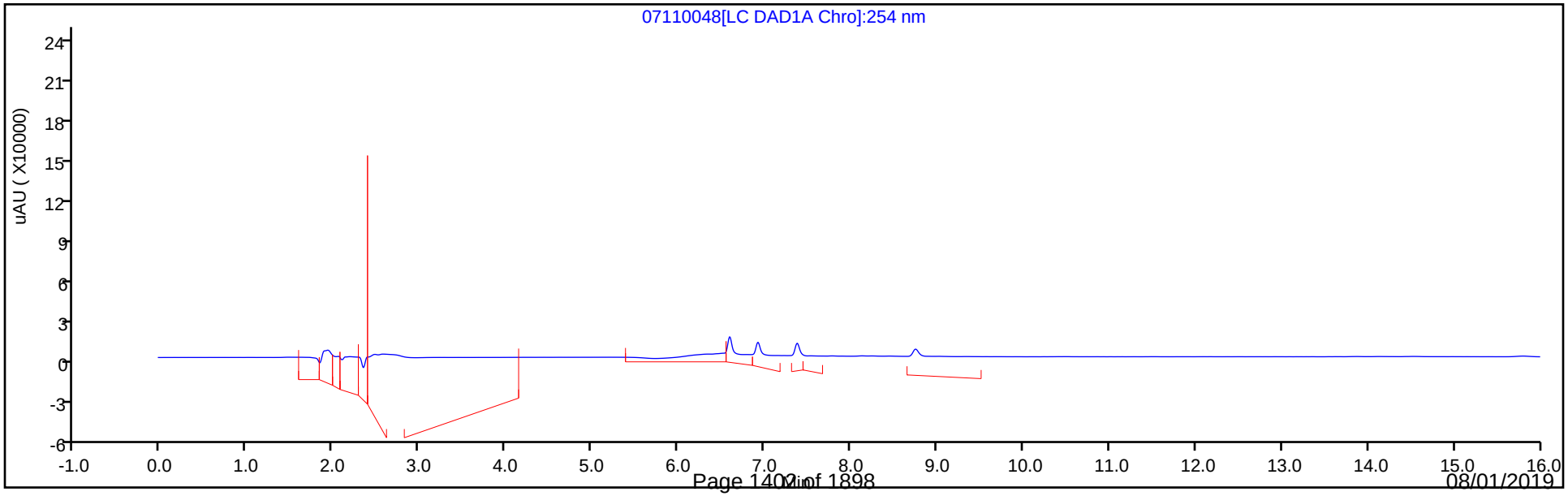
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110048.D

Injection Date:	12-Jul-2019 01:56:52	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	LCS 280-464162/4-A			Worklist Smp#:	48
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110048.D
Lims ID: LCS 280-464162/4-A
Client ID:
Sample Type: LCS
Inject. Date: 12-Jul-2019 01:56:52 ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-464162/4
Misc. Info.: 280-0083617-048
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 09:00:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1806	90.31

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

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

Matrix: Water Lab File ID: 07110047.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 07/10/2019 16:51

Sample wt/vol: 500(mL) Date Analyzed: 07/12/2019 01:33

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 464207 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.99		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	1.95		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.85		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.87		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	1.88		0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.75		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.41		0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.59		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.68		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.53		1.0	0.40	0.20
2691-41-0	HMX	1.80	M	0.40	0.20	0.088
98-95-3	Nitrobenzene	1.66		0.40	0.20	0.091
121-82-4	RDX	1.92		0.40	0.40	0.16
479-45-8	Tetryl	2.08		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110047.D
Lims ID: LCSD 280-464162/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 12-Jul-2019 01:33:51 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-464162/
Misc. Info.: 280-0083617-047
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:52

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.692	6.692	0.000	16560	0.2000	0.1803	M
	7 RDX	1	7.785	7.799	-0.014	21374	0.2000	0.1923	
	8 2,4,6-Trinitrophenol	1	8.172	8.199	-0.027	19889	0.2000	0.2192	
$	9 1,2-Dinitrobenzene	1	8.752	8.759	-0.007	24517	0.2000	0.1760	
	10 1,3,5-Trinitrobenzene	1	8.918	8.919	-0.001	48766	0.2000	0.1990	
	11 1,3-Dinitrobenzene	1	9.578	9.578	0.000	60799	0.2000	0.1954	
	12 Nitrobenzene	1	9.965	9.965	0.000	33002	0.2000	0.1659	
	14 Tetryl	1	10.298	10.285	0.013	33761	0.2000	0.2085	
	15 Nitroglycerin	2	10.805	10.792	0.013	136679	2.00	1.92	
	16 2,4,6-Trinitrotoluene	1	11.265	11.258	0.007	42006	0.2000	0.1848	
	17 4-Amino-2,6-dinitrotoluene	1	11.465	11.445	0.020	28021	0.2000	0.1684	
	18 2-Amino-4,6-dinitrotoluene	1	11.765	11.738	0.027	35897	0.2000	0.1749	
	19 2,6-Dinitrotoluene	1	11.891	11.878	0.013	29903	0.2000	0.1877	
	20 2,4-Dinitrotoluene	1	12.098	12.078	0.020	56303	0.2000	0.1874	
	21 o-Nitrotoluene	1	12.945	12.925	0.020	18342	0.2000	0.1413	
	22 p-Nitrotoluene	1	13.391	13.372	0.019	16852	0.2000	0.1528	
	23 m-Nitrotoluene	1	13.998	13.978	0.020	23086	0.2000	0.1591	
	24 PETN	2	15.118	15.098	0.020	150753	2.00	2.03	

QC Flag Legend

Review Flags
M - Manually Integrated

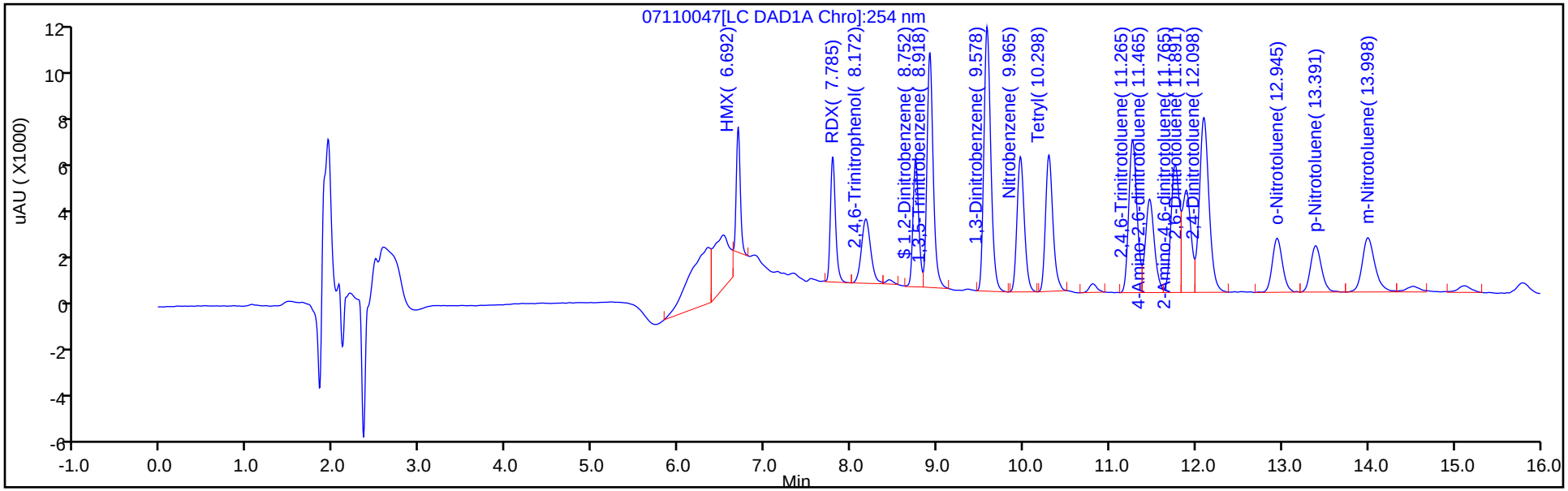
Report Date: 12-Jul-2019 09:20:35 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

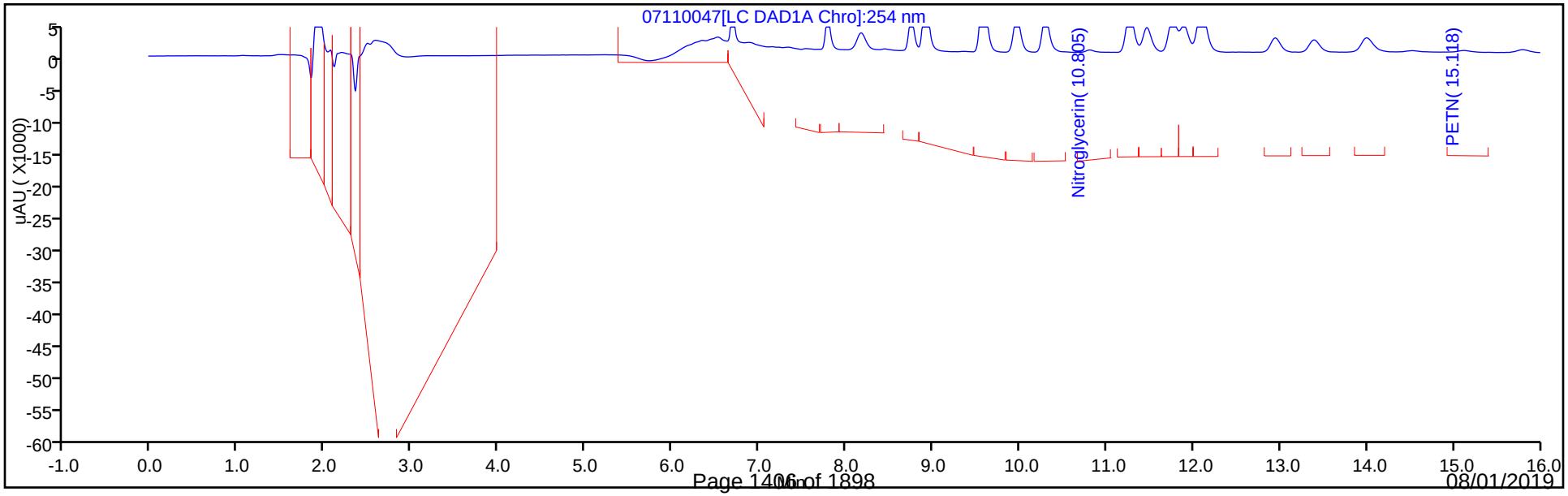
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110047.D

Injection Date:	12-Jul-2019 01:33:51	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	LCSD 280-464162/3-A			Worklist Smp#:	47
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110047.D
Lims ID: LCSD 280-464162/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 12-Jul-2019 01:33:51 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-464162/
Misc. Info.: 280-0083617-047
Operator ID: hkf Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Jul-2019 09:20:30 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0330

First Level Reviewer: fiedlerh Date: 12-Jul-2019 08:59:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1760	87.98

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

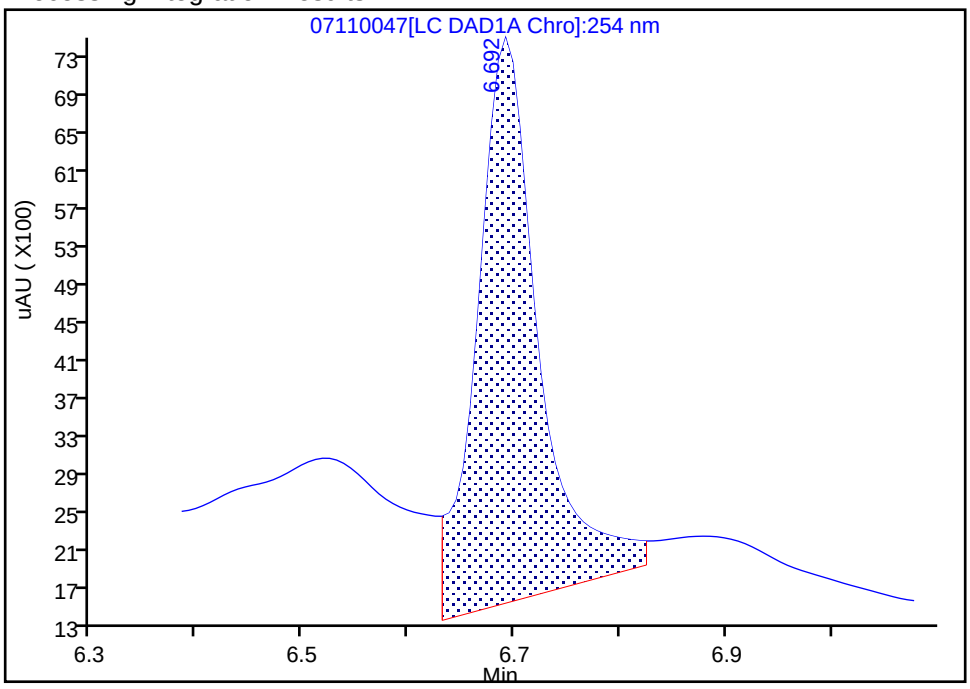
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190711-83617.b\07110047.D				
Injection Date:	12-Jul-2019 01:33:51	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-464162/3-A				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

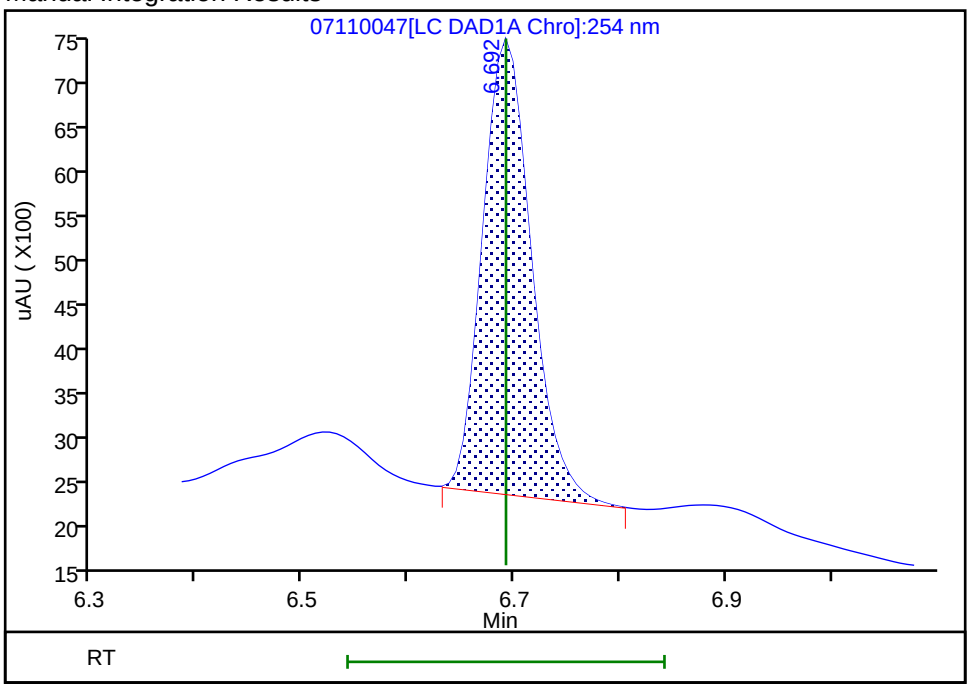
Processing Integration Results

RT: 6.69
Area: 24295
Amount: 0.264556
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 16560
Amount: 0.180327
Amount Units: ug/mL



Reviewer: fiedlerh, 12-Jul-2019 08:59:52
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/07/2019 15:08

Analysis Batch Number: 457315 End Date: 05/08/2019 01:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-457315/7		05/07/2019 15:08	1	05070007.D	Luna-phenylhex 4.6(mm)
IC 280-457315/8		05/07/2019 15:43	1	05070008.D	Luna-phenylhex 4.6(mm)
IC 280-457315/9		05/07/2019 16:18	1	05070009.D	Luna-phenylhex 4.6(mm)
IC 280-457315/10		05/07/2019 16:53	1	05070010.D	Luna-phenylhex 4.6(mm)
IC 280-457315/11		05/07/2019 17:28	1	05070011.D	Luna-phenylhex 4.6(mm)
IC 280-457315/12		05/07/2019 18:03	1	05070012.D	Luna-phenylhex 4.6(mm)
IC 280-457315/13		05/07/2019 18:38	1	05070013.D	Luna-phenylhex 4.6(mm)
IC 280-457315/14		05/07/2019 19:13	1	05070014.D	Luna-phenylhex 4.6(mm)
ICV 280-457315/15		05/07/2019 19:48	1	05070015.D	Luna-phenylhex 4.6(mm)
IC 280-457315/16		05/07/2019 20:23	1	05070016.D	Luna-phenylhex 4.6(mm)
IC 280-457315/17		05/07/2019 20:58	1	05070017.D	Luna-phenylhex 4.6(mm)
IC 280-457315/18		05/07/2019 21:33	1	05070018.D	Luna-phenylhex 4.6(mm)
IC 280-457315/19		05/07/2019 22:08	1	05070019.D	Luna-phenylhex 4.6(mm)
IC 280-457315/20		05/07/2019 22:43	1	05070020.D	Luna-phenylhex 4.6(mm)
IC 280-457315/21		05/07/2019 23:18	1	05070021.D	Luna-phenylhex 4.6(mm)
IC 280-457315/22		05/07/2019 23:53	1	05070022.D	Luna-phenylhex 4.6(mm)
IC 280-457315/23		05/08/2019 00:28	1	05070023.D	Luna-phenylhex 4.6(mm)
ICV 280-457315/24		05/08/2019 01:03	1	05070024.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/08/2019 12:21

Analysis Batch Number: 457456 End Date: 05/08/2019 16:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICV 280-457456/7		05/08/2019 12:21	1	05080007.D	Luna-phenylhex 4.6(mm)
CCV 280-457456/8		05/08/2019 12:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/08/2019 13:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/08/2019 14:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/08/2019 14:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/08/2019 15:16	1		Luna-phenylhex 4.6(mm)
CCV 280-457456/13		05/08/2019 15:51	1		Luna-phenylhex 4.6(mm)
CCV 280-457456/14		05/08/2019 16:26	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/14/2019 15:49

Analysis Batch Number: 458150 End Date: 05/15/2019 02:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-458150/7		05/14/2019 15:49	1	0514B007.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/8		05/14/2019 16:13	1	0514B008.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/9		05/14/2019 16:36	1	0514B009.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/10		05/14/2019 17:00	1	0514B010.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/11		05/14/2019 17:24	1	0514B011.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/12		05/14/2019 17:48	1	0514B012.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/13		05/14/2019 18:11	1	0514B013.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/14		05/14/2019 18:35	1	0514B014.D	UltraCarb5uODS 4.6(mm)
ICV 280-458150/15		05/14/2019 18:59	1	0514B015.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/16		05/14/2019 19:22	1		UltraCarb5uODS 4.6(mm)
IC 280-458150/17		05/14/2019 19:46	1		UltraCarb5uODS 4.6(mm)
IC 280-458150/18		05/14/2019 20:10	1		UltraCarb5uODS 4.6(mm)
IC 280-458150/19		05/14/2019 20:34	1		UltraCarb5uODS 4.6(mm)
IC 280-458150/20		05/14/2019 20:57	1		UltraCarb5uODS 4.6(mm)
IC 280-458150/21		05/14/2019 21:21	1		UltraCarb5uODS 4.6(mm)
IC 280-458150/22		05/14/2019 21:45	1		UltraCarb5uODS 4.6(mm)
IC 280-458150/23		05/14/2019 22:09	1		UltraCarb5uODS 4.6(mm)
ICV 280-458150/24		05/14/2019 22:32	1		UltraCarb5uODS 4.6(mm)
IC 280-458150/25		05/14/2019 22:56	1	0514B025.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/26		05/14/2019 23:20	1	0514B026.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/27		05/14/2019 23:43	1	0514B027.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/28		05/15/2019 00:07	1	0514B028.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/29		05/15/2019 00:31	1	0514B029.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/30		05/15/2019 00:54	1	0514B030.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/31		05/15/2019 01:18	1	0514B031.D	UltraCarb5uODS 4.6(mm)
IC 280-458150/32		05/15/2019 01:42	1	0514B032.D	UltraCarb5uODS 4.6(mm)
ICV 280-458150/33		05/15/2019 02:06	1	0514B033.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/15/2019 06:15

Analysis Batch Number: 461580 End Date: 06/15/2019 22:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-461580/40		06/15/2019 06:15	1	06140040.D	UltraCarb5uODS 4.6(mm)
CCV 280-461580/41		06/15/2019 06:39	1		UltraCarb5uODS 4.6(mm)
CCV 280-461580/42		06/15/2019 07:03	1	06140042.D	UltraCarb5uODS 4.6(mm)
MB 280-461286/1-A		06/15/2019 07:27	1	06140043.D	UltraCarb5uODS 4.6(mm)
LCS 280-461286/2-A		06/15/2019 07:51	1	06140044.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 08:14	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 08:38	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 09:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 09:26	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 09:50	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 10:13	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 10:37	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 11:01	1		UltraCarb5uODS 4.6(mm)
CCV 280-461580/53		06/15/2019 11:25	1	06140053.D	UltraCarb5uODS 4.6(mm)
CCV 280-461580/54		06/15/2019 11:49	1		UltraCarb5uODS 4.6(mm)
CCV 280-461580/55		06/15/2019 12:12	1	06140055.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 12:36	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 13:00	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 13:24	1		UltraCarb5uODS 4.6(mm)
280-124928-2		06/15/2019 13:48	1	06140059.D	UltraCarb5uODS 4.6(mm)
280-124928-7		06/15/2019 14:11	1	06140060.D	UltraCarb5uODS 4.6(mm)
280-124928-8		06/15/2019 14:35	1	06140061.D	UltraCarb5uODS 4.6(mm)
280-124928-9		06/15/2019 14:59	1	06140062.D	UltraCarb5uODS 4.6(mm)
280-124928-14		06/15/2019 15:23	1	06140063.D	UltraCarb5uODS 4.6(mm)
280-124928-15		06/15/2019 15:47	1	06140064.D	UltraCarb5uODS 4.6(mm)
280-124928-16		06/15/2019 16:10	1	06140065.D	UltraCarb5uODS 4.6(mm)
CCV 280-461580/66		06/15/2019 16:34	1	06140066.D	UltraCarb5uODS 4.6(mm)
CCV 280-461580/67		06/15/2019 16:58	1		UltraCarb5uODS 4.6(mm)
CCV 280-461580/68		06/15/2019 17:22	1	06140068.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 17:46	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 18:09	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 18:33	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 18:57	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 19:21	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 19:45	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 20:09	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 20:32	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 20:56	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/15/2019 21:20	1000		UltraCarb5uODS 4.6(mm)
CCV 280-461580/79		06/15/2019 21:44	1		UltraCarb5uODS 4.6(mm)
CCV 280-461580/80		06/15/2019 22:08	1		UltraCarb5uODS 4.6(mm)
CCV 280-461580/81		06/15/2019 22:32	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 06/18/2019 05:05

Analysis Batch Number: 461836 End Date: 06/18/2019 23:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-461836/25		06/18/2019 05:05	1		Luna-phenylhex 4.6(mm)
CCV 280-461836/26		06/18/2019 05:40	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 06:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 06:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 07:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 08:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 08:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 09:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 09:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 10:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 10:55	20		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 11:30	1		Luna-phenylhex 4.6(mm)
CCV 280-461836/38		06/18/2019 12:05	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 12:40	1		Luna-phenylhex 4.6(mm)
CCV 280-461836/37		06/18/2019 13:24	1	007-3801.D	Luna-phenylhex 4.6(mm)
280-124928-15		06/18/2019 14:34	1	06170041.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 15:09	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 15:44	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 16:19	100		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 16:54	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 17:29	100		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 18:04	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 18:39	100		Luna-phenylhex 4.6(mm)
CCV 280-461836/49		06/18/2019 19:14	1	06170049.D	Luna-phenylhex 4.6(mm)
CCV 280-461836/50		06/18/2019 19:49	1	06170050.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 20:24	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 20:59	100		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 21:34	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/18/2019 22:09	1		Luna-phenylhex 4.6(mm)
CCV 280-461836/55		06/18/2019 22:44	1		Luna-phenylhex 4.6(mm)
CCV 280-461836/56		06/18/2019 23:19	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 06/21/2019 11:38

Analysis Batch Number: 462205 End Date: 06/21/2019 14:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-462205/7		06/21/2019 11:38	1	06210007.D	Luna-phenylhex 4.6(mm)
CCV 280-462205/8		06/21/2019 12:13	1	06210008.D	Luna-phenylhex 4.6(mm)
280-124928-14		06/21/2019 12:48	1	06210009.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/21/2019 13:23	1		Luna-phenylhex 4.6(mm)
CCV 280-462205/11		06/21/2019 13:58	1	06210011.D	Luna-phenylhex 4.6(mm)
CCV 280-462205/12		06/21/2019 14:33	1	06210012.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 07/01/2019 14:40

Analysis Batch Number: 463276 End Date: 07/02/2019 00:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-463276/7		07/01/2019 14:40	1	07010007.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/8		07/01/2019 15:04	1	07010008.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/9		07/01/2019 15:27	1	07010009.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/10		07/01/2019 15:50	1	07010010.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/11		07/01/2019 16:13	1	07010011.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/12		07/01/2019 16:36	1	07010012.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/13		07/01/2019 17:00	1	07010013.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/14		07/01/2019 17:23	1	07010014.D	UltraCarb5uODS 4.6(mm)
ICV 280-463276/15		07/01/2019 17:46	1	07010015.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/16		07/01/2019 18:09	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/17		07/01/2019 18:32	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/18		07/01/2019 18:55	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/19		07/01/2019 19:18	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/20		07/01/2019 19:41	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/21		07/01/2019 20:04	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/22		07/01/2019 20:27	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/23		07/01/2019 20:50	1		UltraCarb5uODS 4.6(mm)
ICV 280-463276/24		07/01/2019 21:13	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/25		07/01/2019 21:36	1	07010025.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/26		07/01/2019 22:00	1	07010026.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/27		07/01/2019 22:23	1	07010027.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/28		07/01/2019 22:46	1	07010028.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/29		07/01/2019 23:09	1	07010029.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/30		07/01/2019 23:32	1	07010030.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/31		07/01/2019 23:55	1	07010031.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/32		07/02/2019 00:18	1	07010032.D	UltraCarb5uODS 4.6(mm)
ICV 280-463276/33		07/02/2019 00:41	1	07010033.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 07/11/2019 23:39

Analysis Batch Number: 464207 End Date: 07/12/2019 10:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-464207/42		07/11/2019 23:39	1	07110042.D	UltraCarb5uODS 4.6(mm)
CCV 280-464207/43		07/12/2019 00:02	1		UltraCarb5uODS 4.6(mm)
CCV 280-464207/44		07/12/2019 00:25	1	07110044.D	UltraCarb5uODS 4.6(mm)
MB 280-464162/1-A		07/12/2019 00:48	1	07110045.D	UltraCarb5uODS 4.6(mm)
LCS 280-464162/2-A		07/12/2019 01:10	1	07110046.D	UltraCarb5uODS 4.6(mm)
LCSD 280-464162/3-A		07/12/2019 01:33	1	07110047.D	UltraCarb5uODS 4.6(mm)
LCS 280-464162/4-A		07/12/2019 01:56	1	07110048.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 02:19	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 02:42	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 03:05	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 03:28	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 03:51	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 04:14	1		UltraCarb5uODS 4.6(mm)
CCV 280-464207/55		07/12/2019 04:37	1	07110055.D	UltraCarb5uODS 4.6(mm)
CCV 280-464207/56		07/12/2019 05:00	1		UltraCarb5uODS 4.6(mm)
CCV 280-464207/57		07/12/2019 05:23	1	07110057.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 05:46	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 06:09	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 06:32	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 06:55	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 07:18	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 07:41	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 08:04	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 08:27	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 08:50	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/12/2019 09:13	1		UltraCarb5uODS 4.6(mm)
CCV 280-464207/68		07/12/2019 09:36	1		UltraCarb5uODS 4.6(mm)
CCV 280-464207/69		07/12/2019 09:59	1		UltraCarb5uODS 4.6(mm)
CCV 280-464207/70		07/12/2019 10:22	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 07/12/2019 18:56

Analysis Batch Number: 464373 End Date: 07/13/2019 08:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-464373/18		07/12/2019 18:56	1	07120018.D	Luna-phenylhex 4.6(mm)
CCV 280-464373/19		07/12/2019 19:31	1	07120019.D	Luna-phenylhex 4.6(mm)
ZZZZZ		07/12/2019 20:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/12/2019 20:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/12/2019 21:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/12/2019 21:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/12/2019 22:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/12/2019 23:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/12/2019 23:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 00:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 00:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 01:20	1		Luna-phenylhex 4.6(mm)
CCV 280-464373/30		07/13/2019 01:55	1	07120030.D	Luna-phenylhex 4.6(mm)
CCV 280-464373/31		07/13/2019 02:30	1	07120031.D	Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 03:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 03:40	1		Luna-phenylhex 4.6(mm)
280-124928-7 RE		07/13/2019 04:15	1	07120034.D	Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 04:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 05:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 06:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 06:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 07:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		07/13/2019 07:45	1000		Luna-phenylhex 4.6(mm)
CCV 280-464373/41		07/13/2019 08:20	1	07120041.D	Luna-phenylhex 4.6(mm)
CCV 280-464373/42		07/13/2019 08:55	1	07120042.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 07/15/2019 12:18

Analysis Batch Number: 464537 End Date: 07/15/2019 18:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-464537/7		07/15/2019 12:18	1	07150007.D	UltraCarb5uODS 4.6(mm)
CCV 280-464537/8		07/15/2019 12:41	1		UltraCarb5uODS 4.6(mm)
CCV 280-464537/9		07/15/2019 13:04	1	07150009.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		07/15/2019 13:27	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		07/15/2019 13:50	1		UltraCarb5uODS 4.6(mm)
280-124928-2 RE		07/15/2019 14:13	1	07150012.D	UltraCarb5uODS 4.6(mm)
280-124928-7 RE		07/15/2019 14:36	1	07150013.D	UltraCarb5uODS 4.6(mm)
280-124928-8 RE		07/15/2019 14:59	1	07150014.D	UltraCarb5uODS 4.6(mm)
280-124928-9 RE		07/15/2019 15:21	1	07150015.D	UltraCarb5uODS 4.6(mm)
280-124928-14 RE		07/15/2019 15:44	1	07150016.D	UltraCarb5uODS 4.6(mm)
280-124928-15 RE		07/15/2019 16:07	1	07150017.D	UltraCarb5uODS 4.6(mm)
280-124928-16 RE		07/15/2019 16:30	1	07150018.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		07/15/2019 16:53	1000		UltraCarb5uODS 4.6(mm)
CCV 280-464537/20		07/15/2019 17:16	1	07150020.D	UltraCarb5uODS 4.6(mm)
CCV 280-464537/21		07/15/2019 17:39	1		UltraCarb5uODS 4.6(mm)
CCV 280-464537/22		07/15/2019 18:02	1	07150022.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 07/16/2019 16:43

Analysis Batch Number: 464736 End Date: 07/16/2019 19:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-464736/7		07/16/2019 16:43	1	07160007.D	Luna-phenylhex 4.6(mm)
CCV 280-464736/8		07/16/2019 17:18	1	07160008.D	Luna-phenylhex 4.6(mm)
280-124928-7		07/16/2019 17:53	1	07160009.D	Luna-phenylhex 4.6(mm)
CCV 280-464736/10		07/16/2019 18:28	1	07160010.D	Luna-phenylhex 4.6(mm)
CCV 280-464736/11		07/16/2019 19:03	1	07160011.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461286 Batch Start Date: 06/12/19 17:51 Batch Analyst: Anders, Kayla S

Batch Method: 3535 Batch End Date: 06/12/19 20:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00089	8330Surrogate 00105
MB 280-461286/1		3535, 8330A				500 mL	5 mL		0.1 mL
LCS 280-461286/2		3535, 8330A				500 mL	5 mL	0.1 mL	0.1 mL
280-124928-A-2	Source2019	3535, 8330A	T	779.7 g	286.0 g	493.7 mL	5 mL		0.1 mL
280-124928-A-7	G0105-19A	3535, 8330A	T	771.5 g	285.2 g	486.3 mL	5 mL		0.1 mL
280-124928-A-8	G0107-19A	3535, 8330A	T	796.6 g	284.7 g	511.9 mL	5 mL		0.1 mL
280-124928-A-9	G0106-19A	3535, 8330A	T	798.9 g	286.4 g	512.5 mL	5 mL		0.1 mL
280-124928-A-14	G0017-19A	3535, 8330A	T	795.0 g	284.8 g	510.2 mL	5 mL		0.1 mL
280-124928-A-15	PZ009-19A	3535, 8330A	T	784.9 g	285.8 g	499.1 mL	5 mL		0.1 mL
280-124928-A-16	G0045-19A	3535, 8330A	T	760.5 g	285.5 g	475 mL	5 mL		0.1 mL

Batch Notes	
Acid ID	.1AAinACN_00127
Acid Name	.1AAinACN
Balance ID	24350888
Batch Comment	DV-OP-0017
First End time	06/12/2019 19:46
Pipette/Syringe/Dispenser ID	Jiji, Soot
Rinse Solvent Lot	Acetonitrile_00034
Rinse Solvent Name	Acetonitrile
Solvent Lot #	CaCl2_Sol_00066
Solvent Name	Calcium Chloride
SPE Cartridge Lot ID	004938274A
SPE Cartridge Type	Proapak RDX Cartridges
Analyst ID - Spike Analyst	KA
Analyst ID - Spike Witness Analyst	Reviewer:CR
First Start time	06/12/2019 18:17

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 464162 Batch Start Date: 07/10/19 20:21 Batch Analyst: Exstrum, Adam J

Batch Method: 3535 Batch End Date: 07/11/19 01:07

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00089	8330_OP_DMT 00002
MB 280-464162/1		3535, 8330A				500 mL	5 mL		
LCS 280-464162/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCSD 280-464162/3		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-464162/4		3535, 8330A				500 mL	5 mL		0.1 mL
280-124928-B-2	Source2019	3535, 8330A	T	793.3 g	283.5 g	509.8 mL	5 mL		
280-124928-B-7	G0105-19A	3535, 8330A	T	786.9 g	283.7 g	503.2 mL	5 mL		
280-124928-B-8	G0107-19A	3535, 8330A	T	755.7 g	284.2 g	471.5 mL	5 mL		
280-124928-B-9	G0106-19A	3535, 8330A	T	753.2 g	283.3 g	469.9 mL	5 mL		
280-124928-B-14	G0017-19A	3535, 8330A	T	754.4 g	283.7 g	470.7 mL	5 mL		
280-124928-B-15	PZ009-19A	3535, 8330A	T	772.5 g	283.9 g	488.6 mL	5 mL		
280-124928-B-16	G0045-19A	3535, 8330A	T	772.2 g	283.1 g	489.1 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00105	AnalysisComment				
MB 280-464162/1		3535, 8330A		0.1 mL					
LCS 280-464162/2		3535, 8330A		0.1 mL	8330				
LCSD 280-464162/3		3535, 8330A		0.1 mL	8330				
LCS 280-464162/4		3535, 8330A		0.1 mL	DMT				
280-124928-B-2	Source2019	3535, 8330A	T	0.1 mL					
280-124928-B-7	G0105-19A	3535, 8330A	T	0.1 mL					
280-124928-B-8	G0107-19A	3535, 8330A	T	0.1 mL					
280-124928-B-9	G0106-19A	3535, 8330A	T	0.1 mL					
280-124928-B-14	G0017-19A	3535, 8330A	T	0.1 mL					
280-124928-B-15	PZ009-19A	3535, 8330A	T	0.1 mL					
280-124928-B-16	G0045-19A	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.: 280-124928-1

SDG No.:

Batch Number: 464162 Batch Start Date: 07/10/19 20:21 Batch Analyst: Exstrum, Adam J

Batch Method: 3535 Batch End Date: 07/11/19 01:07

Batch Notes	
Acid ID	.1AAinACN_00131
Acid Name	.1AAinACN
Batch Comment	DV-OP-0017
First End time	07/10/2019 23:46
Pipette/Syringe/Dispenser ID	Jiji, Soot
Rinse Solvent Lot	Acetonitrile_00034
Rinse Solvent Name	Acetonitrile
Solvent Lot #	CaCl2_Sol_00066
Solvent Name	Calcium Chloride
SPE Cartridge Lot ID	004939008A
SPE Cartridge Type	Porapak RDX Cartridges
Analyst ID - Spike Analyst	AE
Analyst ID - Spike Witness Analyst	Reviewer: DC
First Start time	07/10/2019 20:55

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
SHGW02-19A	280-124928-3
SHGW05-19A	280-124928-4
SAMW1-19A	280-124928-5
G0053-19A	280-124928-6
G0105-19A	280-124928-7
G0107-19A	280-124928-8
G0106-19A	280-124928-9
SHGW03-19A	280-124928-10
G0069-19A	280-124928-11
SHGW04-19A	280-124928-12
G0017-19A	280-124928-14
PZ009-19A	280-124928-15
G0045-19A	280-124928-16

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW02-19A
Lab Sample ID: 280-124928-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 13:25
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.033	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfate	15	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	85	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW05-19A
Lab Sample ID: 280-124928-4
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 08:00
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.032	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfate	15	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	85	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SAMW1-19A
Lab Sample ID: 280-124928-5
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 10:55
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	8.4	0.20	0.10	0.038	mg/L			2	353.2
Sulfate	25	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	92	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0053-19A
Lab Sample ID: 280-124928-6
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 12:10
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	16	0.20	0.10	0.038	mg/L			2	353.2
Sulfate	27	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	76	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0105-19A
Lab Sample ID: 280-124928-7
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 12:35
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.4	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.9	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	870	50	30	10	mg/L		H J1 D	10	9056A
Total Alkalinity as CaCO3	580	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0105-19A
Lab Sample ID: 280-124928-7
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 12:35
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.9	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0107-19A
Lab Sample ID: 280-124928-8
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 13:50
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.17	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	1000	50	30	10	mg/L		H D	10	9056A
Total Alkalinity as CaCO3	450	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0107-19A
Lab Sample ID: 280-124928-8
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 13:50
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.4	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0106-19A
Lab Sample ID: 280-124928-9
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 15:05
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.074	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	1000	50	30	10	mg/L		H D	10	9056A
Total Alkalinity as CaCO3	420	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0106-19A
Lab Sample ID: 280-124928-9
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 15:05
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.9	1.0	0.50	0.16	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW03-19A
Lab Sample ID: 280-124928-10
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 10:50
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.47	0.10	0.050	0.019	mg/L			1	353.2
Sulfate	29	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	180	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0069-19A
Lab Sample ID: 280-124928-11
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 12:10
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	1.6	0.10	0.050	0.019	mg/L			1	353.2
Sulfate	21	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	130	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW04-19A
Lab Sample ID: 280-124928-12
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 13:35
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.032	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfate	13	5.0	3.0	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	190	10	10	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0017-19A
Lab Sample ID: 280-124928-14
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 16:15
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	8.0	4.0	1.9	0.79	mg/L			1	9034
Sulfate	380	25	15	5.2	mg/L		H D	5	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: G0017-19A
Lab Sample ID: 280-124928-14
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 16:15
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.7	1.0	0.50	0.16	mg/L		H	1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ009-19A
Lab Sample ID: 280-124928-15
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 16:35
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	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	530	25	15	5.2	mg/L		H D	5	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: PZ009-19A
Lab Sample ID: 280-124928-15
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/05/2019 16:35
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.8	1.0	0.50	0.16	mg/L		H	1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0045-19A
Lab Sample ID: 280-124928-16
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 08:55
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.9	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	4.0	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	1000	50	30	10	mg/L		H D	10	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: G0045-19A
Lab Sample ID: 280-124928-16
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-124928-1
SDG ID.:
Matrix: Water
Date Sampled: 06/06/2019 08:55
Reporting Basis: WET
Date Received: 06/07/2019 08:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.5	1.0	0.50	0.16	mg/L		H	1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Analyst: MJS Batch Start Date: 06/19/2019

Reporting Units: mg/L Analytical Batch No.: 462115

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:19	Ammonia	0.519	0.498	104	90-110		350.1 ICV_00353
15	ICV	10:21	Ammonia	2.55	2.49	103	90-110		350.1 ICV_00353
16	ICB	10:23	Ammonia	0.050				U	
130	CCVL	14:35	Ammonia	0.493	0.500	99	90-110		350.1 cal_00370
131	CCV	14:37	Ammonia	2.40	2.50	96	90-110		350.1 cal_00370
132	CCB	14:39	Ammonia	0.050				U	
154	CCVL	15:31	Ammonia	0.465	0.500	93	90-110		350.1 cal_00370
155	CCV	15:33	Ammonia	2.54	2.50	102	90-110		350.1 cal_00370
156	CCB	15:35	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.: 280-124928-1

SDG No.:

Analyst: SVC Batch Start Date: 06/25/2019

Reporting Units: mg/L Analytical Batch No.: 462702

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	ICV	19:01	Nitrogen, Total Kjeldahl	4.86	5.00	97	90-110		TKN ICV 25_00078
14	ICB	19:02	Nitrogen, Total Kjeldahl	1.0				U	
31	CCV	19:23	Nitrogen, Total Kjeldahl	4.97	5.00	99	90-110		TKN 25ppm_00794
32	CCB	19:25	Nitrogen, Total Kjeldahl	1.0				U	
49	CCV	19:46	Nitrogen, Total Kjeldahl	4.94	5.00	99	90-110		TKN 25ppm_00794
50	CCB	19:47	Nitrogen, Total Kjeldahl	1.0				U	
65	CCV	20:06	Nitrogen, Total Kjeldahl	4.98	5.00	100	90-110		TKN 25ppm_00794
66	CCB	20:07	Nitrogen, Total Kjeldahl	1.0				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Analyst: SVC Batch Start Date: 06/26/2019

Reporting Units: mg/L Analytical Batch No.: 463103

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	17:56	Nitrate Nitrite as N	5.19	5.00	104	90-110		NXN ICV INT_00480
18	ICVL	17:58	Nitrate Nitrite as N	2.07	2.00	103	90-110		NXN ICV INT_00480
19	ICB	18:00	Nitrate Nitrite as N	0.050				U	
35	CCV	18:32	Nitrate Nitrite as N	4.93	5.00	99	90-110		NXN CAL INT_00499
36	CCVL	18:34	Nitrate Nitrite as N	1.03	1.00	103	90-110		NXN CAL INT_00499
37	CCB	18:36	Nitrate Nitrite as N	0.050				U	
51	CCV	19:04	Nitrate Nitrite as N	4.98	5.00	100	90-110		NXN CAL INT_00499
52	CCVL	19:06	Nitrate Nitrite as N	1.03	1.00	103	90-110		NXN CAL INT_00499
53	CCB	19:08	Nitrate Nitrite as N	0.050				U	
67	CCV	19:36	Nitrate Nitrite as N	4.78	5.00	96	90-110		NXN CAL INT_00499
68	CCVL	19:38	Nitrate Nitrite as N	0.986	1.00	99	90-110		NXN CAL INT_00499
69	CCB	19:40	Nitrate Nitrite as N	0.050				U	
83	CCV	20:08	Nitrate Nitrite as N	4.64	5.00	93	90-110		NXN CAL INT_00499
84	CCVL	20:10	Nitrate Nitrite as N	0.977	1.00	98	90-110		NXN CAL INT_00499
85	CCB	20:12	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.: 280-124928-1

SDG No.:

Analyst: JAP Batch Start Date: 07/03/2019

Reporting Units: mg/L Analytical Batch No.: 463528

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	12:22	Sulfate	97.3	100	97	90-110		IC LCS_01622
2	CCB	12:39	Sulfate	2.5				U	
17	CCV	21:48	Sulfate	97.4	100	97	90-110		IC LCS_01622
18	CCB	22:05	Sulfate	2.5				U	
29	CCV	01:18	Sulfate	97.7	100	98	90-110		IC LCS_01622
30	CCB	01:36	Sulfate	2.5				U	
41	CCV	04:48	Sulfate	97.4	100	97	90-110		IC LCS_01622
42	CCB	05:05	Sulfate	2.5				U	
53	CCV	08:17	Sulfate	97.7	100	98	90-110		IC LCS_01622
54	CCB	08:34	Sulfate	2.5				U	
65	CCV	11:47	Sulfate	98.0	100	98	90-110		IC LCS_01622
66	CCB	12:04	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.: 280-124928-1

SDG No.:

Analyst: TLP Batch Start Date: 07/11/2019

Reporting Units: mg/L Analytical Batch No.: 464281

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	21:08	Sulfate	97.7	100	98	90-110		IC LCS_01628
2	CCB	21:31	Sulfate	2.5				U	
17	CCV	01:53	Sulfate	92.8	100	93	90-110		IC LCS_01628
18	CCB	02:10	Sulfate	1.07				J	
29	CCV	05:23	Sulfate	907	1000	91	90-110		IC LCS_01628
30	CCB	05:41	Sulfate	2.5				U	
41	CCV	08:53	Sulfate	90.0	100	90	90-110		IC LCS_01628
42	CCB	09:10	Sulfate	2.5				U	
53	CCV	12:22	Sulfate	91.5	100	91	90-110		IC LCS_01628
54	CCB	12:39	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.: 280-124928-1

SDG No.:

Analyst: CCJ Batch Start Date: 07/03/2019

Reporting Units: mg/L Analytical Batch No.: 463648

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	15:51	Dissolved Organic Carbon - Quad	20.0	20.0	100	90-110		TOC ICV Std_00037
2	ICB	16:05	Dissolved Organic Carbon - Quad	0.50				U	
15	CCV	19:17	Dissolved Organic Carbon - Quad	24.8	25.0	99	90-110		TOC ICV Std_00037
16	CCB	19:32	Dissolved Organic Carbon - Quad	0.50				U	
27	CCV	22:18	Dissolved Organic Carbon - Quad	24.8	25.0	99	90-110		TOC ICV Std_00037
28	CCB	22:32	Dissolved Organic Carbon - Quad	0.50				U	
123	CCV	22:19	Dissolved Organic Carbon - Quad	24.9					
124	CCB	22:34	Dissolved Organic Carbon - Quad	0.50				U	
135	CCV	01:18	Dissolved Organic Carbon - Quad	25.1	25.0	100	90-110		TOC ICV Std_00037
136	CCB	01:33	Dissolved Organic Carbon - Quad	0.50				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Analyst: CCJ Batch Start Date: 07/05/2019

Reporting Units: mg/L Analytical Batch No.: 463832

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	11:27	Dissolved Organic Carbon - Quad	20.1	20.0	101	90-110		TOC ICV Std_00037
2	ICB	11:44	Dissolved Organic Carbon - Quad	0.50				U	
16	CCV	15:26	Dissolved Organic Carbon - Quad	25.5	25.0	102	90-110		TOC ICV Std_00037
17	CCB	15:41	Dissolved Organic Carbon - Quad	0.50				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Analyst: SGB Batch Start Date: 06/15/2019

Reporting Units: mg/L Analytical Batch No.: 461772

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
80	CCV	03:25	Total Alkalinity as CaCO3	207	200	103	90-110		Alk daily lcs 00825
81	CCB	03:30	Total Alkalinity as CaCO3	10				U	
94	CCV	04:57	Total Alkalinity as CaCO3	208	200	104	90-110		Alk daily lcs 00825
95	CCB	05:01	Total Alkalinity as CaCO3	10				U	
106	CCV	06:09	Total Alkalinity as CaCO3	207	200	104	90-110		Alk daily lcs 00825
107	CCB	06:13	Total Alkalinity as CaCO3	10				U	
120	CCV	07:30	Total Alkalinity as CaCO3	207	200	104	90-110		Alk daily lcs 00825
121	CCB	07:35	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.: 280-124928-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 462115	Date: 06/19/2019 15:05						
350.1	MB 280-462115/141	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 462702	Date: 06/25/2019 19:05	Prep Batch: 462534	Date: 06/24/2019 16:14				
351.2	MB 280-462534/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 463103	Date: 06/26/2019 18:06						
353.2	MB 280-463103/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 463103	Date: 06/26/2019 19:22						
353.2	MB 280-463103/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 461193	Date: 06/11/2019 15:04	Prep Batch: 461159	Date: 06/11/2019 12:16				
9034	MB 280-461159/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 461300	Date: 06/12/2019 12:54	Prep Batch: 461272	Date: 06/12/2019 09:51				
9034	MB 280-461272/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 463528	Date: 07/03/2019 13:49						
9056A	MB 280-463528/6	Sulfate	3.0	U	mg/L	5.0	1
Batch ID: 464281	Date: 07/11/2019 22:41						
9056A	MB 280-464281/6	Sulfate	3.0	U	mg/L	5.0	1
Batch ID: 463648	Date: 07/03/2019 18:18						
9060A	MB 280-463539/2-A	Dissolved Organic Carbon - Quad	0.50	U	mg/L	1.0	1
Batch ID: 463832	Date: 07/05/2019 12:13						
9060A	MB 280-463669/2-A	Dissolved Organic Carbon - Quad	0.50	U	mg/L	1.0	1
Batch ID: 461772	Date: 06/15/2019 03:40						
SM 2320B	MB 280-461772/83	Total Alkalinity as CaCO3	10	U	mg/L	10	1
Batch ID: 461772	Date: 06/15/2019 06:24						
SM 2320B	MB 280-461772/109	Total Alkalinity as CaCO3	10	U	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 463528 Date: 07/04/2019 03:38											
9056A	280-124928-3	Sulfate	15		mg/L						
9056A	280-124928-3 MS	Sulfate	40.4		mg/L	25.0	103	87-112			
Batch ID: 463528 Date: 07/04/2019 05:58											
9056A	280-124928-6	Sulfate	27		mg/L						
9056A	280-124928-6 MS	Sulfate	54.3		mg/L	25.0	109	87-112			
Batch ID: 463528 Date: 07/04/2019 08:52											
9056A	280-124928-11	Sulfate	21		mg/L						
9056A	280-124928-11 MS	Sulfate	48.2		mg/L	25.0	107	87-112			
Batch ID: 464281 Date: 07/12/2019 06:16											
9056A	280-124928-7	Sulfate	870		mg/L						H J1 D
9056A	280-124928-7 MS	Sulfate	1070		mg/L	250	83	87-112			J1 D
Batch ID: 464281 Date: 07/12/2019 08:35											
9056A	280-124928-16	Sulfate	1000		mg/L						H D
9056A	280-124928-16 MS	Sulfate	1270		mg/L	250	99	87-112			4 D
Batch ID: 463648 Date: 07/03/2019 19:02											
9060A	280-124928-7	Dissolved Organic Carbon - Quad	5.9		mg/L						
9060A	280-124928-7 MS	Dissolved Organic Carbon - Quad	29.3		mg/L	25.0	93	88-112			
Batch ID: 463832 Date: 07/05/2019 13:14											
9060A	280-124928-15	Dissolved Organic Carbon - Quad	4.8		mg/L						H
9060A	280-124928-15 MS	Dissolved Organic Carbon - Quad	29.2		mg/L	25.0	98	88-112			

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 463528 Date: 07/04/2019 03:55											
9056A	280-124928-3 MSD	Sulfate	40.7		mg/L	25.0	104	87-112	1	10	
Batch ID: 463528 Date: 07/04/2019 06:15											
9056A	280-124928-6 MSD	Sulfate	54.3		mg/L	25.0	109	87-112	0	10	
Batch ID: 463528 Date: 07/04/2019 09:09											
9056A	280-124928-11 MSD	Sulfate	48.7		mg/L	25.0	110	87-112	1	10	
Batch ID: 464281 Date: 07/12/2019 06:33											
9056A	280-124928-7 MSD	Sulfate	1080		mg/L	250	84	87-112	0	10	D J1
Batch ID: 464281 Date: 07/12/2019 09:28											
9056A	280-124928-16 MSD	Sulfate	1260		mg/L	250	96	87-112	1	10	4 D
Batch ID: 463648 Date: 07/03/2019 19:46											
9060A	280-124928-7 MSD	Dissolved Organic Carbon - Quad	30.4		mg/L	25.0	98	88-112	4	15	
Batch ID: 463832 Date: 07/05/2019 13:29											
9060A	280-124928-15 MSD	Dissolved Organic Carbon - Quad	29.5		mg/L	25.0	99	88-112	1	15	

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 463528 Date: 07/04/2019 03:21								
9056A	SHGW02-19A	280-124928-3	Sulfate	15	mg/L			
9056A	SHGW02-19A	280-124928-3 DU	Sulfate	14.5	mg/L	0.8	10	
Batch ID: 463528 Date: 07/04/2019 05:40								
9056A	G0053-19A	280-124928-6	Sulfate	27	mg/L			
9056A	G0053-19A	280-124928-6 DU	Sulfate	27.1	mg/L	0.1	10	
Batch ID: 463528 Date: 07/04/2019 07:59								
9056A	G0069-19A	280-124928-11	Sulfate	21	mg/L			
9056A	G0069-19A	280-124928-11 DU	Sulfate	21.3	mg/L	0	10	
Batch ID: 464281 Date: 07/12/2019 05:58								
9056A	G0105-19A	280-124928-7	Sulfate	870	mg/L			
9056A	G0105-19A	280-124928-7 DU	Sulfate	836	mg/L	4	10	D
Batch ID: 464281 Date: 07/12/2019 08:18								
9056A	G0045-19A	280-124928-16	Sulfate	1000	mg/L			
9056A	G0045-19A	280-124928-16 DU	Sulfate	997	mg/L	2	10	D
Batch ID: 461772 Date: 06/15/2019 06:39								
SM 2320B	PZ009-19A	280-124928-15	Total Alkalinity as CaCO3	500	mg/L			
SM 2320B	PZ009-19A	280-124928-15 DU	Total Alkalinity as CaCO3	491	mg/L	1	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.: 280-124928-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 462115	Date: 06/19/2019 14:59										
						LCS Source: 350.1 cal_00370					
350.1	LCS 280-462115/138	Ammonia	2.49		mg/L	2.50	100	90-110	8	10	
Batch ID: 462702	Date: 06/25/2019 19:22	Prep Batch: 462534	Date: 06/24/2019 16:14								
						LCS Source: TKN 25ppm_00794					
351.2	LCS 280-462534/1-A	Nitrogen, Total Kjeldahl	5.59		mg/L	6.00	93	90-110			
Batch ID: 463103	Date: 06/26/2019 18:04										
						LCS Source: NXN CAL INT_00499					
353.2	LCS 280-463103/21	Nitrate Nitrite as N	4.98		mg/L	5.00	100	90-110			
Batch ID: 463103	Date: 06/26/2019 19:20										
						LCS Source: NXN CAL INT_00499					
353.2	LCS 280-463103/59	Nitrate Nitrite as N	4.74		mg/L	5.00	95	90-110			
Batch ID: 461193	Date: 06/11/2019 15:04	Prep Batch: 461159	Date: 06/11/2019 12:16								
						LCS Source: SFD CAL INT_01659					
9034	LCS 280-461159/1-A	Sulfide	18.4		mg/L	26.0	71	44-110			
Batch ID: 461300	Date: 06/12/2019 12:54	Prep Batch: 461272	Date: 06/12/2019 09:51								
						LCS Source: SFD CAL INT_01659					
9034	LCS 280-461272/1-A	Sulfide	20.0		mg/L	26.0	77	44-110			
Batch ID: 463528	Date: 07/03/2019 13:14										
						LCS Source: IC LCS_01622					
9056A	LCS 280-463528/4	Sulfate	97.3		mg/L	100	97	87-112	0	10	
Batch ID: 464281	Date: 07/11/2019 22:06										
						LCS Source: IC LCS_01628					
9056A	LCS 280-464281/4	Sulfate	98.5		mg/L	100	98	87-112	0	10	
Batch ID: 463648	Date: 07/03/2019 18:03										
						LCS Source: TOC LCS Std_00046					
9060A	LCS 280-463539/1-A	Dissolved Organic Carbon - Quad	24.1		mg/L	25.0	97	88-112			
Batch ID: 463832	Date: 07/05/2019 11:58										
						LCS Source: TOC LCS Std_00046					
9060A	LCS 280-463669/1-A	Dissolved Organic Carbon - Quad	24.6		mg/L	25.0	99	88-112			
Batch ID: 461772	Date: 06/15/2019 03:36										
						LCS Source: Alk daily lcs_00825					
SM 2320B	LCS 280-461772/82	Total Alkalinity as CaCO3	207		mg/L	200	104	89-109			

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 461772 Date: 06/15/2019 06:19											
						LCS Source: Alk daily lcs_00825					
SM 2320B	LCS 280-461772/108	Total Alkalinity as CaCO3	207		mg/L	200	104	89-109			

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 462115	Date: 06/19/2019 15:03										
						LCSD Source: 350.1 cal_00370					
350.1	LCSD 280-462115/140	Ammonia	2.31		mg/L	2.50	92	90-110	8	10	
Batch ID: 463528	Date: 07/03/2019 13:31										
						LCSD Source: IC LCS_01622					
9056A	LCSD 280-463528/5	Sulfate	97.3		mg/L	100	97	87-112	0	10	
Batch ID: 464281	Date: 07/11/2019 22:24										
						LCSD Source: IC LCS_01628					
9056A	LCSD 280-464281/5	Sulfate	98.4		mg/L	100	98	87-112	0	10	

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

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 463528	Date: 07/03/2019 12:57										
						LCS Source: IC CAL cl/so4_00263					
9056A	MRL 280-463528/3	Sulfate	2.30	J	mg/L	2.50	92	50-150			
Batch ID: 464281	Date: 07/11/2019 21:49										
						LCS Source: IC CAL cl/so4_00264					
9056A	MRL 280-464281/3	Sulfate	2.28	J	mg/L	2.50	91	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: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 3

Method: 350.1 DL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia		0.1	0.022

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 3

Method: 350.1 XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia		0.1	0.0225

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_Astoria

Method: 351.2 DL Date: 02/03/2019 00:00

Prep Method: 351.2

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_Astoria

Method: 351.2 XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 2

Method: 353.2 DL Date: 12/16/2011 09:50

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrate Nitrite as N		0.1	0.019

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

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: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 DL Date: 03/28/2011 13:37

Prep Method: 9030B

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfide		4	0.793

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 XMDL Date: 03/28/2011 13:37

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfide		4	0.793

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

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

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-124928-1

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

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-462534/1-A	06/24/2019 16:14	462534		25	25
MB 280-462534/2-A	06/24/2019 16:14	462534		25	25
280-124928-7	06/24/2019 16:14	462534		25	25
280-124928-8	06/24/2019 16:14	462534		25	25
280-124928-9	06/24/2019 16:14	462534		25	25
280-124928-14	06/24/2019 16:14	462534		25	25
280-124928-15	06/24/2019 16:14	462534		25	25
280-124928-16	06/24/2019 16:14	462534		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-461159/1-A	06/11/2019 12:16	461159		50	50
MB 280-461159/2-A	06/11/2019 12:16	461159		50	50
280-124928-7	06/11/2019 12:16	461159		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-461272/1-A	06/12/2019 09:51	461272		50	50
MB 280-461272/2-A	06/12/2019 09:51	461272		50	50
280-124928-8	06/12/2019 09:51	461272		50	50
280-124928-9	06/12/2019 09:51	461272		50	50
280-124928-15	06/12/2019 09:51	461272		50	50
280-124928-14	06/12/2019 09:51	461272		50	50
280-124928-16	06/12/2019 09:51	461272		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/19/2019 09:53 End Date: 06/19/2019 16:29

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			09:53																									
ZZZZZZ			09:55																									
ZZZZZZ			09:57																									
IC 280-462115/4			09:59	X																								
IC 280-462115/5			10:01	X																								
IC 280-462115/6			10:03	X																								
IC 280-462115/7			10:05	X																								
IC 280-462115/8			10:07	X																								
IC 280-462115/9			10:09	X																								
IC 280-462115/10			10:11	X																								
IC 280-462115/11			10:13	X																								
ZZZZZZ			10:15																									
ZZZZZZ			10:17																									
ICVL 280-462115/14	1		10:19	X																								
ICV 280-462115/15	1		10:21	X																								
ICB 280-462115/16	1		10:23	X																								
ZZZZZZ			10:25																									
ZZZZZZ			10:27																									
ZZZZZZ			10:29																									
ZZZZZZ			10:31																									
ZZZZZZ			10:33																									
ZZZZZZ			10:35																									
ZZZZZZ			10:37																									
ZZZZZZ			10:39																									
ZZZZZZ			10:41																									
ZZZZZZ			10:43																									
ZZZZZZ			10:45																									
ZZZZZZ			10:47																									
ZZZZZZ			10:49																									
ZZZZZZ			10:51																									
RINSE 280-462115/31			10:53																									
ZZZZZZ			10:55																									
CCVL 280-462115/33			10:57																									
CCV 280-462115/34			10:59																									
CCB 280-462115/35			11:01																									
ZZZZZZ			11:03																									
ZZZZZZ			11:05																									
ZZZZZZ			11:07																									
ZZZZZZ			11:09																									
ZZZZZZ			11:11																									
ZZZZZZ			11:13																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/19/2019 09:53 End Date: 06/19/2019 16:29

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			11:21																									
ZZZZZZ			11:23																									
ZZZZZZ			11:25																									
ZZZZZZ			11:27																									
ZZZZZZ			11:29																									
ZZZZZZ			11:31																									
RINSE 280-462115/48			11:33																									
ZZZZZZ			11:35																									
CCVL 280-462115/50			11:37																									
CCV 280-462115/51			11:39																									
CCB 280-462115/52			11:41																									
ZZZZZZ			11:43																									
ZZZZZZ			11:45																									
ZZZZZZ			11:47																									
RINSE 280-462115/56			12:07																									
ZZZZZZ			12:09																									
CCVL 280-462115/58			12:11																									
CCV 280-462115/59			12:13																									
CCV 280-462115/60			12:15																									
CCB 280-462115/61			12:17																									
ZZZZZZ			12:19																									
ZZZZZZ			12:21																									
ZZZZZZ			12:23																									
ZZZZZZ			12:25																									
ZZZZZZ			12:27																									
ZZZZZZ			12:29																									
ZZZZZZ			12:31																									
ZZZZZZ			12:33																									
ZZZZZZ			12:35																									
ZZZZZZ			12:37																									
ZZZZZZ			12:39																									
RINSE 280-462115/73			12:41																									
ZZZZZZ			12:43																									
CCVL 280-462115/75			12:45																									
CCV 280-462115/76			12:47																									
CCB 280-462115/77			12:49																									
ZZZZZZ			12:51																									
ZZZZZZ			12:53																									
ZZZZZZ			12:55																									
ZZZZZZ			12:57																									
ZZZZZZ			12:59																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/19/2019 09:53 End Date: 06/19/2019 16:29

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
RINSE 280-462115/83			13:01																									
ZZZZZZ			13:03																									
CCVL 280-462115/85			13:05																									
CCV 280-462115/86			13:07																									
CCB 280-462115/87			13:09																									
ZZZZZZ			13:11																									
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
ZZZZZZ			13:17																									
ZZZZZZ			13:19																									
ZZZZZZ			13:21																									
ZZZZZZ			13:23																									
ZZZZZZ			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:29																									
ZZZZZZ			13:31																									
ZZZZZZ			13:33																									
ZZZZZZ			13:35																									
ZZZZZZ			13:37																									
RINSE 280-462115/102			13:39																									
ZZZZZZ			13:41																									
CCVL 280-462115/104			13:43																									
CCV 280-462115/105			13:45																									
CCB 280-462115/106			13:47																									
ZZZZZZ			13:49																									
ZZZZZZ			13:51																									
ZZZZZZ			13:53																									
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
ZZZZZZ			13:59																									
ZZZZZZ			14:01																									
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
ZZZZZZ			14:07																									
ZZZZZZ			14:09																									
RINSE 280-462115/118			14:11																									
ZZZZZZ			14:13																									
CCVL 280-462115/120			14:15																									
CCV 280-462115/121			14:17																									
CCB 280-462115/122			14:19																									
ZZZZZZ			14:21																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/19/2019 09:53 End Date: 06/19/2019 16:29

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			14:23																									
ZZZZZZ			14:25																									
ZZZZZZ			14:27																									
ZZZZZZ			14:29																									
RINSE 280-462115/128			14:31																									
ZZZZZZ			14:33																									
CCVL 280-462115/130	1		14:35	X																								
CCV 280-462115/131	1		14:37	X																								
CCB 280-462115/132	1		14:39	X																								
ZZZZZZ			14:41																									
ZZZZZZ			14:43																									
ZZZZZZ			14:45																									
ZZZZZZ			14:47																									
ZZZZZZ			14:49																									
LCS 280-462115/138	1	T	14:59	X																								
ZZZZZZ			15:01																									
LCSD 280-462115/140	1	T	15:03	X																								
MB 280-462115/141	1	T	15:05	X																								
ZZZZZZ			15:07																									
ZZZZZZ			15:09																									
ZZZZZZ			15:11																									
280-124928-7	1	T	15:13	X																								
280-124928-8	1	T	15:15	X																								
280-124928-9	1	T	15:17	X																								
280-124928-14	1	T	15:19	X																								
280-124928-15	1	T	15:21	X																								
280-124928-16	1	T	15:23	X																								
ZZZZZZ			15:25																									
RINSE 280-462115/152			15:27																									
ZZZZZZ			15:29																									
CCVL 280-462115/154	1		15:31	X																								
CCV 280-462115/155	1		15:33	X																								
CCB 280-462115/156	1		15:35	X																								
ZZZZZZ			15:37																									
ZZZZZZ			15:39																									
ZZZZZZ			15:41																									
ZZZZZZ			15:43																									
ZZZZZZ			15:45																									
ZZZZZZ			15:47																									
ZZZZZZ			15:49																									
ZZZZZZ			15:51																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Alp 3 Analysis Method: 350.1

Start Date: 06/19/2019 09:53 End Date: 06/19/2019 16:29

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			15:53																									
ZZZZZZ			15:55																									
ZZZZZZ			15:57																									
RINSE 280-462115/168			15:59																									
ZZZZZZ			16:01																									
CCVL 280-462115/170			16:03																									
CCV 280-462115/171			16:05																									
CCB 280-462115/172			16:07																									
ZZZZZZ			16:09																									
ZZZZZZ			16:11																									
ZZZZZZ			16:13																									
ZZZZZZ			16:15																									
ZZZZZZ			16:17																									
RINSE 280-462115/178			16:19																									
ZZZZZZ			16:21																									
CCVL 280-462115/180			16:23																									
CCV 280-462115/181			16:25																									
CCB 280-462115/182			16:27																									
ZZZZZZ			16:29																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/25/2019 18:47 End Date: 06/25/2019 21:00

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			18:47																									
ZZZZZZ			18:47																									
ZZZZZZ			18:48																									
ZZZZZZ			18:50																									
IC 280-460066/36-A			18:51	X																								
IC 280-460066/37-A			18:52	X																								
IC 280-460066/38-A			18:53	X																								
IC 280-460066/39-A			18:55	X																								
IC 280-460066/40-A			18:56	X																								
IC 280-460066/41-A			18:57	X																								
ZZZZZZ			18:58																									
ZZZZZZ			19:00																									
ICV 280-460066/42-A	1		19:01	X																								
ICB 280-460066/43-A	1		19:02	X																								
ZZZZZZ			19:03																									
MB 280-462534/2-A	1	T	19:05	X																								
ZZZZZZ			19:06																									
ZZZZZZ			19:07																									
ZZZZZZ			19:08																									
ZZZZZZ			19:10																									
ZZZZZZ			19:11																									
ZZZZZZ			19:12																									
ZZZZZZ			19:13																									
ZZZZZZ			19:15																									
ZZZZZZ			19:16																									
ZZZZZZ			19:17																									
ZZZZZZ			19:18																									
ZZZZZZ			19:20																									
ZZZZZZ			19:21																									
LCS 280-462534/1-A	1	T	19:22	X																								
CCV 280-460066/44-A	1		19:23	X																								
CCB 280-460066/45-A	1		19:25	X																								
ZZZZZZ			19:26																									
ZZZZZZ			19:27																									
ZZZZZZ			19:28																									
ZZZZZZ			19:30																									
ZZZZZZ			19:31																									
ZZZZZZ			19:32																									
ZZZZZZ			19:33																									
ZZZZZZ			19:35																									
280-124928-7	1	T	19:36	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/25/2019 18:47 End Date: 06/25/2019 21:00

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
280-124928-8	1	T	19:37	X																								
280-124928-9	1	T	19:38	X																								
280-124928-14	1	T	19:40	X																								
280-124928-15	1	T	19:41	X																								
ZZZZZZ			19:42																									
ZZZZZZ			19:43																									
ZZZZZZ			19:45																									
CCV 280-460066/44-A	1		19:46	X																								
CCB 280-460066/45-A	1		19:47	X																								
280-124928-16	1	T	19:48	X																								
ZZZZZZ			19:50																									
ZZZZZZ			19:51																									
ZZZZZZ			19:52																									
ZZZZZZ			19:53																									
ZZZZZZ			19:55																									
ZZZZZZ			19:56																									
ZZZZZZ			19:57																									
ZZZZZZ			19:58																									
ZZZZZZ			20:00																									
ZZZZZZ			20:01																									
ZZZZZZ			20:02																									
ZZZZZZ			20:03																									
ZZZZZZ			20:05																									
CCV 280-460066/44-A	1		20:06	X																								
CCB 280-460066/45-A	1		20:07	X																								
ZZZZZZ			20:08																									
ZZZZZZ			20:10																									
ZZZZZZ			20:11																									
ZZZZZZ			20:12																									
ZZZZZZ			20:13																									
ZZZZZZ			20:15																									
ZZZZZZ			20:16																									
ZZZZZZ			20:17																									
ZZZZZZ			20:18																									
ZZZZZZ			20:20																									
ZZZZZZ			20:21																									
ZZZZZZ			20:22																									
ZZZZZZ			20:23																									
CCV 280-460066/44-A			20:25																									
CCB 280-460066/45-A			20:26																									
ZZZZZZ			20:27																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/25/2019 18:47 End Date: 06/25/2019 21:00

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			20:28																									
ZZZZZZ			20:30																									
ZZZZZZ			20:31																									
ZZZZZZ			20:32																									
ZZZZZZ			20:33																									
ZZZZZZ			20:35																									
ZZZZZZ			20:36																									
ZZZZZZ			20:37																									
ZZZZZZ			20:38																									
ZZZZZZ			20:40																									
CCV 280-460066/44-A			20:41																									
CCB 280-460066/45-A			20:42																									
ZZZZZZ			20:43																									
ZZZZZZ			20:45																									
ZZZZZZ			20:46																									
ZZZZZZ			20:47																									
ZZZZZZ			20:48																									
ZZZZZZ			20:50																									
ZZZZZZ			20:51																									
ZZZZZZ			20:52																									
ZZZZZZ			20:53																									
ZZZZZZ			20:55																									
CCV 280-460066/44-A			20:56																									
CCB 280-460066/45-A			20:57																									
ZZZZZZ			20:58																									
ZZZZZZ			21:00																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/26/2019 17:24 End Date: 06/26/2019 20:46

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			17:24	
ZZZZZZ			17:26	
ZZZZZZ			17:28	
ZZZZZZ			17:30	
IC 280-463103/5			17:32	X
IC 280-463103/6			17:34	X
IC 280-463103/7			17:36	X
IC 280-463103/8			17:38	X
IC 280-463103/9			17:40	X
IC 280-463103/10			17:42	X
IC 280-463103/11			17:44	X
IC 280-463103/12			17:46	X
IC 280-463103/13			17:48	X
ZZZZZZ			17:50	
ZZZZZZ			17:52	
ZZZZZZ			17:54	
ICV 280-463103/17	1		17:56	X
ICVL 280-463103/18	1		17:58	X
ICB 280-463103/19	1		18:00	X
ZZZZZZ			18:02	
LCS 280-463103/21	1	T	18:04	X
MB 280-463103/22	1	T	18:06	X
ZZZZZZ			18:08	
ZZZZZZ			18:10	
ZZZZZZ			18:12	
ZZZZZZ			18:14	
ZZZZZZ			18:16	
ZZZZZZ			18:18	
ZZZZZZ			18:20	
ZZZZZZ			18:22	
ZZZZZZ			18:24	
ZZZZZZ			18:26	
RINSE 280-463103/33			18:28	
ZZZZZZ			18:30	
CCV 280-463103/35	1		18:32	X
CCVL 280-463103/36	1		18:34	X
CCB 280-463103/37	1		18:36	X
ZZZZZZ			18:38	
ZZZZZZ			18:40	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/26/2019 17:24 End Date: 06/26/2019 20:46

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			18:42	
ZZZZZZ			18:44	
ZZZZZZ			18:46	
ZZZZZZ			18:48	
ZZZZZZ			18:50	
ZZZZZZ			18:52	
ZZZZZZ			18:54	
280-124928-3	1	T	18:56	X
280-124928-4	1	T	18:58	X
RINSE 280-463103/49			19:00	
ZZZZZZ			19:02	
CCV 280-463103/51	1		19:04	X
CCVL 280-463103/52	1		19:06	X
CCB 280-463103/53	1		19:08	X
ZZZZZZ			19:10	
280-124928-5	2	T	19:12	X
280-124928-6	2	T	19:14	X
280-124928-7	1	T	19:16	X
280-124928-8	1	T	19:18	X
LCS 280-463103/59	1	T	19:20	X
MB 280-463103/60	1	T	19:22	X
ZZZZZZ			19:24	
ZZZZZZ			19:26	
ZZZZZZ			19:28	
280-124928-9	1	T	19:30	X
RINSE 280-463103/65			19:32	
ZZZZZZ			19:34	
CCV 280-463103/67	1		19:36	X
CCVL 280-463103/68	1		19:38	X
CCB 280-463103/69	1		19:40	X
ZZZZZZ			19:42	
280-124928-10	1	T	19:44	X
280-124928-11	1	T	19:46	X
280-124928-12	1	T	19:48	X
280-124928-14	1	T	19:50	X
280-124928-15	1	T	19:52	X
280-124928-16	1	T	19:54	X
ZZZZZZ			19:56	
ZZZZZZ			19:58	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/26/2019 17:24 End Date: 06/26/2019 20:46

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			20:00	
ZZZZZZ			20:02	
RINSE 280-463103/81			20:04	
ZZZZZZ			20:06	
CCV 280-463103/83	1		20:08	X
CCVL 280-463103/84	1		20:10	X
CCB 280-463103/85	1		20:12	X
ZZZZZZ			20:14	
ZZZZZZ			20:16	
ZZZZZZ			20:18	
ZZZZZZ			20:20	
ZZZZZZ			20:22	
ZZZZZZ			20:24	
ZZZZZZ			20:26	
ZZZZZZ			20:28	
ZZZZZZ			20:30	
ZZZZZZ			20:32	
ZZZZZZ			20:34	
RINSE 280-463103/97			20:36	
ZZZZZZ			20:38	
CCV 280-463103/99			20:40	
CCVL 280-463103/100			20:42	
CCB 280-463103/101			20:44	
ZZZZZZ			20:46	

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 06/11/2019 15:04 End Date: 06/11/2019 15:04

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-461159/1-A	1	T	15:04	X																								
MB 280-461159/2-A	1	T	15:04	X																								
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
ZZZZZZ			15:04																									
280-124928-7	1	T	15:04	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 06/12/2019 12:54 End Date: 06/12/2019 12:54

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-461272/1-A	1	T	12:54	X																								
MB 280-461272/2-A	1	T	12:54	X																								
ZZZZZZ			12:54																									
ZZZZZZ			12:54																									
ZZZZZZ			12:54																									
280-124928-8	1	T	12:54	X																								
ZZZZZZ			12:54																									
280-124928-9	1	T	12:54	X																								
280-124928-15	1	T	12:54	X																								
280-124928-14	1	T	12:54	X																								
280-124928-16	1	T	12:54	X																								
ZZZZZZ			12:54																									
ZZZZZZ			12:54																									
ZZZZZZ			12:54																									
ZZZZZZ			12:54																									
ZZZZZZ			12:54																									
ZZZZZZ			12:54																									
ZZZZZZ			12:54																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 07/03/2019 12:22 End Date: 07/04/2019 21:05

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-463528/1	1		12:22	X																								
CCB 280-463528/2	1		12:39	X																								
MRL 280-463528/3	1	T	12:57	X																								
LCS 280-463528/4	1	T	13:14	X																								
LCSD 280-463528/5	1	T	13:31	X																								
MB 280-463528/6	1	T	13:49	X																								
ZZZZZZ			18:53																									
ZZZZZZ			19:11																									
ZZZZZZ			19:28																									
ZZZZZZ			19:46																									
ZZZZZZ			20:03																									
ZZZZZZ			20:21																									
ZZZZZZ			21:13																									
ZZZZZZ			21:31																									
CCV 280-463528/17	1		21:48	X																								
CCB 280-463528/18	1		22:05	X																								
ZZZZZZ			22:23																									
ZZZZZZ			22:40																									
ZZZZZZ			22:58																									
ZZZZZZ			23:15																									
ZZZZZZ			23:33																									
ZZZZZZ			23:51																									
ZZZZZZ			00:08																									
ZZZZZZ			00:26																									
ZZZZZZ			00:43																									
ZZZZZZ			01:01																									
CCV 280-463528/29	1		01:18	X																								
CCB 280-463528/30	1		01:36	X																								
ZZZZZZ			01:53																									
ZZZZZZ			02:11																									
ZZZZZZ			02:28																									
ZZZZZZ			02:46																									
280-124928-3	1	T	03:03	X																								
280-124928-3 DU	1	T	03:21	X																								
280-124928-3 MS	1	T	03:38	X																								
280-124928-3 MSD	1	T	03:55	X																								
280-124928-4	1	T	04:13	X																								
280-124928-5	1	T	04:30	X																								
CCV 280-463528/41	1		04:48	X																								
CCB 280-463528/42	1		05:05	X																								
280-124928-6	1	T	05:23	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 07/03/2019 12:22 End Date: 07/04/2019 21:05

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
280-124928-6 DU	1	T	05:40	X																								
280-124928-6 MS	1	T	05:58	X																								
280-124928-6 MSD	1	T	06:15	X																								
ZZZZZZ			06:32																									
ZZZZZZ			06:50																									
ZZZZZZ			07:07																									
280-124928-10	1	T	07:25	X																								
280-124928-11	1	T	07:42	X																								
280-124928-11 DU	1	T	07:59	X																								
CCV 280-463528/53	1		08:17	X																								
CCB 280-463528/54	1		08:34	X																								
280-124928-11 MS	1	T	08:52	X																								
280-124928-11 MSD	1	T	09:09	X																								
280-124928-12	1	T	09:27	X																								
ZZZZZZ			09:44																									
ZZZZZZ			10:02																									
ZZZZZZ			10:19																									
ZZZZZZ			10:37																									
ZZZZZZ			10:54																									
ZZZZZZ			11:12																									
ZZZZZZ			11:29																									
CCV 280-463528/65	1		11:47	X																								
CCB 280-463528/66	1		12:04	X																								
ZZZZZZ			12:22																									
ZZZZZZ			12:39																									
ZZZZZZ			12:57																									
ZZZZZZ			13:14																									
ZZZZZZ			13:32																									
ZZZZZZ			13:49																									
ZZZZZZ			14:07																									
ZZZZZZ			14:24																									
ZZZZZZ			14:42																									
ZZZZZZ			14:59																									
CCV 280-463528/77			15:17																									
CCB 280-463528/78			15:34																									
ZZZZZZ			15:51																									
ZZZZZZ			16:09																									
ZZZZZZ			16:26																									
ZZZZZZ			16:44																									
ZZZZZZ			17:01																									
ZZZZZZ			17:19																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 07/03/2019 12:22 End Date: 07/04/2019 21:05

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			17:36																									
ZZZZZZ			17:53																									
ZZZZZZ			18:11																									
CCV 280-463528/88			18:28																									
CCB 280-463528/89			18:46																									
ZZZZZZ			19:03																									
ZZZZZZ			19:20																									
ZZZZZZ			19:38																									
ZZZZZZ			19:55																									
ZZZZZZ			20:13																									
ZZZZZZ			20:30																									
CCV 280-463528/96			20:48																									
CCB 280-463528/97			21:05																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 07/11/2019 21:08 End Date: 07/12/2019 14:24

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-464281/1	1		21:08	X																								
CCB 280-464281/2	1		21:31	X																								
MRL 280-464281/3	1	T	21:49	X																								
LCS 280-464281/4	1	T	22:06	X																								
LCSD 280-464281/5	1	T	22:24	X																								
MB 280-464281/6	1	T	22:41	X																								
ZZZZZZ			22:58																									
ZZZZZZ			23:16																									
ZZZZZZ			23:33																									
ZZZZZZ			23:51																									
ZZZZZZ			00:08																									
ZZZZZZ			00:26																									
ZZZZZZ			00:43																									
ZZZZZZ			01:01																									
ZZZZZZ			01:18																									
ZZZZZZ			01:36																									
CCV 280-464281/17	1		01:53	X																								
CCB 280-464281/18	1		02:10	X																								
ZZZZZZ			02:28																									
ZZZZZZ			02:45																									
ZZZZZZ			03:03																									
ZZZZZZ			03:20																									
ZZZZZZ			03:38																									
ZZZZZZ			03:56																									
ZZZZZZ			04:13																									
ZZZZZZ			04:31																									
ZZZZZZ			04:48																									
280-124928-7	10	T	05:06	X																								
CCV 280-464281/29	10		05:23	X																								
CCB 280-464281/30	1		05:41	X																								
280-124928-7 DU	10	T	05:58	X																								
280-124928-7 MS	10	T	06:16	X																								
280-124928-7 MSD	10	T	06:33	X																								
280-124928-8	10	T	06:51	X																								
280-124928-9	10	T	07:08	X																								
280-124928-14	5	T	07:26	X																								
280-124928-15	5	T	07:43	X																								
280-124928-16	10	T	08:00	X																								
280-124928-16 DU	10	T	08:18	X																								
280-124928-16 MS	10	T	08:35	X																								
CCV 280-464281/41	1		08:53	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 07/11/2019 21:08 End Date: 07/12/2019 14:24

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-464281/42	1		09:10	X																								
280-124928-16 MSD	10	T	09:28	X																								
ZZZZZZ			09:45																									
ZZZZZZ			10:03																									
ZZZZZZ			10:20																									
ZZZZZZ			10:37																									
ZZZZZZ			10:55																									
ZZZZZZ			11:12																									
ZZZZZZ			11:30																									
ZZZZZZ			11:47																									
ZZZZZZ			12:04																									
CCV 280-464281/53	1		12:22	X																								
CCB 280-464281/54	1		12:39	X																								
ZZZZZZ			12:57																									
ZZZZZZ			13:14																									
ZZZZZZ			13:32																									
ZZZZZZ			13:49																									
CCV 280-464281/59			14:07																									
CCB 280-464281/60			14:24																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/03/2019 15:51 End Date: 07/05/2019 06:53

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-463648/1	1		15:51	X
ICB 280-463648/2	1		16:05	X
ZZZZZZ			16:20	
ZZZZZZ			16:35	
ZZZZZZ			16:50	
ZZZZZZ			17:04	
ZZZZZZ			17:19	
ZZZZZZ			17:34	
ZZZZZZ			17:48	
LCS 280-463539/1-A	1	D	18:03	X
MB 280-463539/2-A	1	D	18:18	X
ZZZZZZ			18:33	
280-124928-7	1	D	18:47	X
280-124928-7 MS	1	D	19:02	X
CCV 280-463648/15	1		19:17	X
CCB 280-463648/16	1		19:32	X
280-124928-7 MSD	1	D	19:46	X
280-124928-8	1	D	20:03	X
280-124928-9	1	D	20:18	X
ZZZZZZ			20:32	
ZZZZZZ			20:47	
ZZZZZZ			21:02	
ZZZZZZ			21:17	
ZZZZZZ			21:31	
ZZZZZZ			21:48	
ZZZZZZ			22:03	
CCV 280-463648/27	1		22:18	X
CCB 280-463648/28	1		22:32	X
ZZZZZZ			22:47	
ZZZZZZ			23:04	
ZZZZZZ			23:19	
ZZZZZZ			23:33	
ZZZZZZ			23:48	
ZZZZZZ			00:03	
ZZZZZZ			00:17	
ZZZZZZ			00:32	
ZZZZZZ			00:47	
ZZZZZZ			01:02	
CCV 280-463648/39			01:16	
CCB 280-463648/40			01:31	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/03/2019 15:51 End Date: 07/05/2019 06:53

Lab Sample Id	D/F	Type	Time	Analytes																										
				DOCQ																										
ZZZZZZ			01:48																											
ZZZZZZ			02:07																											
ZZZZZZ			02:21																											
ZZZZZZ			02:36																											
ZZZZZZ			02:51																											
ZZZZZZ			03:06																											
ZZZZZZ			03:21																											
ZZZZZZ			03:35																											
ZZZZZZ			03:50																											
ZZZZZZ			04:05																											
CCV 280-463648/51			04:19																											
CCB 280-463648/52			04:34																											
ZZZZZZ			04:49																											
ZZZZZZ			05:04																											
ZZZZZZ			05:18																											
ZZZZZZ			05:33																											
ZZZZZZ			05:48																											
ZZZZZZ			06:03																											
ZZZZZZ			06:17																											
ZZZZZZ			06:32																											
ZZZZZZ			06:47																											
ZZZZZZ			07:02																											
CCV 280-463648/63			07:17																											
CCB 280-463648/64			07:31																											
ZZZZZZ			07:46																											
ZZZZZZ			08:01																											
ZZZZZZ			08:16																											
ZZZZZZ			08:30																											
ZZZZZZ			08:45																											
ZZZZZZ			09:00																											
ZZZZZZ			09:15																											
ZZZZZZ			09:31																											
ZZZZZZ			09:46																											
ZZZZZZ			10:08																											
CCV 280-463648/75			10:23																											
CCB 280-463648/76			10:38																											
ZZZZZZ			10:53																											
ZZZZZZ			11:07																											
ZZZZZZ			11:22																											
ZZZZZZ			11:37																											

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/03/2019 15:51 End Date: 07/05/2019 06:53

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ZZZZZZ			11:52	
ZZZZZZ			12:06	
ZZZZZZ			12:21	
ZZZZZZ			12:36	
ZZZZZZ			12:51	
ZZZZZZ			13:06	
CCV 280-463648/87			13:20	
CCB 280-463648/88			13:35	
ZZZZZZ			13:50	
ZZZZZZ			14:05	
ZZZZZZ			14:20	
ZZZZZZ			14:36	
ZZZZZZ			14:53	
ZZZZZZ			15:12	
ZZZZZZ			15:27	
ZZZZZZ			15:42	
ZZZZZZ			15:56	
ZZZZZZ			16:11	
CCV 280-463648/99			16:26	
CCB 280-463648/100			16:40	
ZZZZZZ			16:55	
ZZZZZZ			17:10	
ZZZZZZ			17:25	
ZZZZZZ			17:39	
ZZZZZZ			17:54	
ZZZZZZ			18:09	
ZZZZZZ			18:23	
ZZZZZZ			18:38	
ZZZZZZ			18:53	
ZZZZZZ			19:08	
CCV 280-463648/111			19:22	
CCB 280-463648/112			19:37	
ZZZZZZ			19:52	
ZZZZZZ			20:07	
ZZZZZZ			20:21	
ZZZZZZ			20:36	
ZZZZZZ			20:51	
ZZZZZZ			21:05	
ZZZZZZ			21:20	
ZZZZZZ			21:35	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/03/2019 15:51 End Date: 07/05/2019 06:53

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ZZZZZZ			21:50																										
ZZZZZZ			22:04																										
CCV 280-463648/123	1		22:19	X																									
CCB 280-463648/124	1		22:34	X																									
ZZZZZZ			22:48																										
ZZZZZZ			23:03																										
ZZZZZZ			23:18																										
ZZZZZZ			23:33																										
ZZZZZZ			23:47																										
ZZZZZZ			00:02																										
ZZZZZZ			00:17																										
ZZZZZZ			00:34																										
280-124928-16	1	D	00:48	X																									
ZZZZZZ			01:03																										
CCV 280-463648/135	1		01:18	X																									
CCB 280-463648/136	1		01:33	X																									
ZZZZZZ			01:47																										
ZZZZZZ			02:04																										
ZZZZZZ			02:23																										
ZZZZZZ			02:38																										
ZZZZZZ			02:54																										
ZZZZZZ			03:13																										
ZZZZZZ			03:30																										
ZZZZZZ			03:47																										
ZZZZZZ			04:02																										
ZZZZZZ			04:17																										
CCV 280-463648/147			04:32																										
CCB 280-463648/148			04:47																										
ZZZZZZ			05:03																										
ZZZZZZ			05:20																										
ZZZZZZ			05:37																										
ZZZZZZ			05:54																										
ZZZZZZ			06:09																										
ZZZZZZ			06:23																										
CCV 280-463648/155			06:38																										
CCB 280-463648/156			06:53																										

Prep Types:
D = Dissolved

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/05/2019 11:27 End Date: 07/06/2019 17:19

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-463832/1	1		11:27	X
ICB 280-463832/2	1		11:44	X
LCS 280-463669/1-A	1	D	11:58	X
MB 280-463669/2-A	1	D	12:13	X
ZZZZZZ			12:28	
280-124928-14	1	D	12:43	X
280-124928-15	1	D	13:00	X
280-124928-15 MS	1	D	13:14	X
280-124928-15 MSD	1	D	13:29	X
ZZZZZZ			13:46	
ZZZZZZ			14:03	
ZZZZZZ			14:19	
ZZZZZZ			14:40	
ZZZZZZ			14:57	
ZZZZZZ			15:11	
CCV 280-463832/16	1		15:26	X
CCB 280-463832/17	1		15:41	X
ZZZZZZ			15:55	
ZZZZZZ			16:12	
ZZZZZZ			16:27	
ZZZZZZ			16:44	
ZZZZZZ			16:58	
ZZZZZZ			17:45	
ZZZZZZ			18:00	
ZZZZZZ			18:19	
ZZZZZZ			18:36	
ZZZZZZ			18:51	
CCV 280-463832/28			19:05	
CCB 280-463832/29			19:20	
ZZZZZZ			19:35	
ZZZZZZ			19:50	
ZZZZZZ			20:04	
ZZZZZZ			20:19	
ZZZZZZ			20:34	
ZZZZZZ			20:49	
ZZZZZZ			21:03	
ZZZZZZ			21:18	
ZZZZZZ			21:33	
ZZZZZZ			21:50	
CCV 280-463832/40			22:04	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/05/2019 11:27 End Date: 07/06/2019 17:19

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
CCB 280-463832/41			22:19	
ZZZZZZ			22:36	
ZZZZZZ			22:51	
ZZZZZZ			23:05	
ZZZZZZ			23:22	
ZZZZZZ			23:37	
ZZZZZZ			23:52	
ZZZZZZ			00:07	
ZZZZZZ			00:21	
ZZZZZZ			00:38	
ZZZZZZ			00:53	
CCV 280-463832/52			01:08	
CCB 280-463832/53			01:22	
ZZZZZZ			01:37	
ZZZZZZ			01:52	
ZZZZZZ			02:07	
ZZZZZZ			02:21	
ZZZZZZ			02:36	
ZZZZZZ			02:51	
ZZZZZZ			03:06	
ZZZZZZ			03:20	
ZZZZZZ			03:37	
ZZZZZZ			03:54	
CCV 280-463832/64			04:09	
CCB 280-463832/65			04:23	
ZZZZZZ			04:38	
ZZZZZZ			04:55	
ZZZZZZ			05:10	
ZZZZZZ			05:24	
ZZZZZZ			05:39	
ZZZZZZ			05:54	
ZZZZZZ			06:09	
ZZZZZZ			06:24	
ZZZZZZ			06:38	
ZZZZZZ			06:53	
CCV 280-463832/76			07:08	
CCB 280-463832/77			07:23	
ZZZZZZ			07:37	
ZZZZZZ			07:52	
ZZZZZZ			08:07	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 07/05/2019 11:27 End Date: 07/06/2019 17:19

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ZZZZZZ			08:22	
ZZZZZZ			08:36	
ZZZZZZ			08:51	
ZZZZZZ			09:06	
ZZZZZZ			09:21	
ZZZZZZ			09:36	
ZZZZZZ			09:50	
CCV 280-463832/88			10:05	
CCB 280-463832/89			10:20	
ZZZZZZ			10:35	
ZZZZZZ			10:52	
ZZZZZZ			11:06	
ZZZZZZ			11:21	
ZZZZZZ			11:38	
ZZZZZZ			11:53	
ZZZZZZ			12:10	
ZZZZZZ			12:24	
ZZZZZZ			12:39	
ZZZZZZ			12:54	
CCV 280-463832/100			13:09	
CCB 280-463832/101			13:23	
ZZZZZZ			13:38	
ZZZZZZ			13:53	
ZZZZZZ			14:08	
ZZZZZZ			14:22	
ZZZZZZ			14:37	
ZZZZZZ			14:52	
ZZZZZZ			15:07	
ZZZZZZ			15:21	
ZZZZZZ			15:36	
ZZZZZZ			15:51	
CCV 280-463832/112			16:05	
CCB 280-463832/113			16:20	
ZZZZZZ			16:35	
ZZZZZZ			16:50	
CCV 280-463832/116			17:04	
CCB 280-463832/117			17:19	

Prep Types:
D = Dissolved

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 06/14/2019 17:54 End Date: 06/15/2019 07:56

Lab Sample Id	D/F	Type	Time	Analytes
				Alk
RINSE 280-461772/1			17:54	
ZZZZZZ			18:00	
ZZZZZZ			18:02	
ZZZZZZ			18:08	
ZZZZZZ			18:13	
ZZZZZZ			18:19	
ZZZZZZ			18:24	
ZZZZZZ			18:29	
ZZZZZZ			18:35	
ZZZZZZ			18:43	
ZZZZZZ			18:49	
ZZZZZZ			18:54	
ZZZZZZ			18:59	
ZZZZZZ			19:05	
ZZZZZZ			19:12	
CCV 280-461772/16			19:18	
CCB 280-461772/17			19:23	
ZZZZZZ			19:29	
ZZZZZZ			19:37	
ZZZZZZ			19:44	
ZZZZZZ			19:50	
ZZZZZZ			20:00	
ZZZZZZ			20:09	
ZZZZZZ			20:18	
ZZZZZZ			20:25	
ZZZZZZ			20:33	
ZZZZZZ			20:39	
CCV 280-461772/28			20:45	
CCB 280-461772/29			20:50	
ZZZZZZ			20:56	
ZZZZZZ			21:01	
ZZZZZZ			21:23	
ZZZZZZ			21:45	
ZZZZZZ			22:02	
ZZZZZZ			22:21	
ZZZZZZ			22:37	
ZZZZZZ			22:58	
ZZZZZZ			23:02	
ZZZZZZ			23:08	
ZZZZZZ			23:14	
ZZZZZZ			23:21	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 06/14/2019 17:54 End Date: 06/15/2019 07:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
CCV 280-461772/42			23:28																									
CCB 280-461772/43			23:33																									
ZZZZZZ			23:38																									
ZZZZZZ			23:47																									
ZZZZZZ			23:57																									
ZZZZZZ			00:06																									
ZZZZZZ			00:12																									
ZZZZZZ			00:19																									
ZZZZZZ			00:26																									
ZZZZZZ			00:33																									
ZZZZZZ			00:40																									
ZZZZZZ			00:45																									
CCV 280-461772/54			00:51																									
CCB 280-461772/55			00:56																									
ZZZZZZ			01:03																									
ZZZZZZ			01:07																									
ZZZZZZ			01:12																									
ZZZZZZ			01:16																									
ZZZZZZ			01:22																									
ZZZZZZ			01:27																									
ZZZZZZ			01:32																									
ZZZZZZ			01:37																									
ZZZZZZ			01:43																									
ZZZZZZ			01:48																									
ZZZZZZ			01:52																									
ZZZZZZ			01:57																									
CCV 280-461772/68			02:04																									
CCB 280-461772/69			02:09																									
ZZZZZZ			02:15																									
ZZZZZZ			02:23																									
ZZZZZZ			02:28																									
ZZZZZZ			02:34																									
ZZZZZZ			02:43																									
ZZZZZZ			02:50																									
ZZZZZZ			02:58																									
ZZZZZZ			03:04																									
ZZZZZZ			03:11																									
ZZZZZZ			03:19																									
CCV 280-461772/80	1		03:25	X																								
CCB 280-461772/81	1		03:30	X																								
LCS 280-461772/82	1	T	03:36	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 06/14/2019 17:54 End Date: 06/15/2019 07:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
MB 280-461772/83	1	T	03:40	X																								
ZZZZZZ			03:47																									
ZZZZZZ			03:53																									
ZZZZZZ			03:58																									
ZZZZZZ			04:04																									
ZZZZZZ			04:12																									
ZZZZZZ			04:21																									
ZZZZZZ			04:29																									
ZZZZZZ			04:37																									
ZZZZZZ			04:46																									
280-124928-3	1	T	04:50	X																								
CCV 280-461772/94	1		04:57	X																								
CCB 280-461772/95	1		05:01	X																								
280-124928-4	1	T	05:06	X																								
280-124928-5	1	T	05:11	X																								
280-124928-6	1	T	05:16	X																								
280-124928-7	1	T	05:24	X																								
280-124928-8	1	T	05:31	X																								
280-124928-9	1	T	05:38	X																								
280-124928-10	1	T	05:44	X																								
280-124928-11	1	T	05:49	X																								
280-124928-12	1	T	05:54	X																								
280-124928-14	1	T	06:03	X																								
CCV 280-461772/106	1		06:09	X																								
CCB 280-461772/107	1		06:13	X																								
LCS 280-461772/108	1	T	06:19	X																								
MB 280-461772/109	1	T	06:24	X																								
280-124928-15	1	T	06:32	X																								
280-124928-15 DU	1	T	06:39	X																								
280-124928-16	1	T	06:46	X																								
ZZZZZZ			06:52																									
ZZZZZZ			06:57																									
ZZZZZZ			07:03																									
ZZZZZZ			07:07																									
ZZZZZZ			07:13																									
ZZZZZZ			07:18																									
ZZZZZZ			07:24																									
CCV 280-461772/120	1		07:30	X																								
CCB 280-461772/121	1		07:35	X																								
ZZZZZZ			07:40																									
ZZZZZZ			07:45																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 06/14/2019 17:54 End Date: 06/15/2019 07:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
CCV 280-461772/124			07:51																									
CCB 280-461772/125			07:56																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 462115 Batch Start Date: 06/19/19 09:53 Batch Analyst: Setjoadi, Mayori J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	AdjustedpH	350.1 cal 00370
ICVL 280-462115/14		350.1			100 mL	100 mL			
ICV 280-462115/15		350.1			100 mL	100 mL			
ICB 280-462115/16		350.1			10 mL	10 mL			
CCVL 280-462115/130		350.1			100 mL	100 mL			0.5 mL
CCV 280-462115/131		350.1			100 mL	100 mL			2.5 mL
CCB 280-462115/132		350.1			10 mL	10 mL			
LCS 280-462115/138		350.1			100 mL	100 mL			2.5 mL
LCSD 280-462115/140		350.1			100 mL	100 mL			2.5 mL
MB 280-462115/141		350.1			10 mL	10 mL			
280-124928-D-7	G0105-19A	350.1	T	N	10 mL	10 mL	7 SU	<2 SU	
280-124928-D-8	G0107-19A	350.1	T	N	10 mL	10 mL	7 SU	<2 SU	
280-124928-D-9	G0106-19A	350.1	T	N	10 mL	10 mL	7 SU	<2 SU	
280-124928-D-14	G0017-19A	350.1	T	N	10 mL	10 mL	7 SU	<2 SU	
280-124928-D-15	PZ009-19A	350.1	T	N	10 mL	10 mL	7 SU	<2 SU	
280-124928-D-16	G0045-19A	350.1	T	N	10 mL	10 mL	7 SU	<2 SU	
CCVL 280-462115/154		350.1			100 mL	100 mL			0.5 mL
CCV 280-462115/155		350.1			100 mL	100 mL			2.5 mL
CCB 280-462115/156		350.1			10 mL	10 mL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	350.1 ICV 00353					
ICVL 280-462115/14		350.1		0.5 mL					
ICV 280-462115/15		350.1		2.5 mL					
ICB 280-462115/16		350.1							

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.: 280-124928-1

SDG No.:

Batch Number: 462115 Batch Start Date: 06/19/19 09:53 Batch Analyst: Setjoadi, Mayori J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	350.1 ICV 00353					
CCVL 280-462115/130		350.1							
CCV 280-462115/131		350.1							
CCB 280-462115/132		350.1							
LCS 280-462115/138		350.1							
LCSD 280-462115/140		350.1							
MB 280-462115/141		350.1							
280-124928-D-7	G0105-19A	350.1	T						
280-124928-D-8	G0107-19A	350.1	T						
280-124928-D-9	G0106-19A	350.1	T						
280-124928-D-14	G0017-19A	350.1	T						
280-124928-D-15	PZ009-19A	350.1	T						
280-124928-D-16	G0045-19A	350.1	T						
CCVL 280-462115/154		350.1							
CCV 280-462115/155		350.1							
CCB 280-462115/156		350.1							

Batch Notes	
Carrier Identification	350.1 complex_00429
Hypochlorite ID	350.1 bleach_01078
Sodium Nitroprusside ID	350.1 color_00154
Pipette/Syringe/Dispenser ID	JPX100, JPX1000, JPX5000

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 460066 Batch Start Date: 05/31/19 16:12 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TKN 25ppm 00794	TKN ICV 25 00078		
ICV 280-460066/42		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-460066/43		351.2, 351.2		25 mL	25 mL				
CCV 280-460066/44		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-460066/45		351.2, 351.2		25 mL	25 mL				

Batch Notes	
Block Digestion End time	06/01/19 0400
Block Digestion Start time	05/31/19 2100
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00126
Oven, Bath or Block Temperature 1	185 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 462534 Batch Start Date: 06/24/19 16:13 Batch Analyst: Ryan, Jonathan D

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00794		
LCS 280-462534/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-462534/2		351.2, 351.2			25 mL	25 mL			
280-124928-C-7	G0105-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124928-C-8	G0107-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124928-C-9	G0106-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124928-C-14	G0017-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124928-C-15	PZ009-19A	351.2, 351.2	T	<2	25 mL	25 mL			
280-124928-C-16	G0045-19A	351.2, 351.2	T	<2	25 mL	25 mL			

Batch Notes	
Block Digestion End time	06/20/19 2340
Block Digestion Start time	06/24/19 1740
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00127
Oven, Bath or Block Temperature 1	185 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 462702 Batch Start Date: 06/25/19 18:47 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-460066/42-A		351.2		4 mL					
ICB 280-460066/43-A		351.2		4 mL					
MB 280-462534/2-A		351.2		4 mL					
LCS 280-462534/1-A		351.2		4 mL					
CCV 280-460066/44-A		351.2		4 mL					
CCB 280-460066/45-A		351.2		4 mL					
280-124928-C-7-A	G0105-19A	351.2	T	4 mL					
280-124928-C-8-A	G0107-19A	351.2	T	4 mL					
280-124928-C-9-A	G0106-19A	351.2	T	4 mL					
280-124928-C-14-A	G0017-19A	351.2	T	4 mL					
280-124928-C-15-A	PZ009-19A	351.2	T	4 mL					
CCV 280-460066/44-A		351.2		4 mL					
CCB 280-460066/45-A		351.2		4 mL					
280-124928-C-16-A	G0045-19A	351.2	T	4 mL					
CCV 280-460066/44-A		351.2		4 mL					
CCB 280-460066/45-A		351.2		4 mL					

Batch Notes	
Buffer Reagent ID	TKN buffer_00118
Hypochlorite ID	TKN hypo_00665
Sodium Nitroprusside ID	Sodium Nitro_00095
Pipette/Syringe/Dispenser ID	5000AD, 1000AD

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.: 280-124928-1

SDG No.:

Batch Number: 462702 Batch Start Date: 06/25/19 18:47 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

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.: 280-124928-1

SDG No.:

Batch Number: 463103 Batch Start Date: 06/26/19 17:24 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00499	NXN ICV INT 00480		
ICV 280-463103/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-463103/18		353.2		100 mL	100 mL		2 mL		
ICB 280-463103/19		353.2		100 mL	100 mL				
LCS 280-463103/21		353.2		100 mL	100 mL	5 mL			
MB 280-463103/22		353.2		100 mL	100 mL				
CCV 280-463103/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-463103/36		353.2		100 mL	100 mL	1 mL			
CCB 280-463103/37		353.2		100 mL	100 mL				
280-124928-A-3	SHGW02-19A	353.2	T	100 mL	100 mL				
280-124928-A-4	SHGW05-19A	353.2	T	100 mL	100 mL				
CCV 280-463103/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-463103/52		353.2		100 mL	100 mL	1 mL			
CCB 280-463103/53		353.2		100 mL	100 mL				
280-124928-A-5	SAMW1-19A	353.2	T	100 mL	100 mL				
280-124928-A-6	G0053-19A	353.2	T	100 mL	100 mL				
280-124928-C-7	G0105-19A	353.2	T	100 mL	100 mL				
280-124928-C-8	G0107-19A	353.2	T	100 mL	100 mL				
LCS 280-463103/59		353.2		100 mL	100 mL	5 mL			
MB 280-463103/60		353.2		100 mL	100 mL				
280-124928-C-9	G0106-19A	353.2	T	100 mL	100 mL				
CCV 280-463103/67		353.2		100 mL	100 mL	5 mL			
CCVL 280-463103/68		353.2		100 mL	100 mL	1 mL			
CCB 280-463103/69		353.2		100 mL	100 mL				

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.: 280-124928-1

SDG No.:

Batch Number: 463103 Batch Start Date: 06/26/19 17:24 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00499	NXN ICV INT 00480		
280-124928-C-10	SHGW03-19A	353.2	T	100 mL	100 mL				
280-124928-C-11	G0069-19A	353.2	T	100 mL	100 mL				
280-124928-C-12	SHGW04-19A	353.2	T	100 mL	100 mL				
280-124928-C-14	G0017-19A	353.2	T	100 mL	100 mL				
280-124928-C-15	PZ009-19A	353.2	T	100 mL	100 mL				
280-124928-C-16	G0045-19A	353.2	T	100 mL	100 mL				
CCV 280-463103/83		353.2		100 mL	100 mL	5 mL			
CCVL 280-463103/84		353.2		100 mL	100 mL	1 mL			
CCB 280-463103/85		353.2		100 mL	100 mL				

Batch Notes	
Acid used for pH adjustment	SulfuricAcid_00223
Base used for pH adjustment	50%NaOH_00016
Buffer Reagent ID	NOXT Buffer_00203
Color Reagent ID	NOXT CR_00103
Copper Sulfate ID	CuSO4 NOXT_0006
Hydrochloric Acid ID	0.5N HCl_0074
pH Indicator ID	hc869997
Pipette/Syringe/Dispenser ID	5000AD, 1000AD

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461159 Batch Start Date: 06/11/19 12:16 Batch Analyst: Abeyta, Joseph L

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-461159/1		9030B, 9034		50 mL	50 mL	1			5 mL
MB 280-461159/2		9030B, 9034		50 mL	50 mL	4			5 mL
280-124928-E-7	G0105-19A	9030B, 9034	T	50 mL	50 mL	20	14 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01659					
LCS 280-461159/1		9030B, 9034		1 mL					
MB 280-461159/2		9030B, 9034							
280-124928-E-7	G0105-19A	9030B, 9034	T						

Batch Notes	
Batch Comment	JA
Distillation End Time	06/11/2019 14:22
Distillation Start Time	06/11/2019 13:15
Formaldehyde ID	Form_00112
pH Indicator ID	HC987808 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00197
Zinc Acetate Buffer ID	Znac_00108

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461193 Batch Start Date: 06/11/19 15:04 Batch Analyst: Abeyta, Joseph L

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-461159/1-A		9034		0.00 mL	2.70 mL	5 mL	2.7 mL	50 mL	
MB 280-461159/2-A		9034		2.70 mL	3.80 mL	1 mL	1.1 mL	50 mL	
280-124928-E-7-A	G0105-19A	9034	T	3.60 mL	4.80 mL	1 mL	1.2 mL	50 mL	

Batch Notes	
Batch Comment	JA
Hydrochloric Acid ID	HCL Sol_00168
Iodine ID	Iod_00229
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00152
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Starch Reagent ID	Starch Ind_00057
Normality of First Titrant	0.0250 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461272 Batch Start Date: 06/12/19 09:51 Batch Analyst: Abeyta, Joseph L

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-461272/1		9030B, 9034		50 mL	50 mL	1		<2 SU	5 mL
MB 280-461272/2		9030B, 9034		50 mL	50 mL	4		<2 SU	5 mL
280-124928-E-8	G0107-19A	9030B, 9034	T	50 mL	50 mL	8	14 SU	<2 SU	5 mL
280-124928-E-9	G0106-19A	9030B, 9034	T	50 mL	50 mL	10	14 SU	<2 SU	5 mL
280-124928-E-15	PZ009-19A	9030B, 9034	T	50 mL	50 mL	11	14 SU	<2 SU	5 mL
280-124928-E-14	G0017-19A	9030B, 9034	T	50 mL	50 mL	12	14 SU	<2 SU	5 mL
280-124928-E-16	G0045-19A	9030B, 9034	T	50 mL	50 mL	13	14 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 01659					
LCS 280-461272/1		9030B, 9034		1 mL					
MB 280-461272/2		9030B, 9034							
280-124928-E-8	G0107-19A	9030B, 9034	T						
280-124928-E-9	G0106-19A	9030B, 9034	T						
280-124928-E-15	PZ009-19A	9030B, 9034	T						
280-124928-E-14	G0017-19A	9030B, 9034	T						
280-124928-E-16	G0045-19A	9030B, 9034	T						

Batch Notes	
Batch Comment	JA
Distillation End Time	06/11/2019 12:38
Distillation Start Time	06/12/2019 11:32
Formaldehyde ID	Form_00112
pH Indicator ID	HC987808 & HC 606169
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Sulfuric Acid Reagent ID Number	H2SO4_00197
Zinc Acetate Buffer ID	Znac_00108

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.: 280-124928-1

SDG No.:

Batch Number: 461272 Batch Start Date: 06/12/19 09:51 Batch Analyst: Abeyta, Joseph L

Batch Method: 9030B Batch End Date:

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.: 280-124928-1

SDG No.:

Batch Number: 461300 Batch Start Date: 06/12/19 12:54 Batch Analyst: Abeyta, Joseph L

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-461272/1-A		9034		0.00 mL	2.50 mL	5 mL	2.5 mL	50 mL	
MB 280-461272/2-A		9034		2.50 mL	3.80 mL	1 mL	1.3 mL	50 mL	
280-124928-E-8-A	G0107-19A	9034	T	10.00 mL	11.10 mL	1 mL	1.1 mL	50 mL	
280-124928-E-9-A	G0106-19A	9034	T	12.20 mL	13.50 mL	1 mL	1.3 mL	50 mL	
280-124928-E-15-A	PZ009-19A	9034	T	13.50 mL	14.60 mL	1 mL	1.1 mL	50 mL	
280-124928-E-14-A	G0017-19A	9034	T	14.60 mL	15.60 mL	2 mL	1 mL	50 mL	
280-124928-E-16-A	G0045-19A	9034	T	15.60 mL	16.80 mL	1 mL	1.2 mL	50 mL	

Batch Notes	
Batch Comment	JA
Hydrochloric Acid ID	HCL Sol_00168
Iodine ID	Iod_00229
Normality of Iodine Solution	0.0250 N
Sodium Thiosulfate ID	Na Thio_00152
Pipette/Syringe/Dispenser ID	AB8A1000 & 5000IX
Starch Reagent ID	Starch Ind_00057
Normality of First Titrant	0.0250 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 463472 Batch Start Date: 07/02/19 21:56 Batch Analyst: Phan, Thu L

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00263	IC Cal low 00469		
STD1 280-463472/2 IC		9056A		5 mL	5 mL	0.04 mL	0.04 mL		
STD2 280-463472/3 IC		9056A		5 mL	5 mL	0.1 mL	0.1 mL		
STD3 280-463472/4 IC		9056A		5 mL	5 mL	0.2 mL	0.2 mL		
STD4 280-463472/5 IC		9056A		5 mL	5 mL	2.4 mL	0.8 mL		
STD5 280-463472/6 IC		9056A		5 mL	5 mL	4.8 mL	1.6 mL		
STD6 280-463472/7 IC		9056A		5 mL	5 mL	8 mL	2 mL		

Batch Notes	
Eluent 1 ID	m19030703
Filter ID	r7ma61819
Pipette/Syringe/Dispenser ID	5000ics, 1000d, ic100
Regeneration Solution ID	m19040102
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.: 280-124928-1

SDG No.:

Batch Number: 463528 Batch Start Date: 07/03/19 12:22 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00263	IC Cal low 00469	IC LCS 01622	ICMS/MSD WEEK 00602
CCV 280-463528/1		9056A		5 mL	5 mL			10 mL	
CCB 280-463528/2		9056A		5 mL	5 mL				
MRL 280-463528/3		9056A		5 mL	5 mL	0.1 mL	0.04 mL		
LCS 280-463528/4		9056A		5 mL	5 mL			10 mL	
LCSD 280-463528/5		9056A		5 mL	5 mL			10 mL	
MB 280-463528/6		9056A		5 mL	5 mL				
CCV 280-463528/17		9056A		5 mL	5 mL			10 mL	
CCB 280-463528/18		9056A		5 mL	5 mL				
CCV 280-463528/29		9056A		5 mL	5 mL			10 mL	
CCB 280-463528/30		9056A		5 mL	5 mL				
280-124928-B-3	SHGW02-19A	9056A	T	5 mL	5 mL				
280-124928-B-3 DU	SHGW02-19A	9056A	T	5 mL	5 mL				
280-124928-B-3 MS	SHGW02-19A	9056A	T	5 mL	5 mL				0.1 mL
280-124928-B-3 MSD	SHGW02-19A	9056A	T	5 mL	5 mL				0.1 mL
280-124928-B-4	SHGW05-19A	9056A	T	5 mL	5 mL				
280-124928-B-5	SAMW1-19A	9056A	T	5 mL	5 mL				
CCV 280-463528/41		9056A		5 mL	5 mL			10 mL	
CCB 280-463528/42		9056A		5 mL	5 mL				
280-124928-B-6	G0053-19A	9056A	T	5 mL	5 mL				
280-124928-B-6 DU	G0053-19A	9056A	T	5 mL	5 mL				
280-124928-B-6 MS	G0053-19A	9056A	T	5 mL	5 mL				0.1 mL
280-124928-B-6 MSD	G0053-19A	9056A	T	5 mL	5 mL				0.1 mL
280-124928-F-7	G0105-19A	9056A	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 463528 Batch Start Date: 07/03/19 12:22 Batch Analyst: Pedrick, Joshua A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00263	IC Cal low 00469	IC LCS 01622	ICMS/MSD WEEK 00602
280-124928-F-8	G0107-19A	9056A	T	5 mL	5 mL				
280-124928-F-9	G0106-19A	9056A	T	5 mL	5 mL				
280-124928-D-10	SHGW03-19A	9056A	T	5 mL	5 mL				
280-124928-D-11	G0069-19A	9056A	T	5 mL	5 mL				
280-124928-D-11 DU	G0069-19A	9056A	T	5 mL	5 mL				
CCV 280-463528/53		9056A		5 mL	5 mL			10 mL	
CCB 280-463528/54		9056A		5 mL	5 mL				
280-124928-D-11 MS	G0069-19A	9056A	T	5 mL	5 mL				0.1 mL
280-124928-D-11 MSD	G0069-19A	9056A	T	5 mL	5 mL				0.1 mL
280-124928-D-12	SHGW04-19A	9056A	T	5 mL	5 mL				
280-124928-F-14	G0017-19A	9056A	T	5 mL	5 mL				
280-124928-F-15	PZ009-19A	9056A	T	5 mL	5 mL				
280-124928-F-16	G0045-19A	9056A	T	5 mL	5 mL				
CCV 280-463528/65		9056A		5 mL	5 mL			5 mL	
CCB 280-463528/66		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	M18082401
Sufficient Volume for Batch QC	Yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 464281 Batch Start Date: 07/11/19 21:08 Batch Analyst: Phan, Thu L

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00264	IC Cal low 00470	IC LCS 01628	ICMS/MSD WEEK 00603
CCV 280-464281/1		9056A		5 mL	5 mL			10 mL	
CCB 280-464281/2		9056A		5 mL	5 mL				
MRL 280-464281/3		9056A		5 mL	5 mL	0.1 mL	0.04 mL		
LCS 280-464281/4		9056A		5 mL	5 mL			10 mL	
LCSD 280-464281/5		9056A		5 mL	5 mL			10 mL	
MB 280-464281/6		9056A		5 mL	5 mL				
CCV 280-464281/17		9056A		5 mL	5 mL			5 mL	
CCB 280-464281/18		9056A		5 mL	5 mL				
280-124928-F-7	G0105-19A	9056A	T	5 mL	5 mL				
CCV 280-464281/29		9056A		5 mL	5 mL			10 mL	
CCB 280-464281/30		9056A		5 mL	5 mL				
280-124928-F-7 DU	G0105-19A	9056A	T	5 mL	5 mL				
280-124928-F-7 MS	G0105-19A	9056A	T	5 mL	5 mL				0.1 mL
280-124928-F-7 MSD	G0105-19A	9056A	T	5 mL	5 mL				0.1 mL
280-124928-F-8	G0107-19A	9056A	T	5 mL	5 mL				
280-124928-F-9	G0106-19A	9056A	T	5 mL	5 mL				
280-124928-F-14	G0017-19A	9056A	T	5 mL	5 mL				
280-124928-F-15	PZ009-19A	9056A	T	5 mL	5 mL				
280-124928-F-16	G0045-19A	9056A	T	5 mL	5 mL				
280-124928-F-16 DU	G0045-19A	9056A	T	5 mL	5 mL				
280-124928-F-16 MS	G0045-19A	9056A	T	5 mL	5 mL				0.1 mL
CCV 280-464281/41		9056A		5 mL	5 mL			10 mL	
CCB 280-464281/42		9056A		5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 464281 Batch Start Date: 07/11/19 21:08 Batch Analyst: Phan, Thu L

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00264	IC Cal low 00470	IC LCS 01628	ICMS/MSD WEEK 00603
280-124928-F-16 MSD	G0045-19A	9056A	T	5 mL	5 mL				0.1 mL
CCV 280-464281/53		9056A		5 mL	5 mL			10 mL	
CCB 280-464281/54		9056A		5 mL	5 mL				

Batch Notes	
Eluent 1 ID	m19030702
Filter ID	r7ma61819
Pipette/Syringe/Dispenser ID	5000ics, 1000d, ic100
Regeneration Solution ID	m19040102
Sufficient Volume for Batch QC	yes

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 463539 Batch Start Date: 07/03/19 11:51 Batch Analyst: Jewell, Connie C

Batch Method: FILTRATION Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
LCS 280-463539/1		FILTRATION, 9060A		20 mL	20 mL				
MB 280-463539/2		FILTRATION, 9060A		20 mL	20 mL				
280-124928-D-7	G0105-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124928-D-7 MS	G0105-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124928-D-7 MSD	G0105-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124928-D-8	G0107-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124928-D-9	G0106-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124928-D-16	G0045-19A	FILTRATION, 9060A	D	20 mL	20 mL				

Batch Notes	
Filter ID	9743727

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 463647 Batch Start Date: 07/03/19 15:51 Batch Analyst: Jewell, Connie C

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TOC LCS Std 00046			
LCS 280-463539/1-A		9060A		200 mL	200 mL	5 mL			
MB 280-463539/2-A		9060A		20 mL	20 mL				
280-124928-D-7-A	G0105-19A	9060A	D	20 mL	20 mL				
280-124928-D-7-B MS	G0105-19A	9060A	D	50 mL	50 mL	1.25 mL			
280-124928-D-7-C MSD	G0105-19A	9060A	D	50 mL	50 mL	1.25 mL			
280-124928-D-8-A	G0107-19A	9060A	D	20 mL	20 mL				
280-124928-D-9-A	G0106-19A	9060A	D	20 mL	20 mL				
280-124928-D-16-A	G0045-19A	9060A	D	20 mL	20 mL				

Batch Notes	
Acid ID	0.2%H2SO4_00319, H2SO4_00199
Combustion Catylyst ID	18003D-05
Pipette/Syringe/Dispenser ID	wc5000ccj, wc1000cj

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 463648 Batch Start Date: 07/03/19 15:51 Batch Analyst: Jewell, Connie C

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TOC ICV Std 00037	TOC LCS Std 00046		
ICV 280-463648/1		9060A		50 mL	50 mL	1 mL			
ICB 280-463648/2		9060A		20 mL	20 mL				
LCS 280-463539/1-A		9060A		200 mL	200 mL		5 mL		
MB 280-463539/2-A		9060A		20 mL	20 mL				
280-124928-D-7-A	G0105-19A	9060A	D	20 mL	20 mL				
280-124928-D-7-B MS	G0105-19A	9060A	D	50 mL	50 mL		1.25 mL		
CCV 280-463648/15		9060A		200 mL	200 mL	5 mL			
CCB 280-463648/16		9060A		20 mL	20 mL				
280-124928-D-7-C MSD	G0105-19A	9060A	D	50 mL	50 mL		1.25 mL		
280-124928-D-8-A	G0107-19A	9060A	D	20 mL	20 mL				
280-124928-D-9-A	G0106-19A	9060A	D	20 mL	20 mL				
CCV 280-463648/27		9060A		200 mL	200 mL	5 mL			
CCB 280-463648/28		9060A		20 mL	20 mL				
CCV 280-463648/123		9060A		20 mL	20 mL				
CCB 280-463648/124		9060A		20 mL	20 mL				
280-124928-D-16-A	G0045-19A	9060A	D	20 mL	20 mL				
CCV 280-463648/135		9060A		200 mL	200 mL	5 mL			
CCB 280-463648/136		9060A		20 mL	20 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 463648 Batch Start Date: 07/03/19 15:51 Batch Analyst: Jewell, Connie C

Batch Method: 9060A Batch End Date:

Batch Notes	
Acid ID	0.2%H2SO4_00319, 0.2%H2SO4_00199
Combustion Catylyst ID	18003D-05
Pipette/Syringe/Dispenser ID	wc5000ccj, wc1000cj

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 463669 Batch Start Date: 07/05/19 09:14 Batch Analyst: Martinez, Joslyn A

Batch Method: FILTRATION Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
LCS 280-463669/1		FILTRATION, 9060A		200 mL	200 mL				
MB 280-463669/2		FILTRATION, 9060A		20 mL	20 mL				
280-124928-D-14	G0017-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124928-D-15	PZ009-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124928-D-15 MS	PZ009-19A	FILTRATION, 9060A	D	20 mL	20 mL				
280-124928-D-15 MSD	PZ009-19A	FILTRATION, 9060A	D	20 mL	20 mL				

Batch Notes	

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 463832 Batch Start Date: 07/05/19 11:27 Batch Analyst: Jewell, Connie C

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TOC ICV Std 00037	TOC LCS Std 00046		
ICV 280-463832/1		9060A		50 mL	50 mL	1 mL			
ICB 280-463832/2		9060A		20 mL	20 mL				
LCS 280-463669/1-A		9060A		200 mL	200 mL		5 mL		
MB 280-463669/2-A		9060A		20 mL	20 mL				
280-124928-D-14 -A	G0017-19A	9060A	D	20 mL	20 mL				
280-124928-D-15 -A	PZ009-19A	9060A	D	20 mL	20 mL				
280-124928-D-15 -B MS	PZ009-19A	9060A	D	50 mL	50 mL		1.25 mL		
280-124928-D-15 -C MSD	PZ009-19A	9060A	D	50 mL	50 mL		1.25 mL		
CCV 280-463832/16		9060A		200 mL	200 mL	5 mL			
CCB 280-463832/17		9060A		20 mL	20 mL				

Batch Notes	
Acid ID	0.2%H2SO4_00319, H2SO4_00199
Combustion Catylyst ID	18003D-05
Pipette/Syringe/Dispenser ID	wc5000ccj, wc1000cj

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461772 Batch Start Date: 06/14/19 17:54 Batch Analyst: Barker, Scott G

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00825				
CCV 280-461772/80		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-461772/81		SM 2320B		InitialAmount is blank					
LCS 280-461772/82		SM 2320B		InitialAmount is blank	10 mL				
MB 280-461772/83		SM 2320B		InitialAmount is blank					
280-124928-B-3	SHGW02-19A	SM 2320B	T	InitialAmount is blank					
CCV 280-461772/94		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-461772/95		SM 2320B		InitialAmount is blank					
280-124928-B-4	SHGW05-19A	SM 2320B	T	InitialAmount is blank					
280-124928-B-5	SAMW1-19A	SM 2320B	T	InitialAmount is blank					
280-124928-B-6	G0053-19A	SM 2320B	T	InitialAmount is blank					
280-124928-F-7	G0105-19A	SM 2320B	T	InitialAmount is blank					
280-124928-F-8	G0107-19A	SM 2320B	T	InitialAmount is blank					
280-124928-F-9	G0106-19A	SM 2320B	T	InitialAmount is blank					
280-124928-D-10	SHGW03-19A	SM 2320B	T	InitialAmount is blank					
280-124928-D-11	G0069-19A	SM 2320B	T	InitialAmount is blank					
280-124928-D-12	SHGW04-19A	SM 2320B	T	InitialAmount is blank					
280-124928-F-14	G0017-19A	SM 2320B	T	InitialAmount is blank					
CCV 280-461772/106		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-461772/107		SM 2320B		InitialAmount is blank					
LCS 280-461772/108		SM 2320B		InitialAmount is blank	10 mL				
MB 280-461772/109		SM 2320B		InitialAmount is blank					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-124928-1

SDG No.:

Batch Number: 461772 Batch Start Date: 06/14/19 17:54 Batch Analyst: Barker, Scott G

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00825				
280-124928-F-15	PZ009-19A	SM 2320B	T	InitialAmount is blank					
280-124928-F-15 DU	PZ009-19A	SM 2320B	T	InitialAmount is blank					
280-124928-F-16	G0045-19A	SM 2320B	T	InitialAmount is blank					
CCV 280-461772/120		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-461772/121		SM 2320B		InitialAmount is blank					

Batch Notes	
Acid ID	0.02 H2SO4_00258
pH Buffer 1 ID	pH 2.0 buffer_00079
pH Buffer 2 ID	pH 4.0 buffer_00179
pH Buffer 3 ID	pH 7.0 buffer_00258
pH Buffer 4 ID	pH 10 buffer_00142
pH Buffer 5 ID	pH 12 buffer_00149
pH Buffer 6 ID	pH 7.0 buffer_00257
Sodium Carbonate ID	Alk Stk Std_00016
Nominal Amount Used	10 mL
Pipette/Syringe/Dispenser ID	5000 ADI
Probe ID	PCE 86 pH 1105 sep14
Normality of First Titrant	0.02 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 19-Jun-19

Cup	Name	Type	R	Dil	Wt	Comment
5	Sync	SYNC	1	1	1	
0	blk	CO	1	1	1	
0	Read Baseline	RB	1	1	1	
1	Cal 0.0 PPB	C	1	1	1	
3	Cal 25.0 ppb	C	1	1	1	
4	Cal 50.0 ppb	C	1	1	1	
5	Cal 100.0 ppb	C	1	1	1	
6	Cal 500.0 ppb	C	1	1	1	
7	Cal 1000.0 ppb	C	1	1	1	
8	Cal 2500.0 ppb	C	1	1	1	
9	Cal 5000.0 ppb	C	1	1	1	
0	blank	BLNK	1	1	1	
0	read baseline	RB	1	1	1	
10	ICVL 500.0 ppb	U	1	1	1	
11	ICV 2500.0 ppb	U	1	1	1	
1	ICB	U	1	1	1	
0	read baseline	RB	1	1	1	
8	LCS	U	1	1	1	
8	LCSD	U	1	1	1	
12	MB	U	1	1	1	
13	280-124194-g-1	U	1	1	1	L2 N
14	MS 280-124194-g-1	U	1	1	1	
15	MSD 280-124194-g-1	U	1	1	1	
16	280-124194-h-2	U	1	1	1	L2 N
17	280-124706-o-1	U	1	1	1	L2 N
18	280-124706-o-2	U	1	1	1	L2 N
19	280-124724-b-2	U	1	10	1	L2 N
20	280-124736-h-2	U	1	100	1	L2 N
21	280-124738-j-1	U	1	100	1	L2 N
22	280-124738-j-2	U	1	100	1	L2 N
0	Rinse	U	1	1	1	
0	Read Baseline	RB	1	1	1	
6	CCVL 500 ppb	U	1	1	1	
8	CCV 2500 ppb	U	1	1	1	
12	CCB	U	1	1	1	
0	Read Baseline	RB	1	1	1	
23	280-124813-b-1	U	1	1	1	L2 N
24	280-124813-b-3	U	1	1	1	L2 N
25	280-125041-a-3	U	1	1	1	L2 N
26	MS 280-125041-a-3	U	1	1	1	
27	MSD 280-125041-a-3	U	1	1	1	
28	280-124813-b-4	U	1	1	1	L2 N
29	280-124813-b-5	U	1	1	1	L2 N
30	280-124813-b-6	U	1	1	1	L2 N
31	280-124813-b-8	U	1	1	1	L2 N
32	280-124813-b-9	U	1	1	1	L2 N
0	Rinse	U	1	1	1	
0	Read Baseline	RB	1	1	1	
6	CCVL 500 ppb	U	1	1	1	
8	CCV 2500 ppb	U	1	1	1	
12	CCB	U	1	1	1	
0	Read Baseline	RB	1	1	1	
33	280-125078-c-3	U	1	1	1	L2 N
34	280-125078-c-5	U	1	1	1	L2 N
35	280-125078-c-6	U	1	1	1	L2 N
36	280-125078-c-7	U	1	1	1	L2 N

Cup	Name	Type	R	Dil	Wt	Comment		
0	Rinse	U	1	1	1			
0	Read Baseline	RB	1	1	1			
6	CCVL 500 ppb	U	1	1	1			
8	CCV 2500 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	Read Baseline	RB	1	1	1			
8	LCS	U	1	1	1			
8	LCSD	U	1	1	1			
12	MB	U	1	1	1			
37	280-125079-a-3	U	1	1	1	L2		N
38	MS 280-125079-a-3	U	1	1	1			
39	MSD 280-125079-a-3	U	1	1	1			
40	280-125044-a-5	U	1	100	1	L2		N
41	280-124842-c-1	U	1	1000	1	L2		N
42	280-124842-b-2	U	1	1000	1	7		N
43	280-124902-d-1	U	1	± 100 MRS 6/19/19	1	7		N
44	280-124902-d-2	U	1	± 100 MRS 6/19/19	1	7		N
45	280-124902-e-3	U	1	± 100 MRS 6/19/19	1	7		N
46	280-124902-e-5	U	1	± 100 MRS 6/19/19	1	8		N
0	Rinse	U	1	1	1			
0	Read Baseline	RB	1	1	1			
6	CCVL 500 ppb	U	1	1	1			
8	CCV 2500 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	Read Baseline	RB	1	1 MRS 6/19/19	1			
47	280-124902-e-6	U	1	± 100	1	7		N
48	280-125109-d-4	U	1	1	1	L2		N
49	280-124887-b-1	U	1	1	1	L2		N
50	MS 280-124887-b-1	U	1	1	1			
51	MSD 280-124887-b-1	U	1	1	1			
52	280-125088-c-1	U	1	1	1	L2		N
53	280-125088-c-2	U	1	1	1	L2		N
54	280-125088-c-3	U	1	1	1	L2		N
55	280-125088-c-4	U	1	1	1	L2		N
56	280-125088-c-5	U	1	1	1	L2		N
0	Rinse	U	1	1	1			
0	Read Baseline	RB	1	1	1			
6	CCVL 500 ppb	U	1	1	1			
8	CCV 2500 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	Read Baseline	RB	1	1	1			
57	280-125088-c-6	U	1	1	1	L2		N
58	280-125145-b-1	U	1	100	1	L2		N
59	280-125147-b-1	U	1	100	1	L2		N
60	D	U	1	1	1			
0	Rinse	U	1	1	1			
0	Read Baseline	RB	1	1	1			
6	CCVL 500 ppb	U	1	1	1			
8	CCV 2500 ppb	U	1	1	1			
12	CCB	U	1	1	1			
0	Read Baseline	RB	1	1	1			
8	LCS	U	1	1	1			
8	LCSD	U	1	1	1			
12	MB	U	1	1	1			
61	280-124887-a-2	U	1	1	1	L2		N
62	MS 280-124887-a-2	U	1	1	1			
63	MSD 280-124887-a-2	U	1	1	1			
64	280-124928-d-7	U	1	1	1	L2 7	MRS 6/19/19	N
65	280-124928-d-8	U	1	1	1	L2 7	MRS 6/19/19	N
66	280-124928-d-9	U	1	1	1	L2 7		N

 MRS 6/19/19

Cup	Name	Type	R	Dil	Wt	Comment
67	280-124928-d-14	U	1	1	1	7 N
68	280-124928-d-15	U	1	1	1	7 N
69	280-124928-d-16	U	1	1	1	7 EJ N MSS 6/19/19
70	280-125041-a-1	U	1	1	1	L2 N
0	Rinse	U	1	1	1	
0	Read Baseline	RB	1	1	1	
6	CCVL 500 ppb	U	1	1	1	
8	CCV 2500 ppb	U	1	1	1	
12	CCB	U	1	1	1	
0	Read Baseline	RB	1	1	1	
71	280-125041-a-2	U	1	1	1	L2 N
72	280-125041-a-4	U	1	1	1	L2 N
73	280-124887-a-3	U	1	1	1	L2 N
74	MS 280-124887-a-3	U	1	1	1	
75	MSD 280-124887-a-3	U	1	1	1	
76	280-125041-a-5	U	1	1	1	L2 N
77	280-125041-a-6	U	1	1	1	L2 N
78	280-125041-a-7	U	1	1	1	L2 N
79	280-125041-a-8	U	1	1	1	L2 N
80	280-125079-a-2	U	1	1	1	L2 N
0	Rinse	U	1	1	1	
0	Read Baseline	RB	1	1	1	
6	CCVL 500 ppb	U	1	1	1	
8	CCV 2500 ppb	U	1	1	1	
12	CCB	U	1	1	1	
0	Read Baseline	RB	1	1	1	
81	280-125079-a-4	U	1	1	1	L2 N
82	280-125079-a-5	U	1	1	1	L2 N
83	280-125079-a-6	U	1	1	1	L2 N
84	280-125079-a-7	U	1	1	1	L2 N
0	Rinse	U	1	1	1	
0	Read Baseline	RB	1	1	1	
6	CCVL 500 ppb	U	1	1	1	
8	CCV 2500 ppb	U	1	1	1	
12	CCB	U	1	1	1	
0	Read Baseline	RB	1	1	1	

Run Results Report

Facility Name
Facility Location
Department
Operator Name MJS
Operator ID MJS
Platform FS 3000
Software Rev Code 222
Data system ID 57

Result path C:\FLOW_4\061919.RST
Sample table path C:\FLOW_4\061919.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 19-Jun-19
Time acquired 16:35

				Ammonia		
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
19-Jun-19	09:53	5	Sync	14404	99.587	
19-Jun-19	09:55	0	blk	-5	1.769	
19-Jun-19	09:57	0	Read Baseline	0	1.802	BL
19-Jun-19	09:59	1	Cal 0.0 PPB	401	4.518	
19-Jun-19	10:01	3	Cal 25.0 ppb	3646	26.523	
19-Jun-19	10:03	4	Cal 50.0 ppb	7326	51.493	
19-Jun-19	10:05	5	Cal 100.0 ppb	14516	100.348	
19-Jun-19	10:07	6	Cal 500.0 ppb	72191	495.012	
19-Jun-19	10:09	7	Cal 1000.0 ppb	143125	987.254	
19-Jun-19	10:11	8	Cal 2500.0 ppb	356048	2510.187	
19-Jun-19	10:13	9	Cal 5000.0 ppb	685132	4997.855	
19-Jun-19	10:15	0	blank	133	2.700	
19-Jun-19	10:17	0	read baseline	0	1.802	BL
19-Jun-19	10:19	10	ICVL 500.0 ppb	75687	519.095	
19-Jun-19	10:21	11	ICV 2500.0 ppb	362059	2554.171	
19-Jun-19	10:23	1	ICB	412	4.596	
19-Jun-19	10:25	0	read baseline	0	1.802	BL
19-Jun-19	10:27	8	LCS	362182	2555.068	
19-Jun-19	10:29	8	LCSD	367686	2595.391	
19-Jun-19	10:31	12	MB	454	4.882	
19-Jun-19	10:33	13	280-124194-g-1	919	8.033	
19-Jun-19	10:35	14	MS 280-124194-g-1	154612	1067.677	
19-Jun-19	10:37	15	MSD 280-124194-g-1	145157	1001.467	
19-Jun-19	10:39	16	280-124194-h-2	879	7.762	
19-Jun-19	10:41	17	280-124706-o-1	32856	225.306	
19-Jun-19	10:43	18	280-124706-o-2	5771	40.941	
19-Jun-19	10:45	19	280-124724-b-2	5134	366.217	
19-Jun-19	10:47	20	280-124736-h-2	5361	3816.174	
19-Jun-19	10:49	21	280-124738-j-1	5264	3750.413	
19-Jun-19	10:51	22	280-124738-j-2	5175	3689.998	
19-Jun-19	10:53	0	Rinse	-206	0.403	LO
19-Jun-19	10:55	0	Read Baseline	0	1.802	BL
19-Jun-19	10:57	6	CCVL 500 ppb	72684	498.407	
19-Jun-19	10:59	8	CCV 2500 ppb	359356	2534.391	
19-Jun-19	11:01	12	CCB	374	4.340	
19-Jun-19	11:03	0	Read Baseline	0	1.802	BL
19-Jun-19	11:05	23	280-124813-b-1	5399	38.419	
19-Jun-19	11:07	24	280-124813-b-3	5695	40.427	
19-Jun-19	11:09	25	280-125041-a-3	5882	41.692	
19-Jun-19	11:11	26	MS 280-125041-a-3	5559	39.506	
19-Jun-19	11:13	27	MSD 280-125041-a-3	5457	38.812	
19-Jun-19	11:21	0	Read Baseline	0	1.802	BL
19-Jun-19	11:23	18	280-124706-o-2	28130	193.055	
19-Jun-19	11:25	19	280-124724-b-2	298	38.212	
19-Jun-19	11:27	20	280-124736-h-2	914715	682963.062	
19-Jun-19	11:29	21	280-124738-j-1	625596	453575.938	

Result path C:\FLOW_4\061919.RST
Sample table path C:\FLOW_4\061919.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 19-Jun-19
Time acquired 16:35

				Ammonia		
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
19-Jun-19	11:31	22	280-124738-j-2	44557	30529.455	
19-Jun-19	11:33	0	Rinse	241	3.438	
19-Jun-19	11:35	0	Read Baseline	0	1.802	BL UM
19-Jun-19	11:37	6	CCVL 500 ppb	66694	457.181	
19-Jun-19	11:39	8	CCV 2500 ppb	319254	2242.158	
19-Jun-19	11:41	12	CCB	2285	17.292	
19-Jun-19	11:43	0	Read Baseline	0	1.802	BL
19-Jun-19	11:45	23	280-124813-b-1	1522	12.121	
19-Jun-19	11:47	24	280-124813-b-3	29038	199.252	
19-Jun-19	12:07	0	Rinse	182	3.036	
19-Jun-19	12:09	0	Read Baseline	0	1.802	BL
19-Jun-19	12:11	6	CCVL 500 ppb	72279	495.615	
19-Jun-19	12:13	8	CCV 2500 ppb	352345	2483.121	
19-Jun-19	12:15	8	CCV 2500 ppb	363703	2566.208	
19-Jun-19	12:17	12	CCB	268	3.616	
19-Jun-19	12:19	0	Read Baseline	0	1.802	BL
19-Jun-19	12:21	23	280-124813-b-1	-298	-0.216	LO
19-Jun-19	12:23	24	280-124813-b-3	28295	194.182	
19-Jun-19	12:25	25	280-125041-a-3	363671	2565.978	
19-Jun-19	12:27	26	MS 280-125041-a-3	460809	3284.479	
19-Jun-19	12:29	27	MSD 280-125041-a-3	459869	3277.453	
19-Jun-19	12:31	28	280-124813-b-4	3633	26.436	
19-Jun-19	12:33	29	280-124813-b-5	5546	39.414	
19-Jun-19	12:35	30	280-124813-b-6	-149	0.795	LO
19-Jun-19	12:37	31	280-124813-b-8	-12	1.721	
19-Jun-19	12:39	32	280-124813-b-9	-42	1.520	
19-Jun-19	12:41	0	Rinse	54	2.168	
19-Jun-19	12:43	0	Read Baseline	0	1.802	BL
19-Jun-19	12:45	6	CCVL 500 ppb	72240	495.347	
19-Jun-19	12:47	8	CCV 2500 ppb	361499	2550.073	
19-Jun-19	12:49	12	CCB	170	2.951	
19-Jun-19	12:51	0	Read Baseline	0	1.802	BL
19-Jun-19	12:53	33	280-125078-c-3	1565	12.413	
19-Jun-19	12:55	34	280-125078-c-5	523	5.345	
19-Jun-19	12:57	35	280-125078-c-6	-43	1.509	
19-Jun-19	12:59	36	280-125078-c-7	-42	1.518	
19-Jun-19	13:01	0	Rinse	-246	0.133	LO
19-Jun-19	13:03	0	Read Baseline	0	1.802	BL
19-Jun-19	13:05	6	CCVL 500 ppb	72837	499.458	
19-Jun-19	13:07	8	CCV 2500 ppb	341449	2403.600	
19-Jun-19	13:09	12	CCB	264	3.590	
19-Jun-19	13:11	0	Read Baseline	0	1.802	BL
19-Jun-19	13:13	8	LCS	343952	2421.848	
19-Jun-19	13:15	8	LCSD	367695	2595.460	
19-Jun-19	13:17	12	MB	136	2.724	
19-Jun-19	13:19	37	280-125079-a-3	6229	44.050	
19-Jun-19	13:21	38	MS 280-125079-a-3	157022	1084.577	
19-Jun-19	13:23	39	MSD 280-125079-a-3	155245	1072.115	
19-Jun-19	13:25	40	280-125044-a-5	29089	19960.027	
19-Jun-19	13:27	41	280-124842-c-1	94833	651311.312	
19-Jun-19	13:29	42	280-124842-b-2	368453	2601011.750	
19-Jun-19	13:31	43	280-124902-d-1	2663212	2337657.500	HI
19-Jun-19	13:33	44	280-124902-d-2	2870352	2564091.500	HI
19-Jun-19	13:35	45	280-124902-e-3	3147923	2877616.500	HI
19-Jun-19	13:37	46	280-124902-e-5	3065298	2783079.750	HI
19-Jun-19	13:39	0	Rinse	1627	12.828	FL
19-Jun-19	13:41	0	Read Baseline	0	1.802	BL

Result path C:\FLOW_4\061919.RST
Sample table path C:\FLOW_4\061919.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 19-Jun-19
Time acquired 16:35

				Ammonia		
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
19-Jun-19	13:43	6	CCVL 500 ppb	73362	503.074	
19-Jun-19	13:45	8	CCV 2500 ppb	350169	2467.229	
19-Jun-19	13:47	12	CCB	500	5.190	
19-Jun-19	13:49	0	Read Baseline	0	1.802	BL
19-Jun-19	13:51	47	280-124902-e-6	2968497	26736.279	HI
19-Jun-19	13:53	48	280-125109-d-4	74451	510.580	FL
19-Jun-19	13:55	49	280-124887-b-1	7243	50.936	
19-Jun-19	13:57	50	MS 280-124887-b-1	152204	1050.804	
19-Jun-19	13:59	51	MSD 280-124887-b-1	158642	1095.943	
19-Jun-19	14:01	52	280-125088-c-1	31430	215.569	
19-Jun-19	14:03	53	280-125088-c-2	85014	583.433	
19-Jun-19	14:05	54	280-125088-c-3	12164	84.359	
19-Jun-19	14:07	55	280-125088-c-4	51744	354.523	
19-Jun-19	14:09	56	280-125088-c-5	-217	0.331	LO
19-Jun-19	14:11	0	Rinse	-149	0.789	LO
19-Jun-19	14:13	0	Read Baseline	0	1.802	BL
19-Jun-19	14:15	6	CCVL 500 ppb	73184	501.852	
19-Jun-19	14:17	8	CCV 2500 ppb	350470	2469.423	
19-Jun-19	14:19	12	CCB	563	5.621	
19-Jun-19	14:21	0	Read Baseline	0	1.802	BL
19-Jun-19	14:23	57	280-125088-c-6	41527	284.562	
19-Jun-19	14:25	58	280-125145-b-1	394	447.072	
19-Jun-19	14:27	59	280-125147-b-1	151891	104861.070	
19-Jun-19	14:29	60	D	-134	0.891	LO
19-Jun-19	14:31	0	Rinse	-1	1.794	
19-Jun-19	14:33	0	Read Baseline	0	1.802	BL
19-Jun-19	14:35	6	CCVL 500 ppb	71942	493.297	
19-Jun-19	14:37	8	CCV 2500 ppb	340392	2395.890	
19-Jun-19	14:39	12	CCB	-2030	-11.951	LO
19-Jun-19	14:41	0	Read Baseline	0	1.802	BL
19-Jun-19	14:43	8	LCS	351148	2474.376	
19-Jun-19	14:45	8	LCSD	314669	2208.900	
19-Jun-19	14:47	12	MB	358	4.225	
19-Jun-19	14:49	61	280-124887-a-2	1857	14.393	
19-Jun-19	14:59	8	LCS	353788	2493.666	
19-Jun-19	15:01	8	LCSD	365694	2580.797	
19-Jun-19	15:03	8	LCSD	328134	2306.656	
19-Jun-19	15:05	12	MB	547	5.508	UM
19-Jun-19	15:07	61	280-124887-a-2	1589	12.575	
19-Jun-19	15:09	62	MS 280-124887-a-2	146628	1011.757	
19-Jun-19	15:11	63	MSD 280-124887-a-2	148987	1028.268	
19-Jun-19	15:13	64	280-124928-d-7	197012	1366.247	
19-Jun-19	15:15	65	280-124928-d-8	24304	166.976	
19-Jun-19	15:17	66	280-124928-d-9	10646	74.042	
19-Jun-19	15:19	67	280-124928-d-14	674	6.369	
19-Jun-19	15:21	68	280-124928-d-15	471	4.995	
19-Jun-19	15:23	69	280-124928-d-16	548275	3943.560	
19-Jun-19	15:25	70	280-125041-a-1	24438	167.885	
19-Jun-19	15:27	0	Rinse	-109	1.061	
19-Jun-19	15:29	0	Read Baseline	0	1.802	BL
19-Jun-19	15:31	6	CCVL 500 ppb	67770	464.585	
19-Jun-19	15:33	8	CCV 2500 ppb	360338	2541.574	
19-Jun-19	15:35	12	CCB	109	2.542	
19-Jun-19	15:37	0	Read Baseline	0	1.802	BL
19-Jun-19	15:39	71	280-125041-a-2	25303	173.784	
19-Jun-19	15:41	72	280-125041-a-4	5609	39.845	
19-Jun-19	15:43	73	280-124887-a-3	7230	50.844	

Result path C:\FLOW_4\061919.RST
Sample table path C:\FLOW_4\061919.tbl
Method path C:\FLOW_4\nh3.mth
Date acquired 19-Jun-19
Time acquired 16:35

				Ammonia		
Date	Time	Cup	Name	Response	Calc [ppb]	Flags
19-Jun-19	15:45	74	MS 280-124887-a-3	154689	1068.220	
19-Jun-19	15:47	75	MSD 280-124887-a-3	158897	1097.731	
19-Jun-19	15:49	76	280-125041-a-5	24660	169.401	
19-Jun-19	15:51	77	280-125041-a-6	-293	-0.182	LO
19-Jun-19	15:53	78	280-125041-a-7	5386	38.327	
19-Jun-19	15:55	79	280-125041-a-8	5226	37.240	
19-Jun-19	15:57	80	280-125079-a-2	1572	12.460	
19-Jun-19	15:59	0	Rinse	166	2.924	
19-Jun-19	16:01	0	Read Baseline	0	1.802	BL
19-Jun-19	16:03	6	CCVL 500 ppb	72165	494.835	
19-Jun-19	16:05	8	CCV 2500 ppb	336642	2368.571	
19-Jun-19	16:07	12	CCB	46	2.113	
19-Jun-19	16:09	0	Read Baseline	0	1.802	BL
19-Jun-19	16:11	81	280-125079-a-4	31202	214.012	
19-Jun-19	16:13	82	280-125079-a-5	28268	193.998	
19-Jun-19	16:15	83	280-125079-a-6	-40	1.533	
19-Jun-19	16:17	84	280-125079-a-7	6426	45.389	
19-Jun-19	16:19	0	Rinse	-112	1.042	
19-Jun-19	16:21	0	Read Baseline	0	1.802	BL
19-Jun-19	16:23	6	CCVL 500 ppb	72634	498.059	
19-Jun-19	16:25	8	CCV 2500 ppb	356006	2509.885	
19-Jun-19	16:27	12	CCB	90	2.412	
19-Jun-19	16:29	0	Read Baseline	0	1.802	BL

Peak Table:Ammonia

File name: C:\FLOW_4\061919.RST
Date: 19-Jun-19
Operator: MJS

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	5	Sync	1	SYNC	1	1	14404	99.587456	
2	0	blk	1	CO	1	1	-5	1.768888	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
4	1	Cal 0.0 PPB	1	C	1	1	401	4.518177	
5	3	Cal 25.0 ppb	1	C	1	1	3646	26.522837	
6	4	Cal 50.0 ppb	1	C	1	1	7326	51.493488	
7	5	Cal 100.0 ppb	1	C	1	1	14516	100.347969	
8	6	Cal 500.0 ppb	1	C	1	1	72191	495.011963	
9	7	Cal 1000.0 ppb	1	C	1	1	143125	987.254272	
10	8	Cal 2500.0 ppb	1	C	1	1	356048	2510.186523	
11	9	Cal 5000.0 ppb	1	C	1	1	685132	4997.854980	
12	0	blank	1	BLNK	1	1	133	2.699838	
B	0	read baseline	1	RB	1	1	0	1.801662	BL
14	10	ICVL 500.0 ppb	1	U	1	1	75687	519.095398	
15	11	ICV 2500.0 ppb	1	U	1	1	362059	2554.171143	
16	1	ICB	1	U	1	1	412	4.595780	
B	0	read baseline	1	RB	1	1	0	1.801662	BL
18	8	LCS	1	U	1	1	362182	2555.068359	
19	8	LCSD	1	U	1	1	367686	2595.390625	
20	12	MB	1	U	1	1	454	4.881803	
21	13	280-124194-g-1	1	U	1	1	919	8.032890	
22	14	MS 280-124194-g-1	1	U	1	1	154612	1067.677490	
23	15	MSD 280-124194-g-1	1	U	1	1	145157	1001.467346	
24	16	280-124194-h-2	1	U	1	1	879	7.761576	
25	17	280-124706-o-1	1	U	1	1	32856	225.305679	
26	18	280-124706-o-2	1	U	1	1	5771	40.941372	
27	19	280-124724-b-2	1	U	10	1	5134	366.216553	
28	20	280-124736-h-2	1	U	100	1	5361	3816.173584	
29	21	280-124738-j-1	1	U	100	1	5264	3750.412842	
30	22	280-124738-j-2	1	U	100	1	5175	3689.997803	
31	0	Rinse	1	U	1	1	-206	0.402623	LO
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
33	6	CCVL 500 ppb	1	U	1	1	72684	498.407379	
34	8	CCV 2500 ppb	1	U	1	1	359356	2534.390625	
35	12	CCB	1	U	1	1	374	4.339620	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
37	23	280-124813-b-1	1	U	1	1	5399	38.418877	
38	24	280-124813-b-3	1	U	1	1	5695	40.426758	
39	25	280-125041-a-3	1	U	1	1	5882	41.692116	
40	26	MS 280-125041-a-3	1	U	1	1	5559	39.505566	
41	27	MSD 280-125041-a-3	1	U	1	1	5457	38.812225	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
43	18	280-124706-o-2	1	U	1	1	28130	193.055237	
44	19	280-124724-b-2	1	U	10	1	298	38.212479	
45	20	280-124736-h-2	1	U	100	1	914715	682963.062500	
46	21	280-124738-j-1	1	U	100	1	625596	453575.937500	
47	22	280-124738-j-2	1	U	100	1	44557	30529.455078	
48	0	Rinse	1	U	1	1	241	3.437940	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL UM
50	6	CCVL 500 ppb	1	U	1	1	66694	457.181396	
51	8	CCV 2500 ppb	1	U	1	1	319254	2242.157959	
52	12	CCB	1	U	1	1	2285	17.292088	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
54	23	280-124813-b-1	1	U	1	1	1522	12.121020	
55	24	280-124813-b-3	1	U	1	1	29038	199.251907	
56	0	Rinse	1	U	1	1	182	3.036039	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
58	6	CCVL 500 ppb	1	U	1	1	72279	495.614960	
59	8	CCV 2500 ppb	1	U	1	1	352345	2483.121094	
60	8	CCV 2500 ppb	2	U	1	1	363703	2566.207764	
61	12	CCB	1	U	1	1	268	3.615865	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
63	23	280-124813-b-1	1	U	1	1	-298	-0.216310	LO
64	24	280-124813-b-3	1	U	1	1	28295	194.182419	
65	25	280-125041-a-3	1	U	1	1	363671	2565.978027	
66	26	MS 280-125041-a-3	1	U	1	1	460809	3284.479492	
67	27	MSD 280-125041-a-3	1	U	1	1	459869	3277.453369	
68	28	280-124813-b-4	1	U	1	1	3633	26.436434	
69	29	280-124813-b-5	1	U	1	1	5546	39.414230	
70	30	280-124813-b-6	1	U	1	1	-149	0.794864	LO

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	31	280-124813-b-8	1	U	1	1	-12	1.721209	
72	32	280-124813-b-9	1	U	1	1	-42	1.520053	
73	0	Rinse	1	U	1	1	54	2.167784	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
75	6	CCVL 500 ppb	1	U	1	1	72240	495.346741	
76	8	CCV 2500 ppb	1	U	1	1	361499	2550.073242	
77	12	CCB	1	U	1	1	170	2.951004	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
79	33	280-125078-c-3	1	U	1	1	1565	12.413037	
80	34	280-125078-c-5	1	U	1	1	523	5.345046	
81	35	280-125078-c-6	1	U	1	1	-43	1.509423	
82	36	280-125078-c-7	1	U	1	1	-42	1.517913	
83	0	Rinse	1	U	1	1	-246	0.133427	LO
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
85	6	CCVL 500 ppb	1	U	1	1	72837	499.457703	
86	8	CCV 2500 ppb	1	U	1	1	341449	2403.599609	
87	12	CCB	1	U	1	1	264	3.590069	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
89	8	LCS	1	U	1	1	343952	2421.847900	
90	8	LCSD	1	U	1	1	367695	2595.459717	
91	12	MB	1	U	1	1	136	2.724387	
92	37	280-125079-a-3	1	U	1	1	6229	44.049541	
93	38	MS 280-125079-a-3	1	U	1	1	157022	1084.577271	
94	39	MSD 280-125079-a-3	1	U	1	1	155245	1072.115234	
95	40	280-125044-a-5	1	U	100	1	29089	19960.027344	
96	41	280-124842-c-1	1	U	1000	1	94833	651311.312500	
97	42	280-124842-b-2	1	U	1000	1	368453	2601011.750000	
98	43	280-124902-d-1	1	U	100	1	2663212	2337657.500000	HI
99	44	280-124902-d-2	1	U	100	1	2870352	2564091.500000	HI
100	45	280-124902-e-3	1	U	100	1	3147923	2877616.500000	HI
101	46	280-124902-e-5	1	U	100	1	3065298	2783079.750000	HI
102	0	Rinse	1	U	1	1	1627	12.827880	FL
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
104	6	CCVL 500 ppb	1	U	1	1	73362	503.073822	
105	8	CCV 2500 ppb	1	U	1	1	350169	2467.228760	
106	12	CCB	1	U	1	1	500	5.190479	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
108	47	280-124902-e-6	1	U	1	1	2968497	26736.279297	HI
109	48	280-125109-d-4	1	U	1	1	74451	510.579987	FL
110	49	280-124887-b-1	1	U	1	1	7243	50.935627	
111	50	MS 280-124887-b-1	1	U	1	1	152204	1050.803589	
112	51	MSD 280-124887-b-1	1	U	1	1	158642	1095.942627	
113	52	280-125088-c-1	1	U	1	1	31430	215.568710	
114	53	280-125088-c-2	1	U	1	1	85014	583.433472	
115	54	280-125088-c-3	1	U	1	1	12164	84.359352	
116	55	280-125088-c-4	1	U	1	1	51744	354.522827	
117	56	280-125088-c-5	1	U	1	1	-217	0.331054	LO
118	0	Rinse	1	U	1	1	-149	0.788572	LO
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
120	6	CCVL 500 ppb	1	U	1	1	73184	501.851868	
121	8	CCV 2500 ppb	1	U	1	1	350470	2469.422852	
122	12	CCB	1	U	1	1	563	5.620580	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
124	57	280-125088-c-6	1	U	1	1	41527	284.561676	
125	58	280-125145-b-1	1	U	100	1	394	447.071991	
126	59	280-125147-b-1	1	U	100	1	151891	104861.070312	
127	60	D	1	U	1	1	-134	0.891493	LO
128	0	Rinse	1	U	1	1	-1	1.794366	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
130	6	CCVL 500 ppb	1	U	1	1	71942	493.297272	
131	8	CCV 2500 ppb	1	U	1	1	340392	2395.889648	
132	12	CCB	1	U	1	1	-2030	-11.951155	LO
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
134	8	LCS	1	U	1	1	351148	2474.375732	
135	8	LCSD	1	U	1	1	314669	2208.899902	
136	12	MB	1	U	1	1	358	4.225085	
137	61	280-124887-a-2	1	U	1	1	1857	14.393445	
138	8	LCS	1	U	1	1	353788	2493.666260	
139	8	LCSD	1	U	1	1	365694	2580.797363	
140	8	LCSD	2	U	1	1	328134	2306.656494	
141	12	MB	1	U	1	1	547	5.507720	UM
142	61	280-124887-a-2	1	U	1	1	1589	12.575230	
143	62	MS 280-124887-a-2	1	U	1	1	146628	1011.756653	
144	63	MSD 280-124887-a-2	1	U	1	1	148987	1028.268066	
145	64	280-124928-d-7	1	U	1	1	197012	1366.246704	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
146	65	280-124928-d-8	1	U	1	1	24304	166.976135	
147	66	280-124928-d-9	1	U	1	1	10646	74.041542	
148	67	280-124928-d-14	1	U	1	1	674	6.369211	
149	68	280-124928-d-15	1	U	1	1	471	4.994773	
150	69	280-124928-d-16	1	U	1	1	548275	3943.559570	
151	70	280-125041-a-1	1	U	1	1	24438	167.885254	
152	0	Rinse	1	U	1	1	-109	1.060759	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
154	6	CCVL 500 ppb	1	U	1	1	67770	464.584717	
155	8	CCV 2500 ppb	1	U	1	1	360338	2541.574463	
156	12	CCB	1	U	1	1	109	2.542322	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
158	71	280-125041-a-2	1	U	1	1	25303	173.783585	
159	72	280-125041-a-4	1	U	1	1	5609	39.845005	
160	73	280-124887-a-3	1	U	1	1	7230	50.844006	
161	74	MS 280-124887-a-3	1	U	1	1	154689	1068.220093	
162	75	MSD 280-124887-a-3	1	U	1	1	158897	1097.731079	
163	76	280-125041-a-5	1	U	1	1	24660	169.401367	
164	77	280-125041-a-6	1	U	1	1	-293	-0.182381	LO
165	78	280-125041-a-7	1	U	1	1	5386	38.327065	
166	79	280-125041-a-8	1	U	1	1	5226	37.239685	
167	80	280-125079-a-2	1	U	1	1	1572	12.459896	
168	0	Rinse	1	U	1	1	166	2.923579	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
170	6	CCVL 500 ppb	1	U	1	1	72165	494.835022	
171	8	CCV 2500 ppb	1	U	1	1	336642	2368.570557	
172	12	CCB	1	U	1	1	46	2.112730	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
174	81	280-125079-a-4	1	U	1	1	31202	214.012405	
175	82	280-125079-a-5	1	U	1	1	28268	193.997559	
176	83	280-125079-a-6	1	U	1	1	-40	1.532955	
177	84	280-125079-a-7	1	U	1	1	6426	45.389072	
178	0	Rinse	1	U	1	1	-112	1.042376	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL
180	6	CCVL 500 ppb	1	U	1	1	72634	498.059204	
181	8	CCV 2500 ppb	1	U	1	1	356006	2509.885010	
182	12	CCB	1	U	1	1	90	2.411859	
B	0	Read Baseline	1	RB	1	1	0	1.801662	BL

Ammonia:Calibration 1: Peak 4-183

File name: C:\FLOW_4\061919.RST
Date: 19-Jun-19
Operator: MJS

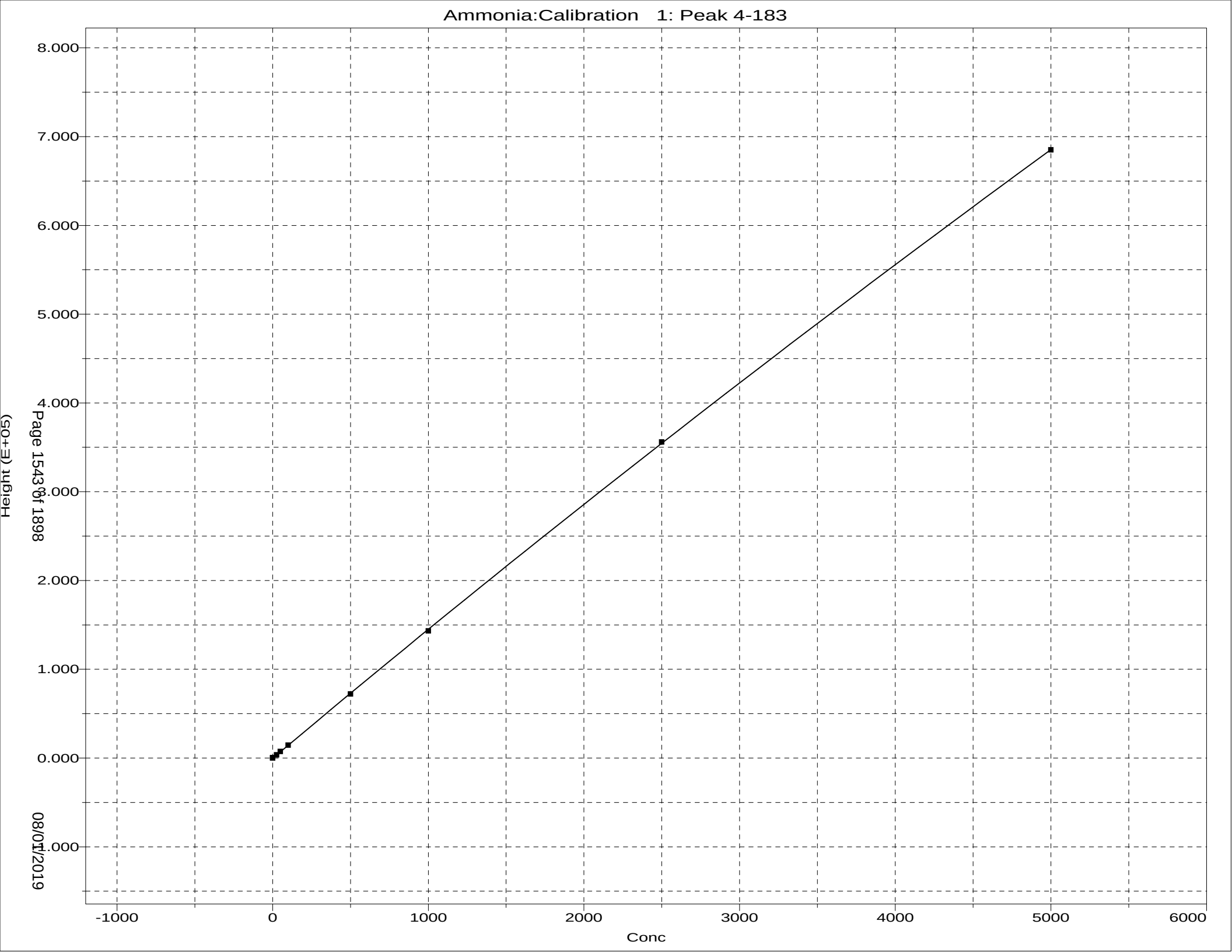
*	Name	Conc	Height
*	Cal 0.0 PPB	0.000000	400.776733
*	Cal 25.0 ppb	25.000000	3645.889160
*	Cal 50.0 ppb	50.000000	7325.587402
*	Cal 100.0 ppb	100.000000	14516.182617
*	Cal 500.0 ppb	500.000000	72191.070312
*	Cal 1000.0 ppb	1000.000000	143125.015625
*	Cal 2500.0 ppb	2500.000000	356047.531250
*	Cal 5000.0 ppb	5000.000000	685131.937500

Calib Coef:
x=cyy+by+a
a: (intercept) 1.8017e+00
b: 6.7778e-03
c: 7.5063e-10

Corr Coef: 0.999993

Carryover: 0%

No Drift Peaks


Ammonia:Calibration 1: Peak 4-183
Height (E+05)
8.000
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
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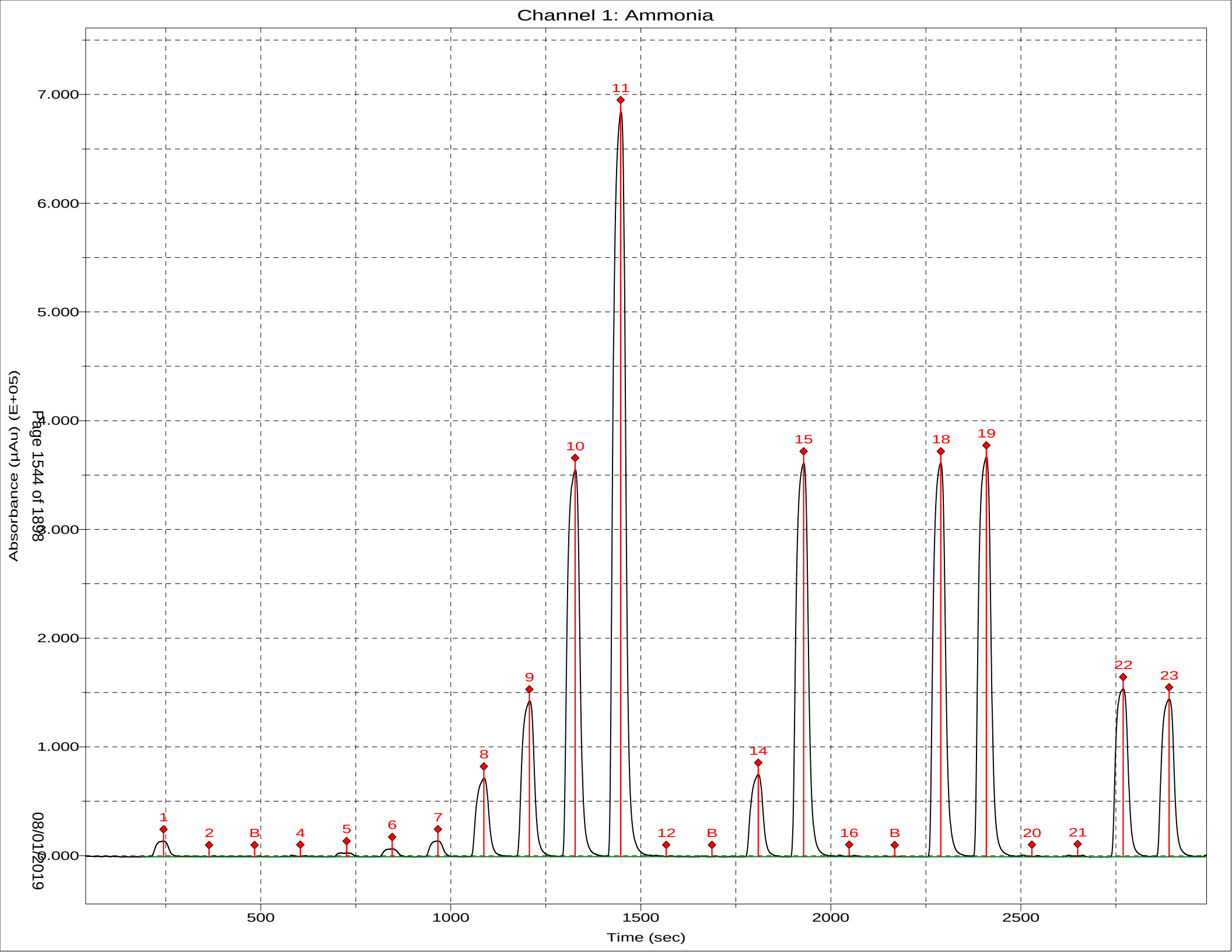
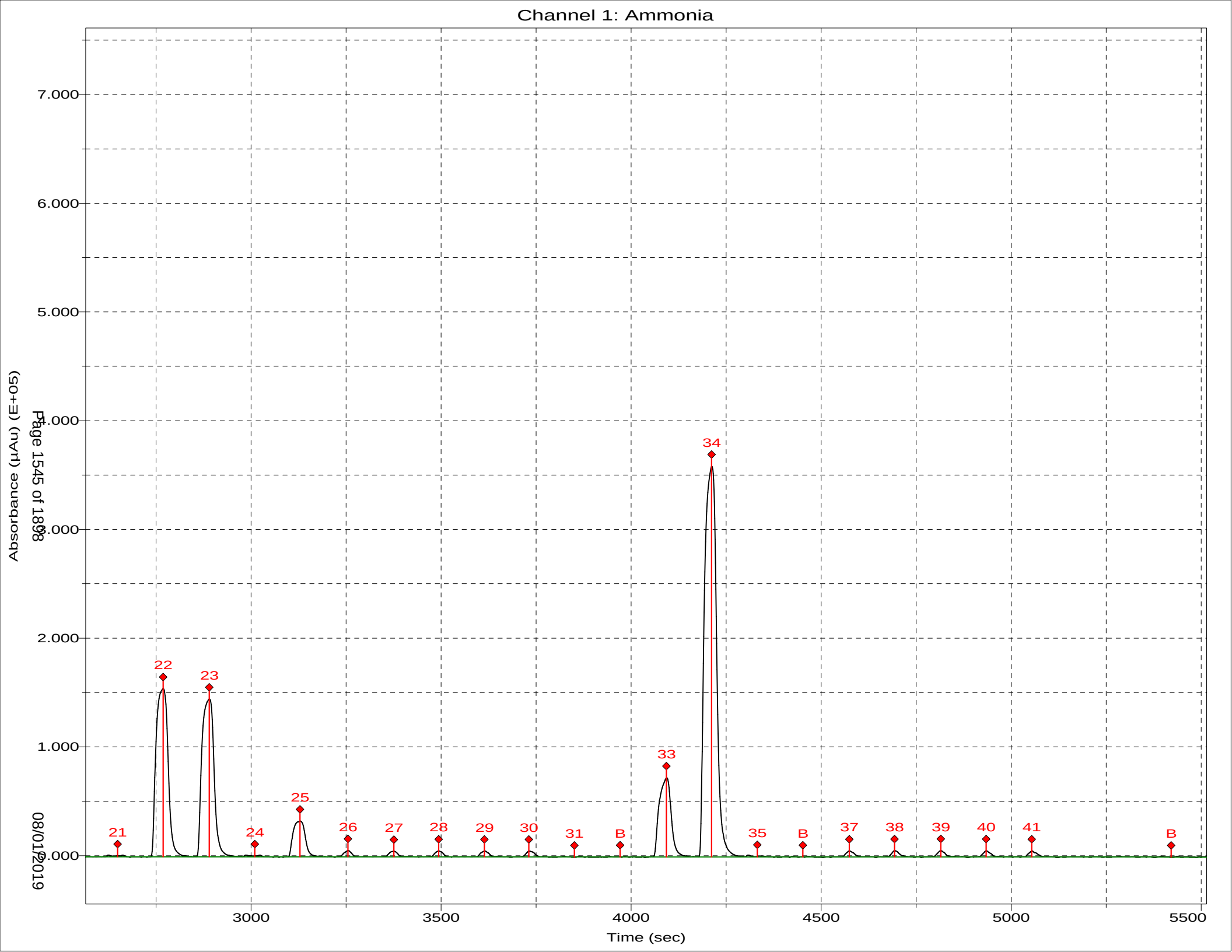

Channel 1: Ammonia
Absorbance (µAu) (E+05)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
500
1000
1500
2000
2500
Time (sec)
1
2
B
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
21
22
23


Channel 1: Ammonia
Absorbance (µAu) (E+05)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec)
3000
3500
4000
4500
5000
5500
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
37
38
39
40
41
B
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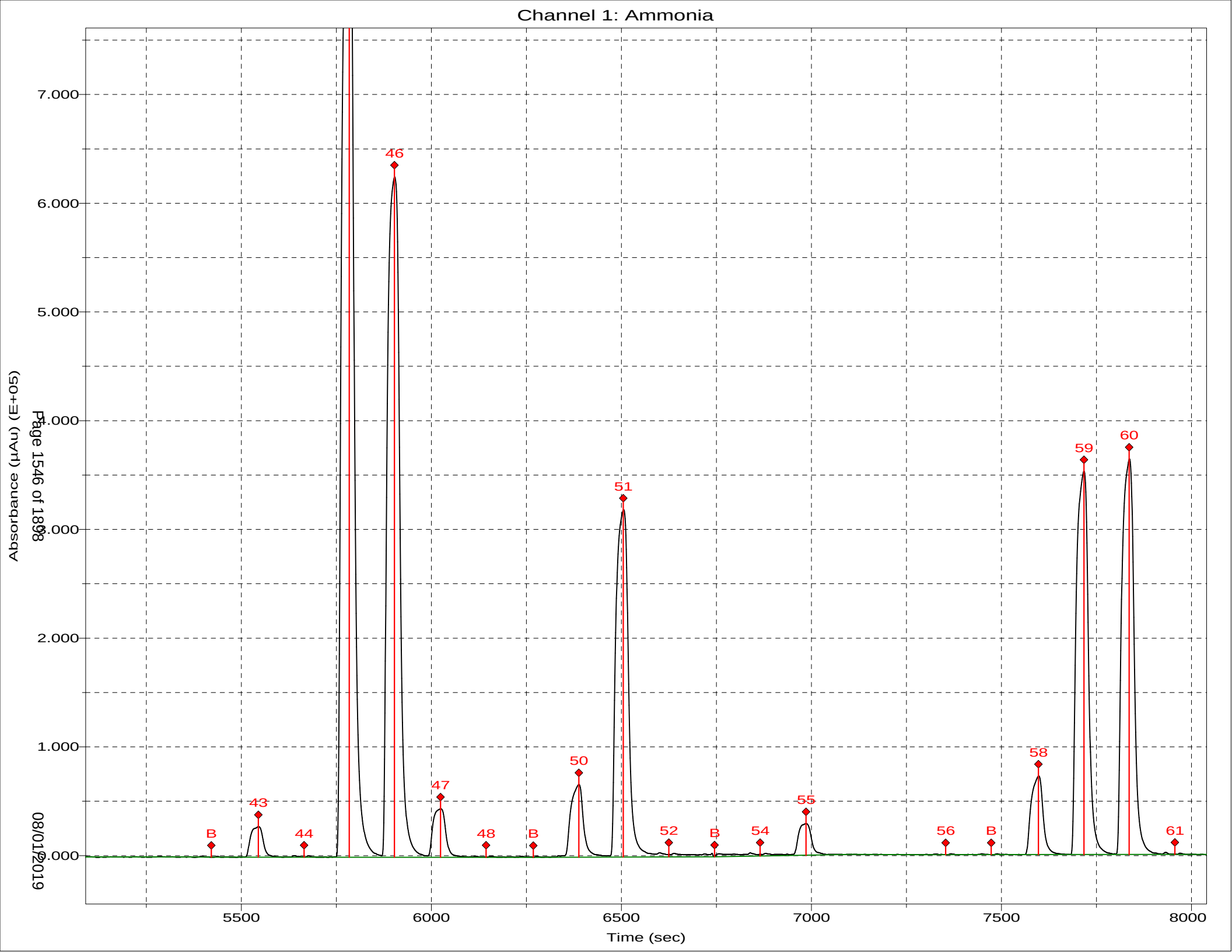
Channel 1: Ammonia
Absorbance (µAu) (E+05)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec)
5500
6000
6500
7000
7500
8000
B
43
44
46
47
48
B
50
51
52
B
54
55
56
B
58
59
60
61
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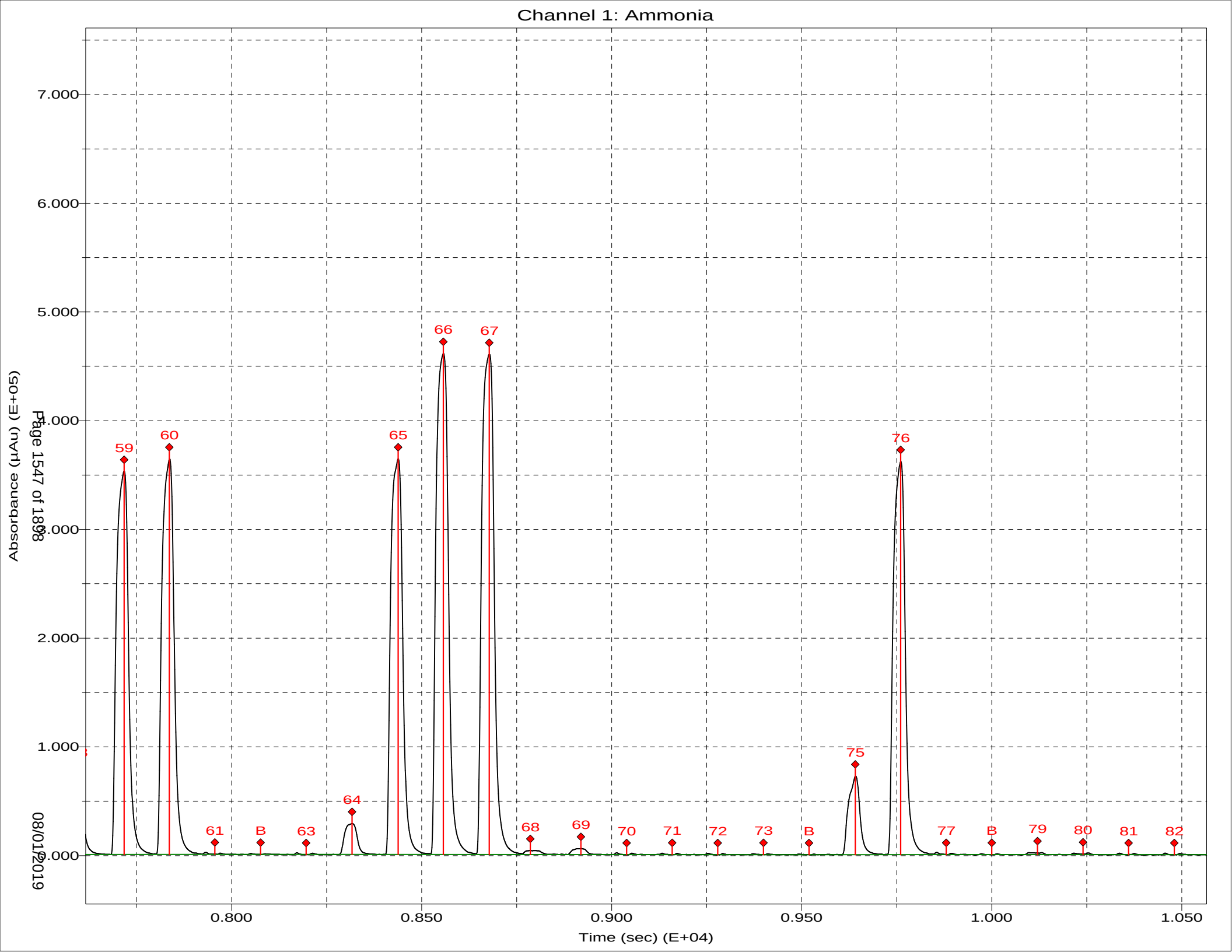
Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec) (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.800
0.850
0.900
0.950
1.000
1.050
59
60
61
B
63
64
65
66
67
68
69
70
71
72
73
B
75
76
77
B
79
80
81
82
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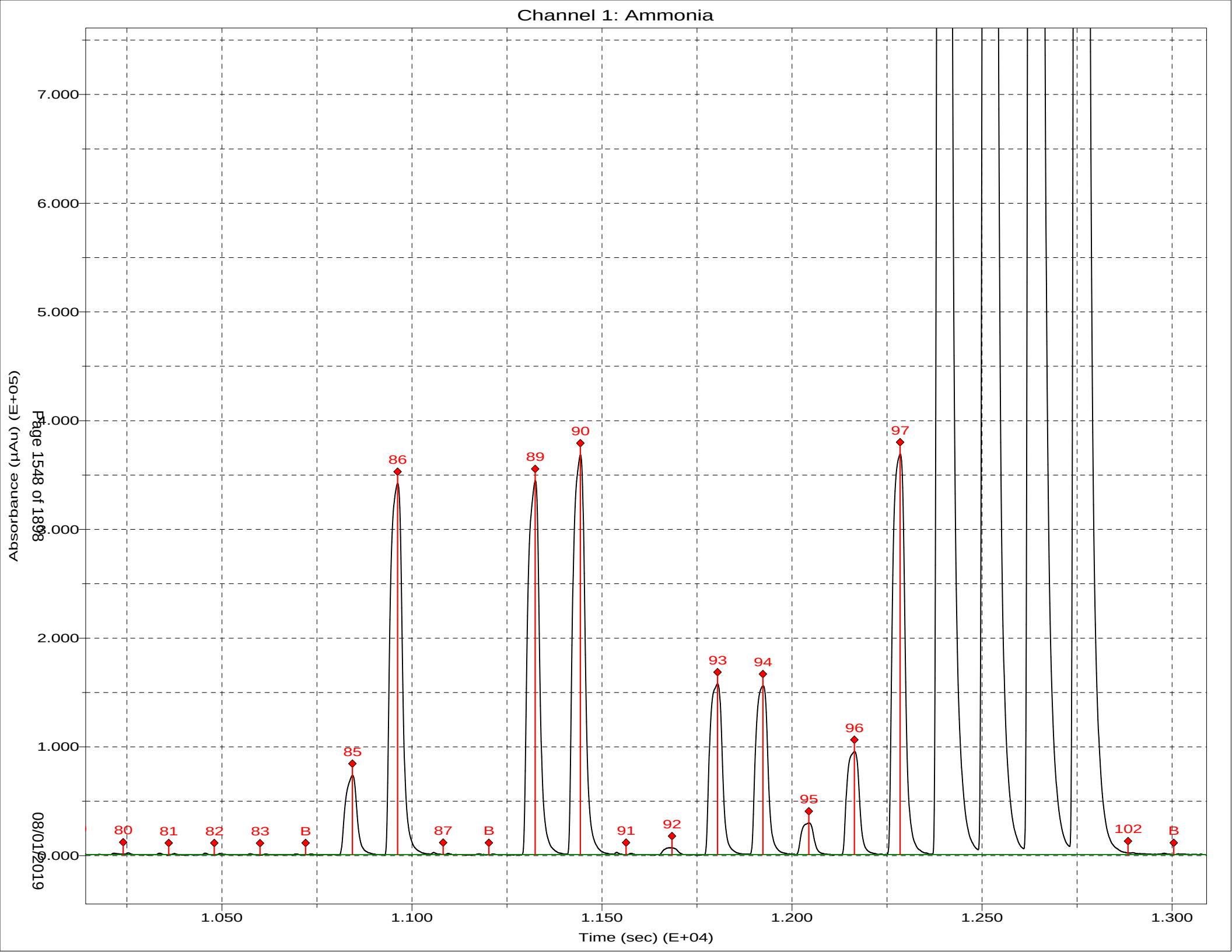
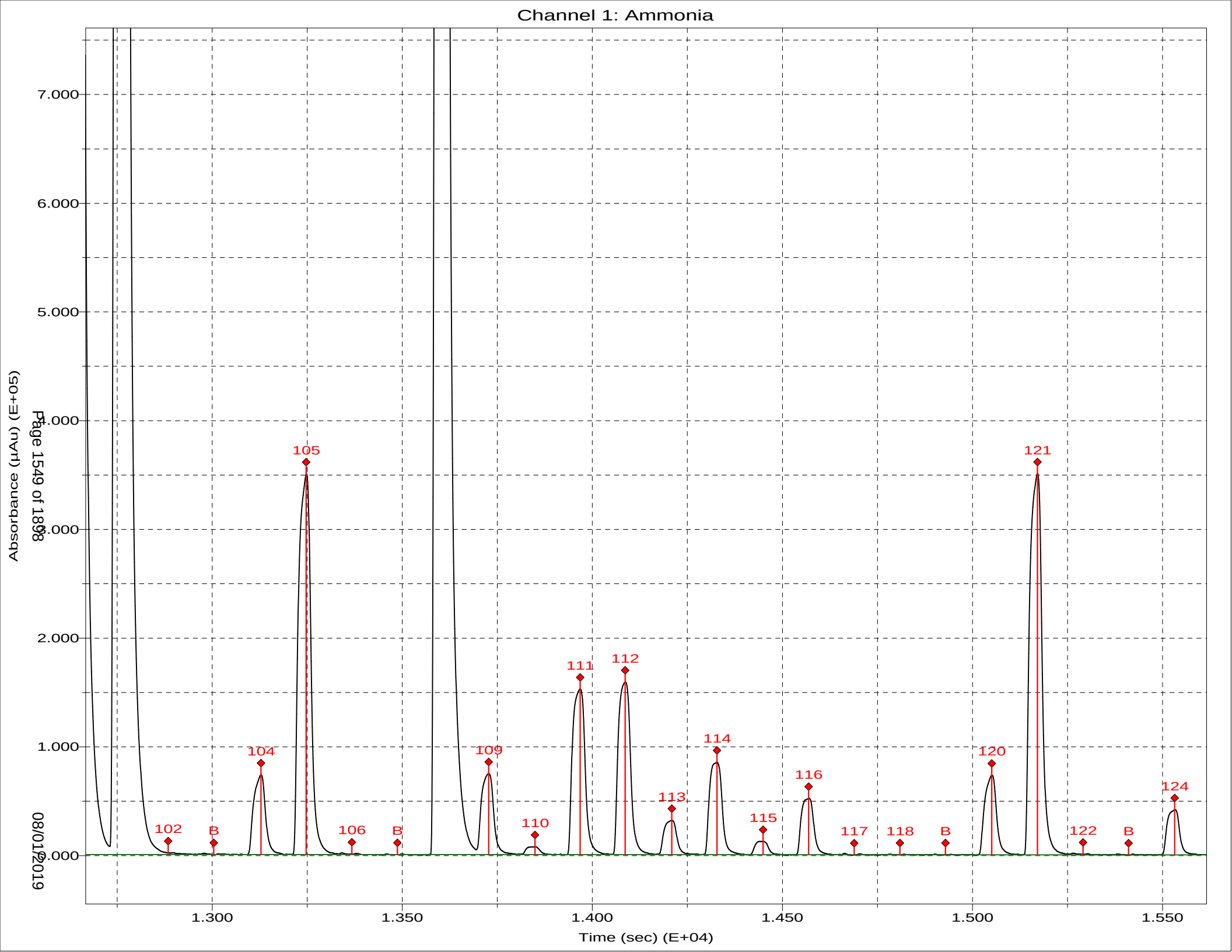
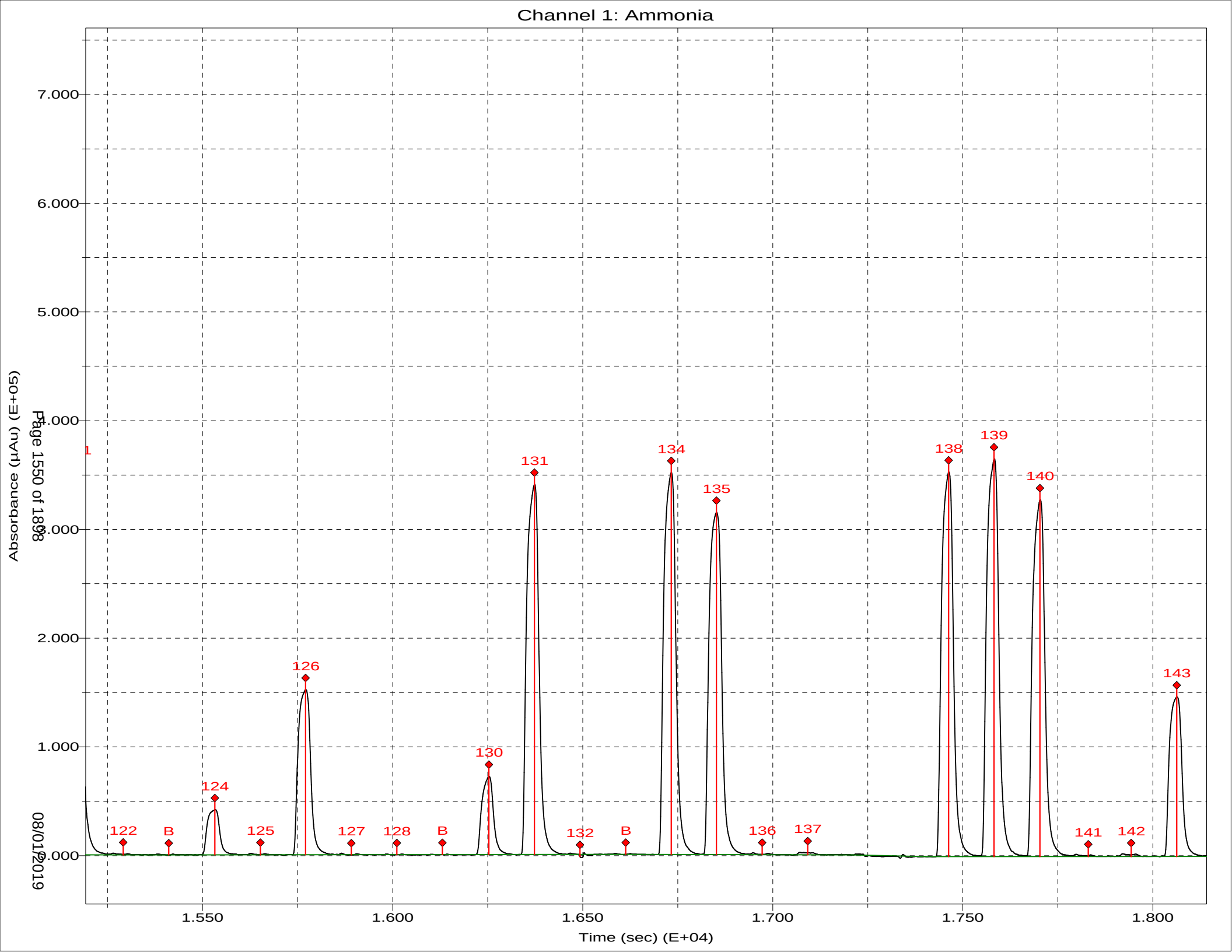

Channel 1: Ammonia
Absorbance (µAu) (E+05)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec) (E+04)
1.050
1.100
1.150
1.200
1.250
1.300
80
81
82
83
B
85
86
87
B
89
90
91
92
93
94
95
96
97
102
B


Channel 1: Ammonia
Absorbance (µAu) (E+05)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
1.300
1.350
1.400
1.450
1.500
1.550
Time (sec) (E+04)
102
B
104
105
106
B
109
110
111
112
113
114
115
116
117
118
B
120
121
122
B
124


Channel 1: Ammonia
Absorbance (µAu) (E+05)
Time (sec) (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
1.550
1.600
1.650
1.700
1.750
1.800
1
122
B
124
125
126
127
128
B
130
131
132
B
134
135
136
137
138
139
140
141
142
143
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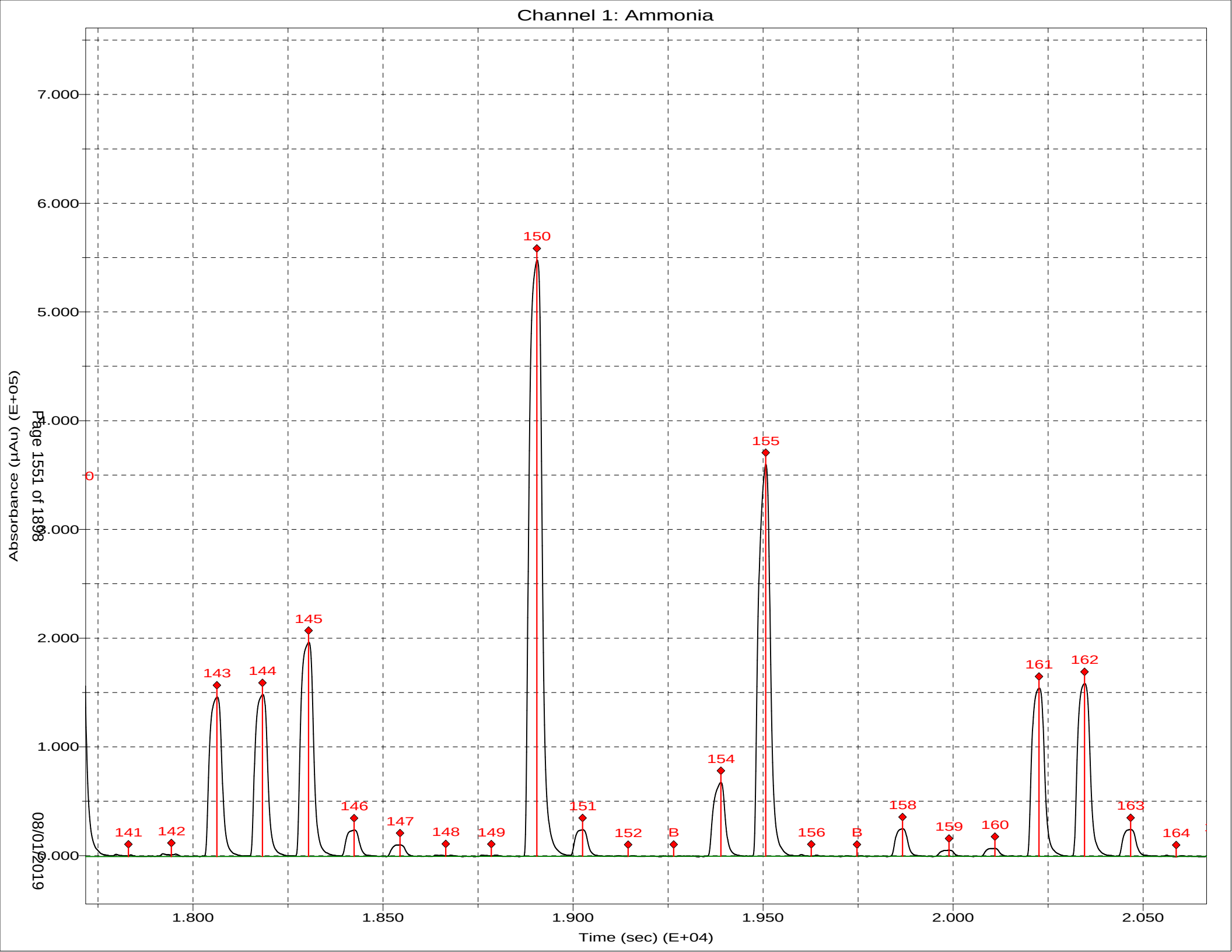
Channel 1: Ammonia
Absorbance (µAu) (E+05)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec) (E+04)
1.800
1.850
1.900
1.950
2.000
2.050
141
142
143
144
145
146
147
148
149
150
151
152
B
154
155
156
B
158
159
160
161
162
163
164
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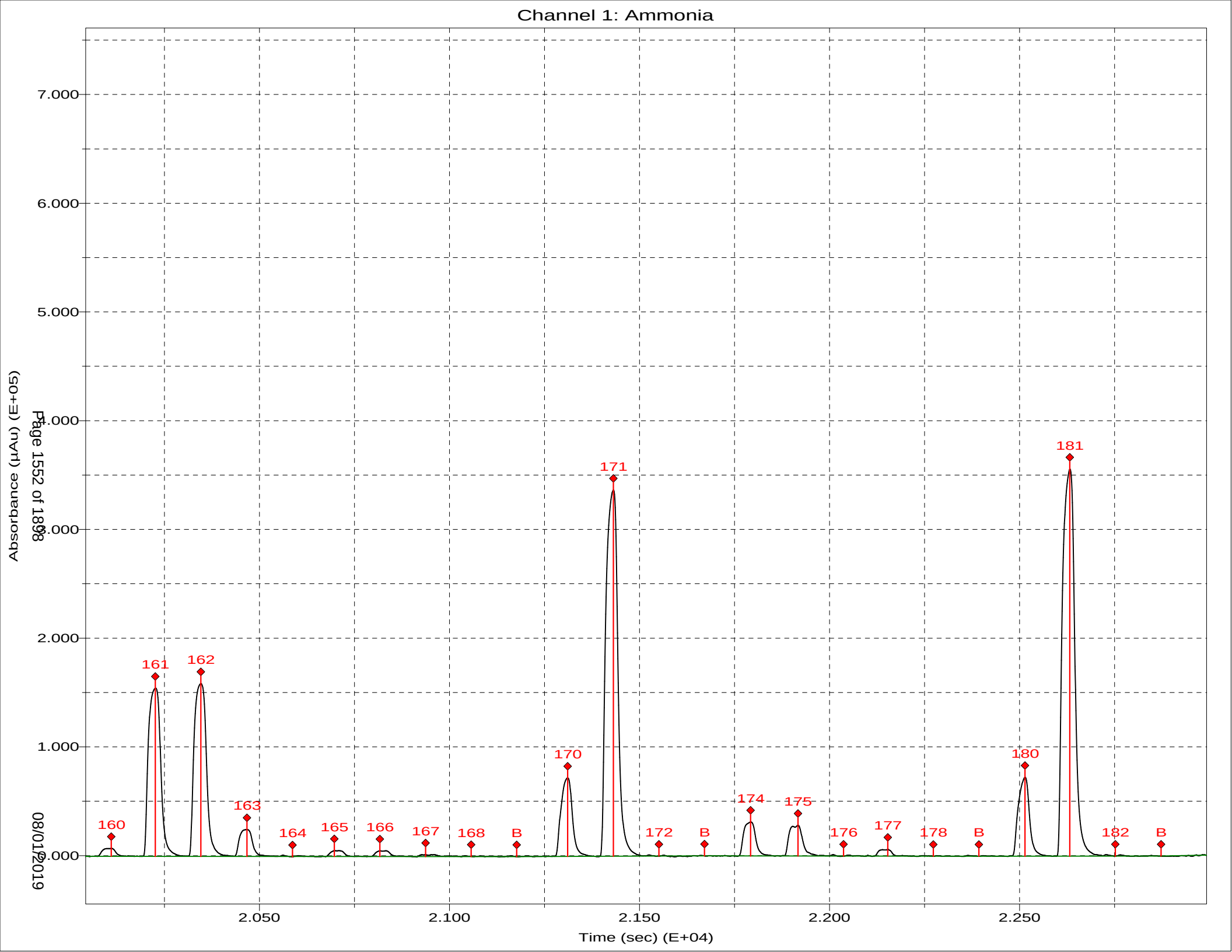
Channel 1: Ammonia
Absorbance (µAu) (E+05)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec) (E+04)
2.050
2.100
2.150
2.200
2.250
160
161
162
163
164
165
166
167
168
B
170
171
172
B
174
175
176
177
178
B
180
181
182
B
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Sample Table for 062519

	Position	Identifier	Type	Cup Type
1	1:1	SYNC	SYNC	4 ml
2	1:2	CO	Carry over	4 ml
3	1:3	w	Blank	4 ml
4	1:4	W	Wash	4 ml
5	1:5	C1	Calibrant	4 ml
6	1:6	C2	Calibrant	4 ml
7	1:7	C3	Calibrant	4 ml
8	1:8	C4	Calibrant	4 ml
9	1:9	C5	Calibrant	4 ml
10	1:10	C6	Calibrant	4 ml
11	1:13	w	Blank	4 ml
12	1:14	W	Wash	4 ml
13	1:15	ICV 280-460066/42-A	Unknown	4 ml
14	1:16	ICB 280-460066/43-A	Unknown	4 ml
15	1:17	xLCS 280-462534/1-A	Unknown	4 ml
16	1:18	MB 280-462534/2-A	Unknown	4 ml
17	1:19	280-124912-C-4-A	Unknown	4 ml
18	1:20	280-124912-C-4-C MS	Unknown	4 ml
19	1:21	280-124912-C-4-B MS	Unknown	4 ml
20	1:22	w	Blank	4 ml
21	1:23	280-124912-C-1-A	Unknown	4 ml
22	1:24	280-124912-C-2-A	Unknown	4 ml
23	1:25	280-124912-C-3-A	Unknown	4 ml
24	1:26	280-124912-C-6-A	Unknown	4 ml
25	1:27	280-124912-C-7-A	Unknown	4 ml
26	1:28	280-124912-C-8-A	Unknown	4 ml
27	1:29	280-124912-C-9-A	Unknown	4 ml
28	1:30	LCS 280-462534/1-A	Unknown	4 ml
29	1:31	CCV 280-460066/44-A	Unknown	4 ml
30	1:32	CCB 280-460066/45-A	Unknown	4 ml
31	1:33	280-124912-C-10-A	Unknown	4 ml
32	1:34	280-124912-C-11-A	Unknown	4 ml
33	1:35	280-124912-C-5-A	Unknown	4 ml
34	1:36	280-124912-C-5-B MS	Unknown	4 ml
35	1:37	280-124912-C-5-C MS	Unknown	4 ml
36	1:38	w	Blank	4 ml
37	1:39	280-124928-C-7-A	Unknown	4 ml
38	1:40	280-124928-C-8-A	Unknown	4 ml
39	1:41	280-124928-C-9-A	Unknown	4 ml
40	1:42	280-124928-C-14-A	Unknown	4 ml
41	1:43	280-124928-C-15-A	Unknown	4 ml
42	1:44	w	Blank	4 ml
43	1:45	CCV 280-460066/44-A	Unknown	4 ml
44	1:46	CCB 280-460066/45-A	Unknown	4 ml

	Position	Identifier	Type	Cup Type
45	1:47	280-124928-C-16-A	Unknown	4 ml
46	1:48	280-124718-F-1-A	Unknown	4 ml
47	1:49	280-124718-F-2-A	Unknown	4 ml
48	1:50	280-124718-G-3-A	Unknown	4 ml
49	1:51	w	Blank	4 ml
50	1:52	xLCS 280-462534/27-A	Unknown	4 ml
51	1:53	MB 280-462534/28-A	Unknown	4 ml
52	1:54	280-124912-C-12-A	Unknown	4 ml
53	1:55	280-124912-C-12-B MS	Unknown	4 ml
54	1:56	280-124912-C-12-C MS	Unknown	4 ml
55	1:57	280-124718-F-1-A	Unknown	4 ml
56	1:58	w	Blank	4 ml
57	1:59	CCV 280-460066/44-A	Unknown	4 ml
58	1:60	CCB 280-460066/45-A	Unknown	4 ml
59	2:1	280-124738-J-1-A	Unknown	4 ml
60	2:2	280-124738-J-2-A	Unknown	4 ml
61	2:3	280-125145-A-1-A	Unknown	4 ml
62	2:4	280-125147-A-1-A	Unknown	4 ml
63	2:5	280-125109-C-4-A	Unknown	4 ml
64	2:6	280-124724-B-2-A	Unknown	4 ml
65	2:7	280-124902-D-1-A	Unknown	4 ml
66	2:8	280-124819-E-1-A	Unknown	4 ml
67	2:9	280-124718-F-2-A	Unknown	4 ml
68	2:10	280-124718-G-3-A	Unknown	4 ml
69	2:11	w	Blank	4 ml
70	2:12	CCV 280-460066/44-A	Unknown	4 ml
71	2:13	CCB 280-460066/45-A	Unknown	4 ml
72	2:14	LCS 280-462534/40-A	Unknown	4 ml
73	2:15	MB 280-462534/41-A	Unknown	4 ml
74	2:16	280-124659-A-1-A	Unknown	4 ml
75	2:17	280-124659-A-1-A	Unknown	4 ml
76	2:18	280-124659-A-1-A	Unknown	4 ml
77	2:19	280-124659-A-1-B	Unknown	4 ml
78	2:20	280-124659-A-1-B	Unknown	4 ml
79	2:21	LCS 280-462534/27-A	Unknown	4 ml
80	2:22	w	Blank	4 ml
81	2:23	CCV 280-460066/44-A	Unknown	4 ml
82	2:24	CCB 280-460066/45-A	Unknown	4 ml
83	2:25	280-124718-F-1-A	Unknown	4 ml
84	2:26	280-124738-J-1-A	Unknown	4 ml
85	2:27	280-125147-A-1-A	Unknown	4 ml
86	2:28	280-124902-D-1-A	Unknown	4 ml
87	2:29	280-124819-E-1-A	Unknown	4 ml
88	2:30	280-124659-A-1-B	Unknown	4 ml

Sample Table for 062519

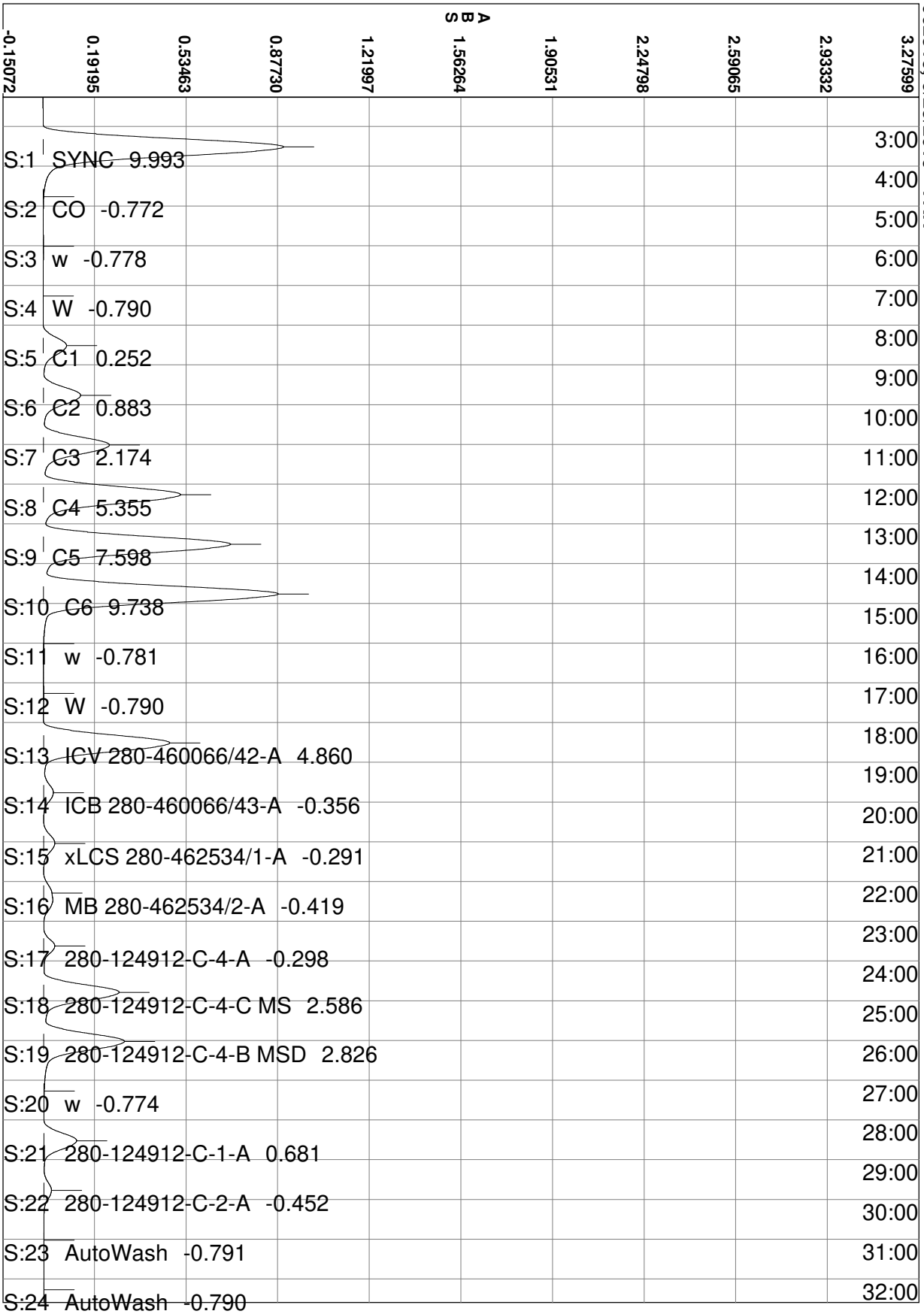
	Position	Identifier	Type	Cup Type
89	2:31	280-124659-A-1-B	Unknown	4 ml
90	2:32	w	Blank	4 ml
91	2:33	CCV 280-460066/44-A	Unknown	4 ml
92	2:34	CCB 280-460066/45-A	Unknown	4 ml

Run Name: 062519
Configuration: TKN
Run date: 6/25/2019

	Position	Identifier	Type	Comme	Date	Time	otal	TKN Cor Ht	TKN mg/l
1	1:1	SYNC	SYNC	50;351.2	6/25/2019	6:47:09 PM	1	0.89789	9.993
2	1:2	CO	Carry over		6/25/2019	6:47:40 PM	1	0.00155	-0.772
3	1:3	w	Blank		6/25/2019	6:48:55 PM	1	0.00105	-0.778
4	1:4	W	Wash		6/25/2019	6:50:10 PM	1	0.00000	-0.790
5	1:5	C1	Calibrant		6/25/2019	6:51:25 PM	1	0.08677	0.252
6	1:6	C2	Calibrant		6/25/2019	6:52:40 PM	1	0.13931	0.883
7	1:7	C3	Calibrant		6/25/2019	6:53:55 PM	1	0.24681	2.174
8	1:8	C4	Calibrant		6/25/2019	6:55:09 PM	1	0.51168	5.355
9	1:9	C5	Calibrant		6/25/2019	6:56:24 PM	1	0.69845	7.598
10	1:10	C6	Calibrant		6/25/2019	6:57:39 PM	1	0.87668	9.738
		Curve #:							1
		Curve Type:							Linear
		Correlation:							0.99791
		Intercept:							0.065796
		Linear coef:							0.083266
11	1:13	w	Blank		6/25/2019	6:58:54 PM	1	0.00079	-0.781
12	1:14	W	Wash		6/25/2019	7:00:09 PM	1	0.00000	-0.790
13	1:15	ICV 280-460066/42-A	Unknown		6/25/2019	7:01:24 PM	1	0.47046	4.860
14	1:16	ICB 280-460066/43-A	Unknown		6/25/2019	7:02:39 PM	1	0.03615	-0.356
15	1:17	xLCS 280-462534/1-A	Unknown		6/25/2019	7:03:54 PM	1	0.04156	-0.291
16	1:18	MB 280-462534/2-A	Unknown		6/25/2019	7:05:09 PM	1	0.03090	-0.419
17	1:19	280-124912-C-4-A	Unknown		6/25/2019	7:06:24 PM	1	0.04102	-0.298
18	1:20	280-124912-C-4-C MS	Unknown		6/25/2019	7:07:39 PM	1	0.28113	2.586
19	1:21	280-124912-C-4-B MSD	Unknown		6/25/2019	7:08:54 PM	1	0.30110	2.826
20	1:22	w	Blank		6/25/2019	7:10:09 PM	1	0.00135	-0.774
21	1:23	280-124912-C-1-A	Unknown		6/25/2019	7:11:24 PM	1	0.12250	0.681
22	1:24	280-124912-C-2-A	Unknown		6/25/2019	7:12:39 PM	1	0.02816	-0.452
23	0	AutoWash	AutoWash		6/25/2019	7:13:54 PM	1	-0.00004	-0.791
24	0	AutoWash	AutoWash		6/25/2019	7:15:09 PM	1	0.00000	-0.790
25	1:25	280-124912-C-3-A	Unknown		6/25/2019	7:16:25 PM	1	0.12294	0.686
26	1:26	280-124912-C-6-A	Unknown		6/25/2019	7:17:40 PM	1	0.17266	1.283
27	1:27	280-124912-C-7-A	Unknown		6/25/2019	7:18:55 PM	1	0.02901	-0.442
28	1:28	280-124912-C-8-A	Unknown		6/25/2019	7:20:10 PM	1	0.65461	7.071
29	1:29	280-124912-C-9-A	Unknown		6/25/2019	7:21:25 PM	1	0.10053	0.417
30	1:30	LCS 280-462534/1-A	Unknown		6/25/2019	7:22:40 PM	1	0.53162	5.594
31	1:31	CCV 280-460066/44-A	Unknown		6/25/2019	7:23:55 PM	1	0.47942	4.968
32	1:32	CCB 280-460066/45-A	Unknown		6/25/2019	7:25:10 PM	1	0.03685	-0.348
33	1:33	280-124912-C-10-A	Unknown		6/25/2019	7:26:25 PM	1	0.13452	0.825
34	1:34	280-124912-C-11-A	Unknown		6/25/2019	7:27:40 PM	1	0.14361	0.935
35	0	AutoWash	AutoWash		6/25/2019	7:28:55 PM	1	0.00011	-0.789
36	0	AutoWash	AutoWash		6/25/2019	7:30:09 PM	1	0.00000	-0.790
37	1:35	280-124912-C-5-A	Unknown		6/25/2019	7:31:24 PM	1	0.07513	0.112
38	1:36	280-124912-C-5-B MS	Unknown		6/25/2019	7:32:39 PM	1	0.30794	2.908

	Position	Identifier	Type	Comme	Date	Time	otal	Cor Ht	TKN mg/l
39	1:37	280-124912-C-5-C MSD	Unknown		6/25/2019	7:33:54 PM	1	0.31211	2.958
40	1:38	w	Blank		6/25/2019	7:35:09 PM	1	0.00063	-0.783
41	1:39	280-124928-C-7-A	Unknown		6/25/2019	7:36:24 PM	1	0.22036	1.856
42	1:40	280-124928-C-8-A	Unknown		6/25/2019	7:37:39 PM	1	0.10772	0.503
43	1:41	280-124928-C-9-A	Unknown		6/25/2019	7:38:54 PM	1	0.06521	-0.007
44	1:42	280-124928-C-14-A	Unknown		6/25/2019	7:40:09 PM	1	0.07108	0.063
45	1:43	280-124928-C-15-A	Unknown		6/25/2019	7:41:24 PM	1	0.05658	-0.111
46	1:44	w	Blank		6/25/2019	7:42:39 PM	1	0.00107	-0.777
47	0	AutoWash	AutoWash		6/25/2019	7:43:54 PM	1	0.00025	-0.787
48	0	AutoWash	AutoWash		6/25/2019	7:45:09 PM	1	0.00000	-0.790
49	1:45	CCV 280-460066/44-A	Unknown		6/25/2019	7:46:24 PM	1	0.47718	4.941
50	1:46	CCB 280-460066/45-A	Unknown		6/25/2019	7:47:39 PM	1	0.03675	-0.349
51	1:47	280-124928-C-16-A	Unknown		6/25/2019	7:48:54 PM	1	0.40245	4.043
52	1:48	280-124718-F-1-A	Unknown		6/25/2019	7:50:09 PM	1	2.98677	35.080
53	1:49	280-124718-F-2-A	Unknown		6/25/2019	7:51:25 PM	1	2.55224	29.861
54	1:50	280-124718-G-3-A	Unknown		6/25/2019	7:52:40 PM	1	2.51538	29.419
55	1:51	w	Blank		6/25/2019	7:53:55 PM	1	0.00370	-0.746
56	1:52	xLCS 280-462534/27-A	Unknown		6/25/2019	7:55:10 PM	1	0.04134	-0.294
57	1:53	MB 280-462534/28-A	Unknown		6/25/2019	7:56:25 PM	1	0.03786	-0.335
58	1:54	280-124912-C-12-A	Unknown		6/25/2019	7:57:40 PM	1	0.09723	0.377
59	0	AutoWash	AutoWash		6/25/2019	7:58:55 PM	1	-0.00039	-0.795
60	0	AutoWash	AutoWash		6/25/2019	8:00:10 PM	1	0.00000	-0.790
61	1:55	280-124912-C-12-B MS	Unknown		6/25/2019	8:01:25 PM	1	0.19628	1.567
62	1:56	280-124912-C-12-C MSD	Unknown		6/25/2019	8:02:40 PM	1	0.25547	2.278
63	1:57	280-124718-F-1-A	Unknown		6/25/2019	8:03:54 PM	5	0.98325	55.092
64	1:58	w	Blank		6/25/2019	8:05:09 PM	1	0.00360	-0.747
65	1:59	CCV 280-460066/44-A	Unknown		6/25/2019	8:06:24 PM	1	0.48081	4.984
66	1:60	CCB 280-460066/45-A	Unknown		6/25/2019	8:07:39 PM	1	0.03840	-0.329
67	2:1	280-124738-J-1-A	Unknown		6/25/2019	8:08:54 PM	1	1.94930	22.620
68	2:2	280-124738-J-2-A	Unknown		6/25/2019	8:10:09 PM	1	0.14626	0.966
69	2:3	280-125145-A-1-A	Unknown		6/25/2019	8:11:24 PM	1	0.03918	-0.320
70	2:4	280-125147-A-1-A	Unknown		6/25/2019	8:12:39 PM	1	2.00303	23.266
71	0	AutoWash	AutoWash		6/25/2019	8:13:54 PM	1	0.00276	-0.757
72	0	AutoWash	AutoWash		6/25/2019	8:15:09 PM	1	0.00000	-0.790
73	2:5	280-125109-C-4-A	Unknown		6/25/2019	8:16:24 PM	1	0.16945	1.245
74	2:6	280-124724-B-2-A	Unknown		6/25/2019	8:17:39 PM	1	0.05469	-0.133
75	2:7	280-124902-D-1-A	Unknown		6/25/2019	8:18:54 PM	1	2.99403	35.167
76	2:8	280-124819-E-1-A	Unknown		6/25/2019	8:20:09 PM	1	1.62218	18.692
77	2:9	280-124718-F-2-A	Unknown		6/25/2019	8:21:24 PM	10	0.31216	29.587
78	2:10	280-124718-G-3-A	Unknown		6/25/2019	8:22:39 PM	10	0.29606	27.654
79	2:11	w	Blank		6/25/2019	8:23:54 PM	1	0.00107	-0.777
80	2:12	CCV 280-460066/44-A	Unknown		6/25/2019	8:25:09 PM	1	0.49121	5.109
81	2:13	CCB 280-460066/45-A	Unknown		6/25/2019	8:26:25 PM	1	0.03825	-0.331
82	2:14	LCS 280-462534/40-A	Unknown		6/25/2019	8:27:40 PM	1	0.54805	5.792
83	0	AutoWash	AutoWash		6/25/2019	8:28:55 PM	1	0.00077	-0.781
84	0	AutoWash	AutoWash		6/25/2019	8:30:09 PM	1	0.00000	-0.790
85	2:15	MB 280-462534/41-A	Unknown		6/25/2019	8:31:25 PM	1	0.03659	-0.351
86	2:16	280-124659-A-1-A	Unknown		6/25/2019	8:32:40 PM	5	3.10898	182.738

	Position	Identifier	Type	Comme	Date	Time	otal	Cor Ht	TKN mg/l
87	2:17	280-124659-A-1-A	Unknown		6/25/2019	8:33:55 PM	10	3.10554	365.062
88	2:18	280-124659-A-1-A	Unknown		6/25/2019	8:35:10 PM	20	2.93026	688.025
89	2:19	280-124659-A-1-B	Unknown		6/25/2019	8:36:25 PM	1	3.08924	36.311
90	2:20	280-124659-A-1-B	Unknown		6/25/2019	8:37:40 PM	5	3.06770	180.259
91	2:21	LCS 280-462534/27-A	Unknown		6/25/2019	8:38:54 PM	1	0.56333	5.975
92	2:22	w	Blank		6/25/2019	8:40:09 PM	1	0.00451	-0.736
93	2:23	CCV 280-460066/44-A	Unknown		6/25/2019	8:41:24 PM	1	0.48245	5.004
94	2:24	CCB 280-460066/45-A	Unknown		6/25/2019	8:42:39 PM	1	0.03813	-0.332
95	0	AutoWash	AutoWash		6/25/2019	8:43:54 PM	1	0.00073	-0.781
96	0	AutoWash	AutoWash		6/25/2019	8:45:09 PM	1	0.00000	-0.790
97	2:25	280-124718-F-1-A	Unknown		6/25/2019	8:46:24 PM	10	0.50179	52.362
98	2:26	280-124738-J-1-A	Unknown		6/25/2019	8:47:39 PM	5	0.40129	20.146
99	2:27	280-125147-A-1-A	Unknown		6/25/2019	8:48:54 PM	5	0.42834	21.770
100	2:28	280-124902-D-1-A	Unknown		6/25/2019	8:50:09 PM	10	0.70703	77.010
101	2:29	280-124819-E-1-A	Unknown		6/25/2019	8:51:24 PM	5	0.32250	15.415
102	2:30	280-124659-A-1-B	Unknown		6/25/2019	8:52:39 PM	20	1.62119	373.594
103	2:31	280-124659-A-1-B	Unknown		6/25/2019	8:53:54 PM	50	0.36023	176.803
104	2:32	w	Blank		6/25/2019	8:55:09 PM	1	0.00155	-0.772
105	2:33	CCV 280-460066/44-A	Unknown		6/25/2019	8:56:24 PM	1	0.48298	5.010
106	2:34	CCB 280-460066/45-A	Unknown		6/25/2019	8:57:39 PM	1	0.03978	-0.312
107	0	AutoWash	AutoWash		6/25/2019	8:58:54 PM	1	-0.00056	-0.797
108	0	AutoWash	AutoWash		6/25/2019	9:00:09 PM	1	0.00000	-0.790


062519, 6/25/2019 - TKN
ABS
-0.15072
0.19195
0.53463
0.87730
1.21997
1.56264
1.90531
2.24798
2.59065
2.93332
3.27599
S:1 SYNC 9.993
S:2 CO -0.772
S:3 w -0.778
S:4 W -0.790
S:5 C1 0.252
S:6 C2 0.883
S:7 C3 2.174
S:8 C4 5.355
S:9 C5 7.598
S:10 C6 9.738
S:11 w -0.781
S:12 W -0.790
S:13 ICV 280-460066/42-A 4.860
S:14 ICB 280-460066/43-A -0.356
S:15 xLCS 280-462534/1-A -0.291
S:16 MB 280-462534/2-A -0.419
S:17 280-124912-C-4-A -0.298
S:18 280-124912-C-4-C MS 2.586
S:19 280-124912-C-4-B MSD 2.826
S:20 w -0.774
S:21 280-124912-C-1-A 0.681
S:22 280-124912-C-2-A -0.452
S:23 AutoWash -0.791
S:24 AutoWash -0.790
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
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15:00
16:00
17:00
18:00
19:00
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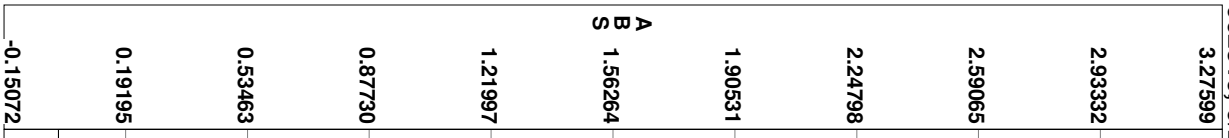
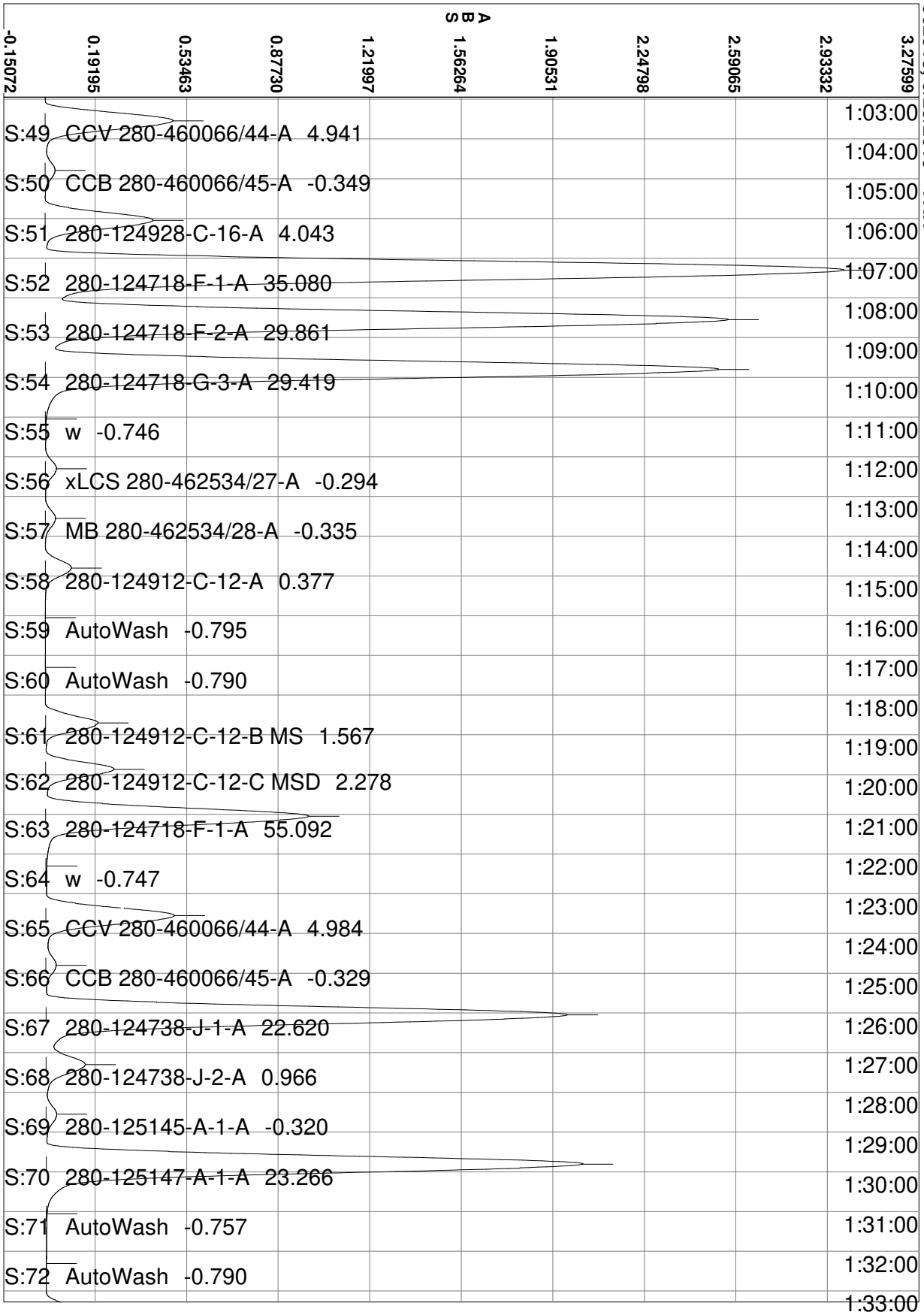
31:00
32:00



062519, 6/25/2019 - TKN

S:25 280-124912-C-3-A 0.686	33:00
S:26 280-124912-C-6-A 1.283	34:00
S:27 280-124912-C-7-A -0.442	35:00
S:28 280-124912-C-8-A 7.071	36:00
S:29 280-124912-C-9-A 0.417	37:00
S:30 LCS 280-462534/1-A 5.594	38:00
S:31 CCV 280-460066/44-A 4.968	39:00
S:32 CCB 280-460066/45-A -0.348	40:00
S:33 280-124912-C-10-A 0.825	41:00
S:34 280-124912-C-11-A 0.935	42:00
S:35 AutoWash -0.789	43:00
S:36 AutoWash -0.790	44:00
S:37 280-124912-C-5-A 0.112	45:00
S:38 280-124912-C-5-B MS 2.908	46:00
S:39 280-124912-C-5-C MSD 2.958	47:00
S:40 w -0.783	48:00
S:41 280-124928-C-7-A 1.856	49:00
S:42 280-124928-C-8-A 0.503	50:00
S:43 280-124928-C-9-A -0.007	51:00
S:44 280-124928-C-14-A 0.063	52:00
S:45 280-124928-C-15-A -0.111	53:00
S:46 w -0.777	54:00
S:47 AutoWash -0.787	55:00
S:48 AutoWash -0.790	56:00
	57:00
	58:00
	59:00
	1:00:00
	1:01:00
	1:02:00


062519, 6/25/2019 - TKN
ABS
-0.15072
0.19195
0.53463
0.87730
1.21997
1.56264
1.90531
2.24798
2.59065
2.93332
3.27599
S:49 CCV 280-460066/44-A 4.941
S:50 CCB 280-460066/45-A -0.349
S:51 280-124928-C-16-A 4.043
S:52 280-124718-F-1-A 35.080
S:53 280-124718-F-2-A 29.861
S:54 280-124718-G-3-A 29.419
S:55 w -0.746
S:56 xLCS 280-462534/27-A -0.294
S:57 MB 280-462534/28-A -0.335
S:58 280-124912-C-12-A 0.377
S:59 AutoWash -0.795
S:60 AutoWash -0.790
S:61 280-124912-C-12-B MS 1.567
S:62 280-124912-C-12-C MSD 2.278
S:63 280-124718-F-1-A 55.092
S:64 w -0.747
S:65 CCV 280-460066/44-A 4.984
S:66 CCB 280-460066/45-A -0.329
S:67 280-124738-J-1-A 22.620
S:68 280-124738-J-2-A 0.966
S:69 280-125145-A-1-A -0.320
S:70 280-125147-A-1-A 23.266
S:71 AutoWash -0.757
S:72 AutoWash -0.790
1:03:00
1:04:00
1:05:00
1:06:00
1:07:00
1:08:00
1:09:00
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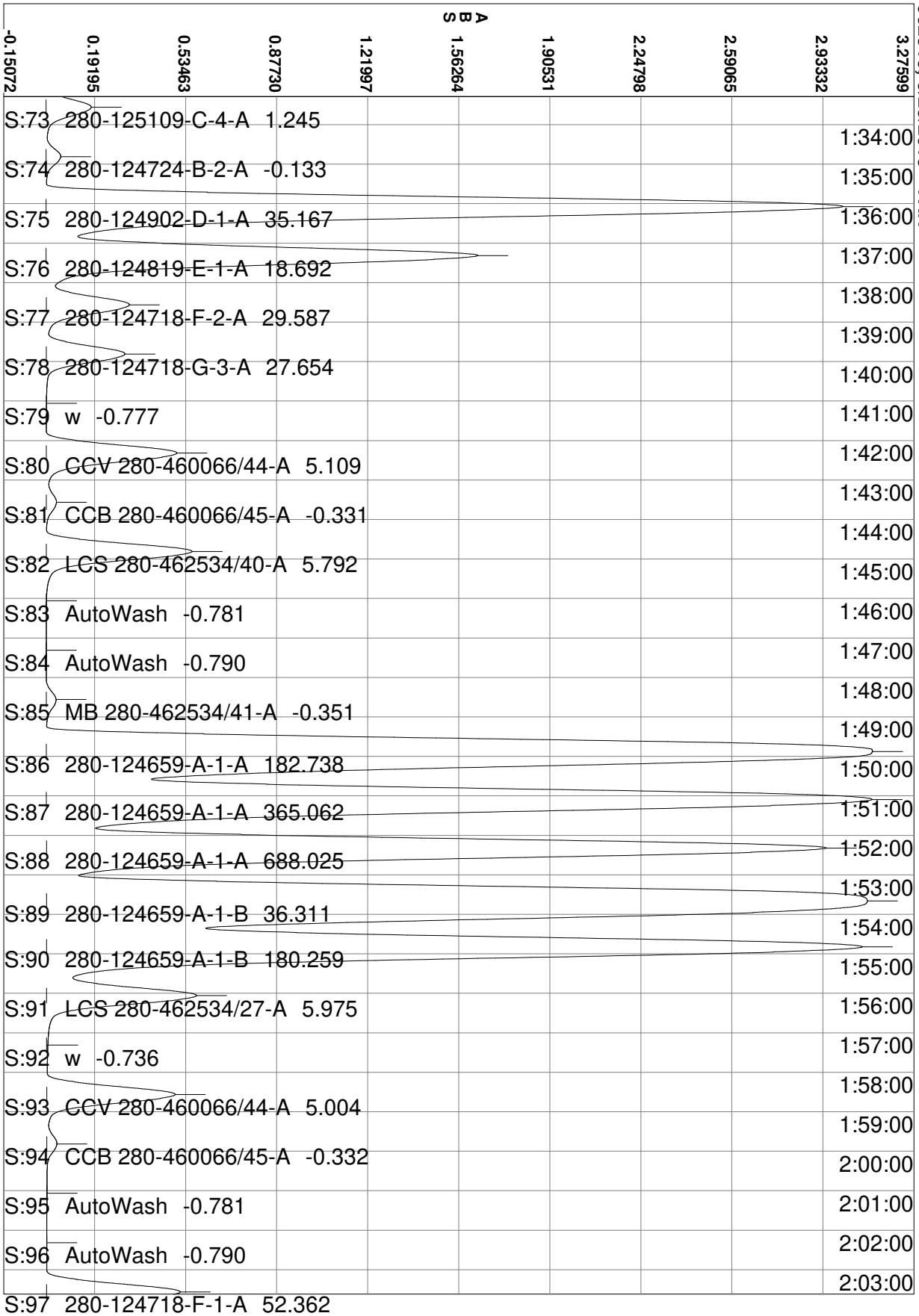
062519, 6/25/2019 - TKN
ABS
-0.15072
0.19195
0.53463
0.87730
1.21997
1.56264
1.90531
2.24798
2.59065
2.93332
3.27599
S:73 280-125109-C-4-A 1.245
S:74 280-124724-B-2-A -0.133
S:75 280-124902-D-1-A 35.167
S:76 280-124819-E-1-A 18.692
S:77 280-124718-F-2-A 29.587
S:78 280-124718-G-3-A 27.654
S:79 w -0.777
S:80 CCV 280-460066/44-A 5.109
S:81 CCB 280-460066/45-A -0.331
S:82 LCS 280-462534/40-A 5.792
S:83 AutoWash -0.781
S:84 AutoWash -0.790
S:85 MB 280-462534/41-A -0.351
S:86 280-124659-A-1-A 182.738
S:87 280-124659-A-1-A 365.062
S:88 280-124659-A-1-A 688.025
S:89 280-124659-A-1-B 36.311
S:90 280-124659-A-1-B 180.259
S:91 LCS 280-462534/27-A 5.975
S:92 w -0.736
S:93 CCV 280-460066/44-A 5.004
S:94 CCB 280-460066/45-A -0.332
S:95 AutoWash -0.781
S:96 AutoWash -0.790
S:97 280-124718-F-1-A 52.362
1:34:00
1:35:00
1:36:00
1:37:00
1:38:00
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1:40:00
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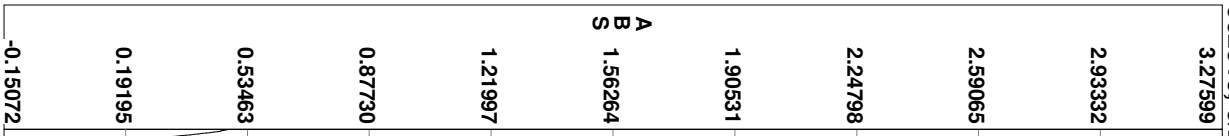
2:03:00



062519, 6/25/2019 - TKN

	2:04:00
S:98 280-124738-J-1-A 20.146	2:05:00
S:99 280-125147-A-1-A 21.770	2:06:00
S:100 280-124902-D-1-A 77.010	2:07:00
S:101 280-124819-E-1-A 15.415	2:08:00
S:102 280-124659-A-1-B 373.594	2:09:00
S:103 280-124659-A-1-B 176.803	2:10:00
S:104 w -0.772	2:11:00
S:105 CCV 280-460066/44-A 5.010	2:12:00
S:106 CCB 280-460066/45-A -0.312	2:13:00
S:107 AutoWash -0.797	2:14:00
S:108 AutoWash -0.790	2:15:00
	2:16:00
	2:17:00
	2:18:00
	2:19:00
	2:20:00
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	2:23:00
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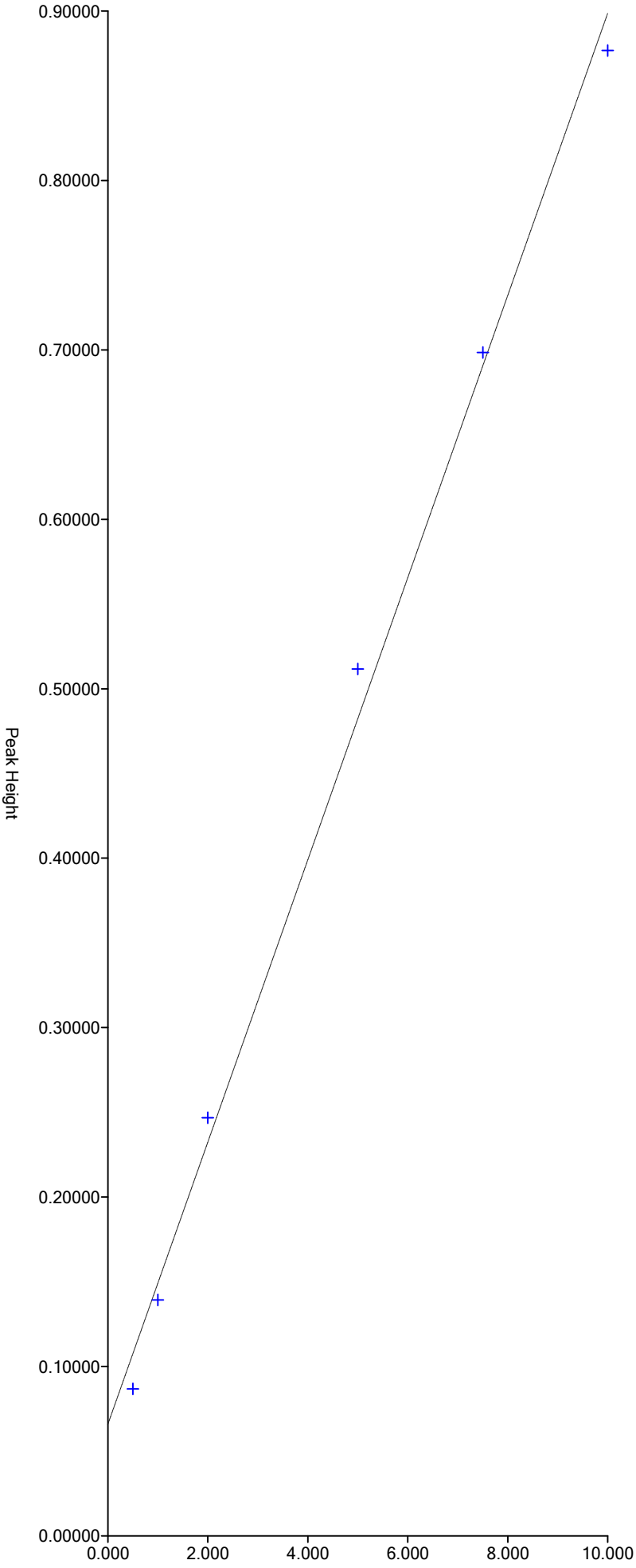
	2:32:00
	2:33:00

Calibration for TKN



Segment 1: Equation: y = 0.08327x + 0.06580
Correlation: 0.9979
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\062619.RST
Sample table path	C:\FLOW_4\062619.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	26-Jun-19
Time acquired	20:55

Time	Cup	Name
17:24	109	SYNC
17:26	0	Carryover
17:28	0	Carryover (Statistics)
17:30	0	read baseline
17:32	101	Cal 0.00 ppb
17:34	102	Cal 50.0 ppb
17:36	103	Cal 100 ppb
17:38	104	Cal 500 ppb
17:40	105	Cal 1000 ppb
17:42	106	Cal 2500 ppb
17:44	107	Cal 5000 ppb
17:46	108	Cal 7500 ppb
17:48	109	Cal 10000 ppb
17:50	0	Blank
17:52	0	Read Baseline
17:54	110	5000 PPB NO2
17:56	111	ICV 5000 PPB
17:58	112	ICV 2000 PPB
18:00	0	ICB
18:02	0	Read Baseline
18:04	107	LCS
18:06	0	MB
18:08	113	280-124912-B-4
18:10	114	ms 280-124912-B-4
18:12	115	msd 280-124912-B-4
18:14	116	280-124912-B-1
18:16	117	280-124912-B-2
18:18	118	280-124912-B-3
18:20	119	280-124912-B-7
18:22	120	280-124912-B-8
18:24	121	280-124912-B-9
18:26	122	280-124912-B-10
18:28	0	Rinse
18:30	0	Read Baseline
18:32	107	CCV 5000 ppb
18:34	105	CCVL 1000 ppb
18:36	0	CCB
18:38	0	Read Baseline
18:40	123	280-124912-B-11
18:42	124	280-124912-B-6
18:44	125	280-124912-B-5
18:46	126	ms 280-124912-B-5
18:48	127	msd 280-124912-B-5
18:50	128	280-124887-A-1

Result path C:\FLOW_4\062619.RST
Sample table path C:\FLOW_4\062619.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 26-Jun-19
Time acquired 20:55

Time	Cup	Name
18:52	129	280-124887-A-2
18:54	130	280-124887-A-3
18:56	131	280-124928-A-3
18:58	132	280-124928-A-4
19:00	0	Rinse
19:02	0	Read Baseline
19:04	107	CCV 5000 ppb
19:06	105	CCVL 1000 ppb
19:08	0	CCB
19:10	0	Read Baseline
19:12	133	280-124928-A-5
19:14	134	280-124928-A-6
19:16	135	280-124928-C-7
19:18	136	280-124928-C-8
19:20	107	LCS
19:22	0	MB
19:24	137	280-124912-B-12
19:26	138	ms 280-124912-B-12
19:28	139	msd 280-124912-B-12
19:30	140	280-124928-C-9
19:32	0	Rinse
19:34	0	Read Baseline
19:36	107	CCV 5000 ppb
19:38	105	CCVL 1000 ppb
19:40	0	CCB
19:42	0	Read Baseline
19:44	141	280-124928-C-10
19:46	142	280-124928-C-11
19:48	143	280-124928-C-12
19:50	144	280-124928-C-14
19:52	145	280-124928-C-15
19:54	146	280-124928-C-16
19:56	147	280-124724-B-2
19:58	148	280-124681-A-1
20:00	149	280-124936-C-1
20:02	150	ms 280-124936-C-1
20:04	0	Rinse
20:06	0	Read Baseline
20:08	107	CCV 5000 ppb
20:10	105	CCVL 1000 ppb
20:12	0	CCB
20:14	0	Read Baseline
20:16	151	msd 280-124936-C-1
20:18	152	280-124827-B-1
20:20	153	280-124827-B-2
20:22	154	280-124827-B-3
20:24	155	280-124827-B-4
20:26	156	280-124827-B-5
20:28	157	280-124827-B-6
20:30	158	280-124827-B-7
20:32	159	280-124827-B-8
20:34	160	d
20:36	0	Rinse
20:38	0	Read Baseline
20:40	107	CCV 5000 ppb
20:42	105	CCVL 1000 ppb
20:44	0	CCB

Result path	C:\FLOW_4\062619.RST
Sample table path	C:\FLOW_4\062619.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	26-Jun-19
Time acquired	20:55

Time	Cup	Name
20:46	0	Read Baseline

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	svc
Operator ID	svc
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	54
Result path	C:\FLOW_4\062619.RST
Sample table path	C:\FLOW_4\062619.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	26-Jun-19
Time acquired	20:55

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	1619818	10365.893	HI			
Carryover	969	-9.264	LO			
Carryover	252	-13.428	LO			
(Statistics)				610	-11.346	N
read baseline	0	-14.890	BL			
Cal 0.00 ppb	-40	-15.120	LO			
Cal 50.0 ppb	8829	36.418				
Cal 100 ppb	17328	85.867				
Cal 500 ppb	85638	485.230				
Cal 1000 ppb	181944	1054.143				
Cal 2500 ppb	428300	2540.741				
Cal 5000 ppb	816023	4971.541				
Cal 7500 ppb	1197137	7469.524				
Cal 10000 ppb	1570587	10021.728	HI			
Blank	-200	-16.054	LO			
Read Baseline	0	-14.890	BL			
5000 PPB NO2	856230	5229.997				
ICV 5000 PPB	850724	5194.528				
ICV 2000 PPB	350621	2067.143				
ICB	-102	-15.480	LO			
Read Baseline	0	-14.890	BL			
LCS	817704	4982.323				
MB	-307	-16.674	LO			
280-124912-B-4	1254	-7.606	LO			
ms 280-124912-B-4	681771	4117.245				
msd 280-124912-B-4	664364	4007.458				
280-124912-B-1	162045	936.025				
280-124912-B-2	776744	9440.416				
280-124912-B-3	1035640	12795.716				
280-124912-B-7	868317	26539.609				
280-124912-B-8	2996	2.514				
280-124912-B-9	78531	443.517				
280-124912-B-10	3386	4.780				
Rinse	131	-14.128	LO			
Read Baseline	0	-14.890	BL			
CCV 5000 ppb	810198	4934.199				
CCVL 1000 ppb	177720	1029.043				
CCB	-51	-15.187	LO			
Read Baseline	0	-14.890	BL			
280-124912-B-11	251	-13.434	LO			
280-124912-B-6	1775	-4.578	LO			
280-124912-B-5	19547	98.781				
ms 280-124912-B-5	690339	4171.367				
msd 280-124912-B-5	701010	4238.847				
280-124887-A-1	671169	4050.349				

Result path	C:\FLOW_4\062619.RST
Sample table path	C:\FLOW_4\062619.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	26-Jun-19
Time acquired	20:55

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-124887-A-2	331735	3905.345			
280-124887-A-3	567270	16995.945			
280-124928-A-3	8265	33.139			
280-124928-A-4	7987	31.524			
Rinse	25	-14.743	LO		
Read Baseline	0	-14.890	BL		
CCV 5000 ppb	817283	4979.620			
CCVL 1000 ppb	177597	1028.311			
CCB	-24	-15.027	LO		
Read Baseline	0	-14.890	BL		
280-124928-A-5	695325	8405.776			
280-124928-A-6	1296755	16280.421			
280-124928-C-7	575	-11.551	LO		
280-124928-C-8	568	-11.588	LO		
LCS	780403	4743.576			
MB	-193	-16.012	LO		
280-124912-B-12	143198	824.428			
ms 280-124912-B-12	777564	4725.444			
msd 280-124912-B-12	777618	4725.794			
280-124928-C-9	926	-9.510	LO		
Rinse	119	-14.200	LO		
Read Baseline	0	-14.890	BL		
CCV 5000 ppb	786768	4784.243			
CCVL 1000 ppb	170485	986.087			
CCB	123	-14.177	LO		
Read Baseline	0	-14.890	BL		
280-124928-C-10	83581	473.153			
280-124928-C-11	276483	1619.302			
280-124928-C-12	7987	31.523			
280-124928-C-14	311	-13.084	LO		
280-124928-C-15	688648	4160.680			
280-124928-C-16	2170	-2.284	LO		
280-124724-B-2	185	-13.813	LO		
280-124681-A-1	2870	1.784			
280-124936-C-1	596216	17898.969			
ms 280-124936-C-1	1209900	37775.188			
Rinse	-192	-16.005	LO		
Read Baseline	0	-14.890	BL		
CCV 5000 ppb	764700	4643.378			
CCVL 1000 ppb	168911	976.749			
CCB	165	-13.934	LO		
Read Baseline	0	-14.890	BL		
msd 280-124936-C-1	1212101	37848.996			
280-124827-B-1	498589	2973.141			
280-124827-B-2	533204	3187.433			
280-124827-B-3	550391	3294.162			
280-124827-B-4	414171	2454.270			
280-124827-B-5	559412	3350.269			
280-124827-B-6	441433	2621.253			
280-124827-B-7	494022	2944.936			
280-124827-B-8	18121	90.483			
d	272	-13.308	LO		
Rinse	55	-14.572	LO		
Read Baseline	0	-14.890	BL		
CCV 5000 ppb	757512	4597.567			
CCVL 1000 ppb	170711	987.426			
CCB	-55	-15.207	LO		

Result path C:\FLOW_4\062619.RST
Sample table path C:\FLOW_4\062619.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 26-Jun-19
Time acquired 20:55

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Read Baseline	0	-14.890	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\062619.RST
Date: 26-Jun-19
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	1619818	10365.892578	HI
2	0	Carryover	1	CO	1	1	969	-9.264330	LO
3	0	Carryover	2	CO	1	1	252	-13.428156	LO
B	0	read baseline	1	RB	1	1	0	-14.889925	BL
5	101	Cal 0.00 ppb	1	C	1	1	-40	-15.119634	LO
6	102	Cal 50.0 ppb	1	C	1	1	8829	36.417973	
7	103	Cal 100 ppb	1	C	1	1	17328	85.866585	
8	104	Cal 500 ppb	1	C	1	1	85638	485.229706	
9	105	Cal 1000 ppb	1	C	1	1	181944	1054.143311	
10	106	Cal 2500 ppb	1	C	1	1	428300	2540.740967	
11	107	Cal 5000 ppb	1	C	1	1	816023	4971.540527	
12	108	Cal 7500 ppb	1	C	1	1	1197137	7469.524414	
13	109	Cal 10000 ppb	1	C	1	1	1570587	10021.727539	HI
14	0	Blank	1	BLNK	1	1	-200	-16.054163	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
16	110	5000 PPB NO2	1	U	1	1	856230	5229.996582	
17	111	ICV 5000 PPB	1	CCV	1	1	850724	5194.528320	
18	112	ICV 2000 PPB	1	CCV	1	1	350621	2067.142578	
19	0	ICB	1	U	1	1	-102	-15.479785	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
21	107	LCS	1	U	1	1	817704	4982.323242	
22	0	MB	1	U	1	1	-307	-16.674063	LO
23	113	280-124912-B-4	1	U	1	1	1254	-7.606014	LO
24	114	ms 280-124912-B-4	1	U	1	1	681771	4117.244629	
25	115	msd 280-124912-B-4	1	U	1	1	664364	4007.458496	
26	116	280-124912-B-1	1	U	1	1	162045	936.024841	
27	117	280-124912-B-2	1	U	2	1	776744	9440.416016	
28	118	280-124912-B-3	1	U	2	1	1035640	12795.715820	
29	119	280-124912-B-7	1	U	5	1	868317	26539.609375	
30	120	280-124912-B-8	1	U	1	1	2996	2.514340	
31	121	280-124912-B-9	1	U	1	1	78531	443.517456	
32	122	280-124912-B-10	1	U	1	1	3386	4.780234	
33	0	Rinse	1	U	1	1	131	-14.127595	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
35	107	CCV 5000 ppb	1	CCV	1	1	810198	4934.198730	
36	105	CCVL 1000 ppb	1	CCV	1	1	177720	1029.043335	
37	0	CCB	1	U	1	1	-51	-15.187373	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
39	123	280-124912-B-11	1	U	1	1	251	-13.434275	LO
40	124	280-124912-B-6	1	U	1	1	1775	-4.578269	LO
41	125	280-124912-B-5	1	U	1	1	19547	98.781174	
42	126	ms 280-124912-B-5	1	U	1	1	690339	4171.367188	
43	127	msd 280-124912-B-5	1	U	1	1	701010	4238.846680	
44	128	280-124887-A-1	1	U	1	1	671169	4050.349121	
45	129	280-124887-A-2	1	U	2	1	331735	3905.344727	
46	130	280-124887-A-3	1	U	5	1	567270	16995.945312	
47	131	280-124928-A-3	1	U	1	1	8265	33.138645	
48	132	280-124928-A-4	1	U	1	1	7987	31.523993	
49	0	Rinse	1	U	1	1	25	-14.743288	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
51	107	CCV 5000 ppb	1	CCV	1	1	817283	4979.620117	
52	105	CCVL 1000 ppb	1	CCV	1	1	177597	1028.311035	
53	0	CCB	1	U	1	1	-24	-15.027138	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
55	133	280-124928-A-5	1	U	2	1	695325	8405.776367	
56	134	280-124928-A-6	1	U	2	1	1296755	16280.420898	
57	135	280-124928-C-7	1	U	1	1	575	-11.550909	LO
58	136	280-124928-C-8	1	U	1	1	568	-11.588126	LO
59	107	LCS	1	U	1	1	780403	4743.576172	
60	0	MB	1	U	1	1	-193	-16.011723	LO
61	137	280-124912-B-12	1	U	1	1	143198	824.428040	
62	138	ms 280-124912-B-12	1	U	1	1	777564	4725.443848	
63	139	msd 280-124912-B-12	1	U	1	1	777618	4725.794434	
64	140	280-124928-C-9	1	U	1	1	926	-9.510403	LO
65	0	Rinse	1	U	1	1	119	-14.200494	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL
67	107	CCV 5000 ppb	1	CCV	1	1	786768	4784.242676	
68	105	CCVL 1000 ppb	1	CCV	1	1	170485	986.087036	
69	0	CCB	1	U	1	1	123	-14.176649	LO
B	0	Read Baseline	1	RB	1	1	0	-14.889925	BL

Peak	Cup	Name	R	Type	Dil	Wt		Height	Calc. (ppb)	Flags
71	141	280-124928-C-10	1	U	1	1		83581	473.152771	
72	142	280-124928-C-11	1	U	1	1		276483	1619.302246	
73	143	280-124928-C-12	1	U	1	1		7987	31.523083	
74	144	280-124928-C-14	1	U	1	1		311	-13.083802	LO
75	145	280-124928-C-15	1	U	1	1		688648	4160.679688	
76	146	280-124928-C-16	1	U	1	1		2170	-2.284314	LO
77	147	280-124724-B-2	1	U	1	1		185	-13.813395	LO
78	148	280-124681-A-1	1	U	1	1		2870	1.784475	
79	149	280-124936-C-1	1	U	5	1		596216	17898.968750	
80	150	ms 280-124936-C-1	1	U	5	1		1209900	37775.187500	
81	0	Rinse	1	U	1	1		-192	-16.005053	LO
B	0	Read Baseline	1	RB	1	1		0	-14.889925	BL
83	107	CCV 5000 ppb	1	CCV	1	1		764700	4643.377930	
84	105	CCVL 1000 ppb	1	CCV	1	1		168911	976.749023	
85	0	CCB	1	U	1	1		165	-13.934418	LO
B	0	Read Baseline	1	RB	1	1		0	-14.889925	BL
87	151	msd 280-124936-C-1	1	U	5	1		1212101	37848.996094	
88	152	280-124827-B-1	1	U	1	1		498589	2973.140869	
89	153	280-124827-B-2	1	U	1	1		533204	3187.432861	
90	154	280-124827-B-3	1	U	1	1		550391	3294.162354	
91	155	280-124827-B-4	1	U	1	1		414171	2454.270020	
92	156	280-124827-B-5	1	U	1	1		559412	3350.268555	
93	157	280-124827-B-6	1	U	1	1		441433	2621.253174	
94	158	280-124827-B-7	1	U	1	1		494022	2944.936035	
95	159	280-124827-B-8	1	U	1	1		18121	90.483467	
96	160	d	1	U	1	1		272	-13.307947	LO
97	0	Rinse	1	U	1	1		55	-14.571710	LO
B	0	Read Baseline	1	RB	1	1		0	-14.889925	BL
99	107	CCV 5000 ppb	1	CCV	1	1		757512	4597.567383	
100	105	CCVL 1000 ppb	1	CCV	1	1		170711	987.426147	
101	0	CCB	1	U	1	1		-55	-15.207439	LO
B	0	Read Baseline	1	RB	1	1		0	-14.889925	BL

Nitrate as N:Calibration 1: Peak 5-102

File name: C:\FLOW_4\062619.RST
Date: 26-Jun-19
Operator: svc

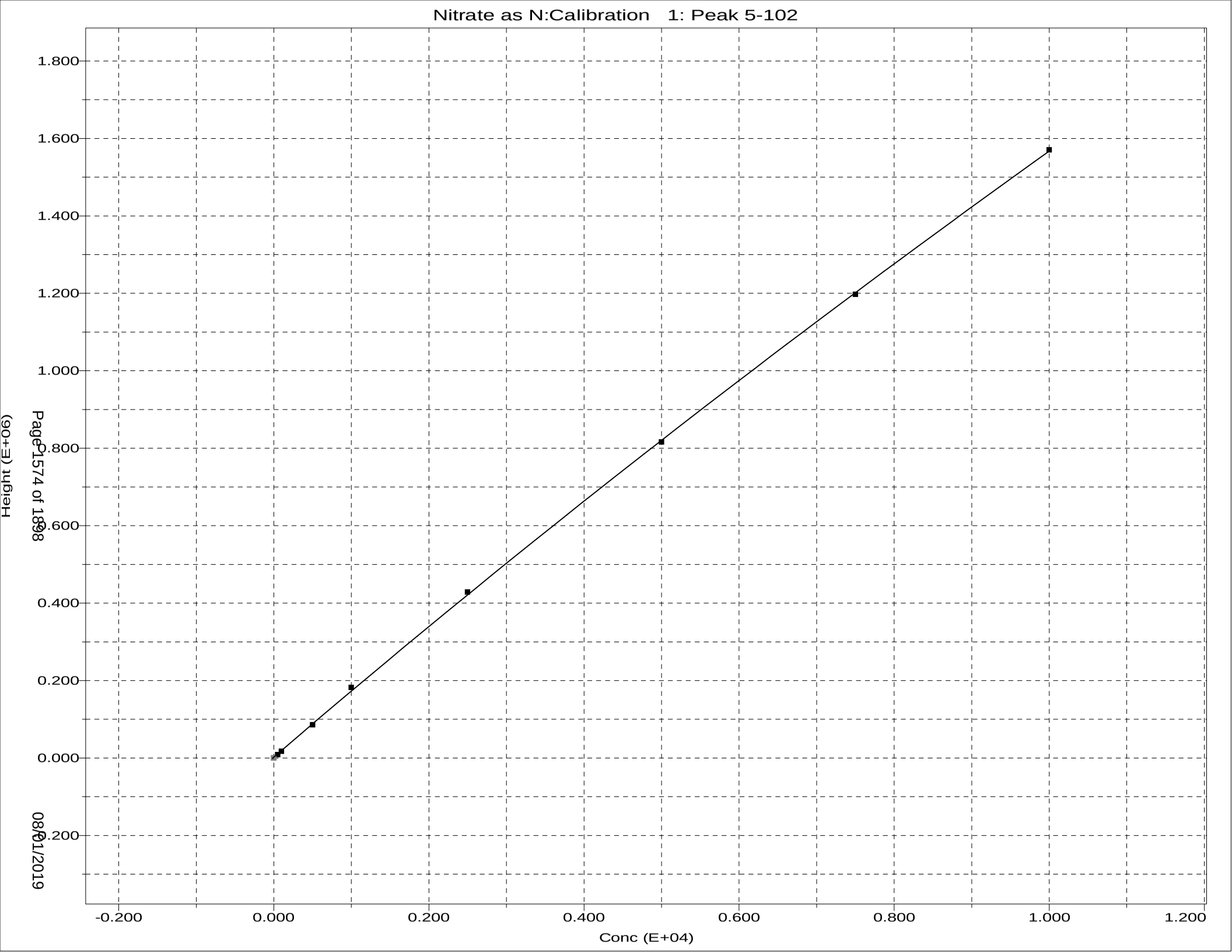
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	-39.549393
*	Cal 50.0 ppb	50.000000	8828.793945
*	Cal 100 ppb	100.000000	17328.257812
*	Cal 500 ppb	500.000000	85638.382812
*	Cal 1000 ppb	1000.000000	181944.500000
*	Cal 2500 ppb	2500.000000	428299.625000
*	Cal 5000 ppb	5000.000000	816023.000000
*	Cal 7500 ppb	7500.000000	1197137.375000
*	Cal 10000 ppb	10000.000000	1570586.750000

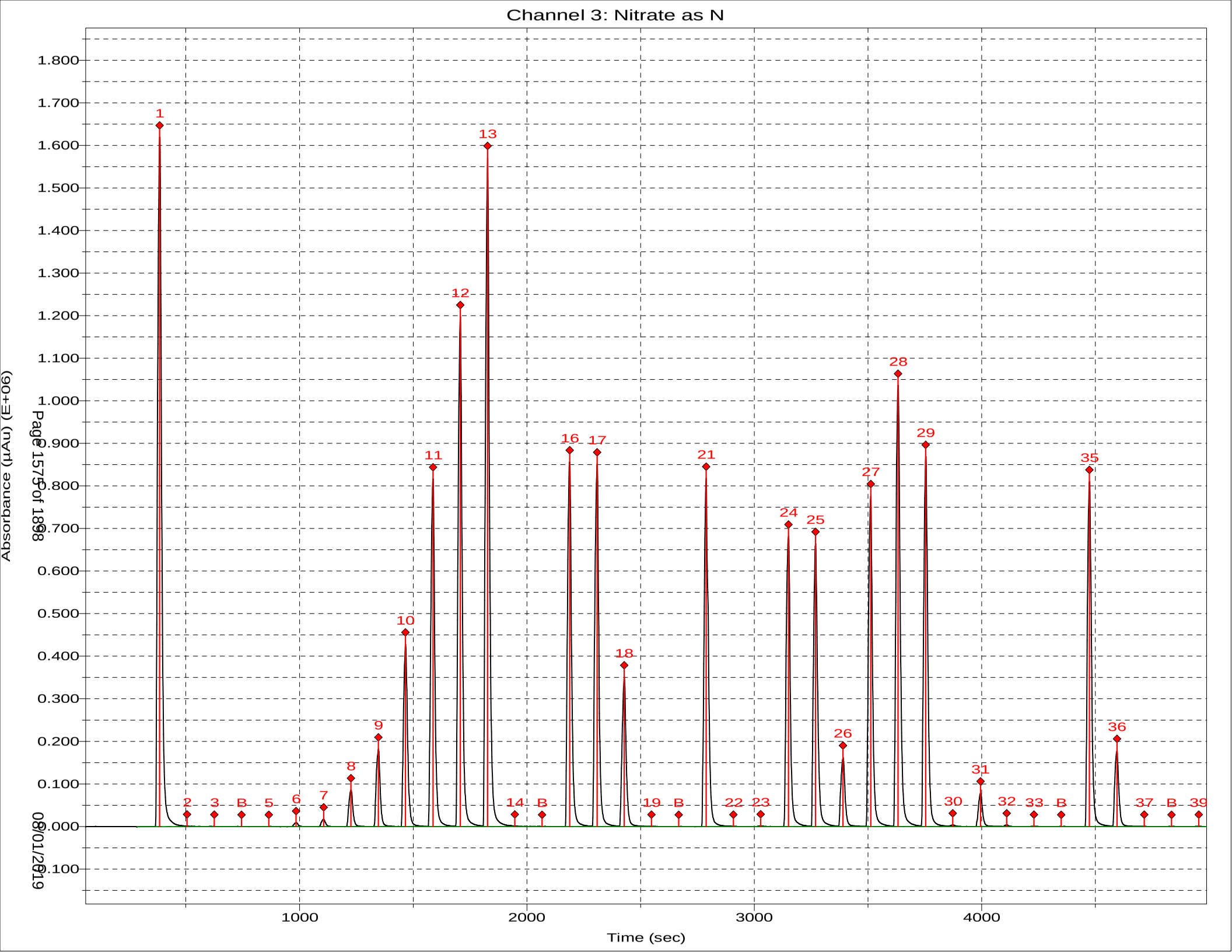
Calib Coef:
x=cyy+by+a
a: (intercept) -1.4890e+01
b: 5.8082e-03
c: 3.7069e-10

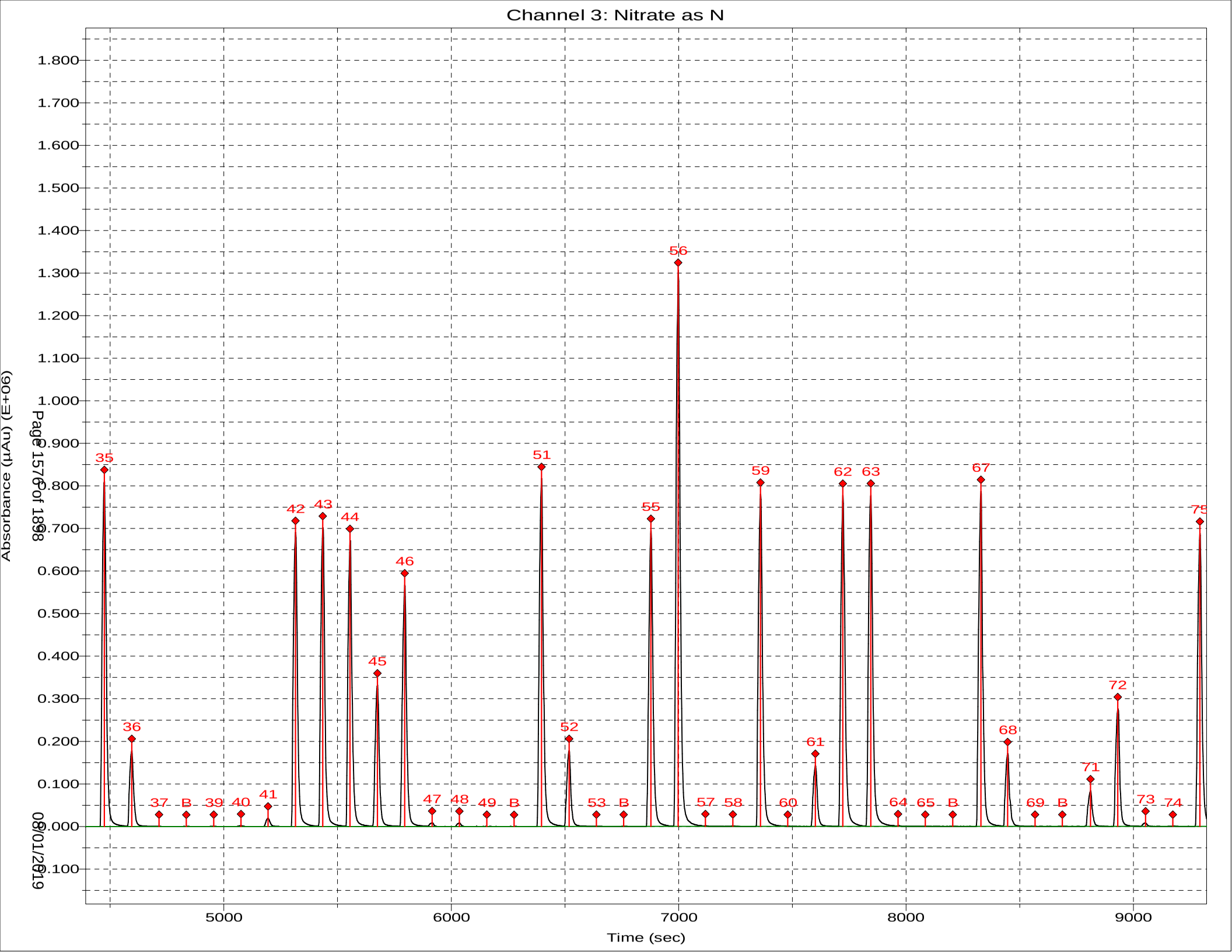
Corr Coef: 0.999965

Carryover: 0.0598%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-102
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
Height (E+06)
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
1.800
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
1000
2000
3000
4000
1
2
3
B
5
6
7
8
9
10
11
12
13
14
B
16
17
18
19
B
21
22
23
24
25
26
27
28
29
30
31
32
33
B
35
36
37
B
39


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
1.800
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
5000
6000
7000
8000
9000
35
36
37
B
39
40
41
42
43
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45
46
47
48
49
B
51
52
53
B
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B
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B
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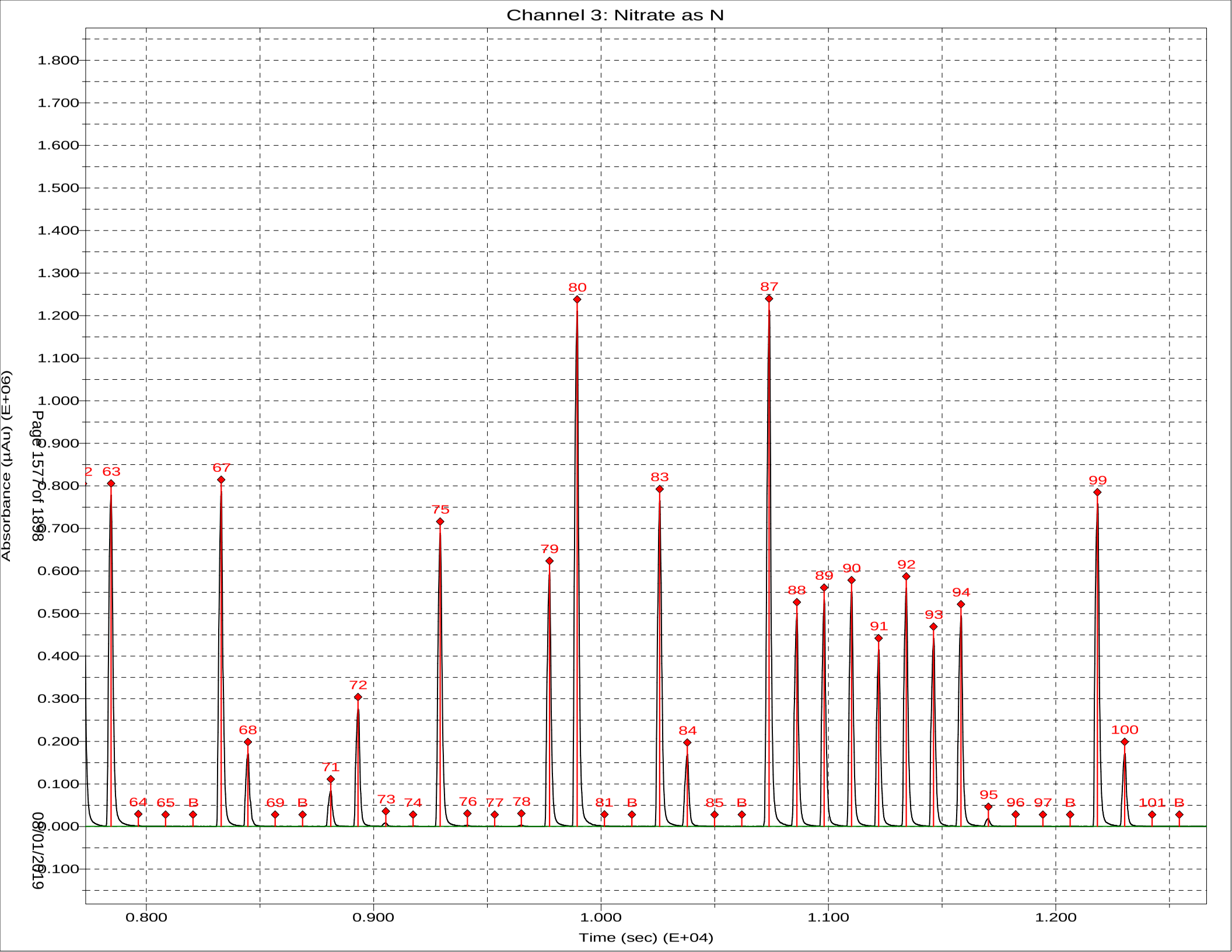
Page 1576 of 1898
08/01/2019


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
1.800
1.700
1.600
1.500
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
0.800
0.900
1.000
1.100
1.200
2
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
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89
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93
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95
96
97
B
99
100
101
B
Page 1577 of 1898
08/01/2019

Sample Table - 062619.tbl

File name: C:\FLOW_4\062619.TBL
Date: 26-Jun-19

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1	1	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		pH
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
113	280-124912-B-4	U	1	1	1		"
114	ms 280-124912-B-4	U	1	1	1		"
115	msd 280-124912-B-4	U	1	1	1		"
116	280-124912-B-1	U	1	1	1		"
117	280-124912-B-2	U	1	2	1		"
118	280-124912-B-3	U	1	2	1		"
119	280-124912-B-7	U	1	5	1		"
120	280-124912-B-8	U	1	1	1		"
121	280-124912-B-9	U	1	1	1		"
122	280-124912-B-10	U	1	1	1		"
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
123	280-124912-B-11	U	1	1	1		"
124	280-124912-B-6	U	1	1	1		"
125	280-124912-B-5	U	1	1	1		"
126	ms 280-124912-B-5	U	1	1	1		"
127	msd 280-124912-B-5	U	1	1	1		"
128	280-124887-A-1	U	1	1	1		"
129	280-124887-A-2	U	1	2	1		"
130	280-124887-A-3	U	1	5	1		"
131	280-124928-A-3	U	1	1	1		"
132	280-124928-A-4	U	1	1	1		"
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
133	280-124928-A-5	U	1	2	1		"
134	280-124928-A-6	U	1	2	1		"

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-124928-C-7	U	1	1	1		
136	280-124928-C-8	U	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-124912-B-12	U	1	1	1		
138	ms 280-124912-B-12	U	1	1	1		
139	msd 280-124912-B-12	U	1	1	1		
140	280-124928-C-9	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
141	280-124928-C-10	U	1	1	1		
142	280-124928-C-11	U	1	1	1		
143	280-124928-C-12	U	1	1	1		
144	280-124928-C-14	U	1	1	1		
145	280-124928-C-15	U	1	1	1		
146	280-124928-C-16	U	1	1	1		
147	280-124724-B-2	U	1	1	1		
148	280-124681-A-1	U	1	1	1		
149	280-124936-C-1	U	1	5	1		
150	ms 280-124936-C-1	U	1	5	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
151	msd 280-124936-C-1	U	1	5	1		
152	280-124827-B-1	U	1	1	1		
153	280-124827-B-2	U	1	1	1		
154	280-124827-B-3	U	1	1	1		
155	280-124827-B-4	U	1	1	1		
156	280-124827-B-5	U	1	1	1		
157	280-124827-B-6	U	1	1	1		
158	280-124827-B-7	U	1	1	1		
159	280-124827-B-8	U	1	1	1		
160	d	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		

Sulfide by Titration

Analyst:	JLA	SOP Information:	
Date:	6/11/2019	Number:	91

Titration Solutions		Calibration Information	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_01659
TALS ID	Iod_00229	Prep Date:	5/28/2019
Normality:	0.025	Made By:	JLA
Solution 2:	sodium thiosulfate	Concentration:	1224
TALS ID	Na Thio_00152	Expiration Date:	8/28/2019
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00057		

ICV Information	
Source/Ver-Lot#:	INT_01607
Prep Date:	5/28/2019
Made By:	JLA
Concentration:	1188
Expiration Date:	8/28/2019

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	4.70	20	4.70	1224.000
CAL	5	4.70	9.40	20	4.70	1224.000

For SM4500 S2 D colorimetric

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	9.40	14.30	20	4.90	1208.000
ICV	5	14.30	19.70	20	5.40	1168.000

TALS Raw Data Report

Job Number: 280-124912-1
LIMS Batch: 461193
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461159/1-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461159/2-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-124912-E-1-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-124912-E-2-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	1.9 U mg/L				
Sulfide as H2S		-1.7 mg/L	2.0 U mg/L				

RS# 5 Lab ID: **280-124912-E-3-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	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# 6 Lab ID: **280-124912-E-12-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	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# 7 Lab ID: **280-124912-E-12-B MS** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	83	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 8 Lab ID: **280-124912-E-12-C MSD** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		22.4 mg/L	mg/L	86	44 110	4	20
Sulfide as H2S		23.8 mg/L	mg/L				

RS# 9 Lab ID: **280-124912-E-6-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 10 Lab ID: **280-124912-E-7-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

TALS Raw Data Report

RS# 11 Lab ID: **280-124912-E-8-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	1.9 U mg/L				
Sulfide as H2S		-1.7 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-124912-E-10-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		31.2 mg/L	mg/L				
Sulfide as H2S		33.15 mg/L	mg/L				

RS# 13 Lab ID: **280-124912-E-11-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-124912-E-4-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-124912-E-4-B MS** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		23.2 mg/L	mg/L	89	44 110		
Sulfide as H2S		24.65 mg/L	mg/L				

RS# 16 Lab ID: **280-124912-E-4-C MSD** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	77	44 110	15	20
Sulfide as H2S		21.25 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-124928-1
LIMS Batch: 461193
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461159/1-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461159/2-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-124912-E-4-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-124912-E-4-B MS** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		23.2 mg/L	mg/L	89	44 110		
Sulfide as H2S		24.65 mg/L	mg/L				

RS# 16 Lab ID: **280-124912-E-4-C MSD** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	77	44 110	15	20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 18 Lab ID: **280-124928-E-7-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	1.9 U mg/L				
Sulfide as H2S		-1.7 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-86670-1
LIMS Batch: 461193
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461159/1-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461159/2-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-124912-E-4-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-124912-E-4-B MS** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		23.2 mg/L	mg/L	89	44 110		
Sulfide as H2S		24.65 mg/L	mg/L				

RS# 16 Lab ID: **280-124912-E-4-C MSD** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	77	44 110	15	20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 17 Lab ID: **580-86670-A-2-A** Inj Date: 6/11/2019 3:04:48PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

Sulfide by Titration

Analyst:	JLA	SOP Information:	
Date:	5/12/2019	Number:	
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_01659
TALS ID	Iod_00229	Prep Date:	5/28/2019
Normality:	0.025	Made By:	JLA
Solution 2:	sodium thiosulfate	Concentration:	1204
TALS ID	Na Thio_00152	Expiration Date:	8/28/2019
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00057		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	4.70	20	4.70	1224.000
CAL	5	4.70	9.90	20	5.20	1184.000

For SM4500 S2 D colorimetric

ICV Information	
Source/Ver-Lot#:	INT_01607
Prep Date:	5/28/2019
Made By:	JLA
Concentration:	1180
Expiration Date:	8/28/2019

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	9.90	15.20	20	5.30	1176.000
ICV	5	15.20	20.40	20	5.20	1184.000

TALS Raw Data Report

Job Number: 280-124794-1
LIMS Batch: 461300
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461272/1-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	77	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461272/2-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-2.4 mg/L	mg/L				
Sulfide as H2S		-2.55 mg/L	mg/L				

RS# 3 Lab ID: **280-124912-E-5-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	mg/L				
Sulfide as H2S		-0.85 mg/L	mg/L				

RS# 4 Lab ID: **280-124912-E-5-B MS** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	83	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-124912-E-5-C MSD** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44 110	16	20
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 12 Lab ID: **280-124794-M-1-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	mg/L				
Sulfide as H2S		-0.85 mg/L	mg/L				

RS# 13 Lab ID: **280-124794-M-2-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 14 Lab ID: **280-124794-M-4-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	mg/L				
Sulfide as H2S		-0.85 mg/L	mg/L				

RS# 15 Lab ID: **280-124794-M-5-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	mg/L				
Sulfide as H2S		-0.85 mg/L	mg/L				

RS# 16 Lab ID: **280-124794-M-5-B MS** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	83	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 17 Lab ID: **280-124794-M-5-C MSD** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20.8 mg/L	mg/L	80	44 110	4	20
Sulfide as H2S		22.1 mg/L	mg/L				

RS# 18 Lab ID: **280-124794-M-6-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	mg/L				
Sulfide as H2S		-1.7 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-124912-1
LIMS Batch: 461300
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461272/1-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	77	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461272/2-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-2.4 mg/L	1.9 U mg/L				
Sulfide as H2S		-2.55 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-124912-E-5-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-124912-E-5-B MS** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	83	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-124912-E-5-C MSD** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44 110	16	20
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 7 Lab ID: **280-124912-E-9-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-124928-1
LIMS Batch: 461300
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-461272/1-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	77	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-461272/2-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-2.4 mg/L	1.9 U mg/L				
Sulfide as H2S		-2.55 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-124912-E-5-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-124912-E-5-B MS** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	83	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-124912-E-5-C MSD** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	71	44 110	16	20
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 6 Lab ID: **280-124928-E-8-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-124928-E-9-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-2.4 mg/L	1.9 U mg/L				
Sulfide as H2S		-2.55 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-124928-E-15-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 10 Lab ID: **280-124928-E-14-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		8 mg/L	mg/L				
Sulfide as H2S		8.5 mg/L	mg/L				

RS# 11 Lab ID: **280-124928-E-16-A** Inj Date: 6/12/2019 12:54:29PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-1.6 mg/L	1.9 U mg/L				
Sulfide as H2S		-1.7 mg/L	2.0 U mg/L				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-223
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-Jul-2019 22:14:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083432-002
Misc. Info.: 280-0083432-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jul-2019 08:35:26 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0301

First Level Reviewer: pedrickj Date: 03-Jul-2019 08:31:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.262	3.265	-0.003	1079576	0.2000	0.2097	
2 Chloride	4.500	4.492	0.008	2956306	1.00	1.16	
3 Nitrite as N	5.228	5.217	0.011	1303020	NC	NC	
4 Bromide	6.373	6.357	0.016	272549	0.2000	0.2307	
5 Nitrate as N	7.213	7.167	0.046	1400822	NC	NC	
6 Orthophosphate as P	9.760	9.745	0.015	1239188	NC	NC	
7 Sulfate	11.557	11.543	0.014	2194448	1.00	1.21	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

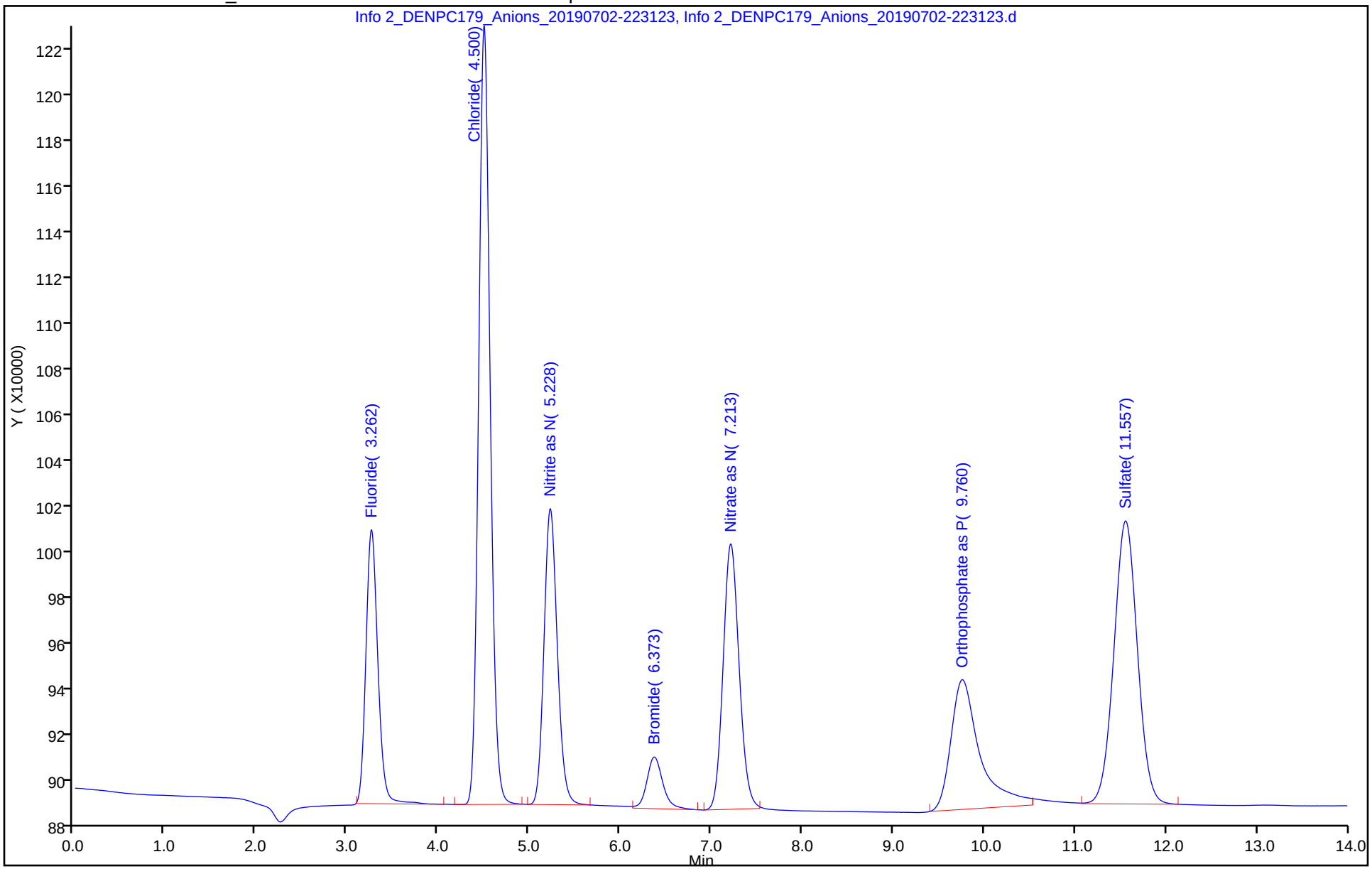
IC Cal low_00469 Amount Added: 0.04 Units: mL
IC CAL cl/so4_00263 Amount Added: 0.04 Units: mL

Report Date: 03-Jul-2019 08:35:26 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-223123.d

Injection Date:	02-Jul-2019 22:14:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD1			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-223

Injection Date: 02-Jul-2019 22:14:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

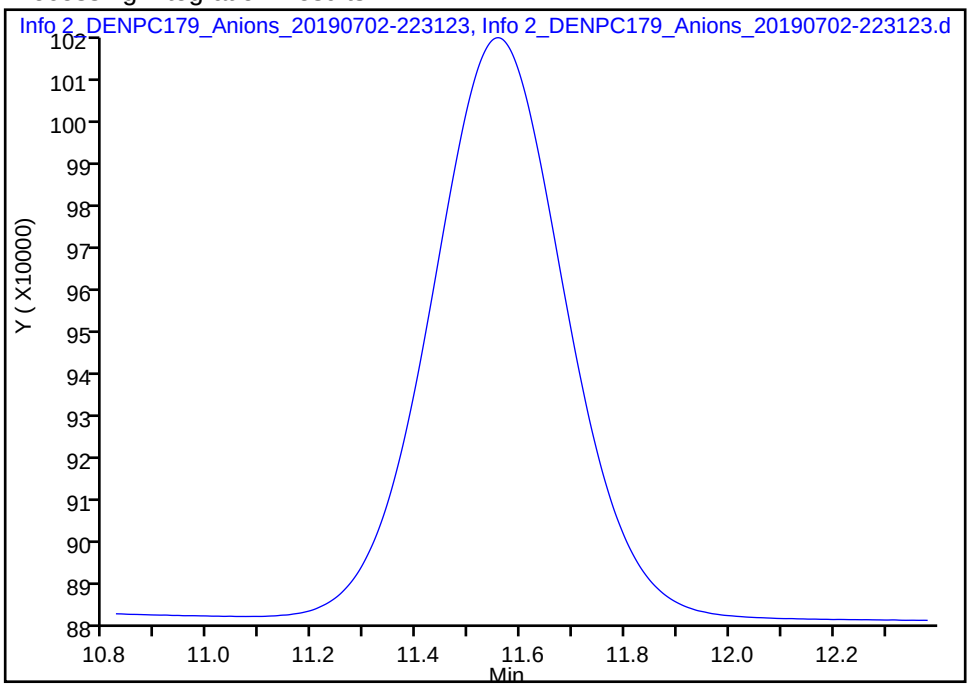
7 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 11.54

Processing Integration Results



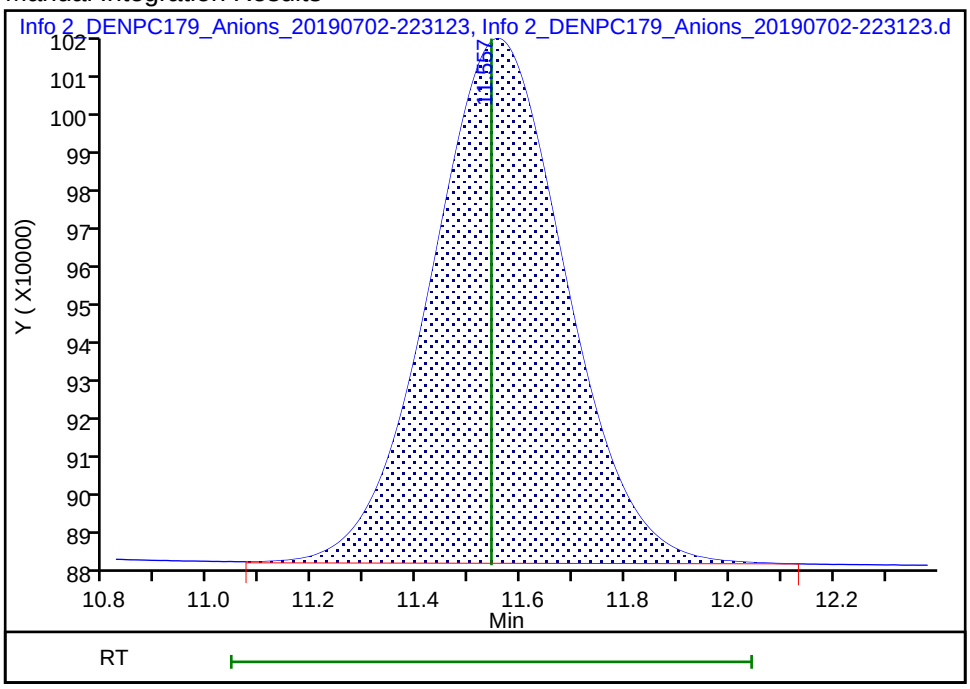
Manual Integration Results

RT: 11.56

Area: 2194448

Amount: 1.214882

Amount Units: ug/ml



Reviewer: pedrickj, 03-Jul-2019 08:31:53

Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-224
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-Jul-2019 22:31:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083432-003
Misc. Info.: 280-0083432-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jul-2019 08:35:27 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0301

First Level Reviewer: pedrickj Date: 03-Jul-2019 08:32:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.262	3.265	-0.003	3081171	0.5000	0.4760	
2 Chloride	4.498	4.492	0.006	7855494	2.50	2.34	
3 Nitrite as N	5.225	5.217	0.008	3465174	NC	NC	
4 Bromide	6.368	6.357	0.011	642865	0.5000	0.4804	
5 Nitrate as N	7.202	7.167	0.035	3672996	NC	NC	
6 Orthophosphate as P	9.752	9.745	0.007	2865837	NC	NC	
7 Sulfate	11.553	11.543	0.010	5714338	2.50	2.34	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

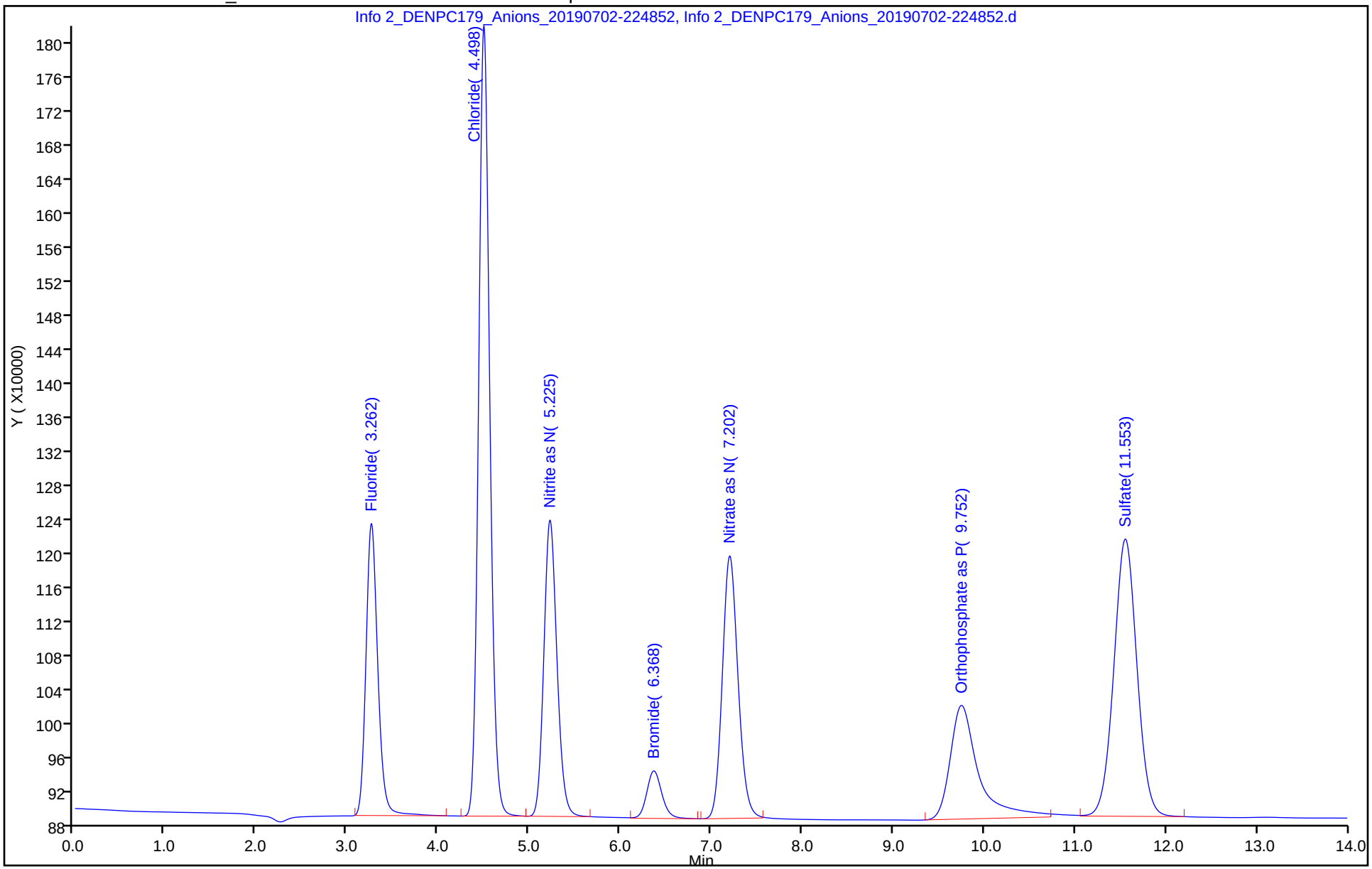
IC Cal low_00469 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00263 Amount Added: 0.10 Units: mL

Report Date: 03-Jul-2019 08:35:27 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-224852.d

Injection Date:	02-Jul-2019 22:31:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD2			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-224

Injection Date: 02-Jul-2019 22:31:00 Instrument ID: WC_IonChrom10

Lims ID: STD2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

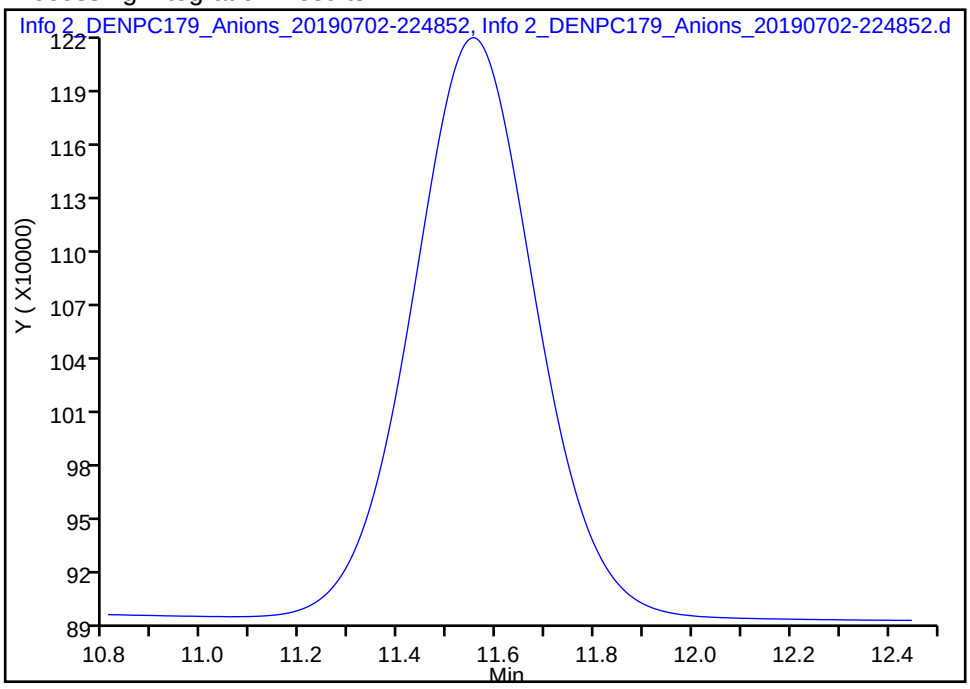
7 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 11.54

Processing Integration Results



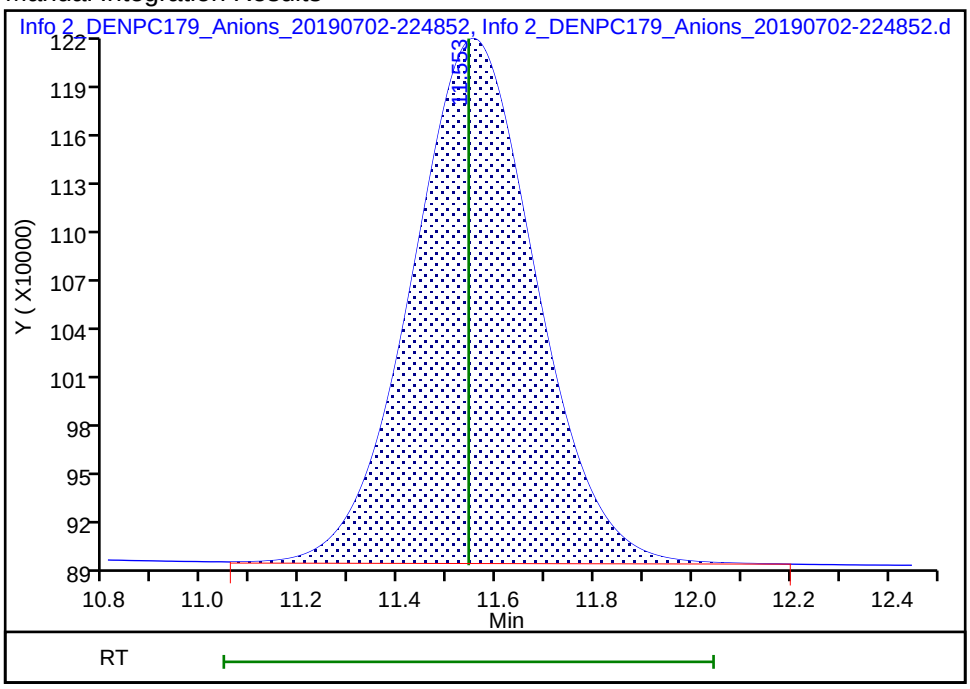
Manual Integration Results

RT: 11.55

Area: 5714338

Amount: 2.339126

Amount Units: ug/ml



Reviewer: pedrickj, 03-Jul-2019 08:32:01

Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-230
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 02-Jul-2019 22:49:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083432-004
Misc. Info.: 280-0083432-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jul-2019 08:35:28 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0301

First Level Reviewer: pedrickj Date: 03-Jul-2019 08:32:18

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.265	3.265	0.000	6855229	1.00	0.9780	
2 Chloride	4.500	4.492	0.008	17054714	5.00	4.56	
3 Nitrite as N	5.227	5.217	0.010	7288564	NC	NC	
4 Bromide	6.368	6.357	0.011	1277020	1.00	0.9081	
5 Nitrate as N	7.197	7.167	0.030	7689073	NC	NC	
6 Orthophosphate as P	9.750	9.745	0.005	5301432	NC	NC	
7 Sulfate	11.555	11.543	0.012	11947958	5.00	4.33	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

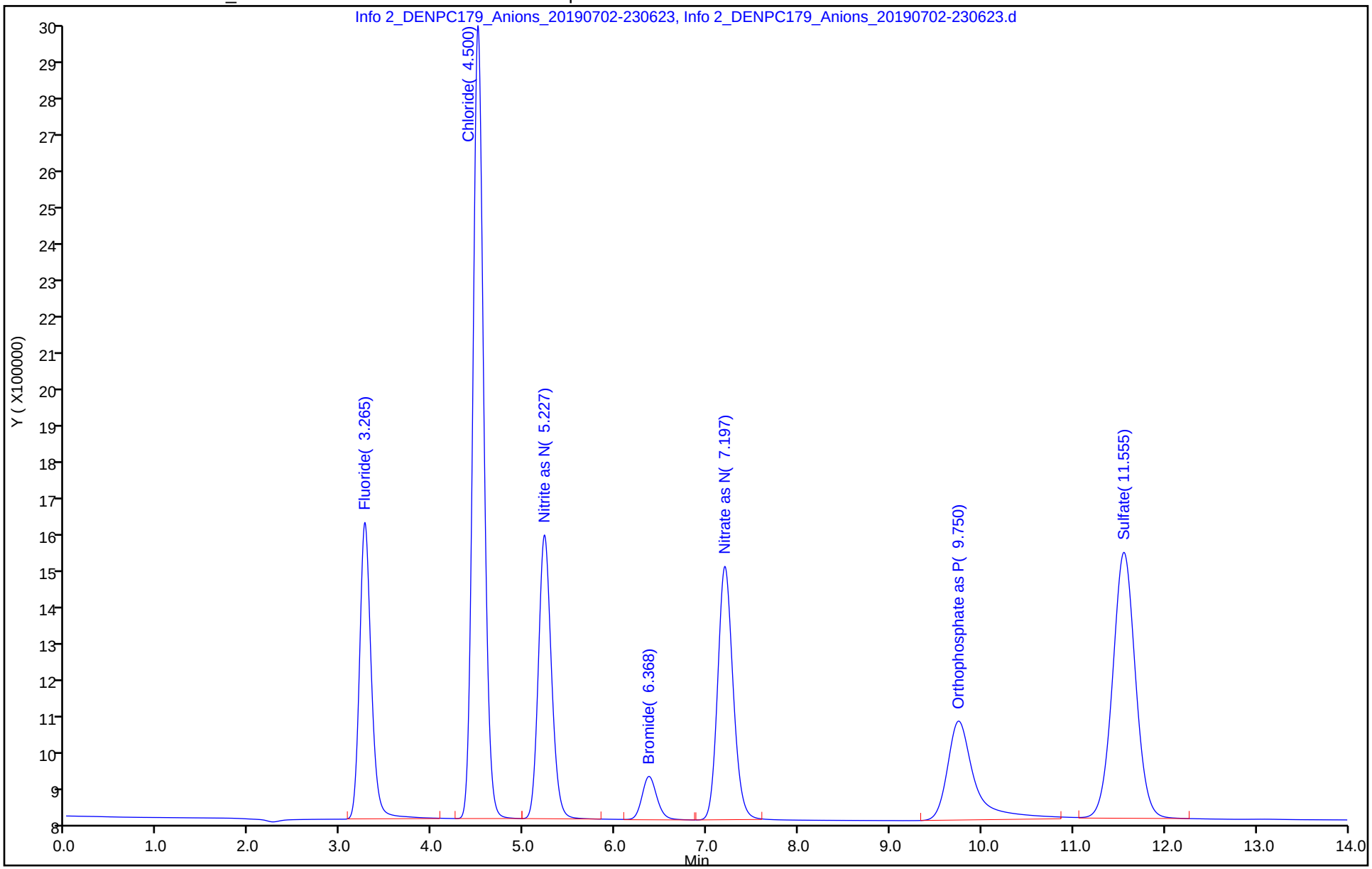
IC Cal low_00469 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00263 Amount Added: 0.20 Units: mL

Report Date: 03-Jul-2019 08:35:28 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-230623.d

Injection Date:	02-Jul-2019 22:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD3			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-230

Injection Date: 02-Jul-2019 22:49:00 Instrument ID: WC_IonChrom10

Lims ID: STD3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

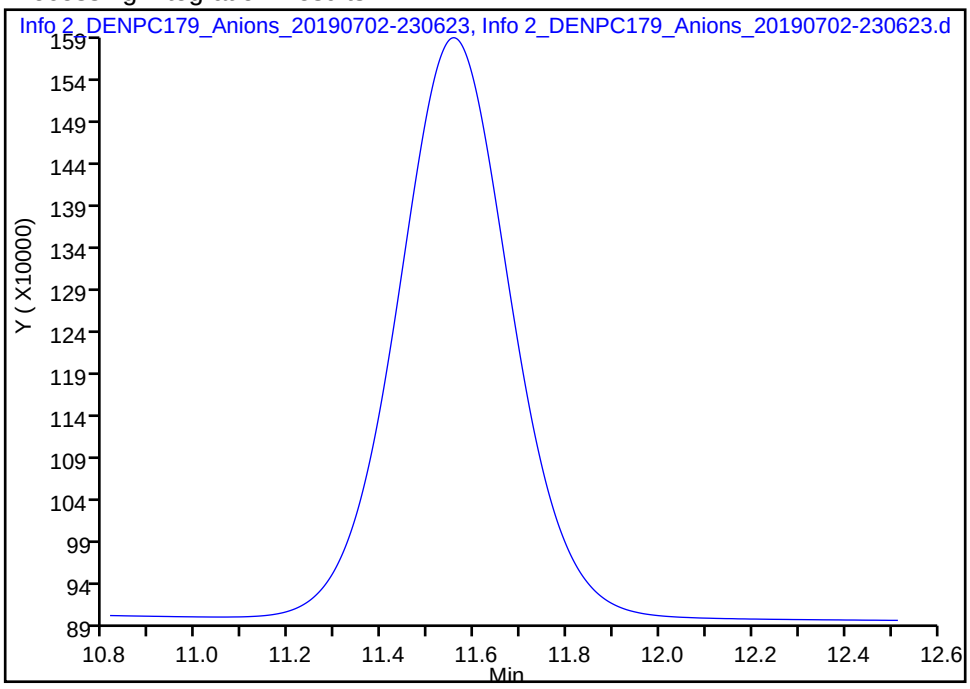
7 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 11.54

Processing Integration Results



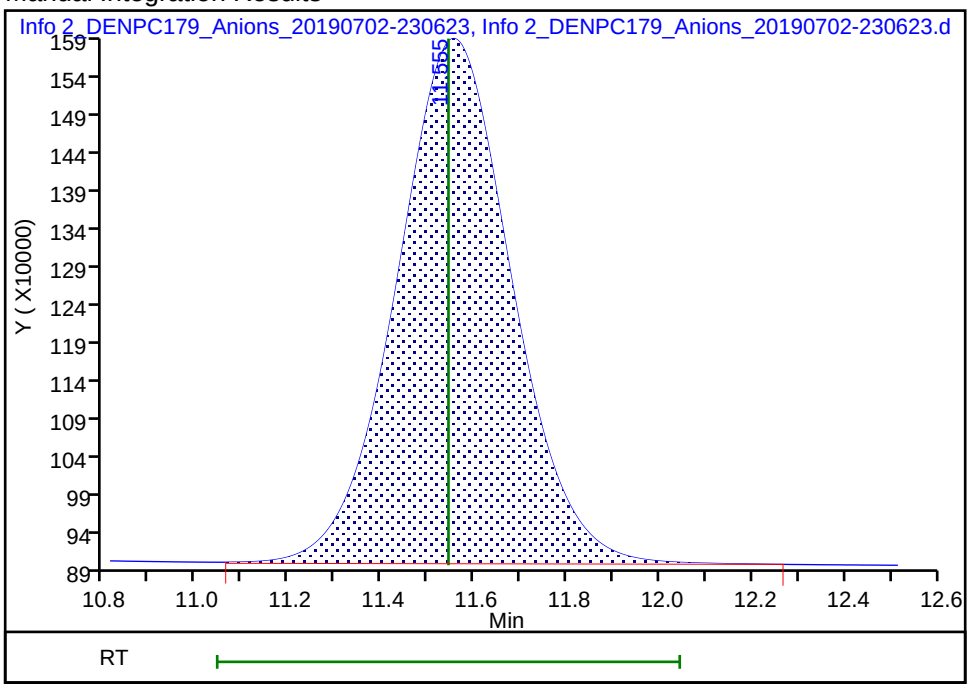
Manual Integration Results

RT: 11.56

Area: 11947958

Amount: 4.330129

Amount Units: ug/ml



Reviewer: pedrickj, 03-Jul-2019 08:32:11

Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-232
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-Jul-2019 23:06:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083432-005
Misc. Info.: 280-0083432-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jul-2019 08:35:29 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0301

First Level Reviewer: pedrickj Date: 03-Jul-2019 08:32:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.265	3.265	0.000	30511987	4.00	4.12	
2 Chloride	4.492	4.492	0.000	244045509	60.0	59.3	
3 Nitrite as N	5.217	5.217	0.000	35462557	NC	NC	
4 Bromide	6.357	6.357	0.000	5563002	4.00	3.80	
5 Nitrate as N	7.168	7.168	0.000	37393721	NC	NC	
6 Orthophosphate as P	9.737	9.737	0.000	17438096	NC	NC	
7 Sulfate	11.540	11.540	0.000	181039624	60.0	58.3	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

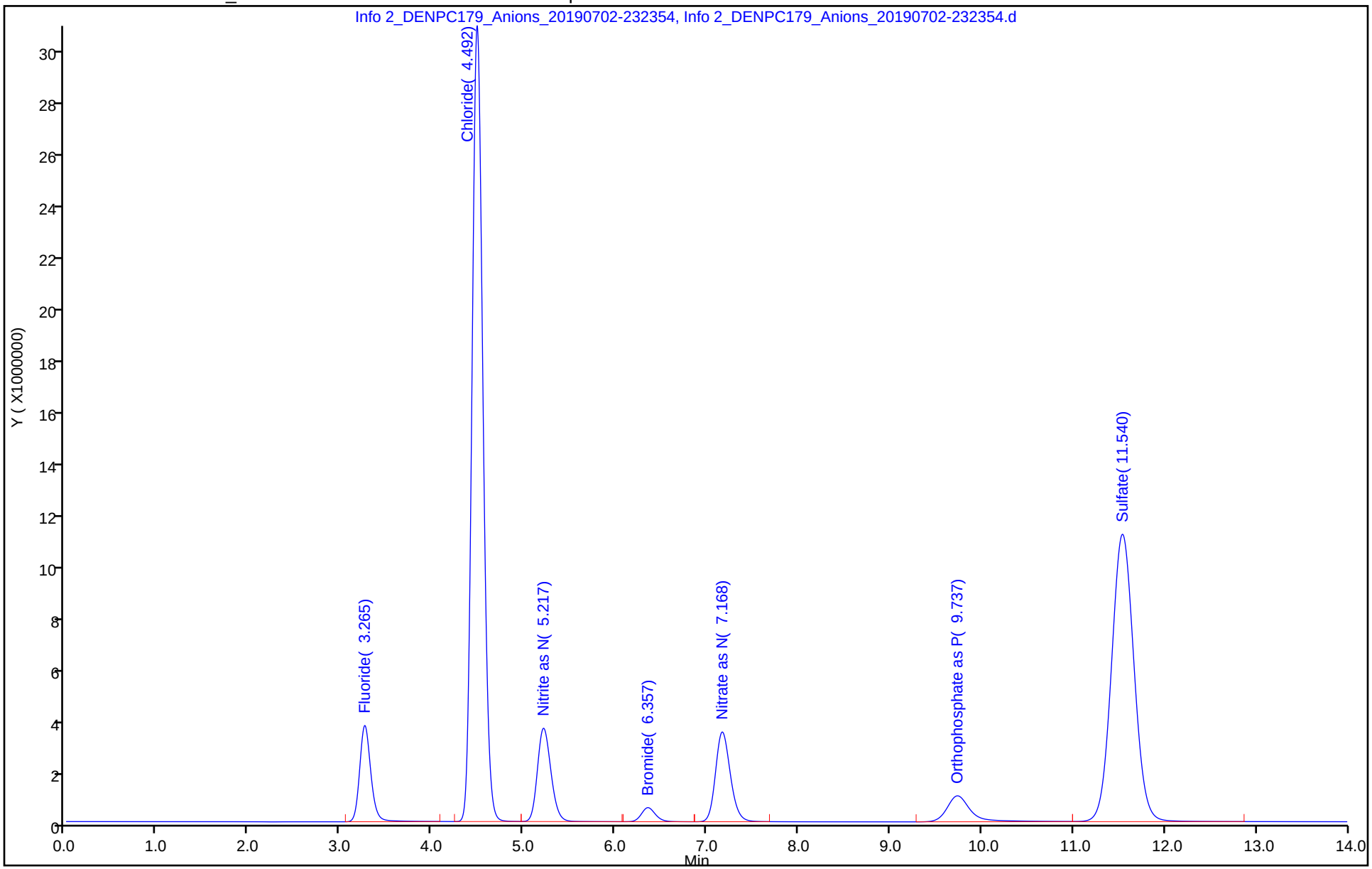
Reagents:

IC Cal low_00469 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00263 Amount Added: 2.40 Units: mL

Report Date: 03-Jul-2019 08:35:29 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-232354.d				
Injection Date:	02-Jul-2019 23:06:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD4			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-232

Injection Date: 02-Jul-2019 23:06:00 Instrument ID: WC_IonChrom10

Lims ID: STD4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

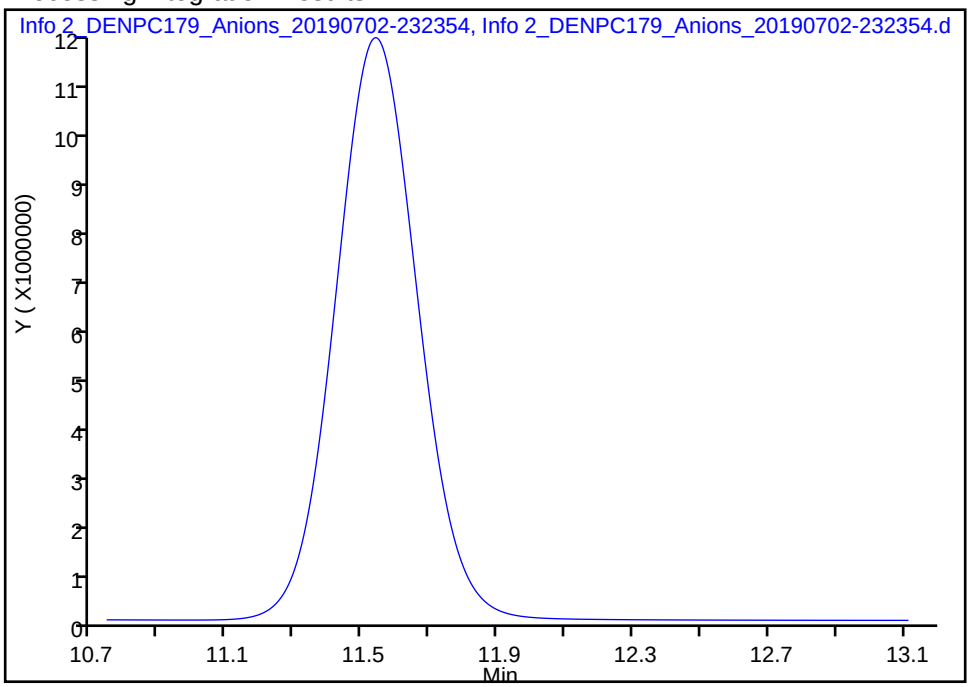
7 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 11.54

Processing Integration Results



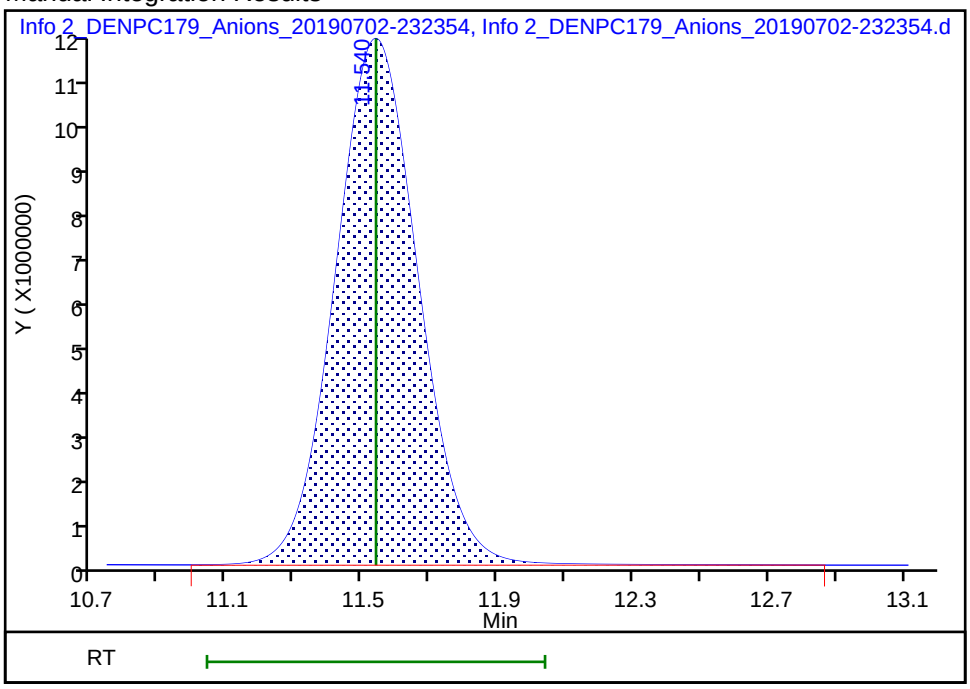
Manual Integration Results

RT: 11.54

Area: 181039624

Amount: 58.337606

Amount Units: ug/ml



Reviewer: pedrickj, 03-Jul-2019 08:32:22

Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-234
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Jul-2019 23:24:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083432-006
Misc. Info.: 280-0083432-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jul-2019 08:35:30 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0301

First Level Reviewer: pedrickj Date: 03-Jul-2019 08:32:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.263	3.265	-0.002	59408259	8.00	7.97	
2 Chloride	4.485	4.492	-0.007	496177676	120.0	120.0	
3 Nitrite as N	5.203	5.217	-0.014	73818417	NC	NC	
4 Bromide	6.345	6.357	-0.012	11779153	8.00	7.99	
5 Nitrate as N	7.147	7.168	-0.021	78748712	NC	NC	
6 Orthophosphate as P	9.722	9.737	-0.015	33048521	NC	NC	
7 Sulfate	11.508	11.540	-0.032	373870178	120.0	119.9	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

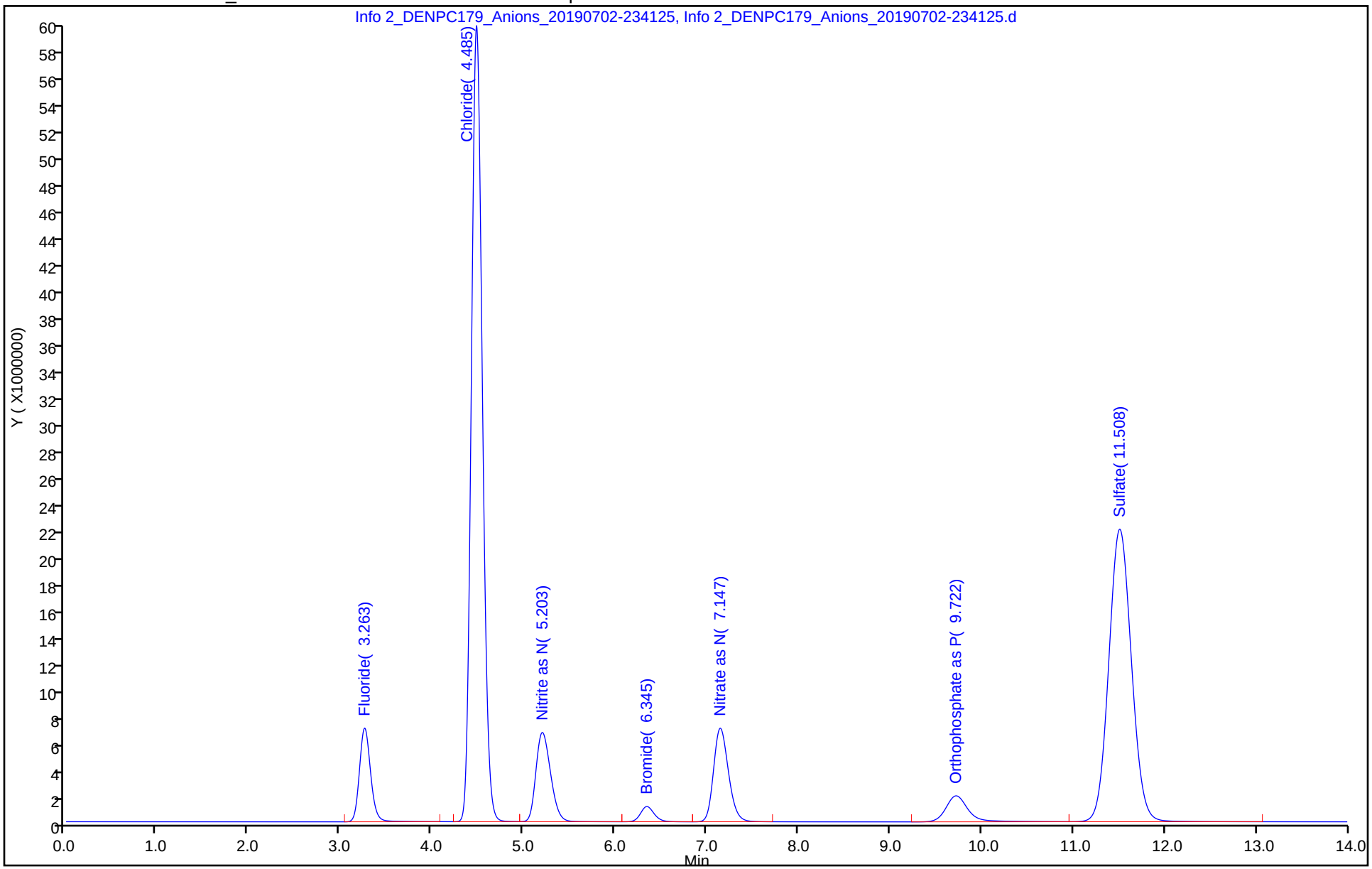
Reagents:

IC Cal low_00469 Amount Added: 1.60 Units: mL
IC CAL cl/so4_00263 Amount Added: 4.80 Units: mL

Report Date: 03-Jul-2019 08:35:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-234125.d				
Injection Date:	02-Jul-2019 23:24:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-234

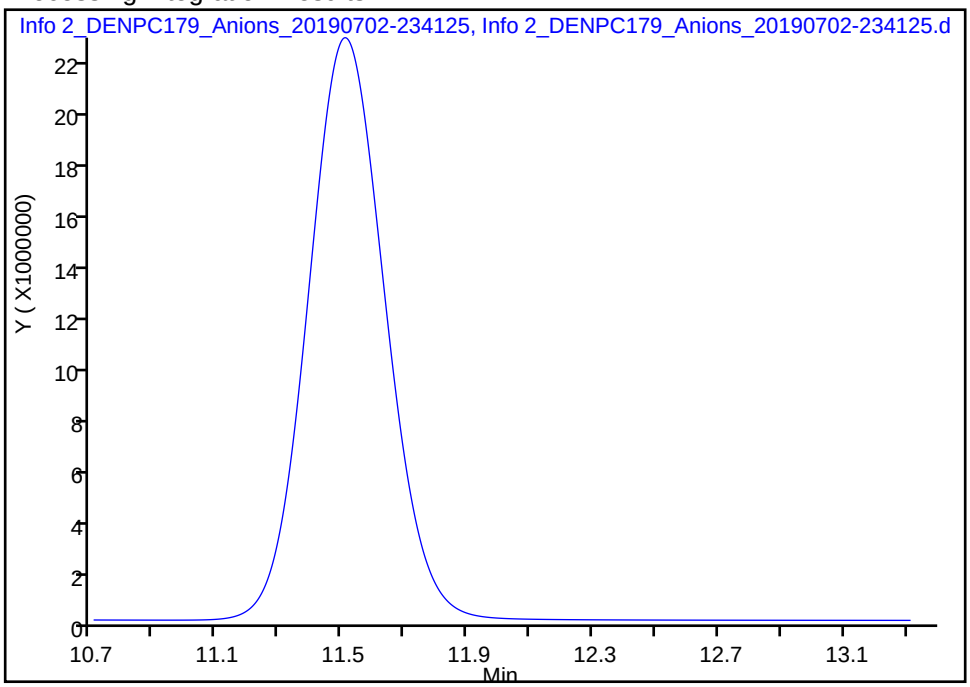
Injection Date:	02-Jul-2019 23:24:00	Instrument ID:	WC_IonChrom10
Lims ID:	STD5		
Client ID:			
Operator ID:	wetchemd	ALS Bottle#:	0 Worklist Smp#: 6
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D
Column:		Detector	Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

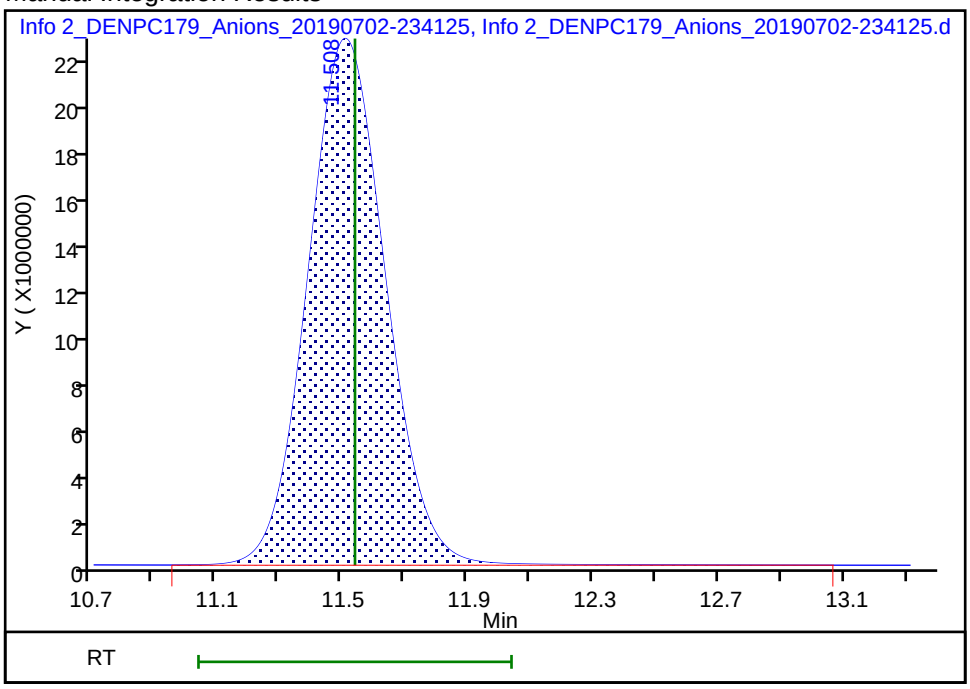
Not Detected
Expected RT: 11.54

Processing Integration Results



Manual Integration Results

RT: 11.51
Area: 373870178
Amount: 119.9272
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jul-2019 08:32:27
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Jul-2019 23:41:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083432-007
Misc. Info.: 280-0083432-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jul-2019 08:35:31 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0301

First Level Reviewer: pedrickj Date: 03-Jul-2019 08:32:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.265	3.265	0.000	74244226	10.0	9.94	
2 Chloride	4.487	4.492	-0.005	832681709	200.0	201.1	
3 Nitrite as N	5.203	5.217	-0.014	92967944	NC	NC	
4 Bromide	6.345	6.357	-0.012	15189226	10.0	10.3	
5 Nitrate as N	7.143	7.168	-0.025	100541186	NC	NC	
6 Orthophosphate as P	9.718	9.737	-0.019	42039789	NC	NC	
7 Sulfate	11.495	11.540	-0.045	631930336	200.0	202.4	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Reagents:

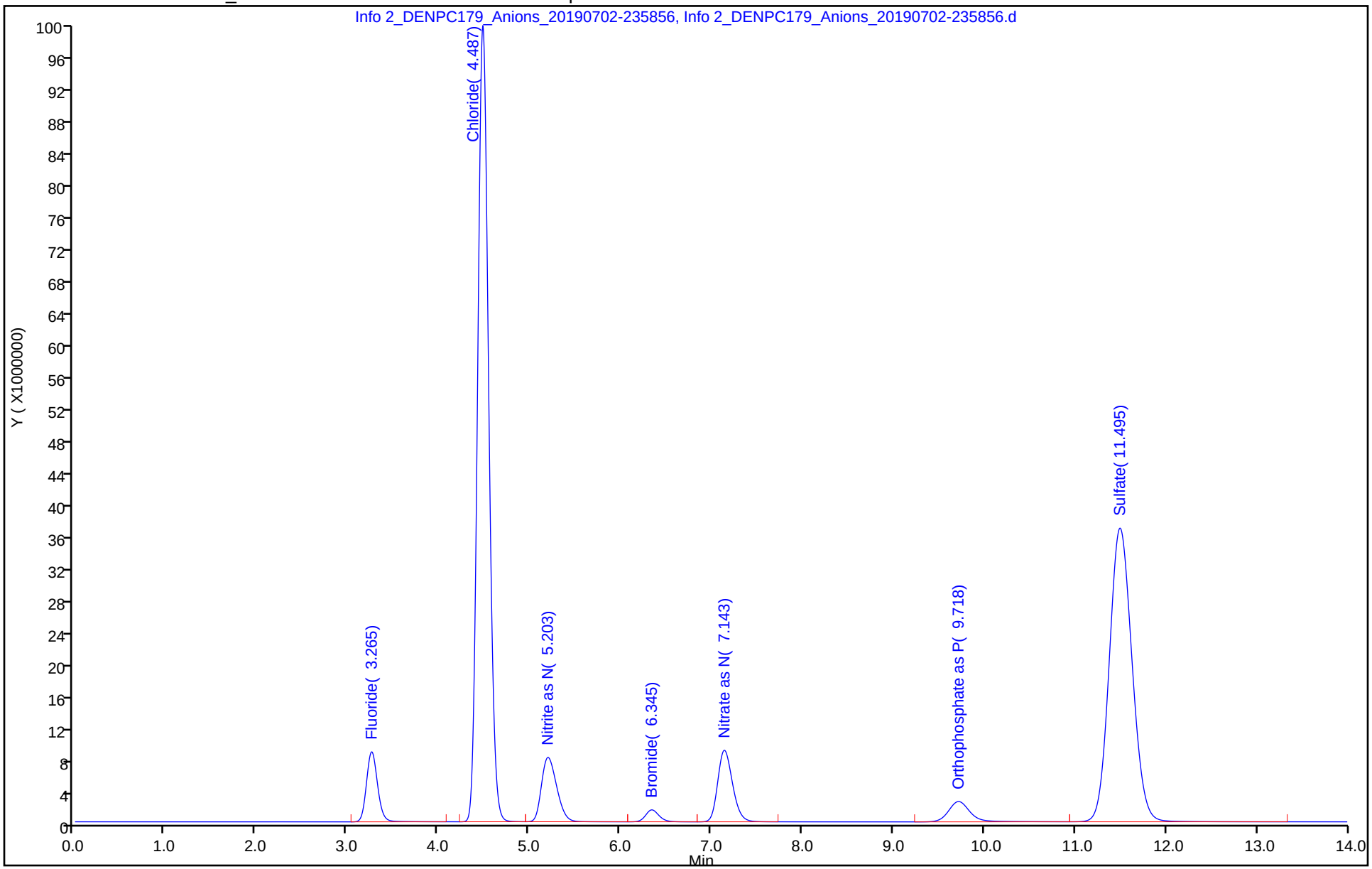
IC Cal low_00469 Amount Added: 2.00 Units: mL
IC CAL cl/so4_00263 Amount Added: 8.00 Units: mL

Report Date: 03-Jul-2019 08:35:31 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235856.d

Injection Date:	02-Jul-2019 23:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD6			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

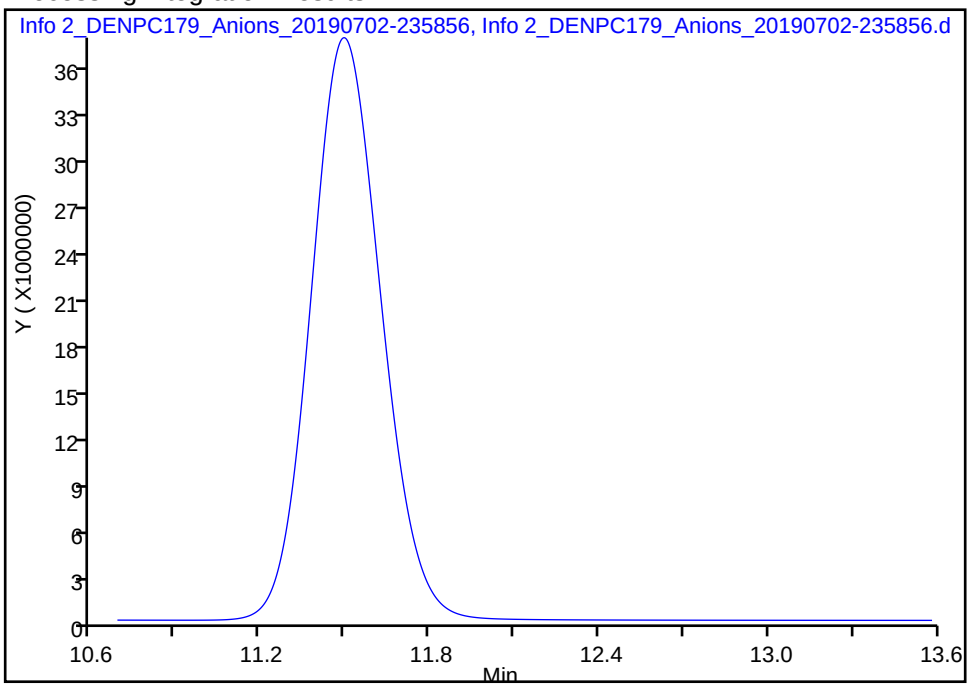
Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235
Injection Date: 02-Jul-2019 23:41:00 Instrument ID: WC_IonChrom10
Lims ID: STD6
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

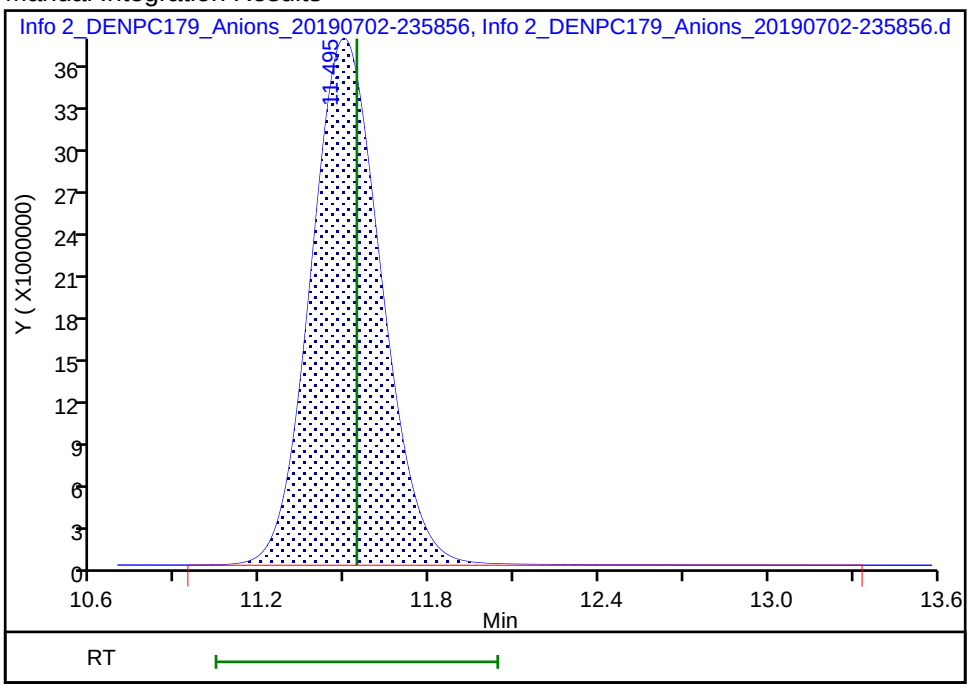
Not Detected
Expected RT: 11.54

Processing Integration Results



Manual Integration Results

RT: 11.50
Area: 631930336
Amount: 202.3510
Amount Units: ug/ml



Reviewer: pedrickj, 03-Jul-2019 08:32:32
Audit Action: Assigned Compound ID Audit Reason:

07/03/19 TP
83445

IC Instrument Information

WL: ~~83446~~ **Inst ID:** ID **Analysis Date:** 07/03/19 **Analyst:** TP

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	125876 -	3	(F) (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	125878 -	1	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	125879 -	3	F Cl NO2 Br (NO3) PO4 (SO4)	(MS/D) 1	client
☐ →	550-124731	2	F Cl NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	124928	13	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D) 3, 6, 11	
☐	124888	10	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	124939	9	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

expired already

Dilutions

Job No.	Samples	Anions	Dilution	Reason
125876	1, 2, 3	(F) (Cl) NO2 Br (NO3) PO4 (SO4)	2x	cond.
125878	1	F Cl NO2 Br (NO3) PO4 SO4	5x	cond.
125879	1	F Cl NO2 Br (NO3) PO4 (SO4)	2x	cond.
124888	1-10	F Cl NO2 Br NO3 PO4 (SO4)	500x	burst.
		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		

463528 / 463527

TestAmerica Denver

TestAmerica

07/03/19 TP
83445

IC Instrument Information

WL: ~~83466~~ Inst ID: ID Analysis Date: 07/03/19 Analyst: TP

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	125876 -	3	(F) (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	125878 -	1	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	125879 -	3	F Cl NO2 Br (NO3) PO4 (SO4)	MS/D	1 client
☐ → expired already	550-124731	2	F Cl NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	124928	13	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	3, 6, 11
☐	124888	10	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	124939	9	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
125876	1,2,3	(F) (Cl) NO2 Br (NO3) PO4 (SO4)	2x	cond.
125878	1	F Cl NO2 Br (NO3) PO4 SO4	5x	cond.
125879	1	F Cl NO2 Br (NO3) PO4 (SO4)	2x	cond.
124888	1-10	F Cl NO2 Br NO3 PO4 (SO4)	500x	limit.
		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		

Panida R.
7/8/19

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 03-Jul-2019 08:32:57
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b
Inj Date : 02-Jul-2019 22:14:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-496776	7517346		1.000				
2 Chloride	-185206	4148993		1.000				
3 Nitrite as N					-881375	9265566		0.999
4 Bromide	-69476	1482729		0.998				
5 Nitrate as N					-977918	9928862		0.998
6 Orthophosphate as P					591981	4151096		0.998
7 Sulfate	-160921	3130894		0.999				

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 03-Jul-2019 08:32:57
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b
Inj Date : 02-Jul-2019 22:14:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-496776	7517346		1.000				
2 Chloride	-185206	4148993		1.000				
3 Nitrite as N					-881375	9265566		0.999
4 Bromide	-69476	1482729		0.998				
5 Nitrate as N					-977918	9928862		0.998
6 Orthophosphate as P					591981	4151096		0.998
7 Sulfate	-160921	3130894		0.999				

Panida P
7/8/19

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-123
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-Jul-2019 12:22:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-001
Misc. Info.: 280-0083445-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:43:23 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.260	3.263	-0.003	37679894	5.00	5.08	
2 Chloride	4.483	4.490	-0.007	417741148	100.0	101.1	
3 Nitrite as N	5.208	5.217	-0.009	44608016	NC	NC	
4 Bromide	6.342	6.355	-0.013	6951220	5.00	4.73	
5 Nitrate as N	7.148	7.167	-0.019	46980233	NC	NC	
6 Orthophosphate as P	9.702	9.727	-0.025	20983991	NC	NC	
7 Sulfate	11.483	11.522	-0.039	303141560	100.0	97.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

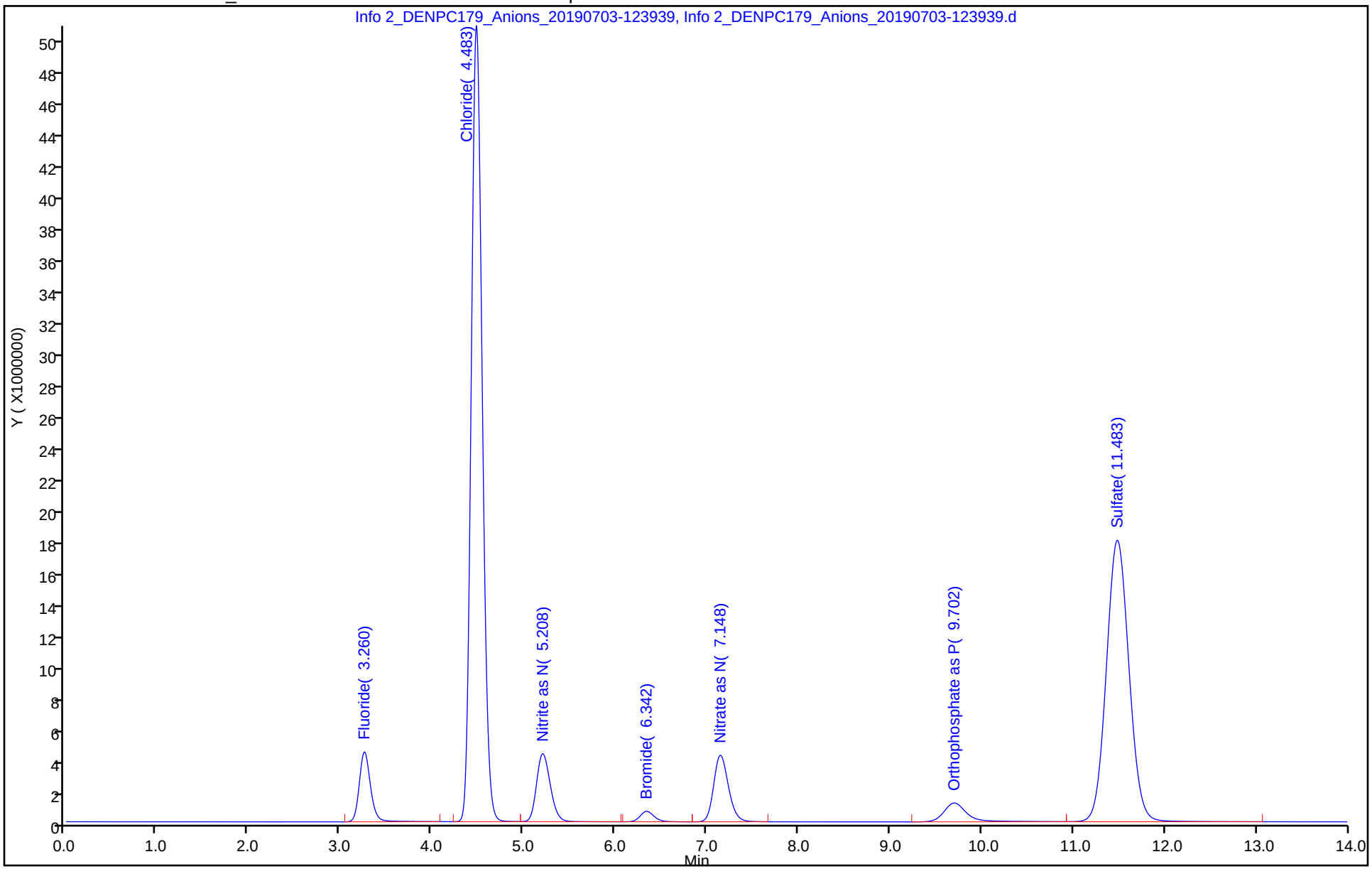
Reagents:

IC LCS_01622 Amount Added: 10.00 Units: mL

Report Date: 05-Jul-2019 12:43:25 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-123939.d				
Injection Date:	03-Jul-2019 12:22:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-125
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 03-Jul-2019 12:39:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-002
Misc. Info.: 280-0083445-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:43:23 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

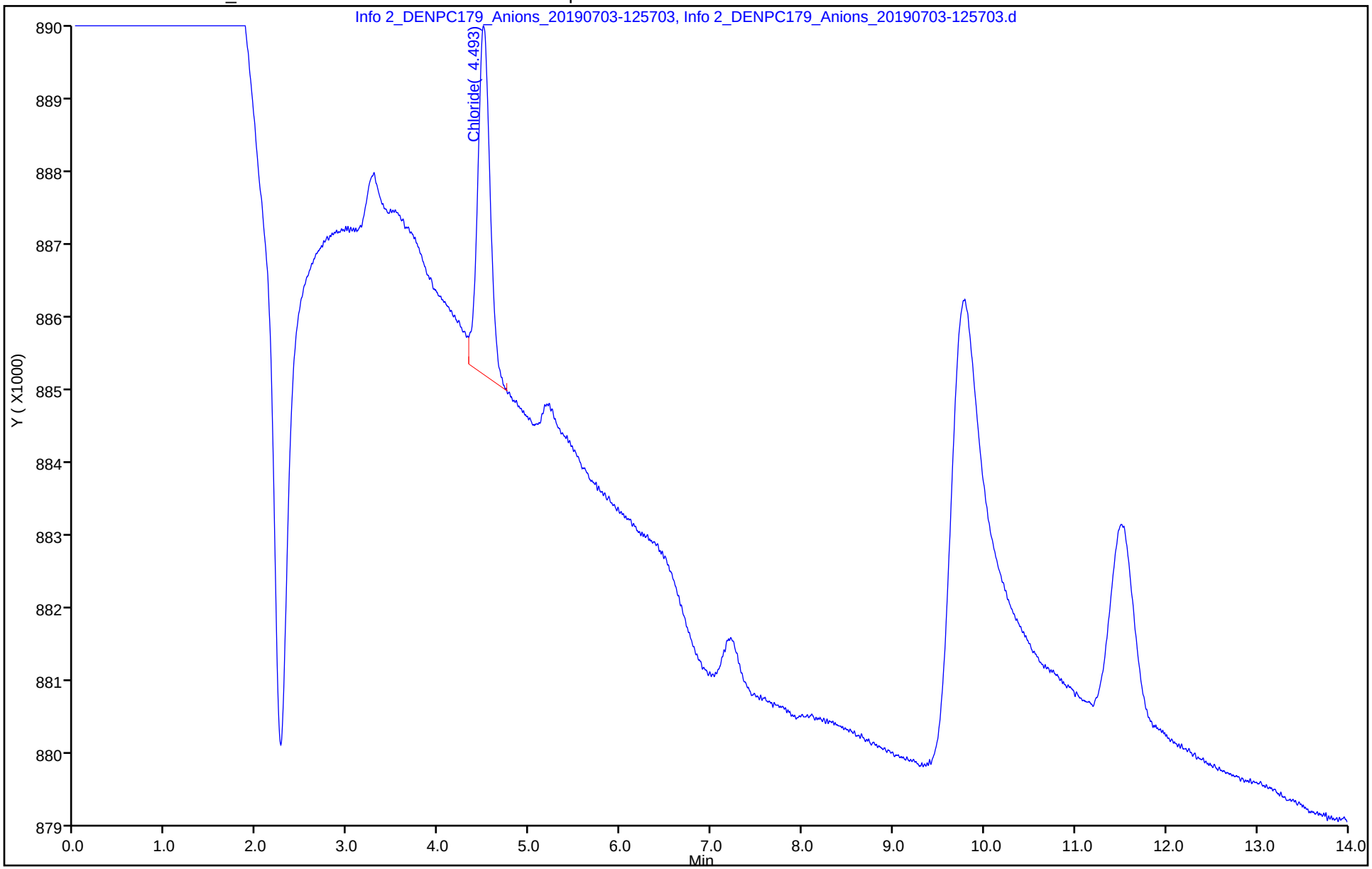
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.493	4.490	0.003	43939		0.4570	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P		9.727				ND	
7 Sulfate		11.522				ND	

Report Date: 05-Jul-2019 12:43:29 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-125703.d

Injection Date:	03-Jul-2019 12:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-131
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 03-Jul-2019 12:57:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-003
Misc. Info.: 280-0083445-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:43:23 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.257	3.263	-0.006	1121479	0.2000	0.2153	
2 Chloride	4.492	4.490	0.002	7839470	2.50	2.34	
3 Nitrite as N	5.220	5.217	0.003	1332790	NC	NC	
4 Bromide	6.360	6.355	0.005	263145	0.2000	0.2243	
5 Nitrate as N	7.198	7.167	0.031	1411869	NC	NC	
6 Orthophosphate as P	9.722	9.727	-0.005	1161910	NC	NC	
7 Sulfate	11.503	11.522	-0.019	5597313	2.50	2.30	

QC Flag Legend

Processing Flags
NC - Not Calibrated

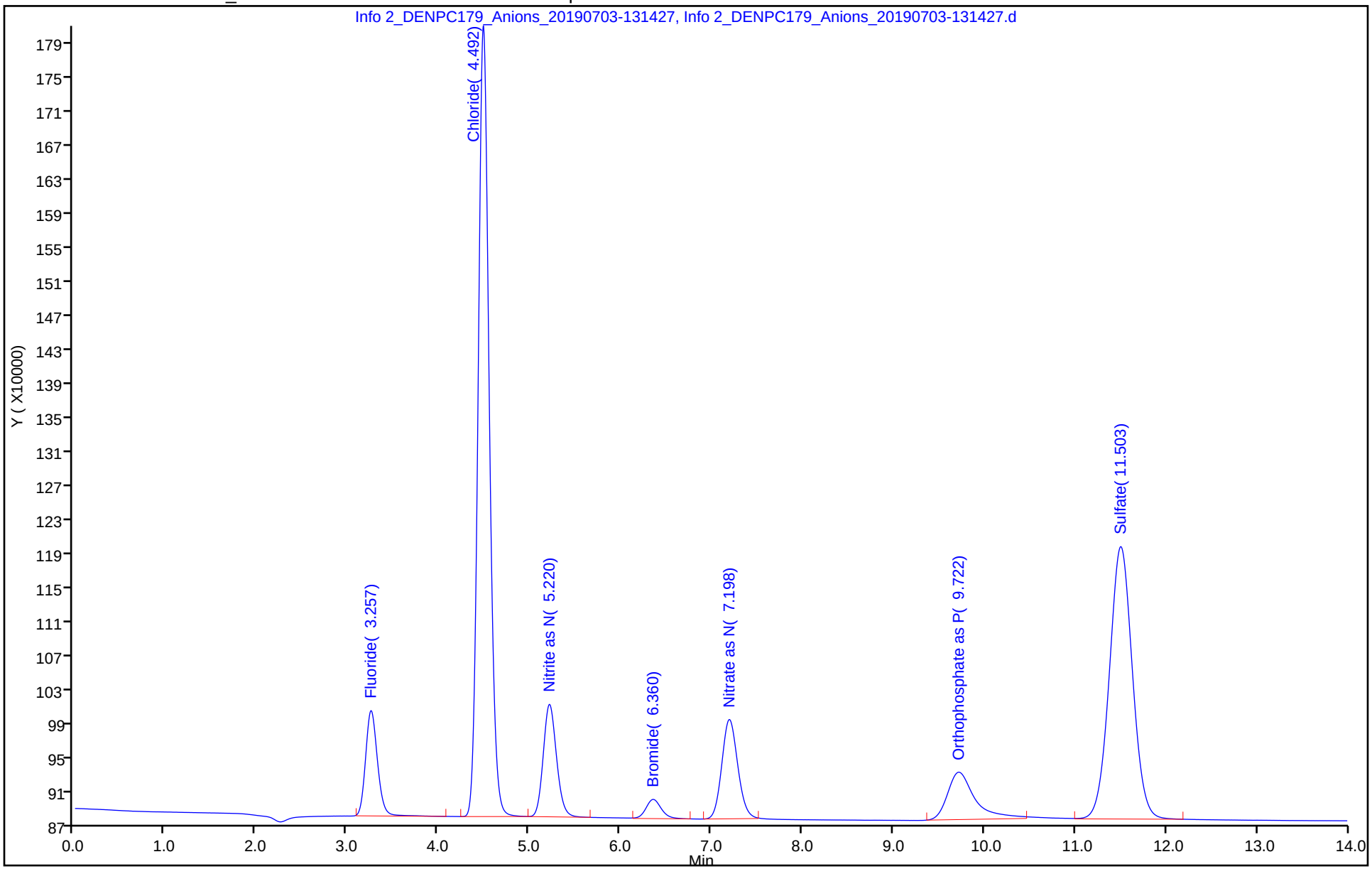
Reagents:

IC CAL cl/so4_00263 Amount Added: 0.10 Units: mL
IC Cal low_00469 Amount Added: 0.04 Units: mL

Report Date: 05-Jul-2019 12:43:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-131427.d				
Injection Date:	03-Jul-2019 12:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-133
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Jul-2019 13:14:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-004
Misc. Info.: 280-0083445-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:43:23 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.258	3.263	-0.005	36257127	5.00	4.89	
2 Chloride	4.483	4.490	-0.007	418438618	100.0	101.3	
3 Nitrite as N	5.207	5.217	-0.010	44736447	NC	NC	
4 Bromide	6.343	6.355	-0.012	6973869	5.00	4.75	
5 Nitrate as N	7.150	7.167	-0.017	47084550	NC	NC	
6 Orthophosphate as P	9.703	9.727	-0.024	20497496	NC	NC	
7 Sulfate	11.483	11.522	-0.039	303099272	100.0	97.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

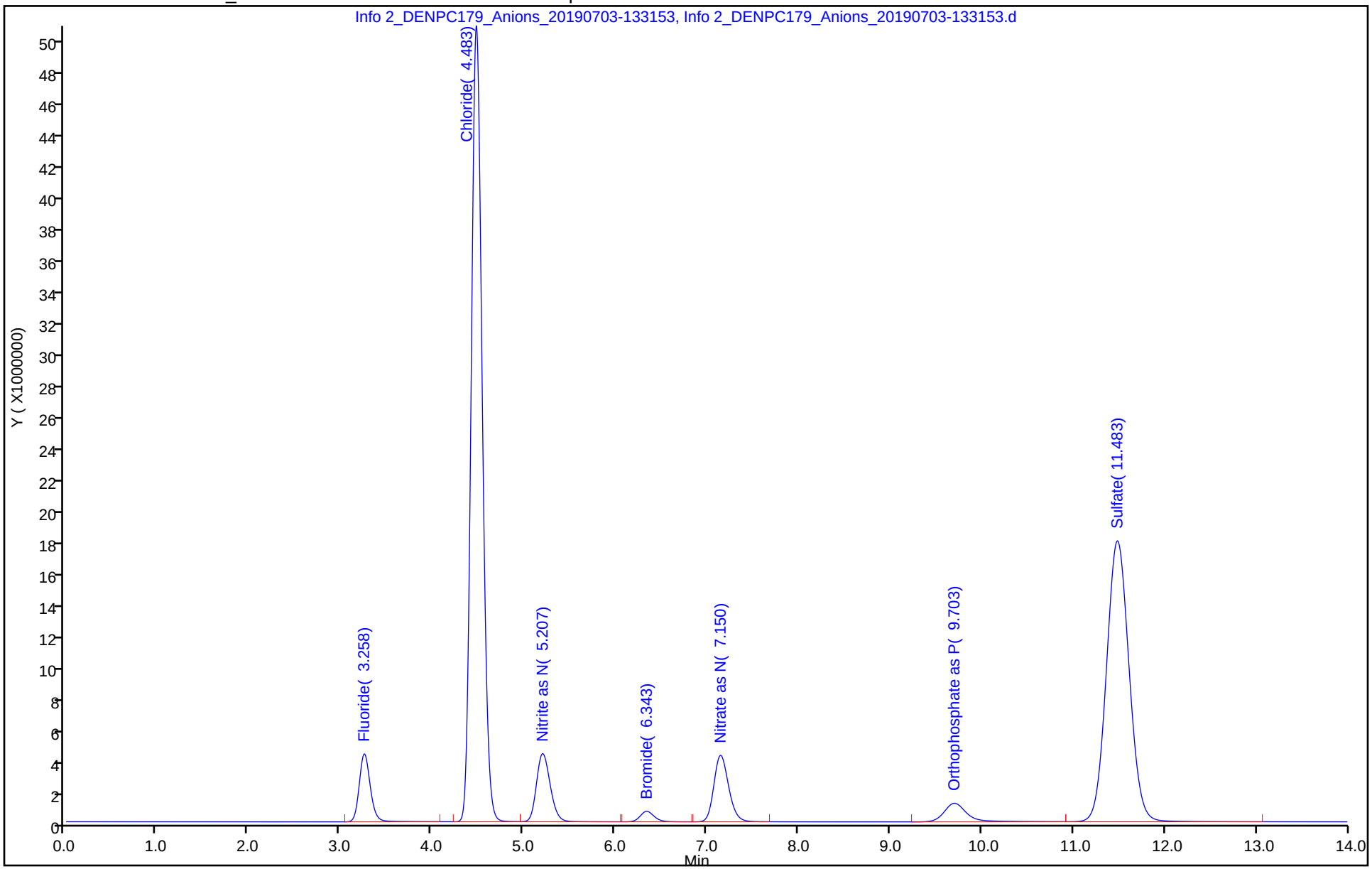
IC LCS_01622 Amount Added: 10.00 Units: mL

Report Date: 05-Jul-2019 12:43:39 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-133153.d

Injection Date:	03-Jul-2019 13:14:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-134
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 03-Jul-2019 13:31:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-005
Misc. Info.: 280-0083445-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:43:23 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.262	3.263	-0.001	35611569	5.00	4.80	
2 Chloride	4.485	4.490	-0.005	418732374	100.0	101.4	
3 Nitrite as N	5.208	5.217	-0.009	44367143	NC	NC	
4 Bromide	6.343	6.355	-0.012	6983805	5.00	4.76	
5 Nitrate as N	7.148	7.167	-0.019	47094182	NC	NC	
6 Orthophosphate as P	9.697	9.727	-0.030	20327549	NC	NC	
7 Sulfate	11.475	11.522	-0.047	302955030	100.0	97.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

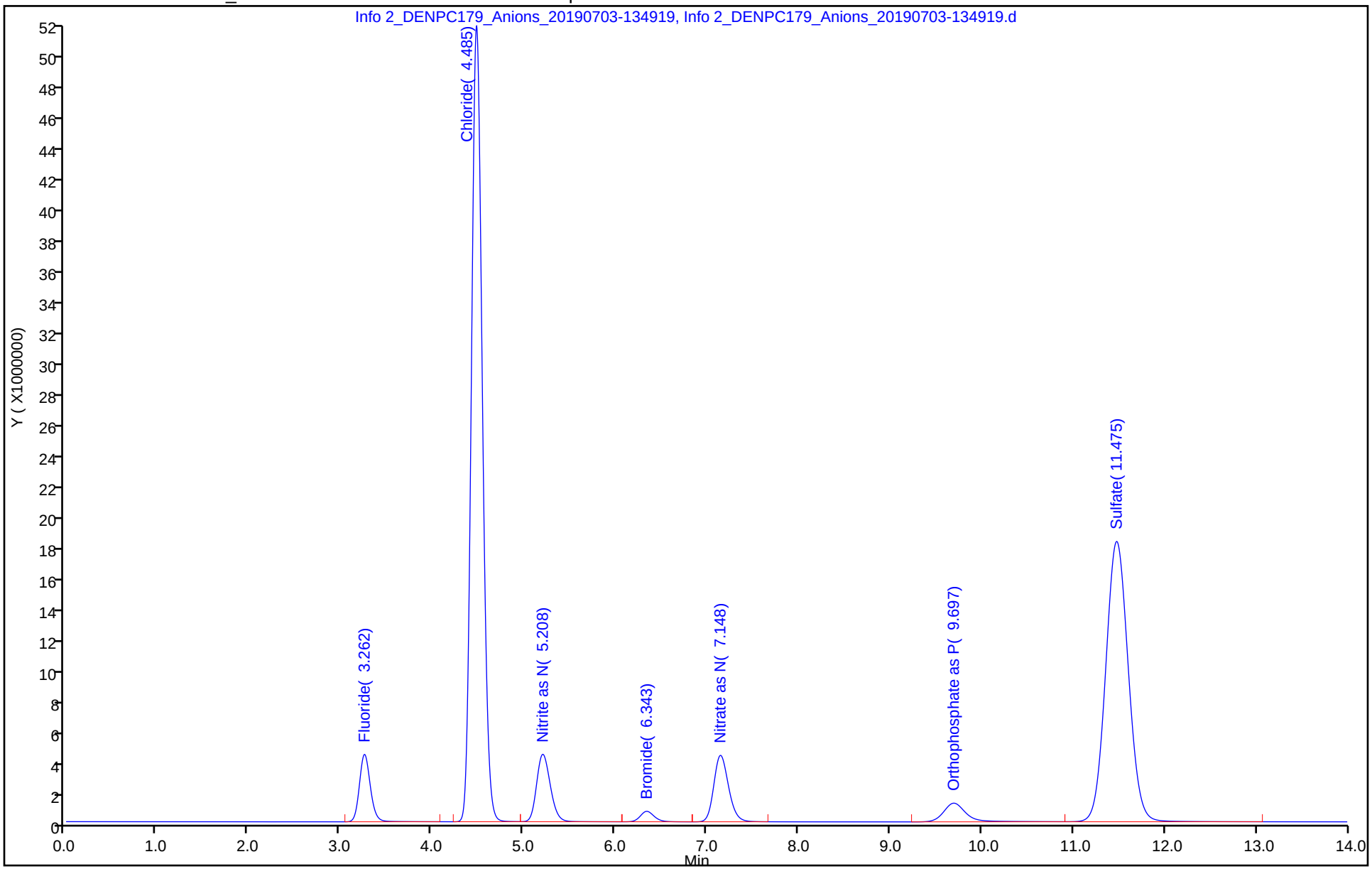
Reagents:

IC LCS_01622 Amount Added: 10.00 Units: mL

Report Date: 05-Jul-2019 12:43:45 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-134919.d				
Injection Date:	03-Jul-2019 13:31:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-140
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Jul-2019 13:49:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-006
Misc. Info.: 280-0083445-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:43:23 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

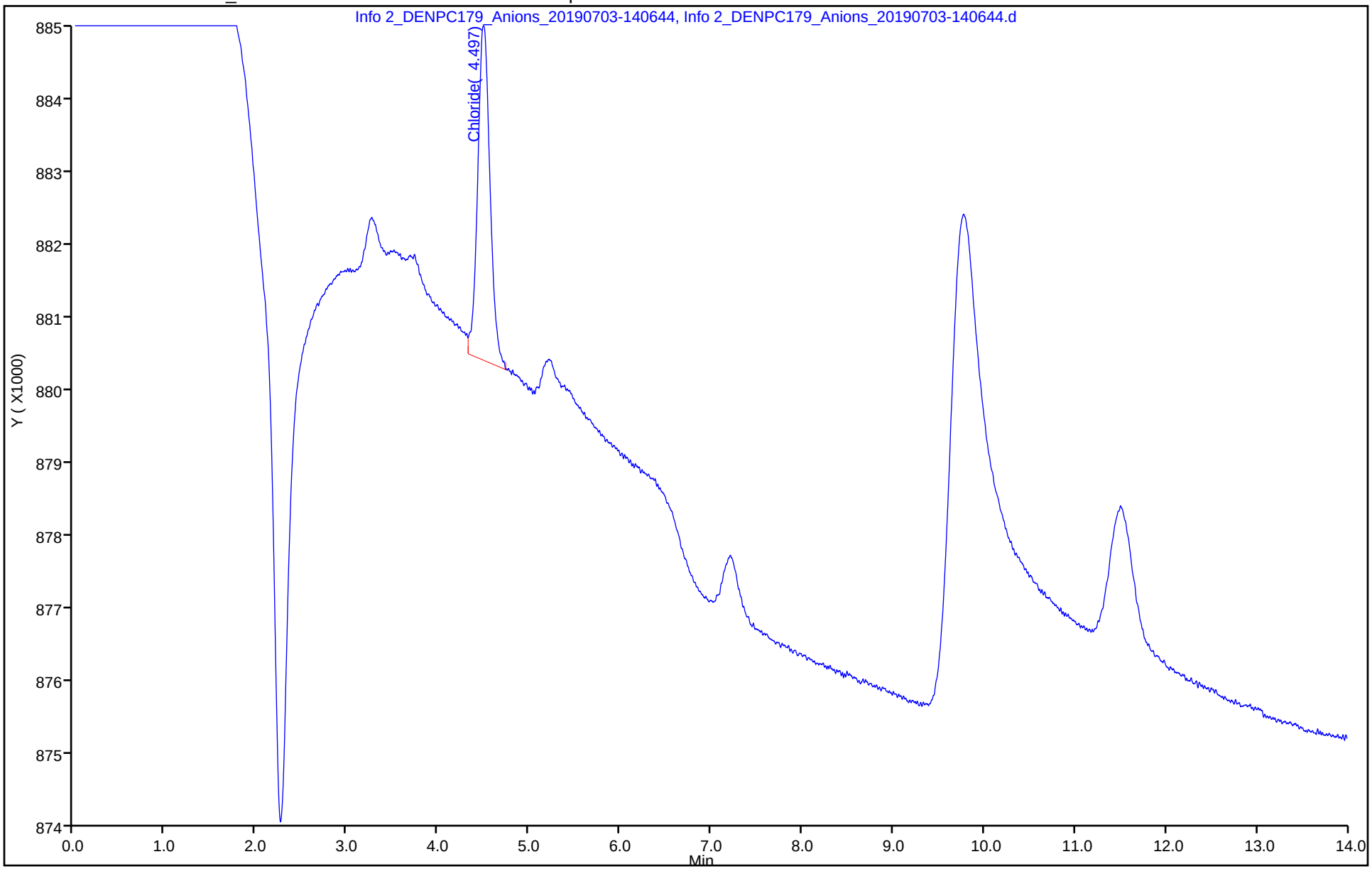
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.497	4.490	0.007	39928		0.4560	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P		9.727				ND	
7 Sulfate		11.522				ND	

Report Date: 05-Jul-2019 12:43:50 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-140644.d

Injection Date:	03-Jul-2019 13:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-220				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	03-Jul-2019 21:48:00	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0083445-017				
Misc. Info.:	280-0083445-017				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub2				
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-Jul-2019 12:44:45	Calib Date:	02-Jul-2019 23:41:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0318				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.255	3.263	-0.008	34442302	5.00	4.65	
2 Chloride	4.475	4.490	-0.015	419687086	100.0	101.6	
3 Nitrite as N	5.197	5.217	-0.020	44690958	NC	NC	
4 Bromide	6.330	6.355	-0.025	6950524	5.00	4.73	
5 Nitrate as N	7.137	7.167	-0.030	47073804	NC	NC	
6 Orthophosphate as P	9.655	9.727	-0.072	19729171	NC	NC	
7 Sulfate	11.405	11.522	-0.117	303187652	100.0	97.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

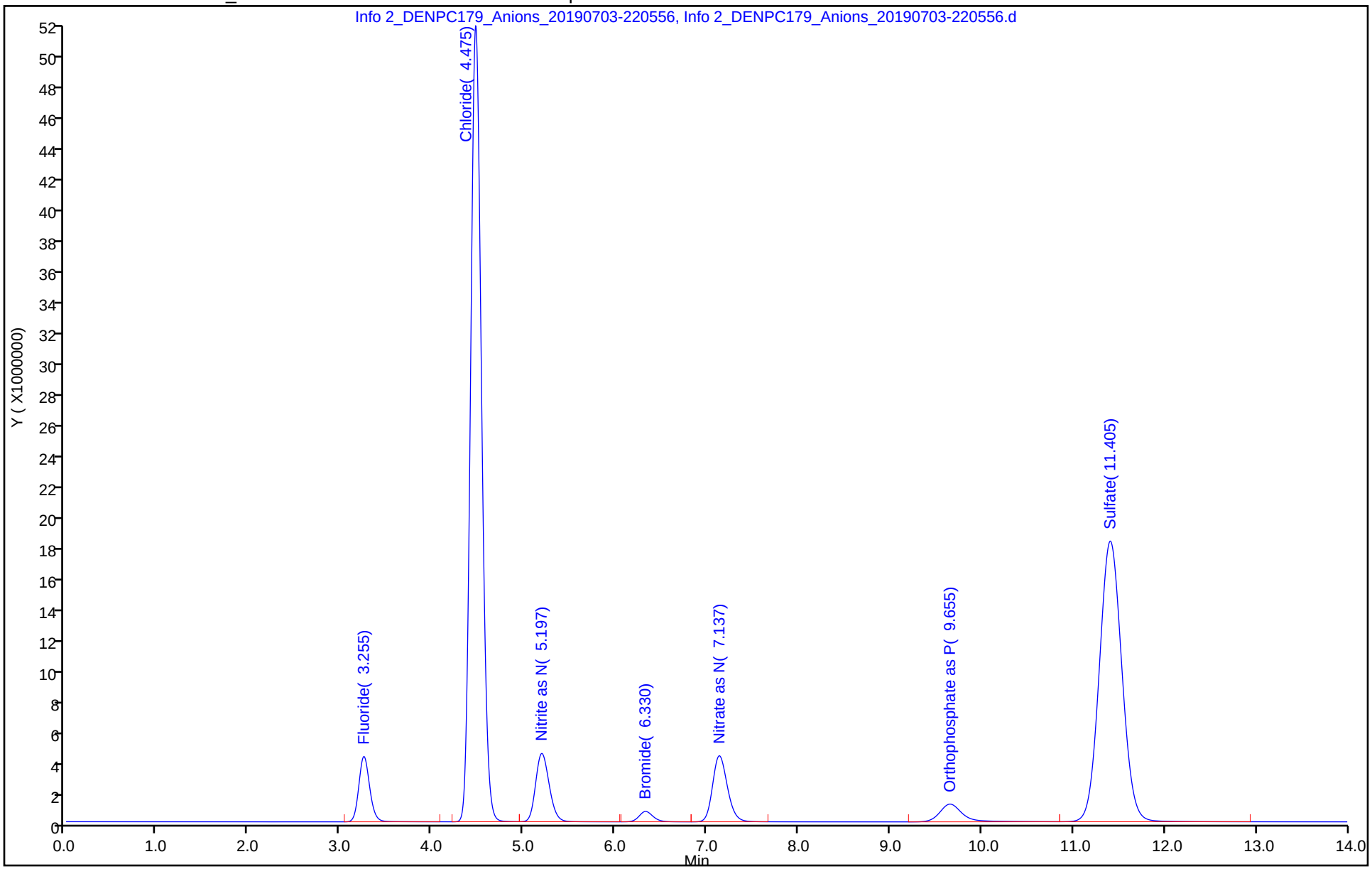
Reagents:

IC LCS_01622 Amount Added: 10.00 Units: mL

Report Date: 05-Jul-2019 12:44:46 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-220556.d				
Injection Date:	03-Jul-2019 21:48:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-222
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 03-Jul-2019 22:05:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-018
Misc. Info.: 280-0083445-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:44:45 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

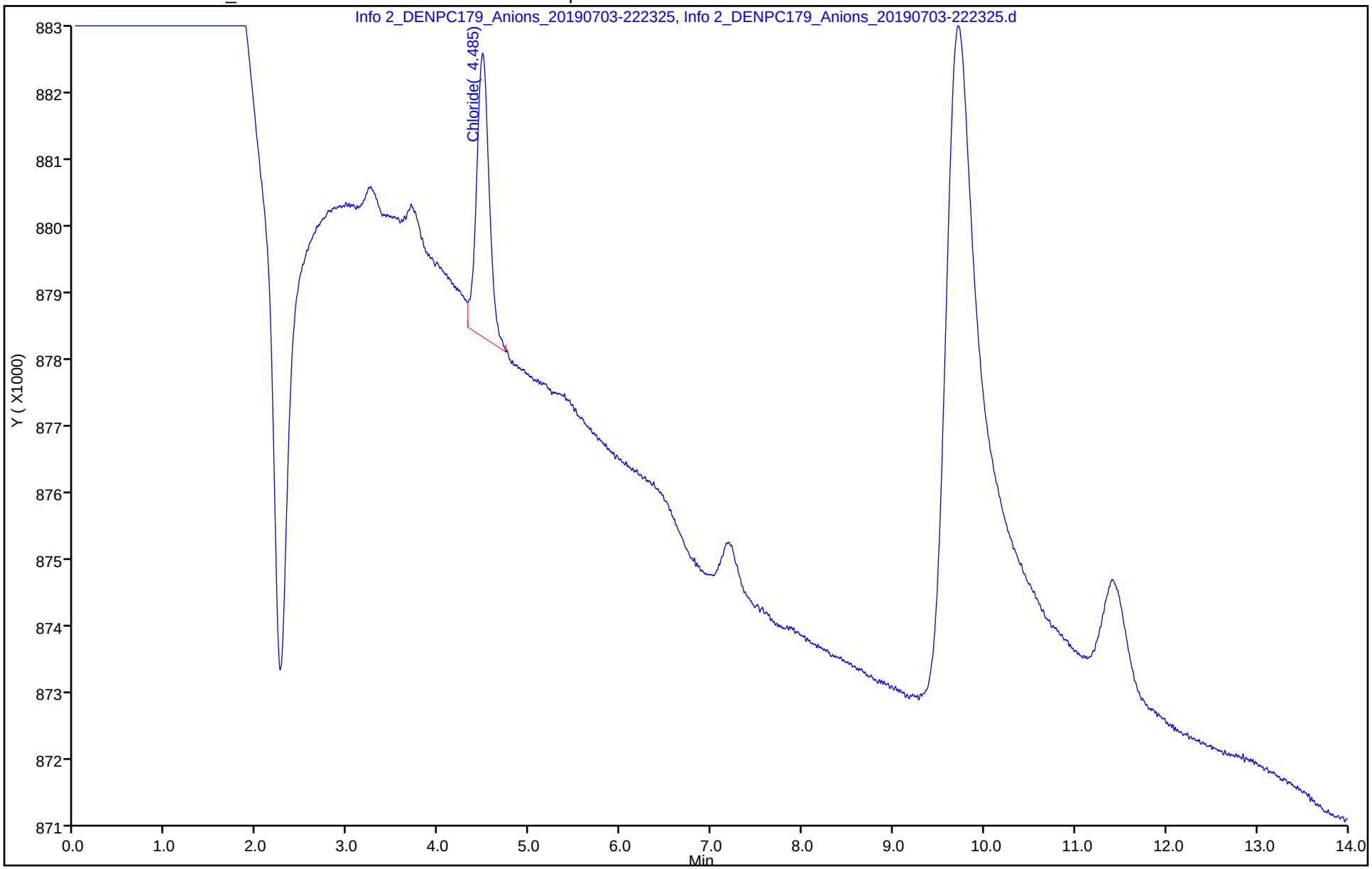
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.485	4.490	-0.005	39814		0.4560	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P		9.727				ND	
7 Sulfate		11.522				ND	

Report Date: 05-Jul-2019 12:44:52 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190703-222325.d

Injection Date:	03-Jul-2019 22:05:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-013
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 04-Jul-2019 01:18:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-029
Misc. Info.: 280-0083445-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:45:48 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.252	3.263	-0.011	34537343	5.00	4.66	
2 Chloride	4.472	4.490	-0.018	421635444	100.0	102.1	
3 Nitrite as N	5.192	5.217	-0.025	44980472	NC	NC	
4 Bromide	6.322	6.355	-0.033	6959903	5.00	4.74	
5 Nitrate as N	7.127	7.167	-0.040	47247716	NC	NC	
6 Orthophosphate as P	9.633	9.727	-0.094	19355137	NC	NC	
7 Sulfate	11.370	11.522	-0.152	304352583	100.0	97.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

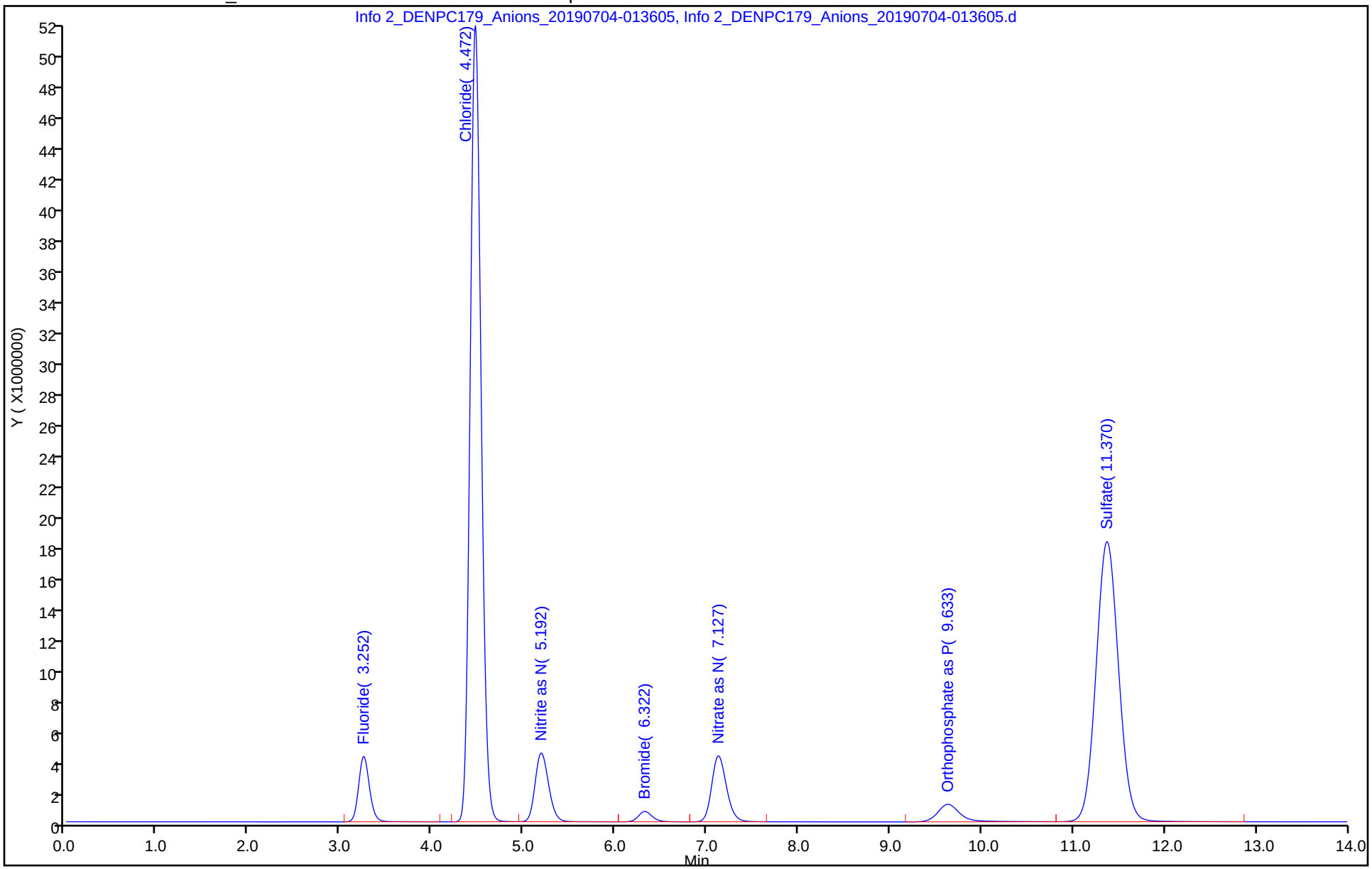
Reagents:

IC LCS_01622 Amount Added: 10.00 Units: mL

Report Date: 05-Jul-2019 12:45:50 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-013605.d				
Injection Date:	04-Jul-2019 01:18:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-015
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 04-Jul-2019 01:36:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-030
Misc. Info.: 280-0083445-030
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:45:48 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

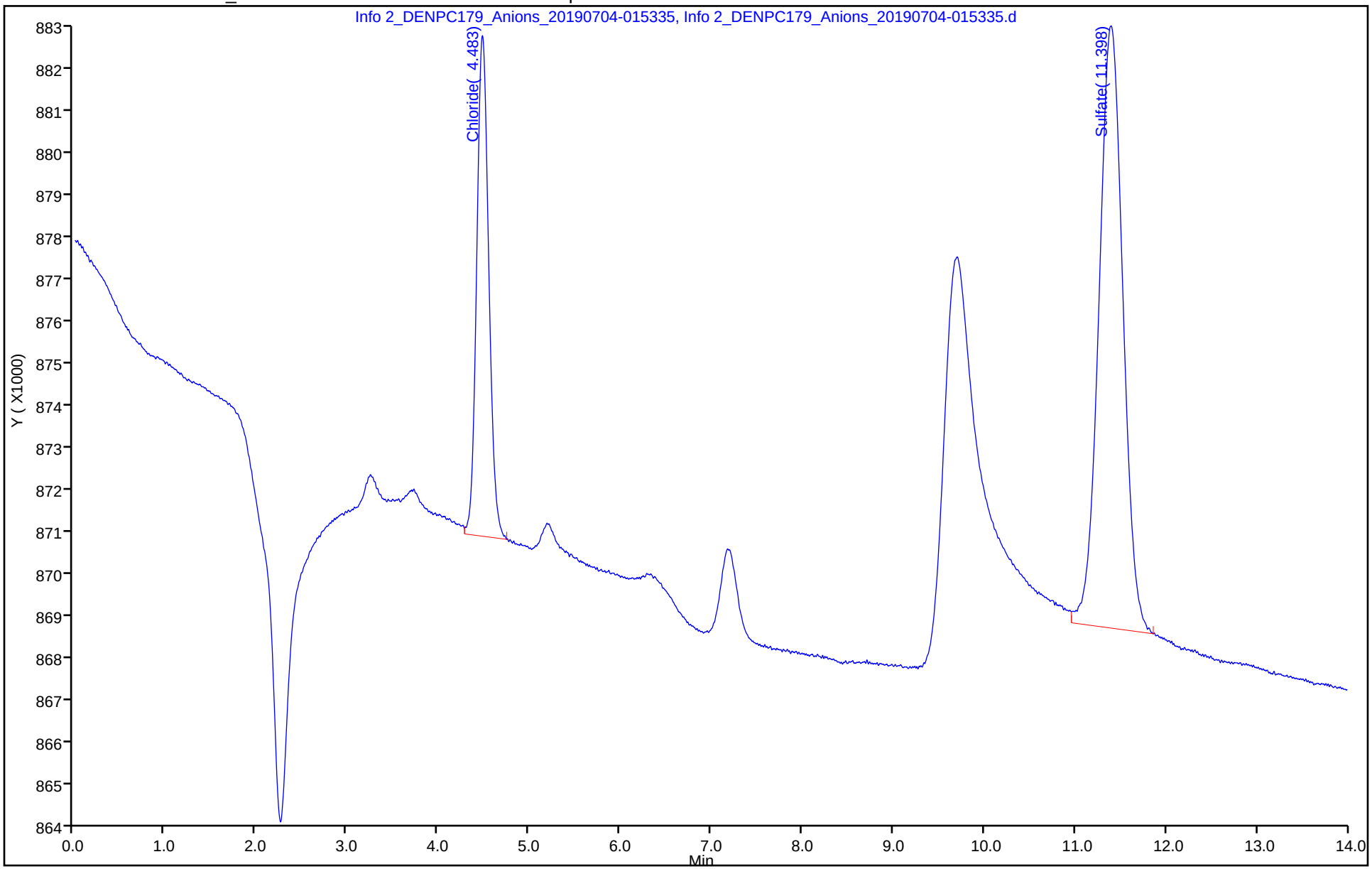
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.483	4.490	-0.007	103542		0.4713	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P		9.727				ND	
7 Sulfate	11.398	11.522	-0.124	248226		0.5933	

Report Date: 05-Jul-2019 12:45:54 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-015335.d

Injection Date:	04-Jul-2019 01:36:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-032
Lims ID: 280-124928-B-3
Client ID: SHGW02-19A
Sample Type: Client
Inject. Date: 04-Jul-2019 03:03:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-035
Misc. Info.: 280-0083445-035
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:45:48 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

First Level Reviewer: pedrickj Date: 05-Jul-2019 12:40:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.263			ND	Ua
2 Chloride	4.493	4.490	0.003	43325930	10.9	
3 Nitrite as N	5.362	5.217	0.145	67107632	NC	
4 Bromide		6.355			ND	
5 Nitrate as N	7.227	7.167	0.060	1118662	NC	
6 Orthophosphate as P	9.677	9.727	-0.050	6570149	NC	
7 Sulfate	11.395	11.522	-0.127	44293521	14.7	

QC Flag Legend

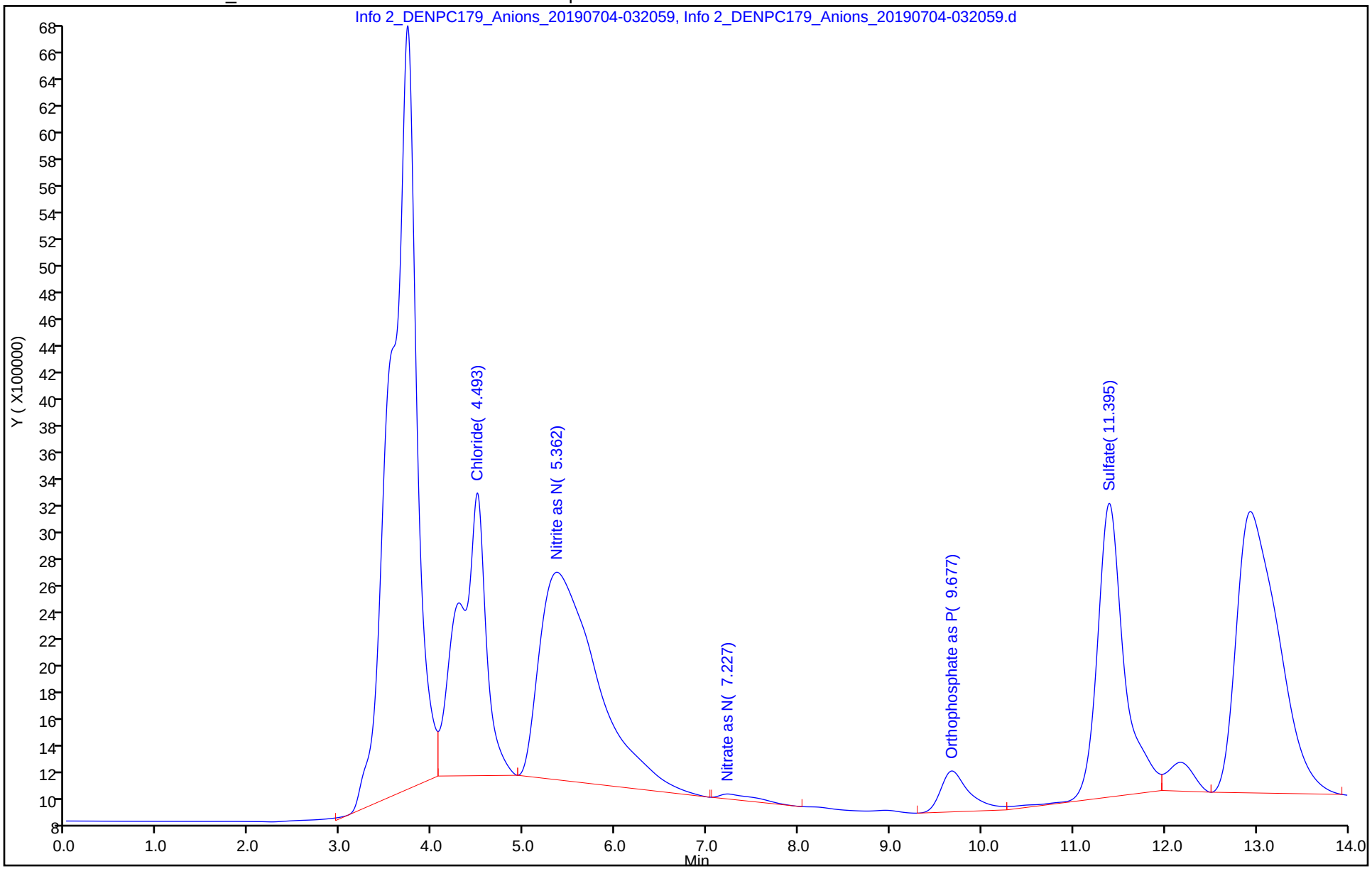
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected
a - User Assigned ID

Report Date: 05-Jul-2019 12:46:17 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-032059.d

Injection Date:	04-Jul-2019 03:03:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-3	Lab Sample ID:	280-124928-3	Worklist Smp#:	35
Client ID:	SHGW02-19A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-033
Lims ID: 280-124928-B-3 DU
Client ID:
Sample Type: DU
Inject. Date: 04-Jul-2019 03:21:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-036
Misc. Info.: 280-0083445-036
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:45:48 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

First Level Reviewer: pedrickj Date: 05-Jul-2019 12:40:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	Ua
2 Chloride	4.493	4.490	0.003	43113611		10.8	
3 Nitrite as N	5.360	5.217	0.143	67858797		NC	
4 Bromide		6.355				ND	
5 Nitrate as N	7.227	7.167	0.060	1151171		NC	
6 Orthophosphate as P	9.677	9.727	-0.050	7554128		NC	
7 Sulfate	11.395	11.522	-0.127	43933879		14.5	

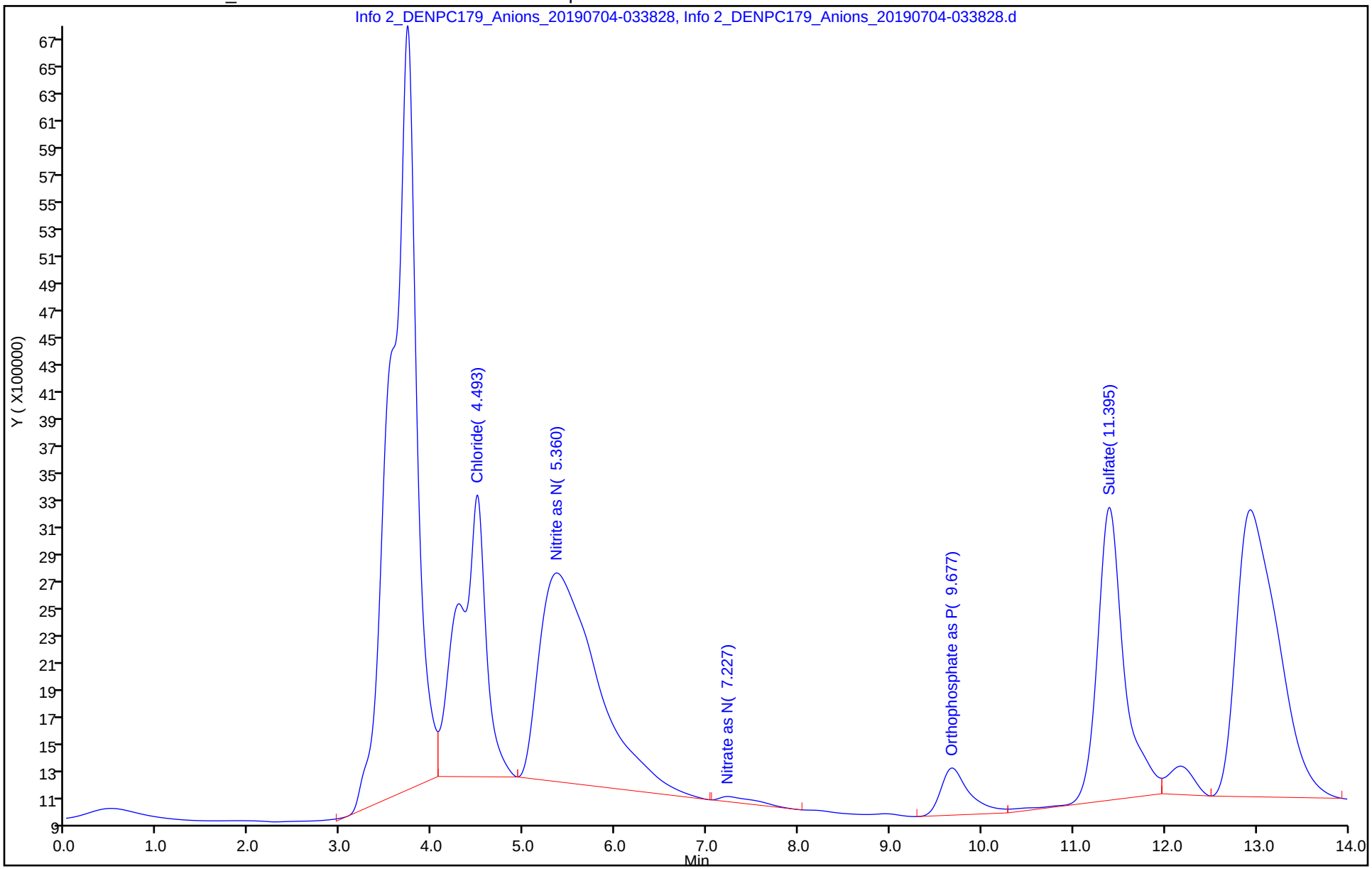
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected
a - User Assigned ID

Report Date: 05-Jul-2019 12:46:22 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-033828.d				
Injection Date:	04-Jul-2019 03:21:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-3 DU			Worklist Smp#:	36
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-035
Lims ID: 280-124928-B-3 MS
Client ID:
Sample Type: MS
Inject. Date: 04-Jul-2019 03:38:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-037
Misc. Info.: 280-0083445-037
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:45:48 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.258	3.263	-0.005	33655502	5.00	4.54	
2 Chloride	4.488	4.490	-0.002	149592064	25.0	36.5	
3 Nitrite as N	5.427	5.217	0.210	96298161	NC	NC	
4 Bromide	6.343	6.355	-0.012	8512637	5.00	5.79	
5 Nitrate as N	7.138	7.167	-0.029	51634205	NC	NC	
6 Orthophosphate as P	9.652	9.727	-0.075	27641677	NC	NC	
7 Sulfate	11.373	11.522	-0.149	125000754	25.0	40.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

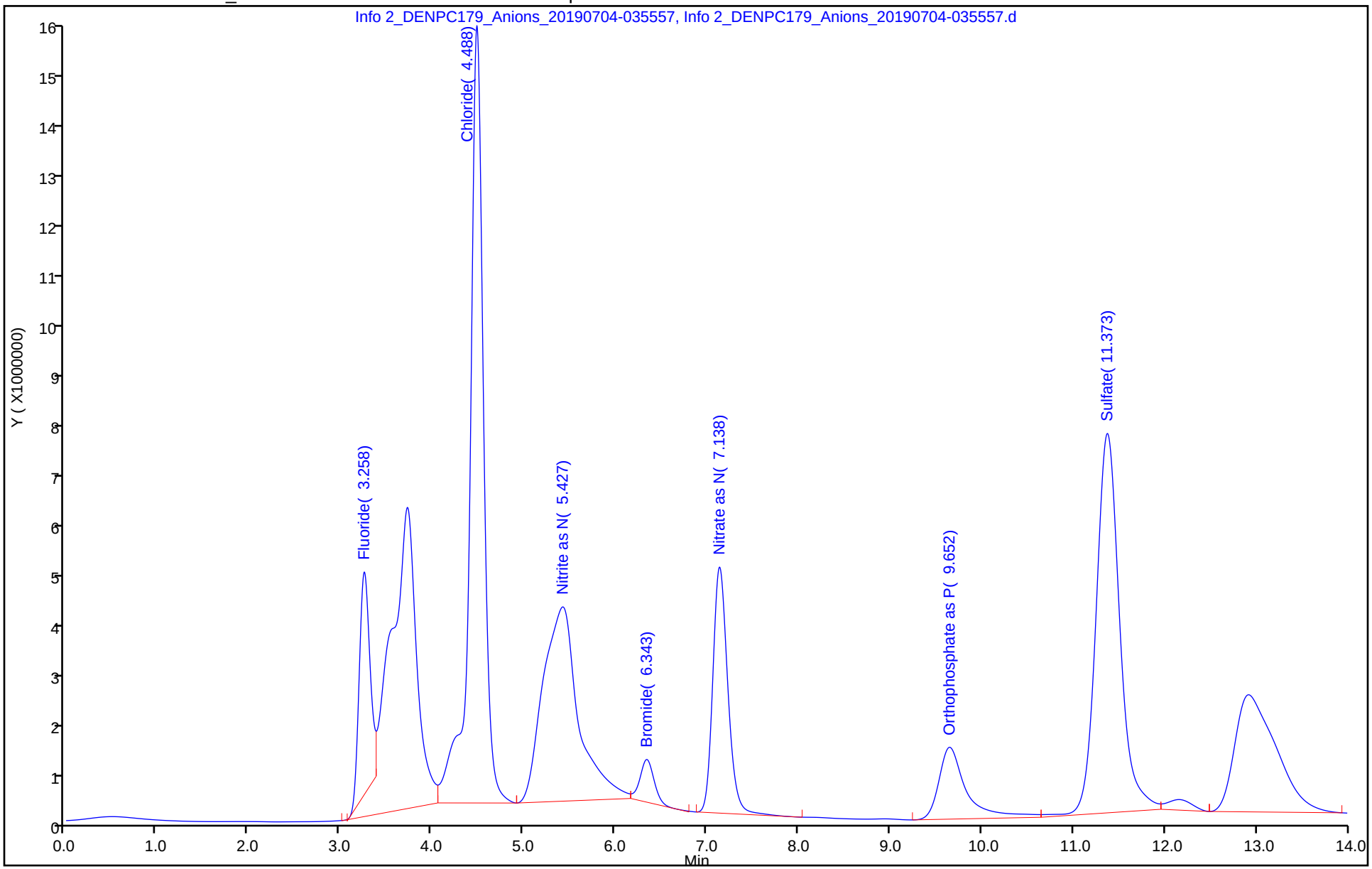
Reagents:

ICMS/MSD WEEK_00602 Amount Added: 0.10 Units: mL

Report Date: 05-Jul-2019 12:46:25 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-035557.d				
Injection Date:	04-Jul-2019 03:38:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-3 MS			Worklist Smp#:	37
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-041
Lims ID: 280-124928-B-3 MSD
Client ID:
Sample Type: MSD
Inject. Date: 04-Jul-2019 03:55:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-038
Misc. Info.: 280-0083445-038
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:45:48 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.260	3.263	-0.003	34560012	5.00	4.66	
2 Chloride	4.490	4.490	0.000	150971912	25.0	36.8	
3 Nitrite as N	5.428	5.217	0.211	97267849	NC	NC	
4 Bromide	6.347	6.355	-0.008	8605084	5.00	5.85	
5 Nitrate as N	7.142	7.167	-0.025	52303166	NC	NC	
6 Orthophosphate as P	9.653	9.727	-0.074	28110658	NC	NC	
7 Sulfate	11.378	11.522	-0.144	125907352	25.0	40.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

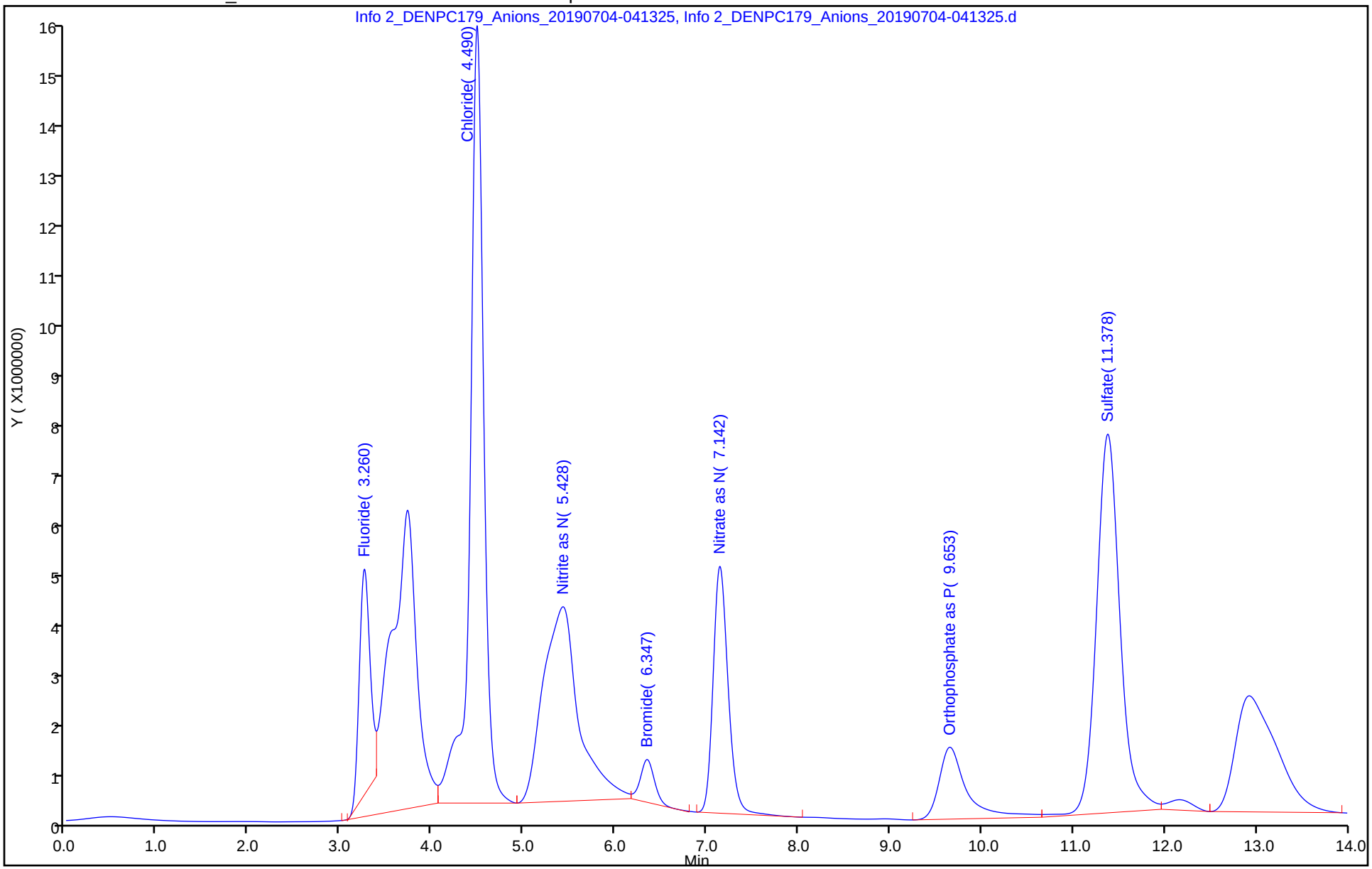
Reagents:

ICMS/MSD WEEK_00602 Amount Added: 0.10 Units: mL

Report Date: 05-Jul-2019 12:46:28 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-041325.d				
Injection Date:	04-Jul-2019 03:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-3 MSD			Worklist Smp#:	38
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-043
Lims ID: 280-124928-B-4
Client ID: SHGW05-19A
Sample Type: Client
Inject. Date: 04-Jul-2019 04:13:00 ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-039
Misc. Info.: 280-0083445-039
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:45:48 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.263			ND	
2 Chloride	4.488	4.490	-0.002	43092998	10.8	
3 Nitrite as N	5.340	5.217	0.123	67779055	NC	
4 Bromide		6.355			ND	
5 Nitrate as N	7.223	7.167	0.056	1197290	NC	
6 Orthophosphate as P	9.672	9.727	-0.055	9243835	NC	
7 Sulfate	11.382	11.522	-0.140	43853050	14.5	

QC Flag Legend

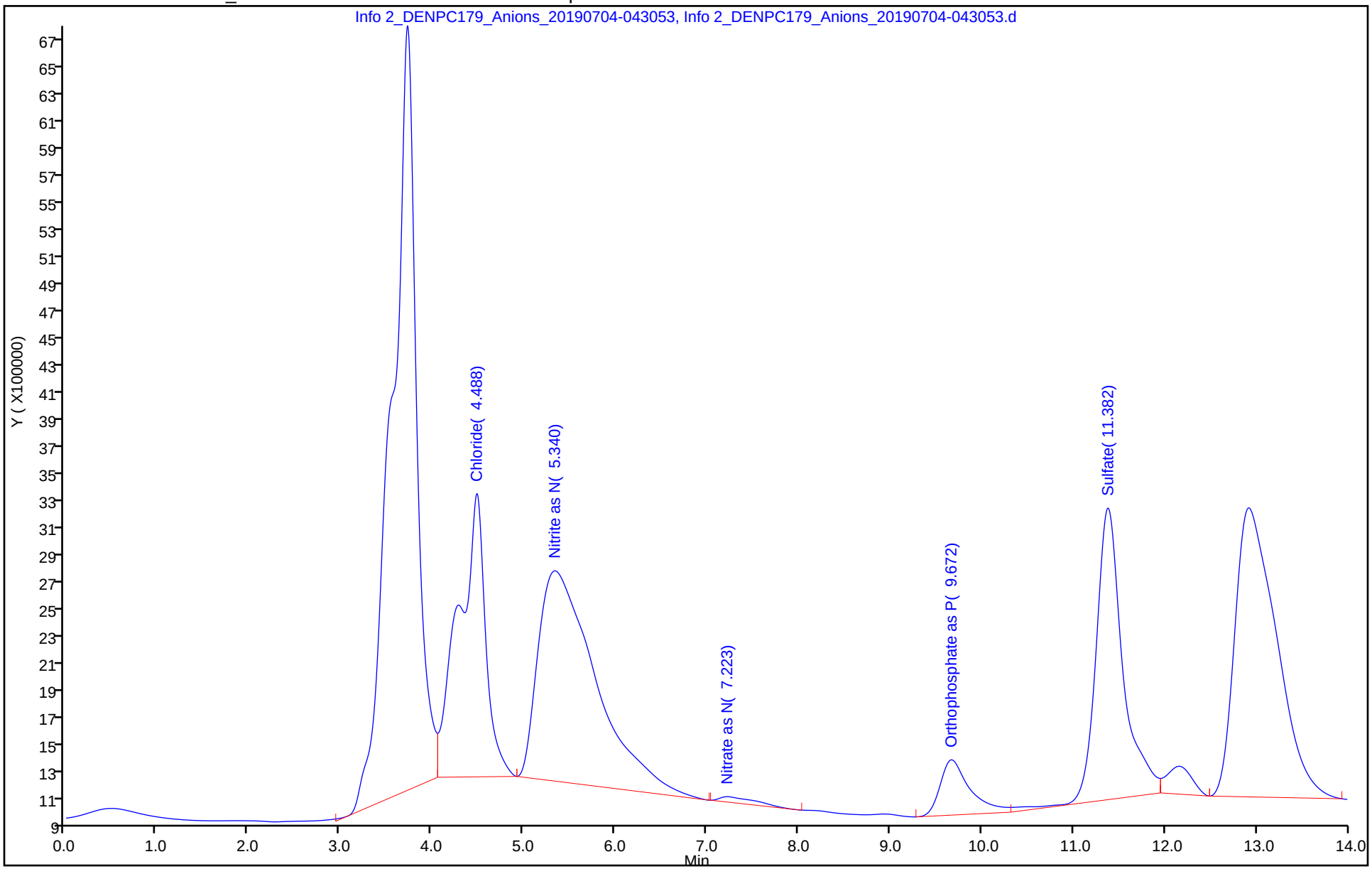
Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:46:36 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-043053.d

Injection Date:	04-Jul-2019 04:13:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-4	Lab Sample ID:	280-124928-4	Worklist Smp#:	39
Client ID:	SHGW05-19A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-044
Lims ID: 280-124928-B-5
Client ID: SAMW1-19A
Sample Type: Client
Inject. Date: 04-Jul-2019 04:30:00 ALS Bottle#: 0 Worklist Smp#: 40
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-040
Misc. Info.: 280-0083445-040
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:45:48 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.253	3.263	-0.010	1550966	0.2724	
2 Chloride	4.480	4.490	-0.010	53579182	13.4	
3 Nitrite as N	5.352	5.217	0.135	198518	NC	
4 Bromide		6.355			ND	
5 Nitrate as N	7.117	7.167	-0.050	82046407	NC	
6 Orthophosphate as P	9.643	9.727	-0.084	9352878	NC	
7 Sulfate	11.372	11.522	-0.150	77315399	25.2	

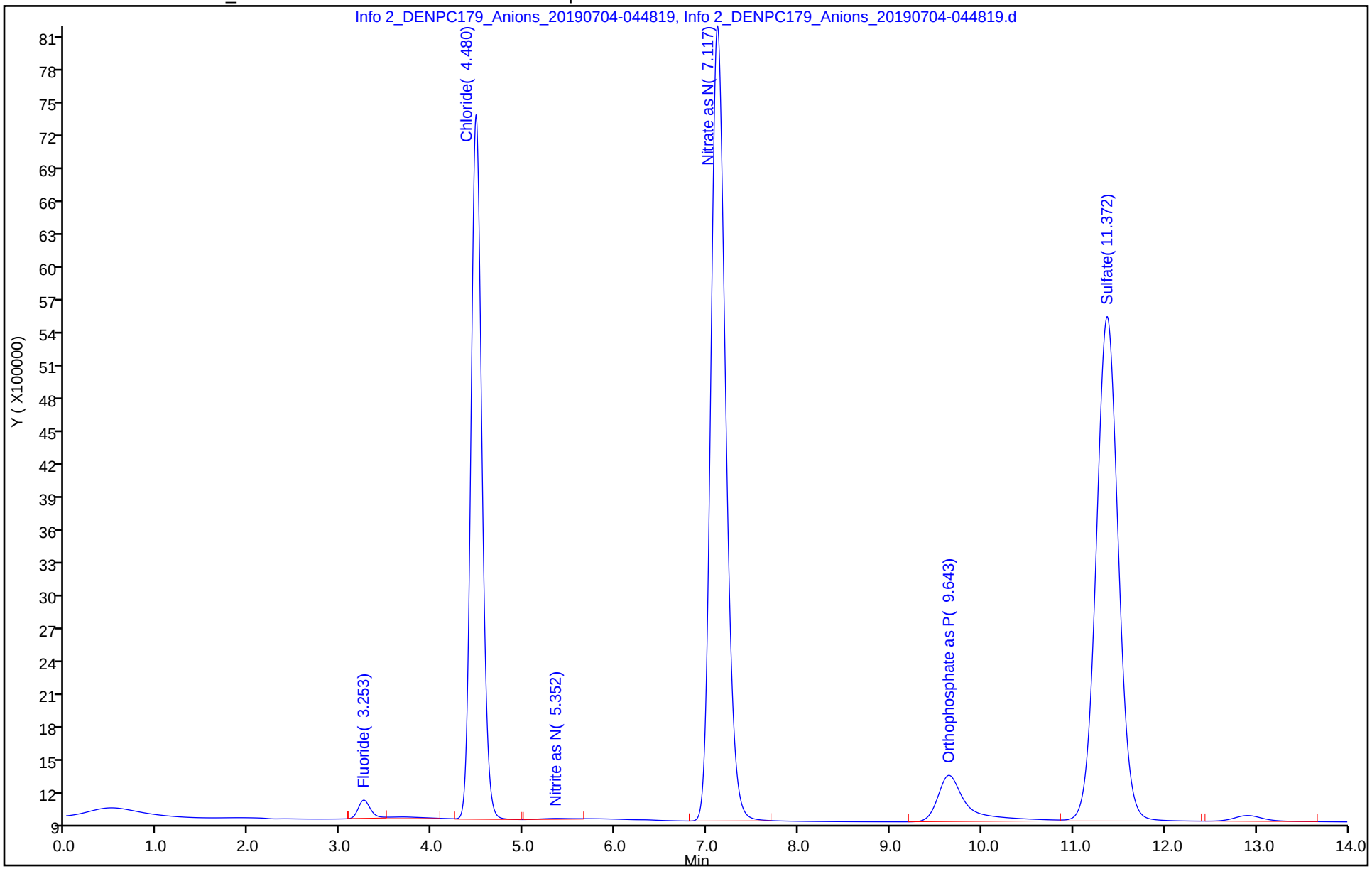
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:46:40 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-044819.d				
Injection Date:	04-Jul-2019 04:30:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-5	Lab Sample ID:	280-124928-5	Worklist Smp#:	40
Client ID:	SAMW1-19A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-050				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Jul-2019 04:48:00	ALS Bottle#:	0	Worklist Smp#:	41
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0083445-041				
Misc. Info.:	280-0083445-041				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub2				
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-Jul-2019 12:46:44	Calib Date:	02-Jul-2019 23:41:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0318				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.252	3.263	-0.011	35420725	5.00	4.78	
2 Chloride	4.470	4.490	-0.020	421109667	100.0	101.9	
3 Nitrite as N	5.190	5.217	-0.027	44719581	NC	NC	
4 Bromide	6.318	6.355	-0.037	7020206	5.00	4.78	
5 Nitrate as N	7.120	7.167	-0.047	47276910	NC	NC	
6 Orthophosphate as P	9.617	9.727	-0.110	20484595	NC	NC	
7 Sulfate	11.342	11.522	-0.180	303303986	100.0	97.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

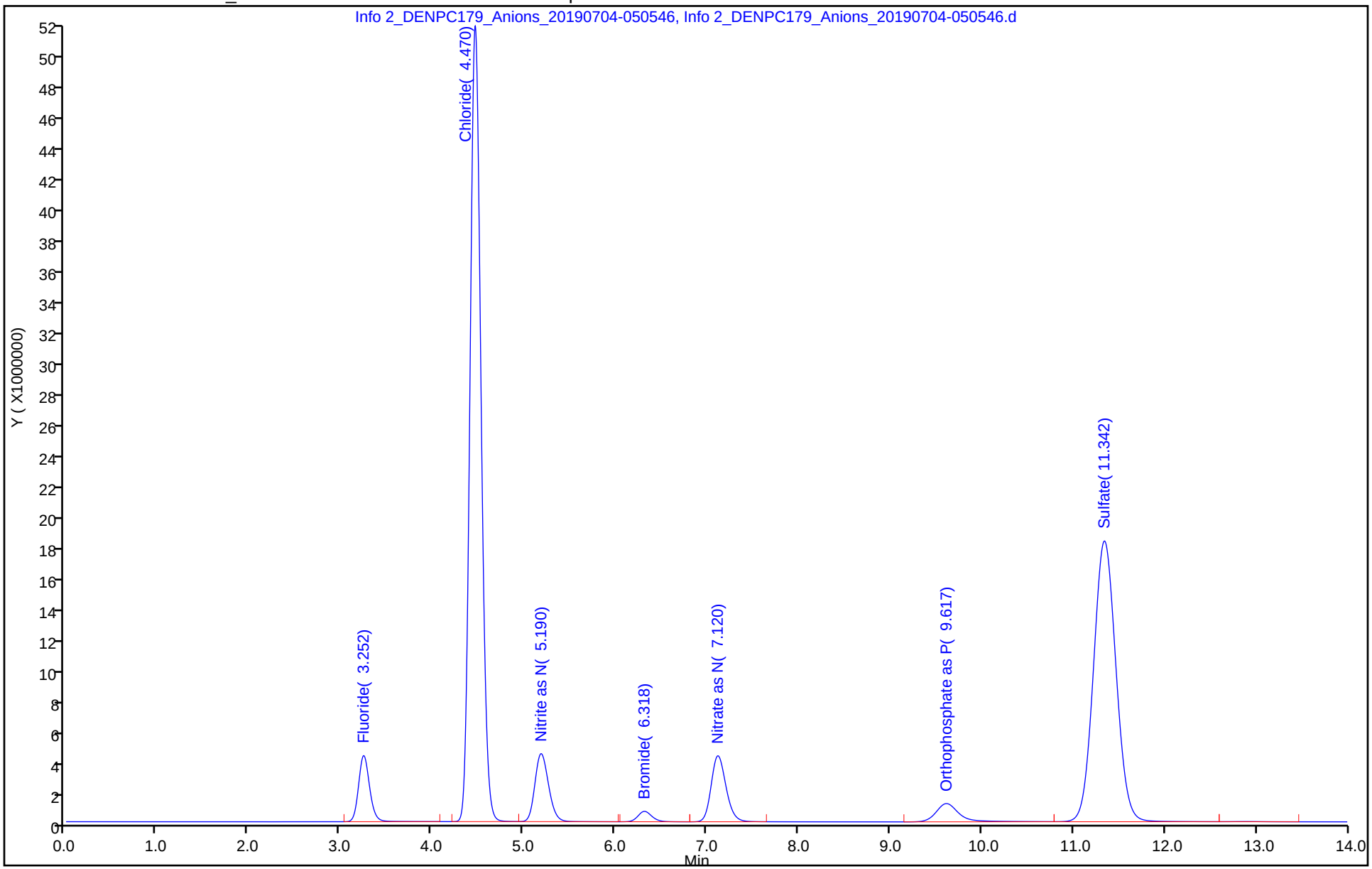
Reagents:

IC LCS_01622 Amount Added: 10.00 Units: mL

Report Date: 05-Jul-2019 12:46:46 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-050546.d				
Injection Date:	04-Jul-2019 04:48:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-052				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	04-Jul-2019 05:05:00	ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0083445-042				
Misc. Info.:	280-0083445-042				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-Jul-2019 12:46:44	Calib Date:	02-Jul-2019 23:41:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0318				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.472	4.490	-0.018	32140		0.4541	
3 Nitrite as N	5.218	5.217	0.001	27012		NC	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.673	9.727	-0.054	582747		NC	
7 Sulfate		11.522				ND	

QC Flag Legend

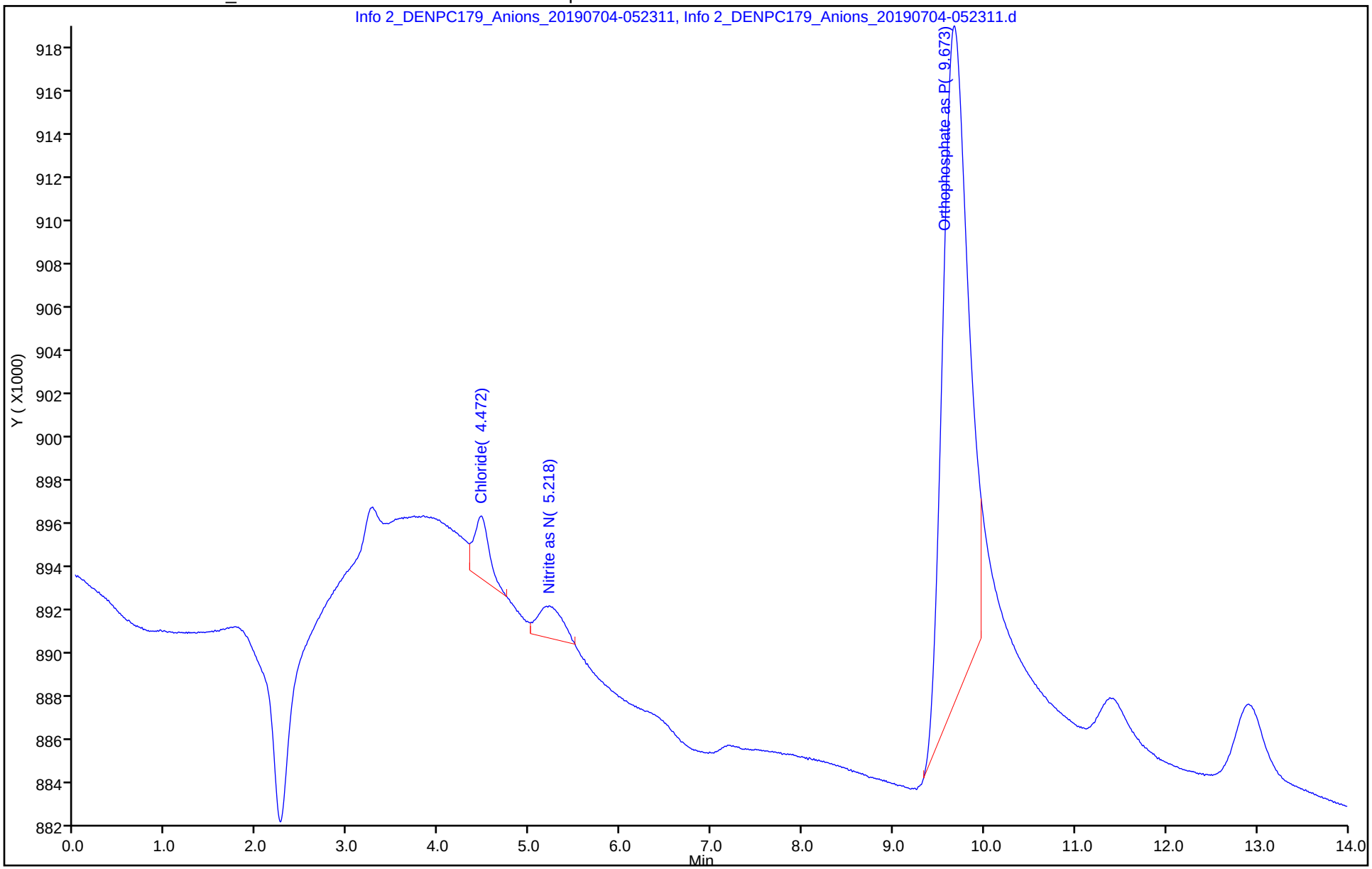
Processing Flags

NC - Not Calibrated

Report Date: 05-Jul-2019 12:46:48 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-052311.d				
Injection Date:	04-Jul-2019 05:05:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-054
Lims ID: 280-124928-B-6
Client ID: G0053-19A
Sample Type: Client
Inject. Date: 04-Jul-2019 05:23:00 ALS Bottle#: 0 Worklist Smp#: 43
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-043
Misc. Info.: 280-0083445-043
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:46:44 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.252	3.263	-0.011	520213	0.1353	
2 Chloride	4.480	4.490	-0.010	20699267	5.44	
3 Nitrite as N	5.385	5.217	0.168	36010	NC	
4 Bromide	6.345	6.355	-0.010	102877	0.1162	
5 Nitrate as N	7.095	7.167	-0.072	166739273	NC	
6 Orthophosphate as P	9.667	9.727	-0.060	805169	NC	
7 Sulfate	11.365	11.522	-0.157	83370967	27.1	

QC Flag Legend

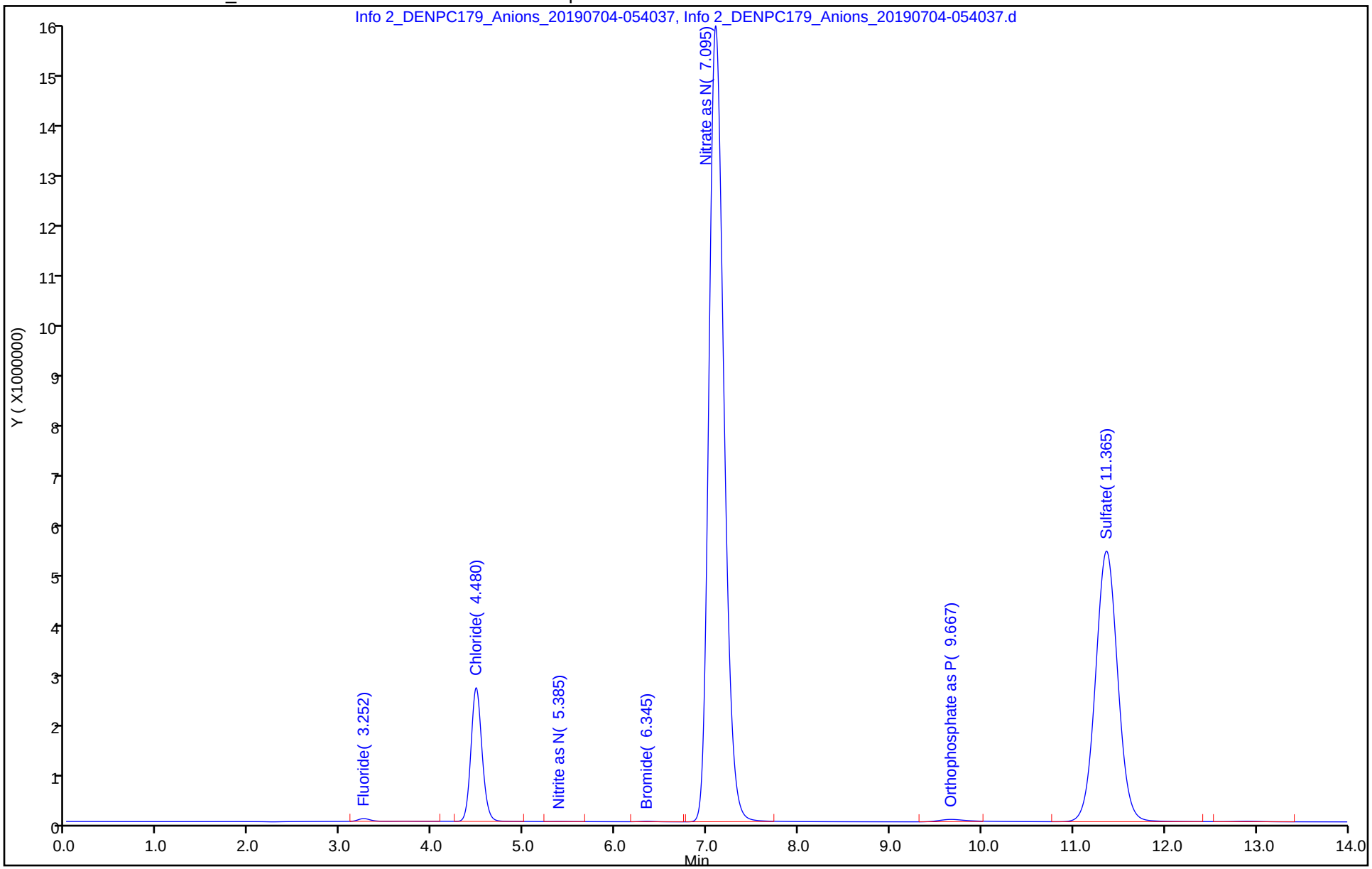
Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:46:54 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-054037.d

Injection Date:	04-Jul-2019 05:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-6	Lab Sample ID:	280-124928-6	Worklist Smp#:	43
Client ID:	G0053-19A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-055
Lims ID: 280-124928-B-6 DU
Client ID:
Sample Type: DU
Inject. Date: 04-Jul-2019 05:40:00 ALS Bottle#: 0 Worklist Smp#: 44
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-044
Misc. Info.: 280-0083445-044
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:46:44 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.253	3.263	-0.010	443834		0.1251	
2 Chloride	4.482	4.490	-0.008	20690926		5.43	
3 Nitrite as N	5.377	5.217	0.160	34618		NC	
4 Bromide	6.345	6.355	-0.010	99874		0.1142	
5 Nitrate as N	7.097	7.167	-0.070	166851636		NC	
6 Orthophosphate as P	9.668	9.727	-0.059	1049787		NC	
7 Sulfate	11.367	11.522	-0.155	83286471		27.1	

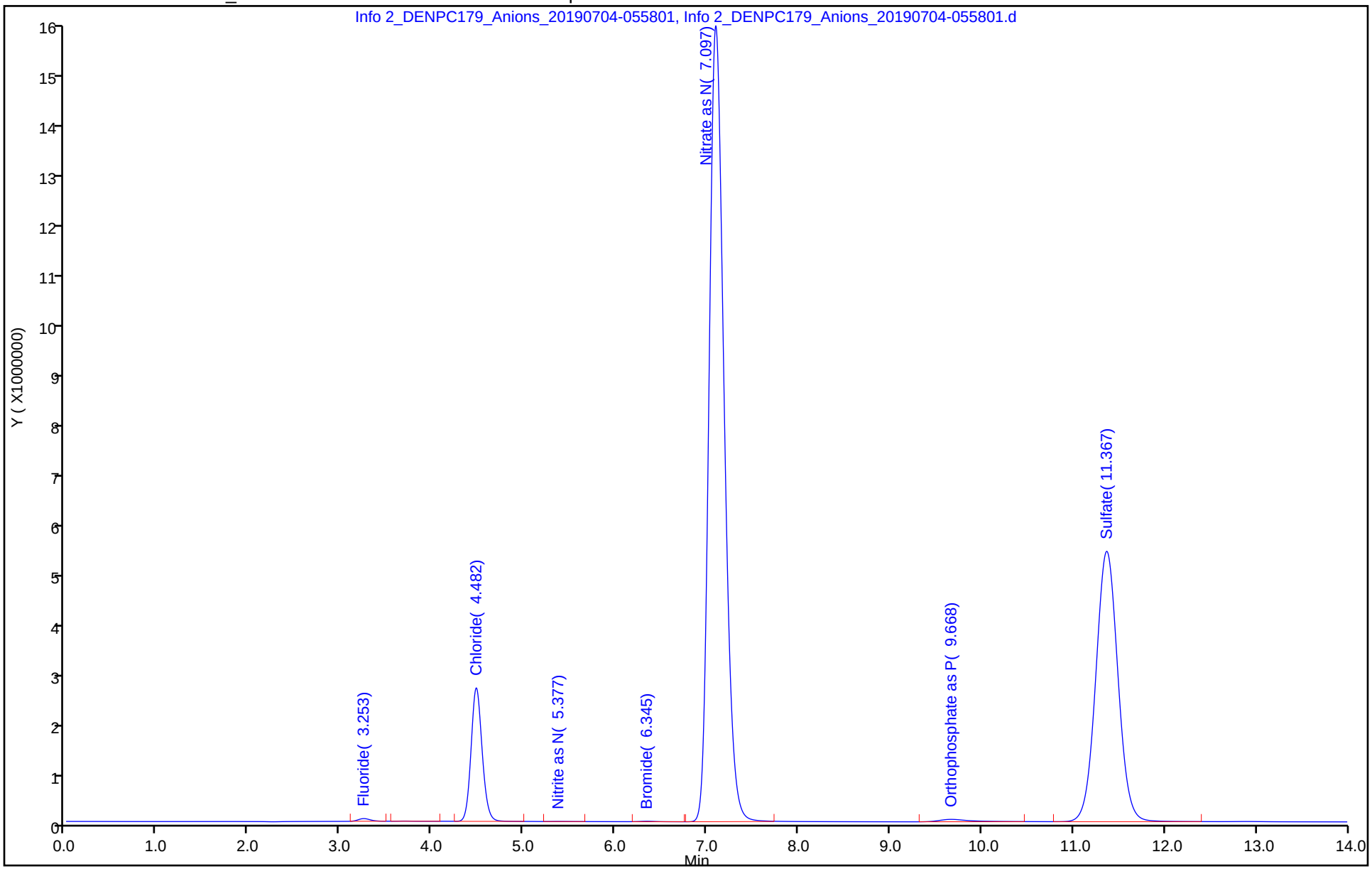
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:47:00 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-055801.d				
Injection Date:	04-Jul-2019 05:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-6 DU			Worklist Smp#:	44
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-061
Lims ID: 280-124928-B-6 MS
Client ID:
Sample Type: MS
Inject. Date: 04-Jul-2019 05:58:00 ALS Bottle#: 0 Worklist Smp#: 45
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-045
Misc. Info.: 280-0083445-045
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:46:44 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.250	3.263	-0.013	36169147	5.00	4.88	
2 Chloride	4.472	4.490	-0.018	135667288	25.0	33.1	
3 Nitrite as N	5.208	5.217	-0.009	46316316	NC	NC	
4 Bromide	6.318	6.355	-0.037	7452710	5.00	5.07	
5 Nitrate as N	7.082	7.167	-0.085	223813840	NC	NC	
6 Orthophosphate as P	9.617	9.727	-0.110	22569764	NC	NC	
7 Sulfate	11.347	11.522	-0.175	168430193	25.0	54.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

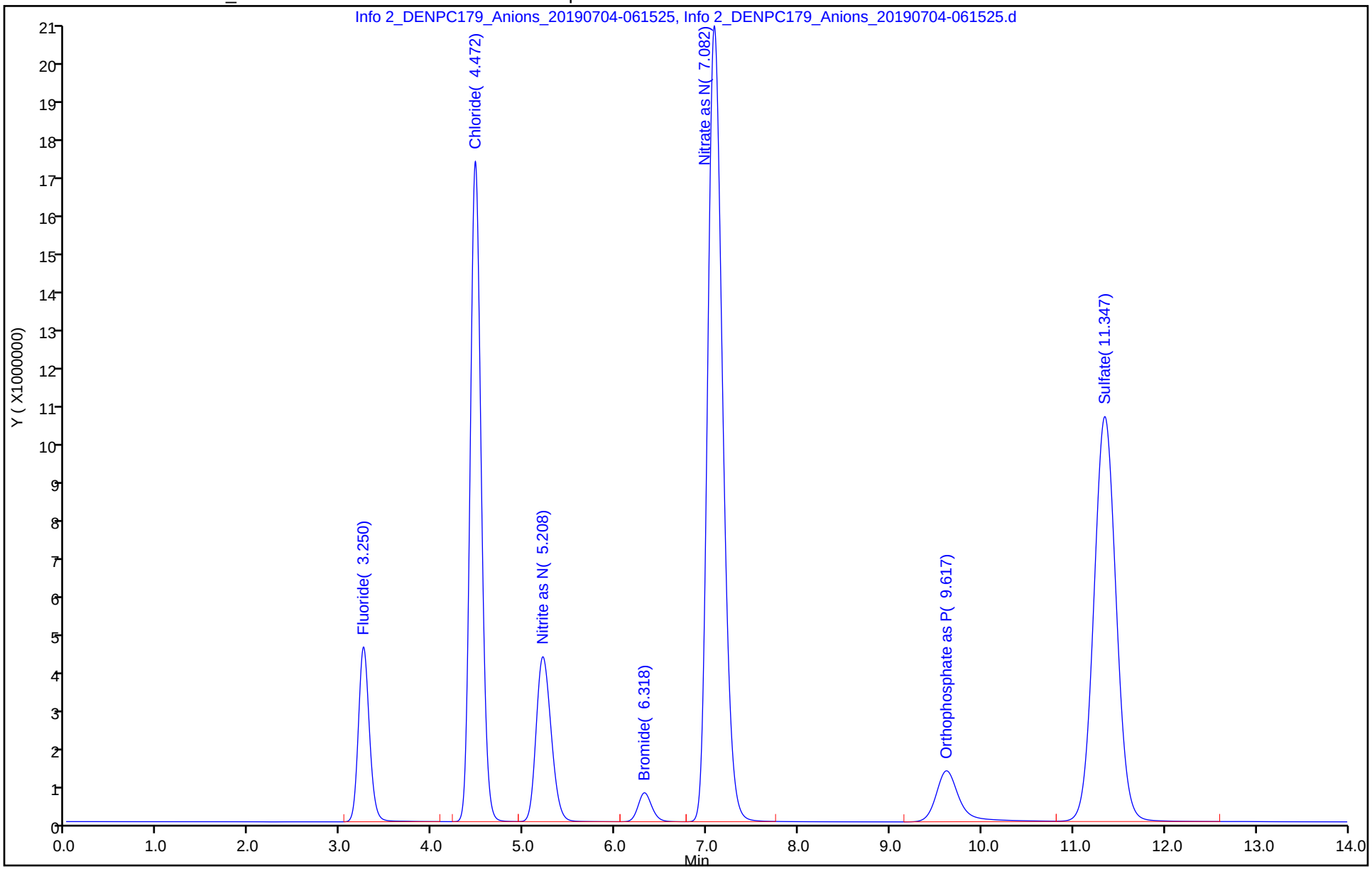
ICMS/MSD WEEK_00602 Amount Added: 0.10 Units: mL

Report Date: 05-Jul-2019 12:47:05 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-061525.d

Injection Date:	04-Jul-2019 05:58:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-6 MS			Worklist Smp#:	45
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-063
Lims ID: 280-124928-B-6 MSD
Client ID:
Sample Type: MSD
Inject. Date: 04-Jul-2019 06:15:00 ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-046
Misc. Info.: 280-0083445-046
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:46:44 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.252	3.263	-0.011	35809948	5.00	4.83	
2 Chloride	4.473	4.490	-0.017	135733530	25.0	33.2	
3 Nitrite as N	5.210	5.217	-0.007	46076981	NC	NC	
4 Bromide	6.322	6.355	-0.033	7458151	5.00	5.08	
5 Nitrate as N	7.085	7.167	-0.082	223758629	NC	NC	
6 Orthophosphate as P	9.620	9.727	-0.107	22548187	NC	NC	
7 Sulfate	11.350	11.522	-0.172	168474031	25.0	54.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

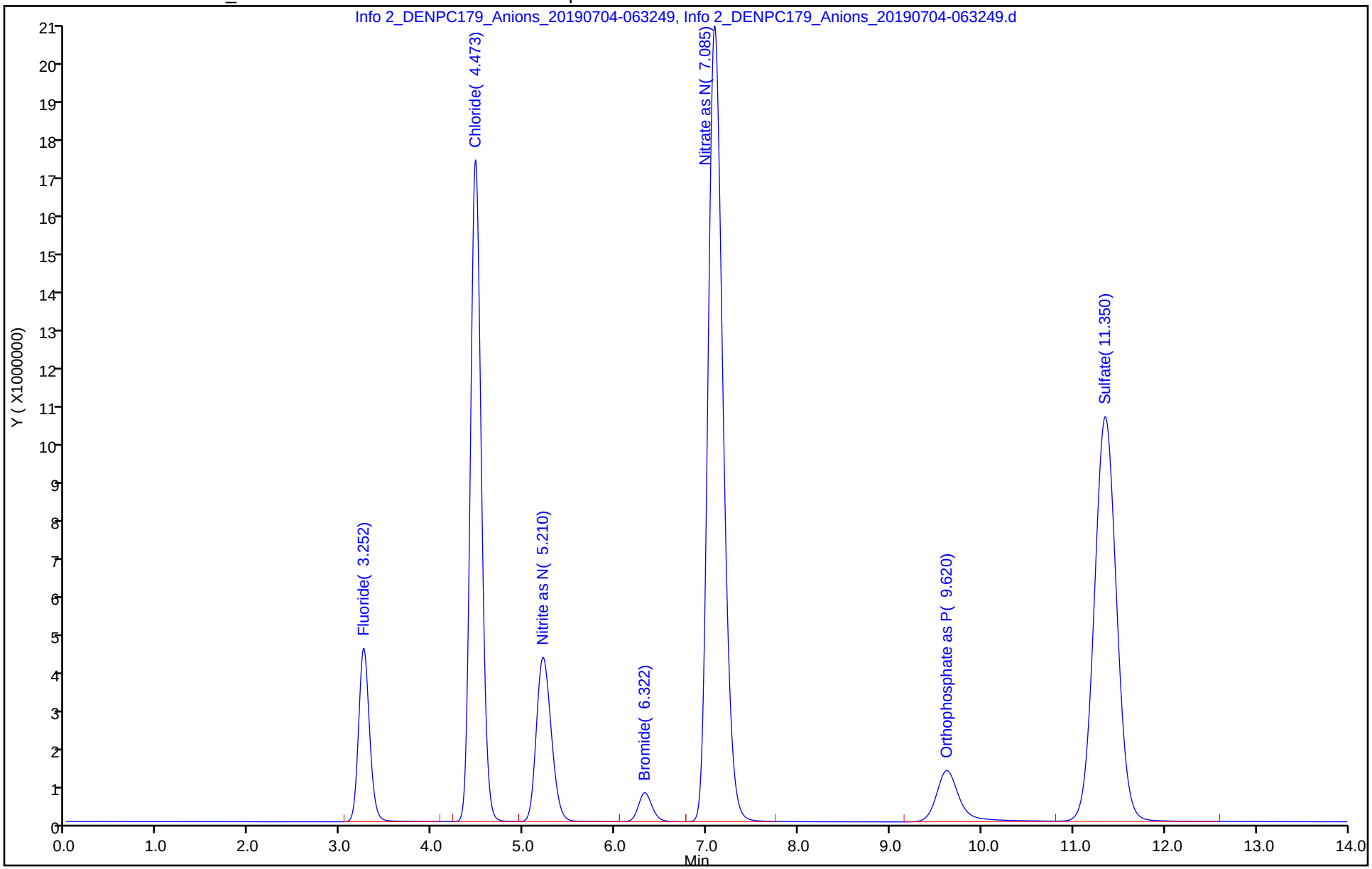
ICMS/MSD WEEK_00602 Amount Added: 0.10 Units: mL

Report Date: 05-Jul-2019 12:47:08 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-063249.d

Injection Date:	04-Jul-2019 06:15:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-B-6 MSD			Worklist Smp#:	46
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-074
Lims ID: 280-124928-D-10
Client ID: SHGW03-19A
Sample Type: Client
Inject. Date: 04-Jul-2019 07:25:00 ALS Bottle#: 0 Worklist Smp#: 50
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-050
Misc. Info.: 280-0083445-050
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:46:44 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.250	3.263	-0.013	909611	0.1871	
2 Chloride	4.485	4.490	-0.005	29245400	7.50	
3 Nitrite as N	5.370	5.217	0.153	75106	NC	
4 Bromide		6.355			ND	
5 Nitrate as N	7.170	7.167	0.003	4571192	NC	
6 Orthophosphate as P	9.672	9.727	-0.055	399289	NC	
7 Sulfate	11.355	11.522	-0.167	89751215	29.2	

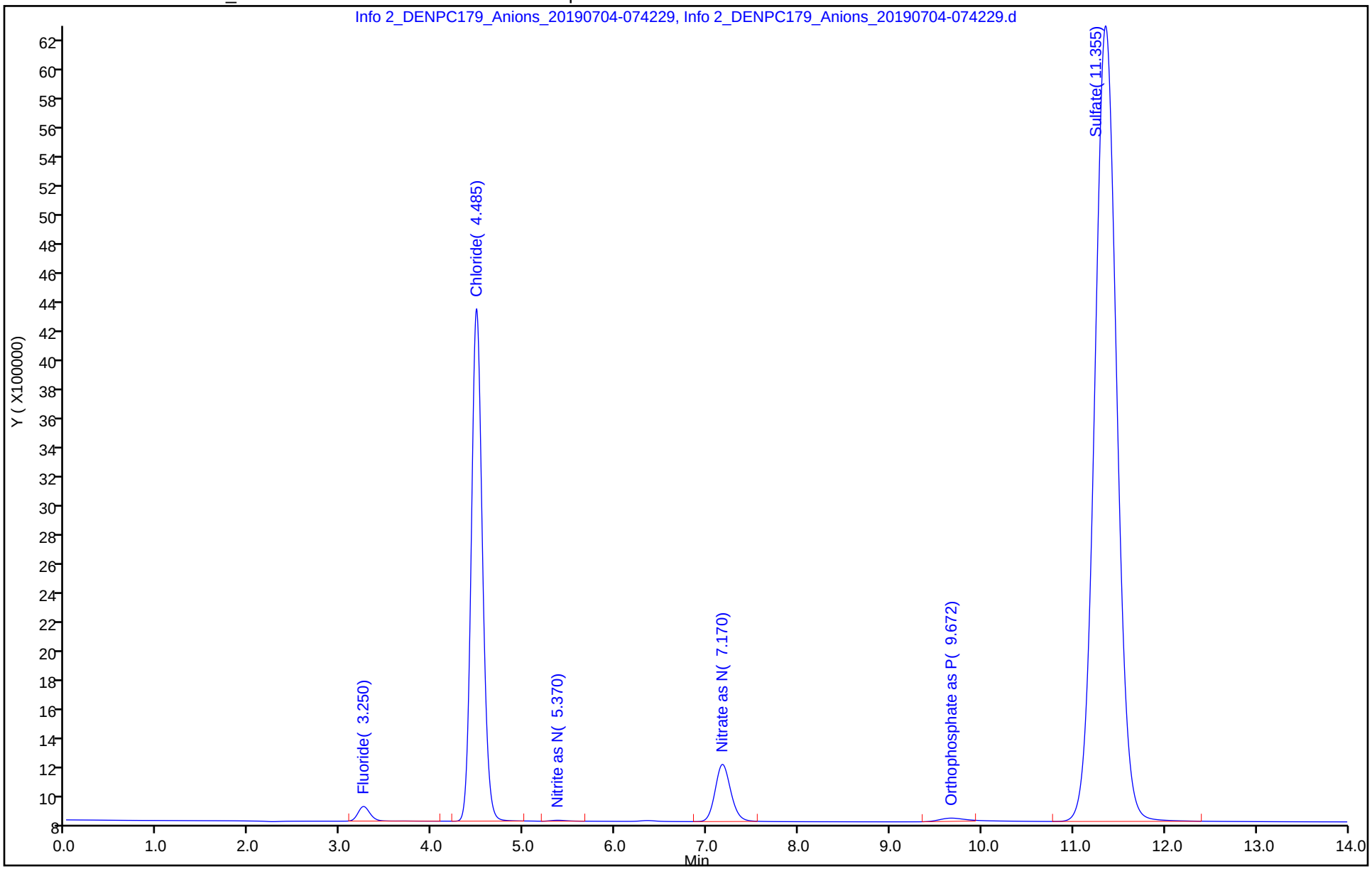
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:47:25 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-074229.d				
Injection Date:	04-Jul-2019 07:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-D-10	Lab Sample ID:	280-124928-10	Worklist Smp#:	50
Client ID:	SHGW03-19A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-075
Lims ID: 280-124928-D-11
Client ID: G0069-19A
Sample Type: Client
Inject. Date: 04-Jul-2019 07:42:00 ALS Bottle#: 0 Worklist Smp#: 51
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-051
Misc. Info.: 280-0083445-051
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:46:44 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.248	3.263	-0.015	1290303	0.2377	
2 Chloride	4.480	4.490	-0.010	11381023	3.19	
3 Nitrite as N	5.390	5.217	0.173	39874	NC	
4 Bromide		6.355			ND	
5 Nitrate as N	7.152	7.167	-0.015	12871606	NC	
6 Orthophosphate as P	9.652	9.727	-0.075	861192	NC	
7 Sulfate	11.353	11.522	-0.169	65180590	21.3	

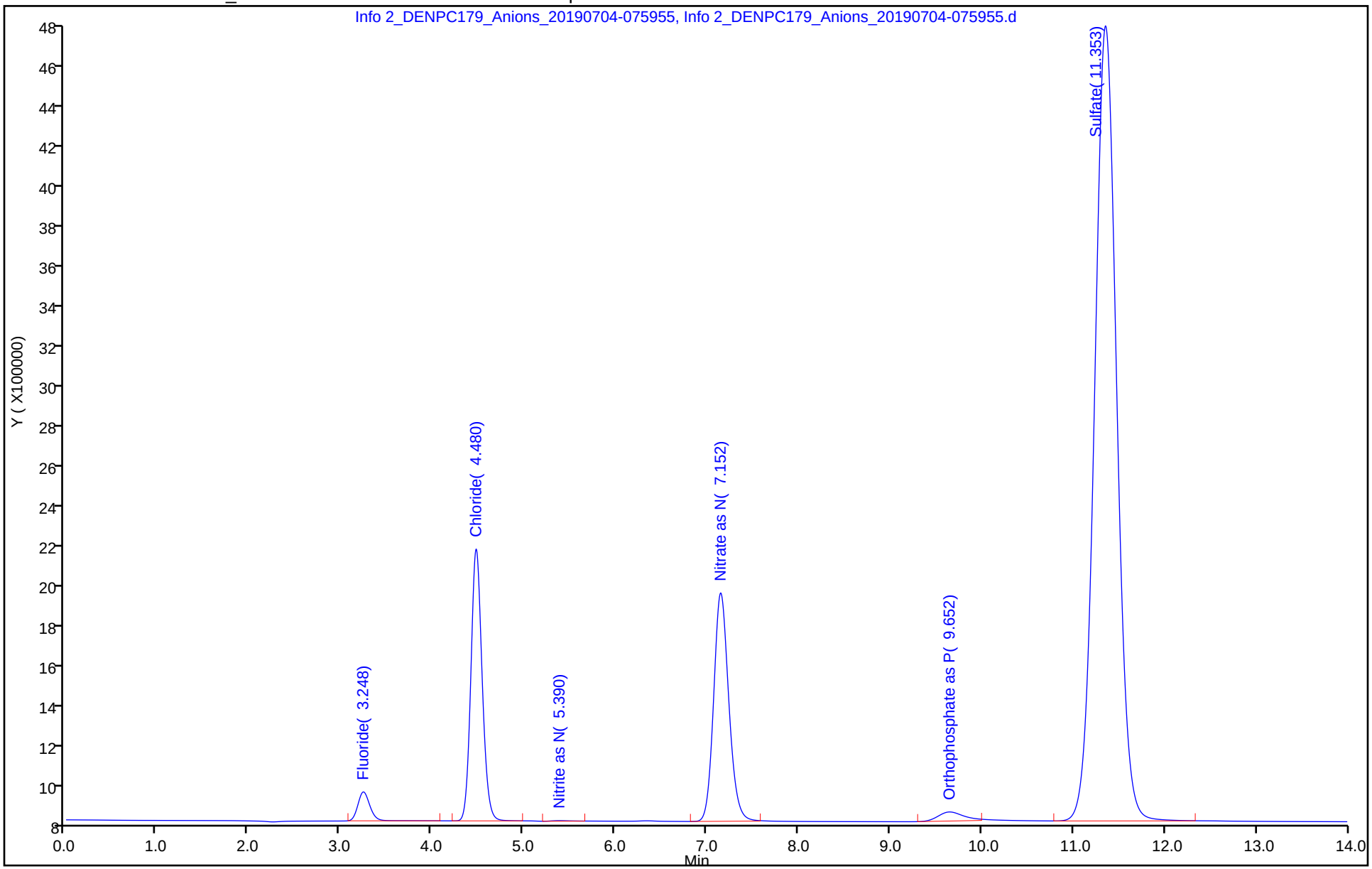
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:47:29 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-075955.d				
Injection Date:	04-Jul-2019 07:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-D-11	Lab Sample ID:	280-124928-11	Worklist Smp#:	51
Client ID:	G0069-19A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-081
Lims ID: 280-124928-D-11 DU
Client ID:
Sample Type: DU
Inject. Date: 04-Jul-2019 07:59:00 ALS Bottle#: 0 Worklist Smp#: 52
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-052
Misc. Info.: 280-0083445-052
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:46:44 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.250	3.263	-0.013	1287500		0.2374	
2 Chloride	4.482	4.490	-0.008	11385239		3.19	
3 Nitrite as N	5.385	5.217	0.168	36859		NC	
4 Bromide		6.355				ND	
5 Nitrate as N	7.152	7.167	-0.015	12875388		NC	
6 Orthophosphate as P	9.652	9.727	-0.075	1105323		NC	
7 Sulfate	11.355	11.522	-0.167	65188352		21.3	

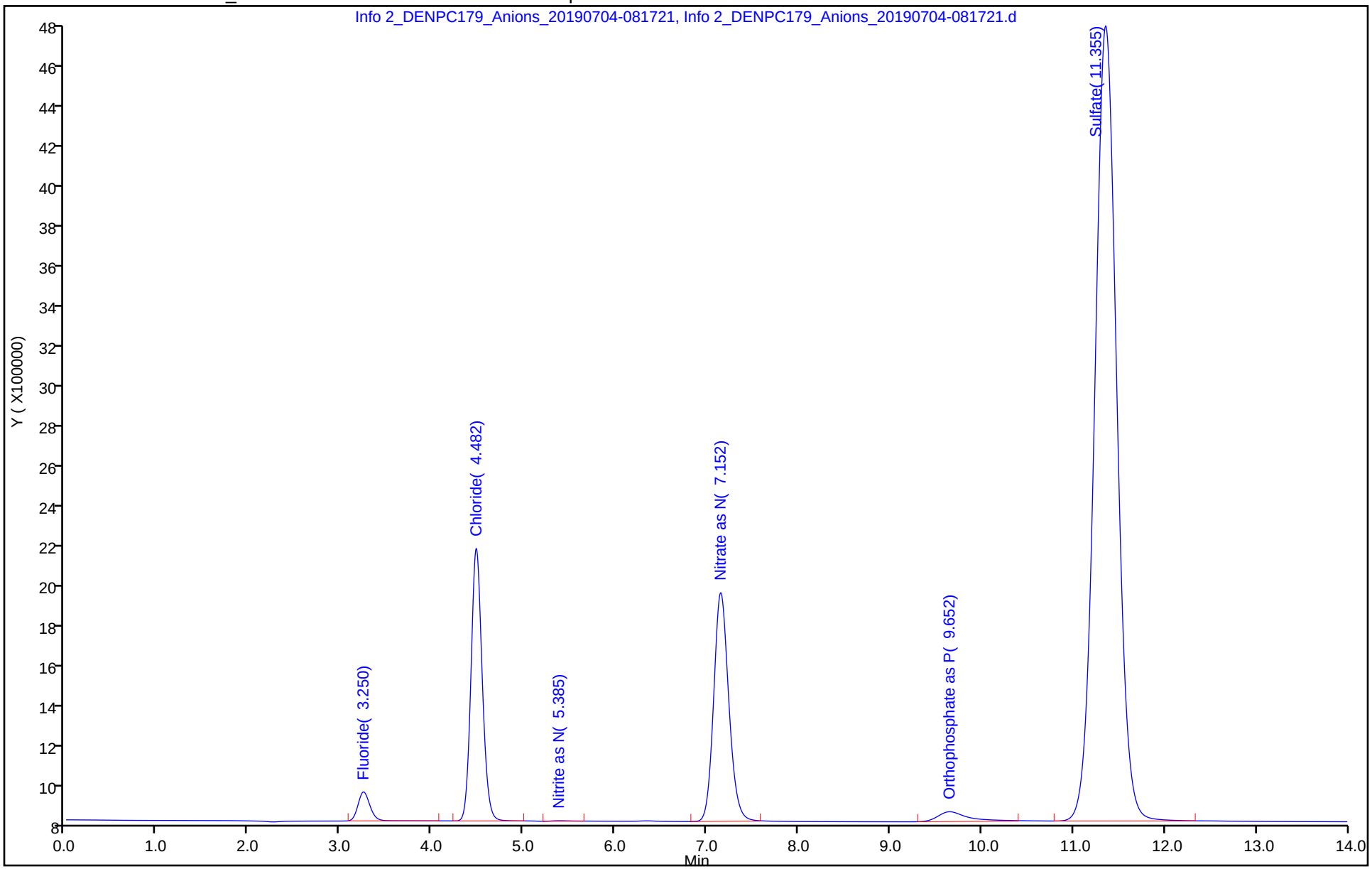
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:47:33 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-081721.d				
Injection Date:	04-Jul-2019 07:59:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-D-11 DU			Worklist Smp#:	52
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-083				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Jul-2019 08:17:00	ALS Bottle#:	0	Worklist Smp#:	53
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0083445-053				
Misc. Info.:	280-0083445-053				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub2				
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-Jul-2019 12:47:40	Calib Date:	02-Jul-2019 23:41:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0318				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.250	3.263	-0.013	34224261	5.00	4.62	
2 Chloride	4.467	4.490	-0.023	422214703	100.0	102.2	
3 Nitrite as N	5.187	5.217	-0.030	44664106	NC	NC	
4 Bromide	6.315	6.355	-0.040	6955756	5.00	4.74	
5 Nitrate as N	7.115	7.167	-0.052	47249354	NC	NC	
6 Orthophosphate as P	9.603	9.727	-0.124	19162680	NC	NC	
7 Sulfate	11.323	11.522	-0.199	304219355	100.0	97.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

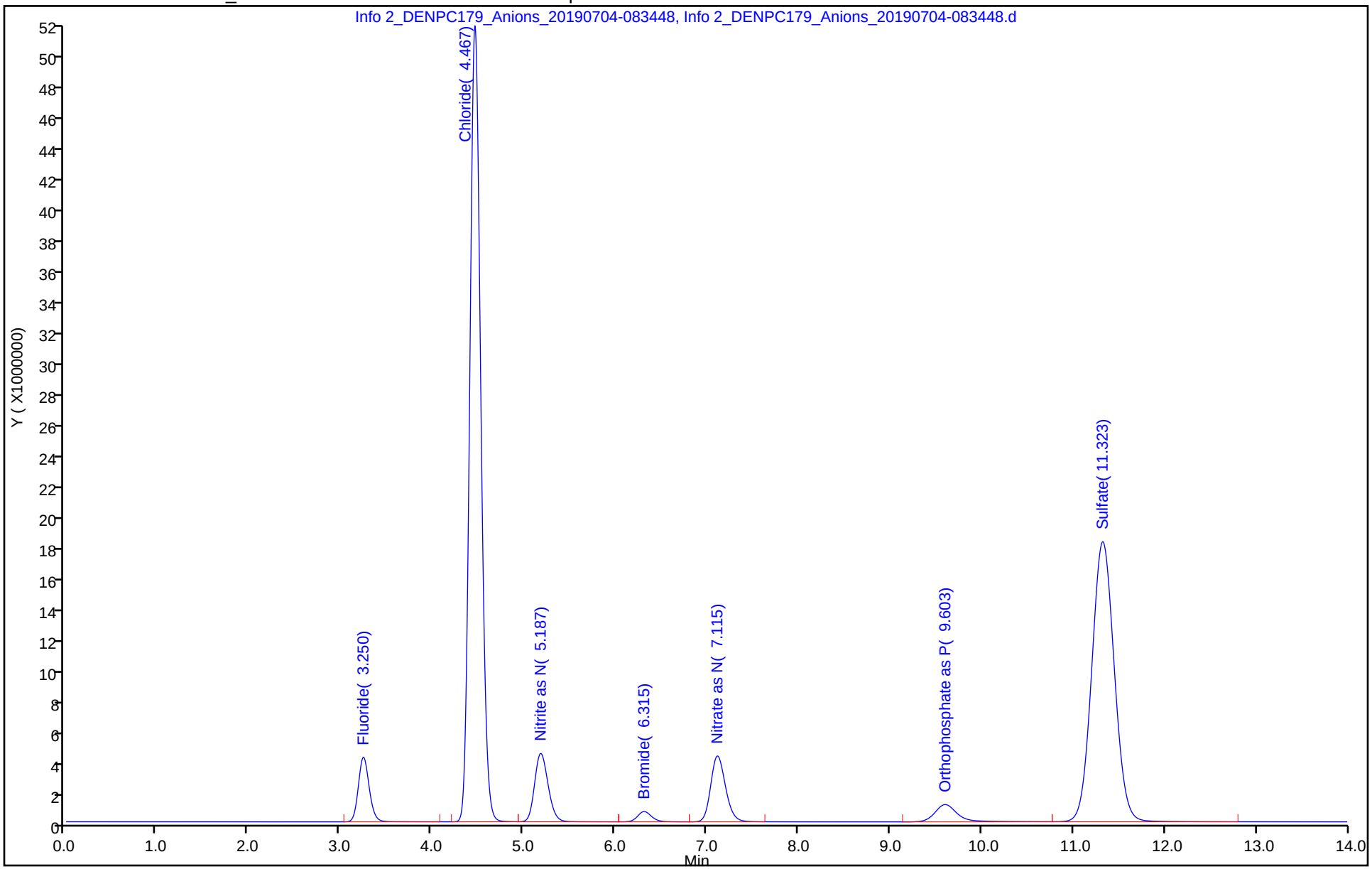
Reagents:

IC LCS_01622 Amount Added: 10.00 Units: mL

Report Date: 05-Jul-2019 12:47:43 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-083448.d				
Injection Date:	04-Jul-2019 08:17:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-085
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 04-Jul-2019 08:34:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-054
Misc. Info.: 280-0083445-054
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:47:40 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.478	4.490	-0.012	19500		0.4511	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.653	9.727	-0.074	127687		NC	
7 Sulfate		11.522				ND	

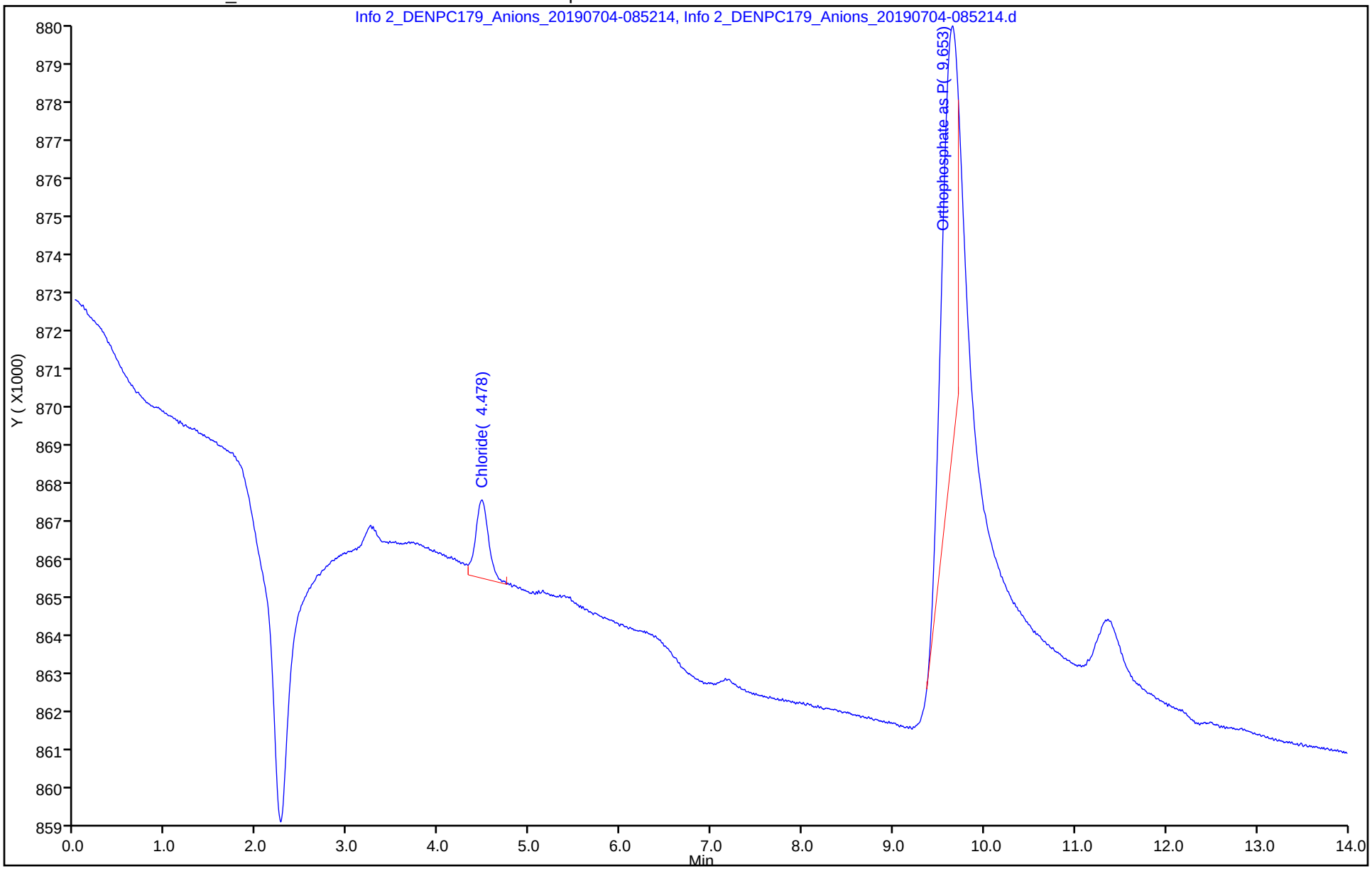
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:47:46 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-085214.d				
Injection Date:	04-Jul-2019 08:34:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	54
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-090
Lims ID: 280-124928-D-11 MS
Client ID:
Sample Type: MS
Inject. Date: 04-Jul-2019 08:52:00 ALS Bottle#: 0 Worklist Smp#: 55
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-055
Misc. Info.: 280-0083445-055
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:47:40 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.250	3.263	-0.013	35713561	5.00	4.82	
2 Chloride	4.472	4.490	-0.018	124161134	25.0	30.4	
3 Nitrite as N	5.210	5.217	-0.007	45444616	NC	NC	
4 Bromide	6.318	6.355	-0.037	7252642	5.00	4.94	
5 Nitrate as N	7.112	7.167	-0.055	66712293	NC	NC	
6 Orthophosphate as P	9.612	9.727	-0.115	21698240	NC	NC	
7 Sulfate	11.337	11.522	-0.185	149216113	25.0	48.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

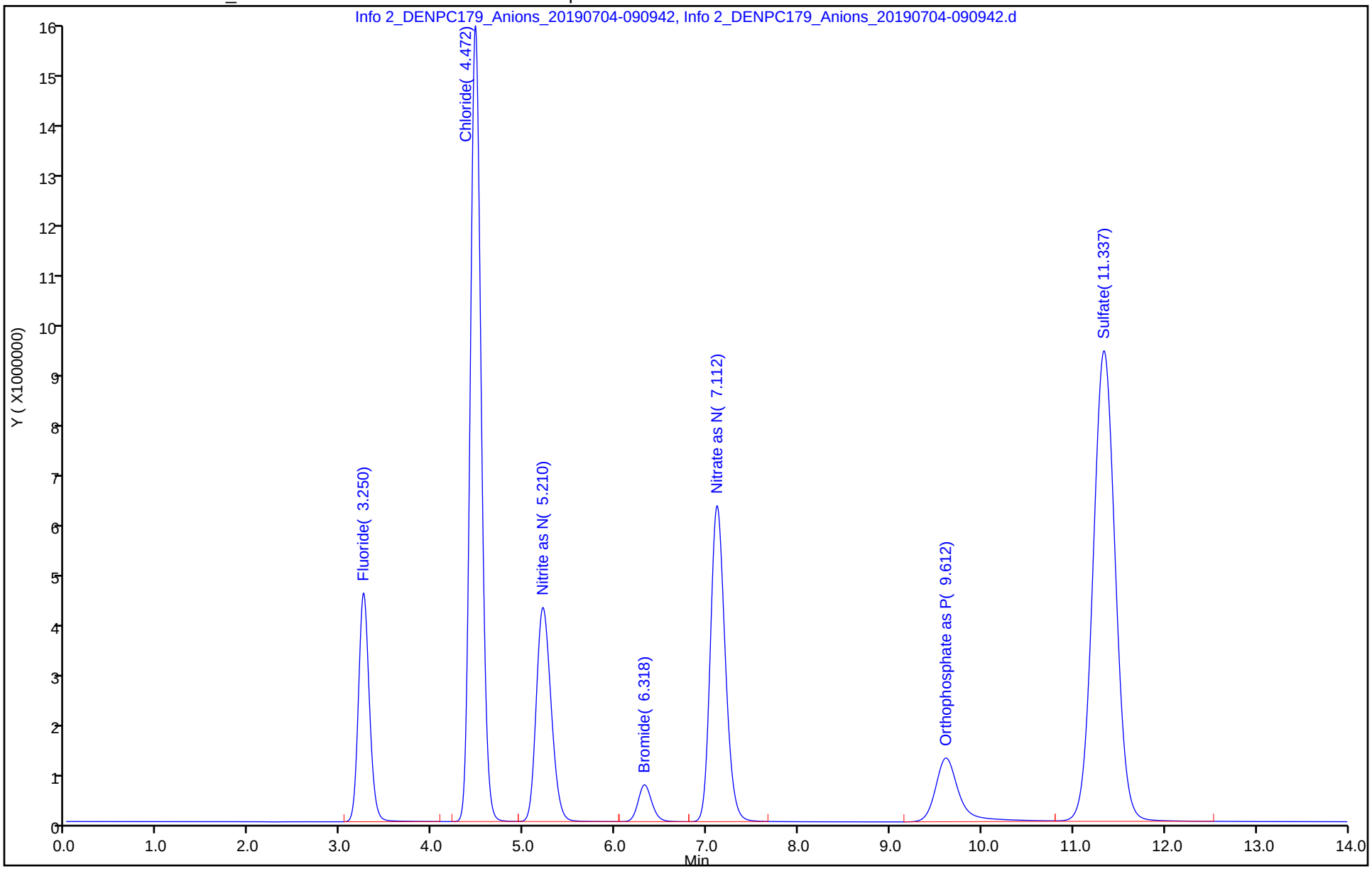
ICMS/MSD WEEK_00602 Amount Added: 0.10 Units: mL

Report Date: 05-Jul-2019 12:47:53 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-090942.d

Injection Date:	04-Jul-2019 08:52:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-D-11 MS			Worklist Smp#:	55
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-092
Lims ID: 280-124928-D-11 MSD
Client ID:
Sample Type: MSD
Inject. Date: 04-Jul-2019 09:09:00 ALS Bottle#: 0 Worklist Smp#: 56
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-056
Misc. Info.: 280-0083445-056
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:47:40 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.250	3.263	-0.013	36019121	5.00	4.86	
2 Chloride	4.472	4.490	-0.018	126524159	25.0	30.9	
3 Nitrite as N	5.210	5.217	-0.007	46832170	NC	NC	
4 Bromide	6.318	6.355	-0.037	7427105	5.00	5.06	
5 Nitrate as N	7.112	7.167	-0.055	67875617	NC	NC	
6 Orthophosphate as P	9.612	9.727	-0.115	22324554	NC	NC	
7 Sulfate	11.338	11.522	-0.184	150963479	25.0	48.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

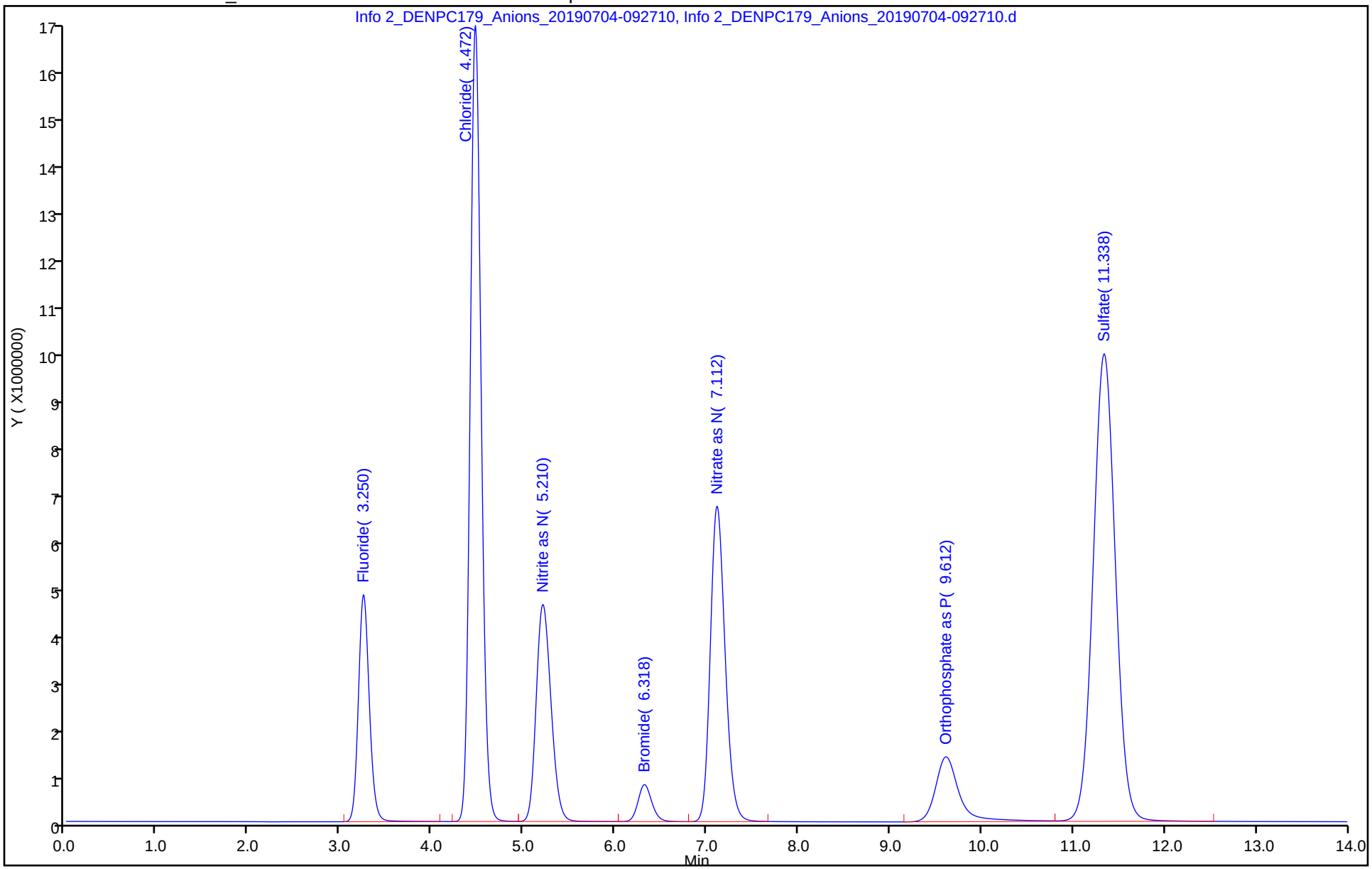
ICMS/MSD WEEK_00602 Amount Added: 0.10 Units: mL

Report Date: 05-Jul-2019 12:48:01 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-092710.d

Injection Date:	04-Jul-2019 09:09:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-D-11 MSD			Worklist Smp#:	56
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-094
Lims ID: 280-124928-D-12
Client ID: SHGW04-19A
Sample Type: Client
Inject. Date: 04-Jul-2019 09:27:00 ALS Bottle#: 0 Worklist Smp#: 57
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-057
Misc. Info.: 280-0083445-057
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:47:40 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.248	3.263	-0.015	1506866	0.2665	
2 Chloride	4.482	4.490	-0.008	15722235	4.24	
3 Nitrite as N	5.405	5.217	0.188	65334	NC	
4 Bromide		6.355			ND	
5 Nitrate as N	7.183	7.167	0.016	135992	NC	
6 Orthophosphate as P	9.643	9.727	-0.084	1777446	NC	
7 Sulfate	11.343	11.522	-0.179	38415920	12.8	

QC Flag Legend

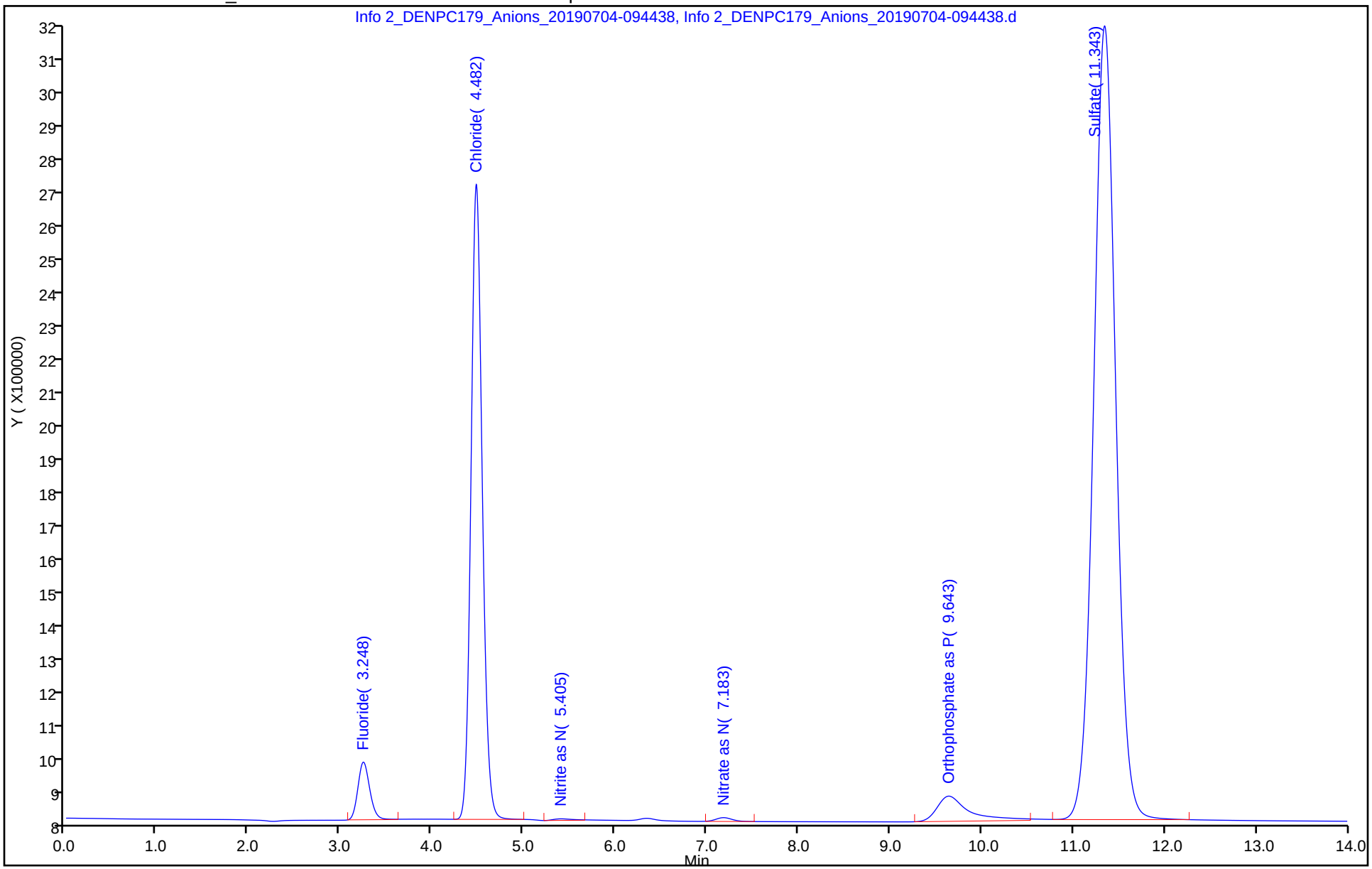
Processing Flags
NC - Not Calibrated

Report Date: 05-Jul-2019 12:48:07 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-094438.d

Injection Date:	04-Jul-2019 09:27:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-D-12	Lab Sample ID:	280-124928-12	Worklist Smp#:	57
Client ID:	SHGW04-19A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-120
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 04-Jul-2019 11:47:00 ALS Bottle#: 0 Worklist Smp#: 65
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083445-065
Misc. Info.: 280-0083445-065
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-Jul-2019 12:48:45 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0318

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.248	3.263	-0.015	35103265	5.00	4.74	
2 Chloride	4.467	4.490	-0.023	423171409	100.0	102.4	
3 Nitrite as N	5.185	5.217	-0.032	45119987	NC	NC	
4 Bromide	6.313	6.355	-0.042	6972616	5.00	4.75	
5 Nitrate as N	7.113	7.167	-0.054	47388277	NC	NC	
6 Orthophosphate as P	9.598	9.727	-0.129	19136921	NC	NC	
7 Sulfate	11.312	11.522	-0.210	305176849	100.0	98.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

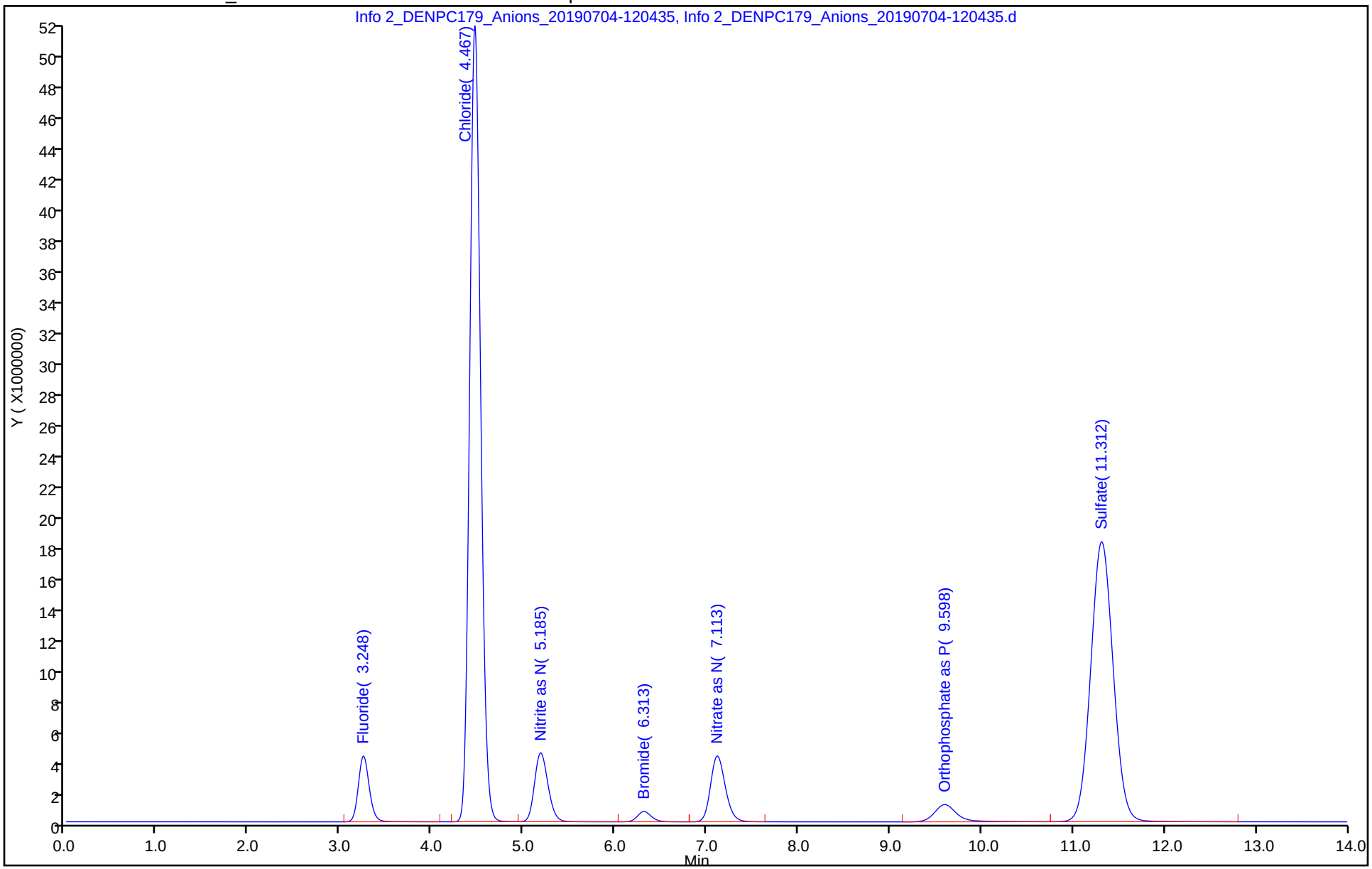
Reagents:

IC LCS_01622 Amount Added: 5.00 Units: mL

Report Date: 05-Jul-2019 12:48:46 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-120435.d				
Injection Date:	04-Jul-2019 11:47:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	65
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-122				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	04-Jul-2019 12:04:00	ALS Bottle#:	0	Worklist Smp#:	66
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0083445-066				
Misc. Info.:	280-0083445-066				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-Jul-2019 12:48:45	Calib Date:	02-Jul-2019 23:41:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0318				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.470	4.490	-0.020	16435		0.4503	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.643	9.727	-0.084	87288		NC	
7 Sulfate		11.522				ND	

QC Flag Legend

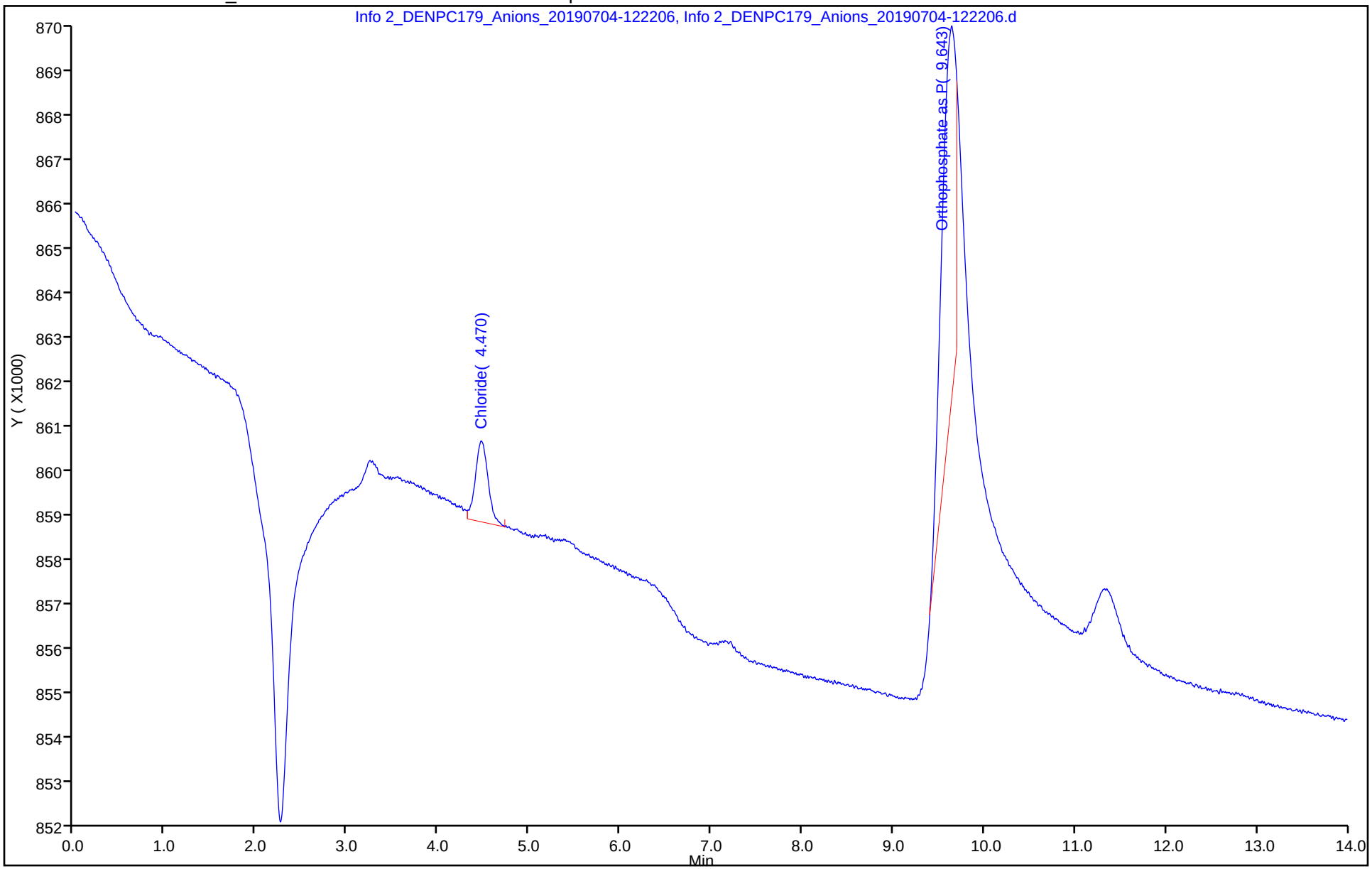
Processing Flags

NC - Not Calibrated

Report Date: 05-Jul-2019 12:48:52 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190703-83445.b\Info 2_DENPC179_Anions_20190704-122206.d				
Injection Date:	04-Jul-2019 12:04:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	66
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 83633 Inst ID: 10 Analysis Date: 07/11/19 Analyst: TP

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	125252	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	125258	5	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	125223	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	125232	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	124928	6	F Cl NO2 Br NO3 PO4 SO4	MS/D	7 & 14
☐	125399	9	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
125399	1→4	F Cl NO2 Br NO3 PO4 SO4	5x, 10x	limit.
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

TestAmerica Laboratories
Initial Calibration Summary Report

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190708-83534.b\Anions_IC10.m

Instrument:	WC_IonChrom10	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Jul-2019 12:00:41

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b
Inj Date : 02-Jul-2019 22:14:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-496776	7517346		1.000				
2 Chloride	-185206	4148993		1.000				
3 Nitrite as N					-881375	9265566		0.999
4 Bromide	-69476	1482729		0.998				
5 Nitrate as N					-977918	9928862		0.998
6 Orthophosphate as P					591981	4151096		0.998
7 Sulfate	-160921	3130894		0.999				

TestAmerica Laboratories
Initial Calibration Report

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190708-83534.b\Anions_IC10.m

Instrument:	WC_IonChrom10	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Jul-2019 12:00:41
No.Compounds:	7		
Sublist:	chrom-Anions_IC10*sub2		
Limit Group:	Wet - Anions 28D		

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-17.383 No. Points: 7196

Calibration File Names

Level: 1	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-223		
	Inj Date: 02-Jul-2019 22:14:00	Worklist: 83432	Sample#: 2
Level: 2	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-224		
	Inj Date: 02-Jul-2019 22:31:00	Worklist: 83432	Sample#: 3
Level: 3	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-230		
	Inj Date: 02-Jul-2019 22:49:00	Worklist: 83432	Sample#: 4
Level: 4	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-232		
	Inj Date: 02-Jul-2019 23:06:00	Worklist: 83432	Sample#: 5
Level: 5	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-234		
	Inj Date: 02-Jul-2019 23:24:00	Worklist: 83432	Sample#: 6
Level: 6	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235		
	Inj Date: 02-Jul-2019 23:41:00	Worklist: 83432	Sample#: 7

Start Cal Date: 02-Jul-2019 22:14:00 End Cal Date: 08-Jul-2019 16:21:00

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					
5397880	6162342	6855229	7627997	7426032	7424423	-496776			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		7517346		
1079576	3081171	6855229	30511987	59408259	74244226				
83432(2)	83432(3)	83432(4)	83432(5)	83432(6)	83432(7)				
2 Chloride				Signal: 1					
2956306	3142198	3410943	4067425	4134814	4163409	-1852064			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		4148993		
2956306	7855494	17054714	244045509	496177676	832681709				
83432(2)	83432(3)	83432(4)	83432(5)	83432(6)	83432(7)				
4 Bromide				Signal: 1					
1362745	1285730	1277020	1390751	1472394	1518923	-69476			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		1482729		
272549	642865	1277020	5563002	11779153	15189226				
83432(2)	83432(3)	83432(4)	83432(5)	83432(6)	83432(7)				
7 Sulfate				Signal: 1					
2194448	2285735	2389592	3017327	3115585	3159652	-1609217			0.999
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		3130894		
M2194448	M5714338	M11947958	M181039624	M373870178	M631930336				
83432(2)	83432(3)	83432(4)	83432(5)	83432(6)	83432(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-212
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Jul-2019 21:08:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-001
Misc. Info.: 280-0083633-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:03:36 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	35719835	5.00	4.82	
2 Chloride	4.458	4.490	-0.032	421588553	100.0	102.1	
3 Nitrite as N	5.175	5.217	-0.042	43774171	NC	NC	
4 Bromide	6.300	6.355	-0.055	6697636	5.00	4.56	
5 Nitrate as N	7.100	7.167	-0.067	45969877	NC	NC	
6 Orthophosphate as P	9.520	9.727	-0.207	18654439	NC	NC	
7 Sulfate	11.182	11.522	-0.340	304174228	100.0	97.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

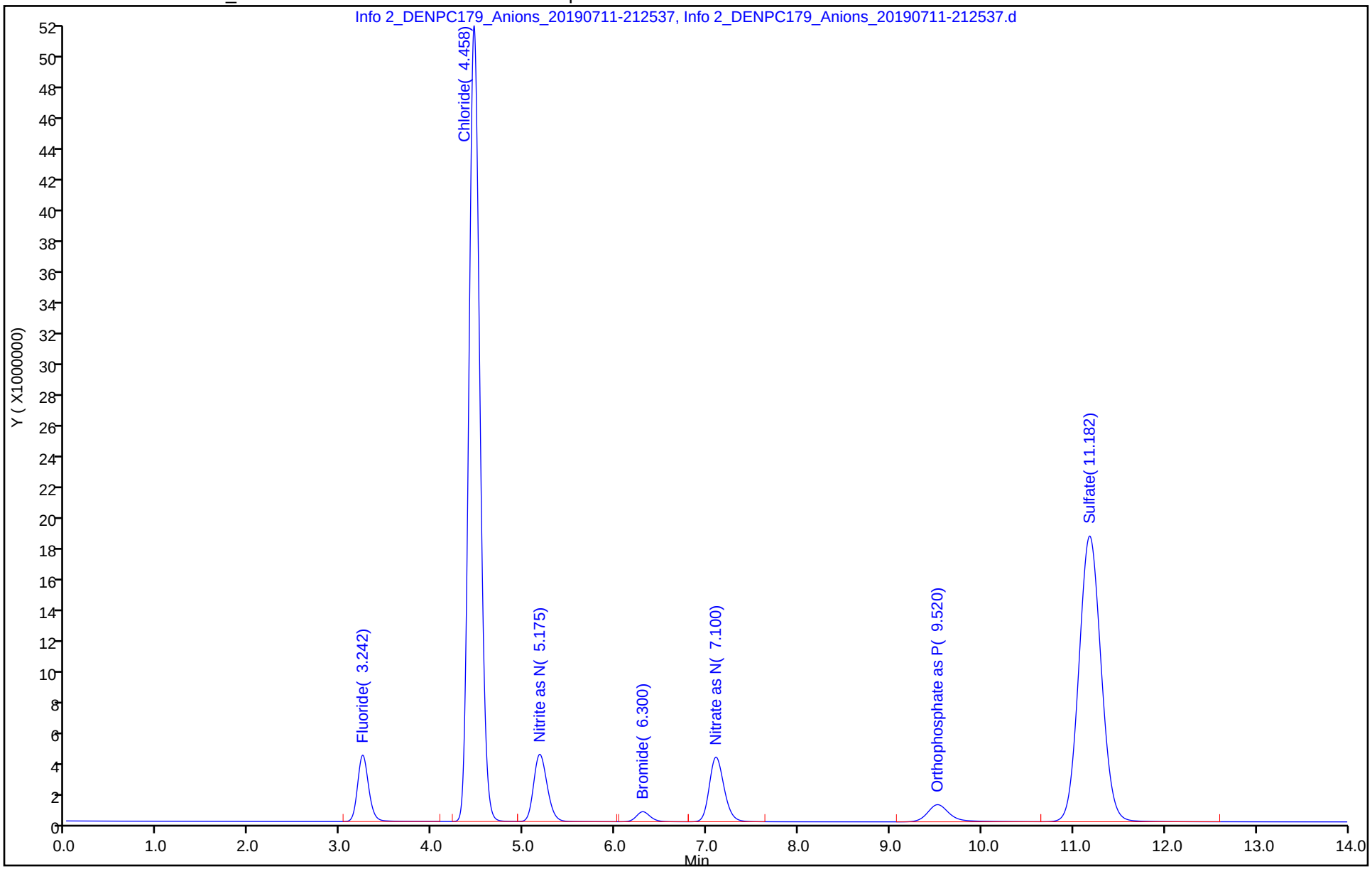
IC LCS_01628 Amount Added: 10.00 Units: mL

Report Date: 12-Jul-2019 08:03:38 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-212537.d

Injection Date:	11-Jul-2019 21:08:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-214
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 11-Jul-2019 21:31:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-002
Misc. Info.: 280-0083633-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:03:05 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.468	4.490	-0.022	18313		0.4508	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.618	9.727	-0.109	110084		NC	
7 Sulfate		11.522				ND	

QC Flag Legend

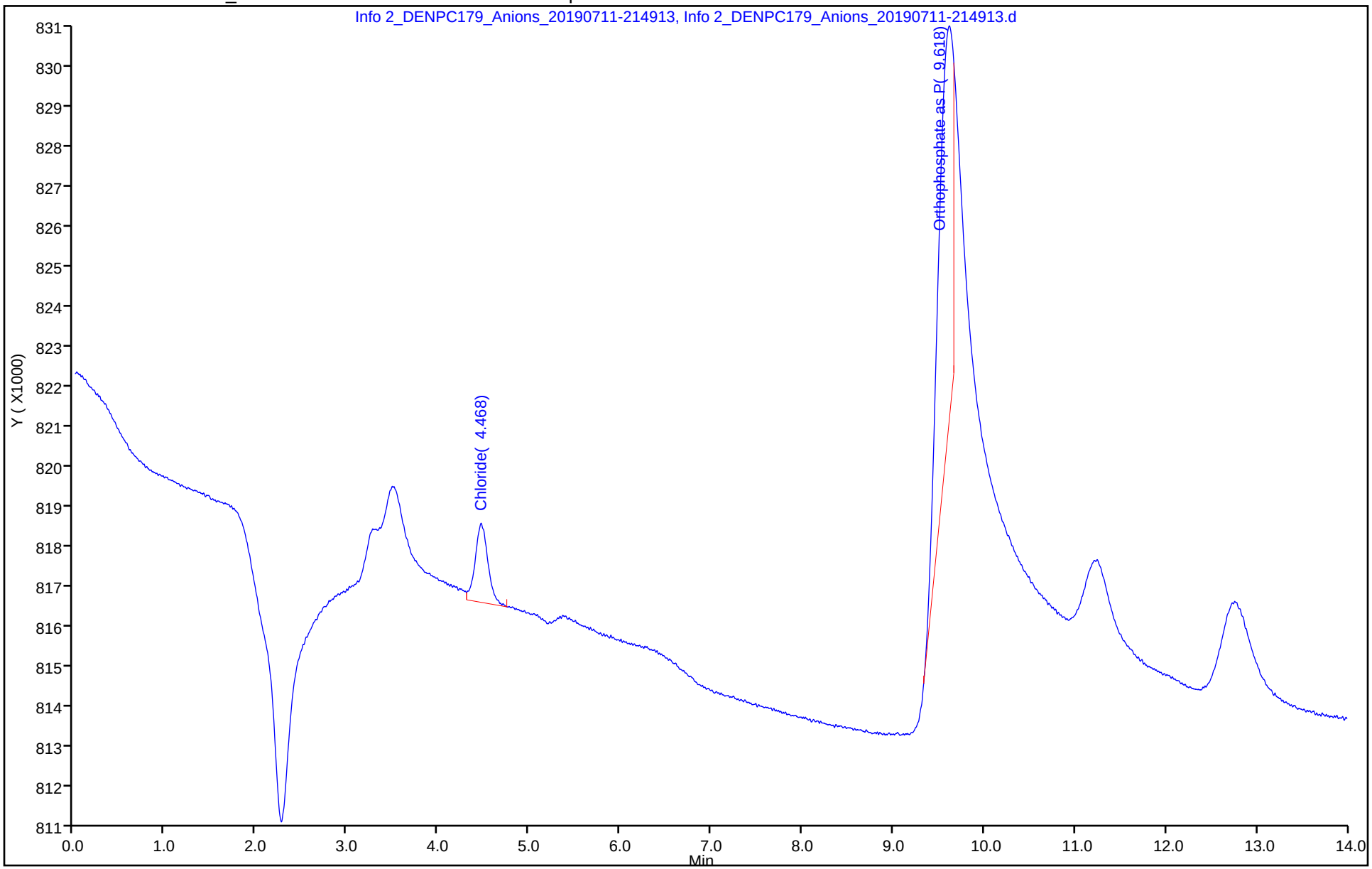
Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 08:03:35 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-214913.d

Injection Date:	11-Jul-2019 21:31:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-220
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 11-Jul-2019 21:49:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-003
Misc. Info.: 280-0083633-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:03:05 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.243	3.263	-0.020	1184544	0.2000	0.2237	
2 Chloride	4.468	4.490	-0.022	7789392	2.50	2.32	
3 Nitrite as N	5.192	5.217	-0.025	984008	NC	NC	
4 Bromide	6.323	6.355	-0.032	253023	0.2000	0.2175	
5 Nitrate as N	7.153	7.167	-0.014	1267213	NC	NC	
6 Orthophosphate as P	9.558	9.727	-0.169	1050042	NC	NC	
7 Sulfate	11.207	11.522	-0.315	5541128	2.50	2.28	

QC Flag Legend

Processing Flags
NC - Not Calibrated

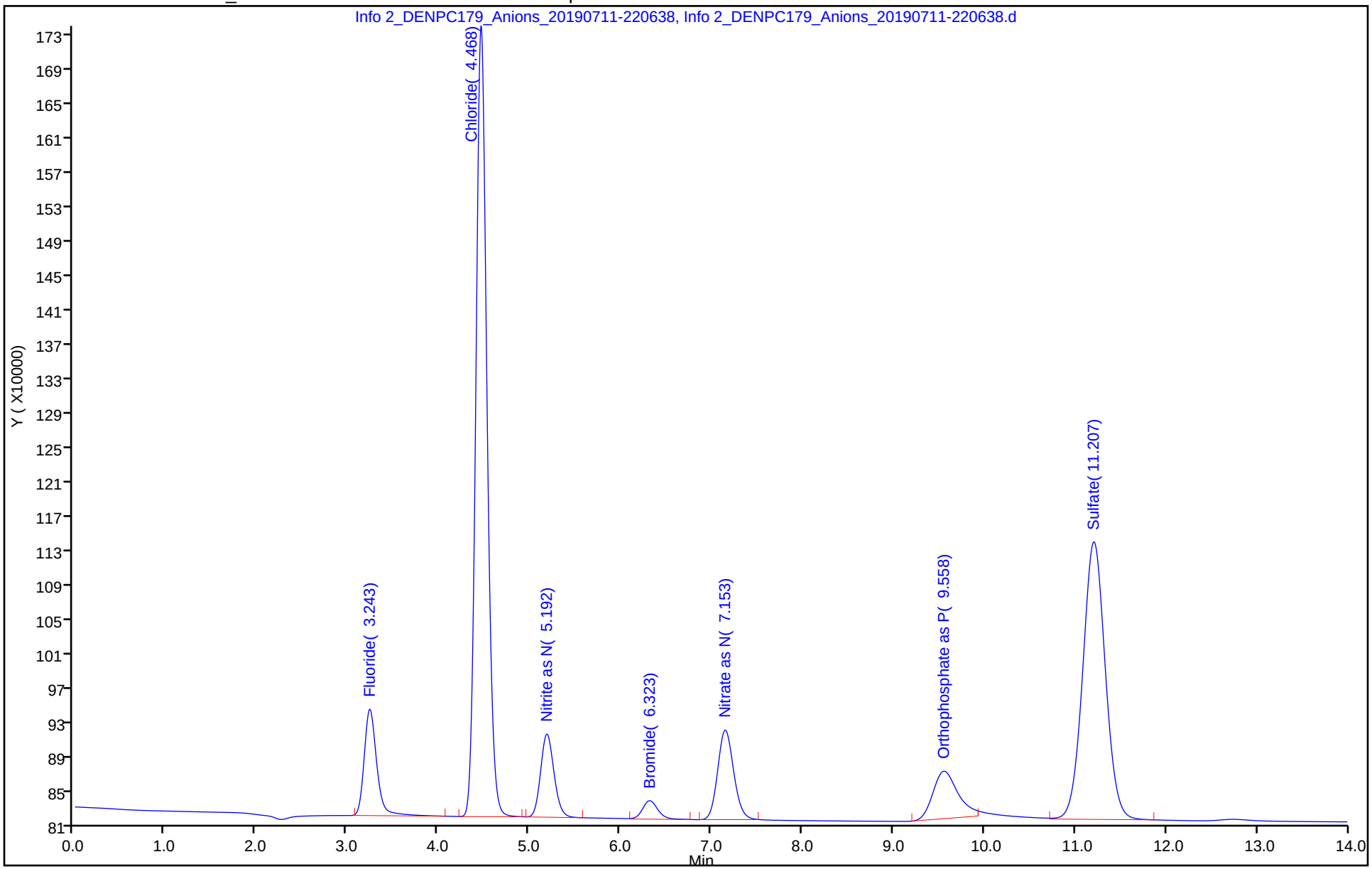
Reagents:

IC CAL cl/so4_00264 Amount Added: 0.10 Units: mL
IC Cal low_00470 Amount Added: 0.04 Units: mL

Report Date: 12-Jul-2019 08:03:32 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-220638.d				
Injection Date:	11-Jul-2019 21:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-222
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 11-Jul-2019 22:06:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-004
Misc. Info.: 280-0083633-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:03:05 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	36163209	5.00	4.88	
2 Chloride	4.460	4.490	-0.030	425206005	100.0	102.9	
3 Nitrite as N	5.177	5.217	-0.040	44715555	NC	NC	
4 Bromide	6.302	6.355	-0.053	6754631	5.00	4.60	
5 Nitrate as N	7.102	7.167	-0.065	46380381	NC	NC	
6 Orthophosphate as P	9.525	9.727	-0.202	18987664	NC	NC	
7 Sulfate	11.187	11.522	-0.335	306717334	100.0	98.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

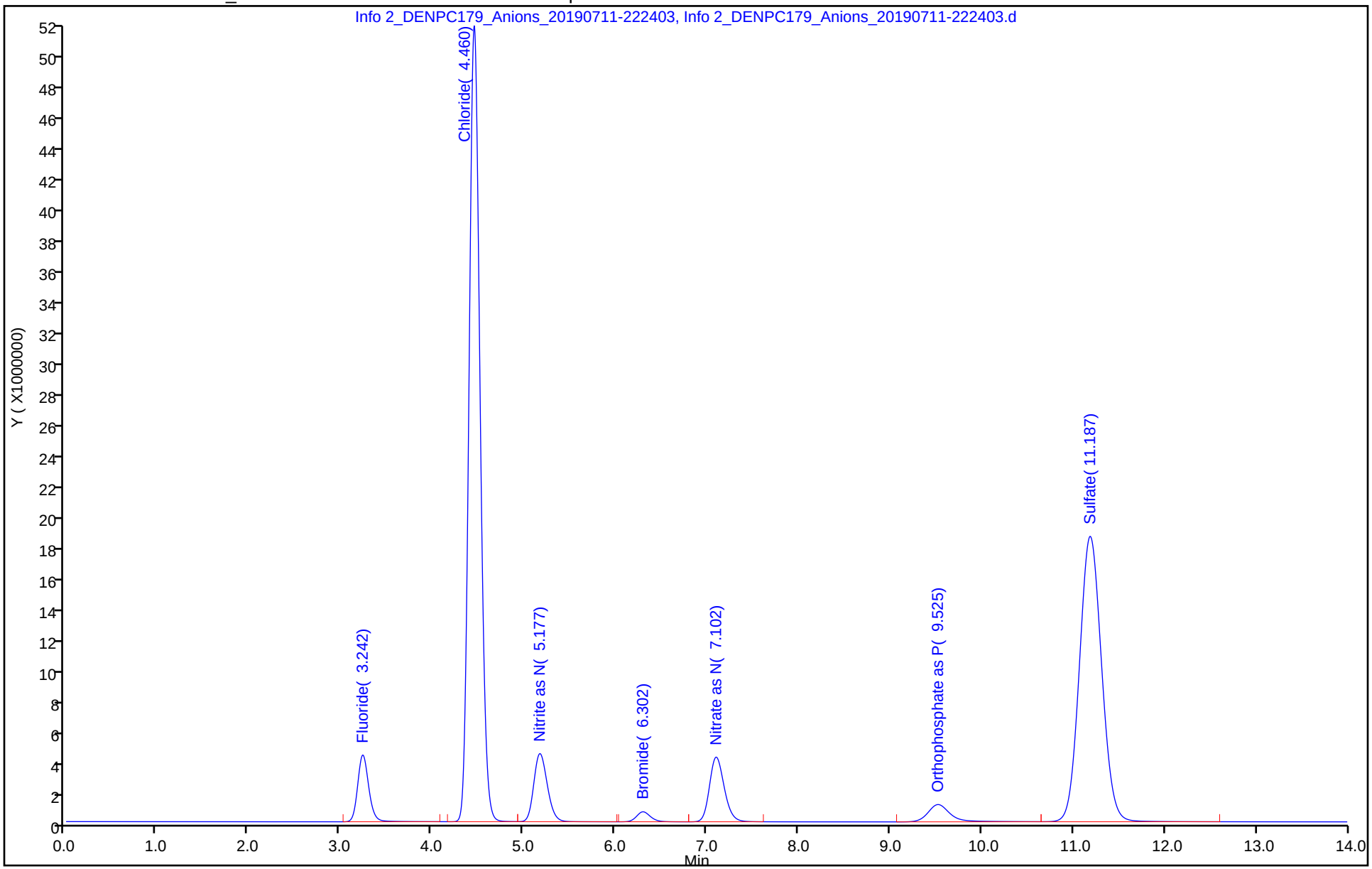
IC LCS_01628 Amount Added: 10.00 Units: mL

Report Date: 12-Jul-2019 08:03:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-222403.d

Injection Date:	11-Jul-2019 22:06:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-224
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 11-Jul-2019 22:24:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-005
Misc. Info.: 280-0083633-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:03:05 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	35933643	5.00	4.85	
2 Chloride	4.458	4.490	-0.032	425091608	100.0	102.9	
3 Nitrite as N	5.175	5.217	-0.042	43892998	NC	NC	
4 Bromide	6.302	6.355	-0.053	6755609	5.00	4.60	
5 Nitrate as N	7.100	7.167	-0.067	46382582	NC	NC	
6 Orthophosphate as P	9.522	9.727	-0.205	18871167	NC	NC	
7 Sulfate	11.183	11.522	-0.339	306491391	100.0	98.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

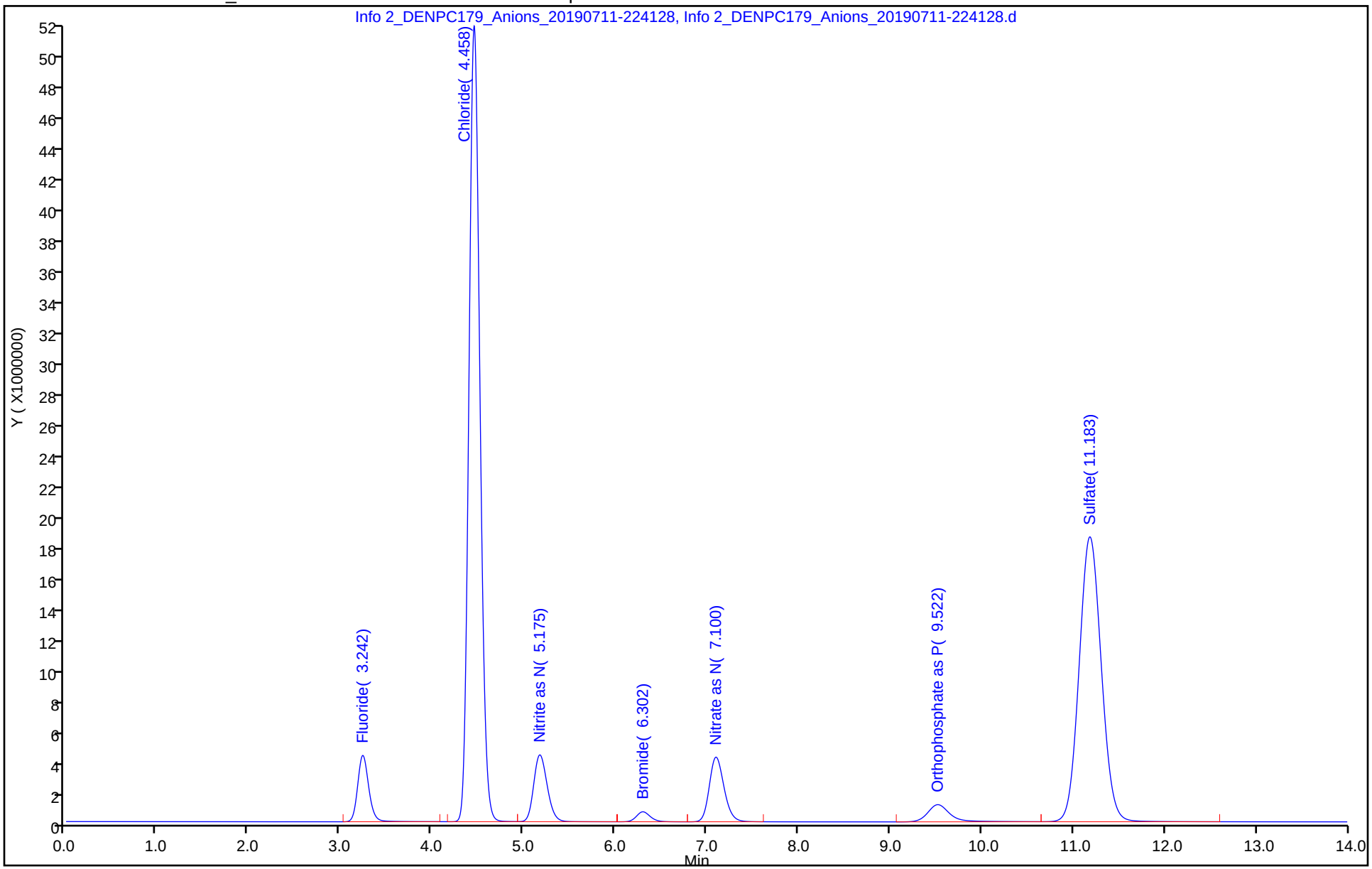
IC LCS_01628 Amount Added: 10.00 Units: mL

Report Date: 12-Jul-2019 08:03:24 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-224128.d

Injection Date:	11-Jul-2019 22:24:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-225
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 11-Jul-2019 22:41:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-006
Misc. Info.: 280-0083633-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:03:05 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.263				ND	
2 Chloride	4.470	4.490	-0.020	43674		0.4569	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.617	9.727	-0.110	122967		NC	
7 Sulfate		11.522				ND	

QC Flag Legend

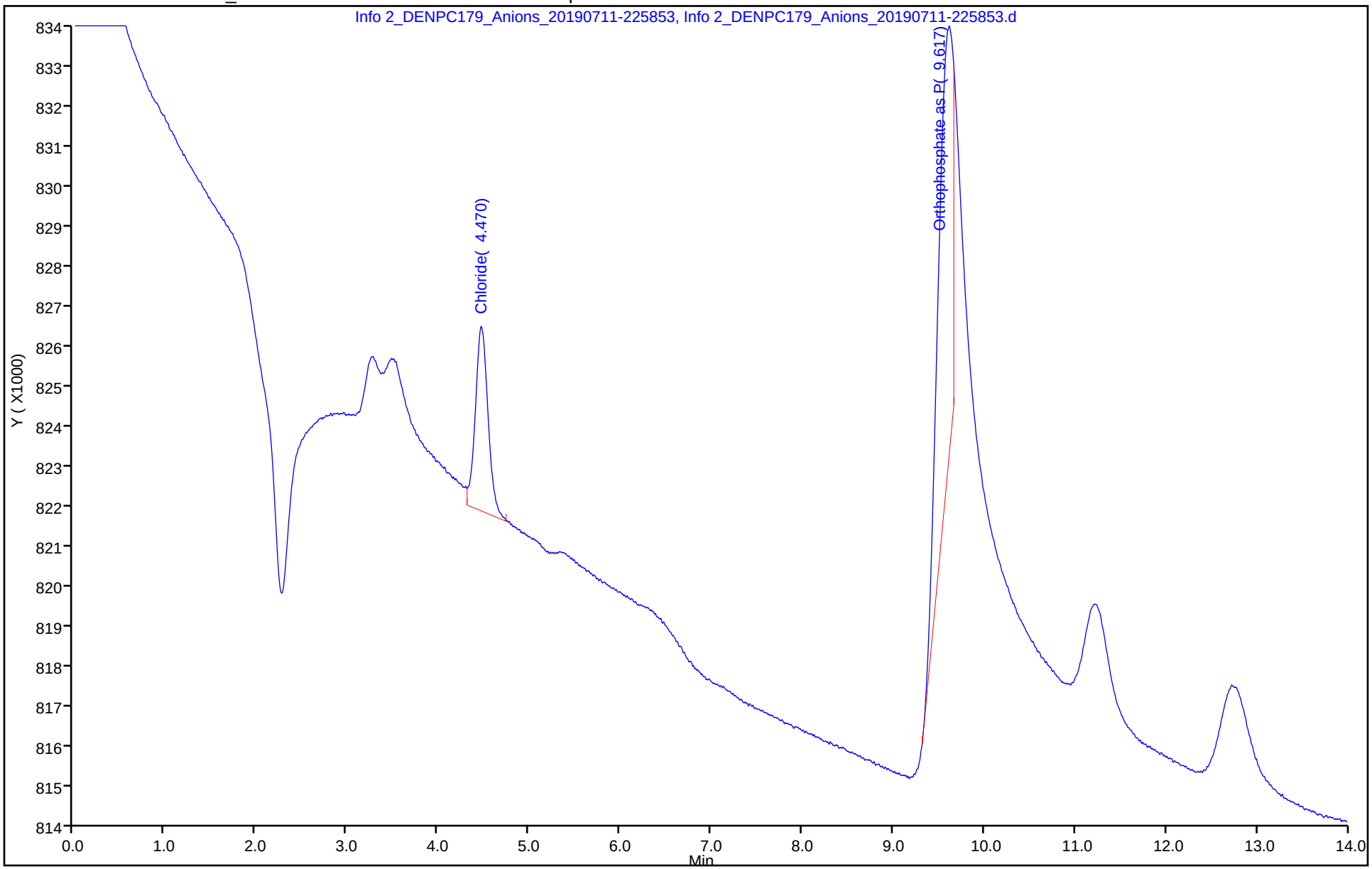
Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 08:03:22 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190711-225853.d

Injection Date:	11-Jul-2019 22:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-021
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-Jul-2019 01:53:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-017
Misc. Info.: 280-0083633-017
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:03:02 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	32389821	5.00	4.37	
2 Chloride	4.460	4.490	-0.030	402635135	100.0	97.5	
3 Nitrite as N	5.178	5.217	-0.039	39578982	NC	NC	
4 Bromide	6.303	6.355	-0.052	6368695	5.00	4.34	
5 Nitrate as N	7.107	7.167	-0.060	42903187	NC	NC	
6 Orthophosphate as P	9.523	9.727	-0.204	13494070	NC	NC	
7 Sulfate	11.185	11.522	-0.337	288991324	100.0	92.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

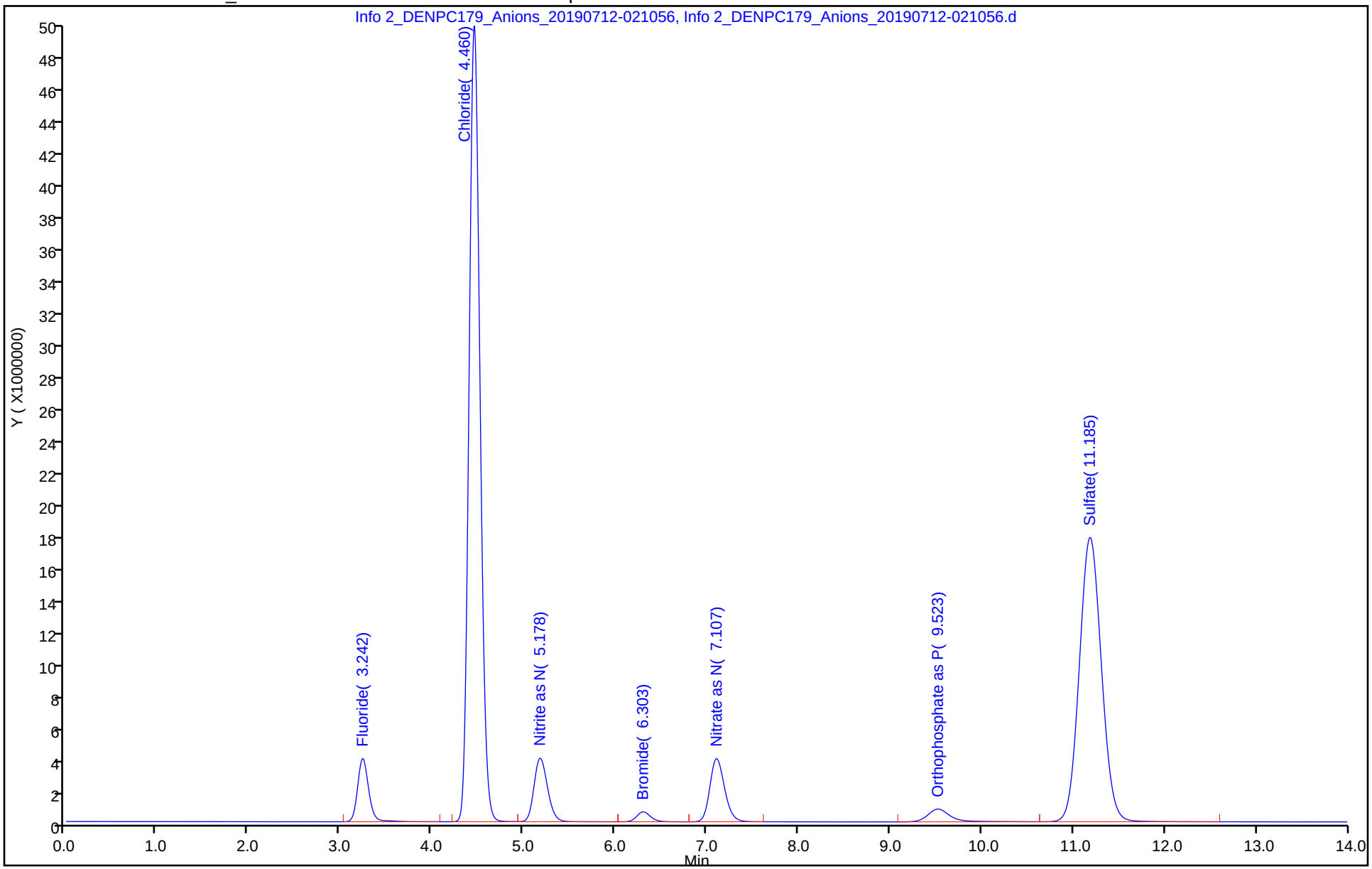
IC LCS_01628 Amount Added: 5.00 Units: mL

Report Date: 12-Jul-2019 08:03:02 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-021056.d

Injection Date:	12-Jul-2019 01:53:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-022
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 12-Jul-2019 02:10:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-018
Misc. Info.: 280-0083633-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:02:39 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.512	3.263	0.249	308928		0.1072	
2 Chloride	4.472	4.490	-0.018	172959		0.4881	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.593	9.727	-0.134	425266		NC	
7 Sulfate	11.208	11.522	-0.314	1732282		1.07	

QC Flag Legend

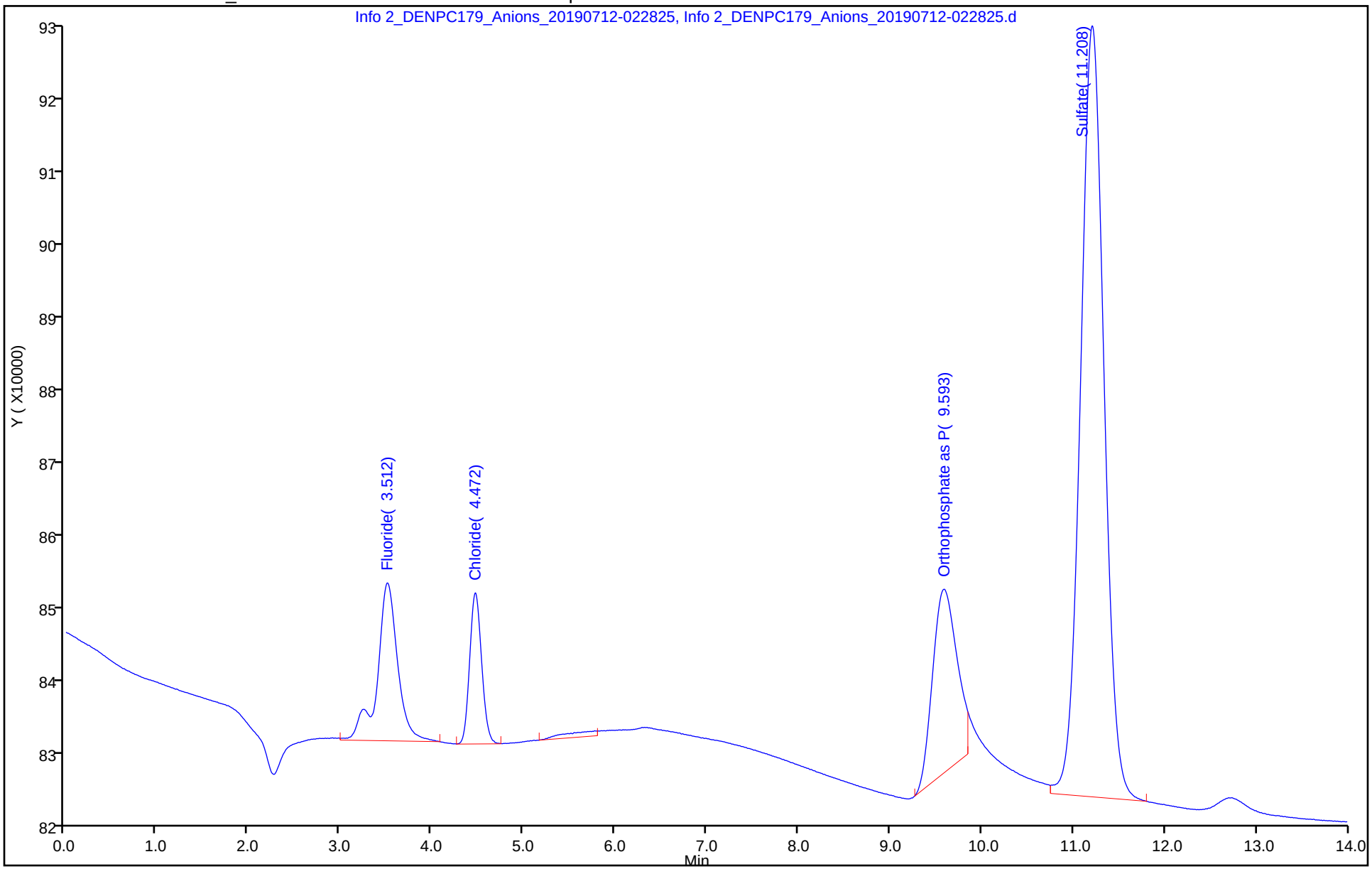
Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 08:03:00 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-022825.d

Injection Date:	12-Jul-2019 02:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-052
Lims ID: 280-124928-F-7
Client ID: G0105-19A
Sample Type: Client
Inject. Date: 12-Jul-2019 05:06:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-028
Misc. Info.: 280-0083633-028
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:02:39 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

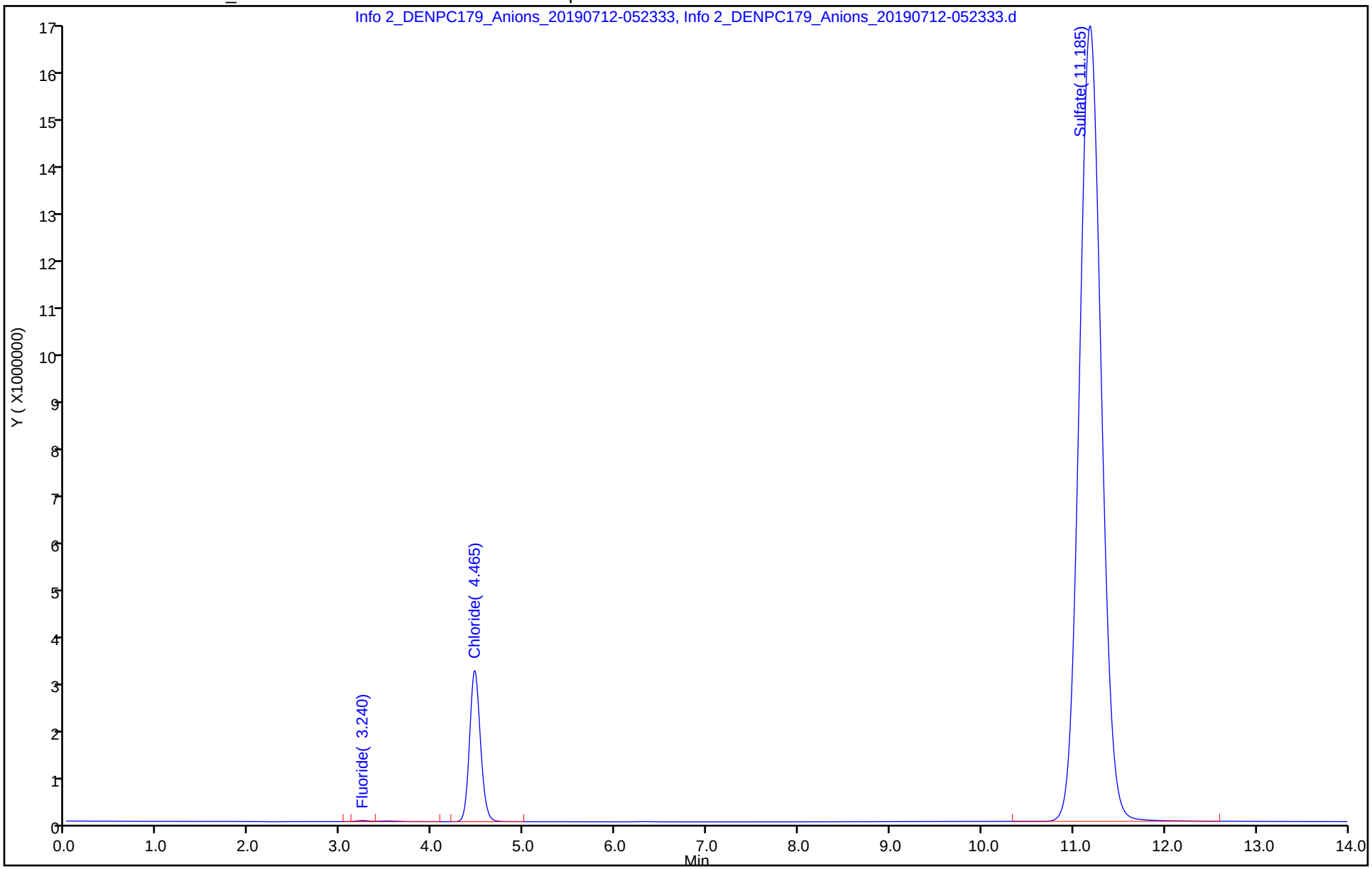
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.240	3.263	-0.023	172981	0.0891	
2 Chloride	4.465	4.490	-0.025	25345598	6.56	
3 Nitrite as N		5.217			ND	
4 Bromide		6.355			ND	
5 Nitrate as N		7.167			ND	
6 Orthophosphate as P		9.727			ND	
7 Sulfate	11.185	11.522	-0.337	269871668	86.7	

Report Date: 12-Jul-2019 08:02:41 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-052333.d

Injection Date:	12-Jul-2019 05:06:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-7	Lab Sample ID:	280-124928-7	Worklist Smp#:	28
Client ID:	G0105-19A				
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-054
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-Jul-2019 05:23:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-029
Misc. Info.: 280-0083633-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:02:39 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.243	3.263	-0.020	32400974	0.5000	4.38	
2 Chloride	4.462	4.490	-0.028	400355184	10.0	96.9	
3 Nitrite as N	5.182	5.217	-0.035	39716681	NC	NC	
4 Bromide	6.308	6.355	-0.047	6323075	0.5000	4.31	
5 Nitrate as N	7.110	7.167	-0.057	42846075	NC	NC	
6 Orthophosphate as P	9.527	9.727	-0.200	15314412	NC	NC	
7 Sulfate	11.190	11.522	-0.332	282436912	10.0	90.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

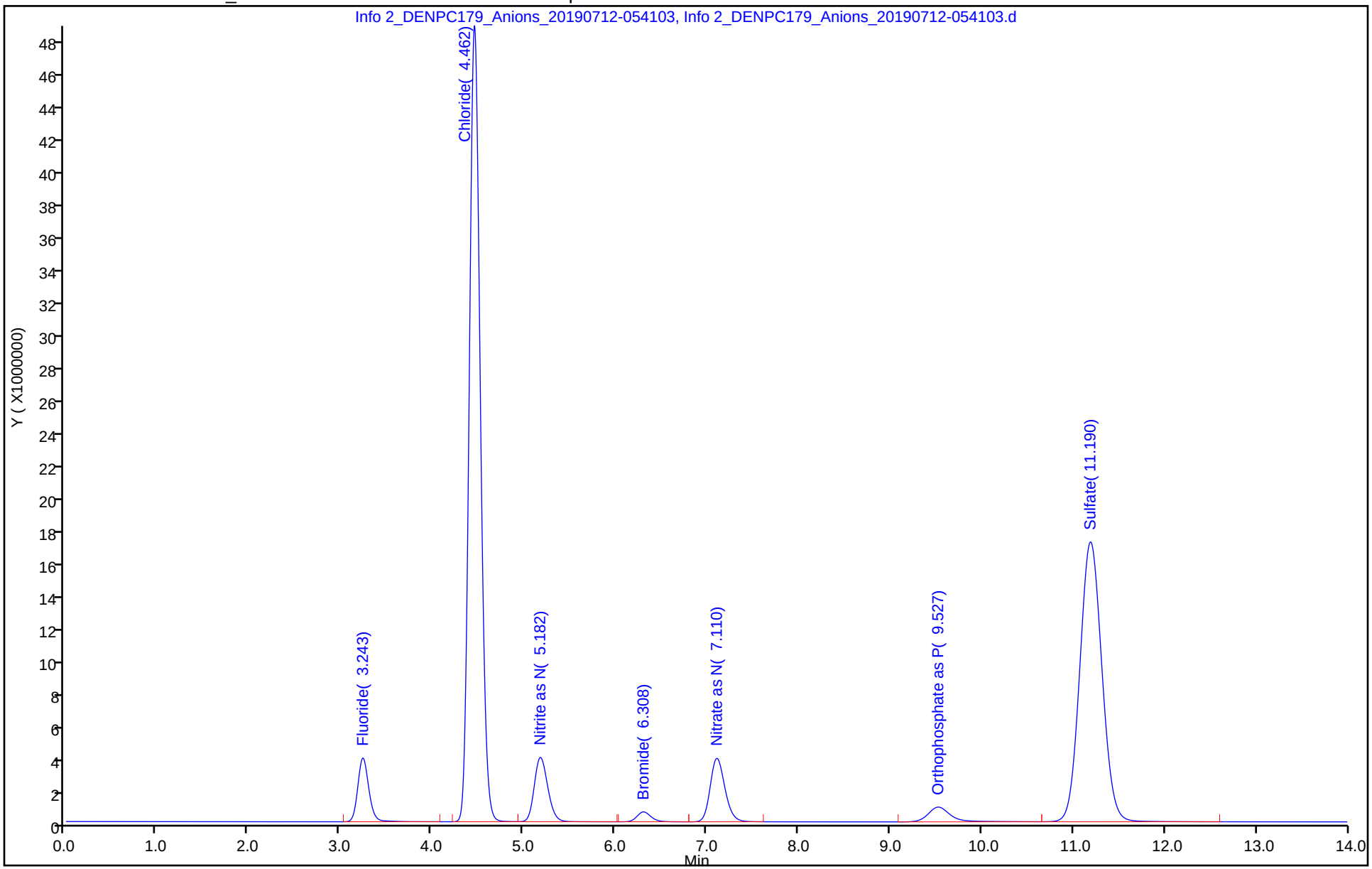
IC LCS_01628 Amount Added: 10.00 Units: mL

Report Date: 12-Jul-2019 08:02:40 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-054103.d

Injection Date:	12-Jul-2019 05:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-055
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 12-Jul-2019 05:41:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-030
Misc. Info.: 280-0083633-030
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 08:00:43 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0333

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.512	3.263	0.249	259188		0.1006	
2 Chloride	4.470	4.490	-0.020	141198		0.4804	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.588	9.727	-0.139	440654		NC	
7 Sulfate	11.208	11.522	-0.314	412573		0.6458	

QC Flag Legend

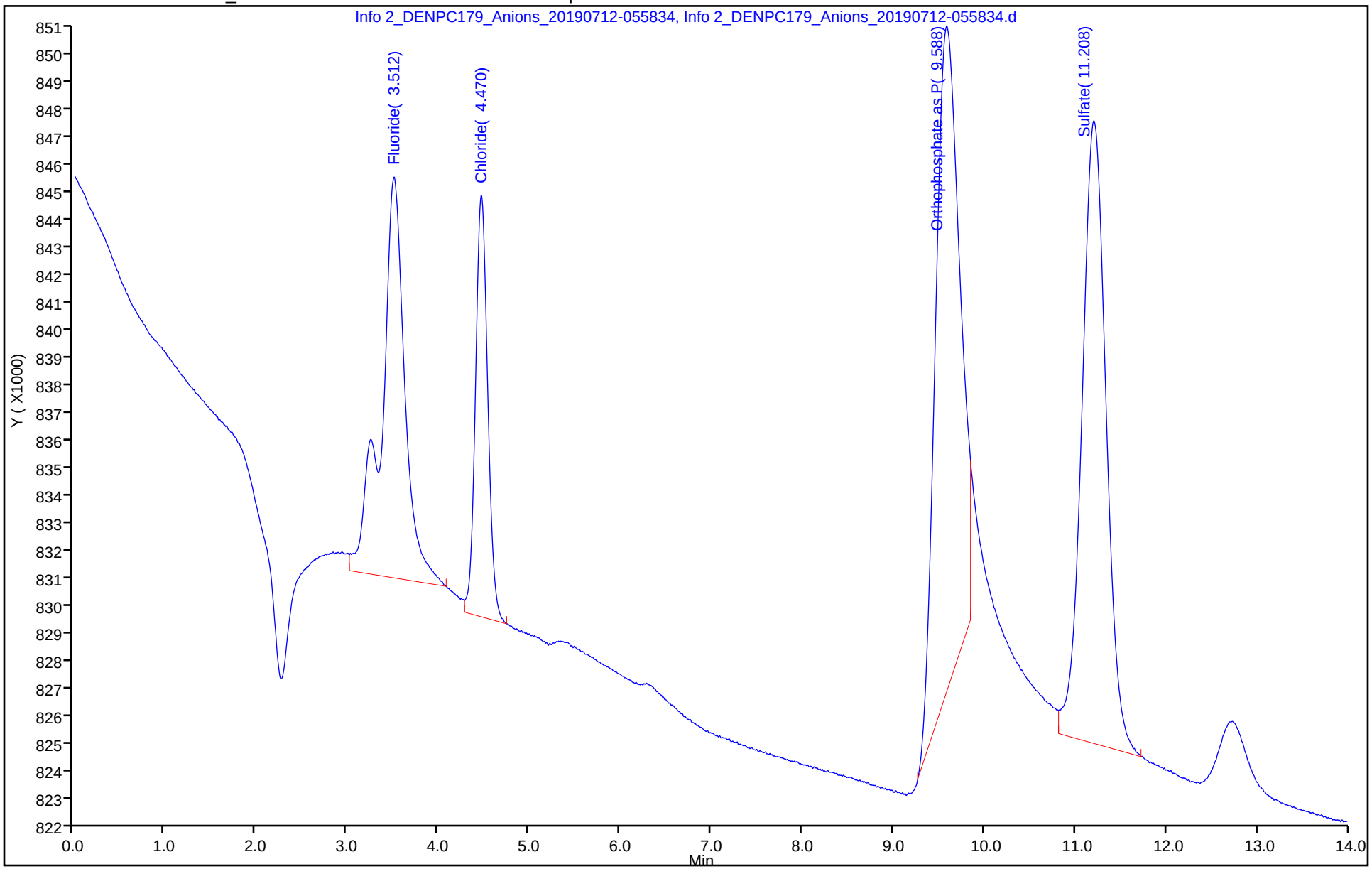
Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 08:02:38 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-055834.d

Injection Date:	12-Jul-2019 05:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-061
Lims ID: 280-124928-F-7 DU
Client ID:
Sample Type: DU
Inject. Date: 12-Jul-2019 05:58:00 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-031
Misc. Info.: 280-0083633-031
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

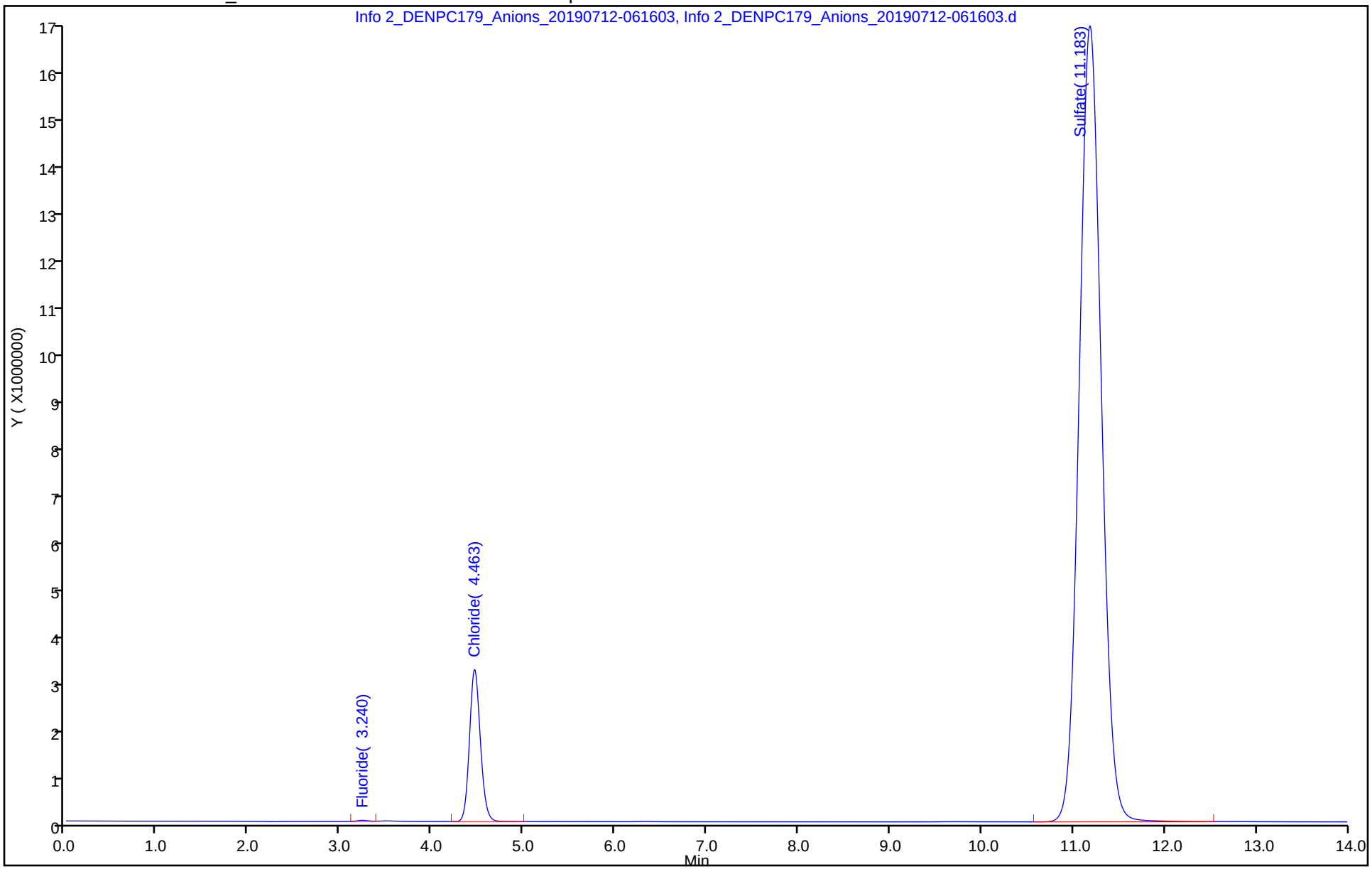
Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.240	3.263	-0.023	179598		0.0900	
2 Chloride	4.463	4.490	-0.027	24623536		6.38	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P		9.727				ND	
7 Sulfate	11.183	11.522	-0.339	260234658		83.6	

Report Date: 12-Jul-2019 23:06:30 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-061603.d				
Injection Date:	12-Jul-2019 05:58:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-7 DU			Worklist Smp#:	31
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-063
Lims ID: 280-124928-F-7 MS
Client ID:
Sample Type: MS
Inject. Date: 12-Jul-2019 06:16:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-032
Misc. Info.: 280-0083633-032
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.245	3.263	-0.018	31191712	0.5000	4.22	
2 Chloride	4.463	4.490	-0.027	130350945	2.50	31.9	
3 Nitrite as N	5.185	5.217	-0.032	39284437	NC	NC	
4 Bromide	6.308	6.355	-0.047	6610539	0.4999	4.51	
5 Nitrate as N	7.108	7.167	-0.059	44947137	NC	NC	
6 Orthophosphate as P	9.532	9.727	-0.195	15866081	NC	NC	
7 Sulfate	11.185	11.522	-0.337	334784488	2.50	107.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

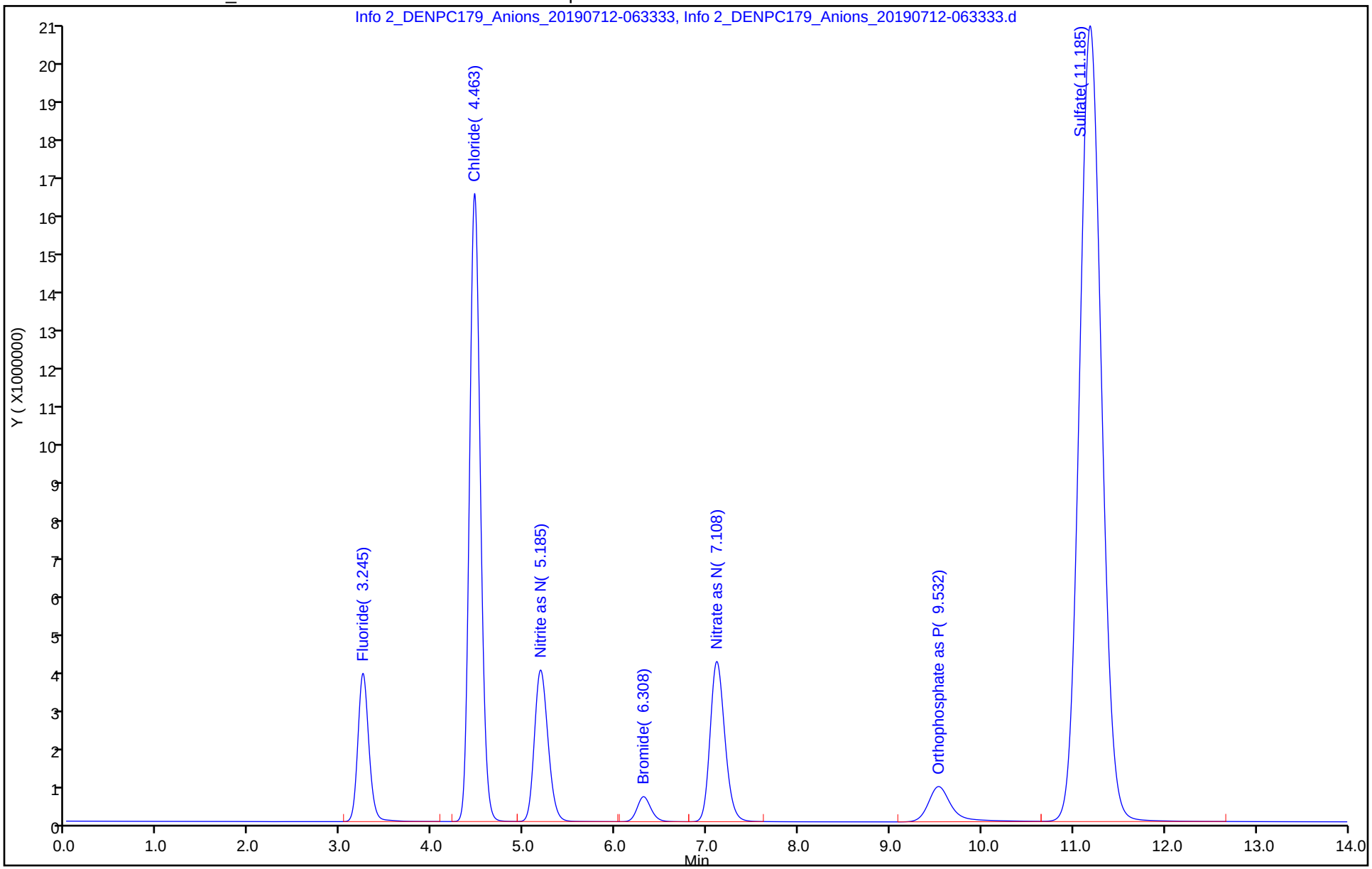
ICMS/MSD WEEK_00603 Amount Added: 0.10 Units: mL

Report Date: 12-Jul-2019 23:06:33 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-063333.d

Injection Date:	12-Jul-2019 06:16:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-7 MS			Worklist Smp#:	32
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-065
Lims ID: 280-124928-F-7 MSD
Client ID:
Sample Type: MSD
Inject. Date: 12-Jul-2019 06:33:00 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-033
Misc. Info.: 280-0083633-033
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.243	3.263	-0.020	31618560	0.5000	4.27	
2 Chloride	4.462	4.490	-0.028	130195718	2.50	31.8	
3 Nitrite as N	5.183	5.217	-0.034	39227939	NC	NC	
4 Bromide	6.308	6.355	-0.047	6604893	0.4999	4.50	
5 Nitrate as N	7.108	7.167	-0.059	44999418	NC	NC	
6 Orthophosphate as P	9.530	9.727	-0.197	17170831	NC	NC	
7 Sulfate	11.187	11.522	-0.335	335465496	2.50	107.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

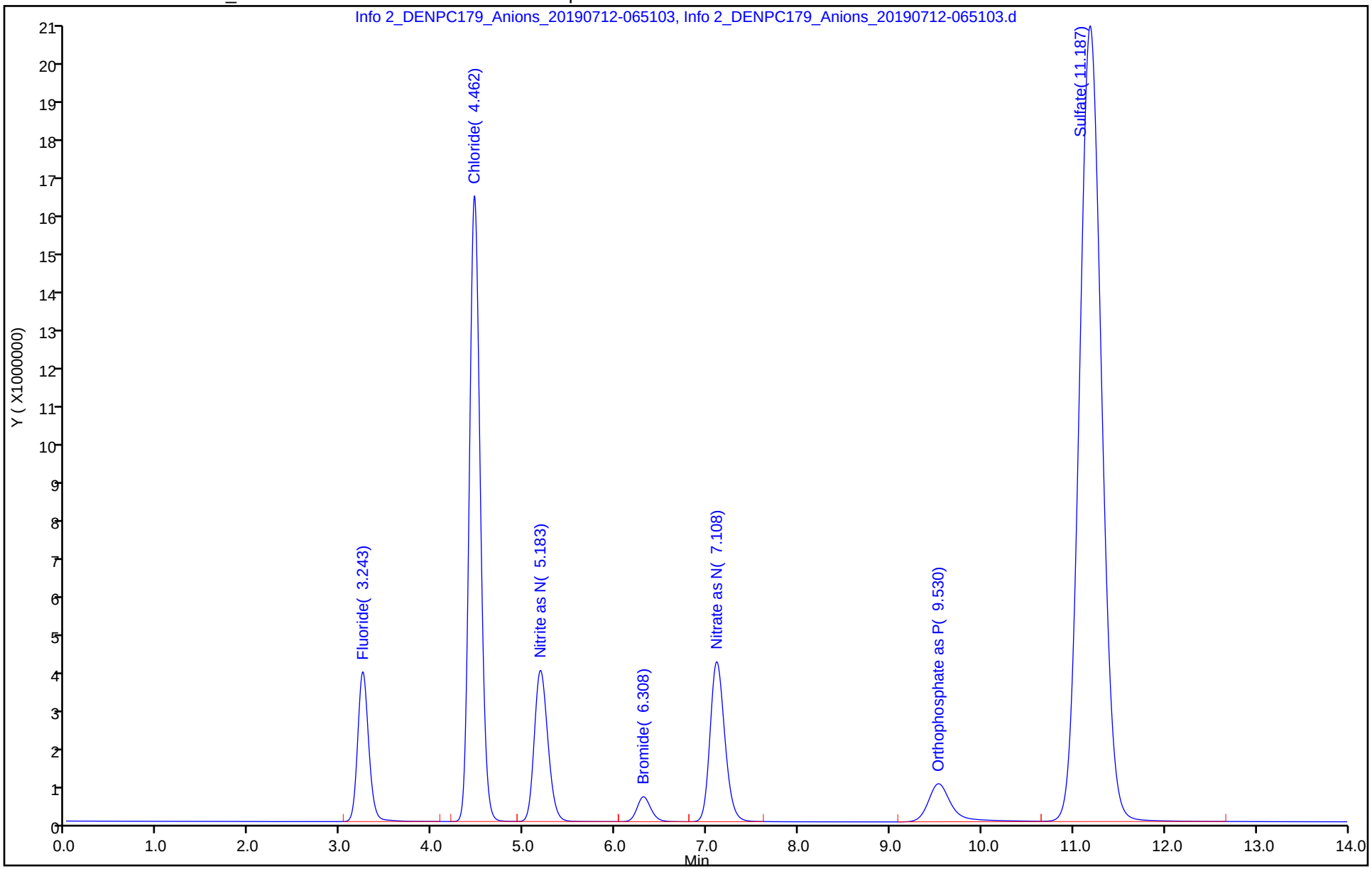
Reagents:

ICMS/MSD WEEK_00603 Amount Added: 0.10 Units: mL

Report Date: 12-Jul-2019 23:06:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-065103.d				
Injection Date:	12-Jul-2019 06:33:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-7 MSD			Worklist Smp#:	33
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-070
Lims ID: 280-124928-F-8
Client ID: G0107-19A
Sample Type: Client
Inject. Date: 12-Jul-2019 06:51:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-034
Misc. Info.: 280-0083633-034
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.240	3.263	-0.023	111363	0.0809	
2 Chloride	4.463	4.490	-0.027	25137793	6.51	
3 Nitrite as N		5.217			ND	
4 Bromide		6.355			ND	
5 Nitrate as N		7.167			ND	
6 Orthophosphate as P	9.585	9.727	-0.142	618769	NC	
7 Sulfate	11.180	11.522	-0.342	310842711	99.8	

QC Flag Legend

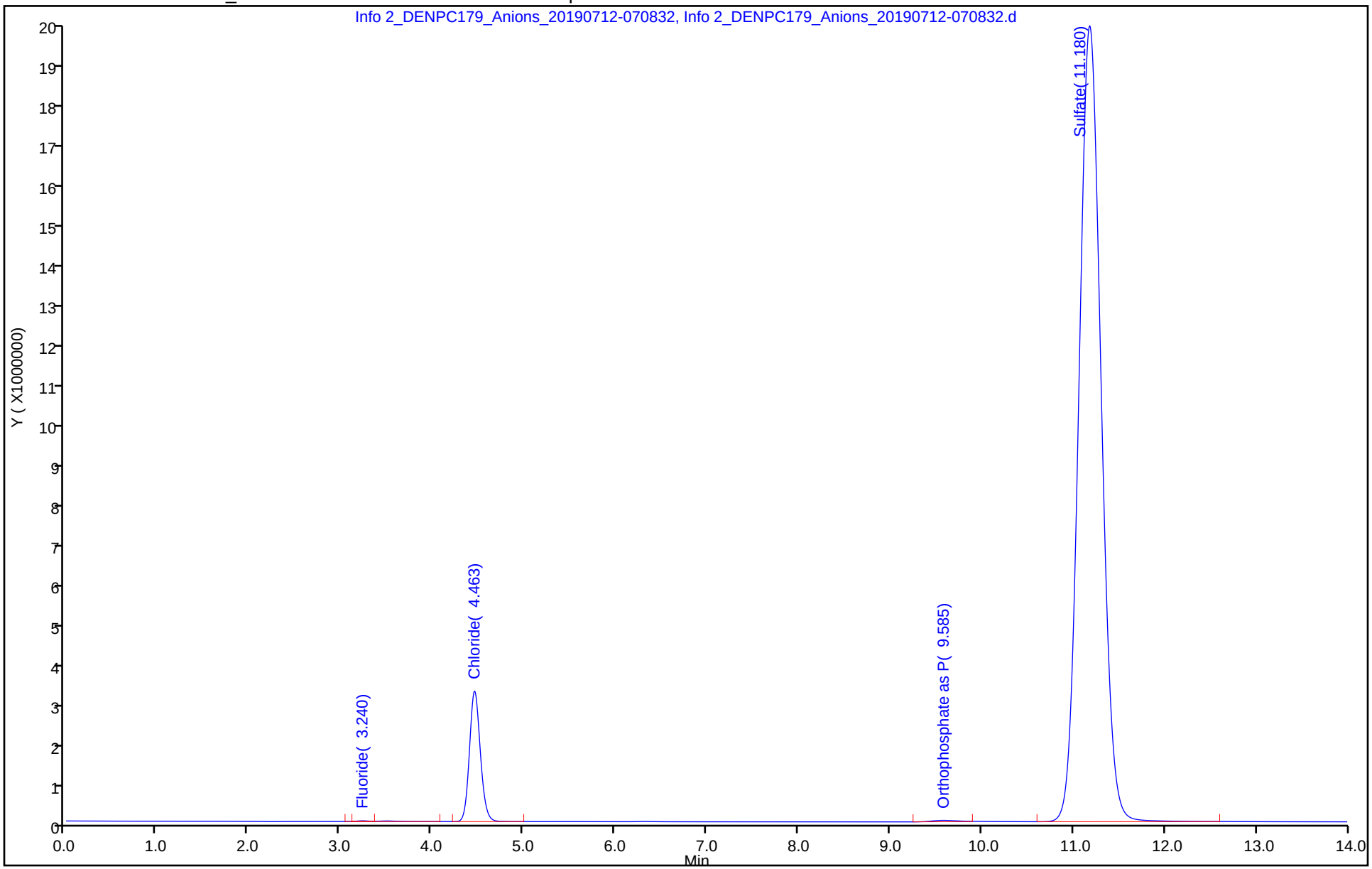
Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 23:06:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-070832.d

Injection Date:	12-Jul-2019 06:51:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-8	Lab Sample ID:	280-124928-8	Worklist Smp#:	34
Client ID:	G0107-19A				
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-072
Lims ID: 280-124928-F-9
Client ID: G0106-19A
Sample Type: Client
Inject. Date: 12-Jul-2019 07:08:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-035
Misc. Info.: 280-0083633-035
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	79075	0.0766	
2 Chloride	4.465	4.490	-0.025	24593349	6.37	
3 Nitrite as N		5.217			ND	
4 Bromide		6.355			ND	
5 Nitrate as N		7.167			ND	
6 Orthophosphate as P	9.605	9.727	-0.122	79733	NC	
7 Sulfate	11.183	11.522	-0.339	314987336	101.1	

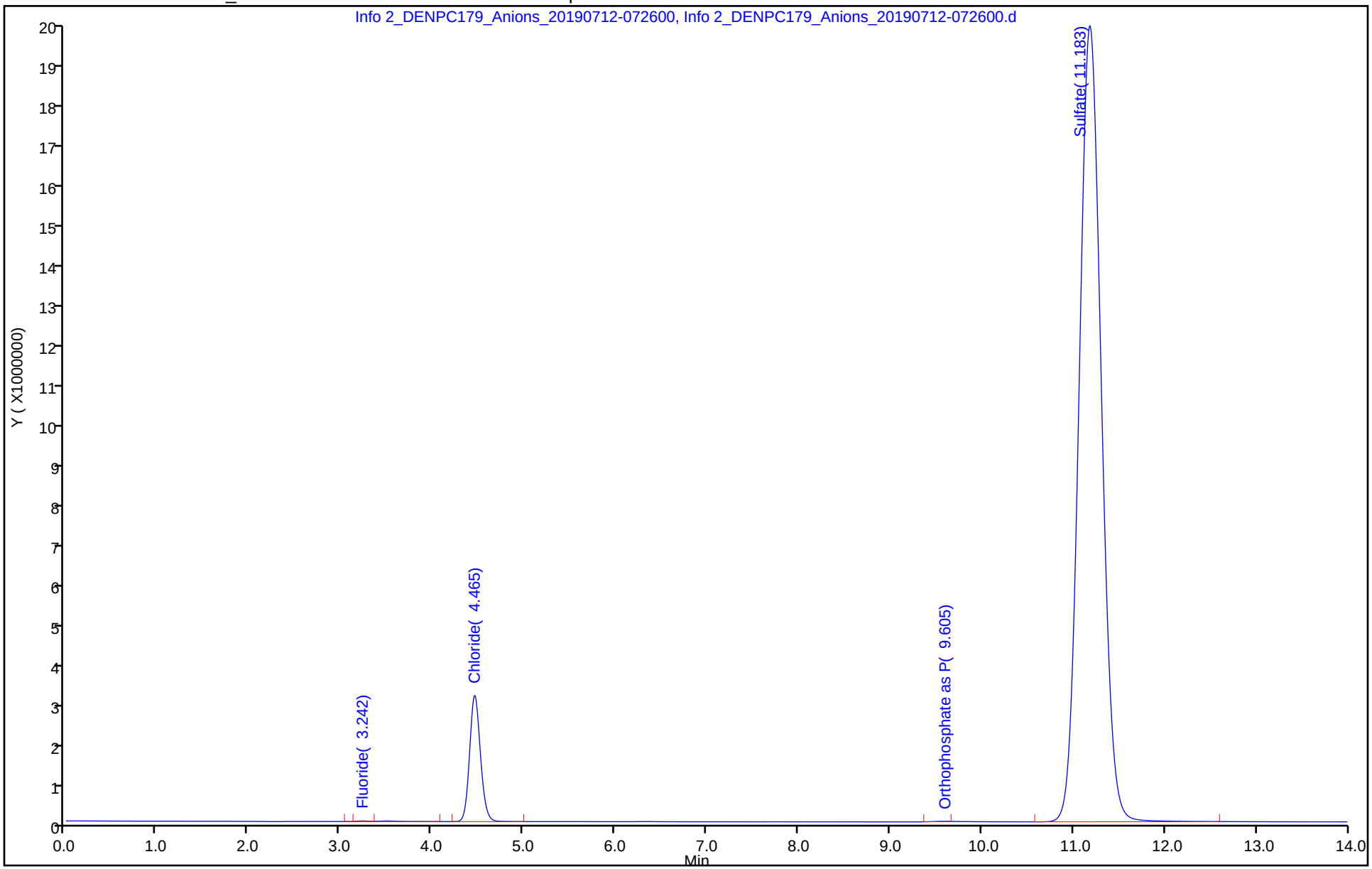
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 23:06:35 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-072600.d				
Injection Date:	12-Jul-2019 07:08:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-9	Lab Sample ID:	280-124928-9	Worklist Smp#:	35
Client ID:	G0106-19A				
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-074
Lims ID: 280-124928-F-14
Client ID: G0017-19A
Sample Type: Client
Inject. Date: 12-Jul-2019 07:26:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0083633-036
Misc. Info.: 280-0083633-036
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.240	3.263	-0.023	172439	0.0890	
2 Chloride	4.465	4.490	-0.025	33375750	8.49	
3 Nitrite as N	5.392	5.217	0.175	11185	NC	
4 Bromide		6.355			ND	
5 Nitrate as N		7.167			ND	
6 Orthophosphate as P		9.727			ND	
7 Sulfate	11.187	11.522	-0.335	239293337	76.9	

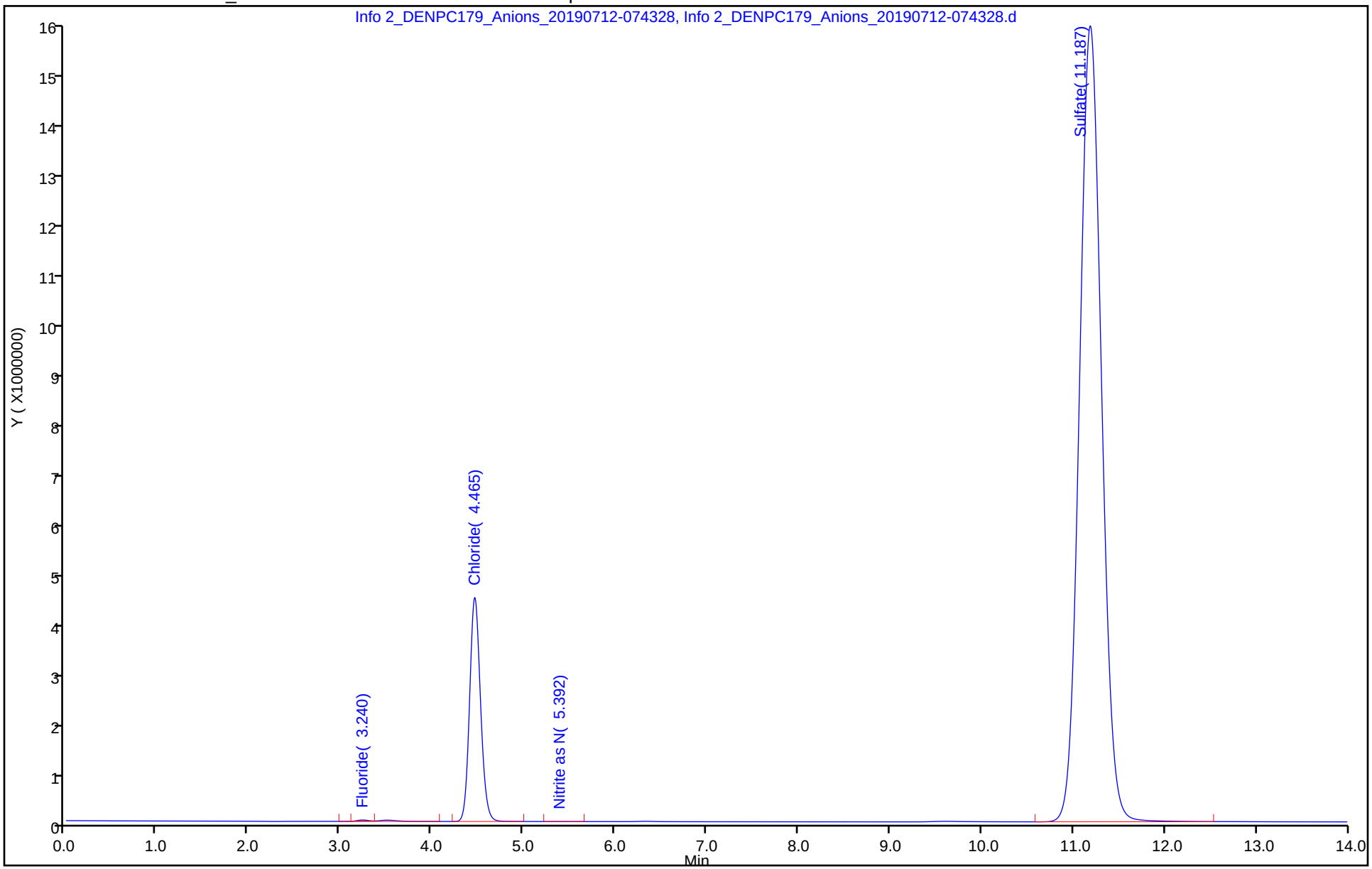
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 23:06:37 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-074328.d				
Injection Date:	12-Jul-2019 07:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-14	Lab Sample ID:	280-124928-14	Worklist Smp#:	36
Client ID:	G0017-19A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-080
Lims ID: 280-124928-F-15
Client ID: PZ009-19A
Sample Type: Client
Inject. Date: 12-Jul-2019 07:43:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0083633-037
Misc. Info.: 280-0083633-037
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	108642	0.0805	
2 Chloride	4.465	4.490	-0.025	57352037	14.3	
3 Nitrite as N	5.210	5.217	-0.007	52998	NC	
4 Bromide	6.332	6.355	-0.023	104433	0.1173	
5 Nitrate as N	7.148	7.167	-0.019	3850922	NC	
6 Orthophosphate as P		9.727			ND	
7 Sulfate	11.187	11.522	-0.335	329530522	105.8	

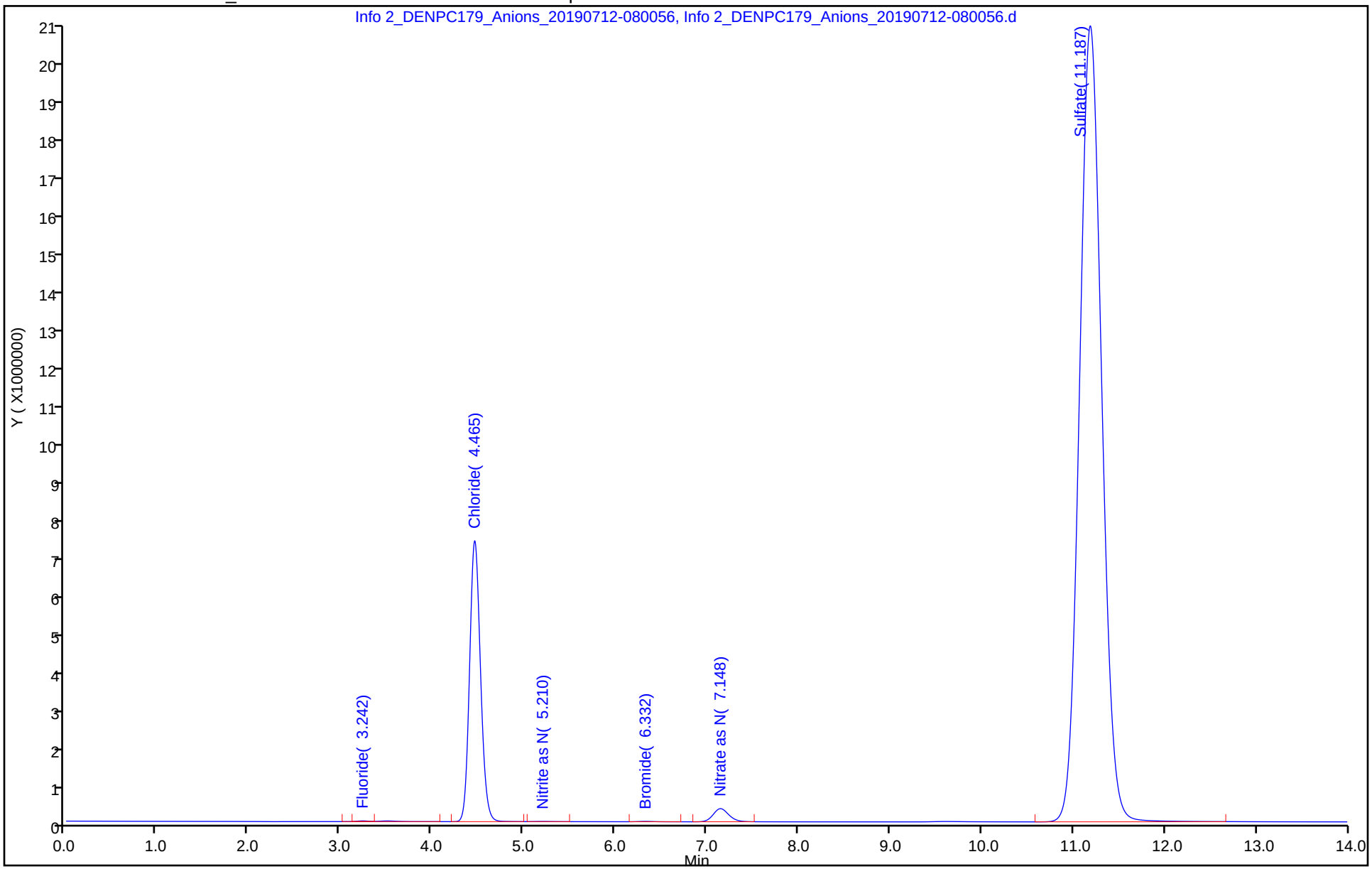
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 23:06:38 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-080056.d				
Injection Date:	12-Jul-2019 07:43:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-15	Lab Sample ID:	280-124928-15	Worklist Smp#:	37
Client ID:	PZ009-19A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-081
Lims ID: 280-124928-F-16
Client ID: G0045-19A
Sample Type: Client
Inject. Date: 12-Jul-2019 08:00:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-038
Misc. Info.: 280-0083633-038
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

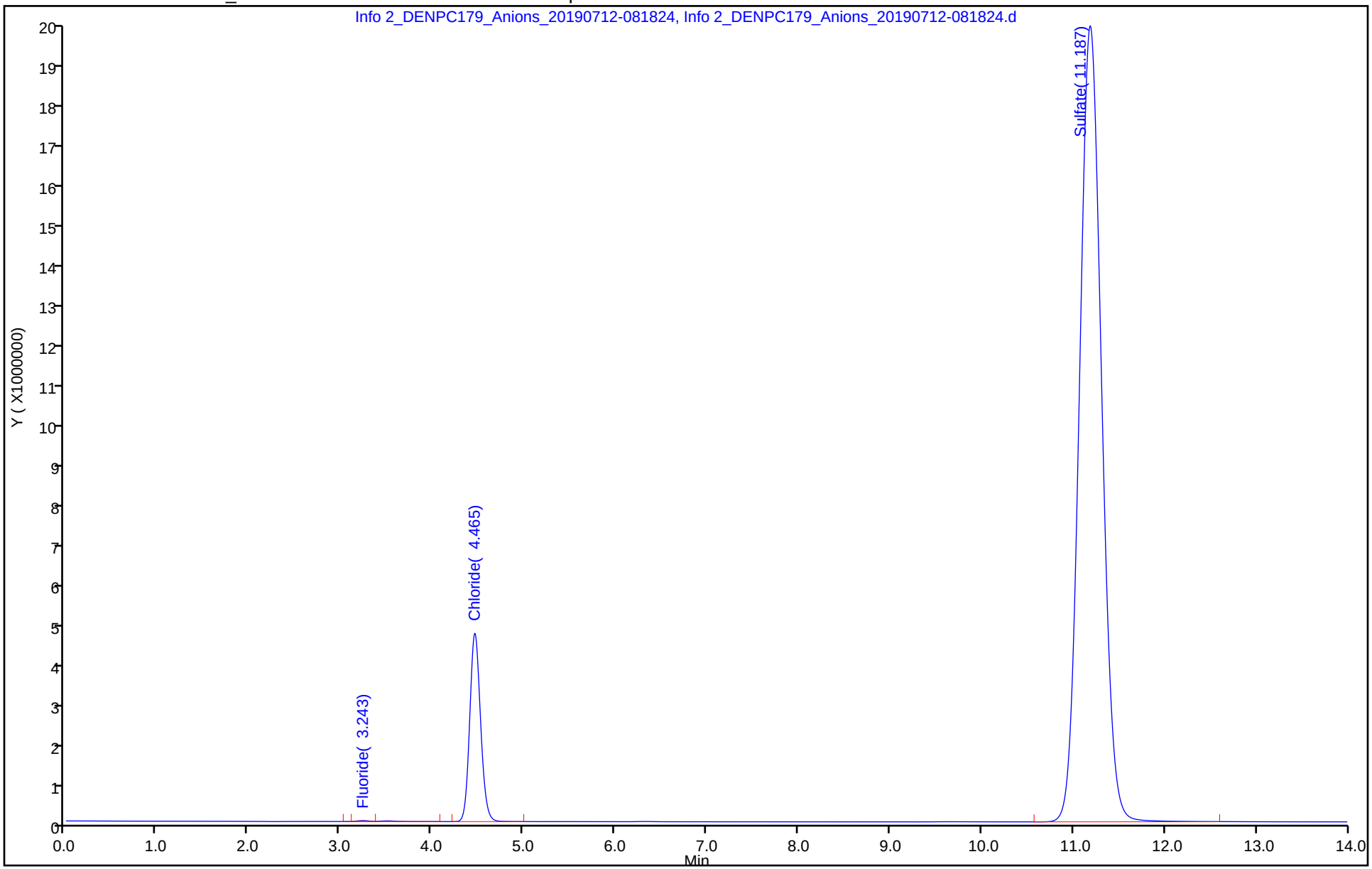
Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.243	3.263	-0.020	157796	0.0871	
2 Chloride	4.465	4.490	-0.025	36842625	9.33	
3 Nitrite as N		5.217			ND	
4 Bromide		6.355			ND	
5 Nitrate as N		7.167			ND	
6 Orthophosphate as P		9.727			ND	
7 Sulfate	11.187	11.522	-0.335	317509755	101.9	

Report Date: 12-Jul-2019 23:06:39 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-081824.d				
Injection Date:	12-Jul-2019 08:00:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-16	Lab Sample ID:	280-124928-16	Worklist Smp#:	38
Client ID:	G0045-19A				
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-083
Lims ID: 280-124928-F-16 DU
Client ID:
Sample Type: DU
Inject. Date: 12-Jul-2019 08:18:00 ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-039
Misc. Info.: 280-0083633-039
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

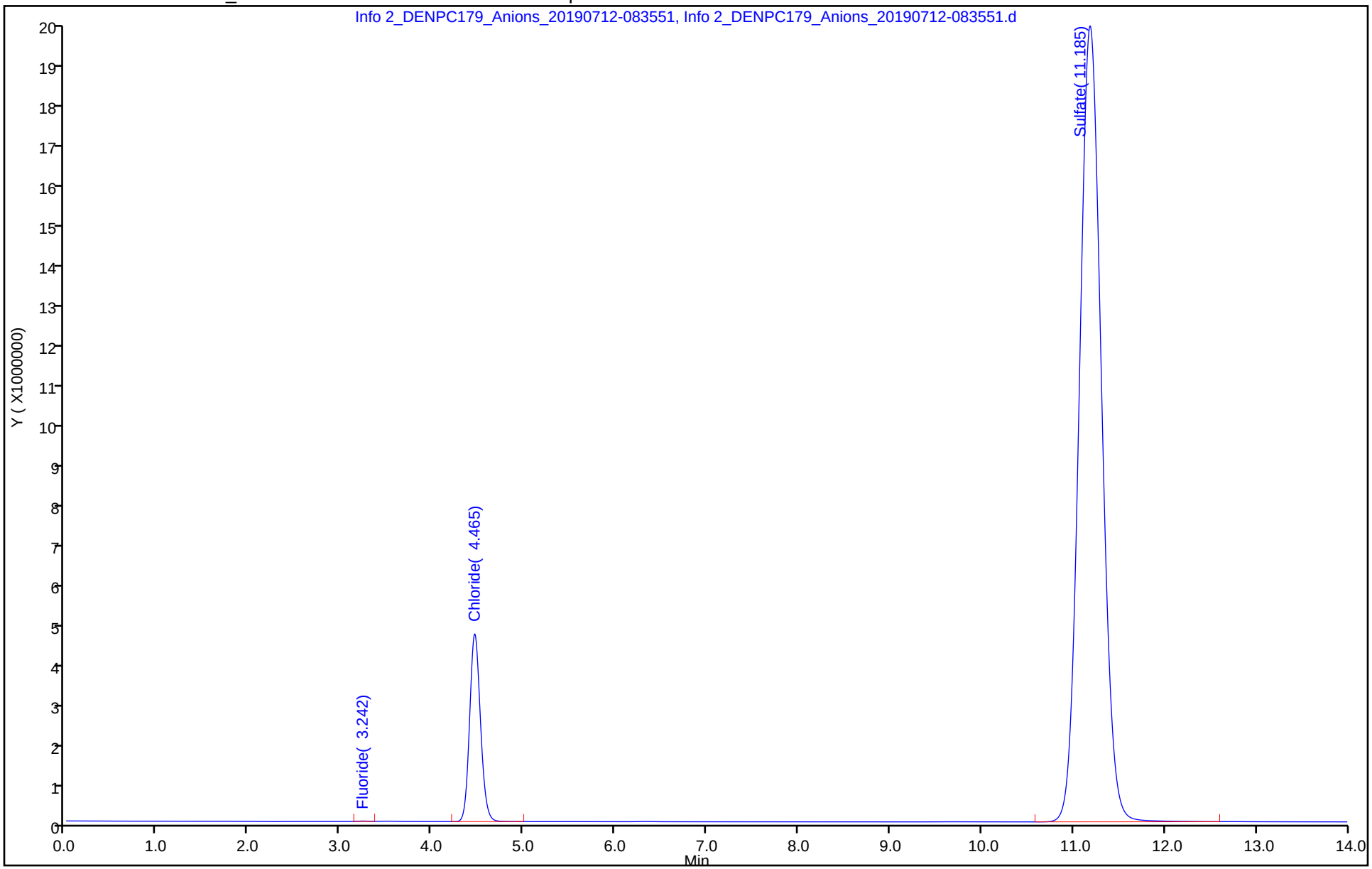
Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	58403		0.0739	
2 Chloride	4.465	4.490	-0.025	35983035		9.12	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P		9.727				ND	
7 Sulfate	11.185	11.522	-0.337	310625957		99.7	

Report Date: 12-Jul-2019 23:06:40 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-083551.d				
Injection Date:	12-Jul-2019 08:18:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-16 DU			Worklist Smp#:	39
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-085
Lims ID: 280-124928-F-16 MS
Client ID:
Sample Type: MS
Inject. Date: 12-Jul-2019 08:35:00 ALS Bottle#: 0 Worklist Smp#: 40
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-040
Misc. Info.: 280-0083633-040
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 14:42:59 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	32163331	0.5000	4.34	
2 Chloride	4.462	4.490	-0.028	143925389	2.50	35.1	
3 Nitrite as N	5.180	5.217	-0.037	39998633	NC	NC	
4 Bromide	6.307	6.355	-0.048	6679596	0.4999	4.55	
5 Nitrate as N	7.108	7.167	-0.059	45223039	NC	NC	
6 Orthophosphate as P	9.532	9.727	-0.195	17519685	NC	NC	
7 Sulfate	11.185	11.522	-0.337	395214683	2.50	126.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated

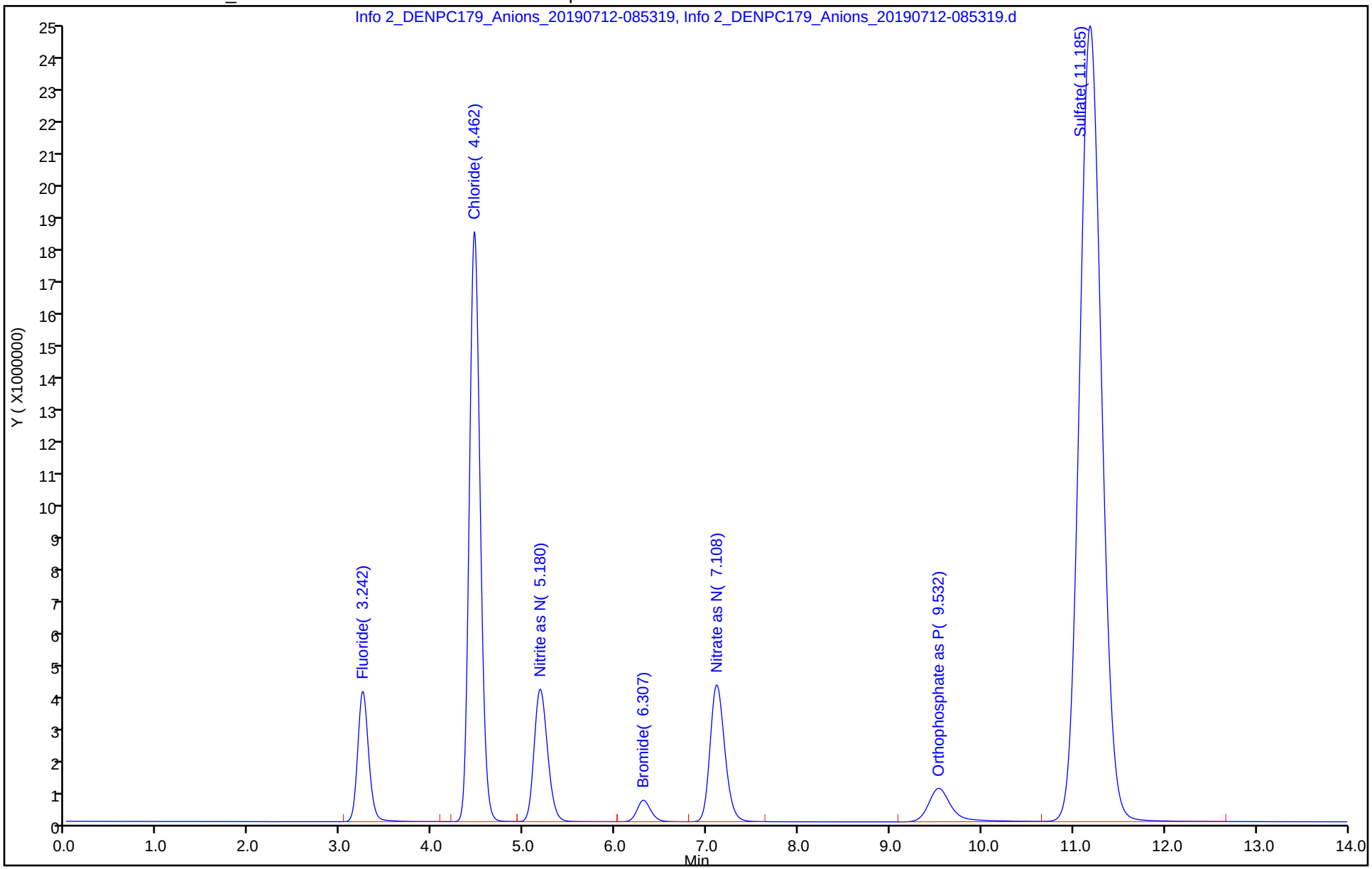
Reagents:

ICMS/MSD WEEK_00603 Amount Added: 0.10 Units: mL

Report Date: 12-Jul-2019 23:06:41 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-085319.d				
Injection Date:	12-Jul-2019 08:35:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-16 MS			Worklist Smp#:	40
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-091
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-Jul-2019 08:53:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-041
Misc. Info.: 280-0083633-041
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 23:06:41 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.243	3.263	-0.020	32202723	5.00	4.35	
2 Chloride	4.462	4.490	-0.028	399016117	100.0	96.6	
3 Nitrite as N	5.182	5.217	-0.035	38277498	NC	NC	
4 Bromide	6.307	6.355	-0.048	6327397	5.00	4.31	
5 Nitrate as N	7.108	7.167	-0.059	42776860	NC	NC	
6 Orthophosphate as P	9.528	9.727	-0.199	17038024	NC	NC	
7 Sulfate	11.192	11.522	-0.330	280294119	100.0	90.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

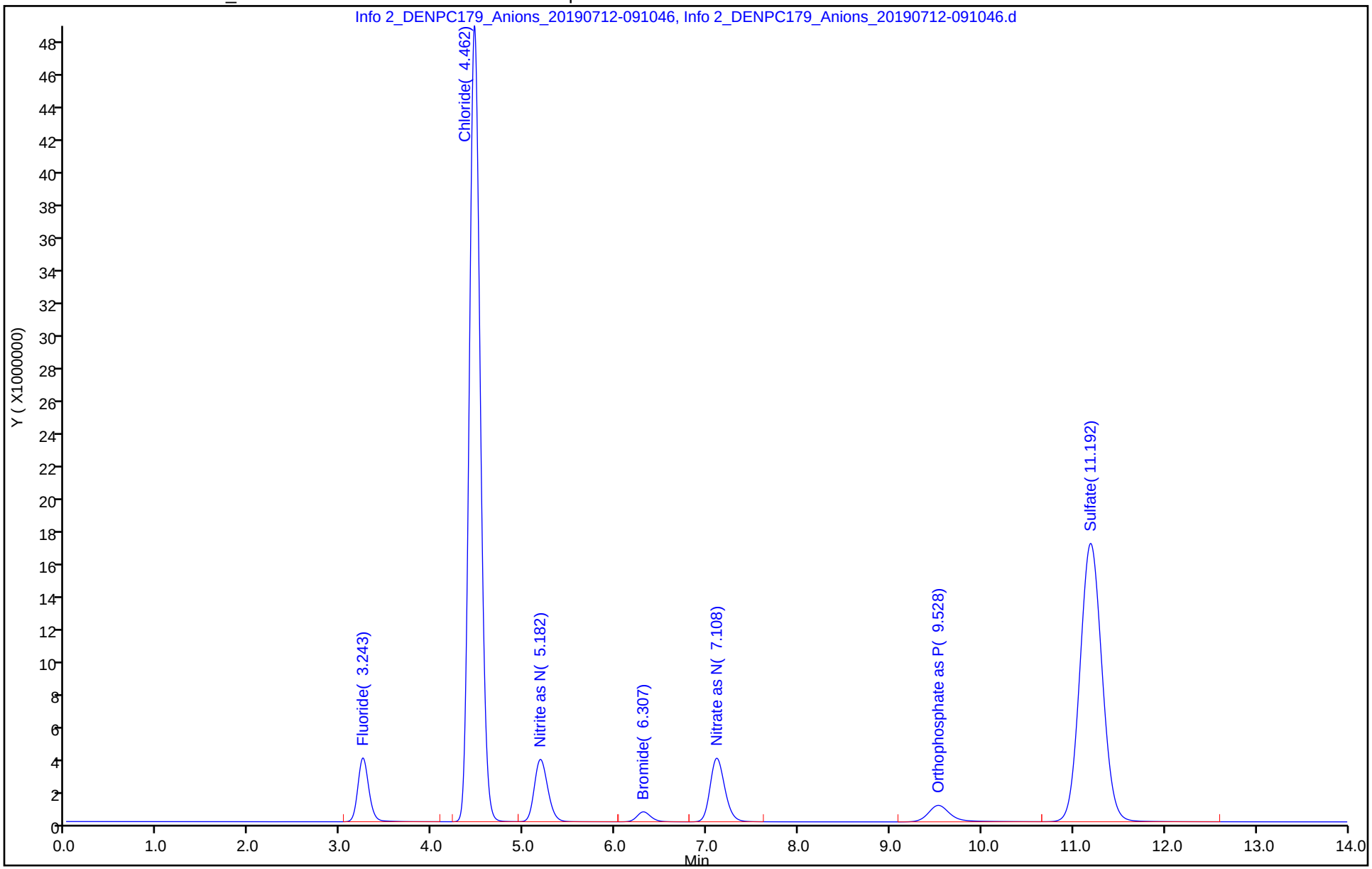
IC LCS_01628 Amount Added: 10.00 Units: mL

Report Date: 12-Jul-2019 23:06:42 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-091046.d

Injection Date:	12-Jul-2019 08:53:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-092				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	12-Jul-2019 09:10:00	ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0083633-042				
Misc. Info.:	280-0083633-042				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	12-Jul-2019 23:06:41	Calib Date:	02-Jul-2019 23:41:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0329				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.508	3.263	0.245	272521		0.1023	
2 Chloride	4.470	4.490	-0.020	147147		0.4819	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.588	9.727	-0.139	556903		NC	
7 Sulfate	11.208	11.522	-0.314	257096		0.5961	

QC Flag Legend

Processing Flags

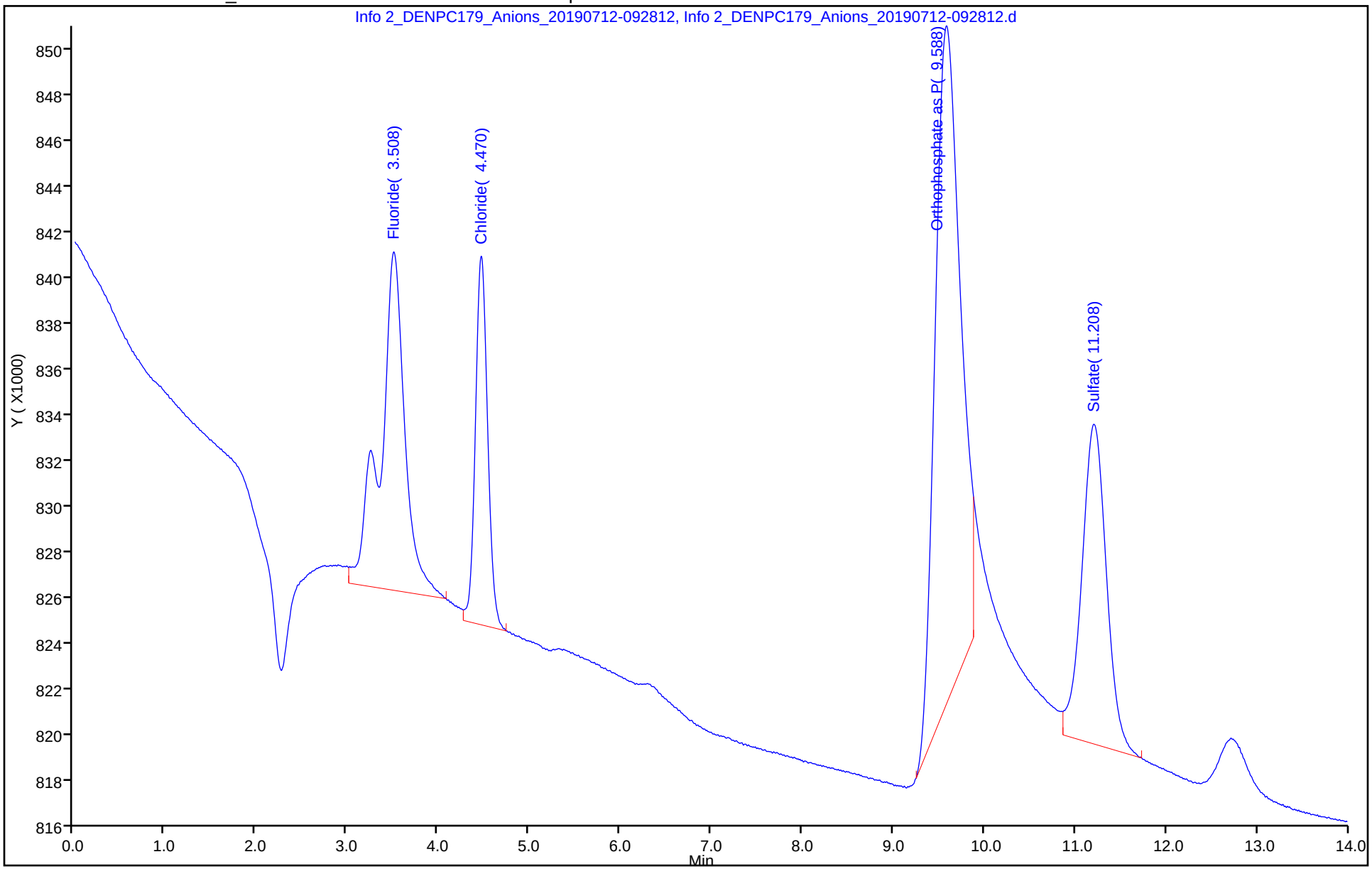
NC - Not Calibrated

Report Date: 12-Jul-2019 23:06:43 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-092812.d

Injection Date:	12-Jul-2019 09:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-094
Lims ID: 280-124928-F-16 MSD
Client ID:
Sample Type: MSD
Inject. Date: 12-Jul-2019 09:28:00 ALS Bottle#: 0 Worklist Smp#: 43
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0083633-043
Misc. Info.: 280-0083633-043
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 23:06:41 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.242	3.263	-0.021	32400291	0.5000	4.38	
2 Chloride	4.460	4.490	-0.030	143686655	2.50	35.1	
3 Nitrite as N	5.177	5.217	-0.040	40579787	NC	NC	
4 Bromide	6.303	6.355	-0.052	6688589	0.4999	4.56	
5 Nitrate as N	7.103	7.167	-0.064	45784656	NC	NC	
6 Orthophosphate as P	9.528	9.727	-0.199	17192227	NC	NC	
7 Sulfate	11.180	11.522	-0.342	392293750	2.50	125.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

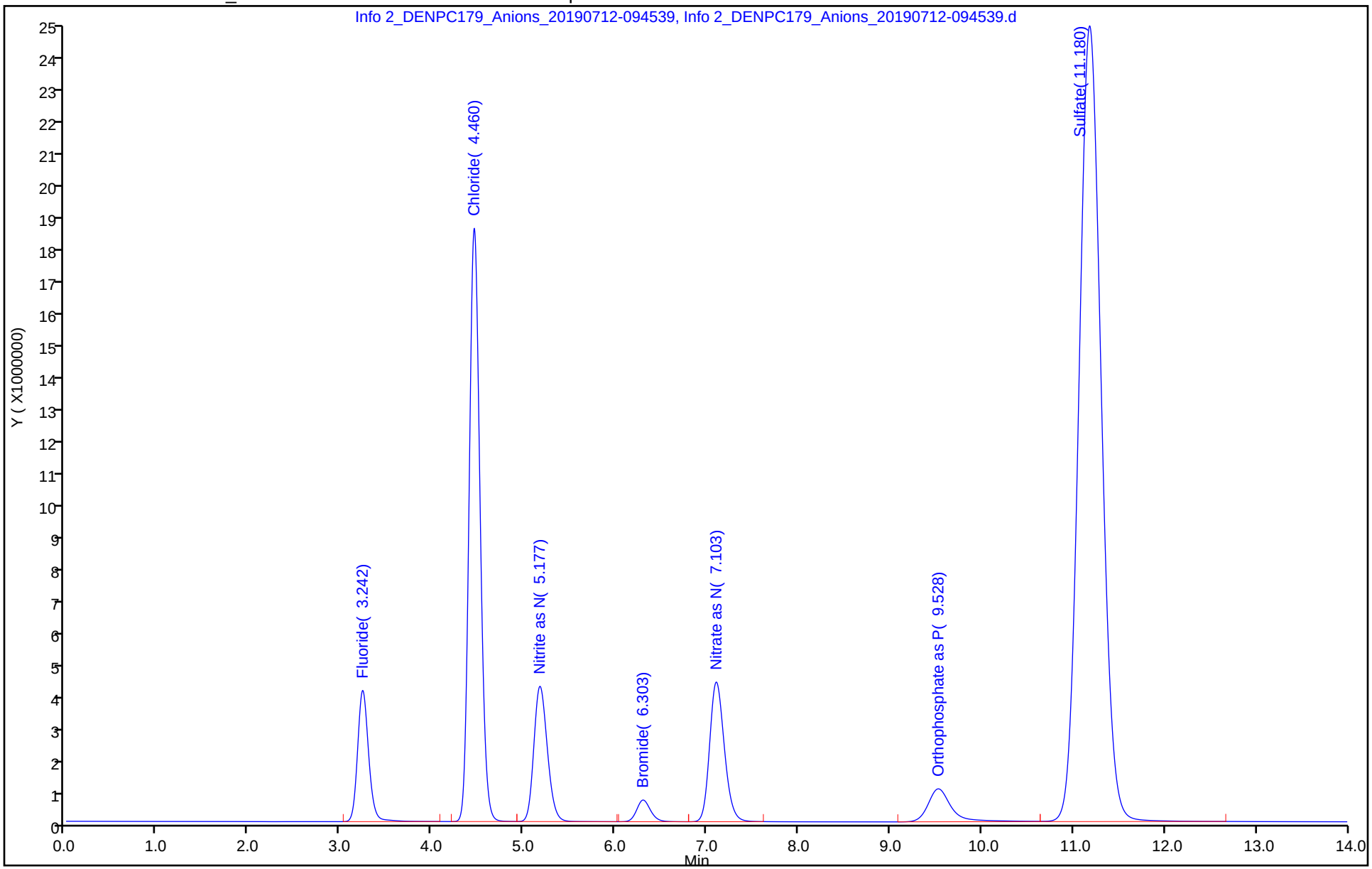
ICMS/MSD WEEK_00603 Amount Added: 0.10 Units: mL

Report Date: 12-Jul-2019 23:06:44 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-094539.d

Injection Date:	12-Jul-2019 09:28:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-124928-F-16 MSD			Worklist Smp#:	43
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-123				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	12-Jul-2019 12:22:00	ALS Bottle#:	0	Worklist Smp#:	53
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0083633-053				
Misc. Info.:	280-0083633-053				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub2				
Method:	\\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	12-Jul-2019 23:06:53	Calib Date:	02-Jul-2019 23:41:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX0329				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.243	3.263	-0.020	32409777	5.00	4.38	
2 Chloride	4.460	4.490	-0.030	404252876	100.0	97.9	
3 Nitrite as N	5.180	5.217	-0.037	38836418	NC	NC	
4 Bromide	6.303	6.355	-0.052	6410492	5.00	4.37	
5 Nitrate as N	7.105	7.167	-0.062	43427776	NC	NC	
6 Orthophosphate as P	9.525	9.727	-0.202	16463071	NC	NC	
7 Sulfate	11.187	11.522	-0.335	284722747	100.0	91.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

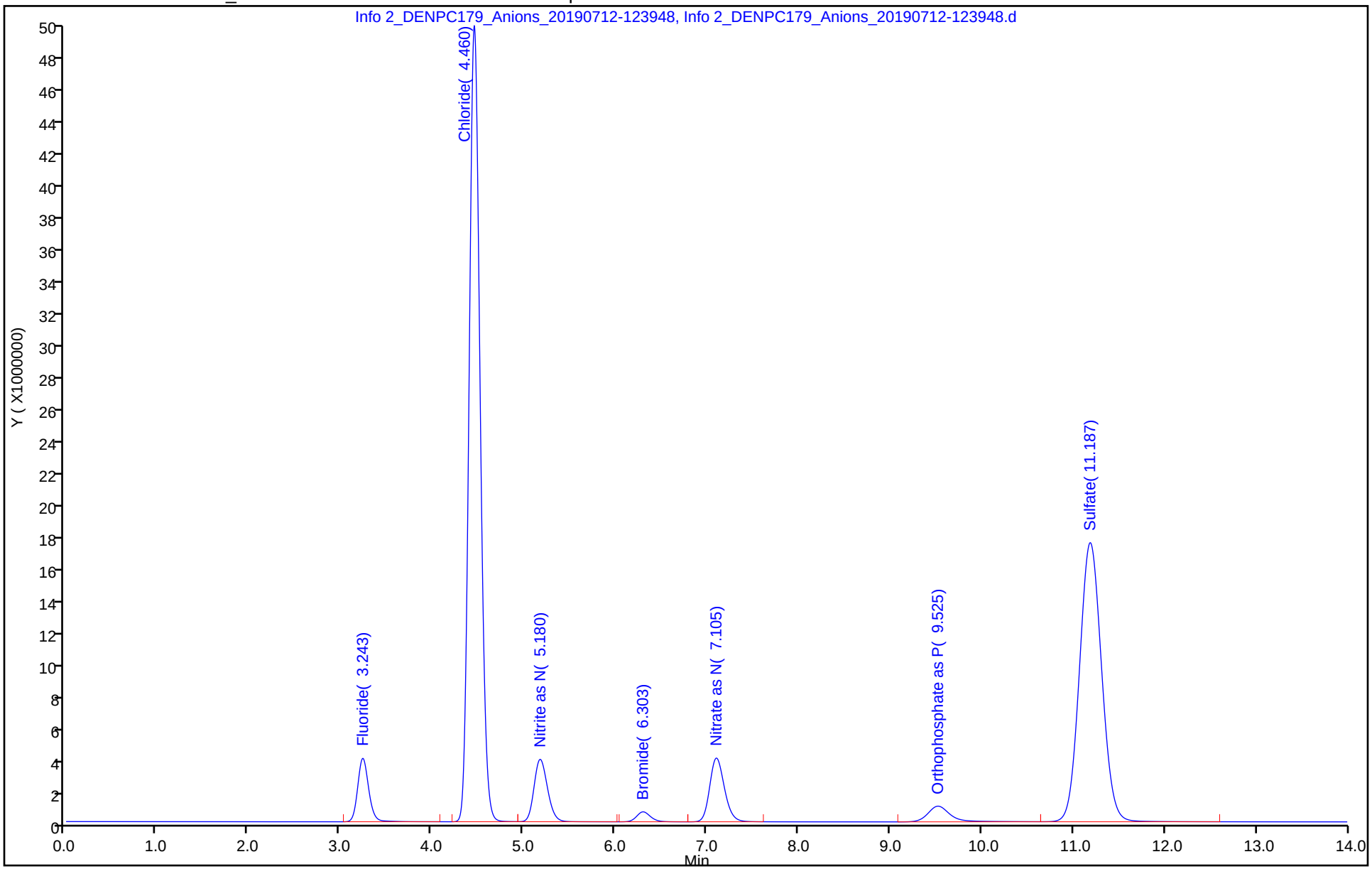
IC LCS_01628 Amount Added: 10.00 Units: mL

Report Date: 12-Jul-2019 23:06:53 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-123948.d

Injection Date:	12-Jul-2019 12:22:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-125
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 12-Jul-2019 12:39:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0083633-054
Misc. Info.: 280-0083633-054
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-Jul-2019 23:06:53 Calib Date: 02-Jul-2019 23:41:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\WC_IonChrom10\20190702-83432.b\Info 2_DENPC179_Anions_20190702-235

Column 1 : Det: Info 2_091554_1
Process Host: CTX0329

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.510	3.263	0.247	247570		0.0990	
2 Chloride	4.470	4.490	-0.020	99117		0.4703	
3 Nitrite as N		5.217				ND	
4 Bromide		6.355				ND	
5 Nitrate as N		7.167				ND	
6 Orthophosphate as P	9.595	9.727	-0.132	413980		NC	
7 Sulfate	11.217	11.522	-0.305	113246		0.5502	

QC Flag Legend

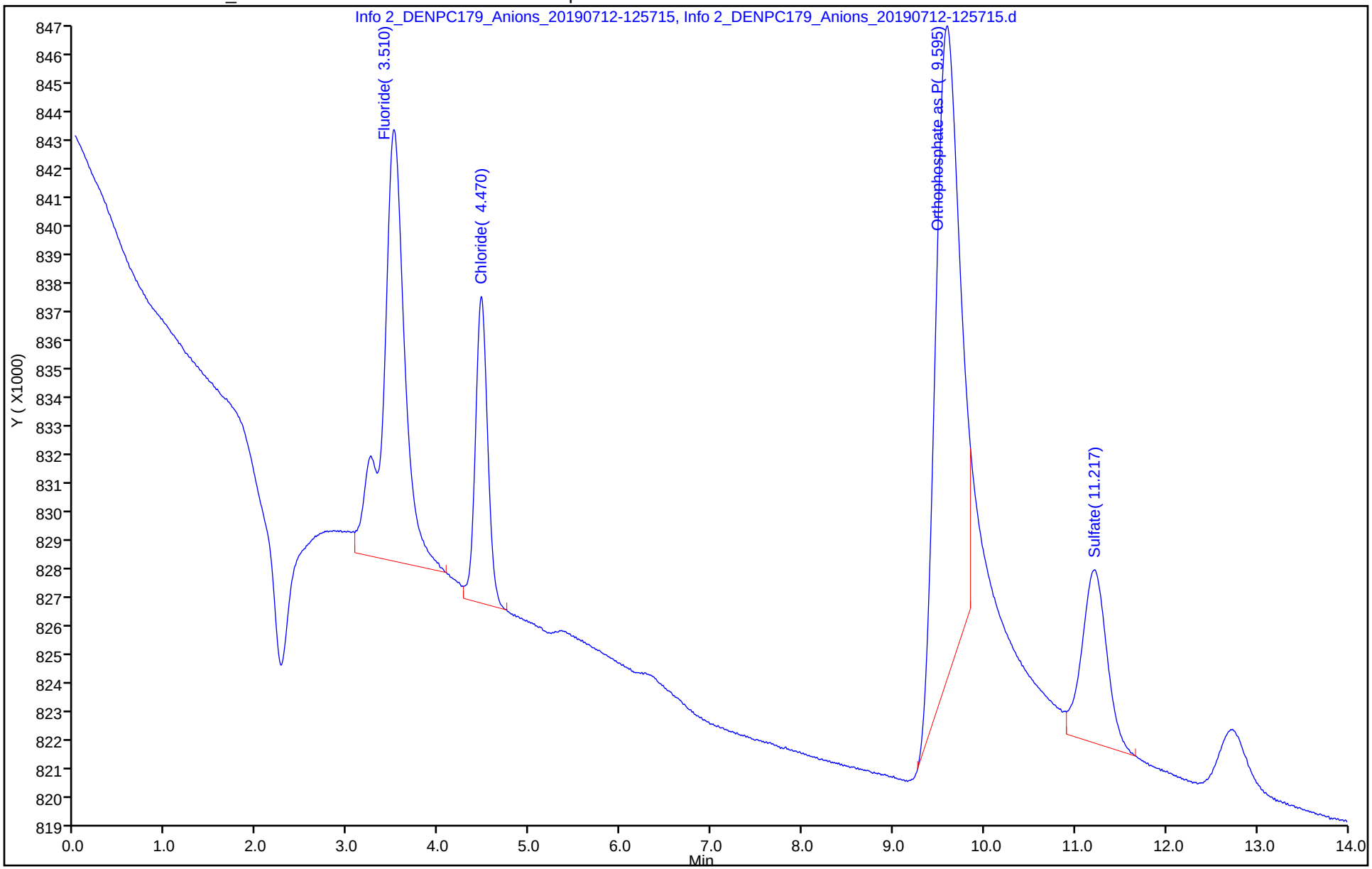
Processing Flags
NC - Not Calibrated

Report Date: 12-Jul-2019 23:06:55 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

Data File: \\chromna\Denver\ChromData\WC_IonChrom10\20190711-83633.b\Info 2_DENPC179_Anions_20190712-125715.d

Injection Date:	12-Jul-2019 12:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	54
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



pH CC 7/3/19

	Analysis	Sample Name	Sample ID	Manual Diluti	~~Result~~	Notes	Date / Time	Vial
1*	NPOC	ICV		1.000	cc			1
2*	NPOC	ICB		1.000	cc			2
3*	NPOC	lcs 280-463538/1-a		1.000	cc			3
4*	NPOC	mb 280-463538/2-a		1.000	cc			4
5*	NPOC	TIC		1.000	cc			5
6*	NPOC	280-124726-c-1-a		1.000	7			6
7*	NPOC	280-124726-c-1-b ms		1.000	7			7
8*	NPOC	280-124726-c-1-c ms		1.000	7			8
9*	NPOC	280-124726-c-2-a		1.000	7			9
10*	NPOC	lcs 280-463539/1-a		1.000	cc			10
11*	NPOC	mb 280-463539/2-a		1.000	cc			11
12*	NPOC	TIC		1.000	cc			12
13*	NPOC	280-124928-d-7-a		1.000	7			13
14*	NPOC	280-124928-d-7-b ms		1.000	7			14
15*	NPOC	CCV		1.000	cc			15
16*	NPOC	CCB		1.000	cc			16
17*	NPOC	280-124928-d-7-c ms		1.000	7			17
18*	NPOC	280-124928-d-8-a		1.000	7			18
19*	NPOC	280-124928-d-9-a		1.000	7			19
20*	NPOC	LCS		1.000	cc			20
21*	NPOC	LCSD		1.000	cc			21
22*	NPOC	MB		1.000	cc			22
23*	NPOC	280-124713-i-9		1.000	cc			23
24*	NPOC	280-124713-b-10		1.000	cc			24
25*	NPOC	280-124713-h-11		1.000	cc			25
26*	NPOC	MS 280-124713-h-11		1.000	cc			26
27*	NPOC	CCV		1.000	cc			27
28*	NPOC	CCB		1.000	cc			28
29*	NPOC	MSD 280-124713-h-1		1.000	cc			29
30*	NPOC	280-124713-c-12		1.000	cc			30
31*	NPOC	280-124726-a-2		1.000	cc			31
32*	NPOC	280-124726-a-1		1.000	cc			32
33*	NPOC	280-124727-e-1		1.000	cc			33
34*	NPOC	280-124732-f-1		1.000	cc			34
35*	NPOC	280-124732-f-2		1.000	cc			35
36*	NPOC	280-124732-f-3		1.000	cc			36
37*	NPOC	280-124732-f-4		1.000	cc			37
38*	NPOC	280-124736-h-1		5x ~~1.000~~	cc	flocculus/stinky		38
39*	NPOC	CCV		1.000	cc			39
40*	NPOC	CCB		1.000	cc			40
41*	NPOC	280-124736-h-2		5x ~~1.000~~	cc	colored/slightly fizzy		41
42*	NPOC	280-124738-j-1		5x ~~1.000~~	cc			42
43*	NPOC	280-124738-j-2		5x ~~1.000~~	cc	high chloride		43
44*	NPOC	280-124789-a-1		1.000	cc			44
45*	NPOC	280-124794-k-1		1.000	cc			45
46*	NPOC	280-124794-l-2		1.000	cc			46
47*	NPOC	280-124794-l-4		1.000	cc			47
48*	NPOC	280-124794-k-5		1.000	cc			48
49*	NPOC	MS 280-124794-k-5		1.000	cc			49
50*	NPOC	MSD 280-124794-k-5		1.000	cc			50
51*	NPOC	CCV		1.000	cc			51

53103
90160
53103

pH OT 7/3/19

	Analysis	Sample Name	Sample ID	Manual Diluti	~~Result~~	Notes	Date / Time	Vial
52*	NPOC	CCB		1.000				52
53*	NPOC	LCS		1.000				53
54*	NPOC	LCSD		1.000				54
55*	NPOC	MB		1.000				55
56*	NPOC	TIC		1.000				56
57*	NPOC	280-124794-k-6		1.000				57
58*	NPOC	MS 280-124794-k-6		1.000				58
59*	NPOC	MSD 280-124794-k-6		1.000				59
60*	NPOC	280-124794-l-7		1.000				60
61*	NPOC	280-124801-a-1		1.000				61
62*	NPOC	280-124801-a-2		1.000				62
63*	NPOC	CCV		1.000				63
64*	NPOC	CCB		1.000				64
65*	NPOC	280-124806-b-11		1.000				65
66*	NPOC	280-124806-b-12		1.000				66
67*	NPOC	280-124794-k-8		1.000				67
68*	NPOC	280-124806-b-1		1.000				68
69*	NPOC	280-124806-b-2		1.000				69
70*	NPOC	280-124806-b-3		1.000				70
71*	NPOC	280-124806-b-4		1.000				71
72*	NPOC	280-124806-b-5		1.000				72
73*	NPOC	MS 280-124806-b-5		1.000				73
74*	NPOC	MSD 280-124806-b-5		1.000				74
75*	NPOC	CCV		1.000				75
76*	NPOC	CCB		1.000				76
77*	NPOC	280-124806-b-6		1.000				77
78*	NPOC	280-124806-b-7		1.000				78
79*	NPOC	280-124806-b-8		1.000				79
80*	NPOC	280-124806-b-9		1.000				80
81*	NPOC	280-124806-b-10		1.000				81
82*	NPOC	280-124813-b-1		1.000				82
83*	NPOC	280-124813-b-3		1.000				83
84*	NPOC	280-124813-b-4		1.000				84
85*	NPOC	LCS		1.000				85
86*	NPOC	LCSD		1.000				86
87*	NPOC	CCV		1.000				87
88*	NPOC	CCB		1.000				88
89*	NPOC	MB		1.000				89
90*	NPOC	TIC		1.000				90
91*	NPOC	280-124813-b-5		1.000				91
92*	NPOC	280-124819-e-1		1.000				92
93*	NPOC	MS 280-124819-e-1		1.000				93
94*	NPOC	MSD 280-124819-e-1		1.000				1
95*	NPOC	280-124817-c-1		1.000				2
96*	NPOC	280-124813-b-9		1.000				3
97*	NPOC	280-124813-b-8		1.000				4
98*	NPOC	280-124813-b-6		1.000				5
99*	NPOC	CCV		1.000				6
100*	NPOC	CCB		1.000				7
101*	NPOC	280-124817-d-2		1.000				8
102*	NPOC	280-124817-f-3		1.000				9

pH CT 7/3/19

	Analysis	Sample Name	Sample ID	Manual Diluti	~~Result~~	Notes	Date / Time	Vial
103*	NPOC	280-124817-e-4		1.000	cl			10
104*	NPOC	280-124817-e-5		1.000	cl			11
105*	NPOC	280-124950-f-15		1.000	cl			12
106*	NPOC	280-124950-e-16		1.000	cl			13
107*	NPOC	280-124950-e-1		1.000	cl			14
108*	NPOC	MS 280-124950-e-1		1.000	cl			15
109*	NPOC	MSD 280-124950-e-1		1.000	cl			16
110*	NPOC	280-124950-e-2		1.000	cl			17
111*	NPOC	CCV		1.000	cl			18
112*	NPOC	CCB		1.000	cl			19
113*	NPOC	280-124950-e-3		1.000	cl			20
114*	NPOC	280-124950-e-4		1.000	cl			21
115*	NPOC	280-124950-e-5		1.000	cl			22
116*	NPOC	280-124950-e-6		1.000	cl			23
117*	NPOC	280-124950-f-7		1.000	cl			24
118*	NPOC	280-124950-f-8		1.000	cl			25
119*	NPOC	LCS		1.000	cl			26
120*	NPOC	LCSD		1.000	cl			27
121*	NPOC	MB		1.000	cl			28
122*	NPOC	TIC		1.000	cl			29
123*	NPOC	CCV		1.000	cl			30
124*	NPOC	CCB		1.000	cl			31
125*	NPOC	280-124950-f-9		1.000	cl			32
126*	NPOC	MS 280-124950-f-9		1.000	cl			33
127*	NPOC	MSD 280-124950-f-9		1.000	cl			34
128*	NPOC	280-124950-e-10		1.000	cl			35
129*	NPOC	280-124950-f-11		1.000	cl			36
130*	NPOC	280-124950-f-12		1.000	cl			37
131*	NPOC	280-124950-e-13		1.000	cl			38
132*	NPOC	280-124950-e-14		1.000	cl			39
133*	NPOC	280-124928-d-16-a		1.000	7			40
134*	NPOC	280-124946-f-12-a		1.000	7			41
135*	NPOC	CCV		1.000	cl			42
136*	NPOC	CCB		1.000	cl			43
137*	NPOC	280-124946-f-13-a		1.000	7			44
138*	NPOC	280-124946-f-14-a		1.000	7			45
139*	NPOC	280-124946-f-15-a		1.000	7			46
140*	NPOC	280-124946-f-16-a		1.000	7			47
141*	NPOC	280-124888-p-1		1.000	cl			48
142*	NPOC	280-124888-l-2		1.000	cl			49
143*	NPOC	280-124888-k-3		1.000	cl			50
144*	NPOC	MS 280-124888-k-3		1.000	cl			51
145*	NPOC	MSD 280-124888-k-3		1.000	cl			52
146*	NPOC	280-124888-l-4		1.000	cl			53
147*	NPOC	CCV		1.000	cl			54
148*	NPOC	CCB		1.000	cl			55
149*	NPOC	280-124888-l-5		1.000	cl			56
150*	NPOC	280-124888-l-6		1.000	cl			57
151*	NPOC	280-124888-k-7		1.000	cl			58
152*	NPOC	280-124888-l-8		1.000	cl			59
153*	NPOC	280-124888-k-9		1.000	cl			60

5306 2060

5310

	Analysis	Sample Name	Sample ID	Manual Diluti	~~Result~~	Notes	Date / Time	Vial
154*	NPOC	280-124888-k-10		1.000				61
155*	NPOC	CCV		1.000				62
156*	NPOC	CCB		1.000				63

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
1	NPOC	ICV		1.000	NPOC:20.0		7/3/2019 3:57:2	1
2	NPOC	ICB		1.000	NPOC:0.00		7/3/2019 4:12:0	2
3	NPOC	lcs 280-463538/1-a		1.000	NPOC:24.7		7/3/2019 4:26:5	3
4	NPOC	mb 280-463538/2-a		1.000	NPOC:0.08		7/3/2019 4:41:3	4
5	NPOC	TIC		1.000	NPOC:0.05		7/3/2019 4:56:1	5
6	NPOC	280-124726-c-1-a		1.000	NPOC:6.30		7/3/2019 5:11:0	6
7	NPOC	280-124726-c-1-b ms		1.000	NPOC:30.6		7/3/2019 5:25:4	7
8	NPOC	280-124726-c-1-c ms		1.000	NPOC:31.3		7/3/2019 5:40:2	8
9	NPOC	280-124726-c-2-a		1.000	NPOC:6.21		7/3/2019 5:55:1	9
10	NPOC	lcs 280-463539/1-a		1.000	NPOC:24.1		7/3/2019 6:09:5	10
11	NPOC	mb 280-463539/2-a		1.000	NPOC:0.06		7/3/2019 6:24:3	11
12	NPOC	TIC		1.000	NPOC:0.07		7/3/2019 6:39:2	12
13	NPOC	280-124928-d-7-a		1.000	NPOC:5.91		7/3/2019 6:54:0	13
14	NPOC	280-124928-d-7-b ms		1.000	NPOC:29.2		7/3/2019 7:08:4	14
15	NPOC	CCV		1.000	NPOC:24.8		7/3/2019 7:23:3	15
16	NPOC	CCB		1.000	NPOC:0.04		7/3/2019 7:38:1	16
17	NPOC	280-124928-d-7-c ms		1.000	NPOC:30.3		7/3/2019 7:52:5	17
18	NPOC	280-124928-d-8-a		1.000	NPOC:4.42		7/3/2019 8:09:4	18
19	NPOC	280-124928-d-9-a		1.000	NPOC:3.92		7/3/2019 8:24:2	19
20	NPOC	LCS		1.000	NPOC:24.7		7/3/2019 8:39:0	20
21	NPOC	LCSD		1.000	NPOC:24.5		7/3/2019 8:53:5	21
22	NPOC	MB		1.000	NPOC:0.04		7/3/2019 9:08:3	22
23	NPOC	280-124713-i-9		1.000	NPOC:0.22		7/3/2019 9:23:2	23
24	NPOC	280-124713-b-10		1.000	NPOC:0.20		7/3/2019 9:38:0	24
25	NPOC	280-124713-h-11		1.000	NPOC:1.98		7/3/2019 9:54:5	25
26	NPOC	MS 280-124713-h-11		1.000	NPOC:26.9		7/3/2019 10:09:	26
27	NPOC	CCV		1.000	NPOC:24.8		7/3/2019 10:24:	27
28	NPOC	CCB		1.000	NPOC:0.04		7/3/2019 10:39:	28
29	NPOC	MSD 280-124713-h-1		1.000	NPOC:26.9		7/3/2019 10:53:	29
30	NPOC	280-124713-c-12		1.000	NPOC:2.31		7/3/2019 11:10:	30
31	NPOC	280-124726-a-2		1.000	NPOC:7.18		7/3/2019 11:25:	31
32	NPOC	280-124726-a-1		1.000	NPOC:7.10		7/3/2019 11:39:	32
33	NPOC	280-124727-e-1		1.000	NPOC:0.52		7/3/2019 11:54:	33
34	NPOC	280-124732-f-1		1.000	NPOC:0.82		7/4/2019 12:09:	34
35	NPOC	280-124732-f-2		1.000	NPOC:2.56		7/4/2019 12:24:	35
36	NPOC	280-124732-f-3		1.000	NPOC:23.1		7/4/2019 12:38:	36
37	NPOC	280-124732-f-4		1.000	NPOC:0.80		7/4/2019 12:53:	37
38	NPOC	280-124736-h-1		5.000	NPOC:225.		7/4/2019 1:08:2	38
39	NPOC	CCV		1.000	NPOC:24.9		7/4/2019 1:23:1	39
40	NPOC	CCB		1.000	NPOC:0.04		7/4/2019 1:37:5	40
41	NPOC	280-124736-h-2		5.000	NPOC:399.		7/4/2019 1:56:4	41
42	NPOC	280-124738-j-1		5.000	NPOC:423.		7/4/2019 2:13:2	42
43	NPOC	280-124738-j-2		5.000	NPOC:142.		7/4/2019 2:28:1	43
44	NPOC	280-124789-a-1		1.000	NPOC:0.29		7/4/2019 2:43:0	44
45	NPOC	280-124794-k-1		1.000	NPOC:0.69		7/4/2019 2:57:4	45
46	NPOC	280-124794-l-2		1.000	NPOC:0.15		7/4/2019 3:12:3	46
47	NPOC	280-124794-l-4		1.000	NPOC:10.6		7/4/2019 3:27:1	47
48	NPOC	280-124794-k-5		1.000	NPOC:15.7		7/4/2019 3:41:5	48
49	NPOC	MS 280-124794-k-5		1.000	NPOC:40.4		7/4/2019 3:56:4	49
50	NPOC	MSD 280-124794-k-5		1.000	NPOC:40.5		7/4/2019 4:11:2	50
51	NPOC	CCV		1.000	NPOC:25.1		7/4/2019 4:26:1	51
52	NPOC	CCB		1.000	NPOC:0.07		7/4/2019 4:40:5	52
53	NPOC	LCS		1.000	NPOC:24.9		7/4/2019 4:55:4	53

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
54	NPOC	LCSD		1.000	NPOC:24.8		7/4/2019 5:10:2	54
55	NPOC	MB		1.000	NPOC:0.06		7/4/2019 5:25:0	55
56	NPOC	TIC		1.000	NPOC:0.08		7/4/2019 5:39:5	56
57	NPOC	280-124794-k-6		1.000	NPOC:12.9		7/4/2019 5:54:3	57
58	NPOC	MS 280-124794-k-6		1.000	NPOC:37.9		7/4/2019 6:09:2	58
59	NPOC	MSD 280-124794-k-6		1.000	NPOC:38.0		7/4/2019 6:24:1	59
60	NPOC	280-124794-l-7		1.000	NPOC:13.2		7/4/2019 6:39:0	60
61	NPOC	280-124801-a-1		1.000	NPOC:0.70		7/4/2019 6:53:4	61
62	NPOC	280-124801-a-2		1.000	NPOC:0.17		7/4/2019 7:08:3	62
63	NPOC	CCV		1.000	NPOC:25.1		7/4/2019 7:23:1	63
64	NPOC	CCB		1.000	NPOC:0.06		7/4/2019 7:38:0	64
65	NPOC	280-124806-b-11		1.000	NPOC:0.74		7/4/2019 7:52:4	65
66	NPOC	280-124806-b-12		1.000	NPOC:0.19		7/4/2019 8:07:3	66
67	NPOC	280-124794-k-8		1.000	NPOC:15.6		7/4/2019 8:22:1	67
68	NPOC	280-124806-b-1		1.000	NPOC:1.04		7/4/2019 8:37:0	68
69	NPOC	280-124806-b-2		1.000	NPOC:3.31		7/4/2019 8:51:4	69
70	NPOC	280-124806-b-3		1.000	NPOC:3.08		7/4/2019 9:06:3	70
71	NPOC	280-124806-b-4		1.000	NPOC:5.15		7/4/2019 9:21:1	71
72	NPOC	280-124806-b-5		1.000	NPOC:3.37		7/4/2019 9:38:0	72
73	NPOC	MS 280-124806-b-5		1.000	NPOC:28.4		7/4/2019 9:52:4	73
74	NPOC	MSD 280-124806-b-5		1.000	NPOC:28.5		7/4/2019 10:14:	74
75	NPOC	CCV		1.000	NPOC:24.9		7/4/2019 10:29:	75
76	NPOC	CCB		1.000	NPOC:0.04		7/4/2019 10:44:	76
77	NPOC	280-124806-b-6		1.000	NPOC:0.73		7/4/2019 10:59:	77
78	NPOC	280-124806-b-7		1.000	NPOC:1.52		7/4/2019 11:14:	78
79	NPOC	280-124806-b-8		1.000	NPOC:1.28		7/4/2019 11:28:	79
80	NPOC	280-124806-b-9		1.000	NPOC:1.25		7/4/2019 11:43:	80
81	NPOC	280-124806-b-10		1.000	NPOC:3.12		7/4/2019 11:58:	81
82	NPOC	280-124813-b-1		1.000	NPOC:0.29		7/4/2019 12:13:	82
83	NPOC	280-124813-b-3		1.000	NPOC:0.67		7/4/2019 12:27:	83
84	NPOC	280-124813-b-4		1.000	NPOC:9.82		7/4/2019 12:42:	84
85	NPOC	LCS		1.000	NPOC:25.0		7/4/2019 12:57:	85
86	NPOC	LCSD		1.000	NPOC:24.8		7/4/2019 1:12:1	86
87	NPOC	CCV		1.000	NPOC:24.9		7/4/2019 1:27:0	87
88	NPOC	CCB		1.000	NPOC:0.04		7/4/2019 1:41:5	88
89	NPOC	MB		1.000	NPOC:0.03		7/4/2019 1:56:3	89
90	NPOC	TIC		1.000	NPOC:0.05		7/4/2019 2:11:2	90
91	NPOC	280-124813-b-5		1.000	NPOC:2.55		7/4/2019 2:26:1	91
92	NPOC	280-124819-e-1		1.000	NPOC:75.0		7/4/2019 2:43:0	92
93	NPOC	MS 280-124819-e-1		1.000	NPOC:93.6		7/4/2019 3:02:0	93
94	NPOC	MSD 280-124819-e-1		1.000	NPOC:95.6		7/4/2019 3:18:4	1
95	NPOC	280-124817-c-1		1.000	NPOC:0.57		7/4/2019 3:33:2	2
96	NPOC	280-124813-b-9		1.000	NPOC:0.19		7/4/2019 3:48:1	3
97	NPOC	280-124813-b-8		1.000	NPOC:5.70		7/4/2019 4:02:5	4
98	NPOC	280-124813-b-6		1.000	NPOC:3.73		7/4/2019 4:17:3	5
99	NPOC	CCV		1.000	NPOC:24.8		7/4/2019 4:32:2	6
100	NPOC	CCB		1.000	NPOC:0.06		7/4/2019 4:47:0	7
101	NPOC	280-124817-d-2		1.000	NPOC:1.22		7/4/2019 5:01:4	8
102	NPOC	280-124817-f-3		1.000	NPOC:1.55		7/4/2019 5:16:3	9
103	NPOC	280-124817-e-4		1.000	NPOC:0.53		7/4/2019 5:31:1	10
104	NPOC	280-124817-e-5		1.000	NPOC:0.43		7/4/2019 5:45:5	11
105	NPOC	280-124950-f-15		1.000	NPOC:0.15		7/4/2019 6:00:4	12
106	NPOC	280-124950-e-16		1.000	NPOC:0.14		7/4/2019 6:15:2	13

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
107	NPOC	280-124950-e-1		1.000	NPOC:0.74		7/4/2019 6:30:0	14
108	NPOC	MS 280-124950-e-1		1.000	NPOC:25.3		7/4/2019 6:44:5	15
109	NPOC	MSD 280-124950-e-1		1.000	NPOC:25.2		7/4/2019 6:59:3	16
110	NPOC	280-124950-e-2		1.000	NPOC:1.15		7/4/2019 7:14:1	17
111	NPOC	CCV		1.000	NPOC:24.7		7/4/2019 7:29:0	18
112	NPOC	CCB		1.000	NPOC:0.06		7/4/2019 7:43:4	19
113	NPOC	280-124950-e-3		1.000	NPOC:0.66		7/4/2019 7:58:2	20
114	NPOC	280-124950-e-4		1.000	NPOC:1.37		7/4/2019 8:13:1	21
115	NPOC	280-124950-e-5		1.000	NPOC:1.33		7/4/2019 8:27:5	22
116	NPOC	280-124950-e-6		1.000	NPOC:0.63		7/4/2019 8:42:3	23
117	NPOC	280-124950-f-7		1.000	NPOC:0.74		7/4/2019 8:57:2	24
118	NPOC	280-124950-f-8		1.000	NPOC:4.03		7/4/2019 9:12:0	25
119	NPOC	LCS		1.000	NPOC:24.8		7/4/2019 9:26:4	26
120	NPOC	LCSD		1.000	NPOC:24.8		7/4/2019 9:41:3	27
121	NPOC	MB		1.000	NPOC:0.05		7/4/2019 9:56:1	28
122	NPOC	TIC		1.000	NPOC:0.09		7/4/2019 10:10:	29
123	NPOC	CCV		1.000	NPOC:24.9		7/4/2019 10:25:	30
124	NPOC	CCB		1.000	NPOC:0.06		7/4/2019 10:40:	31
125	NPOC	280-124950-f-9		1.000	NPOC:9.99		7/4/2019 10:55:	32
126	NPOC	MS 280-124950-f-9		1.000	NPOC:34.6		7/4/2019 11:09:	33
127	NPOC	MSD 280-124950-f-9		1.000	NPOC:34.6		7/4/2019 11:24:	34
128	NPOC	280-124950-e-10		1.000	NPOC:26.0		7/4/2019 11:39:	35
129	NPOC	280-124950-f-11		1.000	NPOC:30.2		7/4/2019 11:54:	36
130	NPOC	280-124950-f-12		1.000	NPOC:28.3		7/5/2019 12:08:	37
131	NPOC	280-124950-e-13		1.000	NPOC:32.7		7/5/2019 12:23:	38
132	NPOC	280-124950-e-14		1.000	NPOC:0.72		7/5/2019 12:40:	39
133	NPOC	280-124928-d-16-a		1.000	NPOC:5.45		7/5/2019 12:55:	40
134	NPOC	280-124946-f-12-a		1.000	NPOC:17.8		7/5/2019 1:09:4	41
135	NPOC	CCV		1.000	NPOC:25.1		7/5/2019 1:24:3	42
136	NPOC	CCB		1.000	NPOC:0.10		7/5/2019 1:39:1	43
137	NPOC	280-124946-f-13-a		1.000	NPOC:7.07		7/5/2019 1:54:0	44
138	NPOC	280-124946-f-14-a		1.000	NPOC:33.1		7/5/2019 2:10:5	45
139	NPOC	280-124946-f-15-a		1.000	NPOC:4.48		7/5/2019 2:29:4	46
140	NPOC	280-124946-f-16-a		1.000	NPOC:5.41		7/5/2019 2:44:1	47
141	NPOC	280-124888-p-1		1.000	NPOC:11.0		7/5/2019 3:01:0	48
142	NPOC	280-124888-l-2		1.000	NPOC:14.6		7/5/2019 3:19:5	49
143	NPOC	280-124888-k-3		1.000	NPOC:15.9		7/5/2019 3:36:3	50
144	NPOC	MS 280-124888-k-3		1.000	NPOC:40.6		7/5/2019 3:53:2	51
145	NPOC	MSD 280-124888-k-3		1.000	NPOC:41.1		7/5/2019 4:08:3	52
146	NPOC	280-124888-l-4		1.000	NPOC:33.3		7/5/2019 4:23:3	53
147	NPOC	CCV		1.000	NPOC:25.0		7/5/2019 4:38:2	54
148	NPOC	CCB		1.000	NPOC:0.12		7/5/2019 4:53:1	55
149	NPOC	280-124888-l-5		1.000	NPOC:23.8		7/5/2019 5:10:0	56
150	NPOC	280-124888-l-6		1.000	NPOC:19.0		7/5/2019 5:26:5	57
151	NPOC	280-124888-k-7		1.000	NPOC:18.2		7/5/2019 5:43:3	58
152	NPOC	280-124888-l-8		1.000	NPOC:16.0		7/5/2019 6:00:2	59
153	NPOC	280-124888-k-9		1.000	NPOC:21.3		7/5/2019 6:15:1	60
154	NPOC	280-124888-k-10		1.000	NPOC:19.2		7/5/2019 6:29:5	61
155	NPOC	CCV		1.000	NPOC:25.2		7/5/2019 6:45:0	62
156	NPOC	CCB		1.000	NPOC:0.11		7/5/2019 6:59:4	63

Instr.Information

System TOC-V cpn 3
Instrument Options TOC/ASI/
Catalyst Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

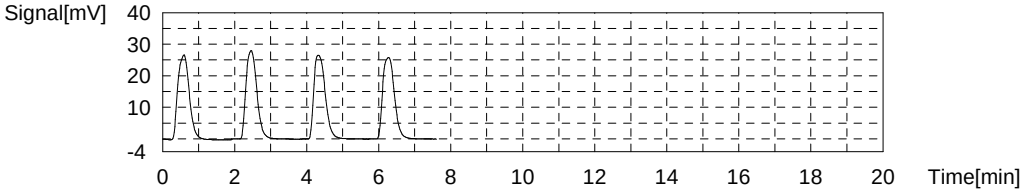
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.00mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.32	20.35mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:51:14 PM
2	59.24	19.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:53:18 PM
3	58.74	19.82mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:55:22 PM
4	58.76	19.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 3:57:26 PM

Mean Area 59.27
Mean Conc. 20.00mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

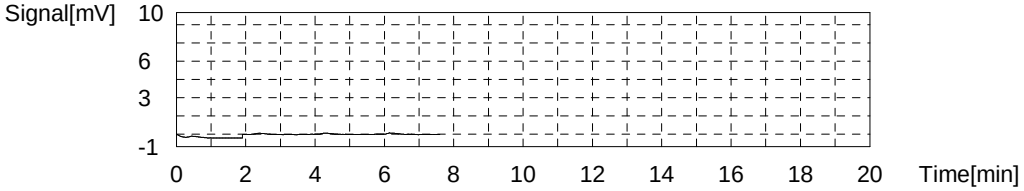
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.00226mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1501	0.01516mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:05:57 PM
2	0.000	-0.03558mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:08:01 PM
3	0.1446	0.01330mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:10:05 PM
4	0.1530	0.01614mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:12:09 PM

Mean Area 0.1119
Mean Conc. 0.00226mg/L



Sample

Sample Name: lcs 280-463538/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

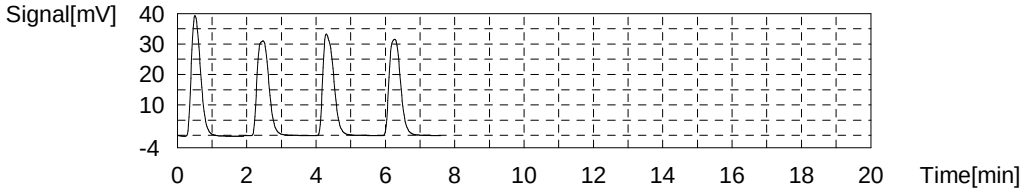
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.73mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.01	24.98mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:20:40 PM
2	73.43	24.79mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:22:44 PM
3	72.90	24.61mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:24:48 PM
4	72.73	24.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:26:52 PM

Mean Area 73.27
Mean Conc. 24.73mg/L



Sample

Sample Name: mb 280-463538/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

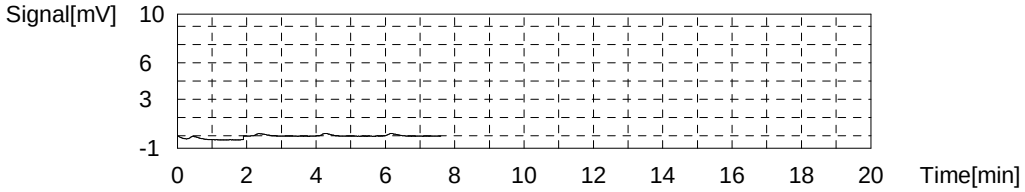
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08088mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3337	0.07723mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:35:23 PM
2	0.3460	0.08138mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:37:27 PM
3	0.3414	0.07983mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:39:31 PM
4	0.3569	0.08507mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:41:35 PM

Mean Area 0.3445
Mean Conc. 0.08088mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

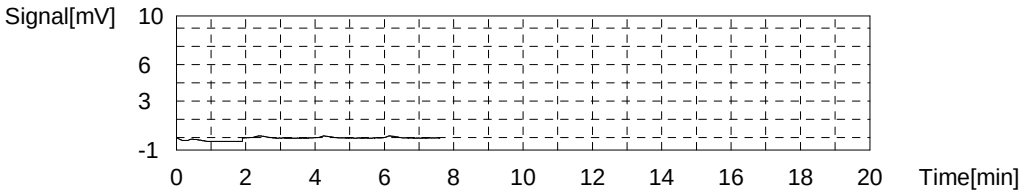
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05398mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2182	0.03818mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:50:06 PM
2	0.3134	0.07036mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:52:10 PM
3	0.2478	0.04819mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:54:14 PM
4	0.2803	0.05917mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 4:56:18 PM

Mean Area 0.2649
Mean Conc. 0.05398mg/L



Sample

Sample Name: 280-124726-c-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

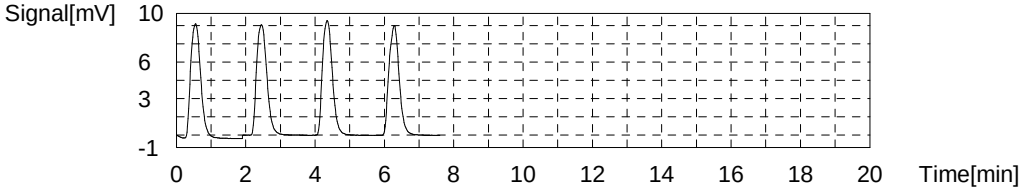
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.304mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.90	6.353mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:04:50 PM
2	18.77	6.309mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:06:54 PM
3	18.76	6.306mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:08:58 PM
4	18.59	6.248mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:11:02 PM

Mean Area 18.76
Mean Conc. 6.304mg/L



Sample

Sample Name: 280-124726-c-1-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

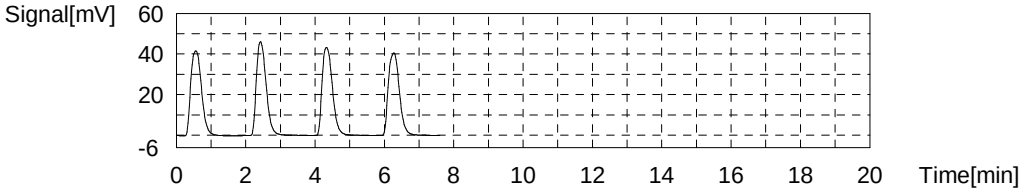
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.67mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.64	30.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:19:33 PM
2	90.87	30.68mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:21:37 PM
3	90.25	30.47mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:23:41 PM
4	90.56	30.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:25:45 PM

Mean Area 90.83
Mean Conc. 30.67mg/L



Sample

Sample Name: 280-124726-c-1-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

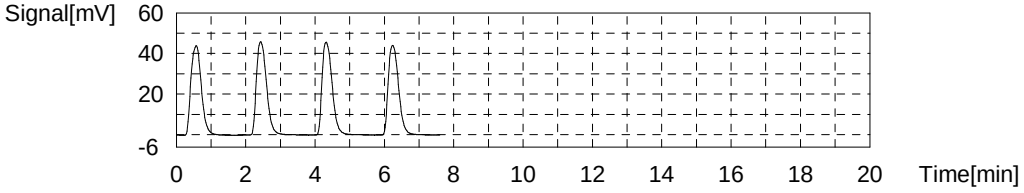
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:31.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.44	31.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:34:16 PM
2	93.36	31.52mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:36:20 PM
3	92.39	31.20mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:38:24 PM
4	91.80	31.00mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:40:28 PM

Mean Area 92.75
Mean Conc. 31.32mg/L



Sample

Sample Name: 280-124726-c-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

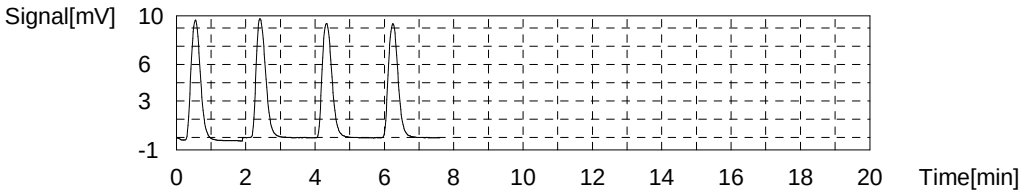
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.210mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.74	6.299mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:48:59 PM
2	18.57	6.242mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:51:03 PM
3	18.35	6.167mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:53:07 PM
4	18.25	6.133mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 5:55:11 PM

Mean Area 18.48
Mean Conc. 6.210mg/L



Sample

Sample Name: lcs 280-463539/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

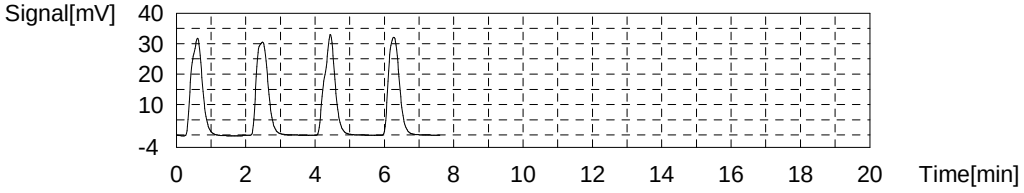
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.31	24.41mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:03:42 PM
2	71.94	24.28mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:05:46 PM
3	70.93	23.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:07:50 PM
4	70.85	23.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:09:54 PM

Mean Area 71.51
Mean Conc. 24.14mg/L



Sample

Sample Name: mb 280-463539/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

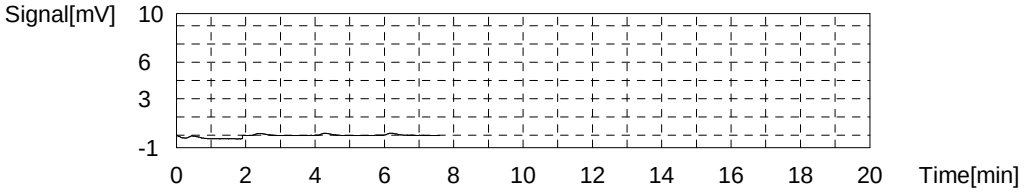
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06674mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3227	0.07351mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:18:25 PM
2	0.2890	0.06212mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:20:29 PM
3	0.3034	0.06698mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:22:33 PM
4	0.2956	0.06435mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:24:37 PM

Mean Area 0.3027
Mean Conc. 0.06674mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

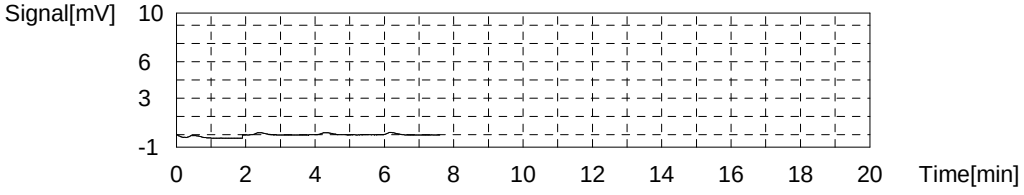
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07767mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3364	0.07814mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:33:08 PM
2	0.3283	0.07540mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:35:12 PM
3	0.3201	0.07263mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:37:16 PM
4	0.3553	0.08453mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:39:20 PM

Mean Area 0.3350
Mean Conc. 0.07767mg/L



Sample

Sample Name: 280-124928-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

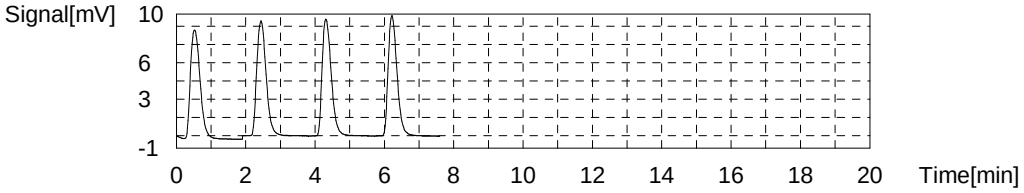
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.915mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.38	5.839mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:47:51 PM
2	17.80	5.981mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:49:55 PM
3	17.56	5.900mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:51:59 PM
4	17.68	5.941mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 6:54:03 PM

Mean Area 17.61
Mean Conc. 5.915mg/L



Sample

Sample Name: 280-124928-d-7-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

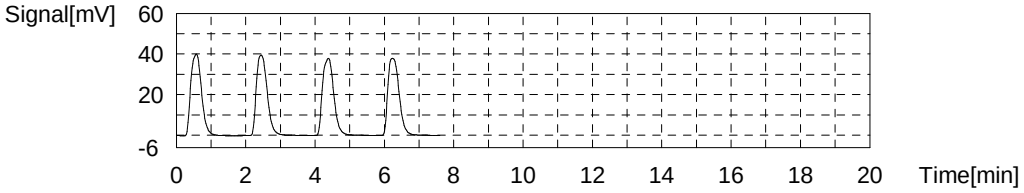
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.04	29.72mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:02:34 PM
2	86.23	29.11mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:04:38 PM
3	86.24	29.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:06:42 PM
4	86.28	29.13mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:08:46 PM

Mean Area 86.70
Mean Conc. 29.27mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

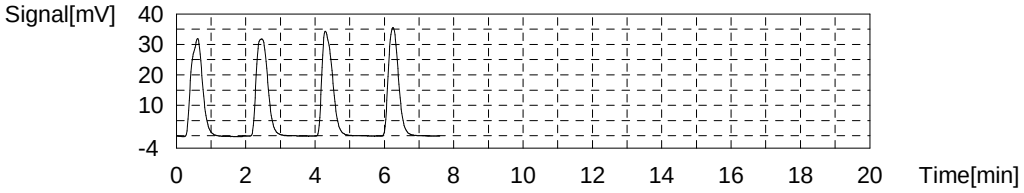
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.62	25.19mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:17:18 PM
2	73.95	24.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:19:22 PM
3	73.05	24.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:21:26 PM
4	72.70	24.54mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:23:30 PM

Mean Area 73.58
Mean Conc. 24.84mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

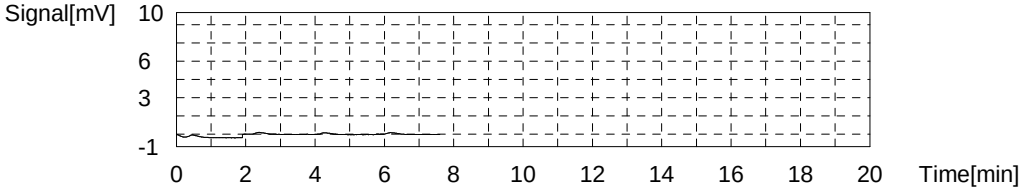
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04891mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2772	0.05813mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:32:01 PM
2	0.2525	0.04978mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:34:05 PM
3	0.2234	0.03994mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:36:09 PM
4	0.2466	0.04778mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:38:13 PM

Mean Area 0.2499
Mean Conc. 0.04891mg/L



Sample

Sample Name: 280-124928-d-7-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

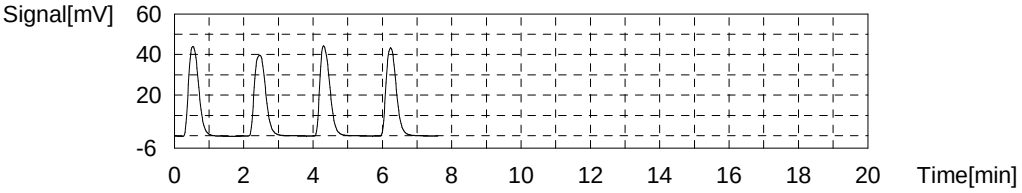
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.35mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.98	30.72mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:46:45 PM
2	90.17	30.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:48:49 PM
3	88.86	30.00mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:50:53 PM
4	89.59	30.25mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 7:52:57 PM

Mean Area 89.90
Mean Conc. 30.35mg/L



Sample

Sample Name: 280-124928-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

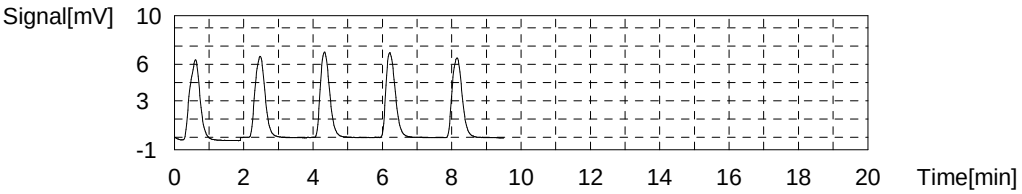
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.425mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.73	4.606mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:01:28 PM
2	13.35	4.477mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:03:32 PM
3	13.12	4.399mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:05:36 PM
4	13.13	4.403mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:07:40 PM
5	13.18	4.420mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:09:44 PM

Mean Area 13.20
Mean Conc. 4.425mg/L



Sample

Sample Name: 280-124928-d-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

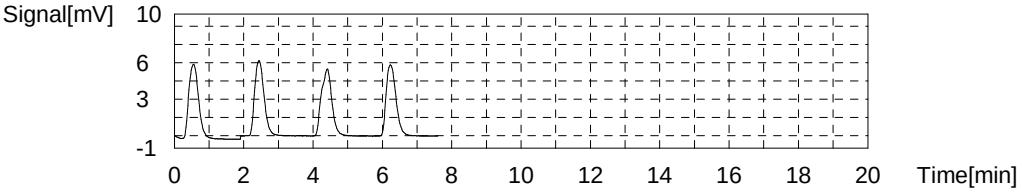
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.921mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.05	4.038mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:18:14 PM
2	11.61	3.889mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:20:18 PM
3	11.59	3.882mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:22:22 PM
4	11.57	3.875mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:24:26 PM

Mean Area 11.71
Mean Conc. 3.921mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

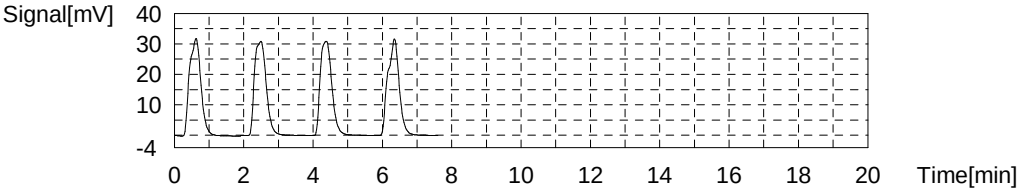
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.27	25.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:32:57 PM
2	73.33	24.75mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:35:01 PM
3	72.47	24.46mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:37:05 PM
4	72.66	24.53mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:39:09 PM

Mean Area 73.18
Mean Conc. 24.70mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

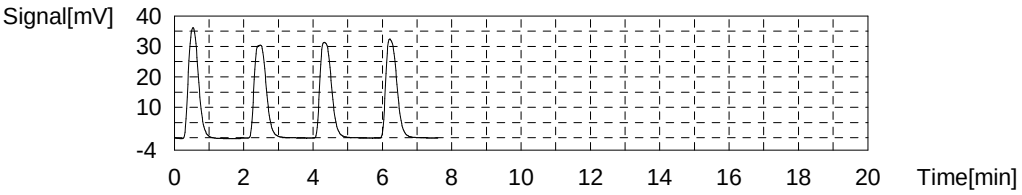
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.57mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.80	24.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:47:40 PM
2	73.11	24.68mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:49:44 PM
3	72.51	24.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:51:48 PM
4	71.77	24.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 8:53:52 PM

Mean Area 72.80
Mean Conc. 24.57mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

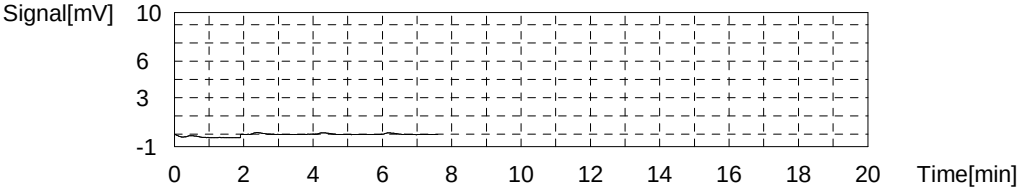
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04215mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2059	0.03402mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:02:24 PM
2	0.2415	0.04606mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:04:28 PM
3	0.2247	0.04038mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:06:32 PM
4	0.2477	0.04815mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:08:36 PM

Mean Area 0.2300
Mean Conc. 0.04215mg/L



Sample

Sample Name: 280-124713-i-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

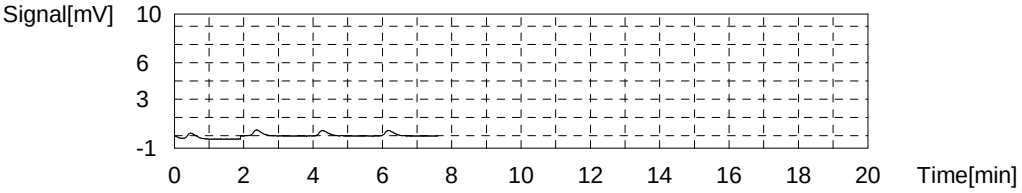
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2243mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7319	0.2118mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:17:08 PM
2	0.7668	0.2236mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:19:12 PM
3	0.7853	0.2299mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:21:16 PM
4	0.7915	0.2320mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:23:20 PM

Mean Area 0.7689
Mean Conc. 0.2243mg/L



Sample

Sample Name: 280-124713-b-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

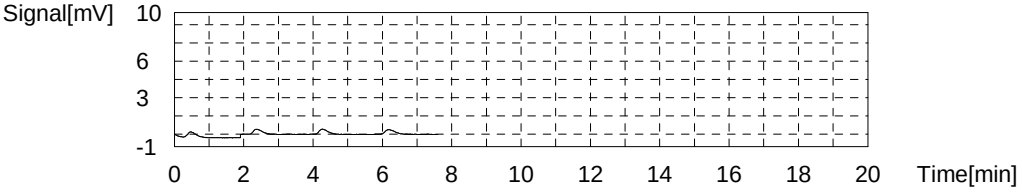
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2018mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6847	0.1959mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:31:51 PM
2	0.7040	0.2024mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:33:55 PM
3	0.7359	0.2132mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:35:59 PM
4	0.6847	0.1959mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:38:03 PM

Mean Area 0.7023
Mean Conc. 0.2018mg/L



Sample

Sample Name: 280-124713-h-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

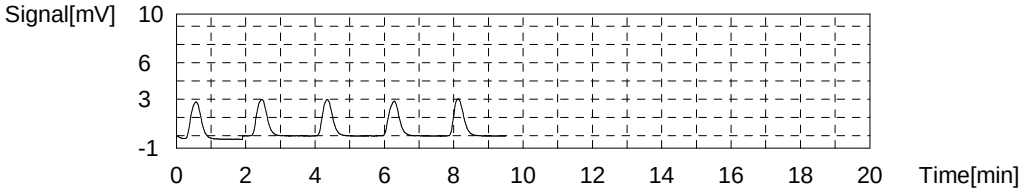
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.982mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.218	2.066mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:46:34 PM
2	6.109	2.029mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:48:38 PM
3	5.911	1.963mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:50:42 PM
4	5.923	1.967mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:52:46 PM
5	5.930	1.969mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 9:54:50 PM

Mean Area 5.968
Mean Conc. 1.982mg/L



Sample

Sample Name: MS 280-124713-h-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

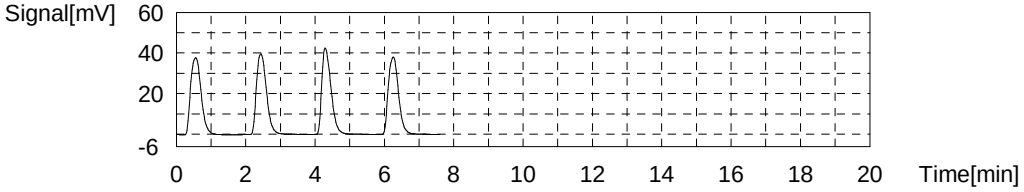
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.36	27.47mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:03:20 PM
2	80.18	27.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:05:24 PM
3	79.11	26.71mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:07:28 PM
4	79.03	26.68mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:09:32 PM

Mean Area 79.92
Mean Conc. 26.98mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

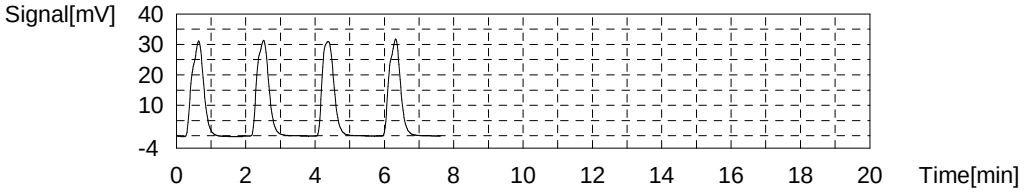
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.43	25.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:18:04 PM
2	73.90	24.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:20:08 PM
3	72.82	24.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:22:12 PM
4	72.77	24.56mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:24:17 PM

Mean Area 73.48
Mean Conc. 24.80mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

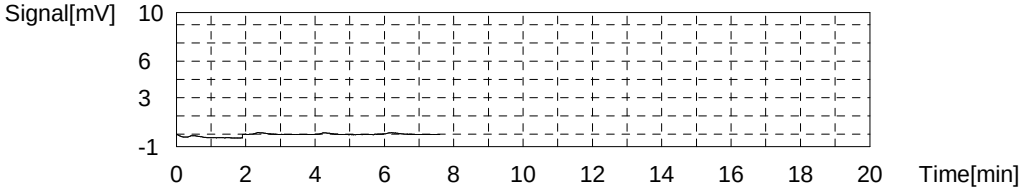
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04502mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2396	0.04542mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:32:48 PM
2	0.2503	0.04903mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:34:52 PM
3	0.2242	0.04021mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:36:56 PM
4	0.2396	0.04542mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:39:00 PM

Mean Area 0.2384
Mean Conc. 0.04502mg/L



Sample

Sample Name: MSD 280-124713-h-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

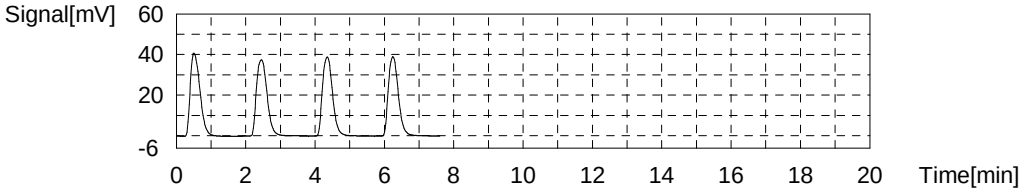
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.12	27.39mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:47:32 PM
2	80.35	27.13mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:49:36 PM
3	79.32	26.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:51:40 PM
4	78.93	26.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 10:53:44 PM

Mean Area 79.93
Mean Conc. 26.98mg/L



Sample

Sample Name: 280-124713-c-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

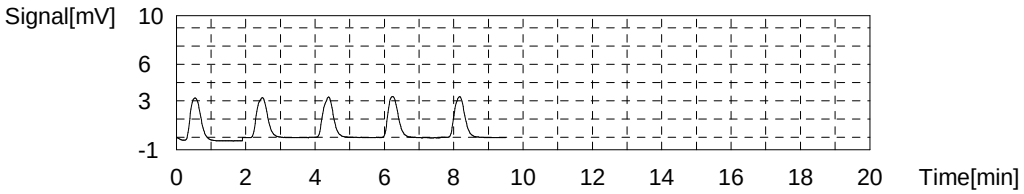
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.311mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.252	2.416mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:02:16 PM
2	7.110	2.368mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:04:20 PM
3	6.879	2.290mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:06:24 PM
4	6.871	2.287mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:08:28 PM
5	6.907	2.299mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:10:32 PM

Mean Area 6.942
Mean Conc. 2.311mg/L



Sample

Sample Name: 280-124726-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

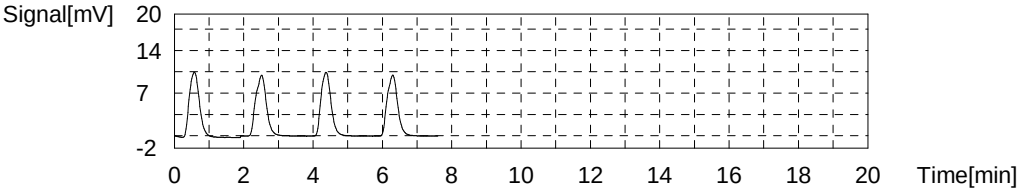
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.186mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.93	7.377mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:19:03 PM
2	21.44	7.212mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:21:07 PM
3	21.03	7.073mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:23:11 PM
4	21.05	7.080mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:25:15 PM

Mean Area 21.36
Mean Conc. 7.186mg/L



Sample

Sample Name: 280-124726-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

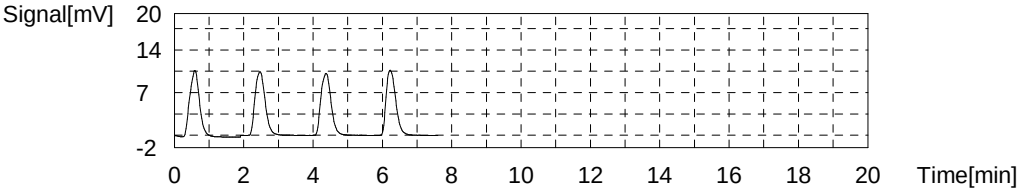
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.101mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.50	7.232mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:33:47 PM
2	21.30	7.164mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:35:51 PM
3	20.83	7.006mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:37:55 PM
4	20.82	7.002mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:39:59 PM

Mean Area 21.11
Mean Conc. 7.101mg/L



Sample

Sample Name: 280-124727-e-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

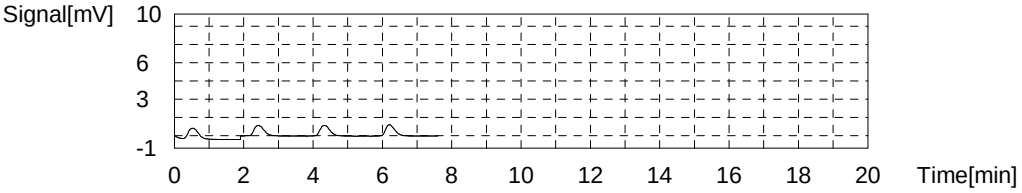
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5288mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.684	0.5337mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:48:31 PM
2	1.678	0.5316mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:50:35 PM
3	1.660	0.5256mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:52:39 PM
4	1.656	0.5242mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/3/2019 11:54:43 PM

Mean Area 1.670
Mean Conc. 0.5288mg/L



Sample

Sample Name: 280-124732-f-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

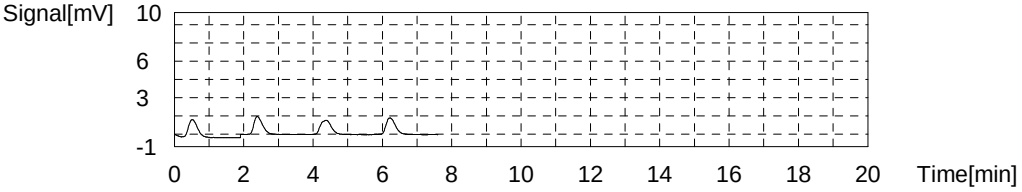
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8278mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.554	0.8278mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:03:15 AM
2	2.563	0.8308mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:05:19 AM
3	2.544	0.8244mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:07:23 AM
4	2.555	0.8281mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:09:27 AM

Mean Area 2.554
Mean Conc. 0.8278mg/L



Sample

Sample Name: 280-124732-f-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

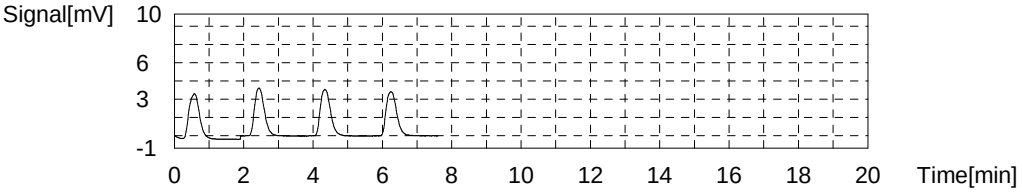
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.566mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.750	2.584mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:17:59 AM
2	7.676	2.559mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:20:03 AM
3	7.729	2.577mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:22:07 AM
4	7.627	2.543mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:24:11 AM

Mean Area 7.696
Mean Conc. 2.566mg/L



Sample

Sample Name: 280-124732-f-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

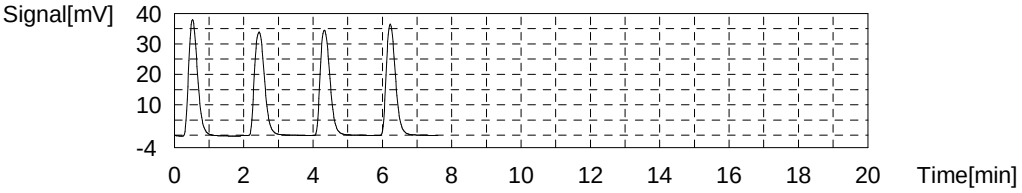
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.12mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.99	23.29mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:32:43 AM
2	69.02	23.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:34:47 AM
3	67.93	22.93mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:36:51 AM
4	68.05	22.97mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:38:55 AM

Mean Area 68.50
Mean Conc. 23.12mg/L



Sample

Sample Name: 280-124732-f-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

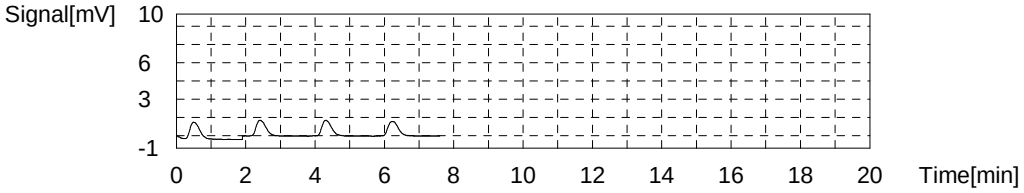
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8021mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.571	0.8335mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:47:27 AM
2	2.485	0.8044mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:49:31 AM
3	2.444	0.7906mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:51:35 AM
4	2.413	0.7801mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:53:39 AM

Mean Area 2.478
Mean Conc. 0.8021mg/L



Sample

Sample Name: 280-124736-h-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

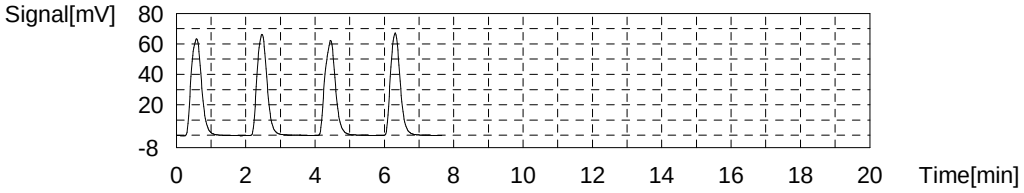
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:225.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	134.7	227.5mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:02:11 AM
2	134.0	226.3mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:04:18 AM
3	132.9	224.4mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:06:22 AM
4	131.5	222.1mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:08:26 AM

Mean Area 133.3
Mean Conc. 225.1mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

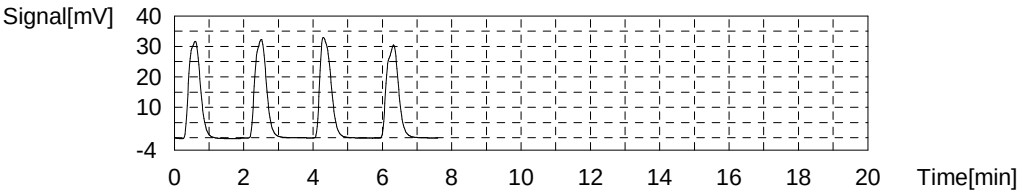
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.48	25.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:16:58 AM
2	74.23	25.06mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:19:02 AM
3	73.49	24.81mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:21:06 AM
4	73.19	24.70mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:23:10 AM

Mean Area 73.85
Mean Conc. 24.93mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

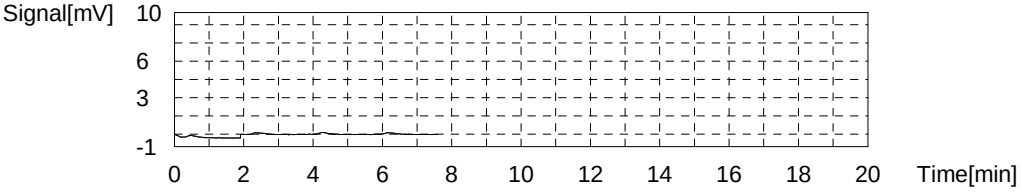
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04585mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2446	0.04711mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:31:42 AM
2	0.2573	0.05140mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:33:46 AM
3	0.2224	0.03960mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:35:50 AM
4	0.2392	0.04528mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:37:54 AM

Mean Area 0.2409
Mean Conc. 0.04585mg/L



Sample

Sample Name: 280-124736-h-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

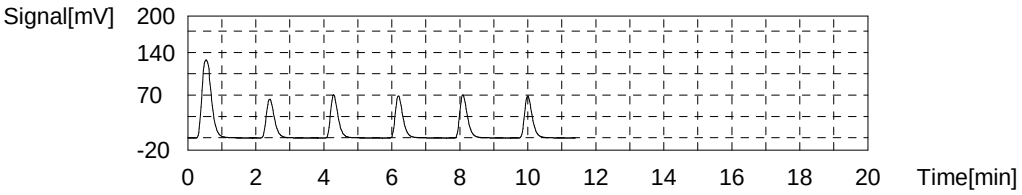
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:399.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	249.7	421.9mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:46:26 AM
2	106.8	392.2mg/L	23uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:48:30 AM
3	109.3	401.4mg/L	23uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:50:34 AM
4	109.0	400.3mg/L	23uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:52:37 AM
5	112.4	412.8mg/L	23uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:54:41 AM
6	109.6	402.5mg/L	23uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:56:45 AM

Mean Area 108.7
Mean Conc. 399.1mg/L



Sample

Sample Name: 280-124738-j-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

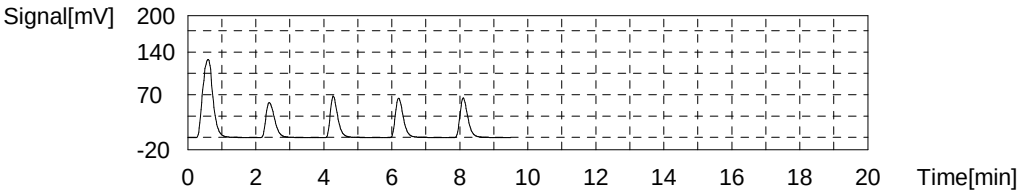
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:423.4mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	270.6	457.2mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:05:11 AM
2	103.9	417.9mg/L	21uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:07:15 AM
3	104.5	420.3mg/L	21uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:09:19 AM
4	106.8	429.6mg/L	21uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:11:22 AM
5	105.8	425.6mg/L	21uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:13:26 AM

Mean Area 105.3
Mean Conc. 423.4mg/L



Sample

Sample Name: 280-124738-j-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

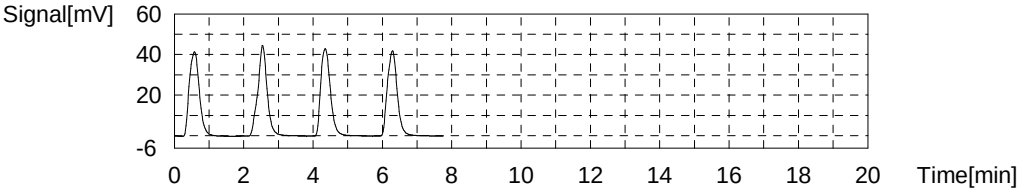
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:142.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.40	144.2mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:21:58 AM
2	83.84	141.5mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:24:02 AM
3	83.61	141.1mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:26:06 AM
4	83.76	141.4mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:28:19 AM

Mean Area 84.15
Mean Conc. 142.1mg/L



Sample

Sample Name: 280-124789-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

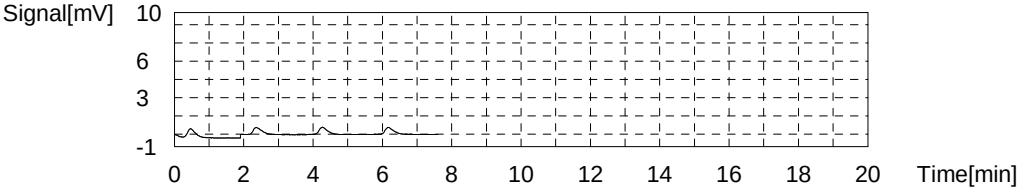
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2957mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.051	0.3197mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:36:51 AM
2	0.9939	0.3004mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:38:55 AM
3	0.9384	0.2816mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:40:59 AM
4	0.9368	0.2811mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:43:03 AM

Mean Area 0.9800
Mean Conc. 0.2957mg/L



Sample

Sample Name: 280-124794-k-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

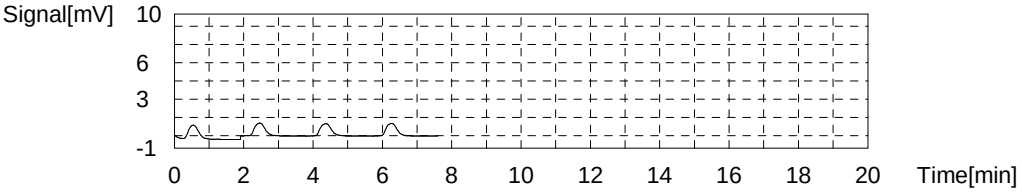
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6954mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.142	0.6885mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:51:35 AM
2	2.184	0.7027mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:53:39 AM
3	2.173	0.6990mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:55:43 AM
4	2.151	0.6915mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:57:47 AM

Mean Area 2.163
Mean Conc. 0.6954mg/L



Sample

Sample Name: 280-124794-I-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

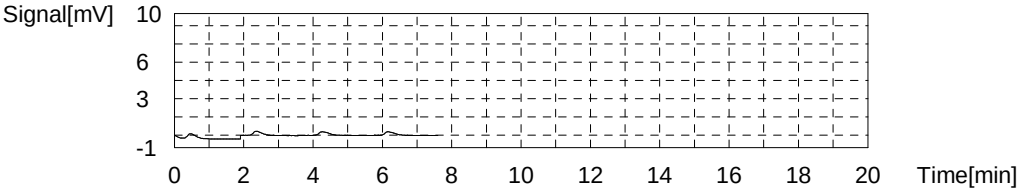
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1587mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6003	0.1673mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:06:19 AM
2	0.5835	0.1617mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:08:23 AM
3	0.5575	0.1529mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:10:27 AM
4	0.5574	0.1528mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:12:31 AM

Mean Area 0.5747
Mean Conc. 0.1587mg/L



Sample

Sample Name: 280-124794-I-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

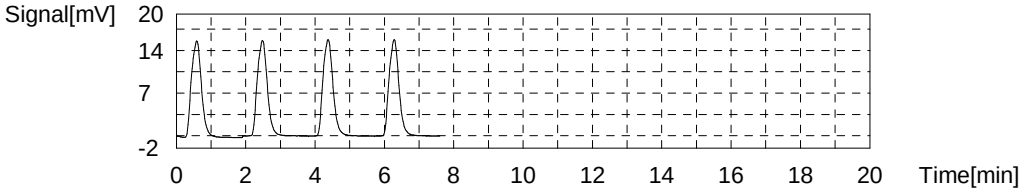
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.66mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.06	10.80mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:21:03 AM
2	31.31	10.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:23:07 AM
3	31.74	10.69mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:25:11 AM
4	31.50	10.61mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:27:15 AM

Mean Area 31.65
Mean Conc. 10.66mg/L



Sample

Sample Name: 280-124794-k-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

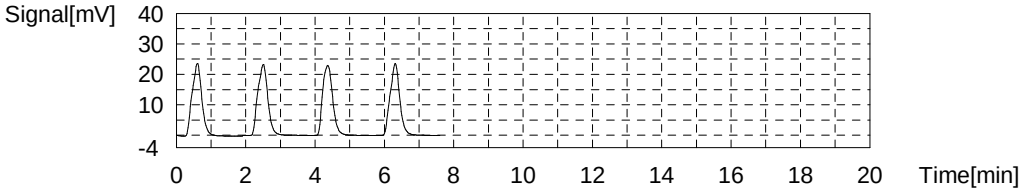
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.77mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.13	15.90mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:35:47 AM
2	47.16	15.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:37:51 AM
3	46.57	15.71mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:39:55 AM
4	46.12	15.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:41:59 AM

Mean Area 46.75
Mean Conc. 15.77mg/L



Sample

Sample Name: MS 280-124794-k-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

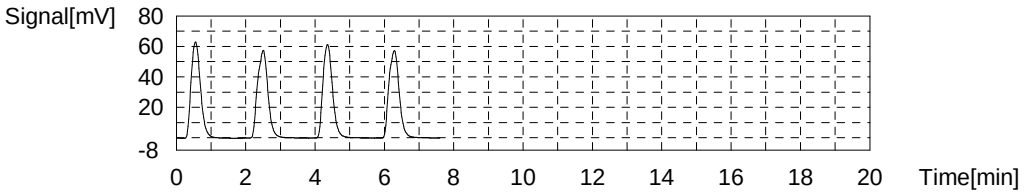
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:40.44mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	120.8	40.80mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:50:31 AM
2	120.5	40.70mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:52:35 AM
3	118.3	39.95mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:54:39 AM
4	119.4	40.33mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:56:43 AM

Mean Area 119.8
Mean Conc. 40.44mg/L



Sample

Sample Name: MSD 280-124794-k-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

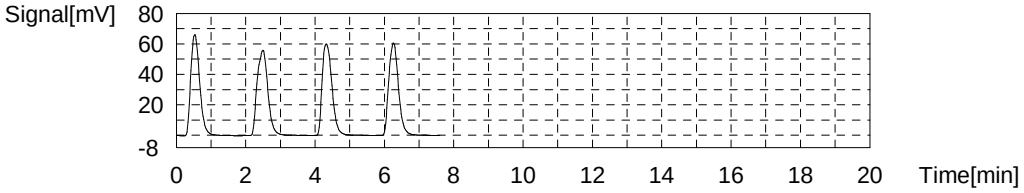
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:40.52mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	120.9	40.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:05:15 AM
2	120.8	40.80mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:07:19 AM
3	118.8	40.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:09:23 AM
4	119.4	40.33mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:11:27 AM

Mean Area 120.0
Mean Conc. 40.52mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

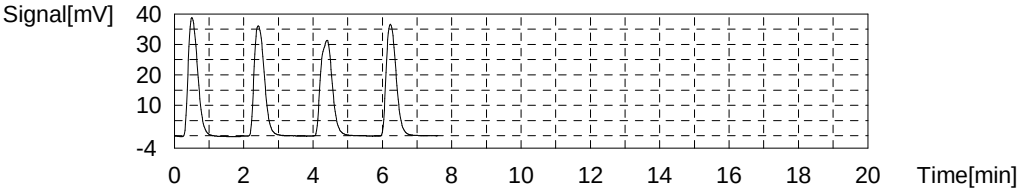
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.15mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.79	25.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:19:59 AM
2	74.22	25.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:22:03 AM
3	74.08	25.01mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:24:07 AM
4	73.94	24.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:26:11 AM

Mean Area 74.51
Mean Conc. 25.15mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

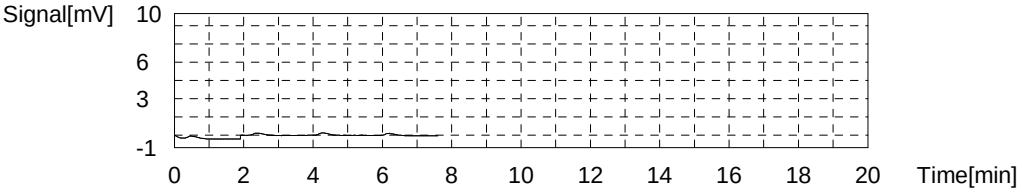
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07691mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3276	0.07516mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:34:44 AM
2	0.3289	0.07560mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:36:48 AM
3	0.3434	0.08050mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:38:52 AM
4	0.3312	0.07638mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:40:56 AM

Mean Area 0.3328
Mean Conc. 0.07691mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

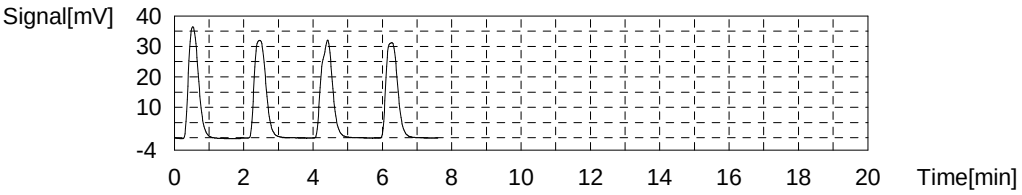
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.30	25.08mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:49:28 AM
2	74.49	25.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:51:32 AM
3	73.50	24.81mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:53:36 AM
4	73.13	24.68mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:55:40 AM

Mean Area 73.86
Mean Conc. 24.93mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

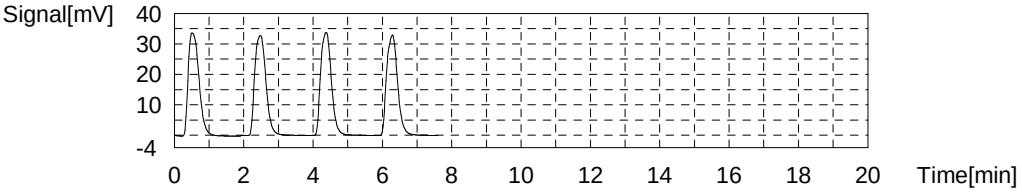
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.10	25.01mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:04:12 AM
2	73.99	24.98mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:06:16 AM
3	73.02	24.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:08:20 AM
4	72.88	24.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:10:24 AM

Mean Area 73.50
Mean Conc. 24.81mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

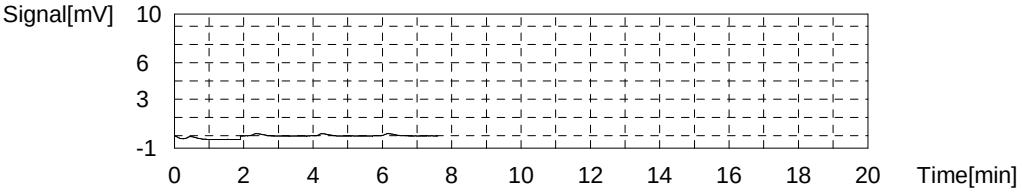
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06839mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3094	0.06901mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:18:57 AM
2	0.3270	0.07496mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:21:01 AM
3	0.2903	0.06255mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:23:05 AM
4	0.3036	0.06705mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:25:09 AM

Mean Area 0.3076
Mean Conc. 0.06839mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

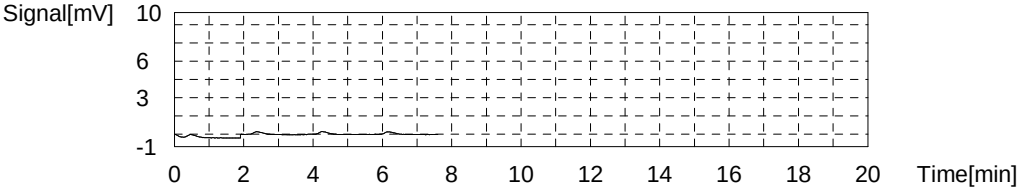
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08521mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3219	0.07324mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:33:42 AM
2	0.3684	0.08895mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:35:46 AM
3	0.3788	0.09247mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:37:50 AM
4	0.3602	0.08618mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:39:54 AM

Mean Area 0.3573
Mean Conc. 0.08521mg/L



Sample

Sample Name: 280-124794-k-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

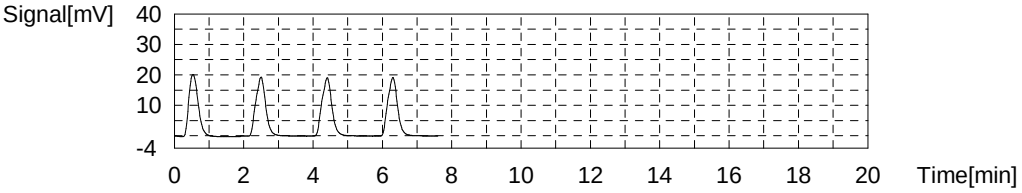
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.90mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	38.67	13.04mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:48:27 AM
2	38.35	12.93mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:50:31 AM
3	38.20	12.88mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:52:35 AM
4	37.82	12.75mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:54:39 AM

Mean Area 38.26
Mean Conc. 12.90mg/L



Sample

Sample Name: MS 280-124794-k-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

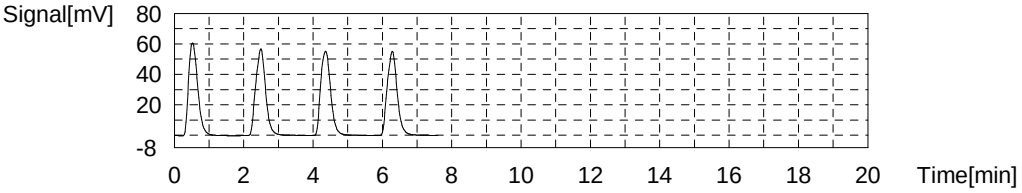
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:37.90mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	113.4	38.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:03:12 AM
2	113.0	38.16mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:05:16 AM
3	111.5	37.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:07:20 AM
4	111.0	37.49mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:09:24 AM

Mean Area 112.2
Mean Conc. 37.90mg/L



Sample

Sample Name: MSD 280-124794-k-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

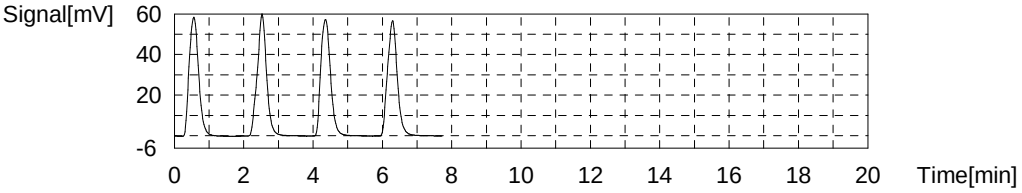
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:38.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	113.4	38.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:17:57 AM
2	112.6	38.03mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:20:01 AM
3	112.7	38.06mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:22:05 AM
4	112.3	37.93mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:24:16 AM

Mean Area 112.8
Mean Conc. 38.08mg/L



Sample

Sample Name: 280-124794-I-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

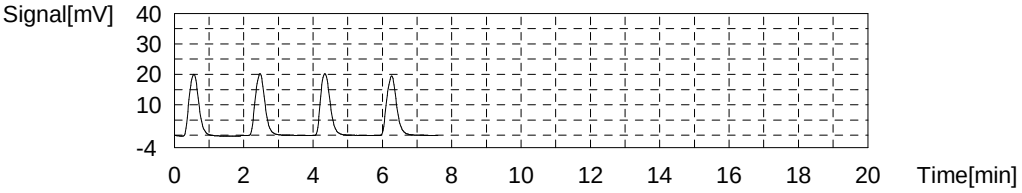
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	39.74	13.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:32:49 AM
2	39.40	13.28mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:34:53 AM
3	39.17	13.21mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:36:57 AM
4	38.87	13.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:39:01 AM

Mean Area 39.30
Mean Conc. 13.25mg/L



Sample

Sample Name: 280-124801-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

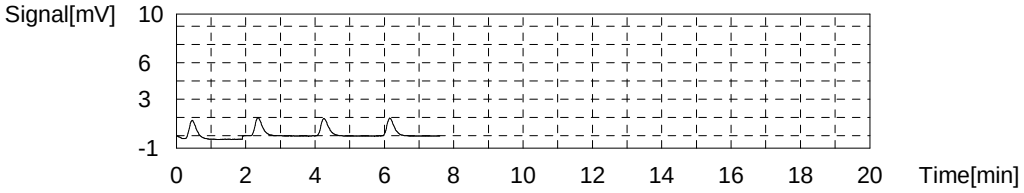
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7068mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.204	0.7094mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:47:34 AM
2	2.184	0.7027mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:49:38 AM
3	2.212	0.7121mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:51:42 AM
4	2.185	0.7030mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:53:46 AM

Mean Area 2.196
Mean Conc. 0.7068mg/L



Sample

Sample Name: 280-124801-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

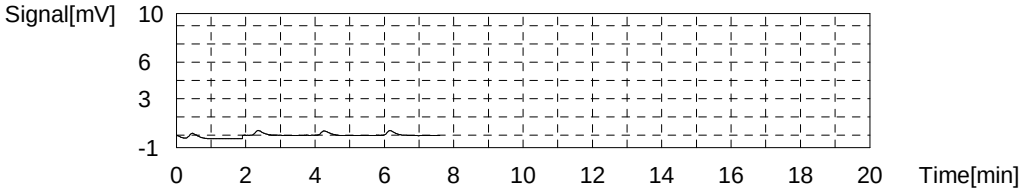
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1732mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5960	0.1659mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:02:19 AM
2	0.6148	0.1722mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:04:23 AM
3	0.6200	0.1740mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:06:27 AM
4	0.6399	0.1807mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:08:31 AM

Mean Area 0.6177
Mean Conc. 0.1732mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

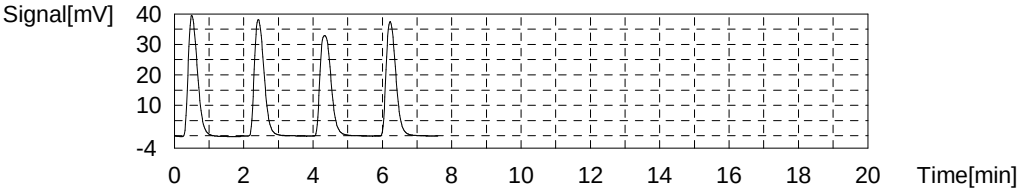
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.12mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.97	25.31mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:17:04 AM
2	75.07	25.34mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:19:08 AM
3	73.78	24.90mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:21:12 AM
4	73.84	24.92mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:23:16 AM

Mean Area 74.42
Mean Conc. 25.12mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

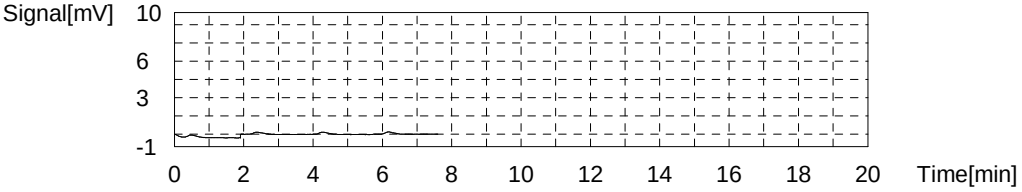
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06109mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2775	0.05823mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:31:49 AM
2	0.2698	0.05563mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:33:53 AM
3	0.2866	0.06130mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:35:57 AM
4	0.3100	0.06921mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:38:01 AM

Mean Area 0.2860
Mean Conc. 0.06109mg/L



Sample

Sample Name: 280-124806-b-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

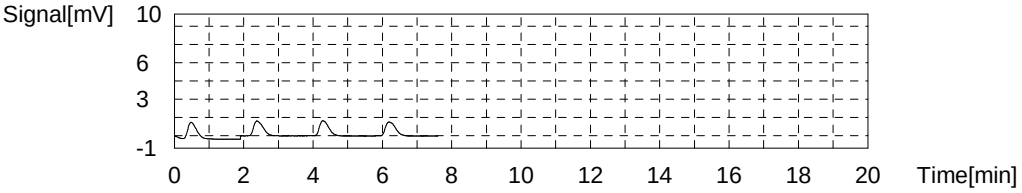
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7454mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.336	0.7541mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:46:34 AM
2	2.314	0.7466mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:48:38 AM
3	2.289	0.7382mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:50:42 AM
4	2.303	0.7429mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:52:46 AM

Mean Area 2.311
Mean Conc. 0.7454mg/L



Sample

Sample Name: 280-124806-b-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

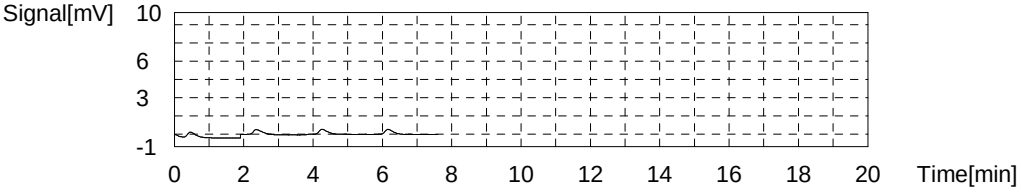
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1906mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6396	0.1806mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:01:19 AM
2	0.7471	0.2170mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:03:23 AM
3	0.6475	0.1833mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:05:27 AM
4	0.6422	0.1815mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:07:31 AM

Mean Area 0.6691
Mean Conc. 0.1906mg/L



Sample

Sample Name: 280-124794-k-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

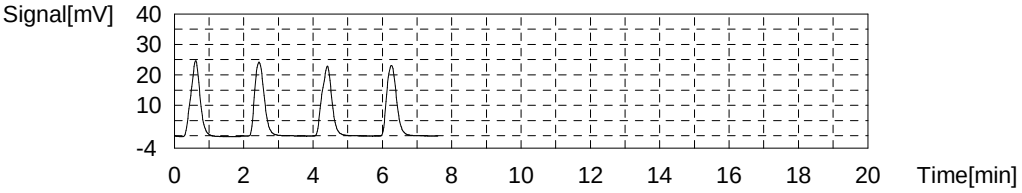
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.60mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.90	15.82mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:16:04 AM
2	46.40	15.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:18:08 AM
3	45.91	15.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:20:12 AM
4	45.76	15.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:22:16 AM

Mean Area 46.24
Mean Conc. 15.60mg/L



Sample

Sample Name: 280-124806-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

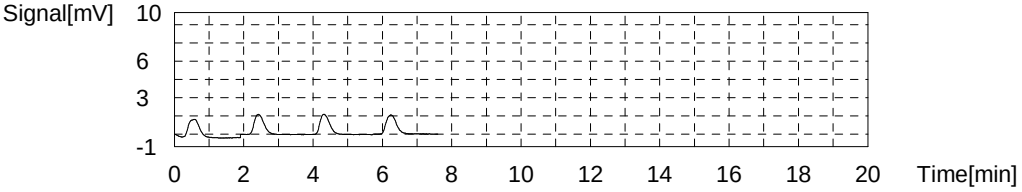
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.047mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.178	1.039mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:30:49 AM
2	3.225	1.055mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:32:53 AM
3	3.186	1.041mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:34:57 AM
4	3.224	1.054mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:37:01 AM

Mean Area 3.203
Mean Conc. 1.047mg/L



Sample

Sample Name: 280-124806-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

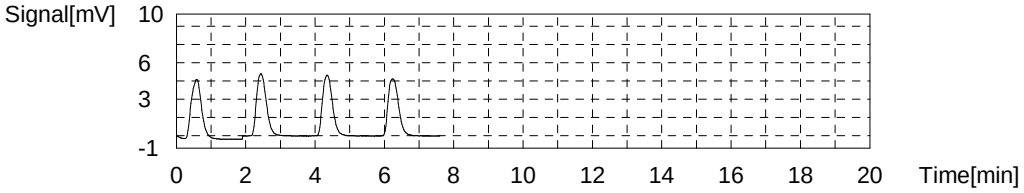
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.318mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.00	3.345mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:45:34 AM
2	10.01	3.348mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:47:38 AM
3	9.874	3.302mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:49:42 AM
4	9.801	3.277mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:51:46 AM

Mean Area 9.921
Mean Conc. 3.318mg/L



Sample

Sample Name: 280-124806-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

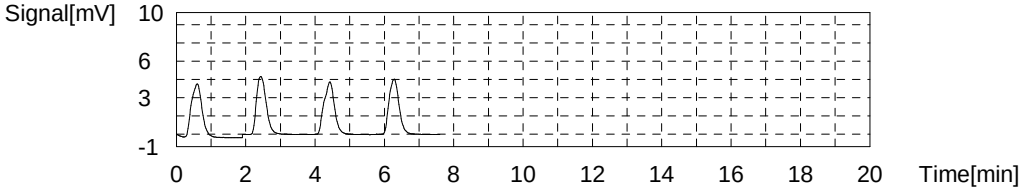
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.082mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.343	3.123mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:00:19 AM
2	9.274	3.099mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:02:23 AM
3	9.101	3.041mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:04:27 AM
4	9.178	3.067mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:06:31 AM

Mean Area 9.224
Mean Conc. 3.082mg/L



Sample

Sample Name: 280-124806-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

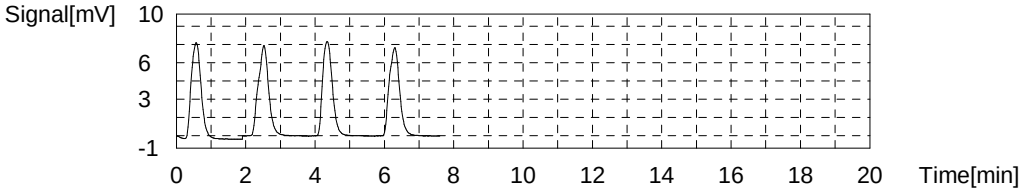
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.154mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.65	5.255mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:15:04 AM
2	15.42	5.177mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:17:08 AM
3	15.19	5.099mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:19:12 AM
4	15.15	5.086mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:21:16 AM

Mean Area 15.35
Mean Conc. 5.154mg/L



Sample

Sample Name: 280-124806-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

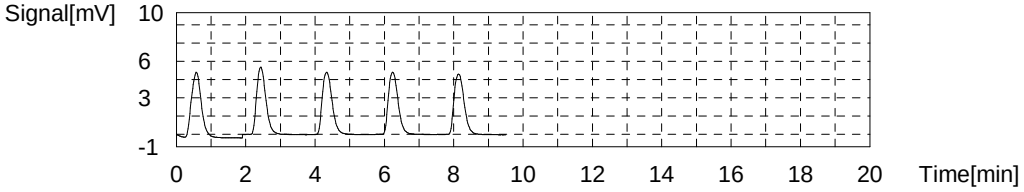
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.371mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.56	3.534mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:29:49 AM
2	10.27	3.436mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:31:53 AM
3	10.09	3.375mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:33:57 AM
4	9.926	3.320mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:36:01 AM
5	10.02	3.351mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:38:04 AM

Mean Area 10.08
Mean Conc. 3.371mg/L



Sample

Sample Name: MS 280-124806-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

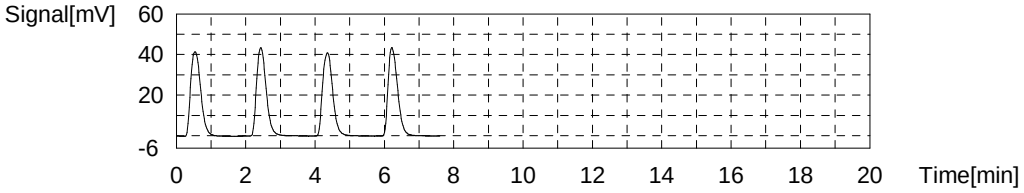
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.46mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.77	28.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:46:37 AM
2	84.30	28.46mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:48:41 AM
3	83.75	28.27mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:50:45 AM
4	83.37	28.15mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:52:48 AM

Mean Area 84.30
Mean Conc. 28.46mg/L



Sample

Sample Name: MSD 280-124806-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

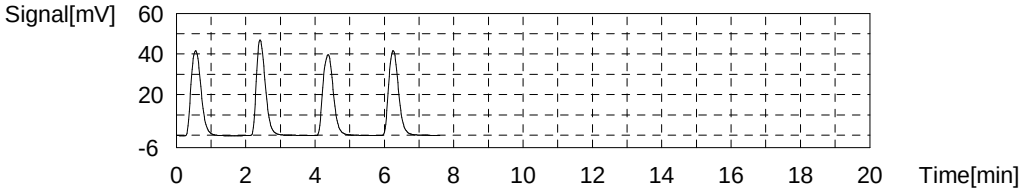
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.56mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.41	28.84mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:08:46 AM
2	85.40	28.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:10:50 AM
3	83.83	28.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:12:54 AM
4	83.70	28.26mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:14:58 AM

Mean Area 84.58
Mean Conc. 28.56mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

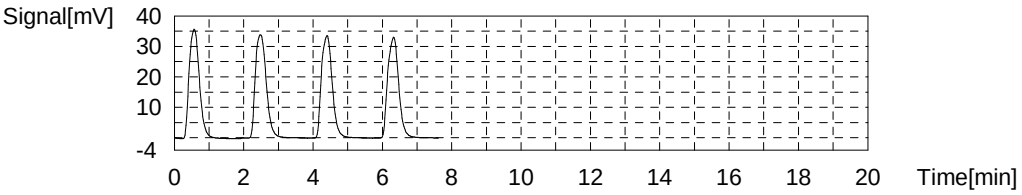
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.57	25.17mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:23:33 AM
2	74.58	25.17mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:25:37 AM
3	72.99	24.64mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:27:41 AM
4	73.28	24.74mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:29:45 AM

Mean Area 73.86
Mean Conc. 24.93mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

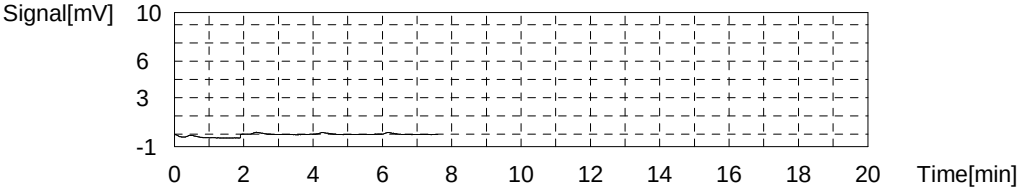
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04803mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2501	0.04897mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:38:19 AM
2	0.2709	0.05600mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:40:23 AM
3	0.2531	0.04998mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:42:27 AM
4	0.2152	0.03717mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:44:30 AM

Mean Area 0.2473
Mean Conc. 0.04803mg/L



Sample

Sample Name: 280-124806-b-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

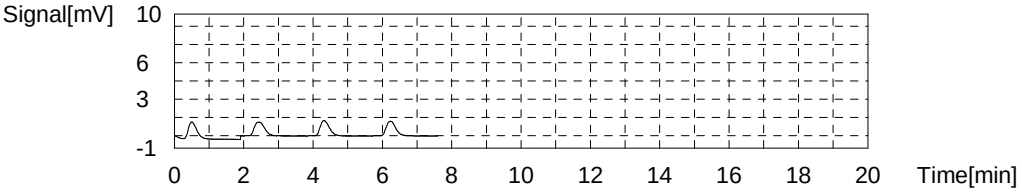
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7334mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.298	0.7412mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:53:05 AM
2	2.280	0.7351mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:55:09 AM
3	2.306	0.7439mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:57:13 AM
4	2.215	0.7132mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:59:17 AM

Mean Area 2.275
Mean Conc. 0.7334mg/L



Sample

Sample Name: 280-124806-b-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

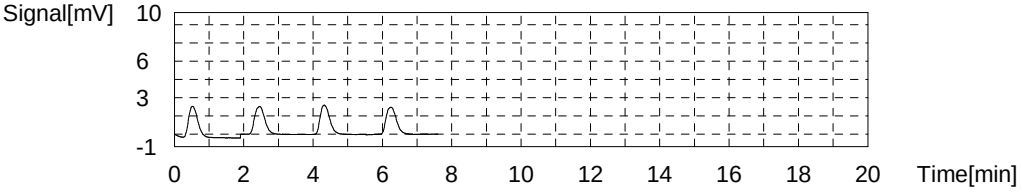
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.528mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.659	1.539mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:07:51 AM
2	4.654	1.538mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:09:55 AM
3	4.603	1.520mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:11:59 AM
4	4.589	1.516mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:14:02 AM

Mean Area 4.626
Mean Conc. 1.528mg/L



Sample

Sample Name: 280-124806-b-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

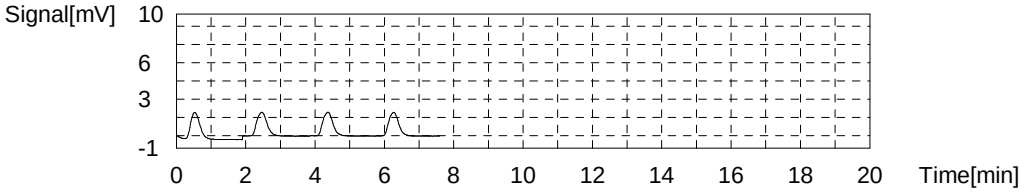
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.287mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.934	1.294mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:22:37 AM
2	3.936	1.295mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:24:41 AM
3	3.902	1.283mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:26:45 AM
4	3.875	1.274mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:28:49 AM

Mean Area 3.912
Mean Conc. 1.287mg/L



Sample

Sample Name: 280-124806-b-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

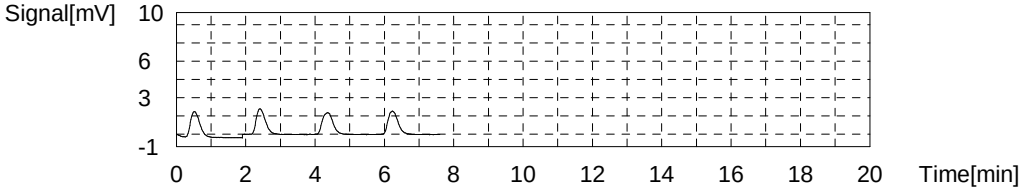
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.254mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.846	1.264mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:37:23 AM
2	3.830	1.259mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:39:27 AM
3	3.772	1.239mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:41:31 AM
4	3.817	1.255mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:43:35 AM

Mean Area 3.816
Mean Conc. 1.254mg/L



Sample

Sample Name: 280-124806-b-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

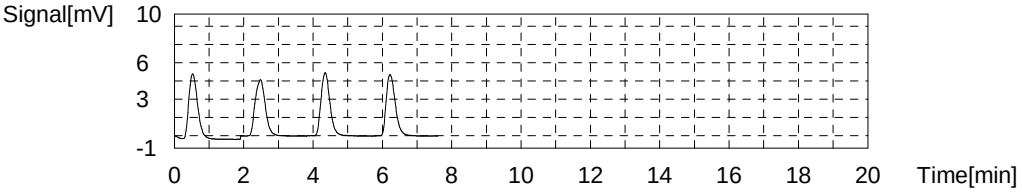
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.122mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.496	3.174mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:52:09 AM
2	9.367	3.131mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:54:13 AM
3	9.266	3.097mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:56:17 AM
4	9.233	3.085mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:58:21 AM

Mean Area 9.340
Mean Conc. 3.122mg/L



Sample

Sample Name: 280-124813-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

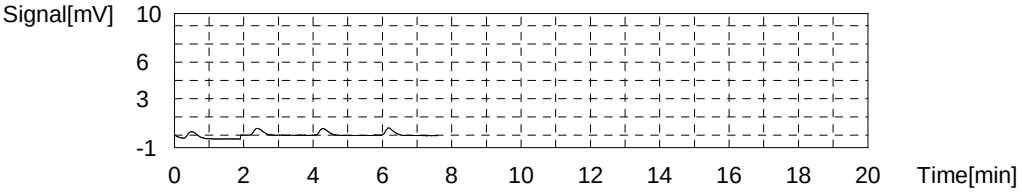
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2978mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9732	0.2934mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:06:55 PM
2	1.022	0.3099mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:08:59 PM
3	0.9543	0.2870mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:11:03 PM
4	0.9959	0.3011mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:13:07 PM

Mean Area 0.9864
Mean Conc. 0.2978mg/L



Sample

Sample Name: 280-124813-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

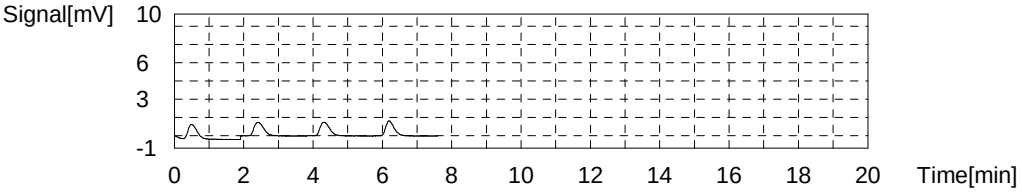
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6735mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.068	0.6635mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:21:41 PM
2	2.167	0.6969mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:23:45 PM
3	2.094	0.6723mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:25:49 PM
4	2.062	0.6614mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:27:52 PM

Mean Area 2.098
Mean Conc. 0.6735mg/L



Sample

Sample Name: 280-124813-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

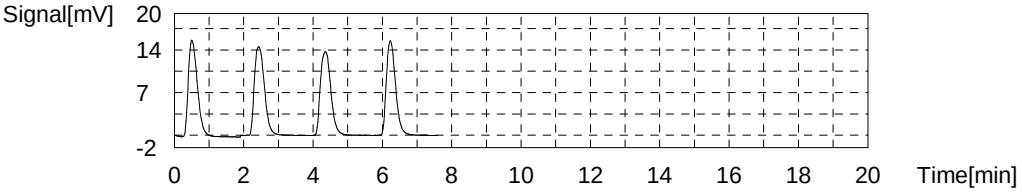
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.820mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.16	9.821mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:36:27 PM
2	29.50	9.936mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:38:31 PM
3	29.04	9.781mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:40:35 PM
4	28.92	9.740mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:42:39 PM

Mean Area 29.16
Mean Conc. 9.820mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

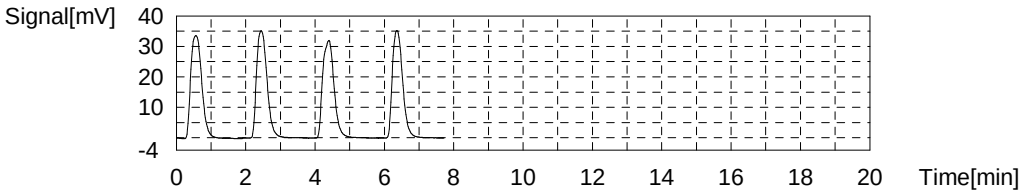
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.56	25.51mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:51:13 PM
2	74.20	25.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:53:17 PM
3	73.57	24.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:55:28 PM
4	73.24	24.72mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 12:57:31 PM

Mean Area 74.14
Mean Conc. 25.03mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

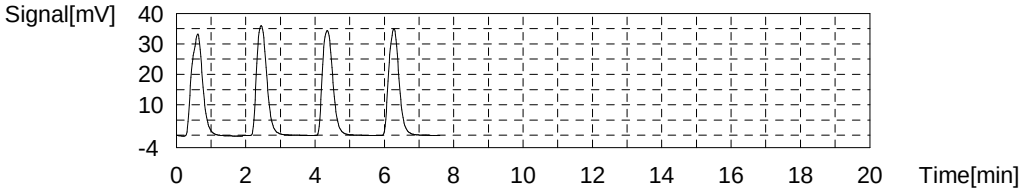
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.15	25.37mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:06:06 PM
2	74.02	24.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:08:10 PM
3	72.45	24.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:10:14 PM
4	72.89	24.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:12:17 PM

Mean Area 73.63
Mean Conc. 24.85mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

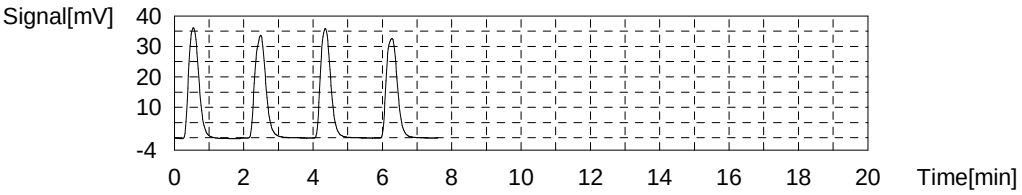
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.91mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.13	25.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:20:53 PM
2	74.06	25.00mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:22:57 PM
3	73.44	24.79mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:25:01 PM
4	72.61	24.51mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:27:04 PM

Mean Area 73.81
Mean Conc. 24.91mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

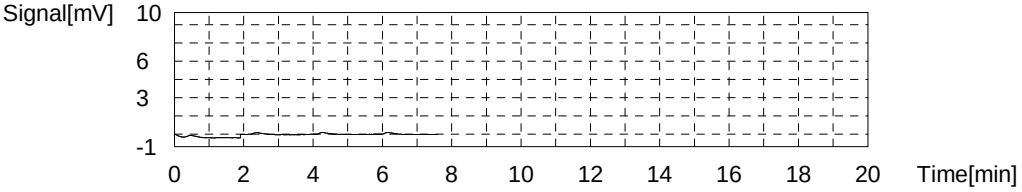
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04386mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2132	0.03649mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:35:40 PM
2	0.2688	0.05529mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:37:44 PM
3	0.2191	0.03849mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:39:48 PM
4	0.2389	0.04518mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:41:51 PM

Mean Area 0.2350
Mean Conc. 0.04386mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

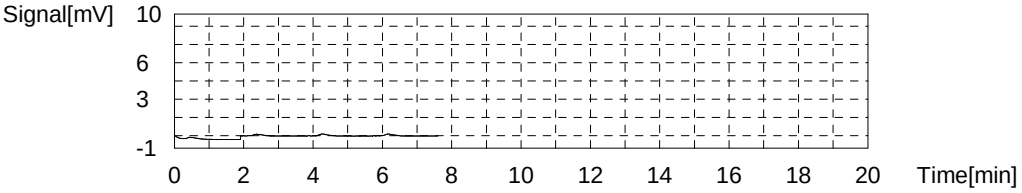
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03698mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1835	0.02645mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:50:27 PM
2	0.2051	0.03375mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:52:31 PM
3	0.2323	0.04295mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:54:35 PM
4	0.2377	0.04477mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 1:56:39 PM

Mean Area 0.2147
Mean Conc. 0.03698mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

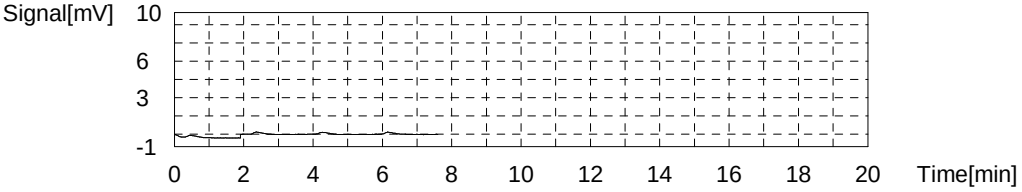
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05796mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2589	0.05194mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:05:14 PM
2	0.2988	0.06543mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:07:18 PM
3	0.2657	0.05424mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:09:22 PM
4	0.2834	0.06022mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:11:25 PM

Mean Area 0.2767
Mean Conc. 0.05796mg/L



Sample

Sample Name: 280-124813-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

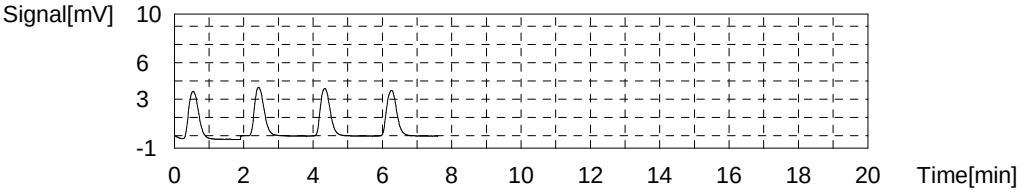
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.556mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.770	2.591mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:20:01 PM
2	7.667	2.556mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:22:05 PM
3	7.637	2.546mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:24:09 PM
4	7.587	2.529mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:26:13 PM

Mean Area 7.665
Mean Conc. 2.556mg/L



Sample

Sample Name: 280-124819-e-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

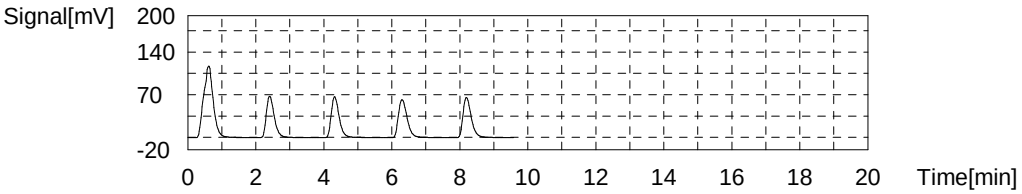
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:75.09mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	233.4	78.86mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:34:48 PM
2	111.1	75.07mg/L	25uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:36:52 PM
3	109.5	73.99mg/L	25uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:39:00 PM
4	112.1	75.75mg/L	25uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:41:04 PM
5	111.8	75.55mg/L	25uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:43:08 PM

Mean Area 111.1
Mean Conc. 75.09mg/L



Sample

Sample Name: MS 280-124819-e-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

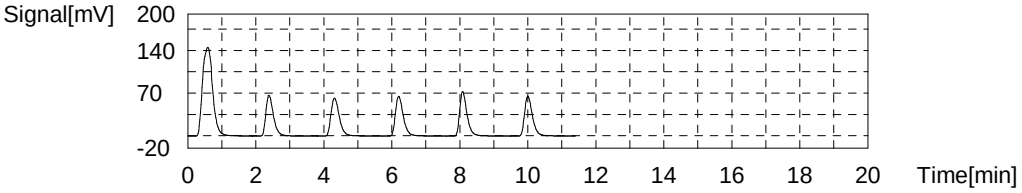
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:93.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	304.7	103.0mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:51:42 PM
2	104.3	92.75mg/L	19uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:53:46 PM
3	106.2	94.44mg/L	19uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:55:49 PM
4	105.2	93.55mg/L	19uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:57:53 PM
5	109.8	97.64mg/L	19uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/4/2019 2:59:57 PM
6	105.5	93.81mg/L	19uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:02:01 PM

Mean Area 105.3
Mean Conc. 93.63mg/L



Sample

Sample Name: MSD 280-124819-e-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

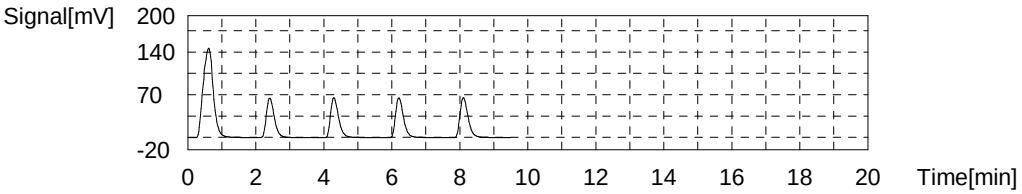
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:95.66mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	307.4	103.9mg/L	50uL	1	R	TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:10:30 PM
2	106.1	94.35mg/L	19uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:12:34 PM
3	107.6	95.68mg/L	19uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:14:37 PM
4	106.6	94.79mg/L	19uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:16:41 PM
5	110.0	97.82mg/L	19uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:18:45 PM

Mean Area 107.6
Mean Conc. 95.66mg/L



Sample

Sample Name: 280-124817-c-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

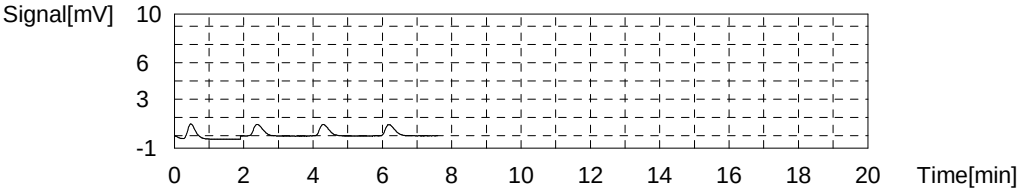
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5720mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.892	0.6040mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:27:16 PM
2	1.785	0.5678mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:29:20 PM
3	1.759	0.5590mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:31:24 PM
4	1.753	0.5570mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:33:27 PM

Mean Area 1.797
Mean Conc. 0.5720mg/L



Sample

Sample Name: 280-124813-b-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

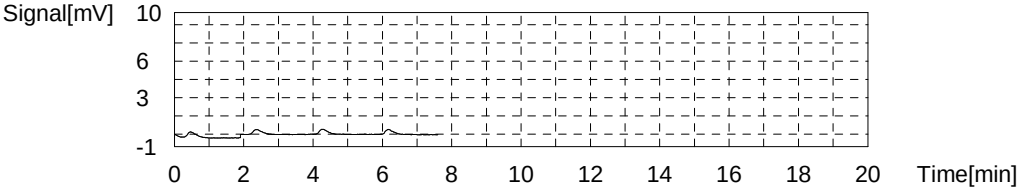
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1939mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7128	0.2054mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:42:00 PM
2	0.6963	0.1998mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:44:04 PM
3	0.6776	0.1935mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:46:08 PM
4	0.6291	0.1771mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:48:11 PM

Mean Area 0.6789
Mean Conc. 0.1939mg/L



Sample

Sample Name: 280-124813-b-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

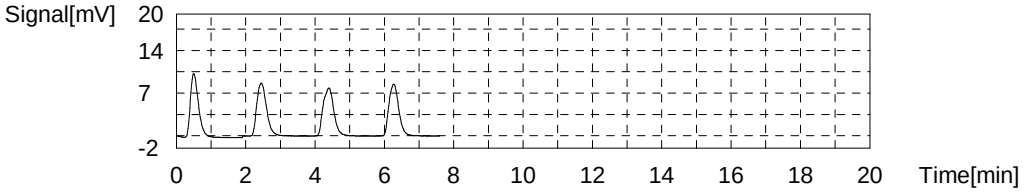
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.704mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.07	5.735mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:56:43 PM
2	17.06	5.731mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 3:58:47 PM
3	16.94	5.691mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:00:50 PM
4	16.85	5.660mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:02:54 PM

Mean Area 16.98
Mean Conc. 5.704mg/L



Sample

Sample Name: 280-124813-b-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

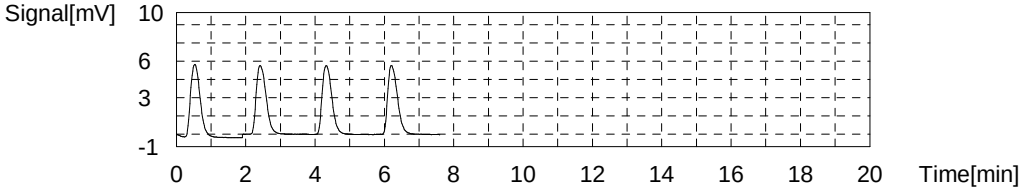
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.739mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.42	3.825mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:11:26 PM
2	11.16	3.737mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:13:30 PM
3	11.01	3.686mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:15:34 PM
4	11.08	3.710mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:17:37 PM

Mean Area 11.17
Mean Conc. 3.739mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

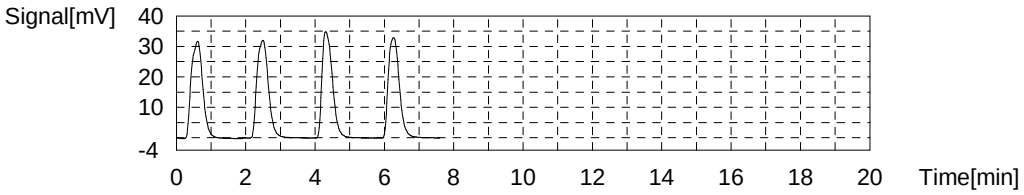
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.89mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.56	25.17mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:26:09 PM
2	74.04	24.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:28:13 PM
3	73.15	24.69mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:30:17 PM
4	73.21	24.71mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:32:20 PM

Mean Area 73.74
Mean Conc. 24.89mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

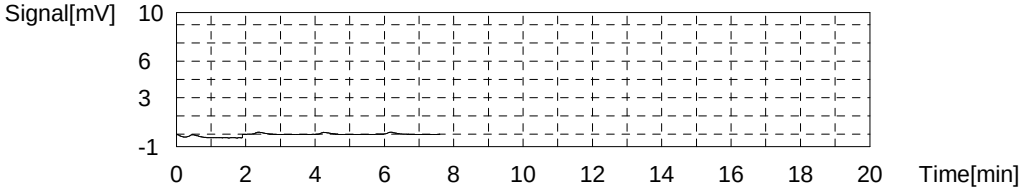
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06189mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3102	0.06928mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:40:53 PM
2	0.2925	0.06330mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:42:57 PM
3	0.2857	0.06100mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:45:01 PM
4	0.2649	0.05397mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:47:04 PM

Mean Area 0.2883
Mean Conc. 0.06189mg/L



Sample

Sample Name: 280-124817-d-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

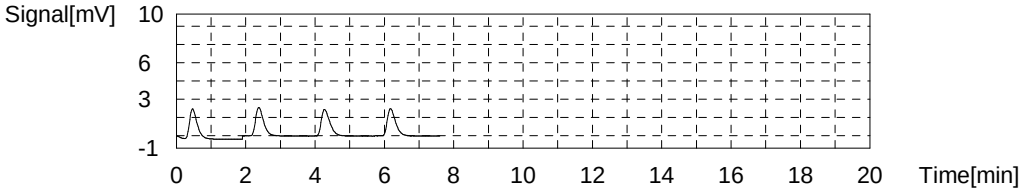
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.222mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.718	1.221mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:55:37 PM
2	3.729	1.225mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:57:41 PM
3	3.732	1.226mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 4:59:45 PM
4	3.702	1.216mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:01:48 PM

Mean Area 3.720
Mean Conc. 1.222mg/L



Sample

Sample Name: 280-124817-f-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

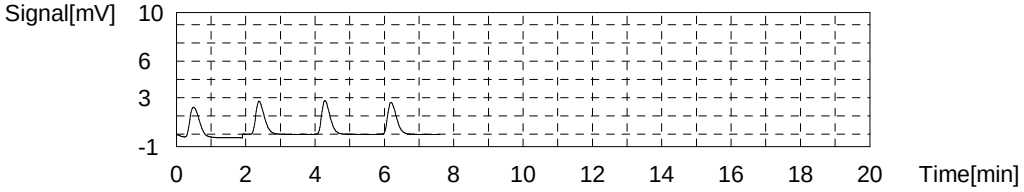
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.551mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.679	1.546mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:10:21 PM
2	4.723	1.561mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:12:25 PM
3	4.698	1.552mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:14:28 PM
4	4.669	1.543mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:16:32 PM

Mean Area 4.692
Mean Conc. 1.551mg/L



Sample

Sample Name: 280-124817-e-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

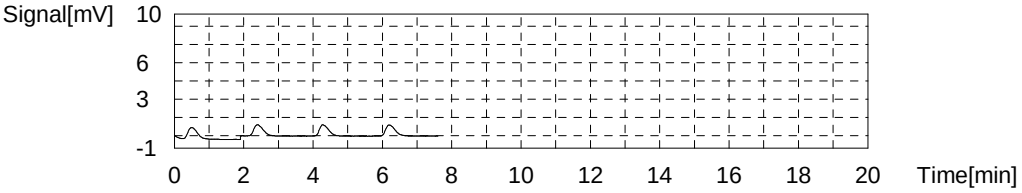
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5380mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.685	0.5340mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:25:04 PM
2	1.702	0.5398mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:27:08 PM
3	1.681	0.5327mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:29:12 PM
4	1.719	0.5455mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:31:15 PM

Mean Area 1.697
Mean Conc. 0.5380mg/L



Sample

Sample Name: 280-124817-e-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

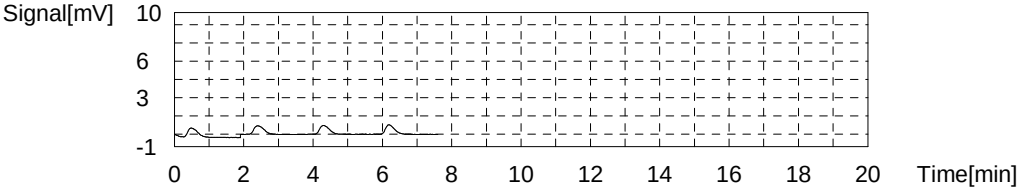
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4301mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.354	0.4221mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:39:47 PM
2	1.405	0.4394mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:41:51 PM
3	1.378	0.4302mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:43:54 PM
4	1.373	0.4285mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:45:58 PM

Mean Area 1.378
Mean Conc. 0.4301mg/L



Sample

Sample Name: 280-124950-f-15
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

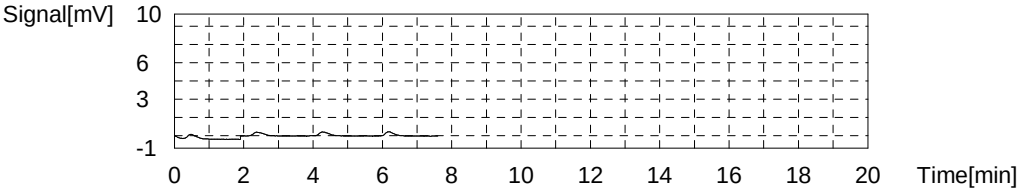
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1567mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5615	0.1542mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:54:30 PM
2	0.5746	0.1587mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:56:34 PM
3	0.5775	0.1596mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 5:58:38 PM
4	0.5616	0.1543mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:00:41 PM

Mean Area 0.5688
Mean Conc. 0.1567mg/L



Sample

Sample Name: 280-124950-e-16
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

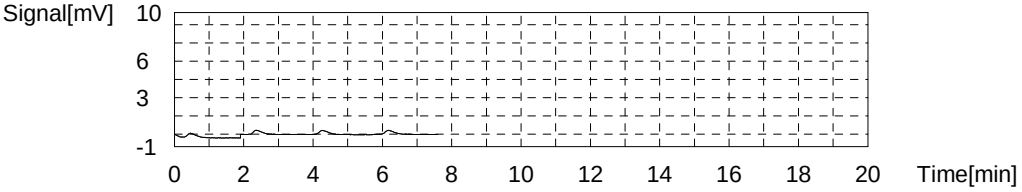
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1490mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5172	0.1393mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:09:14 PM
2	0.5612	0.1541mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:11:18 PM
3	0.5657	0.1556mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:13:22 PM
4	0.5404	0.1471mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:15:25 PM

Mean Area 0.5461
Mean Conc. 0.1490mg/L



Sample

Sample Name: 280-124950-e-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

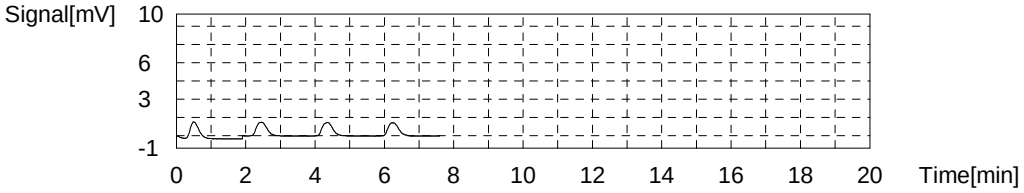
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7461mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.316	0.7473mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:23:58 PM
2	2.339	0.7551mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:26:02 PM
3	2.292	0.7392mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:28:05 PM
4	2.303	0.7429mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:30:09 PM

Mean Area 2.313
Mean Conc. 0.7461mg/L



Sample

Sample Name: MS 280-124950-e-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

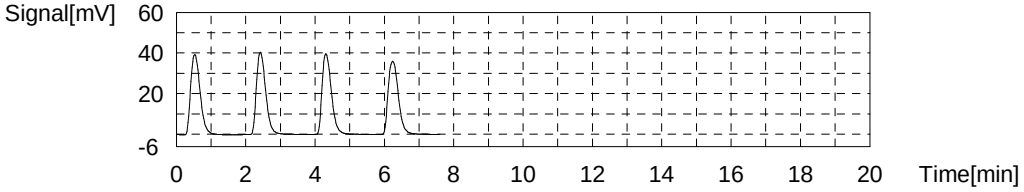
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.39mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.42	25.80mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:38:41 PM
2	75.54	25.50mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:40:45 PM
3	74.48	25.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:42:49 PM
4	74.37	25.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:44:52 PM

Mean Area 75.20
Mean Conc. 25.39mg/L



Sample

Sample Name: MSD 280-124950-e-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

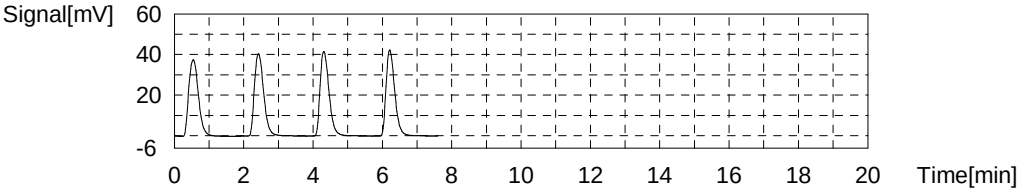
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.26mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.45	25.13mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:53:24 PM
2	75.81	25.59mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:55:28 PM
3	74.82	25.26mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:57:31 PM
4	74.20	25.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 6:59:35 PM

Mean Area 74.82
Mean Conc. 25.26mg/L



Sample

Sample Name: 280-124950-e-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

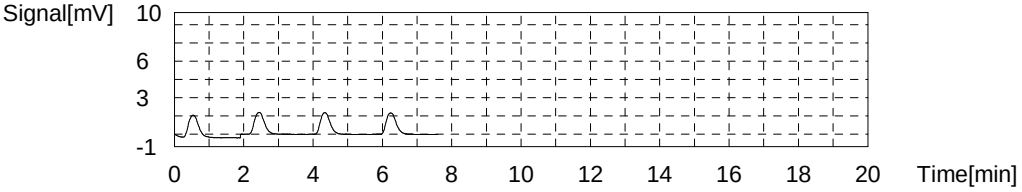
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.153mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.548	1.164mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:08:07 PM
2	3.567	1.170mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:10:11 PM
3	3.450	1.131mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:12:15 PM
4	3.499	1.147mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:14:18 PM

Mean Area 3.516
Mean Conc. 1.153mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

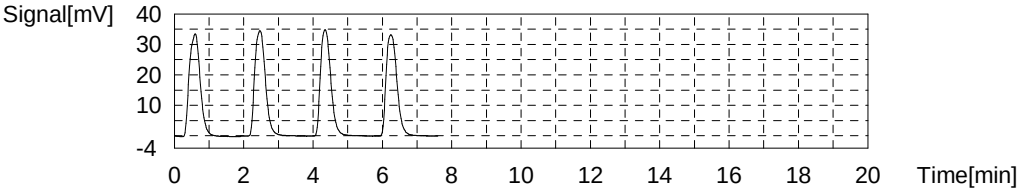
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.37	25.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:22:50 PM
2	74.04	24.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:24:54 PM
3	72.37	24.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:26:58 PM
4	72.39	24.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:29:01 PM

Mean Area 73.29
Mean Conc. 24.74mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

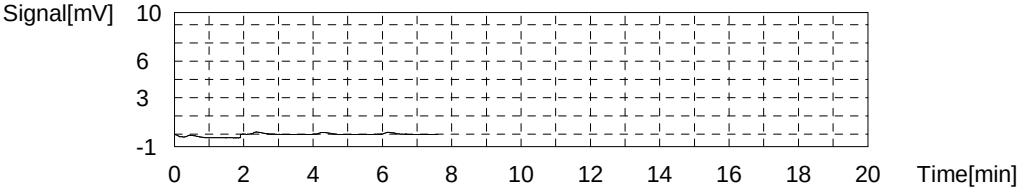
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06334mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2533	0.05005mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:37:34 PM
2	0.3326	0.07685mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:39:38 PM
3	0.2941	0.06384mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:41:41 PM
4	0.2905	0.06262mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:43:45 PM

Mean Area 0.2926
Mean Conc. 0.06334mg/L



Sample

Sample Name: 280-124950-e-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

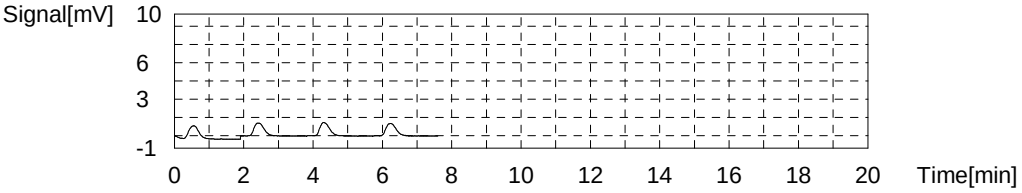
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6641mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.026	0.6493mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:52:17 PM
2	2.099	0.6740mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:54:21 PM
3	2.089	0.6706mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:56:24 PM
4	2.066	0.6628mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 7:58:28 PM

Mean Area 2.070
Mean Conc. 0.6641mg/L



Sample

Sample Name: 280-124950-e-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

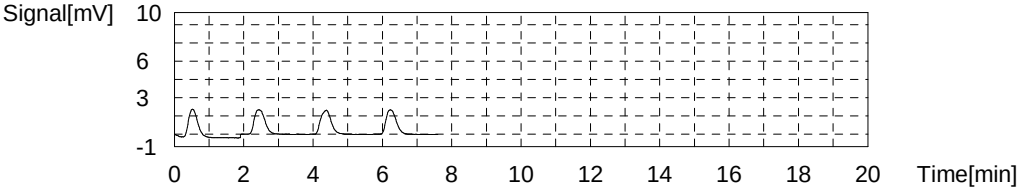
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.374mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.145	1.366mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:07:00 PM
2	4.280	1.411mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:09:04 PM
3	4.156	1.369mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:11:07 PM
4	4.096	1.349mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:13:11 PM

Mean Area 4.169
Mean Conc. 1.374mg/L



Sample

Sample Name: 280-124950-e-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

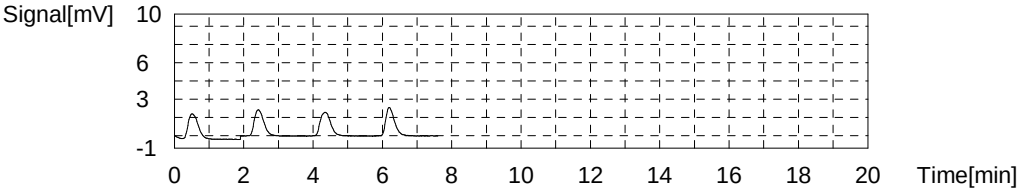
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.336mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.085	1.345mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:21:43 PM
2	4.085	1.345mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:23:47 PM
3	4.018	1.323mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:25:51 PM
4	4.042	1.331mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:27:54 PM

Mean Area 4.057
Mean Conc. 1.336mg/L



Sample

Sample Name: 280-124950-e-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

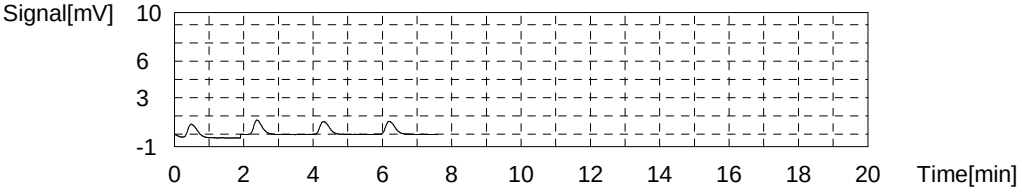
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6323mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.954	0.6249mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:36:27 PM
2	2.003	0.6415mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:38:31 PM
3	1.956	0.6256mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:40:35 PM
4	1.990	0.6371mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:42:38 PM

Mean Area 1.976
Mean Conc. 0.6323mg/L



Sample

Sample Name: 280-124950-f-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

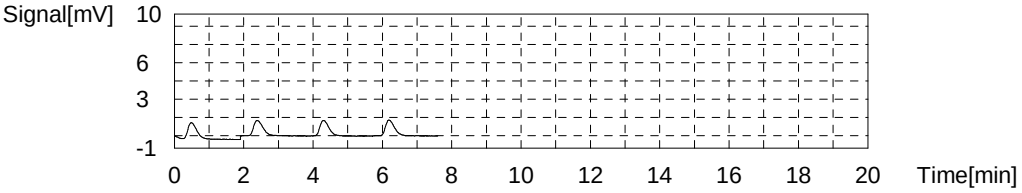
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7431mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.298	0.7412mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:51:11 PM
2	2.329	0.7517mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:53:15 PM
3	2.289	0.7382mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:55:18 PM
4	2.298	0.7412mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 8:57:22 PM

Mean Area 2.304
Mean Conc. 0.7431mg/L



Sample

Sample Name: 280-124950-f-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

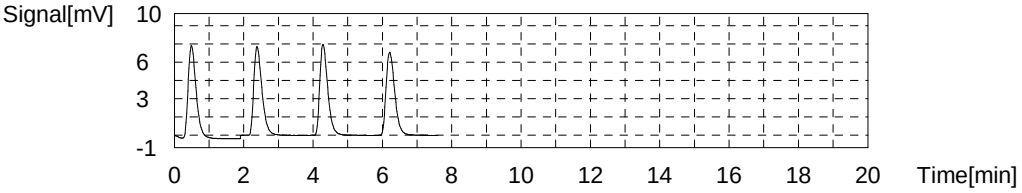
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.039mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.27	4.112mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:05:54 PM
2	12.06	4.041mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:07:58 PM
3	11.94	4.001mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:10:01 PM
4	11.94	4.001mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:12:05 PM

Mean Area 12.05
Mean Conc. 4.039mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

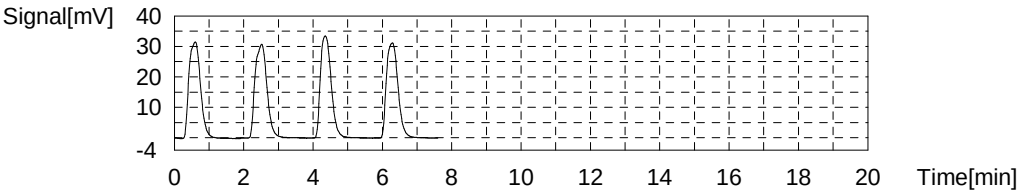
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.47	25.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:20:37 PM
2	73.60	24.84mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:22:41 PM
3	72.73	24.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:24:44 PM
4	73.03	24.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:26:48 PM

Mean Area 73.46
Mean Conc. 24.80mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

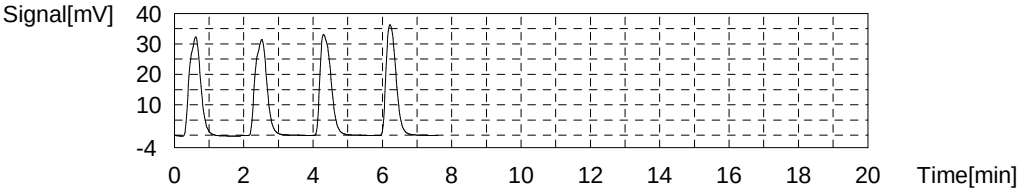
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.24	25.06mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:35:20 PM
2	73.90	24.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:37:24 PM
3	73.11	24.68mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:39:27 PM
4	73.05	24.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:41:31 PM

Mean Area 73.58
Mean Conc. 24.84mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

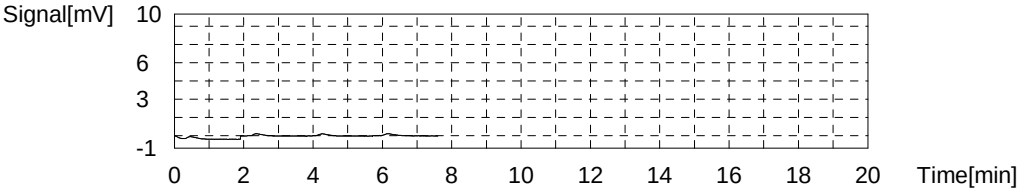
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05496mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2508	0.04920mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:50:03 PM
2	0.2868	0.06137mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:52:07 PM
3	0.2524	0.04974mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:54:10 PM
4	0.2813	0.05951mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 9:56:14 PM

Mean Area 0.2678
Mean Conc. 0.05496mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

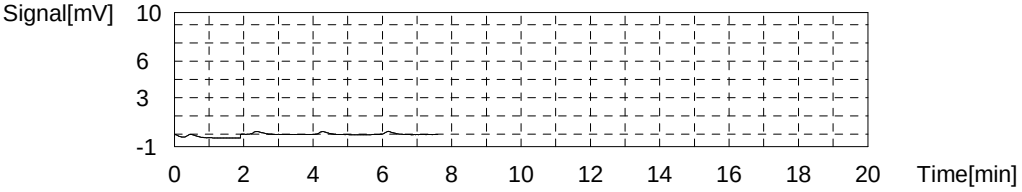
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.09519mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3483	0.08216mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:04:47 PM
2	0.4348	0.1114mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:06:50 PM
3	0.3884	0.09572mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:08:54 PM
4	0.3759	0.09149mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:10:58 PM

Mean Area 0.3869
Mean Conc. 0.09519mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

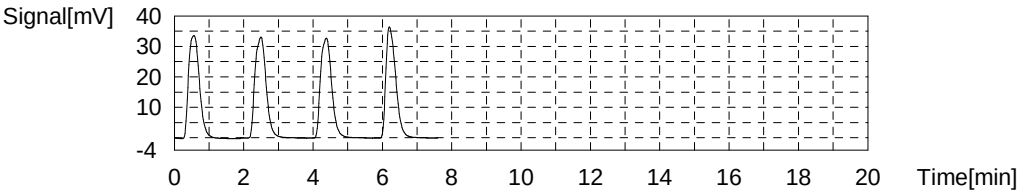
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.90mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.96	25.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:19:30 PM
2	74.49	25.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:21:34 PM
3	73.20	24.71mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:23:37 PM
4	72.41	24.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:25:41 PM

Mean Area 73.77
Mean Conc. 24.90mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

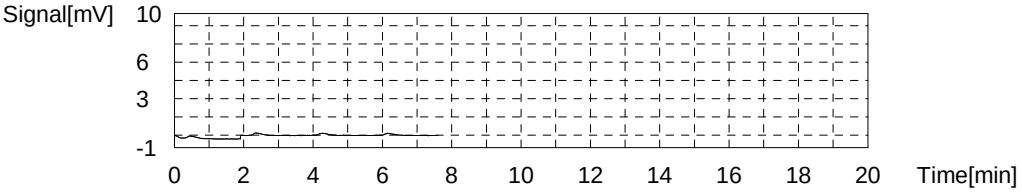
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06022mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2558	0.05089mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:34:14 PM
2	0.3304	0.07611mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:36:18 PM
3	0.2915	0.06296mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:38:21 PM
4	0.2559	0.05093mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:40:25 PM

Mean Area 0.2834
Mean Conc. 0.06022mg/L



Sample

Sample Name: 280-124950-f-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

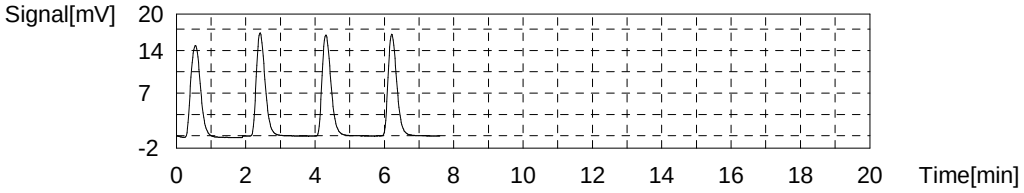
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.995mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.83	10.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:48:58 PM
2	29.94	10.09mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:51:02 PM
3	29.66	9.990mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:53:05 PM
4	29.27	9.859mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 10:55:09 PM

Mean Area 29.68
Mean Conc. 9.995mg/L



Sample

Sample Name: MS 280-124950-f-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

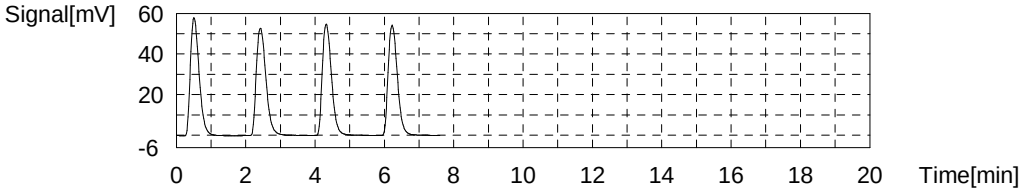
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:34.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.0	35.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:03:42 PM
2	103.2	34.85mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:05:46 PM
3	101.7	34.34mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:07:49 PM
4	101.6	34.31mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:09:53 PM

Mean Area 102.6
Mean Conc. 34.65mg/L



Sample

Sample Name: MSD 280-124950-f-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

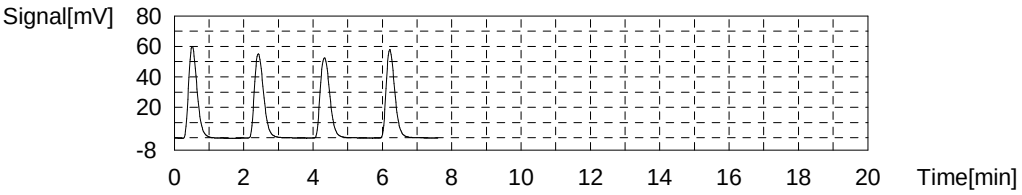
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:34.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	104.7	35.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:18:26 PM
2	102.4	34.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:20:29 PM
3	102.0	34.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:22:33 PM
4	101.7	34.34mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:24:37 PM

Mean Area 102.7
Mean Conc. 34.68mg/L



Sample

Sample Name: 280-124950-e-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

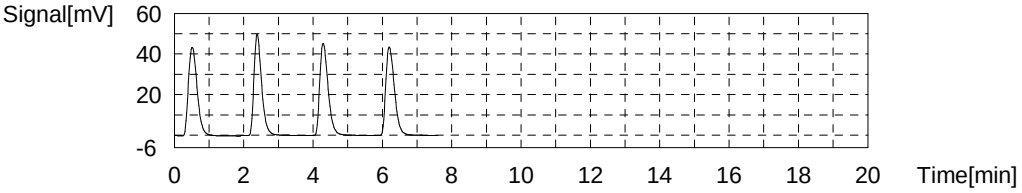
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.01mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.92	26.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:33:10 PM
2	77.37	26.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:35:14 PM
3	76.52	25.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:37:17 PM
4	76.37	25.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:39:21 PM

Mean Area 77.05
Mean Conc. 26.01mg/L



Sample

Sample Name: 280-124950-f-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

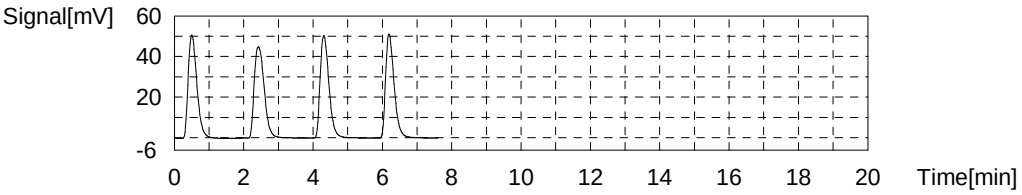
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.26mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.28	30.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:47:54 PM
2	90.60	30.59mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:49:58 PM
3	89.37	30.17mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:52:01 PM
4	88.21	29.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/4/2019 11:54:05 PM

Mean Area 89.62
Mean Conc. 30.26mg/L



Sample

Sample Name: 280-124950-f-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

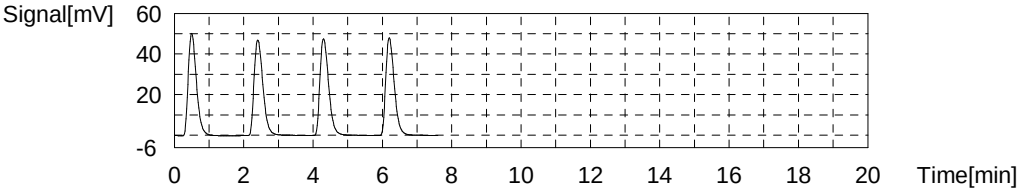
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.57	28.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:02:38 AM
2	84.36	28.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:04:42 AM
3	83.59	28.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:06:45 AM
4	83.07	28.04mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:08:49 AM

Mean Area 83.90
Mean Conc. 28.32mg/L



Sample

Sample Name: 280-124950-e-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

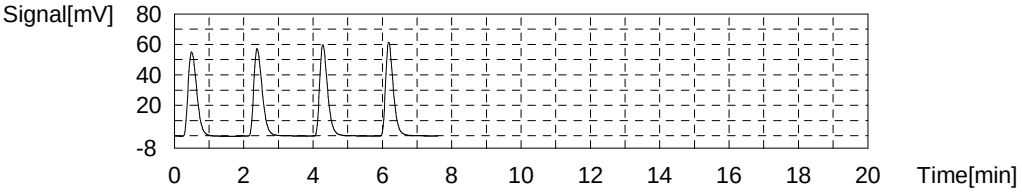
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.71mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	98.00	33.09mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:17:22 AM
2	97.72	33.00mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:19:26 AM
3	95.96	32.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:21:30 AM
4	95.75	32.33mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:23:33 AM

Mean Area 96.86
Mean Conc. 32.71mg/L



Sample

Sample Name: 280-124950-e-14
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

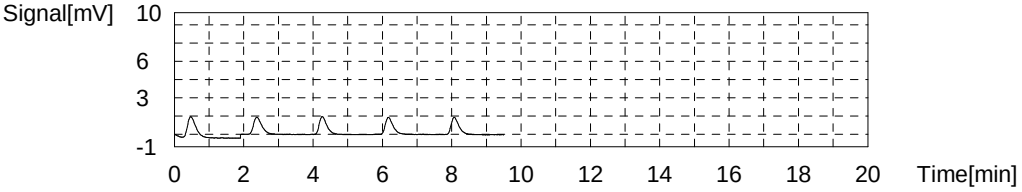
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7222mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.792	0.9082mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:32:06 AM
2	2.331	0.7524mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:34:09 AM
3	2.261	0.7287mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:36:13 AM
4	2.167	0.6969mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:38:17 AM
5	2.208	0.7108mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:40:21 AM

Mean Area 2.242
Mean Conc. 0.7222mg/L



Sample

Sample Name: 280-124928-d-16-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

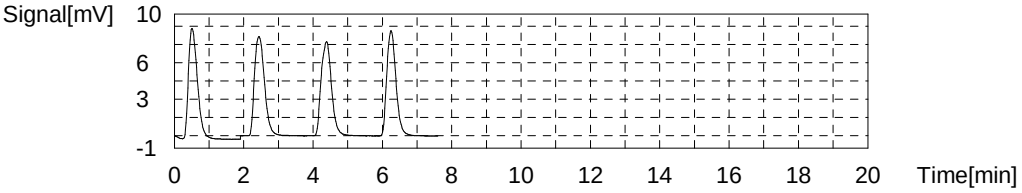
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.452mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.43	5.518mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:48:53 AM
2	16.40	5.508mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:50:57 AM
3	16.07	5.397mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:53:00 AM
4	16.03	5.383mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:55:04 AM

Mean Area 16.23
Mean Conc. 5.452mg/L



Sample

Sample Name: 280-124946-f-12-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

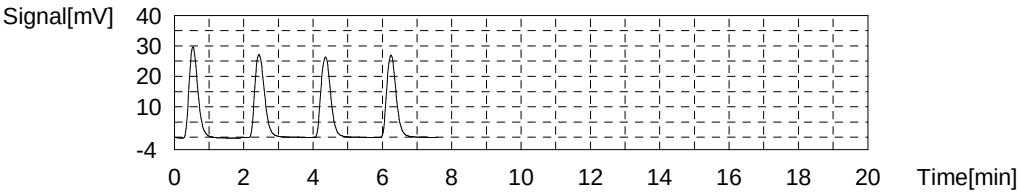
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:17.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.93	18.19mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:03:37 AM
2	53.38	18.01mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:05:40 AM
3	52.14	17.59mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:07:44 AM
4	51.68	17.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:09:48 AM

Mean Area 52.78
Mean Conc. 17.81mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

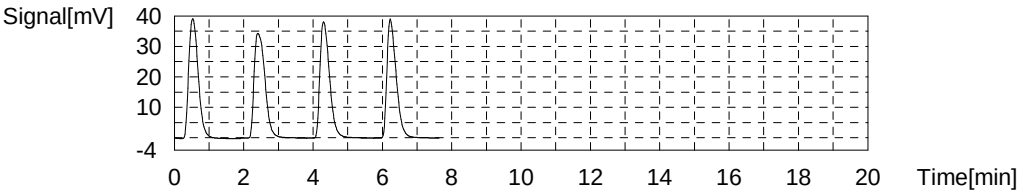
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.03	25.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:18:21 AM
2	75.02	25.32mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:20:25 AM
3	73.74	24.89mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:22:30 AM
4	72.78	24.57mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:24:34 AM

Mean Area 74.39
Mean Conc. 25.11mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

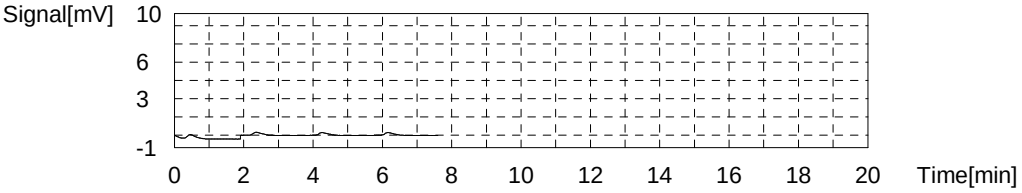
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1032mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4640	0.1213mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:33:07 AM
2	0.4249	0.1081mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:35:10 AM
3	0.3789	0.09250mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:37:14 AM
4	0.3749	0.09115mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:39:18 AM

Mean Area 0.4107
Mean Conc. 0.1032mg/L



Sample

Sample Name: 280-124946-f-13-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

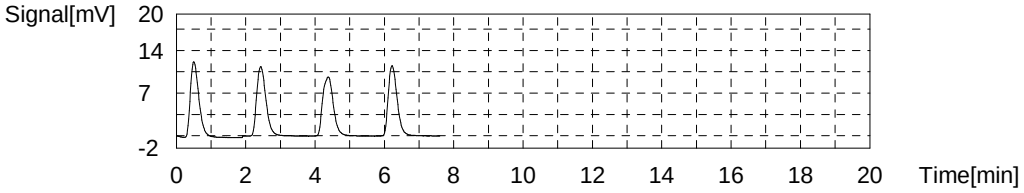
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.077mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.49	7.229mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:47:51 AM
2	21.22	7.137mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:49:55 AM
3	20.74	6.975mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:51:58 AM
4	20.71	6.965mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:54:02 AM

Mean Area 21.04
Mean Conc. 7.077mg/L



Sample

Sample Name: 280-124946-f-14-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

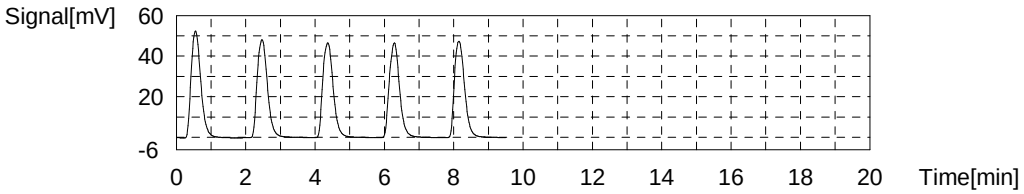
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:33.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	103.8	35.05mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:02:35 AM
2	100.1	33.80mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:04:38 AM
3	98.10	33.13mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:06:42 AM
4	96.94	32.73mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:08:46 AM
5	97.46	32.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:10:50 AM

Mean Area 98.15
Mean Conc. 33.14mg/L



Sample

Sample Name: 280-124946-f-15-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

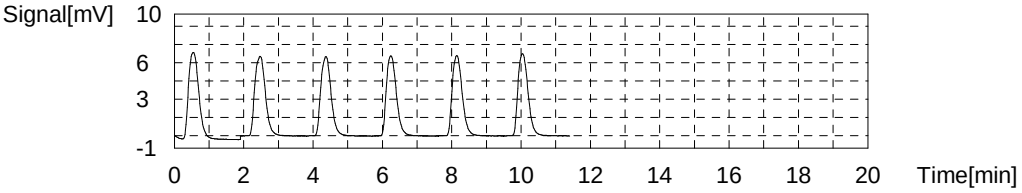
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.485mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.65	4.917mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:19:22 AM
2	13.88	4.656mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:21:25 AM
3	13.40	4.494mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:23:29 AM
4	13.23	4.437mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:25:33 AM
5	13.24	4.440mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:27:37 AM
6	13.62	4.568mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:29:41 AM

Mean Area 13.37
Mean Conc. 4.485mg/L



Sample

Sample Name: 280-124946-f-16-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

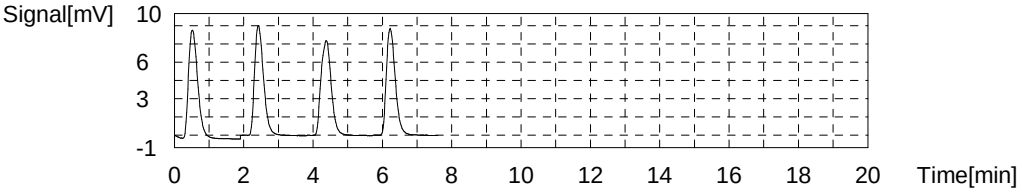
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.419mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.44	5.522mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:38:07 AM
2	16.27	5.464mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:40:11 AM
3	16.06	5.393mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:42:14 AM
4	15.78	5.299mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:44:18 AM

Mean Area 16.14
Mean Conc. 5.419mg/L



Sample

Sample Name: 280-124888-p-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

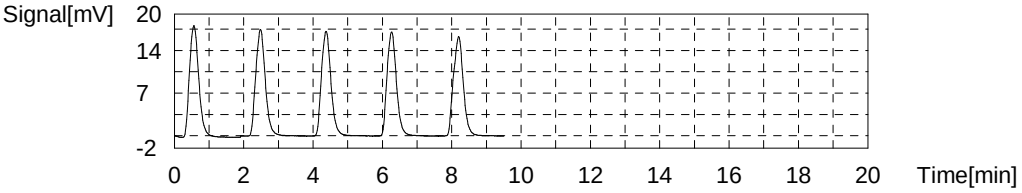
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.07mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.52	11.63mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:52:51 AM
2	33.60	11.32mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:54:54 AM
3	32.90	11.09mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:56:58 AM
4	32.39	10.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:59:02 AM
5	32.57	10.97mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:01:06 AM

Mean Area 32.87
Mean Conc. 11.07mg/L



Sample

Sample Name: 280-124888-l-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

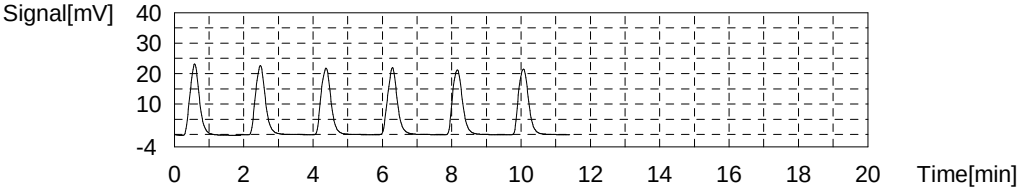
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.60mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.81	15.11mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:09:38 AM
2	44.88	15.14mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:11:42 AM
3	43.62	14.71mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:13:45 AM
4	42.91	14.47mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:15:49 AM
5	42.81	14.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:17:53 AM
6	43.83	14.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:19:57 AM

Mean Area 43.29
Mean Conc. 14.60mg/L



Sample

Sample Name: 280-124888-k-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

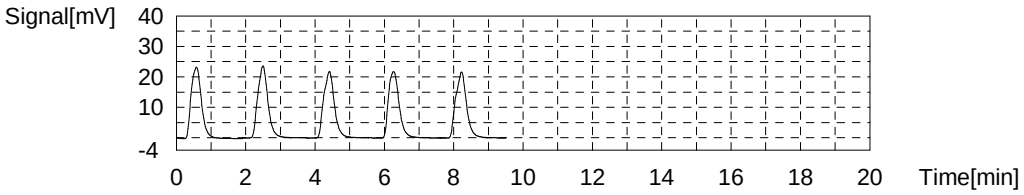
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.97mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	48.95	16.51mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:28:24 AM
2	48.35	16.31mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:30:27 AM
3	46.94	15.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:32:31 AM
4	46.83	15.79mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:34:35 AM
5	47.25	15.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:36:39 AM

Mean Area 47.34
Mean Conc. 15.97mg/L



Sample

Sample Name: MS 280-124888-k-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

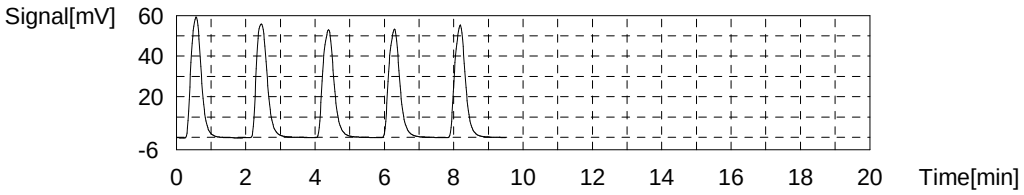
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:40.66mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	124.7	42.12mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:45:11 AM
2	122.6	41.41mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:47:14 AM
3	120.2	40.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:49:18 AM
4	119.2	40.26mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:51:22 AM
5	119.6	40.39mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:53:26 AM

Mean Area 120.4
Mean Conc. 40.66mg/L



Sample

Sample Name: MSD 280-124888-k-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

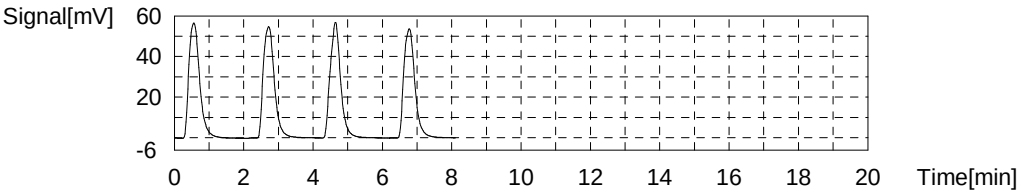
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:41.12mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	124.9	42.18mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:02:13 AM
2	122.2	41.27mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:04:16 AM
3	120.4	40.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:06:35 AM
4	119.5	40.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:08:39 AM

Mean Area 121.8
Mean Conc. 41.12mg/L



Sample

Sample Name: 280-124888-I-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

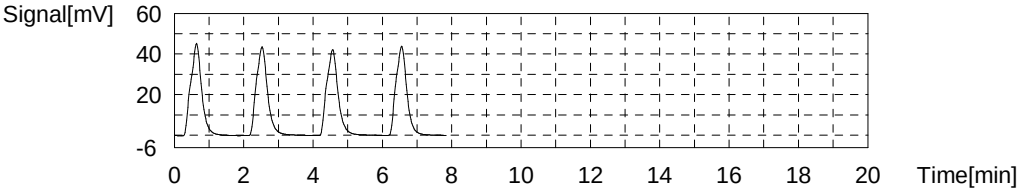
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:33.34mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	101.1	34.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:17:12 AM
2	99.29	33.53mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:19:23 AM
3	97.81	33.03mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:21:33 AM
4	96.75	32.67mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:23:37 AM

Mean Area 98.74
Mean Conc. 33.34mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

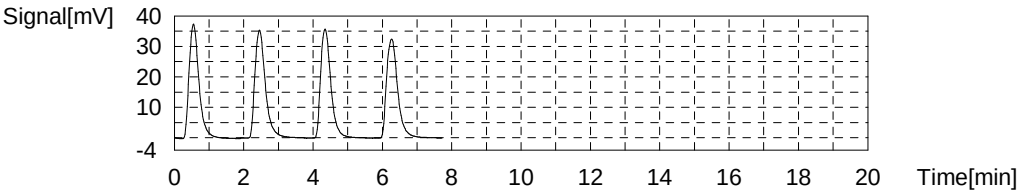
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.50	25.49mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:32:09 AM
2	75.02	25.32mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:34:13 AM
3	73.40	24.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:36:17 AM
4	72.86	24.59mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:38:28 AM

Mean Area 74.20
Mean Conc. 25.04mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

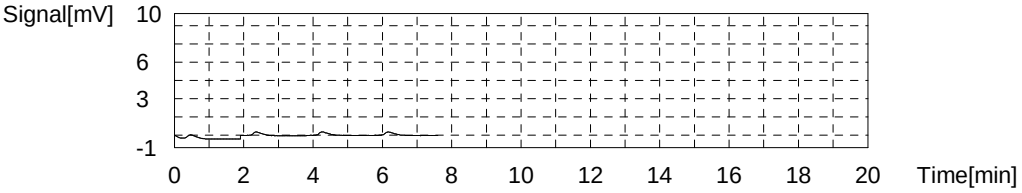
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1251mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4614	0.1204mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:47:02 AM
2	0.4652	0.1217mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:49:05 AM
3	0.4859	0.1287mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:51:09 AM
4	0.4885	0.1296mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:53:13 AM

Mean Area 0.4753
Mean Conc. 0.1251mg/L



Sample

Sample Name: 280-124888-I-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

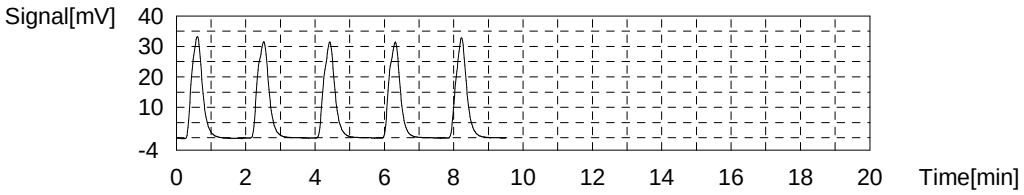
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.88mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.66	24.86mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:01:47 AM
2	72.39	24.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:03:50 AM
3	69.87	23.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:05:54 AM
4	70.12	23.67mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:07:58 AM
5	70.58	23.82mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:10:02 AM

Mean Area 70.74
Mean Conc. 23.88mg/L



Sample

Sample Name: 280-124888-I-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

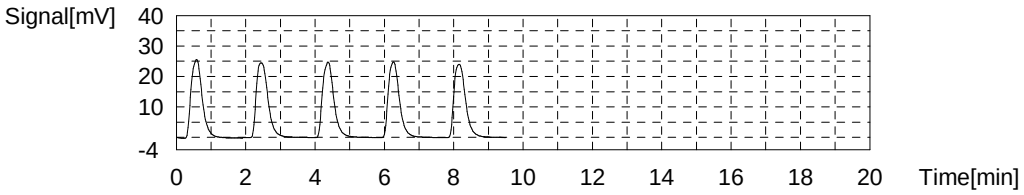
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.57	19.76mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:18:35 AM
2	57.51	19.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:20:38 AM
3	56.54	19.08mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:22:42 AM
4	55.58	18.75mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:24:46 AM
5	56.08	18.92mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:26:50 AM

Mean Area 56.43
Mean Conc. 19.04mg/L



Sample

Sample Name: 280-124888-k-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

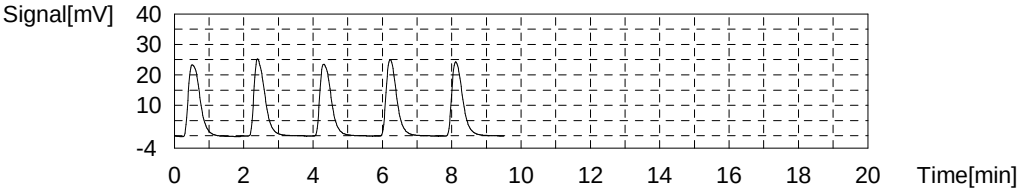
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.23mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.20	18.96mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:35:23 AM
2	55.35	18.67mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:37:26 AM
3	53.64	18.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:39:30 AM
4	53.59	18.08mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:41:34 AM
5	53.55	18.07mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:43:38 AM

Mean Area 54.03
Mean Conc. 18.23mg/L



Sample

Sample Name: 280-124888-I-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

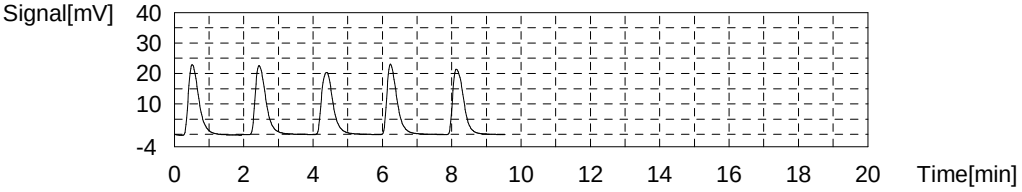
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:16.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.56	16.72mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:52:12 AM
2	48.70	16.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:54:16 AM
3	47.40	15.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:56:20 AM
4	47.06	15.87mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:58:24 AM
5	47.49	16.02mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:00:28 AM

Mean Area 47.66
Mean Conc. 16.08mg/L



Sample

Sample Name: 280-124888-k-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

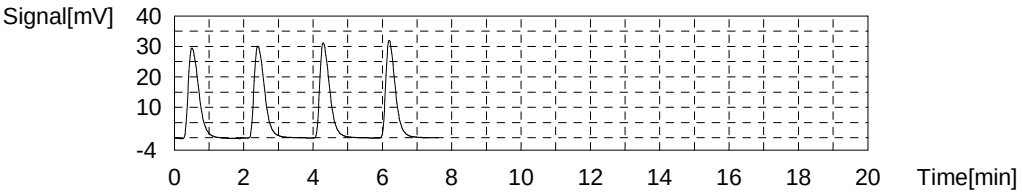
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:21.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.37	21.72mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:09:01 AM
2	63.98	21.59mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:11:04 AM
3	62.41	21.06mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:13:08 AM
4	61.91	20.89mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:15:12 AM

Mean Area 63.17
Mean Conc. 21.32mg/L



Sample

Sample Name: 280-124888-k-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

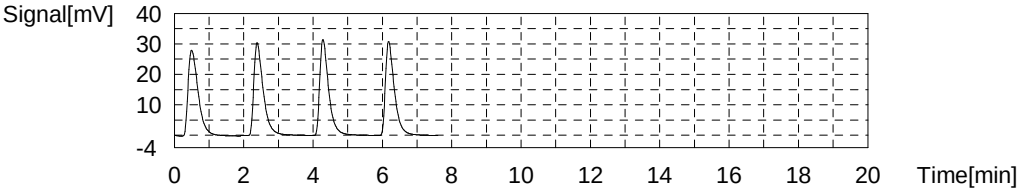
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.92	19.54mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:23:46 AM
2	57.73	19.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:25:49 AM
3	56.39	19.03mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:27:53 AM
4	56.09	18.92mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:29:57 AM

Mean Area 57.03
Mean Conc. 19.24mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

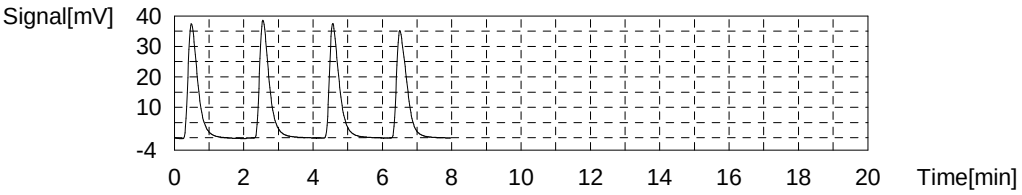
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.98	25.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:38:40 AM
2	75.92	25.63mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:40:51 AM
3	74.29	25.08mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:42:57 AM
4	73.40	24.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:45:04 AM

Mean Area 74.90
Mean Conc. 25.28mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

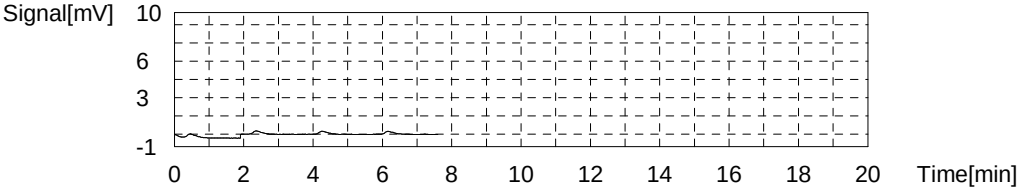
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1113mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4599	0.1199mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:53:38 AM
2	0.4569	0.1189mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:55:41 AM
3	0.4163	0.1051mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:57:45 AM
4	0.4044	0.1011mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:59:49 AM

Mean Area 0.4344
Mean Conc. 0.1113mg/L



TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2019_06_24_10_12_13.cal

Date of Creation 11:17:07 AM 6/24/2019
User wetchemd
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
Sample ID: Untitled
Object ID 0A-103108-04335027-13415A0166CC-0000
Cal. Curve: TOC3.2019_06_24_10_12_13.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2765	50uL	1	*******		6/24/2019 10:19:54 A
2	0.3484	50uL	1	*******		6/24/2019 10:21:58 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.3125
SD Area 0.05084
CV Area 16.27%
Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.311	50uL	1	*******		6/24/2019 10:30:32 A
2	3.309	50uL	1	*******		6/24/2019 10:32:36 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 3.310
SD Area 0.00141
CV Area 0.04%
Vial 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	14.36	50uL	1	*******	E	6/24/2019 10:41:10 A
2	14.95	50uL	1	*******		6/24/2019 10:43:14 A
3	14.85	50uL	1	*******		6/24/2019 10:45:18 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 14.90
SD Area 0.07071
CV Area 0.47%
Vial 3

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	29.38	50uL	1	*******		6/24/2019 10:53:47 A
2	29.94	50uL	1	*******		6/24/2019 10:55:51 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 29.66
SD Area 0.3960
CV Area 1.34%
Vial 4

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	72.31	50uL	1	*******		6/24/2019 11:04:25 A
2	74.10	50uL	1	*******		6/24/2019 11:06:29 A

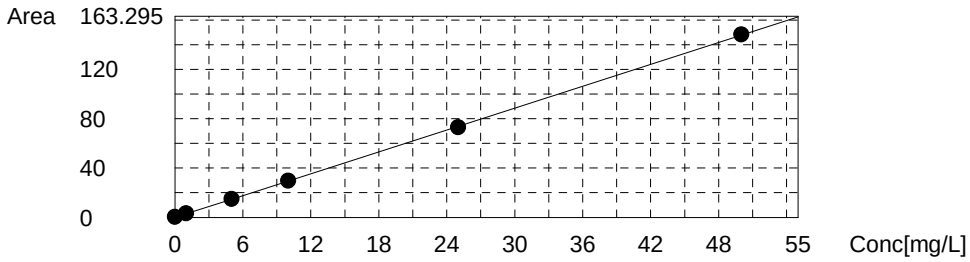
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 73.21
SD Area 1.266
CV Area 1.73%
Vial 5

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	147.7	50uL	1	*******		6/24/2019 11:15:03 A
2	149.2	50uL	1	*******		6/24/2019 11:17:07 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 148.5
SD Area 1.061
CV Area 0.71%
Vial 6

Slope: 2.958
Intercept 0.1052
r^2 0.9999
r 1.0000
Zero Shift No



JM 7/3/19
pH

	Analysis	Sample Name	Sample ID	Manual Diluti	~~Result~~	Notes	Date / Time	Vial
1*	NPOC	ICV		1.000	<2			1
2*	NPOC	ICB		1.000	<2			2
3*	NPOC	lcs 280-463669/1-a		1.000	<2			3
4*	NPOC	mb 280-463669/2-a		1.000	<2			4
5*	NPOC	TIC		1.000	<2			5
6*	NPOC	280-124928-d-14-a		1.000	8			6
7*	NPOC	280-124928-d-15-a		1.000	8			7
8*	NPOC	280-124928-d-15-b m		1.000	8			8
9*	NPOC	280-124928-d-15-c m		1.000	8			9
10*	NPOC	280-124946-d-1-a		1.000	8			10
11*	NPOC	280-124946-d-2-a		1.000	8			11
12*	NPOC	280-124946-d-3-a		1.000	8			12
13*	NPOC	280-124946-d-4-a		1.000	8			13
14*	NPOC	280-124946-d-5-a		1.000	8			14
15*	NPOC	280-124946-d-6-a		1.000	8			15
16*	NPOC	CCV		1.000	<2			16
17*	NPOC	CCB		1.000	<2			17
18*	NPOC	280-124946-d-7-a		1.000	8			18
19*	NPOC	280-124946-d-8-a		1.000	8			19
20*	NPOC	280-124946-d-9-a		1.000	9			20
21*	NPOC	280-124946-d-10-a		1.000	8			21
22*	NPOC	280-124946-d-11-a		1.000	8			22
23*	NPOC	280-124946-d-11-b m		1.000	8			23
24*	NPOC	280-124946-d-11-c m		1.000	8			24
25*	NPOC	280-124946-d-17-a		1.000	8			25
26*	NPOC	280-124946-d-18-a		1.000	8			26
27*	NPOC	LCS		1.000	<2			27
28*	NPOC	CCV		1.000	<2			28
29*	NPOC	CCB		1.000	<2			29
30*	NPOC	LCSD		1.000	<2			30
31*	NPOC	MB		1.000	<2			31
32*	NPOC	TIC		1.000	<2			32
33*	NPOC	280-124900-c-1		1.000	<2			33
34*	NPOC	LCS		1.000	<2			34
35*	NPOC	LCSD		1.000	<2			35
36*	NPOC	TIC		1.000	<2			36
37*	NPOC	MB		1.000	<2			37
38*	NPOC	280-124713-g-1		1.000	<2			38
39*	NPOC	280-124713-g-3		1.000	<2			39
40*	NPOC	CCV		1.000	<2			40
41*	NPOC	CCB		1.000	<2			41
42*	NPOC	280-124713-i-5		1.000	<2			42
43*	NPOC	MS 280-124713-i-5		1.000	<2			43
44*	NPOC	MSD 280-124713-i-5		1.000	<2			44
45*	NPOC	280-124713-g-6		1.000	<2			45
46*	NPOC	280-124892-b-2		1.000	<2			46
47*	NPOC	280-124892-b-1		1.000	<2			47
48*	NPOC	280-124897-c-1		1.000	<2			48
49*	NPOC	280-124899-d-1		1.000	<2			49
50*	NPOC	280-124933-l-1		1.000	<2			50
51*	NPOC	280-124933-m-3		1.000	<2			51

9060
5310B

jm 7/5/19 pH

	Analysis	Sample Name	Sample ID	Manual Diluti	~~Result~~	Notes	Date / Time	Vial
52*	NPOC	CCV		1.000	<2			52
53*	NPOC	CCB		1.000	<2			53
54*	NPOC	280-124933-l-4		1.000	<2			54
55*	NPOC	MS 280-124933-l-4		1.000	<2			55
56*	NPOC	MSD 280-124933-l-4		1.000	<2			56
57*	NPOC	280-124933-l-5		1.000	<2			57
58*	NPOC	280-124933-l-6		1.000	<2			58
59*	NPOC	280-124933-m-7		1.000	<2			59
60*	NPOC	280-124987-e-4		1.000	<2			60
61*	NPOC	280-124987-e-4		1.000	<2			61
62*	NPOC	280-124986-f-5-a		1.000	9			62
63*	NPOC	280-124986-f-6-a		1.000	8			63
64*	NPOC	CCV		1.000	<2			64
65*	NPOC	CCB		1.000	<2			65
66*	NPOC	280-124986-f-10-a		1.000	9			66
67*	NPOC	280-124986-f-11-a		1.000	8			67
68*	NPOC	280-124986-f-13-a		1.000	8			68
69*	NPOC	280-124986-f-14-a		1.000	8			69
70*	NPOC	280-124986-f-15-a		1.000	9			70
71*	NPOC	280-124986-f-25-a		1.000	8			71
72*	NPOC	280-124986-f-25-b ms		1.000	8			72
73*	NPOC	280-124986-f-25-c ms		1.000	8			73
74*	NPOC	280-124987-d-5		1.000	<2			74
75*	NPOC	280-124987-e-5		1.000	<2			75
76*	NPOC	CCV		1.000	<2			76
77*	NPOC	CCB		1.000	<2			77
78*	NPOC	280-124987-d-6		1.000	<2			78
79*	NPOC	MS 280-124987-d-6		1.000	<2			79
80*	NPOC	MSD 280-124987-d-6		1.000	<2			80
81*	NPOC	280-124987-e-6		1.000	<2			81
82*	NPOC	MS 280-124987-e-6		1.000	<2			82
83*	NPOC	MSD 280-124987-e-6		1.000	<2			83
84*	NPOC	280-124987-d-7		1.000	<2			84
85*	NPOC	280-124987-e-7		1.000	<2			85
86*	NPOC	280-124987-d-8		1.000	<2			86
87*	NPOC	280-124987-e-8		1.000	<2			87
88*	NPOC	CCV		1.000	<2			88
89*	NPOC	CCB		1.000	<2			89
90*	NPOC	280-124986-f-29-a		1.000	8			90
91*	NPOC	280-124986-f-30-a		1.000	8			91
92*	NPOC	280-124986-f-31-a		1.000	8			92
93*	NPOC	280-124986-f-1-a		1.000	8			93
94*	NPOC	280-124986-f-7-a		1.000	8			1
95*	NPOC	lcs 280-463672/1-a		1.000	<2 8 jm 7/5/19			2
96*	NPOC	mb 280-463672/2-a		1.000	<2			3
97*	NPOC	TI C		1.000	<2			4
98*	NPOC	280-124986-f-8-a		1.000	8			5
99*	NPOC	280-124986-f-8-b ms		1.000	8			6
100*	NPOC	CCV		1.000	<2			7
101*	NPOC	CCB		1.000	<2			8
102*	NPOC	280-124986-f-8-c msd		1.000	8			9

53103

~~60~~ 61

9060 60

gm pH 7/5/19

	Analysis	Sample Name	Sample ID	Manual Diluti	~~Result~~	Notes	Date / Time	Vial
103*	NPOC	280-124986-f-9-a		1.000	8			10
104*	NPOC	280-124986-f-16-a		1.000	8			11
105*	NPOC	280-124986-f-17-a		1.000	8			12
106*	NPOC	280-124986-f-18-a		1.000	8			13
107*	NPOC	280-124986-f-26-a		1.000	8			14
108*	NPOC	280-124986-f-27-a		1.000	8			15
109*	NPOC	280-124986-f-32-a		1.000	7			16
110*	NPOC	280-124986-f-28-a		1.000	8			17
111*	NPOC	280-124986-f-33-a		1.000	8			18
112*	NPOC	CCV		1.000	2			19
113*	NPOC	CCB		1.000	2			20
114*	NPOC	280-124986-f-34-a		1.000	8			21
115*	NPOC	280-124986-f-4-a		1.000	8			22
116*	NPOC	CCV		1.000	2			23
117*	NPOC	CCB		1.000	2			24

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
1	NPOC	ICV		1.000	NPOC:20.1		7/5/2019 11:33:	1
2	NPOC	ICB		1.000	NPOC:0.04		7/5/2019 11:50:	2
3	NPOC	lcs 280-463669/1-a		1.000	NPOC:24.6		7/5/2019 12:05:	3
4	NPOC	mb 280-463669/2-a		1.000	NPOC:0.15		7/5/2019 12:19:	4
5	NPOC	TIC		1.000	NPOC:0.13		7/5/2019 12:34:	5
6	NPOC	280-124928-d-14-a		1.000	NPOC:7.70		7/5/2019 12:49:	6
7	NPOC	280-124928-d-15-a		1.000	NPOC:4.80		7/5/2019 1:06:1	7
8	NPOC	280-124928-d-15-b m		1.000	NPOC:29.2		7/5/2019 1:21:0	8
9	NPOC	280-124928-d-15-c m		1.000	NPOC:29.5		7/5/2019 1:35:5	9
10	NPOC	280-124946-d-1-a		1.000	NPOC:7.71		7/5/2019 1:52:3	10
11	NPOC	280-124946-d-2-a		1.000	NPOC:8.14		7/5/2019 2:09:2	11
12	NPOC	280-124946-d-3-a		1.000	NPOC:13.0		7/5/2019 2:26:1	12
13	NPOC	280-124946-d-4-a		1.000	NPOC:17.5		7/5/2019 2:46:3	13
14	NPOC	280-124946-d-5-a		1.000	NPOC:4.31		7/5/2019 3:03:1	14
15	NPOC	280-124946-d-6-a		1.000	NPOC:8.47		7/5/2019 3:18:0	15
16	NPOC	CCV		1.000	NPOC:25.5		7/5/2019 3:32:4	16
17	NPOC	CCB		1.000	NPOC:0.06		7/5/2019 3:47:2	17
18	NPOC	280-124946-d-7-a		1.000	NPOC:4.23		7/5/2019 4:02:1	18
19	NPOC	280-124946-d-8-a		1.000	NPOC:5.80		7/5/2019 4:18:5	19
20	NPOC	280-124946-d-9-a		1.000	NPOC:15.3		7/5/2019 4:33:3	20
21	NPOC	280-124946-d-10-a		1.000	NPOC:5.22		7/5/2019 4:50:2	21
22	NPOC	280-124946-d-11-a		1.000	NPOC:9.12		7/5/2019 5:05:0	22
23	NPOC	280-124946-d-11-b m		1.000	NPOC:33.1		7/5/2019 5:51:4	23
24	NPOC	280-124946-d-11-c m		1.000	NPOC:33.4		7/5/2019 6:06:3	24
25	NPOC	280-124946-d-17-a		1.000	NPOC:25.7		7/5/2019 6:25:5	25
26	NPOC	280-124946-d-18-a		1.000	NPOC:14.0		7/5/2019 6:42:4	26
27	NPOC	LCS		1.000	NPOC:25.0		7/5/2019 6:57:2	27
28	NPOC	CCV		1.000	NPOC:24.8		7/5/2019 7:12:0	28
29	NPOC	CCB		1.000	NPOC:0.04		7/5/2019 7:26:5	29
30	NPOC	LCSD		1.000	NPOC:24.8		7/5/2019 7:41:3	30
31	NPOC	MB		1.000	NPOC:0.04		7/5/2019 7:56:2	31
32	NPOC	TIC		1.000	NPOC:0.13		7/5/2019 8:11:0	32
33	NPOC	280-124900-c-1		1.000	NPOC:4.37		7/5/2019 8:25:4	33
34	NPOC	LCS		1.000	NPOC:25.5		7/5/2019 8:40:3	34
35	NPOC	LCSD		1.000	NPOC:25.6		7/5/2019 8:55:2	35
36	NPOC	TIC		1.000	NPOC:0.13		7/5/2019 9:10:0	36
37	NPOC	MB		1.000	NPOC:0.04		7/5/2019 9:24:5	37
38	NPOC	280-124713-g-1		1.000	NPOC:2.86		7/5/2019 9:39:3	38
39	NPOC	280-124713-g-3		1.000	NPOC:1.46		7/5/2019 9:56:2	39
40	NPOC	CCV		1.000	NPOC:25.5		7/5/2019 10:11:	40
41	NPOC	CCB		1.000	NPOC:0.04		7/5/2019 10:25:	41
42	NPOC	280-124713-i-5		1.000	NPOC:3.47		7/5/2019 10:42:	42
43	NPOC	MS 280-124713-i-5		1.000	NPOC:28.9		7/5/2019 10:57:	43
44	NPOC	MSD 280-124713-i-5		1.000	NPOC:29.0		7/5/2019 11:12:	44
45	NPOC	280-124713-g-6		1.000	NPOC:5.64		7/5/2019 11:29:	45
46	NPOC	280-124892-b-2		1.000	NPOC:0.19		7/5/2019 11:43:	46
47	NPOC	280-124892-b-1		1.000	NPOC:2.41		7/5/2019 11:58:	47
48	NPOC	280-124897-c-1		1.000	NPOC:0.37		7/6/2019 12:13:	48
49	NPOC	280-124899-d-1		1.000	NPOC:1.89		7/6/2019 12:30:	49
50	NPOC	280-124933-l-1		1.000	NPOC:11.8		7/6/2019 12:44:	50
51	NPOC	280-124933-m-3		1.000	NPOC:0.35		7/6/2019 12:59:	51
52	NPOC	CCV		1.000	NPOC:25.5		7/6/2019 1:14:1	52
53	NPOC	CCB		1.000	NPOC:0.07		7/6/2019 1:28:5	53

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
54	NPOC	280-124933-I-4		1.000	NPOC:3.45		7/6/2019 1:43:4	54
55	NPOC	MS 280-124933-I-4		1.000	NPOC:28.9		7/6/2019 1:58:2	55
56	NPOC	MSD 280-124933-I-4		1.000	NPOC:28.7		7/6/2019 2:13:1	56
57	NPOC	280-124933-I-5		1.000	NPOC:6.81		7/6/2019 2:27:5	57
58	NPOC	280-124933-I-6		1.000	NPOC:4.29		7/6/2019 2:42:4	58
59	NPOC	280-124933-m-7		1.000	NPOC:11.2		7/6/2019 2:57:2	59
60	NPOC	280-124987-D-4		1.000	NPOC:12.4		7/6/2019 3:12:1	60
61	NPOC	280-124987-e-4		1.000	NPOC:12.5		7/6/2019 3:26:5	61
62	NPOC	280-124986-f-5-a		1.000	NPOC:2.70		7/6/2019 3:43:4	62
63	NPOC	280-124986-f-6-a		1.000	NPOC:2.70		7/6/2019 4:00:3	63
64	NPOC	CCV		1.000	NPOC:25.7		7/6/2019 4:15:1	64
65	NPOC	CCB		1.000	NPOC:0.06		7/6/2019 4:30:0	65
66	NPOC	280-124986-f-10-a		1.000	NPOC:3.18		7/6/2019 4:44:4	66
67	NPOC	280-124986-f-11-a		1.000	NPOC:2.79		7/6/2019 5:01:3	67
68	NPOC	280-124986-f-13-a		1.000	NPOC:2.56		7/6/2019 5:16:2	68
69	NPOC	280-124986-f-14-a		1.000	NPOC:2.64		7/6/2019 5:31:0	69
70	NPOC	280-124986-f-15-a		1.000	NPOC:2.50		7/6/2019 5:45:5	70
71	NPOC	280-124986-f-25-a		1.000	NPOC:0.86		7/6/2019 6:00:3	71
72	NPOC	280-124986-f-25-b ms		1.000	NPOC:25.7		7/6/2019 6:15:2	72
73	NPOC	280-124986-f-25-c ms		1.000	NPOC:25.6		7/6/2019 6:30:1	73
74	NPOC	280-124987-d-5		1.000	NPOC:7.23		7/6/2019 6:44:5	74
75	NPOC	280-124987-e-5		1.000	NPOC:7.63		7/6/2019 6:59:4	75
76	NPOC	CCV		1.000	NPOC:25.7		7/6/2019 7:14:3	76
77	NPOC	CCB		1.000	NPOC:0.06		7/6/2019 7:29:1	77
78	NPOC	280-124987-d-6		1.000	NPOC:2.78		7/6/2019 7:44:0	78
79	NPOC	MS 280-124987-d-6		1.000	NPOC:27.6		7/6/2019 7:58:4	79
80	NPOC	MSD 280-124987-d-6		1.000	NPOC:27.6		7/6/2019 8:13:3	80
81	NPOC	280-124987-e-6		1.000	NPOC:3.20		7/6/2019 8:28:2	81
82	NPOC	MS 280-124987-e-6		1.000	NPOC:28.6		7/6/2019 8:43:1	82
83	NPOC	MSD 280-124987-e-6		1.000	NPOC:28.4		7/6/2019 8:58:0	83
84	NPOC	280-124987-d-7		1.000	NPOC:8.12		7/6/2019 9:12:5	84
85	NPOC	280-124987-e-7		1.000	NPOC:8.28		7/6/2019 9:27:3	85
86	NPOC	280-124987-d-8		1.000	NPOC:18.0		7/6/2019 9:42:2	86
87	NPOC	280-124987-e-8		1.000	NPOC:18.2		7/6/2019 9:57:1	87
88	NPOC	CCV		1.000	NPOC:25.8		7/6/2019 10:11:	88
89	NPOC	CCB		1.000	NPOC:0.07		7/6/2019 10:26:	89
90	NPOC	280-124986-f-29-a		1.000	NPOC:3.67		7/6/2019 10:41:	90
91	NPOC	280-124986-f-30-a		1.000	NPOC:3.49		7/6/2019 10:58:	91
92	NPOC	280-124986-f-31-a		1.000	NPOC:3.34		7/6/2019 11:13:	92
93	NPOC	280-124986-f-1-a		1.000	NPOC:4.34		7/6/2019 11:27:	93
94	NPOC	280-124986-f-7-a		1.000	NPOC:2.44		7/6/2019 11:44:	1
95	NPOC	lcs 280-463672/1-a		1.000	NPOC:25.3		7/6/2019 11:59:	2
96	NPOC	mb 280-463672/2-a		1.000	NPOC:0.15		7/6/2019 12:16:	3
97	NPOC	TI C		1.000	NPOC:0.14		7/6/2019 12:31:	4
98	NPOC	280-124986-f-8-a		1.000	NPOC:4.51		7/6/2019 12:45:	5
99	NPOC	280-124986-f-8-b ms		1.000	NPOC:29.5		7/6/2019 1:00:3	6
100	NPOC	CCV		1.000	NPOC:25.8		7/6/2019 1:15:2	7
101	NPOC	CCB		1.000	NPOC:0.06		7/6/2019 1:30:0	8
102	NPOC	280-124986-f-8-c msd		1.000	NPOC:29.4		7/6/2019 1:44:4	9
103	NPOC	280-124986-f-9-a		1.000	NPOC:5.01		7/6/2019 1:59:3	10
104	NPOC	280-124986-f-16-a		1.000	NPOC:57.0		7/6/2019 2:14:1	11
105	NPOC	280-124986-f-17-a		1.000	NPOC:15.3		7/6/2019 2:29:0	12
106	NPOC	280-124986-f-18-a		1.000	NPOC:3.09		7/6/2019 2:43:4	13

	Analysis	Sample Name	Sample ID	Manual Diluti	Result	Notes	Date / Time	Vial
107	NPOC	280-124986-f-26-a		1.000	NPOC:7.88		7/6/2019 2:58:2	14
108	NPOC	280-124986-f-27-a		1.000	NPOC:3.81		7/6/2019 3:13:1	15
109	NPOC	280-124986-f-32-a		1.000	NPOC:3.21		7/6/2019 3:27:5	16
110	NPOC	280-124986-f-28-a		1.000	NPOC:49.5		7/6/2019 3:42:4	17
111	NPOC	280-124986-f-33-a		1.000	NPOC:8.62		7/6/2019 3:57:2	18
112	NPOC	CCV		1.000	NPOC:25.8		7/6/2019 4:12:1	19
113	NPOC	CCB		1.000	NPOC:0.06		7/6/2019 4:26:5	20
114	NPOC	280-124986-f-34-a		1.000	NPOC:3.03		7/6/2019 4:41:3	21
115	NPOC	280-124986-f-4-a		1.000	NPOC:3.77		7/6/2019 4:56:2	22
116	NPOC	CCV		1.000	NPOC:25.8		7/6/2019 5:11:0	23
117	NPOC	CCB		1.000	NPOC:0.05		7/6/2019 5:25:5	24

Instr.Information

System TOC-V cpn 3
Instrument Options TOC/ASI/
Catalyst Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

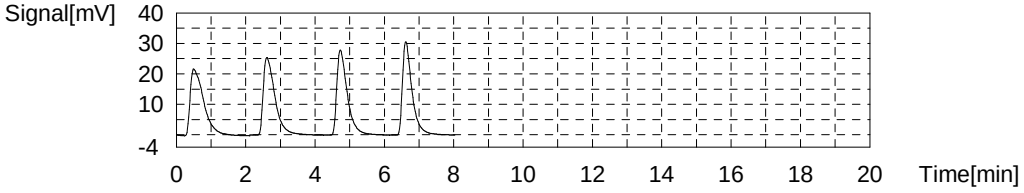
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.13mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.51	20.42mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:27:13 AM
2	60.07	20.27mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:29:30 AM
3	59.09	19.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:31:34 AM
4	58.96	19.89mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:33:38 AM

Mean Area 59.66
Mean Conc. 20.13mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

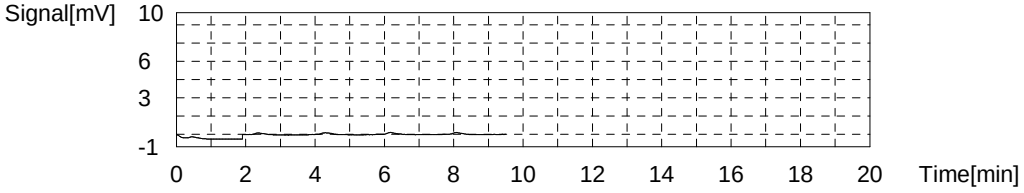
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04738mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03558mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:42:10 AM
2	0.2394	0.04535mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:44:14 AM
3	0.2515	0.04944mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:46:18 AM
4	0.2456	0.04744mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:48:22 AM
5	0.2451	0.04728mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:50:26 AM

Mean Area 0.2454
Mean Conc. 0.04738mg/L



Sample

Sample Name: lcs 280-463669/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

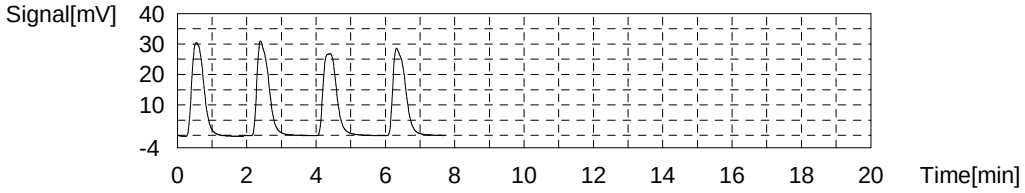
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.44	25.13mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:58:56 AM
2	72.88	24.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:01:00 PM
3	72.67	24.53mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:03:11 PM
4	71.88	24.26mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:05:15 PM

Mean Area 72.97
Mean Conc. 24.63mg/L



Sample

Sample Name: mb 280-463669/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

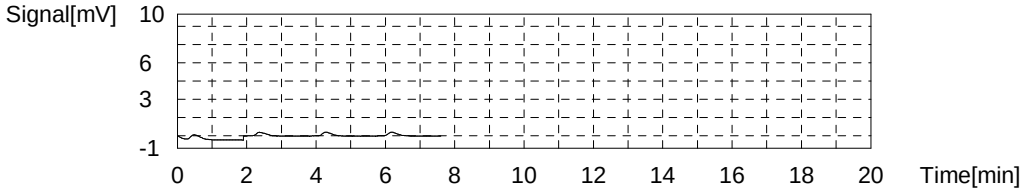
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1546mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6153	0.1724mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:13:46 PM
2	0.5267	0.1425mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:15:50 PM
3	0.5494	0.1501mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:17:54 PM
4	0.5595	0.1536mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:19:58 PM

Mean Area 0.5627
Mean Conc. 0.1546mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

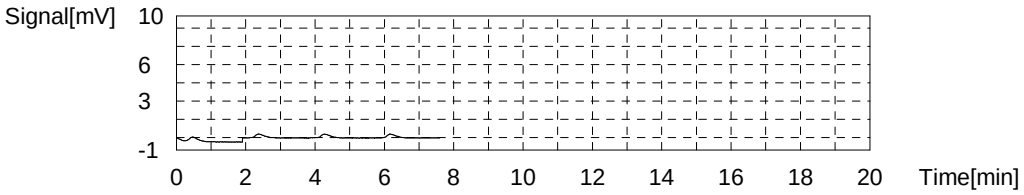
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1363mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4670	0.1223mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:28:29 PM
2	0.5322	0.1443mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:30:33 PM
3	0.5037	0.1347mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:32:37 PM
4	0.5315	0.1441mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:34:41 PM

Mean Area 0.5086
Mean Conc. 0.1363mg/L



Sample

Sample Name: 280-124928-d-14-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

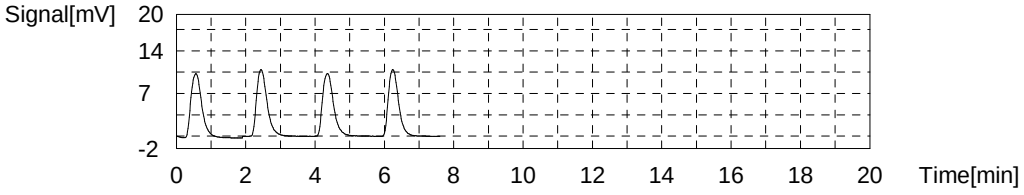
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.704mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.10	7.773mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:43:12 PM
2	23.15	7.790mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:45:16 PM
3	22.78	7.665mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:47:20 PM
4	22.55	7.587mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:49:24 PM

Mean Area 22.90
Mean Conc. 7.704mg/L



Sample

Sample Name: 280-124928-d-15-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

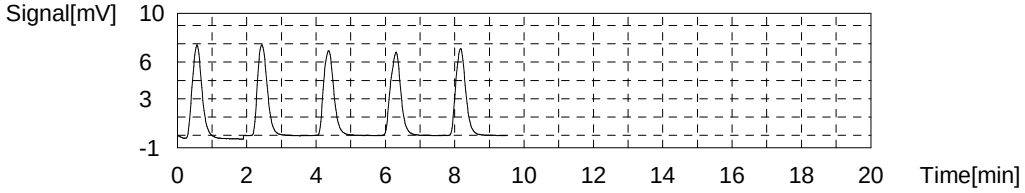
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.805mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.96	5.021mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 12:57:56 PM
2	14.49	4.862mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:00:00 PM
3	14.25	4.781mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:02:04 PM
4	14.32	4.805mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:04:08 PM
5	14.22	4.771mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:06:12 PM

Mean Area 14.32
Mean Conc. 4.805mg/L



Sample

Sample Name: 280-124928-d-15-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

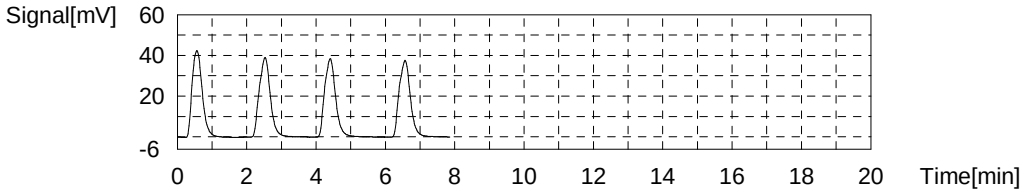
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.52	29.89mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:14:42 PM
2	87.12	29.41mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:16:46 PM
3	85.57	28.89mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:19:05 PM
4	84.84	28.64mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:21:09 PM

Mean Area 86.51
Mean Conc. 29.21mg/L



Sample

Sample Name: 280-124928-d-15-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

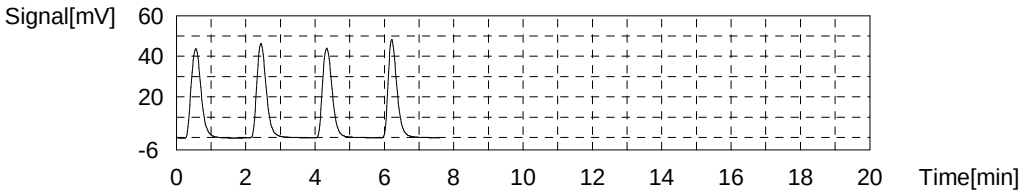
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.16	30.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:29:40 PM
2	88.47	29.87mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:31:44 PM
3	86.30	29.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:33:48 PM
4	85.92	29.01mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:35:52 PM

Mean Area 87.46
Mean Conc. 29.53mg/L



Sample

Sample Name: 280-124946-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

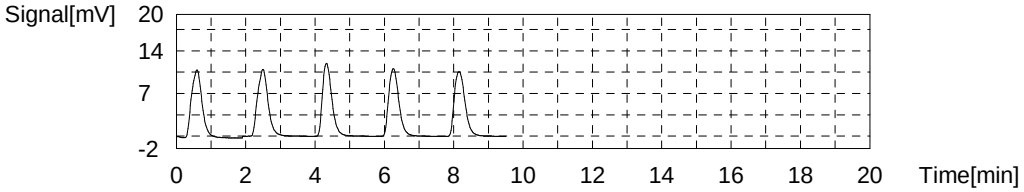
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.710mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.66	7.962mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:44:23 PM
2	23.25	7.824mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:46:27 PM
3	22.65	7.621mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:48:31 PM
4	22.77	7.661mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:50:35 PM
5	22.98	7.732mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 1:52:39 PM

Mean Area 22.91
Mean Conc. 7.710mg/L



Sample

Sample Name: 280-124946-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

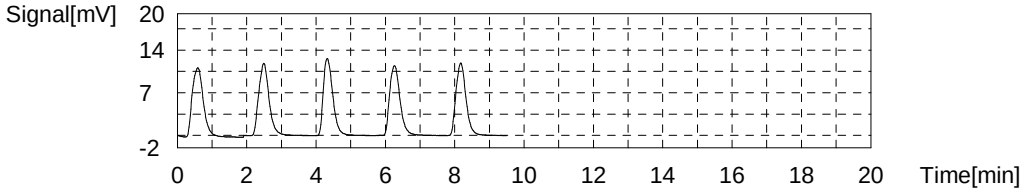
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.148mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.39	8.547mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:01:09 PM
2	24.61	8.283mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:03:13 PM
3	24.12	8.118mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:05:17 PM
4	24.05	8.094mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:07:21 PM
5	24.06	8.097mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:09:25 PM

Mean Area 24.21
Mean Conc. 8.148mg/L



Sample

Sample Name: 280-124946-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

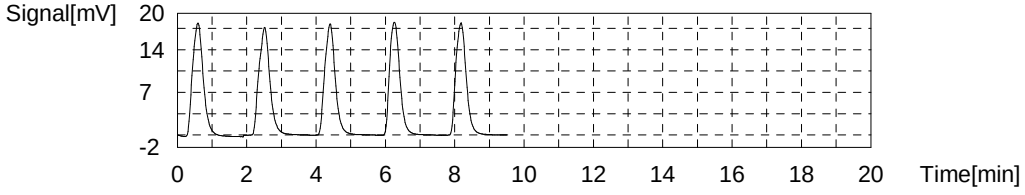
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.64	13.70mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:17:55 PM
2	39.14	13.19mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:19:59 PM
3	38.53	12.99mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:22:03 PM
4	38.48	12.97mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:24:07 PM
5	38.62	13.02mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:26:11 PM

Mean Area 38.69
Mean Conc. 13.04mg/L



Sample

Sample Name: 280-124946-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

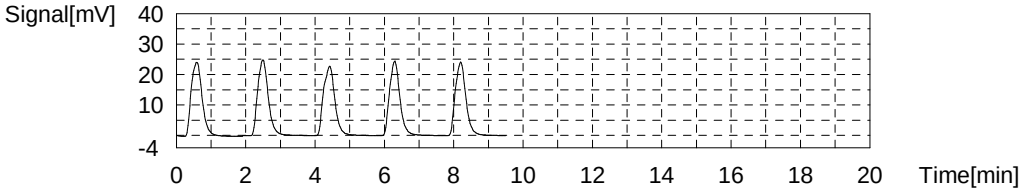
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:17.59mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.11	18.26mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:38:16 PM
2	53.17	17.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:40:20 PM
3	52.21	17.61mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:42:24 PM
4	51.52	17.38mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:44:28 PM
5	51.72	17.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:46:32 PM

Mean Area 52.16
Mean Conc. 17.59mg/L



Sample

Sample Name: 280-124946-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

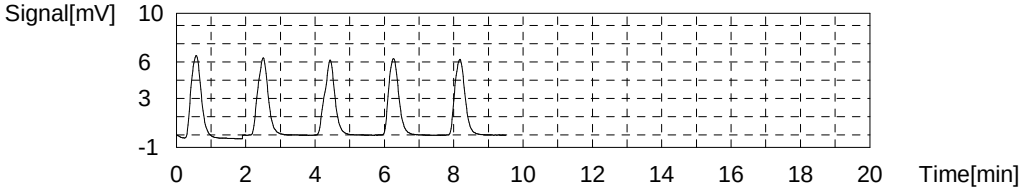
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.316mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.93	4.673mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:55:02 PM
2	13.18	4.420mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:57:06 PM
3	12.73	4.268mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 2:59:10 PM
4	12.80	4.291mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:01:14 PM
5	12.78	4.284mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:03:18 PM

Mean Area 12.87
Mean Conc. 4.316mg/L



Sample

Sample Name: 280-124946-d-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

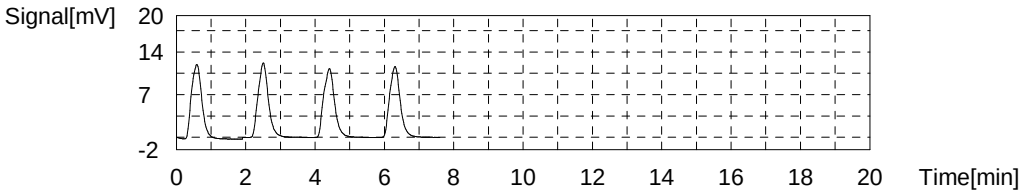
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.479mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.67	8.642mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:11:48 PM
2	25.33	8.527mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:13:52 PM
3	24.92	8.388mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:15:56 PM
4	24.84	8.361mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:18:00 PM

Mean Area 25.19
Mean Conc. 8.479mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

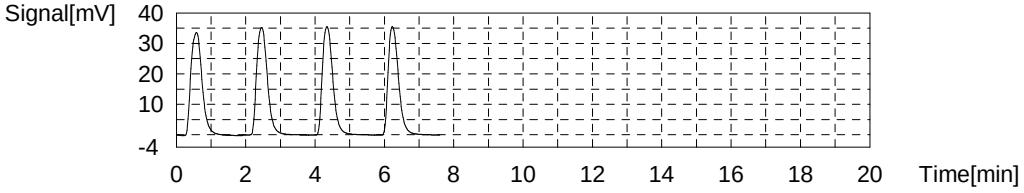
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.15	26.04mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:26:32 PM
2	76.20	25.72mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:28:36 PM
3	74.49	25.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:30:40 PM
4	74.31	25.08mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:32:44 PM

Mean Area 75.54
Mean Conc. 25.50mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

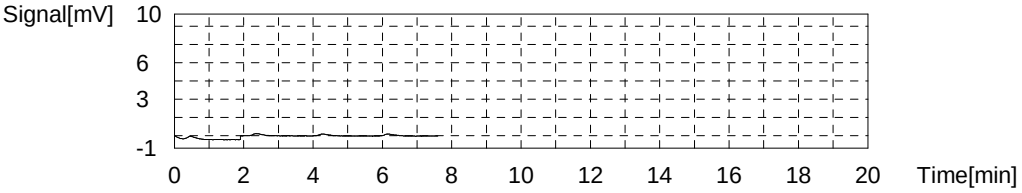
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06211mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3354	0.07780mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:41:15 PM
2	0.2893	0.06222mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:43:19 PM
3	0.2515	0.04944mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:45:23 PM
4	0.2797	0.05897mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:47:27 PM

Mean Area 0.2890
Mean Conc. 0.06211mg/L



Sample

Sample Name: 280-124946-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

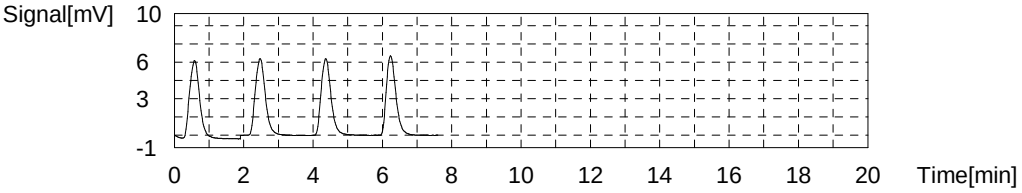
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.236mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.87	4.315mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:55:58 PM
2	12.66	4.244mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 3:58:02 PM
3	12.47	4.180mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:00:06 PM
4	12.55	4.207mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:02:10 PM

Mean Area 12.64
Mean Conc. 4.236mg/L



Sample

Sample Name: 280-124946-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

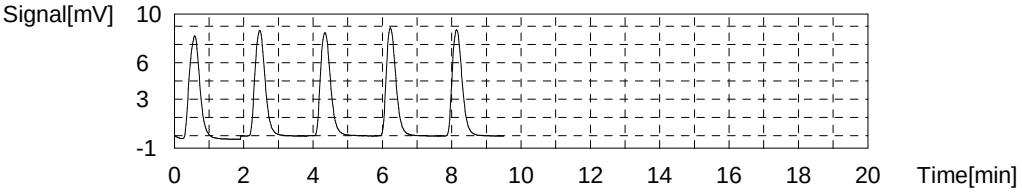
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.807mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.95	6.032mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:10:41 PM
2	17.67	5.937mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:12:45 PM
3	17.11	5.748mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:14:49 PM
4	17.05	5.728mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:16:53 PM
5	17.31	5.816mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:18:57 PM

Mean Area 17.29
Mean Conc. 5.807mg/L



Sample

Sample Name: 280-124946-d-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

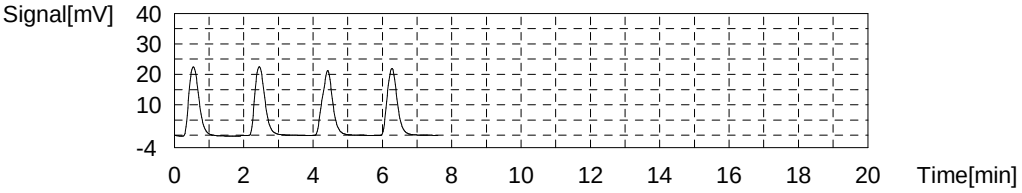
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.31mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.44	15.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:27:27 PM
2	45.76	15.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:29:31 PM
3	44.83	15.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:31:35 PM
4	44.57	15.03mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:33:39 PM

Mean Area 45.40
Mean Conc. 15.31mg/L



Sample

Sample Name: 280-124946-d-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

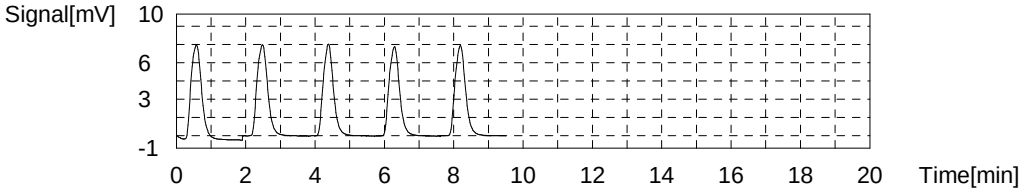
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.223mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.37	5.498mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:42:11 PM
2	15.92	5.346mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:44:15 PM
3	15.32	5.143mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:46:19 PM
4	15.43	5.180mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:48:23 PM
5	15.56	5.224mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:50:27 PM

Mean Area 15.56
Mean Conc. 5.223mg/L



Sample

Sample Name: 280-124946-d-11-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

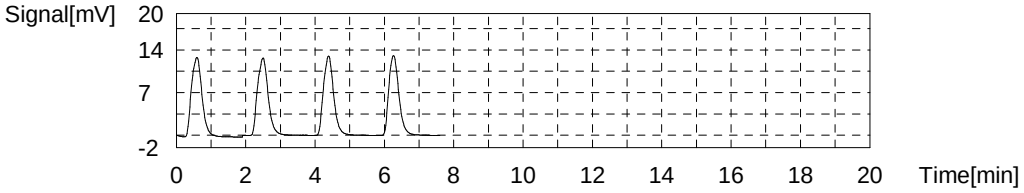
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.127mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.76	9.348mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 4:58:57 PM
2	27.30	9.193mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:01:01 PM
3	26.71	8.993mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:03:05 PM
4	26.65	8.973mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:05:09 PM

Mean Area 27.11
Mean Conc. 9.127mg/L



Sample

Sample Name: 280-124946-d-11-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

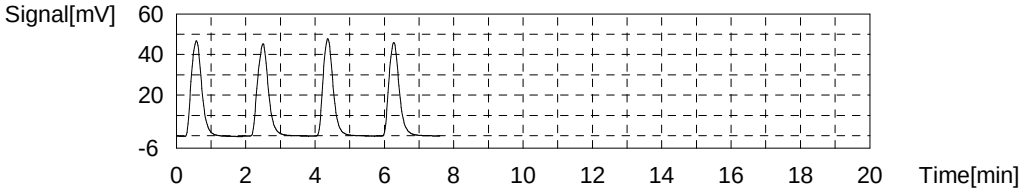
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:33.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	100.4	33.90mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:45:29 PM
2	99.28	33.52mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:47:33 PM
3	97.14	32.80mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:49:37 PM
4	96.11	32.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 5:51:41 PM

Mean Area 98.23
Mean Conc. 33.17mg/L



Sample

Sample Name: 280-124946-d-11-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

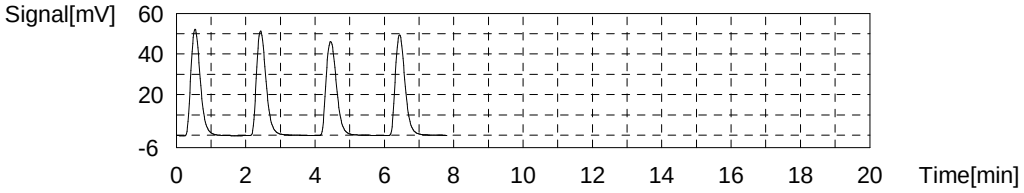
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:33.48mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	101.1	34.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:00:13 PM
2	99.99	33.76mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:02:23 PM
3	97.92	33.06mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:04:33 PM
4	97.58	32.95mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:06:36 PM

Mean Area 99.15
Mean Conc. 33.48mg/L



Sample

Sample Name: 280-124946-d-17-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

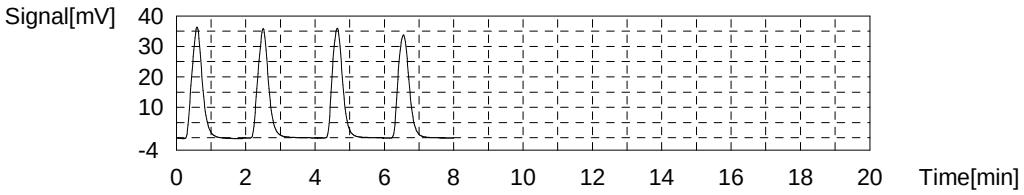
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.73mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.82	26.27mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:19:20 PM
2	76.69	25.89mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:21:40 PM
3	75.15	25.37mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:23:44 PM
4	75.19	25.38mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:25:56 PM

Mean Area 76.21
Mean Conc. 25.73mg/L



Sample

Sample Name: 280-124946-d-18-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

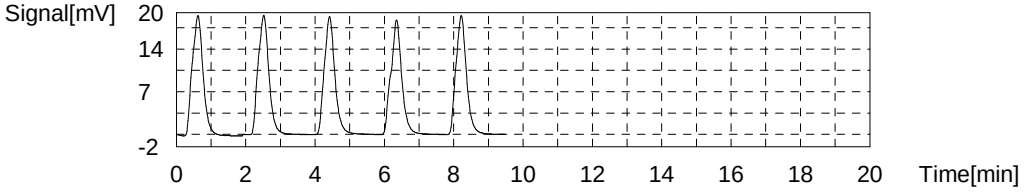
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.64	14.72mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:34:28 PM
2	42.59	14.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:36:32 PM
3	41.44	13.97mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:38:35 PM
4	41.36	13.95mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:40:39 PM
5	41.59	14.02mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:42:43 PM

Mean Area 41.75
Mean Conc. 14.08mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

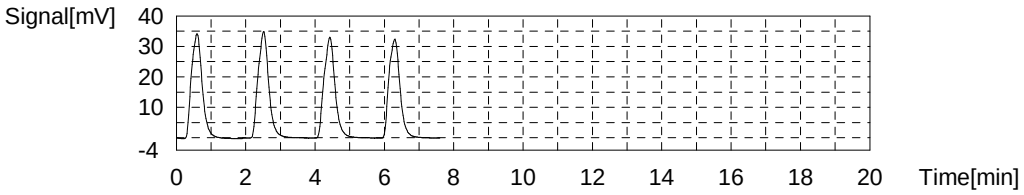
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.00mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.37	25.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:51:14 PM
2	75.16	25.37mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:53:18 PM
3	73.49	24.81mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:55:22 PM
4	72.28	24.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 6:57:25 PM

Mean Area 74.08
Mean Conc. 25.00mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

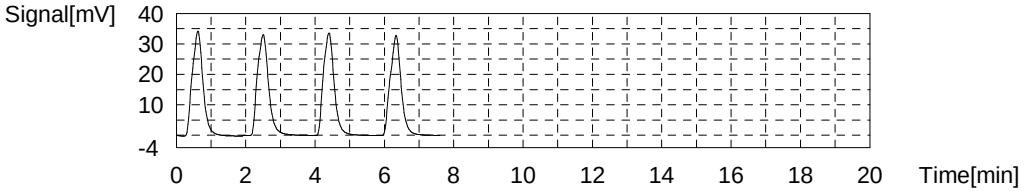
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.88mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.99	25.31mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:05:58 PM
2	74.54	25.16mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:08:02 PM
3	73.03	24.65mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:10:06 PM
4	72.22	24.38mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:12:09 PM

Mean Area 73.70
Mean Conc. 24.88mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

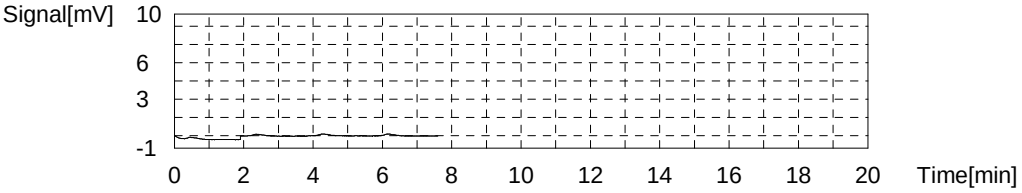
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04386mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2173	0.03788mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:20:42 PM
2	0.2391	0.04525mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:22:46 PM
3	0.2367	0.04444mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:24:50 PM
4	0.2469	0.04788mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:26:53 PM

Mean Area 0.2350
Mean Conc. 0.04386mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

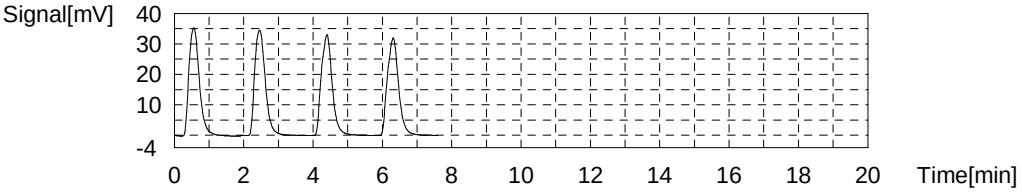
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.24	25.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:35:26 PM
2	73.94	24.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:37:30 PM
3	72.60	24.51mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:39:34 PM
4	72.33	24.41mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:41:37 PM

Mean Area 73.53
Mean Conc. 24.82mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

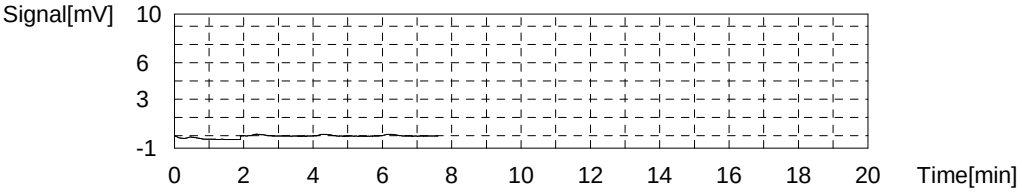
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04939mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2069	0.03436mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:50:10 PM
2	0.2527	0.04984mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:52:14 PM
3	0.2713	0.05613mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:54:17 PM
4	0.2745	0.05721mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 7:56:21 PM

Mean Area 0.2514
Mean Conc. 0.04939mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

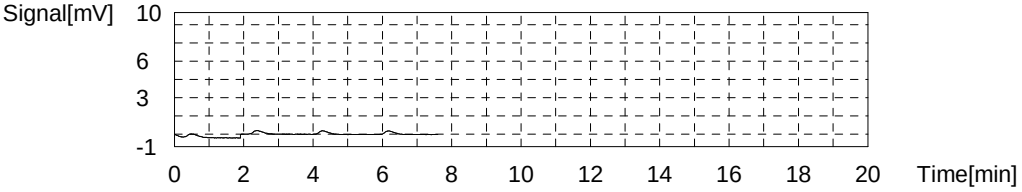
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1351mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4707	0.1235mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:04:54 PM
2	0.5365	0.1458mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:06:58 PM
3	0.5095	0.1367mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:09:02 PM
4	0.5027	0.1344mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:11:05 PM

Mean Area 0.5049
Mean Conc. 0.1351mg/L



Sample

Sample Name: 280-124900-c-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

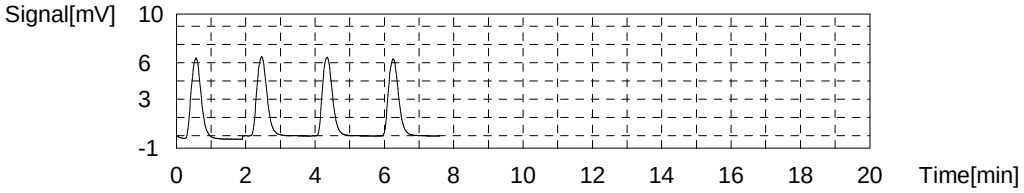
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.376mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.23	4.437mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:19:38 PM
2	13.17	4.416mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:21:42 PM
3	12.90	4.325mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:23:45 PM
4	12.90	4.325mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:25:49 PM

Mean Area 13.05
Mean Conc. 4.376mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

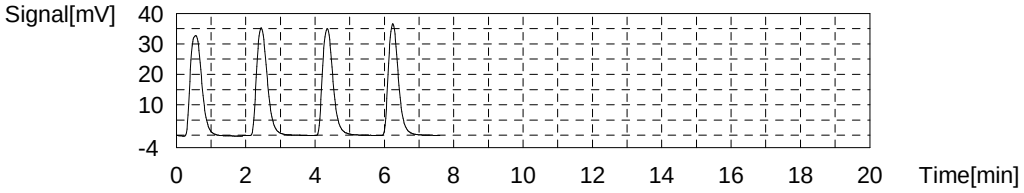
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.84	25.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:34:22 PM
2	76.31	25.76mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:36:26 PM
3	74.77	25.24mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:38:30 PM
4	74.66	25.20mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:40:33 PM

Mean Area 75.65
Mean Conc. 25.53mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

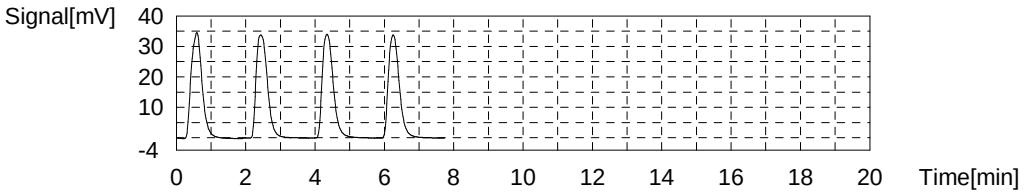
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.64mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.44	26.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:49:06 PM
2	76.41	25.79mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:51:10 PM
3	75.23	25.39mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:53:14 PM
4	74.71	25.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 8:55:25 PM

Mean Area 75.95
Mean Conc. 25.64mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

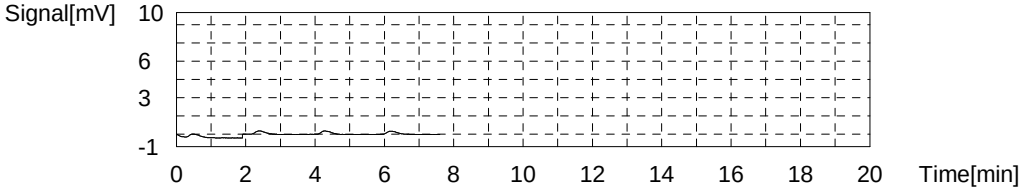
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1367mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4407	0.1134mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:03:58 PM
2	0.5517	0.1509mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:06:02 PM
3	0.5220	0.1409mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:08:05 PM
4	0.5239	0.1415mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:10:09 PM

Mean Area 0.5096
Mean Conc. 0.1367mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

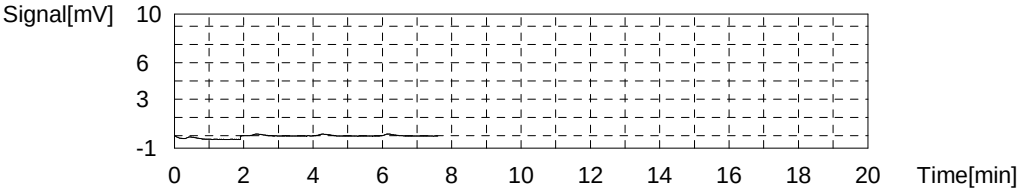
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04548mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2250	0.04048mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:18:42 PM
2	0.2451	0.04728mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:20:46 PM
3	0.2485	0.04842mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:22:50 PM
4	0.2405	0.04572mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:24:53 PM

Mean Area 0.2398
Mean Conc. 0.04548mg/L



Sample

Sample Name: 280-124713-g-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

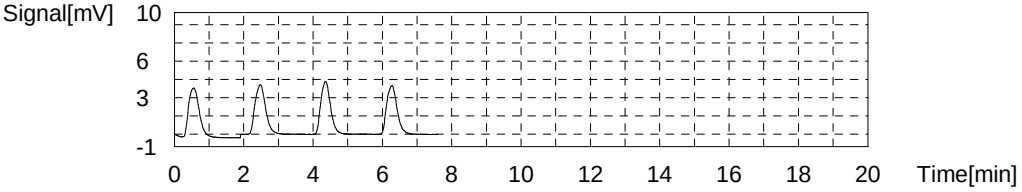
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.863mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.671	2.895mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:33:26 PM
2	8.672	2.896mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:35:30 PM
3	8.546	2.853mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:37:33 PM
4	8.407	2.806mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:39:37 PM

Mean Area 8.574
Mean Conc. 2.863mg/L



Sample

Sample Name: 280-124713-g-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

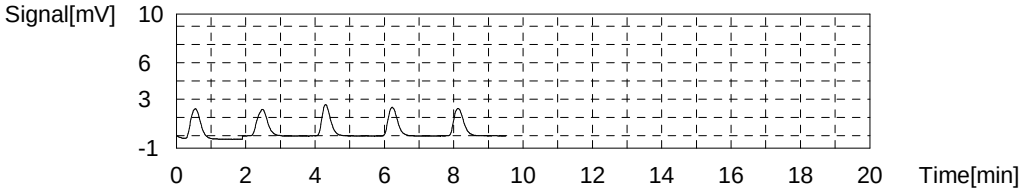
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.464mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.803	1.588mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:48:10 PM
2	4.545	1.501mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:50:14 PM
3	4.413	1.456mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:52:18 PM
4	4.421	1.459mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:54:21 PM
5	4.369	1.441mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 9:56:25 PM

Mean Area 4.437
Mean Conc. 1.464mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

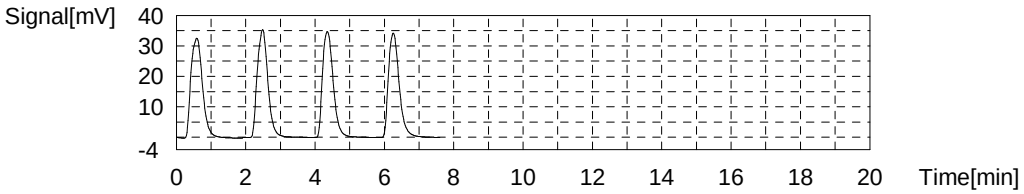
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.52mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.85	25.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:04:57 PM
2	75.85	25.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:07:01 PM
3	74.95	25.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:09:04 PM
4	74.71	25.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:11:08 PM

Mean Area 75.59
Mean Conc. 25.52mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

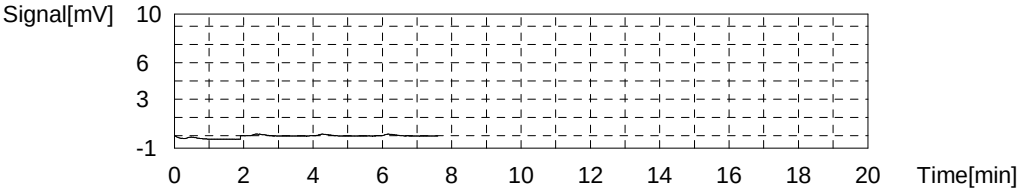
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04859mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2110	0.03575mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:19:41 PM
2	0.2792	0.05880mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:21:45 PM
3	0.2586	0.05184mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:23:48 PM
4	0.2472	0.04799mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:25:52 PM

Mean Area 0.2490
Mean Conc. 0.04859mg/L



Sample

Sample Name: 280-124713-i-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

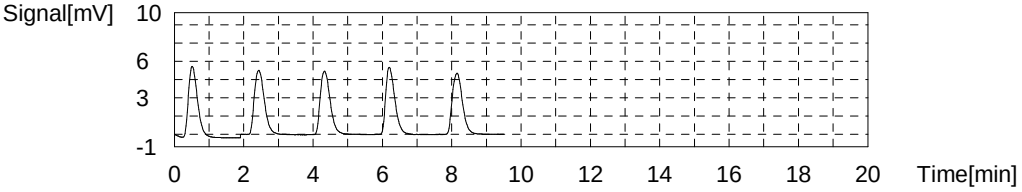
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.471mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.75	3.598mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:34:25 PM
2	10.59	3.544mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:36:29 PM
3	10.39	3.477mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:38:32 PM
4	10.19	3.409mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:40:36 PM
5	10.32	3.453mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:42:40 PM

Mean Area 10.37
Mean Conc. 3.471mg/L



Sample

Sample Name: MS 280-124713-i-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

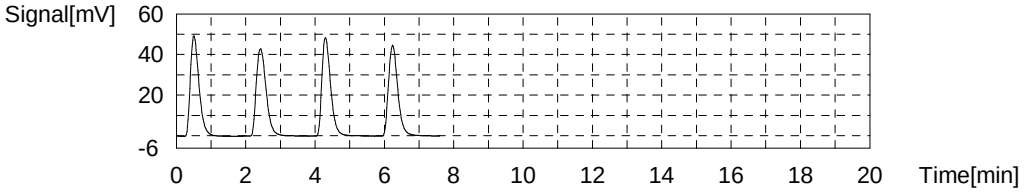
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.92mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.44	29.52mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:51:12 PM
2	85.74	28.95mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:53:16 PM
3	85.20	28.76mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:55:19 PM
4	84.30	28.46mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 10:57:23 PM

Mean Area 85.67
Mean Conc. 28.92mg/L



Sample

Sample Name: MSD 280-124713-i-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

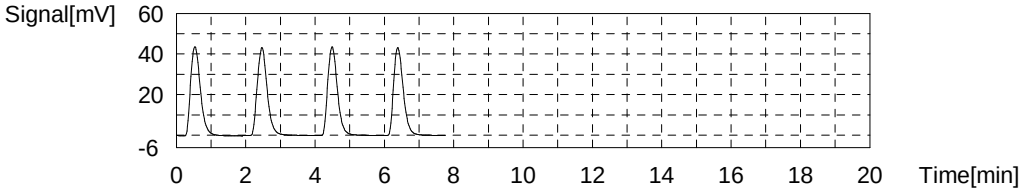
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.07mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.67	29.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:05:56 PM
2	87.02	29.38mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:08:09 PM
3	85.44	28.85mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:10:13 PM
4	84.24	28.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:12:16 PM

Mean Area 86.09
Mean Conc. 29.07mg/L



Sample

Sample Name: 280-124713-g-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

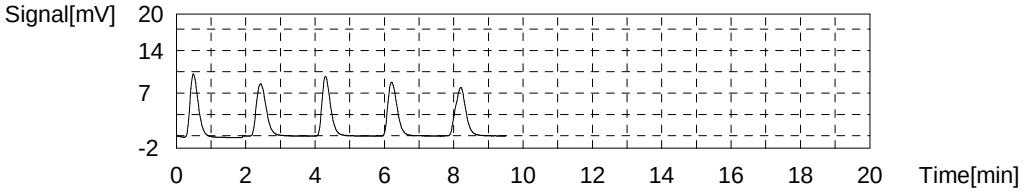
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.640mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.33	5.823mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:20:49 PM
2	17.12	5.752mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:22:53 PM
3	16.78	5.637mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:24:56 PM
4	16.57	5.566mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:27:00 PM
5	16.69	5.606mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:29:04 PM

Mean Area 16.79
Mean Conc. 5.640mg/L



Sample

Sample Name: 280-124892-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

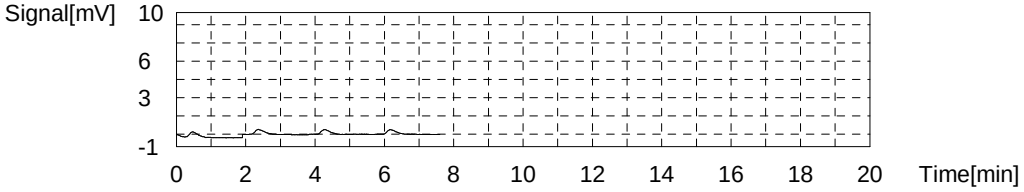
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1922mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6560	0.1862mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:37:36 PM
2	0.7235	0.2090mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:39:40 PM
3	0.6476	0.1833mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:41:43 PM
4	0.6680	0.1902mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:43:47 PM

Mean Area 0.6738
Mean Conc. 0.1922mg/L



Sample

Sample Name: 280-124892-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

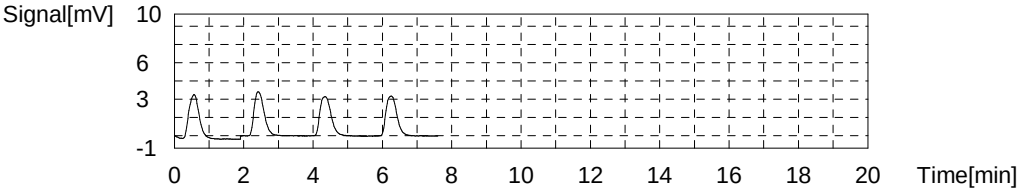
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.414mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.446	2.481mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:52:20 PM
2	7.252	2.416mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:54:24 PM
3	7.167	2.387mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:56:27 PM
4	7.126	2.373mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/5/2019 11:58:31 PM

Mean Area 7.248
Mean Conc. 2.414mg/L



Sample

Sample Name: 280-124897-c-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

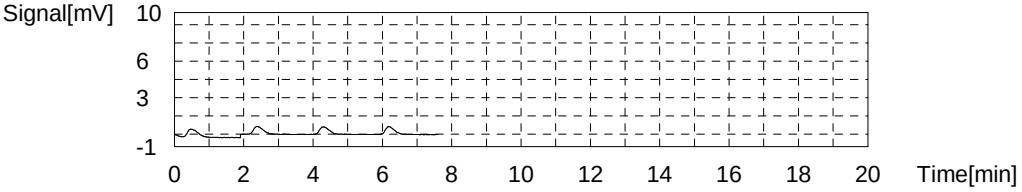
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3796mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.305	0.4056mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:07:04 AM
2	1.262	0.3910mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:09:08 AM
3	1.167	0.3589mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:11:11 AM
4	1.179	0.3630mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:13:15 AM

Mean Area 1.228
Mean Conc. 0.3796mg/L



Sample

Sample Name: 280-124899-d-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

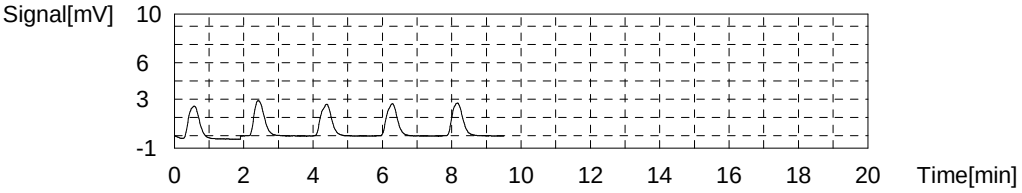
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.890mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.807	1.927mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:21:48 AM
2	5.871	1.949mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:23:52 AM
3	5.643	1.872mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:25:56 AM
4	5.631	1.868mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:27:59 AM
5	5.710	1.895mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:30:03 AM

Mean Area 5.698
Mean Conc. 1.890mg/L



Sample

Sample Name: 280-124933-I-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

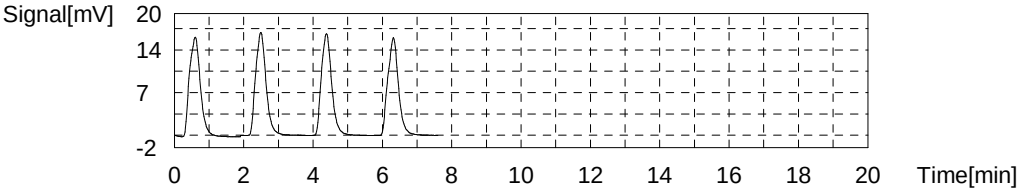
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.87mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.04	12.15mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:38:35 AM
2	35.54	11.98mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:40:39 AM
3	34.85	11.74mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:42:42 AM
4	34.47	11.62mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:44:46 AM

Mean Area 35.23
Mean Conc. 11.87mg/L



Sample

Sample Name: 280-124933-m-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

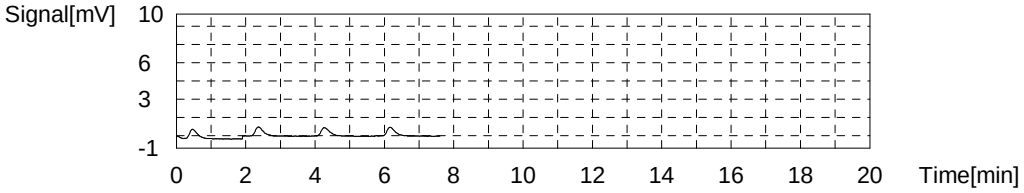
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3588mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.187	0.3657mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:53:19 AM
2	1.182	0.3640mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:55:23 AM
3	1.152	0.3538mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:57:26 AM
4	1.146	0.3518mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:59:30 AM

Mean Area 1.167
Mean Conc. 0.3588mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

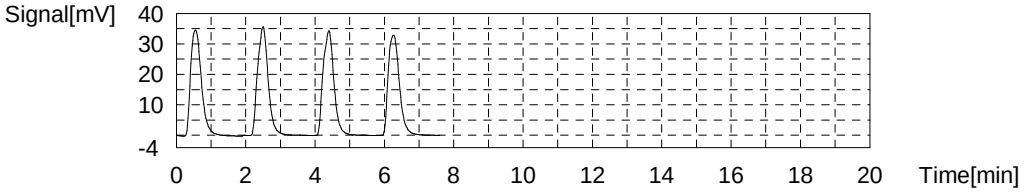
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.61	25.86mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:08:03 AM
2	76.38	25.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:10:07 AM
3	74.82	25.26mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:12:10 AM
4	74.46	25.13mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:14:14 AM

Mean Area 75.57
Mean Conc. 25.51mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

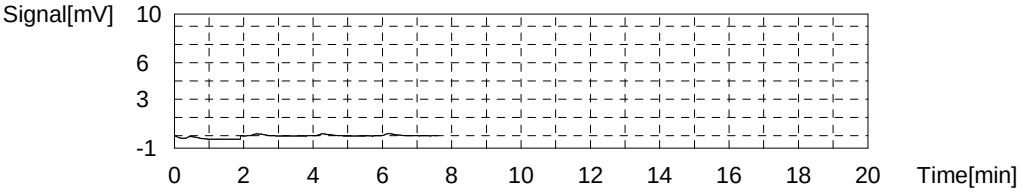
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07192mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2914	0.06293mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:22:47 AM
2	0.3392	0.07908mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:24:51 AM
3	0.3061	0.06790mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:26:55 AM
4	0.3353	0.07777mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:28:58 AM

Mean Area 0.3180
Mean Conc. 0.07192mg/L



Sample

Sample Name: 280-124933-I-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

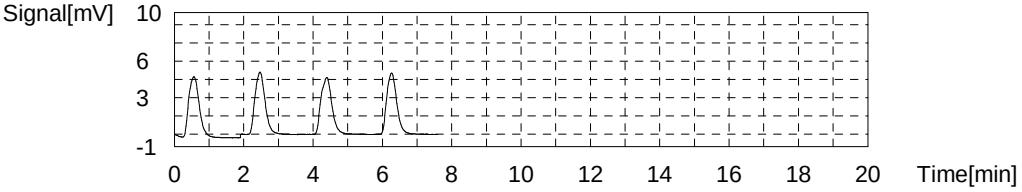
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.452mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.48	3.507mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:37:31 AM
2	10.43	3.490mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:39:35 AM
3	10.23	3.422mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:41:38 AM
4	10.13	3.389mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:43:42 AM

Mean Area 10.32
Mean Conc. 3.452mg/L



Sample

Sample Name: MS 280-124933-I-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

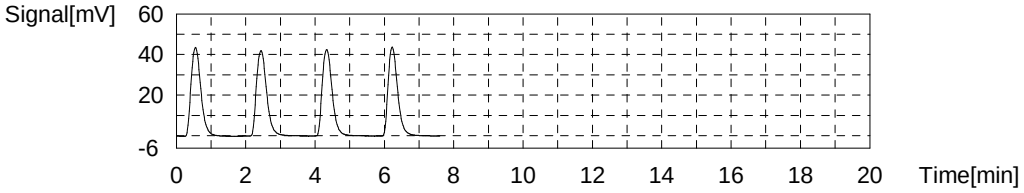
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.94mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.46	29.53mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:52:16 AM
2	86.20	29.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:54:20 AM
3	84.96	28.68mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:56:23 AM
4	84.25	28.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:58:27 AM

Mean Area 85.72
Mean Conc. 28.94mg/L



Sample

Sample Name: MSD 280-124933-I-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

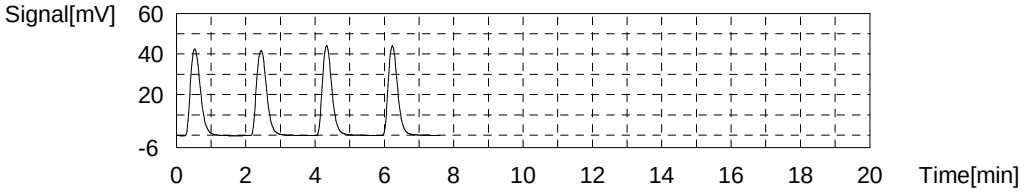
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.79	29.30mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:07:01 AM
2	85.73	28.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:09:05 AM
3	84.64	28.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:11:08 AM
4	83.97	28.35mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:13:12 AM

Mean Area 85.28
Mean Conc. 28.79mg/L



Sample

Sample Name: 280-124933-I-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

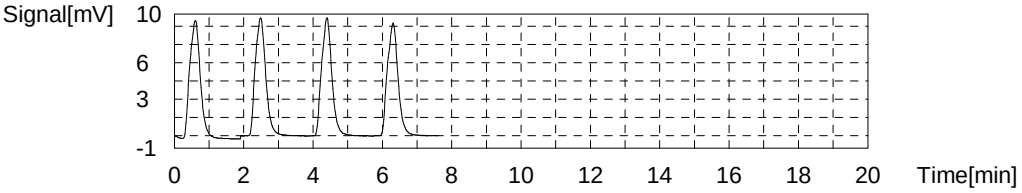
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.810mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.69	6.958mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:21:46 AM
2	20.44	6.874mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:23:49 AM
3	20.06	6.745mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:25:53 AM
4	19.81	6.661mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:27:57 AM

Mean Area 20.25
Mean Conc. 6.810mg/L



Sample

Sample Name: 280-124933-I-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

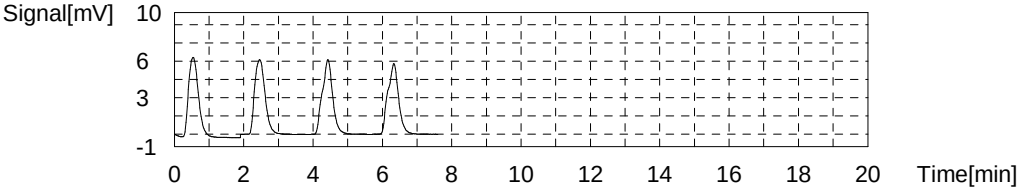
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.297mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.05	4.376mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:36:31 AM
2	12.85	4.308mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:38:35 AM
3	12.78	4.284mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:40:38 AM
4	12.59	4.220mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:42:42 AM

Mean Area 12.82
Mean Conc. 4.297mg/L



Sample

Sample Name: 280-124933-m-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

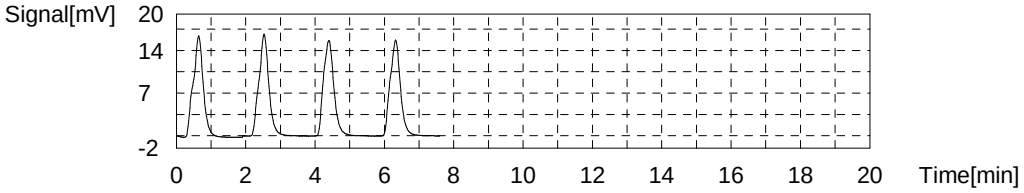
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.02	11.46mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:51:16 AM
2	33.41	11.26mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:53:20 AM
3	32.95	11.10mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:55:23 AM
4	32.75	11.03mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:57:27 AM

Mean Area 33.28
Mean Conc. 11.21mg/L



Sample

Sample Name: 280-124987-D-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

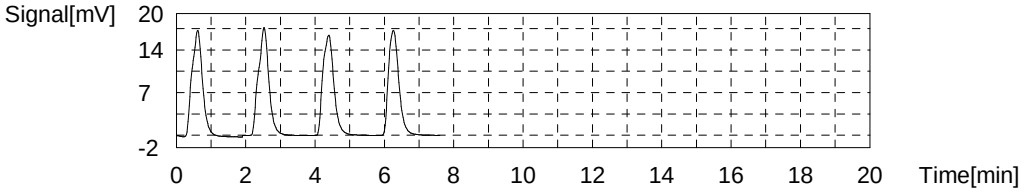
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.46mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.49	12.64mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:06:01 AM
2	37.56	12.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:08:05 AM
3	36.61	12.34mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:10:09 AM
4	36.22	12.21mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:12:12 AM

Mean Area 36.97
Mean Conc. 12.46mg/L



Sample

Sample Name: 280-124987-e-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

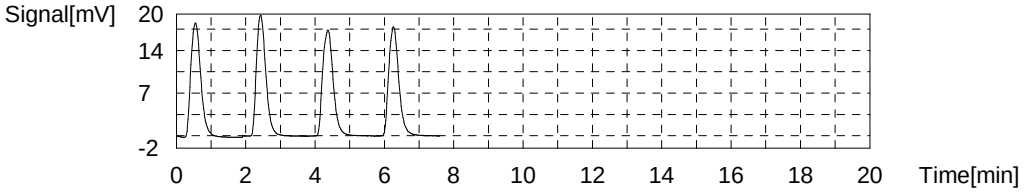
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.82	12.75mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:20:46 AM
2	37.55	12.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:22:50 AM
3	36.87	12.43mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:24:53 AM
4	36.56	12.32mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:26:57 AM

Mean Area 37.20
Mean Conc. 12.54mg/L



Sample

Sample Name: 280-124986-f-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

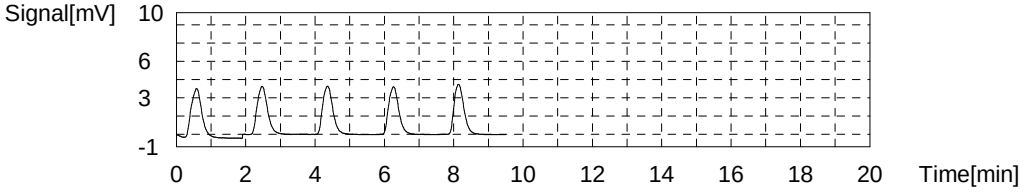
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.705mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.512	2.842mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:35:31 AM
2	8.266	2.759mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:37:34 AM
3	8.077	2.695mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:39:38 AM
4	7.977	2.661mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:41:42 AM
5	8.115	2.708mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:43:46 AM

Mean Area 8.109
Mean Conc. 2.705mg/L



Sample

Sample Name: 280-124986-f-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

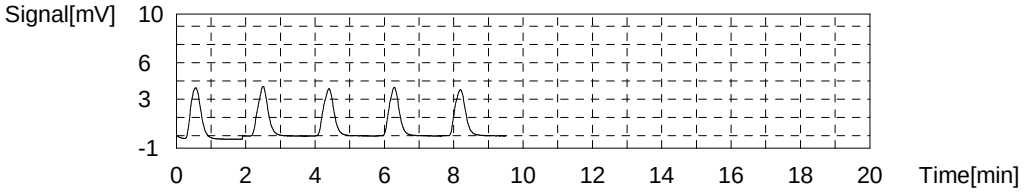
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.705mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.538	2.851mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:52:19 AM
2	8.330	2.780mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:54:23 AM
3	8.099	2.702mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:56:26 AM
4	7.999	2.668mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:58:30 AM
5	7.997	2.668mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:00:34 AM

Mean Area 8.106
Mean Conc. 2.705mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

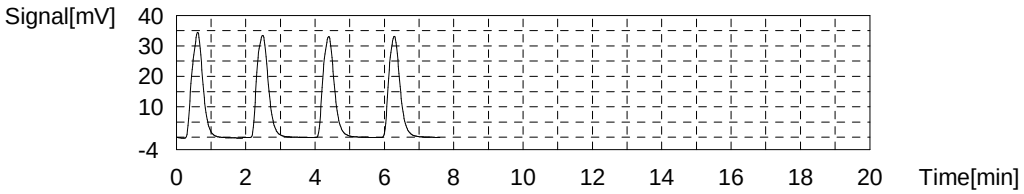
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.73mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.17	26.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:09:07 AM
2	77.66	26.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:11:10 AM
3	75.30	25.42mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:13:14 AM
4	74.76	25.24mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:15:18 AM

Mean Area 76.22
Mean Conc. 25.73mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

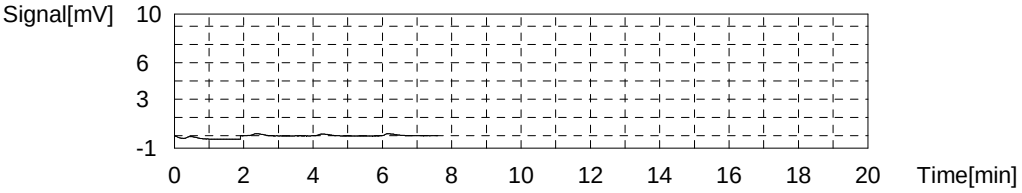
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06314mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2448	0.04717mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:23:52 AM
2	0.3064	0.06800mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:25:56 AM
3	0.2892	0.06218mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:27:59 AM
4	0.3277	0.07520mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:30:03 AM

Mean Area 0.2920
Mean Conc. 0.06314mg/L



Sample

Sample Name: 280-124986-f-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

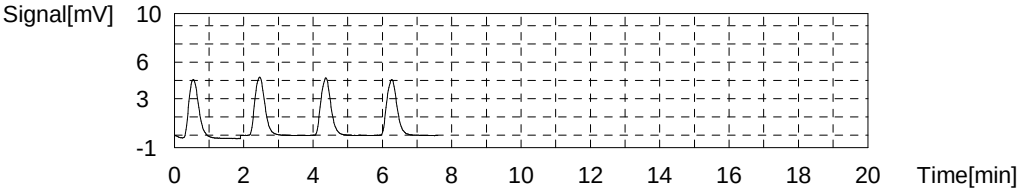
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.181mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.597	3.209mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:38:37 AM
2	9.586	3.205mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:40:40 AM
3	9.501	3.176mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:42:44 AM
4	9.383	3.136mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:44:48 AM

Mean Area 9.517
Mean Conc. 3.181mg/L



Sample

Sample Name: 280-124986-f-11-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

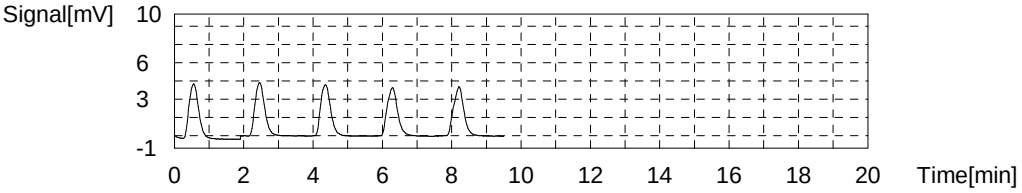
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.799mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.707	2.908mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:53:22 AM
2	8.547	2.854mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:55:26 AM
3	8.392	2.801mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:57:29 AM
4	8.290	2.767mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:59:33 AM
5	8.318	2.776mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:01:37 AM

Mean Area 8.387
Mean Conc. 2.799mg/L



Sample

Sample Name: 280-124986-f-13-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

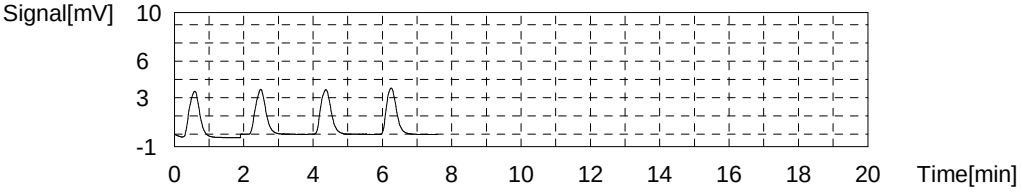
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.560mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.814	2.606mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:10:10 AM
2	7.632	2.544mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:12:14 AM
3	7.623	2.541mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:14:17 AM
4	7.640	2.547mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:16:21 AM

Mean Area 7.677
Mean Conc. 2.560mg/L



Sample

Sample Name: 280-124986-f-14-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

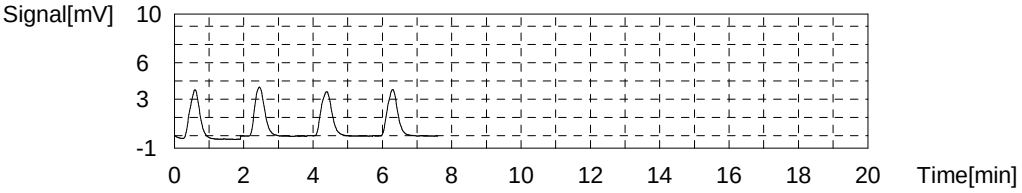
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.640mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.047	2.685mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:24:55 AM
2	7.934	2.646mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:26:59 AM
3	7.881	2.628mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:29:02 AM
4	7.794	2.599mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:31:06 AM

Mean Area 7.914
Mean Conc. 2.640mg/L



Sample

Sample Name: 280-124986-f-15-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

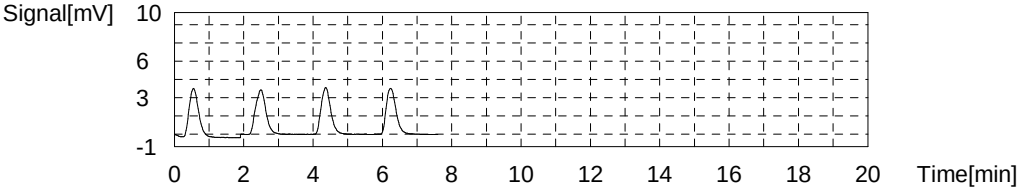
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.505mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.600	2.533mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:39:40 AM
2	7.655	2.552mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:41:44 AM
3	7.457	2.485mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:43:47 AM
4	7.346	2.448mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:45:51 AM

Mean Area 7.515
Mean Conc. 2.505mg/L



Sample

Sample Name: 280-124986-f-25-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

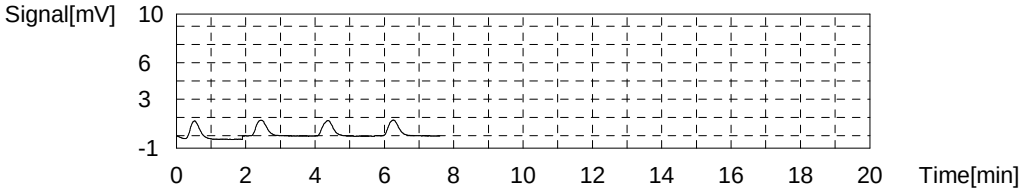
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8611mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.707	0.8795mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:54:24 AM
2	2.665	0.8653mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:56:28 AM
3	2.625	0.8518mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:58:32 AM
4	2.614	0.8480mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:00:36 AM

Mean Area 2.653
Mean Conc. 0.8611mg/L



Sample

Sample Name: 280-124986-f-25-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

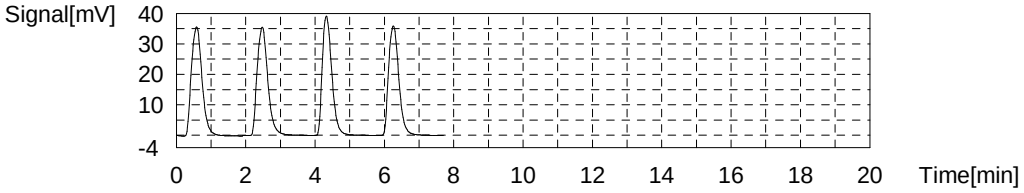
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.43	26.14mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:09:10 AM
2	76.60	25.86mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:11:13 AM
3	75.50	25.49mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:13:17 AM
4	75.01	25.32mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:15:27 AM

Mean Area 76.14
Mean Conc. 25.70mg/L



Sample

Sample Name: 280-124986-f-25-c msD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

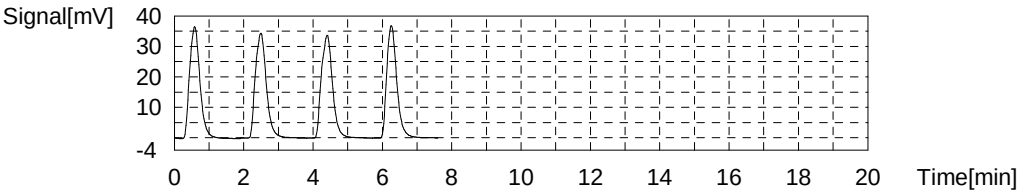
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.60mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.08	26.02mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:24:02 AM
2	76.03	25.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:26:05 AM
3	75.68	25.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:28:09 AM
4	74.53	25.16mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:30:13 AM

Mean Area 75.83
Mean Conc. 25.60mg/L



Sample

Sample Name: 280-124987-d-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

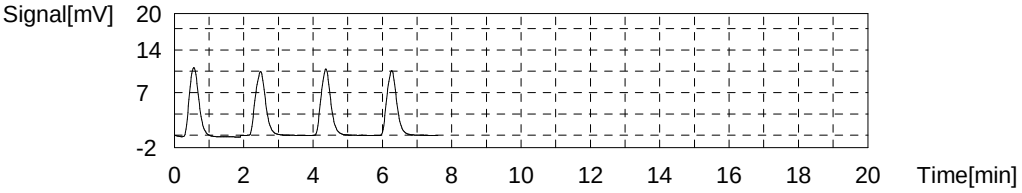
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.237mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.90	7.367mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:38:48 AM
2	21.64	7.279mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:40:51 AM
3	21.30	7.164mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:42:55 AM
4	21.22	7.137mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:44:59 AM

Mean Area 21.52
Mean Conc. 7.237mg/L



Sample

Sample Name: 280-124987-e-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

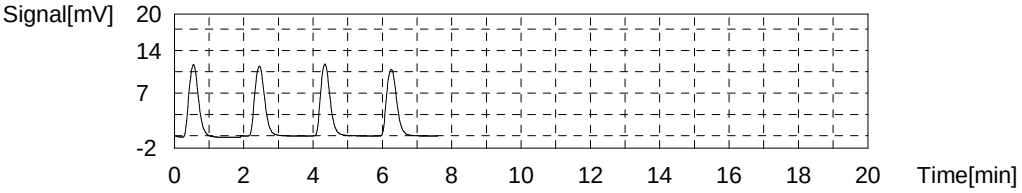
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.631mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.06	7.759mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:53:34 AM
2	22.80	7.672mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:55:38 AM
3	22.53	7.580mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:57:41 AM
4	22.33	7.513mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 6:59:45 AM

Mean Area 22.68
Mean Conc. 7.631mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

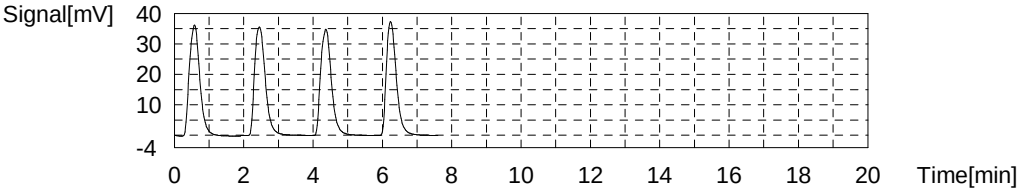
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.57	26.19mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:08:19 AM
2	76.90	25.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:10:23 AM
3	75.74	25.57mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:12:27 AM
4	75.37	25.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:14:31 AM

Mean Area 76.40
Mean Conc. 25.79mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

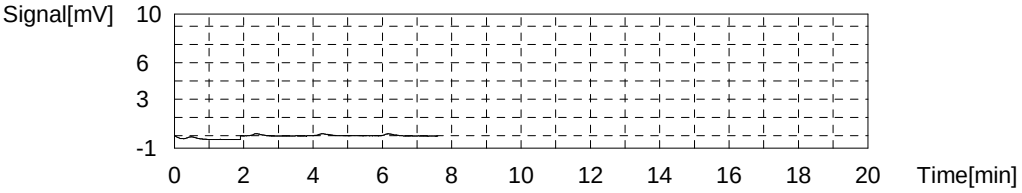
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06156mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2796	0.05894mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:23:06 AM
2	0.2858	0.06103mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:25:09 AM
3	0.2858	0.06103mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:27:13 AM
4	0.2982	0.06523mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:29:17 AM

Mean Area 0.2873
Mean Conc. 0.06156mg/L



Sample

Sample Name: 280-124987-d-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

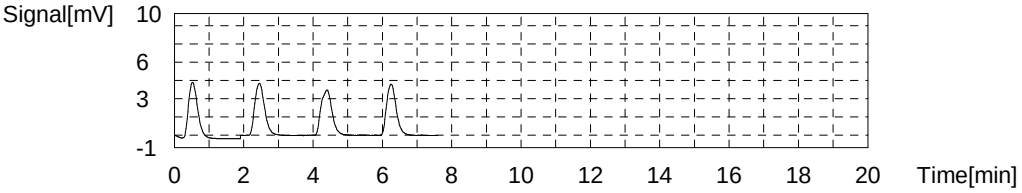
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.783mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.434	2.815mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:37:52 AM
2	8.510	2.841mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:39:55 AM
3	8.208	2.739mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:41:59 AM
4	8.204	2.738mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:44:03 AM

Mean Area 8.339
Mean Conc. 2.783mg/L



Sample

Sample Name: MS 280-124987-d-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

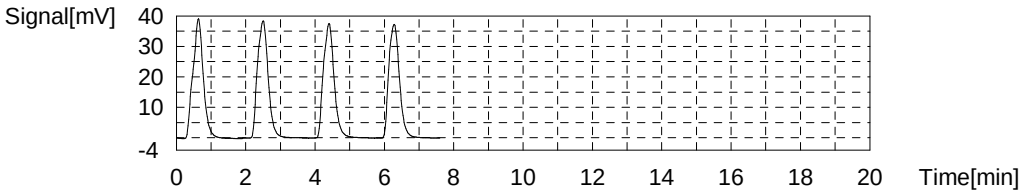
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.21	28.09mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:52:38 AM
2	83.07	28.04mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:54:41 AM
3	81.29	27.44mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:56:45 AM
4	80.44	27.16mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 7:58:49 AM

Mean Area 82.00
Mean Conc. 27.68mg/L



Sample

Sample Name: MSD 280-124987-d-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

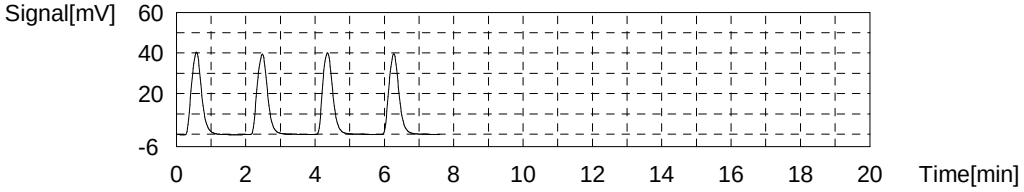
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.61mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.29	28.12mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:07:24 AM
2	82.18	27.74mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:09:27 AM
3	81.04	27.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:11:31 AM
4	80.62	27.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:13:35 AM

Mean Area 81.78
Mean Conc. 27.61mg/L



Sample

Sample Name: 280-124987-e-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

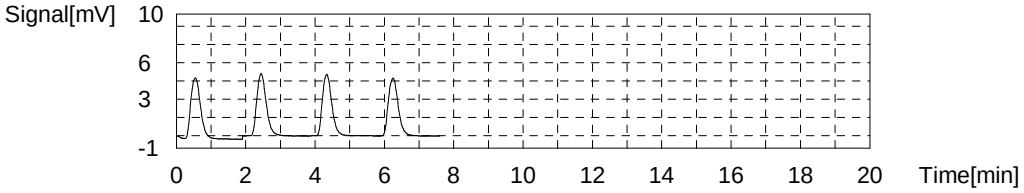
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.206mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.726	3.252mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:22:09 AM
2	9.690	3.240mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:24:13 AM
3	9.468	3.165mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:26:17 AM
4	9.474	3.167mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:28:21 AM

Mean Area 9.590
Mean Conc. 3.206mg/L



Sample

Sample Name: MS 280-124987-e-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

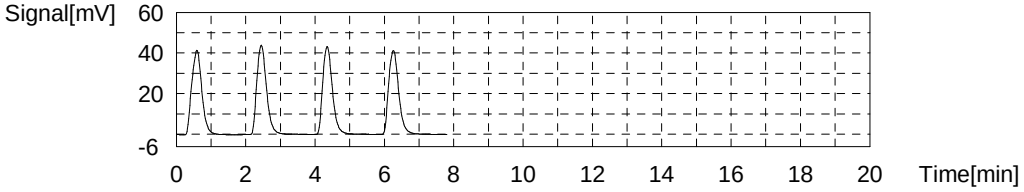
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.70	28.93mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:36:56 AM
2	85.73	28.94mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:38:59 AM
3	84.18	28.42mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:41:03 AM
4	84.36	28.48mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:43:19 AM

Mean Area 84.99
Mean Conc. 28.69mg/L



Sample

Sample Name: MSD 280-124987-e-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

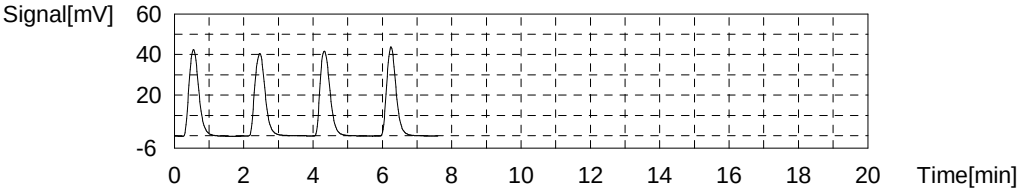
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.41mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.27	28.79mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:51:53 AM
2	84.49	28.52mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:53:57 AM
3	83.59	28.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:56:01 AM
4	83.20	28.09mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 8:58:05 AM

Mean Area 84.14
Mean Conc. 28.41mg/L



Sample

Sample Name: 280-124987-d-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

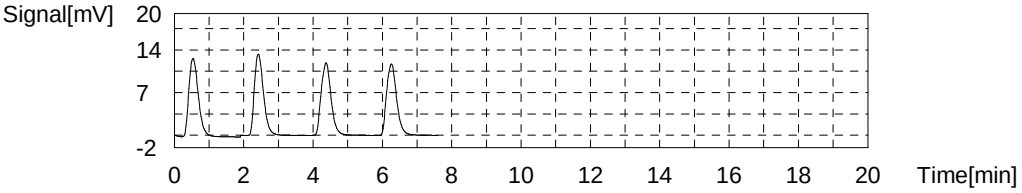
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.129mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.58	8.273mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:06:40 AM
2	24.55	8.263mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:08:43 AM
3	23.73	7.986mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:10:47 AM
4	23.75	7.993mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:12:51 AM

Mean Area 24.15
Mean Conc. 8.129mg/L



Sample

Sample Name: 280-124987-e-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

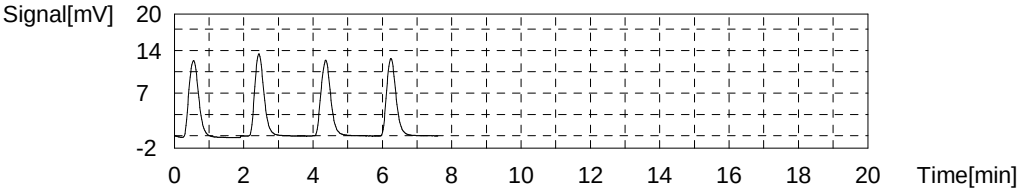
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.283mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.99	8.412mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:21:26 AM
2	24.92	8.388mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:23:29 AM
3	24.35	8.195mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:25:33 AM
4	24.18	8.138mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:27:37 AM

Mean Area 24.61
Mean Conc. 8.283mg/L



Sample

Sample Name: 280-124987-d-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

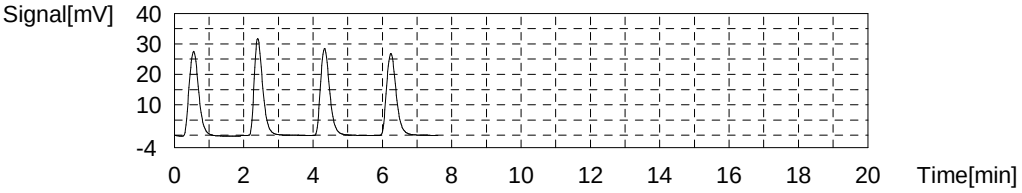
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.22	18.29mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:36:12 AM
2	54.44	18.37mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:38:16 AM
3	52.81	17.82mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:40:20 AM
4	52.69	17.78mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:42:24 AM

Mean Area 53.54
Mean Conc. 18.06mg/L



Sample

Sample Name: 280-124987-e-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

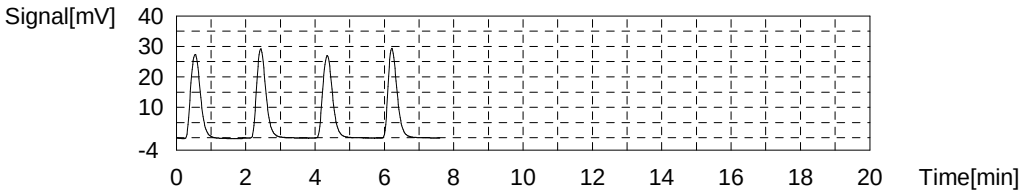
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.98	18.55mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:50:59 AM
2	54.68	18.45mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:53:03 AM
3	53.37	18.01mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:55:07 AM
4	53.34	18.00mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 9:57:11 AM

Mean Area 54.09
Mean Conc. 18.25mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

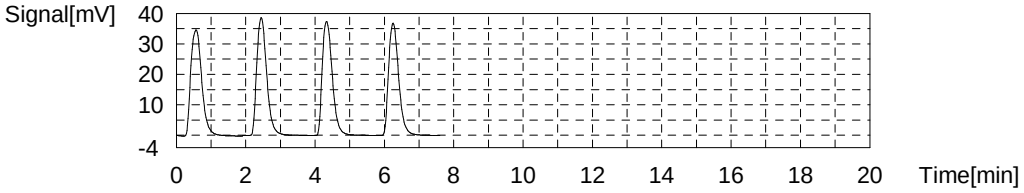
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.60	26.20mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:05:46 AM
2	77.74	26.24mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:07:50 AM
3	75.72	25.56mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:09:54 AM
4	75.26	25.40mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:11:58 AM

Mean Area 76.58
Mean Conc. 25.85mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

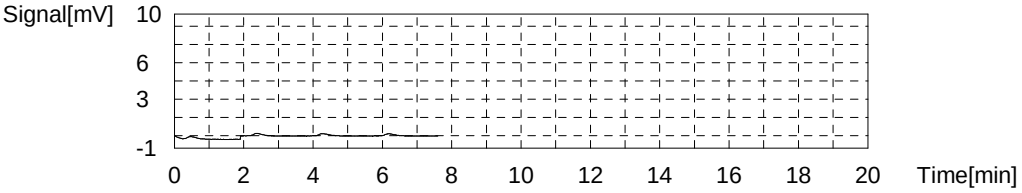
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07566mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3308	0.07624mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:20:34 AM
2	0.3450	0.08104mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:22:37 AM
3	0.3328	0.07692mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:24:41 AM
4	0.3077	0.06844mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:26:45 AM

Mean Area 0.3291
Mean Conc. 0.07566mg/L



Sample

Sample Name: 280-124986-f-29-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

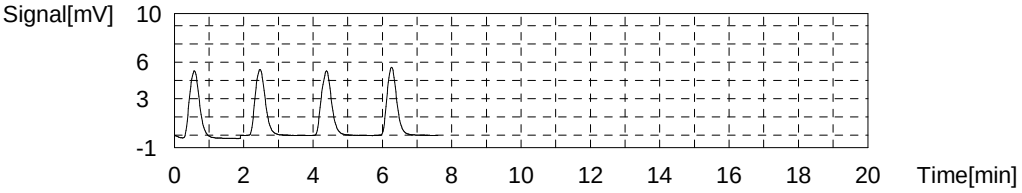
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.678mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.15	3.733mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:35:21 AM
2	11.01	3.686mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:37:24 AM
3	10.92	3.656mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:39:28 AM
4	10.86	3.635mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:41:32 AM

Mean Area 10.98
Mean Conc. 3.678mg/L



Sample

Sample Name: 280-124986-f-30-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

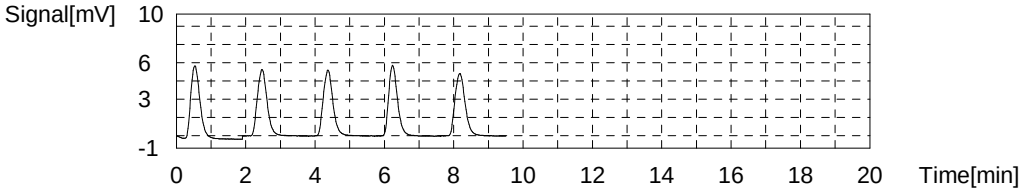
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.499mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.99	3.679mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:50:07 AM
2	10.57	3.537mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:52:11 AM
3	10.45	3.497mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:54:15 AM
4	10.37	3.470mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:56:19 AM
5	10.43	3.490mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 10:58:23 AM

Mean Area 10.46
Mean Conc. 3.499mg/L



Sample

Sample Name: 280-124986-f-31-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

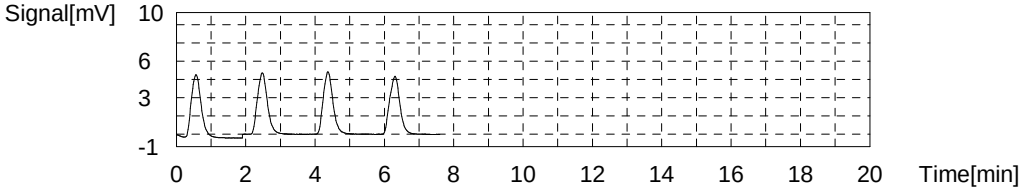
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.347mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.10	3.379mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:06:57 AM
2	10.11	3.382mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:09:01 AM
3	9.958	3.331mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:11:05 AM
4	9.853	3.295mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:13:09 AM

Mean Area 10.01
Mean Conc. 3.347mg/L



Sample

Sample Name: 280-124986-f-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

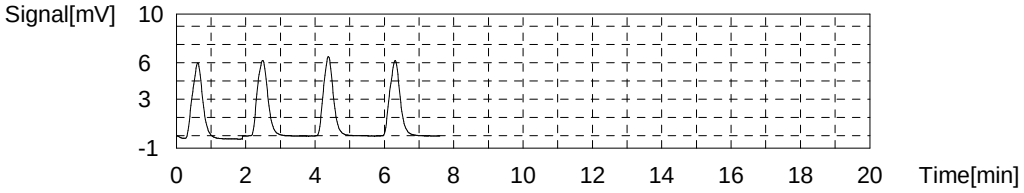
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.343mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.96	4.345mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:21:44 AM
2	13.11	4.396mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:23:48 AM
3	12.85	4.308mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:25:52 AM
4	12.89	4.322mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:27:56 AM

Mean Area 12.95
Mean Conc. 4.343mg/L



Sample

Sample Name: 280-124986-f-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

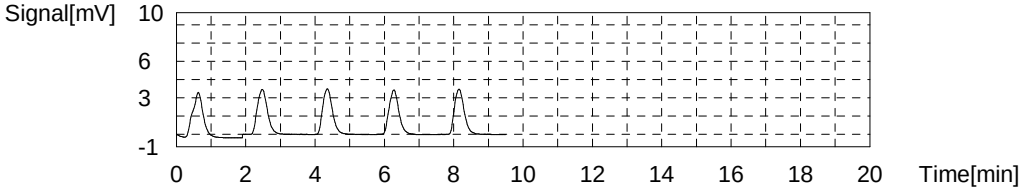
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.448mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.719	2.574mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:36:31 AM
2	7.557	2.519mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:38:35 AM
3	7.326	2.441mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:40:39 AM
4	7.240	2.412mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:42:43 AM
5	7.264	2.420mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:44:47 AM

Mean Area 7.347
Mean Conc. 2.448mg/L



Sample

Sample Name: lcs 280-463672/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

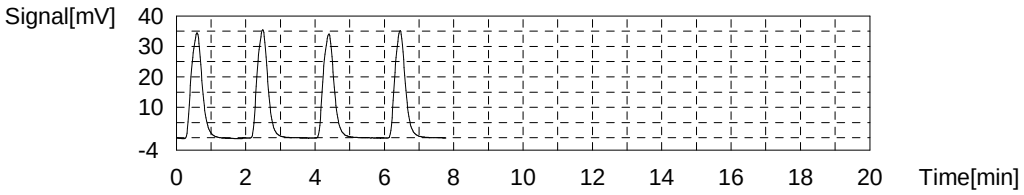
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.51	25.83mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:53:18 AM
2	75.60	25.52mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:55:21 AM
3	74.21	25.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:57:35 AM
4	73.73	24.89mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 11:59:39 AM

Mean Area 75.01
Mean Conc. 25.32mg/L



Sample

Sample Name: mb 280-463672/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

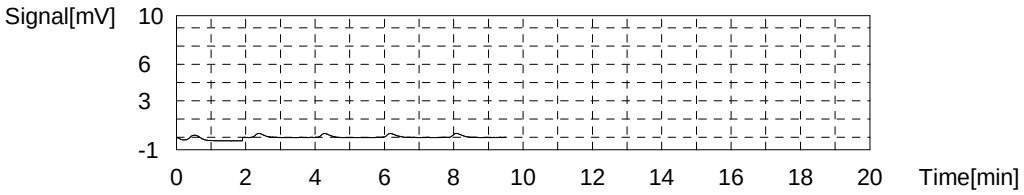
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1550mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7679	0.2240mg/L	50uL	1	E	TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:08:11 PM
2	0.5980	0.1666mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:10:15 PM
3	0.5480	0.1497mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:12:19 PM
4	0.5624	0.1545mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:14:23 PM
5	0.5464	0.1491mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:16:27 PM

Mean Area 0.5637
Mean Conc. 0.1550mg/L



Sample

Sample Name: TI C
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

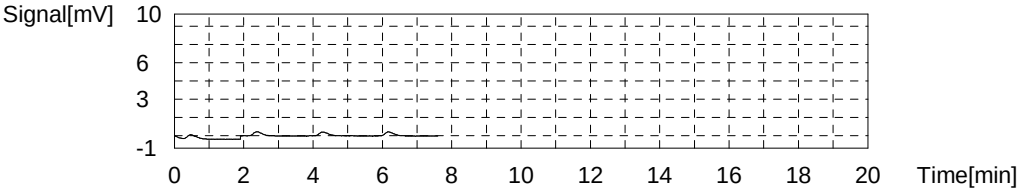
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1459mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5363	0.1457mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:24:57 PM
2	0.5335	0.1448mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:27:01 PM
3	0.5379	0.1463mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:29:05 PM
4	0.5401	0.1470mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:31:09 PM

Mean Area 0.5370
Mean Conc. 0.1459mg/L



Sample

Sample Name: 280-124986-f-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

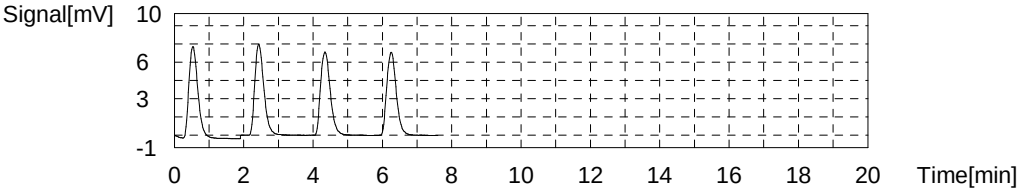
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.510mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.62	4.568mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:39:41 PM
2	13.66	4.582mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:41:45 PM
3	13.37	4.484mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:43:49 PM
4	13.14	4.406mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:45:53 PM

Mean Area 13.45
Mean Conc. 4.510mg/L



Sample

Sample Name: 280-124986-f-8-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

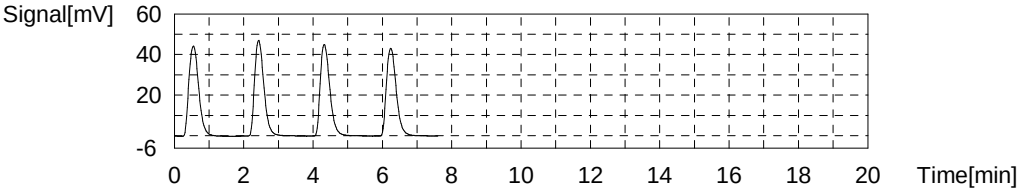
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.57mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.36	30.17mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:54:25 PM
2	88.41	29.85mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:56:29 PM
3	86.56	29.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 12:58:33 PM
4	85.96	29.02mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:00:37 PM

Mean Area 87.57
Mean Conc. 29.57mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

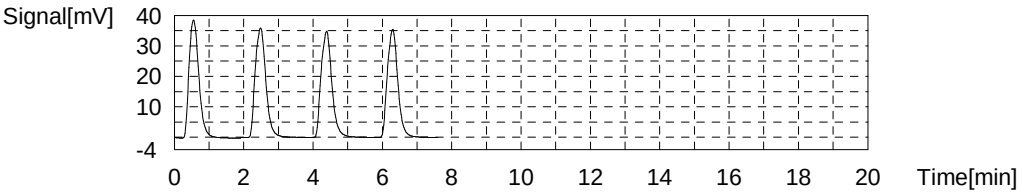
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.55	26.18mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:09:09 PM
2	77.18	26.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:11:13 PM
3	75.78	25.58mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:13:17 PM
4	75.15	25.37mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:15:21 PM

Mean Area 76.42
Mean Conc. 25.80mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

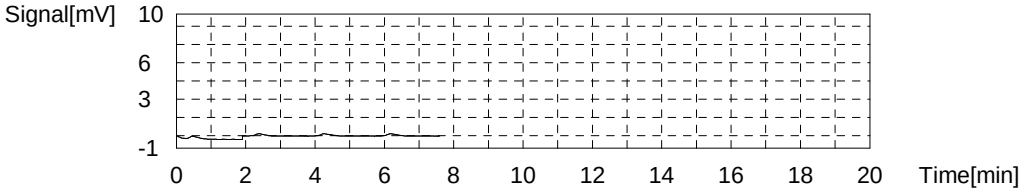
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06472mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2870	0.06144mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:23:53 PM
2	0.2926	0.06333mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:25:57 PM
3	0.2921	0.06316mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:28:01 PM
4	0.3151	0.07094mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:30:05 PM

Mean Area 0.2967
Mean Conc. 0.06472mg/L



Sample

Sample Name: 280-124986-f-8-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

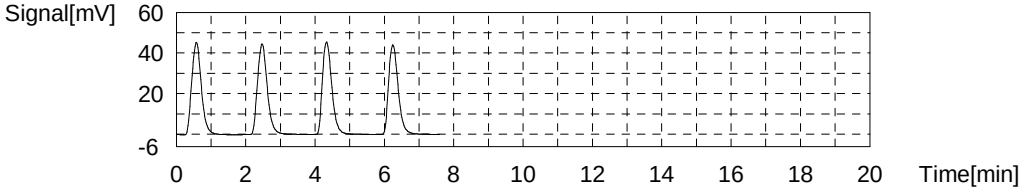
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.00	30.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:38:37 PM
2	87.68	29.60mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:40:41 PM
3	86.51	29.21mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:42:45 PM
4	85.49	28.86mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:44:49 PM

Mean Area 87.17
Mean Conc. 29.43mg/L



Sample

Sample Name: 280-124986-f-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

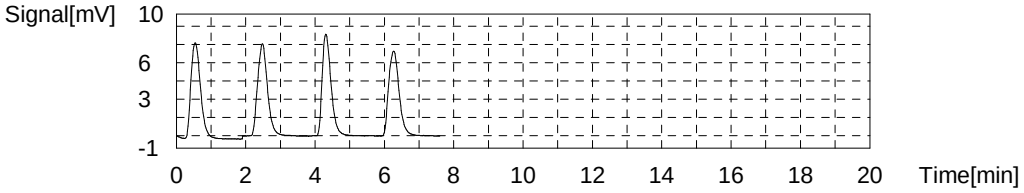
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.016mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.23	5.113mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:53:21 PM
2	15.03	5.045mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:55:25 PM
3	14.83	4.977mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:57:29 PM
4	14.69	4.930mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 1:59:33 PM

Mean Area 14.95
Mean Conc. 5.016mg/L



Sample

Sample Name: 280-124986-f-16-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

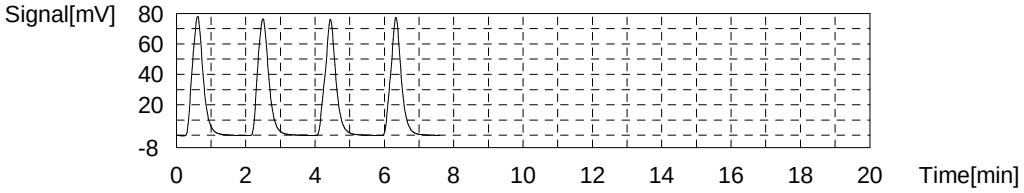
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:57.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	172.7	58.34mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:08:05 PM
2	170.3	57.53mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:10:09 PM
3	166.8	56.35mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:12:13 PM
4	165.5	55.91mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:14:17 PM

Mean Area 168.8
Mean Conc. 57.03mg/L



Sample

Sample Name: 280-124986-f-17-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

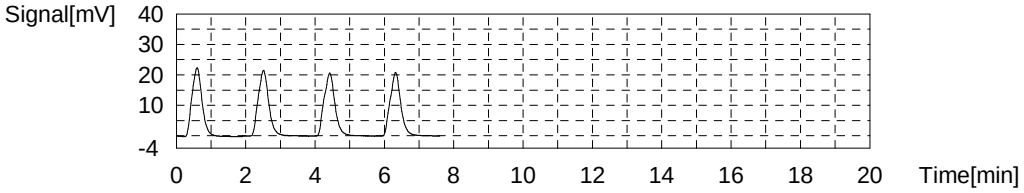
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.34	15.63mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:22:49 PM
2	45.60	15.38mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:24:53 PM
3	45.14	15.22mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:26:57 PM
4	44.61	15.04mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:29:01 PM

Mean Area 45.42
Mean Conc. 15.32mg/L



Sample

Sample Name: 280-124986-f-18-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

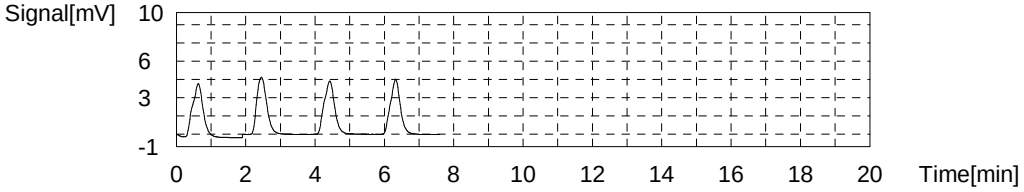
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.094mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.355	3.127mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:37:33 PM
2	9.386	3.137mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:39:37 PM
3	9.214	3.079mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:41:41 PM
4	9.083	3.035mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:43:45 PM

Mean Area 9.259
Mean Conc. 3.094mg/L



Sample

Sample Name: 280-124986-f-26-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

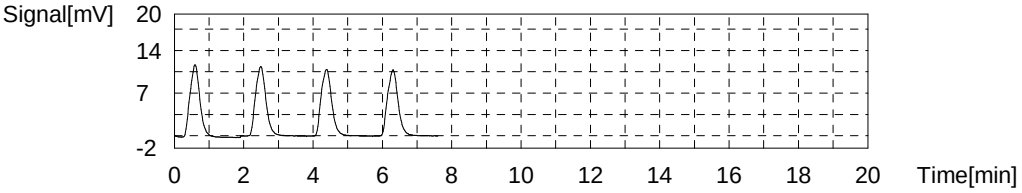
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.889mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.87	8.033mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:52:17 PM
2	23.73	7.986mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:54:21 PM
3	23.13	7.783mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:56:25 PM
4	23.04	7.753mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 2:58:29 PM

Mean Area 23.44
Mean Conc. 7.889mg/L



Sample

Sample Name: 280-124986-f-27-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

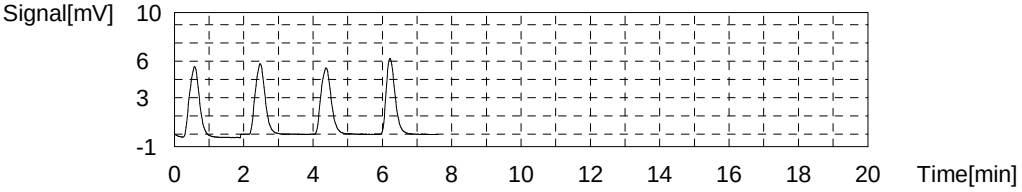
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.815mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.65	3.902mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:07:01 PM
2	11.47	3.842mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:09:05 PM
3	11.29	3.781mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:11:09 PM
4	11.15	3.733mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:13:13 PM

Mean Area 11.39
Mean Conc. 3.815mg/L



Sample

Sample Name: 280-124986-f-32-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

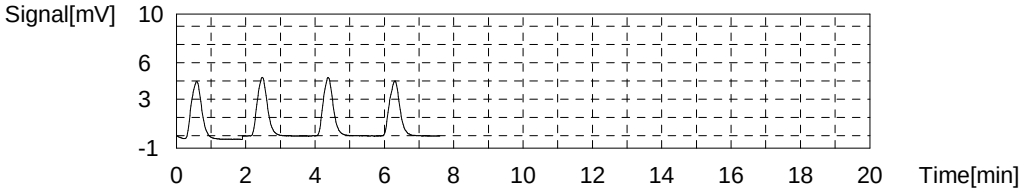
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.210mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.779	3.270mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:21:45 PM
2	9.700	3.243mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:23:49 PM
3	9.526	3.185mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:25:53 PM
4	9.403	3.143mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:27:57 PM

Mean Area 9.602
Mean Conc. 3.210mg/L



Sample

Sample Name: 280-124986-f-28-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

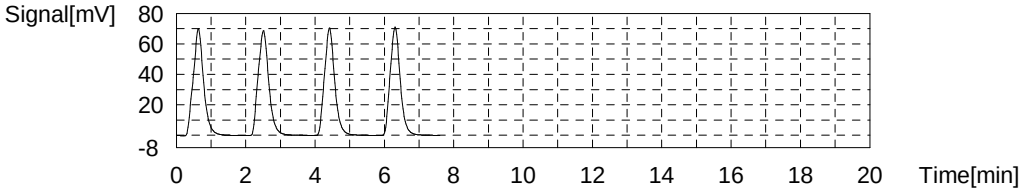
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:49.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	148.7	50.23mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:36:29 PM
2	147.9	49.96mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:38:33 PM
3	145.6	49.18mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:40:37 PM
4	144.9	48.95mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:42:41 PM

Mean Area 146.8
Mean Conc. 49.58mg/L



Sample

Sample Name: 280-124986-f-33-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

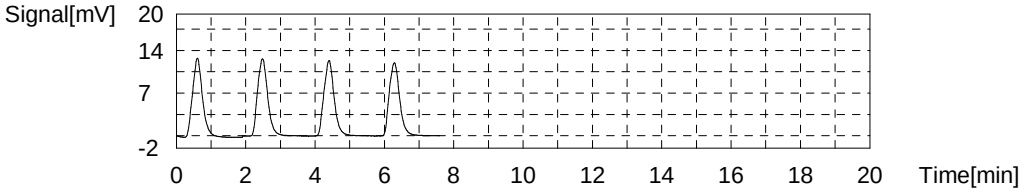
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.621mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.10	8.787mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:51:13 PM
2	25.76	8.672mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:53:17 PM
3	25.43	8.561mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:55:21 PM
4	25.15	8.466mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 3:57:25 PM

Mean Area 25.61
Mean Conc. 8.621mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

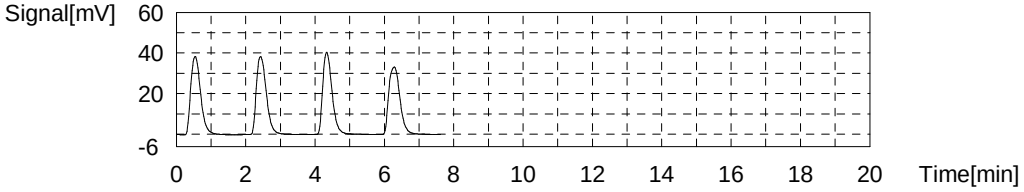
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.82	26.27mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:05:57 PM
2	77.35	26.11mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:08:02 PM
3	76.03	25.66mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:10:06 PM
4	75.12	25.36mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:12:10 PM

Mean Area 76.58
Mean Conc. 25.85mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

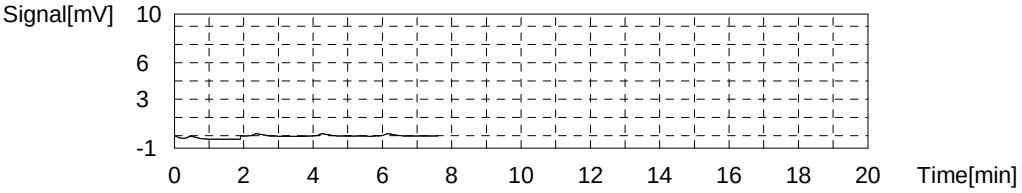
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06488mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2679	0.05498mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:20:42 PM
2	0.3191	0.07229mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:22:46 PM
3	0.2873	0.06154mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:24:50 PM
4	0.3144	0.07070mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:26:54 PM

Mean Area 0.2972
Mean Conc. 0.06488mg/L



Sample

Sample Name: 280-124986-f-34-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

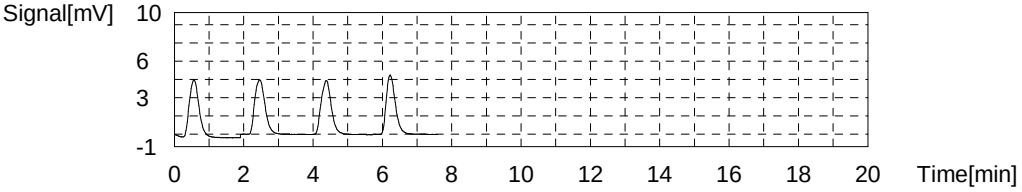
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.037mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.184	3.069mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:35:26 PM
2	9.217	3.080mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:37:30 PM
3	9.046	3.022mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:39:34 PM
4	8.909	2.976mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:41:38 PM

Mean Area 9.089
Mean Conc. 3.037mg/L



Sample

Sample Name: 280-124986-f-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

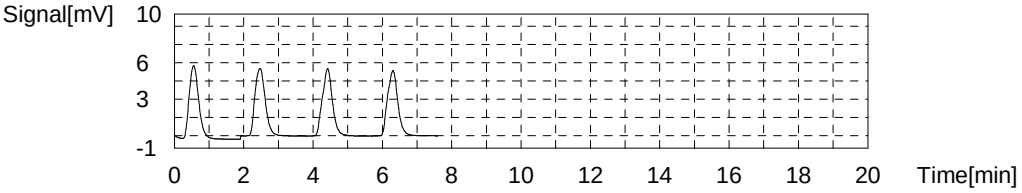
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.777mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.46	3.838mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:50:10 PM
2	11.41	3.821mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:52:14 PM
3	11.20	3.750mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:54:18 PM
4	11.05	3.700mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 4:56:22 PM

Mean Area 11.28
Mean Conc. 3.777mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

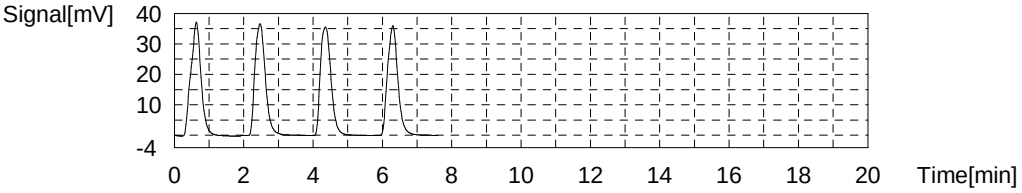
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.77	26.25mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:04:54 PM
2	77.17	26.05mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:06:58 PM
3	76.16	25.71mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:09:02 PM
4	75.23	25.39mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:11:06 PM

Mean Area 76.58
Mean Conc. 25.85mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

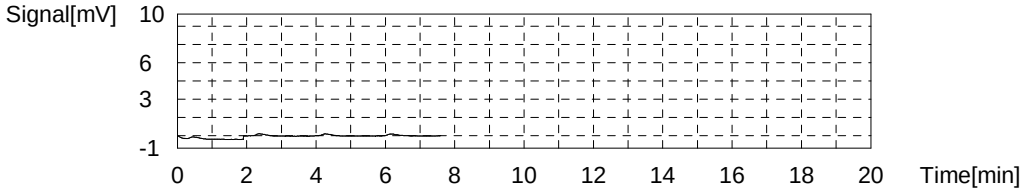
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05104mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2128	0.03636mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:19:38 PM
2	0.2929	0.06343mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:21:42 PM
3	0.2683	0.05512mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:23:46 PM
4	0.2509	0.04924mg/L	50uL	1		TOC3.2019_06_24_10_12_13.cal	7/6/2019 5:25:50 PM

Mean Area	0.2562
Mean Conc.	0.05104mg/L



TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2019_06_24_10_12_13.cal

Date of Creation 11:17:07 AM 6/24/2019
User wetchemd
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
Sample ID: Untitled
Object ID 0A-103108-04335027-13415A0166CC-0000
Cal. Curve: TOC3.2019_06_24_10_12_13.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2765	50uL	1	*******		6/24/2019 10:19:54 A
2	0.3484	50uL	1	*******		6/24/2019 10:21:58 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.3125
SD Area 0.05084
CV Area 16.27%
Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.311	50uL	1	*******		6/24/2019 10:30:32 A
2	3.309	50uL	1	*******		6/24/2019 10:32:36 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 3.310
SD Area 0.00141
CV Area 0.04%
Vial 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	14.36	50uL	1	*******	E	6/24/2019 10:41:10 A
2	14.95	50uL	1	*******		6/24/2019 10:43:14 A
3	14.85	50uL	1	*******		6/24/2019 10:45:18 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 14.90
SD Area 0.07071
CV Area 0.47%
Vial 3

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	29.38	50uL	1	*******		6/24/2019 10:53:47 A
2	29.94	50uL	1	*******		6/24/2019 10:55:51 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 29.66
SD Area 0.3960
CV Area 1.34%
Vial 4

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	72.31	50uL	1	*******		6/24/2019 11:04:25 A
2	74.10	50uL	1	*******		6/24/2019 11:06:29 A

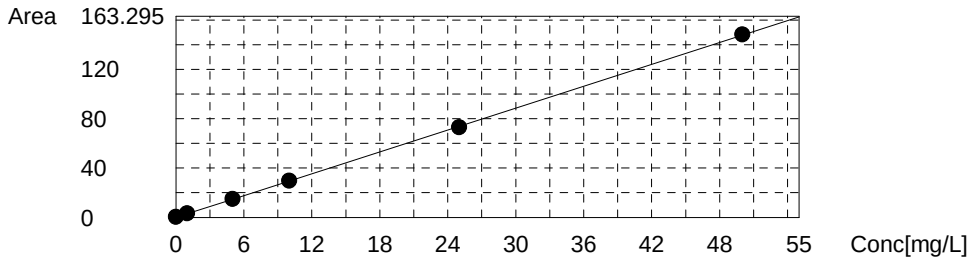
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 73.21
SD Area 1.266
CV Area 1.73%
Vial 5

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	147.7	50uL	1	*******		6/24/2019 11:15:03 A
2	149.2	50uL	1	*******		6/24/2019 11:17:07 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 148.5
SD Area 1.061
CV Area 0.71%
Vial 6

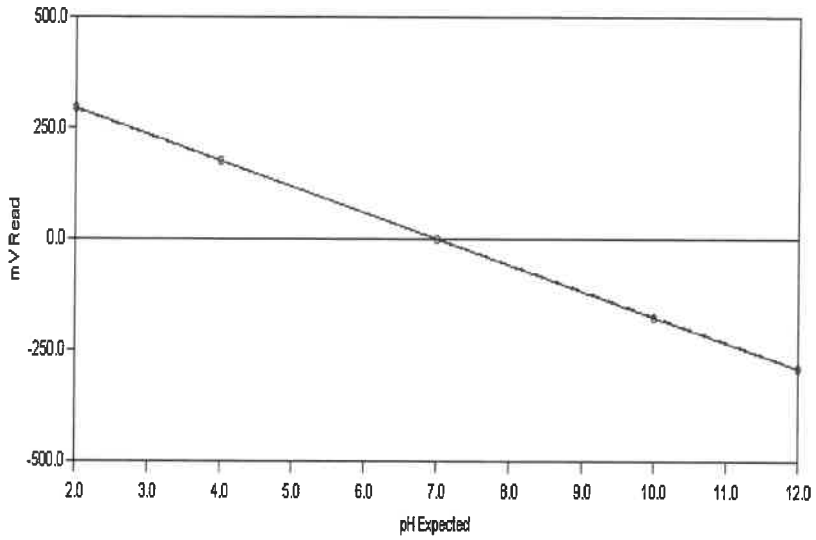
Slope: 2.958
Intercept 0.1052
r^2 0.9999
r 1.0000
Zero Shift No



PC-TitratION PLUS
Calibration Report

Analyst:_____

Calibration Record # 1412



Calibration Settings

Calibration ID	PH	Date	06/13/2019
Channel	1	Time	11:01 AM
Probe Type	pH	Temperature	296.32 K 23.17 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-58.579	CorrCoeff	1.0000
Intercept	-0.022	Equation: Y = (-58.579) X + (-0.022)	

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-58.579	-65.00	-53.00
Intercept	-0.022	-100.00	100.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	2.00	293.09
	4.00	175.78
	7.00	-0.61
	10.00	-175.65
	12.00	-292.72

PC-TitratION PLUS by Man-Tech Associates, Inc.
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Test America

Water Analysis Historical Data Report

Run Number 4670 **Order Number** 20190614-1

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	tcon
rinse	6/14/2019	3:07 PM	22.86	-1.00	5.63	-1.00	-1.00	-1.00	.00	.27	.27	.00	.00	.00	.05	.10	.02
check	6/14/2019	3:15 PM	22.48	-1.00	10.66	-1.00	-1.00	-1.00	106.31	209.16	.00	205.71	3.45	2.66	5.23	-1.00	.02
b7	6/14/2019	3:19 PM	22.86	-1.00	7.35	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
lcs	6/14/2019	3:35 PM	22.63	-1.00	10.64	-1.00	-1.00	-1.00	103.80	211.48	3.89	207.59	.00	2.59	5.29	-1.00	.02
mb	6/14/2019	3:42 PM	21.77	-1.00	7.31	-1.00	-1.00	-1.00	.00	.76	.76	.00	.00	.00	.06	.10	.02
280-124794-I-4	6/14/2019	3:50 PM	18.76	-1.00	7.66	-1.00	-1.00	-1.00	.00	210.32	210.32	.00	.00	.00	5.26	-1.00	.02
280-124794-I-4 du	6/14/2019	3:59 PM	18.81	-1.00	7.68	-1.00	-1.00	-1.00	.00	209.91	209.91	.00	.00	.00	5.25	-1.00	.02
280-124794-I-2	6/14/2019	4:05 PM	18.88	-1.00	6.51	-1.00	-1.00	-1.00	.00	.25	.25	.00	.00	.00	.05	.10	.02
280-124794-I-5	6/14/2019	4:13 PM	18.74	-1.00	7.68	-1.00	-1.00	-1.00	.00	204.00	204.00	.00	.00	.00	5.10	-1.00	.02
280-124794-I-6	6/14/2019	4:22 PM	18.99	-1.00	7.82	-1.00	-1.00	-1.00	.00	253.83	253.83	.00	.00	.00	6.35	-1.00	.02
280-124794-I-7	6/14/2019	4:30 PM	19.64	-1.00	7.83	-1.00	-1.00	-1.00	.00	255.07	255.07	.00	.00	.00	6.38	-1.00	.02
280-124673-A-1	6/14/2019	4:37 PM	20.20	-1.00	7.05	-1.00	-1.00	-1.00	.00	.54	.54	.00	.00	.00	.06	.10	.02
280-124673-A-2	6/14/2019	4:45 PM	20.85	-1.00	6.20	-1.00	-1.00	-1.00	.00	162.85	162.85	.00	.00	.00	4.07	-1.00	.02
280-124673-A-3	6/14/2019	4:51 PM	21.19	-1.00	5.79	-1.00	-1.00	-1.00	.00	.30	.30	.00	.00	.00	.05	.09	.02
280-124673-A-4	6/14/2019	5:00 PM	20.74	-1.00	7.48	-1.00	-1.00	-1.00	.00	332.39	332.39	.00	.00	.00	8.31	-1.00	.02
ccv	6/14/2019	5:10 PM	20.81	-1.00	10.65	-1.00	-1.00	-1.00	105.11	212.21	2.00	210.21	.00	2.63	5.31	-1.00	.02
ccb	6/14/2019	5:16 PM	20.54	-1.00	6.38	-1.00	-1.00	-1.00	.00	.38	.38	.00	.00	.00	.05	.10	.02
280-124673-A-5	6/14/2019	5:28 PM	20.18	-1.00	7.16	-1.00	-1.00	-1.00	.00	467.72	467.72	.00	.00	.00	11.69	-1.00	.02
280-124673-A-6	6/14/2019	5:36 PM	20.49	-1.00	7.47	-1.00	-1.00	-1.00	.00	299.26	299.26	.00	.00	.00	7.48	-1.00	.02
280-124673-A-7	6/14/2019	5:49 PM	21.09	-1.00	7.45	-1.00	-1.00	-1.00	.00	552.07	552.07	.00	.00	.00	13.80	-1.00	.02
280-124673-A-8	6/14/2019	5:58 PM	21.96	-1.00	7.47	-1.00	-1.00	-1.00	.00	319.37	319.37	.00	.00	.00	7.98	-1.00	.02
280-124724-A-2	6/14/2019	6:05 PM	21.38	-1.00	6.84	-1.00	-1.00	-1.00	.00	176.53	176.53	.00	.00	.00	4.41	-1.00	.02
280-124678-B-1	6/14/2019	6:12 PM	20.99	-1.00	7.85	-1.00	-1.00	-1.00	.00	61.51	61.51	.00	.00	.00	1.54	-1.00	.02
280-124678-A-3	6/14/2019	6:19 PM	20.74	-1.00	7.89	-1.00	-1.00	-1.00	.00	60.14	60.14	.00	.00	.00	1.50	-1.00	.02
280-124678-A-2	6/14/2019	6:26 PM	20.66	-1.00	7.88	-1.00	-1.00	-1.00	.00	59.93	59.93	.00	.00	.00	1.50	-1.00	.02
280-124682-G-1	6/14/2019	6:34 PM	20.67	-1.00	8.32	-1.00	-1.00	-1.00	2.89	251.23	245.45	5.78	.00	.07	6.28	-1.00	.02
280-124682-G-2	6/14/2019	6:42 PM	21.27	-1.00	6.55	-1.00	-1.00	-1.00	.00	.34	.34	.00	.00	.00	.05	.10	.02
ccv	6/14/2019	6:51 PM	22.10	-1.00	10.59	-1.00	-1.00	-1.00	100.78	212.82	11.26	201.56	.00	2.52	5.32	-1.00	.02
ccb	6/14/2019	6:58 PM	21.71	-1.00	6.35	-1.00	-1.00	-1.00	.00	.21	.21	.00	.00	.00	.05	.10	.02
lcs	6/14/2019	7:07 PM	21.34	-1.00	10.60	-1.00	-1.00	-1.00	102.78	212.61	7.06	205.55	.00	2.57	5.32	-1.00	.02
mb	6/14/2019	7:14 PM	21.18	-1.00	6.42	-1.00	-1.00	-1.00	.00	.48	.48	.00	.00	.00	.06	.10	.02
280-124682-G-3	6/14/2019	7:22 PM	20.94	-1.00	8.32	-1.00	-1.00	-1.00	3.13	239.33	233.07	6.26	.00	.08	5.98	-1.00	.02
du	6/14/2019	7:29 PM	21.03	-1.00	8.35	-1.00	-1.00	-1.00	4.20	243.12	234.71	8.40	.00	.11	6.08	-1.00	.02
280-124682-G-4	6/14/2019	7:39 PM	21.48	-1.00	8.16	-1.00	-1.00	-1.00	.00	276.35	276.35	.00	.00	.00	6.91	-1.00	.02
280-124682-G-5	6/14/2019	7:48 PM	22.37	-1.00	8.27	-1.00	-1.00	-1.00	.00	284.86	284.86	.00	.00	.00	7.12	-1.00	.02
280-124682-G-6	6/14/2019	7:57 PM	21.93	-1.00	8.21	-1.00	-1.00	-1.00	.00	275.74	275.74	.00	.00	.00	6.89	-1.00	.02
280-124682-G-7	6/14/2019	8:06 PM	21.64	-1.00	8.03	-1.00	-1.00	-1.00	.00	281.55	281.55	.00	.00	.00	7.04	-1.00	.02
280-124682-G-8	6/14/2019	8:15 PM	21.48	-1.00	7.89	-1.00	-1.00	-1.00	.00	297.88	297.88	.00	.00	.00	7.45	-1.00	.02
280-124682-G-9	6/14/2019	8:24 PM	21.41	-1.00	8.15	-1.00	-1.00	-1.00	.00	266.67	266.67	.00	.00	.00	6.67	-1.00	.02
280-124711-A-1	6/14/2019	8:34 PM	21.47	-1.00	7.31	-1.00	-1.00	-1.00	.00	395.33	395.33	.00	.00	.00	9.88	-1.00	.02
280-124711-A-2	6/14/2019	8:44 PM	21.70	-1.00	7.90	-1.00	-1.00	-1.00	.00	359.67	359.67	.00	.00	.00	8.99	-1.00	.02
ccv	6/14/2019	8:52 PM	22.45	-1.00	10.53	-1.00	-1.00	-1.00	99.11	214.71	16.49	198.22	.00	2.48	5.37	-1.00	.02

Run Number 4670 **Order Number** 20190614-1

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	tcon
ccb	6/14/2019	8:59 PM	22.11	-1.00	6.39	-1.00	-1.00	-1.00	.00	.29	.29	.00	.00	.00	.05	.10	.02
280-124711-B-3	6/14/2019	9:06 PM	21.83	-1.00	7.68	-1.00	-1.00	-1.00	.00	205.57	205.57	.00	.00	.00	5.14	-1.00	.02
280-124717-A-1	6/14/2019	9:15 PM	21.73	-1.00	8.14	-1.00	-1.00	-1.00	.00	209.89	209.89	.00	.00	.00	5.25	-1.00	.02
280-124717-A-2	6/14/2019	9:22 PM	21.71	-1.00	6.25	-1.00	-1.00	-1.00	.00	.36	.36	.00	.00	.00	.05	.09	.02
280-124717-A-3	6/14/2019	9:29 PM	21.69	-1.00	7.97	-1.00	-1.00	-1.00	.00	127.76	127.76	.00	.00	.00	3.19	-1.00	.02
280-124711-A-4	6/14/2019	9:37 PM	21.80	-1.00	7.73	-1.00	-1.00	-1.00	.00	202.43	202.43	.00	.00	.00	5.06	-1.00	.02
280-124717-A-5	6/14/2019	9:45 PM	22.31	-1.00	7.70	-1.00	-1.00	-1.00	.00	134.52	134.52	.00	.00	.00	3.36	-1.00	.02
280-124717-A-6	6/14/2019	9:52 PM	22.08	-1.00	7.66	-1.00	-1.00	-1.00	.00	115.42	115.42	.00	.00	.00	2.89	-1.00	.02
280-124717-A-7	6/14/2019	9:59 PM	21.96	-1.00	7.68	-1.00	-1.00	-1.00	.00	114.17	114.17	.00	.00	.00	2.85	-1.00	.02
280-124717-A-8	6/14/2019	10:06 PM	21.93	-1.00	8.09	-1.00	-1.00	-1.00	.00	120.70	120.70	.00	.00	.00	3.02	-1.00	.02
ccv	6/14/2019	10:16 PM	21.87	-1.00	10.51	-1.00	-1.00	-1.00	99.65	212.51	13.22	199.30	.00	2.49	5.31	-1.00	.02

Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019 OU/OU3 LTM
AECOM Project Number: 60565355
Project Location: Grand Island, NE
AECOM Project Manager: Dean Converse
Sampler(s): SA, CH, KL, BE

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)	VOCs+Freon 113 (8260B)	MEE (RSK 175)	NO_2/NO_3 (353.2)	SO_4 (9056A), AK (2320B)			Remarks
6-5-19	0700		X	TB060519	H_2O	1	40mL VOA		X						6°C + HCL
6-5-19	0700		X	Source2019	H_2O	3	↓		X						↓
↓	↓		X	↓	↓	2	500mL Amb	X							6°C
6-6-19				SHGW02-19A		3	40mL VOA		X						6°C + HCL
						↓	↓			X					↓
						1	1-L HDPE				X				6°C + H_2SO_4
				↓		1	↓					X			6°C
				SHGW05-19A		3	40mL VOA		X						6°C + HCL
						3	↓			X					↓
						1	1-L HDPE				X				6°C + H_2SO_4
				↓		1	↓					X			6°C
				SAMW1-19A		3	40mL VOA		X						6°C + HCL
						3	↓			X					↓
						1	1-L HDPE				X				6°C + H_2SO_4
↓			↓		↓	1	↓					X			6°C

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by: [signature]	6/6/19	1800	Method of Shipment: Federal Express	TAL: 28017805
Received by: [signature]	6/7/19	830	Airbill Number: FedEx Receipt	
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	280-124928 Chain of Custody
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2.2, 2.9, 0.8, 1.2 ±0.01R #95 6-7-19

2019020

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019 OU1/OU3 LTM
AECOM Project Number: 60565355
Project Location: Grand Island, NE
AECOM Project Manager: Dean Coverdale
Sampler(s): SA, CH, KL, BE

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Analytical Parameters: Explosives + MNX (8330A)	VOCs + Freon 113 (8260B)	MEE (RSK 175)	NO_3/NO_2 (353.2)	SO_4 (9056A), Al (6020B)	Bill to: Brice Engineering / Remarks / standard TAT
6-6-19			X	G-0053-19A	H_2O	3	40mL VOA		X				6°C + HCL
						3	↓			X			↓
						1	1-L HDPE				X		6°C + H_2SO_4
						1	↓					X	6°C

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	6/6/19	1800	Method of Shipment: Federal Express	TAL: 280 17805
Received by:	6/7/19	8:30	Airbill Number: Fed Ex Receipt	
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				

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08/01/2019

2019021

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: ~~2018~~ 2019 CHAAP 2018 OU1/OU3 LTM Groundwater Sampling	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): SA, CH, KL, BE	

Analytical Parameters: Explosives+MNX (8330B)*; TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2); SO_4 (9056A), Alkalinity (2320B); Sulfide (9034); DOC (9060A)*; Methane (RSK 175)

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330B)*	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
6-5-19	1235		X	GO105-19A	H_2O	9	ABCDEF	X	X	X	X	X	X		6°C
↓	1350		↓	GO107-19A	↓	↓	↓	↓	↓	↓	↓	↓	↓		↓
↓	1505		↓	GO106-19A	↓	↓	↓	↓	↓	↓	↓	↓	↓		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	6/6/19	1800	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC 500mL **(A)** (2) 1L 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)
Received by:	6/7/19	8:30	Airbill Number: FedEx Receipt	
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: ~~Carissa Cumine~~ Pat McGee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0164	TAL: 28017805
Received for Laboratory by:				

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COC: 2019600

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CHAIN OF CUSTODY RECORD

Page 1 of 2

Project Name: CHAPP 2019 GW/GW3LTM
AECOM Project Number: 60565355
Project Location: Grand Island, NE
AECOM Project Manager: Dean Converse
Sampler(s): SA, CH, KL, BE

Bill to: Brice Engineering

Remarks

standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Analytical Parameters: VOCs+Freon 113 (8260B)	MEE (RSK 175)	NO_2/NO_3 (353.2)	SO_4 (9056A), AT (2320B)	TPH-DRO (8015B)			Remarks
6-6-19	1050		X	SHGW03-19A	H_2O	3	40mL VOA	X							6°C +HCL
						3	↓		X						+HCL
						1	1-L HDPE			X					+H_2SO_4
						1	↓				X				
						2	1-L Amber					X			
	1210			GW069-19A		3	40mL VOA	X							6°C +HCL
						3	↓		X						+HCL
						1	1-L HDPE			X					+H_2SO_4
						1	↓				X				
						2	1-L Amber					X			
	1335			SHGW04-19A		3	40mL VOA	X							+HCL
						3	↓		X						+HCL
						1	1-L HDPE			X					+H_2SO_4
						1	↓				X				
						2	1-L Amber					X			

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	6/6/19	1800	Method of Shipment: Federal Express	TAL# 280-77805
Received by:	6/7/19	8:30	Airbill Number: FedEx Receipt	
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				

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Page 1895 of 1898
08/01/2019

2019022

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019 041/003 LTM	AECOM Project Number: 60565355
Project Location: Grand Island, NE	AECOM Project Manager: Dean Converse
Sampler(s): SA, CH, KL, BE	

Analytical Parameters: VOCs + Freon 113 (8260B)

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type							Remarks
6-6-19	0700		X	TB060619	H_2O	1	40mL VOA	X						6°C + HCL

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	6/6/19	1800	Method of Shipment: Federal Express	
Received by: 6/7/19	6/8/19 6/7/19	8:30	Airbill Number: FedEx Receipt	TAL: 28017805
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				

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2019016

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2018 OU1/OU3 LTM Groundwater Sampling 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): SA, CH, KL, BE	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330B) ~~A~~ S	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
6-5-19	1615		X	GOOI7-19A	H_2O	9	ABCDEF	X	X	X	X	X	X		6°C
6-5-19	1635		↓	PZ009-19A	↓	↓	↓	↓	↓	↓	↓	↓	↓		↓
6-6-19	0855		↓	GOO45-19A	↓	↓	↓	↓	↓	↓	↓	↓	↓		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	6/6/19	1200	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC 500 mL
Received by:	6/7/19	8130	Airbill Number: FedEx Receipt	(A) (2) 1L Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: ~~Carissa Cumine~~ Pat McEnter, 4955 Yarrow St., Arvada, CO 80002, (303) 736-0164	TAL: 28017805
Received for Laboratory by:				

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COC: 2019601

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-124928-1

Login Number: 124928
List Number: 1
Creator: Dedio, Michael T

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
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.	False	Refer to Job Narrative for details.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	