ANALYTICAL REPORT

Job Number: 280-149116-1

Job Description: Cornhusker (CHAAP)

For:
Brice Environmental Services, Corp
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Attention: Corey Schwabenlander



Approved for release.
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6/17/2021 4:57 AM

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The Lab Certification ID# is 4025.

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

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

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Qualifiers

GC/MS VOA

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

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Glossary

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

Glossary (Continued)

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

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-149116-1

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

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

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

RECEIPT

The samples were received on 5/27/2021 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were 0.9º C, 1.2º C, 1.7º C, 1.9º C, 3.0º C, 4.0º C, 4.3º C and 4.5º C.

Receipt Exceptions

Analyses were not marked on the COC for the following samples: PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12) and PZ020-21A (280-149116-15). These samples were logged according to the received containers.

The following samples were received at ELLE outside the required temperature criteria at 18.9º C due to a FedEx delay: G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), SHGW03-21A (280-149116-5), SHGW02-21A (280-149116-6), SHGW05-21A (280-149116-7), TB052621 (280-149116-8), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), PZ007-21A (280-149116-13[MS]), PZ007-21A (280-149116-13[MSD]), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15). The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis on samples SHGW02-21A (280-149116-6) and SHGW05-21A (280-149116-7), since this was the only unpreserved sample volume received for these two samples. The analysis for the remaining samples was performed at ETA Denver using the extra unpreserved volume received for explosives analysis.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples SHGW03-21A (280-149116-5), SHGW02-21A (280-149116-6), SHGW05-21A (280-149116-7) and TB052621 (280-149116-8) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were analyzed on 06/05/2021.

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

DISSOLVED GASES (GC)

Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), SHGW03-21A (280-149116-5), SHGW02-21A (280-149116-6), SHGW05-21A (280-149116-7), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 06/01/2021.

The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container(s): G0045-21A (280-149116-2).

The following sample(s) was collected in a properly preserved vial; however, the pH was 7 and outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: G0045-21A (280-149116-2).

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

DIESEL RANGE ORGANICS (DRO)

Sample SHGW03-21A (280-149116-5) was analyzed for Diesel Range Organics (DRO) in accordance with 8015C DRO. The samples were prepared on 05/31/2021 and analyzed on 06/10/2021.

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

NITROAROMATICS AND NITRAMINES (HPLC)
Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 05/31/2021 and 06/01/2021 and analyzed on 06/04/2021 and 06/05/2021.

The laboratory control sample (LCS) for preparation batch 280-538125 and analytical batch 280-538449 recovered outside control limits for the following analytes:m-Nitrotoluene(73-125%R) at 69%R, o-Nitrotoluene(70-127%R) at 66%R, and p-Nitrotoluene(71-127%R) at 69%R. The associated sample is impacted: G0077-21A (280-149116-9).Affected analytes are ND in associated samples. The associated samples were outside of the holding time; therefore, re-extraction/reanalysis was not performed.

The %RPD between the primary and confirmation column exceeded 40% for RDX for the following sample: G0077-21A (280-149116-9) in preparation batch 280-538125 and analytical batch 280-538449 .The results from both columns has been reported and qualified in accordance with the laboratory's SOP.

The laboratory control sample (LCS) for preparation batch 280-538030 and analytical batch 280-538649 recovered outside control limits for the following analytes:m-Nitrotoluene(73-125%R) at 57%R, o-Nitrotoluene(70-127%R) at 59%R, and p-Nitrotoluene(71-127%R) at 63%R. The associated samples are impacted: G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), PZ007-21A (280-149116-13[MS]), PZ007-21A (280-149116-13[MSD]), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15). The associated samples were outside of the holding time; therefore, re-extraction/reanalysis was not performed.

Surrogate recovery for the following sample in preparation batch 280-538030 and analytical batch 280-538649 was outside the lower control limits: G0017-21A (280-149116-1) and G0086-21A (280-149116-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the confirmation instrument.

The %RPD between the primary and confirmation column exceeded 40% for RDX, HMX, 2-Amino-4,6-dinitrotoluene, 2,6-Dinitrotoluene and 4-Amino-2,6-dinitrotoluene for the following samples: G0017-21A (280-149116-1), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12) and PZ020-21A (280-149116-15) in preparation batch 280-538030 and analytical batch 280-538717 .The results from both columns has been reported and qualified in accordance with the laboratory's SOP.

The method blank(MB) associated with preparation batch 280-538030 and analytical batch 280-538717 contained analyte 2-Amino-4,6-dinitrotoluene greater than one-half the reporting limit (RL). The analyte was ND in the MB in the primary instrument. The analyte is reported from both instrument. The associated sample is impacted: G0017-21A (280-149116-1).

3-Nitrotoluene failed the recovery criteria low for the MS of sample PZ007-21AMS (280-149116-13) in batch 280-538649. 2-Nitrotoluene, 3-Nitrotoluene and 4-Nitrotoluene failed the recovery criteria low for the MSD of sample PZ007-21AMSD (280-149116-13) in batch 280-538649. Refer to the QC report for details.

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

ALKALINITY
Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), SHGW03-21A (280-149116-5), SHGW02-21A (280-149116-6), SHGW05-21A (280-149116-7), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 06/04/2021 and 06/07/2021.

Total Alkalinity as CaCO3 was detected in method blank MB 280-538839/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Total Alkalinity as CaCO3 was detected in method blank MB 280-538981/5 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

AMMONIA
Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/11/2021.

Sample PZ0018-21A (280-149116-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL KJELDAHL NITROGEN
Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), G0077-21A

(280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 06/01/2021 and analyzed on 06/02/2021.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MS of sample PZ007-21AMS (280-149116-13) in batch 280-538329. Refer to the QC report for details.

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

NITRATE-NITRITE AS NITROGEN

Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), SHGW03-21A (280-149116-5), SHGW02-21A (280-149116-6), SHGW05-21A (280-149116-7), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 06/04/2021.

Samples PZ017R-21A (280-149116-11)[25X], PZ021-21A (280-149116-12)[25X] and PZ020-21A (280-149116-15)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE

Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 06/01/2021 and 06/02/2021.

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

ANIONS (28 DAYS)

Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), SHGW03-21A (280-149116-5), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 06/15/2021 and 06/16/2021.

Sulfate failed the recovery criteria high for the MS of sample PZ007-21AMS (280-149116-13) in batch 280-539823. Refer to the QC report for details.

Samples G0017-21A (280-149116-1)[5X], G0045-21A (280-149116-2)[10X], G0078-21A (280-149116-10)[5X] and PZ007-21A (280-149116-13)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

ANIONS BY ION CHROMATOGRAPHY

Samples SHGW02-21A (280-149116-6) and SHGW05-21A (280-149116-7) were analyzed for Anions by Ion Chromatography in accordance with 9056A - 28 Day. The samples were analyzed on 06/16/2021.

Samples SHGW02-21A (280-149116-6)[5X] and SHGW05-21A (280-149116-7)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED ORGANIC CARBON

Samples G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 06/09/2021.

The pH measured at the bench was >2, it was reduced to <2 using concentrated sulfuric acid after filtration prior to analysis. G0017-21A (280-149116-1), G0045-21A (280-149116-2), G0086-21A (280-149116-3), PZ0018-21A (280-149116-4), G0077-21A (280-149116-9), G0078-21A (280-149116-10), PZ017R-21A (280-149116-11), PZ021-21A (280-149116-12), PZ007-21A (280-149116-13), PZ007-21A (280-149116-13[MS]), PZ007-21A (280-149116-13[MSD]), G0024-21A (280-149116-14) and PZ020-21A (280-149116-15).

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: 280-149116-1

Client Sample ID: G0017-21A — Lab Sample ID: 280-149116-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	1.5		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.066	J Q J1	0.12	0.11	0.053	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.51	B M J1	0.12	0.11	0.053	ug/L	1		8330A	Total/NA
Nitrogen, Total Kjeldahl	0.71	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	6.4		4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	540	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	440		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.6		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0045-21A — Lab Sample ID: 280-149116-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.00079	J M	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.1		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	1300	D	50	25	10	mg/L	10		9056A	Total/NA
Total Alkalinity as CaCO3	470		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0086-21A — Lab Sample ID: 280-149116-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.014		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	14	Q M	0.22	0.21	0.089	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.9	Q	0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.053	J Q M	0.11	0.084	0.029	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.4	Q	0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.1	Q	0.16	0.13	0.061	ug/L	1		8330A	Total/NA
HMX	0.44	Q M	0.22	0.21	0.093	ug/L	1		8330A	Total/NA
RDX	0.84	Q M J1	0.22	0.21	0.054	ug/L	1		8330A	Total/NA
RDX	0.53	J1	0.22	0.21	0.054	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	5.4		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	180		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	310		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ0018-21A — Lab Sample ID: 280-149116-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	7.9		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
2,4,6-Trinitrotoluene	4.6		0.12	0.11	0.049	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.5		0.12	0.11	0.055	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	4.9	J1	0.16	0.13	0.062	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	9.7	J1	0.16	0.13	0.062	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ0018-21A (Continued) — Lab Sample ID: 280-149116-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia	0.32	J	0.50	0.25	0.11	mg/L	5		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.4		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	5.0		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	53		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	360		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	11		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: SHGW03-21A — Lab Sample ID: 280-149116-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	11		1.0	0.80	0.27	ug/L	1		8260B	Total/NA
Methane	0.051		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
C10-C28	180	J	240	120	31	ug/L	1		8015C DRO	Total/NA
Nitrate Nitrite as N	7.5		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	31		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	160		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW02-21A — Lab Sample ID: 280-149116-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	15		6.0	4.0	2.0	ug/L	1		8260B	Total/NA
2-Hexanone	55		5.0	4.0	1.7	ug/L	1		8260B	Total/NA
Acetone	9.1	J	10	6.4	1.9	ug/L	1		8260B	Total/NA
Methane	6.1		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Sulfate	26	D	5.0	4.5	1.5	mg/L	5		9056A	Total/NA
Nitrate Nitrite as N	0.17		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Alkalinity as CaCO3	200		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW05-21A — Lab Sample ID: 280-149116-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	16		6.0	4.0	2.0	ug/L	1		8260B	Total/NA
2-Hexanone	56		5.0	4.0	1.7	ug/L	1		8260B	Total/NA
Acetone	8.7	J	10	6.4	1.9	ug/L	1		8260B	Total/NA
Methane	6.9		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Sulfate	21	D	5.0	4.5	1.5	mg/L	5		9056A	Total/NA
Nitrate Nitrite as N	0.16		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Total Alkalinity as CaCO3	200		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB052621 — Lab Sample ID: 280-149116-8

No Detections.

Client Sample ID: G0077-21A — Lab Sample ID: 280-149116-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.53		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	4.3	M	0.22	0.20	0.086	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.3	M	0.11	0.10	0.046	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.061	J M	0.10	0.082	0.028	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.5	M	0.11	0.10	0.052	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0077-21A (Continued) — Lab Sample ID: 280-149116-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
4-Amino-2,6-dinitrotoluene	2.5	M	0.15	0.12	0.059	ug/L	1		8330A	Total/NA
HMX	0.57	M	0.22	0.20	0.090	ug/L	1		8330A	Total/NA
RDX	1.2	M J1	0.22	0.20	0.053	ug/L	1		8330A	Total/NA
RDX	0.63	M J1	0.22	0.20	0.053	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	9.0		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	140		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	310		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.4		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0078-21A — Lab Sample ID: 280-149116-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.13		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.29		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.70	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	270	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	320		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.9		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ017R-21A — Lab Sample ID: 280-149116-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	6.5		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	1.1	M	0.22	0.21	0.088	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	10		0.11	0.10	0.047	ug/L	1		8330A	Total/NA
2,6-Dinitrotoluene	0.36	J1	0.10	0.083	0.042	ug/L	1		8330A	Total/NA
2,6-Dinitrotoluene	0.86	J1	0.10	0.083	0.042	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	3.0		0.11	0.10	0.053	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.7		0.16	0.13	0.060	ug/L	1		8330A	Total/NA
HMX	1.6	M J1	0.22	0.21	0.091	ug/L	1		8330A	Total/NA
HMX	4.2	J1	0.22	0.21	0.091	ug/L	1		8330A	Total/NA
RDX	2.1	M	0.22	0.21	0.054	ug/L	1		8330A	Total/NA
Ammonia	0.033	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	24		2.5	1.3	0.48	mg/L	25		353.2	Total/NA
Sulfate	81		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	280		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ021-21A — Lab Sample ID: 280-149116-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	6.4		0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	1.2	M	0.21	0.20	0.083	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	10		0.11	0.099	0.044	ug/L	1		8330A	Total/NA
2,6-Dinitrotoluene	0.32	J1	0.099	0.079	0.040	ug/L	1		8330A	Total/NA
2,6-Dinitrotoluene	0.82	J1	0.099	0.079	0.040	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ021-21A (Continued) — Lab Sample ID: 280-149116-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	3.3		0.11	0.099	0.050	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	4.0		0.15	0.12	0.057	ug/L	1		8330A	Total/NA
HMX	1.6	M J1	0.21	0.20	0.087	ug/L	1		8330A	Total/NA
HMX	3.8	M J1	0.21	0.20	0.087	ug/L	1		8330A	Total/NA
RDX	2.3	M	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
Ammonia	0.028	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	23		2.5	1.3	0.48	mg/L	25		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	82		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	280		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.3		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ007-21A — Lab Sample ID: 280-149116-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia	0.035	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	0.80		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	510	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	390		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0024-21A — Lab Sample ID: 280-149116-14

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.44		0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.2		0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.1		0.16	0.13	0.061	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	7.8		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	54		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	220		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.3		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ020-21A — Lab Sample ID: 280-149116-15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.00079	J M	0.0050	0.0020	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	2.2		0.22	0.21	0.087	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	3.8		0.11	0.10	0.047	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.5		0.11	0.10	0.053	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.7		0.16	0.12	0.060	ug/L	1		8330A	Total/NA
HMX	0.73	M	0.22	0.21	0.091	ug/L	1		8330A	Total/NA
RDX	0.68	M J1	0.22	0.21	0.053	ug/L	1		8330A	Total/NA
RDX	0.40	M J1	0.22	0.21	0.053	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	13		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	150		5.0	2.5	1.0	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ020-21A (Continued)
Lab Sample ID: 280-149116-15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3	320		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.5		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0017-21A
Lab Sample ID: 280-149116-1

Date Collected: 05/25/21 15:20
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**1.5**		0.0050	0.0020	0.00063	mg/L		06/01/21 14:03	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.089	ug/L		06/05/21 00:44	1
1,3-Dinitrobenzene	0.11	U Q M	0.12	0.11	0.039	ug/L		06/05/21 00:44	1
2,4,6-Trinitrotoluene	0.11	U Q	0.12	0.11	0.047	ug/L		06/05/21 00:44	1
2,4-Dinitrotoluene	0.084	U Q	0.11	0.084	0.029	ug/L		06/05/21 00:44	1
2,6-Dinitrotoluene	0.084	U Q M	0.11	0.084	0.042	ug/L		06/05/21 00:44	1
2-Amino-4,6-dinitrotoluene	**0.066**	**J Q J1**	0.12	0.11	0.053	ug/L		06/05/21 00:44	1
2-Amino-4,6-dinitrotoluene	**0.51**	**B M J1**	0.12	0.11	0.053	ug/L		06/05/21 18:11	1
2-Nitrotoluene	0.21	U Q M	0.22	0.21	0.090	ug/L		06/05/21 00:44	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21	ug/L		06/05/21 00:44	1
4-Amino-2,6-dinitrotoluene	0.13	U Q M	0.16	0.13	0.061	ug/L		06/05/21 00:44	1
4-Nitrotoluene	0.42	U Q	0.43	0.42	0.11	ug/L		06/05/21 00:44	1
HMX	0.21	U Q M	0.22	0.21	0.092	ug/L		06/05/21 00:44	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/05/21 00:44	1
Nitrobenzene	0.21	U Q M	0.22	0.21	0.096	ug/L		06/05/21 00:44	1
RDX	0.21	U Q	0.22	0.21	0.054	ug/L		06/05/21 00:44	1
Tetryl	0.11	U Q M	0.12	0.11	0.034	ug/L		06/05/21 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*80*	*Q M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 00:44*	*1*
1,2-Dinitrobenzene	*111*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 18:11*	*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		06/11/21 11:13	1
Nitrogen, Total Kjeldahl	**0.71**	**J**	1.0	1.0	0.69	mg/L		06/02/21 15:20	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/04/21 12:44	1
Sulfide	**6.4**		4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**540**	**D**	25	13	5.2	mg/L		06/16/21 13:21	5
Total Alkalinity as CaCO3	**440**		10	6.4	3.1	mg/L		06/07/21 20:01	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.6**		1.0	0.80	0.35	mg/L		06/09/21 00:05	1

Client Sample ID: G0045-21A
Lab Sample ID: 280-149116-2

Date Collected: 05/25/21 16:15
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.00079**	**J M**	0.0050	0.0020	0.00063	mg/L		06/01/21 14:15	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085	ug/L		06/05/21 01:07	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		06/05/21 01:07	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		06/05/21 01:07	1

Client Sample ID: G0045-21A

Date Collected: 05/25/21 16:15
Date Received: 05/27/21 09:45

Lab Sample ID: 280-149116-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		06/05/21 01:07	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040	ug/L		06/05/21 01:07	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		06/05/21 01:07	1
2-Nitrotoluene	0.20	U Q	0.21	0.20	0.086	ug/L		06/05/21 01:07	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.20	ug/L		06/05/21 01:07	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		06/05/21 01:07	1
4-Nitrotoluene	0.40	U Q	0.41	0.40	0.10	ug/L		06/05/21 01:07	1
HMX	0.20	U M	0.21	0.20	0.088	ug/L		06/05/21 01:07	1
MNX	0.40	U	2.0	0.40	0.16	ug/L		06/05/21 01:07	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		06/05/21 01:07	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		06/05/21 01:07	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		06/05/21 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*87*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 01:07*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.1**		0.10	0.050	0.022	mg/L		06/11/21 11:21	1
Nitrogen, Total Kjeldahl	**2.0**		1.0	1.0	0.69	mg/L		06/02/21 15:25	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/04/21 12:58	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**1300**	**D**	50	25	10	mg/L		06/15/21 19:24	10
Total Alkalinity as CaCO3	**470**		10	6.4	3.1	mg/L		06/07/21 20:10	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.0**		1.0	0.80	0.35	mg/L		06/09/21 00:20	1

Client Sample ID: G0086-21A

Date Collected: 05/25/21 14:05
Date Received: 05/27/21 09:45

Lab Sample ID: 280-149116-3

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.014**		0.0050	0.0020	0.00063	mg/L		06/01/21 14:27	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**14**	**Q M**	0.22	0.21	0.089	ug/L		06/05/21 01:30	1
1,3-Dinitrobenzene	0.11	U Q	0.12	0.11	0.039	ug/L		06/05/21 01:30	1
2,4,6-Trinitrotoluene	**4.9**	**Q**	0.12	0.11	0.048	ug/L		06/05/21 01:30	1
2,4-Dinitrotoluene	**0.053**	**J Q M**	0.11	0.084	0.029	ug/L		06/05/21 01:30	1
2,6-Dinitrotoluene	0.084	U Q	0.11	0.084	0.042	ug/L		06/05/21 01:30	1
2-Amino-4,6-dinitrotoluene	**1.4**	**Q**	0.12	0.11	0.054	ug/L		06/05/21 01:30	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.090	ug/L		06/05/21 01:30	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21	ug/L		06/05/21 01:30	1
4-Amino-2,6-dinitrotoluene	**1.1**	**Q**	0.16	0.13	0.061	ug/L		06/05/21 01:30	1
4-Nitrotoluene	0.42	U Q M	0.43	0.42	0.11	ug/L		06/05/21 01:30	1
HMX	**0.44**	**Q M**	0.22	0.21	0.093	ug/L		06/05/21 01:30	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/05/21 01:30	1

Client Sample ID: G0086-21A
Lab Sample ID: 280-149116-3

Date Collected: 05/25/21 14:05
Matrix: Water
Date Received: 05/27/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrobenzene	0.21	U Q	0.22	0.21	0.096	ug/L		06/05/21 01:30	1
RDX	**0.84**	**Q M J1**	0.22	0.21	0.054	ug/L		06/05/21 01:30	1
RDX	**0.53**	**J1**	0.22	0.21	0.054	ug/L		06/05/21 18:46	1
Tetryl	0.11	U Q M	0.12	0.11	0.034	ug/L		06/05/21 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*78*	*Q M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 01:30*	*1*
1,2-Dinitrobenzene	*84*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 18:46*	*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		06/11/21 11:23	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/02/21 15:26	1
Nitrate Nitrite as N	**5.4**		0.10	0.050	0.019	mg/L		06/04/21 13:00	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**180**		5.0	2.5	1.0	mg/L		06/15/21 19:38	1
Total Alkalinity as CaCO3	**310**		10	6.4	3.1	mg/L		06/07/21 20:17	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.0**		1.0	0.80	0.35	mg/L		06/09/21 00:35	1

Client Sample ID: PZ0018-21A
Lab Sample ID: 280-149116-4

Date Collected: 05/25/21 15:25
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**7.9**		0.0050	0.0020	0.00063	mg/L		06/01/21 14:40	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091	ug/L		06/05/21 19:21	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		06/05/21 19:21	1
2,4,6-Trinitrotoluene	**4.6**		0.12	0.11	0.049	ug/L		06/05/21 01:53	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030	ug/L		06/05/21 01:53	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		06/05/21 01:53	1
2-Amino-4,6-dinitrotoluene	**2.5**		0.12	0.11	0.055	ug/L		06/05/21 01:53	1
2-Nitrotoluene	0.22	U Q	0.23	0.22	0.092	ug/L		06/05/21 01:53	1
3-Nitrotoluene	0.43	U Q	0.43	0.43	0.21	ug/L		06/05/21 01:53	1
4-Amino-2,6-dinitrotoluene	**4.9**	**J1**	0.16	0.13	0.062	ug/L		06/05/21 01:53	1
4-Amino-2,6-dinitrotoluene	**9.7**	**J1**	0.16	0.13	0.062	ug/L		06/05/21 19:21	1
4-Nitrotoluene	0.43	U Q M	0.44	0.43	0.11	ug/L		06/05/21 01:53	1
HMX	0.22	U	0.23	0.22	0.095	ug/L		06/05/21 01:53	1
MNX	0.43	U M	2.2	0.43	0.17	ug/L		06/05/21 01:53	1
Nitrobenzene	0.22	U M	0.23	0.22	0.098	ug/L		06/05/21 01:53	1
RDX	0.22	U M	0.23	0.22	0.056	ug/L		06/05/21 01:53	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		06/05/21 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*113*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 01:53*	*1*

Client Sample ID: PZ0018-21A
Lab Sample ID: 280-149116-4

Date Collected: 05/25/21 15:25
Matrix: Water
Date Received: 05/27/21 09:45

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*		*83 - 119*	*05/31/21 14:02*	*06/05/21 19:21*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.32**	**J**	0.50	0.25	0.11	mg/L		06/11/21 11:25	5
Nitrogen, Total Kjeldahl	**2.4**		1.0	1.0	0.69	mg/L		06/02/21 15:35	1
Nitrate Nitrite as N	**5.0**		0.10	0.050	0.019	mg/L		06/04/21 13:02	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**53**		5.0	2.5	1.0	mg/L		06/15/21 19:52	1
Total Alkalinity as CaCO3	**360**		10	6.4	3.1	mg/L		06/07/21 20:25	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**11**		1.0	0.80	0.35	mg/L		06/09/21 01:20	1

Client Sample ID: SHGW03-21A
Lab Sample ID: 280-149116-5

Date Collected: 05/26/21 12:05
Matrix: Water
Date Received: 05/27/21 09:45

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		06/05/21 17:33	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 17:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/05/21 17:33	1
1,1,2-Trichloroethane	**11**		1.0	0.80	0.27	ug/L		06/05/21 17:33	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/05/21 17:33	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/05/21 17:33	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 17:33	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 17:33	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/05/21 17:33	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 17:33	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 17:33	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 17:33	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 17:33	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:33	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/05/21 17:33	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/05/21 17:33	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/05/21 17:33	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/05/21 17:33	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:33	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/05/21 17:33	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 17:33	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/05/21 17:33	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/05/21 17:33	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/05/21 17:33	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/05/21 17:33	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 17:33	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/05/21 17:33	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:33	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/05/21 17:33	1

Client Sample ID: SHGW03-21A

Date Collected: 05/26/21 12:05
Date Received: 05/27/21 09:45

Lab Sample ID: 280-149116-5

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 17:33	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:33	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/05/21 17:33	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 17:33	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/05/21 17:33	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:33	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 17:33	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 17:33	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/05/21 17:33	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/05/21 17:33	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/05/21 17:33	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/05/21 17:33	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/05/21 17:33	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/05/21 17:33	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 17:33	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 17:33	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 17:33	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:33	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/05/21 17:33	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/05/21 17:33	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/05/21 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*		*06/05/21 17:33*	*1*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*		*06/05/21 17:33*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/05/21 17:33*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*06/05/21 17:33*	*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		06/01/21 14:52	1
Methane	**0.051**		0.0050	0.0020	0.00063	mg/L		06/01/21 14:52	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/21 14:52	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	**180**	**J**	240	120	31	ug/L		06/10/21 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*80*		*56 - 125*	*05/31/21 10:59*	*06/10/21 03:59*	*1*
n-Octacosane	*92*		*60 - 142*	*05/31/21 10:59*	*06/10/21 03:59*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**7.5**		0.10	0.050	0.019	mg/L		06/04/21 13:42	1
Sulfate	**31**		5.0	2.5	1.0	mg/L		06/15/21 20:06	1
Total Alkalinity as CaCO3	**160**		10	6.4	3.1	mg/L		06/07/21 20:31	1

Client Sample ID: SHGW02-21A
Date Collected: 05/26/21 10:40
Date Received: 05/27/21 09:45

Lab Sample ID: 280-149116-6
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		06/05/21 17:54	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 17:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/05/21 17:54	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/05/21 17:54	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/05/21 17:54	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/05/21 17:54	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 17:54	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 17:54	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/05/21 17:54	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 17:54	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 17:54	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 17:54	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 17:54	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:54	1
2-Butanone (MEK)	**15**		6.0	4.0	2.0	ug/L		06/05/21 17:54	1
2-Hexanone	**55**		5.0	4.0	1.7	ug/L		06/05/21 17:54	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/05/21 17:54	1
Acetone	**9.1**	**J**	10	6.4	1.9	ug/L		06/05/21 17:54	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:54	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/05/21 17:54	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 17:54	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/05/21 17:54	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/05/21 17:54	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/05/21 17:54	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/05/21 17:54	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 17:54	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/05/21 17:54	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:54	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/05/21 17:54	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 17:54	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:54	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/05/21 17:54	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 17:54	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/05/21 17:54	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:54	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 17:54	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 17:54	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/05/21 17:54	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/05/21 17:54	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/05/21 17:54	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/05/21 17:54	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/05/21 17:54	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/05/21 17:54	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 17:54	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 17:54	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 17:54	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 17:54	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/05/21 17:54	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/05/21 17:54	1

Client Sample ID: SHGW02-21A
Lab Sample ID: 280-149116-6

Date Collected: 05/26/21 10:40
Matrix: Water
Date Received: 05/27/21 09:45

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		06/05/21 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*06/05/21 17:54*	*1*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*		*06/05/21 17:54*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/05/21 17:54*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*06/05/21 17:54*	*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		06/01/21 16:06	1
Methane	**6.1**		0.0050	0.0020	0.00063	mg/L		06/01/21 16:06	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/21 16:06	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**26**	**D**	5.0	4.5	1.5	mg/L		06/16/21 10:05	5

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.17**		0.10	0.050	0.019	mg/L		06/04/21 13:04	1
Total Alkalinity as CaCO3	**200**		10	6.4	3.1	mg/L		06/07/21 20:52	1

Client Sample ID: SHGW05-21A
Lab Sample ID: 280-149116-7

Date Collected: 05/26/21 08:00
Matrix: Water
Date Received: 05/27/21 09:45

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		06/05/21 18:15	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 18:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/05/21 18:15	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/05/21 18:15	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/05/21 18:15	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/05/21 18:15	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 18:15	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 18:15	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/05/21 18:15	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 18:15	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 18:15	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 18:15	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 18:15	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:15	1
2-Butanone (MEK)	**16**		6.0	4.0	2.0	ug/L		06/05/21 18:15	1
2-Hexanone	**56**		5.0	4.0	1.7	ug/L		06/05/21 18:15	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/05/21 18:15	1
Acetone	**8.7**	**J**	10	6.4	1.9	ug/L		06/05/21 18:15	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:15	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/05/21 18:15	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 18:15	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/05/21 18:15	1

Client Sample ID: SHGW05-21A

Date Collected: 05/26/21 08:00
Date Received: 05/27/21 09:45

Lab Sample ID: 280-149116-7

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		06/05/21 18:15	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/05/21 18:15	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/05/21 18:15	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 18:15	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/05/21 18:15	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:15	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/05/21 18:15	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 18:15	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:15	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/05/21 18:15	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 18:15	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/05/21 18:15	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:15	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 18:15	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 18:15	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/05/21 18:15	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/05/21 18:15	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/05/21 18:15	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/05/21 18:15	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/05/21 18:15	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/05/21 18:15	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 18:15	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 18:15	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 18:15	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:15	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/05/21 18:15	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/05/21 18:15	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/05/21 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*06/05/21 18:15*	*1*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*		*06/05/21 18:15*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 119*		*06/05/21 18:15*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*06/05/21 18:15*	*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		06/01/21 20:38	1
Methane	**6.9**		0.0050	0.0020	0.00063	mg/L		06/01/21 20:38	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/21 20:38	1

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**21**	**D**	5.0	4.5	1.5	mg/L		06/16/21 10:16	5

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.16**		0.10	0.050	0.019	mg/L		06/04/21 13:16	1
Total Alkalinity as CaCO3	**200**		10	6.4	3.1	mg/L		06/07/21 20:58	1

Client Sample ID: TB052621
Date Collected: 05/26/21 08:00
Date Received: 05/27/21 09:45

Lab Sample ID: 280-149116-8
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		06/05/21 18:36	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 18:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/05/21 18:36	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/05/21 18:36	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/05/21 18:36	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/05/21 18:36	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 18:36	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 18:36	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/05/21 18:36	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 18:36	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 18:36	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 18:36	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 18:36	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:36	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/05/21 18:36	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/05/21 18:36	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/05/21 18:36	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/05/21 18:36	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:36	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/05/21 18:36	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 18:36	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/05/21 18:36	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/05/21 18:36	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/05/21 18:36	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/05/21 18:36	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 18:36	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/05/21 18:36	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:36	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/05/21 18:36	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 18:36	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:36	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/05/21 18:36	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 18:36	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/05/21 18:36	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:36	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 18:36	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 18:36	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/05/21 18:36	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/05/21 18:36	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/05/21 18:36	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/05/21 18:36	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/05/21 18:36	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/05/21 18:36	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 18:36	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 18:36	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 18:36	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 18:36	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/05/21 18:36	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		06/05/21 18:36	1

Client Sample ID: TB052621
Lab Sample ID: 280-149116-8
Date Collected: 05/26/21 08:00
Matrix: Water
Date Received: 05/27/21 09:45

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		06/05/21 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*		*06/05/21 18:36*	*1*
4-Bromofluorobenzene (Surr)	*102*		*85 - 114*		*06/05/21 18:36*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*06/05/21 18:36*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*06/05/21 18:36*	*1*

Client Sample ID: G0077-21A
Lab Sample ID: 280-149116-9
Date Collected: 05/26/21 09:30
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.53**		0.0050	0.0020	0.00063	mg/L		06/01/21 20:50	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**4.3**	**M**	0.22	0.20	0.086	ug/L		06/04/21 01:20	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		06/04/21 01:20	1
2,4,6-Trinitrotoluene	**4.3**	**M**	0.11	0.10	0.046	ug/L		06/04/21 01:20	1
2,4-Dinitrotoluene	**0.061**	**J M**	0.10	0.082	0.028	ug/L		06/04/21 01:20	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		06/04/21 01:20	1
2-Amino-4,6-dinitrotoluene	**2.5**	**M**	0.11	0.10	0.052	ug/L		06/04/21 01:20	1
2-Nitrotoluene	0.20	U Q	0.22	0.20	0.088	ug/L		06/04/21 01:20	1
3-Nitrotoluene	0.41	U Q	0.41	0.41	0.20	ug/L		06/04/21 01:20	1
4-Amino-2,6-dinitrotoluene	**2.5**	**M**	0.15	0.12	0.059	ug/L		06/04/21 01:20	1
4-Nitrotoluene	0.41	U Q M	0.42	0.41	0.10	ug/L		06/04/21 01:20	1
HMX	**0.57**	**M**	0.22	0.20	0.090	ug/L		06/04/21 01:20	1
MNX	0.41	U M	2.0	0.41	0.16	ug/L		06/04/21 01:20	1
Nitrobenzene	0.20	U M	0.22	0.20	0.093	ug/L		06/04/21 01:20	1
RDX	**1.2**	**M J1**	0.22	0.20	0.053	ug/L		06/04/21 01:20	1
RDX	**0.63**	**M J1**	0.22	0.20	0.053	ug/L		06/04/21 20:41	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		06/04/21 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*90*	*M*	*83 - 119*	*06/01/21 17:35*	*06/04/21 01:20*	*1*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*06/01/21 17:35*	*06/04/21 20:41*	*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		06/11/21 11:27	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/02/21 15:36	1
Nitrate Nitrite as N	**9.0**		0.10	0.050	0.019	mg/L		06/04/21 13:30	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**140**		5.0	2.5	1.0	mg/L		06/15/21 20:48	1
Total Alkalinity as CaCO3	**310**		10	6.4	3.1	mg/L		06/07/21 21:06	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.4**		1.0	0.80	0.35	mg/L		06/09/21 01:35	1

Client Sample ID: G0078-21A
Lab Sample ID: 280-149116-10
Date Collected: 05/26/21 10:30
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.13**		0.0050	0.0020	0.00063	mg/L		06/01/21 21:03	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089	ug/L		06/05/21 02:16	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		06/05/21 02:16	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		06/05/21 02:16	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		06/05/21 02:16	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042	ug/L		06/05/21 02:16	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		06/05/21 02:16	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.090	ug/L		06/05/21 02:16	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21	ug/L		06/05/21 02:16	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		06/05/21 02:16	1
4-Nitrotoluene	0.42	U Q	0.43	0.42	0.11	ug/L		06/05/21 02:16	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		06/05/21 02:16	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/05/21 02:16	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		06/05/21 02:16	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		06/05/21 02:16	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		06/05/21 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*		*83 - 119*	*05/31/21 14:02*	*06/05/21 02:16*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.29**		0.10	0.050	0.022	mg/L		06/11/21 11:29	1
Nitrogen, Total Kjeldahl	**0.70**	**J**	1.0	1.0	0.69	mg/L		06/02/21 15:37	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/04/21 13:32	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**270**	**D**	25	13	5.2	mg/L		06/16/21 13:35	5
Total Alkalinity as CaCO3	**320**		10	6.4	3.1	mg/L		06/07/21 21:13	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.9**		1.0	0.80	0.35	mg/L		06/09/21 01:49	1

Client Sample ID: PZ017R-21A
Lab Sample ID: 280-149116-11
Date Collected: 05/26/21 08:45
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**6.5**		0.0050	0.0020	0.00063	mg/L		06/01/21 21:15	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.1**	**M**	0.22	0.21	0.088	ug/L		06/05/21 02:39	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		06/05/21 02:39	1
2,4,6-Trinitrotoluene	**10**		0.11	0.10	0.047	ug/L		06/05/21 02:39	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.029	ug/L		06/05/21 02:39	1
2,6-Dinitrotoluene	**0.36**	**J1**	0.10	0.083	0.042	ug/L		06/05/21 02:39	1

Client Sample ID: PZ017R-21A
Lab Sample ID: 280-149116-11
Date Collected: 05/26/21 08:45
Matrix: Water
Date Received: 05/27/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	**0.86**	**J1**	0.10	0.083	0.042	ug/L		06/05/21 21:06	1
2-Amino-4,6-dinitrotoluene	**3.0**		0.11	0.10	0.053	ug/L		06/05/21 02:39	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089	ug/L		06/05/21 02:39	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20	ug/L		06/05/21 02:39	1
4-Amino-2,6-dinitrotoluene	**2.7**		0.16	0.13	0.060	ug/L		06/05/21 02:39	1
4-Nitrotoluene	0.42	U Q M	0.43	0.42	0.10	ug/L		06/05/21 02:39	1
HMX	**1.6**	**M J1**	0.22	0.21	0.091	ug/L		06/05/21 02:39	1
HMX	**4.2**	**J1**	0.22	0.21	0.091	ug/L		06/05/21 21:06	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/05/21 21:06	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		06/05/21 02:39	1
RDX	**2.1**	**M**	0.22	0.21	0.054	ug/L		06/05/21 02:39	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		06/05/21 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 02:39*	*1*
1,2-Dinitrobenzene	*106*		*83 - 119*	*05/31/21 14:02*	*06/05/21 21:06*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.033**	**J**	0.10	0.050	0.022	mg/L		06/11/21 11:51	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/02/21 15:39	1
Nitrate Nitrite as N	**24**		2.5	1.3	0.48	mg/L		06/04/21 13:34	25
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**81**		5.0	2.5	1.0	mg/L		06/15/21 21:16	1
Total Alkalinity as CaCO3	**280**		10	6.4	3.1	mg/L		06/07/21 21:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.2**		1.0	0.80	0.35	mg/L		06/09/21 02:04	1

Client Sample ID: PZ021-21A
Lab Sample ID: 280-149116-12
Date Collected: 05/26/21 08:00
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**6.4**		0.0050	0.0020	0.00063	mg/L		06/01/21 21:28	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.2**	**M**	0.21	0.20	0.083	ug/L		06/05/21 03:02	1
1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.036	ug/L		06/05/21 03:02	1
2,4,6-Trinitrotoluene	**10**		0.11	0.099	0.044	ug/L		06/05/21 03:02	1
2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027	ug/L		06/05/21 03:02	1
2,6-Dinitrotoluene	**0.32**	**J1**	0.099	0.079	0.040	ug/L		06/05/21 03:02	1
2,6-Dinitrotoluene	**0.82**	**J1**	0.099	0.079	0.040	ug/L		06/05/21 21:41	1
2-Amino-4,6-dinitrotoluene	**3.3**		0.11	0.099	0.050	ug/L		06/05/21 03:02	1
2-Nitrotoluene	0.20	U Q	0.21	0.20	0.085	ug/L		06/05/21 03:02	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19	ug/L		06/05/21 03:02	1
4-Amino-2,6-dinitrotoluene	**4.0**		0.15	0.12	0.057	ug/L		06/05/21 03:02	1
4-Nitrotoluene	0.40	U Q M	0.41	0.40	0.099	ug/L		06/05/21 03:02	1

Client Sample ID: PZ021-21A
Lab Sample ID: 280-149116-12
Date Collected: 05/26/21 08:00
Matrix: Water
Date Received: 05/27/21 09:45

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
HMX	**1.6**	**M J1**	0.21	0.20	0.087	ug/L		06/05/21 03:02	1
HMX	**3.8**	**M J1**	0.21	0.20	0.087	ug/L		06/05/21 21:41	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		06/05/21 21:41	1
Nitrobenzene	0.20	U	0.21	0.20	0.090	ug/L		06/05/21 03:02	1
RDX	**2.3**	**M**	0.21	0.20	0.051	ug/L		06/05/21 03:02	1
Tetryl	0.099	U M	0.11	0.099	0.031	ug/L		06/05/21 03:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 03:02*	*1*
1,2-Dinitrobenzene	*90*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 21:41*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.028**	**J**	0.10	0.050	0.022	mg/L		06/11/21 11:53	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/02/21 15:40	1
Nitrate Nitrite as N	**23**		2.5	1.3	0.48	mg/L		06/04/21 13:36	25
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**82**		5.0	2.5	1.0	mg/L		06/15/21 21:30	1
Total Alkalinity as CaCO3	**280**		10	6.4	3.1	mg/L		06/07/21 21:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.3**		1.0	0.80	0.35	mg/L		06/09/21 02:19	1

Client Sample ID: PZ007-21A
Lab Sample ID: 280-149116-13
Date Collected: 05/25/21 13:25
Matrix: Water
Date Received: 05/27/21 09:45

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		06/01/21 12:26	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085	ug/L		06/05/21 04:34	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		06/05/21 04:34	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		06/05/21 04:34	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		06/05/21 04:34	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040	ug/L		06/05/21 04:34	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		06/05/21 04:34	1
2-Nitrotoluene	0.20	U Q J1	0.21	0.20	0.086	ug/L		06/05/21 04:34	1
3-Nitrotoluene	0.40	U Q J1	0.40	0.40	0.20	ug/L		06/05/21 04:34	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		06/05/21 04:34	1
4-Nitrotoluene	0.40	U Q J1	0.41	0.40	0.10	ug/L		06/05/21 04:34	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		06/05/21 04:34	1
MNX	0.40	U	2.0	0.40	0.16	ug/L		06/05/21 04:34	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		06/05/21 04:34	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		06/05/21 04:34	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		06/05/21 04:34	1

Client Sample ID: PZ007-21A
Lab Sample ID: 280-149116-13

Date Collected: 05/25/21 13:25
Matrix: Water
Date Received: 05/27/21 09:45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 04:34*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.035**	**J**	0.10	0.050	0.022	mg/L		06/11/21 11:15	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		06/02/21 15:30	1
Nitrate Nitrite as N	**0.80**		0.10	0.050	0.019	mg/L		06/04/21 13:10	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/01/21 12:36	1
Sulfate	**510**	**D**	25	13	5.2	mg/L		06/16/21 12:25	5
Total Alkalinity as CaCO3	**390**		10	6.4	3.1	mg/L		06/04/21 19:43	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.2**		1.0	0.80	0.35	mg/L		06/09/21 02:36	1

Client Sample ID: G0024-21A
Lab Sample ID: 280-149116-14

Date Collected: 05/26/21 08:30
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0020	U M	0.0050	0.0020	0.00063	mg/L		06/01/21 21:40	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089	ug/L		06/05/21 06:29	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039	ug/L		06/05/21 06:29	1
2,4,6-Trinitrotoluene	**0.44**		0.12	0.11	0.048	ug/L		06/05/21 06:29	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		06/05/21 06:29	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		06/05/21 06:29	1
2-Amino-4,6-dinitrotoluene	**1.2**		0.12	0.11	0.054	ug/L		06/05/21 06:29	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.091	ug/L		06/05/21 06:29	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21	ug/L		06/05/21 06:29	1
4-Amino-2,6-dinitrotoluene	**1.1**		0.16	0.13	0.061	ug/L		06/05/21 06:29	1
4-Nitrotoluene	0.42	U Q M	0.44	0.42	0.11	ug/L		06/05/21 06:29	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		06/05/21 06:29	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		06/05/21 06:29	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		06/05/21 06:29	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		06/05/21 06:29	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		06/05/21 06:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*05/31/21 14:02*	*06/05/21 06:29*	*1*
1,2-Dinitrobenzene	*91*		*83 - 119*	*05/31/21 14:02*	*06/05/21 22:16*	*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		06/11/21 11:55	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/02/21 15:48	1
Nitrate Nitrite as N	**7.8**		0.10	0.050	0.019	mg/L		06/04/21 13:38	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/01/21 15:48	1
Sulfate	**54**		5.0	2.5	1.0	mg/L		06/15/21 23:50	1

Client Sample ID: G0024-21A

Lab Sample ID: 280-149116-14

Date Collected: 05/26/21 08:30
Matrix: Water
Date Received: 05/27/21 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	**220**		10	6.4	3.1	mg/L		06/07/21 21:34	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.3**		1.0	0.80	0.35	mg/L		06/09/21 03:21	1

Client Sample ID: PZ020-21A

Lab Sample ID: 280-149116-15

Date Collected: 05/26/21 11:40
Matrix: Water
Date Received: 05/27/21 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.00079**	**J M**	0.0050	0.0020	0.00063	mg/L		06/01/21 22:54	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**2.2**		0.22	0.21	0.087	ug/L		06/05/21 06:52	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		06/05/21 06:52	1
2,4,6-Trinitrotoluene	**3.8**		0.11	0.10	0.047	ug/L		06/05/21 06:52	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		06/05/21 06:52	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		06/05/21 06:52	1
2-Amino-4,6-dinitrotoluene	**2.5**		0.11	0.10	0.053	ug/L		06/05/21 06:52	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089	ug/L		06/05/21 06:52	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20	ug/L		06/05/21 06:52	1
4-Amino-2,6-dinitrotoluene	**2.7**		0.16	0.12	0.060	ug/L		06/05/21 06:52	1
4-Nitrotoluene	0.42	U Q M	0.43	0.42	0.10	ug/L		06/05/21 06:52	1
HMX	**0.73**	**M**	0.22	0.21	0.091	ug/L		06/05/21 06:52	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		06/05/21 06:52	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		06/05/21 06:52	1
RDX	**0.68**	**M J1**	0.22	0.21	0.053	ug/L		06/05/21 06:52	1
RDX	**0.40**	**M J1**	0.22	0.21	0.053	ug/L		06/05/21 22:51	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		06/05/21 06:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*		*83 - 119*	*05/31/21 14:02*	*06/05/21 06:52*	*1*
1,2-Dinitrobenzene	*102*		*83 - 119*	*05/31/21 14:02*	*06/05/21 22:51*	*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		06/11/21 11:59	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		06/02/21 15:49	1
Nitrate Nitrite as N	**13**		0.50	0.25	0.095	mg/L		06/04/21 13:40	5
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		06/02/21 13:47	1
Sulfate	**150**		5.0	2.5	1.0	mg/L		06/16/21 00:04	1
Total Alkalinity as CaCO3	**320**		10	6.4	3.1	mg/L		06/07/21 21:42	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.5**		1.0	0.80	0.35	mg/L		06/09/21 03:36	1

Client Sample ID: RINSE 280-538637/33

Lab Sample ID: RINSE 280-538637/33

Date Collected:
Date Received:

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/04/21 12:14	1

Client Sample ID: RINSE 280-538637/49

Lab Sample ID: RINSE 280-538637/49

Date Collected:
Date Received:

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/04/21 12:46	1

Client Sample ID: RINSE 280-538637/65

Lab Sample ID: RINSE 280-538637/65

Date Collected:
Date Received:

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/04/21 13:18	1

Client Sample ID: RINSE 280-538637/81

Lab Sample ID: RINSE 280-538637/81

Date Collected:
Date Received:

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		06/04/21 13:50	1

Default Detection Limits

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

Job ID: 280-149116-1

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

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

Method: RSK-175 - Dissolved Gases (GC)

Default Detection Limits

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

Job ID: 280-149116-1

Method: RSK-175 - Dissolved Gases (GC)

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

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

Prep: 3510C

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

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Prep: 3535

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

Method: 9056A - Anions, Ion Chromatography

Analyte	LOQ	DL	Units
Sulfate	1.0	0.30	mg/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

Default Detection Limits

Client: Brice Environmental Services, Corp
Job ID: 280-149116-1
Project/Site: Cornhusker (CHAAP)

General Chemistry - Dissolved

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

Surrogate Summary

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

Job ID: 280-149116-1

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)
280-149116-5	SHGW03-21A	99	101	100	102
280-149116-6	SHGW02-21A	97	101	100	100
280-149116-7	SHGW05-21A	98	101	102	101
280-149116-8	TB052621	97	102	101	102
LCS 280-538703/4	Lab Control Sample	98	102	100	101
LCSD 280-538703/5	Lab Control Sample Dup	98	99	100	100
MB 280-538703/9	Method Blank	99	102	100	99

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		OTPH1	OTCN1
Lab Sample ID	Client Sample ID	(56-125)	(60-142)
280-149116-5	SHGW03-21A	80	92
LCS 280-537990/2-A	Lab Control Sample	113	95
MB 280-537990/1-A	Method Blank	82	94

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)
280-149116-1	G0017-21A	80 Q M
280-149116-2	G0045-21A	87 M
280-149116-3	G0086-21A	78 Q M
280-149116-4	PZ0018-21A	113 M
280-149116-9	G0077-21A	90 M
280-149116-10	G0078-21A	99
280-149116-11	PZ017R-21A	93 M
280-149116-12	PZ021-21A	93 M
280-149116-13	PZ007-21A	92 M
280-149116-13 MS	PZ007-21A	95 M
280-149116-13 MS	PZ007-21A	103
280-149116-13 MSD	PZ007-21A	95 M
280-149116-13 MSD	PZ007-21A	105
280-149116-14	G0024-21A	92 M
280-149116-15	PZ020-21A	97
LCS 280-538030/2-A	Lab Control Sample	89
LCS 280-538030/3-A	Lab Control Sample	89

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)
LCS 280-538125/2-A	Lab Control Sample	92
LCS 280-538125/3-A	Lab Control Sample	96
LCSD 280-538125/4-A	Lab Control Sample Dup	96
MB 280-538030/1-A	Method Blank	97
MB 280-538125/1-A	Method Blank	97

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	12DNB2 (83-119)
280-149116-1	G0017-21A	111 M
280-149116-3	G0086-21A	84 M
280-149116-4	PZ0018-21A	99
280-149116-9	G0077-21A	99 M
280-149116-11	PZ017R-21A	106
280-149116-12	PZ021-21A	90 M
280-149116-14	G0024-21A	91
280-149116-15	PZ020-21A	102

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

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

Lab Sample ID: MB 280-538703/9
Matrix: Water
Analysis Batch: 538703

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		06/05/21 11:07	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 11:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		06/05/21 11:07	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		06/05/21 11:07	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		06/05/21 11:07	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		06/05/21 11:07	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 11:07	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		06/05/21 11:07	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		06/05/21 11:07	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 11:07	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 11:07	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 11:07	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		06/05/21 11:07	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 11:07	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		06/05/21 11:07	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		06/05/21 11:07	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		06/05/21 11:07	1
Acetone	6.4	U	10	6.4	1.9	ug/L		06/05/21 11:07	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 11:07	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		06/05/21 11:07	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 11:07	1
Bromoform	1.0	U	1.0	1.0	0.46	ug/L		06/05/21 11:07	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		06/05/21 11:07	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		06/05/21 11:07	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		06/05/21 11:07	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 11:07	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		06/05/21 11:07	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 11:07	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		06/05/21 11:07	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 11:07	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 11:07	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		06/05/21 11:07	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 11:07	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		06/05/21 11:07	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 11:07	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		06/05/21 11:07	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 11:07	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		06/05/21 11:07	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		06/05/21 11:07	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		06/05/21 11:07	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		06/05/21 11:07	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		06/05/21 11:07	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		06/05/21 11:07	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		06/05/21 11:07	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		06/05/21 11:07	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		06/05/21 11:07	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		06/05/21 11:07	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		06/05/21 11:07	1

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

Lab Sample ID: MB 280-538703/9
Matrix: Water
Analysis Batch: 538703

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		06/05/21 11:07	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		06/05/21 11:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*		*06/05/21 11:07*	*1*
4-Bromofluorobenzene (Surr)	*102*		*85 - 114*		*06/05/21 11:07*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*06/05/21 11:07*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*06/05/21 11:07*	*1*

Lab Sample ID: LCS 280-538703/4
Matrix: Water
Analysis Batch: 538703

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	23.7		ug/L		95	74 - 131
1,1,2,2-Tetrachloroethane	25.0	25.1		ug/L		100	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	23.8		ug/L		95	80 - 119
1,1-Dichloroethane	25.0	25.9		ug/L		103	77 - 125
1,1-Dichloroethene	25.0	26.1		ug/L		104	71 - 131
1,2,3-Trichlorobenzene	25.0	23.6		ug/L		94	69 - 129
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	69 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L		95	62 - 128
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 119
1,2-Dichloroethane	25.0	25.3		ug/L		101	73 - 128
1,2-Dichloropropane	25.0	26.6		ug/L		107	78 - 122
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	80 - 119
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	79 - 118
2-Butanone (MEK)	100	86.5		ug/L		86	56 - 143
2-Hexanone	100	92.0		ug/L		92	57 - 139
4-Methyl-2-pentanone (MIBK)	100	94.1		ug/L		94	67 - 130
Acetone	100	86.4		ug/L		86	39 - 160
Benzene	25.0	25.8		ug/L		103	79 - 120
Bromochloromethane	25.0	24.6		ug/L		98	78 - 123
Bromodichloromethane	25.0	23.4		ug/L		94	79 - 125
Bromoform	25.0	24.0		ug/L		96	66 - 130
Bromomethane	25.0	26.8		ug/L		107	53 - 141
Carbon disulfide	25.0	27.3		ug/L		109	64 - 133
Carbon tetrachloride	25.0	25.7		ug/L		103	72 - 136
Chlorobenzene	25.0	24.5		ug/L		98	82 - 118
Chloroethane	25.0	26.3		ug/L		105	60 - 138
Chloroform	25.0	24.6		ug/L		98	79 - 124
Chloromethane	25.0	22.2		ug/L		89	50 - 139
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	78 - 123
cis-1,3-Dichloropropene	25.0	26.2		ug/L		105	75 - 124
Cyclohexane	25.0	25.5		ug/L		102	71 - 130
Dibromochloromethane	25.0	24.8		ug/L		99	74 - 126
Dichlorodifluoromethane	25.0	23.6		ug/L		95	32 - 152

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

Lab Sample ID: LCS 280-538703/4
Matrix: Water
Analysis Batch: 538703

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	24.8		ug/L		99	79 - 121		
Ethylene Dibromide			25.0	23.2		ug/L		93	77 - 121		
Isopropylbenzene			25.0	25.6		ug/L		102	72 - 131		
Methyl acetate			50.0	46.3		ug/L		93	56 - 136		
Methyl tert-butyl ether			25.0	25.1		ug/L		100	71 - 124		
Methylcyclohexane			25.0	24.2		ug/L		97	72 - 132		
Methylene Chloride			25.0	25.4		ug/L		102	74 - 124		
Styrene			25.0	25.2		ug/L		101	78 - 123		
Tetrachloroethene			25.0	26.0		ug/L		104	74 - 129		
Toluene			25.0	24.9		ug/L		100	80 - 121		
trans-1,2-Dichloroethene			25.0	23.8		ug/L		95	75 - 124		
trans-1,3-Dichloropropene			25.0	25.5		ug/L		102	73 - 127		
Trichloroethene			25.0	23.2		ug/L		93	79 - 123		
Trichlorofluoromethane			25.0	25.1		ug/L		101	65 - 141		
Vinyl chloride			25.0	24.9		ug/L		100	58 - 137		
Xylenes, Total			50.0	52.4		ug/L		105	79 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*
4-Bromofluorobenzene (Surr)	*102*		*85 - 114*
Dibromofluoromethane (Surr)	*100*		*80 - 119*
Toluene-d8 (Surr)	*101*		*89 - 112*

Lab Sample ID: LCSD 280-538703/5
Matrix: Water
Analysis Batch: 538703

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			25.0	23.5		ug/L		94	74 - 131	1	20
1,1,2,2-Tetrachloroethane			25.0	24.5		ug/L		98	71 - 121	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	29.0		ug/L		116	70 - 136	1	20
1,1,2-Trichloroethane			25.0	24.4		ug/L		97	80 - 119	2	20
1,1-Dichloroethane			25.0	26.3		ug/L		105	77 - 125	2	20
1,1-Dichloroethene			25.0	27.0		ug/L		108	71 - 131	4	20
1,2,3-Trichlorobenzene			25.0	25.1		ug/L		100	69 - 129	6	20
1,2,4-Trichlorobenzene			25.0	24.8		ug/L		99	69 - 130	0	20
1,2-Dibromo-3-Chloropropane			25.0	22.1		ug/L		88	62 - 128	7	20
1,2-Dichlorobenzene			25.0	26.0		ug/L		104	80 - 119	2	20
1,2-Dichloroethane			25.0	25.0		ug/L		100	73 - 128	1	20
1,2-Dichloropropane			25.0	26.3		ug/L		105	78 - 122	1	20
1,3-Dichlorobenzene			25.0	26.0		ug/L		104	80 - 119	1	20
1,4-Dichlorobenzene			25.0	25.5		ug/L		102	79 - 118	4	20
2-Butanone (MEK)			100	79.5		ug/L		79	56 - 143	8	20
2-Hexanone			100	88.9		ug/L		89	57 - 139	3	20
4-Methyl-2-pentanone (MIBK)			100	93.1		ug/L		93	67 - 130	1	20
Acetone			100	81.2		ug/L		81	39 - 160	6	20
Benzene			25.0	26.2		ug/L		105	79 - 120	2	20
Bromochloromethane			25.0	24.1		ug/L		97	78 - 123	2	20

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

Lab Sample ID: LCSD 280-538703/5
Matrix: Water
Analysis Batch: 538703

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromodichloromethane	25.0	23.6		ug/L		95	79 - 125	1	20
Bromoform	25.0	22.8		ug/L		91	66 - 130	5	20
Bromomethane	25.0	26.2		ug/L		105	53 - 141	2	20
Carbon disulfide	25.0	27.6		ug/L		110	64 - 133	1	20
Carbon tetrachloride	25.0	27.2		ug/L		109	72 - 136	6	20
Chlorobenzene	25.0	25.5		ug/L		102	82 - 118	4	20
Chloroethane	25.0	26.6		ug/L		106	60 - 138	1	20
Chloroform	25.0	24.5		ug/L		98	79 - 124	0	20
Chloromethane	25.0	21.9		ug/L		88	50 - 139	1	20
cis-1,2-Dichloroethene	25.0	24.6		ug/L		99	78 - 123	3	20
cis-1,3-Dichloropropene	25.0	26.4		ug/L		105	75 - 124	1	20
Cyclohexane	25.0	27.2		ug/L		109	71 - 130	6	20
Dibromochloromethane	25.0	25.1		ug/L		100	74 - 126	1	20
Dichlorodifluoromethane	25.0	24.4		ug/L		97	32 - 152	3	20
Ethylbenzene	25.0	26.3		ug/L		105	79 - 121	6	20
Ethylene Dibromide	25.0	23.7		ug/L		95	77 - 121	2	20
Isopropylbenzene	25.0	25.9		ug/L		104	72 - 131	1	20
Methyl acetate	50.0	43.4		ug/L		87	56 - 136	6	20
Methyl tert-butyl ether	25.0	24.1		ug/L		97	71 - 124	4	20
Methylcyclohexane	25.0	27.0		ug/L		108	72 - 132	11	20
Methylene Chloride	25.0	25.4		ug/L		101	74 - 124	0	20
Styrene	25.0	25.2		ug/L		101	78 - 123	0	20
Tetrachloroethene	25.0	26.0		ug/L		104	74 - 129	0	20
Toluene	25.0	24.9		ug/L		100	80 - 121	0	20
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	75 - 124	1	20
trans-1,3-Dichloropropene	25.0	26.1		ug/L		104	73 - 127	2	20
Trichloroethene	25.0	24.6		ug/L		99	79 - 123	6	20
Trichlorofluoromethane	25.0	26.3		ug/L		105	65 - 141	5	20
Vinyl chloride	25.0	26.7		ug/L		107	58 - 137	7	20
Xylenes, Total	50.0	51.9		ug/L		104	79 - 121	1	20

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

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-538094/7
Matrix: Water
Analysis Batch: 538094

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		06/01/21 11:51	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/01/21 11:51	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/21 11:51	1

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

Lab Sample ID: LCS 280-538094/5
Matrix: Water
Analysis Batch: 538094

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	0.122		mg/L		89	74 - 131
Methane	0.0730	0.0670		mg/L		92	73 - 125
Ethylene	0.128	0.117		mg/L		92	72 - 133

Lab Sample ID: LCSD 280-538094/6
Matrix: Water
Analysis Batch: 538094

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	0.121		mg/L		89	74 - 131	1	20
Methane	0.0730	0.0701		mg/L		96	73 - 125	5	20
Ethylene	0.128	0.117	M	mg/L		91	72 - 133	1	20

Lab Sample ID: 280-149116-13 MS
Matrix: Water
Analysis Batch: 538094

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0020	U	0.0730	0.0646		mg/L		89	73 - 125

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 538094

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0020	U	0.0730	0.0618		mg/L		85	73 - 125	5	20

Lab Sample ID: 280-149116-13 DU
Matrix: Water
Analysis Batch: 538094

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ethane	0.0015	U	0.0015	U	mg/L		NC	20
Methane	0.0020	U	0.0020	U	mg/L		NC	20
Ethylene	0.0014	U	0.0014	U	mg/L		NC	20

Lab Sample ID: MB 280-538142/38
Matrix: Water
Analysis Batch: 538142

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		06/01/21 18:35	1
Methane	0.0020	U	0.0050	0.0020	0.00063	mg/L		06/01/21 18:35	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/21 18:35	1

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

Lab Sample ID: LCS 280-538142/36
Matrix: Water
Analysis Batch: 538142

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	0.132		mg/L		96	74 - 131		
Methane			0.0730	0.0729		mg/L		100	73 - 125		
Ethylene			0.128	0.127	M	mg/L		100	72 - 133		

Lab Sample ID: LCSD 280-538142/37
Matrix: Water
Analysis Batch: 538142

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	0.128		mg/L		94	74 - 131	3	20
Methane			0.0730	0.0705		mg/L		97	73 - 125	3	20
Ethylene			0.128	0.123		mg/L		96	72 - 133	3	20

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

Lab Sample ID: MB 280-537990/1-A
Matrix: Water
Analysis Batch: 538605

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537990

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	120	U	250	120	33	ug/L		06/10/21 02:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*56 - 125*	*05/31/21 10:59*	*06/10/21 02:51*	*1*
n-Octacosane	*94*		*60 - 142*	*05/31/21 10:59*	*06/10/21 02:51*	*1*

Lab Sample ID: LCS 280-537990/2-A
Matrix: Water
Analysis Batch: 538605

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537990

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28			1980	1740		ug/L		88	36 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*113*		*56 - 125*
n-Octacosane	*95*		*60 - 142*

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-538030/1-A
Matrix: Water
Analysis Batch: 538649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538030

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		06/04/21 18:36	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		06/04/21 18:36	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		06/04/21 18:36	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		06/04/21 18:36	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		06/04/21 18:36	1

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

Lab Sample ID: MB 280-538030/1-A
Matrix: Water
Analysis Batch: 538649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538030

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		06/04/21 18:36	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		06/04/21 18:36	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		06/04/21 18:36	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		06/04/21 18:36	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		06/04/21 18:36	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		06/04/21 18:36	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		06/04/21 18:36	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		06/04/21 18:36	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		06/04/21 18:36	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		06/04/21 18:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*		*83 - 119*	*05/31/21 14:02*	*06/04/21 18:36*	*1*

Lab Sample ID: LCS 280-538030/2-A
Matrix: Water
Analysis Batch: 538649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538030

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3,5-Trinitrobenzene			2.00	1.87		ug/L		93	73 - 125		
1,3-Dinitrobenzene			2.00	1.77		ug/L		88	78 - 120		
2,4,6-Trinitrotoluene			2.00	1.84		ug/L		92	71 - 123		
2,4-Dinitrotoluene			2.00	1.65		ug/L		82	78 - 120		
2,6-Dinitrotoluene			2.00	1.67		ug/L		84	77 - 127		
2-Amino-4,6-dinitrotoluene			2.00	1.62		ug/L		81	79 - 120		
2-Nitrotoluene			2.00	1.17	Q	ug/L		59	70 - 127		
3-Nitrotoluene			2.00	1.13	Q	ug/L		57	73 - 125		
4-Amino-2,6-dinitrotoluene			2.00	1.56		ug/L		78	76 - 125		
4-Nitrotoluene			2.00	1.26	Q	ug/L		63	71 - 127		
HMX			2.00	1.83	M	ug/L		91	65 - 135		
Nitrobenzene			2.00	1.38		ug/L		69	65 - 134		
RDX			2.00	1.79		ug/L		89	68 - 130		
Tetryl			2.00	1.81		ug/L		90	64 - 128		

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

Lab Sample ID: LCS 280-538030/3-A
Matrix: Water
Analysis Batch: 538649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538030

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
MNX			2.33	2.26	M	ug/L		97	57 - 132		

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

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

Lab Sample ID: 280-149116-13 MS
Matrix: Water
Analysis Batch: 538649

Client Sample ID: PZ007-21A
Prep Type: Total/NA
Prep Batch: 538030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.20	U	2.01	1.90	M	ug/L		95	73 - 125
1,3-Dinitrobenzene	0.10	U	2.01	1.92		ug/L		95	78 - 120
2,4,6-Trinitrotoluene	0.10	U	2.01	1.90		ug/L		95	71 - 123
2,4-Dinitrotoluene	0.081	U	2.01	1.75		ug/L		87	78 - 120
2,6-Dinitrotoluene	0.081	U	2.01	1.82		ug/L		90	77 - 127
2-Amino-4,6-dinitrotoluene	0.10	U	2.01	1.69		ug/L		84	79 - 120
2-Nitrotoluene	0.20	U Q J1	2.01	1.40		ug/L		70	70 - 127
3-Nitrotoluene	0.40	U Q J1	2.01	1.36	J1	ug/L		68	73 - 125
4-Amino-2,6-dinitrotoluene	0.12	U	2.01	1.65		ug/L		82	76 - 125
4-Nitrotoluene	0.40	U Q J1	2.01	1.45	M	ug/L		72	71 - 127
HMX	0.20	U	2.01	1.84	M	ug/L		91	65 - 135
Nitrobenzene	0.20	U	2.01	1.65		ug/L		82	65 - 134
RDX	0.20	U	2.01	1.75	M	ug/L		87	68 - 130
Tetryl	0.10	U	2.01	1.87		ug/L		93	64 - 128

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

Lab Sample ID: 280-149116-13 MS
Matrix: Water
Analysis Batch: 538649

Client Sample ID: PZ007-21A
Prep Type: Total/NA
Prep Batch: 538030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	0.40	U	2.28	2.15	M	ug/L		94	57 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*103*		*83 - 119*

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 538649

Client Sample ID: PZ007-21A
Prep Type: Total/NA
Prep Batch: 538030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.20	U	2.00	1.89	M	ug/L		94	73 - 125	1	30
1,3-Dinitrobenzene	0.10	U	2.00	1.88		ug/L		94	78 - 120	2	30
2,4,6-Trinitrotoluene	0.10	U	2.00	1.92		ug/L		96	71 - 123	1	30
2,4-Dinitrotoluene	0.081	U	2.00	1.72		ug/L		86	78 - 120	2	30
2,6-Dinitrotoluene	0.081	U	2.00	1.79		ug/L		90	77 - 127	1	30
2-Amino-4,6-dinitrotoluene	0.10	U	2.00	1.68		ug/L		84	79 - 120	1	30
2-Nitrotoluene	0.20	U Q J1	2.00	1.30	J1	ug/L		65	70 - 127	7	30
3-Nitrotoluene	0.40	U Q J1	2.00	1.30	J1	ug/L		65	73 - 125	5	30
4-Amino-2,6-dinitrotoluene	0.12	U	2.00	1.65		ug/L		83	76 - 125	0	30
4-Nitrotoluene	0.40	U Q J1	2.00	1.36	J1	ug/L		68	71 - 127	7	30
HMX	0.20	U	2.00	1.88	M	ug/L		94	65 - 135	2	30
Nitrobenzene	0.20	U	2.00	1.53		ug/L		76	65 - 134	7	30
RDX	0.20	U	2.00	1.78	M	ug/L		89	68 - 130	1	30
Tetryl	0.10	U	2.00	1.89		ug/L		94	64 - 128	1	30

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

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 538649

Client Sample ID: PZ007-21A
Prep Type: Total/NA
Prep Batch: 538030

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

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 538649

Client Sample ID: PZ007-21A
Prep Type: Total/NA
Prep Batch: 538030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	0.40	U	2.37	2.17	M	ug/L		92	57 - 132	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*105*		*83 - 119*

Lab Sample ID: MB 280-538125/1-A
Matrix: Water
Analysis Batch: 538449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538125

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		06/03/21 17:17	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		06/03/21 17:17	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		06/03/21 17:17	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		06/03/21 17:17	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		06/03/21 17:17	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		06/03/21 17:17	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		06/03/21 17:17	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		06/03/21 17:17	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		06/03/21 17:17	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		06/03/21 17:17	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		06/03/21 17:17	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		06/03/21 17:17	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		06/03/21 17:17	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		06/03/21 17:17	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		06/03/21 17:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*		*83 - 119*	*06/01/21 17:35*	*06/03/21 17:17*	*1*

Lab Sample ID: LCS 280-538125/2-A
Matrix: Water
Analysis Batch: 538449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	1.83		ug/L		91	73 - 125
1,3-Dinitrobenzene	2.00	1.77		ug/L		88	78 - 120
2,4,6-Trinitrotoluene	2.00	1.79		ug/L		90	71 - 123
2,4-Dinitrotoluene	2.00	1.68		ug/L		84	78 - 120
2,6-Dinitrotoluene	2.00	1.69		ug/L		85	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.64		ug/L		82	79 - 120
2-Nitrotoluene	2.00	1.31	Q	ug/L		66	70 - 127

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

Lab Sample ID: LCS 280-538125/2-A
Matrix: Water
Analysis Batch: 538449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3-Nitrotoluene	2.00	1.38	Q	ug/L		69	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.56		ug/L		78	76 - 125
4-Nitrotoluene	2.00	1.39	Q	ug/L		69	71 - 127
HMX	2.00	1.76	M	ug/L		88	65 - 135
Nitrobenzene	2.00	1.52		ug/L		76	65 - 134
RDX	2.00	1.71		ug/L		86	68 - 130
Tetryl	2.00	1.72		ug/L		86	64 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*92*		*83 - 119*

Lab Sample ID: LCS 280-538125/3-A
Matrix: Water
Analysis Batch: 538449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.37		ug/L		101	57 - 132

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

Lab Sample ID: LCSD 280-538125/4-A
Matrix: Water
Analysis Batch: 538449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 538125

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	2.33	2.30	M	ug/L		98	57 - 132	3	30

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

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 410-138324/4
Matrix: Water
Analysis Batch: 138324

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	0.90	U	1.0	0.90	0.30	mg/L		06/16/21 05:50	1

Lab Sample ID: LCS 410-138324/3
Matrix: Water
Analysis Batch: 138324

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	7.50	7.61		mg/L		101	87 - 112

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-539549/20
Matrix: Water
Analysis Batch: 539549

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		06/11/21 10:37	1

Lab Sample ID: MB 280-539549/55
Matrix: Water
Analysis Batch: 539549

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		06/11/21 11:47	1

Lab Sample ID: LCS 280-539549/18
Matrix: Water
Analysis Batch: 539549

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	2.45		mg/L		98	90 - 110		

Lab Sample ID: LCS 280-539549/53
Matrix: Water
Analysis Batch: 539549

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

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

Lab Sample ID: LCSD 280-539549/19
Matrix: Water
Analysis Batch: 539549

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	2.51		mg/L		101	90 - 110	2	10

Lab Sample ID: LCSD 280-539549/54
Matrix: Water
Analysis Batch: 539549

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	2.58		mg/L		103	90 - 110	2	10

Lab Sample ID: 280-149116-13 MS
Matrix: Water
Analysis Batch: 539549

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	0.035	J	1.00	1.09		mg/L		105	90 - 110		

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 539549

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.035	J	1.00	1.08		mg/L		105	90 - 110	1	10

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 280-149116-15 MS
Matrix: Water
Analysis Batch: 539549

Client Sample ID: PZ020-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.050	U	1.00	1.06		mg/L		106	90 - 110

Lab Sample ID: 280-149116-15 MSD
Matrix: Water
Analysis Batch: 539549

Client Sample ID: PZ020-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.050	U	1.00	1.04		mg/L		104	90 - 110	2	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-538091/2-A
Matrix: Water
Analysis Batch: 538329

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538091

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		06/02/21 15:04	1

Lab Sample ID: LCS 280-538091/1-A
Matrix: Water
Analysis Batch: 538329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538091

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	6.00	5.75		mg/L		96	90 - 110

Lab Sample ID: 280-149116-13 MS
Matrix: Water
Analysis Batch: 538329

Client Sample ID: PZ007-21A
Prep Type: Total/NA
Prep Batch: 538091

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	2.43	J1	mg/L		81	90 - 110

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 538329

Client Sample ID: PZ007-21A
Prep Type: Total/NA
Prep Batch: 538091

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	2.90		mg/L		97	90 - 110	18	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-538637/22
Matrix: Water
Analysis Batch: 538637

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		06/04/21 11:52	1

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

Lab Sample ID: MB 280-538637/60
Matrix: Water
Analysis Batch: 538637

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		06/04/21 13:08	1

Lab Sample ID: LCS 280-538637/21
Matrix: Water
Analysis Batch: 538637

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 280-538637/59
Matrix: Water
Analysis Batch: 538637

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	4.78		mg/L		96	90 - 110		

Lab Sample ID: 280-149116-13 MS
Matrix: Water
Analysis Batch: 538637

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	0.80		4.00	5.03		mg/L		106	90 - 110		

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 538637

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.80		4.00	4.99		mg/L		105	90 - 110	1	10

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

Lab Sample ID: MB 280-537775/2-A
Matrix: Water
Analysis Batch: 537793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 537775

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		05/28/21 09:57	1

Lab Sample ID: LCS 280-537775/1-A
Matrix: Water
Analysis Batch: 537793

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 537775

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			19.0	12.8		mg/L		67	44 - 110		

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

Lab Sample ID: MB 280-538090/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 538118 — **Prep Batch: 538090**

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		06/01/21 12:36	1

Lab Sample ID: LCS 280-538090/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 538118 — **Prep Batch: 538090**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	18.6	11.2		mg/L		60	44 - 110

Lab Sample ID: 280-149116-13 MS — **Client Sample ID: PZ007-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 538118 — **Prep Batch: 538090**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	1.9	U	18.6	12.0		mg/L		65	44 - 110

Lab Sample ID: 280-149116-13 MSD — **Client Sample ID: PZ007-21A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 538118 — **Prep Batch: 538090**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	18.6	12.0		mg/L		65	44 - 110	0	20

Lab Sample ID: MB 280-538266/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 538293 — **Prep Batch: 538266**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		06/02/21 13:47	1

Lab Sample ID: LCS 280-538266/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 538293 — **Prep Batch: 538266**

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

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-539823/13 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 539823

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U M	5.0	2.5	1.0	mg/L		06/14/21 22:45	1

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

Lab Sample ID: MB 280-539823/50
Matrix: Water
Analysis Batch: 539823

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U M	5.0	2.5	1.0	mg/L		06/15/21 23:36	1

Lab Sample ID: LCS 280-539823/11
Matrix: Water
Analysis Batch: 539823

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	103		mg/L		103	87 - 112		

Lab Sample ID: LCS 280-539823/46
Matrix: Water
Analysis Batch: 539823

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	105		mg/L		105	87 - 112		

Lab Sample ID: LCSD 280-539823/12
Matrix: Water
Analysis Batch: 539823

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	103		mg/L		103	87 - 112	0	10

Lab Sample ID: LCSD 280-539823/47
Matrix: Water
Analysis Batch: 539823

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	106		mg/L		106	87 - 112	0	10

Lab Sample ID: MRL 280-539823/10
Matrix: Water
Analysis Batch: 539823

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			5.00	4.67	J	mg/L		93	50 - 150		

Lab Sample ID: 280-149116-13 MS
Matrix: Water
Analysis Batch: 539823

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	500	J1 D	100	609	J1 4 D	mg/L		113	87 - 112		

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 539823

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	500	J1 D	100	593	J1 4 D	mg/L		97	87 - 112	3	10

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: 280-149116-13 DU
Matrix: Water
Analysis Batch: 539823

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	500	J1 D	516	J1 D	mg/L		4	10

Lab Sample ID: MB 280-540037/6
Matrix: Water
Analysis Batch: 540037

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U	5.0	2.5	1.0	mg/L		06/16/21 10:39	1

Lab Sample ID: LCS 280-540037/4
Matrix: Water
Analysis Batch: 540037

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	102		mg/L		102	87 - 112

Lab Sample ID: LCSD 280-540037/5
Matrix: Water
Analysis Batch: 540037

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	102		mg/L		102	87 - 112	0	10

Lab Sample ID: MRL 280-540037/3
Matrix: Water
Analysis Batch: 540037

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.08	J	mg/L		82	50 - 150

Lab Sample ID: 280-149116-13 DU
Matrix: Water
Analysis Batch: 540037

Client Sample ID: PZ007-21A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	510	D	503	D	mg/L		2	10

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

Lab Sample ID: MB 280-539003/28-A
Matrix: Water
Analysis Batch: 539121

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	0.80	U	1.0	0.80	0.35	mg/L		06/08/21 23:34	1

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

Lab Sample ID: MB 280-539003/2-A
Matrix: Water
Analysis Batch: 539121

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	0.80	U	1.0	0.80	0.35	mg/L		06/08/21 15:57	1

Lab Sample ID: LCS 280-539003/27-A
Matrix: Water
Analysis Batch: 539121

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	24.4		mg/L		97	88 - 112

Lab Sample ID: 280-149116-13 MS
Matrix: Water
Analysis Batch: 539121

Client Sample ID: PZ007-21A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	3.2		25.0	26.8		mg/L		94	88 - 112

Lab Sample ID: 280-149116-13 MSD
Matrix: Water
Analysis Batch: 539121

Client Sample ID: PZ007-21A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	3.2		25.0	26.9		mg/L		95	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-538839/5
Matrix: Water
Analysis Batch: 538839

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	3.98	J	10	6.4	3.1	mg/L		06/04/21 19:08	1

Lab Sample ID: LCS 280-538839/4
Matrix: Water
Analysis Batch: 538839

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	193		mg/L		96	89 - 109

Lab Sample ID: MB 280-538981/31
Matrix: Water
Analysis Batch: 538981

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	6.4	U	10	6.4	3.1	mg/L		06/07/21 19:13	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 280-538981/5
Matrix: Water
Analysis Batch: 538981

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	4.37	J	10	6.4	3.1	mg/L		06/07/21 15:10	1

Lab Sample ID: LCS 280-538981/30
Matrix: Water
Analysis Batch: 538981

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	196		mg/L		98	89 - 109		

GC/MS VOA

Analysis Batch: 538703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-5	SHGW03-21A	Total/NA	Water	8260B	
280-149116-6	SHGW02-21A	Total/NA	Water	8260B	
280-149116-7	SHGW05-21A	Total/NA	Water	8260B	
280-149116-8	TB052621	Total/NA	Water	8260B	
MB 280-538703/9	Method Blank	Total/NA	Water	8260B	
LCS 280-538703/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-538703/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 538094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	RSK-175	
280-149116-2	G0045-21A	Total/NA	Water	RSK-175	
280-149116-3	G0086-21A	Total/NA	Water	RSK-175	
280-149116-4	PZ0018-21A	Total/NA	Water	RSK-175	
280-149116-5	SHGW03-21A	Total/NA	Water	RSK-175	
280-149116-6	SHGW02-21A	Total/NA	Water	RSK-175	
280-149116-13	PZ007-21A	Total/NA	Water	RSK-175	
MB 280-538094/7	Method Blank	Total/NA	Water	RSK-175	
LCS 280-538094/5	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-538094/6	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-149116-13 MS	PZ007-21A	Total/NA	Water	RSK-175	
280-149116-13 MSD	PZ007-21A	Total/NA	Water	RSK-175	
280-149116-13 DU	PZ007-21A	Total/NA	Water	RSK-175	

Analysis Batch: 538142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-7	SHGW05-21A	Total/NA	Water	RSK-175	
280-149116-9	G0077-21A	Total/NA	Water	RSK-175	
280-149116-10	G0078-21A	Total/NA	Water	RSK-175	
280-149116-11	PZ017R-21A	Total/NA	Water	RSK-175	
280-149116-12	PZ021-21A	Total/NA	Water	RSK-175	
280-149116-14	G0024-21A	Total/NA	Water	RSK-175	
280-149116-15	PZ020-21A	Total/NA	Water	RSK-175	
MB 280-538142/38	Method Blank	Total/NA	Water	RSK-175	
LCS 280-538142/36	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-538142/37	Lab Control Sample Dup	Total/NA	Water	RSK-175	

GC Semi VOA

Prep Batch: 537990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-5	SHGW03-21A	Total/NA	Water	3510C	
MB 280-537990/1-A	Method Blank	Total/NA	Water	3510C	
LCS 280-537990/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 538605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-5	SHGW03-21A	Total/NA	Water	8015C DRO	537990
MB 280-537990/1-A	Method Blank	Total/NA	Water	8015C DRO	537990
LCS 280-537990/2-A	Lab Control Sample	Total/NA	Water	8015C DRO	537990

HPLC/IC

Analysis Batch: 138324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-6	SHGW02-21A	Total/NA	Water	9056A	
280-149116-7	SHGW05-21A	Total/NA	Water	9056A	
MB 410-138324/4	Method Blank	Total/NA	Water	9056A	
LCS 410-138324/3	Lab Control Sample	Total/NA	Water	9056A	

Prep Batch: 538030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	3535	
280-149116-2	G0045-21A	Total/NA	Water	3535	
280-149116-3	G0086-21A	Total/NA	Water	3535	
280-149116-4	PZ0018-21A	Total/NA	Water	3535	
280-149116-10	G0078-21A	Total/NA	Water	3535	
280-149116-11	PZ017R-21A	Total/NA	Water	3535	
280-149116-12	PZ021-21A	Total/NA	Water	3535	
280-149116-13	PZ007-21A	Total/NA	Water	3535	
280-149116-14	G0024-21A	Total/NA	Water	3535	
280-149116-15	PZ020-21A	Total/NA	Water	3535	
MB 280-538030/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-538030/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-538030/3-A	Lab Control Sample	Total/NA	Water	3535	
280-149116-13 MS	PZ007-21A	Total/NA	Water	3535	
280-149116-13 MS	PZ007-21A	Total/NA	Water	3535	
280-149116-13 MSD	PZ007-21A	Total/NA	Water	3535	
280-149116-13 MSD	PZ007-21A	Total/NA	Water	3535	

Prep Batch: 538125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-9	G0077-21A	Total/NA	Water	3535	
MB 280-538125/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-538125/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-538125/3-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-538125/4-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 538449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-9	G0077-21A	Total/NA	Water	8330A	538125
MB 280-538125/1-A	Method Blank	Total/NA	Water	8330A	538125
LCS 280-538125/2-A	Lab Control Sample	Total/NA	Water	8330A	538125
LCS 280-538125/3-A	Lab Control Sample	Total/NA	Water	8330A	538125
LCSD 280-538125/4-A	Lab Control Sample Dup	Total/NA	Water	8330A	538125

Analysis Batch: 538649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	8330A	538030
280-149116-2	G0045-21A	Total/NA	Water	8330A	538030
280-149116-3	G0086-21A	Total/NA	Water	8330A	538030
280-149116-4	PZ0018-21A	Total/NA	Water	8330A	538030
280-149116-10	G0078-21A	Total/NA	Water	8330A	538030
280-149116-11	PZ017R-21A	Total/NA	Water	8330A	538030
280-149116-12	PZ021-21A	Total/NA	Water	8330A	538030
280-149116-13	PZ007-21A	Total/NA	Water	8330A	538030

HPLC/IC (Continued)

Analysis Batch: 538649 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-14	G0024-21A	Total/NA	Water	8330A	538030
280-149116-15	PZ020-21A	Total/NA	Water	8330A	538030
MB 280-538030/1-A	Method Blank	Total/NA	Water	8330A	538030
LCS 280-538030/2-A	Lab Control Sample	Total/NA	Water	8330A	538030
LCS 280-538030/3-A	Lab Control Sample	Total/NA	Water	8330A	538030
280-149116-13 MS	PZ007-21A	Total/NA	Water	8330A	538030
280-149116-13 MS	PZ007-21A	Total/NA	Water	8330A	538030
280-149116-13 MSD	PZ007-21A	Total/NA	Water	8330A	538030
280-149116-13 MSD	PZ007-21A	Total/NA	Water	8330A	538030

Analysis Batch: 538650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-9	G0077-21A	Total/NA	Water	8330A	538125

Analysis Batch: 538717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	8330A	538030
280-149116-3	G0086-21A	Total/NA	Water	8330A	538030
280-149116-4	PZ0018-21A	Total/NA	Water	8330A	538030
280-149116-11	PZ017R-21A	Total/NA	Water	8330A	538030
280-149116-12	PZ021-21A	Total/NA	Water	8330A	538030
280-149116-14	G0024-21A	Total/NA	Water	8330A	538030
280-149116-15	PZ020-21A	Total/NA	Water	8330A	538030

General Chemistry

Prep Batch: 537775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-537775/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-537775/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 537793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-537775/2-A	Method Blank	Total/NA	Water	9034	537775
LCS 280-537775/1-A	Lab Control Sample	Total/NA	Water	9034	537775

Prep Batch: 538090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	9030B	
280-149116-2	G0045-21A	Total/NA	Water	9030B	
280-149116-3	G0086-21A	Total/NA	Water	9030B	
280-149116-4	PZ0018-21A	Total/NA	Water	9030B	
280-149116-9	G0077-21A	Total/NA	Water	9030B	
280-149116-10	G0078-21A	Total/NA	Water	9030B	
280-149116-11	PZ017R-21A	Total/NA	Water	9030B	
280-149116-12	PZ021-21A	Total/NA	Water	9030B	
280-149116-13	PZ007-21A	Total/NA	Water	9030B	
MB 280-538090/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-538090/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-149116-13 MS	PZ007-21A	Total/NA	Water	9030B	
280-149116-13 MSD	PZ007-21A	Total/NA	Water	9030B	

General Chemistry

Prep Batch: 538091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	351.2	
280-149116-2	G0045-21A	Total/NA	Water	351.2	
280-149116-3	G0086-21A	Total/NA	Water	351.2	
280-149116-4	PZ0018-21A	Total/NA	Water	351.2	
280-149116-9	G0077-21A	Total/NA	Water	351.2	
280-149116-10	G0078-21A	Total/NA	Water	351.2	
280-149116-11	PZ017R-21A	Total/NA	Water	351.2	
280-149116-12	PZ021-21A	Total/NA	Water	351.2	
280-149116-13	PZ007-21A	Total/NA	Water	351.2	
280-149116-14	G0024-21A	Total/NA	Water	351.2	
280-149116-15	PZ020-21A	Total/NA	Water	351.2	
MB 280-538091/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-538091/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-149116-13 MS	PZ007-21A	Total/NA	Water	351.2	
280-149116-13 MSD	PZ007-21A	Total/NA	Water	351.2	

Analysis Batch: 538118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	9034	538090
280-149116-2	G0045-21A	Total/NA	Water	9034	538090
280-149116-3	G0086-21A	Total/NA	Water	9034	538090
280-149116-4	PZ0018-21A	Total/NA	Water	9034	538090
280-149116-9	G0077-21A	Total/NA	Water	9034	538090
280-149116-10	G0078-21A	Total/NA	Water	9034	538090
280-149116-11	PZ017R-21A	Total/NA	Water	9034	538090
280-149116-12	PZ021-21A	Total/NA	Water	9034	538090
280-149116-13	PZ007-21A	Total/NA	Water	9034	538090
MB 280-538090/2-A	Method Blank	Total/NA	Water	9034	538090
LCS 280-538090/1-A	Lab Control Sample	Total/NA	Water	9034	538090
280-149116-13 MS	PZ007-21A	Total/NA	Water	9034	538090
280-149116-13 MSD	PZ007-21A	Total/NA	Water	9034	538090

Prep Batch: 538121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-14	G0024-21A	Total/NA	Water	9030B	

Analysis Batch: 538145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-14	G0024-21A	Total/NA	Water	9034	538121

Prep Batch: 538266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-15	PZ020-21A	Total/NA	Water	9030B	
MB 280-538266/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-538266/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 538293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-15	PZ020-21A	Total/NA	Water	9034	538266
MB 280-538266/2-A	Method Blank	Total/NA	Water	9034	538266
LCS 280-538266/1-A	Lab Control Sample	Total/NA	Water	9034	538266

General Chemistry

Analysis Batch: 538329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	351.2	538091
280-149116-2	G0045-21A	Total/NA	Water	351.2	538091
280-149116-3	G0086-21A	Total/NA	Water	351.2	538091
280-149116-4	PZ0018-21A	Total/NA	Water	351.2	538091
280-149116-9	G0077-21A	Total/NA	Water	351.2	538091
280-149116-10	G0078-21A	Total/NA	Water	351.2	538091
280-149116-11	PZ017R-21A	Total/NA	Water	351.2	538091
280-149116-12	PZ021-21A	Total/NA	Water	351.2	538091
280-149116-13	PZ007-21A	Total/NA	Water	351.2	538091
280-149116-14	G0024-21A	Total/NA	Water	351.2	538091
280-149116-15	PZ020-21A	Total/NA	Water	351.2	538091
MB 280-538091/2-A	Method Blank	Total/NA	Water	351.2	538091
LCS 280-538091/1-A	Lab Control Sample	Total/NA	Water	351.2	538091
280-149116-13 MS	PZ007-21A	Total/NA	Water	351.2	538091
280-149116-13 MSD	PZ007-21A	Total/NA	Water	351.2	538091

Analysis Batch: 538637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	353.2	
280-149116-2	G0045-21A	Total/NA	Water	353.2	
280-149116-3	G0086-21A	Total/NA	Water	353.2	
280-149116-4	PZ0018-21A	Total/NA	Water	353.2	
280-149116-5	SHGW03-21A	Total/NA	Water	353.2	
280-149116-6	SHGW02-21A	Total/NA	Water	353.2	
280-149116-7	SHGW05-21A	Total/NA	Water	353.2	
280-149116-9	G0077-21A	Total/NA	Water	353.2	
280-149116-10	G0078-21A	Total/NA	Water	353.2	
280-149116-11	PZ017R-21A	Total/NA	Water	353.2	
280-149116-12	PZ021-21A	Total/NA	Water	353.2	
280-149116-13	PZ007-21A	Total/NA	Water	353.2	
280-149116-14	G0024-21A	Total/NA	Water	353.2	
280-149116-15	PZ020-21A	Total/NA	Water	353.2	
RINSE 280-538637/33	RINSE 280-538637/33		Water	353.2	
RINSE 280-538637/49	RINSE 280-538637/49		Water	353.2	
RINSE 280-538637/65	RINSE 280-538637/65		Water	353.2	
RINSE 280-538637/81	RINSE 280-538637/81		Water	353.2	
MB 280-538637/22	Method Blank	Total/NA	Water	353.2	
MB 280-538637/60	Method Blank	Total/NA	Water	353.2	
LCS 280-538637/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-538637/59	Lab Control Sample	Total/NA	Water	353.2	
280-149116-13 MS	PZ007-21A	Total/NA	Water	353.2	
280-149116-13 MSD	PZ007-21A	Total/NA	Water	353.2	

Analysis Batch: 538839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-13	PZ007-21A	Total/NA	Water	SM 2320B	
MB 280-538839/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-538839/4	Lab Control Sample	Total/NA	Water	SM 2320B	

General Chemistry

Analysis Batch: 538981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	SM 2320B	
280-149116-2	G0045-21A	Total/NA	Water	SM 2320B	
280-149116-3	G0086-21A	Total/NA	Water	SM 2320B	
280-149116-4	PZ0018-21A	Total/NA	Water	SM 2320B	
280-149116-5	SHGW03-21A	Total/NA	Water	SM 2320B	
280-149116-6	SHGW02-21A	Total/NA	Water	SM 2320B	
280-149116-7	SHGW05-21A	Total/NA	Water	SM 2320B	
280-149116-9	G0077-21A	Total/NA	Water	SM 2320B	
280-149116-10	G0078-21A	Total/NA	Water	SM 2320B	
280-149116-11	PZ017R-21A	Total/NA	Water	SM 2320B	
280-149116-12	PZ021-21A	Total/NA	Water	SM 2320B	
280-149116-14	G0024-21A	Total/NA	Water	SM 2320B	
280-149116-15	PZ020-21A	Total/NA	Water	SM 2320B	
MB 280-538981/31	Method Blank	Total/NA	Water	SM 2320B	
MB 280-538981/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-538981/30	Lab Control Sample	Total/NA	Water	SM 2320B	

Filtration Batch: 539003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Dissolved	Water	FILTRATION	
280-149116-2	G0045-21A	Dissolved	Water	FILTRATION	
280-149116-3	G0086-21A	Dissolved	Water	FILTRATION	
280-149116-4	PZ0018-21A	Dissolved	Water	FILTRATION	
280-149116-9	G0077-21A	Dissolved	Water	FILTRATION	
280-149116-10	G0078-21A	Dissolved	Water	FILTRATION	
280-149116-11	PZ017R-21A	Dissolved	Water	FILTRATION	
280-149116-12	PZ021-21A	Dissolved	Water	FILTRATION	
280-149116-13	PZ007-21A	Dissolved	Water	FILTRATION	
280-149116-14	G0024-21A	Dissolved	Water	FILTRATION	
280-149116-15	PZ020-21A	Dissolved	Water	FILTRATION	
MB 280-539003/28-A	Method Blank	Dissolved	Water	FILTRATION	
MB 280-539003/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-539003/27-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-149116-13 MS	PZ007-21A	Dissolved	Water	FILTRATION	
280-149116-13 MSD	PZ007-21A	Dissolved	Water	FILTRATION	

Analysis Batch: 539121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Dissolved	Water	9060A	539003
280-149116-2	G0045-21A	Dissolved	Water	9060A	539003
280-149116-3	G0086-21A	Dissolved	Water	9060A	539003
280-149116-4	PZ0018-21A	Dissolved	Water	9060A	539003
280-149116-9	G0077-21A	Dissolved	Water	9060A	539003
280-149116-10	G0078-21A	Dissolved	Water	9060A	539003
280-149116-11	PZ017R-21A	Dissolved	Water	9060A	539003
280-149116-12	PZ021-21A	Dissolved	Water	9060A	539003
280-149116-13	PZ007-21A	Dissolved	Water	9060A	539003
280-149116-14	G0024-21A	Dissolved	Water	9060A	539003
280-149116-15	PZ020-21A	Dissolved	Water	9060A	539003
MB 280-539003/28-A	Method Blank	Dissolved	Water	9060A	539003
MB 280-539003/2-A	Method Blank	Dissolved	Water	9060A	539003

General Chemistry (Continued)

Analysis Batch: 539121 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-539003/27-A	Lab Control Sample	Dissolved	Water	9060A	539003
280-149116-13 MS	PZ007-21A	Dissolved	Water	9060A	539003
280-149116-13 MSD	PZ007-21A	Dissolved	Water	9060A	539003

Analysis Batch: 539549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	350.1	
280-149116-2	G0045-21A	Total/NA	Water	350.1	
280-149116-3	G0086-21A	Total/NA	Water	350.1	
280-149116-4	PZ0018-21A	Total/NA	Water	350.1	
280-149116-9	G0077-21A	Total/NA	Water	350.1	
280-149116-10	G0078-21A	Total/NA	Water	350.1	
280-149116-11	PZ017R-21A	Total/NA	Water	350.1	
280-149116-12	PZ021-21A	Total/NA	Water	350.1	
280-149116-13	PZ007-21A	Total/NA	Water	350.1	
280-149116-14	G0024-21A	Total/NA	Water	350.1	
280-149116-15	PZ020-21A	Total/NA	Water	350.1	
MB 280-539549/20	Method Blank	Total/NA	Water	350.1	
MB 280-539549/55	Method Blank	Total/NA	Water	350.1	
LCS 280-539549/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-539549/53	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-539549/19	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-539549/54	Lab Control Sample Dup	Total/NA	Water	350.1	
280-149116-13 MS	PZ007-21A	Total/NA	Water	350.1	
280-149116-13 MSD	PZ007-21A	Total/NA	Water	350.1	
280-149116-15 MS	PZ020-21A	Total/NA	Water	350.1	
280-149116-15 MSD	PZ020-21A	Total/NA	Water	350.1	

Analysis Batch: 539823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-2	G0045-21A	Total/NA	Water	9056A	
280-149116-3	G0086-21A	Total/NA	Water	9056A	
280-149116-4	PZ0018-21A	Total/NA	Water	9056A	
280-149116-5	SHGW03-21A	Total/NA	Water	9056A	
280-149116-9	G0077-21A	Total/NA	Water	9056A	
280-149116-11	PZ017R-21A	Total/NA	Water	9056A	
280-149116-12	PZ021-21A	Total/NA	Water	9056A	
280-149116-14	G0024-21A	Total/NA	Water	9056A	
280-149116-15	PZ020-21A	Total/NA	Water	9056A	
MB 280-539823/13	Method Blank	Total/NA	Water	9056A	
MB 280-539823/50	Method Blank	Total/NA	Water	9056A	
LCS 280-539823/11	Lab Control Sample	Total/NA	Water	9056A	
LCS 280-539823/46	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-539823/12	Lab Control Sample Dup	Total/NA	Water	9056A	
LCSD 280-539823/47	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-539823/10	Lab Control Sample	Total/NA	Water	9056A	
280-149116-13 MS	PZ007-21A	Total/NA	Water	9056A	
280-149116-13 MSD	PZ007-21A	Total/NA	Water	9056A	
280-149116-13 DU	PZ007-21A	Total/NA	Water	9056A	

QC Association Summary

Client: Brice Environmental Services, Corp
Job ID: 280-149116-1
Project/Site: Cornhusker (CHAAP)

General Chemistry

Analysis Batch: 540037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-149116-1	G0017-21A	Total/NA	Water	9056A	
280-149116-10	G0078-21A	Total/NA	Water	9056A	
280-149116-13	PZ007-21A	Total/NA	Water	9056A	
MB 280-540037/6	Method Blank	Total/NA	Water	9056A	
LCS 280-540037/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-540037/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-540037/3	Lab Control Sample	Total/NA	Water	9056A	
280-149116-13 DU	PZ007-21A	Total/NA	Water	9056A	

Client Sample ID: G0017-21A
Lab Sample ID: 280-149116-1

Date Collected: 05/25/21 15:20
Matrix: Water
Date Received: 05/27/21 09:45

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	538094	06/01/21 14:03	CAS	TAL DEN
Total/NA	Prep	3535			474 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 00:44	JZ	TAL DEN
Total/NA	Prep	3535			474 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538717	06/05/21 18:11	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:13	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:20	ZPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 12:44	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	540037	06/16/21 13:21	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 00:05	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 20:01	QJB	TAL DEN

Client Sample ID: G0045-21A
Lab Sample ID: 280-149116-2

Date Collected: 05/25/21 16:15
Matrix: Water
Date Received: 05/27/21 09:45

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	538094	06/01/21 14:15	CAS	TAL DEN
Total/NA	Prep	3535			495.2 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 01:07	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:21	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:25	ZPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 12:58	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		10	10 mL	10 mL	539823	06/15/21 19:24	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 00:20	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 20:10	QJB	TAL DEN

Client Sample ID: G0086-21A
Lab Sample ID: 280-149116-3

Date Collected: 05/25/21 14:05
Matrix: Water
Date Received: 05/27/21 09:45

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	538094	06/01/21 14:27	CAS	TAL DEN
Total/NA	Prep	3535			473.4 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 01:30	JZ	TAL DEN

Client Sample ID: G0086-21A
Lab Sample ID: 280-149116-3

Date Collected: 05/25/21 14:05
Matrix: Water
Date Received: 05/27/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			473.4 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538717	06/05/21 18:46	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:23	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:26	ZPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:00	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	539823	06/15/21 19:38	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 00:35	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 20:17	QJB	TAL DEN

Client Sample ID: PZ0018-21A
Lab Sample ID: 280-149116-4

Date Collected: 05/25/21 15:25
Matrix: Water
Date Received: 05/27/21 09:45

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	538094	06/01/21 14:40	CAS	TAL DEN
Total/NA	Prep	3535			462.5 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 01:53	JZ	TAL DEN
Total/NA	Prep	3535			462.5 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538717	06/05/21 19:21	JZ	TAL DEN
Total/NA	Analysis	350.1		5	10 mL	10 mL	539549	06/11/21 11:25	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:35	ZPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:02	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	539823	06/15/21 19:52	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 01:20	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 20:25	QJB	TAL DEN

Client Sample ID: SHGW03-21A
Lab Sample ID: 280-149116-5

Date Collected: 05/26/21 12:05
Matrix: Water
Date Received: 05/27/21 09:45

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	538703	06/05/21 17:33	JLS	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	538094	06/01/21 14:52	CAS	TAL DEN
Total/NA	Prep	3510C			1041.7 mL	1 mL	537990	05/31/21 10:59	CDH	TAL DEN
Total/NA	Analysis	8015C DRO		1			538605	06/10/21 03:59	JSM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:42	ZPM	TAL DEN

Client Sample ID: SHGW03-21A

Lab Sample ID: 280-149116-5

Date Collected: 05/26/21 12:05

Matrix: Water

Date Received: 05/27/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	10 mL	10 mL	539823	06/15/21 20:06	JMB	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 20:31	QJB	TAL DEN

Client Sample ID: SHGW02-21A

Lab Sample ID: 280-149116-6

Date Collected: 05/26/21 10:40

Matrix: Water

Date Received: 05/27/21 09:45

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	538703	06/05/21 17:54	JLS	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	538094	06/01/21 16:06	CAS	TAL DEN
Total/NA	Analysis	9056A		5			138324	06/16/21 10:05	GJ35	ELLE
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:04	ZPM	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 20:52	QJB	TAL DEN

Client Sample ID: SHGW05-21A

Lab Sample ID: 280-149116-7

Date Collected: 05/26/21 08:00

Matrix: Water

Date Received: 05/27/21 09:45

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	538703	06/05/21 18:15	JLS	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	538142	06/01/21 20:38	CAS	TAL DEN
Total/NA	Analysis	9056A		5			138324	06/16/21 10:16	GJ35	ELLE
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:16	ZPM	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 20:58	QJB	TAL DEN

Client Sample ID: TB052621

Lab Sample ID: 280-149116-8

Date Collected: 05/26/21 08:00

Matrix: Water

Date Received: 05/27/21 09:45

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	538703	06/05/21 18:36	JLS	TAL DEN

Client Sample ID: G0077-21A

Lab Sample ID: 280-149116-9

Date Collected: 05/26/21 09:30

Matrix: Water

Date Received: 05/27/21 09:45

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	538142	06/01/21 20:50	CAS	TAL DEN
Total/NA	Prep	3535			488.1 mL	5 mL	538125	06/01/21 17:35	DCL	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	538449	06/04/21 01:20	JZ	TAL DEN
Total/NA	Prep	3535			488.1 mL	5 mL	538125	06/01/21 17:35	DCL	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	538650	06/04/21 20:41	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:27	RKD	TAL DEN

Client Sample ID: G0077-21A
Lab Sample ID: 280-149116-9

Date Collected: 05/26/21 09:30
Matrix: Water
Date Received: 05/27/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:36	ZPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:30	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	539823	06/15/21 20:48	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 01:35	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 21:06	QJB	TAL DEN

Client Sample ID: G0078-21A
Lab Sample ID: 280-149116-10

Date Collected: 05/26/21 10:30
Matrix: Water
Date Received: 05/27/21 09:45

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	538142	06/01/21 21:03	CAS	TAL DEN
Total/NA	Prep	3535			472.4 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 02:16	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:29	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:37	ZPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:32	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	540037	06/16/21 13:35	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 01:49	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 21:13	QJB	TAL DEN

Client Sample ID: PZ017R-21A
Lab Sample ID: 280-149116-11

Date Collected: 05/26/21 08:45
Matrix: Water
Date Received: 05/27/21 09:45

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	538142	06/01/21 21:15	CAS	TAL DEN
Total/NA	Prep	3535			479.8 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 02:39	JZ	TAL DEN
Total/NA	Prep	3535			479.8 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538717	06/05/21 21:06	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:51	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:39	ZPM	TAL DEN
Total/NA	Analysis	353.2		25	100 mL	100 mL	538637	06/04/21 13:34	ZPM	TAL DEN

Client Sample ID: PZ017R-21A
Lab Sample ID: 280-149116-11

Date Collected: 05/26/21 08:45
Matrix: Water
Date Received: 05/27/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	539823	06/15/21 21:16	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 02:04	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 21:20	QJB	TAL DEN

Client Sample ID: PZ021-21A
Lab Sample ID: 280-149116-12

Date Collected: 05/26/21 08:00
Matrix: Water
Date Received: 05/27/21 09:45

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	538142	06/01/21 21:28	CAS	TAL DEN
Total/NA	Prep	3535			505.9 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 03:02	JZ	TAL DEN
Total/NA	Prep	3535			505.9 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538717	06/05/21 21:41	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:53	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:40	ZPM	TAL DEN
Total/NA	Analysis	353.2		25	100 mL	100 mL	538637	06/04/21 13:36	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	539823	06/15/21 21:30	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 02:19	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 21:27	QJB	TAL DEN

Client Sample ID: PZ007-21A
Lab Sample ID: 280-149116-13

Date Collected: 05/25/21 13:25
Matrix: Water
Date Received: 05/27/21 09:45

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	538094	06/01/21 12:26	CAS	TAL DEN
Total/NA	Prep	3535			496.5 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 04:34	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:15	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:30	ZPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:10	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538090	06/01/21 09:21	JJM	TAL DEN
Total/NA	Analysis	9034		1			538118	06/01/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	540037	06/16/21 12:25	JMB	TAL DEN

Client Sample ID: PZ007-21A

Lab Sample ID: 280-149116-13

Date Collected: 05/25/21 13:25

Matrix: Water

Date Received: 05/27/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 02:36	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538839	06/04/21 19:43	QJB	TAL DEN

Client Sample ID: G0024-21A

Lab Sample ID: 280-149116-14

Date Collected: 05/26/21 08:30

Matrix: Water

Date Received: 05/27/21 09:45

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	538142	06/01/21 21:40	CAS	TAL DEN
Total/NA	Prep	3535			470.7 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 06:29	JZ	TAL DEN
Total/NA	Prep	3535			470.7 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538717	06/05/21 22:16	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:55	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:48	ZPM	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:38	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538121	06/01/21 12:41	JJM	TAL DEN
Total/NA	Analysis	9034		1			538145	06/01/21 15:48	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	539823	06/15/21 23:50	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 03:21	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			538981	06/07/21 21:34	QJB	TAL DEN

Client Sample ID: PZ020-21A

Lab Sample ID: 280-149116-15

Date Collected: 05/26/21 11:40

Matrix: Water

Date Received: 05/27/21 09:45

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	538142	06/01/21 22:54	CAS	TAL DEN
Total/NA	Prep	3535			481.7 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538649	06/05/21 06:52	JZ	TAL DEN
Total/NA	Prep	3535			481.7 mL	5 mL	538030	05/31/21 14:02	DCL	TAL DEN
Total/NA	Analysis	8330A		1			538717	06/05/21 22:51	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	539549	06/11/21 11:59	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	538091	06/01/21 09:30	ZPM	TAL DEN
Total/NA	Analysis	351.2		1			538329	06/02/21 15:49	ZPM	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	538637	06/04/21 13:40	ZPM	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	538266	06/02/21 12:36	JJM	TAL DEN
Total/NA	Analysis	9034		1			538293	06/02/21 13:47	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	539823	06/16/21 00:04	JMB	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	539003	06/08/21 11:25		TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	539121	06/09/21 03:36	RAF	TAL DEN

Client Sample ID: PZ020-21A
Date Collected: 05/26/21 11:40
Date Received: 05/27/21 09:45

Lab Sample ID: 280-149116-15
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	SM 2320B		1			538981	06/07/21 21:42	QJB	TAL DEN

Client Sample ID: RINSE 280-538637/33
Date Collected: N/A
Date Received:

Lab Sample ID: RINSE 280-538637/33
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 12:14	ZPM	TAL DEN

Client Sample ID: RINSE 280-538637/49
Date Collected: N/A
Date Received:

Lab Sample ID: RINSE 280-538637/49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 12:46	ZPM	TAL DEN

Client Sample ID: RINSE 280-538637/65
Date Collected: N/A
Date Received:

Lab Sample ID: RINSE 280-538637/65
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:18	ZPM	TAL DEN

Client Sample ID: RINSE 280-538637/81
Date Collected: N/A
Date Received:

Lab Sample ID: RINSE 280-538637/81
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
	Analysis	353.2		1	100 mL	100 mL	538637	06/04/21 13:50	ZPM	TAL DEN

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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: 280-149116-1
Project/Site: Cornhusker (CHAAP)

Laboratory: Eurofins TestAmerica, Denver

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

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

Laboratory: Eurofins Lancaster Laboratories Env, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	1.01	11-30-22
Alaska	State	PA00009	06-30-22
Alaska (UST)	State	17-027	02-28-22
Arizona	State	AZ0780	03-12-22
Arkansas DEQ	State	19-053-0	08-09-21
California	State	2792	01-31-22
Colorado	State	PA00009	06-30-21
Connecticut	State	PH-0746	06-30-21
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-22
Delaware (DW)	State	N/A	02-01-22
Florida	NELAP	E87997	06-30-21
Hawaii	State	N/A	01-31-22
Illinois	NELAP	004559	01-31-22
Iowa	State	361	03-02-22
Kansas	NELAP	E-10151	10-31-21
Kentucky (DW)	State	KY90088	01-01-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	12-31-21
Louisiana	NELAP	02055	06-30-21
Maine	State	2019012	03-12-22
Maryland	State	100	06-30-22
Massachusetts	State	M-PA009	06-30-21
Michigan	State	9930	01-31-22
Minnesota	NELAP	042-999-487	12-31-21
Missouri	State	450	01-31-22
Montana (DW)	State	0098	01-01-22
Montana (UST)	State	0098	01-01-22
Nebraska	State	NE-OS-32-17	01-31-22
Nevada	State	PA000092019-3	07-31-21
New Hampshire	NELAP	273019	01-10-22
New Jersey	NELAP	PA011	06-30-21
New York	NELAP	10670	04-01-22
North Carolina (DW)	State	42705	07-31-21
North Carolina (WW/SW)	State	521	12-31-21
North Dakota	State	R-205	01-31-22
Oklahoma	NELAP	R-205	08-31-21
Oregon	NELAP	PA200001-018	09-12-21
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-22
Rhode Island	State	LAO00338	01-31-22
South Carolina	State	89002002	01-31-22
Tennessee	State	02838	01-31-22
Texas	NELAP	T104704194-20-38	08-31-21
Utah	NELAP	PA000092019-16	03-01-22

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Vermont	State	VT - 36037	10-29-21
Virginia	NELAP	10561	06-14-22
Washington	State	C457	04-12-22
West Virginia (DW)	State	9906 C	12-31-21
West Virginia DEP	State	055	06-30-21
Wyoming	State	8TMS-L	01-31-22
Wyoming (UST)	A2LA	1.01	11-30-22

Method Summary

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

Job ID: 280-149116-1

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
9056A	Anions, Ion Chromatography	SW846	ELLE
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:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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: 280-149116-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-149116-1	G0017-21A	Water	05/25/21 15:20	05/27/21 09:45	
280-149116-2	G0045-21A	Water	05/25/21 16:15	05/27/21 09:45	
280-149116-3	G0086-21A	Water	05/25/21 14:05	05/27/21 09:45	
280-149116-4	PZ0018-21A	Water	05/25/21 15:25	05/27/21 09:45	
280-149116-5	SHGW03-21A	Water	05/26/21 12:05	05/27/21 09:45	
280-149116-6	SHGW02-21A	Water	05/26/21 10:40	05/27/21 09:45	
280-149116-7	SHGW05-21A	Water	05/26/21 08:00	05/27/21 09:45	
280-149116-8	TB052621	Water	05/26/21 08:00	05/27/21 09:45	
280-149116-9	G0077-21A	Water	05/26/21 09:30	05/27/21 09:45	
280-149116-10	G0078-21A	Water	05/26/21 10:30	05/27/21 09:45	
280-149116-11	PZ017R-21A	Water	05/26/21 08:45	05/27/21 09:45	
280-149116-12	PZ021-21A	Water	05/26/21 08:00	05/27/21 09:45	
280-149116-13	PZ007-21A	Water	05/25/21 13:25	05/27/21 09:45	
280-149116-14	G0024-21A	Water	05/26/21 08:30	05/27/21 09:45	
280-149116-15	PZ020-21A	Water	05/26/21 11:40	05/27/21 09:45	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VMS_MS1 Analysis Batch Number: 538548

Lab Sample ID: STD010 280-538548/24 IC Client Sample ID:

Date Analyzed: 06/04/21 10:18 Lab File ID: MS1_2712.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitropropane		Invalid Compound ID	seifertj	06/04/21 13:32
n-Butanol		Invalid Compound ID	seifertj	06/04/21 13:32

Lab Sample ID: STD020 280-538548/25 IC Client Sample ID:

Date Analyzed: 06/04/21 10:39 Lab File ID: MS1_2713.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethanol	2.91	Assign Peak	seifertj	06/04/21 10:55

Lab Sample ID: STD050 280-538548/26 IC Client Sample ID:

Date Analyzed: 06/04/21 11:00 Lab File ID: MS1_2714.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isopropyl alcohol	3.41	Assign Peak	seifertj	06/04/21 11:45

Lab Sample ID: STD10 280-538548/27 IC Client Sample ID:

Date Analyzed: 06/04/21 11:21 Lab File ID: MS1_2715.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Butanol	6.03	Peak Tail	seifertj	06/04/21 13:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VMS_MS1 Analysis Batch Number: 538548

Lab Sample ID: STD005 280-538548/14 IC Client Sample ID:

Date Analyzed: 06/04/21 13:50 Lab File ID: MS1_2722.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Methyl-2-pentanone (MIBK)		Invalid Compound ID	seifertj	06/05/21 09:04
Bromomethane		Invalid Compound ID	seifertj	06/05/21 09:03
Ethyl methacrylate		Invalid Compound ID	seifertj	06/05/21 09:04

Lab Sample ID: STD010 280-538548/15 IC Client Sample ID:

Date Analyzed: 06/04/21 14:11 Lab File ID: MS1_2723.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.70	Assign Peak	seifertj	06/05/21 09:05
Chloromethane	1.90	Assign Peak	seifertj	06/05/21 09:05
Chloroethane	2.46	Assign Peak	seifertj	06/05/21 09:05
Iodomethane	3.38	Assign Peak	seifertj	06/05/21 09:05
Methyl acetate	3.58	Assign Peak	seifertj	06/05/21 09:05
sec-Butyl Alcohol	4.99	Assign Peak	seifertj	06/05/21 09:05
Bromochloromethane	5.06	Assign Peak	seifertj	06/05/21 09:06
1,1-Dichloropropene	5.42	Assign Peak	seifertj	06/05/21 09:06
1,2-Dichloroethane	5.63	Assign Peak	seifertj	06/05/21 09:06
2-Pentanone	6.29	Assign Peak	seifertj	06/05/21 09:06
1,2-Dichloropropane	6.38	Assign Peak	seifertj	06/05/21 09:06
Ethyl methacrylate	7.52	Poor chromatography	seifertj	06/05/21 09:34
1,3-Dichloropropane	7.83	Assign Peak	seifertj	06/05/21 09:07
Bromoform	9.38	Assign Peak	seifertj	06/05/21 09:07
trans-1,4-Dichloro-2-butene	9.86	Assign Peak	seifertj	06/05/21 09:07
1,2,3-Trichloropropane	9.88	Assign Peak	seifertj	06/05/21 09:08
Isobutyl alcohol		Invalid Compound ID	seifertj	06/05/21 09:06
1,2-Dibromo-3-Chloropropane	12.03	Assign Peak	seifertj	06/05/21 09:08
Hexachlorobutadiene	12.99	Assign Peak	seifertj	06/05/21 09:08
Naphthalene	13.12	Assign Peak	seifertj	06/05/21 09:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VMS_MS1 Analysis Batch Number: 538548

Lab Sample ID: STD020 280-538548/16 IC Client Sample ID:

Date Analyzed: 06/04/21 14:33 Lab File ID: MS1_2724.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.69	Assign Peak	seifertj	06/05/21 09:09
Chloroethane	2.46	Assign Peak	seifertj	06/05/21 09:09
1,4-Dioxane	6.43	Assign Peak	seifertj	06/05/21 09:10
Bromoform	9.38	Assign Peak	seifertj	06/05/21 09:10
1,2-Dibromo-3-Chloropropane	12.02	Assign Peak	seifertj	06/05/21 09:09
Hexachlorobutadiene	12.99	Assign Peak	seifertj	06/05/21 09:09

Lab Sample ID: ICV 280-538548/23 Client Sample ID:

Date Analyzed: 06/04/21 17:24 Lab File ID: MS1_2732.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.14	Assign Peak	seifertj	06/05/21 11:42

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499937

Lab Sample ID: IC 280-499937/1 Client Sample ID:

Date Analyzed: 06/24/20 10:08 Lab File ID: 06242001.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.27	Peak not integrated	meierg	06/24/20 11:04

Lab Sample ID: IC 280-499937/1 Client Sample ID:

Date Analyzed: 06/24/20 10:08 Lab File ID: 06242001.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.37	Shouldering	meierg	06/24/20 11:03
Acetylene	2.49	Peak not integrated	meierg	06/24/20 11:03

Lab Sample ID: IC 280-499937/2 Client Sample ID:

Date Analyzed: 06/24/20 10:20 Lab File ID: 06242002.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Shouldering	meierg	06/24/20 11:05

Lab Sample ID: IC 280-499937/3 Client Sample ID:

Date Analyzed: 06/24/20 10:33 Lab File ID: 06242003.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Shouldering	meierg	06/24/20 11:08

Lab Sample ID: ICRT 280-499937/4 Client Sample ID:

Date Analyzed: 06/24/20 10:45 Lab File ID: 06242004.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Shouldering	meierg	06/24/20 11:01

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 499937

Lab Sample ID: IC 280-499937/5 Client Sample ID:

Date Analyzed: 06/24/20 10:57 Lab File ID: 06242005.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Shouldering	meierg	06/24/20 11:09

Lab Sample ID: IC 280-499937/6 Client Sample ID:

Date Analyzed: 06/24/20 11:09 Lab File ID: 06242006.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.22	Peak not integrated	meierg	06/24/20 11:22

Lab Sample ID: IC 280-499937/6 Client Sample ID:

Date Analyzed: 06/24/20 11:09 Lab File ID: 06242006.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.49	Peak not integrated	meierg	06/24/20 11:22

Lab Sample ID: ICV 280-499937/11 Client Sample ID:

Date Analyzed: 06/24/20 12:11 Lab File ID: 06242011.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.48	Shouldering	meierg	06/24/20 12:29

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 538094

Lab Sample ID: CCVRT 280-538094/4 Client Sample ID:

Date Analyzed: 06/01/21 11:14 Lab File ID: 004F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.40	Split Peak	sciannac	06/01/21 11:34
Acetylene	2.52	Split Peak	sciannac	06/01/21 11:34

Lab Sample ID: LCS 280-538094/5 Client Sample ID:

Date Analyzed: 06/01/21 11:27 Lab File ID: 005F0501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.73	Incomplete Integration	sciannac	06/02/21 09:39

Lab Sample ID: LCSD 280-538094/6 Client Sample ID:

Date Analyzed: 06/01/21 11:39 Lab File ID: 006F0601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.39	Wrong Peak	sciannac	06/02/21 09:40

Lab Sample ID: 280-149116-2 Client Sample ID: G0045-21A

Date Analyzed: 06/01/21 14:15 Lab File ID: 017F1701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.58	Split Peak	sciannac	06/02/21 09:53

Lab Sample ID: CCV 280-538094/21 Client Sample ID:

Date Analyzed: 06/01/21 15:04 Lab File ID: 021F2101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.02	Split Peak	sciannac	06/02/21 08:54

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 538094

Lab Sample ID: CCV 280-538094/21 Client Sample ID:

Date Analyzed: 06/01/21 15:04 Lab File ID: 021F2101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.38	Split Peak	sciannac	06/02/21 08:54
Acetylene	2.50	Split Peak	sciannac	06/02/21 08:54

Lab Sample ID: CCV 280-538094/35 Client Sample ID:

Date Analyzed: 06/01/21 17:58 Lab File ID: 035F3501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.03	Peak assignment corrected	sciannac	06/02/21 09:01

Lab Sample ID: CCV 280-538094/35 Client Sample ID:

Date Analyzed: 06/01/21 17:58 Lab File ID: 035F3501.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.38	Incomplete Integration	sciannac	06/02/21 09:07
Acetylene	2.50	Incomplete Integration	sciannac	06/02/21 09:06
Ethane	2.77	Incomplete Integration	sciannac	06/02/21 09:06

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 538142

Lab Sample ID: CCVRT 280-538142/4 Client Sample ID:

Date Analyzed: 06/01/21 11:14 Lab File ID: 004F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.40	Split Peak	sciannac	06/01/21 11:34
Acetylene	2.52	Split Peak	sciannac	06/01/21 11:34

Lab Sample ID: CCV 280-538142/35 Client Sample ID:

Date Analyzed: 06/01/21 17:58 Lab File ID: 035F3501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.03	Peak assignment corrected	sciannac	06/02/21 09:01

Lab Sample ID: CCV 280-538142/35 Client Sample ID:

Date Analyzed: 06/01/21 17:58 Lab File ID: 035F3501.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.38	Incomplete Integration	sciannac	06/02/21 09:07
Acetylene	2.50	Incomplete Integration	sciannac	06/02/21 09:06
Ethane	2.77	Incomplete Integration	sciannac	06/02/21 09:06

Lab Sample ID: LCS 280-538142/36 Client Sample ID:

Date Analyzed: 06/01/21 18:10 Lab File ID: 036F3601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.38	Shouldering	sciannac	06/02/21 09:19

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 538142

Lab Sample ID: 280-149116-14 Client Sample ID: G0024-21A

Date Analyzed: 06/01/21 21:40 Lab File ID: 053F5301.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.18	Peak assignment corrected	sciannac	06/02/21 10:47

Lab Sample ID: 280-149116-14 Client Sample ID: G0024-21A

Date Analyzed: 06/01/21 21:40 Lab File ID: 053F5301.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.59	Split Peak	sciannac	06/02/21 10:47

Lab Sample ID: CCV 280-538142/54 Client Sample ID:

Date Analyzed: 06/01/21 21:52 Lab File ID: 054F5401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.51	Split Peak	sciannac	06/02/21 09:08

Lab Sample ID: 280-149116-15 Client Sample ID: PZ020-21A

Date Analyzed: 06/01/21 22:54 Lab File ID: 059F5901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.19	Peak assignment corrected	sciannac	06/02/21 10:54

Lab Sample ID: 280-149116-15 Client Sample ID: PZ020-21A

Date Analyzed: 06/01/21 22:54 Lab File ID: 059F5901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.59	Split Peak	sciannac	06/02/21 10:54

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 538142

Lab Sample ID: CCV 280-538142/66 Client Sample ID:

Date Analyzed: 06/02/21 00:20 Lab File ID: 066F6601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.39	Split Peak	sciannac	06/02/21 09:10
Acetylene	2.52	Split Peak	sciannac	06/02/21 09:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 527768

Lab Sample ID: IC 280-527768/29 Client Sample ID:

Date Analyzed: 03/02/21 23:49 Lab File ID: 03020029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:18
DNX	6.83	Baseline	zhangji	03/03/21 13:18
MNX	7.24	Baseline	zhangji	03/03/21 13:18

Lab Sample ID: IC 280-527768/30 Client Sample ID:

Date Analyzed: 03/03/21 00:12 Lab File ID: 03020030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:19
DNX	6.84	Baseline	zhangji	03/03/21 13:19
MNX	7.24	Baseline	zhangji	03/03/21 13:19

Lab Sample ID: IC 280-527768/31 Client Sample ID:

Date Analyzed: 03/03/21 00:35 Lab File ID: 03020031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:19
DNX	6.83	Baseline	zhangji	03/03/21 13:19
MNX	7.24	Baseline	zhangji	03/03/21 13:19

Lab Sample ID: IC 280-527768/32 Client Sample ID:

Date Analyzed: 03/03/21 00:58 Lab File ID: 03020032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:19
DNX	6.83	Baseline	zhangji	03/03/21 13:19

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 527768

Lab Sample ID: IC 280-527768/33 Client Sample ID:

Date Analyzed: 03/03/21 01:21 Lab File ID: 03020033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:20
DNX	6.83	Baseline	zhangji	03/03/21 13:20

Lab Sample ID: IC 280-527768/34 Client Sample ID:

Date Analyzed: 03/03/21 01:44 Lab File ID: 03020034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:20
DNX	6.83	Baseline	zhangji	03/03/21 13:20

Lab Sample ID: IC 280-527768/35 Client Sample ID:

Date Analyzed: 03/03/21 02:07 Lab File ID: 03020035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:20
DNX	6.83	Baseline	zhangji	03/03/21 13:20

Lab Sample ID: IC 280-527768/36 Client Sample ID:

Date Analyzed: 03/03/21 02:30 Lab File ID: 03020036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:20
DNX	6.83	Baseline	zhangji	03/03/21 13:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 527768

Lab Sample ID: ICV 280-527768/37 Client Sample ID:

Date Analyzed: 03/03/21 02:53 Lab File ID: 03020037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:21
DNX	6.83	Baseline	zhangji	03/03/21 13:21
MNX	7.24	Baseline	zhangji	03/03/21 13:21

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 534622

Lab Sample ID: IC 280-534622/11 Client Sample ID:

Date Analyzed: 05/01/21 18:01 Lab File ID: 011-0501.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:15

Lab Sample ID: IC 280-534622/12 Client Sample ID:

Date Analyzed: 05/01/21 18:23 Lab File ID: 012-0601.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:15

Lab Sample ID: IC 280-534622/13 Client Sample ID:

Date Analyzed: 05/01/21 18:46 Lab File ID: 013-0701.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

Lab Sample ID: IC 280-534622/14 Client Sample ID:

Date Analyzed: 05/01/21 19:09 Lab File ID: 014-0801.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

Lab Sample ID: IC 280-534622/15 Client Sample ID:

Date Analyzed: 05/01/21 19:32 Lab File ID: 015-0901.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 534622

Lab Sample ID: IC 280-534622/16 Client Sample ID:

Date Analyzed: 05/01/21 19:55 Lab File ID: 016-1001.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

Lab Sample ID: IC 280-534622/17 Client Sample ID:

Date Analyzed: 05/01/21 20:18 Lab File ID: 017-1101.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

Lab Sample ID: IC 280-534622/18 Client Sample ID:

Date Analyzed: 05/01/21 20:41 Lab File ID: 018-1201.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16
RDX	7.61	Baseline	zhangji	05/04/21 13:18
Tetryl	9.98	Baseline	zhangji	05/04/21 13:23
PETN	14.68	Baseline	zhangji	05/04/21 13:18

Lab Sample ID: IC 280-534622/19 Client Sample ID:

Date Analyzed: 05/01/21 21:04 Lab File ID: 019-1301.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:17
Tetryl	9.98	Baseline	zhangji	05/04/21 13:23
Nitroglycerin	10.44	Baseline	zhangji	05/04/21 13:18
PETN	14.68	Baseline	zhangji	05/04/21 13:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 534622

Lab Sample ID: ICV 280-534622/20 Client Sample ID:

Date Analyzed: 05/01/21 21:27 Lab File ID: 020-1401.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538449

Lab Sample ID: CCV 280-538449/12 Client Sample ID:

Date Analyzed: 06/03/21 16:08 Lab File ID: 06030012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	06/03/21 17:00

Lab Sample ID: CCV 280-538449/13 Client Sample ID:

Date Analyzed: 06/03/21 16:31 Lab File ID: 06030013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	06/03/21 17:00

Lab Sample ID: LCS 280-538125/2-A Client Sample ID:

Date Analyzed: 06/03/21 17:40 Lab File ID: 06030016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	06/03/21 18:08

Lab Sample ID: LCSD 280-538125/4-A Client Sample ID:

Date Analyzed: 06/03/21 18:26 Lab File ID: 06030018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	zhangji	06/03/21 19:37

Lab Sample ID: CCV 280-538449/24 Client Sample ID:

Date Analyzed: 06/03/21 20:44 Lab File ID: 06030024.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	06/03/21 21:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538449

Lab Sample ID: CCV 280-538449/26 Client Sample ID:

Date Analyzed: 06/03/21 21:30 Lab File ID: 06030026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.50	Baseline	zhangji	06/04/21 12:47
DNX	6.80	Baseline	zhangji	06/04/21 12:47

Lab Sample ID: 280-149116-9 Client Sample ID: G0077-21A

Date Analyzed: 06/04/21 01:20 Lab File ID: 06030036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	06/04/21 13:05
RDX	7.57	Baseline	zhangji	06/04/21 13:05
1,2-Dinitrobenzene	8.51	Baseline	zhangji	06/04/21 13:05
1,3,5-Trinitrobenzene	8.63	Baseline	zhangji	06/04/21 13:05
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/04/21 13:05
4-Nitrotoluene		Invalid Compound ID	zhangji	06/04/21 13:06
MNX		Invalid Compound ID	zhangji	06/04/21 13:05
Nitrobenzene		Invalid Compound ID	zhangji	06/04/21 13:05
Tetryl		Invalid Compound ID	zhangji	06/04/21 13:05
2,4,6-Trinitrotoluene	10.91	Baseline	zhangji	06/04/21 13:06
4-Amino-2,6-dinitrotoluene	11.12	Baseline	zhangji	06/04/21 13:06
2-Amino-4,6-dinitrotoluene	11.38	Baseline	zhangji	06/04/21 13:06
2,4-Dinitrotoluene	11.71	Baseline	zhangji	06/04/21 13:06

Lab Sample ID: CCV 280-538449/38 Client Sample ID:

Date Analyzed: 06/04/21 02:06 Lab File ID: 06030038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	06/04/21 13:06
DNX	6.80	Baseline	zhangji	06/04/21 13:06

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538649

Lab Sample ID: CCV 280-538649/9 Client Sample ID:

Date Analyzed: 06/04/21 18:13 Lab File ID: 06040009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	06/04/21 18:41
DNX	6.80	Baseline	zhangji	06/04/21 18:41

Lab Sample ID: LCS 280-538030/2-A Client Sample ID:

Date Analyzed: 06/04/21 18:59 Lab File ID: 06040012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	06/04/21 19:36

Lab Sample ID: LCS 280-538030/3-A Client Sample ID:

Date Analyzed: 06/04/21 19:22 Lab File ID: 06040013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	zhangji	06/04/21 20:57

Lab Sample ID: CCV 280-538649/21 Client Sample ID:

Date Analyzed: 06/04/21 22:26 Lab File ID: 06040021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	06/05/21 10:09

Lab Sample ID: CCV 280-538649/23 Client Sample ID:

Date Analyzed: 06/04/21 23:12 Lab File ID: 06040023.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.50	Baseline	zhangji	06/05/21 10:10
DNX	6.80	Baseline	zhangji	06/05/21 10:10

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HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538649

Lab Sample ID: 280-149116-1 Client Sample ID: G0017-21A

Date Analyzed: 06/05/21 00:44 Lab File ID: 06040027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.50	Baseline	zhangji	06/05/21 10:11
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/05/21 10:11
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:11
2-Nitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:11
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:11
HMX		Invalid Compound ID	zhangji	06/05/21 10:10
MNX		Invalid Compound ID	zhangji	06/05/21 10:10
Nitrobenzene		Invalid Compound ID	zhangji	06/05/21 10:11
Tetryl		Invalid Compound ID	zhangji	06/05/21 10:11

Lab Sample ID: 280-149116-2 Client Sample ID: G0045-21A

Date Analyzed: 06/05/21 01:07 Lab File ID: 06040028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.50	Baseline	zhangji	06/05/21 10:11
HMX		Invalid Compound ID	zhangji	06/05/21 10:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538649

Lab Sample ID: 280-149116-3 Client Sample ID: G0086-21A

Date Analyzed: 06/05/21 01:30 Lab File ID: 06040029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	06/05/21 10:12
RDX	7.57	Baseline	zhangji	06/05/21 10:12
1,2-Dinitrobenzene	8.50	Incomplete Integration	zhangji	06/05/21 10:11
1,3,5-Trinitrobenzene	8.63	Incomplete Integration	zhangji	06/05/21 10:11
4-Nitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:12
MNX		Baseline	zhangji	06/05/21 10:12
Tetryl		Invalid Compound ID	zhangji	06/05/21 10:11
2,4-Dinitrotoluene	11.69	Baseline	zhangji	06/05/21 10:12

Lab Sample ID: 280-149116-4 Client Sample ID: PZ0018-21A

Date Analyzed: 06/05/21 01:53 Lab File ID: 06040030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.50	Baseline	zhangji	06/05/21 10:12
1,3,5-Trinitrobenzene	8.62	Baseline	zhangji	06/05/21 10:12
1,3-Dinitrobenzene	9.28	Baseline	zhangji	06/05/21 10:13
4-Nitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:12
MNX		Invalid Compound ID	zhangji	06/05/21 10:12
Nitrobenzene		Invalid Compound ID	zhangji	06/05/21 10:12
RDX		Invalid Compound ID	zhangji	06/05/21 10:12
Tetryl		Invalid Compound ID	zhangji	06/05/21 10:12

Lab Sample ID: 280-149116-10 Client Sample ID: G0078-21A

Date Analyzed: 06/05/21 02:16 Lab File ID: 06040031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	zhangji	06/05/21 10:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538649

Lab Sample ID: 280-149116-11 Client Sample ID: PZ017R-21A

Date Analyzed: 06/05/21 02:39 Lab File ID: 06040032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	06/05/21 10:14
MNX	7.19	Baseline	zhangji	06/05/21 10:14
RDX	7.58	Baseline	zhangji	06/05/21 10:15
1,2-Dinitrobenzene	8.50	Baseline	zhangji	06/05/21 10:15
1,3,5-Trinitrobenzene	8.63	Baseline	zhangji	06/05/21 10:15
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/05/21 10:14
4-Nitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:14
Tetryl		Invalid Compound ID	zhangji	06/05/21 10:14

Lab Sample ID: 280-149116-12 Client Sample ID: PZ021-21A

Date Analyzed: 06/05/21 03:02 Lab File ID: 06040033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	06/05/21 10:15
MNX	7.19	Baseline	zhangji	06/05/21 10:15
RDX	7.57	Baseline	zhangji	06/05/21 10:15
1,2-Dinitrobenzene	8.50	Baseline	zhangji	06/05/21 10:15
1,3,5-Trinitrobenzene	8.63	Baseline	zhangji	06/05/21 10:16
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/05/21 10:15
4-Nitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:15
Tetryl		Invalid Compound ID	zhangji	06/05/21 10:15

Lab Sample ID: CCV 280-538649/36 Client Sample ID:

Date Analyzed: 06/05/21 04:11 Lab File ID: 06040036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	06/05/21 10:16
DNX	6.80	Baseline	zhangji	06/05/21 10:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538649

Lab Sample ID: 280-149116-13 Client Sample ID: PZ007-21A

Date Analyzed: 06/05/21 04:34 Lab File ID: 06040037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.50	Baseline	zhangji	06/05/21 10:16

Lab Sample ID: 280-149116-13 MS Client Sample ID: PZ007-21A MS

Date Analyzed: 06/05/21 04:57 Lab File ID: 06040038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	06/05/21 10:16
RDX	7.57	Baseline	zhangji	06/05/21 10:16
1,2-Dinitrobenzene	8.50	Baseline	zhangji	06/05/21 10:17
1,3,5-Trinitrobenzene	8.62	Baseline	zhangji	06/05/21 10:17
4-Nitrotoluene	12.99	Baseline	zhangji	06/05/21 10:17

Lab Sample ID: 280-149116-13 MSD Client Sample ID: PZ007-21A MSD

Date Analyzed: 06/05/21 05:20 Lab File ID: 06040039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	06/05/21 10:17
RDX	7.57	Baseline	zhangji	06/05/21 10:17
1,2-Dinitrobenzene	8.50	Baseline	zhangji	06/05/21 10:17
1,3,5-Trinitrobenzene	8.63	Baseline	zhangji	06/05/21 10:17

Lab Sample ID: 280-149116-13 MS Client Sample ID: PZ007-21A MS

Date Analyzed: 06/05/21 05:43 Lab File ID: 06040040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.20	Baseline	zhangji	06/05/21 10:18

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538649

Lab Sample ID: 280-149116-13 MSD Client Sample ID: PZ007-21A MSD

Date Analyzed: 06/05/21 06:06 Lab File ID: 06040041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.20	Baseline	zhangji	06/05/21 10:18

Lab Sample ID: 280-149116-14 Client Sample ID: G0024-21A

Date Analyzed: 06/05/21 06:29 Lab File ID: 06040042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.49	Baseline	zhangji	06/05/21 10:18
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/05/21 10:18
4-Nitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:18
Tetryl		Invalid Compound ID	zhangji	06/05/21 10:18

Lab Sample ID: 280-149116-15 Client Sample ID: PZ020-21A

Date Analyzed: 06/05/21 06:52 Lab File ID: 06040043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	06/05/21 10:18
RDX	7.57	Baseline	zhangji	06/05/21 10:19
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	06/05/21 10:19
4-Nitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:19
MNX		Invalid Compound ID	zhangji	06/05/21 10:18
Tetryl		Invalid Compound ID	zhangji	06/05/21 10:19

Lab Sample ID: CCV 280-538649/46 Client Sample ID:

Date Analyzed: 06/05/21 08:01 Lab File ID: 06040046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	06/05/21 10:19

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 538649

Lab Sample ID: CCV 280-538649/48 Client Sample ID:

Date Analyzed: 06/05/21 08:47 Lab File ID: 06040048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	06/05/21 10:19
DNX	6.80	Baseline	zhangji	06/05/21 10:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 534620

Lab Sample ID: IC 280-534620/10 Client Sample ID:

Date Analyzed: 05/01/21 18:54 Lab File ID: 010-0501.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.16	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/11 Client Sample ID:

Date Analyzed: 05/01/21 19:29 Lab File ID: 011-0601.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.14	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/12 Client Sample ID:

Date Analyzed: 05/01/21 20:04 Lab File ID: 012-0701.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.18	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/13 Client Sample ID:

Date Analyzed: 05/01/21 20:39 Lab File ID: 013-0801.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/14 Client Sample ID:

Date Analyzed: 05/01/21 21:15 Lab File ID: 014-0901.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.19	Baseline Smoothing	zhangji	05/04/21 13:40

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 534620

Lab Sample ID: IC 280-534620/15 Client Sample ID:

Date Analyzed: 05/01/21 21:50 Lab File ID: 015-1001.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.17	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/16 Client Sample ID:

Date Analyzed: 05/01/21 22:25 Lab File ID: 016-1101.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/17 Client Sample ID:

Date Analyzed: 05/01/21 23:00 Lab File ID: 017-1201.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.18	Baseline Smoothing	zhangji	05/04/21 13:41

Lab Sample ID: IC 280-534620/18 Client Sample ID:

Date Analyzed: 05/01/21 23:35 Lab File ID: 018-1301.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:41

Lab Sample ID: ICV 280-534620/19 Client Sample ID:

Date Analyzed: 05/02/21 00:10 Lab File ID: 019-1401.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.19	Baseline Smoothing	zhangji	05/04/21 13:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 538650

Lab Sample ID: 280-149116-9 Client Sample ID: G0077-21A

Date Analyzed: 06/04/21 20:41 Lab File ID: 06040014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	zhangji	06/05/21 10:20
RDX	8.85	Baseline Smoothing	zhangji	06/05/21 10:20
2-Nitrotoluene		Invalid Compound ID	zhangji	06/05/21 10:20
MNX		Invalid Compound ID	zhangji	06/05/21 10:20
1,2-Dinitrobenzene	13.02	Baseline Smoothing	zhangji	06/05/21 10:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 538717

Lab Sample ID: 280-149116-1 Client Sample ID: G0017-21A

Date Analyzed: 06/05/21 18:11 Lab File ID: 06050017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	zhangji	06/08/21 16:14
Nitrobenzene		Baseline Smoothing	zhangji	06/08/21 16:14
RDX		Invalid Compound ID	zhangji	06/08/21 16:14
1,2-Dinitrobenzene	13.03	Baseline Smoothing	zhangji	06/08/21 16:14
1,3-Dinitrobenzene	15.43	Baseline Smoothing	zhangji	06/08/21 16:14
3-Nitrotoluene	18.03	Baseline Smoothing	zhangji	06/08/21 16:14
2-Amino-4,6-dinitrotoluene	18.36	Baseline Smoothing	zhangji	06/08/21 16:14

Lab Sample ID: 280-149116-3 Client Sample ID: G0086-21A

Date Analyzed: 06/05/21 18:46 Lab File ID: 06050018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	zhangji	06/08/21 16:15
2-Nitrotoluene		Invalid Compound ID	zhangji	06/08/21 16:15
1,2-Dinitrobenzene	13.02	Baseline Smoothing	zhangji	06/08/21 16:15

Lab Sample ID: 280-149116-4 Client Sample ID: PZ0018-21A

Date Analyzed: 06/05/21 19:21 Lab File ID: 06050019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.66	Baseline Smoothing	zhangji	06/08/21 16:34
RDX	8.88	Baseline Smoothing	zhangji	06/08/21 16:34
2-Nitrotoluene		Invalid Compound ID	zhangji	06/08/21 16:34
Nitrobenzene		Invalid Compound ID	zhangji	06/08/21 16:33

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 538717

Lab Sample ID: 280-149116-11 Client Sample ID: PZ017R-21A

Date Analyzed: 06/05/21 21:06 Lab File ID: 06050022.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/08/21 16:35
2-Nitrotoluene		Invalid Compound ID	zhangji	06/08/21 16:35
MNX		Invalid Compound ID	zhangji	06/08/21 16:35

Lab Sample ID: 280-149116-12 Client Sample ID: PZ021-21A

Date Analyzed: 06/05/21 21:41 Lab File ID: 06050023.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline Smoothing	zhangji	06/08/21 16:36
RDX	8.87	Baseline Smoothing	zhangji	06/08/21 16:36
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	06/08/21 16:36
2-Nitrotoluene		Invalid Compound ID	zhangji	06/08/21 16:36
MNX		Invalid Compound ID	zhangji	06/08/21 16:36
1,2-Dinitrobenzene	13.04	Baseline Smoothing	zhangji	06/08/21 16:36

Lab Sample ID: 280-149116-14 Client Sample ID: G0024-21A

Date Analyzed: 06/05/21 22:16 Lab File ID: 06050024.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.87	Baseline Smoothing	zhangji	06/08/21 16:36
2-Nitrotoluene		Invalid Compound ID	zhangji	06/08/21 16:36
4-Amino-2,6-dinitrotoluene	17.46	Baseline Smoothing	zhangji	06/08/21 16:37

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 538717

Lab Sample ID: 280-149116-15 Client Sample ID: PZ020-21A

Date Analyzed: 06/05/21 22:51 Lab File ID: 06050025.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.70	Baseline Smoothing	zhangji	06/08/21 16:37
RDX	8.87	Baseline Smoothing	zhangji	06/08/21 16:37
2-Nitrotoluene		Invalid Compound ID	zhangji	06/08/21 16:37
MNX		Invalid Compound ID	zhangji	06/08/21 16:37
2,4-Dinitrotoluene	20.61	Baseline Smoothing	zhangji	06/08/21 16:37

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 539823

Lab Sample ID: STD1 280-539823/2 IC Client Sample ID:

Date Analyzed: 06/14/21 20:12 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.86	Baseline Smoothing	battilloj	06/15/21 12:20

Lab Sample ID: STD2 280-539823/3 IC Client Sample ID:

Date Analyzed: 06/14/21 20:26 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.86	Baseline Smoothing	battilloj	06/15/21 12:21
Chloride	3.98	Baseline Smoothing	battilloj	06/15/21 12:21

Lab Sample ID: STD3 280-539823/4 IC Client Sample ID:

Date Analyzed: 06/14/21 20:40 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.86	Baseline Smoothing	jindaratc	06/14/21 21:13

Lab Sample ID: STD4 280-539823/5 IC Client Sample ID:

Date Analyzed: 06/14/21 20:54 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.87	Baseline Smoothing	jindaratc	06/14/21 21:13

Lab Sample ID: ICB 280-539823/8 Client Sample ID:

Date Analyzed: 06/14/21 21:36 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.29	Baseline Smoothing	battilloj	06/16/21 09:47

9056A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 539823

Lab Sample ID: ICV 280-539823/9 Client Sample ID:

Date Analyzed: 06/14/21 21:50 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.86	Baseline Smoothing	battilloj	06/15/21 12:24

Lab Sample ID: MB 280-539823/13 Client Sample ID:

Date Analyzed: 06/14/21 22:45 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.27	Peak not integrated	battilloj	06/16/21 10:12

Lab Sample ID: CCB 280-539823/25 Client Sample ID:

Date Analyzed: 06/15/21 17:46 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.32	Baseline Smoothing	battilloj	06/16/21 10:13

Lab Sample ID: CCB 280-539823/37 Client Sample ID:

Date Analyzed: 06/15/21 20:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.32	Peak not integrated	battilloj	06/16/21 10:15

Lab Sample ID: CCB 280-539823/49 Client Sample ID:

Date Analyzed: 06/15/21 23:22 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.31	Baseline Smoothing	battilloj	06/16/21 10:17

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 539823

Lab Sample ID: MB 280-539823/50 Client Sample ID:

Date Analyzed: 06/15/21 23:36 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.31	Baseline Smoothing	battilloj	06/16/21 10:17

Lab Sample ID: CCB 280-539823/62 Client Sample ID:

Date Analyzed: 06/16/21 02:10 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.28	Baseline Smoothing	battilloj	06/16/21 10:19

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00471	06/18/21	06/11/21	Di Water, Lot na	100 mL	NH3 CAL STD_00033	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00033	02/28/22		Ricca, Lot 4008G09		(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV_00460	06/18/21	06/11/21	na, Lot na	100 mL	NH3 ICV STD_00029	10 mL	Ammonia	100.2 mg/L
.NH3 ICV STD_00029	08/01/21		Inorganic Ventures, Lot N2-NH669544		(Purchased Reagent)		Ammonia	1002 mg/L
8015 LCS_00088	09/10/21	03/10/21	ACETONE, Lot Acetone_00478	200 mL	8015 DROStock_00710	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_00711	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_00713	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_00719	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_00720	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_00721	1 mL	#2 Diesel Fuel	2000 ug/mL
							C10-C22	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

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_00722	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_00723	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_00710	01/31/30		Accustandard, Lot 219091457		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00711	01/31/30		Accustandard, Lot 219091457		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00713	01/31/30		Accustandard, Lot 219091457		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	49050 ug/mL
							C10-C28	49600 ug/mL
							C10-C32	49800 ug/mL
							C10-C36	50000 ug/mL
							C8-C34	50000 ug/mL
.8015 DROStock_00719	01/13/30		Accustandard, Lot 220011117		(Purchased Reagent)		#2 Diesel Fuel	50000 ug/mL
							C10-C22	50000 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

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_00720	01/13/30		Accustandard, Lot 220011117		(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_00721	01/13/30		Accustandard, Lot 220011117		(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_00722	01/13/30		Accustandard, Lot 220011117		(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_00723	01/13/30		Accustandard, Lot 220011117		(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_00197	09/25/21	05/27/21	90:10 Acetone:MeCl2, Lot 90Ace10MeCl2_00068	500 mL	DRO_SURR_00156	0.5 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
					DRO_SURR_00162	1 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
					DRO_SURR_00163	1 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
					DRO_SURR_00164	1 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
.DRO_SURR_00156	10/17/22		Accustandard, Lot 219101198		(Purchased Reagent)		n-Octacosane	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_SURR_00162	10/17/22	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_SURR_00163	10/17/22	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_SURR_00164	10/17/22	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
8330 DMT_00008	05/31/21	01/08/21	Acetonitrile, Lot 257727	5 mL	MNX,TNX,DNX_00051	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00051	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 DMT_00009	12/02/21	06/02/21	Acetonitrile, Lot ACN 237	5 mL	MNX,TNX,DNX_00059	1 mL	MNX	23.34 ug/mL
.MNX,TNX,DNX_00059	04/30/22	Agilent, Lot 0006599273			(Purchased Reagent)		MNX	116.7 ug/mL
8330 LCS_00108	09/02/21	03/31/21	Acetonitrile, Lot Acetonitrile_00050	100 mL	8330_NG_Stk_00101	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00102	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00104	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00105	1 mL	PETN	100 ug/mL
					8330LCSMix1_00121	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00023	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_00097	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00101	05/31/23	Restek, Lot A0161120			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00102	05/31/23	Restek, Lot A0161120			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00104	12/31/23	Restek, Lot A0167376			(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00105	12/31/23	Restek, Lot A0167376			(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00121	08/31/25	Restek, Lot A0163590			(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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							RDX	1000 ug/mL
.8330LCSmix2_00023	11/30/25	Restek, Lot A0165983			(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_00097	09/30/25	Restek, Lot A0164473			(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00009	05/31/21	08/14/20	Acetonitrile, Lot Acetonitrile_00045	25 mL	MNX,TNX,DNX_00048	1 mL	MNX	11.67 ug/mL
					MNX,TNX,DNX_00049	0.5 mL	MNX	11.67 ug/mL
					MNX,TNX,DNX_00050	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00048	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		MNX	116.7 ug/mL
.MNX,TNX,DNX_00049	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		MNX	116.7 ug/mL
.MNX,TNX,DNX_00050	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00010	05/31/21	03/03/21	Acetonitrile, Lot Acetonitrile_00051	20 mL	MNX,TNX,DNX_00052	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
					MNX,TNX,DNX_00053	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00052	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
.MNX,TNX,DNX_00053	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330_OP_DMT_00011	04/30/22	06/01/21	Acetonitrile, Lot Acetonitrile_00054	10 mL	MNX,TNX,DNX_00054	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00054	04/30/22	Agilent, Lot 0006594482			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00067	05/22/21	11/18/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00094	200 uL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00087	200 uL	PETN	100 ug/mL
					8330ICALStock_00030	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00064	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00094	06/30/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22		Restek, Lot A0154763		(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330 Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00015	03/31/22		Ultra Scientific, Lot CT-0801		(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00164	07/01/26		AccuStandard, Lot 216071012		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00064	05/22/21		AccuStandard, Lot 214121302-02		(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00068	10/30/21	04/30/21	Acetonitrile, Lot ACN_237	10 mL	8330ICALStock_00031	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
.8330ICALStock_00031	03/31/22	04/30/21	Acetonitrile, Lot ACN_237	10 mL	8330 Stock_TS_00018	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00168	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00018	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00168	04/30/22	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00124	09/29/21	03/29/21	Acetonitrile, Lot Acetonitrile_00050	400 mL	8330SurrStkSS_00185	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00188	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00192	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330SurrStkSS_00193	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00185	05/31/25	Restek, Lot A0160559			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00188	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00192	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00193	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_00967	06/11/21	06/04/21	Di Water, Lot na	1000 mL	Alk stk std_00019	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00019	08/31/21	Fischer, Lot 194904			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
DRO_L4/CCV_00102	11/05/21	05/27/21	Methylene Chloride, Lot MeCl2_Cycl_00464	10 mL	DRO_SURR_00125	50 uL	n-Octacosane	25 ug/mL
							o-Terphenyl (Surr)	25 ug/mL
.DRO_SURR_00125	11/05/21	Accustandard, Lot 219101198			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_L4/CCV_00102	11/05/21	05/27/21	Methylene Chloride, Lot MeCl2_Cycl_00464	10 mL	DRO_Fuel2_00145	1 mL	C10-C28	4960 ug/mL
.DRO_Fuel2_00145	05/27/22	Restek, Lot A0163966			(Purchased Reagent)		C10-C28	49600 ug/mL
DRO_RTMKR_00062	10/23/21	04/23/21	Methylene Chloride, Lot MeCl2_cycl_00463	5 mL	DRO_RTMKR1_00120	625 uL	C10-C28	1250 ug/mL
							n-Octacosane	250 ug/mL
					DRO_RTMKR2_00065	625 uL	n-Octacosane	250 ug/mL
.DRO_RTMKR1_00120	10/22/29	Accustandard, Lot 219101211			(Purchased Reagent)		C10-C28	10000 ug/mL
							n-Octacosane	1000 ug/mL
.DRO_RTMKR2_00065	04/30/22	Ultra Scientific, Lot CT-1500			(Purchased Reagent)		n-Octacosane	1000 ug/mL
IC CAL cl/so4_00370	06/15/21	06/08/21	Di Water, Lot na	100 mL	IC CL cal_00064	25 mL	Chloride	250 mg/L
					IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC CL cal_00064	02/28/22	SPEX CertiPrep, Lot 5-67CL-2Y			(Purchased Reagent)		Chloride	1000 mg/L
.IC sulfatecal_00062	12/30/21	SPEX CertiPrep, Lot 5-48SO4-2x			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00371	06/22/21	06/15/21	Di Water, Lot na	100 mL	IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00062	12/30/21	SPEX CertiPrep, Lot 5-48SO4-2x			(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00584	06/15/21	06/08/21	Di Water, Lot NA	100 mL	IC BR ICV_00020	5 mL	Bromide	50 mg/L
					IC FL cal_00017	5 mL	Fluoride	50 mg/L
.IC BR ICV_00020	04/01/22	ricca, Lot 4010N41			(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00017	01/31/22	Ricca, Lot 2008B18			(Purchased Reagent)		Fluoride	1000 mg/L
IC LCS_01814	06/15/21	06/08/21	Di Water, Lot 27	200 mL	IC sulfatecal_00063	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00063	02/28/22	SPEX CertiPrep, Lot 5-48SO4-2x			(Purchased Reagent)		Sulfate	1000 mg/L
IC LCS_01815	06/22/21	06/15/21	Di Water, Lot 27	200 mL	IC sulfatecal_00063	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00063	02/28/22	SPEX CertiPrep, Lot 5-48SO4-2x			(Purchased Reagent)		Sulfate	1000 mg/L
IC SO4 ICV_00022	07/06/22	ERA, Lot 060720m			(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00707	06/22/21	06/15/21	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00023	5 mL	Sulfate	5000.51 mg/L
.IC SPK 6 ANIO_00023	09/29/21	09/29/20	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00006	18.1408 g	Sulfate	10001 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..IC MS/MSD S04_00006	09/29/23		FISHER, Lot 147276		(Purchased Reagent)		Sulfate	0.5513 g/g
mv-Cent BFB_00003							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					mv-IS/SS Tune_00001	10 mL	BFB	50 ug/mL
.mv-IS/SS Tune_00001	11/30/23		Restek, Lot A0143593		(Purchased Reagent)		BFB	250 ug/mL
mv-Cent IS_00006	07/31/23	02/24/20	P&T Methanol, Lot 1996628	5 mL	MV-568718-D_00016	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.MV-568718-D_00016	07/31/23		RESTEK, Lot A0139459		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
MV-Gas A_00089	06/06/21	05/06/21	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00012	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00007	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
.MV-569722_00012	03/31/23		RESTEK, Lot A0159085		(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_00007	02/28/22		RESTEK, Lot A0158872		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas B_00091	06/20/21	05/20/21	P&T Methanol, Lot 198123	12.5 mL	MV-569722.sec_00010	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722.sec_00010	10/31/21		RESTEK, Lot A0142594		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	2500 ug/mL
mv-IS_SS_00018	08/27/21	02/27/21	P&T Methanol, Lot 198123	50 mL	mv-30241_00008	1000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
					MV-567650_00028	1000 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.mv-30241_00008	10/31/22	Restek, Lot A0131578			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
.MV-567650_00028	11/30/22	Restek, Lot A0132615			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-MegaMain B_00047	06/22/21	05/22/21	P&T Methanol, Lot 181124	25 mL	MV-569721.sec_00006	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-571992.sec_00005	1000 uL	1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							Benzene	100 ug/mL
							Bromochloromethane	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromochloromethane	100 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00050	06/08/21	05/08/21	P&T Methanol, Lot 181124	25 mL	MV-568720_00033	1250 uL	Acrolein	987.5 ug/mL
					MV-569721_00008	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-569724_00025	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00010	3000 uL	Cyclohexanone	3000 ug/mL
					MV-571992_00004	1000 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							3-Chloro-1-propene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							4-Isopropyltoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromochloromethane	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromochloromethane	100 ug/mL
							Dibromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Ethylene Dibromide	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexane	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
					MV-CUS17739_00005	2000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 ug/mL
.MV-568720_00033	04/30/21		RESTEK, Lot A0154578		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569721_00008	10/31/21		RESTEK, Lot A0143988		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724_00025	07/31/21		RESTEK, Lot A0156559		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-569727_00010	03/31/22		RESTEK, Lot A0146650		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.MV-571992_00004	06/30/21		RESTEK, Lot A0143774		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.MV-CUS17739_00005	12/31/21		Agilent, Lot 6503344		(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMainA_00050	06/08/21	05/08/21	P&T Methanol, Lot 181124	25 mL	MV-571992_00004	1000 uL	Xylenes, Total	200 ug/mL
.MV-571992_00004	06/30/21		RESTEK, Lot A0143774		(Purchased Reagent)		Xylenes, Total	5000 ug/mL
MV-Supp A_00051	09/30/21	03/30/21	P&T Methanol, Lot 199628	20 mL	mv-570808_00007	400 uL	1,2,3-Trimethylbenzene	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Isopropyl alcohol	500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					mv-570809_00007	400 uL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
					mv-571993_00004	400 uL	Acetonitrile	500 ug/mL
							Isopropyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					mv-571994_00004	600 uL	Ethanol	3000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					mv-VO-TAOH-5_00011	2000 uL	cis-1,4-Dichloro-2-butene	100 ug/mL
							Ethylene oxide	5000 ug/mL
.mv-570808_00007	05/31/21		Restek, Lot A0154734		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.mv-570809_00007	05/31/21		Restek, Lot A0156071		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
.mv-571993_00004	01/31/21		RESTEK, Lot A0144915		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
.mv-571994_00004	12/31/22		RESTEK, Lot A0156082		(Purchased Reagent)		Ethanol	100000 ug/mL
.mv-VO-TAOH-5_00011	03/01/21		SPEX, Lot CP200901024		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
							Ethylene oxide	50000 ug/mL
NXN CAL INT_00579	06/04/21	05/28/21	Di Water, Lot NA	100 mL	NOXT Cal STD_00024	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00024	11/30/21		RICCA, Lot 2005e97		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00555	06/04/21	05/28/21	Di Water, Lot NA	100 mL	NOXT ICV STD_00024	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00024	02/10/22		ERA, Lot 190220m		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
RSK175methane_00010	04/16/22		Supelco Analytical, Lot 160-401480003-1		(Purchased Reagent)		Methane	650500 ug/L
RSK7gasMathes_00027	10/24/20		Matheson, Lot 9308634170		(Purchased Reagent)		Methane	6570.3 ug/L
RSK7gasMathes_00031	03/09/22		Matheson, Lot DL0396162		(Purchased Reagent)		Acetylene	10667 ug/L
							Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
SFD ICV INT_01920	08/26/21	04/26/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	3.5656 g	Sulfide	952.015 mg/L
.50% NaOH_00022	06/30/23		RICCA, Lot 1006F87		(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00008	04/03/24		Acros, Lot A0412804		(Purchased Reagent)		Sulfide	0.1335 g/g
SFD ICV INT_01921	08/26/21	04/26/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	3.4759 g	Sulfide	928.065 mg/L
.50% NaOH_00022	06/30/23		RICCA, Lot 1006F87		(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00008	04/03/24		Acros, Lot A0412804		(Purchased Reagent)		Sulfide	0.1335 g/g
SFD ICV INT_01922	08/26/21	04/26/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	3.4011 g	Sulfide	908.094 mg/L
.50% NaOH_00022	06/30/23		RICCA, Lot 1006F87		(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00008	04/03/24		Acros, Lot A0412804		(Purchased Reagent)		Sulfide	0.1335 g/g
TKN 25ppm_00820	06/03/21	05/03/21	Di Water, Lot 1	100 mL	TKN 100PPM_00133	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00133	06/03/21	05/03/21	Di Water, Lot 1	500 mL	TKN CAL STD_00019	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN CAL STD_00019	08/31/24		nsi lab solutions, Lot 200817		(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TKN ICV 25_00106	06/03/21	05/03/21	DI water, Lot 1	100 mL	TKN ICV 100_00095	25 mL	Nitrogen, Total Kjeldahl	25 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.TKN ICV 100_00095	06/03/21	05/03/21	Di Water, Lot 1	500 mL	TKN ICV_00013	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN ICV_00013	07/02/22	ERA, Lot 200220m			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TOC ICV Std_00046	08/31/21	Ricca, Lot 1008G17			(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_00051	03/31/23	Agilent, Lot 0006588597			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm
							DOC Result 2	1001 ppm
							DOC Result 3	1001 ppm
							DOC Result 4	1001 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 280-149116-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC_IC_C_Det_00073	06/12/21	06/10/21	Carb Buffered Di, Lot 1335203	50 mL	WC_IC_C_Br_00005	2.5 mL	Bromide	50.05 ug/mL
					WC_IC_C_Cl_00004	2 mL	Chloride	40 ug/mL
					WC_IC_C_F_00004	0.5 mL	Fluoride	10 ug/mL
					WC_IC_C_SO4_00002	5 mL	Sulfate	100 ug/mL
.WC_IC_C_Br_00005	03/09/22	Inorganic Ventures, Lot R2-BR690540			(Purchased Reagent)		Bromide	1001 ug/mL
.WC_IC_C_Cl_00004	06/25/21	Inorganic Ventures, Lot P2-CL683977			(Purchased Reagent)		Chloride	1000 ug/mL
.WC_IC_C_F_00004	07/16/21	Inorganic Ventures, Lot P2-F676731			(Purchased Reagent)		Fluoride	1000 ug/mL
.WC_IC_C_SO4_00002	09/30/21	Inorganic Ventures, Lot R2-SOX689601			(Purchased Reagent)		Sulfate	1000 ug/mL
WC_IC_C_Int_00070	06/12/21	06/10/21	Carb Buffered Di, Lot 1335203	50 mL	WC_IC_C_Br_00005	2.5 mL	Bromide	50.05 ug/mL
					WC_IC_C_Cl_00004	1 mL	Chloride	20 ug/mL
					WC_IC_C_F_00004	0.5 mL	Fluoride	10 ug/mL
					WC_IC_C_SO4_00002	2.5 mL	Sulfate	50 ug/mL
.WC_IC_C_Br_00005	03/09/22	Inorganic Ventures, Lot R2-BR690540			(Purchased Reagent)		Bromide	1001 ug/mL
.WC_IC_C_Cl_00004	06/25/21	Inorganic Ventures, Lot P2-CL683977			(Purchased Reagent)		Chloride	1000 ug/mL
.WC_IC_C_F_00004	07/16/21	Inorganic Ventures, Lot P2-F676731			(Purchased Reagent)		Fluoride	1000 ug/mL
.WC_IC_C_SO4_00002	09/30/21	Inorganic Ventures, Lot R2-SOX689601			(Purchased Reagent)		Sulfate	1000 ug/mL
WC_IC_QC2_00391	06/17/21	06/16/21	DI Water, Lot IC	50 mL	WC_IC_Q_SO4_00009	2.5 mL	Sulfate	50 ug/mL
.WC_IC_Q_SO4_00009	01/30/22	Spex Certiprep, Lot 5-48SO4-2X			(Purchased Reagent)		Sulfate	1000 ug/mL

Reagent

50% NaOH_00022

RICCA CHEMICAL COMPANY®

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customerservice@riccachemical.com

Certificate of Analysis

Sodium Hydroxide, 50% (w/w) (760 g/L), Analytical Reagent Grade

Lot Number: 1006F87 **Product Number:** 7291

Manufacture Date: JUN 23, 2020
Expiration Date: JUN 2023

The specifications below are equivalent to the ACS Reagent Grade specifications for Sodium Hydroxide pellets, corrected for assay.
There is no ACS specification for 50% (w/w) Sodium Hydroxide solution.

Name	CAS#	Grade
Water	7732-18-5	Reagent
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Sulfuric Acid/Phenolphthalein)	50-52 % (w/w)	50 % (w/w)	723
Chloride (Cl)	max 0.002 %	< 0.002 %	
Heavy Metals (as Ag)	max 0.001 %	< 0.001 %	
Iron (Fe)	max 5 ppm	0.2 ppm	3126
NH_4OH Precipitate	max 0.01 %	0.004 %	
Nickel (Ni)	max 5 ppm	0.04 ppm	3136
Nitrogen Compounds (as N)	max 5 ppm	< 5 ppm	
Phosphate (PO_4)	max 5 ppm	< 5 ppm	
Potassium (K)	max 0.01 %	0.001 %	3141
Sodium Carbonate (Na_2CO_3)	max 0.1 %	0.02 %	
Sulfate (SO_4)	max 0.001 %	< 0.001 %	

Specification	Reference
Sodium Hydroxide Solution, 50%	ASTM (D 2187 E)
Sodium Hydroxide Solution, 50%	ASTM (D 2187 F)
Sodium hydroxide stock solution, about 50%	TAPPI (T 235 cm-85)
Sodium Hydroxide Solution	ASTM (D 2187 G)
Sodium Hydroxide Solution, 50%	ASTM (D 4548)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 A)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 B)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 C)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 D)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
7291-16	500 mL natural poly	36 months
7291-5HP	20 L Ropak™	36 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Israel Alamudun (06/23/2020)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

8015 DROStock_00710

125 Market Street
New Haven, CT 06513
USA

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X-R1
Description: #2 Diesel Fuel
Lot: 220011117
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jan 13, 2020
Expiration: Jan 13, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel	68334-30-5	Tech Mix	50.01	50.01

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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

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

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8015 DROStock_00711

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X-R1
Description: #2 Diesel Fuel
Lot: 220011117
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jan 13, 2020
Expiration: Jan 13, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel	68334-30-5	Tech Mix	50.01	50.01

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8015 DROStock_00713

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X-R1
Description: #2 Diesel Fuel
Lot: 220011117
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jan 13, 2020
Expiration: Jan 13, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel	68334-30-5	Tech Mix	50.01	50.01

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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Certified By: Larry Decker, Organic QC Manager

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

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8015 DROStock_00719

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USA

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X-R1
Description: #2 Diesel Fuel
Lot: 220011117
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jan 13, 2020
Expiration: Jan 13, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel	68334-30-5	Tech Mix	50.01	50.01

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8015 DROStock_00720

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-R1
Description: #2 Diesel Fuel
Lot: 220011117
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jan 13, 2020
Expiration: Jan 13, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel	68334-30-5	Tech Mix	50.01	50.01

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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

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Certified By: Larry Decker, Organic QC Manager

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   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

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3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8015 DROStock_00721

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New Haven, CT 06513
USA

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X-R1
Description: #2 Diesel Fuel
Lot: 220011117
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jan 13, 2020
Expiration: Jan 13, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel	68334-30-5	Tech Mix	50.01	50.01

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

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3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

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Reagent

8015 DROStock_00722

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X-R1
Description: #2 Diesel Fuel
Lot: 220011117
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jan 13, 2020
Expiration: Jan 13, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel	68334-30-5	Tech Mix	50.01	50.01

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

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4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

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Reagent

8015 DROStock_00723

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CERTIFICATE OF ANALYSIS

Catalog No: DRO-AK-102-LCS-10X-R1
Description: #2 Diesel Fuel
Lot: 220011117
Solvent: Acetone
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jan 13, 2020
Expiration: Jan 13, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (mg/mL)	Certified Analyte Concentration[1] (mg/mL)
#2 Diesel Fuel	68334-30-5	Tech Mix	50.01	50.01

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.

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   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

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Reagent

8015Surrogate_00197

Preliminary Report

Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20210527-101843.b\05270003.D				
Lims ID:	8015Surrogate_00197				
Client ID:					
Sample Type:	Client				
Inject. Date:	28-May-2021 10:17:30	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	8015Surrogate_00197				
Misc. Info.:	280-0101843-003				
Operator ID:	JSM	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20210527-101843.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	28-May-2021 10:35:05	Calib Date:	24-May-2021 13:25:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20210524-101719.b\05240009.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1632				

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	26.6	75.96
$ 14 n-Octacosane	35.0	29.0	82.75

Reagent

8330 LCS_00108

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X5\20210401-100246.b\04010006.D

Lims ID: Phenyl-Hexyl:H20-014671 Inj. Date: 01-Apr-2021 16:25:43

Worklist ID: 280-0100246-006 Instrument: CHHPLC_X5

Method: 8330_X5_Luna

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
6 HMX	0.5000	0.4313	86.3	65-135	
5 2,4,6-Trinitrophenol	0.5000	0.4984	99.7	73-124	80-120
8 RDX	0.5000	0.4421	88.4	68-130	
9 Nitrobenzene	0.5000	0.4453	89.1	65-134	
12 1,3-Dinitrobenzene	0.5000	0.4523	90.5	78-120	
13 Nitroglycerin	5.00	4.36	87.2	74-127	
14 o-Nitrotoluene	0.5000	0.4357	87.1	70-127	
15 p-Nitrotoluene	0.5000	0.4531	90.6	71-127	
16 4AMD	0.5000	0.4354	87.1	76-125	
17 m-Nitrotoluene	0.5000	0.4468	89.4	73-125	
18 2-Amino-4,6-dinitrotolu	0.5000	0.4371	87.4	79-120	
19 1,3,5-Trinitrobenzene	0.5000	0.4516	90.3	73-125	
20 2,6-Dinitrotoluene	0.5000	0.4547	90.9	77-127	
21 2,4-Dinitrotoluene	0.5000	0.4375	87.5	78-120	
22 Tetryl	0.5000	0.4501	90.0	64-128	
23 2,4,6-Trinitrotoluene	0.5000	0.4624	92.5	71-123	
24 PETN	5.00	4.48	89.6	73-127	

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

280-146741-A-1-A 280-146741-A-2-A

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

280-146623-B-5-A 160-41555-D-1-A 160-41555-D-3-A

160-41555-C-5-A

Reagent

8330 Stock_TS_00015

Agilent

Certificate of Analysis
ISO Guide 34

Stock Standard

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

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

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

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

Matrix: acetonitrile

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

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

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

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

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

Certificate of Analysis
ISO Guide 34

Stock Standard

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

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

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

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

ISO17025 Cert No.
AT-1937

Reagent

8330 Stock_TS_00018

Agilent

Certificate of Analysis
ISO Guide 34

Stock Standard

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

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

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

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

Matrix: acetonitrile

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

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

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

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

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

Certificate of Analysis
ISO Guide 34

Stock Standard

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

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

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

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

ISO17025 Cert No.
AT-1937

Reagent

8330_NG_Stk_00094

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Composition

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0161450

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : June 30, 2023 **Storage:** 10°C or colder

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,020.0 µg/mL	+/- 46.6833	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 277.3466	µg/mL	Unstressed
	Purity 99%		+/- 322.6949	µg/mL	Stressed

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

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

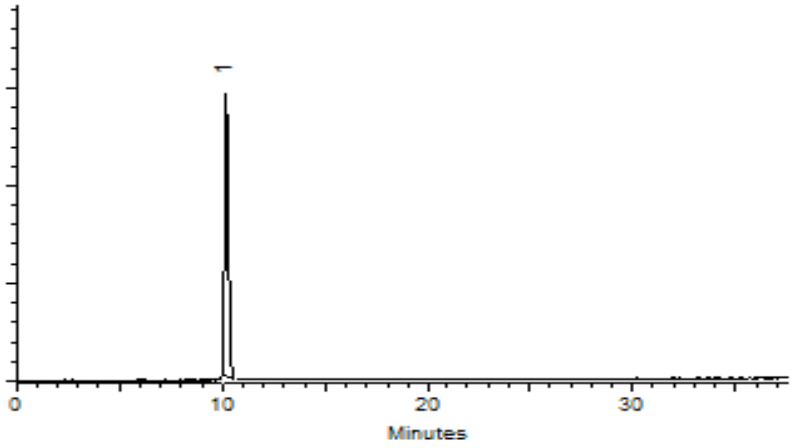
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 03-Jun-2020 **Balance:** 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jun-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep 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.

Reagent

8330_NG_Stk_00101

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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

Catalog No. : 568871 **Lot No.:** A0161120

Description : Custom Nitroglycerin Standard

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin **CAS #** 55-63-0 **Purity** 99% (Lot 200507JLM)	5,024.0 µg/mL	+/- 46.7205 µg/mL +/- 277.5676 µg/mL +/- 322.9521 µg/mL		Gravimetric Unstressed Stressed

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

Reagent

8330_NG_Stk_00102

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

Reagent

8330_OP_DMT_00009

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20200818-94226.b\08180006.D

Lims ID: C18column:B16162 Inj. Date: 18-Aug-2020 16:53:53

Worklist ID: 280-0094226-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
2 TNX	0.2503	0.2275	90.9	50-150		
5 DNX	0.2503	0.2475	98.9	66-119	50-150	
6 MNX	0.2918	0.2601	89.2	57-132	68-123	

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

280-139502-A-1-A 280-139502-A-2-A 280-139502-A-3-A
280-139502-A-4-A 280-139485-A-1-A 280-139485-A-2-A
280-139485-A-3-A 280-139485-A-4-A 280-139485-A-5-A
280-139362-A-1-A 280-139362-A-2-A 280-139362-A-3-A
280-139434-A-12-A 280-139434-A-14-A 280-139434-A-16-A
280-139434-A-18-A 280-139434-A-20-A 280-139434-A-22-A
280-139434-A-28-A 280-139434-A-35-A 280-139434-A-41-A
280-139466-A-6-A 280-139466-A-13-A 280-139472-A-4-A
280-139472-A-15-A 280-139435-A-1-A 280-139467-A-9-A
280-139469-A-6-A 280-139469-A-17-A 280-139470-A-4-A
280-139470-A-14-A

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

600-209588-G-1-A 280-139486-A-1-A 280-139486-A-2-A
280-139514-A-1-A 280-139514-A-2-A 280-139514-A-3-A
280-139514-A-4-A

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

280-139522-A-1-A 280-139524-A-1-A

Reagent

8330_OP_DMT_00011

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20210602-102004.b\06020006.D

Lims ID: C18column:B16162 Inj. Date: 02-Jun-2021 16:51:12

Worklist ID: 280-0102004-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
2 TNX	0.5005	0.5222	104.3	50-150
5 DNX	0.5005	0.5023	100.4	66-119
6 MNX	0.5835	0.5910	101.3	57-132

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

280-149049-A-5-A	280-149049-A-11-A	280-149049-A-12-A
280-149013-A-16-A	280-149013-A-17-A	280-149013-A-18-A
280-149013-B-19-A	280-149013-B-21-A	280-149013-A-22-A
280-149013-A-23-A	280-149013-B-24-A	280-149013-B-25-A
280-149013-B-26-A	280-149013-B-27-A	280-149013-A-28-A
280-149013-A-29-A	280-149013-A-30-A	280-149013-B-31-A
280-149013-B-32-A	280-149013-B-33-A	280-149013-A-34-A
280-149013-B-35-A	280-149013-B-36-A	

Reagent

8330_PETN_Stk_00087

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

Description : Custom PETN Standard

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

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

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

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)

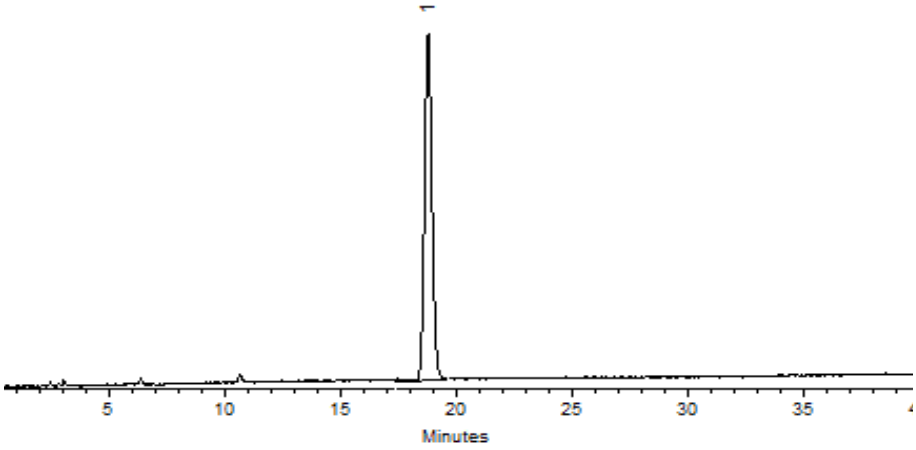
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Clara Windle - Operations Technician I

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

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

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 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:

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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 dissolved.

Reagent

8330_PETN_Stk_00104

110 Benner Circle
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Certificate of Composition

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Catalog No. : 568872 **Lot No.:** A0167376

Description : Custom PETN Standard

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

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

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

Ship: Ambient

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	5,020.0 µg/mL	+/- 46.6833 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 277.3466 µg/mL	Unstressed
	Purity 99%		+/- 322.6949 µg/mL	Stressed

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

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

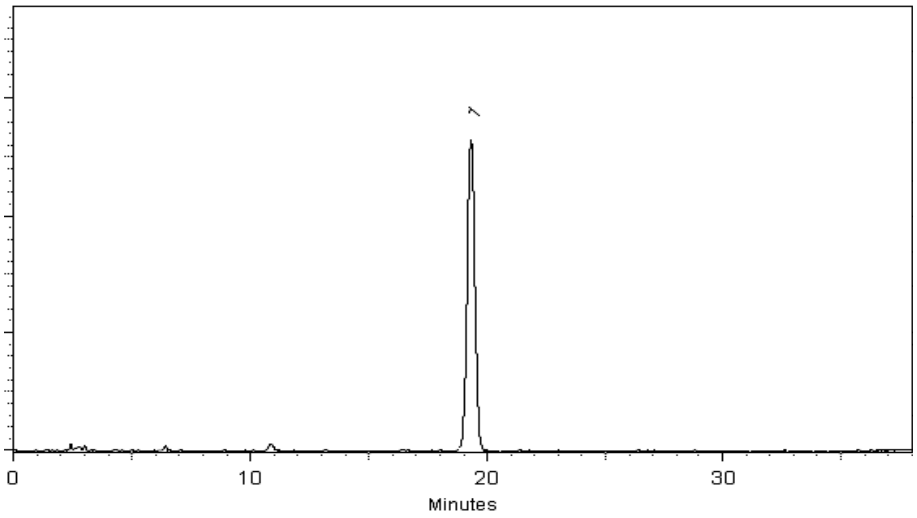
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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Tom Suckar - Mix Technician

Date Mixed: 18-Dec-2020 **Balance:** B442140311

Marlina Cowan - Operations Tech I

Date Passed: 29-Dec-2020

REVIEWED
By Jennifer Pollino at 2:34 pm, Dec 29, 2020

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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Ultra C18 (cat.# 9174575)

Flow Rate:
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Mobile Phase A:
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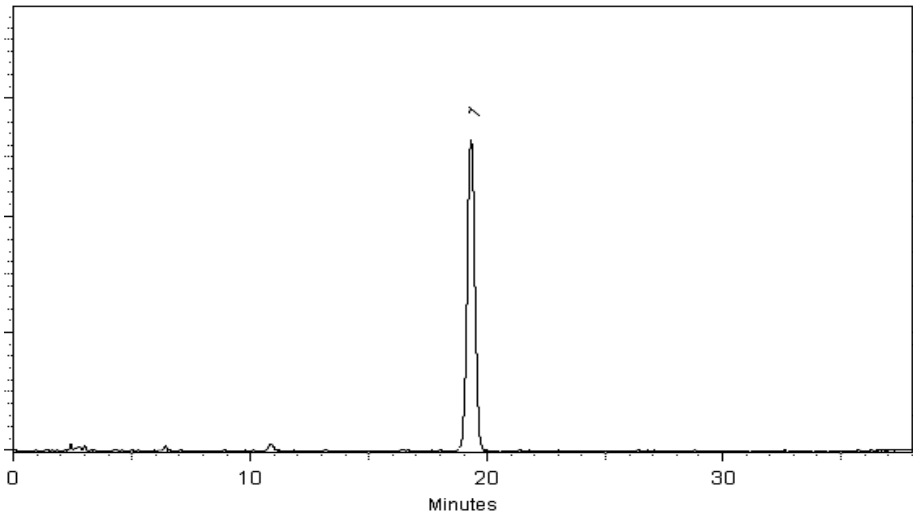
Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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Tom Suckar - Mix Technician

Date Mixed: 18-Dec-2020 **Balance:** B442140311

Marlina Cowan - Operations Tech I

Date Passed: 29-Dec-2020

REVIEWED
By Jennifer Pollino at 2:34 pm, Dec 29, 2020

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

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

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- 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) -20°C or colder (Deep 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.

Reagent

8330LCSMix1_00121

4 vials Rec. 10/6/20
8330 Cali mix 1

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

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

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

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

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 191003JLM)		+/- 54.9222	µg/mL	Unstressed
	Purity 98%			+/- 64.0446	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	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		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%			+/- 64.2657	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,009.0 µg/mL	+/- 5.9932	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.2761	µg/mL	Unstressed
	Purity 99%			+/- 64.4573	µg/mL	Stressed

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

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

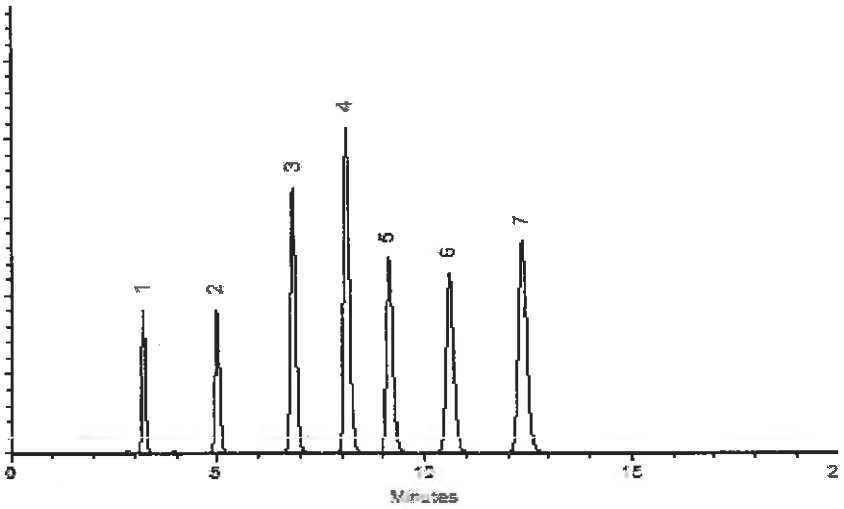
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSmix2_00023

Rec 1/22/21 at 2 vials

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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.:** A0165983

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, 2025 **Storage:** 10°C or colder

Ship: Ambient

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)	1,000.6 µg/mL	+/- 5.9433 +/- 54.8159 +/- 63.9207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,000.8 µg/mL	+/- 5.9444 +/- 54.8268 +/- 63.9335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 99%	(Lot 29550-55)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot BCBB8606)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot BCBZ7826)	1,000.6 µg/mL	+/- 5.9433 +/- 54.8159 +/- 63.9207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,001.2 µg/mL	+/- 5.9468 +/- 54.8487 +/- 63.9590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 99%	(Lot 07329LG)	1,000.4 µg/mL	+/- 5.9421 +/- 54.8049 +/- 63.9079	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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) -20°C or colder (Deep 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.

Reagent

8330PAStkPS_00064

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: M-8330-ADD-3
Description: Picric acid
Lot: 218031154-01
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Apr 22, 2019
Expiration: May 22, 2021
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

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

8330Surrogate_00124

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20210330-100173.b\03300006.D

Lims ID: C18column:B16162 Inj. Date: 30-Mar-2021 16:29:09

Worklist ID: 280-0100173-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535	Limits 4 3535
$ 9 1,2-Dinitrobenzene	0.5000	0.4768	95.4	63-127	83-119		

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

860-270-C-1-A

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

280-146579-B-1-A

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

280-146648-A-7-A 280-146741-A-1-A 280-146741-A-2-A

280-146741-A-3-A 280-146741-G-8-A

Samples for Limit Group: 4, Lims Prep Method: 3535

280-146625-B-1-A 280-146625-B-2-A 280-146623-A-1-A

280-146623-B-2-A 280-146623-A-3-A 280-146623-A-4-A

280-146623-B-5-A 280-146623-A-6-A 280-146623-B-7-A

Reagent

8330SurrStkSS_00185

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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.:** A0160559

Description : 8330 Surrogate Mix

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

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

Expiration Date : May 31, 2025 **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 **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 56.1943 µg/mL +/- 57.5086 µg/mL		Gravimetric Unstressed Stressed

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

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

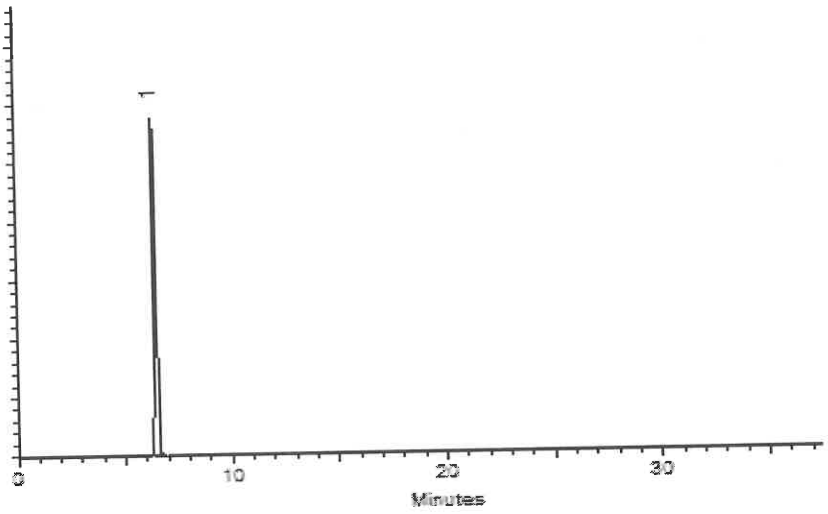
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Tom Suckar - Mix Technician

Date Mixed: 05-May-2020 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-May-2020

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

Reagent

8330SurrStkSS_00188

Rec 1/22/21 @ 2 vials

RESTEK

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
			+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep 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.

Reagent

8330SurrStkSS_00192

Rec 1/22/21 @ 2 vials

RESTEK

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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.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813 +/- 56.4747 +/- 57.7956	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep 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:

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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.

Reagent

8330SurrStkSS_00193

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
			+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep 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.

Reagent

8330SurrStock_00164

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USA

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Fax (203)786-5287
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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.

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Reagent

8330SurrStock_00168

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 219051500
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 22, 2019
Expiration: May 22, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	1002	1002

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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

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Rev. 5/18

Reagent

Alk stk std_00019

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	SS148	Quality Test / Release Date	08/02/2019
Lot Number	194904	Expiration Date	Aug/2021
Description	SODIUM CARBONATE SOLUTION, 1N		
Country of Origin	United States		
Chemical Origin			
BSE/TSE Comment			
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid
COLOR	APHA	<= 5	<5
NORMALITY		Inclusive Between 0.995 - 1.000	0.997
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

DRO_RTMKR1_00120

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CERTIFICATE OF ANALYSIS

Catalog No: DRH-004S-R1-5X
Description: Calibration/Window Defining Hydrocarbon Standard
Lot: 219101211
Solvent: Chloroform
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 22, 2019
Expiration: Oct 22, 2029
Sample Size: 1 mL
Components: 17
Storage Condition: Ambient (>5 °C)/Sonicate

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
n-Octane	111-65-9	100.0	1001	1001
Decane	124-18-5	100.0	1000	1000
Dodecane	112-40-3	100.0	1001	1001
n-Tetradecane	629-59-4	100.0	1001	1001
Hexadecane	544-76-3	99.4	1003	997
n-Octadecane	593-45-3	99.1	1001	992
Eicosane	112-95-8	99.8	1002	1000
Docosane	629-97-0	99.1	1003	994
n-Tetracosane	646-31-1	95.7	1047*	1002
Hexacosane	630-01-3	99.5	1003	998
n-Octacosane	630-02-4	99.0	1003	993
n-Triacontane	638-68-6	100.0	1000	1000
Dotriacontane	544-85-4	98.5	1000	985
Tetratriacontane	14167-59-0	99.0	1001	991
Hexatriacontane	630-06-8	93.0	1076*	1001
n-Octatriacontane	7194-85-6	98.5	1003	988
Tetracontane	4181-95-7	99.9	1001	1000

* Weight compensated to 100% purity.

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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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Reagent

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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_00125

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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

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Certified By: Larry Decker, Organic QC Manager

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Reagent

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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Reagent

DRO_SURR_00162

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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Reagent

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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Certified By: Larry Decker, Organic QC Manager

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Rev. 5/18

Reagent

DRO_SURR_00164

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 219101198
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Oct 17, 2019
Expiration: Oct 17, 2022
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
o-Terphenyl	84-15-1	99.9	5004	4999
n-Octacosane	630-02-4	99.0	5019	4969

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

[2] All weights are traceable through NIST, Test No. 684/289871-17

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

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

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

Reagent

IC CL cal_00064

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-CL9-2X **Lot No.** 5-67CL-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: 998 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3182*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Sodium Chloride, Lot# 09141H. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 998 µg/mL

Method: Precipitation using Silver Nitrate. Filter, dry and weigh as AgCl.

Instrumental Analysis by Ion Chromatography: 997 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_3^-	<0.06
F^-	<0.05	$PO4^{-3}$	<0.03
NO_2^-	<0.05	$SO4^{-2}$	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: FEB - - 2021 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2020 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.

SPEX CertiPrep
Your Science is Our Passion®

203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647

Reagent

IC FL cal_00017

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: 2008D03 **Product Number:** 5459

Manufacture Date: AUG 14, 2020
Expiration Date: FEB 2022

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)

Chris Collins (08/14/2020)
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_00006

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 SO4 ICV_00022

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Sulfate
Catalog Number:	062-125mL, 995-500mL
Lot No.	060720m
Starting Material:	Potassium Sulfate (K_2SO_4)
Matrix:	18 megohm deionized water
Density:	1.0001 ± 0.0010 mg/L at 21.2 °C and 755 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	July 13, 2020
Expiration Date:	July 6, 2022
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Sulfate	1000	0.984	3181	97.7

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ 800.372.0122 ▪ 303.431.8454 ▪ fax 303.421.0159 ▪ www.eraqc.com

Reagent

IC sulfatecal_00062

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 5-48SO4-2X

Description: 1000 µg/mL Sulfate

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1000 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: 997 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 1002 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: DEC -- 2020 Certifying Officer: Katherine Cullinan, QC Manager

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Reagent

IC sulfatecal_00063

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 5-48SO4-2X

Description: 1000 µg/mL Sulfate

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1000 µg/mL ±5 µg/mL

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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.

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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: FEB - - 2021 Certifying Officer: Katherine Cullinan, QC Manager

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems -- Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials -- Selected terms and definitions
- ISO Guide 31: Reference Materials -- Contents of certificates and labels
- ISO Guide 35: Reference Materials -- General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement -- Third Edition
- NIST Technical Note 1297

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001, ISO 17025, and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c=combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:

All certified values reported were derived from the Certification Report, SPEX CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at crmsales@spexcsp.com.

Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

SPEX CertiPrep
Your Science is Our Passion®

203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-[illegible] Fax: 732-603-9647

Reagent

MNX,TNX,DNX_00048

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Reagent

MNX,TNX,DNX_00049

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Reagent

MNX,TNX,DNX_00050

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Reagent

MNX,TNX,DNX_00051

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Reagent

MNX,TNX,DNX_00052

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Reagent

MNX,TNX,DNX_00053

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Reagent

MNX,TNX,DNX_00054

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 10-Mar-2021

Lot Number: 0006594482 **Expiration Date:** 30-Apr-2022

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	99.7 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY
ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006594482

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760
Page: 2 of 2
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Reagent

MNX,TNX,DNX_00059

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Number: 0006599273

Lot Issue Date: 02-Apr-2021

Expiration Date: 30-Apr-2022

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.4 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760

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CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY
ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006599273

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760
Page: 2 of 2
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CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
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No. AT-1937

Reagent

mv-30241_00008

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30241 **Lot No.:** A0131578

Description : 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene	2,522.1 µg/mL	+/- 14.6637 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBK8171V)		+/- 141.4116 µg/mL	Unstressed
	Purity 99%		+/- 144.7205 µg/mL	Stressed
2	Chlorobenzene-d5	2,518.6 µg/mL	+/- 14.6434 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-23926)		+/- 141.2154 µg/mL	Unstressed
	Purity 99%		+/- 144.5197 µg/mL	Stressed
3	1,4-Dichlorobenzene-d4	2,520.5 µg/mL	+/- 14.6544 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 141.3219 µg/mL	Unstressed
	Purity 99%		+/- 144.6287 µg/mL	Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

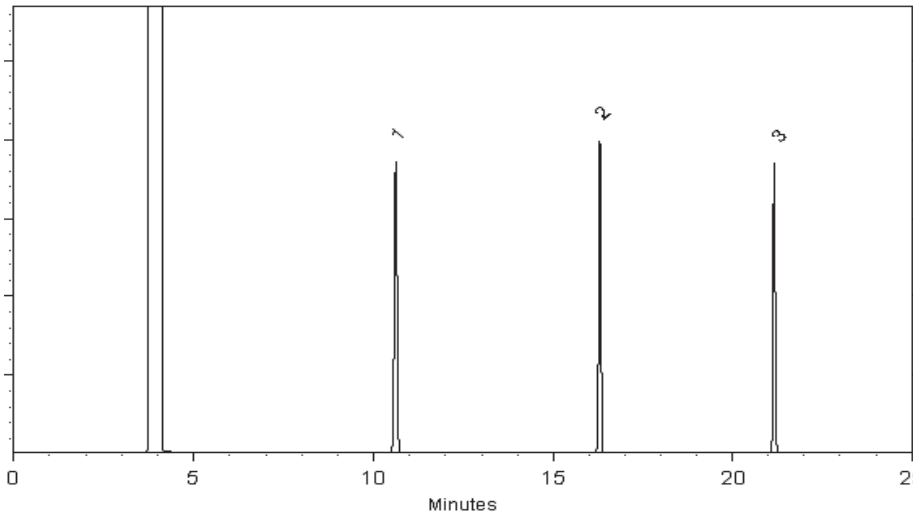
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 11-Oct-2017 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 13-Oct-2017

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MV-567650_00028

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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. : 567650 **Lot No.:** A0132615

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2022 **Storage:** 0°C or colder

Rec'd 11/1/19

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,500.2 µg/mL	+/- 14.5364 µg/mL		Gravimetric
	CAS # 1868-53-7	(Lot 0012017)		+/- 140.1837 µg/mL		Unstressed
	Purity 99.8%			+/- 143.4639 µg/mL		Stressed
2	1,2-Dichloroethane-d4		2,500.2 µg/mL	+/- 14.5361 µg/mL		Gravimetric
	CAS # 17060-07-0	(Lot PR-26748)		+/- 140.1809 µg/mL		Unstressed
	Purity 99%			+/- 143.4610 µg/mL		Stressed
3	Toluene-d8		2,500.2 µg/mL	+/- 14.5364 µg/mL		Gravimetric
	CAS # 2037-26-5	(Lot PR-26623)		+/- 140.1837 µg/mL		Unstressed
	Purity 99%			+/- 143.4639 µg/mL		Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,500.3 µg/mL	+/- 14.5370 µg/mL		Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)		+/- 140.1893 µg/mL		Unstressed
	Purity 99%			+/- 143.4696 µg/mL		Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

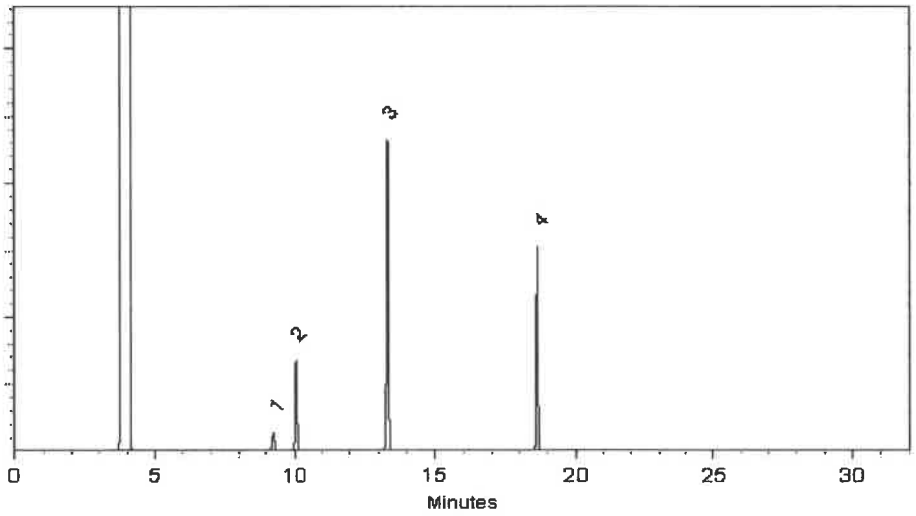
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Michael J Maye

Date Mixed: 21-Nov-2017 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 22-Nov-2017

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

Reagent

MV-568718-D_00016

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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. : 568718 **Lot No.:** A0139459

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol		5,018.0 µg/mL	+/- 29.1735 µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.4354 µg/mL	Unstressed
	Purity 98%			+/- 110.5588 µg/mL	Stressed
2	2-Butanone-d5		1,253.8 µg/mL	+/- 7.2897 µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M-276)		+/- 26.8440 µg/mL	Unstressed
	Purity 99%			+/- 27.6244 µg/mL	Stressed
3	Fluorobenzene		250.1 µg/mL	+/- 1.4575 µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3556 µg/mL	Unstressed
	Purity 99%			+/- 5.5112 µg/mL	Stressed
4	1,4-Dioxane-d8		5,004.8 µg/mL	+/- 29.0965 µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I-19942)		+/- 107.1519 µg/mL	Unstressed
	Purity 99%			+/- 110.2670 µg/mL	Stressed
5	Chlorobenzene-d5		250.4 µg/mL	+/- 1.4589 µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-23926)		+/- 5.3609 µg/mL	Unstressed
	Purity 99%			+/- 5.5167 µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		250.6 µg/mL	+/- 1.4604 µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 5.3663 µg/mL	Unstressed
	Purity 99%			+/- 5.5222 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

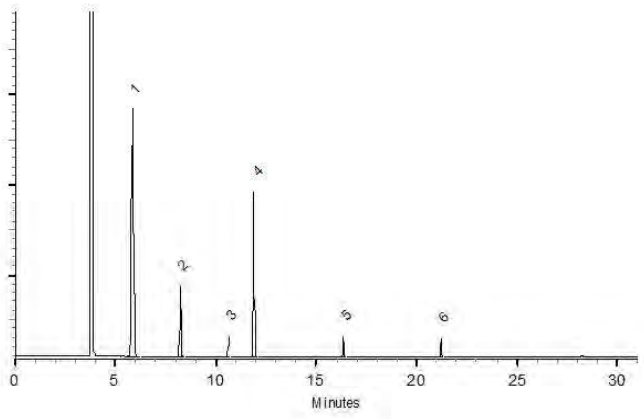
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Matt Fragassi - Mix Technician

Date Mixed: 09-Jul-2018 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

Date Passed: 10-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-568720_00033

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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.

Rec'd 4/28/20

GM

Catalog No. : 568720 **Lot No.:** A0154578

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

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

Expiration Date : April 30, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,810.7 µg/mL	+/- 115.9958 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot D0012019410)		+/- 395.7642 µg/mL	Unstressed
	Purity 99%		+/- 887.8866 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

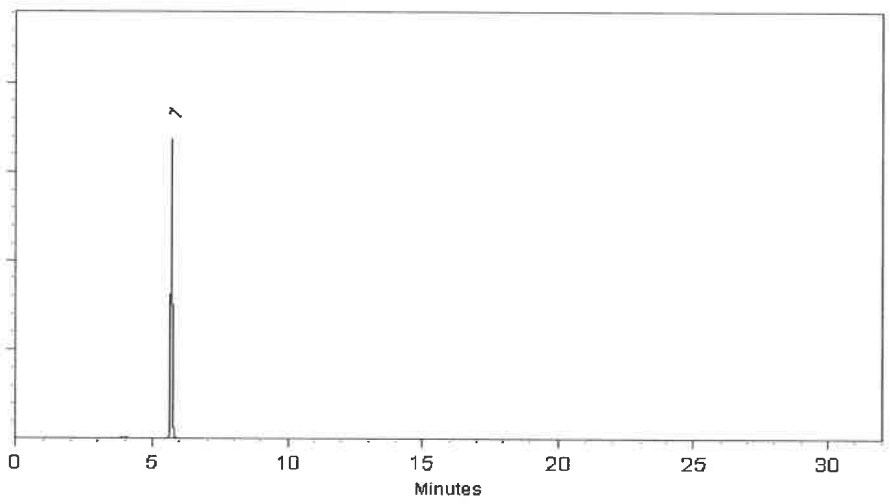
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 31-Oct-2019 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Nov-2019

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

Reagent

MV-569721.sec_00006

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Catalog No. : 569721.SEC **Lot No.:** A0140519

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

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

Expiration Date : August 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,509.0 µg/mL	+/- 73.2429 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot U13B039)		+/- 754.7732 µg/mL	Unstressed
	Purity 99%		+/- 756.5649 µg/mL	Stressed
2	2-Butanone (MEK)	12,558.0 µg/mL	+/- 73.5299 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 757.7297 µg/mL	Unstressed
	Purity 99%		+/- 759.5285 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,547.0 µg/mL	+/- 73.4654 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 757.0660 µg/mL	Unstressed
	Purity 99%		+/- 758.8632 µg/mL	Stressed
4	2-Hexanone	12,561.0 µg/mL	+/- 73.5474 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot V3NRA)		+/- 757.9108 µg/mL	Unstressed
	Purity 99%		+/- 759.7099 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

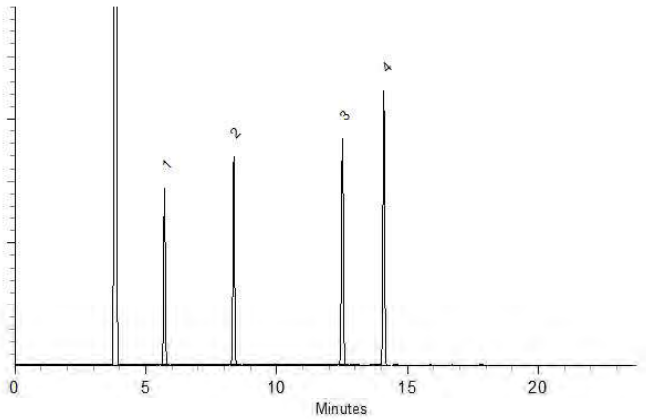
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Matt Fragassi - Mix Technician

Date Mixed: 09-Aug-2018 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Aug-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721 **Lot No.:** A0143988

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

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

Expiration Date : December 31, 2021 **Storage:** 0°C or colder

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

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone		12,500.5 µg/mL	+/- 72.6790 µg/mL	Gravimetric
	CAS # 67-64-1	(Lot SHBJ7699)		+/- 754.2106 µg/mL	Unstressed
	Purity 99%			+/- 756.0012 µg/mL	Stressed
2	2-Butanone (MEK)		12,501.0 µg/mL	+/- 72.6819 µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)		+/- 754.2407 µg/mL	Unstressed
	Purity 99%			+/- 756.0314 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,501.5 µg/mL	+/- 72.6848 µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBH8930)		+/- 754.2709 µg/mL	Unstressed
	Purity 99%			+/- 756.0617 µg/mL	Stressed
4	2-Hexanone		12,501.8 µg/mL	+/- 72.6863 µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKCD9048)		+/- 754.2860 µg/mL	Unstressed
	Purity 99%			+/- 756.0768 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

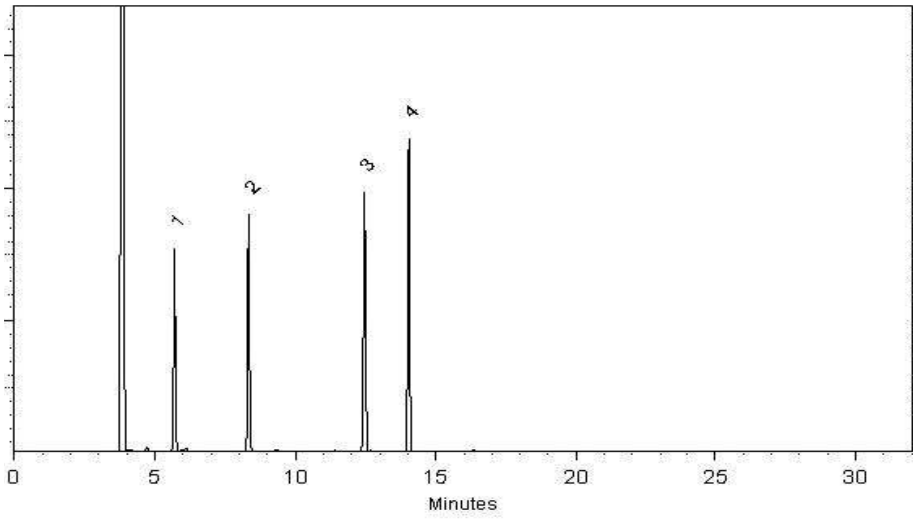
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

F. Joseph Fallon - Mix Technician

Date Mixed: 11-Dec-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Dec-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569722.SEC **Lot No.:** A0142594

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,499.3 µg/mL	+/- 25.7724 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 24847)		+/- 141.7384 µg/mL	Unstressed
	Purity 99%		+/- 144.9810 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,506.0 µg/mL	+/- 21.8612 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 141.4482 µg/mL	Unstressed
	Purity 99%		+/- 144.7145 µg/mL	Stressed
3	Vinyl chloride	2,505.4 µg/mL	+/- 25.4396 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 142.0168 µg/mL	Unstressed
	Purity 99%		+/- 145.2689 µg/mL	Stressed
4	1,3-Butadiene	2,500.1 µg/mL	+/- 22.0034 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 22331)		+/- 141.1491 µg/mL	Unstressed
	Purity 99%		+/- 144.4071 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,511.9 µg/mL	+/- 23.0453 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 141.9646 µg/mL	Unstressed
	Purity 99%		+/- 145.2346 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,498.5 µg/mL	+/- 23.5866 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 141.3133 µg/mL	Unstressed
	Purity 99%		+/- 144.5633 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,450.0 µg/mL	+/- 14.3780 µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 7766400)		+/- 137.3830 µg/mL	Unstressed
	Purity 97%		+/- 140.5969 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,502.5 µg/mL	+/-	22.2947	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 253600)		+/-	141.3276	µg/mL	Unstressed
	Purity 99%			+/-	144.5877	µg/mL	Stressed

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

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

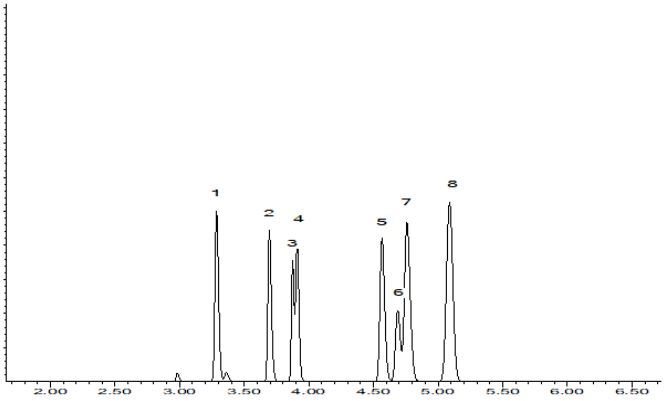
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Brandon Reish - Mix Technician

Date Mixed: 24-Oct-2018 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 05-Nov-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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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.:** A0159085

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Rec'd 6/2/20 Gm

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

Expiration Date : March 31, 2023 **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) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,502.3 µg/mL	+/- 16.4178 µg/mL +/- 140.5076 µg/mL +/- 143.7858 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.6 µg/mL	+/- 16.3299 µg/mL +/- 140.4038 µg/mL +/- 143.6799 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,500.2 µg/mL	+/- 17.2154 µg/mL +/- 140.4890 µg/mL +/- 143.7623 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.7 µg/mL	+/- 17.6652 µg/mL +/- 140.5681 µg/mL +/- 143.8406 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,501.2 µg/mL	+/- 16.4034 µg/mL +/- 140.4450 µg/mL +/- 143.7217 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,500.3 µg/mL	+/- 17.7279 µg/mL +/- 140.5555 µg/mL +/- 143.8274 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 8582700) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,501.4	µg/mL	+/-	16.0800	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4203	µg/mL	Unstressed
	Purity 99%				+/-	143.6982	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)

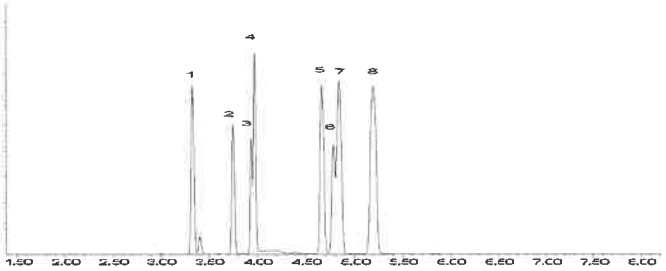
Carrier Gas:
helium-constant pressure 30 psi

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.

Tom Suckar - Mix Technician **Date Mixed:** 23-Mar-2020 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 26-Mar-2020

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

Reagent

MV-569723_00007

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

Catalog No. : 569723 **Lot No.:** A0158872

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

Rec'd 6/2/20

GM

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

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,500.5 µg/mL	+/- 14.5381	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBS6526V)		+/- 53.5360	µg/mL	Unstressed
	Purity 99%		+/- 55.0924	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)

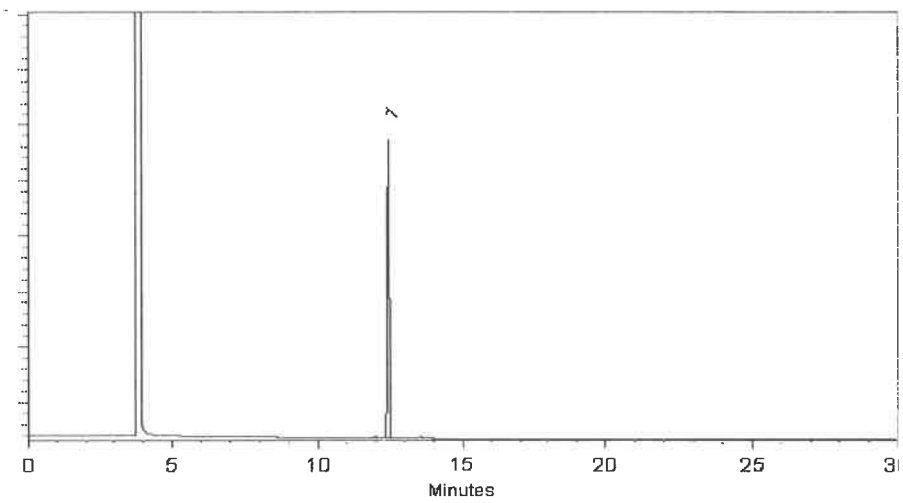
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 16-Mar-2020 **Balance:** B707717271

Tyler Brown - Operations Tech-ARM QC

Date Passed: 18-Mar-2020

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

Reagent

MV-569724_00025

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Catalog No. : 569724 **Lot No.:** A0156559

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Rec'd 4/24/20 GM

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

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Vinyl acetate		5,040.0 µg/mL	+/-	29.5103	µg/mL	Gravimetric
	CAS # 108-05-4	(Lot 192709KJ)		+/-	304.1056	µg/mL	Unstressed
	Purity 99%			+/-	304.8275	µg/mL	Stressed

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

Specific Reference Material Notes:
08 April 2020
Expiration date extended from July 31, 2020 to July 31, 2021.

Tech Tips:
Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

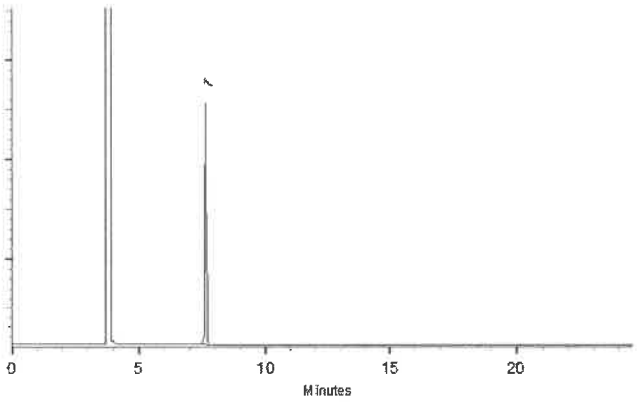
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

Date Mixed: 10-Jan-2020 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 13-Jan-2020

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

Reagent

MV-569727_00010

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

Catalog No. : 569727 **Lot No.:** A0146650

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

Rec'd 4/28/20

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

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

GM

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Cyclohexanone		25,006.0 µg/mL	+/- 146.4156	µg/mL	Gravimetric
	CAS # 108-94-1	(Lot MKCD4357)		+/- 1,508.8223	µg/mL	Unstressed
	Purity 99%			+/- 1,512.4040	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

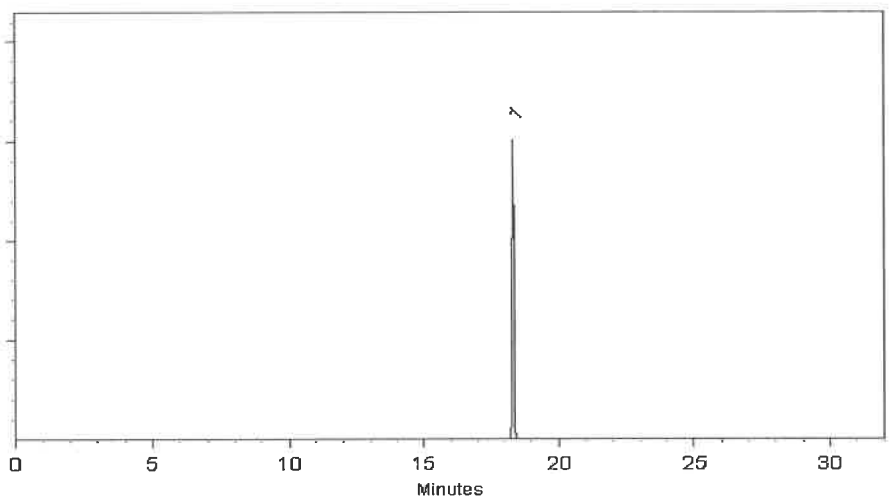
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Jessica McClenahan - Operations Technician I

Date Mixed: 05-Mar-2019 **Balance:** B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 07-Mar-2019

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

Reagent

mv-570808_00007

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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. : 570808 **Lot No.:** A0154734

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2,500-62,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : May 31, 2021 **Storage:** 0°C or colder

Rec'd 4/23/20

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0 (Lot SHBH7211) **Purity** 99%	25,135.0 µg/mL	+/- 147.1710 µg/mL +/- 1,243.4963 µg/mL +/- 1,274.4109 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene (2-chloro-1,3-butadiene) **CAS #** 126-99-8 (Lot 190814JLM) **Purity** 99%	2,523.5 µg/mL	+/- 14.8093 µg/mL +/- 124.8483 µg/mL +/- 127.9520 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 (Lot 1012019) **Purity** 99%	25,164.0 µg/mL	+/- 147.3408 µg/mL +/- 1,244.9310 µg/mL +/- 1,275.8813 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (isooctane) **CAS #** 540-84-1 (Lot SHBD2922V) **Purity** 99%	2,512.0 µg/mL	+/- 14.7418 µg/mL +/- 124.2794 µg/mL +/- 127.3689 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3 (Lot SHBK4786) **Purity** 99%	63,024.5 µg/mL	+/- 369.0033 µg/mL +/- 3,117.9899 µg/mL +/- 3,195.5065 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9 (Lot BCBL0537V) **Purity** 98%	5,009.8 µg/mL	+/- 29.3332 µg/mL +/- 247.8464 µg/mL +/- 254.0081 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5 (Lot BCBS3368V) **Purity** 98%	2,516.6 µg/mL	+/- 14.7691 µg/mL +/- 124.5090 µg/mL +/- 127.6042 µg/mL	Gravimetric Unstressed Stressed

8	1,2,3-Trimethylbenzene		2,510.3	µg/mL	+/-	14.7317	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 877605-12)			+/-	124.1938	µg/mL	Unstressed
	Purity 98%				+/-	127.2812	µg/mL	Stressed
9	Benzyl chloride		2,516.0	µg/mL	+/-	14.7653	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBH2102V)			+/-	124.4773	µg/mL	Unstressed
	Purity 99%				+/-	127.5717	µg/mL	Stressed
10	1,3,5-Trichlorobenzene		2,523.0	µg/mL	+/-	14.8064	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	124.8236	µg/mL	Unstressed
	Purity 99%				+/-	127.9267	µg/mL	Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

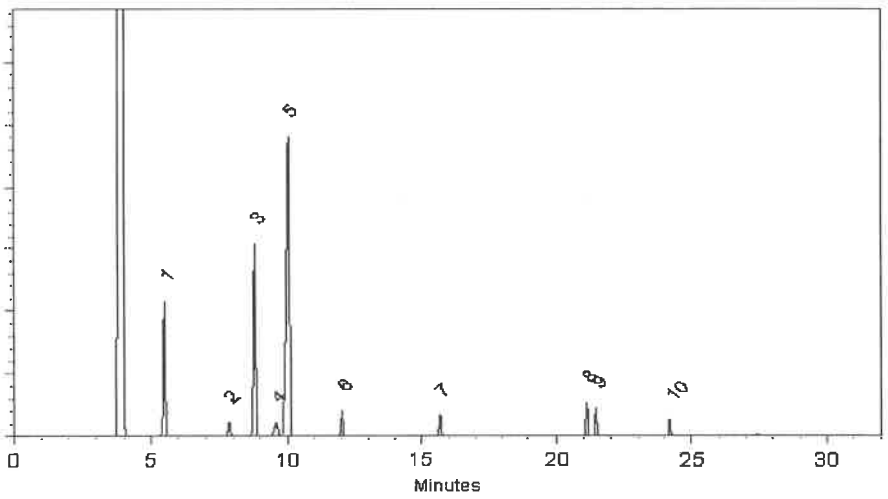
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Tom Suckar - Mix Technician

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

Fang-Yun Lo - QC Analyst

Date Passed: 07-Nov-2019

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

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Rec'd 4/23/20

GM

Catalog No. : 570809 **Lot No.:** A0156071

Description : 8260 List 2 / Std #7

8260 List 2 / Std #7 2,500-5,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethyl acetate		5,015.6 µg/mL	+/- 29.3674 µg/mL	Gravimetric
	CAS # 141-78-6	(Lot SHBL1336)		+/- 302.6333 µg/mL	Unstressed
	Purity 99%			+/- 303.3517 µg/mL	Stressed
2	Ethyl acrylate		2,508.8 µg/mL	+/- 14.7230 µg/mL	Gravimetric
	CAS # 140-88-5	(Lot 10129902)		+/- 151.3803 µg/mL	Unstressed
	Purity 99%			+/- 151.7396 µg/mL	Stressed
3	Methyl methacrylate		5,015.2 µg/mL	+/- 29.3651 µg/mL	Gravimetric
	CAS # 80-62-6	(Lot MKCG6589)		+/- 302.6092 µg/mL	Unstressed
	Purity 99%			+/- 303.3275 µg/mL	Stressed
4	Butyl acetate		2,512.0 µg/mL	+/- 14.7418 µg/mL	Gravimetric
	CAS # 123-86-4	(Lot SHBK5137)		+/- 151.5733 µg/mL	Unstressed
	Purity 99%			+/- 151.9331 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)

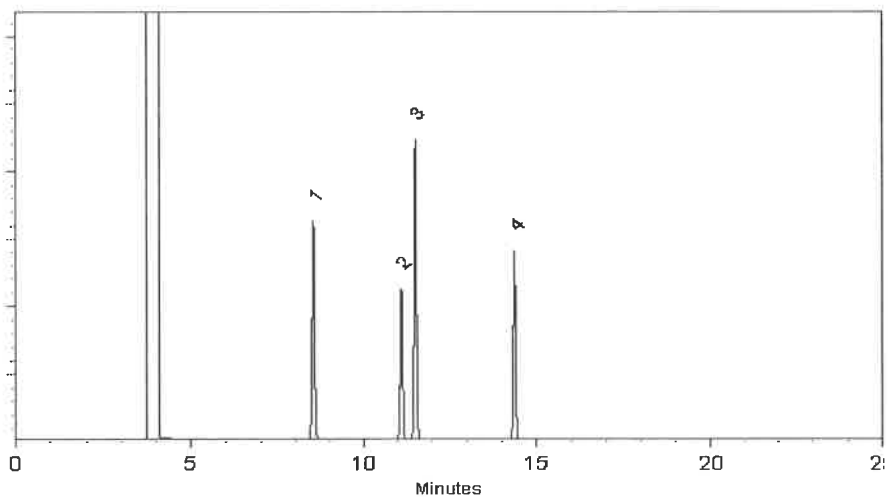
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 22-Dec-2019 **Balance:** B442140311

Tyler Brown - Operations Tech-ARM QC

Date Passed: 26-Dec-2019

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

Reagent

MV-571992.sec_00005

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Catalog No. : 571992.SEC **Lot No.:** A0144202

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Rec'd 4/24/20

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

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

GM

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,517.0 µg/mL	+/- 14.6339 µg/mL +/- 151.8598 µg/mL +/- 152.2203 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,506.7 µg/mL	+/- 14.5740 µg/mL +/- 151.2383 µg/mL +/- 151.5974 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,503.3 µg/mL	+/- 14.5546 µg/mL +/- 151.0372 µg/mL +/- 151.3958 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,000.8 µg/mL	+/- 145.3491 µg/mL +/- 1,508.4071 µg/mL +/- 1,511.9883 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,002.3 µg/mL	+/- 29.0840 µg/mL +/- 301.8129 µg/mL +/- 302.5295 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,503.5 µg/mL	+/- 14.5556 µg/mL +/- 151.0472 µg/mL +/- 151.4059 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,511.7 µg/mL	+/- 14.6030 µg/mL +/- 151.5400 µg/mL +/- 151.8998 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
9	Carbon disulfide		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
10	Acrylonitrile		25,001.2	µg/mL	+/-	145.3513	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL)			+/-	1,508.4304	µg/mL	Unstressed
	Purity 99%				+/-	1,512.0117	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
13	n-Hexane (C6)		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot K24W001)			+/-	151.0320	µg/mL	Unstressed
	Purity 97%				+/-	151.3905	µg/mL	Stressed
14	1,1-Dichloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5379000)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
15	2,2-Dichloropropane		2,503.2	µg/mL	+/-	14.5541	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	151.0320	µg/mL	Unstressed
	Purity 98%				+/-	151.3905	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,501.0	µg/mL	+/-	14.5409	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.8954	µg/mL	Unstressed
	Purity 97%				+/-	151.2537	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,508.3	µg/mL	+/-	363.4098	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot PH2XK)			+/-	3,771.4029	µg/mL	Unstressed
	Purity 99%				+/-	3,780.3569	µg/mL	Stressed
18	Chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,507.0	µg/mL	+/-	14.5759	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 5670200)			+/-	151.2584	µg/mL	Unstressed
	Purity 99%				+/-	151.6175	µg/mL	Stressed
20	Tetrahydrofuran		5,006.7	µg/mL	+/-	29.1092	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	302.0744	µg/mL	Unstressed
	Purity 99%				+/-	302.7916	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,507.7	µg/mL	+/-	14.5798	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	151.2986	µg/mL	Unstressed
	Purity 99%				+/-	151.6579	µg/mL	Stressed
22	Cyclohexane		2,508.0	µg/mL	+/-	14.5817	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	151.3188	µg/mL	Unstressed
	Purity 99%				+/-	151.6780	µg/mL	Stressed
23	1,1-Dichloropropene		2,502.4	µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 5221100)			+/-	150.9809	µg/mL	Unstressed
	Purity 96%				+/-	151.3393	µg/mL	Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,510.3	µg/mL	+/- +/- +/-	14.5953 151.4595 151.8191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot TFHUC)	2,511.8	µg/mL	+/- +/- +/-	14.6040 151.5500 151.9098	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,501.3	µg/mL	+/- +/- +/-	14.5430 150.9165 151.2748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,504.8	µg/mL	+/- +/- +/-	14.5633 151.1277 151.4865	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,508.7	µg/mL	+/- +/- +/-	14.5856 151.3590 151.7183	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot Q02QG)	2,504.5	µg/mL	+/- +/- +/-	14.5614 151.1076 151.4663	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot ERRBI-RH)	2,504.0	µg/mL	+/- +/- +/-	14.5585 151.0774 151.4361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot YVP2C)	50,008.0	µg/mL	+/- +/- +/-	290.7356 3,017.2028 3,024.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,509.5	µg/mL	+/- +/- +/-	14.5904 151.4093 151.7687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,502.0	µg/mL	+/- +/- +/-	14.5468 150.9567 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,501.5	µg/mL	+/- +/- +/-	14.5439 150.9266 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,508.8	µg/mL	+/- +/- +/-	14.5866 151.3690 151.7284	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 96%	(Lot ZDMSL)	2,502.9	µg/mL	+/- +/- +/-	14.5520 151.0098 151.3684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	(Lot 7871500)	2,502.5	µg/mL	+/- +/- +/-	14.5498 150.9869 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,502.7	µg/mL	+/- +/- +/-	14.5507 150.9970 151.3555	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,505.0	µg/mL	+/- +/- +/-	14.5643 151.1378 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane		2,502.4	µg/mL	+/-	14.5494	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	150.9832	µg/mL	Unstressed
	Purity 97%				+/-	151.3417	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
42	Chlorobenzene		2,504.8	µg/mL	+/-	14.5633	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	151.1277	µg/mL	Unstressed
	Purity 99%				+/-	151.4865	µg/mL	Stressed
43	m-Xylene		1,251.7	µg/mL	+/-	7.2941	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.5202	µg/mL	Unstressed
	Purity 99%				+/-	75.6995	µg/mL	Stressed
44	p-Xylene		1,253.7	µg/mL	+/-	7.3058	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	75.6409	µg/mL	Unstressed
	Purity 99%				+/-	75.8205	µg/mL	Stressed
45	Ethylbenzene		2,503.5	µg/mL	+/-	14.5556	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	151.0472	µg/mL	Unstressed
	Purity 99%				+/-	151.4059	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,506.7	µg/mL	+/-	14.5740	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	151.2383	µg/mL	Unstressed
	Purity 99%				+/-	151.5974	µg/mL	Stressed
47	o-Xylene		2,504.2	µg/mL	+/-	14.5594	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	151.0875	µg/mL	Unstressed
	Purity 99%				+/-	151.4462	µg/mL	Stressed
48	Styrene		2,507.2	µg/mL	+/-	14.5769	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	151.2685	µg/mL	Unstressed
	Purity 99%				+/-	151.6276	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,505.2	µg/mL	+/-	14.5653	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	151.1478	µg/mL	Unstressed
	Purity 99%				+/-	151.5067	µg/mL	Stressed
50	Bromoform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5461400)			+/-	150.8661	µg/mL	Unstressed
	Purity 97%				+/-	151.2243	µg/mL	Stressed
51	Bromodichloromethane		2,501.3	µg/mL	+/-	14.5427	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	150.9137	µg/mL	Unstressed
	Purity 98%				+/-	151.2720	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,505.7	µg/mL	+/-	14.5682	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)			+/-	151.1780	µg/mL	Unstressed
	Purity 99%				+/-	151.5369	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,514.2	µg/mL	+/-	14.6177	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	151.6922	µg/mL	Unstressed
	Purity 98%				+/-	152.0524	µg/mL	Stressed
55	n-Propylbenzene		2,503.7	µg/mL	+/-	14.5565	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	151.0573	µg/mL	Unstressed
	Purity 99%				+/-	151.4159	µg/mL	Stressed

56	Bromobenzene		2,506.2	µg/mL	+/-	14.5711	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	151.2081	µg/mL	Unstressed
	Purity 99%				+/-	151.5671	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
58	2-Chlorotoluene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
59	4-Chlorotoluene		2,509.2	µg/mL	+/-	14.5885	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	151.3891	µg/mL	Unstressed
	Purity 99%				+/-	151.7486	µg/mL	Stressed
60	tert-Butylbenzene		2,505.8	µg/mL	+/-	14.5691	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	151.1880	µg/mL	Unstressed
	Purity 99%				+/-	151.5470	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,508.7	µg/mL	+/-	14.5856	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	151.3590	µg/mL	Unstressed
	Purity 99%				+/-	151.7183	µg/mL	Stressed
62	sec-Butylbenzene		2,504.7	µg/mL	+/-	14.5623	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	151.1176	µg/mL	Unstressed
	Purity 99%				+/-	151.4764	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,506.3	µg/mL	+/-	14.5720	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	151.2182	µg/mL	Unstressed
	Purity 99%				+/-	151.5772	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,509.8	µg/mL	+/-	14.5924	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	151.4294	µg/mL	Unstressed
	Purity 99%				+/-	151.7889	µg/mL	Stressed
66	n-Butylbenzene		2,513.7	µg/mL	+/-	14.6147	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	151.6607	µg/mL	Unstressed
	Purity 99%				+/-	152.0207	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,508.5	µg/mL	+/-	14.5845	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	151.3473	µg/mL	Unstressed
	Purity 98%				+/-	151.7066	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed
70	Hexachlorobutadiene		2,504.4	µg/mL	+/-	14.5607	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 5526800)			+/-	151.1002	µg/mL	Unstressed
	Purity 97%				+/-	151.4590	µg/mL	Stressed
71	Naphthalene		2,503.3	µg/mL	+/-	14.5546	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	151.0372	µg/mL	Unstressed
	Purity 99%				+/-	151.3958	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,512.2	µg/mL	+/-	14.6063	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	151.5740	µg/mL	Unstressed
	Purity 98%				+/-	151.9338	µg/mL	Stressed

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

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

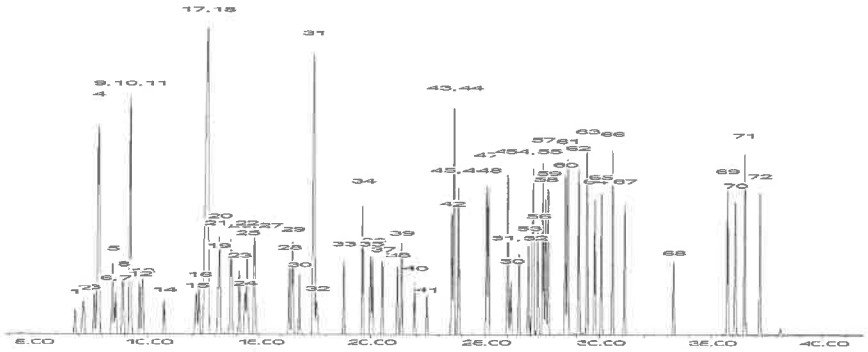
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2018 **Balance:** 1127510105

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 21-Dec-2018

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

Reagent

MV-571992_00004

RESTEK®
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 571992 **Lot No.:** A0143774

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : June 30, 2021 **Storage:** 0°C or colder

Received 8/30/19 GM

4x/mL

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether)	2,500.6 µg/mL	+/- 14.5388 µg/mL	Gravimetric
	CAS # 60-29-7 (Lot SHBJ5713)		+/- 150.8738 µg/mL	Unstressed
	Purity 99%		+/- 151.2320 µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	2,501.6 µg/mL	+/- 14.5447 µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00009482)		+/- 150.9341 µg/mL	Unstressed
	Purity 99%		+/- 151.2925 µg/mL	Stressed
3	1,1-dichloroethene	2,501.9 µg/mL	+/- 14.5461 µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/- 150.9492 µg/mL	Unstressed
	Purity 99%		+/- 151.3076 µg/mL	Stressed
4	tert-Butanol (TBA)	25,008.1 µg/mL	+/- 145.3918 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBJ9404)		+/- 1,508.8503 µg/mL	Unstressed
	Purity 99%		+/- 1,512.4325 µg/mL	Stressed
5	Methyl acetate	5,000.8 µg/mL	+/- 29.0748 µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBG4345V)		+/- 301.7174 µg/mL	Unstressed
	Purity 99%		+/- 302.4337 µg/mL	Stressed
6	Iodomethane (methyl iodide)	2,500.6 µg/mL	+/- 14.5388 µg/mL	Gravimetric
	CAS # 74-88-4 (Lot SHBH4362V)		+/- 150.8738 µg/mL	Unstressed
	Purity 99%		+/- 151.2320 µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	2,502.0 µg/mL	+/- 14.5468 µg/mL	Gravimetric
	CAS # 107-05-1 (Lot WXBB7852V)		+/- 150.9567 µg/mL	Unstressed
	Purity 99%		+/- 151.3151 µg/mL	Stressed

8	Methylene chloride (dichloromethane)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
9	Carbon disulfide		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
10	Acrylonitrile		25,010.4	µg/mL	+/-	145.4049	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot R15D047)			+/-	1,508.9860	µg/mL	Unstressed
	Purity 99%				+/-	1,512.5686	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBH9526)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
13	n-Hexane (C6)		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBH8106)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBT5124)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.9	µg/mL	+/-	363.3665	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,770.9529	µg/mL	Unstressed
	Purity 99%				+/-	3,779.9058	µg/mL	Stressed
18	chloroform		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
19	Bromochloromethane		2,500.6	µg/mL	+/-	14.5387	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	150.8718	µg/mL	Unstressed
	Purity 98%				+/-	151.2300	µg/mL	Stressed
20	Tetrahydrofuran		5,000.6	µg/mL	+/-	29.0741	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	301.7099	µg/mL	Unstressed
	Purity 99%				+/-	302.4262	µg/mL	Stressed
21	1,1,1-trichloroethane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot B15W12061)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
22	Cyclohexane		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCC9660)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
23	1,1-Dichloropropene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 180531JLM)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBJ2110)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBJ2424)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBJ0707)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBJ5344)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 99%	(Lot SHBJ0457)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot BCBR0882V)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBJ7415)	50,001.1	µg/mL	+/- 290.6957 +/- 3,016.7880 +/- 3,023.9503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 99%	(Lot 10201030)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 25076)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBJ5659)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot 69796APV)	2,502.8	µg/mL	+/- 14.5512 +/- 151.0020 +/- 151.3605	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 98%	(Lot C797620)	2,500.6	µg/mL	+/- 14.5387 +/- 150.8718 +/- 151.2300	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBH9691)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane		2,502.4	µg/mL	+/-	14.5493	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)			+/-	150.9827	µg/mL	Unstressed
	Purity 98%				+/-	151.3411	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
42	Chlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
43	m-Xylene		1,251.5	µg/mL	+/-	7.2763	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)			+/-	75.5085	µg/mL	Unstressed
	Purity 99%				+/-	75.6878	µg/mL	Stressed
44	p-Xylene		1,250.1	µg/mL	+/-	7.2683	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ0052)			+/-	75.4256	µg/mL	Unstressed
	Purity 99%				+/-	75.6047	µg/mL	Stressed
45	Ethylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ3183)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
47	o-Xylene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
48	Styrene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot 10185056)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
50	bromoform		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBG3138V)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
51	bromodichloromethane		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,500.0	µg/mL	+/-	14.5355	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBX7788V)			+/-	150.8389	µg/mL	Unstressed
	Purity 94%				+/-	151.1971	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
58	2-Chlorotoluene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
59	4-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,499.9	µg/mL	+/-	14.5348	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBH5027V)			+/-	150.8320	µg/mL	Unstressed
	Purity 97%				+/-	151.1901	µg/mL	Stressed
62	sec-Butylbenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKBV3556V)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
66	n-Butylbenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	151.0095	µg/mL	Unstressed
	Purity 99%				+/-	151.3681	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,502.0	µg/mL	+/-	14.5468	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	150.9567	µg/mL	Unstressed
	Purity 99%				+/-	151.3151	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,502.1	µg/mL	+/-	14.5476	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	150.9643	µg/mL	Unstressed
	Purity 99%				+/-	151.3227	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
71	Naphthalene		2,502.8	µg/mL	+/-	14.5512	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	151.0020	µg/mL	Unstressed
	Purity 99%				+/-	151.3605	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,502.5 µg/mL	+/-	14.5498	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)		+/-	150.9869	µg/mL	Unstressed
	Purity 99%			+/-	151.3454	µg/mL	Stressed

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

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

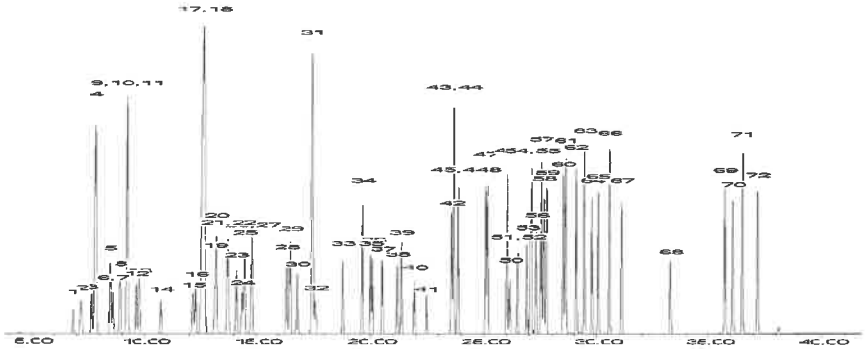
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

F. Joseph Tallon - Mix Technician **Date Mixed:** 05-Dec-2018 **Balance:** B251644995

Diane Shaffer - Operations Tech-ARM QC **Date Passed:** 21-Dec-2018

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

Reagent

mv-571993_00004

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 571993 **Lot No.:** A0144915

Description : 8260 List 3/ Std#1 Polar Additions (2017)

8260 List 3/ Std#1 Polar Additions (2017) 2,500-25,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : January 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetonitrile	25,249.0 µg/mL	+/- 147.8384 µg/mL	Gravimetric
	CAS # 75-05-8 (Lot SHBH6233)		+/- 1,249.1362 µg/mL	Unstressed
	Purity 99%		+/- 1,280.1910 µg/mL	Stressed
2	Diisopropyl ether (DIPE)	2,524.3 µg/mL	+/- 14.8142 µg/mL	Gravimetric
	CAS # 108-20-3 (Lot SHBH1927V)		+/- 124.8896 µg/mL	Unstressed
	Purity 99%		+/- 127.9943 µg/mL	Stressed
3	Ethyl-tert-butyl ether (ETBE)	2,524.3 µg/mL	+/- 14.8142 µg/mL	Gravimetric
	CAS # 637-92-3 (Lot MKCC2702)		+/- 124.8896 µg/mL	Unstressed
	Purity 99%		+/- 127.9943 µg/mL	Stressed
4	Propionitrile	25,249.7 µg/mL	+/- 147.8424 µg/mL	Gravimetric
	CAS # 107-12-0 (Lot BCBV8545)		+/- 1,249.1692 µg/mL	Unstressed
	Purity 99%		+/- 1,280.2248 µg/mL	Stressed
5	tert-Amyl alcohol	25,249.0 µg/mL	+/- 147.8384 µg/mL	Gravimetric
	CAS # 75-85-4 (Lot STBG1140V)		+/- 1,249.1362 µg/mL	Unstressed
	Purity 99%		+/- 1,280.1910 µg/mL	Stressed
6	tert-Amyl methyl ether (TAME)	2,523.7 µg/mL	+/- 14.8103 µg/mL	Gravimetric
	CAS # 994-05-8 (Lot HMBF8365V)		+/- 124.8566 µg/mL	Unstressed
	Purity 99%		+/- 127.9605 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)

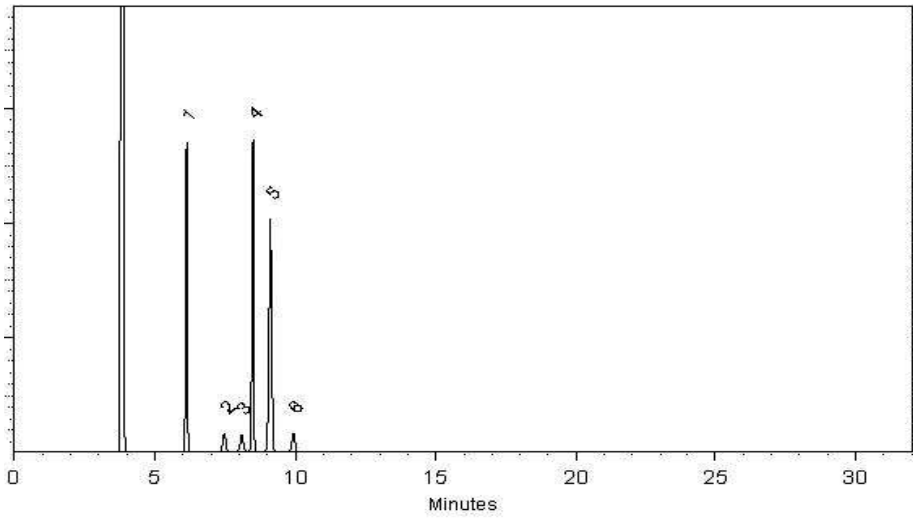
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jessica McClenahan - Operations Technician I

Date Mixed: 14-Jan-2019 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jan-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-571994_00004

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Certificate of Analysis

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Rec'd 4/23/20

Catalog No. : 571994 **Lot No.:** A0156082

Description : 8260 Ethanol Standard

8260 Ethanol Standard 100,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : December 31, 2022 **Storage:** 0°C or colder

GM

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethanol	100,295.5 µg/mL	+/- 587.2219	µg/mL	Gravimetric
	CAS # 64-17-5 (Lot SHBK6489)		+/- 2,148.4543	µg/mL	Unstressed
	Purity 99%		+/- 2,210.8497	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)

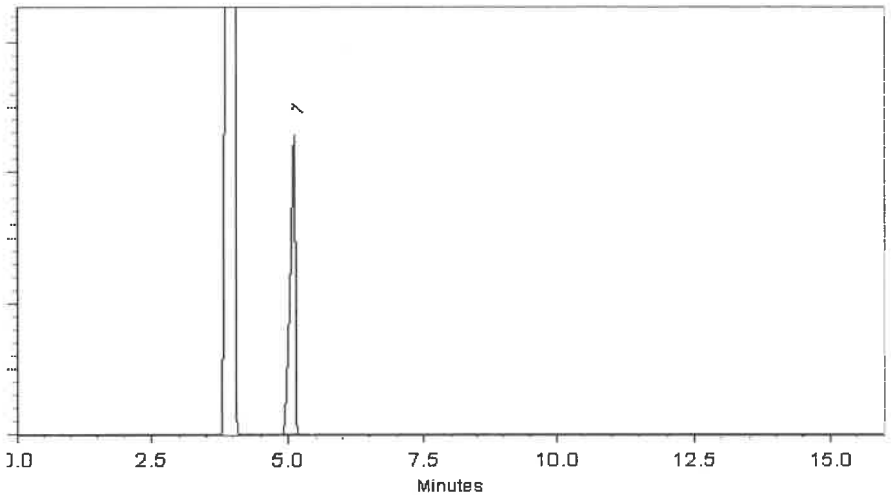
Carrier Gas:
hydrogen-constant pressure 11 psi.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/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.

Cathleen Soltis - Mix Technician

Date Mixed: 23-Dec-2019 **Balance:** B251644995

Tyler Brown - Operations Tech-ARM QC

Date Passed: 26-Dec-2019

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

Reagent

MV-CUS17739_00005

Agilent

Certificate of Analysis
ISO 17034

Custom Standard

Product Number: CUS-17739 **Page:** 1 of 1

Lot Number: 0006503344 **Lot Issue Date:** 12-Nov-2019 **Expiration Date:** 31-Dec-2021

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1-chlorohexane	000544-10-5	RM12893	1001 ± 5 µg/mL
2-pentanone	000107-87-9	RM03775	4016 ± 20 µg/mL
sec-butanol	000078-92-2	RM01299	30126 ± 151 µg/mL

Matrix: methanol (purge & trap grade)

Storage: Store Frozen (-25° to -10°C).

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

Monica Bourgeois
QMS Representative

12/11/19

RECEIVED

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ISO 17034 Cert No. AR-1936

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

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 570812 **Lot No.:** A0143593

Description : 8260 IS/Surrogate Mix (2016)

8260 IS/Surrogate Mix (2016) 250-5,000µg/mL, P&T Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol	5,000.1 µg/mL	+/- 29.0694 µg/mL	Gravimetric
	CAS # 25725-11-5 (Lot CD-107)		+/- 107.0521 µg/mL	Unstressed
	Purity 98%		+/- 110.1643 µg/mL	Stressed
2	Dibromofluoromethane	250.2 µg/mL	+/- 1.4580 µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 0012017)		+/- 5.3577 µg/mL	Unstressed
	Purity 99%		+/- 5.5134 µg/mL	Stressed
3	1,2-Dichloroethane-d4	250.3 µg/mL	+/- 1.4584 µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot PR-29377)		+/- 5.3592 µg/mL	Unstressed
	Purity 99%		+/- 5.5149 µg/mL	Stressed
4	1,4-Dioxane-d8	5,000.5 µg/mL	+/- 29.0716 µg/mL	Gravimetric
	CAS # 17647-74-4 (Lot I-19942)		+/- 107.0602 µg/mL	Unstressed
	Purity 99%		+/- 110.1726 µg/mL	Stressed
5	Fluorobenzene	250.1 µg/mL	+/- 1.4573 µg/mL	Gravimetric
	CAS # 462-06-6 (Lot BCBK8171V)		+/- 5.3549 µg/mL	Unstressed
	Purity 99%		+/- 5.5105 µg/mL	Stressed
6	Toluene-d8	250.1 µg/mL	+/- 1.4575 µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-27311)		+/- 5.3556 µg/mL	Unstressed
	Purity 99%		+/- 5.5112 µg/mL	Stressed
7	Chlorobenzene-d5	250.5 µg/mL	+/- 1.4600 µg/mL	Gravimetric
	CAS # 3114-55-4 (Lot PR-23926)		+/- 5.3649 µg/mL	Unstressed
	Purity 99%		+/- 5.5208 µg/mL	Stressed

8	1-Bromo-4-fluorobenzene (BFB)		250.1	µg/mL	+/-	1.4575	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KO)			+/-	5.3556	µg/mL	Unstressed
	Purity 99%				+/-	5.5112	µg/mL	Stressed
9	1,4-Dichlorobenzene-d4		250.2	µg/mL	+/-	1.4580	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/-	5.3577	µg/mL	Unstressed
	Purity 99%				+/-	5.5134	µg/mL	Stressed

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

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

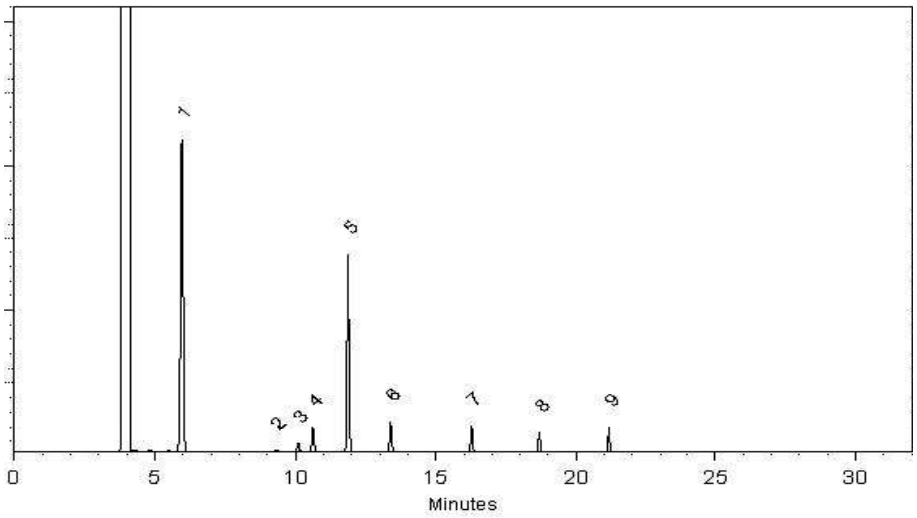
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

F. Joseph Tallon - Mix Technician

Date Mixed: 29-Nov-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Dec-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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mv-VO-TAOH-5_00011

Reference Materials Producer
Cert #2495.01

SPEXertificate®
Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: VO-TAOH-5 **Lot No.** CP200901024

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: September 2, 2020

Expiration Date: March 1, 2021

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
Propylene oxide	75-56-9	50000 µg/mL	99%	49920 µg/mL	± 1797 µg/mL
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	49993 µg/mL	± 1800 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	999 µg/mL	± 36 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	1018 µg/mL	± 37 µg/mL

* - Isomer ratios (when applicable) are an uncertified parameter.

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. 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 information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: September 2, 2020

Certifying Officer: Shannon Mace

Shannon Macieira, Operations Manager

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Report of Certification

Catalog Number: VO-TAOH-5
Description: Custom Organic Standard
Matrix: Methanol (Purge & Trap Grade)

Lot No. CP200901024

Manufactured Date: September 2, 2020
Expiration Date: March 1, 2021

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS) and ISO 17025 (accredited by A2LA), and ISO 17034 (accredited by A2LA) quality system consistent with the following standards:

- 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 lables
- ISO Guide 35: Refernece Materials - General and Statistical 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

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a freezer (-35°C to -10°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and applicable only if the product is stored under the laboratory specified conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 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 assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of this 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 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bo ttle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as 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 compound standard uncertainty components u_i, where $u_c=\sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified 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 of any kind whatsoever, whether based on breech 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 be liable for any loss of profits or any incidental, special, or consequential damages.

SPEX CertiPrep®
Your Science is Our Passion.®

203 Norcross Ave. Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-732-549-7144 • Fax 1-732-603-9647

Reagent

NH3 CAL STD_00033

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH_3)

Lot Number: 4008G09 **Product Number:** 5455

Manufacture Date: AUG 17, 2020
Expiration Date: FEB 2022

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Chloride	12125-02-9	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonia nitrogen)	ASTM (D 3590 A)
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonium nitrogen)	ASTM (D 3590 B)
Stock Ammonium Chloride Solution	APHA (4500-CN- L)
Stock Ammonium Solution	APHA (4500-NH3 C)
Stock Ammonium chloride Solution	APHA (4500-NH3 D)
Stock Ammonium Solution	APHA (4500-NH3 F)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.3)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.4)
Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.1)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5455-16	500 mL natural poly	18 months
5455-4	120 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Chris Collins (08/17/2020)

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_00029

300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com
tel: 800.669.6779 · 540.585.3030
fax: 540.585.3017
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	N2-NH669544
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.0000%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 3 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1005 ± 3 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

Assay Method #2 **997 ± 3 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

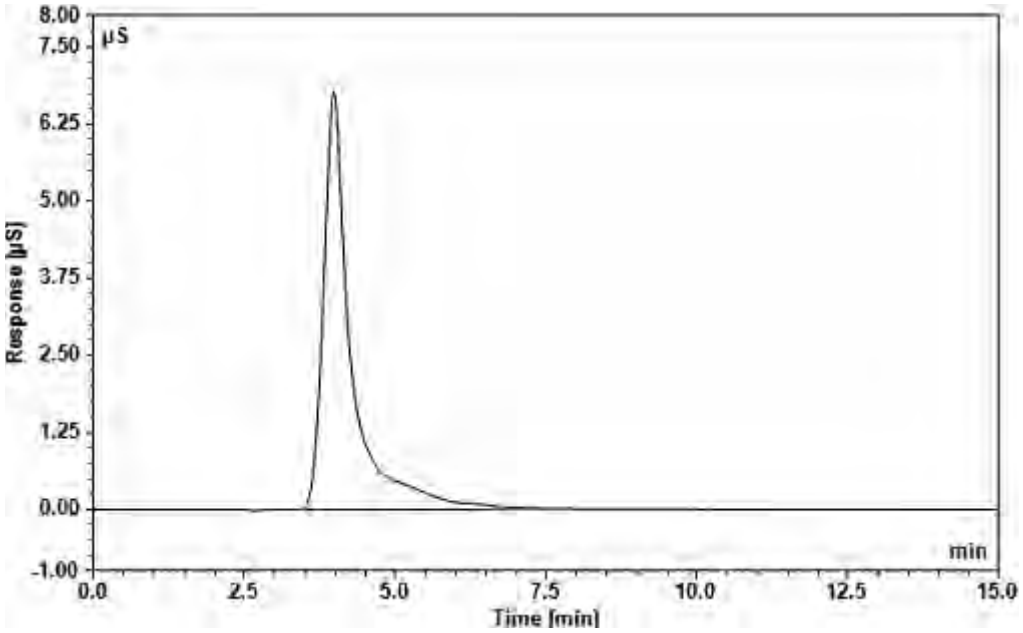
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS18 2 x 250 mm	**Eluent:**	10 mM MSA
Guard Column:	IonPac CG18 2 x 50 mm	**Eluent Flow Rate:**	0.25 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	35 °C
		Cell Temp:	35 °C
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale X-Axis:**	minutes
		Scale Y-Axis:	8 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	8 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 01, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 01, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

James King Jr
Chemist, Technical Manager



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

PicricARestek_00097

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.:** A0164473

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 : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid **CAS #** 88-89-1 **Purity** 97%	(Lot 06130CU)	1,006.9 µg/mL	+/- 5.9804 µg/mL +/- 55.1588 µg/mL +/- 64.3206 µg/mL		Gravimetric Unstressed Stressed

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

Rec 2/10/21 2 vials

AL

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

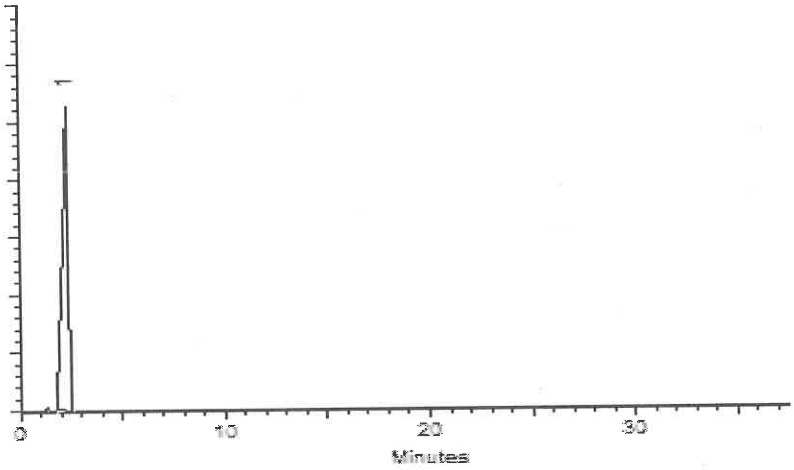
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Kylie Struble - Operations Technician I

Date Mixed: 16-Sep-2020 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 24-Sep-2020

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

Reagent

RSK175methane_00010

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
6141 Easton Road
Bldg 1
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF BATCH ANALYSIS

Grade of Product: CP

Customer:	SIGMA-ALDRICH		
Part Number:	ME CPP14C514	Reference Number:	160-401480003-1
Cylinder Analyzed:	ST0000198540	Cylinder Volume:	14.0 LG
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	240 PSIG
Analysis Date:	Apr 16, 2019	Valve Outlet:	160
Lot Number:	160-401480003-1		

Expiration Date: Apr 16, 2022

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
METHANE	> 99.0 %	> 99.0 %

Cylinders in Batch:

ST0000198540, ST0000198541, ST0000198542, ST0000198543

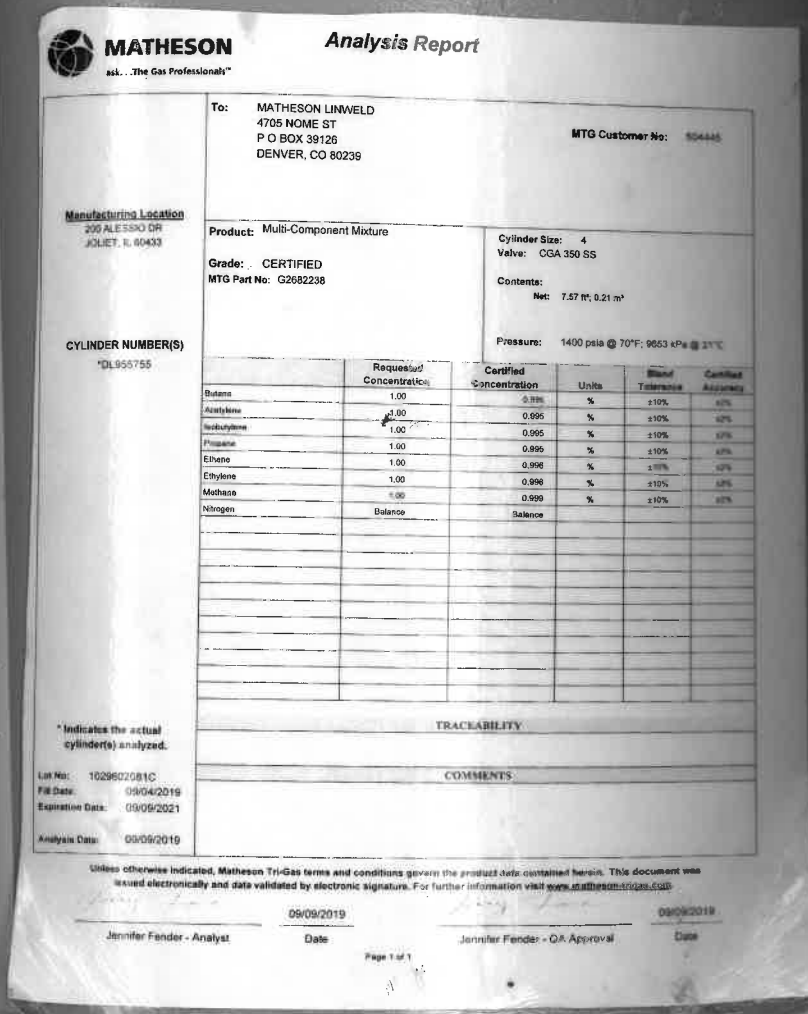
Notes:MANUFACTURE DATE 4-16-2019
PO# P481562
P/N 22562

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Approved for Release

Reagent

RSK7gasMathes_00027



MATHESON
ask...The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
200 ALESSIO DR
JOLIET, IL 60433

Product: Multi-Component Mixture

Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS

Contents:
Net: 7.57 ft³; 0.21 m³

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)
*DL955755

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	0.995	%	±10%	±2%
Acetylene	1.00	0.995	%	±10%	±2%
Isobutylene	1.00	0.995	%	±10%	±2%
Propane	1.00	0.995	%	±10%	±2%
Ethene	1.00	0.998	%	±10%	±2%
Ethylene	1.00	0.998	%	±10%	±2%
Methane	1.00	0.999	%	±10%	±2%
Nitrogen	Balance	Balance			

* Indicates the actual cylinder(s) analyzed.

Lot No: 1029602081C
Fill Date: 09/04/2019
Expiration Date: 09/09/2021

Analysis Date: 09/09/2019

TRACEABILITY

COMMENTS

Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com

Jennifer Fender - Analyst — 09/09/2019 Date

Jennifer Fender - QA Approval — 09/09/2019 Date

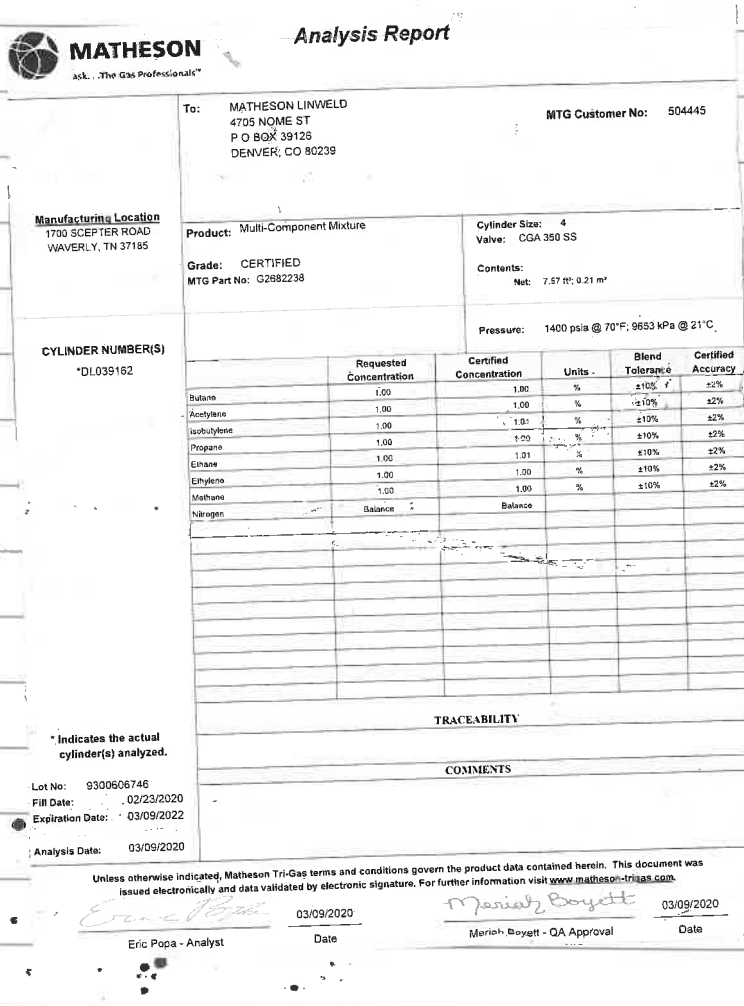
Page 1 of 1

74-82-8
7727-37-9

PRODUCT LABEL
Industrial Use Only.
Ver. 3.93
Matheson
Joliet, IL

Reagent

RSK7gasMathes_00031



MATHESON

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Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture

Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS

Contents:
Net: 7.57 ft³; 0.21 m³

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)
*DL039162

	Requested Concentration	Certified Concentration	Units -	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.01	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	1.01	%	±10%	±2%
Ethylene	1.00	1.00	%	±10%	±2%
Methane	1.00	1.00	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

* Indicates the actual cylinder(s) analyzed.

Lot No: 9300606746
Fill Date: 02/23/2020
Expiration Date: 03/09/2022
Analysis Date: 03/09/2020

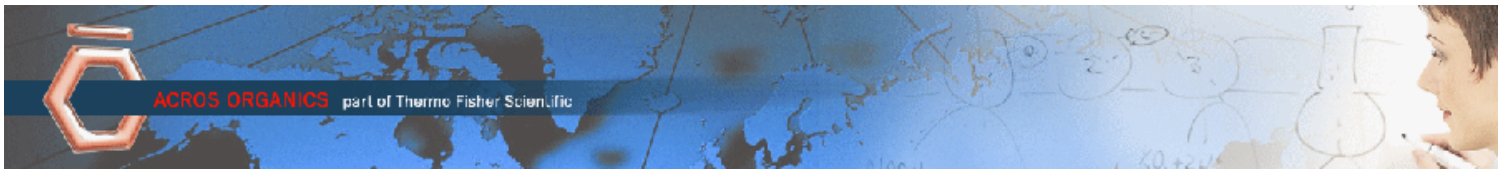
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — 03/09/2020 — Date

Meriah Boyett - QA Approval — 03/09/2020 — Date

Reagent

SFD ICV STK_00008



Version	1
Molecular weight	240.18
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 lot number below 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

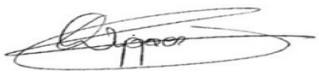
warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsiblity of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	38706	**Quality Test / Release Date**	22 April 2021
Lot Number	A0412804	**Suggested Retest Date**	April 2024
Description	Sodium sulfide nonahydrate,98+%,extra pure		
Country of Origin	INDIA		
Declaration of Origin	synthetic		

Origin Comment	

Result Name	Specifications	Test Value
Appearance (Color)	Colorless to light yellow	Light yellow
Appearance (Form)	Adhering crystals and/or chunks	Adhering crystals
Titration Iodimetric	32.0 to 38.0 % (Na2S)	32.3 % (Na2S)
Total nitrogen (as N)	=<0.005 %	=<0.005 %
Sulfite (as SO2)	=<2000 ppm	=<1000 ppm
Thiosulphate (S2O3)	=<5000 ppm	=<1000 ppm





C. Wygaerts, QA Manager Issued: 27 April 2021

Acros Organics
ENA23, zone 1, 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 Reagent Lane, Fair Lawn, NJ 07410,USA Fax 201-796-1329

Reagent

TKN CAL STD_00019

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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: 200817
Manufacture Date: 08/17/20
Certified Date: 08/17/20

Expiration: 08/31/2024
Matrix: Water
Hazards: Irritant
(See MSDS)

Bulk Number	Analyte	CAS #	Purity	Certified Concentration (mg/L TKN)
W-1477-30	TKN from Glycine	56-40-6	99.8%	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 ANSI 17025 accredited calibration laboratory.

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Catalog Number: IS-009, IS-009-500
Lot Number: 200817

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_00013

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:	200220m
ISSUE DATE:	March 20, 2020
REVISION DATE:	Original
STARTING MATERIAL:	Glycine (NH_2CH_2COOH)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	6.1%
MATRIX:	18 megohm deionized water and 1% (v/v) HCl
DENSITY:	0.9966 ± 0.0020 g/mL at 19.4°C and 753 mm Hg
TRACEABILITY[3]:	98.3%
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 02/07/2022.** 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

TOC ICV Std_00046

RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Organic Carbon Standard, 1000 ppm C

Lot Number: 1008G17 **Product Number:** 1847

Manufacture Date: AUG 28, 2020
Expiration Date: AUG 2021

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

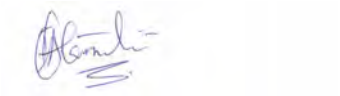
Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

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
1847-8	250 mL amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Israel Alamudun (08/28/2020)
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_00051

Agilent

Certificate of Analysis

Product Name: Total Organic Carbon (TOC) Standard

Product Number: IQC-106 **Lot Issue Date:** 09-Feb-2021

Lot Number: 0006588597 **Expiration Date:** 31-Mar-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO 17034 / ISO 17025 accredited laboratory and compared to calibration standards independently prepared using NIST SRM(s) when available. The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
potassium hydrogen phthalate (KHP) (as TOC)	000877-24-7	RM14981	1001 ± 5 mg/L

Matrix: water (low TOC, < 50 ppb)

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

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-040.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SHGW03-21A	280-149116-5	100	99	102	101
SHGW02-21A	280-149116-6	100	97	100	101
SHGW05-21A	280-149116-7	102	98	101	101
TB052621	280-149116-8	101	97	102	102
	MB 280-538703/9	100	99	99	102
	LCS 280-538703/4	100	98	101	102
	LCSD 280-538703/5	100	98	100	99

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-119
DCA = 1,2-Dichloroethane-d4 (Surr)	81-118
TOL = Toluene-d8 (Surr)	89-112
BFB = 4-Bromofluorobenzene (Surr)	85-114

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS1_2746.D

Lab ID: LCS 280-538703/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	23.7	95	74-131	
1,1,2,2-Tetrachloroethane	25.0	25.1	100	71-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.8	115	70-136	
1,1,2-Trichloroethane	25.0	23.8	95	80-119	
1,1-Dichloroethane	25.0	25.9	103	77-125	
1,1-Dichloroethene	25.0	26.1	104	71-131	
1,2,3-Trichlorobenzene	25.0	23.6	94	69-129	
1,2,4-Trichlorobenzene	25.0	24.7	99	69-130	
1,2-Dibromo-3-Chloropropane	25.0	23.8	95	62-128	
1,2-Dichlorobenzene	25.0	25.3	101	80-119	
1,2-Dichloroethane	25.0	25.3	101	73-128	
1,2-Dichloropropane	25.0	26.6	107	78-122	
1,3-Dichlorobenzene	25.0	25.8	103	80-119	
1,4-Dichlorobenzene	25.0	24.6	98	79-118	
2-Butanone (MEK)	100	86.5	86	56-143	
2-Hexanone	100	92.0	92	57-139	
4-Methyl-2-pentanone (MIBK)	100	94.1	94	67-130	
Acetone	100	86.4	86	39-160	
Benzene	25.0	25.8	103	79-120	
Bromochloromethane	25.0	24.6	98	78-123	
Bromodichloromethane	25.0	23.4	94	79-125	
Bromoform	25.0	24.0	96	66-130	
Bromomethane	25.0	26.8	107	53-141	
Carbon disulfide	25.0	27.3	109	64-133	
Carbon tetrachloride	25.0	25.7	103	72-136	
Chlorobenzene	25.0	24.5	98	82-118	
Chloroethane	25.0	26.3	105	60-138	
Chloroform	25.0	24.6	98	79-124	
Chloromethane	25.0	22.2	89	50-139	
cis-1,2-Dichloroethene	25.0	24.0	96	78-123	
cis-1,3-Dichloropropene	25.0	26.2	105	75-124	
Cyclohexane	25.0	25.5	102	71-130	
Dibromochloromethane	25.0	24.8	99	74-126	
Dichlorodifluoromethane	25.0	23.6	95	32-152	
Ethylbenzene	25.0	24.8	99	79-121	
Ethylene Dibromide	25.0	23.2	93	77-121	
Isopropylbenzene	25.0	25.6	102	72-131	
Methyl acetate	50.0	46.3	93	56-136	
Methyl tert-butyl ether	25.0	25.1	100	71-124	
Methylcyclohexane	25.0	24.2	97	72-132	
Methylene Chloride	25.0	25.4	102	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.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS1_2746.D

Lab ID: LCS 280-538703/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	25.0	25.2	101	78-123	
Tetrachloroethene	25.0	26.0	104	74-129	
Toluene	25.0	24.9	100	80-121	
trans-1,2-Dichloroethene	25.0	23.8	95	75-124	
trans-1,3-Dichloropropene	25.0	25.5	102	73-127	
Trichloroethene	25.0	23.2	93	79-123	
Trichlorofluoromethane	25.0	25.1	101	65-141	
Vinyl chloride	25.0	24.9	100	58-137	
Xylenes, Total	50.0	52.4	105	79-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS1_2747.D

Lab ID: LCSD 280-538703/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	23.5	94	1	20	74-131	
1,1,2,2-Tetrachloroethane	25.0	24.5	98	3	20	71-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.0	116	1	20	70-136	
1,1,2-Trichloroethane	25.0	24.4	97	2	20	80-119	
1,1-Dichloroethane	25.0	26.3	105	2	20	77-125	
1,1-Dichloroethene	25.0	27.0	108	4	20	71-131	
1,2,3-Trichlorobenzene	25.0	25.1	100	6	20	69-129	
1,2,4-Trichlorobenzene	25.0	24.8	99	0	20	69-130	
1,2-Dibromo-3-Chloropropane	25.0	22.1	88	7	20	62-128	
1,2-Dichlorobenzene	25.0	26.0	104	2	20	80-119	
1,2-Dichloroethane	25.0	25.0	100	1	20	73-128	
1,2-Dichloropropane	25.0	26.3	105	1	20	78-122	
1,3-Dichlorobenzene	25.0	26.0	104	1	20	80-119	
1,4-Dichlorobenzene	25.0	25.5	102	4	20	79-118	
2-Butanone (MEK)	100	79.5	79	8	20	56-143	
2-Hexanone	100	88.9	89	3	20	57-139	
4-Methyl-2-pentanone (MIBK)	100	93.1	93	1	20	67-130	
Acetone	100	81.2	81	6	20	39-160	
Benzene	25.0	26.2	105	2	20	79-120	
Bromochloromethane	25.0	24.1	97	2	20	78-123	
Bromodichloromethane	25.0	23.6	95	1	20	79-125	
Bromoform	25.0	22.8	91	5	20	66-130	
Bromomethane	25.0	26.2	105	2	20	53-141	
Carbon disulfide	25.0	27.6	110	1	20	64-133	
Carbon tetrachloride	25.0	27.2	109	6	20	72-136	
Chlorobenzene	25.0	25.5	102	4	20	82-118	
Chloroethane	25.0	26.6	106	1	20	60-138	
Chloroform	25.0	24.5	98	0	20	79-124	
Chloromethane	25.0	21.9	88	1	20	50-139	
cis-1,2-Dichloroethene	25.0	24.6	99	3	20	78-123	
cis-1,3-Dichloropropene	25.0	26.4	105	1	20	75-124	
Cyclohexane	25.0	27.2	109	6	20	71-130	
Dibromochloromethane	25.0	25.1	100	1	20	74-126	
Dichlorodifluoromethane	25.0	24.4	97	3	20	32-152	
Ethylbenzene	25.0	26.3	105	6	20	79-121	
Ethylene Dibromide	25.0	23.7	95	2	20	77-121	
Isopropylbenzene	25.0	25.9	104	1	20	72-131	
Methyl acetate	50.0	43.4	87	6	20	56-136	
Methyl tert-butyl ether	25.0	24.1	97	4	20	71-124	
Methylcyclohexane	25.0	27.0	108	11	20	72-132	
Methylene Chloride	25.0	25.4	101	0	20	74-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS1_2747.D

Lab ID: LCSD 280-538703/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	25.0	25.2	101	0	20	78-123	
Tetrachloroethene	25.0	26.0	104	0	20	74-129	
Toluene	25.0	24.9	100	0	20	80-121	
trans-1,2-Dichloroethene	25.0	24.0	96	1	20	75-124	
trans-1,3-Dichloropropene	25.0	26.1	104	2	20	73-127	
Trichloroethene	25.0	24.6	99	6	20	79-123	
Trichlorofluoromethane	25.0	26.3	105	5	20	65-141	
Vinyl chloride	25.0	26.7	107	7	20	58-137	
Xylenes, Total	50.0	51.9	104	1	20	79-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab File ID: MS1_2749.D Lab Sample ID: MB 280-538703/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_MS1 Date Analyzed: 06/05/2021 11:07

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 280-538703/4	MS1_2746.D	06/05/2021 10:03
	LCSD 280-538703/5	MS1_2747.D	06/05/2021 10:25
SHGW03-21A	280-149116-5	MS1_2767.D	06/05/2021 17:33
SHGW02-21A	280-149116-6	MS1_2768.D	06/05/2021 17:54
SHGW05-21A	280-149116-7	MS1_2769.D	06/05/2021 18:15
TB052621	280-149116-8	MS1_2770.D	06/05/2021 18:36

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab File ID: MS1_2711.D BFB Injection Date: 06/04/2021

Instrument ID: VMS_MS1 BFB Injection Time: 09:51

Analysis Batch No.: 538548

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.1	
75	30.0 - 60.0 % of mass 95	58.9	
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	Greater than 50% of mass 95	67.3	
175	5.0 - 9.0 % of mass 174	4.2	(6.2) 1
176	95.0 - 101.0 % of mass 174	65.8	(97.8) 1
177	5.0 - 9.0 % of mass 176	4.2	(6.3) 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
	STD010 280-538548/24	MS1_2712.D	06/04/2021	10:18
	STD020 280-538548/25	MS1_2713.D	06/04/2021	10:39
	STD050 280-538548/26	MS1_2714.D	06/04/2021	11:00
	STD10 280-538548/27	MS1_2715.D	06/04/2021	11:21
	STD50 280-538548/28	MS1_2716.D	06/04/2021	11:42
	STD75 280-538548/29	MS1_2717.D	06/04/2021	12:04
	STD100 280-538548/30	MS1_2718.D	06/04/2021	12:25
	STD200 280-538548/31	MS1_2719.D	06/04/2021	12:47
	STD005 280-538548/14	MS1_2722.D	06/04/2021	13:50
	STD010 280-538548/15	MS1_2723.D	06/04/2021	14:11
	STD020 280-538548/16	MS1_2724.D	06/04/2021	14:33
	STD10 280-538548/18	MS1_2726.D	06/04/2021	15:16
	ICIS 280-538548/19	MS1_2727.D	06/04/2021	15:37
	STD75 280-538548/20	MS1_2728.D	06/04/2021	15:58
	STD100 280-538548/21	MS1_2729.D	06/04/2021	16:20
	STD200 280-538548/22	MS1_2730.D	06/04/2021	16:41
	ICV 280-538548/23	MS1_2732.D	06/04/2021	17:24

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab File ID: MS1_2743.D BFB Injection Date: 06/05/2021

Instrument ID: VMS_MS1 BFB Injection Time: 08:45

Analysis Batch No.: 538703

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.4	
75	30.0 - 60.0 % of mass 95	58.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	63.9	
175	5.0 - 9.0 % of mass 174	4.7	(7.4) 1
176	95.0 - 101.0 % of mass 174	60.9	(95.2) 1
177	5.0 - 9.0 % of mass 176	4.1	(6.7) 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 280-538703/2	MS1_2744.D	06/05/2021	9:15
	LCS 280-538703/4	MS1_2746.D	06/05/2021	10:03
	LCSD 280-538703/5	MS1_2747.D	06/05/2021	10:25
	MB 280-538703/9	MS1_2749.D	06/05/2021	11:07
SHGW03-21A	280-149116-5	MS1_2767.D	06/05/2021	17:33
SHGW02-21A	280-149116-6	MS1_2768.D	06/05/2021	17:54
SHGW05-21A	280-149116-7	MS1_2769.D	06/05/2021	18:15
TB052621	280-149116-8	MS1_2770.D	06/05/2021	18:36
	CCVC 280-538703/37	MS1_2773.D	06/05/2021	19:40

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Sample No.: ICIS 280-538548/19 Date Analyzed: 06/04/2021 15:37

Instrument ID: VMS_MS1 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): MS1_2727.D Heated Purge: (Y/N) N

Calibration ID: 54226

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		769988	5.84	161871	8.58	257514	10.86
UPPER LIMIT		1539976	6.34	323742	9.08	515028	11.36
LOWER LIMIT		384994	5.34	80936	8.08	128757	10.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-538548/23		749174	5.84	154032	8.58	248786	10.86
CCV 280-538703/2		815157	5.84	163438	8.58	262417	10.86
LCS 280-538703/4		763066	5.84	159955	8.58	249112	10.86
LCSD 280-538703/5		755552	5.84	158988	8.58	249404	10.86
MB 280-538703/9		732989	5.84	154102	8.58	241734	10.85
280-149116-5	SHGW03-21A	692631	5.84	142741	8.58	220900	10.86
280-149116-6	SHGW02-21A	631999	5.84	131839	8.58	208817	10.86
280-149116-7	SHGW05-21A	627098	5.84	130754	8.58	210403	10.86
280-149116-8	TB052621	700779	5.84	146256	8.58	229674	10.86
CCVC 280-538703/37		745895	5.84	152246	8.58	239225	10.86

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW03-21A Lab Sample ID: 280-149116-5

Matrix: Water Lab File ID: MS1_2767.D

Analysis Method: 8260B Date Collected: 05/26/2021 12:05

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 17:33

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.: 538703 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	11		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.: 280-149116-1

SDG No.:

Client Sample ID: SHGW03-21A Lab Sample ID: 280-149116-5

Matrix: Water Lab File ID: MS1_2767.D

Analysis Method: 8260B Date Collected: 05/26/2021 12:05

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 17:33

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.: 538703 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)	99		81-118
460-00-4	4-Bromofluorobenzene (Surr)	101		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2767.D
Lims ID: 280-149116-E-5
Client ID: SHGW03-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 17:33:30 ALS Bottle#: 24 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-e-5 pH
Misc. Info.: 280-0102098-033
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:27:26 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 09:23:01

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.839	5.839	0.000	97	692631	50.0	
*	2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	142741	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	220900	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	184032	50.1	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	242950	49.4	
$	7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	632547	51.2	
$	8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	241060	50.3	
	11 Dichlorodifluoromethane	85		1.691				ND	
	12 Chloromethane	50		1.900				ND	
	13 Vinyl chloride	62		1.998				ND	
	15 Bromomethane	94		2.347				ND	
	16 Chloroethane	64		2.473				ND	
	18 Trichlorofluoromethane	101		2.724				ND	
	23 1,1-Dichloroethene	96		3.241				ND	
	24 112TCTFE	151		3.255				ND	
	25 Acetone	43		3.269				ND	
	28 Carbon disulfide	76		3.450				ND	
	30 Methyl acetate	43		3.562				ND	
	32 Methylene Chloride	84		3.702				ND	
	35 Methyl tert-butyl ether	73		3.939				ND	
	36 trans-1,2-Dichloroethene	96		3.953				ND	
	40 1,1-Dichloroethane	63		4.344				ND	
	46 2-Butanone (MEK)	43		4.819				ND	
	48 cis-1,2-Dichloroethene	96		4.847				ND	
	53 Chlorobromomethane	128		5.056				ND	
	55 Chloroform	83		5.126				ND	
	56 1,1,1-Trichloroethane	97		5.280				ND	
	57 Cyclohexane	56		5.350				ND	
	59 Carbon tetrachloride	117		5.420				ND	
	63 Benzene	78		5.587				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
70 Methylcyclohexane	55		6.369				ND	
71 1,2-Dichloropropane	63		6.383				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	95	23072	11.3	
89 Tetrachloroethene	164		7.767				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
107 Isopropylbenzene	105		9.533				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
134 1,2,3-Trichlorobenzene	180		13.344				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

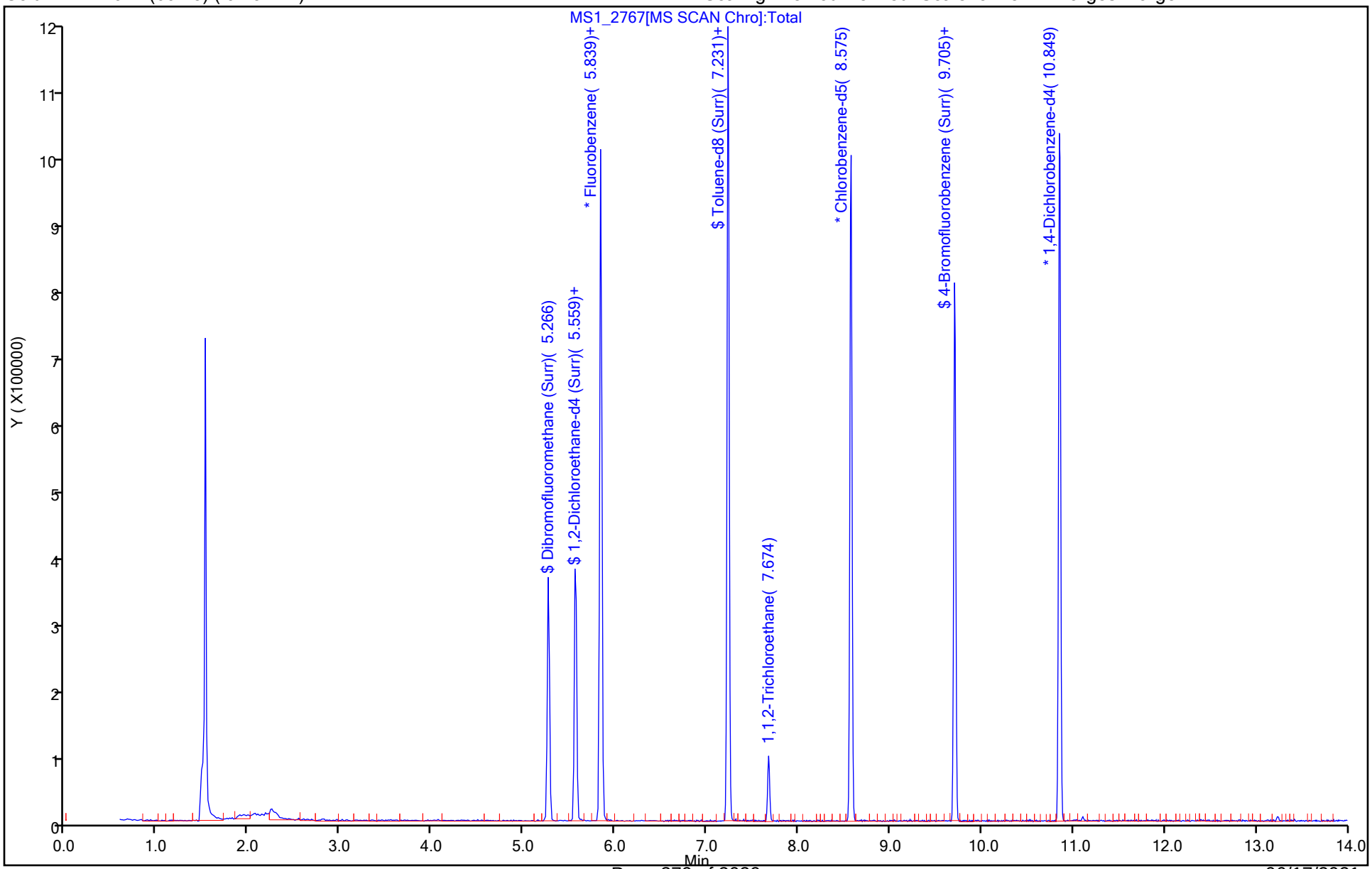
mv-IS_SS_00018 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 07-Jun-2021 09:28:10 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2767.D				
Injection Date:	05-Jun-2021 17:33:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	280-149116-E-5	Lab Sample ID:	280-149116-5	Worklist Smp#:	33
Client ID:	SHGW03-21A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2767.D
Lims ID: 280-149116-E-5
Client ID: SHGW03-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 17:33:30 ALS Bottle#: 24 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-e-5 pH
Misc. Info.: 280-0102098-033
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:27:26 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 09:23:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.1	100.25
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.4	98.79
$ 7 Toluene-d8 (Surr)	50.0	51.2	102.31
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.3	100.57

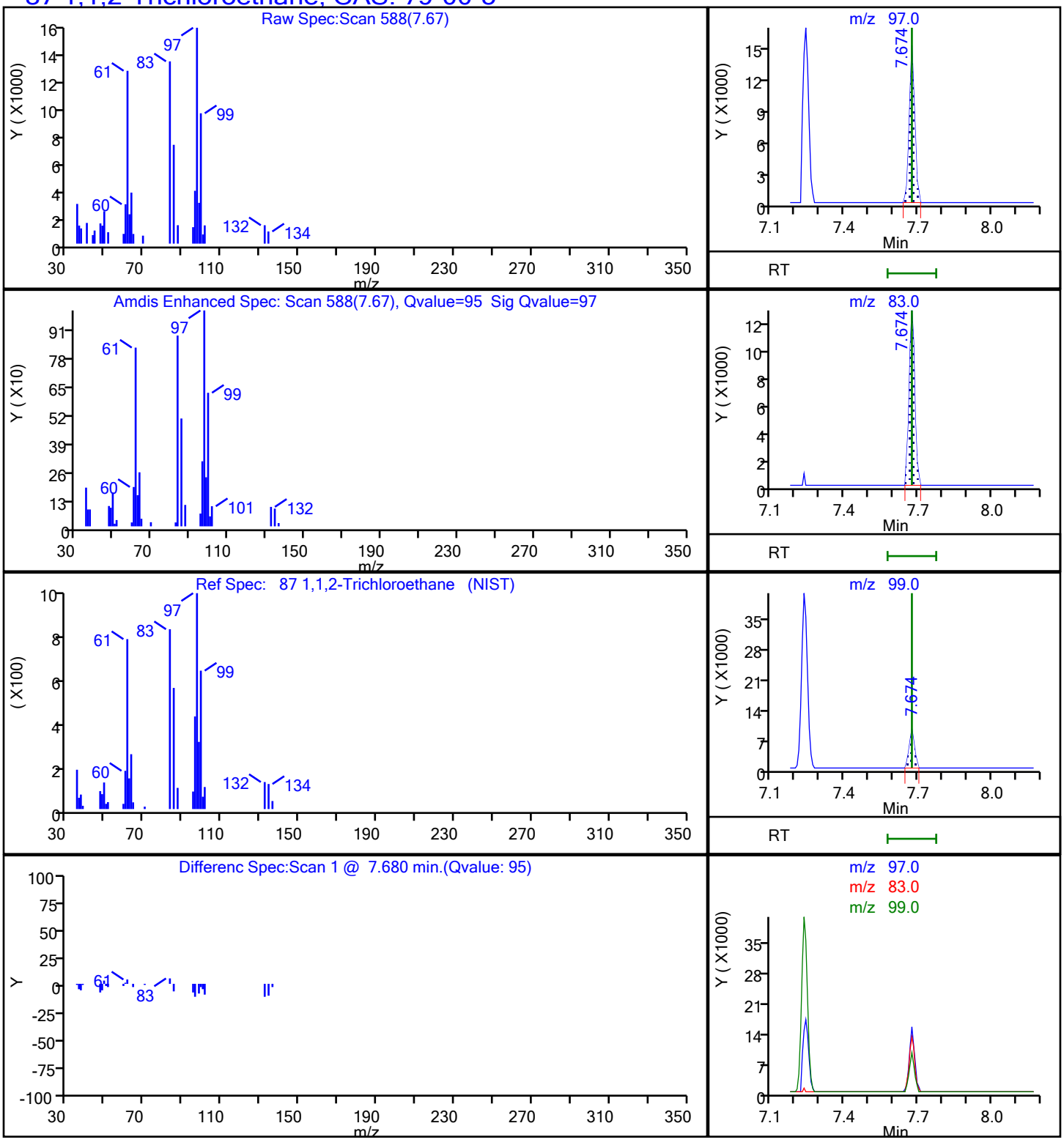
Report Date: 07-Jun-2021 09:28:10 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2767.D

Injection Date:	05-Jun-2021 17:33:30	Instrument ID:	VMS_MS1		
Lims ID:	280-149116-E-5	Lab Sample ID:	280-149116-5		
Client ID:	SHGW03-21A				
Operator ID:	SEIFERTJ	ALS Bottle#:	24	Worklist Smp#:	33
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

87 1,1,2-Trichloroethane, CAS: 79-00-5



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW02-21A Lab Sample ID: 280-149116-6

Matrix: Water Lab File ID: MS1_2768.D

Analysis Method: 8260B Date Collected: 05/26/2021 10:40

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 17:54

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.: 538703 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)	15		6.0	4.0	2.0
591-78-6	2-Hexanone	55		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	9.1	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.: 280-149116-1

SDG No.:

Client Sample ID: SHGW02-21A Lab Sample ID: 280-149116-6

Matrix: Water Lab File ID: MS1_2768.D

Analysis Method: 8260B Date Collected: 05/26/2021 10:40

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 17:54

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.: 538703 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		81-118
460-00-4	4-Bromofluorobenzene (Surr)	101		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2768.D
Lims ID: 280-149116-C-6
Client ID: SHGW02-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 17:54:30 ALS Bottle#: 25 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-c-6 pH
Misc. Info.: 280-0102098-034
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:27:26 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 09:23:53

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.838	5.839	-0.001	97	631999	50.0	
*	2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	131839	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	208817	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	168302	50.2	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	217835	48.5	
$	7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	570188	49.9	
$	8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	228219	50.4	
	11 Dichlorodifluoromethane	85		1.691				ND	
	12 Chloromethane	50		1.900				ND	
	13 Vinyl chloride	62		1.998				ND	
	15 Bromomethane	94		2.347				ND	
	16 Chloroethane	64		2.473				ND	
	18 Trichlorofluoromethane	101		2.724				ND	
	23 1,1-Dichloroethene	96		3.241				ND	
	24 112TCTFE	151		3.255				ND	
	25 Acetone	43	3.283	3.269	0.014	99	10524	9.14	
	28 Carbon disulfide	76		3.450				ND	
	30 Methyl acetate	43		3.562				ND	
	32 Methylene Chloride	84		3.702				ND	
	35 Methyl tert-butyl ether	73		3.939				ND	
	36 trans-1,2-Dichloroethene	96		3.953				ND	
	40 1,1-Dichloroethane	63		4.344				ND	
	46 2-Butanone (MEK)	43	4.833	4.819	0.014	99	18097	14.6	
	48 cis-1,2-Dichloroethene	96		4.847				ND	
	53 Chlorobromomethane	128		5.056				ND	
	55 Chloroform	83		5.126				ND	
	56 1,1,1-Trichloroethane	97		5.280				ND	
	57 Cyclohexane	56		5.350				ND	
	59 Carbon tetrachloride	117		5.420				ND	
	63 Benzene	78		5.587				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
70 Methylcyclohexane	55		6.369				ND	
71 1,2-Dichloropropane	63		6.383				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
91 2-Hexanone	43	7.853	7.853	0.000	98	76454	55.5	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
107 Isopropylbenzene	105		9.533				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
134 1,2,3-Trichlorobenzene	180		13.344				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

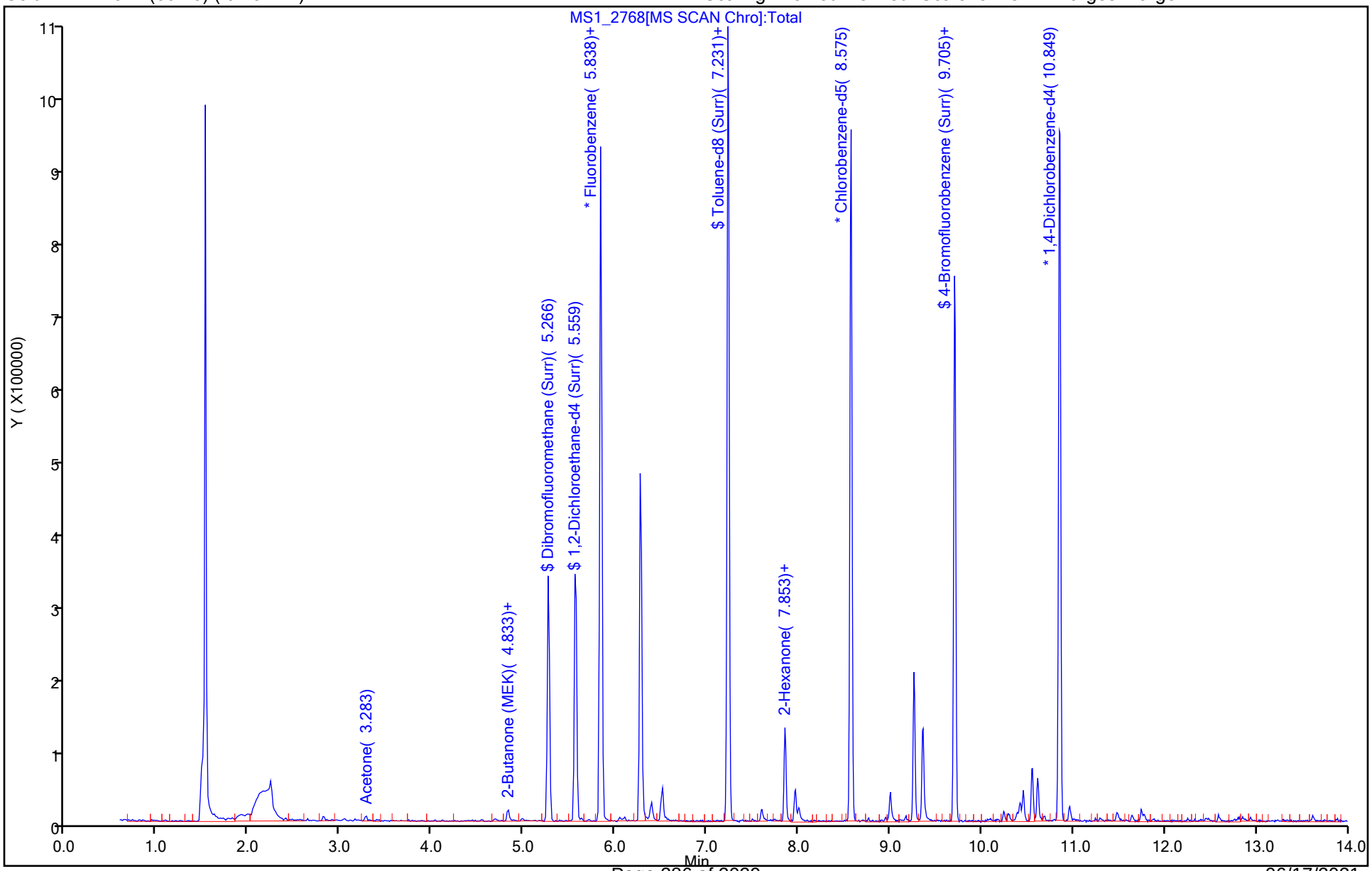
mv-IS_SS_00018 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 07-Jun-2021 09:28:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2768.D				
Injection Date:	05-Jun-2021 17:54:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	280-149116-C-6	Lab Sample ID:	280-149116-6	Worklist Smp#:	34
Client ID:	SHGW02-21A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2768.D
Lims ID: 280-149116-C-6
Client ID: SHGW02-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 17:54:30 ALS Bottle#: 25 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-c-6 pH
Misc. Info.: 280-0102098-034
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:27:26 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

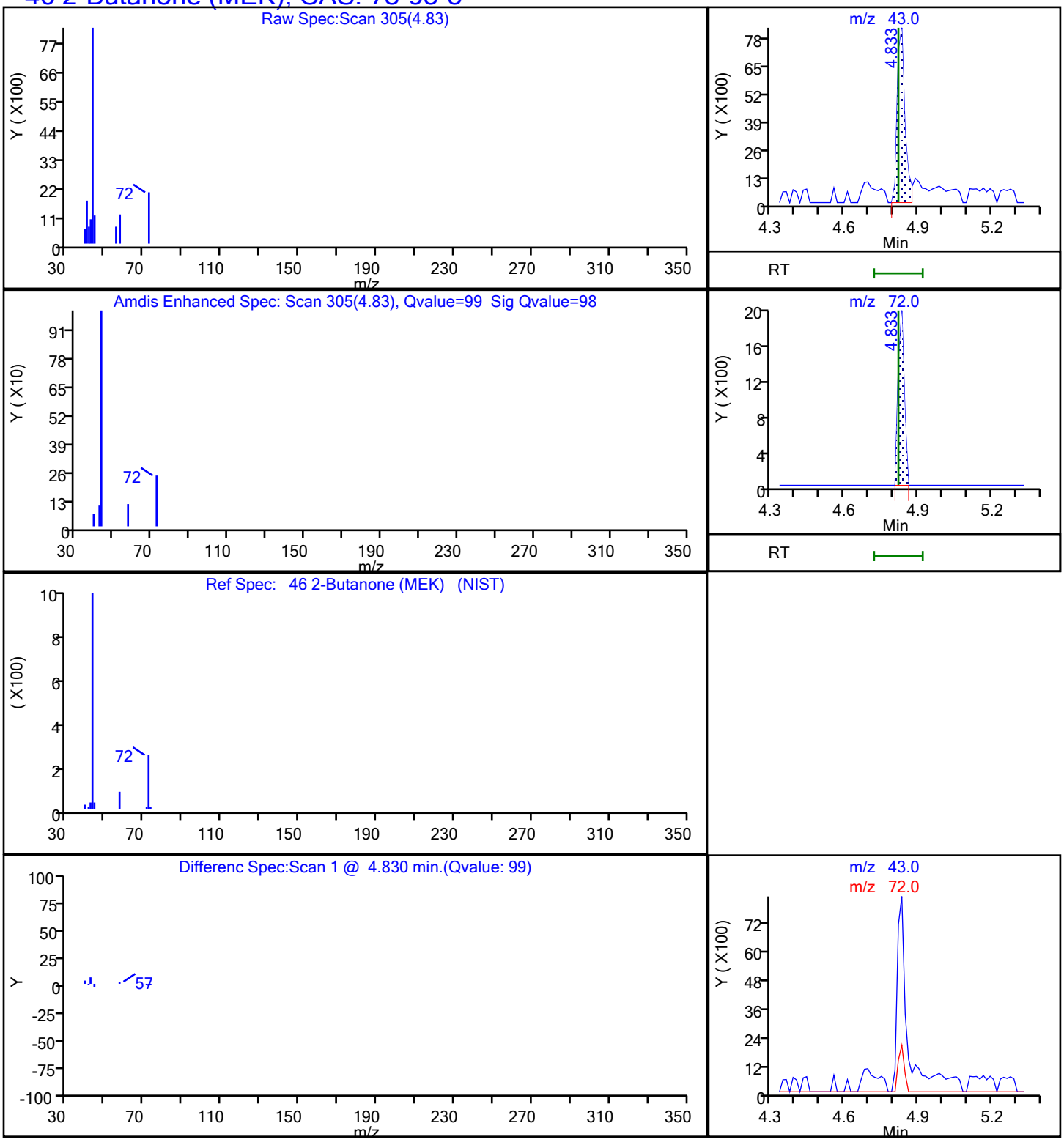
First Level Reviewer: seifertj Date: 07-Jun-2021 09:23:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.2	100.48
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.5	97.07
$ 7 Toluene-d8 (Surr)	50.0	49.9	99.85
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.4	100.72

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2768.D				
Injection Date:	05-Jun-2021 17:54:30	Instrument ID:	VMS_MS1		
Lims ID:	280-149116-C-6	Lab Sample ID:	280-149116-6		
Client ID:	SHGW02-21A				
Operator ID:	SEIFERTJ	ALS Bottle#:	25	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

46 2-Butanone (MEK), CAS: 78-93-3



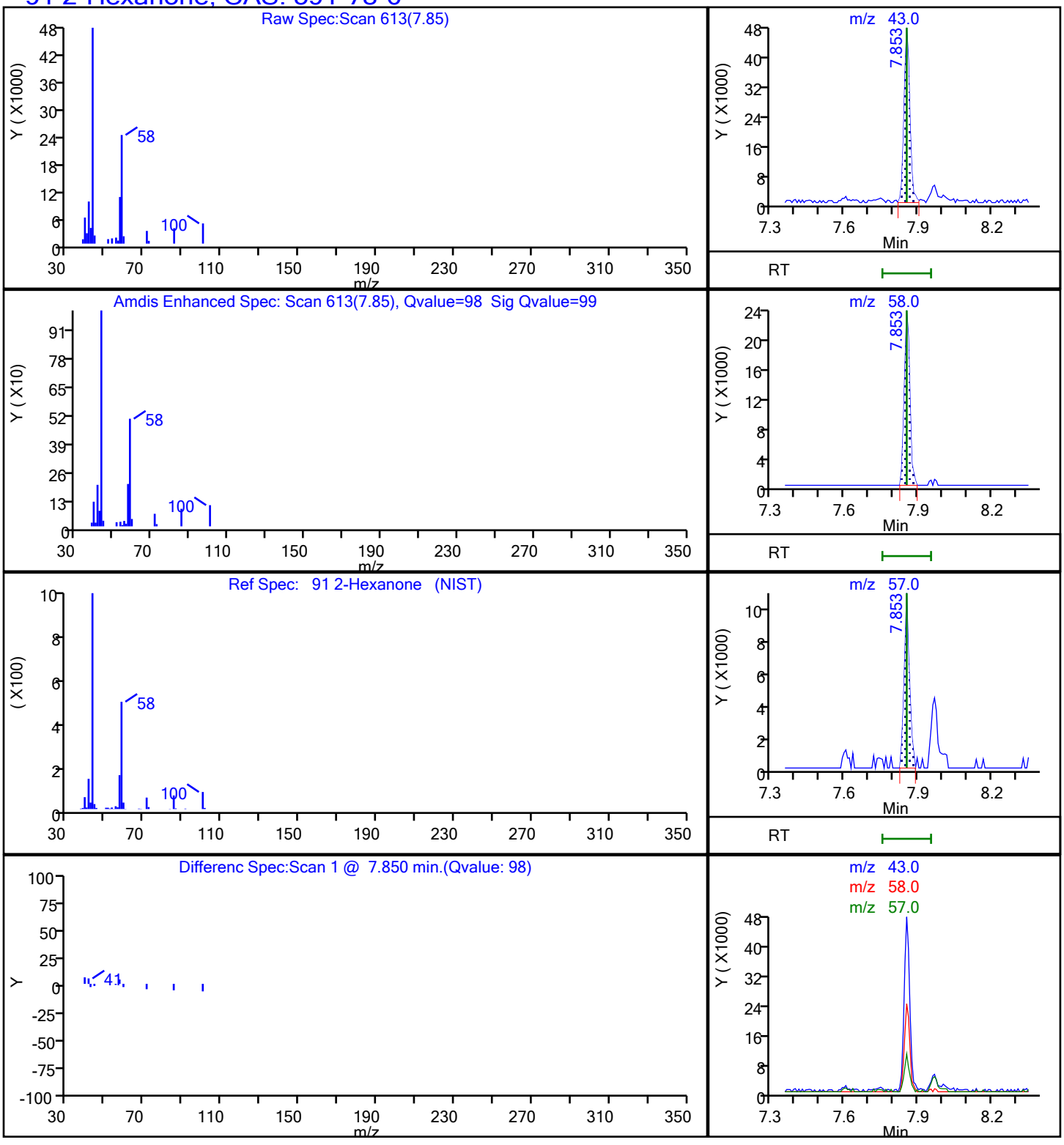
Report Date: 07-Jun-2021 09:28:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2768.D

Injection Date:	05-Jun-2021 17:54:30	Instrument ID:	VMS_MS1		
Lims ID:	280-149116-C-6	Lab Sample ID:	280-149116-6		
Client ID:	SHGW02-21A				
Operator ID:	SEIFERTJ	ALS Bottle#:	25	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

91 2-Hexanone, CAS: 591-78-6



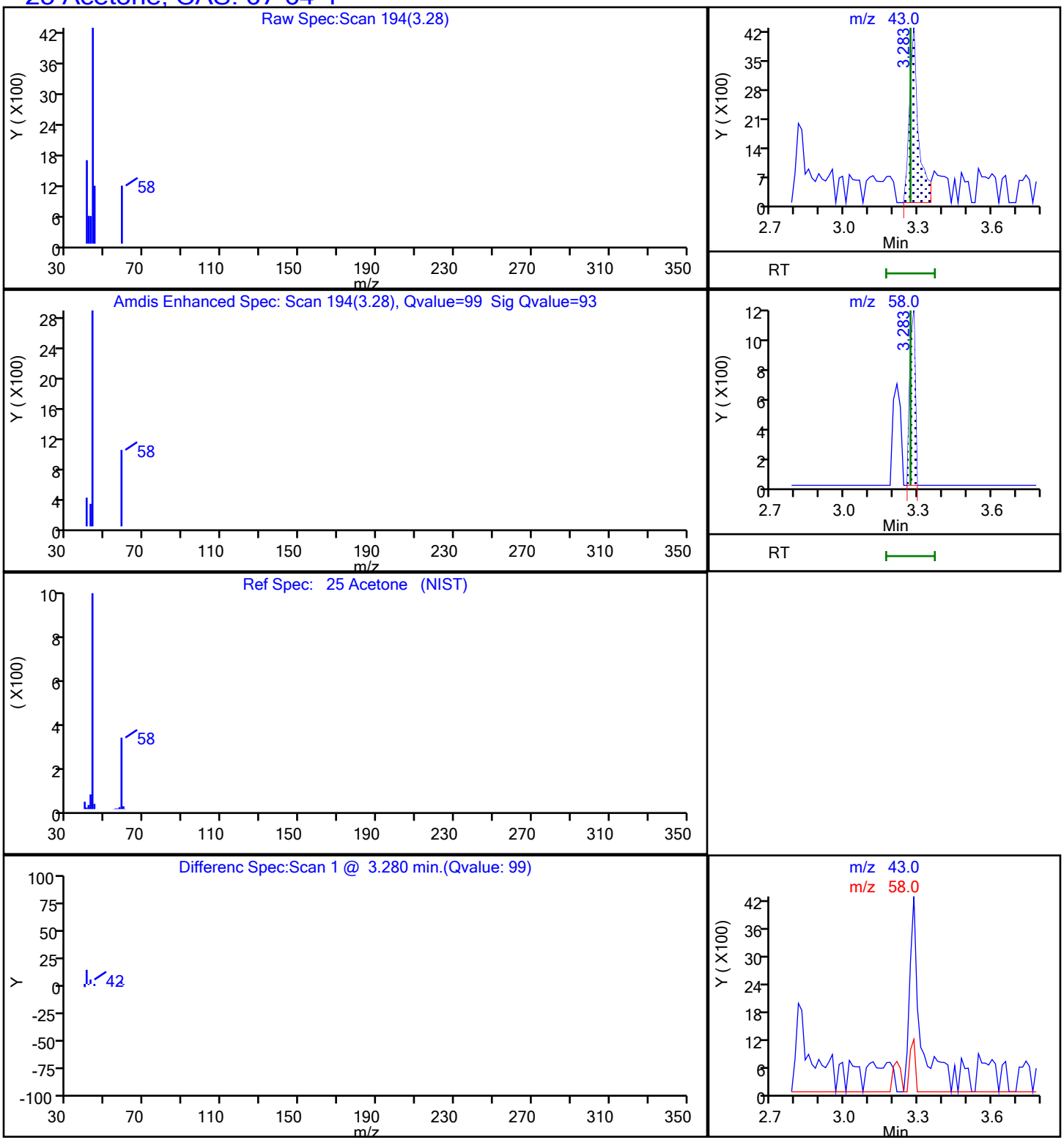
Report Date: 07-Jun-2021 09:28:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2768.D

Injection Date:	05-Jun-2021 17:54:30	Instrument ID:	VMS_MS1		
Lims ID:	280-149116-C-6	Lab Sample ID:	280-149116-6		
Client ID:	SHGW02-21A				
Operator ID:	SEIFERTJ	ALS Bottle#:	25	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

25 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW05-21A Lab Sample ID: 280-149116-7

Matrix: Water Lab File ID: MS1_2769.D

Analysis Method: 8260B Date Collected: 05/26/2021 08:00

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 18:15

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.: 538703 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)	16		6.0	4.0	2.0
591-78-6	2-Hexanone	56		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	8.7	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	0.40	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.: 280-149116-1

SDG No.:

Client Sample ID: SHGW05-21A Lab Sample ID: 280-149116-7

Matrix: Water Lab File ID: MS1_2769.D

Analysis Method: 8260B Date Collected: 05/26/2021 08:00

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 18:15

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.: 538703 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)	98		81-118
460-00-4	4-Bromofluorobenzene (Surr)	101		85-114
1868-53-7	Dibromofluoromethane (Surr)	102		80-119
2037-26-5	Toluene-d8 (Surr)	101		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2769.D
Lims ID: 280-149116-D-7
Client ID: SHGW05-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 18:15:30 ALS Bottle#: 26 Worklist Smp#: 35
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-d-7 pH
Misc. Info.: 280-0102098-035
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:27:26 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 09:24:32

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.839	5.839	0.000	97	627098	50.0	
*	2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	130754	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	210403	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	170215	51.2	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	218512	49.1	
$	7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	574596	50.7	
$	8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	231119	50.6	
	11 Dichlorodifluoromethane	85		1.691				ND	
	12 Chloromethane	50		1.900				ND	
	13 Vinyl chloride	62		1.998				ND	
	15 Bromomethane	94		2.347				ND	
	16 Chloroethane	64		2.473				ND	
	18 Trichlorofluoromethane	101		2.724				ND	
	23 1,1-Dichloroethene	96		3.241				ND	
	24 112TCTFE	151		3.255				ND	
	25 Acetone	43	3.283	3.269	0.014	98	10126	8.69	
	28 Carbon disulfide	76		3.450				ND	
	30 Methyl acetate	43		3.562				ND	
	32 Methylene Chloride	84		3.702				ND	
	35 Methyl tert-butyl ether	73		3.939				ND	
	36 trans-1,2-Dichloroethene	96		3.953				ND	
	40 1,1-Dichloroethane	63		4.344				ND	
	46 2-Butanone (MEK)	43	4.833	4.819	0.014	99	19908	16.4	
	48 cis-1,2-Dichloroethene	96		4.847				ND	
	53 Chlorobromomethane	128		5.056				ND	
	55 Chloroform	83		5.126				ND	
	56 1,1,1-Trichloroethane	97		5.280				ND	
	57 Cyclohexane	56		5.350				ND	
	59 Carbon tetrachloride	117		5.420				ND	
	63 Benzene	78		5.587				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.629				ND	
68 Trichloroethene	95		6.160				ND	
70 Methylcyclohexane	55		6.369				ND	
71 1,2-Dichloropropane	63		6.383				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
91 2-Hexanone	43	7.853	7.853	0.000	97	76151	55.7	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
107 Isopropylbenzene	105		9.533				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
134 1,2,3-Trichlorobenzene	180		13.344				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

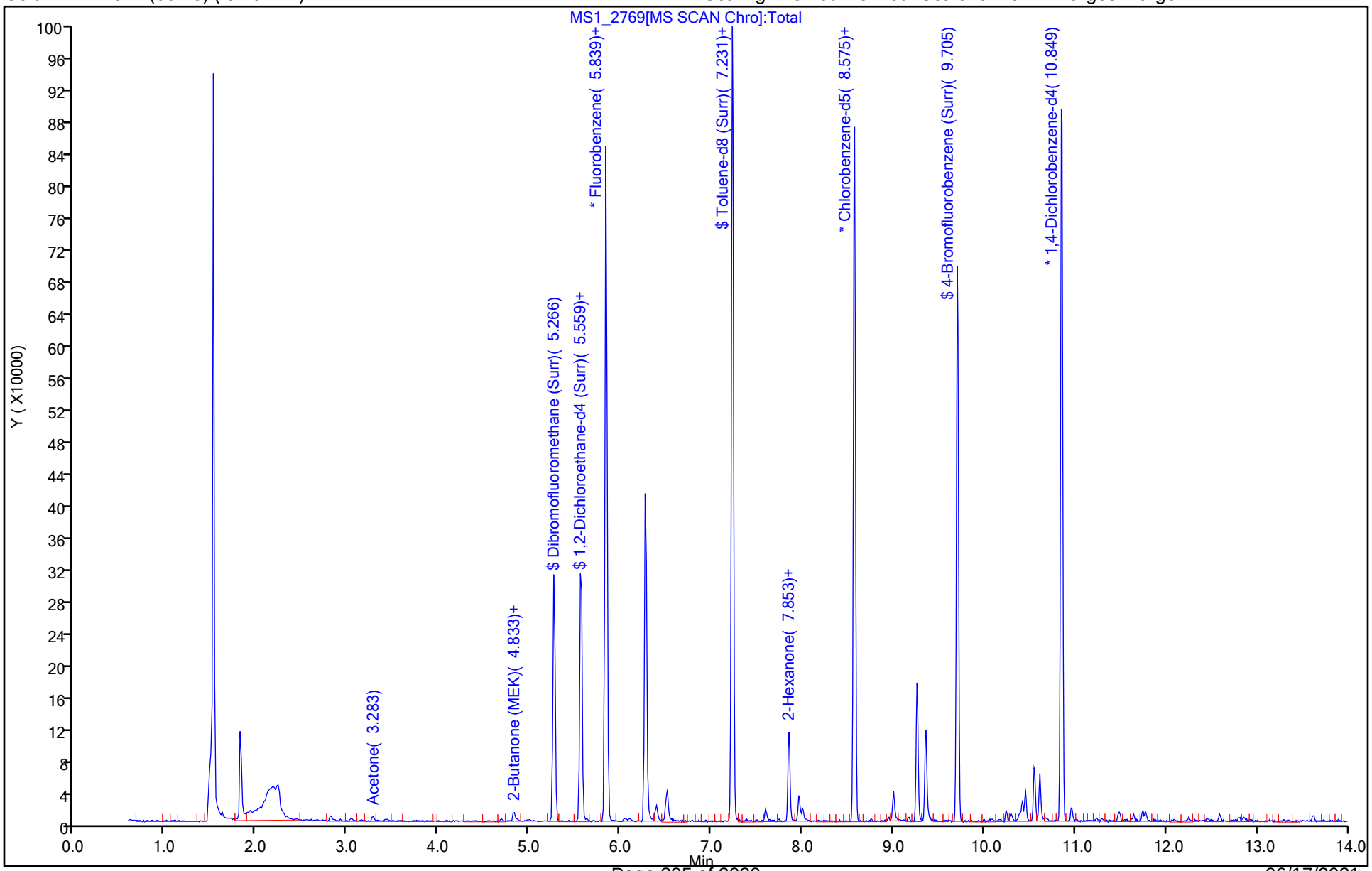
mv-IS_SS_00018 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 07-Jun-2021 09:28:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2769.D				
Injection Date:	05-Jun-2021 18:15:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	280-149116-D-7	Lab Sample ID:	280-149116-7	Worklist Smp#:	35
Client ID:	SHGW05-21A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2769.D
Lims ID: 280-149116-D-7
Client ID: SHGW05-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 18:15:30 ALS Bottle#: 26 Worklist Smp#: 35
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-d-7 pH
Misc. Info.: 280-0102098-035
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:27:26 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 09:24:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.2	102.41
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.1	98.14
$ 7 Toluene-d8 (Surr)	50.0	50.7	101.45
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.6	101.23

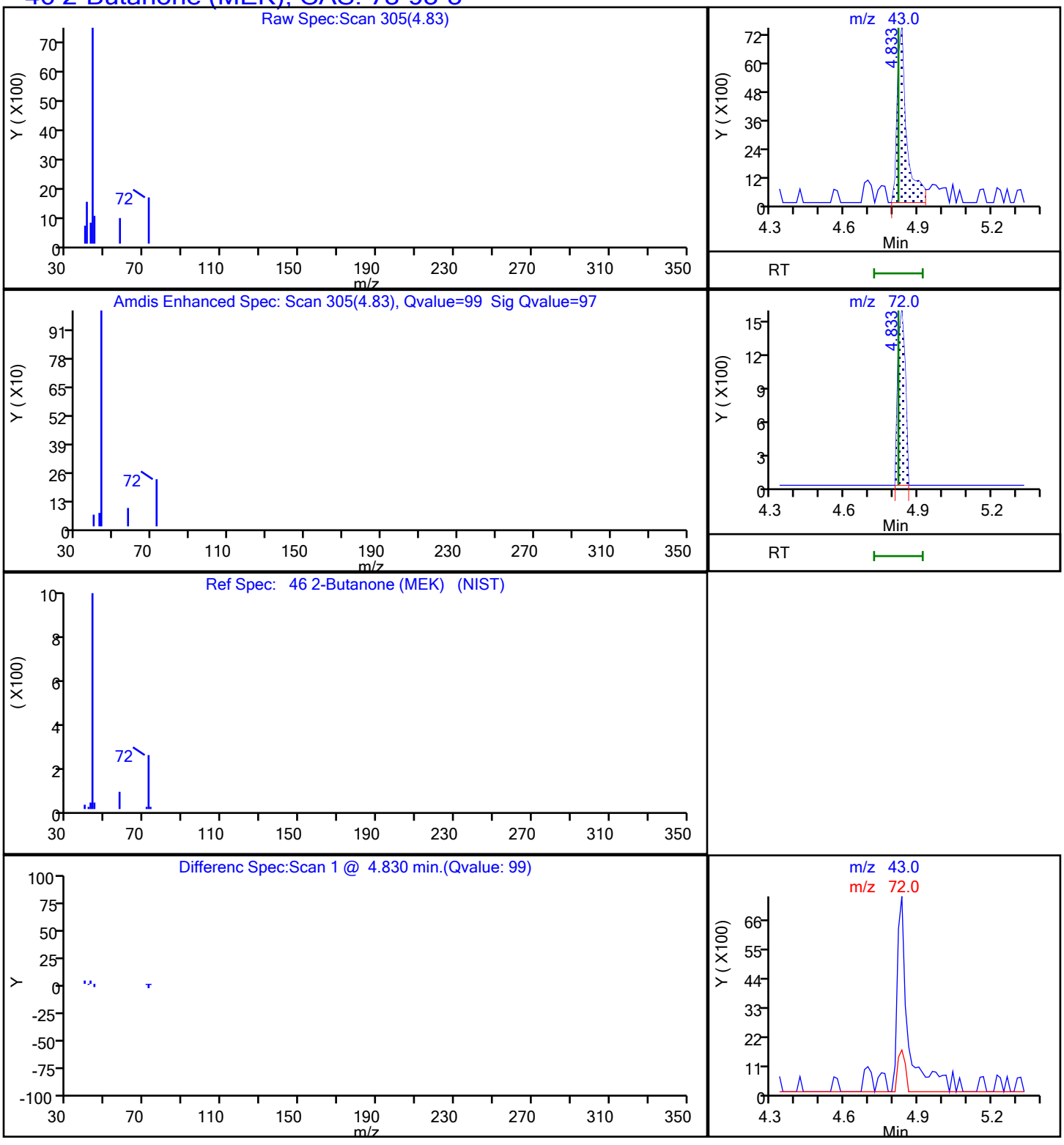
Report Date: 07-Jun-2021 09:28:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2769.D

Injection Date:	05-Jun-2021 18:15:30	Instrument ID:	VMS_MS1		
Lims ID:	280-149116-D-7	Lab Sample ID:	280-149116-7		
Client ID:	SHGW05-21A				
Operator ID:	SEIFERTJ	ALS Bottle#:	26	Worklist Smp#:	35
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

46 2-Butanone (MEK), CAS: 78-93-3



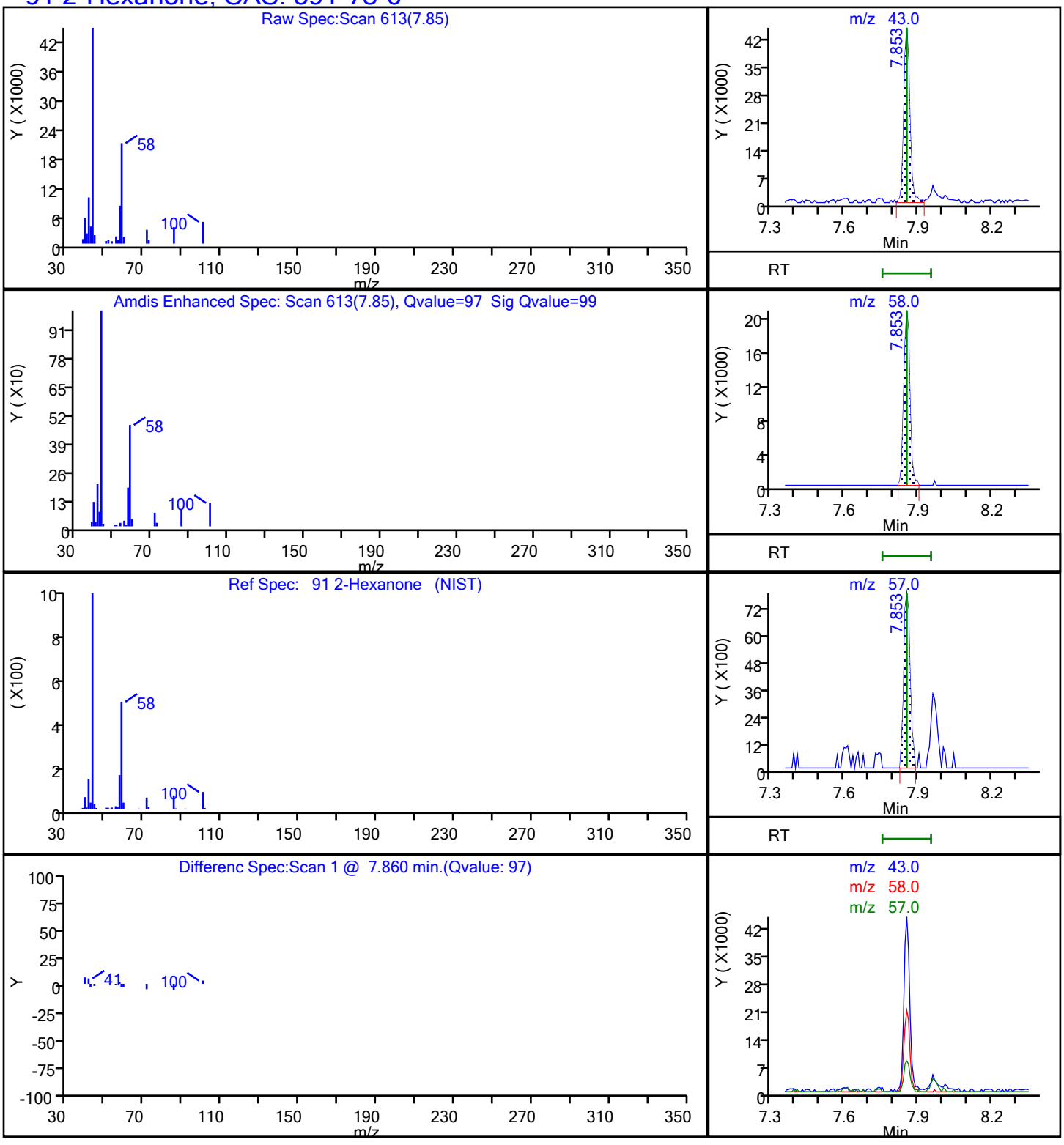
Report Date: 07-Jun-2021 09:28:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2769.D

Injection Date:	05-Jun-2021 18:15:30	Instrument ID:	VMS_MS1		
Lims ID:	280-149116-D-7	Lab Sample ID:	280-149116-7		
Client ID:	SHGW05-21A				
Operator ID:	SEIFERTJ	ALS Bottle#:	26	Worklist Smp#:	35
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

91 2-Hexanone, CAS: 591-78-6



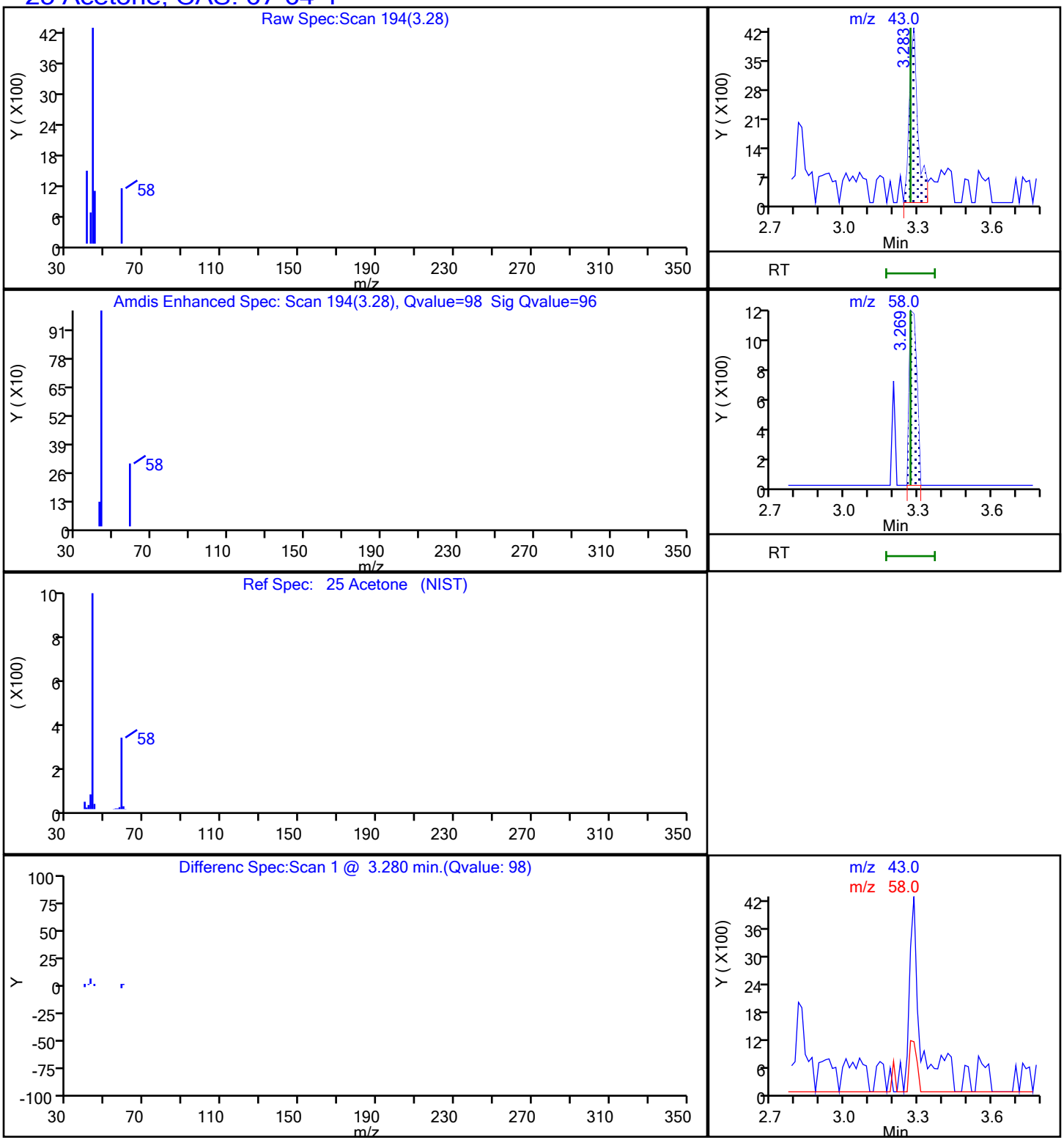
Report Date: 07-Jun-2021 09:28:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2769.D

Injection Date:	05-Jun-2021 18:15:30	Instrument ID:	VMS_MS1		
Lims ID:	280-149116-D-7	Lab Sample ID:	280-149116-7		
Client ID:	SHGW05-21A				
Operator ID:	SEIFERTJ	ALS Bottle#:	26	Worklist Smp#:	35
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

25 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: TB052621 Lab Sample ID: 280-149116-8

Matrix: Water Lab File ID: MS1_2770.D

Analysis Method: 8260B Date Collected: 05/26/2021 08:00

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 18:36

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.: 538703 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.: 280-149116-1

SDG No.:

Client Sample ID: TB052621 Lab Sample ID: 280-149116-8

Matrix: Water Lab File ID: MS1_2770.D

Analysis Method: 8260B Date Collected: 05/26/2021 08:00

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 18:36

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.: 538703 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	0.40	U	1.0	0.40	0.18
98-82-8	Isopropylbenzene	0.40	U	1.0	0.40	0.19
79-20-9	Methyl acetate	4.0	U	5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25
108-87-2	Methylcyclohexane	0.40	U	2.0	0.40	0.10
75-09-2	Methylene Chloride	2.0	U	5.0	2.0	0.94
100-42-5	Styrene	0.80	U	1.0	0.80	0.36
127-18-4	Tetrachloroethene	0.40	U	1.0	0.40	0.20
108-88-3	Toluene	0.40	U	1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19
79-01-6	Trichloroethene	0.40	U	1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	0.80	U	2.0	0.80	0.29
75-01-4	Vinyl chloride	0.20	U	1.5	0.20	0.10
1330-20-7	Xylenes, Total	0.80	U	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		81-118
460-00-4	4-Bromofluorobenzene (Surr)	102		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2770.D
Lims ID: 280-149116-A-8
Client ID: TB052621
Sample Type: Client
Inject. Date: 05-Jun-2021 18:36:30 ALS Bottle#: 27 Worklist Smp#: 36
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-a-8 PH
Misc. Info.: 280-0102098-036
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:27:26 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.838	5.839	-0.001	97	700779	50.0	
*	2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	146256	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	97	229674	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	186758	50.3	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	100	242010	48.6	
$	7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	647018	51.1	
$	8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	254245	51.0	
	11 Dichlorodifluoromethane	85		1.691				ND	
	12 Chloromethane	50		1.900				ND	
	13 Vinyl chloride	62		1.998				ND	
	15 Bromomethane	94		2.347				ND	
	16 Chloroethane	64		2.473				ND	
	18 Trichlorofluoromethane	101		2.724				ND	
	23 1,1-Dichloroethene	96		3.241				ND	
	24 112TCTFE	151		3.255				ND	
	25 Acetone	43		3.269				ND	
	28 Carbon disulfide	76		3.450				ND	
	30 Methyl acetate	43		3.562				ND	
	32 Methylene Chloride	84		3.702				ND	
	35 Methyl tert-butyl ether	73		3.939				ND	
	36 trans-1,2-Dichloroethene	96		3.953				ND	
	40 1,1-Dichloroethane	63		4.344				ND	
	46 2-Butanone (MEK)	43		4.819				ND	
	48 cis-1,2-Dichloroethene	96		4.847				ND	
	53 Chlorobromomethane	128		5.056				ND	
	55 Chloroform	83		5.126				ND	
	56 1,1,1-Trichloroethane	97		5.280				ND	
	57 Cyclohexane	56		5.350				ND	
	59 Carbon tetrachloride	117		5.420				ND	
	63 Benzene	78		5.587				ND	
	64 1,2-Dichloroethane	62		5.629				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
68 Trichloroethene	95		6.160				ND	
70 Methylcyclohexane	55		6.369				ND	
71 1,2-Dichloropropane	63		6.383				ND	
75 Dichlorobromomethane	83		6.609				ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	
82 Toluene	91		7.295				ND	
84 trans-1,3-Dichloropropene	75		7.488				ND	
87 1,1,2-Trichloroethane	97		7.674				ND	
89 Tetrachloroethene	164		7.767				ND	
91 2-Hexanone	43		7.853				ND	
95 Chlorodibromomethane	129		8.032				ND	
96 Ethylene Dibromide	107		8.153				ND	
99 Chlorobenzene	112		8.604				ND	
101 Ethylbenzene	106		8.690				ND	
102 m-Xylene & p-Xylene	106		8.804				ND	
103 o-Xylene	106		9.176				ND	
104 Styrene	104		9.197				ND	
106 Bromoform	173		9.383				ND	
107 Isopropylbenzene	105		9.533				ND	
110 1,1,2,2-Tetrachloroethane	83		9.827				ND	
121 1,3-Dichlorobenzene	146		10.778				ND	
123 1,4-Dichlorobenzene	146		10.878				ND	
127 1,2-Dichlorobenzene	146		11.235				ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029				ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	
134 1,2,3-Trichlorobenzene	180		13.344				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00018 Amount Added: 5.00 Units: uL Run Reagent

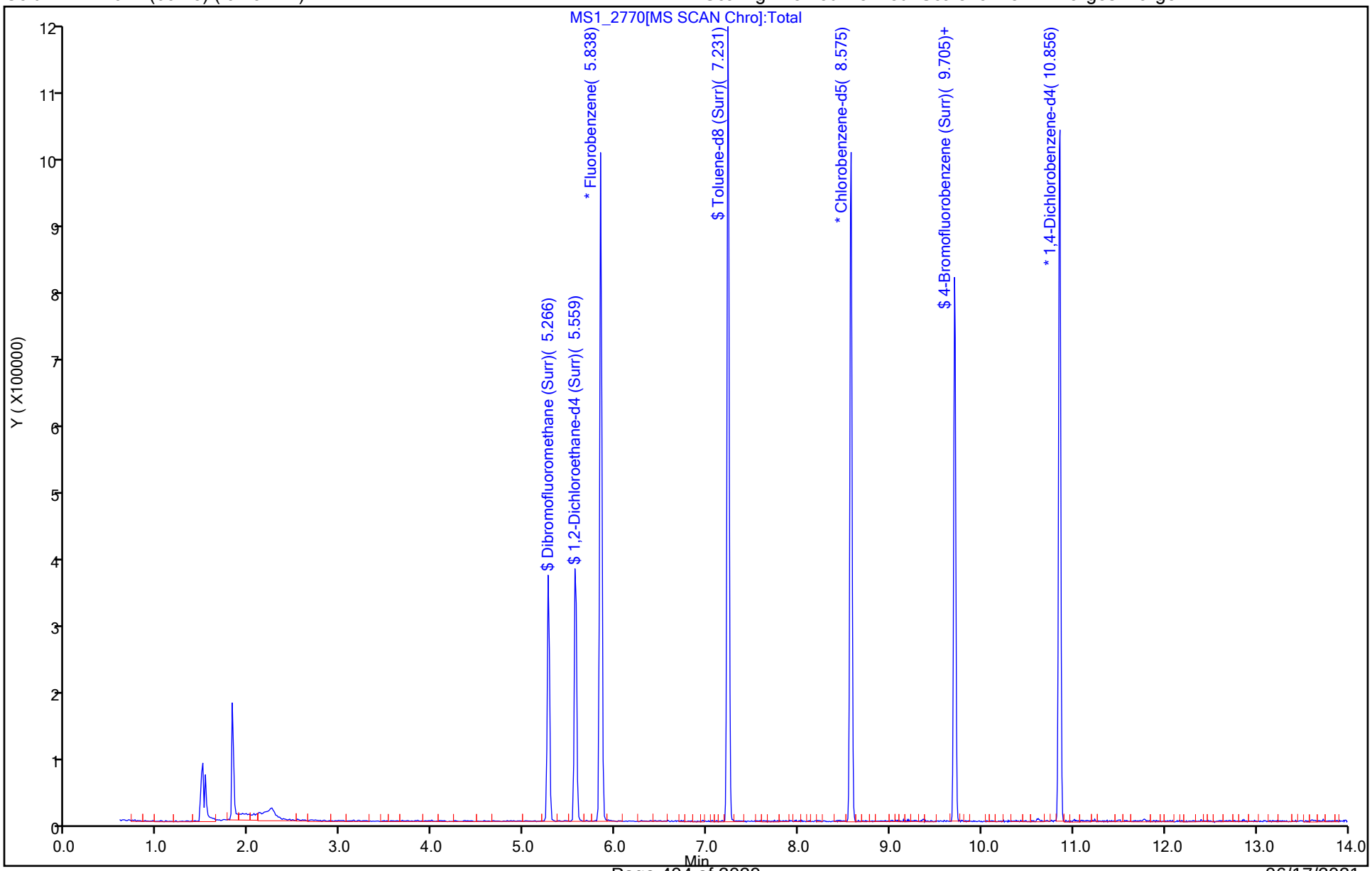
Report Date: 07-Jun-2021 09:28:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2770.D

Injection Date:	05-Jun-2021 18:36:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	280-149116-A-8	Lab Sample ID:	280-149116-8	Worklist Smp#:	36
Client ID:	TB052621				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2770.D
Lims ID: 280-149116-A-8
Client ID: TB052621
Sample Type: Client
Inject. Date: 05-Jun-2021 18:36:30 ALS Bottle#: 27 Worklist Smp#: 36
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-a-8 PH
Misc. Info.: 280-0102098-036
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:27:26 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.3	100.55
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.26
$ 7 Toluene-d8 (Surr)	50.0	51.1	102.13
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.0	102.02

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-538548/24	MS1_2712.D
Level 2	STD020 280-538548/25	MS1_2713.D
Level 3	STD050 280-538548/26	MS1_2714.D
Level 4	STD10 280-538548/27	MS1_2715.D
Level 5	STD50 280-538548/28	MS1_2716.D
Level 6	STD75 280-538548/29	MS1_2717.D
Level 7	STD100 280-538548/30	MS1_2718.D
Level 8	STD200 280-538548/31	MS1_2719.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethylene oxide	0.0171 0.0089	0.0130 0.0085	0.0115 0.0069	0.0106	0.0088	Qua	0.5928	0.0099	0						1.0000		0.9900
Ethanol	+++++ 0.0021	0.0035 0.0020	0.0021 0.0023	0.0022	0.0020	Lin1	0.0861	0.0021							0.9950		0.9900
Isopropyl alcohol	+++++ 0.0102	0.0125 0.0099	0.0120 0.0112	0.0115	0.0099	Ave		0.0111				9.5		15.0			
Acetonitrile	0.0341 0.0226	0.0319 0.0216	0.0287 0.0240	0.0241	0.0223	Lin2	0.1254	0.0233							0.9920		0.9900
Isopropyl ether	+++++ 0.1335	0.1205 0.1347	0.1328 0.1405	0.1376	0.1298	Ave		0.1328				4.8		15.0			
2-Chloro-1,3-butadiene	0.3897 0.2908	0.3137 0.2906	0.3073 0.2909	0.3211	0.2809	Ave		0.3106				11.2		15.0			
Tert-butyl ethyl ether	0.4660 0.5133	0.5157 0.5108	0.4947 0.5399	0.5195	0.5067	Ave		0.5083				4.2		15.0			
Ethyl acetate	+++++ 0.1269	0.1579 0.1255	0.1212 0.1456	0.1157	0.1176	Ave		0.1300				12.1		15.0			
Propionitrile	0.0429 0.0235	0.0345 0.0222	0.0233 0.0251	0.0261	0.0217	Lin2	0.2046	0.0227							0.9910		0.9900
Methacrylonitrile	0.1403 0.0954	0.1061 0.0938	0.0964 0.1029	0.0979	0.0920	Lin2	0.4167	0.0935							0.9950		0.9900
Tert-amyl methyl ether	0.4186 0.4504	0.4535 0.4453	0.4214 0.4742	0.4452	0.4287	Ave		0.4421				4.2		15.0			
n-Butanol	+++++ 0.0041	0.0041 0.0039	0.0035 0.0048	0.0044	0.0037	Ave		0.0041				11.0		15.0			
Methyl methacrylate	+++++ 0.0398	0.0376 0.0379	0.0374 0.0422	0.0381	0.0370	Ave		0.0386				4.8		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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Nitropropane	+++++ 0.0413	0.0931 0.0412	0.0599 0.0468	0.0496	0.0384	Lin2	0.2081	0.0403							0.9930		0.9900
cis-1,4-Dichloro-2-butene	0.2957 0.2326	0.2783 0.2180	0.2347 0.2471	0.2286	0.2191	Ave		0.2443				11.6		15.0			
1,2,3-Trimethylbenzene	2.2043 1.8923	1.8786 1.8140	1.7807 1.8763	1.9942	1.7670	Ave		1.9009				7.5		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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 280-538548/24	MS1_2712.D
Level 2	STD020 280-538548/25	MS1_2713.D
Level 3	STD050 280-538548/26	MS1_2714.D
Level 4	STD10 280-538548/27	MS1_2715.D
Level 5	STD50 280-538548/28	MS1_2716.D
Level 6	STD75 280-538548/29	MS1_2717.D
Level 7	STD100 280-538548/30	MS1_2718.D
Level 8	STD200 280-538548/31	MS1_2719.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethylene oxide	FB	Qua	26068 1036589	38113 1325947	84752 2156198	154927	675626	100 7500	200 10000	500 20000	1000	5000
Ethanol	FB	Lin1	+++++ 148252	6104 189484	9295 430073	19386	90674	+++++ 4500	120 6000	300 12000	600	3000
Isopropyl alcohol	FB	Ave	+++++ 118762	3668 154722	8838 353633	16816	76551	+++++ 750	20.0 1000	50.0 2000	100	500
Acetonitrile	FB	Lin2	5207 262979	9342 336478	21094 755055	35157	171419	10.0 750	20.0 1000	50.0 2000	100	500
Isopropyl ether	FB	Ave	+++++ 155693	3527 210233	9769 441906	20052	99914	+++++ 75.0	2.00 100	5.00 200	10.0	50.0
2-Chloro-1,3-butadiene	FB	Ave	5950 339131	9185 453554	22612 914862	46806	216293	1.00 75.0	2.00 100	5.00 200	10.0	50.0
Tert-butyl ethyl ether	FB	Ave	7115 598583	15102 797316	36395 1697935	75717	390067	1.00 75.0	2.00 100	5.00 200	10.0	50.0
Ethyl acetate	FB	Ave	+++++ 295874	9246 391747	17830 916063	33715	181020	+++++ 150	4.00 200	10.0 400	20.0	100
Propionitrile	FB	Lin2	6552 273883	10115 345991	17161 788894	38061	167396	10.0 750	20.0 1000	50.0 2000	100	500
Methacrylonitrile	FB	Lin2	21423 1112747	31063 1464721	70916 3237312	142757	708538	10.0 750	20.0 1000	50.0 2000	100	500
Tert-amyl methyl ether	FB	Ave	6390 525182	13278 695022	31002 1491195	64899	330078	1.00 75.0	2.00 100	5.00 200	10.0	50.0
n-Butanol	FB	Ave	+++++ 120882	3029 151525	6413 380063	16178	71615	+++++ 1875	50.0 2500	125 5000	250	1250
Methyl methacrylate	FB	Ave	+++++ 92850	2202 118435	5497 265731	11096	56906	+++++ 150	4.00 200	10.0 400	20.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 10:18 Calibration End Date: 06/04/2021 12:47 Calibration ID: 54225

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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-Nitropropane	FB	Lin2	+++++ 96340	5455 128713	8818 294580	14473	59124	+++++ 150	4.00 200	10.0 400	20.0	100
cis-1,4-Dichloro-2-butene	DCBd 4	Ave	3048 174974	5665 229641	12139 514731	22598	114331	2.00 150	4.00 200	10.0 400	20.0	100
1,2,3-Trimethylbenzene	DCBd 4	Ave	11362 711897	19118 955425	46043 1954614	98549	461007	1.00 75.0	2.00 100	5.00 200	10.0	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: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Jun-2021 10:18:30 ALS Bottle#: 1 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub157

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:46 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 10:55:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	763333	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162017	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	257720	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	99	26068	100.0	113.4	
19 Ethanol	45		2.892				ND	ND	
21 Propene oxide	58	3.059	3.059	0.000	86	46510	100.0	102.0	
27 Isopropyl alcohol	45		3.395				ND	ND	
29 Acetonitrile	41	3.548	3.534	0.014	92	5207	10.0	9.28	
41 Isopropyl ether	87		4.372				ND	ND	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	88	5950	1.00	1.25	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	96	7115	1.00	0.9168	
47 Ethyl acetate	43	4.861	4.847	0.014	32	2788	2.00	1.40	
50 Propionitrile	54	4.889	4.875	0.014	91	6552	10.0	9.90	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	21423	10.0	10.6	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	82	6390	1.00	0.9467	
67 n-Butanol	56		6.034				ND	ND	U
72 Methyl methacrylate	100		6.397				ND	ND	
76 2-Nitropropane	41		6.788				ND	ND	U
94 Tetrahydrothiophene	60	8.018	8.018	0.000	1	1432	2.00	2.05	a
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	79	3048	2.00	2.42	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	93	11362	1.00	1.16	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	84	2931	1.00	0.9775	a
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags
U - Marked Undetected
a - User Assigned ID

Reagents:

MV-Supp A_00051	Amount Added:	1.00	Units: uL
mv-Cent IS_00006	Amount Added:	5.00	Units: uL

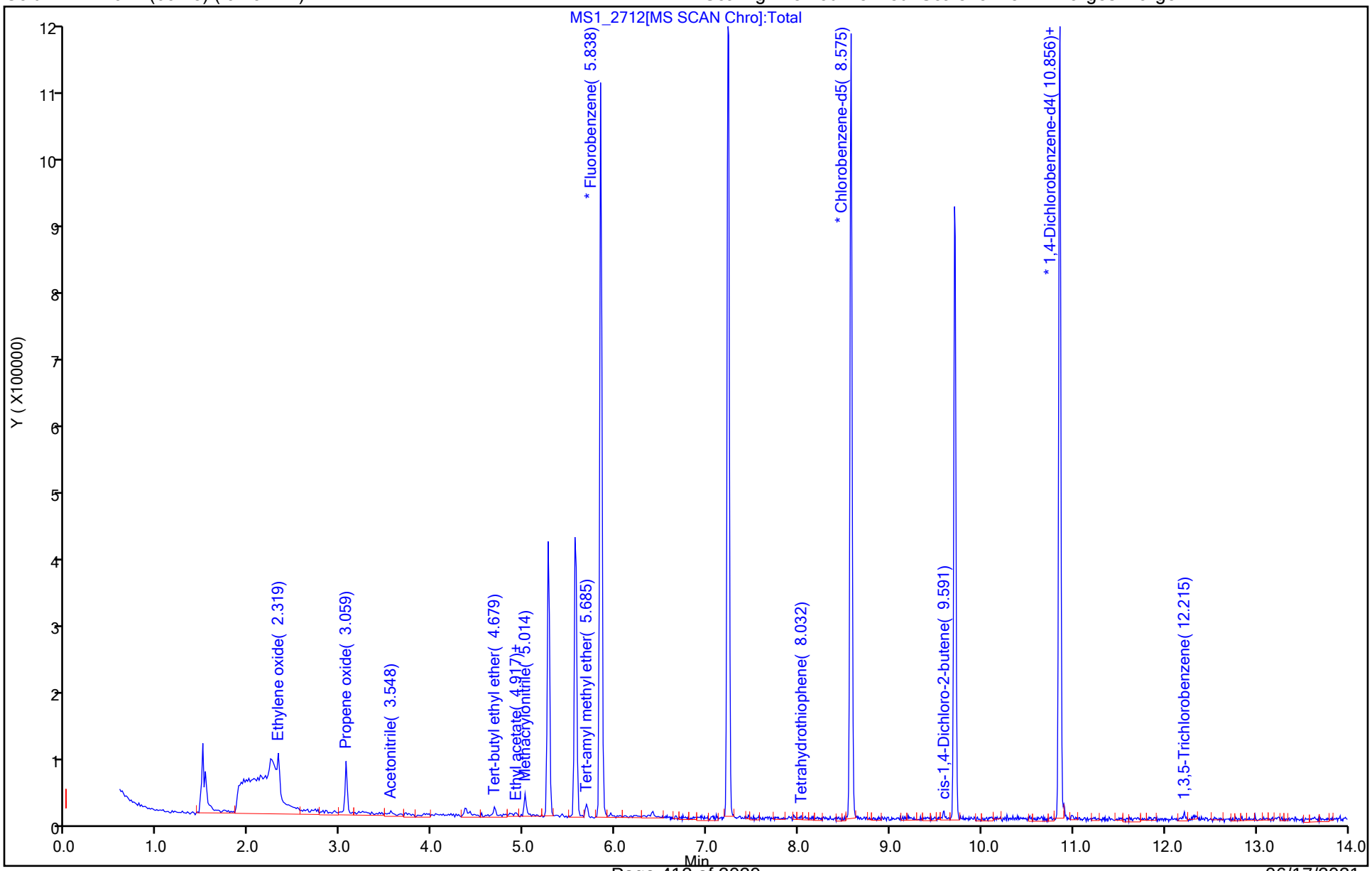
Report Date: 05-Jun-2021 11:14:46 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D

Injection Date:	04-Jun-2021 10:18:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD010			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	AQ_VMS1_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



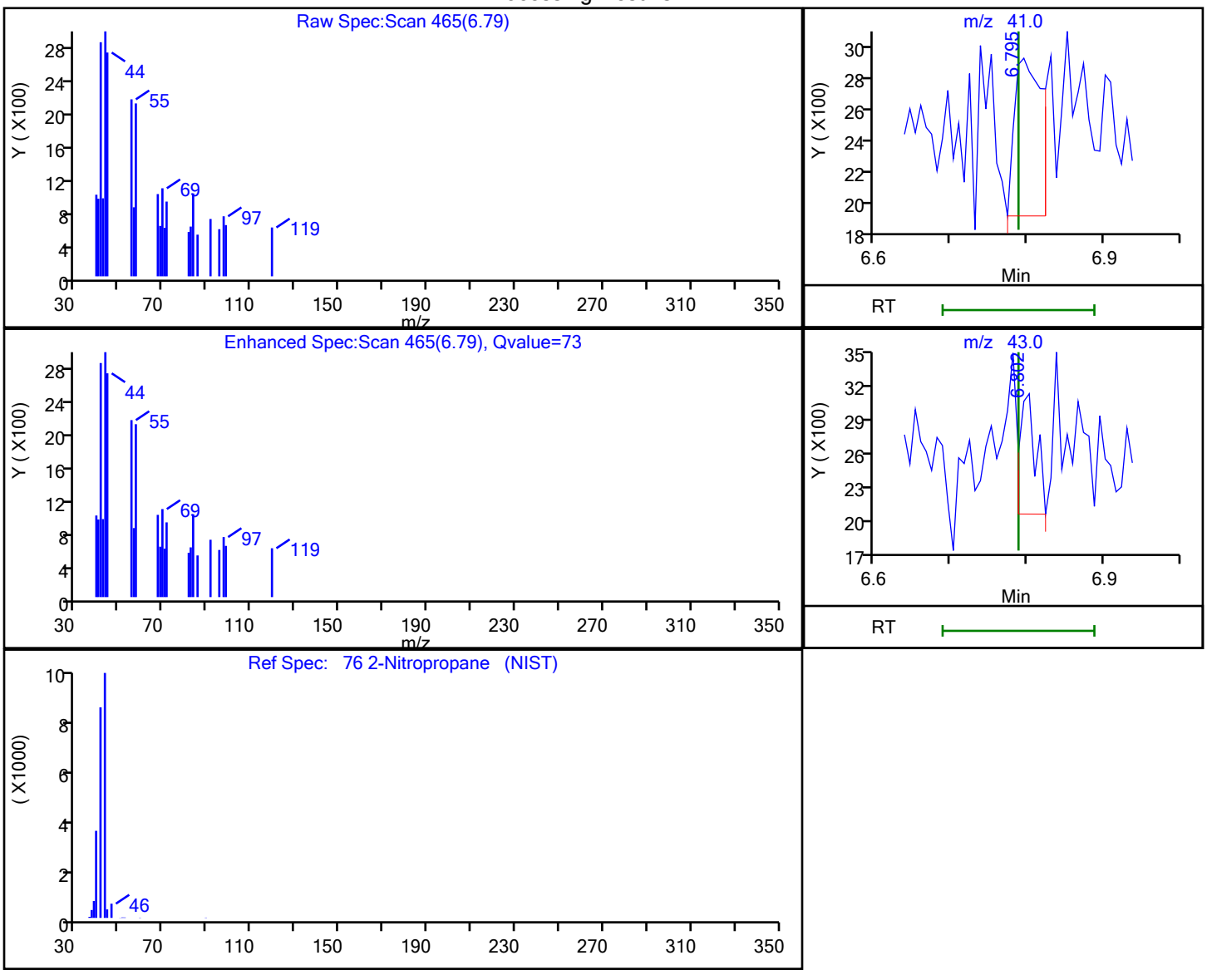
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D				
Injection Date:	04-Jun-2021 10:18:30	Instrument ID:	VMS_MS1		
Lims ID:	STD010				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	1	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

76 2-Nitropropane, CAS: 79-46-9

Processing Results



RT	Mass	Response	Amount
6.79	41.00	2363	1.015467
6.80	43.00	1535	

Reviewer: seifertj, 04-Jun-2021 13:32:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

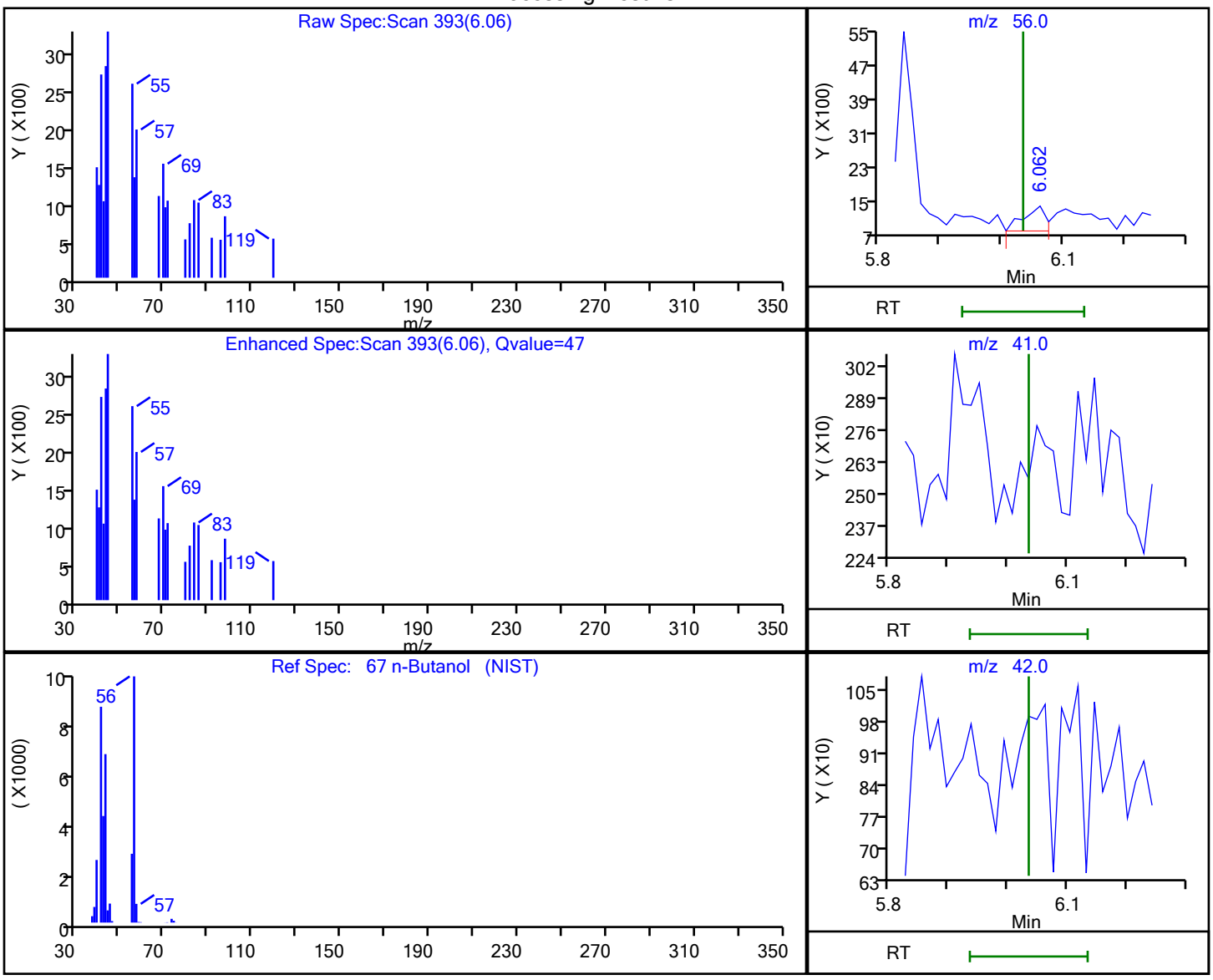
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2712.D
Injection Date: 04-Jun-2021 10:18:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 1 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 n-Butanol, CAS: 71-36-3

Processing Results



RT	Mass	Response	Amount
6.06	56.00	1484	23.133241
6.03	41.00	0	
6.03	42.00	0	

Reviewer: seifertj, 04-Jun-2021 13:32:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2713.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Jun-2021 10:39:30 ALS Bottle#: 2 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub157

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:47 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 10:56:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	732042	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	156659	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	254416	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	38113	200.0	204.7	
19 Ethanol	45	2.906	2.892	0.014	35	6104	120.0	154.8	Ma
21 Propene oxide	58	3.059	3.059	0.000	88	94633	200.0	216.4	
27 Isopropyl alcohol	45	3.408	3.395	0.014	1	3668	20.0	22.7	
29 Acetonitrile	41	3.548	3.534	0.014	98	9342	20.0	22.0	
41 Isopropyl ether	87	4.372	4.372	0.000	94	3527	2.00	1.81	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	94	9185	2.00	2.02	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	15102	2.00	2.03	
47 Ethyl acetate	43	4.861	4.847	0.014	77	9246	4.00	4.86	
50 Propionitrile	54	4.889	4.875	0.014	92	10115	20.0	21.4	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	31063	20.0	18.2	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	88	13278	2.00	2.05	
67 n-Butanol	56	6.048	6.034	0.014	49	3029	50.0	50.6	
72 Methyl methacrylate	100	6.411	6.397	0.014	72	2202	4.00	3.90	
76 2-Nitropropane	41	6.788	6.788	0.000	88	5455	4.00	4.08	
94 Tetrahydrothiophene	60	8.025	8.018	0.007	68	2721	4.00	4.02	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	82	5665	4.00	4.56	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	94	19118	2.00	1.98	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	90	6214	2.00	2.10	a
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MV-Supp A_00051	Amount Added:	2.00	Units: uL
mv-Cent IS_00006	Amount Added:	5.00	Units: uL

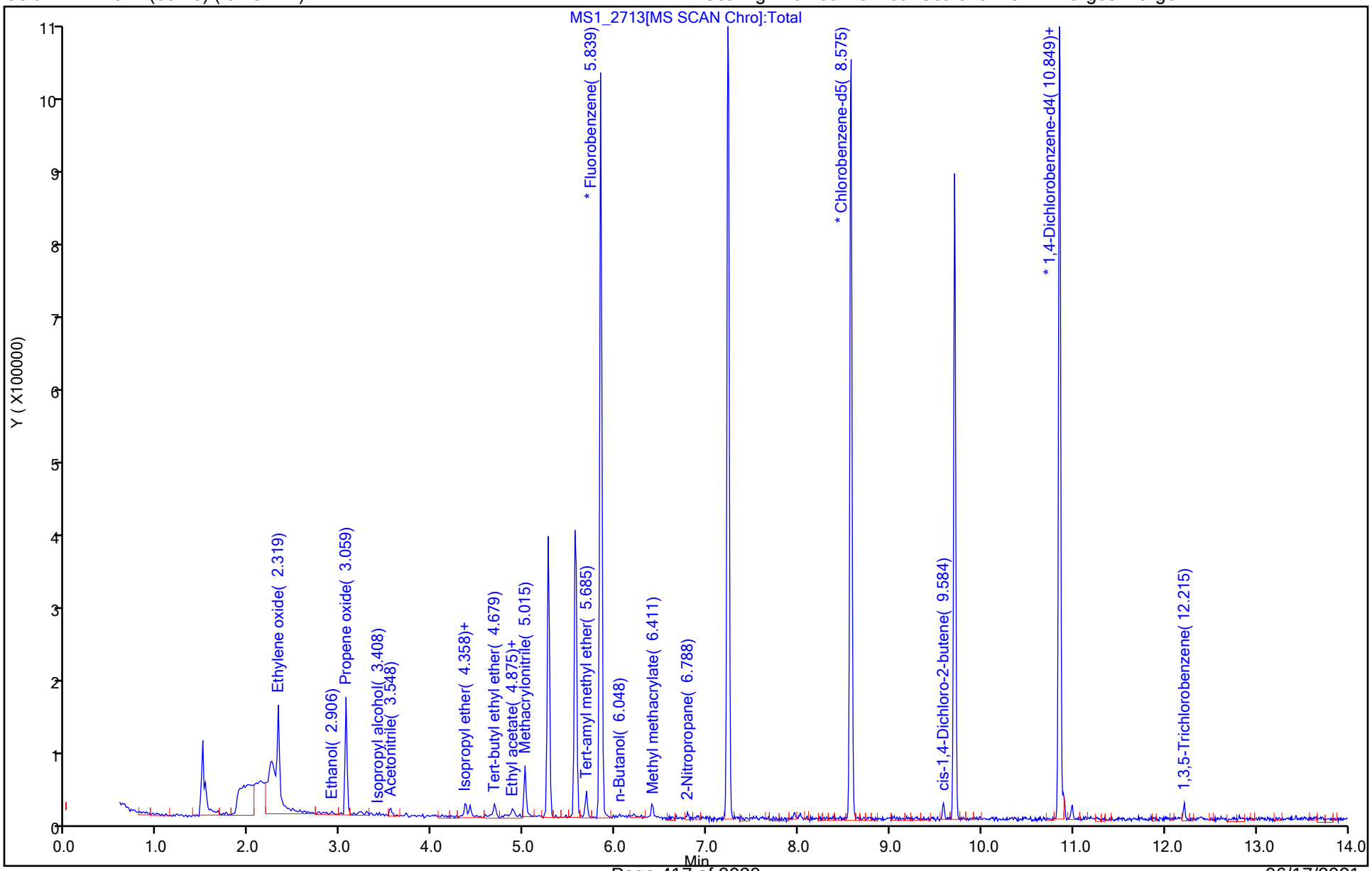
Report Date: 05-Jun-2021 11:14:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2713.D

Injection Date:	04-Jun-2021 10:39:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD020			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

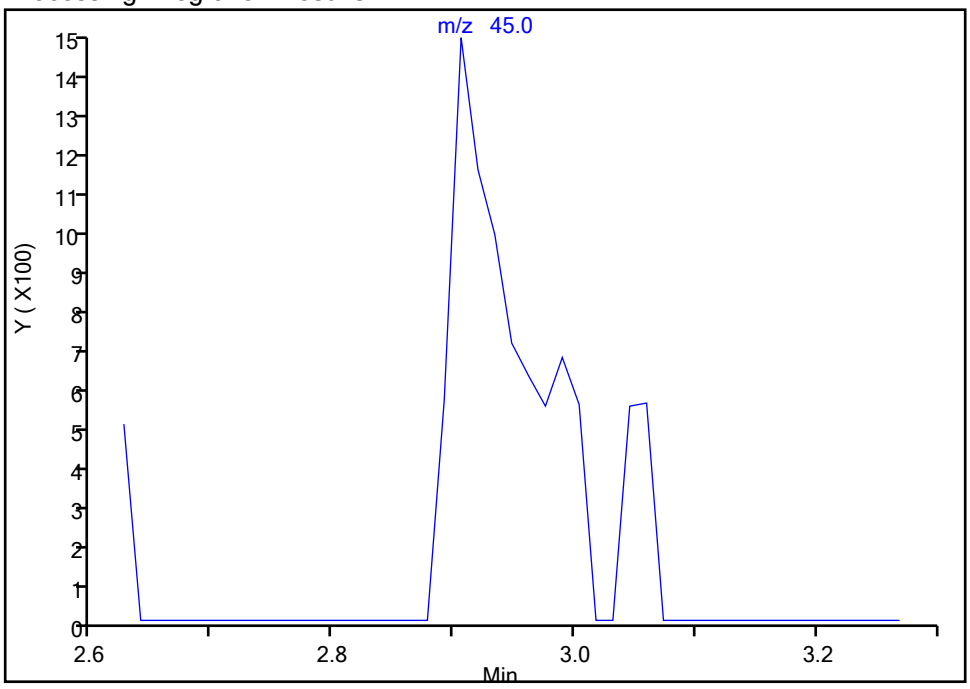
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2713.D
Injection Date: 04-Jun-2021 10:39:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 2 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

19 Ethanol, CAS: 64-17-5

Signal: 1

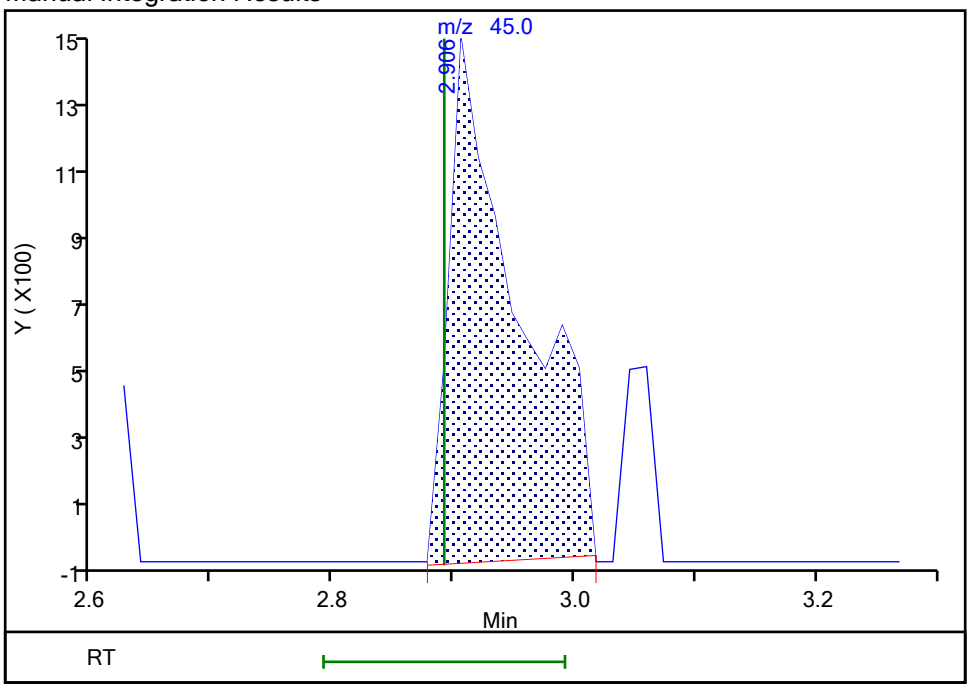
Not Detected
Expected RT: 2.89

Processing Integration Results



Manual Integration Results

RT: 2.91
Area: 6104
Amount: 154.7501
Amount Units: ug/l



Reviewer: seifertj, 04-Jun-2021 10:55:53
Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2714.D
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Jun-2021 11:00:30 ALS Bottle#: 3 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD050
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub157

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:49 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 11:45:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	735722	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	92	160452	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	98	258566	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	84752	500.0	528.8	
19 Ethanol	45	2.906	2.892	0.014	94	9295	300.0	255.2	
21 Propene oxide	58	3.059	3.059	0.000	88	213448	500.0	485.6	
27 Isopropyl alcohol	45	3.408	3.395	0.014	95	8838	50.0	54.3	a
29 Acetonitrile	41	3.534	3.534	0.000	98	21094	50.0	56.3	
41 Isopropyl ether	87	4.358	4.372	-0.014	92	9769	5.00	5.00	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	95	22612	5.00	4.95	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	97	36395	5.00	4.87	
47 Ethyl acetate	43	4.861	4.847	0.014	99	17830	10.0	9.32	
50 Propionitrile	54	4.875	4.875	0.000	96	17161	50.0	42.4	
52 Methacrylonitrile	41	5.014	5.015	-0.001	94	70916	50.0	47.1	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	87	31002	5.00	4.77	
67 n-Butanol	56	6.034	6.034	0.000	63	6413	125.0	106.5	
72 Methyl methacrylate	100	6.397	6.397	0.000	92	5497	10.0	9.69	
76 2-Nitropropane	41	6.788	6.788	0.000	97	8818	10.0	9.70	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	7052	10.0	10.2	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	84	12139	10.0	9.61	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	98	46043	5.00	4.68	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	89	13570	5.00	4.51	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
a - User Assigned ID

Reagents:

MV-Supp A_00051	Amount Added:	5.00	Units: uL
mv-Cent IS_00006	Amount Added:	5.00	Units: uL

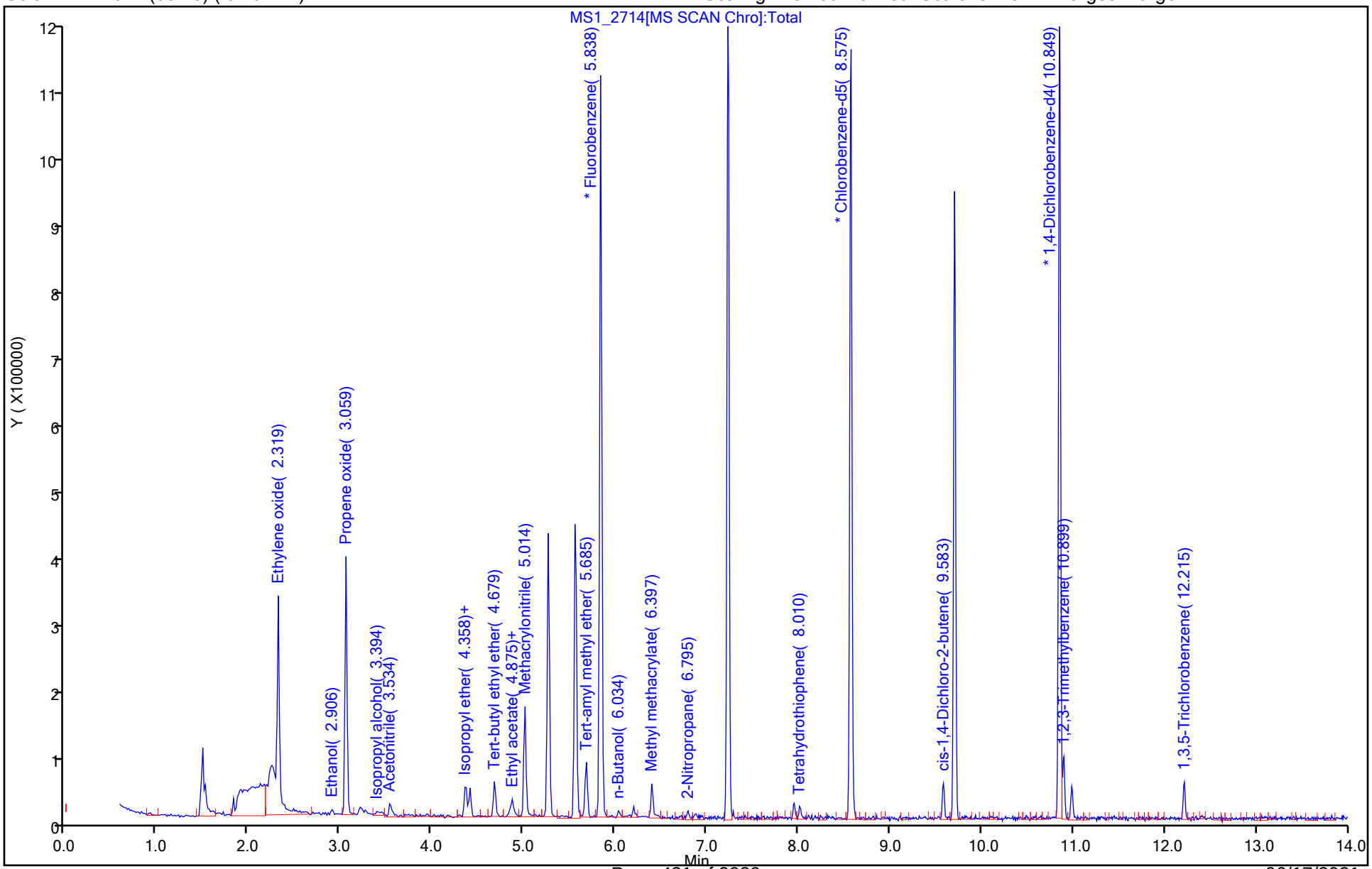
Report Date: 05-Jun-2021 11:14:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2714.D

Injection Date:	04-Jun-2021 11:00:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD050			Worklist Smp#:	26
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

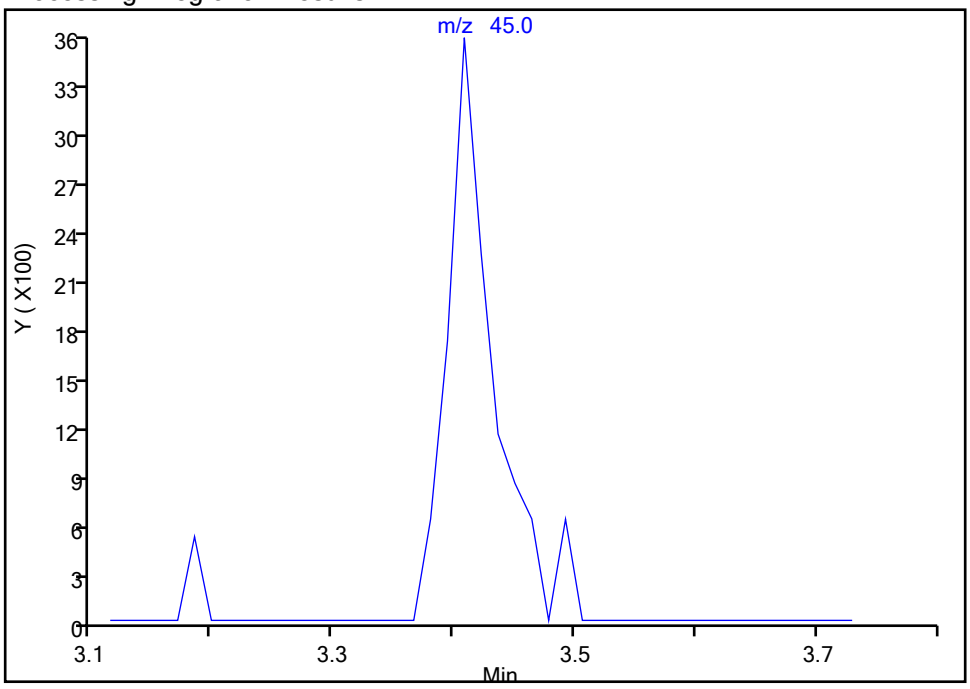
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2714.D
Injection Date: 04-Jun-2021 11:00:30 Instrument ID: VMS_MS1
Lims ID: STD050
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 3 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

27 Isopropyl alcohol, CAS: 67-63-0

Signal: 1

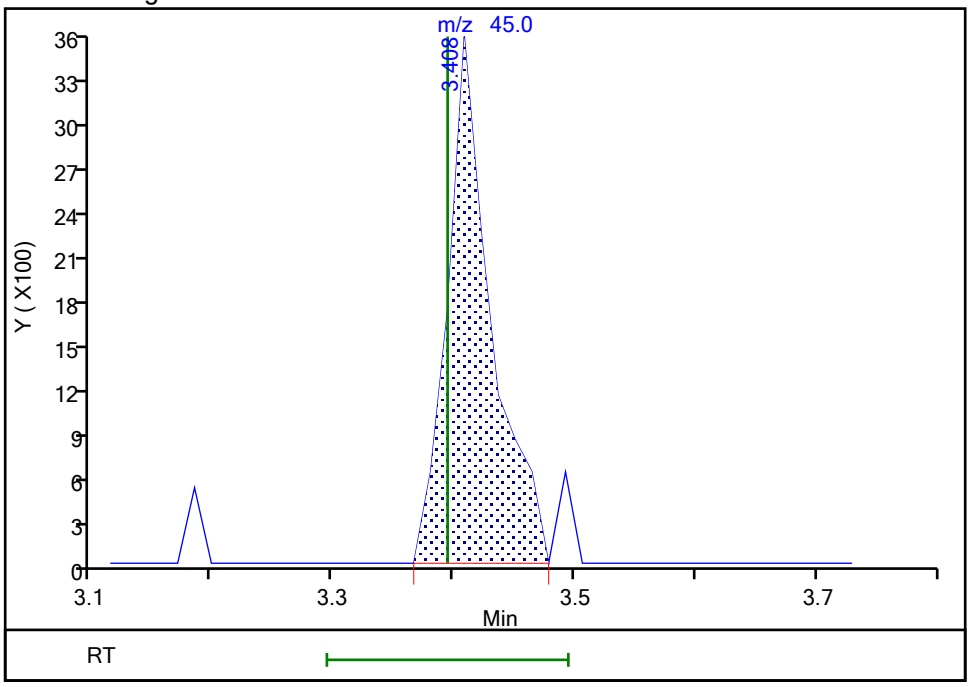
Not Detected
Expected RT: 3.39

Processing Integration Results



Manual Integration Results

RT: 3.41
Area: 8838
Amount: 54.348681
Amount Units: ug/l



Reviewer: seifertj, 04-Jun-2021 11:45:30
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2715.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Jun-2021 11:21:30 ALS Bottle#: 4 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub157

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:50 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 11:50:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	728798	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	155504	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	247091	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	154927	1000.0	1035.2	
19 Ethanol	45	2.906	2.892	0.014	99	19386	600.0	581.9	
21 Propene oxide	58	3.059	3.059	0.000	86	462698	1000.0	1062.6	
27 Isopropyl alcohol	45	3.408	3.395	0.014	97	16816	100.0	104.4	
29 Acetonitrile	41	3.534	3.534	0.000	98	35157	100.0	98.3	
41 Isopropyl ether	87	4.372	4.372	0.000	92	20052	10.0	10.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	46806	10.0	10.3	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	99	75717	10.0	10.2	
47 Ethyl acetate	43	4.861	4.847	0.014	99	33715	20.0	17.8	
50 Propionitrile	54	4.875	4.875	0.000	98	38061	100.0	106.0	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	142757	100.0	100.3	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	84	64899	10.0	10.1	
67 n-Butanol	56	6.034	6.034	0.000	86	16178	250.0	271.2	M
72 Methyl methacrylate	100	6.397	6.397	0.000	90	11096	20.0	19.7	
76 2-Nitropropane	41	6.788	6.788	0.000	96	14473	20.0	19.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	93	13786	20.0	20.5	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	85	22598	20.0	18.7	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	98549	10.0	10.5	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	91	30060	10.0	10.5	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

Reagents:

MV-Supp A_00051	Amount Added:	10.00	Units: uL
mv-Cent IS_00006	Amount Added:	5.00	Units: uL

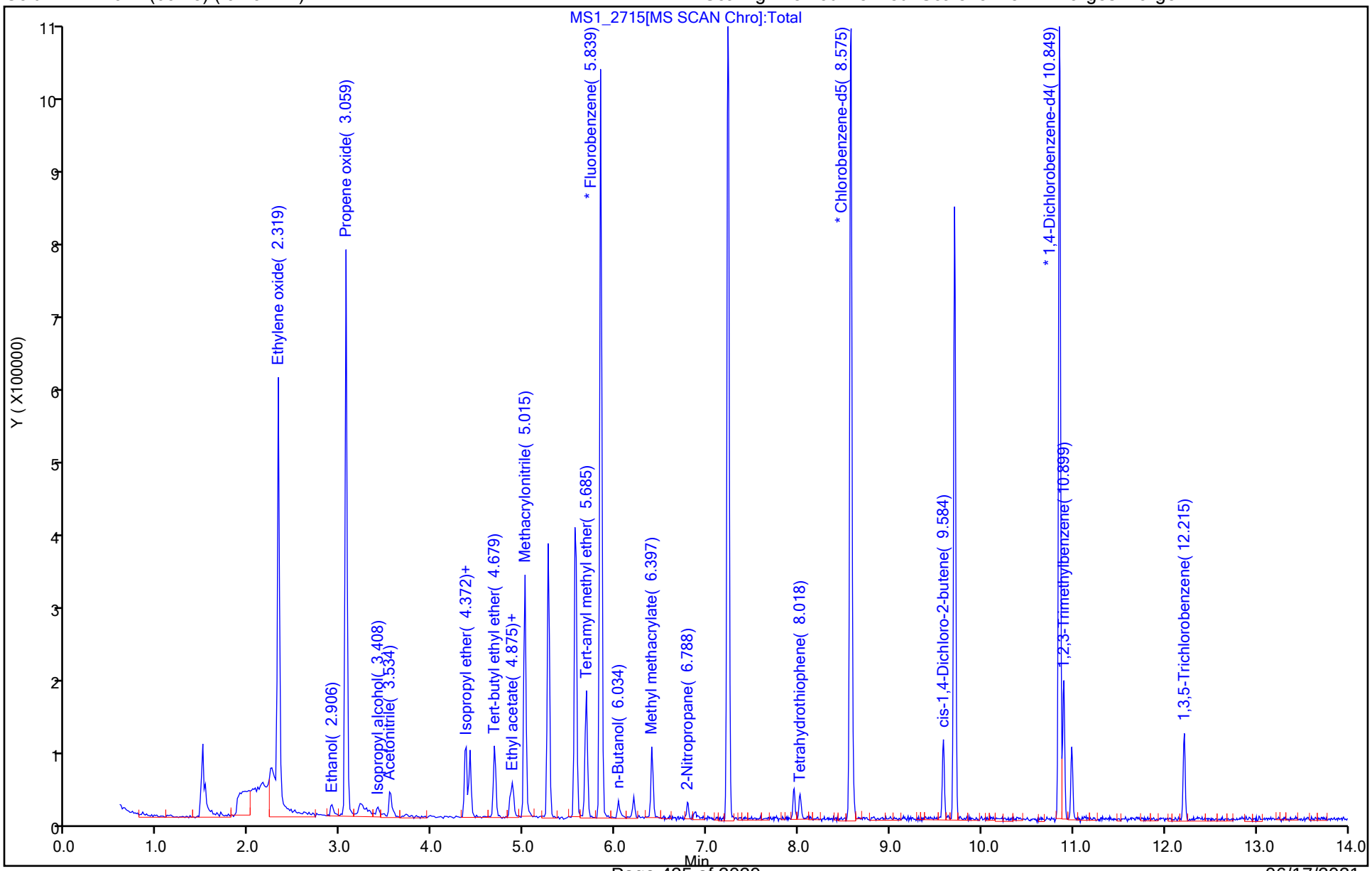
Report Date: 05-Jun-2021 11:14:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2715.D

Injection Date:	04-Jun-2021 11:21:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD10			Worklist Smp#:	27
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

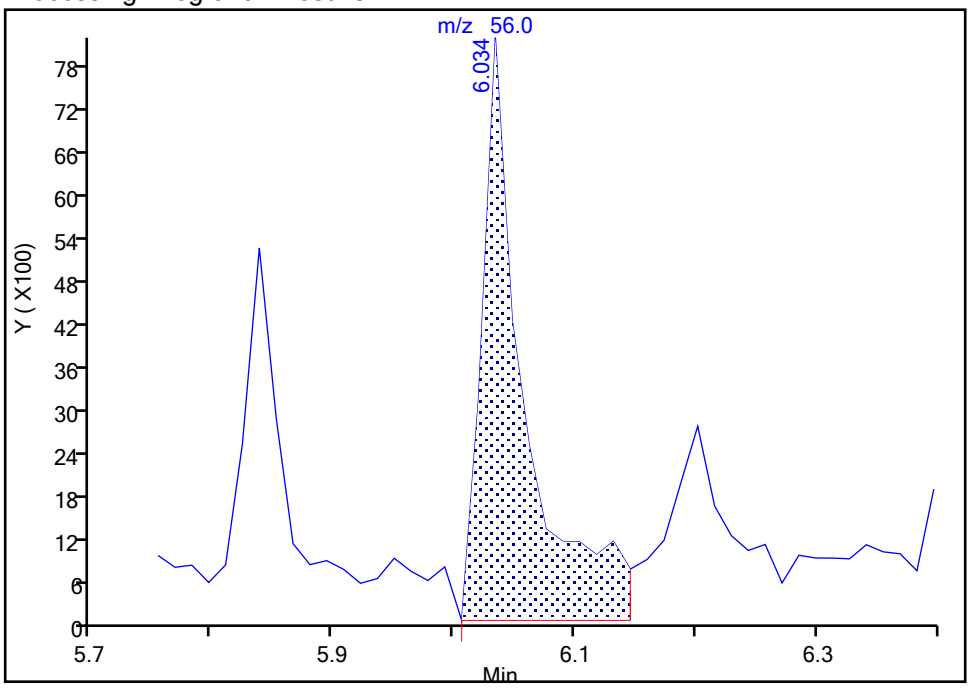
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2715.D
Injection Date: 04-Jun-2021 11:21:30 Instrument ID: VMS_MS1
Lims ID: STD10
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 4 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

67 n-Butanol, CAS: 71-36-3

Signal: 1

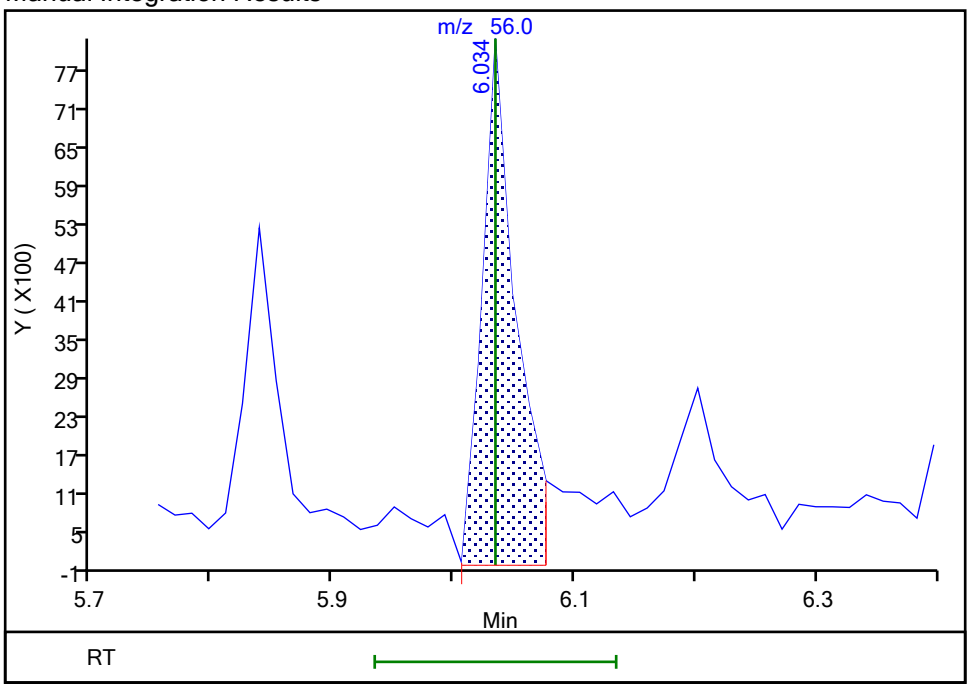
Processing Integration Results

RT: 6.03
Area: 20111
Amount: 324.8890
Amount Units: ug/l



Manual Integration Results

RT: 6.03
Area: 16178
Amount: 271.1985
Amount Units: ug/l



Reviewer: seifertj, 04-Jun-2021 13:35:21
Audit Action: Manually Integrated Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2716.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 04-Jun-2021 11:42:30 ALS Bottle#: 5 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub157

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:52 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 12:08:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	769875	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	160270	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	260891	50.0	50.0	
14 Ethylene oxide	43	2.319	2.319	0.000	100	675626	5000.0	4737.6	
19 Ethanol	45	2.892	2.892	0.000	100	90674	3000.0	2714.6	
21 Propene oxide	58	3.059	3.059	0.000	87	2199226	5000.0	4781.0	
27 Isopropyl alcohol	45	3.394	3.395	0.000	99	76551	500.0	449.9	
29 Acetonitrile	41	3.534	3.534	0.000	99	171419	500.0	473.4	
41 Isopropyl ether	87	4.372	4.372	0.000	92	99914	50.0	48.9	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	216293	50.0	45.2	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	390067	50.0	49.8	
47 Ethyl acetate	43	4.847	4.847	0.000	100	181020	100.0	90.4	
50 Propionitrile	54	4.875	4.875	0.000	98	167396	500.0	470.0	
52 Methacrylonitrile	41	5.015	5.015	0.000	93	708538	500.0	487.7	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	86	330078	50.0	48.5	
67 n-Butanol	56	6.034	6.034	0.000	93	71615	1250.0	1136.5	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	56906	100.0	95.8	
76 2-Nitropropane	41	6.788	6.788	0.000	99	59124	100.0	90.1	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	96	66531	100.0	96.1	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	84	114331	100.0	89.7	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	461007	50.0	46.5	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	93	146215	50.0	48.2	
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051	Amount Added: 50.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

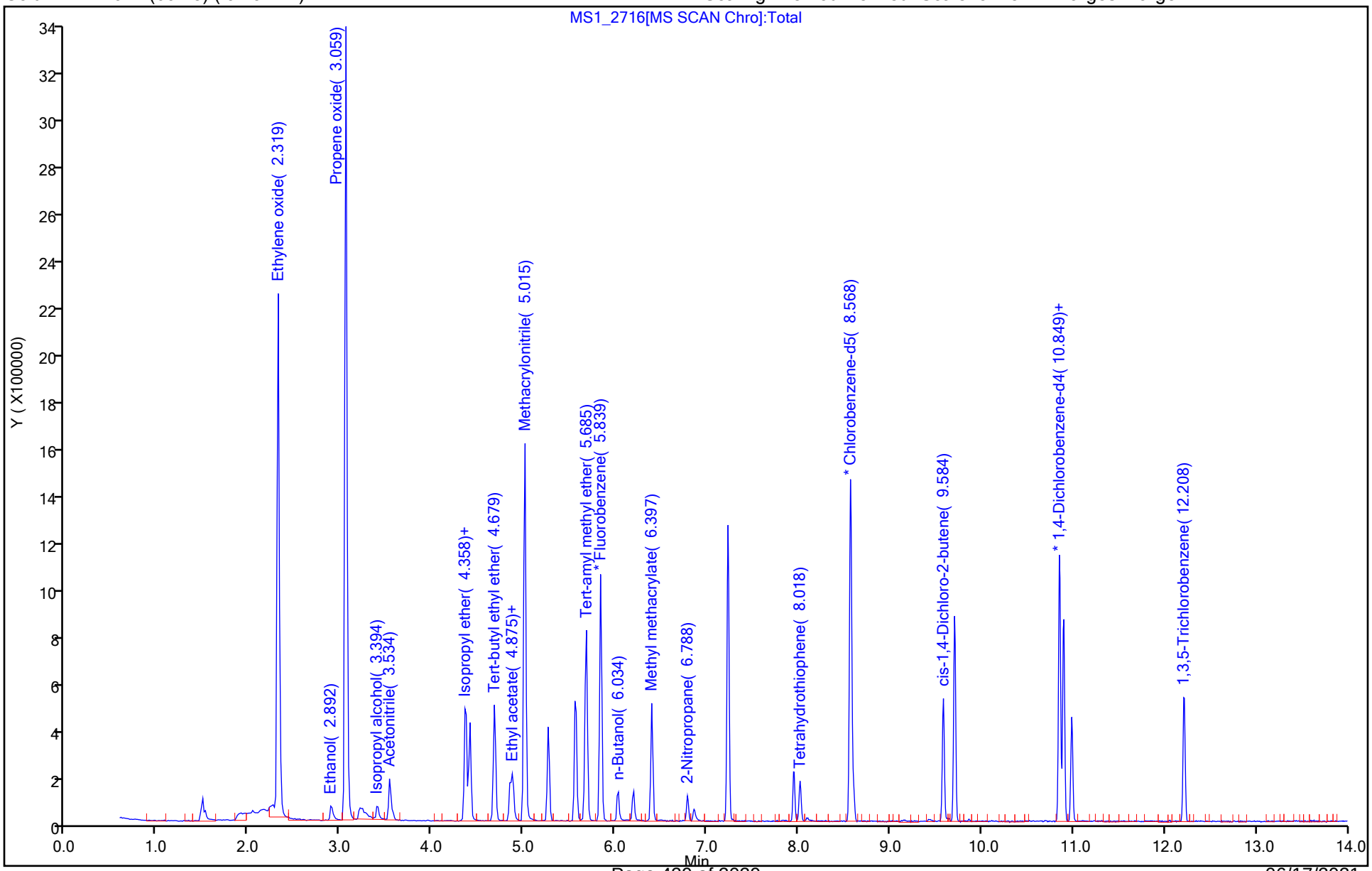
Report Date: 05-Jun-2021 11:14:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2716.D

Injection Date:	04-Jun-2021 11:42:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD50			Worklist Smp#:	28
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2717.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Jun-2021 12:04:30 ALS Bottle#: 6 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub157

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:53 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 12:41:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	777438	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162224	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	250801	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	1036589	7500.0	7588.7	
19 Ethanol	45	2.892	2.892	0.000	99	148252	4500.0	4420.2	
21 Propene oxide	58	3.059	3.059	0.000	87	3412846	7500.0	7347.1	
27 Isopropyl alcohol	45	3.395	3.395	0.000	99	118762	750.0	691.1	
29 Acetonitrile	41	3.534	3.534	0.000	99	262979	750.0	722.0	
41 Isopropyl ether	87	4.372	4.372	0.000	92	155693	75.0	75.4	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	339131	75.0	70.2	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	598583	75.0	75.7	
47 Ethyl acetate	43	4.847	4.847	0.000	100	295874	150.0	146.3	
50 Propionitrile	54	4.875	4.875	0.000	98	273883	750.0	767.1	
52 Methacrylonitrile	41	5.015	5.015	0.000	92	1112747	750.0	761.0	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	85	525182	75.0	76.4	
67 n-Butanol	56	6.034	6.034	0.000	90	120882	1875.0	1899.6	
72 Methyl methacrylate	100	6.397	6.397	0.000	91	92850	150.0	154.8	
76 2-Nitropropane	41	6.788	6.788	0.000	99	96340	150.0	148.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	102776	150.0	146.6	
108 cis-1,4-Dichloro-2-butene	53	9.584	9.584	0.000	84	174974	150.0	142.8	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	711897	75.0	74.7	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	95	224118	75.0	76.8	
145 Ethyl acrylate	55		0.000				ND	ND	
146 t-Amyl alcohol	1		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051	Amount Added: 75.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

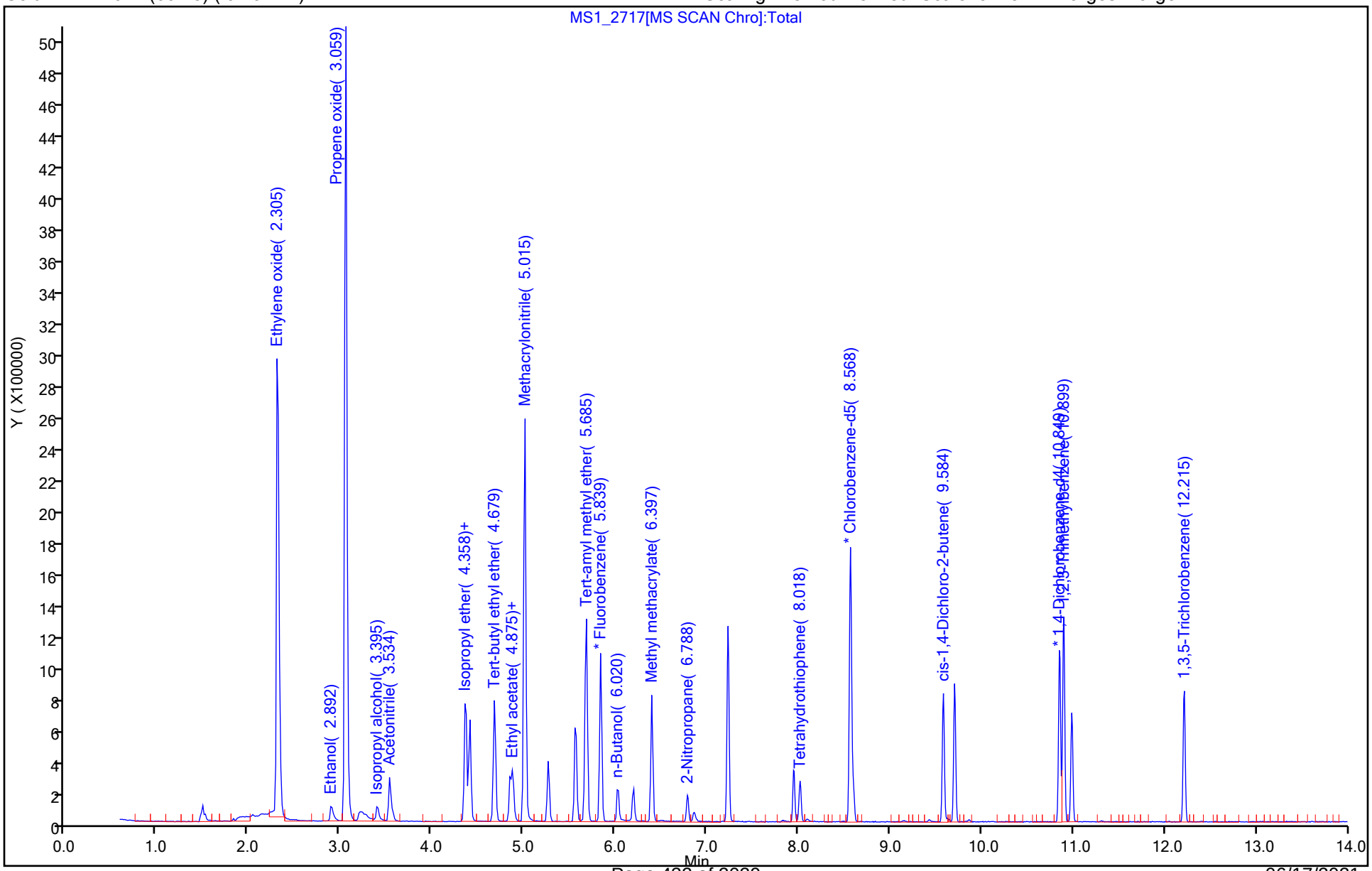
Report Date: 05-Jun-2021 11:14:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2717.D

Injection Date:	04-Jun-2021 12:04:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD75			Worklist Smp#:	29
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2718.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Jun-2021 12:25:30 ALS Bottle#: 7 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub157

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:55 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 13:30:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	780425	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162096	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	263349	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	1325947	10000	10136	
19 Ethanol	45	2.892	2.892	0.000	100	189484	6000.0	5638.9	
21 Propene oxide	58	3.059	3.059	0.000	87	4345569	10000	9319.2	
27 Isopropyl alcohol	45	3.394	3.395	-0.001	98	154722	1000.0	897.0	
29 Acetonitrile	41	3.534	3.534	0.000	99	336478	1000.0	921.8	
41 Isopropyl ether	87	4.372	4.372	0.000	92	210233	100.0	101.5	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	453554	100.0	93.5	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	99	797316	100.0	100.5	
47 Ethyl acetate	43	4.847	4.847	0.000	100	391747	200.0	193.0	
50 Propionitrile	54	4.875	4.875	0.000	98	345991	1000.0	967.7	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	1464721	1000.0	999.3	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	85	695022	100.0	100.7	
67 n-Butanol	56	6.034	6.034	0.000	92	151525	2500.0	2372.0	
72 Methyl methacrylate	100	6.397	6.397	0.000	89	118435	200.0	196.7	
76 2-Nitropropane	41	6.788	6.788	0.000	99	128713	200.0	199.4	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	135312	200.0	193.2	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	83	229641	200.0	178.5	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	955425	100.0	95.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	305264	100.0	99.6	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051	Amount Added: 100.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

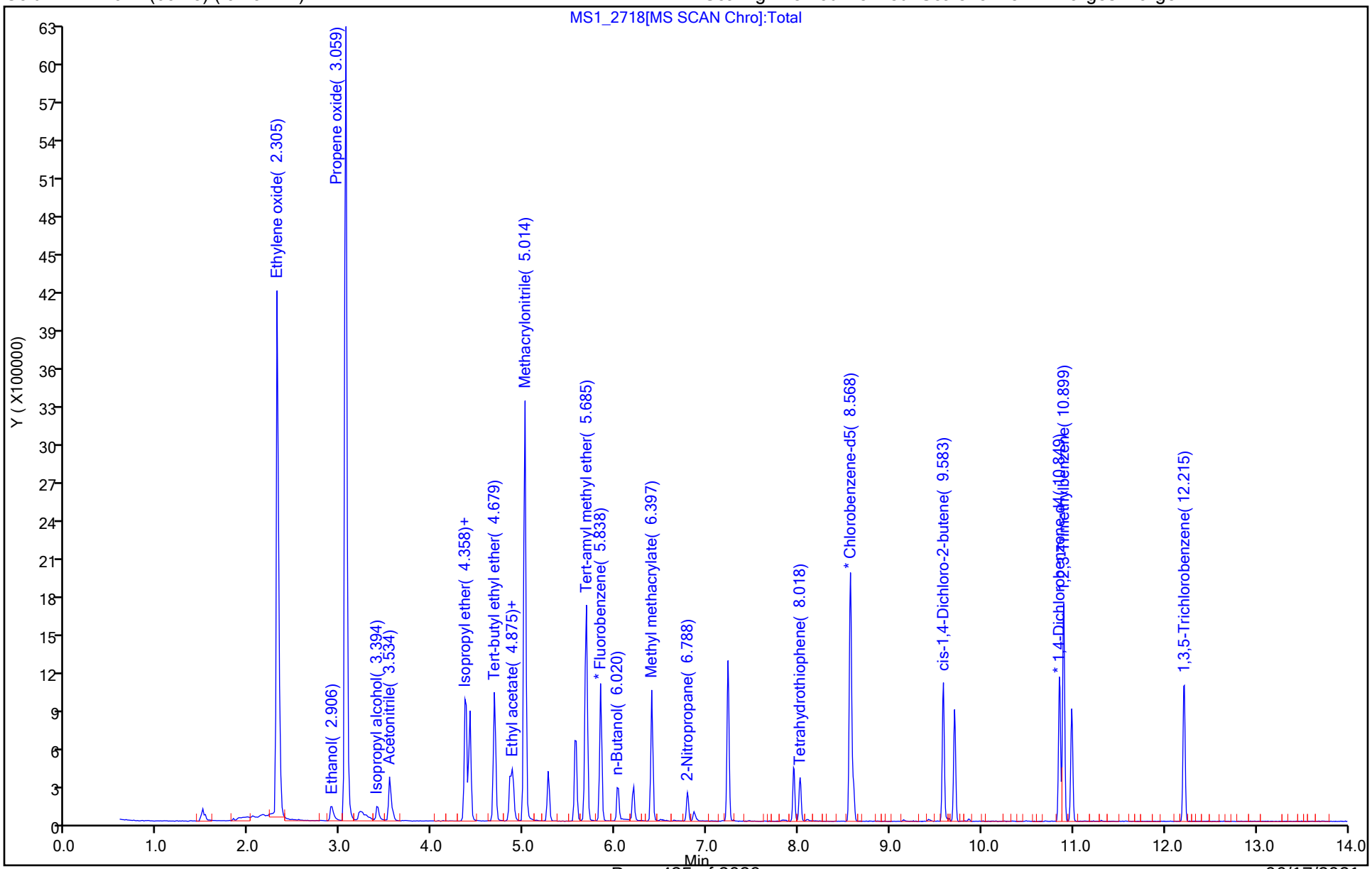
Report Date: 05-Jun-2021 11:14:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2718.D

Injection Date:	04-Jun-2021 12:25:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD100			Worklist Smp#:	30
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2719.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Jun-2021 12:47:30 ALS Bottle#: 8 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub157

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:56 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 13:31:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	786244	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	167037	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	260433	50.0	50.0	
14 Ethylene oxide	43	2.305	2.305	0.000	100	2156198	20000	19951	
19 Ethanol	45	2.906	2.892	0.014	100	430073	12000	12754	
21 Propene oxide	58	3.059	3.059	0.000	86	9367709	20000	19941	
27 Isopropyl alcohol	45	3.408	3.395	0.013	99	353633	2000.0	2034.9	
29 Acetonitrile	41	3.534	3.534	0.000	99	755055	2000.0	2059.8	
41 Isopropyl ether	87	4.372	4.372	0.000	92	441906	200.0	211.7	
42 2-Chloro-1,3-butadiene	53	4.414	4.414	0.000	96	914862	200.0	187.3	
44 Tert-butyl ethyl ether	59	4.679	4.679	0.000	98	1697935	200.0	212.4	
47 Ethyl acetate	43	4.847	4.847	0.000	100	916063	400.0	448.0	
50 Propionitrile	54	4.875	4.875	0.000	98	788894	2000.0	2201.5	
52 Methacrylonitrile	41	5.014	5.015	-0.001	92	3237312	2000.0	2197.5	
65 Tert-amyl methyl ether	73	5.685	5.685	0.000	86	1491195	200.0	214.5	
67 n-Butanol	56	6.034	6.034	0.000	91	380063	5000.0	5905.7	
72 Methyl methacrylate	100	6.397	6.397	0.000	89	265731	400.0	438.2	
76 2-Nitropropane	41	6.788	6.788	0.000	99	294580	400.0	459.5	
94 Tetrahydrothiophene	60	8.018	8.018	0.000	95	295899	400.0	410.0	
108 cis-1,4-Dichloro-2-butene	53	9.583	9.584	-0.001	84	514731	400.0	404.6	
124 1,2,3-Trimethylbenzene	105	10.899	10.899	0.000	99	1954614	200.0	197.4	
129 1,3,5-Trichlorobenzene	180	12.215	12.215	0.000	94	630938	200.0	208.2	
146 t-Amyl alcohol	1		0.000				ND	ND	
145 Ethyl acrylate	55		0.000				ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00051	Amount Added: 200.00	Units: uL
mv-Cent IS_00006	Amount Added: 5.00	Units: uL

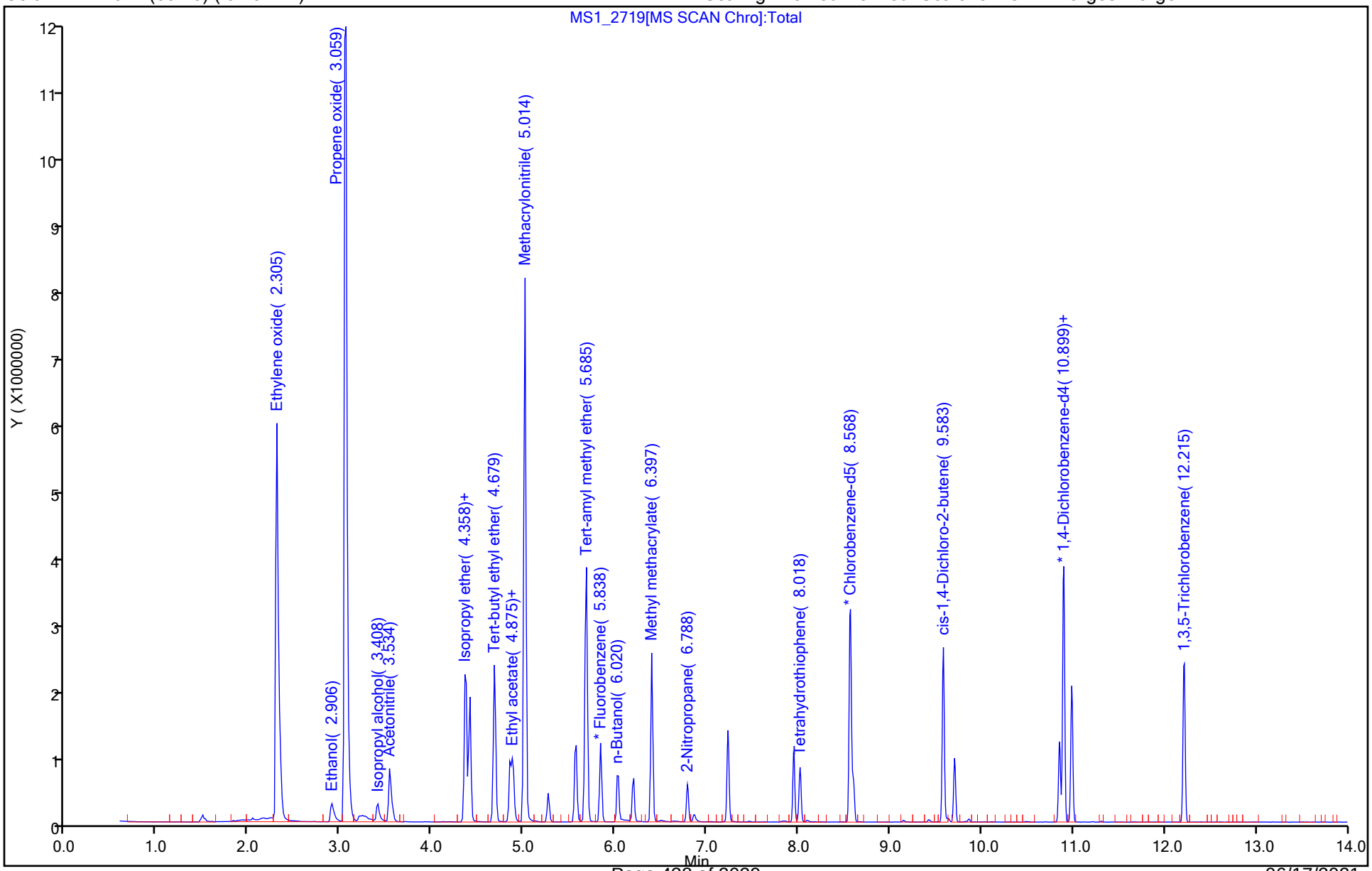
Report Date: 05-Jun-2021 11:14:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2719.D

Injection Date:	04-Jun-2021 12:47:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD200			Worklist Smp#:	31
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	AQ_VMS1_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



Calibration / Ethylene oxide

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

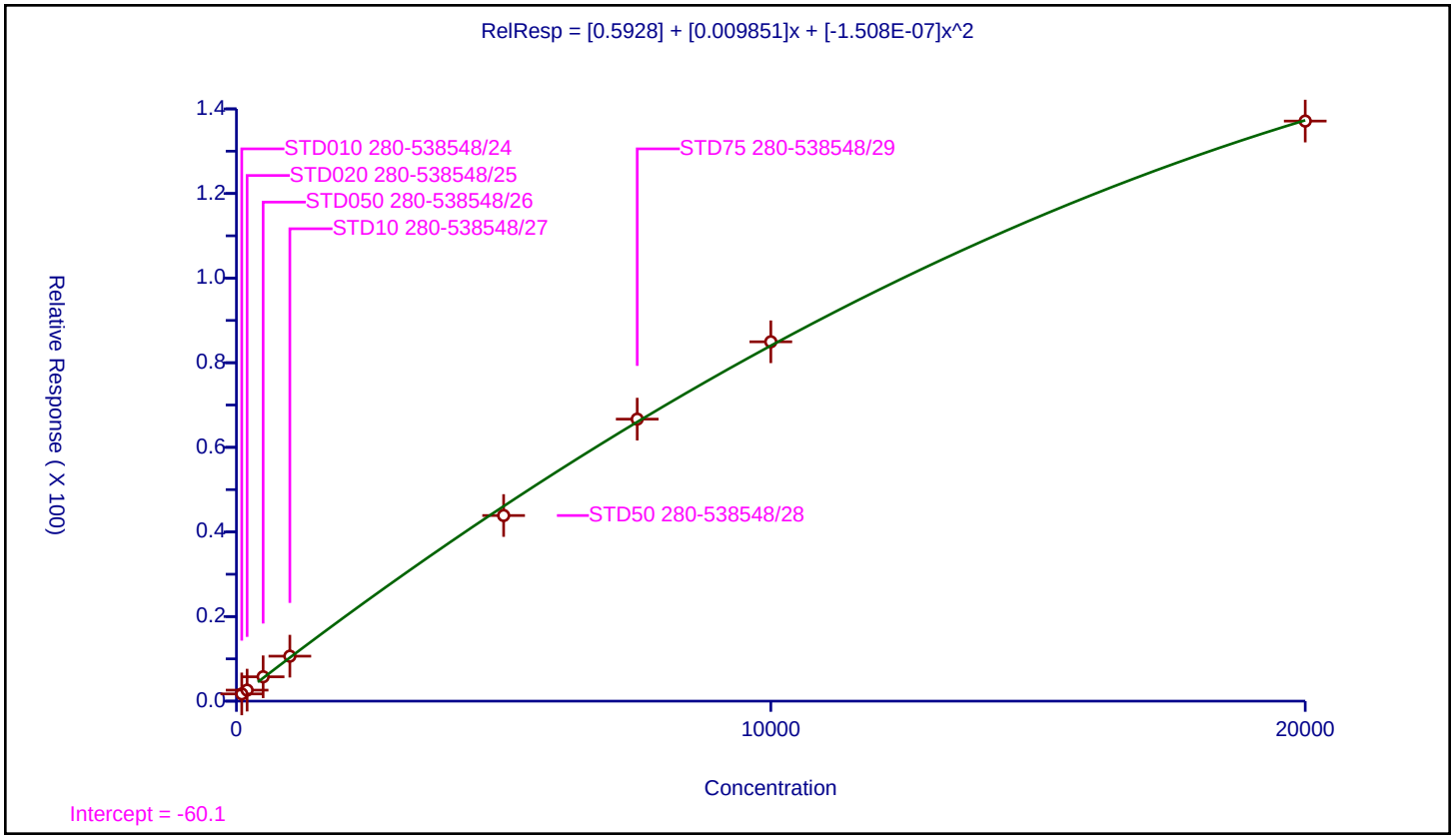
Curve Coefficients

Intercept:	0.5928
Slope:	0.009851
Second Order:	-1.508E-07

Error Coefficients

Standard Error:	1260000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	100.0	1.707512	50.0	763333.0	0.017075	Y
2	STD020 280-538548/25	200.0	2.603198	50.0	732042.0	0.013016	Y
3	STD050 280-538548/26	500.0	5.759784	50.0	735722.0	0.01152	Y
4	STD10 280-538548/27	1000.0	10.62894	50.0	728798.0	0.010629	Y
5	STD50 280-538548/28	5000.0	43.878941	50.0	769875.0	0.008776	Y
6	STD75 280-538548/29	7500.0	66.666988	50.0	777438.0	0.008889	Y
7	STD100 280-538548/30	10000.0	84.950316	50.0	780425.0	0.008495	Y
8	STD200 280-538548/31	20000.0	137.120156	50.0	786244.0	0.006856	Y



Calibration / Ethanol

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

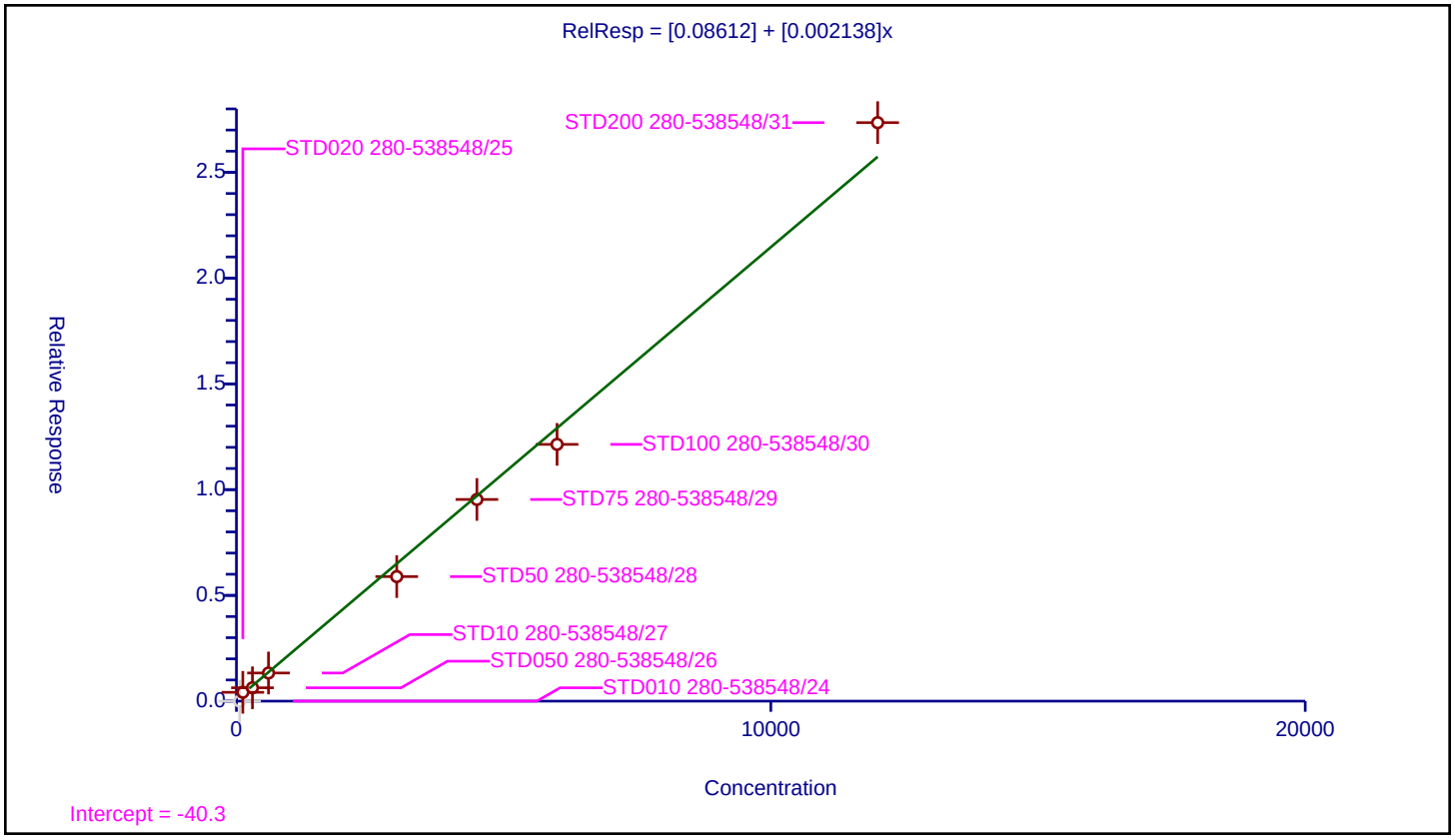
Curve Coefficients

Intercept:	0.08612
Slope:	0.002138

Error Coefficients

Standard Error:	224000
Relative Standard Error:	15.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	60.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	120.0	0.416916	50.0	732042.0	0.003474	Y
3	STD050 280-538548/26	300.0	0.631692	50.0	735722.0	0.002106	Y
4	STD10 280-538548/27	600.0	1.329998	50.0	728798.0	0.002217	Y
5	STD50 280-538548/28	3000.0	5.888878	50.0	769875.0	0.001963	Y
6	STD75 280-538548/29	4500.0	9.534651	50.0	777438.0	0.002119	Y
7	STD100 280-538548/30	6000.0	12.139796	50.0	780425.0	0.002023	Y
8	STD200 280-538548/31	12000.0	27.349843	50.0	786244.0	0.002279	Y



Calibration / Isopropyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

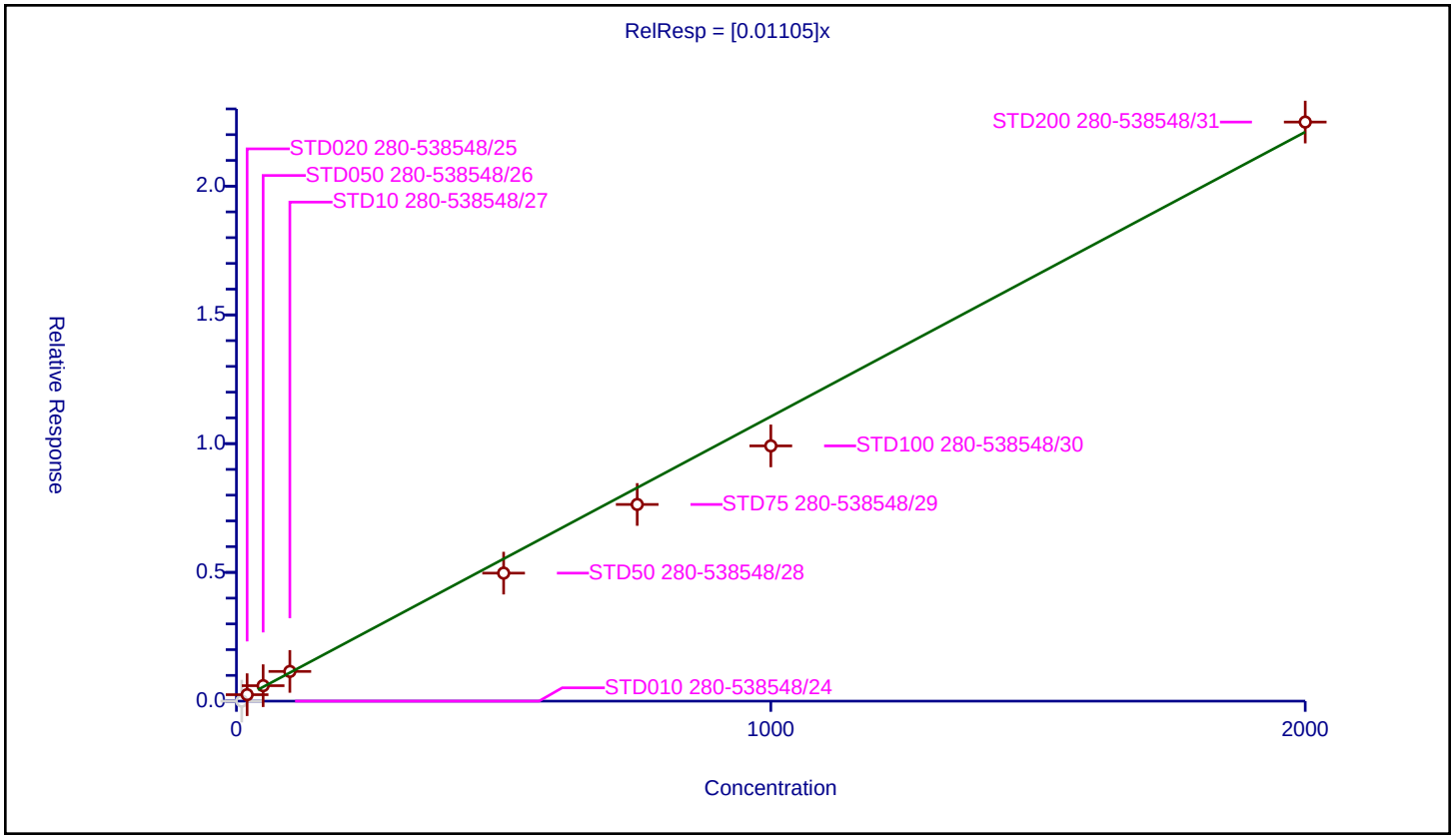
Curve Coefficients

Intercept:	0
Slope:	0.01105

Error Coefficients

Standard Error:	168000
Relative Standard Error:	9.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	20.0	0.250532	50.0	732042.0	0.012527	Y
3	STD050 280-538548/26	50.0	0.600634	50.0	735722.0	0.012013	Y
4	STD10 280-538548/27	100.0	1.15368	50.0	728798.0	0.011537	Y
5	STD50 280-538548/28	500.0	4.971651	50.0	769875.0	0.009943	Y
6	STD75 280-538548/29	750.0	7.638037	50.0	777438.0	0.010184	Y
7	STD100 280-538548/30	1000.0	9.912676	50.0	780425.0	0.009913	Y
8	STD200 280-538548/31	2000.0	22.488757	50.0	786244.0	0.011244	Y



Calibration / Acetonitrile

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

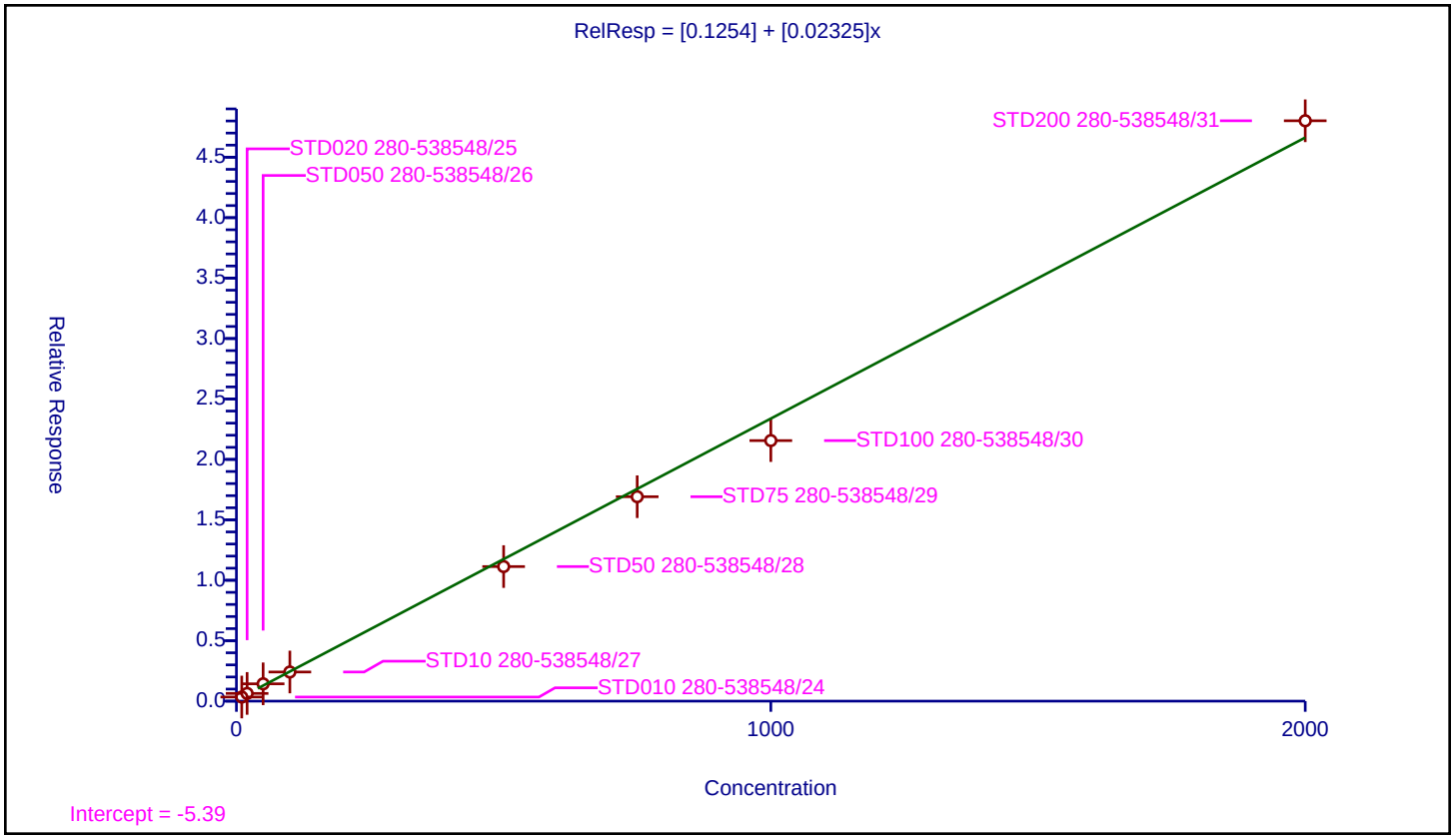
Curve Coefficients

Intercept:	0.1254
Slope:	0.02325

Error Coefficients

Standard Error:	361000
Relative Standard Error:	8.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.34107	50.0	763333.0	0.034107	Y
2	STD020 280-538548/25	20.0	0.638078	50.0	732042.0	0.031904	Y
3	STD050 280-538548/26	50.0	1.433558	50.0	735722.0	0.028671	Y
4	STD10 280-538548/27	100.0	2.411985	50.0	728798.0	0.02412	Y
5	STD50 280-538548/28	500.0	11.132911	50.0	769875.0	0.022266	Y
6	STD75 280-538548/29	750.0	16.913182	50.0	777438.0	0.022551	Y
7	STD100 280-538548/30	1000.0	21.557357	50.0	780425.0	0.021557	Y
8	STD200 280-538548/31	2000.0	48.016583	50.0	786244.0	0.024008	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

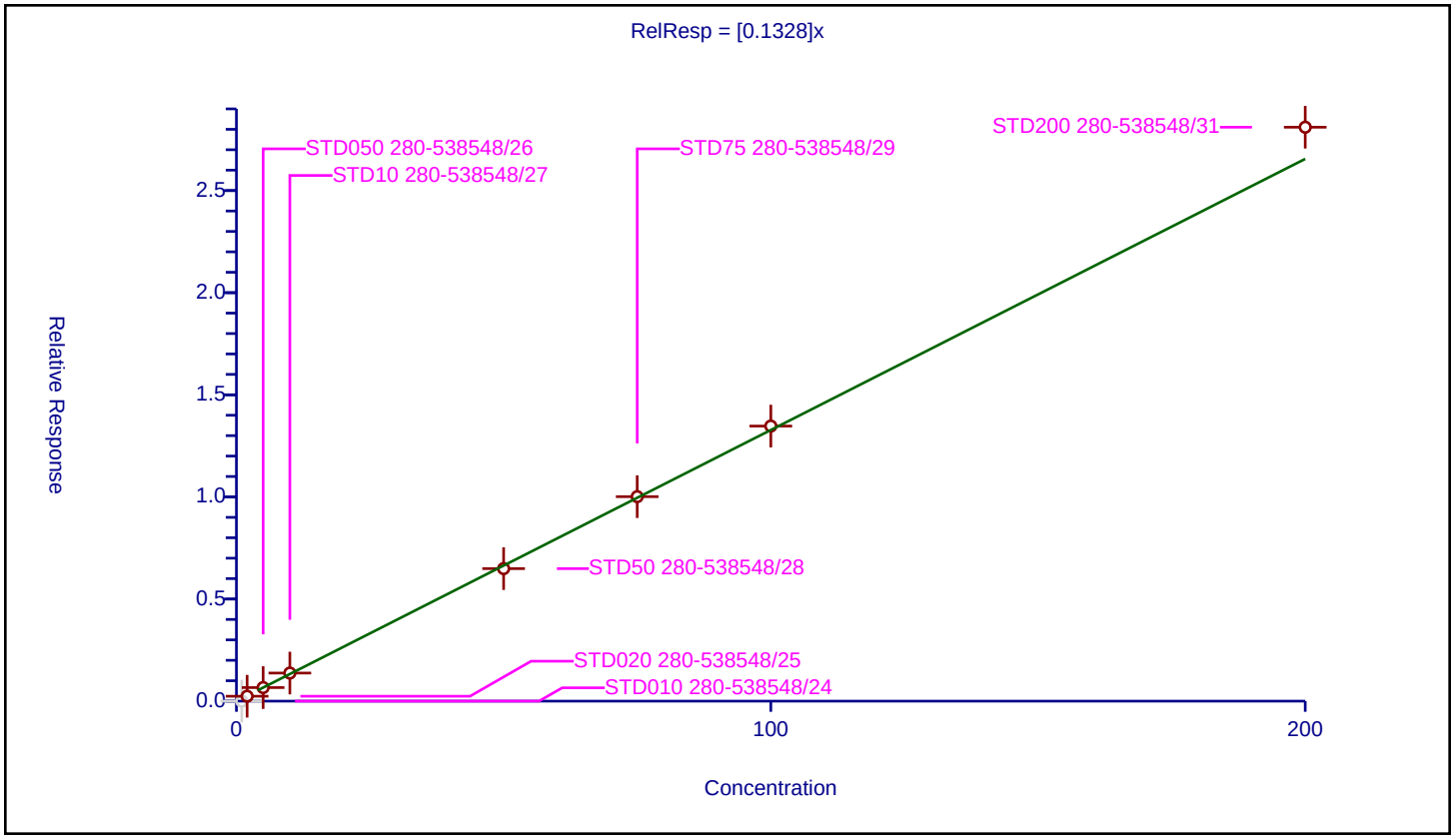
Curve Coefficients

Intercept:	0
Slope:	0.1328

Error Coefficients

Standard Error:	214000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	2.0	0.240901	50.0	732042.0	0.120451	Y
3	STD050 280-538548/26	5.0	0.663906	50.0	735722.0	0.132781	Y
4	STD10 280-538548/27	10.0	1.37569	50.0	728798.0	0.137569	Y
5	STD50 280-538548/28	50.0	6.488975	50.0	769875.0	0.12978	Y
6	STD75 280-538548/29	75.0	10.01321	50.0	777438.0	0.133509	Y
7	STD100 280-538548/30	100.0	13.469135	50.0	780425.0	0.134691	Y
8	STD200 280-538548/31	200.0	28.102345	50.0	786244.0	0.140512	Y



Calibration / 2-Chloro-1,3-butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

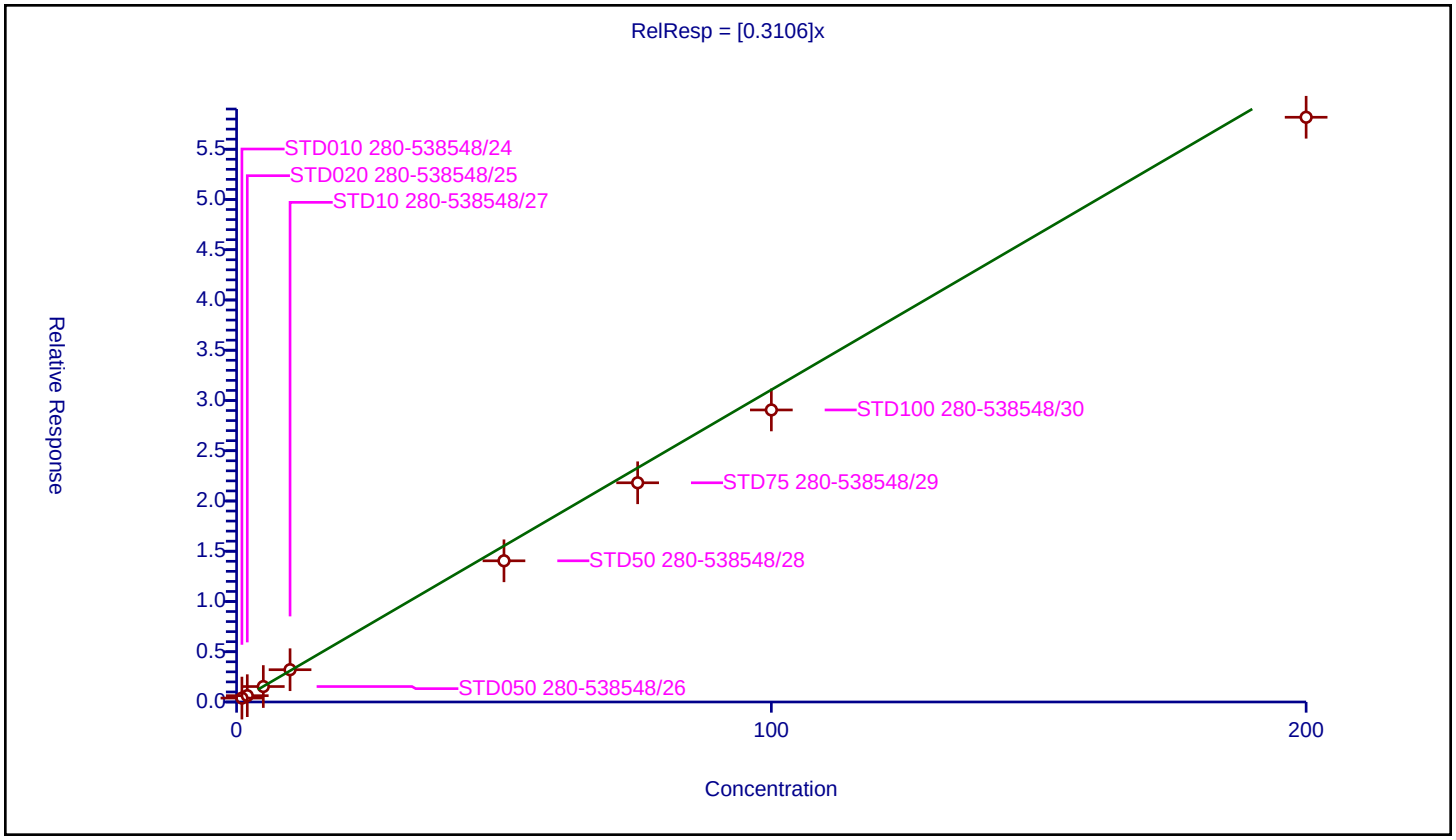
Curve Coefficients

Intercept:	0
Slope:	0.3106

Error Coefficients

Standard Error:	415000
Relative Standard Error:	11.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.389738	50.0	763333.0	0.389738	Y
2	STD020 280-538548/25	2.0	0.627355	50.0	732042.0	0.313677	Y
3	STD050 280-538548/26	5.0	1.536722	50.0	735722.0	0.307344	Y
4	STD10 280-538548/27	10.0	3.211178	50.0	728798.0	0.321118	Y
5	STD50 280-538548/28	50.0	14.04728	50.0	769875.0	0.280946	Y
6	STD75 280-538548/29	75.0	21.810807	50.0	777438.0	0.290811	Y
7	STD100 280-538548/30	100.0	29.058141	50.0	780425.0	0.290581	Y
8	STD200 280-538548/31	200.0	58.179268	50.0	786244.0	0.290896	Y



Calibration / Tert-butyl ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

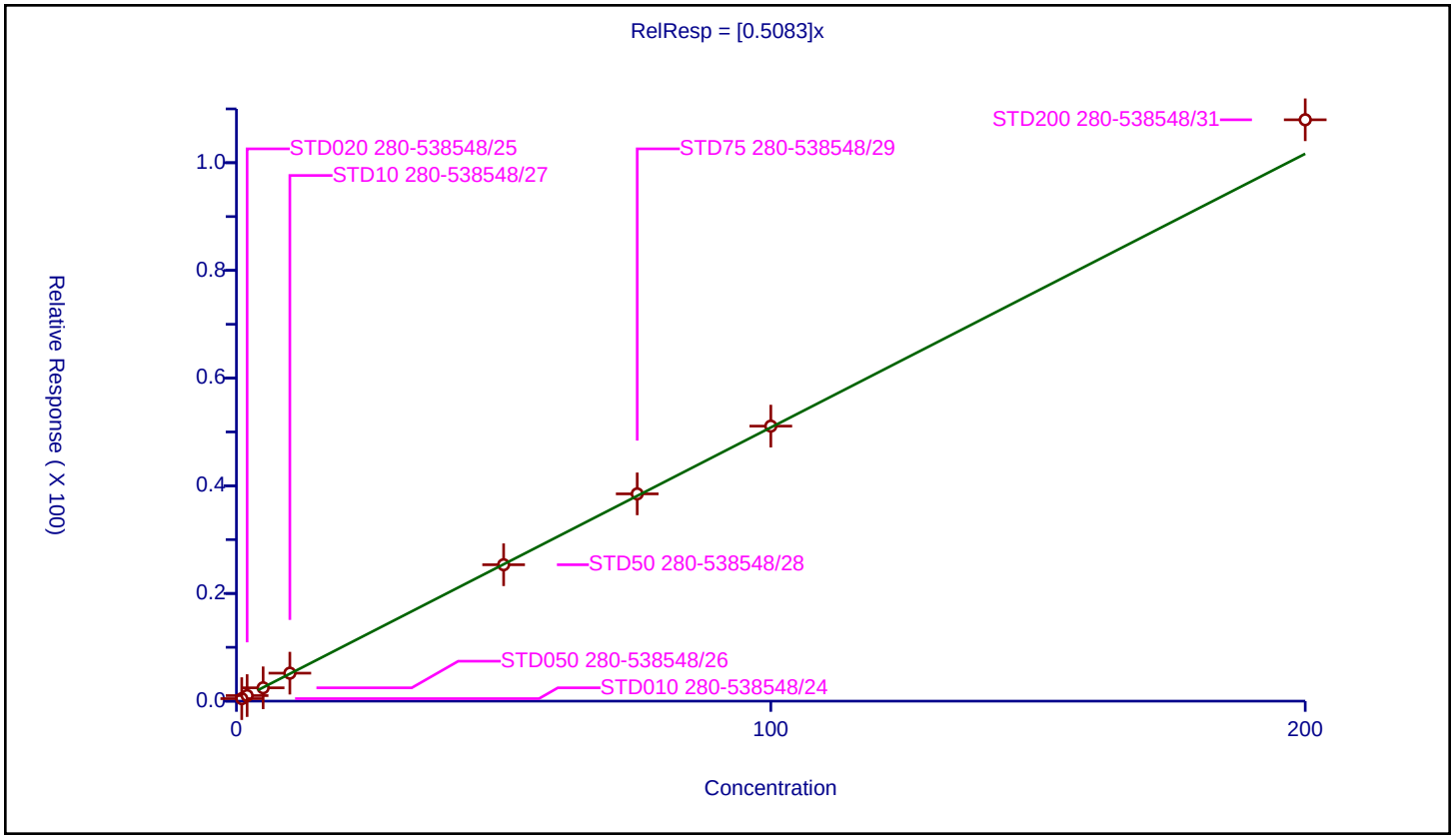
Curve Coefficients

Intercept:	0
Slope:	0.5083

Error Coefficients

Standard Error:	759000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.466048	50.0	763333.0	0.466048	Y
2	STD020 280-538548/25	2.0	1.031498	50.0	732042.0	0.515749	Y
3	STD050 280-538548/26	5.0	2.473421	50.0	735722.0	0.494684	Y
4	STD10 280-538548/27	10.0	5.194649	50.0	728798.0	0.519465	Y
5	STD50 280-538548/28	50.0	25.333138	50.0	769875.0	0.506663	Y
6	STD75 280-538548/29	75.0	38.497153	50.0	777438.0	0.513295	Y
7	STD100 280-538548/30	100.0	51.082167	50.0	780425.0	0.510822	Y
8	STD200 280-538548/31	200.0	107.977613	50.0	786244.0	0.539888	Y



Calibration / Ethyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

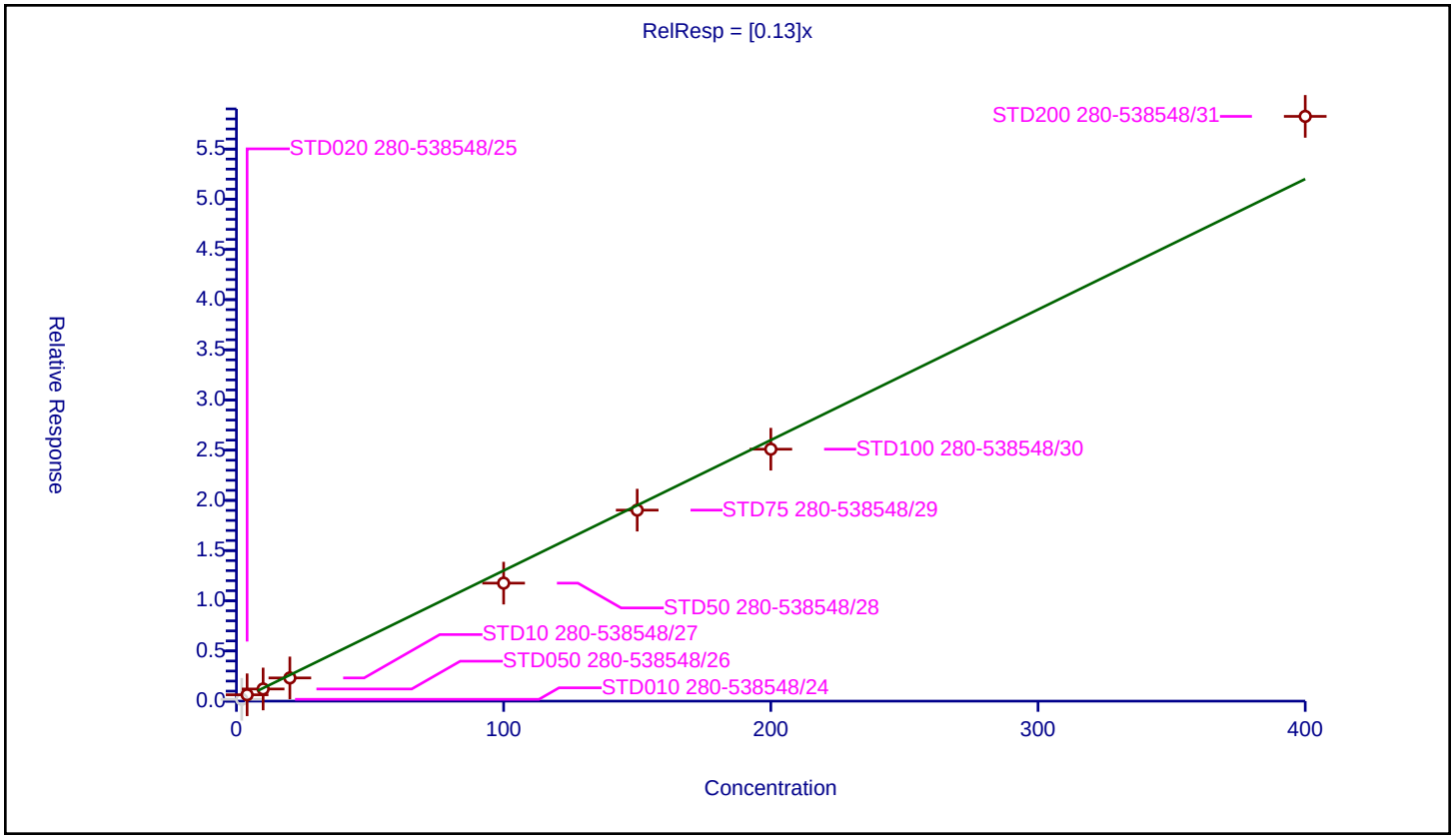
Curve Coefficients

Intercept:	0
Slope:	0.13

Error Coefficients

Standard Error:	431000
Relative Standard Error:	12.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.18262	50.0	763333.0	0.09131	N
2	STD020 280-538548/25	4.0	0.631521	50.0	732042.0	0.15788	Y
3	STD050 280-538548/26	10.0	1.211735	50.0	735722.0	0.121173	Y
4	STD10 280-538548/27	20.0	2.313055	50.0	728798.0	0.115653	Y
5	STD50 280-538548/28	100.0	11.756454	50.0	769875.0	0.117565	Y
6	STD75 280-538548/29	150.0	19.028784	50.0	777438.0	0.126859	Y
7	STD100 280-538548/30	200.0	25.098312	50.0	780425.0	0.125492	Y
8	STD200 280-538548/31	400.0	58.255643	50.0	786244.0	0.145639	Y



Calibration / Propionitrile

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

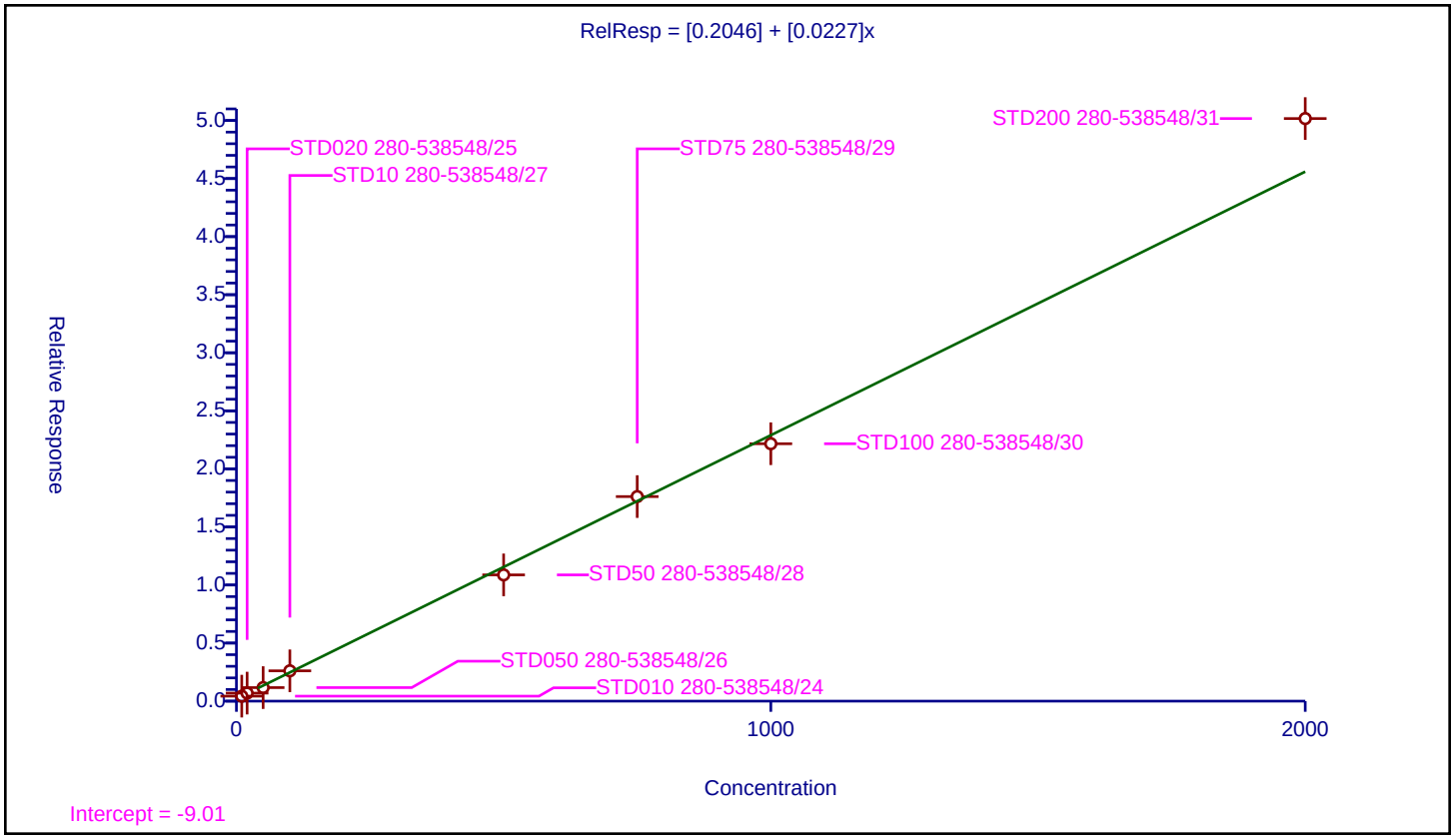
Curve Coefficients

Intercept:	0.2046
Slope:	0.0227

Error Coefficients

Standard Error:	376000
Relative Standard Error:	8.9
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	0.42917	50.0	763333.0	0.042917	Y
2	STD020 280-538548/25	20.0	0.690876	50.0	732042.0	0.034544	Y
3	STD050 280-538548/26	50.0	1.166269	50.0	735722.0	0.023325	Y
4	STD10 280-538548/27	100.0	2.611217	50.0	728798.0	0.026112	Y
5	STD50 280-538548/28	500.0	10.871635	50.0	769875.0	0.021743	Y
6	STD75 280-538548/29	750.0	17.614459	50.0	777438.0	0.023486	Y
7	STD100 280-538548/30	1000.0	22.166832	50.0	780425.0	0.022167	Y
8	STD200 280-538548/31	2000.0	50.168523	50.0	786244.0	0.025084	Y



Calibration / Methacrylonitrile

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

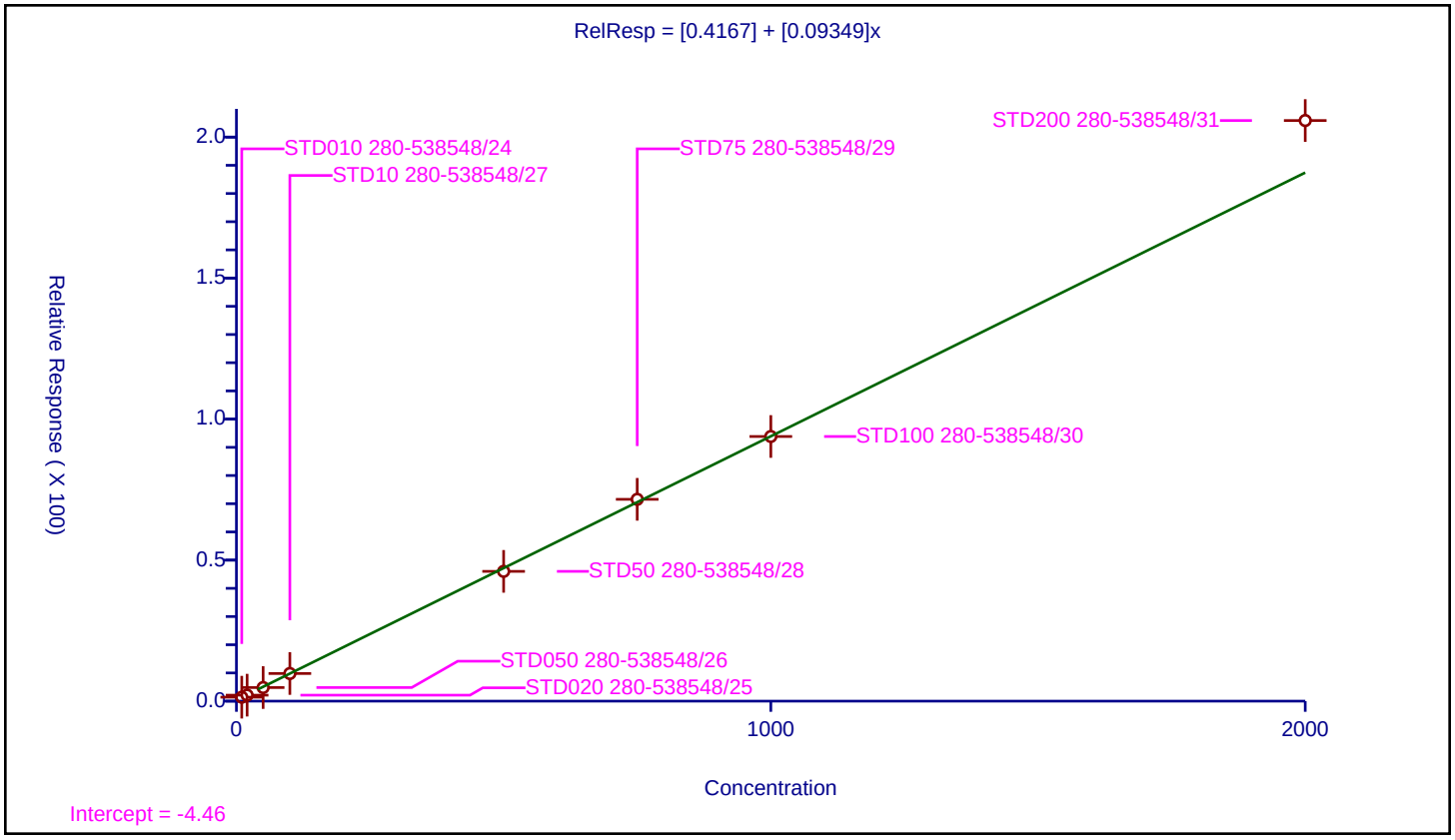
Curve Coefficients

Intercept:	0.4167
Slope:	0.09349

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	6.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	10.0	1.403254	50.0	763333.0	0.140325	Y
2	STD020 280-538548/25	20.0	2.121668	50.0	732042.0	0.106083	Y
3	STD050 280-538548/26	50.0	4.819483	50.0	735722.0	0.09639	Y
4	STD10 280-538548/27	100.0	9.794003	50.0	728798.0	0.09794	Y
5	STD50 280-538548/28	500.0	46.016431	50.0	769875.0	0.092033	Y
6	STD75 280-538548/29	750.0	71.564999	50.0	777438.0	0.09542	Y
7	STD100 280-538548/30	1000.0	93.84124	50.0	780425.0	0.093841	Y
8	STD200 280-538548/31	2000.0	205.871968	50.0	786244.0	0.102936	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

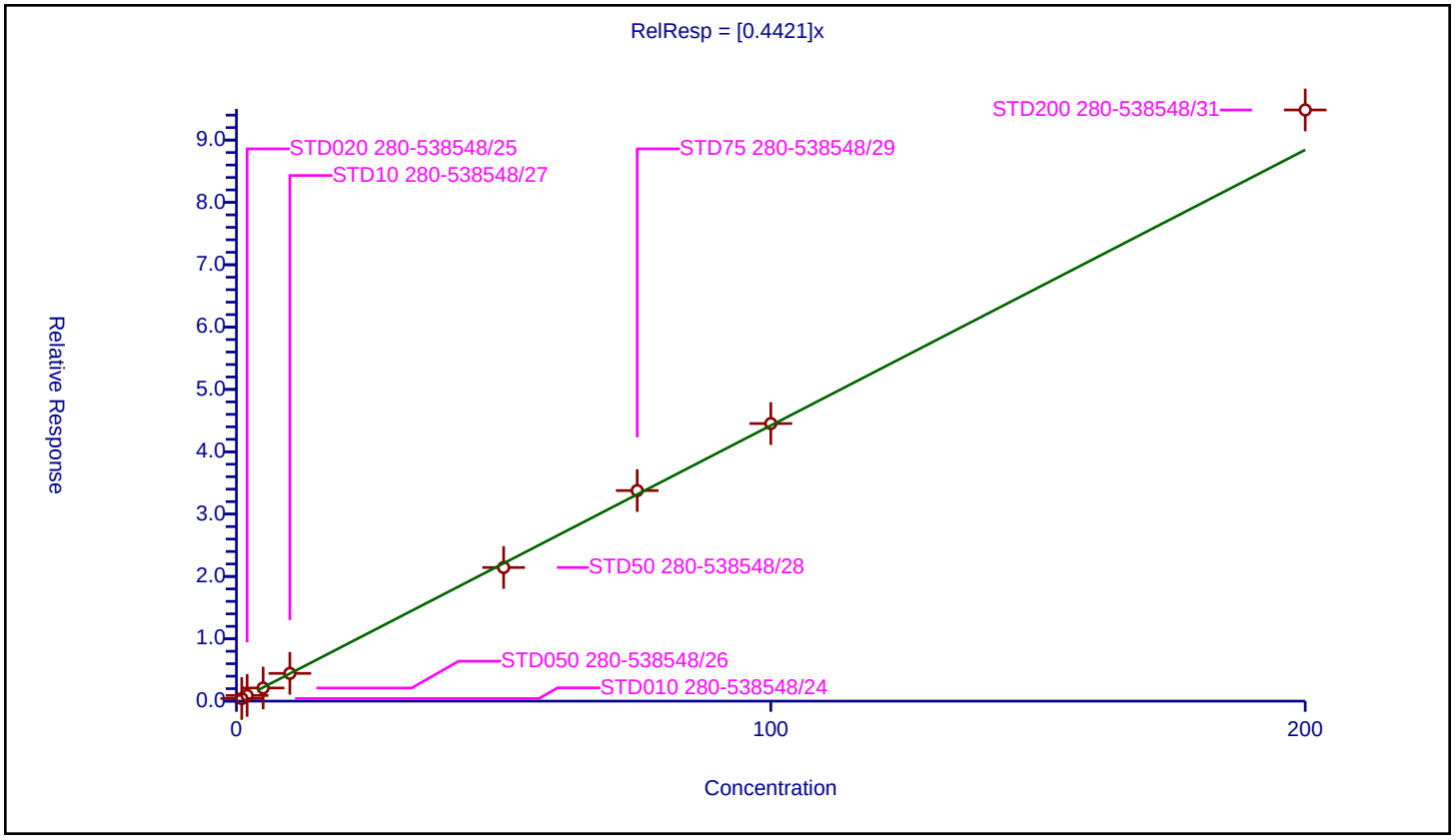
Curve Coefficients

Intercept:	0
Slope:	0.4421

Error Coefficients

Standard Error:	665000
Relative Standard Error:	4.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	0.418559	50.0	763333.0	0.418559	Y
2	STD020 280-538548/25	2.0	0.906915	50.0	732042.0	0.453458	Y
3	STD050 280-538548/26	5.0	2.10691	50.0	735722.0	0.421382	Y
4	STD10 280-538548/27	10.0	4.452468	50.0	728798.0	0.445247	Y
5	STD50 280-538548/28	50.0	21.437116	50.0	769875.0	0.428742	Y
6	STD75 280-538548/29	75.0	33.776455	50.0	777438.0	0.450353	Y
7	STD100 280-538548/30	100.0	44.52843	50.0	780425.0	0.445284	Y
8	STD200 280-538548/31	200.0	94.830294	50.0	786244.0	0.474151	Y



Calibration / n-Butanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

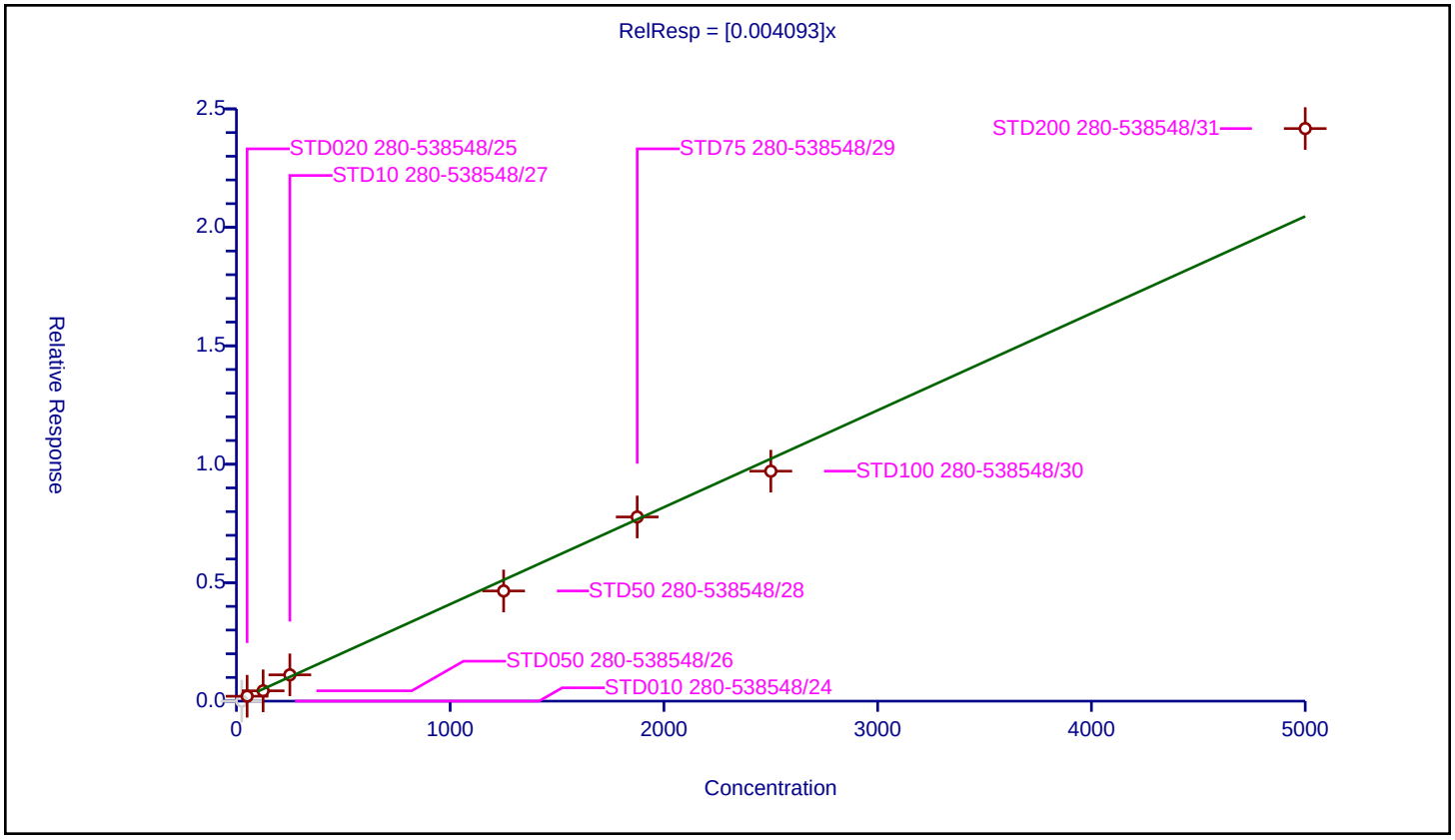
Curve Coefficients

Intercept:	0
Slope:	0.004093

Error Coefficients

Standard Error:	177000
Relative Standard Error:	11.0
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	25.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	50.0	0.206887	50.0	732042.0	0.004138	Y
3	STD050 280-538548/26	125.0	0.43583	50.0	735722.0	0.003487	Y
4	STD10 280-538548/27	250.0	1.10991	50.0	728798.0	0.00444	Y
5	STD50 280-538548/28	1250.0	4.65108	50.0	769875.0	0.003721	Y
6	STD75 280-538548/29	1875.0	7.774382	50.0	777438.0	0.004146	Y
7	STD100 280-538548/30	2500.0	9.707851	50.0	780425.0	0.003883	Y
8	STD200 280-538548/31	5000.0	24.169533	50.0	786244.0	0.004834	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

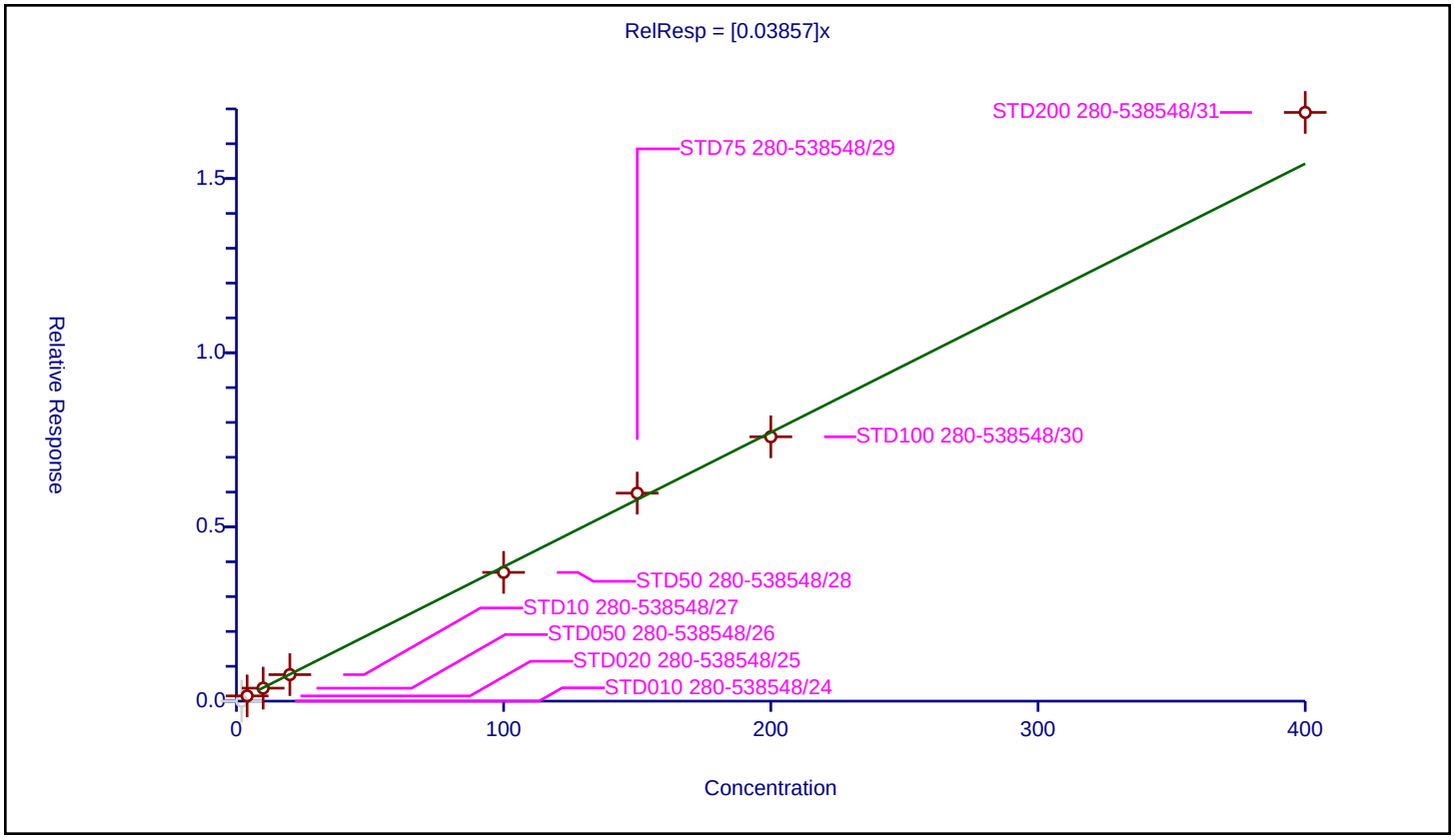
Curve Coefficients

Intercept:	0
Slope:	0.03857

Error Coefficients

Standard Error:	127000
Relative Standard Error:	4.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	4.0	0.150401	50.0	732042.0	0.0376	Y
3	STD050 280-538548/26	10.0	0.373579	50.0	735722.0	0.037358	Y
4	STD10 280-538548/27	20.0	0.761253	50.0	728798.0	0.038063	Y
5	STD50 280-538548/28	100.0	3.695795	50.0	769875.0	0.036958	Y
6	STD75 280-538548/29	150.0	5.971537	50.0	777438.0	0.03981	Y
7	STD100 280-538548/30	200.0	7.587853	50.0	780425.0	0.037939	Y
8	STD200 280-538548/31	400.0	16.898762	50.0	786244.0	0.042247	Y



Calibration / 2-Nitropropane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

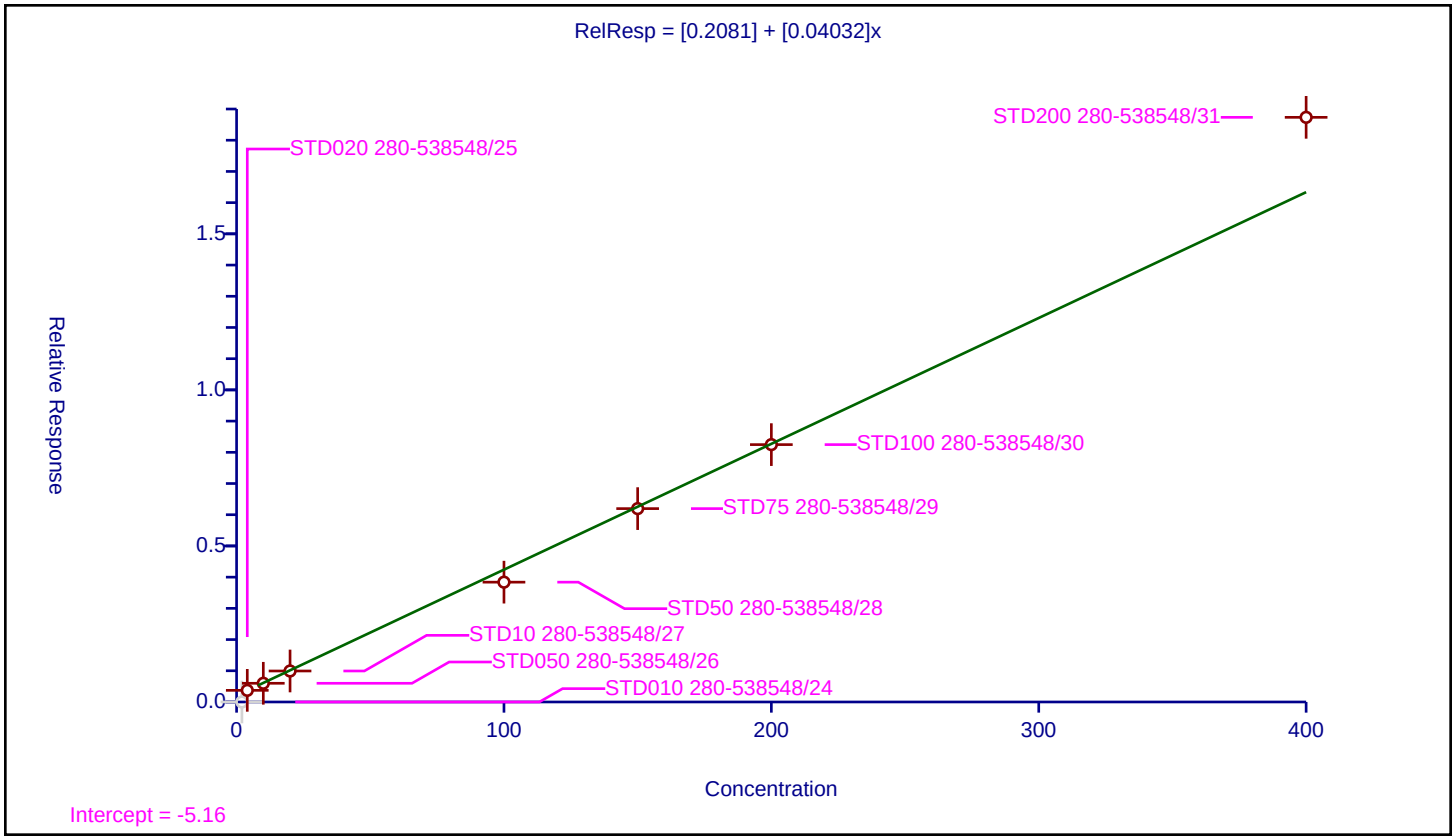
Curve Coefficients

Intercept:	0.2081
Slope:	0.04032

Error Coefficients

Standard Error:	153000
Relative Standard Error:	8.3
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.0	50.0	763333.0	0.0	N
2	STD020 280-538548/25	4.0	0.372588	50.0	732042.0	0.093147	Y
3	STD050 280-538548/26	10.0	0.599275	50.0	735722.0	0.059928	Y
4	STD10 280-538548/27	20.0	0.992936	50.0	728798.0	0.049647	Y
5	STD50 280-538548/28	100.0	3.839844	50.0	769875.0	0.038398	Y
6	STD75 280-538548/29	150.0	6.195992	50.0	777438.0	0.041307	Y
7	STD100 280-538548/30	200.0	8.24634	50.0	780425.0	0.041232	Y
8	STD200 280-538548/31	400.0	18.73337	50.0	786244.0	0.046833	Y



Calibration / cis-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

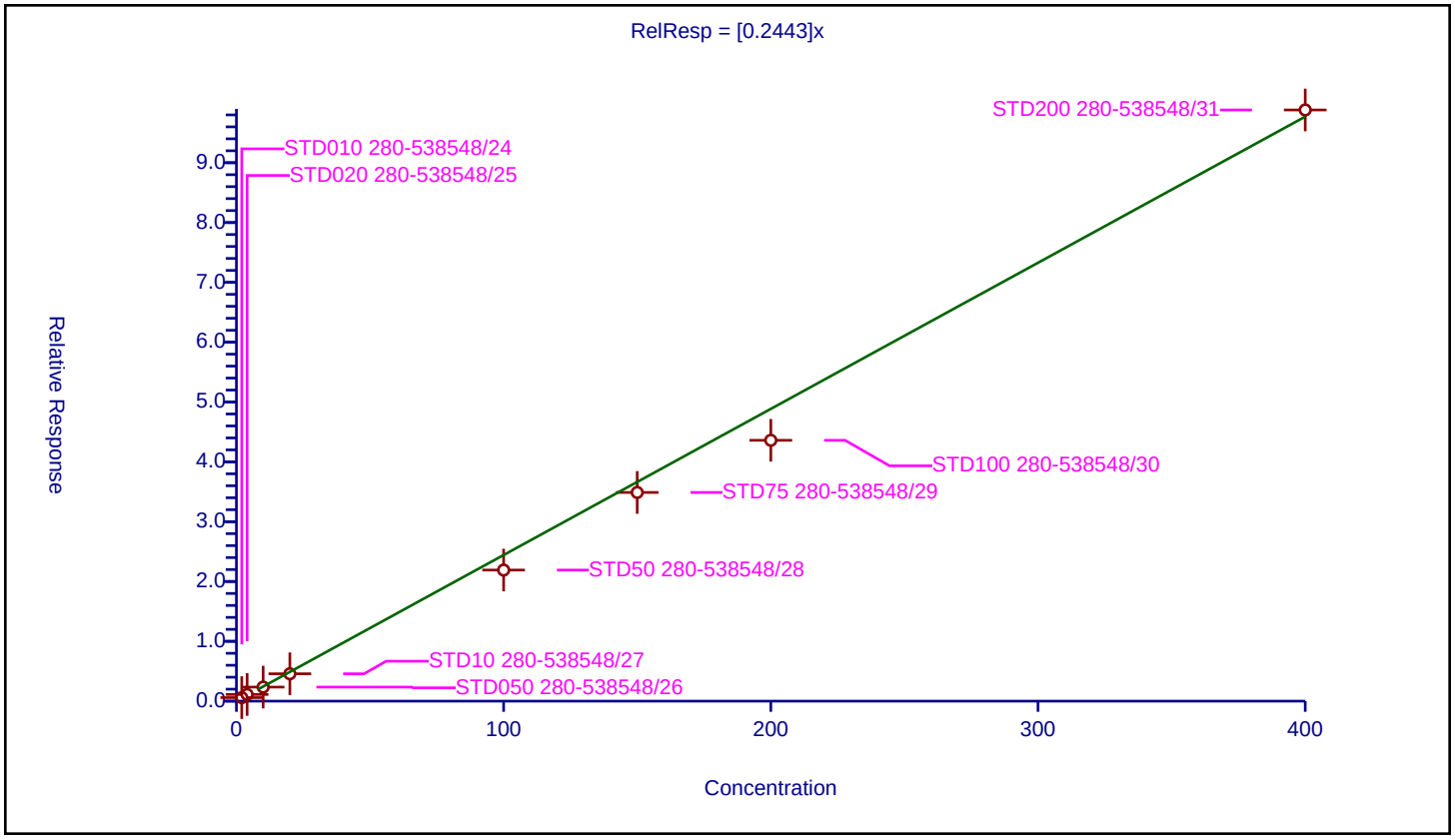
Curve Coefficients

Intercept:	0
Slope:	0.2443

Error Coefficients

Standard Error:	227000
Relative Standard Error:	11.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	2.0	0.591339	50.0	257720.0	0.29567	Y
2	STD020 280-538548/25	4.0	1.113334	50.0	254416.0	0.278334	Y
3	STD050 280-538548/26	10.0	2.34737	50.0	258566.0	0.234737	Y
4	STD10 280-538548/27	20.0	4.572809	50.0	247091.0	0.22864	Y
5	STD50 280-538548/28	100.0	21.911641	50.0	260891.0	0.219116	Y
6	STD75 280-538548/29	150.0	34.883035	50.0	250801.0	0.232554	Y
7	STD100 280-538548/30	200.0	43.600128	50.0	263349.0	0.218001	Y
8	STD200 280-538548/31	400.0	98.822154	50.0	260433.0	0.247055	Y



Calibration / 1,2,3-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

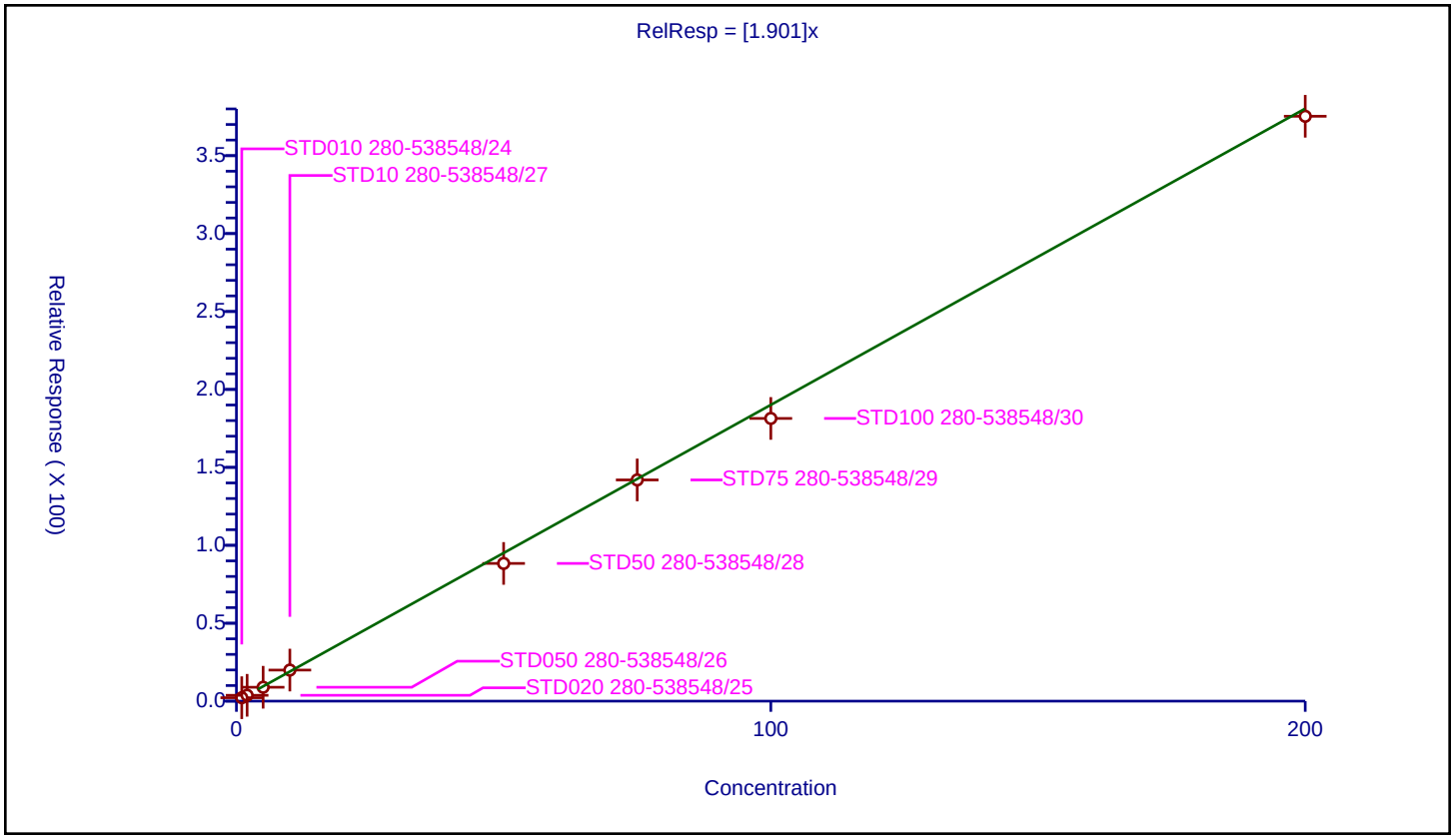
Curve Coefficients

Intercept:	0
Slope:	1.901

Error Coefficients

Standard Error:	883000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD010 280-538548/24	1.0	2.20433	50.0	257720.0	2.20433	Y
2	STD020 280-538548/25	2.0	3.757232	50.0	254416.0	1.878616	Y
3	STD050 280-538548/26	5.0	8.903529	50.0	258566.0	1.780706	Y
4	STD10 280-538548/27	10.0	19.941843	50.0	247091.0	1.994184	Y
5	STD50 280-538548/28	50.0	88.352415	50.0	260891.0	1.767048	Y
6	STD75 280-538548/29	75.0	141.924673	50.0	250801.0	1.892329	Y
7	STD100 280-538548/30	100.0	181.399018	50.0	263349.0	1.81399	Y
8	STD200 280-538548/31	200.0	375.262352	50.0	260433.0	1.876312	Y



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-538548/14	MS1_2722.D
Level 2	STD010 280-538548/15	MS1_2723.D
Level 3	STD020 280-538548/16	MS1_2724.D
Level 4	STD10 280-538548/18	MS1_2726.D
Level 5	ICIS 280-538548/19	MS1_2727.D
Level 6	STD75 280-538548/20	MS1_2728.D
Level 7	STD100 280-538548/21	MS1_2729.D
Level 8	STD200 280-538548/22	MS1_2730.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.2436	0.1945 0.2218	0.1649 0.2163	0.2742	0.2291	Lin1	-0.019	0.2251							0.9960		0.9900
Chloromethane	+++++ 0.2228	0.2098 0.2059	0.2126 0.2096	0.2437	0.2158	Ave		0.2172			0.1000	5.9		15.0			
Vinyl chloride	+++++ 0.1878	0.1442 0.1759	0.1666 0.1755	0.1929	0.1842	Ave		0.1753				9.3		30.0			
Bromomethane	+++++ 0.1314	0.1357 0.1268	0.1421 0.1219	0.1506	0.1364	Ave		0.1350				7.1		15.0			
Chloroethane	+++++ 0.1401	0.1179 0.1310	0.1331 0.1311	0.1512	0.1415	Ave		0.1351				7.7		15.0			
Dichlorofluoromethane	0.7971 0.3480	0.5100 0.3224	0.4172 0.3248	0.4047	0.3446	Lin2	0.2190	0.3337							0.9900		0.9900
Trichlorofluoromethane	0.2928 0.3120	0.2419 0.2911	0.2545 0.2871	0.3254	0.3006	Ave		0.2882				9.7		15.0			
Ethyl ether	+++++ 0.1405	+++++ 0.1426	0.1318 0.1440	0.1422	0.1446	Ave		0.1409				3.3		15.0			
Acrolein	0.0559 0.0268	0.0424 0.0262	0.0457 0.0272	0.0302	0.0276	Lin1	0.1821	0.0268							0.9990		0.9900
1,1-Dichloroethene	+++++ 0.1368	0.1400 0.1365	0.1611 0.1440	0.1573	0.1350	Ave		0.1444				7.3		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.1006	0.0819 0.1004	0.0786 0.1052	0.1053	0.0963	Ave		0.0955				11.4		15.0			
Acetone	0.2176 0.0624	0.1401 0.0570	0.0887 0.0585	0.0608	0.0554	Lin2	0.3234	0.0557							0.9930		0.9900
Iodomethane	+++++ 0.2179	0.1147 0.2237	0.1424 0.2284	0.2029	0.2193	Lin2	-0.116	0.2200							0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	+++++ 0.4802	0.4831 0.4803	0.4400 0.4976	0.5410	0.4771	Ave		0.4856				6.2		15.0			
Methyl acetate	+++++ 0.1401	0.1607 0.1355	0.1240 0.1421	0.1239	0.1304	Ave		0.1367				9.4		15.0			
3-Chloro-1-propene	+++++ 0.2766	0.3013 0.2766	0.3105 0.2661	0.3206	0.2837	Ave		0.2908				7.0		15.0			
Methylene Chloride	0.4044 0.1737	0.2781 0.1730	0.2225 0.1786	0.2048	0.1765	Lin2	0.1115	0.1756							0.9970		0.9900
t-Butyl alcohol	+++++ 0.0190	0.0141 0.0189	0.0156 0.0193	0.0177	0.0174	Ave		0.0174				11.1		15.0			
Acrylonitrile	0.0767 0.0706	0.0644 0.0688	0.0662 0.0689	0.0695	0.0678	Ave		0.0691				5.3		15.0			
Methyl tert-butyl ether	0.5135 0.5209	0.4851 0.5280	0.4636 0.5312	0.5105	0.5226	Ave		0.5094				4.6		15.0			
trans-1,2-Dichloroethene	0.1969 0.1577	0.2094 0.1633	0.1740 0.1640	0.1790	0.1587	Ave		0.1754				10.8		15.0			
Hexane	+++++ 1.0405	0.5202 1.0278	0.9302 1.0384	1.0966	0.9867	Lin2	-0.481	1.0619							0.9950		0.9900
Vinyl acetate	+++++ 0.4027	0.3213 0.4101	0.3737 0.4005	0.4168	0.4211	Ave		0.3923				8.9		15.0			
1,1-Dichloroethane	+++++ 0.3326	0.3157 0.3428	0.3473 0.3411	0.3575	0.3356	Ave		0.3389			0.1000	3.9		15.0			
2-Butanone (MEK)	+++++ 0.0862	0.1397 0.0835	0.1020 0.0867	0.0941	0.0818	Lin2	0.2084	0.0840							0.9960		0.9900
2,2-Dichloropropane	0.3378 0.2796	0.3037 0.2792	0.3080 0.2878	0.3213	0.2811	Ave		0.2998				7.3		15.0			
cis-1,2-Dichloroethene	+++++ 0.1811	0.2206 0.1823	0.1936 0.1868	0.1979	0.1831	Ave		0.1922				7.3		15.0			
sec-Butyl Alcohol	+++++ 0.0148	0.0089 0.0145	0.0118 0.0151	0.0132	0.0135	Lin2	-0.132	0.0144							0.9980		0.9900
Bromochloromethane	+++++ 0.0829	0.0401 0.0853	0.0783 0.0859	0.0892	0.0854	Lin2	-0.042	0.0880							0.9940		0.9900
Tetrahydrofuran	+++++ 0.0589	0.2277 0.0537	0.1205 0.0550	0.0684	0.0528	Lin1	0.3179	0.0536							0.9980		0.9900
Chloroform	+++++ 0.3255	0.4012 0.3259	0.3720 0.3387	0.3646	0.3334	Ave		0.3516				8.1		30.0			

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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	+++++ 0.2831	0.3833 0.2865	0.3120 0.3001	0.3146	0.2860	Ave		0.3094				11.3		15.0			
Cyclohexane	+++++ 0.3064	0.5249 0.3037	0.3573 0.3131	0.3499	0.2921	Lin1	0.1854	0.3060							0.9990		0.9900
1,1-Dichloropropene	+++++ 0.2578	0.2247 0.2573	0.2247 0.2637	0.2703	0.2499	Ave		0.2498				7.3		15.0			
Carbon tetrachloride	+++++ 0.2303	0.2063 0.2388	0.1889 0.2469	0.2513	0.2310	Ave		0.2276				9.9		15.0			
Isobutyl alcohol	+++++ 0.0062	+++++ 0.0062	0.0075 0.0063	0.0057	0.0056	Ave		0.0062				10.9		15.0			
Benzene	0.7423 0.6831	0.6272 0.6978	0.6584 0.7128	0.7213	0.6925	Ave		0.6919				5.3		15.0			
1,2-Dichloroethane	+++++ 0.2806	0.2821 0.2923	0.2908 0.2986	0.3050	0.2927	Ave		0.2917				2.9		15.0			
Trichloroethene	+++++ 0.8633	1.1825 0.8775	0.9458 0.8778	0.8716	0.8710	Ave		0.9271				12.5		15.0			
2-Pentanone	+++++ 0.1400	0.1418 0.1381	0.1207 0.1413	0.1264	0.1319	Ave		0.1343				6.1		15.0			
Methylcyclohexane	0.5210 0.2403	0.3056 0.2387	0.2685 0.2443	0.2525	0.2308	Lin1	0.1054	0.2396							0.9990		0.9900
1,2-Dichloropropane	+++++ 0.1893	0.1543 0.1956	0.1875 0.1952	0.2042	0.1904	Ave		0.1881				8.5		30.0			
1,4-Dioxane	+++++ 0.0022	+++++ 0.0022	0.0010 0.0022	0.0020	0.0020	Lin2	-0.048	0.0022							0.9990		0.9900
Dibromomethane	+++++ 0.1211	0.1002 0.1219	0.1104 0.1254	0.1270	0.1195	Ave		0.1179				8.0		15.0			
Bromodichloromethane	+++++ 0.2432	0.3078 0.2500	0.2502 0.2525	0.2574	0.2451	Ave		0.2580				8.7		15.0			
2-Chloroethyl vinyl ether	+++++ 0.1258	0.1055 0.1159	0.0929 0.1190	0.1196	0.1268	Ave		0.1151				10.5		15.0			
cis-1,3-Dichloropropene	+++++ 1.4294	1.1338 1.4391	1.1952 1.4229	1.4098	1.4294	Ave		1.3514				9.6		15.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.1646	0.1540 0.1610	0.1349 0.1656	0.1512	0.1591	Ave		0.1558				6.8		15.0			
Toluene	+++++ 0.6651	0.7321 0.6811	0.6513 0.7075	0.7160	0.6783	Ave		0.6902				4.2		30.0			

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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
trans-1,3-Dichloropropene	+++++ 0.2854	0.2145 0.2886	0.2642 0.2972	0.2877	0.2938	Ave		0.2759				10.5		15.0			
Ethyl methacrylate	+++++ 1.0446	+++++ 1.0197	0.8667 1.0116	1.0453	0.9877	Ave		0.9959				6.7		15.0			
1,1,2-Trichloroethane	0.1988 0.1420	0.1942 0.1413	0.1580 0.1444	0.1514	0.1391	Lin2	0.0317	0.1442							0.9960		0.9900
Tetrachloroethene	+++++ 0.5410	0.5007 0.5424	0.3991 0.5587	0.5525	0.5287	Ave		0.5176				10.7		15.0			
1,3-Dichloropropane	+++++ 1.3206	1.1641 1.2931	1.2174 1.2913	1.2824	1.3019	Ave		1.2672				4.4		15.0			
2-Hexanone	0.2599 0.5515	0.4991 0.5329	0.4296 0.5204	0.5092	0.5120	Lin2	-0.478	0.5313							0.9930		0.9900
Dibromochloromethane	+++++ 0.7682	0.6349 0.7873	0.7060 0.7981	0.7824	0.7540	Ave		0.7473				7.8		15.0			
Ethylene Dibromide	+++++ 0.7419	0.6840 0.7322	0.7166 0.7336	0.7053	0.7218	Ave		0.7193				2.7		15.0			
1-Chlorohexane	2.9701 1.0434	1.9332 1.0432	1.5024 1.0653	1.1655	1.0358	Lin2	0.7627	1.0351							0.9990		0.9900
Chlorobenzene	+++++ 2.0330	2.0463 2.0529	1.9449 2.0757	2.0898	2.0478	Ave		2.0415			0.3000	2.3		15.0			
1,1,1,2-Tetrachloroethane	+++++ 0.7464	0.5820 0.7706	0.6744 0.7648	0.7623	0.7460	Ave		0.7209				9.6		15.0			
Ethylbenzene	1.0731 1.0870	1.0190 1.1148	1.0116 1.1219	1.1533	1.0952	Ave		1.0845				4.5		30.0			
m-Xylene & p-Xylene	1.3947 1.3489	1.2555 1.3733	1.4376 1.3725	1.4099	1.3426	Ave		1.3669				4.0		15.0			
o-Xylene	1.1713 1.2971	1.1532 1.3230	1.3254 1.3237	1.2963	1.3233	Ave		1.2766				5.6		15.0			
Styrene	2.4813 2.3230	2.1372 2.3499	2.2510 2.3567	2.4299	2.3425	Ave		2.3339				4.5		15.0			
Bromoform	+++++ 0.4877	0.1807 0.5022	0.3514 0.5022	0.4690	0.4708	Lin2	-0.311	0.4966			0.1000				0.9990		0.9900
Isopropylbenzene	2.0599 2.2199	2.0181 2.2253	2.1407 2.3072	2.3519	2.1757	Ave		2.1873				5.2		15.0			
Cyclohexanone	0.0580 0.0603	0.0648 0.0552	0.0582 +++++	0.0489	0.0466	Ave		0.0560				11.4		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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,2,2-Tetrachloroethane	1.0853 0.6022	0.8819 0.5954	0.7225 0.6176	0.6241	0.5915	Lin2	0.2492	0.6014			0.3000				0.9990		0.9900
Bromobenzene	+++++ 0.5075	0.4094 0.5118	0.4912 0.5366	0.5106	0.5082	Ave		0.4965				8.2		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2199	0.2014 0.2166	0.2230 0.2304	0.2168	0.2195	Ave		0.2182				4.0		15.0			
1,2,3-Trichloropropane	+++++ 0.1764	0.2372 0.1733	0.1668 0.1759	0.1646	0.1683	Lin2	0.0551	0.1674							0.9910		0.9900
N-Propylbenzene	+++++ 0.5956	0.5664 0.6082	0.6127 0.6305	0.6462	0.5943	Ave		0.6077				4.3		15.0			
2-Chlorotoluene	+++++ 0.5113	0.4052 0.5162	0.4641 0.5401	0.5293	0.5125	Ave		0.4970				9.4		15.0			
1,3,5-Trimethylbenzene	2.1348 1.9074	1.8675 1.9118	1.8917 1.9953	2.0238	1.8949	Ave		1.9534				4.7		15.0			
4-Chlorotoluene	0.5769 0.5361	0.5782 0.5513	0.4710 0.5685	0.5529	0.5410	Ave		0.5470				6.3		15.0			
tert-Butylbenzene	+++++ 1.5602	1.6929 1.5534	1.5345 1.6394	1.6811	1.5426	Ave		1.6006				4.3		15.0			
1,2,4-Trimethylbenzene	2.2037 1.9572	1.9606 1.9810	1.8725 2.0301	2.0882	1.9336	Ave		2.0033				5.1		15.0			
sec-Butylbenzene	+++++ 0.4444	0.2789 0.4487	0.4392 0.4670	0.4764	0.4470	Lin2	-0.159	0.4663							0.9950		0.9900
1,3-Dichlorobenzene	0.9297 0.9737	0.8559 0.9926	0.9944 1.0254	1.0114	0.9757	Ave		0.9698				5.6		15.0			
4-Isopropyltoluene	2.3019 1.9506	1.8089 1.9616	1.8340 2.0491	2.0508	1.9330	Ave		1.9862				7.8		15.0			
1,4-Dichlorobenzene	1.1208 1.0019	0.9724 1.0194	0.9736 1.0460	1.0144	0.9974	Ave		1.0182				4.7		15.0			
n-Butylbenzene	2.1181 1.8768	1.8137 1.8527	1.9093 1.9206	1.9966	1.8335	Ave		1.9152				5.2		15.0			
1,2-Dichlorobenzene	0.7924 0.9363	0.8559 0.9418	0.9121 0.9712	0.9532	0.9350	Ave		0.9122				6.5		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1322	0.0468 0.1280	0.0802 0.1314	0.1281	0.1226	Lin2	-0.086	0.1302							0.9980		0.9900
1,2,4-Trichlorobenzene	+++++ 0.6134	0.5534 0.6088	0.5828 0.6421	0.5872	0.5923	Ave		0.5972				4.7		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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Hexachlorobutadiene	+++++ 0.2038	0.0575 0.2029	0.1498 0.2119	0.2118	0.1975	Lin2	-0.146	0.2109							0.9970		0.9900
Naphthalene	+++++ 1.8591	1.5848 1.8328	1.6197 1.8693	1.8735	1.7739	Ave		1.7733				6.9		15.0			
1,2,3-Trichlorobenzene	+++++ 0.5586	0.5249 0.5559	0.4821 0.5821	0.5592	0.5532	Ave		0.5451				5.9		15.0			
Dibromofluoromethane (Surr)	0.2708 0.2587	0.2714 0.2591	0.2712 0.2626	0.2678	0.2586	Ave		0.2650				2.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3532 0.3519	0.3605 0.3514	0.3614 0.3566	0.3599	0.3456	Ave		0.3551				1.5		15.0			
Toluene-d8 (Surr)	4.3466 4.3502	4.3544 4.3575	4.3428 4.2747	4.2746	4.3512	Ave		4.3315				0.8		15.0			
4-Bromofluorobenzene (Surr)	1.0990 1.0883	1.0908 1.0557	1.1042 1.0889	1.0922	1.0615	Ave		1.0851				1.6		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-538548/14	MS1_2722.D
Level 2	STD010 280-538548/15	MS1_2723.D
Level 3	STD020 280-538548/16	MS1_2724.D
Level 4	STD10 280-538548/18	MS1_2726.D
Level 5	ICIS 280-538548/19	MS1_2727.D
Level 6	STD75 280-538548/20	MS1_2728.D
Level 7	STD100 280-538548/21	MS1_2729.D
Level 8	STD200 280-538548/22	MS1_2730.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Lin1	+++++ 284607	2898 341786	4813 677738	40935	176418	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Chloromethane	FB	Ave	+++++ 260275	3126 317305	6207 656518	36390	166165	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Vinyl chloride	FB	Ave	+++++ 219368	2149 271019	4864 549679	28798	141801	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Bromomethane	FB	Ave	+++++ 153469	2022 195406	4150 381898	22486	105022	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Chloroethane	FB	Ave	+++++ 163644	1757 201788	3886 410848	22577	108932	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Dichlorofluoromethane	FB	Lin2	5909 406591	7600 496647	12181 1017407	60416	265332	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Trichlorofluoromethane	FB	Ave	2171 364532	3605 448550	7431 899290	48588	231476	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Ethyl ether	FB	Ave	+++++ 164162	+++++ 219725	3849 450987	21225	111308	+++++ 75.0	+++++ 100	2.00 200	10.0	50.0
Acrolein	FB	Lin1	4089 309474	6241 398118	13172 841506	44500	210093	4.94 741	9.88 988	19.8 1975	98.8	494
1,1-Dichloroethene	FB	Ave	+++++ 159868	2087 210315	4703 451141	23478	103963	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 117548	1221 154610	2294 329503	15716	74141	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Acetone	FB	Lin2	6452 291619	8353 351099	10353 732628	36311	170768	2.00 300	4.00 400	8.00 800	40.0	200
Iodomethane	FB	Lin2	+++++	1710	4158	30290	168827	+++++	1.00	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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
			254607	344718	715491			75.0	100	200		
Carbon disulfide	FB	Ave	+++++ 561075	7200 740012	12846 1558994	80765	367379	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Methyl acetate	FB	Ave	+++++ 327410	4789 417578	7238 890400	36989	200777	+++++ 150	2.00 200	4.00 400	20.0	100
3-Chloro-1-propene	FB	Ave	+++++ 323120	4490 426172	9065 833624	47872	218412	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Methylene Chloride	FB	Lin2	2998 202992	4145 266563	6497 559662	30580	135869	0.500 75.0	1.00 100	2.00 200	10.0	50.0
t-Butyl alcohol	FB	Ave	+++++ 221885	2103 291368	4555 604617	26461	133797	+++++ 750	10.0 1000	20.0 2000	100	500
Acrylonitrile	FB	Ave	5689 824753	9605 1060618	19333 2157748	103754	522237	5.00 750	10.0 1000	20.0 2000	100	500
Methyl tert-butyl ether	FB	Ave	3807 608637	7230 813446	13534 1664273	76215	402379	0.500 75.0	1.00 100	2.00 200	10.0	50.0
trans-1,2-Dichloroethene	FB	Ave	1460 184274	3121 251645	5079 513885	26723	122215	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Hexane	CBNZ d5	Lin2	+++++ 252996	1632 331780	5710 702356	34832	159716	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Vinyl acetate	FB	Ave	+++++ 941026	9578 1263615	21822 2509441	124457	648475	+++++ 150	2.00 200	4.00 400	20.0	100
1,1-Dichloroethane	FB	Ave	+++++ 388591	4705 528150	10140 1068575	53370	258402	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Butanone (MEK)	FB	Lin2	+++++ 402800	8329 514764	11915 1085961	56212	252081	+++++ 300	4.00 400	8.00 800	40.0	200
2,2-Dichloropropane	FB	Ave	2504 326634	4526 430208	8991 901541	47969	216419	0.500 75.0	1.00 100	2.00 200	10.0	50.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 211634	3288 280945	5653 585356	29549	140988	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
sec-Butyl Alcohol	FB	Lin2	+++++ 414351	3183 535348	8253 1133775	47182	250296	+++++ 1800	24.0 2400	48.0 4800	240	1200
Bromochloromethane	FB	Lin2	+++++ 96812	597 131412	2285 269171	13324	65722	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Tetrahydrofuran	FB	Lin1	+++++ 137587	6788 165527	7039 344648	20411	81383	+++++ 150	2.00 200	4.00 400	20.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
Chloroform	FB	Ave	+++++ 380346	5979 502179	10862 1061208	54433	256700	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,1,1-Trichloroethane	FB	Ave	+++++ 330741	5713 441385	9110 940114	46977	220241	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Cyclohexane	FB	Lin1	+++++ 357975	7823 467867	10432 980879	52233	224931	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,1-Dichloropropene	FB	Ave	+++++ 301212	3349 396397	6559 826072	40352	192450	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Carbon tetrachloride	FB	Ave	+++++ 269121	3074 367905	5514 773566	37517	177897	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Isobutyl alcohol	FB	Ave	+++++ 181153	+++++ 237028	5445 497289	21152	107180	+++++ 1875	+++++ 2500	50.0 5000	250	1250
Benzene	FB	Ave	5503 798115	9347 1075144	19222 2233092	107690	533232	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dichloroethane	FB	Ave	+++++ 327847	4204 450298	8489 935335	45534	225397	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Trichloroethene	CBNZ d5	Ave	+++++ 209925	3710 283268	5806 593715	27685	140987	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Pentanone	FB	Ave	+++++ 523443	6764 681033	11280 1416166	60410	324899	+++++ 240	3.20 320	6.40 640	32.0	160
Methylcyclohexane	FB	Lin1	3862 280807	4554 367688	7839 765192	37693	177721	0.500 75.0	1.00 100	2.00 200	10.0	50.0
1,2-Dichloropropane	FB	Ave	+++++ 221164	2299 301386	5473 611580	30490	146601	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,4-Dioxane	FB	Lin2	+++++ 51778	+++++ 66461	580 139700	5826	31314	+++++ 1500	+++++ 2000	40.0 4000	200	1000
Dibromomethane	FB	Ave	+++++ 141533	1494 187746	3222 392807	18955	92021	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Bromodichloromethane	FB	Ave	+++++ 284099	4588 385100	7304 790878	38423	188758	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 146946	1572 178538	2713 372671	17861	97660	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 347569	3557 464577	7337 962416	44781	231384	+++++ 75.0	1.00 100	2.00 200	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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
4-Methyl-2-pentanone (MIBK)	FB	Ave	+++++ 769063	9180 992438	15752 2075132	90316	490067	+++++ 300	4.00 400	8.00 800	40.0	200
Toluene	FB	Ave	+++++ 777134	10911 1049392	19016 2216570	106895	522295	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
trans-1,3-Dichloropropene	FB	Ave	+++++ 333444	3197 444618	7715 931126	42952	226226	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 254008	+++++ 329168	5320 684215	33204	159888	+++++ 75.0	+++++ 100	2.00 200	10.0	50.0
1,1,2-Trichloroethane	FB	Lin2	1474 165901	2894 217713	4614 452414	22601	107076	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Tetrachloroethene	CBNZ d5	Ave	+++++ 131552	1571 175087	2450 377868	17549	85583	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,3-Dichloropropane	CBNZ d5	Ave	+++++ 321117	3652 417430	7473 873388	40733	210737	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
2-Hexanone	CBNZ d5	Lin2	1610 536450	6263 688140	10548 1407897	64691	331503	2.00 300	4.00 400	8.00 800	40.0	200
Dibromochloromethane	CBNZ d5	Ave	+++++ 186804	1992 254169	4334 539788	24851	122044	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Ethylene Dibromide	CBNZ d5	Ave	+++++ 180401	2146 236353	4399 496186	22403	116835	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1-Chlorohexane	CBNZ d5	Lin2	3680 202968	4852 269413	7378 576421	29616	134135	0.400 60.0	0.800 80.0	1.60 160	8.00	40.0
Chlorobenzene	CBNZ d5	Ave	+++++ 494335	6420 662703	11939 1403932	66381	331478	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 181499	1826 248769	4140 517259	24212	120755	+++++ 75.0	1.00 100	2.00 200	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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
Ethylbenzene	CBNZ d5	Ave	1662 264323	3197 359882	6210 758836	36634	177275	0.500 75.0	1.00 100	2.00 200	10.0	50.0
m-Xylene & p-Xylene	CBNZ d5	Ave	2160 327998	3939 443325	8825 928312	44784	217333	0.500 75.0	1.00 100	2.00 200	10.0	50.0
o-Xylene	CBNZ d5	Ave	1814 315393	3618 427099	8136 895286	41175	214199	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Styrene	CBNZ d5	Ave	3843 564847	6705 758598	13818 1593996	77181	379177	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Bromoform	CBNZ d5	Lin2	+++++ 118591	567 162117	2157 339679	14898	76209	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
Isopropylbenzene	DCBd 4	Ave	5056 858053	10101 1146614	20761 2397490	117182	560279	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Cyclohexanone	CBNZ d5	Ave	2696 440233	6099 534760	10716 +++++	46603	226441	15.0 2250	30.0 3000	60.0 +++++	300	1500
1,1,2,2-Tetrachloroethane	DCBd 4	Lin2	2664 232780	4414 306793	7007 641786	31093	152322	0.500 75.0	1.00 100	2.00 200	10.0	50.0
Bromobenzene	DCBd 4	Ave	+++++ 196163	2049 263713	4764 557639	25440	130861	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 85012	1008 111621	2163 239439	10802	56519	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
1,2,3-Trichloropropane	DCBd 4	Lin2	+++++ 68184	1187 89319	1618 182772	8203	43336	+++++ 75.0	1.00 100	2.00 200	10.0	50.0
N-Propylbenzene	DCBd 4	Ave	+++++ 230236	2835 313375	5942 655122	32197	153038	+++++ 75.0	1.00 100	2.00 200	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.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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-Chlorotoluene	DCBd 4	Ave	+++++	2028	4501	26371	131982	+++++	1.00	2.00	10.0	50.0
			197622	265995	561245			75.0	100	200		
1,3,5-Trimethylbenzene	DCBd 4	Ave	5240	9347	18346	100834	487963	0.500	1.00	2.00	10.0	50.0
			737280	985068	2073344			75.0	100	200		
4-Chlorotoluene	DCBd 4	Ave	1416	2894	4568	27546	139315	0.500	1.00	2.00	10.0	50.0
			207234	284037	590717			75.0	100	200		
tert-Butylbenzene	DCBd 4	Ave	+++++	8473	14882	83762	397245	+++++	1.00	2.00	10.0	50.0
			603080	800394	1703470			75.0	100	200		
1,2,4-Trimethylbenzene	DCBd 4	Ave	5409	9813	18160	104041	497917	0.500	1.00	2.00	10.0	50.0
			756516	1020729	2109459			75.0	100	200		
sec-Butylbenzene	DCBd 4	Lin2	+++++	1396	4259	23738	115108	+++++	1.00	2.00	10.0	50.0
			171771	231170	485251			75.0	100	200		
1,3-Dichlorobenzene	DCBd 4	Ave	2282	4284	9644	50391	251268	0.500	1.00	2.00	10.0	50.0
			376351	511419	1065476			75.0	100	200		
4-Isopropyltoluene	DCBd 4	Ave	5650	9054	17787	102178	497776	0.500	1.00	2.00	10.0	50.0
			753987	1010734	2129213			75.0	100	200		
1,4-Dichlorobenzene	DCBd 4	Ave	2751	4867	9442	50543	256844	0.500	1.00	2.00	10.0	50.0
			387260	525253	1086868			75.0	100	200		
n-Butylbenzene	DCBd 4	Ave	5199	9078	18517	99478	472146	0.500	1.00	2.00	10.0	50.0
			725430	954625	1995762			75.0	100	200		
1,2-Dichlorobenzene	DCBd 4	Ave	1945	4284	8846	47494	240782	0.500	1.00	2.00	10.0	50.0
			361918	485254	1009176			75.0	100	200		
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin2	+++++	234	778	6381	31563	+++++	1.00	2.00	10.0	50.0
			51111	65946	136502			75.0	100	200		

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 538548

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2021 13:50 Calibration End Date: 06/04/2021 16:41 Calibration ID: 54226

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++	2770	5652	29259	152525	+++++	1.00	2.00	10.0	50.0
			237116	313667	667214			75.0	100	200		
Hexachlorobutadiene	DCBd 4	Lin2	+++++	288	1453	10553	50864	+++++	1.00	2.00	10.0	50.0
			78775	104528	220210			75.0	100	200		
Naphthalene	DCBd 4	Ave	+++++	7932	15708	93344	456812	+++++	1.00	2.00	10.0	50.0
			718615	944344	1942455			75.0	100	200		
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++	2627	4676	27863	142446	+++++	1.00	2.00	10.0	50.0
			215935	286406	604902			75.0	100	200		
Dibromofluoromethane (Surr)	FB	Ave	200782	202219	197983	199938	199154	50.0	50.0	50.0	50.0	50.0
			201488	199583	205683			50.0	50.0	50.0		
1,2-Dichloroethane-d4 (Surr)	FB	Ave	261841	268609	263804	268659	266131	50.0	50.0	50.0	50.0	50.0
			274090	270692	279300			50.0	50.0	50.0		
Toluene-d8 (Surr)	CBNZ d5	Ave	673194	683061	666453	678886	704331	50.0	50.0	50.0	50.0	50.0
			705195	703336	722826			50.0	50.0	50.0		
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	269753	272976	267729	272092	273340	50.0	50.0	50.0	50.0	50.0
			280451	271979	282862			50.0	50.0	50.0		

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Jun-2021 13:50:30 ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Misc. Info.: 280-0102067-014
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:22 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 14:55:28

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.839	5.839	0.000	97	741336	50.0	50.0	
*	2 Chlorobenzene-d5	119	8.575	8.575	0.000	92	154877	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	245453	50.0	50.0	
$	5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	200782	50.0	51.1	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	98	261841	50.0	49.7	
$	7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	673194	50.0	50.2	
$	8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	269753	50.0	50.6	
	11 Dichlorodifluoromethane	85		1.690				ND	ND	
	12 Chloromethane	50		1.900				ND	ND	
	13 Vinyl chloride	62		1.998				ND	ND	
	15 Bromomethane	94		2.347				ND	ND	U
	16 Chloroethane	64		2.459				ND	ND	
	17 Dichlorofluoromethane	67	2.696	2.696	0.000	34	5909	0.5000	0.5380	
	18 Trichlorofluoromethane	101	2.724	2.724	0.000	92	2171	0.5000	0.5081	
	20 Ethyl ether	59		3.003				ND	ND	
	22 Acrolein	56	3.143	3.143	0.000	38	4089	4.94	3.49	
	23 1,1-Dichloroethene	96	3.241	3.241	0.000	5	1501	0.5000	0.7011	
	24 112TCTFE	151		3.255				ND	ND	
	25 Acetone	43	3.283	3.269	0.014	97	6452	2.00	2.01	
	26 Iodomethane	142		3.380				ND	ND	
	28 Carbon disulfide	76	3.450	3.450	0.000	94	4394	0.5000	0.6103	
	30 Methyl acetate	43		3.576				ND	ND	
	31 3-Chloro-1-propene	41	3.590	3.590	0.000	40	2694	0.5000	0.6249	
	32 Methylene Chloride	84	3.716	3.716	0.000	92	2998	0.5000	0.5166	
	33 2-Methyl-2-propanol	59		3.785				ND	ND	
	34 Acrylonitrile	53	3.911	3.911	0.000	78	5689	5.00	5.55	
	35 Methyl tert-butyl ether	73	3.939	3.939	0.000	82	3807	0.5000	0.5040	
	36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	82	1460	0.5000	0.5614	
	37 Hexane	57	4.205	4.204	0.001	74	2659	0.5000	1.26	
	39 Vinyl acetate	43	4.344	4.344	0.000	92	6958	1.00	1.20	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.358	4.344	0.014	1	2535	0.5000	0.5044	
46 2-Butanone (MEK)	43		4.819				ND	ND	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	60	2504	0.5000	0.5633	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	83	1849	0.5000	0.6487	
51 sec-Butyl Alcohol	45		4.973				ND	ND	
54 Tetrahydrofuran	42	5.070	5.056	0.014	40	4881	1.00	0.2115	
53 Chlorobromomethane	128		5.056				ND	ND	
55 Chloroform	83	5.126	5.126	0.000	87	4658	0.5000	0.8934	
56 1,1,1-Trichloroethane	97		5.280				ND	ND	
57 Cyclohexane	56	5.350	5.350	0.000	78	3189	0.5000	0.0970	
58 1,1-Dichloropropene	75		5.419				ND	ND	
59 Carbon tetrachloride	117		5.419				ND	ND	
60 Isobutyl alcohol	41	5.559	5.461	0.098	33	2612	12.5	28.3	
63 Benzene	78	5.587	5.587	0.000	88	5503	0.5000	0.5364	
64 1,2-Dichloroethane	62		5.629				ND	ND	
66 n-Heptane	43	5.825	5.824	0.001	36	2814	0.5000	0.5421	
68 Trichloroethene	95	6.160	6.146	0.014	1	1955	0.5000	0.6808	
69 2-Pentanone	43		6.271				ND	ND	
70 Methylcyclohexane	55	6.355	6.355	0.000	77	3862	0.5000	0.6470	
71 1,2-Dichloropropane	63		6.383				ND	ND	
73 1,4-Dioxane	88		6.425				ND	ND	
74 Dibromomethane	93		6.453				ND	ND	
75 Dichlorobromomethane	83		6.609				ND	ND	
77 2-Chloroethyl vinyl ether	63		6.838				ND	ND	
78 cis-1,3-Dichloropropene	75		6.988				ND	ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102				ND	ND	U
82 Toluene	91	7.296	7.295	0.001	95	6088	0.5000	0.5949	
84 trans-1,3-Dichloropropene	75		7.488				ND	ND	
85 Ethyl methacrylate	69		7.517				ND	ND	U
87 1,1,2-Trichloroethane	97	7.682	7.674	0.008	62	1474	0.5000	0.4696	
89 Tetrachloroethene	164		7.767				ND	ND	
90 1,3-Dichloropropane	76		7.824				ND	ND	
91 2-Hexanone	43	7.860	7.853	0.007	44	1610	2.00	1.88	
95 Chlorodibromomethane	129		8.032				ND	ND	
96 Ethylene Dibromide	107		8.146				ND	ND	
98 1-Chlorohexane	91	8.575	8.568	0.007	34	3680	0.4000	0.4110	
99 Chlorobenzene	112		8.604				ND	ND	
100 1,1,1,2-Tetrachloroethane	131		8.682				ND	ND	
101 Ethylbenzene	106	8.683	8.682	0.001	94	1662	0.5000	0.4947	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	94	2160	0.5000	0.5102	
103 o-Xylene	106	9.183	9.176	0.007	91	1814	0.5000	0.4587	
104 Styrene	104	9.197	9.197	0.000	75	3843	0.5000	0.5316	
106 Bromoform	173		9.383				ND	ND	
107 Isopropylbenzene	105	9.534	9.526	0.008	92	5056	0.5000	0.4709	
109 Cyclohexanone	55	9.619	9.626	-0.007	72	2696	15.0	15.5	
110 1,1,2,2-Tetrachloroethane	83	9.812	9.827	-0.015	1	2664	0.5000	0.4880	
111 Bromobenzene	156		9.855				ND	ND	
112 trans-1,4-Dichloro-2-butene	53		9.862				ND	ND	
113 1,2,3-Trichloropropane	110		9.891				ND	ND	
114 N-Propylbenzene	120		9.941				ND	ND	
115 2-Chlorotoluene	126	10.034	10.034	0.000	89	1414	0.5000	0.5796	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	86	5240	0.5000	0.5464	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.148	10.155	-0.007	89	1416	0.5000	0.5273	
118 tert-Butylbenzene	119		10.427				ND	ND	
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.001	93	5409	0.5000	0.5500	
120 sec-Butylbenzene	134		10.649				ND	ND	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	88	2282	0.5000	0.4793	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	92	5650	0.5000	0.5795	
123 1,4-Dichlorobenzene	146	10.871	10.878	-0.007	21	2751	0.5000	0.5504	
125 n-Butylbenzene	91	11.214	11.207	0.007	93	5199	0.5000	0.5530	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	85	1945	0.5000	0.4343	
128 1,2-Dibromo-3-Chloropropane	157		12.022				ND	ND	
130 1,2,4-Trichlorobenzene	180		12.851				ND	ND	
131 Hexachlorobutadiene	225		12.994				ND	ND	
132 Naphthalene	128		13.123				ND	ND	
134 1,2,3-Trichlorobenzene	180		13.344				ND	ND	
S 149 1,2-Dichloroethene, Total (URS)	96				0		1.00	1.21	
S 150 1,2-Dichloroethene, Total	1				0		1.00	1.21	
S 151 Trihalomethanes, Total	1				0		2.00	0.8934	
S 152 Total BTEX	1				0			2.59	
S 153 Xylenes, Total (URS)	1				0		1.00	0.9689	
S 155 Xylenes, Total	106				0		1.00	0.9689	
S 156 1,3-Dichloropropene, Total	1				0		1.00	0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

Reagents:

MV-Gas A_00089	Amount Added:	0.10	Units: uL	
MV-MegaMainA_00050	Amount Added:	0.25	Units: uL	
mv-IS_SS_00018	Amount Added:	5.00	Units: uL	Run Reagent

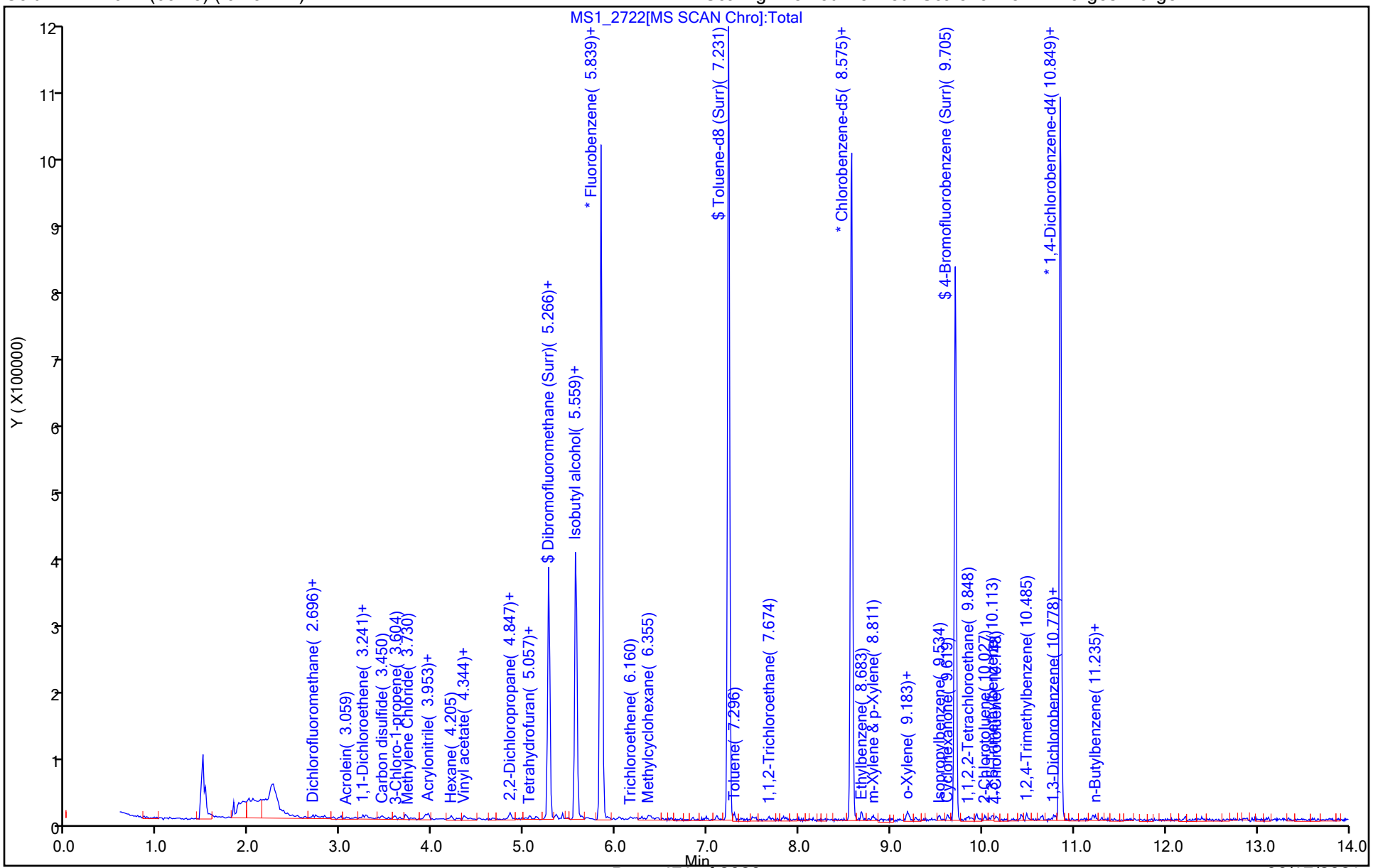
Report Date: 05-Jun-2021 11:14:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D

Injection Date:	04-Jun-2021 13:50:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD005			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	AQ_VMS1_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



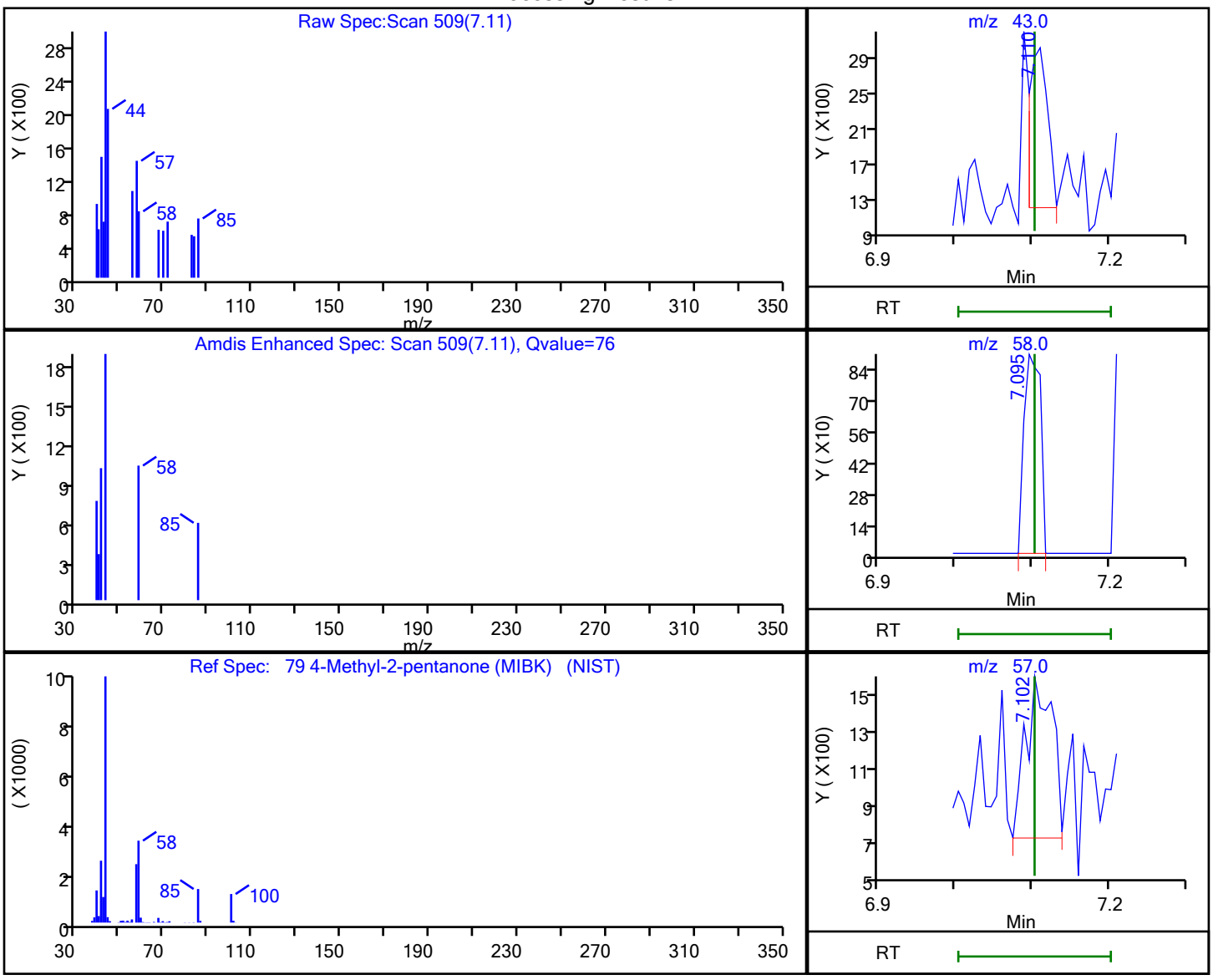
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D
Injection Date: 04-Jun-2021 13:50:30 Instrument ID: VMS_MS1
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

79 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
7.11	43.00	2989	1.353885
7.10	58.00	1350	
7.10	57.00	2080	

Reviewer: seifertj, 05-Jun-2021 09:04:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

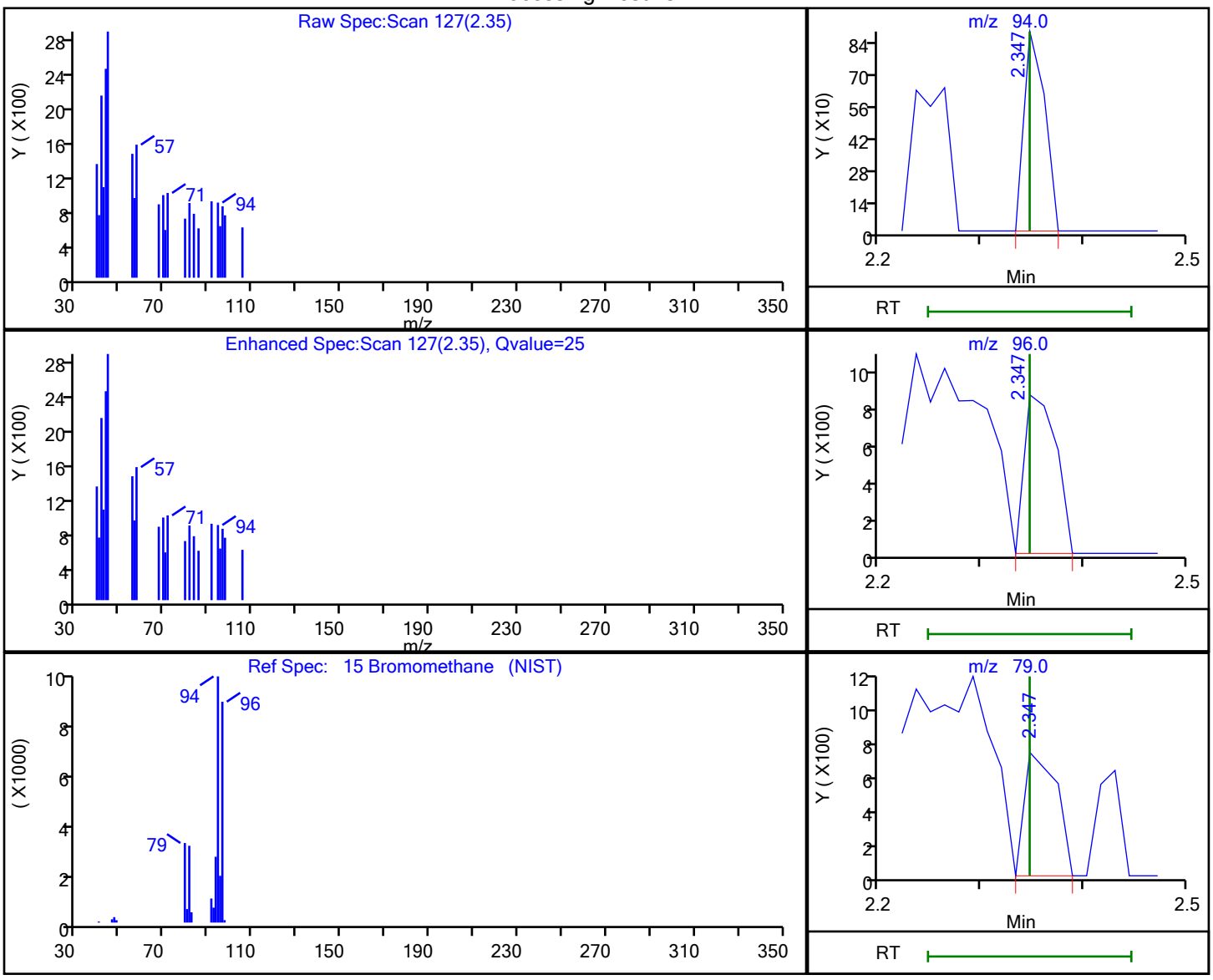
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D
Injection Date: 04-Jun-2021 13:50:30 Instrument ID: VMS_MS1
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
2.35	94.00	1246	0.604053
2.35	96.00	1811	
2.35	79.00	1522	

Reviewer: seifertj, 05-Jun-2021 09:03:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

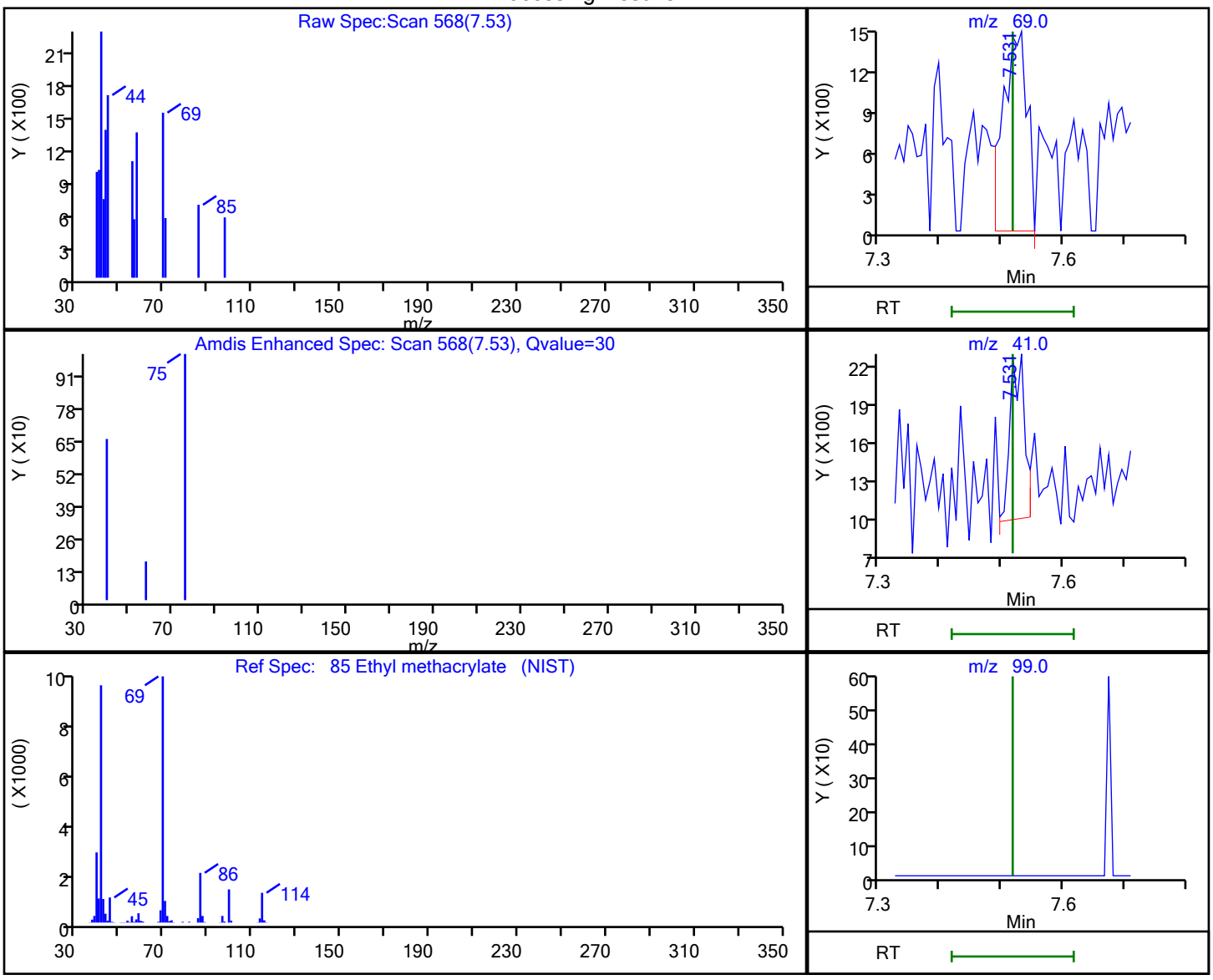
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2722.D
Injection Date: 04-Jun-2021 13:50:30 Instrument ID: VMS_MS1
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

85 Ethyl methacrylate, CAS: 97-63-2

Processing Results



RT	Mass	Response	Amount
7.53	69.00	4052	1.143619
7.53	41.00	2030	
7.52	99.00	0	

Reviewer: seifertj, 05-Jun-2021 09:04:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Jun-2021 14:11:30 ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Misc. Info.: 280-0102067-015
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:24 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 14:49:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	745169	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	156866	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	250257	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	202219	50.0	51.2	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	268609	50.0	50.8	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	683061	50.0	50.3	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	272976	50.0	50.3	
11 Dichlorodifluoromethane	85	1.704	1.690	0.014	1	2898	1.00	0.9476	a
12 Chloromethane	50	1.900	1.900	0.000	93	3126	1.00	0.9659	a
13 Vinyl chloride	62	1.998	1.998	0.000	85	2149	1.00	0.8227	
15 Bromomethane	94	2.347	2.347	0.000	76	2022	1.00	1.01	
16 Chloroethane	64	2.459	2.459	0.000	1	1757	1.00	0.8725	a
17 Dichlorofluoromethane	67	2.696	2.696	0.000	94	7600	1.00	0.8719	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	95	3605	1.00	0.8393	
20 Ethyl ether	59	3.003	3.003	0.000	84	1969	1.00	0.9374	
22 Acrolein	56	3.143	3.143	0.000	93	6241	9.88	8.82	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	89	2087	1.00	0.9698	
24 112TCTFE	151	3.255	3.255	0.000	56	1221	1.00	0.8583	
25 Acetone	43	3.283	3.269	0.014	96	8353	4.00	4.26	
26 Iodomethane	142	3.380	3.380	0.000	1	1710	1.00	1.05	a
28 Carbon disulfide	76	3.450	3.450	0.000	94	7200	1.00	0.99	
30 Methyl acetate	43	3.576	3.576	0.000	70	4789	2.00	2.35	a
31 3-Chloro-1-propene	41	3.590	3.590	0.000	84	4490	1.00	1.04	
32 Methylene Chloride	84	3.702	3.716	-0.014	94	4145	1.00	0.9489	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	24	2103	10.0	8.10	
34 Acrylonitrile	53	3.911	3.911	0.000	98	9605	10.0	9.32	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	64	7230	1.00	0.9523	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	85	3121	1.00	1.19	
37 Hexane	57	4.204	4.204	0.000	77	1632	1.00	0.9428	
39 Vinyl acetate	43	4.344	4.344	0.000	98	9578	2.00	1.64	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	64	4705	1.00	0.9314	
46 2-Butanone (MEK)	43	4.833	4.819	0.014	87	8329	4.00	4.17	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	71	4526	1.00	1.01	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	80	3288	1.00	1.15	
51 sec-Butyl Alcohol	45	4.987	4.973	0.014	15	3183	24.0	24.0	a
54 Tetrahydrofuran	42	5.056	5.056	0.000	60	6788	2.00	2.57	
53 Chlorobromomethane	128	5.056	5.056	0.000	22	597	1.00	0.9316	Ma
55 Chloroform	83	5.140	5.126	0.014	90	5979	1.00	1.14	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	35	5713	1.00	1.24	
57 Cyclohexane	56	5.350	5.350	0.000	85	7823	1.00	1.11	
58 1,1-Dichloropropene	75	5.420	5.419	0.001	85	3349	1.00	0.8997	a
59 Carbon tetrachloride	117	5.420	5.419	0.001	83	3074	1.00	0.9061	
60 Isobutyl alcohol	41		5.461				ND	ND	U
63 Benzene	78	5.587	5.587	0.000	91	9347	1.00	0.9064	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	94	4204	1.00	0.9670	a
66 n-Heptane	43	5.825	5.824	0.001	36	3546	1.00	0.7804	
68 Trichloroethene	95	6.146	6.146	0.000	83	3710	1.00	1.28	
69 2-Pentanone	43	6.285	6.271	0.014	35	6764	3.20	3.38	a
70 Methylcyclohexane	55	6.355	6.355	0.000	84	4554	1.00	0.8352	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	65	2299	1.00	0.8202	a
73 1,4-Dioxane	88		6.425				ND	ND	
74 Dibromomethane	93	6.453	6.453	0.000	8	1494	1.00	0.8501	
75 Dichlorobromomethane	83	6.602	6.609	-0.007	88	4588	1.00	1.19	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	1	1572	1.00	0.9167	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	81	3557	1.00	0.8390	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	94	9180	4.00	3.95	
82 Toluene	91	7.295	7.295	0.000	97	10911	1.00	1.06	
84 trans-1,3-Dichloropropene	75	7.496	7.488	0.008	87	3197	1.00	0.7774	
85 Ethyl methacrylate	69	7.524	7.517	0.007	50	5251	1.00	1.68	M
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	80	2894	1.00	1.13	
89 Tetrachloroethene	164	7.767	7.767	0.000	75	1571	1.00	0.9675	
90 1,3-Dichloropropane	76	7.825	7.824	0.000	91	3652	1.00	0.9186	a
91 2-Hexanone	43	7.853	7.853	0.000	94	6263	4.00	4.66	
95 Chlorodibromomethane	129	8.025	8.032	-0.007	81	1992	1.00	0.8497	
96 Ethylene Dibromide	107	8.153	8.146	0.007	77	2146	1.00	0.9509	
98 1-Chlorohexane	91	8.568	8.568	0.000	34	4852	0.8000	0.7573	
99 Chlorobenzene	112	8.604	8.604	0.000	94	6420	1.00	1.00	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.682	0.001	44	1826	1.00	0.8073	
101 Ethylbenzene	106	8.683	8.682	0.001	96	3197	1.00	0.9396	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	96	3939	1.00	0.9185	
103 o-Xylene	106	9.183	9.176	0.007	97	3618	1.00	0.9033	
104 Styrene	104	9.197	9.197	0.000	83	6705	1.00	0.9157	
106 Bromoform	173	9.376	9.383	-0.007	75	567	1.00	0.9897	Ma
107 Isopropylbenzene	105	9.526	9.526	0.000	95	10101	1.00	0.9226	
109 Cyclohexanone	55	9.626	9.626	0.000	90	6099	30.0	34.7	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	87	4414	1.00	1.05	
111 Bromobenzene	156	9.855	9.855	0.000	90	2049	1.00	0.8246	
112 trans-1,4-Dichloro-2-butene	53	9.855	9.862	-0.007	1	1008	1.00	0.9228	M
113 1,2,3-Trichloropropane	110	9.884	9.891	-0.007	1	1187	1.00	1.09	M
114 N-Propylbenzene	120	9.934	9.941	-0.007	98	2835	1.00	0.9321	
115 2-Chlorotoluene	126	10.034	10.034	0.000	90	2028	1.00	0.8153	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	90	9347	1.00	0.9560	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.155	10.155	0.000	95	2894	1.00	1.06	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	8473	1.00	1.06	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	95	9813	1.00	0.9787	
120 sec-Butylbenzene	134	10.642	10.649	-0.007	93	1396	1.00	0.9397	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	90	4284	1.00	0.8825	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	93	9054	1.00	0.9107	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	80	4867	1.00	0.9550	
125 n-Butylbenzene	91	11.207	11.207	0.000	93	9078	1.00	0.9470	
127 1,2-Dichlorobenzene	146	11.242	11.235	0.007	85	4284	1.00	0.9383	
128 1,2-Dibromo-3-Chloropropane	157	12.029	12.022	0.007	1	234	1.00	1.02	Ma
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	81	2770	1.00	0.9268	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	1	288	1.00	0.9658	M
132 Naphthalene	128	13.123	13.123	0.000	95	7932	1.00	0.8937	a
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	86	2627	1.00	0.9628	
S 149 1,2-Dichloroethene, Total (URS)	96				0		2.00	2.34	
S 150 1,2-Dichloroethene, Total	1				0		2.00	2.34	
S 151 Trihalomethanes, Total	1				0		4.00	4.17	
S 152 Total BTEX	1				0			4.73	
S 153 Xylenes, Total (URS)	1				0		2.00	1.82	
S 155 Xylenes, Total	106				0		2.00	1.82	
S 156 1,3-Dichloropropene, Total	1				0		2.00	1.62	

QC Flag Legend

Processing Flags
- ND - Not Detected or Marked ND

Review Flags
- M - Manually Integrated
- U - Marked Undetected
- a - User Assigned ID

Reagents:

MV-Gas A_00089	Amount Added:	0.20	Units: uL		
MV-MegaMainA_00050	Amount Added:	0.50	Units: uL		
mv-IS_SS_00018	Amount Added:	5.00	Units: uL	Run Reagent	

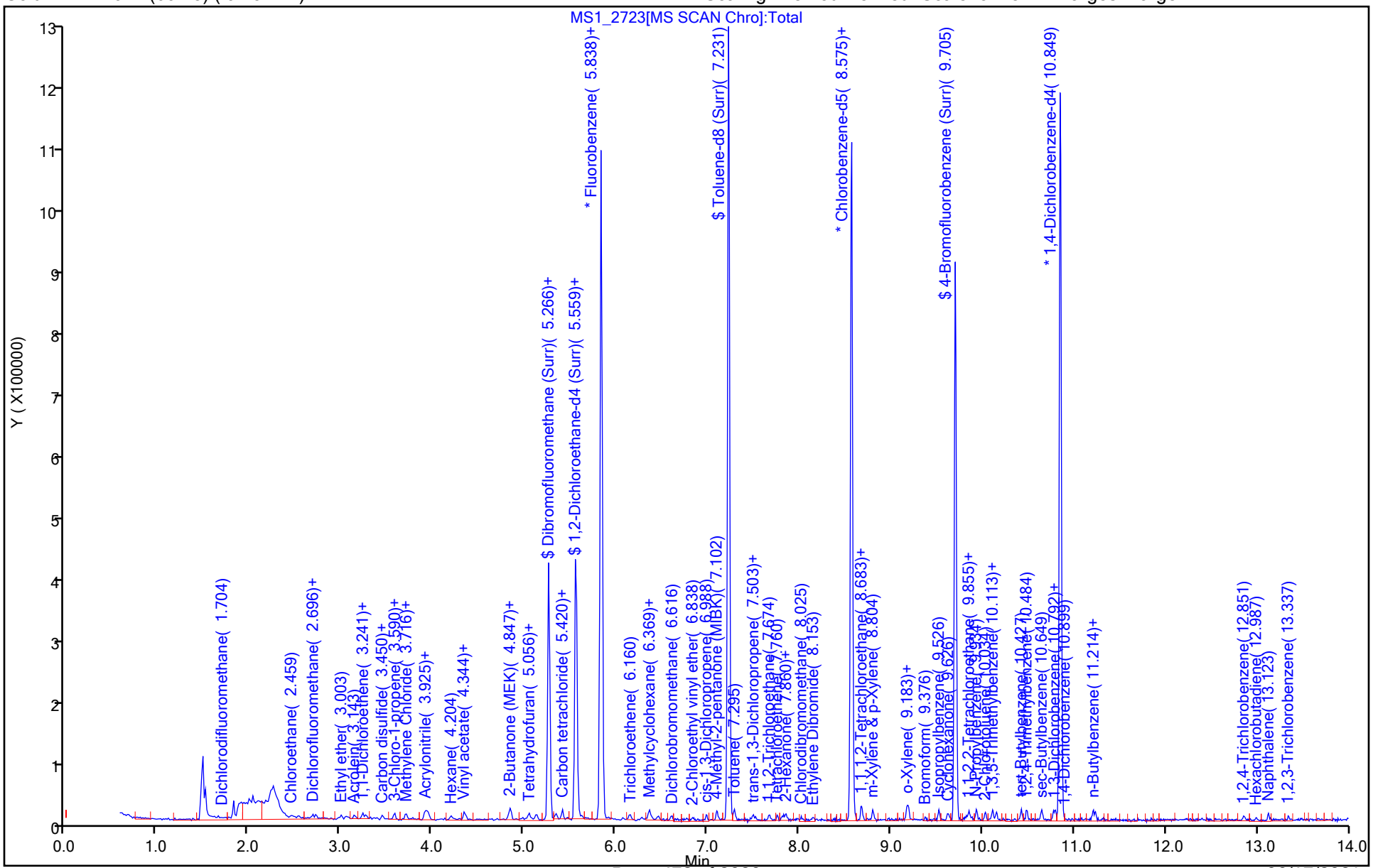
Report Date: 05-Jun-2021 11:14:25 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D

Injection Date:	04-Jun-2021 14:11:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD010			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

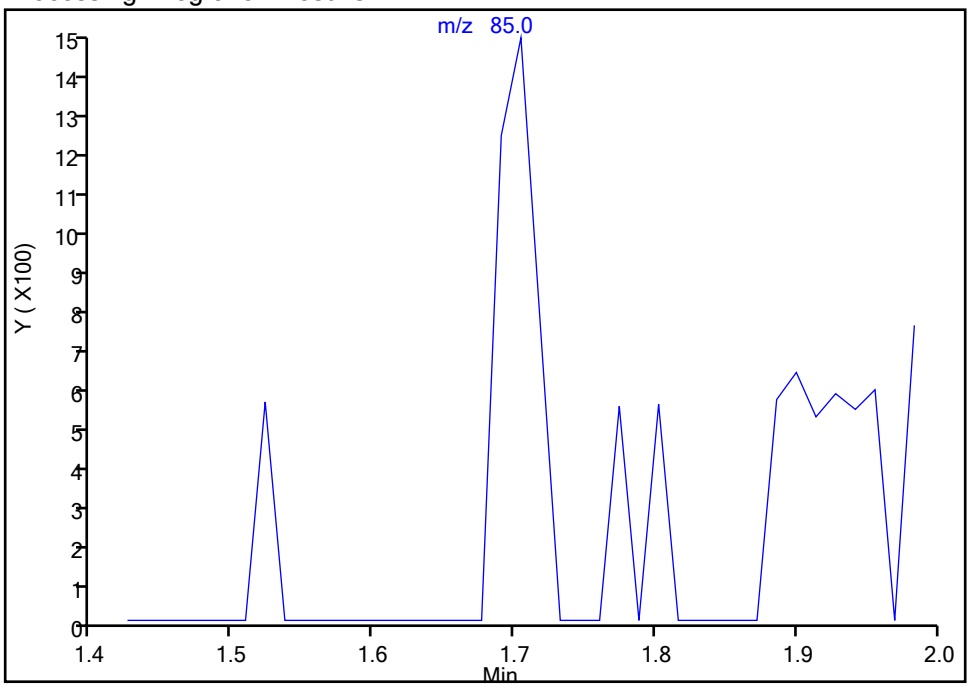
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

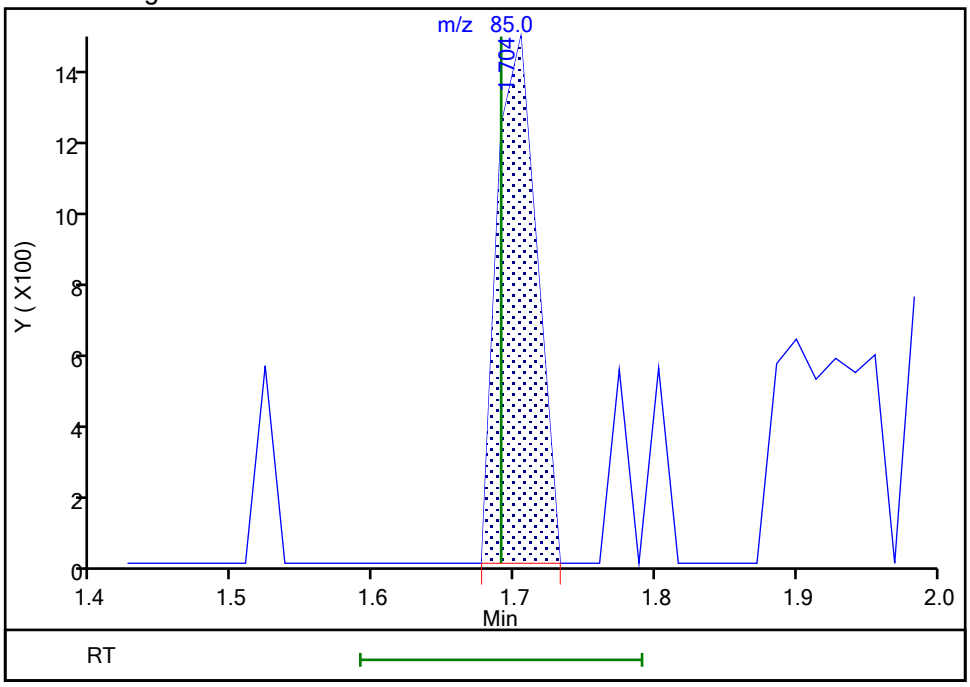
Not Detected
Expected RT: 1.69

Processing Integration Results



RT: 1.70
Area: 2898
Amount: 0.947636
Amount Units: ug/l

Manual Integration Results



Reviewer: seifertj, 05-Jun-2021 09:05:00
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

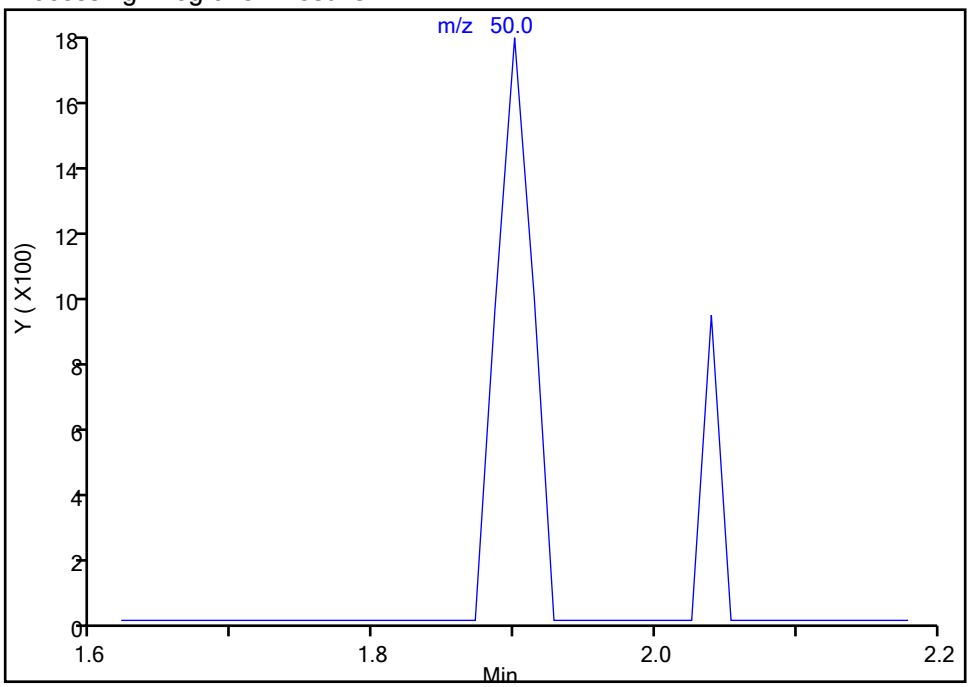
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

Signal: 1

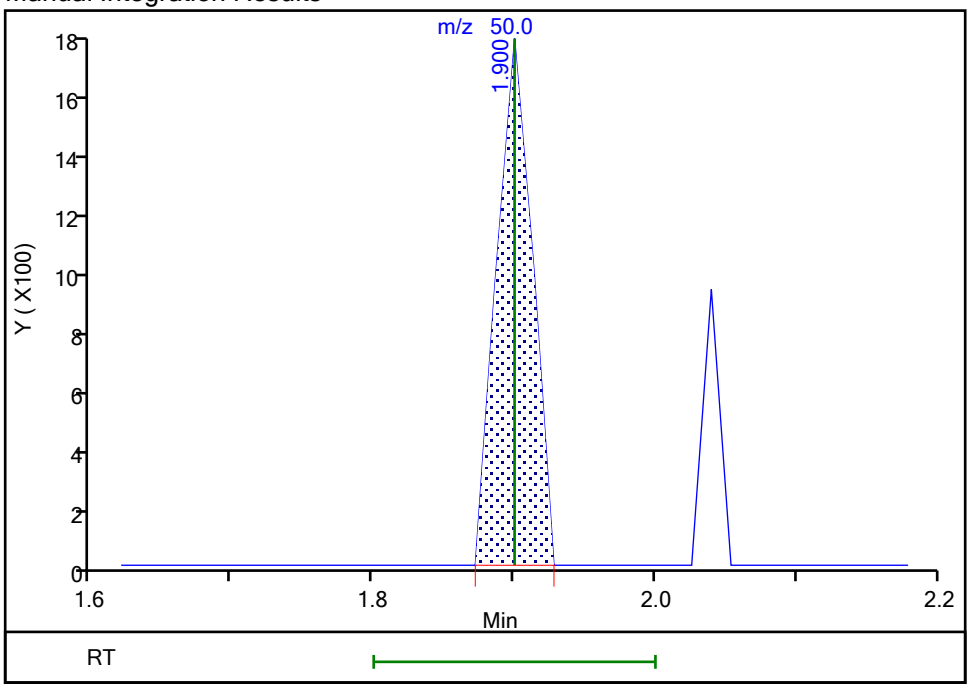
Not Detected
Expected RT: 1.90

Processing Integration Results



Manual Integration Results

RT: 1.90
Area: 3126
Amount: 0.965853
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:05:05
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

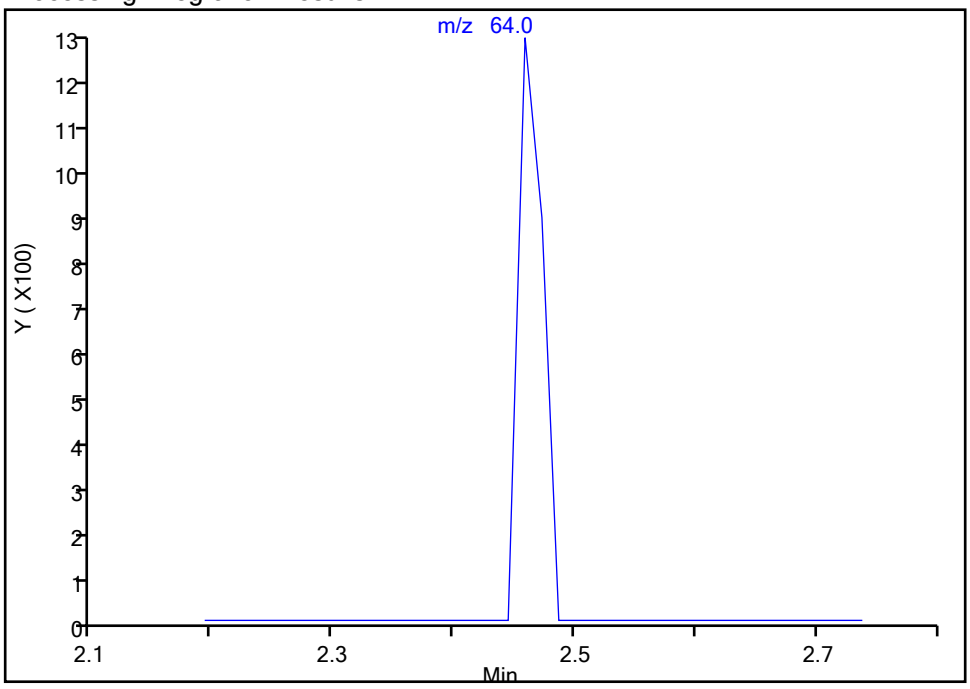
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

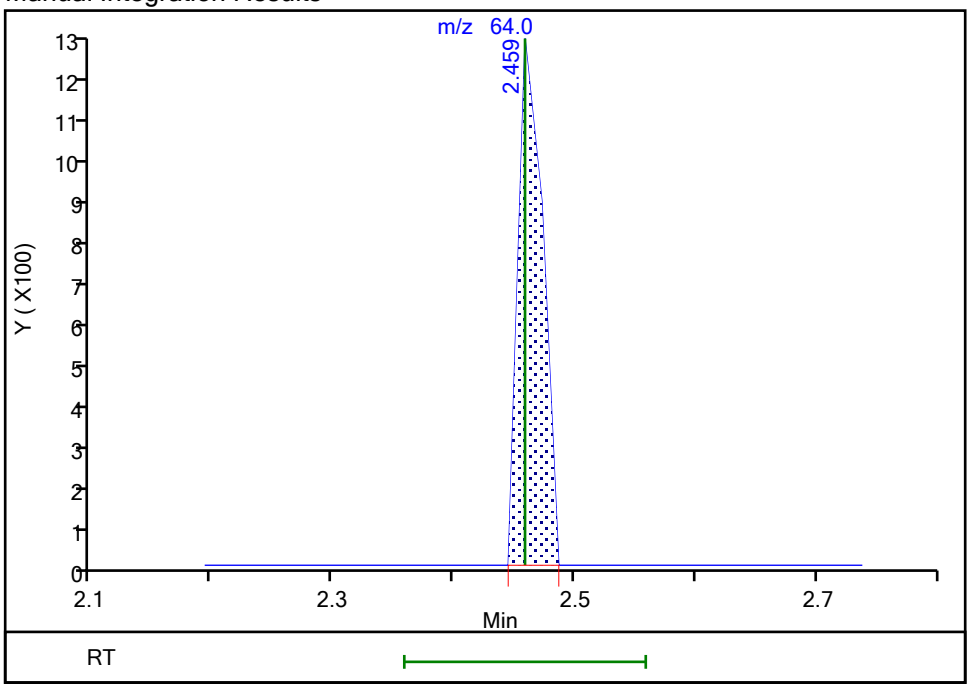
Not Detected
Expected RT: 2.46

Processing Integration Results



Manual Integration Results

RT: 2.46
Area: 1757
Amount: 0.872484
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:05:12
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

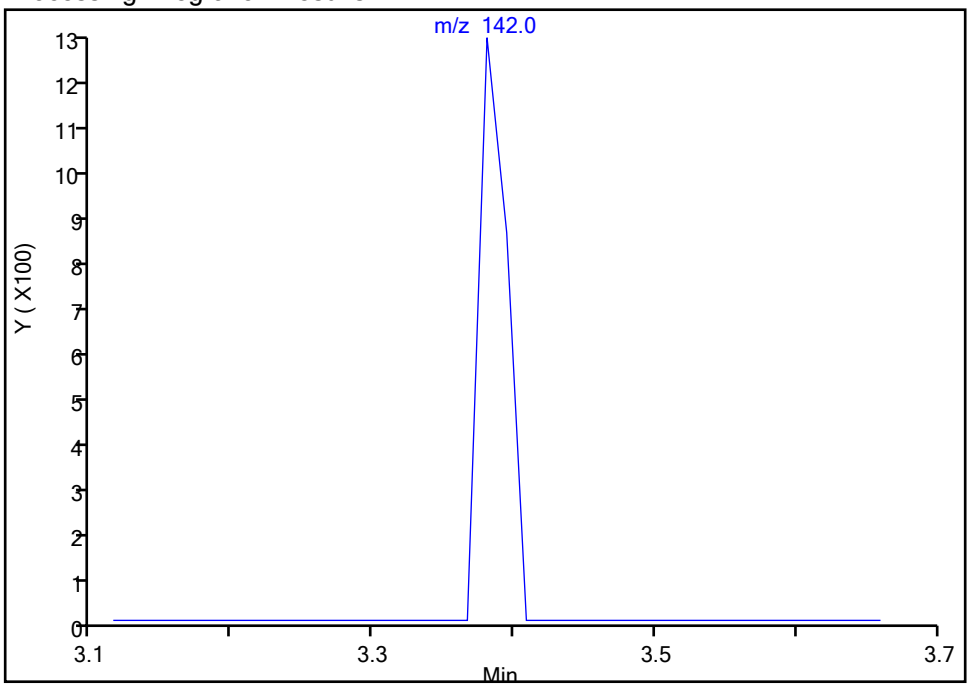
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

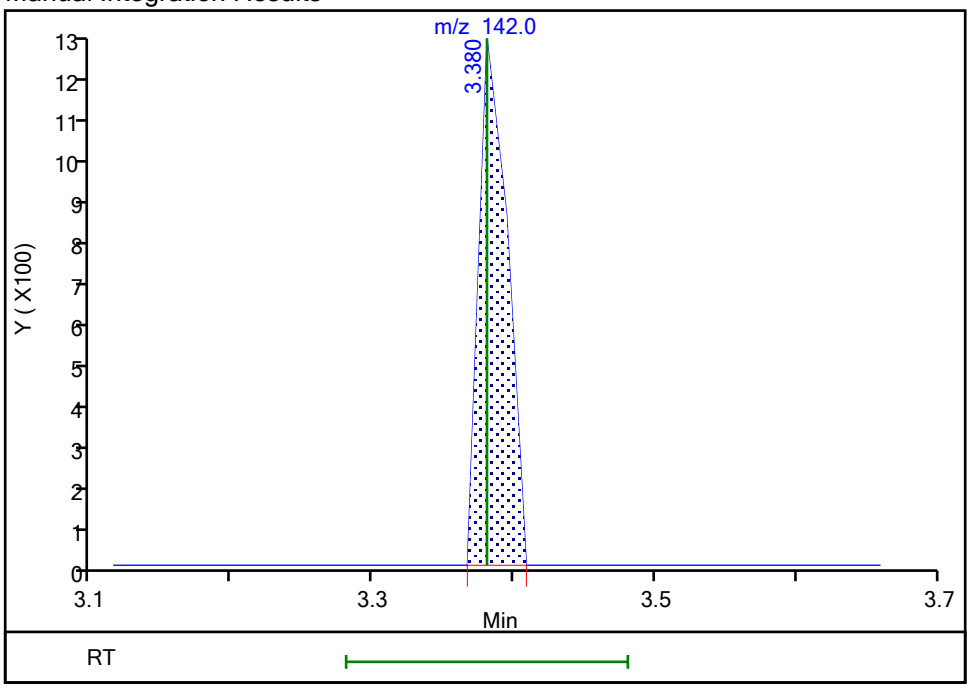
Not Detected
Expected RT: 3.38

Processing Integration Results



Manual Integration Results

RT: 3.38
Area: 1710
Amount: 1.046931
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:05:27
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

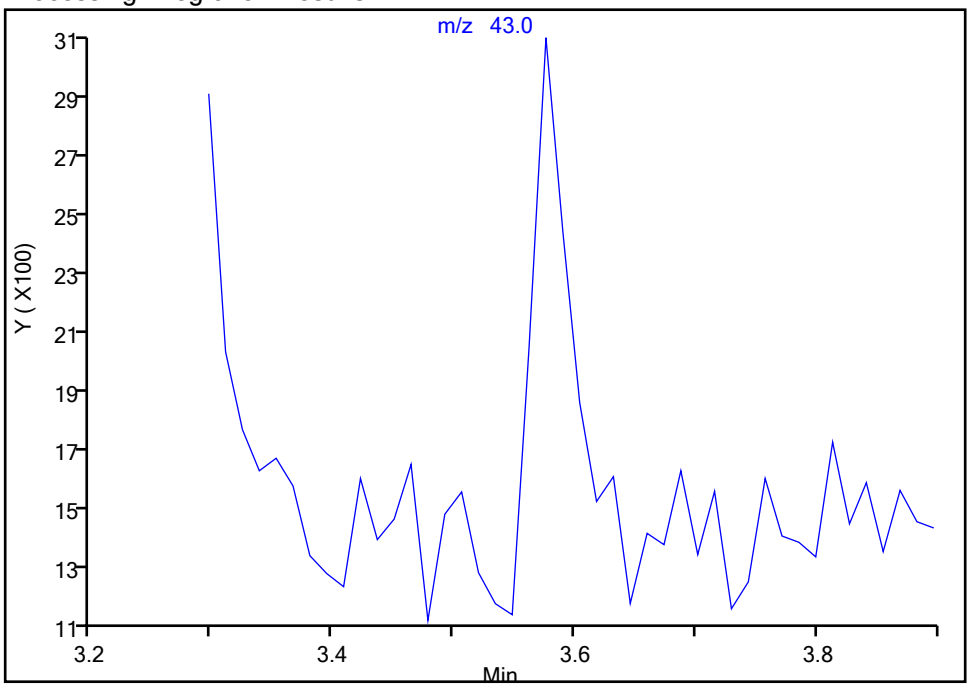
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

30 Methyl acetate, CAS: 79-20-9

Signal: 1

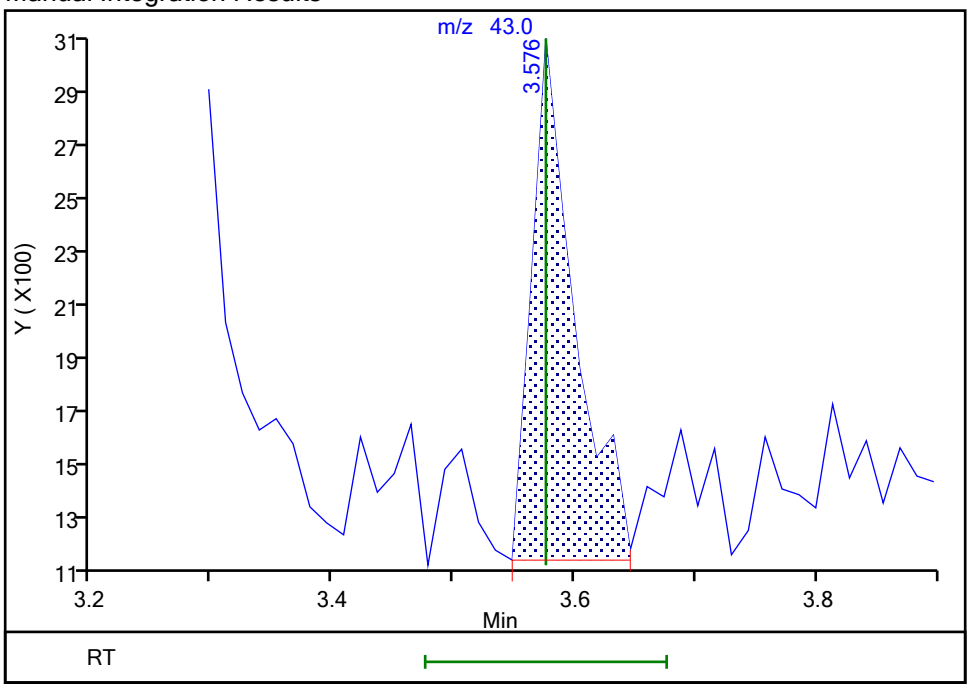
Not Detected
Expected RT: 3.58

Processing Integration Results



Manual Integration Results

RT: 3.58
Area: 4789
Amount: 2.351372
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:05:35
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

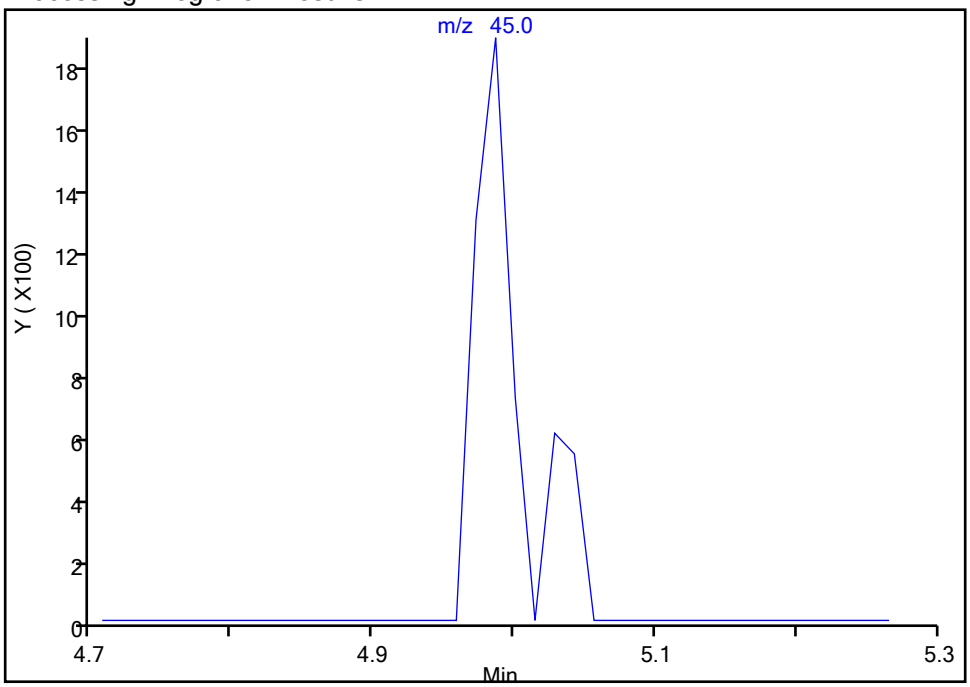
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

51 sec-Butyl Alcohol, CAS: 78-92-2

Signal: 1

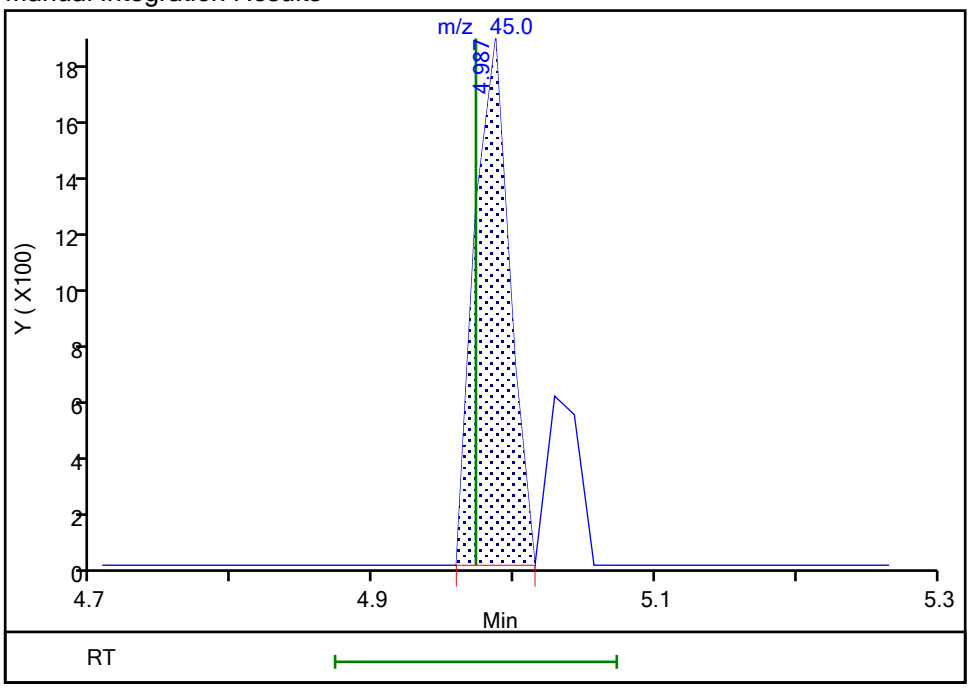
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 3183
Amount: 24.010620
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:05:48
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

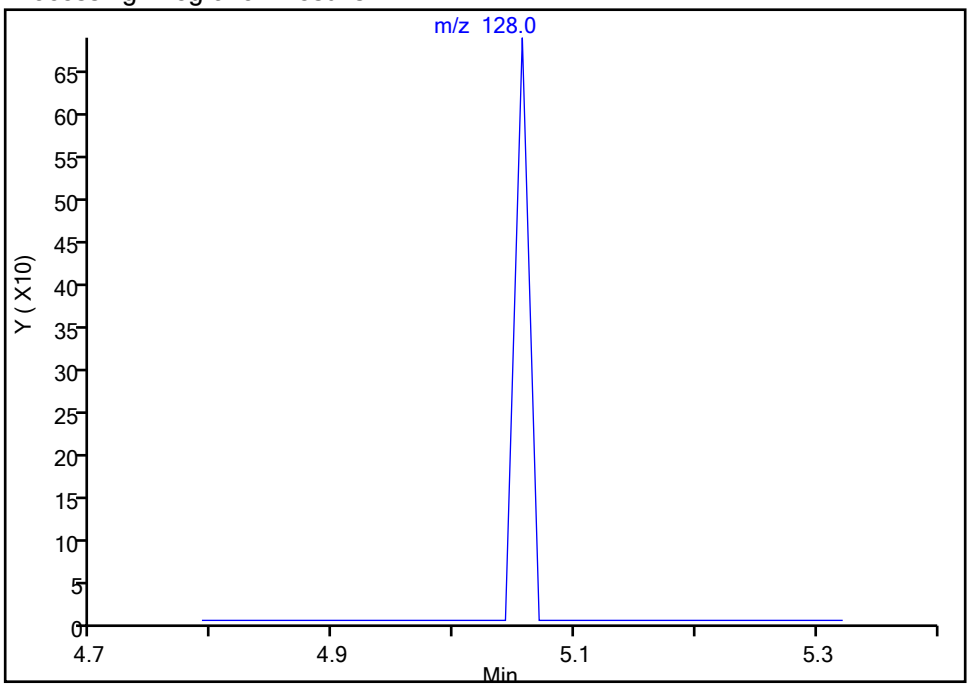
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

53 Chlorobromomethane, CAS: 74-97-5

Signal: 1

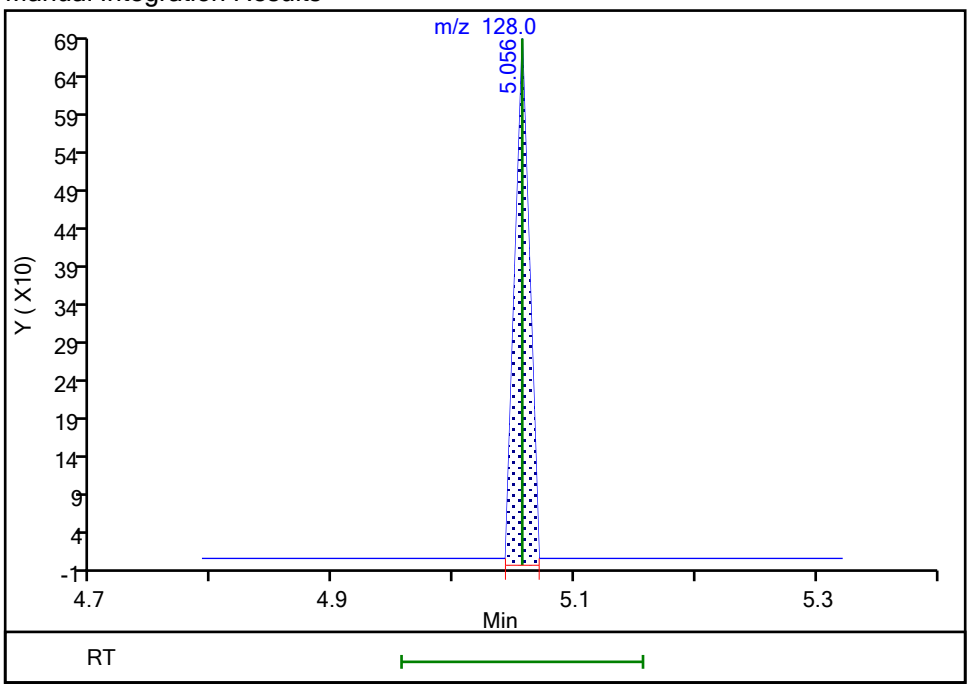
Not Detected
Expected RT: 5.06

Processing Integration Results



Manual Integration Results

RT: 5.06
Area: 597
Amount: 0.931608
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:06:02
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

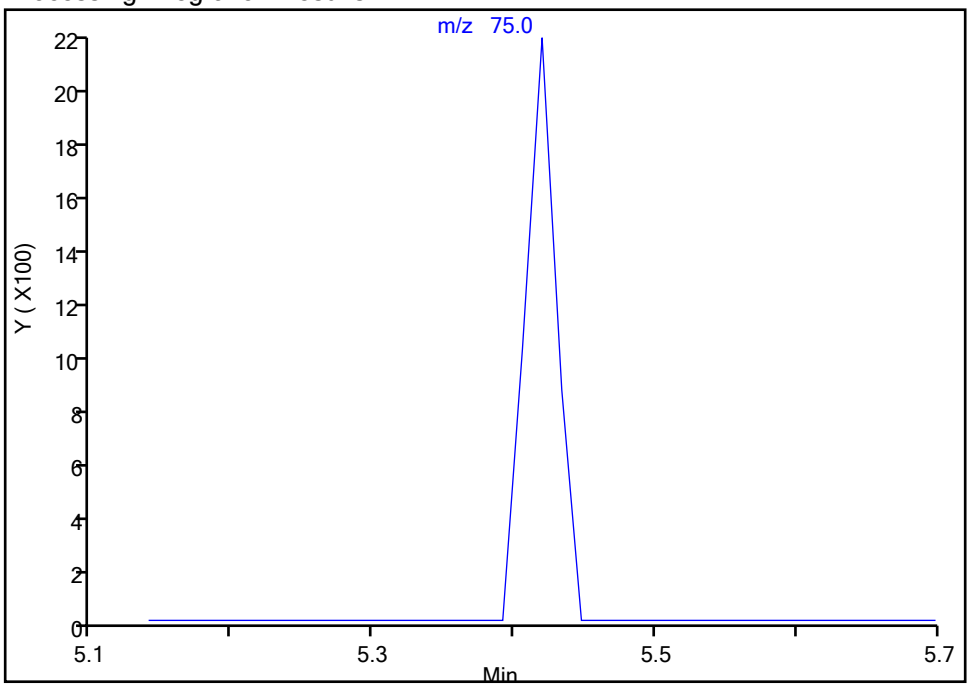
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

58 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

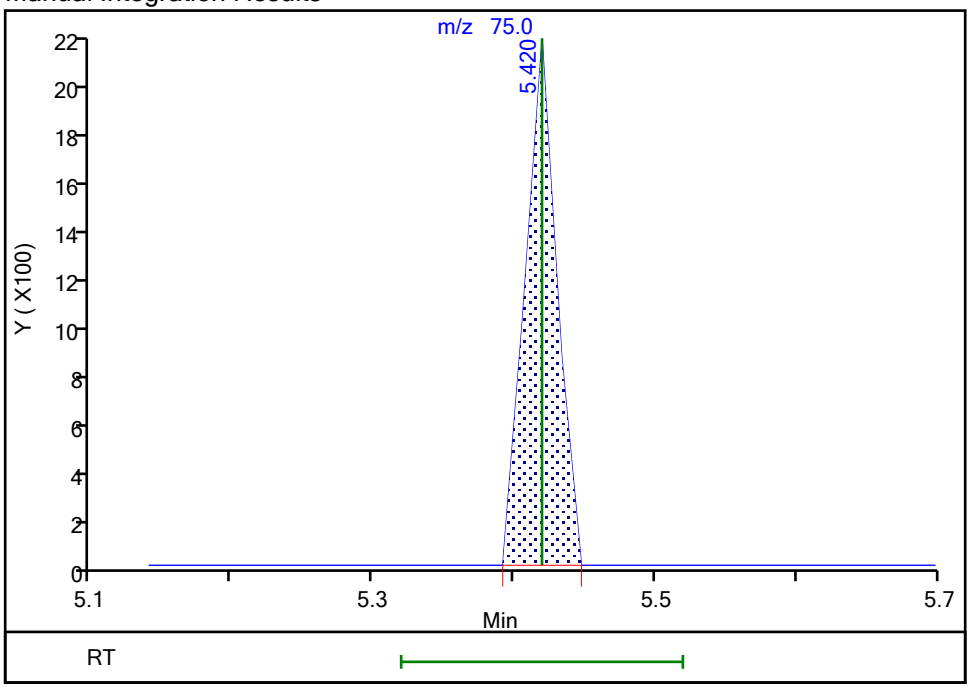
Not Detected
Expected RT: 5.42

Processing Integration Results



Manual Integration Results

RT: 5.42
Area: 3349
Amount: 0.899702
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:06:11
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

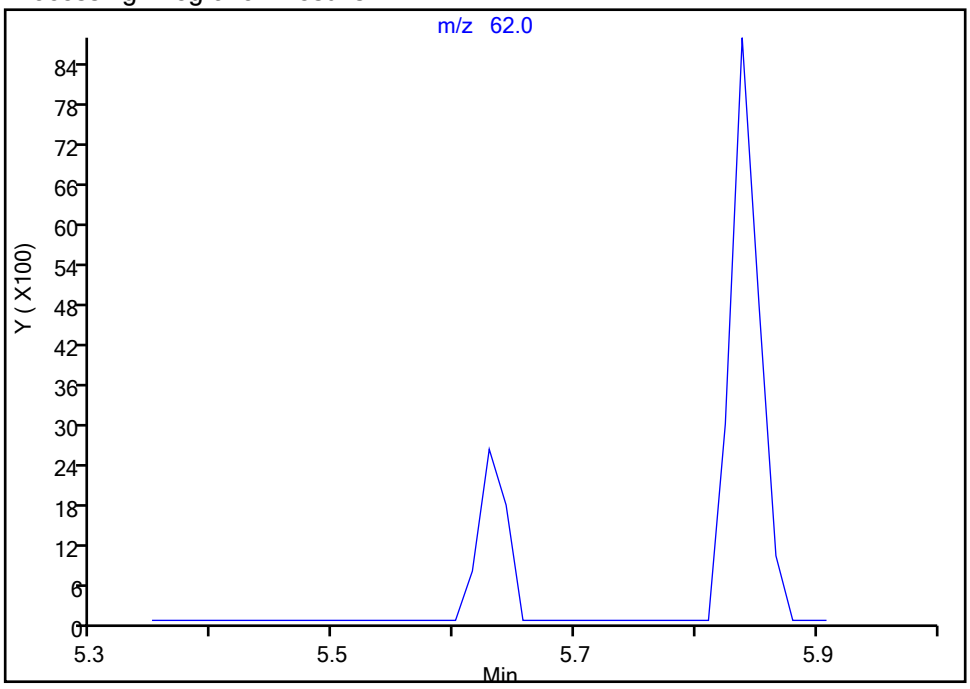
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

64 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

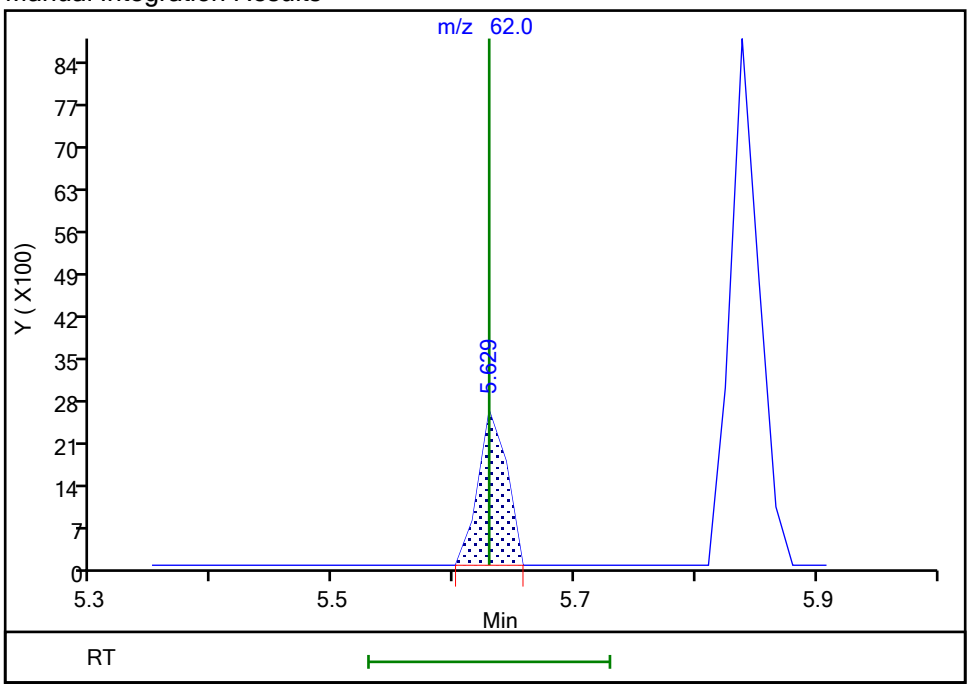
Not Detected
Expected RT: 5.63

Processing Integration Results



Manual Integration Results

RT: 5.63
Area: 4204
Amount: 0.966993
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:06:29
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

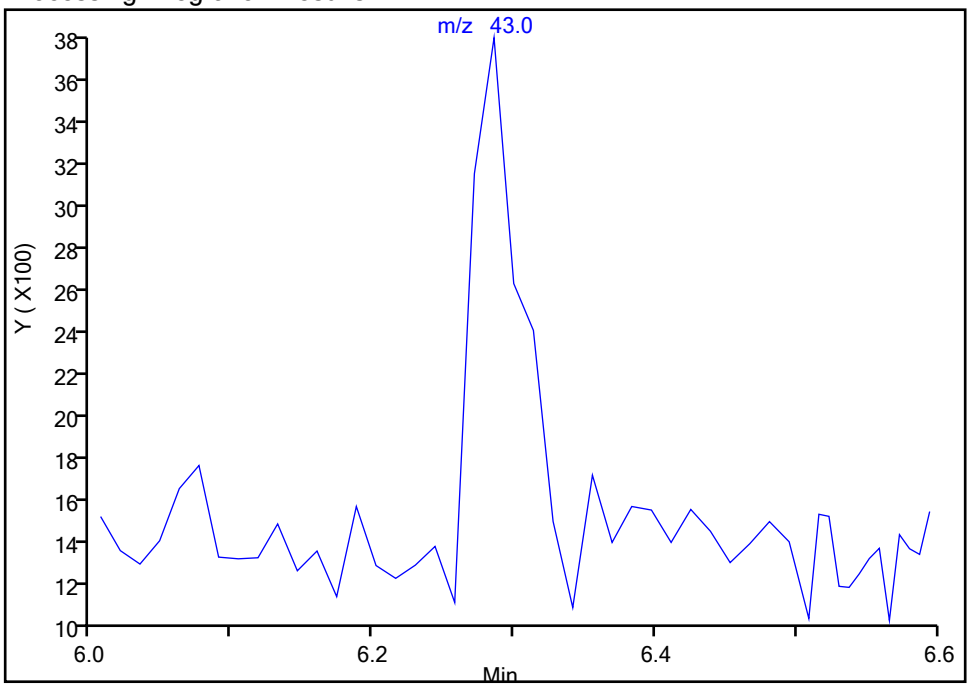
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

69 2-Pentanone, CAS: 107-87-9

Signal: 1

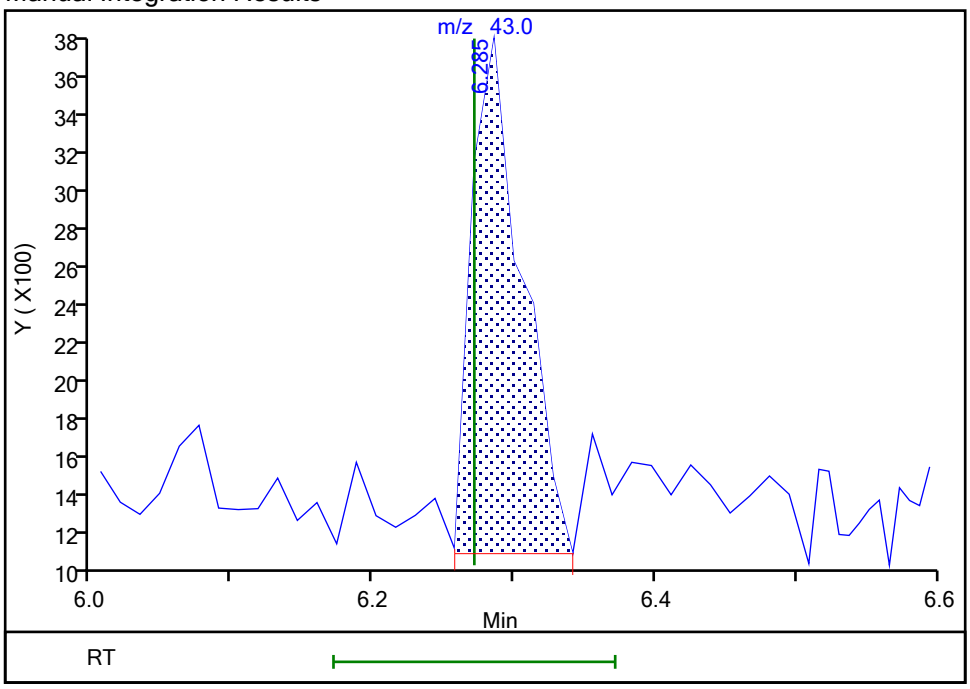
Not Detected
Expected RT: 6.27

Processing Integration Results



Manual Integration Results

RT: 6.29
Area: 6764
Amount: 3.378807
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:06:39
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

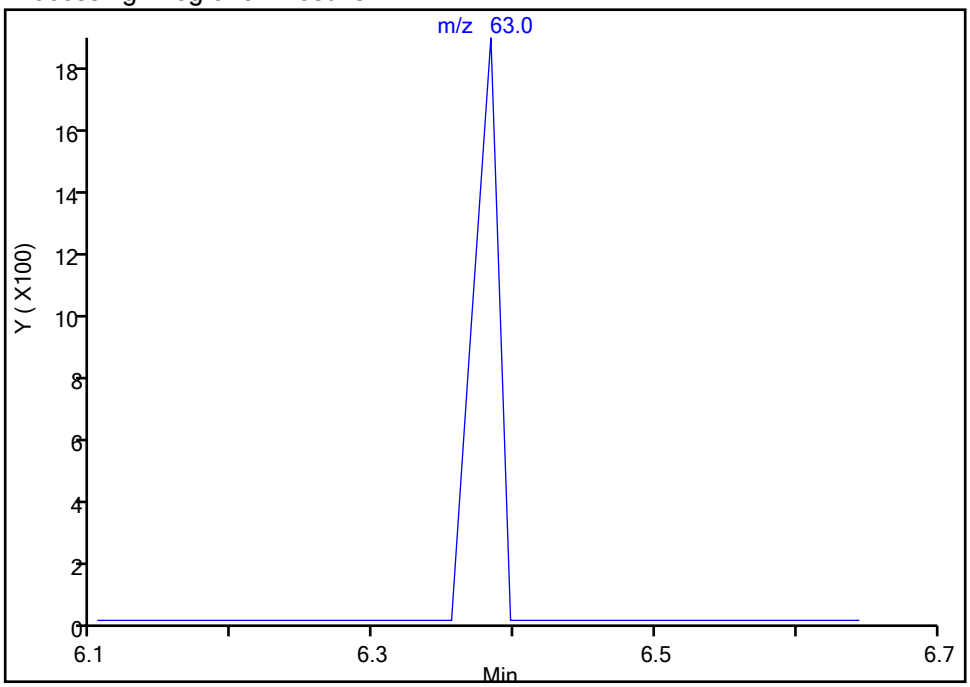
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

71 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

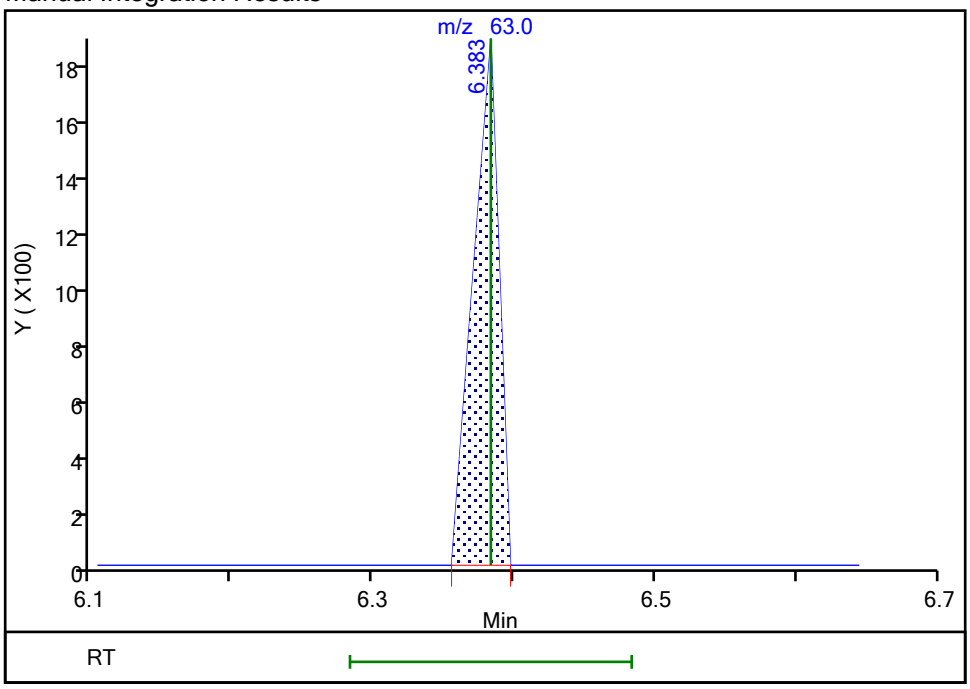
Not Detected
Expected RT: 6.38

Processing Integration Results



Manual Integration Results

RT: 6.38
Area: 2299
Amount: 0.820248
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:06:46
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

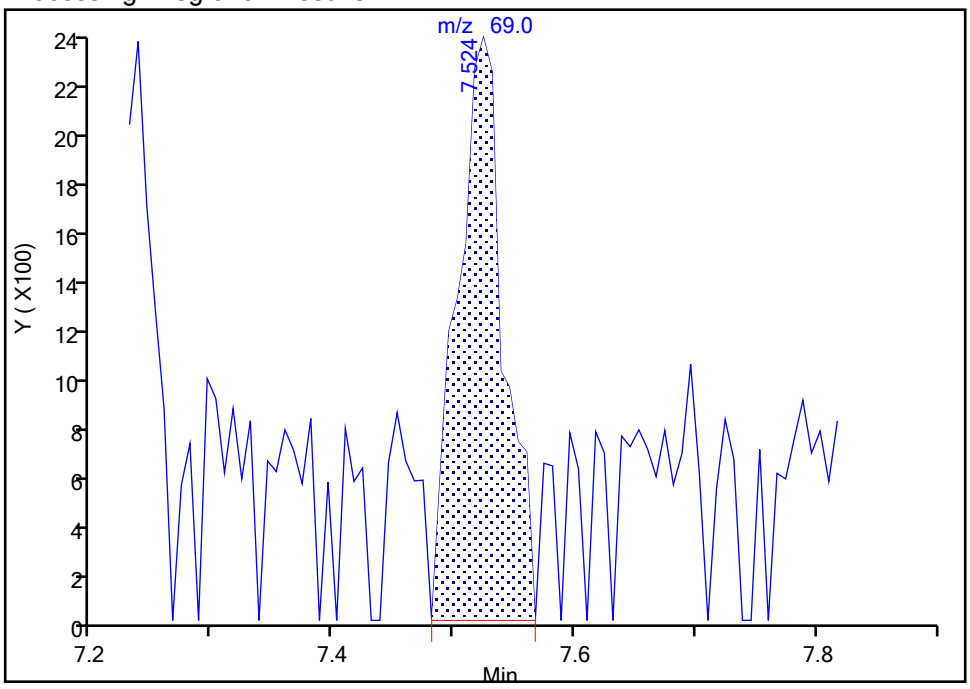
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

85 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

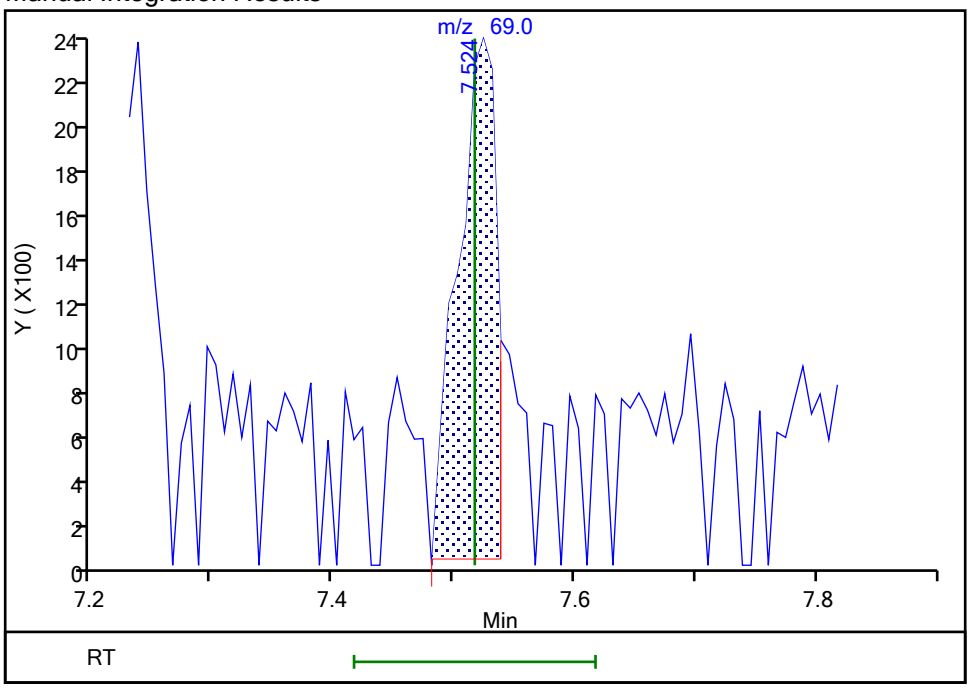
Processing Integration Results

RT: 7.52
Area: 6373
Amount: 2.039633
Amount Units: ug/l



Manual Integration Results

RT: 7.52
Area: 5251
Amount: 1.680545
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:34:30
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

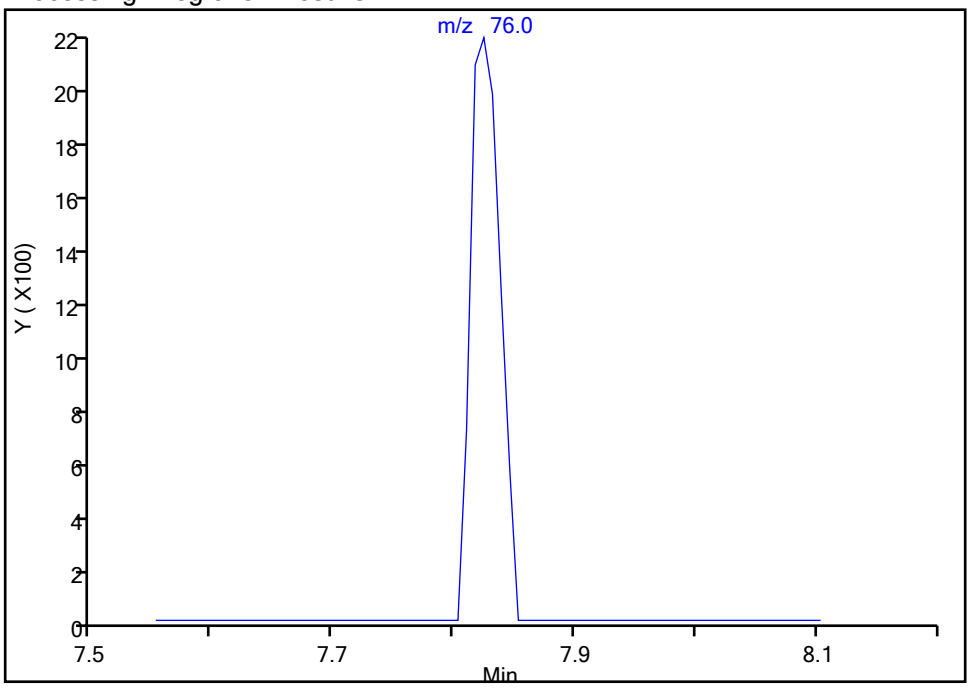
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

90 1,3-Dichloropropane, CAS: 142-28-9

Signal: 1

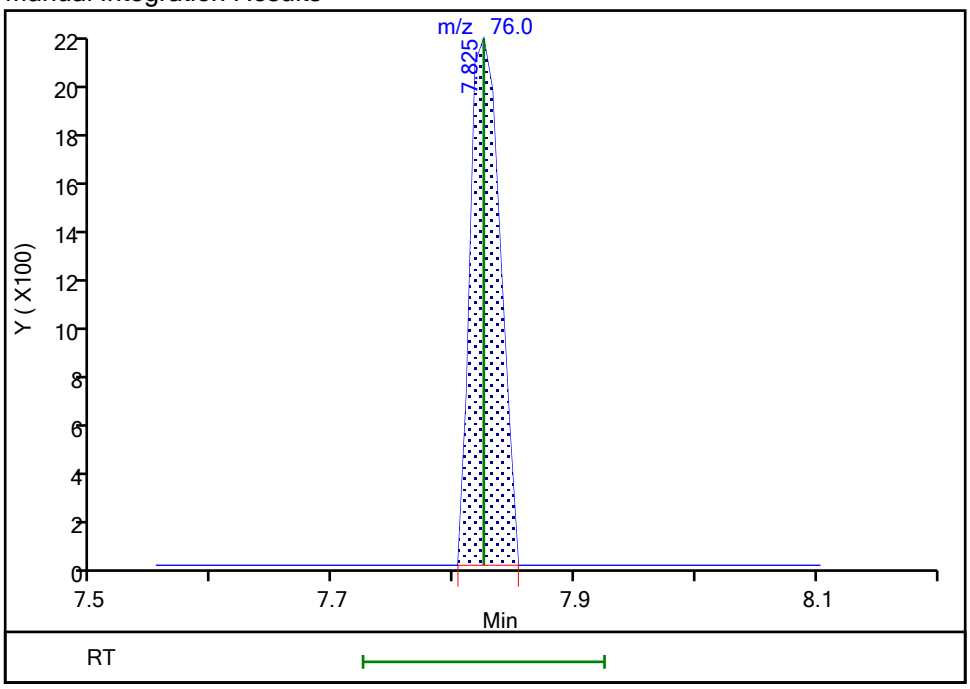
Not Detected
Expected RT: 7.82

Processing Integration Results



Manual Integration Results

RT: 7.82
Area: 3652
Amount: 0.918572
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:07:00
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

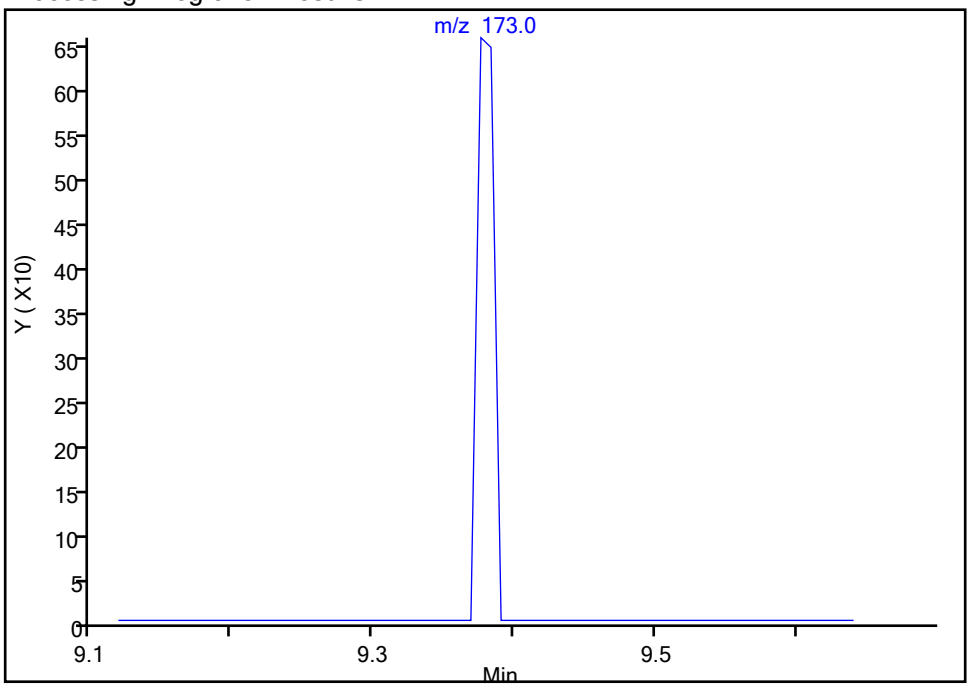
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

106 Bromoform, CAS: 75-25-2

Signal: 1

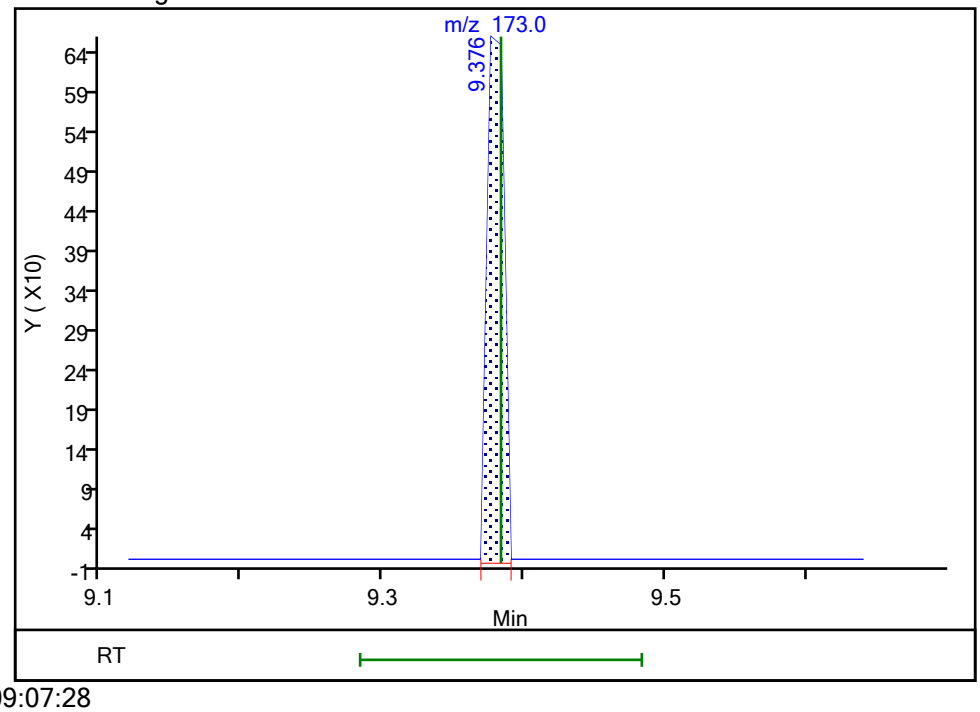
Not Detected
Expected RT: 9.38

Processing Integration Results



Manual Integration Results

RT: 9.38
Area: 567
Amount: 0.989735
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:07:28
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

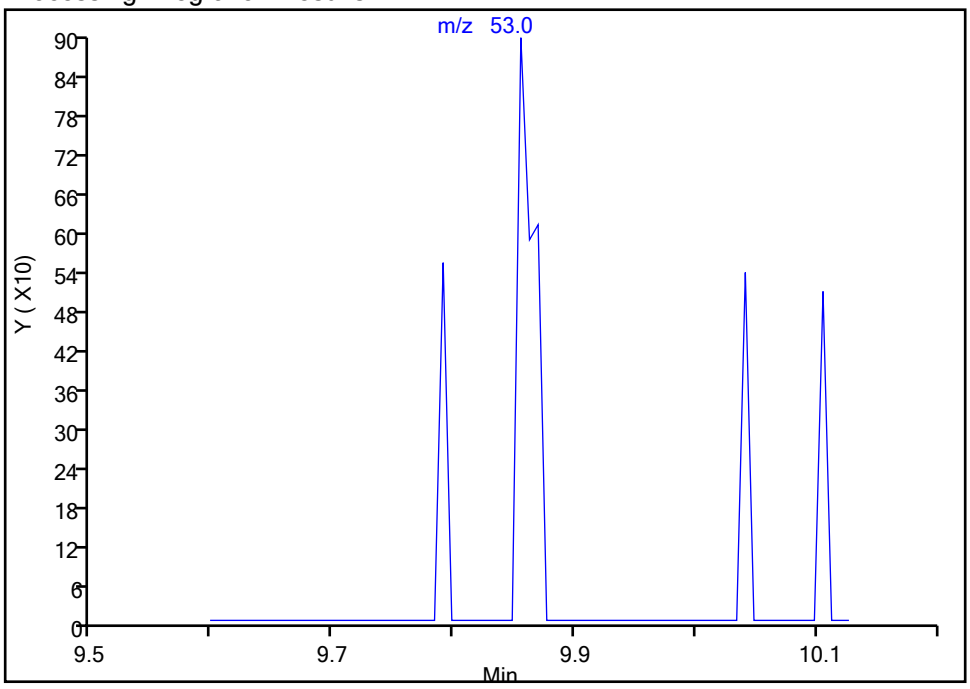
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

112 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

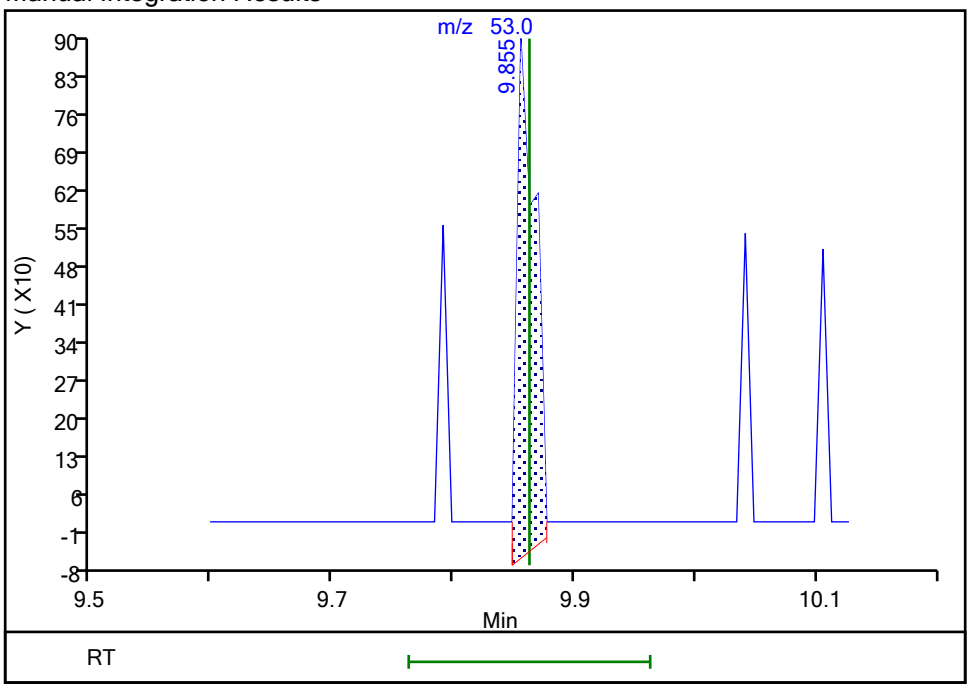
Not Detected
Expected RT: 9.86

Processing Integration Results



Manual Integration Results

RT: 9.86
Area: 1008
Amount: 0.922794
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:07:46
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

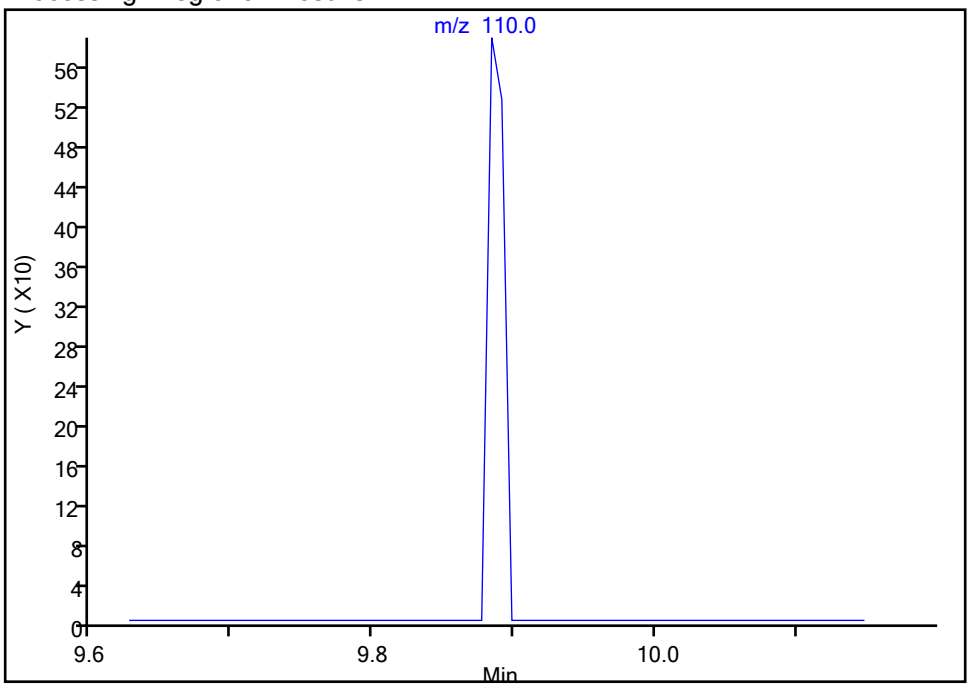
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

113 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

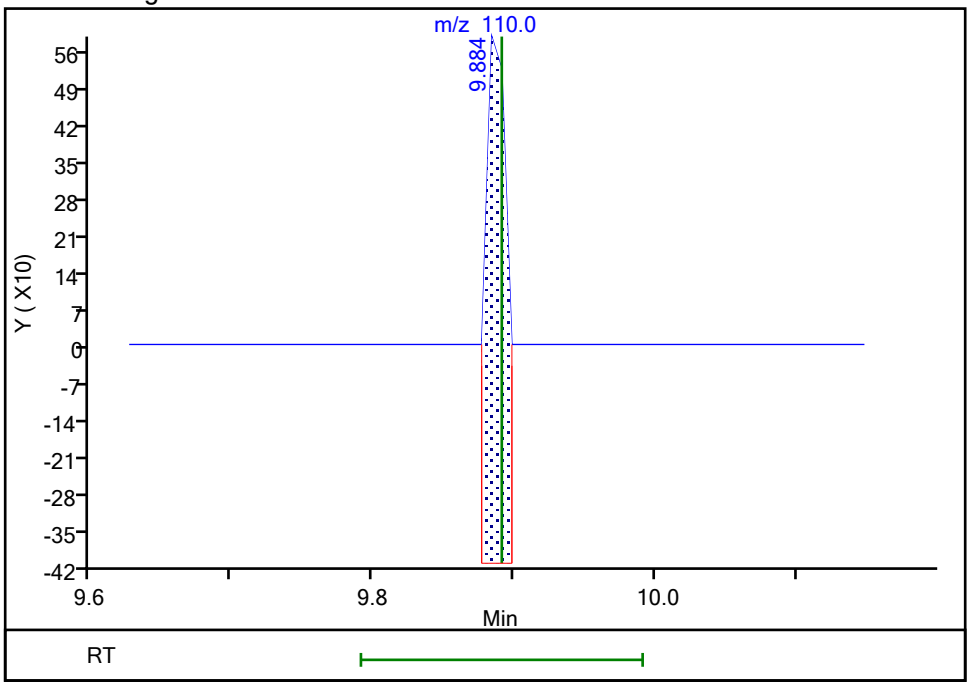
Not Detected
Expected RT: 9.89

Processing Integration Results



Manual Integration Results

RT: 9.88
Area: 1187
Amount: 1.087675
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:08:00
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

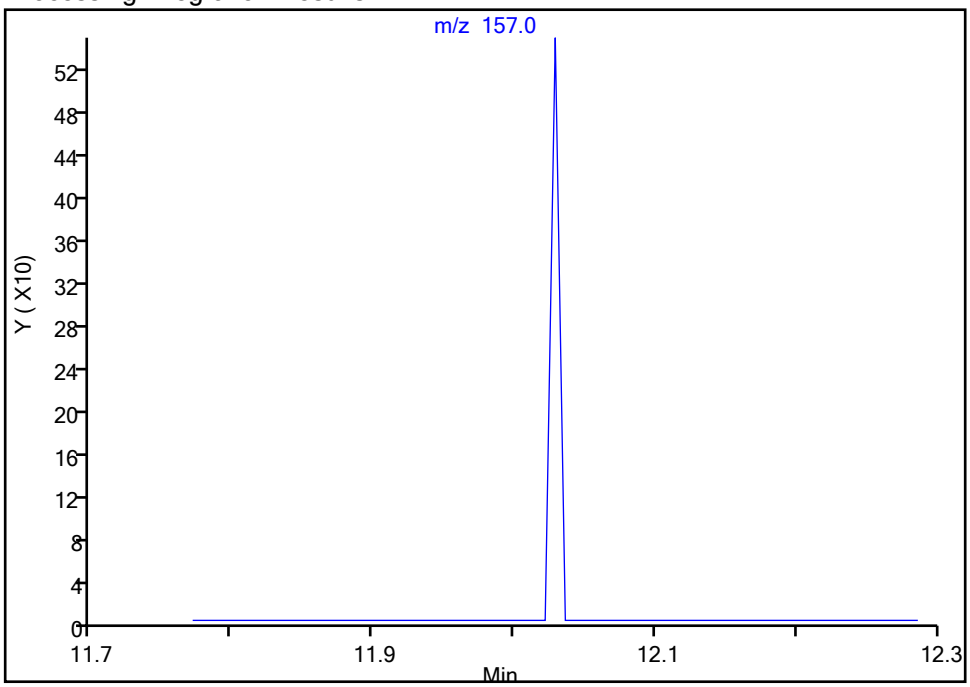
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

128 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

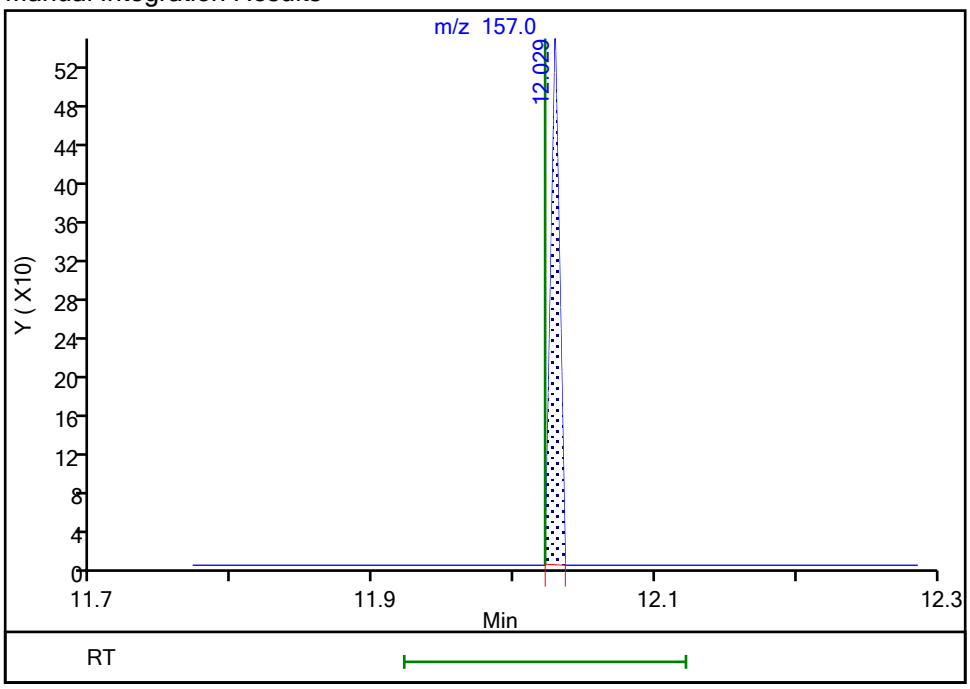
Not Detected
Expected RT: 12.02

Processing Integration Results



Manual Integration Results

RT: 12.03
Area: 234
Amount: 1.021883
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:08:21
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

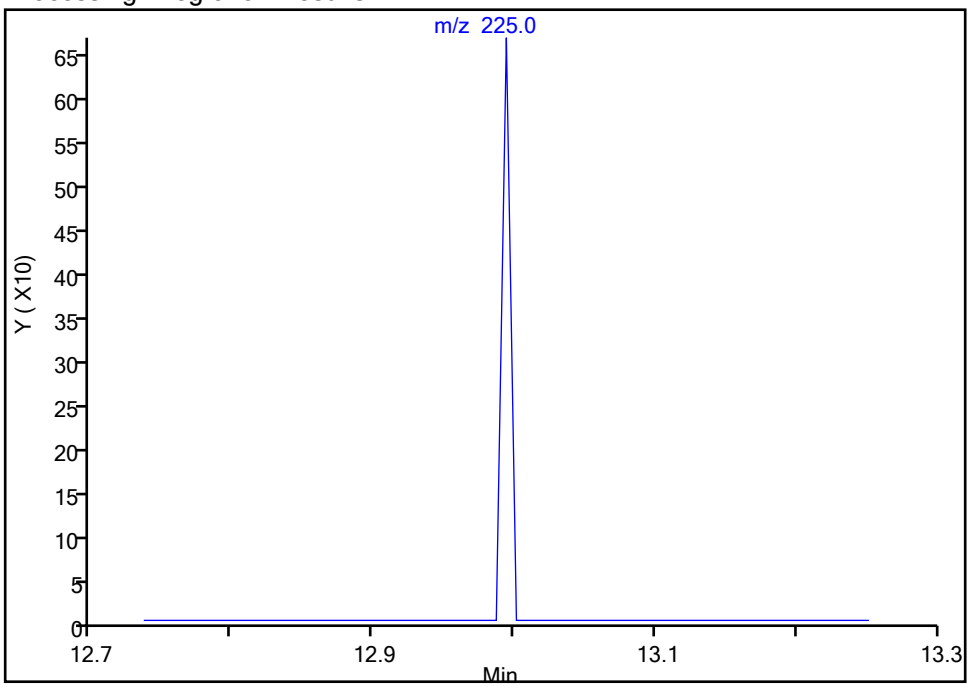
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

131 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

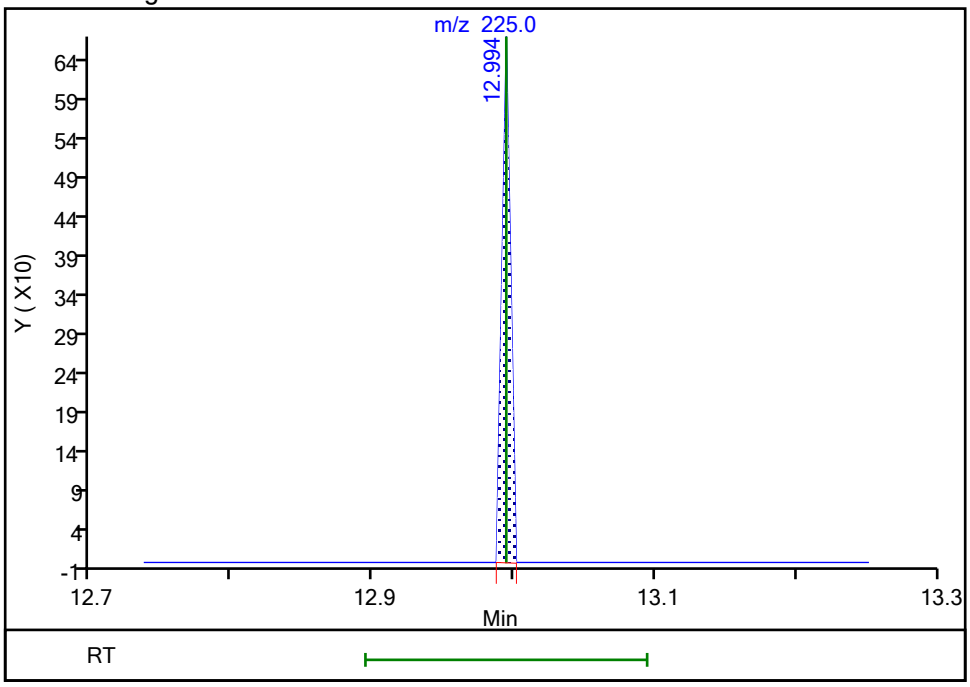
Not Detected
Expected RT: 12.99

Processing Integration Results



Manual Integration Results

RT: 12.99
Area: 288
Amount: 0.965751
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:08:34
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

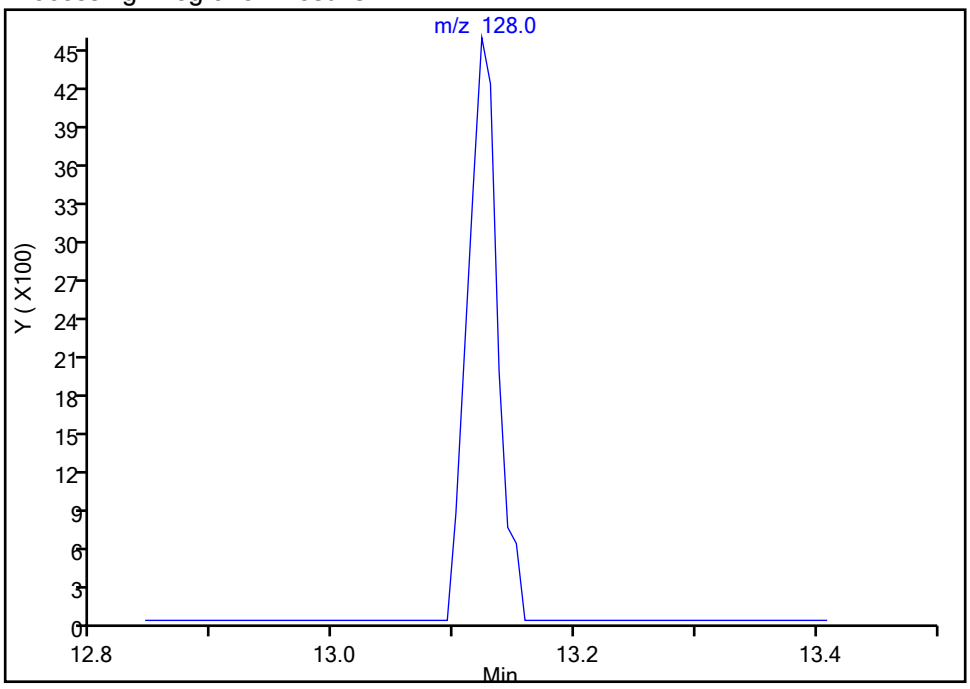
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D
Injection Date: 04-Jun-2021 14:11:30 Instrument ID: VMS_MS1
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

132 Naphthalene, CAS: 91-20-3

Signal: 1

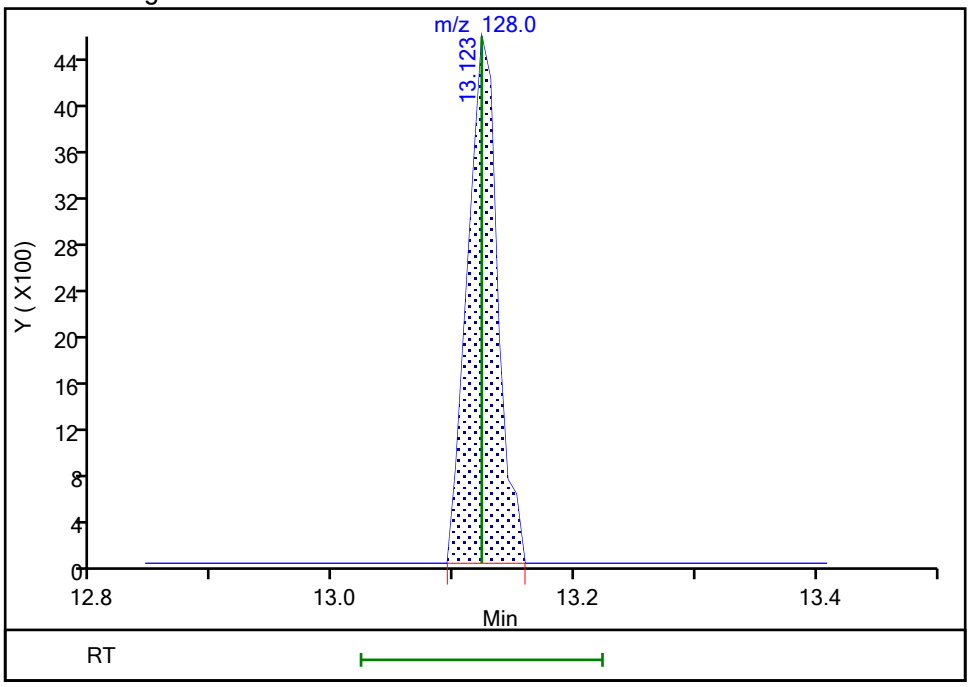
Not Detected
Expected RT: 13.12

Processing Integration Results



Manual Integration Results

RT: 13.12
Area: 7932
Amount: 0.893686
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:08:43
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

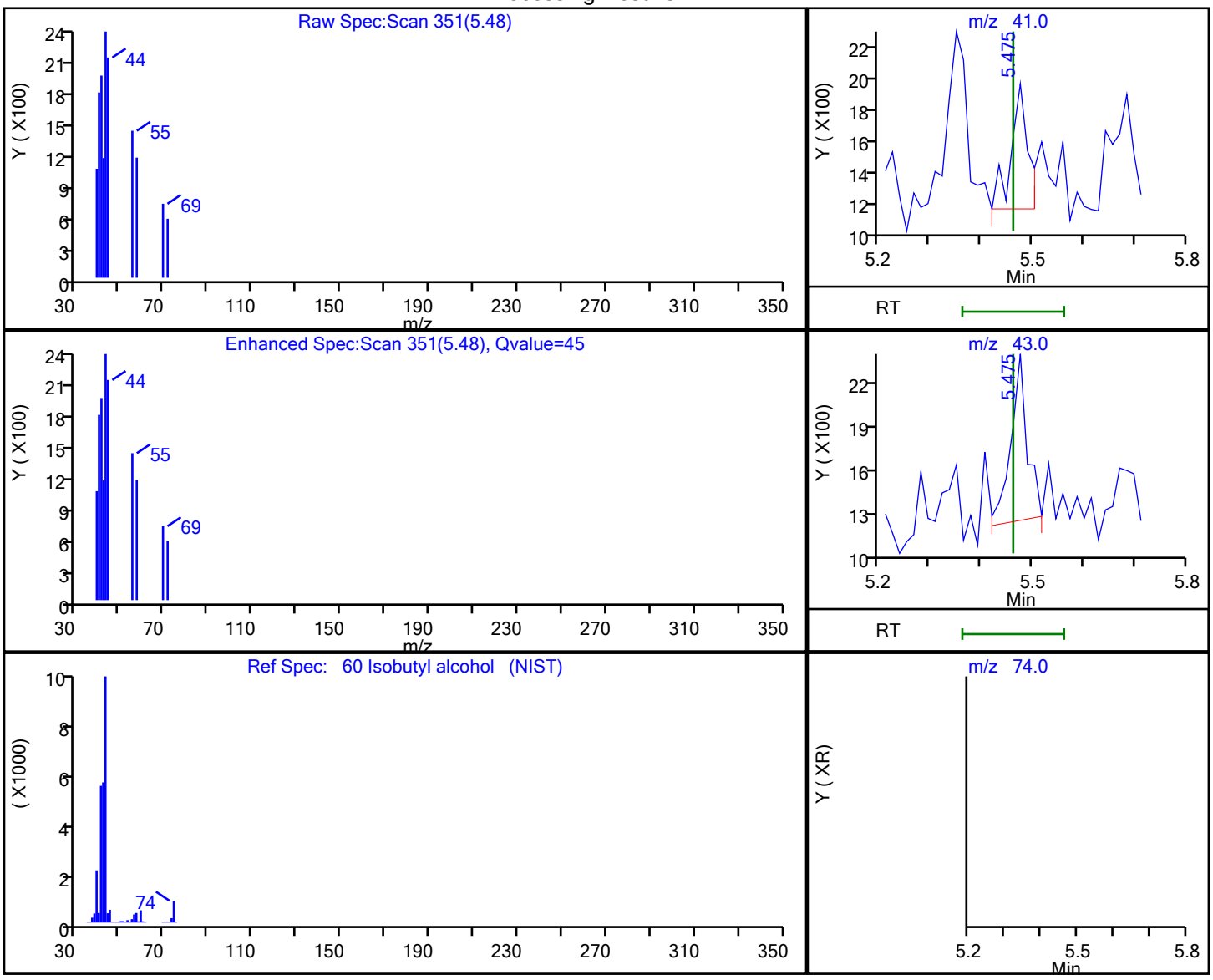
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2723.D				
Injection Date:	04-Jun-2021 14:11:30	Instrument ID:	VMS_MS1		
Lims ID:	STD010				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	12	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

60 Isobutyl alcohol, CAS: 78-83-1

Processing Results



RT	Mass	Response	Amount
5.48	41.00	1765	19.674036
5.48	43.00	2424	
5.46	74.00	0	

Reviewer: seifertj, 05-Jun-2021 09:06:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Jun-2021 14:33:30 ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Misc. Info.: 280-0102067-016
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:28 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 14:53:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.839	-0.001	97	729901	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	153463	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	98	242456	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	197983	50.0	51.2	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	263804	50.0	50.9	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	666453	50.0	50.1	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	267729	50.0	50.9	
11 Dichlorodifluoromethane	85	1.690	1.690	0.000	91	4813	2.00	1.55	a
12 Chloromethane	50	1.900	1.900	0.000	91	6207	2.00	1.96	
13 Vinyl chloride	62	1.998	1.998	0.000	95	4864	2.00	1.90	
15 Bromomethane	94	2.347	2.347	0.000	86	4150	2.00	2.11	
16 Chloroethane	64	2.459	2.459	0.000	92	3886	2.00	1.97	a
17 Dichlorofluoromethane	67	2.696	2.696	0.000	95	12181	2.00	1.84	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	96	7431	2.00	1.77	
20 Ethyl ether	59	3.003	3.003	0.000	84	3849	2.00	1.87	
22 Acrolein	56	3.143	3.143	0.000	93	13172	19.8	26.8	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	96	4703	2.00	2.23	
24 112TCTFE	151	3.241	3.255	-0.014	61	2294	2.00	1.65	
25 Acetone	43	3.283	3.269	0.014	99	10353	8.00	6.93	
26 Iodomethane	142	3.380	3.380	0.000	92	4158	2.00	1.82	
28 Carbon disulfide	76	3.450	3.450	0.000	99	12846	2.00	1.81	
30 Methyl acetate	43	3.576	3.576	0.000	70	7238	4.00	3.63	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	9065	2.00	2.14	
32 Methylene Chloride	84	3.716	3.716	0.000	96	6497	2.00	1.90	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	91	4555	20.0	17.9	
34 Acrylonitrile	53	3.911	3.911	0.000	100	19333	20.0	19.2	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	79	13534	2.00	1.82	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	92	5079	2.00	1.98	
37 Hexane	57	4.204	4.204	0.000	93	5710	2.00	2.20	
39 Vinyl acetate	43	4.344	4.344	0.000	99	21822	4.00	3.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	70	10140	2.00	2.05	
46 2-Butanone (MEK)	43	4.833	4.819	0.014	93	11915	8.00	7.23	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	73	8991	2.00	2.05	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	88	5653	2.00	2.01	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	92	8253	48.0	48.4	
54 Tetrahydrofuran	42	5.056	5.056	0.000	54	7039	4.00	3.07	
53 Chlorobromomethane	128	5.056	5.056	0.000	89	2285	2.00	2.25	
55 Chloroform	83	5.126	5.126	0.000	95	10862	2.00	2.12	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	88	9110	2.00	2.02	
57 Cyclohexane	56	5.350	5.350	0.000	89	10432	2.00	1.73	
58 1,1-Dichloropropene	75	5.419	5.419	0.000	85	6559	2.00	1.80	
59 Carbon tetrachloride	117	5.419	5.419	0.000	82	5514	2.00	1.66	
60 Isobutyl alcohol	41	5.475	5.461	0.014	49	5445	50.0	59.8	
63 Benzene	78	5.587	5.587	0.000	93	19222	2.00	1.90	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	96	8489	2.00	1.99	
66 n-Heptane	43	5.824	5.824	0.000	36	7610	2.00	2.18	
68 Trichloroethene	95	6.146	6.146	0.000	89	5806	2.00	2.04	
69 2-Pentanone	43	6.285	6.271	0.014	97	11280	6.40	5.75	
70 Methylcyclohexane	55	6.355	6.355	0.000	90	7839	2.00	1.80	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	93	5473	2.00	1.99	
73 1,4-Dioxane	88	6.425	6.425	0.000	7	580	40.0	40.0	Ma
74 Dibromomethane	93	6.453	6.453	0.000	56	3222	2.00	1.87	
75 Dichlorobromomethane	83	6.609	6.609	0.000	87	7304	2.00	1.94	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	80	2713	2.00	1.62	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	87	7337	2.00	1.77	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	97	15752	8.00	6.93	
82 Toluene	91	7.295	7.295	0.000	97	19016	2.00	1.89	
84 trans-1,3-Dichloropropene	75	7.496	7.488	0.008	91	7715	2.00	1.92	
85 Ethyl methacrylate	69	7.517	7.517	0.000	88	5320	2.00	1.74	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	89	4614	2.00	1.97	
89 Tetrachloroethene	164	7.760	7.767	-0.007	82	2450	2.00	1.54	
90 1,3-Dichloropropane	76	7.832	7.824	0.008	89	7473	2.00	1.92	
91 2-Hexanone	43	7.853	7.853	0.000	96	10548	8.00	7.37	
95 Chlorodibromomethane	129	8.032	8.032	0.000	83	4334	2.00	1.89	
96 Ethylene Dibromide	107	8.146	8.146	0.000	94	4399	2.00	1.99	
98 1-Chlorohexane	91	8.568	8.568	0.000	34	7378	1.60	1.59	
99 Chlorobenzene	112	8.597	8.604	-0.007	96	11939	2.00	1.91	
100 1,1,1,2-Tetrachloroethane	131	8.682	8.682	0.000	45	4140	2.00	1.87	
101 Ethylbenzene	106	8.682	8.682	0.000	99	6210	2.00	1.87	
102 m-Xylene & p-Xylene	106	8.811	8.804	0.007	97	8825	2.00	2.10	
103 o-Xylene	106	9.176	9.176	0.000	95	8136	2.00	2.08	
104 Styrene	104	9.197	9.197	0.000	90	13818	2.00	1.93	
106 Bromoform	173	9.383	9.383	0.000	82	2157	2.00	2.04	a
107 Isopropylbenzene	105	9.526	9.526	0.000	96	20761	2.00	1.96	
109 Cyclohexanone	55	9.619	9.626	-0.007	94	10716	60.0	62.3	
110 1,1,2,2-Tetrachloroethane	83	9.819	9.827	-0.008	90	7007	2.00	1.99	
111 Bromobenzene	156	9.855	9.855	0.000	94	4764	2.00	1.98	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	40	2163	2.00	2.04	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	80	1618	2.00	1.66	
114 N-Propylbenzene	120	9.941	9.941	0.000	98	5942	2.00	2.02	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	4501	2.00	1.87	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	95	18346	2.00	1.94	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.148	10.155	-0.007	98	4568	2.00	1.72	
118 tert-Butylbenzene	119	10.427	10.427	0.000	91	14882	2.00	1.92	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	98	18160	2.00	1.87	
120 sec-Butylbenzene	134	10.649	10.649	0.000	95	4259	2.00	2.23	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	92	9644	2.00	2.05	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	95	17787	2.00	1.85	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	9442	2.00	1.91	
125 n-Butylbenzene	91	11.207	11.207	0.000	97	18517	2.00	1.99	
127 1,2-Dichlorobenzene	146	11.228	11.235	-0.007	85	8846	2.00	2.00	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	61	778	2.00	1.90	Ma
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	86	5652	2.00	1.95	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	77	1453	2.00	2.11	a
132 Naphthalene	128	13.123	13.123	0.000	97	15708	2.00	1.83	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	87	4676	2.00	1.77	
S 149 1,2-Dichloroethene, Total (URS)	96				0		4.00	4.00	
S 150 1,2-Dichloroethene, Total	1				0		4.00	4.00	
S 151 Trihalomethanes, Total	1				0		8.00	7.99	
S 152 Total BTEX	1				0			9.84	
S 153 Xylenes, Total (URS)	1				0		4.00	4.18	
S 155 Xylenes, Total	106				0		4.00	4.18	
S 156 1,3-Dichloropropene, Total	1				0		4.00	3.68	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Gas A_00089	Amount Added:	0.40	Units: uL	
MV-MegaMainA_00050	Amount Added:	1.00	Units: uL	
mv-IS_SS_00018	Amount Added:	5.00	Units: uL	Run Reagent

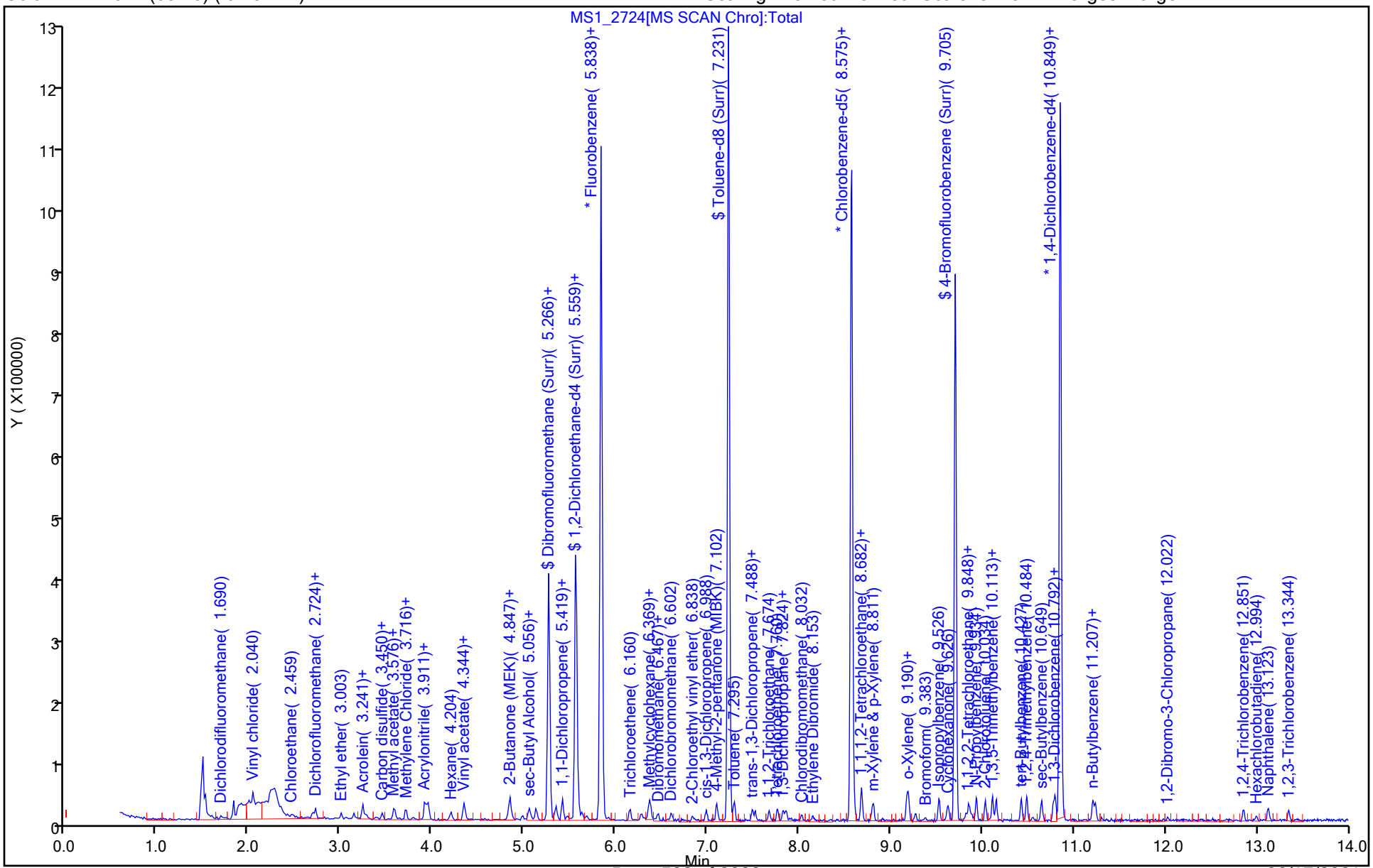
Report Date: 05-Jun-2021 11:14:28 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D

Injection Date:	04-Jun-2021 14:33:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD020			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

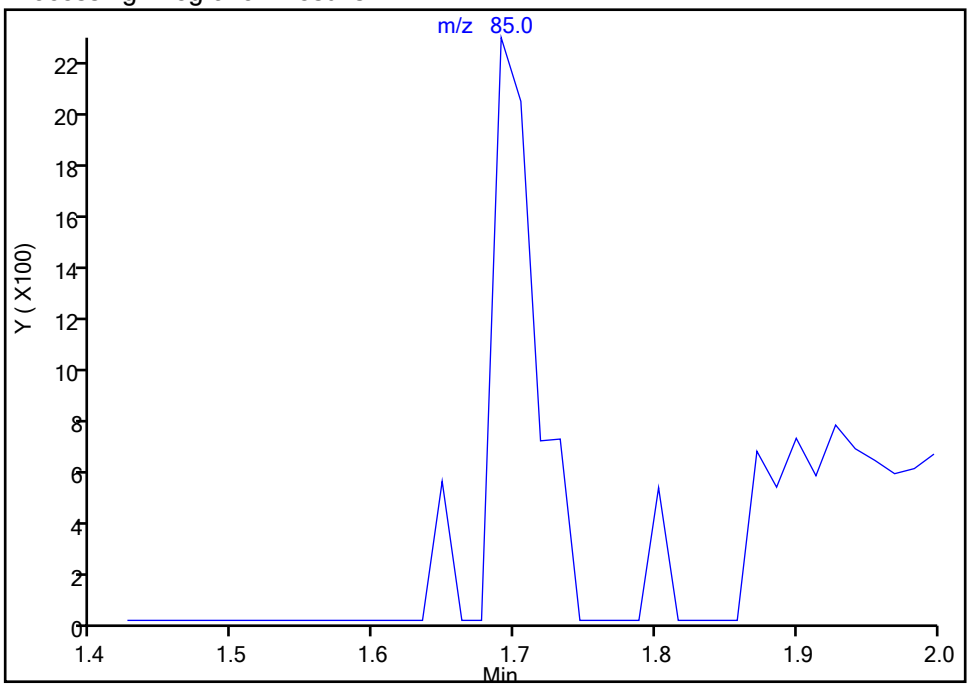
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Injection Date: 04-Jun-2021 14:33:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

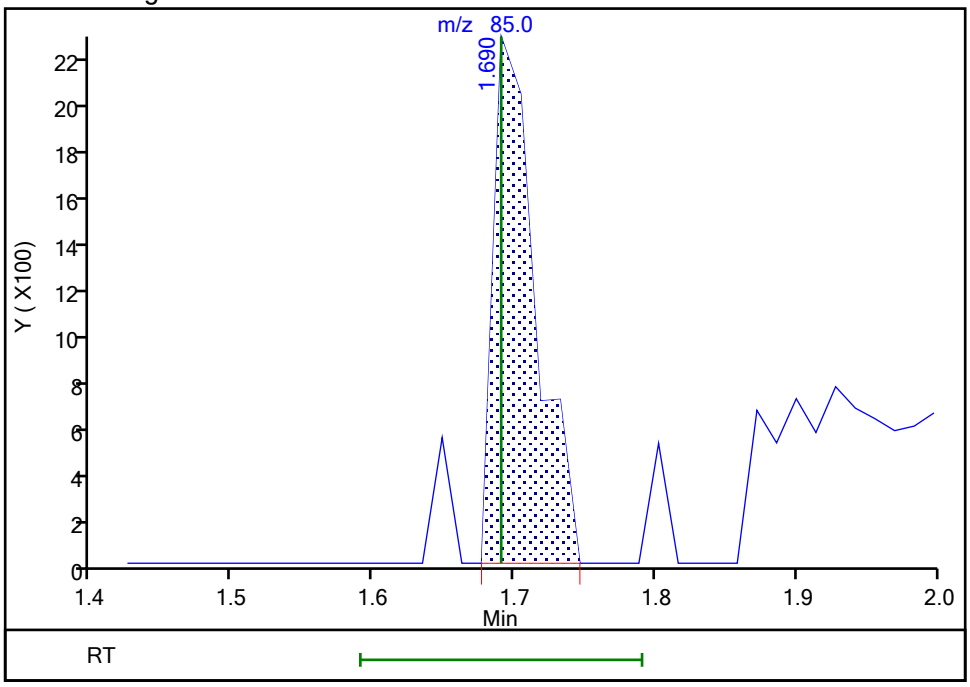
Not Detected
Expected RT: 1.69

Processing Integration Results



Manual Integration Results

RT: 1.69
Area: 4813
Amount: 1.548599
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:09:40
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

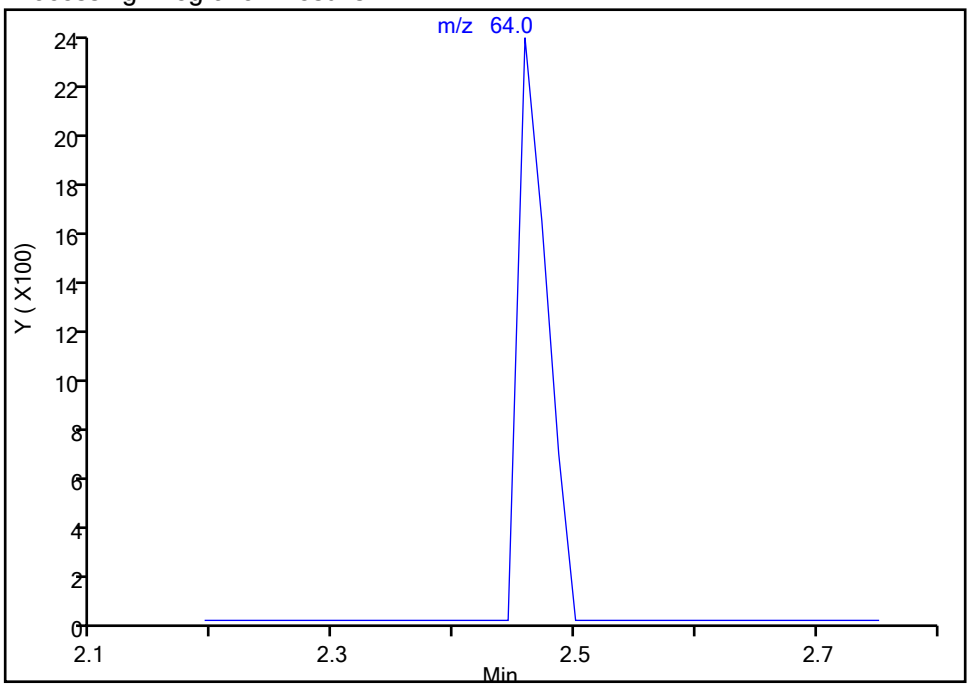
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Injection Date: 04-Jun-2021 14:33:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

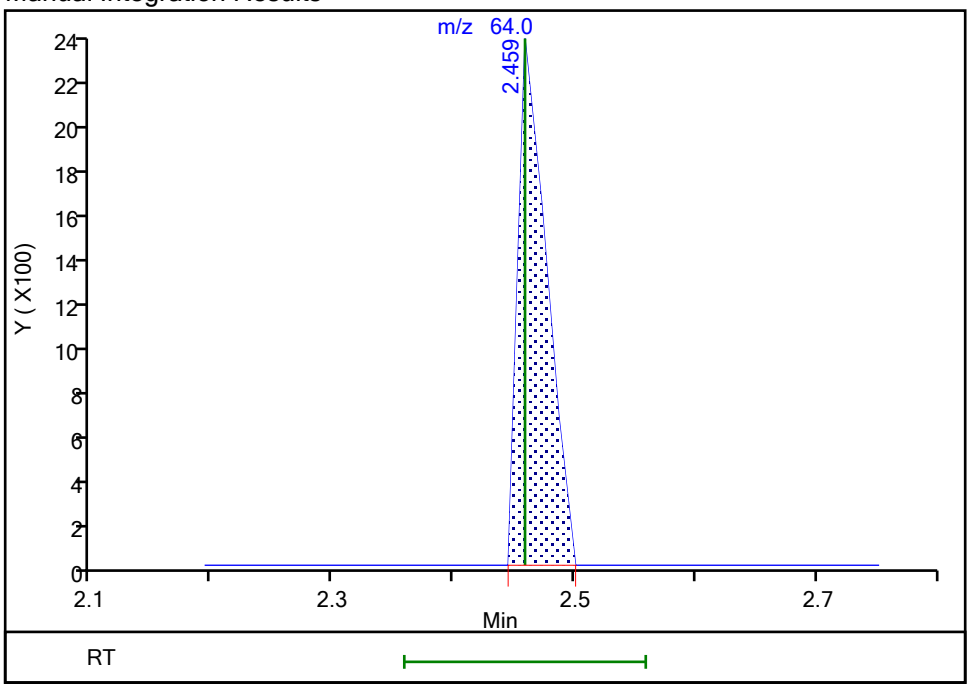
Not Detected
Expected RT: 2.46

Processing Integration Results



Manual Integration Results

RT: 2.46
Area: 3886
Amount: 1.970059
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:09:50
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

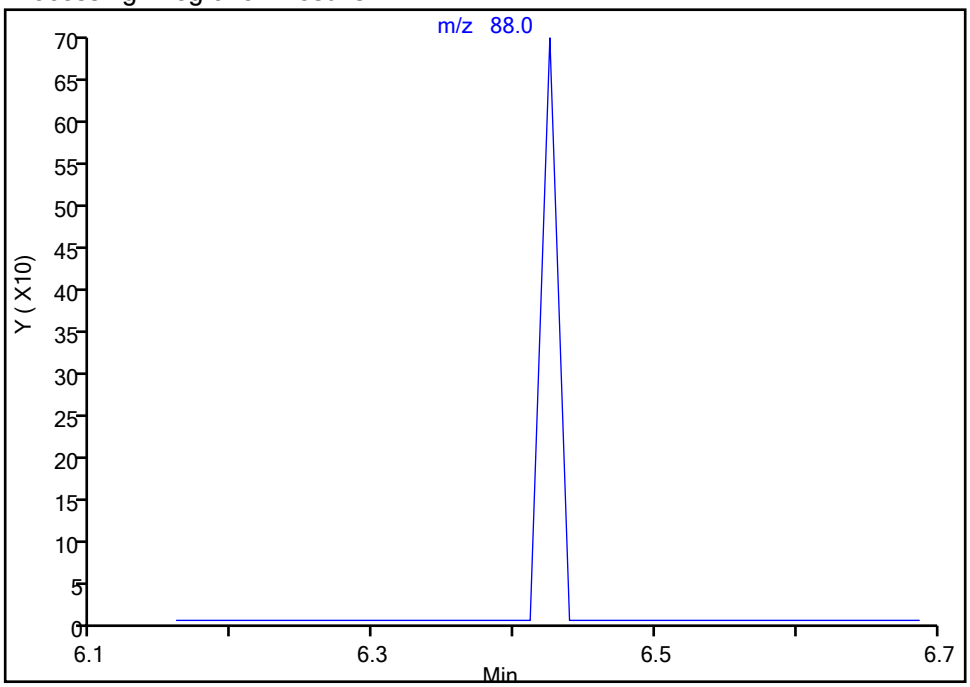
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Injection Date: 04-Jun-2021 14:33:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

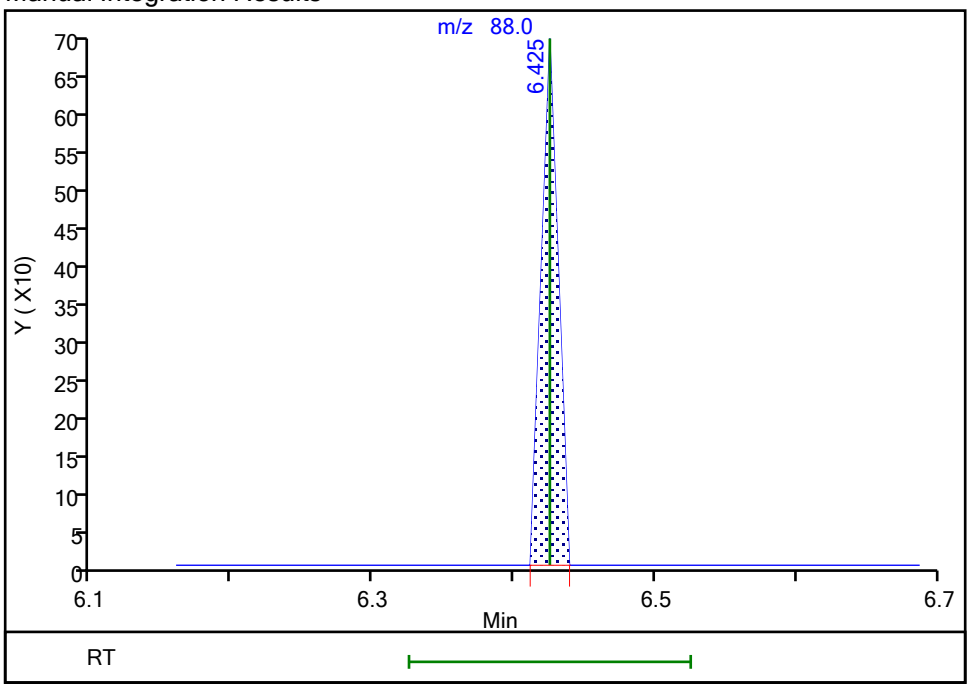
Not Detected
Expected RT: 6.43

Processing Integration Results



Manual Integration Results

RT: 6.43
Area: 580
Amount: 40.036575
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:10:21
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

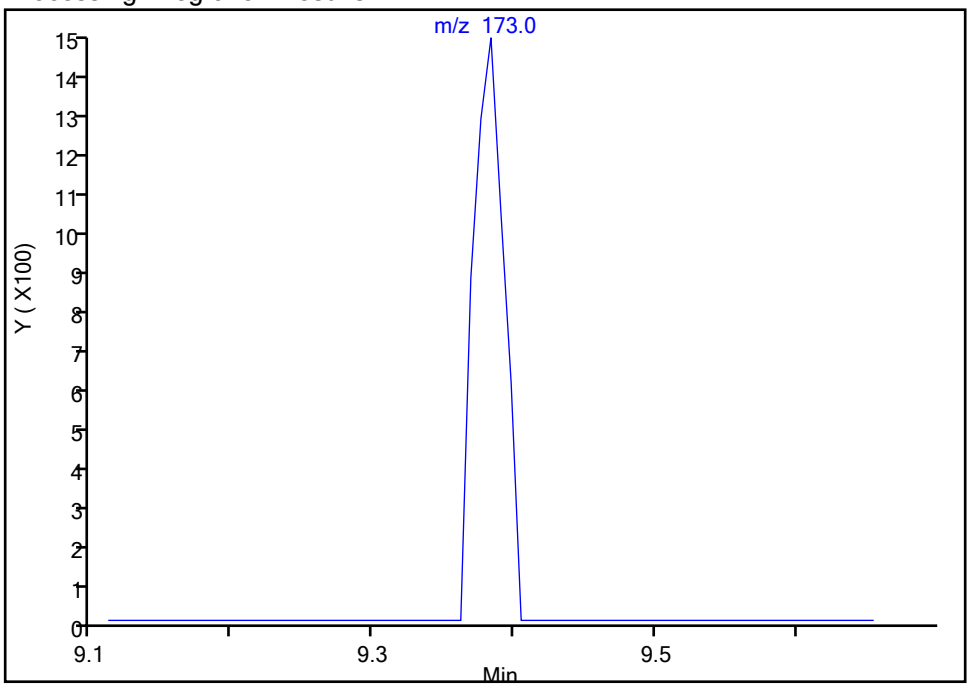
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Injection Date: 04-Jun-2021 14:33:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

106 Bromoform, CAS: 75-25-2

Signal: 1

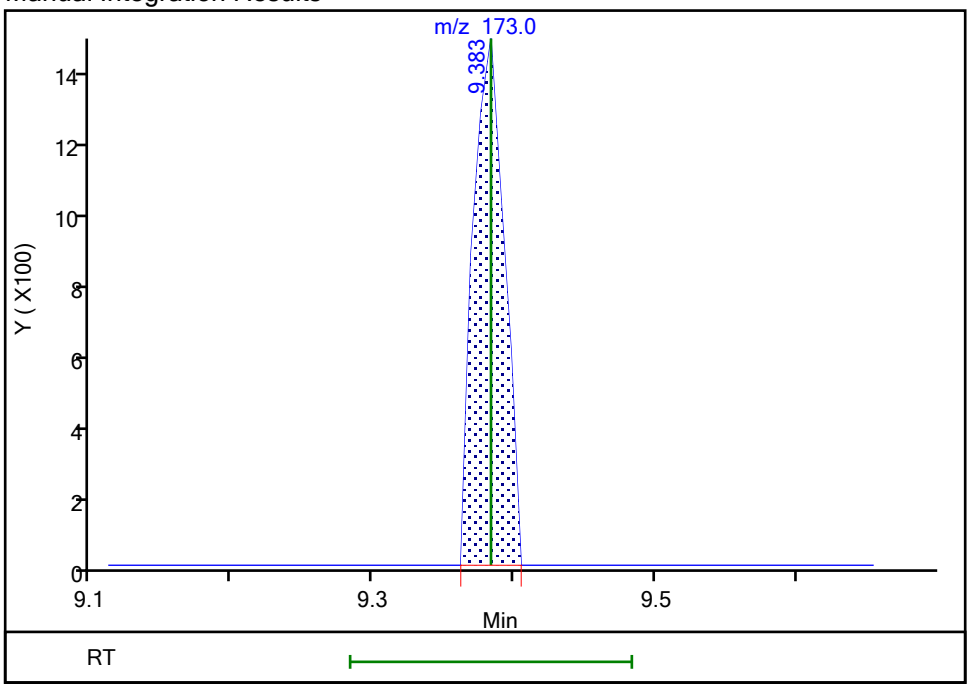
Not Detected
Expected RT: 9.38

Processing Integration Results



Manual Integration Results

RT: 9.38
Area: 2157
Amount: 2.040934
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:10:34
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

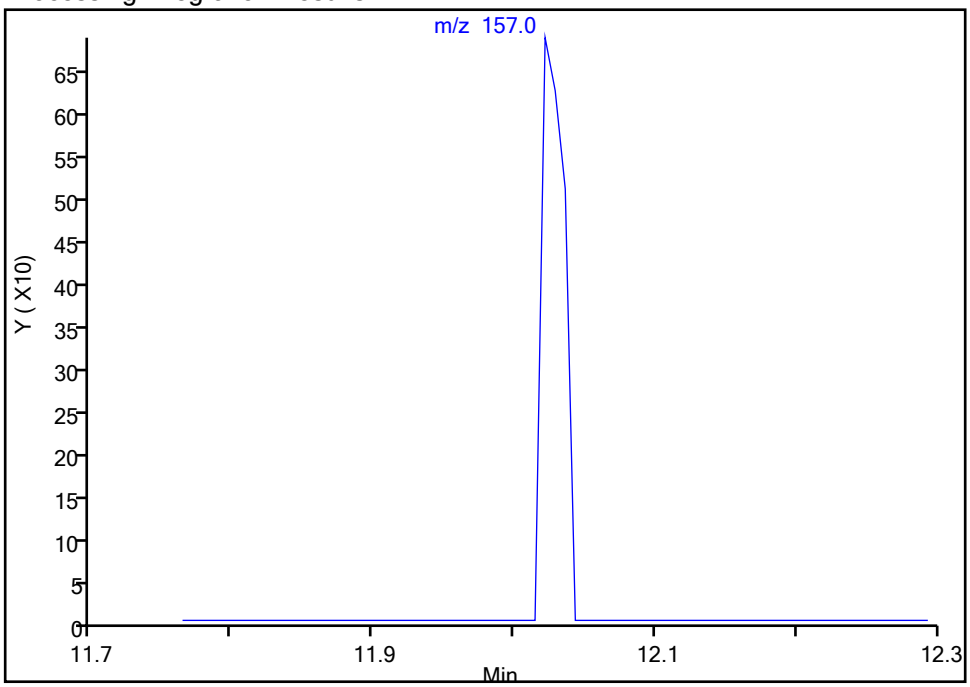
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Injection Date: 04-Jun-2021 14:33:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

128 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

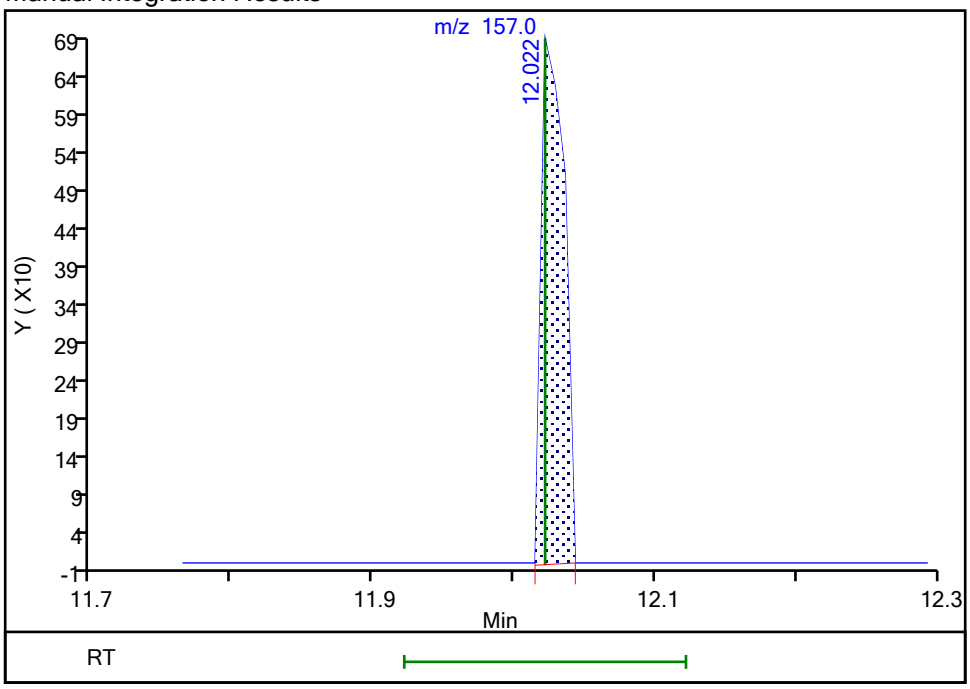
Not Detected
Expected RT: 12.02

Processing Integration Results



Manual Integration Results

RT: 12.02
Area: 778
Amount: 1.895027
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:09:19
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

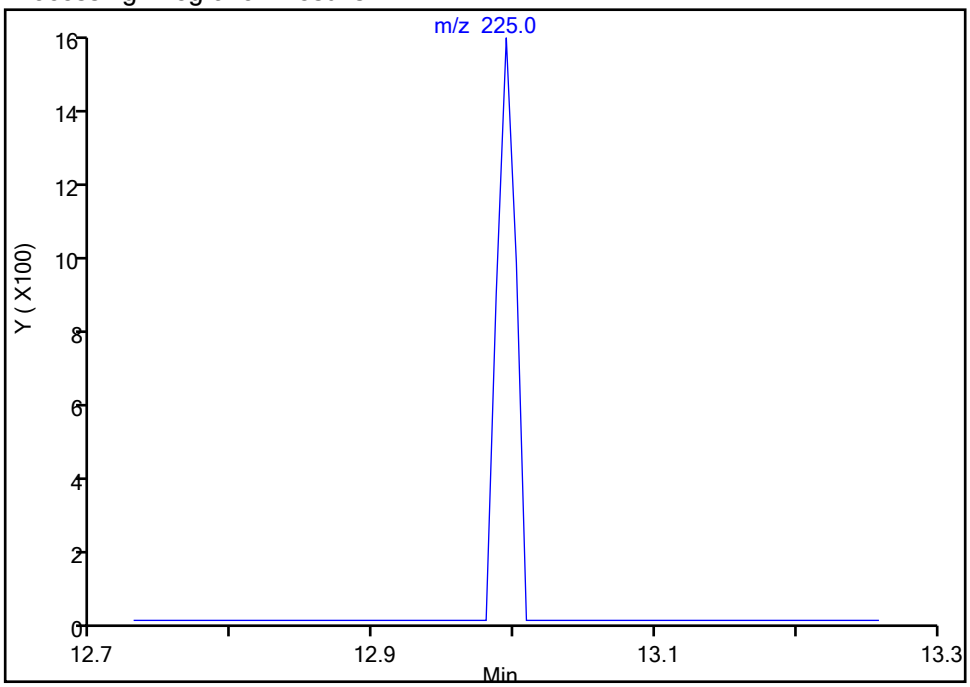
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2724.D
Injection Date: 04-Jun-2021 14:33:30 Instrument ID: VMS_MS1
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

131 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

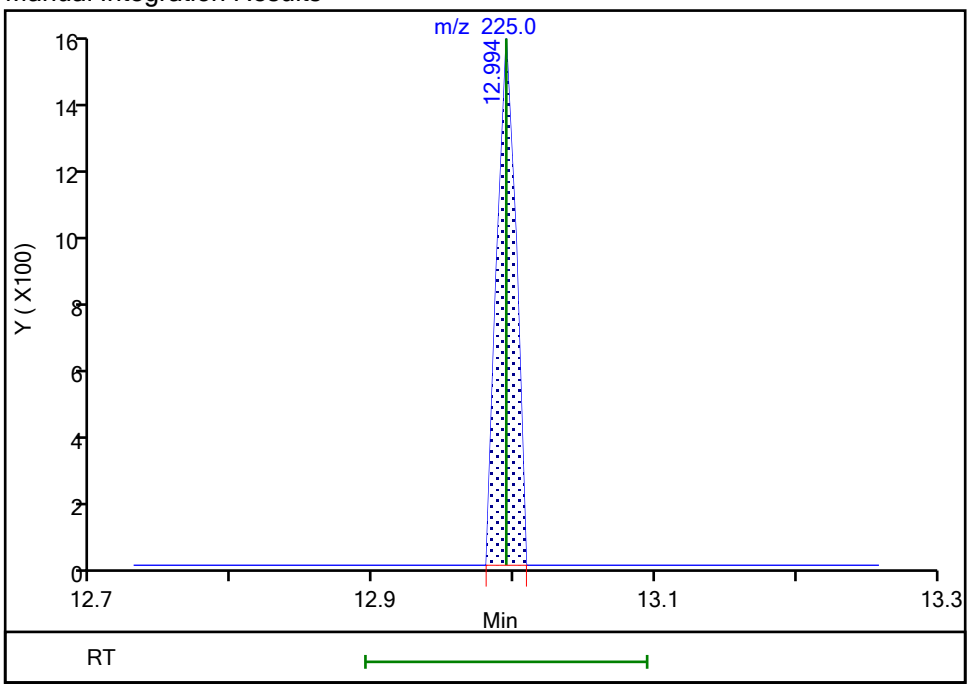
Not Detected
Expected RT: 12.99

Processing Integration Results



Manual Integration Results

RT: 12.99
Area: 1453
Amount: 2.113842
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 09:09:05
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2726.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Jun-2021 15:16:30 ALS Bottle#: 15 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Misc. Info.: 280-0102067-018
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:31 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 05-Jun-2021 08:11:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	746498	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	158818	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	249122	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199938	50.0	50.5	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	268659	50.0	50.7	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	678886	50.0	49.3	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	272092	50.0	50.3	
11 Dichlorodifluoromethane	85	1.691	1.690	0.001	98	40935	10.0	12.3	
12 Chloromethane	50	1.914	1.900	0.014	99	36390	10.0	11.2	
13 Vinyl chloride	62	1.998	1.998	0.000	98	28798	10.0	11.0	
15 Bromomethane	94	2.347	2.347	0.000	95	22486	10.0	11.2	
16 Chloroethane	64	2.459	2.459	0.000	97	22577	10.0	11.2	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	60416	10.0	11.5	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	48588	10.0	11.3	
20 Ethyl ether	59	3.003	3.003	0.000	93	21225	10.0	10.1	
22 Acrolein	56	3.143	3.143	0.000	98	44500	98.8	104.3	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	23478	10.0	10.9	
24 112TCTFE	151	3.241	3.255	-0.014	95	15716	10.0	11.0	
25 Acetone	43	3.269	3.269	0.000	99	36311	40.0	37.9	
26 Iodomethane	142	3.381	3.380	0.001	99	30290	10.0	9.75	
28 Carbon disulfide	76	3.450	3.450	0.000	100	80765	10.0	11.1	
30 Methyl acetate	43	3.576	3.576	0.000	97	36989	20.0	18.1	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	88	47872	10.0	11.0	
32 Methylene Chloride	84	3.702	3.716	-0.014	97	30580	10.0	11.0	
33 2-Methyl-2-propanol	59	3.786	3.785	0.001	98	26461	100.0	101.7	
34 Acrylonitrile	53	3.911	3.911	0.000	97	103754	100.0	100.5	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	76215	10.0	10.0	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	26723	10.0	10.2	
37 Hexane	57	4.205	4.204	0.001	94	34832	10.0	10.8	
39 Vinyl acetate	43	4.344	4.344	0.000	98	124457	20.0	21.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	53370	10.0	10.5	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	56212	40.0	42.3	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	47969	10.0	10.7	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	29549	10.0	10.3	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	47182	240.0	228.6	
54 Tetrahydrofuran	42	5.057	5.056	0.001	86	20411	20.0	19.6	
53 Chlorobromomethane	128	5.057	5.056	0.001	96	13324	10.0	10.6	
55 Chloroform	83	5.126	5.126	0.000	98	54433	10.0	10.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	95	46977	10.0	10.2	
57 Cyclohexane	56	5.350	5.350	0.000	94	52233	10.0	10.8	
58 1,1-Dichloropropene	75	5.420	5.419	0.001	90	40352	10.0	10.8	
59 Carbon tetrachloride	117	5.420	5.419	0.001	85	37517	10.0	11.0	
60 Isobutyl alcohol	41	5.462	5.461	0.001	94	21152	250.0	227.3	
63 Benzene	78	5.587	5.587	0.000	97	107690	10.0	10.4	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	96	45534	10.0	10.5	
66 n-Heptane	43	5.825	5.824	0.001	95	34155	10.0	10.9	
68 Trichloroethene	95	6.146	6.146	0.000	94	27685	10.0	9.40	
69 2-Pentanone	43	6.272	6.271	0.001	98	60410	32.0	30.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	37693	10.0	10.1	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	30490	10.0	10.9	
73 1,4-Dioxane	88	6.425	6.425	0.000	93	5826	200.0	200.2	
74 Dibromomethane	93	6.453	6.453	0.000	88	18955	10.0	10.8	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	38423	10.0	9.97	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	92	17861	10.0	10.4	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	44781	10.0	10.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	97	90316	40.0	38.8	
82 Toluene	91	7.296	7.295	0.001	97	106895	10.0	10.4	
84 trans-1,3-Dichloropropene	75	7.489	7.488	0.001	94	42952	10.0	10.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	33204	10.0	10.5	
87 1,1,2-Trichloroethane	97	7.675	7.674	0.000	95	22601	10.0	10.3	
89 Tetrachloroethene	164	7.767	7.767	0.000	91	17549	10.0	10.7	
90 1,3-Dichloropropane	76	7.825	7.824	0.001	90	40733	10.0	10.1	
91 2-Hexanone	43	7.853	7.853	0.000	99	64691	40.0	39.2	
95 Chlorodibromomethane	129	8.025	8.032	-0.007	88	24851	10.0	10.5	
96 Ethylene Dibromide	107	8.146	8.146	0.000	95	22403	10.0	9.80	
98 1-Chlorohexane	91	8.561	8.568	-0.007	87	29616	8.00	8.27	
99 Chlorobenzene	112	8.604	8.604	0.000	93	66381	10.0	10.2	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.682	0.001	90	24212	10.0	10.6	
101 Ethylbenzene	106	8.683	8.682	0.001	99	36634	10.0	10.6	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	44784	10.0	10.3	
103 o-Xylene	106	9.176	9.176	0.000	99	41175	10.0	10.2	
104 Styrene	104	9.198	9.197	0.001	94	77181	10.0	10.4	
106 Bromoform	173	9.383	9.383	0.000	90	14898	10.0	10.1	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	117182	10.0	10.8	
109 Cyclohexanone	55	9.627	9.626	0.001	94	46603	300.0	261.9	
110 1,1,2,2-Tetrachloroethane	83	9.820	9.827	-0.007	94	31093	10.0	9.96	
111 Bromobenzene	156	9.855	9.855	0.000	96	25440	10.0	10.3	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	74	10802	10.0	9.93	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	85	8203	10.0	9.51	
114 N-Propylbenzene	120	9.934	9.941	-0.007	99	32197	10.0	10.6	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	26371	10.0	10.7	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	93	100834	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.155	0.001	99	27546	10.0	10.1	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	83762	10.0	10.5	
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.001	99	104041	10.0	10.4	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	23738	10.0	10.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	92	50391	10.0	10.4	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	97	102178	10.0	10.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	95	50543	10.0	9.96	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	99478	10.0	10.4	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	89	47494	10.0	10.4	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	73	6381	10.0	10.5	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	29259	10.0	9.83	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	88	10553	10.0	10.7	
132 Naphthalene	128	13.123	13.123	0.000	98	93344	10.0	10.6	
134 1,2,3-Trichlorobenzene	180	13.345	13.344	0.001	93	27863	10.0	10.3	
S 149 1,2-Dichloroethene, Total (URS)	96				0		20.0	20.5	
S 150 1,2-Dichloroethene, Total	1				0		20.0	20.5	
S 151 Trihalomethanes, Total	1				0		40.0	40.9	
S 152 Total BTEX	1				0			51.9	
S 153 Xylenes, Total (URS)	1				0		20.0	20.5	
S 155 Xylenes, Total	106				0		20.0	20.5	
S 156 1,3-Dichloropropene, Total	1				0		20.0	20.9	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089	Amount Added:	2.00	Units: uL	
MV-MegaMainA_00050	Amount Added:	5.00	Units: uL	
mv-IS_SS_00018	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 05-Jun-2021 11:14:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2726.D

Injection Date: 04-Jun-2021 15:16:30 Instrument ID: VMS_MS1 Operator ID: SEIFERTJ

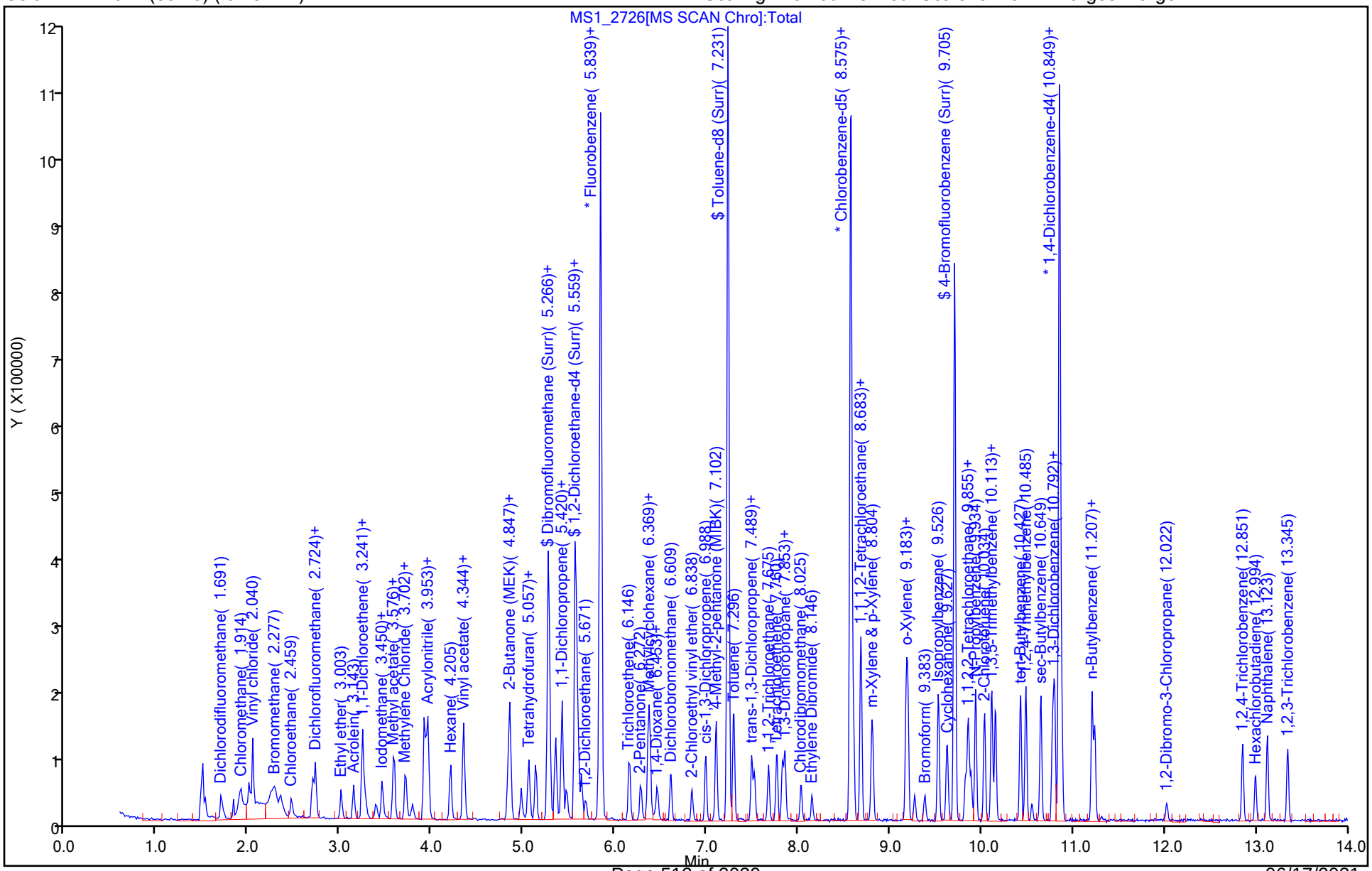
Lims ID: STD10 Worklist Smp#: 18

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 15

Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2727.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 04-Jun-2021 15:37:30 ALS Bottle#: 16 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 280-0102067-019
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:34 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 05-Jun-2021 08:09:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.838	0.000	97	769988	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	161871	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	97	257514	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199154	50.0	48.8	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	266131	50.0	48.7	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	704331	50.0	50.2	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	273340	50.0	48.9	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	176418	50.0	51.0	
12 Chloromethane	50	1.900	1.900	0.000	99	166165	50.0	49.7	
13 Vinyl chloride	62	1.998	1.998	0.000	100	141801	50.0	52.5	
15 Bromomethane	94	2.347	2.347	0.000	93	105022	50.0	50.5	
16 Chloroethane	64	2.459	2.459	0.000	99	108932	50.0	52.3	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	265332	50.0	51.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	231476	50.0	52.2	
20 Ethyl ether	59	3.003	3.003	0.000	93	111308	50.0	51.3	
22 Acrolein	56	3.143	3.143	0.000	98	210093	493.8	501.6	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	103963	50.0	46.8	
24 112TCTFE	151	3.255	3.255	0.000	94	74141	50.0	50.4	
25 Acetone	43	3.269	3.269	0.000	98	170768	200.0	193.3	
26 Iodomethane	142	3.380	3.380	0.000	99	168827	50.0	50.4	
28 Carbon disulfide	76	3.450	3.450	0.000	100	367379	50.0	49.1	
30 Methyl acetate	43	3.562	3.562	0.000	98	200777	100.0	95.4	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	218412	50.0	48.8	
32 Methylene Chloride	84	3.716	3.716	0.000	97	135869	50.0	49.6	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	98	133797	500.0	498.4	
34 Acrylonitrile	53	3.911	3.911	0.000	97	522237	500.0	490.6	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	402379	50.0	51.3	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	122215	50.0	45.2	
37 Hexane	57	4.204	4.204	0.000	94	159716	50.0	46.9	
39 Vinyl acetate	43	4.344	4.344	0.000	98	648475	100.0	107.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	258402	50.0	49.5	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	252081	200.0	192.3	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	90	216419	50.0	46.9	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	140988	50.0	47.6	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	250296	1200.0	1137.9	
54 Tetrahydrofuran	42	5.056	5.056	0.000	87	81383	100.0	92.7	
53 Chlorobromomethane	128	5.056	5.056	0.000	95	65722	50.0	49.0	
55 Chloroform	83	5.126	5.126	0.000	98	256700	50.0	47.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	97	220241	50.0	46.2	
57 Cyclohexane	56	5.350	5.350	0.000	94	224931	50.0	47.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	192450	50.0	50.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	85	177897	50.0	50.7	
60 Isobutyl alcohol	41	5.461	5.461	0.000	94	107180	1250.0	1116.6	
63 Benzene	78	5.587	5.587	0.000	99	533232	50.0	50.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	225397	50.0	50.2	
66 n-Heptane	43	5.825	5.825	0.000	93	151151	50.0	48.2	
68 Trichloroethene	95	6.146	6.146	0.000	95	140987	50.0	47.0	
69 2-Pentanone	43	6.271	6.271	0.000	98	324899	160.0	157.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	177721	50.0	47.7	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	146601	50.0	50.6	
73 1,4-Dioxane	88	6.425	6.425	0.000	98	31314	1000.0	950.9	
74 Dibromomethane	93	6.453	6.453	0.000	88	92021	50.0	50.7	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	188758	50.0	47.5	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	97660	50.0	55.1	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	231384	50.0	52.9	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	490067	200.0	204.3	
82 Toluene	91	7.295	7.295	0.000	97	522295	50.0	49.1	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	98	226226	50.0	53.2	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	159888	50.0	49.6	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	96	107076	50.0	48.0	
89 Tetrachloroethene	164	7.767	7.767	0.000	87	85583	50.0	51.1	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	210737	50.0	51.4	
91 2-Hexanone	43	7.853	7.853	0.000	97	331503	200.0	193.6	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	122044	50.0	50.4	
96 Ethylene Dibromide	107	8.146	8.146	0.000	99	116835	50.0	50.2	
98 1-Chlorohexane	91	8.561	8.561	0.000	93	134135	40.0	39.3	
99 Chlorobenzene	112	8.604	8.604	0.000	91	331478	50.0	50.2	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	120755	50.0	51.7	
101 Ethylbenzene	106	8.683	8.683	0.000	100	177275	50.0	50.5	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	217333	50.0	49.1	
103 o-Xylene	106	9.176	9.176	0.000	99	214199	50.0	51.8	
104 Styrene	104	9.197	9.197	0.000	94	379177	50.0	50.2	
106 Bromoform	173	9.383	9.383	0.000	89	76209	50.0	48.0	
107 Isopropylbenzene	105	9.526	9.526	0.000	97	560279	50.0	49.7	
109 Cyclohexanone	55	9.626	9.626	0.000	95	226441	1500.0	1248.6	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	152322	50.0	48.8	
111 Bromobenzene	156	9.855	9.855	0.000	98	130861	50.0	51.2	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	78	56519	50.0	50.3	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	90	43336	50.0	49.9	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	153038	50.0	48.9	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	131982	50.0	51.6	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	487963	50.0	48.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.155	10.155	0.000	100	139315	50.0	49.5	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	397245	50.0	48.2	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	497917	50.0	48.3	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	115108	50.0	48.3	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	251268	50.0	50.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	497776	50.0	48.7	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	89	256844	50.0	49.0	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	472146	50.0	47.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	92	240782	50.0	51.2	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	71	31563	50.0	47.7	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	91	152525	50.0	49.6	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	50864	50.0	47.5	
132 Naphthalene	128	13.123	13.123	0.000	98	456812	50.0	50.0	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	93	142446	50.0	50.7	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	92.9	
S 150 1,2-Dichloroethene, Total	1				0		100.0	92.9	
S 151 Trihalomethanes, Total	1				0		200.0	193.4	
S 153 Xylenes, Total (URS)	1				0		100.0	100.9	
S 155 Xylenes, Total	106				0		100.0	100.9	
S 156 1,3-Dichloropropene, Total	1				0		100.0	106.1	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089	Amount Added: 10.00	Units: uL	
MV-MegaMainA_00050	Amount Added: 25.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 05-Jun-2021 11:14:34 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2727.D

Injection Date: 04-Jun-2021 15:37:30 Instrument ID: VMS_MS1 Operator ID: SEIFERTJ

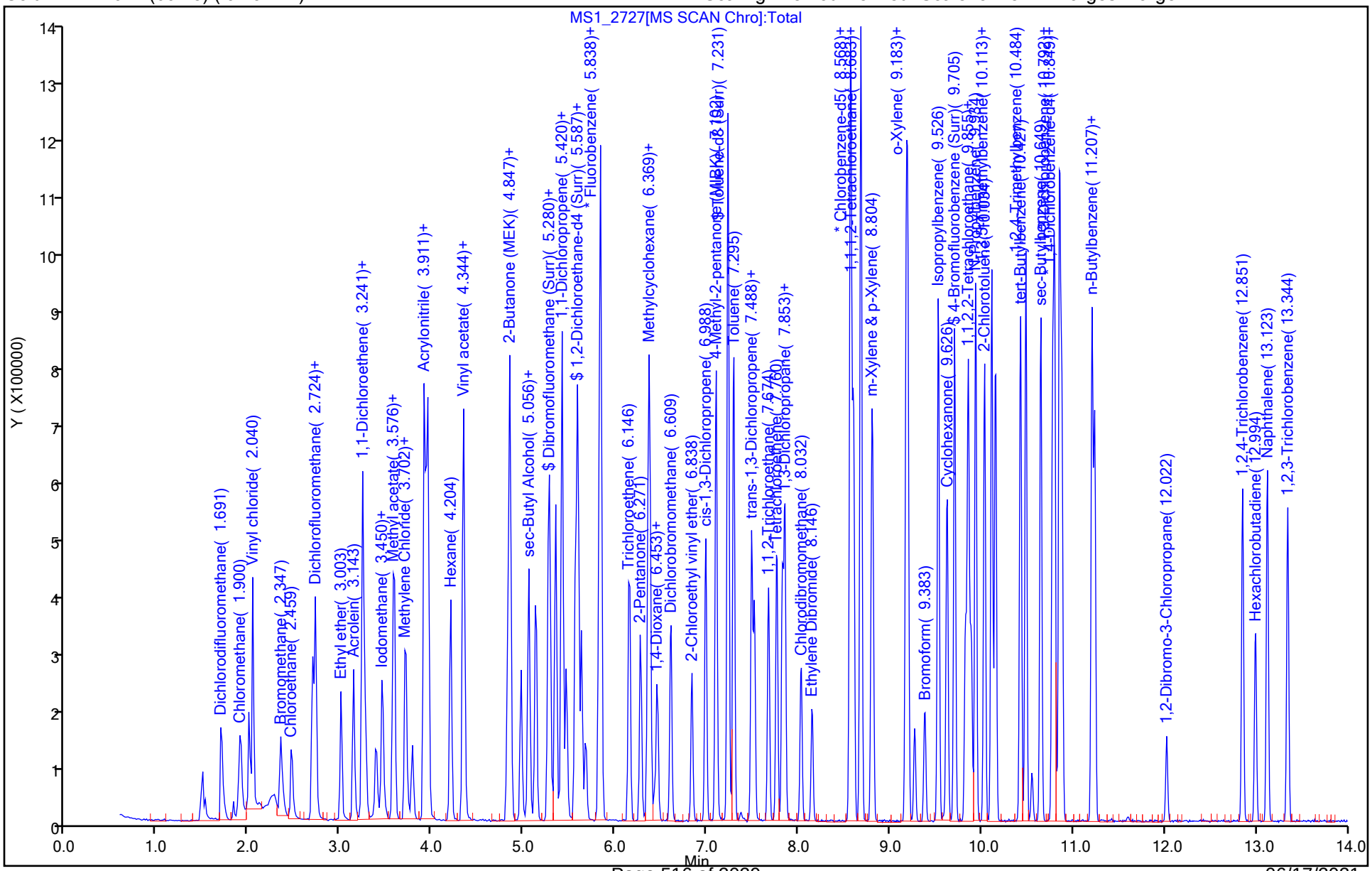
Lims ID: ICIS Worklist Smp#: 19

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 16

Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2728.D
Lims ID: STD75
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Jun-2021 15:58:30 ALS Bottle#: 17 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD75
Misc. Info.: 280-0102067-020
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:37 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 05-Jun-2021 09:12:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	778921	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	162105	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.849	0.000	97	257689	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	201488	50.0	48.8	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	100	274090	50.0	49.6	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	705195	50.0	50.2	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	280451	50.0	50.2	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	284607	75.0	81.3	
12 Chloromethane	50	1.900	1.900	0.000	99	260275	75.0	76.9	
13 Vinyl chloride	62	1.998	1.998	0.000	100	219368	75.0	80.3	
15 Bromomethane	94	2.333	2.333	0.000	94	153469	75.0	73.0	
16 Chloroethane	64	2.459	2.459	0.000	99	163644	75.0	77.7	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	406591	75.0	77.6	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	364532	75.0	81.2	
20 Ethyl ether	59	3.003	3.003	0.000	93	164162	75.0	74.8	
22 Acrolein	56	3.143	3.143	0.000	99	309474	740.6	733.6	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	159868	75.0	71.1	
24 112TCTFE	151	3.241	3.241	0.000	96	117548	75.0	79.0	
25 Acetone	43	3.269	3.269	0.000	98	291619	300.0	330.4	
26 Iodomethane	142	3.381	3.381	0.000	98	254607	75.0	74.8	
28 Carbon disulfide	76	3.450	3.450	0.000	100	561075	75.0	74.2	
30 Methyl acetate	43	3.562	3.562	0.000	98	327410	150.0	153.8	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	323120	75.0	71.3	
32 Methylene Chloride	84	3.702	3.702	0.000	97	202992	75.0	73.6	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	98	221885	750.0	817.1	
34 Acrylonitrile	53	3.911	3.911	0.000	98	824753	750.0	765.8	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	608637	75.0	76.7	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	184274	75.0	67.4	
37 Hexane	57	4.205	4.205	0.000	94	252996	75.0	73.9	
39 Vinyl acetate	43	4.330	4.330	0.000	98	941026	150.0	154.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	388591	75.0	73.6	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	402800	300.0	305.2	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	326634	75.0	69.9	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	89	211634	75.0	70.7	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	414351	1800.0	1856.2	
54 Tetrahydrofuran	42	5.057	5.057	0.000	87	137587	150.0	158.9	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	96812	75.0	71.1	
55 Chloroform	83	5.126	5.126	0.000	98	380346	75.0	69.4	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	330741	75.0	68.6	
57 Cyclohexane	56	5.350	5.350	0.000	95	357975	75.0	74.5	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	301212	75.0	77.4	
59 Carbon tetrachloride	117	5.420	5.420	0.000	84	269121	75.0	75.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	93	181153	1875.0	1865.5	
63 Benzene	78	5.587	5.587	0.000	99	798115	75.0	74.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	327847	75.0	72.1	
66 n-Heptane	43	5.825	5.825	0.000	92	235218	75.0	74.4	
68 Trichloroethene	95	6.146	6.146	0.000	94	209925	75.0	69.8	
69 2-Pentanone	43	6.272	6.272	0.000	98	523443	240.0	250.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	280807	75.0	74.8	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	221164	75.0	75.5	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	51778	1500.0	1540.4	
74 Dibromomethane	93	6.453	6.453	0.000	88	141533	75.0	77.0	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	284099	75.0	70.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	146946	75.0	82.0	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	347569	75.0	79.3	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	769063	300.0	316.9	
82 Toluene	91	7.296	7.296	0.000	97	777134	75.0	72.3	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	333444	75.0	77.6	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	254008	75.0	78.7	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	96	165901	75.0	73.6	
89 Tetrachloroethene	164	7.767	7.767	0.000	89	131552	75.0	78.4	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	95	321117	75.0	78.2	
91 2-Hexanone	43	7.853	7.853	0.000	98	536450	300.0	312.3	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	186804	75.0	77.1	
96 Ethylene Dibromide	107	8.146	8.146	0.000	97	180401	75.0	77.4	
98 1-Chlorohexane	91	8.561	8.561	0.000	93	202968	60.0	59.7	
99 Chlorobenzene	112	8.604	8.604	0.000	91	494335	75.0	74.7	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	181499	75.0	77.7	
101 Ethylbenzene	106	8.683	8.683	0.000	100	264323	75.0	75.2	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	327998	75.0	74.0	
103 o-Xylene	106	9.176	9.176	0.000	98	315393	75.0	76.2	
104 Styrene	104	9.198	9.198	0.000	93	564847	75.0	74.6	
106 Bromoform	173	9.383	9.383	0.000	90	118591	75.0	74.3	
107 Isopropylbenzene	105	9.526	9.526	0.000	97	858053	75.0	76.1	
109 Cyclohexanone	55	9.619	9.619	0.000	95	440233	2250.0	2424.0	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	232780	75.0	74.7	
111 Bromobenzene	156	9.855	9.855	0.000	97	196163	75.0	76.7	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	78	85012	75.0	75.6	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	90	68184	75.0	78.7	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	230236	75.0	73.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	197622	75.0	77.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	737280	75.0	73.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	207234	75.0	73.5	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	603080	75.0	73.1	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	756516	75.0	73.3	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	171771	75.0	71.8	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	376351	75.0	75.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	753987	75.0	73.7	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	91	387260	75.0	73.8	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	725430	75.0	73.5	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	92	361918	75.0	77.0	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	74	51111	75.0	76.8	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	237116	75.0	77.0	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	78775	75.0	73.2	
132 Naphthalene	128	13.123	13.123	0.000	98	718615	75.0	78.6	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	93	215935	75.0	76.9	
S 149 1,2-Dichloroethene, Total (URS)	96				0		150.0	138.1	
S 150 1,2-Dichloroethene, Total	1				0		150.0	138.1	
S 151 Trihalomethanes, Total	1				0		300.0	291.5	
S 152 Total BTEX	1				0			371.7	
S 153 Xylenes, Total (URS)	1				0		150.0	150.2	
S 155 Xylenes, Total	106				0		150.0	150.2	
S 156 1,3-Dichloropropene, Total	1				0		150.0	156.9	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089	Amount Added: 15.00	Units: uL	
MV-MegaMainA_00050	Amount Added: 37.50	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

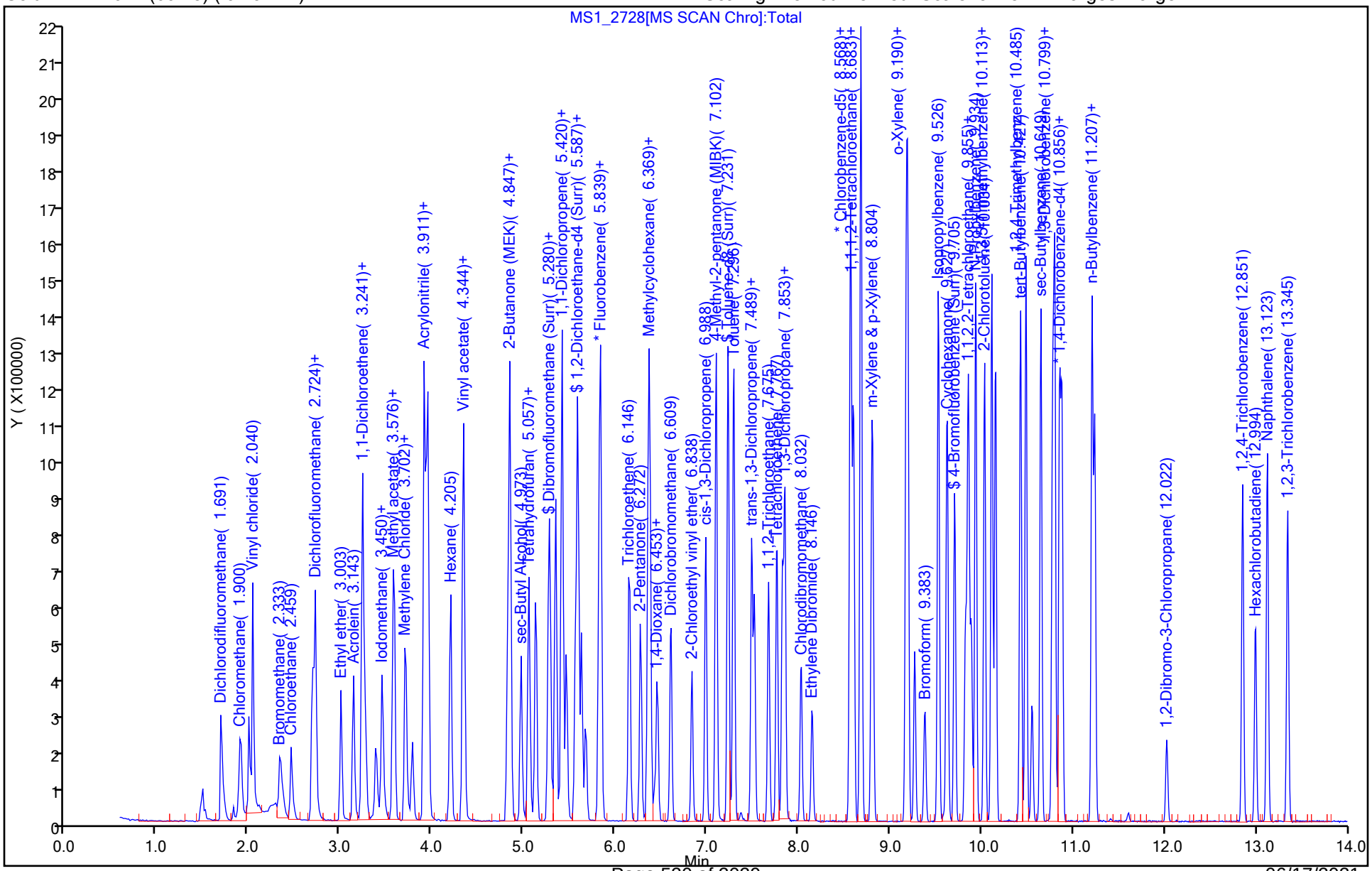
Report Date: 05-Jun-2021 11:14:37 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2728.D

Injection Date:	04-Jun-2021 15:58:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD75			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2729.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Jun-2021 16:20:30 ALS Bottle#: 18 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Misc. Info.: 280-0102067-021
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:40 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 05-Jun-2021 08:48:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	770348	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	161409	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	97	257627	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	199583	50.0	48.9	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	270692	50.0	49.5	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	703336	50.0	50.3	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	271979	50.0	48.6	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	98	341786	100.0	98.7	
12 Chloromethane	50	1.900	1.900	0.000	99	317305	100.0	94.8	
13 Vinyl chloride	62	1.998	1.998	0.000	100	271019	100.0	100.4	
15 Bromomethane	94	2.347	2.333	0.014	93	195406	100.0	94.0	
16 Chloroethane	64	2.459	2.459	0.000	98	201788	100.0	96.9	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	496647	100.0	95.9	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	448550	100.0	101.0	
20 Ethyl ether	59	3.003	3.003	0.000	93	219725	100.0	101.2	
22 Acrolein	56	3.143	3.143	0.000	98	398118	987.5	956.2	
24 112TCTFE	151	3.255	3.241	0.014	96	154610	100.0	105.1	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	210315	100.0	94.5	
25 Acetone	43	3.269	3.269	0.000	98	351099	400.0	403.5	
26 Iodomethane	142	3.381	3.381	0.000	99	344718	100.0	102.2	
28 Carbon disulfide	76	3.450	3.450	0.000	99	740012	100.0	98.9	
30 Methyl acetate	43	3.562	3.562	0.000	98	417578	200.0	198.3	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	426172	100.0	95.1	
32 Methylene Chloride	84	3.702	3.702	0.000	97	266563	100.0	97.9	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	99	291368	1000.0	1085.0	
34 Acrylonitrile	53	3.911	3.911	0.000	98	1060618	1000.0	995.8	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	813446	100.0	103.6	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	251645	100.0	93.1	
37 Hexane	57	4.205	4.205	0.000	94	331780	100.0	97.2	
39 Vinyl acetate	43	4.330	4.330	0.000	98	1263615	200.0	209.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	528150	100.0	101.1	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	514764	400.0	395.1	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	430208	100.0	93.1	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	280945	100.0	94.9	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	535348	2400.0	2422.1	
54 Tetrahydrofuran	42	5.057	5.057	0.000	86	165527	200.0	194.6	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	131412	100.0	97.4	
55 Chloroform	83	5.126	5.126	0.000	98	502179	100.0	92.7	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	441385	100.0	92.6	
57 Cyclohexane	56	5.350	5.350	0.000	95	467867	100.0	98.6	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	396397	100.0	103.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	85	367905	100.0	104.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	92	237028	2500.0	2468.1	
63 Benzene	78	5.587	5.587	0.000	99	1075144	100.0	100.9	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	450298	100.0	100.2	
66 n-Heptane	43	5.825	5.825	0.000	92	304713	100.0	97.5	
68 Trichloroethene	95	6.146	6.146	0.000	94	283268	100.0	94.7	
69 2-Pentanone	43	6.272	6.272	0.000	98	681033	320.0	329.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	95	367688	100.0	99.2	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	301386	100.0	104.0	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	66461	2000.0	1992.7	
74 Dibromomethane	93	6.453	6.453	0.000	88	187746	100.0	103.3	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	385100	100.0	96.9	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	95	178538	100.0	100.7	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	464577	100.0	106.5	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	992438	400.0	413.5	
82 Toluene	91	7.296	7.296	0.000	97	1049392	100.0	98.7	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	99	444618	100.0	104.6	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	329168	100.0	102.4	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.000	95	217713	100.0	97.8	
89 Tetrachloroethene	164	7.767	7.767	0.000	89	175087	100.0	104.8	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	417430	100.0	102.0	
91 2-Hexanone	43	7.853	7.853	0.000	98	688140	400.0	402.1	
95 Chlorodibromomethane	129	8.032	8.032	0.000	90	254169	100.0	105.4	
96 Ethylene Dibromide	107	8.146	8.146	0.000	97	236353	100.0	101.8	
98 1-Chlorohexane	91	8.561	8.561	0.000	94	269413	80.0	79.9	
99 Chlorobenzene	112	8.604	8.604	0.000	91	662703	100.0	100.6	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	93	248769	100.0	106.9	
101 Ethylbenzene	106	8.683	8.683	0.000	99	359882	100.0	102.8	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	99	443325	100.0	100.5	
103 o-Xylene	106	9.176	9.176	0.000	98	427099	100.0	103.6	
104 Styrene	104	9.198	9.198	0.000	94	758598	100.0	100.7	
106 Bromoform	173	9.383	9.383	0.000	89	162117	100.0	101.7	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	1146614	100.0	101.7	
109 Cyclohexanone	55	9.619	9.619	0.000	95	534760	3000.0	2957.2	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	306793	100.0	98.6	
111 Bromobenzene	156	9.855	9.855	0.000	97	263713	100.0	103.1	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	82	111621	100.0	99.3	
113 1,2,3-Trichloropropane	110	9.884	9.891	-0.007	89	89319	100.0	103.2	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	313375	100.0	100.1	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	265995	100.0	103.9	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	985068	100.0	97.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	99	284037	100.0	100.8	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	800394	100.0	97.1	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	1020729	100.0	98.9	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	231170	100.0	96.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	511419	100.0	102.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	1010734	100.0	98.8	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	91	525253	100.0	100.1	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	954625	100.0	96.7	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	485254	100.0	103.2	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	74	65946	100.0	99.0	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	313667	100.0	101.9	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	104528	100.0	96.9	
132 Naphthalene	128	13.123	13.123	0.000	98	944344	100.0	103.4	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	92	286406	100.0	102.0	
S 149 1,2-Dichloroethene, Total (URS)	96				0		200.0	188.0	
S 150 1,2-Dichloroethene, Total	1				0		200.0	188.0	
S 151 Trihalomethanes, Total	1				0		400.0	396.7	
S 152 Total BTEX	1				0			506.4	
S 153 Xylenes, Total (URS)	1				0		200.0	204.1	
S 155 Xylenes, Total	106				0		200.0	204.1	
S 156 1,3-Dichloropropene, Total	1				0		200.0	211.1	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089	Amount Added: 20.00	Units: uL	
MV-MegaMainA_00050	Amount Added: 50.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

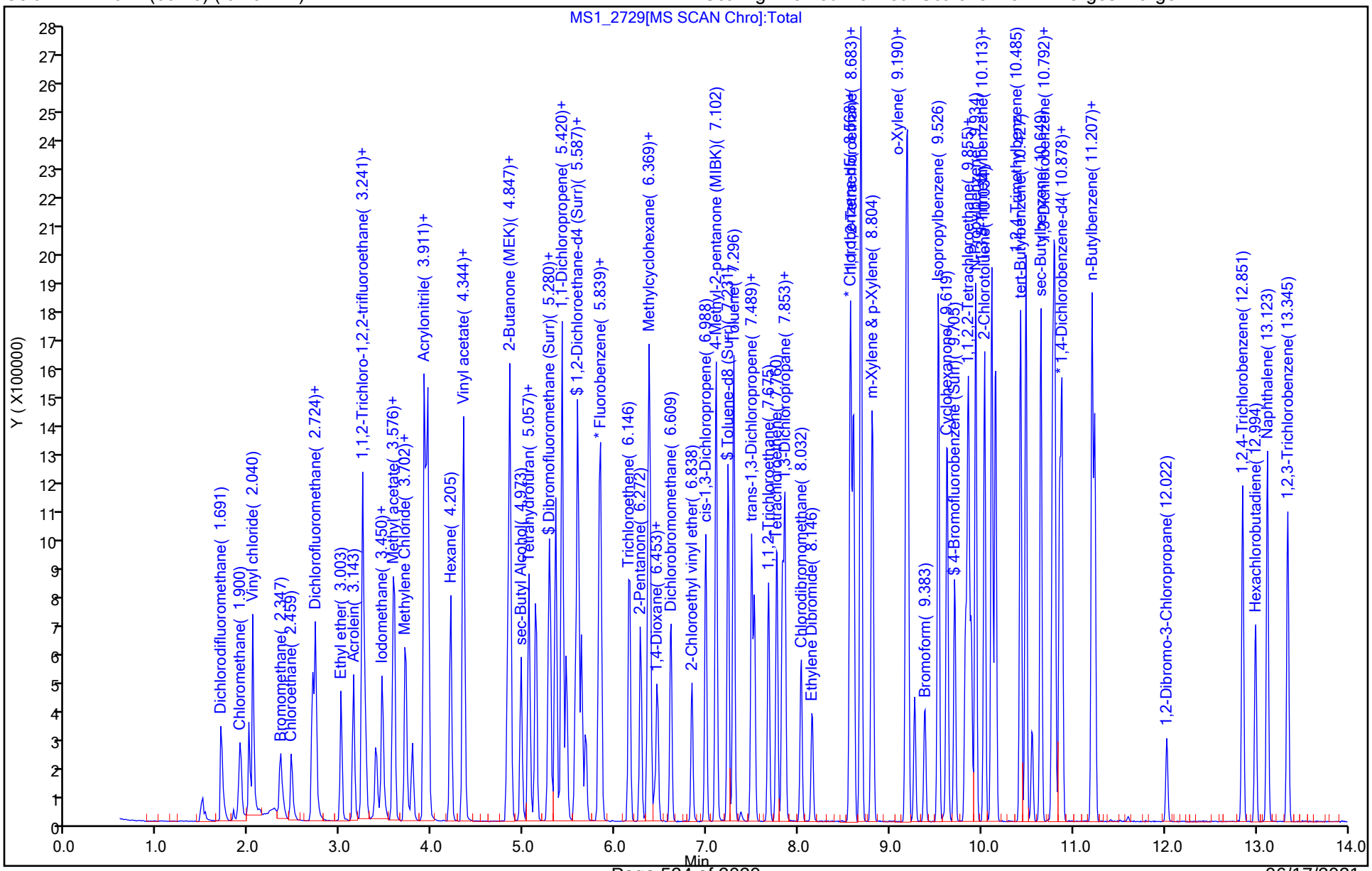
Report Date: 05-Jun-2021 11:14:40 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2729.D

Injection Date:	04-Jun-2021 16:20:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD100			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Jun-2021 16:41:30 ALS Bottle#: 19 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 280-0102067-022
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:14:43 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: petuninp Date: 04-Jun-2021 17:58:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	98	783196	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.568	8.575	-0.007	90	169094	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.849	0.007	96	259778	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	205683	50.0	49.5	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	279300	50.0	50.2	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	722826	50.0	49.3	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	282862	50.0	50.2	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	677738	200.0	192.3	
12 Chloromethane	50	1.900	1.900	0.000	99	656518	200.0	193.0	
13 Vinyl chloride	62	1.998	1.998	0.000	100	549679	200.0	200.2	
15 Bromomethane	94	2.333	2.333	0.000	94	381898	200.0	180.6	
16 Chloroethane	64	2.459	2.459	0.000	99	410848	200.0	194.1	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	1017407	200.0	194.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	899290	200.0	199.2	
20 Ethyl ether	59	3.004	3.003	0.001	93	450987	200.0	204.3	
22 Acrolein	56	3.143	3.143	0.000	98	841506	1975.0	1995.3	
24 112TCTFE	151	3.241	3.241	0.000	98	329503	200.0	220.4	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	451141	200.0	199.5	
25 Acetone	43	3.269	3.269	0.000	98	732628	800.0	834.2	
26 Iodomethane	142	3.381	3.381	0.000	99	715491	200.0	208.2	
28 Carbon disulfide	76	3.450	3.450	0.000	99	1558994	200.0	204.9	
30 Methyl acetate	43	3.562	3.562	0.000	98	890400	400.0	416.0	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	833624	200.0	183.0	
32 Methylene Chloride	84	3.702	3.702	0.000	98	559662	200.0	202.8	
33 2-Methyl-2-propanol	59	3.786	3.786	0.000	98	604617	2000.0	2214.5	
34 Acrylonitrile	53	3.911	3.911	0.000	97	2157748	2000.0	1992.7	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	1664273	200.0	208.6	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	513885	200.0	187.1	
37 Hexane	57	4.205	4.205	0.000	94	702356	200.0	196.0	
39 Vinyl acetate	43	4.330	4.330	0.000	98	2509441	400.0	408.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	1068575	200.0	201.3	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	1085961	800.0	822.6	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	901541	200.0	192.0	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	89	585356	200.0	194.4	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	1133775	4800.0	5035.6	
54 Tetrahydrofuran	42	5.057	5.057	0.000	85	344648	400.0	404.7	
53 Chlorobromomethane	128	5.057	5.057	0.000	96	269171	200.0	195.7	
55 Chloroform	83	5.126	5.126	0.000	99	1061208	200.0	192.7	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	97	940114	200.0	194.0	
57 Cyclohexane	56	5.350	5.350	0.000	94	980879	200.0	204.1	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	826072	200.0	211.1	
59 Carbon tetrachloride	117	5.420	5.420	0.000	87	773566	200.0	216.9	
60 Isobutyl alcohol	41	5.462	5.462	0.000	93	497289	5000.0	5093.2	
63 Benzene	78	5.587	5.587	0.000	99	2233092	200.0	206.0	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	935335	200.0	204.7	
66 n-Heptane	43	5.825	5.825	0.000	94	646535	200.0	204.0	
68 Trichloroethene	95	6.146	6.146	0.000	94	593715	200.0	189.4	
69 2-Pentanone	43	6.272	6.272	0.000	98	1416166	640.0	673.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	765192	200.0	203.4	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	611580	200.0	207.6	
73 1,4-Dioxane	88	6.425	6.425	0.000	99	139700	4000.0	4096.5	
74 Dibromomethane	93	6.453	6.453	0.000	88	392807	200.0	212.7	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	790878	200.0	195.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	372671	200.0	206.8	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	962416	200.0	210.6	
79 4-Methyl-2-pentanone (MIBK)	43	7.103	7.102	0.000	98	2075132	800.0	850.5	
82 Toluene	91	7.296	7.296	0.000	97	2216570	200.0	205.0	
84 trans-1,3-Dichloropropene	75	7.489	7.489	0.000	98	931126	200.0	215.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	684215	200.0	203.1	
87 1,1,2-Trichloroethane	97	7.675	7.675	0.001	95	452414	200.0	200.1	
89 Tetrachloroethene	164	7.767	7.767	0.000	90	377868	200.0	215.9	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	95	873388	200.0	203.8	
91 2-Hexanone	43	7.853	7.853	0.000	97	1407897	800.0	784.5	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	539788	200.0	213.6	
96 Ethylene Dibromide	107	8.146	8.146	0.000	96	496186	200.0	204.0	
98 1-Chlorohexane	91	8.561	8.561	0.000	95	576421	160.0	163.9	
99 Chlorobenzene	112	8.604	8.604	0.000	91	1403932	200.0	203.3	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	517259	200.0	212.2	
101 Ethylbenzene	106	8.683	8.683	0.000	99	758836	200.0	206.9	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	99	928312	200.0	200.8	
103 o-Xylene	106	9.176	9.176	0.000	99	895286	200.0	207.4	
104 Styrene	104	9.198	9.198	0.000	93	1593996	200.0	201.9	
106 Bromoform	173	9.383	9.383	0.000	90	339679	200.0	202.9	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	2397490	200.0	211.0	
109 Cyclohexanone	55	9.627	9.619	0.008	95	891889	6000.0	4708.0	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	641786	200.0	205.0	
111 Bromobenzene	156	9.855	9.855	0.000	97	557639	200.0	216.2	
112 trans-1,4-Dichloro-2-butene	53	9.863	9.862	0.000	82	239439	200.0	211.2	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	182772	200.0	209.8	
114 N-Propylbenzene	120	9.934	9.934	0.000	99	655122	200.0	207.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	561245	200.0	217.4	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	2073344	200.0	204.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.156	0.000	100	590717	200.0	207.9	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	1703470	200.0	204.8	
119 1,2,4-Trimethylbenzene	105	10.485	10.485	0.000	99	2109459	200.0	202.7	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	485251	200.0	200.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	1065476	200.0	211.5	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	2129213	200.0	206.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	1086868	200.0	205.4	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	1995762	200.0	200.6	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	1009176	200.0	212.9	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	73	136502	200.0	202.4	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	667214	200.0	215.1	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	220210	200.0	201.7	
132 Naphthalene	128	13.123	13.123	0.000	98	1942455	200.0	210.8	
134 1,2,3-Trichlorobenzene	180	13.345	13.345	0.000	93	604902	200.0	213.6	
S 149 1,2-Dichloroethene, Total (URS)	96				0		400.0	381.5	
S 150 1,2-Dichloroethene, Total	1				0		400.0	381.5	
S 151 Trihalomethanes, Total	1				0		800.0	804.8	
S 152 Total BTEX	1				0			1026.1	
S 153 Xylenes, Total (URS)	1				0		400.0	408.2	
S 155 Xylenes, Total	106				0		400.0	408.2	
S 156 1,3-Dichloropropene, Total	1				0		400.0	426.0	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089	Amount Added: 40.00	Units: uL	
MV-MegaMainA_00050	Amount Added: 100.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

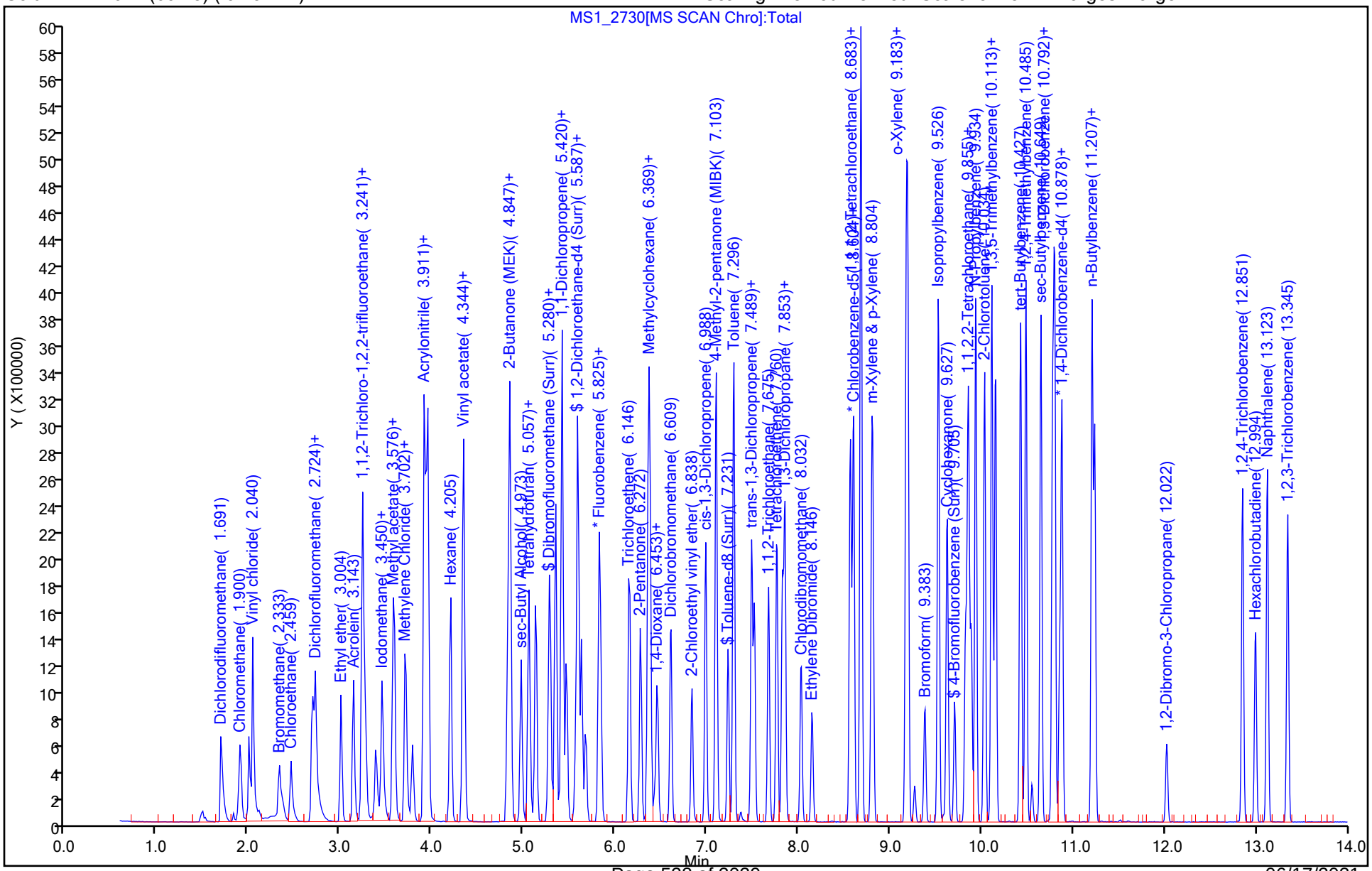
Report Date: 05-Jun-2021 11:14:43 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Injection Date:	04-Jun-2021 16:41:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	STD200			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	AQ_VMS1_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



Calibration / Dichlorodifluoromethane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

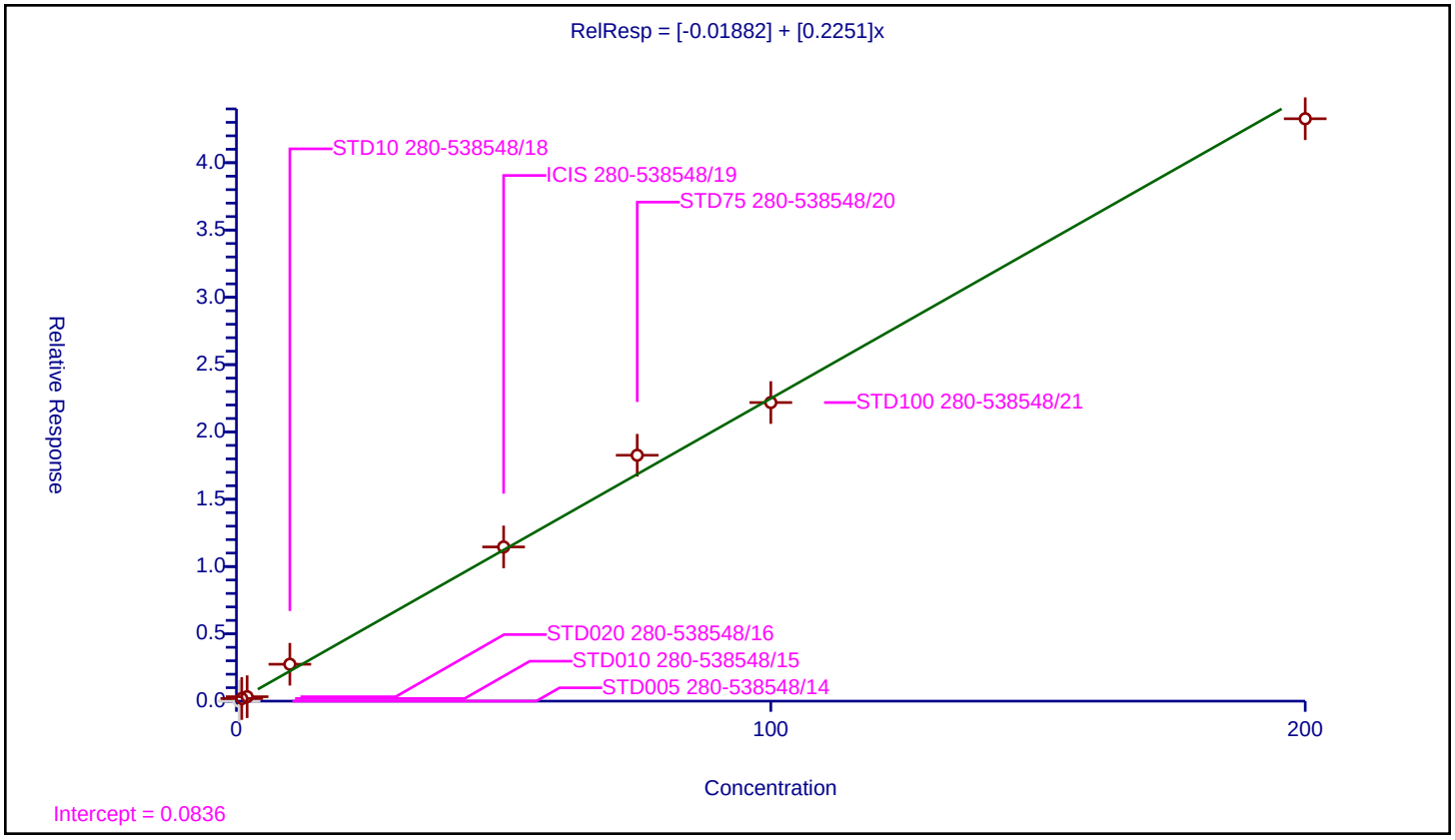
Curve Coefficients

Intercept:	-0.01882
Slope:	0.2251

Error Coefficients

Standard Error:	371000
Relative Standard Error:	15.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.194453	50.0	745169.0	0.194453	Y
3	STD020 280-538548/16	2.0	0.329702	50.0	729901.0	0.164851	Y
4	STD10 280-538548/18	10.0	2.741802	50.0	746498.0	0.27418	Y
5	ICIS 280-538548/19	50.0	11.455893	50.0	769988.0	0.229118	Y
6	STD75 280-538548/20	75.0	18.269311	50.0	778921.0	0.243591	Y
7	STD100 280-538548/21	100.0	22.18387	50.0	770348.0	0.221839	Y
8	STD200 280-538548/22	200.0	43.267458	50.0	783196.0	0.216337	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

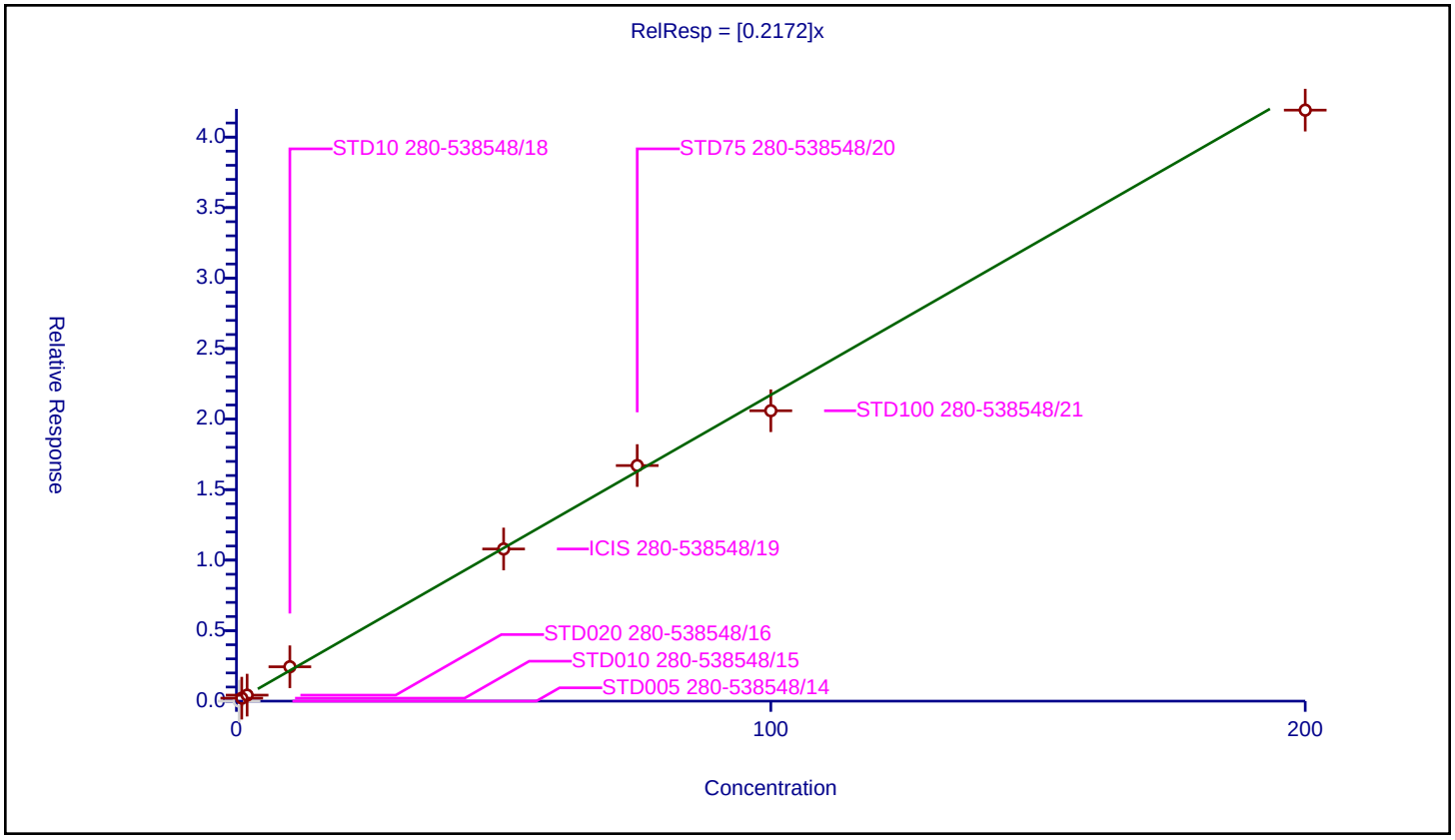
Curve Coefficients

Intercept:	0
Slope:	0.2172

Error Coefficients

Standard Error:	324000
Relative Standard Error:	5.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.209751	50.0	745169.0	0.209751	Y
3	STD020 280-538548/16	2.0	0.425195	50.0	729901.0	0.212597	Y
4	STD10 280-538548/18	10.0	2.437381	50.0	746498.0	0.243738	Y
5	ICIS 280-538548/19	50.0	10.790103	50.0	769988.0	0.215802	Y
6	STD75 280-538548/20	75.0	16.707407	50.0	778921.0	0.222765	Y
7	STD100 280-538548/21	100.0	20.594913	50.0	770348.0	0.205949	Y
8	STD200 280-538548/22	200.0	41.912752	50.0	783196.0	0.209564	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

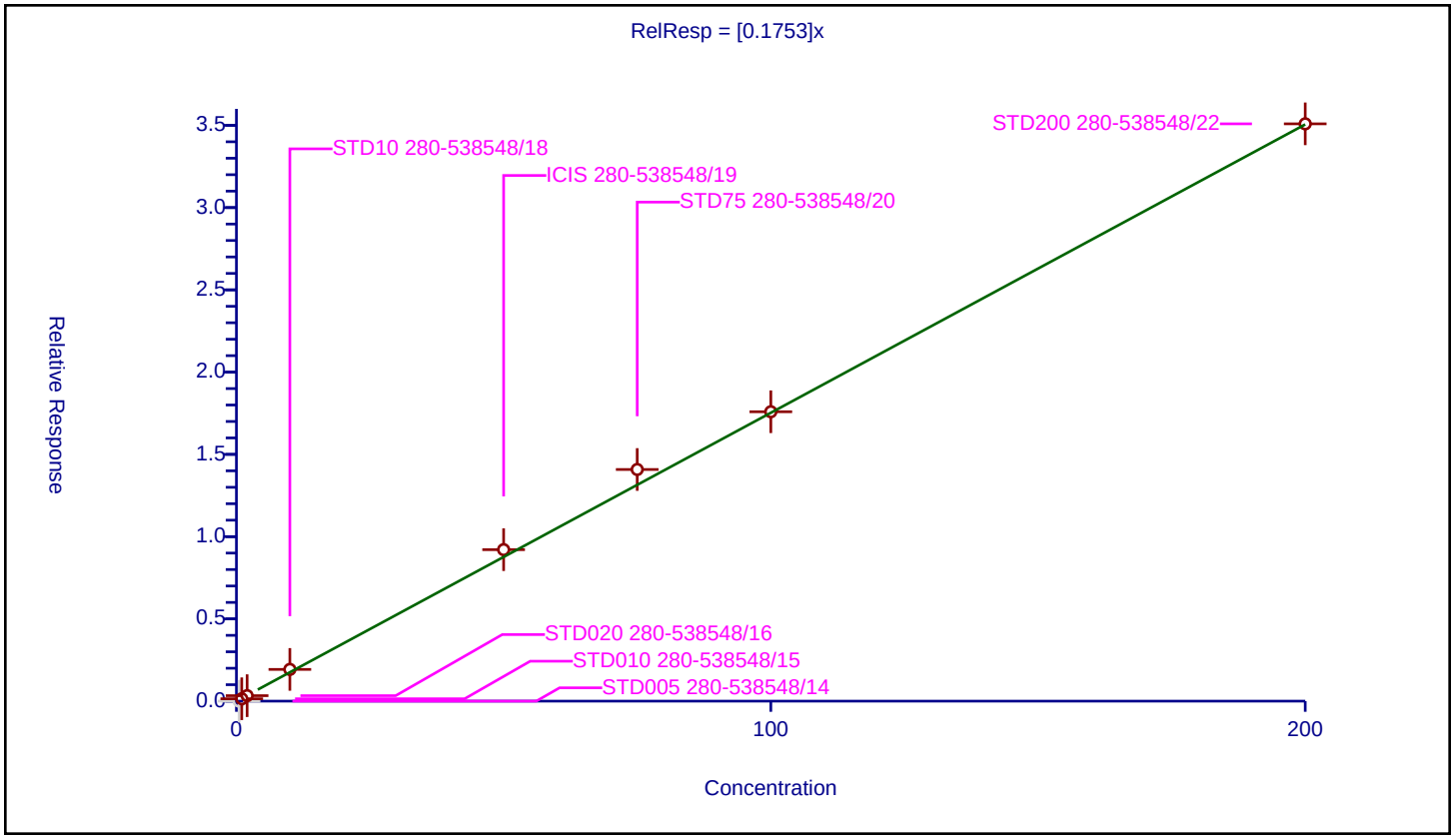
Curve Coefficients

Intercept:	0
Slope:	0.1753

Error Coefficients

Standard Error:	272000
Relative Standard Error:	9.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.144195	50.0	745169.0	0.144195	Y
3	STD020 280-538548/16	2.0	0.333196	50.0	729901.0	0.166598	Y
4	STD10 280-538548/18	10.0	1.928873	50.0	746498.0	0.192887	Y
5	ICIS 280-538548/19	50.0	9.208001	50.0	769988.0	0.18416	Y
6	STD75 280-538548/20	75.0	14.081531	50.0	778921.0	0.187754	Y
7	STD100 280-538548/21	100.0	17.590686	50.0	770348.0	0.175907	Y
8	STD200 280-538548/22	200.0	35.092046	50.0	783196.0	0.17546	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

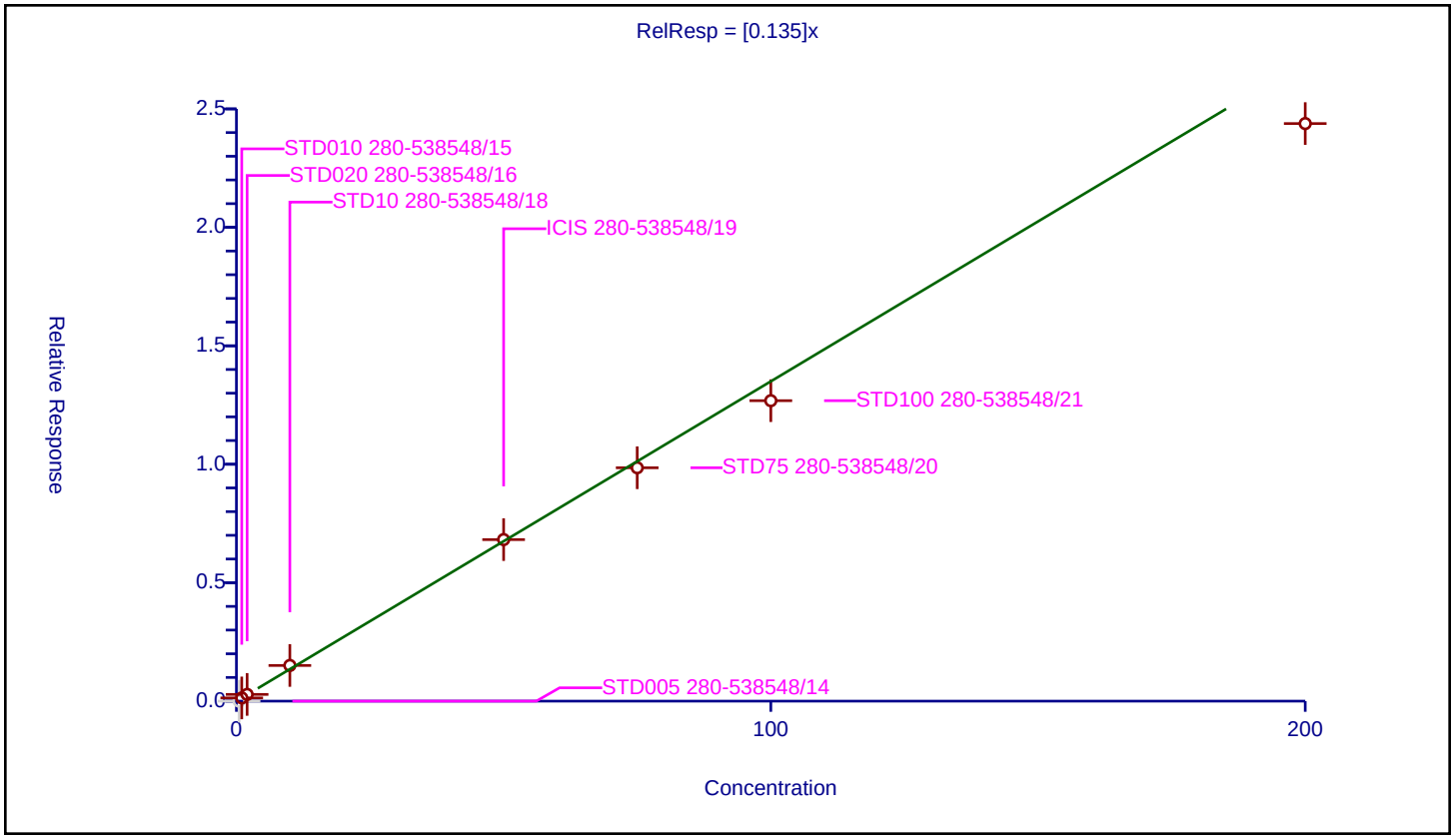
Curve Coefficients

Intercept:	0
Slope:	0.135

Error Coefficients

Standard Error:	191000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.135674	50.0	745169.0	0.135674	Y
3	STD020 280-538548/16	2.0	0.284285	50.0	729901.0	0.142143	Y
4	STD10 280-538548/18	10.0	1.506099	50.0	746498.0	0.15061	Y
5	ICIS 280-538548/19	50.0	6.819717	50.0	769988.0	0.136394	Y
6	STD75 280-538548/20	75.0	9.851384	50.0	778921.0	0.131352	Y
7	STD100 280-538548/21	100.0	12.682969	50.0	770348.0	0.12683	Y
8	STD200 280-538548/22	200.0	24.380742	50.0	783196.0	0.121904	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

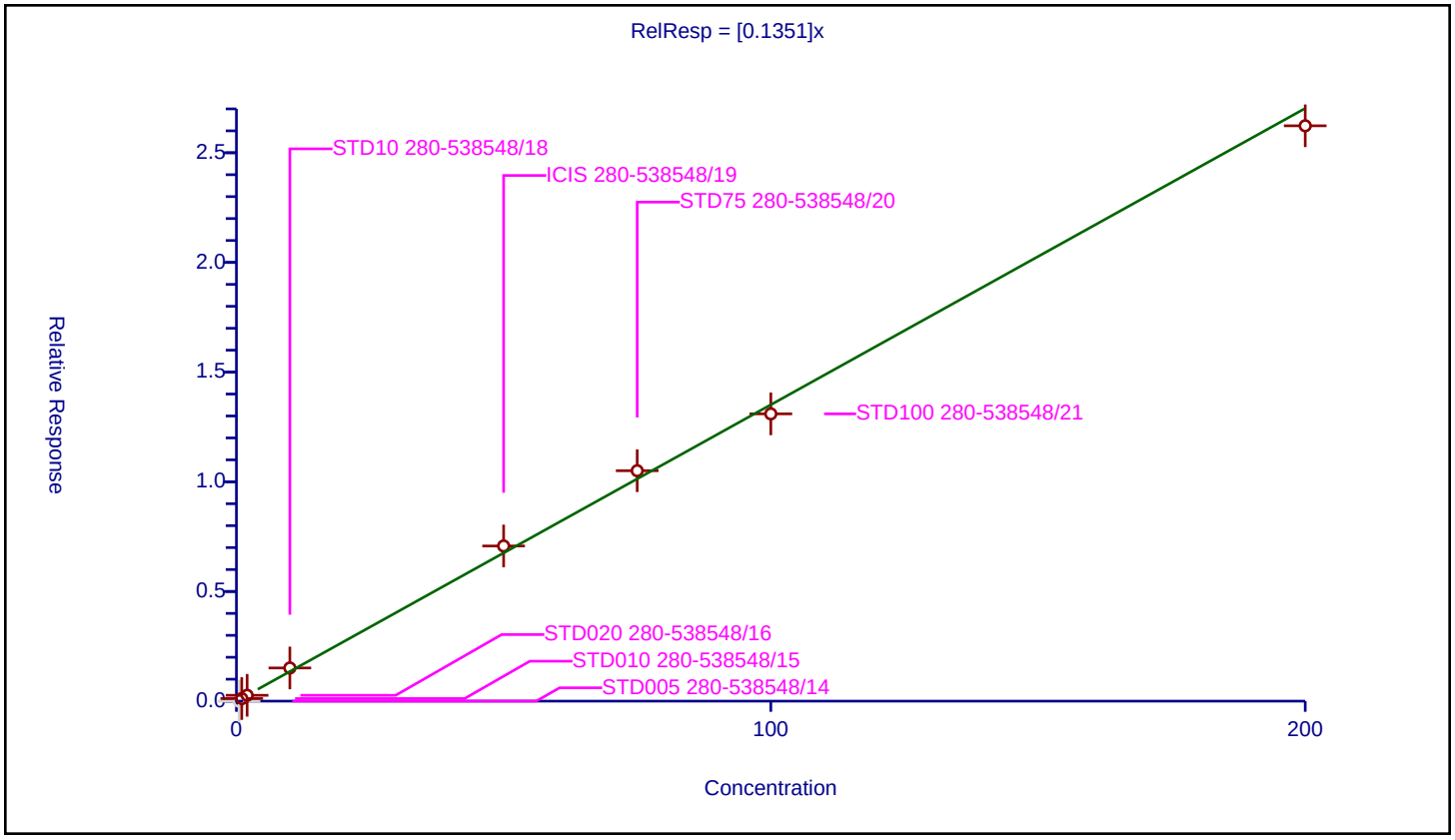
Curve Coefficients

Intercept:	0
Slope:	0.1351

Error Coefficients

Standard Error:	204000
Relative Standard Error:	7.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.117893	50.0	745169.0	0.117893	Y
3	STD020 280-538548/16	2.0	0.2662	50.0	729901.0	0.1331	Y
4	STD10 280-538548/18	10.0	1.512194	50.0	746498.0	0.151219	Y
5	ICIS 280-538548/19	50.0	7.073617	50.0	769988.0	0.141472	Y
6	STD75 280-538548/20	75.0	10.504531	50.0	778921.0	0.14006	Y
7	STD100 280-538548/21	100.0	13.097198	50.0	770348.0	0.130972	Y
8	STD200 280-538548/22	200.0	26.228939	50.0	783196.0	0.131145	Y



Calibration / Dichlorofluoromethane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

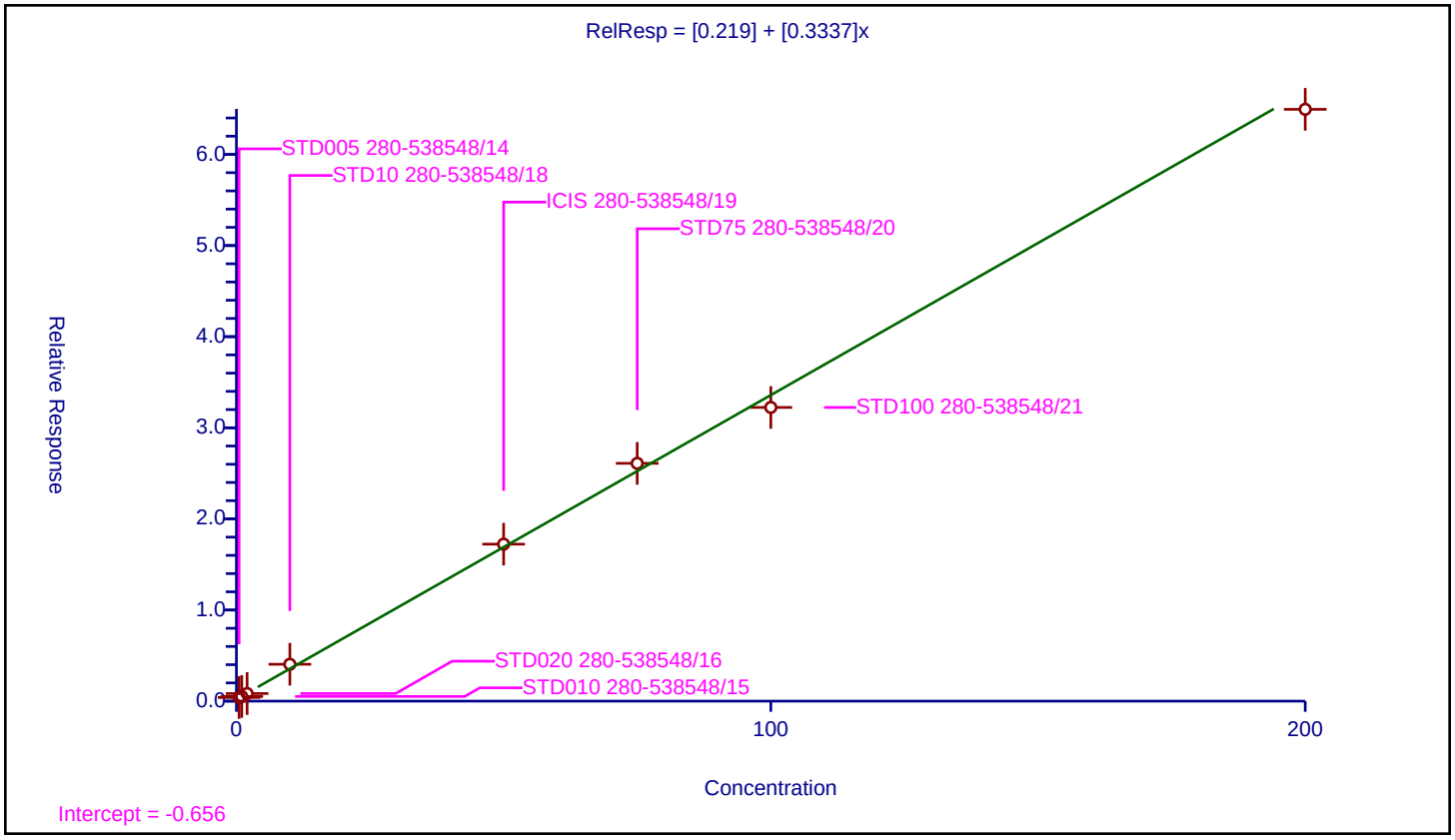
Curve Coefficients

Intercept:	0.219
Slope:	0.3337

Error Coefficients

Standard Error:	504000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.398537	50.0	741336.0	0.797074	Y
2	STD010 280-538548/15	1.0	0.509951	50.0	745169.0	0.509951	Y
3	STD020 280-538548/16	2.0	0.834428	50.0	729901.0	0.417214	Y
4	STD10 280-538548/18	10.0	4.046628	50.0	746498.0	0.404663	Y
5	ICIS 280-538548/19	50.0	17.229619	50.0	769988.0	0.344592	Y
6	STD75 280-538548/20	75.0	26.09963	50.0	778921.0	0.347995	Y
7	STD100 280-538548/21	100.0	32.235237	50.0	770348.0	0.322352	Y
8	STD200 280-538548/22	200.0	64.95226	50.0	783196.0	0.324761	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

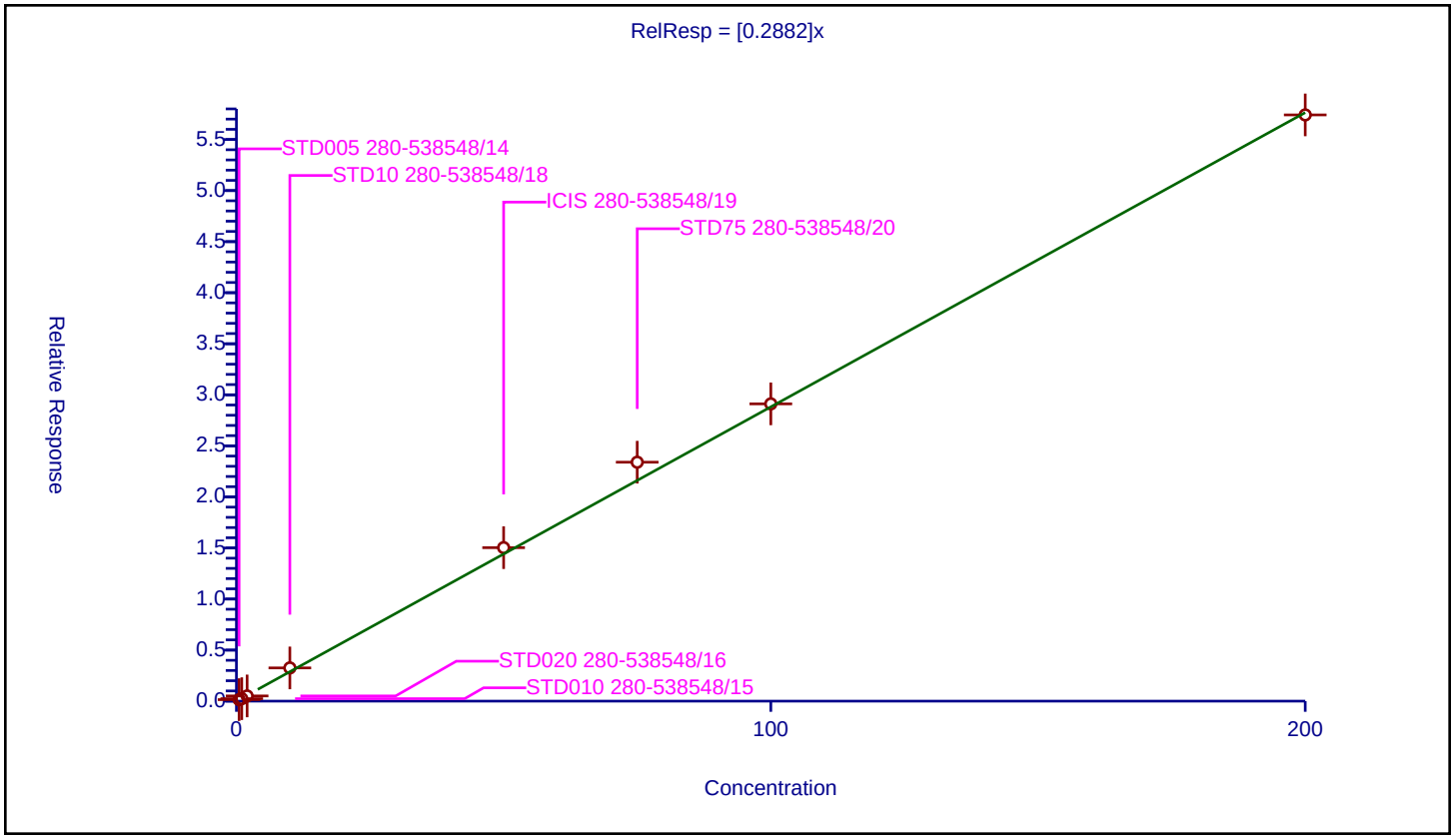
Curve Coefficients

Intercept:	0
Slope:	0.2882

Error Coefficients

Standard Error:	414000
Relative Standard Error:	9.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.146425	50.0	741336.0	0.29285	Y
2	STD010 280-538548/15	1.0	0.241891	50.0	745169.0	0.241891	Y
3	STD020 280-538548/16	2.0	0.509042	50.0	729901.0	0.254521	Y
4	STD10 280-538548/18	10.0	3.254396	50.0	746498.0	0.32544	Y
5	ICIS 280-538548/19	50.0	15.031143	50.0	769988.0	0.300623	Y
6	STD75 280-538548/20	75.0	23.399806	50.0	778921.0	0.311997	Y
7	STD100 280-538548/21	100.0	29.113466	50.0	770348.0	0.291135	Y
8	STD200 280-538548/22	200.0	57.411555	50.0	783196.0	0.287058	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

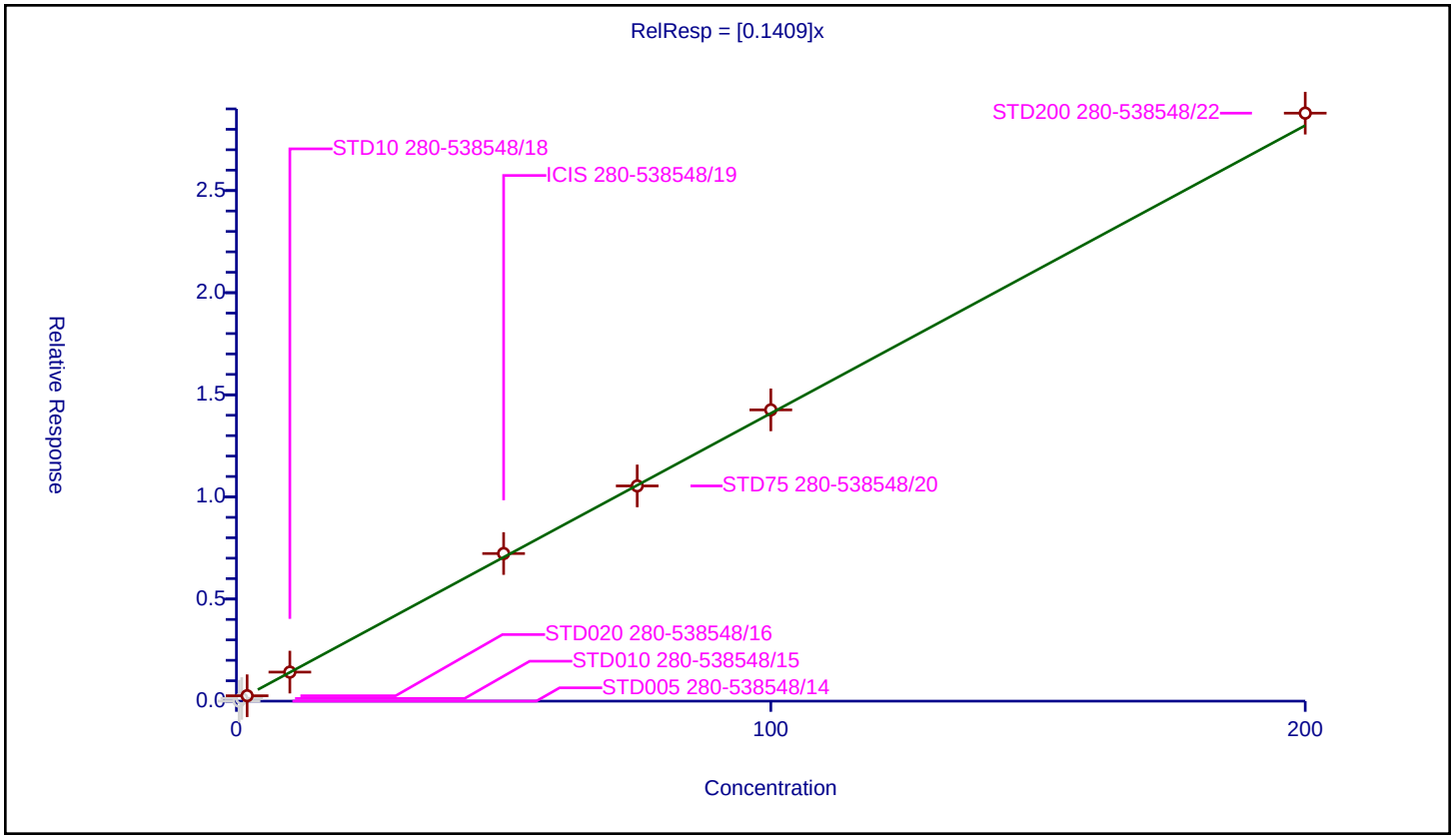
Curve Coefficients

Intercept:	0
Slope:	0.1409

Error Coefficients

Standard Error:	241000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.132118	50.0	745169.0	0.132118	N
3	STD020 280-538548/16	2.0	0.263666	50.0	729901.0	0.131833	Y
4	STD10 280-538548/18	10.0	1.421638	50.0	746498.0	0.142164	Y
5	ICIS 280-538548/19	50.0	7.227905	50.0	769988.0	0.144558	Y
6	STD75 280-538548/20	75.0	10.537782	50.0	778921.0	0.140504	Y
7	STD100 280-538548/21	100.0	14.261412	50.0	770348.0	0.142614	Y
8	STD200 280-538548/22	200.0	28.791452	50.0	783196.0	0.143957	Y



Calibration / Acrolein

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

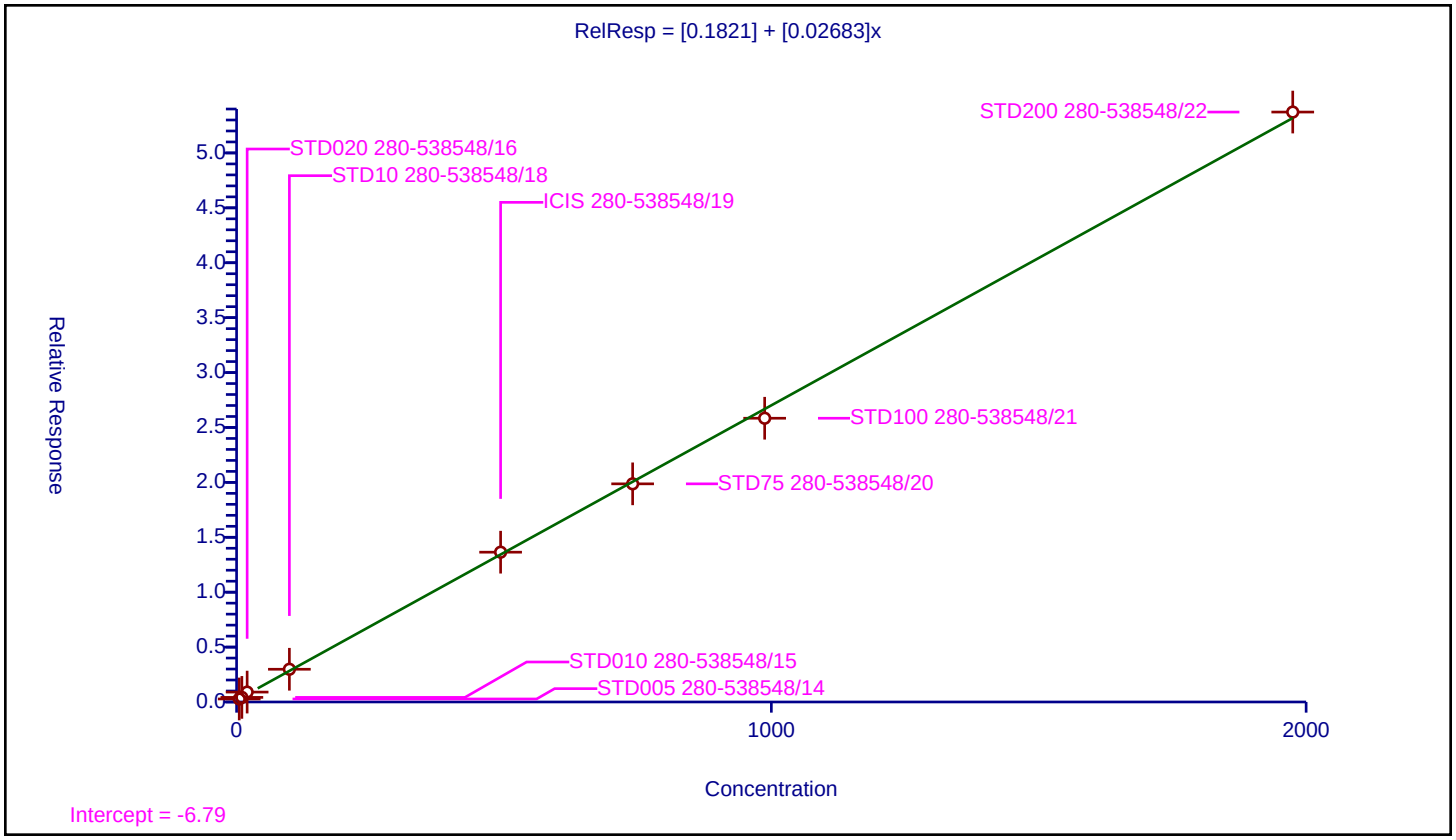
Curve Coefficients

Intercept:	0.1821
Slope:	0.02683

Error Coefficients

Standard Error:	410000
Relative Standard Error:	19.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	4.9375	0.275786	50.0	741336.0	0.055855	Y
2	STD010 280-538548/15	9.875	0.418764	50.0	745169.0	0.042406	Y
3	STD020 280-538548/16	19.75	0.902314	50.0	729901.0	0.045687	Y
4	STD10 280-538548/18	98.75	2.980584	50.0	746498.0	0.030183	Y
5	ICIS 280-538548/19	493.75	13.642615	50.0	769988.0	0.027631	Y
6	STD75 280-538548/20	740.625	19.865558	50.0	778921.0	0.026823	Y
7	STD100 280-538548/21	987.5	25.84014	50.0	770348.0	0.026167	Y
8	STD200 280-538548/22	1975.0	53.722568	50.0	783196.0	0.027201	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

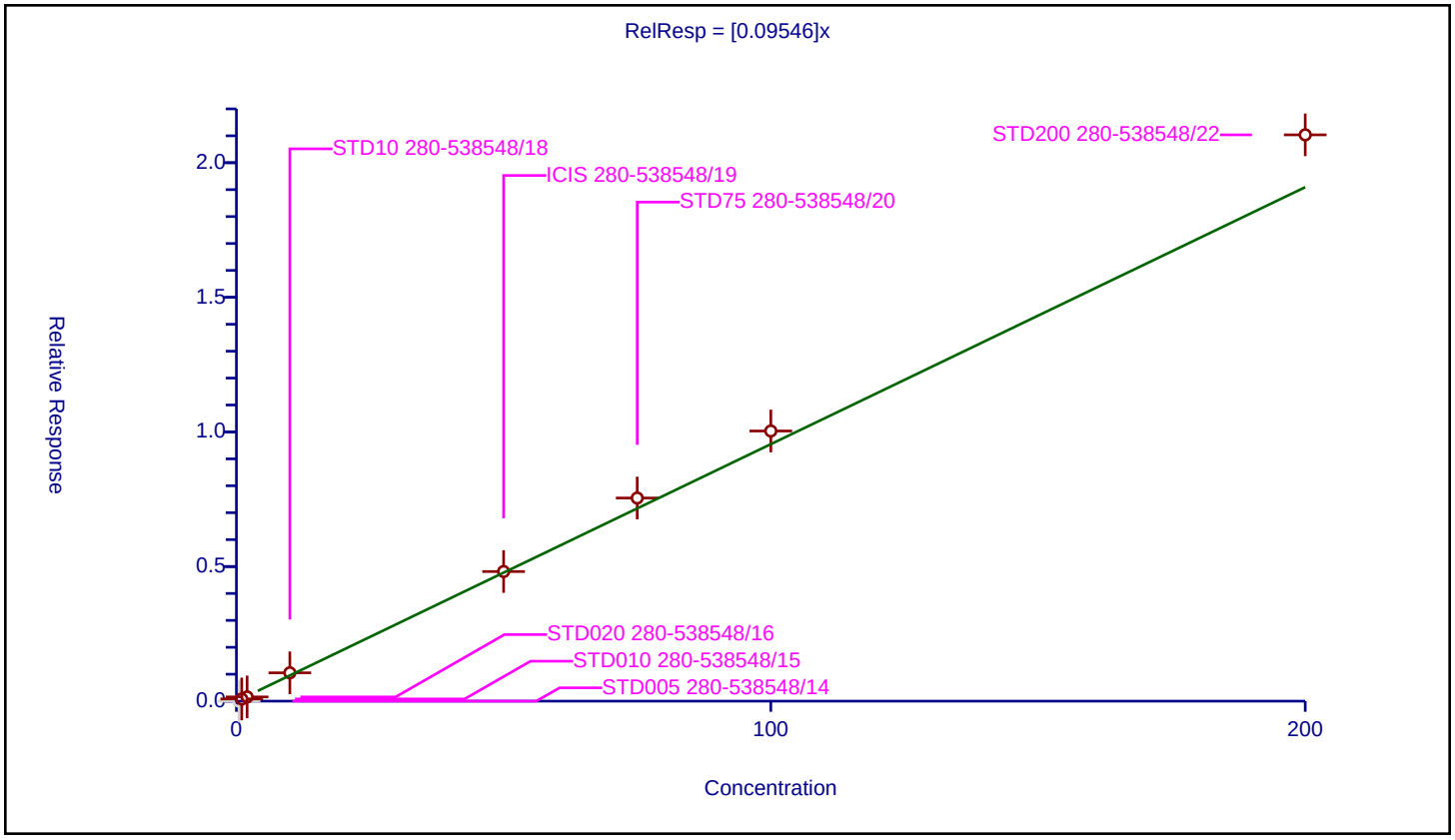
Curve Coefficients

Intercept:	0
Slope:	0.09546

Error Coefficients

Standard Error:	159000
Relative Standard Error:	11.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.081928	50.0	745169.0	0.081928	Y
3	STD020 280-538548/16	2.0	0.157145	50.0	729901.0	0.078572	Y
4	STD10 280-538548/18	10.0	1.052649	50.0	746498.0	0.105265	Y
5	ICIS 280-538548/19	50.0	4.814426	50.0	769988.0	0.096289	Y
6	STD75 280-538548/20	75.0	7.545566	50.0	778921.0	0.100608	Y
7	STD100 280-538548/21	100.0	10.035075	50.0	770348.0	0.100351	Y
8	STD200 280-538548/22	200.0	21.035794	50.0	783196.0	0.105179	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

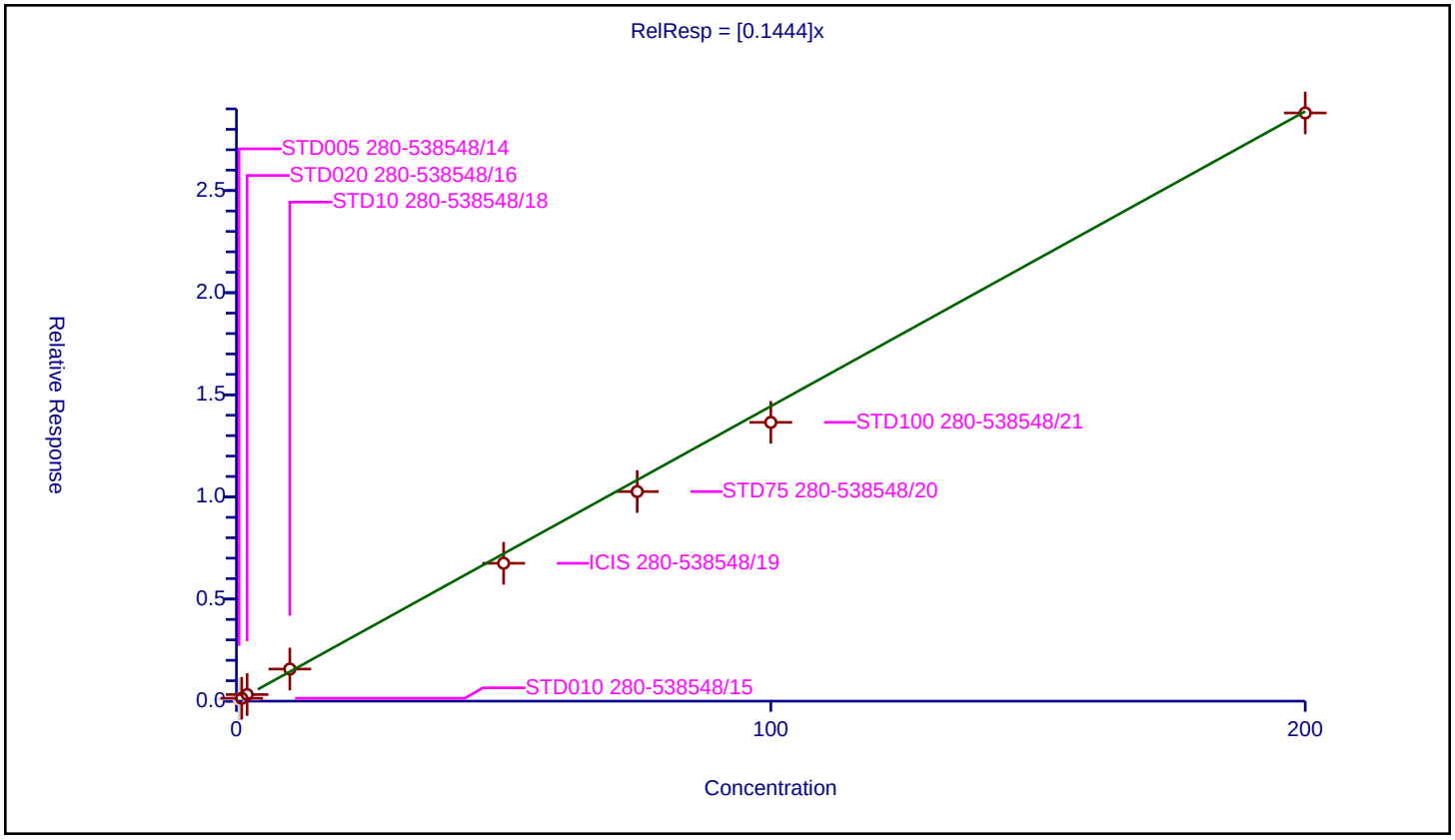
Curve Coefficients

Intercept:	0
Slope:	0.1444

Error Coefficients

Standard Error:	218000
Relative Standard Error:	7.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.101236	50.0	741336.0	0.202472	N
2	STD010 280-538548/15	1.0	0.140035	50.0	745169.0	0.140035	Y
3	STD020 280-538548/16	2.0	0.322167	50.0	729901.0	0.161083	Y
4	STD10 280-538548/18	10.0	1.572543	50.0	746498.0	0.157254	Y
5	ICIS 280-538548/19	50.0	6.750949	50.0	769988.0	0.135019	Y
6	STD75 280-538548/20	75.0	10.262145	50.0	778921.0	0.136829	Y
7	STD100 280-538548/21	100.0	13.650649	50.0	770348.0	0.136506	Y
8	STD200 280-538548/22	200.0	28.801283	50.0	783196.0	0.144006	Y



Calibration / Acetone

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

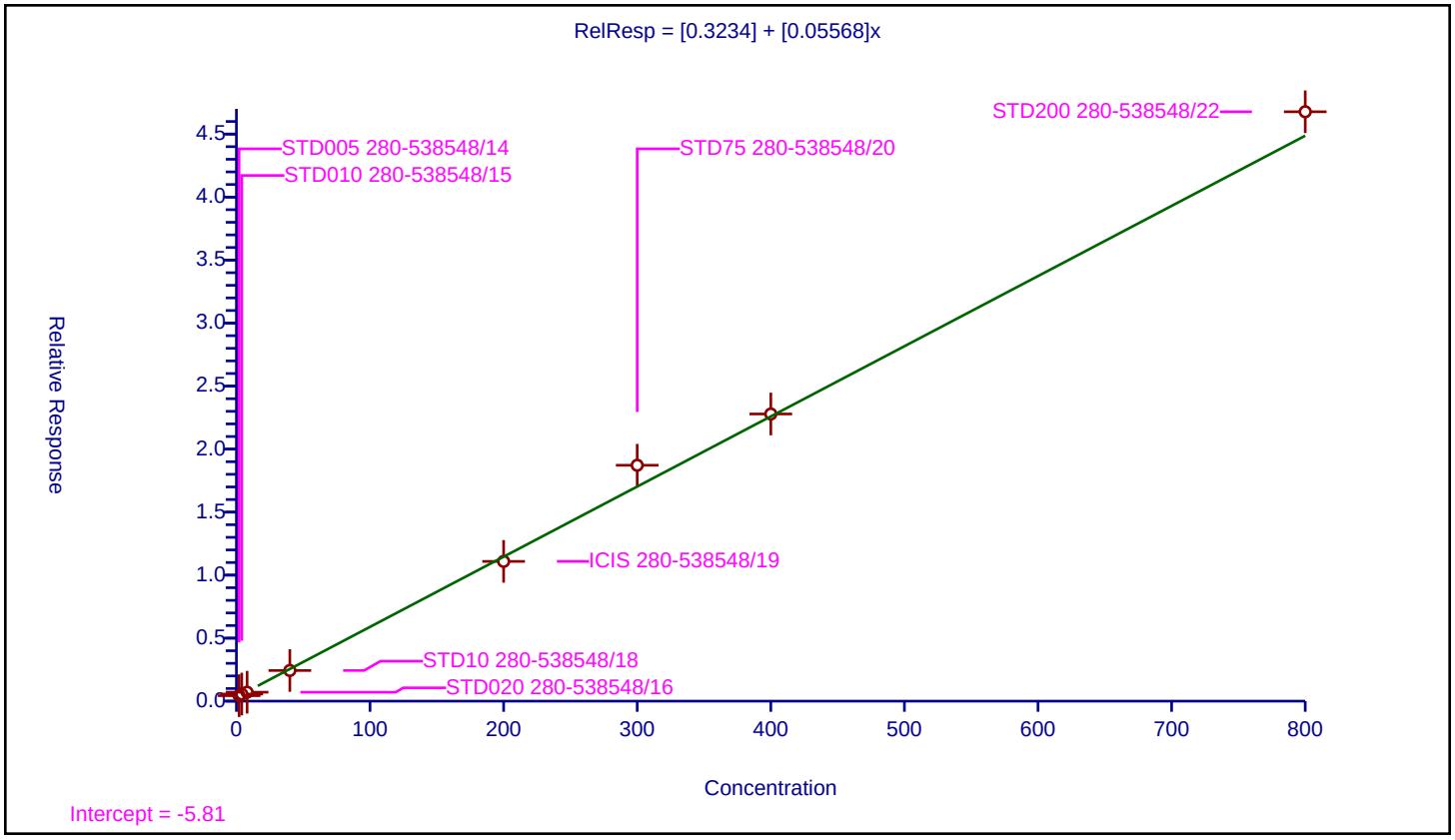
Curve Coefficients

Intercept:	0.3234
Slope:	0.05568

Error Coefficients

Standard Error:	360000
Relative Standard Error:	8.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.43516	50.0	741336.0	0.21758	Y
2	STD010 280-538548/15	4.0	0.560477	50.0	745169.0	0.140119	Y
3	STD020 280-538548/16	8.0	0.709206	50.0	729901.0	0.088651	Y
4	STD10 280-538548/18	40.0	2.43209	50.0	746498.0	0.060802	Y
5	ICIS 280-538548/19	200.0	11.089004	50.0	769988.0	0.055445	Y
6	STD75 280-538548/20	300.0	18.719421	50.0	778921.0	0.062398	Y
7	STD100 280-538548/21	400.0	22.788337	50.0	770348.0	0.056971	Y
8	STD200 280-538548/22	800.0	46.771689	50.0	783196.0	0.058465	Y



Calibration / Iodomethane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

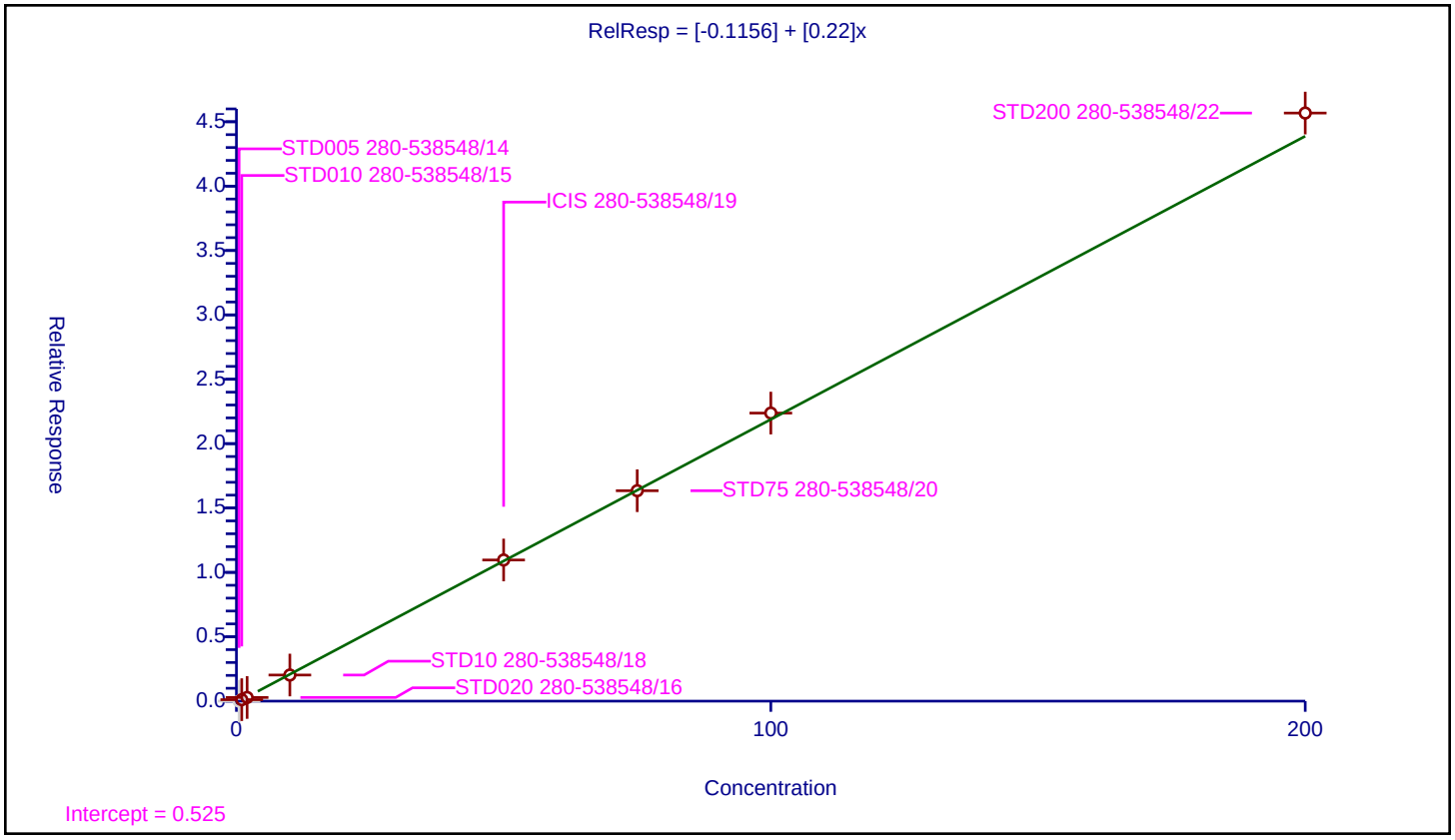
Curve Coefficients

Intercept:	-0.1156
Slope:	0.22

Error Coefficients

Standard Error:	381000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.114739	50.0	745169.0	0.114739	Y
3	STD020 280-538548/16	2.0	0.284833	50.0	729901.0	0.142417	Y
4	STD10 280-538548/18	10.0	2.028807	50.0	746498.0	0.202881	Y
5	ICIS 280-538548/19	50.0	10.962963	50.0	769988.0	0.219259	Y
6	STD75 280-538548/20	75.0	16.34357	50.0	778921.0	0.217914	Y
7	STD100 280-538548/21	100.0	22.374174	50.0	770348.0	0.223742	Y
8	STD200 280-538548/22	200.0	45.677646	50.0	783196.0	0.228388	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

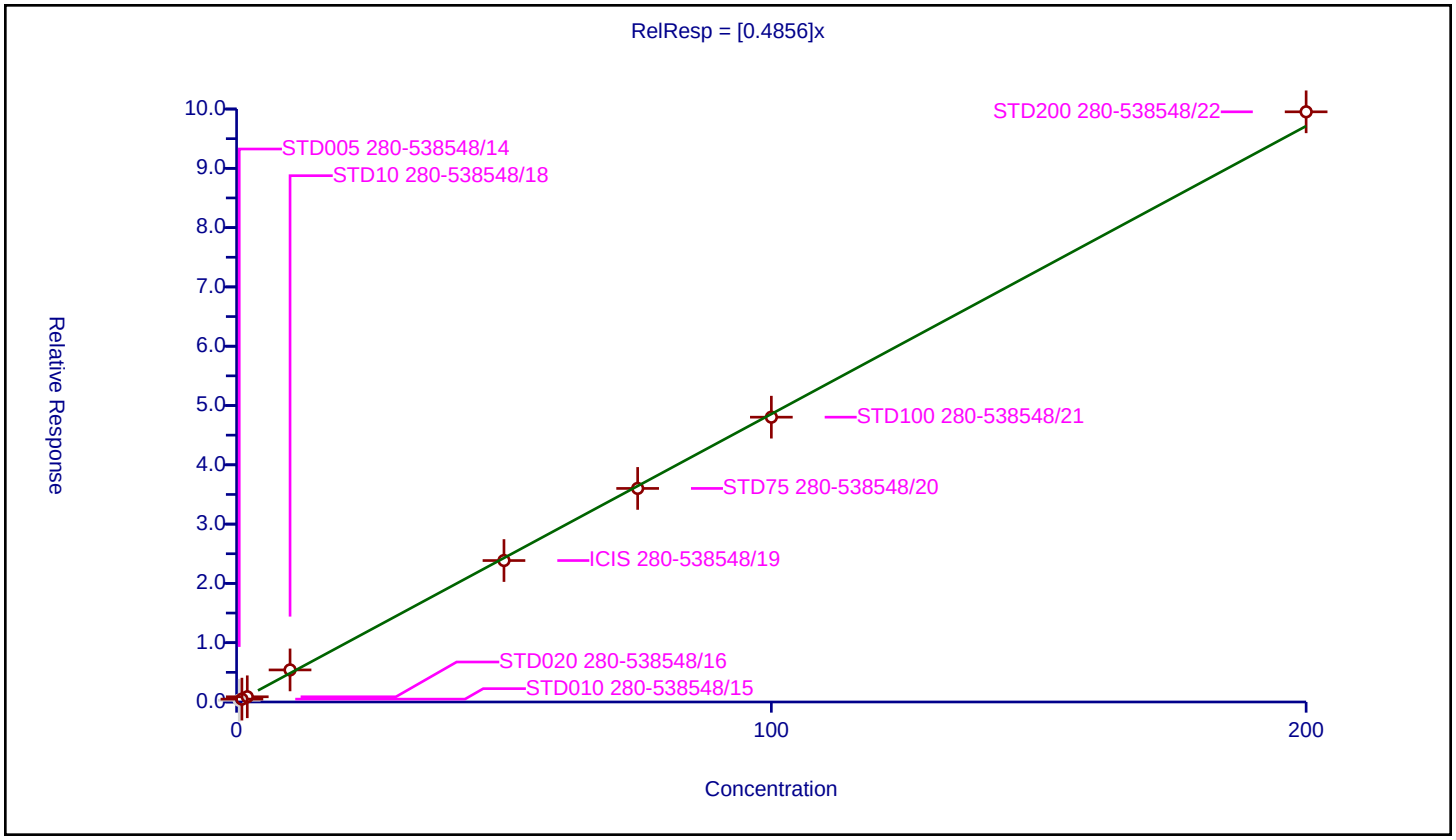
Curve Coefficients

Intercept:	0
Slope:	0.4856

Error Coefficients

Standard Error:	757000
Relative Standard Error:	6.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.296357	50.0	741336.0	0.592714	N
2	STD010 280-538548/15	1.0	0.483112	50.0	745169.0	0.483112	Y
3	STD020 280-538548/16	2.0	0.879982	50.0	729901.0	0.439991	Y
4	STD10 280-538548/18	10.0	5.409593	50.0	746498.0	0.540959	Y
5	ICIS 280-538548/19	50.0	23.856151	50.0	769988.0	0.477123	Y
6	STD75 280-538548/20	75.0	36.016169	50.0	778921.0	0.480216	Y
7	STD100 280-538548/21	100.0	48.03102	50.0	770348.0	0.48031	Y
8	STD200 280-538548/22	200.0	99.527704	50.0	783196.0	0.497639	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

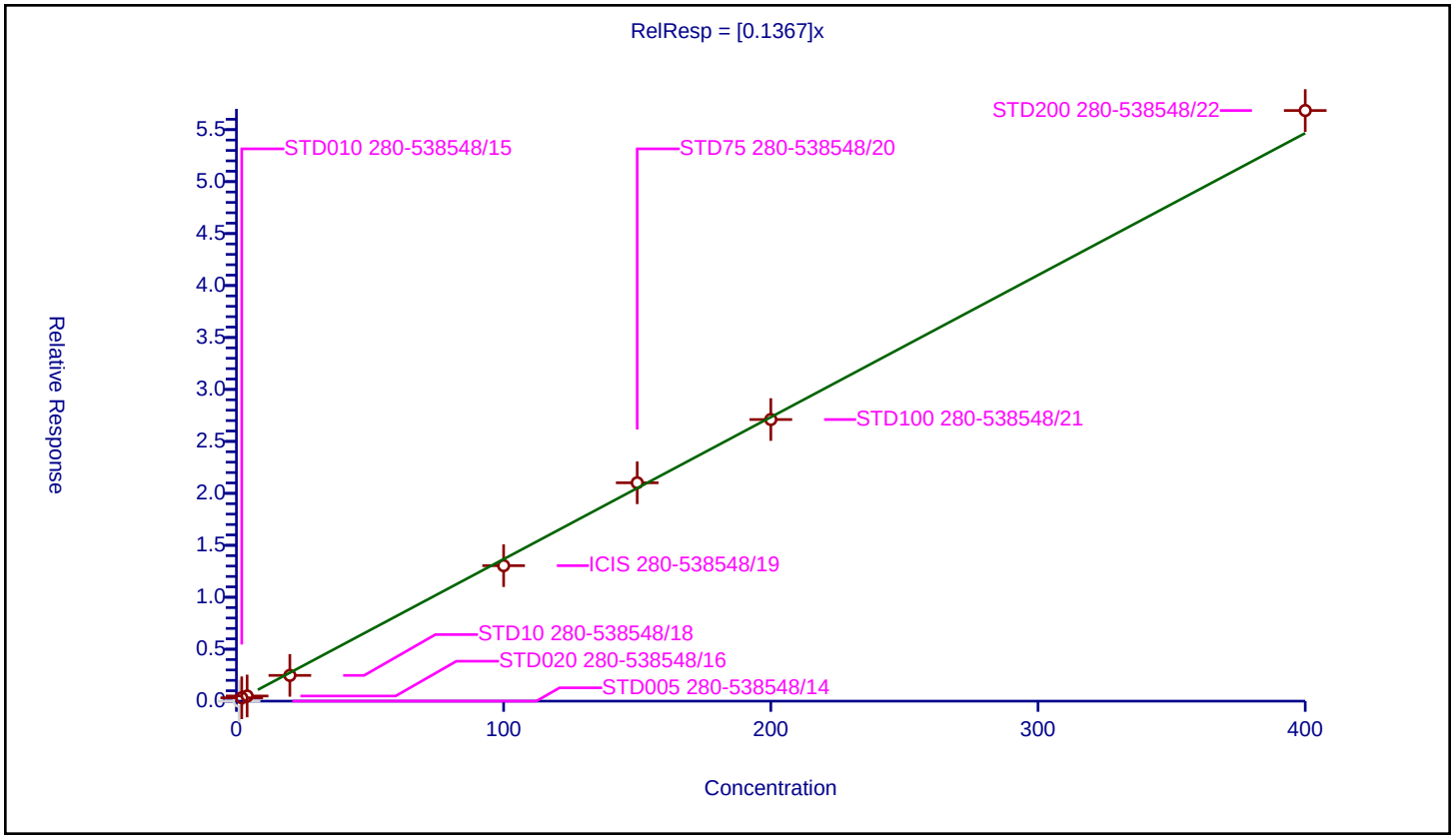
Curve Coefficients

Intercept:	0
Slope:	0.1367

Error Coefficients

Standard Error:	431000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	2.0	0.321337	50.0	745169.0	0.160668	Y
3	STD020 280-538548/16	4.0	0.495821	50.0	729901.0	0.123955	Y
4	STD10 280-538548/18	20.0	2.477502	50.0	746498.0	0.123875	Y
5	ICIS 280-538548/19	100.0	13.037671	50.0	769988.0	0.130377	Y
6	STD75 280-538548/20	150.0	21.016894	50.0	778921.0	0.140113	Y
7	STD100 280-538548/21	200.0	27.103205	50.0	770348.0	0.135516	Y
8	STD200 280-538548/22	400.0	56.844008	50.0	783196.0	0.14211	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

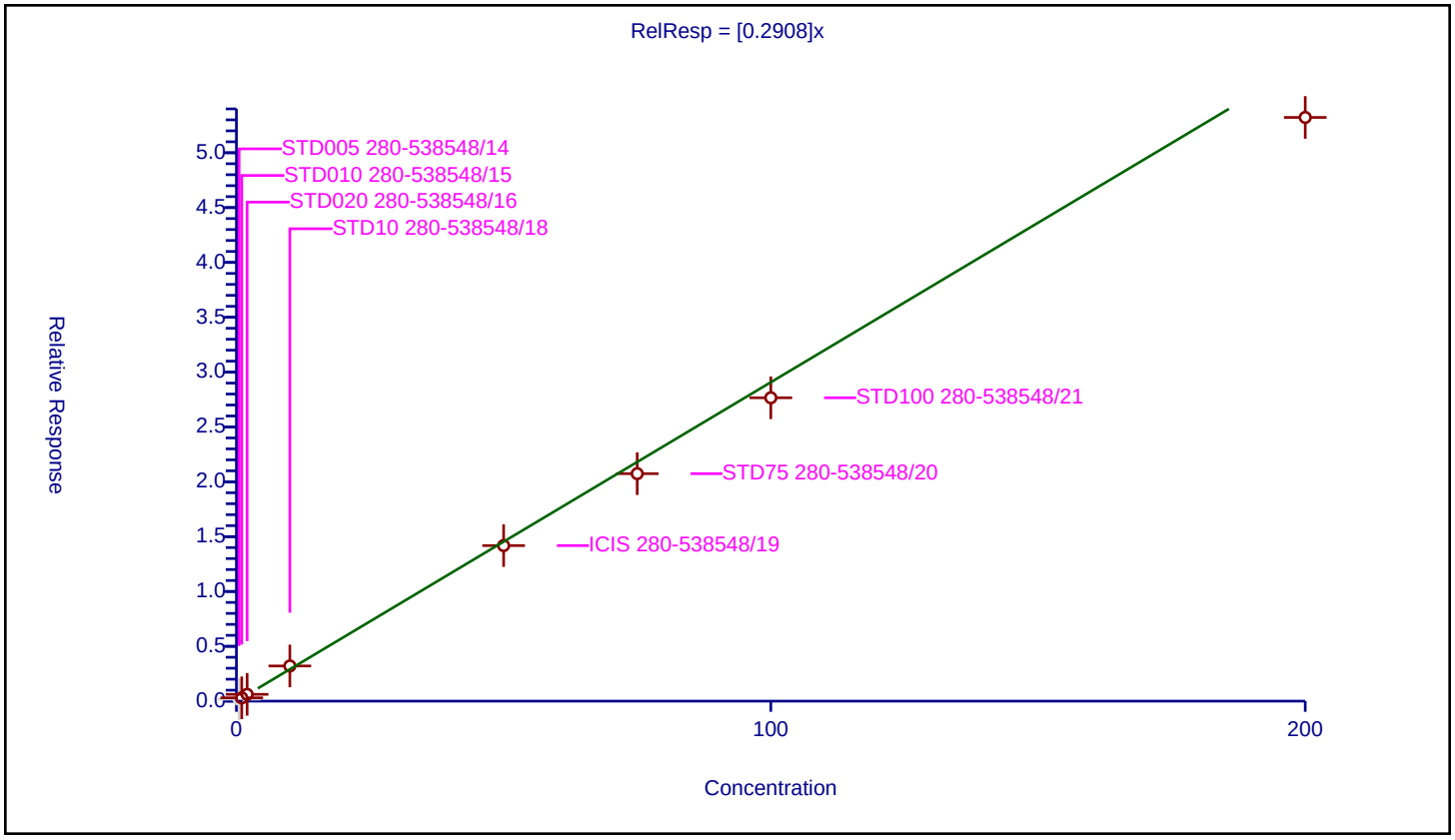
Curve Coefficients

Intercept:	0
Slope:	0.2908

Error Coefficients

Standard Error:	415000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.181699	50.0	741336.0	0.363398	N
2	STD010 280-538548/15	1.0	0.301274	50.0	745169.0	0.301274	Y
3	STD020 280-538548/16	2.0	0.620975	50.0	729901.0	0.310487	Y
4	STD10 280-538548/18	10.0	3.206439	50.0	746498.0	0.320644	Y
5	ICIS 280-538548/19	50.0	14.182818	50.0	769988.0	0.283656	Y
6	STD75 280-538548/20	75.0	20.741513	50.0	778921.0	0.276554	Y
7	STD100 280-538548/21	100.0	27.661005	50.0	770348.0	0.27661	Y
8	STD200 280-538548/22	200.0	53.219373	50.0	783196.0	0.266097	Y



Calibration / Methylene Chloride

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

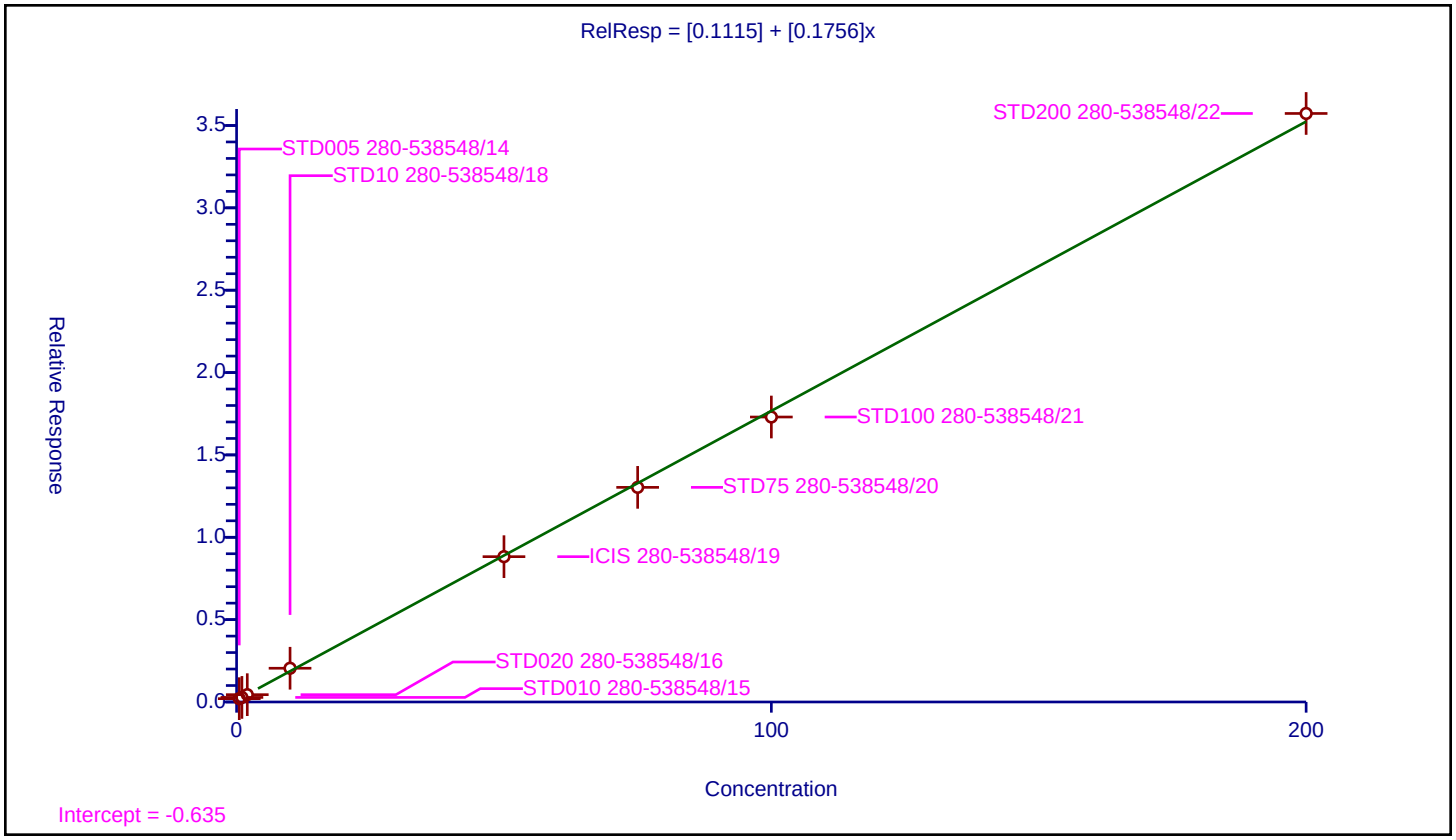
Curve Coefficients

Intercept:	0.1115
Slope:	0.1756

Error Coefficients

Standard Error:	272000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.202203	50.0	741336.0	0.404405	Y
2	STD010 280-538548/15	1.0	0.278125	50.0	745169.0	0.278125	Y
3	STD020 280-538548/16	2.0	0.44506	50.0	729901.0	0.22253	Y
4	STD10 280-538548/18	10.0	2.048231	50.0	746498.0	0.204823	Y
5	ICIS 280-538548/19	50.0	8.8228	50.0	769988.0	0.176456	Y
6	STD75 280-538548/20	75.0	13.030333	50.0	778921.0	0.173738	Y
7	STD100 280-538548/21	100.0	17.301466	50.0	770348.0	0.173015	Y
8	STD200 280-538548/22	200.0	35.72937	50.0	783196.0	0.178647	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

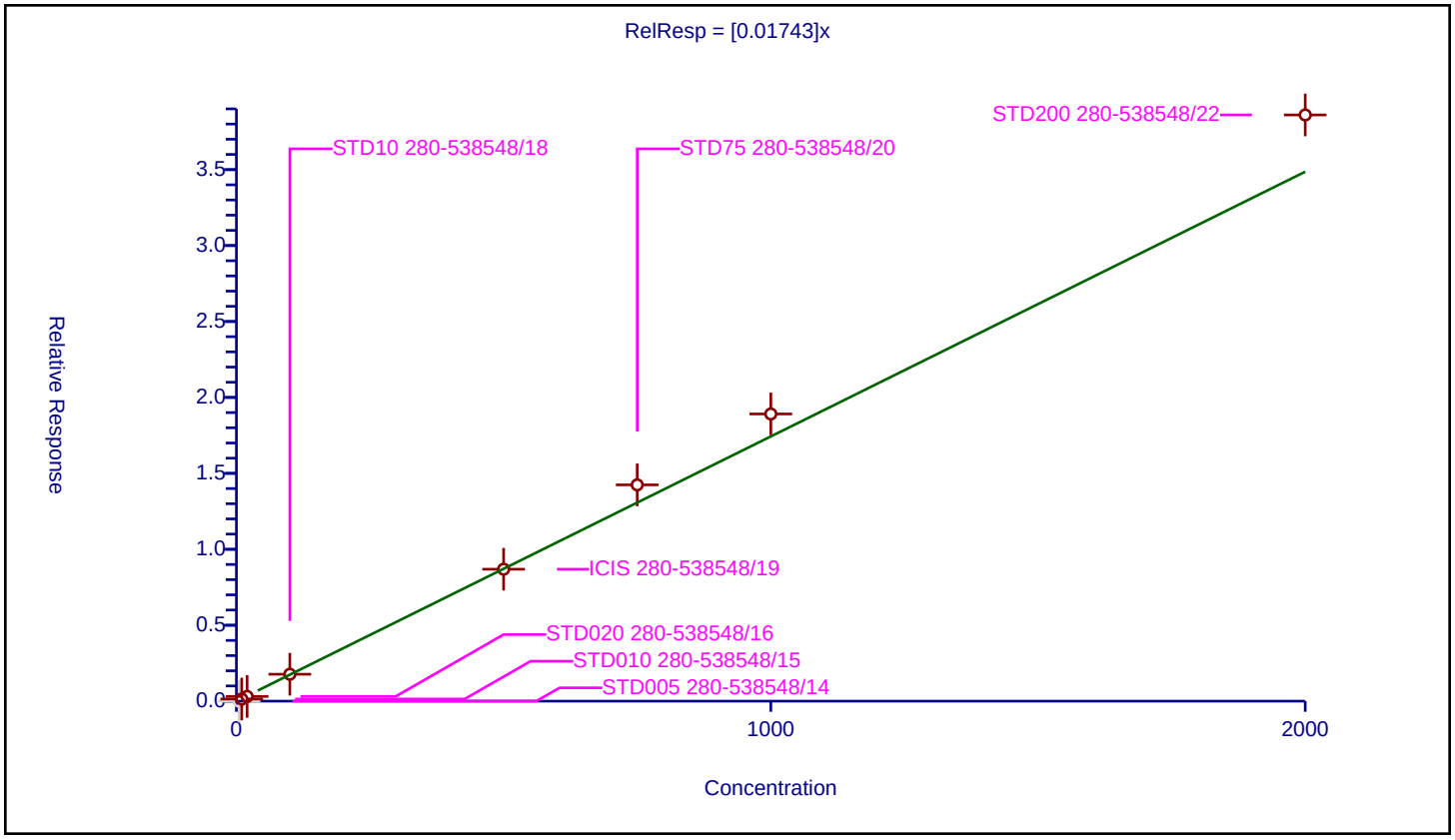
Curve Coefficients

Intercept:	0
Slope:	0.01743

Error Coefficients

Standard Error:	294000
Relative Standard Error:	11.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	5.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	10.0	0.141109	50.0	745169.0	0.014111	Y
3	STD020 280-538548/16	20.0	0.312029	50.0	729901.0	0.015601	Y
4	STD10 280-538548/18	100.0	1.772342	50.0	746498.0	0.017723	Y
5	ICIS 280-538548/19	500.0	8.688252	50.0	769988.0	0.017377	Y
6	STD75 280-538548/20	750.0	14.2431	50.0	778921.0	0.018991	Y
7	STD100 280-538548/21	1000.0	18.911453	50.0	770348.0	0.018911	Y
8	STD200 280-538548/22	2000.0	38.599342	50.0	783196.0	0.0193	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

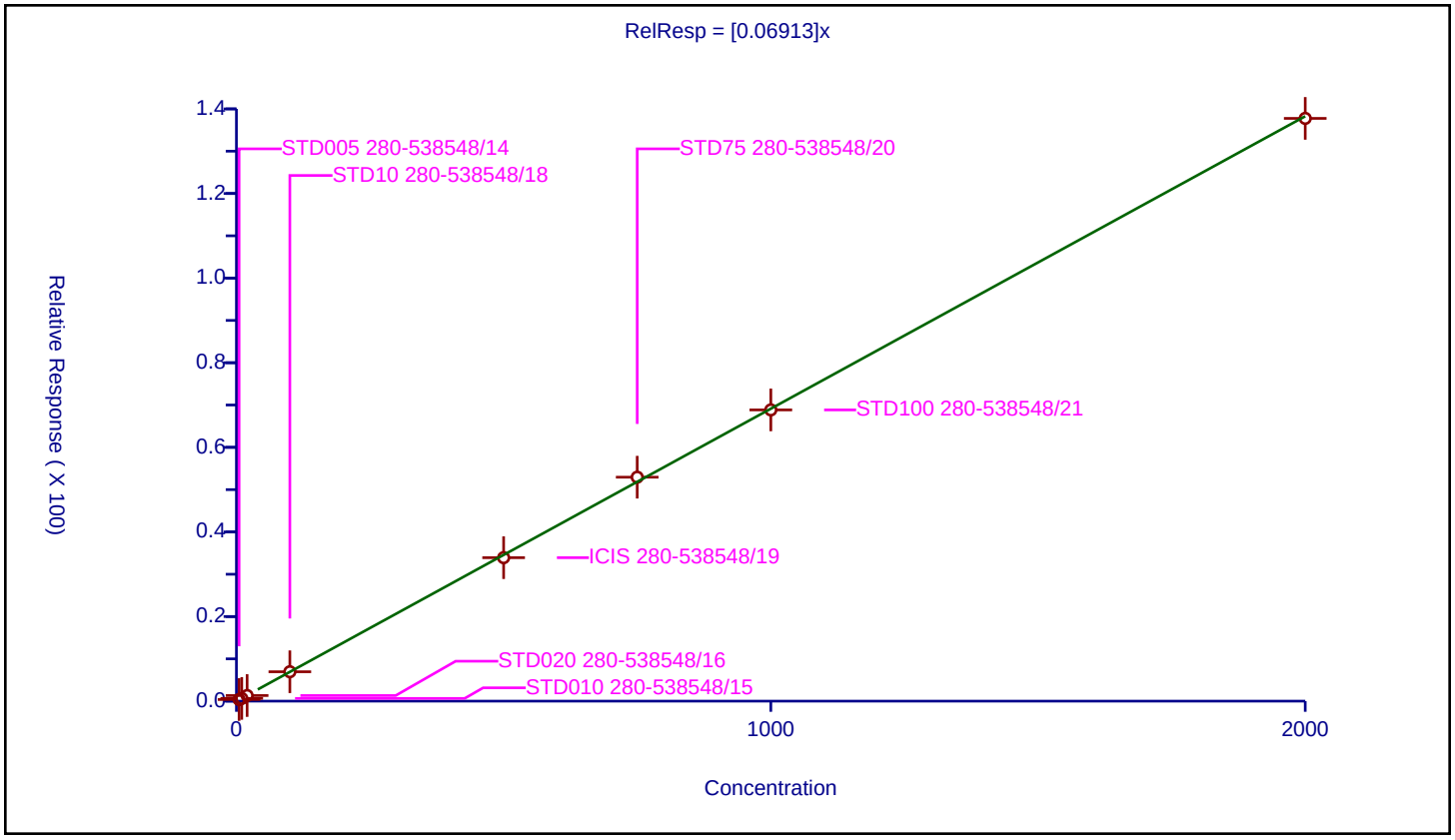
Curve Coefficients

Intercept:	0
Slope:	0.06913

Error Coefficients

Standard Error:	982000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	5.0	0.383699	50.0	741336.0	0.07674	Y
2	STD010 280-538548/15	10.0	0.644485	50.0	745169.0	0.064448	Y
3	STD020 280-538548/16	20.0	1.324358	50.0	729901.0	0.066218	Y
4	STD10 280-538548/18	100.0	6.949382	50.0	746498.0	0.069494	Y
5	ICIS 280-538548/19	500.0	33.912022	50.0	769988.0	0.067824	Y
6	STD75 280-538548/20	750.0	52.942019	50.0	778921.0	0.070589	Y
7	STD100 280-538548/21	1000.0	68.840187	50.0	770348.0	0.06884	Y
8	STD200 280-538548/22	2000.0	137.752746	50.0	783196.0	0.068876	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

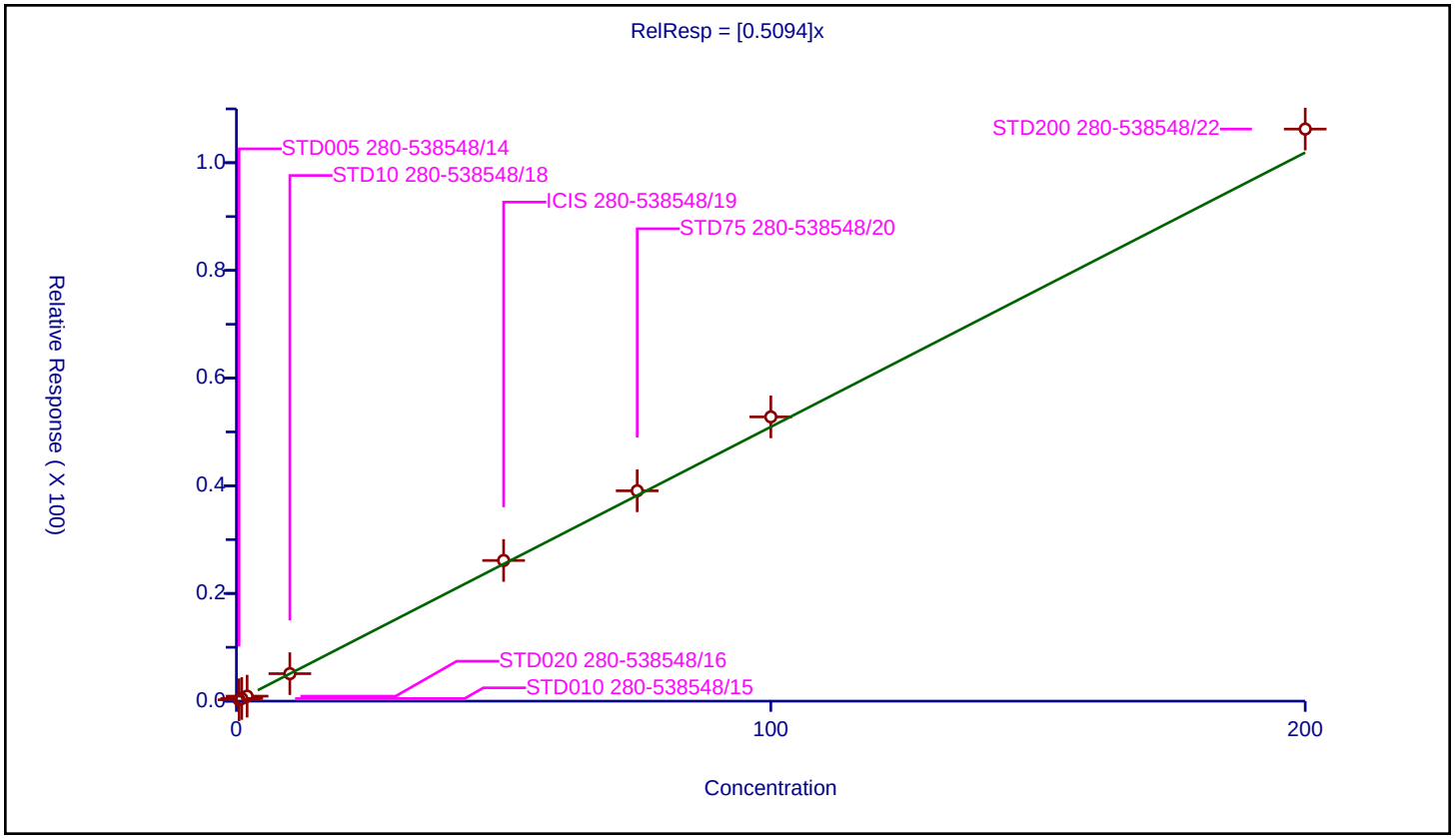
Curve Coefficients

Intercept:	0
Slope:	0.5094

Error Coefficients

Standard Error:	753000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.256766	50.0	741336.0	0.513532	Y
2	STD010 280-538548/15	1.0	0.485125	50.0	745169.0	0.485125	Y
3	STD020 280-538548/16	2.0	0.927112	50.0	729901.0	0.463556	Y
4	STD10 280-538548/18	10.0	5.104836	50.0	746498.0	0.510484	Y
5	ICIS 280-538548/19	50.0	26.128914	50.0	769988.0	0.522578	Y
6	STD75 280-538548/20	75.0	39.069238	50.0	778921.0	0.520923	Y
7	STD100 280-538548/21	100.0	52.797307	50.0	770348.0	0.527973	Y
8	STD200 280-538548/22	200.0	106.248819	50.0	783196.0	0.531244	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

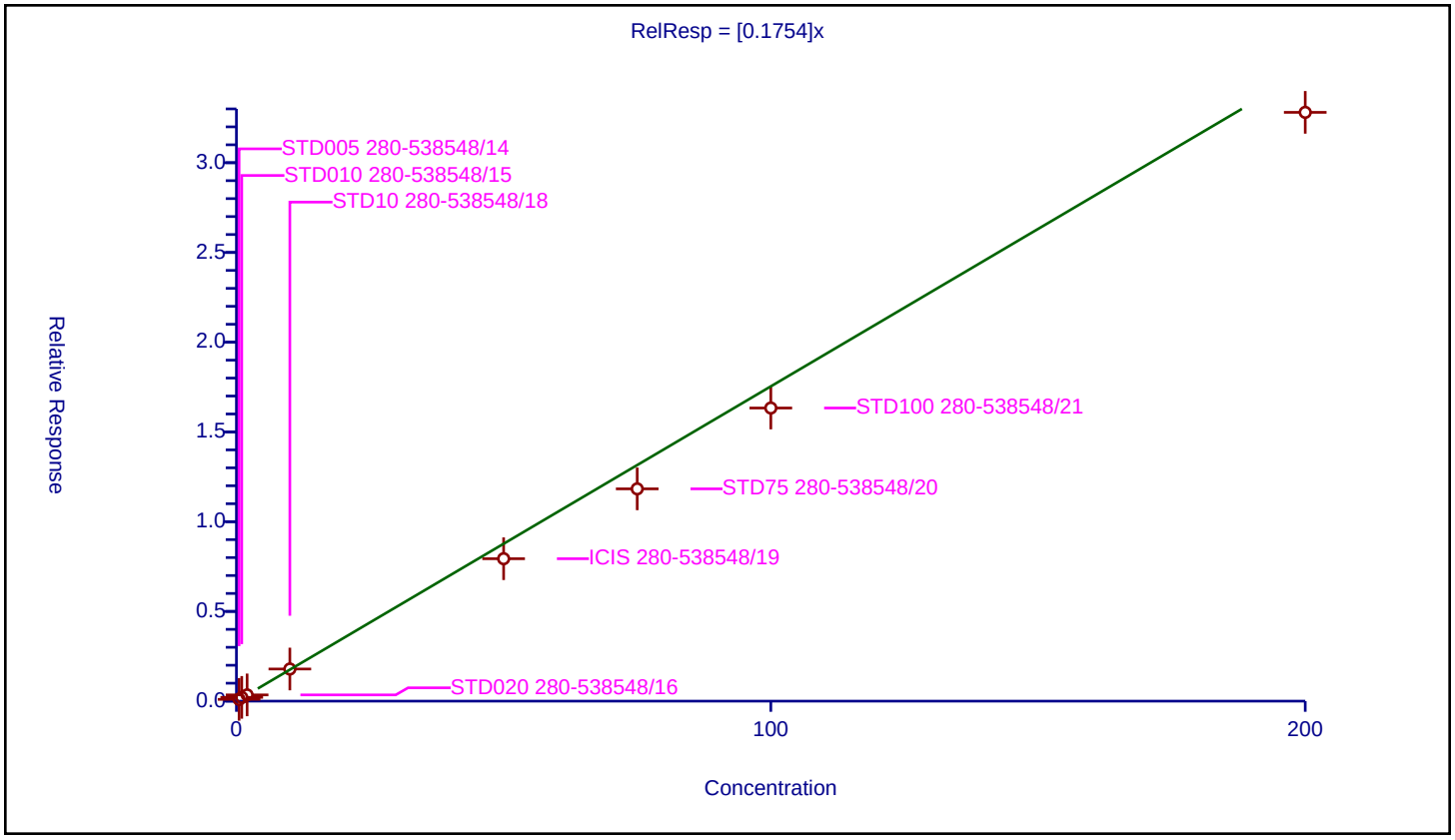
Curve Coefficients

Intercept:	0
Slope:	0.1754

Error Coefficients

Standard Error:	232000
Relative Standard Error:	10.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.098471	50.0	741336.0	0.196942	Y
2	STD010 280-538548/15	1.0	0.209416	50.0	745169.0	0.209416	Y
3	STD020 280-538548/16	2.0	0.347924	50.0	729901.0	0.173962	Y
4	STD10 280-538548/18	10.0	1.789891	50.0	746498.0	0.178989	Y
5	ICIS 280-538548/19	50.0	7.936163	50.0	769988.0	0.158723	Y
6	STD75 280-538548/20	75.0	11.828799	50.0	778921.0	0.157717	Y
7	STD100 280-538548/21	100.0	16.333203	50.0	770348.0	0.163332	Y
8	STD200 280-538548/22	200.0	32.806922	50.0	783196.0	0.164035	Y



Calibration / Hexane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

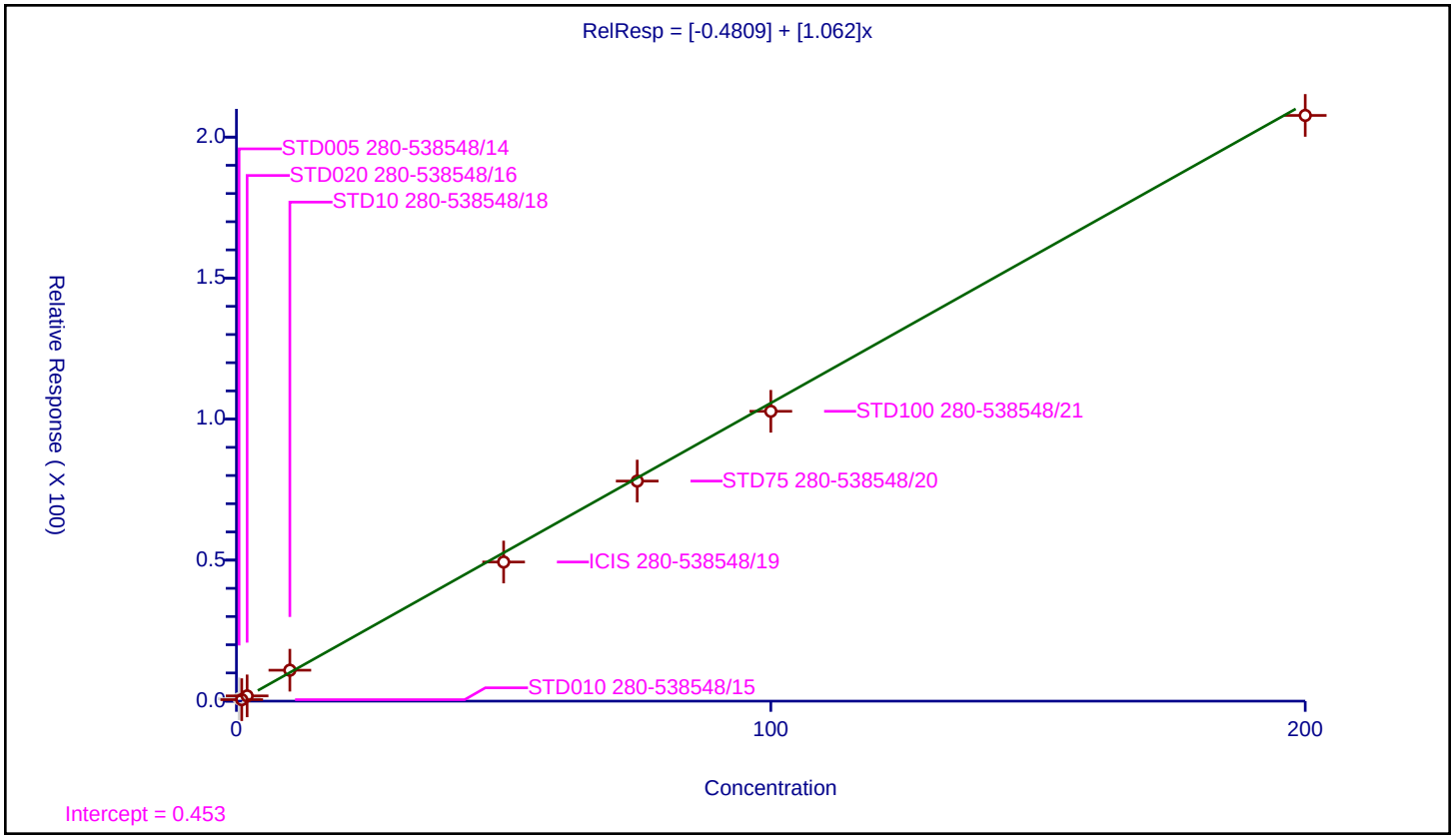
Curve Coefficients

Intercept:	-0.4809
Slope:	1.062

Error Coefficients

Standard Error:	372000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.858423	50.0	154877.0	1.716846	N
2	STD010 280-538548/15	1.0	0.520189	50.0	156866.0	0.520189	Y
3	STD020 280-538548/16	2.0	1.860383	50.0	153463.0	0.930192	Y
4	STD10 280-538548/18	10.0	10.966011	50.0	158818.0	1.096601	Y
5	ICIS 280-538548/19	50.0	49.334346	50.0	161871.0	0.986687	Y
6	STD75 280-538548/20	75.0	78.034607	50.0	162105.0	1.040461	Y
7	STD100 280-538548/21	100.0	102.776177	50.0	161409.0	1.027762	Y
8	STD200 280-538548/22	200.0	207.682118	50.0	169094.0	1.038411	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

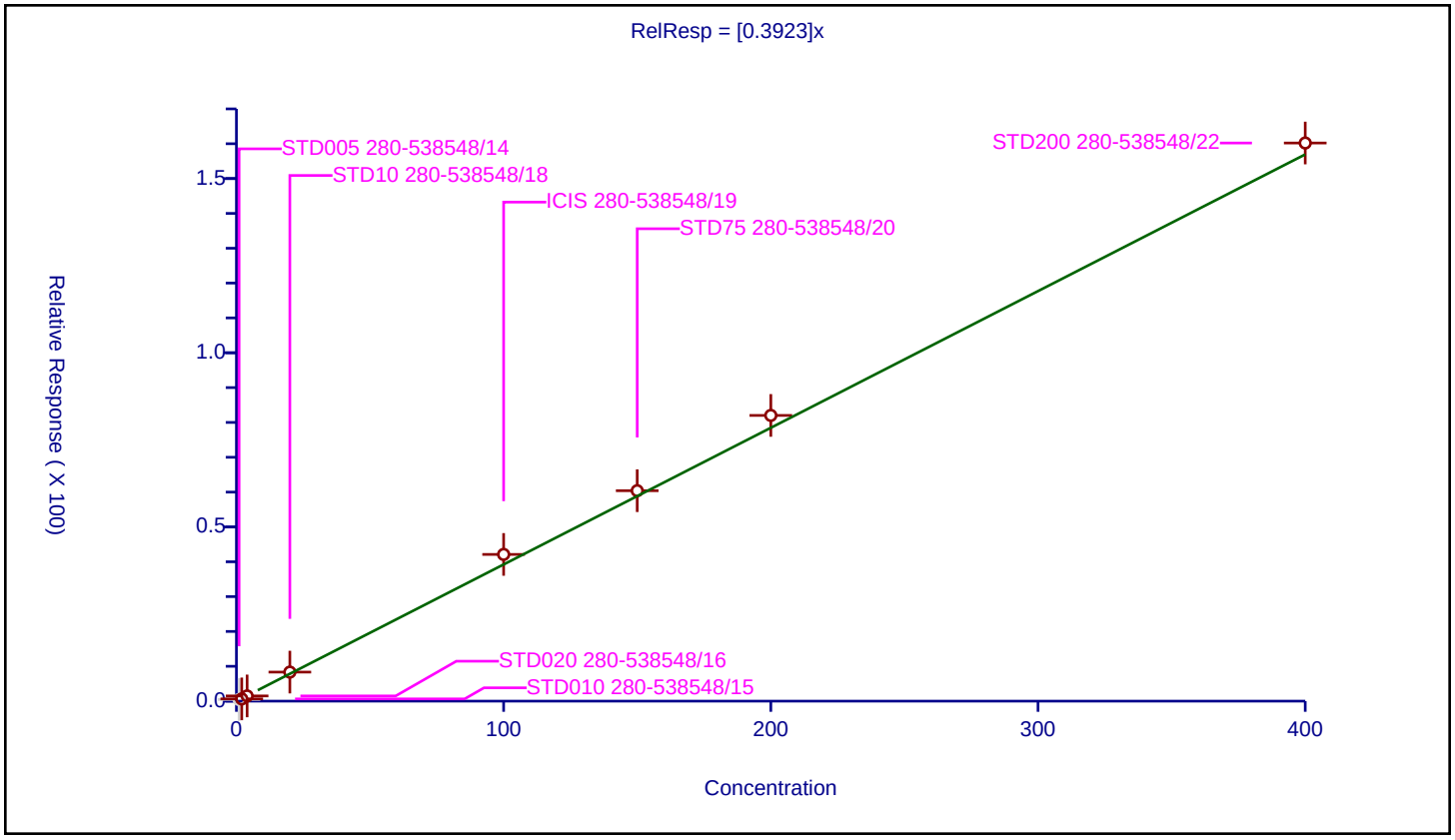
Curve Coefficients

Intercept:	0
Slope:	0.3923

Error Coefficients

Standard Error:	1240000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.469288	50.0	741336.0	0.469288	N
2	STD010 280-538548/15	2.0	0.642673	50.0	745169.0	0.321337	Y
3	STD020 280-538548/16	4.0	1.49486	50.0	729901.0	0.373715	Y
4	STD10 280-538548/18	20.0	8.336057	50.0	746498.0	0.416803	Y
5	ICIS 280-538548/19	100.0	42.109422	50.0	769988.0	0.421094	Y
6	STD75 280-538548/20	150.0	60.405741	50.0	778921.0	0.402705	Y
7	STD100 280-538548/21	200.0	82.015855	50.0	770348.0	0.410079	Y
8	STD200 280-538548/22	400.0	160.205172	50.0	783196.0	0.400513	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

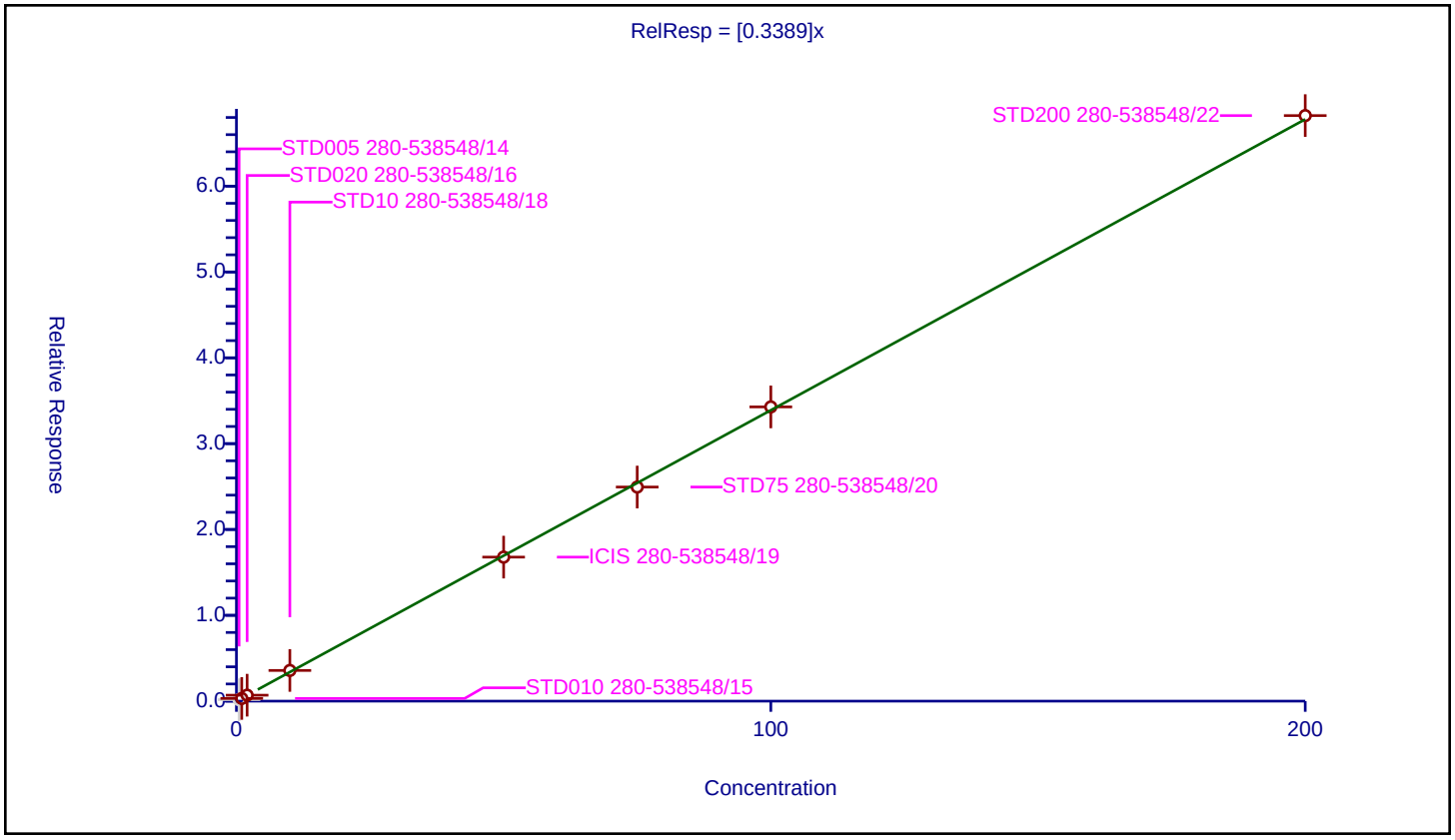
Curve Coefficients

Intercept:	0
Slope:	0.3389

Error Coefficients

Standard Error:	523000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.170975	50.0	741336.0	0.34195	N
2	STD010 280-538548/15	1.0	0.3157	50.0	745169.0	0.3157	Y
3	STD020 280-538548/16	2.0	0.694615	50.0	729901.0	0.347307	Y
4	STD10 280-538548/18	10.0	3.574691	50.0	746498.0	0.357469	Y
5	ICIS 280-538548/19	50.0	16.779612	50.0	769988.0	0.335592	Y
6	STD75 280-538548/20	75.0	24.944186	50.0	778921.0	0.332589	Y
7	STD100 280-538548/21	100.0	34.279962	50.0	770348.0	0.3428	Y
8	STD200 280-538548/22	200.0	68.218875	50.0	783196.0	0.341094	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

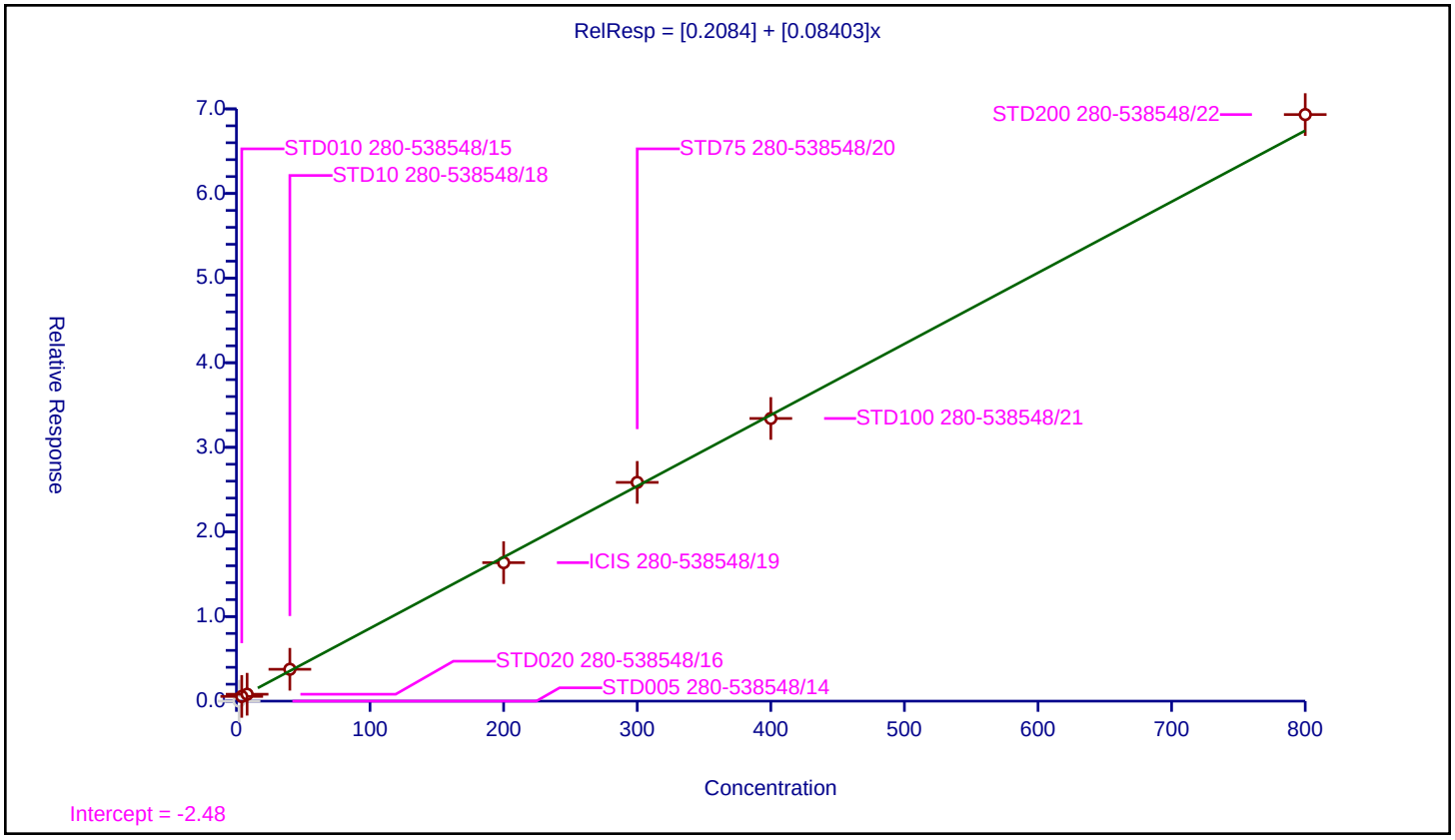
Curve Coefficients

Intercept:	0.2084
Slope:	0.08403

Error Coefficients

Standard Error:	578000
Relative Standard Error:	5.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	4.0	0.558867	50.0	745169.0	0.139717	Y
3	STD020 280-538548/16	8.0	0.816207	50.0	729901.0	0.102026	Y
4	STD10 280-538548/18	40.0	3.765047	50.0	746498.0	0.094126	Y
5	ICIS 280-538548/19	200.0	16.369151	50.0	769988.0	0.081846	Y
6	STD75 280-538548/20	300.0	25.856281	50.0	778921.0	0.086188	Y
7	STD100 280-538548/21	400.0	33.411134	50.0	770348.0	0.083528	Y
8	STD200 280-538548/22	800.0	69.328814	50.0	783196.0	0.086661	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

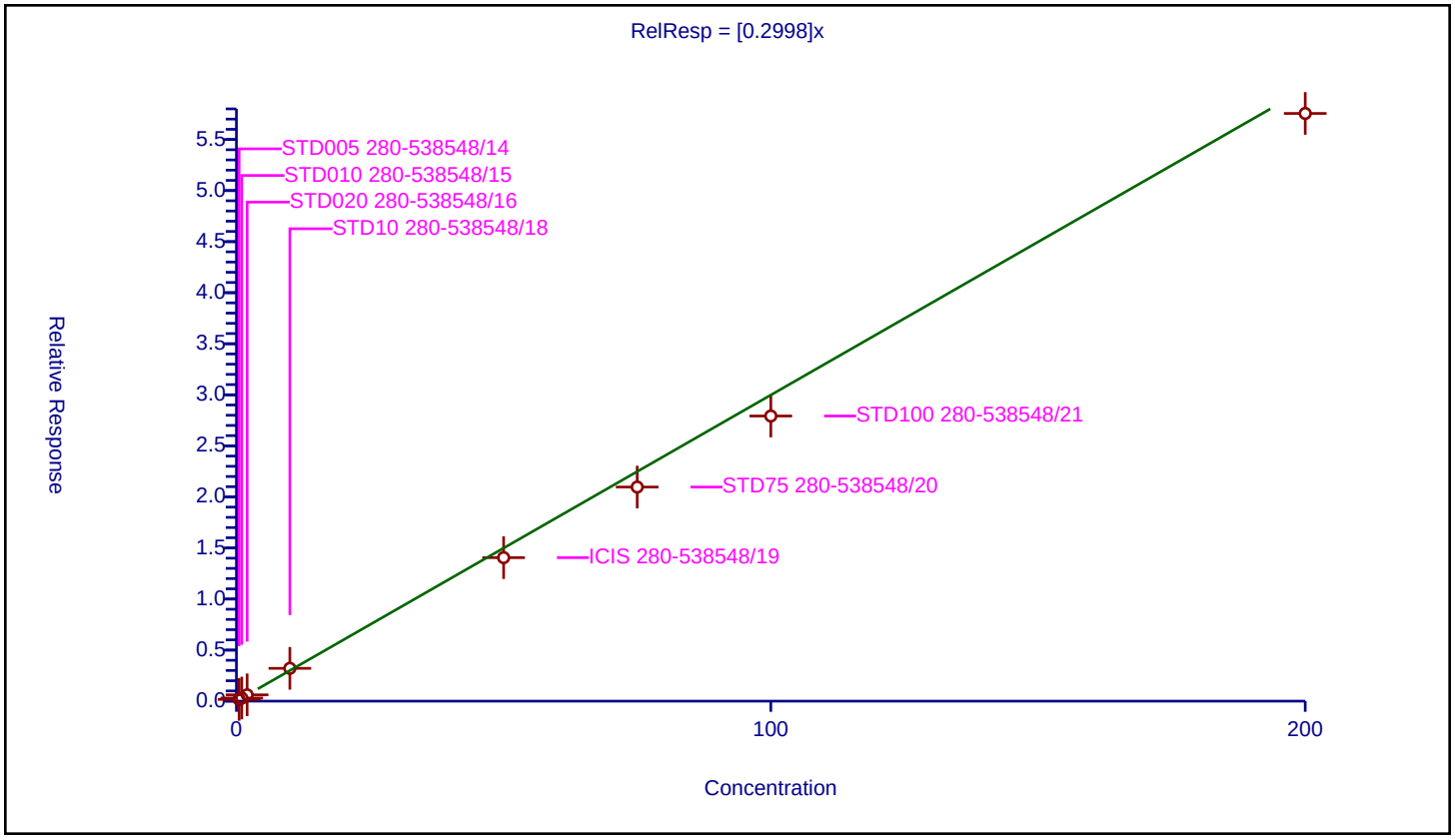
Curve Coefficients

Intercept:	0
Slope:	0.2998

Error Coefficients

Standard Error:	406000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.168884	50.0	741336.0	0.337769	Y
2	STD010 280-538548/15	1.0	0.303689	50.0	745169.0	0.303689	Y
3	STD020 280-538548/16	2.0	0.615905	50.0	729901.0	0.307953	Y
4	STD10 280-538548/18	10.0	3.212936	50.0	746498.0	0.321294	Y
5	ICIS 280-538548/19	50.0	14.053401	50.0	769988.0	0.281068	Y
6	STD75 280-538548/20	75.0	20.967081	50.0	778921.0	0.279561	Y
7	STD100 280-538548/21	100.0	27.922965	50.0	770348.0	0.27923	Y
8	STD200 280-538548/22	200.0	57.555261	50.0	783196.0	0.287776	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

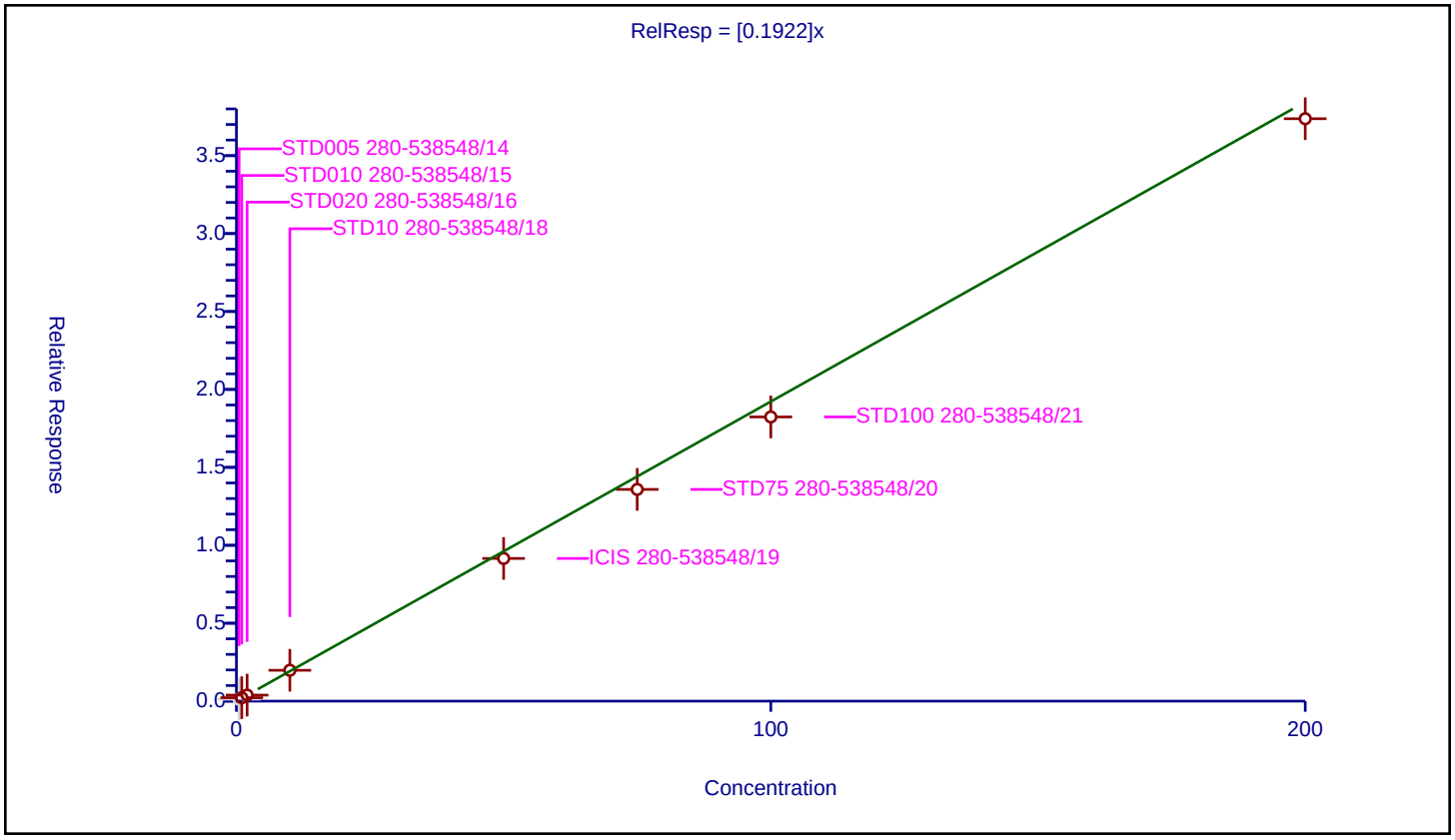
Curve Coefficients

Intercept:	0
Slope:	0.1922

Error Coefficients

Standard Error:	285000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.124707	50.0	741336.0	0.249415	N
2	STD010 280-538548/15	1.0	0.220621	50.0	745169.0	0.220621	Y
3	STD020 280-538548/16	2.0	0.387244	50.0	729901.0	0.193622	Y
4	STD10 280-538548/18	10.0	1.979175	50.0	746498.0	0.197917	Y
5	ICIS 280-538548/19	50.0	9.155208	50.0	769988.0	0.183104	Y
6	STD75 280-538548/20	75.0	13.585075	50.0	778921.0	0.181134	Y
7	STD100 280-538548/21	100.0	18.234941	50.0	770348.0	0.182349	Y
8	STD200 280-538548/22	200.0	37.369701	50.0	783196.0	0.186849	Y



Calibration / sec-Butyl Alcohol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

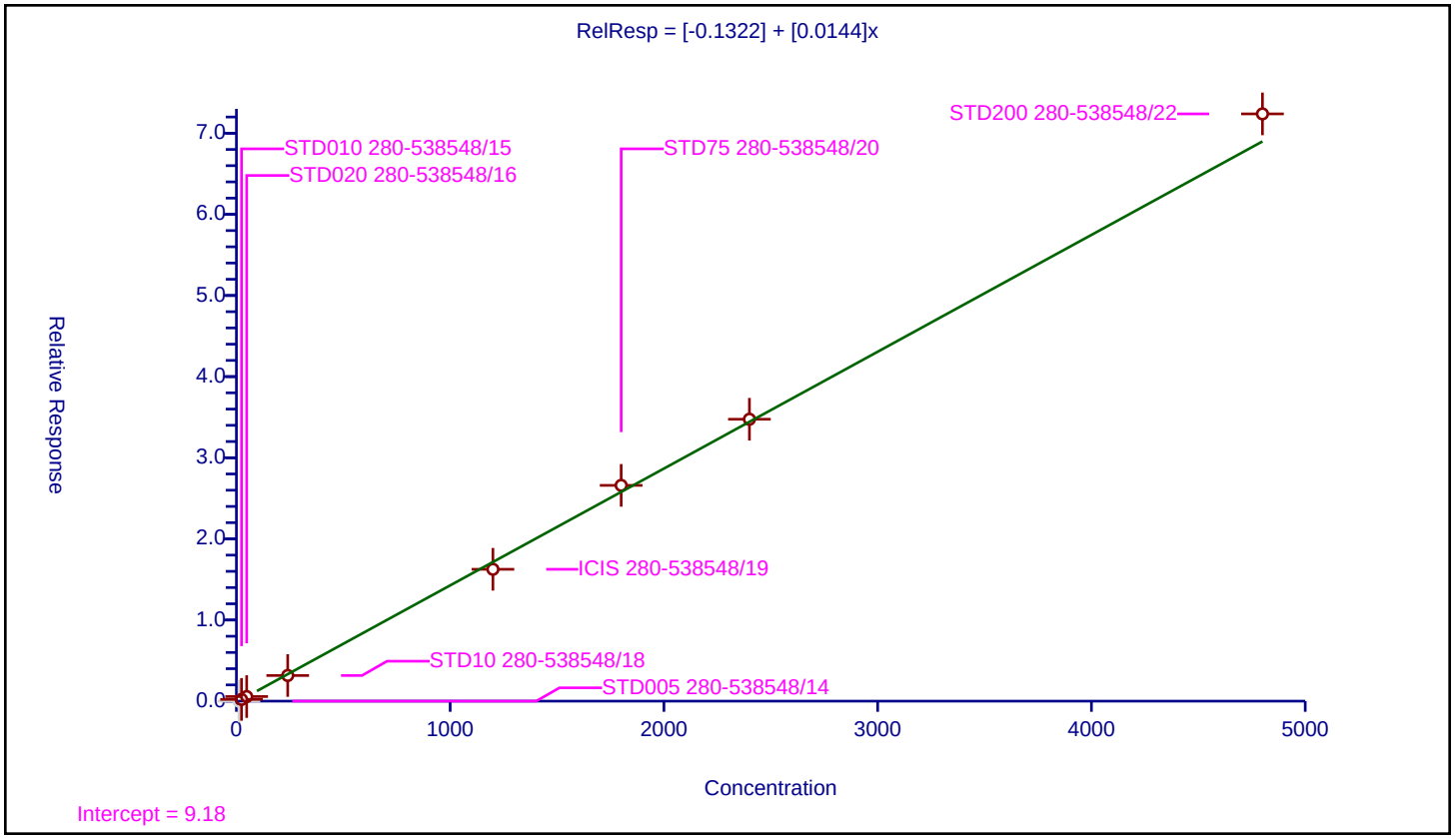
Curve Coefficients

Intercept:	-0.1322
Slope:	0.0144

Error Coefficients

Standard Error:	601000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	12.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	24.0	0.213576	50.0	745169.0	0.008899	Y
3	STD020 280-538548/16	48.0	0.565351	50.0	729901.0	0.011778	Y
4	STD10 280-538548/18	240.0	3.160223	50.0	746498.0	0.013168	Y
5	ICIS 280-538548/19	1200.0	16.25324	50.0	769988.0	0.013544	Y
6	STD75 280-538548/20	1800.0	26.597755	50.0	778921.0	0.014777	Y
7	STD100 280-538548/21	2400.0	34.747153	50.0	770348.0	0.014478	Y
8	STD200 280-538548/22	4800.0	72.381307	50.0	783196.0	0.015079	Y



Calibration / Chlorobromomethane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

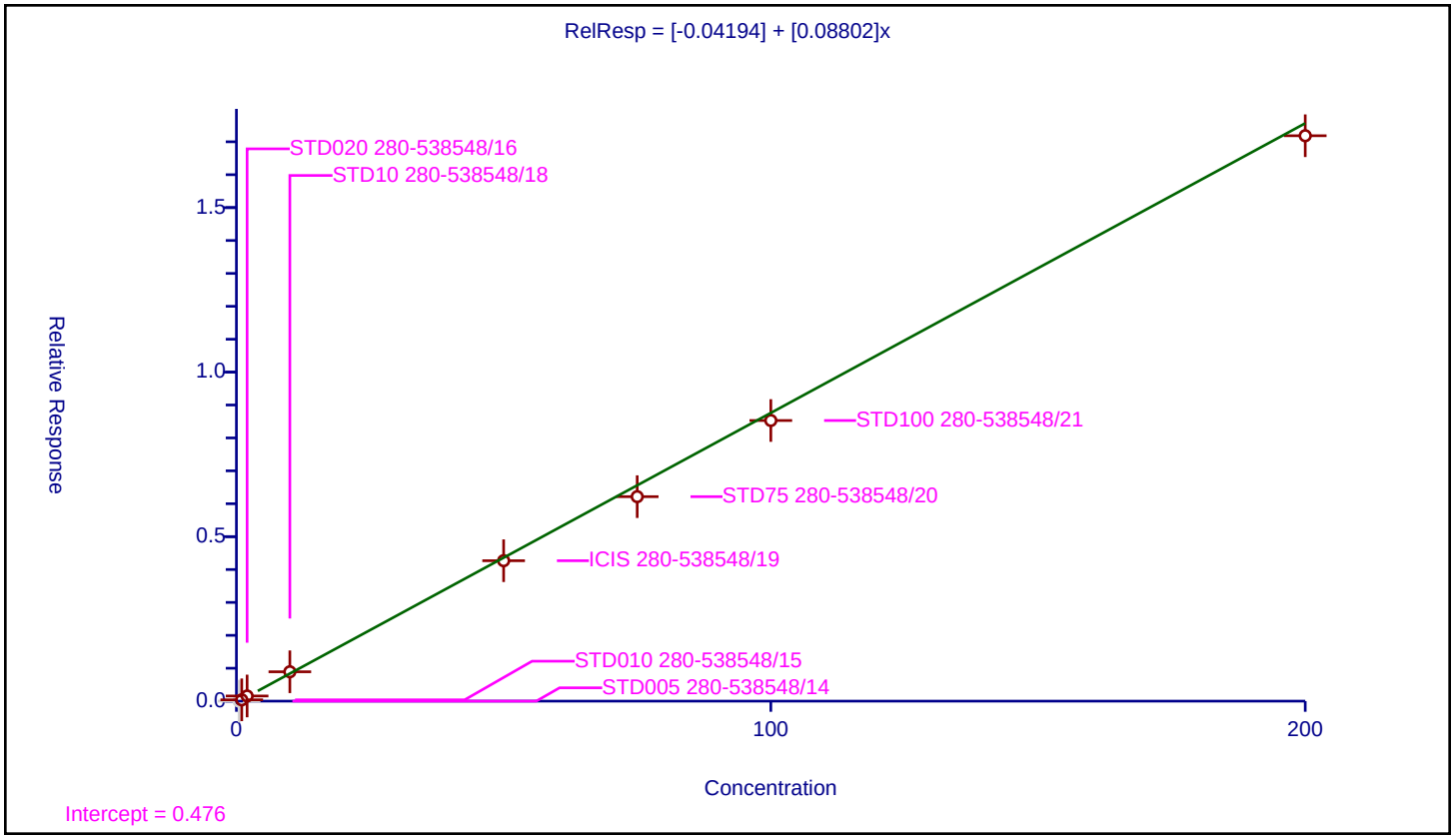
Curve Coefficients

Intercept:	-0.04194
Slope:	0.08802

Error Coefficients

Standard Error:	144000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.040058	50.0	745169.0	0.040058	Y
3	STD020 280-538548/16	2.0	0.156528	50.0	729901.0	0.078264	Y
4	STD10 280-538548/18	10.0	0.892434	50.0	746498.0	0.089243	Y
5	ICIS 280-538548/19	50.0	4.267729	50.0	769988.0	0.085355	Y
6	STD75 280-538548/20	75.0	6.214494	50.0	778921.0	0.08286	Y
7	STD100 280-538548/21	100.0	8.529392	50.0	770348.0	0.085294	Y
8	STD200 280-538548/22	200.0	17.18414	50.0	783196.0	0.085921	Y



Calibration / Tetrahydrofuran

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

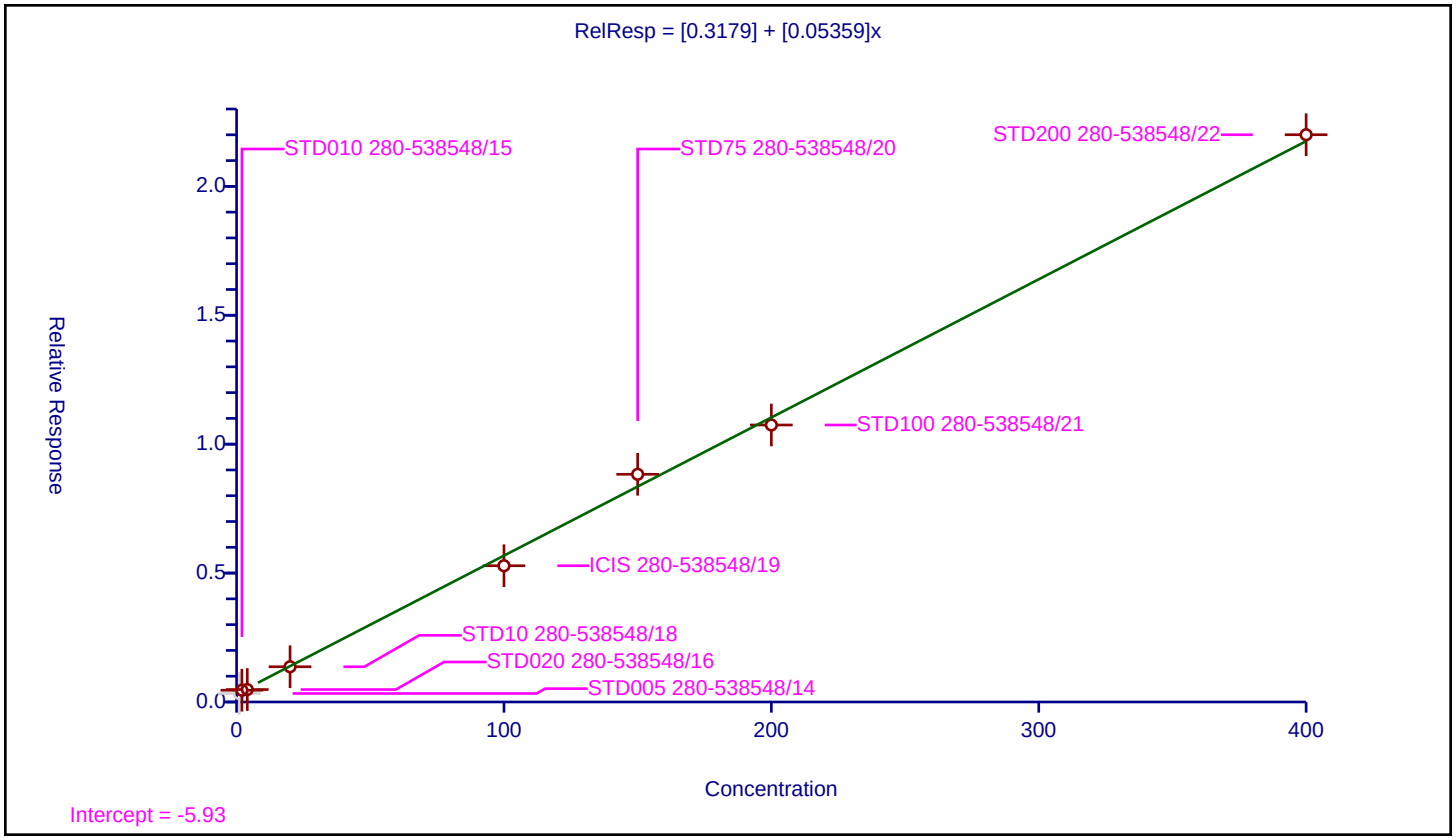
Curve Coefficients

Intercept:	0.3179
Slope:	0.05359

Error Coefficients

Standard Error:	186000
Relative Standard Error:	17.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.0	0.329203	50.0	741336.0	0.329203	N
2	STD010 280-538548/15	2.0	0.455467	50.0	745169.0	0.227734	Y
3	STD020 280-538548/16	4.0	0.482189	50.0	729901.0	0.120547	Y
4	STD10 280-538548/18	20.0	1.367117	50.0	746498.0	0.068356	Y
5	ICIS 280-538548/19	100.0	5.284693	50.0	769988.0	0.052847	Y
6	STD75 280-538548/20	150.0	8.831897	50.0	778921.0	0.058879	Y
7	STD100 280-538548/21	200.0	10.743651	50.0	770348.0	0.053718	Y
8	STD200 280-538548/22	400.0	22.002666	50.0	783196.0	0.055007	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

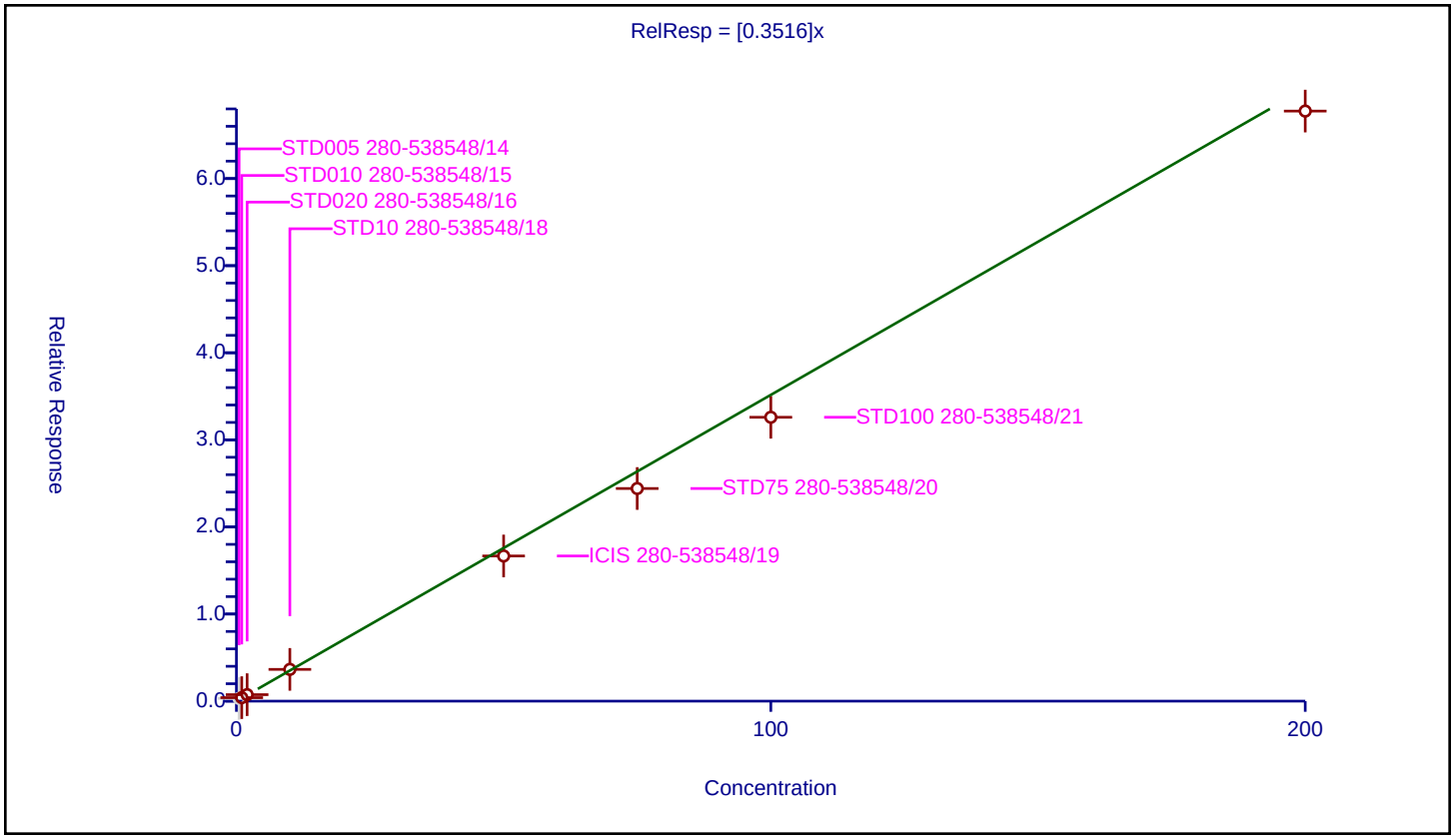
Curve Coefficients

Intercept:	0
Slope:	0.3516

Error Coefficients

Standard Error:	515000
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.314163	50.0	741336.0	0.628325	N
2	STD010 280-538548/15	1.0	0.401184	50.0	745169.0	0.401184	Y
3	STD020 280-538548/16	2.0	0.744074	50.0	729901.0	0.372037	Y
4	STD10 280-538548/18	10.0	3.645891	50.0	746498.0	0.364589	Y
5	ICIS 280-538548/19	50.0	16.669091	50.0	769988.0	0.333382	Y
6	STD75 280-538548/20	75.0	24.414928	50.0	778921.0	0.325532	Y
7	STD100 280-538548/21	100.0	32.594295	50.0	770348.0	0.325943	Y
8	STD200 280-538548/22	200.0	67.748558	50.0	783196.0	0.338743	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

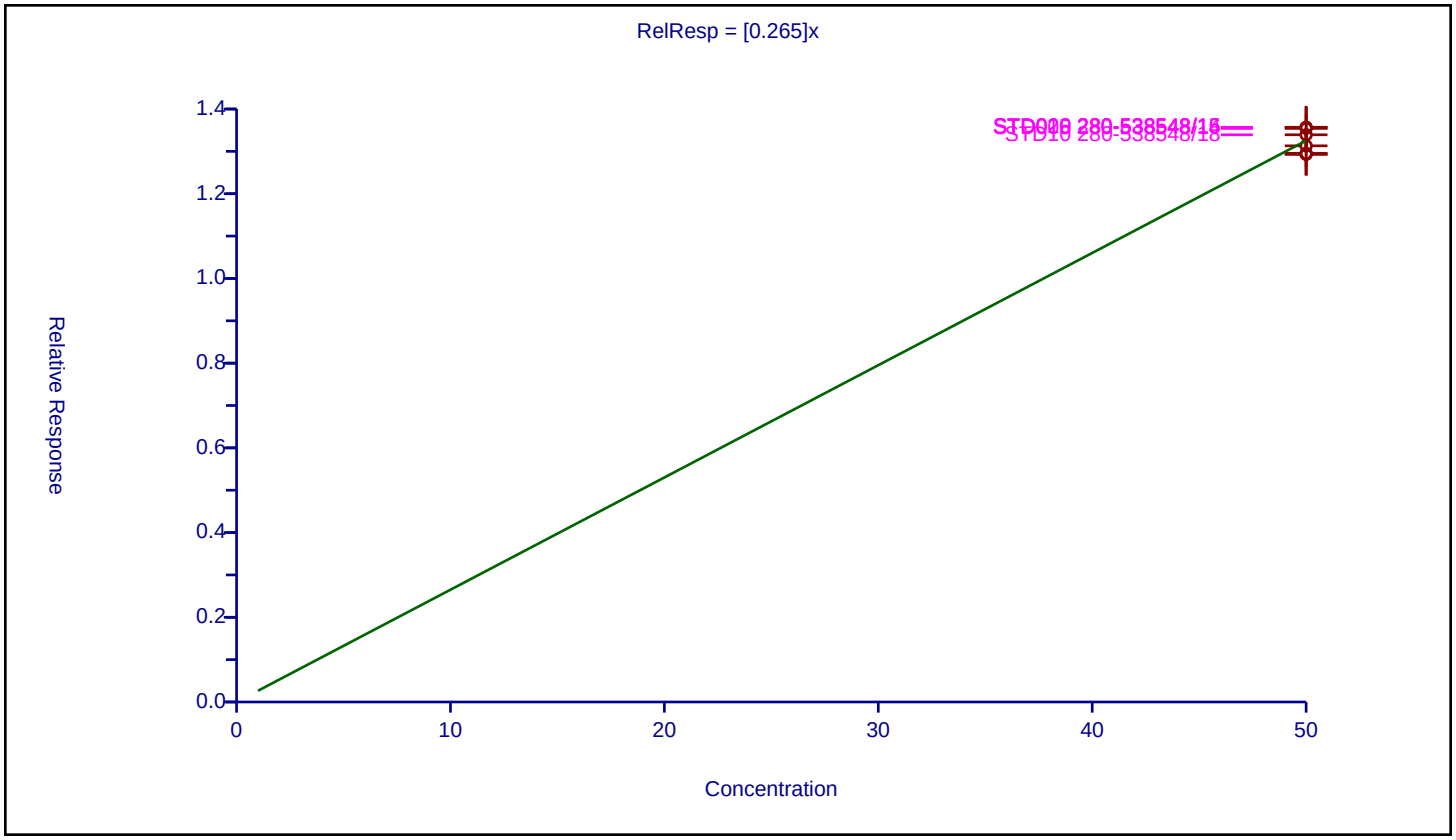
Curve Coefficients

Intercept:	0
Slope:	0.265

Error Coefficients

Standard Error:	215000
Relative Standard Error:	2.2
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	13.541903	50.0	741336.0	0.270838	Y
2	STD010 280-538548/15	50.0	13.568667	50.0	745169.0	0.271373	Y
3	STD020 280-538548/16	50.0	13.562319	50.0	729901.0	0.271246	Y
4	STD10 280-538548/18	50.0	13.39173	50.0	746498.0	0.267835	Y
5	ICIS 280-538548/19	50.0	12.932279	50.0	769988.0	0.258646	Y
6	STD75 280-538548/20	50.0	12.933789	50.0	778921.0	0.258676	Y
7	STD100 280-538548/21	50.0	12.95408	50.0	770348.0	0.259082	Y
8	STD200 280-538548/22	50.0	13.131004	50.0	783196.0	0.26262	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

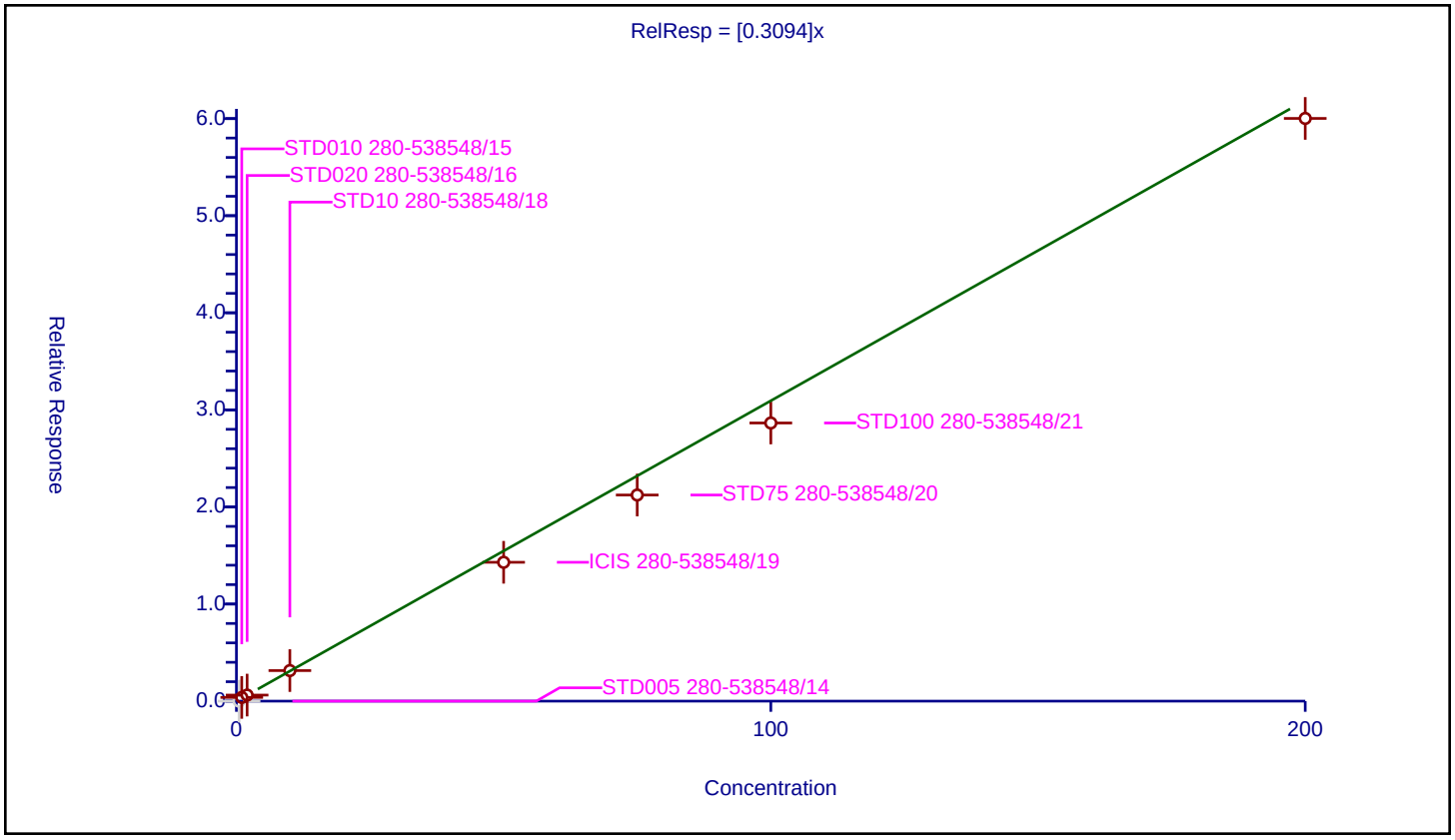
Curve Coefficients

Intercept:	0
Slope:	0.3094

Error Coefficients

Standard Error:	454000
Relative Standard Error:	11.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.383336	50.0	745169.0	0.383336	Y
3	STD020 280-538548/16	2.0	0.624057	50.0	729901.0	0.312029	Y
4	STD10 280-538548/18	10.0	3.146492	50.0	746498.0	0.314649	Y
5	ICIS 280-538548/19	50.0	14.301587	50.0	769988.0	0.286032	Y
6	STD75 280-538548/20	75.0	21.230715	50.0	778921.0	0.283076	Y
7	STD100 280-538548/21	100.0	28.648416	50.0	770348.0	0.286484	Y
8	STD200 280-538548/22	200.0	60.017799	50.0	783196.0	0.300089	Y



Calibration / Cyclohexane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

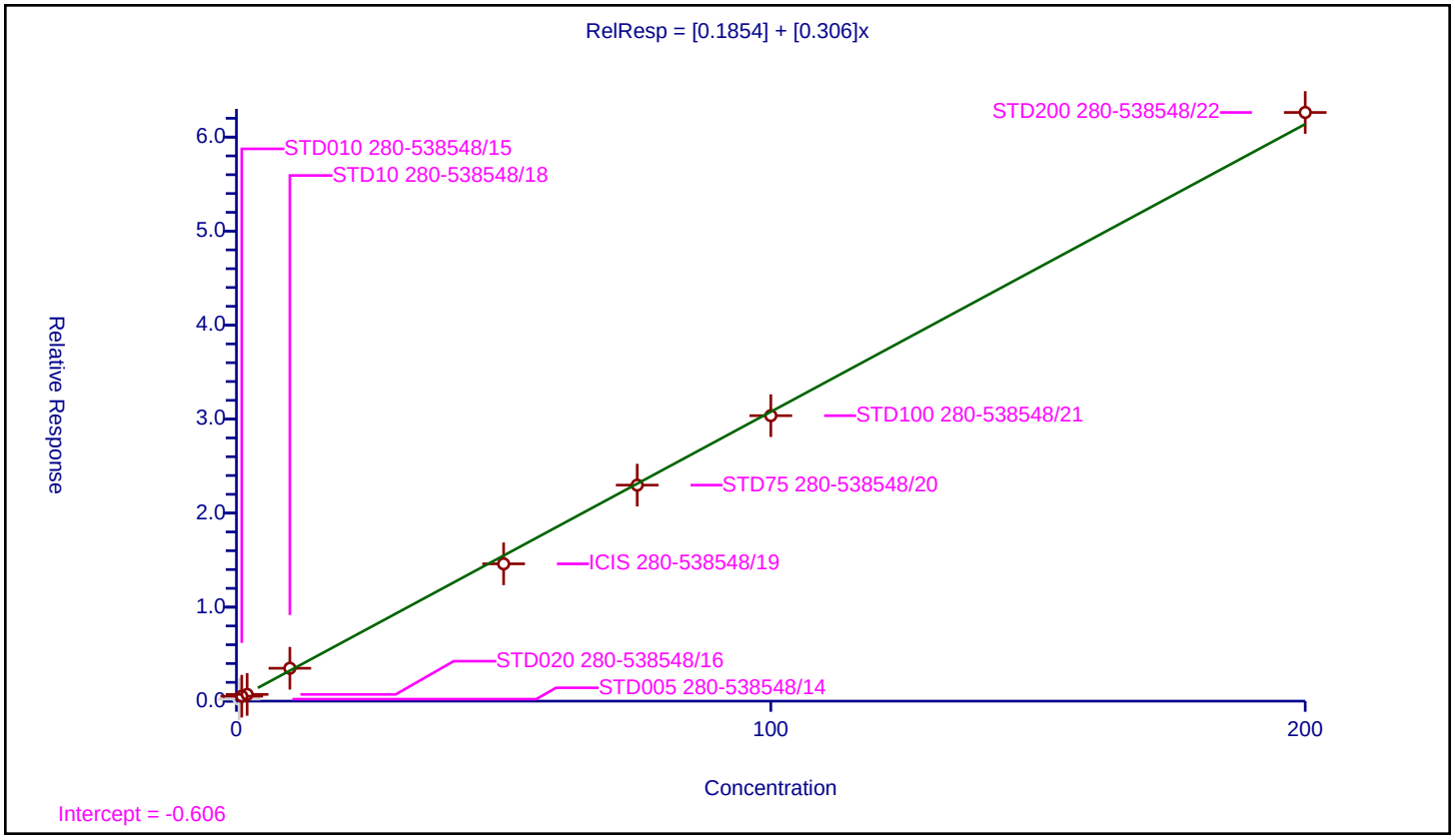
Curve Coefficients

Intercept:	0.1854
Slope:	0.306

Error Coefficients

Standard Error:	522000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.215085	50.0	741336.0	0.430169	N
2	STD010 280-538548/15	1.0	0.524914	50.0	745169.0	0.524914	Y
3	STD020 280-538548/16	2.0	0.714617	50.0	729901.0	0.357309	Y
4	STD10 280-538548/18	10.0	3.498536	50.0	746498.0	0.349854	Y
5	ICIS 280-538548/19	50.0	14.606137	50.0	769988.0	0.292123	Y
6	STD75 280-538548/20	75.0	22.978903	50.0	778921.0	0.306385	Y
7	STD100 280-538548/21	100.0	30.36725	50.0	770348.0	0.303672	Y
8	STD200 280-538548/22	200.0	62.620276	50.0	783196.0	0.313101	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

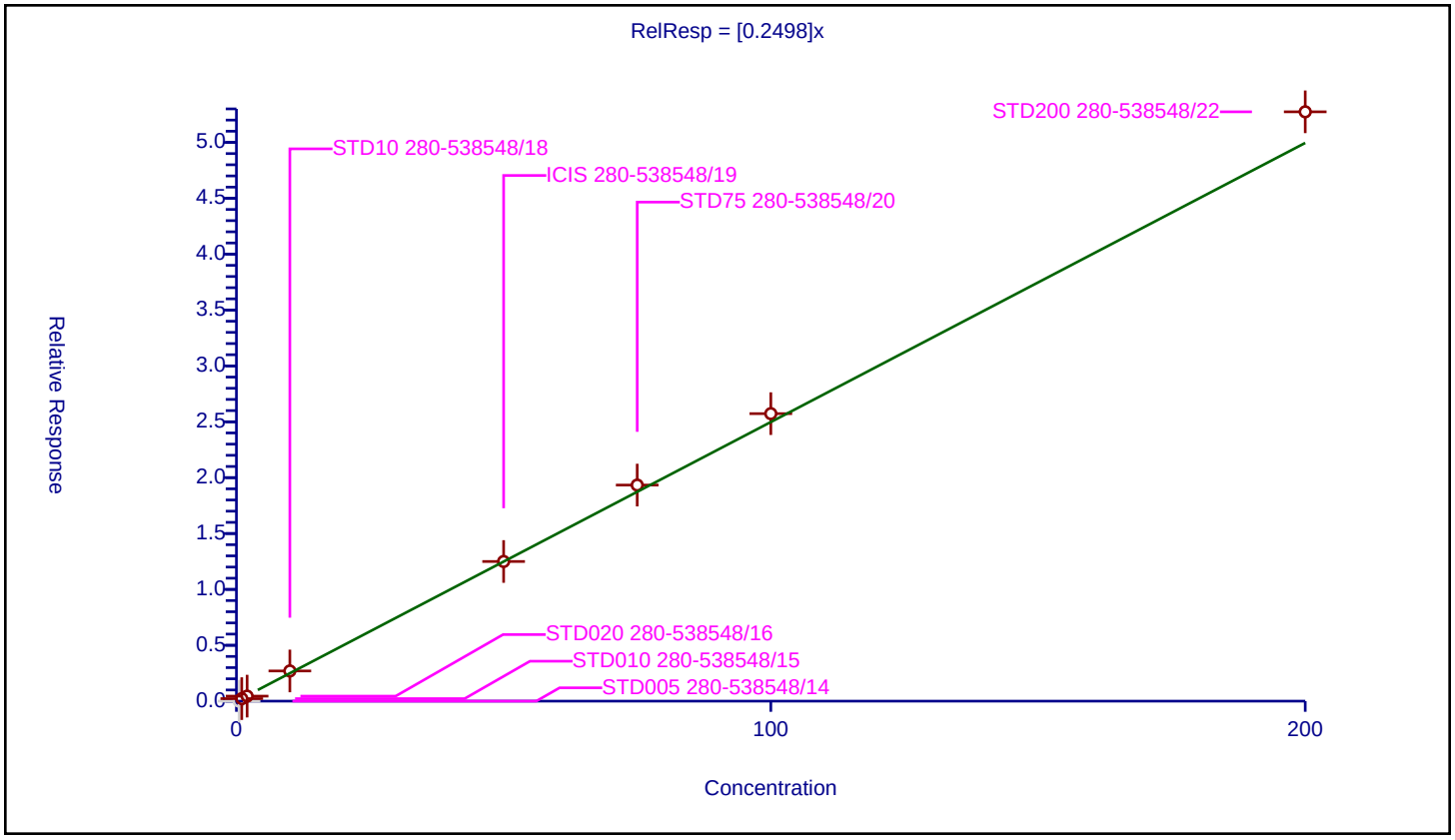
Curve Coefficients

Intercept:	0
Slope:	0.2498

Error Coefficients

Standard Error:	402000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.224714	50.0	745169.0	0.224714	Y
3	STD020 280-538548/16	2.0	0.449308	50.0	729901.0	0.224654	Y
4	STD10 280-538548/18	10.0	2.702753	50.0	746498.0	0.270275	Y
5	ICIS 280-538548/19	50.0	12.496948	50.0	769988.0	0.249939	Y
6	STD75 280-538548/20	75.0	19.335209	50.0	778921.0	0.257803	Y
7	STD100 280-538548/21	100.0	25.728437	50.0	770348.0	0.257284	Y
8	STD200 280-538548/22	200.0	52.737246	50.0	783196.0	0.263686	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

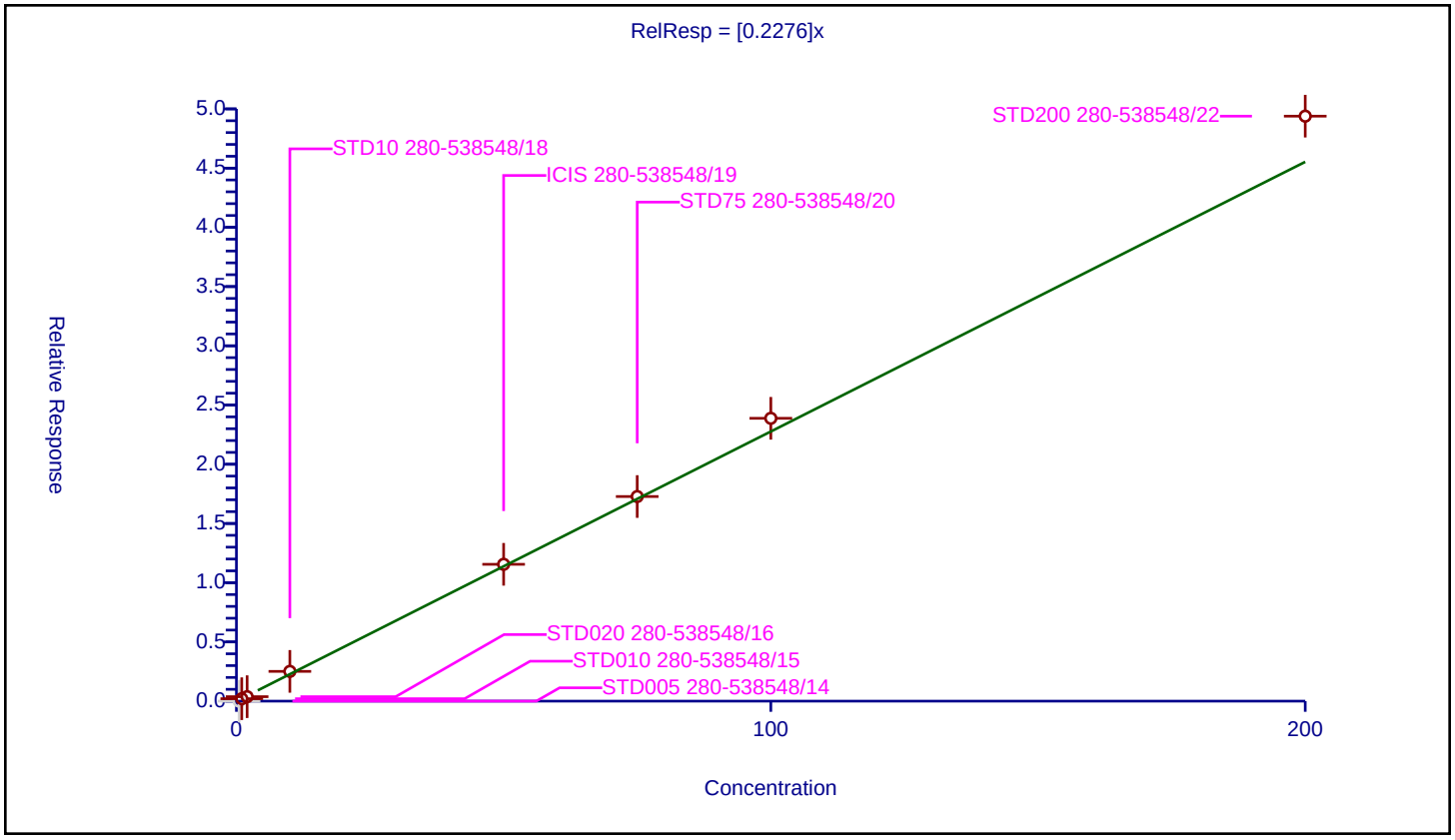
Curve Coefficients

Intercept:	0
Slope:	0.2276

Error Coefficients

Standard Error:	374000
Relative Standard Error:	9.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.206262	50.0	745169.0	0.206262	Y
3	STD020 280-538548/16	2.0	0.377722	50.0	729901.0	0.188861	Y
4	STD10 280-538548/18	10.0	2.512867	50.0	746498.0	0.251287	Y
5	ICIS 280-538548/19	50.0	11.551933	50.0	769988.0	0.231039	Y
6	STD75 280-538548/20	75.0	17.275244	50.0	778921.0	0.230337	Y
7	STD100 280-538548/21	100.0	23.879143	50.0	770348.0	0.238791	Y
8	STD200 280-538548/22	200.0	49.385211	50.0	783196.0	0.246926	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

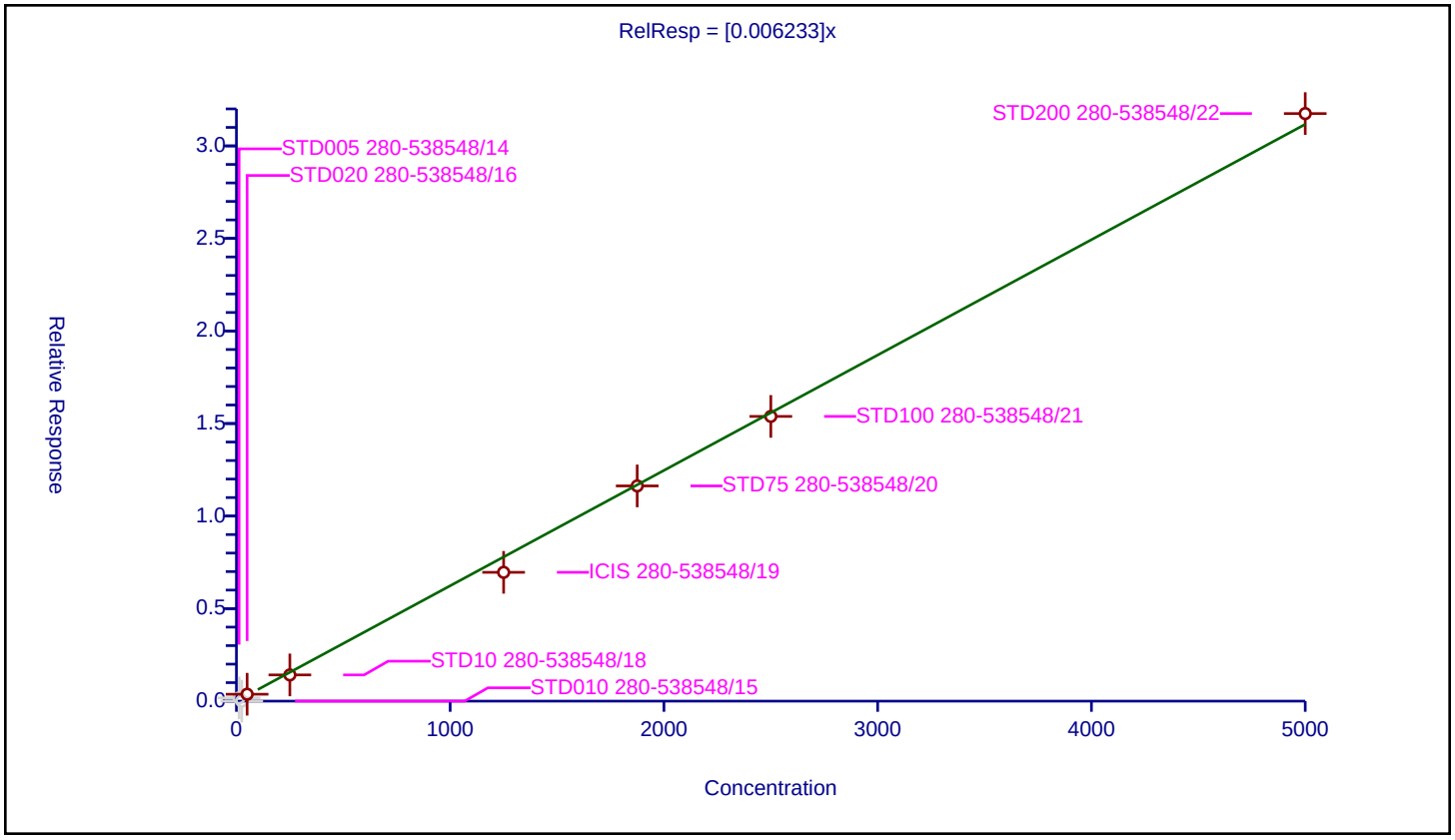
Curve Coefficients

Intercept:	0
Slope:	0.006233

Error Coefficients

Standard Error:	264000
Relative Standard Error:	10.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	12.5	0.176168	50.0	741336.0	0.014093	N
2	STD010 280-538548/15	25.0	0.0	50.0	745169.0	0.0	N
3	STD020 280-538548/16	50.0	0.372996	50.0	729901.0	0.00746	Y
4	STD10 280-538548/18	250.0	1.416749	50.0	746498.0	0.005667	Y
5	ICIS 280-538548/19	1250.0	6.959849	50.0	769988.0	0.005568	Y
6	STD75 280-538548/20	1875.0	11.628458	50.0	778921.0	0.006202	Y
7	STD100 280-538548/21	2500.0	15.384476	50.0	770348.0	0.006154	Y
8	STD200 280-538548/22	5000.0	31.747417	50.0	783196.0	0.006349	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

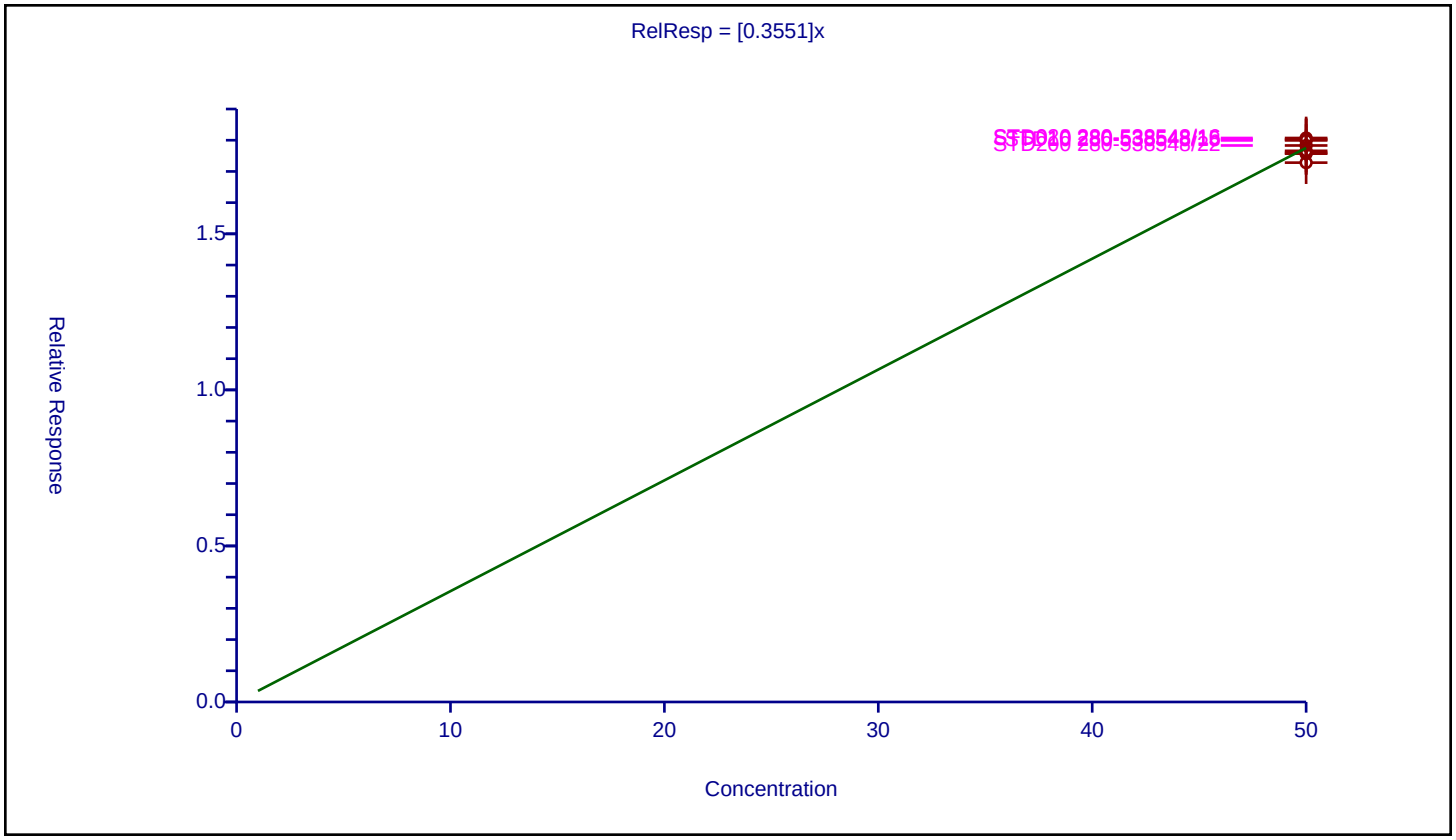
Curve Coefficients

Intercept:	0
Slope:	0.3551

Error Coefficients

Standard Error:	288000
Relative Standard Error:	1.5
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	17.660076	50.0	741336.0	0.353202	Y
2	STD010 280-538548/15	50.0	18.023361	50.0	745169.0	0.360467	Y
3	STD020 280-538548/16	50.0	18.071218	50.0	729901.0	0.361424	Y
4	STD10 280-538548/18	50.0	17.994623	50.0	746498.0	0.359892	Y
5	ICIS 280-538548/19	50.0	17.281503	50.0	769988.0	0.34563	Y
6	STD75 280-538548/20	50.0	17.59421	50.0	778921.0	0.351884	Y
7	STD100 280-538548/21	50.0	17.569462	50.0	770348.0	0.351389	Y
8	STD200 280-538548/22	50.0	17.830786	50.0	783196.0	0.356616	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

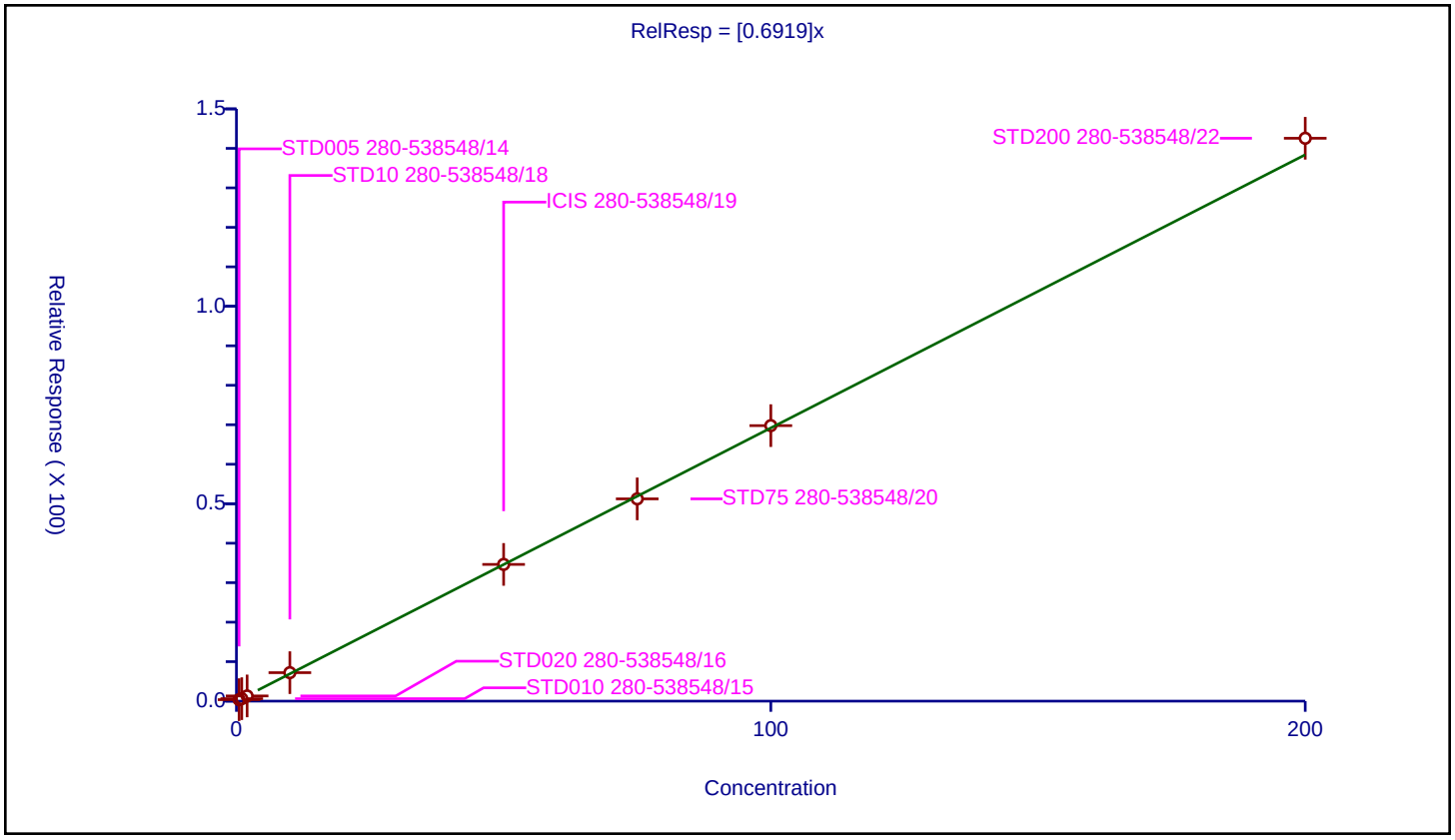
Curve Coefficients

Intercept:	0
Slope:	0.6919

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.371154	50.0	741336.0	0.742308	Y
2	STD010 280-538548/15	1.0	0.627173	50.0	745169.0	0.627173	Y
3	STD020 280-538548/16	2.0	1.316754	50.0	729901.0	0.658377	Y
4	STD10 280-538548/18	10.0	7.213013	50.0	746498.0	0.721301	Y
5	ICIS 280-538548/19	50.0	34.625994	50.0	769988.0	0.69252	Y
6	STD75 280-538548/20	75.0	51.232089	50.0	778921.0	0.683095	Y
7	STD100 280-538548/21	100.0	69.783007	50.0	770348.0	0.69783	Y
8	STD200 280-538548/22	200.0	142.562781	50.0	783196.0	0.712814	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

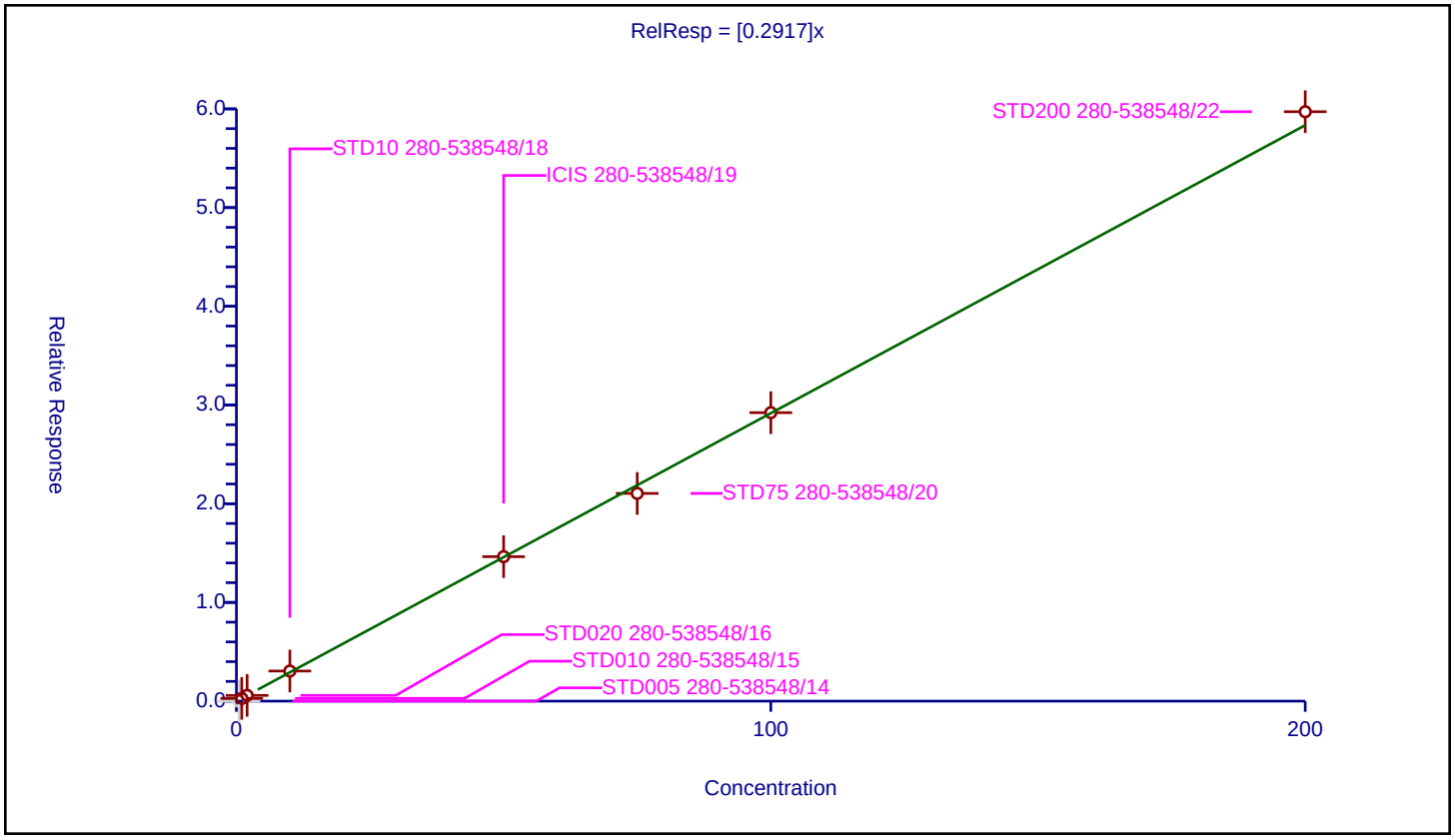
Curve Coefficients

Intercept:	0
Slope:	0.2917

Error Coefficients

Standard Error:	454000
Relative Standard Error:	2.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.282084	50.0	745169.0	0.282084	Y
3	STD020 280-538548/16	2.0	0.581517	50.0	729901.0	0.290759	Y
4	STD10 280-538548/18	10.0	3.049841	50.0	746498.0	0.304984	Y
5	ICIS 280-538548/19	50.0	14.636397	50.0	769988.0	0.292728	Y
6	STD75 280-538548/20	75.0	21.044946	50.0	778921.0	0.280599	Y
7	STD100 280-538548/21	100.0	29.226921	50.0	770348.0	0.292269	Y
8	STD200 280-538548/22	200.0	59.712703	50.0	783196.0	0.298564	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

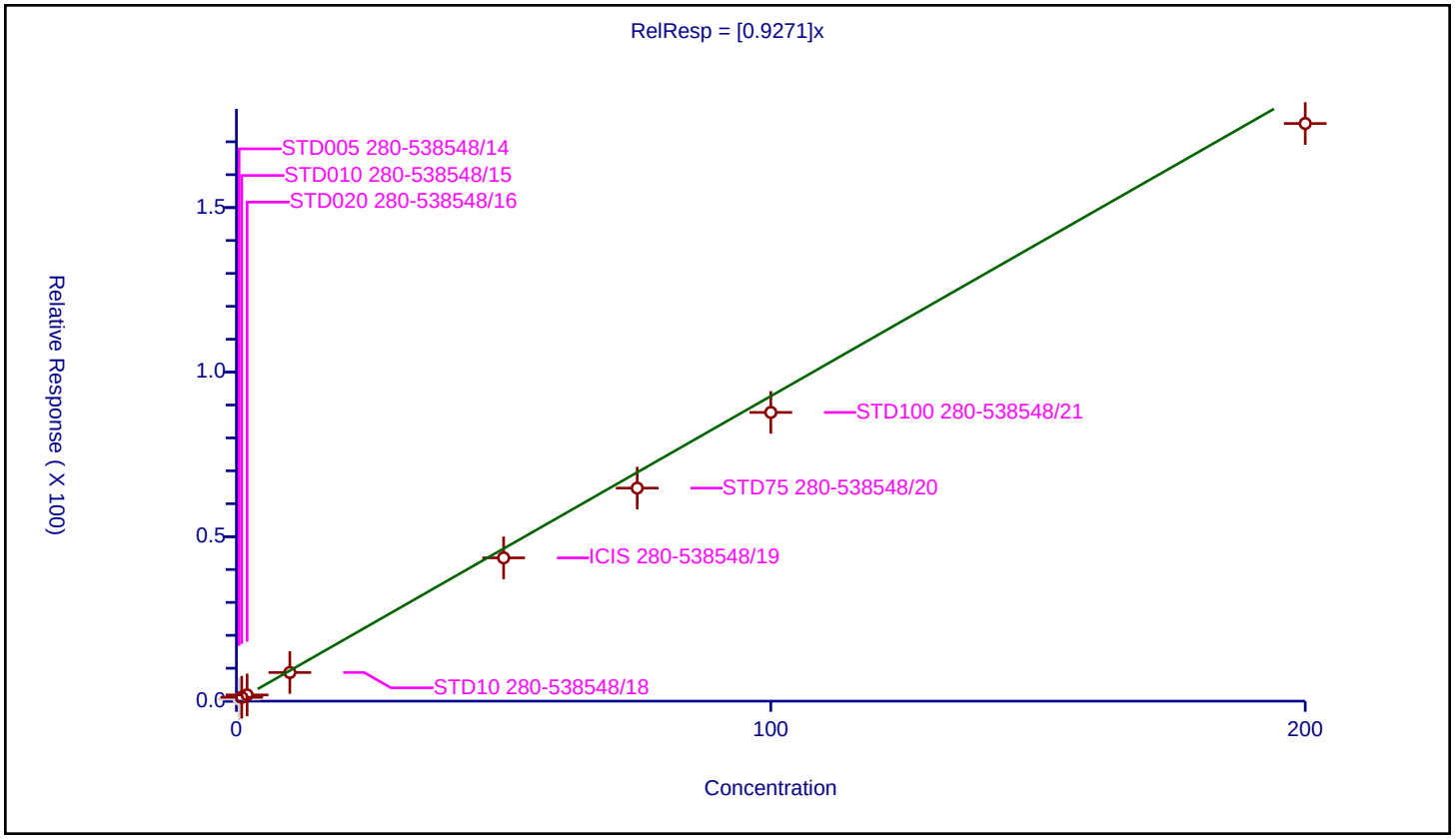
Curve Coefficients

Intercept:	0
Slope:	0.9271

Error Coefficients

Standard Error:	288000
Relative Standard Error:	12.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.631146	50.0	154877.0	1.262292	N
2	STD010 280-538548/15	1.0	1.182538	50.0	156866.0	1.182538	Y
3	STD020 280-538548/16	2.0	1.891661	50.0	153463.0	0.945831	Y
4	STD10 280-538548/18	10.0	8.715952	50.0	158818.0	0.871595	Y
5	ICIS 280-538548/19	50.0	43.549184	50.0	161871.0	0.870984	Y
6	STD75 280-538548/20	75.0	64.749699	50.0	162105.0	0.863329	Y
7	STD100 280-538548/21	100.0	87.748515	50.0	161409.0	0.877485	Y
8	STD200 280-538548/22	200.0	175.557678	50.0	169094.0	0.877788	Y



Calibration / 2-Pentanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

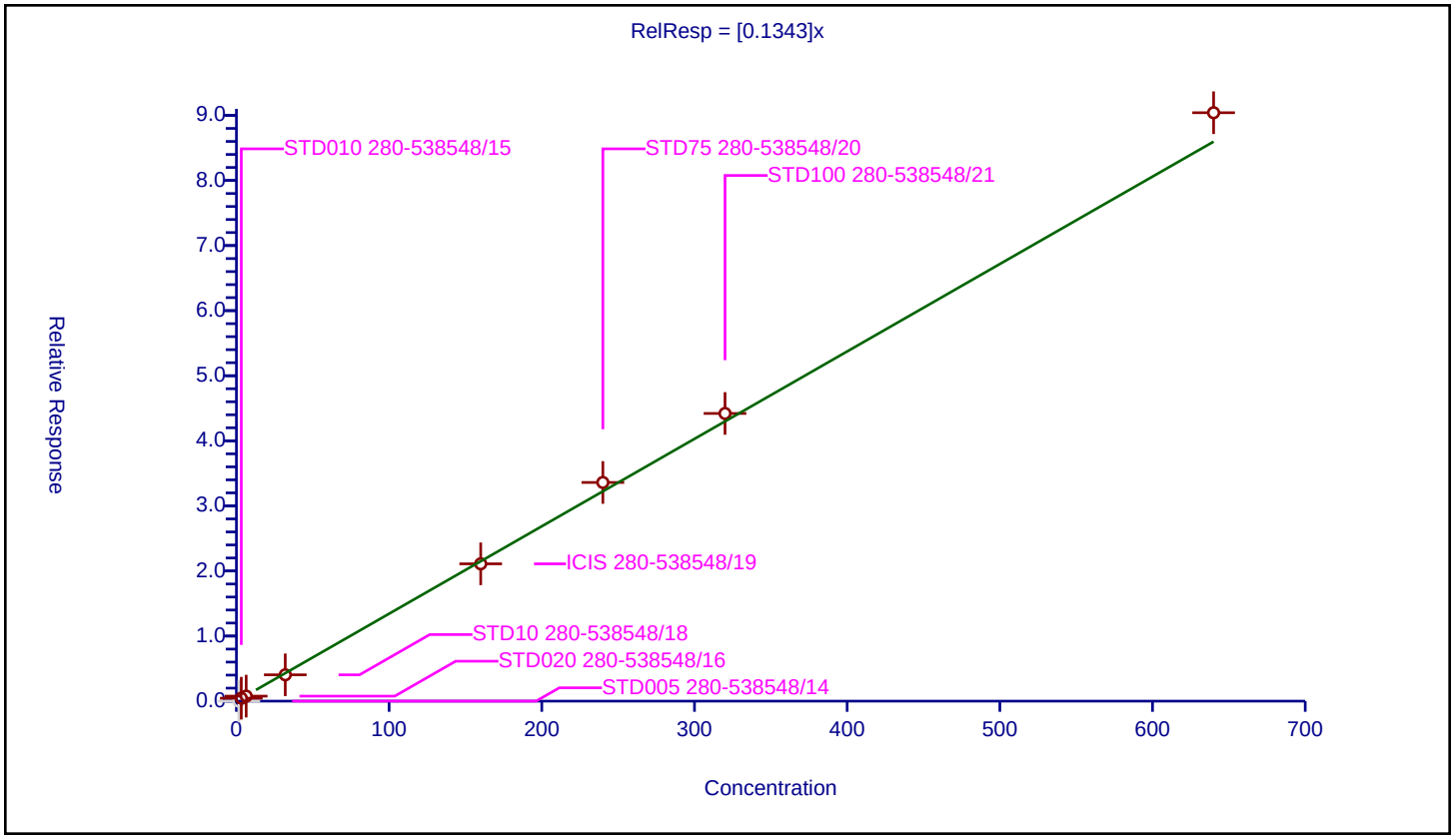
Curve Coefficients

Intercept:	0
Slope:	0.1343

Error Coefficients

Standard Error:	689000
Relative Standard Error:	6.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	1.6	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	3.2	0.453857	50.0	745169.0	0.14183	Y
3	STD020 280-538548/16	6.4	0.772708	50.0	729901.0	0.120736	Y
4	STD10 280-538548/18	32.0	4.046227	50.0	746498.0	0.126445	Y
5	ICIS 280-538548/19	160.0	21.097666	50.0	769988.0	0.13186	Y
6	STD75 280-538548/20	240.0	33.600519	50.0	778921.0	0.140002	Y
7	STD100 280-538548/21	320.0	44.202945	50.0	770348.0	0.138134	Y
8	STD200 280-538548/22	640.0	90.409425	50.0	783196.0	0.141265	Y



Calibration / Methylcyclohexane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

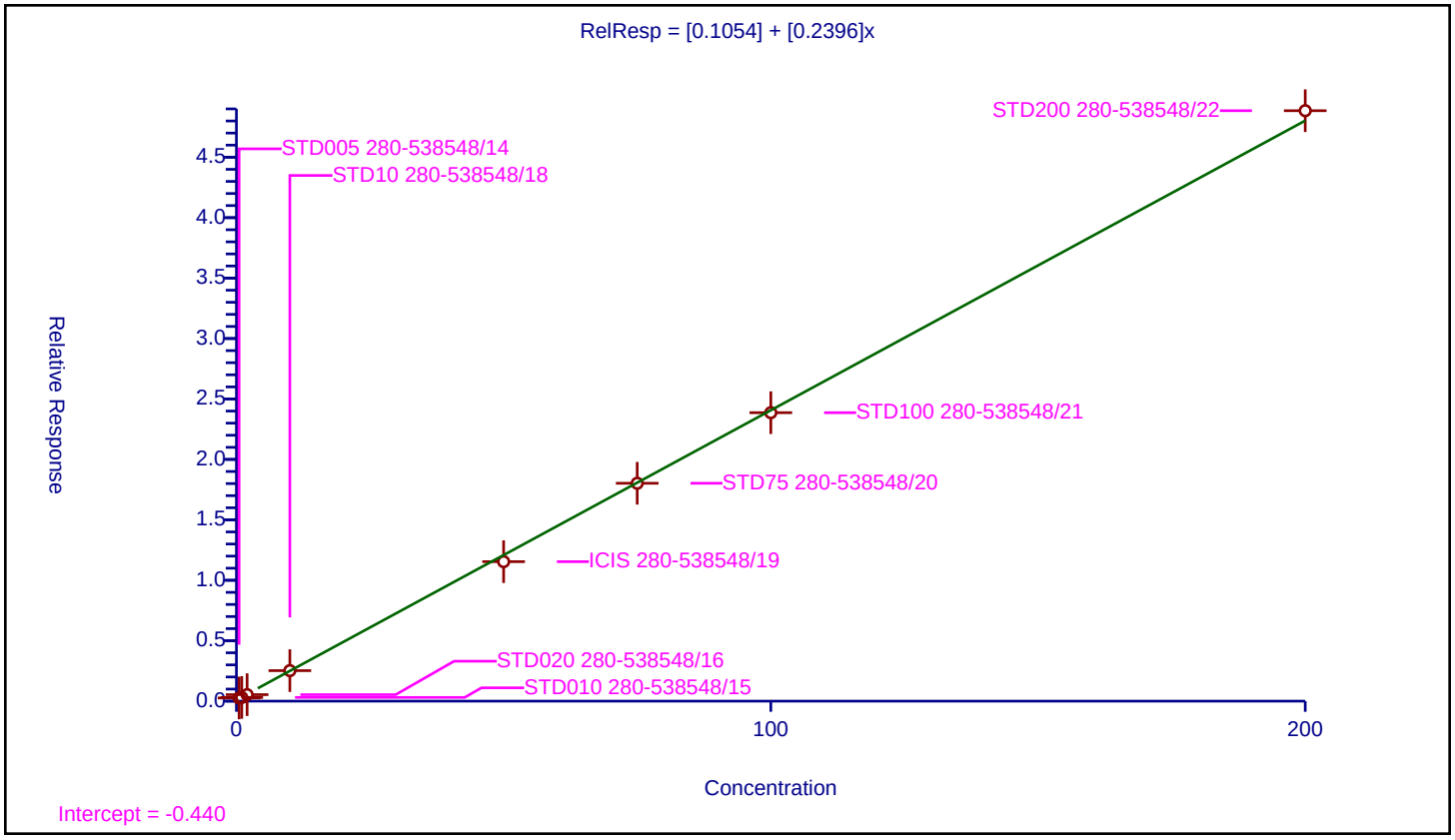
Curve Coefficients

Intercept:	0.1054
Slope:	0.2396

Error Coefficients

Standard Error:	373000
Relative Standard Error:	14.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.260476	50.0	741336.0	0.520951	Y
2	STD010 280-538548/15	1.0	0.305568	50.0	745169.0	0.305568	Y
3	STD020 280-538548/16	2.0	0.536991	50.0	729901.0	0.268495	Y
4	STD10 280-538548/18	10.0	2.524655	50.0	746498.0	0.252466	Y
5	ICIS 280-538548/19	50.0	11.540505	50.0	769988.0	0.23081	Y
6	STD75 280-538548/20	75.0	18.025384	50.0	778921.0	0.240338	Y
7	STD100 280-538548/21	100.0	23.865058	50.0	770348.0	0.238651	Y
8	STD200 280-538548/22	200.0	48.850607	50.0	783196.0	0.244253	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

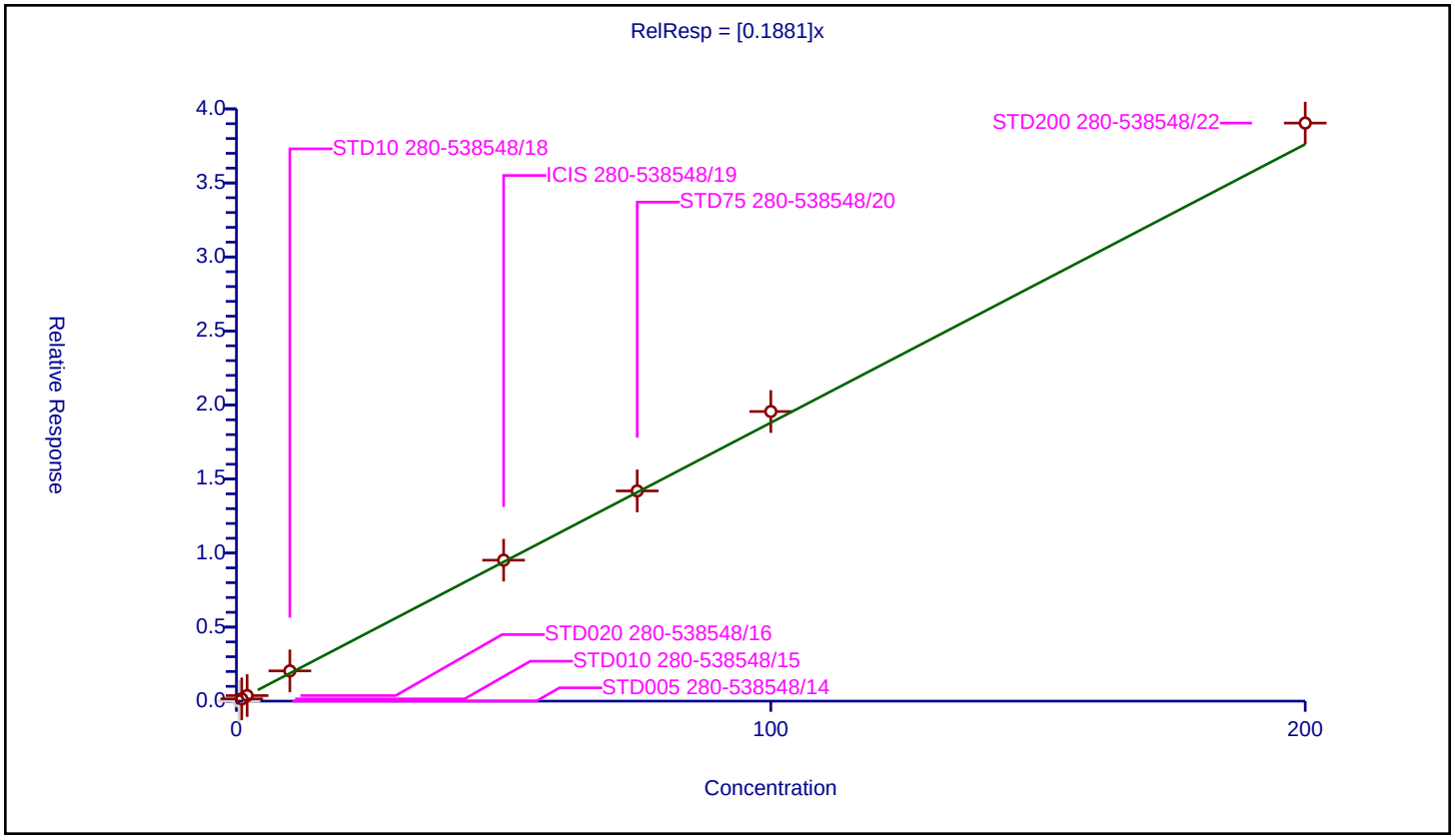
Curve Coefficients

Intercept:	0
Slope:	0.1881

Error Coefficients

Standard Error:	299000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.15426	50.0	745169.0	0.15426	Y
3	STD020 280-538548/16	2.0	0.374914	50.0	729901.0	0.187457	Y
4	STD10 280-538548/18	10.0	2.042202	50.0	746498.0	0.20422	Y
5	ICIS 280-538548/19	50.0	9.519694	50.0	769988.0	0.190394	Y
6	STD75 280-538548/20	75.0	14.196818	50.0	778921.0	0.189291	Y
7	STD100 280-538548/21	100.0	19.561679	50.0	770348.0	0.195617	Y
8	STD200 280-538548/22	200.0	39.043866	50.0	783196.0	0.195219	Y



Calibration / 1,4-Dioxane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

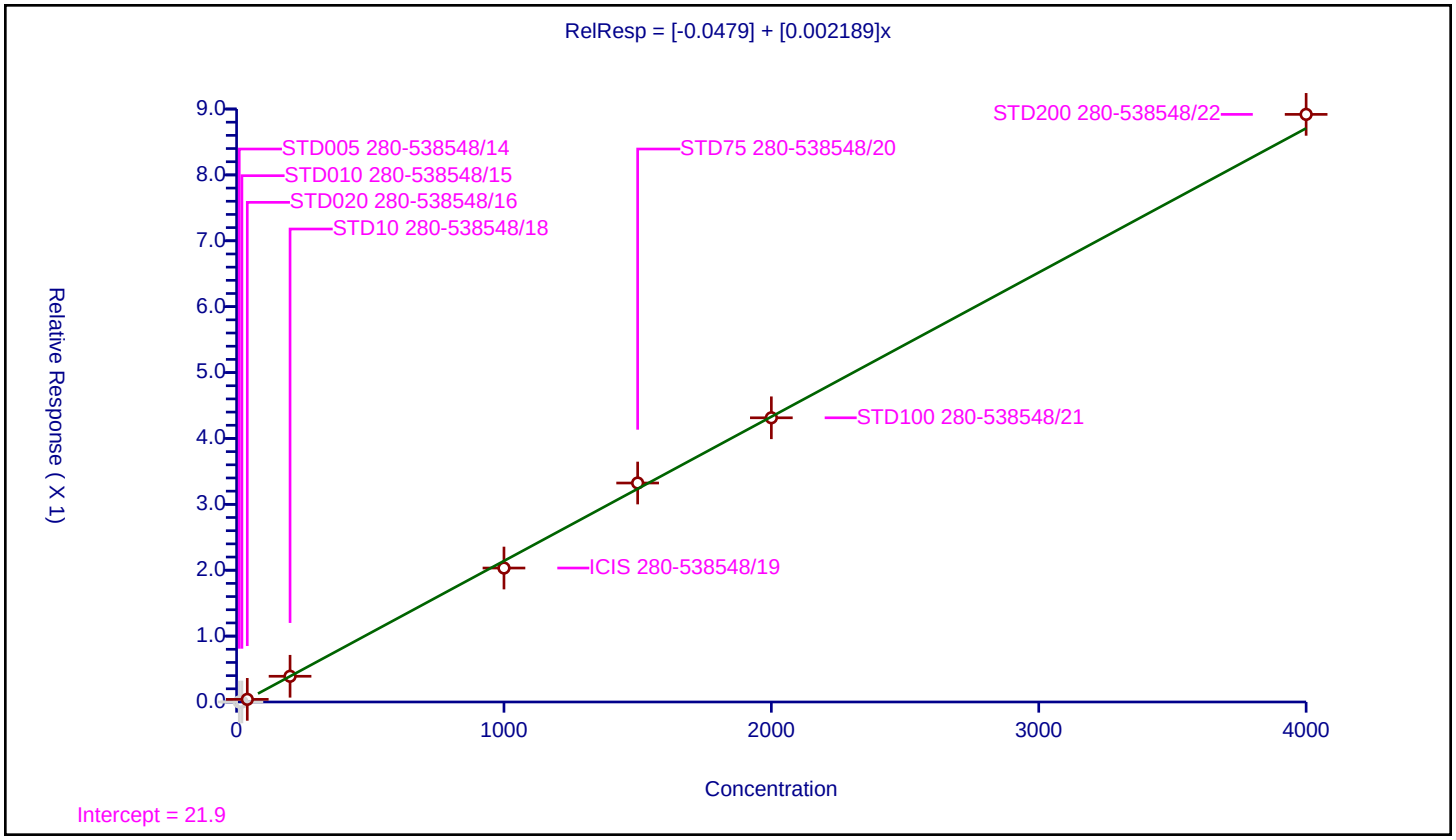
Curve Coefficients

Intercept:	-0.0479
Slope:	0.002189

Error Coefficients

Standard Error:	83100
Relative Standard Error:	3.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	10.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	20.0	0.0	50.0	745169.0	0.0	N
3	STD020 280-538548/16	40.0	0.039731	50.0	729901.0	0.000993	Y
4	STD10 280-538548/18	200.0	0.390222	50.0	746498.0	0.001951	Y
5	ICIS 280-538548/19	1000.0	2.033408	50.0	769988.0	0.002033	Y
6	STD75 280-538548/20	1500.0	3.3237	50.0	778921.0	0.002216	Y
7	STD100 280-538548/21	2000.0	4.3137	50.0	770348.0	0.002157	Y
8	STD200 280-538548/22	4000.0	8.918585	50.0	783196.0	0.00223	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

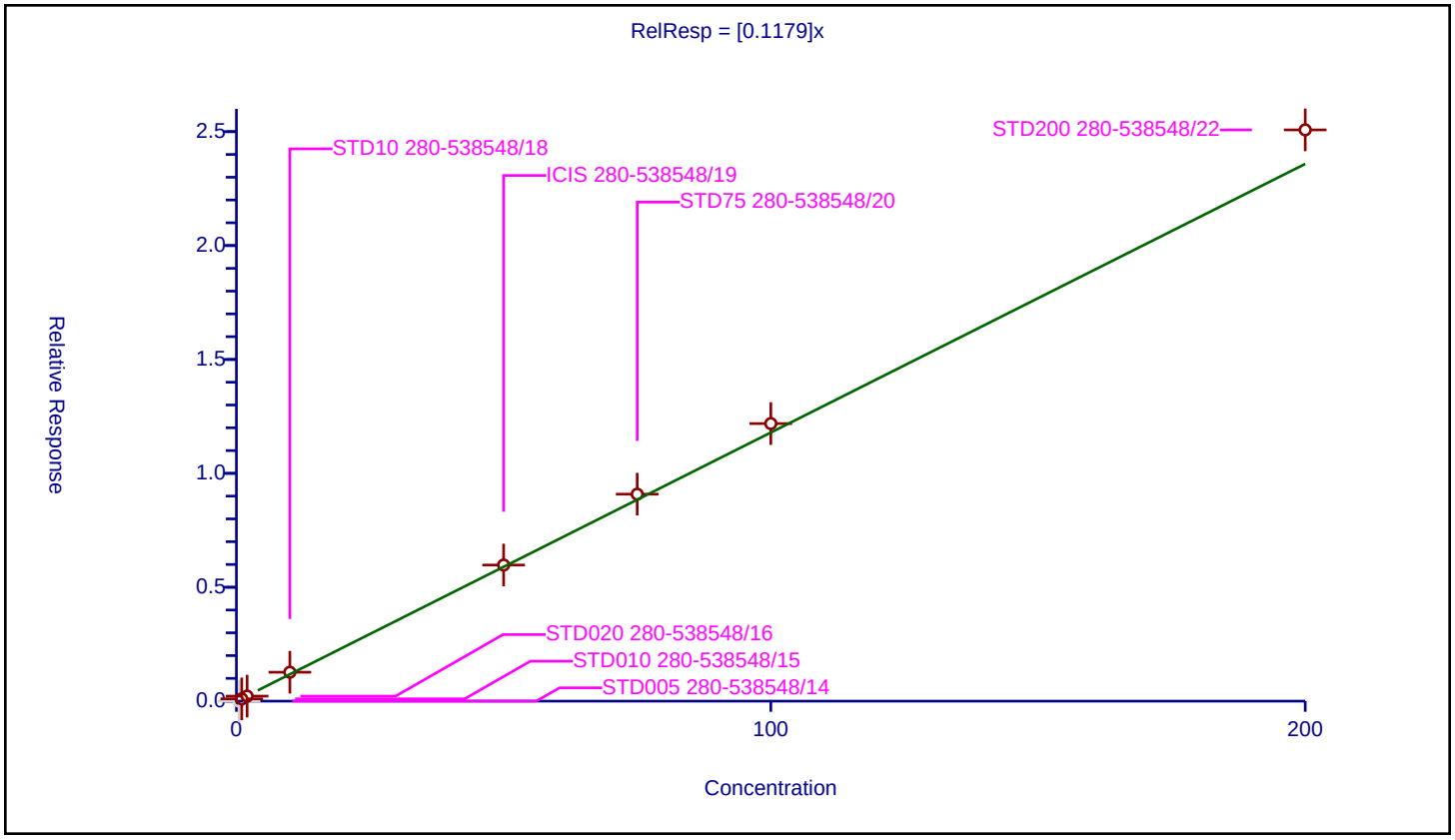
Curve Coefficients

Intercept:	0
Slope:	0.1179

Error Coefficients

Standard Error:	191000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.100246	50.0	745169.0	0.100246	Y
3	STD020 280-538548/16	2.0	0.220715	50.0	729901.0	0.110357	Y
4	STD10 280-538548/18	10.0	1.269595	50.0	746498.0	0.126959	Y
5	ICIS 280-538548/19	50.0	5.975483	50.0	769988.0	0.11951	Y
6	STD75 280-538548/20	75.0	9.085196	50.0	778921.0	0.121136	Y
7	STD100 280-538548/21	100.0	12.185791	50.0	770348.0	0.121858	Y
8	STD200 280-538548/22	200.0	25.077184	50.0	783196.0	0.125386	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

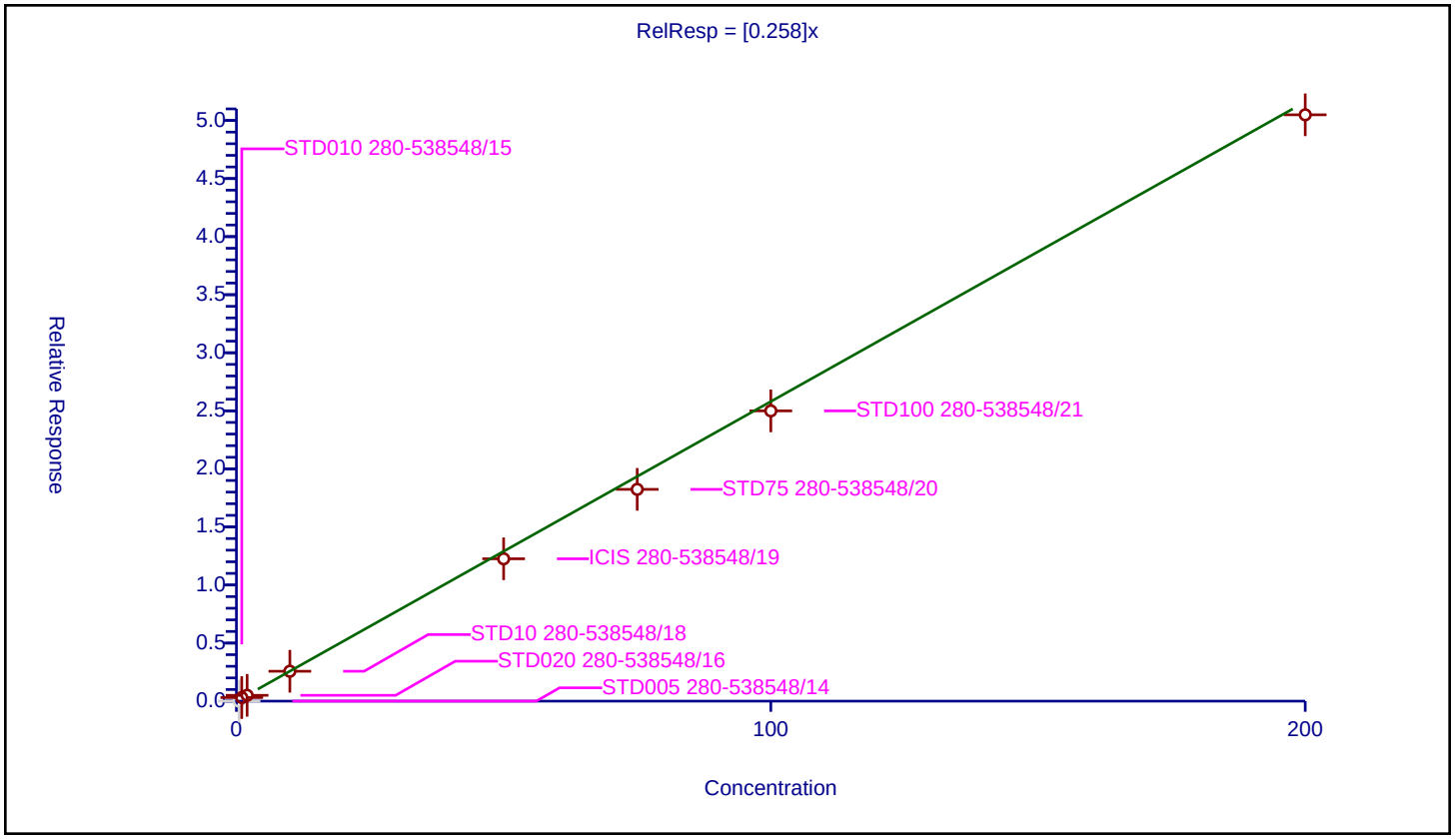
Curve Coefficients

Intercept:	0
Slope:	0.258

Error Coefficients

Standard Error:	385000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.30785	50.0	745169.0	0.30785	Y
3	STD020 280-538548/16	2.0	0.500342	50.0	729901.0	0.250171	Y
4	STD10 280-538548/18	10.0	2.57355	50.0	746498.0	0.257355	Y
5	ICIS 280-538548/19	50.0	12.257204	50.0	769988.0	0.245144	Y
6	STD75 280-538548/20	75.0	18.236702	50.0	778921.0	0.243156	Y
7	STD100 280-538548/21	100.0	24.995197	50.0	770348.0	0.249952	Y
8	STD200 280-538548/22	200.0	50.490426	50.0	783196.0	0.252452	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

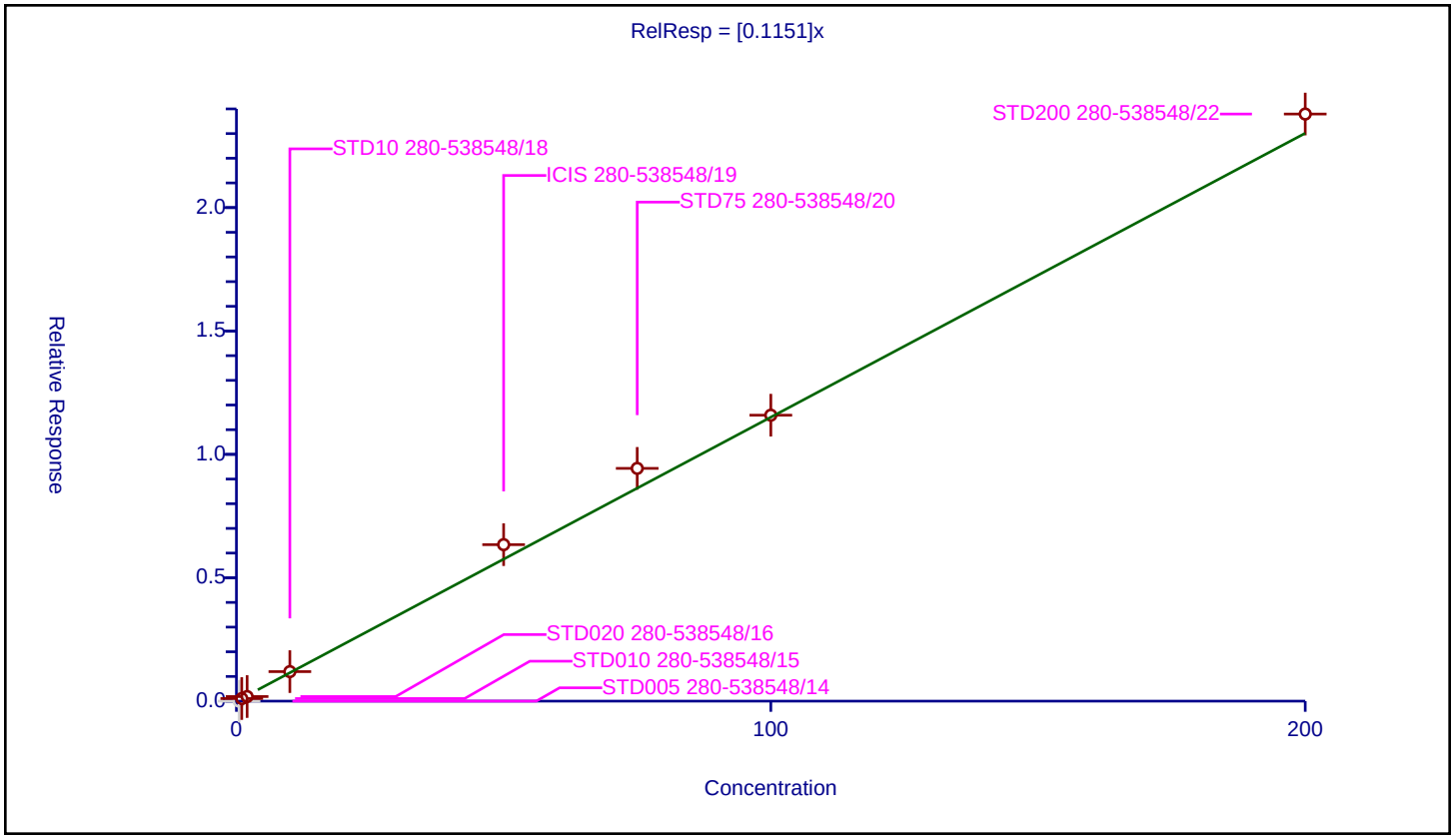
Curve Coefficients

Intercept:	0
Slope:	0.1151

Error Coefficients

Standard Error:	184000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.105479	50.0	745169.0	0.105479	Y
3	STD020 280-538548/16	2.0	0.185847	50.0	729901.0	0.092924	Y
4	STD10 280-538548/18	10.0	1.196319	50.0	746498.0	0.119632	Y
5	ICIS 280-538548/19	50.0	6.341657	50.0	769988.0	0.126833	Y
6	STD75 280-538548/20	75.0	9.432664	50.0	778921.0	0.125769	Y
7	STD100 280-538548/21	100.0	11.588139	50.0	770348.0	0.115881	Y
8	STD200 280-538548/22	200.0	23.791682	50.0	783196.0	0.118958	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

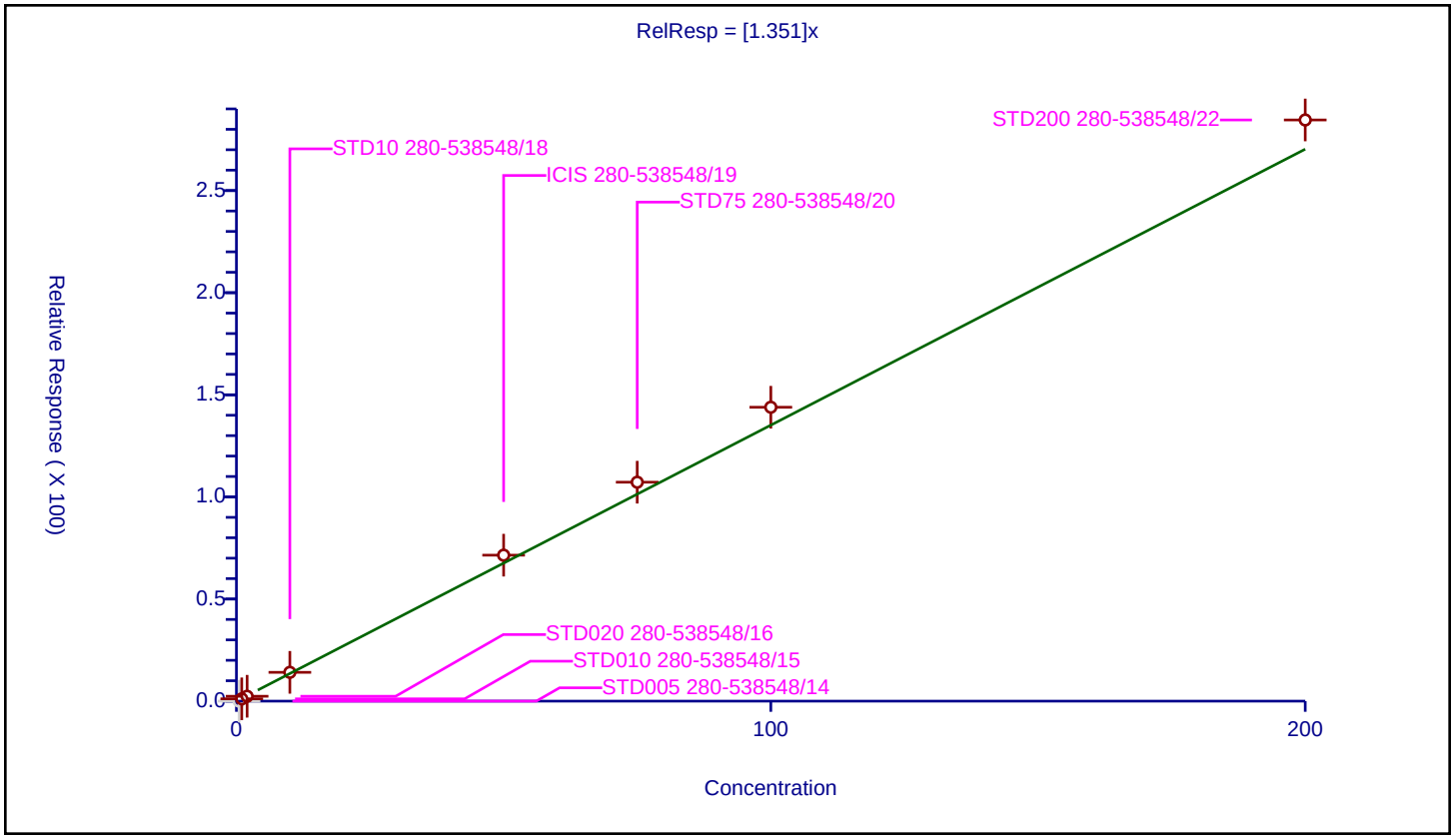
Curve Coefficients

Intercept:	0
Slope:	1.351

Error Coefficients

Standard Error:	469000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.13377	50.0	156866.0	1.13377	Y
3	STD020 280-538548/16	2.0	2.390478	50.0	153463.0	1.195239	Y
4	STD10 280-538548/18	10.0	14.098213	50.0	158818.0	1.409821	Y
5	ICIS 280-538548/19	50.0	71.471727	50.0	161871.0	1.429435	Y
6	STD75 280-538548/20	75.0	107.204898	50.0	162105.0	1.429399	Y
7	STD100 280-538548/21	100.0	143.912979	50.0	161409.0	1.43913	Y
8	STD200 280-538548/22	200.0	284.580174	50.0	169094.0	1.422901	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

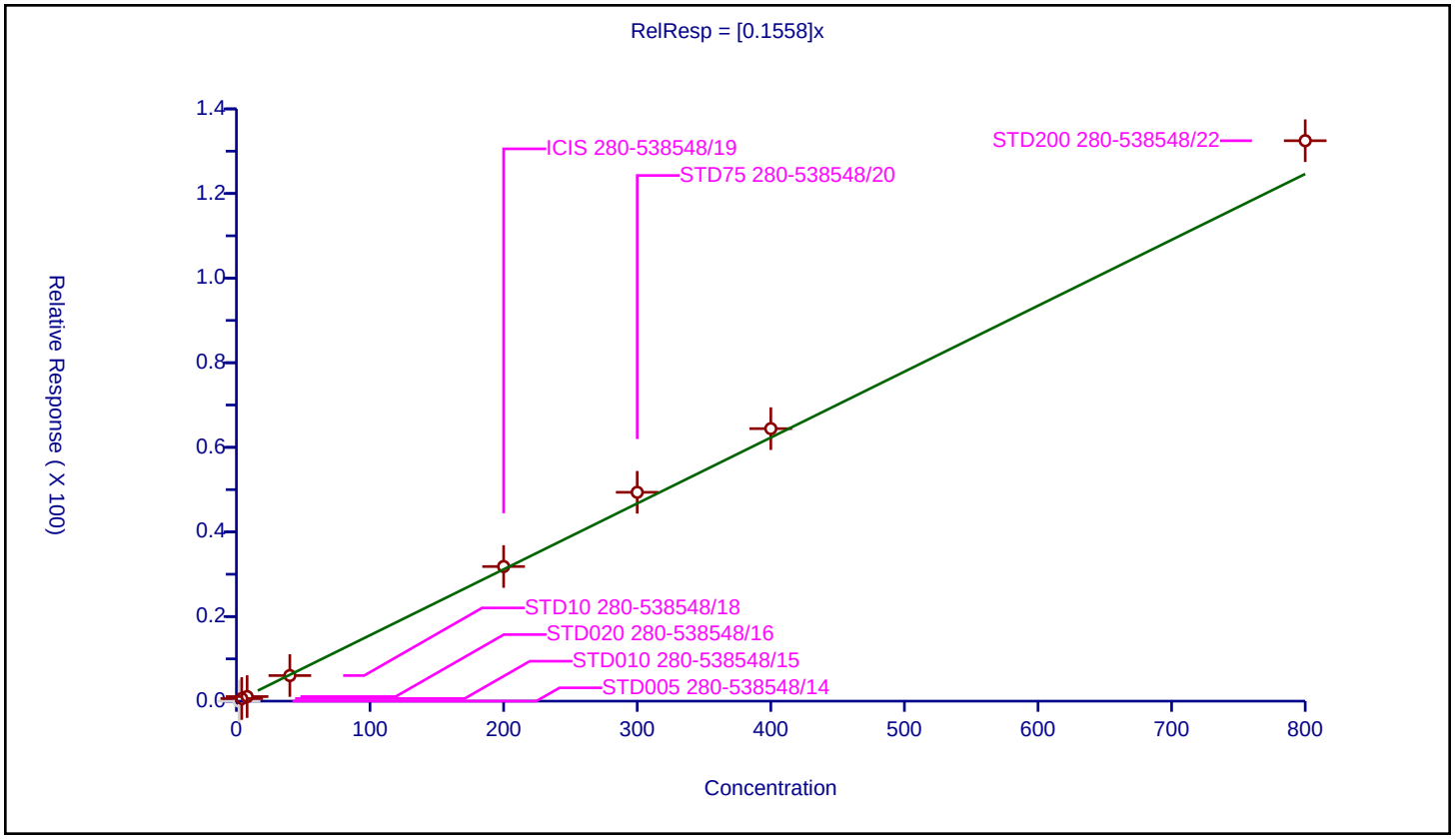
Curve Coefficients

Intercept:	0
Slope:	0.1558

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	4.0	0.615968	50.0	745169.0	0.153992	Y
3	STD020 280-538548/16	8.0	1.07905	50.0	729901.0	0.134881	Y
4	STD10 280-538548/18	40.0	6.049313	50.0	746498.0	0.151233	Y
5	ICIS 280-538548/19	200.0	31.823028	50.0	769988.0	0.159115	Y
6	STD75 280-538548/20	300.0	49.367202	50.0	778921.0	0.164557	Y
7	STD100 280-538548/21	400.0	64.414914	50.0	770348.0	0.161037	Y
8	STD200 280-538548/22	800.0	132.47846	50.0	783196.0	0.165598	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

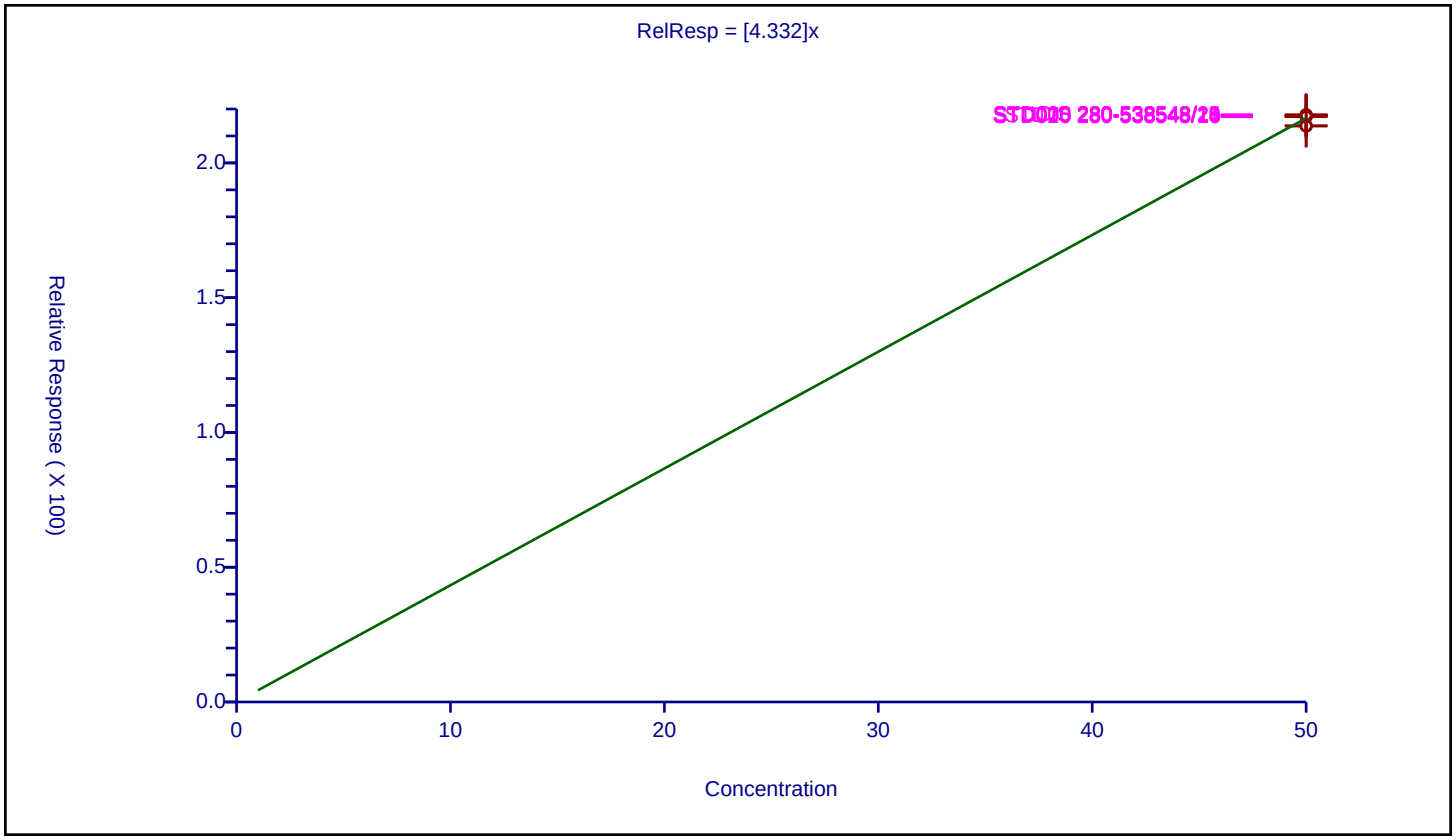
Curve Coefficients

Intercept:	0
Slope:	4.332

Error Coefficients

Standard Error:	740000
Relative Standard Error:	0.8
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	217.331818	50.0	154877.0	4.346636	Y
2	STD010 280-538548/15	50.0	217.721176	50.0	156866.0	4.354424	Y
3	STD020 280-538548/16	50.0	217.138007	50.0	153463.0	4.34276	Y
4	STD10 280-538548/18	50.0	213.730811	50.0	158818.0	4.274616	Y
5	ICIS 280-538548/19	50.0	217.559353	50.0	161871.0	4.351187	Y
6	STD75 280-538548/20	50.0	217.511798	50.0	162105.0	4.350236	Y
7	STD100 280-538548/21	50.0	217.873848	50.0	161409.0	4.357477	Y
8	STD200 280-538548/22	50.0	213.734964	50.0	169094.0	4.274699	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

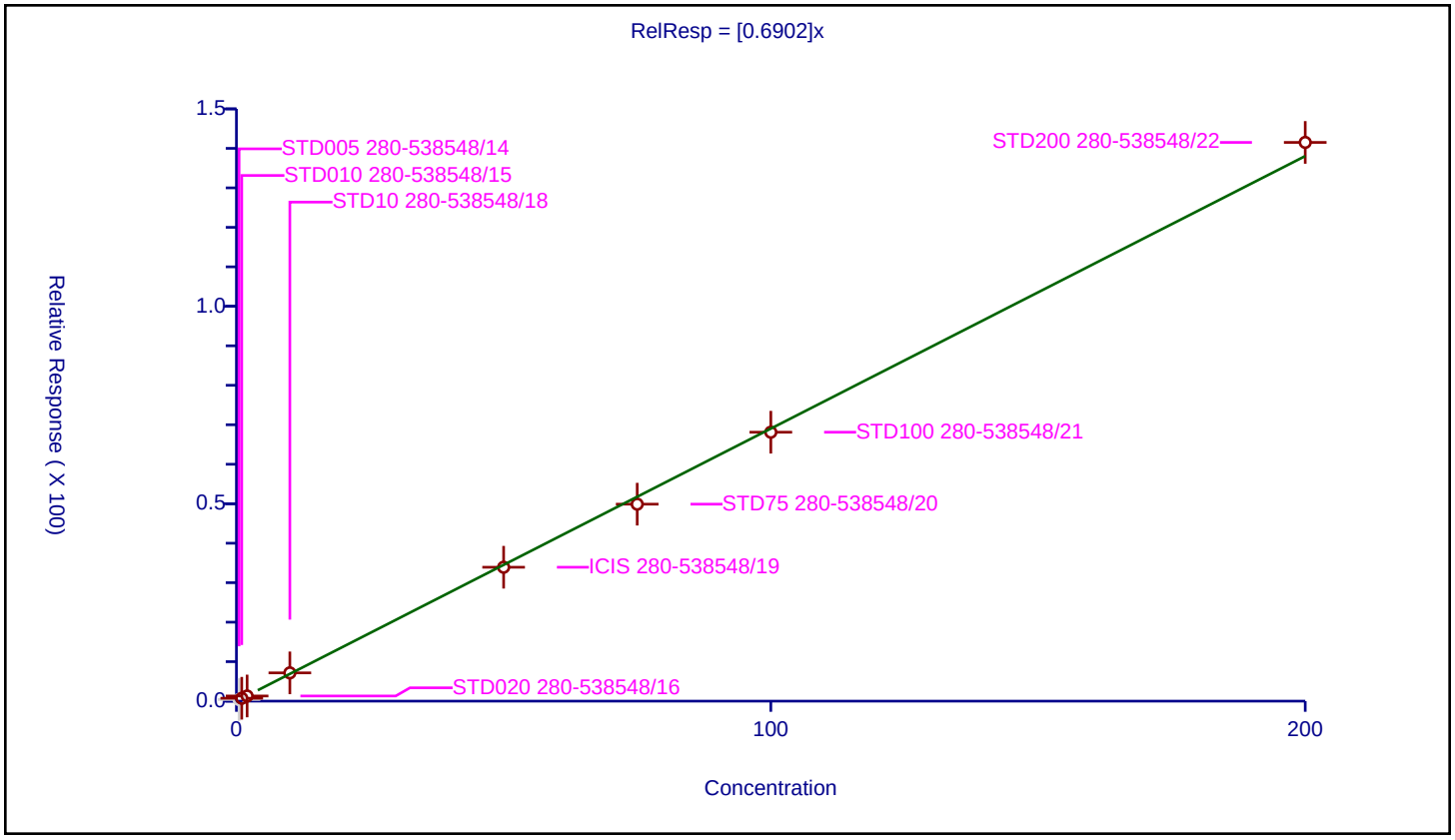
Curve Coefficients

Intercept:	0
Slope:	0.6902

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.41061	50.0	741336.0	0.82122	N
2	STD010 280-538548/15	1.0	0.732116	50.0	745169.0	0.732116	Y
3	STD020 280-538548/16	2.0	1.302642	50.0	729901.0	0.651321	Y
4	STD10 280-538548/18	10.0	7.159765	50.0	746498.0	0.715976	Y
5	ICIS 280-538548/19	50.0	33.915788	50.0	769988.0	0.678316	Y
6	STD75 280-538548/20	75.0	49.88529	50.0	778921.0	0.665137	Y
7	STD100 280-538548/21	100.0	68.111555	50.0	770348.0	0.681116	Y
8	STD200 280-538548/22	200.0	141.508001	50.0	783196.0	0.70754	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

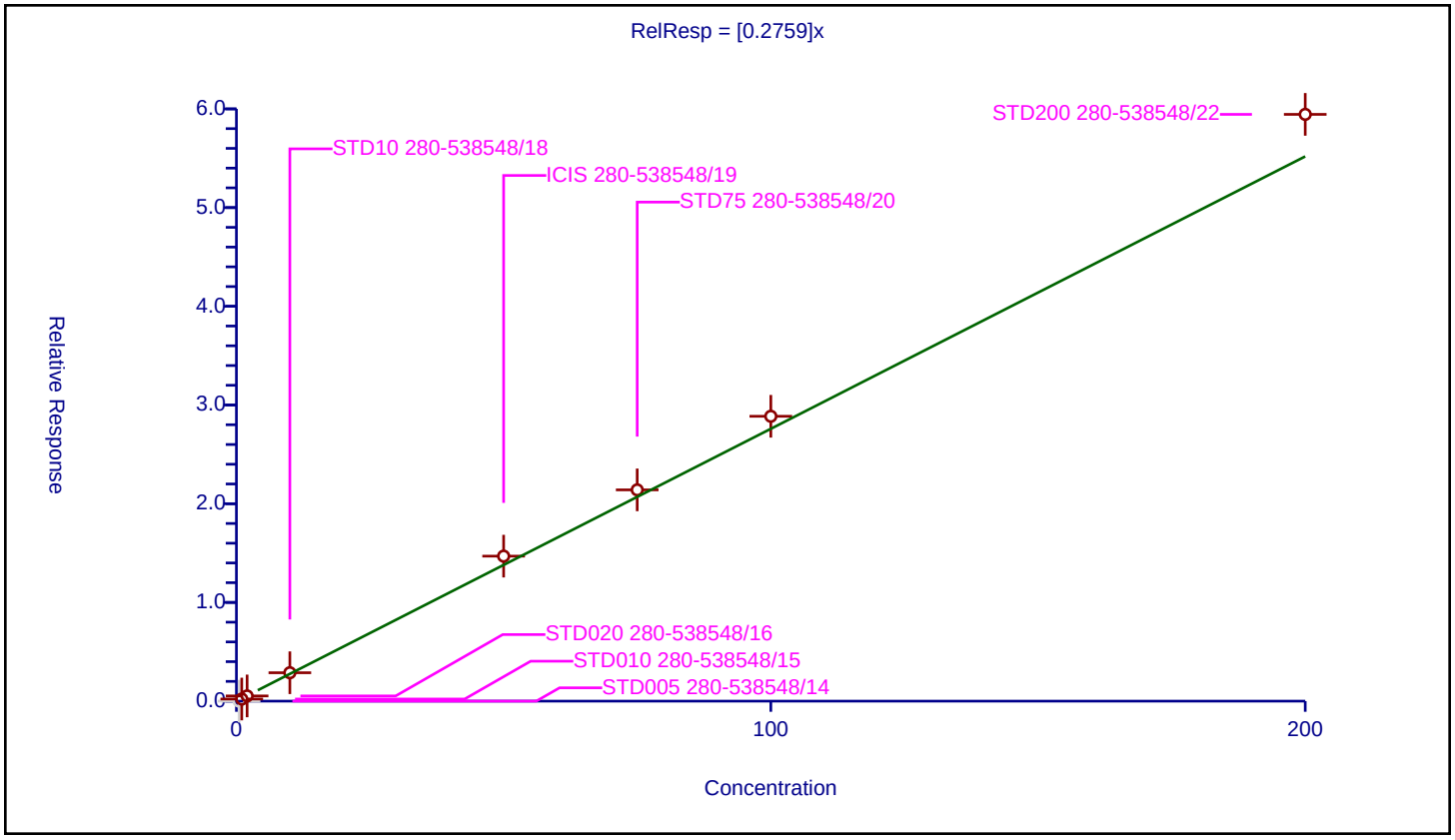
Curve Coefficients

Intercept:	0
Slope:	0.2759

Error Coefficients

Standard Error:	453000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	741336.0	0.0	N
2	STD010 280-538548/15	1.0	0.214515	50.0	745169.0	0.214515	Y
3	STD020 280-538548/16	2.0	0.528496	50.0	729901.0	0.264248	Y
4	STD10 280-538548/18	10.0	2.8769	50.0	746498.0	0.28769	Y
5	ICIS 280-538548/19	50.0	14.690229	50.0	769988.0	0.293805	Y
6	STD75 280-538548/20	75.0	21.404225	50.0	778921.0	0.28539	Y
7	STD100 280-538548/21	100.0	28.858256	50.0	770348.0	0.288583	Y
8	STD200 280-538548/22	200.0	59.443996	50.0	783196.0	0.29722	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

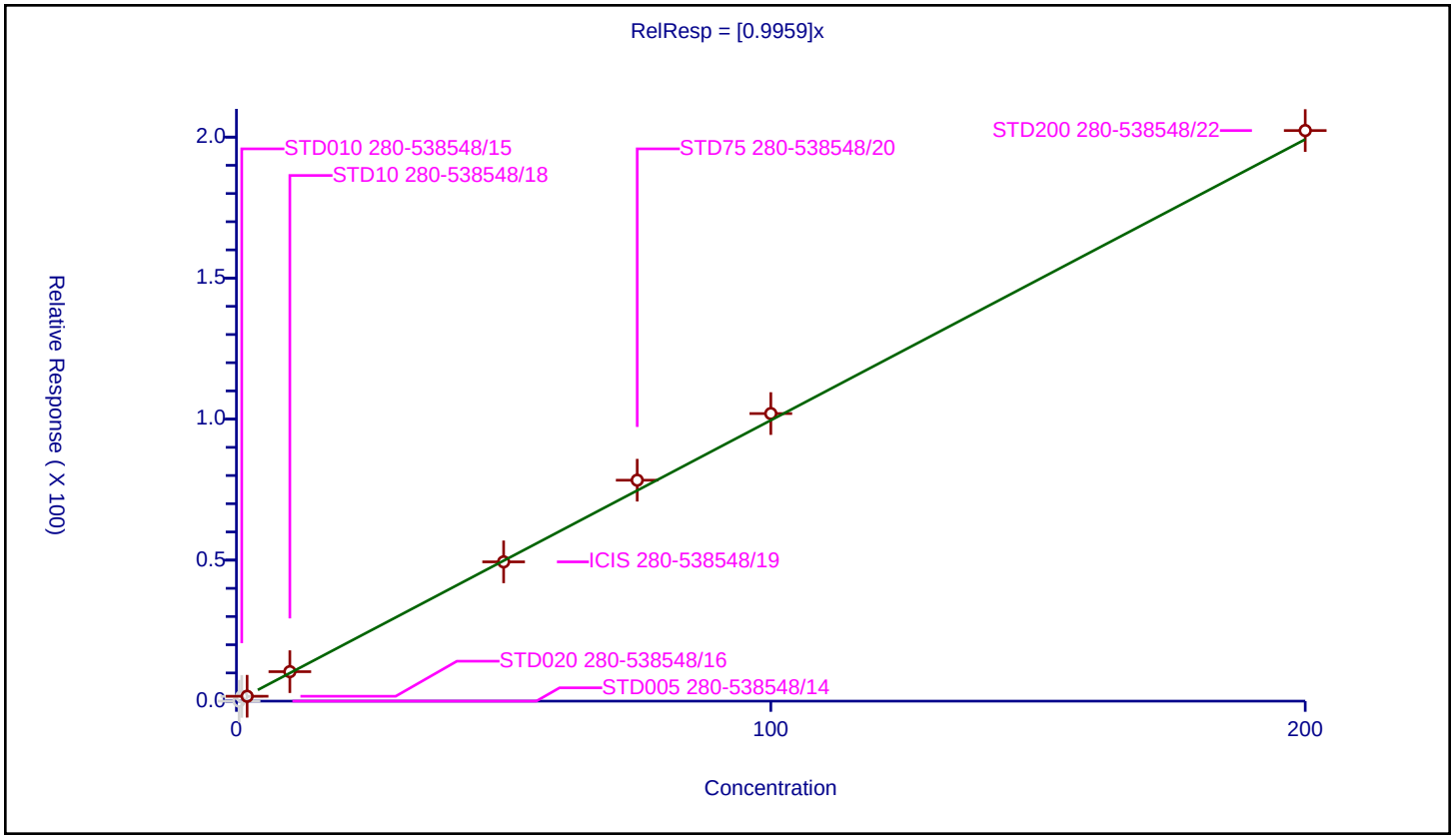
Curve Coefficients

Intercept:	0
Slope:	0.9959

Error Coefficients

Standard Error:	365000
Relative Standard Error:	6.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.673722	50.0	156866.0	1.673722	N
3	STD020 280-538548/16	2.0	1.733317	50.0	153463.0	0.866658	Y
4	STD10 280-538548/18	10.0	10.453475	50.0	158818.0	1.045348	Y
5	ICIS 280-538548/19	50.0	49.387475	50.0	161871.0	0.98775	Y
6	STD75 280-538548/20	75.0	78.346751	50.0	162105.0	1.044623	Y
7	STD100 280-538548/21	100.0	101.967053	50.0	161409.0	1.019671	Y
8	STD200 280-538548/22	200.0	202.317941	50.0	169094.0	1.01159	Y



Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

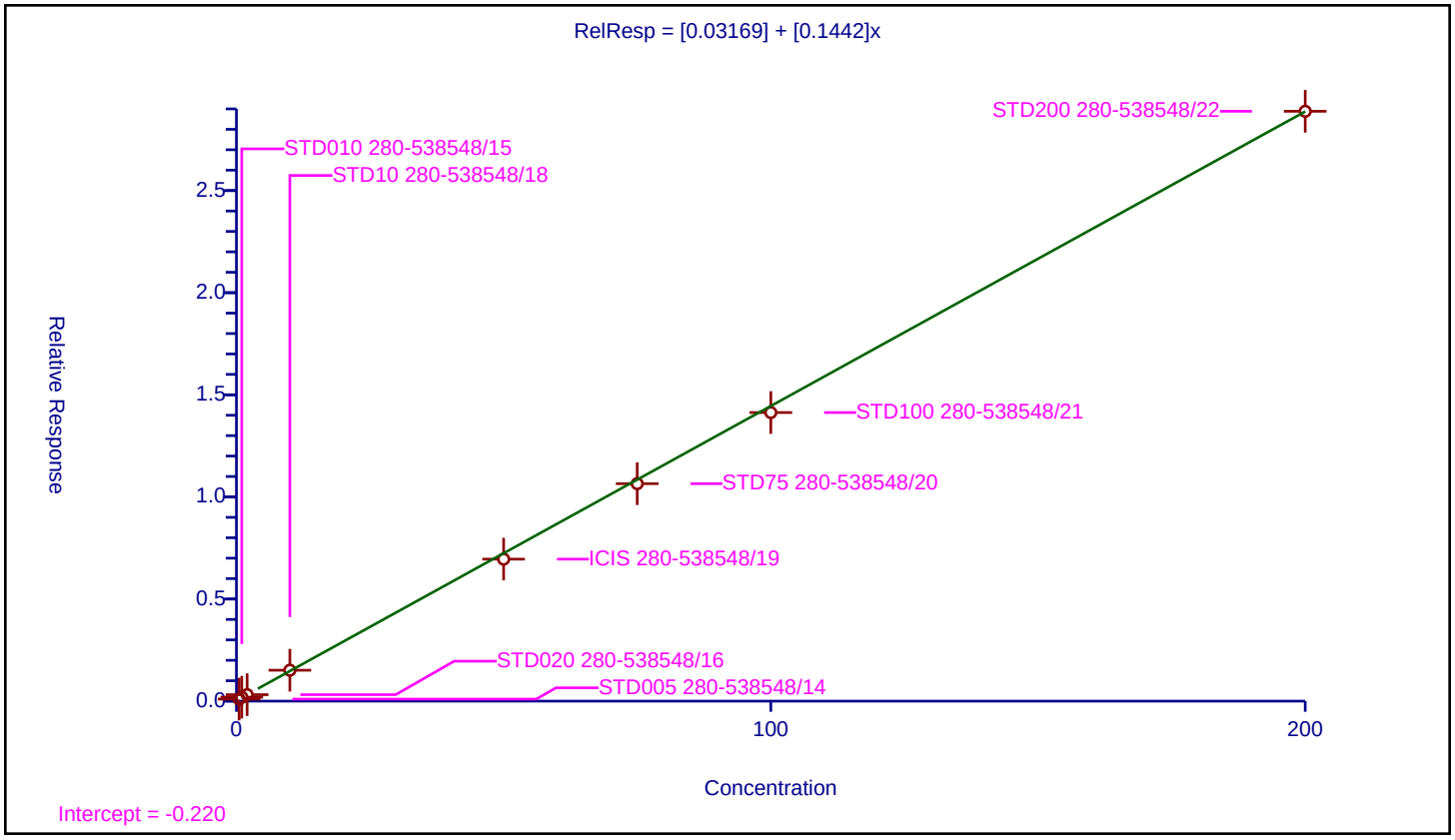
Curve Coefficients

Intercept:	0.03169
Slope:	0.1442

Error Coefficients

Standard Error:	220000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.099415	50.0	741336.0	0.19883	Y
2	STD010 280-538548/15	1.0	0.194184	50.0	745169.0	0.194184	Y
3	STD020 280-538548/16	2.0	0.31607	50.0	729901.0	0.158035	Y
4	STD10 280-538548/18	10.0	1.513802	50.0	746498.0	0.15138	Y
5	ICIS 280-538548/19	50.0	6.953095	50.0	769988.0	0.139062	Y
6	STD75 280-538548/20	75.0	10.649411	50.0	778921.0	0.141992	Y
7	STD100 280-538548/21	100.0	14.130821	50.0	770348.0	0.141308	Y
8	STD200 280-538548/22	200.0	28.882553	50.0	783196.0	0.144413	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

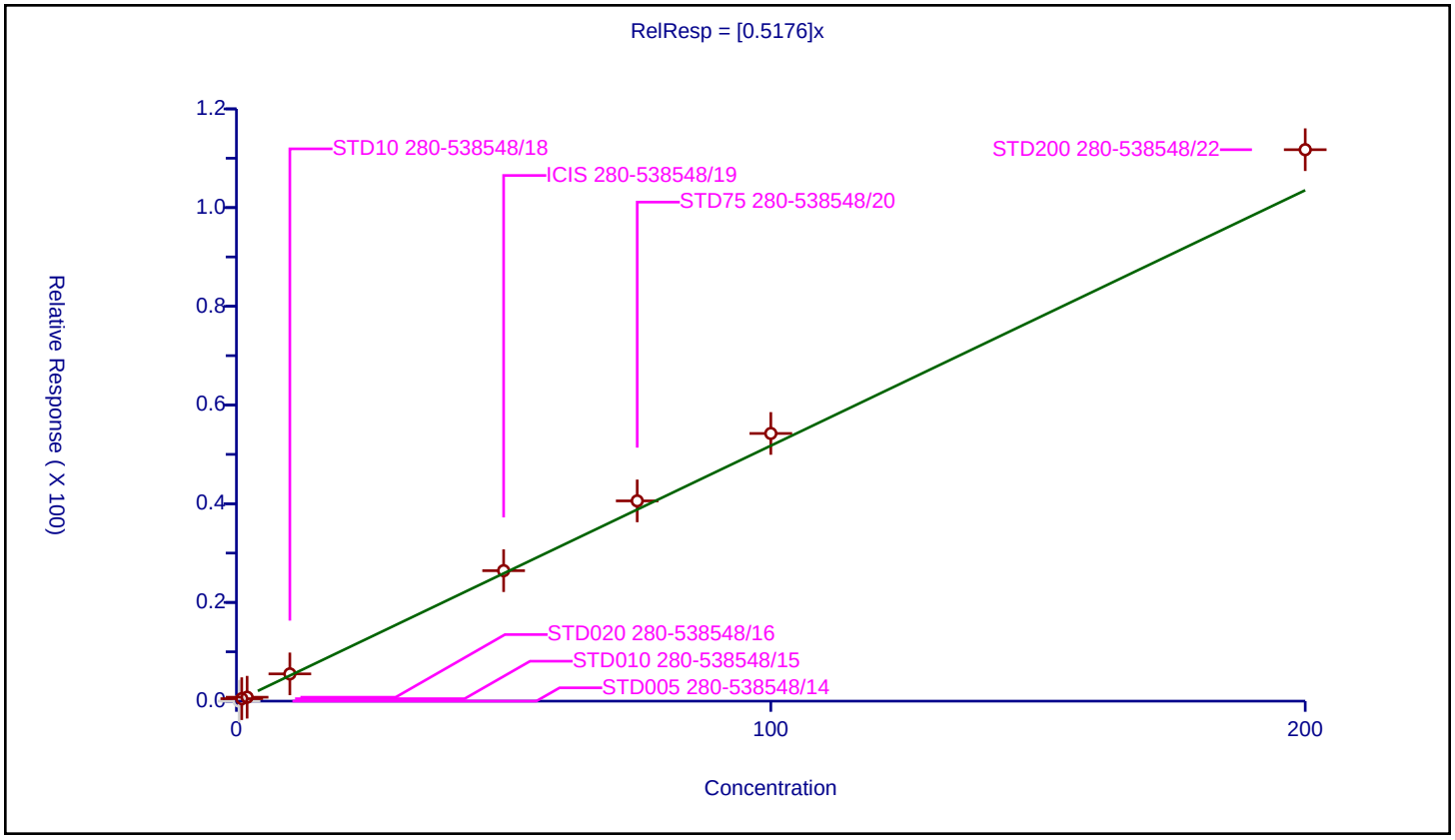
Curve Coefficients

Intercept:	0
Slope:	0.5176

Error Coefficients

Standard Error:	182000
Relative Standard Error:	10.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.500746	50.0	156866.0	0.500746	Y
3	STD020 280-538548/16	2.0	0.798238	50.0	153463.0	0.399119	Y
4	STD10 280-538548/18	10.0	5.524878	50.0	158818.0	0.552488	Y
5	ICIS 280-538548/19	50.0	26.435557	50.0	161871.0	0.528711	Y
6	STD75 280-538548/20	75.0	40.57617	50.0	162105.0	0.541016	Y
7	STD100 280-538548/21	100.0	54.237062	50.0	161409.0	0.542371	Y
8	STD200 280-538548/22	200.0	111.733119	50.0	169094.0	0.558666	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

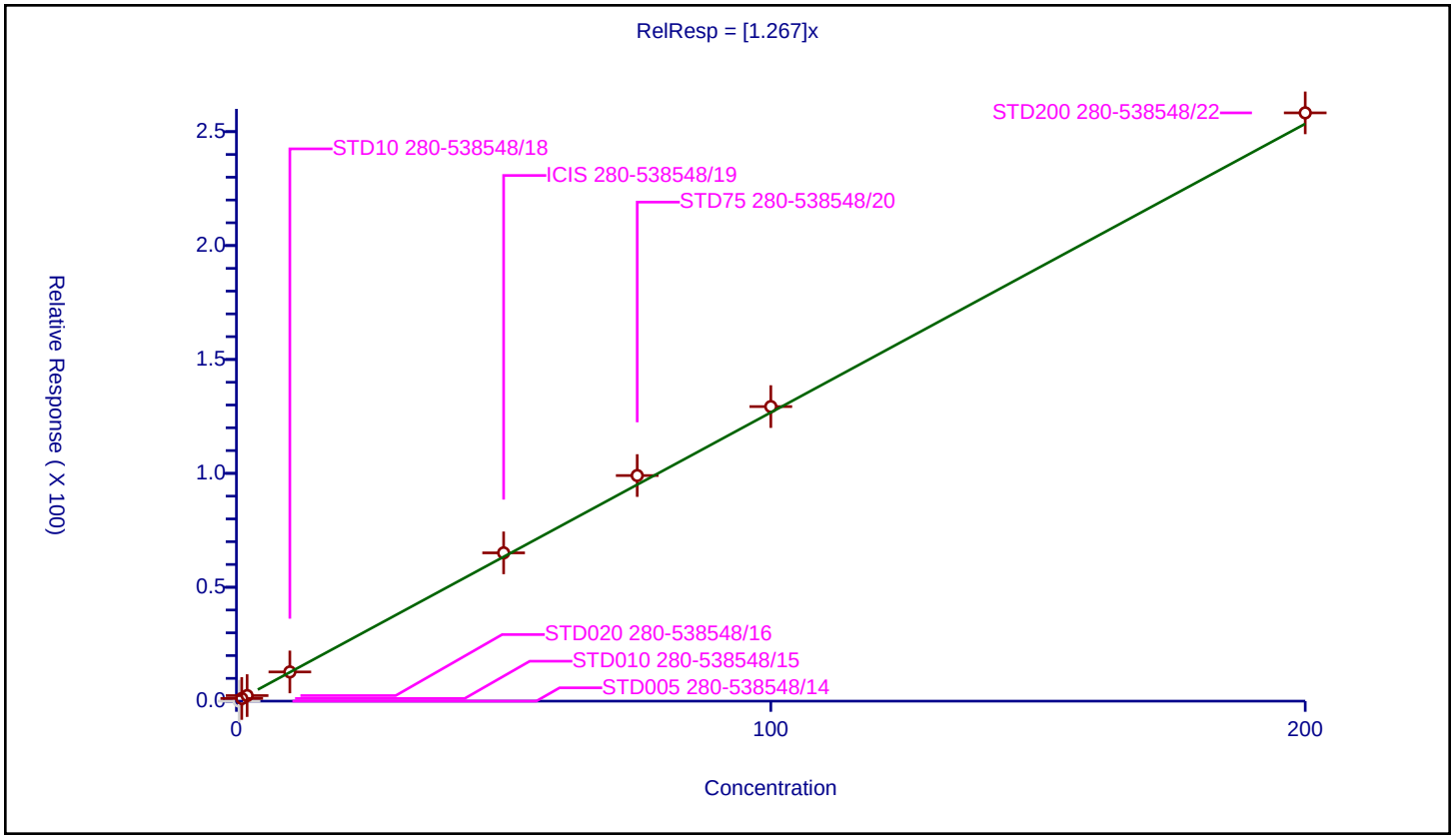
Curve Coefficients

Intercept:	0
Slope:	1.267

Error Coefficients

Standard Error:	425000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	1.164051	50.0	156866.0	1.164051	Y
3	STD020 280-538548/16	2.0	2.434789	50.0	153463.0	1.217394	Y
4	STD10 280-538548/18	10.0	12.823798	50.0	158818.0	1.28238	Y
5	ICIS 280-538548/19	50.0	65.094118	50.0	161871.0	1.301882	Y
6	STD75 280-538548/20	75.0	99.045989	50.0	162105.0	1.320613	Y
7	STD100 280-538548/21	100.0	129.308155	50.0	161409.0	1.293082	Y
8	STD200 280-538548/22	200.0	258.255172	50.0	169094.0	1.291276	Y



Calibration / 2-Hexanone

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

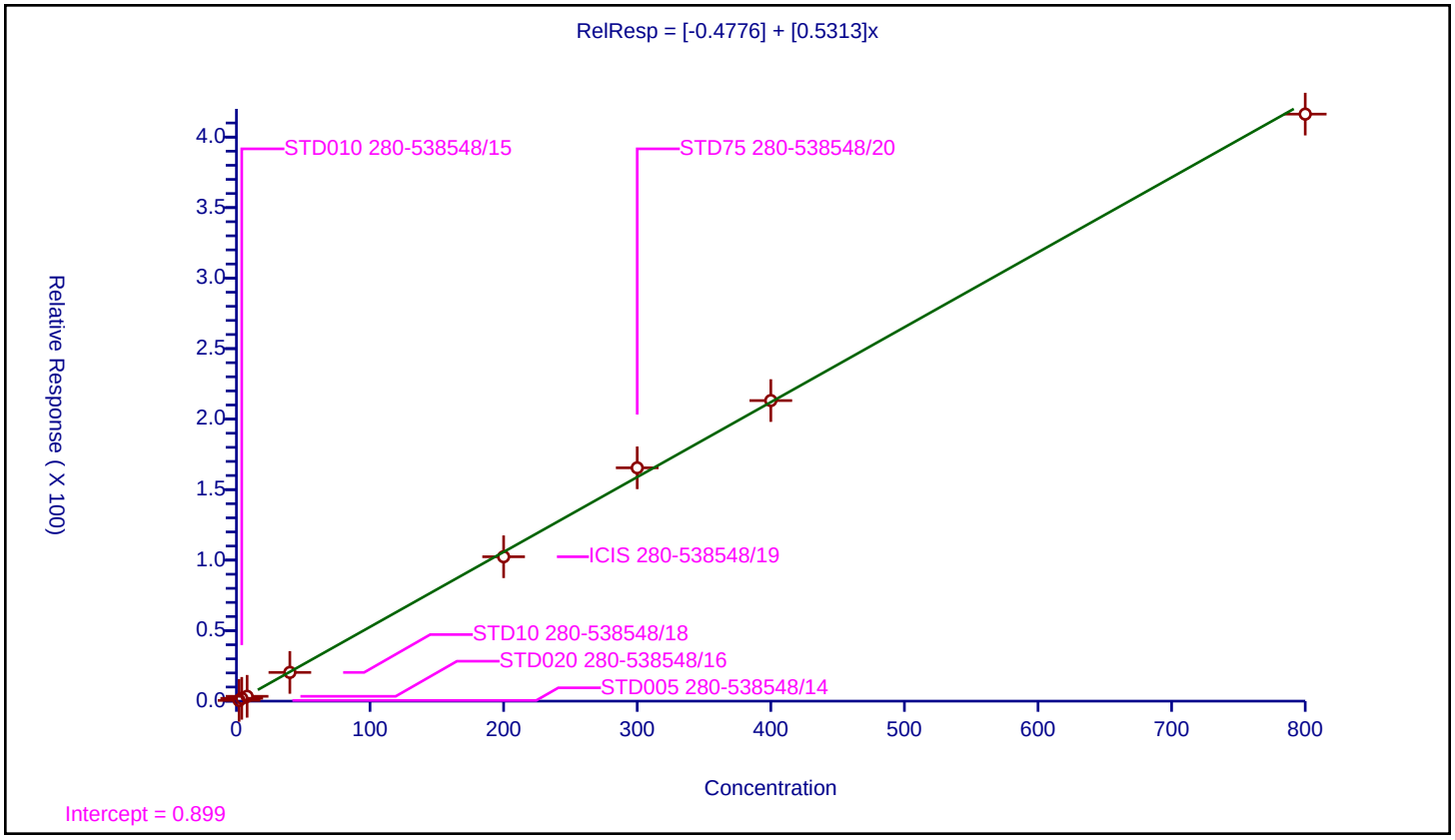
Curve Coefficients

Intercept:	-0.4776
Slope:	0.5313

Error Coefficients

Standard Error:	690000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	2.0	0.519767	50.0	154877.0	0.259884	Y
2	STD010 280-538548/15	4.0	1.99629	50.0	156866.0	0.499072	Y
3	STD020 280-538548/16	8.0	3.436659	50.0	153463.0	0.429582	Y
4	STD10 280-538548/18	40.0	20.366394	50.0	158818.0	0.50916	Y
5	ICIS 280-538548/19	200.0	102.397279	50.0	161871.0	0.511986	Y
6	STD75 280-538548/20	300.0	165.463743	50.0	162105.0	0.551546	Y
7	STD100 280-538548/21	400.0	213.166552	50.0	161409.0	0.532916	Y
8	STD200 280-538548/22	800.0	416.306019	50.0	169094.0	0.520383	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

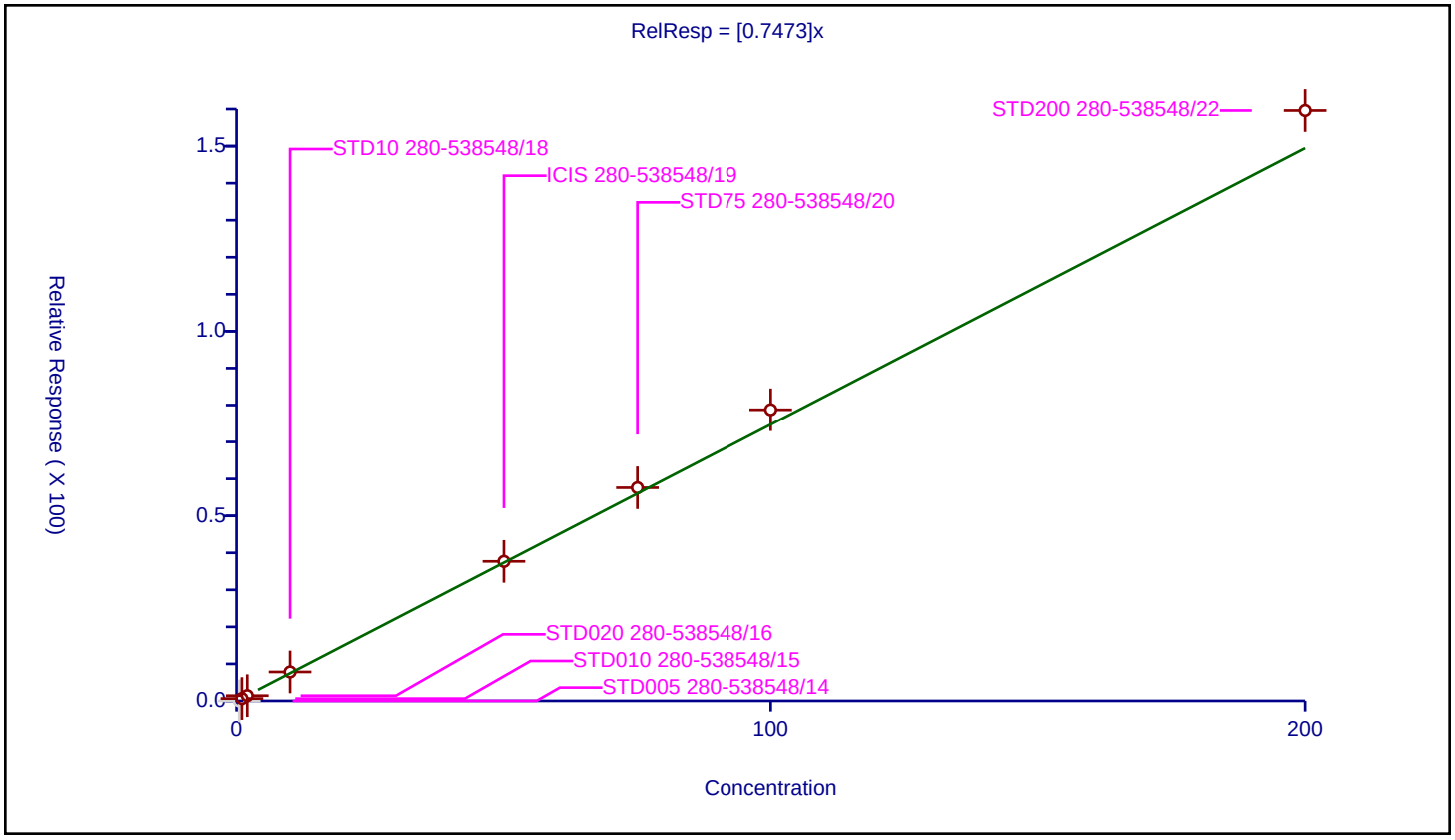
Curve Coefficients

Intercept:	0
Slope:	0.7473

Error Coefficients

Standard Error:	260000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.634937	50.0	156866.0	0.634937	Y
3	STD020 280-538548/16	2.0	1.412067	50.0	153463.0	0.706033	Y
4	STD10 280-538548/18	10.0	7.823735	50.0	158818.0	0.782374	Y
5	ICIS 280-538548/19	50.0	37.69792	50.0	161871.0	0.753958	Y
6	STD75 280-538548/20	75.0	57.61821	50.0	162105.0	0.768243	Y
7	STD100 280-538548/21	100.0	78.734457	50.0	161409.0	0.787345	Y
8	STD200 280-538548/22	200.0	159.611814	50.0	169094.0	0.798059	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

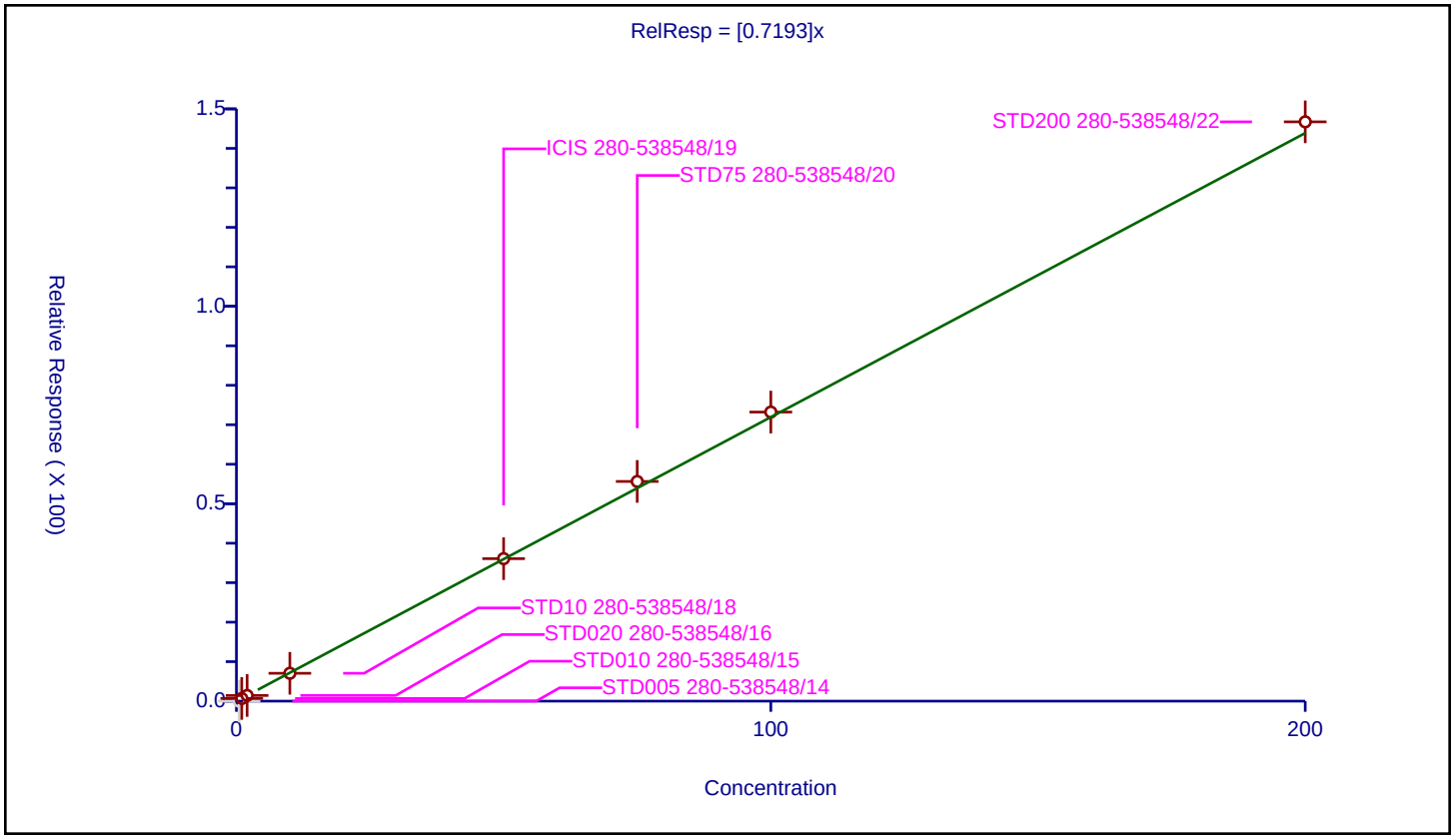
Curve Coefficients

Intercept:	0
Slope:	0.7193

Error Coefficients

Standard Error:	241000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.684023	50.0	156866.0	0.684023	Y
3	STD020 280-538548/16	2.0	1.433244	50.0	153463.0	0.716622	Y
4	STD10 280-538548/18	10.0	7.053042	50.0	158818.0	0.705304	Y
5	ICIS 280-538548/19	50.0	36.088923	50.0	161871.0	0.721778	Y
6	STD75 280-538548/20	75.0	55.643256	50.0	162105.0	0.74191	Y
7	STD100 280-538548/21	100.0	73.215558	50.0	161409.0	0.732156	Y
8	STD200 280-538548/22	200.0	146.718985	50.0	169094.0	0.733595	Y



Calibration / 1-Chlorohexane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

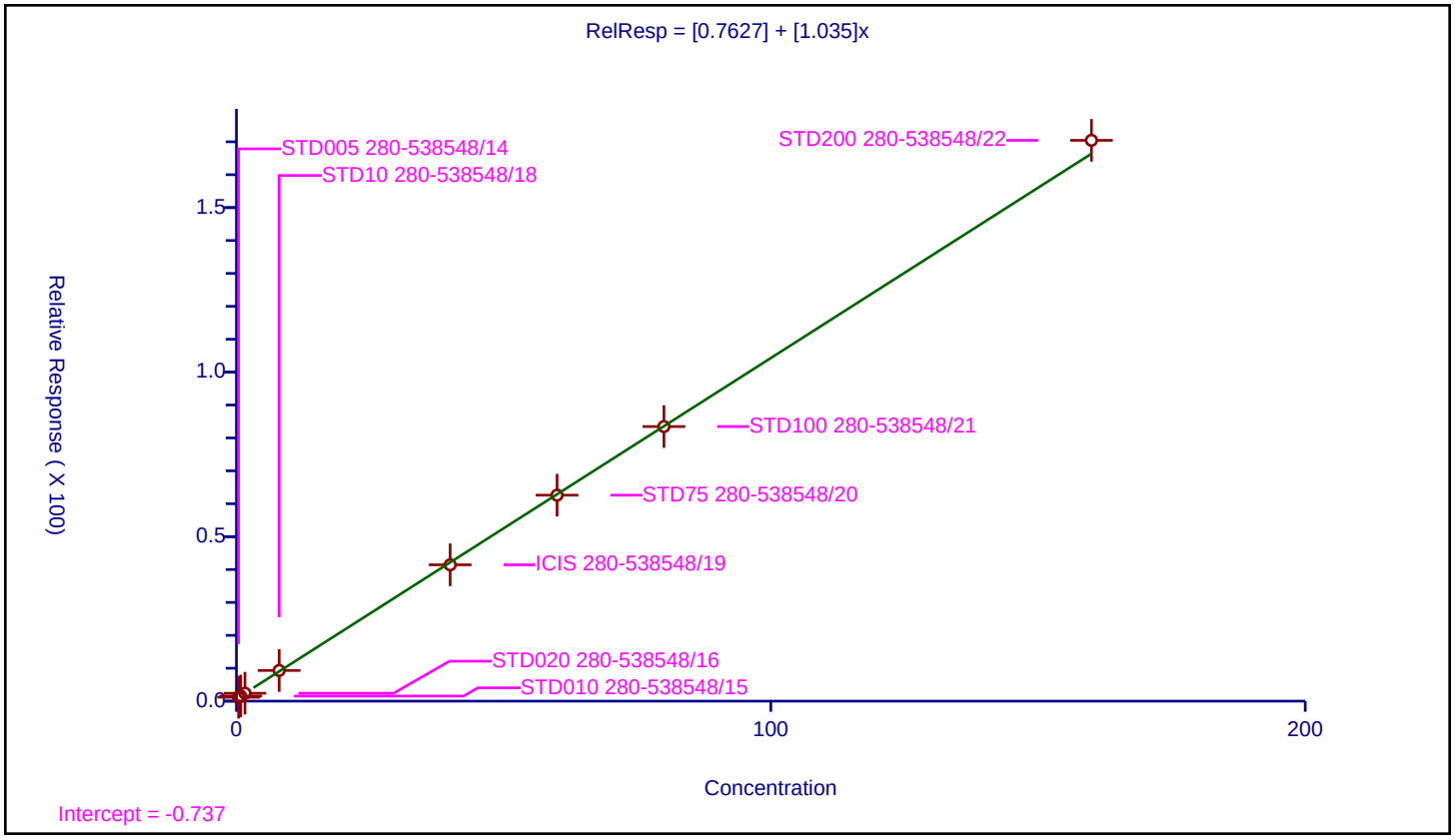
Curve Coefficients

Intercept:	0.7627
Slope:	1.035

Error Coefficients

Standard Error:	278000
Relative Standard Error:	3.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.4	1.18804	50.0	154877.0	2.970099	Y
2	STD010 280-538548/15	0.8	1.546543	50.0	156866.0	1.933179	Y
3	STD020 280-538548/16	1.6	2.403837	50.0	153463.0	1.502398	Y
4	STD10 280-538548/18	8.0	9.32388	50.0	158818.0	1.165485	Y
5	ICIS 280-538548/19	40.0	41.432684	50.0	161871.0	1.035817	Y
6	STD75 280-538548/20	60.0	62.603868	50.0	162105.0	1.043398	Y
7	STD100 280-538548/21	80.0	83.456623	50.0	161409.0	1.043208	Y
8	STD200 280-538548/22	160.0	170.443954	50.0	169094.0	1.065275	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

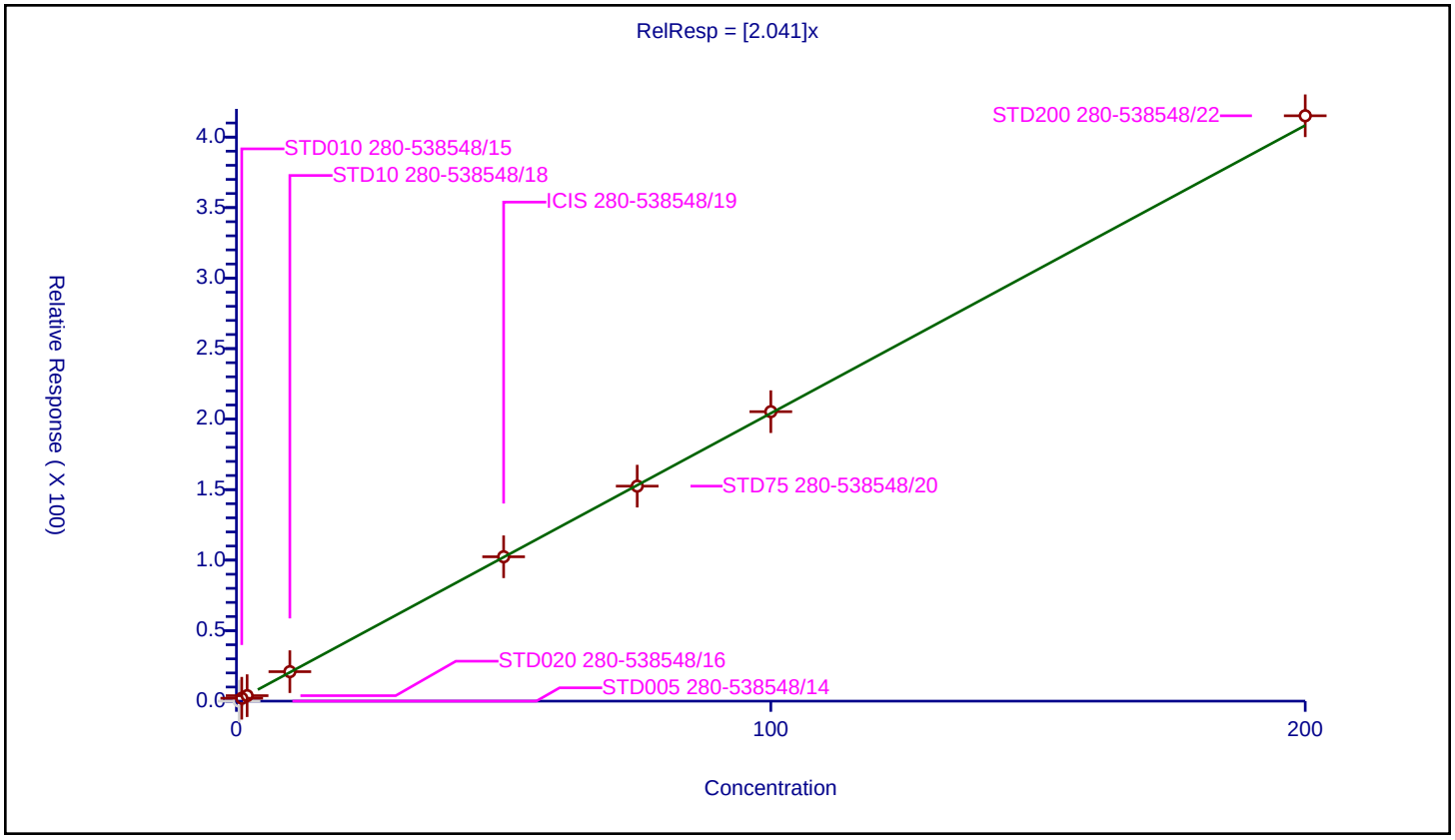
Curve Coefficients

Intercept:	0
Slope:	2.041

Error Coefficients

Standard Error:	679000
Relative Standard Error:	2.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	2.046333	50.0	156866.0	2.046333	Y
3	STD020 280-538548/16	2.0	3.889863	50.0	153463.0	1.944931	Y
4	STD10 280-538548/18	10.0	20.89845	50.0	158818.0	2.089845	Y
5	ICIS 280-538548/19	50.0	102.389557	50.0	161871.0	2.047791	Y
6	STD75 280-538548/20	75.0	152.473705	50.0	162105.0	2.032983	Y
7	STD100 280-538548/21	100.0	205.28688	50.0	161409.0	2.052869	Y
8	STD200 280-538548/22	200.0	415.133594	50.0	169094.0	2.075668	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

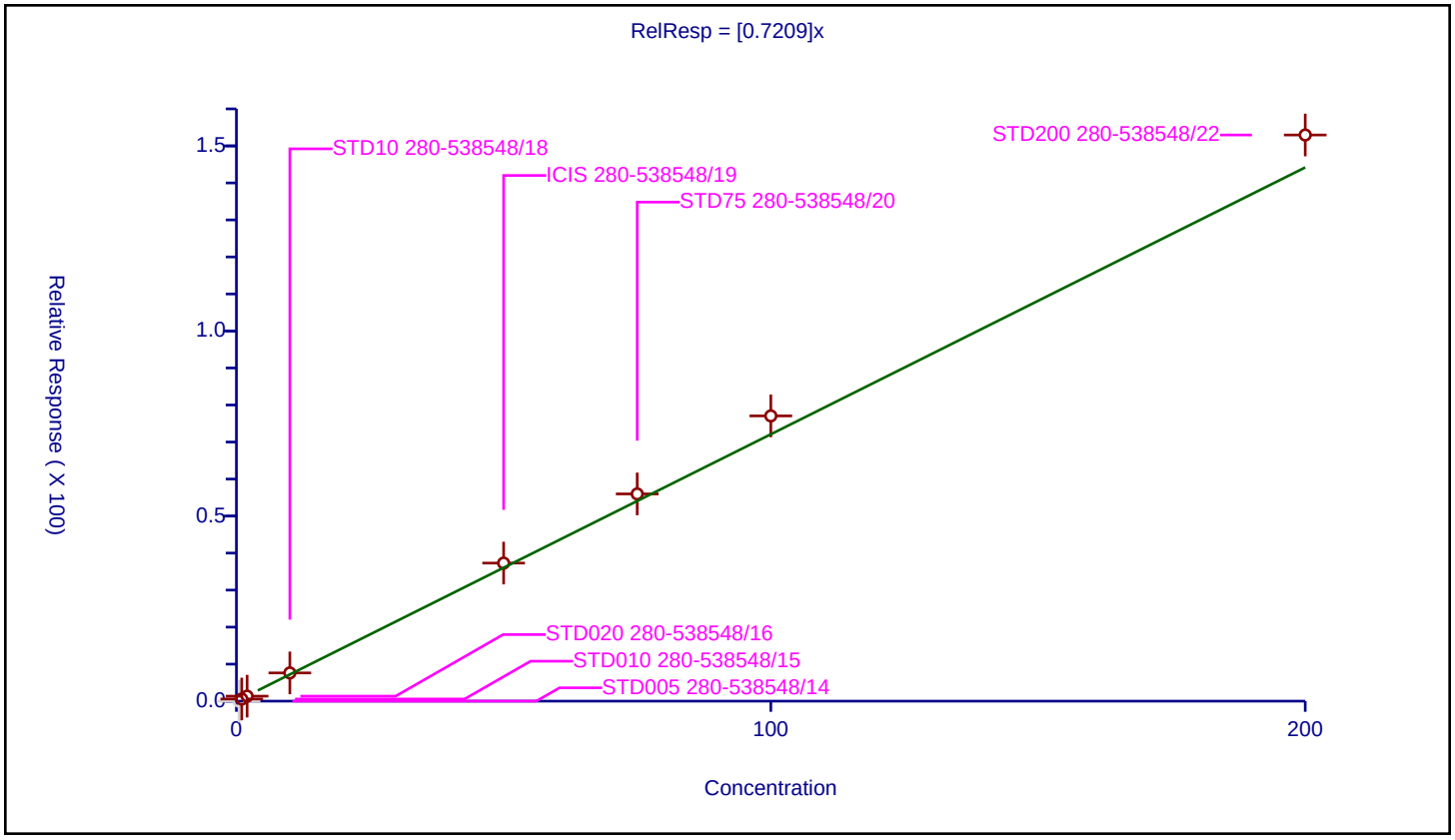
Curve Coefficients

Intercept:	0
Slope:	0.7209

Error Coefficients

Standard Error:	251000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.582025	50.0	156866.0	0.582025	Y
3	STD020 280-538548/16	2.0	1.348859	50.0	153463.0	0.67443	Y
4	STD10 280-538548/18	10.0	7.622562	50.0	158818.0	0.762256	Y
5	ICIS 280-538548/19	50.0	37.299763	50.0	161871.0	0.745995	Y
6	STD75 280-538548/20	75.0	55.981925	50.0	162105.0	0.746426	Y
7	STD100 280-538548/21	100.0	77.061688	50.0	161409.0	0.770617	Y
8	STD200 280-538548/22	200.0	152.950134	50.0	169094.0	0.764751	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

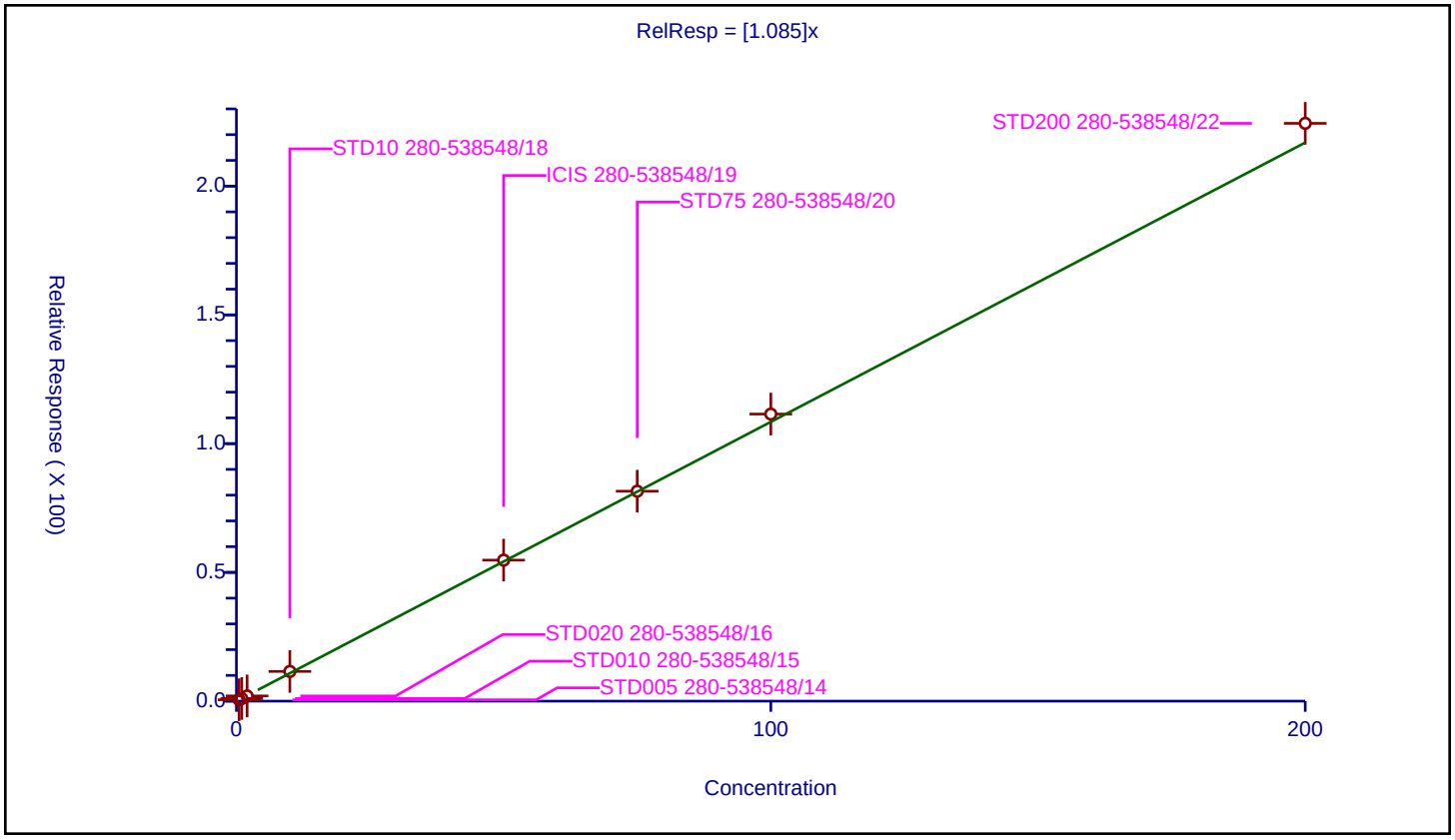
Curve Coefficients

Intercept:	0
Slope:	1.085

Error Coefficients

Standard Error:	340000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.536555	50.0	154877.0	1.07311	Y
2	STD010 280-538548/15	1.0	1.019023	50.0	156866.0	1.019023	Y
3	STD020 280-538548/16	2.0	2.023289	50.0	153463.0	1.011645	Y
4	STD10 280-538548/18	10.0	11.533327	50.0	158818.0	1.153333	Y
5	ICIS 280-538548/19	50.0	54.75811	50.0	161871.0	1.095162	Y
6	STD75 280-538548/20	75.0	81.52833	50.0	162105.0	1.087044	Y
7	STD100 280-538548/21	100.0	111.481392	50.0	161409.0	1.114814	Y
8	STD200 280-538548/22	200.0	224.382888	50.0	169094.0	1.121914	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

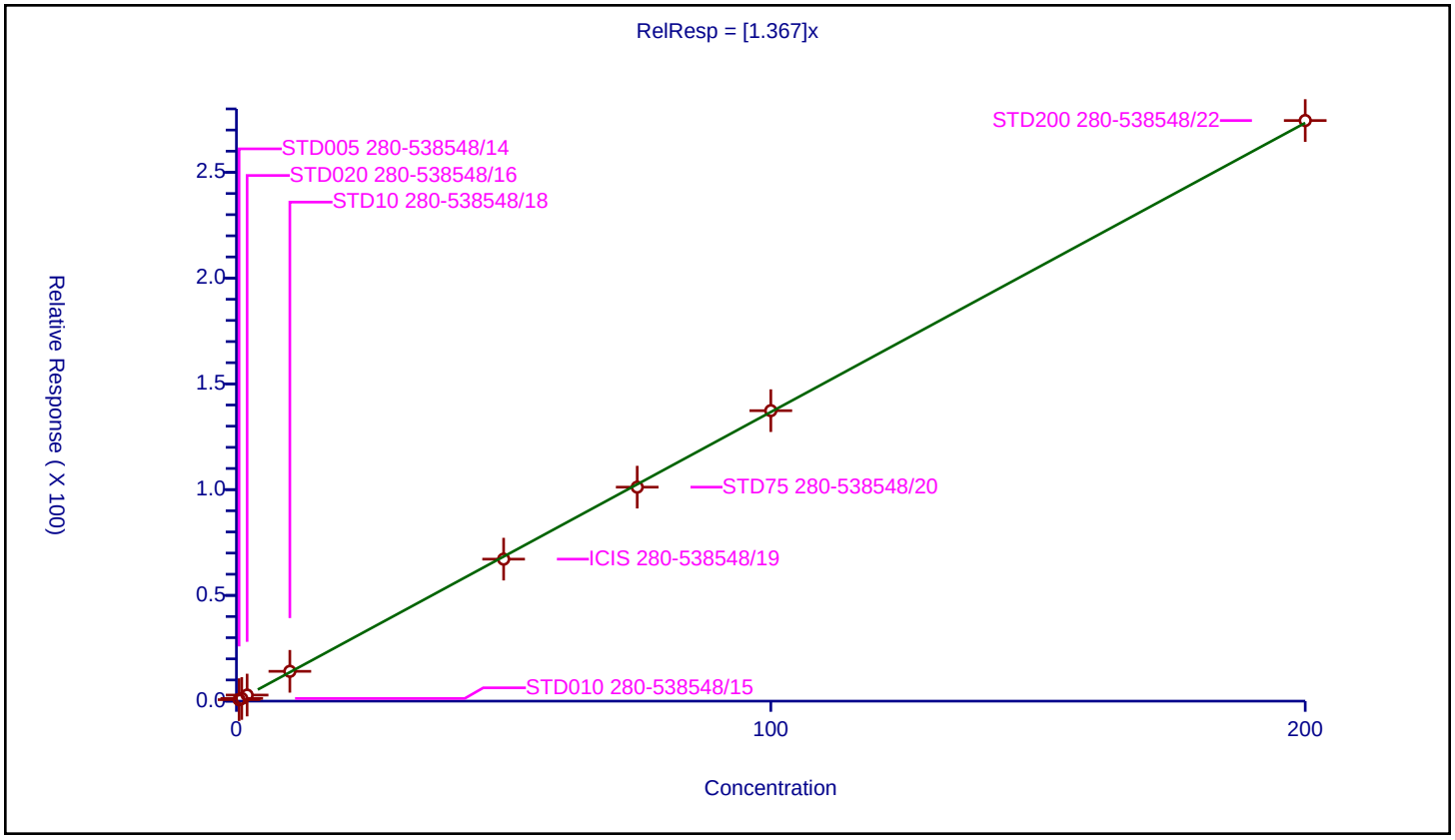
Curve Coefficients

Intercept:	0
Slope:	1.367

Error Coefficients

Standard Error:	417000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.697328	50.0	154877.0	1.394655	Y
2	STD010 280-538548/15	1.0	1.25553	50.0	156866.0	1.25553	Y
3	STD020 280-538548/16	2.0	2.875286	50.0	153463.0	1.437643	Y
4	STD10 280-538548/18	10.0	14.099158	50.0	158818.0	1.409916	Y
5	ICIS 280-538548/19	50.0	67.131543	50.0	161871.0	1.342631	Y
6	STD75 280-538548/20	75.0	101.168379	50.0	162105.0	1.348912	Y
7	STD100 280-538548/21	100.0	137.329703	50.0	161409.0	1.373297	Y
8	STD200 280-538548/22	200.0	274.495843	50.0	169094.0	1.372479	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

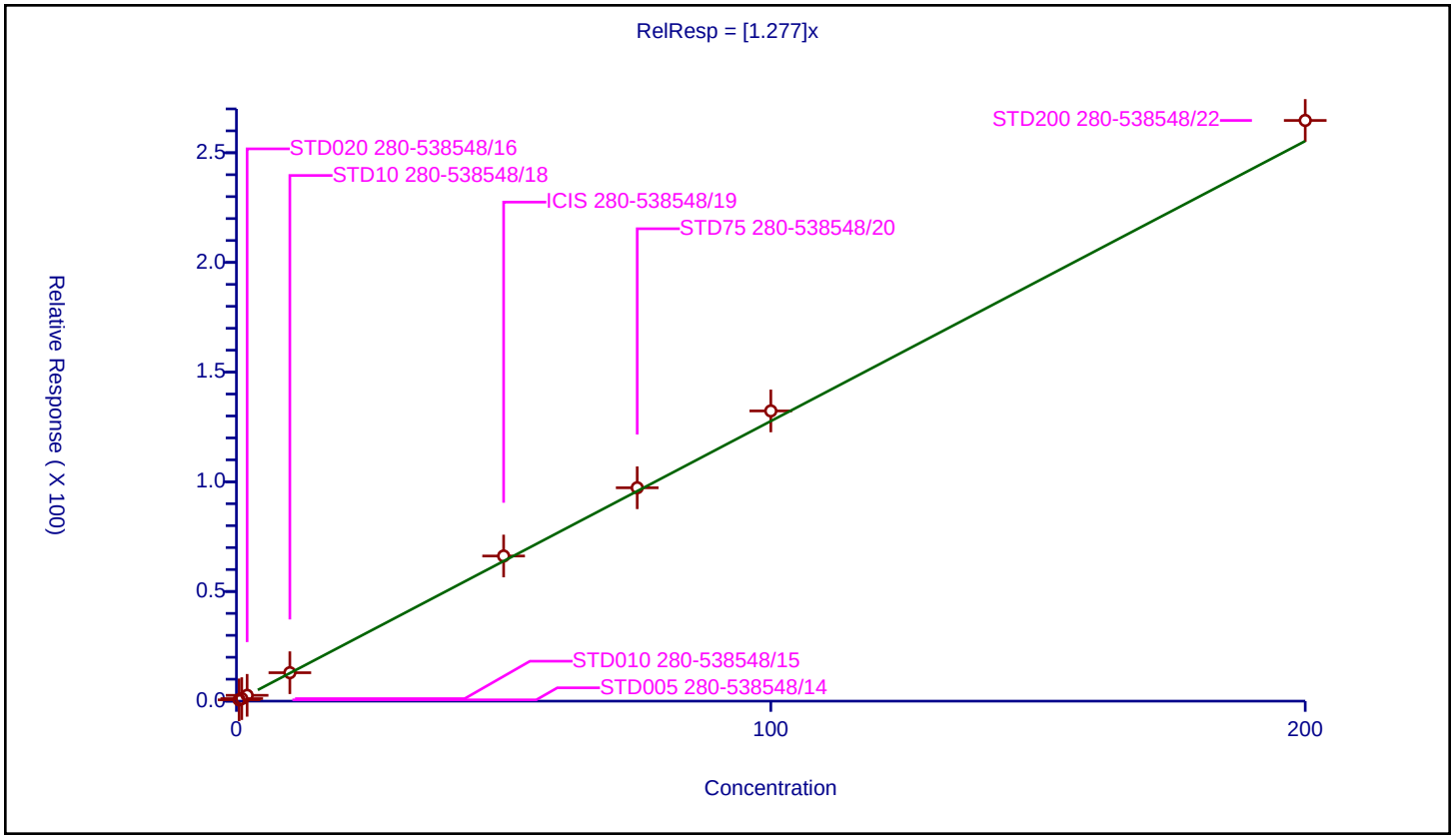
Curve Coefficients

Intercept:	0
Slope:	1.277

Error Coefficients

Standard Error:	402000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.585626	50.0	154877.0	1.171252	Y
2	STD010 280-538548/15	1.0	1.153214	50.0	156866.0	1.153214	Y
3	STD020 280-538548/16	2.0	2.650802	50.0	153463.0	1.325401	Y
4	STD10 280-538548/18	10.0	12.962951	50.0	158818.0	1.296295	Y
5	ICIS 280-538548/19	50.0	66.163488	50.0	161871.0	1.32327	Y
6	STD75 280-538548/20	75.0	97.280466	50.0	162105.0	1.297073	Y
7	STD100 280-538548/21	100.0	132.303341	50.0	161409.0	1.323033	Y
8	STD200 280-538548/22	200.0	264.730268	50.0	169094.0	1.323651	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

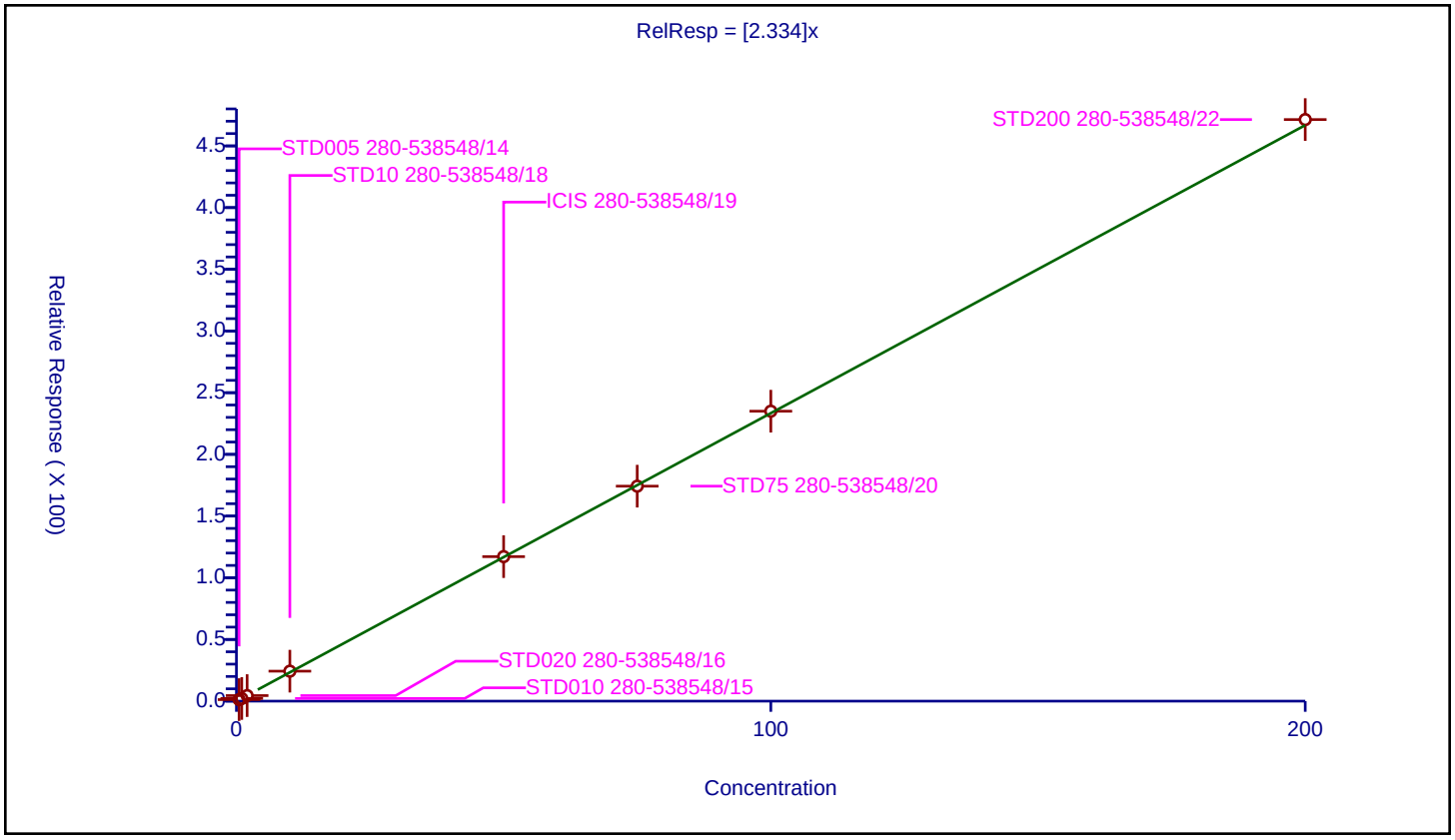
Curve Coefficients

Intercept:	0
Slope:	2.334

Error Coefficients

Standard Error:	715000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.240662	50.0	154877.0	2.481324	Y
2	STD010 280-538548/15	1.0	2.137174	50.0	156866.0	2.137174	Y
3	STD020 280-538548/16	2.0	4.502062	50.0	153463.0	2.251031	Y
4	STD10 280-538548/18	10.0	24.298568	50.0	158818.0	2.429857	Y
5	ICIS 280-538548/19	50.0	117.123203	50.0	161871.0	2.342464	Y
6	STD75 280-538548/20	75.0	174.222572	50.0	162105.0	2.322968	Y
7	STD100 280-538548/21	100.0	234.992473	50.0	161409.0	2.349925	Y
8	STD200 280-538548/22	200.0	471.334287	50.0	169094.0	2.356671	Y



Calibration / Bromoform

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

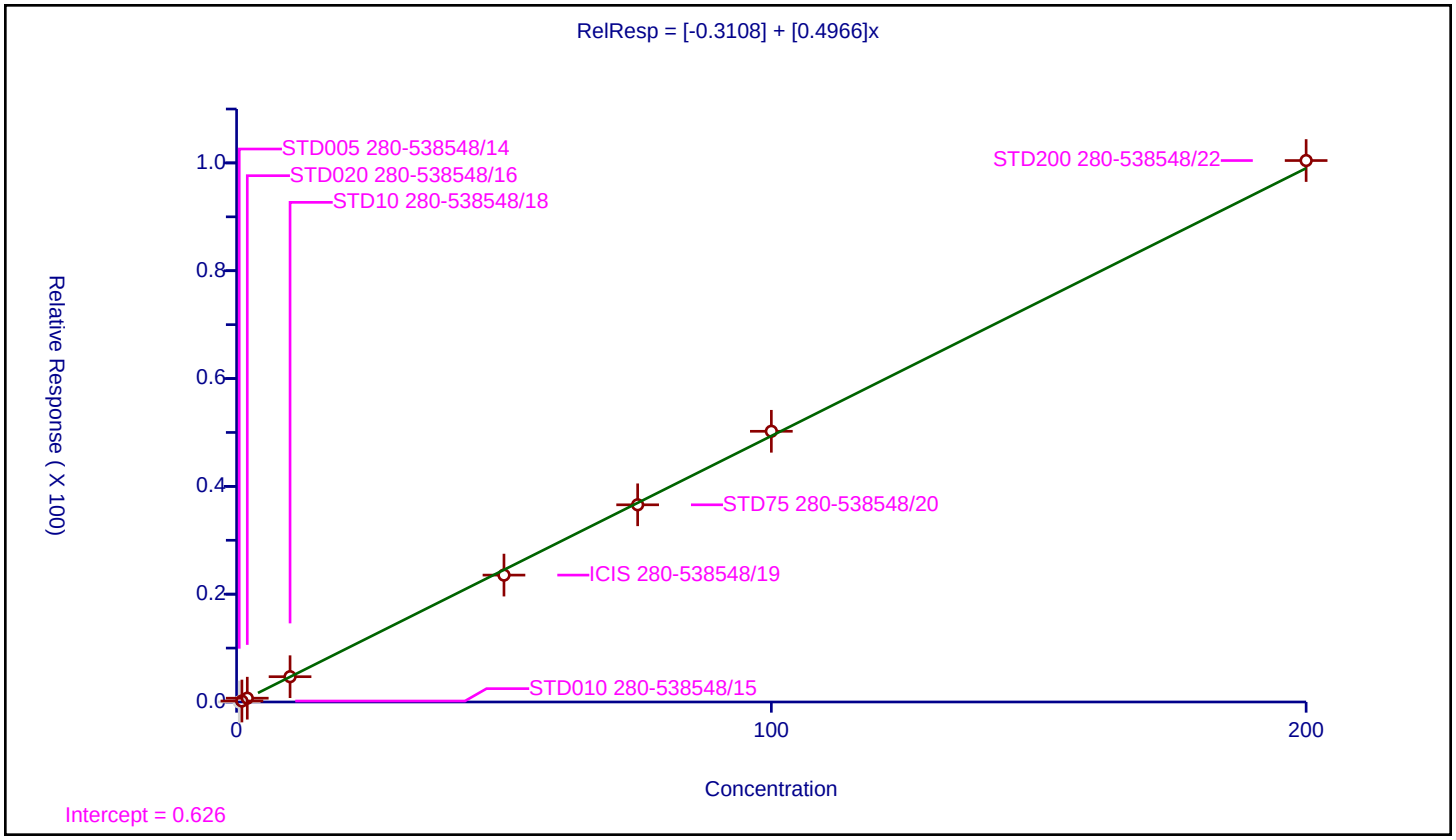
Curve Coefficients

Intercept:	-0.3108
Slope:	0.4966

Error Coefficients

Standard Error:	180000
Relative Standard Error:	2.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	154877.0	0.0	N
2	STD010 280-538548/15	1.0	0.180727	50.0	156866.0	0.180727	Y
3	STD020 280-538548/16	2.0	0.702775	50.0	153463.0	0.351388	Y
4	STD10 280-538548/18	10.0	4.690274	50.0	158818.0	0.469027	Y
5	ICIS 280-538548/19	50.0	23.540041	50.0	161871.0	0.470801	Y
6	STD75 280-538548/20	75.0	36.578452	50.0	162105.0	0.487713	Y
7	STD100 280-538548/21	100.0	50.219319	50.0	161409.0	0.502193	Y
8	STD200 280-538548/22	200.0	100.440879	50.0	169094.0	0.502204	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

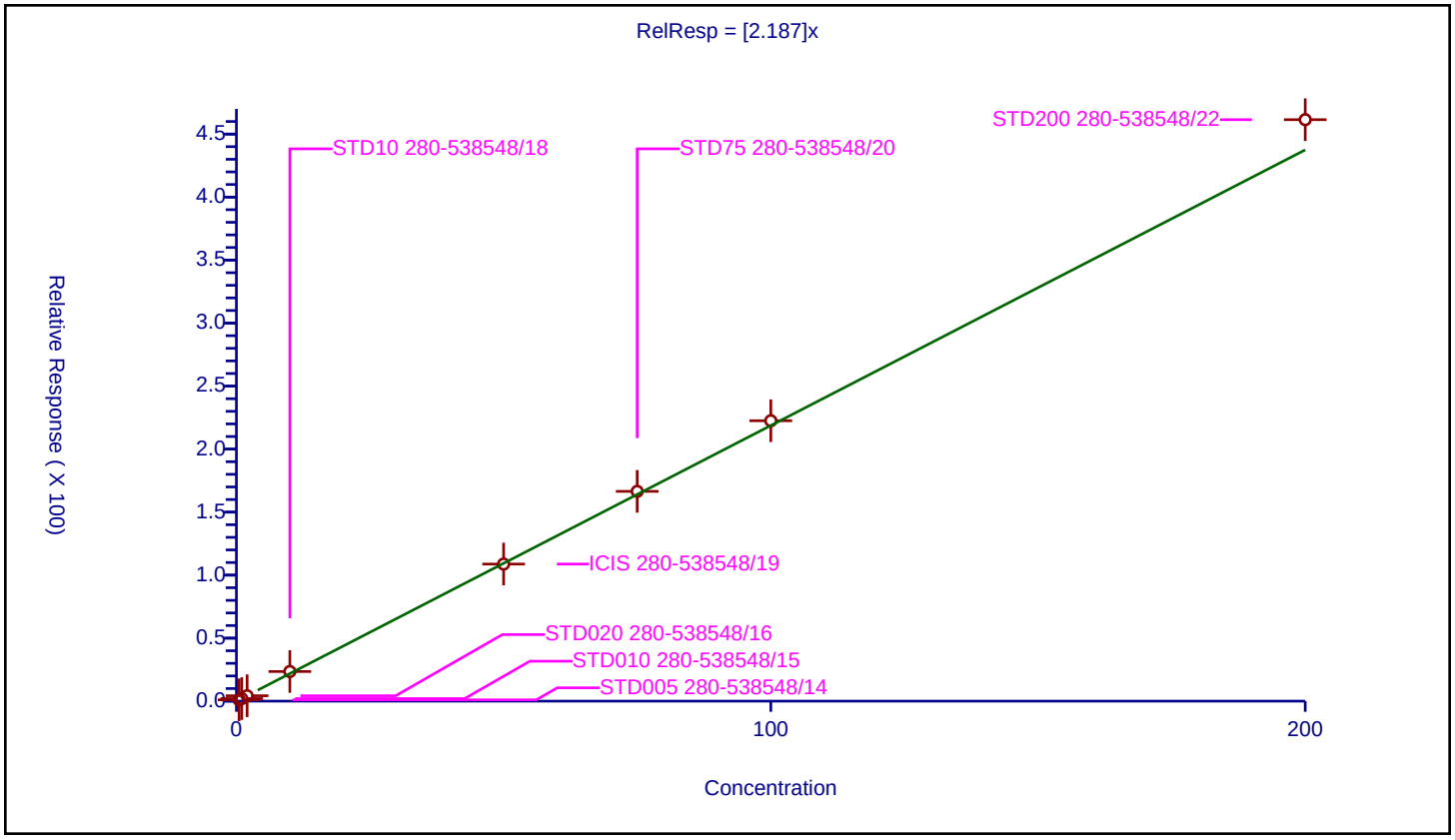
Curve Coefficients

Intercept:	0
Slope:	2.187

Error Coefficients

Standard Error:	1080000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.029932	50.0	245453.0	2.059865	Y
2	STD010 280-538548/15	1.0	2.018125	50.0	250257.0	2.018125	Y
3	STD020 280-538548/16	2.0	4.281395	50.0	242456.0	2.140698	Y
4	STD10 280-538548/18	10.0	23.518999	50.0	249122.0	2.3519	Y
5	ICIS 280-538548/19	50.0	108.786124	50.0	257514.0	2.175722	Y
6	STD75 280-538548/20	75.0	166.490033	50.0	257689.0	2.219867	Y
7	STD100 280-538548/21	100.0	222.533741	50.0	257627.0	2.225337	Y
8	STD200 280-538548/22	200.0	461.449776	50.0	259778.0	2.307249	Y



Calibration / Cyclohexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

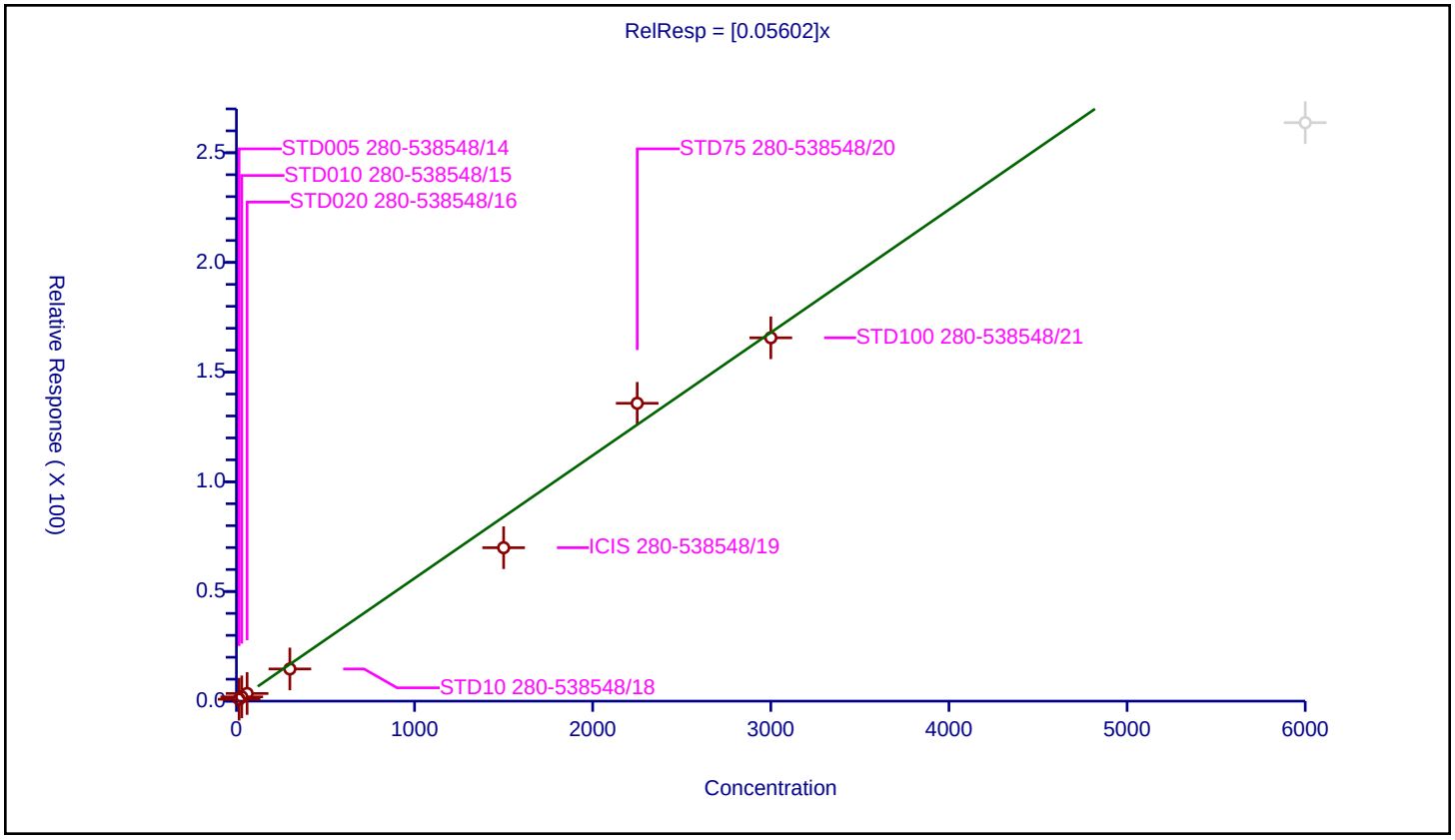
Curve Coefficients

Intercept:	0
Slope:	0.05602

Error Coefficients

Standard Error:	298000
Relative Standard Error:	11.4
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	15.0	0.870368	50.0	154877.0	0.058025	Y
2	STD010 280-538548/15	30.0	1.944016	50.0	156866.0	0.064801	Y
3	STD020 280-538548/16	60.0	3.491395	50.0	153463.0	0.05819	Y
4	STD10 280-538548/18	300.0	14.671826	50.0	158818.0	0.048906	Y
5	ICIS 280-538548/19	1500.0	69.944894	50.0	161871.0	0.04663	Y
6	STD75 280-538548/20	2250.0	135.786373	50.0	162105.0	0.060349	Y
7	STD100 280-538548/21	3000.0	165.653712	50.0	161409.0	0.055218	Y
8	STD200 280-538548/22	6000.0	263.725797	50.0	169094.0	0.043954	N



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

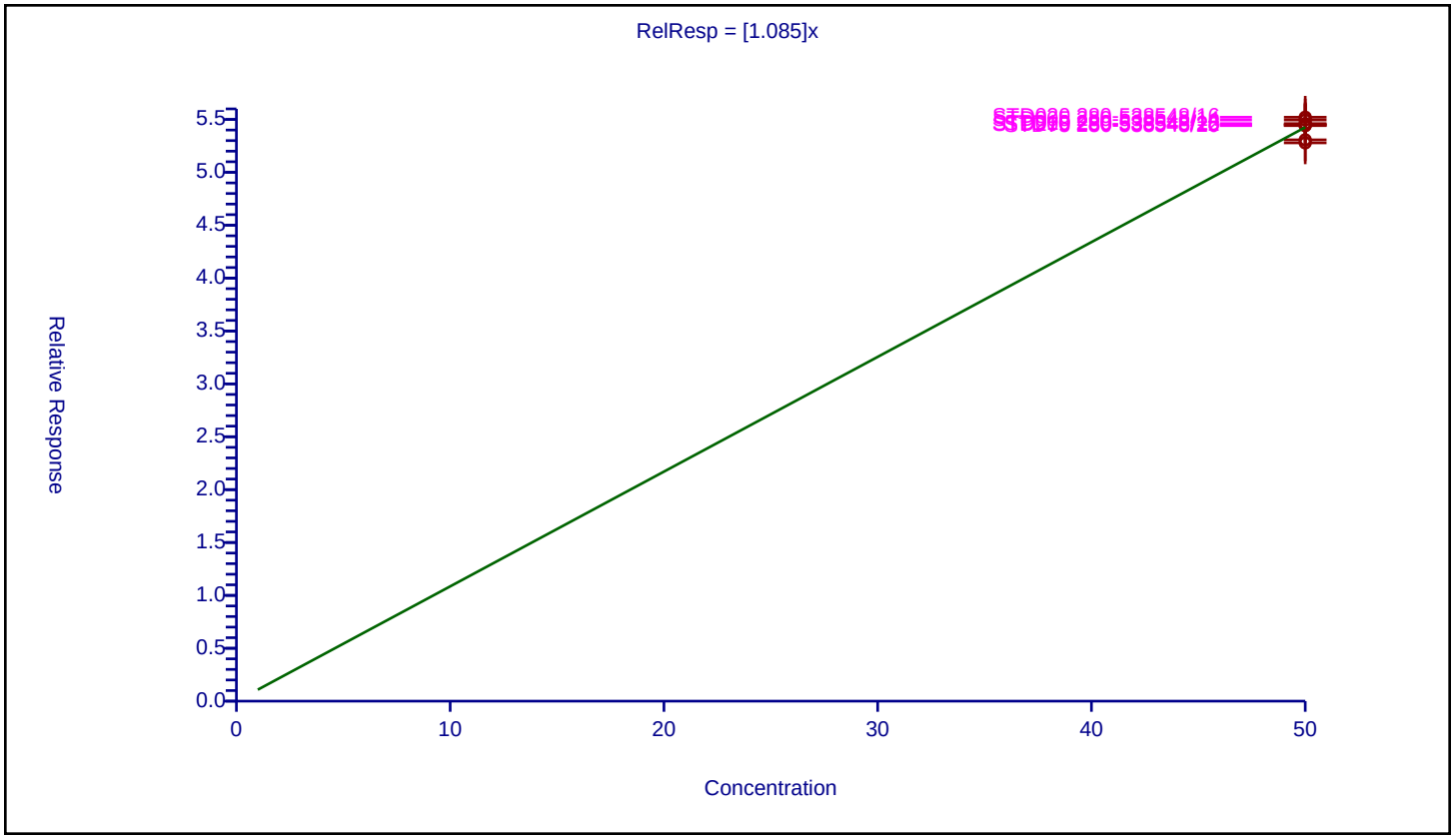
Curve Coefficients

Intercept:	0
Slope:	1.085

Error Coefficients

Standard Error:	293000
Relative Standard Error:	1.6
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	50.0	54.950031	50.0	245453.0	1.099001	Y
2	STD010 280-538548/15	50.0	54.539134	50.0	250257.0	1.090783	Y
3	STD020 280-538548/16	50.0	55.211873	50.0	242456.0	1.104237	Y
4	STD10 280-538548/18	50.0	54.610191	50.0	249122.0	1.092204	Y
5	ICIS 280-538548/19	50.0	53.072843	50.0	257514.0	1.061457	Y
6	STD75 280-538548/20	50.0	54.416564	50.0	257689.0	1.088331	Y
7	STD100 280-538548/21	50.0	52.785422	50.0	257627.0	1.055708	Y
8	STD200 280-538548/22	50.0	54.443024	50.0	259778.0	1.08886	Y



Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

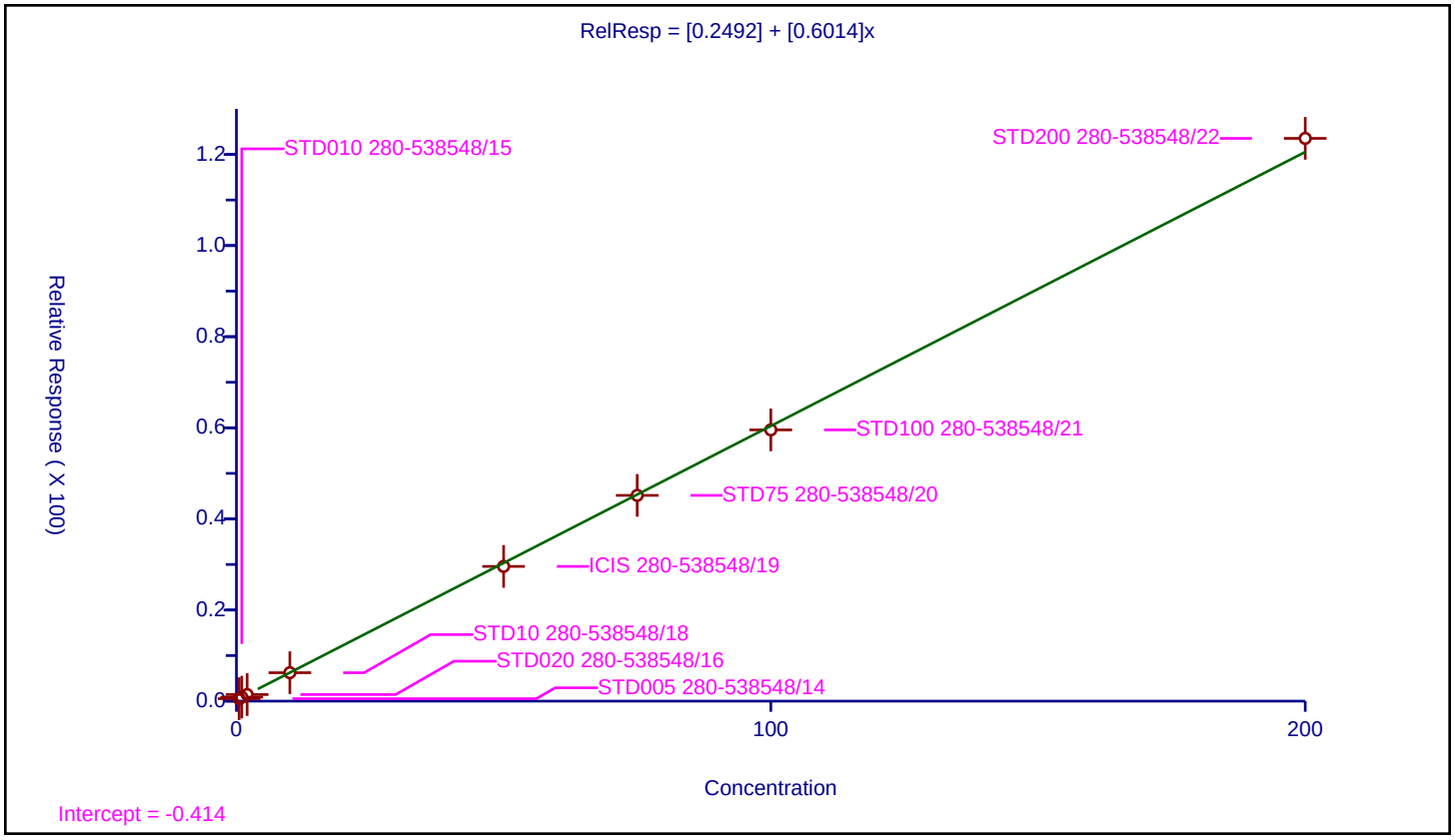
Curve Coefficients

Intercept:	0.2492
Slope:	0.6014

Error Coefficients

Standard Error:	312000
Relative Standard Error:	2.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.54267	50.0	245453.0	1.08534	Y
2	STD010 280-538548/15	1.0	0.881893	50.0	250257.0	0.881893	Y
3	STD020 280-538548/16	2.0	1.445004	50.0	242456.0	0.722502	Y
4	STD10 280-538548/18	10.0	6.240517	50.0	249122.0	0.624052	Y
5	ICIS 280-538548/19	50.0	29.575479	50.0	257514.0	0.59151	Y
6	STD75 280-538548/20	75.0	45.166848	50.0	257689.0	0.602225	Y
7	STD100 280-538548/21	100.0	59.54209	50.0	257627.0	0.595421	Y
8	STD200 280-538548/22	200.0	123.525857	50.0	259778.0	0.617629	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

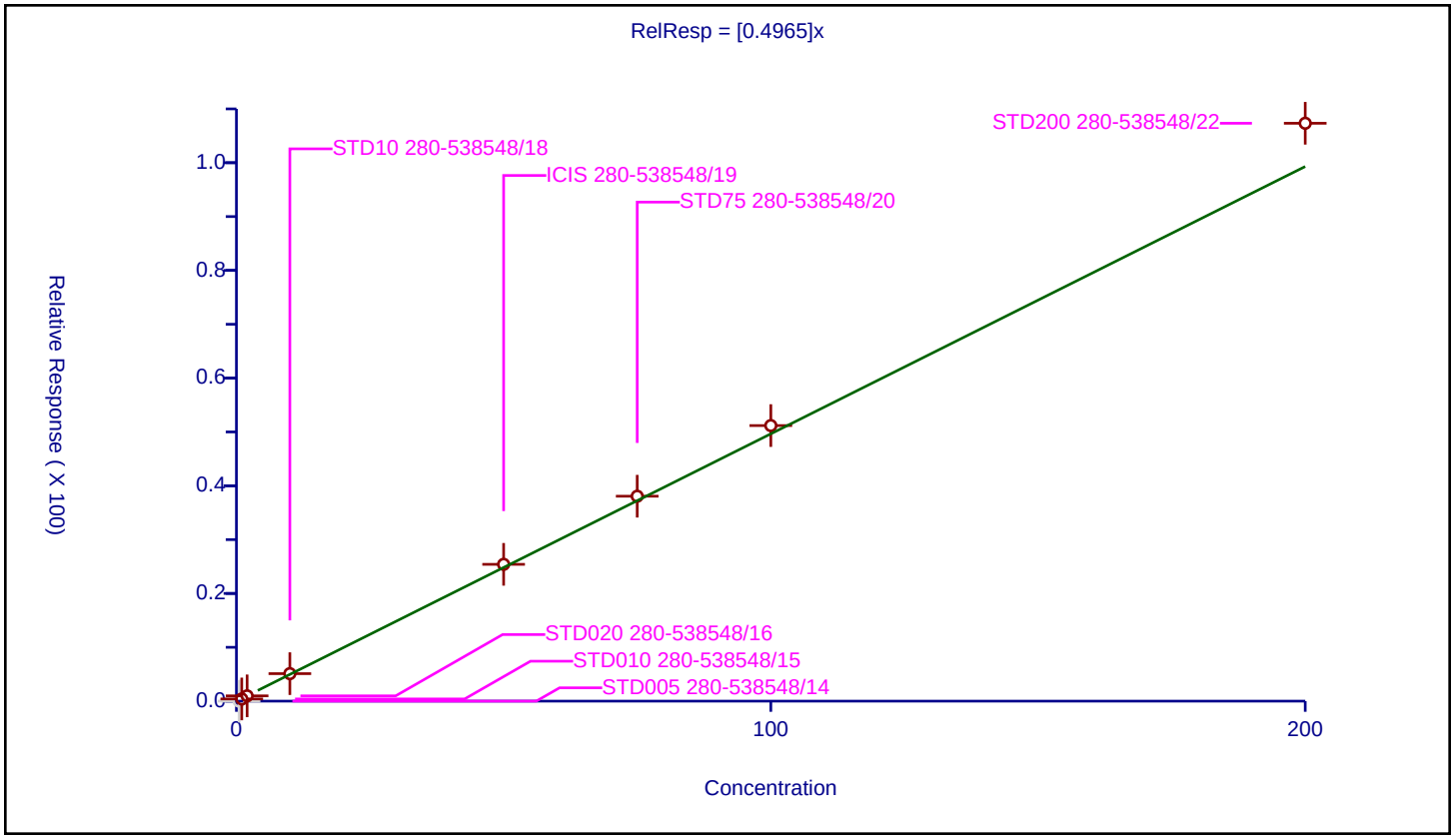
Curve Coefficients

Intercept:	0
Slope:	0.4965

Error Coefficients

Standard Error:	270000
Relative Standard Error:	8.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.409379	50.0	250257.0	0.409379	Y
3	STD020 280-538548/16	2.0	0.982446	50.0	242456.0	0.491223	Y
4	STD10 280-538548/18	10.0	5.105932	50.0	249122.0	0.510593	Y
5	ICIS 280-538548/19	50.0	25.408521	50.0	257514.0	0.50817	Y
6	STD75 280-538548/20	75.0	38.061966	50.0	257689.0	0.507493	Y
7	STD100 280-538548/21	100.0	51.181165	50.0	257627.0	0.511812	Y
8	STD200 280-538548/22	200.0	107.329912	50.0	259778.0	0.53665	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

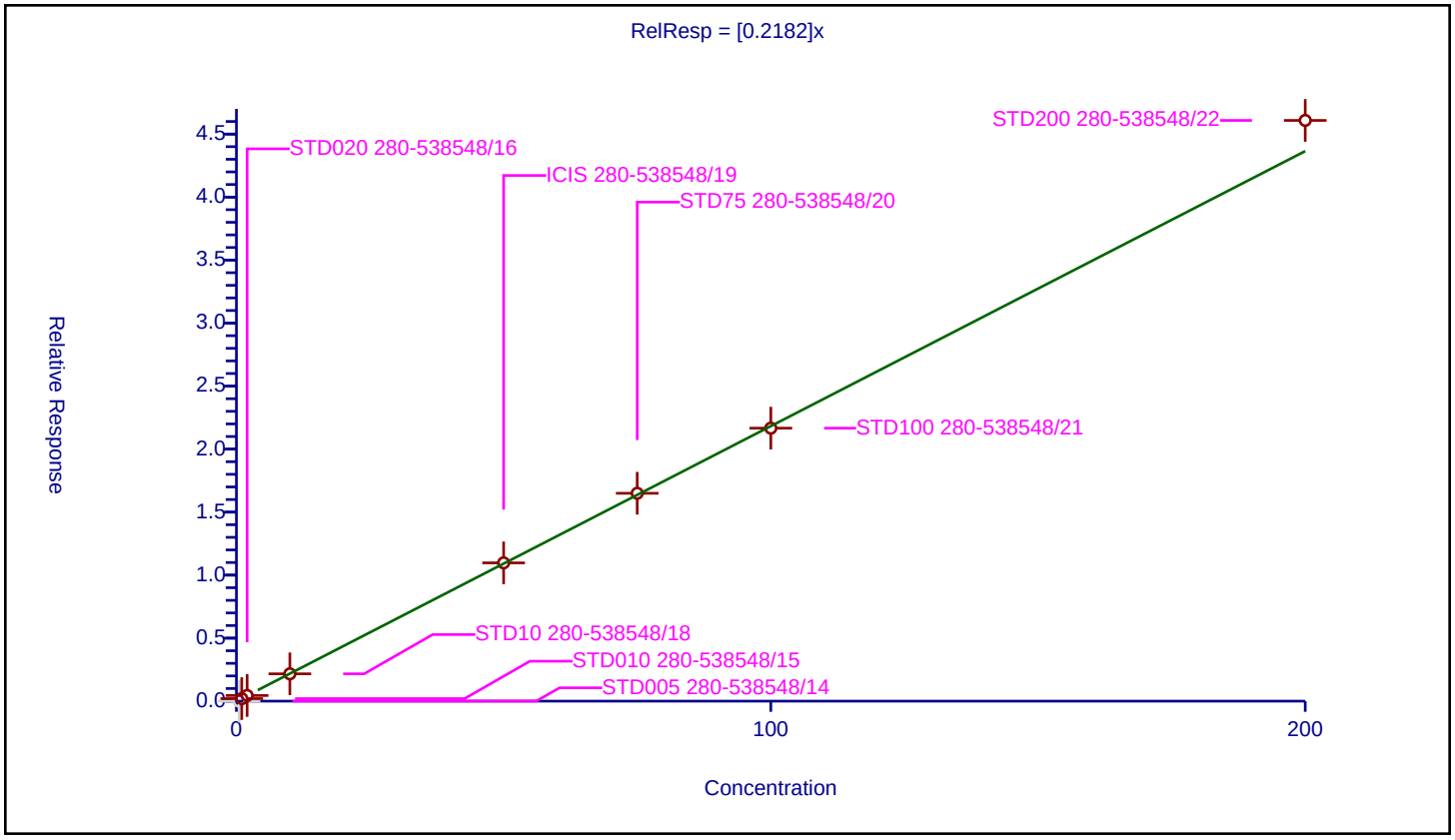
Curve Coefficients

Intercept:	0
Slope:	0.2182

Error Coefficients

Standard Error:	116000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.201393	50.0	250257.0	0.201393	Y
3	STD020 280-538548/16	2.0	0.44606	50.0	242456.0	0.22303	Y
4	STD10 280-538548/18	10.0	2.168014	50.0	249122.0	0.216801	Y
5	ICIS 280-538548/19	50.0	10.973966	50.0	257514.0	0.219479	Y
6	STD75 280-538548/20	75.0	16.495077	50.0	257689.0	0.219934	Y
7	STD100 280-538548/21	100.0	21.663296	50.0	257627.0	0.216633	Y
8	STD200 280-538548/22	200.0	46.085311	50.0	259778.0	0.230427	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

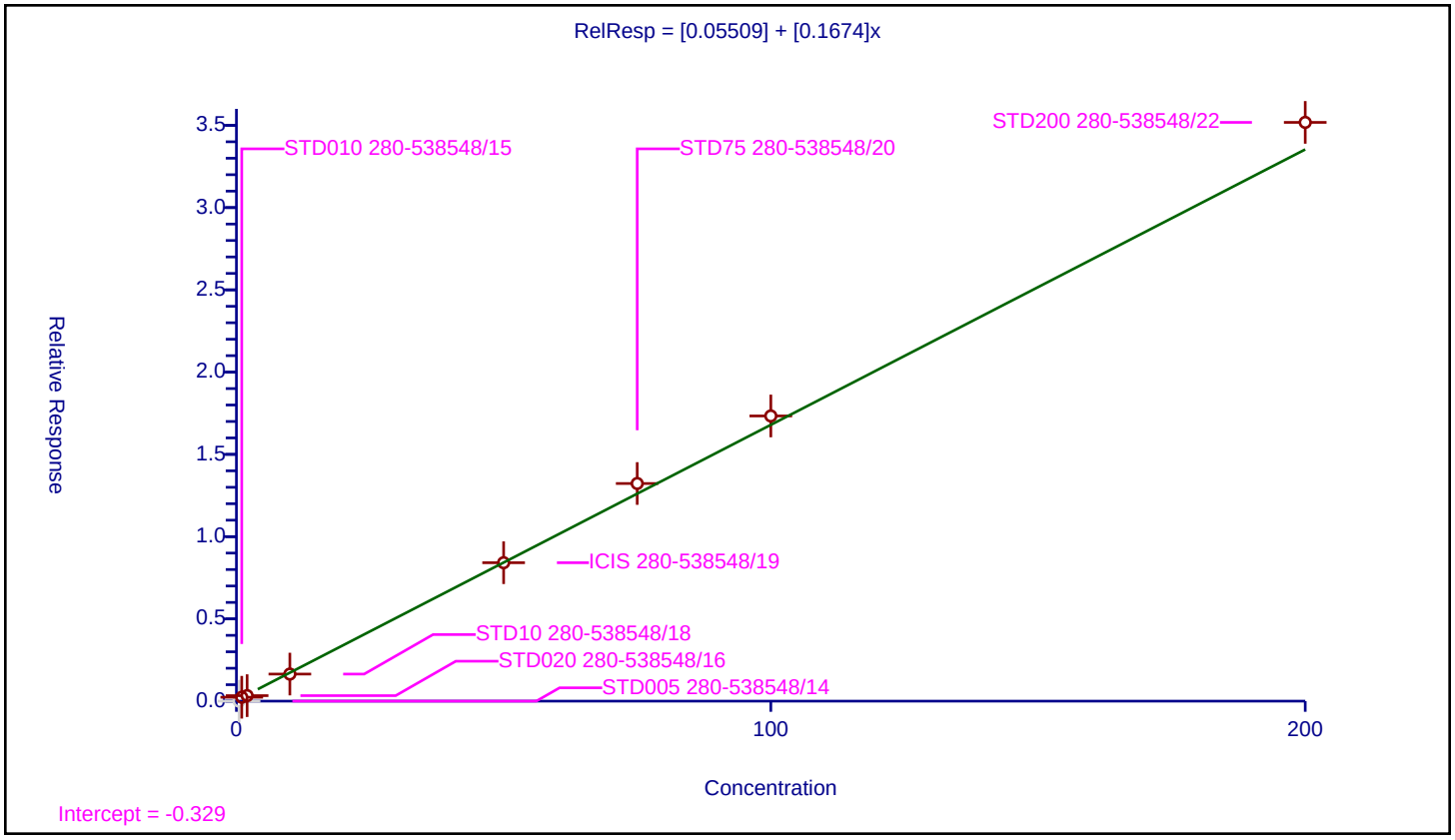
Curve Coefficients

Intercept:	0.05509
Slope:	0.1674

Error Coefficients

Standard Error:	97900
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.237156	50.0	250257.0	0.237156	Y
3	STD020 280-538548/16	2.0	0.333669	50.0	242456.0	0.166834	Y
4	STD10 280-538548/18	10.0	1.646382	50.0	249122.0	0.164638	Y
5	ICIS 280-538548/19	50.0	8.4143	50.0	257514.0	0.168286	Y
6	STD75 280-538548/20	75.0	13.229901	50.0	257689.0	0.176399	Y
7	STD100 280-538548/21	100.0	17.334945	50.0	257627.0	0.173349	Y
8	STD200 280-538548/22	200.0	35.178499	50.0	259778.0	0.175892	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

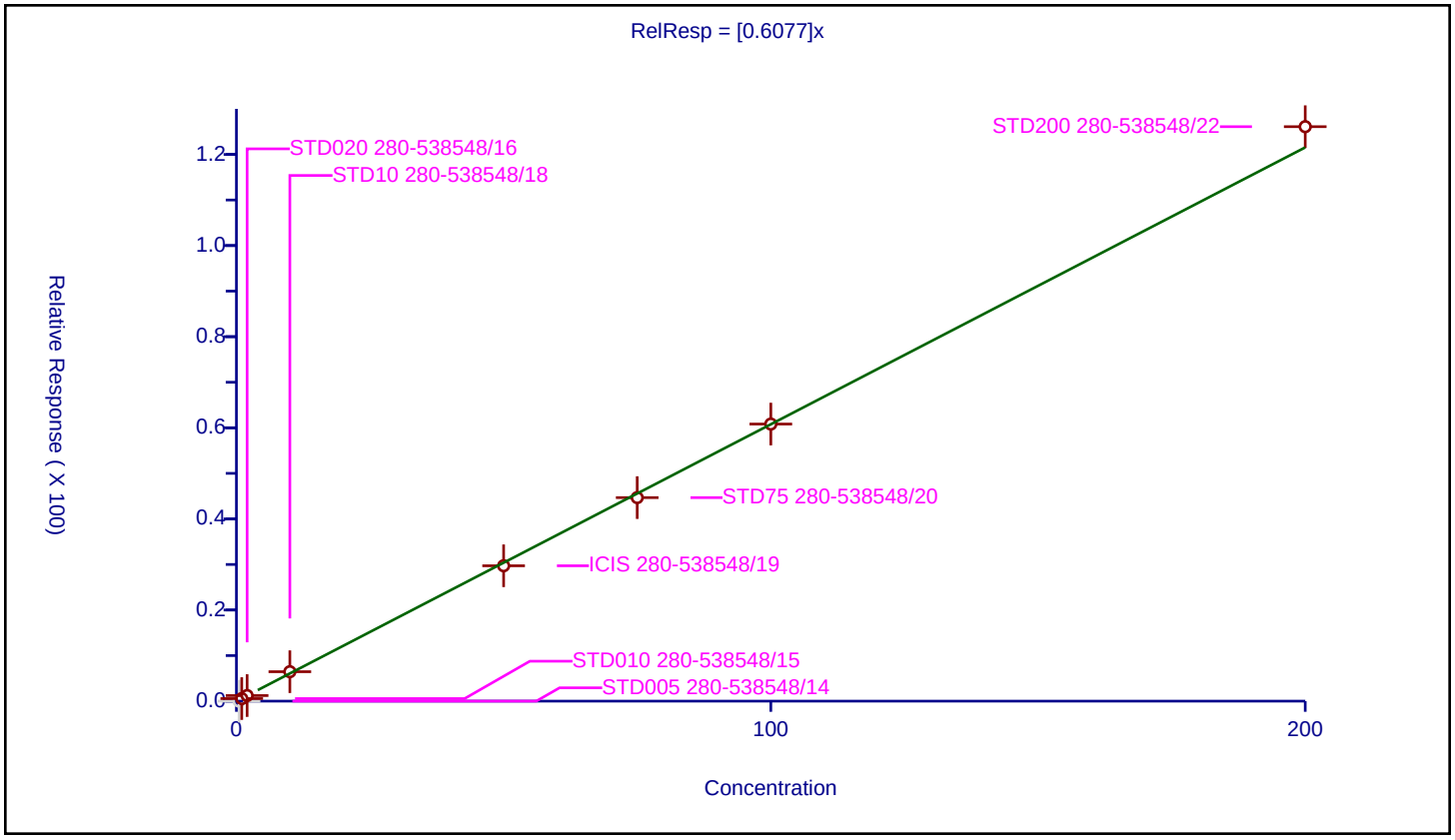
Curve Coefficients

Intercept:	0
Slope:	0.6077

Error Coefficients

Standard Error:	317000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.566418	50.0	250257.0	0.566418	Y
3	STD020 280-538548/16	2.0	1.225377	50.0	242456.0	0.612688	Y
4	STD10 280-538548/18	10.0	6.462095	50.0	249122.0	0.646209	Y
5	ICIS 280-538548/19	50.0	29.714501	50.0	257514.0	0.59429	Y
6	STD75 280-538548/20	75.0	44.67323	50.0	257689.0	0.595643	Y
7	STD100 280-538548/21	100.0	60.819518	50.0	257627.0	0.608195	Y
8	STD200 280-538548/22	200.0	126.092664	50.0	259778.0	0.630463	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

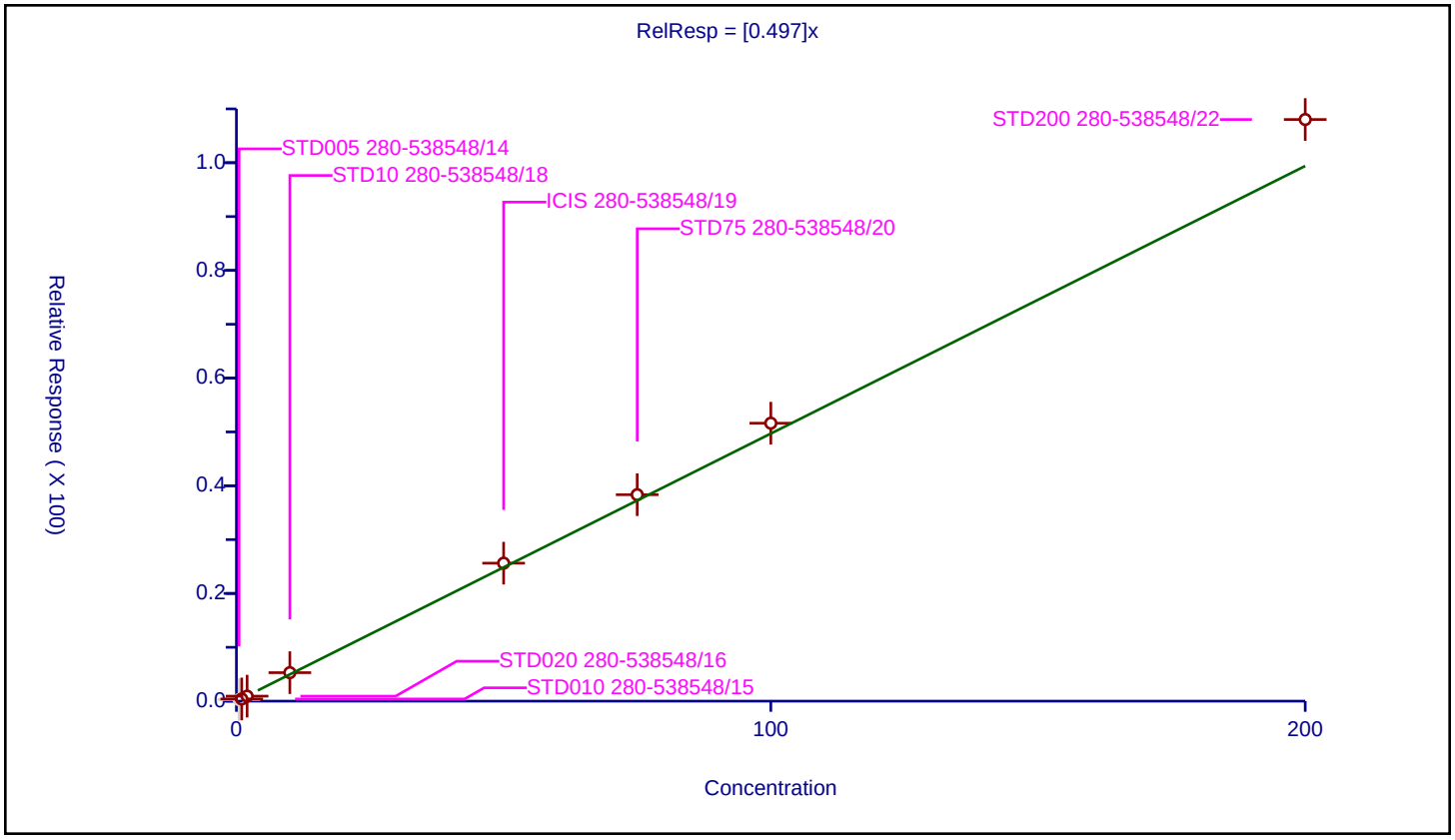
Curve Coefficients

Intercept:	0
Slope:	0.497

Error Coefficients

Standard Error:	272000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.288039	50.0	245453.0	0.576078	N
2	STD010 280-538548/15	1.0	0.405183	50.0	250257.0	0.405183	Y
3	STD020 280-538548/16	2.0	0.92821	50.0	242456.0	0.464105	Y
4	STD10 280-538548/18	10.0	5.292788	50.0	249122.0	0.529279	Y
5	ICIS 280-538548/19	50.0	25.62618	50.0	257514.0	0.512524	Y
6	STD75 280-538548/20	75.0	38.345059	50.0	257689.0	0.511267	Y
7	STD100 280-538548/21	100.0	51.624053	50.0	257627.0	0.516241	Y
8	STD200 280-538548/22	200.0	108.023967	50.0	259778.0	0.54012	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

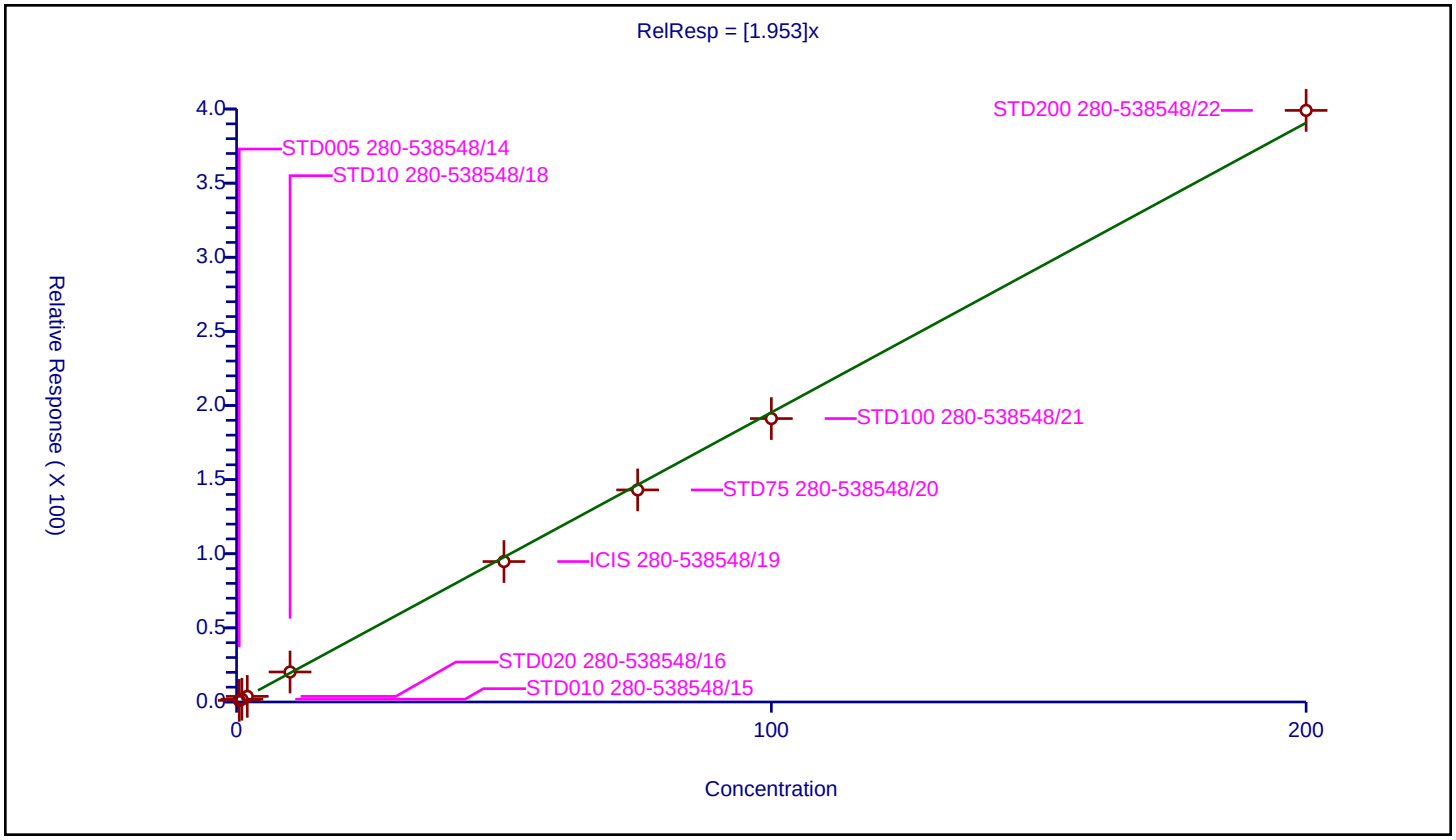
Curve Coefficients

Intercept:	0
Slope:	1.953

Error Coefficients

Standard Error:	930000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.067414	50.0	245453.0	2.134828	Y
2	STD010 280-538548/15	1.0	1.86748	50.0	250257.0	1.86748	Y
3	STD020 280-538548/16	2.0	3.783367	50.0	242456.0	1.891683	Y
4	STD10 280-538548/18	10.0	20.237875	50.0	249122.0	2.023788	Y
5	ICIS 280-538548/19	50.0	94.744946	50.0	257514.0	1.894899	Y
6	STD75 280-538548/20	75.0	143.056165	50.0	257689.0	1.907416	Y
7	STD100 280-538548/21	100.0	191.181049	50.0	257627.0	1.91181	Y
8	STD200 280-538548/22	200.0	399.060736	50.0	259778.0	1.995304	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

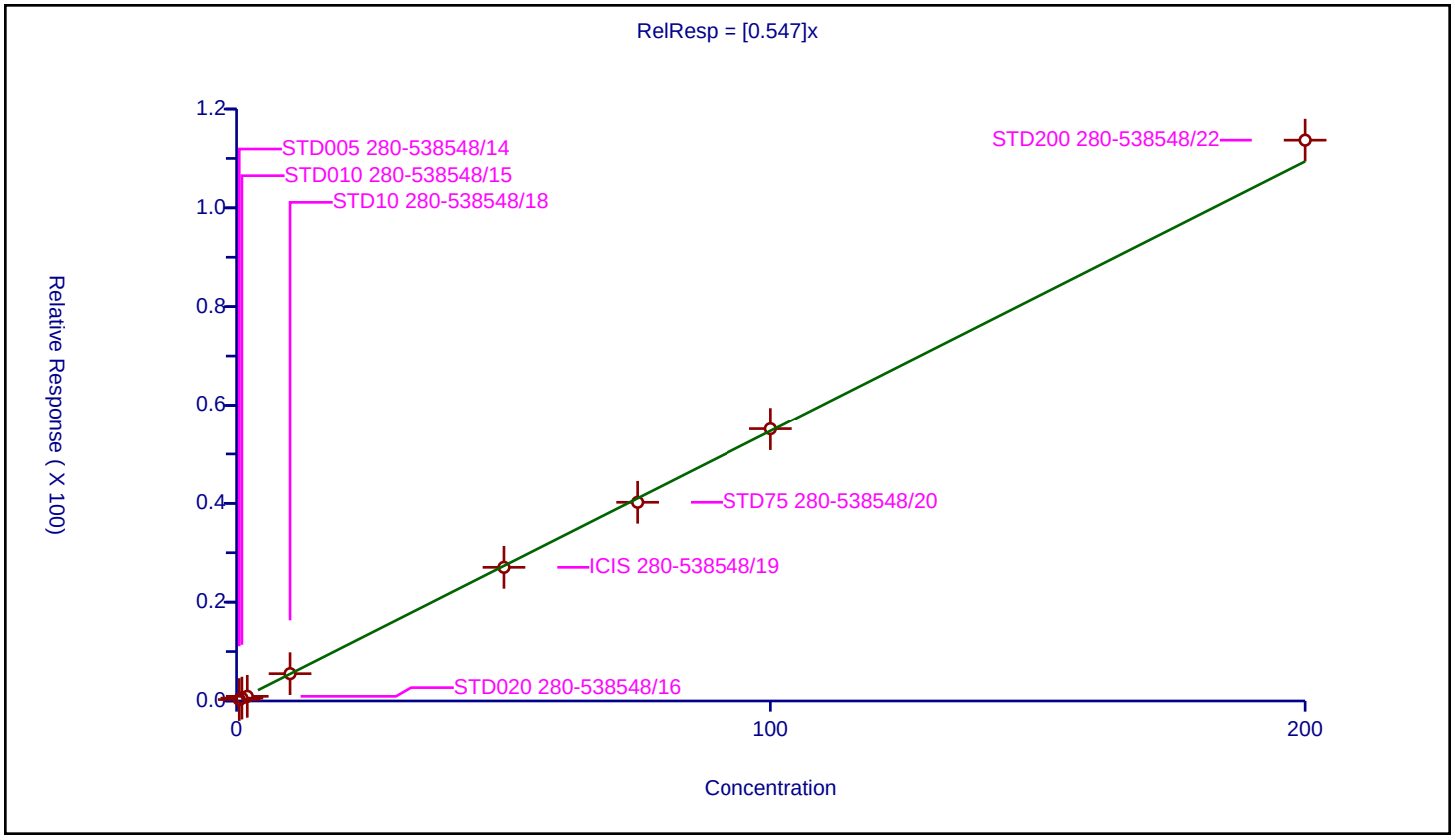
Curve Coefficients

Intercept:	0
Slope:	0.547

Error Coefficients

Standard Error:	265000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.288446	50.0	245453.0	0.576893	Y
2	STD010 280-538548/15	1.0	0.578206	50.0	250257.0	0.578206	Y
3	STD020 280-538548/16	2.0	0.942027	50.0	242456.0	0.471013	Y
4	STD10 280-538548/18	10.0	5.528617	50.0	249122.0	0.552862	Y
5	ICIS 280-538548/19	50.0	27.049986	50.0	257514.0	0.541	Y
6	STD75 280-538548/20	75.0	40.210098	50.0	257689.0	0.536135	Y
7	STD100 280-538548/21	100.0	55.125627	50.0	257627.0	0.551256	Y
8	STD200 280-538548/22	200.0	113.696502	50.0	259778.0	0.568483	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

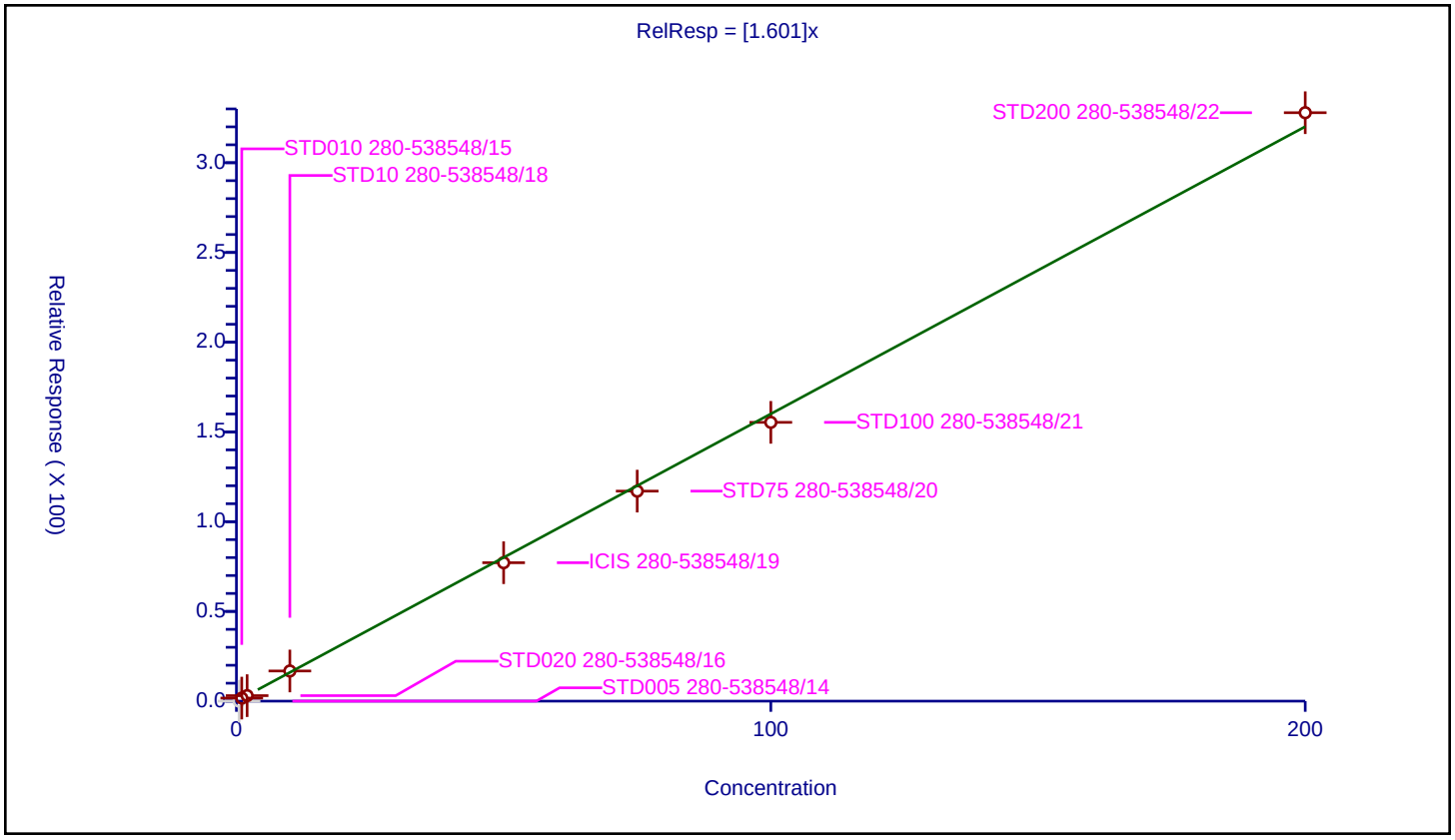
Curve Coefficients

Intercept:	0
Slope:	1.601

Error Coefficients

Standard Error:	824000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	1.69286	50.0	250257.0	1.69286	Y
3	STD020 280-538548/16	2.0	3.06901	50.0	242456.0	1.534505	Y
4	STD10 280-538548/18	10.0	16.811442	50.0	249122.0	1.681144	Y
5	ICIS 280-538548/19	50.0	77.130758	50.0	257514.0	1.542615	Y
6	STD75 280-538548/20	75.0	117.017024	50.0	257689.0	1.560227	Y
7	STD100 280-538548/21	100.0	155.339697	50.0	257627.0	1.553397	Y
8	STD200 280-538548/22	200.0	327.870335	50.0	259778.0	1.639352	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

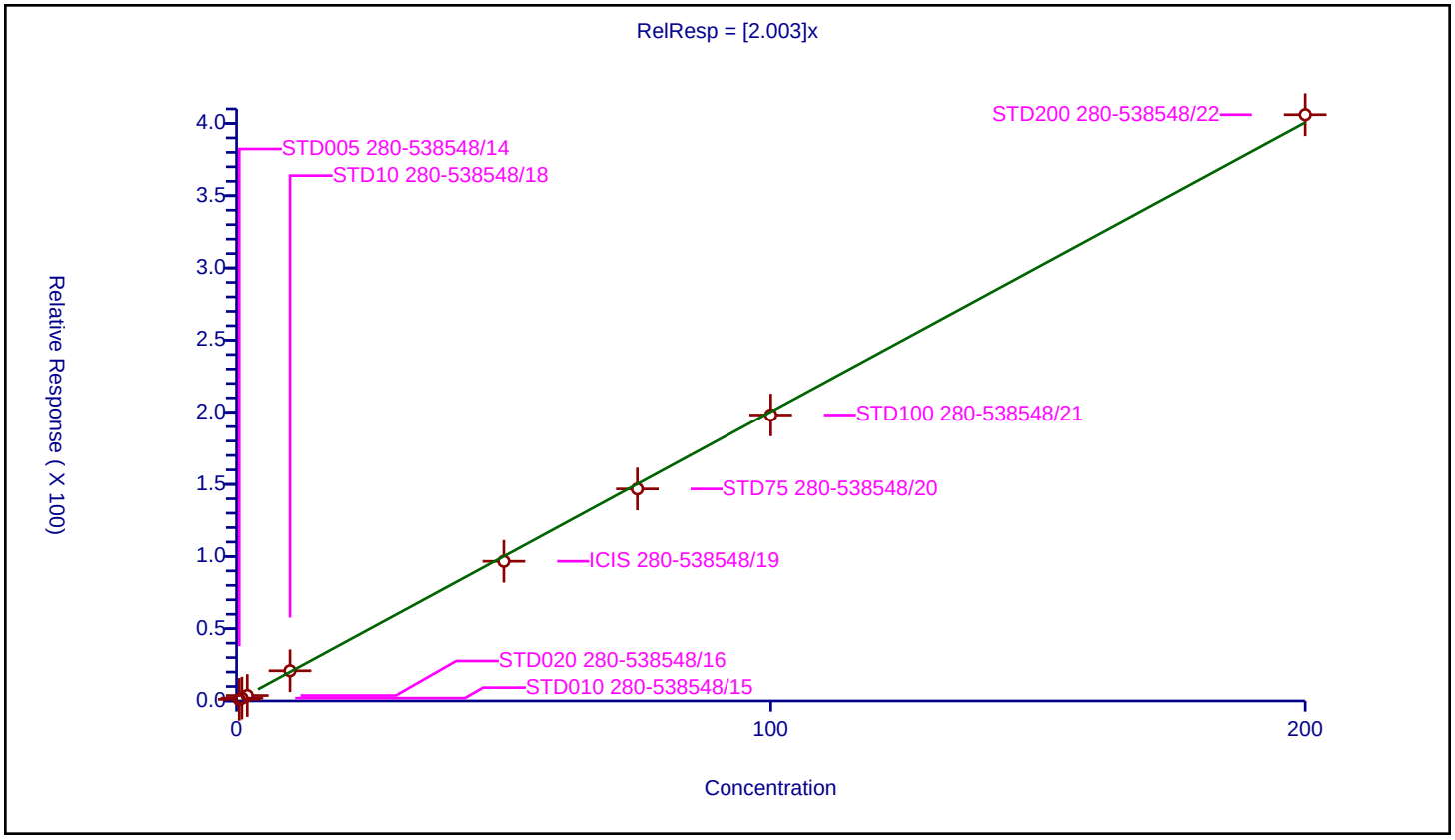
Curve Coefficients

Intercept:	0
Slope:	2.003

Error Coefficients

Standard Error:	950000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.10184	50.0	245453.0	2.203681	Y
2	STD010 280-538548/15	1.0	1.960585	50.0	250257.0	1.960585	Y
3	STD020 280-538548/16	2.0	3.745009	50.0	242456.0	1.872505	Y
4	STD10 280-538548/18	10.0	20.881536	50.0	249122.0	2.088154	Y
5	ICIS 280-538548/19	50.0	96.677656	50.0	257514.0	1.933553	Y
6	STD75 280-538548/20	75.0	146.788571	50.0	257689.0	1.957181	Y
7	STD100 280-538548/21	100.0	198.102101	50.0	257627.0	1.981021	Y
8	STD200 280-538548/22	200.0	406.011864	50.0	259778.0	2.030059	Y



Calibration / sec-Butylbenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

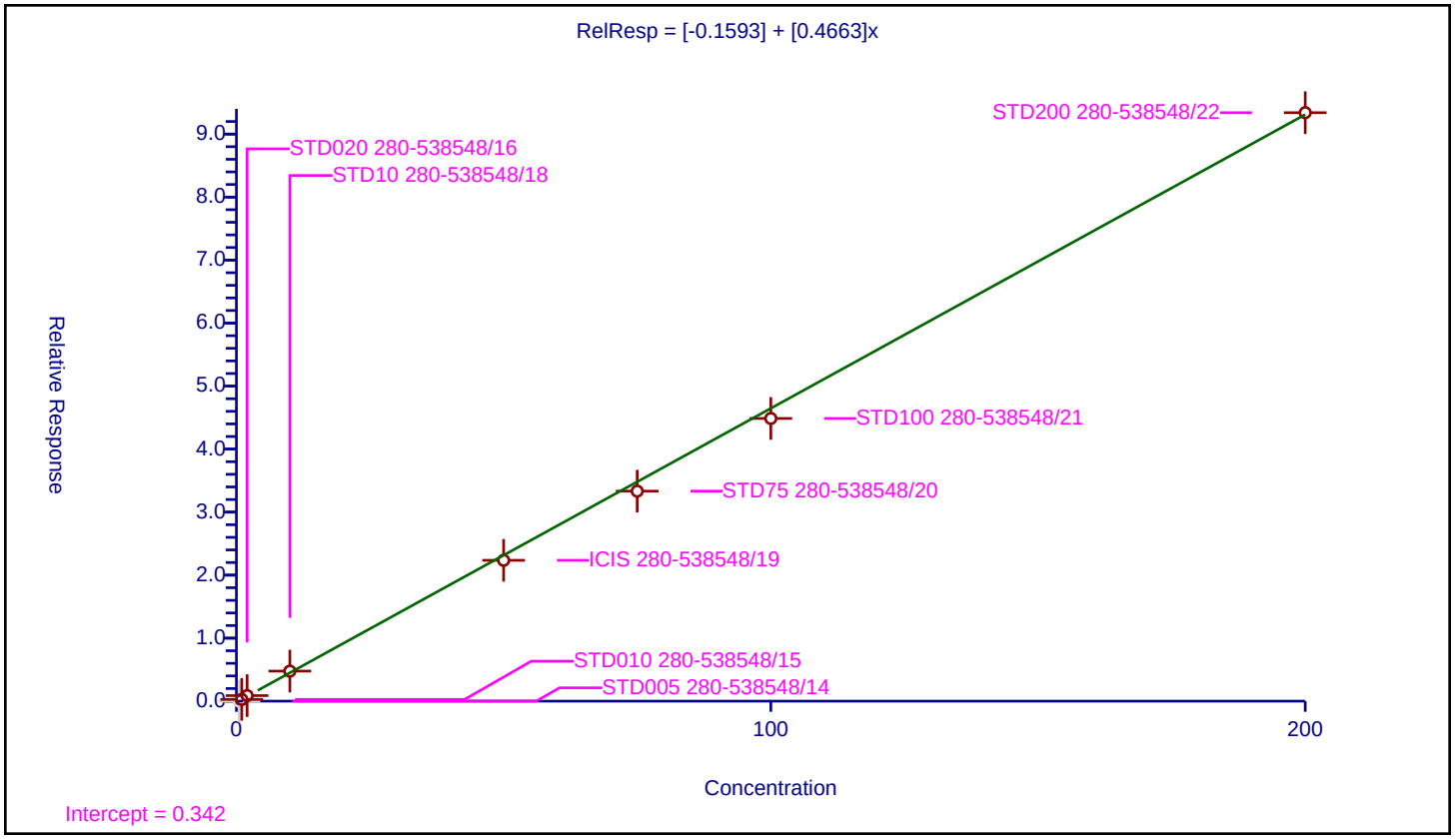
Curve Coefficients

Intercept:	-0.1593
Slope:	0.4663

Error Coefficients

Standard Error:	258000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.278913	50.0	250257.0	0.278913	Y
3	STD020 280-538548/16	2.0	0.878304	50.0	242456.0	0.439152	Y
4	STD10 280-538548/18	10.0	4.764332	50.0	249122.0	0.476433	Y
5	ICIS 280-538548/19	50.0	22.349853	50.0	257514.0	0.446997	Y
6	STD75 280-538548/20	75.0	33.329129	50.0	257689.0	0.444388	Y
7	STD100 280-538548/21	100.0	44.865251	50.0	257627.0	0.448653	Y
8	STD200 280-538548/22	200.0	93.397247	50.0	259778.0	0.466986	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

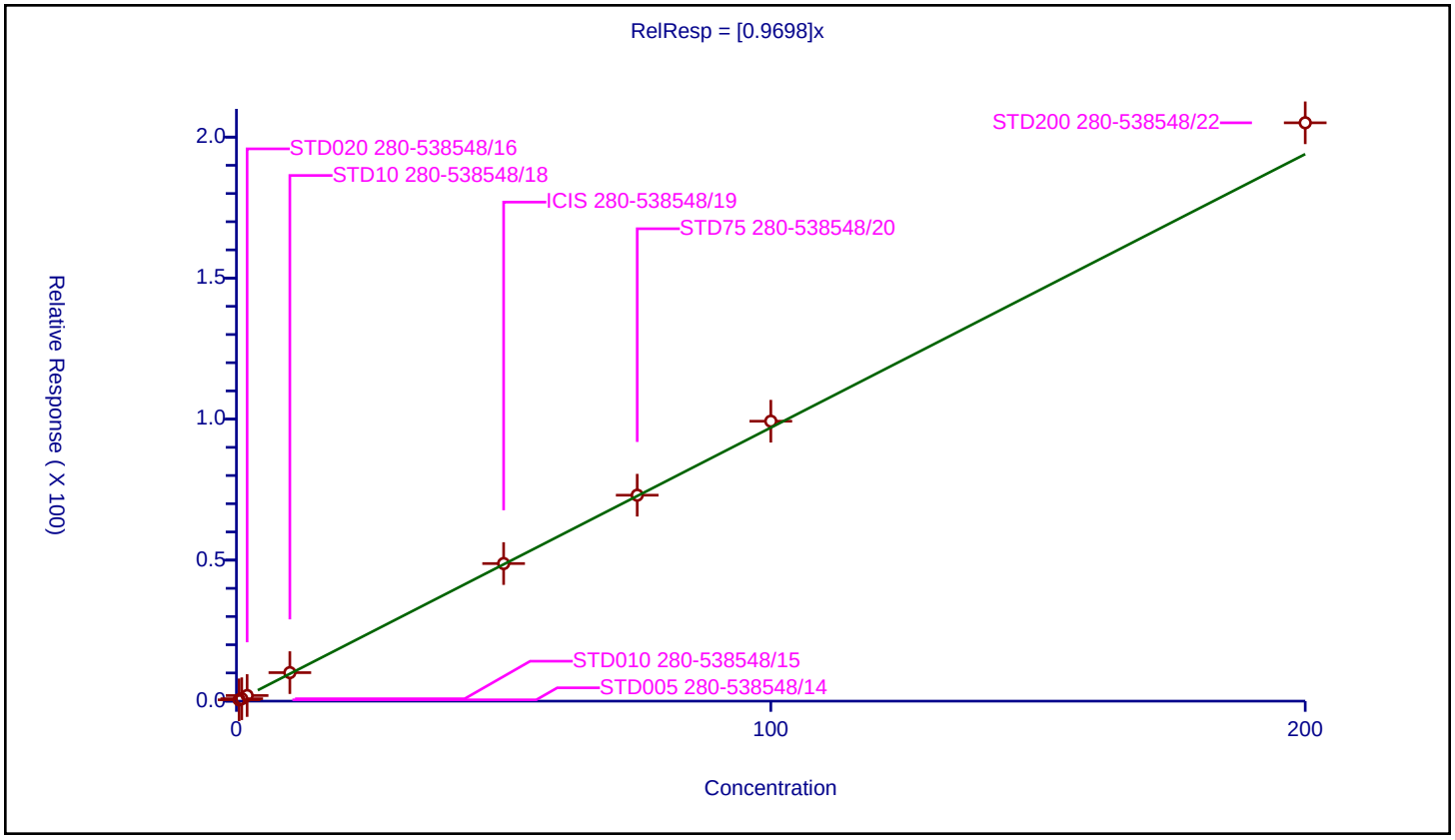
Curve Coefficients

Intercept:	0
Slope:	0.9698

Error Coefficients

Standard Error:	479000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.464855	50.0	245453.0	0.92971	Y
2	STD010 280-538548/15	1.0	0.85592	50.0	250257.0	0.85592	Y
3	STD020 280-538548/16	2.0	1.988814	50.0	242456.0	0.994407	Y
4	STD10 280-538548/18	10.0	10.113719	50.0	249122.0	1.011372	Y
5	ICIS 280-538548/19	50.0	48.78725	50.0	257514.0	0.975745	Y
6	STD75 280-538548/20	75.0	73.024266	50.0	257689.0	0.973657	Y
7	STD100 280-538548/21	100.0	99.255707	50.0	257627.0	0.992557	Y
8	STD200 280-538548/22	200.0	205.074333	50.0	259778.0	1.025372	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

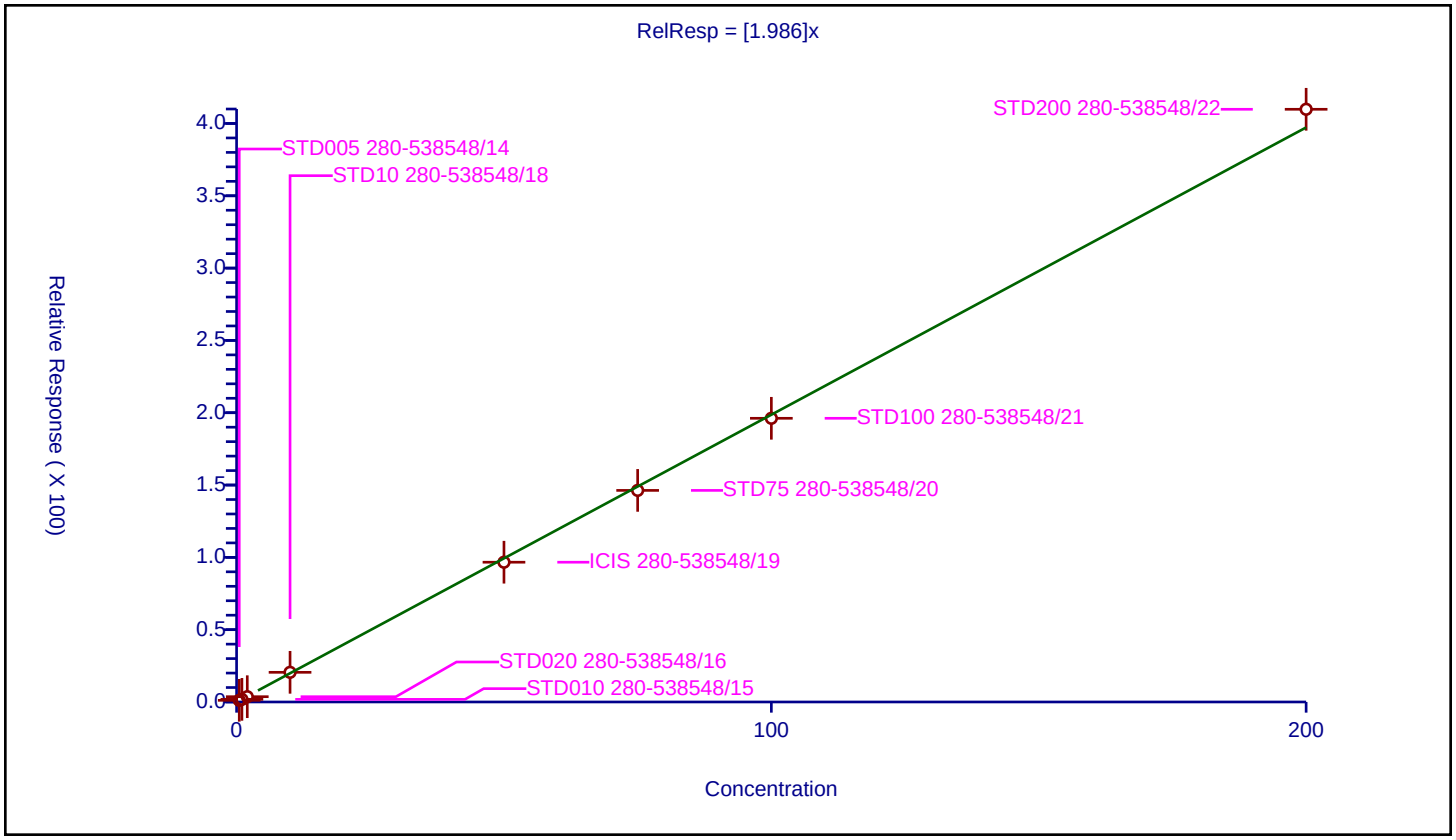
Curve Coefficients

Intercept:	0
Slope:	1.986

Error Coefficients

Standard Error:	955000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.150933	50.0	245453.0	2.301866	Y
2	STD010 280-538548/15	1.0	1.80894	50.0	250257.0	1.80894	Y
3	STD020 280-538548/16	2.0	3.668088	50.0	242456.0	1.834044	Y
4	STD10 280-538548/18	10.0	20.507623	50.0	249122.0	2.050762	Y
5	ICIS 280-538548/19	50.0	96.650279	50.0	257514.0	1.933006	Y
6	STD75 280-538548/20	75.0	146.297863	50.0	257689.0	1.950638	Y
7	STD100 280-538548/21	100.0	196.162281	50.0	257627.0	1.961623	Y
8	STD200 280-538548/22	200.0	409.813957	50.0	259778.0	2.04907	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

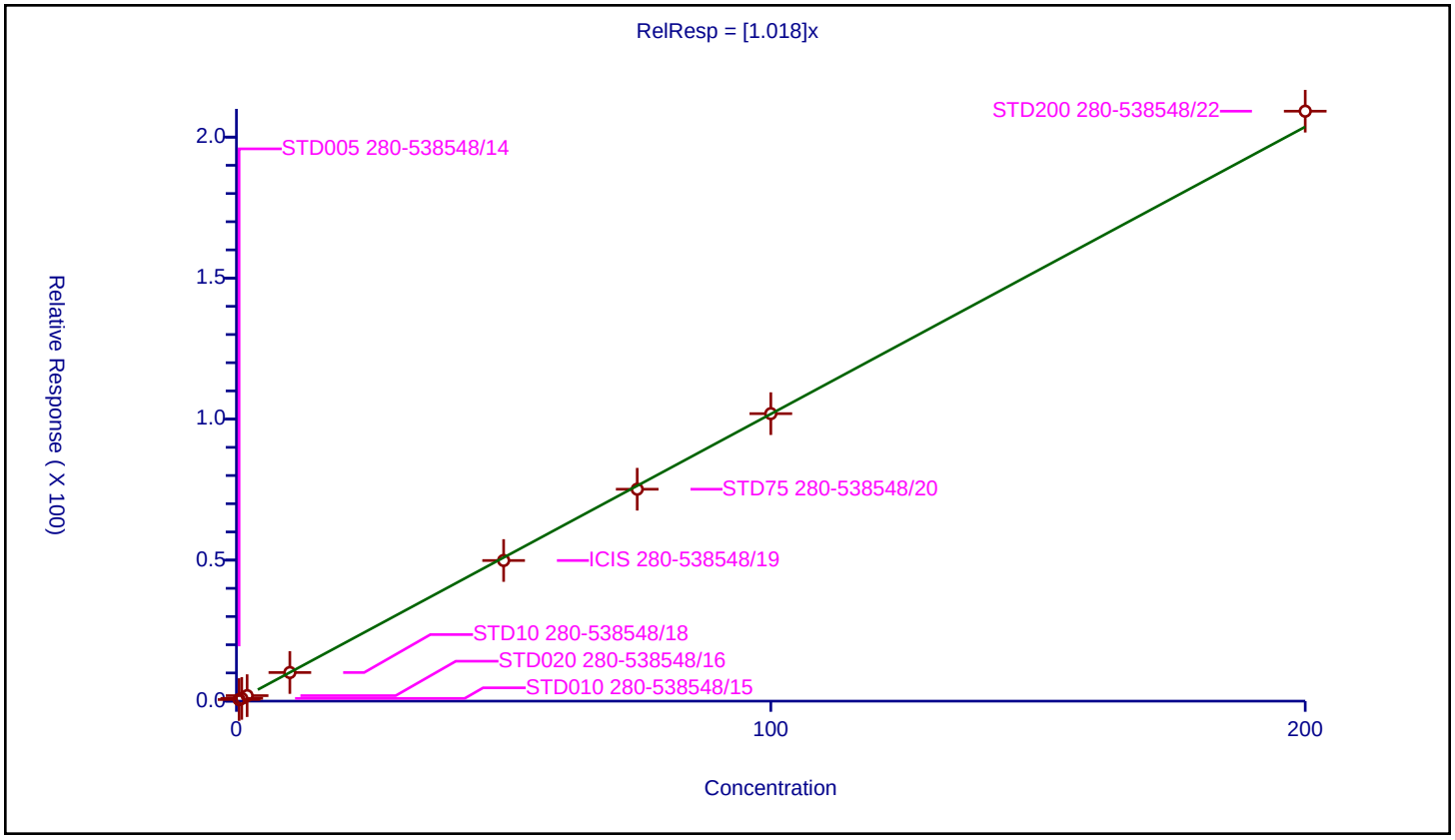
Curve Coefficients

Intercept:	0
Slope:	1.018

Error Coefficients

Standard Error:	489000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.560392	50.0	245453.0	1.120785	Y
2	STD010 280-538548/15	1.0	0.9724	50.0	250257.0	0.9724	Y
3	STD020 280-538548/16	2.0	1.947157	50.0	242456.0	0.973579	Y
4	STD10 280-538548/18	10.0	10.144227	50.0	249122.0	1.014423	Y
5	ICIS 280-538548/19	50.0	49.86991	50.0	257514.0	0.997398	Y
6	STD75 280-538548/20	75.0	75.140964	50.0	257689.0	1.00188	Y
7	STD100 280-538548/21	100.0	101.940596	50.0	257627.0	1.019406	Y
8	STD200 280-538548/22	200.0	209.191694	50.0	259778.0	1.045958	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

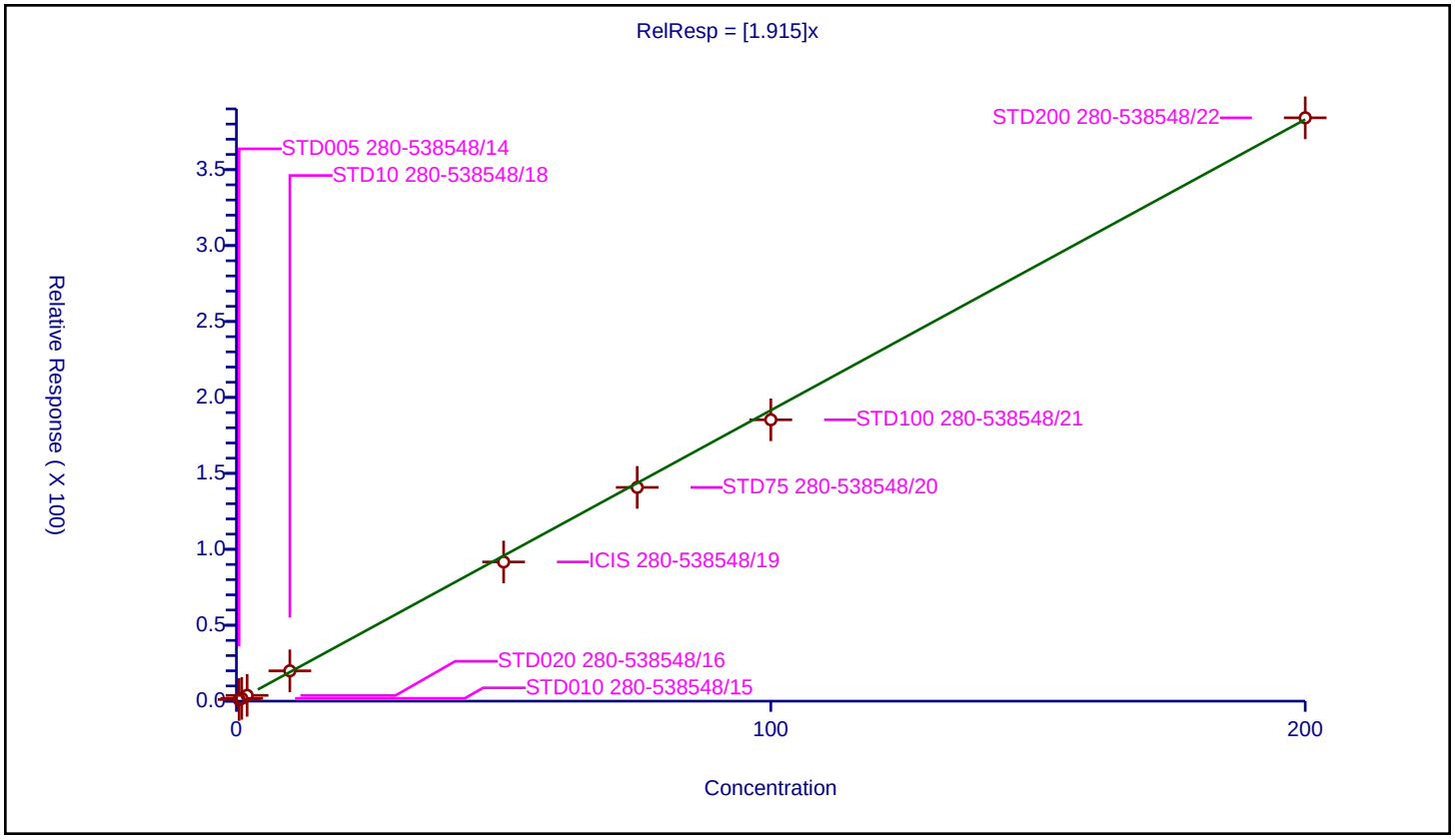
Curve Coefficients

Intercept:	0
Slope:	1.915

Error Coefficients

Standard Error:	899000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	1.059062	50.0	245453.0	2.118124	Y
2	STD010 280-538548/15	1.0	1.813735	50.0	250257.0	1.813735	Y
3	STD020 280-538548/16	2.0	3.818631	50.0	242456.0	1.909316	Y
4	STD10 280-538548/18	10.0	19.96572	50.0	249122.0	1.996572	Y
5	ICIS 280-538548/19	50.0	91.673851	50.0	257514.0	1.833477	Y
6	STD75 280-538548/20	75.0	140.756881	50.0	257689.0	1.876758	Y
7	STD100 280-538548/21	100.0	185.2727	50.0	257627.0	1.852727	Y
8	STD200 280-538548/22	200.0	384.128371	50.0	259778.0	1.920642	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

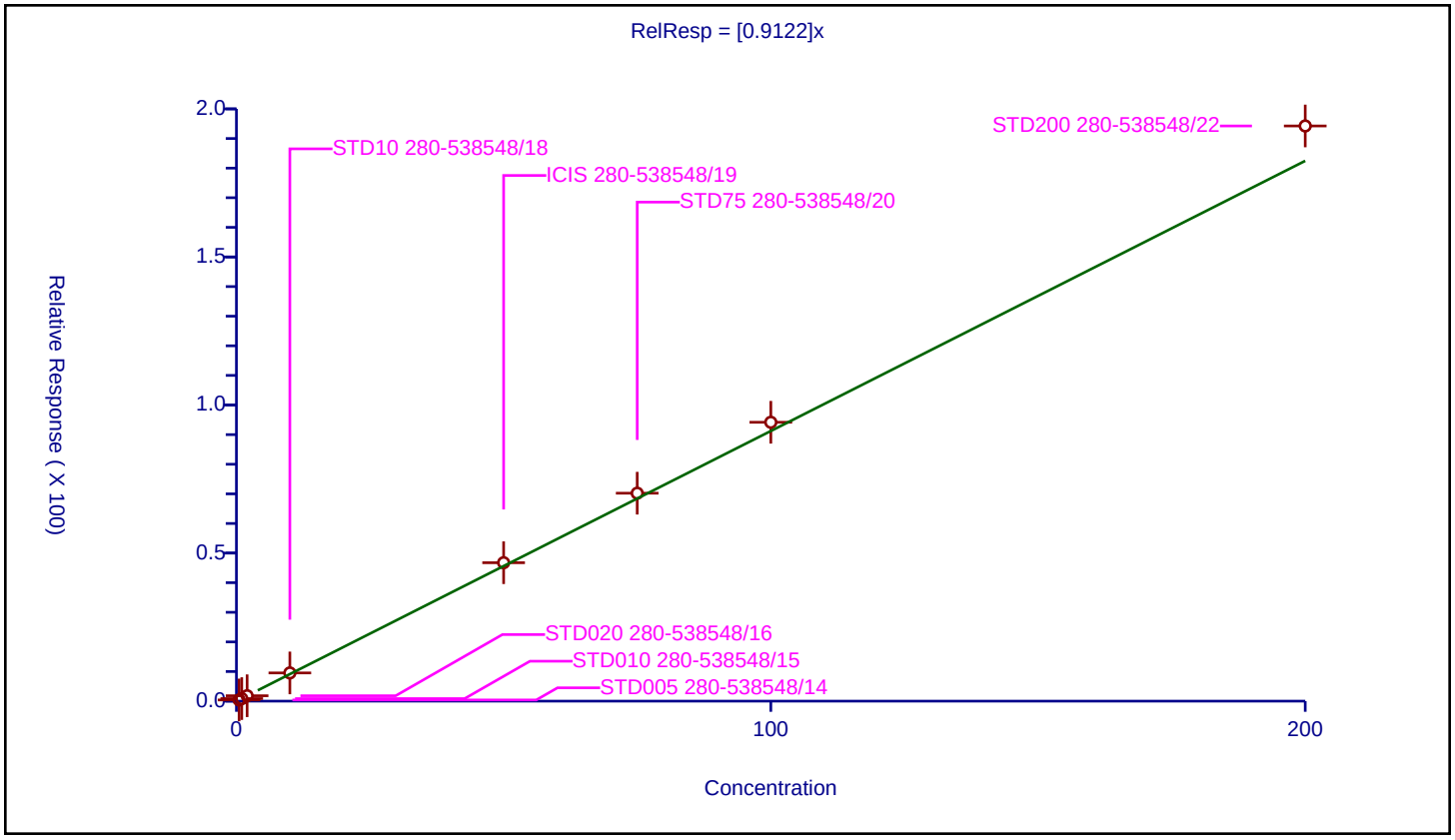
Curve Coefficients

Intercept:	0
Slope:	0.9122

Error Coefficients

Standard Error:	454000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.396206	50.0	245453.0	0.792412	Y
2	STD010 280-538548/15	1.0	0.85592	50.0	250257.0	0.85592	Y
3	STD020 280-538548/16	2.0	1.824249	50.0	242456.0	0.912124	Y
4	STD10 280-538548/18	10.0	9.532277	50.0	249122.0	0.953228	Y
5	ICIS 280-538548/19	50.0	46.751245	50.0	257514.0	0.935025	Y
6	STD75 280-538548/20	75.0	70.223797	50.0	257689.0	0.936317	Y
7	STD100 280-538548/21	100.0	94.177629	50.0	257627.0	0.941776	Y
8	STD200 280-538548/22	200.0	194.238157	50.0	259778.0	0.971191	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

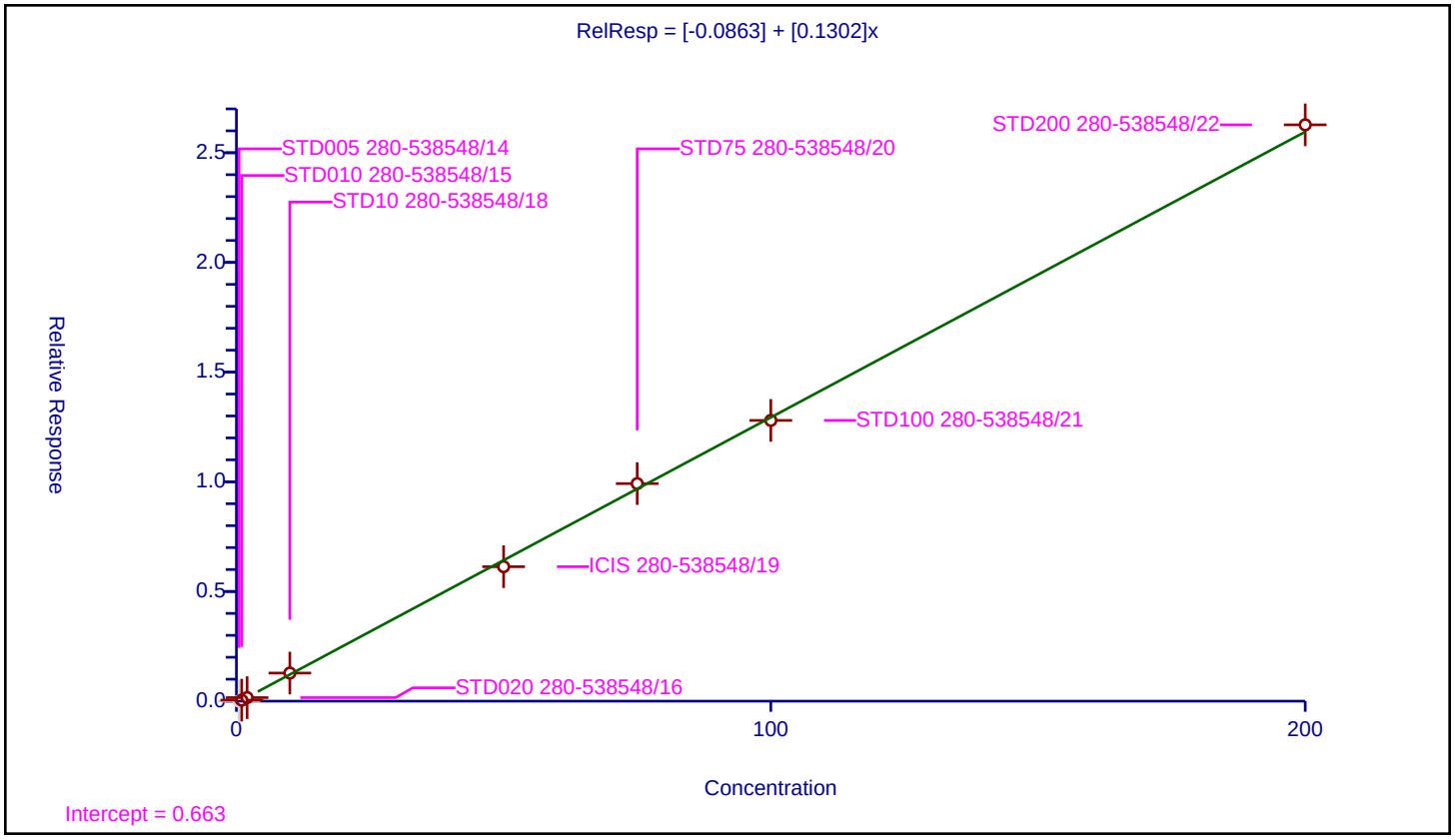
Curve Coefficients

Intercept:	-0.0863
Slope:	0.1302

Error Coefficients

Standard Error:	73000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.046752	50.0	250257.0	0.046752	Y
3	STD020 280-538548/16	2.0	0.160441	50.0	242456.0	0.080221	Y
4	STD10 280-538548/18	10.0	1.280698	50.0	249122.0	0.12807	Y
5	ICIS 280-538548/19	50.0	6.128405	50.0	257514.0	0.122568	Y
6	STD75 280-538548/20	75.0	9.917187	50.0	257689.0	0.132229	Y
7	STD100 280-538548/21	100.0	12.798736	50.0	257627.0	0.127987	Y
8	STD200 280-538548/22	200.0	26.272818	50.0	259778.0	0.131364	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

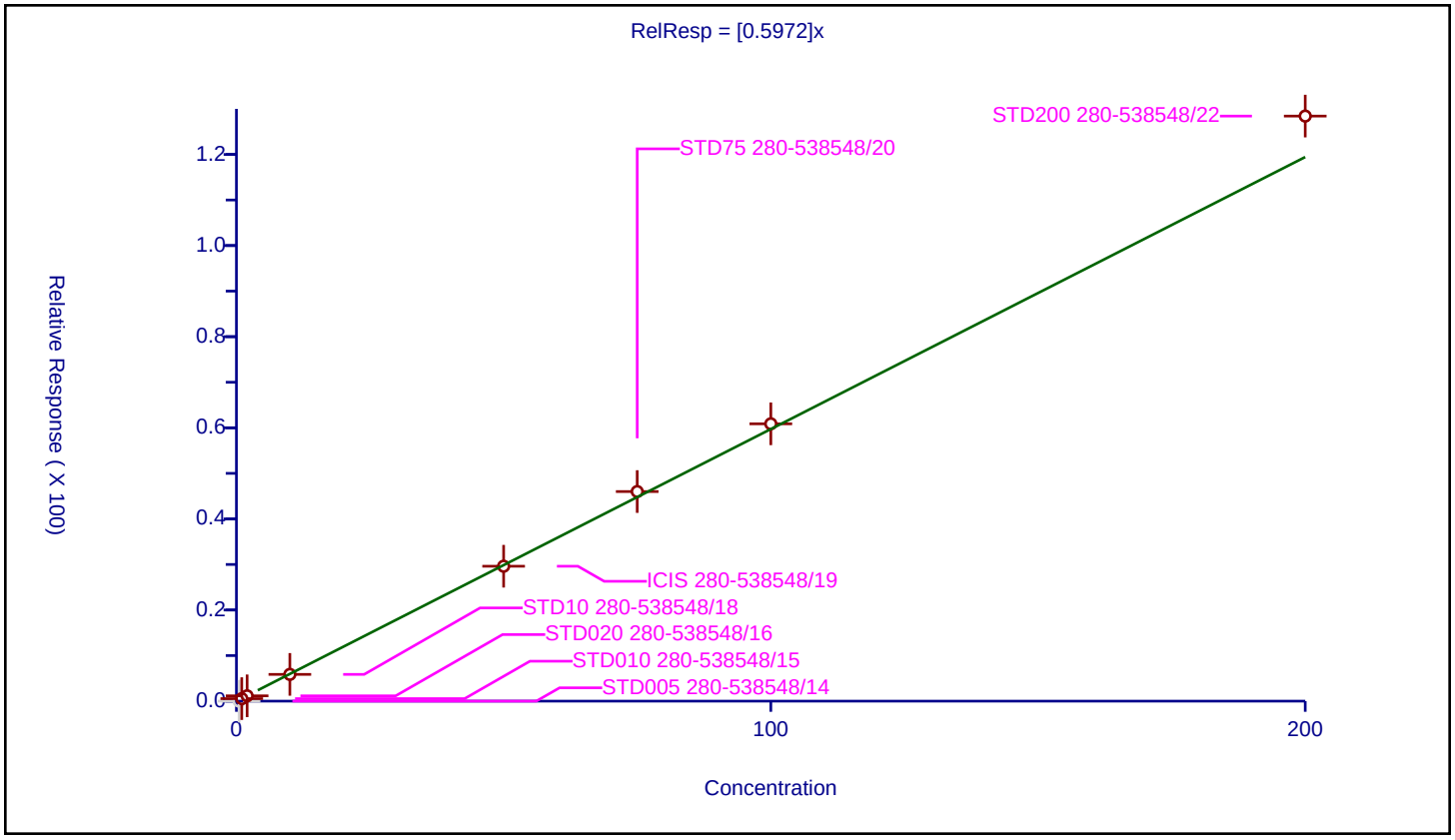
Curve Coefficients

Intercept:	0
Slope:	0.5972

Error Coefficients

Standard Error:	322000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.553431	50.0	250257.0	0.553431	Y
3	STD020 280-538548/16	2.0	1.165572	50.0	242456.0	0.582786	Y
4	STD10 280-538548/18	10.0	5.872424	50.0	249122.0	0.587242	Y
5	ICIS 280-538548/19	50.0	29.614895	50.0	257514.0	0.592298	Y
6	STD75 280-538548/20	75.0	46.008173	50.0	257689.0	0.613442	Y
7	STD100 280-538548/21	100.0	60.876189	50.0	257627.0	0.608762	Y
8	STD200 280-538548/22	200.0	128.420036	50.0	259778.0	0.6421	Y



Calibration / Hexachlorobutadiene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

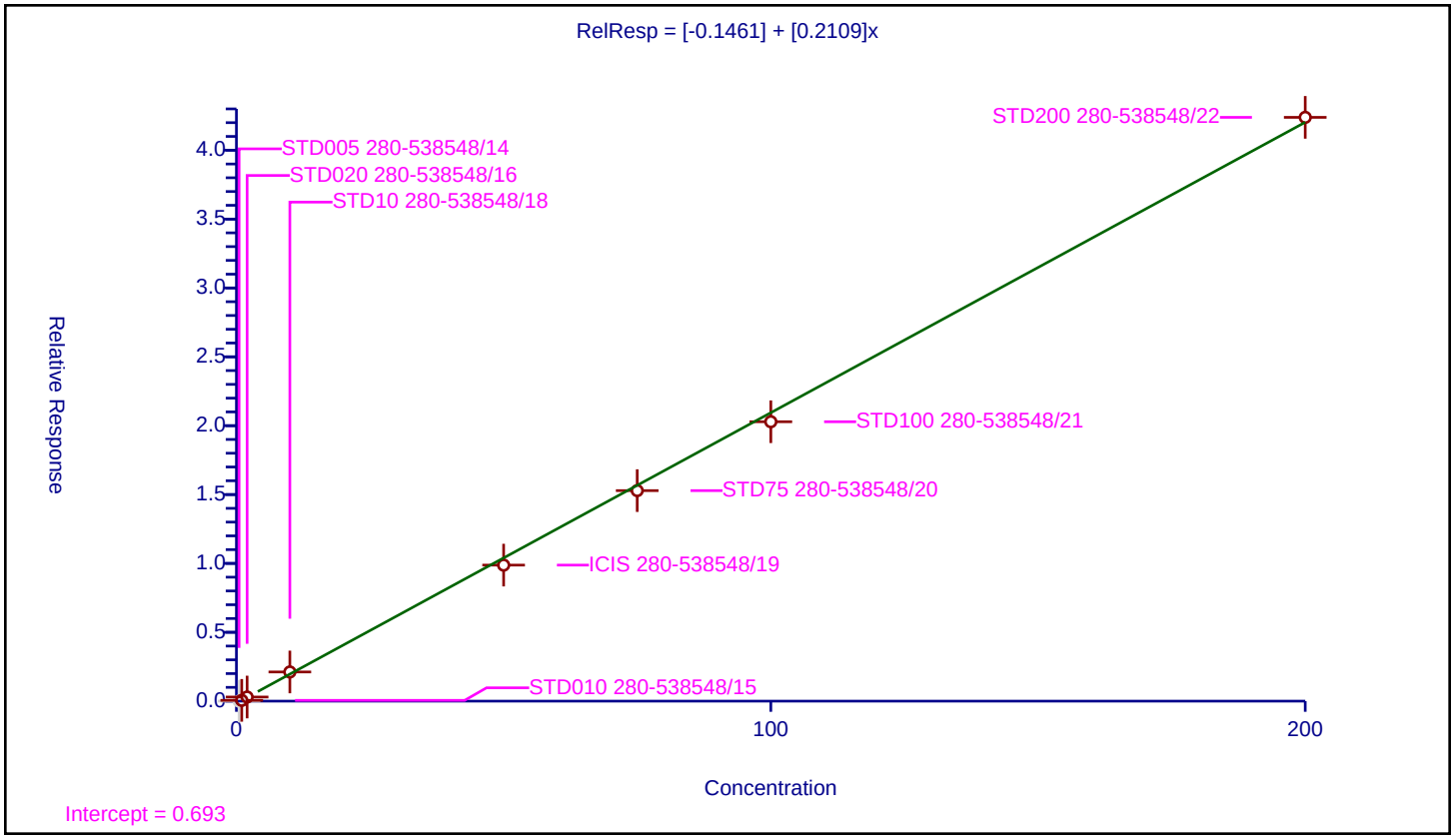
Curve Coefficients

Intercept:	-0.1461
Slope:	0.2109

Error Coefficients

Standard Error:	117000
Relative Standard Error:	5.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.057541	50.0	250257.0	0.057541	Y
3	STD020 280-538548/16	2.0	0.299642	50.0	242456.0	0.149821	Y
4	STD10 280-538548/18	10.0	2.118039	50.0	249122.0	0.211804	Y
5	ICIS 280-538548/19	50.0	9.875968	50.0	257514.0	0.197519	Y
6	STD75 280-538548/20	75.0	15.284898	50.0	257689.0	0.203799	Y
7	STD100 280-538548/21	100.0	20.286694	50.0	257627.0	0.202867	Y
8	STD200 280-538548/22	200.0	42.384267	50.0	259778.0	0.211921	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

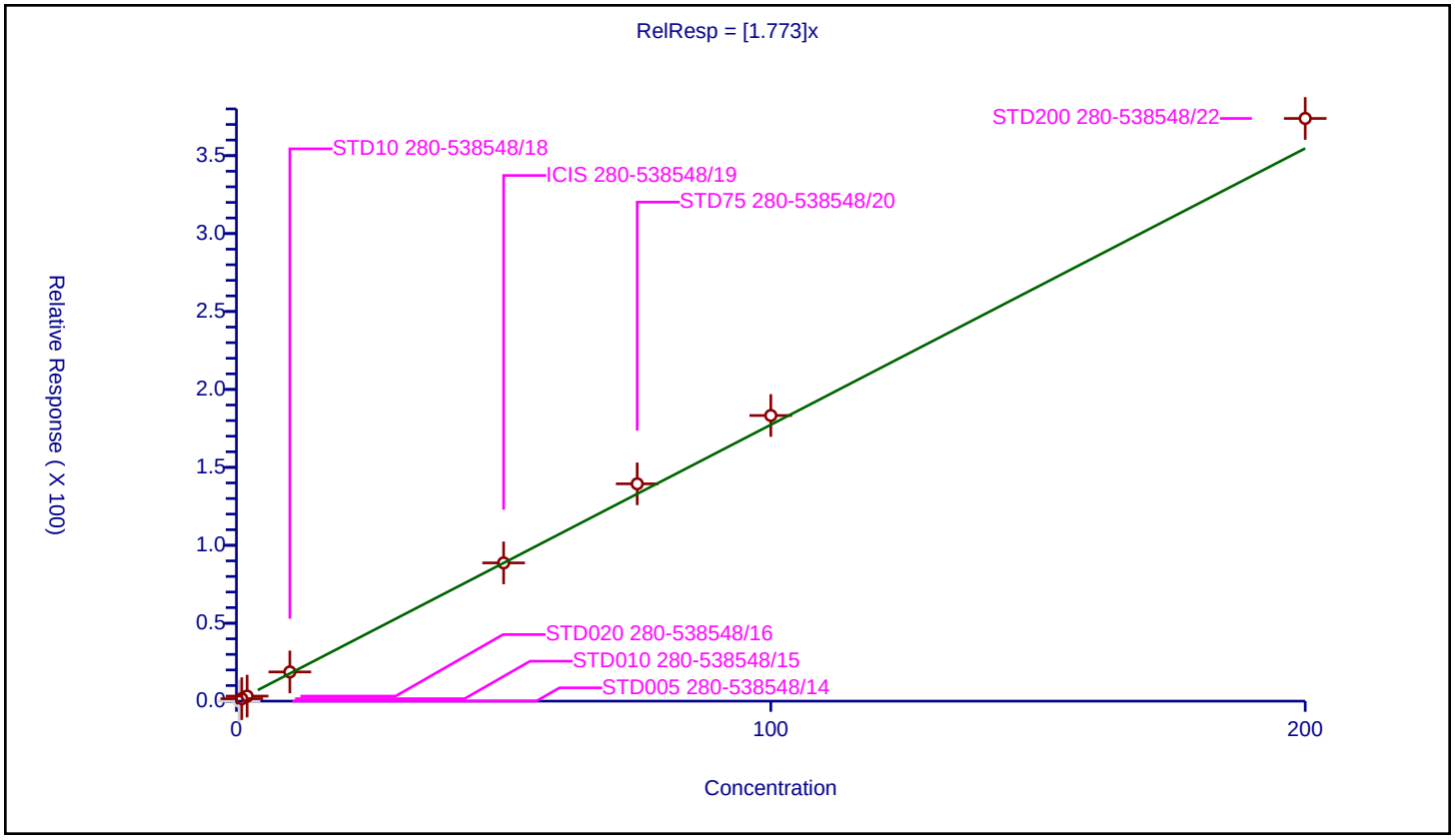
Curve Coefficients

Intercept:	0
Slope:	1.773

Error Coefficients

Standard Error:	948000
Relative Standard Error:	6.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	1.584771	50.0	250257.0	1.584771	Y
3	STD020 280-538548/16	2.0	3.239351	50.0	242456.0	1.619675	Y
4	STD10 280-538548/18	10.0	18.734596	50.0	249122.0	1.87346	Y
5	ICIS 280-538548/19	50.0	88.696537	50.0	257514.0	1.773931	Y
6	STD75 280-538548/20	75.0	139.434551	50.0	257689.0	1.859127	Y
7	STD100 280-538548/21	100.0	183.277374	50.0	257627.0	1.832774	Y
8	STD200 280-538548/22	200.0	373.868264	50.0	259778.0	1.869341	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

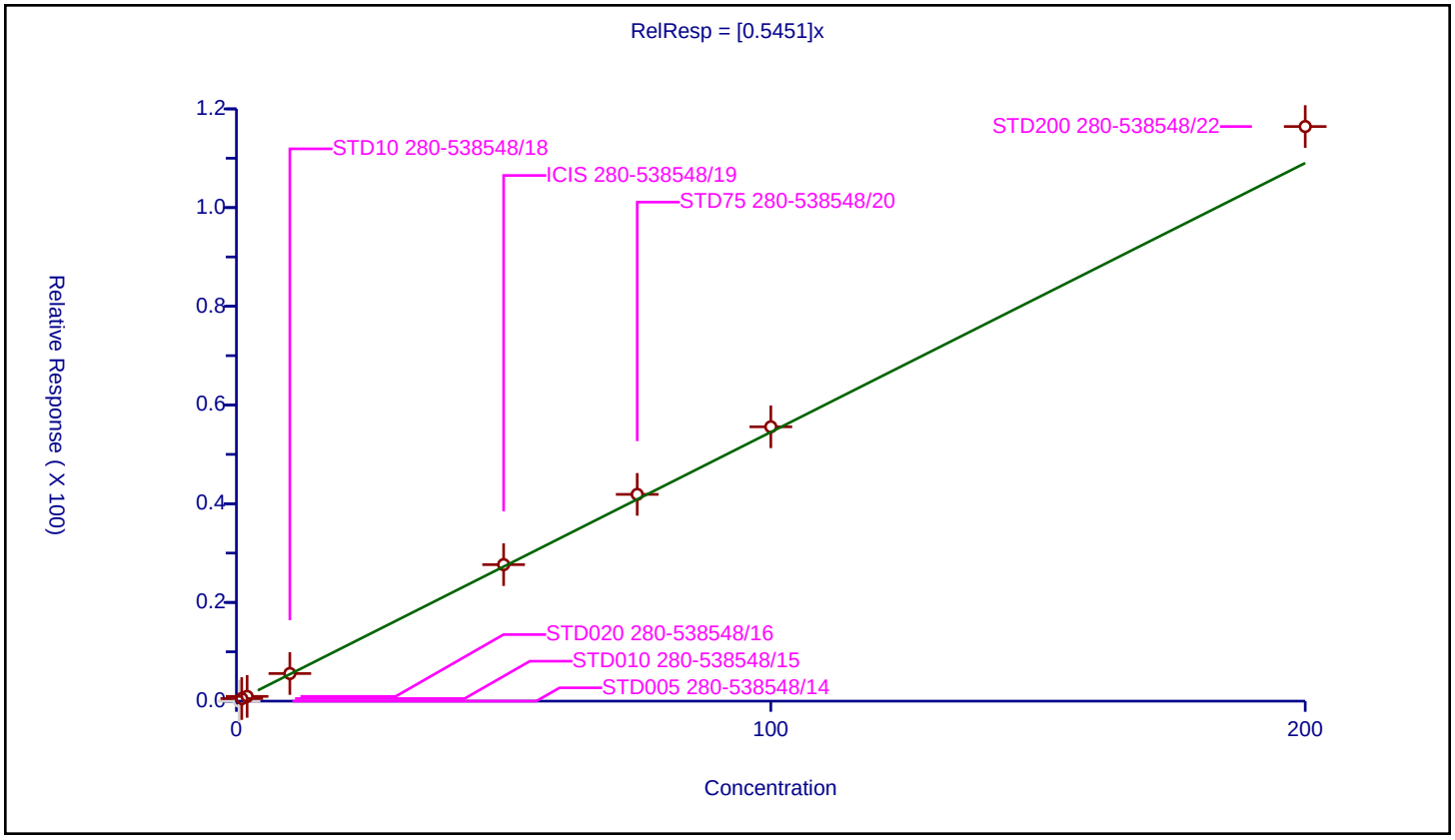
Curve Coefficients

Intercept:	0
Slope:	0.5451

Error Coefficients

Standard Error:	293000
Relative Standard Error:	5.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	STD005 280-538548/14	0.5	0.0	50.0	245453.0	0.0	N
2	STD010 280-538548/15	1.0	0.52486	50.0	250257.0	0.52486	Y
3	STD020 280-538548/16	2.0	0.964299	50.0	242456.0	0.482149	Y
4	STD10 280-538548/18	10.0	5.59224	50.0	249122.0	0.559224	Y
5	ICIS 280-538548/19	50.0	27.657914	50.0	257514.0	0.553158	Y
6	STD75 280-538548/20	75.0	41.898374	50.0	257689.0	0.558645	Y
7	STD100 280-538548/21	100.0	55.585401	50.0	257627.0	0.555854	Y
8	STD200 280-538548/22	200.0	116.426718	50.0	259778.0	0.582134	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2732.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	Lin1		0.1839		40.9	50.0	-18.1	20.0
Chloromethane	Ave	0.2172	0.1840	0.1000	42.4	50.0	-15.3	20.0
Vinyl chloride	Ave	0.1753	0.1664		47.5	50.0	-5.1	20.0
Bromomethane	Ave	0.1350	0.1342		49.7	50.0	-0.6	20.0
Chloroethane	Ave	0.1351	0.1265		46.8	50.0	-6.4	20.0
Dichlorofluoromethane	Lin2		0.3306		48.9	50.0	-2.2	20.0
Trichlorofluoromethane	Ave	0.2882	0.2597		45.1	50.0	-9.9	20.0
Ethyl ether	Ave	0.1409	0.1402		49.7	50.0	-0.5	20.0
Acrolein	Lin1		0.0314		571	494	15.7	20.0
1,1-Dichloroethene	Ave	0.1444	0.1267		43.9	50.0	-12.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.0955	0.0904		47.4	50.0	-5.2	20.0
Acetone	Lin2		0.0539		188	200	-6.1	20.0
Iodomethane	Lin2		0.1811		41.7	50.0	-16.6	20.0
Carbon disulfide	Ave	0.4856	0.4422		45.5	50.0	-8.9	20.0
Methyl acetate	Ave	0.1367	0.1317		96.4	100	-3.6	20.0
3-Chloro-1-propene	Ave	0.2908	0.2719		46.8	50.0	-6.5	20.0
Methylene Chloride	Lin2		0.1699		47.7	50.0	-4.5	20.0
t-Butyl alcohol	Ave	0.0174	0.0179		514	500	2.7	20.0
Acrylonitrile	Ave	0.0691	0.0690		499	500	-0.2	20.0
Methyl tert-butyl ether	Ave	0.5094	0.5122		50.3	50.0	0.5	20.0
trans-1,2-Dichloroethene	Ave	0.1754	0.1487		42.4	50.0	-15.2	20.0
Hexane	Lin2		0.9001		42.8	50.0	-14.3	20.0
1,1-Dichloroethane	Ave	0.3389	0.3134	0.1000	46.2	50.0	-7.5	20.0
Vinyl acetate	Ave	0.3923	0.4035		103	100	2.9	20.0
2-Butanone (MEK)	Lin2		0.0811		191	200	-4.7	20.0
2,2-Dichloropropane	Ave	0.2998	0.2601		43.4	50.0	-13.2	20.0
cis-1,2-Dichloroethene	Ave	0.1922	0.1726		44.9	50.0	-10.2	20.0
sec-Butyl Alcohol	Lin2		0.0139		1160	1200	-3.0	20.0
Bromochloromethane	Lin2		0.0813		46.6	50.0	-6.7	20.0
Tetrahydrofuran	Lin1		0.0545		95.7	100	-4.3	20.0
Chloroform	Ave	0.3516	0.3117		44.3	50.0	-11.4	20.0
1,1,1-Trichloroethane	Ave	0.3094	0.2518		40.7	50.0	-18.6	20.0
Cyclohexane	Lin1		0.2634		42.4	50.0	-15.1	20.0
1,1-Dichloropropene	Ave	0.2498	0.2249		45.0	50.0	-10.0	20.0
Carbon tetrachloride	Ave	0.2276	0.2062		45.3	50.0	-9.4	20.0
Isobutyl alcohol	Ave	0.0062	0.0056		1120	1250	-10.5	20.0
Benzene	Ave	0.6919	0.6544		47.3	50.0	-5.4	20.0
1,2-Dichloroethane	Ave	0.2917	0.2813		48.2	50.0	-3.6	20.0
Trichloroethene	Ave	0.9271	0.8137		43.9	50.0	-12.2	20.0
2-Pentanone	Ave	0.1343	0.1311		156	160	-2.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2732.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	Lin1		0.2034		42.0	50.0	-16.0	20.0
1,2-Dichloropropane	Ave	0.1881	0.1840		48.9	50.0	-2.2	20.0
1,4-Dioxane	Lin2		0.0022		1020	1000	1.9	20.0
Dibromomethane	Ave	0.1179	0.1171		49.6	50.0	-0.7	20.0
Bromodichloromethane	Ave	0.2580	0.2306		44.7	50.0	-10.6	20.0
2-Chloroethyl vinyl ether	Ave	0.1151	0.1209		52.5	50.0	5.1	20.0
cis-1,3-Dichloropropene	Ave	1.351	1.357		50.2	50.0	0.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1558	0.1554		200	200	-0.2	20.0
Toluene	Ave	0.6902	0.6210		45.0	50.0	-10.0	20.0
trans-1,3-Dichloropropene	Ave	0.2759	0.2779		50.4	50.0	0.7	20.0
Ethyl methacrylate	Ave	0.996	1.064		53.4	50.0	6.9	20.0
1,1,2-Trichloroethane	Lin2		0.1407		48.6	50.0	-2.9	20.0
Tetrachloroethene	Ave	0.5176	0.5006		48.4	50.0	-3.3	20.0
1,3-Dichloropropane	Ave	1.267	1.282		50.6	50.0	1.1	20.0
2-Hexanone	Lin2		0.5219		197	200	-1.3	20.0
Dibromochloromethane	Ave	0.7473	0.7821		52.3	50.0	4.7	20.0
Ethylene Dibromide	Ave	0.7193	0.7102		49.4	50.0	-1.3	20.0
1-Chlorohexane	Lin2		0.9422		35.7	40.0	-10.8	20.0
Chlorobenzene	Ave	2.041	1.949	0.3000	47.7	50.0	-4.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7209	0.7015		48.7	50.0	-2.7	20.0
Ethylbenzene	Ave	1.085	1.040		47.9	50.0	-4.1	20.0
m-Xylene & p-Xylene	Ave	1.367	1.278		46.7	50.0	-6.5	20.0
o-Xylene	Ave	1.277	1.278		50.1	50.0	0.1	20.0
Styrene	Ave	2.334	2.277		48.8	50.0	-2.4	20.0
Bromoform	Lin2		0.4720	0.1000	48.1	50.0	-3.7	20.0
Isopropylbenzene	Ave	2.187	1.997		45.7	50.0	-8.7	20.0
Cyclohexanone	Ave	0.0560	0.0315		1130	2000	-43.7*	20.0
1,1,2,2-Tetrachloroethane	Lin2		0.6010	0.3000	49.6	50.0	-0.9	20.0
Bromobenzene	Ave	0.4965	0.4947		49.8	50.0	-0.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2182	0.2228		51.0	50.0	2.1	20.0
1,2,3-Trichloropropane	Lin2		0.1702		50.5	50.0	1.0	20.0
N-Propylbenzene	Ave	0.6077	0.5410		44.5	50.0	-11.0	20.0
2-Chlorotoluene	Ave	0.4970	0.4793		48.2	50.0	-3.5	20.0
1,3,5-Trimethylbenzene	Ave	1.953	1.810		46.3	50.0	-7.3	20.0
4-Chlorotoluene	Ave	0.5470	0.5046		46.1	50.0	-7.7	20.0
tert-Butylbenzene	Ave	1.601	1.458		45.5	50.0	-8.9	20.0
1,2,4-Trimethylbenzene	Ave	2.003	1.851		46.2	50.0	-7.6	20.0
sec-Butylbenzene	Lin2		0.4150		44.8	50.0	-10.3	20.0
1,3-Dichlorobenzene	Ave	0.9698	0.9324		48.1	50.0	-3.9	20.0
4-Isopropyltoluene	Ave	1.986	1.809		45.5	50.0	-8.9	20.0
1,4-Dichlorobenzene	Ave	1.018	0.9868		48.5	50.0	-3.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-538548/23 Calibration Date: 06/04/2021 17:24

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2732.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	1.915	1.721		44.9	50.0	-10.1	20.0
1,2-Dichlorobenzene	Ave	0.9122	0.9043		49.6	50.0	-0.9	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1188		46.3	50.0	-7.4	20.0
1,2,4-Trichlorobenzene	Ave	0.5972	0.5757		48.2	50.0	-3.6	20.0
Hexachlorobutadiene	Lin2		0.1871		45.1	50.0	-9.9	20.0
Naphthalene	Ave	1.773	1.793		50.6	50.0	1.1	20.0
1,2,3-Trichlorobenzene	Ave	0.5451	0.5360		49.2	50.0	-1.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2650	0.2619		49.4	50.0	-1.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3551	0.3483		49.0	50.0	-1.9	20.0
Toluene-d8 (Surr)	Ave	4.332	4.397		50.8	50.0	1.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.073		49.4	50.0	-1.1	20.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2732.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 04-Jun-2021 17:24:30 ALS Bottle#: 21 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0102067-023
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist:

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 11:42:23 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 05-Jun-2021 11:42:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.838	5.838	0.000	97	749174	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	154032	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	248786	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	196215	50.0	49.4	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	260905	50.0	49.0	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	677298	50.0	50.8	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	266969	50.0	49.4	
11 Dichlorodifluoromethane	85	1.690	1.690	0.000	98	137806	50.0	40.9	
12 Chloromethane	50	1.900	1.900	0.000	99	137830	50.0	42.4	
13 Vinyl chloride	62	1.998	1.998	0.000	100	124637	50.0	47.5	
15 Bromomethane	94	2.347	2.347	0.000	93	100513	50.0	49.7	
16 Chloroethane	64	2.459	2.459	0.000	98	94749	50.0	46.8	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	247680	50.0	48.9	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	194553	50.0	45.1	
20 Ethyl ether	59	3.003	3.003	0.000	93	105050	50.0	49.7	
22 Acrolein	56	3.143	3.143	0.000	98	232479	493.8	571.4	a
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	94893	50.0	43.9	
24 112TCTFE	151	3.255	3.255	0.000	95	67761	50.0	47.4	
25 Acetone	43	3.269	3.269	0.000	98	161480	200.0	187.7	
26 Iodomethane	142	3.380	3.380	0.000	98	135641	50.0	41.7	
28 Carbon disulfide	76	3.450	3.450	0.000	99	331299	50.0	45.5	
30 Methyl acetate	43	3.576	3.576	0.000	98	197354	100.0	96.4	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	86	203702	50.0	46.8	
32 Methylene Chloride	84	3.716	3.716	0.000	97	127274	50.0	47.7	
33 2-Methyl-2-propanol	59	3.785	3.785	0.000	98	134139	500.0	513.6	
34 Acrylonitrile	53	3.911	3.911	0.000	97	516763	500.0	498.9	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	383730	50.0	50.3	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	111423	50.0	42.4	
37 Hexane	57	4.204	4.204	0.000	94	138643	50.0	42.8	
39 Vinyl acetate	43	4.344	4.344	0.000	98	604607	100.0	102.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	234818	50.0	46.2	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	243087	200.0	190.6	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	194894	50.0	43.4	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	129274	50.0	44.9	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	249046	1200.0	1163.4	
54 Tetrahydrofuran	42	5.056	5.056	0.000	87	81589	100.0	95.7	
53 Chlorobromomethane	128	5.056	5.056	0.000	95	60892	50.0	46.6	
55 Chloroform	83	5.126	5.126	0.000	98	233531	50.0	44.3	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	188632	50.0	40.7	
57 Cyclohexane	56	5.350	5.350	0.000	94	197345	50.0	42.4	
58 1,1-Dichloropropene	75	5.419	5.419	0.000	91	168483	50.0	45.0	
59 Carbon tetrachloride	117	5.419	5.419	0.000	84	154474	50.0	45.3	
60 Isobutyl alcohol	41	5.461	5.461	0.000	94	104463	1250.0	1118.5	
63 Benzene	78	5.587	5.587	0.000	99	490289	50.0	47.3	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	210764	50.0	48.2	
66 n-Heptane	43	5.824	5.824	0.000	93	129529	50.0	42.4	
68 Trichloroethene	95	6.146	6.146	0.000	93	125331	50.0	43.9	
69 2-Pentanone	43	6.271	6.271	0.000	98	314197	160.0	156.1	
70 Methylcyclohexane	55	6.355	6.355	0.000	94	152377	50.0	42.0	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	137831	50.0	48.9	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	32705	1000.0	1019.1	
74 Dibromomethane	93	6.453	6.453	0.000	89	87722	50.0	49.6	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	172789	50.0	44.7	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	90576	50.0	52.5	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	208971	50.0	50.2	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	465669	200.0	199.5	
82 Toluene	91	7.295	7.295	0.000	97	465232	50.0	45.0	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	99	208177	50.0	50.4	
85 Ethyl methacrylate	69	7.517	7.517	0.000	89	163928	50.0	53.4	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	95	105406	50.0	48.6	
89 Tetrachloroethene	164	7.767	7.767	0.000	86	77111	50.0	48.4	
90 1,3-Dichloropropane	76	7.824	7.824	0.000	95	197428	50.0	50.6	
91 2-Hexanone	43	7.853	7.853	0.000	99	321572	200.0	197.4	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	120461	50.0	52.3	
96 Ethylene Dibromide	107	8.146	8.146	0.000	96	109392	50.0	49.4	
98 1-Chlorohexane	91	8.568	8.568	0.000	94	116109	40.0	35.7	
99 Chlorobenzene	112	8.604	8.604	0.000	90	300182	50.0	47.7	
100 1,1,1,2-Tetrachloroethane	131	8.682	8.682	0.000	91	108061	50.0	48.7	
101 Ethylbenzene	106	8.682	8.682	0.000	99	160135	50.0	47.9	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	196849	50.0	46.7	
103 o-Xylene	106	9.176	9.176	0.000	99	196851	50.0	50.1	
104 Styrene	104	9.197	9.197	0.000	95	350770	50.0	48.8	
106 Bromoform	173	9.383	9.383	0.000	89	72696	50.0	48.1	
107 Isopropylbenzene	105	9.526	9.526	0.000	98	496911	50.0	45.7	
109 Cyclohexanone	55	9.626	9.626	0.000	95	194155	2000.0	1125.1	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	149523	50.0	49.6	
111 Bromobenzene	156	9.855	9.855	0.000	96	123063	50.0	49.8	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	74	55427	50.0	51.0	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	42332	50.0	50.5	
114 N-Propylbenzene	120	9.941	9.941	0.000	99	134588	50.0	44.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	119253	50.0	48.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	93	450332	50.0	46.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.155	10.155	0.000	99	125546	50.0	46.1	
118 tert-Butylbenzene	119	10.427	10.427	0.000	93	362761	50.0	45.5	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	460459	50.0	46.2	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	103236	50.0	44.8	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	231970	50.0	48.1	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	450072	50.0	45.5	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	90	245500	50.0	48.5	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	428125	50.0	44.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	224969	50.0	49.6	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.022	0.000	75	29554	50.0	46.3	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	143218	50.0	48.2	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	46558	50.0	45.1	
132 Naphthalene	128	13.123	13.123	0.000	98	446124	50.0	50.6	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	92	133359	50.0	49.2	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	87.3	
S 150 1,2-Dichloroethene, Total	1				0		100.0	87.3	
S 151 Trihalomethanes, Total	1				0		200.0	189.5	
S 152 Total BTEX	1				0			237.0	
S 153 Xylenes, Total (URS)	1				0		100.0	96.8	
S 155 Xylenes, Total	106				0		100.0	96.8	
S 156 1,3-Dichloropropene, Total	1				0		100.0	100.5	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

MV-Gas B_00091	Amount Added:	10.00	Units: uL	
MV-MegaMain B_00047	Amount Added:	25.00	Units: uL	
Acrolein_B_00005	Amount Added:	25.00	Units: uL	
mv-IS_SS_00018	Amount Added:	5.00	Units: uL	Run Reagent

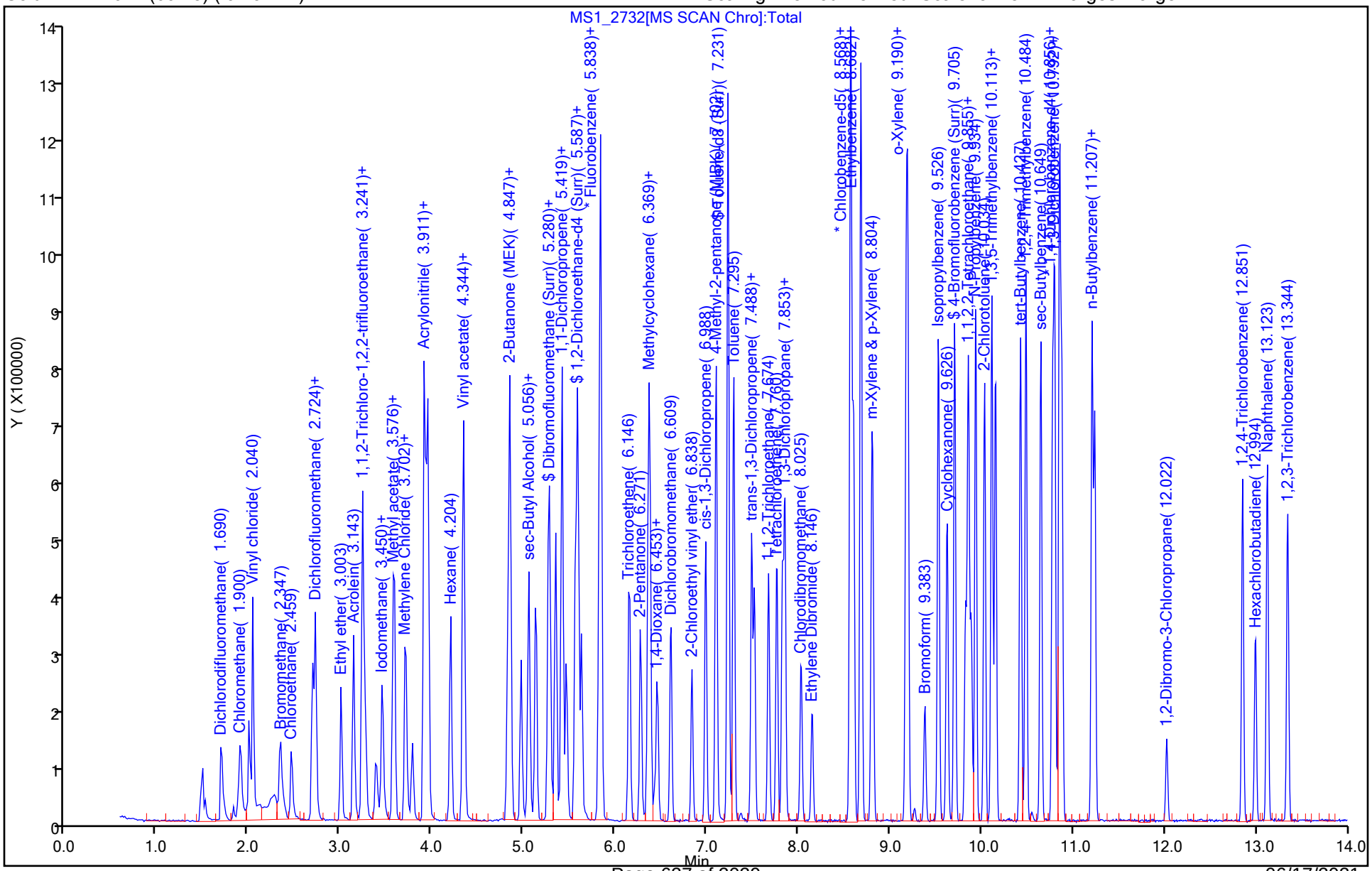
Report Date: 05-Jun-2021 11:42:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2732.D

Injection Date:	04-Jun-2021 17:24:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	23
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

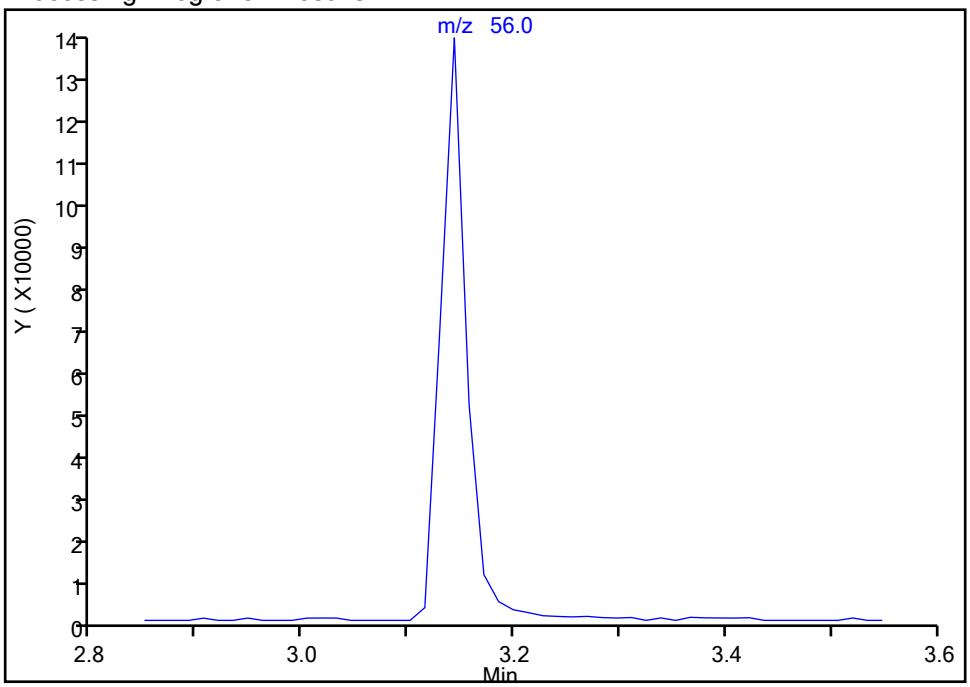
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2732.D
Injection Date: 04-Jun-2021 17:24:30 Instrument ID: VMS_MS1
Lims ID: ICV
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 21 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

22 Acrolein, CAS: 107-02-8

Signal: 1

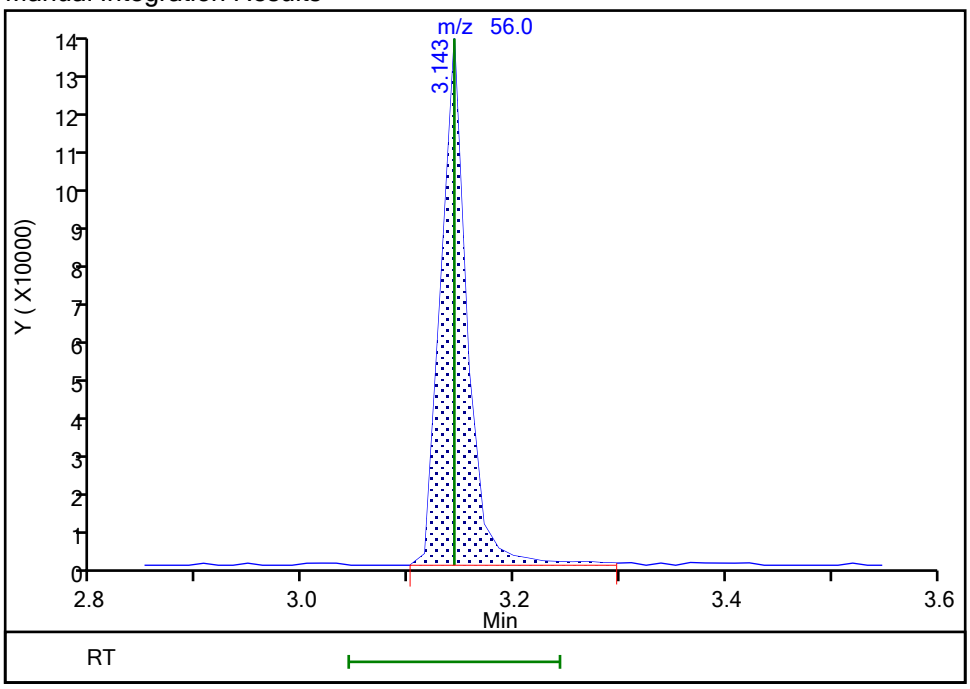
Not Detected
Expected RT: 3.14

Processing Integration Results



Manual Integration Results

RT: 3.14
Area: 232479
Amount: 571.4472
Amount Units: ug/l



Reviewer: seifertj, 05-Jun-2021 11:42:07
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538703/2 Calibration Date: 06/05/2021 09:15

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2744.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	Lin1		0.2337		52.0	50.0	4.0	20.0
Chloromethane	Ave	0.2172	0.2277	0.1000	52.4	50.0	4.8	20.0
Vinyl chloride	Ave	0.1753	0.1869		53.3	50.0	6.6	20.0
Bromomethane	Ave	0.1350	0.1435		53.2	50.0	6.3	20.0
Chloroethane	Ave	0.1351	0.1407		52.1	50.0	4.1	20.0
Dichlorofluoromethane	Lin2		0.3625		53.7	50.0	7.3	20.0
Trichlorofluoromethane	Ave	0.2882	0.3159		54.8	50.0	9.6	20.0
Ethyl ether	Ave	0.1409	0.1476		52.4	50.0	4.7	20.0
Acrolein	Lin1		0.0260		472	494	-4.4	20.0
1,1-Dichloroethene	Ave	0.1444	0.1425		49.3	50.0	-1.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.0955	0.1008		52.8	50.0	5.6	20.0
Acetone	Lin2		0.0503		175	200	-12.5	20.0
Iodomethane	Lin2		0.1996		45.9	50.0	-8.2	20.0
Carbon disulfide	Ave	0.4856	0.5079		52.3	50.0	4.6	20.0
Methyl acetate	Ave	0.1367	0.1256		91.9	100	-8.1	20.0
3-Chloro-1-propene	Ave	0.2908	0.3119		53.6	50.0	7.3	20.0
Methylene Chloride	Lin2		0.1838		51.7	50.0	3.4	20.0
t-Butyl alcohol	Ave	0.0174	0.0160		458	500	-8.3	20.0
Acrylonitrile	Ave	0.0691	0.0653		472	500	-5.6	20.0
Methyl tert-butyl ether	Ave	0.5094	0.5052		49.6	50.0	-0.8	20.0
trans-1,2-Dichloroethene	Ave	0.1754	0.1698		48.4	50.0	-3.2	20.0
Hexane	Lin2		1.169		55.5	50.0	11.0	20.0
Vinyl acetate	Ave	0.3923	0.4224		108	100	7.7	20.0
1,1-Dichloroethane	Ave	0.3389	0.3528	0.1000	52.0	50.0	4.1	20.0
2-Butanone (MEK)	Lin2		0.0744		175	200	-12.7	20.0
2,2-Dichloropropane	Ave	0.2998	0.3318		55.3	50.0	10.7	20.0
cis-1,2-Dichloroethene	Ave	0.1922	0.1816		47.2	50.0	-5.5	20.0
sec-Butyl Alcohol	Lin2		0.0122		1030	1200	-14.2	20.0
Bromochloromethane	Lin2		0.0866		49.6	50.0	-0.7	20.0
Tetrahydrofuran	Lin1		0.0503		87.9	100	-12.1	20.0
Chloroform	Ave	0.3516	0.3394		48.3	50.0	-3.5	20.0
1,1,1-Trichloroethane	Ave	0.3094	0.2906		47.0	50.0	-6.1	20.0
Cyclohexane	Lin1		0.3070		49.6	50.0	-0.9	20.0
1,1-Dichloropropene	Ave	0.2498	0.2678		53.6	50.0	7.2	20.0
Carbon tetrachloride	Ave	0.2276	0.2373		52.1	50.0	4.2	20.0
Isobutyl alcohol	Ave	0.0062	0.0049		978	1250	-21.8*	20.0
Benzene	Ave	0.6919	0.7078		51.1	50.0	2.3	20.0
1,2-Dichloroethane	Ave	0.2917	0.2982		51.1	50.0	2.2	20.0
Trichloroethene	Ave	0.9271	0.9236		49.8	50.0	-0.4	20.0
2-Pentanone	Ave	0.1343	0.1230		147	160	-8.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538703/2 Calibration Date: 06/05/2021 09:15

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2744.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	Lin1		0.2437		50.4	50.0	0.8	20.0
1,2-Dichloropropane	Ave	0.1881	0.1988		52.9	50.0	5.7	20.0
1,4-Dioxane	Lin2		0.0019		896	1000	-10.4	20.0
Dibromomethane	Ave	0.1179	0.1215		51.5	50.0	3.1	20.0
Bromodichloromethane	Ave	0.2580	0.2495		48.4	50.0	-3.3	20.0
2-Chloroethyl vinyl ether	Ave	0.1151	0.1164		50.6	50.0	1.1	20.0
cis-1,3-Dichloropropene	Ave	1.351	1.543		57.1	50.0	14.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1558	0.1474		189	200	-5.4	20.0
Toluene	Ave	0.6902	0.6908		50.0	50.0	0.0	20.0
trans-1,3-Dichloropropene	Ave	0.2759	0.2941		53.3	50.0	6.6	20.0
Ethyl methacrylate	Ave	0.996	1.036		52.0	50.0	4.0	20.0
1,1,2-Trichloroethane	Lin2		0.1402		48.4	50.0	-3.2	20.0
Tetrachloroethene	Ave	0.5176	0.5473		52.9	50.0	5.7	20.0
1,3-Dichloropropane	Ave	1.267	1.328		52.4	50.0	4.8	20.0
2-Hexanone	Lin2		0.5023		190	200	-5.0	20.0
Dibromochloromethane	Ave	0.7473	0.8006		53.6	50.0	7.1	20.0
Ethylene Dibromide	Ave	0.7193	0.7523		52.3	50.0	4.6	20.0
1-Chlorohexane	Lin2		1.099		41.7	40.0	4.3	20.0
Chlorobenzene	Ave	2.041	2.120	0.3000	51.9	50.0	3.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.7209	0.7840		54.4	50.0	8.7	20.0
Ethylbenzene	Ave	1.085	1.144		52.8	50.0	5.5	20.0
m-Xylene & p-Xylene	Ave	1.367	1.430		52.3	50.0	4.6	20.0
o-Xylene	Ave	1.277	1.386		54.3	50.0	8.6	20.0
Styrene	Ave	2.334	2.420		51.8	50.0	3.7	20.0
Bromoform	Lin2		0.4895	0.1000	49.9	50.0	-0.2	20.0
Isopropylbenzene	Ave	2.187	2.290		52.3	50.0	4.7	20.0
Cyclohexanone	Ave	0.0560	0.0599		1600	1500	7.0	20.0
1,1,2,2-Tetrachloroethane	Lin2		0.5849	0.3000	48.2	50.0	-3.6	20.0
Bromobenzene	Ave	0.4965	0.5134		51.7	50.0	3.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2182	0.2207		50.6	50.0	1.1	20.0
1,2,3-Trichloropropane	Lin2		0.1703		50.5	50.0	1.1	20.0
N-Propylbenzene	Ave	0.6077	0.6223		51.2	50.0	2.4	20.0
2-Chlorotoluene	Ave	0.4970	0.5434		54.7	50.0	9.4	20.0
1,3,5-Trimethylbenzene	Ave	1.953	1.959		50.2	50.0	0.3	20.0
4-Chlorotoluene	Ave	0.5470	0.5491		50.2	50.0	0.4	20.0
tert-Butylbenzene	Ave	1.601	1.610		50.3	50.0	0.6	20.0
1,2,4-Trimethylbenzene	Ave	2.003	2.044		51.0	50.0	2.0	20.0
sec-Butylbenzene	Lin2		0.4497		48.6	50.0	-2.9	20.0
1,3-Dichlorobenzene	Ave	0.9698	1.015		52.3	50.0	4.6	20.0
4-Isopropyltoluene	Ave	1.986	2.038		51.3	50.0	2.6	20.0
1,4-Dichlorobenzene	Ave	1.018	1.021		50.2	50.0	0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538703/2 Calibration Date: 06/05/2021 09:15

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2744.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	1.915	1.951		50.9	50.0	1.9	20.0
1,2-Dichlorobenzene	Ave	0.9122	0.9671		53.0	50.0	6.0	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1095		42.7	50.0	-14.6	20.0
1,2,4-Trichlorobenzene	Ave	0.5972	0.5958		49.9	50.0	-0.2	20.0
Hexachlorobutadiene	Lin2		0.2110		50.7	50.0	1.4	20.0
Naphthalene	Ave	1.773	1.725		48.6	50.0	-2.7	20.0
1,2,3-Trichlorobenzene	Ave	0.5451	0.5296		48.6	50.0	-2.8	20.0
Dibromofluoromethane (Surr)	Ave	0.2650	0.2590		48.9	50.0	-2.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3551	0.3524		49.6	50.0	-0.8	20.0
Toluene-d8 (Surr)	Ave	4.332	4.506		52.0	50.0	4.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.091		50.3	50.0	0.6	20.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2744.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2021 09:15:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:28:17 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 08:40:27

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.838	5.838	0.000	97	815157	50.0	50.0	
*	2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	163438	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	97	262417	50.0	50.0	
$	5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	211141	50.0	48.9	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	287247	50.0	49.6	
$	7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	95	736435	50.0	52.0	
$	8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	286416	50.0	50.3	
	11 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	190487	50.0	52.0	
	12 Chloromethane	50	1.900	1.900	0.000	99	185594	50.0	52.4	
	13 Vinyl chloride	62	1.998	1.998	0.000	100	152363	50.0	53.3	
	15 Bromomethane	94	2.347	2.347	0.000	93	116981	50.0	53.2	
	16 Chloroethane	64	2.473	2.473	0.000	98	114716	50.0	52.1	
	17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	295459	50.0	53.7	
	18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	257522	50.0	54.8	
	20 Ethyl ether	59	3.003	3.003	0.000	94	120316	50.0	52.4	
	22 Acrolein	56	3.143	3.143	0.000	98	209404	493.8	471.9	
	23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	116163	50.0	49.3	
	24 112TCTFE	151	3.255	3.255	0.000	96	82204	50.0	52.8	
	25 Acetone	43	3.269	3.269	0.000	98	164162	200.0	175.0	
	26 Iodomethane	142	3.394	3.394	0.000	99	162734	50.0	45.9	
	28 Carbon disulfide	76	3.450	3.450	0.000	99	413980	50.0	52.3	
	30 Methyl acetate	43	3.562	3.562	0.000	98	204719	100.0	91.9	
	31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	254222	50.0	53.6	
	32 Methylene Chloride	84	3.702	3.702	0.000	97	149829	50.0	51.7	
	33 2-Methyl-2-propanol	59	3.785	3.785	0.000	98	130244	500.0	458.3	
	34 Acrylonitrile	53	3.911	3.911	0.000	98	532047	500.0	472.1	
	35 Methyl tert-butyl ether	73	3.939	3.939	0.000	98	411854	50.0	49.6	
	36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	138419	50.0	48.4	
	37 Hexane	57	4.204	4.204	0.000	95	191005	50.0	55.5	
	39 Vinyl acetate	43	4.330	4.330	0.000	98	688586	100.0	107.7	
	40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	287559	50.0	52.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	242459	200.0	174.5	
49 2,2-Dichloropropane	77	4.847	4.847	0.000	88	270451	50.0	55.3	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	91	148070	50.0	47.2	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	239436	1200.0	1029.1	
54 Tetrahydrofuran	42	5.056	5.056	0.000	86	81943	100.0	87.9	
53 Chlorobromomethane	128	5.056	5.056	0.000	95	70558	50.0	49.6	
55 Chloroform	83	5.126	5.126	0.000	98	276638	50.0	48.3	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	236919	50.0	47.0	
57 Cyclohexane	56	5.350	5.350	0.000	95	250266	50.0	49.6	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	218313	50.0	53.6	
59 Carbon tetrachloride	117	5.420	5.420	0.000	83	193442	50.0	52.1	
60 Isobutyl alcohol	41	5.461	5.461	0.000	93	99339	1250.0	977.5	
63 Benzene	78	5.587	5.587	0.000	99	576935	50.0	51.1	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	243050	50.0	51.1	
66 n-Heptane	43	5.825	5.825	0.000	92	180189	50.0	54.3	
68 Trichloroethene	95	6.160	6.160	0.000	96	150947	50.0	49.8	
69 2-Pentanone	43	6.271	6.271	0.000	98	320875	160.0	146.5	
70 Methylcyclohexane	55	6.369	6.369	0.000	94	198629	50.0	50.4	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	162046	50.0	52.9	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	31181	1000.0	895.7	
74 Dibromomethane	93	6.453	6.453	0.000	89	99067	50.0	51.5	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	203380	50.0	48.4	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	94850	50.0	50.6	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	90	252170	50.0	57.1	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	98	480528	200.0	189.2	
82 Toluene	91	7.295	7.295	0.000	96	563149	50.0	50.0	
84 trans-1,3-Dichloropropene	75	7.488	7.488	0.000	99	239708	50.0	53.3	
85 Ethyl methacrylate	69	7.517	7.517	0.000	90	169273	50.0	52.0	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	95	114258	50.0	48.4	
89 Tetrachloroethene	164	7.767	7.767	0.000	88	89450	50.0	52.9	
90 1,3-Dichloropropane	76	7.825	7.825	0.000	94	217114	50.0	52.4	
91 2-Hexanone	43	7.853	7.853	0.000	98	328360	200.0	190.0	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	130853	50.0	53.6	
96 Ethylene Dibromide	107	8.153	8.153	0.000	96	122959	50.0	52.3	
98 1-Chlorohexane	91	8.568	8.568	0.000	95	143643	40.0	41.7	
99 Chlorobenzene	112	8.604	8.604	0.000	90	346414	50.0	51.9	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	128132	50.0	54.4	
101 Ethylbenzene	106	8.690	8.690	0.000	99	187008	50.0	52.8	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	233781	50.0	52.3	
103 o-Xylene	106	9.176	9.176	0.000	99	226552	50.0	54.3	
104 Styrene	104	9.197	9.197	0.000	94	395488	50.0	51.8	
106 Bromoform	173	9.383	9.383	0.000	89	79996	50.0	49.9	
107 Isopropylbenzene	105	9.533	9.533	0.000	98	600940	50.0	52.3	
109 Cyclohexanone	55	9.626	9.626	0.000	95	293786	1500.0	1604.5	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	153494	50.0	48.2	
111 Bromobenzene	156	9.855	9.855	0.000	97	134737	50.0	51.7	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	83	57921	50.0	50.6	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	44696	50.0	50.5	
114 N-Propylbenzene	120	9.941	9.941	0.000	99	163289	50.0	51.2	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	142609	50.0	54.7	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	95	514206	50.0	50.2	
117 4-Chlorotoluene	126	10.155	10.155	0.000	99	144099	50.0	50.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	422412	50.0	50.3	
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	536254	50.0	51.0	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	118014	50.0	48.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	266327	50.0	52.3	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	534909	50.0	51.3	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	89	268014	50.0	50.2	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	512045	50.0	50.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	253772	50.0	53.0	
128 1,2-Dibromo-3-Chloropropane	157	12.029	12.029	0.000	72	28743	50.0	42.7	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	156341	50.0	49.9	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	89	55370	50.0	50.7	
132 Naphthalene	128	13.123	13.123	0.000	98	452775	50.0	48.6	
134 1,2,3-Trichlorobenzene	180	13.344	13.344	0.000	92	138982	50.0	48.6	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	95.7	
S 150 1,2-Dichloroethene, Total	1				0		100.0	95.7	
S 151 Trihalomethanes, Total	1				0		200.0	200.1	
S 153 Xylenes, Total (URS)	1				0		100.0	106.6	
S 155 Xylenes, Total	106				0		100.0	106.6	
S 156 1,3-Dichloropropene, Total	1				0		100.0	110.4	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00050	Amount Added: 25.00	Units: uL	
MV-Gas A_00089	Amount Added: 10.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 07-Jun-2021 09:28:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2744.D

Injection Date: 05-Jun-2021 09:15:30 Instrument ID: VMS_MS1 Operator ID: SEIFERTJ

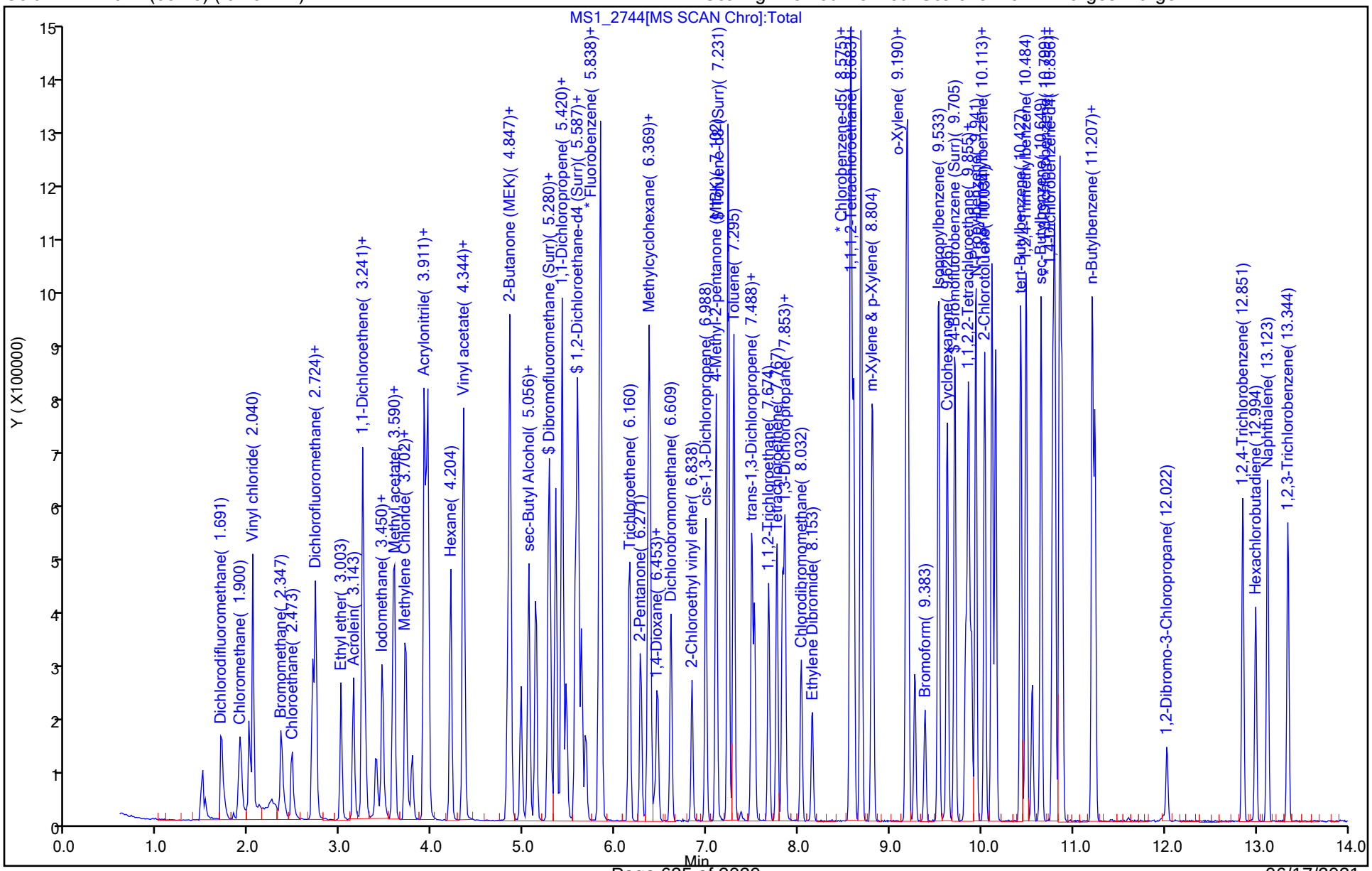
Lims ID: CCV Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: AQ_VMS1_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.: 280-149116-1

SDG No.:

Lab Sample ID: CCVC 280-538703/37 Calibration Date: 06/05/2021 19:40

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2773.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	Lin1		0.1956		43.5	50.0	-12.9	50.0
Chloromethane	Ave	0.2172	0.1990	0.1000	45.8	50.0	-8.4	50.0
Vinyl chloride	Ave	0.1753	0.1674		47.7	50.0	-4.5	50.0
Bromomethane	Ave	0.1350	0.1260		46.7	50.0	-6.7	50.0
Chloroethane	Ave	0.1351	0.1374		50.8	50.0	1.7	50.0
Dichlorofluoromethane	Lin2		0.3376		49.9	50.0	-0.2	50.0
Trichlorofluoromethane	Ave	0.2882	0.2745		47.6	50.0	-4.8	50.0
Ethyl ether	Ave	0.1409	0.1426		50.6	50.0	1.2	50.0
Acrolein	Lin1		0.0280		508	494	2.9	50.0
1,1-Dichloroethene	Ave	0.1444	0.1300		45.0	50.0	-10.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.0955	0.0874		45.8	50.0	-8.5	50.0
Acetone	Lin2		0.0552		193	200	-3.7	50.0
Iodomethane	Lin2		0.1992		45.8	50.0	-8.4	50.0
Carbon disulfide	Ave	0.4856	0.4446		45.8	50.0	-8.4	50.0
Methyl acetate	Ave	0.1367	0.1270		93.0	100	-7.0	50.0
3-Chloro-1-propene	Ave	0.2908	0.2755		47.4	50.0	-5.3	50.0
Methylene Chloride	Lin2		0.1732		48.7	50.0	-2.6	50.0
t-Butyl alcohol	Ave	0.0174	0.0170		487	500	-2.7	50.0
Acrylonitrile	Ave	0.0691	0.0680		492	500	-1.6	50.0
Methyl tert-butyl ether	Ave	0.5094	0.5011		49.2	50.0	-1.6	50.0
trans-1,2-Dichloroethene	Ave	0.1754	0.1520		43.3	50.0	-13.4	50.0
Hexane	Lin2		0.9788		46.5	50.0	-6.9	50.0
1,1-Dichloroethane	Ave	0.3389	0.3236	0.1000	47.7	50.0	-4.5	50.0
Vinyl acetate	Ave	0.3923	0.4063		104	100	3.6	50.0
2-Butanone (MEK)	Lin2		0.0783		184	200	-8.0	50.0
cis-1,2-Dichloroethene	Ave	0.1922	0.1740		45.3	50.0	-9.5	50.0
2,2-Dichloropropane	Ave	0.2998	0.2624		43.8	50.0	-12.5	50.0
sec-Butyl Alcohol	Lin2		0.0130		1090	1200	-8.8	50.0
Bromochloromethane	Lin2		0.0813		46.7	50.0	-6.7	50.0
Tetrahydrofuran	Lin1		0.0534		93.6	100	-6.4	50.0
Chloroform	Ave	0.3516	0.3137		44.6	50.0	-10.8	50.0
1,1,1-Trichloroethane	Ave	0.3094	0.2649		42.8	50.0	-14.4	50.0
Cyclohexane	Lin1		0.2825		45.6	50.0	-8.9	50.0
1,1-Dichloropropene	Ave	0.2498	0.2359		47.2	50.0	-5.6	50.0
Carbon tetrachloride	Ave	0.2276	0.2090		45.9	50.0	-8.2	50.0
Isobutyl alcohol	Ave	0.0062	0.0058		1160	1250	-7.0	50.0
Benzene	Ave	0.6919	0.6730		48.6	50.0	-2.7	50.0
1,2-Dichloroethane	Ave	0.2917	0.2856		48.9	50.0	-2.1	50.0
Trichloroethene	Ave	0.9271	0.8470		45.7	50.0	-8.6	50.0
2-Pentanone	Ave	0.1343	0.1295		154	160	-3.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVC 280-538703/37 Calibration Date: 06/05/2021 19:40

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2773.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	Lin1		0.2189		45.2	50.0	-9.5	50.0
1,2-Dichloropropane	Ave	0.1881	0.1877		49.9	50.0	-0.2	50.0
1,4-Dioxane	Lin2		0.0019		890	1000	-11.0	50.0
Dibromomethane	Ave	0.1179	0.1163		49.3	50.0	-1.4	50.0
Bromodichloromethane	Ave	0.2580	0.2293		44.4	50.0	-11.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1151	0.1113		48.4	50.0	-3.2	50.0
cis-1,3-Dichloropropene	Ave	1.351	1.397		51.7	50.0	3.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1558	0.1540		198	200	-1.1	50.0
Toluene	Ave	0.6902	0.6416		46.5	50.0	-7.0	50.0
trans-1,3-Dichloropropene	Ave	0.2759	0.2700		48.9	50.0	-2.1	50.0
Ethyl methacrylate	Ave	0.996	1.002		50.3	50.0	0.6	50.0
1,1,2-Trichloroethane	Lin2		0.1333		46.0	50.0	-8.0	50.0
Tetrachloroethene	Ave	0.5176	0.4980		48.1	50.0	-3.8	50.0
1,3-Dichloropropane	Ave	1.267	1.269		50.1	50.0	0.1	50.0
2-Hexanone	Lin2		0.5198		197	200	-1.7	50.0
Dibromochloromethane	Ave	0.7473	0.7385		49.4	50.0	-1.2	50.0
Ethylene Dibromide	Ave	0.7193	0.7098		49.3	50.0	-1.3	50.0
1-Chlorohexane	Lin2		0.9886		37.5	40.0	-6.3	50.0
Chlorobenzene	Ave	2.041	1.971	0.3000	48.3	50.0	-3.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.7209	0.7100		49.2	50.0	-1.5	50.0
Ethylbenzene	Ave	1.085	1.055		48.6	50.0	-2.8	50.0
m-Xylene & p-Xylene	Ave	1.367	1.278		46.7	50.0	-6.5	50.0
o-Xylene	Ave	1.277	1.286		50.4	50.0	0.7	50.0
Styrene	Ave	2.334	2.273		48.7	50.0	-2.6	50.0
Bromoform	Lin2		0.4343	0.1000	44.4	50.0	-11.3	50.0
Isopropylbenzene	Ave	2.187	2.115		48.4	50.0	-3.3	50.0
Cyclohexanone	Ave	0.0560	0.0381		1020	1500	-31.9	50.0
1,1,2,2-Tetrachloroethane	Lin2		0.5901	0.3000	48.6	50.0	-2.7	50.0
Bromobenzene	Ave	0.4965	0.4959		49.9	50.0	-0.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2182	0.2029		46.5	50.0	-7.0	50.0
1,2,3-Trichloropropane	Lin2		0.1637		48.6	50.0	-2.8	50.0
N-Propylbenzene	Ave	0.6077	0.5780		47.6	50.0	-4.9	50.0
2-Chlorotoluene	Ave	0.4970	0.4812		48.4	50.0	-3.2	50.0
1,3,5-Trimethylbenzene	Ave	1.953	1.858		47.6	50.0	-4.9	50.0
4-Chlorotoluene	Ave	0.5470	0.5282		48.3	50.0	-3.4	50.0
tert-Butylbenzene	Ave	1.601	1.480		46.2	50.0	-7.5	50.0
1,2,4-Trimethylbenzene	Ave	2.003	1.920		47.9	50.0	-4.2	50.0
sec-Butylbenzene	Lin2		0.4218		45.6	50.0	-8.9	50.0
1,3-Dichlorobenzene	Ave	0.9698	0.9500		49.0	50.0	-2.0	50.0
4-Isopropyltoluene	Ave	1.986	1.910		48.1	50.0	-3.8	50.0
1,4-Dichlorobenzene	Ave	1.018	0.9750		47.9	50.0	-4.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVC 280-538703/37 Calibration Date: 06/05/2021 19:40

Instrument ID: VMS_MS1 Calib Start Date: 06/04/2021 13:50

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/04/2021 16:41

Lab File ID: MS1_2773.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	1.915	1.797		46.9	50.0	-6.2	50.0
1,2-Dichlorobenzene	Ave	0.9122	0.9256		50.7	50.0	1.5	50.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1153		44.9	50.0	-10.1	50.0
1,2,4-Trichlorobenzene	Ave	0.5972	0.5781		48.4	50.0	-3.2	50.0
Hexachlorobutadiene	Lin2		0.1867		45.0	50.0	-10.1	50.0
Naphthalene	Ave	1.773	1.726		48.7	50.0	-2.7	50.0
1,2,3-Trichlorobenzene	Ave	0.5451	0.5291		48.5	50.0	-2.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2650	0.2606		49.2	50.0	-1.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3551	0.3541		49.9	50.0	-0.3	50.0
Toluene-d8 (Surr)	Ave	4.332	4.414		51.0	50.0	1.9	50.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.082		49.9	50.0	-0.2	50.0

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2773.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 05-Jun-2021 19:40:30 ALS Bottle#: 30 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Misc. Info.: 280-0102098-037
Operator ID: SEIFERTJ Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:28:15 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 08:01:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	745895	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	152246	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	97	239225	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	194353	50.0	49.2	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	264138	50.0	49.9	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	672001	50.0	51.0	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	258934	50.0	49.9	
11 Dichlorodifluoromethane	85	1.705	1.691	0.014	99	145930	50.0	43.5	
12 Chloromethane	50	1.900	1.900	0.000	99	148410	50.0	45.8	
13 Vinyl chloride	62	1.998	1.998	0.000	100	124845	50.0	47.7	
15 Bromomethane	94	2.347	2.347	0.000	93	93983	50.0	46.7	
16 Chloroethane	64	2.473	2.473	0.000	99	102454	50.0	50.8	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	251791	50.0	49.9	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	99	204714	50.0	47.6	
20 Ethyl ether	59	3.004	3.003	0.001	93	106354	50.0	50.6	
22 Acrolein	56	3.143	3.143	0.000	98	206003	493.8	507.8	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	95	96955	50.0	45.0	
24 112TCTFE	151	3.255	3.255	0.000	96	65178	50.0	45.8	
25 Acetone	43	3.269	3.269	0.000	99	164783	200.0	192.6	
26 Iodomethane	142	3.395	3.394	0.001	99	148577	50.0	45.8	
28 Carbon disulfide	76	3.450	3.450	0.000	99	331640	50.0	45.8	
30 Methyl acetate	43	3.576	3.562	0.014	98	189515	100.0	93.0	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	205472	50.0	47.4	
32 Methylene Chloride	84	3.716	3.702	0.014	97	129220	50.0	48.7	
33 2-Methyl-2-propanol	59	3.786	3.785	0.001	98	126516	500.0	486.5	
34 Acrylonitrile	53	3.911	3.911	0.000	98	507244	500.0	491.9	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	373766	50.0	49.2	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	94	113347	50.0	43.3	
37 Hexane	57	4.205	4.204	0.001	95	149023	50.0	46.5	
39 Vinyl acetate	43	4.344	4.330	0.014	98	606078	100.0	103.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 1,1-Dichloroethane	63	4.344	4.344	0.000	98	241343	50.0	47.7	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	233744	200.0	184.0	
49 2,2-Dichloropropane	77	4.861	4.847	0.014	89	195707	50.0	43.8	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	91	129810	50.0	45.3	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	233179	1200.0	1094.6	
54 Tetrahydrofuran	42	5.057	5.056	0.001	88	79589	100.0	93.6	
53 Chlorobromomethane	128	5.057	5.056	0.001	95	60634	50.0	46.7	
55 Chloroform	83	5.140	5.126	0.014	98	233989	50.0	44.6	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	197569	50.0	42.8	
57 Cyclohexane	56	5.350	5.350	0.000	94	210739	50.0	45.6	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	90	175953	50.0	47.2	
59 Carbon tetrachloride	117	5.420	5.420	0.000	83	155924	50.0	45.9	
60 Isobutyl alcohol	41	5.462	5.461	0.001	94	108128	1250.0	1162.8	
63 Benzene	78	5.587	5.587	0.000	99	501967	50.0	48.6	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	213017	50.0	48.9	
66 n-Heptane	43	5.825	5.825	0.000	91	135257	50.0	44.5	
68 Trichloroethene	95	6.160	6.160	0.000	94	128955	50.0	45.7	
69 2-Pentanone	43	6.272	6.271	0.001	98	309104	160.0	154.3	
70 Methylcyclohexane	55	6.355	6.369	-0.014	95	163313	50.0	45.2	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	139969	50.0	49.9	
73 1,4-Dioxane	88	6.425	6.425	0.000	98	28359	1000.0	890.4	
74 Dibromomethane	93	6.453	6.453	0.000	88	86738	50.0	49.3	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	171031	50.0	44.4	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	94	83053	50.0	48.4	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	212721	50.0	51.7	
79 4-Methyl-2-pentanone (MIBK)	43	7.103	7.102	0.000	99	459566	200.0	197.8	
82 Toluene	91	7.296	7.295	0.001	96	478545	50.0	46.5	
84 trans-1,3-Dichloropropene	75	7.489	7.488	0.001	98	201387	50.0	48.9	
85 Ethyl methacrylate	69	7.517	7.517	0.000	88	152567	50.0	50.3	
87 1,1,2-Trichloroethane	97	7.675	7.674	0.001	95	99440	50.0	46.0	
89 Tetrachloroethene	164	7.767	7.767	0.000	89	75818	50.0	48.1	
90 1,3-Dichloropropane	76	7.825	7.825	0.001	94	193162	50.0	50.1	
91 2-Hexanone	43	7.853	7.853	0.000	98	316526	200.0	196.6	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	112431	50.0	49.4	
96 Ethylene Dibromide	107	8.154	8.153	0.001	95	108059	50.0	49.3	
98 1-Chlorohexane	91	8.561	8.568	-0.007	94	120413	40.0	37.5	
99 Chlorobenzene	112	8.604	8.604	0.000	91	300106	50.0	48.3	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	91	108097	50.0	49.2	
101 Ethylbenzene	106	8.683	8.690	-0.007	99	160567	50.0	48.6	
102 m-Xylene & p-Xylene	106	8.804	8.804	0.000	98	194520	50.0	46.7	
103 o-Xylene	106	9.176	9.176	0.000	97	195751	50.0	50.4	
104 Styrene	104	9.198	9.197	0.001	94	346013	50.0	48.7	
106 Bromoform	173	9.383	9.383	0.000	89	66123	50.0	44.4	
107 Isopropylbenzene	105	9.526	9.533	-0.007	98	506042	50.0	48.4	
109 Cyclohexanone	55	9.627	9.626	0.001	94	174235	1500.0	1021.5	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	97	141161	50.0	48.6	
111 Bromobenzene	156	9.855	9.855	0.000	97	118638	50.0	49.9	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	79	48531	50.0	46.5	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	89	39168	50.0	48.6	
114 N-Propylbenzene	120	9.934	9.941	-0.007	99	138265	50.0	47.6	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	115120	50.0	48.4	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	444465	50.0	47.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 4-Chlorotoluene	126	10.156	10.155	0.001	99	126366	50.0	48.3	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	354154	50.0	46.2	
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.001	99	459325	50.0	47.9	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	100913	50.0	45.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	227262	50.0	49.0	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	457007	50.0	48.1	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	88	233243	50.0	47.9	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	429862	50.0	46.9	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	92	221431	50.0	50.7	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.029	-0.007	73	27585	50.0	44.9	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	138300	50.0	48.4	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	90	44665	50.0	45.0	
132 Naphthalene	128	13.123	13.123	0.000	98	412890	50.0	48.7	
134 1,2,3-Trichlorobenzene	180	13.345	13.344	0.001	93	126577	50.0	48.5	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	88.6	
S 150 1,2-Dichloroethene, Total	1				0		100.0	88.6	
S 151 Trihalomethanes, Total	1				0		200.0	182.8	
S 152 Total BTEX	1				0			240.8	
S 153 Xylenes, Total (URS)	1				0		100.0	97.1	
S 155 Xylenes, Total	106				0		100.0	97.1	
S 156 1,3-Dichloropropene, Total	1				0		100.0	100.6	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas A_00089	Amount Added: 10.00	Units: uL	
MV-MegaMainA_00050	Amount Added: 25.00	Units: uL	
mv-IS_SS_00018	Amount Added: 5.00	Units: uL	Run Reagent

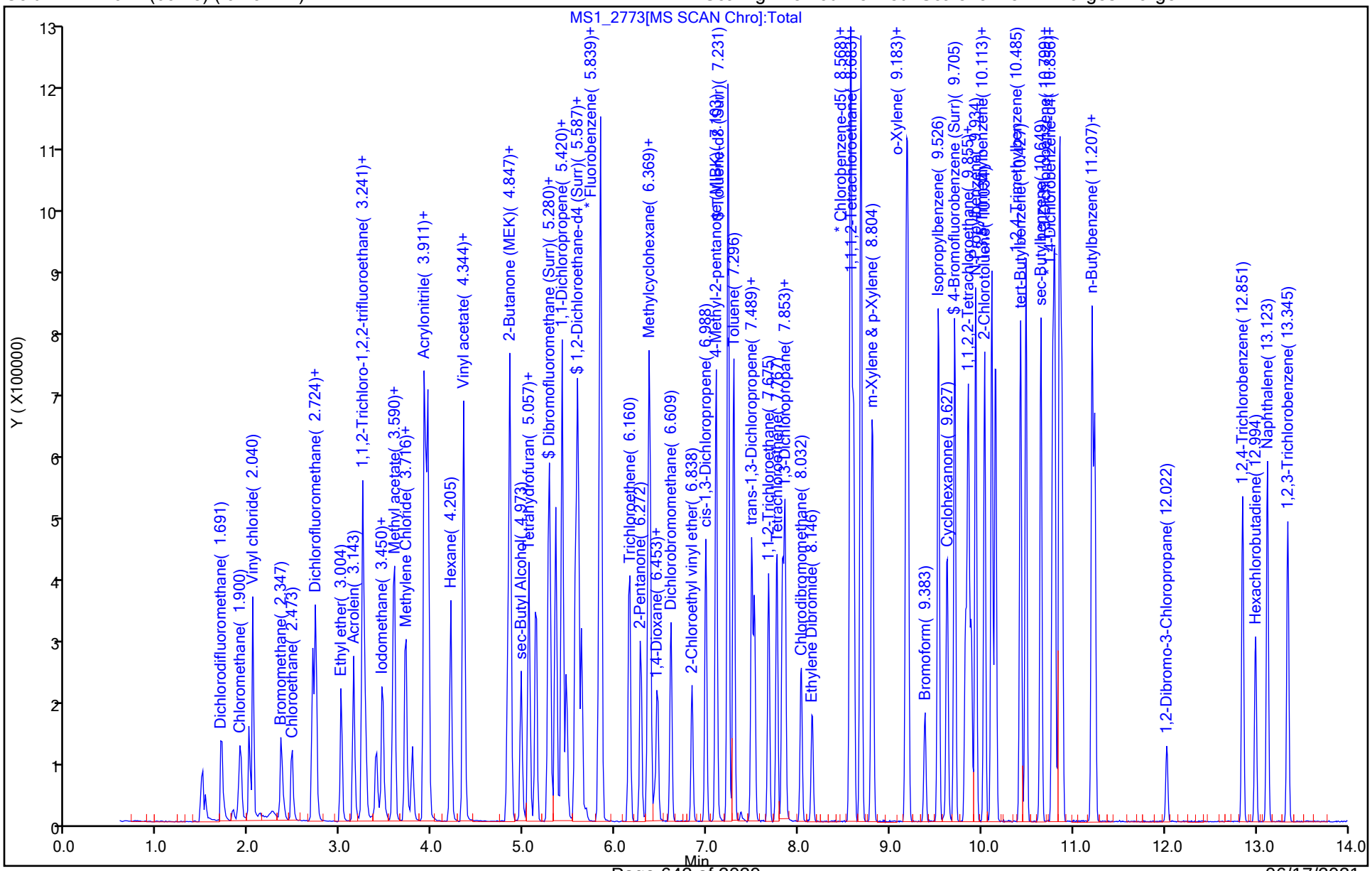
Report Date: 07-Jun-2021 09:28:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2773.D

Injection Date:	05-Jun-2021 19:40:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	CCVC			Worklist Smp#:	37
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Jun-2021 09:51:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2021 10:10:29 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1680

First Level Reviewer: seifertj Date: 04-Jun-2021 10:07:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 10 BFB	95	3.579	3.579	0.000	0	285505	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

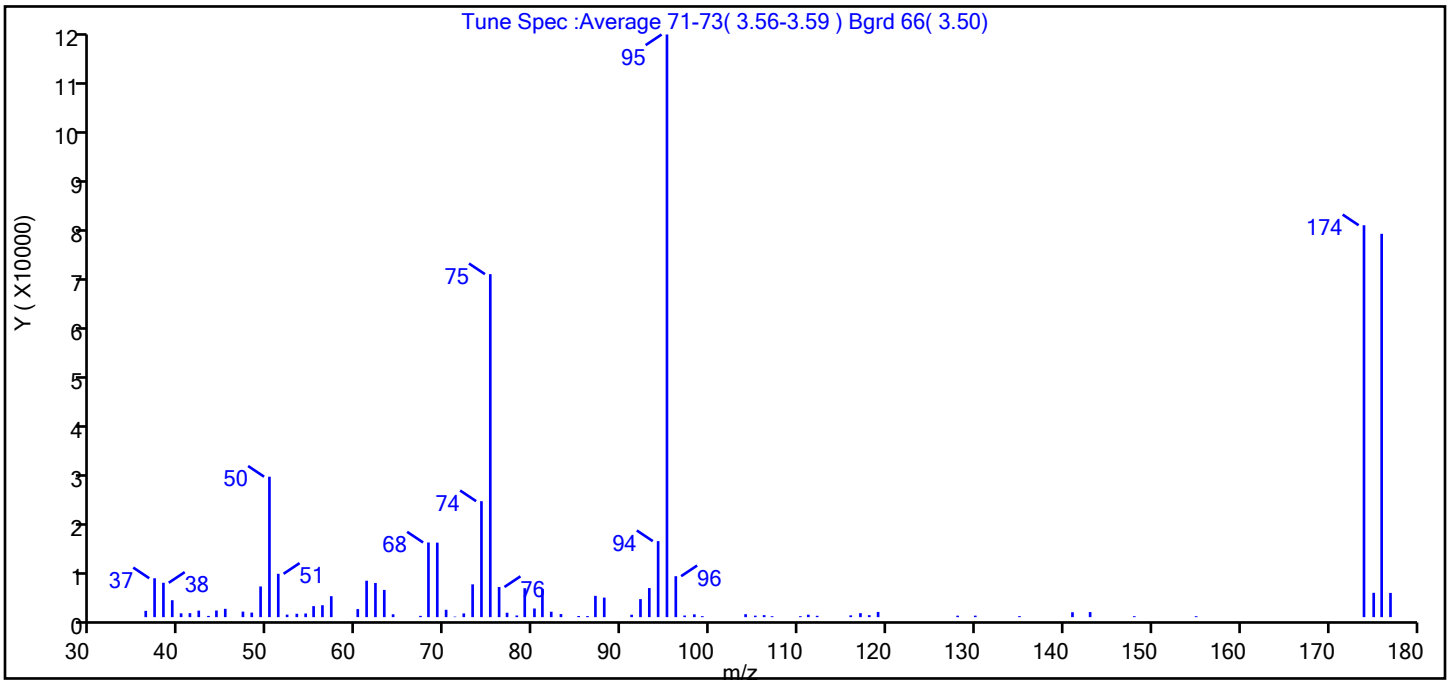
mv-Cent BFB_00003 Amount Added: 5.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D
Injection Date: 04-Jun-2021 09:51:30 Instrument ID: VMS_MS1
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.1
75	30 to 60% of m/z 95	58.9
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	67.3
175	5 to 9% of m/z 174	4.2 (6.2)
176	Greater than 95% but less than 101% of m/z 174	65.8 (97.8)
177	5 to 9% of m/z 176	4.2 (6.3)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D\AQ_VMS1_8260.rslt\spectra.c
Injection Date: 04-Jun-2021 09:51:30
Spectrum: Tune Spec :Average 71-73(3.56-3.59) Bgrd 66(3.50)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1192	57.00	3972	81.00	5340	110.00	177
37.00	7372	60.00	1526	82.00	1030	111.00	460
38.00	6514	61.00	6904	83.00	586	112.00	256
39.00	3207	62.00	6480	85.00	221	116.00	336
40.00	725	63.00	5163	86.00	201	117.00	755
41.00	757	64.00	539	87.00	4038	118.00	377
42.00	1236	67.00	246	88.00	3708	119.00	988
43.00	235	68.00	14151	91.00	454	128.00	278
44.00	1257	69.00	14121	92.00	3418	130.00	283
45.00	1577	70.00	1398	93.00	5513	135.00	191
47.00	1049	71.00	98	94.00	14409	141.00	929
48.00	859	72.00	707	95.00	110448	143.00	962
49.00	5820	73.00	6213	96.00	7764	148.00	180
50.00	26624	74.00	21984	97.00	308	155.00	178
51.00	8219	75.00	65016	98.00	531	174.00	74288
52.00	483	76.00	5715	99.00	187	175.00	4611
53.00	643	77.00	833	104.00	556	176.00	72664
54.00	691	78.00	315	105.00	284	177.00	4592
55.00	2093	79.00	5485	106.00	378		
56.00	2260	80.00	1640	107.00	175		

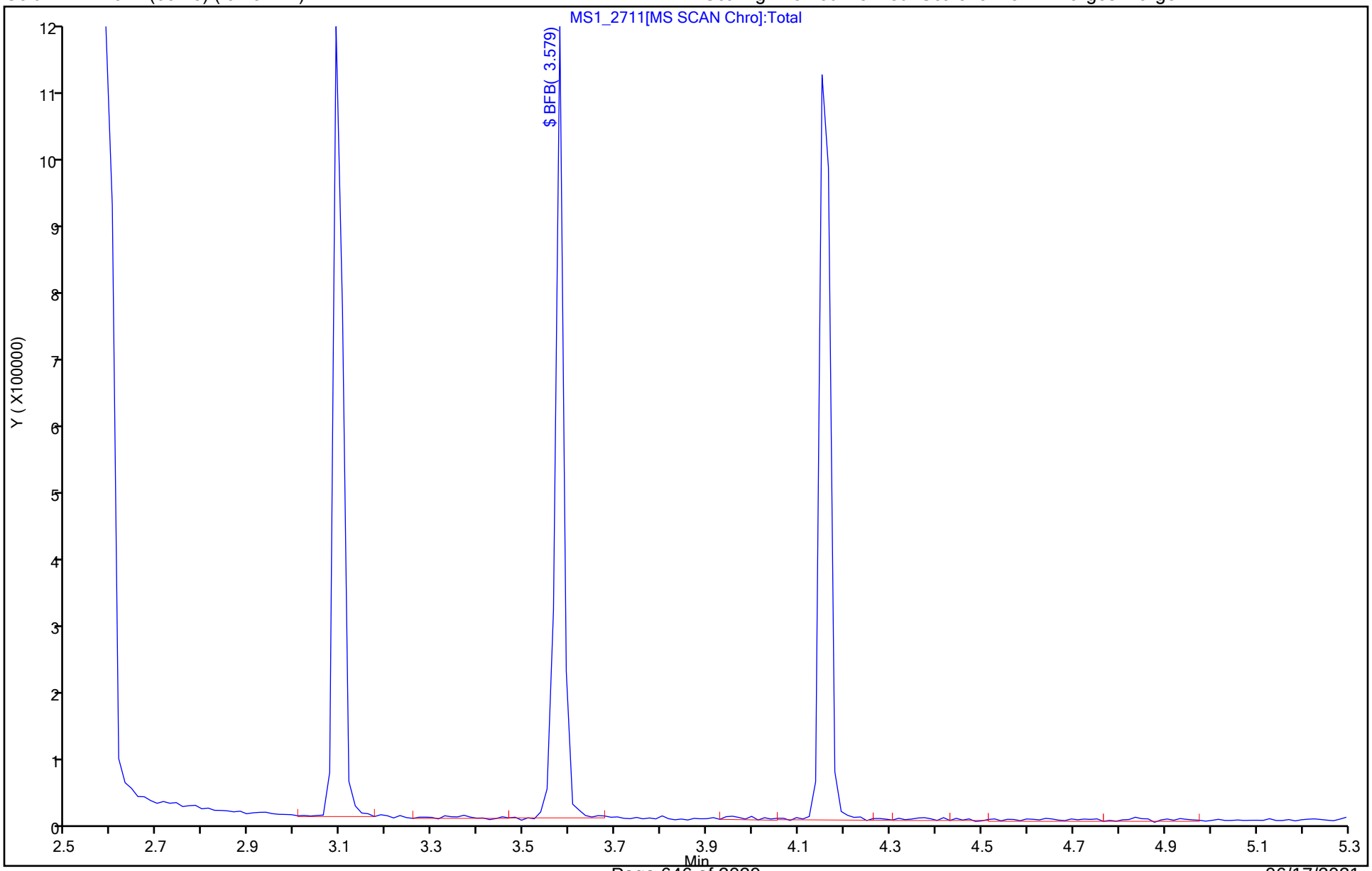
Report Date: 05-Jun-2021 10:10:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2711.D

Injection Date:	04-Jun-2021 09:51:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2743.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-Jun-2021 08:45:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	2.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_MS1		
Method:	\\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	07-Jun-2021 09:28:16	Calib Date:	04-Jun-2021 16:41:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1668				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 10 BFB	95	3.579	3.579	0.000	0	321022	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

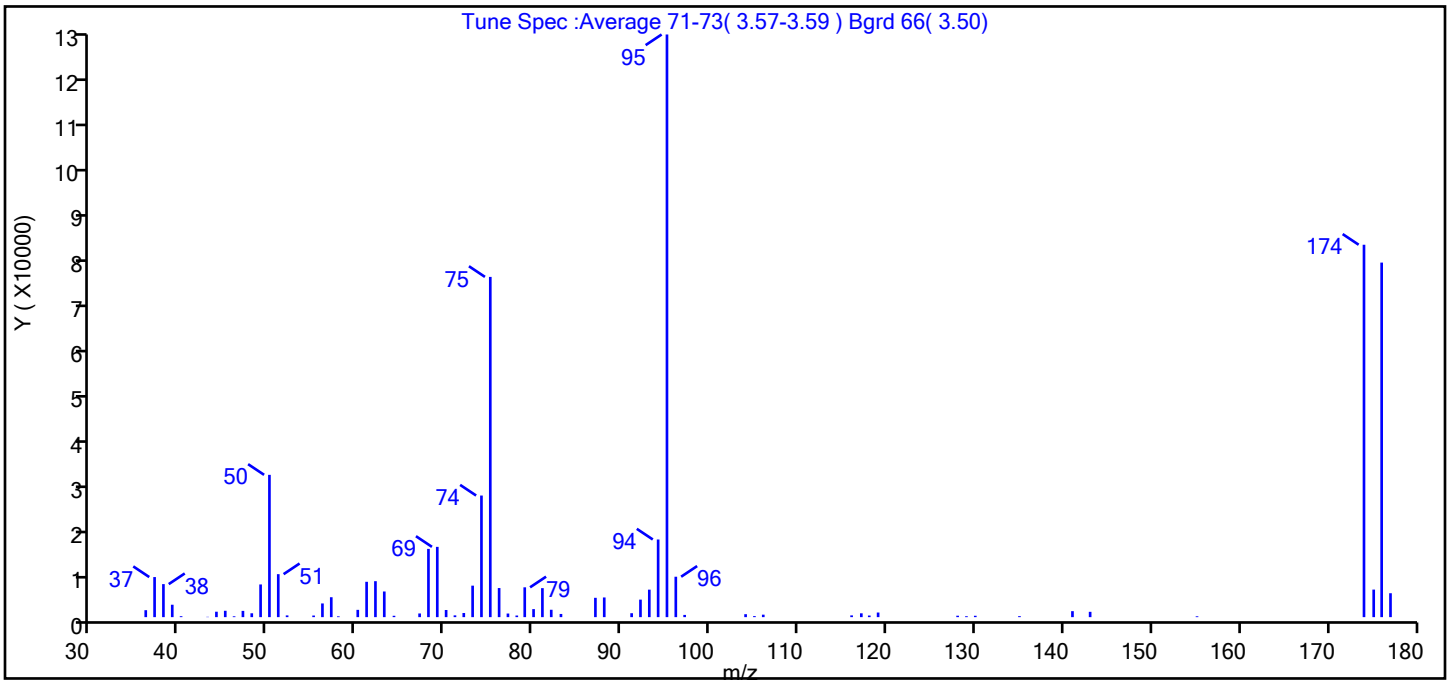
mv-Cent BFB_00003 Amount Added: 5.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2743.D
Injection Date: 05-Jun-2021 08:45:30 Instrument ID: VMS_MS1
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.4
75	30 to 60% of m/z 95	58.4
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	63.9
175	5 to 9% of m/z 174	4.7 (7.4)
176	Greater than 95% but less than 101% of m/z 174	60.9 (95.2)
177	5 to 9% of m/z 176	4.1 (6.7)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2743.D\AQ_VMS1_8260.rslt\spectra.c
Injection Date: 05-Jun-2021 08:45:30
Spectrum: Tune Spec :Average 71-73(3.57-3.59) Bgrd 66(3.50)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1482	57.00	4242	77.00	770	105.00	221
37.00	8534	58.00	168	78.00	345	106.00	529
38.00	7034	60.00	1553	79.00	6351	116.00	375
39.00	2644	61.00	7528	80.00	1712	117.00	816
40.00	198	62.00	7657	81.00	6176	118.00	344
43.00	66	63.00	5463	82.00	1573	119.00	983
44.00	1158	64.00	291	83.00	679	128.00	304
45.00	1355	67.00	783	87.00	4116	129.00	194
46.00	178	68.00	14537	88.00	4192	130.00	293
47.00	1333	69.00	14967	91.00	838	135.00	210
48.00	823	70.00	1522	92.00	3732	141.00	1275
49.00	6962	71.00	379	93.00	5854	143.00	1134
50.00	30304	72.00	881	94.00	16536	155.00	179
51.00	9153	73.00	6706	95.00	124080	174.00	79304
52.00	371	74.00	25896	96.00	8607	175.00	5868
55.00	343	75.00	72456	97.00	474	176.00	75504
56.00	2917	76.00	6195	104.00	630	177.00	5093

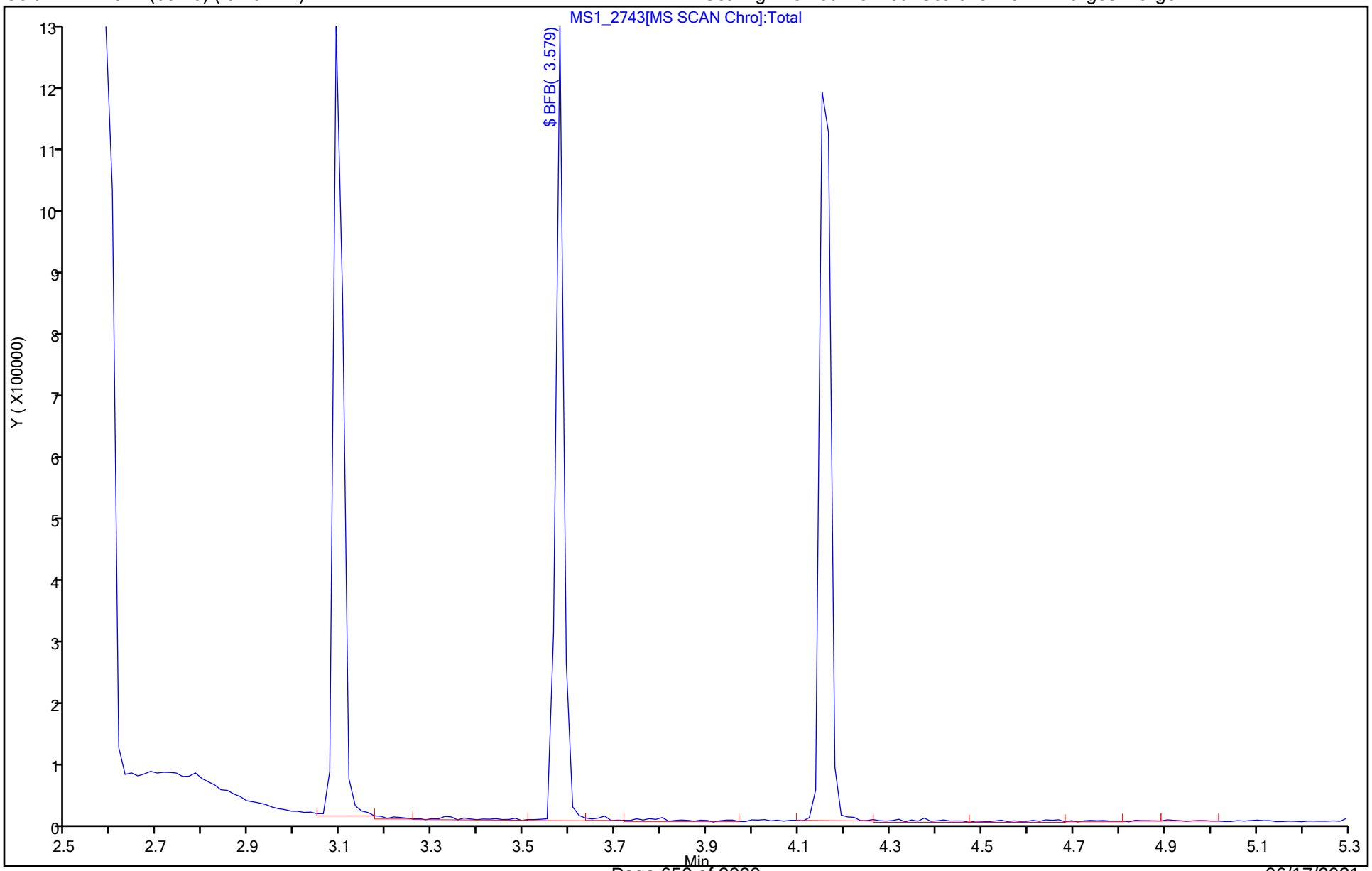
Report Date: 07-Jun-2021 09:28:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2743.D

Injection Date:	05-Jun-2021 08:45:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	AQ_VMS1_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.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-538703/9

Matrix: Water Lab File ID: MS1_2749.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 11:07

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.: 538703 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.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-538703/9

Matrix: Water Lab File ID: MS1_2749.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 11:07

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.: 538703 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)	99		81-118
460-00-4	4-Bromofluorobenzene (Surr)	102		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2749.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Jun-2021 11:07:30 ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:28:19 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 05-Jun-2021 11:27:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	732989	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	154102	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.849	10.856	-0.007	98	241734	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	195053	50.0	50.2	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	257458	50.0	49.5	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	661976	50.0	49.6	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	79	268161	50.0	51.1	
$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
$ 10 BFB	95		3.579					ND	
11 Dichlorodifluoromethane	85		1.691					ND	
12 Chloromethane	50		1.900					ND	
13 Vinyl chloride	62		1.998					ND	
14 Ethylene oxide	43		2.319					ND	7
15 Bromomethane	94		2.347					ND	
16 Chloroethane	64		2.473					ND	
17 Dichlorofluoromethane	67		2.696					ND	
18 Trichlorofluoromethane	101		2.724					ND	
19 Ethanol	45		2.892					ND	
20 Ethyl ether	59		3.003					ND	
21 Propene oxide	58		3.059					ND	
22 Acrolein	56		3.143					ND	
23 1,1-Dichloroethene	96		3.241					ND	
24 112TCTFE	151		3.255					ND	
25 Acetone	43		3.269					ND	
26 Iodomethane	142		3.394					ND	
27 Isopropyl alcohol	45		3.395					ND	
28 Carbon disulfide	76		3.450					ND	
29 Acetonitrile	41		3.534					ND	
30 Methyl acetate	43		3.562					ND	
31 3-Chloro-1-propene	41		3.590					ND	
32 Methylene Chloride	84		3.702					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 2-Methyl-2-propanol	59		3.785					ND	
34 Acrylonitrile	53		3.911					ND	
35 Methyl tert-butyl ether	73		3.939					ND	
36 trans-1,2-Dichloroethene	96		3.953					ND	
37 Hexane	57		4.204					ND	
38 Chlorotrifluoroethene	116		4.248					ND	
39 Vinyl acetate	43		4.330					ND	U
40 1,1-Dichloroethane	63		4.344					ND	
41 Isopropyl ether	87		4.372					ND	
42 2-Chloro-1,3-butadiene	53		4.414					ND	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59		4.679					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43		4.819					ND	
49 2,2-Dichloropropane	77		4.847					ND	
48 cis-1,2-Dichloroethene	96		4.847					ND	
47 Ethyl acetate	43		4.847					ND	U
50 Propionitrile	54		4.875					ND	
51 sec-Butyl Alcohol	45		4.973					ND	
52 Methacrylonitrile	41		5.015					ND	
54 Tetrahydrofuran	42		5.056					ND	
53 Chlorobromomethane	128		5.056					ND	
55 Chloroform	83		5.126					ND	
56 1,1,1-Trichloroethane	97		5.280					ND	
57 Cyclohexane	56		5.350					ND	
58 1,1-Dichloropropene	75		5.420					ND	
59 Carbon tetrachloride	117		5.420					ND	
60 Isobutyl alcohol	41		5.461					ND	
61 1,2-Dichloro-1,1,2-trifluoroetha	117		5.505					ND	
62 1,1,1-Trifluoro-2,2-dichloroetha	83		5.533					ND	
63 Benzene	78		5.587					ND	
64 1,2-Dichloroethane	62		5.629					ND	
65 Tert-amyl methyl ether	73		5.685					ND	
66 n-Heptane	43		5.825					ND	U
67 n-Butanol	56		6.034					ND	
68 Trichloroethene	95		6.160					ND	
69 2-Pentanone	43		6.271					ND	
70 Methylcyclohexane	55		6.369					ND	
71 1,2-Dichloropropane	63		6.383					ND	
72 Methyl methacrylate	100		6.397					ND	
73 1,4-Dioxane	88		6.425					ND	
74 Dibromomethane	93		6.453					ND	
75 Dichlorobromomethane	83		6.609					ND	
76 2-Nitropropane	41		6.788					ND	7
77 2-Chloroethyl vinyl ether	63		6.838					ND	
78 cis-1,3-Dichloropropene	75		6.988					ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.102					ND	
80 2,2-Dimethylpentane	57	7.224	7.251	-0.027	27	1427		NC	
81 2,4-Dimethylpentane	43	7.231	7.293	-0.062	31	6266		NC	
82 Toluene	91		7.295					ND	
84 trans-1,3-Dichloropropene	75		7.488					ND	
83 2,2,3-Trimethylbutane	57		7.502					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 Ethyl methacrylate	69		7.517					ND	
87 1,1,2-Trichloroethane	97		7.674					ND	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164		7.767					ND	
88 2-Methylhexane	43		7.810					ND	
90 1,3-Dichloropropane	76		7.825					ND	
91 2-Hexanone	43		7.853					ND	
92 3-Methylhexane	43		7.949					ND	
93 2,3-Dimethylpentane	56		7.949					ND	
94 Tetrahydrothiophene	60		8.018					ND	
95 Chlorodibromomethane	129		8.032					ND	
96 Ethylene Dibromide	107		8.153					ND	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91		8.568					ND	7
99 Chlorobenzene	112		8.604					ND	
100 1,1,1,2-Tetrachloroethane	131		8.683					ND	
101 Ethylbenzene	106		8.690					ND	
102 m-Xylene & p-Xylene	106		8.804					ND	
103 o-Xylene	106		9.176					ND	
104 Styrene	104		9.197					ND	
106 Bromoform	173		9.383					ND	
105 Dimethyl disulfide	94		9.388					ND	
107 Isopropylbenzene	105		9.533					ND	
108 cis-1,4-Dichloro-2-butene	53		9.584					ND	
109 Cyclohexanone	55		9.626					ND	U
110 1,1,2,2-Tetrachloroethane	83		9.827					ND	
111 Bromobenzene	156		9.855					ND	
112 trans-1,4-Dichloro-2-butene	53		9.862					ND	
113 1,2,3-Trichloropropane	110		9.891					ND	
114 N-Propylbenzene	120		9.941					ND	
115 2-Chlorotoluene	126		10.034					ND	
116 1,3,5-Trimethylbenzene	105		10.113					ND	
117 4-Chlorotoluene	126		10.155					ND	
118 tert-Butylbenzene	119		10.427					ND	
119 1,2,4-Trimethylbenzene	105		10.484					ND	
120 sec-Butylbenzene	134		10.649					ND	
121 1,3-Dichlorobenzene	146		10.778					ND	
122 4-Isopropyltoluene	119		10.799					ND	
123 1,4-Dichlorobenzene	146		10.878					ND	
124 1,2,3-Trimethylbenzene	105		10.899					ND	
125 n-Butylbenzene	91		11.207					ND	
127 1,2-Dichlorobenzene	146		11.235					ND	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157		12.029					ND	
129 1,3,5-Trichlorobenzene	180		12.215					ND	
130 1,2,4-Trichlorobenzene	180		12.851					ND	
131 Hexachlorobutadiene	225		12.994					ND	
132 Naphthalene	128		13.123					ND	
133 n-Nonyl Aldehyde	57		13.340					ND	
134 1,2,3-Trichlorobenzene	180		13.344					ND	
135 Pentachloroethane TIC	1		0.000					ND	
137 1,2-dichloro-4-(trifluoromethyl)	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
141 4-Chlorobenzotrifluoride	1		0.000				ND		
143 Benzene, 1-bromo-3-fluoro-	1		0.000				ND		
146 t-Amyl alcohol	1		0.000				ND		
148 1-Bromo-2-chloroethane	1		0.000				ND		
147 n-Nonane TIC	1		0.000				ND		
140 4-Bromofluorobenzene	95		0.000				ND		
138 1,4-Dibromobenzene	1		0.000				ND		
144 1-Chlorohexane TIC	1		0.000				ND		
136 1-Chloro-1-fluoroethane TIC	1		0.000				ND		
145 Ethyl acrylate	55		0.000				ND		
139 1,3-Dibromobenzene	1		0.000				ND		
142 Benzene, 1-bromo-4-ethyl-	1		0.000				ND		
S 149 1,2-Dichloroethene, Total (URS)	96		2.000				ND		7
S 150 1,2-Dichloroethene, Total	1		0.000				ND		7
S 151 Trihalomethanes, Total	1		0.000				ND		7
S 152 Total BTEX	1		0.000				ND		7
S 153 Xylenes, Total (URS)	1		0.000				ND		7
S 154 TAH	1				0			0	
S 155 Xylenes, Total	106		0.000				ND		7
S 156 1,3-Dichloropropene, Total	1		0.000				ND		7

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00018 Amount Added: 5.00 Units: uL Run Reagent

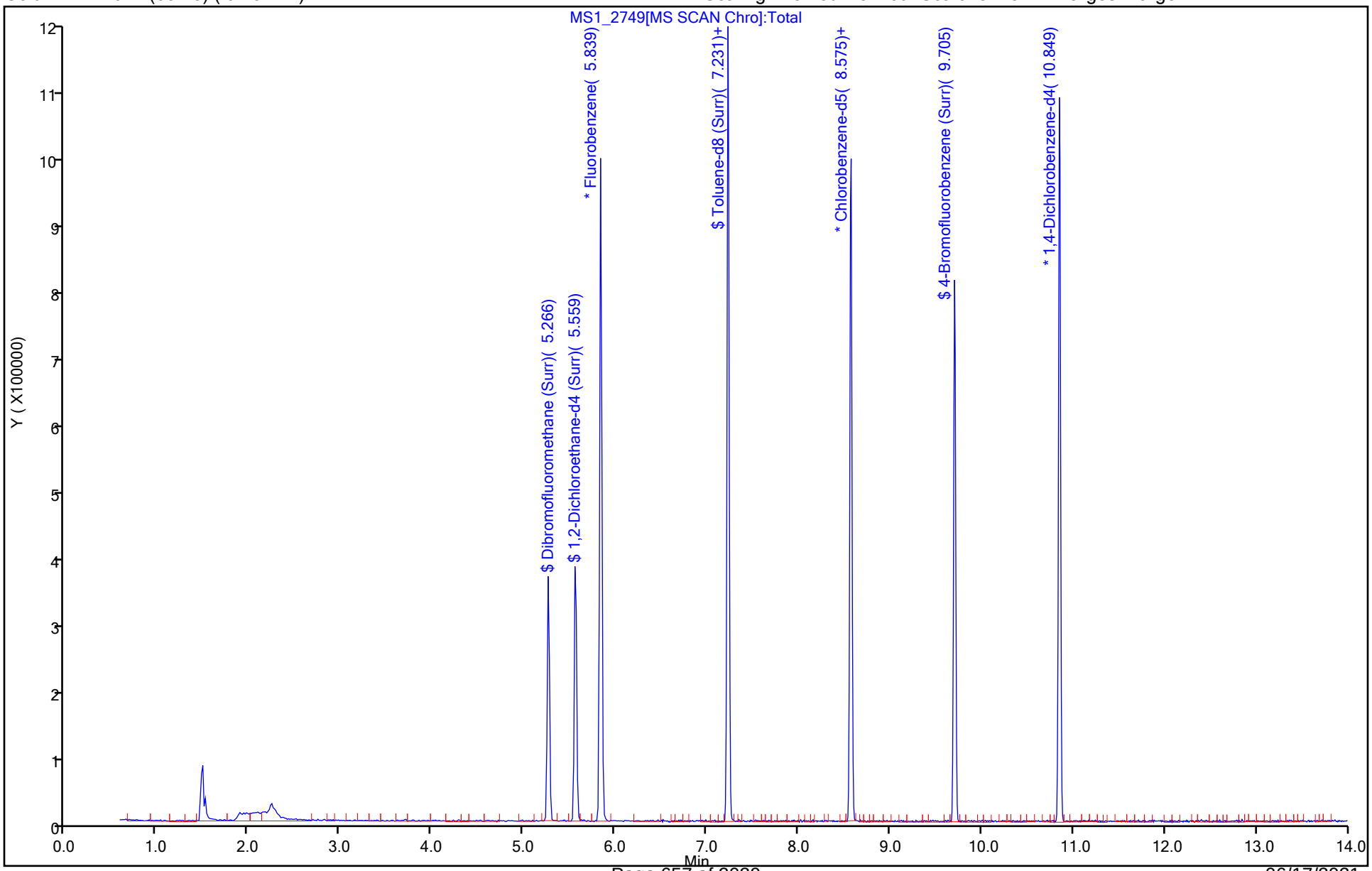
Report Date: 07-Jun-2021 09:28:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2749.D

Injection Date:	05-Jun-2021 11:07:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2749.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Jun-2021 11:07:30 ALS Bottle#: 6 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:28:19 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 05-Jun-2021 11:27:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.2	100.40
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.5	98.92
$ 7 Toluene-d8 (Surr)	50.0	49.6	99.17
$ 8 4-Bromofluorobenzene (Surr)	50.0	51.1	102.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538703/4

Matrix: Water Lab File ID: MS1_2746.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 10:03

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.: 538703 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	23.7		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	25.1		1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	28.8		3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	23.8		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	25.9		1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	26.1		1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	23.6		1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	24.7		1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	23.8		5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	25.3		1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	25.3		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	26.6		1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	25.8		1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	24.6		1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	86.5		6.0	4.0	2.0
591-78-6	2-Hexanone	92.0		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	94.1		5.0	3.2	0.98
67-64-1	Acetone	86.4		10	6.4	1.9
71-43-2	Benzene	25.8		1.0	0.40	0.16
74-97-5	Bromochloromethane	24.6		1.0	0.20	0.10
75-27-4	Bromodichloromethane	23.4		1.0	0.40	0.17
75-25-2	Bromoform	24.0		1.0	1.0	0.46
74-83-9	Bromomethane	26.8		2.0	0.80	0.21
75-15-0	Carbon disulfide	27.3		2.0	0.80	0.17
56-23-5	Carbon tetrachloride	25.7		2.0	0.40	0.19
108-90-7	Chlorobenzene	24.5		1.0	0.40	0.17
75-00-3	Chloroethane	26.3		2.0	1.6	0.41
67-66-3	Chloroform	24.6		1.0	0.40	0.16
74-87-3	Chloromethane	22.2		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	24.0		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	26.2		1.0	0.40	0.16
110-82-7	Cyclohexane	25.5		2.0	0.80	0.28
124-48-1	Dibromochloromethane	24.8		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	23.6		2.0	0.80	0.31
100-41-4	Ethylbenzene	24.8		1.0	0.40	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538703/4

Matrix: Water Lab File ID: MS1_2746.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 10:03

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.: 538703 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	23.2		1.0	0.40	0.18
98-82-8	Isopropylbenzene	25.6		1.0	0.40	0.19
79-20-9	Methyl acetate	46.3		5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	25.1		5.0	0.80	0.25
108-87-2	Methylcyclohexane	24.2		2.0	0.40	0.10
75-09-2	Methylene Chloride	25.4		5.0	2.0	0.94
100-42-5	Styrene	25.2		1.0	0.80	0.36
127-18-4	Tetrachloroethene	26.0		1.0	0.40	0.20
108-88-3	Toluene	24.9		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	23.8		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	25.5		1.0	0.40	0.19
79-01-6	Trichloroethene	23.2		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	25.1		2.0	0.80	0.29
75-01-4	Vinyl chloride	24.9		1.5	0.20	0.10
1330-20-7	Xylenes, Total	52.4		1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		81-118
460-00-4	4-Bromofluorobenzene (Surr)	102		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	101		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2746.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Jun-2021 10:03:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:28:19 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 08:40:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	763066	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	159955	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	249112	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	90	201665	50.0	49.9	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	99	265265	50.0	49.0	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	699023	50.0	50.4	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	274603	50.0	50.8	
11 Dichlorodifluoromethane	85	1.705	1.691	0.014	98	80911	25.0	23.6	
12 Chloromethane	50	1.914	1.900	0.014	99	73530	25.0	22.2	
13 Vinyl chloride	62	1.998	1.998	0.000	97	66685	25.0	24.9	
15 Bromomethane	94	2.347	2.347	0.000	93	55249	25.0	26.8	
16 Chloroethane	64	2.473	2.473	0.000	98	54186	25.0	26.3	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	100	133313	25.0	25.5	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	110569	25.0	25.1	
20 Ethyl ether	59	3.003	3.003	0.000	94	54964	25.0	25.6	
22 Acrolein	56	3.143	3.143	0.000	99	117876	246.9	281.1	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	94	57406	25.0	26.1	
24 112TCTFE	151	3.255	3.255	0.000	94	41884	25.0	28.8	
25 Acetone	43	3.269	3.269	0.000	97	78343	100.0	86.4	
26 Iodomethane	142	3.394	3.394	0.000	99	78310	25.0	23.9	
28 Carbon disulfide	76	3.450	3.450	0.000	99	201987	25.0	27.3	
30 Methyl acetate	43	3.562	3.562	0.000	98	96595	50.0	46.3	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	88	125585	25.0	28.3	
32 Methylene Chloride	84	3.716	3.702	0.014	97	69891	25.0	25.4	
33 2-Methyl-2-propanol	59	3.786	3.785	0.001	99	63129	250.0	237.3	
34 Acrylonitrile	53	3.911	3.911	0.000	98	253183	250.0	240.0	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	195085	25.0	25.1	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	92	63730	25.0	23.8	
37 Hexane	57	4.204	4.204	0.000	95	97010	25.0	29.0	
39 Vinyl acetate	43	4.344	4.330	0.014	98	304162	50.0	50.8	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	97	133839	25.0	25.9	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	99	114091	100.0	86.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
49 2,2-Dichloropropane	77	4.847	4.847	0.000	88	125636	25.0	27.5	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	91	70304	25.0	24.0	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	98	109999	600.0	509.7	
54 Tetrahydrofuran	42	5.056	5.056	0.000	86	39246	50.0	42.1	
53 Chlorobromomethane	128	5.056	5.056	0.000	95	32404	25.0	24.6	
55 Chloroform	83	5.126	5.126	0.000	98	132009	25.0	24.6	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	111799	25.0	23.7	
57 Cyclohexane	56	5.350	5.350	0.000	94	122066	25.0	25.5	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	89	99129	25.0	26.0	
59 Carbon tetrachloride	117	5.420	5.420	0.000	84	89171	25.0	25.7	
60 Isobutyl alcohol	41	5.461	5.461	0.000	92	50122	625.0	526.9	
63 Benzene	78	5.587	5.587	0.000	98	272337	25.0	25.8	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	97	112625	25.0	25.3	
66 n-Heptane	43	5.825	5.825	0.000	94	81762	25.0	26.1	
68 Trichloroethene	95	6.160	6.160	0.000	95	68682	25.0	23.2	
69 2-Pentanone	43	6.271	6.271	0.000	98	148530	80.0	72.5	
70 Methylcyclohexane	55	6.355	6.369	-0.014	94	90001	25.0	24.2	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	91	76473	25.0	26.6	
73 1,4-Dioxane	88	6.425	6.425	0.000	97	14552	500.0	457.5	
74 Dibromomethane	93	6.453	6.453	0.000	88	44832	25.0	24.9	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	92248	25.0	23.4	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	43128	25.0	24.6	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	113193	25.0	26.2	
79 4-Methyl-2-pentanone (MIBK)	43	7.102	7.102	0.000	99	223613	100.0	94.1	
82 Toluene	91	7.295	7.295	0.000	96	262349	25.0	24.9	
84 trans-1,3-Dichloropropene	75	7.489	7.488	0.000	98	107511	25.0	25.5	
85 Ethyl methacrylate	69	7.517	7.517	0.000	91	80972	25.0	25.4	
87 1,1,2-Trichloroethane	97	7.674	7.674	0.000	95	52827	25.0	23.8	
89 Tetrachloroethene	164	7.767	7.767	0.000	89	43104	25.0	26.0	
90 1,3-Dichloropropane	76	7.825	7.825	0.001	93	98807	25.0	24.4	
91 2-Hexanone	43	7.853	7.853	0.000	99	154808	100.0	92.0	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	59335	25.0	24.8	
96 Ethylene Dibromide	107	8.153	8.153	0.000	98	53468	25.0	23.2	
98 1-Chlorohexane	91	8.568	8.568	0.000	93	67571	20.0	19.7	
99 Chlorobenzene	112	8.604	8.604	0.000	91	160256	25.0	24.5	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	57917	25.0	25.1	
101 Ethylbenzene	106	8.690	8.690	0.000	99	86200	25.0	24.8	
102 m-Xylene & p-Xylene	106	8.811	8.804	0.007	99	110020	25.0	25.2	
103 o-Xylene	106	9.176	9.176	0.000	98	110929	25.0	27.2	
104 Styrene	104	9.197	9.197	0.000	95	188097	25.0	25.2	
106 Bromoform	173	9.383	9.383	0.000	88	37163	25.0	24.0	
107 Isopropylbenzene	105	9.526	9.533	-0.007	98	279162	25.0	25.6	
109 Cyclohexanone	55	9.626	9.626	0.000	95	93731	1000.0	523.0	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	95	76443	25.0	25.1	
111 Bromobenzene	156	9.855	9.855	0.000	98	63532	25.0	25.7	
112 trans-1,4-Dichloro-2-butene	53	9.862	9.862	0.000	79	28592	25.0	26.3	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	90	19371	25.0	22.9	
114 N-Propylbenzene	120	9.941	9.941	0.000	99	76985	25.0	25.4	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	64055	25.0	25.9	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	247030	25.0	25.4	
117 4-Chlorotoluene	126	10.156	10.155	0.001	100	68262	25.0	25.0	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	196634	25.0	24.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 1,2,4-Trimethylbenzene	105	10.484	10.484	0.000	99	250677	25.0	25.1	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	58778	25.0	25.6	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	124492	25.0	25.8	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	97	251577	25.0	25.4	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	92	124842	25.0	24.6	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	238165	25.0	25.0	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	91	115192	25.0	25.3	
128 1,2-Dibromo-3-Chloropropane	157	12.022	12.029	-0.007	75	14982	25.0	23.8	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	73391	25.0	24.7	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	91	26469	25.0	25.9	
132 Naphthalene	128	13.123	13.123	0.000	98	214215	25.0	24.2	
134 1,2,3-Trichlorobenzene	180	13.345	13.344	0.001	92	64079	25.0	23.6	
S 149 1,2-Dichloroethene, Total (URS)	96				0		50.0	47.8	
S 150 1,2-Dichloroethene, Total	1				0		50.0	47.8	
S 151 Trihalomethanes, Total	1				0		100.0	96.9	
S 153 Xylenes, Total (URS)	1				0		50.0	52.3	
S 155 Xylenes, Total	106				0		50.0	52.3	
S 156 1,3-Dichloropropene, Total	1				0		50.0	51.7	

QC Flag Legend

Processing Flags

Reagents:

Acrolein_B_00005	Amount Added:	12.50	Units: uL	
MV-MegaMain B_00047	Amount Added:	12.50	Units: uL	
MV-Gas B_00091	Amount Added:	5.00	Units: uL	
mv-IS_SS_00018	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 07-Jun-2021 09:28:21 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2746.D

Injection Date: 05-Jun-2021 10:03:30 Instrument ID: VMS_MS1 Operator ID: SEIFERTJ

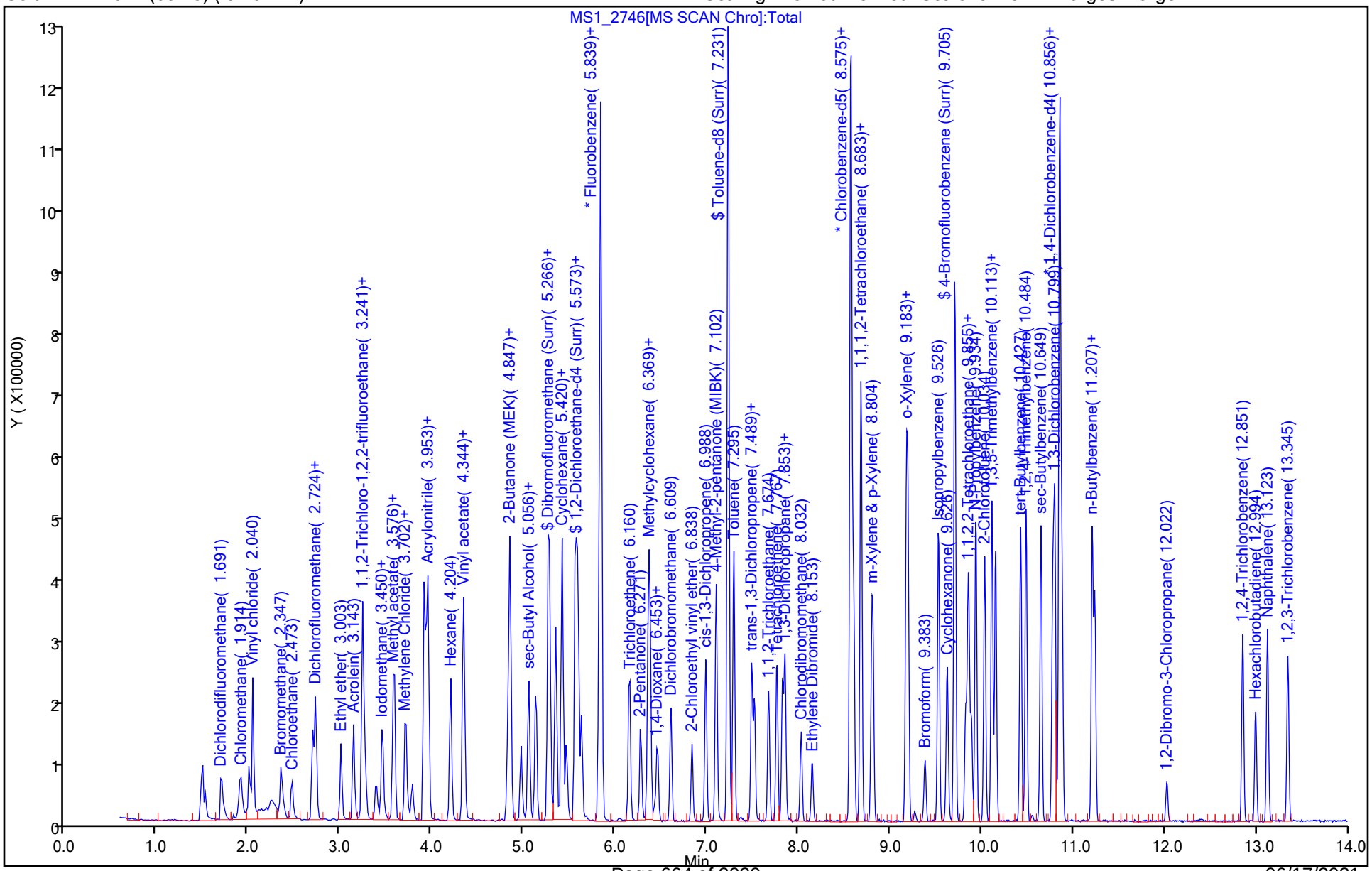
Lims ID: LCS Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2746.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Jun-2021 10:03:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:28:19 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 08:40:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.9	99.71
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.0	97.91
$ 7 Toluene-d8 (Surr)	50.0	50.4	100.89
$ 8 4-Bromofluorobenzene (Surr)	50.0	50.8	101.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-538703/5

Matrix: Water Lab File ID: MS1_2747.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 10:25

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.: 538703 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	23.5		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	24.5		1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	29.0		3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	24.4		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	26.3		1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	27.0		1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	25.1		1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	24.8		1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	22.1		5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	26.0		1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	25.0		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	26.3		1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	26.0		1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	25.5		1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	79.5		6.0	4.0	2.0
591-78-6	2-Hexanone	88.9		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	93.1		5.0	3.2	0.98
67-64-1	Acetone	81.2		10	6.4	1.9
71-43-2	Benzene	26.2		1.0	0.40	0.16
74-97-5	Bromochloromethane	24.1		1.0	0.20	0.10
75-27-4	Bromodichloromethane	23.6		1.0	0.40	0.17
75-25-2	Bromoform	22.8		1.0	1.0	0.46
74-83-9	Bromomethane	26.2		2.0	0.80	0.21
75-15-0	Carbon disulfide	27.6		2.0	0.80	0.17
56-23-5	Carbon tetrachloride	27.2		2.0	0.40	0.19
108-90-7	Chlorobenzene	25.5		1.0	0.40	0.17
75-00-3	Chloroethane	26.6		2.0	1.6	0.41
67-66-3	Chloroform	24.5		1.0	0.40	0.16
74-87-3	Chloromethane	21.9		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	24.6		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	26.4		1.0	0.40	0.16
110-82-7	Cyclohexane	27.2		2.0	0.80	0.28
124-48-1	Dibromochloromethane	25.1		1.0	0.40	0.17
75-71-8	Dichlorodifluoromethane	24.4		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.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-538703/5

Matrix: Water Lab File ID: MS1_2747.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2021 10:25

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.: 538703 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
106-93-4	Ethylene Dibromide	23.7		1.0	0.40	0.18
98-82-8	Isopropylbenzene	25.9		1.0	0.40	0.19
79-20-9	Methyl acetate	43.4		5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	24.1		5.0	0.80	0.25
108-87-2	Methylcyclohexane	27.0		2.0	0.40	0.10
75-09-2	Methylene Chloride	25.4		5.0	2.0	0.94
100-42-5	Styrene	25.2		1.0	0.80	0.36
127-18-4	Tetrachloroethene	26.0		1.0	0.40	0.20
108-88-3	Toluene	24.9		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	24.0		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	26.1		1.0	0.40	0.19
79-01-6	Trichloroethene	24.6		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	26.3		2.0	0.80	0.29
75-01-4	Vinyl chloride	26.7		1.5	0.20	0.10
1330-20-7	Xylenes, Total	51.9		1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		81-118
460-00-4	4-Bromofluorobenzene (Surr)	99		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2747.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 05-Jun-2021 10:25:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:28:19 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 08:43:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.839	5.839	0.000	97	755552	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.575	8.575	0.000	91	158988	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.856	10.856	0.000	98	249404	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.266	5.266	0.000	91	200280	50.0	50.0	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.559	5.559	0.000	100	263450	50.0	49.1	
$ 7 Toluene-d8 (Surr)	98	7.231	7.231	0.000	96	690893	50.0	50.2	
$ 8 4-Bromofluorobenzene (Surr)	95	9.705	9.705	0.000	80	267296	50.0	49.4	
11 Dichlorodifluoromethane	85	1.691	1.691	0.000	98	82543	25.0	24.4	
12 Chloromethane	50	1.900	1.900	0.000	99	71944	25.0	21.9	
13 Vinyl chloride	62	1.998	1.998	0.000	99	70750	25.0	26.7	
15 Bromomethane	94	2.347	2.347	0.000	95	53432	25.0	26.2	
16 Chloroethane	64	2.473	2.473	0.000	98	54322	25.0	26.6	
17 Dichlorofluoromethane	67	2.696	2.696	0.000	99	134653	25.0	26.0	
18 Trichlorofluoromethane	101	2.724	2.724	0.000	98	114708	25.0	26.3	
20 Ethyl ether	59	3.004	3.003	0.001	93	56458	25.0	26.5	
22 Acrolein	56	3.143	3.143	0.000	99	104784	246.9	251.6	
23 1,1-Dichloroethene	96	3.241	3.241	0.000	94	58995	25.0	27.0	
24 112TCTFE	151	3.255	3.255	0.000	97	41807	25.0	29.0	
25 Acetone	43	3.269	3.269	0.000	98	73206	100.0	81.2	
26 Iodomethane	142	3.395	3.394	0.001	99	84960	25.0	26.1	
28 Carbon disulfide	76	3.450	3.450	0.000	99	202188	25.0	27.6	
30 Methyl acetate	43	3.576	3.562	0.014	98	89653	50.0	43.4	
31 3-Chloro-1-propene	41	3.590	3.590	0.000	87	120907	25.0	27.5	
32 Methylene Chloride	84	3.716	3.702	0.014	98	69007	25.0	25.4	
33 2-Methyl-2-propanol	59	3.786	3.785	0.001	99	58896	250.0	223.6	
34 Acrylonitrile	53	3.911	3.911	0.000	98	242371	250.0	232.0	
35 Methyl tert-butyl ether	73	3.939	3.939	0.000	97	185902	25.0	24.1	
36 trans-1,2-Dichloroethene	96	3.953	3.953	0.000	93	63488	25.0	24.0	
37 Hexane	57	4.205	4.204	0.001	94	95835	25.0	28.8	
39 Vinyl acetate	43	4.344	4.330	0.014	98	296853	50.0	50.1	
40 1,1-Dichloroethane	63	4.344	4.344	0.000	97	134651	25.0	26.3	
46 2-Butanone (MEK)	43	4.819	4.819	0.000	100	104085	100.0	79.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
49 2,2-Dichloropropane	77	4.847	4.847	0.000	89	124672	25.0	27.5	
48 cis-1,2-Dichloroethene	96	4.847	4.847	0.000	90	71530	25.0	24.6	
51 sec-Butyl Alcohol	45	4.973	4.973	0.000	99	103753	600.0	486.0	
54 Tetrahydrofuran	42	5.057	5.056	0.001	83	38753	50.0	41.9	
53 Chlorobromomethane	128	5.057	5.056	0.001	96	31473	25.0	24.1	
55 Chloroform	83	5.126	5.126	0.000	99	130324	25.0	24.5	
56 1,1,1-Trichloroethane	97	5.280	5.280	0.000	96	109935	25.0	23.5	
57 Cyclohexane	56	5.350	5.350	0.000	94	128582	25.0	27.2	
58 1,1-Dichloropropene	75	5.420	5.420	0.000	89	100955	25.0	26.7	
59 Carbon tetrachloride	117	5.420	5.420	0.000	86	93471	25.0	27.2	
60 Isobutyl alcohol	41	5.462	5.461	0.001	94	46526	625.0	493.9	
63 Benzene	78	5.587	5.587	0.000	99	274431	25.0	26.2	
64 1,2-Dichloroethane	62	5.629	5.629	0.000	98	110075	25.0	25.0	
66 n-Heptane	43	5.825	5.825	0.000	92	84301	25.0	27.2	
68 Trichloroethene	95	6.160	6.160	0.000	94	72611	25.0	24.6	
69 2-Pentanone	43	6.272	6.271	0.001	98	135918	80.0	67.0	
70 Methylcyclohexane	55	6.355	6.369	-0.014	95	99403	25.0	27.0	
71 1,2-Dichloropropane	63	6.383	6.383	0.000	90	74695	25.0	26.3	
73 1,4-Dioxane	88	6.425	6.425	0.000	96	14474	500.0	459.5	
74 Dibromomethane	93	6.453	6.453	0.000	88	44444	25.0	24.9	
75 Dichlorobromomethane	83	6.609	6.609	0.000	97	92129	25.0	23.6	
77 2-Chloroethyl vinyl ether	63	6.838	6.838	0.000	93	41973	25.0	24.1	
78 cis-1,3-Dichloropropene	75	6.988	6.988	0.000	91	113320	25.0	26.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.103	7.102	0.001	98	219117	100.0	93.1	
82 Toluene	91	7.296	7.295	0.001	96	259998	25.0	24.9	
84 trans-1,3-Dichloropropene	75	7.489	7.488	0.001	99	108890	25.0	26.1	
85 Ethyl methacrylate	69	7.517	7.517	0.000	90	77856	25.0	24.6	
87 1,1,2-Trichloroethane	97	7.675	7.674	0.001	95	53553	25.0	24.4	
89 Tetrachloroethene	164	7.768	7.767	0.001	84	42719	25.0	26.0	
90 1,3-Dichloropropane	76	7.825	7.825	0.001	93	99708	25.0	24.7	
91 2-Hexanone	43	7.853	7.853	0.000	98	148661	100.0	88.9	
95 Chlorodibromomethane	129	8.032	8.032	0.000	89	59526	25.0	25.1	
96 Ethylene Dibromide	107	8.146	8.153	-0.007	96	54262	25.0	23.7	
98 1-Chlorohexane	91	8.561	8.568	-0.007	91	70728	20.0	20.8	
99 Chlorobenzene	112	8.604	8.604	0.000	90	165747	25.0	25.5	
100 1,1,1,2-Tetrachloroethane	131	8.683	8.683	0.000	92	60057	25.0	26.2	
101 Ethylbenzene	106	8.683	8.690	-0.007	99	90608	25.0	26.3	
102 m-Xylene & p-Xylene	106	8.811	8.804	0.007	98	110222	25.0	25.4	
103 o-Xylene	106	9.176	9.176	0.000	99	107584	25.0	26.5	
104 Styrene	104	9.198	9.197	0.001	93	186833	25.0	25.2	
106 Bromoform	173	9.383	9.383	0.000	88	34987	25.0	22.8	
107 Isopropylbenzene	105	9.526	9.533	-0.007	98	282731	25.0	25.9	
109 Cyclohexanone	55	9.619	9.626	-0.007	95	95419	1000.0	535.7	
110 1,1,2,2-Tetrachloroethane	83	9.827	9.827	0.000	96	74595	25.0	24.5	
111 Bromobenzene	156	9.855	9.855	0.000	97	64502	25.0	26.0	
112 trans-1,4-Dichloro-2-butene	53	9.863	9.862	0.001	86	27435	25.0	25.2	
113 1,2,3-Trichloropropane	110	9.891	9.891	0.000	88	19716	25.0	23.3	
114 N-Propylbenzene	120	9.934	9.941	-0.007	99	77154	25.0	25.5	
115 2-Chlorotoluene	126	10.034	10.034	0.000	94	65002	25.0	26.2	
116 1,3,5-Trimethylbenzene	105	10.113	10.113	0.000	94	247643	25.0	25.4	
117 4-Chlorotoluene	126	10.156	10.155	0.001	99	71453	25.0	26.2	
118 tert-Butylbenzene	119	10.427	10.427	0.000	92	202020	25.0	25.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 1,2,4-Trimethylbenzene	105	10.485	10.484	0.001	100	255536	25.0	25.6	
120 sec-Butylbenzene	134	10.649	10.649	0.000	96	57102	25.0	24.9	
121 1,3-Dichlorobenzene	146	10.778	10.778	0.000	94	125619	25.0	26.0	
122 4-Isopropyltoluene	119	10.799	10.799	0.000	96	249941	25.0	25.2	
123 1,4-Dichlorobenzene	146	10.878	10.878	0.000	92	129681	25.0	25.5	
125 n-Butylbenzene	91	11.207	11.207	0.000	98	243528	25.0	25.5	
127 1,2-Dichlorobenzene	146	11.235	11.235	0.000	93	118187	25.0	26.0	
128 1,2-Dibromo-3-Chloropropane	157	12.029	12.029	0.000	75	13895	25.0	22.1	
130 1,2,4-Trichlorobenzene	180	12.851	12.851	0.000	92	73782	25.0	24.8	
131 Hexachlorobutadiene	225	12.994	12.994	0.000	89	27124	25.0	26.5	
132 Naphthalene	128	13.123	13.123	0.000	98	213625	25.0	24.2	
134 1,2,3-Trichlorobenzene	180	13.345	13.344	0.001	92	68277	25.0	25.1	
S 149 1,2-Dichloroethene, Total (URS)	96				0		50.0	48.6	
S 150 1,2-Dichloroethene, Total	1				0		50.0	48.6	
S 151 Trihalomethanes, Total	1				0		100.0	96.0	
S 153 Xylenes, Total (URS)	1				0		50.0	51.9	
S 155 Xylenes, Total	106				0		50.0	51.9	
S 156 1,3-Dichloropropene, Total	1				0		50.0	52.5	

QC Flag Legend

Processing Flags

Reagents:

MV-Gas B_00091	Amount Added:	5.00	Units: uL	
Acrolein_B_00005	Amount Added:	12.50	Units: uL	
MV-MegaMain B_00047	Amount Added:	12.50	Units: uL	
mv-IS_SS_00018	Amount Added:	5.00	Units: uL	Run Reagent

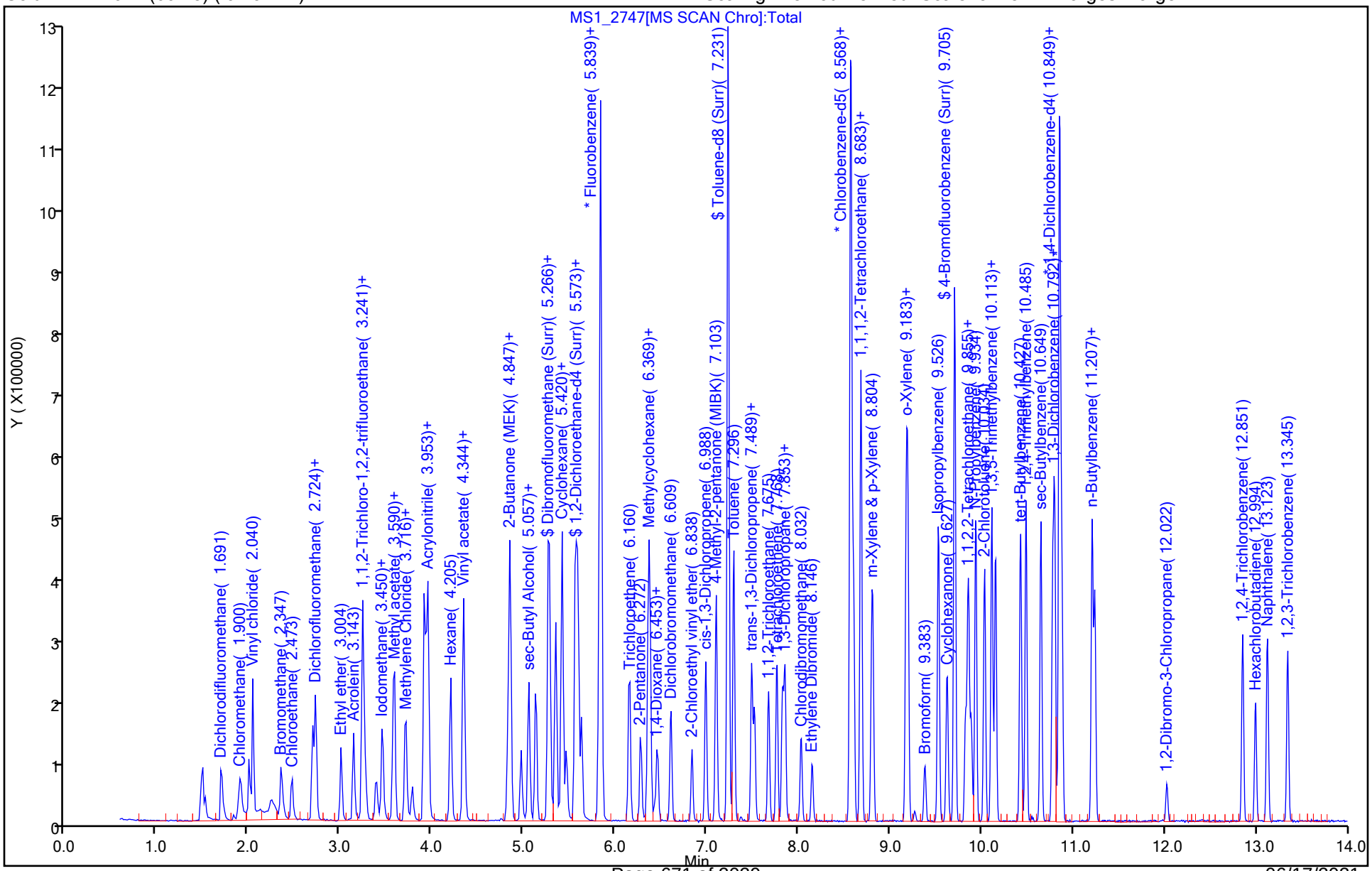
Report Date: 07-Jun-2021 09:28:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2747.D

Injection Date:	05-Jun-2021 10:25:30	Instrument ID:	VMS_MS1	Operator ID:	SEIFERTJ
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\MS1_2747.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 05-Jun-2021 10:25:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: SEIFERTJ Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 07-Jun-2021 09:28:19 Calib Date: 04-Jun-2021 16:41:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b\MS1_2730.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1668

First Level Reviewer: seifertj Date: 07-Jun-2021 08:43:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.0	100.01
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.1	98.20
$ 7 Toluene-d8 (Surr)	50.0	50.2	100.32
$ 8 4-Bromofluorobenzene (Surr)	50.0	49.4	98.77

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VMS_MS1 Start Date: 06/04/2021 09:51

Analysis Batch Number: 538548 End Date: 06/04/2021 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-538548/1		06/04/2021 09:51	1	MS1_2711.D	DB-624 (60.25) 0.25(mm)
STD010 280-538548/24 IC		06/04/2021 10:18	1	MS1_2712.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 10:18	1		DB-624 (60.25) 0.25(mm)
STD020 280-538548/25 IC		06/04/2021 10:39	1	MS1_2713.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 10:39	1		DB-624 (60.25) 0.25(mm)
STD050 280-538548/26 IC		06/04/2021 11:00	1	MS1_2714.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 11:00	1		DB-624 (60.25) 0.25(mm)
STD10 280-538548/27 IC		06/04/2021 11:21	1	MS1_2715.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 11:21	1		DB-624 (60.25) 0.25(mm)
STD50 280-538548/28 IC		06/04/2021 11:42	1	MS1_2716.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 11:42	1		DB-624 (60.25) 0.25(mm)
STD75 280-538548/29 IC		06/04/2021 12:04	1	MS1_2717.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 12:04	1		DB-624 (60.25) 0.25(mm)
STD100 280-538548/30 IC		06/04/2021 12:25	1	MS1_2718.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 12:25	1		DB-624 (60.25) 0.25(mm)
STD200 280-538548/31 IC		06/04/2021 12:47	1	MS1_2719.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 12:47	1		DB-624 (60.25) 0.25(mm)
ICV 280-538548/32		06/04/2021 13:29	1		DB-624 (60.25) 0.25(mm)
STD005 280-538548/14 IC		06/04/2021 13:50	1	MS1_2722.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 13:50	1		DB-624 (60.25) 0.25(mm)
STD010 280-538548/15 IC		06/04/2021 14:11	1	MS1_2723.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 14:11	1		DB-624 (60.25) 0.25(mm)
STD020 280-538548/16 IC		06/04/2021 14:33	1	MS1_2724.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 14:33	1		DB-624 (60.25) 0.25(mm)
STD10 280-538548/18 IC		06/04/2021 15:16	1	MS1_2726.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 15:16	1		DB-624 (60.25) 0.25(mm)
ICIS 280-538548/19		06/04/2021 15:37	1	MS1_2727.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 15:37	1		DB-624 (60.25) 0.25(mm)
STD75 280-538548/20 IC		06/04/2021 15:58	1	MS1_2728.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 15:58	1		DB-624 (60.25) 0.25(mm)
STD100 280-538548/21 IC		06/04/2021 16:20	1	MS1_2729.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 16:20	1		DB-624 (60.25) 0.25(mm)
STD200 280-538548/22 IC		06/04/2021 16:41	1	MS1_2730.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2021 16:41	1		DB-624 (60.25) 0.25(mm)
ICV 280-538548/23		06/04/2021 17:24	1	MS1_2732.D	DB-624 (60.25) 0.25(mm)
280-149476-A-14 MDLV		06/04/2021 17:45	1		DB-624 (60.25) 0.25(mm)
280-149476-A-14 MDLV		06/04/2021 18:06	1		DB-624 (60.25) 0.25(mm)
280-149476-A-14 MDLV		06/04/2021 18:27	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VMS_MS1 Start Date: 06/04/2021 09:51

Analysis Batch Number: 538548 End Date: 06/04/2021 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-149476-A-14 MDLV		06/04/2021 18:49	1		DB-624 (60.25) 0.25(mm)
280-149476-A-14 MDLV		06/04/2021 19:10	1		DB-624 (60.25) 0.25(mm)
280-149476-A-14 MDLV		06/04/2021 19:31	1		DB-624 (60.25) 0.25(mm)
280-149476-A-15 MDLV		06/04/2021 19:52	1		DB-624 (60.25) 0.25(mm)
280-149476-A-15 MDLV		06/04/2021 20:14	1		DB-624 (60.25) 0.25(mm)
280-149476-A-15 MDLV		06/04/2021 20:35	1		DB-624 (60.25) 0.25(mm)
280-149476-A-15 MDLV		06/04/2021 20:56	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VMS_MS1 Start Date: 06/05/2021 08:45

Analysis Batch Number: 538703 End Date: 06/05/2021 19:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-538703/1		06/05/2021 08:45	1	MS1_2743.D	DB-624 (60.25) 0.25(mm)
CCV 280-538703/2		06/05/2021 09:15	1	MS1_2744.D	DB-624 (60.25) 0.25(mm)
CCV 280-538703/3		06/05/2021 09:37	1		DB-624 (60.25) 0.25(mm)
LCS 280-538703/4		06/05/2021 10:03	1	MS1_2746.D	DB-624 (60.25) 0.25(mm)
LCSD 280-538703/5		06/05/2021 10:25	1	MS1_2747.D	DB-624 (60.25) 0.25(mm)
MB 280-538703/9		06/05/2021 11:07	1	MS1_2749.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 11:28	5		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 11:50	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 12:11	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 12:32	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 12:53	10		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 13:15	50		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 13:36	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 13:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 14:19	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 14:40	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 15:02	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 15:23	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 15:45	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 16:07	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 16:28	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 16:50	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 17:11	1		DB-624 (60.25) 0.25(mm)
280-149116-5	SHGW03-21A	06/05/2021 17:33	1	MS1_2767.D	DB-624 (60.25) 0.25(mm)
280-149116-6	SHGW02-21A	06/05/2021 17:54	1	MS1_2768.D	DB-624 (60.25) 0.25(mm)
280-149116-7	SHGW05-21A	06/05/2021 18:15	1	MS1_2769.D	DB-624 (60.25) 0.25(mm)
280-149116-8	TB052621	06/05/2021 18:36	1	MS1_2770.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 18:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2021 19:19	1		DB-624 (60.25) 0.25(mm)
CCVC 280-538703/37		06/05/2021 19:40	1	MS1_2773.D	DB-624 (60.25) 0.25(mm)

Sequence Name: C:¥msdchem¥1¥sequence¥060521.s
Comment:
Operator: SEIFERTJ
Data Path: C:¥MSDCHEM¥1¥DATA¥060521¥
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Eurofins TestAmerica Denver
Instrument ID: MS1
SOP: DV-MS-0010 Rev. 2.7
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 0545-1440
TALs Batch: 538703

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

WL 102098
JL 6/7/21

Line					
1)	Sample	100	MS1_2743	BFB	BFB 0545
2)	Sample	1	MS1_2744	8260	CCV
3)	Sample	2	MS1_2745	8260	CCV
4)	Sample	3	MS1_2746	8260	LCS
5)	Sample	4	MS1_2747	8260	LCSD
6)	Sample	5	MS1_2748	8260	RINSE
7)	Sample	6	MS1_2749	8260	MB
8)	Sample	7	MS1_2750	8260	280-149011-b-2 5X pH LL
9)	Sample	8	MS1_2751	8260	280-149011-f-3 pH LL
10)	Sample	9	MS1_2752	8260	280-149012-b-2 pH LL
11)	Sample	10	MS1_2753	8260	280-149012-d-3 pH LL
12)	Sample	11	MS1_2754	8260	280-149012-c-4 10X pH LL
13)	Sample	12	MS1_2755	8260	280-149012-b-5 50X pH LL
14)	Sample	13	MS1_2756	8260	280-149012-e-6 pH LL
15)	Sample	14	MS1_2757	8260	280-149032-f-1 pH LL
16)	Sample	15	MS1_2758	8260	280-149032-h-2 pH LL
17)	Sample	16	MS1_2759	8260	280-149034-j-1 pH LL
18)	Sample	17	MS1_2760	8260	280-149034-i-2 pH LL
19)	Sample	18	MS1_2761	8260	280-149034-h-3 pH LL
20)	Sample	19	MS1_2762	8260	280-149034-h-4 pH LL
21)	Sample	20	MS1_2763	8260	280-149104-d-1 pH LL
22)	Sample	21	MS1_2764	8260	280-149104-c-2 pH LL
23)	Sample	22	MS1_2765	8260	280-149104-e-3 pH LL
24)	Sample	23	MS1_2766	8260	280-149104-a-4 PH LL
25)	Sample	24	MS1_2767	8260	280-149116-e-5 pH LL
26)	Sample	25	MS1_2768	8260	280-149116-c-6 pH LL
27)	Sample	26	MS1_2769	8260	280-149116-d-7 pH LL
28)	Sample	27	MS1_2770	8260	280-149116-a-8 PH LL
29)	Sample	28	MS1_2771	8260	280-149104-e-1 ms pH LL
30)	Sample	29	MS1_2772	8260	280-149104-e-1 msd PH LL
31)	Sample	30	MS1_2773	8260	CCVC 1440

DILL'd
JL 6/7/21

Last Modified: Sat Jun 05 14:46:53 2021 Page: 1

Eurofins Environment Testing America
Worklist Report

Worklist Name: 060521 Worklist Number: 102098
Instrument Name: VMS_MS1 Chrom Method: AQ_VMS1_8260
Purge Volume: 5.000 Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210605-102098.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00018 Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 BFB	BFB	1.000	voaWater	2.000	uL	mv-Cent BFB_00003		
2	# 2 CCV	CCV	1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
3	# 3 CCV	CCV	1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
4	# 4 LCS	LCS	1.000	voaWater	5.000	mL	Acrolein_B_00005 MV-MegaMain B_00047 MV-Gas B_00091		
5	# 5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Gas B_00091 Acrolein_B_00005 MV-MegaMain B_00047		
6	# 6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp B_00033		
7	# 7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp B_00033		
8	# 8 RINSE	Client	1.000	voaWater	5.000	mL			
9	# 9 MB	MB	1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client	1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client	1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client	1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client	1.000	voaWater	5.000	mL			
14	#14 280-149011-B-2	Client	5.000	voaWater	5.000	mL			
15	#15 280-149011-F-3	Client	1.000	voaWater	5.000	mL			
16	#16 280-149012-B-2	Client	1.000	voaWater	5.000	mL			
17	#17 280-149012-D-3	Client	1.000	voaWater	5.000	mL			
18	#18 280-149012-C-4	Client	10.00	voaWater	5.000	mL			
19	#19 280-149012-B-5	Client	50.00	voaWater	5.000	mL			
20	#20 280-149012-E-6	Client	1.000	voaWater	5.000	mL			
21	#21 280-149032-F-1	Client	1.000	voaWater	5.000	mL			
22	#22 280-149032-H-2	Client	1.000	voaWater	5.000	mL			
23	#23 280-149034-J-1	Client	1.000	voaWater	5.000	mL			
24	#24 280-149034-I-2	Client	1.000	voaWater	5.000	mL			
25	#25 280-149034-H-3	Client	1.000	voaWater	5.000	mL			
26	#26 280-149034-H-4	Client	1.000	voaWater	5.000	mL			
27	#27 280-149104-D-1	Client	1.000	voaWater	5.000	mL			
28	#28 280-149104-E-1 MS	MS	1.000	voaWater	5.000	mL	MV-Gas B_00091 MV-MegaMain B_00047 Acrolein_B_00005		
29	#29 280-149104-E-1 MSD	MSD	1.000	voaWater	5.000	mL	MV-Gas B_00091 MV-MegaMain B_00047 Acrolein_B_00005		
30	#30 280-149104-C-2	Client	1.000	voaWater	5.000	mL			
31	#31 280-149104-E-3	Client	1.000	voaWater	5.000	mL			
32	#32 280-149104-A-4	Client	1.000	voaWater	5.000	mL			
33	#33 280-149116-E-5	Client	1.000	voaWater	5.000	mL			
34	#34 280-149116-C-6	Client	1.000	voaWater	5.000	mL			
35	#35 280-149116-D-7	Client	1.000	voaWater	5.000	mL			
36	#36 280-149116-A-8	Client	1.000	voaWater	5.000	mL			
37	#37 CCVC	CCVC	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		

Sample Request Form: 68351

den_msvoa_totalbacklog Gabe 6/5/2021 2:07:42 PM Assigned to:Seifert, Judy L

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-149116-5	SHGW03-21A		8260B_DOD5	8260B_DOD5	06/09 23:59	06/12/21	PJM	NE	AA-2 & Marked as Disposed & 25 & VS-8	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-149116-6	SHGW02-21A		8260B_DOD5	8260B_DOD5	06/09 23:59	06/12/21	PJM	NE	AA-2 & VS-8 & 25	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-149116-7	SHGW05-21A		8260B_DOD5	8260B_DOD5	06/09 23:59	06/12/21	PJM	NE	AA-2 & 25 & VS-8	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										
280-149116-8	TB052621		8260B_DOD5	8260B_DOD5	06/09 23:59	06/12/21	PJM	NE	AA-2	Unconfirmed
M Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3										

Sample Request Form: 68349

den_msvoa_totalbacklog Gabe 6/5/2021 1:30:06 PM Assigned to:Seifert, Judy L

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-149104-1	KAFB-7001	4	8260B_DOD5	8260B_DOD5	06/09 23:59	06/14/21	PJM	NM	26 & AA-2 & Mtls-Use & VS-8	Unconfirmed
M Q5.3_See AECOM-NM/AZ PBR QAS on Outlook_DIL2_DF										
280-149104-1MS	KAFB-7001	4	8260B_DOD5	8260B_DOD5	06/09 23:59	06/14/21	PJM	NM	26 & Mtls-Use & VS-8 & AA-2	Unconfirmed
M Q5.3_See AECOM-NM/AZ PBR QAS on Outlook_DIL2_DF										
280-149104-1MSD	KAFB-7001	4	8260B_DOD5	8260B_DOD5	06/09 23:59	06/14/21	PJM	NM	Mtls-Use & VS-8 & 26 & AA-2	Unconfirmed
M Q5.3_See AECOM-NM/AZ PBR QAS on Outlook_DIL2_DF										
280-149104-2	KAFB-7001-FD	4	8260B_DOD5	8260B_DOD5	06/09 23:59	06/14/21	PJM	NM	AA-2 & VS-8 & 26 & Mtls-Use	Unconfirmed
M Q5.3_See AECOM-NM/AZ PBR QAS on Outlook_DIL2_DF										
280-149104-3	KAFB-7001-FB	4	8260B_DOD5	8260B_DOD5	06/09 23:59	06/14/21	PJM	NM	VS-8 & AA-2 & Mtls-Use & 26	Unconfirmed
M Q5.3_See AECOM-NM/AZ PBR QAS on Outlook_DIL2_DF										
280-149104-4	Tripblank-1	1	8260B_DOD5	8260B_DOD5	06/09 23:59	06/14/21	PJM	NM	AA-2	Unconfirmed
M Q5.3_See AECOM-NM/AZ PBR QAS on Outlook_DIL2_DF										

149114 1

Sample Request Form: 68347

den_msvoa_totalbacklog Gabe 6/5/2021 12:22:50 PM Assigned to:Seifert, Judy L

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-149032-1	SP-001-42	1x	8260B_DOD5	8260B_DOD5	06/08 23:59	06/11/21	SRT	KY	Mtls-Strge & Marked as Disposed & VS-11 & 3	Unconfirmed
M Q5.1										
280-149032-2	SP-179-42	1x	8260B_DOD5	8260B_DOD5	06/08 23:59	06/11/21	SRT	KY	Mtls-Strge & 3 & VS-11 & Marked as Disposed	Unconfirmed
M Q5.1										
280-149034-1	DZLTM-240521-09-GW-0507-01	1x	8260B_DOD5	8260B_DOD5	06/07 23:59	06/11/21	DRR	KS	Marked as Disposed & AA-2 & 11	Unconfirmed
280-149034-2	DZLTM-240521-09-GW-0507-11	1x	8260B_DOD5	8260B_DOD5	06/07 23:59	06/11/21	DRR	KS	Marked as Disposed & AA-2 & 11	Unconfirmed
280-149034-3	DZLTM-240521-09-GW-0303-01	1x	8260B_DOD5	8260B_DOD5	06/07 23:59	06/11/21	DRR	KS	11 & Marked as Disposed & AA-2	Unconfirmed
280-149034-4	DZLTM-250521-09-GW-2201-01	1x	8260B_DOD5	8260B_DOD5	06/08 23:59	06/11/21	DRR	KS	11 & AA-2 & Marked as Disposed	Unconfirmed

Sample Request Form: 68344

den_msvoa_totalbacklog Gabe 6/5/2021 10:16:38 AM Assigned to:Seifert, Judy L

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-149011-2	OU4-00034R	5x	8260B_DOD5	8260B_DOD5 35x	06/07 23:59	06/10/21	DRR	UT	VS-11	Unconfirmed
M DOD 5.3_ DIL3										
280-149011-3	OU4-00110R	1x	8260B_DOD5	8260B_DOD5	06/07 23:59	06/10/21	DRR	UT	VS-8 & VS-11 & 262 & Mtls-Use	Unconfirmed
M DOD 5.3_ DIL3										
280-149012-2	OU2-00055	1x	8260B_DOD5	8260B_DOD5	06/07 23:59	06/10/21	DRR	UT	VS-11	Unconfirmed
M DOD 5.3_ DIL3										
280-149012-3	OU2-00089	1x	8260B_DOD5	8260B_DOD5	06/07 23:59	06/10/21	DRR	UT	VS-8 & VS-11 & 262 & Mtls-Use	Unconfirmed
M DOD 5.3_ DIL3										
280-149012-4	OU2-00056	10x	8260B_DOD5	8260B_DOD5 58	06/07 23:59	06/10/21	DRR	UT	VS-11	Unconfirmed
M DOD 5.3_ DIL3										
280-149012-5	OU2-00060	50x	8260B_DOD5	8260B_DOD5 32	06/07 23:59	06/10/21	DRR	UT	VS-11	Unconfirmed
M DOD 5.3_ DIL3										
280-149012-6	OU2-00093	1x	8260B_DOD5	8260B_DOD5	06/07 23:59	06/10/21	DRR	UT	Mtls-Use & 262 & VS-11 & VS-8	Unconfirmed
M DOD 5.3_ DIL3										

Sequence Name: C:¥msdchem¥1¥sequence¥060421I.s
Comment:
Operator: SEIFERTJ
Data Path: C:¥MSDCHEM¥1¥DATA¥060421I¥
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Main / GAS / SS / Supp

Submitting TestAmerica Denver
Instrument ID: MS1
SOP: DV-MS-0010 Rev. 27
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 0951-2052
ALs Batch: 538548

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

WL 102067

Line			Sample Name/Misc Info		
1)	Sample	100	MS1_2711 BFB	BFB	0951
2)	Sample	1	MS1_2712 8260	STD010	
3)	Sample	2	MS1_2713 8260	STD020	
4)	Sample	3	MS1_2714 8260	STD050	
5)	Sample	4	MS1_2715 8260	STD10	
6)	Sample	5	MS1_2716 8260	STD50	
7)	Sample	6	MS1_2717 8260	STD75	
8)	Sample	7	MS1_2718 8260	STD100	
9)	Sample	8	MS1_2719 8260	STD200	
10)	Sample	9	MS1_2720 8260	BLK	
11)	Sample	10	MS1_2721 8260	ICV	
12)	Sample	11	MS1_2722 8260	STD005	
13)	Sample	12	MS1_2723 8260	STD010	
14)	Sample	13	MS1_2724 8260	STD020	
15)	Sample	14	MS1_2725 8260	STD050	DNR Removed From Calibration JK 6/5/21
16)	Sample	15	MS1_2726 8260	STD10	
17)	Sample	16	MS1_2727 8260	ICIS	
18)	Sample	17	MS1_2728 8260	STD75	
19)	Sample	18	MS1_2729 8260	STD100	
20)	Sample	19	MS1_2730 8260	STD200	
21)	Sample	20	MS1_2731 8260	BLK	
22)	Sample	21	MS1_2732 8260	ICV	
23)	Sample	22	MS1_2733 8260	MDLV 025	
24)	Sample	23	MS1_2734 8260	MDLV 005	
25)	Sample	24	MS1_2735 8260	MDLV 01	
26)	Sample	25	MS1_2736 8260	MDLV 02	
27)	Sample	26	MS1_2737 8260	MDLV 03	
28)	Sample	27	MS1_2738 8260	MDLV 05	
29)	Sample	28	MS1_2739 8260	MDLV 01	
30)	Sample	29	MS1_2740 8260	MDLV 02	
31)	Sample	30	MS1_2741 8260	MDLV 03	
32)	Sample	31	MS1_2742 8260	MDLV 05	2052

Supp Calib: 54225
ICV: ~~23~~ 32 JK

Main / GAS 54226
ICIS: 19 ICV: 23

1st JK 6/5/21

All < 20% D Except
Cyclohexane -43.7%
Ethanol +35.1%

Last Modified: Fri Jun 04 14:05:55 2021 Page: 1

Eurofins Environment Testing America
Worklist Report

Worklist Name: 060421I
Worklist Number: 102067
Instrument Name: VMS_MS1
Chrom Method: AQ_VMS1_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20210604-102067.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00018
Amount Added: 5.000, Units: uL

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	#1 BFB	BFB		1.000	voaWater	2.000	uL	mv-Cent BFB_00003		
2	#2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
3	#3 CCV	CCV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00051		
4	#4 LCS	LCS		1.000	voaWater	5.000	mL	Acrolein_B_00005 MV-MegaMain B_00047 MV-Gas B_00091		
5	#5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Gas B_00091 Acrolein_B_00005 MV-MegaMain B_00047		
6	#6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp B_00033		
7	#7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp B_00033		
8	#8 RINSE	Client		1.000	voaWater	5.000	mL			
9	#9 MB	MB		1.000	voaWater	5.000	mL			
10	#10 280-141475-A-1	Client		1.000	voaWater	5.000	mL			
11	#11 280-141475-A-2	Client		1.000	voaWater	5.000	mL			
12	#12 280-141475-A-3	Client		1.000	voaWater	5.000	mL			
13	#13 280-141475-A-7	Client		1.000	voaWater	5.000	mL			
14	#14 STD005	IC	1	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
15	#15 STD010	IC	2	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
16	#16 STD020	IC	3	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
18	#18 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
19	#19 ICIS	ICIS	5	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
20	#20 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
21	#21 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
22	#22 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Gas A_00089 MV-MegaMainA_00050		
23	#23 ICV	ICV		1.000	voaWater	5.000	mL	MV-Gas B_00091 MV-MegaMain B_00047 Acrolein_B_00005		
24	#24 STD010	IC	1	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
25	#25 STD020	IC	2	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
26	#26 STD050	IC	3	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
27	#27 STD10	IC	4	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
28	#28 STD50	IC	5	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
29	#29 STD75	IC	6	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
30	#30 STD100	IC	7	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
31	#31 STD200	IC	8	1.000	voaWater	5.000	mL	MV-Supp A_00051 mv-Cent IS_00006		
32	#32 ICV	ICV		1.000	voaWater	5.000	mL	MV-Supp B_00033 mv-Cent IS_00006		
33	#33 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
34	#34 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		
35	#35 MDLV	MDLV		1.000	voaWater	5.000	mL	MV-MegaMainA_00050 MV-Gas A_00089		

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00005	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00089
BFB 280-538548/1		8260B		2 uL	2 uL		5 uL		
STD005 280-538548/14 IC		8260B		5 mL	5 mL				0.1 uL
STD010 280-538548/15 IC		8260B		5 mL	5 mL				0.2 uL
STD020 280-538548/16 IC		8260B		5 mL	5 mL				0.4 uL
STD10 280-538548/18 IC		8260B		5 mL	5 mL				2 uL
ICIS 280-538548/19		8260B		5 mL	5 mL				10 uL
STD75 280-538548/20 IC		8260B		5 mL	5 mL				15 uL
STD100 280-538548/21 IC		8260B		5 mL	5 mL				20 uL
STD200 280-538548/22 IC		8260B		5 mL	5 mL				40 uL
ICV 280-538548/23		8260B		5 mL	5 mL	25 uL			
STD010 280-538548/24 IC		8260B		5 mL	5 mL			5 uL	
STD020 280-538548/25 IC		8260B		5 mL	5 mL			5 uL	
STD050 280-538548/26 IC		8260B		5 mL	5 mL			5 uL	
STD10 280-538548/27 IC		8260B		5 mL	5 mL			5 uL	
STD50 280-538548/28 IC		8260B		5 mL	5 mL			5 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00005	mv-Cent BFB 00003	mv-Cent IS 00006	MV-Gas A 00089
STD75 280-538548/29 IC		8260B		5 mL	5 mL			5 uL	
STD100 280-538548/30 IC		8260B		5 mL	5 mL			5 uL	
STD200 280-538548/31 IC		8260B		5 mL	5 mL			5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00091	mv-IS_SS 00018	MV-MegaMain B 00047	MV-MegaMainA 00050	MV-Supp A 00051	
BFB 280-538548/1		8260B							
STD005 280-538548/14 IC		8260B			5 uL		0.25 uL		
STD010 280-538548/15 IC		8260B			5 uL		0.5 uL		
STD020 280-538548/16 IC		8260B			5 uL		1 uL		
STD10 280-538548/18 IC		8260B			5 uL		5 uL		
ICIS 280-538548/19		8260B			5 uL		25 uL		
STD75 280-538548/20 IC		8260B			5 uL		37.5 uL		
STD100 280-538548/21 IC		8260B			5 uL		50 uL		
STD200 280-538548/22 IC		8260B			5 uL		100 uL		
ICV 280-538548/23		8260B		10 uL	5 uL	25 uL			
STD010 280-538548/24 IC		8260B						1 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538548 Batch Start Date: 06/04/21 09:51 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00091	mv-IS_SS 00018	MV-MegaMain B 00047	MV-MegaMainA 00050	MV-Supp A 00051	
STD020 280-538548/25 IC		8260B						2 uL	
STD050 280-538548/26 IC		8260B						5 uL	
STD10 280-538548/27 IC		8260B						10 uL	
STD50 280-538548/28 IC		8260B						50 uL	
STD75 280-538548/29 IC		8260B						75 uL	
STD100 280-538548/30 IC		8260B						100 uL	
STD200 280-538548/31 IC		8260B						200 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.: 280-149116-1

SDG No.:

Batch Number: 538703 Batch Start Date: 06/05/21 08:45 Batch Analyst: Seifert, Judy L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00005	mv-Cent BFB 00003	MV-Gas A 00089	MV-Gas B 00091
BFB 280-538703/1		8260B		2 uL	2 uL		5 uL		
CCV 280-538703/2		8260B		5 mL	5 mL			10 uL	
LCS 280-538703/4		8260B		5 mL	5 mL	12.5 uL			5 uL
LCSD 280-538703/5		8260B		5 mL	5 mL	12.5 uL			5 uL
MB 280-538703/9		8260B		5 mL	5 mL				
280-149116-E-5	SHGW03-21A	8260B	T	5 mL	5 mL				
280-149116-C-6	SHGW02-21A	8260B	T	5 mL	5 mL				
280-149116-D-7	SHGW05-21A	8260B	T	5 mL	5 mL				
280-149116-A-8	TB052621	8260B	T	5 mL	5 mL				
CCVC 280-538703/37		8260B		5 mL	5 mL			10 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00018	MV-MegaMain B 00047	MV-MegaMainA 00050			
BFB 280-538703/1		8260B							
CCV 280-538703/2		8260B		5 uL		25 uL			
LCS 280-538703/4		8260B		5 uL	12.5 uL				
LCSD 280-538703/5		8260B		5 uL	12.5 uL				
MB 280-538703/9		8260B		5 uL					
280-149116-E-5	SHGW03-21A	8260B	T	5 uL					
280-149116-C-6	SHGW02-21A	8260B	T	5 uL					
280-149116-D-7	SHGW05-21A	8260B	T	5 uL					
280-149116-A-8	TB052621	8260B	T	5 uL					
CCVC 280-538703/37		8260B		5 uL		25 uL			

Batch Notes	

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.: 280-149116-1

SDG No.:

Batch Number: 538703 Batch Start Date: 06/05/21 08:45 Batch Analyst: Seifert, Judy L

Batch Method: 8260B 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.

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 005F0501.D

Lab ID: LCS 280-538094/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Ethane	0.137	0.122	89	74-131	
Methane	0.0730	0.0670	92	73-125	
Ethylene	0.128	0.117	92	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.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 036F3601.D

Lab ID: LCS 280-538142/36 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Ethane	0.137	0.132	96	74-131	
Methane	0.0730	0.0729	100	73-125	
Ethylene	0.128	0.127	100	72-133	M

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 006F0601.D

Lab ID: LCSD 280-538094/6 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethane	0.137	0.121	89	1	20	74-131	
Methane	0.0730	0.0701	96	5	20	73-125	
Ethylene	0.128	0.117	91	1	20	72-133	M

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 037F3701.D

Lab ID: LCSD 280-538142/37 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethane	0.137	0.128	94	3	20	74-131	
Methane	0.0730	0.0705	97	3	20	73-125	
Ethylene	0.128	0.123	96	3	20	72-133	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 010F1001.D

Lab ID: 280-149116-13 MS Client ID: PZ007-21A MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0730	0.0020 U	0.0646	89	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 011F1101.D

Lab ID: 280-149116-13 MSD Client ID: PZ007-21A MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0730	0.0618	85	5	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: MB 280-538094/7

Matrix: Water Date Extracted:

Lab File ID:(1) 007F0701.D Lab File ID:(2) 007F0701.D

Date Analyzed:(1) 06/01/2021 11:51 Date Analyzed:(2) 06/01/2021 11:51

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 280-538094/5	06/01/2021 11:27	06/01/2021 11:27
	LCSD 280-538094/6	06/01/2021 11:39	06/01/2021 11:39
PZ007-21A	280-149116-13	06/01/2021 12:26	06/01/2021 12:26
PZ007-21A DU	280-149116-13 DU	06/01/2021 12:38	06/01/2021 12:38
PZ007-21A MS	280-149116-13 MS	06/01/2021 12:50	06/01/2021 12:50
PZ007-21A MSD	280-149116-13 MSD	06/01/2021 13:02	06/01/2021 13:02
G0017-21A	280-149116-1	06/01/2021 14:03	06/01/2021 14:03
G0045-21A	280-149116-2	06/01/2021 14:15	06/01/2021 14:15
G0086-21A	280-149116-3	06/01/2021 14:27	06/01/2021 14:27
PZ0018-21A	280-149116-4	06/01/2021 14:40	06/01/2021 14:40
SHGW03-21A	280-149116-5	06/01/2021 14:52	06/01/2021 14:52
SHGW02-21A	280-149116-6	06/01/2021 16:06	06/01/2021 16:06

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: MB 280-538142/38

Matrix: Water Date Extracted:

Lab File ID:(1) 038F3801.D Lab File ID:(2) 038F3801.D

Date Analyzed:(1) 06/01/2021 18:35 Date Analyzed:(2) 06/01/2021 18:35

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 280-538142/36	06/01/2021 18:10	06/01/2021 18:10
	LCSD 280-538142/37	06/01/2021 18:22	06/01/2021 18:22
SHGW05-21A	280-149116-7	06/01/2021 20:38	06/01/2021 20:38
G0077-21A	280-149116-9	06/01/2021 20:50	06/01/2021 20:50
G0078-21A	280-149116-10	06/01/2021 21:03	06/01/2021 21:03
PZ017R-21A	280-149116-11	06/01/2021 21:15	06/01/2021 21:15
PZ021-21A	280-149116-12	06/01/2021 21:28	06/01/2021 21:28
G0024-21A	280-149116-14	06/01/2021 21:40	06/01/2021 21:40
PZ020-21A	280-149116-15	06/01/2021 22:54	06/01/2021 22:54

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0017-21A Lab Sample ID: 280-149116-1

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 14:03 Date Analyzed (2): 06/01/2021 14:03

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	1.5		1.4
	2		1.18	1.15	1.23	1.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0045-21A Lab Sample ID: 280-149116-2

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 14:15 Date Analyzed (2): 06/01/2021 14:15

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	0.00079		10.2
	2		1.18	1.15	1.23	0.00072		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0086-21A Lab Sample ID: 280-149116-3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 14:27 Date Analyzed (2): 06/01/2021 14:27

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		1.58	1.56	1.64	0.014		0.4
	2		1.18	1.15	1.23	0.014		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ0018-21A Lab Sample ID: 280-149116-4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 14:40 Date Analyzed (2): 06/01/2021 14:40

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.56	1.56	1.64	7.9		1.6
	2		1.18	1.15	1.23	8.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW03-21A Lab Sample ID: 280-149116-5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 14:52 Date Analyzed (2): 06/01/2021 14:52

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	0.051		0.7
	2		1.18	1.15	1.23	0.052		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW02-21A Lab Sample ID: 280-149116-6

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 16:06 Date Analyzed (2): 06/01/2021 16:06

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		1.58	1.56	1.64	6.1		0.4
	2		1.18	1.15	1.23	6.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW05-21A Lab Sample ID: 280-149116-7

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 20:38 Date Analyzed (2): 06/01/2021 20:38

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		1.58	1.56	1.64	6.9		0.5
	2		1.18	1.15	1.23	7.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0077-21A Lab Sample ID: 280-149116-9

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 20:50 Date Analyzed (2): 06/01/2021 20:50

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		1.59	1.56	1.64	0.53		1.9
	2		1.18	1.15	1.23	0.54		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0078-21A Lab Sample ID: 280-149116-10

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 21:03 Date Analyzed (2): 06/01/2021 21:03

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.59	1.56	1.64	0.13		1.5
	2		1.18	1.15	1.23	0.13		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ017R-21A Lab Sample ID: 280-149116-11

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 21:15 Date Analyzed (2): 06/01/2021 21:15

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	6.5		0.4
	2		1.18	1.15	1.23	6.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ021-21A Lab Sample ID: 280-149116-12

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 21:28 Date Analyzed (2): 06/01/2021 21:28

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	6.4		0.3
	2		1.18	1.15	1.23	6.4		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A MS Lab Sample ID: 280-149116-13 MS

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 12:50 Date Analyzed (2): 06/01/2021 12:50

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		1.58	1.56	1.64	0.0646		1.7
	2		1.18	1.15	1.23	0.0657		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A MSD Lab Sample ID: 280-149116-13 MSD

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 13:02 Date Analyzed (2): 06/01/2021 13:02

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	0.0618		1.7
	2		1.18	1.15	1.23	0.0628		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ020-21A Lab Sample ID: 280-149116-15

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 22:54 Date Analyzed (2): 06/01/2021 22:54

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		1.59	1.56	1.64	0.00079		2.9
	2		1.19	1.15	1.23	0.00077		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538094/5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 11:27 Date Analyzed (2): 06/01/2021 11:27

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		1.59	1.56	1.64	0.0670		2.0
	2		1.19	1.15	1.23	0.0657		
Ethylene	1		2.40	2.35	2.45	0.117		3.7
	2		1.73	1.68	1.78	0.113		
Ethane	1		2.78	2.74	2.84	0.122		1.7
	2		1.45	1.41	1.51	0.120		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-538094/6

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 11:39 Date Analyzed (2): 06/01/2021 11:39

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		1.59	1.56	1.64	0.0701		2.1
	2		1.19	1.15	1.23	0.0687		
Ethylene	1		2.39	2.35	2.45	0.117		3.9
	2		1.73	1.68	1.78	0.112		
Ethane	1		2.78	2.74	2.84	0.121		1.7
	2		1.45	1.41	1.51	0.119		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538142/36

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 18:10 Date Analyzed (2): 06/01/2021 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		1.59	1.56	1.64	0.0729		1.6
	2		1.18	1.15	1.23	0.0718		
Ethylene	1		2.38	2.35	2.45	0.127		3.9
	2		1.73	1.68	1.78	0.122		
Ethane	1		2.77	2.74	2.84	0.132		0.1
	2		1.44	1.41	1.51	0.132		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-538142/37

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2021 18:22 Date Analyzed (2): 06/01/2021 18:22

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.58	1.56	1.64	0.0705		1.6
	2		1.18	1.15	1.23	0.0694		
Ethylene	1		2.39	2.35	2.45	0.123		2.6
	2		1.72	1.68	1.78	0.120		
Ethane	1		2.77	2.74	2.84	0.128		0.9
	2		1.45	1.41	1.51	0.127		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0017-21A Lab Sample ID: 280-149116-1

Matrix: Water Lab File ID: 016F1601.D

Analysis Method: RSK-175 Date Collected: 05/25/2021 15:20

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 14:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	1.5		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\016F1601.D
Lims ID: 280-149116-H-1
Client ID: G0017-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 14:03:31 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-1
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:52:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.176	1.191	-0.015	180891805	1531.8	
2	1.576	1.598	-0.022	162731368	1510.6	
					RPD = 1.39	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

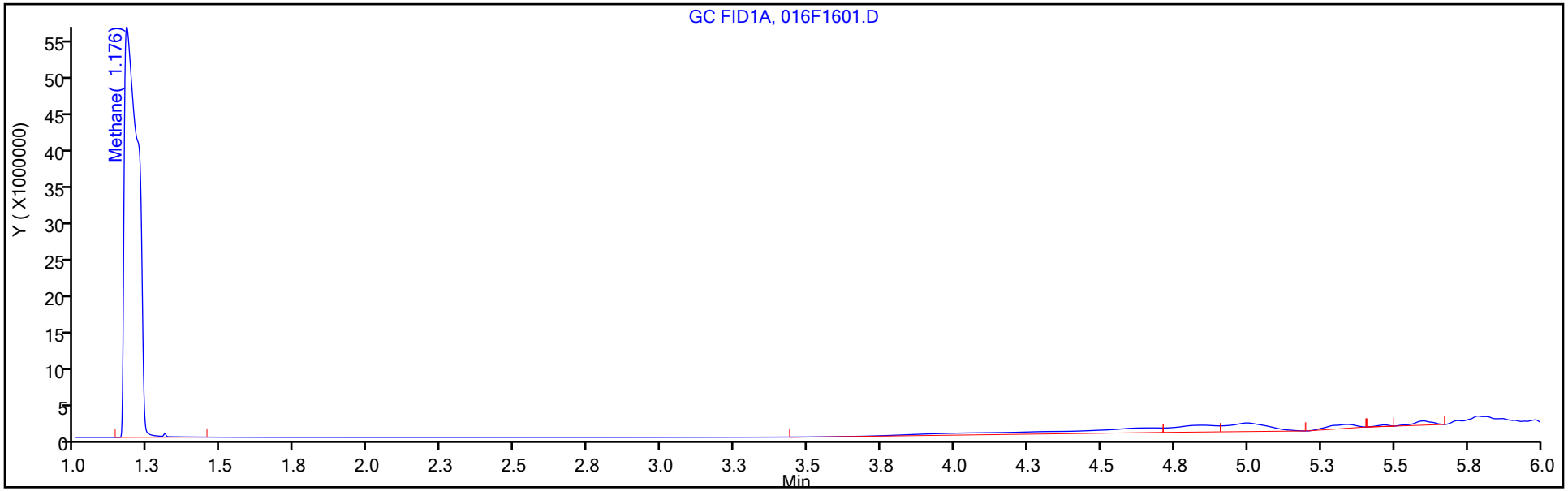
Processing Flags

Report Date: 02-Jun-2021 11:02:55 Chrom Revision: 2.3 13-May-2021 07:57:40

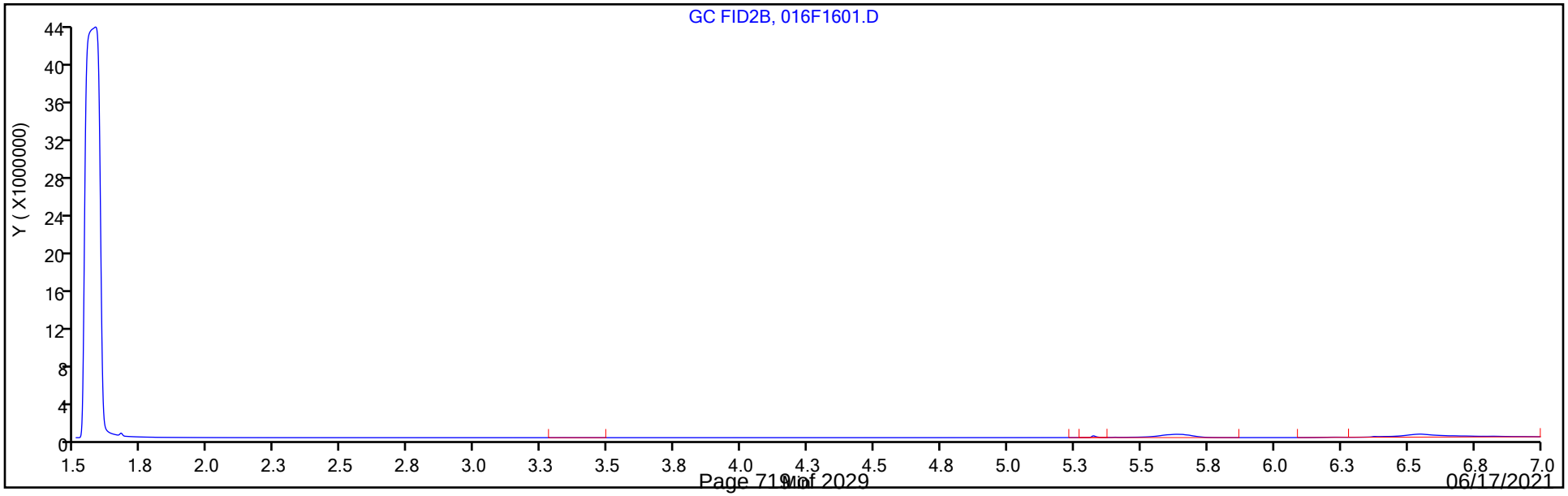
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\016F1601.D				
Injection Date:	01-Jun-2021 14:03:31	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-1	Lab Sample ID:	280-149116-1	Worklist Smp#:	16
Client ID:	G0017-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0045-21A Lab Sample ID: 280-149116-2

Matrix: Water Lab File ID: 017F1701.D

Analysis Method: RSK-175 Date Collected: 05/25/2021 16:15

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 14:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.00079	J M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\017F1701.D
Lims ID: 280-149116-G-2
Client ID: G0045-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 14:15:42 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-G-2
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:53:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						Ma
1	1.177	1.191	-0.014	133110	0.7151	
2	1.579	1.598	-0.019	115482	0.7918	M
					RPD = 10.19	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

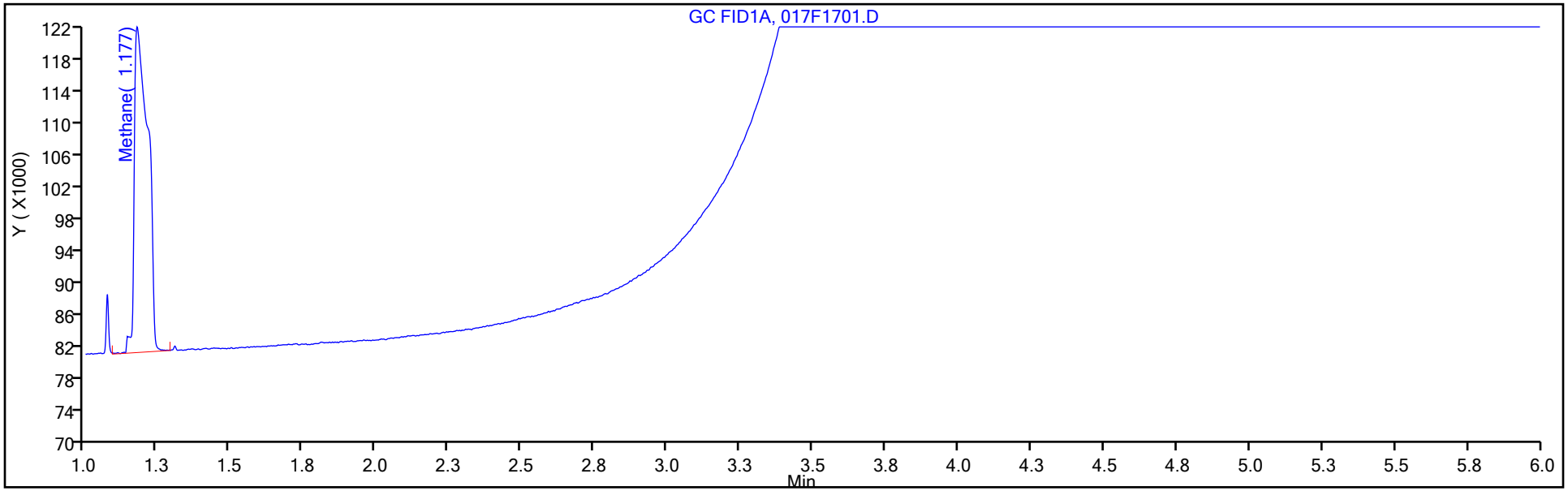
Report Date: 02-Jun-2021 11:02:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

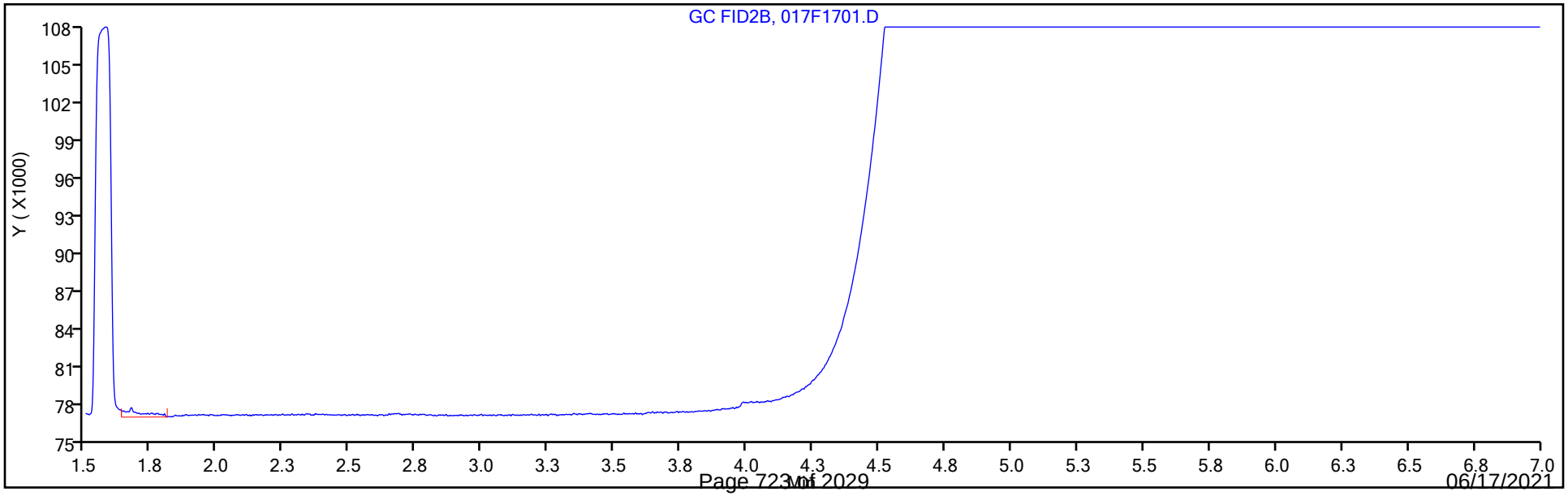
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\017F1701.D

Injection Date:	01-Jun-2021 14:15:42	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-G-2	Lab Sample ID:	280-149116-2	Worklist Smp#:	17
Client ID:	G0045-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

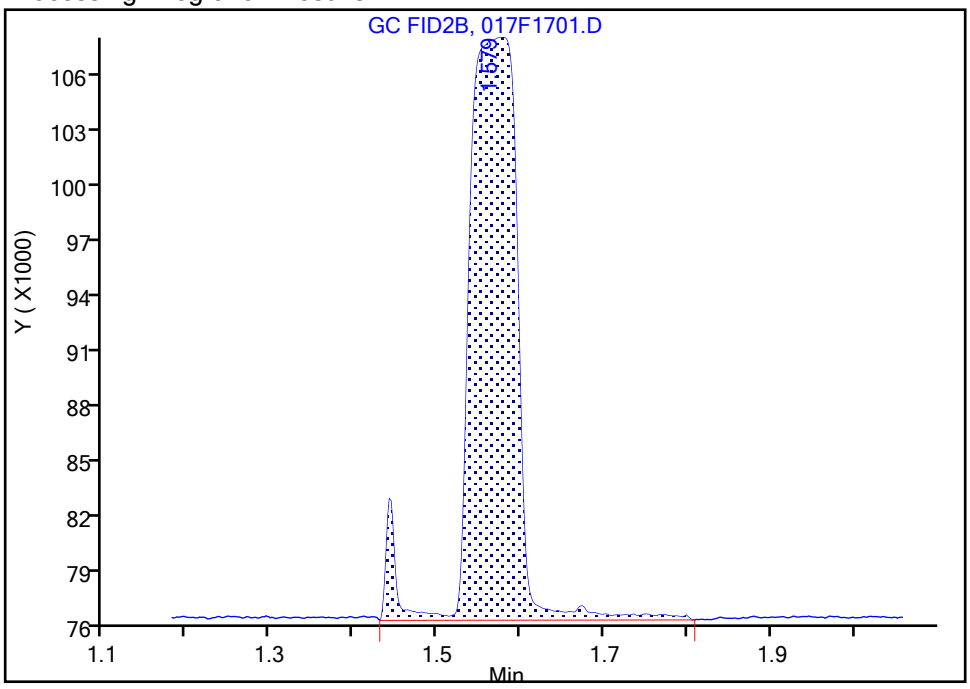
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\017F1701.D				
Injection Date:	01-Jun-2021 14:15:42	Instrument ID:	VGC_J		
Lims ID:	280-149116-G-2	Lab Sample ID:	280-149116-2		
Client ID:	G0045-21A				
Operator ID:	robertstr	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

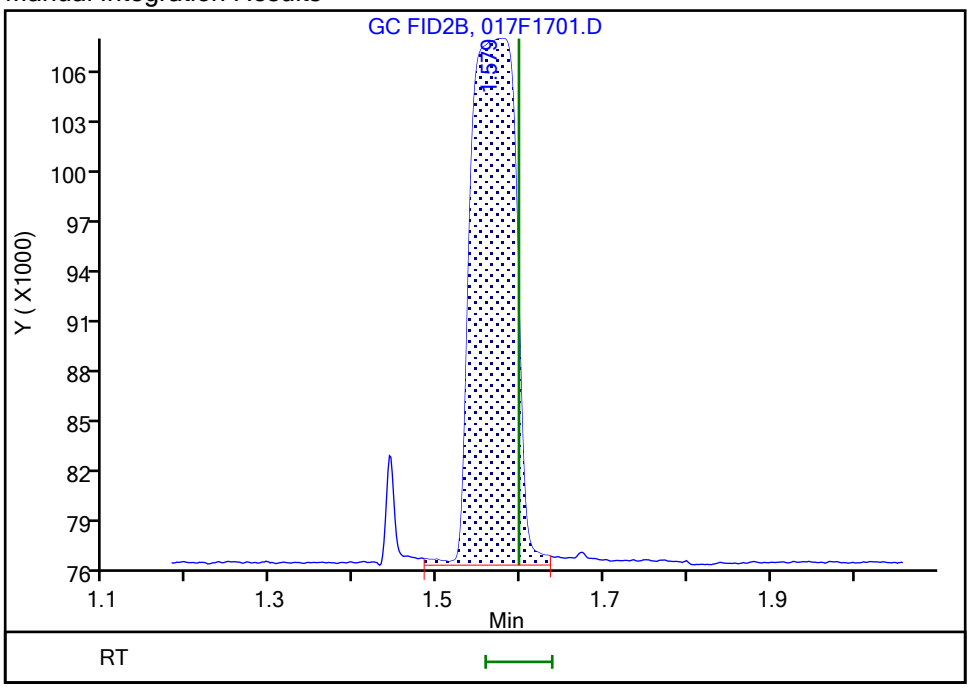
Processing Integration Results

RT: 1.58
Area: 123831
Amount: 0.869359
Amount Units: ug/l



Manual Integration Results

RT: 1.58
Area: 115482
Amount: 0.791843
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:53:18

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0086-21A Lab Sample ID: 280-149116-3

Matrix: Water Lab File ID: 018F1801.D

Analysis Method: RSK-175 Date Collected: 05/25/2021 14:05

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 14:27

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.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.014		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\018F1801.D
Lims ID: 280-149116-H-3
Client ID: G0086-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 14:27:56 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-3
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:53:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.177	1.191	-0.014	1711918	14.1	
2	1.578	1.598	-0.020	1541057	14.0	
					RPD = 0.43	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

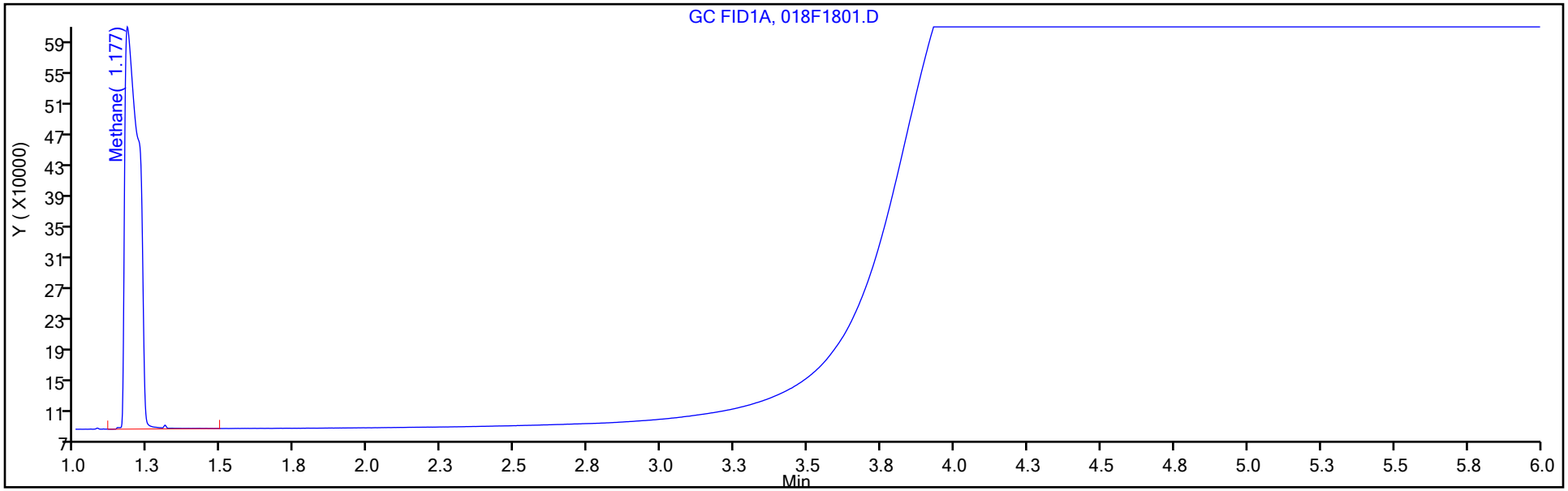
Report Date: 02-Jun-2021 11:02:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

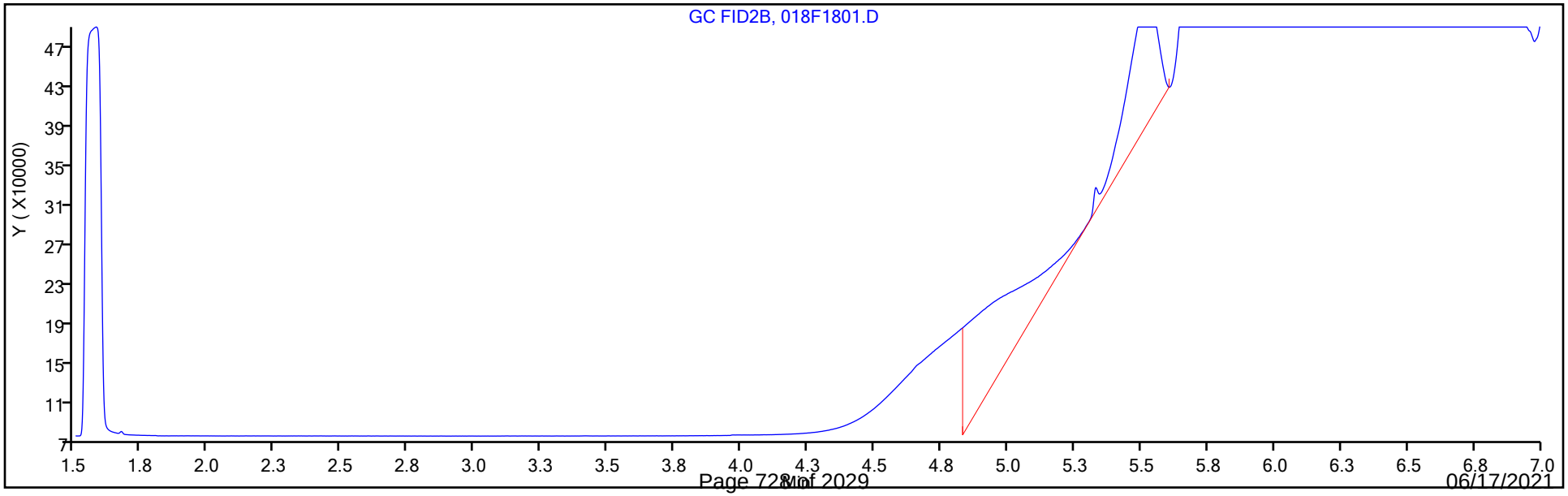
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\018F1801.D

Injection Date:	01-Jun-2021 14:27:56	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-3	Lab Sample ID:	280-149116-3	Worklist Smp#:	18
Client ID:	G0086-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ0018-21A Lab Sample ID: 280-149116-4

Matrix: Water Lab File ID: 019F1901.D

Analysis Method: RSK-175 Date Collected: 05/25/2021 15:25

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 14:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	7.9		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\019F1901.D
Lims ID: 280-149116-I-4
Client ID: PZ0018-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 14:40:05 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-I-4
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:54:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.176	1.191	-0.015	952983968	8071.5	
2	1.563	1.598	-0.035	855458237	7942.2	
					RPD = 1.62	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

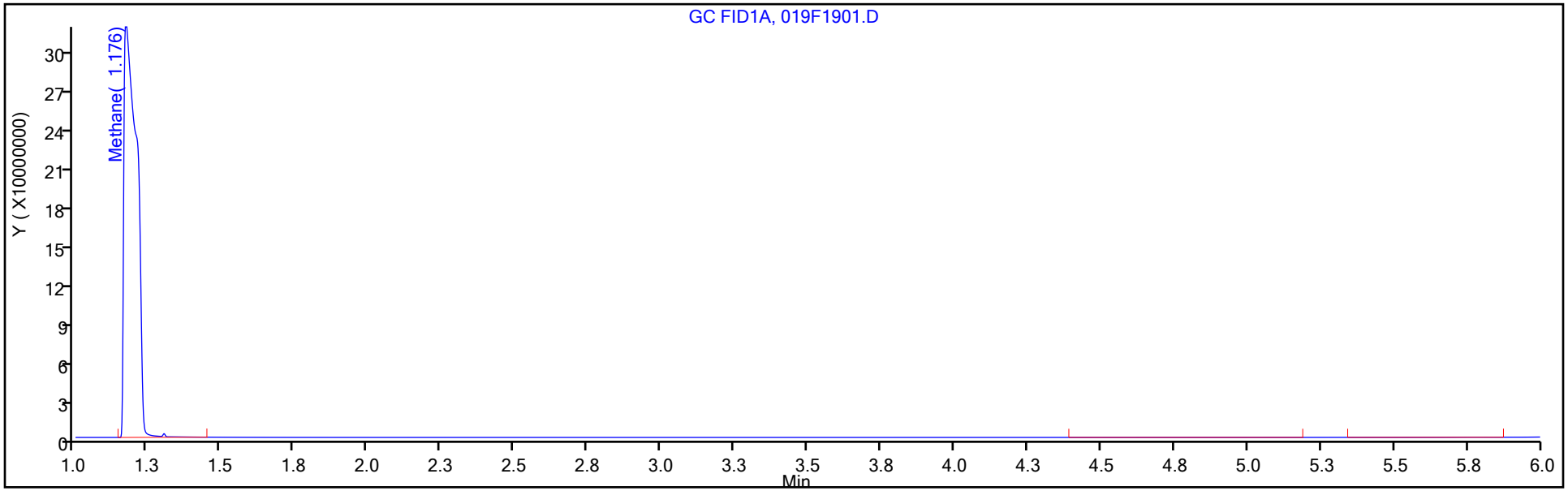
Report Date: 02-Jun-2021 11:02:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

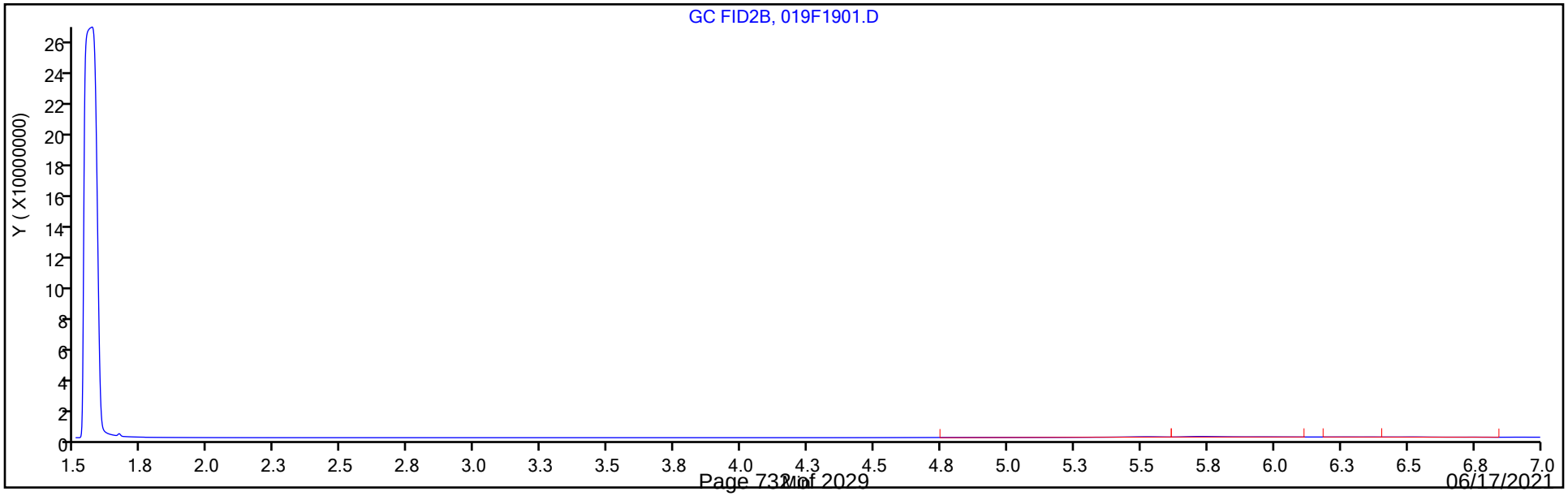
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\019F1901.D

Injection Date:	01-Jun-2021 14:40:05	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-I-4	Lab Sample ID:	280-149116-4	Worklist Smp#:	19
Client ID:	PZ0018-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW03-21A Lab Sample ID: 280-149116-5

Matrix: Water Lab File ID: 020F2001.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 12:05

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 14:52

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.: 538094 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	0.051		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\020F2001.D
Lims ID: 280-149116-H-5
Client ID: SHGW03-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 14:52:12 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-5
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:54:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.177	1.191	-0.014	6167805	51.8	
2	1.579	1.598	-0.019	5576084	51.5	
					RPD = 0.66	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

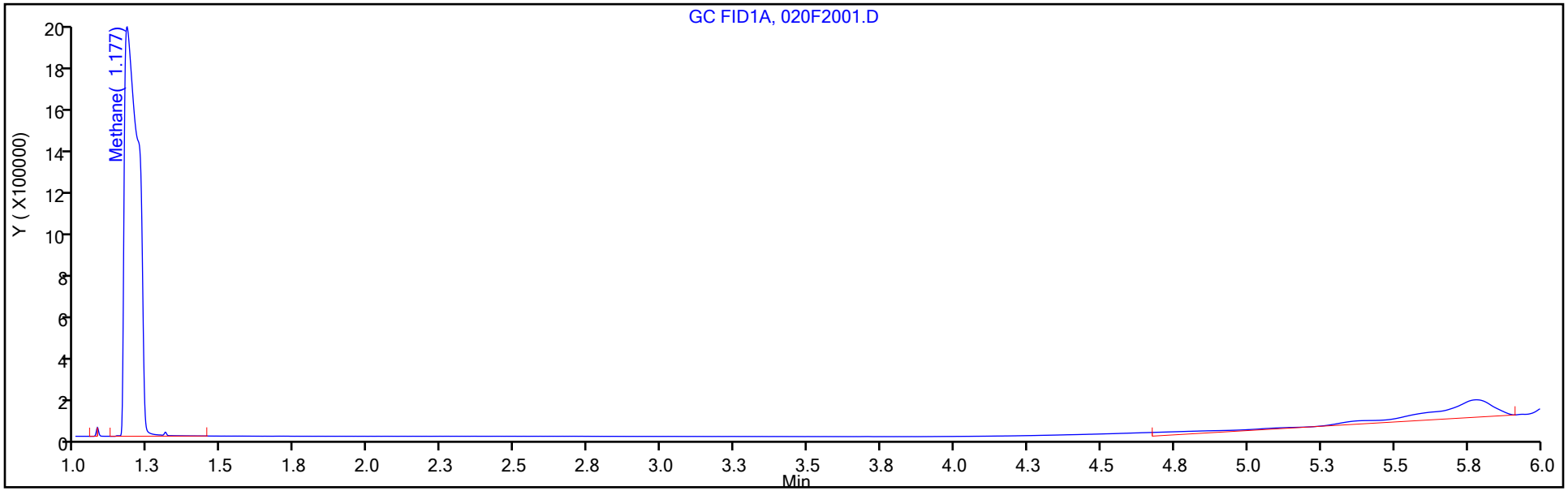
Report Date: 02-Jun-2021 11:02:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

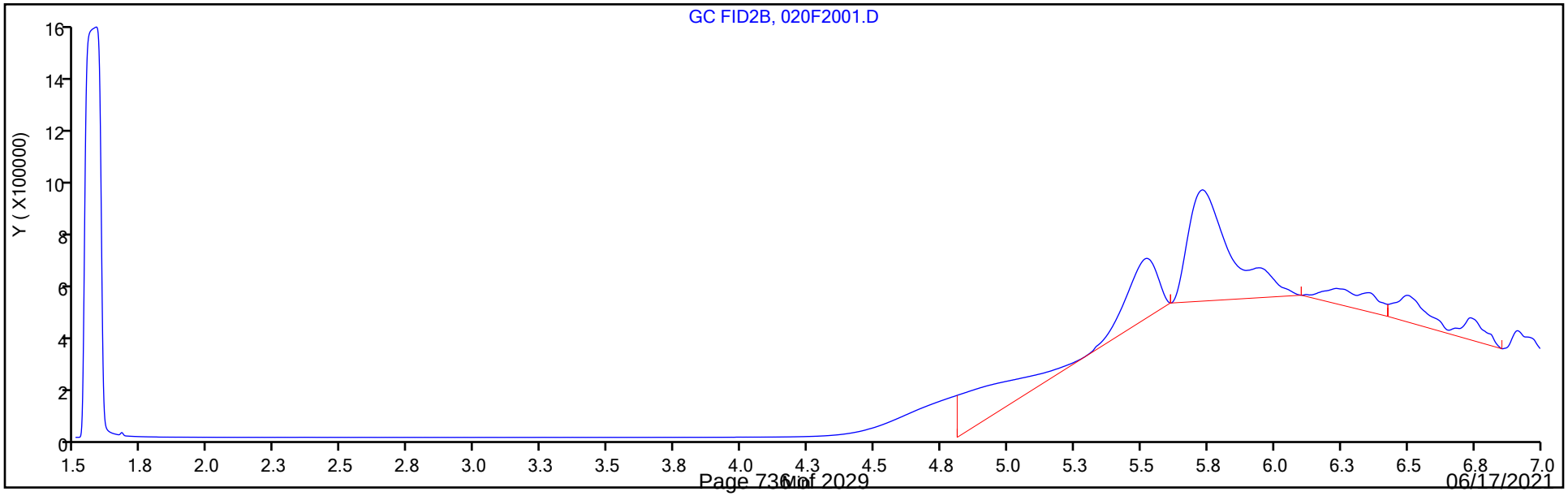
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\020F2001.D

Injection Date:	01-Jun-2021 14:52:12	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-5	Lab Sample ID:	280-149116-5	Worklist Smp#:	20
Client ID:	SHGW03-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW02-21A Lab Sample ID: 280-149116-6

Matrix: Water Lab File ID: 026F2601.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 10:40

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 16:06

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.: 538094 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	6.1		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\026F2601.D
Lims ID: 280-149116-H-6
Client ID: SHGW02-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 16:06:16 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-6
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:57 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 10:07:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.179	1.191	-0.012	724817913	6138.9	
2	1.576	1.598	-0.022	658402170	6112.6	
					RPD = 0.43	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

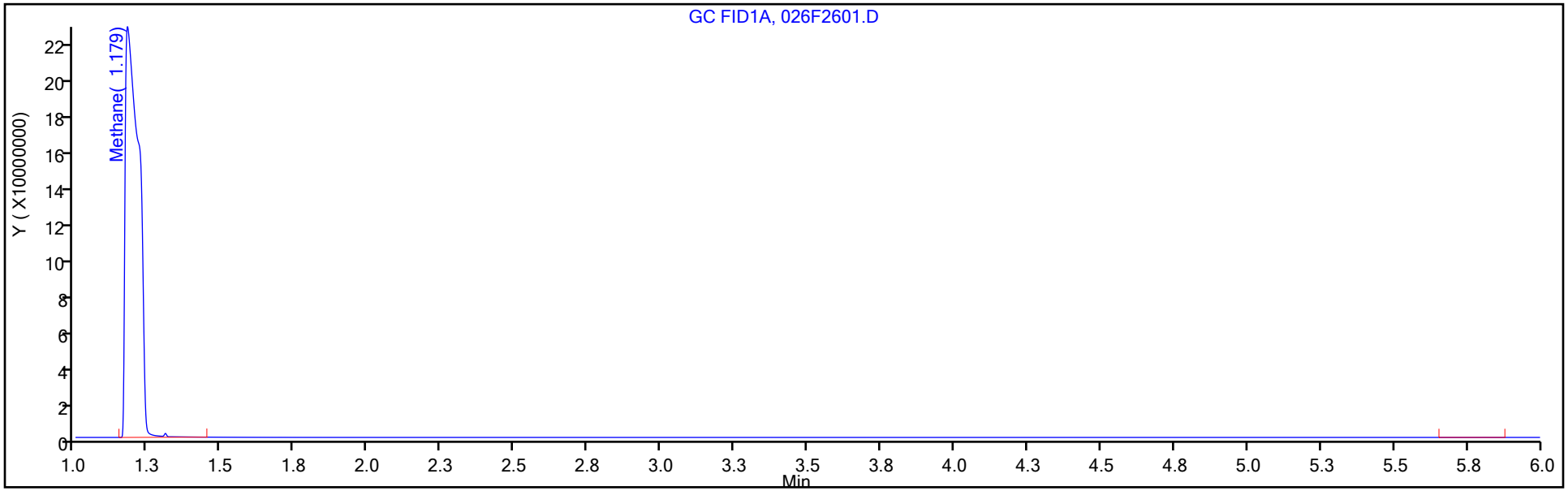
Report Date: 02-Jun-2021 11:03:00 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

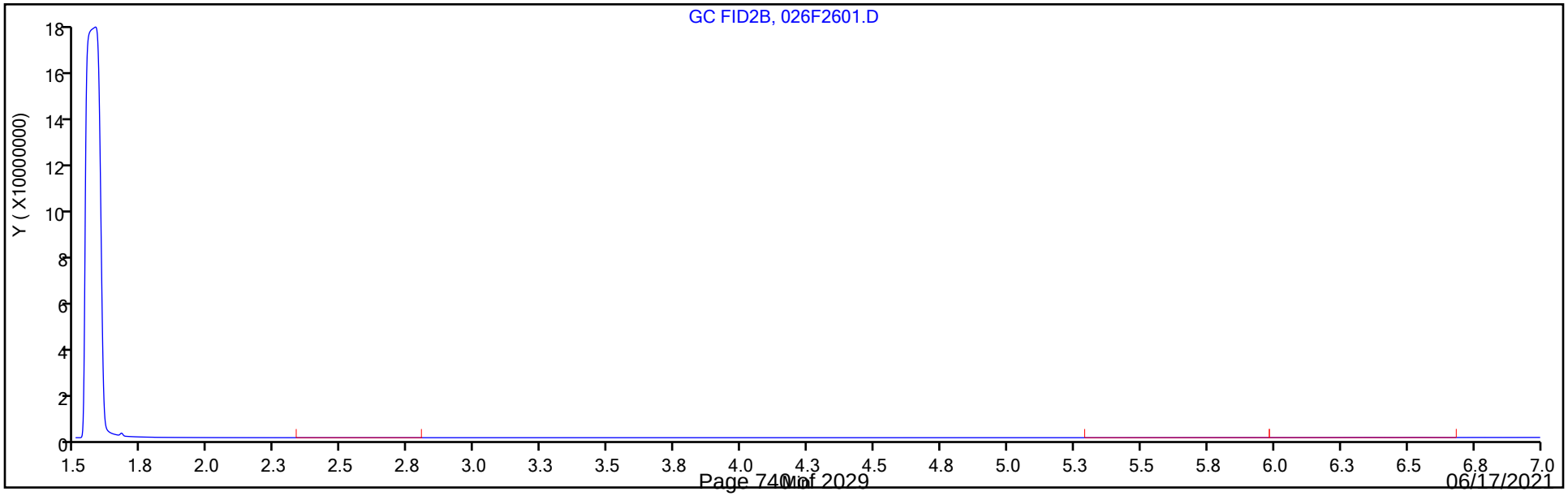
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\026F2601.D

Injection Date:	01-Jun-2021 16:06:16	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-6	Lab Sample ID:	280-149116-6	Worklist Smp#:	26
Client ID:	SHGW02-21A				
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.: 280-149116-1

SDG No.:

Client Sample ID: SHGW05-21A Lab Sample ID: 280-149116-7

Matrix: Water Lab File ID: 048F4801.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 08:00

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 20:38

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.: 538142 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	6.9		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\048F4801.D
Lims ID: 280-149116-H-7
Client ID: SHGW05-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 20:38:49 ALS Bottle#: 48 Worklist Smp#: 48
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-7
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 10:46:28

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.179	1.191	-0.012	821816120	6960.5	
2	1.576	1.598	-0.022	745775530	6923.9	
					RPD = 0.53	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

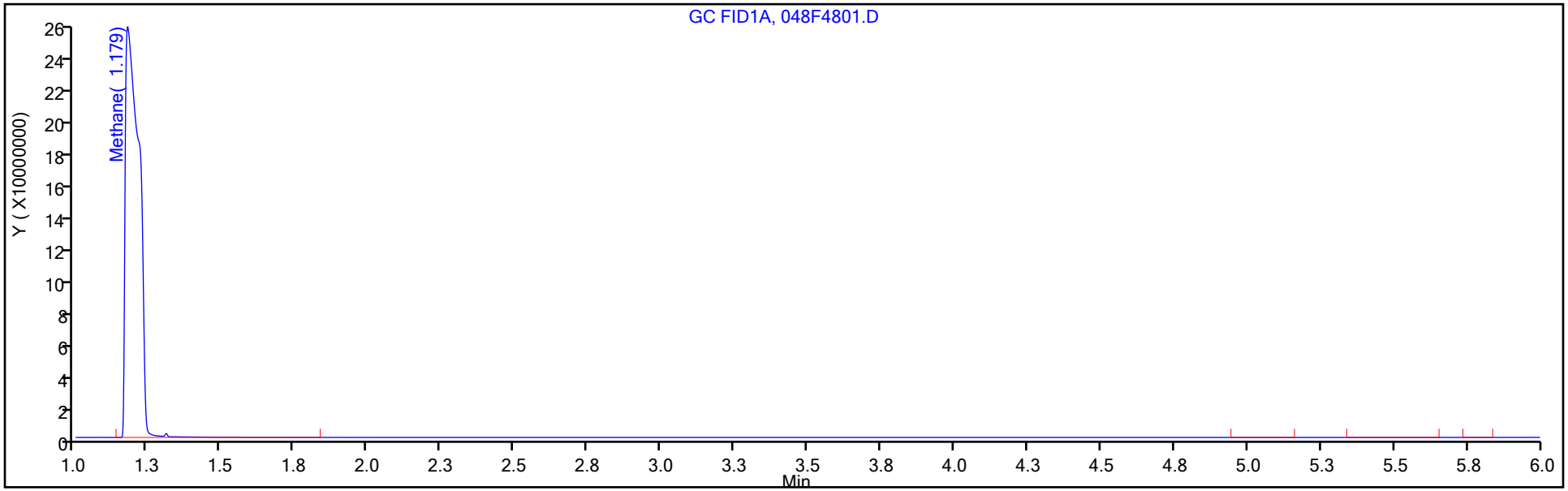
Report Date: 02-Jun-2021 11:03:14 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

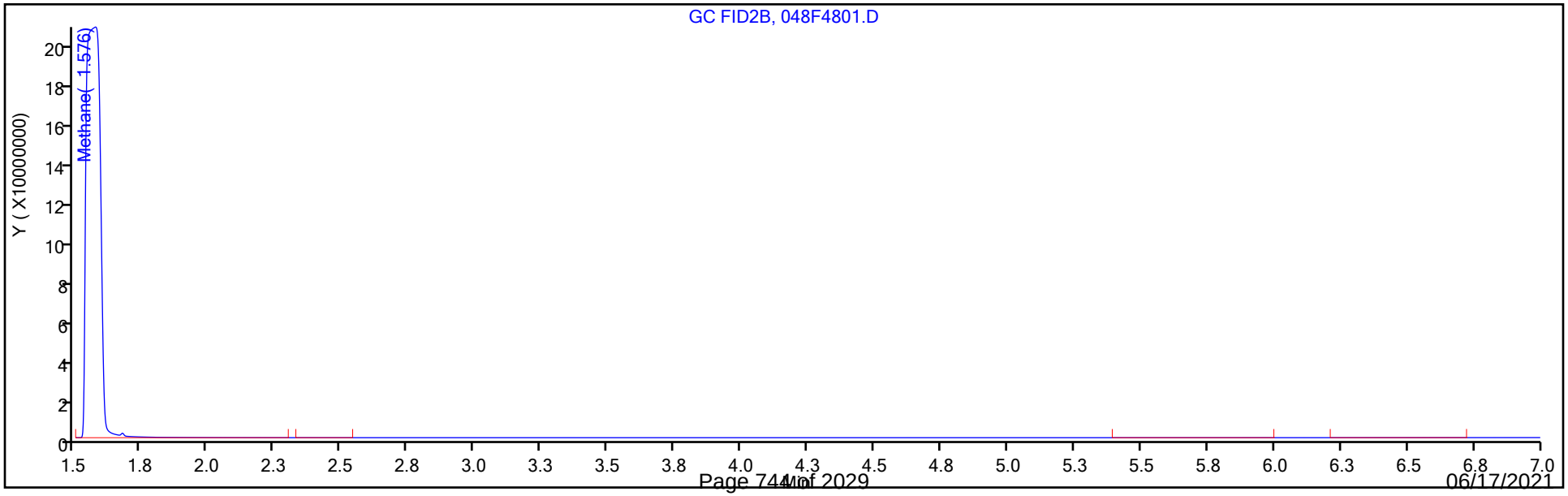
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\048F4801.D

Injection Date:	01-Jun-2021 20:38:49	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-7	Lab Sample ID:	280-149116-7	Worklist Smp#:	48
Client ID:	SHGW05-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0077-21A Lab Sample ID: 280-149116-9

Matrix: Water Lab File ID: 049F4901.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 09:30

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 20:50

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.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.53		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\049F4901.D
Lims ID: 280-149116-G-9
Client ID: G0077-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 20:50:54 ALS Bottle#: 49 Worklist Smp#: 49
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-G-9
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 10:46:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.181	1.191	-0.010	63310899	535.8	
2	1.585	1.598	-0.013	56640039	525.6	
					RPD = 1.93	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

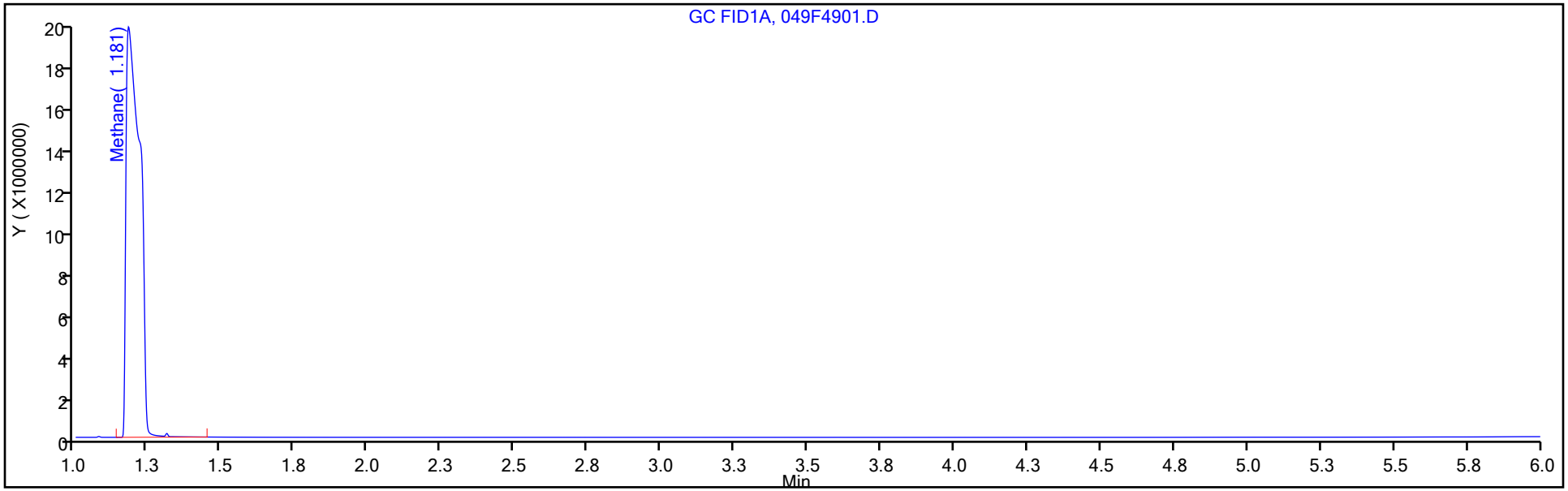
Report Date: 02-Jun-2021 11:03:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

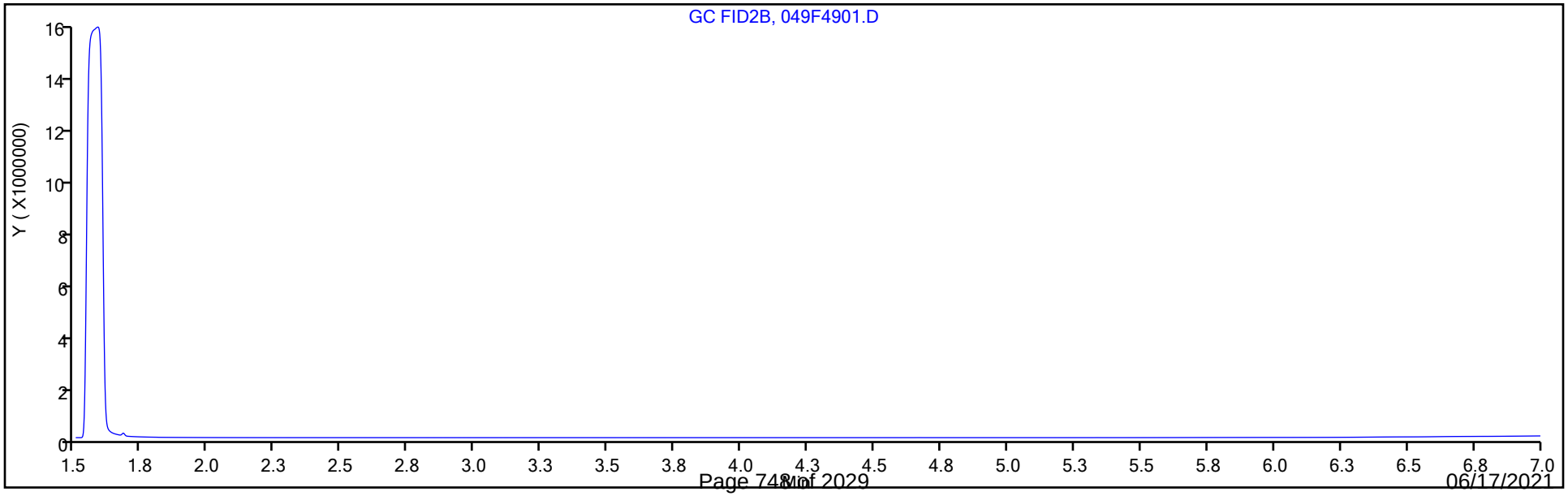
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\049F4901.D

Injection Date:	01-Jun-2021 20:50:54	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-G-9	Lab Sample ID:	280-149116-9	Worklist Smp#:	49
Client ID:	G0077-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0078-21A Lab Sample ID: 280-149116-10

Matrix: Water Lab File ID: 050F5001.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 10:30

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 21:03

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.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.13		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\050F5001.D
Lims ID: 280-149116-I-10
Client ID: G0078-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 21:03:17 ALS Bottle#: 50 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-I-10
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 10:46:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.182	1.191	-0.009	15747163	133.0	
2	1.586	1.598	-0.012	14144639	131.0	
					RPD = 1.46	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

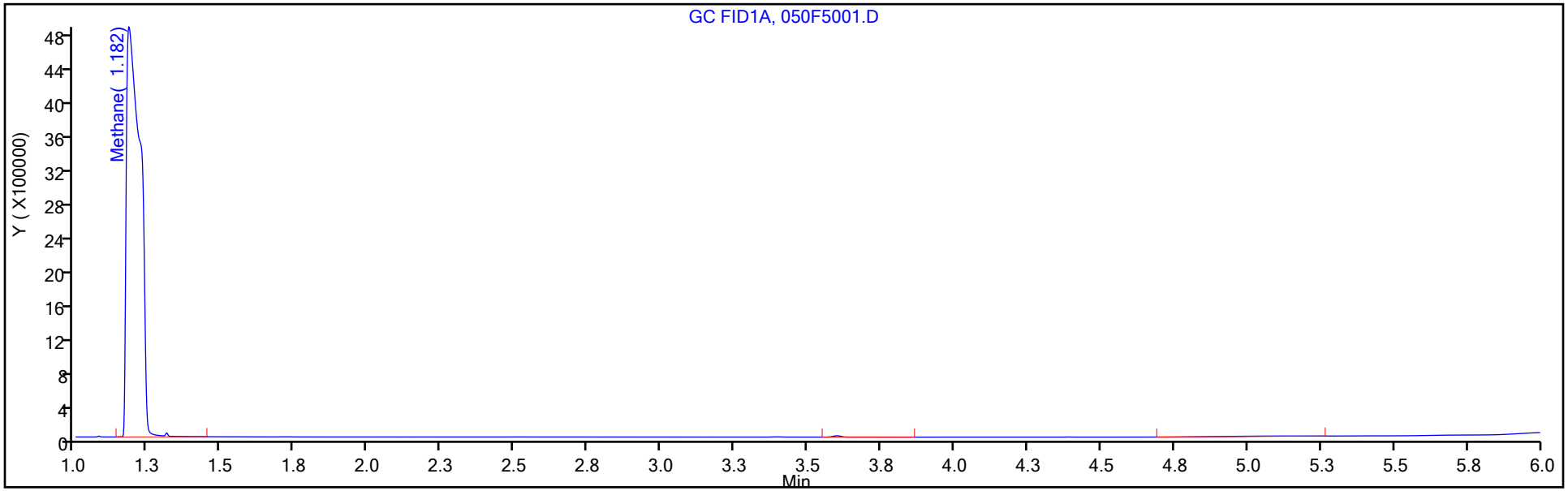
Report Date: 02-Jun-2021 11:03:15 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

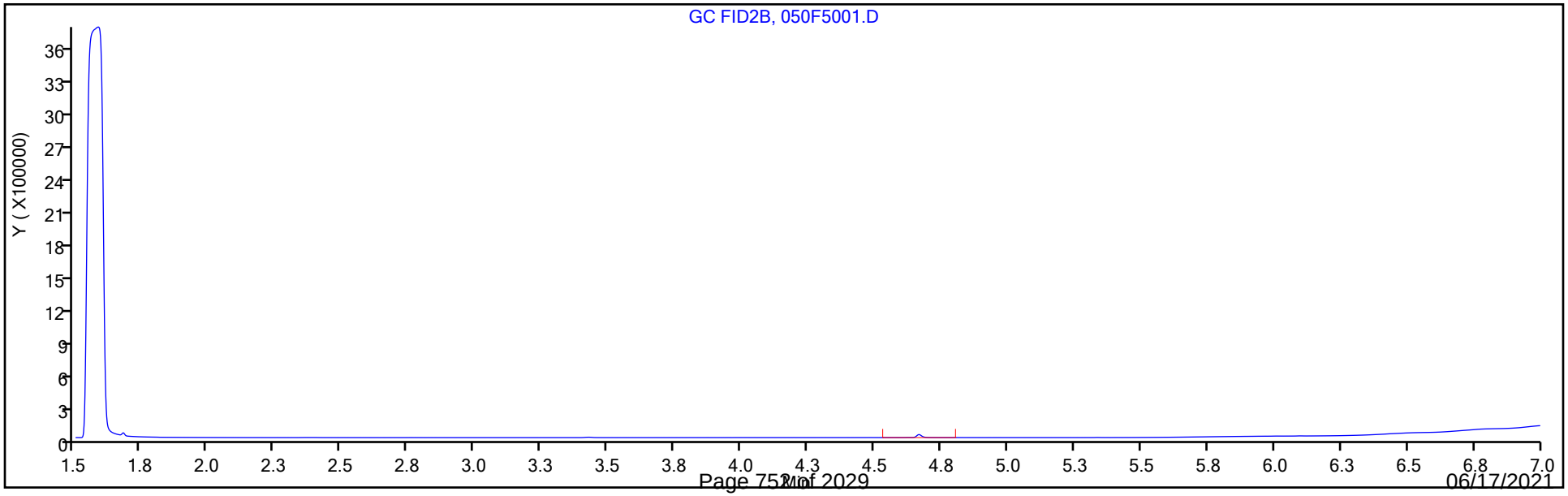
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\050F5001.D

Injection Date:	01-Jun-2021 21:03:17	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-I-10	Lab Sample ID:	280-149116-10	Worklist Smp#:	50
Client ID:	G0078-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	50
Method:	RSK_J	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.: 280-149116-1

SDG No.:

Client Sample ID: PZ017R-21A Lab Sample ID: 280-149116-11

Matrix: Water Lab File ID: 051F5101.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 08:45

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 21:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	6.5		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\051F5101.D
Lims ID: 280-149116-I-11
Client ID: PZ017R-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 21:15:39 ALS Bottle#: 51 Worklist Smp#: 51
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-I-11
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 10:47:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.177	1.191	-0.014	771056847	6530.6	
2	1.576	1.598	-0.022	700844410	6506.7	
					RPD = 0.37	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

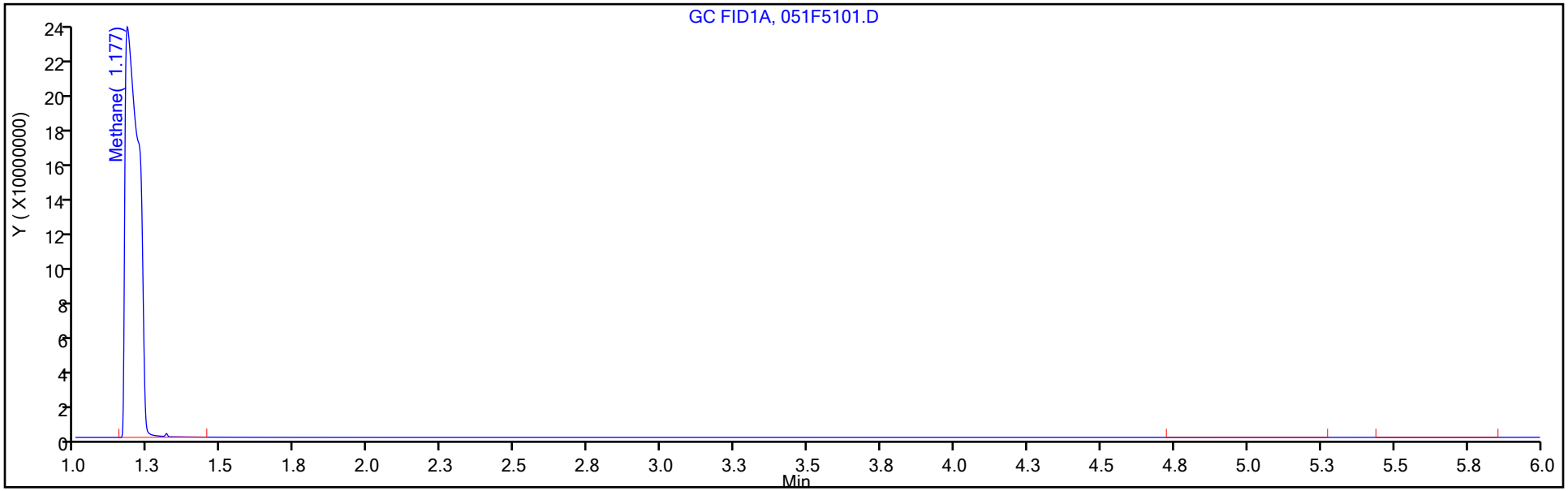
Processing Flags

Report Date: 02-Jun-2021 11:03:16 Chrom Revision: 2.3 13-May-2021 07:57:40

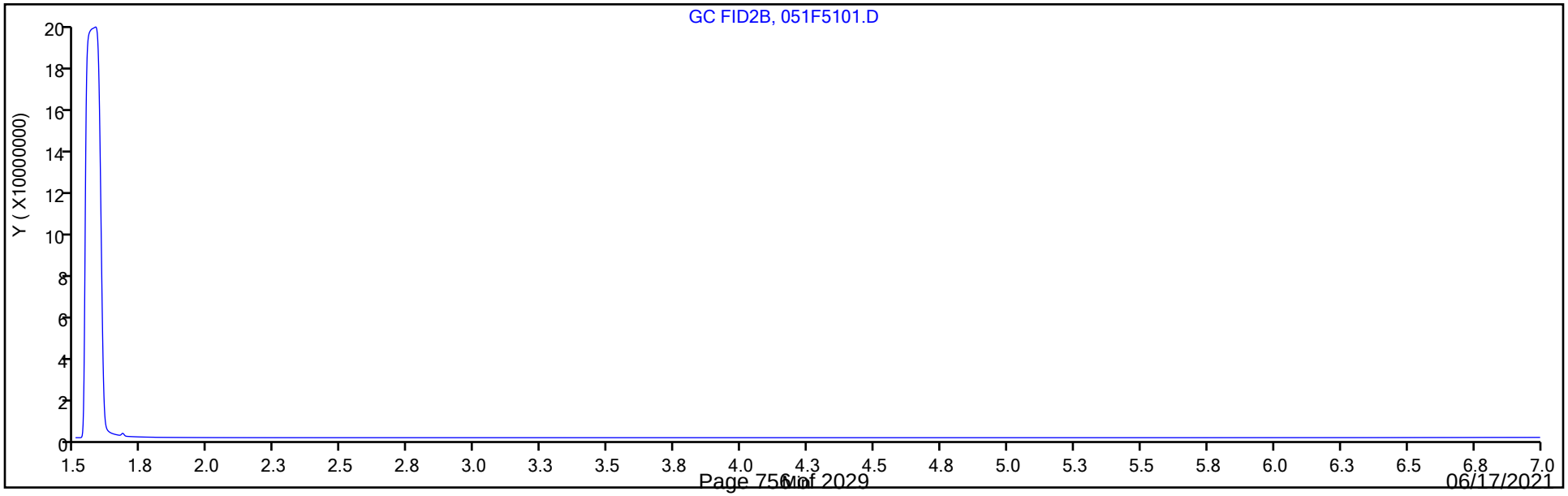
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\051F5101.D				
Injection Date:	01-Jun-2021 21:15:39	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-I-11	Lab Sample ID:	280-149116-11	Worklist Smp#:	51
Client ID:	PZ017R-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	51
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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.: 280-149116-1

SDG No.:

Client Sample ID: PZ021-21A Lab Sample ID: 280-149116-12

Matrix: Water Lab File ID: 052F5201.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 08:00

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 21:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	6.4		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\052F5201.D
Lims ID: 280-149116-I-12
Client ID: PZ021-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 21:28:01 ALS Bottle#: 52 Worklist Smp#: 52
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-I-12
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 10:47:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.179	1.191	-0.012	756699936	6409.0	
2	1.578	1.598	-0.020	687946647	6386.9	
					RPD = 0.34	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

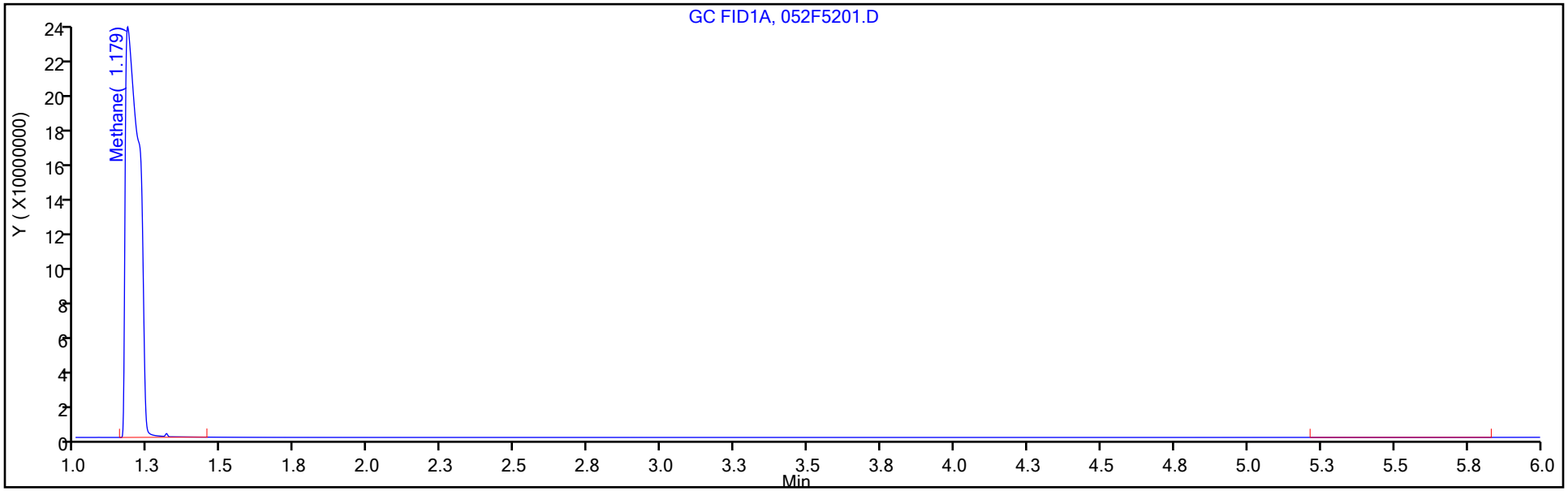
Processing Flags

Report Date: 02-Jun-2021 11:03:16 Chrom Revision: 2.3 13-May-2021 07:57:40

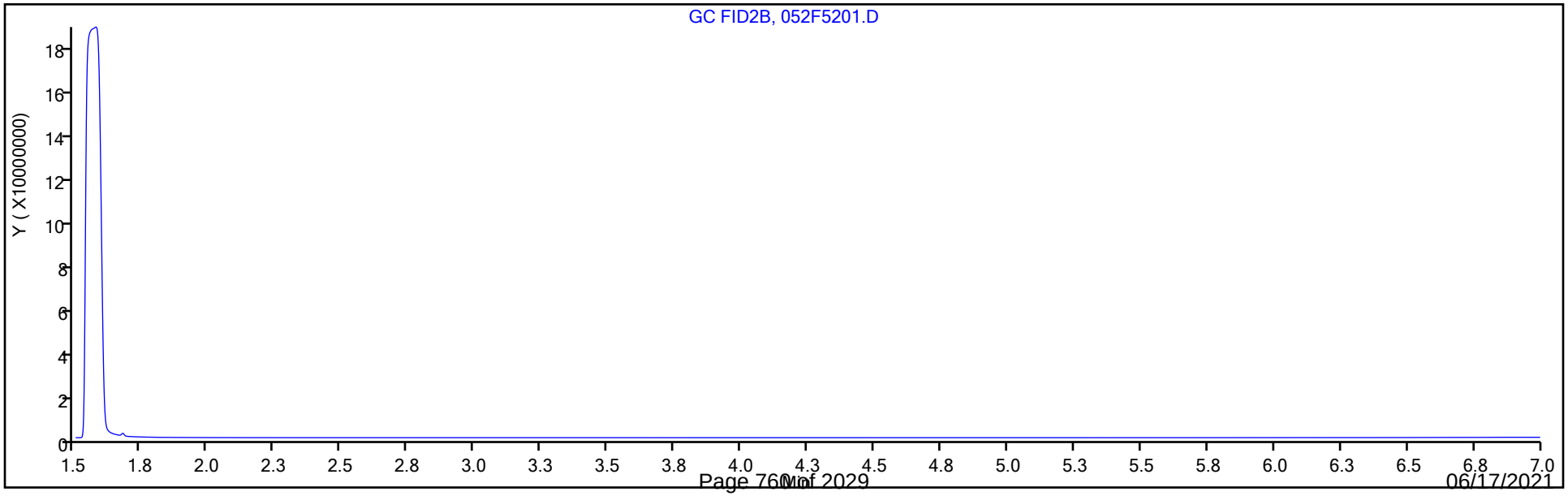
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\052F5201.D				
Injection Date:	01-Jun-2021 21:28:01	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-I-12	Lab Sample ID:	280-149116-12	Worklist Smp#:	52
Client ID:	PZ021-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	52
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A Lab Sample ID: 280-149116-13

Matrix: Water Lab File ID: 008F0801.D

Analysis Method: RSK-175 Date Collected: 05/25/2021 13:25

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 12:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\008F0801.D
Lims ID: 280-149116-H-13
Client ID: PZ007-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 12:26:07 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-13
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:41:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane					7	
1		1.191			ND	
2		1.598				
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

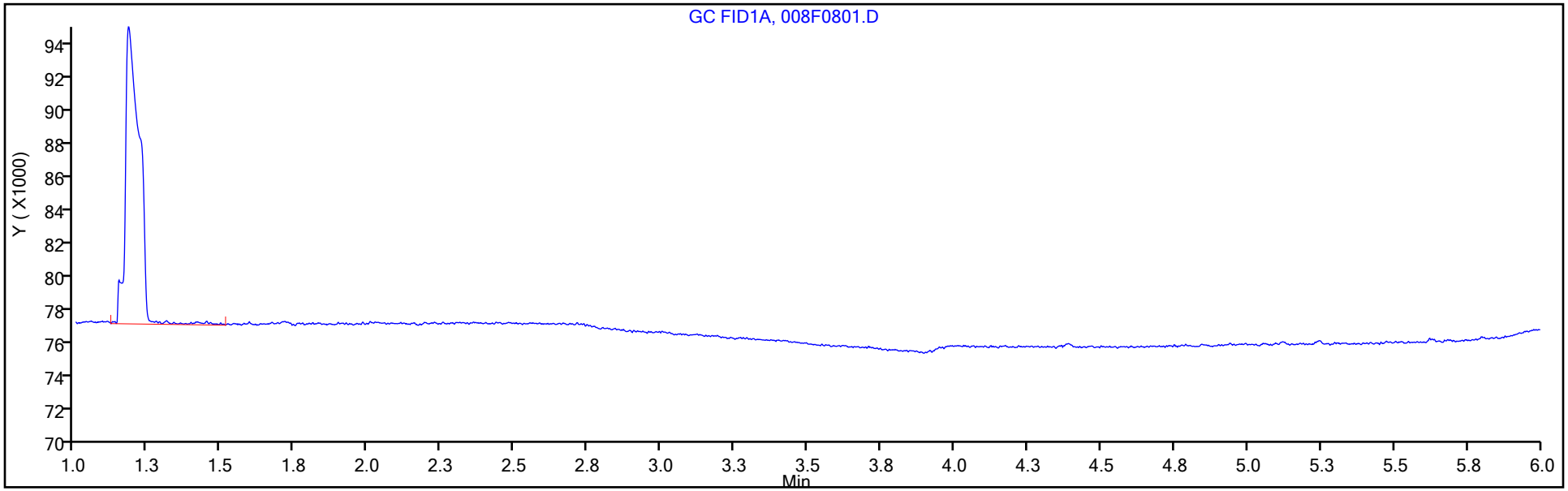
Report Date: 02-Jun-2021 11:02:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

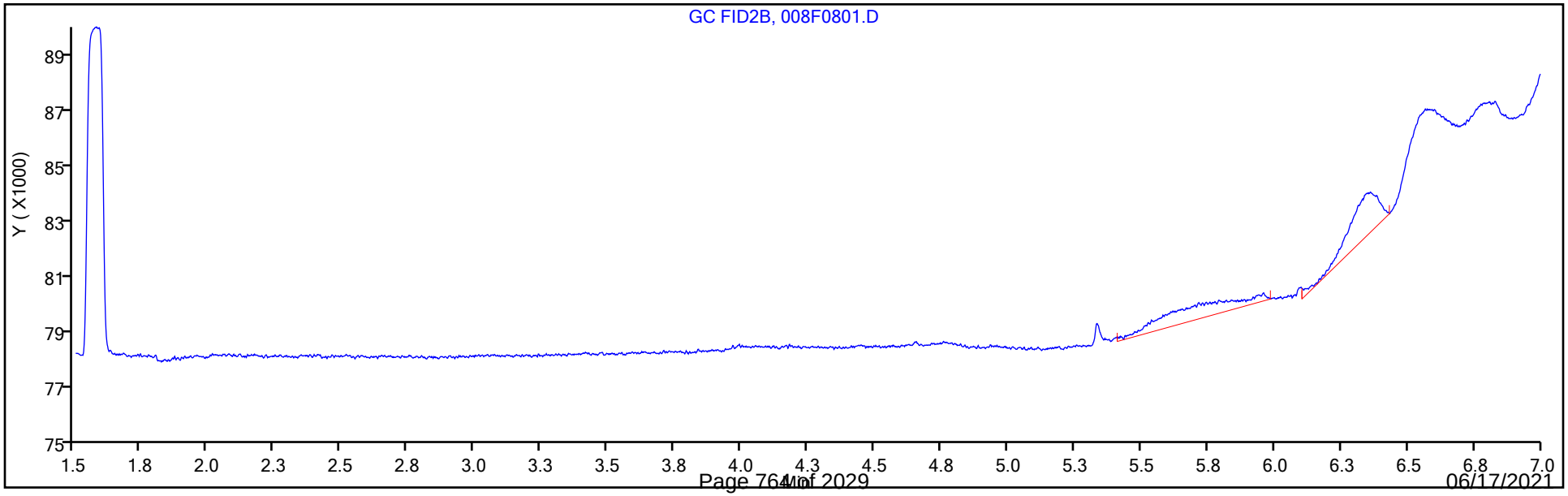
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\008F0801.D

Injection Date:	01-Jun-2021 12:26:07	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-13	Lab Sample ID:	280-149116-13	Worklist Smp#:	8
Client ID:	PZ007-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0024-21A Lab Sample ID: 280-149116-14

Matrix: Water Lab File ID: 053F5301.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 08:30

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 21:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0020	U M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\053F5301.D
Lims ID: 280-149116-H-14
Client ID: G0024-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 21:40:22 ALS Bottle#: 53 Worklist Smp#: 53
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-14
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 10:48:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						7Ma
1	1.183	1.191	-0.008	46390	-0.0194	a
2	1.590	1.598	-0.008	34031	0.0356	M
					RPD = 680.87	
LOD = 0.6300						
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

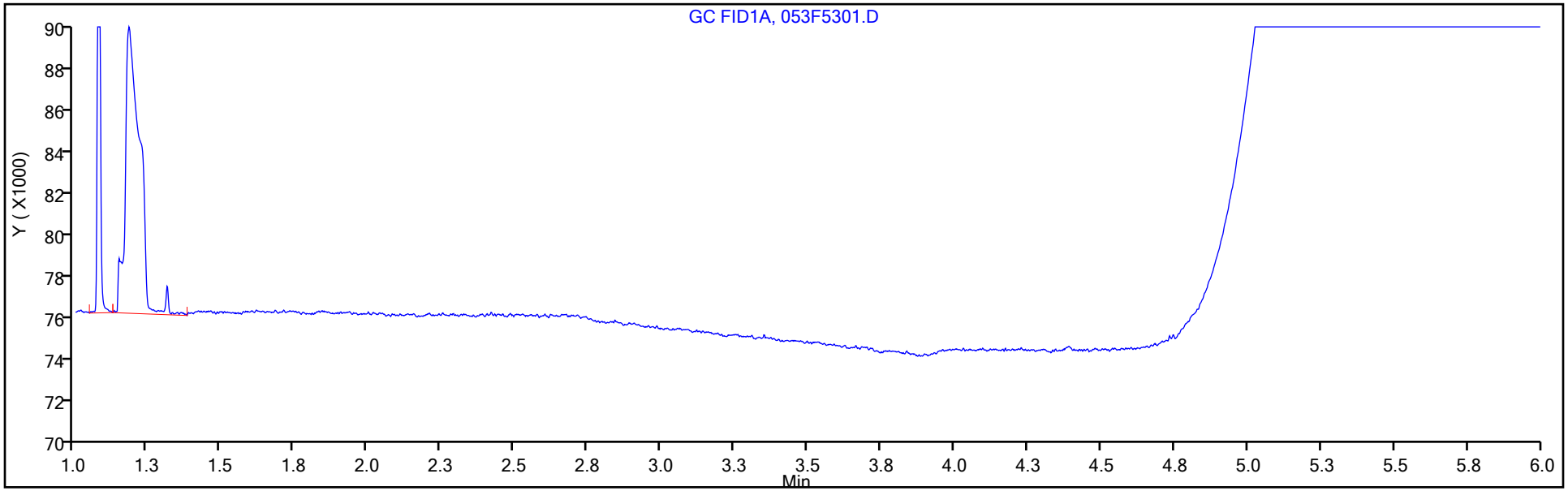
Report Date: 02-Jun-2021 11:03:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

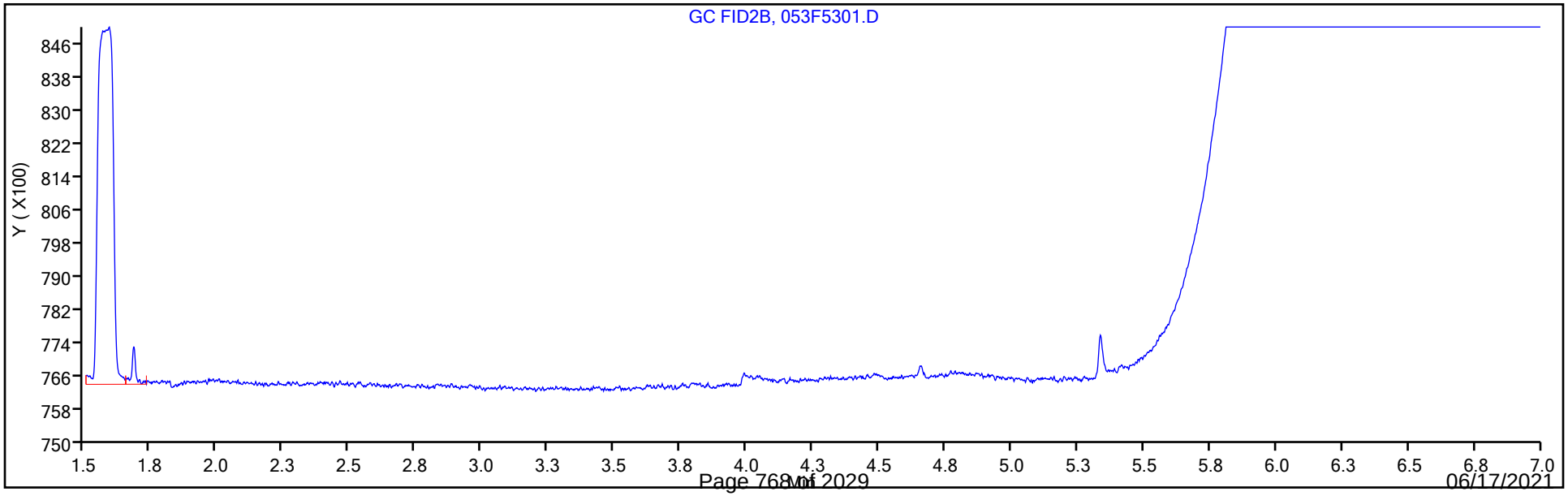
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\053F5301.D

Injection Date:	01-Jun-2021 21:40:22	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-14	Lab Sample ID:	280-149116-14	Worklist Smp#:	53
Client ID:	G0024-21A				
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

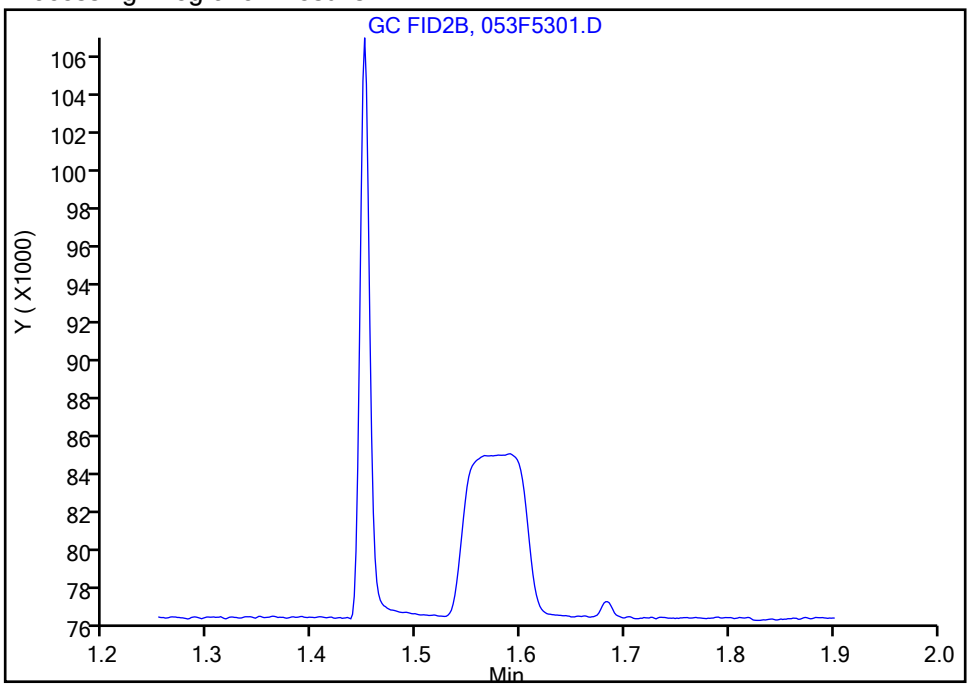
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\053F5301.D				
Injection Date:	01-Jun-2021 21:40:22	Instrument ID:	VGC_J		
Lims ID:	280-149116-H-14	Lab Sample ID:	280-149116-14		
Client ID:	G0024-21A				
Operator ID:	robertstr	ALS Bottle#:	53	Worklist Smp#:	53
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

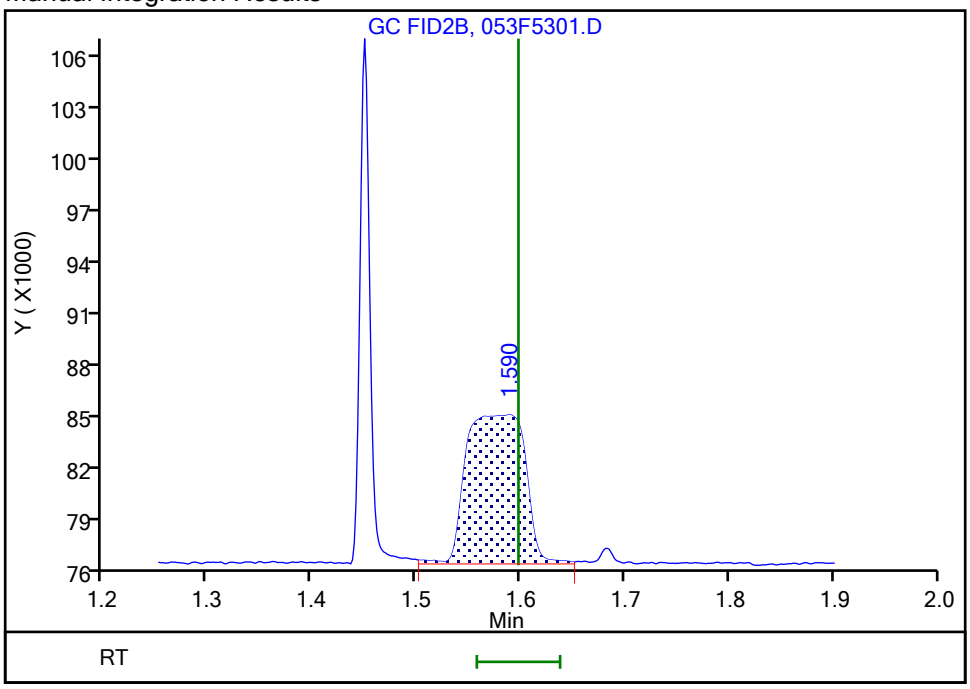
Not Detected
Expected RT: 1.60

Processing Integration Results



Manual Integration Results

RT: 1.59
Area: 34031
Amount: 0.035613
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 10:47:52
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ020-21A Lab Sample ID: 280-149116-15

Matrix: Water Lab File ID: 059F5901.D

Analysis Method: RSK-175 Date Collected: 05/26/2021 11:40

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 22:54

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.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.00079	J M	0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\059F5901.D
Lims ID: 280-149116-H-15
Client ID: PZ020-21A
Sample Type: Client
Inject. Date: 01-Jun-2021 22:54:21 ALS Bottle#: 59 Worklist Smp#: 59
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-15
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:17 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 11:00:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						Ma
1	1.186	1.191	-0.005	139731	0.7712	a
2	1.590	1.598	-0.008	115680	0.7937	M
					RPD = 2.88	
3 Ethane						
1		1.456			ND	
2		2.788				
4 Ethylene						
1		1.734			ND	
2		2.401				
5 Propane						
1		2.529			ND	
2		4.631				
6 Acetylene						
1		4.004			ND	
2		2.521				
7 Butane						
1		4.362			ND	
2		6.094				
8 isobutylene						
1		5.214			ND	
2		5.939				

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

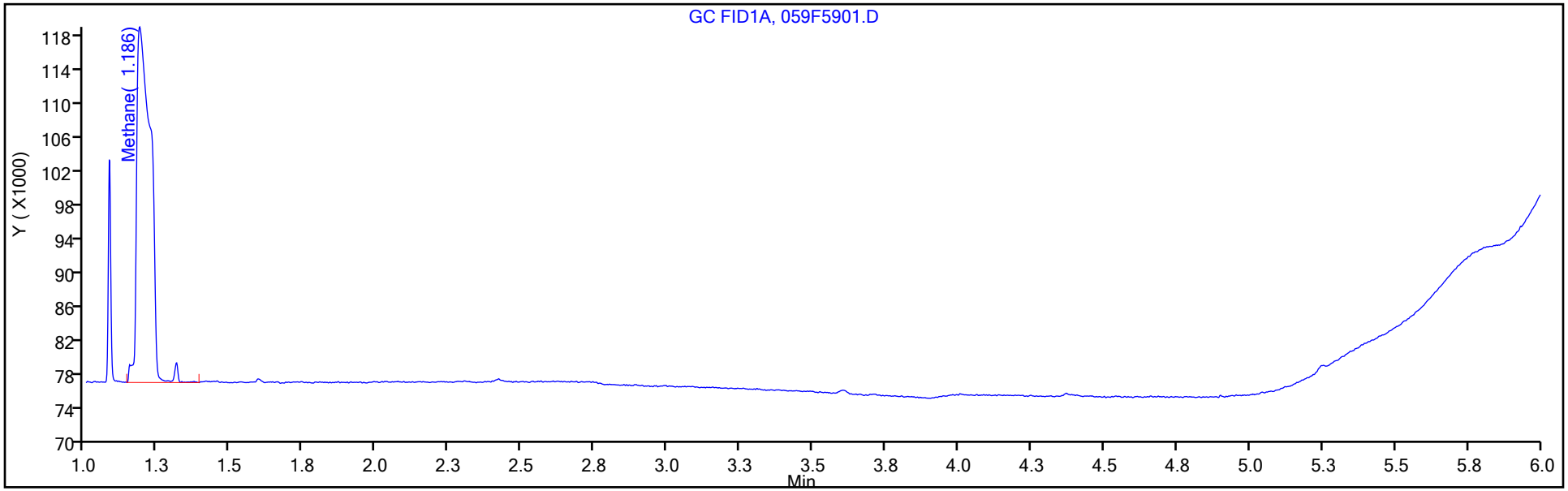
Report Date: 02-Jun-2021 11:03:20 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

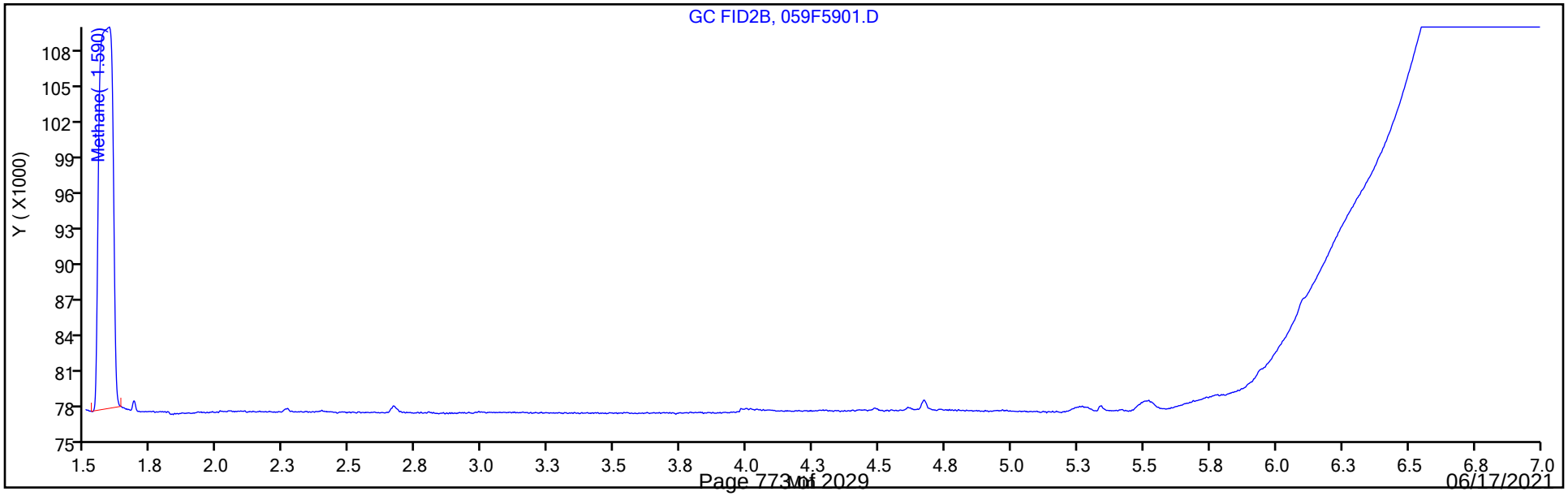
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\059F5901.D

Injection Date:	01-Jun-2021 22:54:21	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-15	Lab Sample ID:	280-149116-15	Worklist Smp#:	59
Client ID:	PZ020-21A				
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

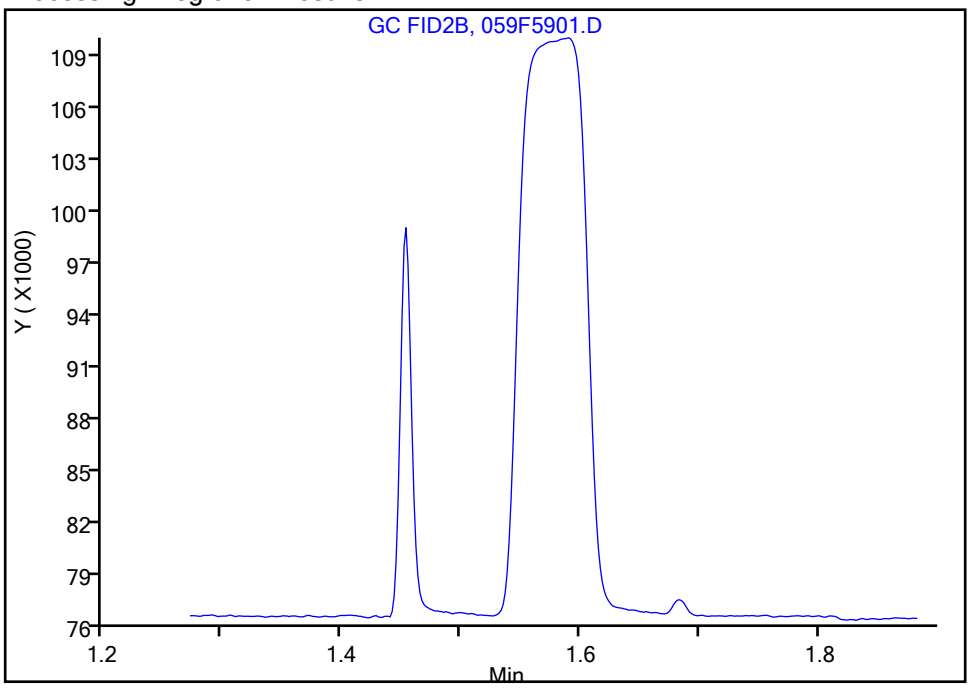
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\059F5901.D				
Injection Date:	01-Jun-2021 22:54:21	Instrument ID:	VGC_J		
Lims ID:	280-149116-H-15	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	robertstr	ALS Bottle#:	59	Worklist Smp#:	59
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

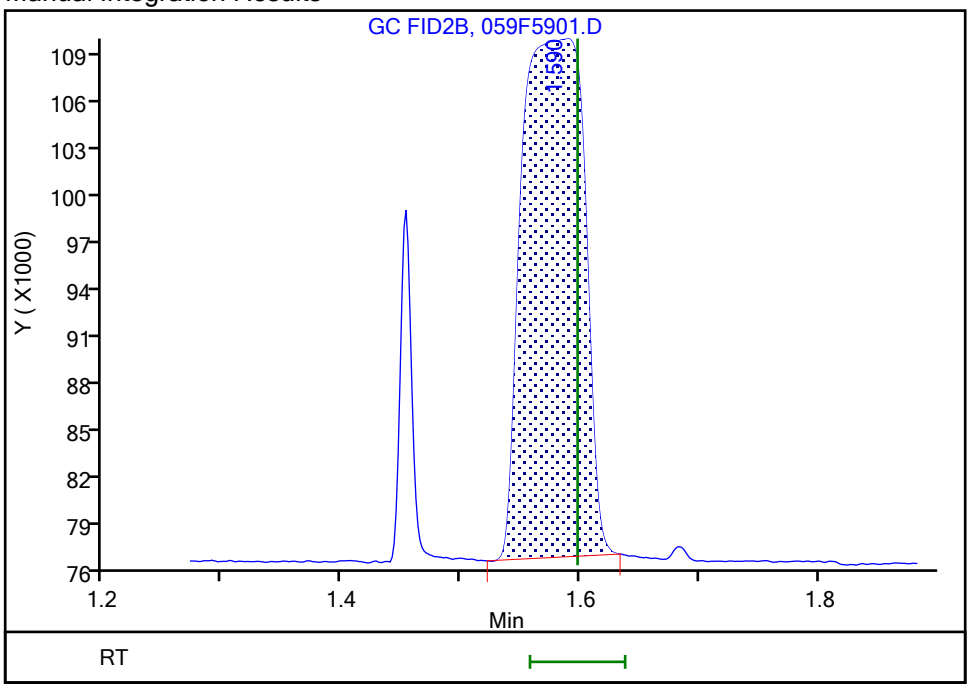
Not Detected
Expected RT: 1.60

Processing Integration Results



Manual Integration Results

RT: 1.59
Area: 115680
Amount: 0.793681
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 10:54:31
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45322

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	1.174	1.173	1.175	1.172	1.172	1.168	1.172	1.169	1.163		1.132 - 1.212	1.171
Ethane	1.462	1.463	1.460	1.457	1.462	1.458					1.412 - 1.512	1.460
Ethylene	1.781	1.778	1.782	1.779	1.779	1.771					1.729 - 1.829	1.778
Acetylene	4.272	4.269	4.262	4.244	4.234	4.216					4.154 - 4.314	4.250

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45322

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	170762 119639 105834	144481 119186	132564 115371	124543 114737	Lin2	48685.2680	118061.221							0.9970		0.9900
Ethane	105903 112915	109698 115182	123636	120380	Ave		114619.149				5.8		20.0			
Ethylene	85223 93883	88022 91460	96848	95242	Ave		91779.7559				4.9		20.0			
Acetylene	22999 26292	25177 26445	27007	27739	Ave		25942.9894				6.4		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.: 280-149116-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45322

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	155827 34804015	263689 208468313	1935518 829291020	9092065 2294825441	17468122	0.913 292	1.83 1807	14.6 7228	73.0 21683	146
Ethane	Ave	181168 63053378	375320	3384056	16474689	30906100	1.71 547	3.42	27.4	137	274
Ethylene	Ave	136002 46705608	280938	2472852	12159201	23971500	1.60 511	3.19	25.5	128	255
Acetylene	Ave	34073 12537110	74600	640190	3287680	6232354	1.48 474	2.96	23.7	119	237

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jun-2020 10:08:41 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 280-0092709-001
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:57 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 10:23:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.172	0.002	155827	0.9125	0.9075	
2	1.578	1.577	0.001	127907	0.9125	0.9072	
						RPD = 0.03	
3 Ethane							
1	1.462	1.462	0.000	181168	1.71	1.58	
2	2.754	2.756	-0.002	152683	1.71	1.57	
						RPD = 0.50	
4 Ethylene							M
1	1.781	1.779	0.002	136002	1.60	1.48	
2	2.369	2.372	-0.003	107572	1.60	1.47	M
						RPD = 0.62	
5 Propane							
1	2.692	2.676	0.016	276461	2.51	2.34	
2	4.616	4.609	0.007	230434	2.51	2.30	
						RPD = 1.64	
6 Acetylene							Ma
1	4.272	4.234	0.038	34073	1.48	1.31	M
2	2.486	2.486	0.000	46871	1.48	1.37	M
						RPD = 3.88	
7 Butane							Ma
1	4.581	4.541	0.040	302314	3.31	3.44	M
2	6.089	6.076	0.013	280641	3.31	3.45	M
						RPD = 0.36	
8 isobutylene							
1	5.414	5.381	0.033	210574	3.19	2.94	
2	5.929	5.921	0.008	184181	3.19	2.94	
						RPD = 0.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

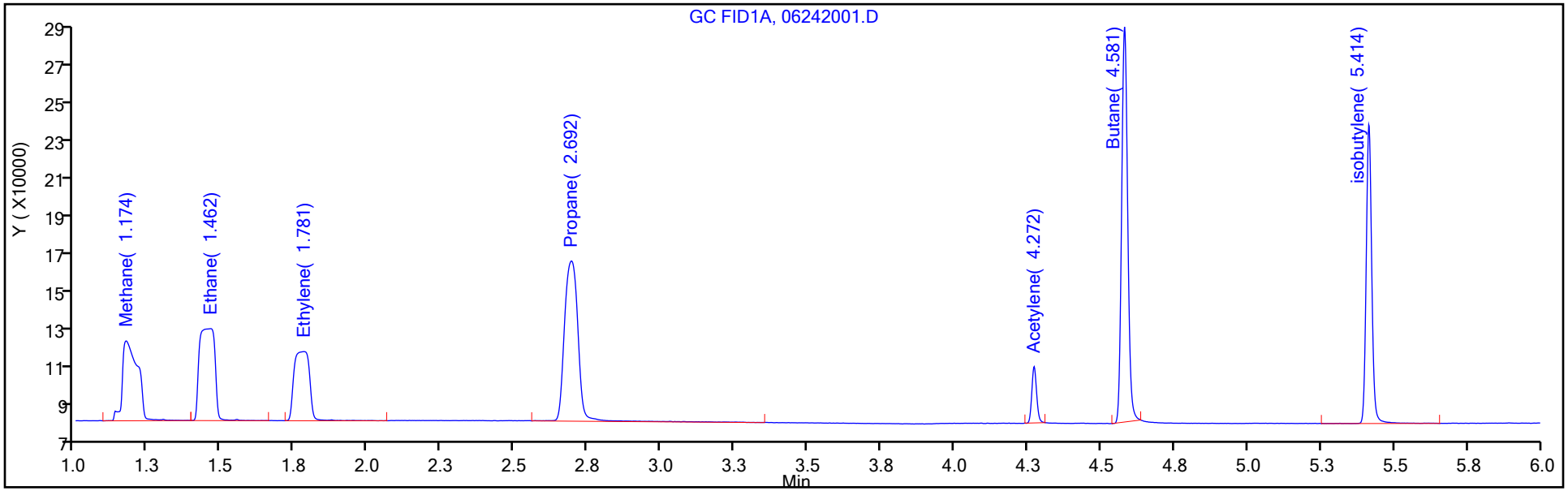
Report Date: 24-Jun-2020 12:39:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

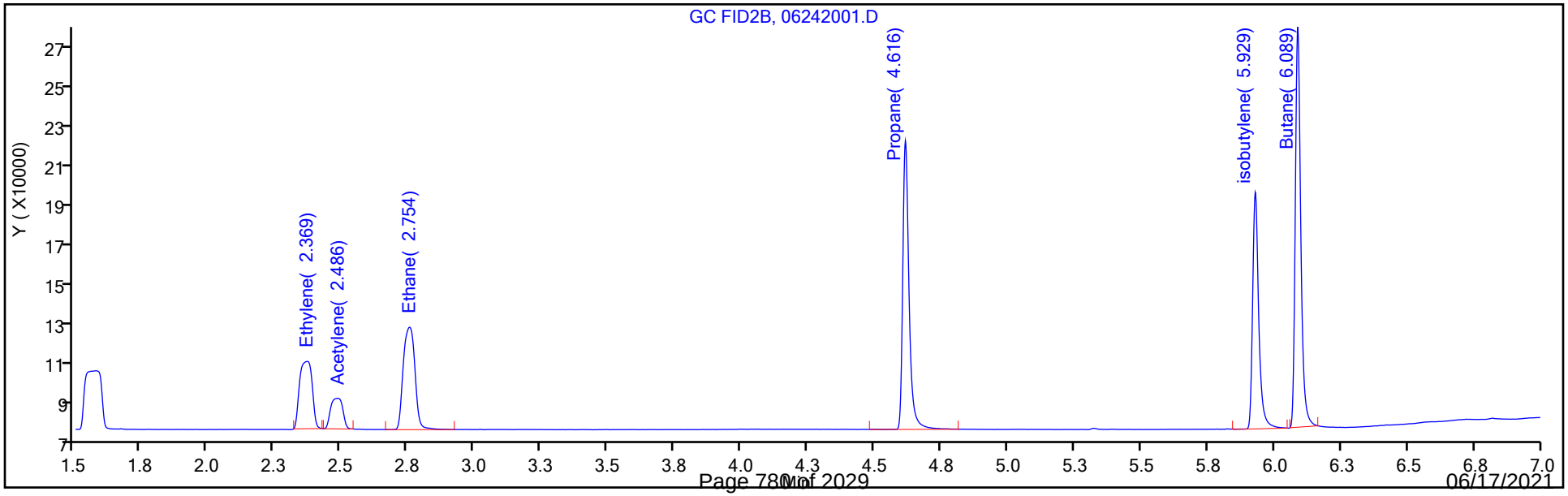
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D

Injection Date:	24-Jun-2020 10:08:41	Instrument ID:	VGC_J	Operator ID:	gm
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

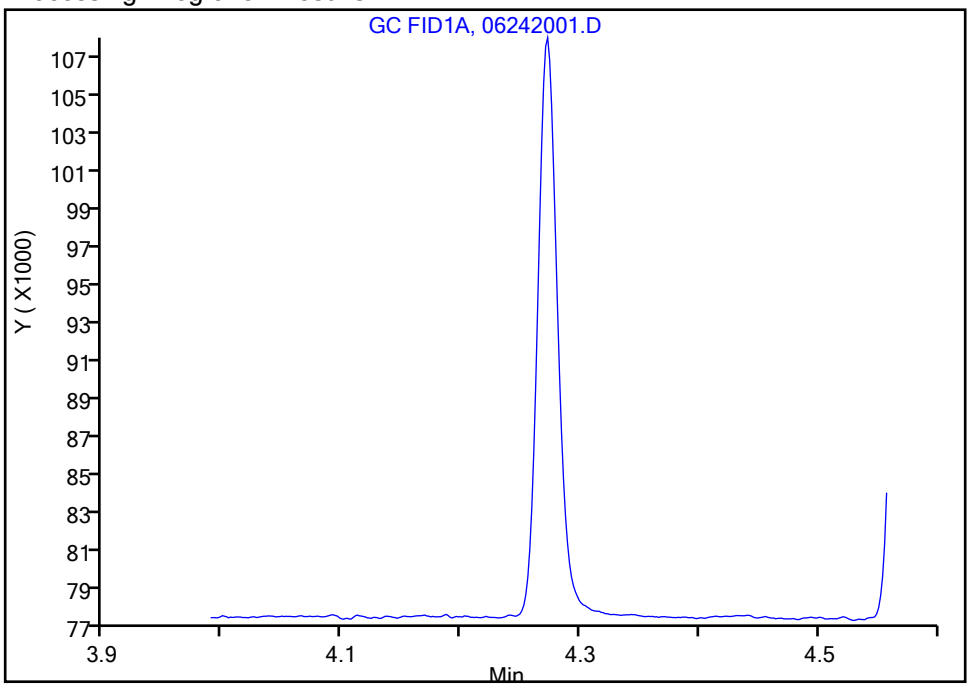
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D
Injection Date: 24-Jun-2020 10:08:41 Instrument ID: VGC_J
Lims ID: IC L1
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

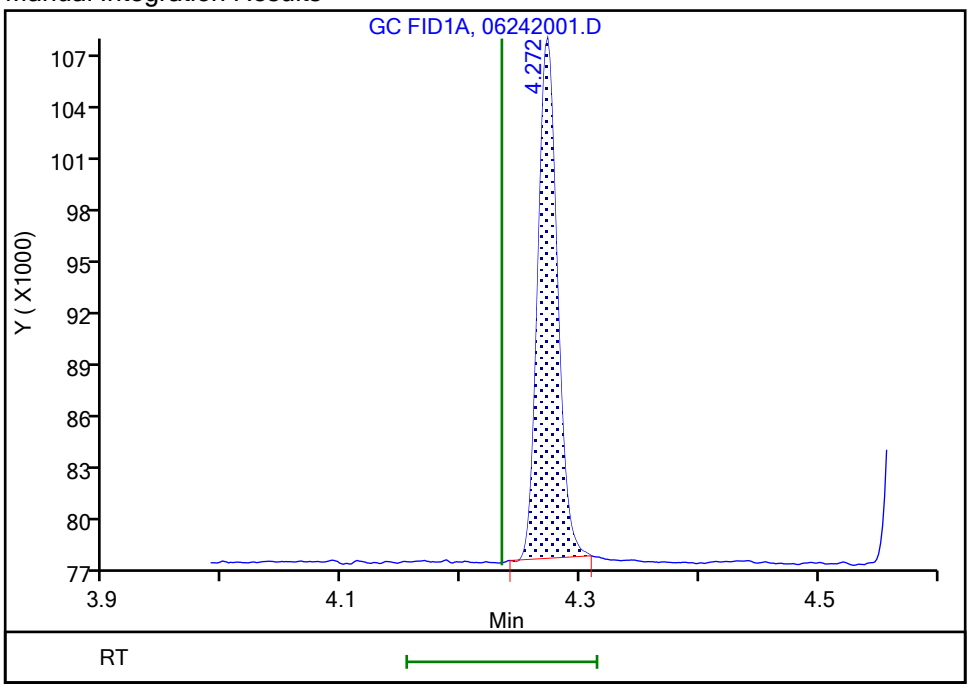
Processing Integration Results

RT: 4.24
Area: 0
Amount: 1.272887
Amount Units: ug/l



Manual Integration Results

RT: 4.27
Area: 34073
Amount: 1.313380
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:04:01
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jun-2020 10:20:49 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 280-0092709-002
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:58 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:05:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.173	1.172	0.001	263689	1.83	1.82	
2	1.576	1.577	-0.001	226430	1.83	1.82	
						RPD = 0.04	
3 Ethane							
1	1.463	1.462	0.001	375320	3.42	3.27	
2	2.759	2.756	0.003	317897	3.42	3.27	
						RPD = 0.00	
4 Ethylene							
1	1.778	1.779	-0.001	280938	3.19	3.06	
2	2.373	2.372	0.001	225225	3.19	3.08	
						RPD = 0.72	
5 Propane							
1	2.693	2.676	0.017	552814	5.02	4.68	
2	4.619	4.609	0.010	470455	5.02	4.70	
						RPD = 0.44	
6 Acetylene							M
1	4.269	4.234	0.035	74600	2.96	2.88	
2	2.486	2.486	0.000	96395	2.96	2.81	M
						RPD = 2.38	
7 Butane							Ma
1	4.578	4.541	0.037	587119	6.61	6.04	M
2	6.089	6.076	0.013	535944	6.61	5.99	M
						RPD = 0.75	
8 isobutylene							
1	5.413	5.381	0.032	406845	6.38	5.68	
2	5.931	5.921	0.010	356829	6.38	5.69	
						RPD = 0.17	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

Report Date: 24-Jun-2020 12:39:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D

Injection Date: 24-Jun-2020 10:20:49 Instrument ID: VGC_J Operator ID: gm

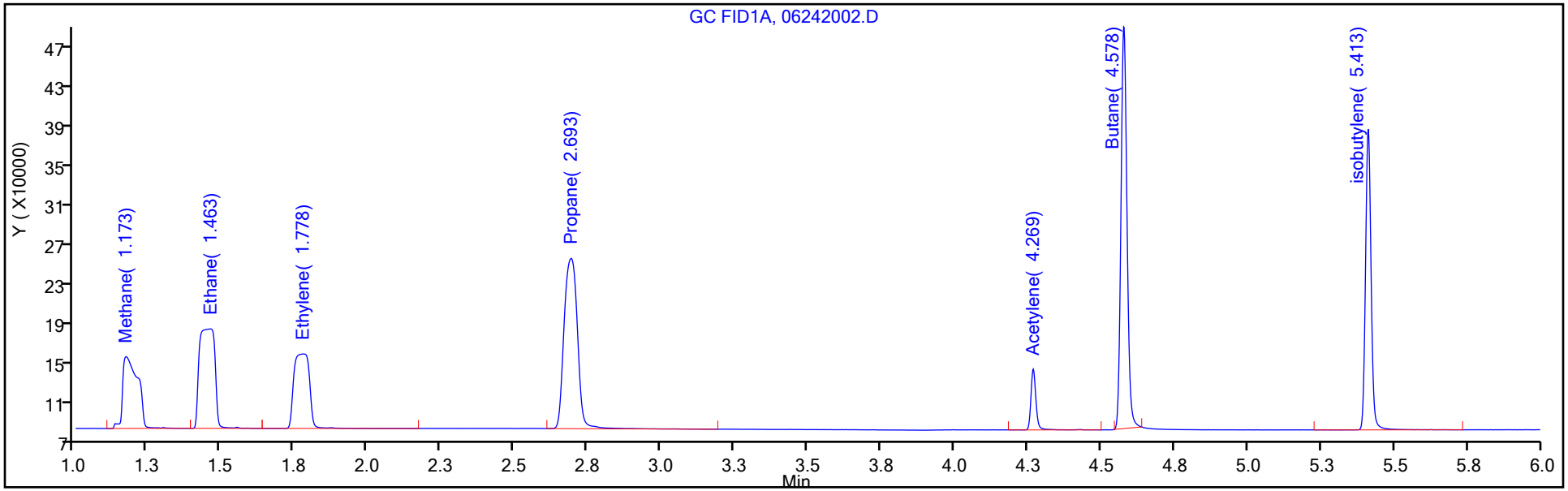
Lims ID: IC L2 Worklist Smp#: 2

Client ID:

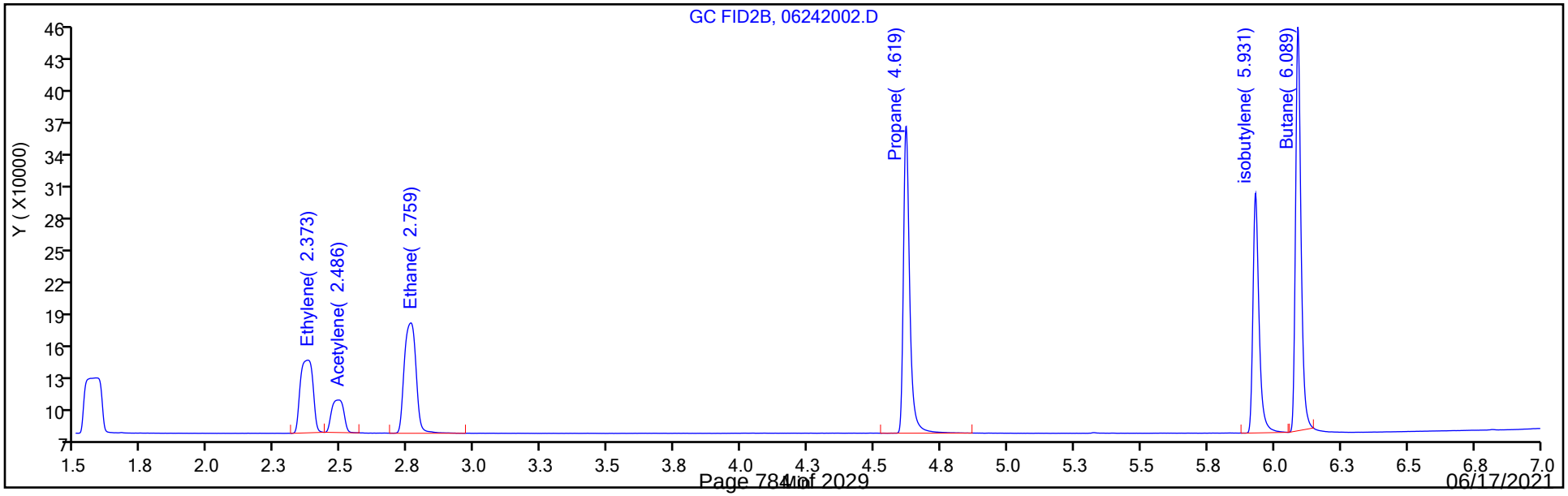
Purge Vol: 18.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

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: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jun-2020 10:33:02 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 280-0092709-003
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:59 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:08:41

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.175	1.172	0.003	1935518	14.6	16.0	
2	1.582	1.577	0.005	1760038	14.6	16.1	
						RPD = 0.49	
3 Ethane							
1	1.460	1.462	-0.002	3384056	27.4	29.5	
2	2.760	2.756	0.004	2873171	27.4	29.6	
						RPD = 0.24	
4 Ethylene							
1	1.782	1.779	0.003	2472852	25.5	26.9	
2	2.375	2.372	0.003	1992619	25.5	27.3	
						RPD = 1.23	
5 Propane							
1	2.690	2.676	0.014	5082003	40.1	43.0	
2	4.618	4.609	0.009	4318201	40.1	43.2	
						RPD = 0.29	
6 Acetylene							M
1	4.262	4.234	0.028	640190	23.7	24.7	
2	2.488	2.486	0.002	841585	23.7	24.5	M
						RPD = 0.66	
7 Butane							M
1	4.572	4.541	0.031	5935156	52.9	54.8	
2	6.088	6.076	0.012	5391164	52.9	54.3	M
						RPD = 0.94	
8 isobutylene							Ma
1	5.405	5.381	0.024	3773741	51.1	52.7	M
2	5.928	5.921	0.007	3291654	51.1	52.5	M
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

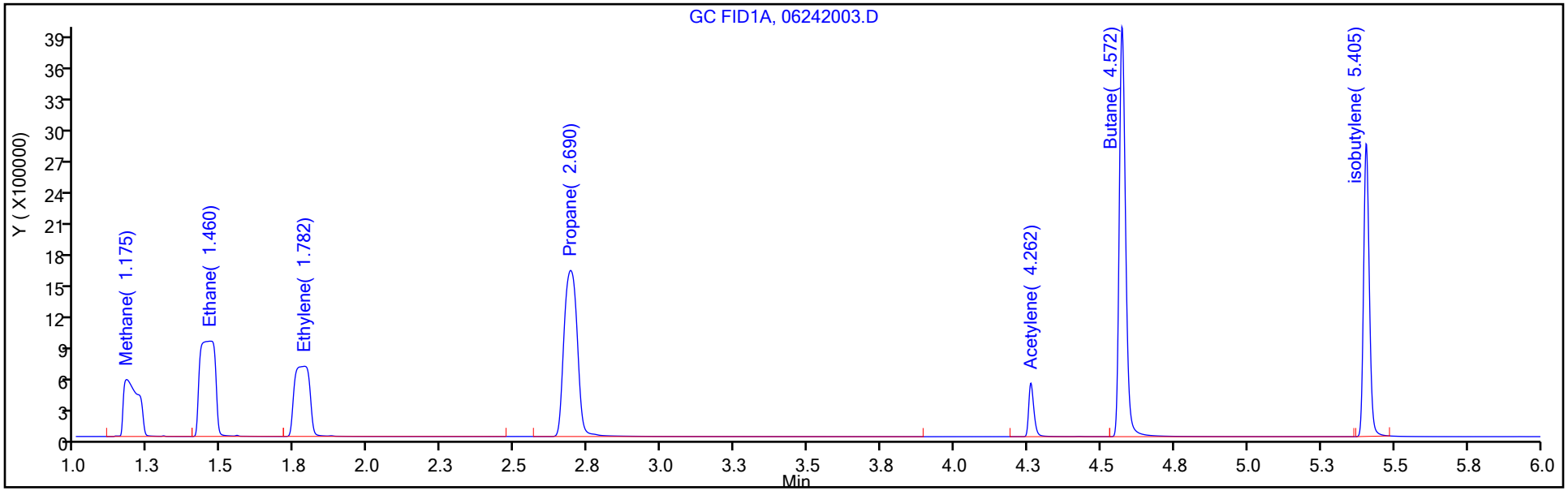
Report Date: 24-Jun-2020 12:39:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

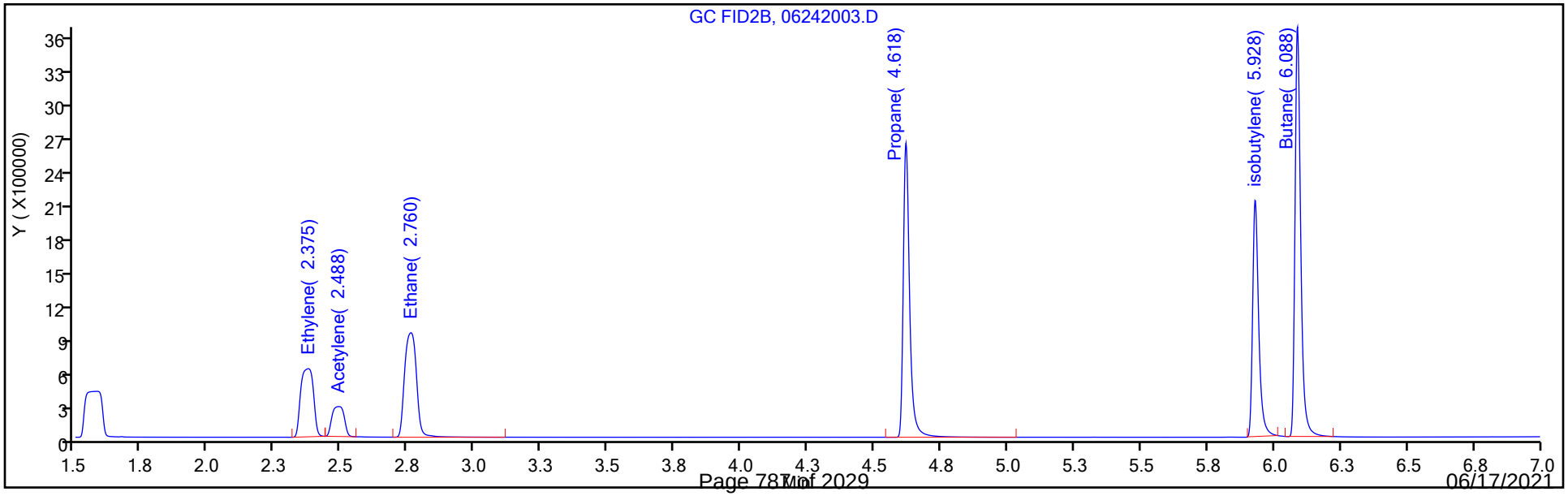
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D

Injection Date:	24-Jun-2020 10:33:02	Instrument ID:	VGC_J	Operator ID:	gm
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: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D
Lims ID: ICRT L4
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 24-Jun-2020 10:45:14 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT L4
Misc. Info.: 280-0092709-004
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:59 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:02:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	9092065	73.0	76.6	
2	1.578	1.578	0.000	8241315	73.0	76.2	
						RPD = 0.48	
3 Ethane							
1	1.457	1.457	0.000	16474689	136.9	143.7	
2	2.756	2.756	0.000	13906890	136.9	143.2	
						RPD = 0.34	
4 Ethylene							
1	1.779	1.779	0.000	12159201	127.7	132.5	
2	2.373	2.373	0.000	9735448	127.7	133.3	
						RPD = 0.59	
5 Propane							
1	2.682	2.682	0.000	25071225	200.7	212.3	
2	4.614	4.614	0.000	21208455	200.7	212.0	
						RPD = 0.16	
6 Acetylene							M
1	4.244	4.244	0.000	3287680	118.5	126.7	
2	2.488	2.488	0.000	4312506	118.5	125.6	M
						RPD = 0.87	
7 Butane							
1	4.554	4.554	0.000	29907332	264.5	273.2	
2	6.083	6.083	0.000	28030666	264.5	279.3	
						RPD = 2.20	
8 isobutylene							
1	5.392	5.392	0.000	19808714	255.4	276.5	
2	5.926	5.926	0.000	17460732	255.4	278.4	
						RPD = 0.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

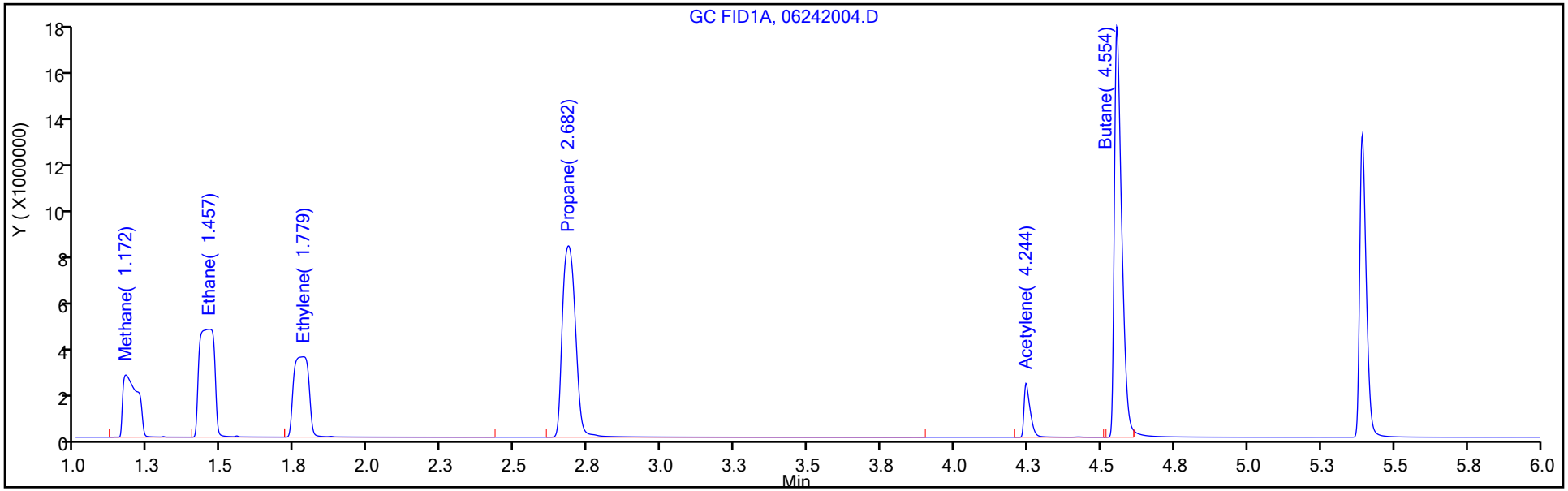
Report Date: 24-Jun-2020 12:39:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

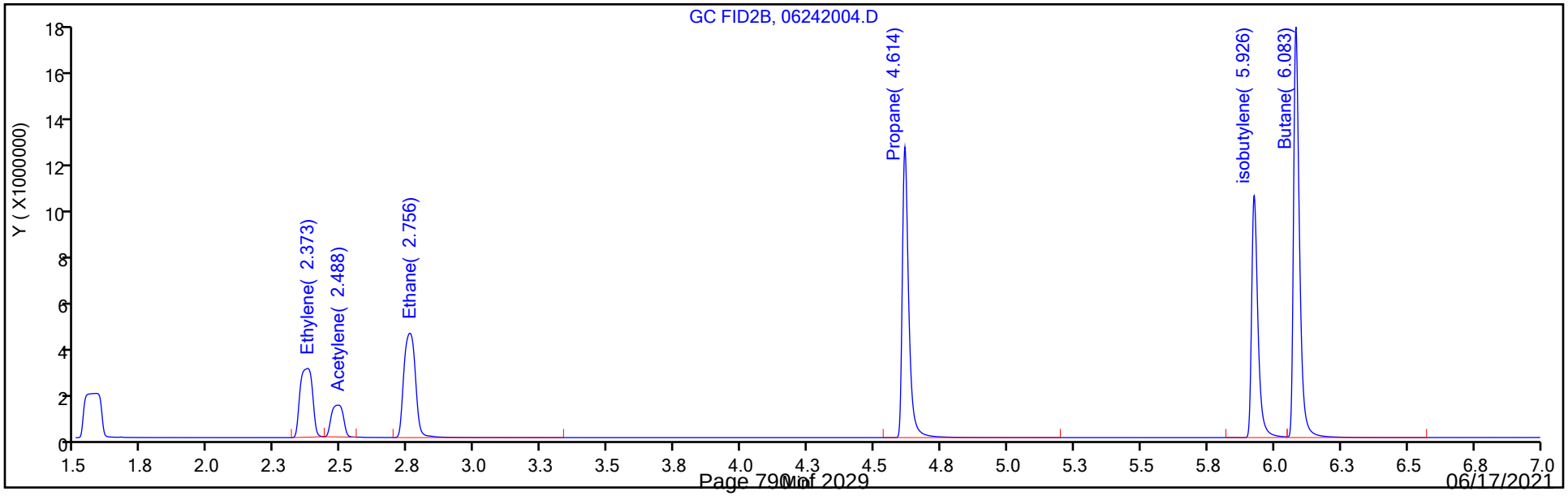
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D

Injection Date:	24-Jun-2020 10:45:14	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ICRT 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: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jun-2020 10:57:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: 280-0092709-005
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:00 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:10:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	17468122	146.0	147.5	
2	1.577	1.577	0.000	15578914	146.0	144.4	
						RPD = 2.18	
3 Ethane							
1	1.462	1.462	0.000	30906100	273.7	269.6	
2	2.756	2.756	0.000	26361358	273.7	271.5	
						RPD = 0.70	
4 Ethylene							
1	1.779	1.779	0.000	23971500	255.3	261.2	
2	2.372	2.372	0.000	18569939	255.3	254.2	
						RPD = 2.71	
5 Propane							
1	2.676	2.676	0.000	46992293	401.4	398.0	
2	4.609	4.609	0.000	40116354	401.4	401.0	
						RPD = 0.76	
6 Acetylene							M
1	4.234	4.234	0.000	6232354	237.0	240.2	
2	2.486	2.486	0.000	8203389	237.0	239.0	M
						RPD = 0.53	
7 Butane							
1	4.541	4.541	0.000	57396046	529.0	523.6	
2	6.076	6.076	0.000	52957196	529.0	527.0	
						RPD = 0.64	
8 isobutylene							
1	5.381	5.381	0.000	37720673	510.8	526.6	
2	5.921	5.921	0.000	33259110	510.8	530.3	
						RPD = 0.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

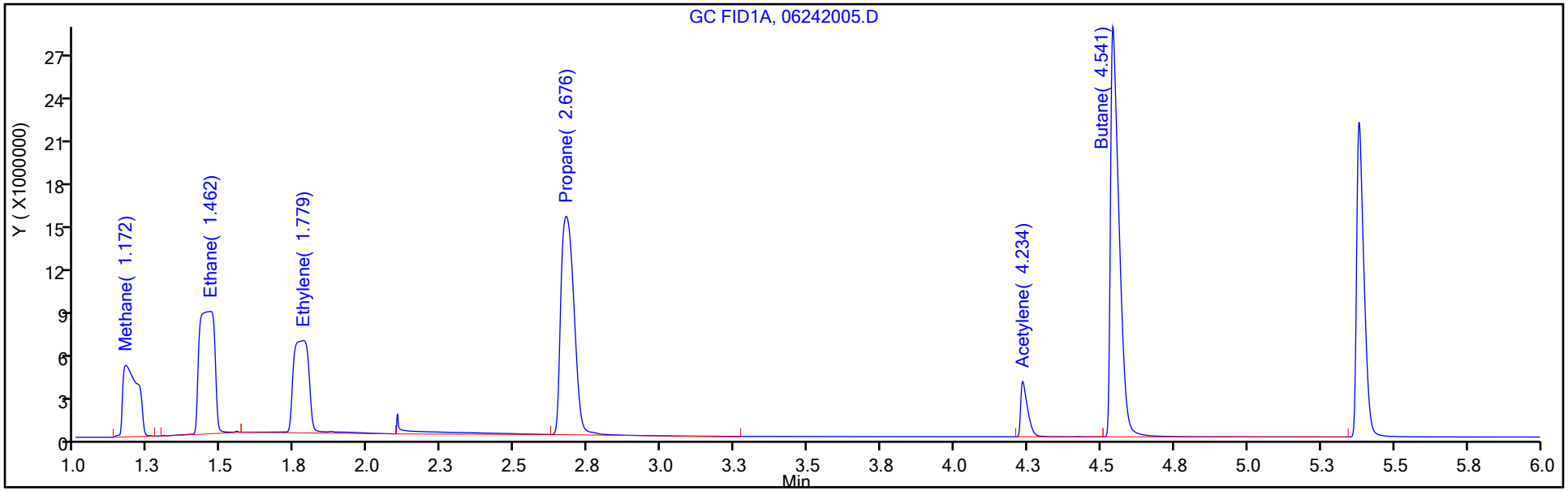
Report Date: 24-Jun-2020 12:40:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

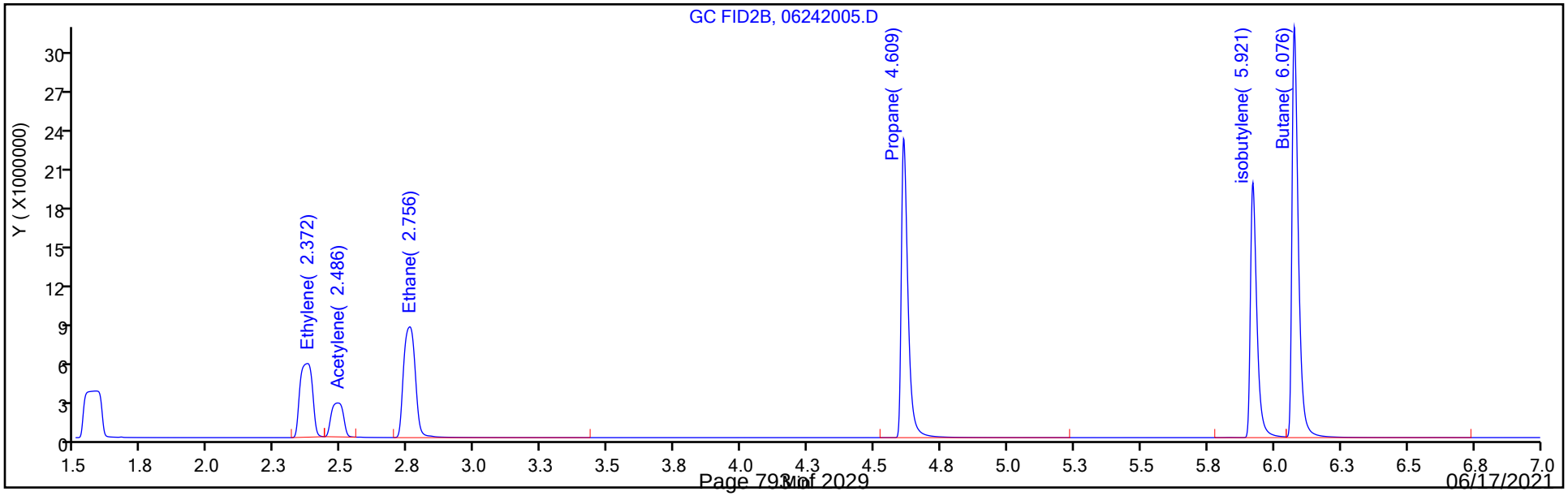
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D

Injection Date:	24-Jun-2020 10:57:30	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC 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: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Jun-2020 11:09:45 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L6
Misc. Info.: 280-0092709-006
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:22:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.168	1.172	-0.004	34804015	292.0	294.4	
2	1.576	1.577	-0.001	31463322	292.0	291.8	
						RPD = 0.87	
3 Ethane							
1	1.458	1.462	-0.004	63053378	547.4	550.1	
2	2.750	2.756	-0.006	53331817	547.4	549.4	
						RPD = 0.14	
4 Ethylene							
1	1.771	1.779	-0.008	46705608	510.7	508.9	
2	2.366	2.372	-0.006	37428833	510.7	512.4	
						RPD = 0.68	
5 Propane							
1	2.658	2.676	-0.018	95948907	802.8	812.6	
2	4.601	4.609	-0.008	81456479	802.8	814.2	
						RPD = 0.20	
6 Acetylene							Ma
1	4.216	4.234	-0.018	12537110	474.1	483.3	M
2	2.485	2.486	-0.001	16738973	474.1	487.6	M
						RPD = 0.90	
7 Butane							Ma
1	4.521	4.541	-0.020	114699787	1058.1	1045.8	M
2	6.066	6.076	-0.010	103377764	1058.1	1028.2	M
						RPD = 1.70	
8 isobutylene							M
1	5.365	5.381	-0.016	76413104	1021.5	1066.7	
2	5.913	5.921	-0.008	66173382	1021.5	1055.1	M
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

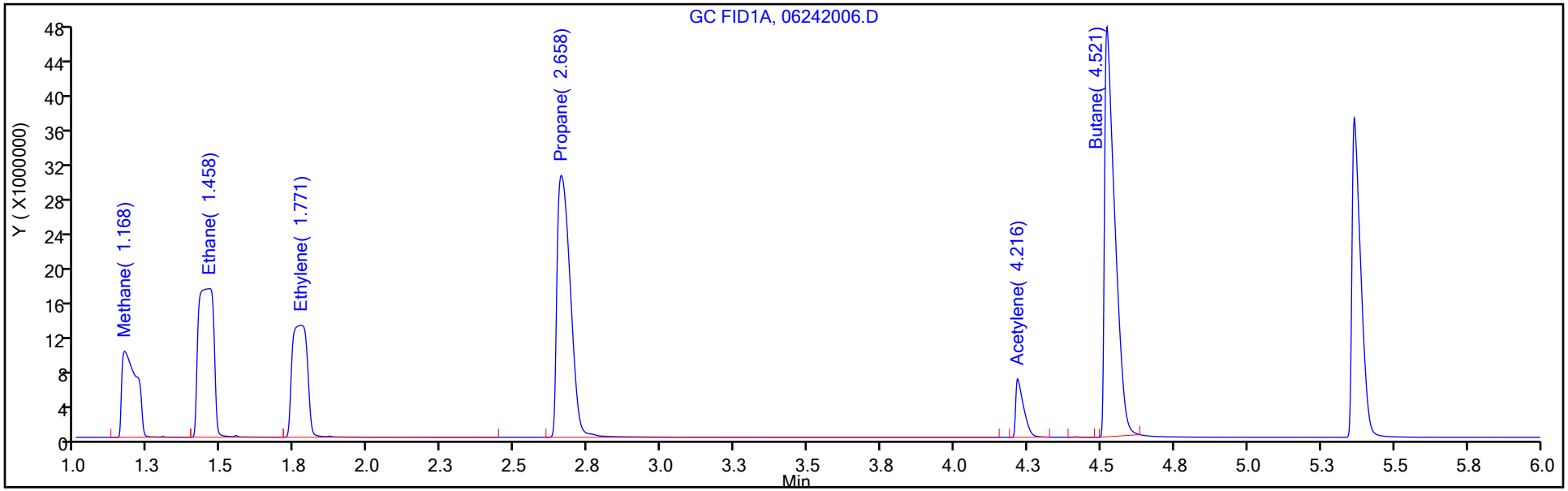
Report Date: 24-Jun-2020 12:40:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

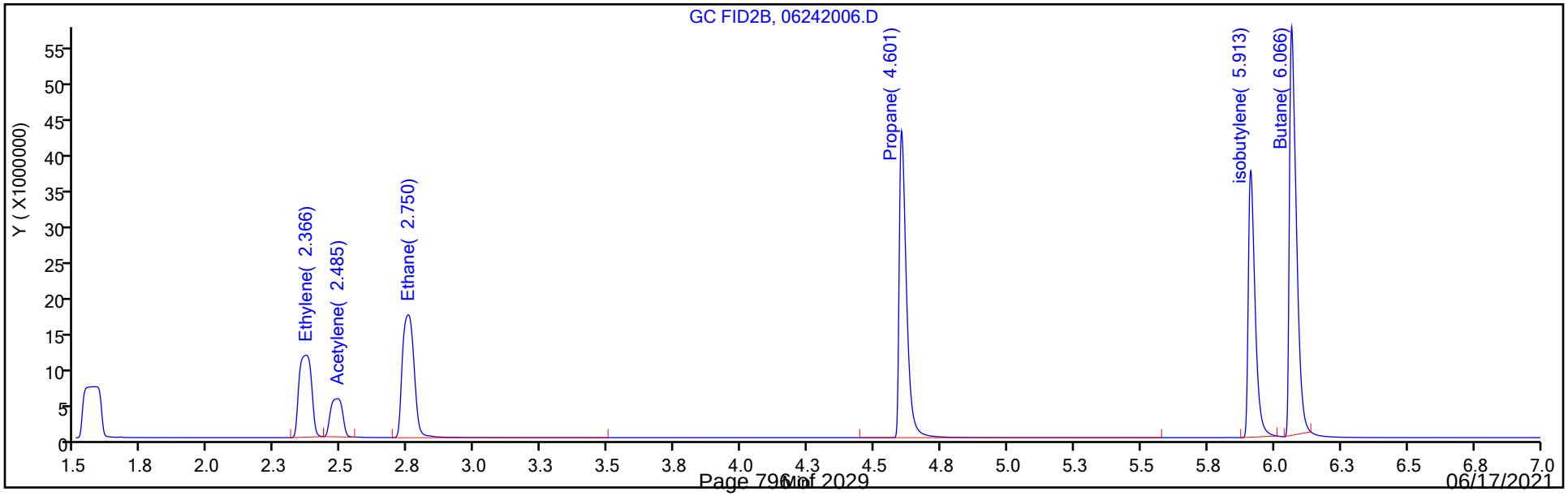
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D

Injection Date:	24-Jun-2020 11:09:45	Instrument ID:	VGC_J	Operator ID:	gm
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

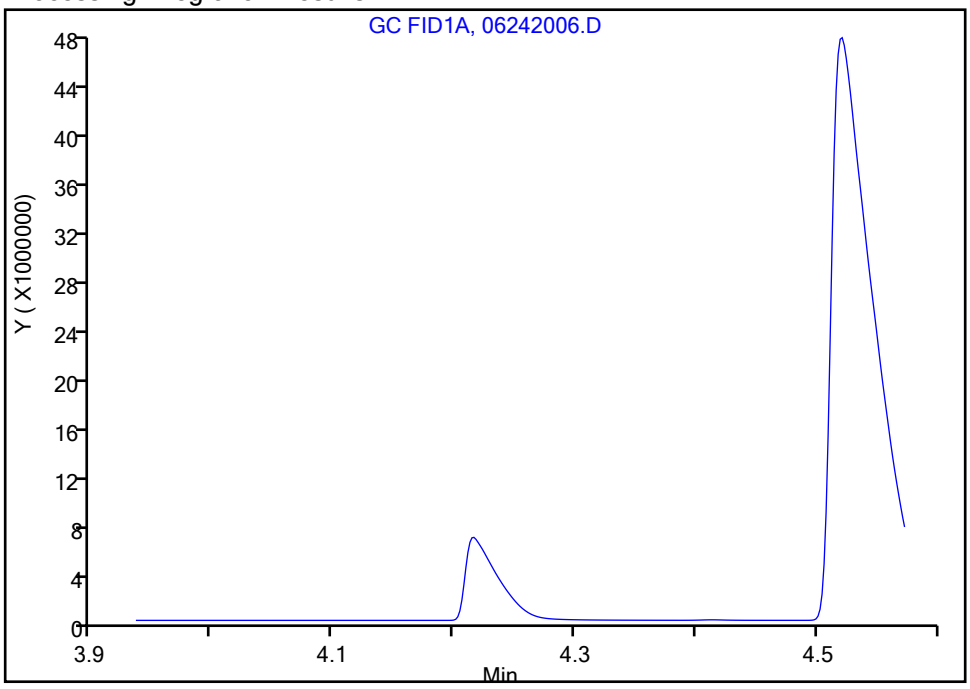
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D
Injection Date: 24-Jun-2020 11:09:45 Instrument ID: VGC_J
Lims ID: IC L6
Client ID:
Operator ID: gm ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

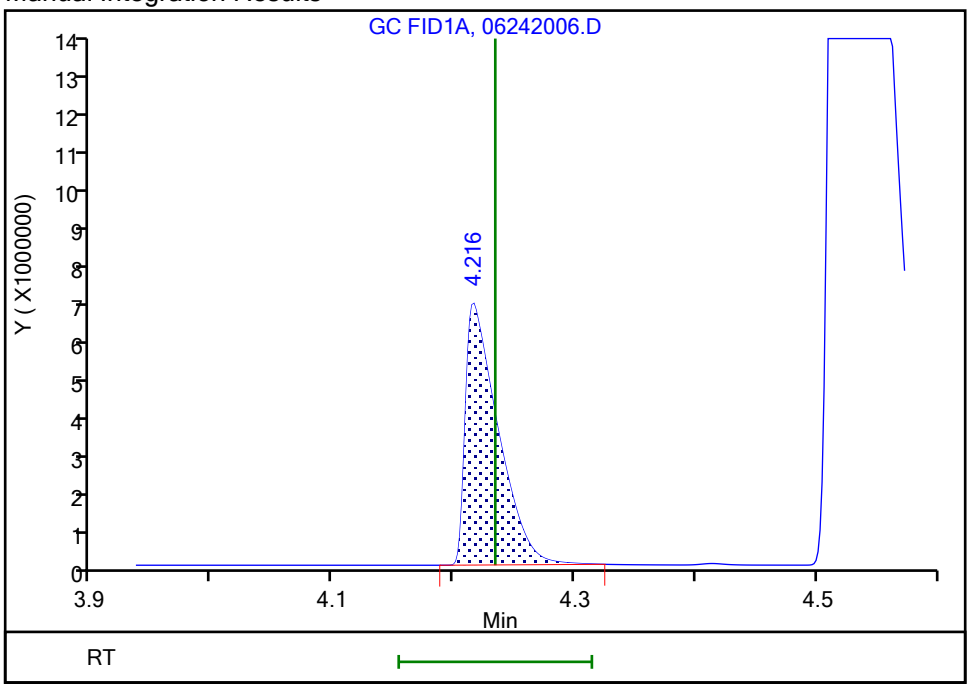
Processing Integration Results

RT: 4.23
Area: 0
Amount: 487.6074
Amount Units: ug/l



Manual Integration Results

RT: 4.22
Area: 12537110
Amount: 483.2562
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:22:47
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242007.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jun-2020 11:22:02 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 280-0092709-007
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:02 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:34:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	208468313	1806.9	1765.4	
2	1.576	1.577	-0.001	189546256	1806.9	1759.6	
						RPD = 0.33	

Reagents:

RSK175methane_00010 Amount Added: 50.00 Units: uL

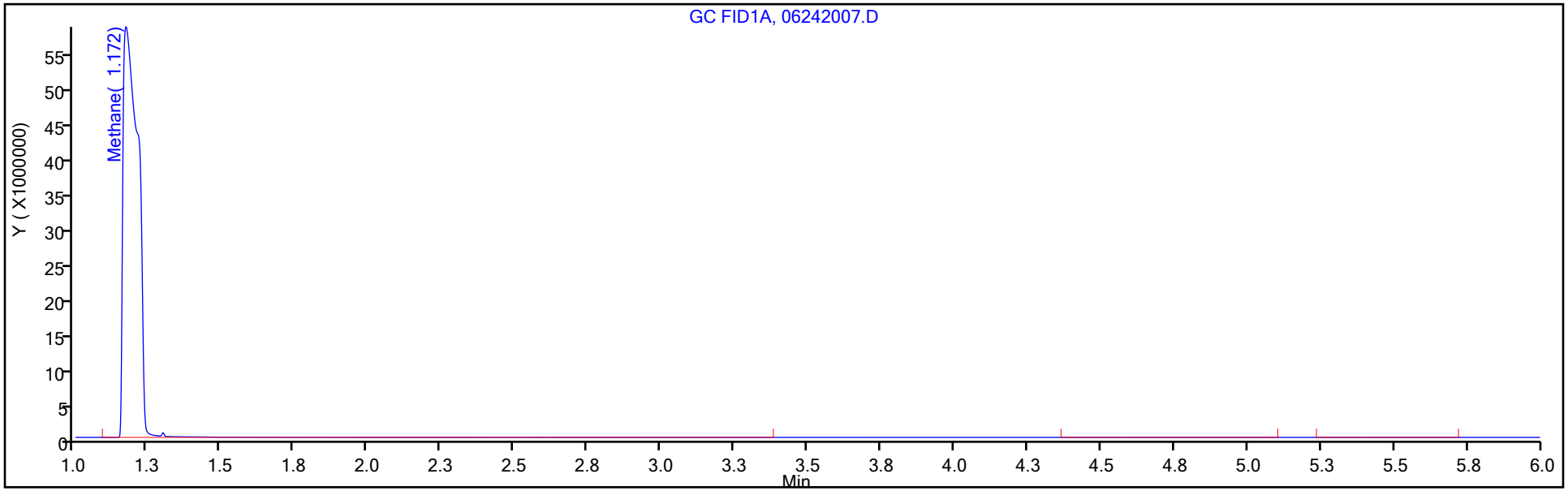
Report Date: 24-Jun-2020 12:40:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

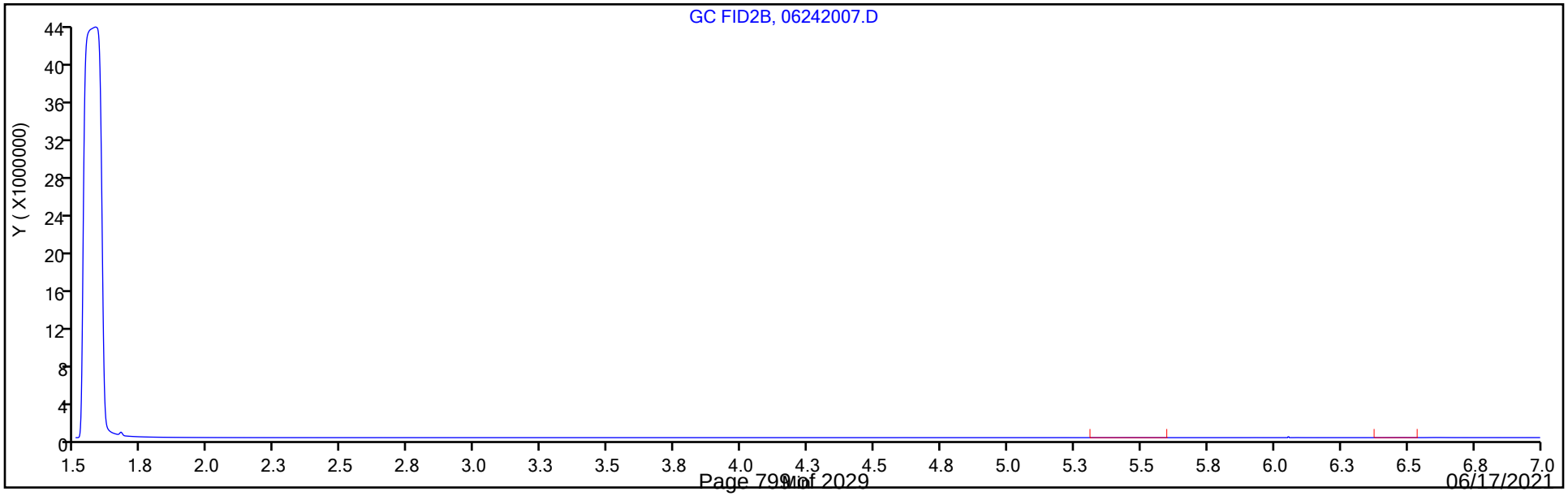
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242007.D

Injection Date:	24-Jun-2020 11:22:02	Instrument ID:	VGC_J	Operator ID:	gm
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: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242008.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Jun-2020 11:34:17 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 280-0092709-008
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:02 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:49:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.169	1.172	-0.003	829291020	7227.8	7023.8	
2	1.571	1.577	-0.006	768036307	7227.8	7130.5	
						RPD = 1.51	

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

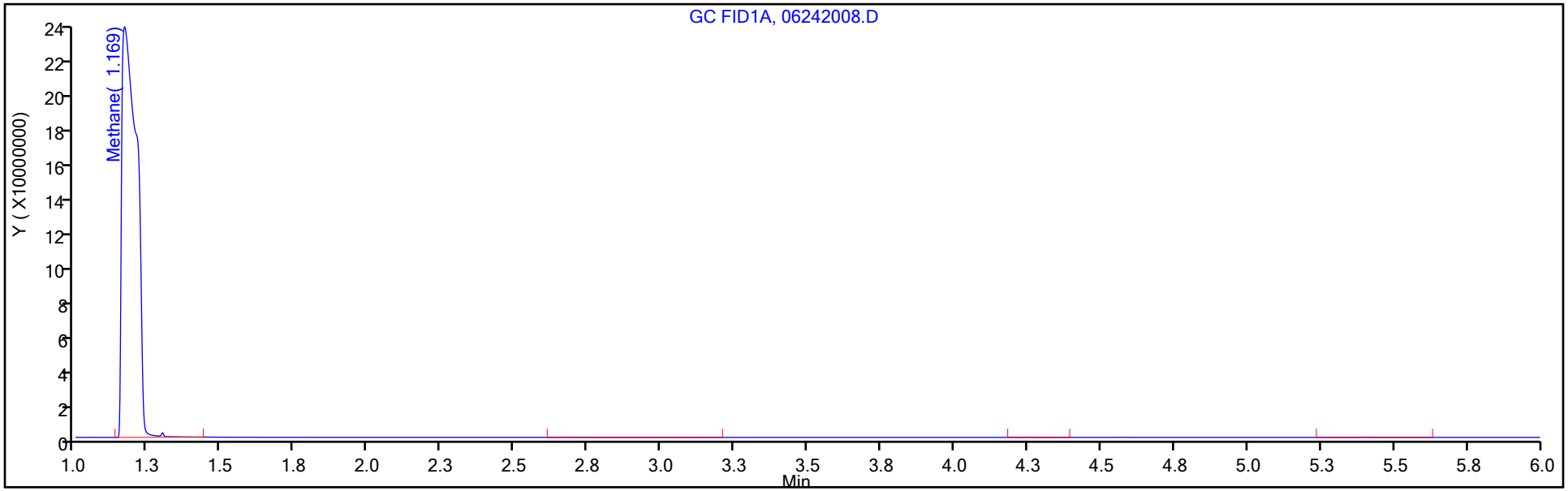
Report Date: 24-Jun-2020 12:40:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

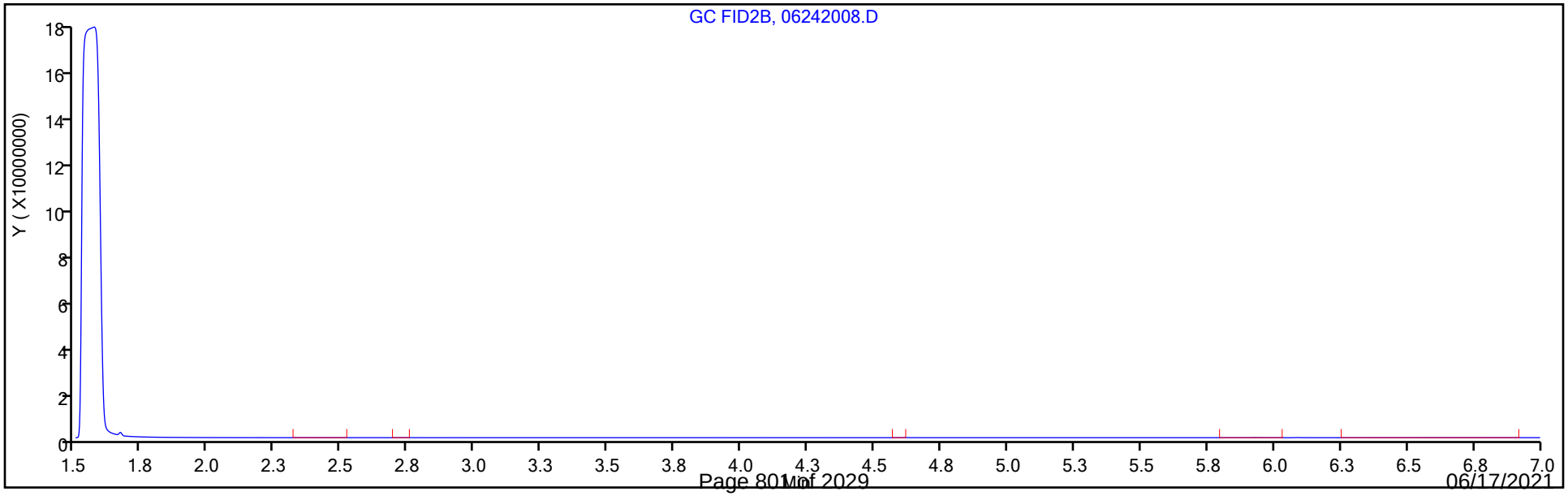
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242008.D

Injection Date:	24-Jun-2020 11:34:17	Instrument ID:	VGC_J	Operator ID:	gm
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: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 24-Jun-2020 11:46:32 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L9
Misc. Info.: 280-0092709-009
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:03 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:58:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.163	1.172	-0.009	2294825441	21683	19437	
2	1.560	1.577	-0.017	2136573736	21683	19837	
						RPD = 2.03	

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

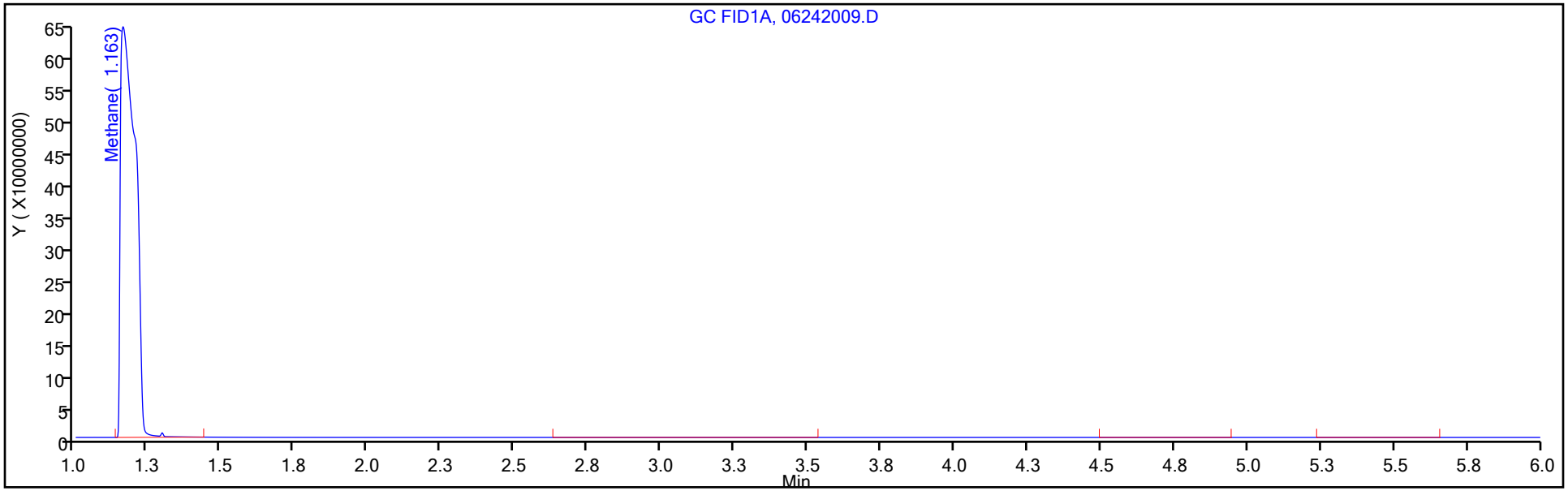
Report Date: 24-Jun-2020 12:40:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

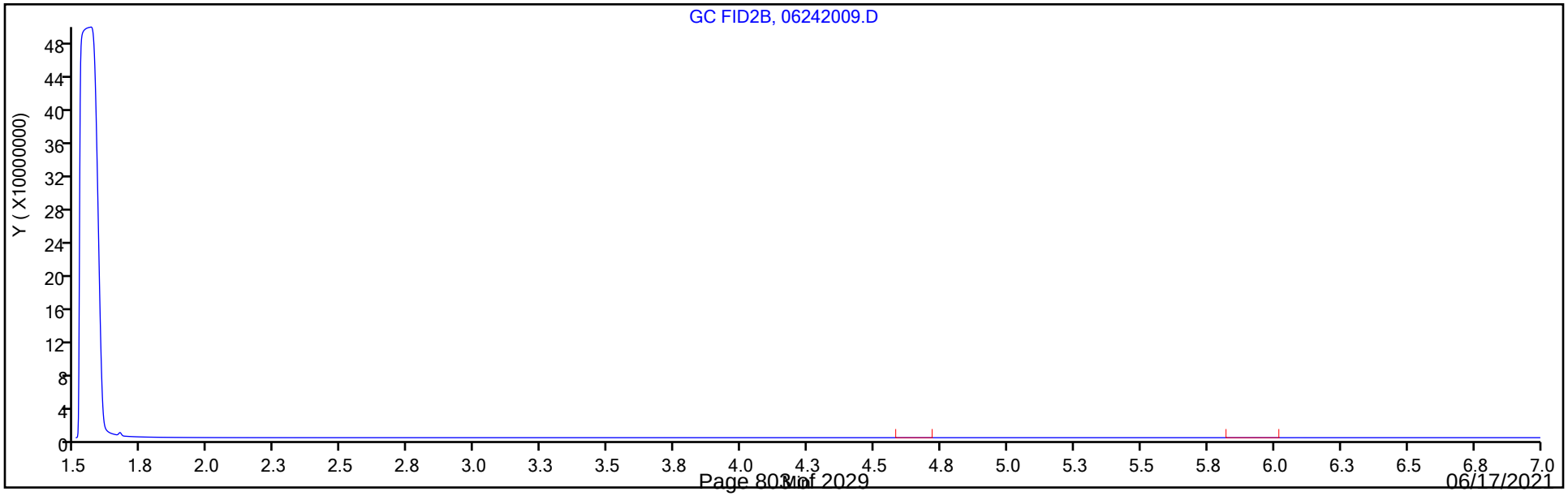
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Injection Date:	24-Jun-2020 11:46:32	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-149116-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45323

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	1.578	1.576	1.582	1.578	1.577	1.576	1.576	1.571	1.560		1.537 - 1.617	1.575
Ethylene	2.369	2.373	2.375	2.373	2.372	2.366					2.322 - 2.422	2.371
Acetylene	2.486	2.486	2.488	2.488	2.486	2.485					2.406 - 2.566	2.487
Ethane	2.754	2.759	2.760	2.756	2.756	2.750					2.706 - 2.806	2.756

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45323

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	140166 106700 98535	124066 107746	120545 104899	112890 106262	Lin2	30195.2183	107706.664							0.9970		0.9900
Ethylene	67408 72728	70567 73294	78040	76257	Ave		73048.9305				5.2		20.0			
Acetylene	31637 34607	32532 35308	35503	36386	Ave		34328.7927				5.4		20.0			
Ethane	89252 96311	92915 97424	104971	101617	Ave		97081.5518				5.9		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.: 280-149116-1 Analy Batch No.: 499937

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2020 10:08 Calibration End Date: 06/24/2020 11:46 Calibration ID: 45323

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-499937/1	06242001.D
Level 2	IC 280-499937/2	06242002.D
Level 3	IC 280-499937/3	06242003.D
Level 4	ICRT 280-499937/4	06242004.D
Level 5	IC 280-499937/5	06242005.D
Level 6	IC 280-499937/6	06242006.D
Level 7	IC 280-499937/7	06242007.D
Level 8	IC 280-499937/8	06242008.D
Level 9	IC 280-499937/9	06242009.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	127907 31463322	226430 189546256	1760038 768036307	8241315 2136573736	15578914	0.913 292	1.83 1807	14.6 7228	73.0 21683	146
Ethylene	Ave	107572 37428833	225225	1992619	9735448	18569939	1.60 511	3.19	25.5	128	255
Acetylene	Ave	46871 16738973	96395	841585	4312506	8203389	1.48 474	2.96	23.7	119	237
Ethane	Ave	152683 53331817	317897	2873171	13906890	26361358	1.71 547	3.42	27.4	137	274

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D
Lims ID: IC L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jun-2020 10:08:41 ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L1
Misc. Info.: 280-0092709-001
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:57 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 10:23:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.174	1.172	0.002	155827	0.9125	0.9075	
2	1.578	1.577	0.001	127907	0.9125	0.9072	
						RPD = 0.03	
3 Ethane							
1	1.462	1.462	0.000	181168	1.71	1.58	
2	2.754	2.756	-0.002	152683	1.71	1.57	
						RPD = 0.50	
4 Ethylene							M
1	1.781	1.779	0.002	136002	1.60	1.48	
2	2.369	2.372	-0.003	107572	1.60	1.47	M
						RPD = 0.62	
5 Propane							
1	2.692	2.676	0.016	276461	2.51	2.34	
2	4.616	4.609	0.007	230434	2.51	2.30	
						RPD = 1.64	
6 Acetylene							Ma
1	4.272	4.234	0.038	34073	1.48	1.31	M
2	2.486	2.486	0.000	46871	1.48	1.37	M
						RPD = 3.88	
7 Butane							Ma
1	4.581	4.541	0.040	302314	3.31	3.44	M
2	6.089	6.076	0.013	280641	3.31	3.45	M
						RPD = 0.36	
8 isobutylene							
1	5.414	5.381	0.033	210574	3.19	2.94	
2	5.929	5.921	0.008	184181	3.19	2.94	
						RPD = 0.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

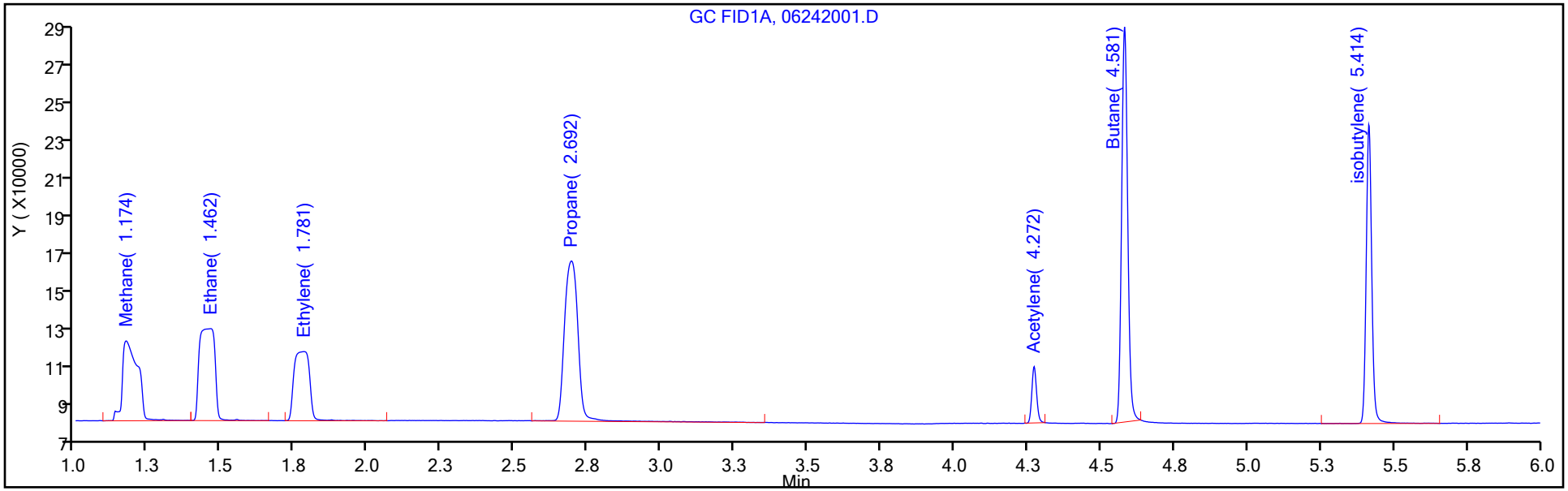
Report Date: 24-Jun-2020 12:39:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

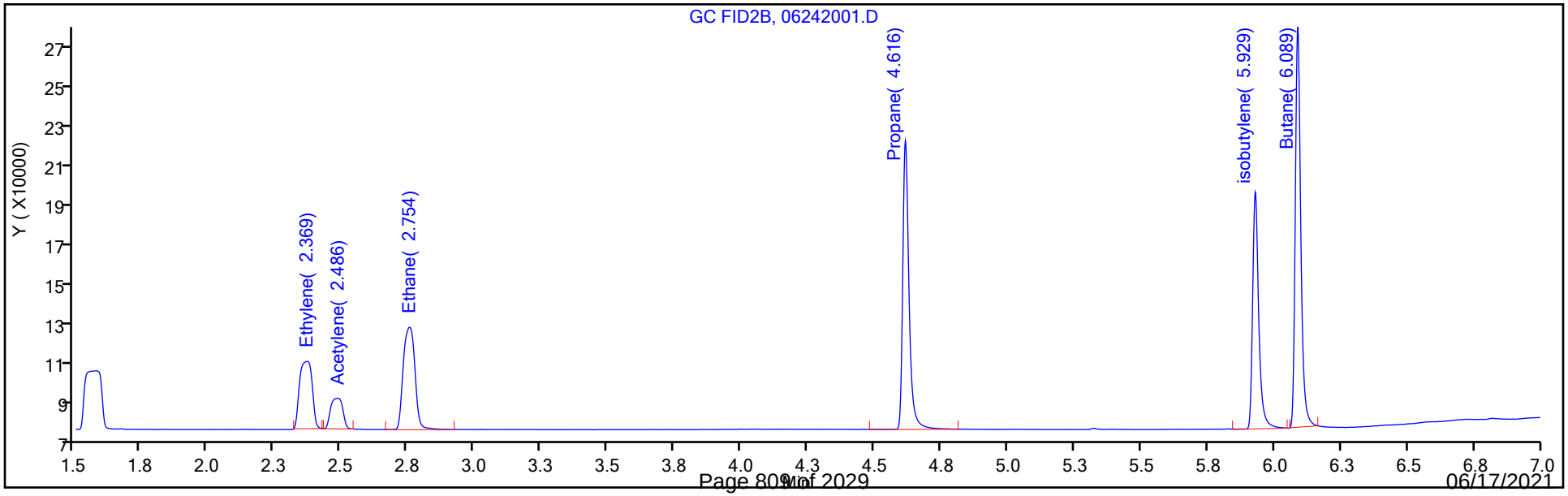
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D

Injection Date:	24-Jun-2020 10:08:41	Instrument ID:	VGC_J	Operator ID:	gm
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

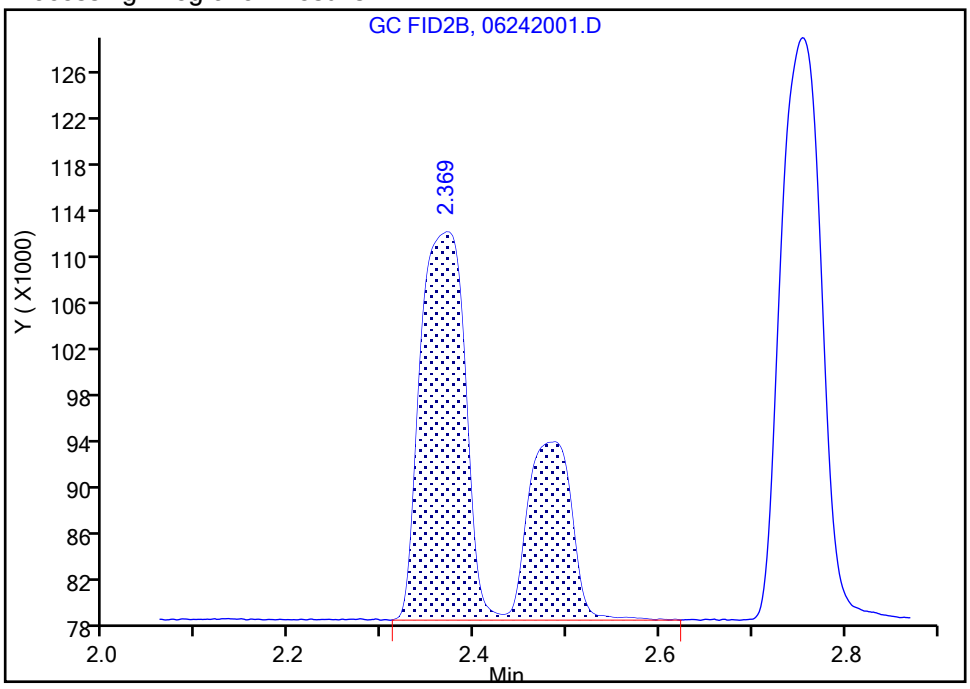
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D
Injection Date: 24-Jun-2020 10:08:41 Instrument ID: VGC_J
Lims ID: IC L1
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

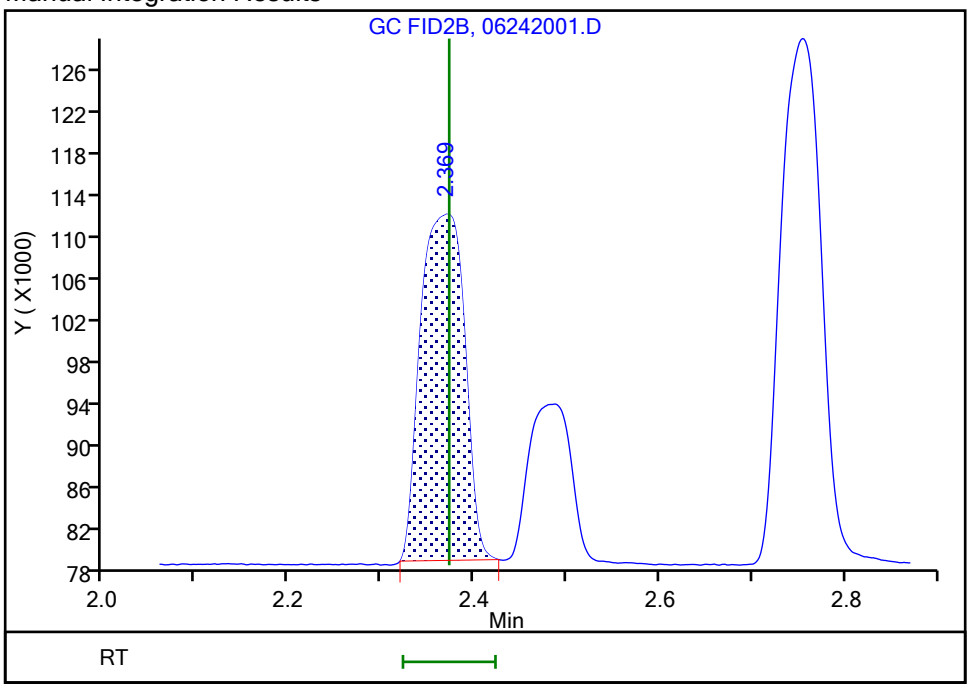
Processing Integration Results

RT: 2.37
Area: 160626
Amount: 1.973798
Amount Units: ug/l



Manual Integration Results

RT: 2.37
Area: 107572
Amount: 1.472602
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:03:38
Audit Action: Manually Integrated Audit Reason: Shouldering

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

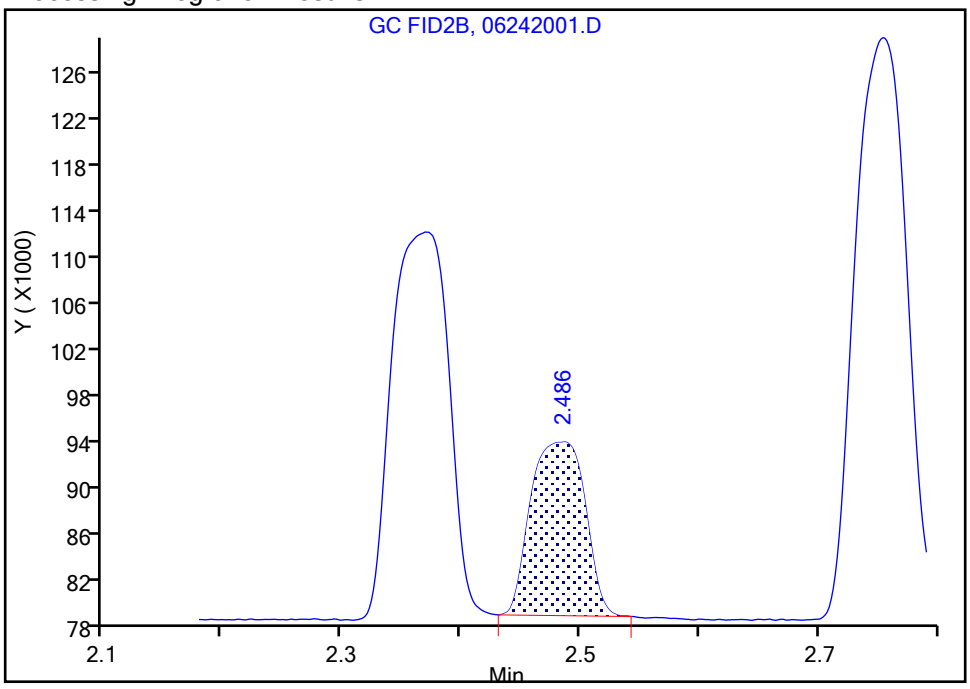
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242001.D
Injection Date: 24-Jun-2020 10:08:41 Instrument ID: VGC_J
Lims ID: IC L1
Client ID:
Operator ID: gm ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

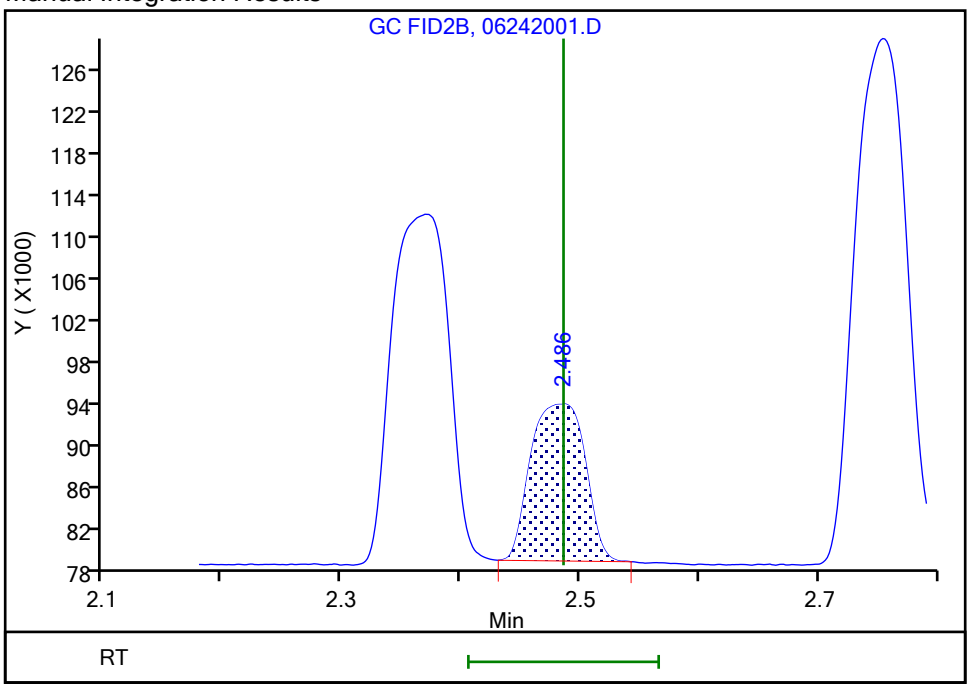
Processing Integration Results

RT: 2.49
Area: 46871
Amount: 1.272887
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 46871
Amount: 1.365355
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:03:56
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D
Lims ID: IC L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jun-2020 10:20:49 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L2
Misc. Info.: 280-0092709-002
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:58 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:05:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.173	1.172	0.001	263689	1.83	1.82	
2	1.576	1.577	-0.001	226430	1.83	1.82	
						RPD = 0.04	
3 Ethane							
1	1.463	1.462	0.001	375320	3.42	3.27	
2	2.759	2.756	0.003	317897	3.42	3.27	
						RPD = 0.00	
4 Ethylene							
1	1.778	1.779	-0.001	280938	3.19	3.06	
2	2.373	2.372	0.001	225225	3.19	3.08	
						RPD = 0.72	
5 Propane							
1	2.693	2.676	0.017	552814	5.02	4.68	
2	4.619	4.609	0.010	470455	5.02	4.70	
						RPD = 0.44	
6 Acetylene							M
1	4.269	4.234	0.035	74600	2.96	2.88	
2	2.486	2.486	0.000	96395	2.96	2.81	M
						RPD = 2.38	
7 Butane							Ma
1	4.578	4.541	0.037	587119	6.61	6.04	M
2	6.089	6.076	0.013	535944	6.61	5.99	M
						RPD = 0.75	
8 isobutylene							
1	5.413	5.381	0.032	406845	6.38	5.68	
2	5.931	5.921	0.010	356829	6.38	5.69	
						RPD = 0.17	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

Report Date: 24-Jun-2020 12:39:58 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D

Injection Date: 24-Jun-2020 10:20:49 Instrument ID: VGC_J Operator ID: gm

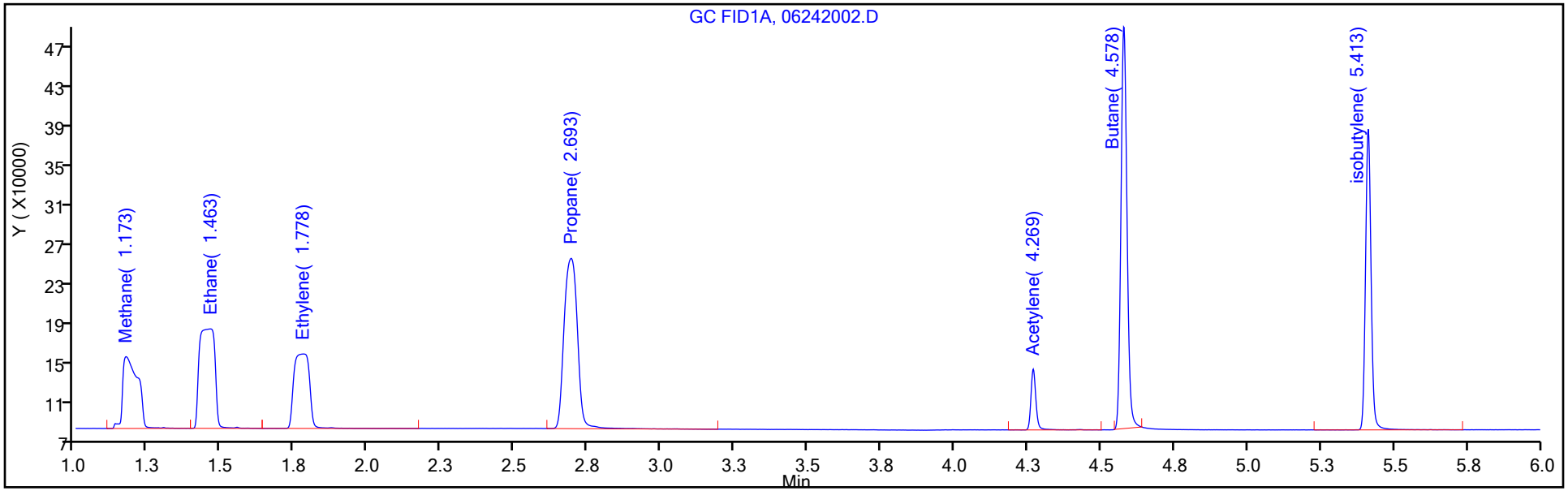
Lims ID: IC L2 Worklist Smp#: 2

Client ID:

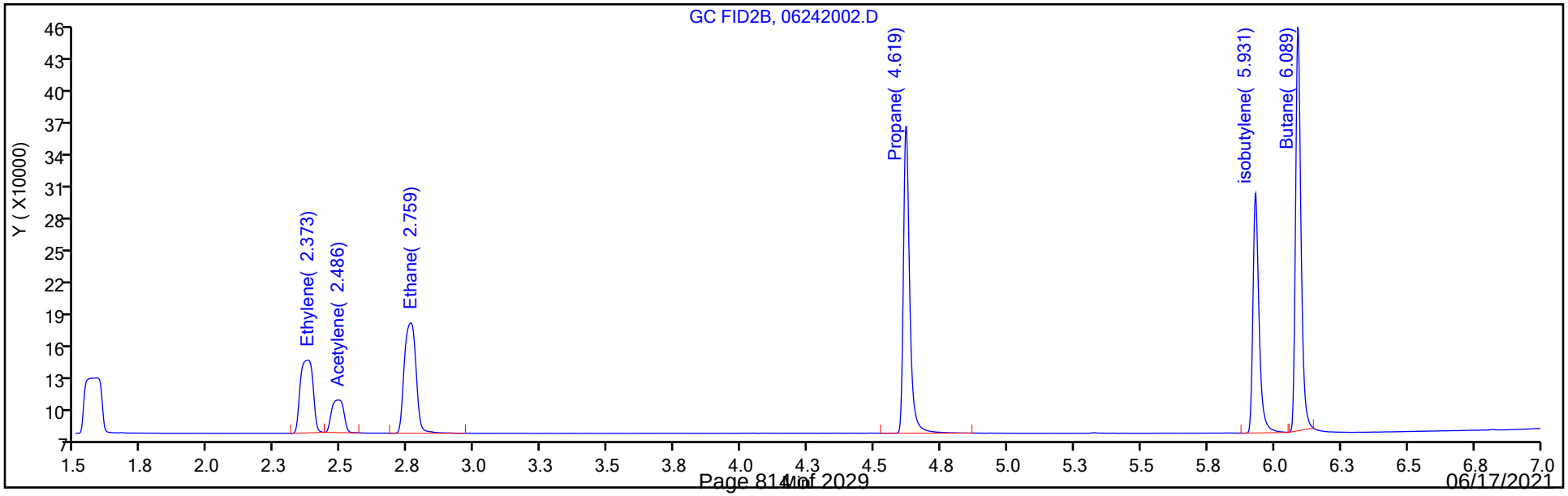
Purge Vol: 18.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

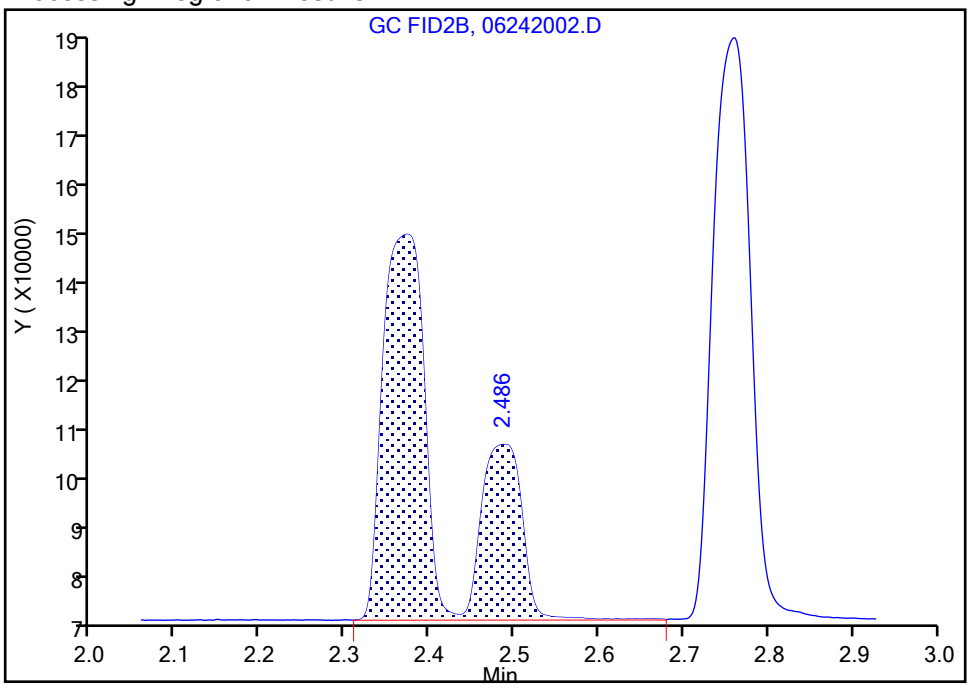
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242002.D
Injection Date: 24-Jun-2020 10:20:49 Instrument ID: VGC_J
Lims ID: IC L2
Client ID:
Operator ID: gm ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

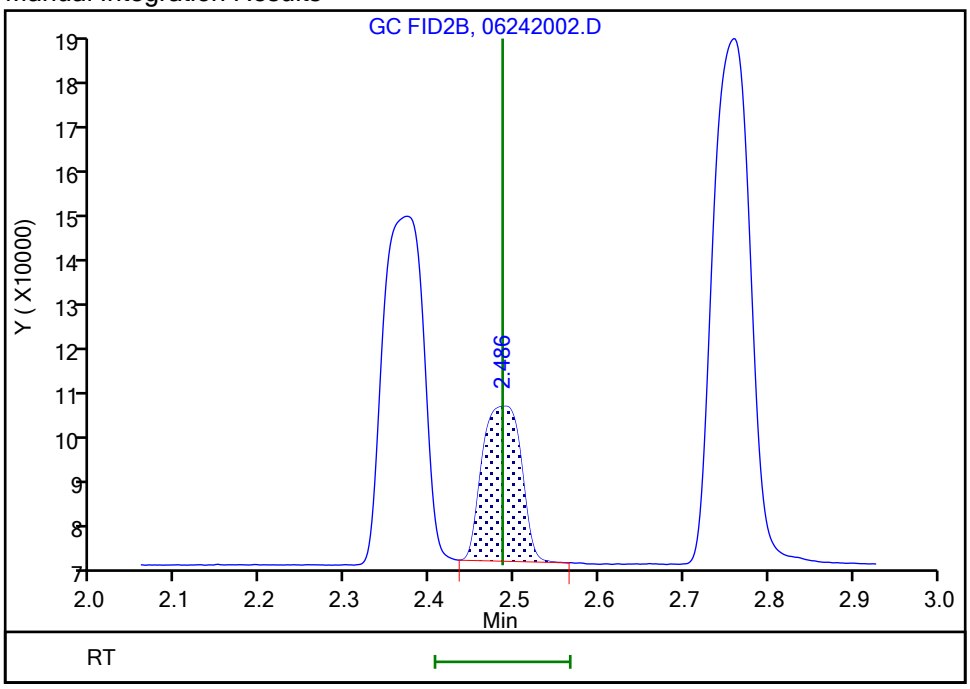
Processing Integration Results

RT: 2.49
Area: 331861
Amount: 3.194563
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 96395
Amount: 2.807993
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:05:18
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D
Lims ID: IC L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jun-2020 10:33:02 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L3
Misc. Info.: 280-0092709-003
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:59 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:08:41

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.175	1.172	0.003	1935518	14.6	16.0	
2	1.582	1.577	0.005	1760038	14.6	16.1	
						RPD = 0.49	
3 Ethane							
1	1.460	1.462	-0.002	3384056	27.4	29.5	
2	2.760	2.756	0.004	2873171	27.4	29.6	
						RPD = 0.24	
4 Ethylene							
1	1.782	1.779	0.003	2472852	25.5	26.9	
2	2.375	2.372	0.003	1992619	25.5	27.3	
						RPD = 1.23	
5 Propane							
1	2.690	2.676	0.014	5082003	40.1	43.0	
2	4.618	4.609	0.009	4318201	40.1	43.2	
						RPD = 0.29	
6 Acetylene							M
1	4.262	4.234	0.028	640190	23.7	24.7	
2	2.488	2.486	0.002	841585	23.7	24.5	M
						RPD = 0.66	
7 Butane							M
1	4.572	4.541	0.031	5935156	52.9	54.8	
2	6.088	6.076	0.012	5391164	52.9	54.3	M
						RPD = 0.94	
8 isobutylene							Ma
1	5.405	5.381	0.024	3773741	51.1	52.7	M
2	5.928	5.921	0.007	3291654	51.1	52.5	M
						RPD = 0.38	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

Report Date: 24-Jun-2020 12:39:59 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D

Injection Date: 24-Jun-2020 10:33:02 Instrument ID: VGC_J Operator ID: gm

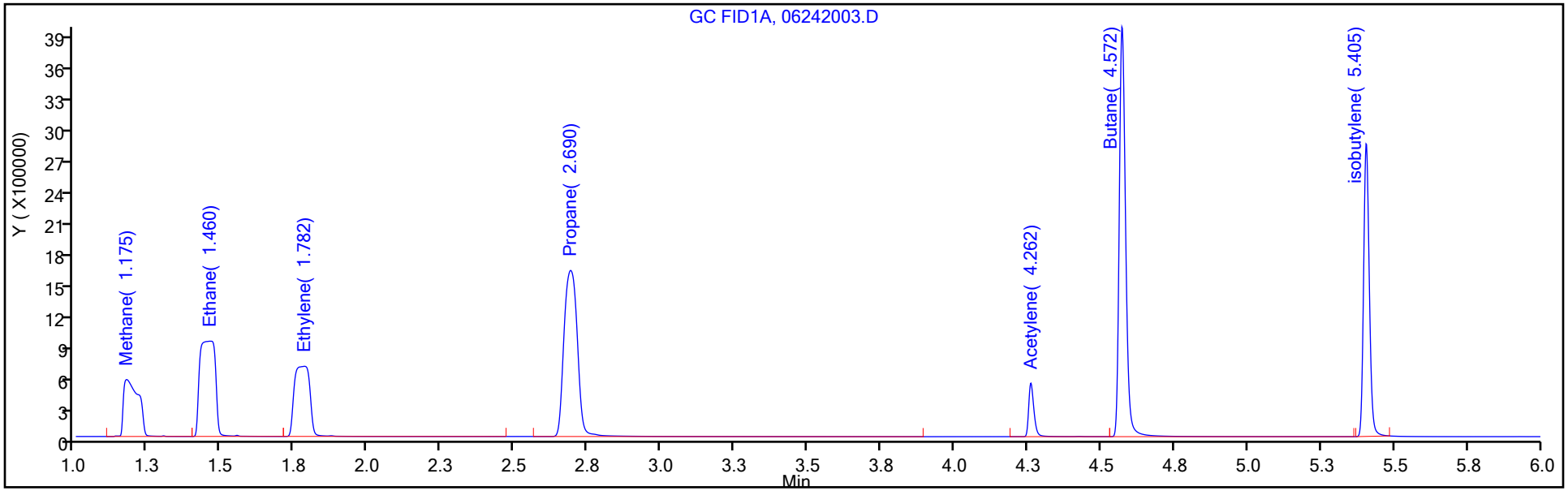
Lims ID: IC L3 Worklist Smp#: 3

Client ID:

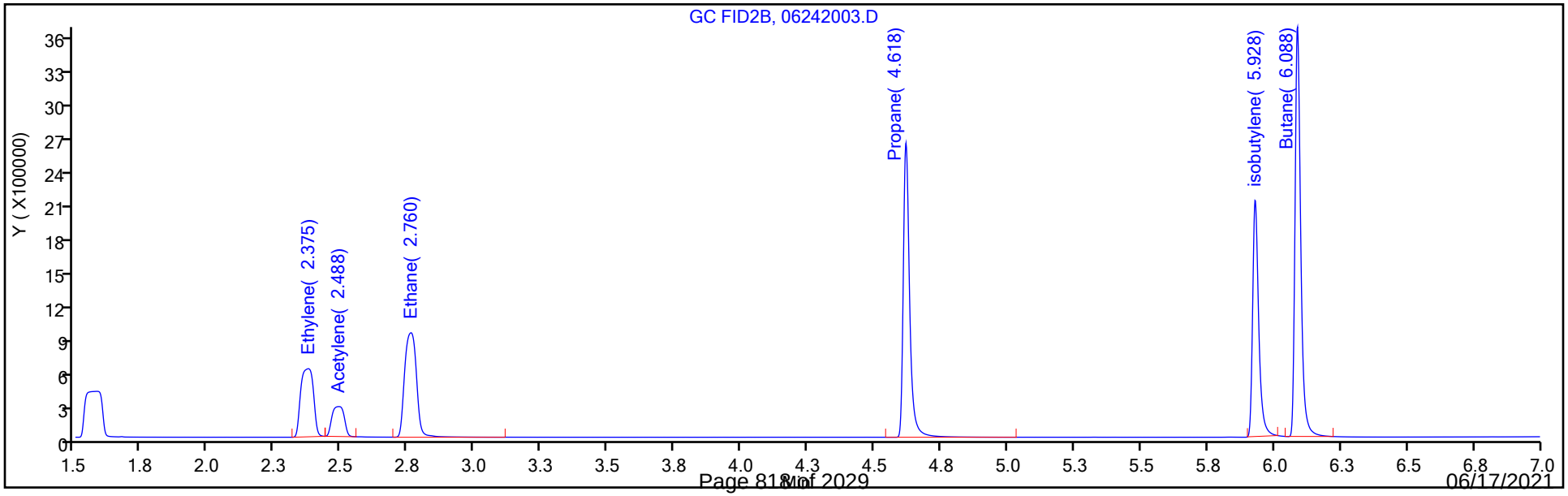
Purge Vol: 18.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

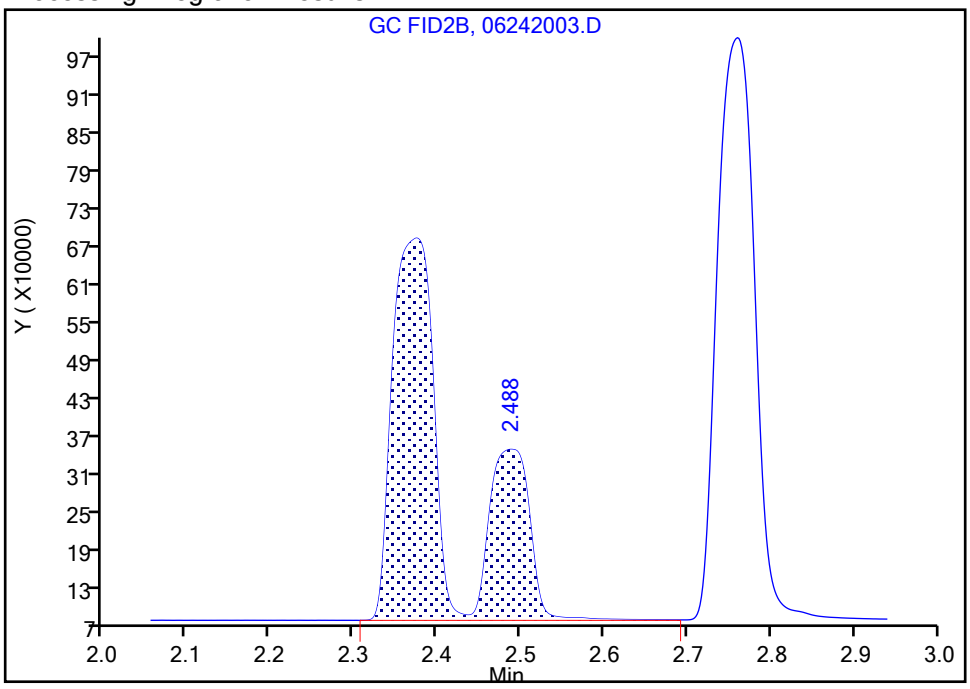
Data File:	\\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242003.D				
Injection Date:	24-Jun-2020 10:33:02	Instrument ID:	VGC_J		
Lims ID:	IC L3				
Client ID:					
Operator ID:	gm	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

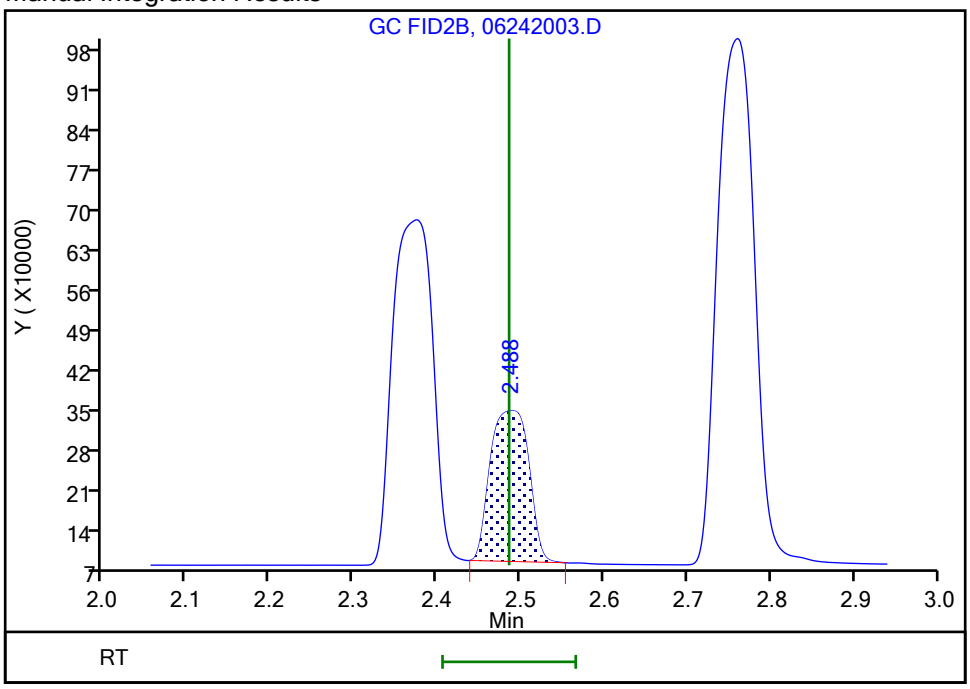
Processing Integration Results

RT: 2.49
Area: 2924290
Amount: 42.965365
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 841585
Amount: 24.515427
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:08:01

Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D
Lims ID: ICRT L4
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 24-Jun-2020 10:45:14 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICRT L4
Misc. Info.: 280-0092709-004
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:39:59 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:02:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	9092065	73.0	76.6	
2	1.578	1.578	0.000	8241315	73.0	76.2	
						RPD = 0.48	
3 Ethane							
1	1.457	1.457	0.000	16474689	136.9	143.7	
2	2.756	2.756	0.000	13906890	136.9	143.2	
						RPD = 0.34	
4 Ethylene							
1	1.779	1.779	0.000	12159201	127.7	132.5	
2	2.373	2.373	0.000	9735448	127.7	133.3	
						RPD = 0.59	
5 Propane							
1	2.682	2.682	0.000	25071225	200.7	212.3	
2	4.614	4.614	0.000	21208455	200.7	212.0	
						RPD = 0.16	
6 Acetylene							M
1	4.244	4.244	0.000	3287680	118.5	126.7	
2	2.488	2.488	0.000	4312506	118.5	125.6	M
						RPD = 0.87	
7 Butane							
1	4.554	4.554	0.000	29907332	264.5	273.2	
2	6.083	6.083	0.000	28030666	264.5	279.3	
						RPD = 2.20	
8 isobutylene							
1	5.392	5.392	0.000	19808714	255.4	276.5	
2	5.926	5.926	0.000	17460732	255.4	278.4	
						RPD = 0.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

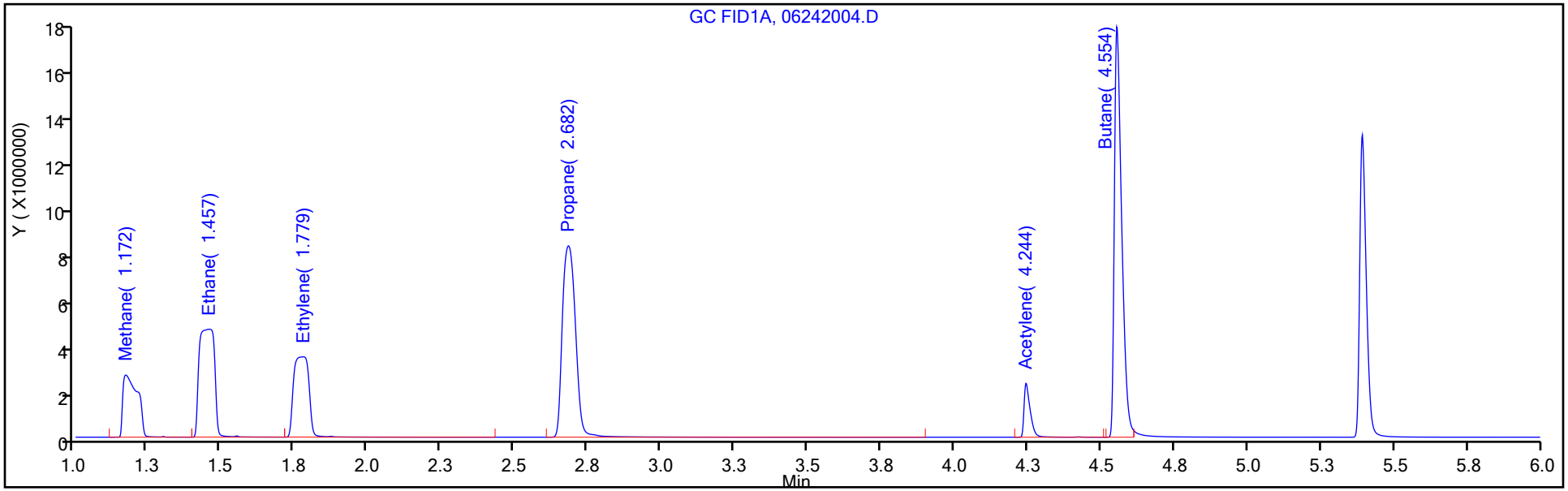
Report Date: 24-Jun-2020 12:40:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

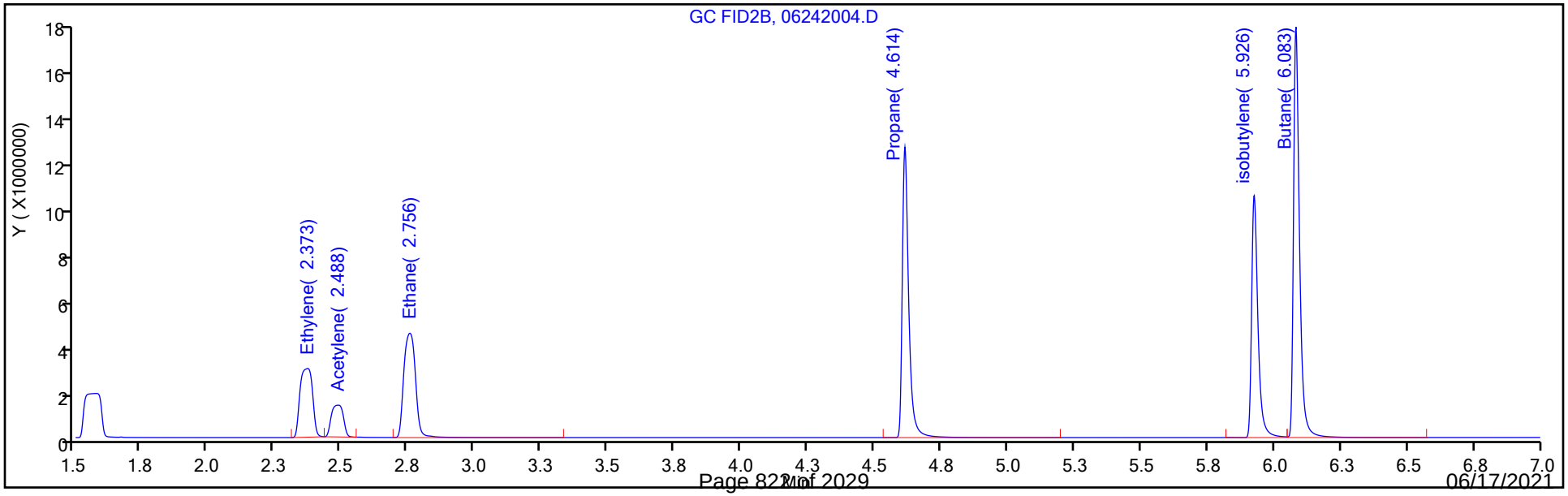
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D

Injection Date:	24-Jun-2020 10:45:14	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	ICRT 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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

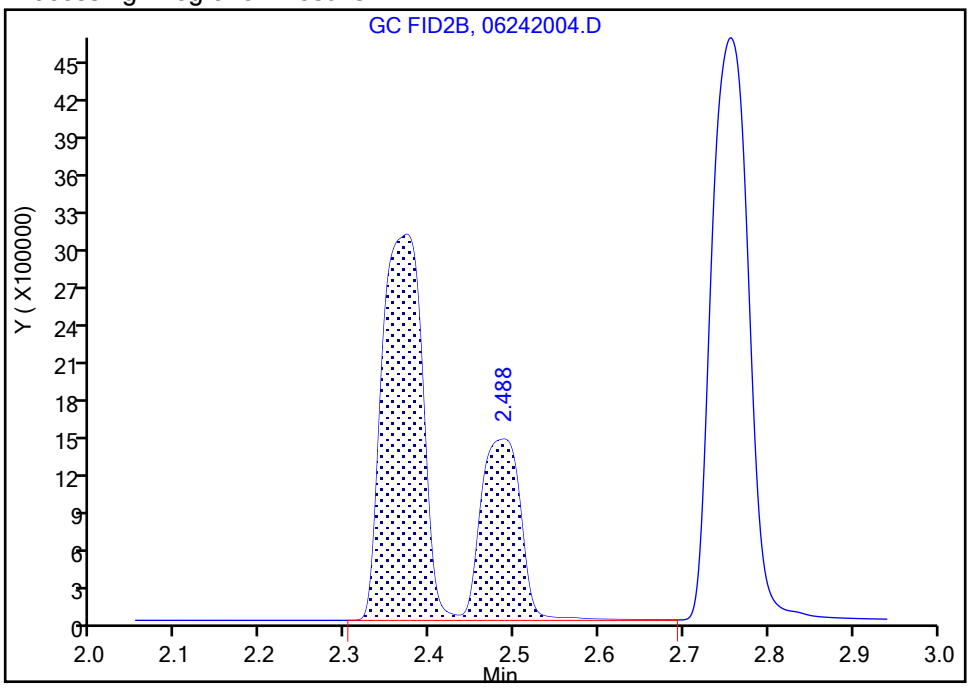
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242004.D
Injection Date: 24-Jun-2020 10:45:14 Instrument ID: VGC_J
Lims ID: ICRT L4
Client ID:
Operator ID: gm ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

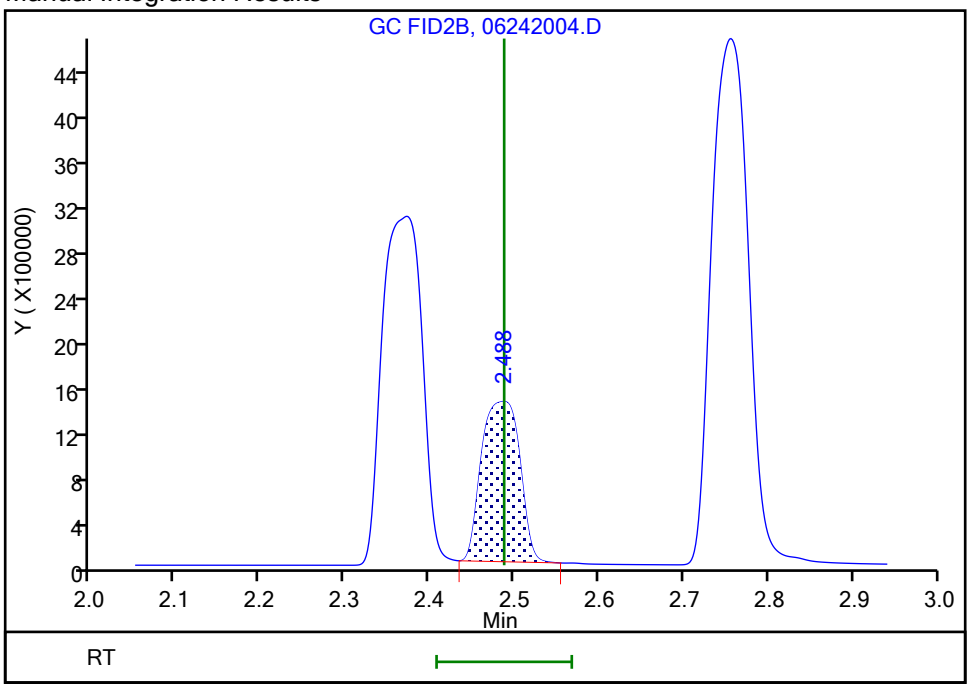
Processing Integration Results

RT: 2.49
Area: 14469565
Amount: 121.4408
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 4312506
Amount: 125.6236
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:01:33
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D
Lims ID: IC L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jun-2020 10:57:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L5
Misc. Info.: 280-0092709-005
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:00 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:10:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	17468122	146.0	147.5	
2	1.577	1.577	0.000	15578914	146.0	144.4	
						RPD = 2.18	
3 Ethane							
1	1.462	1.462	0.000	30906100	273.7	269.6	
2	2.756	2.756	0.000	26361358	273.7	271.5	
						RPD = 0.70	
4 Ethylene							
1	1.779	1.779	0.000	23971500	255.3	261.2	
2	2.372	2.372	0.000	18569939	255.3	254.2	
						RPD = 2.71	
5 Propane							
1	2.676	2.676	0.000	46992293	401.4	398.0	
2	4.609	4.609	0.000	40116354	401.4	401.0	
						RPD = 0.76	
6 Acetylene							M
1	4.234	4.234	0.000	6232354	237.0	240.2	
2	2.486	2.486	0.000	8203389	237.0	239.0	M
						RPD = 0.53	
7 Butane							
1	4.541	4.541	0.000	57396046	529.0	523.6	
2	6.076	6.076	0.000	52957196	529.0	527.0	
						RPD = 0.64	
8 isobutylene							
1	5.381	5.381	0.000	37720673	510.8	526.6	
2	5.921	5.921	0.000	33259110	510.8	530.3	
						RPD = 0.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

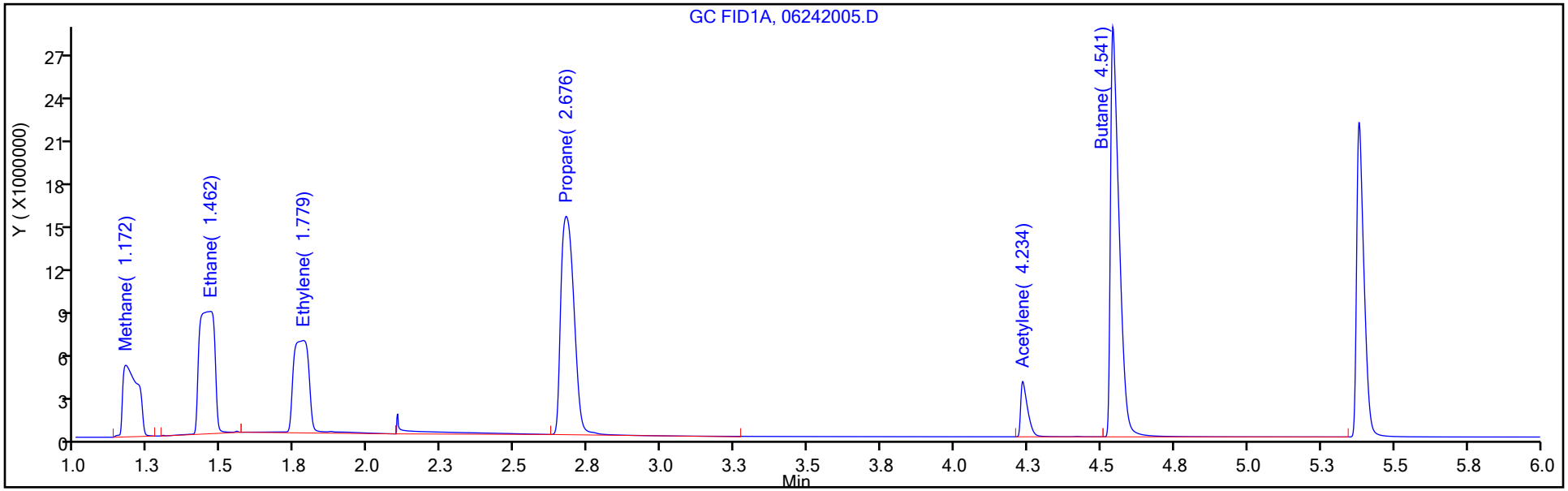
Report Date: 24-Jun-2020 12:40:00 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

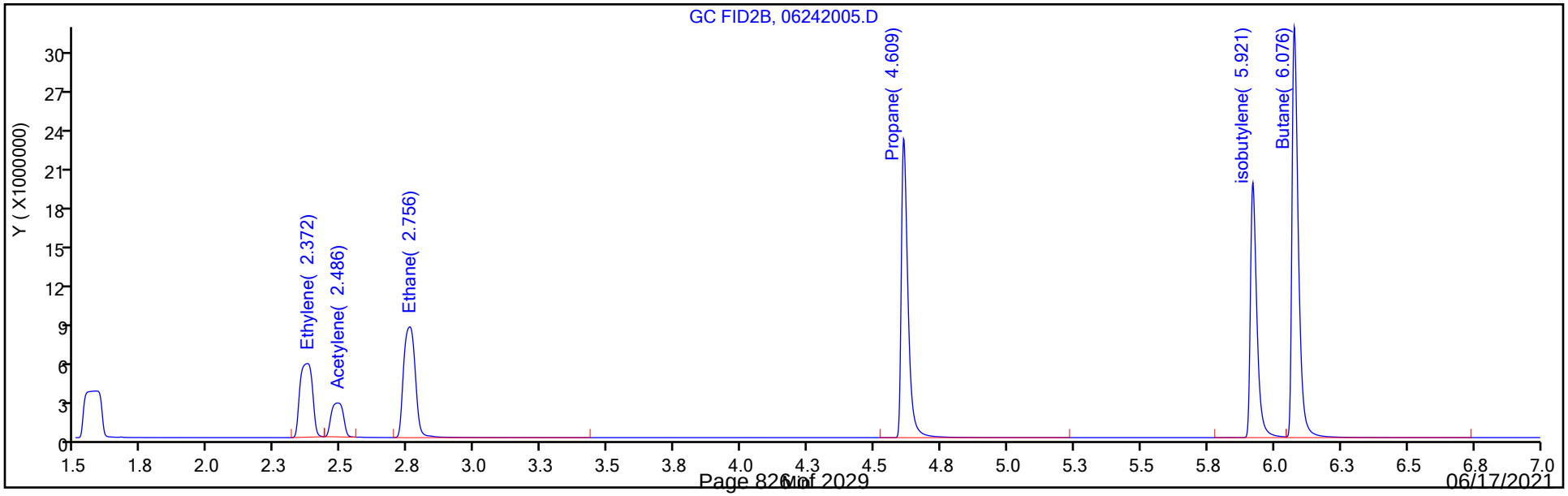
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D

Injection Date:	24-Jun-2020 10:57:30	Instrument ID:	VGC_J	Operator ID:	gm
Lims ID:	IC 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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

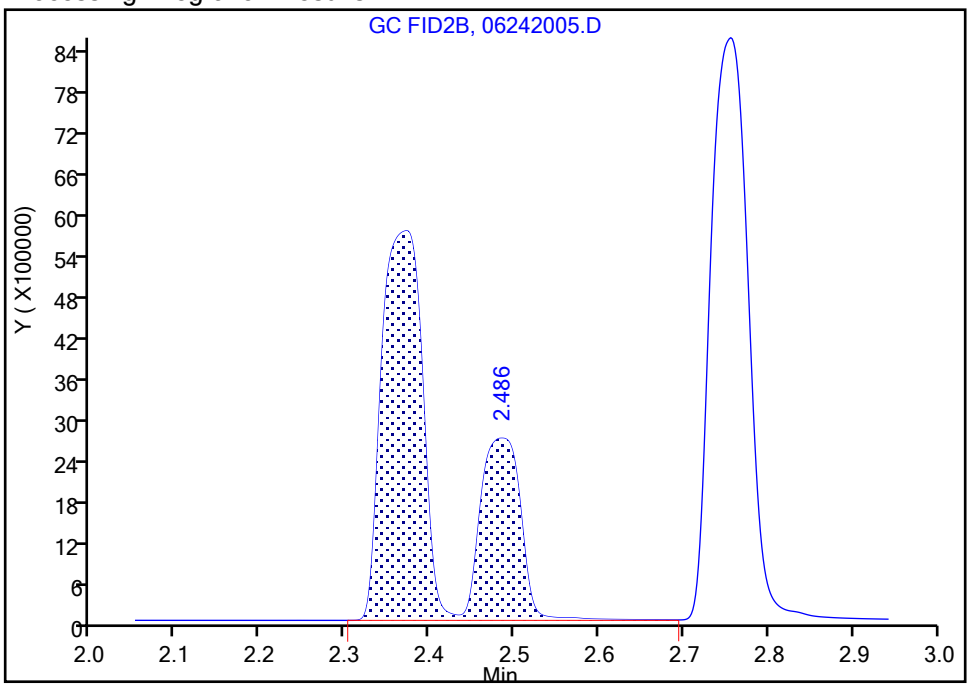
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242005.D
Injection Date: 24-Jun-2020 10:57:30 Instrument ID: VGC_J
Lims ID: IC L5
Client ID:
Operator ID: gm ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

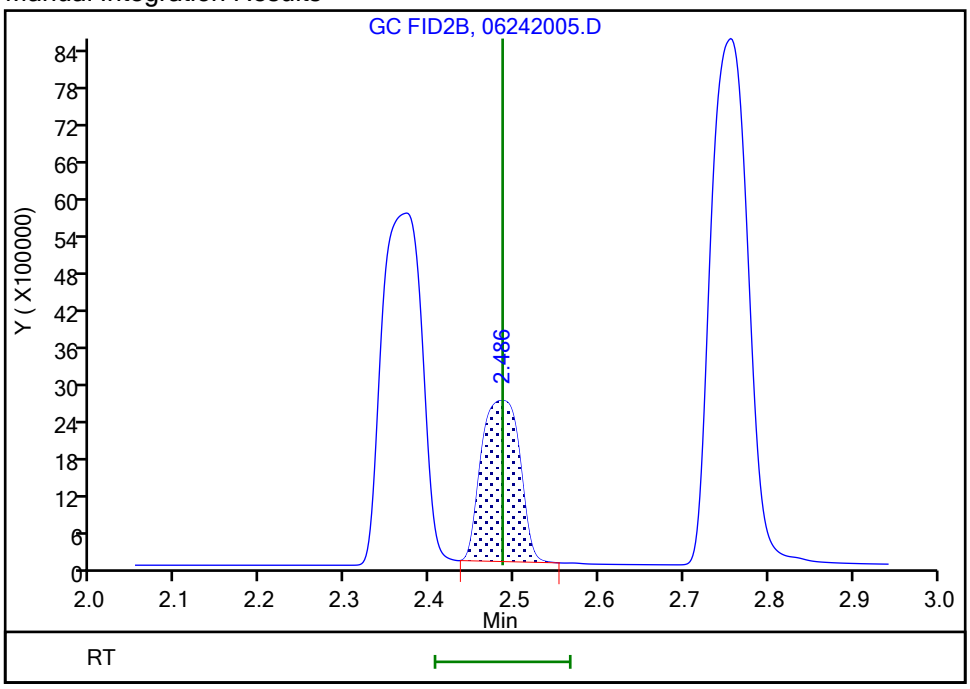
Processing Integration Results

RT: 2.49
Area: 27589208
Amount: 237.3114
Amount Units: ug/l



Manual Integration Results

RT: 2.49
Area: 8203389
Amount: 238.9653
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:09:21
Audit Action: Manually Integrated Audit Reason: Shouldering

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D
Lims ID: IC L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Jun-2020 11:09:45 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L6
Misc. Info.: 280-0092709-006
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:01 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:22:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.168	1.172	-0.004	34804015	292.0	294.4	
2	1.576	1.577	-0.001	31463322	292.0	291.8	
						RPD = 0.87	
3 Ethane							
1	1.458	1.462	-0.004	63053378	547.4	550.1	
2	2.750	2.756	-0.006	53331817	547.4	549.4	
						RPD = 0.14	
4 Ethylene							
1	1.771	1.779	-0.008	46705608	510.7	508.9	
2	2.366	2.372	-0.006	37428833	510.7	512.4	
						RPD = 0.68	
5 Propane							
1	2.658	2.676	-0.018	95948907	802.8	812.6	
2	4.601	4.609	-0.008	81456479	802.8	814.2	
						RPD = 0.20	
6 Acetylene							Ma
1	4.216	4.234	-0.018	12537110	474.1	483.3	M
2	2.485	2.486	-0.001	16738973	474.1	487.6	M
						RPD = 0.90	
7 Butane							Ma
1	4.521	4.541	-0.020	114699787	1058.1	1045.8	M
2	6.066	6.076	-0.010	103377764	1058.1	1028.2	M
						RPD = 1.70	
8 isobutylene							M
1	5.365	5.381	-0.016	76413104	1021.5	1066.7	
2	5.913	5.921	-0.008	66173382	1021.5	1055.1	M
						RPD = 1.10	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

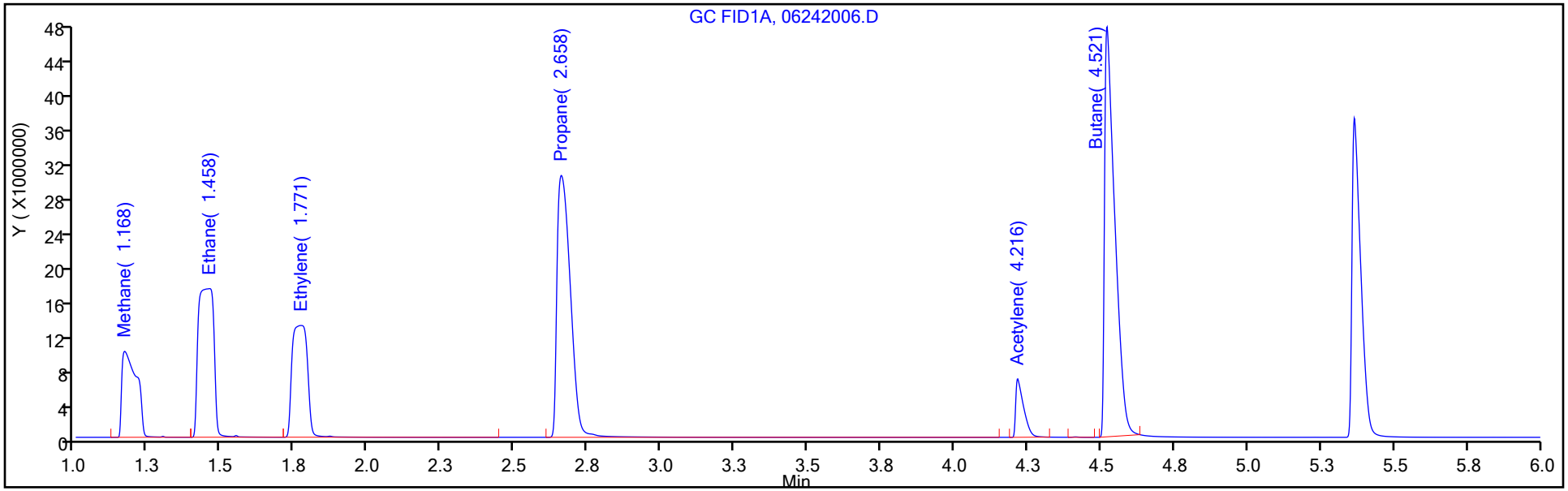
Report Date: 24-Jun-2020 12:40:01 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

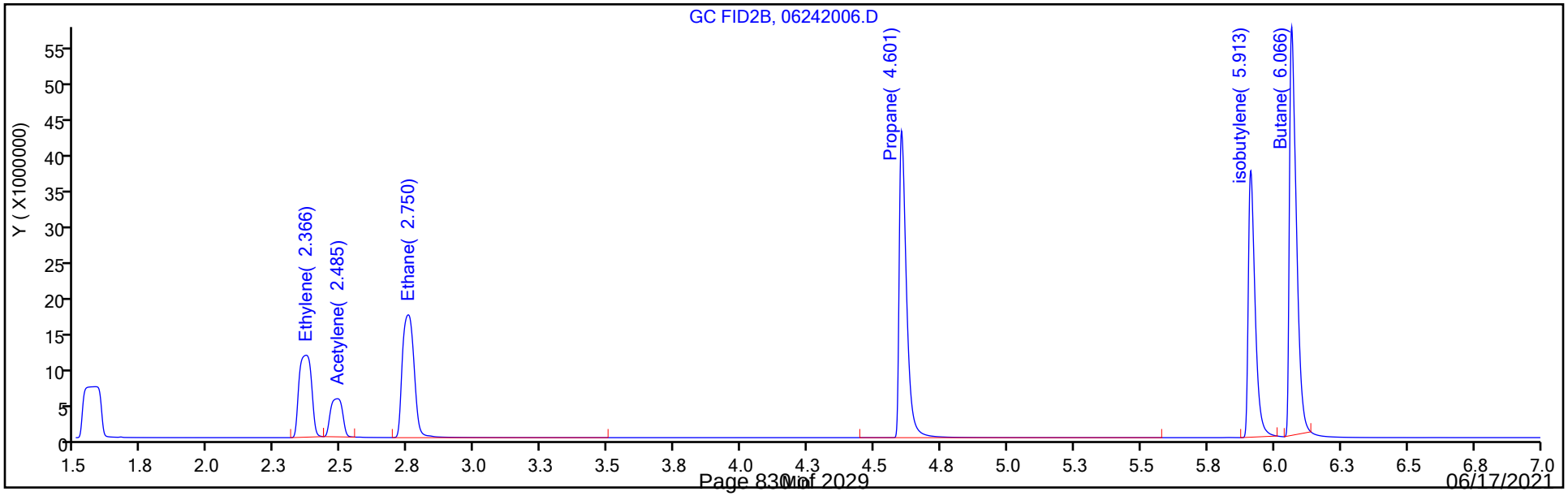
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D

Injection Date:	24-Jun-2020 11:09:45	Instrument ID:	VGC_J	Operator ID:	gm
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

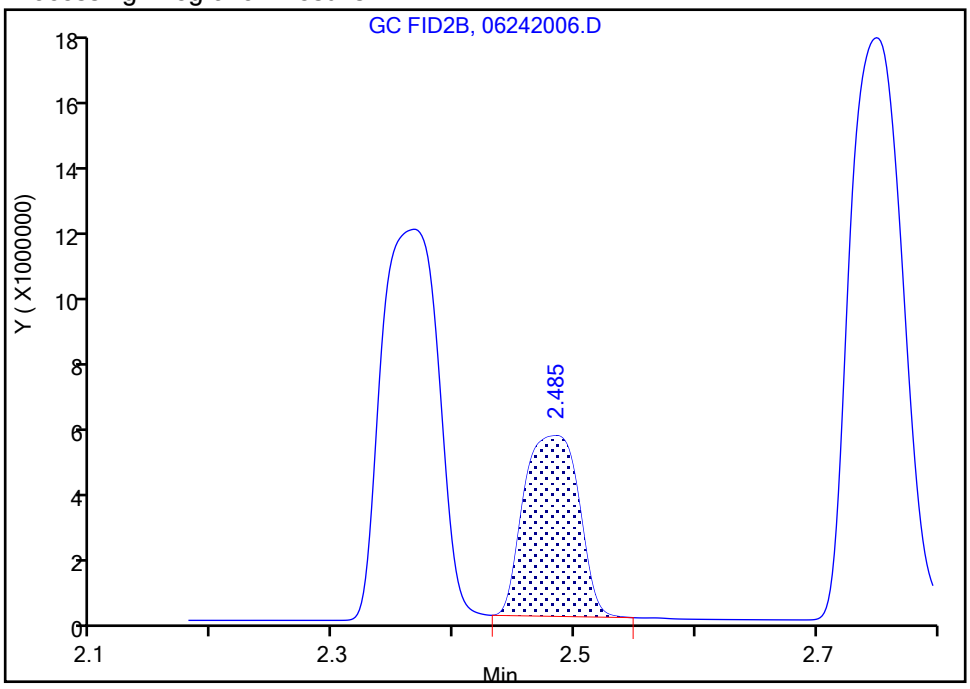
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242006.D
Injection Date: 24-Jun-2020 11:09:45 Instrument ID: VGC_J
Lims ID: IC L6
Client ID:
Operator ID: gm ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

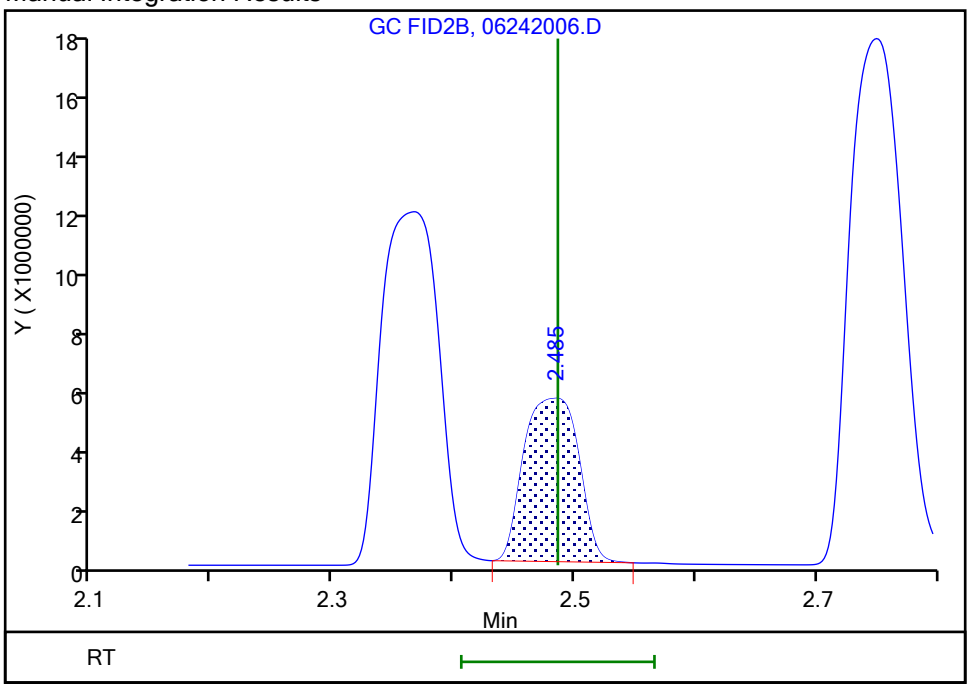
Processing Integration Results

RT: 2.48
Area: 16738973
Amount: 487.6074
Amount Units: ug/l



Manual Integration Results

RT: 2.48
Area: 16738973
Amount: 487.6074
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 11:22:42
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242007.D
Lims ID: IC L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jun-2020 11:22:02 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L7
Misc. Info.: 280-0092709-007
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:02 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:34:52

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.172	1.172	0.000	208468313	1806.9	1765.4	
2	1.576	1.577	-0.001	189546256	1806.9	1759.6	
						RPD = 0.33	

Reagents:

RSK175methane_00010 Amount Added: 50.00 Units: uL

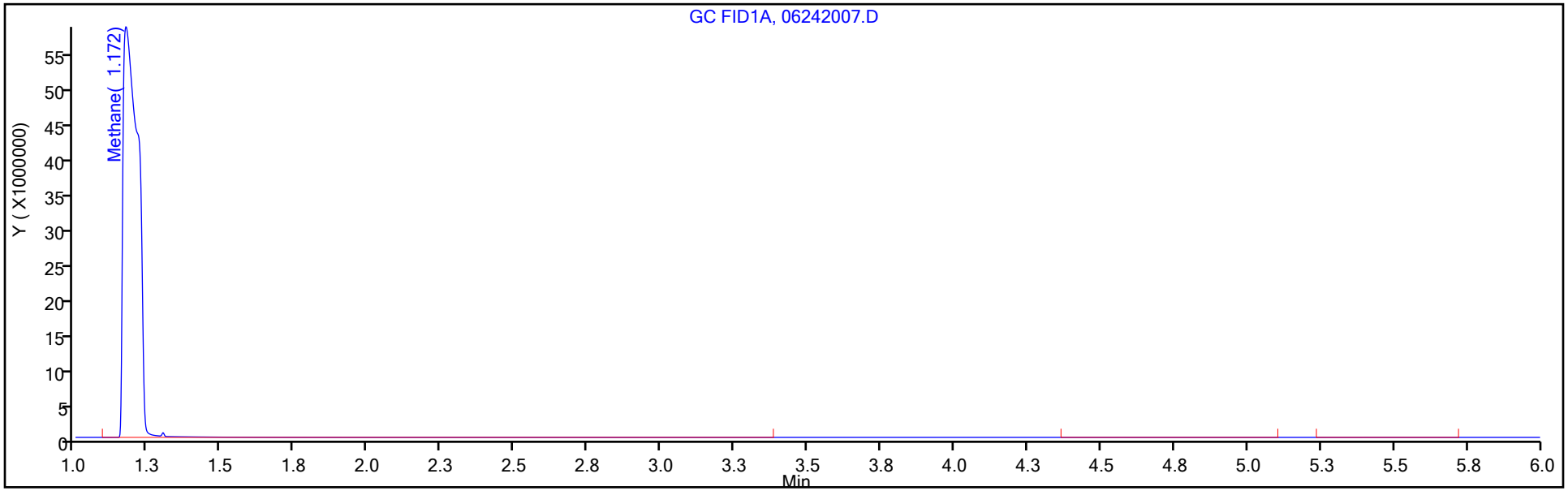
Report Date: 24-Jun-2020 12:40:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

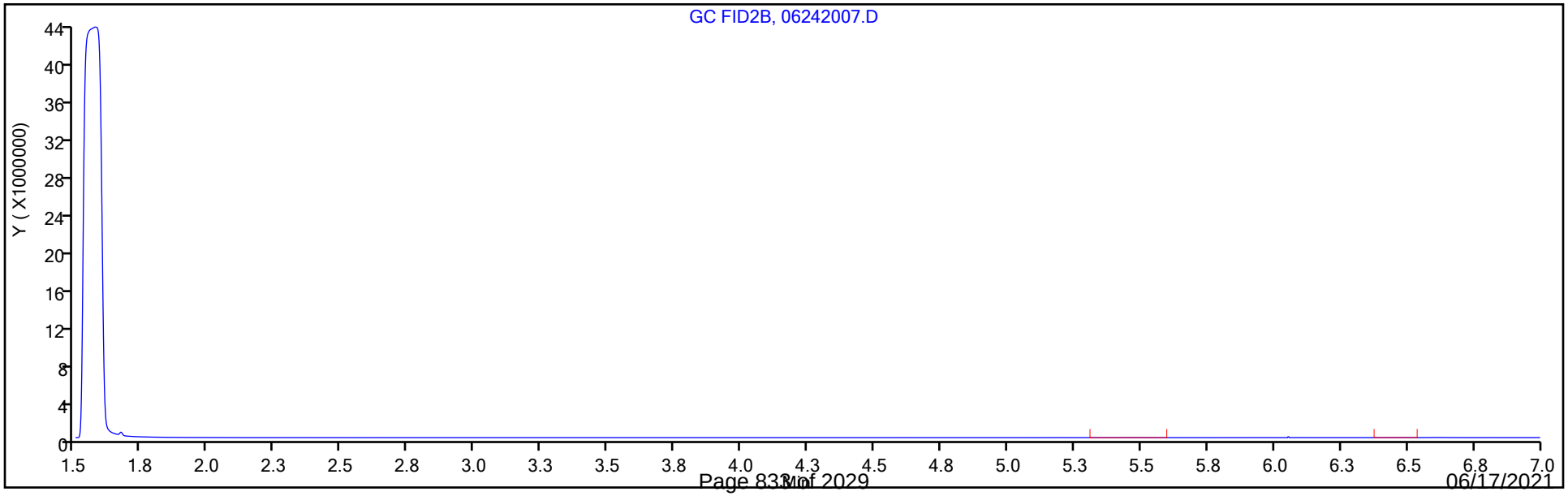
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242007.D

Injection Date:	24-Jun-2020 11:22:02	Instrument ID:	VGC_J	Operator ID:	gm
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: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242008.D
Lims ID: IC L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Jun-2020 11:34:17 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L8
Misc. Info.: 280-0092709-008
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:02 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:49:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.169	1.172	-0.003	829291020	7227.8	7023.8	
2	1.571	1.577	-0.006	768036307	7227.8	7130.5	
						RPD = 1.51	

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

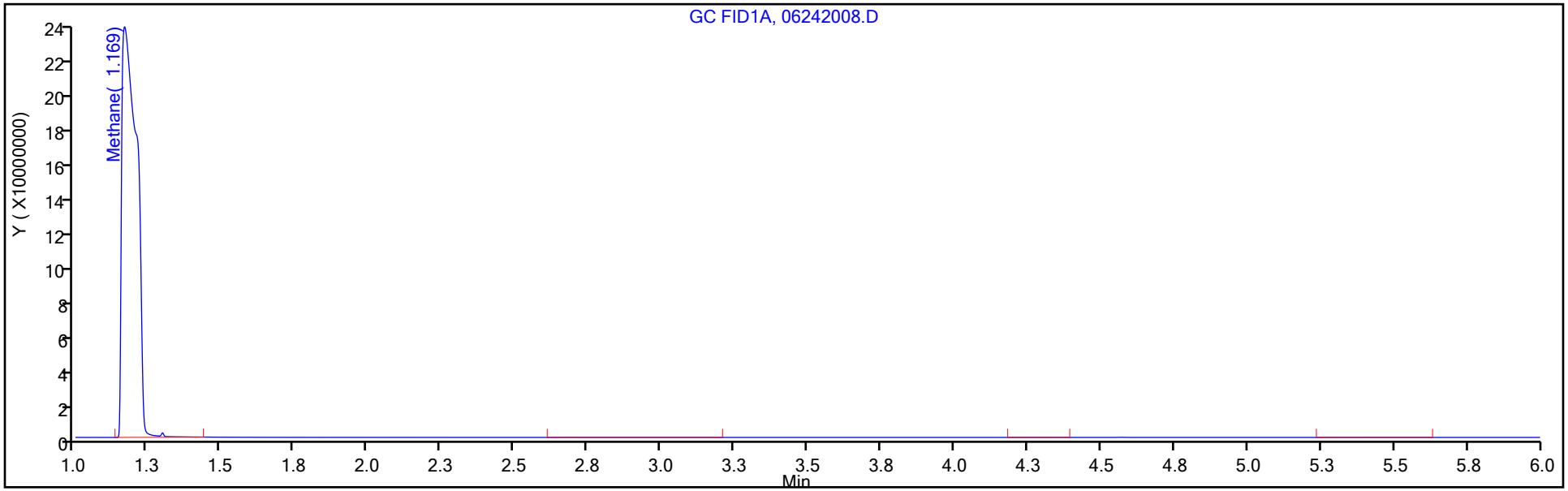
Report Date: 24-Jun-2020 12:40:02 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

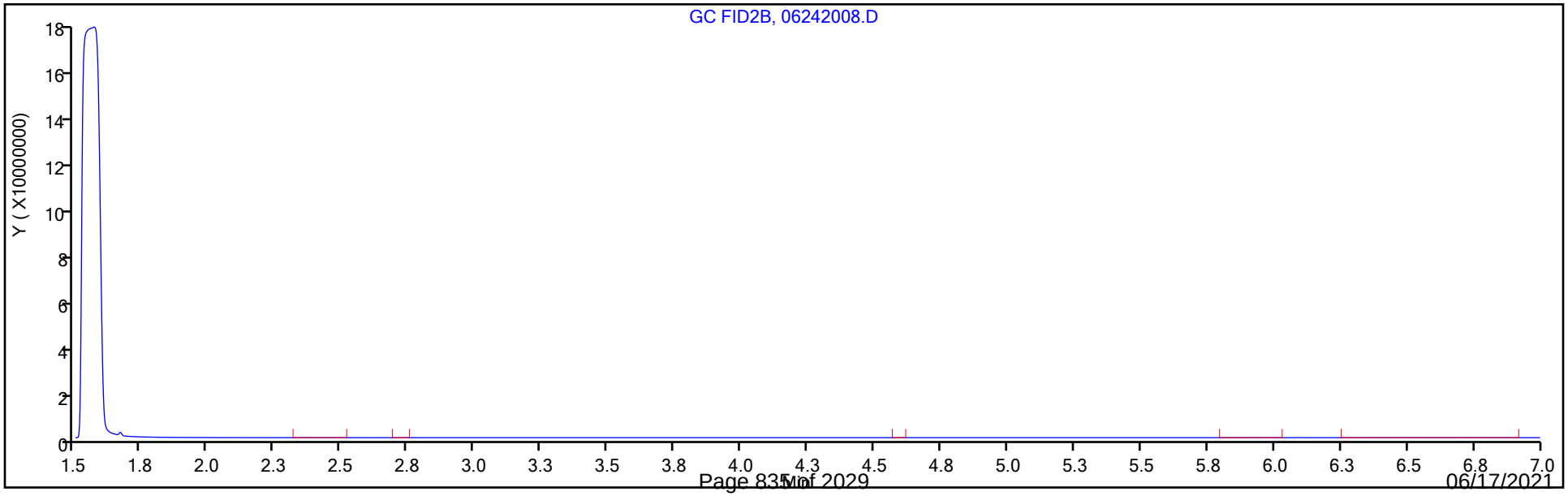
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242008.D

Injection Date:	24-Jun-2020 11:34:17	Instrument ID:	VGC_J	Operator ID:	gm
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: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D
Lims ID: IC L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 24-Jun-2020 11:46:32 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: IC L9
Misc. Info.: 280-0092709-009
Operator ID: gm Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:40:03 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 11:58:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.163	1.172	-0.009	2294825441	21683	19437	
2	1.560	1.577	-0.017	2136573736	21683	19837	
						RPD = 2.03	

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

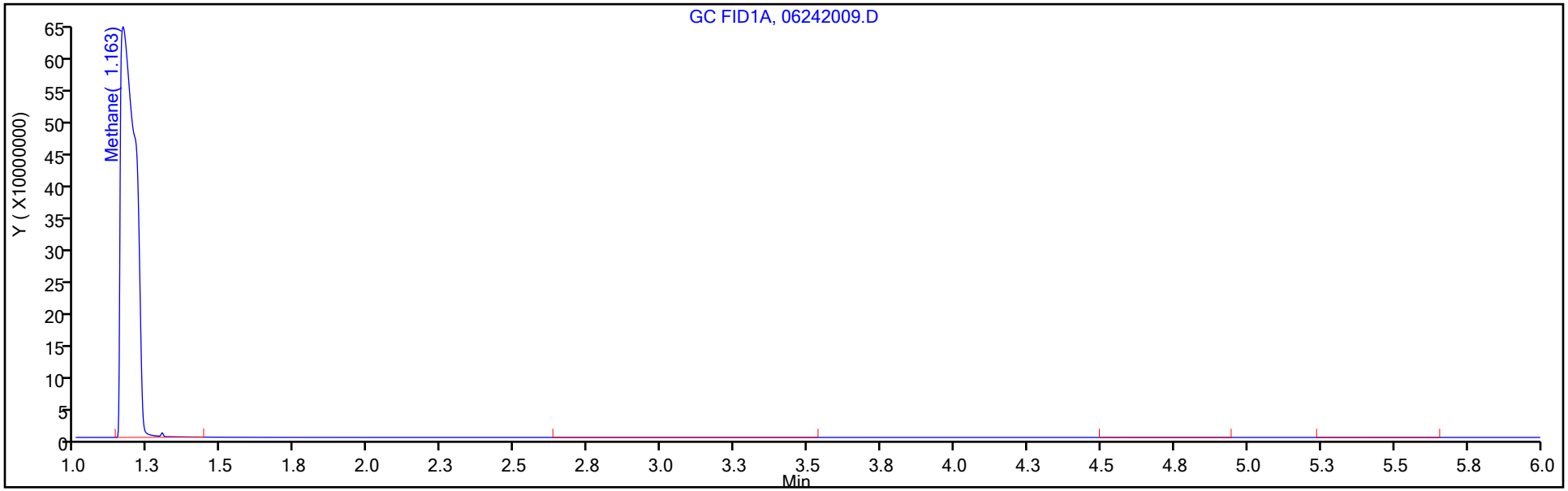
Report Date: 24-Jun-2020 12:40:03 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

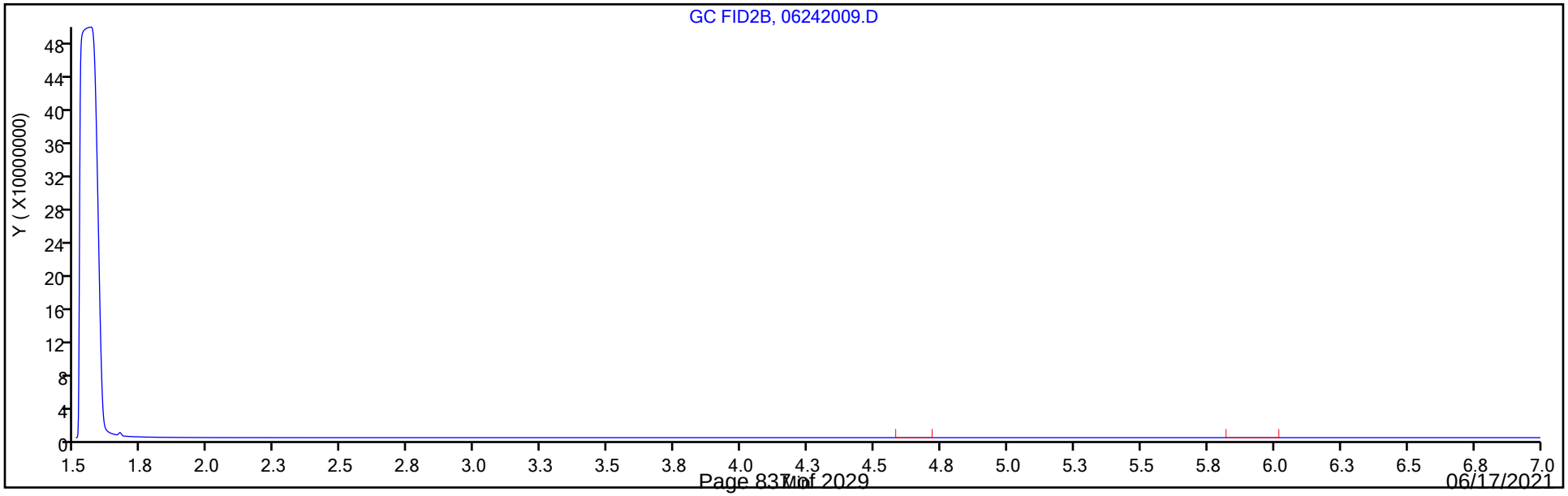
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Injection Date:	24-Jun-2020 11:46:32	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-499937/11 Calibration Date: 06/24/2020 12:11

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 06242011.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		106034		65.2	73.0	-10.8	20.0
Ethane	Ave	114619	103590		124	137	-9.6	20.0
Ethylene	Ave	91780	85095		118	128	-7.3	20.0
Acetylene	Ave	25943	27039		124	119	4.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-499937/11 Calibration Date: 06/24/2020 12:11

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 06242011.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.17	1.13	1.21
Ethane	1.45	1.41	1.51
Ethylene	1.77	1.73	1.83
Acetylene	4.23	4.15	4.31

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Jun-2020 12:11:02 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0092709-011
Operator ID: gm Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:48:56 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 12:48:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.169	1.172	-0.003	7740803	73.0	65.2	
2	1.574	1.577	-0.003	7044681	73.0	65.1	
						RPD = 0.04	
3 Ethane							
1	1.452	1.462	-0.010	14176818	136.9	123.7	
2	2.753	2.756	-0.003	11975757	136.9	123.4	
						RPD = 0.27	
4 Ethylene							
1	1.772	1.779	-0.007	10863846	127.7	118.4	
2	2.368	2.372	-0.004	8712711	127.7	119.3	
						RPD = 0.76	
5 Propane							
1	2.672	2.676	-0.004	21556737	200.7	182.6	
2	4.613	4.609	0.004	18266394	200.7	182.6	
						RPD = 0.01	
6 Acetylene							M
1	4.232	4.234	-0.002	3204718	118.5	123.5	
2	2.483	2.486	-0.003	4204612	118.5	122.5	M
						RPD = 0.85	
7 Butane							M
1	4.547	4.541	0.006	25888359	264.5	236.6	M
2	6.083	6.076	0.007	24281133	264.5	242.0	
						RPD = 2.27	
8 isobutylene							
1	5.382	5.381	0.001	18103424	255.4	252.7	
2	5.924	5.921	0.003	15917479	255.4	253.8	
						RPD = 0.42	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

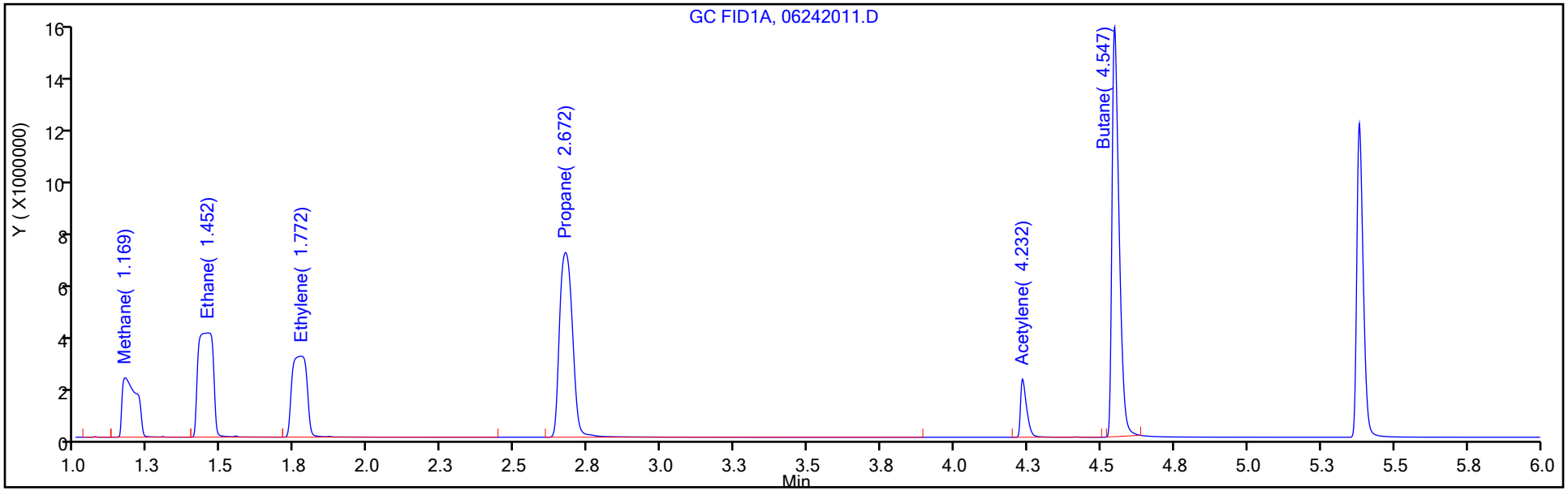
Report Date: 24-Jun-2020 12:48:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

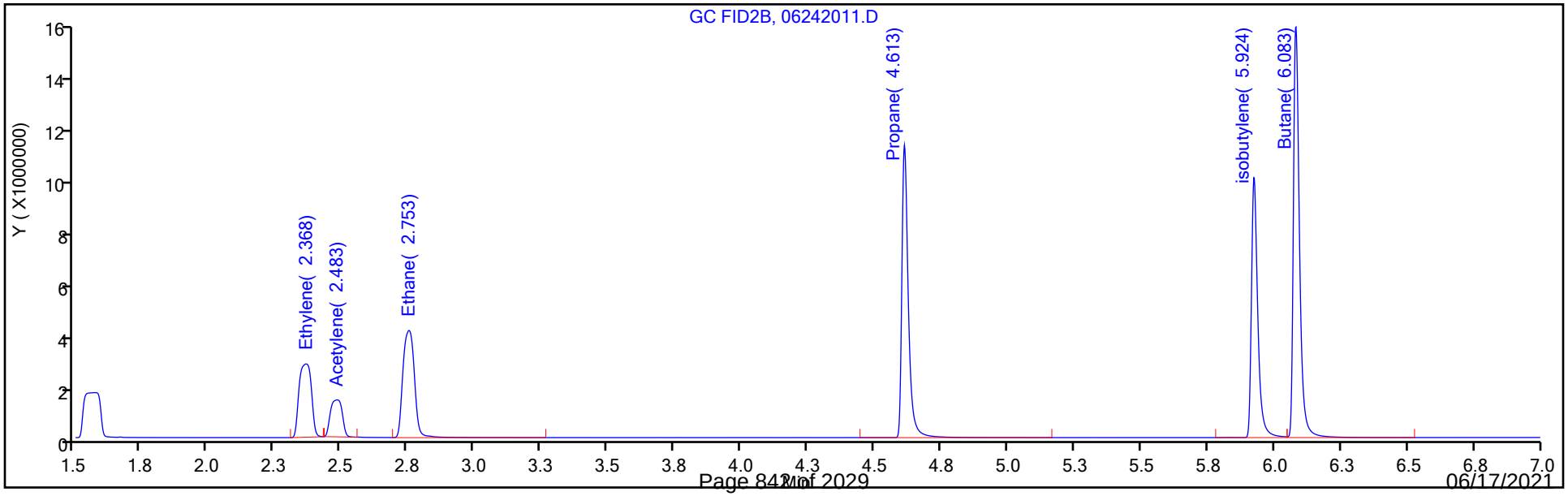
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D

Injection Date:	24-Jun-2020 12:11:02	Instrument ID:	VGC_J	Operator ID:	gm
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.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-499937/11 Calibration Date: 06/24/2020 12:11

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 06242011.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		96498		65.1	73.0	-10.8	20.0
Ethylene	Ave	73049	68246		119	128	-6.6	20.0
Acetylene	Ave	34329	35475		122	119	3.3	20.0
Ethane	Ave	97082	87507		123	137	-9.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-499937/11 Calibration Date: 06/24/2020 12:11

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 06242011.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.57	1.54	1.62
Ethylene	2.37	2.32	2.42
Acetylene	2.48	2.41	2.57
Ethane	2.75	2.71	2.81

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Jun-2020 12:11:02 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0092709-011
Operator ID: gm Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 24-Jun-2020 12:48:56 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1017

First Level Reviewer: meierg Date: 24-Jun-2020 12:48:56

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.169	1.172	-0.003	7740803	73.0	65.2	
2	1.574	1.577	-0.003	7044681	73.0	65.1	
						RPD = 0.04	
3 Ethane							
1	1.452	1.462	-0.010	14176818	136.9	123.7	
2	2.753	2.756	-0.003	11975757	136.9	123.4	
						RPD = 0.27	
4 Ethylene							
1	1.772	1.779	-0.007	10863846	127.7	118.4	
2	2.368	2.372	-0.004	8712711	127.7	119.3	
						RPD = 0.76	
5 Propane							
1	2.672	2.676	-0.004	21556737	200.7	182.6	
2	4.613	4.609	0.004	18266394	200.7	182.6	
						RPD = 0.01	
6 Acetylene							M
1	4.232	4.234	-0.002	3204718	118.5	123.5	
2	2.483	2.486	-0.003	4204612	118.5	122.5	M
						RPD = 0.85	
7 Butane							M
1	4.547	4.541	0.006	25888359	264.5	236.6	M
2	6.083	6.076	0.007	24281133	264.5	242.0	
						RPD = 2.27	
8 isobutylene							
1	5.382	5.381	0.001	18103424	255.4	252.7	
2	5.924	5.921	0.003	15917479	255.4	253.8	
						RPD = 0.42	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00027 Amount Added: 200.00 Units: uL

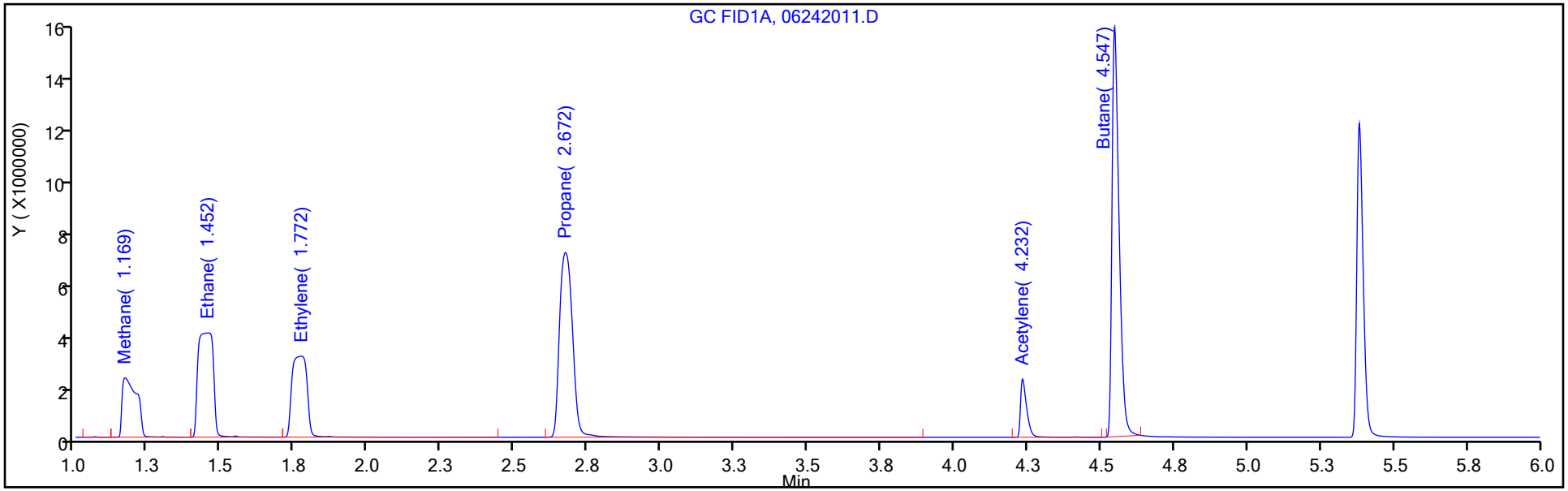
Report Date: 24-Jun-2020 12:48:57 Chrom Revision: 2.3 21-Jun-2020 18:30:46

Eurofins TestAmerica, Denver

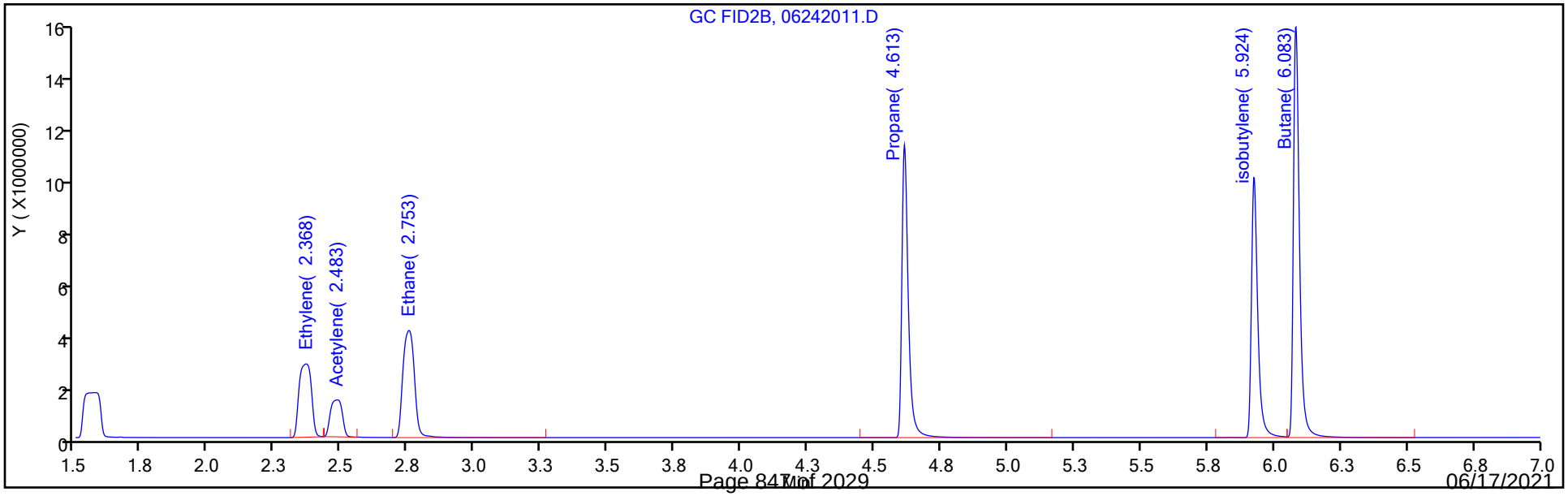
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D

Injection Date:	24-Jun-2020 12:11:02	Instrument ID:	VGC_J	Operator ID:	gm
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

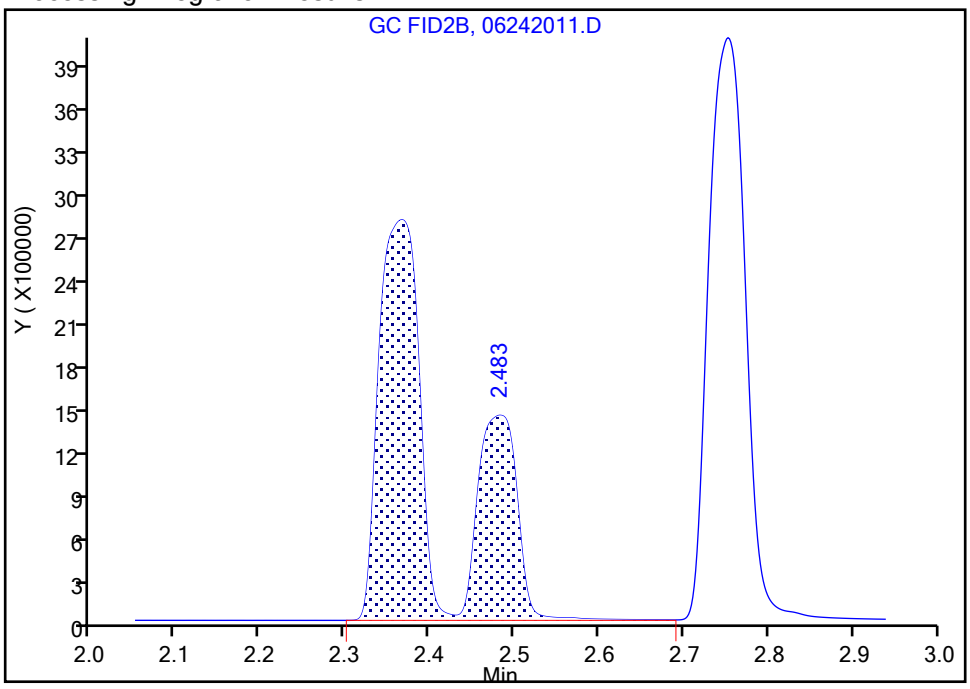
Data File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242011.D
Injection Date: 24-Jun-2020 12:11:02 Instrument ID: VGC_J
Lims ID: ICV
Client ID:
Operator ID: gm ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

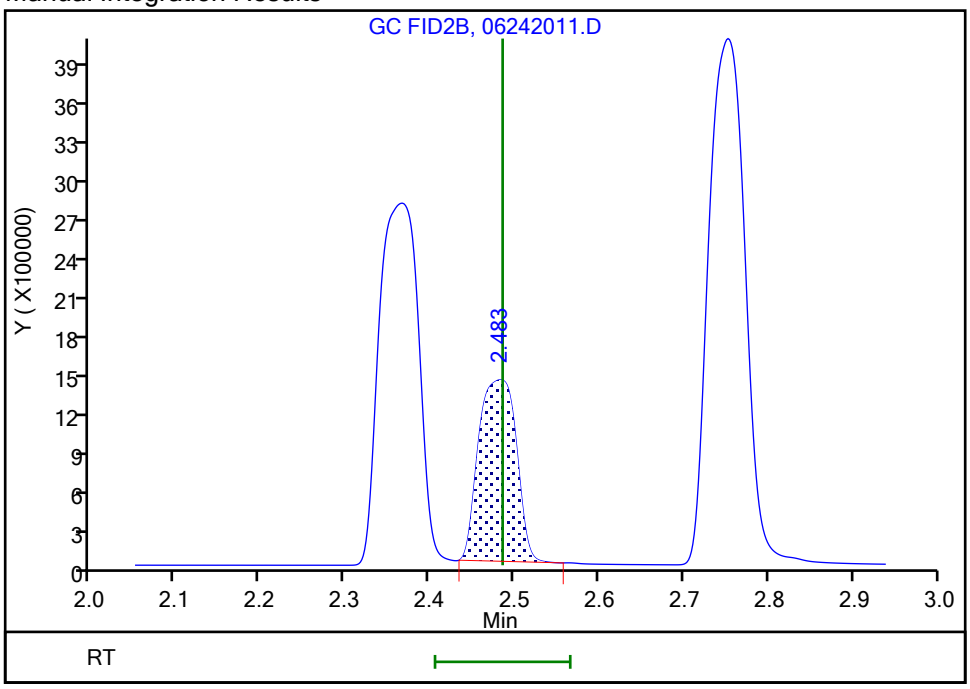
Processing Integration Results

RT: 2.48
Area: 13313502
Amount: 387.8232
Amount Units: ug/l



Manual Integration Results

RT: 2.48
Area: 4204612
Amount: 122.4806
Amount Units: ug/l



Reviewer: meierg, 24-Jun-2020 12:29:59
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVRT 280-538094/4 Calibration Date: 06/01/2021 11:14

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		113717		69.9	73.0	-4.2	20.0
Ethane	Ave	114619	109033		130	137	-4.9	20.0
Ethylene	Ave	91780	88579		123	128	-3.5	20.0
Acetylene	Ave	25943	26872		123	119	3.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVRT 280-538142/4 Calibration Date: 06/01/2021 11:14

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		113717		69.9	73.0	-4.2	20.0
Ethane	Ave	114619	109033		130	137	-4.9	20.0
Ethylene	Ave	91780	88579		123	128	-3.5	20.0
Acetylene	Ave	25943	26872		123	119	3.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVRT 280-538094/4 Calibration Date: 06/01/2021 11:14

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.19	1.15	1.23
Ethane	1.46	1.41	1.51
Ethylene	1.73	1.68	1.78
Acetylene	4.00	3.92	4.08

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVRT 280-538142/4 Calibration Date: 06/01/2021 11:14

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.19	1.15	1.23
Ethane	1.46	1.41	1.51
Ethylene	1.73	1.68	1.78
Acetylene	4.00	3.92	4.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2021 11:14:37 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 01-Jun-2021 11:35:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.191	1.191	0.000	8301745	73.0	69.9	
2	1.598	1.598	0.000	7712267	73.0	71.3	
						RPD = 2.01	
3 Ethane							
1	1.456	1.456	0.000	14921827	136.9	130.2	
2	2.788	2.788	0.000	12870392	136.9	132.6	
						RPD = 1.82	
4 Ethylene							Ma
1	1.734	1.734	0.000	11308542	127.7	123.2	
2	2.401	2.401	0.000	9379766	127.7	128.4	M
						RPD = 4.13	
5 Propane							
1	2.529	2.529	0.000	23359712	200.7	197.8	
2	4.631	4.631	0.000	20121720	200.7	201.1	
						RPD = 1.65	
6 Acetylene							Ma
1	4.004	4.004	0.000	3184931	118.5	122.8	
2	2.521	2.521	0.000	4641886	118.5	135.2	M
						RPD = 9.65	
7 Butane							Ma
1	4.362	4.362	0.000	28760478	264.5	262.7	a
2	6.094	6.094	0.000	27000013	264.5	269.0	M
						RPD = 2.37	
8 isobutylene							Ma
1	5.214	5.214	0.000	18975667	255.4	264.9	M
2	5.939	5.939	0.000	17401877	255.4	277.5	M
						RPD = 4.63	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2021 11:14:37 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 01-Jun-2021 11:35:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.191	1.191	0.000	8301745	73.0	69.9	
2	1.598	1.598	0.000	7712267	73.0	71.3	
						RPD = 2.01	
3 Ethane							
1	1.456	1.456	0.000	14921827	136.9	130.2	
2	2.788	2.788	0.000	12870392	136.9	132.6	
						RPD = 1.82	
4 Ethylene							Ma
1	1.734	1.734	0.000	11308542	127.7	123.2	
2	2.401	2.401	0.000	9379766	127.7	128.4	M
						RPD = 4.13	
5 Propane							
1	2.529	2.529	0.000	23359712	200.7	197.8	
2	4.631	4.631	0.000	20121720	200.7	201.1	
						RPD = 1.65	
6 Acetylene							Ma
1	4.004	4.004	0.000	3184931	118.5	122.8	
2	2.521	2.521	0.000	4641886	118.5	135.2	M
						RPD = 9.65	
7 Butane							Ma
1	4.362	4.362	0.000	28760478	264.5	262.7	a
2	6.094	6.094	0.000	27000013	264.5	269.0	M
						RPD = 2.37	
8 isobutylene							Ma
1	5.214	5.214	0.000	18975667	255.4	264.9	M
2	5.939	5.939	0.000	17401877	255.4	277.5	M
						RPD = 4.63	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

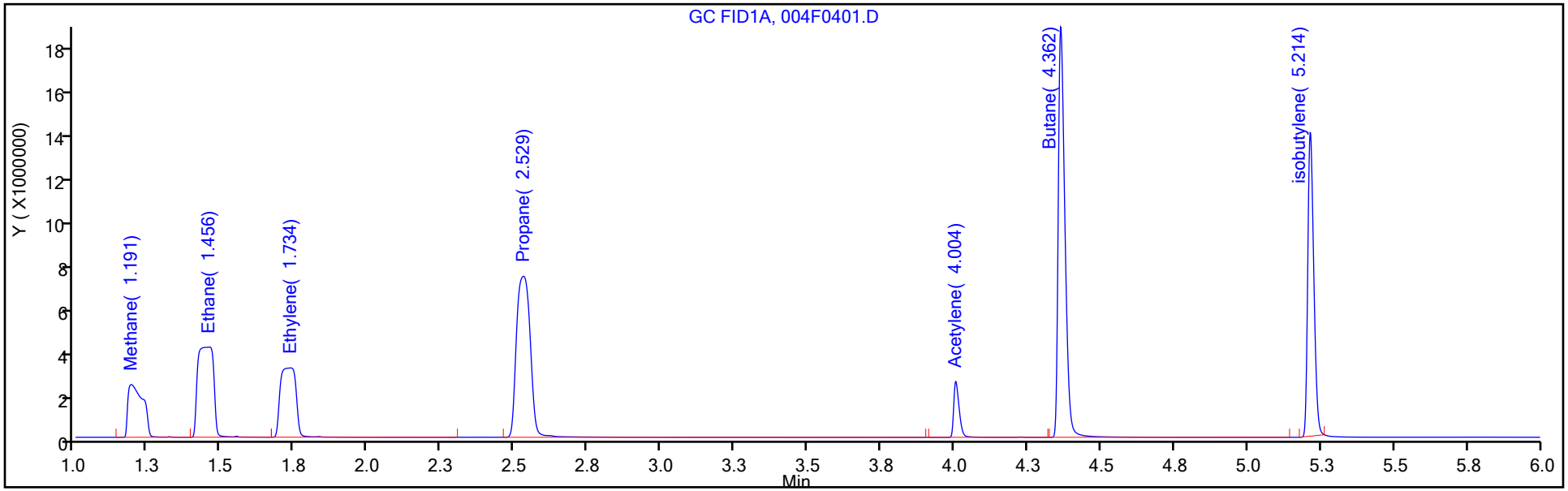
Report Date: 02-Jun-2021 11:02:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

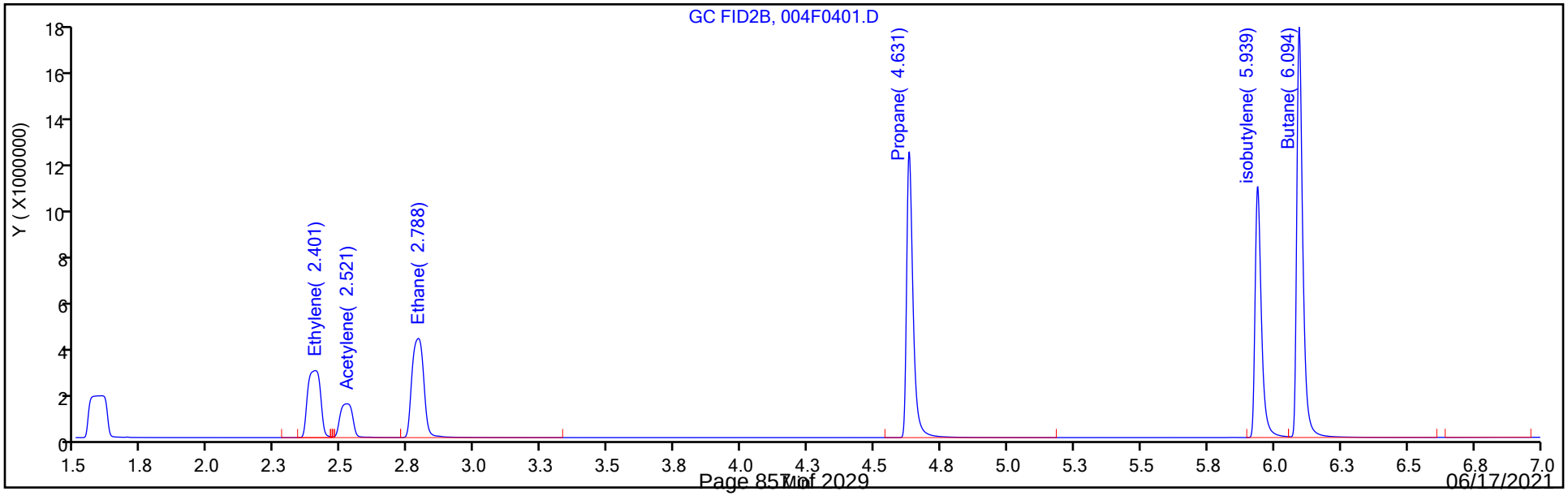
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D

Injection Date:	01-Jun-2021 11:14:37	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



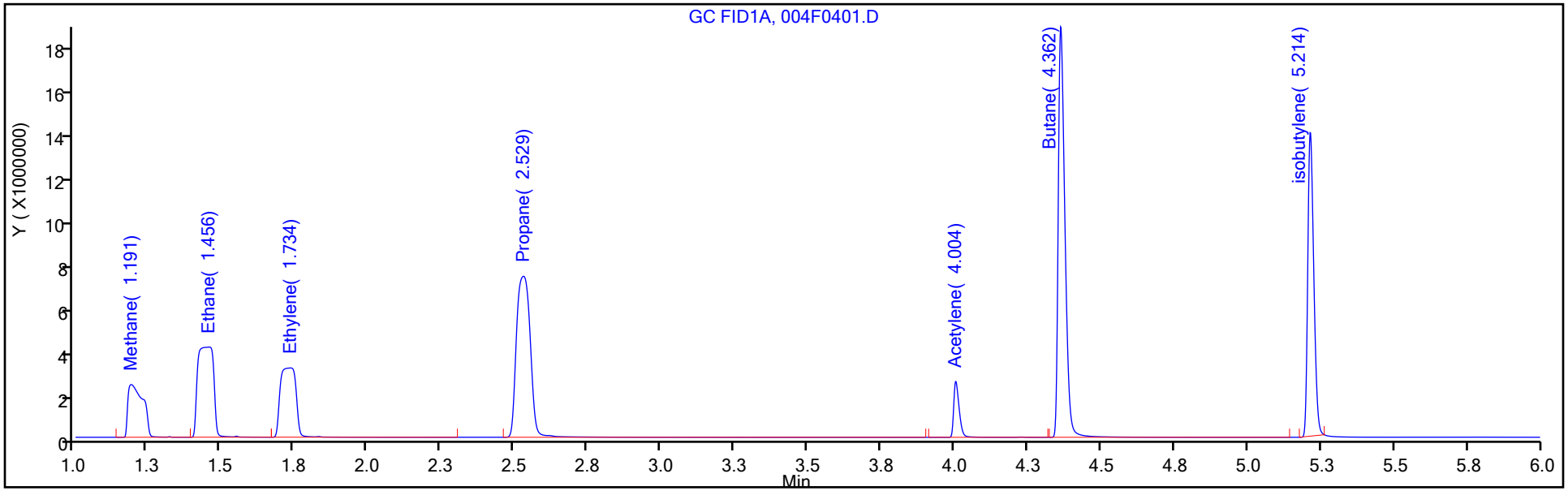
Report Date: 02-Jun-2021 11:02:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

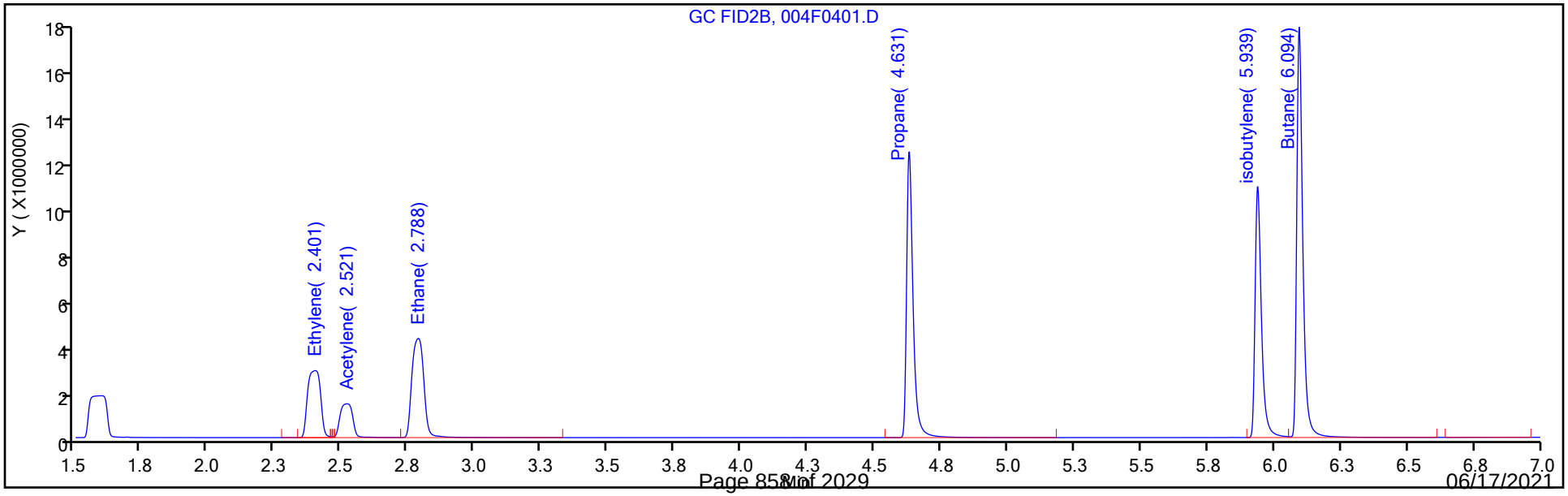
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D

Injection Date:	01-Jun-2021 11:14:37	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVRT 280-538094/4 Calibration Date: 06/01/2021 11:14

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		105643		71.3	73.0	-2.3	20.0
Ethylene	Ave	73049	73471		128	128	0.6	20.0
Acetylene	Ave	34329	39165		135	119	14.1	20.0
Ethane	Ave	97082	94044		133	137	-3.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVRT 280-538142/4 Calibration Date: 06/01/2021 11:14

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		105643		71.3	73.0	-2.3	20.0
Ethylene	Ave	73049	73471		128	128	0.6	20.0
Acetylene	Ave	34329	39165		135	119	14.1	20.0
Ethane	Ave	97082	94044		133	137	-3.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVRT 280-538094/4 Calibration Date: 06/01/2021 11:14

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.60	1.56	1.64
Ethylene	2.40	2.35	2.45
Acetylene	2.52	2.44	2.60
Ethane	2.79	2.74	2.84

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCVRT 280-538142/4 Calibration Date: 06/01/2021 11:14

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 004F0401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.60	1.56	1.64
Ethylene	2.40	2.35	2.45
Acetylene	2.52	2.44	2.60
Ethane	2.79	2.74	2.84

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2021 11:14:37 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 01-Jun-2021 11:35:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.191	1.191	0.000	8301745	73.0	69.9	
2	1.598	1.598	0.000	7712267	73.0	71.3	
						RPD = 2.01	
3 Ethane							
1	1.456	1.456	0.000	14921827	136.9	130.2	
2	2.788	2.788	0.000	12870392	136.9	132.6	
						RPD = 1.82	
4 Ethylene							Ma
1	1.734	1.734	0.000	11308542	127.7	123.2	
2	2.401	2.401	0.000	9379766	127.7	128.4	M
						RPD = 4.13	
5 Propane							
1	2.529	2.529	0.000	23359712	200.7	197.8	
2	4.631	4.631	0.000	20121720	200.7	201.1	
						RPD = 1.65	
6 Acetylene							Ma
1	4.004	4.004	0.000	3184931	118.5	122.8	
2	2.521	2.521	0.000	4641886	118.5	135.2	M
						RPD = 9.65	
7 Butane							Ma
1	4.362	4.362	0.000	28760478	264.5	262.7	a
2	6.094	6.094	0.000	27000013	264.5	269.0	M
						RPD = 2.37	
8 isobutylene							Ma
1	5.214	5.214	0.000	18975667	255.4	264.9	M
2	5.939	5.939	0.000	17401877	255.4	277.5	M
						RPD = 4.63	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2021 11:14:37 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 01-Jun-2021 11:35:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.191	1.191	0.000	8301745	73.0	69.9	
2	1.598	1.598	0.000	7712267	73.0	71.3	
						RPD = 2.01	
3 Ethane							
1	1.456	1.456	0.000	14921827	136.9	130.2	
2	2.788	2.788	0.000	12870392	136.9	132.6	
						RPD = 1.82	
4 Ethylene							Ma
1	1.734	1.734	0.000	11308542	127.7	123.2	
2	2.401	2.401	0.000	9379766	127.7	128.4	M
						RPD = 4.13	
5 Propane							
1	2.529	2.529	0.000	23359712	200.7	197.8	
2	4.631	4.631	0.000	20121720	200.7	201.1	
						RPD = 1.65	
6 Acetylene							Ma
1	4.004	4.004	0.000	3184931	118.5	122.8	
2	2.521	2.521	0.000	4641886	118.5	135.2	M
						RPD = 9.65	
7 Butane							Ma
1	4.362	4.362	0.000	28760478	264.5	262.7	a
2	6.094	6.094	0.000	27000013	264.5	269.0	M
						RPD = 2.37	
8 isobutylene							Ma
1	5.214	5.214	0.000	18975667	255.4	264.9	M
2	5.939	5.939	0.000	17401877	255.4	277.5	M
						RPD = 4.63	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

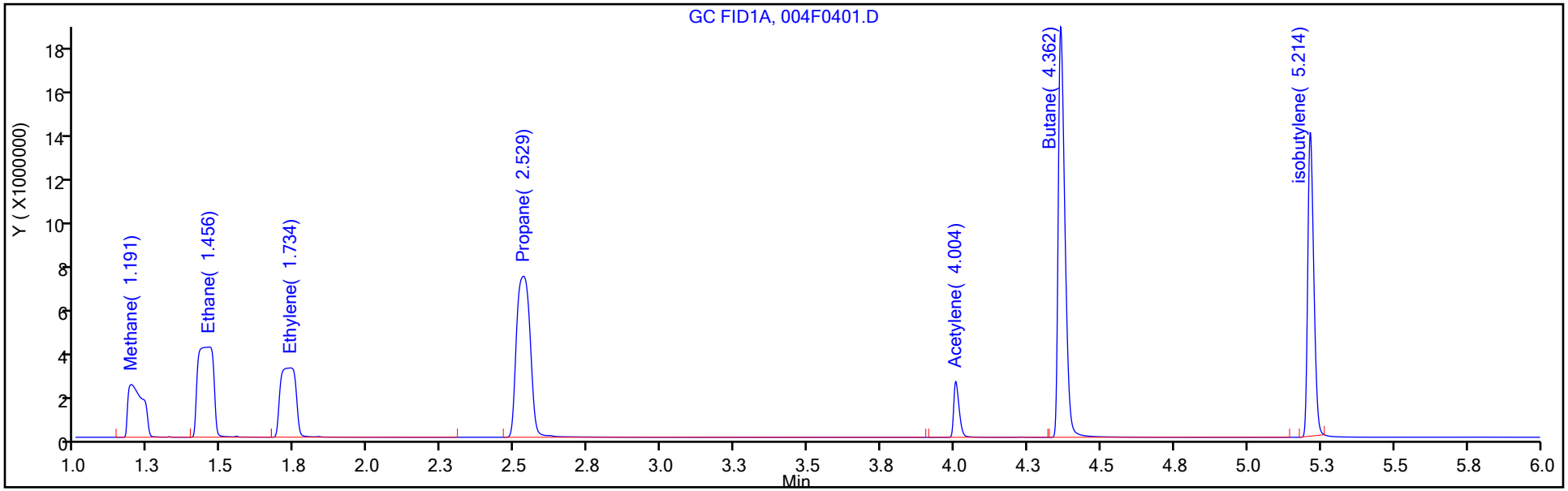
Report Date: 02-Jun-2021 11:02:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

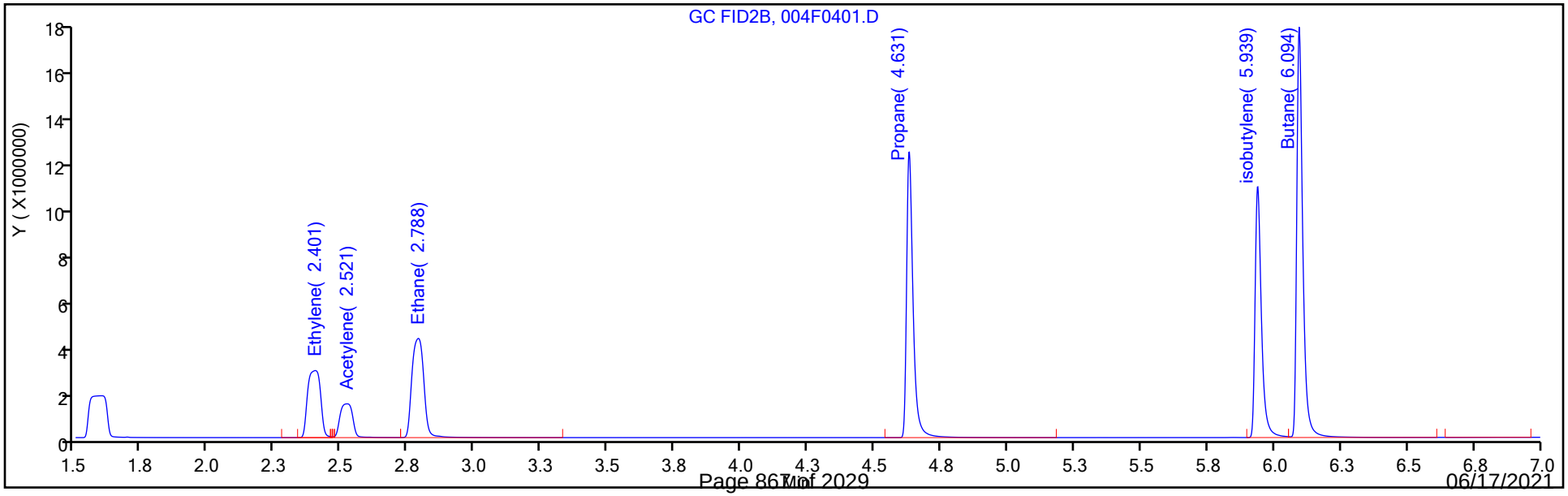
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D

Injection Date:	01-Jun-2021 11:14:37	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



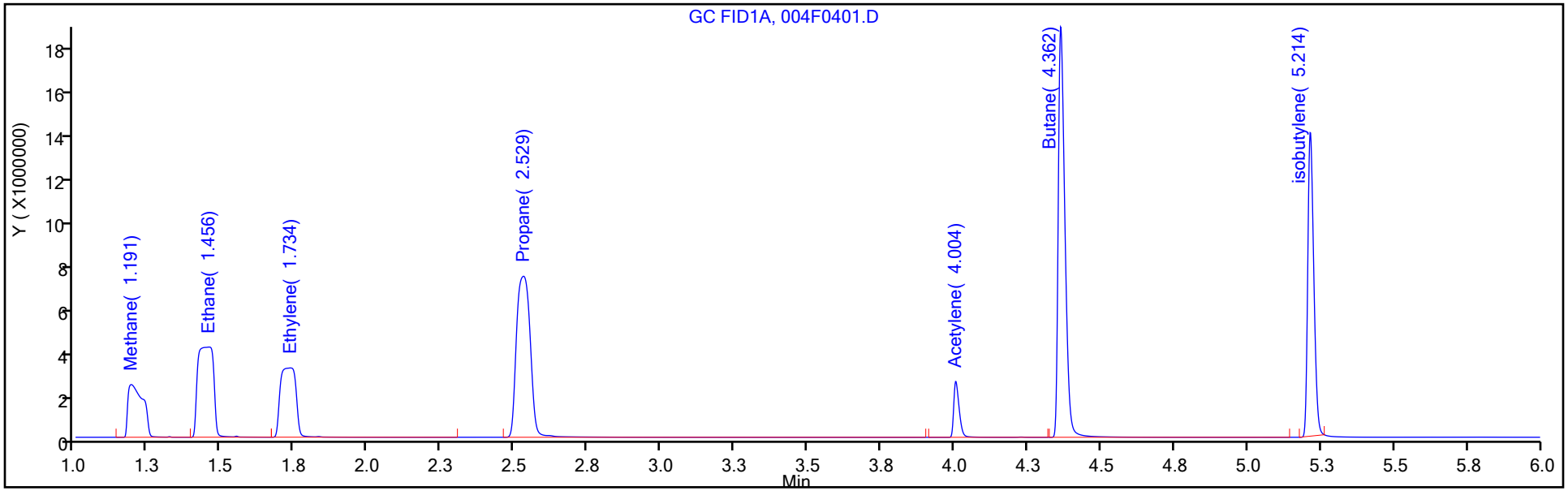
Report Date: 02-Jun-2021 11:02:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

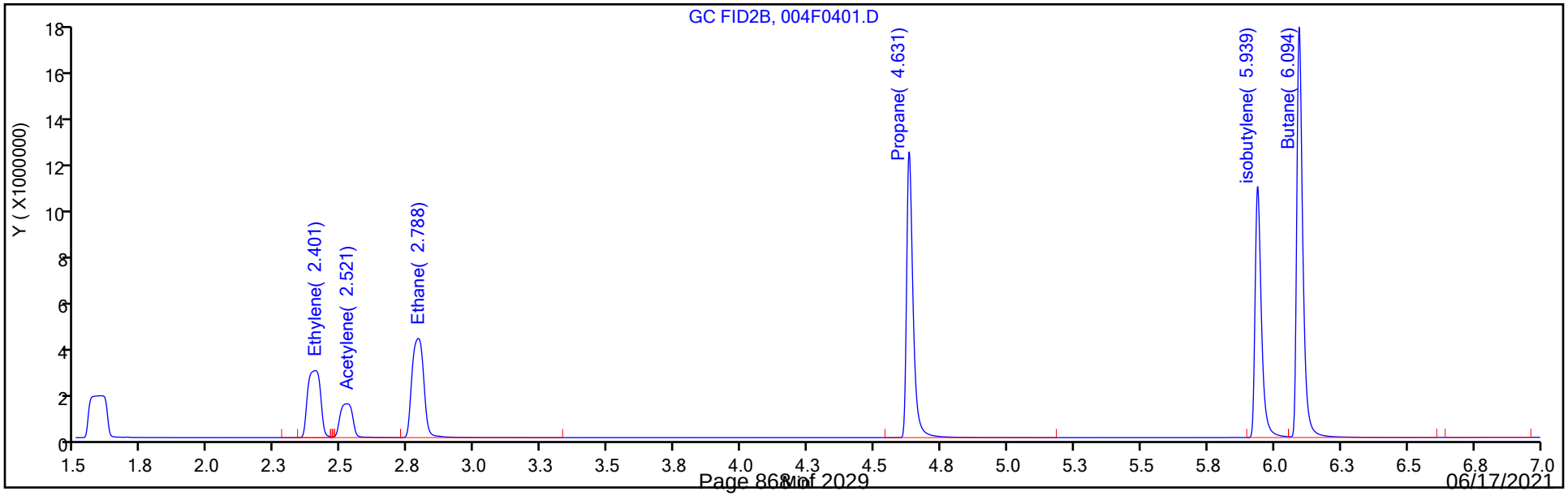
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D

Injection Date:	01-Jun-2021 11:14:37	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

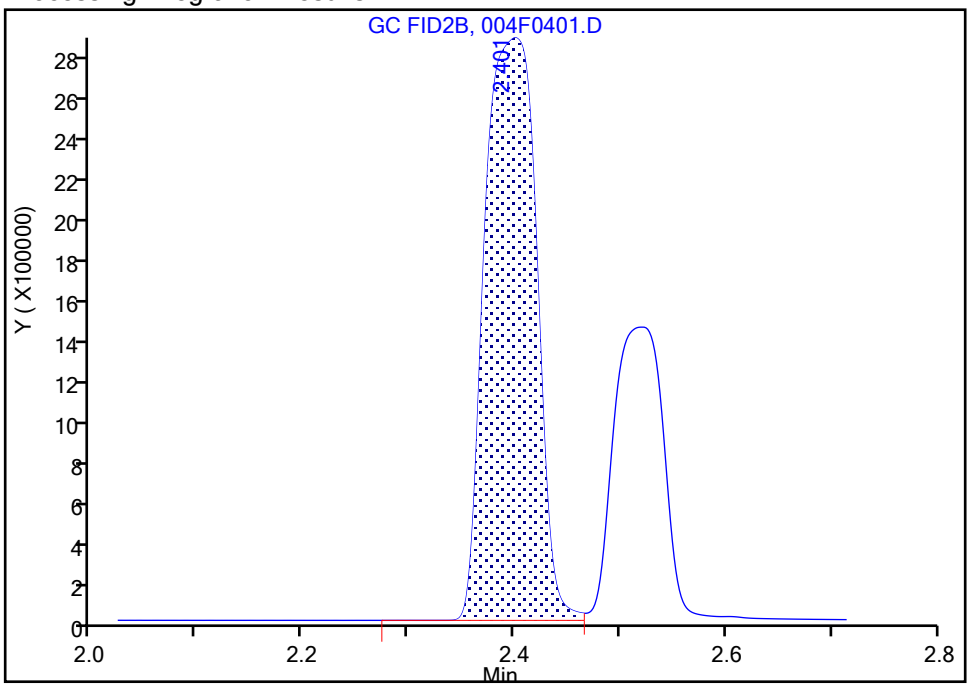
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D
Injection Date: 01-Jun-2021 11:14:37 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

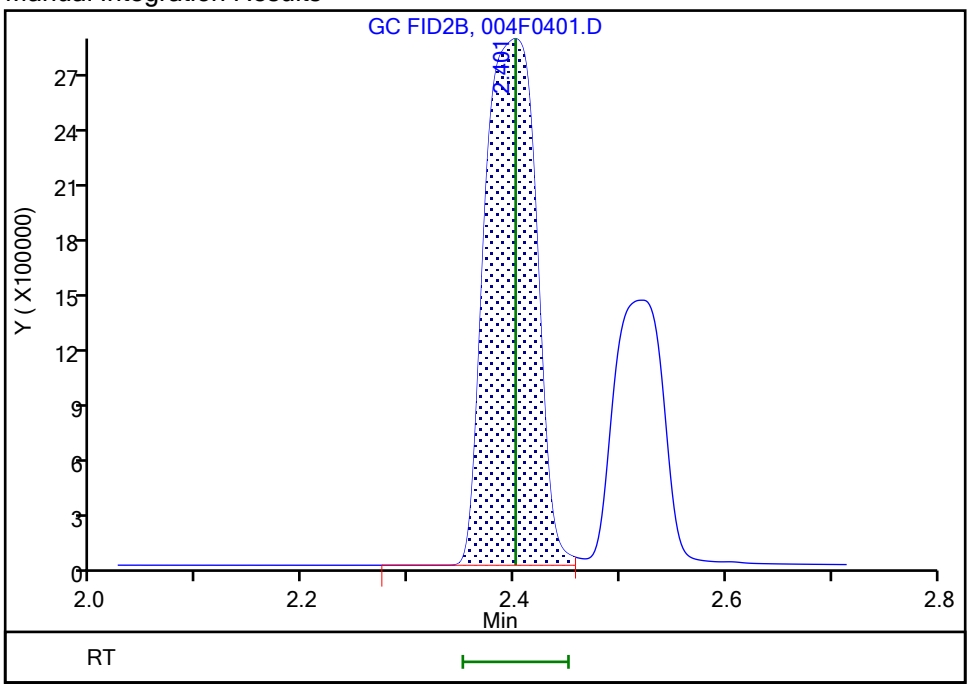
Processing Integration Results

RT: 2.40
Area: 9398391
Amount: 128.6588
Amount Units: ug/l



Manual Integration Results

RT: 2.40
Area: 9379766
Amount: 128.4039
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2021 11:34:50
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

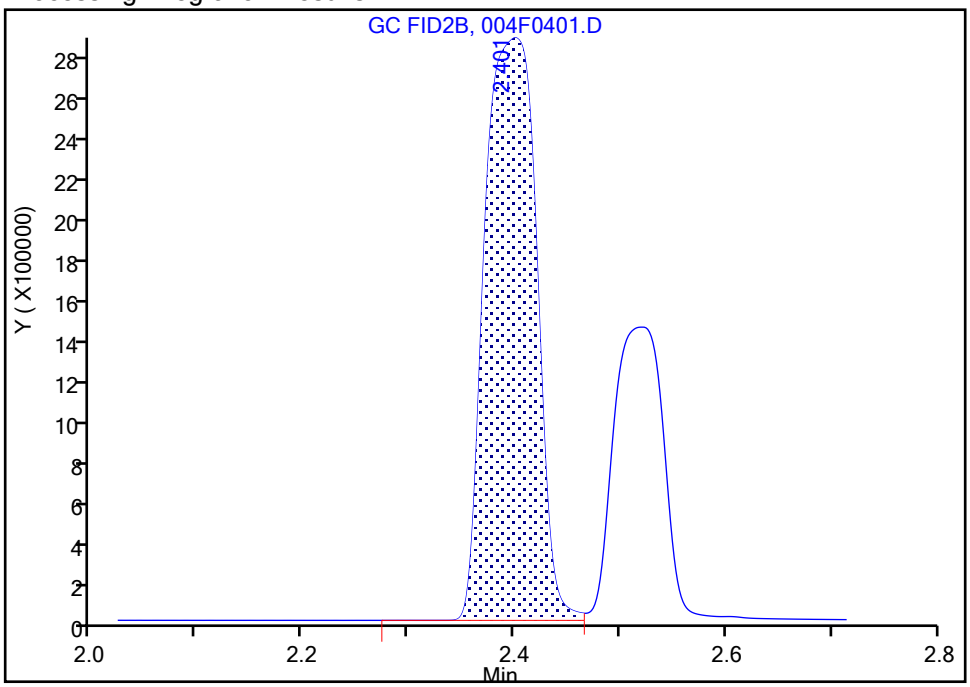
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D
Injection Date: 01-Jun-2021 11:14:37 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

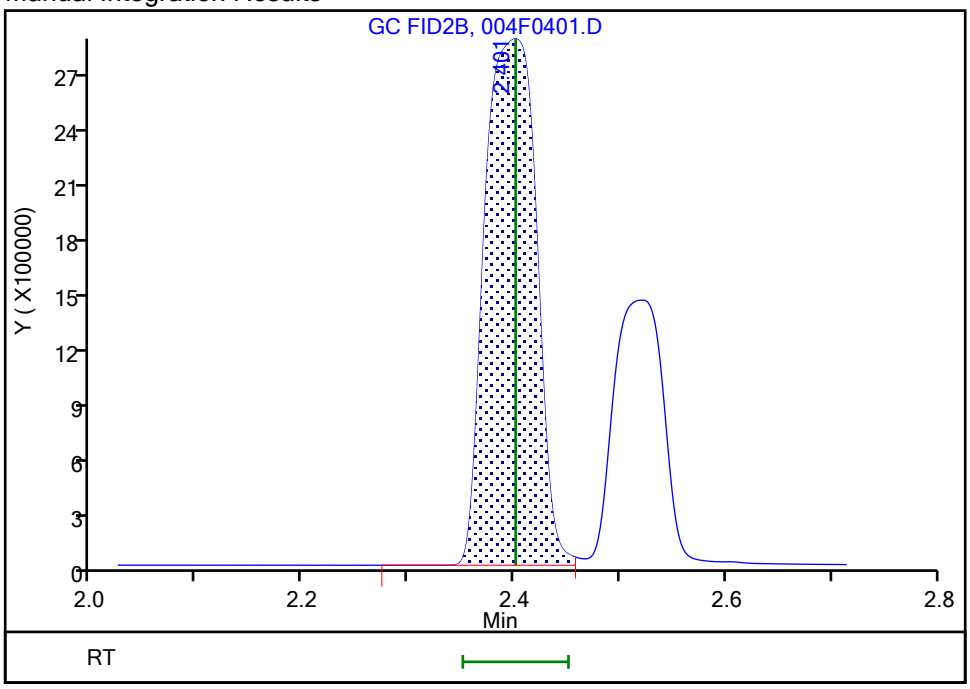
Processing Integration Results

RT: 2.40
Area: 9398391
Amount: 128.6588
Amount Units: ug/l



Manual Integration Results

RT: 2.40
Area: 9379766
Amount: 128.4039
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2021 11:34:50
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

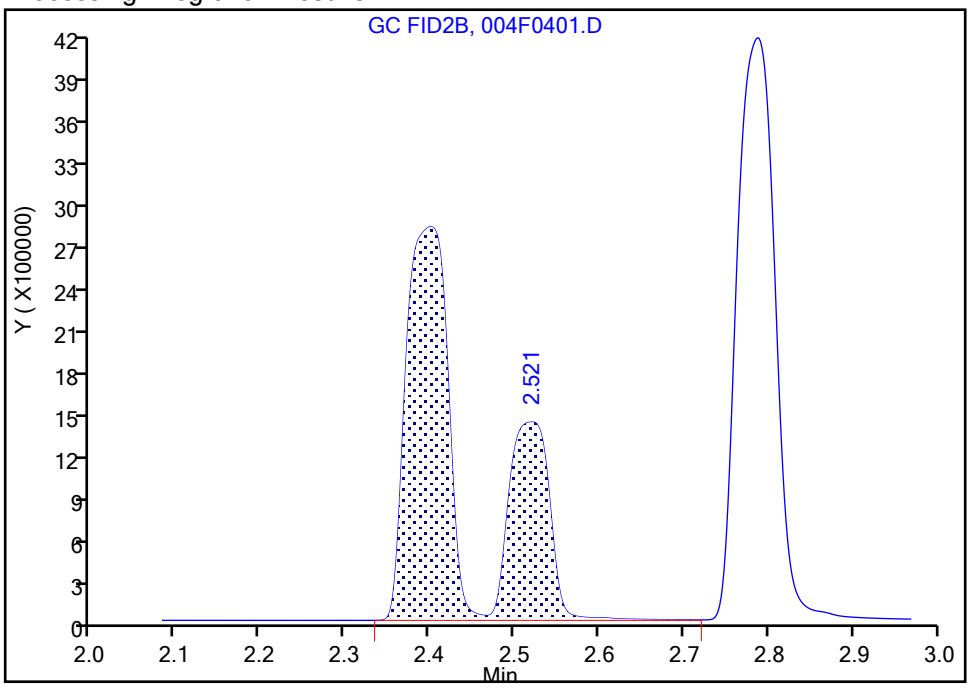
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D
Injection Date: 01-Jun-2021 11:14:37 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

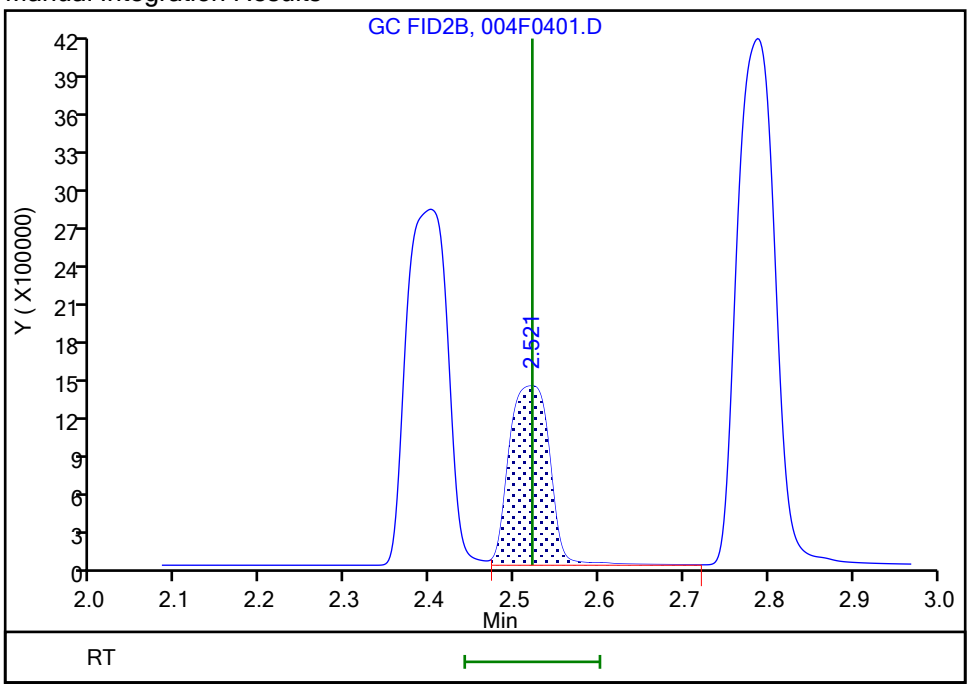
Processing Integration Results

RT: 2.52
Area: 14054809
Amount: 409.4175
Amount Units: ug/l



Manual Integration Results

RT: 2.52
Area: 4641886
Amount: 135.2184
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2021 11:34:41
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

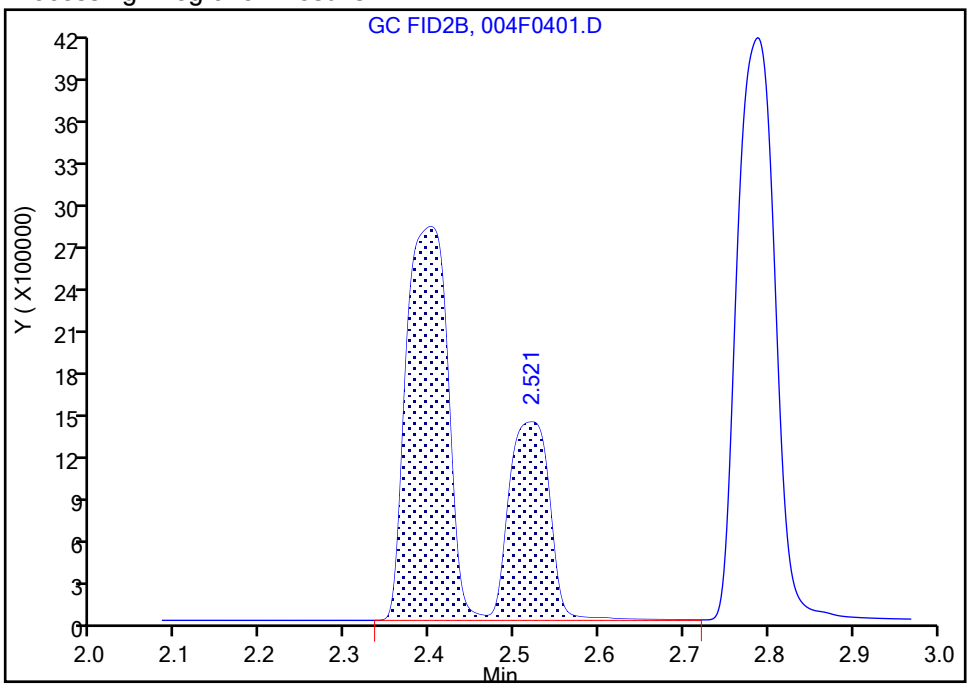
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\004F0401.D
Injection Date: 01-Jun-2021 11:14:37 Instrument ID: VGC_J
Lims ID: CCVRT
Client ID:
Operator ID: robertstr ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

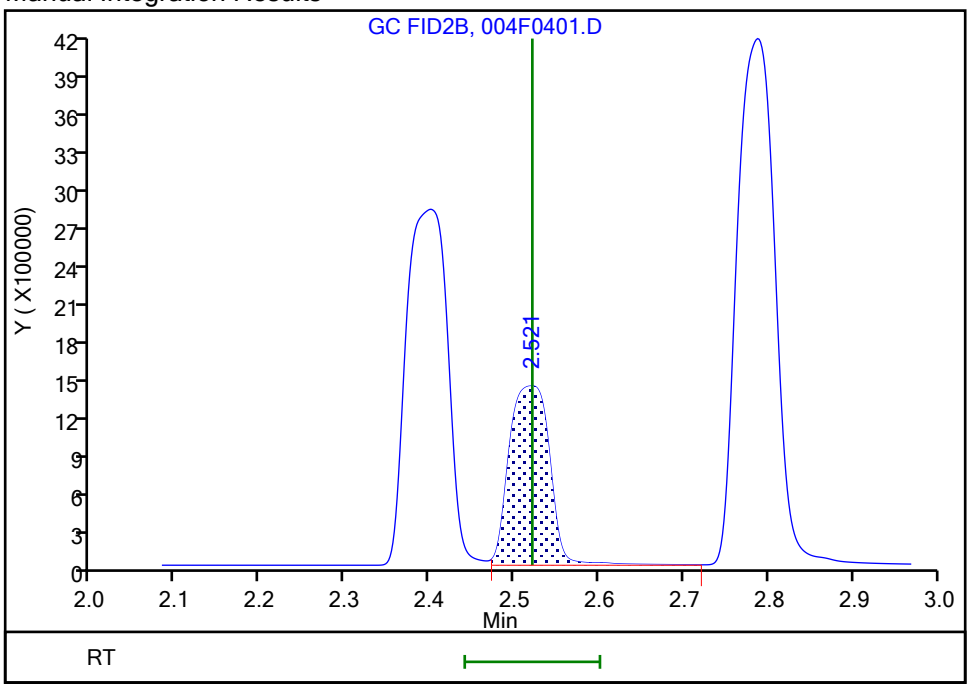
Processing Integration Results

RT: 2.52
Area: 14054809
Amount: 409.4175
Amount Units: ug/l



Manual Integration Results

RT: 2.52
Area: 4641886
Amount: 135.2184
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2021 11:34:41
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538094/21 Calibration Date: 06/01/2021 15:04

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.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		108097		66.4	73.0	-9.0	20.0
Ethane	Ave	114619	102170		122	137	-10.9	20.0
Ethylene	Ave	91780	82527		115	128	-10.1	20.0
Acetylene	Ave	25943	25350		116	119	-2.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538094/21 Calibration Date: 06/01/2021 15:04

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.15	1.23
Ethane	1.44	1.41	1.51
Ethylene	1.72	1.68	1.78
Acetylene	4.02	3.92	4.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\021F2101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2021 15:04:38 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:57 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 08:54:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.180	1.191	-0.011	7891458	73.0	66.4	
2	1.582	1.598	-0.016	7327891	73.0	67.8	
						RPD = 1.98	
3 Ethane							
1	1.443	1.456	-0.013	13982465	136.9	122.0	
2	2.765	2.788	-0.023	11983461	136.9	123.4	
						RPD = 1.18	
4 Ethylene							Ma
1	1.721	1.734	-0.013	10536010	127.7	114.8	
2	2.378	2.401	-0.023	8791598	127.7	120.4	M
						RPD = 4.73	
5 Propane							
1	2.521	2.529	-0.008	21690900	200.7	183.7	
2	4.620	4.631	-0.011	18499584	200.7	184.9	
						RPD = 0.66	
6 Acetylene							Ma
1	4.023	4.004	0.019	3004497	118.5	115.8	a
2	2.500	2.521	-0.021	4425300	118.5	128.9	M
						RPD = 10.70	
7 Butane							Ma
1	4.373	4.362	0.011	25987474	264.5	237.5	a
2	6.087	6.094	-0.007	24719642	264.5	246.4	M
						RPD = 3.68	
8 isobutylene							Ma
1	5.226	5.214	0.012	19684676	255.4	274.8	
2	5.930	5.939	-0.009	16697502	255.4	266.2	M
						RPD = 3.17	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

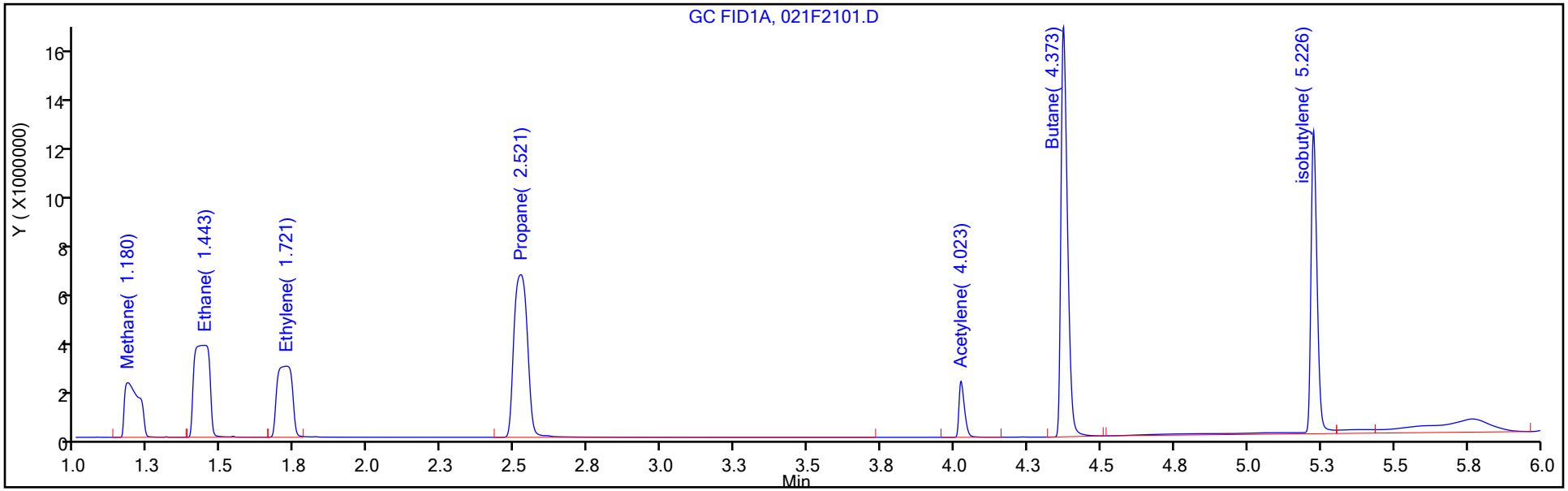
Report Date: 02-Jun-2021 11:02:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

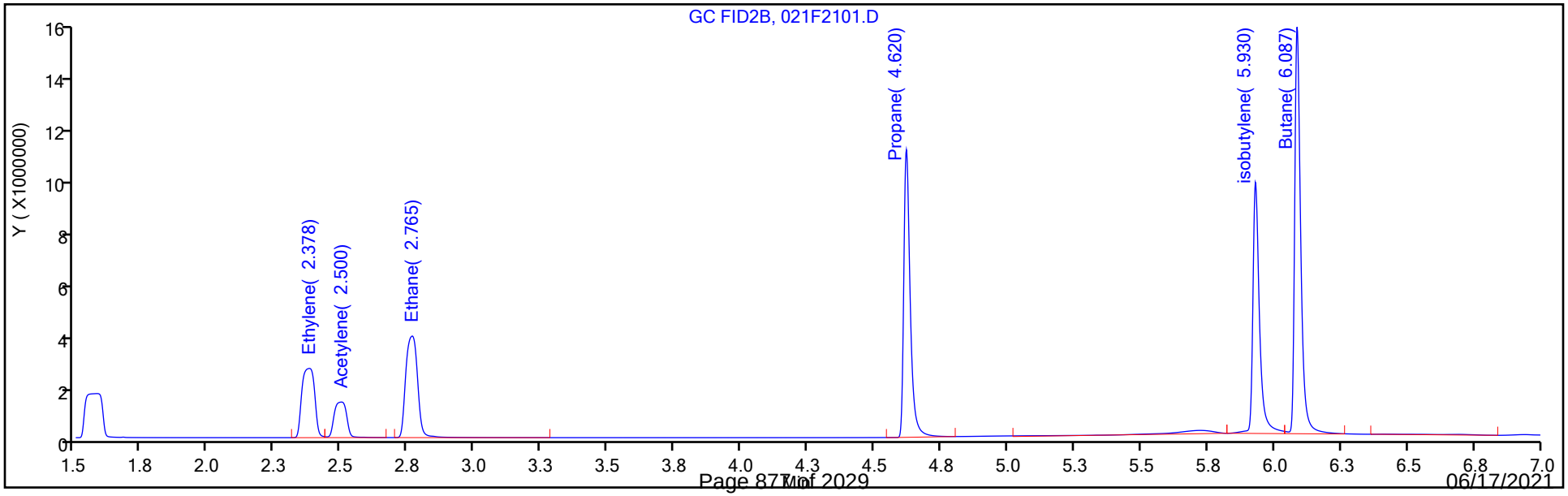
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\021F2101.D

Injection Date:	01-Jun-2021 15:04:38	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

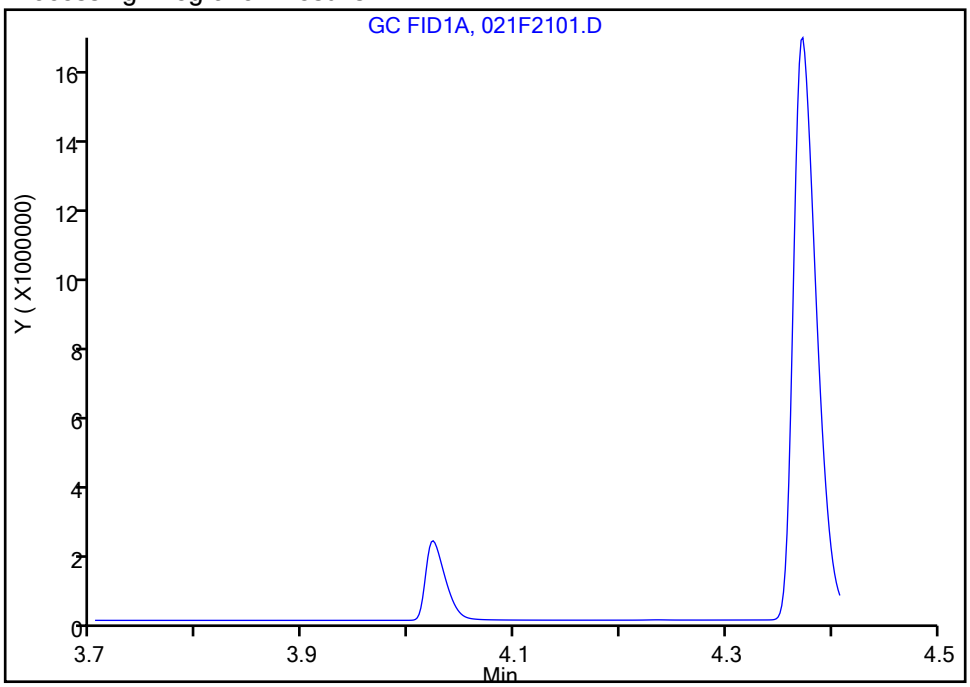
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\021F2101.D
Injection Date: 01-Jun-2021 15:04:38 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

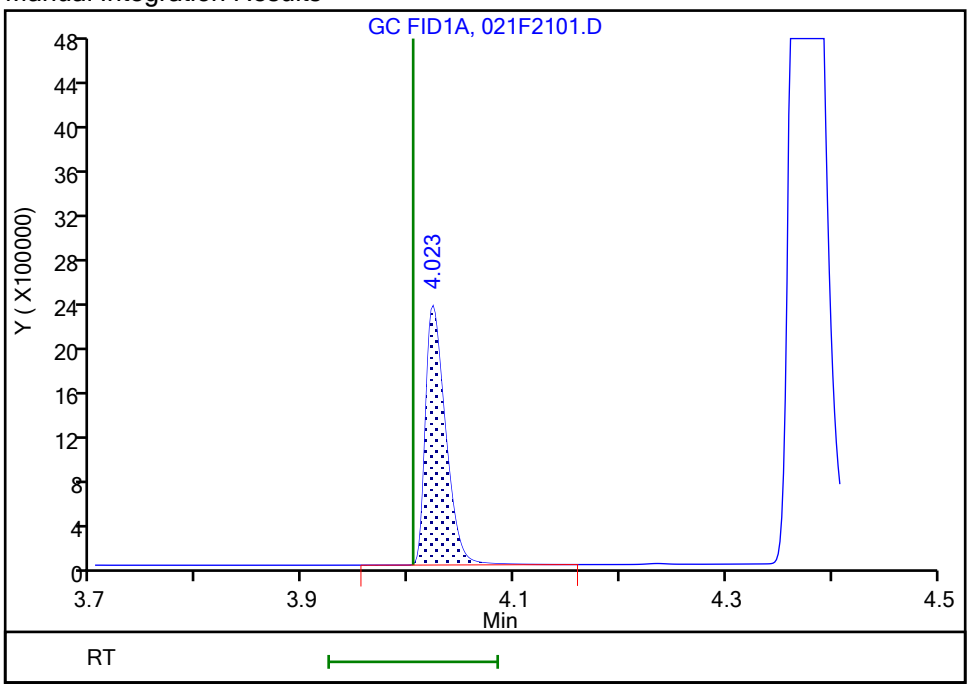
Not Detected
Expected RT: 4.00

Processing Integration Results



Manual Integration Results

RT: 4.02
Area: 3004497
Amount: 115.8115
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 08:54:11
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538094/21 Calibration Date: 06/01/2021 15:04

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.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		100377		67.8	73.0	-7.2	20.0
Ethylene	Ave	73049	68864		120	128	-5.7	20.0
Acetylene	Ave	34329	37337		129	119	8.8	20.0
Ethane	Ave	97082	87563		123	137	-9.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538094/21 Calibration Date: 06/01/2021 15:04

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 021F2101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.58	1.56	1.64
Ethylene	2.38	2.35	2.45
Acetylene	2.50	2.44	2.60
Ethane	2.77	2.74	2.84

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\021F2101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2021 15:04:38 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:57 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 08:54:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.180	1.191	-0.011	7891458	73.0	66.4	
2	1.582	1.598	-0.016	7327891	73.0	67.8	
						RPD = 1.98	
3 Ethane							
1	1.443	1.456	-0.013	13982465	136.9	122.0	
2	2.765	2.788	-0.023	11983461	136.9	123.4	
						RPD = 1.18	
4 Ethylene							Ma
1	1.721	1.734	-0.013	10536010	127.7	114.8	
2	2.378	2.401	-0.023	8791598	127.7	120.4	M
						RPD = 4.73	
5 Propane							
1	2.521	2.529	-0.008	21690900	200.7	183.7	
2	4.620	4.631	-0.011	18499584	200.7	184.9	
						RPD = 0.66	
6 Acetylene							Ma
1	4.023	4.004	0.019	3004497	118.5	115.8	a
2	2.500	2.521	-0.021	4425300	118.5	128.9	M
						RPD = 10.70	
7 Butane							Ma
1	4.373	4.362	0.011	25987474	264.5	237.5	a
2	6.087	6.094	-0.007	24719642	264.5	246.4	M
						RPD = 3.68	
8 isobutylene							Ma
1	5.226	5.214	0.012	19684676	255.4	274.8	
2	5.930	5.939	-0.009	16697502	255.4	266.2	M
						RPD = 3.17	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

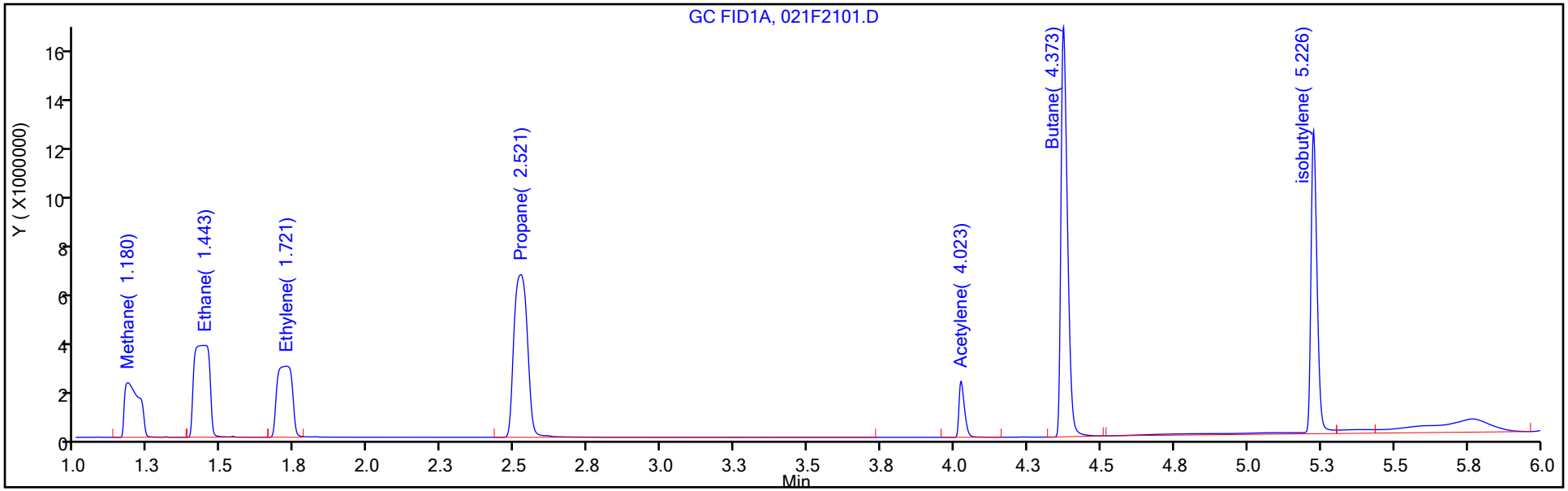
Report Date: 02-Jun-2021 11:02:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

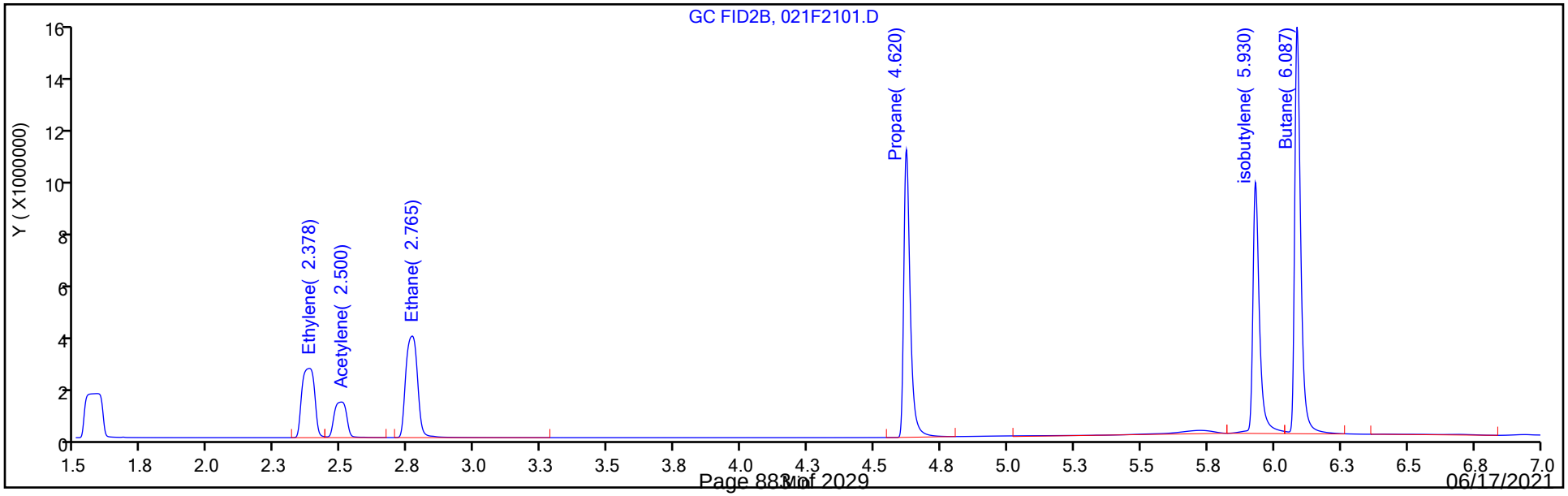
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\021F2101.D

Injection Date:	01-Jun-2021 15:04:38	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

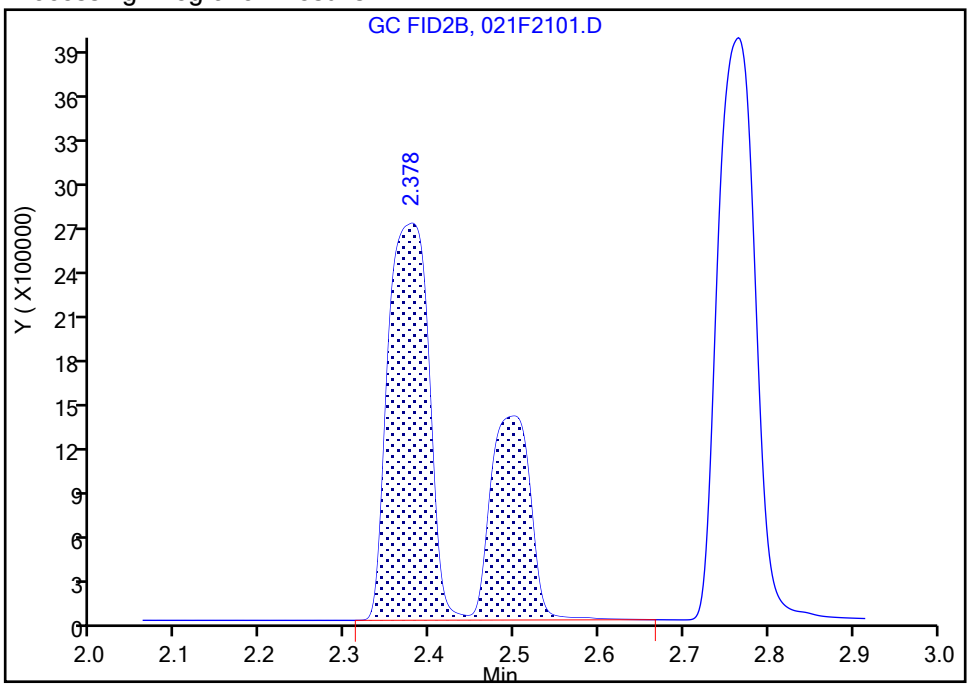
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\021F2101.D
Injection Date: 01-Jun-2021 15:04:38 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

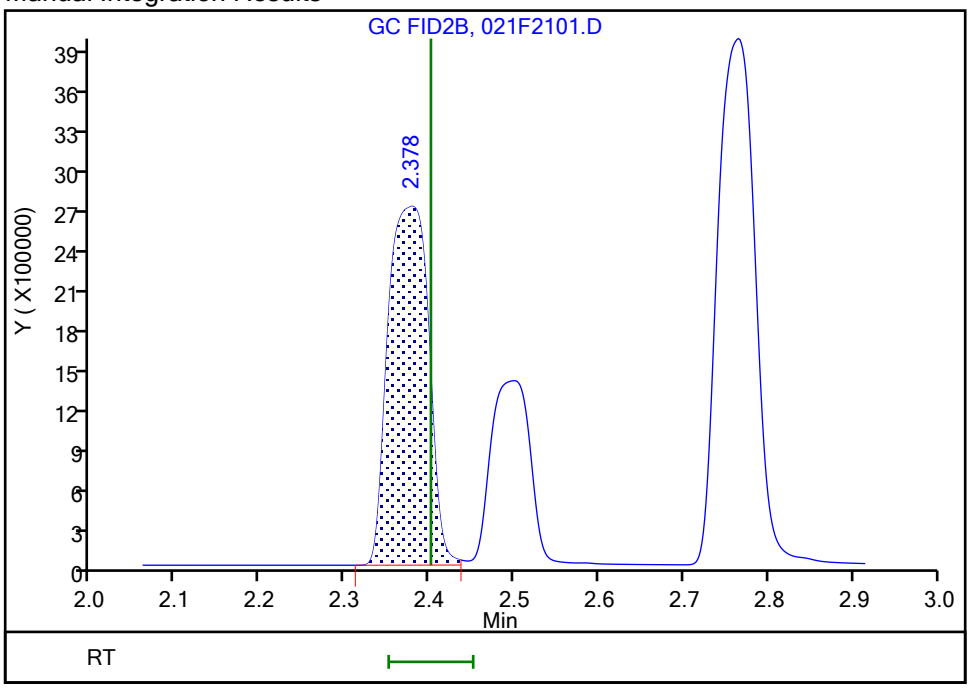
Processing Integration Results

RT: 2.38
Area: 13216810
Amount: 180.9309
Amount Units: ug/l



Manual Integration Results

RT: 2.38
Area: 8791598
Amount: 120.3522
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 08:54:27
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

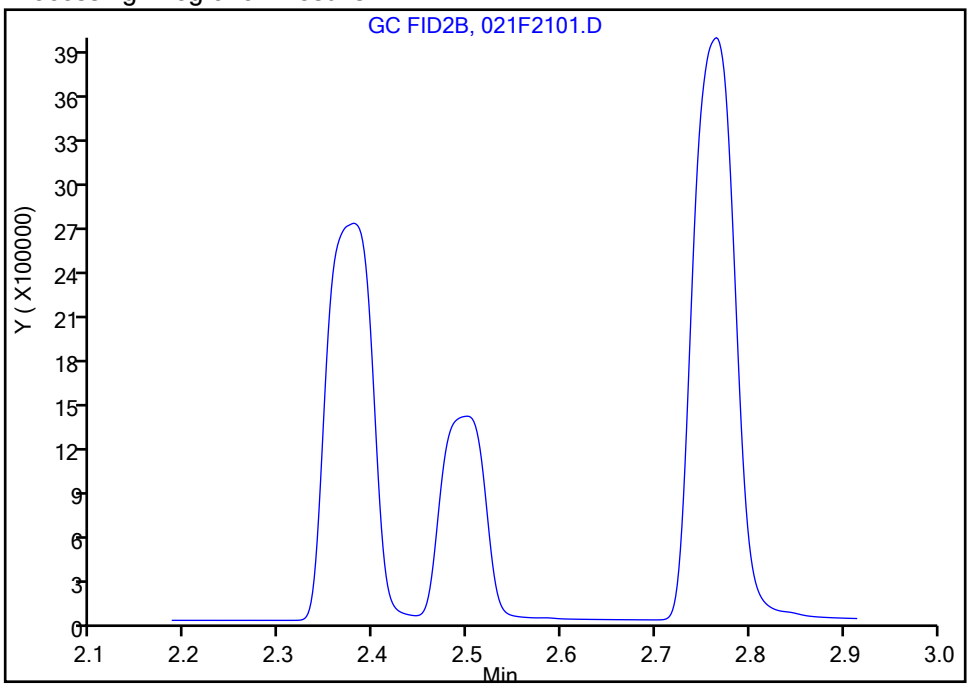
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\021F2101.D
Injection Date: 01-Jun-2021 15:04:38 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

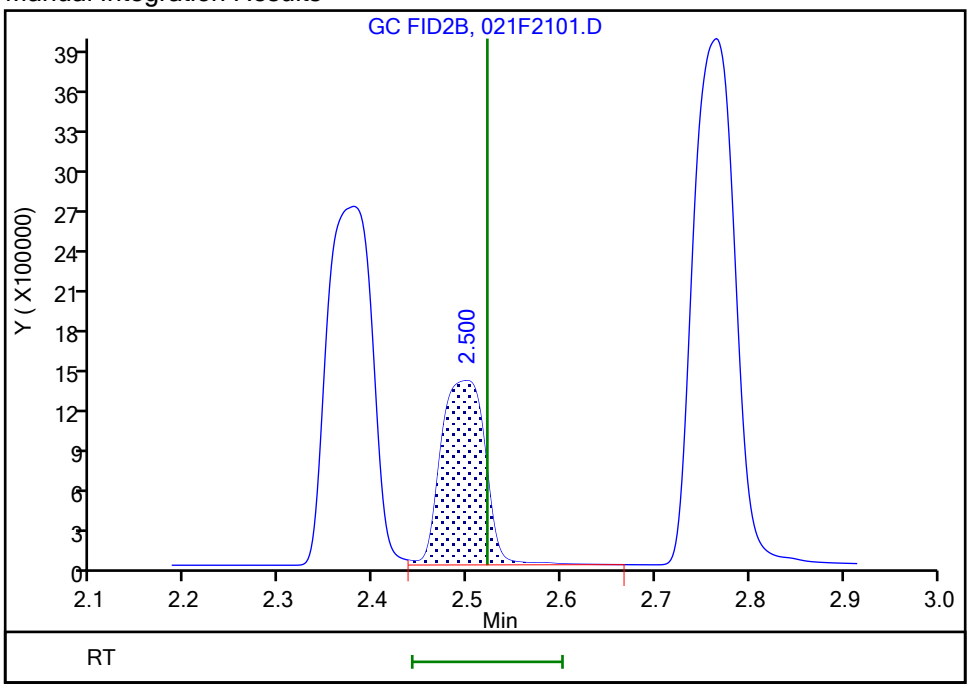
Not Detected
Expected RT: 2.52

Processing Integration Results



Manual Integration Results

RT: 2.50
Area: 4425300
Amount: 128.9093
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 08:54:20
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538094/35 Calibration Date: 06/01/2021 17:58

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 035F3501.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		112091		68.9	73.0	-5.6	20.0
Ethane	Ave	114619	105805		126	137	-7.7	20.0
Ethylene	Ave	91780	85088		118	128	-7.3	20.0
Acetylene	Ave	25943	25767		118	119	-0.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/35 Calibration Date: 06/01/2021 17:58

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 035F3501.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		112091		68.9	73.0	-5.6	20.0
Ethane	Ave	114619	105805		126	137	-7.7	20.0
Ethylene	Ave	91780	85088		118	128	-7.3	20.0
Acetylene	Ave	25943	25767		118	119	-0.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538094/35 Calibration Date: 06/01/2021 17:58

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 035F3501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.15	1.23
Ethane	1.45	1.41	1.51
Ethylene	1.73	1.68	1.78
Acetylene	4.03	3.92	4.08

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/35 Calibration Date: 06/01/2021 17:58

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 035F3501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.15	1.23
Ethane	1.45	1.41	1.51
Ethylene	1.73	1.68	1.78
Acetylene	4.03	3.92	4.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2021 17:58:02 ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:07:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.181	1.191	-0.010	8182984	73.0	68.9	
2	1.586	1.598	-0.012	7578937	73.0	70.1	
						RPD = 1.71	
3 Ethane							M
1	1.446	1.456	-0.010	14480015	136.9	126.3	
2	2.767	2.788	-0.021	12225314	136.9	125.9	M
						RPD = 0.32	
4 Ethylene							Ma
1	1.726	1.734	-0.008	10862927	127.7	118.4	
2	2.382	2.401	-0.019	9053315	127.7	123.9	M
						RPD = 4.60	
5 Propane							
1	2.525	2.529	-0.004	22384888	200.7	189.6	
2	4.621	4.631	-0.010	19166956	200.7	191.6	
						RPD = 1.06	
6 Acetylene							Ma
1	4.025	4.004	0.021	3053907	118.5	117.7	a
2	2.502	2.521	-0.019	4427618	118.5	129.0	M
						RPD = 9.13	
7 Butane							Ma
1	4.370	4.362	0.008	26382184	264.5	241.1	a
2	6.086	6.094	-0.008	24757417	264.5	246.7	M
						RPD = 2.33	
8 isobutylene							Ma
1	5.226	5.214	0.012	18663674	255.4	260.5	M
2	5.931	5.939	-0.008	16555816	255.4	264.0	M
						RPD = 1.31	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2021 17:58:02 ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:07:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.181	1.191	-0.010	8182984	73.0	68.9	
2	1.586	1.598	-0.012	7578937	73.0	70.1	
						RPD = 1.71	
3 Ethane							M
1	1.446	1.456	-0.010	14480015	136.9	126.3	
2	2.767	2.788	-0.021	12225314	136.9	125.9	M
						RPD = 0.32	
4 Ethylene							Ma
1	1.726	1.734	-0.008	10862927	127.7	118.4	
2	2.382	2.401	-0.019	9053315	127.7	123.9	M
						RPD = 4.60	
5 Propane							
1	2.525	2.529	-0.004	22384888	200.7	189.6	
2	4.621	4.631	-0.010	19166956	200.7	191.6	
						RPD = 1.06	
6 Acetylene							Ma
1	4.025	4.004	0.021	3053907	118.5	117.7	a
2	2.502	2.521	-0.019	4427618	118.5	129.0	M
						RPD = 9.13	
7 Butane							Ma
1	4.370	4.362	0.008	26382184	264.5	241.1	a
2	6.086	6.094	-0.008	24757417	264.5	246.7	M
						RPD = 2.33	
8 isobutylene							Ma
1	5.226	5.214	0.012	18663674	255.4	260.5	M
2	5.931	5.939	-0.008	16555816	255.4	264.0	M
						RPD = 1.31	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

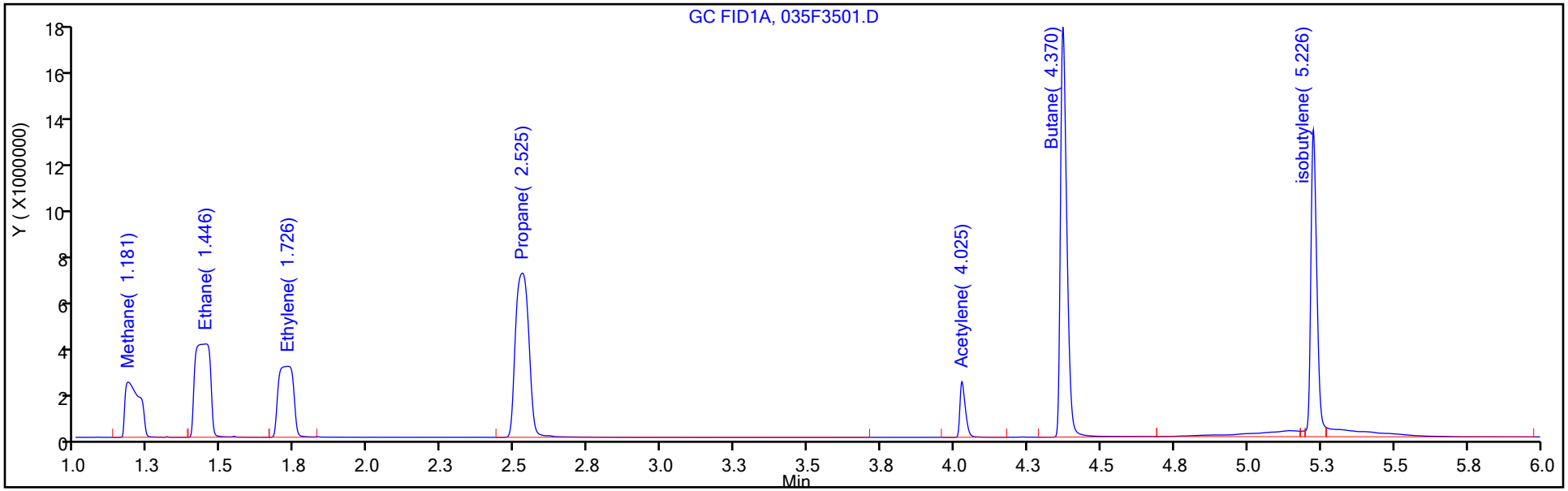
Report Date: 02-Jun-2021 11:03:06 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

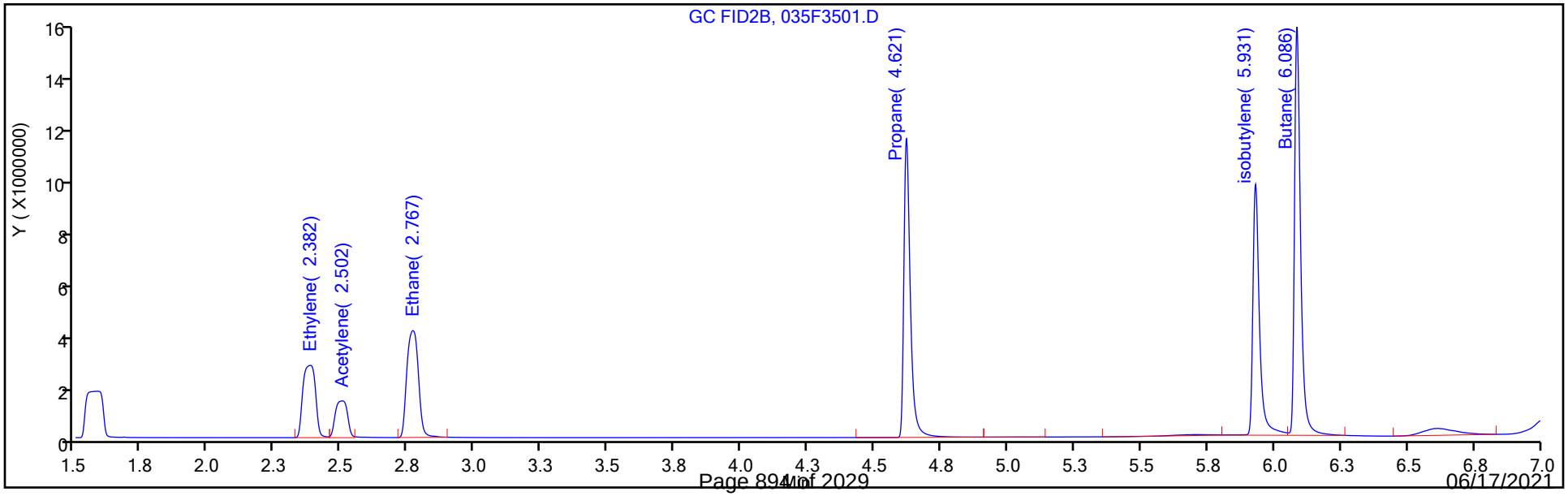
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D

Injection Date:	01-Jun-2021 17:58:02	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	35
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



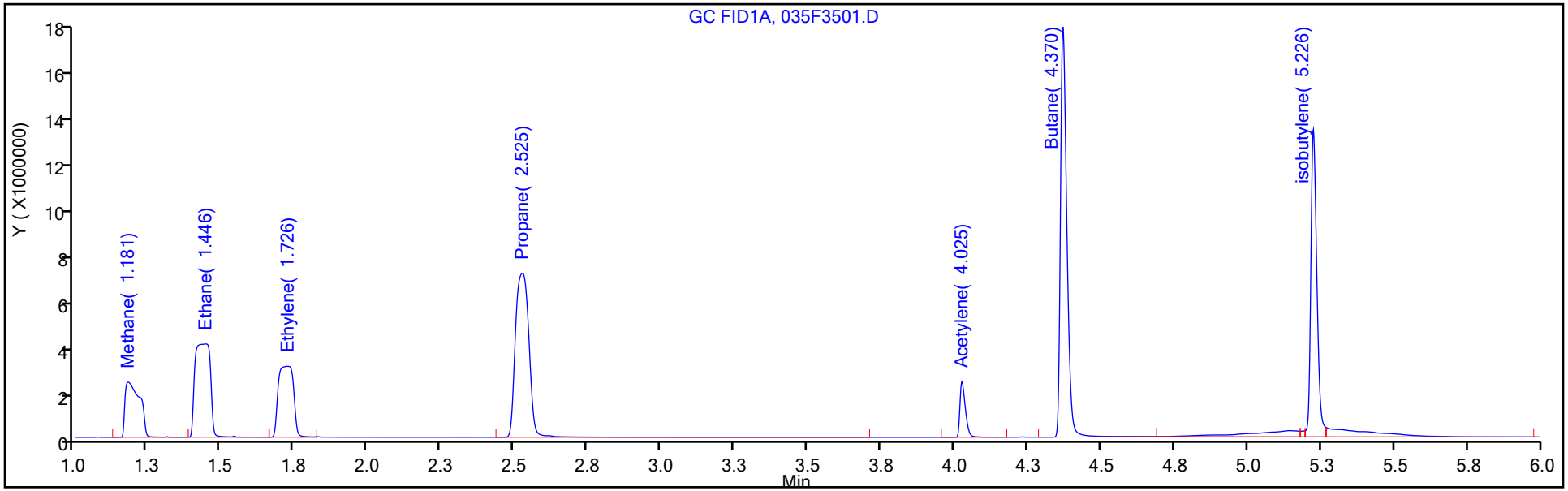
Report Date: 02-Jun-2021 11:03:06 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

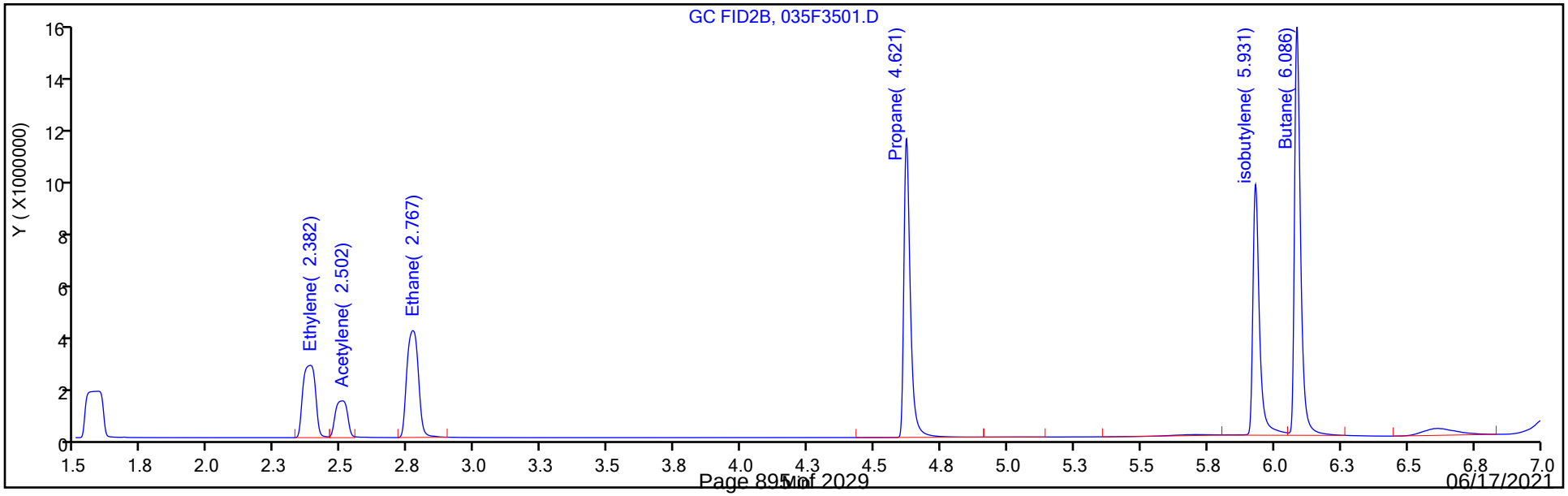
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D

Injection Date:	01-Jun-2021 17:58:02	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	35
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

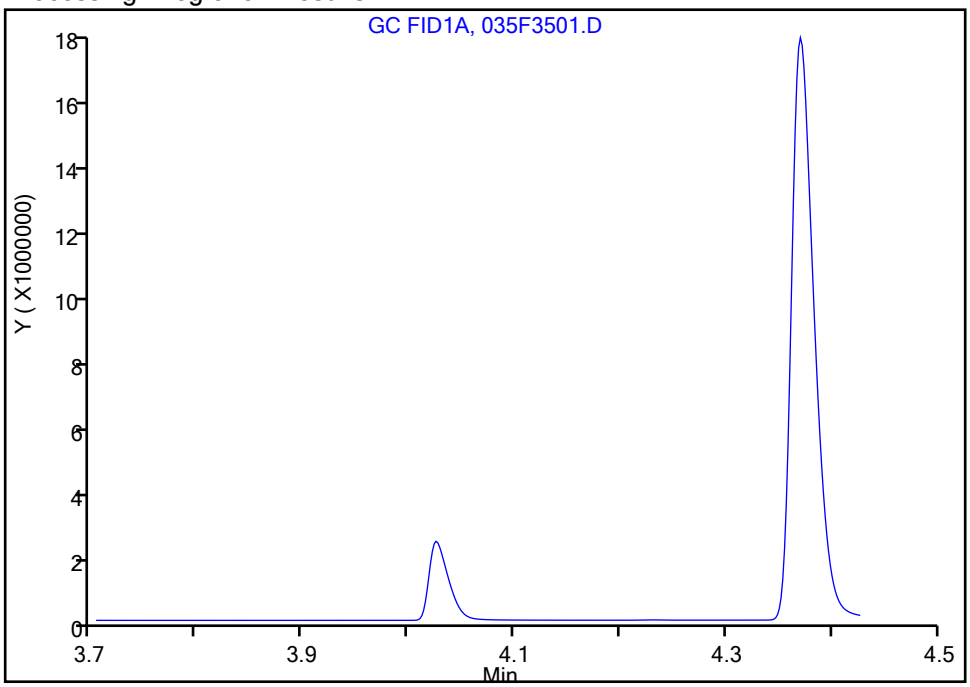
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D				
Injection Date:	01-Jun-2021 17:58:02	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	35	Worklist Smp#:	35
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

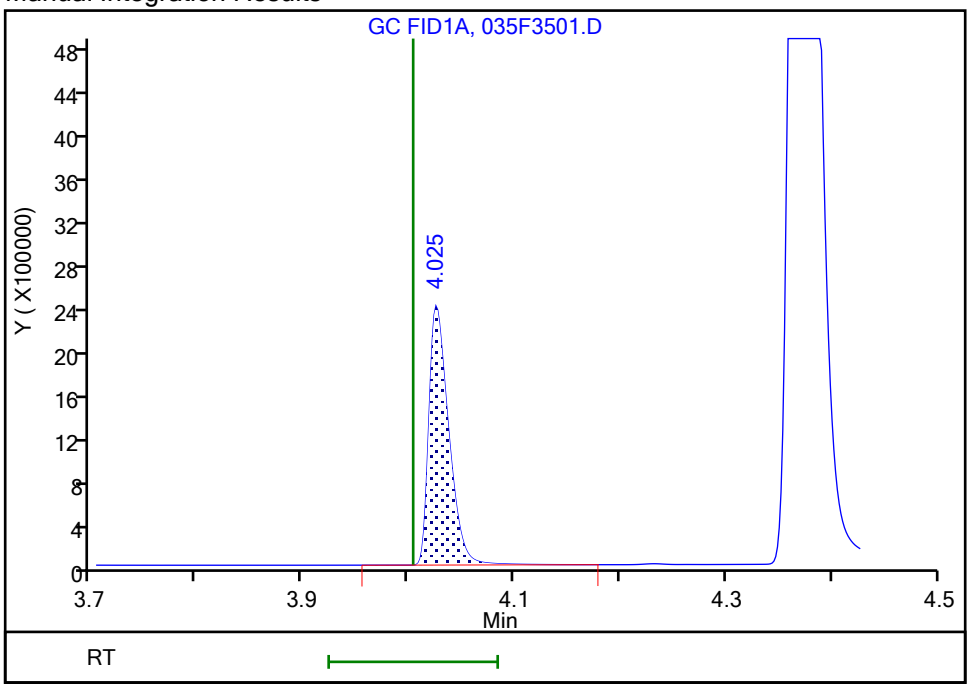
Not Detected
Expected RT: 4.00

Processing Integration Results



Manual Integration Results

RT: 4.03
Area: 3053907
Amount: 117.7161
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:01:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

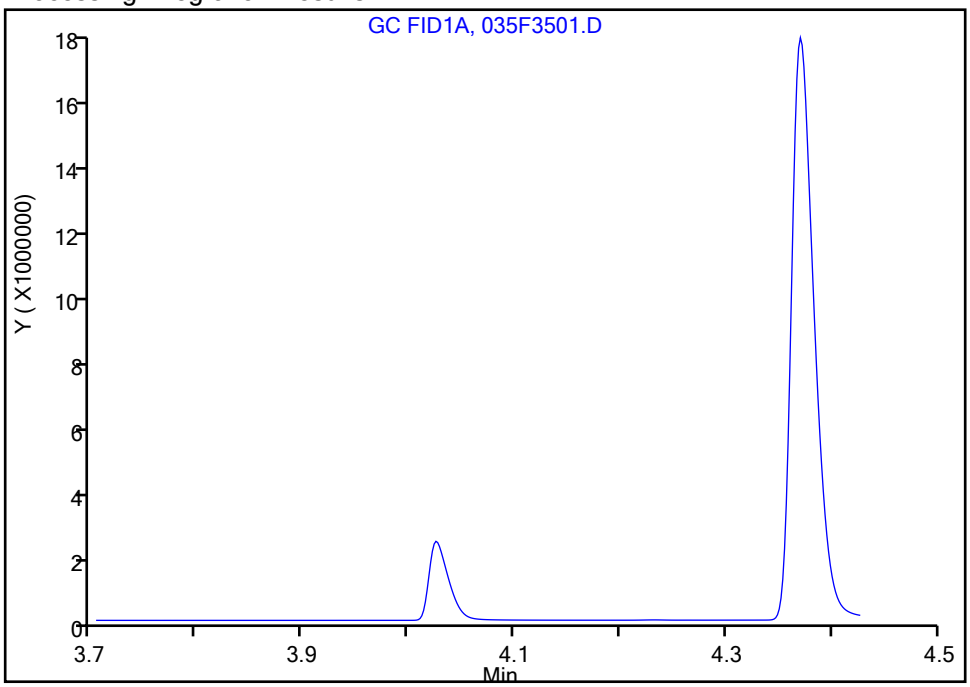
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D				
Injection Date:	01-Jun-2021 17:58:02	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	robertstr	ALS Bottle#:	35	Worklist Smp#:	35
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

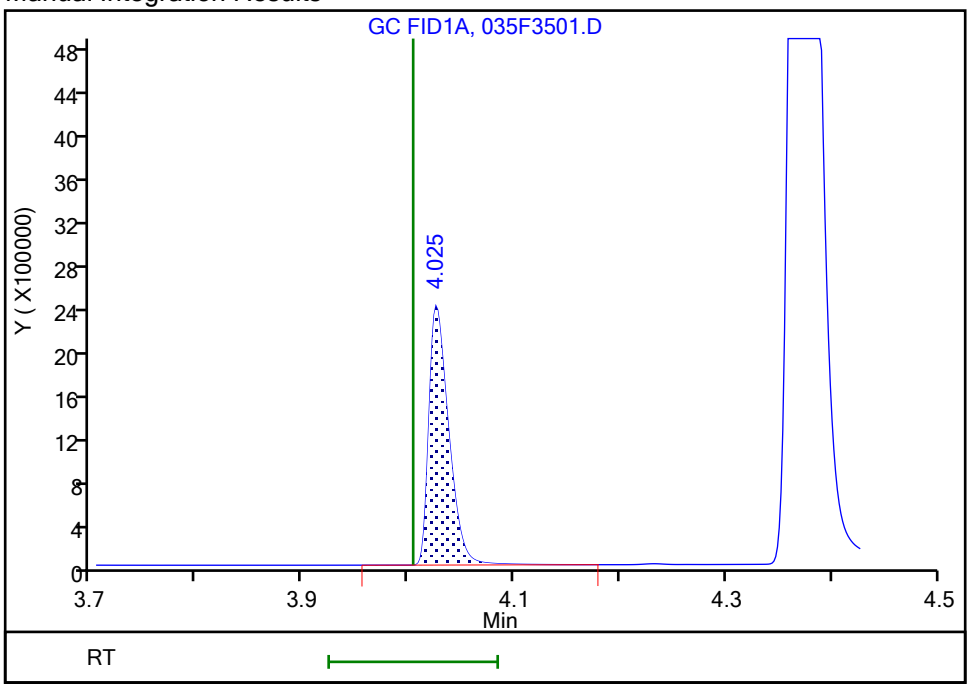
Not Detected
Expected RT: 4.00

Processing Integration Results



Manual Integration Results

RT: 4.03
Area: 3053907
Amount: 117.7161
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:01:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538094/35 Calibration Date: 06/01/2021 17:58

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 035F3501.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		103816		70.1	73.0	-4.0	20.0
Ethylene	Ave	73049	70914		124	128	-2.9	20.0
Acetylene	Ave	34329	37357		129	119	8.8	20.0
Ethane	Ave	97082	89330		126	137	-8.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/35 Calibration Date: 06/01/2021 17:58

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 035F3501.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		103816		70.1	73.0	-4.0	20.0
Ethylene	Ave	73049	70914		124	128	-2.9	20.0
Acetylene	Ave	34329	37357		129	119	8.8	20.0
Ethane	Ave	97082	89330		126	137	-8.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538094/35 Calibration Date: 06/01/2021 17:58

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 035F3501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.59	1.56	1.64
Ethylene	2.38	2.35	2.45
Acetylene	2.50	2.44	2.60
Ethane	2.77	2.74	2.84

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/35 Calibration Date: 06/01/2021 17:58

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 035F3501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.59	1.56	1.64
Ethylene	2.38	2.35	2.45
Acetylene	2.50	2.44	2.60
Ethane	2.77	2.74	2.84

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2021 17:58:02 ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:07:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.181	1.191	-0.010	8182984	73.0	68.9	
2	1.586	1.598	-0.012	7578937	73.0	70.1	
						RPD = 1.71	
3 Ethane							M
1	1.446	1.456	-0.010	14480015	136.9	126.3	
2	2.767	2.788	-0.021	12225314	136.9	125.9	M
						RPD = 0.32	
4 Ethylene							Ma
1	1.726	1.734	-0.008	10862927	127.7	118.4	
2	2.382	2.401	-0.019	9053315	127.7	123.9	M
						RPD = 4.60	
5 Propane							
1	2.525	2.529	-0.004	22384888	200.7	189.6	
2	4.621	4.631	-0.010	19166956	200.7	191.6	
						RPD = 1.06	
6 Acetylene							Ma
1	4.025	4.004	0.021	3053907	118.5	117.7	a
2	2.502	2.521	-0.019	4427618	118.5	129.0	M
						RPD = 9.13	
7 Butane							Ma
1	4.370	4.362	0.008	26382184	264.5	241.1	a
2	6.086	6.094	-0.008	24757417	264.5	246.7	M
						RPD = 2.33	
8 isobutylene							Ma
1	5.226	5.214	0.012	18663674	255.4	260.5	M
2	5.931	5.939	-0.008	16555816	255.4	264.0	M
						RPD = 1.31	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2021 17:58:02 ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:07:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.181	1.191	-0.010	8182984	73.0	68.9	
2	1.586	1.598	-0.012	7578937	73.0	70.1	
						RPD = 1.71	
3 Ethane							M
1	1.446	1.456	-0.010	14480015	136.9	126.3	
2	2.767	2.788	-0.021	12225314	136.9	125.9	M
						RPD = 0.32	
4 Ethylene							Ma
1	1.726	1.734	-0.008	10862927	127.7	118.4	
2	2.382	2.401	-0.019	9053315	127.7	123.9	M
						RPD = 4.60	
5 Propane							
1	2.525	2.529	-0.004	22384888	200.7	189.6	
2	4.621	4.631	-0.010	19166956	200.7	191.6	
						RPD = 1.06	
6 Acetylene							Ma
1	4.025	4.004	0.021	3053907	118.5	117.7	a
2	2.502	2.521	-0.019	4427618	118.5	129.0	M
						RPD = 9.13	
7 Butane							Ma
1	4.370	4.362	0.008	26382184	264.5	241.1	a
2	6.086	6.094	-0.008	24757417	264.5	246.7	M
						RPD = 2.33	
8 isobutylene							Ma
1	5.226	5.214	0.012	18663674	255.4	260.5	M
2	5.931	5.939	-0.008	16555816	255.4	264.0	M
						RPD = 1.31	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

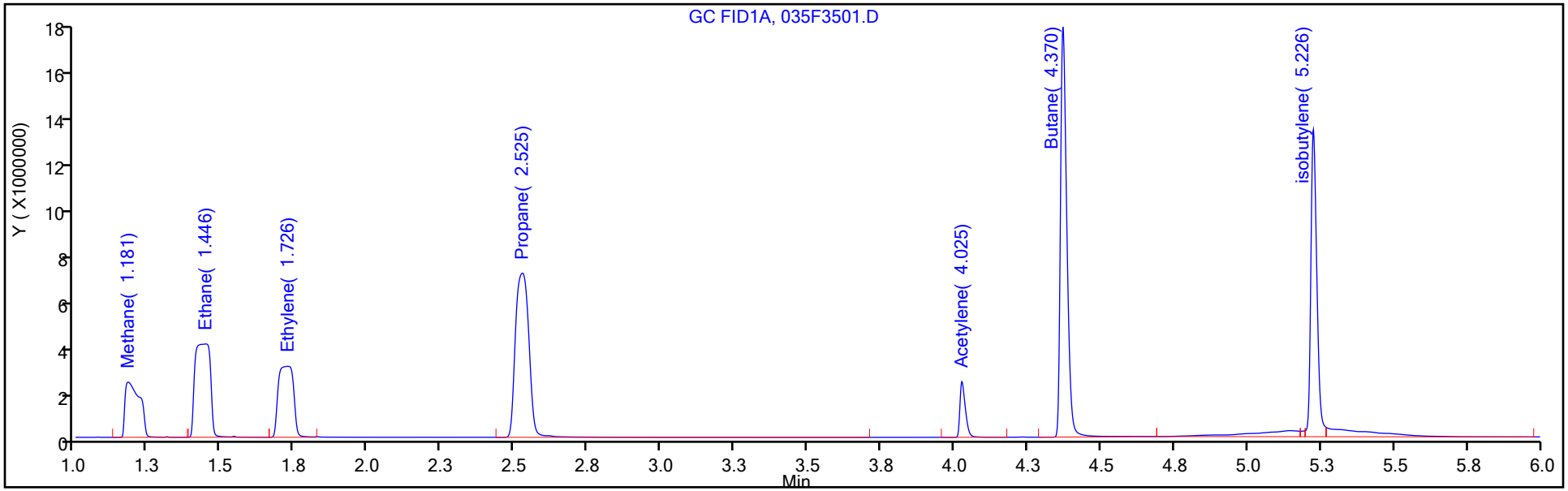
Report Date: 02-Jun-2021 11:03:06 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

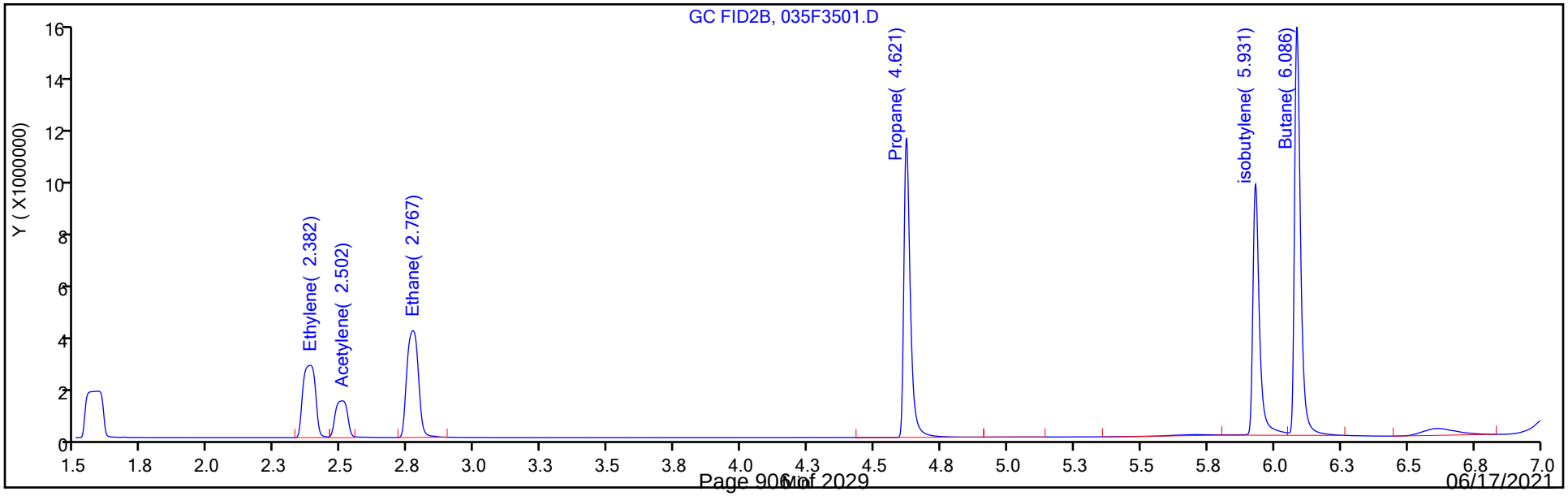
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D

Injection Date:	01-Jun-2021 17:58:02	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	35
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



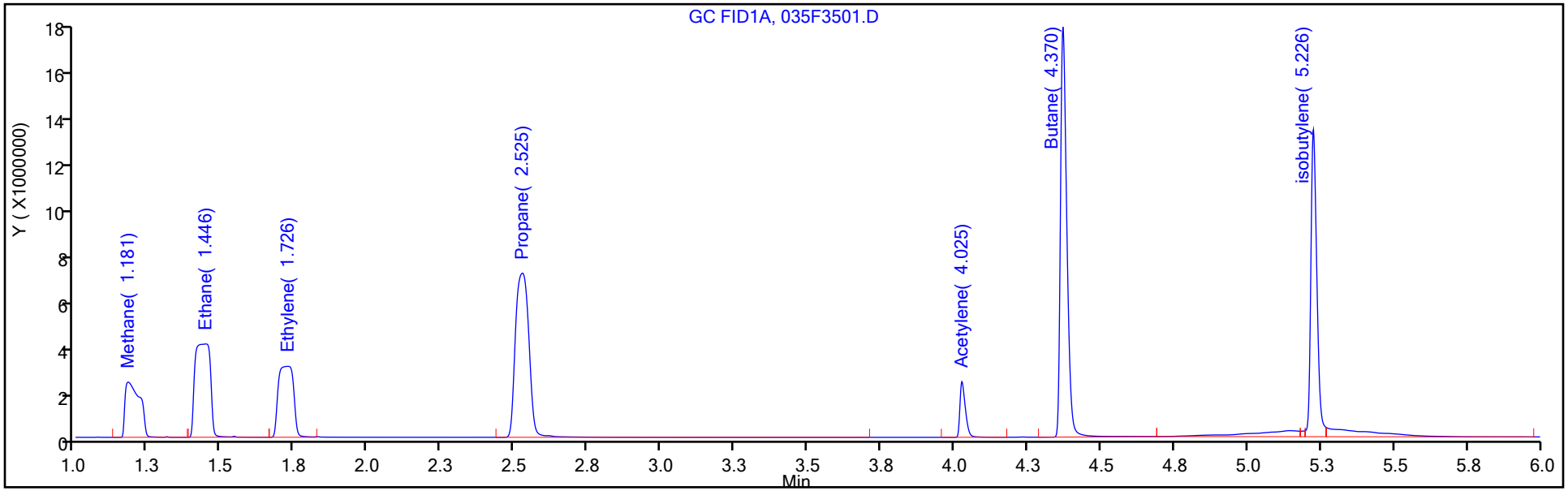
Report Date: 02-Jun-2021 11:03:06 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

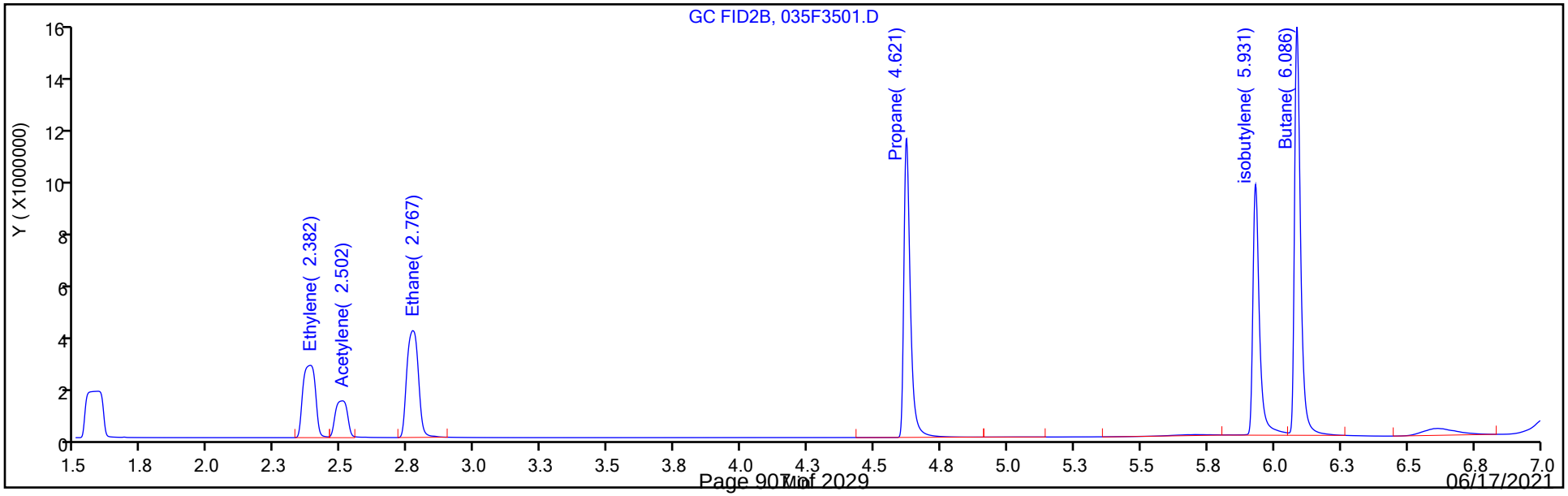
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D

Injection Date:	01-Jun-2021 17:58:02	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	35
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

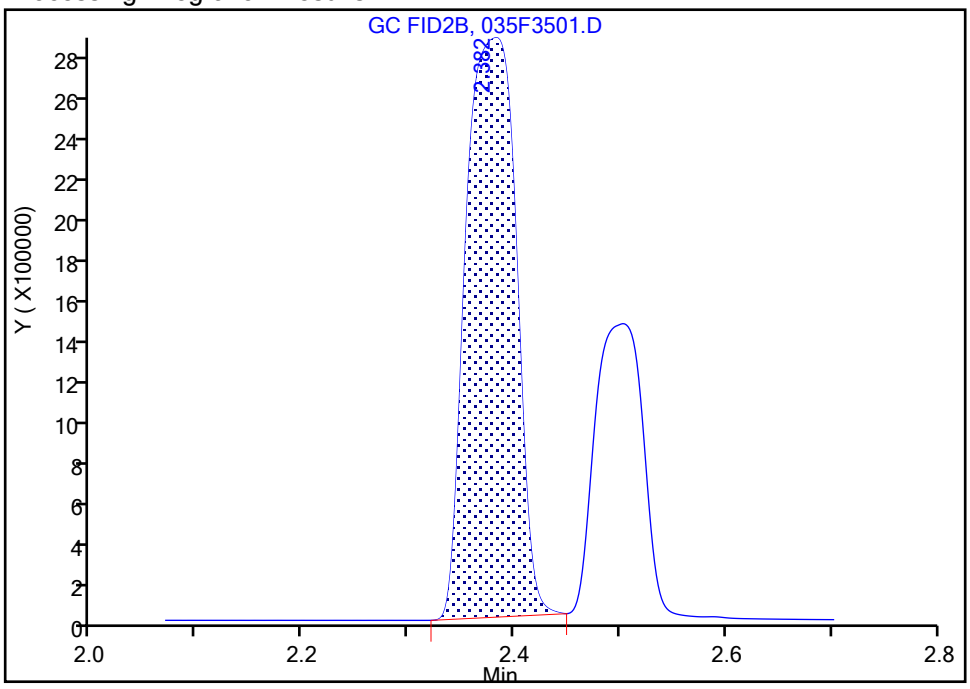
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Injection Date: 01-Jun-2021 17:58:02 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

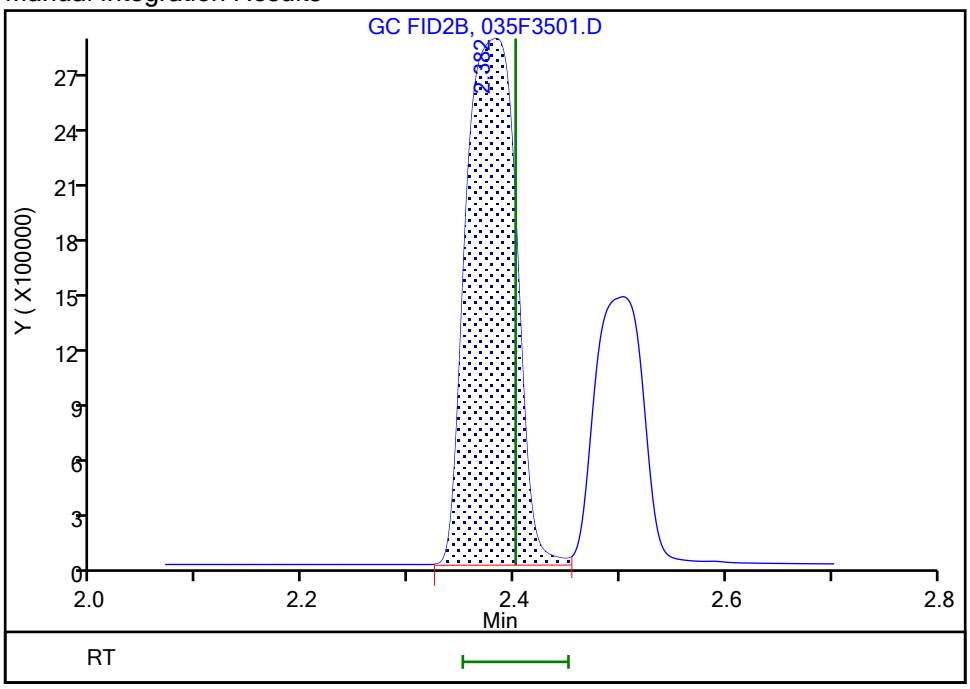
Processing Integration Results

RT: 2.38
Area: 8896948
Amount: 121.7944
Amount Units: ug/l



Manual Integration Results

RT: 2.38
Area: 9053315
Amount: 123.9349
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:07:04
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver

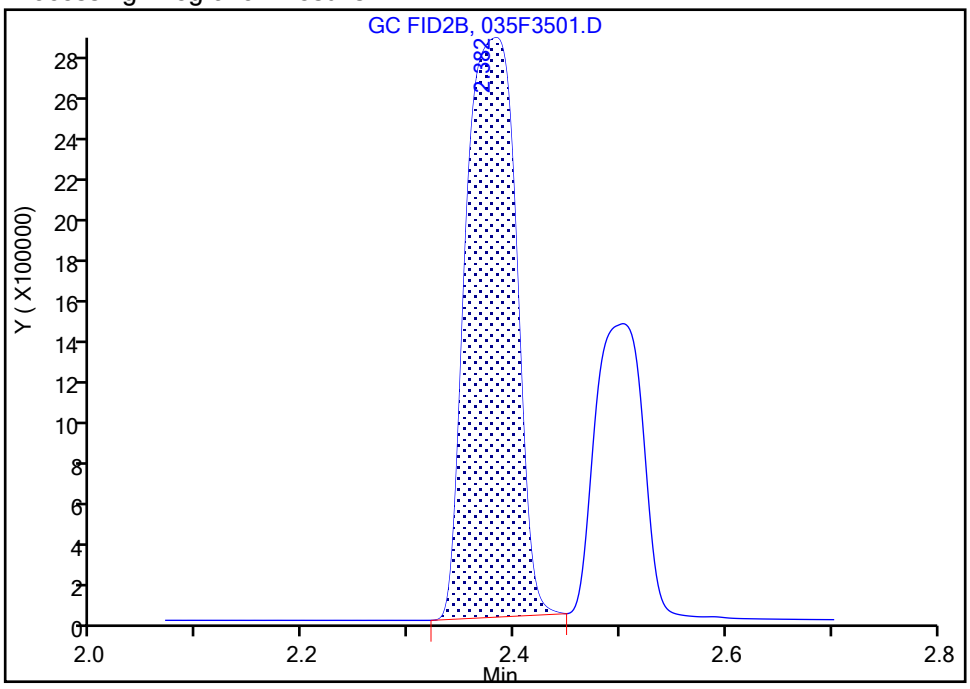
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Injection Date: 01-Jun-2021 17:58:02 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

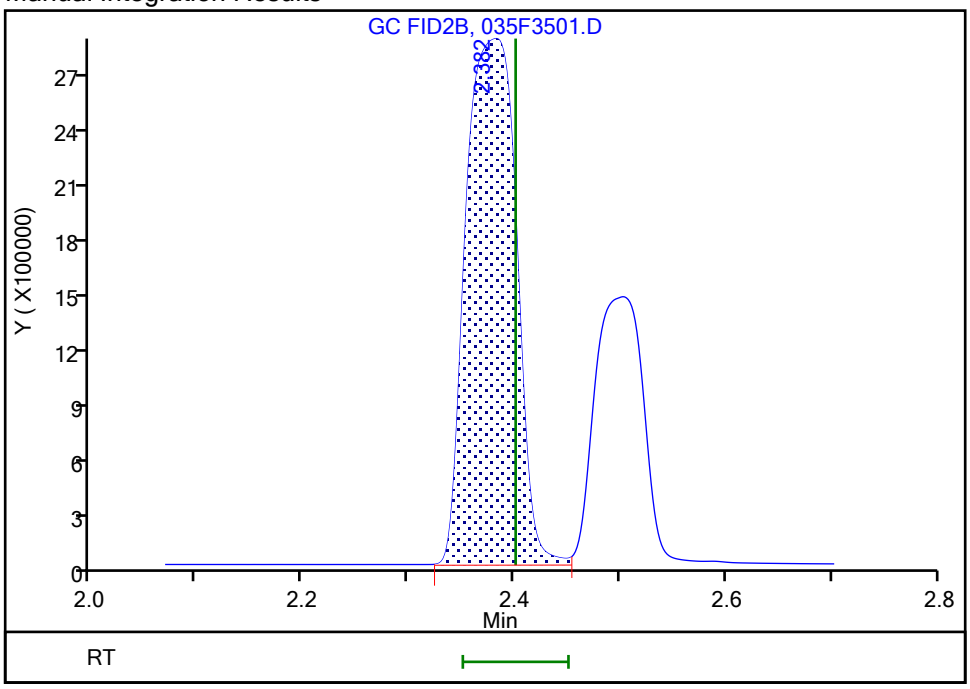
Processing Integration Results

RT: 2.38
Area: 8896948
Amount: 121.7944
Amount Units: ug/l



Manual Integration Results

RT: 2.38
Area: 9053315
Amount: 123.9349
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:07:04
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver

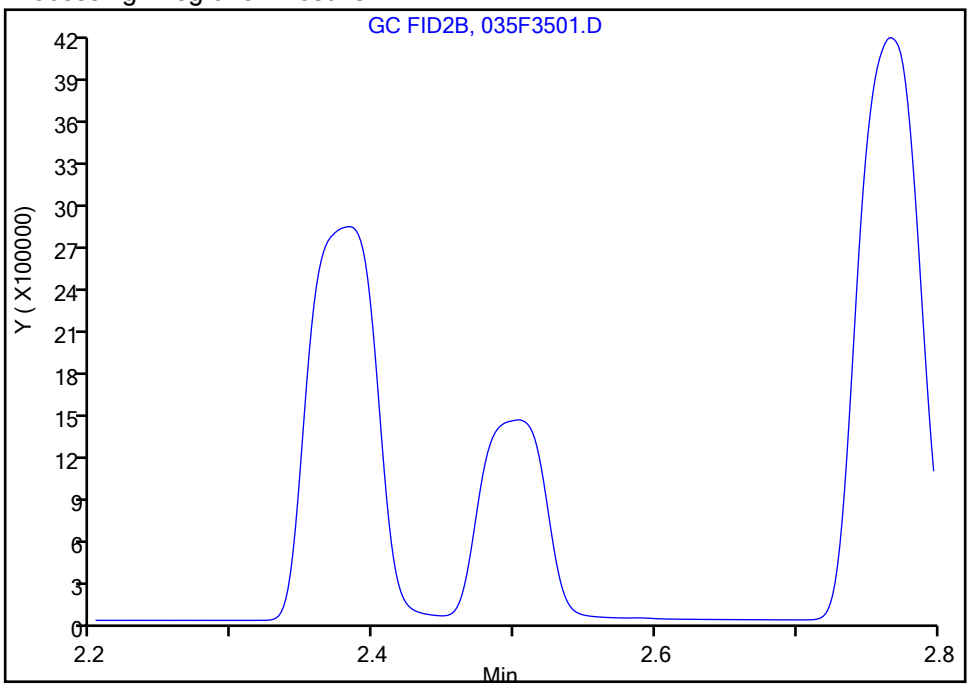
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Injection Date: 01-Jun-2021 17:58:02 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

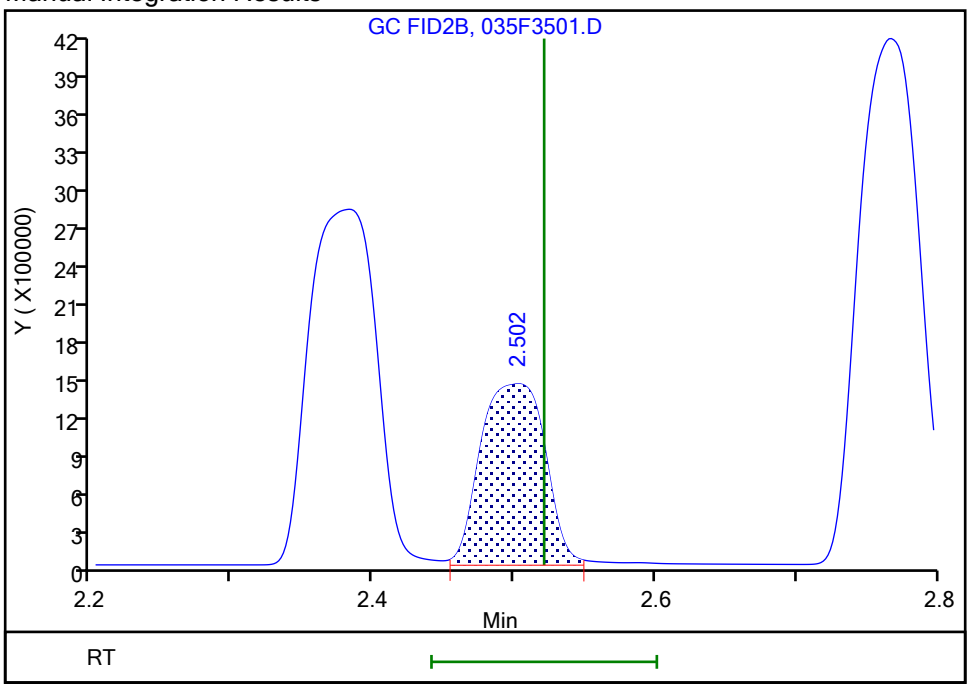
Not Detected
Expected RT: 2.52

Processing Integration Results



Manual Integration Results

RT: 2.50
Area: 4427618
Amount: 128.9768
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:06:50
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

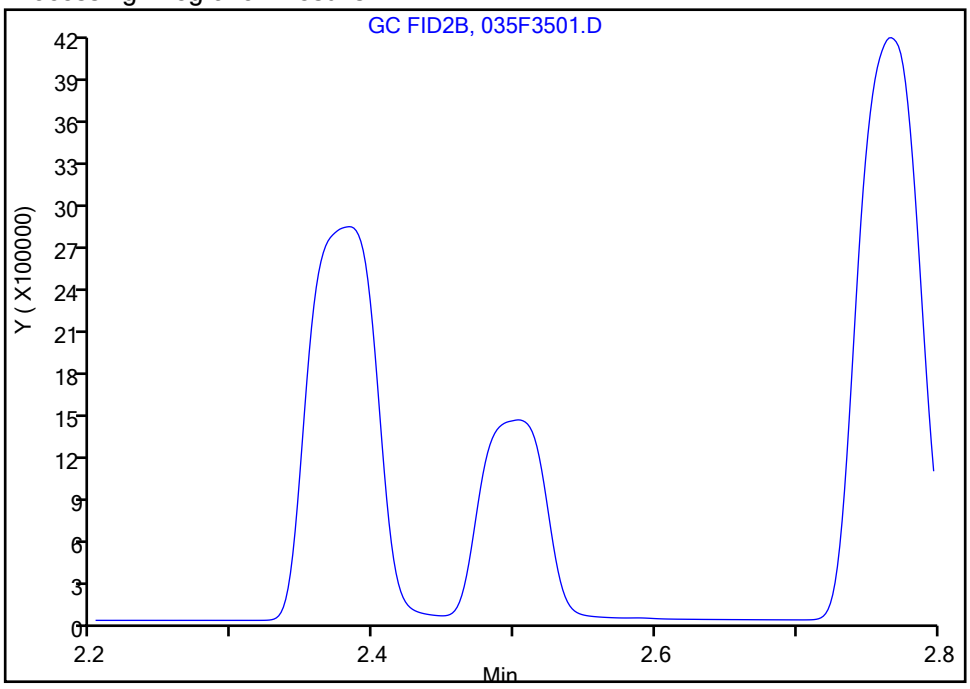
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Injection Date: 01-Jun-2021 17:58:02 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

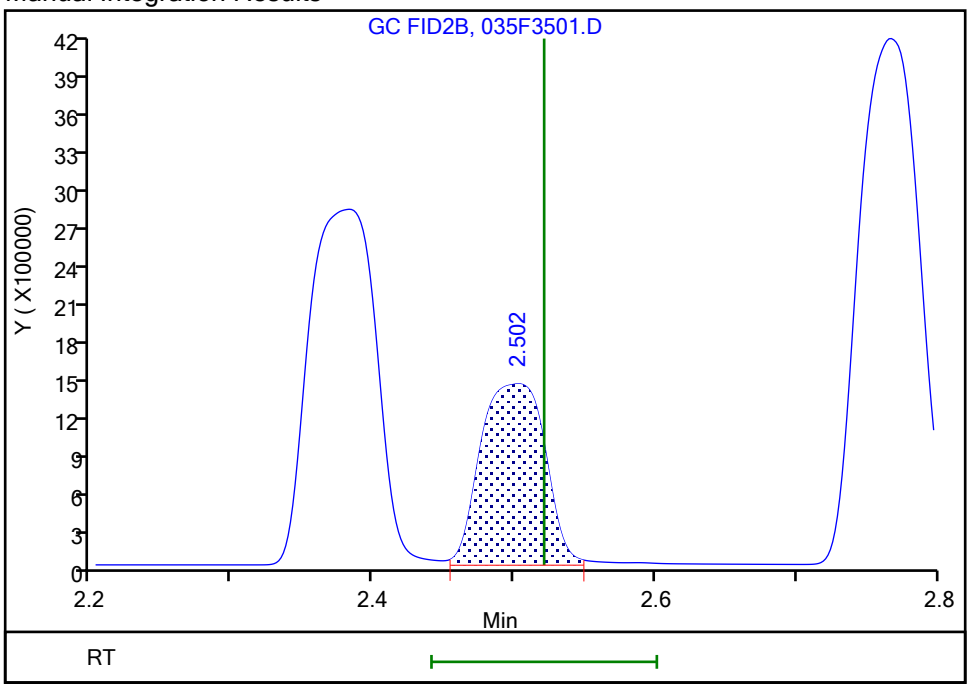
Not Detected
Expected RT: 2.52

Processing Integration Results



Manual Integration Results

RT: 2.50
Area: 4427618
Amount: 128.9768
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:06:50
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

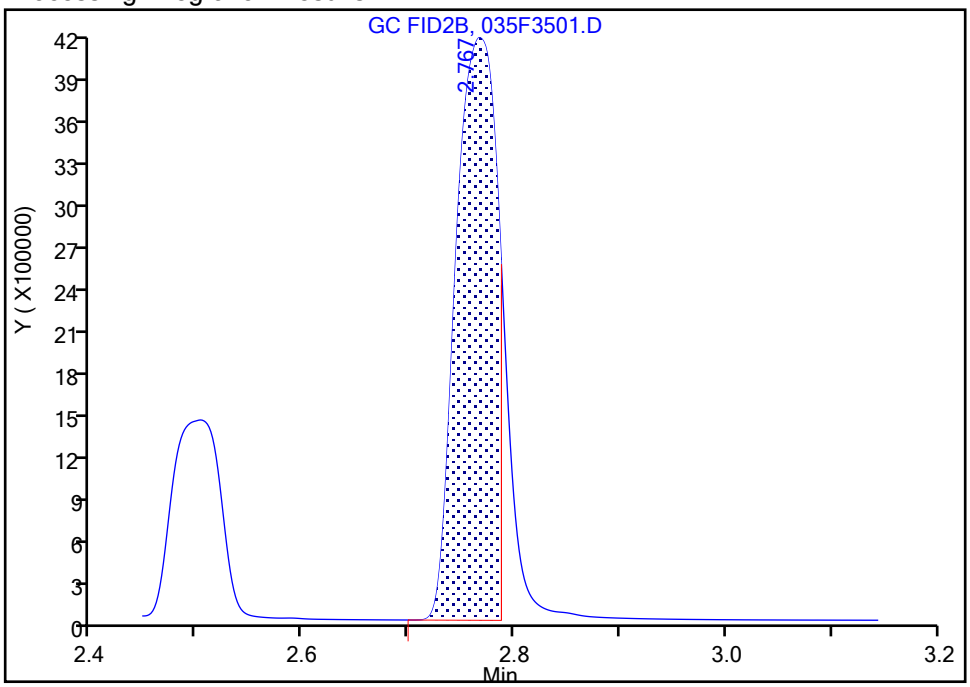
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Injection Date: 01-Jun-2021 17:58:02 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

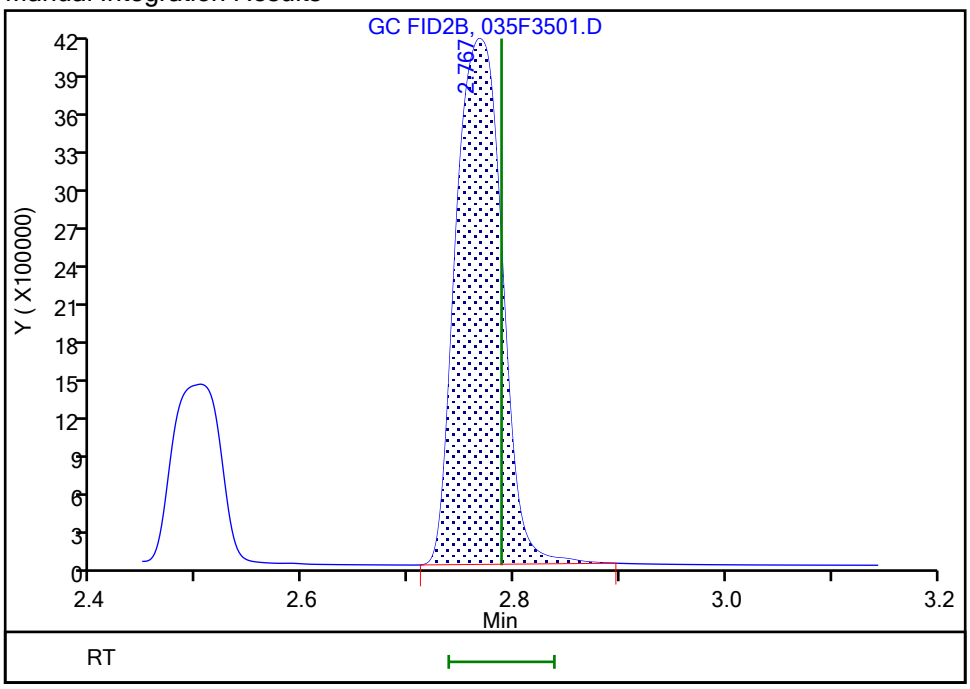
Processing Integration Results

RT: 2.77
Area: 10566181
Amount: 108.8382
Amount Units: ug/l



Manual Integration Results

RT: 2.77
Area: 12225314
Amount: 125.9283
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:06:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

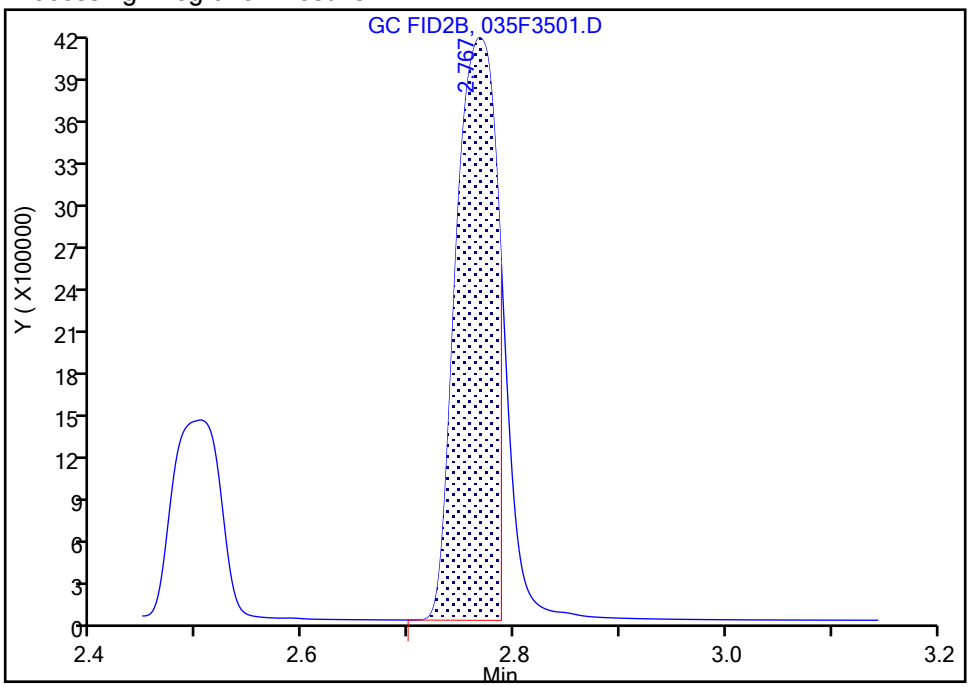
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\035F3501.D
Injection Date: 01-Jun-2021 17:58:02 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 35 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

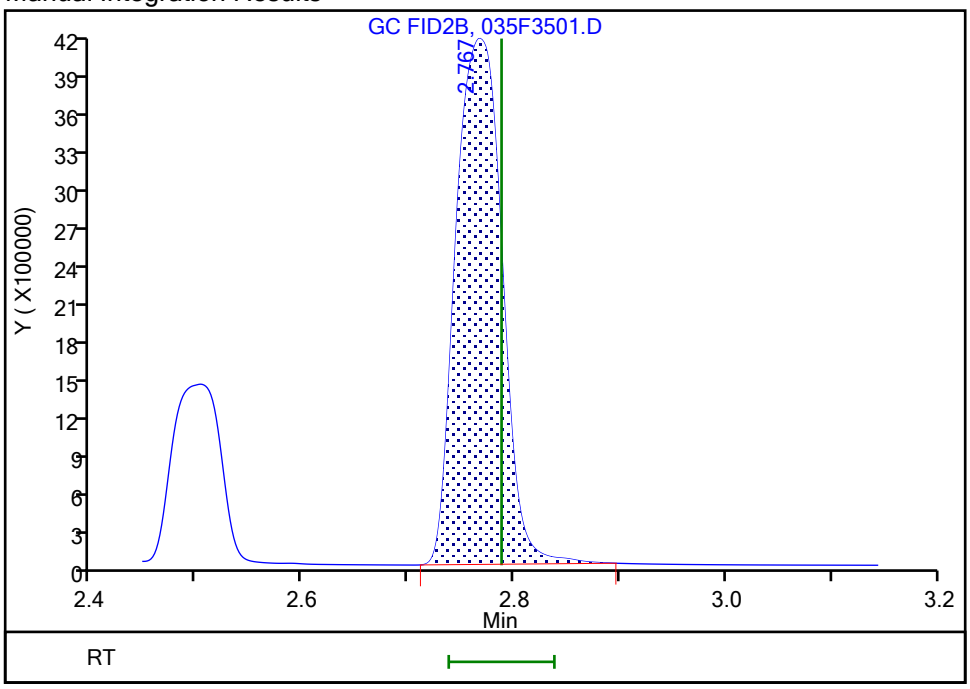
Processing Integration Results

RT: 2.77
Area: 10566181
Amount: 108.8382
Amount Units: ug/l



Manual Integration Results

RT: 2.77
Area: 12225314
Amount: 125.9283
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:06:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/54 Calibration Date: 06/01/2021 21:52

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 054F5401.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		111755		68.7	73.0	-5.9	20.0
Ethane	Ave	114619	102706		123	137	-10.4	20.0
Ethylene	Ave	91780	82195		114	128	-10.4	20.0
Acetylene	Ave	25943	24270		111	119	-6.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/54 Calibration Date: 06/01/2021 21:52

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 054F5401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.19	1.15	1.23
Ethane	1.45	1.41	1.51
Ethylene	1.73	1.68	1.78
Acetylene	4.03	3.92	4.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\054F5401.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2021 21:52:42 ALS Bottle#: 54 Worklist Smp#: 54
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:17 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:08:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.186	1.191	-0.005	8158476	73.0	68.7	
2	1.592	1.598	-0.006	7560500	73.0	69.9	
						RPD = 1.77	
3 Ethane							
1	1.448	1.456	-0.008	14055837	136.9	122.6	
2	2.777	2.788	-0.011	12027990	136.9	123.9	
						RPD = 1.03	
4 Ethylene							
1	1.733	1.734	-0.001	10493521	127.7	114.3	
2	2.392	2.401	-0.009	8639733	127.7	118.3	
						RPD = 3.39	
5 Propane							
1	2.536	2.529	0.007	21317546	200.7	180.5	
2	4.625	4.631	-0.006	18314284	200.7	183.1	
						RPD = 1.39	
6 Acetylene							M
1	4.028	4.004	0.024	2876537	118.5	110.9	
2	2.512	2.521	-0.009	4170838	118.5	121.5	M
						RPD = 9.14	
7 Butane							Ma
1	4.380	4.362	0.018	24478165	264.5	223.7	a
2	6.092	6.094	-0.002	22749590	264.5	226.8	M
						RPD = 1.36	
8 isobutylene							M
1	5.233	5.214	0.019	16330236	255.4	228.0	
2	5.935	5.939	-0.004	14464035	255.4	230.6	M
						RPD = 1.16	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

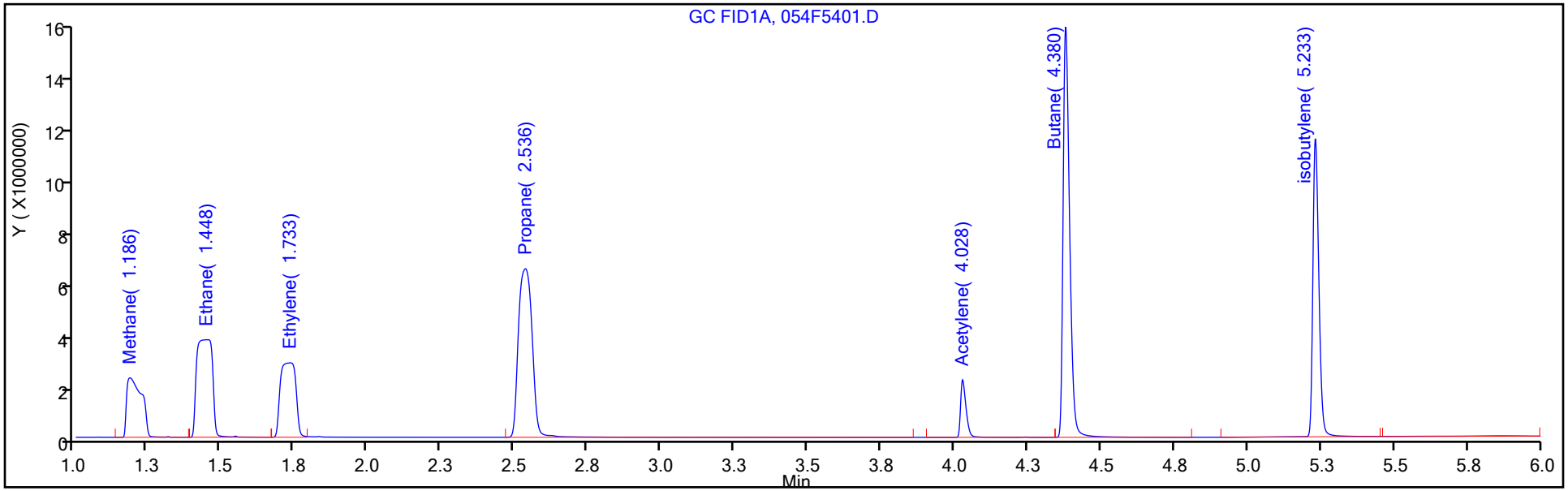
Report Date: 02-Jun-2021 11:03:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

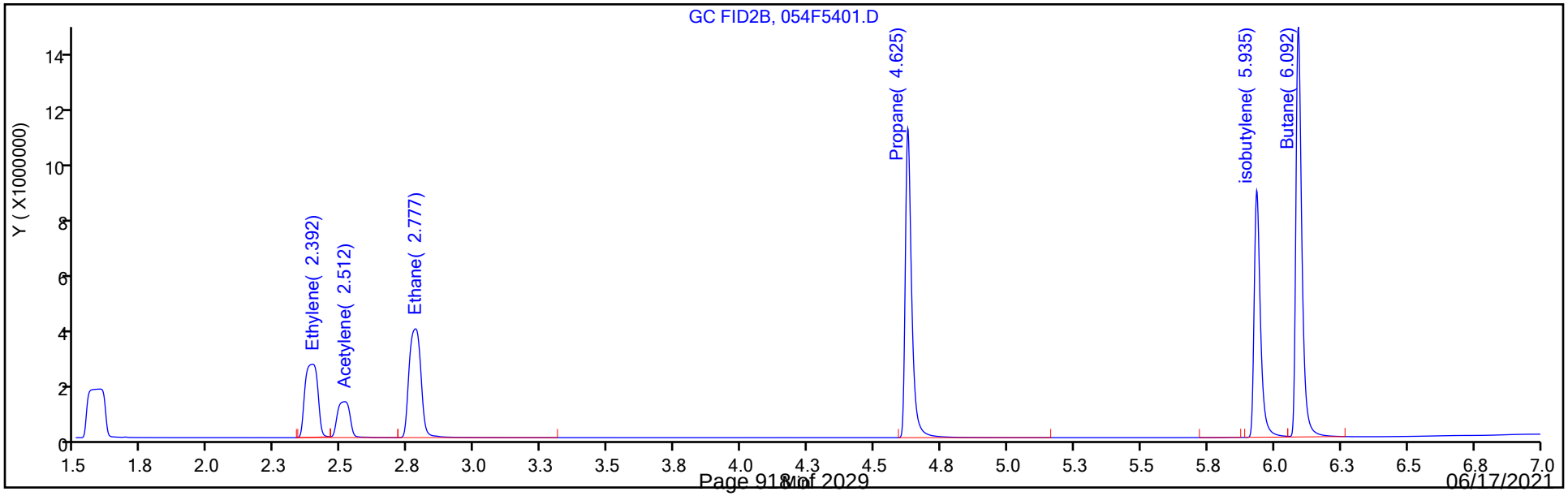
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\054F5401.D

Injection Date:	01-Jun-2021 21:52:42	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	54
Client ID:					
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 VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/54 Calibration Date: 06/01/2021 21:52

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 054F5401.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		103564		69.9	73.0	-4.2	20.0
Ethylene	Ave	73049	67674		118	128	-7.4	20.0
Acetylene	Ave	34329	35190		121	119	2.5	20.0
Ethane	Ave	97082	87888		124	137	-9.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/54 Calibration Date: 06/01/2021 21:52

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 054F5401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.59	1.56	1.64
Ethylene	2.39	2.35	2.45
Acetylene	2.51	2.44	2.60
Ethane	2.78	2.74	2.84

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\054F5401.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2021 21:52:42 ALS Bottle#: 54 Worklist Smp#: 54
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:17 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:08:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.186	1.191	-0.005	8158476	73.0	68.7	
2	1.592	1.598	-0.006	7560500	73.0	69.9	
						RPD = 1.77	
3 Ethane							
1	1.448	1.456	-0.008	14055837	136.9	122.6	
2	2.777	2.788	-0.011	12027990	136.9	123.9	
						RPD = 1.03	
4 Ethylene							
1	1.733	1.734	-0.001	10493521	127.7	114.3	
2	2.392	2.401	-0.009	8639733	127.7	118.3	
						RPD = 3.39	
5 Propane							
1	2.536	2.529	0.007	21317546	200.7	180.5	
2	4.625	4.631	-0.006	18314284	200.7	183.1	
						RPD = 1.39	
6 Acetylene							M
1	4.028	4.004	0.024	2876537	118.5	110.9	
2	2.512	2.521	-0.009	4170838	118.5	121.5	M
						RPD = 9.14	
7 Butane							Ma
1	4.380	4.362	0.018	24478165	264.5	223.7	a
2	6.092	6.094	-0.002	22749590	264.5	226.8	M
						RPD = 1.36	
8 isobutylene							M
1	5.233	5.214	0.019	16330236	255.4	228.0	
2	5.935	5.939	-0.004	14464035	255.4	230.6	M
						RPD = 1.16	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

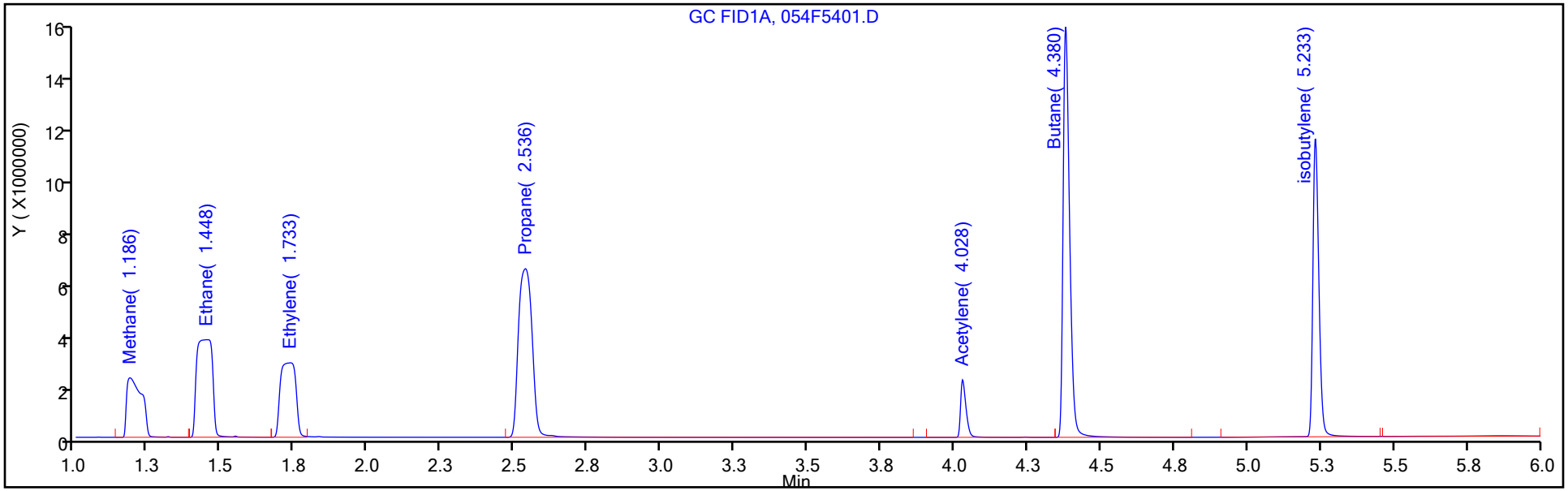
Report Date: 02-Jun-2021 11:03:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

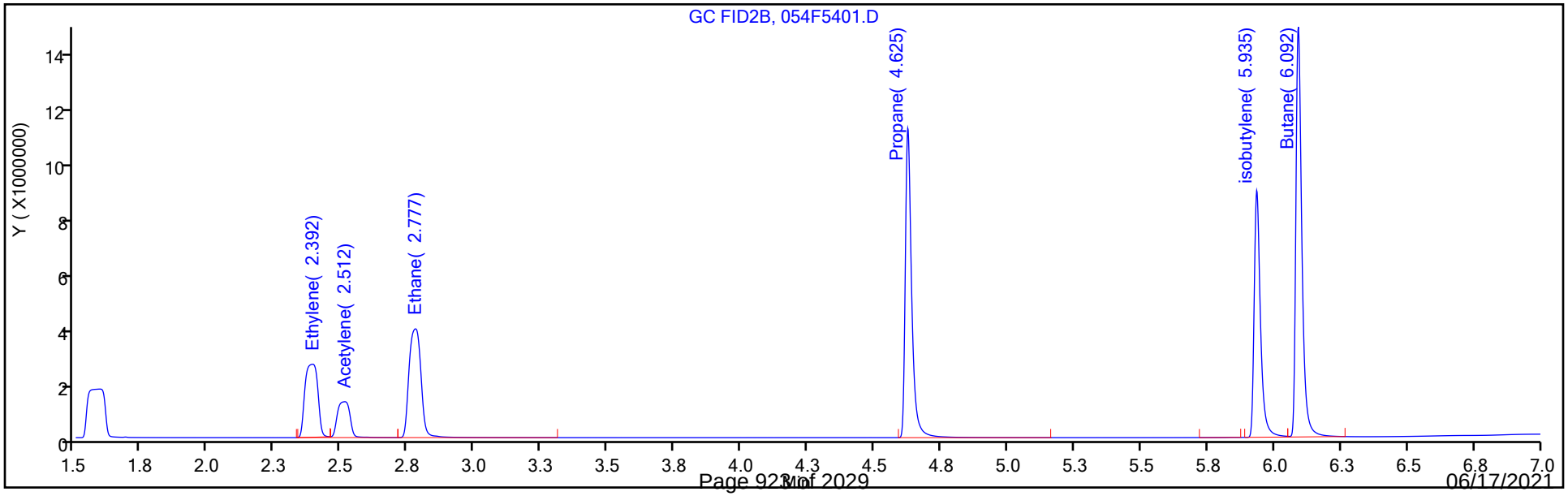
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\054F5401.D

Injection Date:	01-Jun-2021 21:52:42	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	54
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

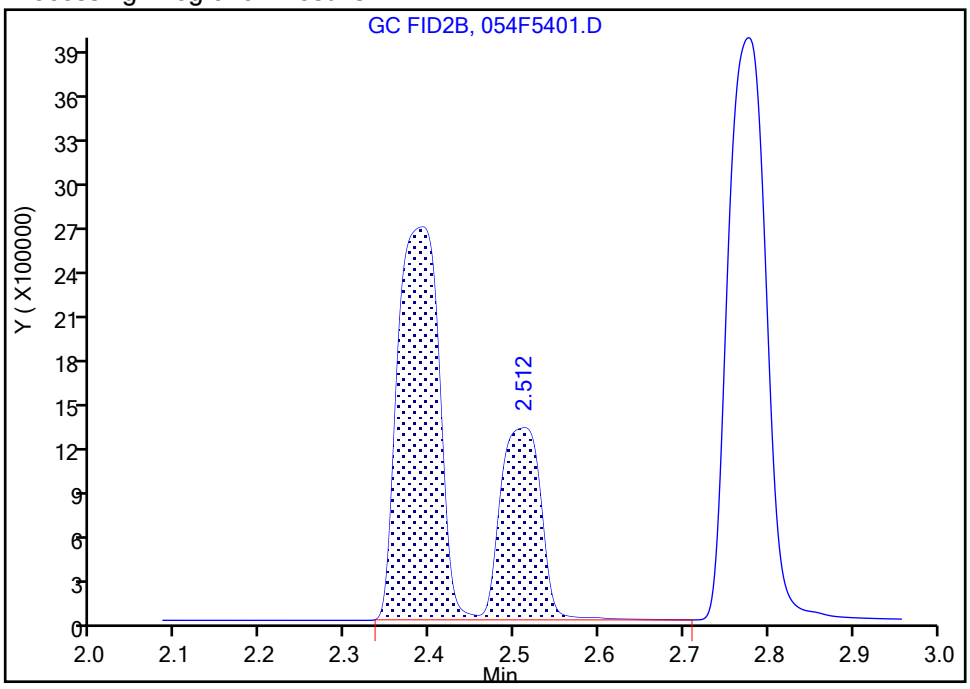
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\054F5401.D
Injection Date: 01-Jun-2021 21:52:42 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 54 Worklist Smp#: 54
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

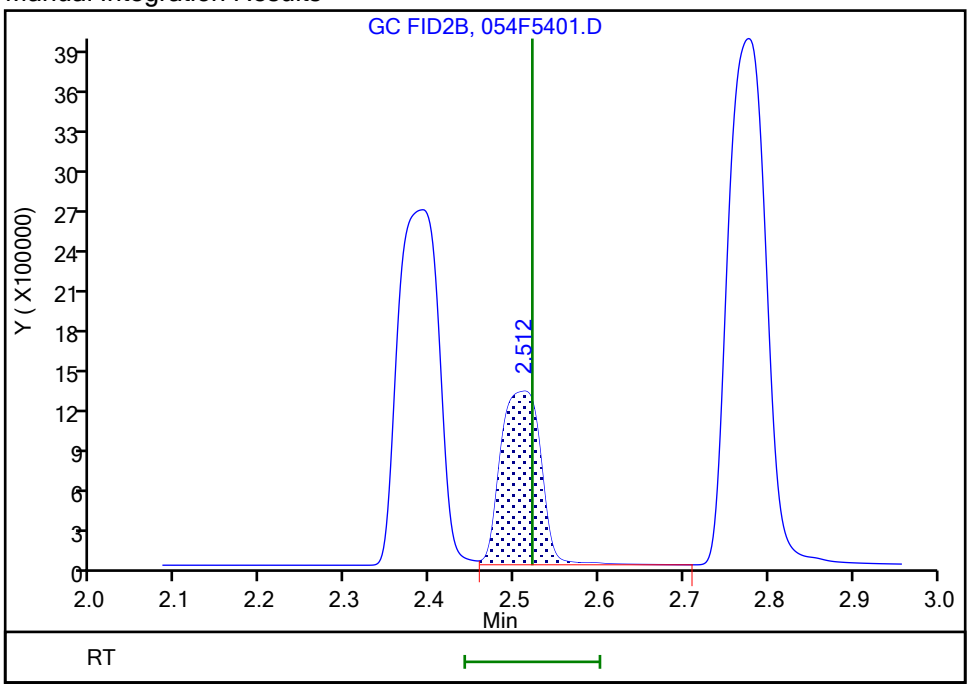
Processing Integration Results

RT: 2.51
Area: 12905105
Amount: 375.9266
Amount Units: ug/l



Manual Integration Results

RT: 2.51
Area: 4170838
Amount: 121.4968
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:08:20
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/66 Calibration Date: 06/02/2021 00:20

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 066F6601.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		118255		72.7	73.0	-0.4	20.0
Ethane	Ave	114619	109508		131	137	-4.5	20.0
Ethylene	Ave	91780	87077		121	128	-5.1	20.0
Acetylene	Ave	25943	25246		115	119	-2.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/66 Calibration Date: 06/02/2021 00:20

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 066F6601.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.19	1.15	1.23
Ethane	1.45	1.41	1.51
Ethylene	1.74	1.68	1.78
Acetylene	4.03	3.92	4.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\066F6601.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2021 00:20:04 ALS Bottle#: 66 Worklist Smp#: 66
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:23 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:10:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.186	1.191	-0.005	8633045	73.0	72.7	
2	1.593	1.598	-0.005	7986812	73.0	73.9	
						RPD = 1.59	
3 Ethane							
1	1.454	1.456	-0.002	14986770	136.9	130.8	
2	2.780	2.788	-0.008	12852212	136.9	132.4	
						RPD = 1.24	
4 Ethylene							Ma
1	1.738	1.734	0.004	11116786	127.7	121.1	
2	2.393	2.401	-0.008	9059152	127.7	124.0	M
						RPD = 2.36	
5 Propane							
1	2.538	2.529	0.009	22854016	200.7	193.6	
2	4.626	4.631	-0.005	19635243	200.7	196.3	
						RPD = 1.40	
6 Acetylene							Ma
1	4.029	4.004	0.025	2992229	118.5	115.3	
2	2.515	2.521	-0.006	4343832	118.5	126.5	M
						RPD = 9.26	
7 Butane							Ma
1	4.381	4.362	0.019	25416398	264.5	232.3	M
2	6.091	6.094	-0.003	23757446	264.5	236.8	M
						RPD = 1.93	
8 isobutylene							Ma
1	5.233	5.214	0.019	17140897	255.4	239.3	
2	5.936	5.939	-0.003	15247682	255.4	243.1	M
						RPD = 1.59	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

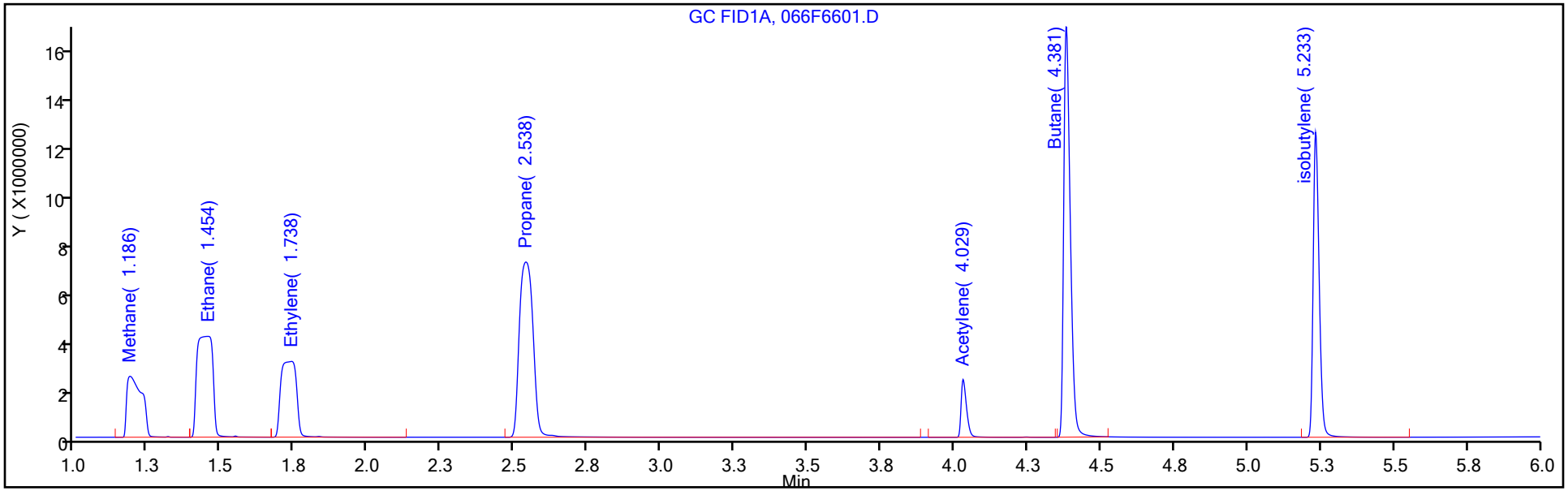
Report Date: 02-Jun-2021 11:03:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

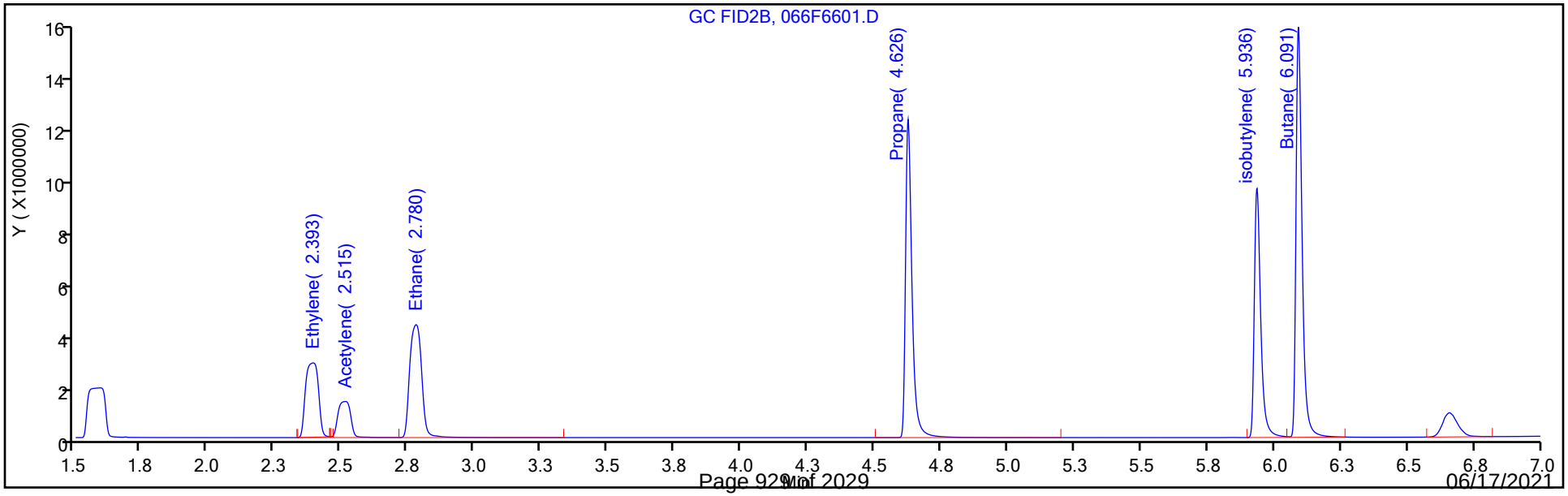
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\066F6601.D

Injection Date:	02-Jun-2021 00:20:04	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	66
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	66
Method:	RSK_J	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.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/66 Calibration Date: 06/02/2021 00:20

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 066F6601.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		109403		73.9	73.0	1.2	20.0
Ethylene	Ave	73049	70959		124	128	-2.9	20.0
Acetylene	Ave	34329	36650		127	119	6.8	20.0
Ethane	Ave	97082	93911		132	137	-3.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538142/66 Calibration Date: 06/02/2021 00:20

Instrument ID: VGC_J Calib Start Date: 06/24/2020 10:08

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 06/24/2020 11:46

Lab File ID: 066F6601.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.59	1.56	1.64
Ethylene	2.39	2.35	2.45
Acetylene	2.52	2.44	2.60
Ethane	2.78	2.74	2.84

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\066F6601.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2021 00:20:04 ALS Bottle#: 66 Worklist Smp#: 66
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: robertstr Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:23 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:10:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.186	1.191	-0.005	8633045	73.0	72.7	
2	1.593	1.598	-0.005	7986812	73.0	73.9	
						RPD = 1.59	
3 Ethane							
1	1.454	1.456	-0.002	14986770	136.9	130.8	
2	2.780	2.788	-0.008	12852212	136.9	132.4	
						RPD = 1.24	
4 Ethylene							Ma
1	1.738	1.734	0.004	11116786	127.7	121.1	
2	2.393	2.401	-0.008	9059152	127.7	124.0	M
						RPD = 2.36	
5 Propane							
1	2.538	2.529	0.009	22854016	200.7	193.6	
2	4.626	4.631	-0.005	19635243	200.7	196.3	
						RPD = 1.40	
6 Acetylene							Ma
1	4.029	4.004	0.025	2992229	118.5	115.3	
2	2.515	2.521	-0.006	4343832	118.5	126.5	M
						RPD = 9.26	
7 Butane							Ma
1	4.381	4.362	0.019	25416398	264.5	232.3	M
2	6.091	6.094	-0.003	23757446	264.5	236.8	M
						RPD = 1.93	
8 isobutylene							Ma
1	5.233	5.214	0.019	17140897	255.4	239.3	
2	5.936	5.939	-0.003	15247682	255.4	243.1	M
						RPD = 1.59	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

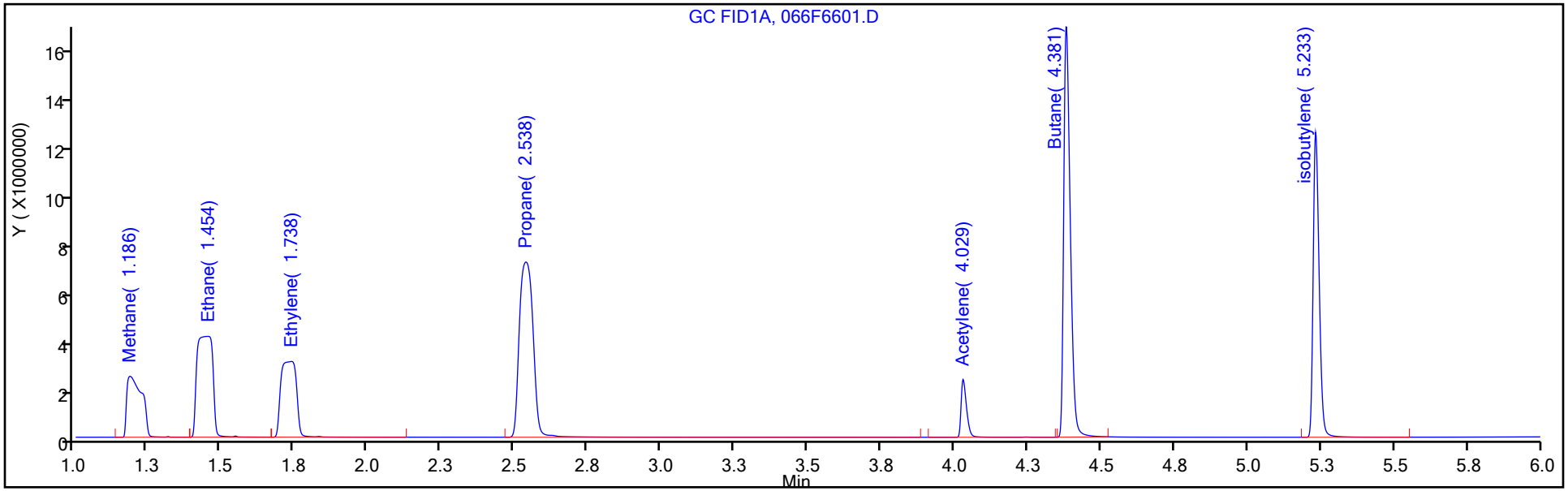
Report Date: 02-Jun-2021 11:03:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

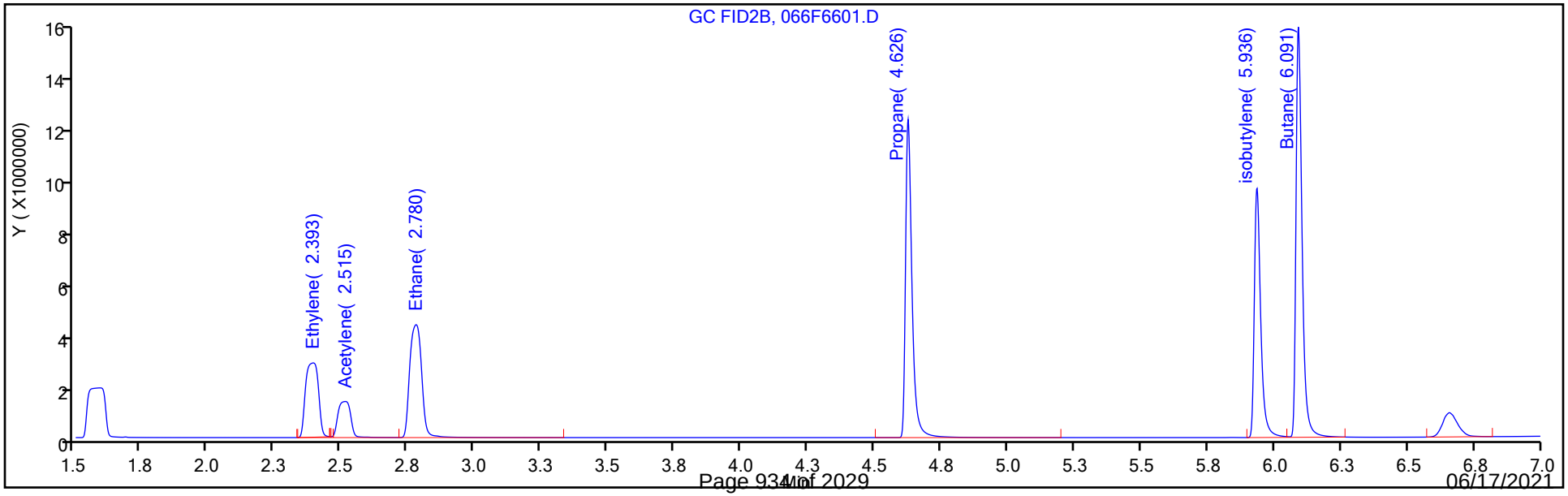
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\066F6601.D

Injection Date:	02-Jun-2021 00:20:04	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	ccv			Worklist Smp#:	66
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	66
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

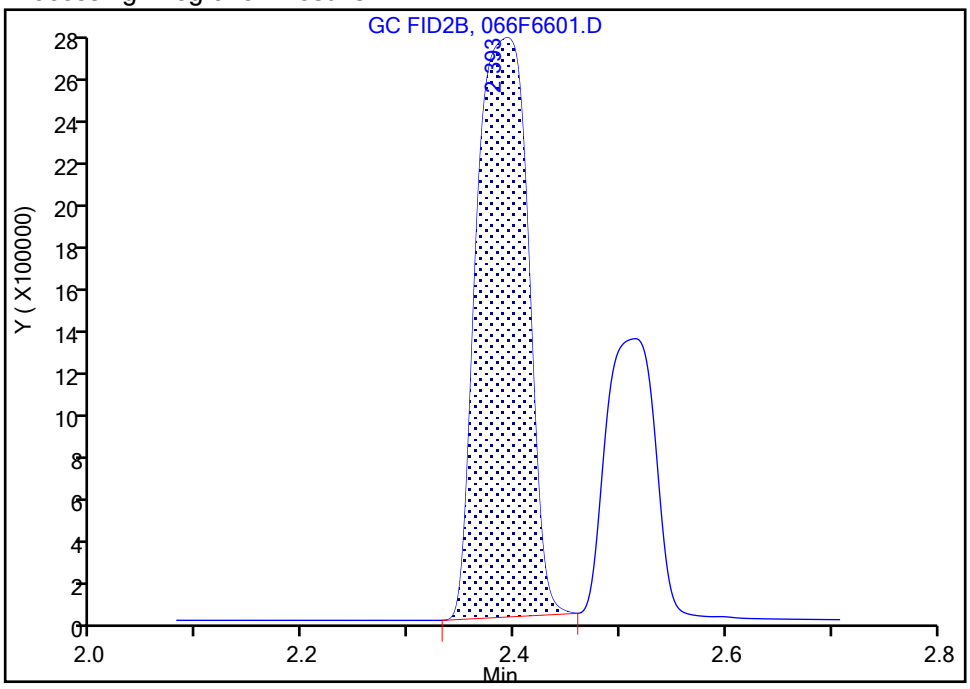
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\066F6601.D
Injection Date: 02-Jun-2021 00:20:04 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 66 Worklist Smp#: 66
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

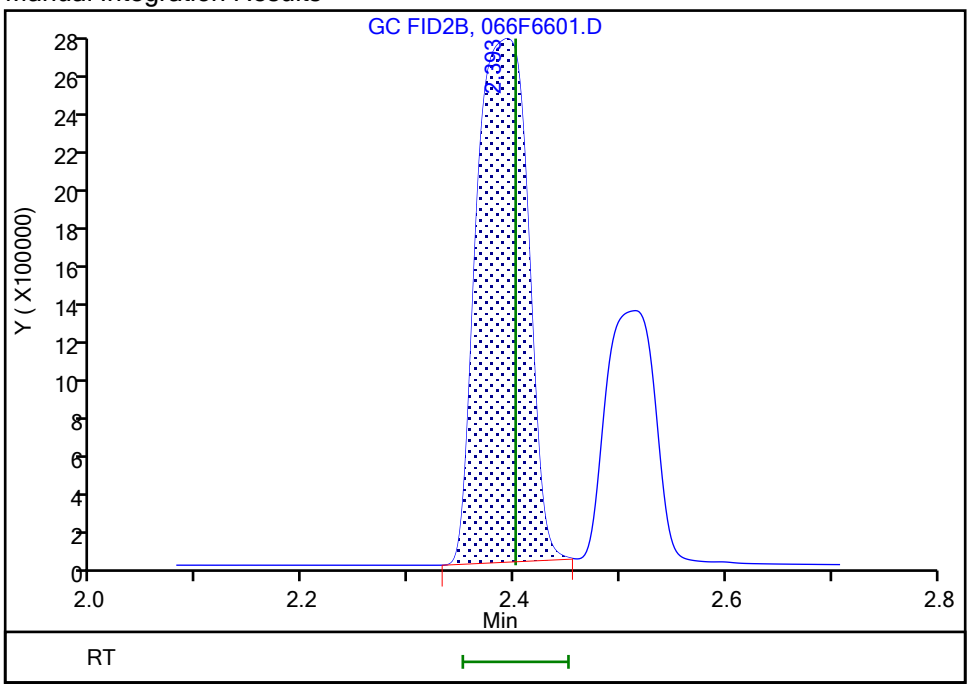
Processing Integration Results

RT: 2.39
Area: 9060305
Amount: 124.0306
Amount Units: ug/l



Manual Integration Results

RT: 2.39
Area: 9059152
Amount: 124.0148
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:10:04
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

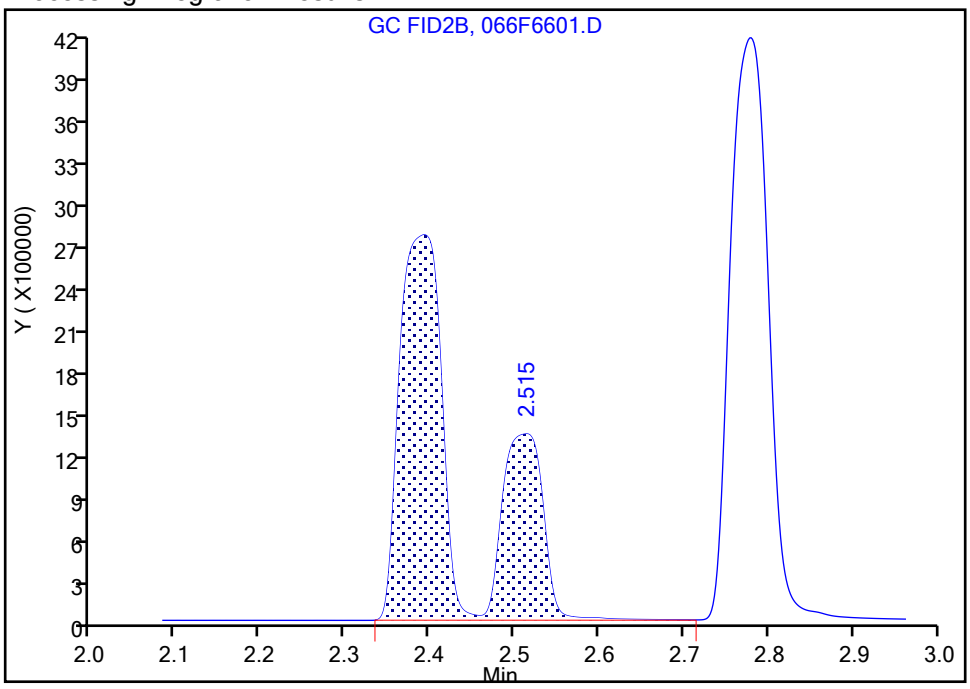
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\066F6601.D
Injection Date: 02-Jun-2021 00:20:04 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: robertstr ALS Bottle#: 66 Worklist Smp#: 66
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

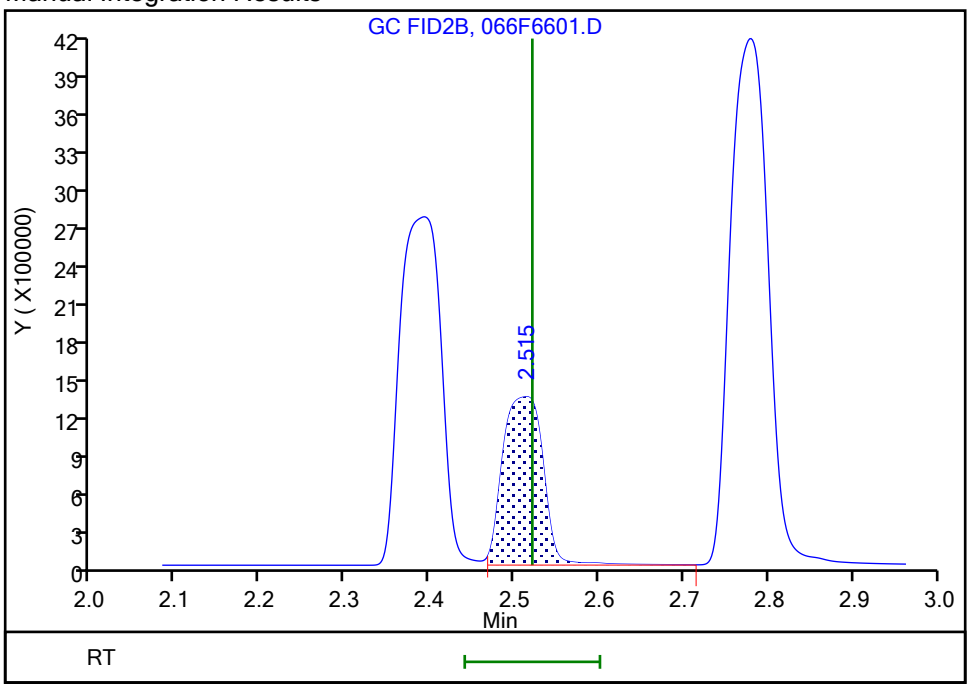
Processing Integration Results

RT: 2.51
Area: 13541490
Amount: 394.4645
Amount Units: ug/l



Manual Integration Results

RT: 2.51
Area: 4343832
Amount: 126.5361
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:09:57
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-538094/7

Matrix: Water Lab File ID: 007F0701.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 11:51

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.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\007F0701.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Jun-2021 11:51:38 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:41:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.191				ND	
2		1.598					
3 Ethane							
1		1.456				ND	
2		2.788					
4 Ethylene							
1		1.734				ND	
2		2.401					
5 Propane							
1		2.529				ND	
2		4.631					
6 Acetylene							
1		4.004				ND	
2		2.521					
7 Butane							
1		4.362				ND	
2		6.094					
8 isobutylene							
1		5.214				ND	
2		5.939					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

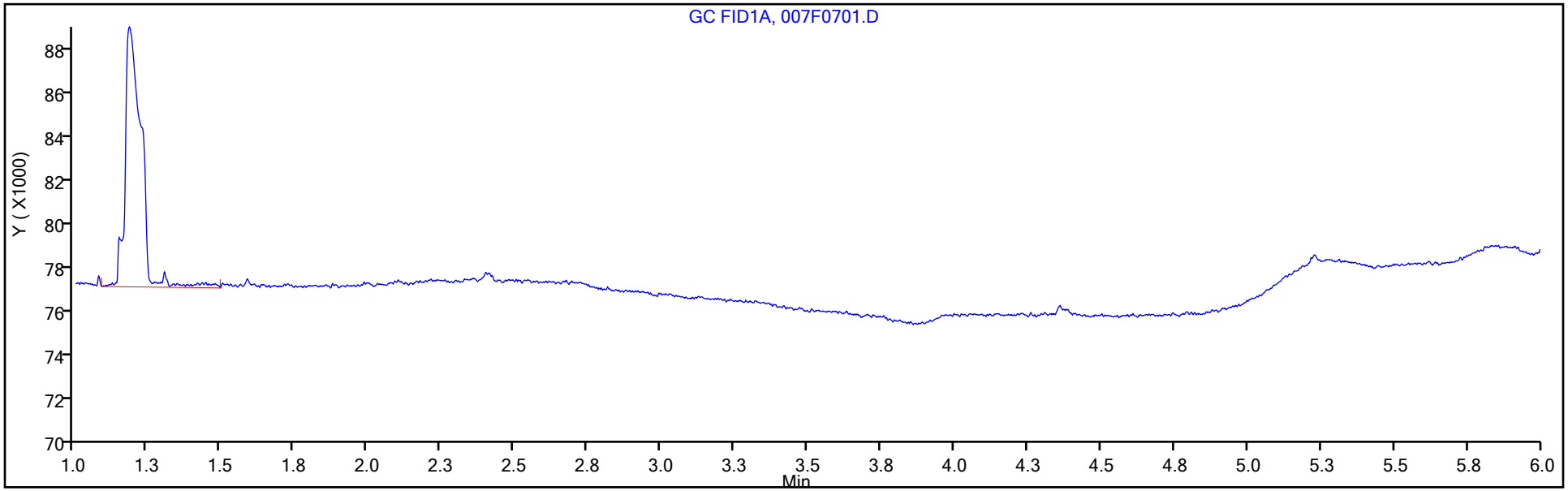
Report Date: 02-Jun-2021 11:02:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

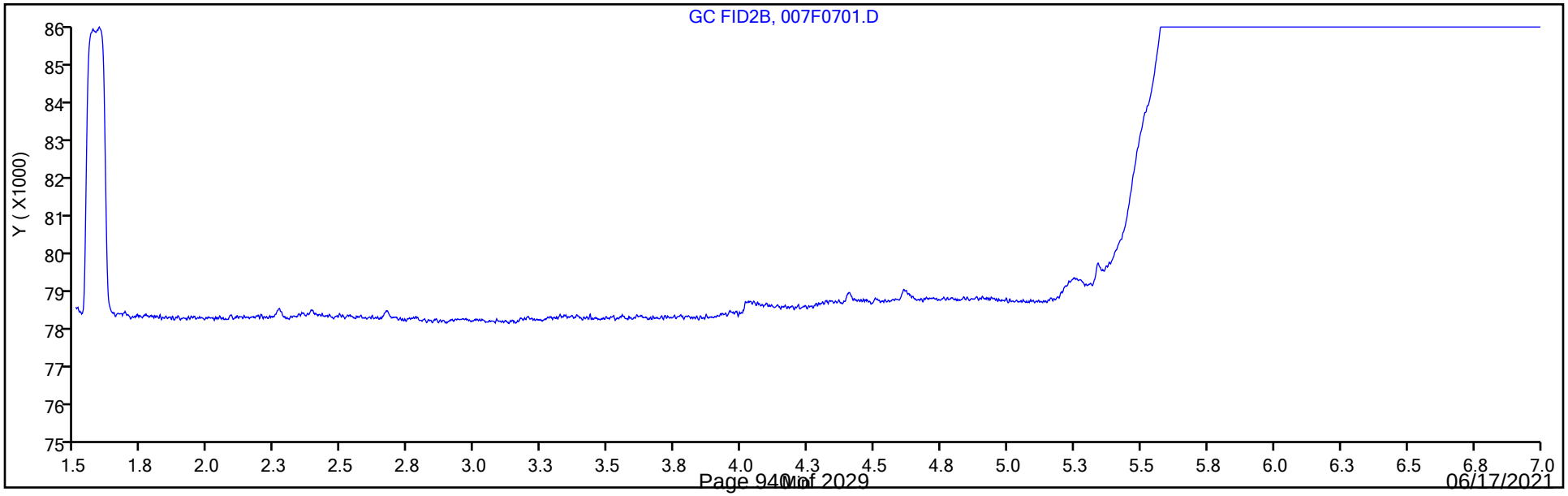
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\007F0701.D

Injection Date:	01-Jun-2021 11:51:38	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	mb			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-538142/38

Matrix: Water Lab File ID: 038F3801.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 18:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\038F3801.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Jun-2021 18:35:17 ALS Bottle#: 38 Worklist Smp#: 38
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:20:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.191				ND	
2		1.598					
3 Ethane							
1		1.456				ND	
2		2.788					
4 Ethylene							
1		1.734				ND	
2		2.401					
5 Propane							
1		2.529				ND	
2		4.631					
6 Acetylene							
1		4.004				ND	
2		2.521					
7 Butane							
1		4.362				ND	
2		6.094					
8 isobutylene							
1		5.214				ND	
2		5.939					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

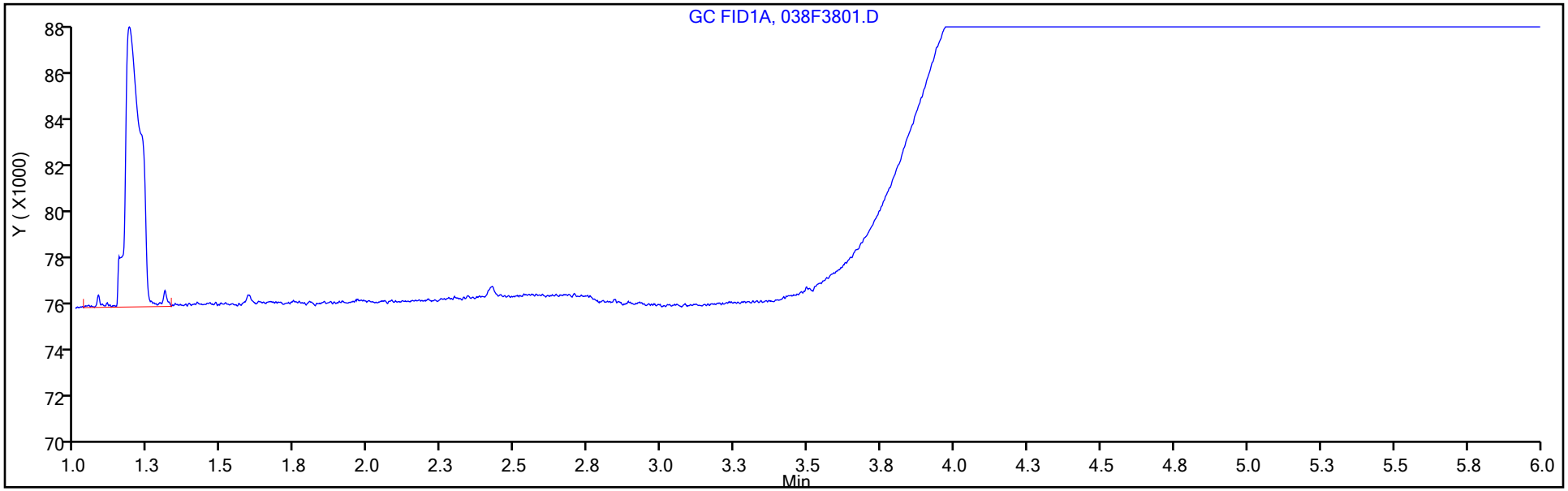
Report Date: 02-Jun-2021 11:03:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

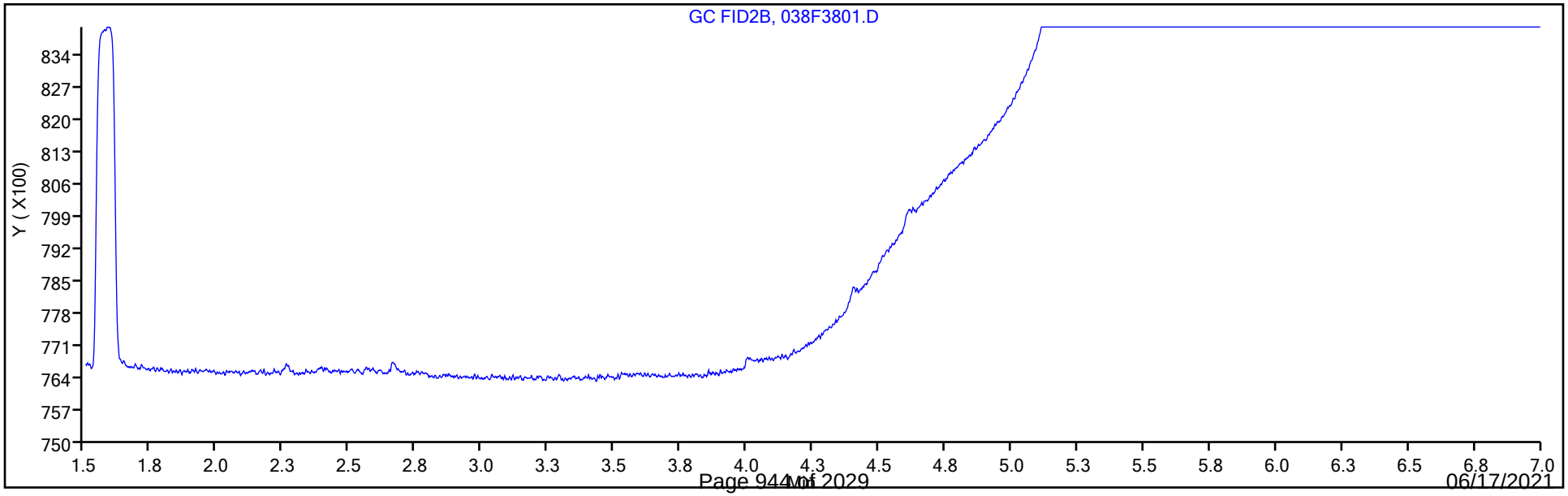
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\038F3801.D

Injection Date:	01-Jun-2021 18:35:17	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	mb			Worklist Smp#:	38
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538094/5

Matrix: Water Lab File ID: 005F0501.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 11:27

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.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.122		0.0050	0.0015	0.00057
74-82-8	Methane	0.0670		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.117		0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\005F0501.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2021 11:27:02 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:39:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.186	1.191	-0.005	7804379	73.0	65.7	
2	1.593	1.598	-0.005	7248810	73.0	67.0	
						RPD = 2.00	
3 Ethane							
1	1.453	1.456	-0.003	13789610	136.9	120.3	
2	2.782	2.788	-0.006	11880904	136.9	122.4	
						RPD = 1.71	
4 Ethylene							M
1	1.728	1.734	-0.006	10383920	127.7	113.1	M
2	2.395	2.401	-0.006	8576111	127.7	117.4	
						RPD = 3.70	
5 Propane							
1	2.525	2.529	-0.004	21301988	200.7	180.4	
2	4.627	4.631	-0.004	18336274	200.7	183.3	
						RPD = 1.58	
6 Acetylene							Ma
1	4.008	4.004	0.004	2829792	118.5	109.1	
2	2.517	2.521	-0.004	4185477	118.5	121.9	M
						RPD = 11.12	
7 Butane							Ma
1	4.365	4.362	0.003	25260659	264.5	230.8	M
2	6.093	6.094	-0.001	24133531	264.5	240.5	M
						RPD = 4.11	
8 isobutylene							Ma
1	5.216	5.214	0.002	17162346	255.4	239.6	M
2	5.937	5.939	-0.002	15395872	255.4	245.5	M
						RPD = 2.43	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

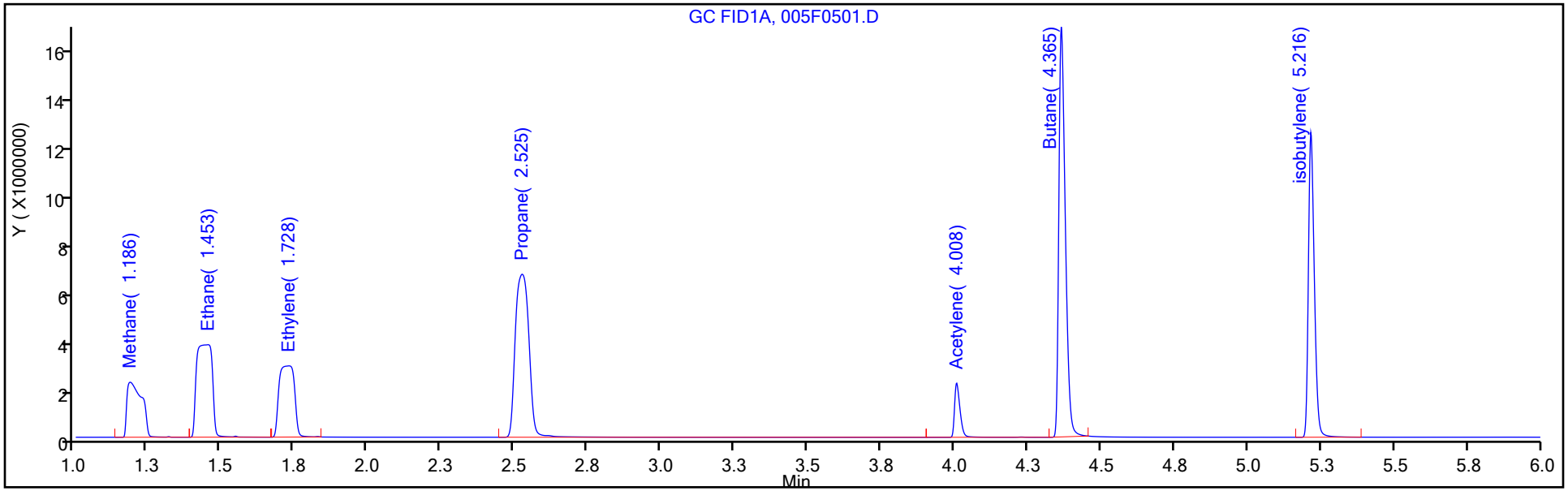
Report Date: 02-Jun-2021 11:02:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

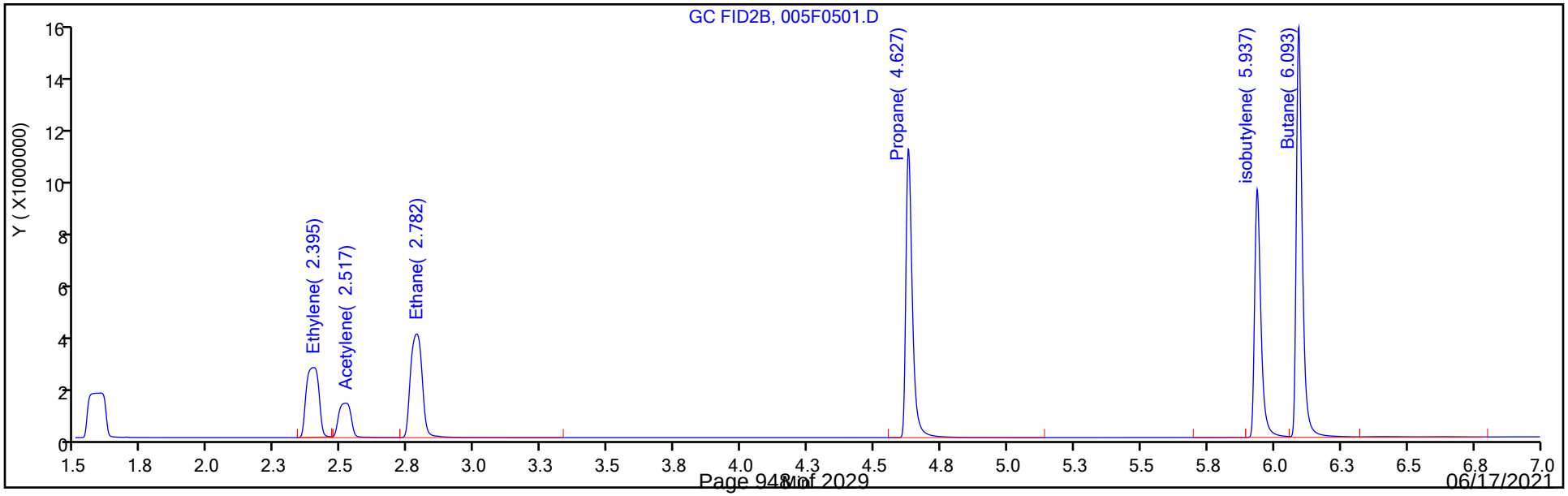
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\005F0501.D

Injection Date:	01-Jun-2021 11:27:02	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcs			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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538142/36

Matrix: Water Lab File ID: 036F3601.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 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.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.132		0.0050	0.0015	0.00057
74-82-8	Methane	0.0729		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.127	M	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\036F3601.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2021 18:10:28 ALS Bottle#: 36 Worklist Smp#: 36
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:20:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.180	1.191	-0.011	8520864	73.0	71.8	
2	1.585	1.598	-0.013	7884490	73.0	72.9	
						RPD = 1.61	
3 Ethane							
1	1.442	1.456	-0.014	15144066	136.9	132.1	
2	2.769	2.788	-0.019	12815813	136.9	132.0	
						RPD = 0.09	
4 Ethylene							Ma
1	1.727	1.734	-0.007	11229779	127.7	122.4	
2	2.382	2.401	-0.019	9296524	127.7	127.3	M
						RPD = 3.93	
5 Propane							
1	2.527	2.529	-0.002	23635423	200.7	200.2	
2	4.622	4.631	-0.009	20296453	200.7	202.9	
						RPD = 1.35	
6 Acetylene							Ma
1	4.028	4.004	0.024	2982509	118.5	115.0	a
2	2.504	2.521	-0.017	4550755	118.5	132.6	M
						RPD = 14.22	
7 Butane							Ma
1	4.372	4.362	0.010	28539721	264.5	260.7	a
2	6.087	6.094	-0.007	27186910	264.5	270.9	M
						RPD = 3.82	
8 isobutylene							Ma
1	5.227	5.214	0.013	19104577	255.4	266.7	M
2	5.932	5.939	-0.007	17375356	255.4	277.0	M
						RPD = 3.80	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

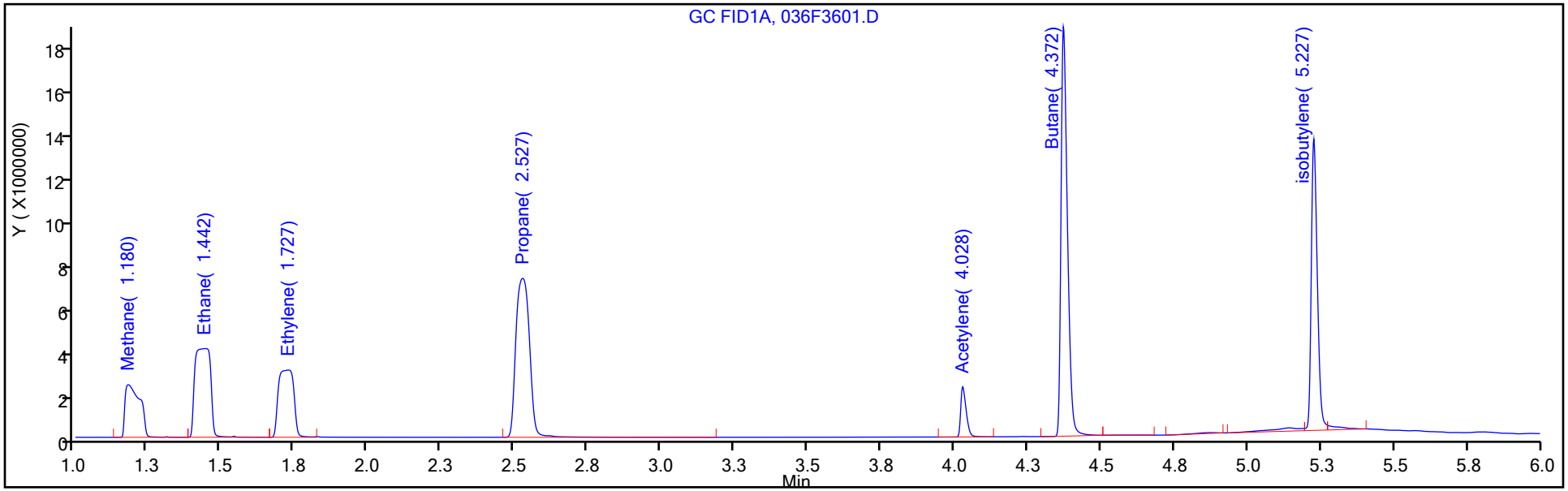
Report Date: 02-Jun-2021 11:03:08 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

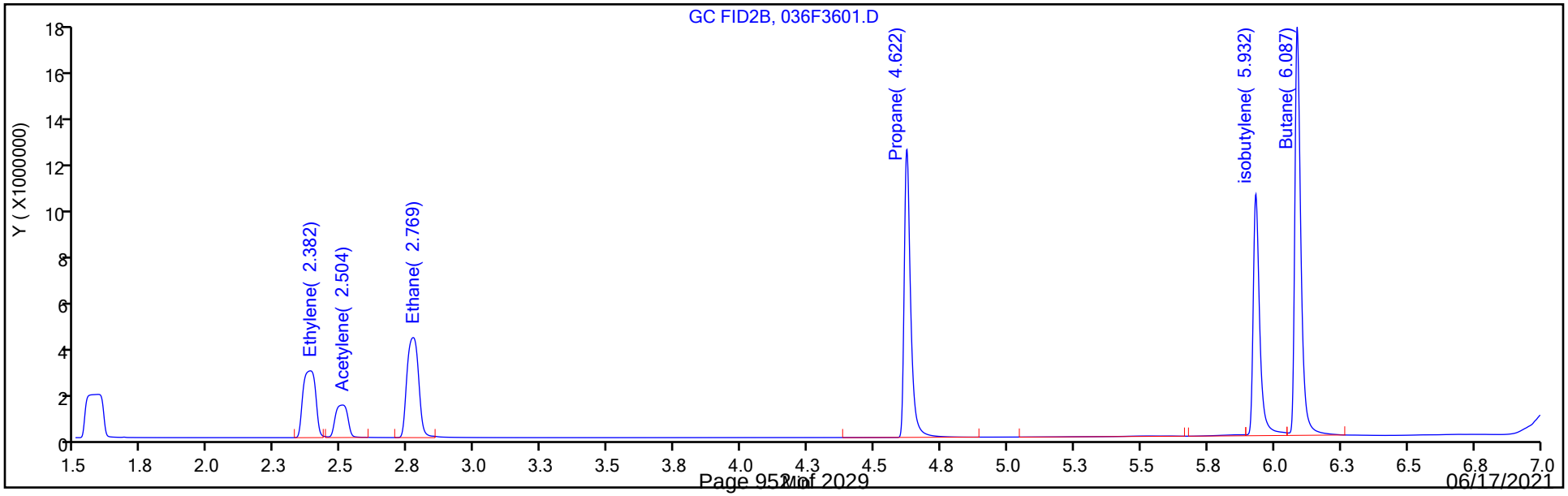
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\036F3601.D

Injection Date:	01-Jun-2021 18:10:28	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcs			Worklist Smp#:	36
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

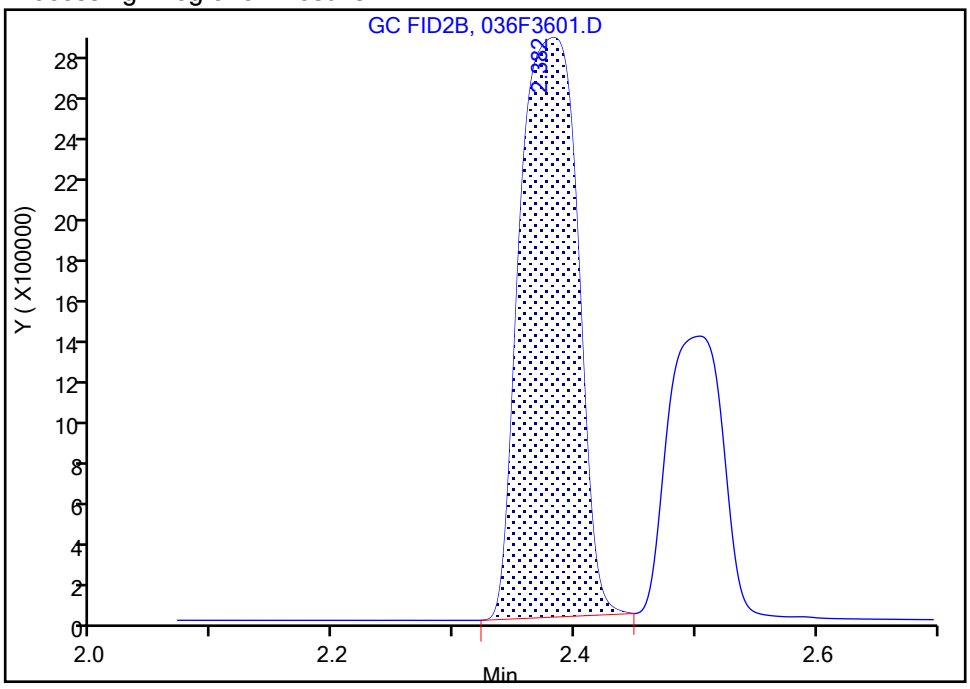
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\036F3601.D
Injection Date: 01-Jun-2021 18:10:28 Instrument ID: VGC_J
Lims ID: lcs
Client ID:
Operator ID: robertstr ALS Bottle#: 36 Worklist Smp#: 36
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

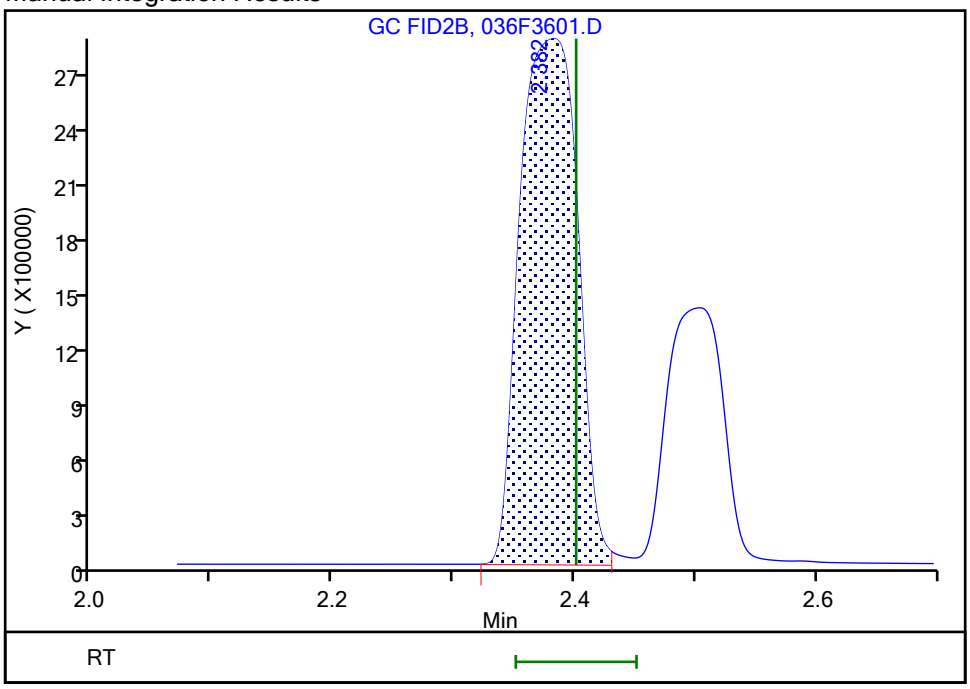
Processing Integration Results

RT: 2.38
Area: 9199256
Amount: 125.9328
Amount Units: ug/l



Manual Integration Results

RT: 2.38
Area: 9296524
Amount: 127.2643
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:19:37
Audit Action: Assigned New Baseline Audit Reason: Shouldering

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-538094/6

Matrix: Water Lab File ID: 006F0601.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 11:39

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.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.121		0.0050	0.0015	0.00057
74-82-8	Methane	0.0701		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.117	M	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\006F0601.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jun-2021 11:39:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:41:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.186	1.191	-0.005	8158478	73.0	68.7	
2	1.591	1.598	-0.007	7585252	73.0	70.1	
						RPD = 2.09	
3 Ethane							
1	1.452	1.456	-0.004	13658054	136.9	119.2	
2	2.779	2.788	-0.009	11765292	136.9	121.2	
						RPD = 1.69	
4 Ethylene							Ma
1	1.729	1.734	-0.005	10295752	127.7	112.2	
2	2.393	2.401	-0.008	8517484	127.7	116.6	M
						RPD = 3.86	
5 Propane							
1	2.524	2.529	-0.005	20011716	200.7	169.5	
2	4.628	4.631	-0.003	17263612	200.7	172.6	
						RPD = 1.80	
6 Acetylene							Ma
1	4.011	4.004	0.007	2751503	118.5	106.1	a
2	2.514	2.521	-0.007	4065624	118.5	118.4	M
						RPD = 11.02	
7 Butane							Ma
1	4.367	4.362	0.005	21606705	264.5	197.6	M
2	6.093	6.094	-0.001	20245503	264.5	201.9	M
						RPD = 2.17	
8 isobutylene							Ma
1	5.219	5.214	0.005	14540502	255.4	203.0	M
2	5.938	5.939	-0.001	13049737	255.4	208.1	M
						RPD = 2.47	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

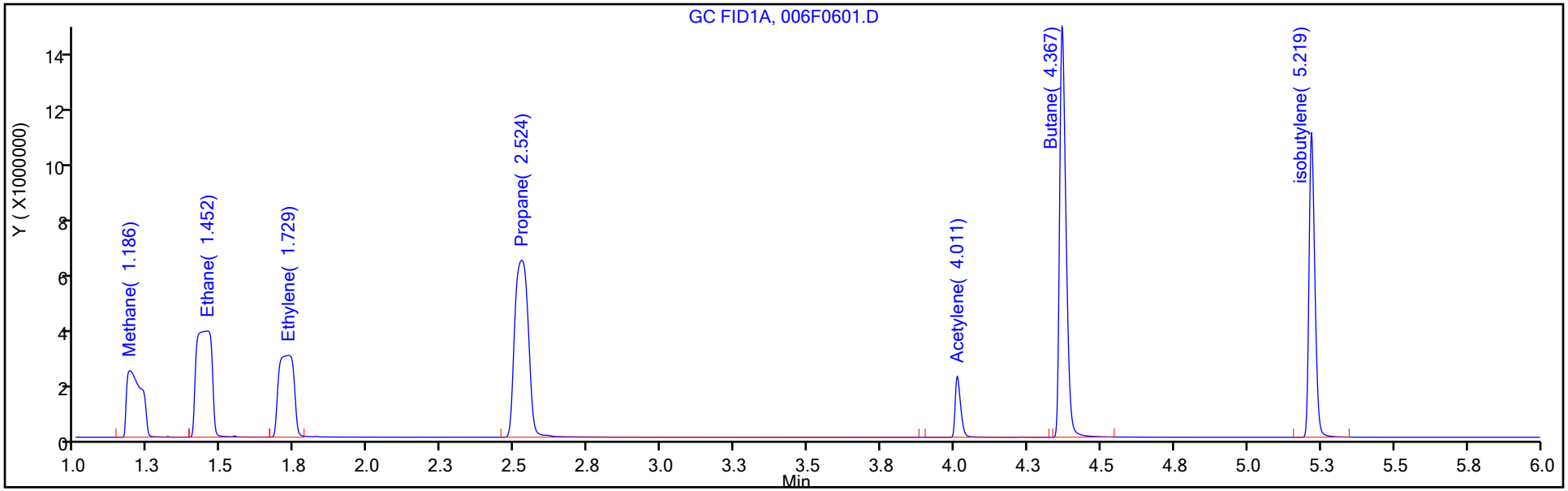
Report Date: 02-Jun-2021 11:02:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

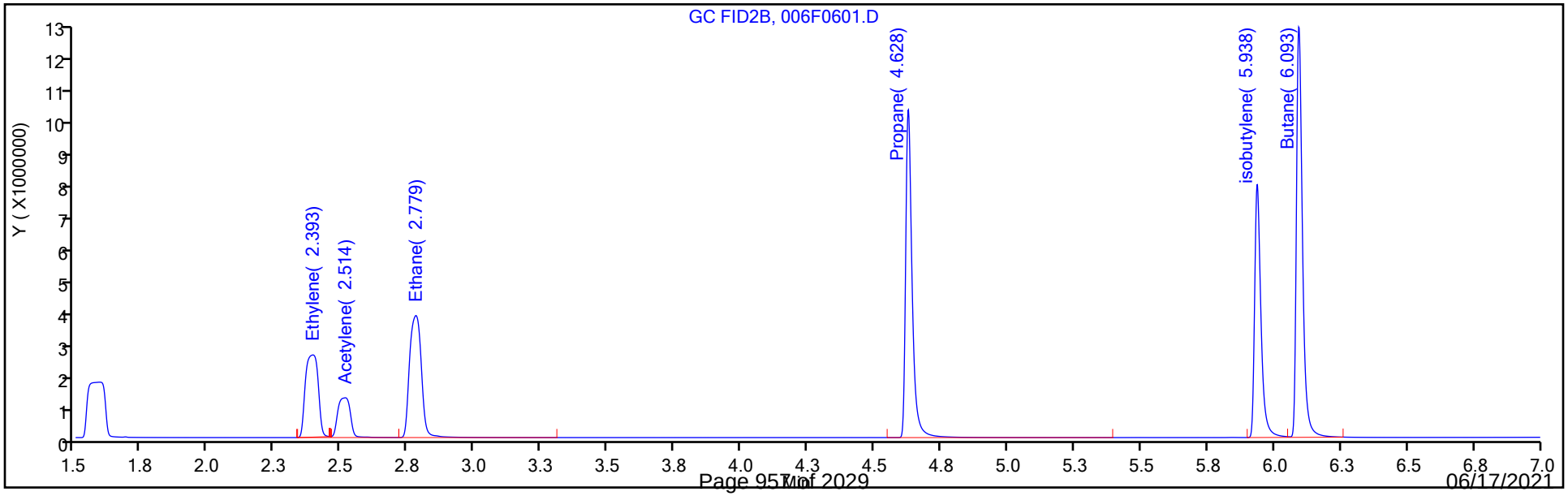
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\006F0601.D

Injection Date:	01-Jun-2021 11:39:30	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcsd			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

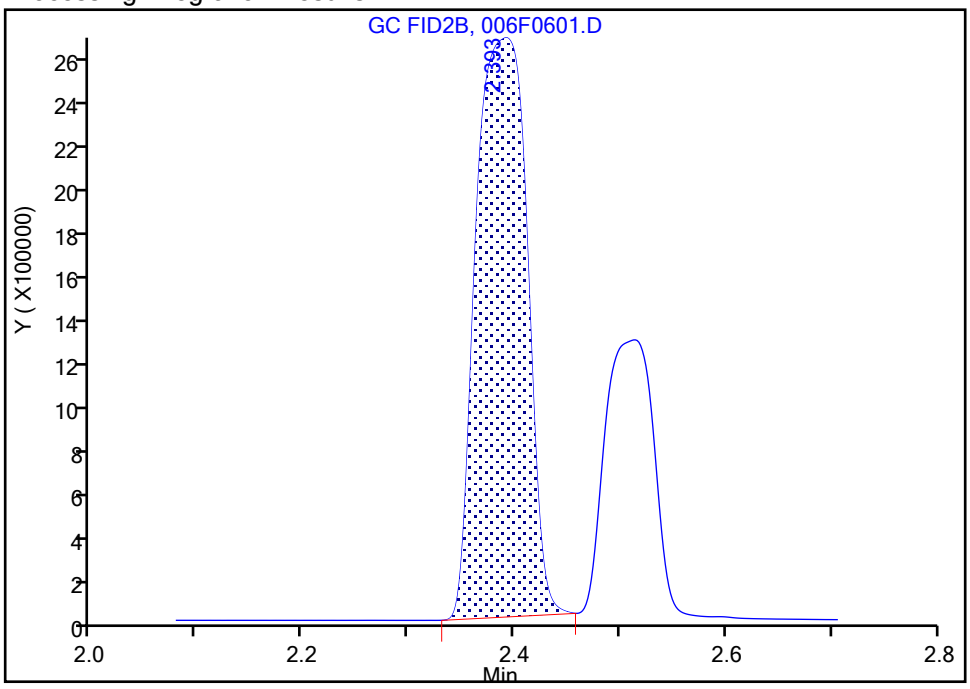
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\006F0601.D
Injection Date: 01-Jun-2021 11:39:30 Instrument ID: VGC_J
Lims ID: lcsd
Client ID:
Operator ID: robertstr ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

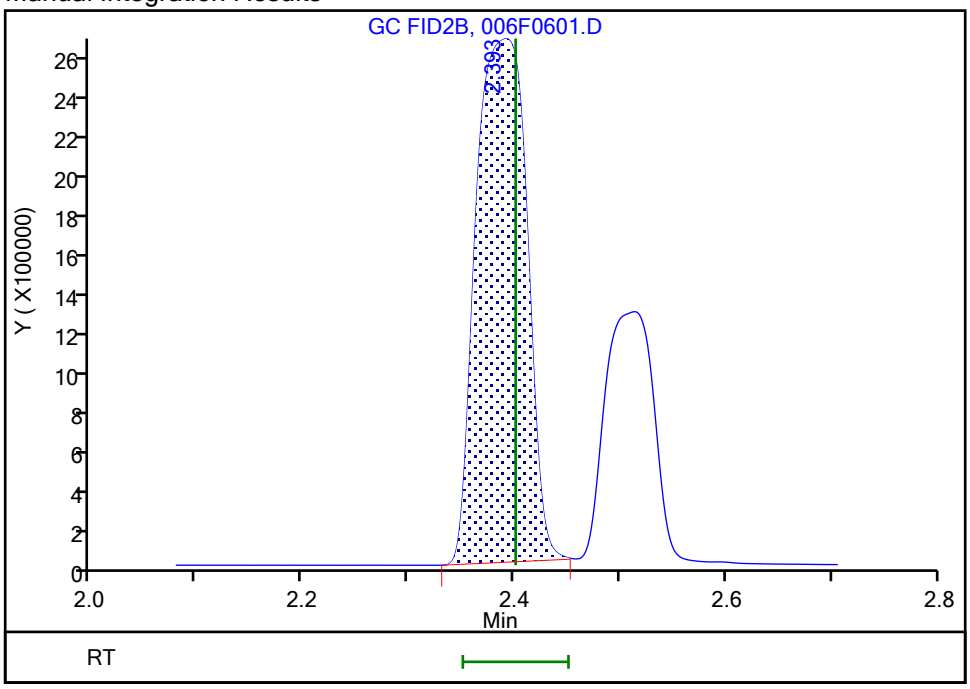
Processing Integration Results

RT: 2.39
Area: 8518127
Amount: 116.6085
Amount Units: ug/l



Manual Integration Results

RT: 2.39
Area: 8517484
Amount: 116.5997
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2021 09:40:56
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Wrong Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-538142/37

Matrix: Water Lab File ID: 037F3701.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 18:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538142 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.128		0.0050	0.0015	0.00057
74-82-8	Methane	0.0705		0.0050	0.0020	0.00063
74-85-1	Ethylene	0.123		0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\037F3701.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jun-2021 18:22:53 ALS Bottle#: 37 Worklist Smp#: 37
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:03:06 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:17:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.182	1.191	-0.009	8240629	73.0	69.4	
2	1.584	1.598	-0.014	7625123	73.0	70.5	
						RPD = 1.61	
3 Ethane							
1	1.449	1.456	-0.007	14560983	136.9	127.0	
2	2.771	2.788	-0.017	12446924	136.9	128.2	
						RPD = 0.92	
4 Ethylene							
1	1.724	1.734	-0.010	10998519	127.7	119.8	
2	2.386	2.401	-0.015	8986693	127.7	123.0	
						RPD = 2.62	
5 Propane							
1	2.531	2.529	0.002	22385444	200.7	189.6	
2	4.623	4.631	-0.008	19252080	200.7	192.4	
						RPD = 1.50	
6 Acetylene							M
1	4.031	4.004	0.027	3076180	118.5	118.6	
2	2.504	2.521	-0.017	4439351	118.5	129.3	M
						RPD = 8.67	
7 Butane							Ma
1	4.376	4.362	0.014	26113705	264.5	238.6	a
2	6.088	6.094	-0.006	24158049	264.5	240.8	M
						RPD = 0.90	
8 isobutylene							a
1	5.229	5.214	0.015	17619155	255.4	246.0	
2	5.933	5.939	-0.006	15713750	255.4	250.5	a
						RPD = 1.85	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

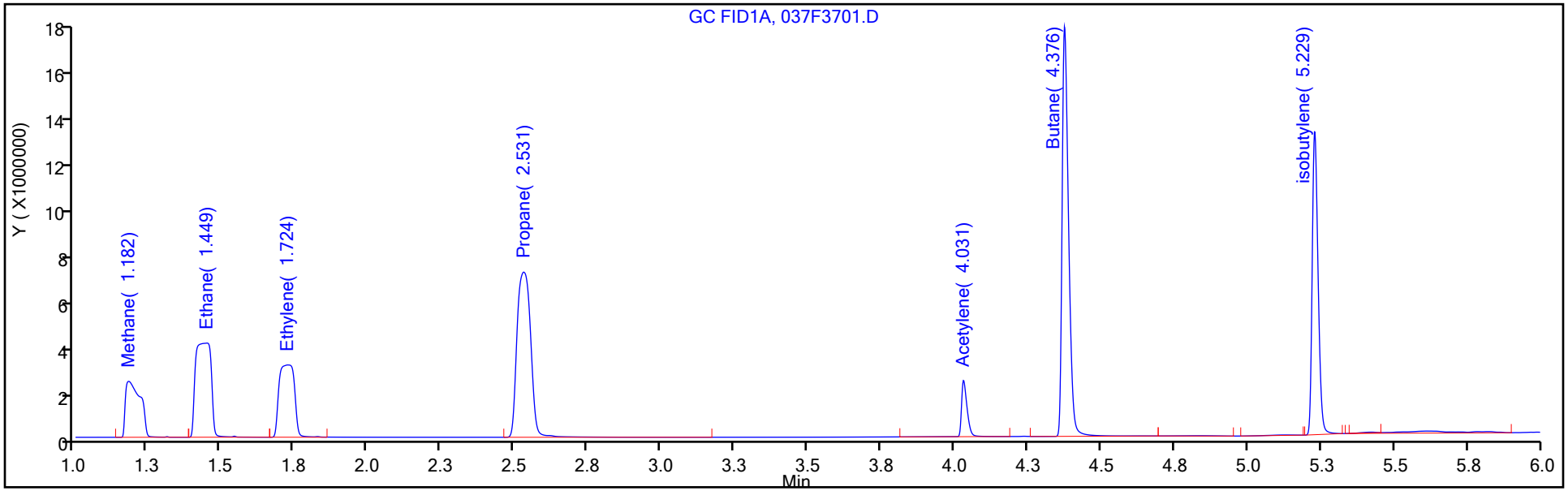
Report Date: 02-Jun-2021 11:03:08 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

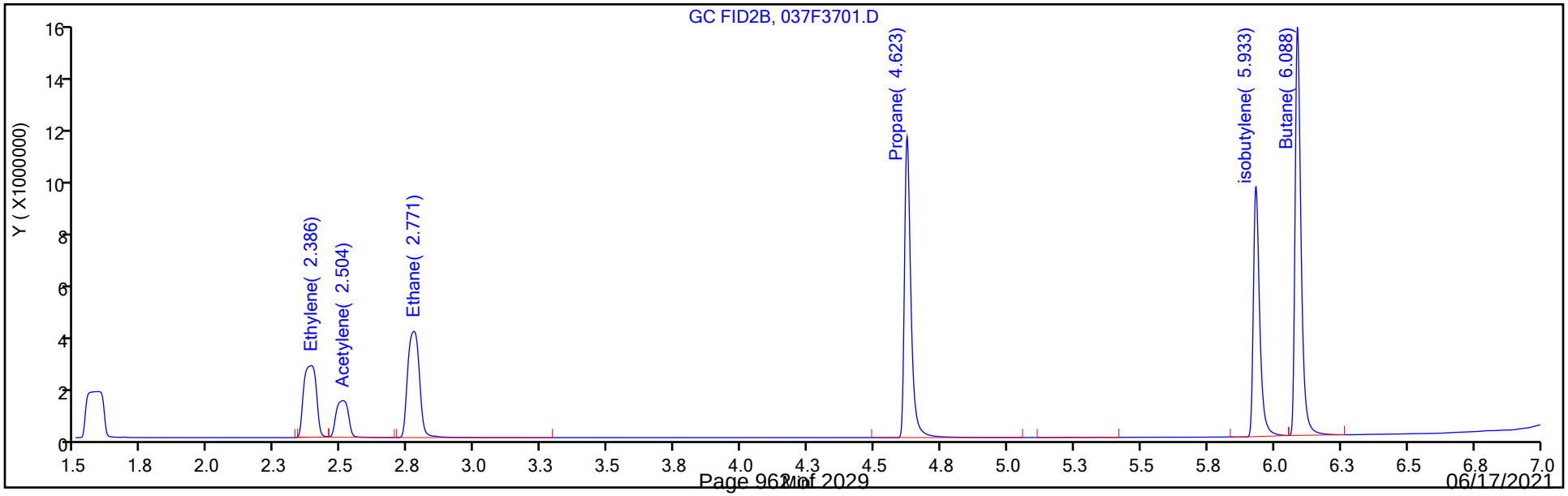
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\037F3701.D

Injection Date:	01-Jun-2021 18:22:53	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	lcsd			Worklist Smp#:	37
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A MS Lab Sample ID: 280-149116-13 MS

Matrix: Water Lab File ID: 010F1001.D

Analysis Method: RSK-175 Date Collected: 05/25/2021 13:25

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 12:50

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.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0646		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\010F1001.D
Lims ID: 280-149116-G-13 MS
Client ID: PZ007-21A
Sample Type: MS
Inject. Date: 01-Jun-2021 12:50:21 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-G-13M
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:43:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							
1	1.179	1.191	-0.012	7807497	73.0	65.7	
2	1.581	1.598	-0.017	6991238	73.0	64.6	
						RPD = 1.67	
3 Ethane							
1	1.431	1.456	-0.025	14033488	136.9	122.4	
2	2.771	2.788	-0.017	11650865	136.9	120.0	
						RPD = 2.00	
4 Ethylene							a
1	1.702	1.734	-0.032	11084748	127.7	120.8	
2	2.383	2.401	-0.018	8765391	127.7	120.0	a
						RPD = 0.65	
5 Propane							M
1	2.492	2.529	-0.037	21399935	200.7	181.2	M
2	4.623	4.631	-0.008	17983024	200.7	179.8	
						RPD = 0.82	
6 Acetylene							Ma
1	4.009	4.004	0.005	3146639	118.5	121.3	a
2	2.504	2.521	-0.017	4369373	118.5	127.3	M
						RPD = 4.82	
7 Butane							Ma
1	4.369	4.362	0.007	25852132	264.5	236.2	a
2	6.089	6.094	-0.005	23325064	264.5	232.5	M
						RPD = 1.59	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.226	5.214	0.012	18642566	255.4	260.3	M
2	5.934	5.939	-0.005	16210613	255.4	258.5	M
						RPD = 0.69	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

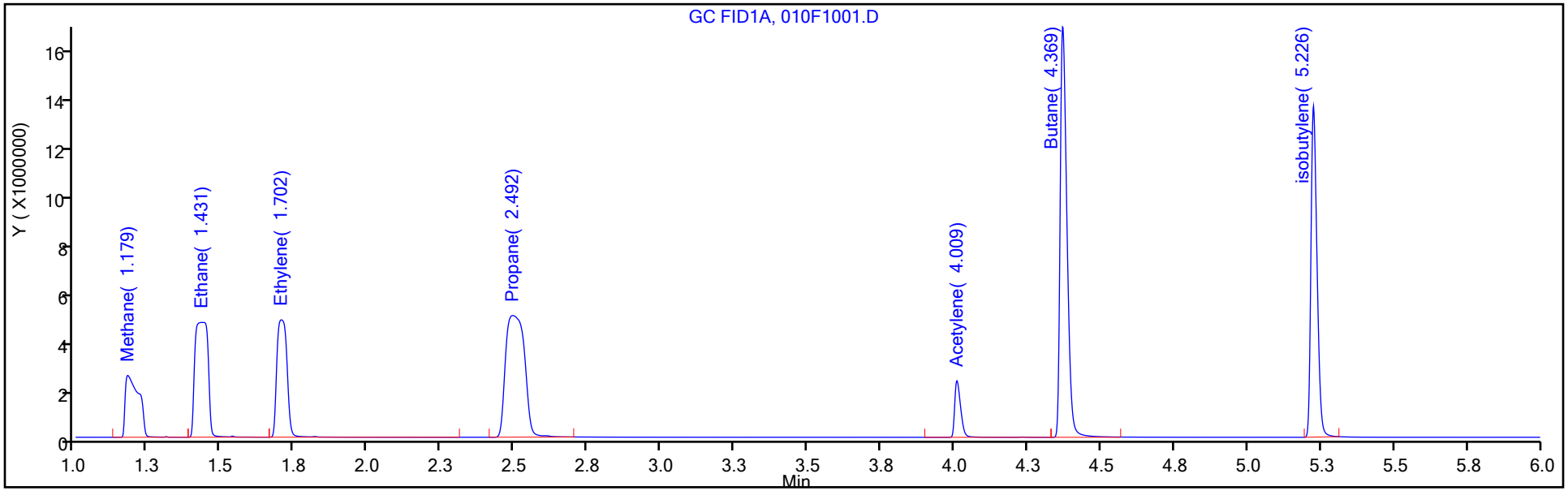
Report Date: 02-Jun-2021 11:02:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

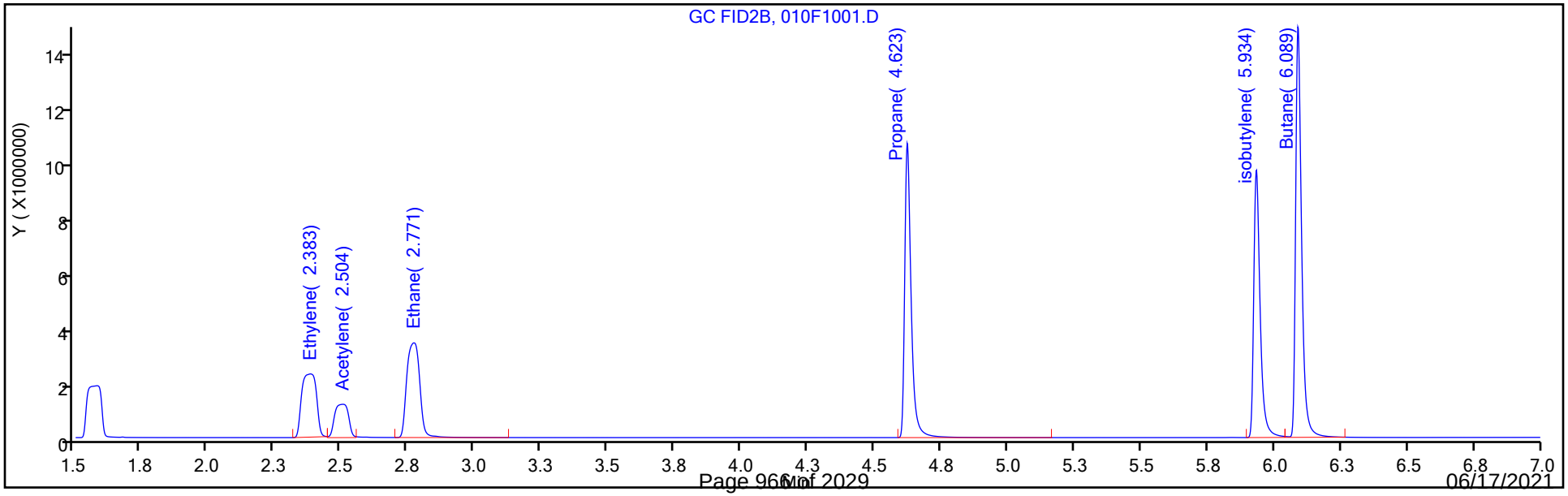
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\010F1001.D

Injection Date:	01-Jun-2021 12:50:21	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-G-13 MS			Worklist Smp#:	10
Client ID:	PZ007-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A MSD Lab Sample ID: 280-149116-13 MSD

Matrix: Water Lab File ID: 011F1101.D

Analysis Method: RSK-175 Date Collected: 05/25/2021 13:25

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 13:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0618		0.0050	0.0020	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\011F1101.D
Lims ID: 280-149116-G-13 MSD
Client ID: PZ007-21A
Sample Type: MSD
Inject. Date: 01-Jun-2021 13:02:31 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-G-13M
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:45:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							
1	1.178	1.191	-0.013	7462389	73.0	62.8	
2	1.580	1.598	-0.018	6682389	73.0	61.8	
						RPD = 1.66	
3 Ethane							
1	1.428	1.456	-0.028	13549067	136.9	118.2	
2	2.768	2.788	-0.020	11243143	136.9	115.8	
						RPD = 2.05	
4 Ethylene							Ma
1	1.701	1.734	-0.033	10759100	127.7	117.2	
2	2.380	2.401	-0.021	8654043	127.7	118.5	M
						RPD = 1.05	
5 Propane							
1	2.491	2.529	-0.038	21047806	200.7	178.3	
2	4.621	4.631	-0.010	17506545	200.7	175.0	
						RPD = 1.85	
6 Acetylene							Ma
1	4.008	4.004	0.004	3106463	118.5	119.7	a
2	2.503	2.521	-0.018	4391507	118.5	127.9	M
						RPD = 6.61	
7 Butane							Ma
1	4.369	4.362	0.007	25529625	264.5	233.3	M
2	6.090	6.094	-0.004	23180698	264.5	231.1	M
						RPD = 0.96	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.224	5.214	0.010	18817428	255.4	262.7	
2	5.933	5.939	-0.006	16259997	255.4	259.3	M
						RPD = 1.32	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

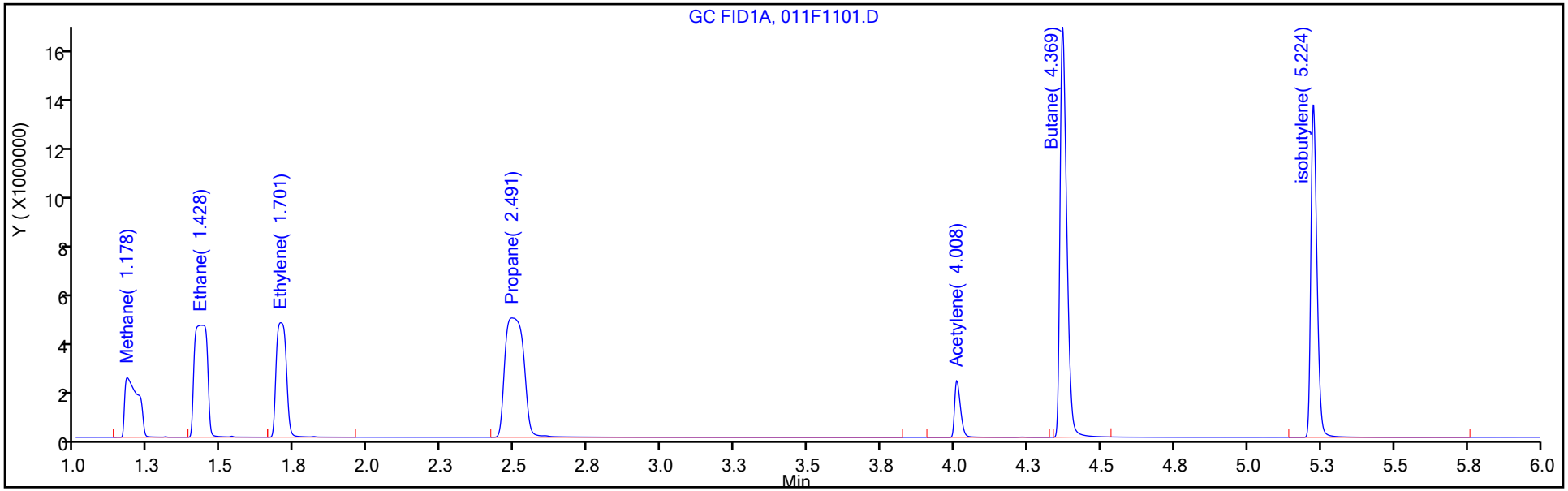
Report Date: 02-Jun-2021 11:02:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

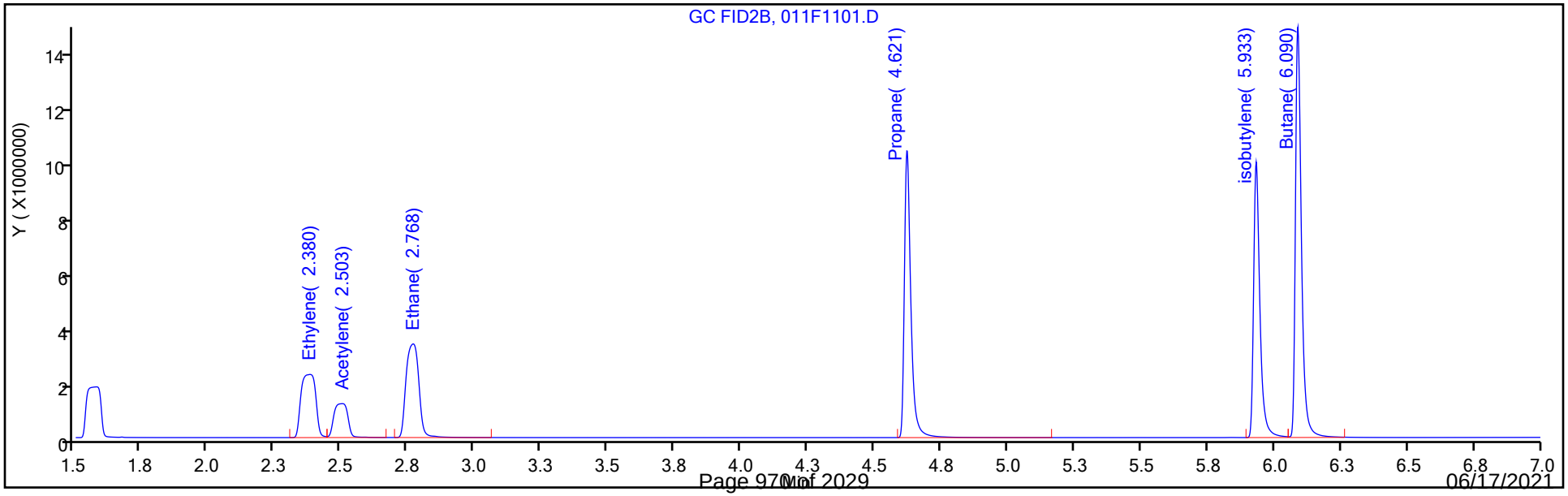
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\011F1101.D

Injection Date:	01-Jun-2021 13:02:31	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-G-13 MSD			Worklist Smp#:	11
Client ID:	PZ007-21A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A DU Lab Sample ID: 280-149116-13 DU

Matrix: Water Lab File ID: 009F0901.D

Analysis Method: RSK-175 Date Collected: 05/25/2021 13:25

Sample wt/vol: 18(mL) Date Analyzed: 06/01/2021 12:38

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.: 538094 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.0015	U	0.0050	0.0015	0.00057
74-82-8	Methane	0.0020	U	0.0050	0.0020	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\009F0901.D
Lims ID: 280-149116-H-13 DU
Client ID:
Sample Type: DU
Inject. Date: 01-Jun-2021 12:38:11 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-149116-H-13d
Operator ID: robertstr Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 02-Jun-2021 11:02:48 Calib Date: 24-Jun-2020 11:46:32
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20200624-92709.b\06242009.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1644

First Level Reviewer: sciannac Date: 02-Jun-2021 09:41:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.191				ND	
2		1.598					
3 Ethane							
1		1.456				ND	
2		2.788					
4 Ethylene							
1		1.734				ND	
2		2.401					
5 Propane							
1		2.529				ND	
2		4.631					
6 Acetylene							
1		4.004				ND	
2		2.521					
7 Butane							
1		4.362				ND	
2		6.094					
8 isobutylene							
1		5.214				ND	
2		5.939					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

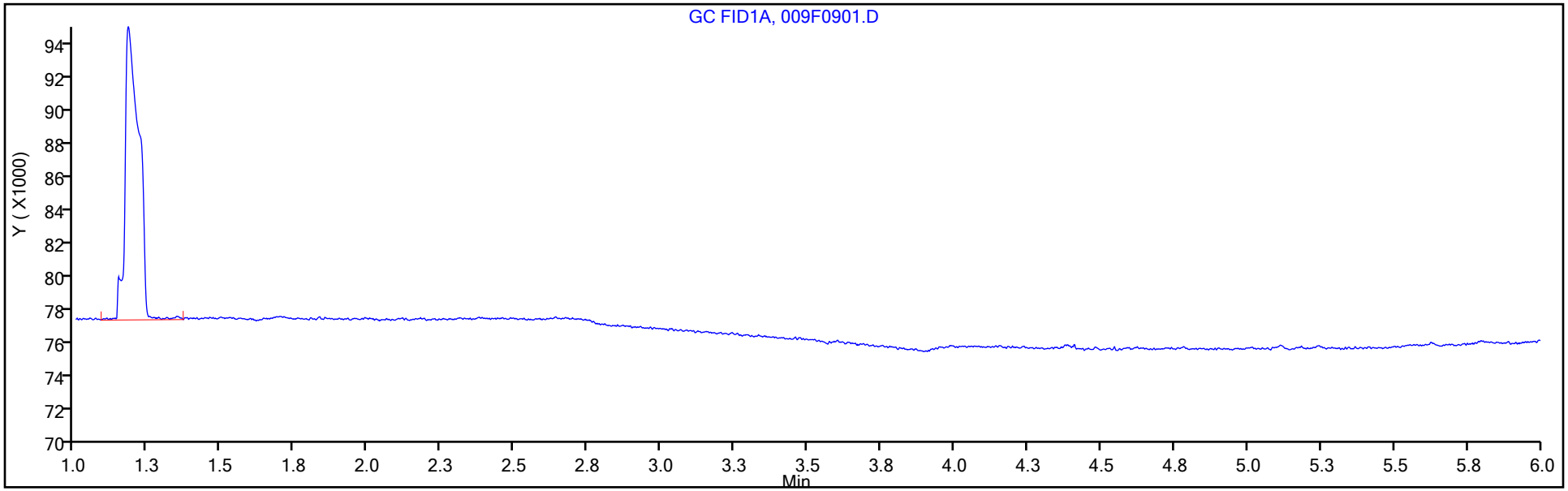
Report Date: 02-Jun-2021 11:02:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

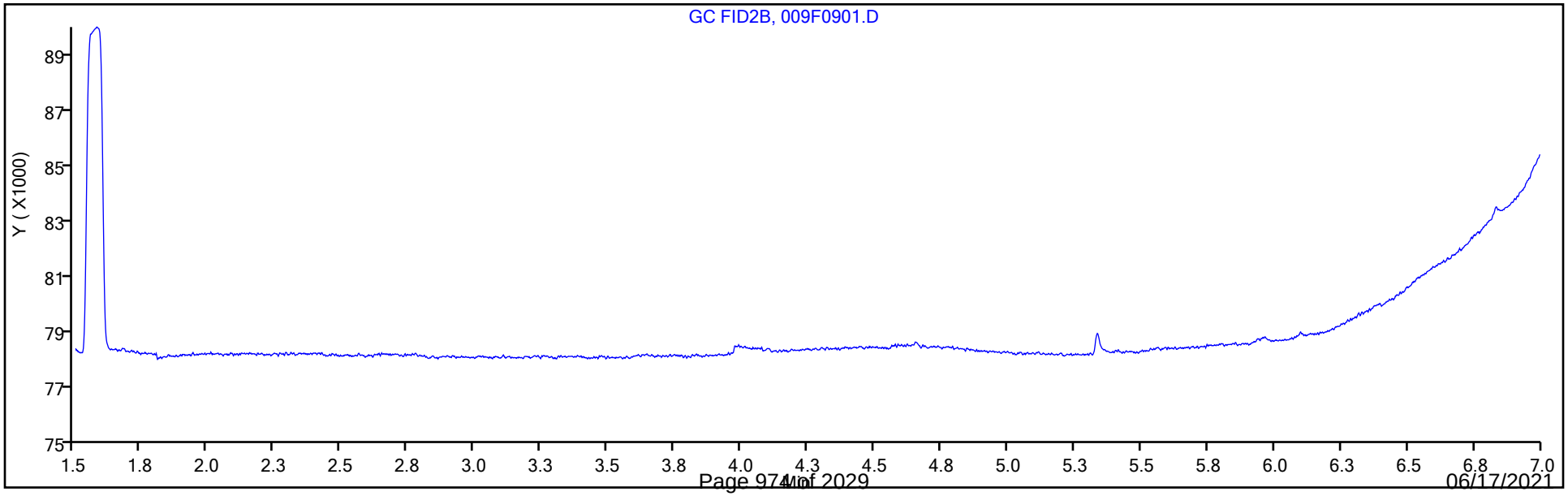
Data File: \\chromfs\Denver\ChromData\VGC_J\20210601-101963.b\009F0901.D

Injection Date:	01-Jun-2021 12:38:11	Instrument ID:	VGC_J	Operator ID:	robertstr
Lims ID:	280-149116-H-13 DU			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/24/2020 10:08

Analysis Batch Number: 499937 End Date: 06/24/2020 12:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-499937/1		06/24/2020 10:08	1	06242001.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/1		06/24/2020 10:08	1	06242001.D	HP-Plot Q 0.53(mm)
IC 280-499937/2		06/24/2020 10:20	1	06242002.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/2		06/24/2020 10:20	1	06242002.D	HP-Plot Q 0.53(mm)
IC 280-499937/3		06/24/2020 10:33	1	06242003.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/3		06/24/2020 10:33	1	06242003.D	HP-Plot Q 0.53(mm)
ICRT 280-499937/4		06/24/2020 10:45	1	06242004.D	Rt-Alumina KCl 0.53(mm)
ICRT 280-499937/4		06/24/2020 10:45	1	06242004.D	HP-Plot Q 0.53(mm)
IC 280-499937/5		06/24/2020 10:57	1	06242005.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/5		06/24/2020 10:57	1	06242005.D	HP-Plot Q 0.53(mm)
IC 280-499937/6		06/24/2020 11:09	1	06242006.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/6		06/24/2020 11:09	1	06242006.D	HP-Plot Q 0.53(mm)
IC 280-499937/7		06/24/2020 11:22	1	06242007.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/7		06/24/2020 11:22	1	06242007.D	HP-Plot Q 0.53(mm)
IC 280-499937/8		06/24/2020 11:34	1	06242008.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/8		06/24/2020 11:34	1	06242008.D	HP-Plot Q 0.53(mm)
IC 280-499937/9		06/24/2020 11:46	1	06242009.D	Rt-Alumina KCl 0.53(mm)
IC 280-499937/9		06/24/2020 11:46	1	06242009.D	HP-Plot Q 0.53(mm)
ICV 280-499937/11		06/24/2020 12:11	1	06242011.D	Rt-Alumina KCl 0.53(mm)
ICV 280-499937/11		06/24/2020 12:11	1	06242011.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2021 11:14

Analysis Batch Number: 538094 End Date: 06/01/2021 17:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-538094/4		06/01/2021 11:14	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-538094/4		06/01/2021 11:14	1	004F0401.D	HP-Plot Q 0.53(mm)
LCS 280-538094/5		06/01/2021 11:27	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
LCS 280-538094/5		06/01/2021 11:27	1	005F0501.D	HP-Plot Q 0.53(mm)
LCSD 280-538094/6		06/01/2021 11:39	1	006F0601.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-538094/6		06/01/2021 11:39	1	006F0601.D	HP-Plot Q 0.53(mm)
MB 280-538094/7		06/01/2021 11:51	1	007F0701.D	Rt-Alumina KCl 0.53(mm)
MB 280-538094/7		06/01/2021 11:51	1	007F0701.D	HP-Plot Q 0.53(mm)
280-149116-13	PZ007-21A	06/01/2021 12:26	1	008F0801.D	Rt-Alumina KCl 0.53(mm)
280-149116-13	PZ007-21A	06/01/2021 12:26	1	008F0801.D	HP-Plot Q 0.53(mm)
280-149116-13 DU	PZ007-21A DU	06/01/2021 12:38	1	009F0901.D	Rt-Alumina KCl 0.53(mm)
280-149116-13 DU	PZ007-21A DU	06/01/2021 12:38	1	009F0901.D	HP-Plot Q 0.53(mm)
280-149116-13 MS	PZ007-21A MS	06/01/2021 12:50	1	010F1001.D	Rt-Alumina KCl 0.53(mm)
280-149116-13 MS	PZ007-21A MS	06/01/2021 12:50	1	010F1001.D	HP-Plot Q 0.53(mm)
280-149116-13 MSD	PZ007-21A MSD	06/01/2021 13:02	1	011F1101.D	Rt-Alumina KCl 0.53(mm)
280-149116-13 MSD	PZ007-21A MSD	06/01/2021 13:02	1	011F1101.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 13:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 13:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 13:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 13:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 13:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 13:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 13:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 13:51	1		HP-Plot Q 0.53(mm)
280-149116-1	G0017-21A	06/01/2021 14:03	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
280-149116-1	G0017-21A	06/01/2021 14:03	1	016F1601.D	HP-Plot Q 0.53(mm)
280-149116-2	G0045-21A	06/01/2021 14:15	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
280-149116-2	G0045-21A	06/01/2021 14:15	1	017F1701.D	HP-Plot Q 0.53(mm)
280-149116-3	G0086-21A	06/01/2021 14:27	1	018F1801.D	Rt-Alumina KCl 0.53(mm)
280-149116-3	G0086-21A	06/01/2021 14:27	1	018F1801.D	HP-Plot Q 0.53(mm)
280-149116-4	PZ0018-21A	06/01/2021 14:40	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
280-149116-4	PZ0018-21A	06/01/2021 14:40	1	019F1901.D	HP-Plot Q 0.53(mm)
280-149116-5	SHGW03-21A	06/01/2021 14:52	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
280-149116-5	SHGW03-21A	06/01/2021 14:52	1	020F2001.D	HP-Plot Q 0.53(mm)
CCV 280-538094/21		06/01/2021 15:04	1	021F2101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-538094/21		06/01/2021 15:04	1	021F2101.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 15:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 15:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 15:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 15:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 15:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 15:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 15:54	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 15:54	1		HP-Plot Q 0.53(mm)
280-149116-6	SHGW02-21A	06/01/2021 16:06	1	026F2601.D	Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2021 11:14

Analysis Batch Number: 538094 End Date: 06/01/2021 17:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-149116-6	SHGW02-21A	06/01/2021 16:06	1	026F2601.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 16:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 16:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 16:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 16:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 16:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 16:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 16:55	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 16:55	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 17:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 17:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 17:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 17:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 17:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 17:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 17:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 17:45	1		HP-Plot Q 0.53(mm)
CCV 280-538094/35		06/01/2021 17:58	1	035F3501.D	Rt-Alumina KCl 0.53(mm)
CCV 280-538094/35		06/01/2021 17:58	1	035F3501.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2021 11:14

Analysis Batch Number: 538142 End Date: 06/02/2021 00:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-538142/4		06/01/2021 11:14	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-538142/4		06/01/2021 11:14	1	004F0401.D	HP-Plot Q 0.53(mm)
CCV 280-538142/35		06/01/2021 17:58	1	035F3501.D	Rt-Alumina KCl 0.53(mm)
CCV 280-538142/35		06/01/2021 17:58	1	035F3501.D	HP-Plot Q 0.53(mm)
LCS 280-538142/36		06/01/2021 18:10	1	036F3601.D	Rt-Alumina KCl 0.53(mm)
LCS 280-538142/36		06/01/2021 18:10	1	036F3601.D	HP-Plot Q 0.53(mm)
LCSD 280-538142/37		06/01/2021 18:22	1	037F3701.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-538142/37		06/01/2021 18:22	1	037F3701.D	HP-Plot Q 0.53(mm)
MB 280-538142/38		06/01/2021 18:35	1	038F3801.D	Rt-Alumina KCl 0.53(mm)
MB 280-538142/38		06/01/2021 18:35	1	038F3801.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 18:47	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 18:47	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 18:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 18:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 19:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 19:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 19:24	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 19:24	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 19:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 19:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 19:49	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 19:49	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 20:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 20:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 20:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 20:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 20:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 20:26	1		HP-Plot Q 0.53(mm)
280-149116-7	SHGW05-21A	06/01/2021 20:38	1	048F4801.D	Rt-Alumina KCl 0.53(mm)
280-149116-7	SHGW05-21A	06/01/2021 20:38	1	048F4801.D	HP-Plot Q 0.53(mm)
280-149116-9	G0077-21A	06/01/2021 20:50	1	049F4901.D	Rt-Alumina KCl 0.53(mm)
280-149116-9	G0077-21A	06/01/2021 20:50	1	049F4901.D	HP-Plot Q 0.53(mm)
280-149116-10	G0078-21A	06/01/2021 21:03	1	050F5001.D	Rt-Alumina KCl 0.53(mm)
280-149116-10	G0078-21A	06/01/2021 21:03	1	050F5001.D	HP-Plot Q 0.53(mm)
280-149116-11	PZ017R-21A	06/01/2021 21:15	1	051F5101.D	Rt-Alumina KCl 0.53(mm)
280-149116-11	PZ017R-21A	06/01/2021 21:15	1	051F5101.D	HP-Plot Q 0.53(mm)
280-149116-12	PZ021-21A	06/01/2021 21:28	1	052F5201.D	Rt-Alumina KCl 0.53(mm)
280-149116-12	PZ021-21A	06/01/2021 21:28	1	052F5201.D	HP-Plot Q 0.53(mm)
280-149116-14	G0024-21A	06/01/2021 21:40	1	053F5301.D	Rt-Alumina KCl 0.53(mm)
280-149116-14	G0024-21A	06/01/2021 21:40	1	053F5301.D	HP-Plot Q 0.53(mm)
CCV 280-538142/54		06/01/2021 21:52	1	054F5401.D	Rt-Alumina KCl 0.53(mm)
CCV 280-538142/54		06/01/2021 21:52	1	054F5401.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 22:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 22:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 22:17	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2021 11:14

Analysis Batch Number: 538142 End Date: 06/02/2021 00:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/01/2021 22:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 22:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 22:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 22:42	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 22:42	1		HP-Plot Q 0.53(mm)
280-149116-15	PZ020-21A	06/01/2021 22:54	1	059F5901.D	Rt-Alumina KCl 0.53(mm)
280-149116-15	PZ020-21A	06/01/2021 22:54	1	059F5901.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 23:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 23:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 23:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 23:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 23:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 23:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 23:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 23:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2021 23:55	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2021 23:55	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2021 00:07	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2021 00:07	1		HP-Plot Q 0.53(mm)
CCV 280-538142/66		06/02/2021 00:20	1	066F6601.D	Rt-Alumina KCl 0.53(mm)
CCV 280-538142/66		06/02/2021 00:20	1	066F6601.D	HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538094 Batch Start Date: 06/01/21 11:14 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00031	AnalysisComment	
CCVRT 280-538094/4		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-538094/5		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-538094/6		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-538094/7		RSK-175		18 mL	18 mL	5 SU			
280-149116-H-13	PZ007-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-H-13 DU	PZ007-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-G-13 MS	PZ007-21A	RSK-175	T	18 mL	18 mL	< 2 SU	200 uL		
280-149116-G-13 MSD	PZ007-21A	RSK-175	T	18 mL	18 mL	< 2 SU	200 uL		
280-149116-H-1	G0017-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-G-2	G0045-21A	RSK-175	T	18 mL	18 mL	7 SU		Headspace	
280-149116-H-3	G0086-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-I-4	PZ0018-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-H-5	SHGW03-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-538094/21		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-149116-H-6	SHGW02-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-538094/35		RSK-175		18 mL	18 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538142 Batch Start Date: 06/01/21 11:14 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00031		
CCVRT 280-538142/4		RSK-175		18 mL	18 mL	5 SU	200 uL		
CCV 280-538142/35		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCS 280-538142/36		RSK-175		18 mL	18 mL	5 SU	200 uL		
LCSD 280-538142/37		RSK-175		18 mL	18 mL	5 SU	200 uL		
MB 280-538142/38		RSK-175		18 mL	18 mL	5 SU			
280-149116-H-7	SHGW05-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-G-9	G0077-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-I-10	G0078-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-I-11	PZ017R-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-I-12	PZ021-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
280-149116-H-14	G0024-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-538142/54		RSK-175		18 mL	18 mL	5 SU	200 uL		
280-149116-H-15	PZ020-21A	RSK-175	T	18 mL	18 mL	< 2 SU			
CCV 280-538142/66		RSK-175		18 mL	18 mL	< 2 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8015C_DRO_DOD5

Diesel Range Organics (DRO) (GC)

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

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 #
SHGW03-21A	280-149116-5	80	92
	MB 280-537990/1-A	82	94
	LCS 280-537990/2-A	113	95

	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.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06100016.D

Lab ID: LCS 280-537990/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
C10-C28	1980	1740	88	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.: 280-149116-1

SDG No.:

Lab Sample ID: MB 280-537990/1-A

Matrix: Water Date Extracted: 05/31/2021 10:59

Lab File ID:(1) 06100015.D Lab File ID:(2)

Date Analyzed:(1) 06/10/2021 02:51 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 280-537990/2-A	06/10/2021 03:14	
SHGW03-21A	280-149116-5	06/10/2021 03:59	

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Sample No.: CCVRT 280-538605/4 Date Analyzed: 06/09/2021 21:57

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID (Standard): 06100004.D Heated Purge: (Y/N) N

Calibration ID: 54271

CCV 280-538605/14		06/10/2021 02:29	06100014.D	7.23	9.85	
MB 280-537990/1-A		06/10/2021 02:51	06100015.D	7.23	9.86	
LCS 280-537990/2-A		06/10/2021 03:14	06100016.D	7.23	9.86	
280-149116-5	SHGW03-21A	06/10/2021 03:59	06100018.D	7.22	9.85	
CCV 280-538605/27		06/10/2021 07:21	06100027.D	7.22	9.85	

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.: 280-149116-1

SDG No.:

Client Sample ID: SHGW03-21A Lab Sample ID: 280-149116-5

Matrix: Water Lab File ID: 06100018.D

Analysis Method: 8015C DRO Date Collected: 05/26/2021 12:05

Extraction Method: 3510C Date Extracted: 05/31/2021 10:59

Sample wt/vol: 1041.7(mL) Date Analyzed: 06/10/2021 03:59

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538605 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	180	J	240	120	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	80		56-125
630-02-4	n-Octacosane	92		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100018.D
Lims ID: 280-149116-A-5-A
Client ID: SHGW03-21A
Sample Type: Client
Inject. Date: 10-Jun-2021 03:59:26 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-5-A
Misc. Info.: 280-0102076-018
Operator ID: JSM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jun-2021 07:56:20 Calib Date: 09-Jun-2021 00:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20210608-102182.b\06080018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1664

First Level Reviewer: meadowsj Date: 10-Jun-2021 07:53:30

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	4 C8-C12					
	3.051	(1.425-4.677)		1608506	9.89	
A	6 C10-C25					
	6.215	(3.364-9.067)		19373537	160.5	
	23 Hexadecane					
	6.343	6.350	-0.007	206830	NC	
A	8 C10-C28					
	6.709	(3.364-10.053)		22895616	189.6	
A	22 C10-C32					
	7.089	(3.364-10.813)		24157946	200.1	
$	9 o-Terphenyl					
	7.219	7.227	-0.008	4573969	28.0	
A	10 C10-C36					
	7.627	(3.364-11.890)		25520709	211.4	
$	14 n-Octacosane					
	9.850	9.855	-0.005	4073741	32.2	
A	13 C20-C38					
	10.214	(7.667-12.762)		13470559	110.6	
A	15 C25-C36					
	10.478	(9.067-11.890)		6147171	50.5	
	18 Dotriacontane					
	10.747	10.761	-0.014	242399	NC	
$	21 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

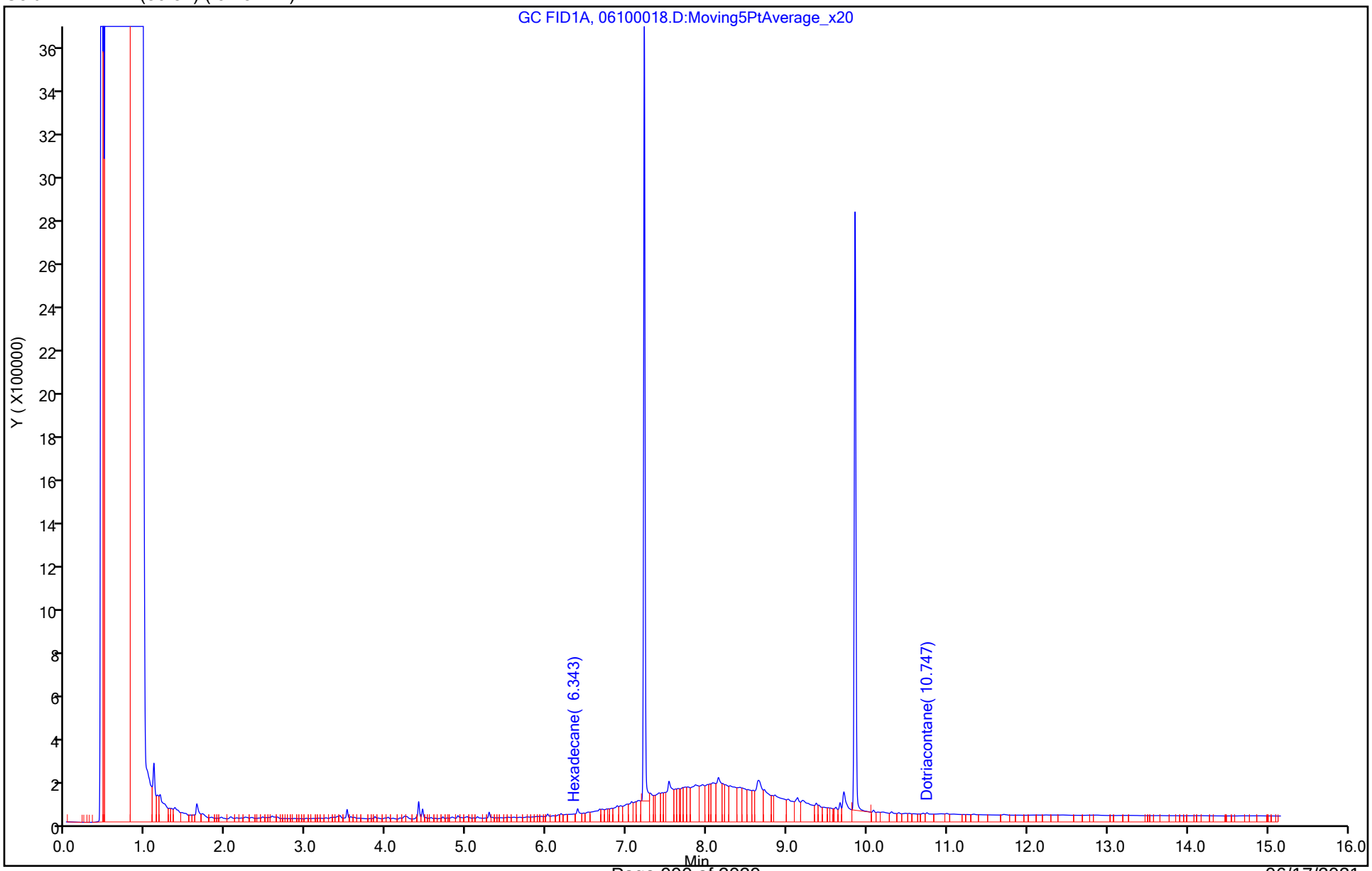
NC - Not Calibrated

Report Date: 10-Jun-2021 07:56:27 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100018.D				
Injection Date:	10-Jun-2021 03:59:26	Instrument ID:	SGC_U2a	Operator ID:	JSM
Lims ID:	280-149116-A-5-A	Lab Sample ID:	280-149116-5	Worklist Smp#:	18
Client ID:	SHGW03-21A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100018.D				
Lims ID:	280-149116-A-5-A				
Client ID:	SHGW03-21A				
Sample Type:	Client				
Inject. Date:	10-Jun-2021 03:59:26	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-5-A				
Misc. Info.:	280-0102076-018				
Operator ID:	JSM	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	10-Jun-2021 07:56:20	Calib Date:	09-Jun-2021 00:35:16		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20210608-102182.b\06080018.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1664				
First Level Reviewer: meadowsj		Date:	10-Jun-2021 07:53:30		

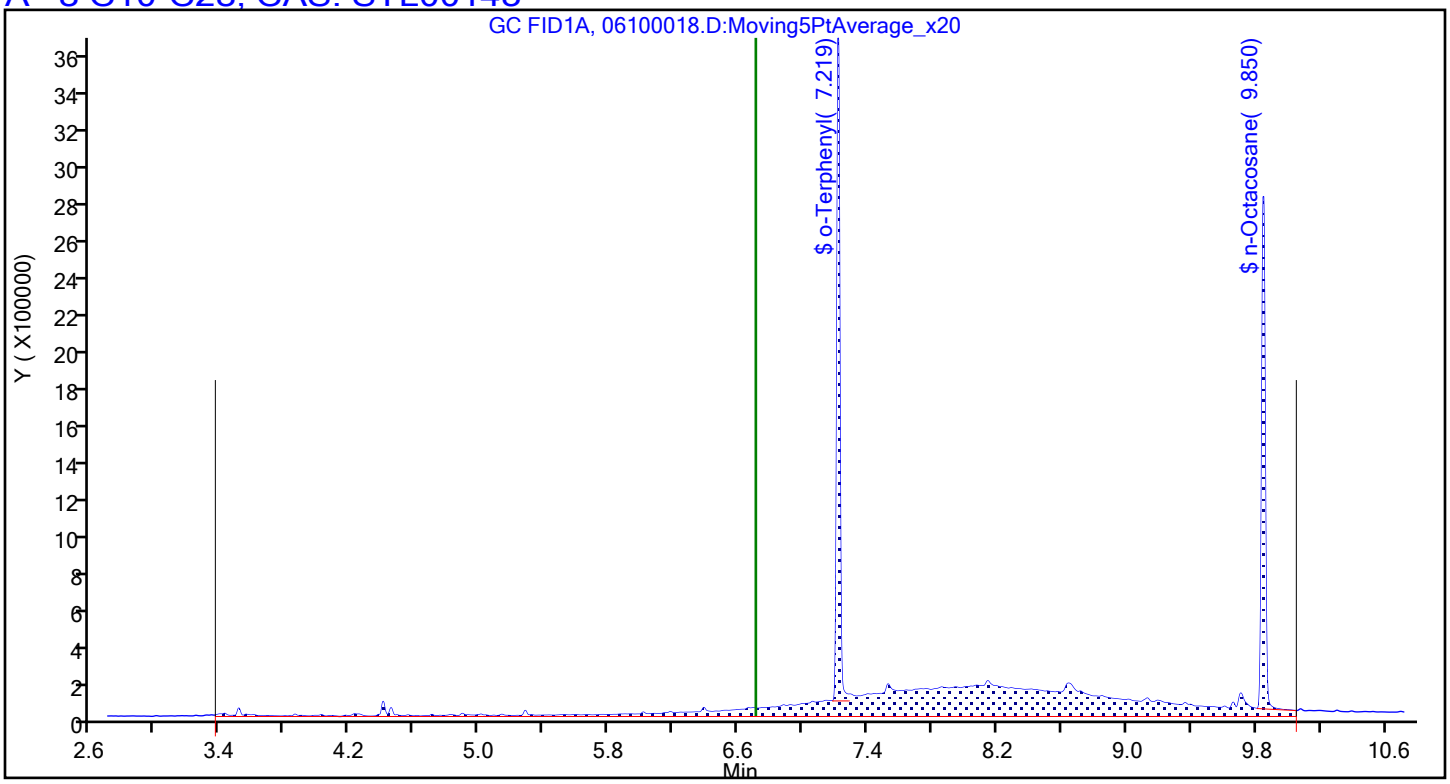
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	28.0	80.01
$ 14 n-Octacosane	35.0	32.2	92.02

Report Date: 10-Jun-2021 07:56:27 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100018.D				
Injection Date:	10-Jun-2021 03:59:26	Instrument ID:	SGC_U2a		
Lims ID:	280-149116-A-5-A	Lab Sample ID:	280-149116-5		
Client ID:	SHGW03-21A				
Operator ID:	JSM	ALS Bottle#:	18	Worklist Smp#:	18
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 RETENTION TIME CALIBRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: RTC 280-538605/3 Date Analyzed: 06/09/2021 21:34

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID: 06100003.D

Analyte	RT	RT WINDOW	
		FROM	TO
Diesel Range Organics [C10-C28]	6.65	3.36	9.93

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100003.D
Lims ID: RTC
Client ID:
Sample Type: RTC
Inject. Date: 09-Jun-2021 21:34:56 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: RTC
Misc. Info.: 280-0102076-003
Operator ID: JSM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jun-2021 07:56:02 Calib Date: 09-Jun-2021 00:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20210608-102182.b\06080018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1664

First Level Reviewer: meadowsj Date: 10-Jun-2021 07:34:03

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
2	n-Octane						
	1.469	1.469	0.000	21124839	NC	NC	
3	n-Decane						
	3.445	3.445	0.000	55956620	NC	NC	
5	Dodecane						
	4.627	4.627	0.000	63655993	NC	NC	
23	Hexadecane						
	6.350	6.350	0.000	71845739	NC	NC	
A 8	C10-C28						
	6.645	(3.364-9.927)		891471626	1250.0	7384.0	
11	icosane						
	7.725	7.725	0.000	72213893	NC	NC	
12	C25						
	9.134	9.134	0.000	39915053	NC	NC	
$ 14	n-Octacosane						
	9.867	9.867	0.000	37183712	250.0	295.3	
18	Dotriacontane						
	10.761	10.761	0.000	31687189	NC	NC	
16	n-Hexatriacontane						
	11.815	11.815	0.000	14980155	NC	NC	
17	C38						
	12.626	12.626	0.000	6417027	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

DRO_RTMKR_00062 Amount Added: 200.00 Units: uL

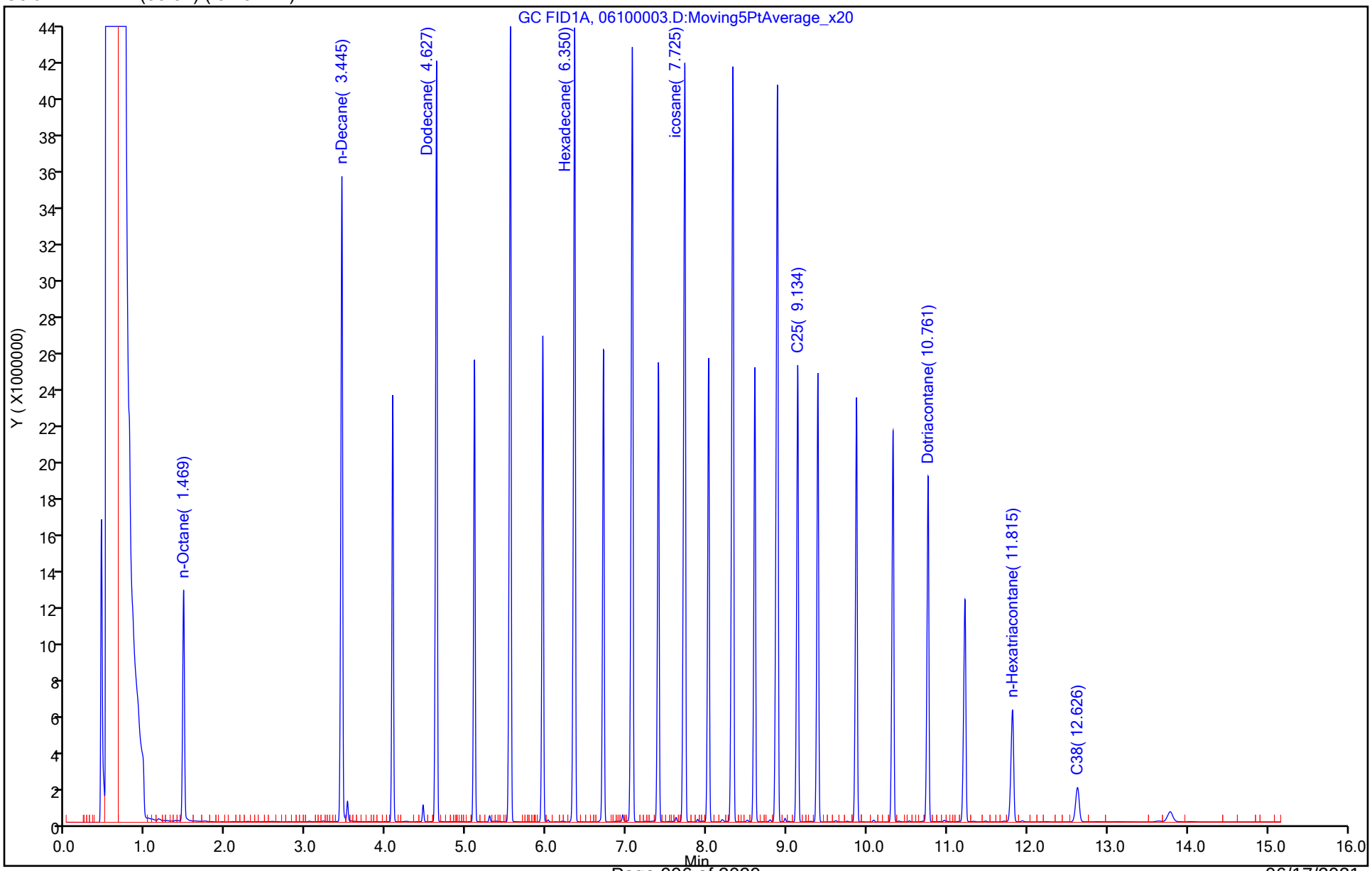
Report Date: 10-Jun-2021 07:56:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100003.D

Injection Date:	09-Jun-2021 21:34:56	Instrument ID:	SGC_U2a	Operator ID:	JSM
Lims ID:	RTC			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

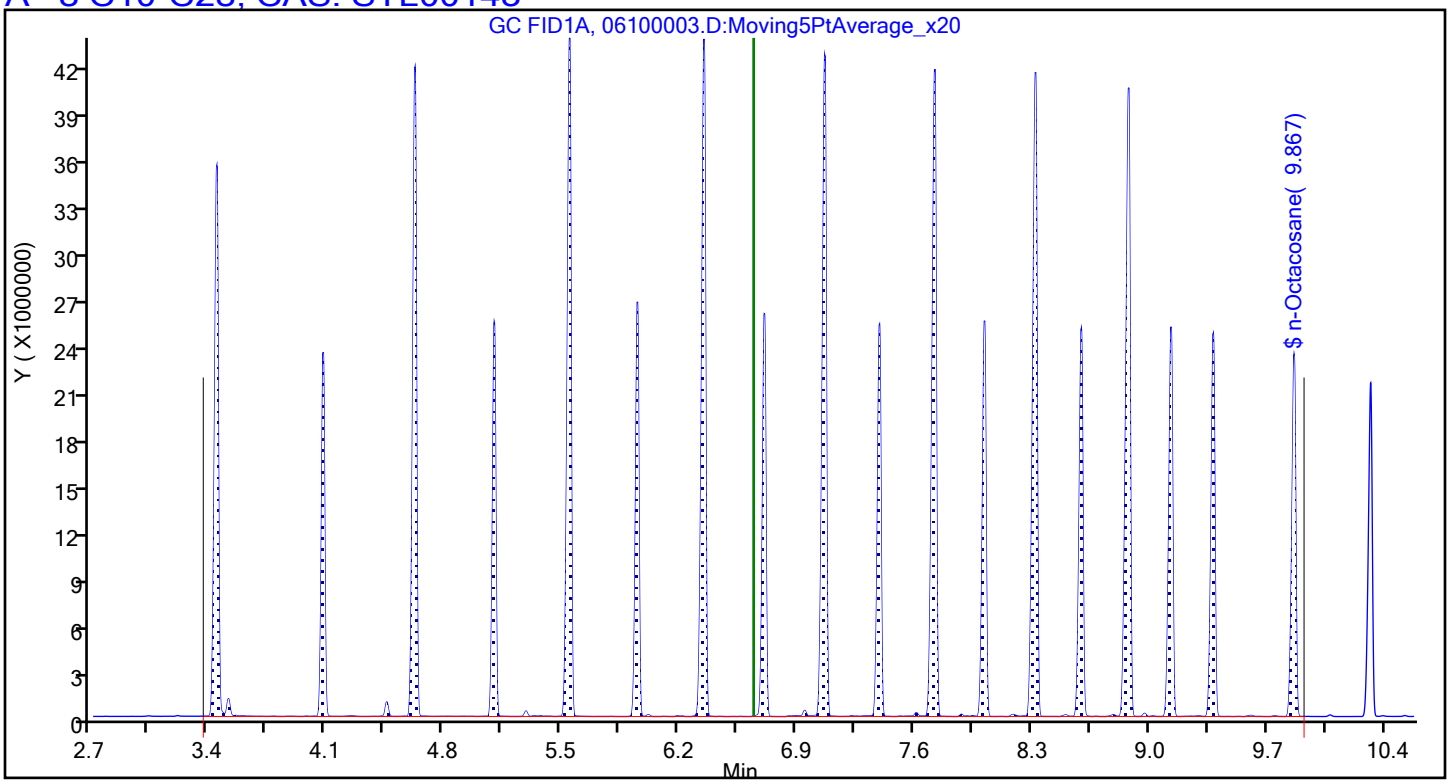


Report Date: 10-Jun-2021 07:56:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100003.D				
Injection Date:	09-Jun-2021 21:34:56	Instrument ID:	SGC_U2a		
Lims ID:	RTC				
Client ID:					
Operator ID:	JSM	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-537990/1-A

Matrix: Water Lab File ID: 06100015.D

Analysis Method: 8015C DRO Date Collected:

Extraction Method: 3510C Date Extracted: 05/31/2021 10:59

Sample wt/vol: 1000(mL) Date Analyzed: 06/10/2021 02:51

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.: 538605 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)	82		56-125
630-02-4	n-Octacosane	94		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100015.D
Lims ID: MB 280-537990/1-A
Client ID:
Sample Type: MB
Inject. Date: 10-Jun-2021 02:51:43 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-537990/1-A
Misc. Info.: 280-0102076-015
Operator ID: JSM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jun-2021 07:56:20 Calib Date: 09-Jun-2021 00:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20210608-102182.b\06080018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1664

First Level Reviewer: meadowsj Date: 10-Jun-2021 07:52:12

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A 4 C8-C12	3.051	(1.425-4.677)		1265985		6.60	
A 6 C10-C25	6.215	(3.364-9.067)		2079740		17.2	
23 Hexadecane	6.334	6.350	-0.016	19441		NC	
A 8 C10-C28	6.709	(3.364-10.053)		3341159		27.7	
A 22 C10-C32	7.089	(3.364-10.813)		4230658		35.0	
$ 9 o-Terphenyl	7.225	7.227	-0.002	4661423	35.0	28.6	
A 10 C10-C36	7.627	(3.364-11.890)		3230934		26.8	
$ 14 n-Octacosane	9.857	9.855	0.002	4181033	35.0	33.1	
A 13 C20-C38	10.214	(7.667-12.762)		5549479		45.6	
A 15 C25-C36	10.478	(9.067-11.890)		3788234		31.1	
18 Dotriacontane	10.752	10.761	-0.009	112933		NC	
$ 21 n-Decanoic Acid (Surr)	0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

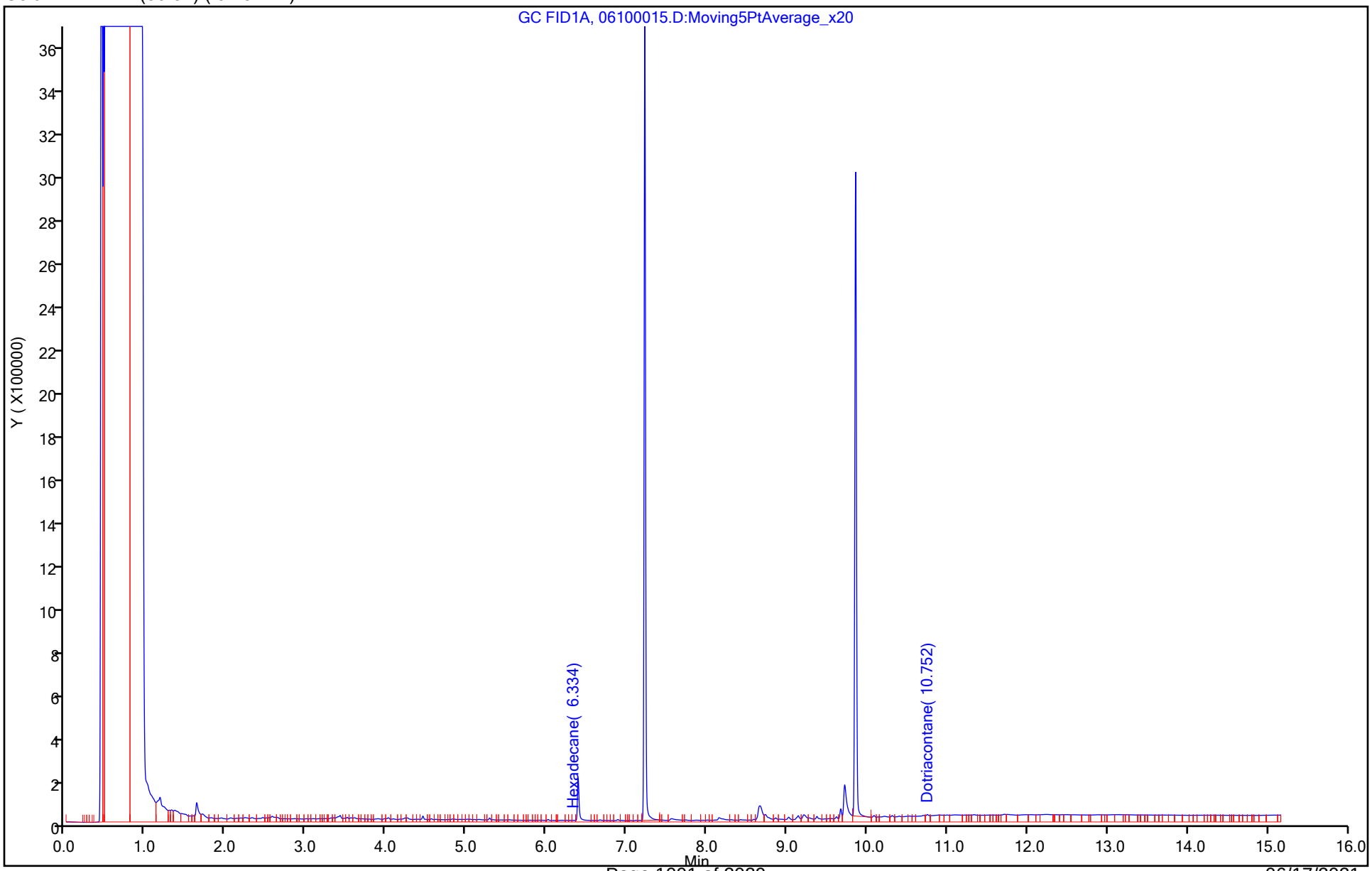
Report Date: 10-Jun-2021 07:56:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100015.D

Injection Date:	10-Jun-2021 02:51:43	Instrument ID:	SGC_U2a	Operator ID:	JSM
Lims ID:	MB 280-537990/1-A			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100015.D
Lims ID: MB 280-537990/1-A
Client ID:
Sample Type: MB
Inject. Date: 10-Jun-2021 02:51:43 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-537990/1-A
Misc. Info.: 280-0102076-015
Operator ID: JSM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jun-2021 07:56:20 Calib Date: 09-Jun-2021 00:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20210608-102182.b\06080018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1664

First Level Reviewer: meadowsj Date: 10-Jun-2021 07:52:12

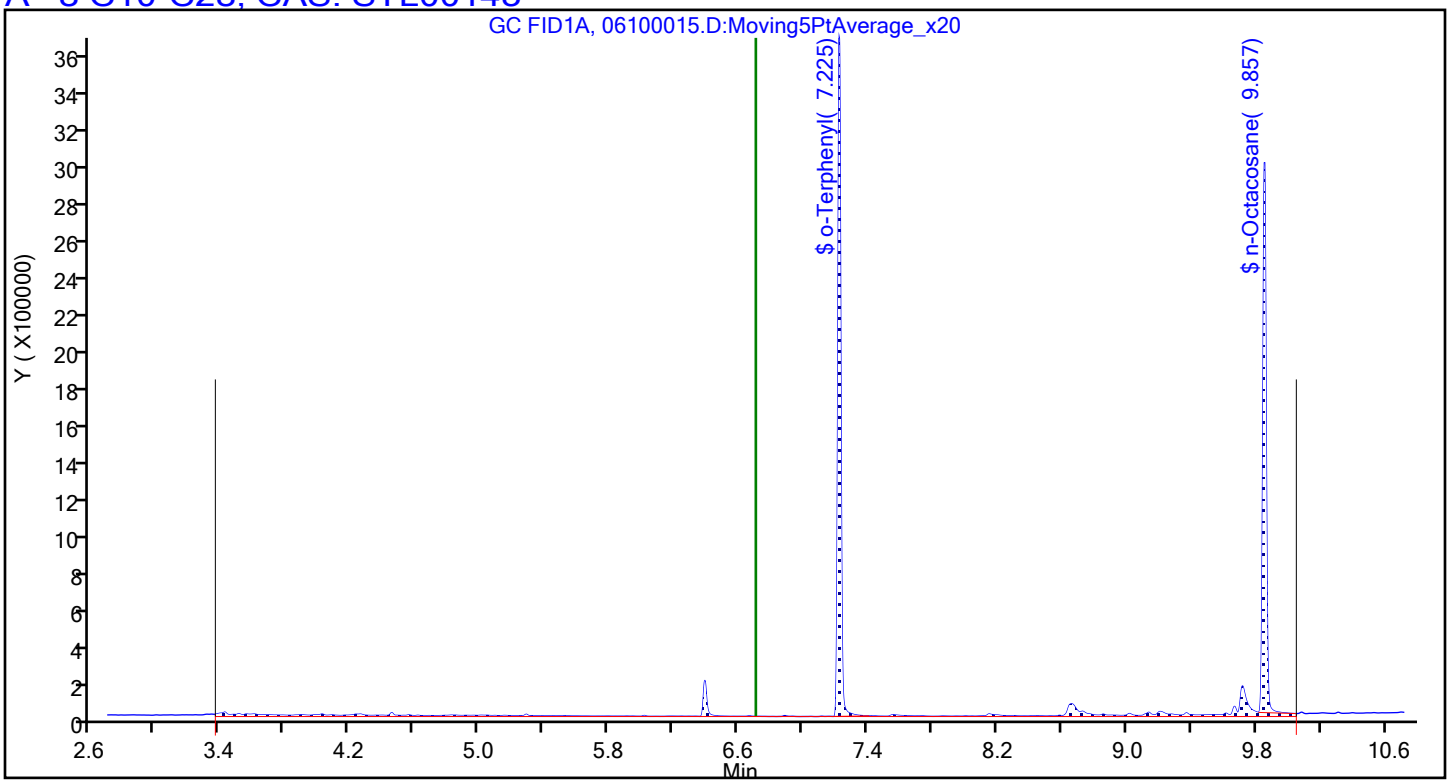
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	28.6	81.61
$ 14 n-Octacosane	35.0	33.1	94.45

Report Date: 10-Jun-2021 07:56:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100015.D				
Injection Date:	10-Jun-2021 02:51:43	Instrument ID:	SGC_U2a		
Lims ID:	MB 280-537990/1-A				
Client ID:					
Operator ID:	JSM	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 8 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-537990/2-A

Matrix: Water Lab File ID: 06100016.D

Analysis Method: 8015C DRO Date Collected:

Extraction Method: 3510C Date Extracted: 05/31/2021 10:59

Sample wt/vol: 1000(mL) Date Analyzed: 06/10/2021 03:14

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.: 538605 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	1740		250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	113		56-125
630-02-4	n-Octacosane	95		60-142

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100016.D
Lims ID: LCS 280-537990/2-A
Client ID:
Sample Type: LCS
Inject. Date: 10-Jun-2021 03:14:28 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-537990/2-A
Misc. Info.: 280-0102076-016
Operator ID: JSM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jun-2021 07:56:20 Calib Date: 09-Jun-2021 00:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20210608-102182.b\06080018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1664

First Level Reviewer: meadowsj Date: 10-Jun-2021 07:52:50

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	6 C10-C25						
	6.215	(3.364-9.067)		185461223	1962.0	1536.2	
A	8 C10-C28						
	6.709	(3.364-10.053)		209845521	1984.0	1738.1	
A	22 C10-C32						
	7.089	(3.364-10.813)		210332851	1992.0	1742.2	
$	9 o-Terphenyl						
	7.227	7.227	0.000	6390597	35.0	39.7	
A	10 C10-C36						
	7.627	(3.364-11.890)		213937683	2000.0	1772.0	
$	14 n-Octacosane						
	9.857	9.855	0.002	4196794	35.0	33.2	

QC Flag Legend
Processing Flags

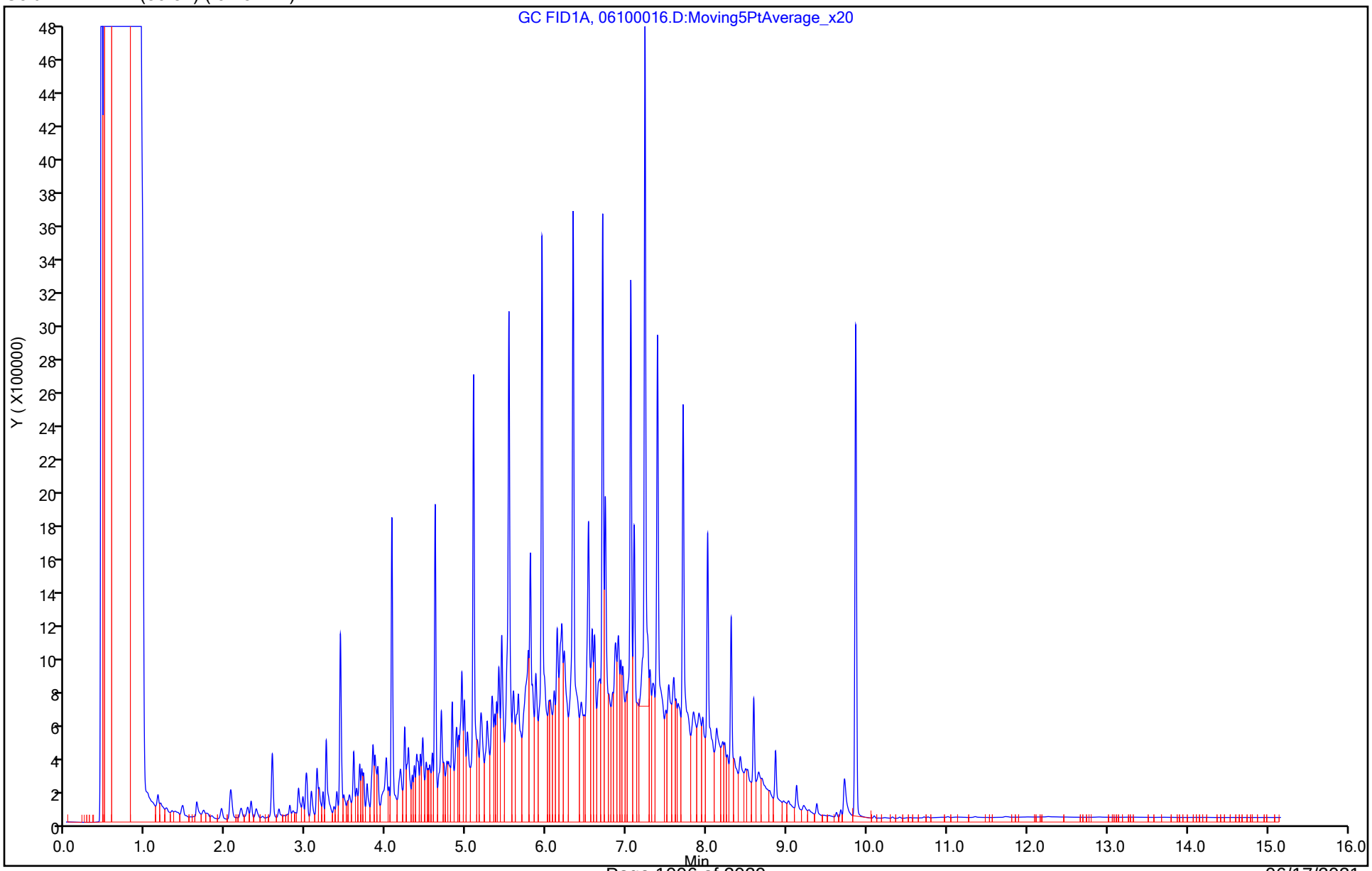
Report Date: 10-Jun-2021 07:56:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100016.D

Injection Date:	10-Jun-2021 03:14:28	Instrument ID:	SGC_U2a	Operator ID:	JSM
Lims ID:	LCS 280-537990/2-A			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100016.D
Lims ID: LCS 280-537990/2-A
Client ID:
Sample Type: LCS
Inject. Date: 10-Jun-2021 03:14:28 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-537990/2-A
Misc. Info.: 280-0102076-016
Operator ID: JSM Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 10-Jun-2021 07:56:20 Calib Date: 09-Jun-2021 00:35:16
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20210608-102182.b\06080018.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1664

First Level Reviewer: meadowsj Date: 10-Jun-2021 07:52:50

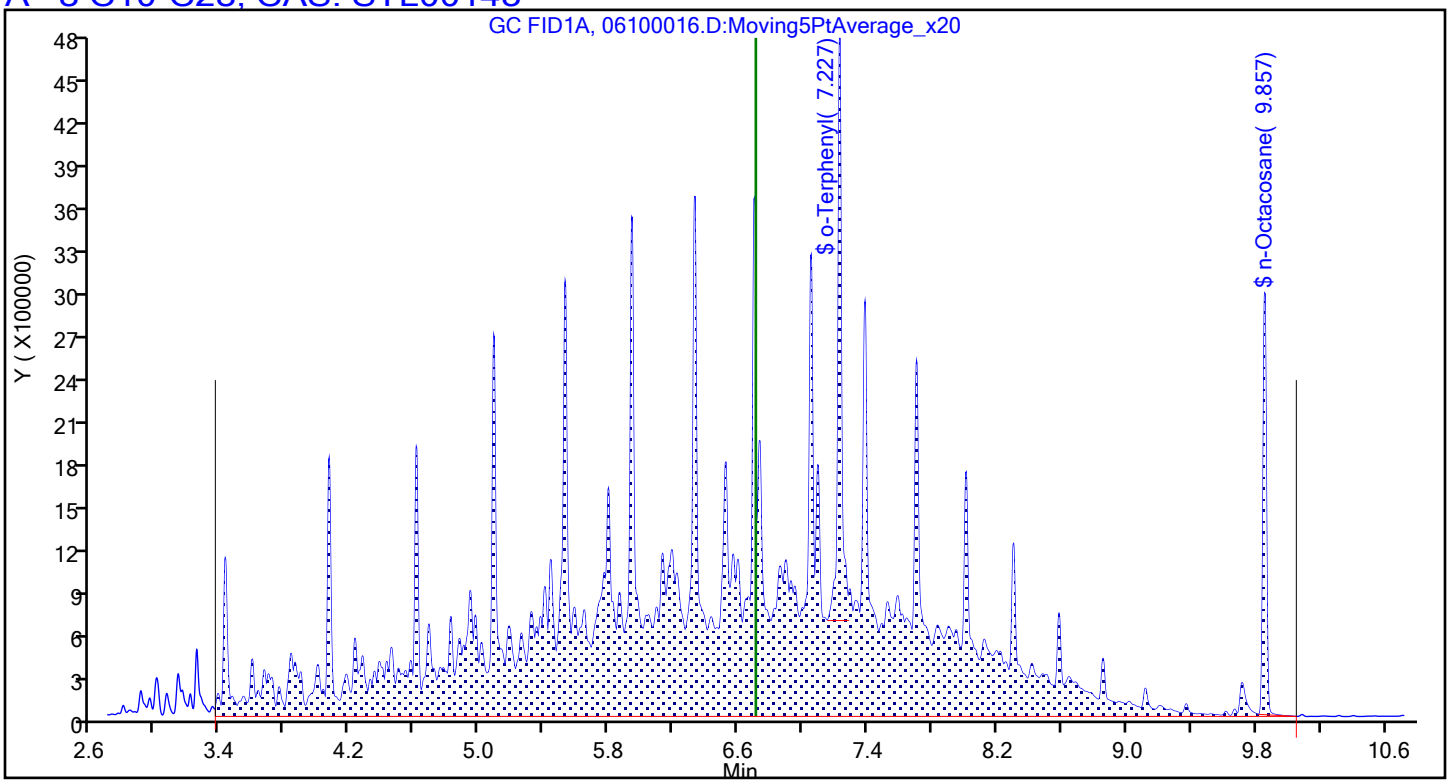
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	39.7	113.33
$ 14 n-Octacosane	35.0	33.2	94.81

Report Date: 10-Jun-2021 07:56:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20210604-102076.b\06100016.D				
Injection Date:	10-Jun-2021 03:14:28	Instrument ID:	SGC_U2a		
Lims ID:	LCS 280-537990/2-A				
Client ID:					
Operator ID:	JSM	ALS Bottle#:	16	Worklist Smp#:	16
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.: 280-149116-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 06/09/2021 21:34

Analysis Batch Number: 538605 End Date: 06/10/2021 07:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-538605/3		06/09/2021 21:34	1	06100003.D	RTX-1 (30.32) 0.25(mm)
CCVRT 280-538605/4		06/09/2021 21:57	1	06100004.D	RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/09/2021 22:20	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/09/2021 22:43	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/09/2021 23:05	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/09/2021 23:28	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/09/2021 23:50	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 00:36	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 00:58	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 01:21	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 01:44	1		RTX-1 (30.32) 0.25(mm)
CCV 280-538605/14		06/10/2021 02:29	1	06100014.D	RTX-1 (30.32) 0.25(mm)
MB 280-537990/1-A		06/10/2021 02:51	1	06100015.D	RTX-1 (30.32) 0.25(mm)
LCS 280-537990/2-A		06/10/2021 03:14	1	06100016.D	RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 03:36	1		RTX-1 (30.32) 0.25(mm)
280-149116-5	SHGW03-21A	06/10/2021 03:59	1	06100018.D	RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 04:21	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 04:44	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 05:06	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 05:29	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 05:51	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 06:13	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 06:36	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/10/2021 06:58	1		RTX-1 (30.32) 0.25(mm)
CCV 280-538605/27		06/10/2021 07:21	1	06100027.D	RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 537990 Batch Start Date: 05/31/21 10:59 Batch Analyst: Hayburn, Christopher D

Batch Method: 3510C Batch End Date: 06/01/21 13:46

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	8015 LCS 00088
MB 280-537990/1		3510C, 8015C DRO				1000 mL	1 mL	5 SU	
LCS 280-537990/2		3510C, 8015C DRO				1000 mL	1 mL	5 SU	1 mL
280-149116-A-5	SHGW03-21A	3510C, 8015C DRO	T	1559.6 g	517.9 g	1041.7 mL	1 mL	7 SU	

Lab Sample ID	Client Sample ID	Method Chain	Basis	8015Surrogate 00197					
MB 280-537990/1		3510C, 8015C DRO		1 mL					
LCS 280-537990/2		3510C, 8015C DRO		1 mL					
280-149116-A-5	SHGW03-21A	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.: 280-149116-1

SDG No.:

Batch Number: 537990 Batch Start Date: 05/31/21 10:59 Batch Analyst: Hayburn, Christopher D

Batch Method: 3510C Batch End Date: 06/01/21 13:46

Batch Notes	
Balance ID	24750399
Batch Comment	DV-OP-0006/0007
Analyst ID - Concentration	ARC, DLB (trainers) KG (trainee)
Concentration 1 Corrected Temperature	84 Degrees C
Concentration 2 Corrected Temperature	29 Degrees C
Equipment ID - Concentration 1	AR
Equipment ID - Concentration 2	42258
Analyst ID - Extraction	CDH, SS
Glass Wool ID	13320999
Method/Fraction	3510C/8015C_DRO
Na2SO4 ID	Na2SO4_00051
NaCl ID	210462
Pipette/Syringe/Dispenser ID	NEXIA
Prep Solvent ID	MeCl2_Cycl_00527
Prep Solvent Volume Used	180 mL
Analyst ID - Spike Analyst	CDH
Analyst ID - Spike Witness Analyst	Reviewer: SS
Sufficient Volume for Batch QC	Y
Thermometer ID - Concentration 2	Nevap North
Concentration 1 Uncorrected Temperature	84 Degrees C
Concentration 2 Uncorrected Temperature	29 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.: 280-149116-1

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 #
G0017-21A	280-149116-1	80 Q M	
G0017-21A	280-149116-1		111 M
G0045-21A	280-149116-2	87 M	
G0086-21A	280-149116-3	78 Q M	
G0086-21A	280-149116-3		84 M
PZ0018-21A	280-149116-4	113 M	
PZ0018-21A	280-149116-4		99
G0077-21A	280-149116-9	90 M	
G0077-21A	280-149116-9		99 M
G0078-21A	280-149116-10	99	
PZ017R-21A	280-149116-11	93 M	
PZ017R-21A	280-149116-11		106
PZ021-21A	280-149116-12	93 M	
PZ021-21A	280-149116-12		90 M
PZ007-21A	280-149116-13	92 M	
G0024-21A	280-149116-14	92 M	
G0024-21A	280-149116-14		91
PZ020-21A	280-149116-15	97	
PZ020-21A	280-149116-15		102
	MB 280-538030/1-A	97	
	MB 280-538125/1-A	97	
	LCS 280-538030/2-A	89	
	LCS 280-538030/3-A	89	
	LCS 280-538125/2-A	92	
	LCS 280-538125/3-A	96	
	LCSD 280-538125/4-A	96	
PZ007-21A MS	280-149116-13 MS	95 M	
PZ007-21A MS	280-149116-13 MS	103	
PZ007-21A MSD	280-149116-13 MSD	95 M	
PZ007-21A MSD	280-149116-13 MSD	105	

	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.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06040012.D

Lab ID: LCS 280-538030/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.87	93	73-125	
1,3-Dinitrobenzene	2.00	1.77	88	78-120	
2,4,6-Trinitrotoluene	2.00	1.84	92	71-123	
2,4-Dinitrotoluene	2.00	1.65	82	78-120	
2,6-Dinitrotoluene	2.00	1.67	84	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.62	81	79-120	
2-Nitrotoluene	2.00	1.17	59	70-127	Q
3-Nitrotoluene	2.00	1.13	57	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.56	78	76-125	
4-Nitrotoluene	2.00	1.26	63	71-127	Q
HMX	2.00	1.83	91	65-135	M
Nitrobenzene	2.00	1.38	69	65-134	
RDX	2.00	1.79	89	68-130	
Tetryl	2.00	1.81	90	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.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06040013.D

Lab ID: LCS 280-538030/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.26	97	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06030016.D

Lab ID: LCS 280-538125/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.83	91	73-125	
1,3-Dinitrobenzene	2.00	1.77	88	78-120	
2,4,6-Trinitrotoluene	2.00	1.79	90	71-123	
2,4-Dinitrotoluene	2.00	1.68	84	78-120	
2,6-Dinitrotoluene	2.00	1.69	85	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.64	82	79-120	
2-Nitrotoluene	2.00	1.31	66	70-127	Q
3-Nitrotoluene	2.00	1.38	69	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.56	78	76-125	
4-Nitrotoluene	2.00	1.39	69	71-127	Q
HMX	2.00	1.76	88	65-135	M
Nitrobenzene	2.00	1.52	76	65-134	
RDX	2.00	1.71	86	68-130	
Tetryl	2.00	1.72	86	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.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06030017.D

Lab ID: LCS 280-538125/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.37	101	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.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06030018.D

Lab ID: LCSD 280-538125/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.33	2.30	98	3	30	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06040038.D

Lab ID: 280-149116-13 MS Client ID: PZ007-21A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.01	0.20 U	1.90	95	73-125	M
1,3-Dinitrobenzene	2.01	0.10 U	1.92	95	78-120	
2,4,6-Trinitrotoluene	2.01	0.10 U	1.90	95	71-123	
2,4-Dinitrotoluene	2.01	0.081 U	1.75	87	78-120	
2,6-Dinitrotoluene	2.01	0.081 U	1.82	90	77-127	
2-Amino-4,6-dinitrotoluene	2.01	0.10 U	1.69	84	79-120	
2-Nitrotoluene	2.01	0.20 U	1.40	70	70-127	
3-Nitrotoluene	2.01	0.40 U	1.36	68	73-125	J1
4-Amino-2,6-dinitrotoluene	2.01	0.12 U	1.65	82	76-125	
4-Nitrotoluene	2.01	0.40 U	1.45	72	71-127	M
HMX	2.01	0.20 U	1.84	91	65-135	M
Nitrobenzene	2.01	0.20 U	1.65	82	65-134	
RDX	2.01	0.20 U	1.75	87	68-130	M
Tetryl	2.01	0.10 U	1.87	93	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06040040.D

Lab ID: 280-149116-13 MS Client ID: PZ007-21A MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.28	0.40 U	2.15	94	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06040039.D

Lab ID: 280-149116-13 MSD Client ID: PZ007-21A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.89	94	1	30	73-125	M
1,3-Dinitrobenzene	2.00	1.88	94	2	30	78-120	
2,4,6-Trinitrotoluene	2.00	1.92	96	1	30	71-123	
2,4-Dinitrotoluene	2.00	1.72	86	2	30	78-120	
2,6-Dinitrotoluene	2.00	1.79	90	1	30	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.68	84	1	30	79-120	
2-Nitrotoluene	2.00	1.30	65	7	30	70-127	J1
3-Nitrotoluene	2.00	1.30	65	5	30	73-125	J1
4-Amino-2,6-dinitrotoluene	2.00	1.65	83	0	30	76-125	
4-Nitrotoluene	2.00	1.36	68	7	30	71-127	J1
HMX	2.00	1.88	94	2	30	65-135	M
Nitrobenzene	2.00	1.53	76	7	30	65-134	
RDX	2.00	1.78	89	1	30	68-130	M
Tetryl	2.00	1.89	94	1	30	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06040041.D

Lab ID: 280-149116-13 MSD Client ID: PZ007-21A MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.37	2.17	92	1	30	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: MB 280-538030/1-A

Matrix: Water Date Extracted: 05/31/2021 14:02

Lab File ID:(1) 06040011.D Lab File ID:(2)

Date Analyzed:(1) 06/04/2021 18:36 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_X5

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 280-538030/2-A	06/04/2021 18:59	
	LCS 280-538030/3-A	06/04/2021 19:22	
G0017-21A	280-149116-1	06/05/2021 00:44	06/05/2021 18:11
G0045-21A	280-149116-2	06/05/2021 01:07	
G0086-21A	280-149116-3	06/05/2021 01:30	06/05/2021 18:46
PZ0018-21A	280-149116-4	06/05/2021 01:53	06/05/2021 19:21
G0078-21A	280-149116-10	06/05/2021 02:16	
PZ017R-21A	280-149116-11	06/05/2021 02:39	06/05/2021 21:06
PZ021-21A	280-149116-12	06/05/2021 03:02	06/05/2021 21:41
PZ007-21A	280-149116-13	06/05/2021 04:34	
PZ007-21A MS	280-149116-13 MS	06/05/2021 04:57	
PZ007-21A MSD	280-149116-13 MSD	06/05/2021 05:20	
PZ007-21A MS	280-149116-13 MS	06/05/2021 05:43	
PZ007-21A MSD	280-149116-13 MSD	06/05/2021 06:06	
G0024-21A	280-149116-14	06/05/2021 06:29	06/05/2021 22:16
PZ020-21A	280-149116-15	06/05/2021 06:52	06/05/2021 22:51

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: MB 280-538125/1-A

Matrix: Water Date Extracted: 06/01/2021 17:35

Lab File ID:(1) 06030015.D Lab File ID:(2)

Date Analyzed:(1) 06/03/2021 17:17 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_X5

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 280-538125/2-A	06/03/2021 17:40	
	LCS 280-538125/3-A	06/03/2021 18:03	
	LCSD 280-538125/4-A	06/03/2021 18:26	
G0077-21A	280-149116-9	06/04/2021 01:20	06/04/2021 20:41

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0017-21A Lab Sample ID: 280-149116-1

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 06/05/2021 00:44 Date Analyzed (2): 06/05/2021 18:11

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2-Amino-4,6-dinitrotoluene	1		11.32	11.24	11.44	0.066		154.4
	2		18.36	18.24	18.54	0.51		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0086-21A Lab Sample ID: 280-149116-3

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 06/05/2021 01:30 Date Analyzed (2): 06/05/2021 18:46

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.60	6.46	6.76	0.44		15.6
	2		6.67	6.55	6.85	0.38		
RDX	1		7.57	7.43	7.73	0.84		45.0
	2		8.83	8.74	9.04	0.53		
1,3,5-Trinitrobenzene	1		8.63	8.48	8.78	14		4.8
	2		18.87	18.76	19.06	14		
2,4,6-Trinitrotoluene	1		10.89	10.78	10.98	4.9		1.3
	2		25.19	25.08	25.38	4.8		
4-Amino-2,6-dinitrotoluene	1		11.09	10.98	11.18	1.1		13.9
	2		17.44	17.34	17.64	1.3		
2-Amino-4,6-dinitrotoluene	1		11.35	11.24	11.44	1.4		29.5
	2		18.34	18.24	18.54	1.9		
2,4-Dinitrotoluene	1		11.69	11.58	11.78	0.053		11.0
	2		20.57	20.48	20.78	0.059		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ0018-21A Lab Sample ID: 280-149116-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 06/05/2021 01:53 Date Analyzed (2): 06/05/2021 19:21

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		10.89	10.78	10.98	4.6		3.8
	2		25.24	25.08	25.38	4.8		
4-Amino-2,6-dinitrotoluene	1		11.10	10.98	11.18	4.9		65.0
	2		17.42	17.34	17.64	9.7		
2-Amino-4,6-dinitrotoluene	1		11.36	11.24	11.44	2.5		39.3
	2		18.36	18.24	18.54	3.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0077-21A Lab Sample ID: 280-149116-9

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 06/04/2021 01:20 Date Analyzed (2): 06/04/2021 20:41

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.60	6.45	6.75	0.57		6.2
	2		6.67	6.52	6.82	0.53		
RDX	1		7.57	7.43	7.73	1.2		65.2
	2		8.85	8.70	9.00	0.63		
1,3,5-Trinitrobenzene	1		8.63	8.48	8.78	4.3		4.1
	2		18.86	18.70	19.00	4.5		
2,4,6-Trinitrotoluene	1		10.91	10.79	10.99	4.3		4.6
	2		25.19	25.02	25.32	4.1		
4-Amino-2,6-dinitrotoluene	1		11.12	11.00	11.20	2.5		5.2
	2		17.43	17.27	17.57	2.6		
2-Amino-4,6-dinitrotoluene	1		11.38	11.26	11.46	2.5		22.4
	2		18.33	18.16	18.46	3.2		
2,4-Dinitrotoluene	1		11.71	11.60	11.80	0.061		3.7
	2		20.57	20.41	20.71	0.059		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ017R-21A Lab Sample ID: 280-149116-11

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 06/05/2021 02:39 Date Analyzed (2): 06/05/2021 21:06

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.60	6.46	6.76	1.6		91.6
	2		6.67	6.55	6.85	4.2		
RDX	1		7.58	7.43	7.73	2.1		5.3
	2		8.88	8.74	9.04	2.0		
1,3,5-Trinitrobenzene	1		8.63	8.48	8.78	1.1		20.3
	2		18.89	18.76	19.06	1.4		
2,4,6-Trinitrotoluene	1		10.88	10.78	10.98	10		4.0
	2		25.24	25.08	25.38	10		
4-Amino-2,6-dinitrotoluene	1		11.09	10.98	11.18	2.7		15.8
	2		17.47	17.34	17.64	3.2		
2-Amino-4,6-dinitrotoluene	1		11.35	11.24	11.44	3.0		15.0
	2		18.37	18.24	18.54	3.5		
2,6-Dinitrotoluene	1		11.51	11.40	11.60	0.36		81.4
	2		20.16	20.02	20.32	0.86		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ021-21A Lab Sample ID: 280-149116-12

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 06/05/2021 03:02 Date Analyzed (2): 06/05/2021 21:41

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.60	6.46	6.76	1.6		80.3
	2		6.69	6.55	6.85	3.8		
RDX	1		7.57	7.43	7.73	2.3		1.6
	2		8.87	8.74	9.04	2.3		
1,3,5-Trinitrobenzene	1		8.63	8.48	8.78	1.2		17.0
	2		18.88	18.76	19.06	1.4		
2,4,6-Trinitrotoluene	1		10.89	10.78	10.98	10		5.2
	2		25.21	25.08	25.38	11		
4-Amino-2,6-dinitrotoluene	1		11.09	10.98	11.18	4.0		9.7
	2		17.46	17.34	17.64	4.4		
2-Amino-4,6-dinitrotoluene	1		11.35	11.24	11.44	3.3		16.9
	2		18.35	18.24	18.54	3.9		
2,6-Dinitrotoluene	1		11.51	11.40	11.60	0.32		88.1
	2		20.16	20.02	20.32	0.82		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0024-21A Lab Sample ID: 280-149116-14

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 06/05/2021 06:29 Date Analyzed (2): 06/05/2021 22:16

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		10.88	10.78	10.98	0.44		9.6
	2		25.22	25.08	25.38	0.40		
4-Amino-2,6-dinitrotoluene	1		11.09	10.98	11.18	1.1		6.4
	2		17.46	17.34	17.64	1.2		
2-Amino-4,6-dinitrotoluene	1		11.35	11.24	11.44	1.2		15.1
	2		18.36	18.24	18.54	1.4		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ020-21A Lab Sample ID: 280-149116-15

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 06/05/2021 06:52 Date Analyzed (2): 06/05/2021 22:51

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.60	6.46	6.76	0.73		24.9
	2		6.70	6.55	6.85	0.57		
RDX	1		7.57	7.43	7.73	0.68		50.2
	2		8.87	8.74	9.04	0.40		
1,3,5-Trinitrobenzene	1		8.63	8.48	8.78	2.2		16.0
	2		18.89	18.76	19.06	2.5		
2,4,6-Trinitrotoluene	1		10.88	10.78	10.98	3.8		3.3
	2		25.22	25.08	25.38	4.0		
4-Amino-2,6-dinitrotoluene	1		11.09	10.98	11.18	2.7		3.5
	2		17.46	17.34	17.64	2.8		
2-Amino-4,6-dinitrotoluene	1		11.35	11.24	11.44	2.5		14.6
	2		18.36	18.24	18.54	2.9		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0017-21A Lab Sample ID: 280-149116-1

Matrix: Water Lab File ID: 06040027.D

Analysis Method: 8330A Date Collected: 05/25/2021 15:20

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 474(mL) Date Analyzed: 06/05/2021 00:44

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.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U Q M	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U Q	0.12	0.11	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U Q	0.11	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U Q M	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.066	J Q J1	0.12	0.11	0.053
88-72-2	2-Nitrotoluene	0.21	U Q M	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U Q M	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U Q	0.43	0.42	0.11
2691-41-0	HMX	0.21	U Q M	0.22	0.21	0.092
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U Q M	0.22	0.21	0.096
121-82-4	RDX	0.21	U Q	0.22	0.21	0.054
479-45-8	Tetryl	0.11	U Q M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	80	Q M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040027.D
Lims ID: 280-149116-B-1-A
Client ID: G0017-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 00:44:08 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-1-A
Misc. Info.: 280-0102084-027
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:17 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:11:17

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.609			ND	U
	6 MNX	1		7.210			ND	U
	7 RDX	1		7.576			ND	
$	9 1,2-Dinitrobenzene	1	8.497	8.496	0.001	20597	0.1606	M
	10 1,3,5-Trinitrobenzene	1		8.629			ND	
	11 1,3-Dinitrobenzene	1		9.249			ND	U
	12 Nitrobenzene	1		9.636			ND	U
	14 Tetryl	1		9.956			ND	U
	16 2,4,6-Trinitrotoluene	1		10.876			ND	7
	17 4-Amino-2,6-dinitrotoluene	1		11.076			ND	U
	18 2-Amino-4,6-dinitrotoluene	1	11.324	11.336	-0.012	1298	0.006273	
	19 2,6-Dinitrotoluene	1		11.502			ND	U
	20 2,4-Dinitrotoluene	1		11.676			ND	
	21 o-Nitrotoluene	1		12.542			ND	U
	22 p-Nitrotoluene	1		12.976			ND	
	23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

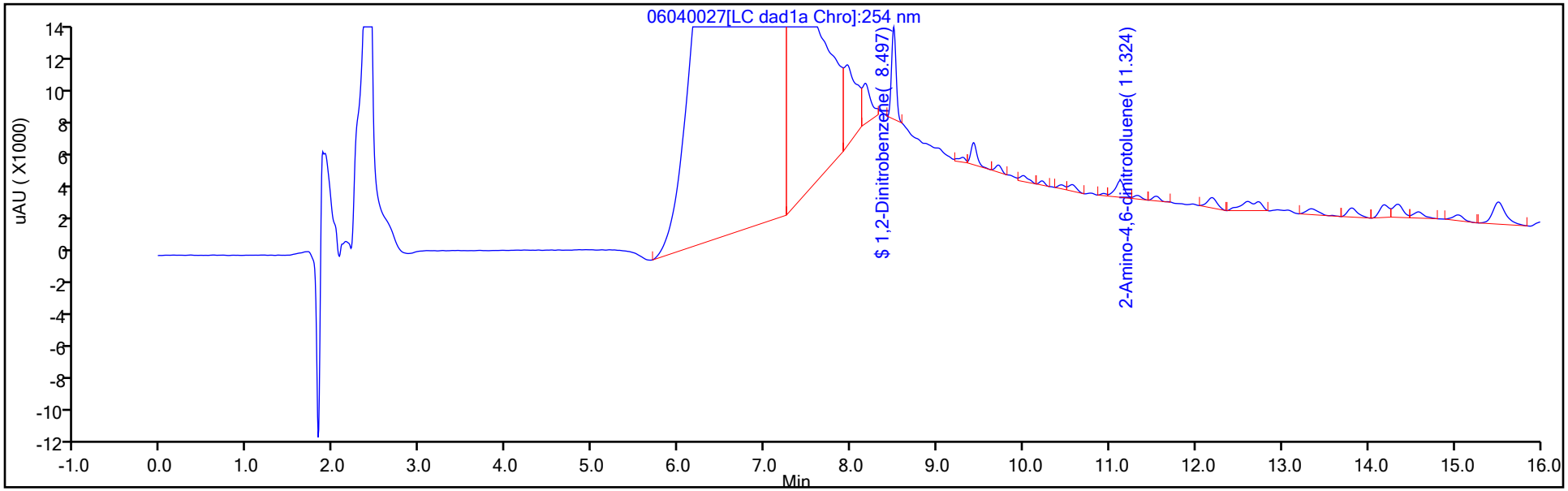
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:19 Chrom Revision: 2.3 13-May-2021 07:57:40

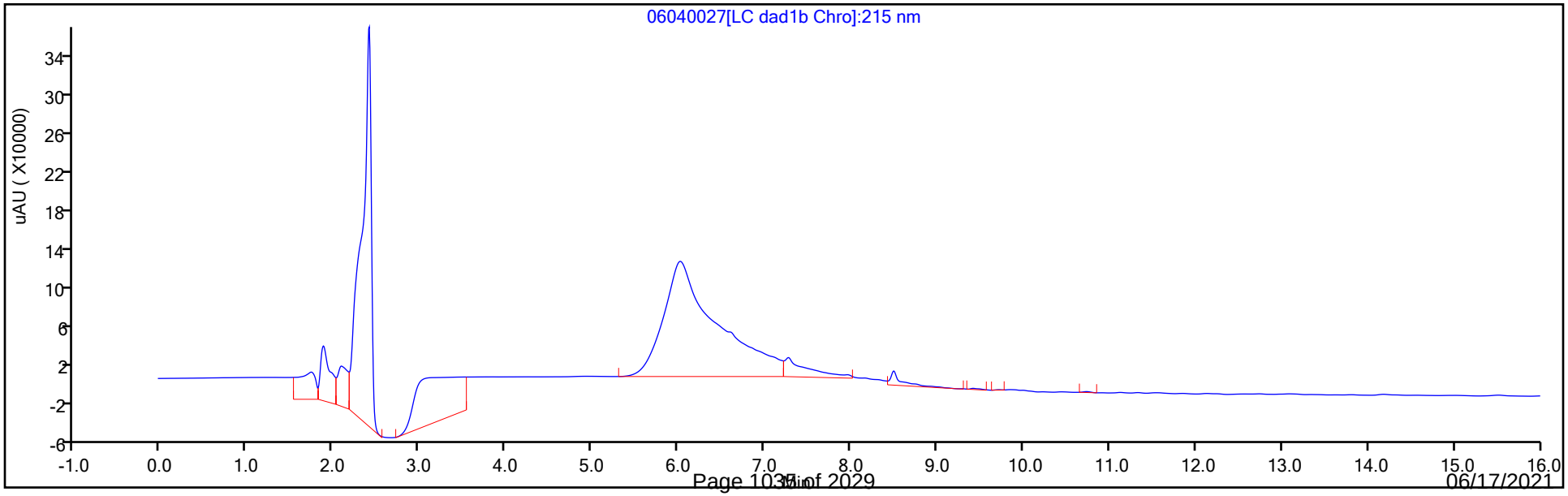
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d				
Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1	Worklist Smp#:	27
Client ID:	G0017-21A				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040027.D				
Lims ID:	280-149116-B-1-A				
Client ID:	G0017-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 00:44:08	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-1-A				
Misc. Info.:	280-0102084-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:17	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:11:17		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1606	80.32

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

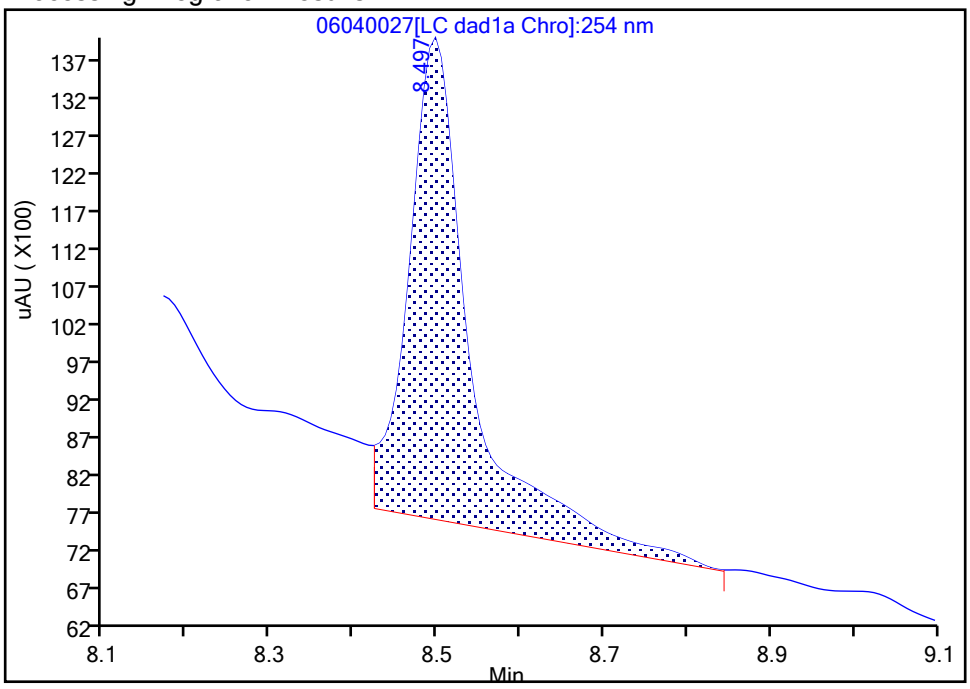
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d				
Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

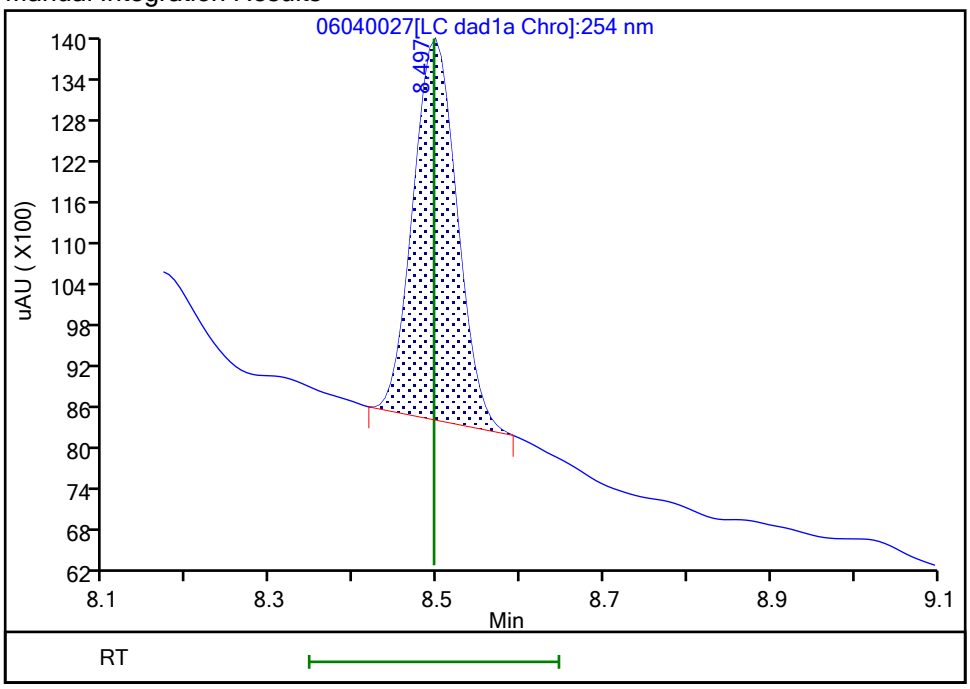
Processing Integration Results

RT: 8.50
Area: 32989
Amount: 0.257290
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 20597
Amount: 0.160641
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:11:13
Audit Action: Manually Integrated Audit Reason: Baseline

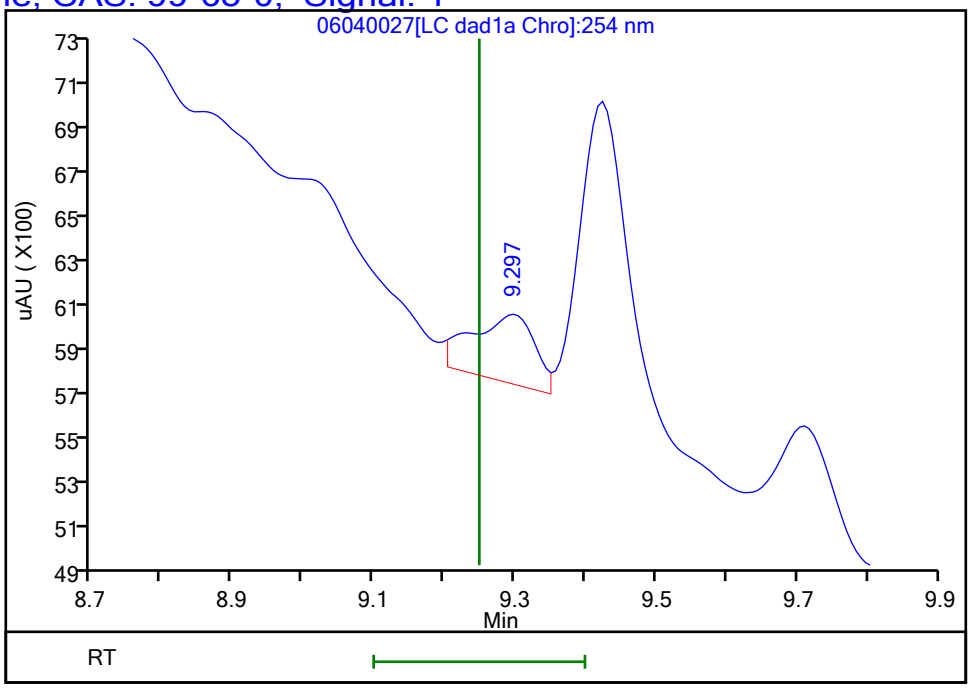
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d				
Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	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		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.30
Response: 1749
Amount: 0.005902



Reviewer: zhangji, 05-Jun-2021 10:11:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

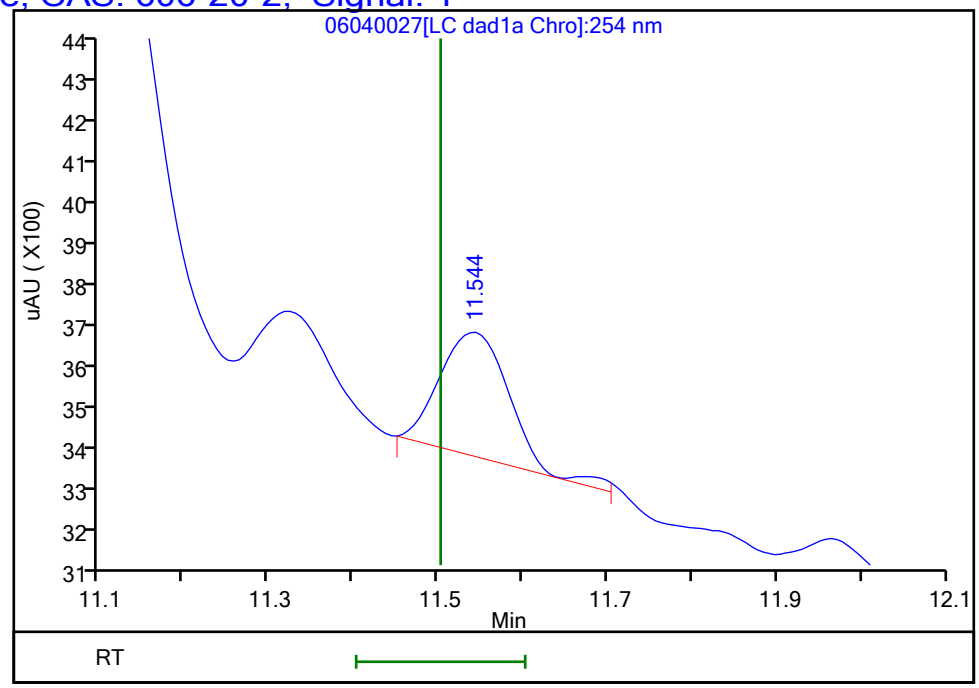
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d

Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	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		

19 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.54
Response: 1634
Amount: 0.011420



Reviewer: zhangji, 05-Jun-2021 10:11:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

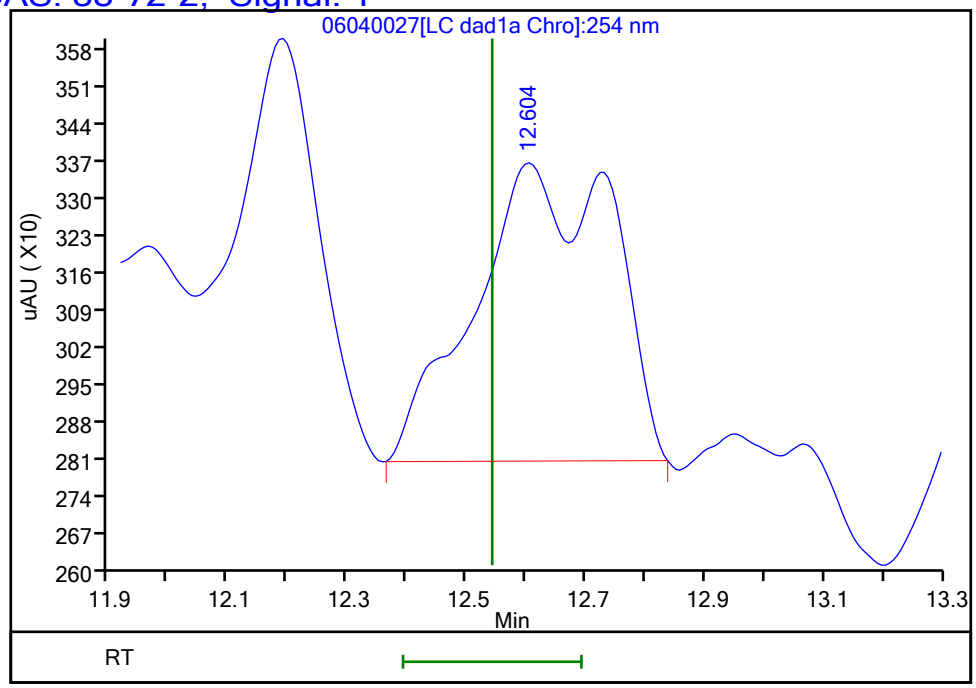
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d

Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	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		

21 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.60
Response: 9029
Amount: 0.070324



Reviewer: zhangji, 05-Jun-2021 10:11:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

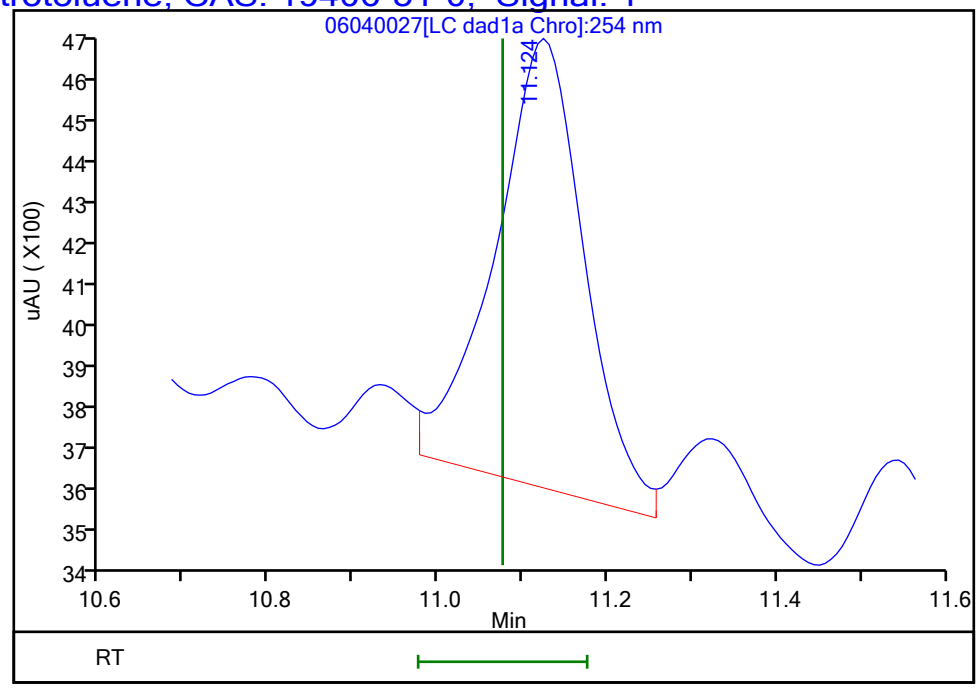
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d

Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	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		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 11.12
Response: 7514
Amount: 0.049186



Reviewer: zhangji, 05-Jun-2021 10:11:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

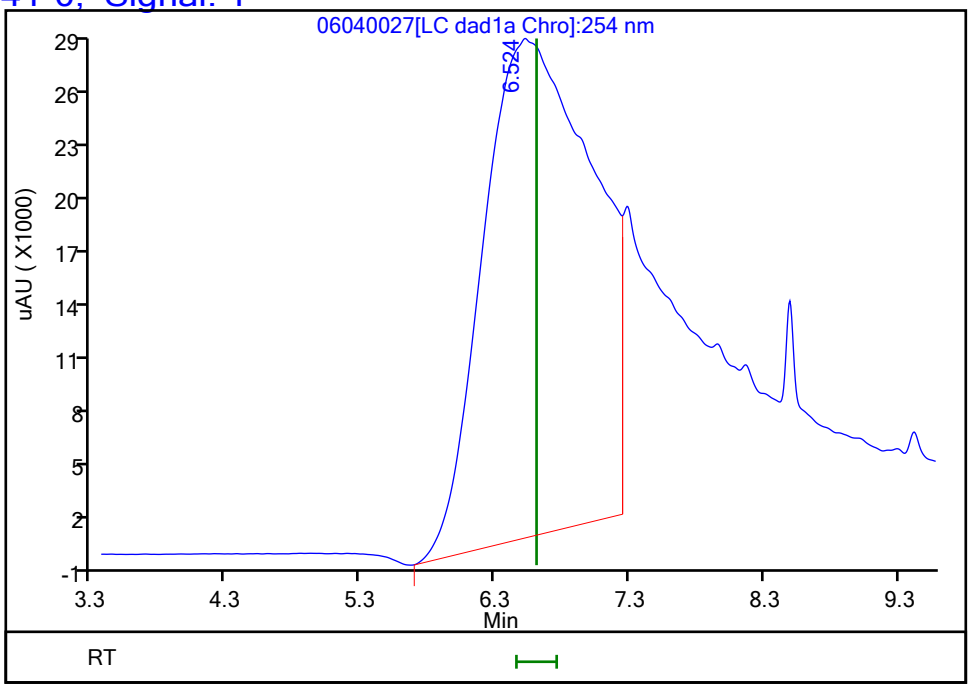
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d

Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	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		

3 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.52
Response: 1528504
Amount: 18.105638



Reviewer: zhangji, 05-Jun-2021 10:11:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

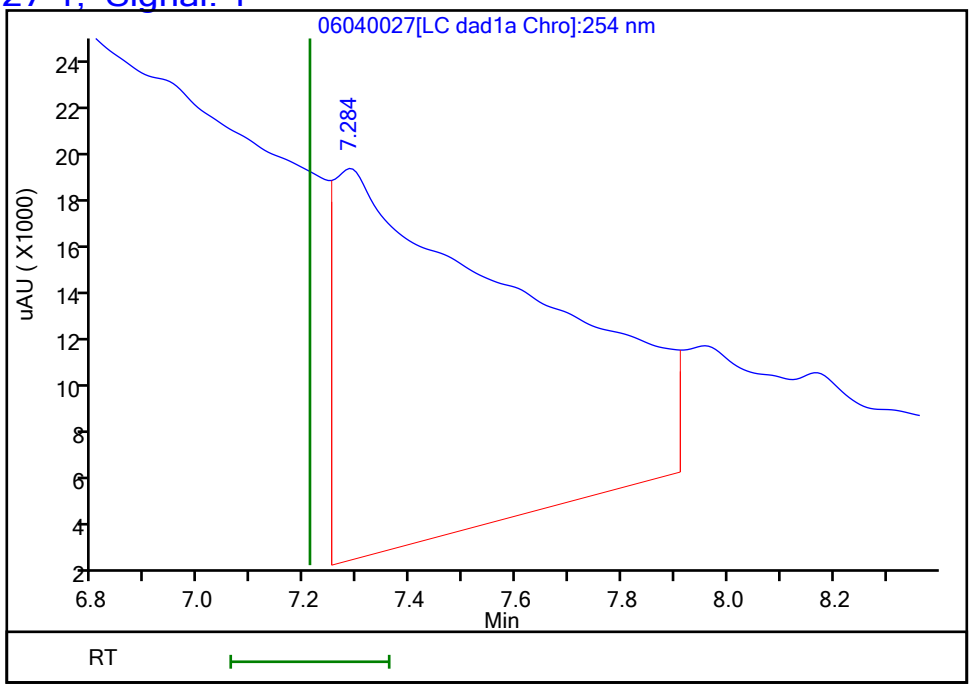
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d				
Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	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		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.28
Response: 396815
Amount: 3.044453



Reviewer: zhangji, 05-Jun-2021 10:11:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

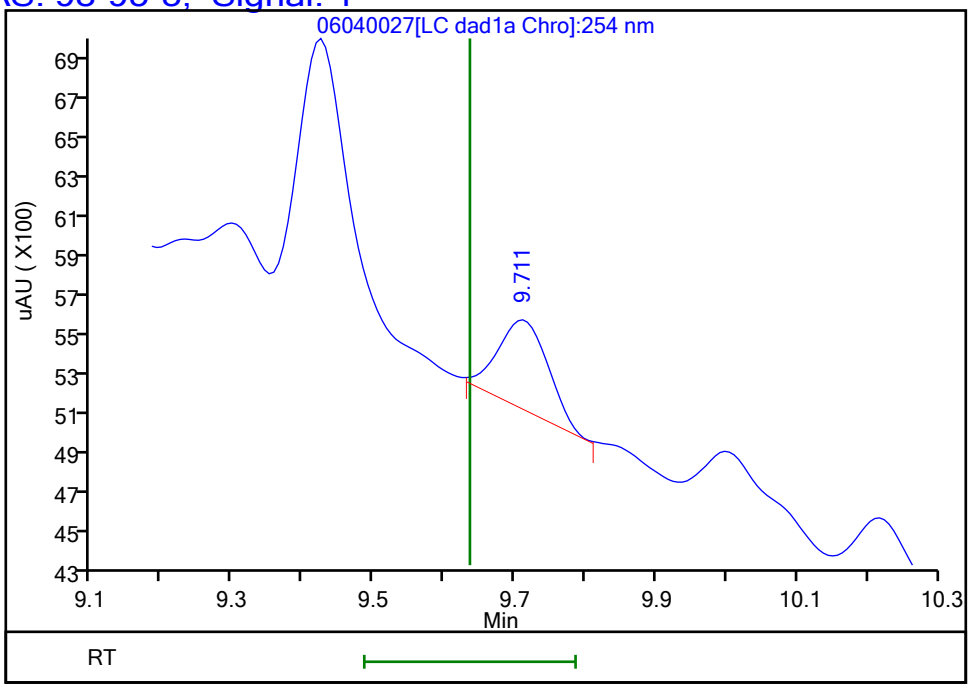
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d				
Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	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		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.71
Response: 2152
Amount: 0.011020



Reviewer: zhangji, 05-Jun-2021 10:11:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

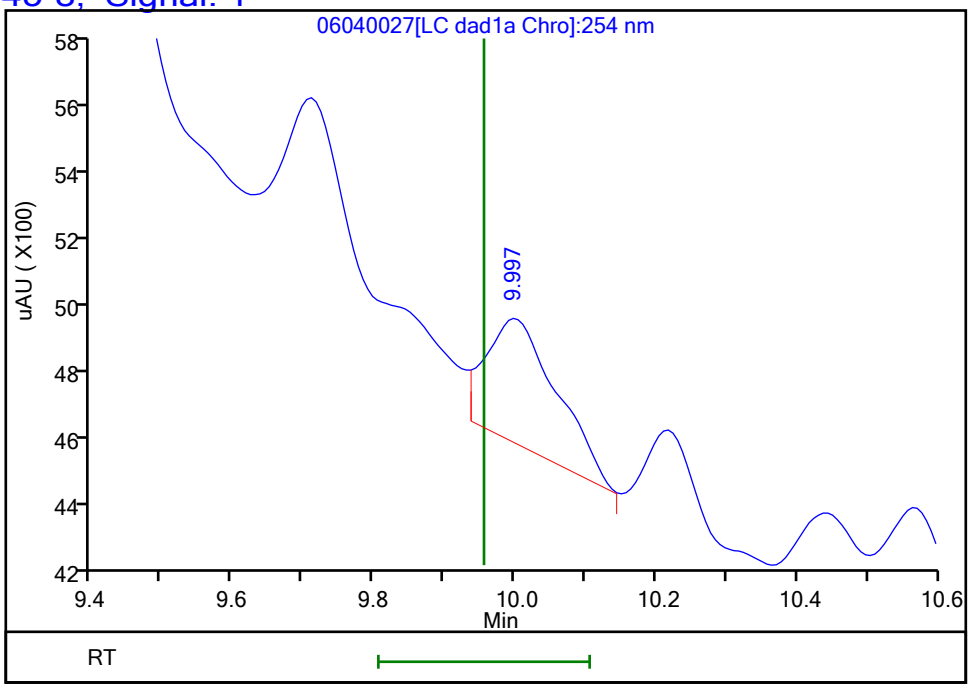
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040027.d

Injection Date:	05-Jun-2021 00:44:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.00
Response: 2526
Amount: 0.014650



Reviewer: zhangji, 05-Jun-2021 10:11:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0017-21A Lab Sample ID: 280-149116-1

Matrix: Water Lab File ID: 06050017.D

Analysis Method: 8330A Date Collected: 05/25/2021 15:20

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 474(mL) Date Analyzed: 06/05/2021 18:11

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.: 538717 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.51*	*B M J1*	*0.12*	0.11	*0.053*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	111	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D
Lims ID: 280-149116-B-1-A
Client ID: G0017-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 18:11:22 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-1-A
Misc. Info.: 280-0102103-017
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:30 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 16:15:01

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		6.699			ND	U
	7 MNX	1		7.429			ND	
	8 RDX	1		8.893			ND	U
	9 Nitrobenzene	1		11.953			ND	MU
$	10 1,2-Dinitrobenzene	1	13.025	13.066	-0.041	59107	0.2225	M
	12 1,3-Dinitrobenzene	1	15.431	15.493	-0.062	12949	0.0206	M
	14 o-Nitrotoluene	1	16.738	16.739	-0.001	7511	0.0302	
	15 p-Nitrotoluene	1		17.033			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.411	17.493	-0.082	22215	0.0749	
	17 m-Nitrotoluene	1	18.031	18.013	0.018	22803	0.0819	M
	18 2-Amino-4,6-dinitrotoluene	1	18.358	18.393	-0.035	20242	0.0487	M
	19 1,3,5-Trinitrobenzene	1		18.906			ND	
	20 2,6-Dinitrotoluene	1		20.173			ND	
	21 2,4-Dinitrotoluene	1		20.633			ND	
	22 Tetryl	1		24.253			ND	
	23 2,4,6-Trinitrotoluene	1		25.233			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

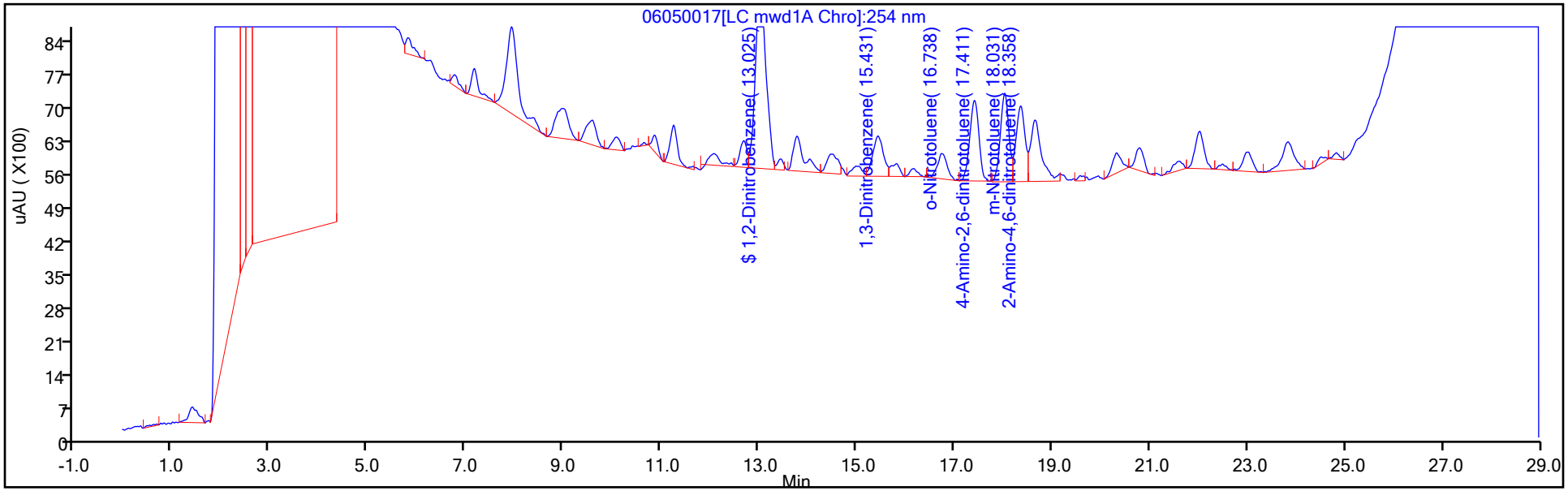
Report Date: 08-Jun-2021 16:38:34 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

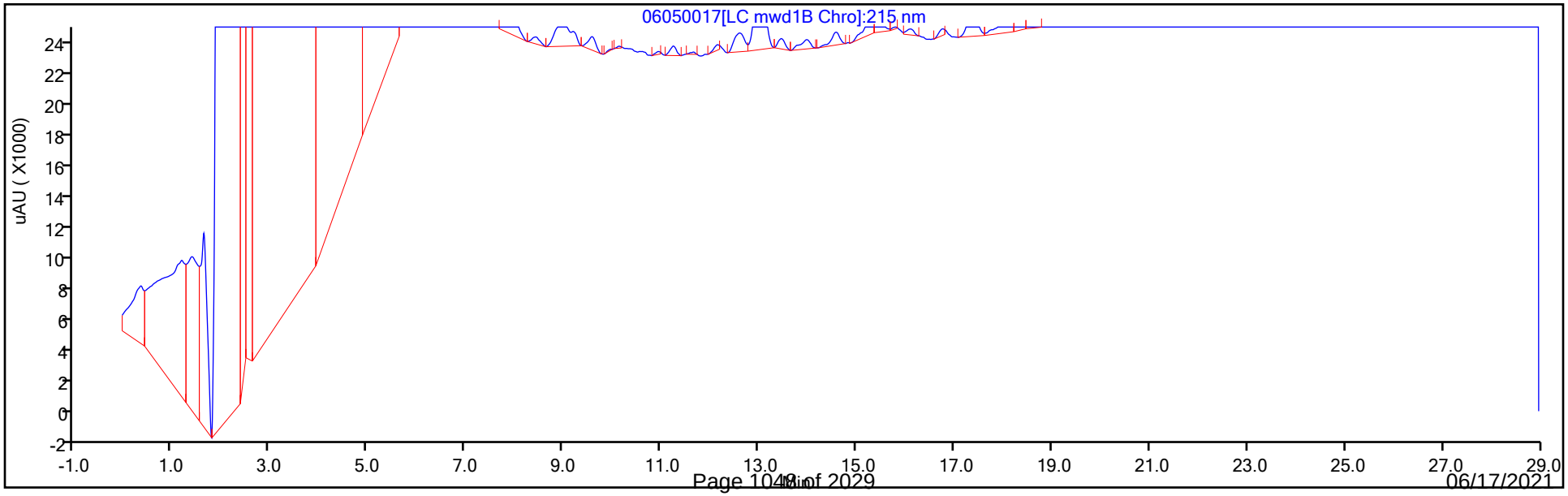
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D

Injection Date:	05-Jun-2021 18:11:22	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1	Worklist Smp#:	17
Client ID:	G0017-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D				
Lims ID:	280-149116-B-1-A				
Client ID:	G0017-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 18:11:22	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-1-A				
Misc. Info.:	280-0102103-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:30	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	08-Jun-2021 16:15:01		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2225	111.25

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

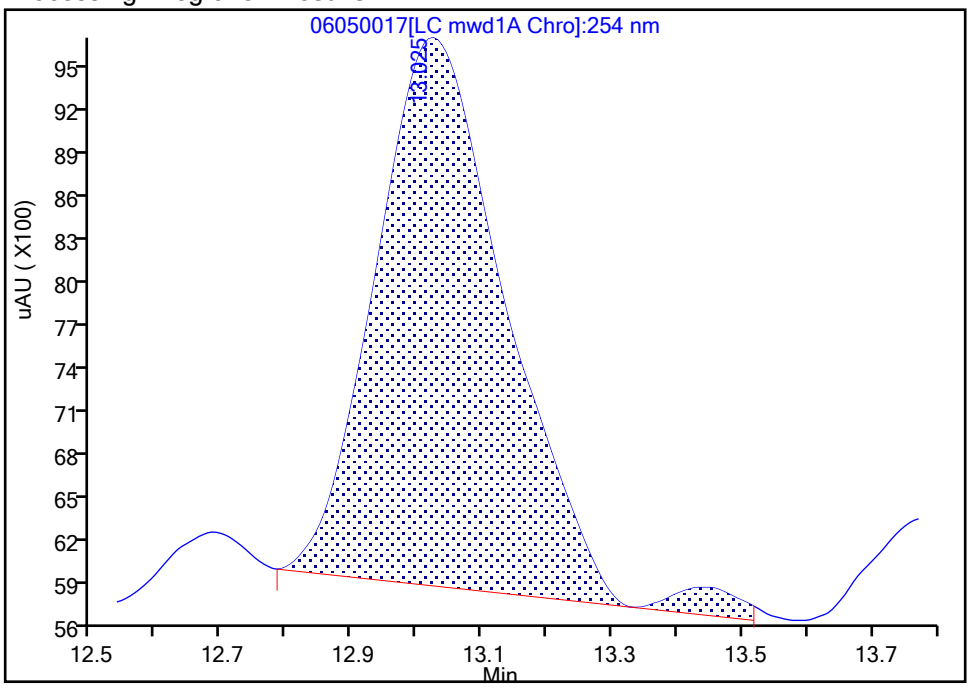
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D				
Injection Date:	05-Jun-2021 18:11:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

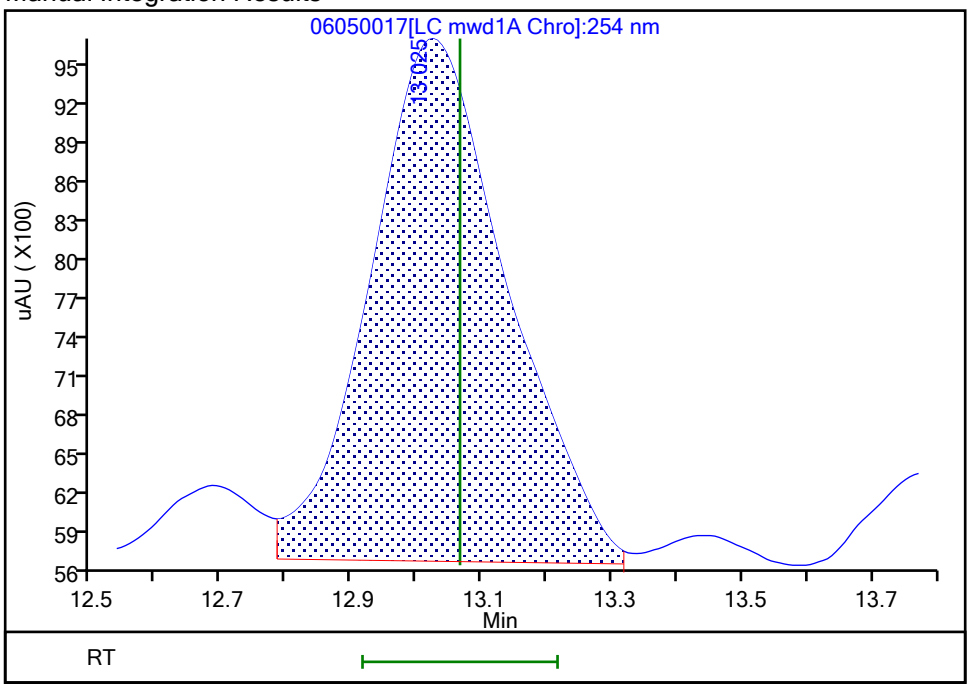
Processing Integration Results

RT: 13.02
Area: 54148
Amount: 0.203825
Amount Units: ug/ml



Manual Integration Results

RT: 13.02
Area: 59107
Amount: 0.222492
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:14:47

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

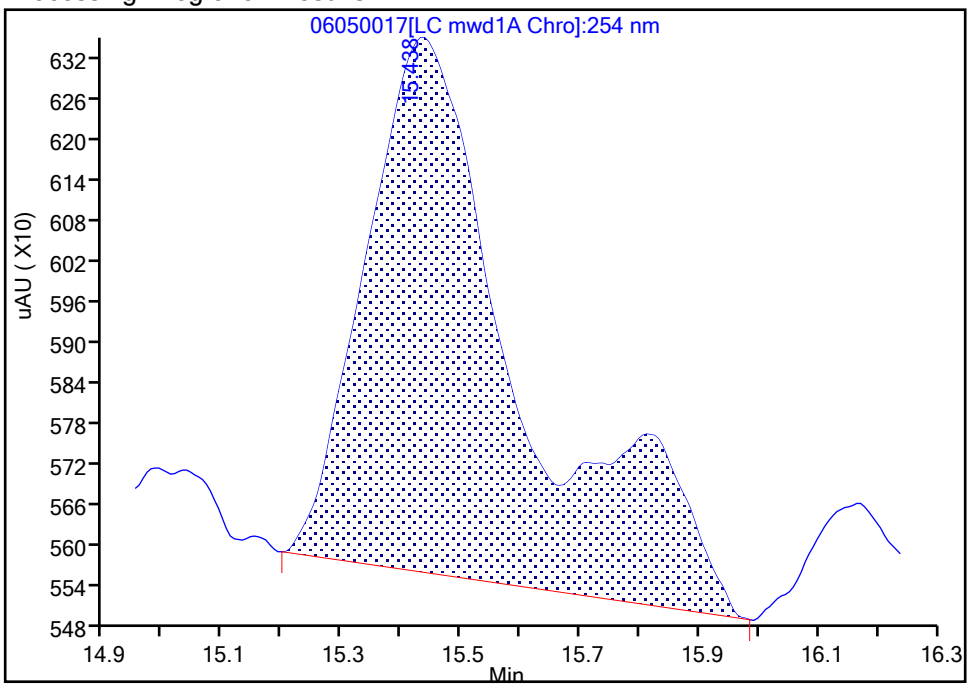
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D				
Injection Date:	05-Jun-2021 18:11:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

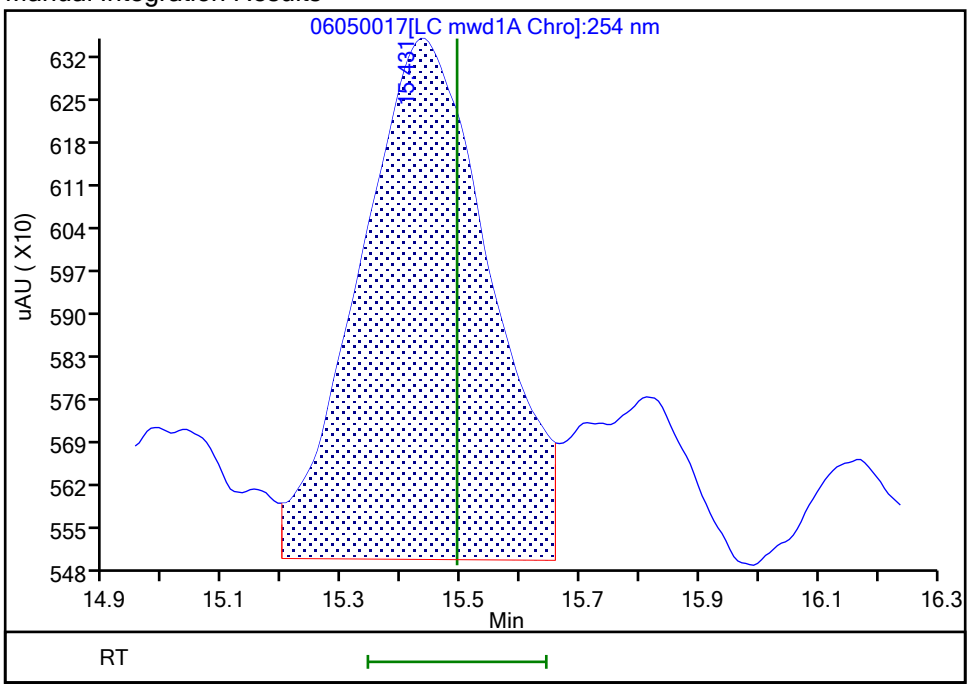
Processing Integration Results

RT: 15.44
Area: 14334
Amount: 0.023023
Amount Units: ug/ml



Manual Integration Results

RT: 15.43
Area: 12949
Amount: 0.020563
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:14:56

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

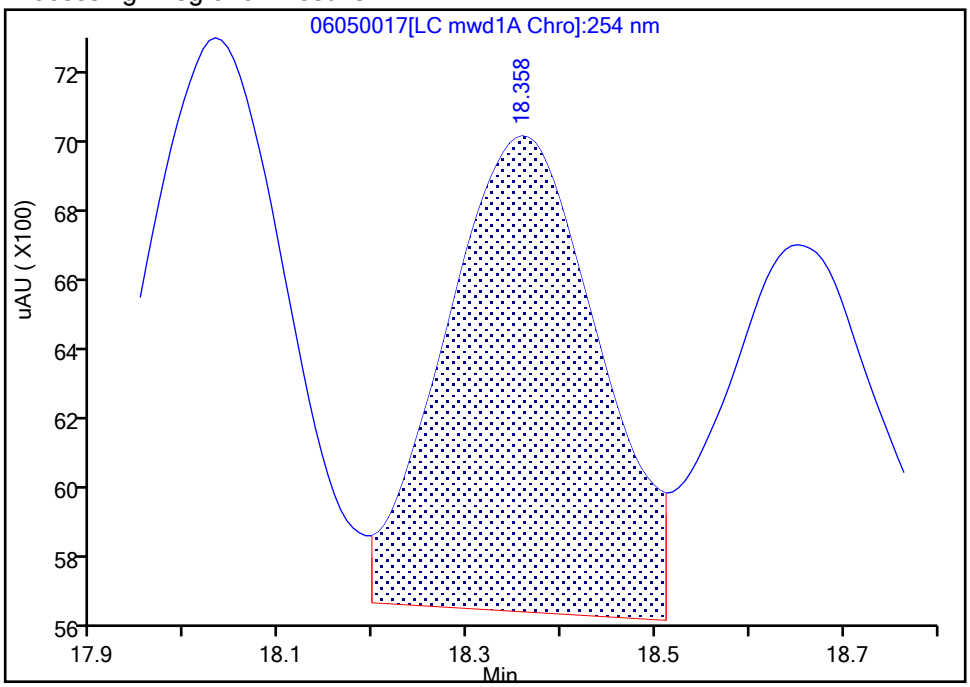
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D				
Injection Date:	05-Jun-2021 18:11:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

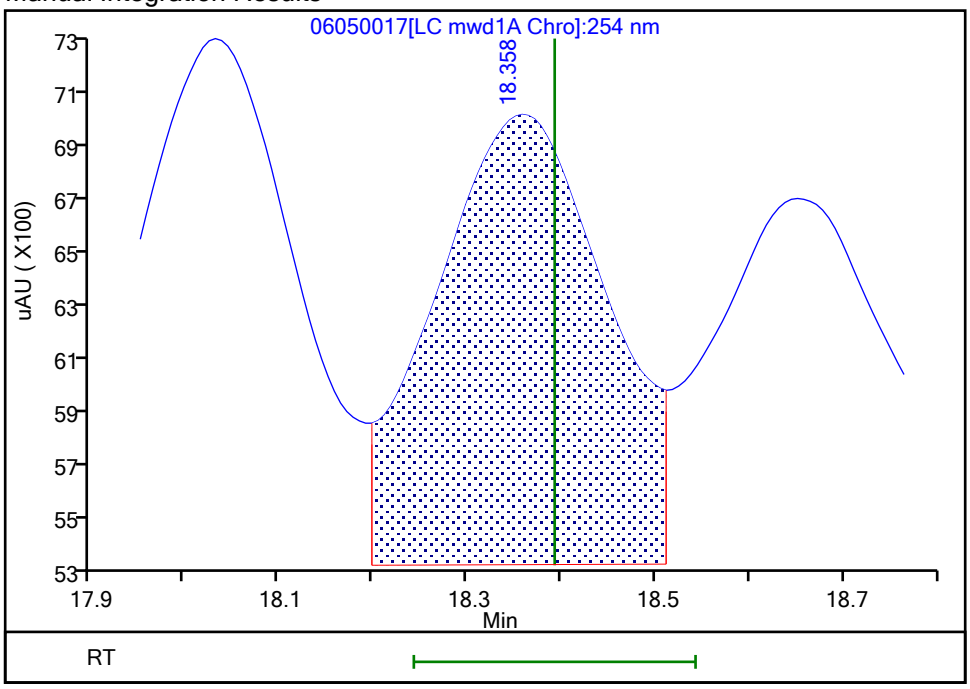
Processing Integration Results

RT: 18.36
Area: 14734
Amount: 0.034577
Amount Units: ug/ml



Manual Integration Results

RT: 18.36
Area: 20242
Amount: 0.048706
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:14:41

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

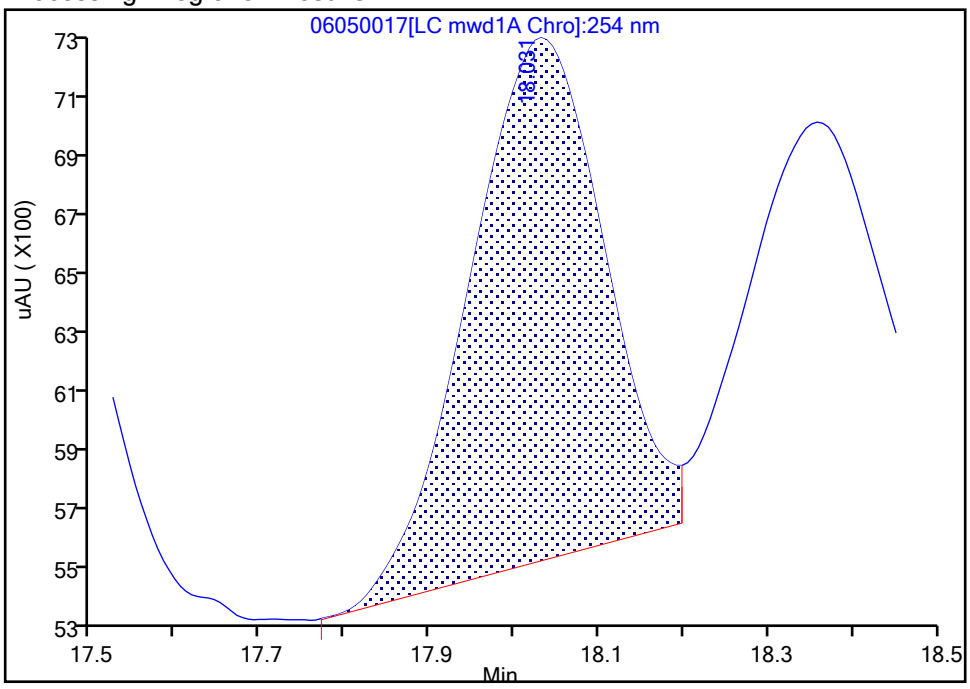
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D				
Injection Date:	05-Jun-2021 18:11:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

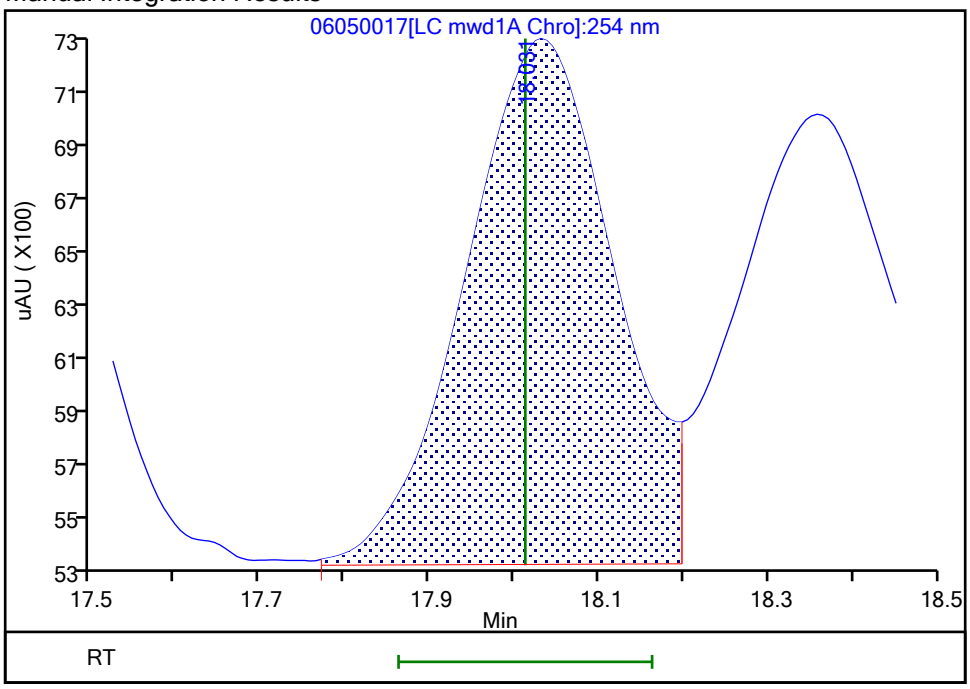
Processing Integration Results

RT: 18.03
Area: 18502
Amount: 0.066460
Amount Units: ug/ml



Manual Integration Results

RT: 18.03
Area: 22803
Amount: 0.081910
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:14:41

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

User Disabled Compound Report

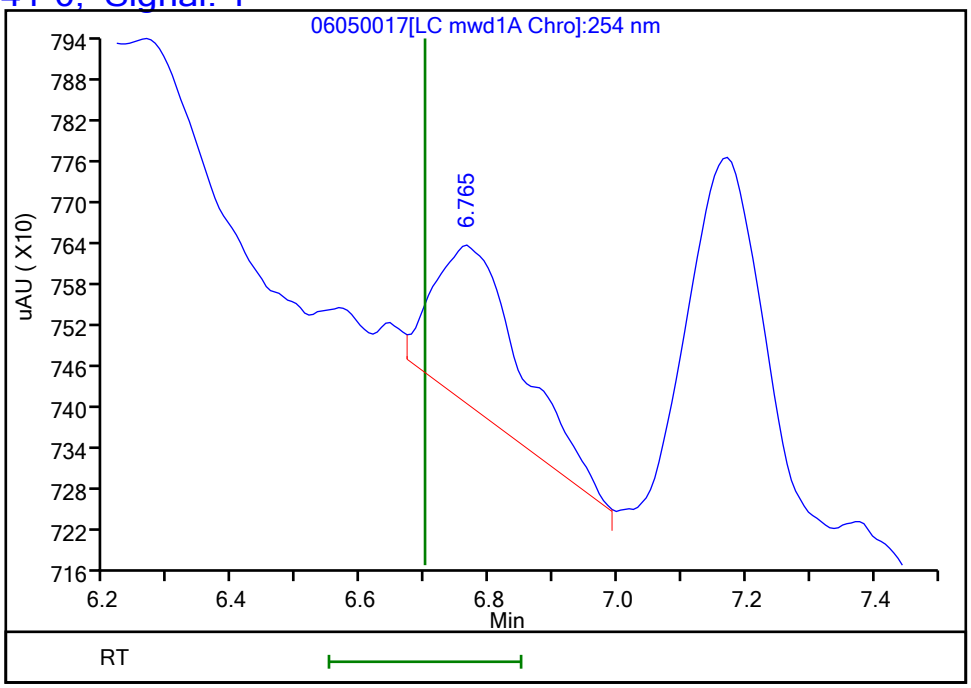
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D

Injection Date:	05-Jun-2021 18:11:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.76
Response: 2276
Amount: 0.008158



Reviewer: zhangji, 08-Jun-2021 16:15:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

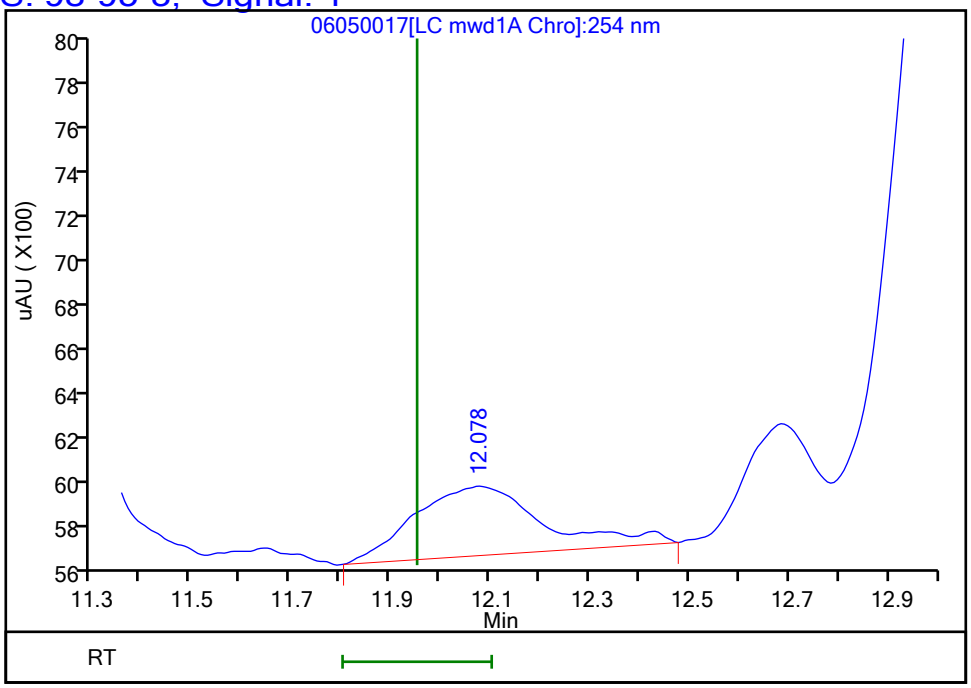
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D				
Injection Date:	05-Jun-2021 18:11:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 12.08
Response: 5432
Amount: 0.014499



Reviewer: zhangji, 08-Jun-2021 16:15:01
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

User Disabled Compound Report

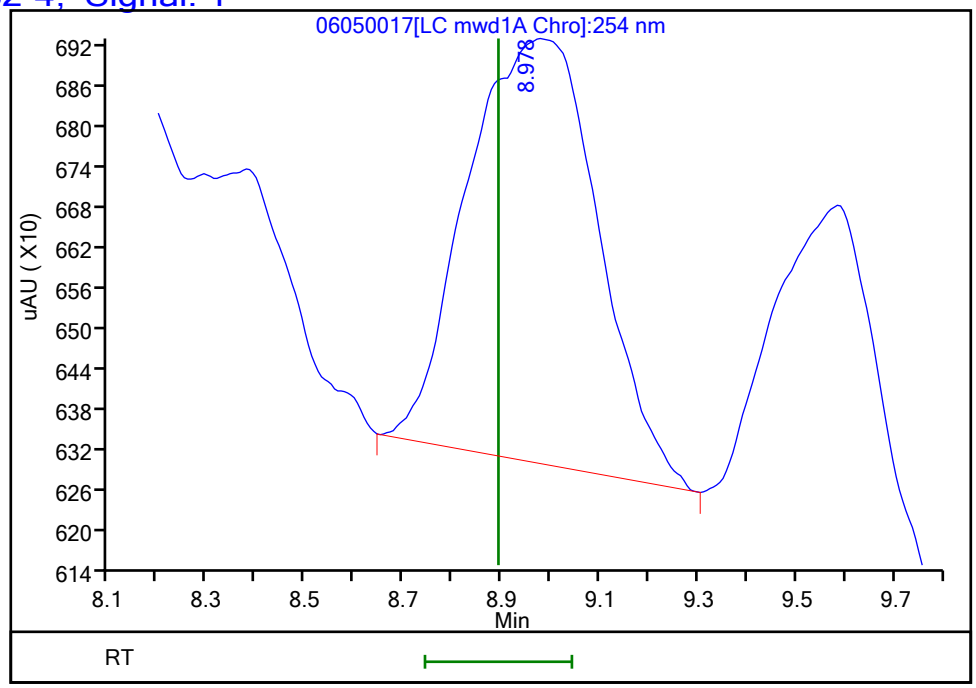
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050017.D

Injection Date:	05-Jun-2021 18:11:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-1-A	Lab Sample ID:	280-149116-1		
Client ID:	G0017-21A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 8.98
Response: 11772
Amount: 0.057630



Reviewer: zhangji, 08-Jun-2021 16:15:01
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.: 280-149116-1

SDG No.:

Client Sample ID: G0045-21A Lab Sample ID: 280-149116-2

Matrix: Water Lab File ID: 06040028.D

Analysis Method: 8330A Date Collected: 05/25/2021 16:15

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 495.2(mL) Date Analyzed: 06/05/2021 01:07

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.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U Q	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U Q	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U Q	0.41	0.40	0.10
2691-41-0	HMX	0.20	U M	0.21	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.16
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	87	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040028.D
Lims ID: 280-149116-B-2-A
Client ID: G0045-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 01:07:07 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-2-A
Misc. Info.: 280-0102084-028
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:17 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:11:26

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.609			ND	U
	6 MNX	1		7.210			ND	
	7 RDX	1		7.576			ND	
$	9 1,2-Dinitrobenzene	1	8.498	8.496	0.002	22364	0.1744	M
	10 1,3,5-Trinitrobenzene	1		8.629			ND	
	11 1,3-Dinitrobenzene	1		9.249			ND	
	12 Nitrobenzene	1		9.636			ND	
	14 Tetryl	1		9.956			ND	
	16 2,4,6-Trinitrotoluene	1		10.876			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.076			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	19 2,6-Dinitrotoluene	1		11.502			ND	
	20 2,4-Dinitrotoluene	1		11.676			ND	
	21 o-Nitrotoluene	1		12.542			ND	
	22 p-Nitrotoluene	1		12.976			ND	
	23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

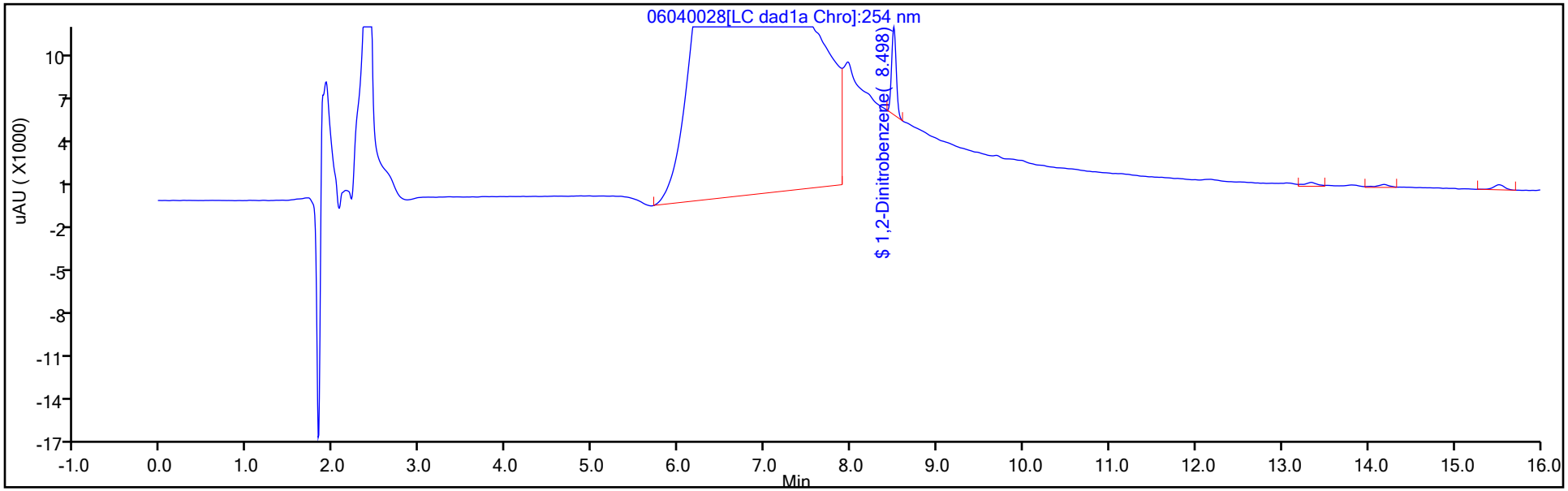
Report Date: 05-Jun-2021 10:20:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

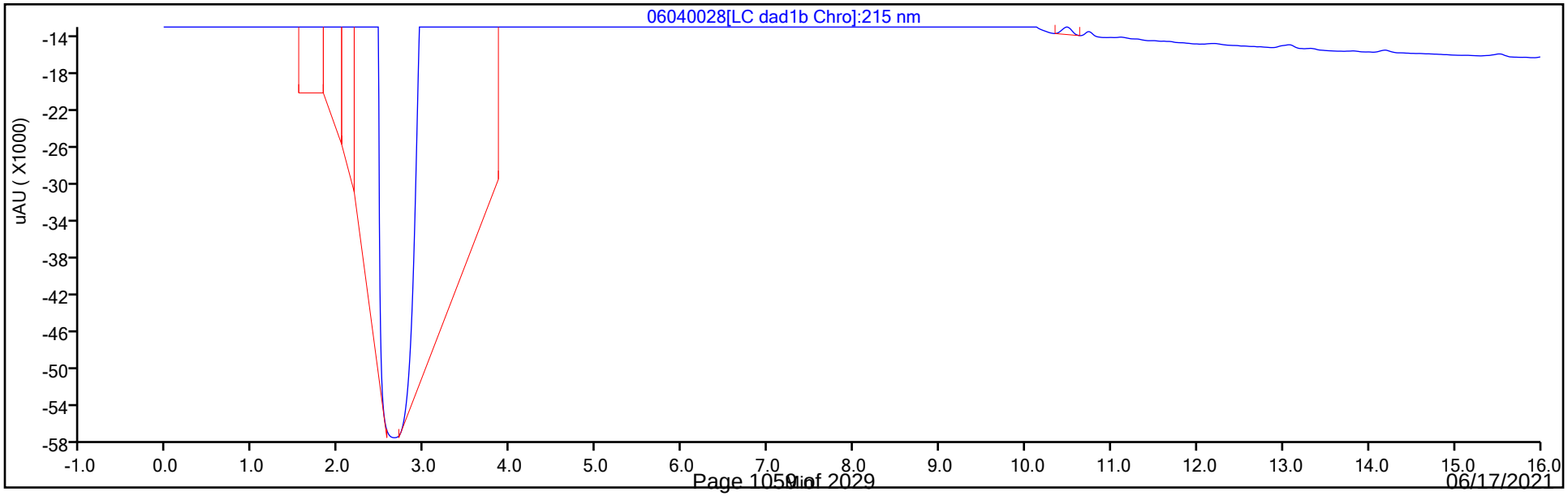
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040028.d

Injection Date:	05-Jun-2021 01:07:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-B-2-A	Lab Sample ID:	280-149116-2	Worklist Smp#:	28
Client ID:	G0045-21A				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040028.D				
Lims ID:	280-149116-B-2-A				
Client ID:	G0045-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 01:07:07	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-2-A				
Misc. Info.:	280-0102084-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:17	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				

First Level Reviewer: zhangji Date: 05-Jun-2021 10:11:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1744	87.21

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

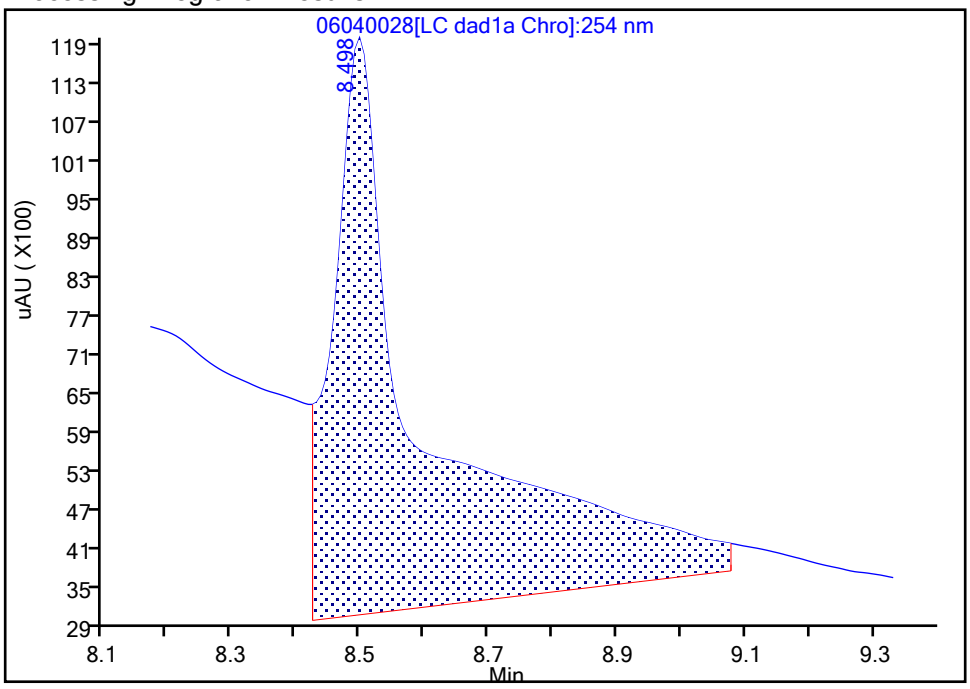
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040028.d				
Injection Date:	05-Jun-2021 01:07:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-2-A	Lab Sample ID:	280-149116-2		
Client ID:	G0045-21A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

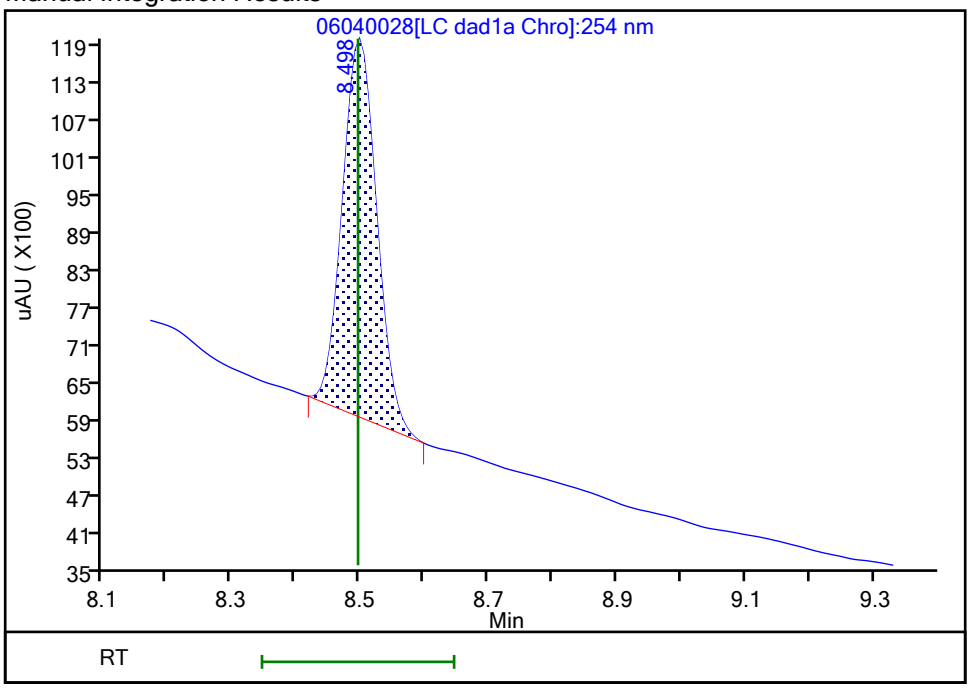
Processing Integration Results

RT: 8.50
Area: 92035
Amount: 0.717805
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 22364
Amount: 0.174423
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:11:25

Audit Action: Manually Integrated Audit Reason: Baseline

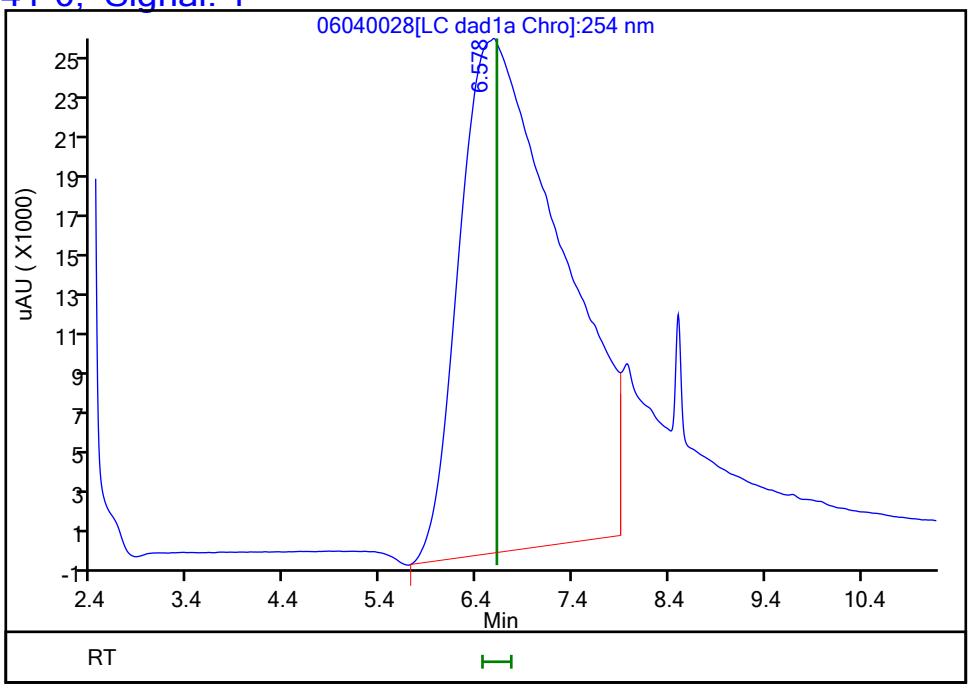
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040028.d				
Injection Date:	05-Jun-2021 01:07:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-2-A	Lab Sample ID:	280-149116-2		
Client ID:	G0045-21A				
Operator ID:	JZ	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		

3 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.58
Response: 1866469
Amount: 22.108946



Reviewer: zhangji, 05-Jun-2021 10:11:26
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.: 280-149116-1

SDG No.:

Client Sample ID: G0086-21A Lab Sample ID: 280-149116-3

Matrix: Water Lab File ID: 06040029.D

Analysis Method: 8330A Date Collected: 05/25/2021 14:05

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 473.4(mL) Date Analyzed: 06/05/2021 01:30

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.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	14	Q M	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U Q	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	4.9	Q	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.053	J Q M	0.11	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U Q	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	1.4	Q	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.1	Q	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U Q M	0.43	0.42	0.11
2691-41-0	HMX	0.44	Q M	0.22	0.21	0.093
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U Q	0.22	0.21	0.096
121-82-4	RDX	0.84	Q M J1	0.22	0.21	0.054
479-45-8	Tetryl	0.11	U Q M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	78	Q M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040029.D
Lims ID: 280-149116-A-3-A
Client ID: G0086-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 01:30:07 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-3-A
Misc. Info.: 280-0102084-029
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:17 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:12:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.601	6.609	-0.008	3526	0.0418	M
	6 MNX	1		7.210			ND	MU
	7 RDX	1	7.574	7.576	-0.002	8470	0.0797	M
$	9 1,2-Dinitrobenzene	1	8.501	8.496	0.005	20066	0.1565	M
	10 1,3,5-Trinitrobenzene	1	8.628	8.629	-0.001	282868	1.28	M
	11 1,3-Dinitrobenzene	1		9.249			ND	7
	12 Nitrobenzene	1		9.636			ND	
	14 Tetryl	1		9.956			ND	U
	16 2,4,6-Trinitrotoluene	1	10.888	10.876	0.012	95495	0.4635	
	17 4-Amino-2,6-dinitrotoluene	1	11.094	11.076	0.018	16155	0.1057	
	18 2-Amino-4,6-dinitrotoluene	1	11.354	11.336	0.018	27179	0.1313	
	19 2,6-Dinitrotoluene	1		11.502			ND	
	20 2,4-Dinitrotoluene	1	11.694	11.676	0.018	1444	0.005031	M
	21 o-Nitrotoluene	1		12.542			ND	
	22 p-Nitrotoluene	1		12.976			ND	U
	23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

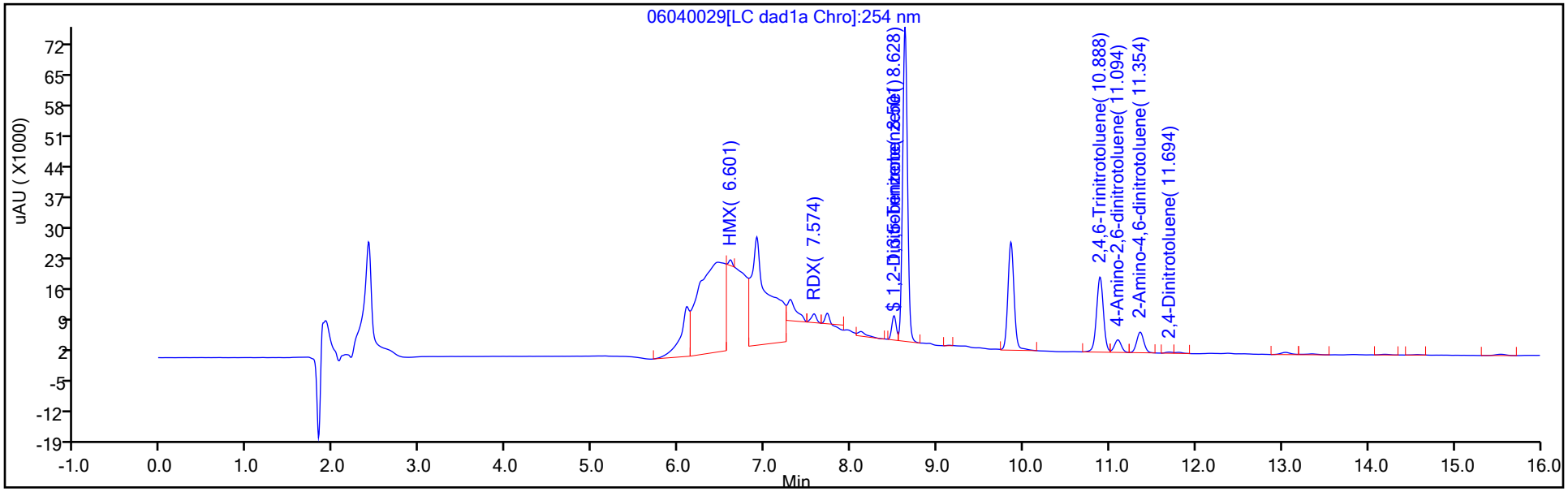
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:20 Chrom Revision: 2.3 13-May-2021 07:57:40

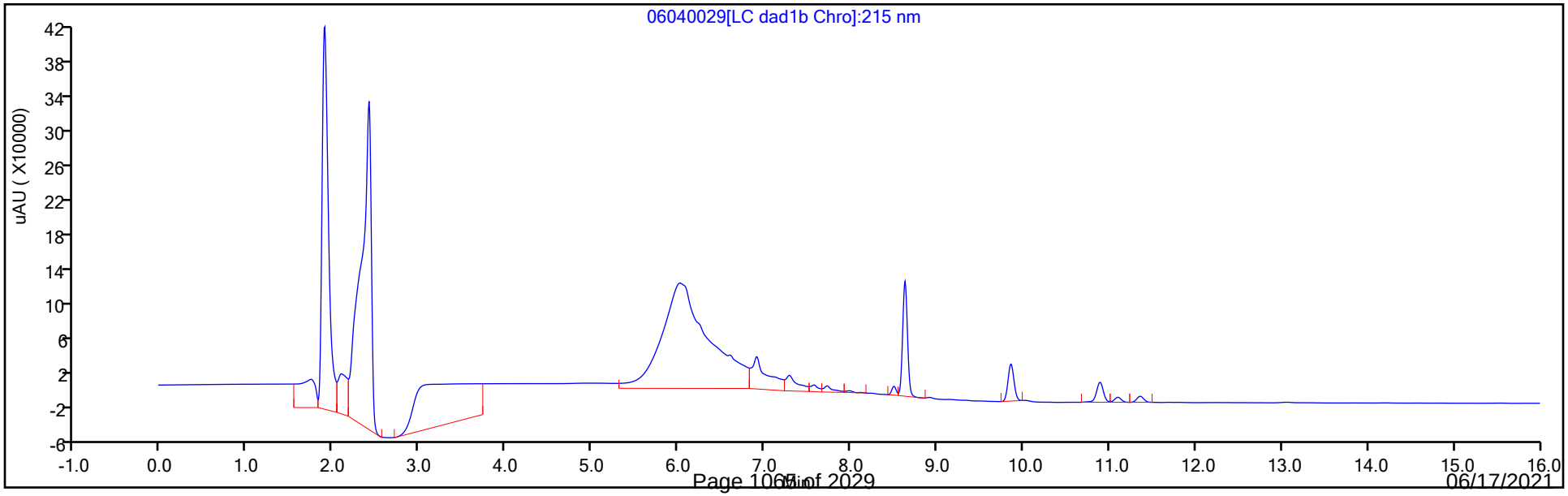
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d				
Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3	Worklist Smp#:	29
Client ID:	G0086-21A				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040029.D				
Lims ID:	280-149116-A-3-A				
Client ID:	G0086-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 01:30:07	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-3-A				
Misc. Info.:	280-0102084-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:17	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				

First Level Reviewer: zhangji Date: 05-Jun-2021 10:12:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1565	78.25

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

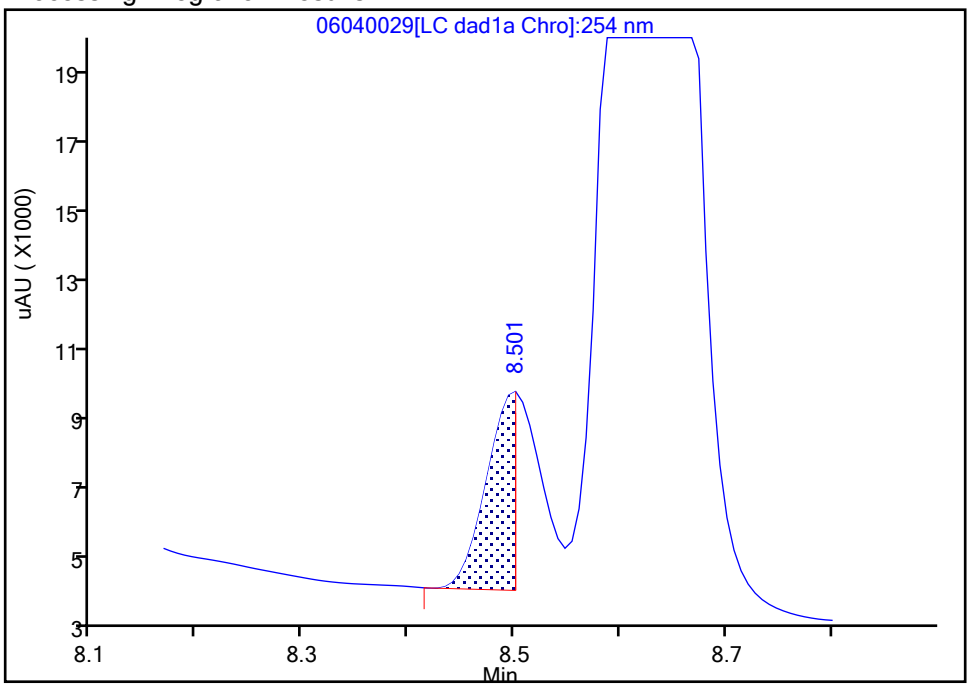
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d				
Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

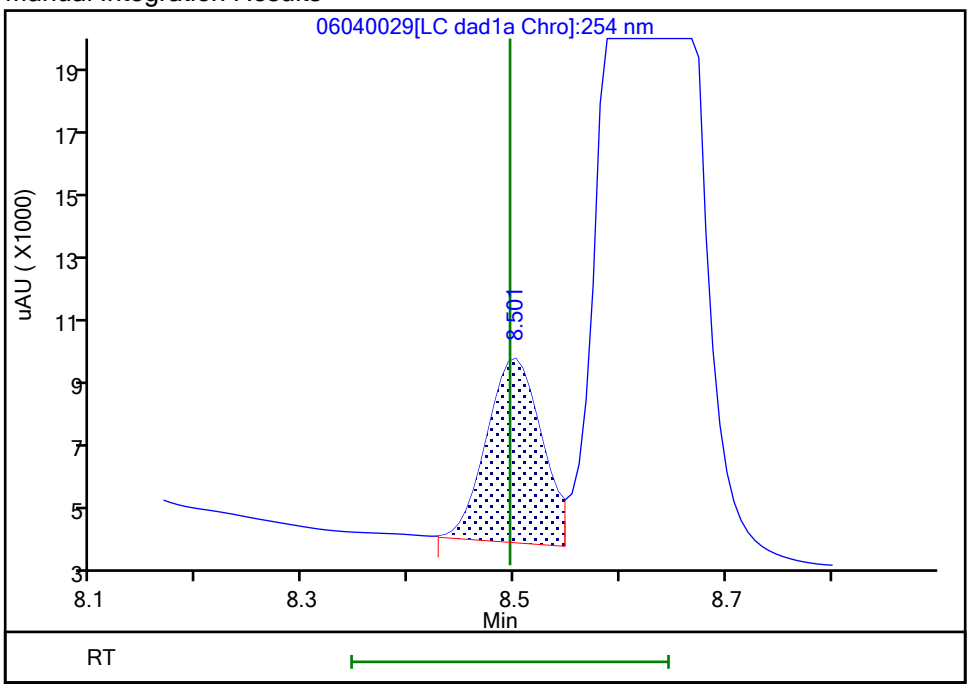
Processing Integration Results

RT: 8.50
Area: 10031
Amount: 0.078234
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 20066
Amount: 0.156500
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:11:45
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver

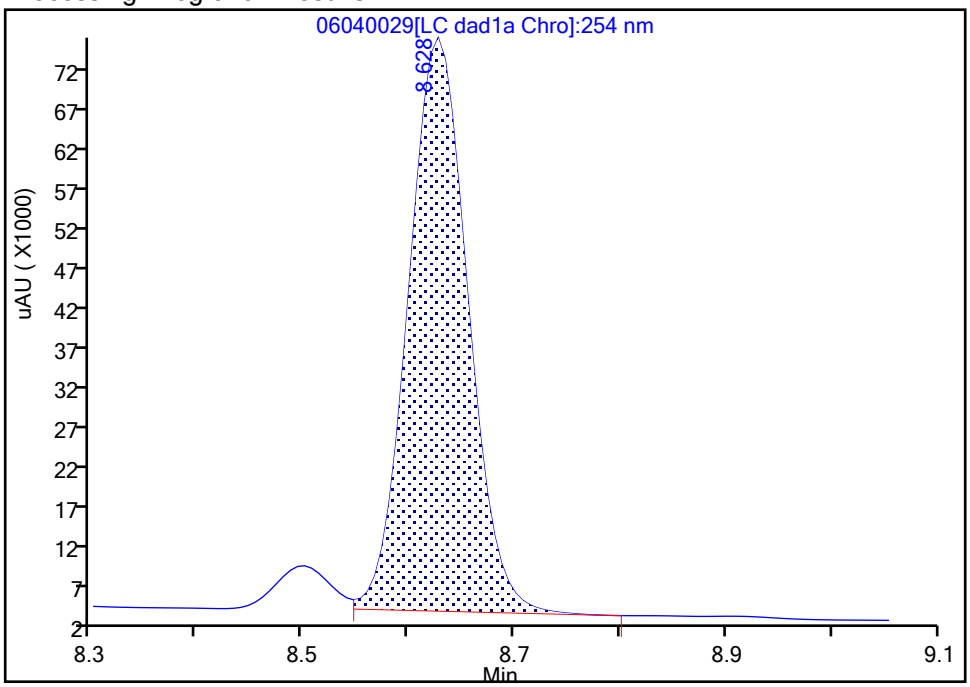
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d				
Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

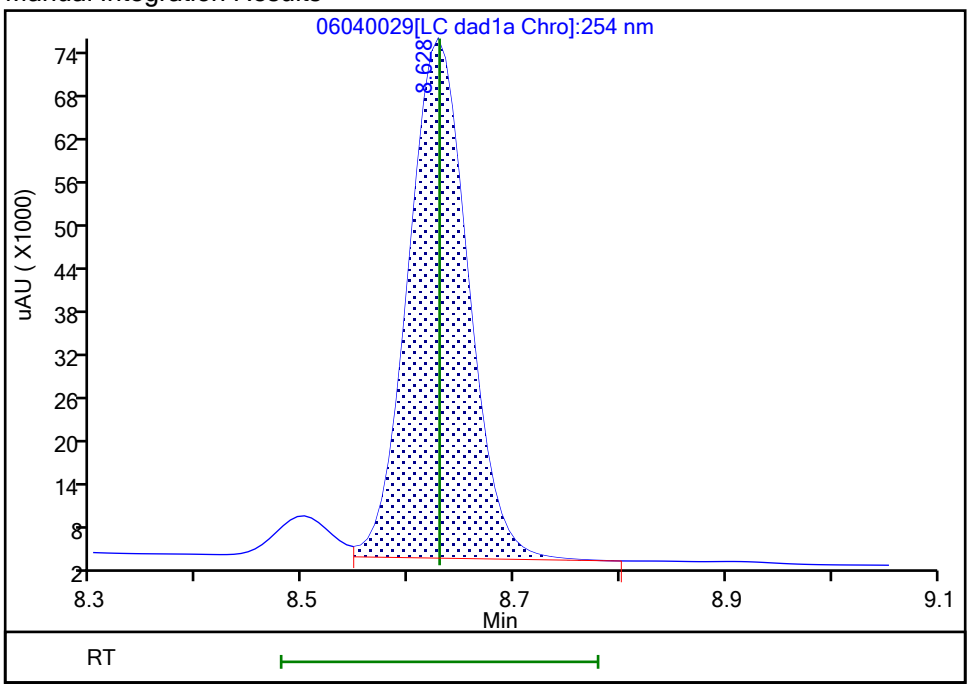
Processing Integration Results

RT: 8.63
Area: 281059
Amount: 1.275701
Amount Units: ug/mL



Manual Integration Results

RT: 8.63
Area: 282868
Amount: 1.283912
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:11:45
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

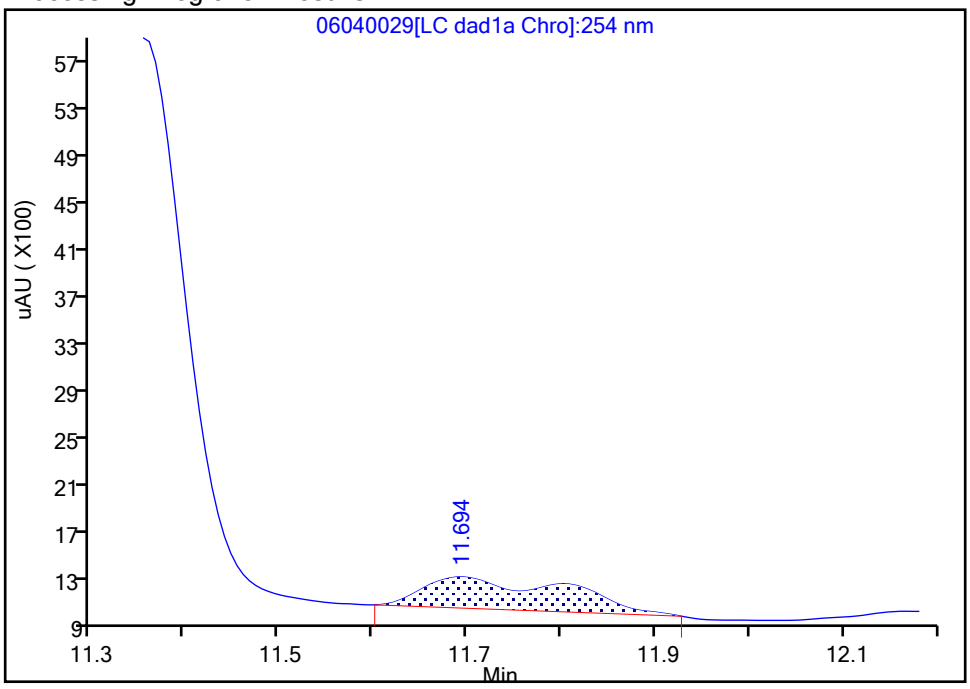
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d				
Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

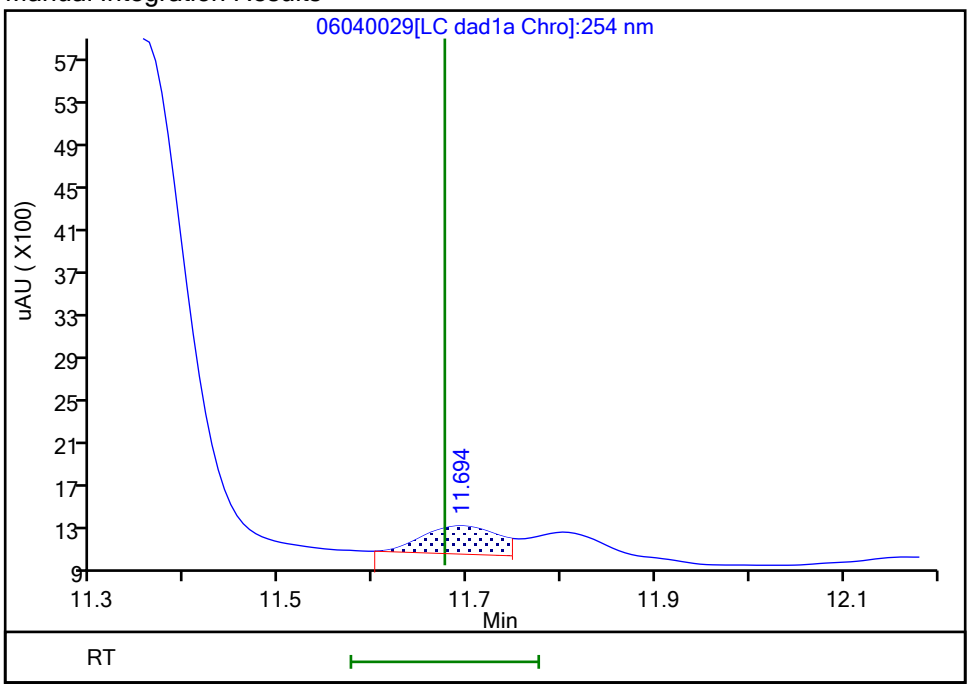
Processing Integration Results

RT: 11.69
Area: 2835
Amount: 0.009878
Amount Units: ug/mL



Manual Integration Results

RT: 11.69
Area: 1444
Amount: 0.005031
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:12:10

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

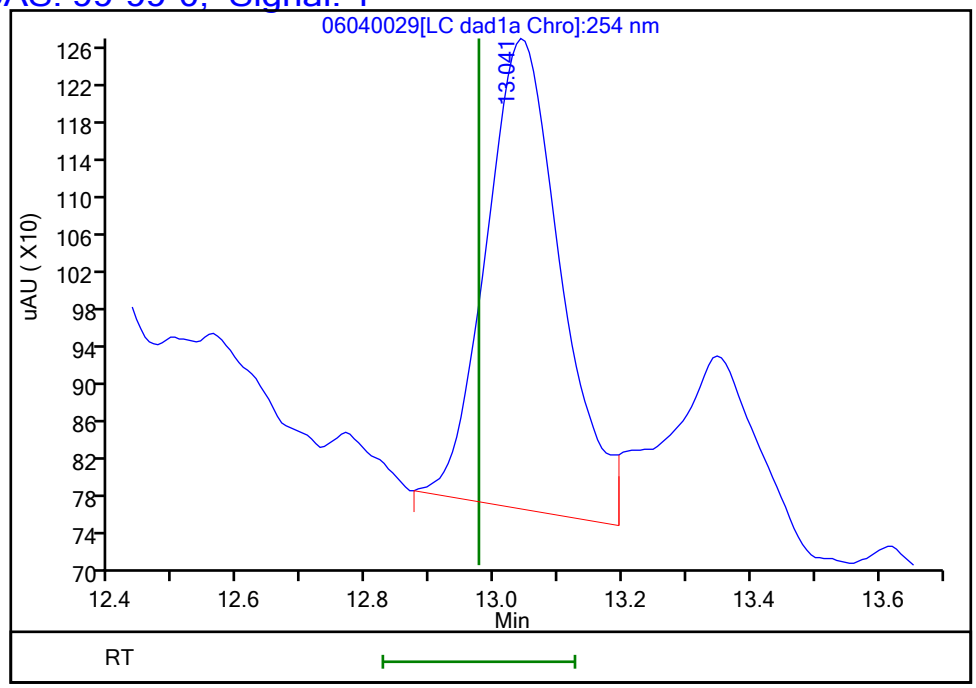
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d

Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	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		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.04
Response: 4066
Amount: 0.036332



Reviewer: zhangji, 05-Jun-2021 10:12:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

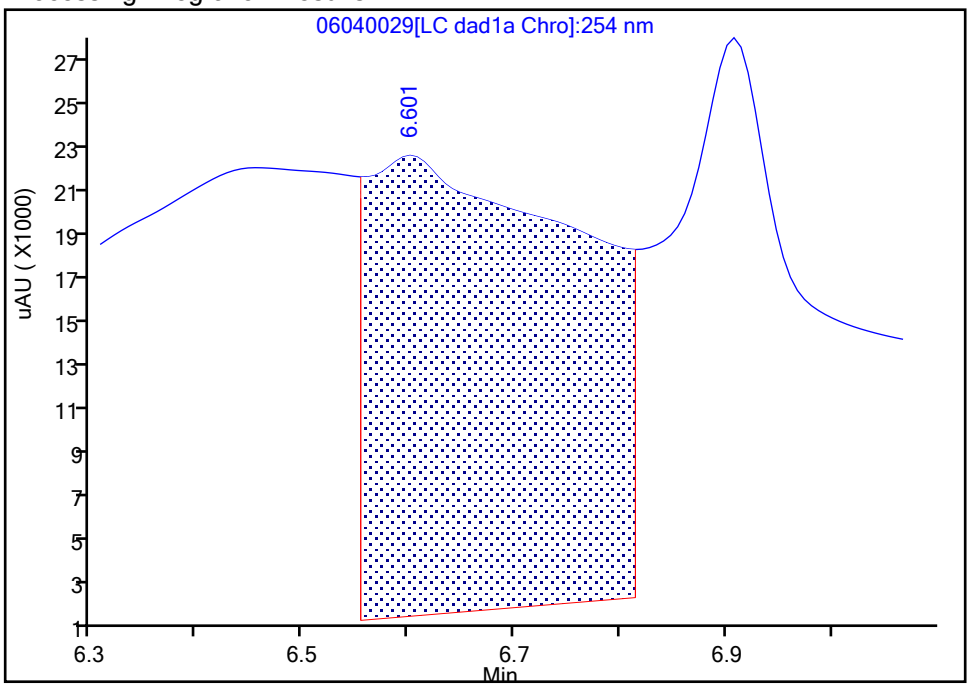
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d				
Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

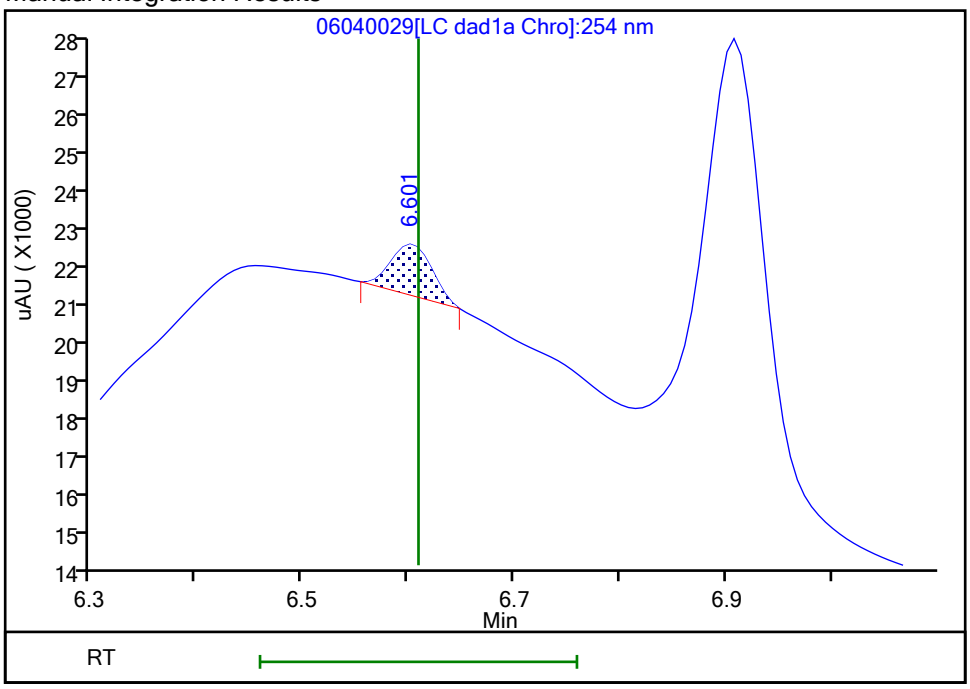
Processing Integration Results

RT: 6.60
Area: 282723
Amount: 3.348948
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 3526
Amount: 0.041767
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:12:37
Audit Action: Manually Integrated Audit Reason: Baseline

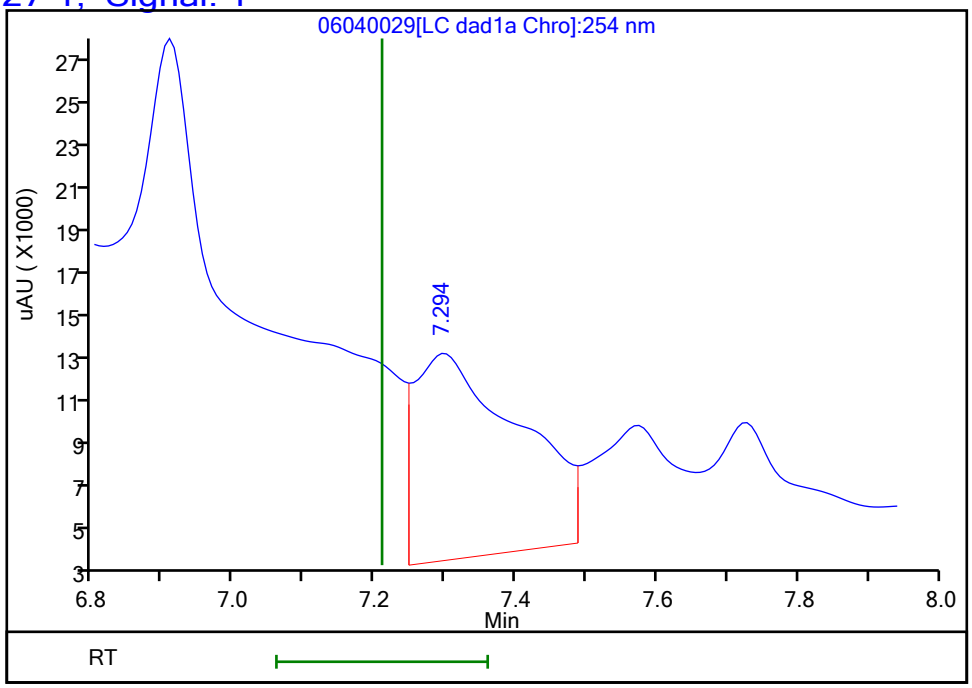
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d				
Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	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		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.29
Response: 96200
Amount: 0.738068



Reviewer: zhangji, 05-Jun-2021 10:12:38
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

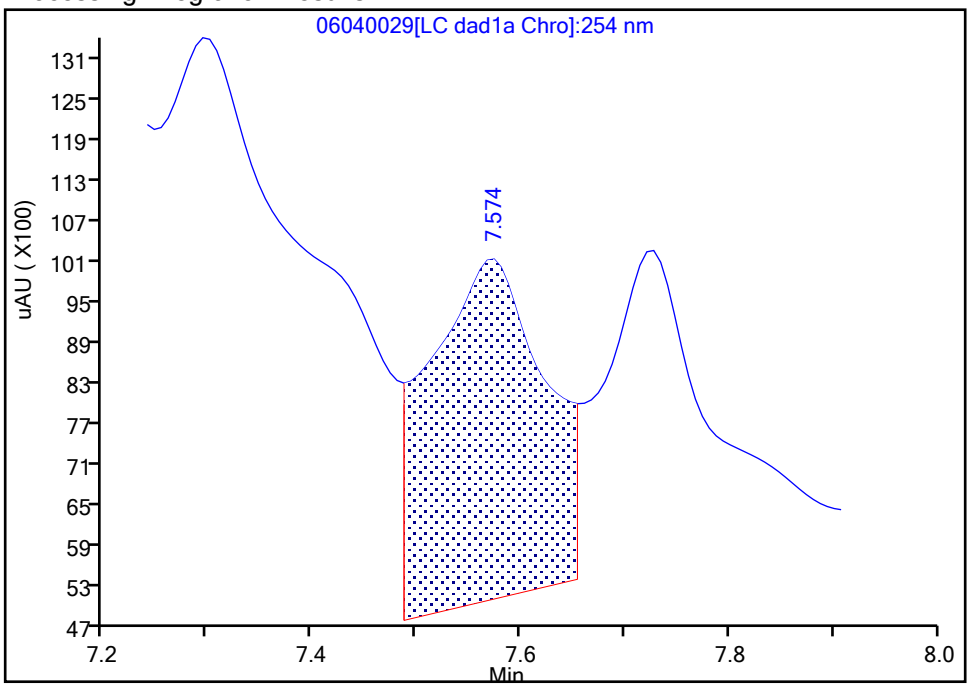
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d				
Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

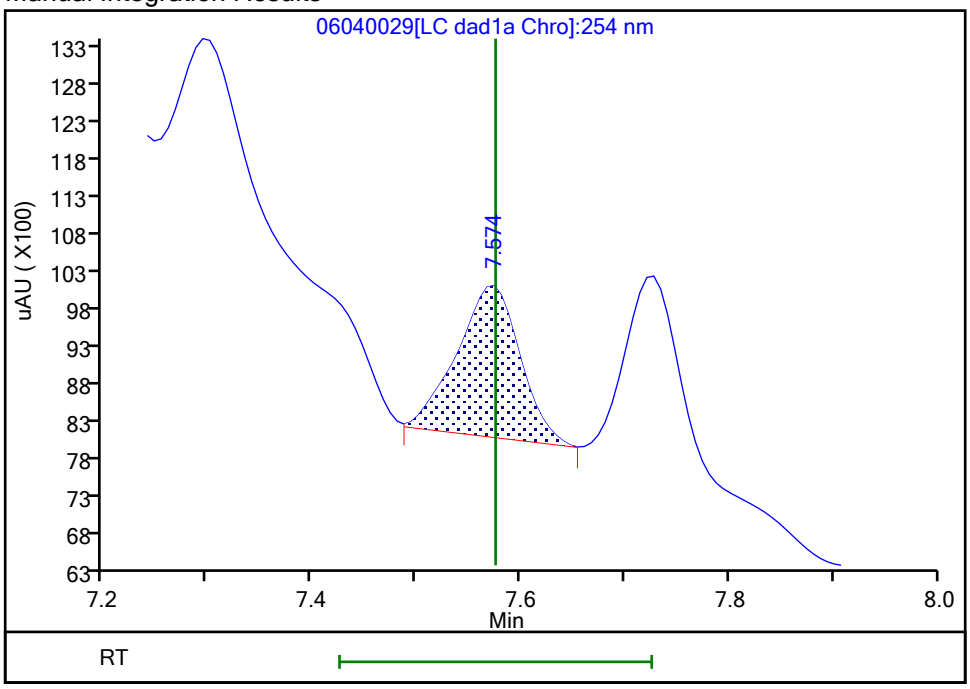
Processing Integration Results

RT: 7.57
Area: 38800
Amount: 0.365137
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 8470
Amount: 0.079709
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:12:28
Audit Action: Assigned New Baseline Audit Reason: Baseline

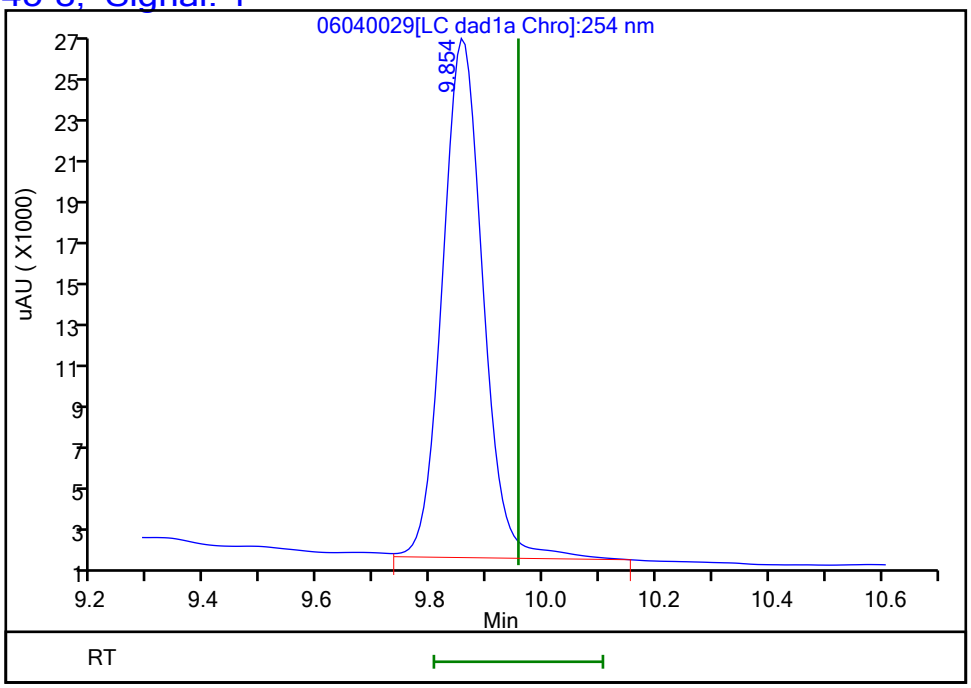
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040029.d				
Injection Date:	05-Jun-2021 01:30:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.85
Response: 123751
Amount: 0.717730



Reviewer: zhangji, 05-Jun-2021 10:12:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0086-21A Lab Sample ID: 280-149116-3

Matrix: Water Lab File ID: 06050018.D

Analysis Method: 8330A Date Collected: 05/25/2021 14:05

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 473.4(mL) Date Analyzed: 06/05/2021 18:46

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.: 538717 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	*RDX*	*0.53*	*J1*	*0.22*	0.21	*0.054*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	84	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050018.D
Lims ID: 280-149116-A-3-A
Client ID: G0086-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 18:46:20 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-3-A
Misc. Info.: 280-0102103-018
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:30 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 16:15:32

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	6.665	6.699	-0.034	6654	0.0357	M
	7 MNX	1		7.429			ND	
	8 RDX	1	8.831	8.893	-0.062	10302	0.0504	
	9 Nitrobenzene	1		11.953			ND	
$	10 1,2-Dinitrobenzene	1	13.018	13.066	-0.048	44857	0.1689	M
	12 1,3-Dinitrobenzene	1		15.493			ND	7
	14 o-Nitrotoluene	1		16.739			ND	U
	15 p-Nitrotoluene	1		17.033			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.438	17.493	-0.055	36079	0.1216	
	17 m-Nitrotoluene	1		18.013			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.338	18.393	-0.055	70171	0.1768	
	19 1,3,5-Trinitrobenzene	1	18.871	18.906	-0.035	554730	1.35	
	20 2,6-Dinitrotoluene	1		20.173			ND	
	21 2,4-Dinitrotoluene	1	20.571	20.633	-0.062	3179	0.005619	
	22 Tetryl	1		24.253			ND	
	23 2,4,6-Trinitrotoluene	1	25.185	25.233	-0.048	171533	0.4573	

QC Flag Legend

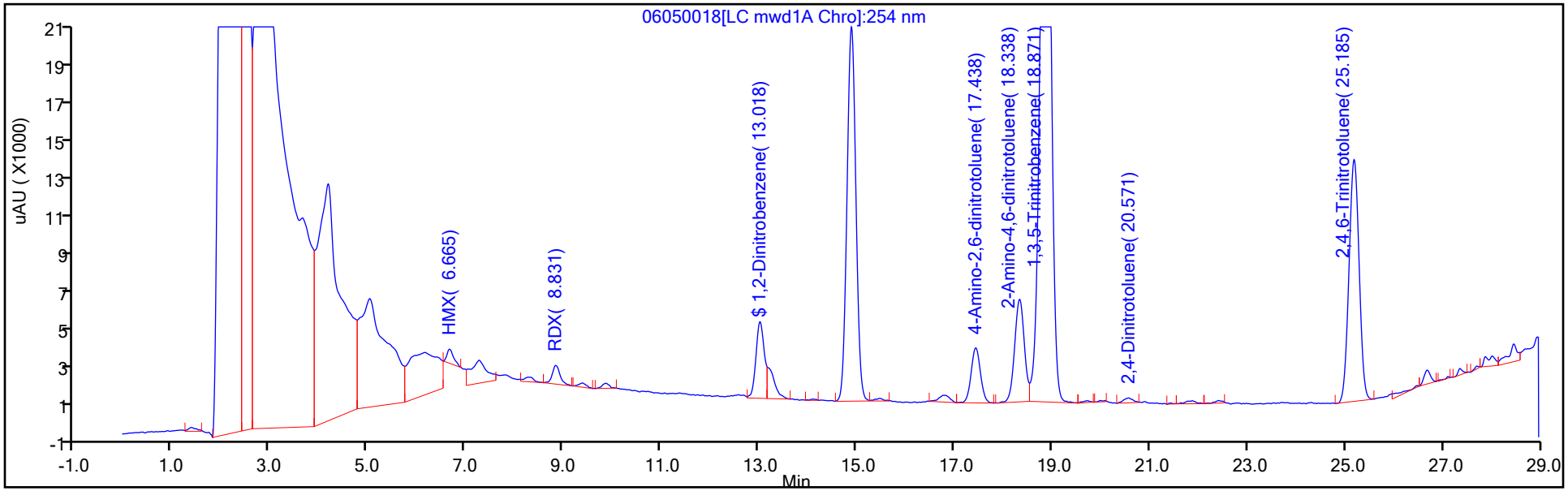
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 08-Jun-2021 16:38:34 Chrom Revision: 2.3 13-May-2021 07:57:40

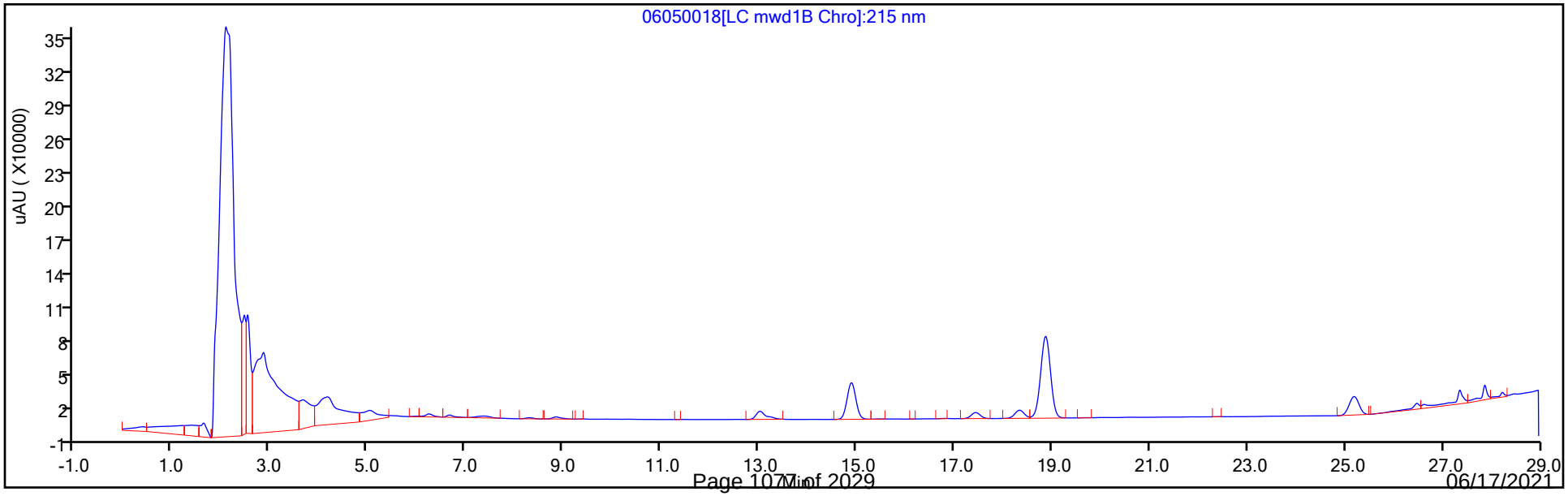
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050018.D				
Injection Date:	05-Jun-2021 18:46:20	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3	Worklist Smp#:	18
Client ID:	G0086-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050018.D				
Lims ID:	280-149116-A-3-A				
Client ID:	G0086-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 18:46:20	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-3-A				
Misc. Info.:	280-0102103-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:30	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	08-Jun-2021 16:15:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1689	84.43

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

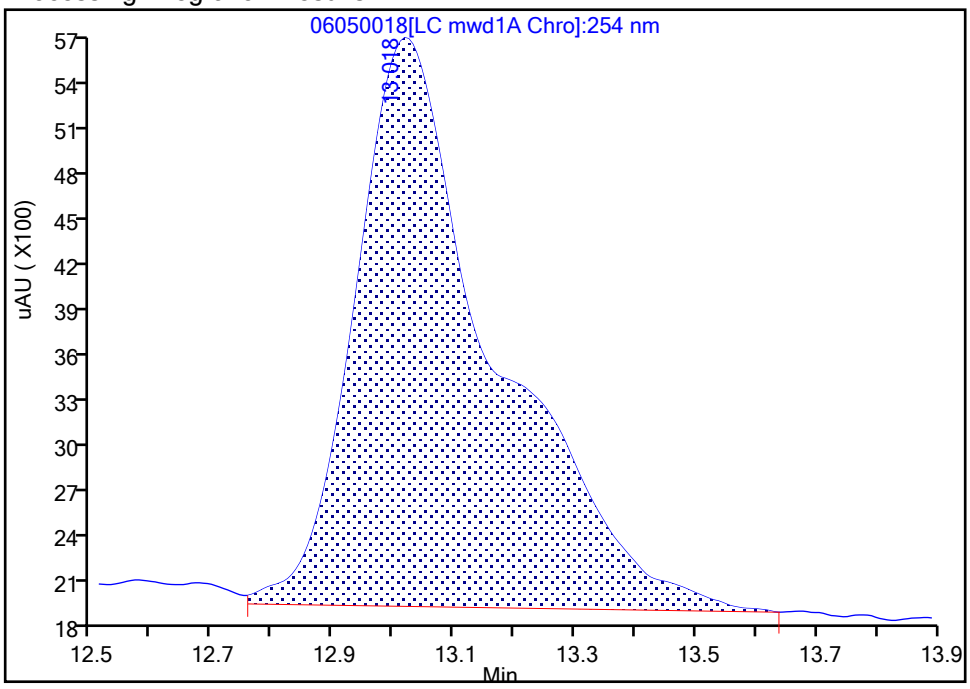
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050018.D				
Injection Date:	05-Jun-2021 18:46:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

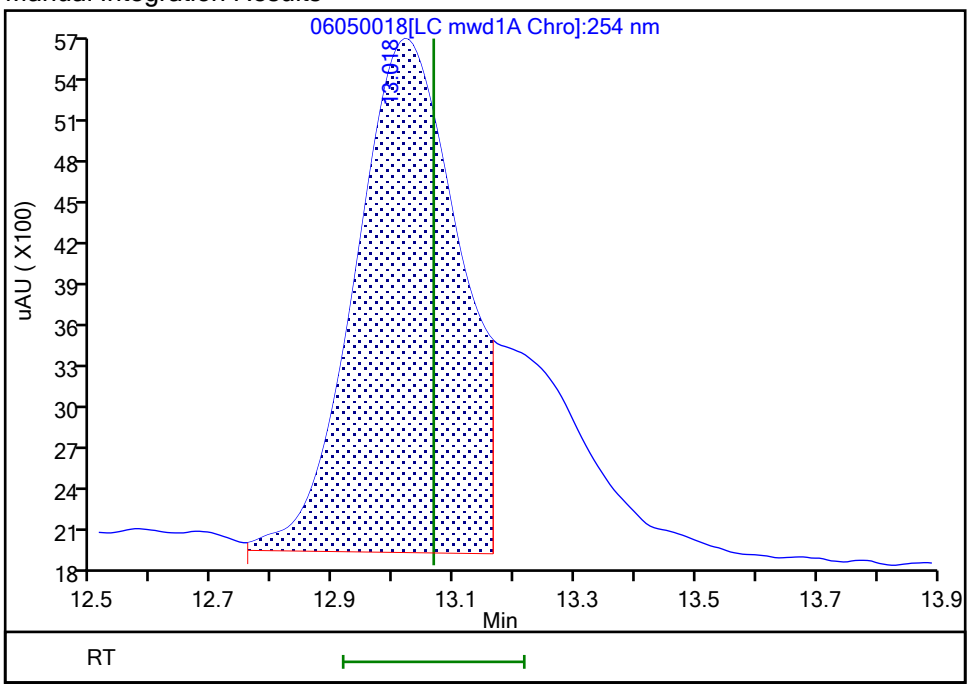
Processing Integration Results

RT: 13.02
Area: 61003
Amount: 0.229629
Amount Units: ug/ml



Manual Integration Results

RT: 13.02
Area: 44857
Amount: 0.168852
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:15:20

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

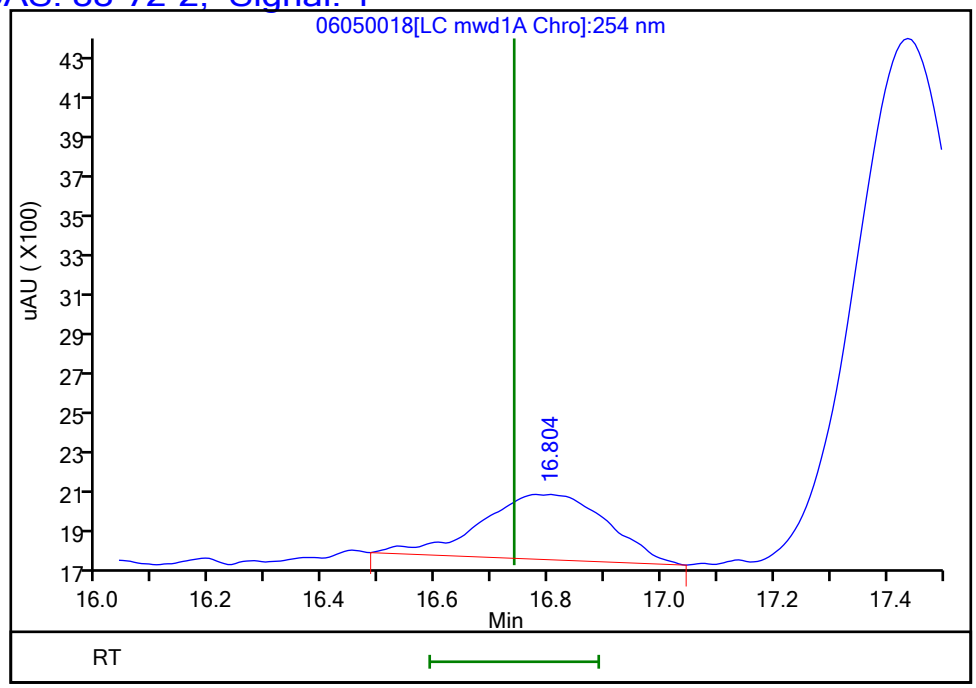
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050018.D				
Injection Date:	05-Jun-2021 18:46:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.80
Response: 5226
Amount: 0.020991



Reviewer: zhangji, 08-Jun-2021 16:15:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

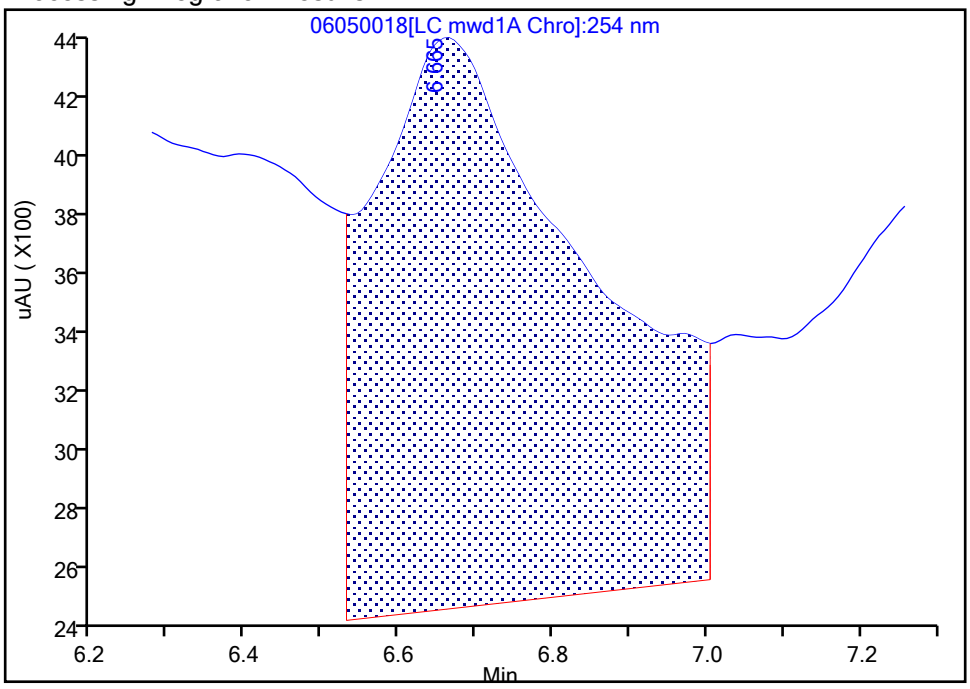
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050018.D				
Injection Date:	05-Jun-2021 18:46:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-3-A	Lab Sample ID:	280-149116-3		
Client ID:	G0086-21A				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

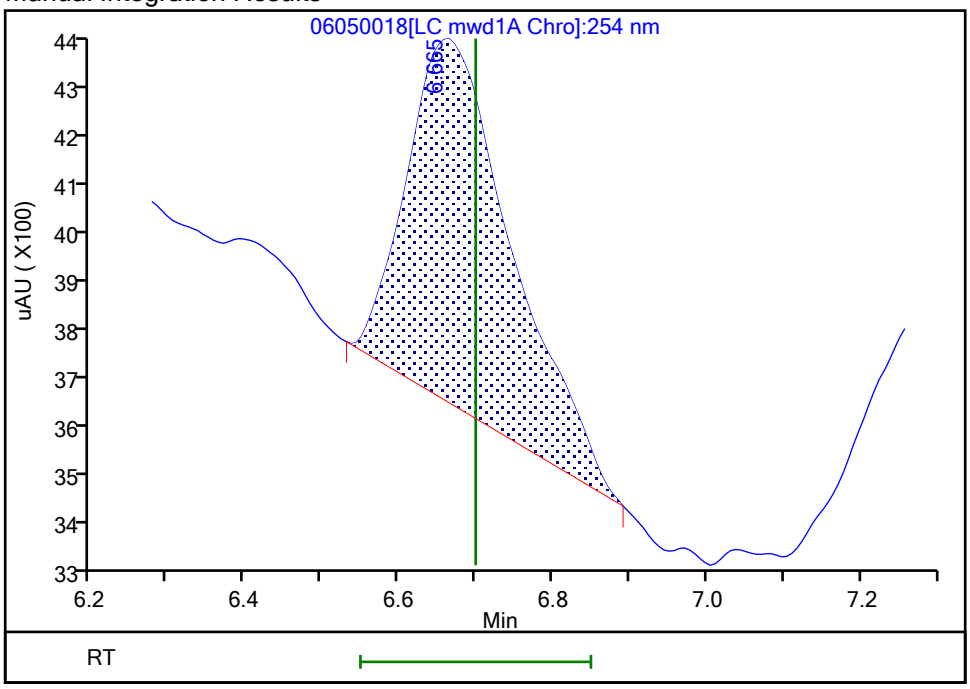
Processing Integration Results

RT: 6.66
Area: 36731
Amount: 0.225165
Amount Units: ug/ml



Manual Integration Results

RT: 6.66
Area: 6654
Amount: 0.035732
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:15:14
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ0018-21A Lab Sample ID: 280-149116-4

Matrix: Water Lab File ID: 06040030.D

Analysis Method: 8330A Date Collected: 05/25/2021 15:25

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 462.5(mL) Date Analyzed: 06/05/2021 01:53

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	4.6		0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	2.5		0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U Q	0.23	0.22	0.092
99-08-1	3-Nitrotoluene	0.43	U Q	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	4.9	J1	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U Q M	0.44	0.43	0.11
2691-41-0	HMX	0.22	U	0.23	0.22	0.095
5755-27-1	MNX	0.43	U M	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U M	0.23	0.22	0.098
121-82-4	RDX	0.22	U M	0.23	0.22	0.056
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	113	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040030.D
Lims ID: 280-149116-A-4-A
Client ID: PZ0018-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 01:53:07 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-4-A
Misc. Info.: 280-0102084-030
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:17 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:13:10

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.609			ND	
	6 MNX	1		7.210			ND	U
	7 RDX	1		7.576			ND	U
$	9 1,2-Dinitrobenzene	1	8.497	8.496	0.001	28931	0.2256	M
	10 1,3,5-Trinitrobenzene	1	8.617	8.629	-0.012	10485	0.0476	M
	11 1,3-Dinitrobenzene	1	9.283	9.249	0.034	5973	0.0202	M
	12 Nitrobenzene	1		9.636			ND	U
	14 Tetryl	1		9.956			ND	U
	16 2,4,6-Trinitrotoluene	1	10.890	10.876	0.014	87715	0.4257	
	17 4-Amino-2,6-dinitrotoluene	1	11.097	11.076	0.021	69897	0.4575	
	18 2-Amino-4,6-dinitrotoluene	1	11.357	11.336	0.021	48690	0.2353	
	19 2,6-Dinitrotoluene	1		11.502			ND	
	20 2,4-Dinitrotoluene	1		11.676			ND	
	21 o-Nitrotoluene	1		12.542			ND	
	22 p-Nitrotoluene	1		12.976			ND	U
	23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

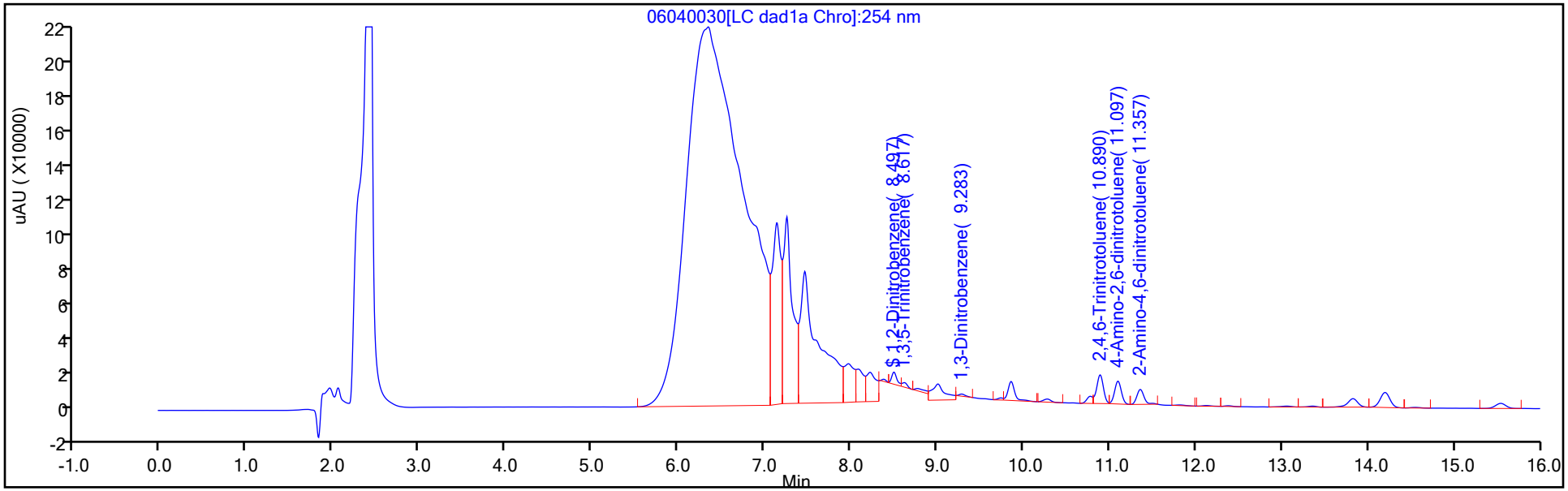
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:20 Chrom Revision: 2.3 13-May-2021 07:57:40

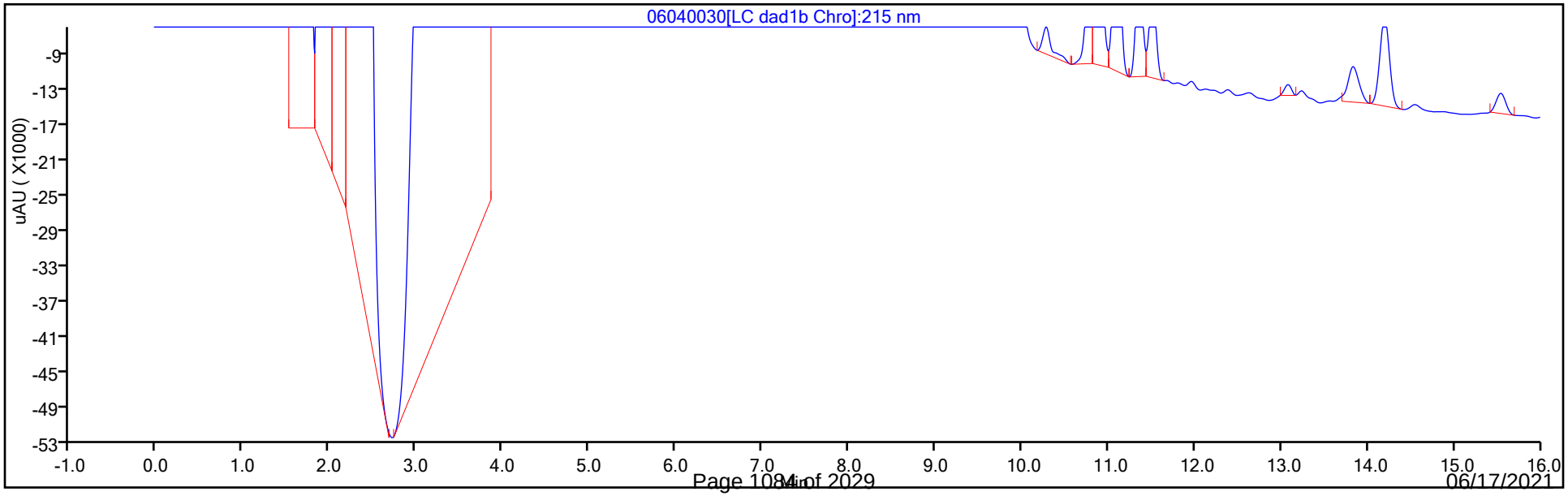
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d				
Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4	Worklist Smp#:	30
Client ID:	PZ0018-21A				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040030.D				
Lims ID:	280-149116-A-4-A				
Client ID:	PZ0018-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 01:53:07	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-4-A				
Misc. Info.:	280-0102084-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:17	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:13:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2256	112.82

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

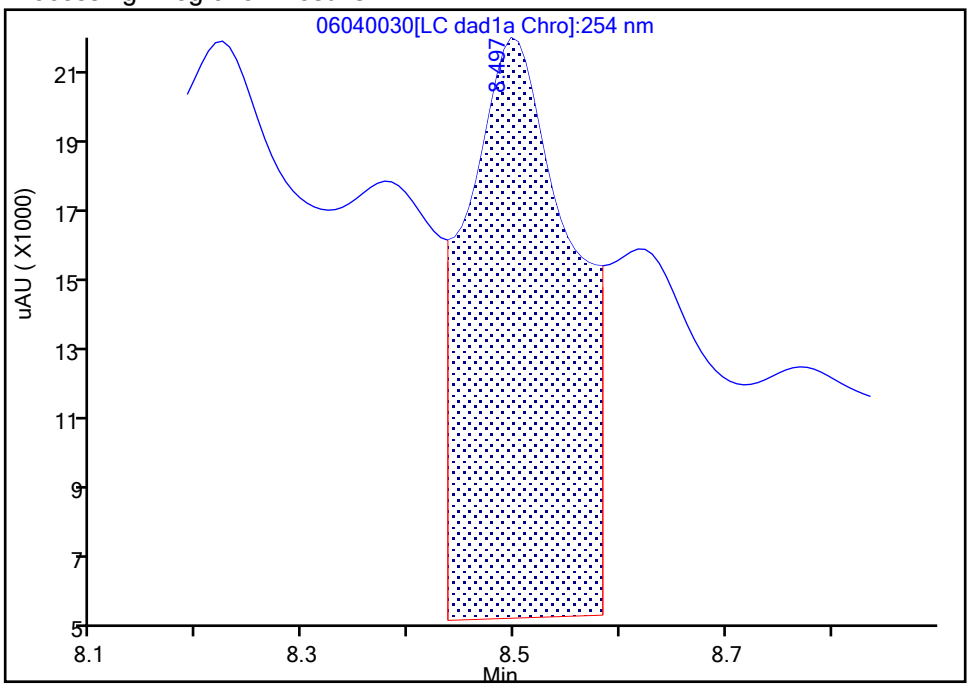
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d				
Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

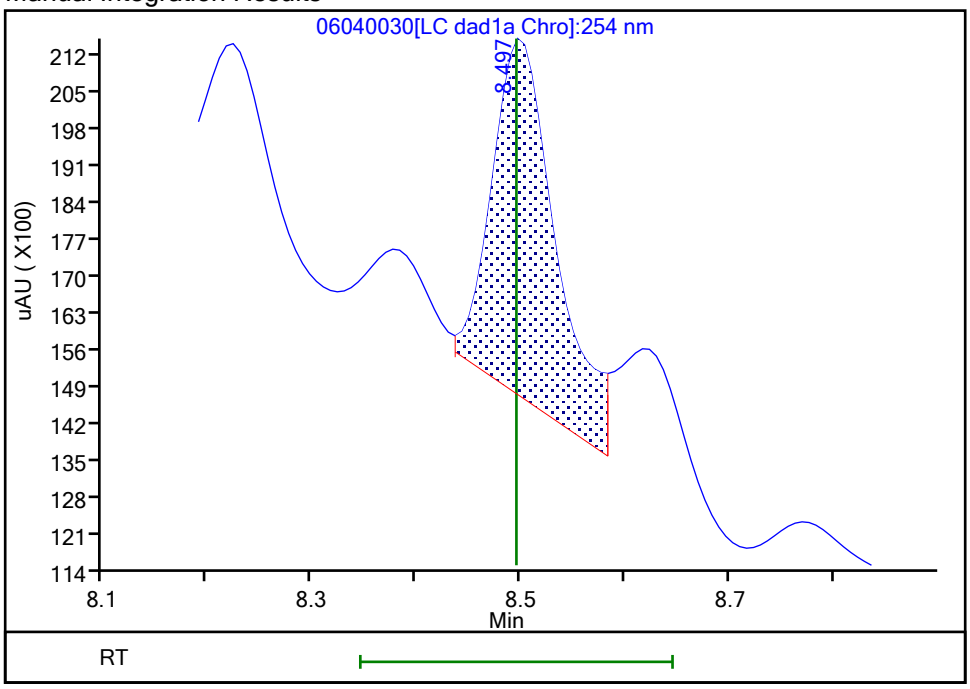
Processing Integration Results

RT: 8.50
Area: 109746
Amount: 0.855938
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 28931
Amount: 0.225641
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:12:58
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

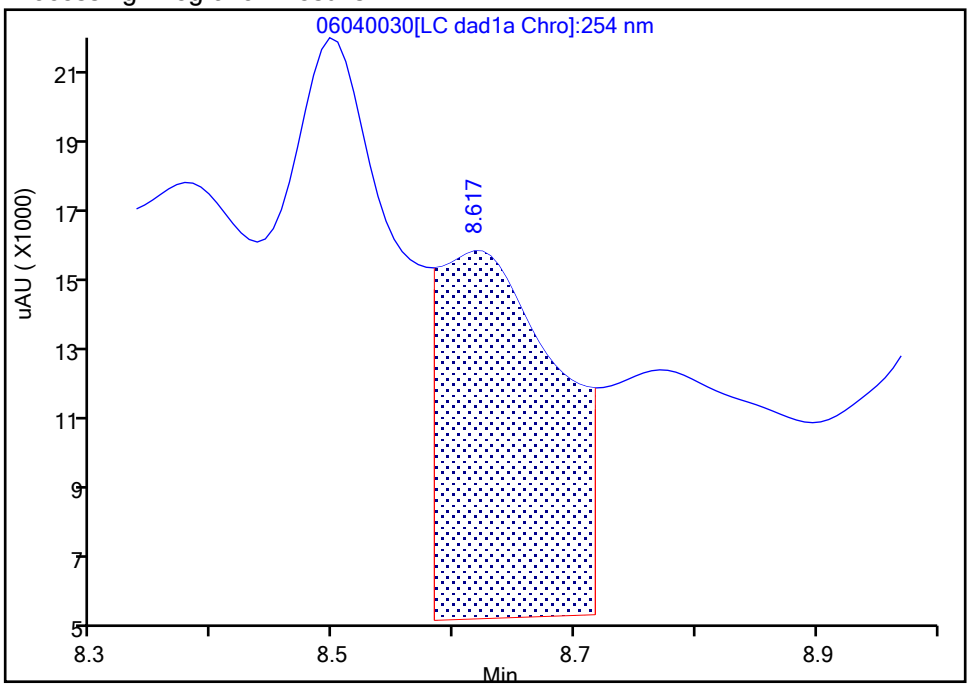
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d				
Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

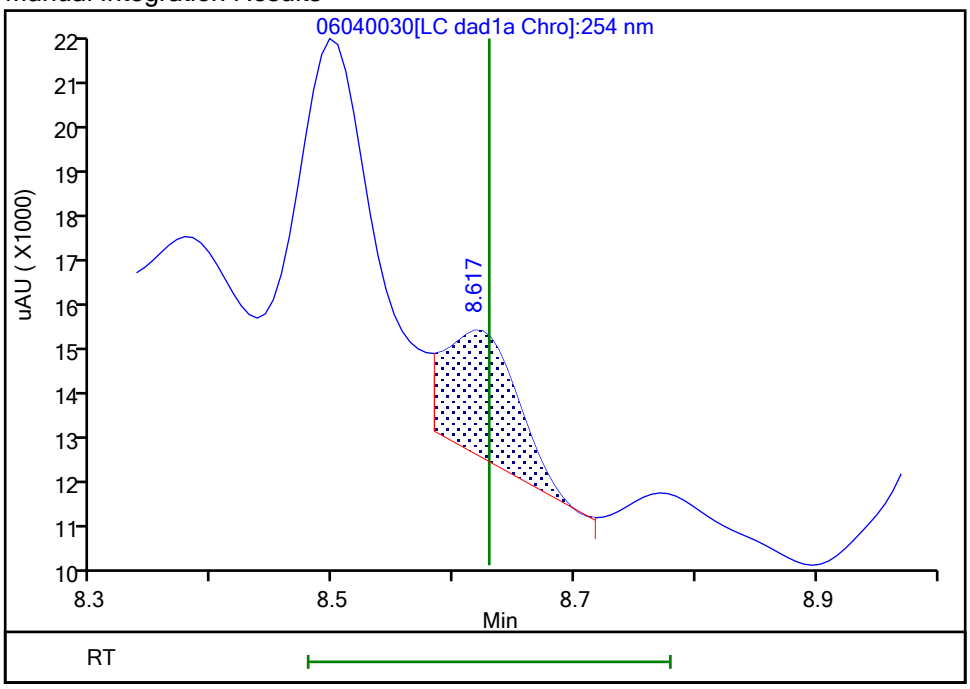
Processing Integration Results

RT: 8.62
Area: 67705
Amount: 0.307307
Amount Units: ug/mL



Manual Integration Results

RT: 8.62
Area: 10485
Amount: 0.047590
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:12:58
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

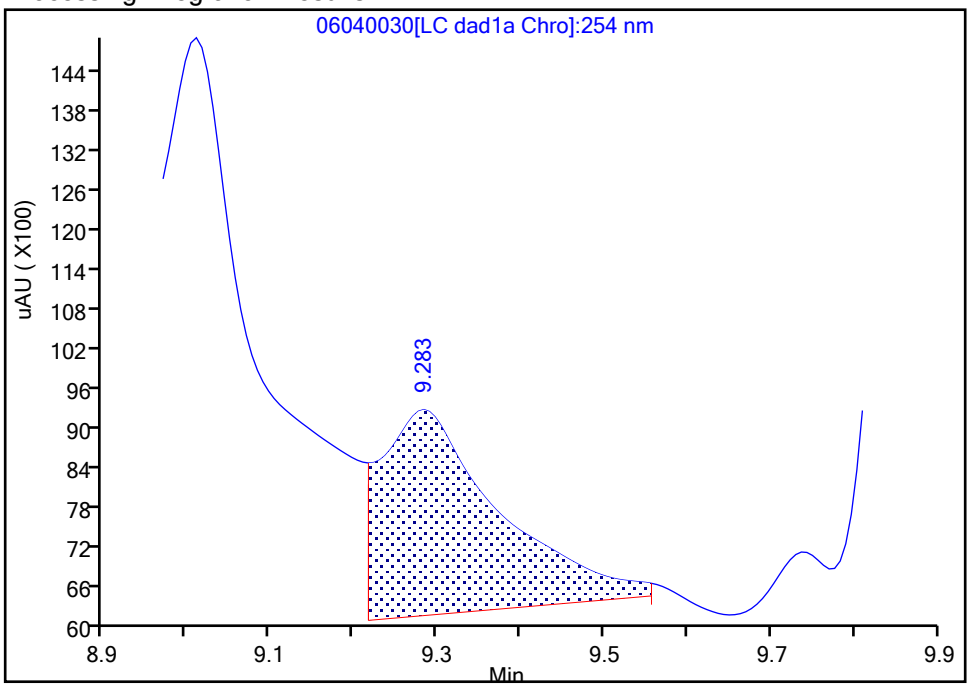
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d				
Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

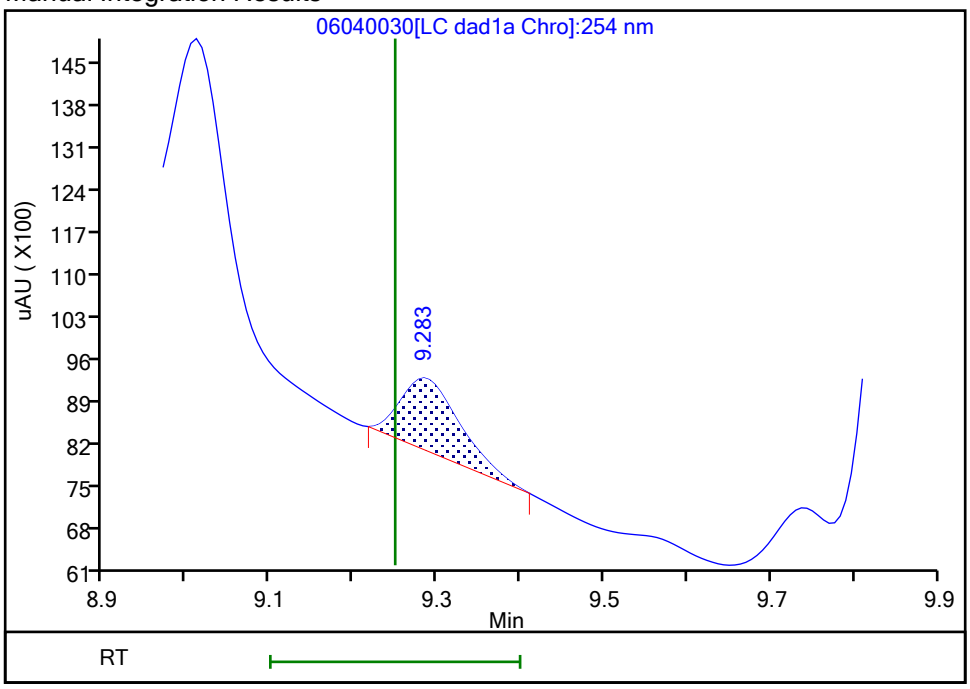
Processing Integration Results

RT: 9.28
Area: 30550
Amount: 0.103095
Amount Units: ug/mL



Manual Integration Results

RT: 9.28
Area: 5973
Amount: 0.020157
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:13:06
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

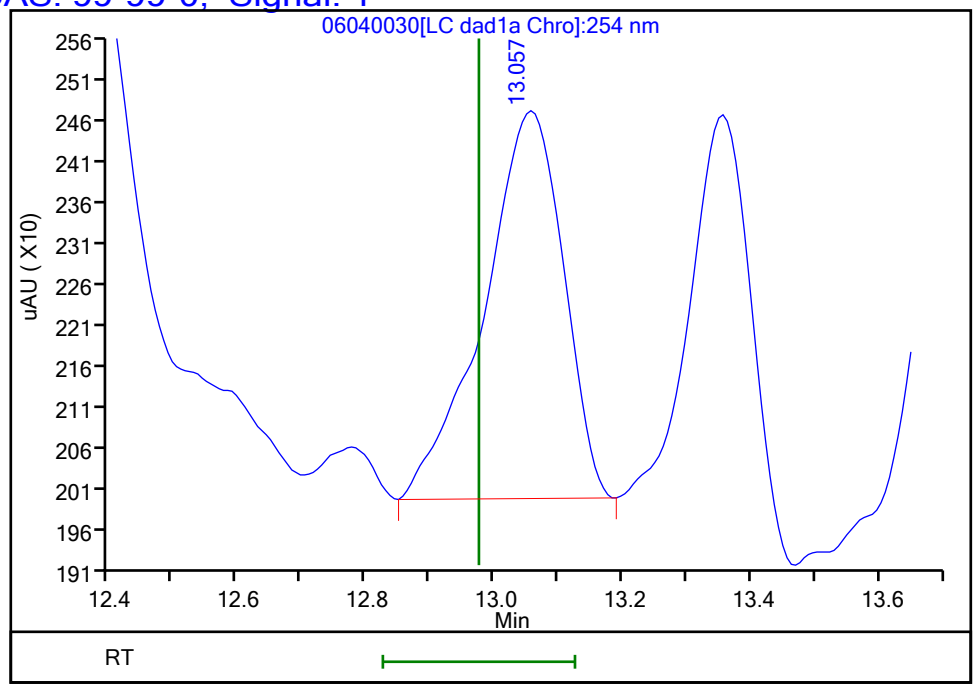
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d

Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	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		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.06
Response: 4069
Amount: 0.036359



Reviewer: zhangji, 05-Jun-2021 10:13:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

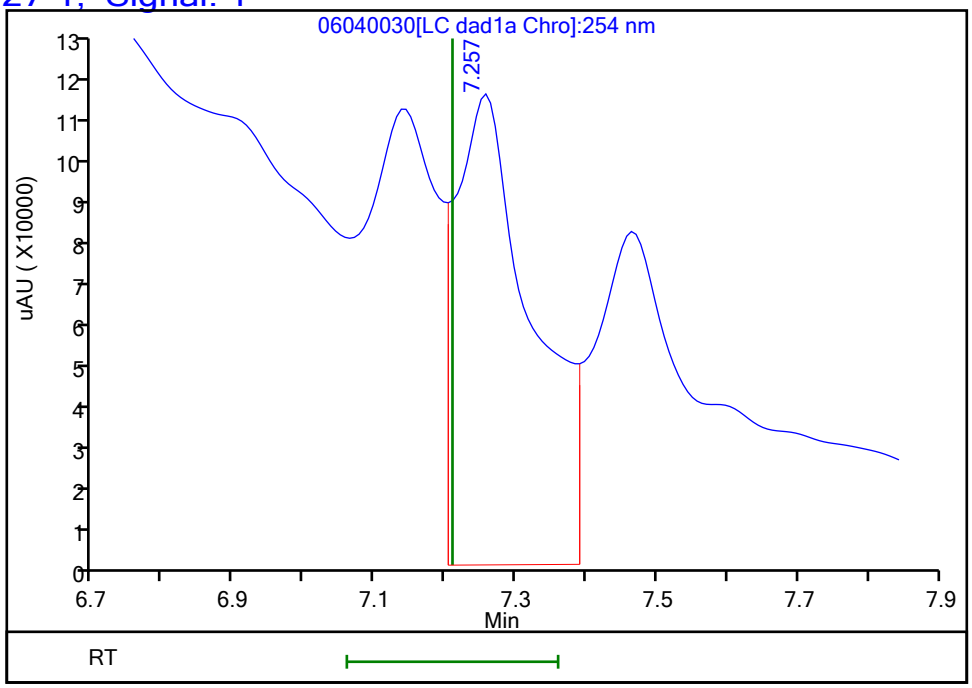
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d				
Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	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		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.26
Response: 780811
Amount: 5.990555



Reviewer: zhangji, 05-Jun-2021 10:13:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

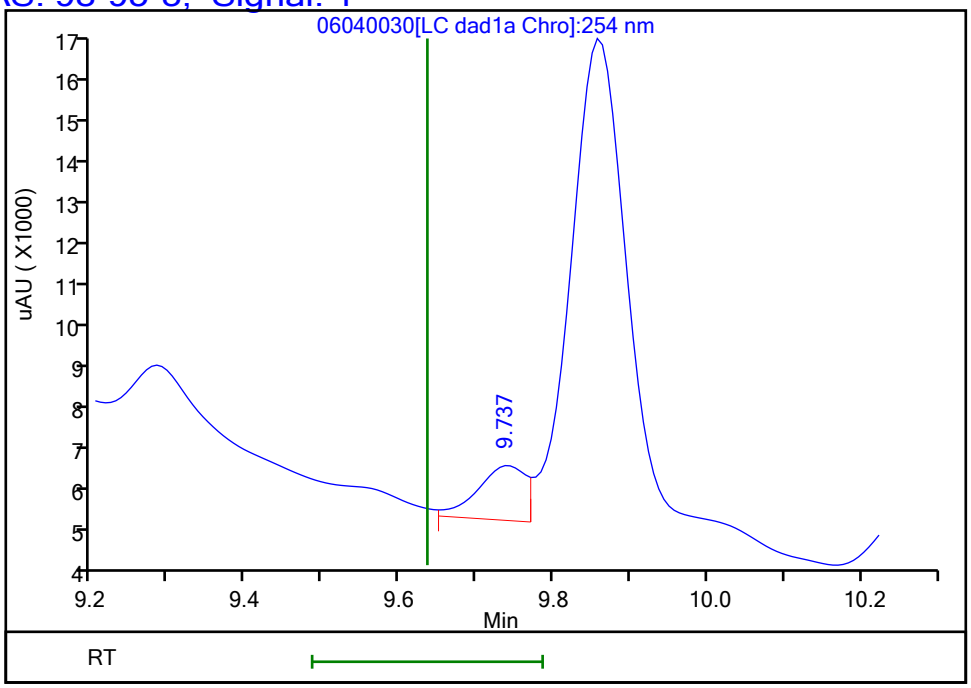
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d				
Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	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		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.74
Response: 5065
Amount: 0.025936



Reviewer: zhangji, 05-Jun-2021 10:13:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

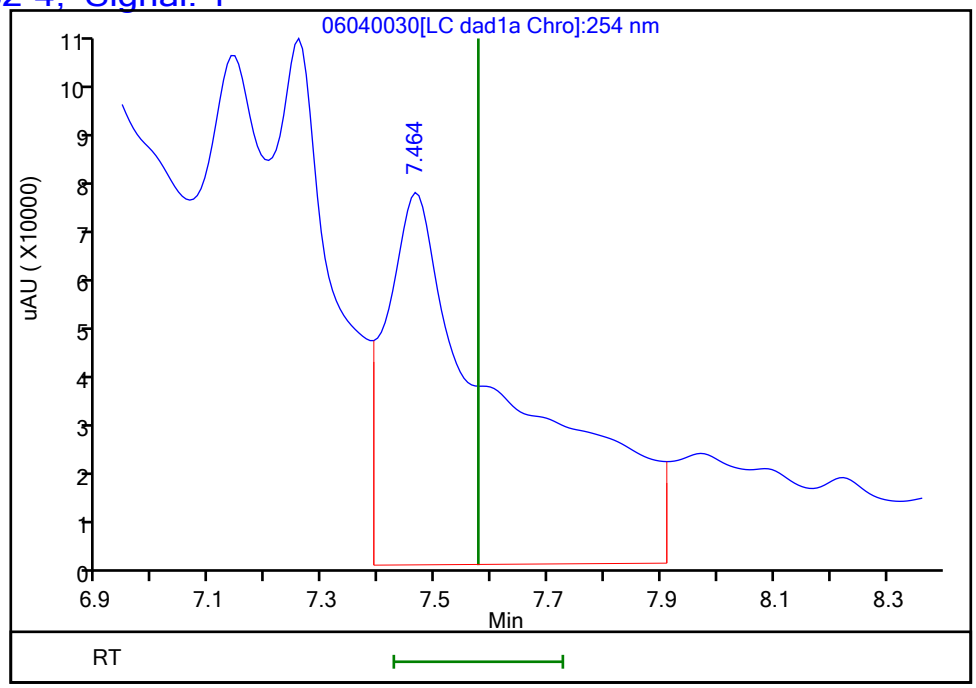
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d

Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	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		

7 RDX, CAS: 121-82-4, Signal: 1

RT: 7.46
Response: 1129803
Amount: 10.632292



Reviewer: zhangji, 05-Jun-2021 10:13:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

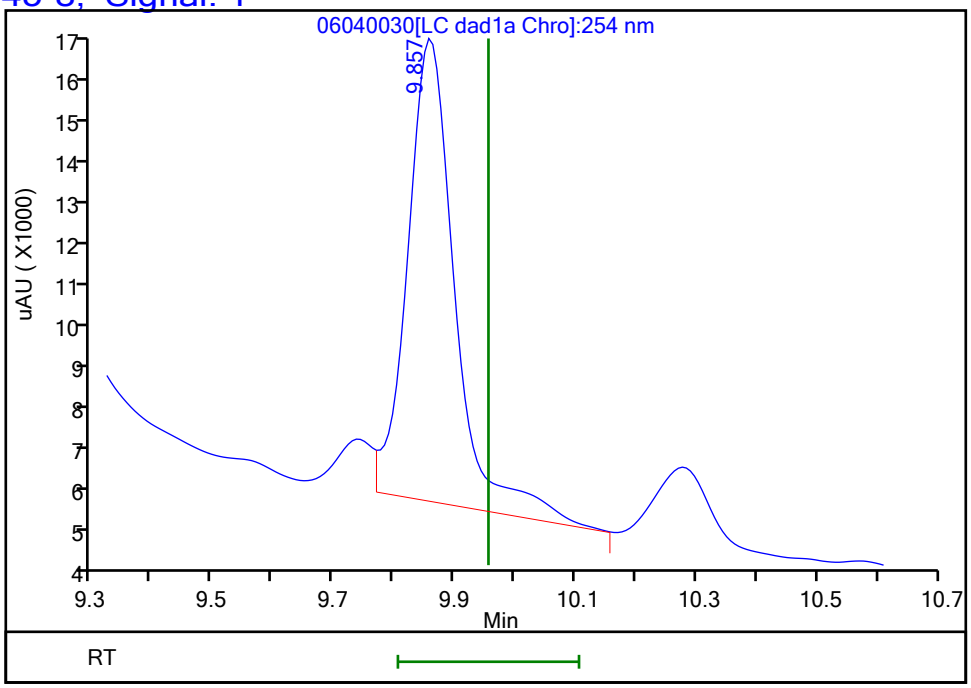
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040030.d

Injection Date:	05-Jun-2021 01:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.86
Response: 57591
Amount: 0.334016



Reviewer: zhangji, 05-Jun-2021 10:13:10
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.: 280-149116-1

SDG No.:

Client Sample ID: PZ0018-21A Lab Sample ID: 280-149116-4

Matrix: Water Lab File ID: 06050019.D

Analysis Method: 8330A Date Collected: 05/25/2021 15:25

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 462.5(mL) Date Analyzed: 06/05/2021 19:21

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.: 538717 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*9.7*	*J1*	*0.16*	0.13	*0.062*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050019.D
Lims ID: 280-149116-A-4-A
Client ID: PZ0018-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 19:21:18 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-4-A
Misc. Info.: 280-0102103-019
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:30 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 16:34:24

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	6.655	6.699	-0.044	17181	0.1020	M
	7 MNX	1		7.429			ND	
	8 RDX	1	8.882	8.893	-0.011	11367	0.0556	M
	9 Nitrobenzene	1		11.953			ND	U
$	10 1,2-Dinitrobenzene	1	13.035	13.066	-0.031	52424	0.1973	
	12 1,3-Dinitrobenzene	1		15.493			ND	
	14 o-Nitrotoluene	1		16.739			ND	U
	15 p-Nitrotoluene	1		17.033			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.422	17.493	-0.071	266600	0.8985	
	17 m-Nitrotoluene	1		18.013			ND	7
	18 2-Amino-4,6-dinitrotoluene	1	18.362	18.393	-0.031	137813	0.3503	
	19 1,3,5-Trinitrobenzene	1		18.906			ND	
	20 2,6-Dinitrotoluene	1		20.173			ND	
	21 2,4-Dinitrotoluene	1		20.633			ND	7
	22 Tetryl	1		24.253			ND	7
	23 2,4,6-Trinitrotoluene	1	25.242	25.233	0.009	165872	0.4421	

QC Flag Legend

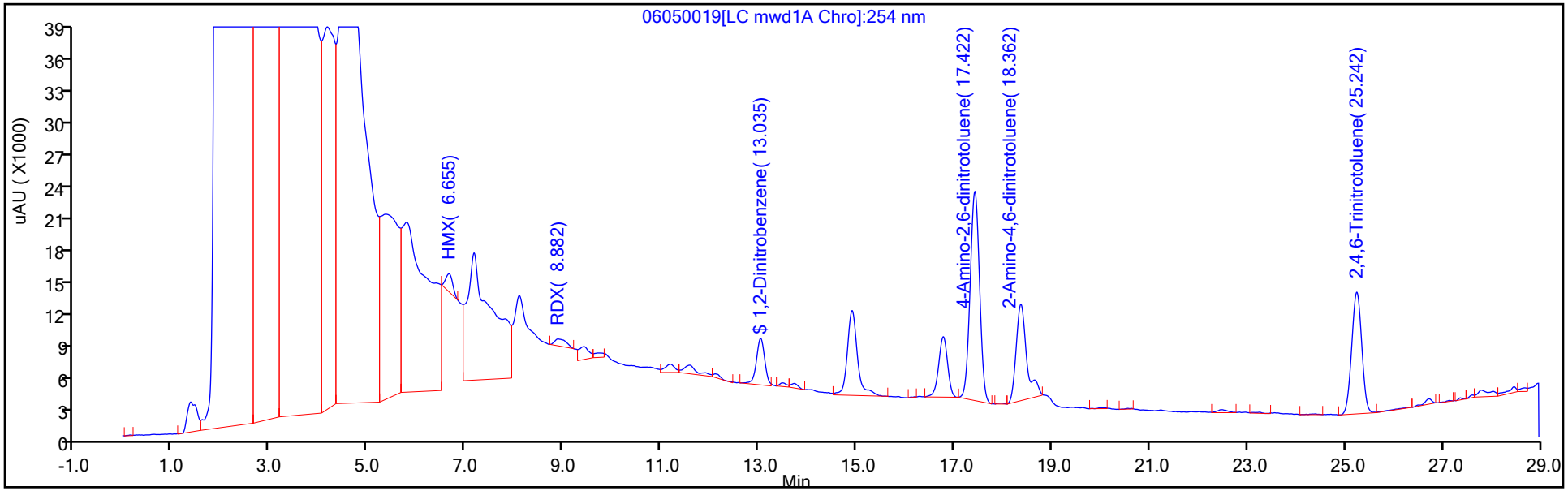
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 08-Jun-2021 16:38:35 Chrom Revision: 2.3 13-May-2021 07:57:40

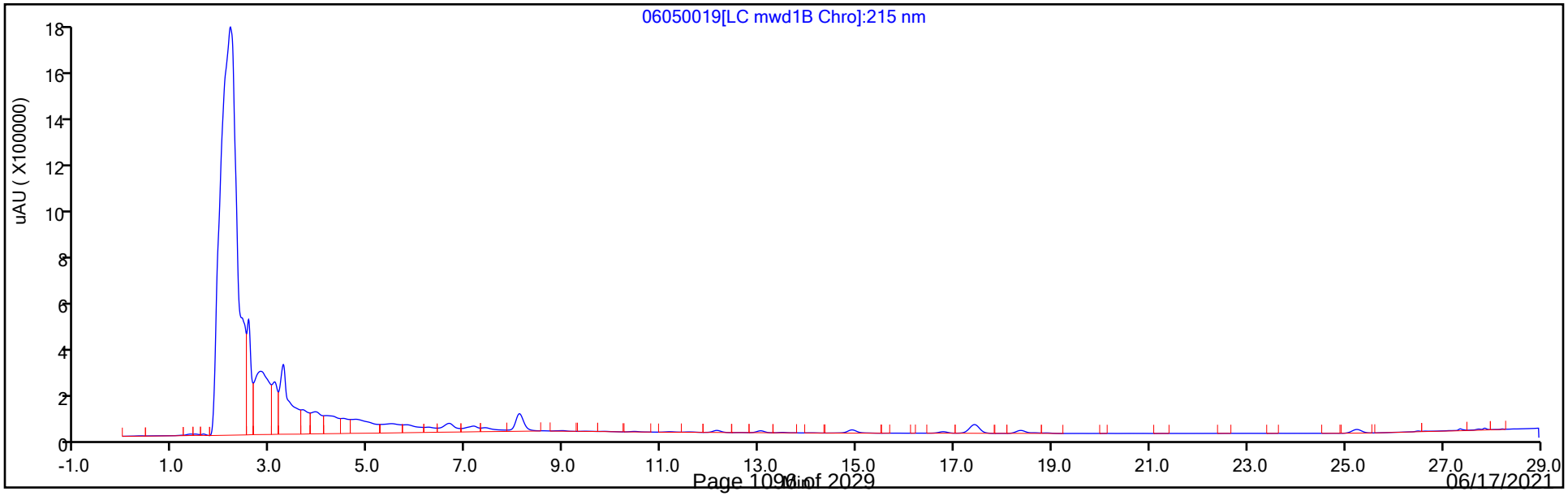
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050019.D				
Injection Date:	05-Jun-2021 19:21:18	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4	Worklist Smp#:	19
Client ID:	PZ0018-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050019.D				
Lims ID:	280-149116-A-4-A				
Client ID:	PZ0018-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 19:21:18	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-4-A				
Misc. Info.:	280-0102103-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:30	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	08-Jun-2021 16:34:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1973	98.67

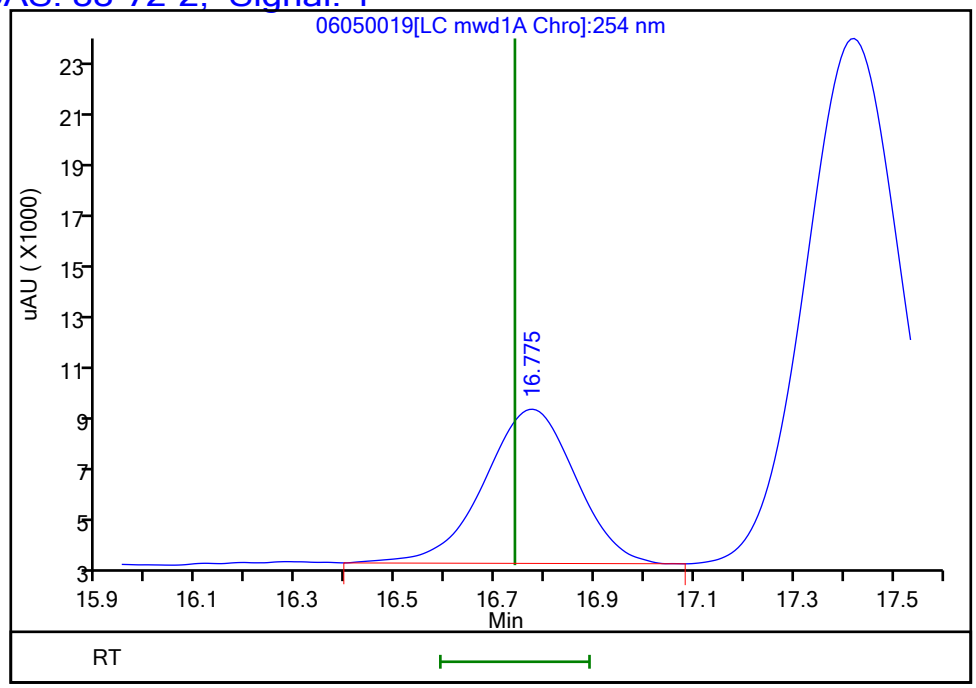
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050019.D				
Injection Date:	05-Jun-2021 19:21:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.78
Response: 73356
Amount: 0.294642



Reviewer: zhangji, 08-Jun-2021 16:34:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

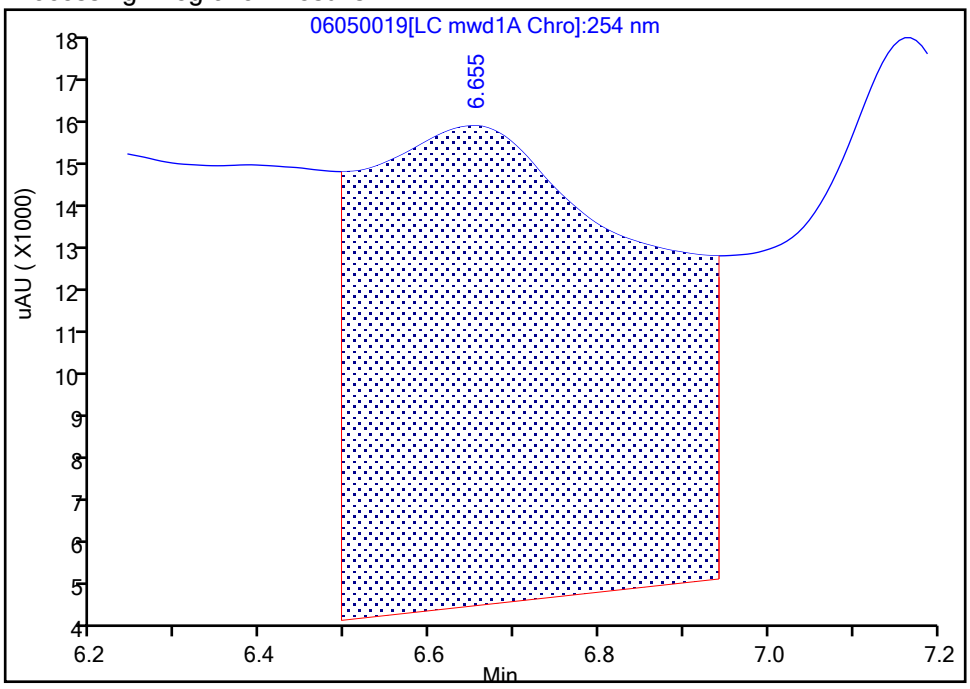
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050019.D				
Injection Date:	05-Jun-2021 19:21:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

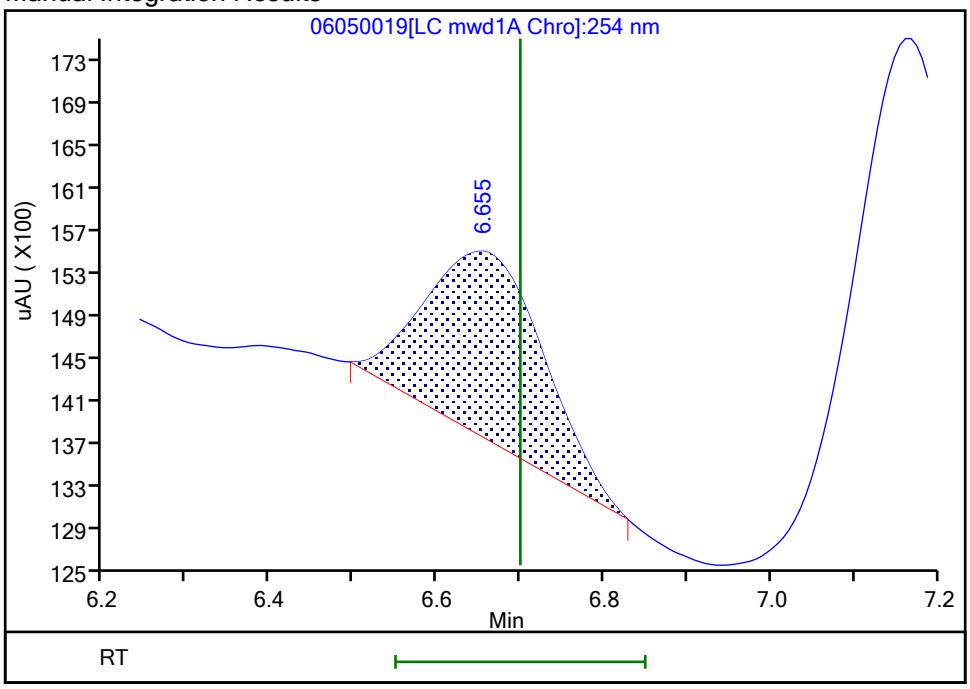
Processing Integration Results

RT: 6.66
Area: 247164
Amount: 1.550529
Amount Units: ug/ml



Manual Integration Results

RT: 6.66
Area: 17181
Amount: 0.102034
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:34:05
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

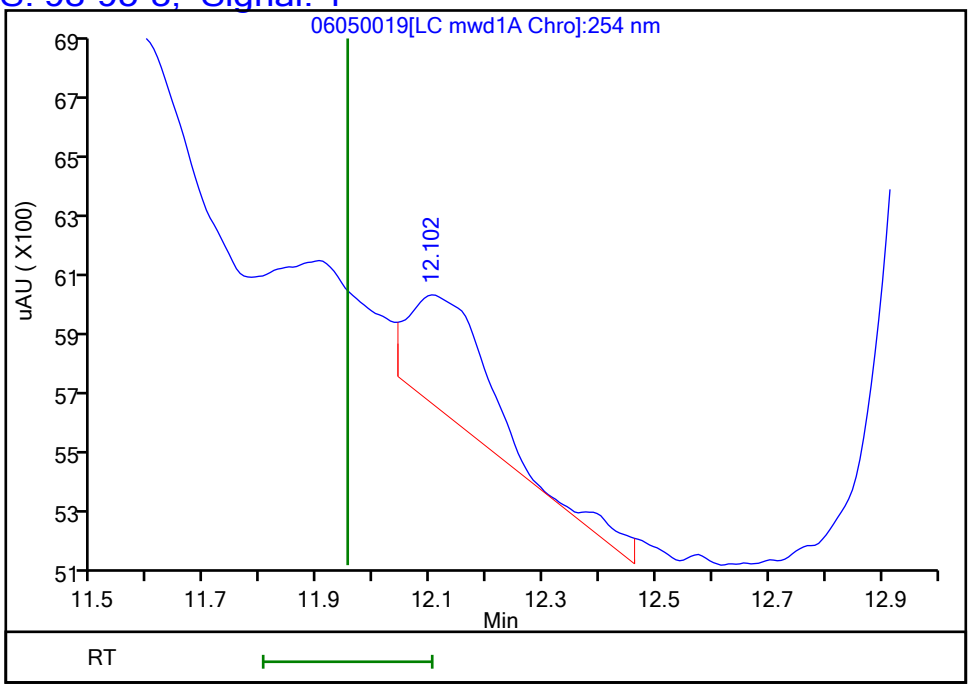
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050019.D				
Injection Date:	05-Jun-2021 19:21:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 12.10
Response: 3828
Amount: 0.010217



Reviewer: zhangji, 08-Jun-2021 16:34:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

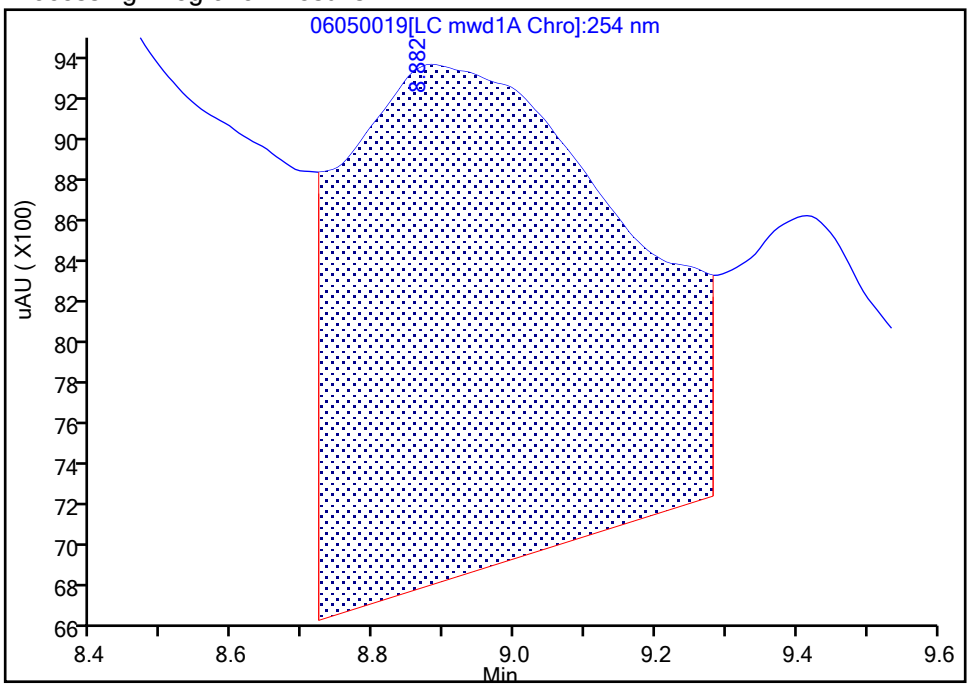
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050019.D				
Injection Date:	05-Jun-2021 19:21:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-4-A	Lab Sample ID:	280-149116-4		
Client ID:	PZ0018-21A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

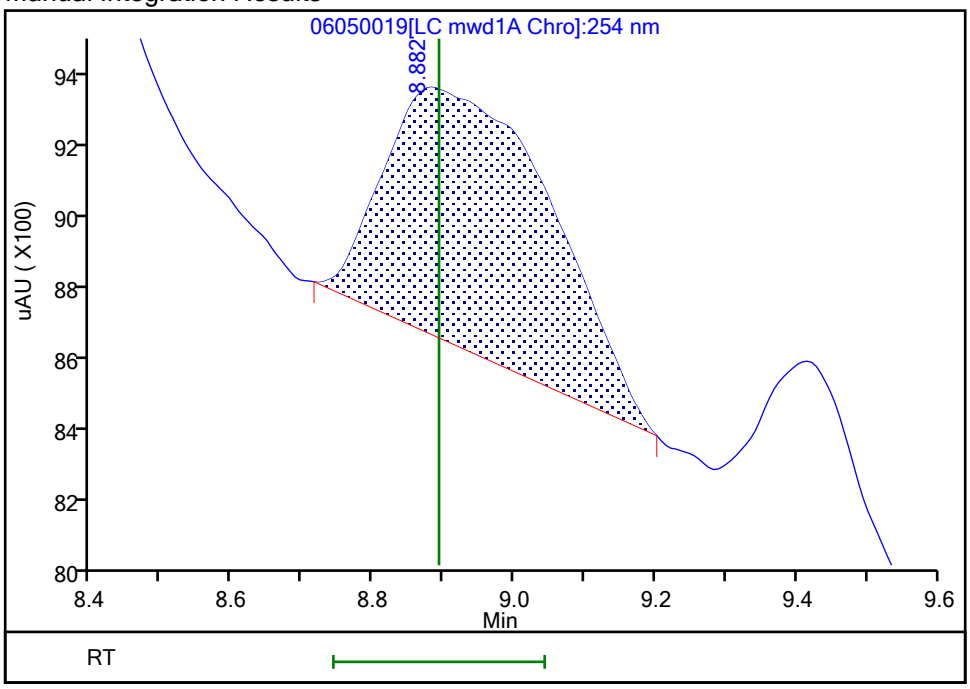
Processing Integration Results

RT: 8.88
Area: 65231
Amount: 0.319337
Amount Units: ug/ml



Manual Integration Results

RT: 8.88
Area: 11367
Amount: 0.055647
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:34:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0077-21A Lab Sample ID: 280-149116-9

Matrix: Water Lab File ID: 06030036.D

Analysis Method: 8330A Date Collected: 05/26/2021 09:30

Extraction Method: 3535 Date Extracted: 06/01/2021 17:35

Sample wt/vol: 488.1(mL) Date Analyzed: 06/04/2021 01:20

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.: 538449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	4.3	M	0.22	0.20	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	4.3	M	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.061	J M	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	2.5	M	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.20	U Q	0.22	0.20	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	2.5	M	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U Q M	0.42	0.41	0.10
2691-41-0	HMX	0.57	M	0.22	0.20	0.090
5755-27-1	MNX	0.41	U M	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U M	0.22	0.20	0.093
121-82-4	RDX	1.2	M J1	0.22	0.20	0.053
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030036.D
Lims ID: 280-149116-A-9-A
Client ID: G0077-21A
Sample Type: Client
Inject. Date: 04-Jun-2021 01:20:17 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-9-A
Misc. Info.: 280-0102044-036
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:48:05 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 17:40:57

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.600	6.603	-0.003	4669	0.0553	M
	6 MNX	1		7.216			ND	U
	7 RDX	1	7.574	7.577	-0.003	12916	0.1215	M
$	9 1,2-Dinitrobenzene	1	8.507	8.503	0.004	23188	0.1808	M
	10 1,3,5-Trinitrobenzene	1	8.634	8.630	0.004	92377	0.4193	M
	11 1,3-Dinitrobenzene	1		9.256			ND	U
	12 Nitrobenzene	1		9.643			ND	U
	14 Tetryl	1		9.970			ND	U
	16 2,4,6-Trinitrotoluene	1	10.907	10.890	0.017	86047	0.4176	M
	17 4-Amino-2,6-dinitrotoluene	1	11.120	11.096	0.024	37136	0.2431	M
	18 2-Amino-4,6-dinitrotoluene	1	11.380	11.356	0.024	51236	0.2476	M
	19 2,6-Dinitrotoluene	1		11.523			ND	
	20 2,4-Dinitrotoluene	1	11.714	11.696	0.018	1704	0.005937	M
	21 o-Nitrotoluene	1		12.570			ND	
	22 p-Nitrotoluene	1		13.003			ND	U
	23 m-Nitrotoluene	1		13.590			ND	

QC Flag Legend

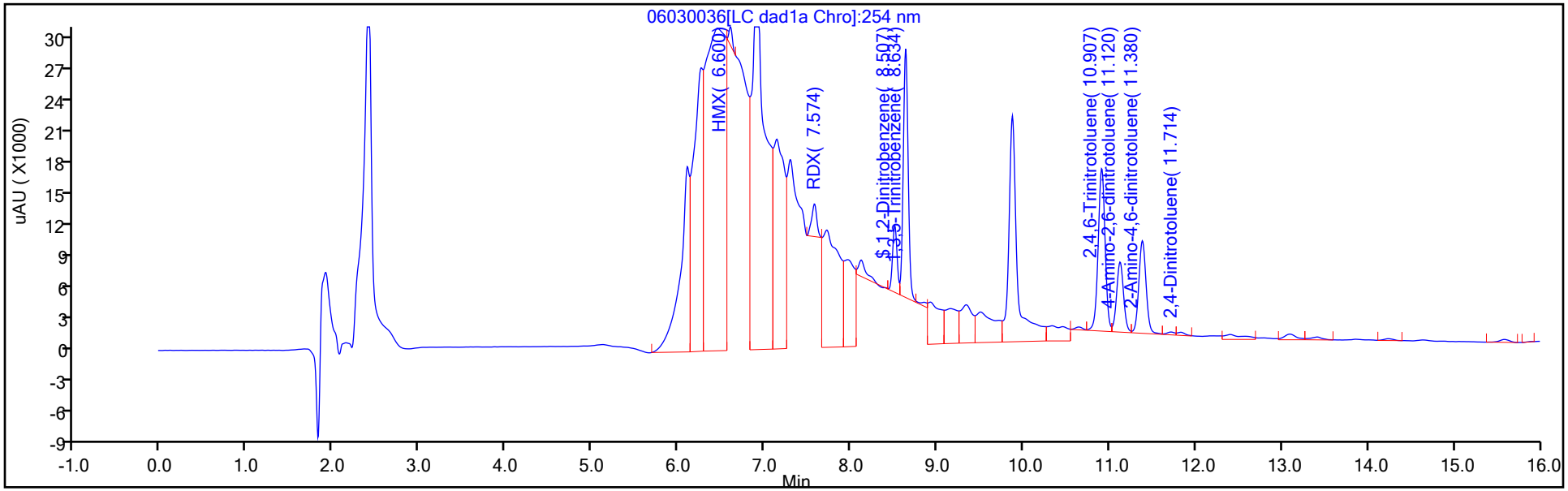
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 08-Jun-2021 17:41:00 Chrom Revision: 2.3 13-May-2021 07:57:40

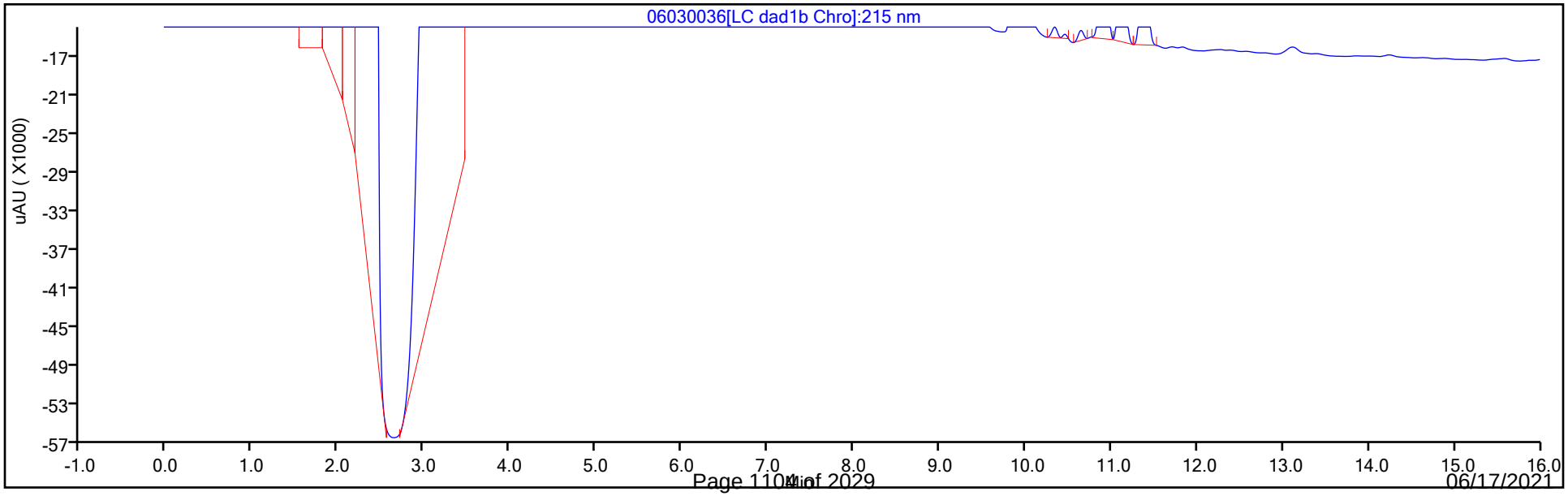
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9	Worklist Smp#:	36
Client ID:	G0077-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030036.D
Lims ID: 280-149116-A-9-A
Client ID: G0077-21A
Sample Type: Client
Inject. Date: 04-Jun-2021 01:20:17 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-9-A
Misc. Info.: 280-0102044-036
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:48:05 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 17:40:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1808	90.42

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

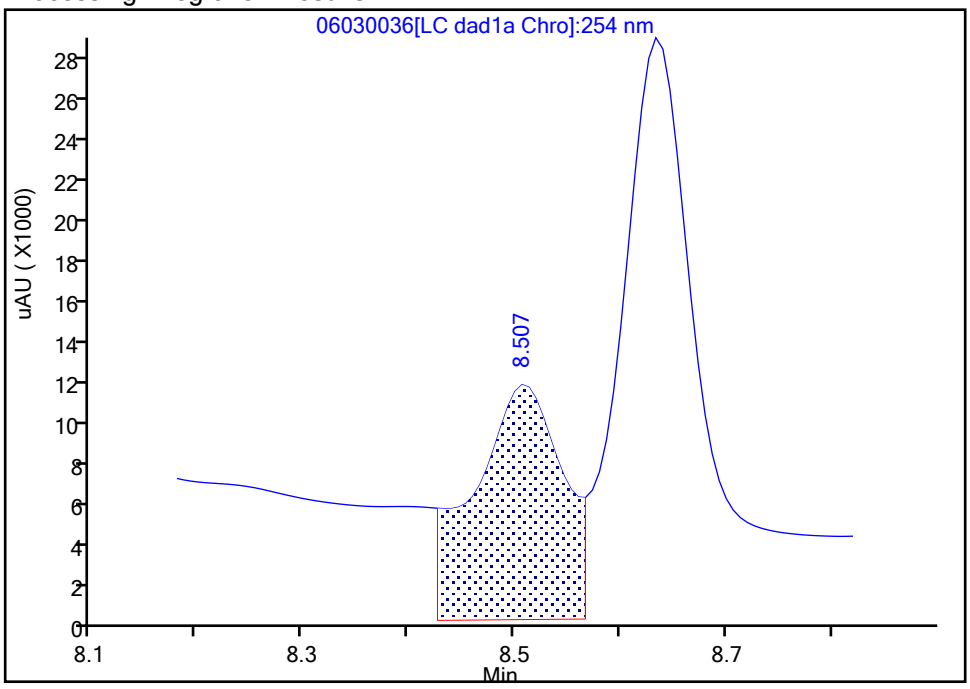
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

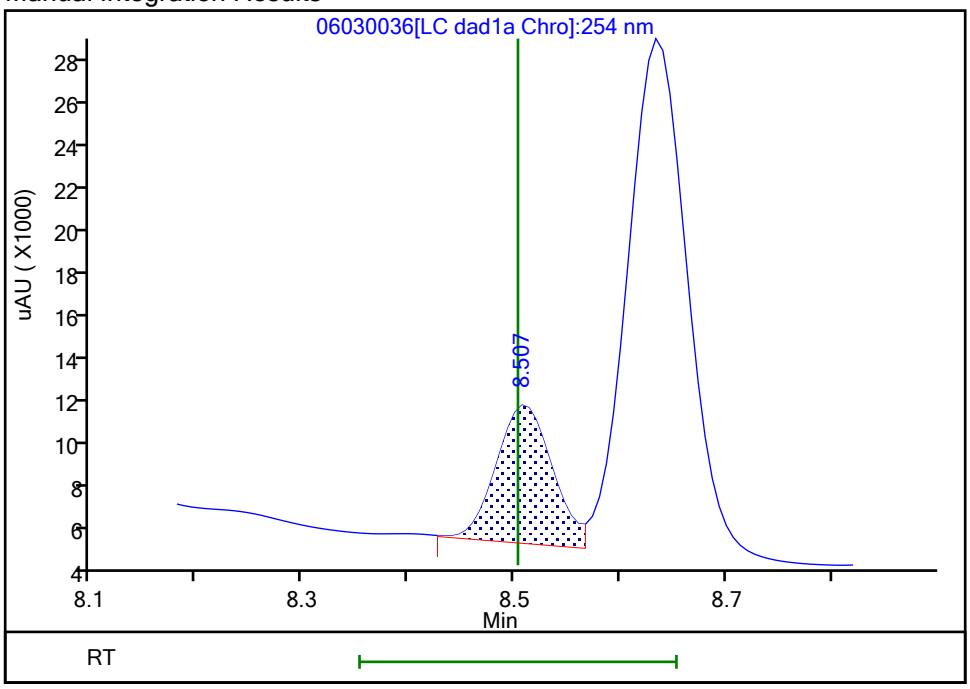
Processing Integration Results

RT: 8.51
Area: 65419
Amount: 0.510220
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 23188
Amount: 0.180849
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:05:15
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

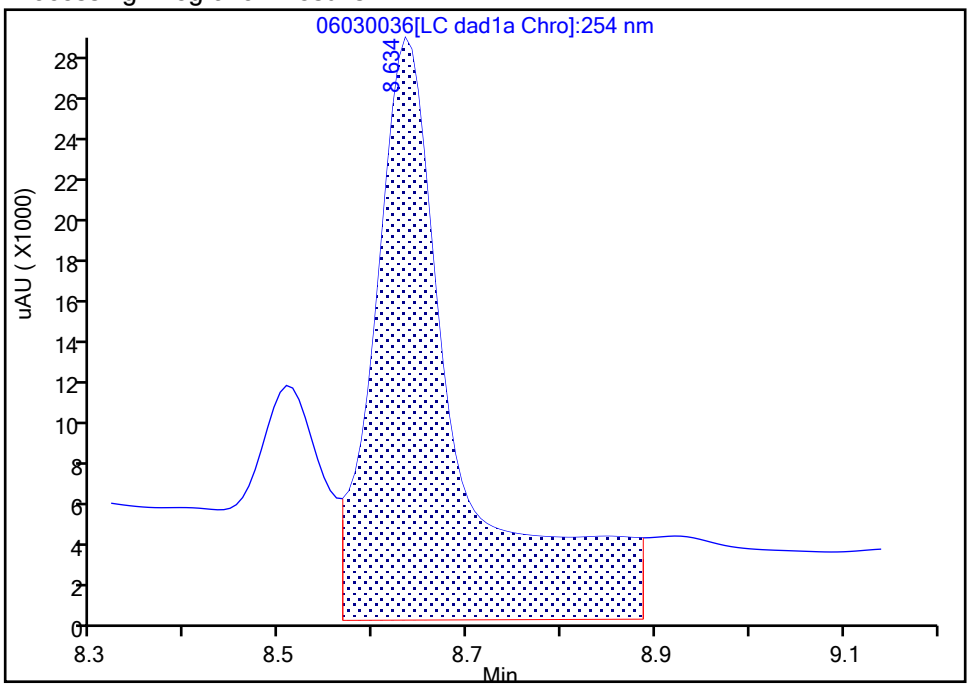
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

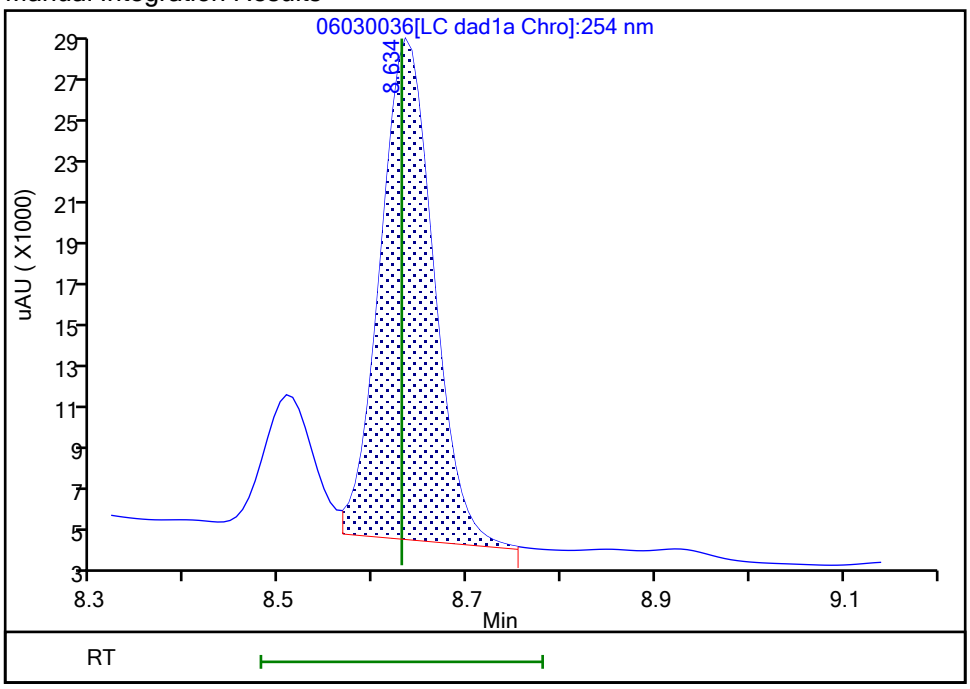
Processing Integration Results

RT: 8.63
Area: 172746
Amount: 0.784078
Amount Units: ug/mL



Manual Integration Results

RT: 8.63
Area: 92377
Amount: 0.419291
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:05:18

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

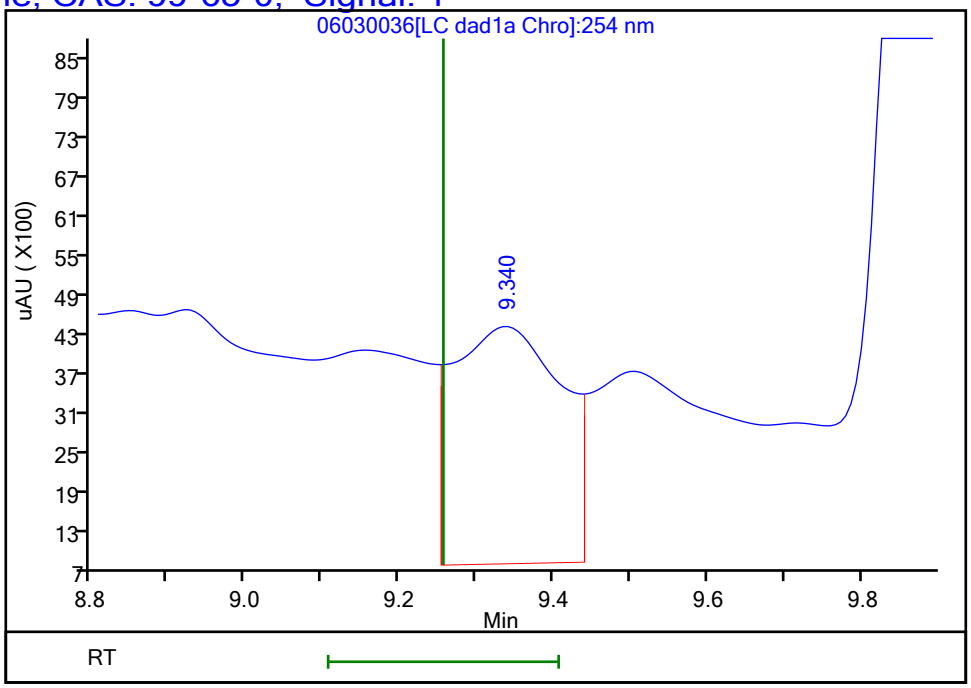
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d

Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.34
Response: 35086
Amount: 0.118402



Reviewer: zhangji, 04-Jun-2021 13:06:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

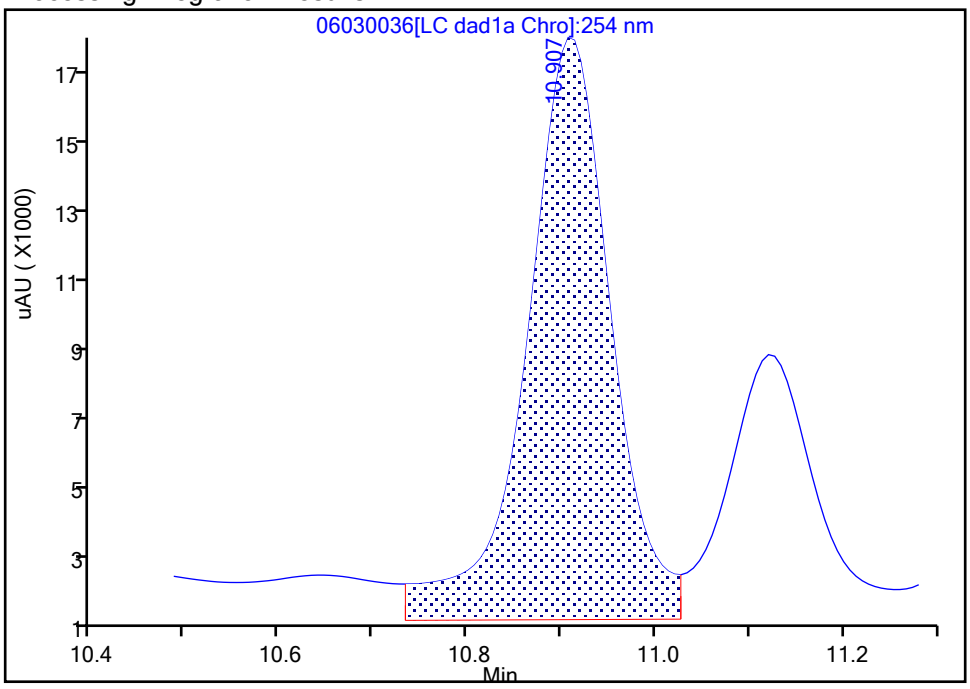
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

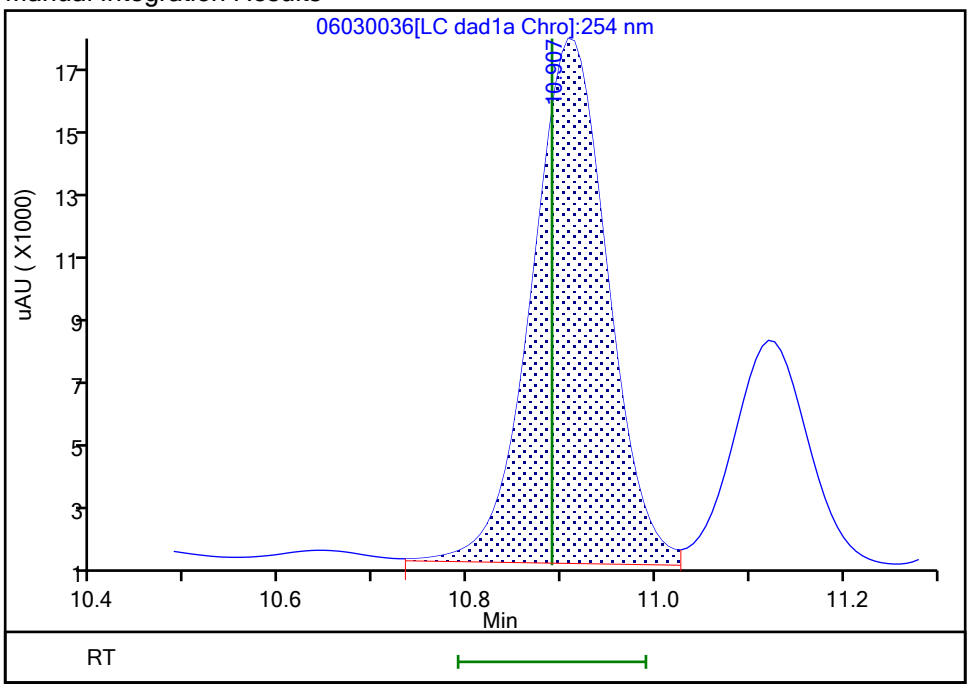
Processing Integration Results

RT: 10.91
Area: 101306
Amount: 0.491686
Amount Units: ug/mL



Manual Integration Results

RT: 10.91
Area: 86047
Amount: 0.417627
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:06:00
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

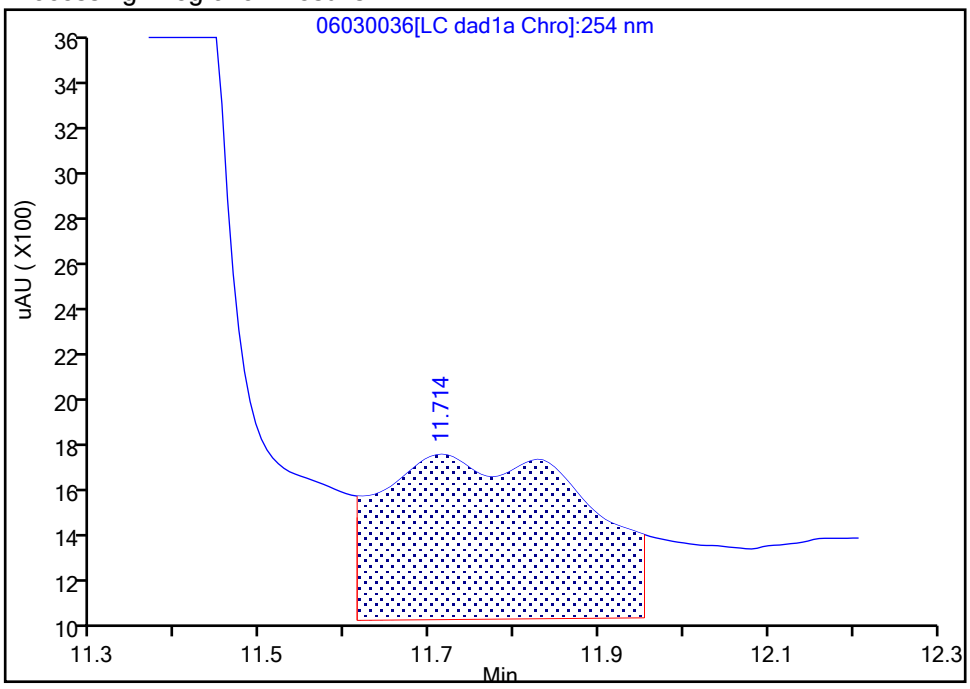
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

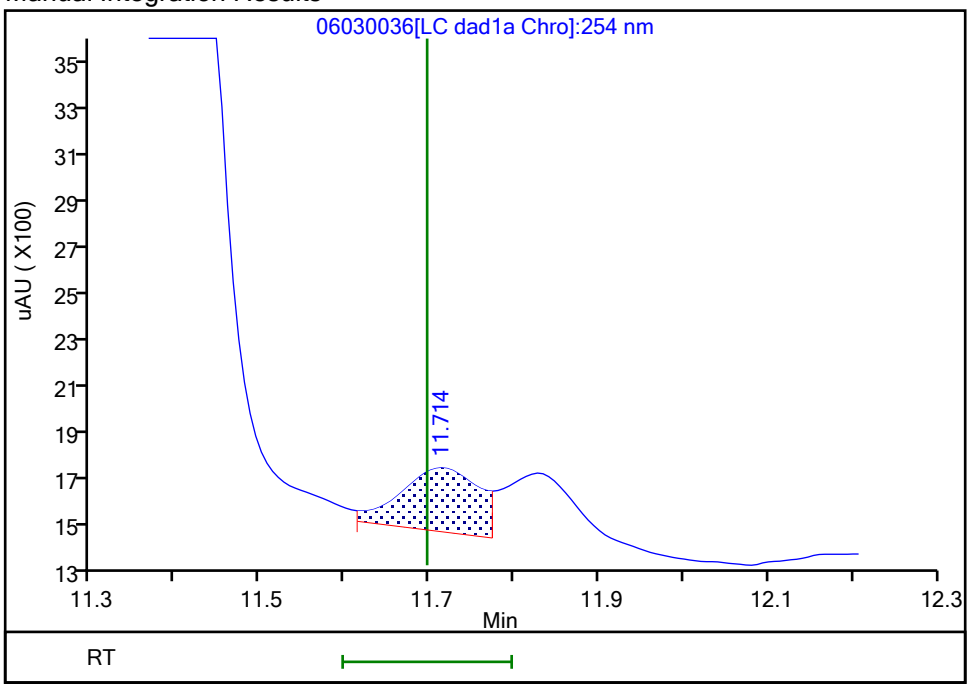
Processing Integration Results

RT: 11.71
Area: 11964
Amount: 0.041685
Amount Units: ug/mL



Manual Integration Results

RT: 11.71
Area: 1704
Amount: 0.005937
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:06:06

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

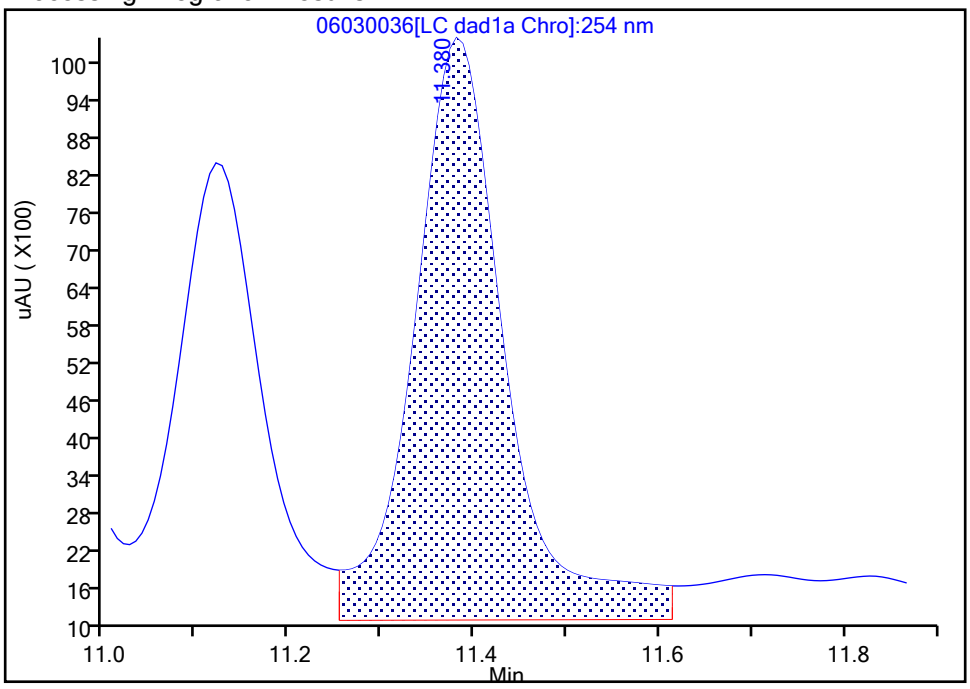
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

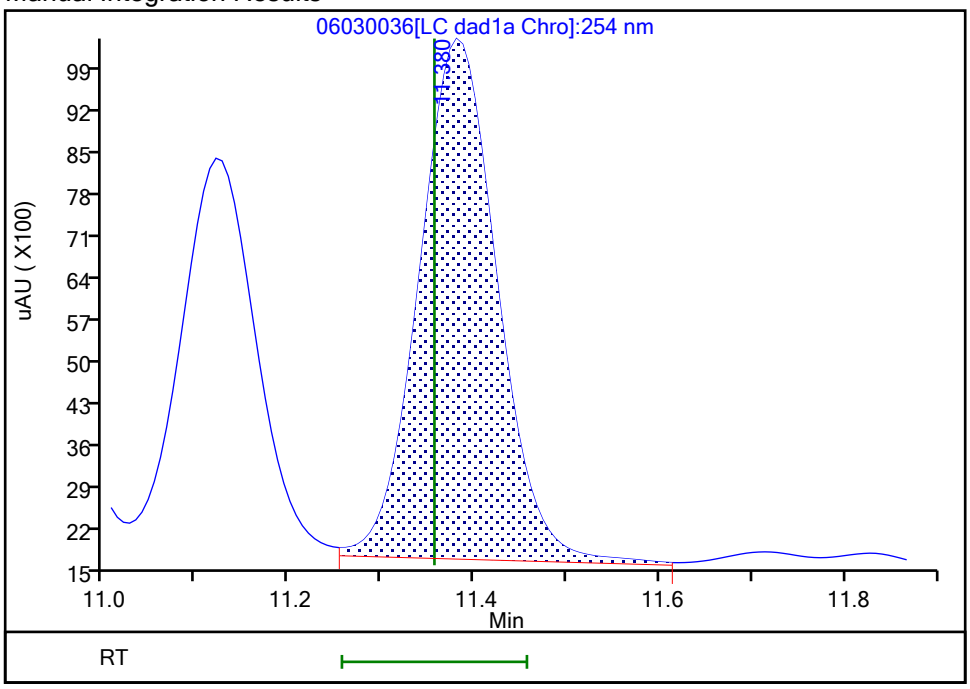
Processing Integration Results

RT: 11.38
Area: 63742
Amount: 0.308042
Amount Units: ug/mL



Manual Integration Results

RT: 11.38
Area: 51236
Amount: 0.247605
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:06:00
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

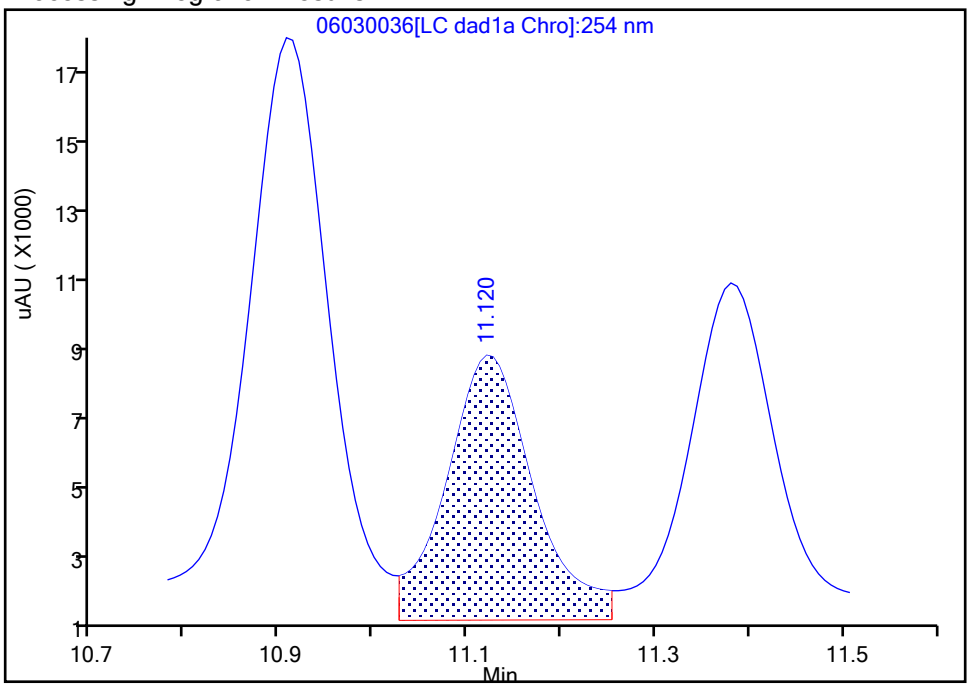
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

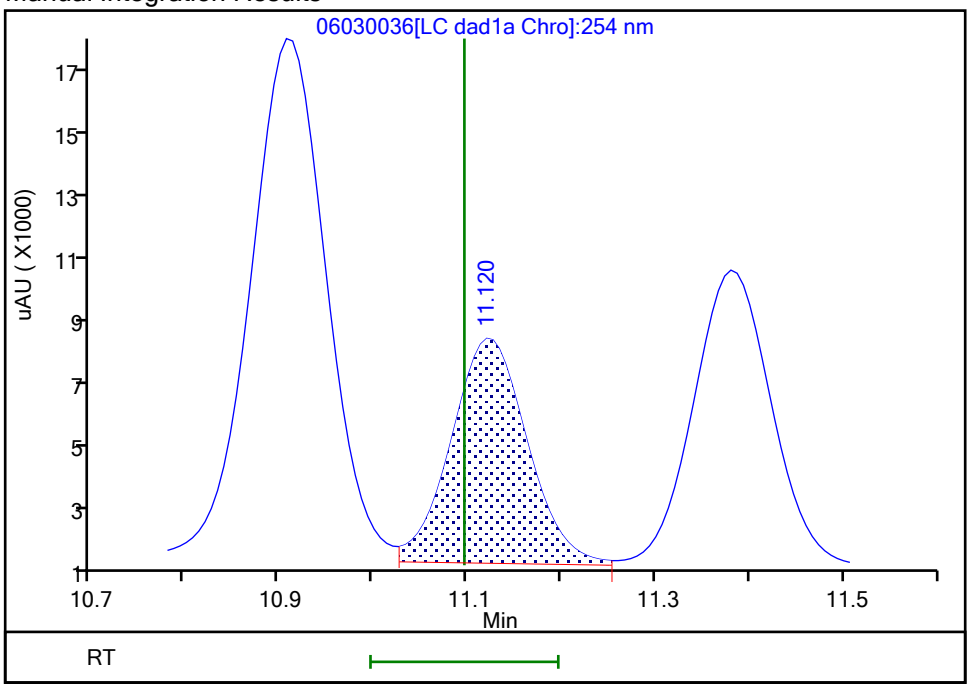
Processing Integration Results

RT: 11.12
Area: 47003
Amount: 0.307676
Amount Units: ug/mL



Manual Integration Results

RT: 11.12
Area: 37136
Amount: 0.243088
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:06:00
Audit Action: Assigned New Baseline Audit Reason: Baseline

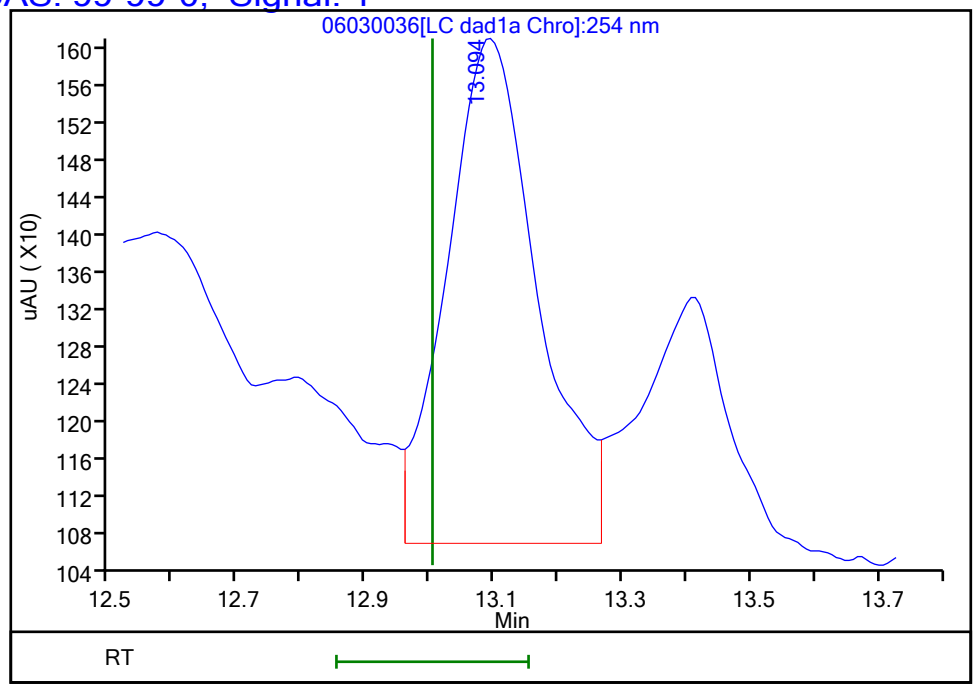
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.09
Response: 5259
Amount: 0.046992



Reviewer: zhangji, 04-Jun-2021 13:06:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

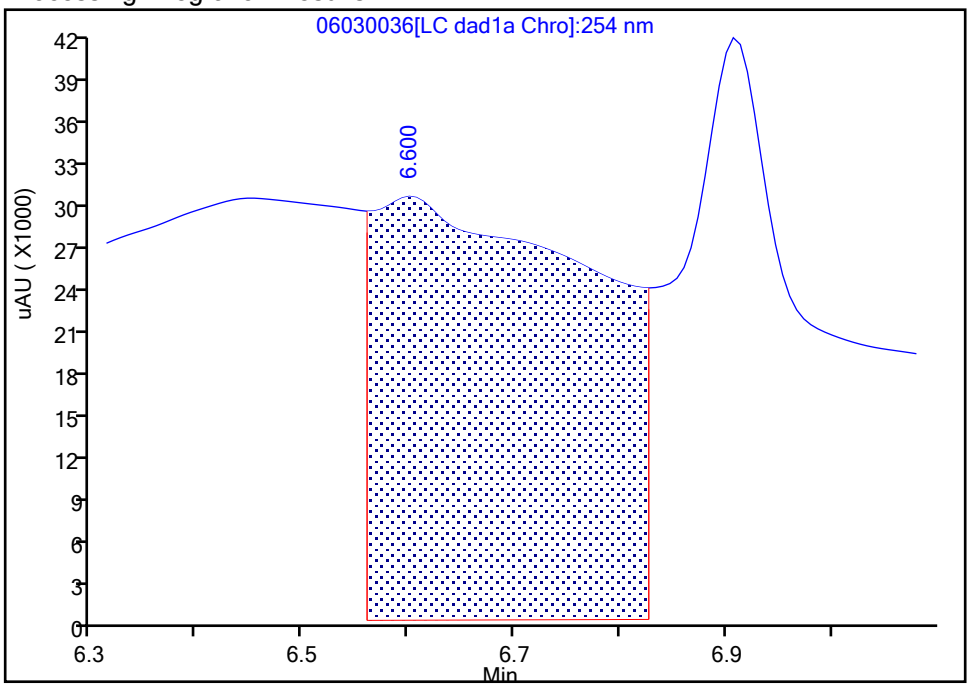
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

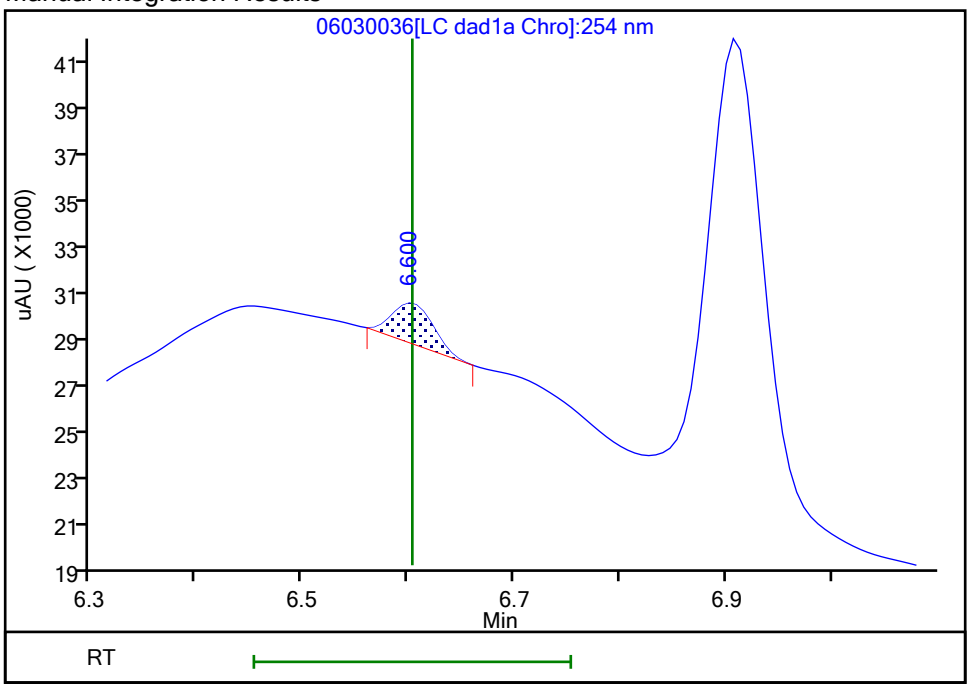
Processing Integration Results

RT: 6.60
Area: 435664
Amount: 5.160585
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 4669
Amount: 0.055306
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:05:29

Audit Action: Manually Integrated Audit Reason: Baseline

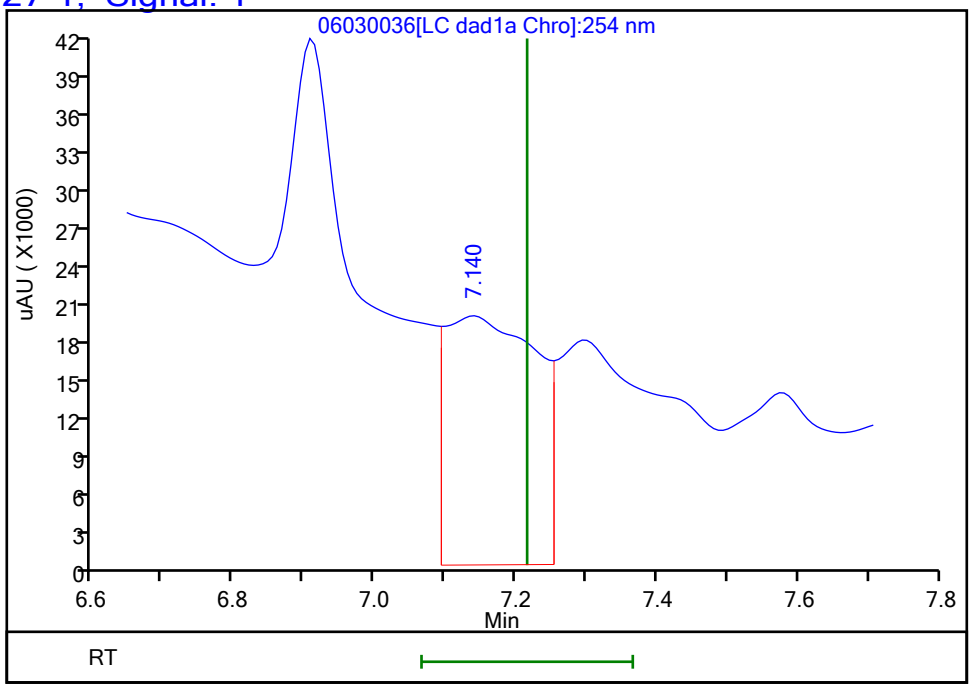
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.14
Response: 176149
Amount: 1.351454



Reviewer: zhangji, 04-Jun-2021 13:06:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

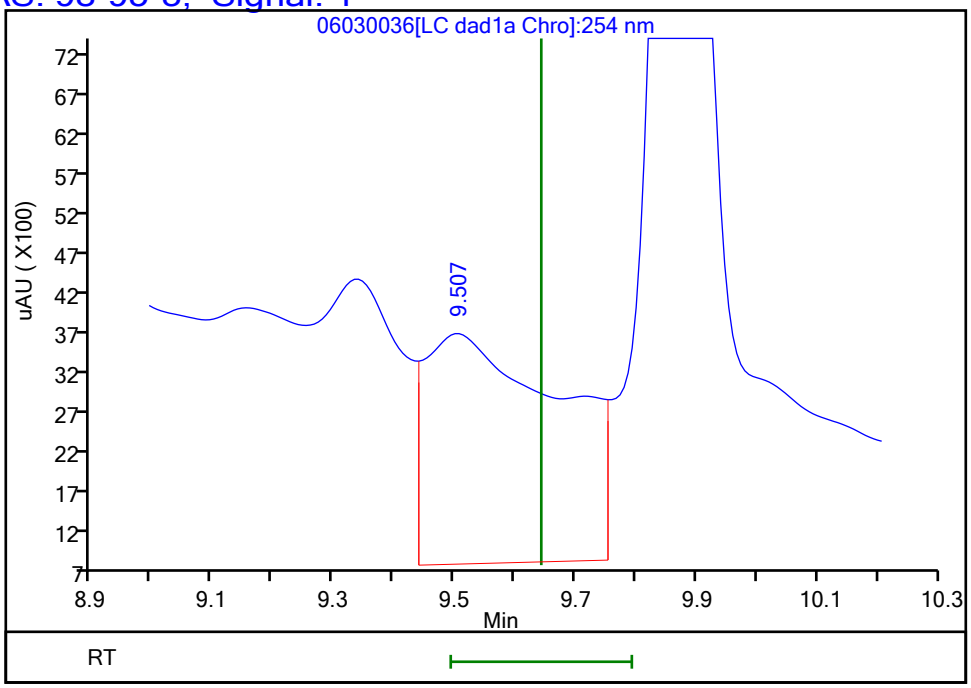
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.51
Response: 44312
Amount: 0.226908



Reviewer: zhangji, 04-Jun-2021 13:06:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

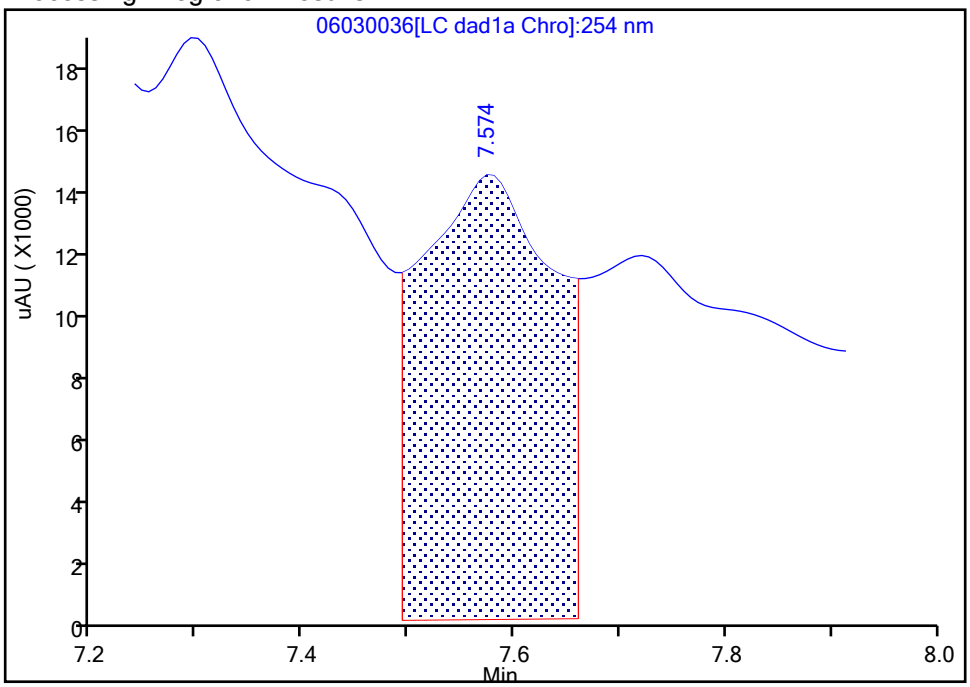
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

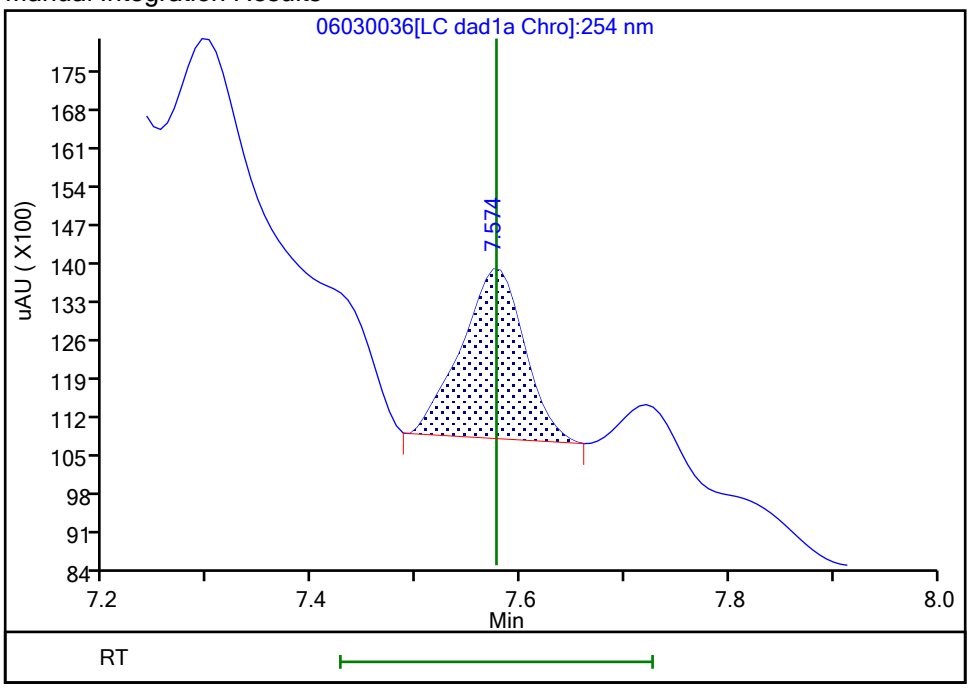
Processing Integration Results

RT: 7.57
Area: 117434
Amount: 1.105142
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 12916
Amount: 0.121549
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:05:38
Audit Action: Manually Integrated Audit Reason: Baseline

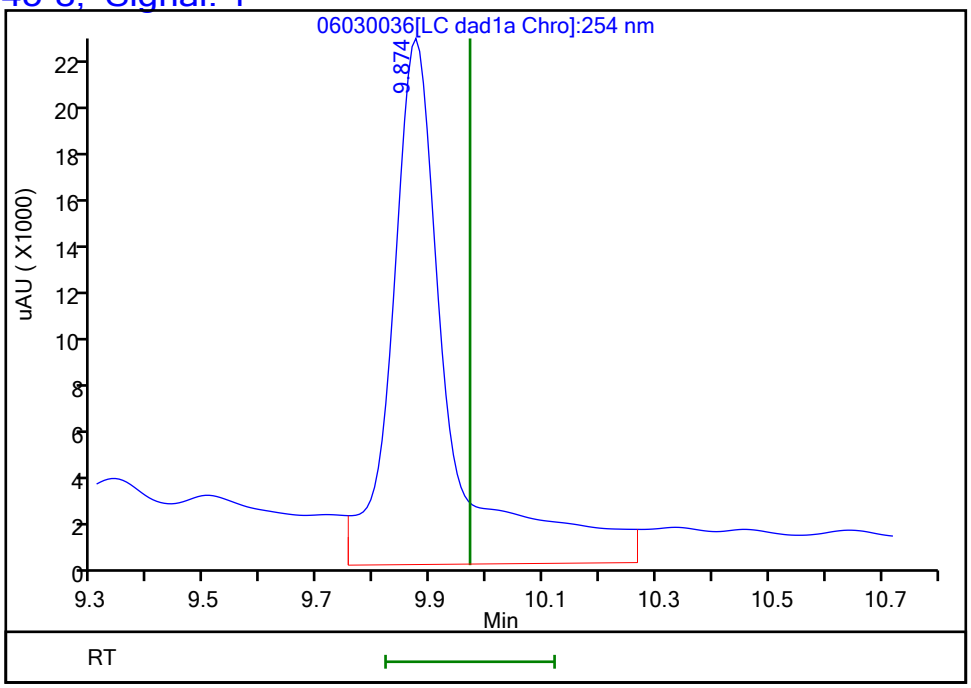
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030036.d				
Injection Date:	04-Jun-2021 01:20:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.87
Response: 148802
Amount: 0.863021



Reviewer: zhangji, 04-Jun-2021 13:06:12
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.: 280-149116-1

SDG No.:

Client Sample ID: G0077-21A Lab Sample ID: 280-149116-9

Matrix: Water Lab File ID: 06040014.D

Analysis Method: 8330A Date Collected: 05/26/2021 09:30

Extraction Method: 3535 Date Extracted: 06/01/2021 17:35

Sample wt/vol: 488.1(mL) Date Analyzed: 06/04/2021 20:41

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538650 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	*RDX*	*0.63*	*M J1*	*0.22*	0.20	*0.053*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040014.D
Lims ID: 280-149116-A-9-A
Client ID: G0077-21A
Sample Type: Client
Inject. Date: 04-Jun-2021 20:41:45 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-9-A
Misc. Info.: 280-0102085-014
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:23:07 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 17:40:37

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	6.667	6.674	-0.007	9235	0.0520	M
	7 MNX	1		7.422			ND	U
	8 RDX	1	8.854	8.847	0.007	12622	0.0618	M
	9 Nitrobenzene	1		11.913			ND	
$	10 1,2-Dinitrobenzene	1	13.020	13.013	0.007	52739	0.1985	M
	12 1,3-Dinitrobenzene	1		15.440			ND	7
	14 o-Nitrotoluene	1		16.680			ND	U
	15 p-Nitrotoluene	1		16.967			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.434	17.420	0.014	76012	0.2562	
	17 m-Nitrotoluene	1		17.940			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.327	18.313	0.014	122162	0.3101	
	19 1,3,5-Trinitrobenzene	1	18.860	18.847	0.013	181768	0.4367	
	20 2,6-Dinitrotoluene	1		20.100			ND	
	21 2,4-Dinitrotoluene	1	20.574	20.560	0.014	3237	0.005722	
	22 Tetryl	1		24.180			ND	
	23 2,4,6-Trinitrotoluene	1	25.187	25.167	0.020	149842	0.3989	

QC Flag Legend

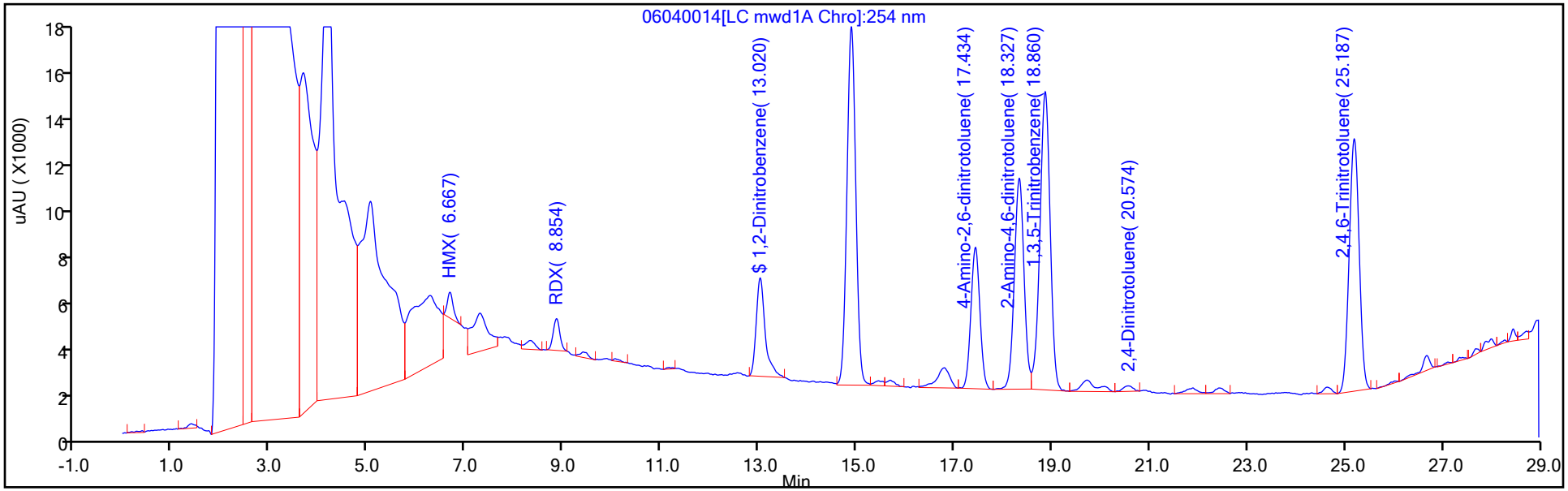
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 08-Jun-2021 17:40:39 Chrom Revision: 2.3 13-May-2021 07:57:40

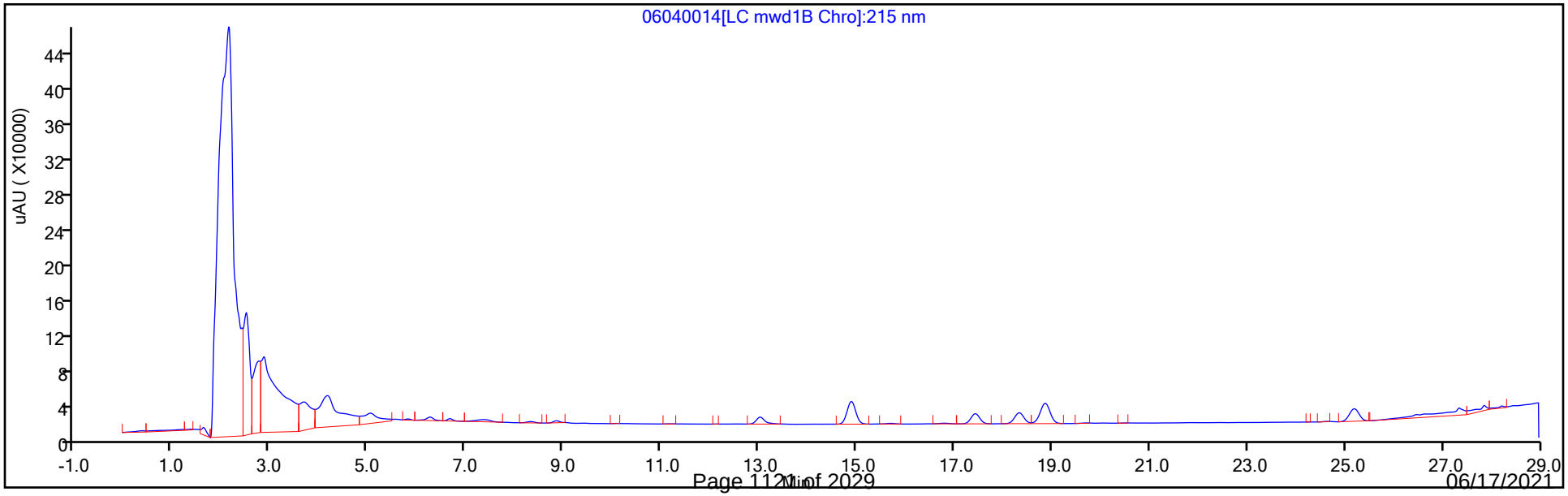
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040014.D				
Injection Date:	04-Jun-2021 20:41:45	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9	Worklist Smp#:	14
Client ID:	G0077-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040014.D				
Lims ID:	280-149116-A-9-A				
Client ID:	G0077-21A				
Sample Type:	Client				
Inject. Date:	04-Jun-2021 20:41:45	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-9-A				
Misc. Info.:	280-0102085-014				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:23:07	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	08-Jun-2021 17:40:37		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1985	99.26

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

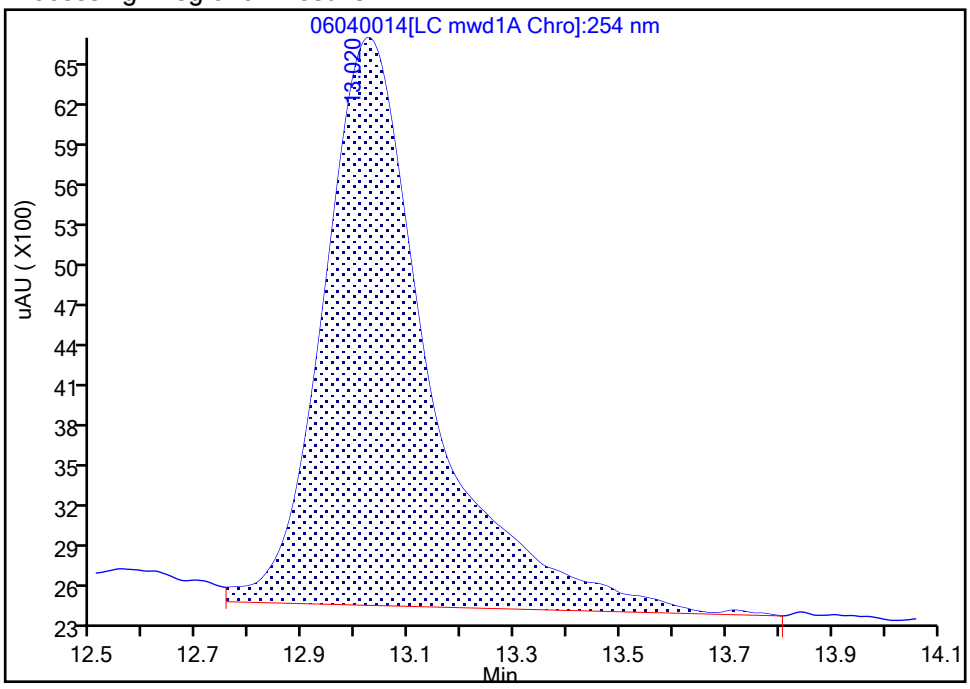
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040014.D				
Injection Date:	04-Jun-2021 20:41:45	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

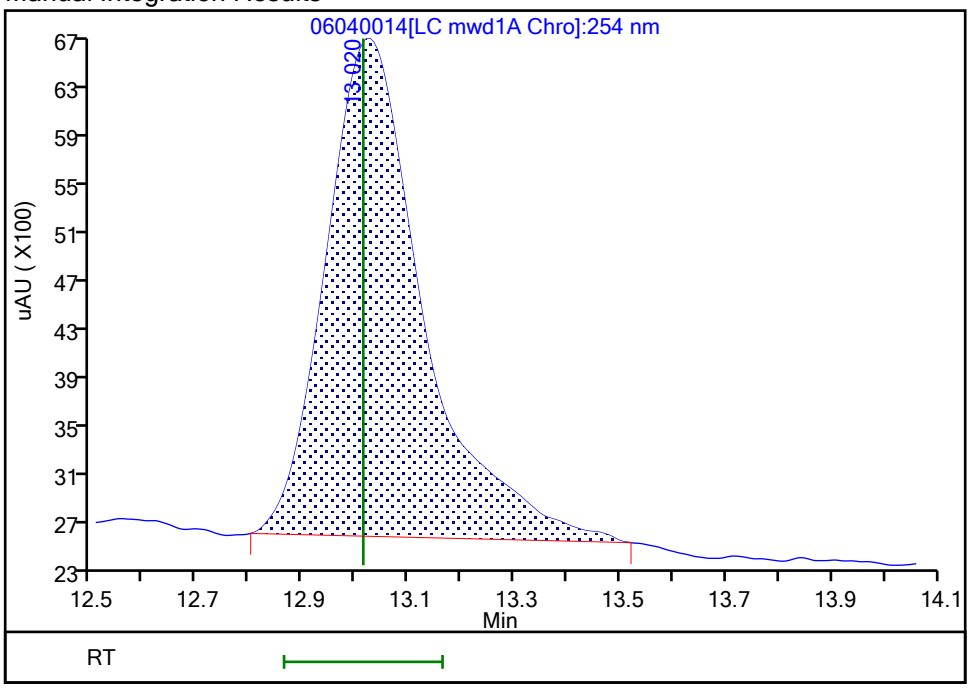
Processing Integration Results

RT: 13.02
Area: 59245
Amount: 0.223011
Amount Units: ug/ml



Manual Integration Results

RT: 13.02
Area: 52739
Amount: 0.198521
Amount Units: ug/ml



Reviewer: zhangji, 05-Jun-2021 10:20:29

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

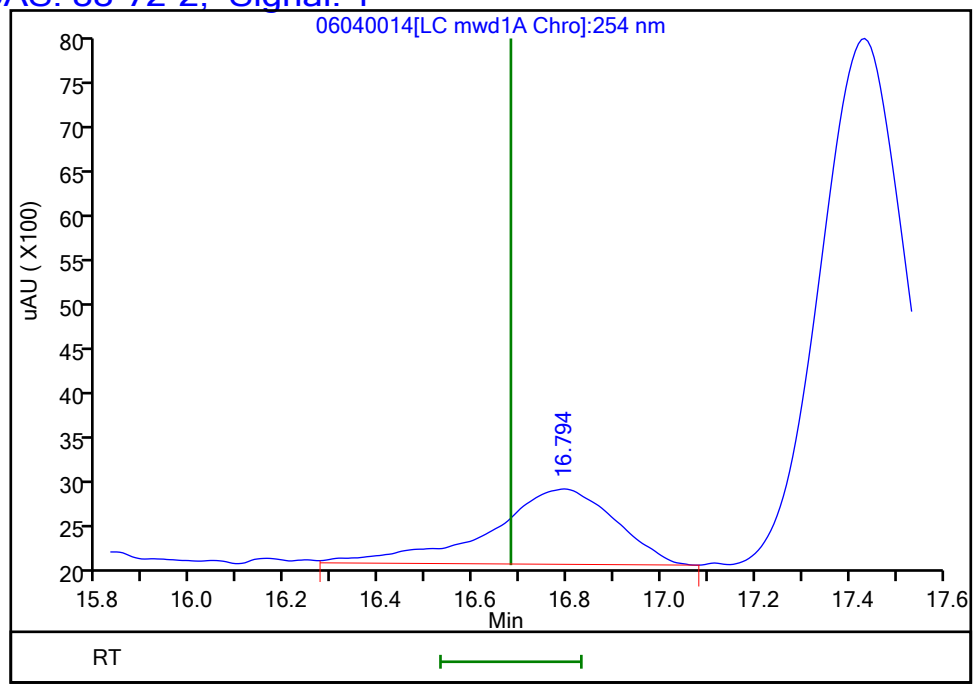
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040014.D				
Injection Date:	04-Jun-2021 20:41:45	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.79
Response: 15530
Amount: 0.062378



Reviewer: zhangji, 05-Jun-2021 10:20:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

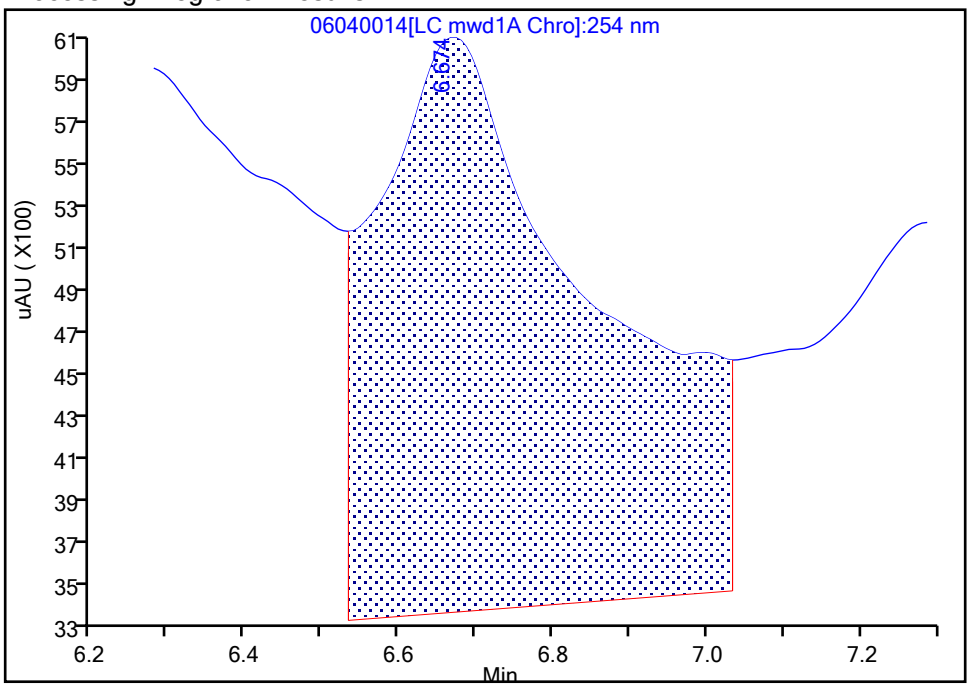
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040014.D				
Injection Date:	04-Jun-2021 20:41:45	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

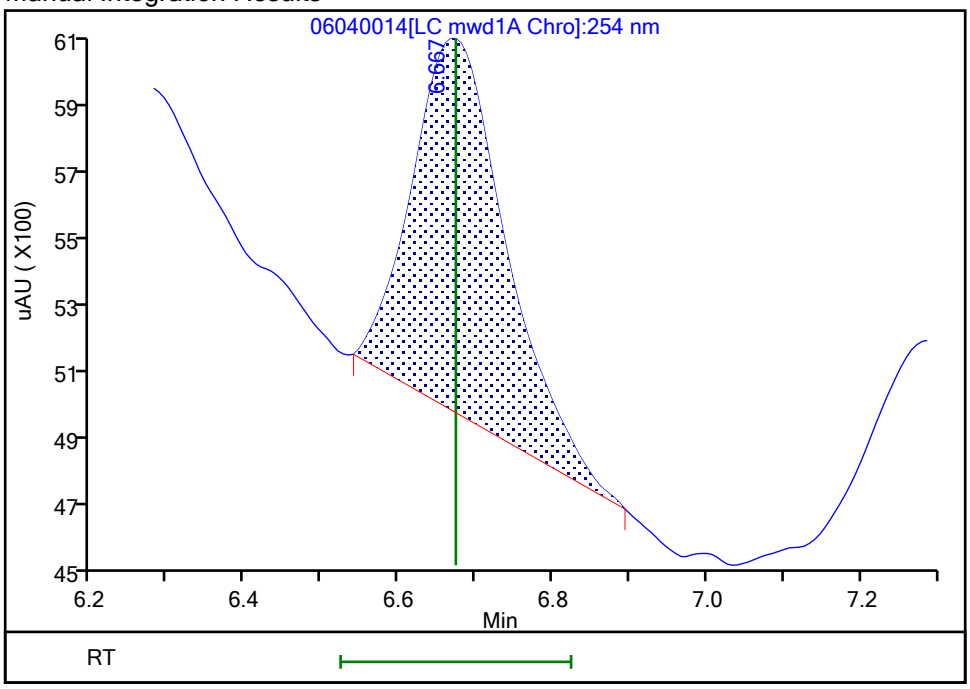
Processing Integration Results

RT: 6.67
Area: 52822
Amount: 0.326511
Amount Units: ug/ml



Manual Integration Results

RT: 6.67
Area: 9235
Amount: 0.051988
Amount Units: ug/ml



Reviewer: zhangji, 05-Jun-2021 10:20:36

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

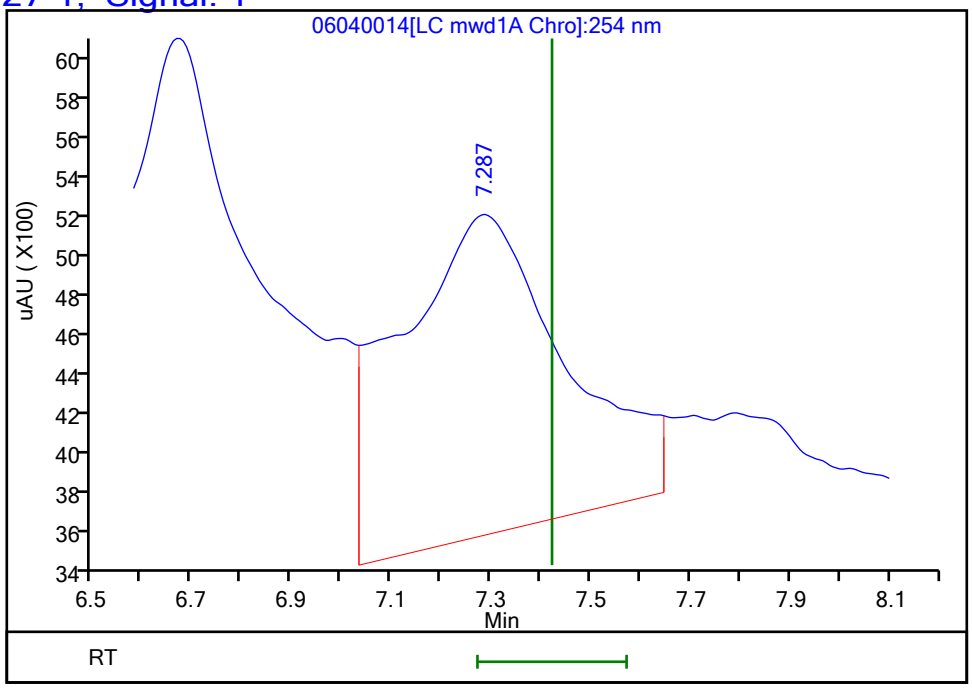
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040014.D				
Injection Date:	04-Jun-2021 20:41:45	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.29
Response: 36571
Amount: 0.138086



Reviewer: zhangji, 05-Jun-2021 10:20:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

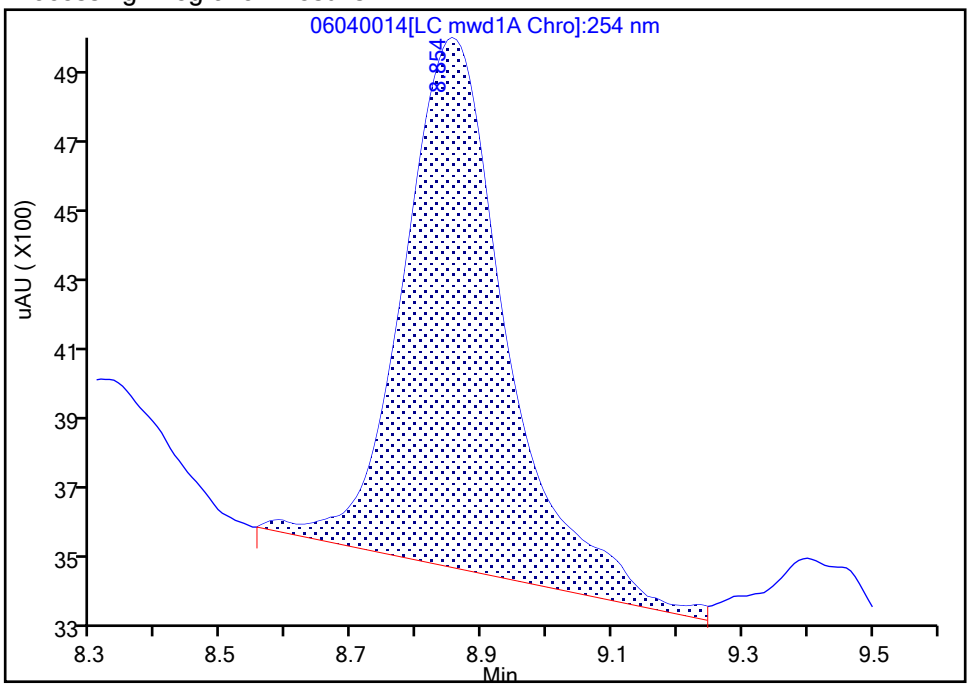
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040014.D				
Injection Date:	04-Jun-2021 20:41:45	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-9-A	Lab Sample ID:	280-149116-9		
Client ID:	G0077-21A				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

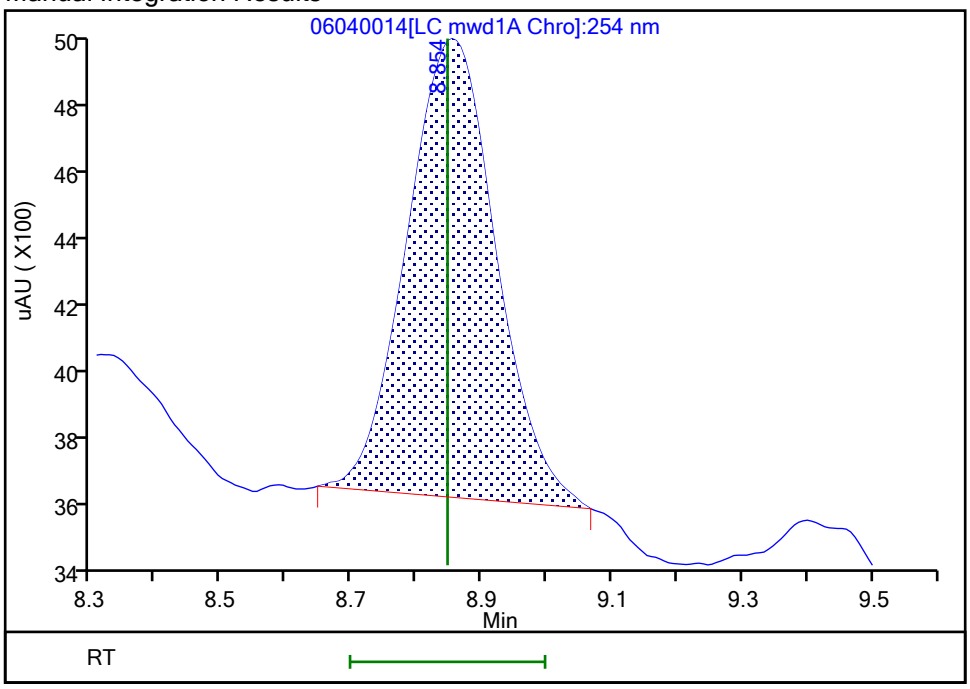
Processing Integration Results

RT: 8.85
Area: 15729
Amount: 0.077001
Amount Units: ug/ml



Manual Integration Results

RT: 8.85
Area: 12622
Amount: 0.061791
Amount Units: ug/ml



Reviewer: zhangji, 05-Jun-2021 10:20:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0078-21A Lab Sample ID: 280-149116-10

Matrix: Water Lab File ID: 06040031.D

Analysis Method: 8330A Date Collected: 05/26/2021 10:30

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 472.4(mL) Date Analyzed: 06/05/2021 02:16

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U Q	0.43	0.42	0.11
2691-41-0	HMX	0.21	U M	0.22	0.21	0.093
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
121-82-4	RDX	0.21	U	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040031.D
Lims ID: 280-149116-A-10-A
Client ID: G0078-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 02:16:06 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-10-
Misc. Info.: 280-0102084-031
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:17 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:13:15

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.609			ND	U
	6 MNX	1		7.210			ND	
	7 RDX	1		7.576			ND	
$	9 1,2-Dinitrobenzene	1	8.497	8.496	0.001	25372	0.1979	
	10 1,3,5-Trinitrobenzene	1		8.629			ND	
	11 1,3-Dinitrobenzene	1		9.249			ND	
	12 Nitrobenzene	1		9.636			ND	
	14 Tetryl	1		9.956			ND	
	16 2,4,6-Trinitrotoluene	1		10.876			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.076			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	19 2,6-Dinitrotoluene	1		11.502			ND	
	20 2,4-Dinitrotoluene	1		11.676			ND	
	21 o-Nitrotoluene	1		12.542			ND	
	22 p-Nitrotoluene	1		12.976			ND	
	23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

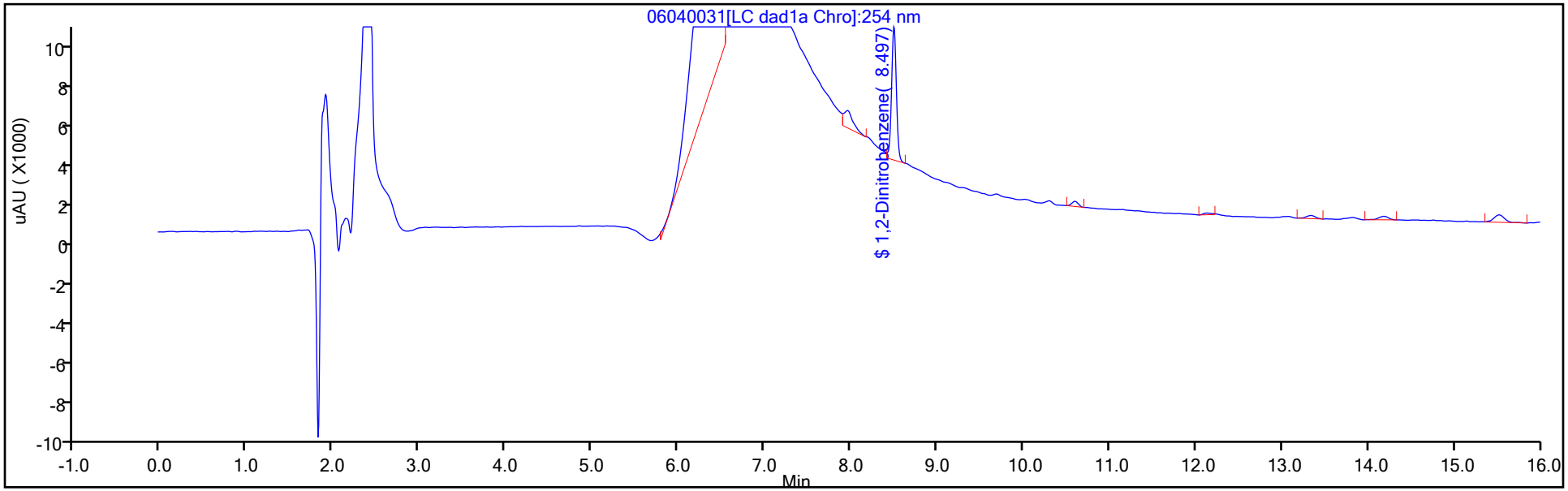
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:21 Chrom Revision: 2.3 13-May-2021 07:57:40

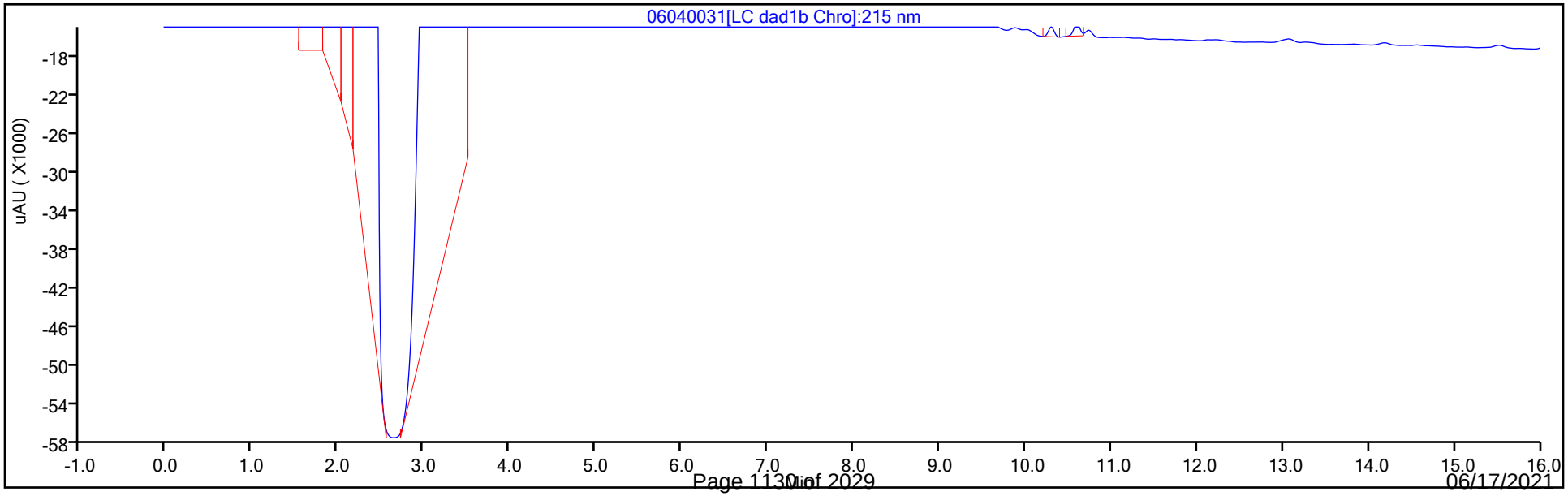
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040031.d				
Injection Date:	05-Jun-2021 02:16:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-10-A	Lab Sample ID:	280-149116-10	Worklist Smp#:	31
Client ID:	G0078-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040031.D				
Lims ID:	280-149116-A-10-A				
Client ID:	G0078-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 02:16:06	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-10-				
Misc. Info.:	280-0102084-031				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:17	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				

First Level Reviewer: zhangji Date: 05-Jun-2021 10:13:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1979	98.94

User Disabled Compound Report

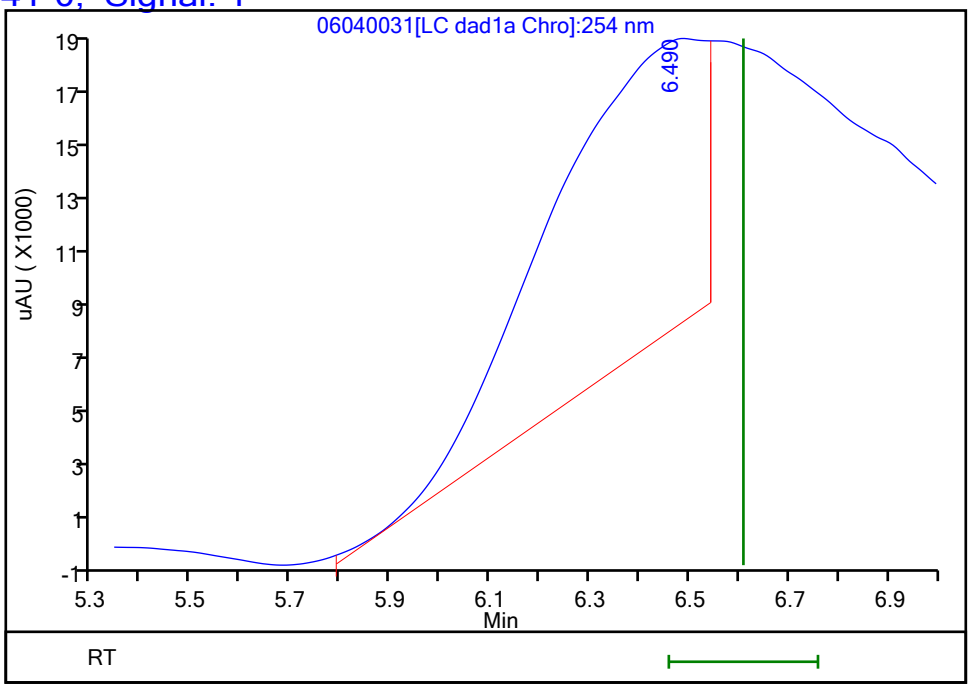
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040031.d

Injection Date:	05-Jun-2021 02:16:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-10-A	Lab Sample ID:	280-149116-10		
Client ID:	G0078-21A				
Operator ID:	JZ	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		

3 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.49
Response: 241374
Amount: 2.859155



Reviewer: zhangji, 05-Jun-2021 10:13:15
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.: 280-149116-1

SDG No.:

Client Sample ID: PZ017R-21A Lab Sample ID: 280-149116-11

Matrix: Water Lab File ID: 06040032.D

Analysis Method: 8330A Date Collected: 05/26/2021 08:45

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 479.8(mL) Date Analyzed: 06/05/2021 02:39

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.1	M	0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	10		0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.029
606-20-2	2,6-Dinitrotoluene	0.36	J1	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	3.0		0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	2.7		0.16	0.13	0.060
99-99-0	4-Nitrotoluene	0.42	U Q M	0.43	0.42	0.10
2691-41-0	HMX	1.6	M J1	0.22	0.21	0.091
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
121-82-4	RDX	2.1	M	0.22	0.21	0.054
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040032.D
Lims ID: 280-149116-A-11-A
Client ID: PZ017R-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 02:39:03 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-11-
Misc. Info.: 280-0102084-032
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:17 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:15:16

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.601	6.609	-0.008	12615	0.1494	M
	6 MNX	1	7.188	7.210	-0.022	14059	0.1079	M
	7 RDX	1	7.575	7.576	-0.001	21448	0.2018	M
$	9 1,2-Dinitrobenzene	1	8.495	8.496	-0.001	23939	0.1867	M
	10 1,3,5-Trinitrobenzene	1	8.628	8.629	-0.001	23792	0.1080	M
	11 1,3-Dinitrobenzene	1		9.249			ND	U
	12 Nitrobenzene	1		9.636			ND	
	14 Tetryl	1		9.956			ND	U
	16 2,4,6-Trinitrotoluene	1	10.881	10.876	0.005	197161	0.9569	
	17 4-Amino-2,6-dinitrotoluene	1	11.088	11.076	0.012	39751	0.2602	
	18 2-Amino-4,6-dinitrotoluene	1	11.348	11.336	0.012	59333	0.2867	
	19 2,6-Dinitrotoluene	1	11.508	11.502	0.006	4977	0.0348	
	20 2,4-Dinitrotoluene	1		11.676			ND	
	21 o-Nitrotoluene	1		12.542			ND	
	22 p-Nitrotoluene	1		12.976			ND	U
	23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

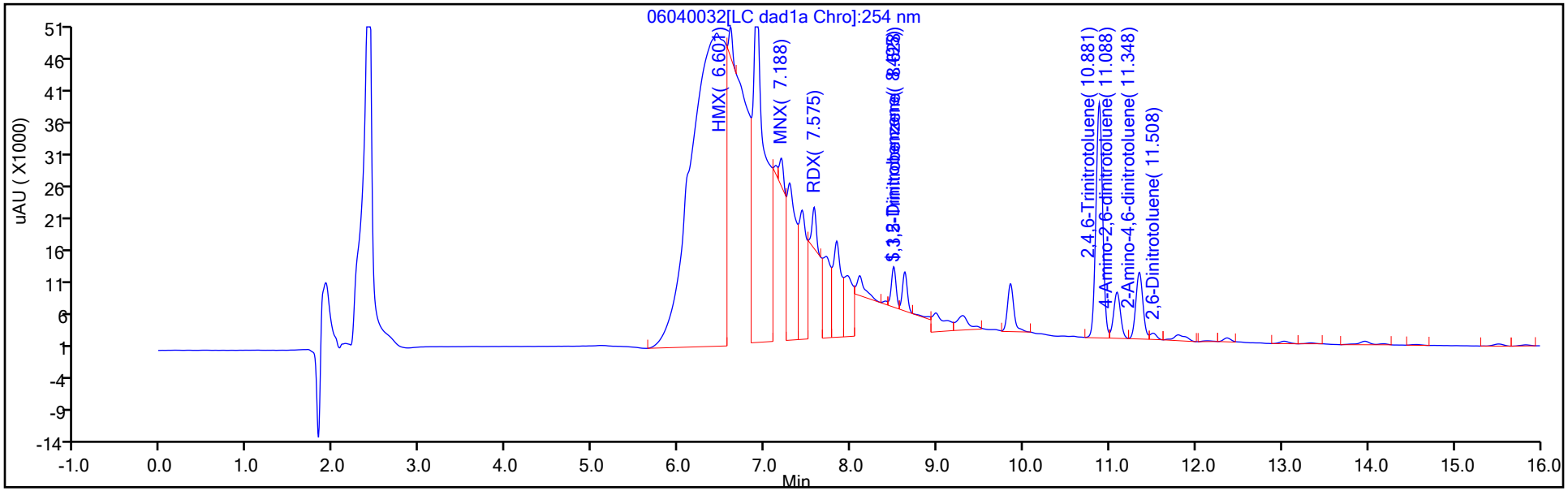
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:21 Chrom Revision: 2.3 13-May-2021 07:57:40

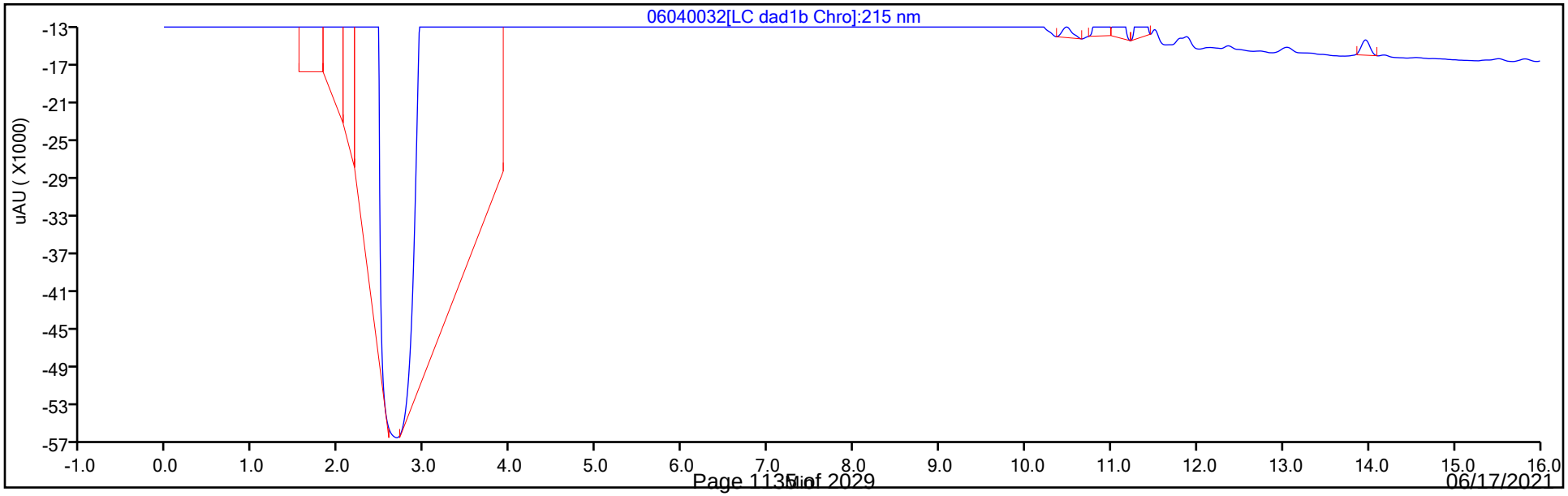
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11	Worklist Smp#:	32
Client ID:	PZ017R-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040032.D				
Lims ID:	280-149116-A-11-A				
Client ID:	PZ017R-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 02:39:03	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-11-				
Misc. Info.:	280-0102084-032				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:17	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				

First Level Reviewer: zhangji Date: 05-Jun-2021 10:15:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1867	93.35

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

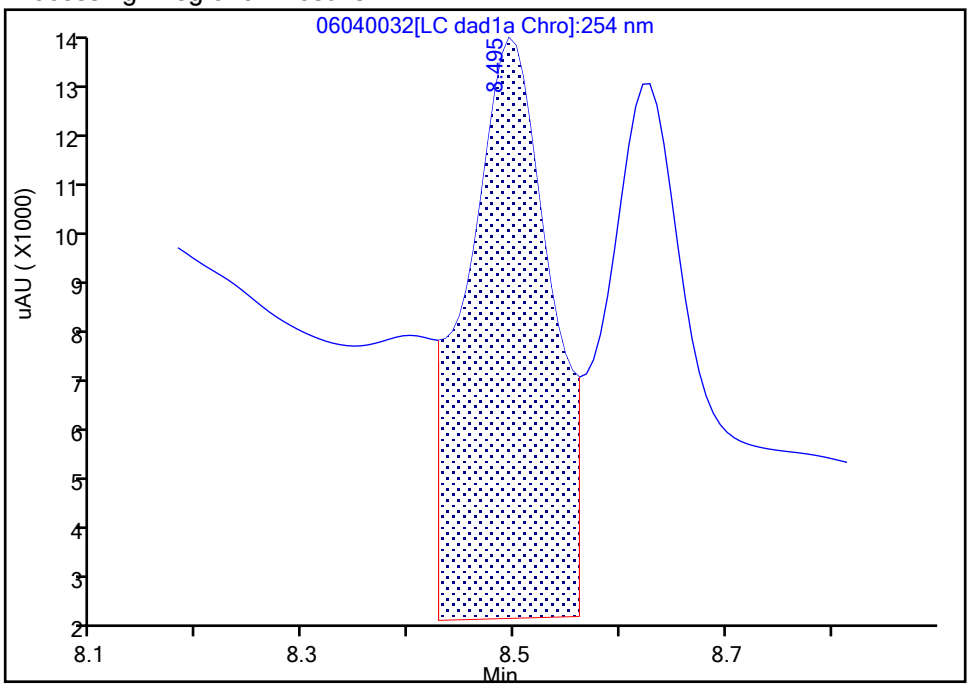
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

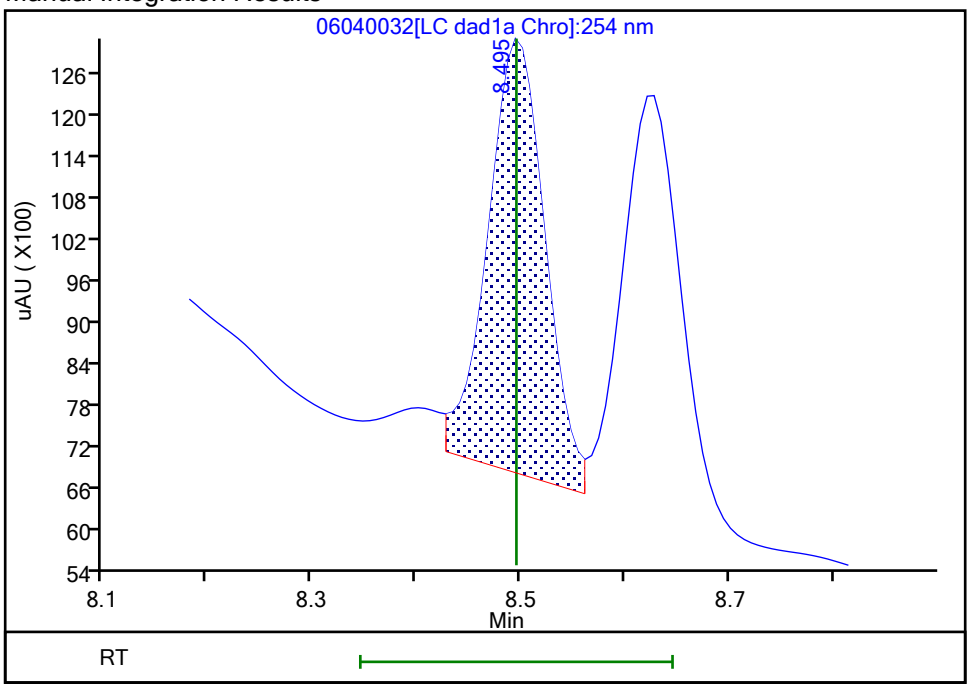
Processing Integration Results

RT: 8.49
Area: 56939
Amount: 0.444082
Amount Units: ug/mL



Manual Integration Results

RT: 8.49
Area: 23939
Amount: 0.186707
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:15:09
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

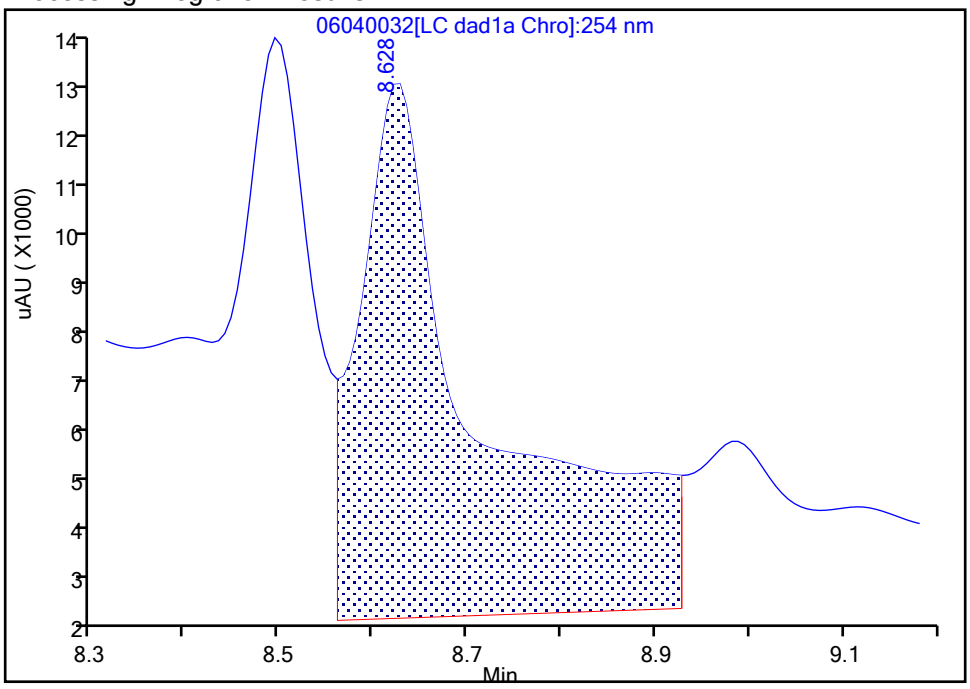
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

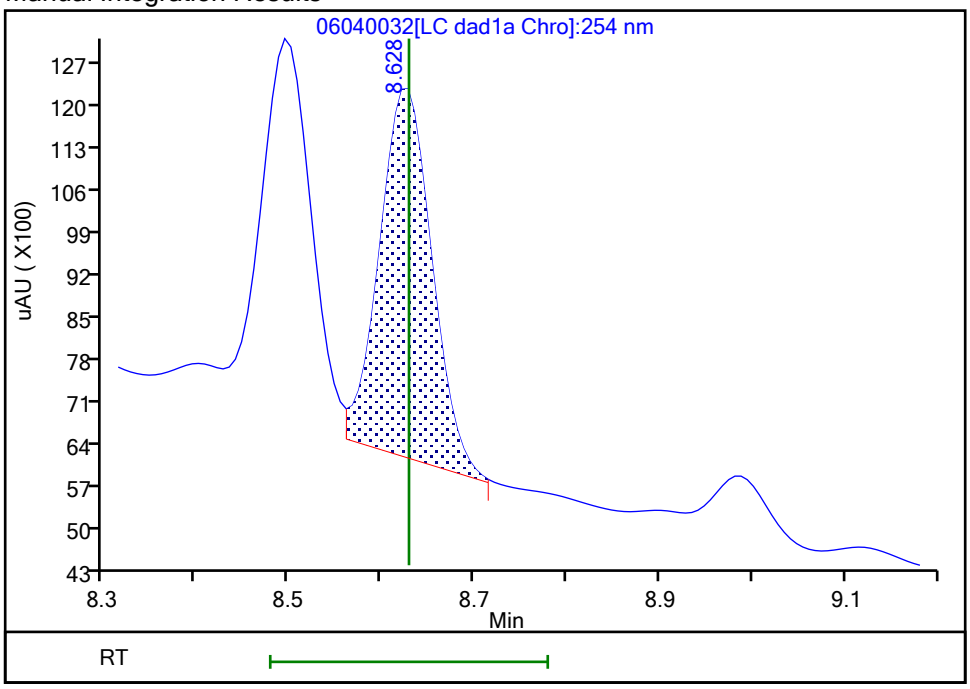
Processing Integration Results

RT: 8.63
Area: 88476
Amount: 0.401584
Amount Units: ug/mL



Manual Integration Results

RT: 8.63
Area: 23792
Amount: 0.107990
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:15:12
Audit Action: Split an Integrated Peak Audit Reason: Baseline

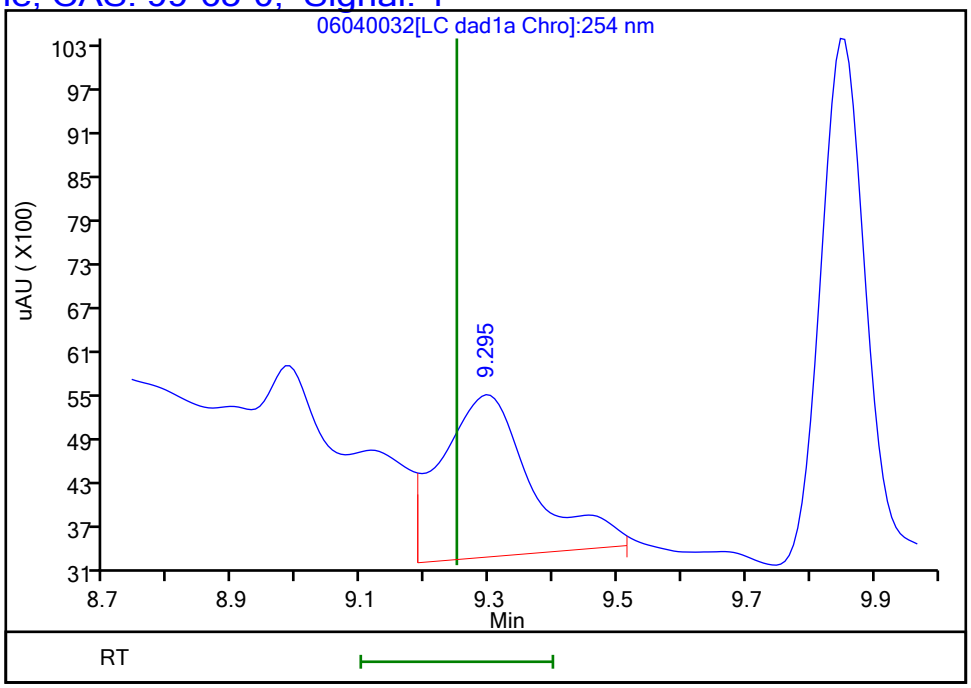
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	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		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.29
Response: 22041
Amount: 0.074380



Reviewer: zhangji, 05-Jun-2021 10:15:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

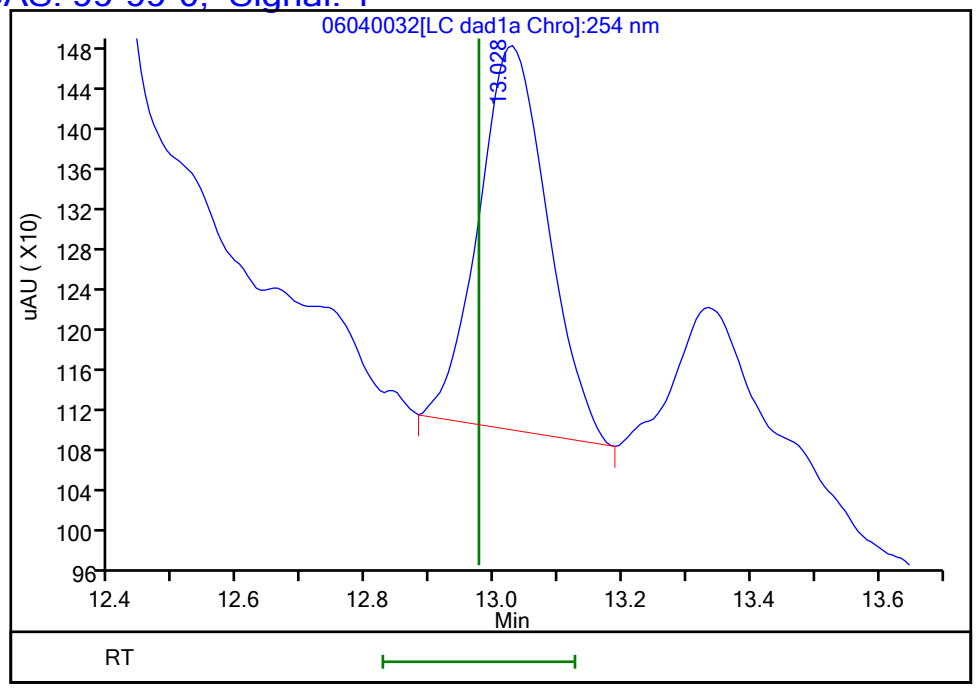
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	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		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.03
Response: 2848
Amount: 0.025448



Reviewer: zhangji, 05-Jun-2021 10:15:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

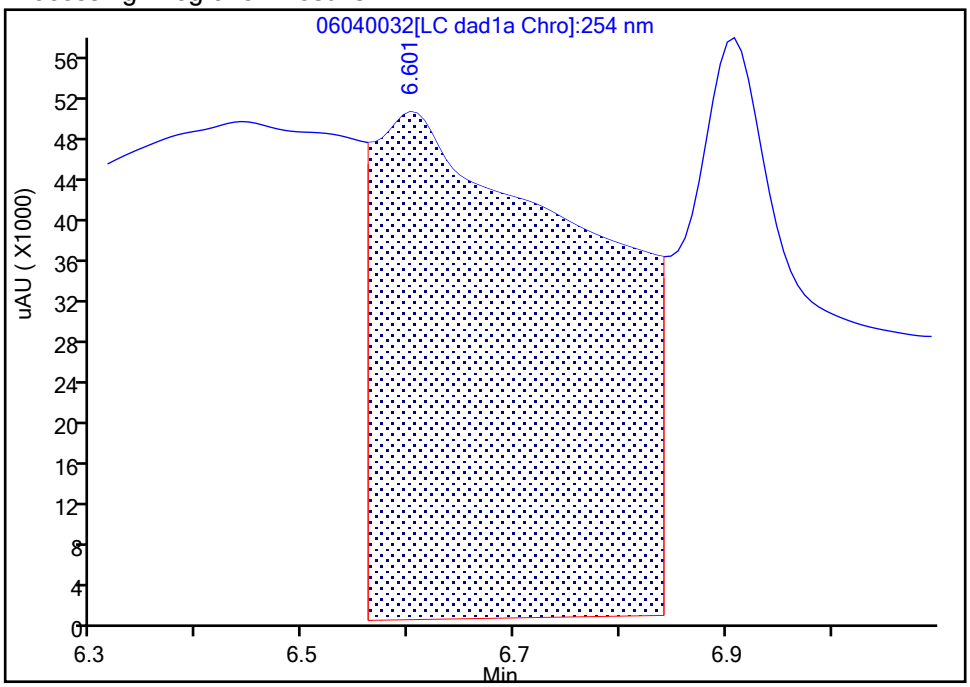
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

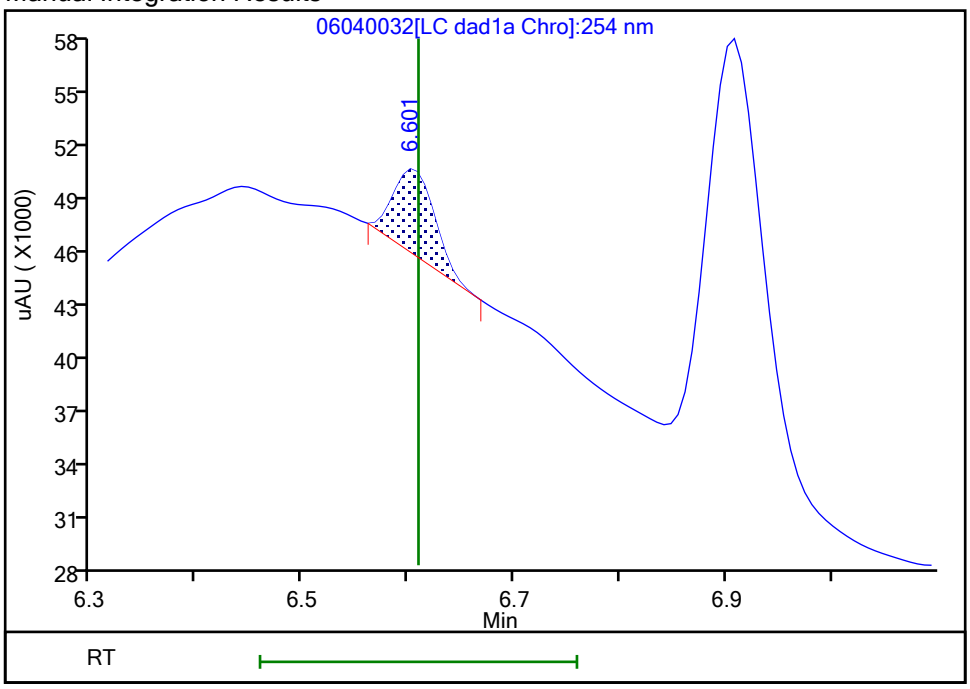
Processing Integration Results

RT: 6.60
Area: 693797
Amount: 8.218256
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 12615
Amount: 0.149429
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:14:47
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

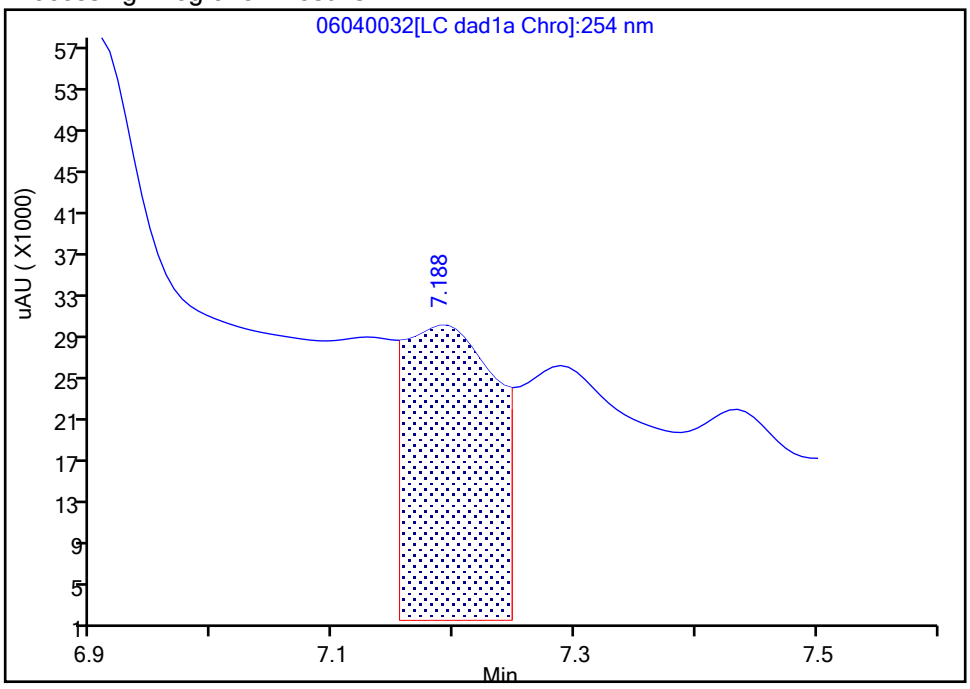
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

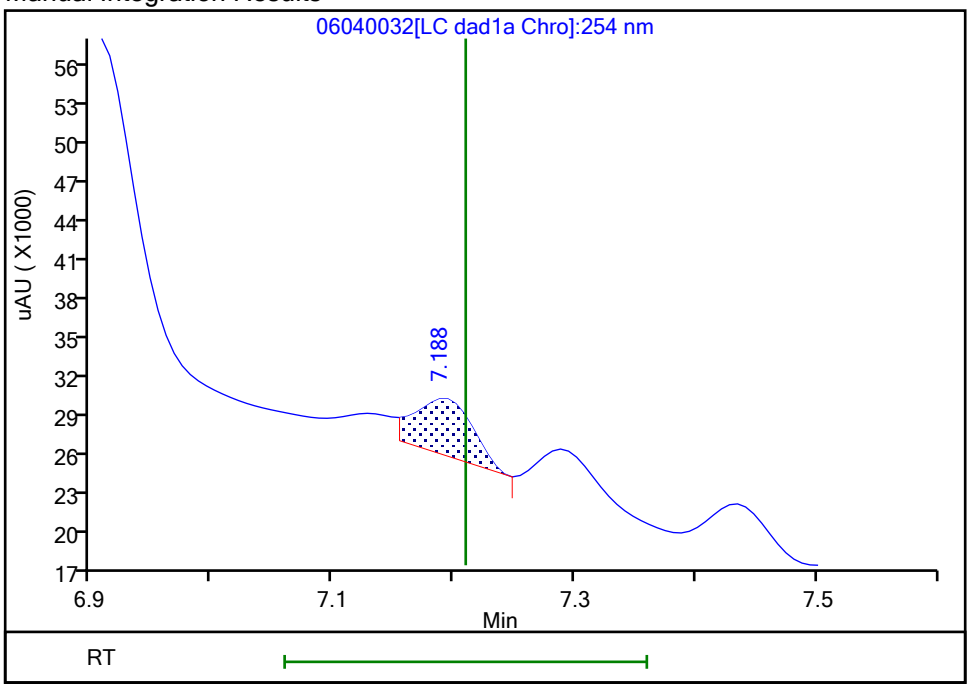
Processing Integration Results

RT: 7.19
Area: 146317
Amount: 1.122577
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 14059
Amount: 0.107864
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:14:56

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

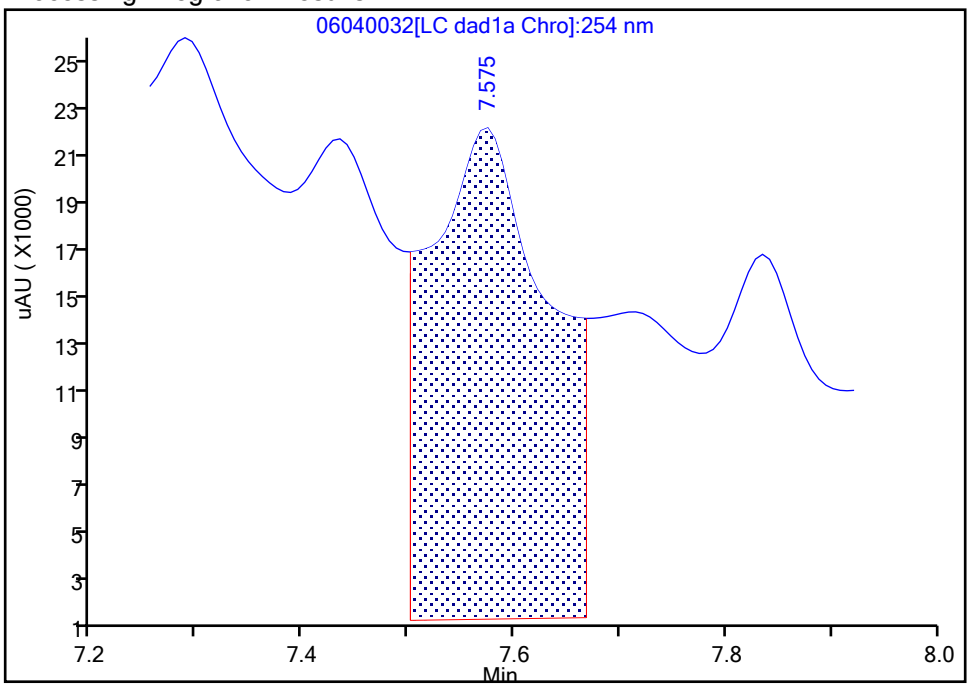
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

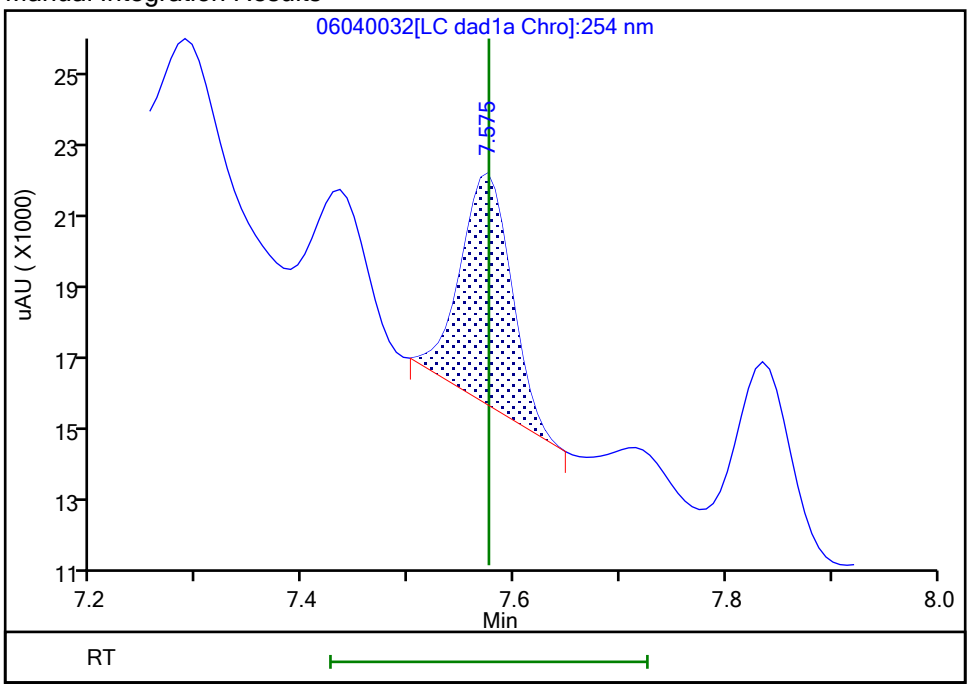
Processing Integration Results

RT: 7.57
Area: 158793
Amount: 1.494361
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 21448
Amount: 0.201842
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:15:03

Audit Action: Manually Integrated Audit Reason: Baseline

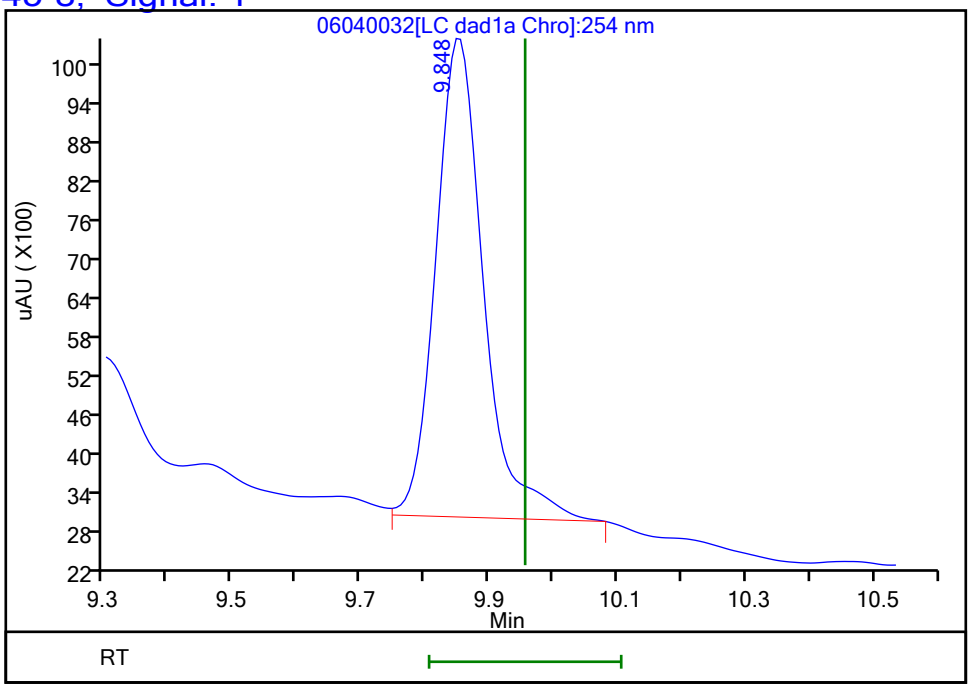
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040032.d				
Injection Date:	05-Jun-2021 02:39:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.85
Response: 38334
Amount: 0.222329



Reviewer: zhangji, 05-Jun-2021 10:15:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ017R-21A Lab Sample ID: 280-149116-11

Matrix: Water Lab File ID: 06050022.D

Analysis Method: 8330A Date Collected: 05/26/2021 08:45

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 479.8(mL) Date Analyzed: 06/05/2021 21:06

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538717 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
606-20-2	*2,6-Dinitrotoluene*	*0.86*	*J1*	*0.10*	0.083	*0.042*
2691-41-0	*HMX*	*4.2*	*J1*	*0.22*	0.21	*0.091*
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050022.D
Lims ID: 280-149116-A-11-A
Client ID: PZ017R-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 21:06:20 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-11-A
Misc. Info.: 280-0102103-022
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:36 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 16:35:57

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	6.668	6.699	-0.031	64822	0.4021	
	7 MNX	1		7.429			ND	U
	8 RDX	1	8.875	8.893	-0.018	39097	0.1914	
	9 Nitrobenzene	1		11.953			ND	
$	10 1,2-Dinitrobenzene	1	13.048	13.066	-0.018	56443	0.2125	
	12 1,3-Dinitrobenzene	1	15.474	15.493	-0.019	5123	0.006661	
	14 o-Nitrotoluene	1		16.739			ND	U
	15 p-Nitrotoluene	1		17.033			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.474	17.493	-0.019	90407	0.3047	
	17 m-Nitrotoluene	1		18.013			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.368	18.393	-0.025	131137	0.3332	
	19 1,3,5-Trinitrobenzene	1	18.894	18.906	-0.012	57111	0.1324	
	20 2,6-Dinitrotoluene	1	20.161	20.173	-0.012	22725	0.0826	
	21 2,4-Dinitrotoluene	1		20.633			ND	U
	22 Tetryl	1		24.253			ND	7
	23 2,4,6-Trinitrotoluene	1	25.235	25.233	0.002	371558	1.00	

QC Flag Legend

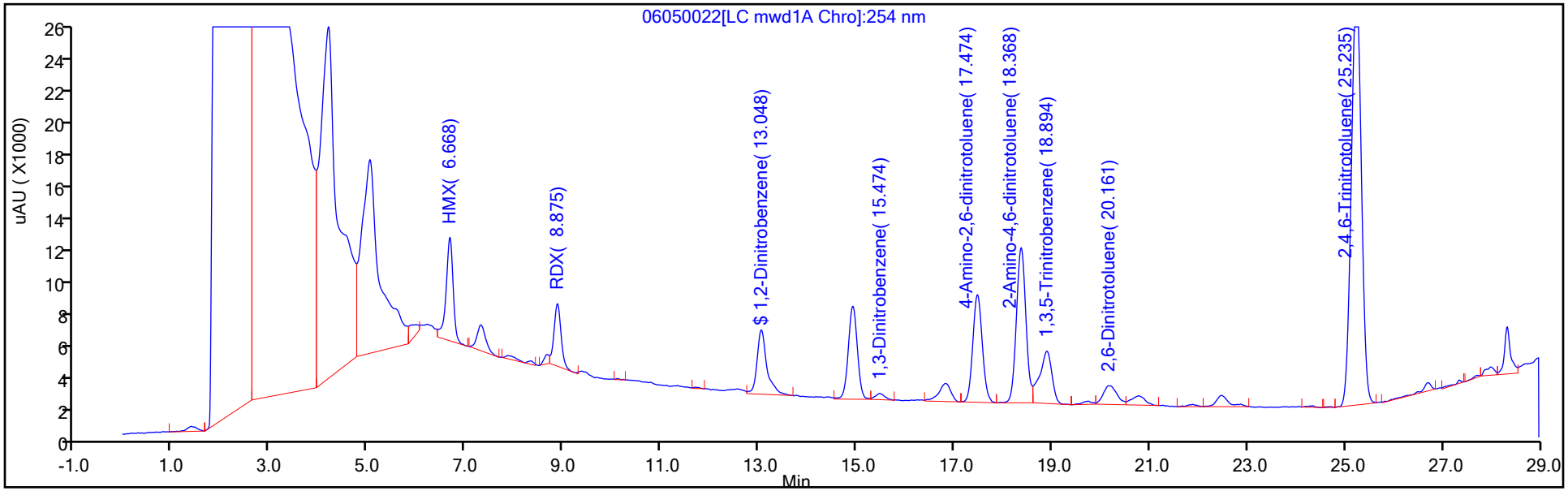
Processing Flags
7 - Failed Limit of Detection
Review Flags
U - Marked Undetected

Report Date: 08-Jun-2021 16:38:36 Chrom Revision: 2.3 13-May-2021 07:57:40

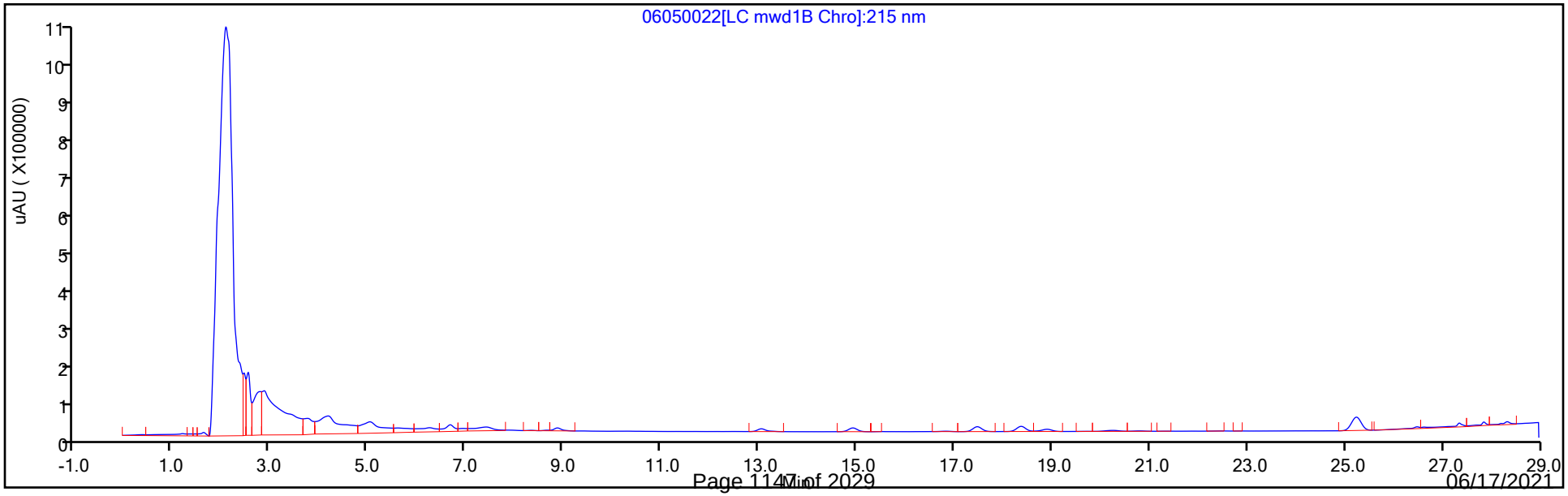
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050022.D				
Injection Date:	05-Jun-2021 21:06:20	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11	Worklist Smp#:	22
Client ID:	PZ017R-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050022.D				
Lims ID:	280-149116-A-11-A				
Client ID:	PZ017R-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 21:06:20	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-11-A				
Misc. Info.:	280-0102103-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:36	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	08-Jun-2021 16:35:57		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2125	106.23

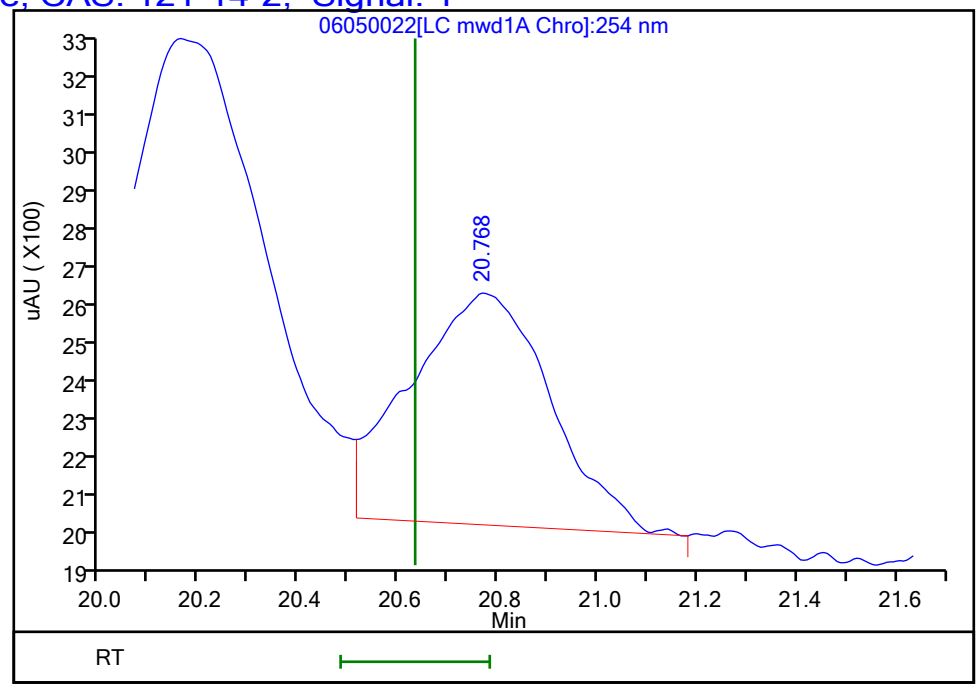
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050022.D				
Injection Date:	05-Jun-2021 21:06:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.77
Response: 11207
Amount: 0.019810



Reviewer: zhangji, 08-Jun-2021 16:35:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

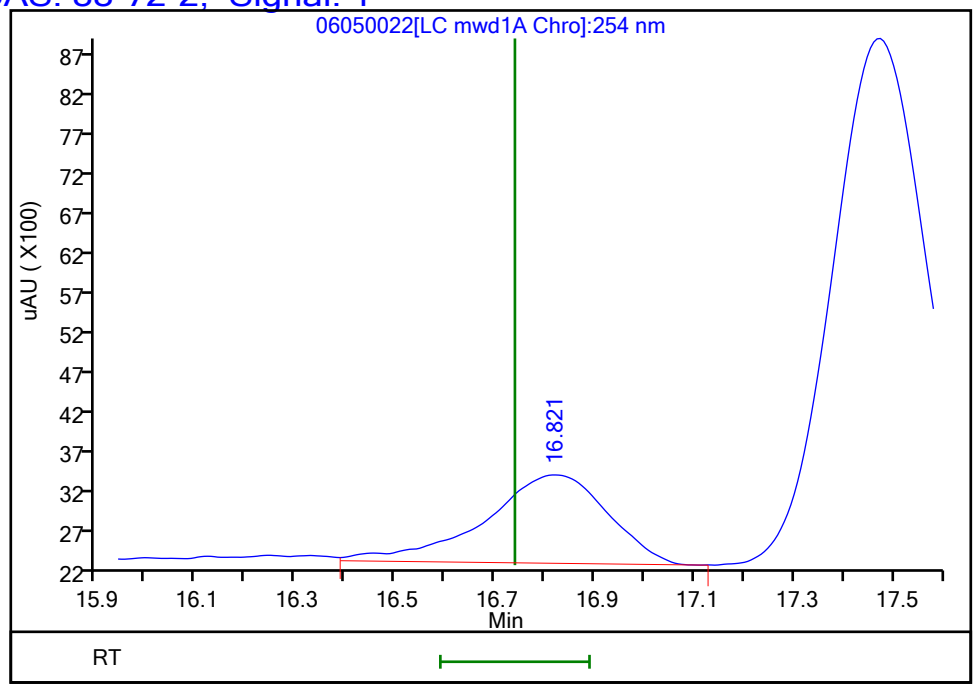
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050022.D				
Injection Date:	05-Jun-2021 21:06:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.82
Response: 19162
Amount: 0.076966



Reviewer: zhangji, 08-Jun-2021 16:35:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

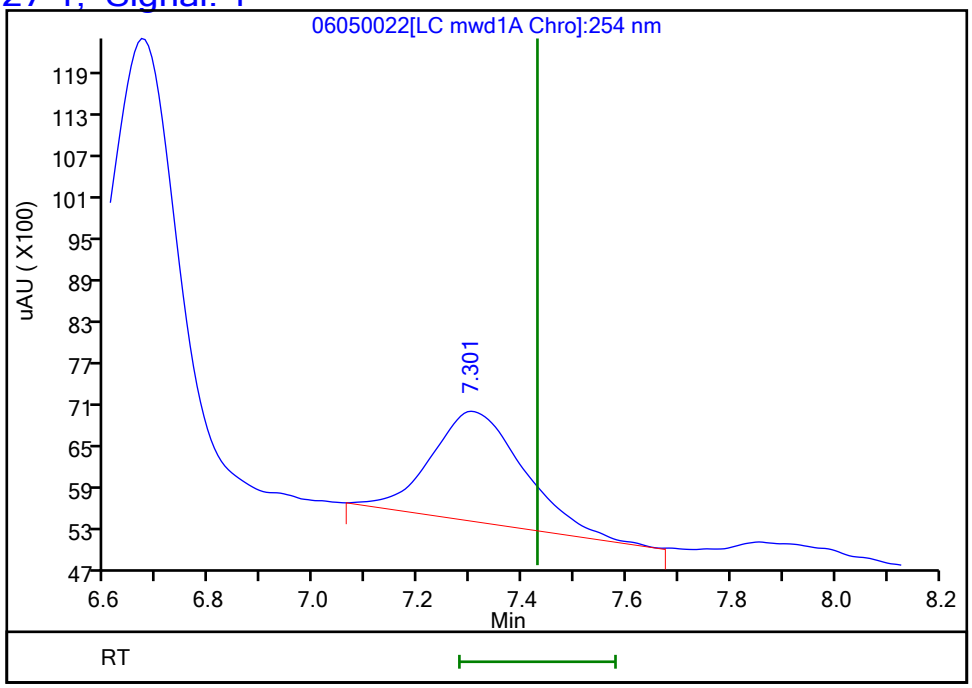
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050022.D				
Injection Date:	05-Jun-2021 21:06:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-11-A	Lab Sample ID:	280-149116-11		
Client ID:	PZ017R-21A				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.30
Response: 20098
Amount: 0.075887



Reviewer: zhangji, 08-Jun-2021 16:35:57
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.: 280-149116-1

SDG No.:

Client Sample ID: PZ021-21A Lab Sample ID: 280-149116-12

Matrix: Water Lab File ID: 06040033.D

Analysis Method: 8330A Date Collected: 05/26/2021 08:00

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 505.9(mL) Date Analyzed: 06/05/2021 03:02

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.2	M	0.21	0.20	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.036
118-96-7	2,4,6-Trinitrotoluene	10		0.11	0.099	0.044
121-14-2	2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.32	J1	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	3.3		0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U Q	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	4.0		0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U Q M	0.41	0.40	0.099
2691-41-0	HMX	1.6	M J1	0.21	0.20	0.087
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.090
121-82-4	RDX	2.3	M	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U M	0.11	0.099	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040033.D
Lims ID: 280-149116-A-12-A
Client ID: PZ021-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 03:02:10 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-12-
Misc. Info.: 280-0102084-033
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:17 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:16:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.600	6.609	-0.009	13955	0.1653	M
6 MNX	1	7.193	7.210	-0.017	16722	0.1283	M
7 RDX	1	7.573	7.576	-0.003	24946	0.2348	M
$ 9 1,2-Dinitrobenzene	1	8.500	8.496	0.004	23778	0.1855	M
10 1,3,5-Trinitrobenzene	1	8.627	8.629	-0.002	26337	0.1195	M
11 1,3-Dinitrobenzene	1		9.249			ND	U
12 Nitrobenzene	1		9.636			ND	
14 Tetryl	1		9.956			ND	U
16 2,4,6-Trinitrotoluene	1	10.887	10.876	0.011	212626	1.03	
17 4-Amino-2,6-dinitrotoluene	1	11.093	11.076	0.017	61860	0.4049	
18 2-Amino-4,6-dinitrotoluene	1	11.353	11.336	0.017	68182	0.3295	
19 2,6-Dinitrotoluene	1	11.507	11.502	0.005	4622	0.0323	
20 2,4-Dinitrotoluene	1		11.676			ND	
21 o-Nitrotoluene	1		12.542			ND	
22 p-Nitrotoluene	1		12.976			ND	U
23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

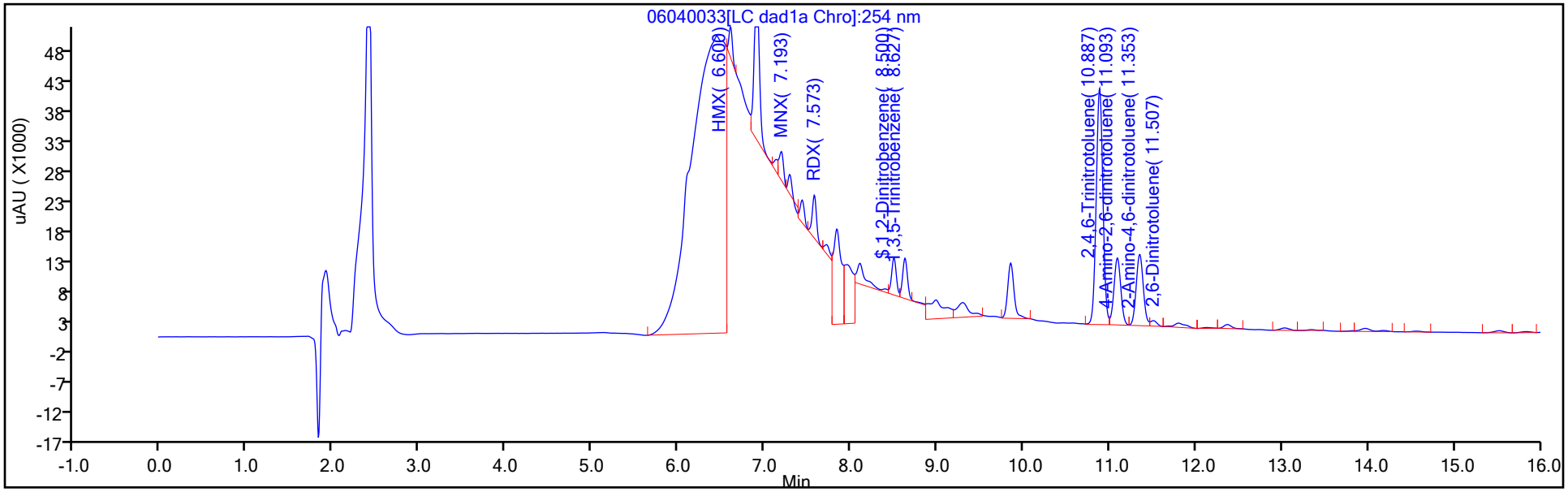
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:22 Chrom Revision: 2.3 13-May-2021 07:57:40

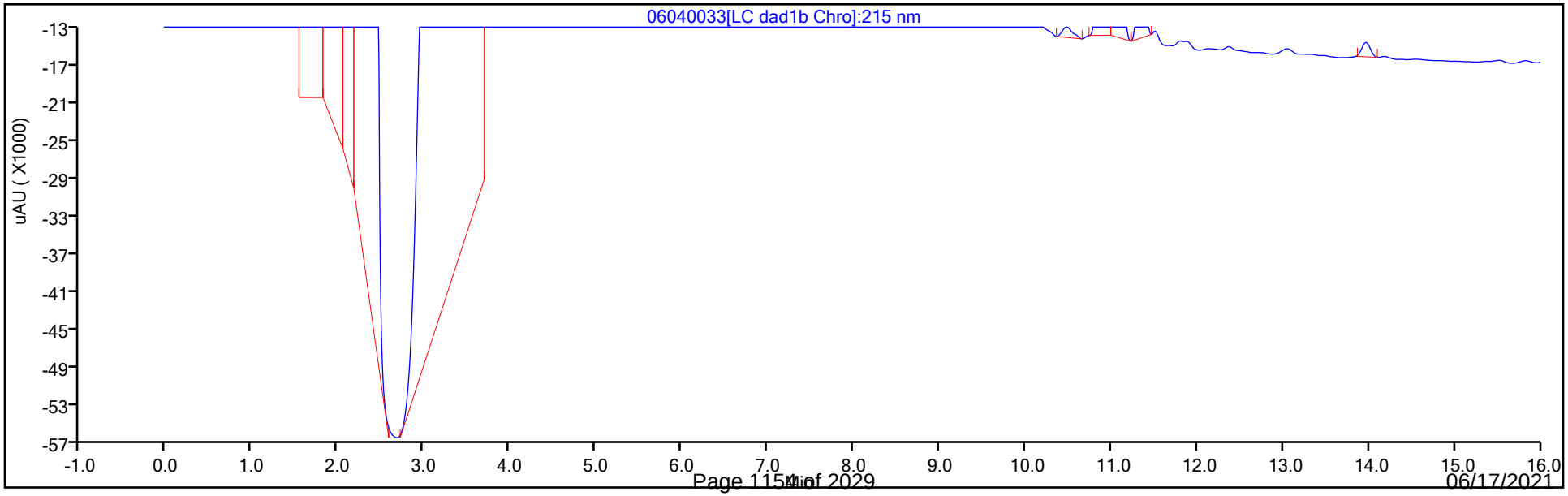
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12	Worklist Smp#:	33
Client ID:	PZ021-21A				
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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040033.D				
Lims ID:	280-149116-A-12-A				
Client ID:	PZ021-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 03:02:10	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-12-				
Misc. Info.:	280-0102084-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:17	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:16:04		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1855	92.73

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

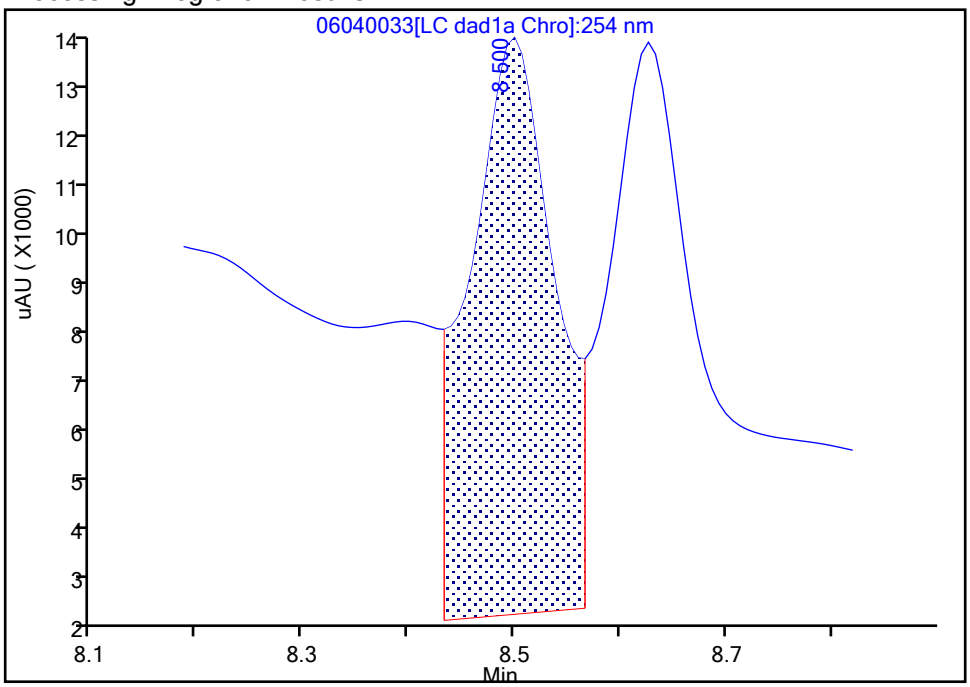
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

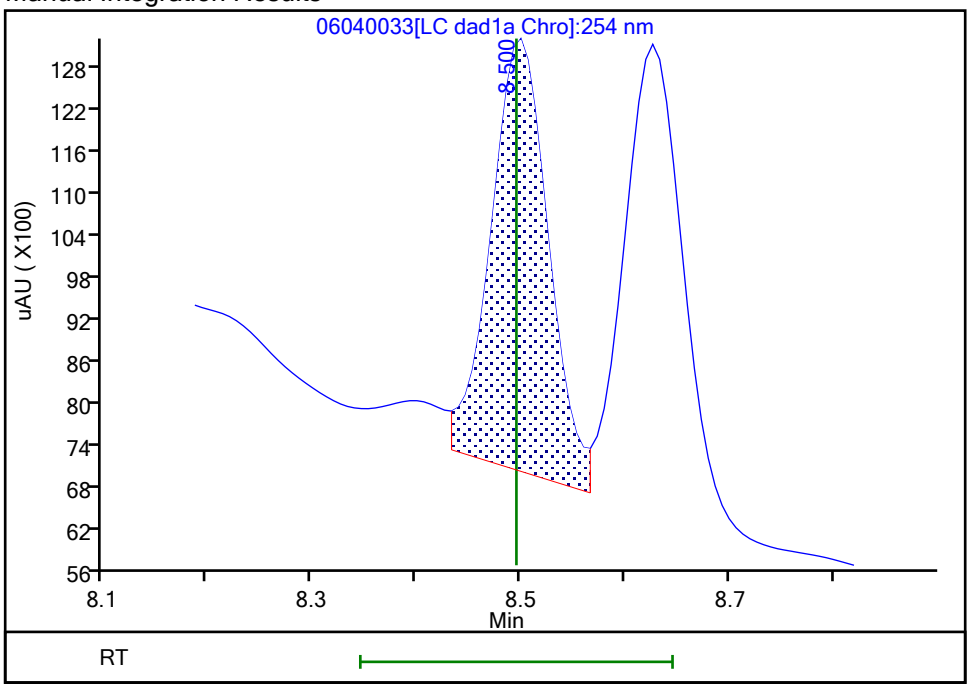
Processing Integration Results

RT: 8.50
Area: 58474
Amount: 0.456054
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 23778
Amount: 0.185451
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:15:57
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

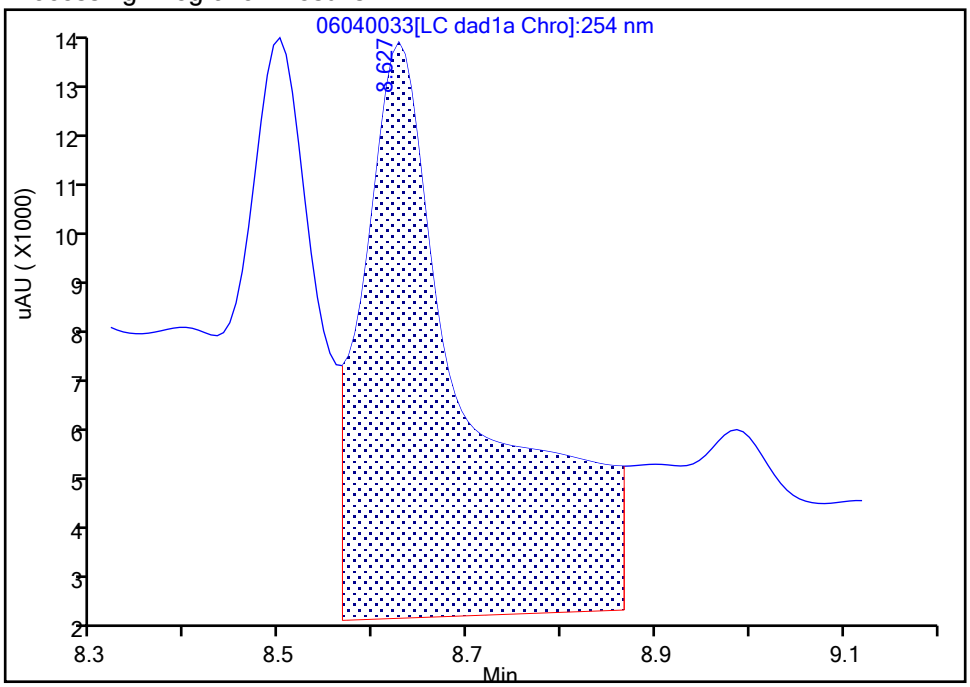
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

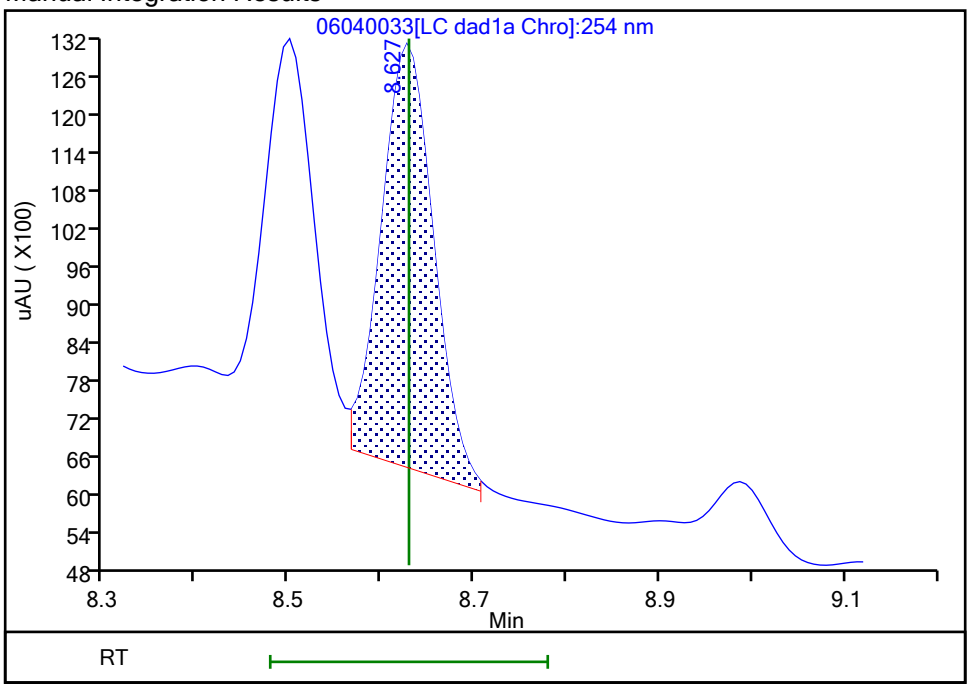
Processing Integration Results

RT: 8.63
Area: 83678
Amount: 0.379807
Amount Units: ug/mL



Manual Integration Results

RT: 8.63
Area: 26337
Amount: 0.119541
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:16:00
Audit Action: Split an Integrated Peak Audit Reason: Baseline

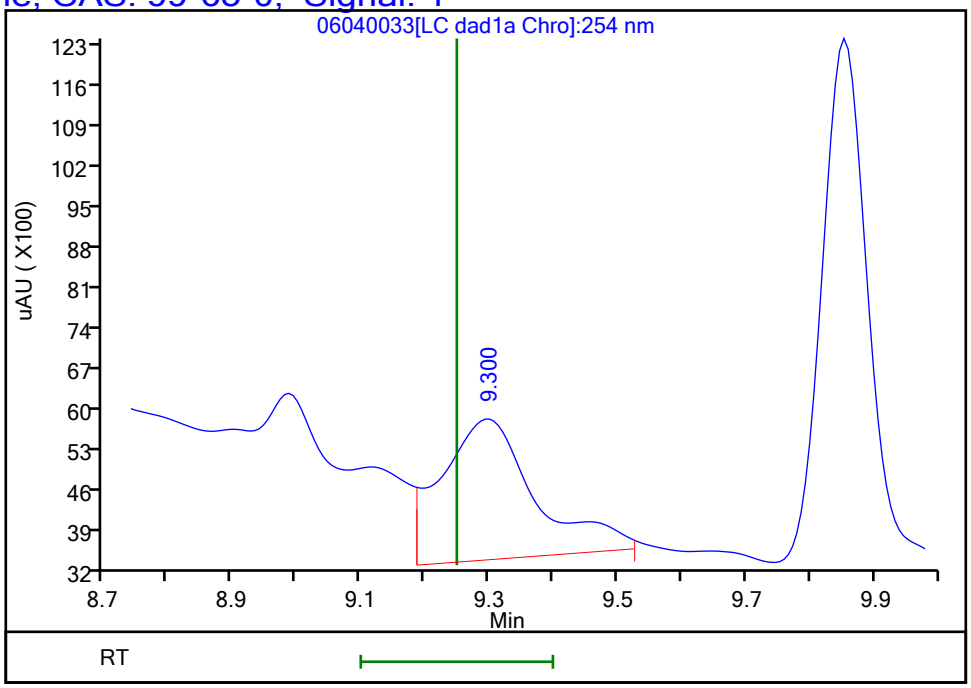
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	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		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.30
Response: 24571
Amount: 0.082918



Reviewer: zhangji, 05-Jun-2021 10:16:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

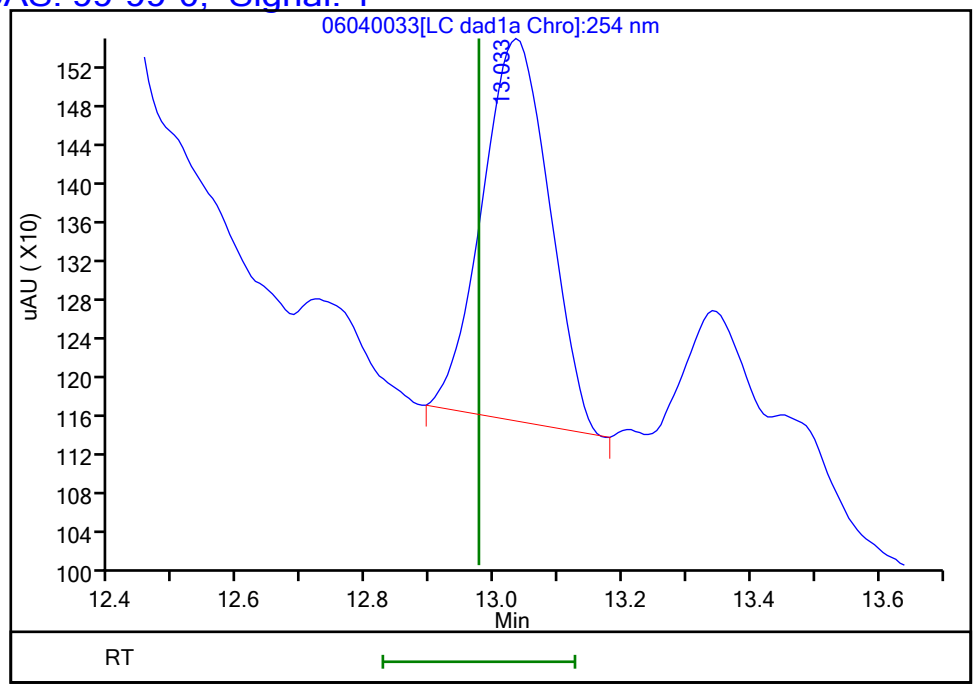
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	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		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.03
Response: 2860
Amount: 0.025556



Reviewer: zhangji, 05-Jun-2021 10:16:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

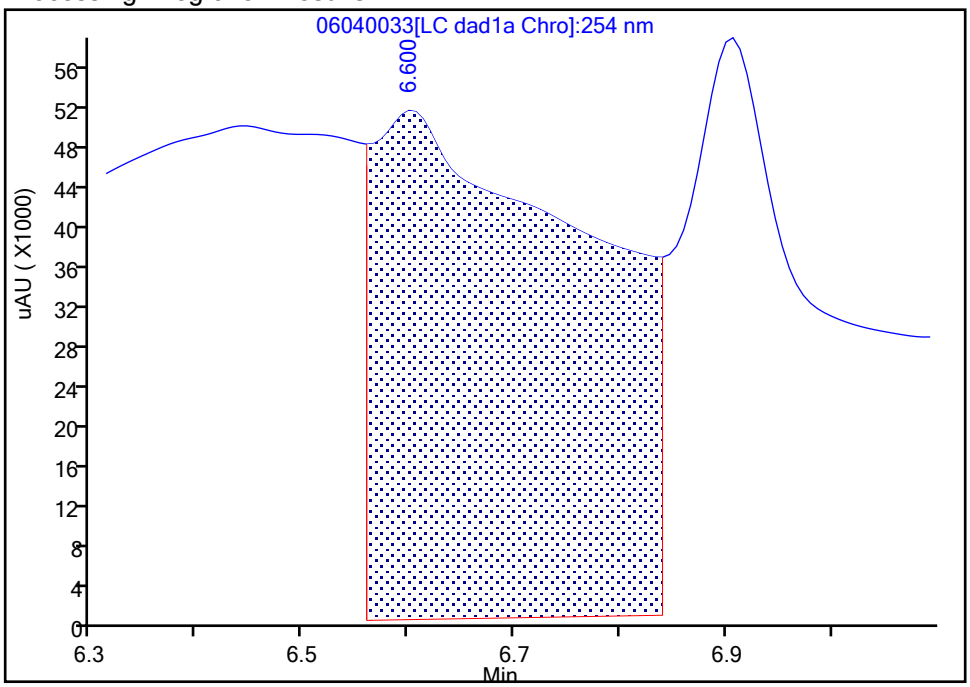
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

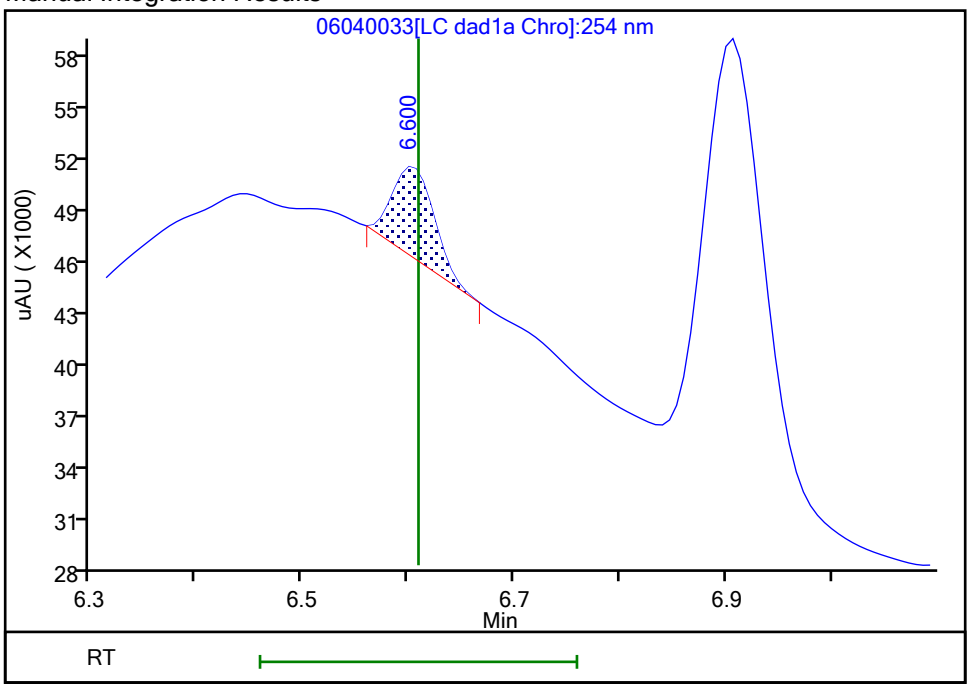
Processing Integration Results

RT: 6.60
Area: 708297
Amount: 8.390014
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 13955
Amount: 0.165302
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:15:36
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

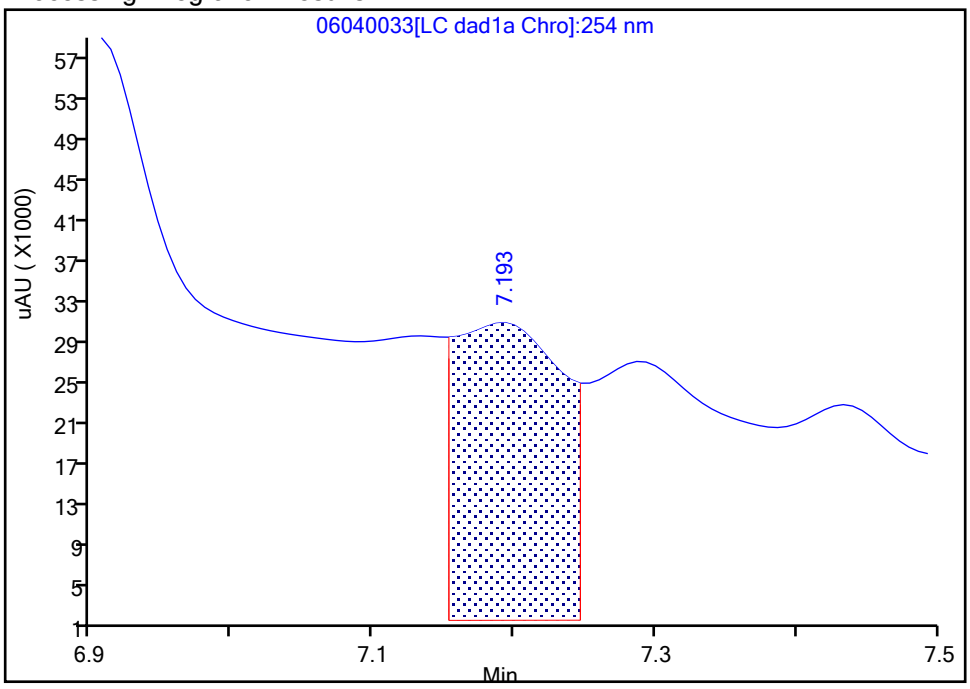
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

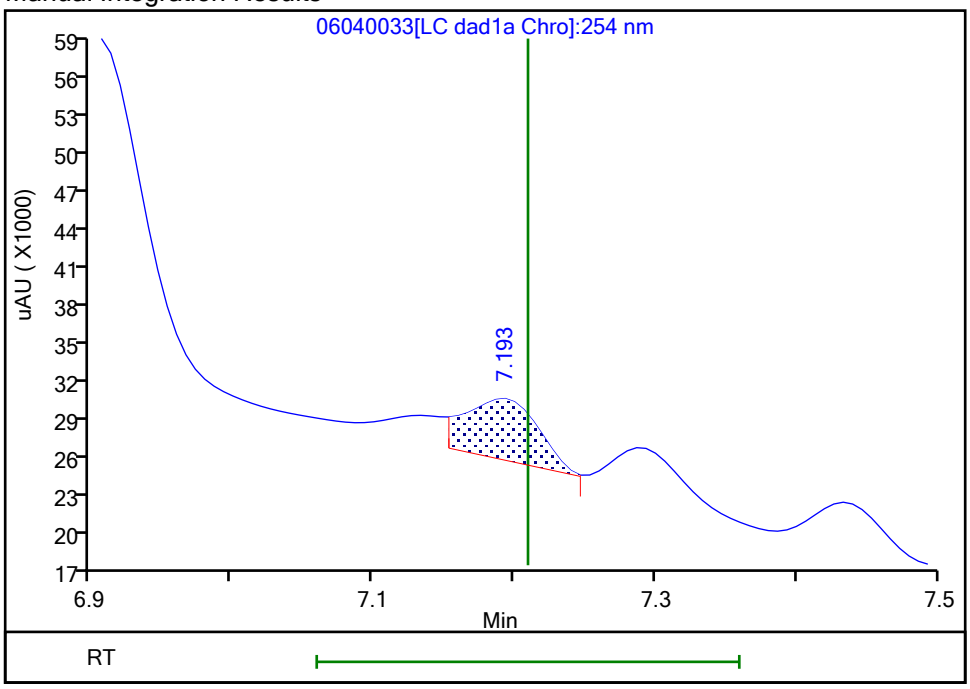
Processing Integration Results

RT: 7.19
Area: 152410
Amount: 1.169323
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 16722
Amount: 0.128295
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:15:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

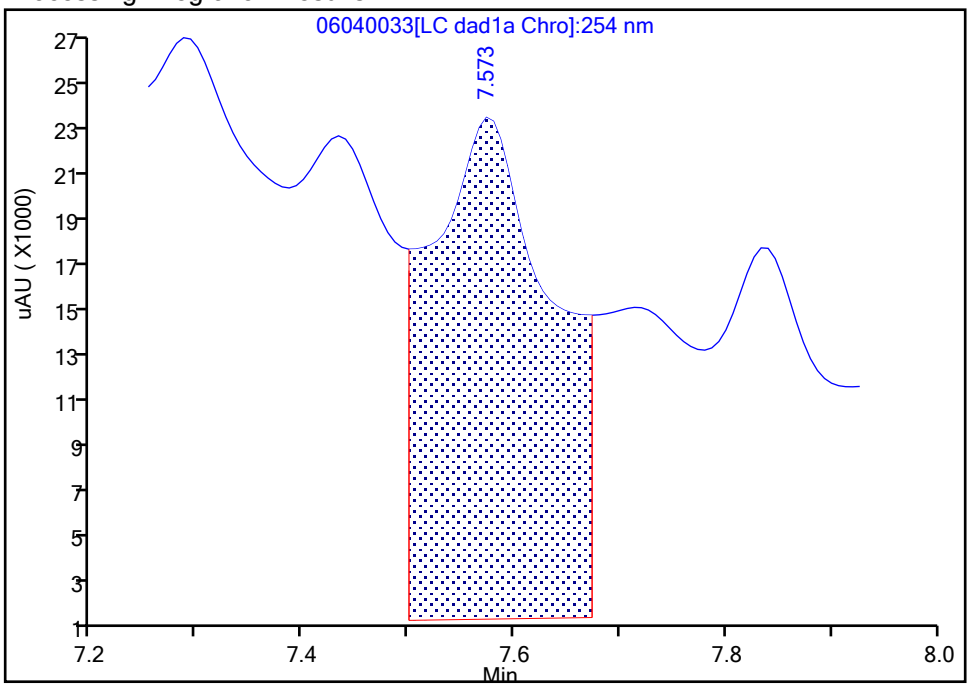
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

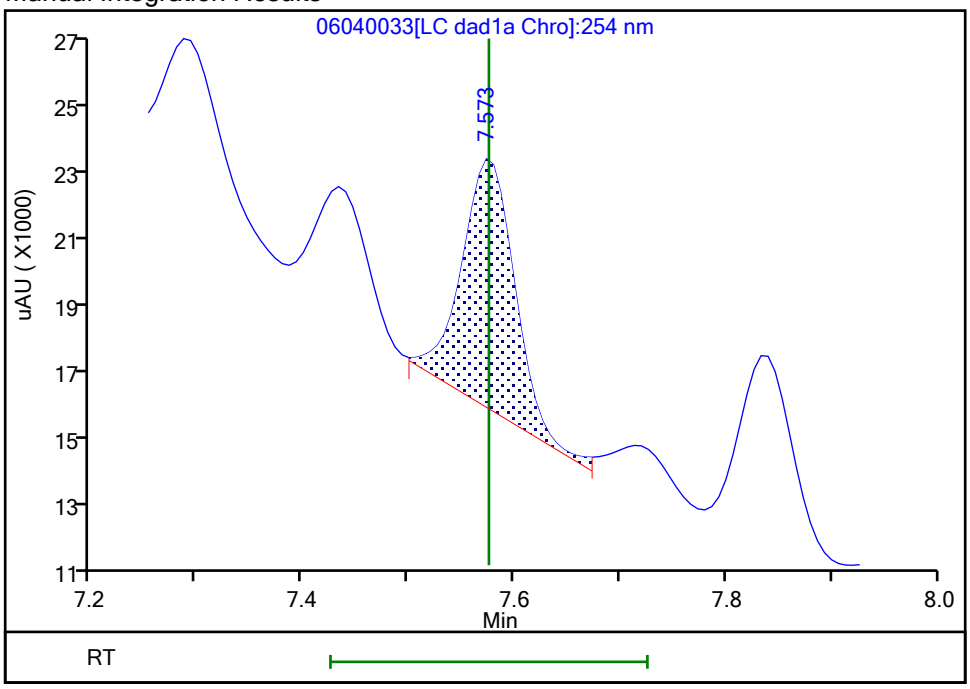
Processing Integration Results

RT: 7.57
Area: 173421
Amount: 1.632021
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 24946
Amount: 0.234761
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:15:49
Audit Action: Assigned New Baseline Audit Reason: Baseline

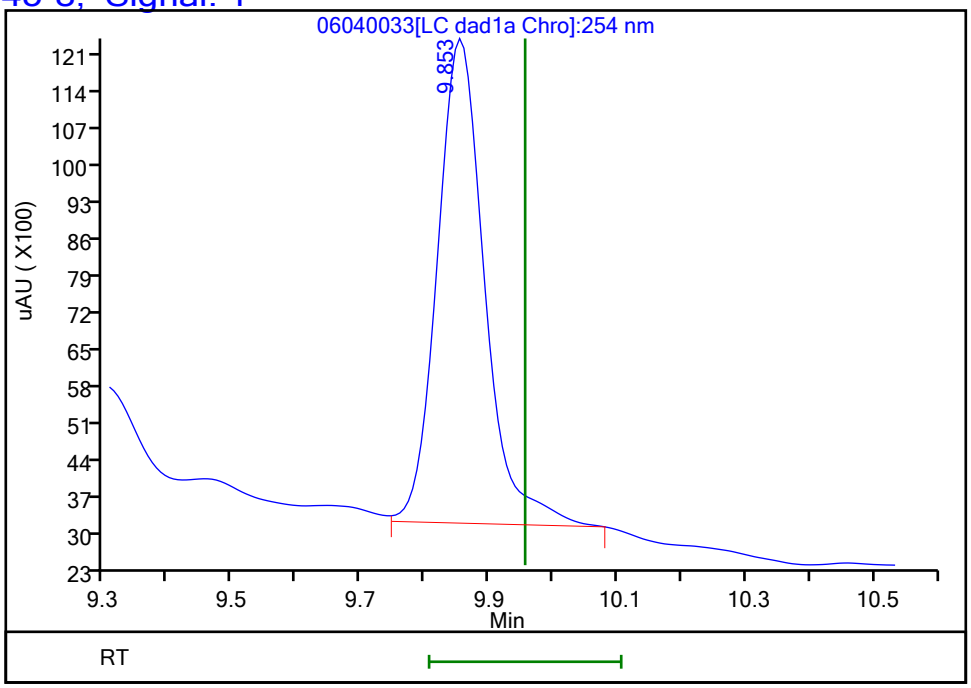
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040033.d				
Injection Date:	05-Jun-2021 03:02:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	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		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.85
Response: 47084
Amount: 0.273077



Reviewer: zhangji, 05-Jun-2021 10:16:04
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.: 280-149116-1

SDG No.:

Client Sample ID: PZ021-21A Lab Sample ID: 280-149116-12

Matrix: Water Lab File ID: 06050023.D

Analysis Method: 8330A Date Collected: 05/26/2021 08:00

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 505.9(mL) Date Analyzed: 06/05/2021 21:41

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538717 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
606-20-2	*2,6-Dinitrotoluene*	*0.82*	*J1*	*0.099*	0.079	*0.040*
2691-41-0	*HMX*	*3.8*	*M J1*	*0.21*	0.20	*0.087*
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D
Lims ID: 280-149116-A-12-A
Client ID: PZ021-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 21:41:19 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-12-A
Misc. Info.: 280-0102103-023
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:36 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 16:36:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	6.685	6.699	-0.014	62405	0.3869	M
	7 MNX	1		7.429			ND	U
	8 RDX	1	8.865	8.893	-0.028	47183	0.2310	M
	9 Nitrobenzene	1		11.953			ND	
$	10 1,2-Dinitrobenzene	1	13.044	13.066	-0.022	47981	0.1806	M
	12 1,3-Dinitrobenzene	1	15.471	15.493	-0.022	4864	0.006201	
	14 o-Nitrotoluene	1		16.739			ND	U
	15 p-Nitrotoluene	1		17.033			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.458	17.493	-0.035	132456	0.4464	
	17 m-Nitrotoluene	1		18.013			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.351	18.393	-0.042	153408	0.3903	
	19 1,3,5-Trinitrobenzene	1	18.884	18.906	-0.022	60958	0.1418	
	20 2,6-Dinitrotoluene	1	20.164	20.173	-0.009	22878	0.0831	
	21 2,4-Dinitrotoluene	1		20.633			ND	U
	22 Tetryl	1		24.253			ND	
	23 2,4,6-Trinitrotoluene	1	25.211	25.233	-0.022	405429	1.09	

QC Flag Legend

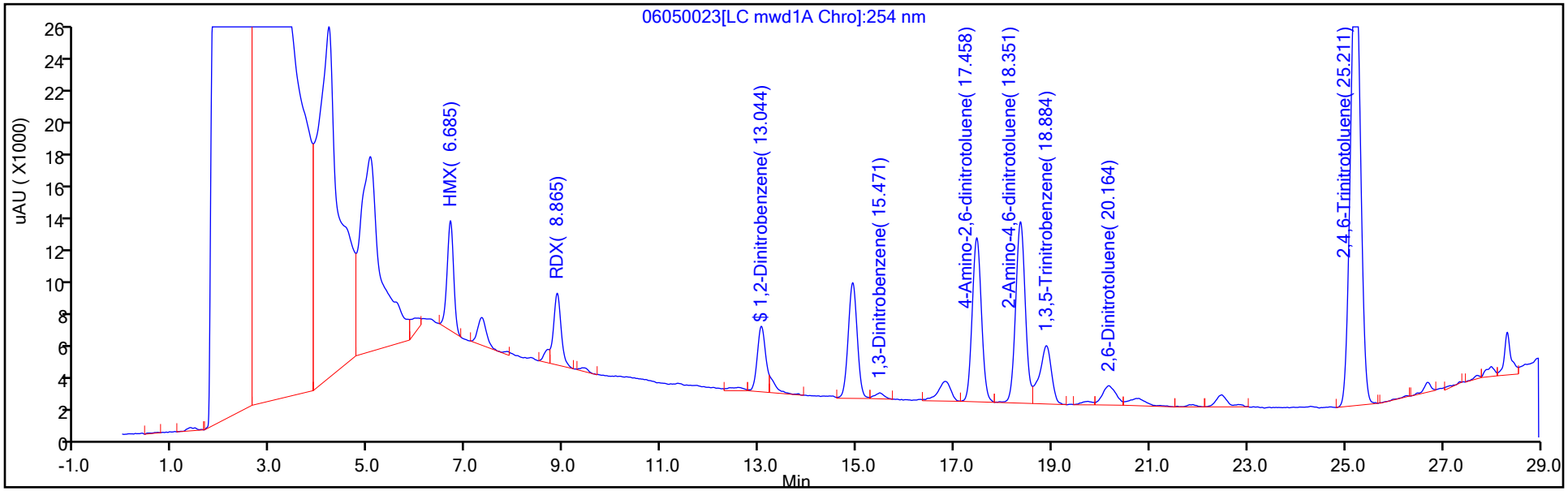
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 08-Jun-2021 16:38:37 Chrom Revision: 2.3 13-May-2021 07:57:40

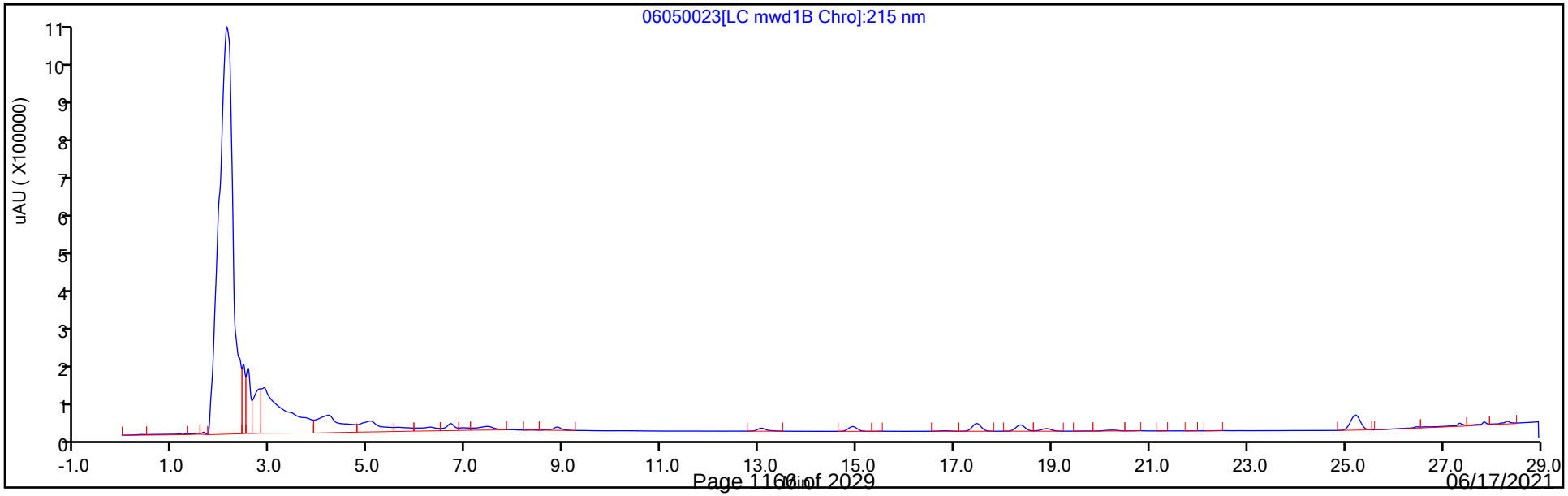
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D				
Injection Date:	05-Jun-2021 21:41:19	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12	Worklist Smp#:	23
Client ID:	PZ021-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D				
Lims ID:	280-149116-A-12-A				
Client ID:	PZ021-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 21:41:19	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-12-A				
Misc. Info.:	280-0102103-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:36	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	08-Jun-2021 16:36:38		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1806	90.31

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

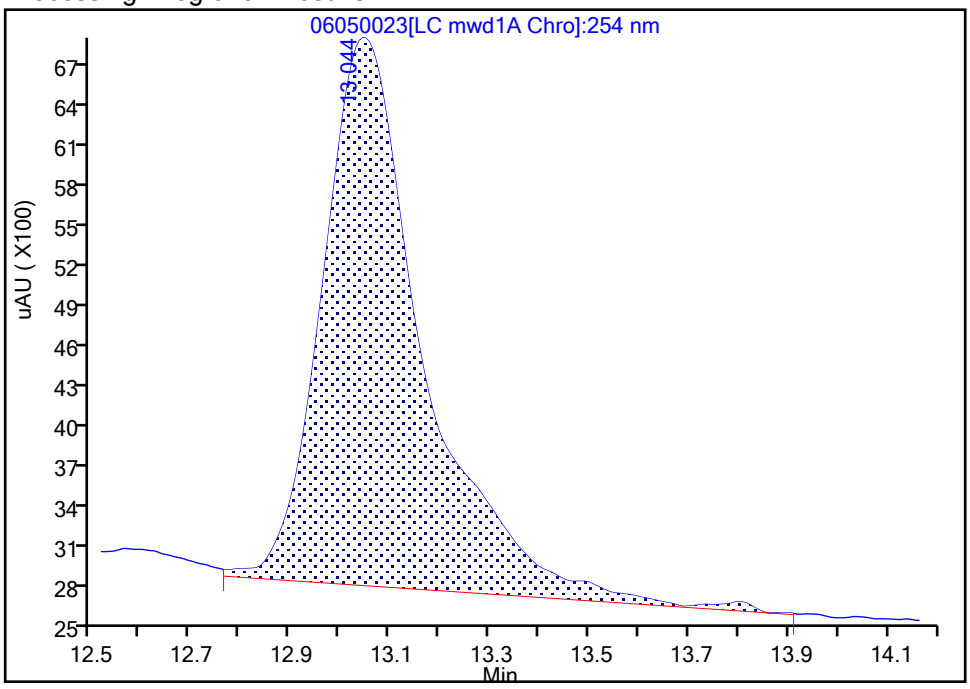
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D				
Injection Date:	05-Jun-2021 21:41:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

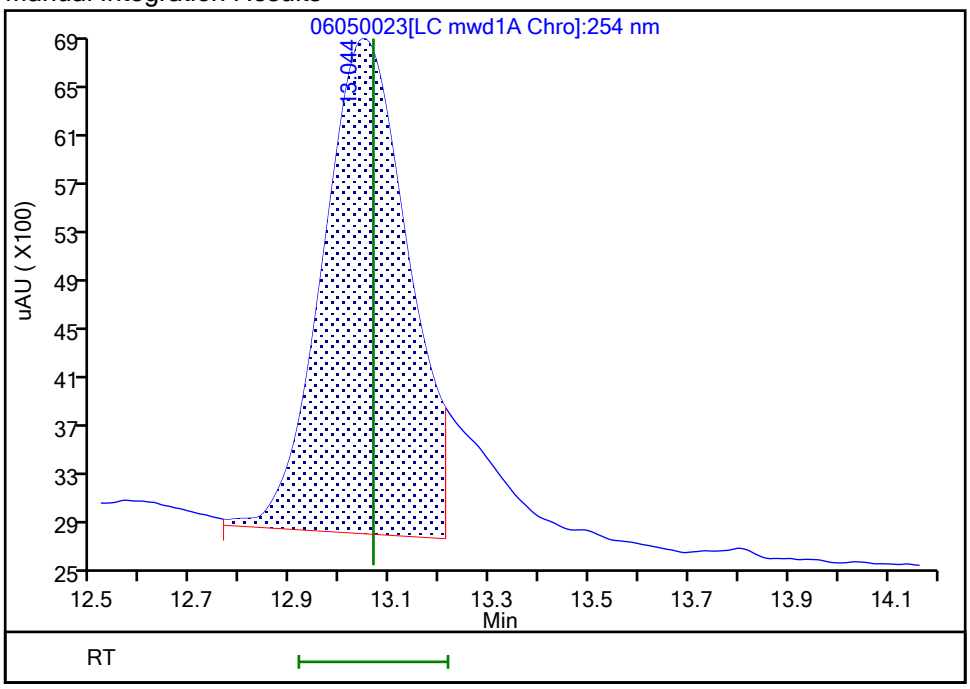
Processing Integration Results

RT: 13.04
Area: 57002
Amount: 0.214568
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 47981
Amount: 0.180611
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:36:24

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

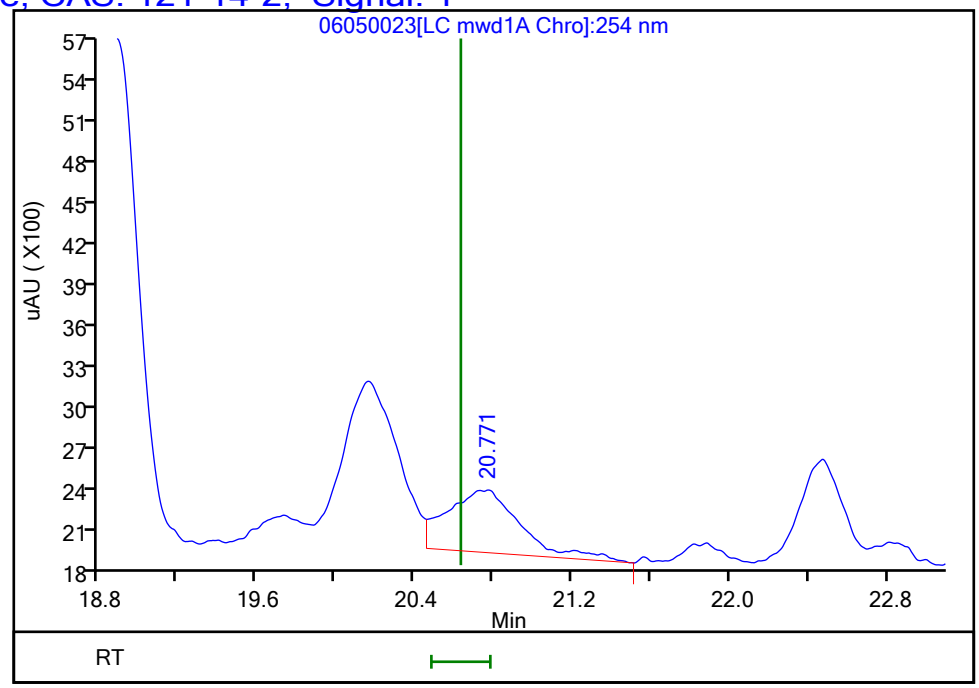
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D				
Injection Date:	05-Jun-2021 21:41:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.77
Response: 11570
Amount: 0.020452



Reviewer: zhangji, 08-Jun-2021 16:36:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

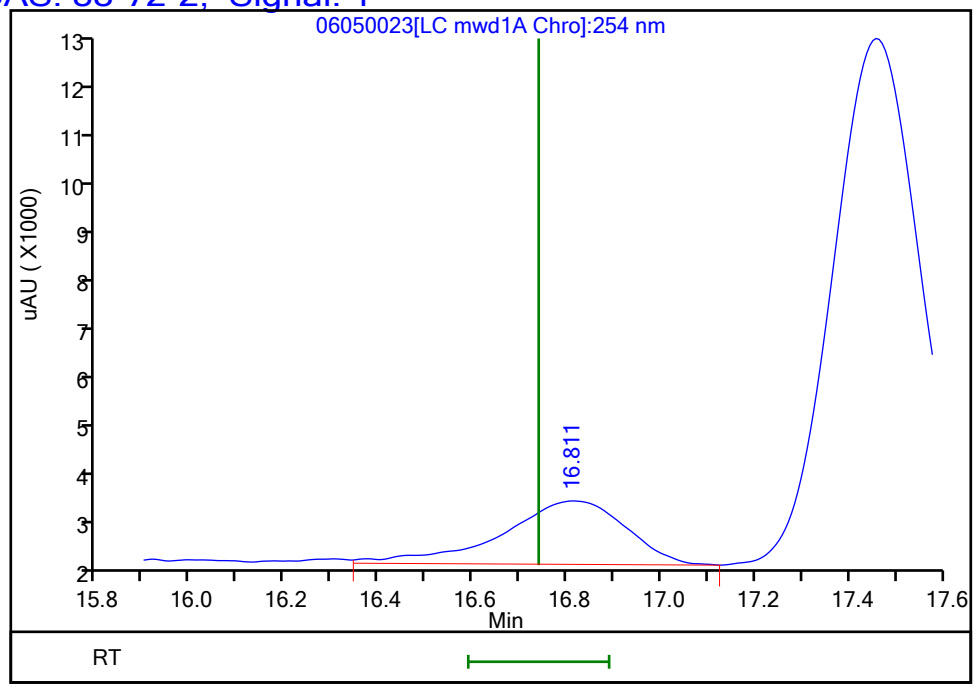
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D				
Injection Date:	05-Jun-2021 21:41:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.81
Response: 22105
Amount: 0.088787



Reviewer: zhangji, 08-Jun-2021 16:36:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

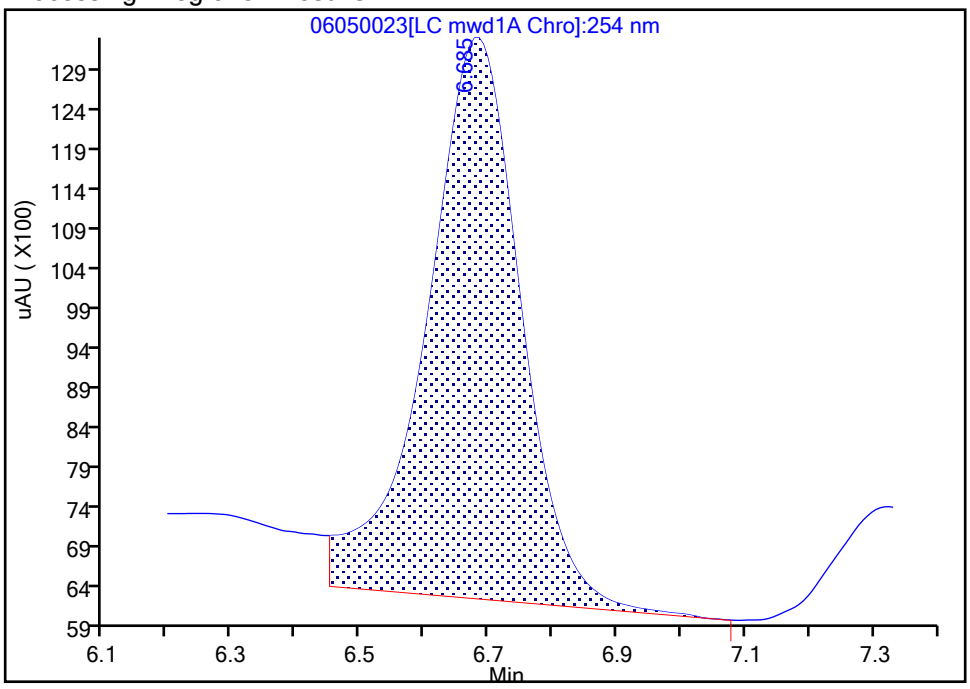
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D				
Injection Date:	05-Jun-2021 21:41:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

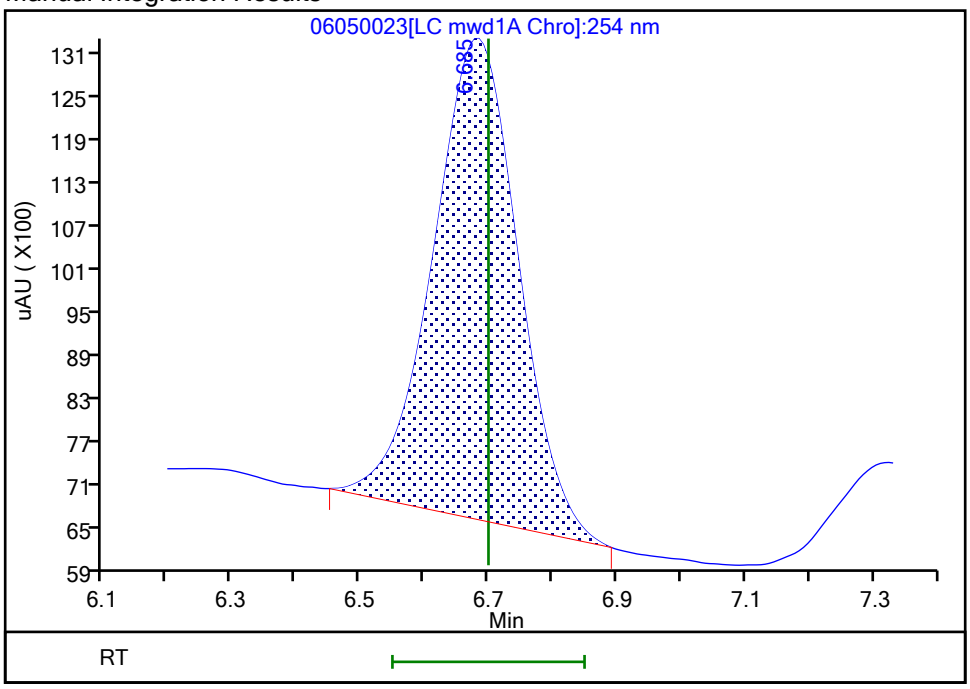
Processing Integration Results

RT: 6.68
Area: 72871
Amount: 0.452785
Amount Units: ug/ml



Manual Integration Results

RT: 6.68
Area: 62405
Amount: 0.386867
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:36:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

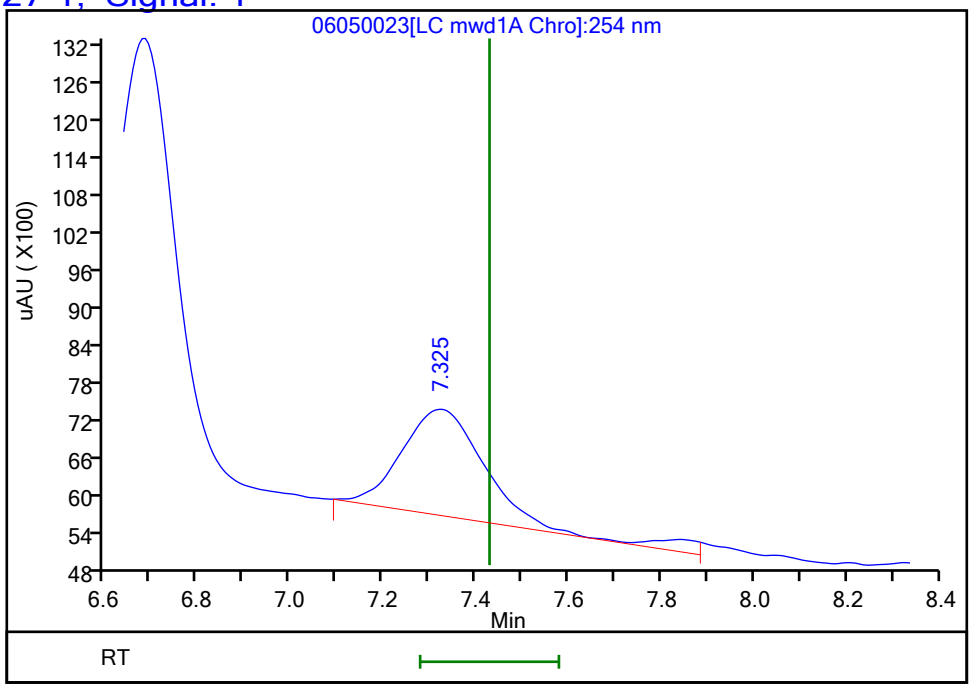
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D				
Injection Date:	05-Jun-2021 21:41:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.32
Response: 22261
Amount: 0.084054



Reviewer: zhangji, 08-Jun-2021 16:36:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

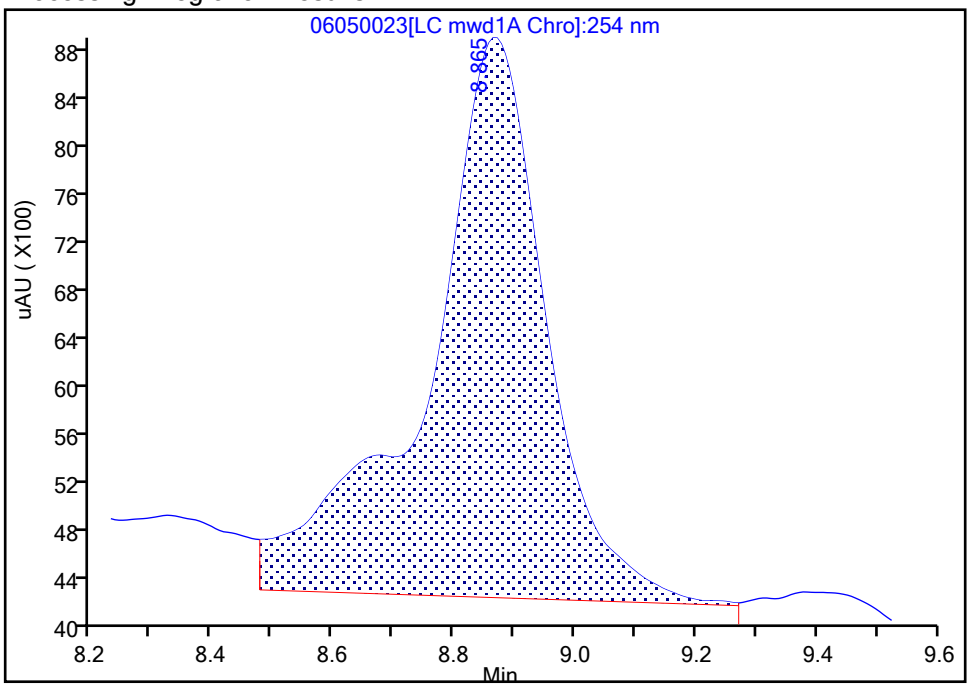
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050023.D				
Injection Date:	05-Jun-2021 21:41:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-A-12-A	Lab Sample ID:	280-149116-12		
Client ID:	PZ021-21A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

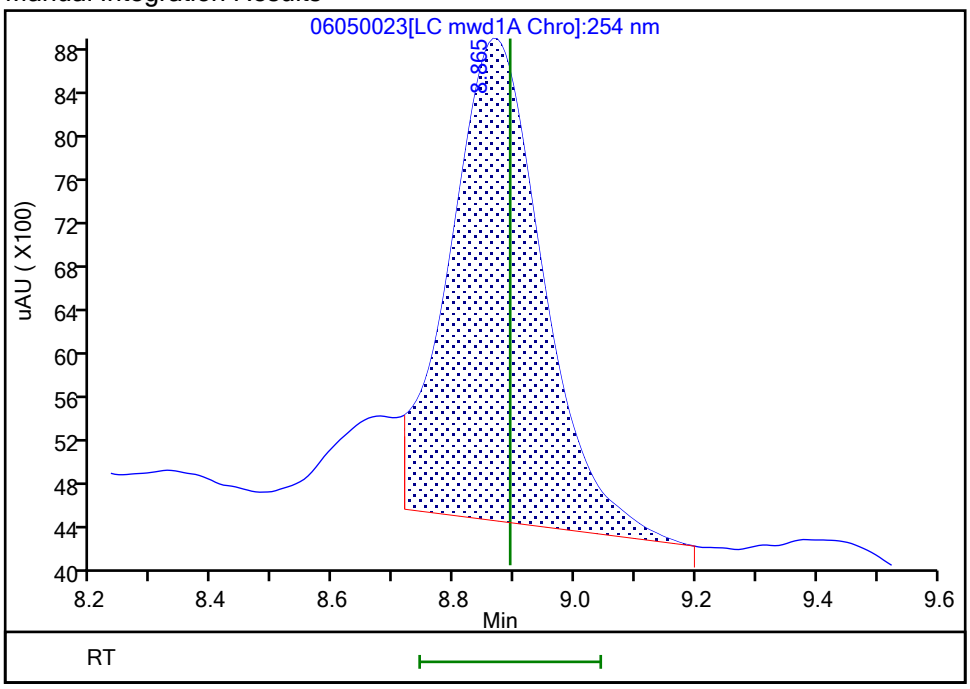
Processing Integration Results

RT: 8.86
Area: 63806
Amount: 0.312361
Amount Units: ug/ml



Manual Integration Results

RT: 8.86
Area: 47183
Amount: 0.230984
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:36:20

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A Lab Sample ID: 280-149116-13

Matrix: Water Lab File ID: 06040037.D

Analysis Method: 8330A Date Collected: 05/25/2021 13:25

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 496.5(mL) Date Analyzed: 06/05/2021 04:34

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U Q J1	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U Q J1	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U Q J1	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.16
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040037.D
Lims ID: 280-149116-A-13-A
Client ID: PZ007-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 04:34:12 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-13-
Misc. Info.: 280-0102084-037
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:23 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:16:39

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	26 Triamine Trinitrobenzene	1		2.474			ND	
	1 2,6-diamino-4-nitrotoluene	1		6.486			ND	
	2 TNX	1		6.490			ND	U
	3 HMX	1		6.609			ND	
	4 2,4-diamino-6-nitrotoluene	1		6.660			ND	
	5 DNX	1		6.803			ND	
	6 MNX	1		7.210			ND	
	7 RDX	1		7.576			ND	
	8 2,4,6-Trinitrophenol	1		7.942			ND	
$	9 1,2-Dinitrobenzene	1	8.497	8.496	0.001	23481	0.1831	M
	10 1,3,5-Trinitrobenzene	1		8.629			ND	
	11 1,3-Dinitrobenzene	1		9.249			ND	
	12 Nitrobenzene	1		9.636			ND	
	13 3,5-Dinitroaniline	1		9.846			ND	
	14 Tetryl	1		9.956			ND	
	15 Nitroglycerin	2		10.416			ND	
	16 2,4,6-Trinitrotoluene	1		10.876			ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.076			ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	19 2,6-Dinitrotoluene	1		11.502			ND	
	20 2,4-Dinitrotoluene	1		11.676			ND	
	21 o-Nitrotoluene	1		12.542			ND	
	22 p-Nitrotoluene	1		12.976			ND	
	23 m-Nitrotoluene	1		13.562			ND	
	24 PETN	2		14.649			ND	
	25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

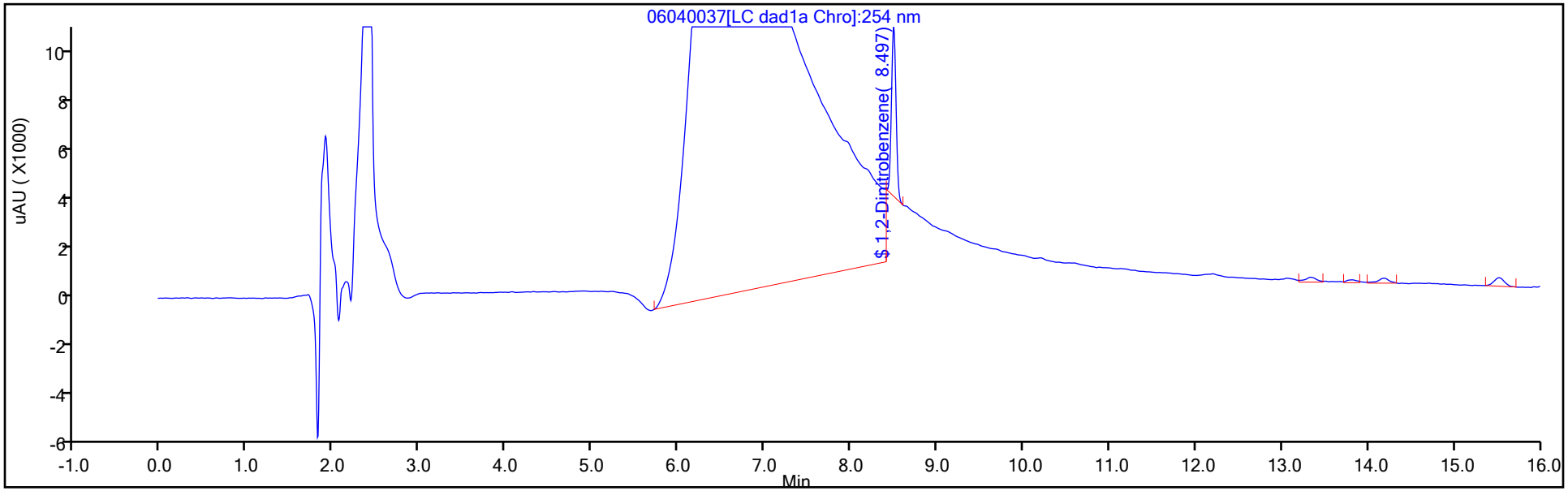
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:24 Chrom Revision: 2.3 13-May-2021 07:57:40

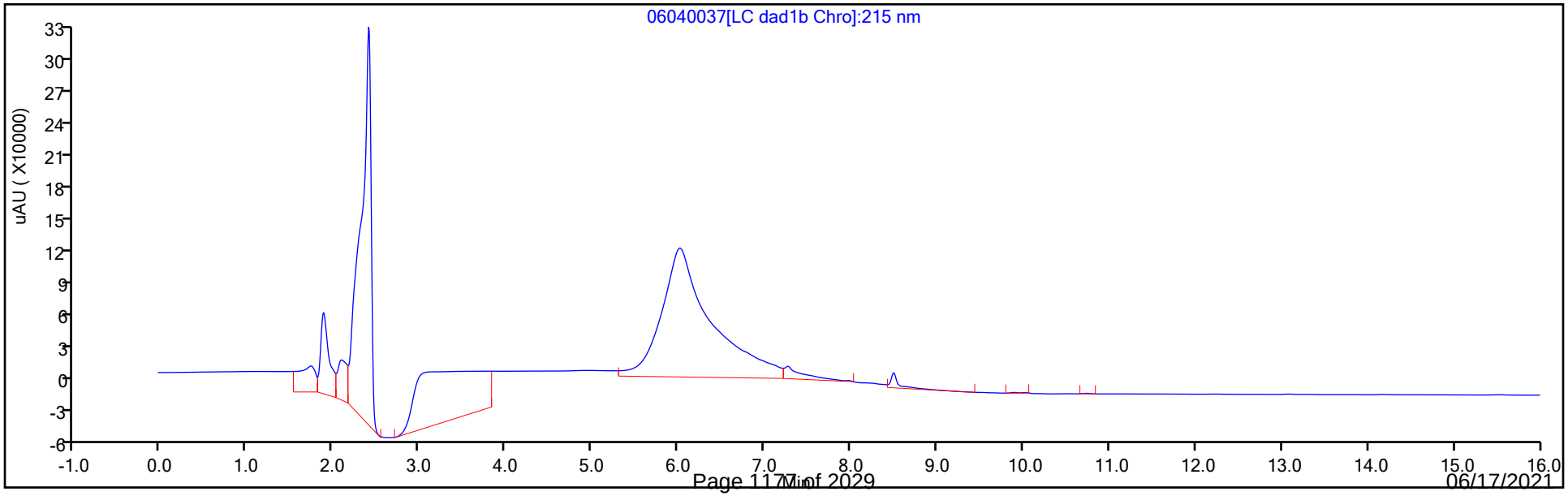
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040037.d				
Injection Date:	05-Jun-2021 04:34:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-13-A	Lab Sample ID:	280-149116-13	Worklist Smp#:	37
Client ID:	PZ007-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040037.D				
Lims ID:	280-149116-A-13-A				
Client ID:	PZ007-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 04:34:12	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-13-				
Misc. Info.:	280-0102084-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				

First Level Reviewer: zhangji Date: 05-Jun-2021 10:16:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1831	91.57

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

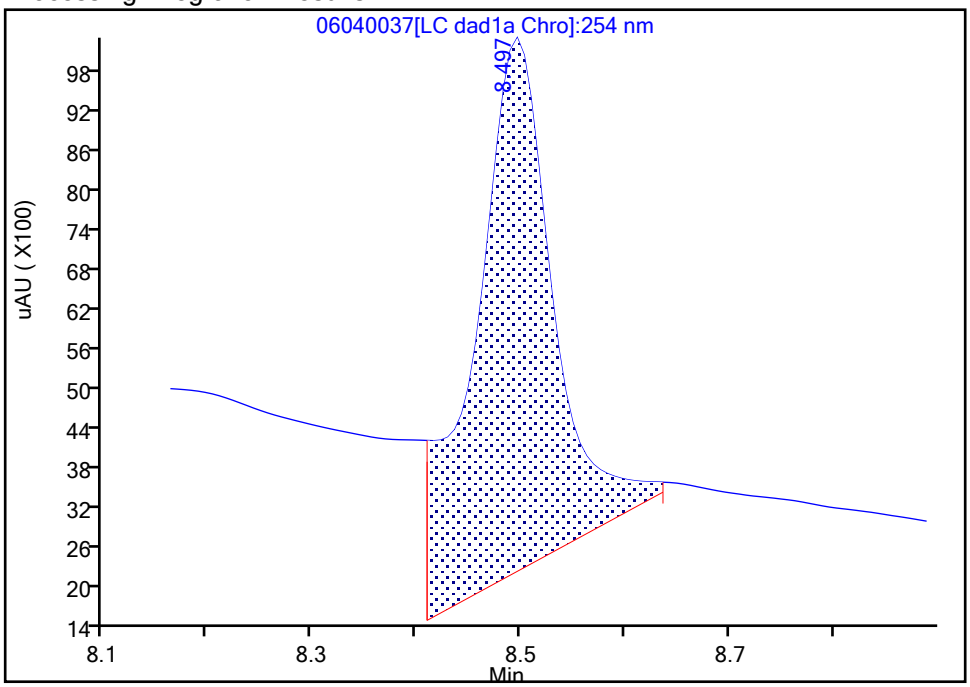
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040037.d				
Injection Date:	05-Jun-2021 04:34:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-13-A	Lab Sample ID:	280-149116-13		
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

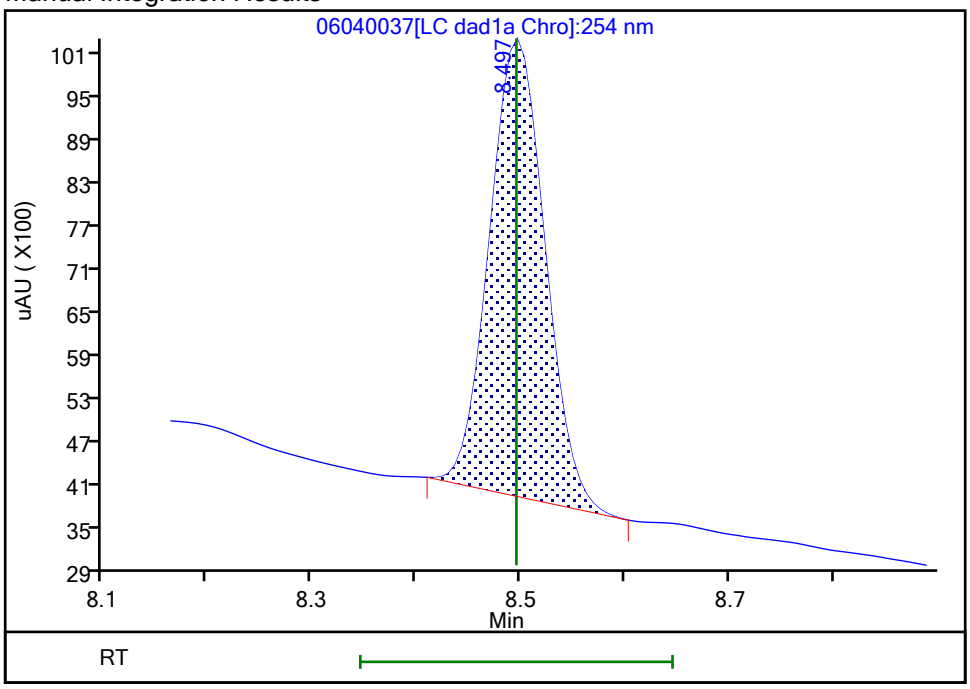
Processing Integration Results

RT: 8.50
Area: 42532
Amount: 0.331718
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 23481
Amount: 0.183135
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:16:38
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: G0024-21A Lab Sample ID: 280-149116-14

Matrix: Water Lab File ID: 06040042.D

Analysis Method: 8330A Date Collected: 05/26/2021 08:30

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 470.7(mL) Date Analyzed: 06/05/2021 06:29

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.44		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	1.2		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.1		0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U Q M	0.44	0.42	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.093
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
121-82-4	RDX	0.21	U	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040042.D
Lims ID: 280-149116-B-14-A
Client ID: G0024-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 06:29:10 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-14-
Misc. Info.: 280-0102084-042
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:23 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:18:41

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1		6.609			ND	
	6 MNX	1		7.210			ND	
	7 RDX	1		7.576			ND	
$	9 1,2-Dinitrobenzene	1	8.493	8.496	-0.003	23577	0.1839	M
	10 1,3,5-Trinitrobenzene	1		8.629			ND	
	11 1,3-Dinitrobenzene	1		9.249			ND	U
	12 Nitrobenzene	1		9.636			ND	
	14 Tetryl	1		9.956			ND	U
	16 2,4,6-Trinitrotoluene	1	10.879	10.876	0.003	8560	0.0415	
	17 4-Amino-2,6-dinitrotoluene	1	11.086	11.076	0.010	15743	0.1031	
	18 2-Amino-4,6-dinitrotoluene	1	11.346	11.336	0.010	22823	0.1103	
	19 2,6-Dinitrotoluene	1		11.502			ND	
	20 2,4-Dinitrotoluene	1		11.676			ND	
	21 o-Nitrotoluene	1		12.542			ND	
	22 p-Nitrotoluene	1		12.976			ND	U
	23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

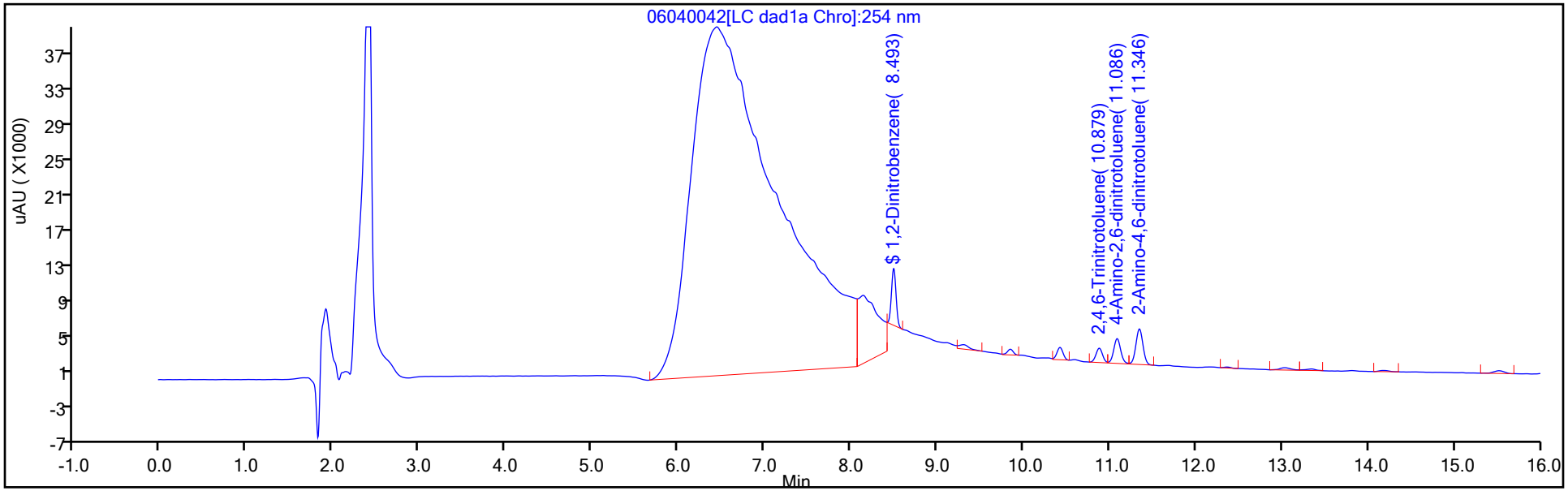
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:26 Chrom Revision: 2.3 13-May-2021 07:57:40

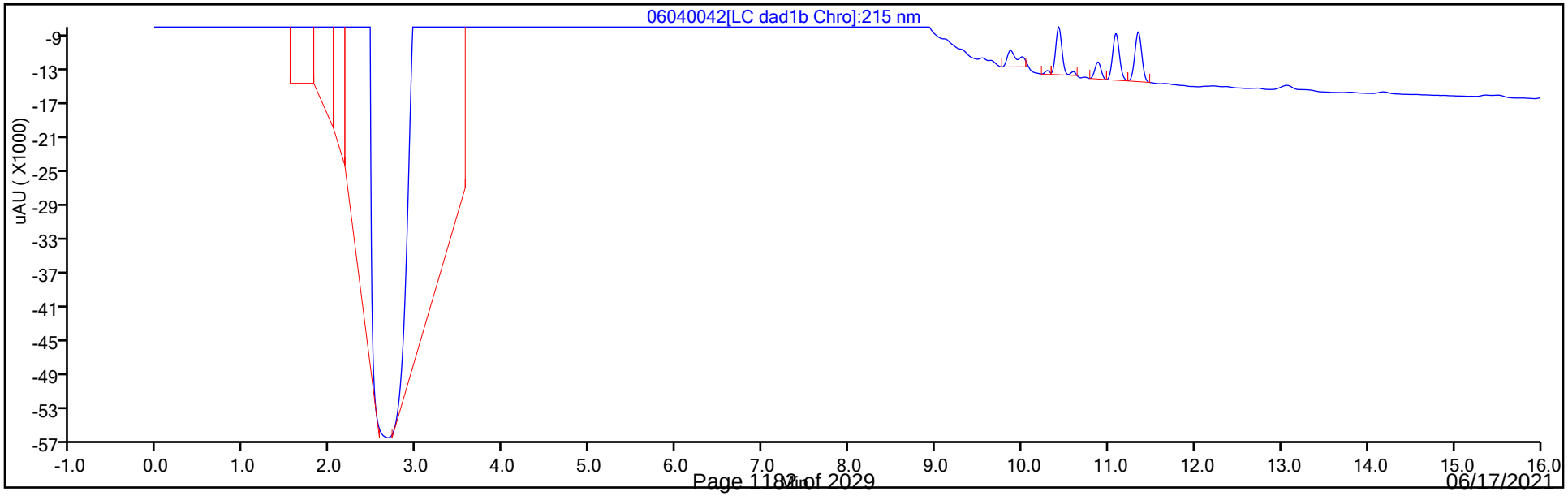
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040042.d				
Injection Date:	05-Jun-2021 06:29:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-B-14-A	Lab Sample ID:	280-149116-14	Worklist Smp#:	42
Client ID:	G0024-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040042.D				
Lims ID:	280-149116-B-14-A				
Client ID:	G0024-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 06:29:10	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-14-				
Misc. Info.:	280-0102084-042				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:18:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1839	91.94

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

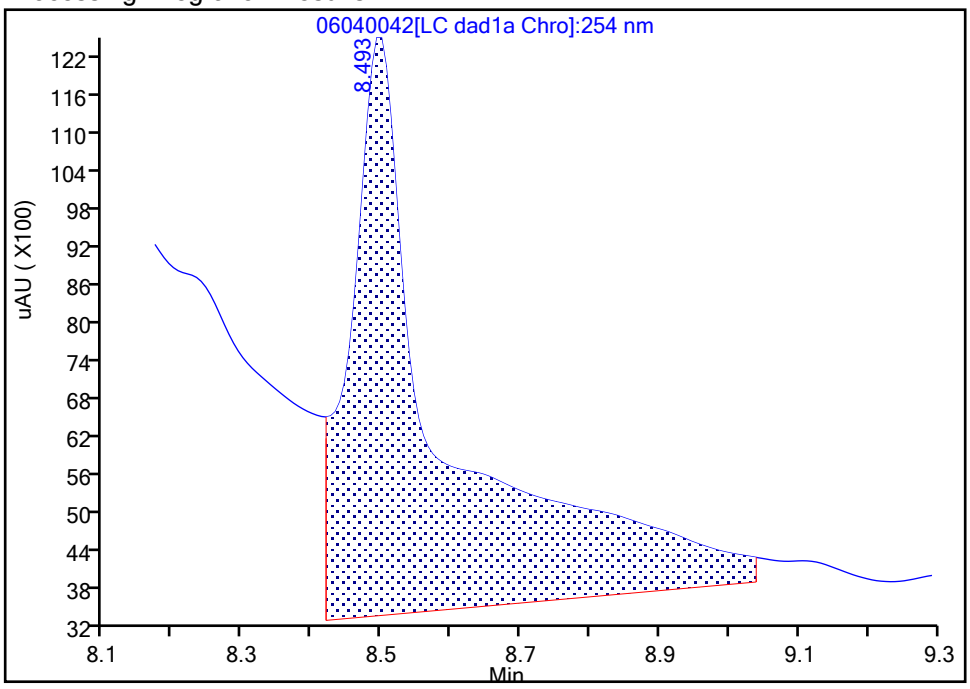
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040042.d				
Injection Date:	05-Jun-2021 06:29:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-14-A	Lab Sample ID:	280-149116-14		
Client ID:	G0024-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

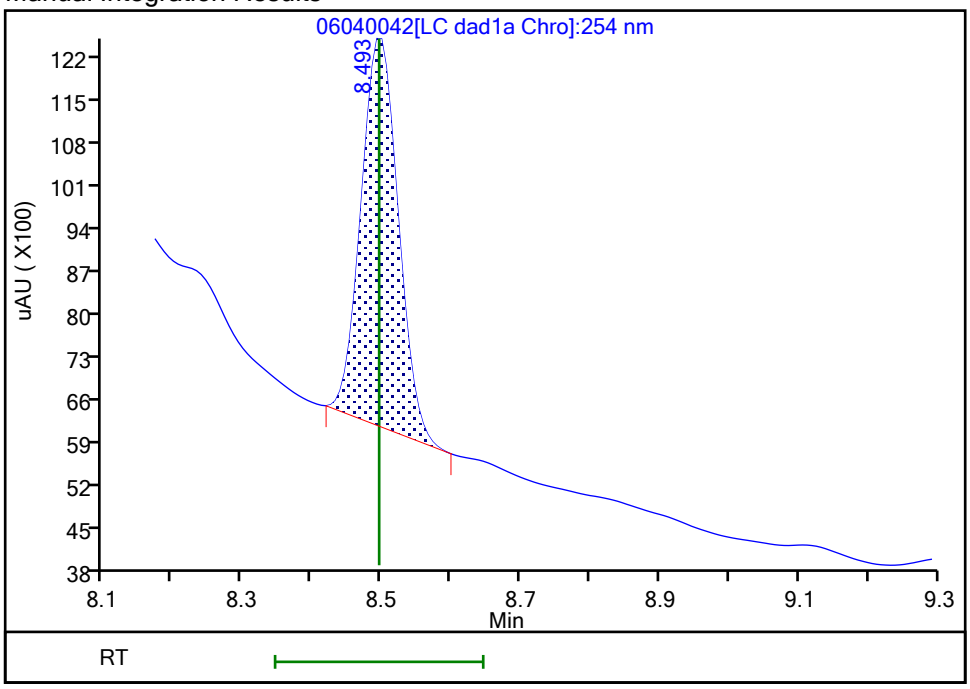
Processing Integration Results

RT: 8.49
Area: 87361
Amount: 0.681352
Amount Units: ug/mL



Manual Integration Results

RT: 8.49
Area: 23577
Amount: 0.183883
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:18:39
Audit Action: Manually Integrated Audit Reason: Baseline

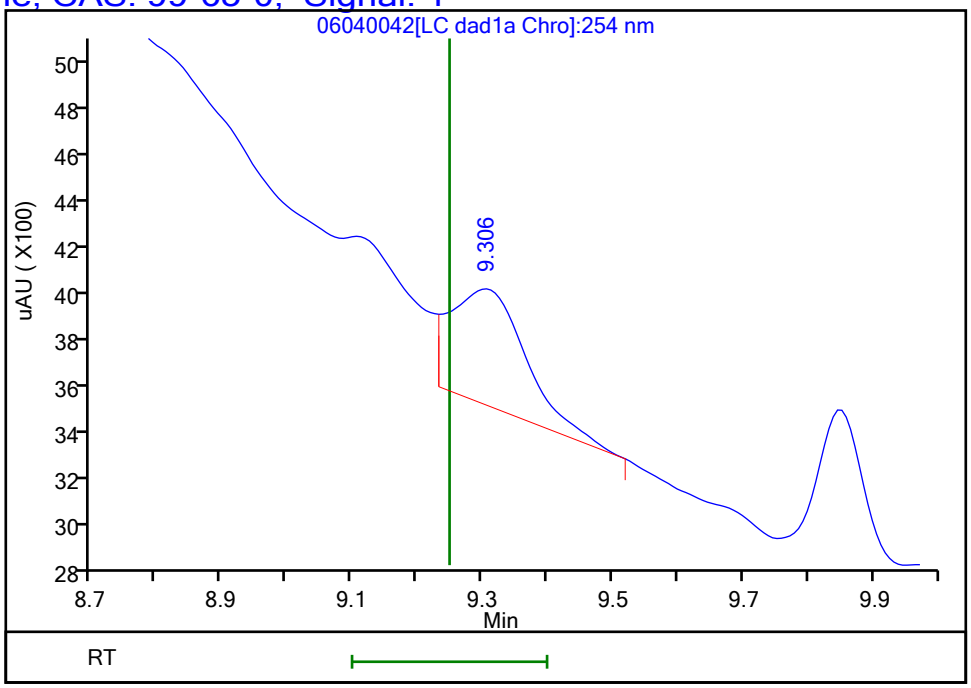
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040042.d				
Injection Date:	05-Jun-2021 06:29:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-14-A	Lab Sample ID:	280-149116-14		
Client ID:	G0024-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.31
Response: 3936
Amount: 0.013283



Reviewer: zhangji, 05-Jun-2021 10:18:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

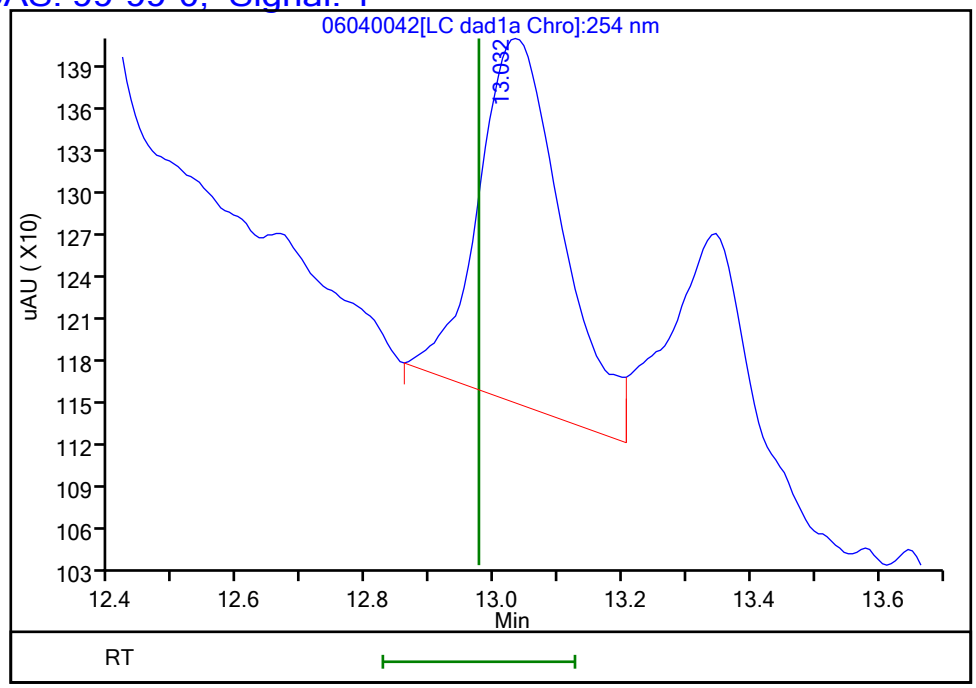
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040042.d				
Injection Date:	05-Jun-2021 06:29:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-14-A	Lab Sample ID:	280-149116-14		
Client ID:	G0024-21A				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.03
Response: 2341
Amount: 0.020918



Reviewer: zhangji, 05-Jun-2021 10:18:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

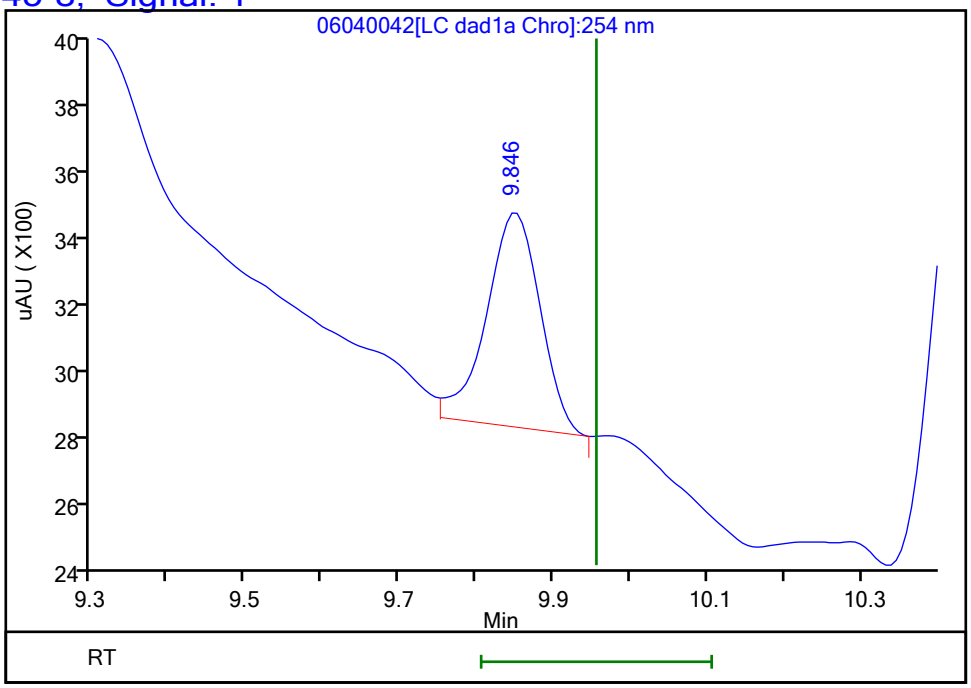
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040042.d
Injection Date: 05-Jun-2021 06:29:10 Instrument ID: CHHPLC_X3
Lims ID: 280-149116-B-14-A Lab Sample ID: 280-149116-14
Client ID: G0024-21A
Operator ID: JZ ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.85
Response: 3059
Amount: 0.017742



Reviewer: zhangji, 05-Jun-2021 10:18:41
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.: 280-149116-1

SDG No.:

Client Sample ID: G0024-21A Lab Sample ID: 280-149116-14

Matrix: Water Lab File ID: 06050024.D

Analysis Method: 8330A Date Collected: 05/26/2021 08:30

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 470.7(mL) Date Analyzed: 06/05/2021 22:16

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538717 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: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050024.D
Lims ID: 280-149116-B-14-A
Client ID: G0024-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 22:16:18 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-14-A
Misc. Info.: 280-0102103-024
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:36 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 16:37:09

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		6.699			ND	
	7 MNX	1		7.429			ND	
	8 RDX	1	8.871	8.893	-0.022	1844	0.009027	M
	9 Nitrobenzene	1		11.953			ND	
$	10 1,2-Dinitrobenzene	1	13.051	13.066	-0.015	48510	0.1826	
	12 1,3-Dinitrobenzene	1		15.493			ND	
	14 o-Nitrotoluene	1		16.739			ND	U
	15 p-Nitrotoluene	1		17.033			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.457	17.493	-0.036	32592	0.1098	M
	17 m-Nitrotoluene	1		18.013			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.364	18.393	-0.029	51285	0.1283	
	19 1,3,5-Trinitrobenzene	1		18.906			ND	
	20 2,6-Dinitrotoluene	1		20.173			ND	
	21 2,4-Dinitrotoluene	1		20.633			ND	7
	22 Tetryl	1		24.253			ND	
	23 2,4,6-Trinitrotoluene	1	25.217	25.233	-0.016	15604	0.0377	

QC Flag Legend

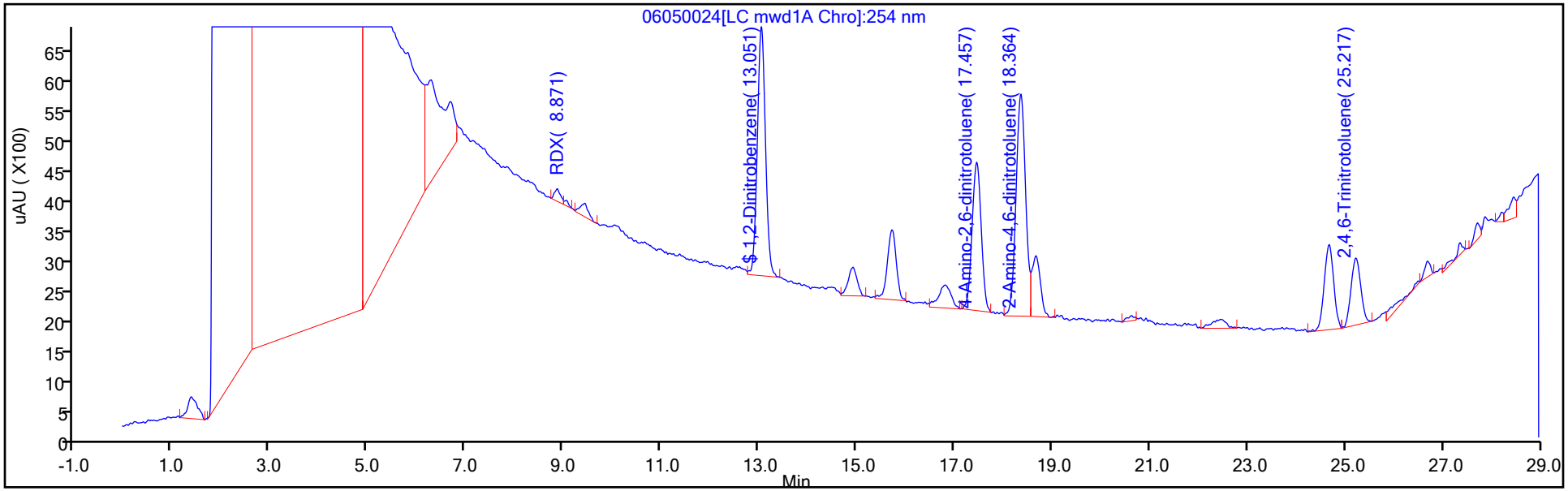
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 08-Jun-2021 16:38:37 Chrom Revision: 2.3 13-May-2021 07:57:40

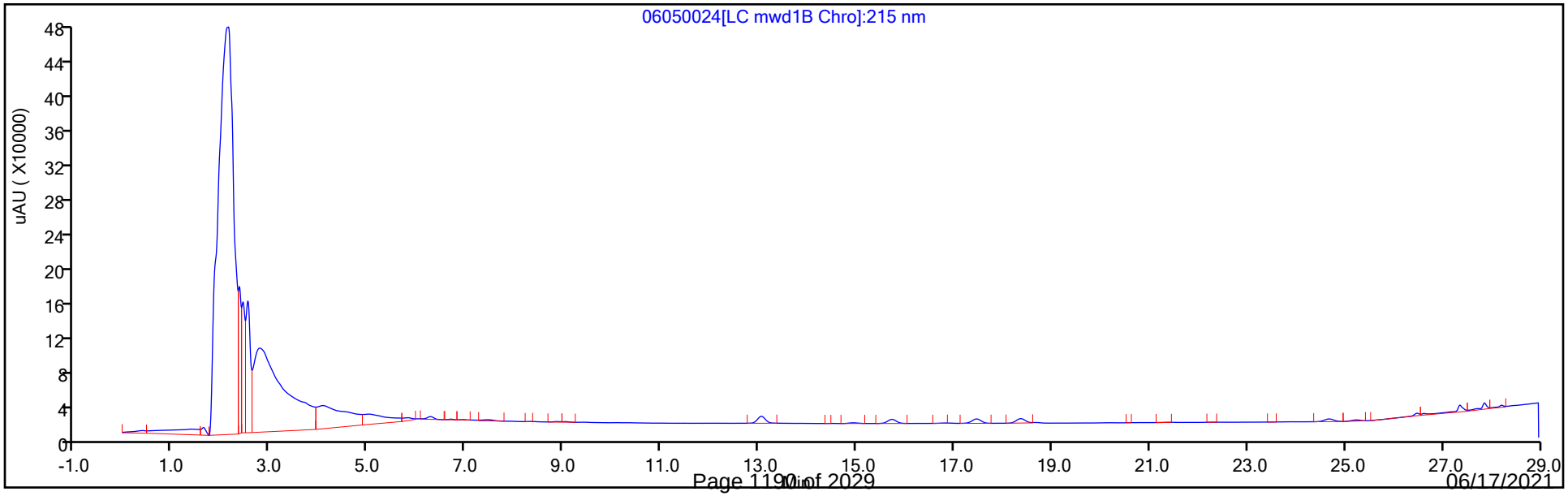
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050024.D				
Injection Date:	05-Jun-2021 22:16:18	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-149116-B-14-A	Lab Sample ID:	280-149116-14	Worklist Smp#:	24
Client ID:	G0024-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050024.D				
Lims ID:	280-149116-B-14-A				
Client ID:	G0024-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 22:16:18	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-14-A				
Misc. Info.:	280-0102103-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:36	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	08-Jun-2021 16:37:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1826	91.30

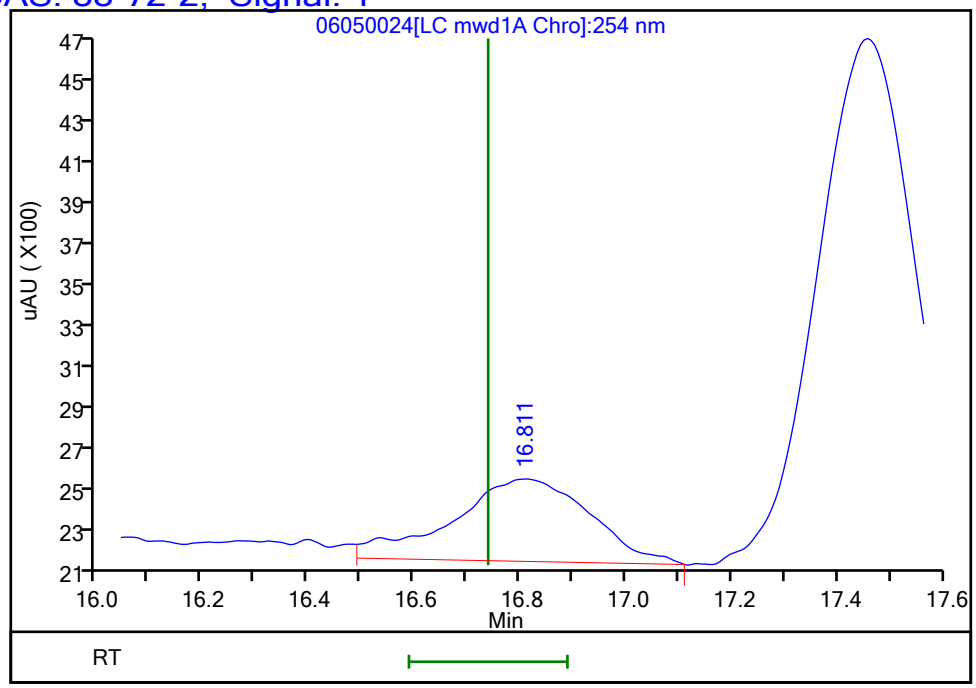
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050024.D				
Injection Date:	05-Jun-2021 22:16:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-14-A	Lab Sample ID:	280-149116-14		
Client ID:	G0024-21A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.81
Response: 6987
Amount: 0.028064



Reviewer: zhangji, 08-Jun-2021 16:37:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

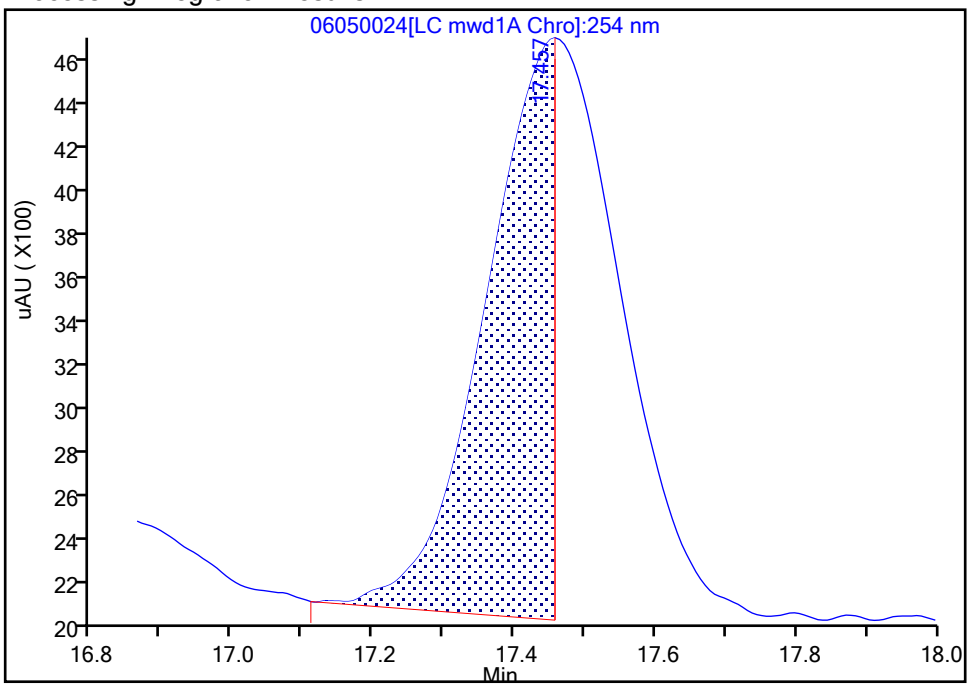
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050024.D				
Injection Date:	05-Jun-2021 22:16:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-14-A	Lab Sample ID:	280-149116-14		
Client ID:	G0024-21A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

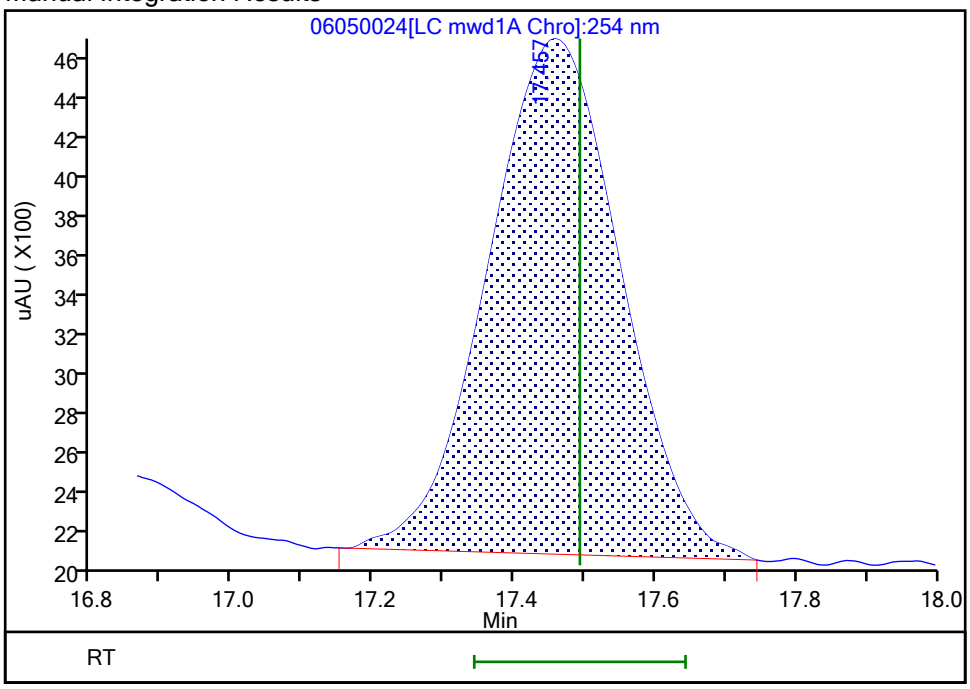
Processing Integration Results

RT: 17.46
Area: 16905
Amount: 0.056976
Amount Units: ug/ml



Manual Integration Results

RT: 17.46
Area: 32592
Amount: 0.109846
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:37:07

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

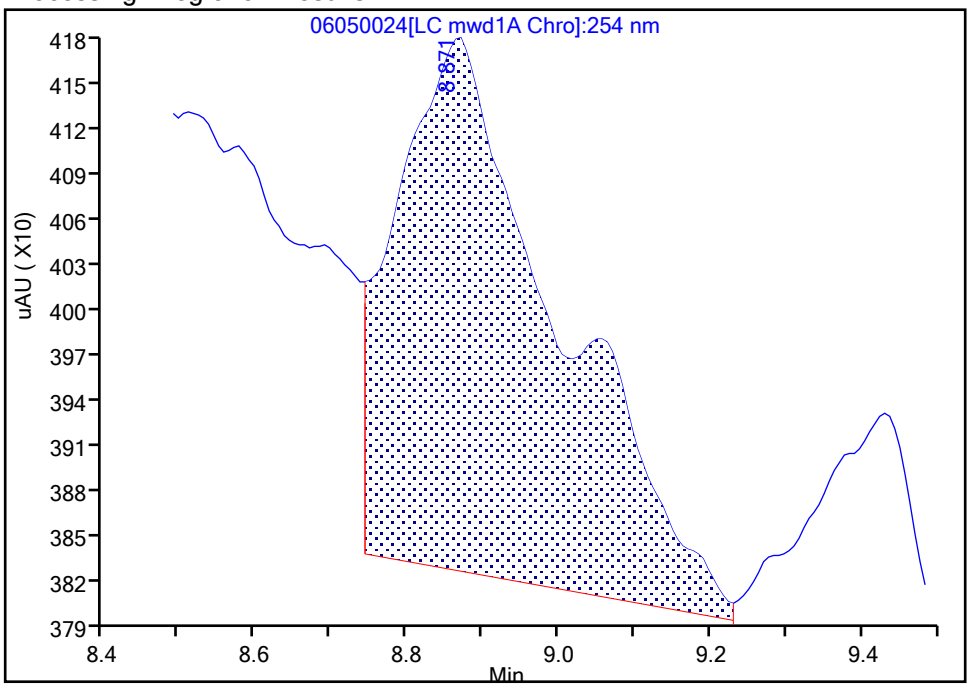
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050024.D				
Injection Date:	05-Jun-2021 22:16:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-14-A	Lab Sample ID:	280-149116-14		
Client ID:	G0024-21A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

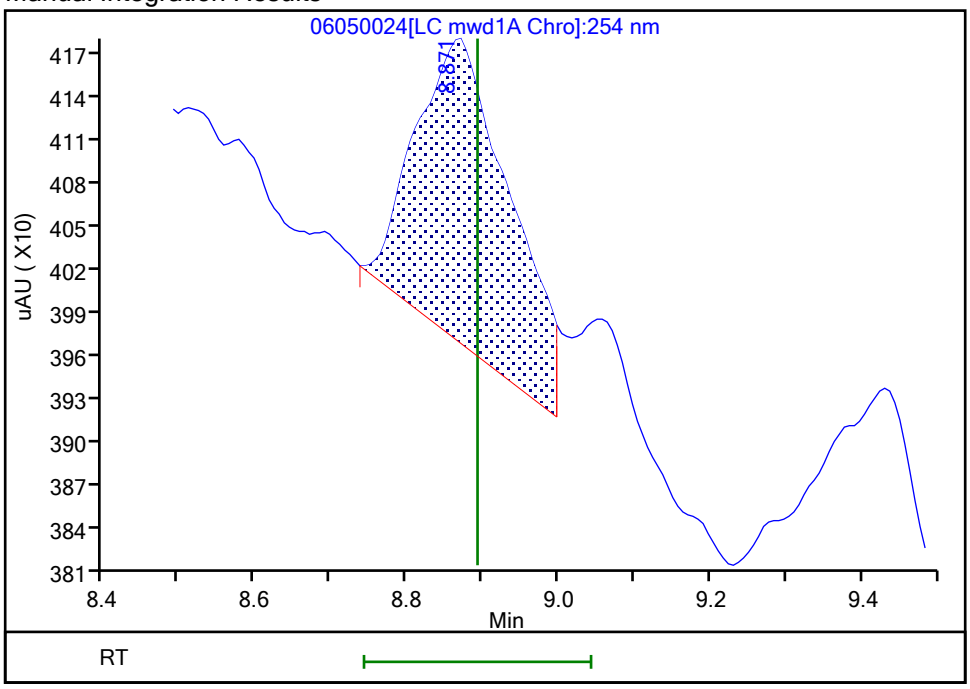
Processing Integration Results

RT: 8.87
Area: 5186
Amount: 0.025388
Amount Units: ug/ml



Manual Integration Results

RT: 8.87
Area: 1844
Amount: 0.009027
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:36:54
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ020-21A Lab Sample ID: 280-149116-15

Matrix: Water Lab File ID: 06040043.D

Analysis Method: 8330A Date Collected: 05/26/2021 11:40

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 481.7(mL) Date Analyzed: 06/05/2021 06:52

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.2		0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	3.8		0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	2.5		0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	2.7		0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U Q M	0.43	0.42	0.10
2691-41-0	HMX	0.73	M	0.22	0.21	0.091
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
121-82-4	RDX	0.68	M J1	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040043.D
Lims ID: 280-149116-B-15-A
Client ID: PZ020-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 06:52:09 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-15-
Misc. Info.: 280-0102084-043
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:23 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:19:10

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.599	6.609	-0.010	5964	0.0706	M
	6 MNX	1		7.210			ND	U
	7 RDX	1	7.565	7.576	-0.011	6918	0.0651	M
$	9 1,2-Dinitrobenzene	1	8.492	8.496	-0.004	24970	0.1947	
	10 1,3,5-Trinitrobenzene	1	8.625	8.629	-0.004	45694	0.2074	
	11 1,3-Dinitrobenzene	1		9.249			ND	U
	12 Nitrobenzene	1		9.636			ND	7
	14 Tetryl	1		9.956			ND	U
	16 2,4,6-Trinitrotoluene	1	10.878	10.876	0.002	76265	0.3702	
	17 4-Amino-2,6-dinitrotoluene	1	11.085	11.076	0.009	39865	0.2610	
	18 2-Amino-4,6-dinitrotoluene	1	11.345	11.336	0.009	50577	0.2444	
	19 2,6-Dinitrotoluene	1		11.502			ND	
	20 2,4-Dinitrotoluene	1		11.676			ND	7
	21 o-Nitrotoluene	1		12.542			ND	
	22 p-Nitrotoluene	1		12.976			ND	U
	23 m-Nitrotoluene	1		13.562			ND	

QC Flag Legend

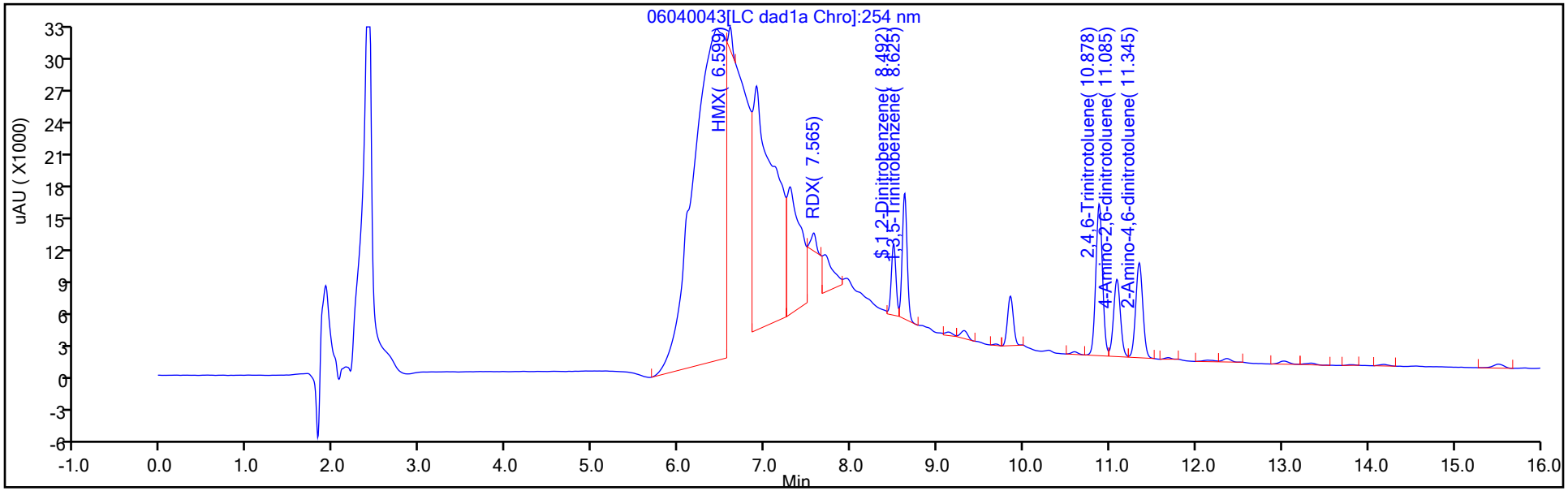
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Jun-2021 10:20:27 Chrom Revision: 2.3 13-May-2021 07:57:40

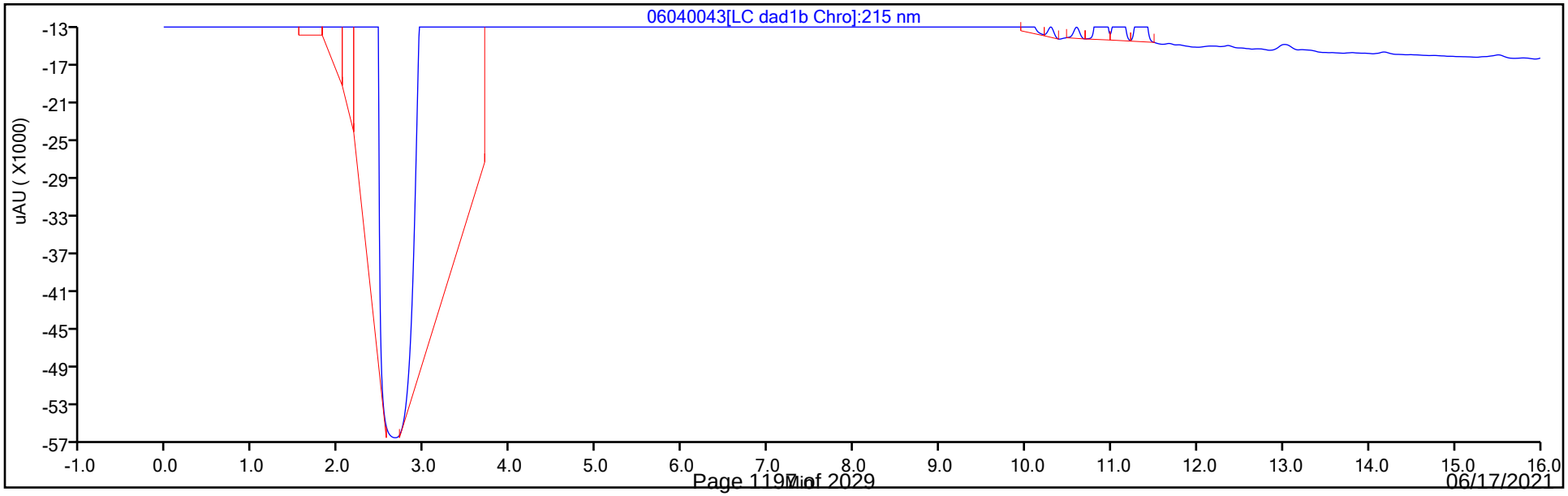
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040043.d				
Injection Date:	05-Jun-2021 06:52:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15	Worklist Smp#:	43
Client ID:	PZ020-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040043.D				
Lims ID:	280-149116-B-15-A				
Client ID:	PZ020-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 06:52:09	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-15-				
Misc. Info.:	280-0102084-043				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:19:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1947	97.37

User Disabled Compound Report

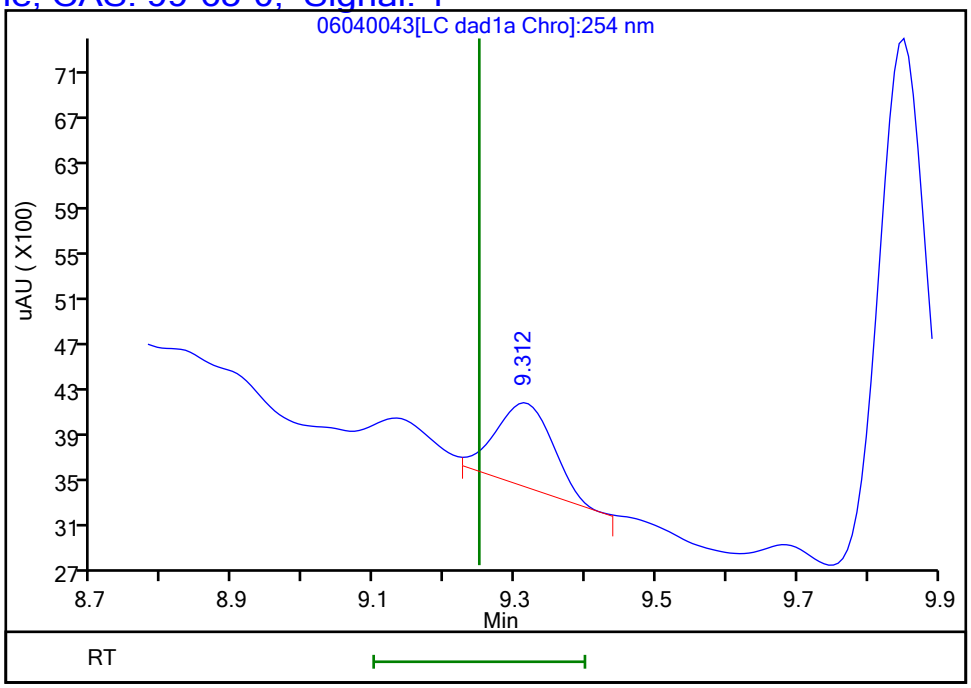
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040043.d

Injection Date:	05-Jun-2021 06:52:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.31
Response: 4174
Amount: 0.014086



Reviewer: zhangji, 05-Jun-2021 10:19:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

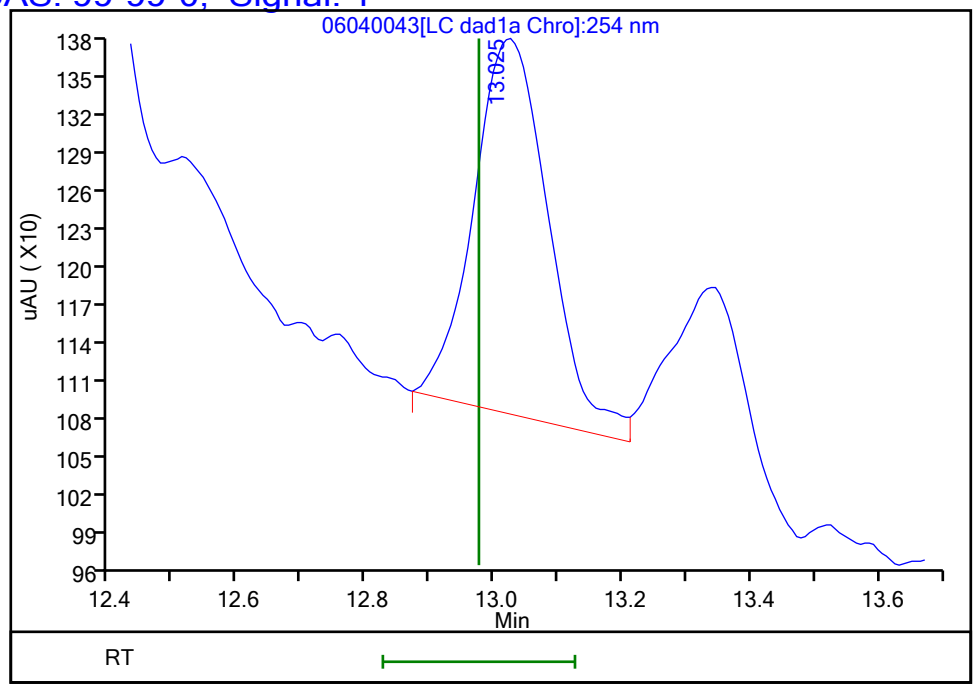
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040043.d				
Injection Date:	05-Jun-2021 06:52:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.03
Response: 2359
Amount: 0.021079



Reviewer: zhangji, 05-Jun-2021 10:19:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

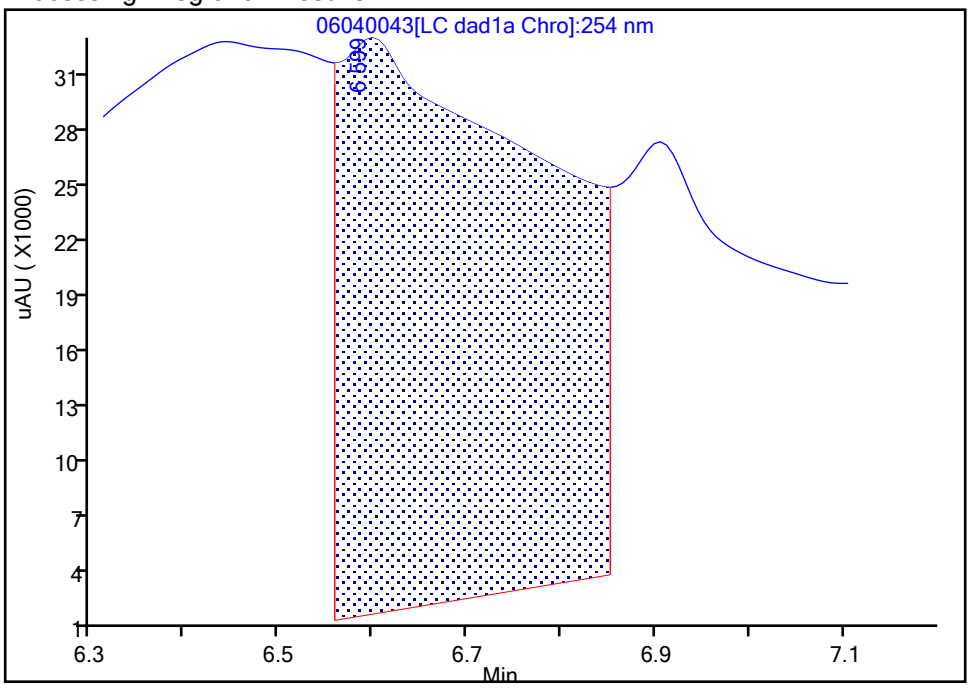
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040043.d				
Injection Date:	05-Jun-2021 06:52:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

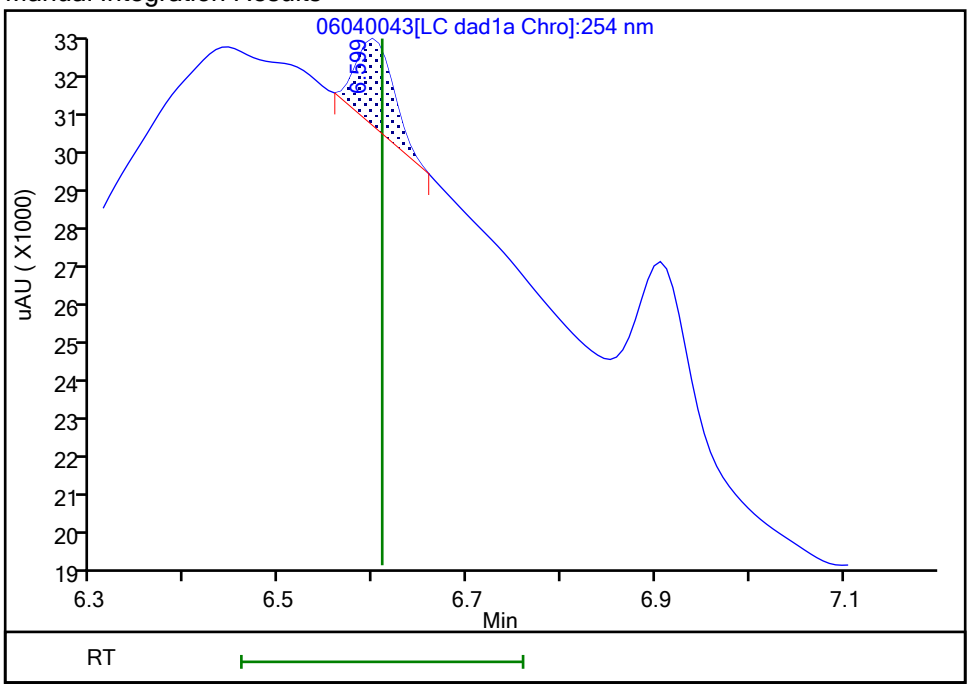
Processing Integration Results

RT: 6.60
Area: 444663
Amount: 5.267181
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 5964
Amount: 0.070646
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:18:54

Audit Action: Manually Integrated Audit Reason: Baseline

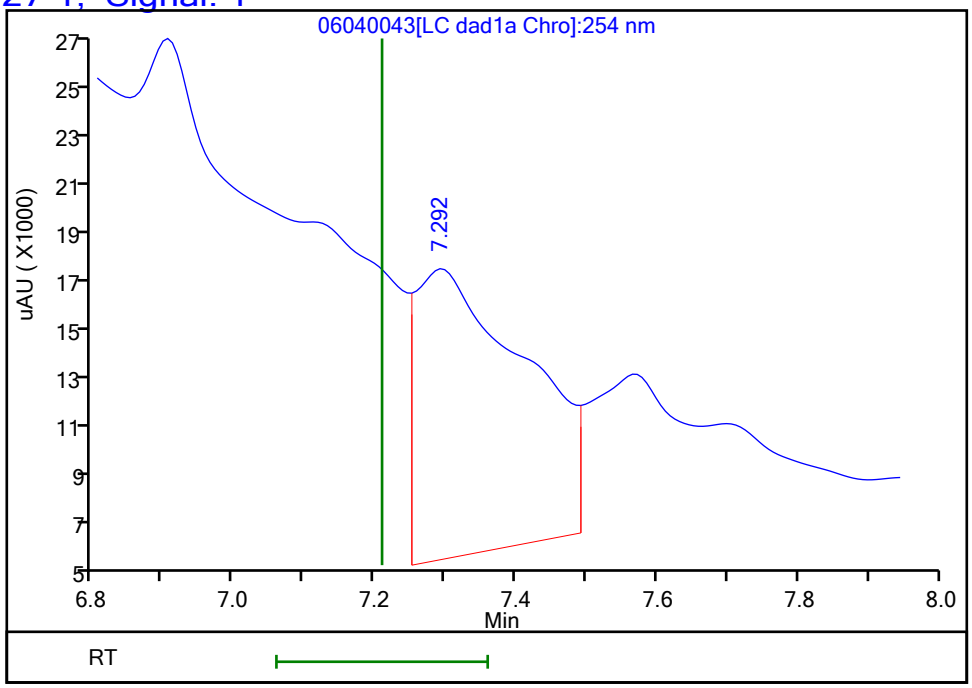
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040043.d				
Injection Date:	05-Jun-2021 06:52:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.29
Response: 125755
Amount: 0.964820



Reviewer: zhangji, 05-Jun-2021 10:19:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

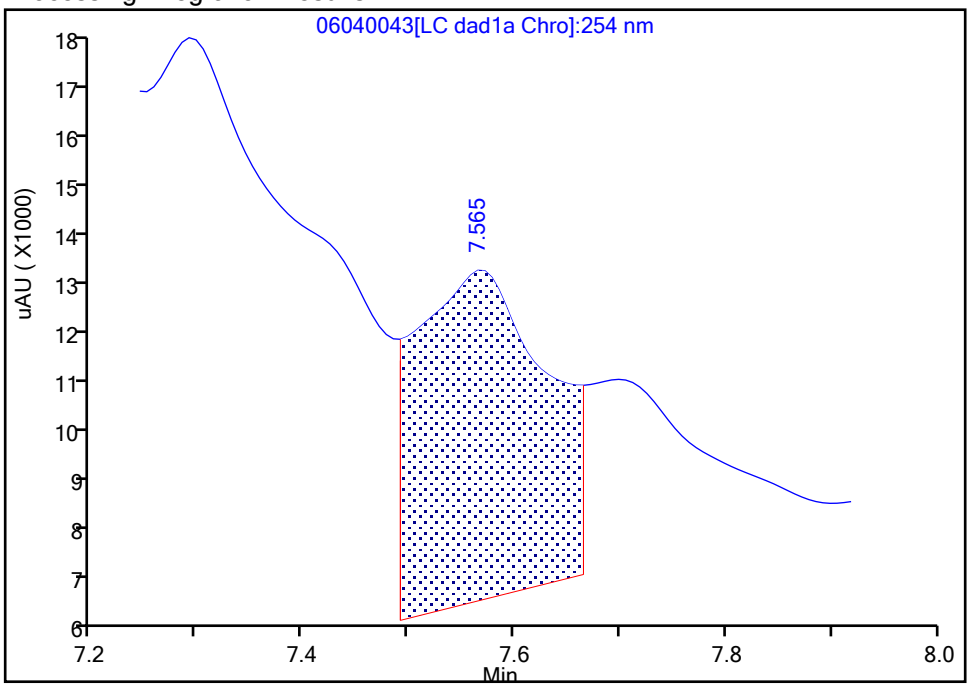
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040043.d				
Injection Date:	05-Jun-2021 06:52:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

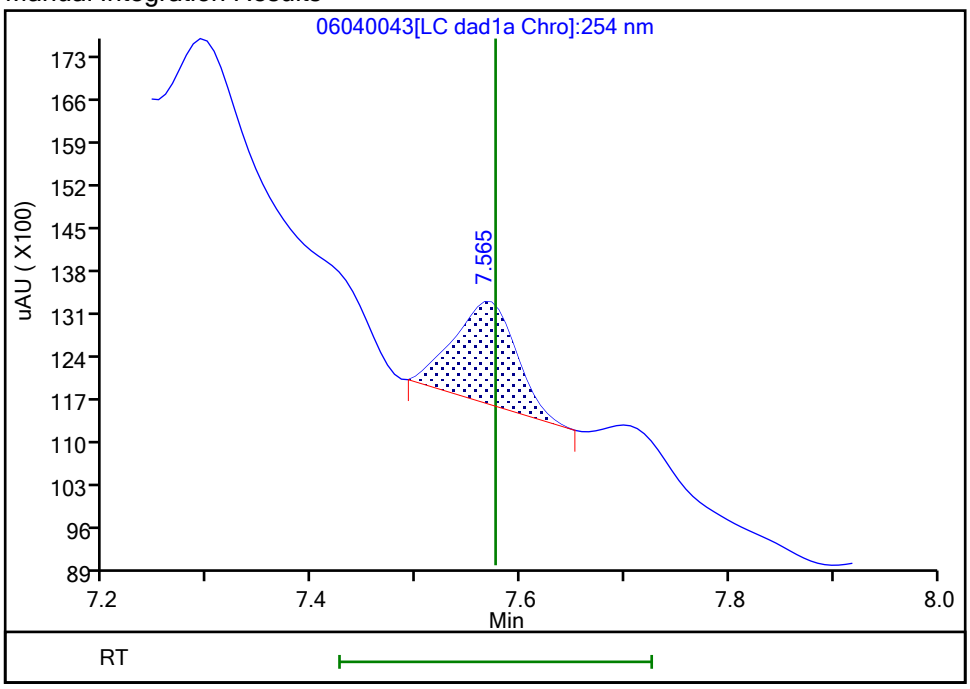
Processing Integration Results

RT: 7.57
Area: 51758
Amount: 0.487082
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 6918
Amount: 0.065104
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:19:00
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

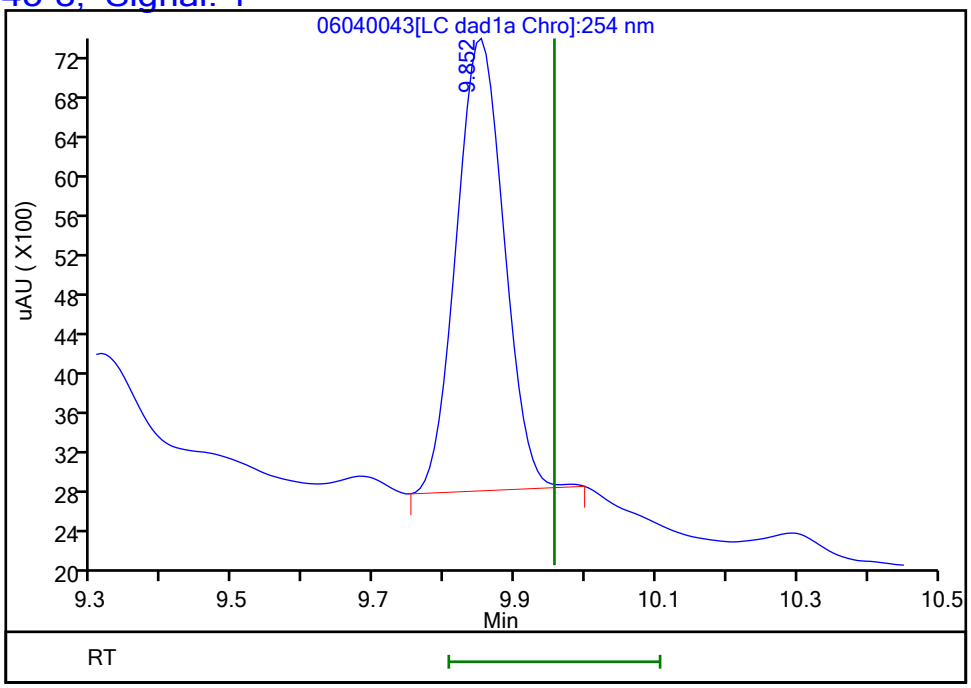
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040043.d

Injection Date:	05-Jun-2021 06:52:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.85
Response: 21628
Amount: 0.125438



Reviewer: zhangji, 05-Jun-2021 10:19:10
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.: 280-149116-1

SDG No.:

Client Sample ID: PZ020-21A Lab Sample ID: 280-149116-15

Matrix: Water Lab File ID: 06050025.D

Analysis Method: 8330A Date Collected: 05/26/2021 11:40

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 481.7(mL) Date Analyzed: 06/05/2021 22:51

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538717 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	*RDX*	*0.40*	*M J1*	*0.22*	0.21	*0.053*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050025.D
Lims ID: 280-149116-B-15-A
Client ID: PZ020-21A
Sample Type: Client
Inject. Date: 05-Jun-2021 22:51:19 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-15-A
Misc. Info.: 280-0102103-025
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:36 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 08-Jun-2021 16:37:42

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1	6.695	6.699	-0.004	9718	0.0550	M
	7 MNX	1		7.429			ND	U
	8 RDX	1	8.869	8.893	-0.024	7965	0.0390	M
	9 Nitrobenzene	1		11.953			ND	
$	10 1,2-Dinitrobenzene	1	13.049	13.066	-0.017	54059	0.2035	
	12 1,3-Dinitrobenzene	1		15.493			ND	7
	14 o-Nitrotoluene	1		16.739			ND	U
	15 p-Nitrotoluene	1		17.033			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.462	17.493	-0.031	80204	0.2703	
	17 m-Nitrotoluene	1		18.013			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.362	18.393	-0.031	111571	0.2830	
	19 1,3,5-Trinitrobenzene	1	18.889	18.906	-0.017	102573	0.2434	
	20 2,6-Dinitrotoluene	1		20.173			ND	
	21 2,4-Dinitrotoluene	1	20.609	20.633	-0.024	3246	0.005738	M
	22 Tetryl	1		24.253			ND	
	23 2,4,6-Trinitrotoluene	1	25.222	25.233	-0.011	143731	0.3825	

QC Flag Legend

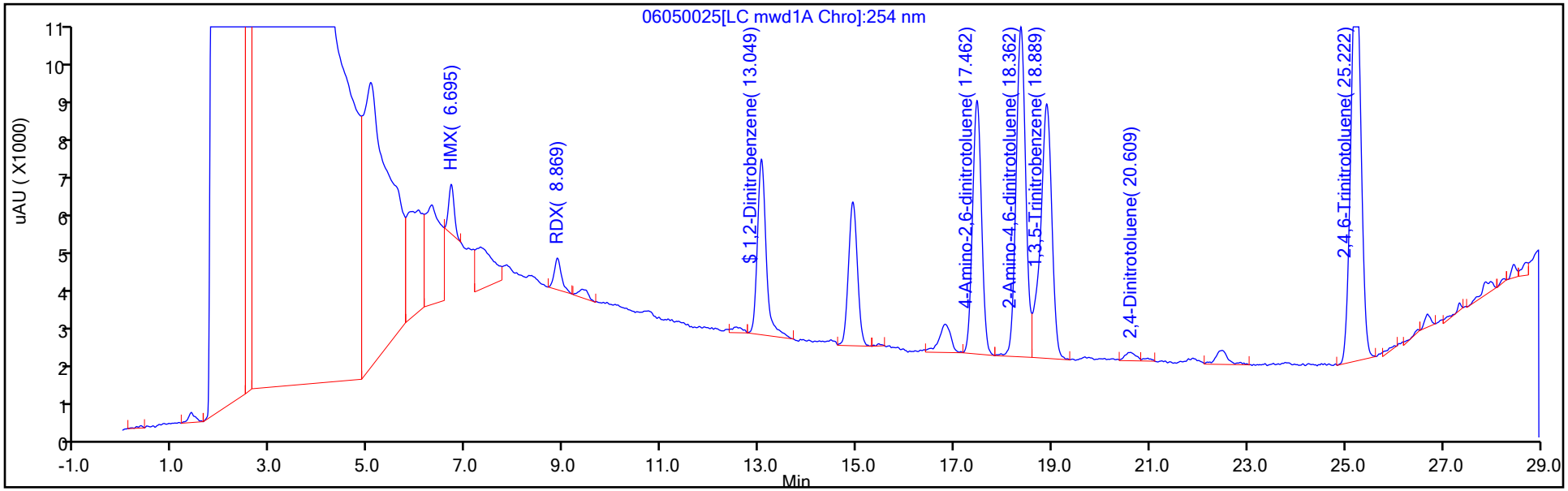
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 08-Jun-2021 16:38:38 Chrom Revision: 2.3 13-May-2021 07:57:40

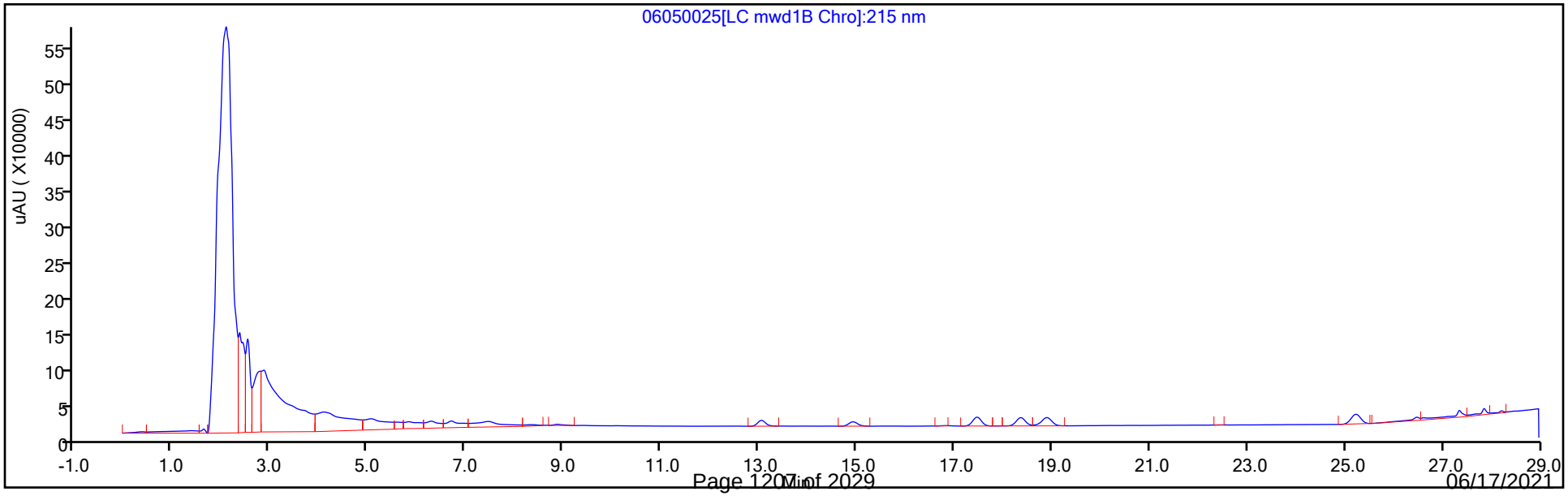
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050025.D				
Injection Date:	05-Jun-2021 22:51:19	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15	Worklist Smp#:	25
Client ID:	PZ020-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050025.D				
Lims ID:	280-149116-B-15-A				
Client ID:	PZ020-21A				
Sample Type:	Client				
Inject. Date:	05-Jun-2021 22:51:19	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-15-A				
Misc. Info.:	280-0102103-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:36	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	08-Jun-2021 16:37:42		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2035	101.75

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

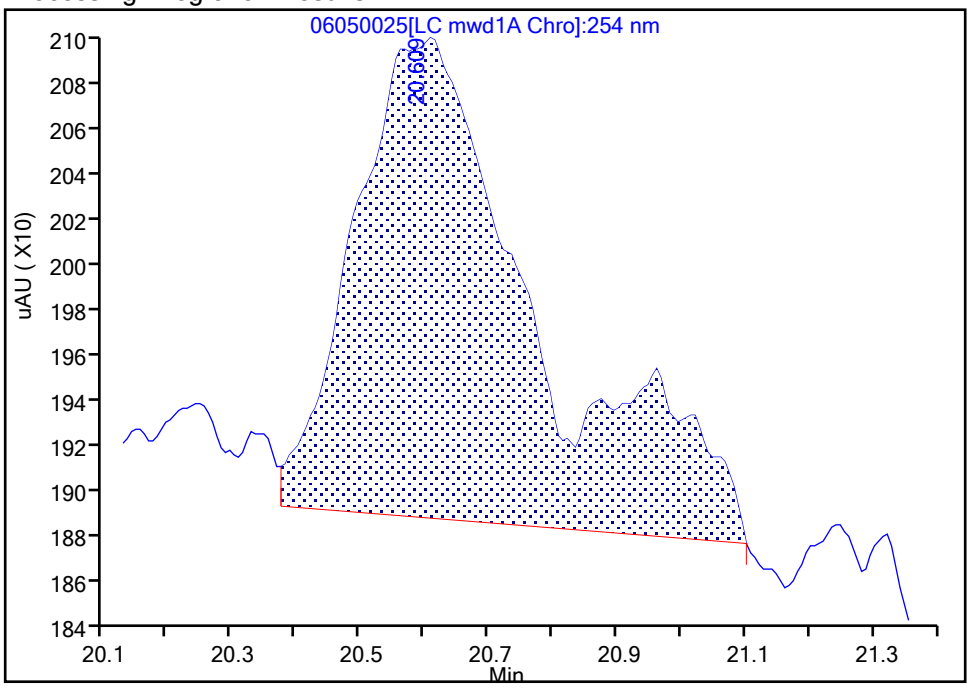
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050025.D				
Injection Date:	05-Jun-2021 22:51:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

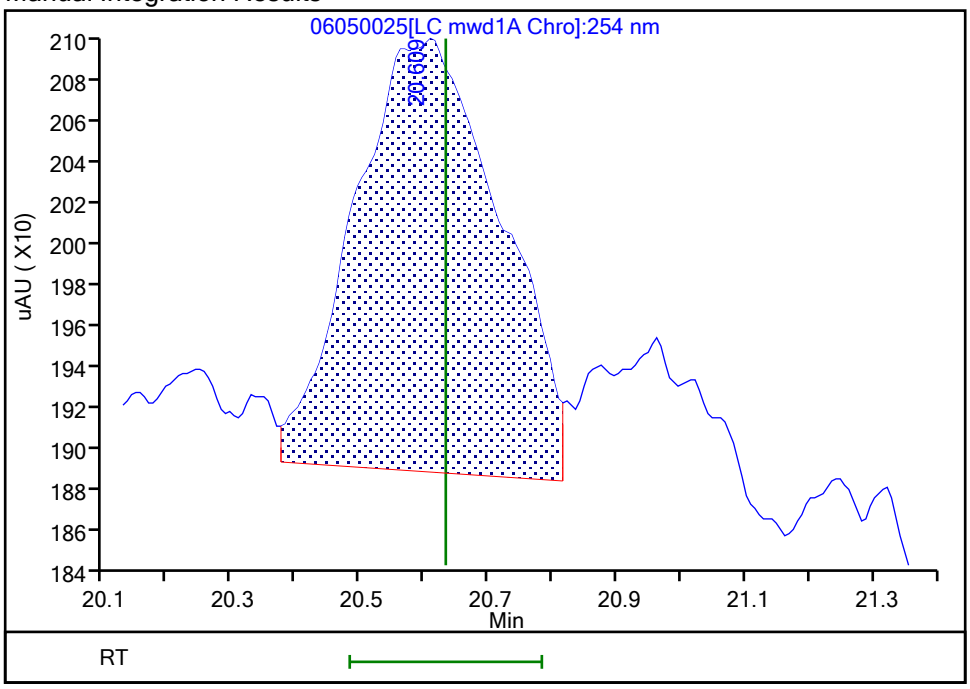
Processing Integration Results

RT: 20.61
Area: 4075
Amount: 0.007203
Amount Units: ug/ml



Manual Integration Results

RT: 20.61
Area: 3246
Amount: 0.005738
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:37:41

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

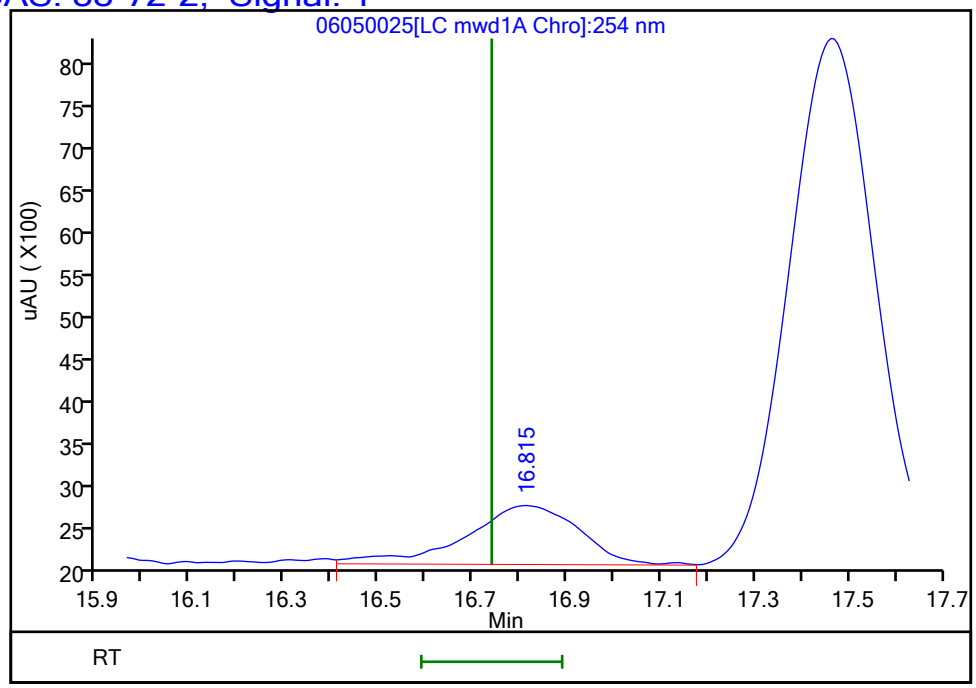
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050025.D				
Injection Date:	05-Jun-2021 22:51:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.82
Response: 11782
Amount: 0.047324



Reviewer: zhangji, 08-Jun-2021 16:37:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

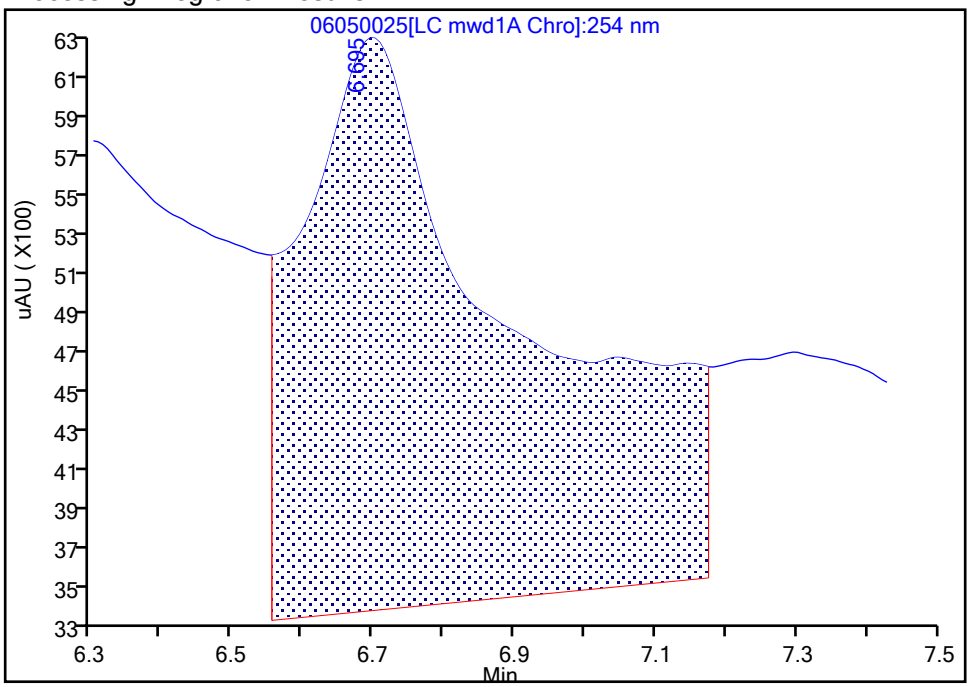
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050025.D				
Injection Date:	05-Jun-2021 22:51:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

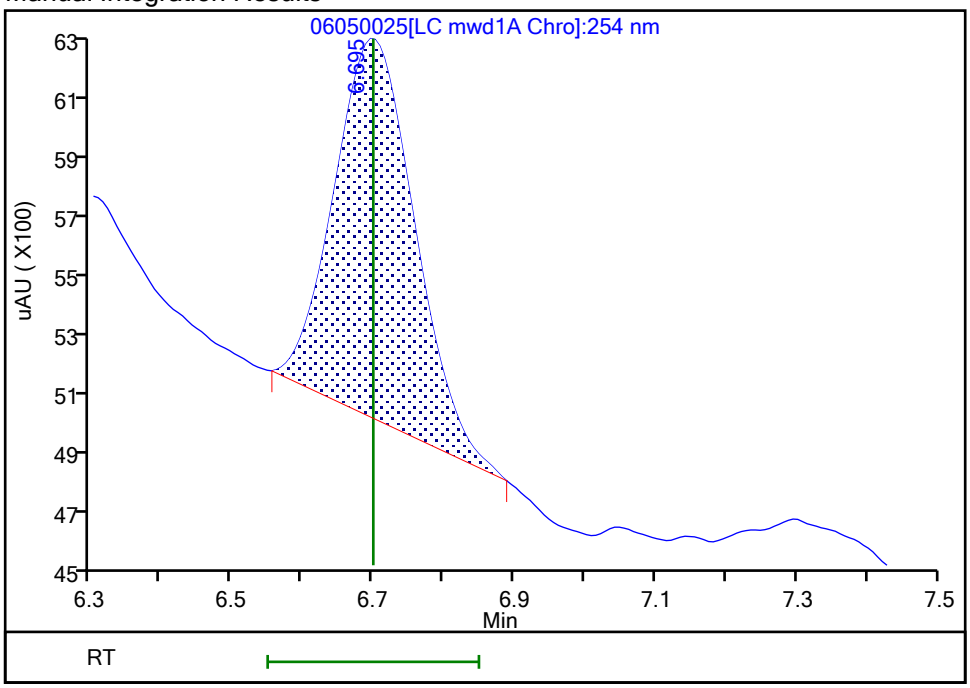
Processing Integration Results

RT: 6.70
Area: 60316
Amount: 0.373710
Amount Units: ug/ml



Manual Integration Results

RT: 6.70
Area: 9718
Amount: 0.055030
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:37:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

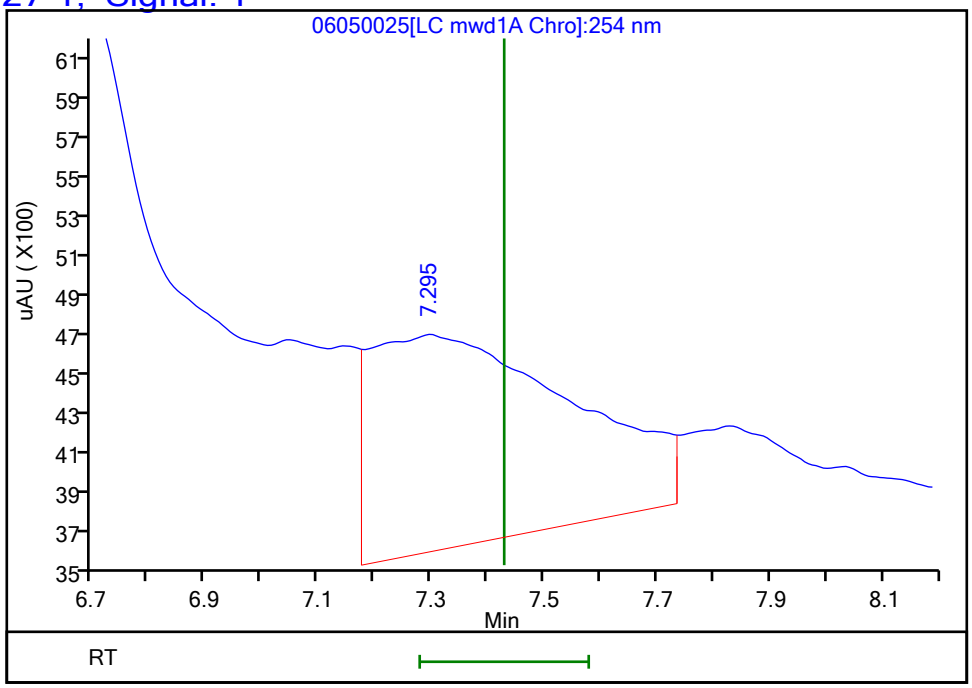
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050025.D				
Injection Date:	05-Jun-2021 22:51:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.30
Response: 25097
Amount: 0.094762



Reviewer: zhangji, 08-Jun-2021 16:37:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

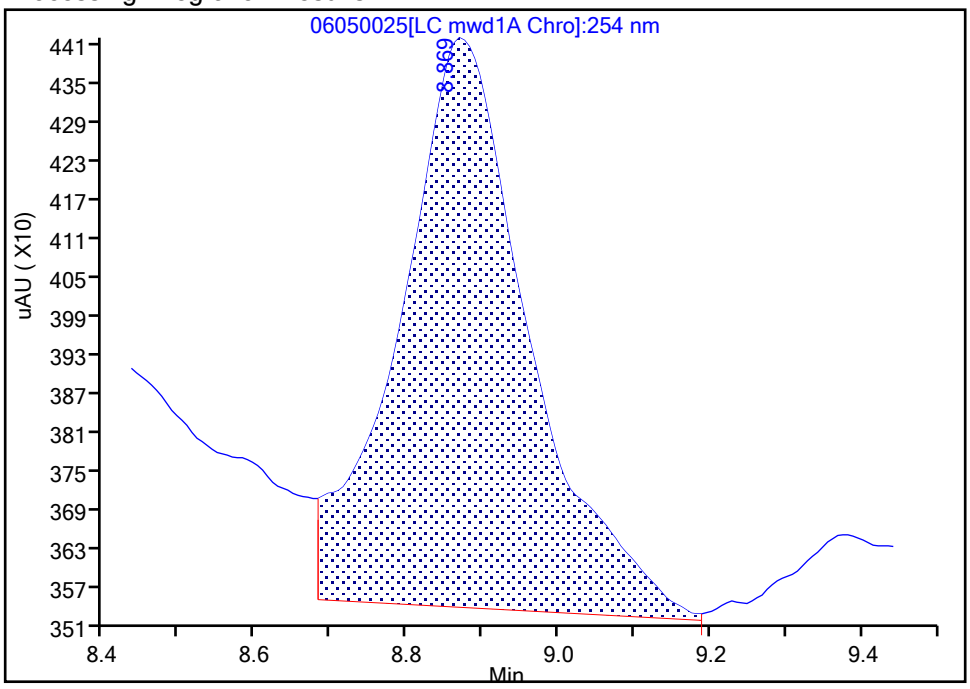
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050025.D				
Injection Date:	05-Jun-2021 22:51:19	Instrument ID:	CHHPLC_X5		
Lims ID:	280-149116-B-15-A	Lab Sample ID:	280-149116-15		
Client ID:	PZ020-21A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

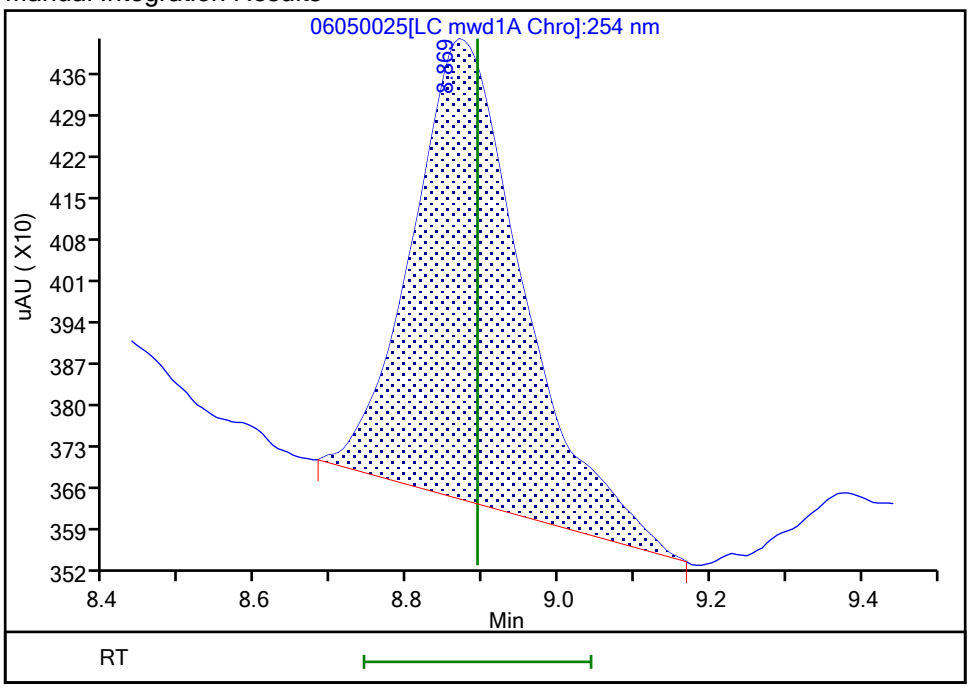
Processing Integration Results

RT: 8.87
Area: 10471
Amount: 0.051261
Amount Units: ug/ml



Manual Integration Results

RT: 8.87
Area: 7965
Amount: 0.038993
Amount Units: ug/ml



Reviewer: zhangji, 08-Jun-2021 16:37:27
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.: 280-149116-1 Analy Batch No.: 527768

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.521	6.522	6.522	6.518	6.521	6.519	6.523	6.520			6.418 - 6.618	6.521
DNX	6.827	6.829	6.828	6.832	6.828	6.833	6.836	6.833			6.732 - 6.932	6.831
MNX	7.234	7.235	7.235	7.232	7.234	7.239	7.236	7.240			7.082 - 7.382	7.236

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 527768

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.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	183017 187800	186374 188250	185594 187339	176735 191339	Ave		185806.003				2.3		20.0			
DNX	149051 143511	142278 143240	139351 141711	133874 143939	Ave		142119.338				3.0		20.0			
MNX	132048 132243	129991 131443	130891 130291	124682 131132	Ave		130340.337				1.9		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.: 280-149116-1 Analy Batch No.: 527768

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.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	3664 131907	9328 187526	18578 478826	44228	75195	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2984 100368	7121 141853	13949 360207	33502	57462	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3082 107376	7585 152050	15275 382579	36376	61731	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:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020029.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	02-Mar-2021 23:49:27	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0099486-029				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:24	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:18:59		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.520	6.518	0.002	478826	2.50	2.58	M
5 DNX	1	6.833	6.832	0.001	360207	2.50	2.53	M
6 MNX	1	7.240	7.232	0.008	382579	2.92	2.94	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 125.00 Units: uL

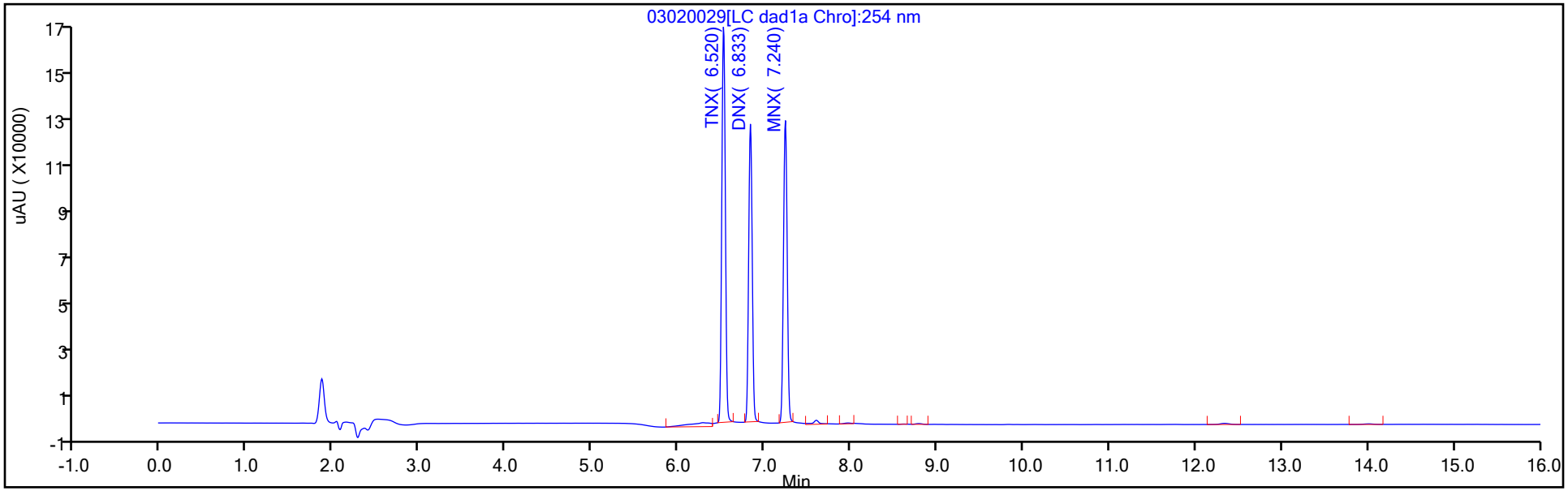
Report Date: 03-Mar-2021 13:32:24 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

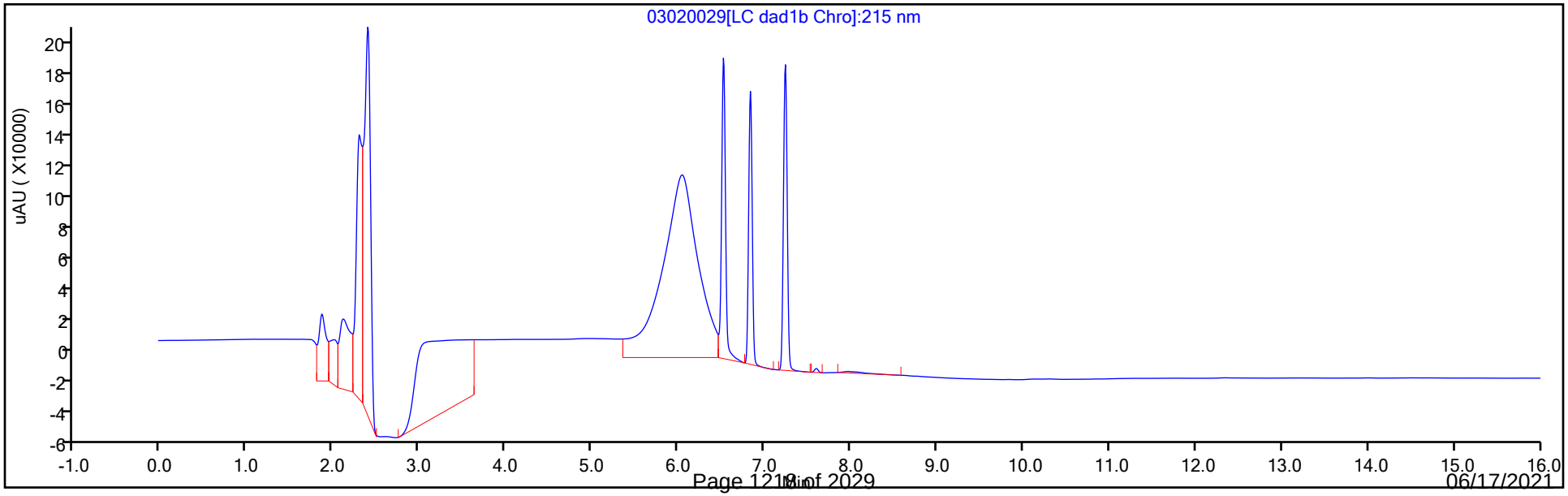
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d

Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 8			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

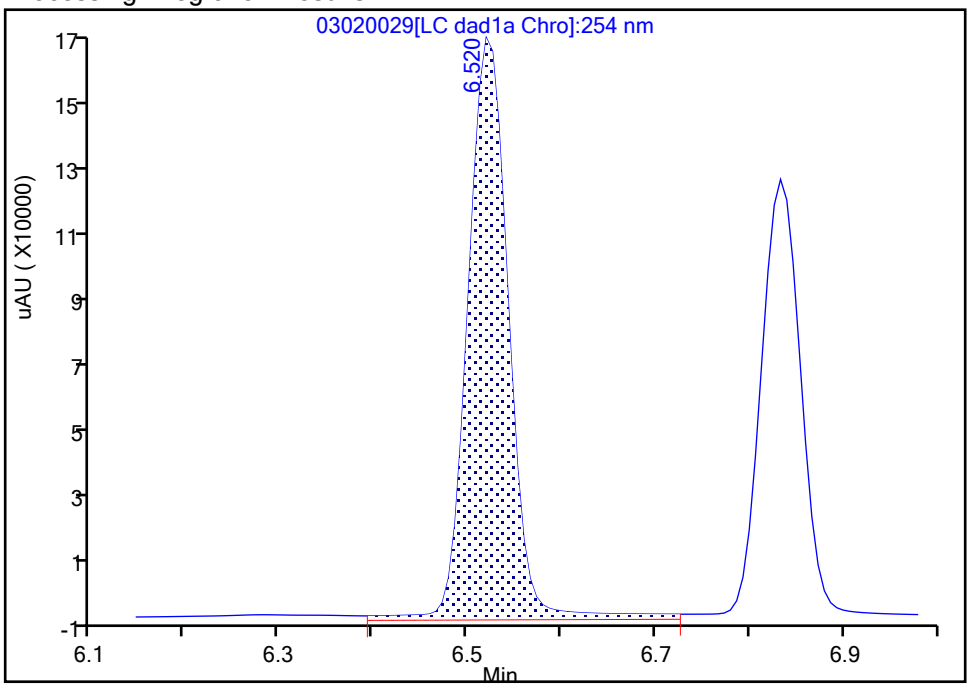
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d
Injection Date: 02-Mar-2021 23:49:27 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

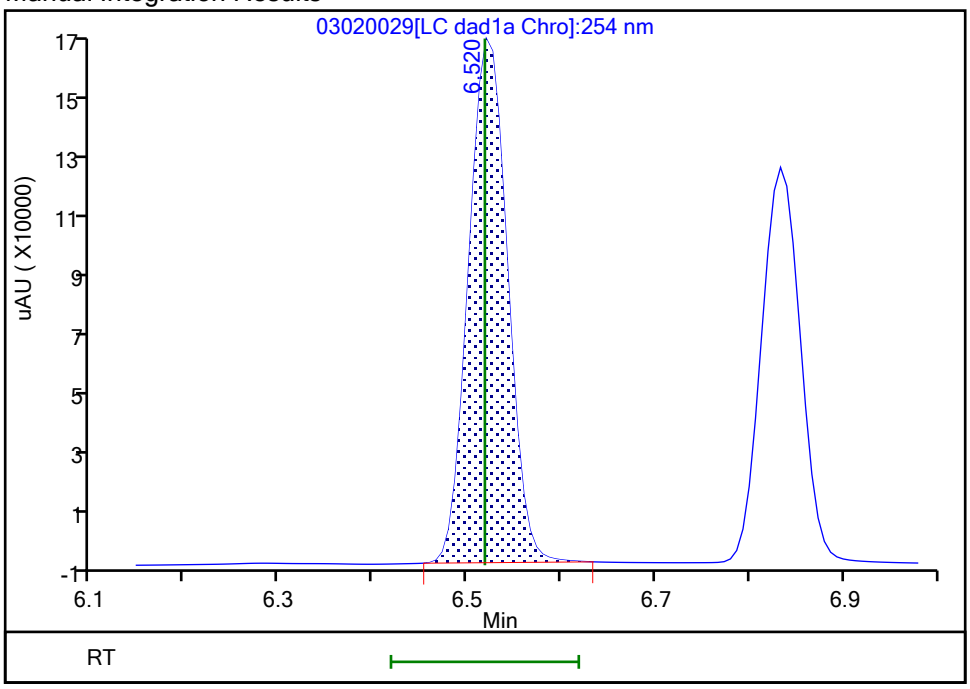
Processing Integration Results

RT: 6.52
Area: 511017
Amount: 2.370738
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 478826
Amount: 2.577021
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:46
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

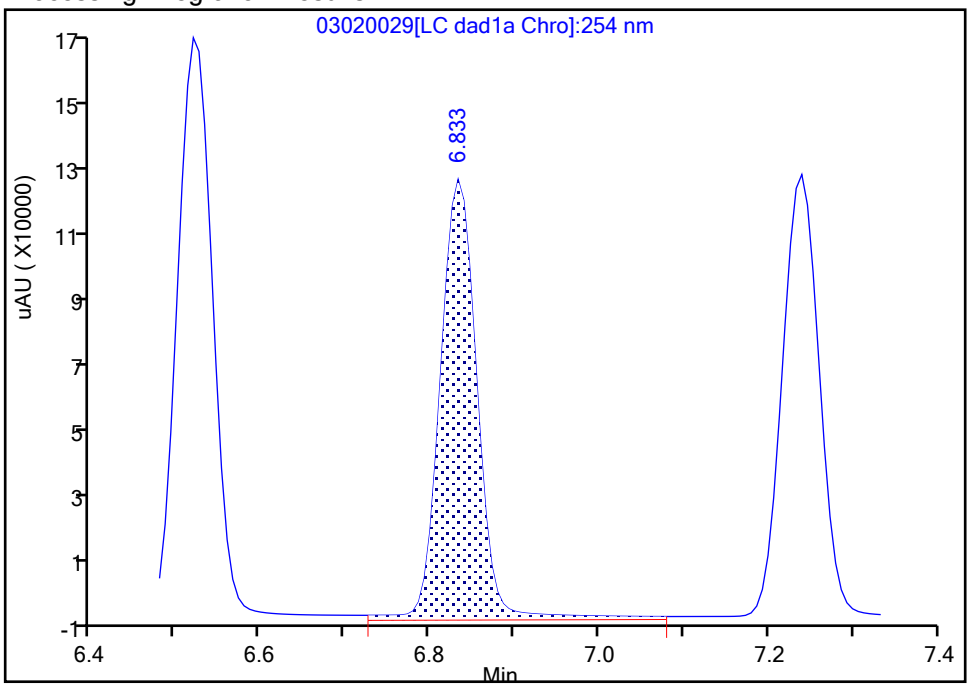
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

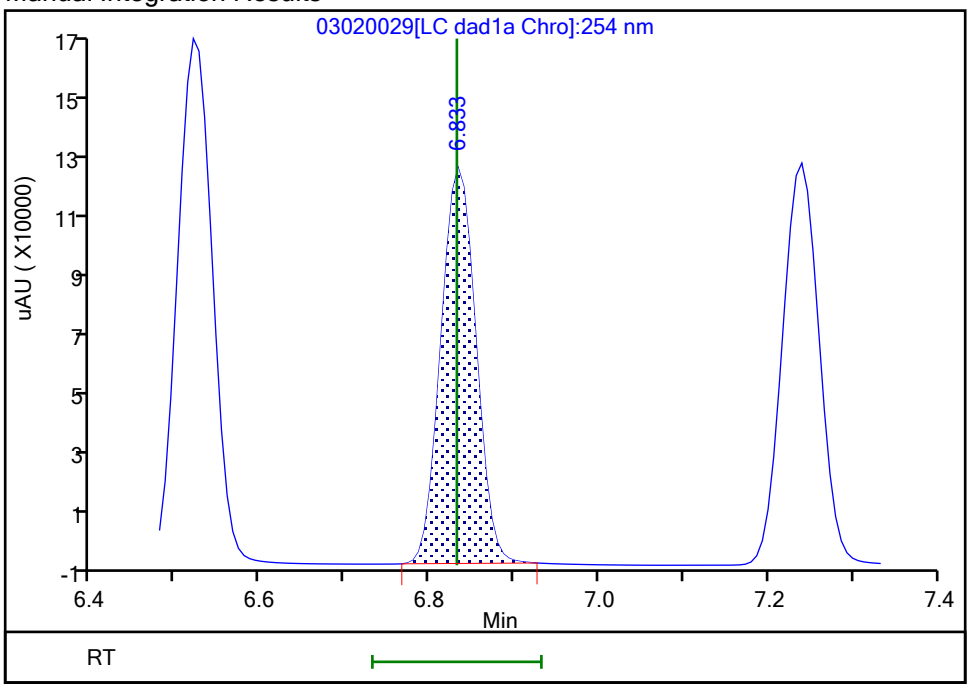
Processing Integration Results

RT: 6.83
Area: 389383
Amount: 2.402937
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 360207
Amount: 2.534539
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

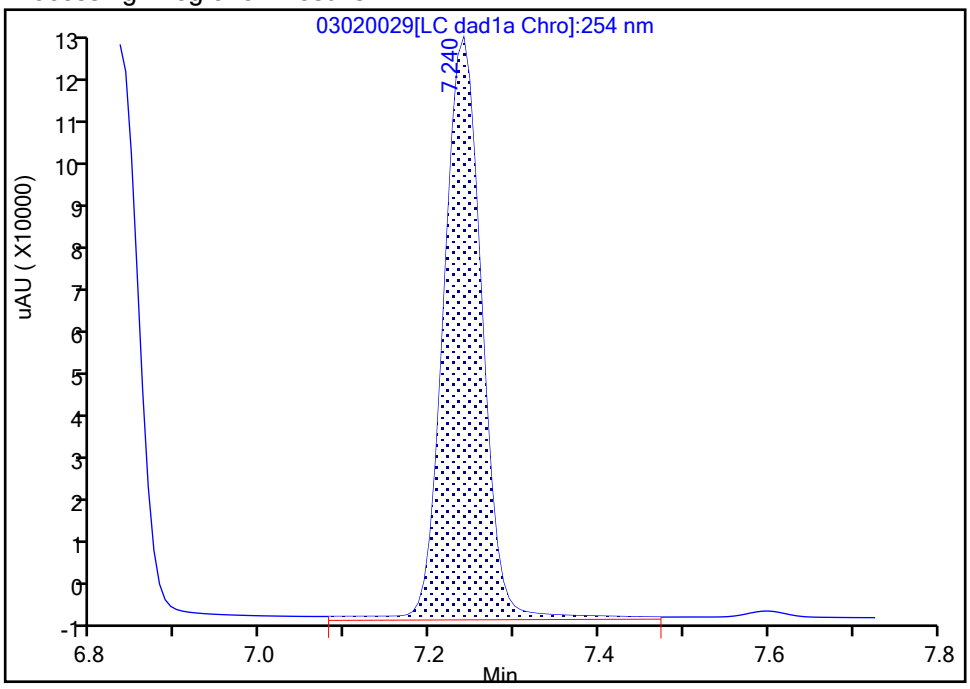
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d				
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:		ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

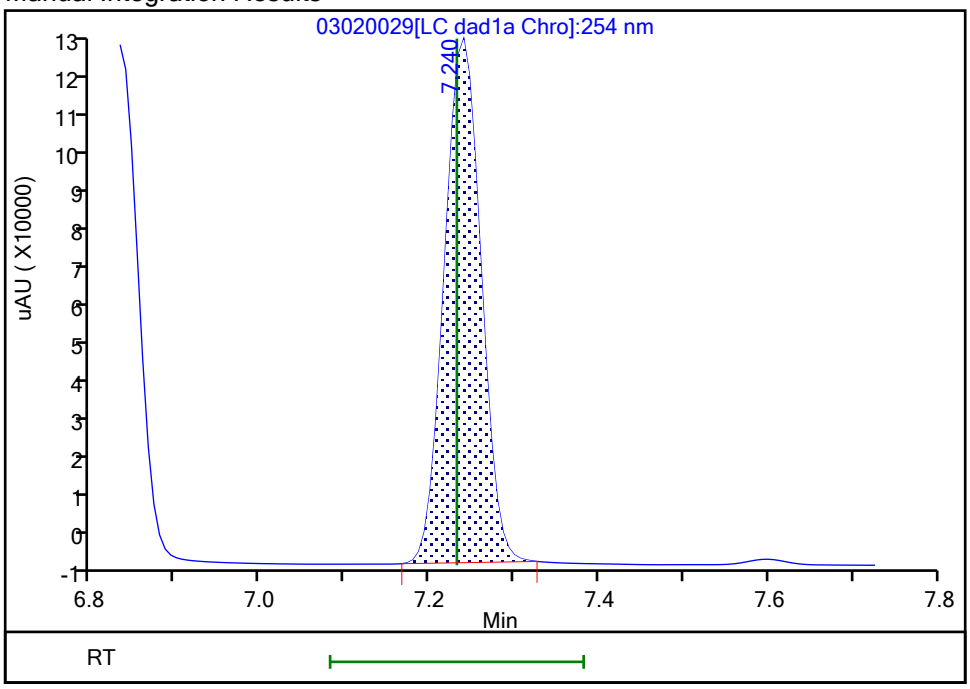
Processing Integration Results

RT: 7.24
Area: 404536
Amount: 3.036153
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 382579
Amount: 2.935231
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:57
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020030.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	03-Mar-2021 00:12:24	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0099486-030				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:25	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:19:14		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.523	6.518	0.005	187526	1.00	1.01	M
5 DNX	1	6.836	6.832	0.004	141853	1.00	1.00	M
6 MNX	1	7.236	7.232	0.004	152050	1.17	1.17	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 50.00 Units: uL

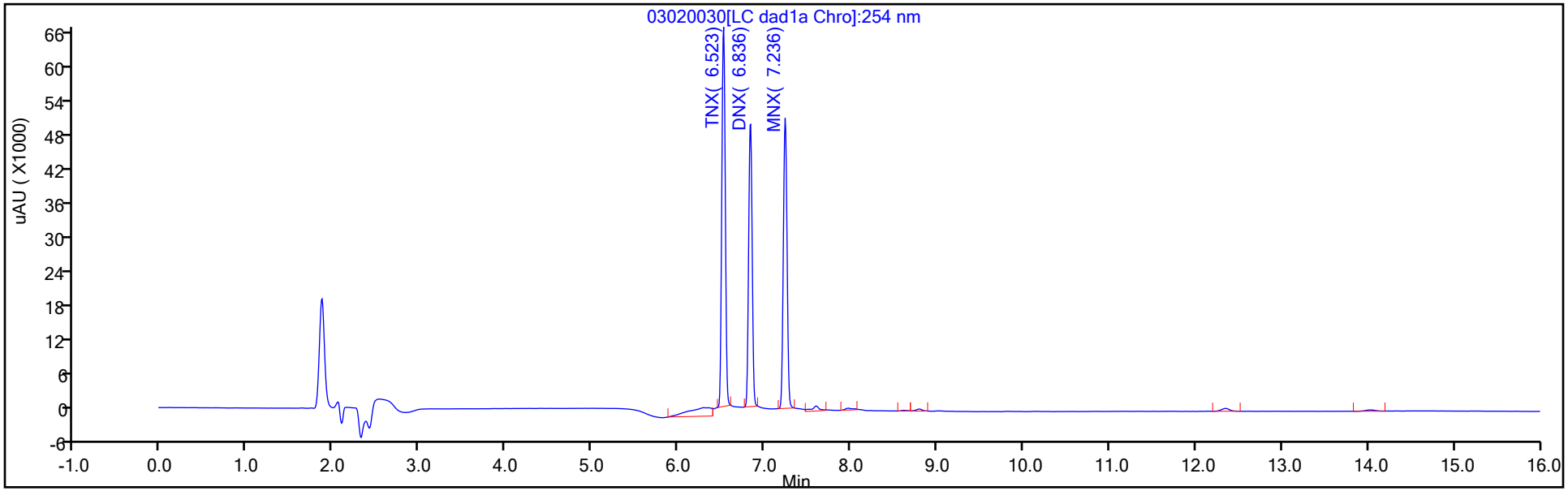
Report Date: 03-Mar-2021 13:32:25 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

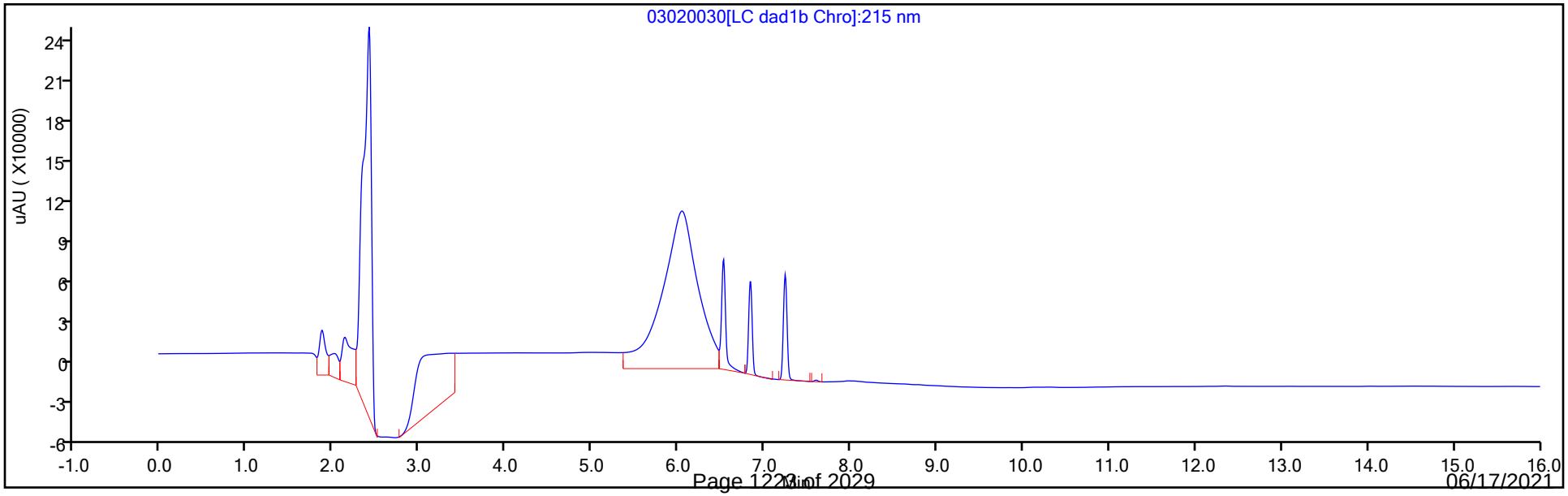
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d

Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 7			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

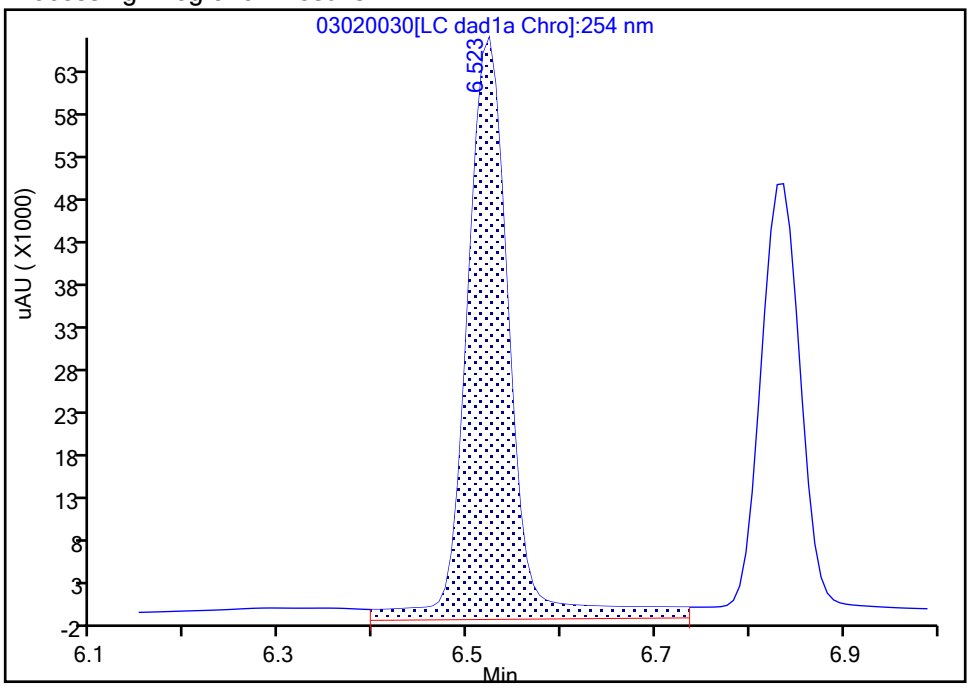
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

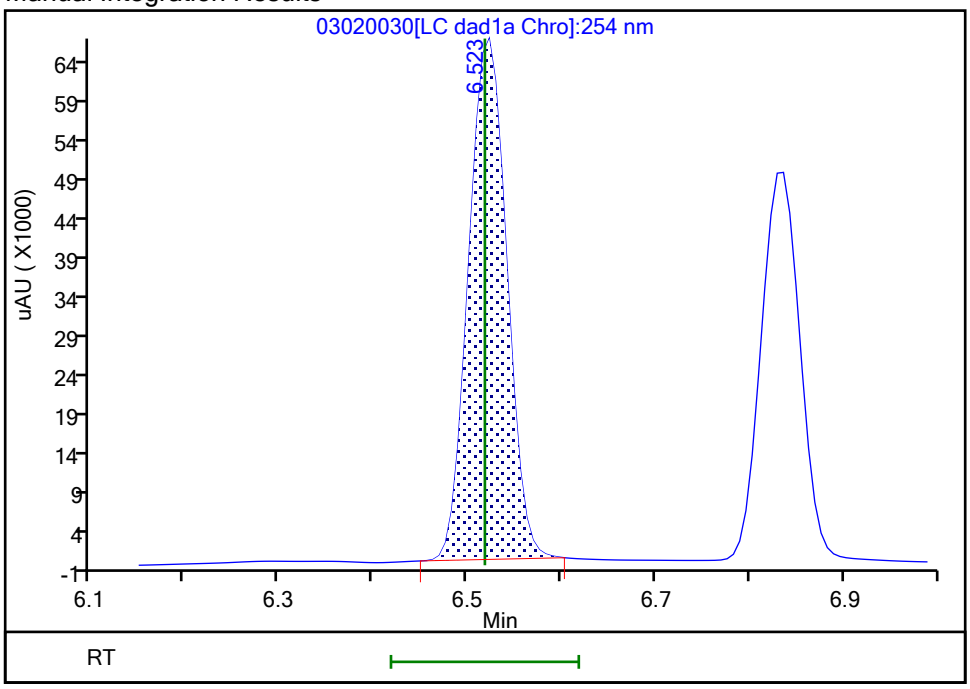
Processing Integration Results

RT: 6.52
Area: 217440
Amount: 0.997461
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 187526
Amount: 1.009257
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:13

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

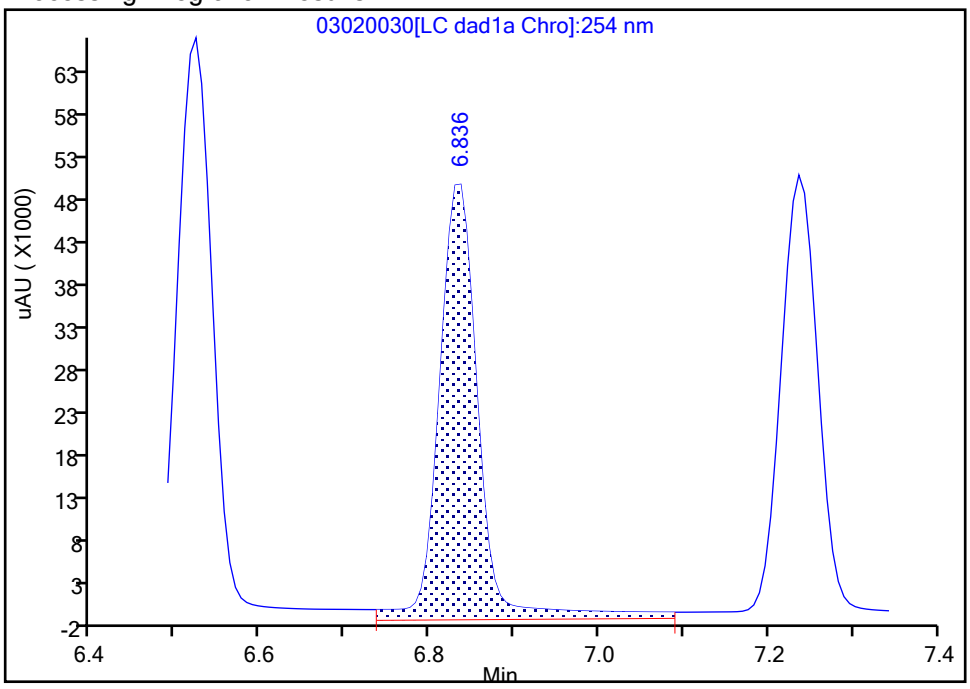
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d		
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 7		
Client ID:			
Operator ID:		ALS Bottle#:	30 Worklist Smp#: 30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

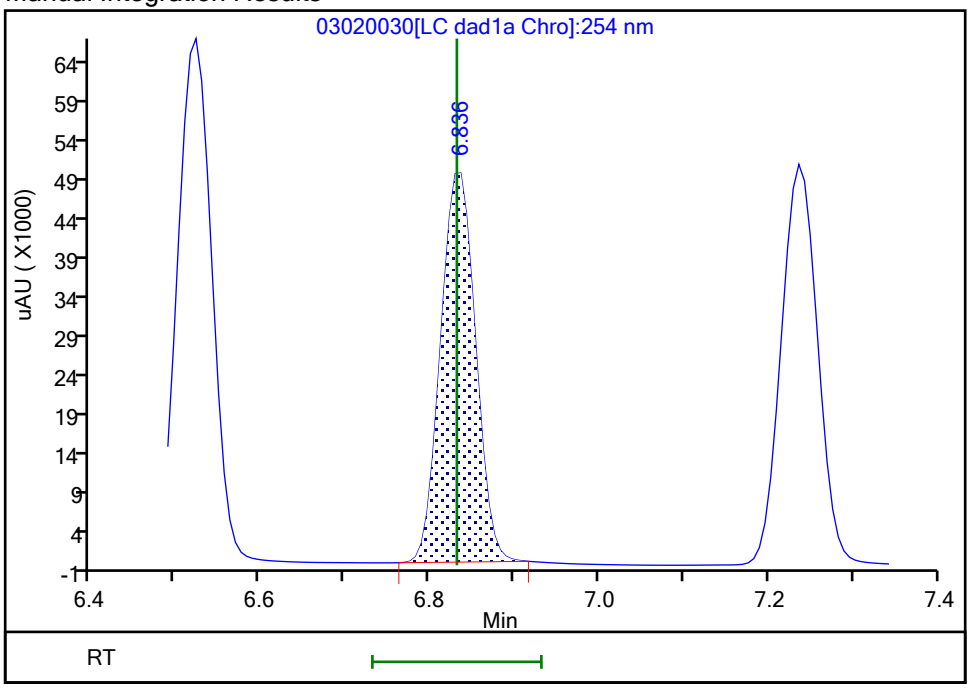
Processing Integration Results

RT: 6.84
Area: 165195
Amount: 1.028693
Amount Units: ug/mL



Manual Integration Results

RT: 6.84
Area: 141853
Amount: 0.998126
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:09
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

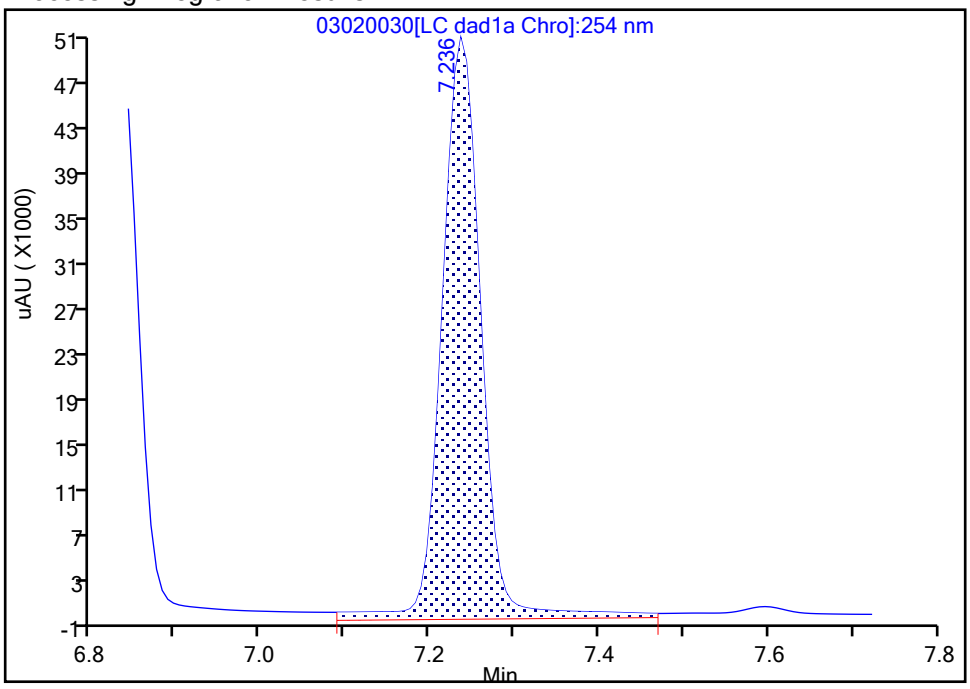
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d		
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 7		
Client ID:			
Operator ID:		ALS Bottle#:	30 Worklist Smp#: 30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

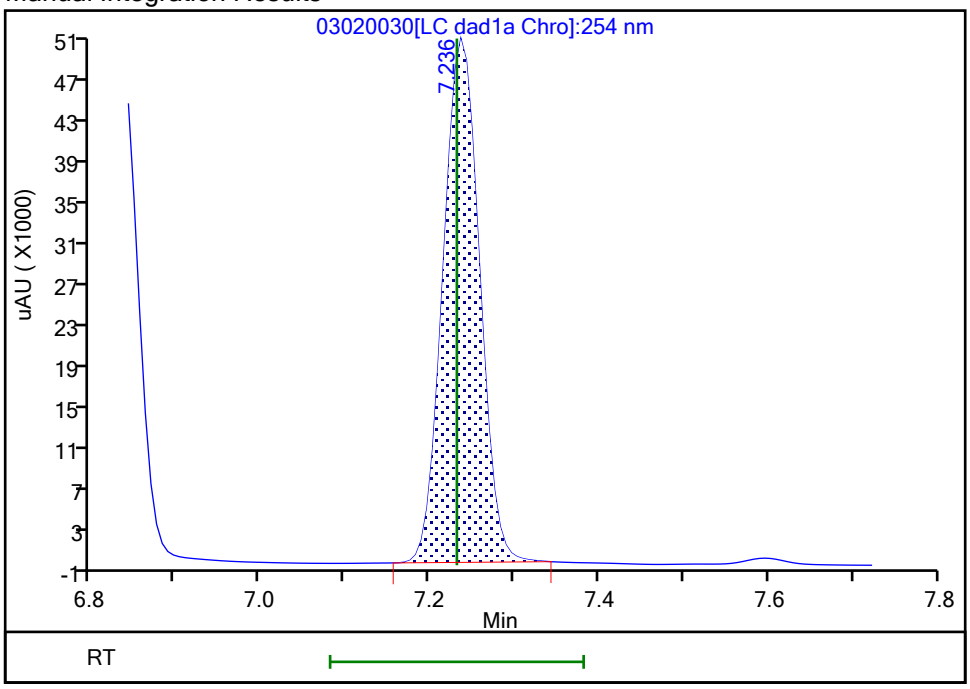
Processing Integration Results

RT: 7.24
Area: 166888
Amount: 1.261447
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 152050
Amount: 1.166561
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:05
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020031.D				
Lims ID:	IC DMT 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	03-Mar-2021 00:35:25	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 6				
Misc. Info.:	280-0099486-031				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:26	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:19:33		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.519	6.518	0.001	131907	0.7007	0.7099	M
5 DNX	1	6.833	6.832	0.001	100368	0.7007	0.7062	M
6 MNX	1	7.239	7.232	0.007	107376	0.8169	0.8238	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 35.00 Units: uL

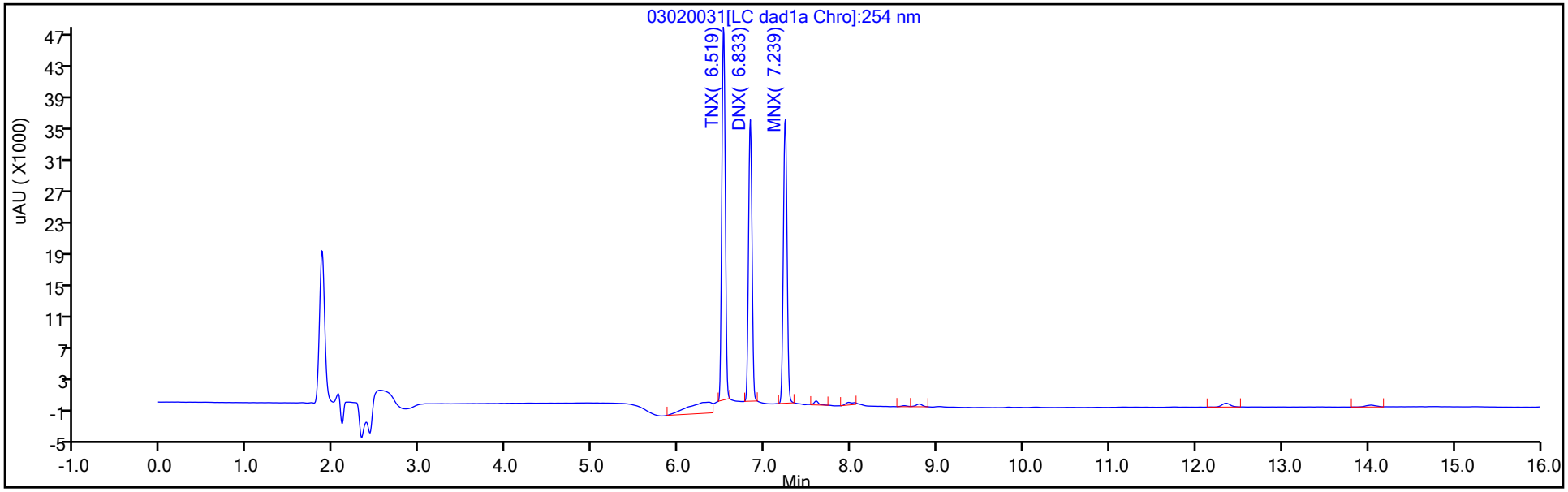
Report Date: 03-Mar-2021 13:32:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

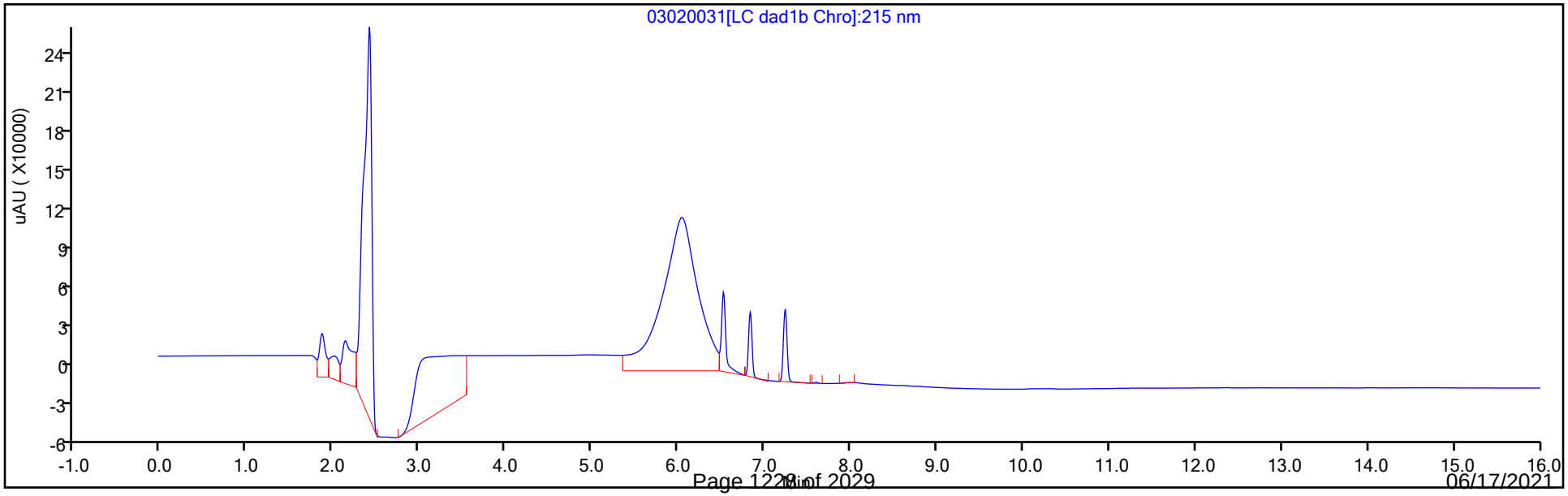
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d

Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 6			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

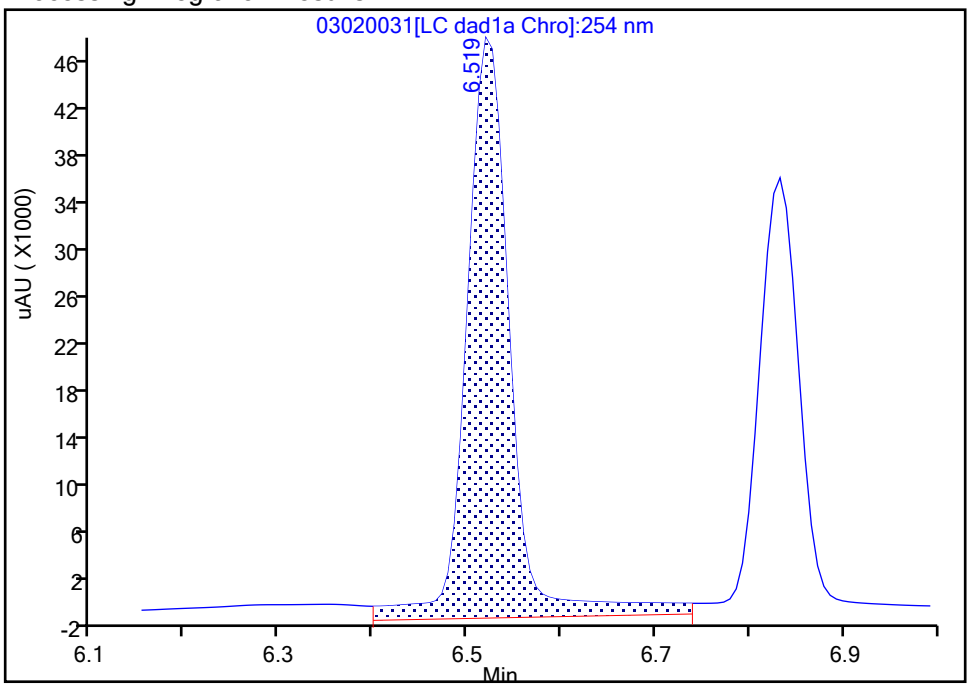
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d		
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 6		
Client ID:			
Operator ID:		ALS Bottle#:	31 Worklist Smp#: 31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

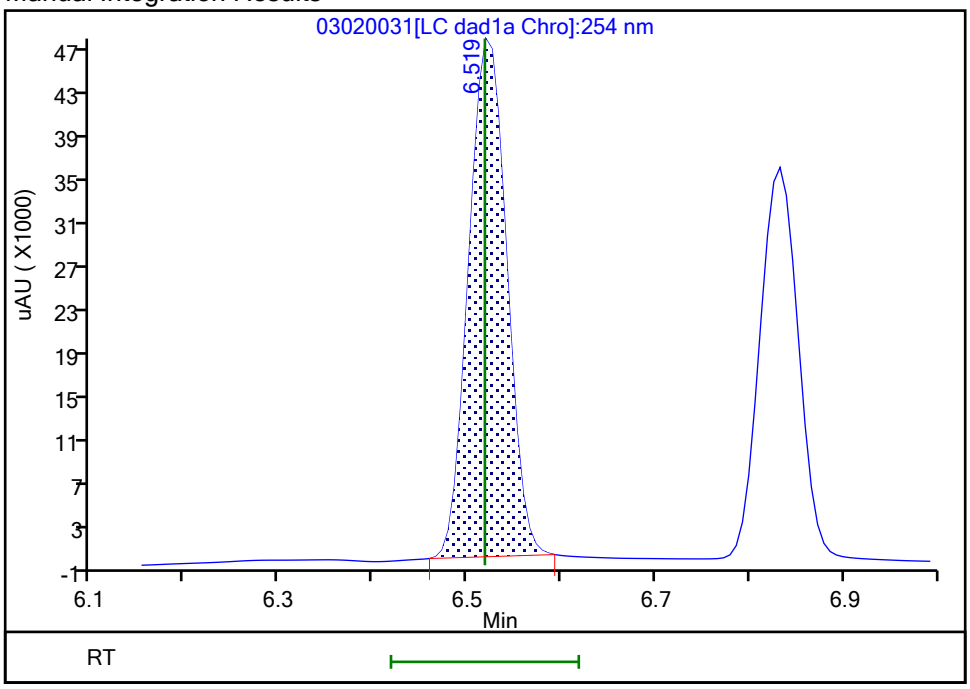
Processing Integration Results

RT: 6.52
Area: 157523
Amount: 0.765441
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 131907
Amount: 0.709918
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

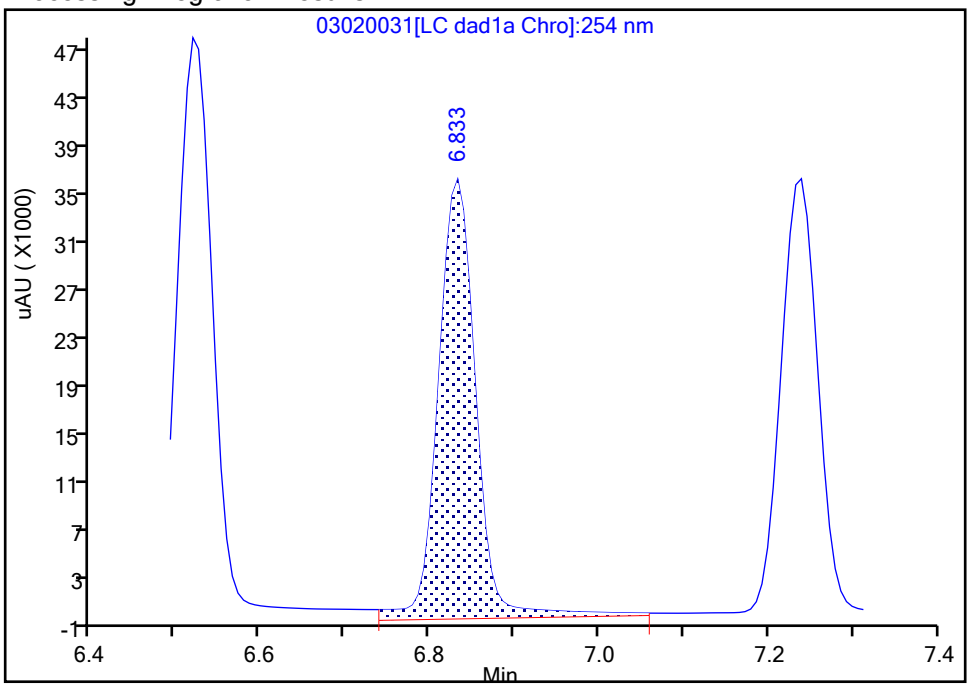
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

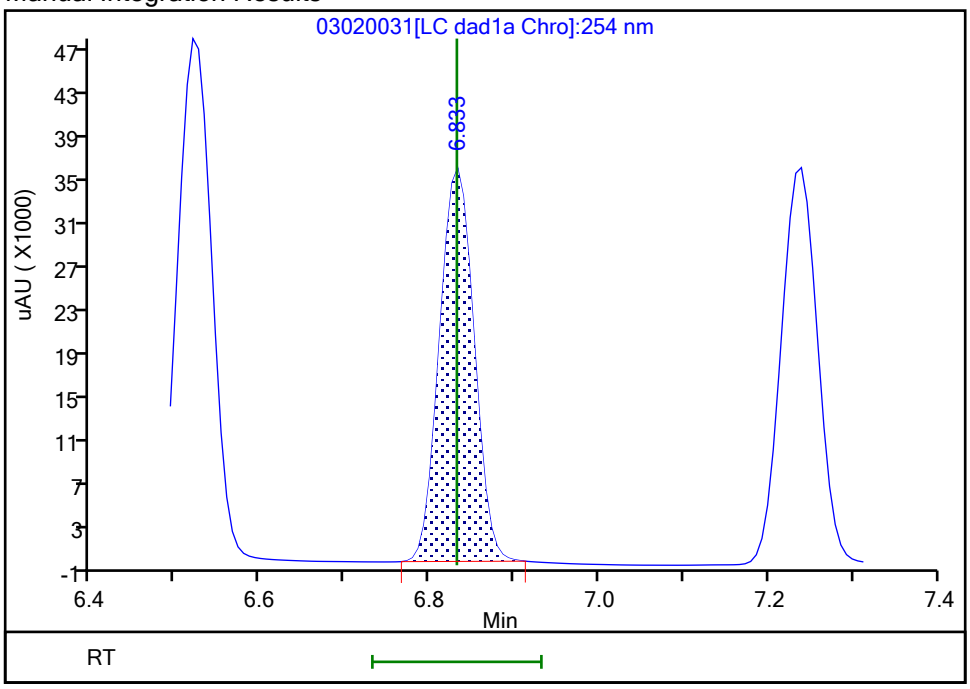
Processing Integration Results

RT: 6.83
Area: 112441
Amount: 0.713130
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 100368
Amount: 0.706223
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:27
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

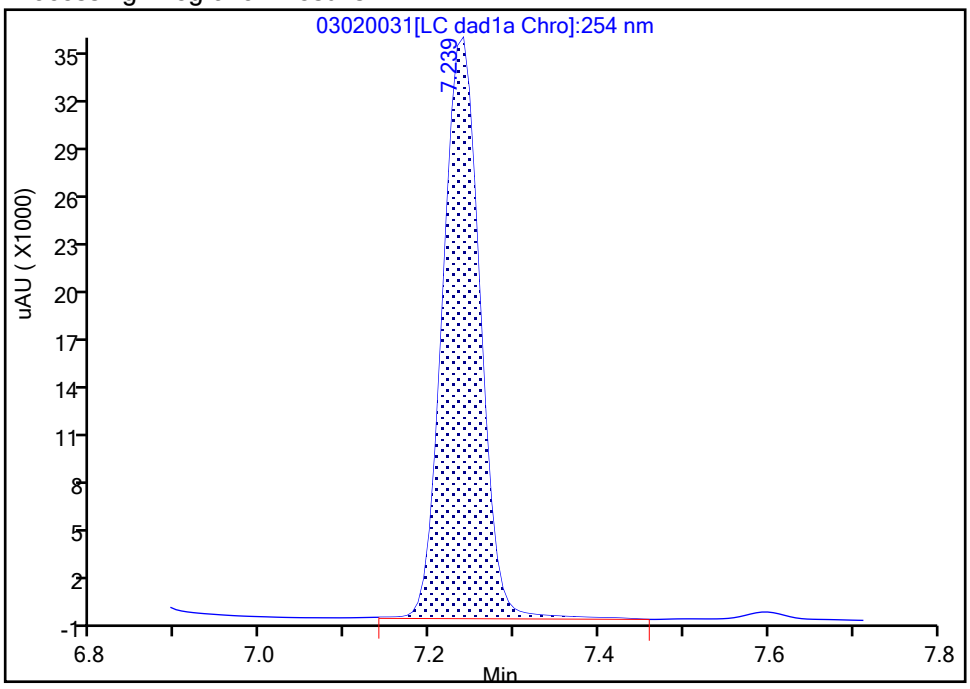
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d		
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 6		
Client ID:			
Operator ID:		ALS Bottle#:	31 Worklist Smp#: 31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

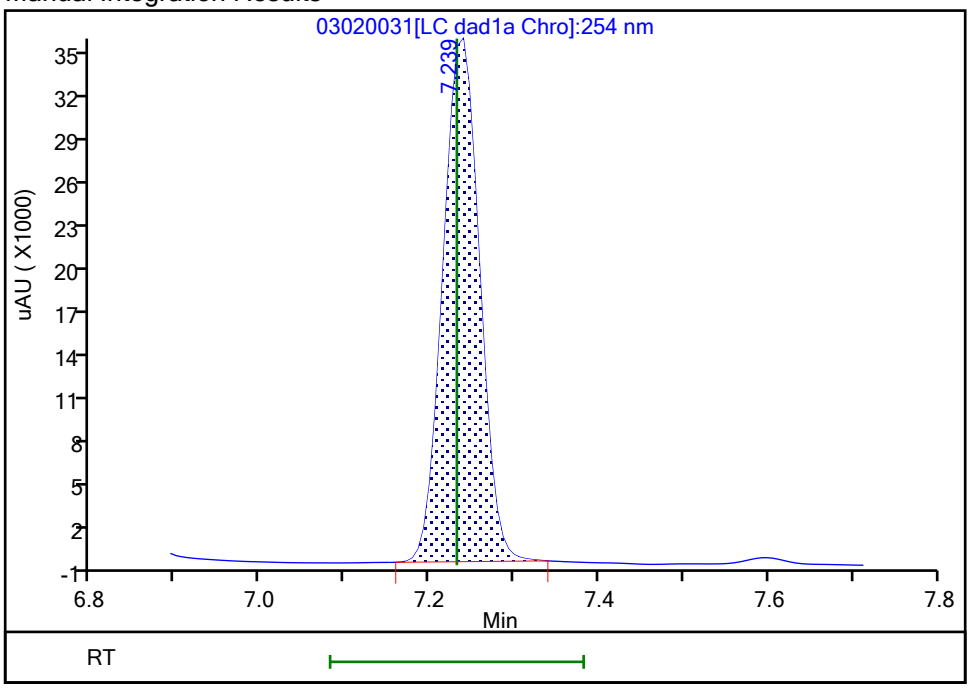
Processing Integration Results

RT: 7.24
Area: 109789
Amount: 0.839946
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 107376
Amount: 0.823813
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:32
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020032.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	03-Mar-2021 00:58:19	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Misc. Info.:	280-0099486-032				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:27	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:19:53		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.521	6.518	0.003	75195	0.4004	0.4047	M
5 DNX	1	6.828	6.832	-0.004	57462	0.4004	0.4043	M
6 MNX	1	7.234	7.232	0.002	61731	0.4668	0.4736	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 20.00 Units: uL

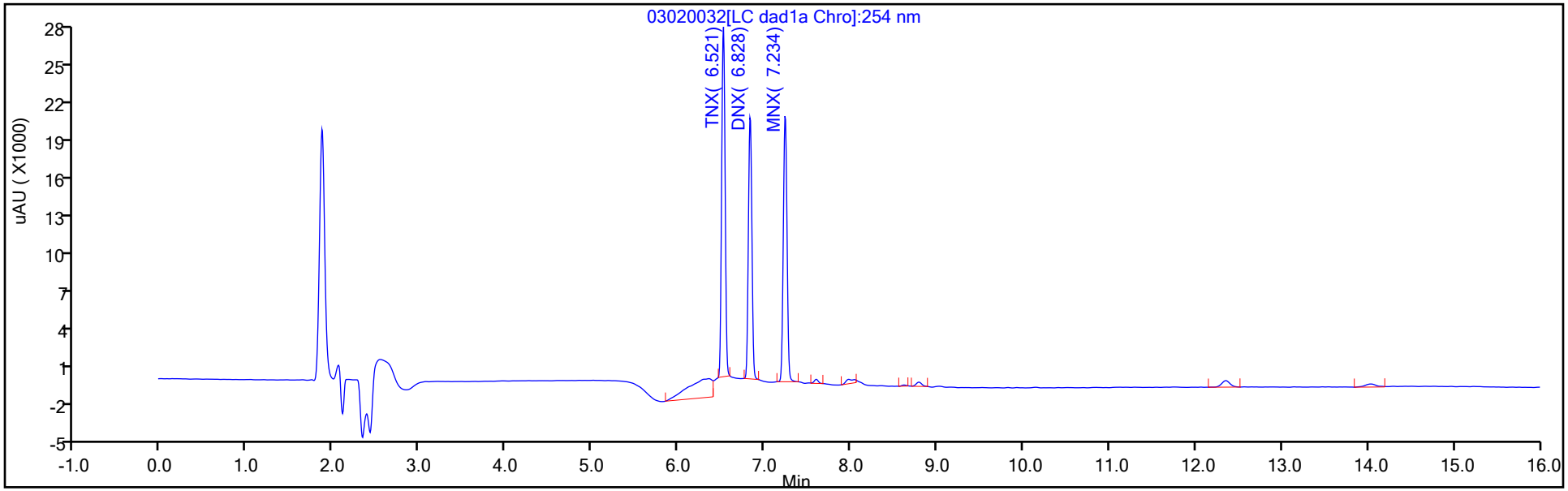
Report Date: 03-Mar-2021 13:32:27 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

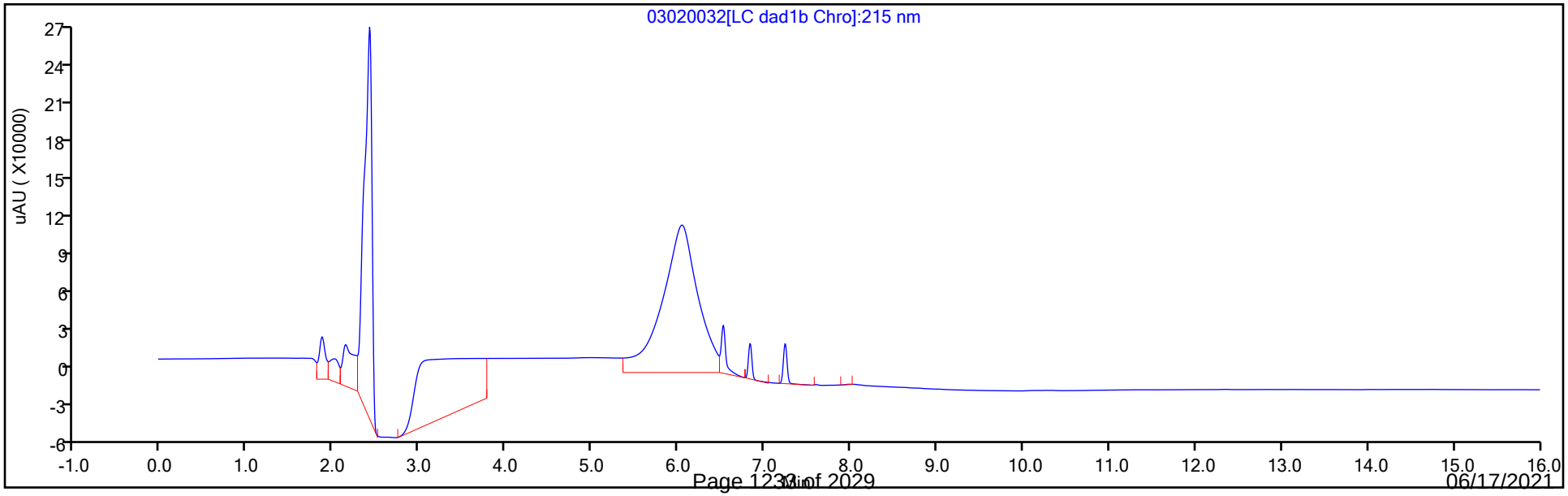
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d

Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 5			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

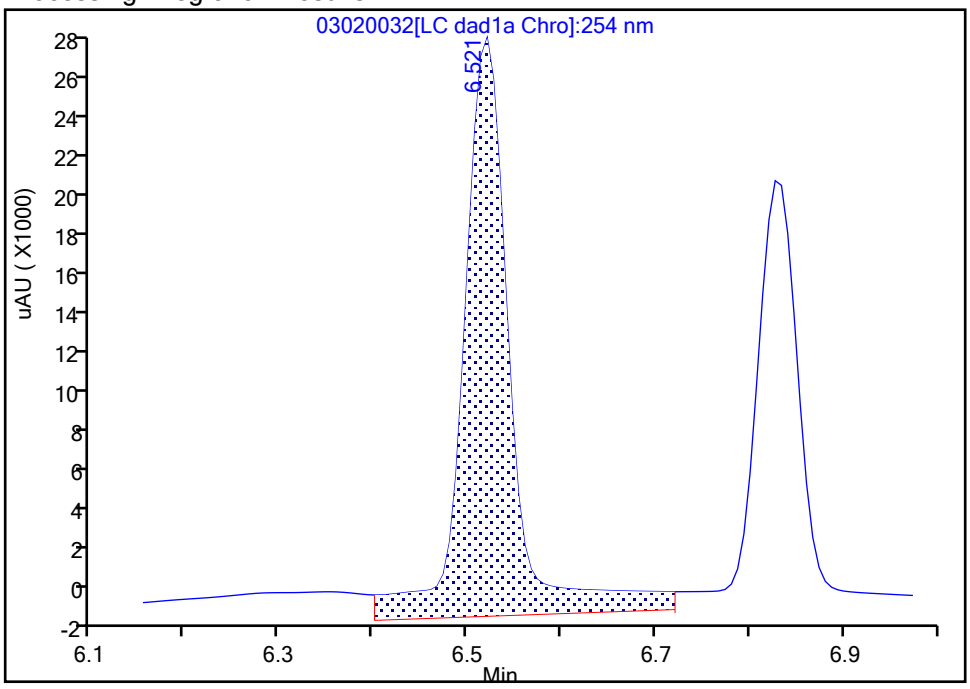
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d		
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 5		
Client ID:			
Operator ID:		ALS Bottle#:	32 Worklist Smp#: 32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

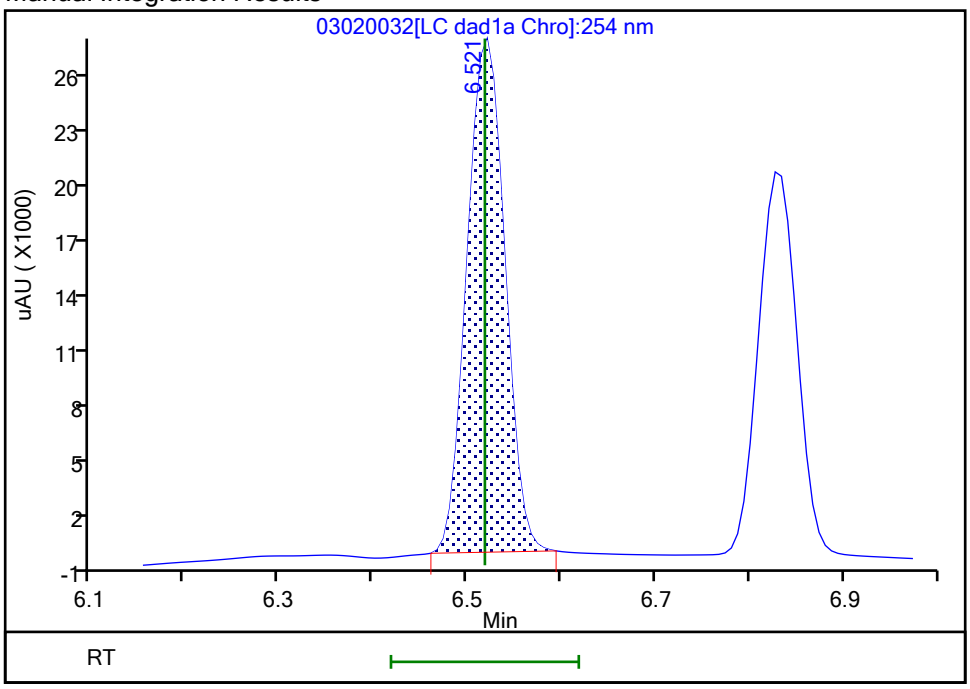
Processing Integration Results

RT: 6.52
Area: 98522
Amount: 0.473037
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 75195
Amount: 0.404696
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

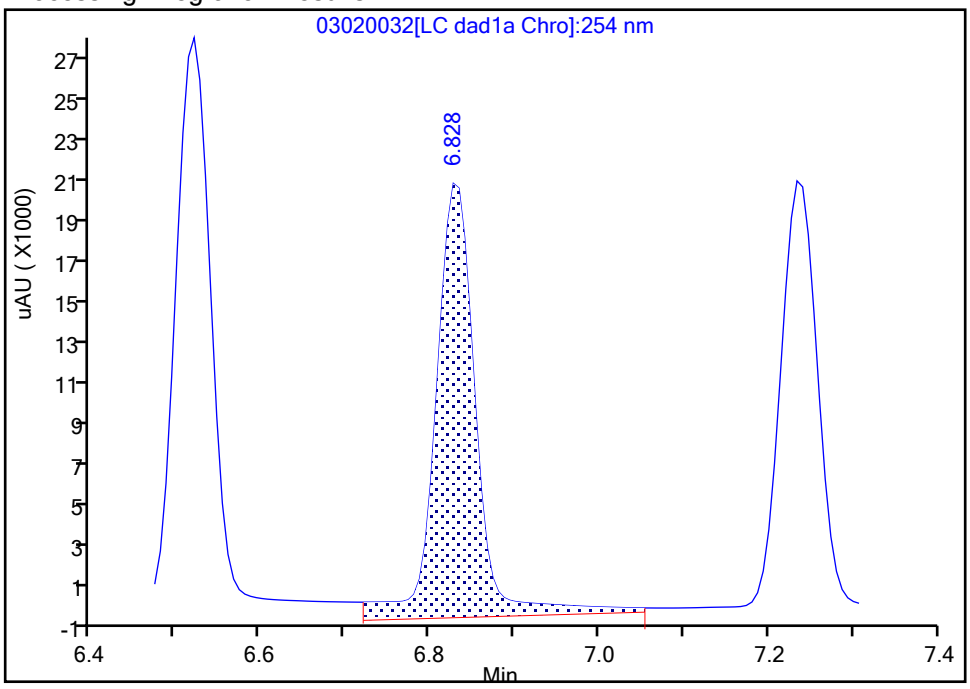
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d				
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:		ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

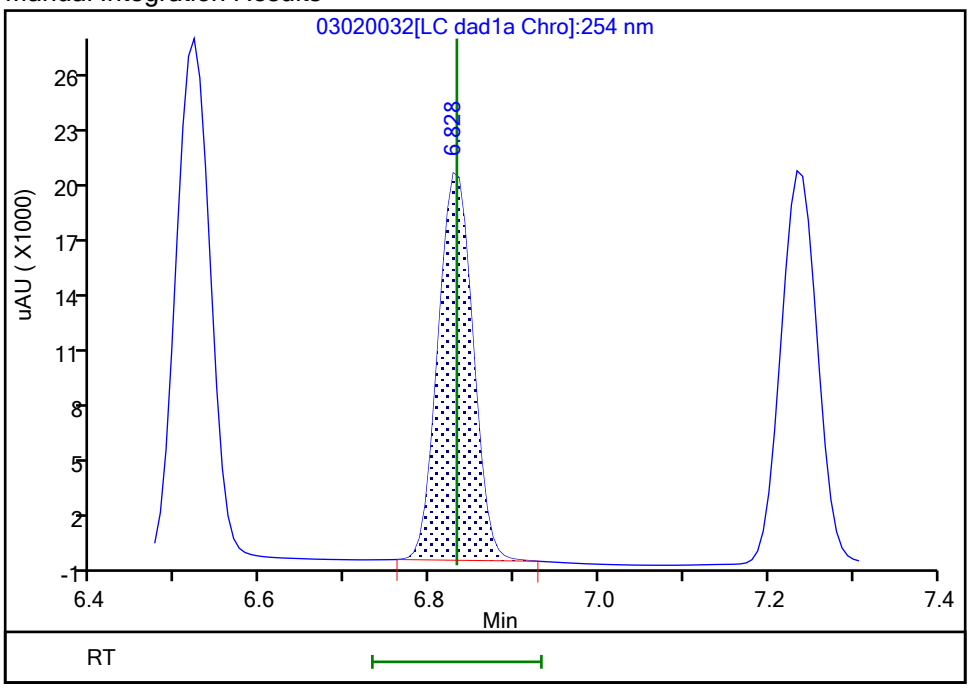
Processing Integration Results

RT: 6.83
Area: 69186
Amount: 0.444873
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 57462
Amount: 0.404322
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:42
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020033.D				
Lims ID:	IC DMT 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	03-Mar-2021 01:21:15	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 4				
Misc. Info.:	280-0099486-033				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:28	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:20:09		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.518	6.518	0.000	44228	0.2503	0.2380	M
5 DNX	1	6.832	6.832	0.000	33502	0.2503	0.2357	M
6 MNX	1	7.232	7.232	0.000	36376	0.2918	0.2791	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

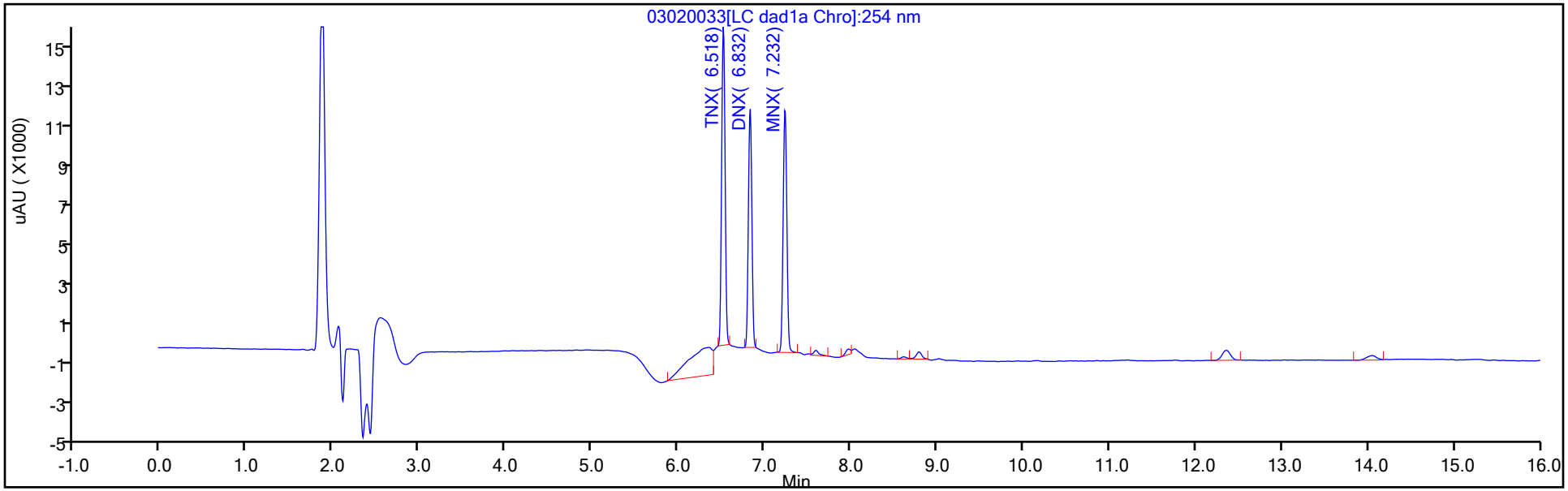
Report Date: 03-Mar-2021 13:32:28 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

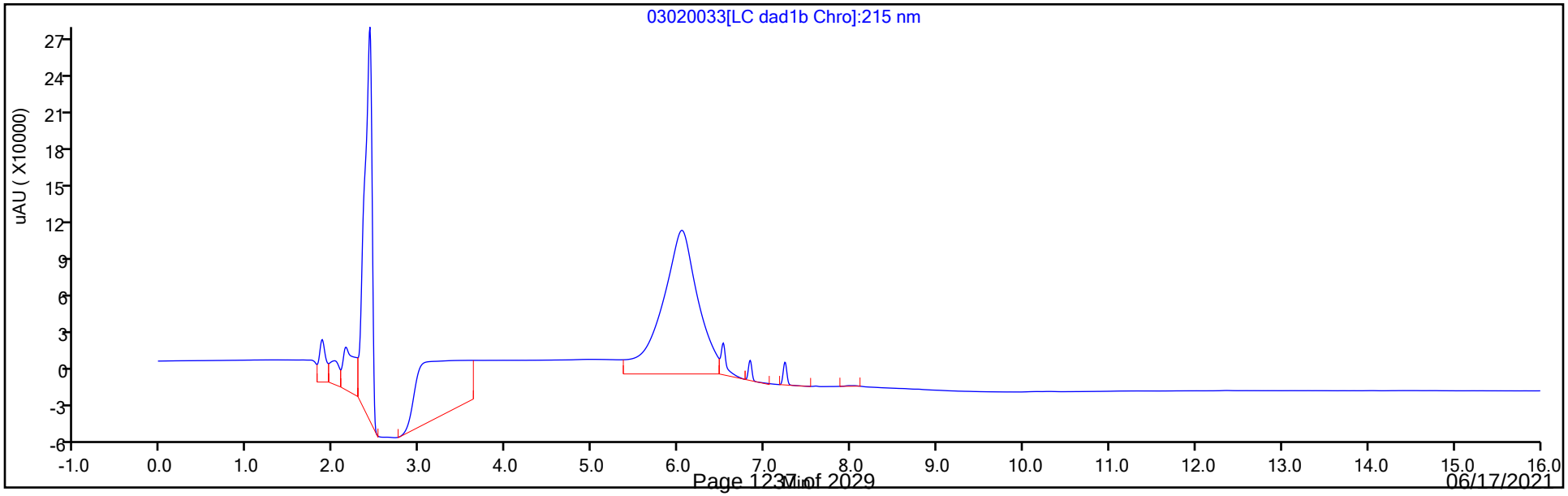
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d

Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 4			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

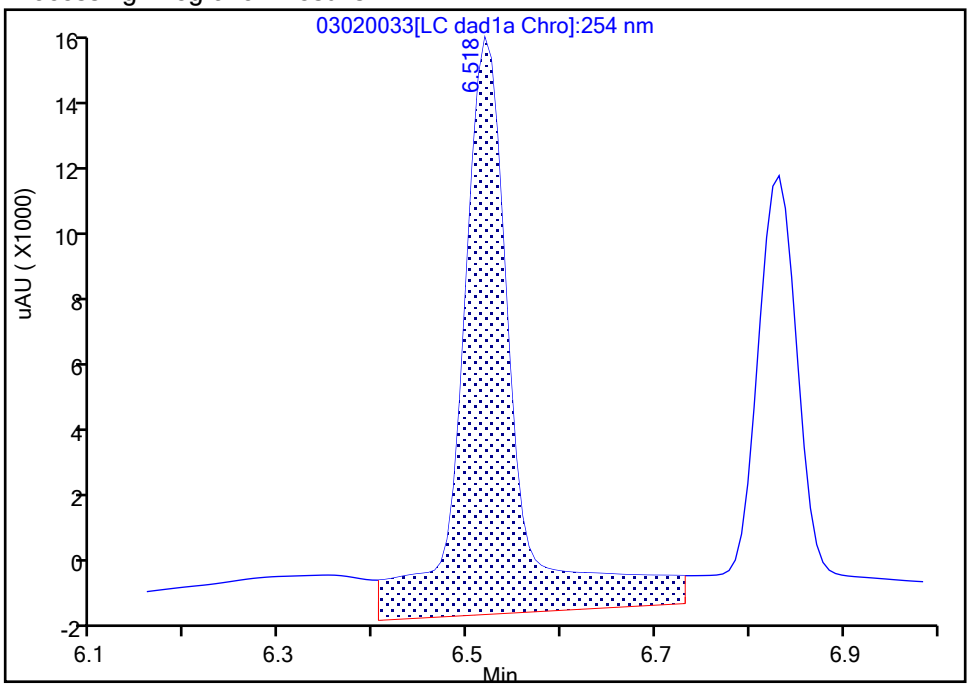
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d		
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 4		
Client ID:			
Operator ID:		ALS Bottle#:	33 Worklist Smp#: 33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

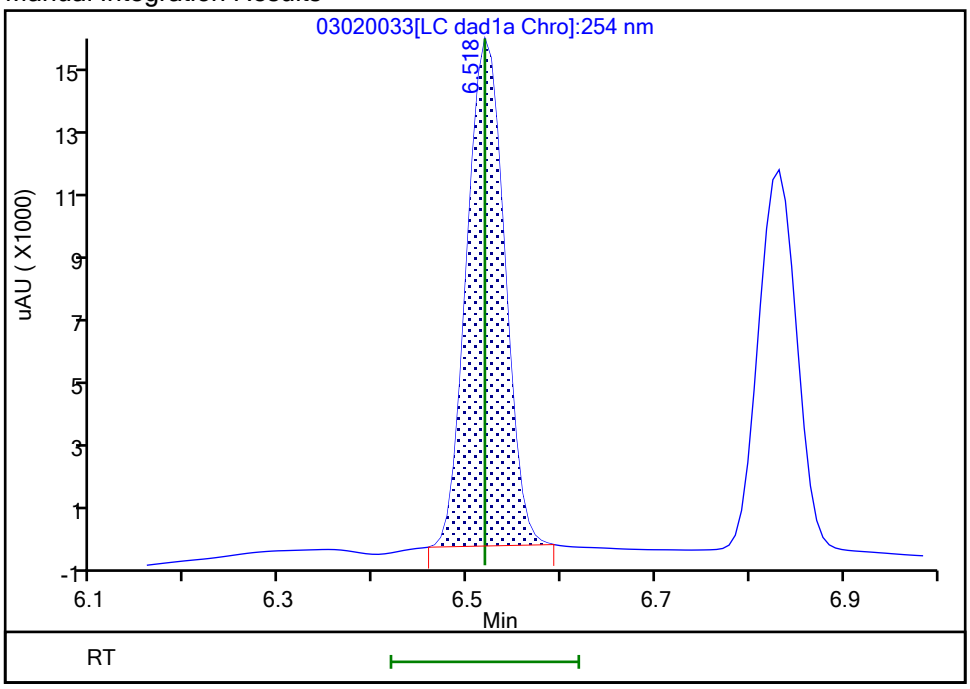
Processing Integration Results

RT: 6.52
Area: 66731
Amount: 0.312730
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 44228
Amount: 0.238033
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:00
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

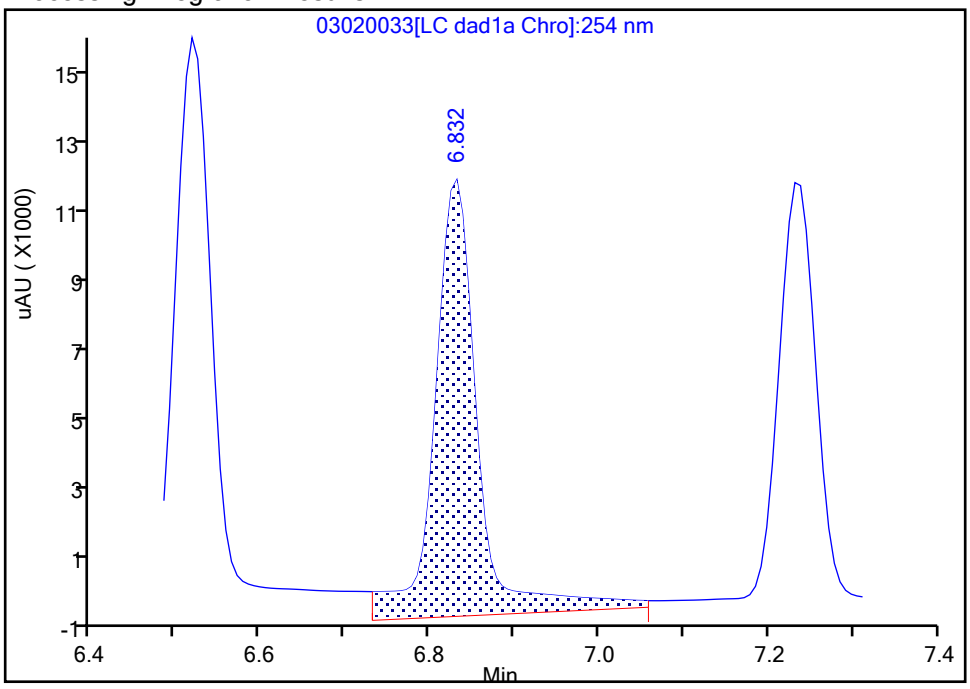
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

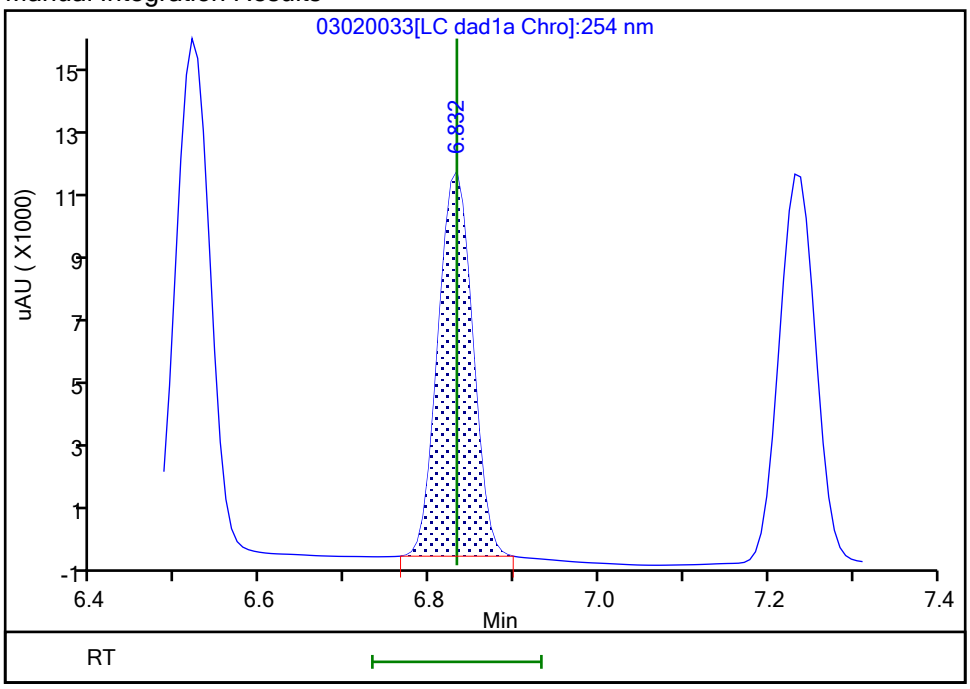
Processing Integration Results

RT: 6.83
Area: 44700
Amount: 0.294353
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 33502
Amount: 0.235731
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:06
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020034.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	03-Mar-2021 01:44:28	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Misc. Info.:	280-0099486-034				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:29	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:20:27		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.522	6.518	0.004	18578	0.1001	0.1000	M
5 DNX	1	6.828	6.832	-0.004	13949	0.1001	0.0981	M
6 MNX	1	7.235	7.232	0.003	15275	0.1167	0.1172	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 5.00 Units: uL

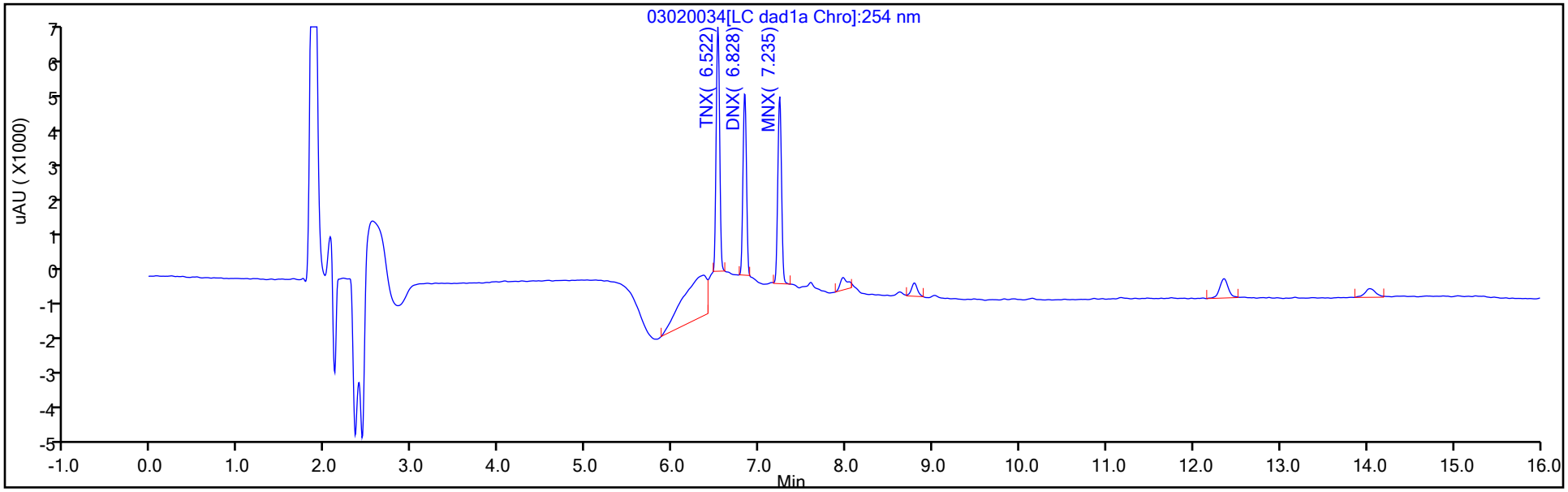
Report Date: 03-Mar-2021 13:32:29 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

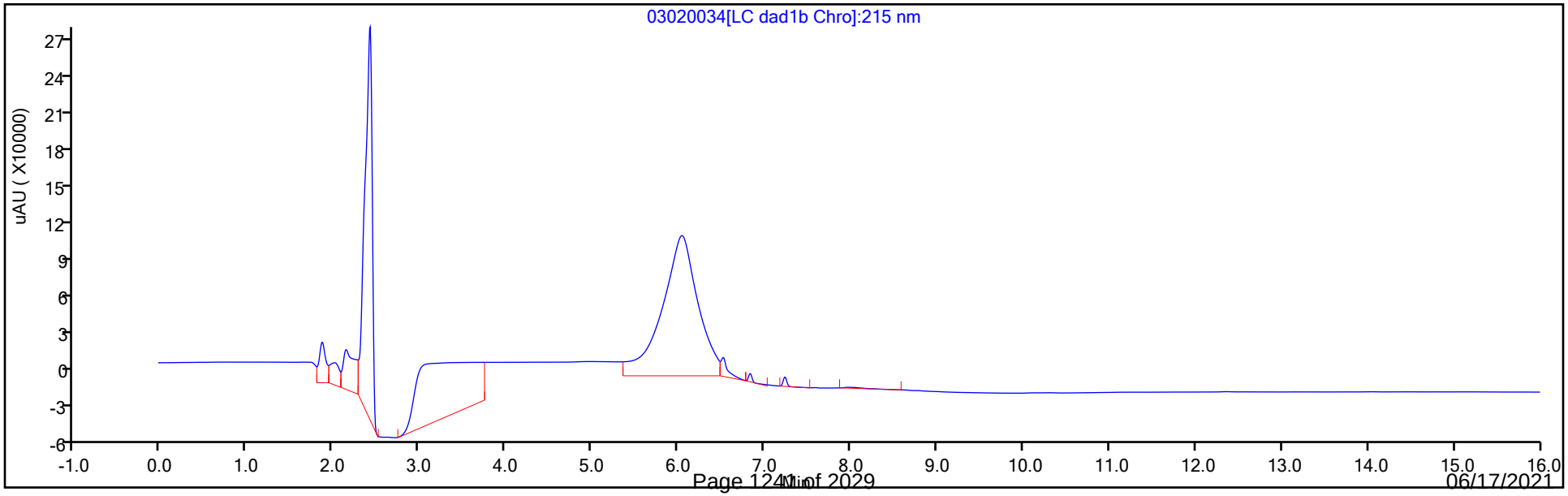
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d

Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 3			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

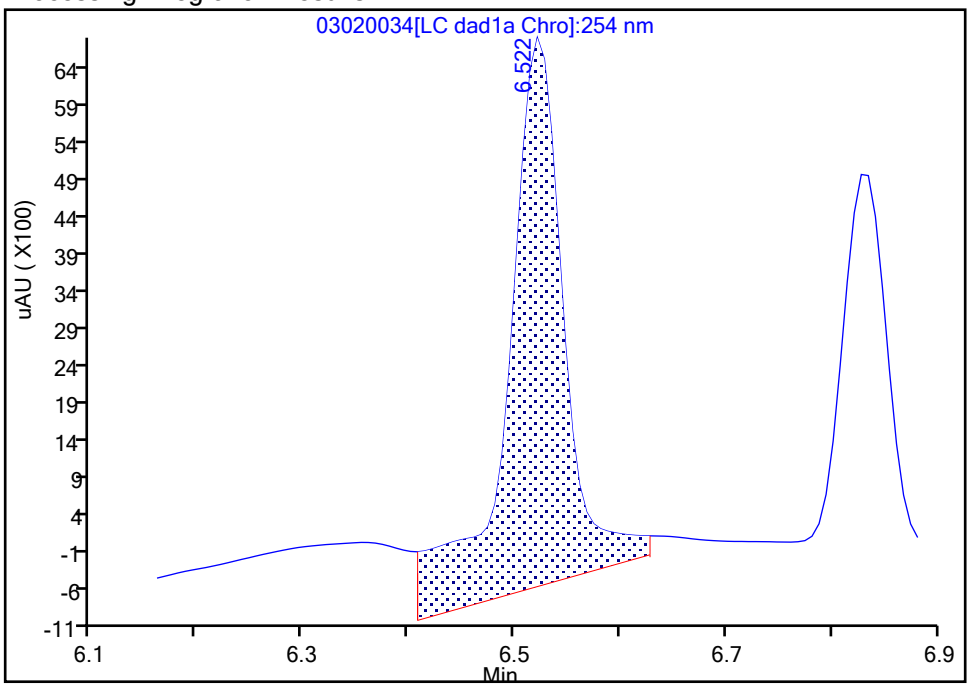
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d				
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

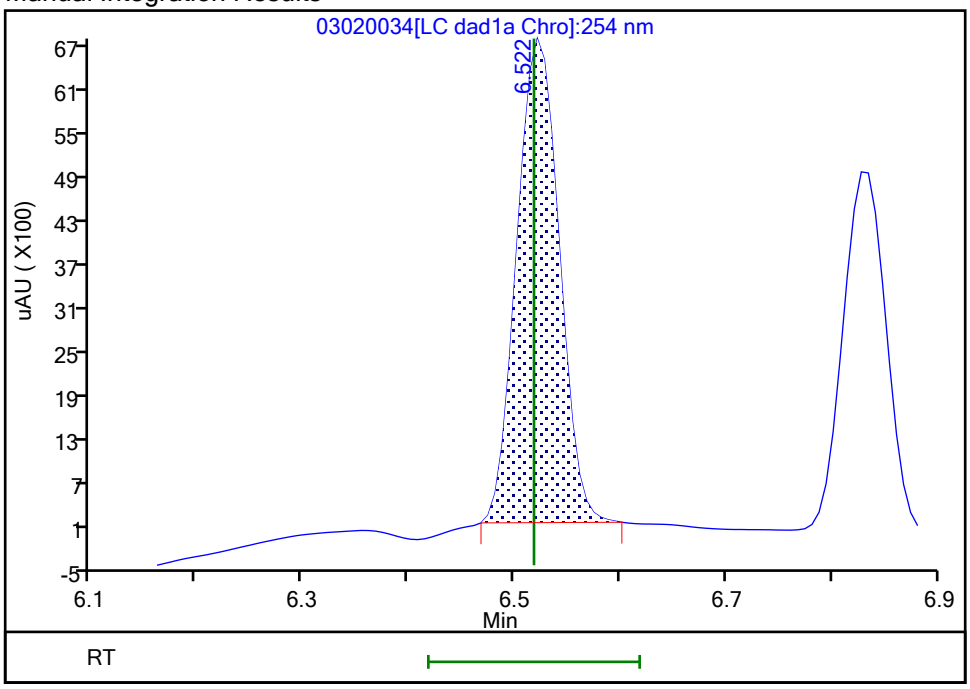
Processing Integration Results

RT: 6.52
Area: 27541
Amount: 0.106458
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 18578
Amount: 0.099986
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

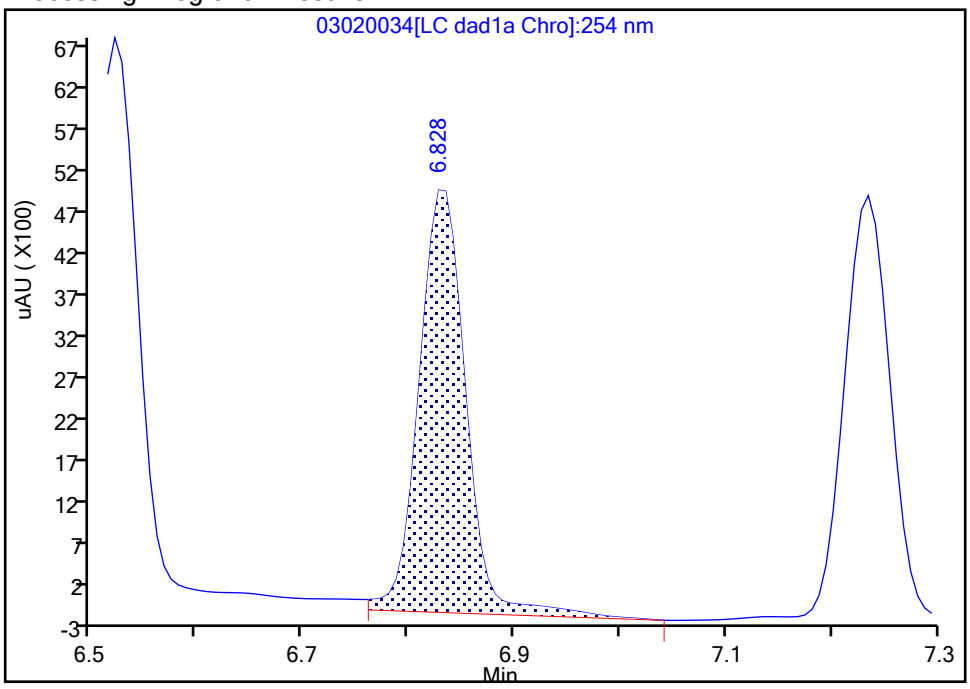
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d		
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 3		
Client ID:			
Operator ID:		ALS Bottle#:	34 Worklist Smp#: 34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

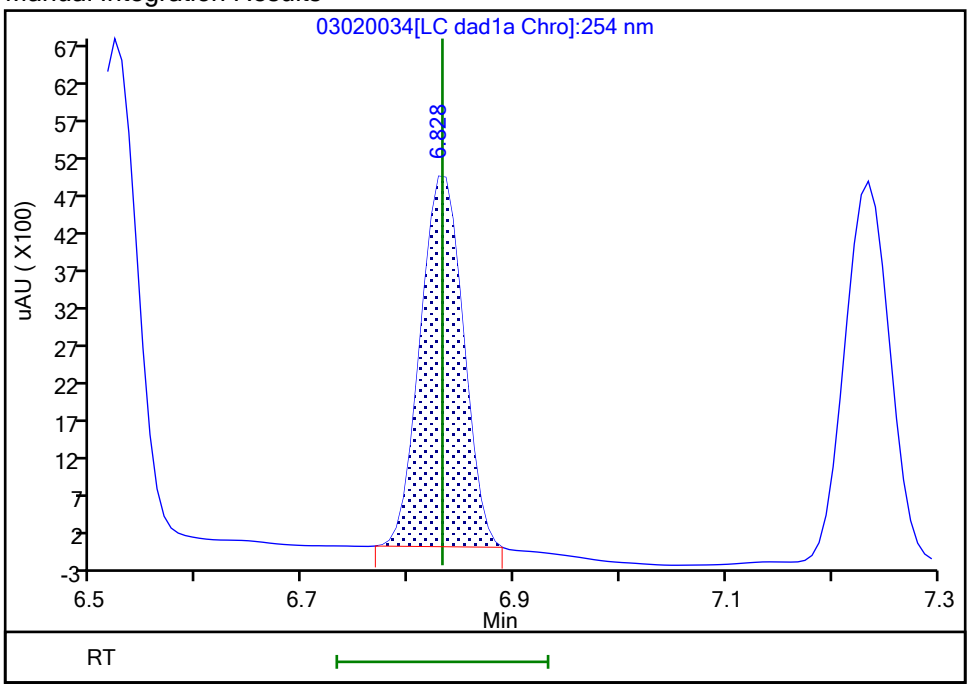
Processing Integration Results

RT: 6.83
Area: 15711
Amount: 0.107414
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 13949
Amount: 0.098150
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:22
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020035.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	03-Mar-2021 02:07:25	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0099486-035				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:30	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:20:44		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.522	6.518	0.004	9328	0.0501	0.0502	M
5 DNX	1	6.829	6.832	-0.003	7121	0.0501	0.0501	M
6 MNX	1	7.235	7.232	0.003	7585	0.0584	0.0582	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 2.50 Units: uL

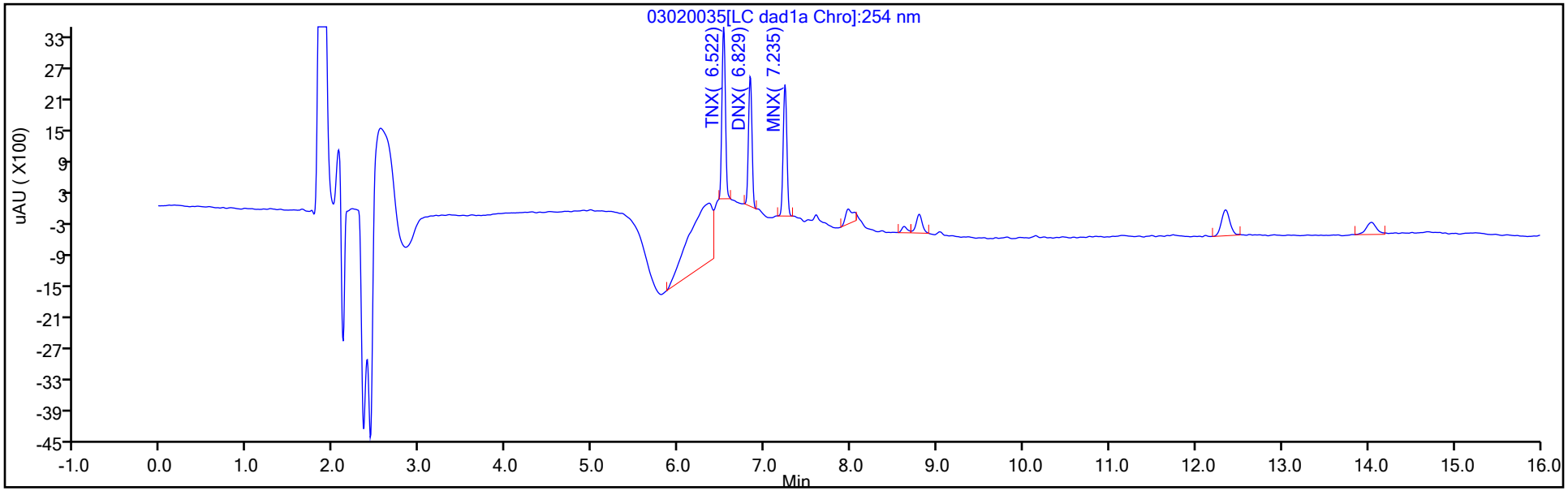
Report Date: 03-Mar-2021 13:32:30 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

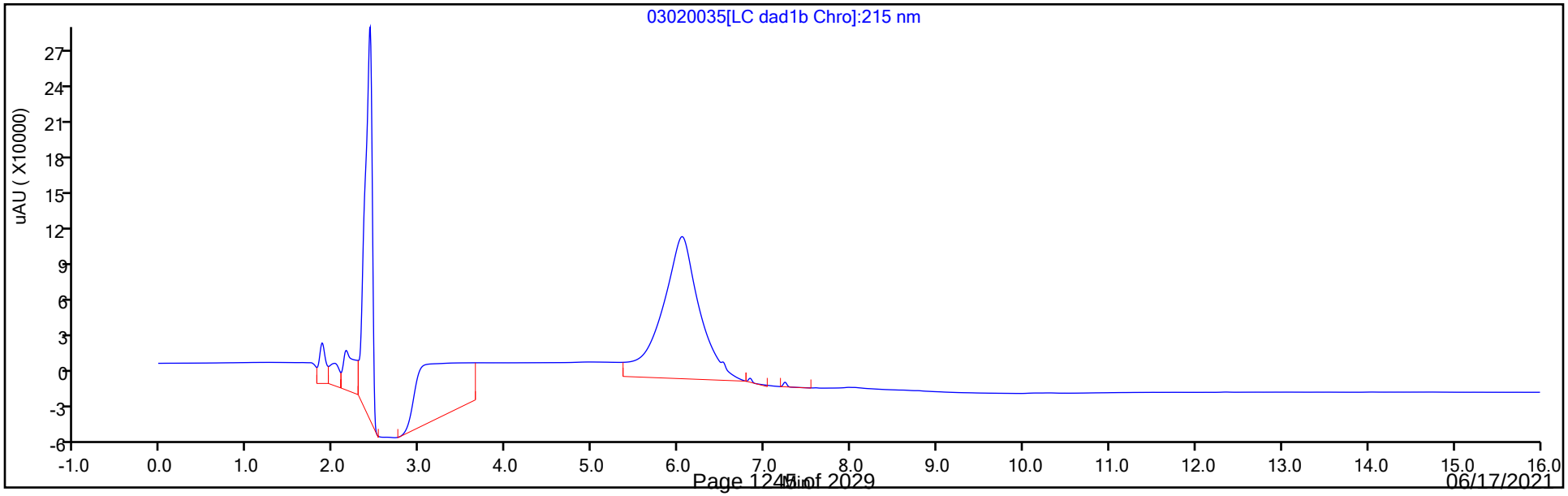
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d

Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 2			Worklist Smp#:	35
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

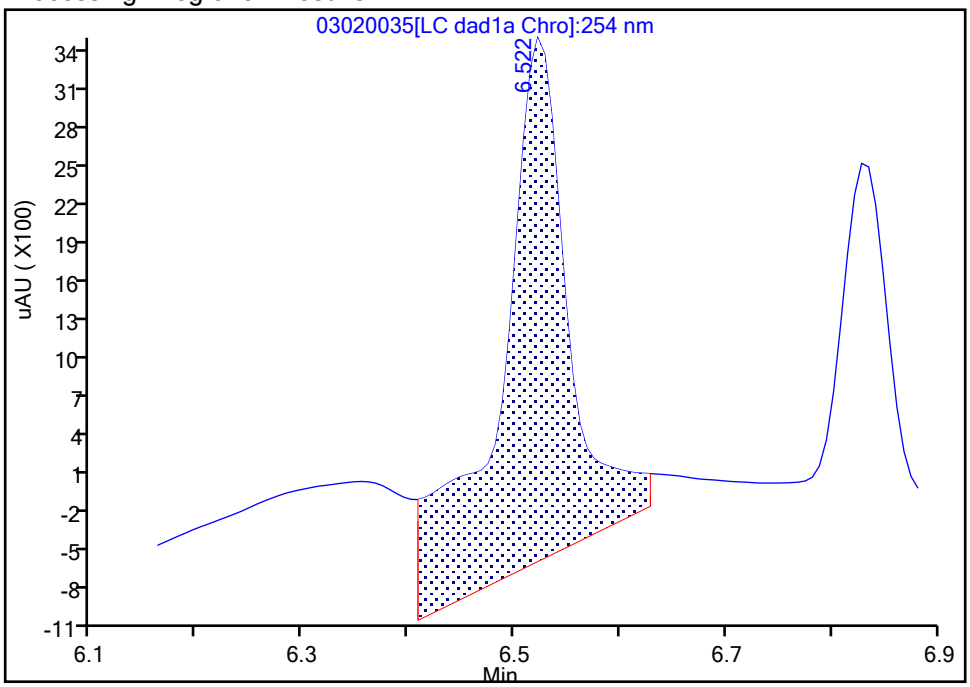
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d				
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:		ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

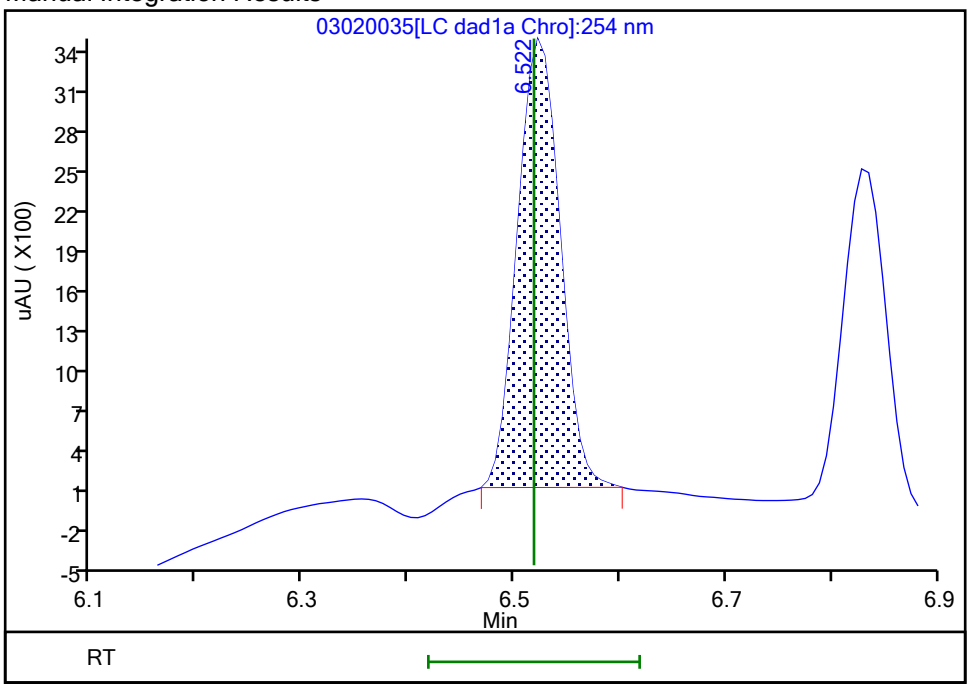
Processing Integration Results

RT: 6.52
Area: 18356
Amount: 0.060447
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 9328
Amount: 0.050203
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:37

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

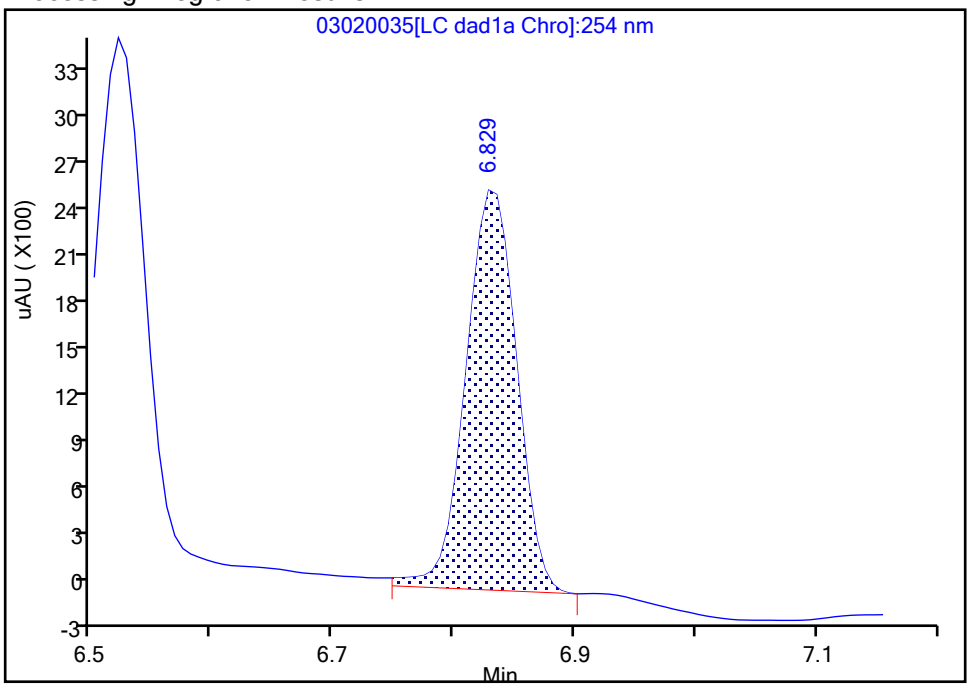
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d
Injection Date: 03-Mar-2021 02:07:25 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 2
Client ID:
Operator ID: ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

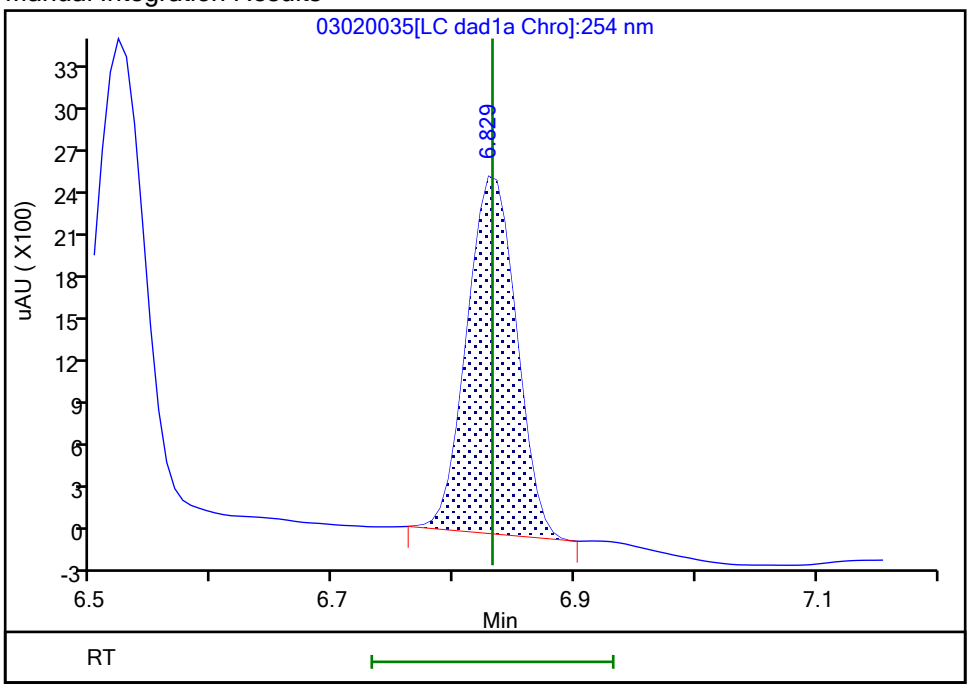
Processing Integration Results

RT: 6.83
Area: 7405
Amount: 0.051400
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 7121
Amount: 0.050106
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:41
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D
Lims ID: IC DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Mar-2021 02:30:22 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 1
Misc. Info.: 280-0099486-036
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:31 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:21:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.521	6.518	0.003	3664	0.0200	0.0197	M
5 DNX	1	6.827	6.832	-0.005	2984	0.0200	0.0210	M
6 MNX	1	7.234	7.232	0.002	3082	0.0233	0.0236	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 1.00 Units: uL

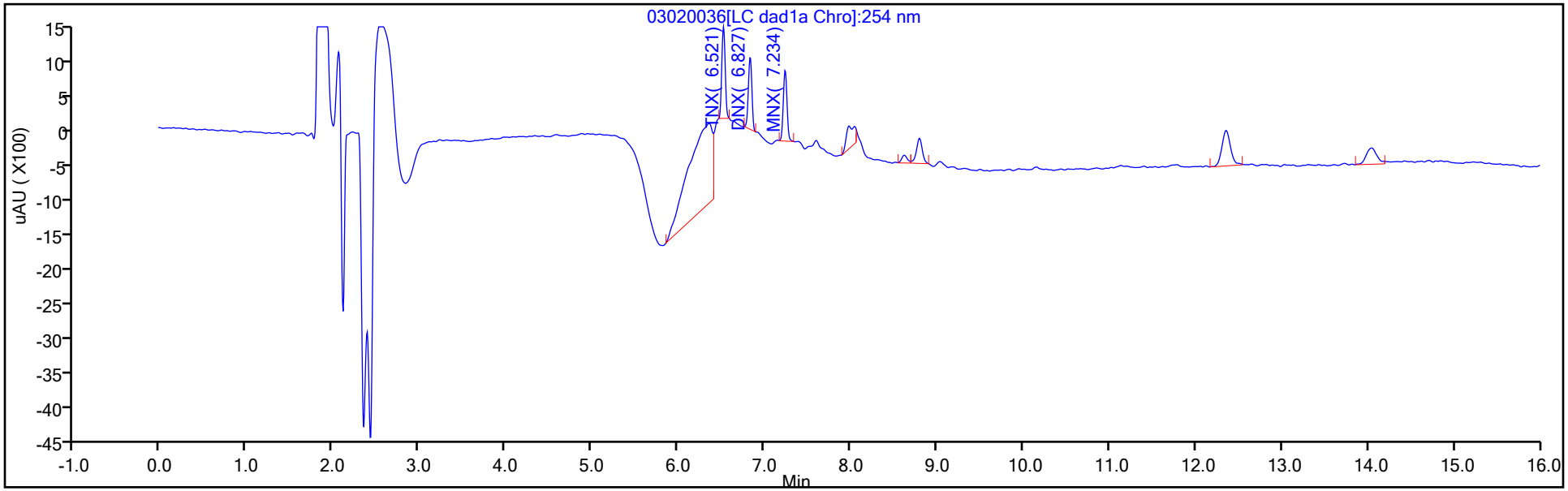
Report Date: 03-Mar-2021 13:32:31 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

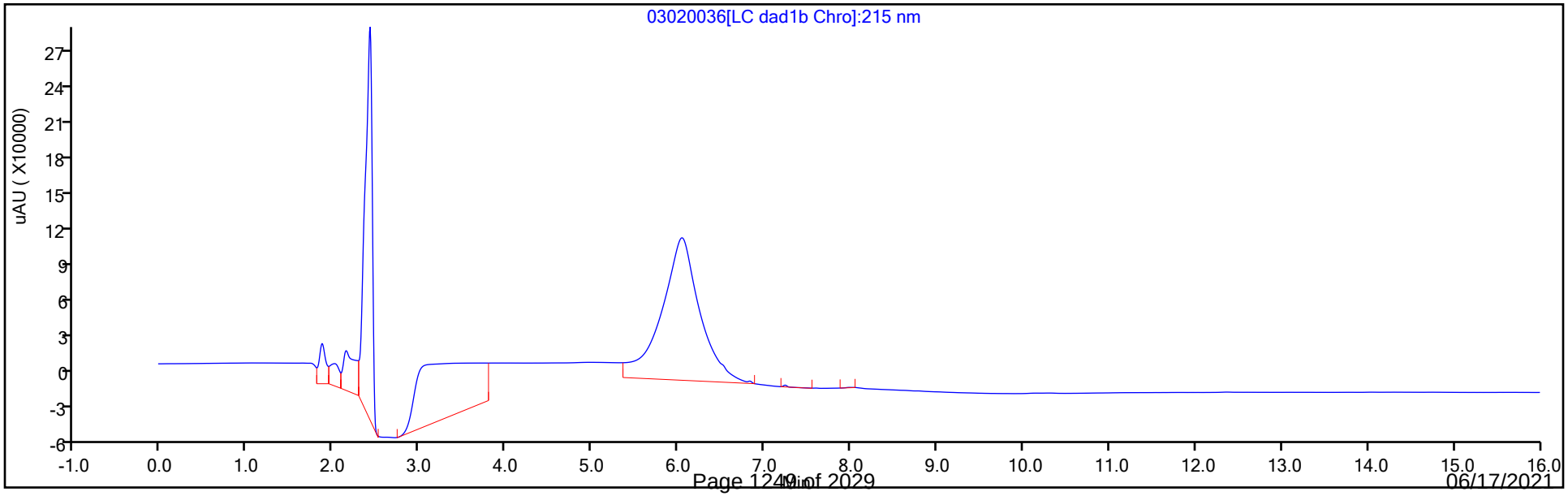
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d

Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 1			Worklist Smp#:	36
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

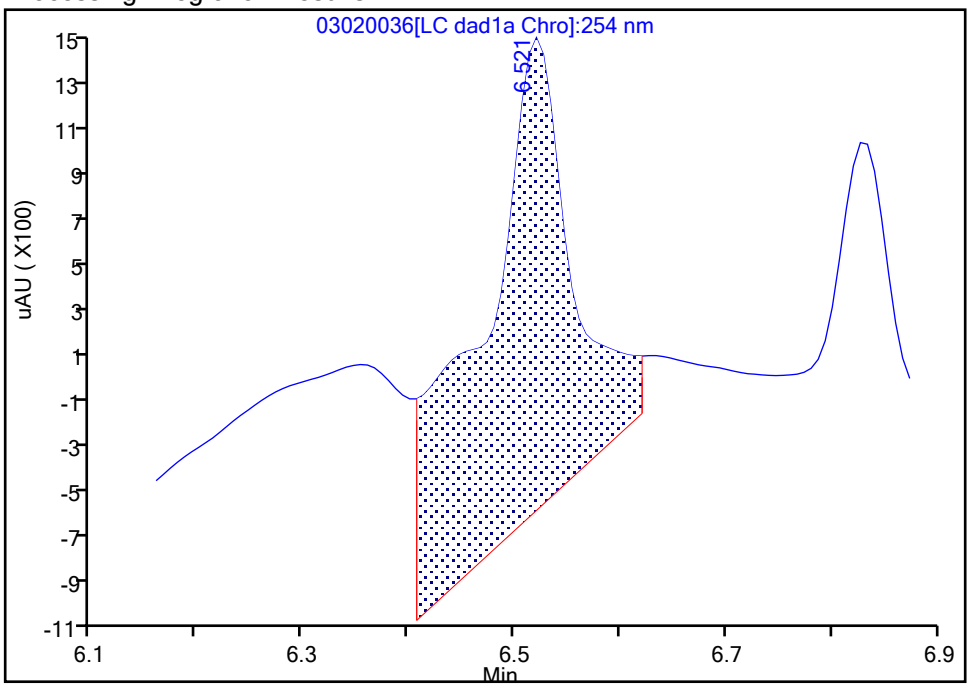
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d		
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 1		
Client ID:			
Operator ID:		ALS Bottle#:	36 Worklist Smp#: 36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

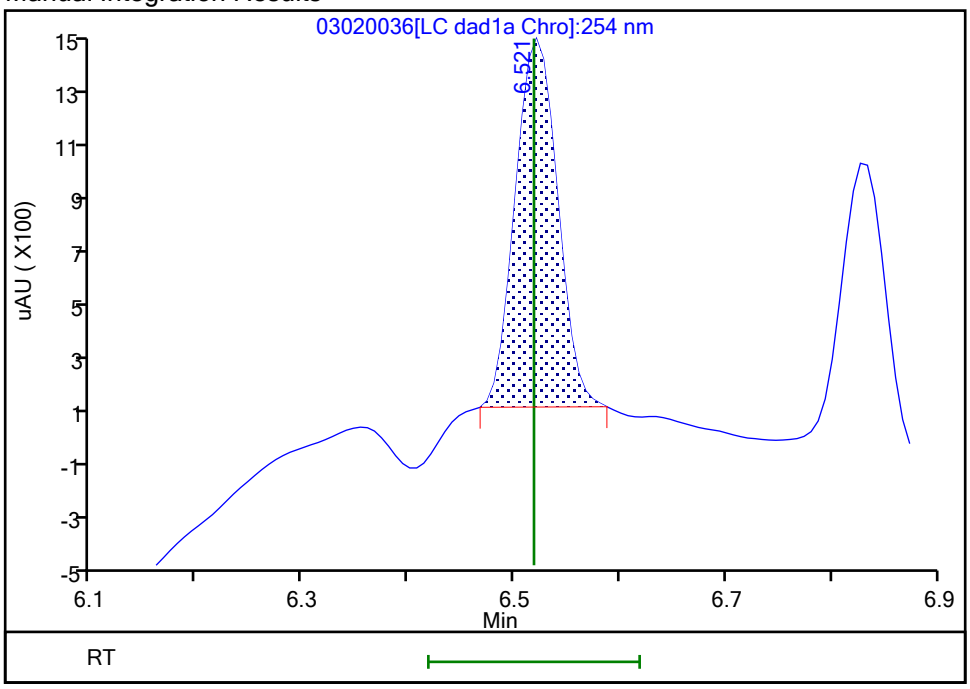
Processing Integration Results

RT: 6.52
Area: 12511
Amount: 0.051903
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 3664
Amount: 0.019719
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

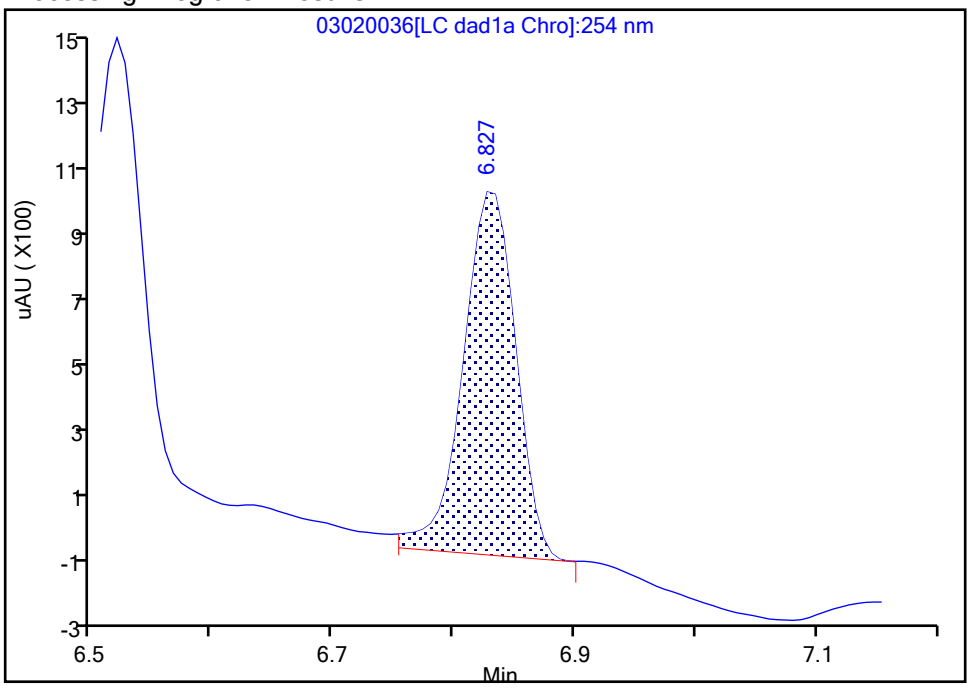
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d				
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:		ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

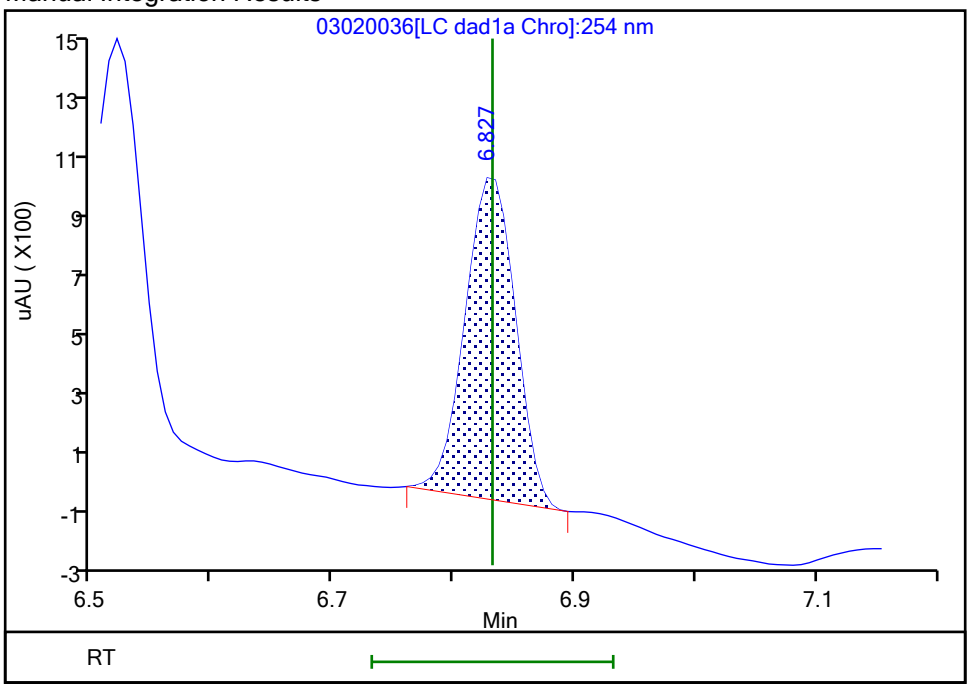
Processing Integration Results

RT: 6.83
Area: 3182
Amount: 0.022197
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 2984
Amount: 0.020996
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:57
Audit Action: Manually Integrated Audit Reason: Baseline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

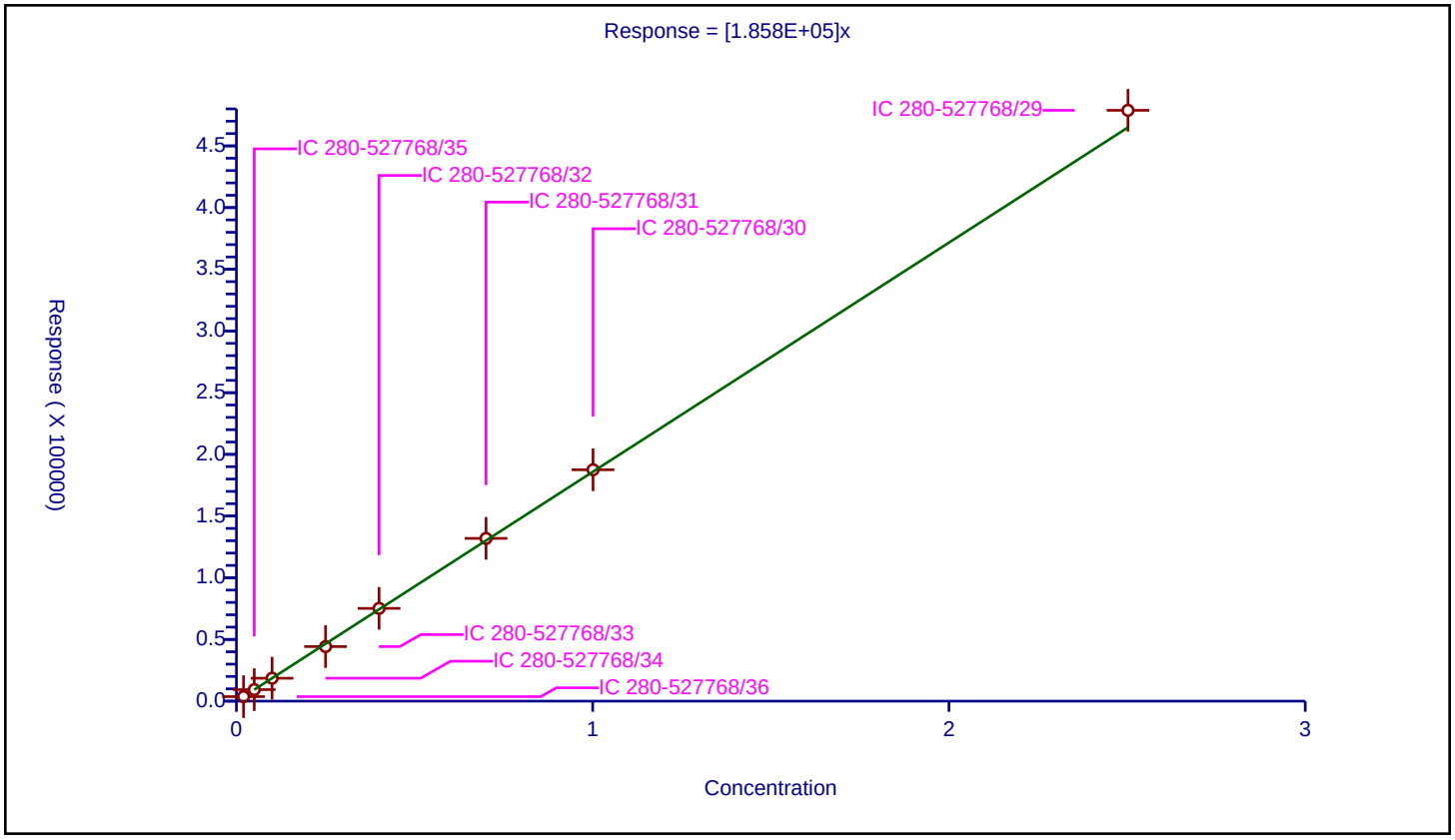
Curve Coefficients

Intercept:	0
Slope:	1.858E+05

Error Coefficients

Standard Error:	5380
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02002	3664.0			183016.983017	Y
2	IC 280-527768/35	0.05005	9328.0			186373.626374	Y
3	IC 280-527768/34	0.1001	18578.0			185594.405594	Y
4	IC 280-527768/33	0.25025	44228.0			176735.264735	Y
5	IC 280-527768/32	0.4004	75195.0			187799.7003	Y
6	IC 280-527768/31	0.7007	131907.0			188250.321107	Y
7	IC 280-527768/30	1.001	187526.0			187338.661339	Y
8	IC 280-527768/29	2.5025	478826.0			191339.060939	Y



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

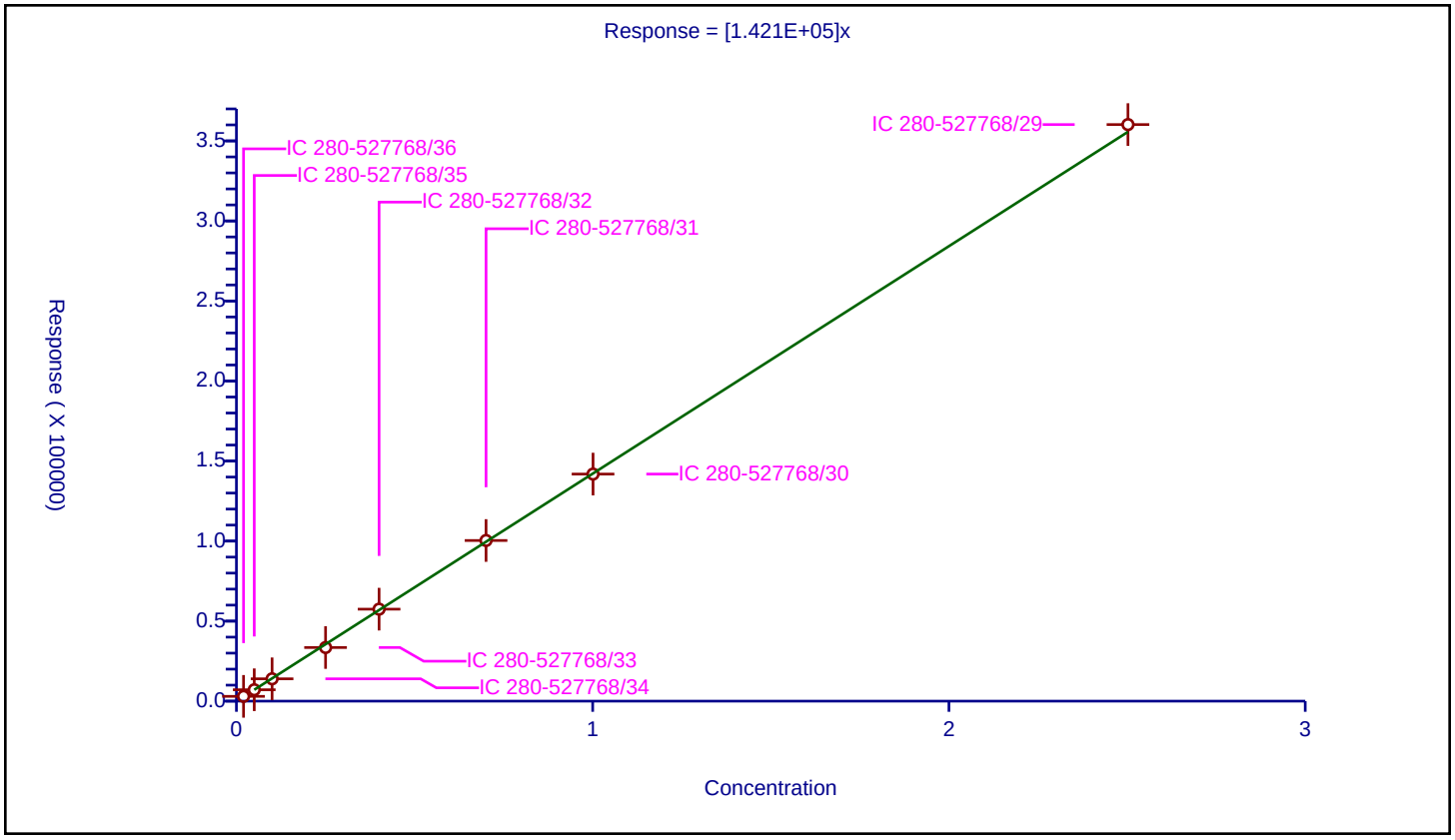
Curve Coefficients

Intercept:	0
Slope:	1.421E+05

Error Coefficients

Standard Error:	1930
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02002	2984.0			149050.949051	Y
2	IC 280-527768/35	0.05005	7121.0			142277.722278	Y
3	IC 280-527768/34	0.1001	13949.0			139350.649351	Y
4	IC 280-527768/33	0.25025	33502.0			133874.125874	Y
5	IC 280-527768/32	0.4004	57462.0			143511.488511	Y
6	IC 280-527768/31	0.7007	100368.0			143239.617525	Y
7	IC 280-527768/30	1.001	141853.0			141711.288711	Y
8	IC 280-527768/29	2.5025	360207.0			143938.861139	Y



Calibration / MNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

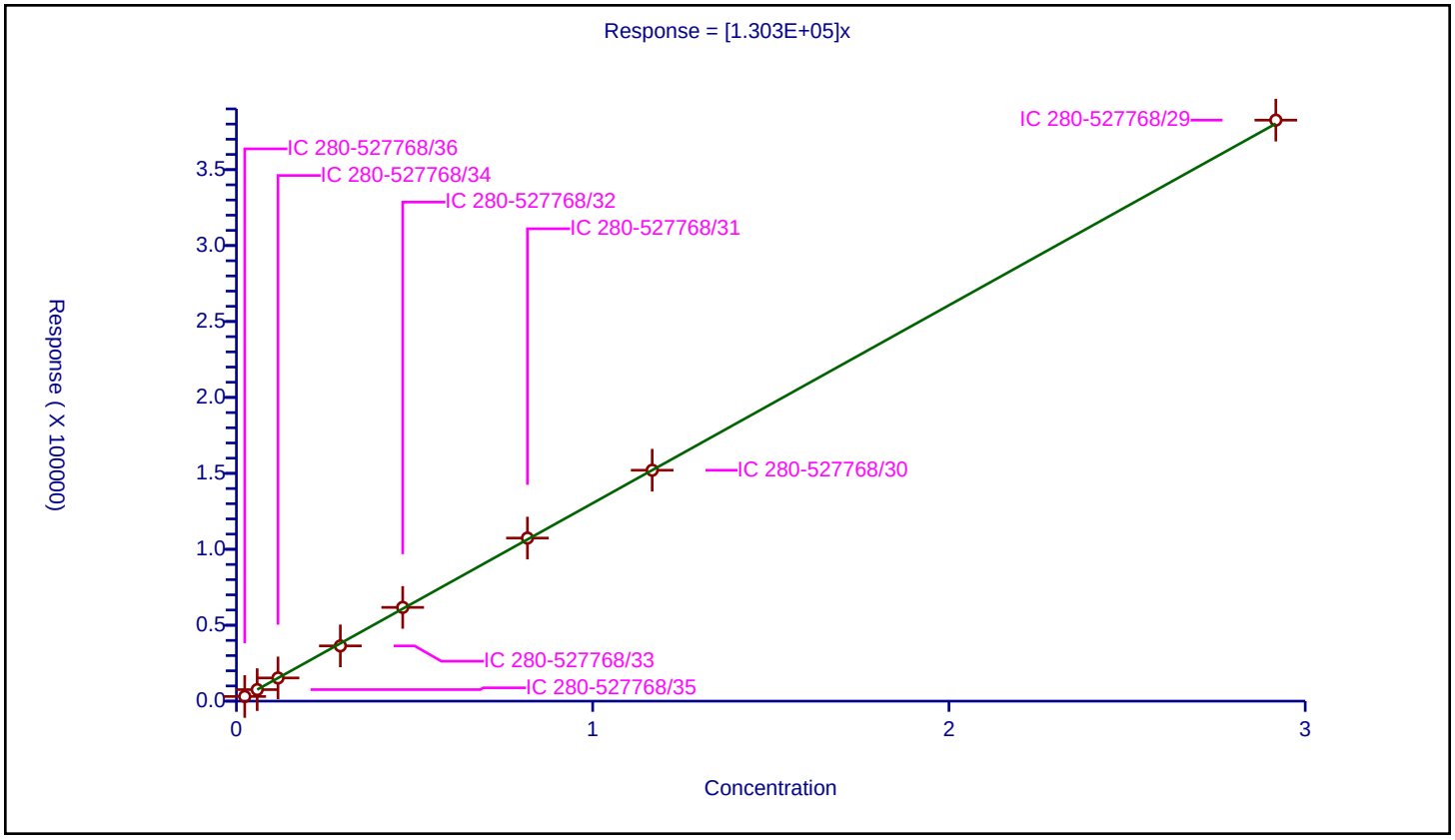
Curve Coefficients

Intercept:	0
Slope:	1.303E+05

Error Coefficients

Standard Error:	1180
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02334	3082.0			132047.98629	Y
2	IC 280-527768/35	0.05835	7585.0			129991.43102	Y
3	IC 280-527768/34	0.1167	15275.0			130891.17395	Y
4	IC 280-527768/33	0.29175	36376.0			124682.090831	Y
5	IC 280-527768/32	0.4668	61731.0			132242.930591	Y
6	IC 280-527768/31	0.8169	107376.0			131443.261109	Y
7	IC 280-527768/30	1.167	152050.0			130291.34533	Y
8	IC 280-527768/29	2.9175	382579.0			131132.476435	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
HMX	6.629	6.626	6.628	6.631	6.631	6.627	6.631	6.626	6.626		6.481 - 6.781	6.628
RDX	+++++	7.606	7.602	7.598	7.597	7.601	7.604	7.593	7.592		7.448 - 7.748	7.599
Picric acid	+++++	7.966	7.968	7.958	7.951	7.947	7.937	7.920	7.879		7.808 - 8.108	7.941
1,3,5-Trinitrobenzene	8.649	8.653	8.655	8.651	8.651	8.654	8.651	8.646	8.646		8.501 - 8.801	8.651
1,3-Dinitrobenzene	9.275	9.280	9.282	9.278	9.271	9.281	9.277	9.273	9.265		9.128 - 9.428	9.276
Nitrobenzene	9.662	9.666	9.662	9.664	9.657	9.667	9.664	9.659	9.652		9.514 - 9.814	9.661
Tetryl	9.975	9.980	9.982	9.978	9.977	9.981	9.977	9.973	9.972		9.828 - 10.128	9.977
Nitroglycerin	10.435	10.440	10.442	10.438	10.437	10.441	10.437	10.433	10.425		10.288 - 10.588	10.436
2,4,6-Trinitrotoluene	10.902	10.906	10.908	10.904	10.904	10.907	10.904	10.899	10.899		10.804 - 11.004	10.904
4-Amino-2,6-dinitrotoluene	11.109	11.106	11.115	11.111	11.104	11.114	11.104	11.099	11.099		11.011 - 11.211	11.107
2-Amino-4,6-dinitrotoluene	11.369	11.366	11.375	11.371	11.364	11.374	11.364	11.359	11.352		11.271 - 11.471	11.366
2,6-Dinitrotoluene	11.529	11.533	11.535	11.531	11.531	11.541	11.531	11.526	11.519		11.431 - 11.631	11.531
2,4-Dinitrotoluene	11.702	11.706	11.708	11.704	11.704	11.714	11.704	11.699	11.692		11.604 - 11.804	11.704
2-Nitrotoluene	12.575	12.573	12.575	12.578	12.571	12.581	12.571	12.566	12.565		12.428 - 12.728	12.573
4-Nitrotoluene	13.015	13.006	13.015	13.011	13.011	13.021	13.011	13.006	12.999		12.861 - 13.161	13.011
3-Nitrotoluene	13.602	13.600	13.602	13.604	13.597	13.607	13.597	13.593	13.592		13.454 - 13.754	13.599
PETN	14.682	14.680	14.688	14.684	14.684	14.694	14.684	14.679	14.679		14.534 - 14.834	14.684
1,2-Dinitrobenzene	8.522	8.526	8.522	8.525	8.517	8.527	8.524	8.520	8.512		8.375 - 8.675	8.522

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	90600 81044 83266	84000 83153	84840 83381	85610 83899	Ave		84421.436 5				3.1		20.0			
RDX	+++++ 100772 100392	110350 101975	121080 101457	112450 101616	Ave		106261.46 8				7.1		20.0			
Picric acid	+++++ 78100 78816	92000 79550	91500 79403	83170 79230	Ave		82721.107 1				7.0		20.0			
1,3,5-Trinitrobenzene	247605 211904 216811	201497 217647	226766 220329	220699 219598	Ave		220317.35 4				5.6		20.0			
1,3-Dinitrobenzene	304591 284922 294659	300349 293466	297944 294726	300389 295917	Ave		296329.29 9				1.9		20.0			
Nitrobenzene	198705 187737 194447	197809 193367	197052 194434	199980 194044	Ave		195285.94 8				1.9		20.0			
Tetryl	170858 167980 172330	166218 172575	177046 172692	178842 173240	Ave		172419.99 8				2.3		20.0			
Nitroglycerin	107780 65334 64661	80810 65580	73966 62107	71053 65275	Lin2	4204.1302 6	64107.750 8							0.9980		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
2,4,6-Trinitrotoluene	211952 197876 204255	206972 203262	209442 203674	212012 204895	Ave		206037.868				2.2		20.0			
4-Amino-2,6-dinitrotoluene	159441 143209 145339	176424 145884	157203 145937	154895 146581	Ave		152767.994				7.0		20.0			
2-Amino-4,6-dinitrotoluene	211753 195992 200761	220767 202107	214920 201639	211185 203212	Ave		206926.219				3.9		20.0			
2,6-Dinitrotoluene	139841 139335 142809	146763 140697	146614 143092	144990 143569	Ave		143078.761				1.9		20.0			
2,4-Dinitrotoluene	293227 274622 284165	296066 283989	291773 282943	292450 283876	Ave		287012.272				2.4		20.0			
2-Nitrotoluene	134600 121368 124876	136850 124703	132320 124706	131380 124724	Ave		128391.846				4.2		20.0			
4-Nitrotoluene	117465 104032 107464	131387 107423	114251 107231	110609 107352	Ave		111912.732				7.5		20.0			
3-Nitrotoluene	157343 133626 137530	155894 136853	143596 136770	141648 136955	Ave		142246.281				6.1		20.0			
PETN	79010 71928 73997	74720 74156	74586 74227	75747 74637	Ave		74778.5667				2.5		20.0			
1,2-Dinitrobenzene	119500 126156 131759	119950 130943	130080 131307	132180 132080	Ave		128217.205				4.0		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.: 280-149116-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Ave	906 33261	1680 58367	4242 83899	8561 208165	20261	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	+++++ 40790	2207 71020	6054 101616	11245 250979	25193	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	+++++ 31820	1840 55582	4575 79230	8317 197040	19525	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2481 87233	4038 154539	11361 220037	22114 543111	53082	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	3052 117621	6019 206721	14927 296509	30099 738121	71373	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitrobenzene	Ave	1995 77656	3972 136648	9892 194820	20078 488061	47122	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	1712 69168	3331 121126	8870 173586	17920 431686	42079	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Lin2	10778 262320	16162 434747	36983 652752	71053 1616536	163334	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2128 81630	4156 143142	10514 205715	21286 512679	49667	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	1596 58412	3532 102258	7868 146728	15505 363710	35838	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2126 81166	4433 141712	10789 204025	21203 503909	49194	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	1404 56504	2947 100565	7360 144143	14557 358451	34973	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	2944	5945	14647	29362	68930	0.0100	0.0201	0.0502	0.100	0.251

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		114050	198852	285012	713254		0.402	0.703	1.00	2.51	
2-Nitrotoluene	Ave	1346	2737	6616	13138	30342	0.0100	0.0200	0.0500	0.100	0.250
		49881	87294	124724	312191		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	1177	2633	5724	11083	26060	0.0100	0.0200	0.0501	0.100	0.251
		43055	75212	107567	269197		0.401	0.701	1.00	2.51	
3-Nitrotoluene	Ave	1575	3121	7187	14179	33440	0.0100	0.0200	0.0501	0.100	0.250
		54796	95835	137092	344169		0.400	0.701	1.00	2.50	
PETN	Ave	7901	14944	37293	75747	179819	0.100	0.200	0.500	1.00	2.50
		296622	519589	746366	1849935		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	1195	2399	6504	13218	31539	0.0100	0.0200	0.0500	0.100	0.250
		52377	91915	132080	329398		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\011-0501.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-May-2021 18:01:04 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:06 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:15:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	208165	2.50	2.47	M
7 RDX	1	7.592	7.598	-0.006	250979	2.50	2.36	
8 2,4,6-Trinitrophenol	1	7.879	7.958	-0.079	197040	2.50	2.38	
$ 9 1,2-Dinitrobenzene	1	8.512	8.525	-0.013	329398	2.50	2.57	
10 1,3,5-Trinitrobenzene	1	8.646	8.651	-0.005	543111	2.51	2.47	
11 1,3-Dinitrobenzene	1	9.265	9.278	-0.013	738121	2.51	2.49	
12 Nitrobenzene	1	9.652	9.664	-0.012	488061	2.51	2.50	
14 Tetryl	1	9.972	9.978	-0.006	431686	2.51	2.50	
15 Nitroglycerin	2	10.425	10.438	-0.013	1616536	25.0	25.2	
16 2,4,6-Trinitrotoluene	1	10.899	10.904	-0.005	512679	2.51	2.49	
17 4-Amino-2,6-dinitrotoluene	1	11.099	11.111	-0.012	363710	2.50	2.38	
18 2-Amino-4,6-dinitrotoluene	1	11.352	11.371	-0.019	503909	2.51	2.44	
19 2,6-Dinitrotoluene	1	11.519	11.531	-0.012	358451	2.51	2.51	
20 2,4-Dinitrotoluene	1	11.692	11.704	-0.012	713254	2.51	2.49	
21 o-Nitrotoluene	1	12.565	12.578	-0.013	312191	2.50	2.43	
22 p-Nitrotoluene	1	12.999	13.011	-0.012	269197	2.51	2.41	
23 m-Nitrotoluene	1	13.592	13.604	-0.012	344169	2.50	2.42	
24 PETN	2	14.679	14.684	-0.005	1849935	25.0	24.7	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 250.00 Units: uL

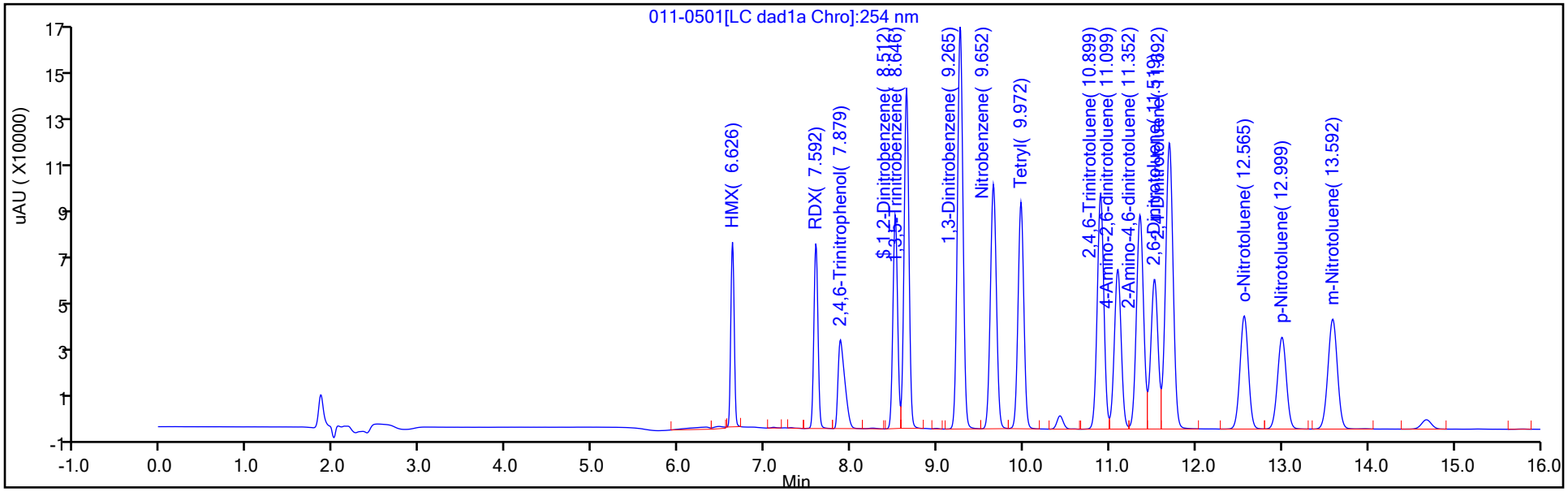
Report Date: 04-May-2021 13:25:06 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

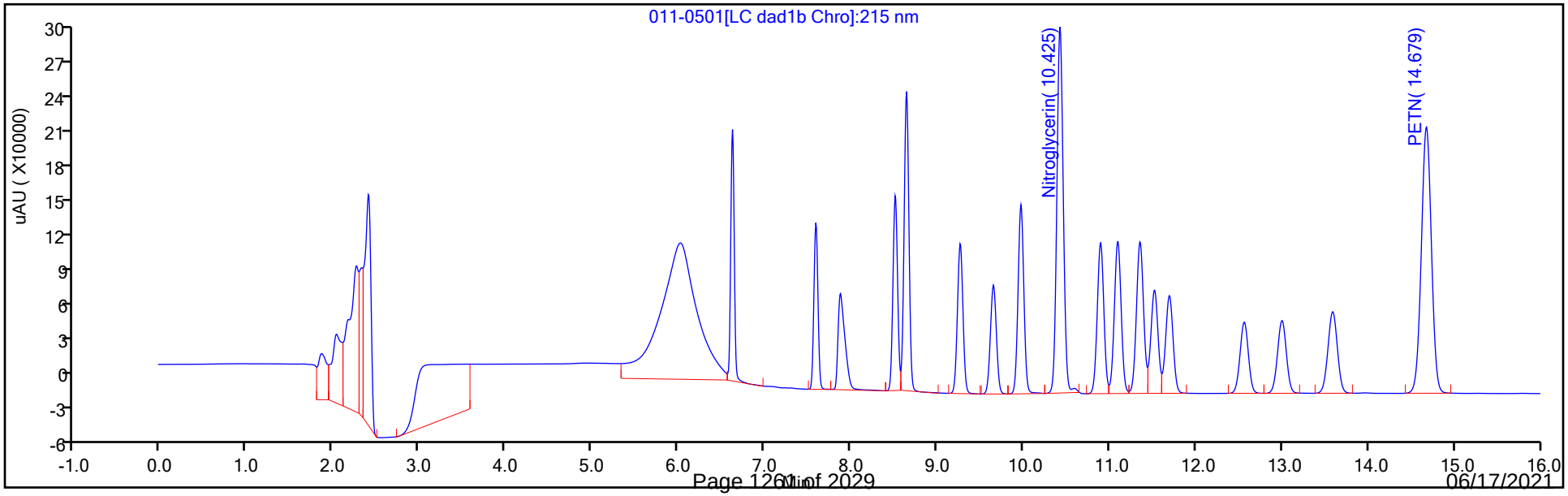
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d

Injection Date:	01-May-2021 18:01:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 9			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

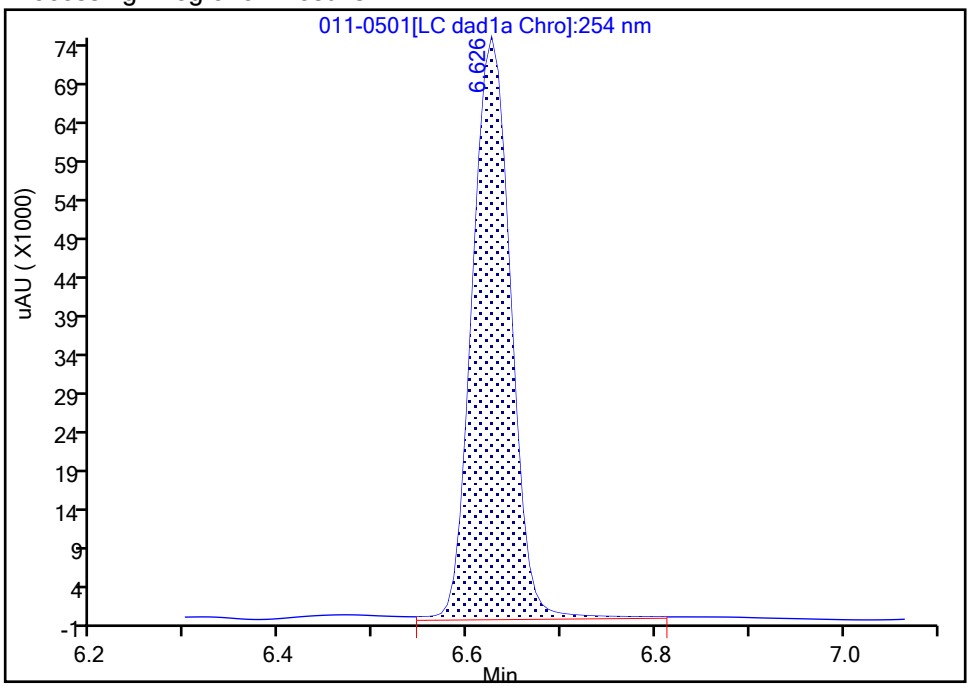
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d				
Injection Date:	01-May-2021 18:01:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

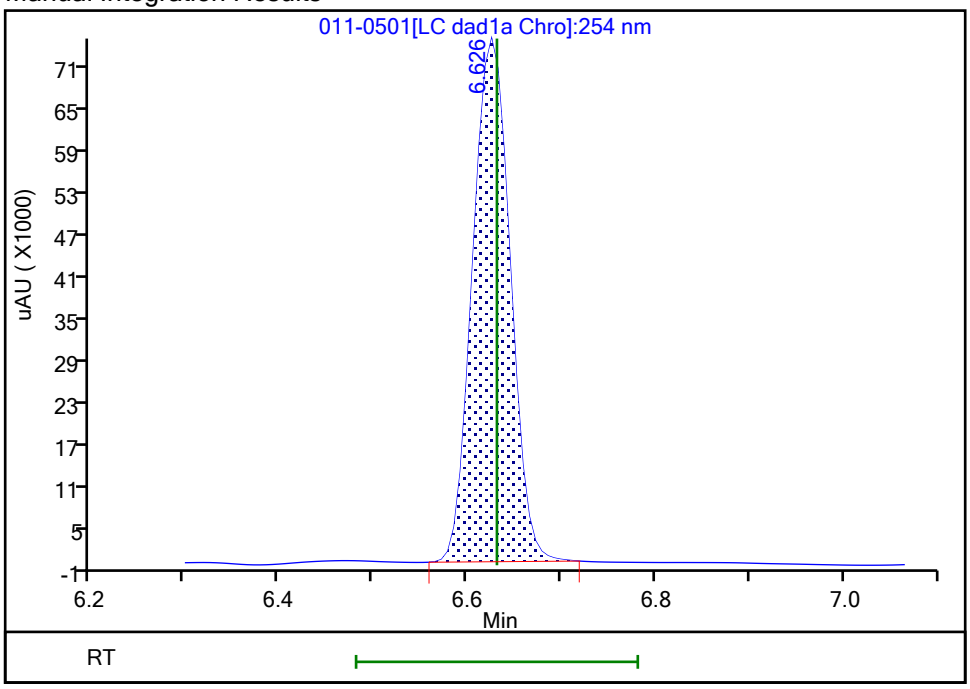
Processing Integration Results

RT: 6.63
Area: 214677
Amount: 2.481723
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 208165
Amount: 2.465784
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:15:42
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\012-0601.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-May-2021 18:23:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:07 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	83899	1.00	0.99	M
7 RDX	1	7.593	7.598	-0.005	101616	1.00	0.9563	
8 2,4,6-Trinitrophenol	1	7.920	7.958	-0.038	79230	1.00	0.9578	
$ 9 1,2-Dinitrobenzene	1	8.520	8.525	-0.005	132080	1.00	1.03	
10 1,3,5-Trinitrobenzene	1	8.646	8.651	-0.005	220037	1.00	1.00	
11 1,3-Dinitrobenzene	1	9.273	9.278	-0.005	296509	1.00	1.00	
12 Nitrobenzene	1	9.659	9.664	-0.005	194820	1.00	1.00	
14 Tetryl	1	9.973	9.978	-0.005	173586	1.00	1.01	
15 Nitroglycerin	2	10.433	10.438	-0.005	652752	10.0	10.1	
16 2,4,6-Trinitrotoluene	1	10.899	10.904	-0.005	205715	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	11.099	11.111	-0.012	146728	1.00	0.9605	
18 2-Amino-4,6-dinitrotoluene	1	11.359	11.371	-0.012	204025	1.00	0.9860	
19 2,6-Dinitrotoluene	1	11.526	11.531	-0.005	144143	1.00	1.01	
20 2,4-Dinitrotoluene	1	11.699	11.704	-0.005	285012	1.00	0.99	
21 o-Nitrotoluene	1	12.566	12.578	-0.012	124724	1.00	0.9714	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	107567	1.00	0.9612	
23 m-Nitrotoluene	1	13.593	13.604	-0.011	137092	1.00	0.9638	
24 PETN	2	14.679	14.684	-0.005	746366	10.0	9.98	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 100.00 Units: uL

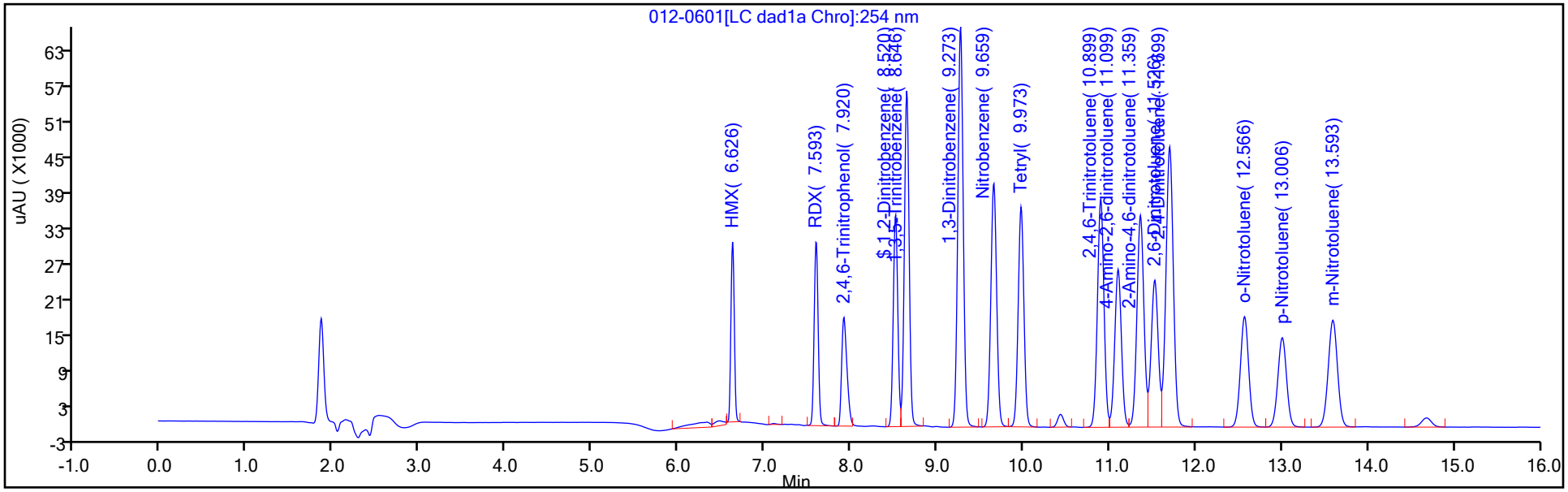
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

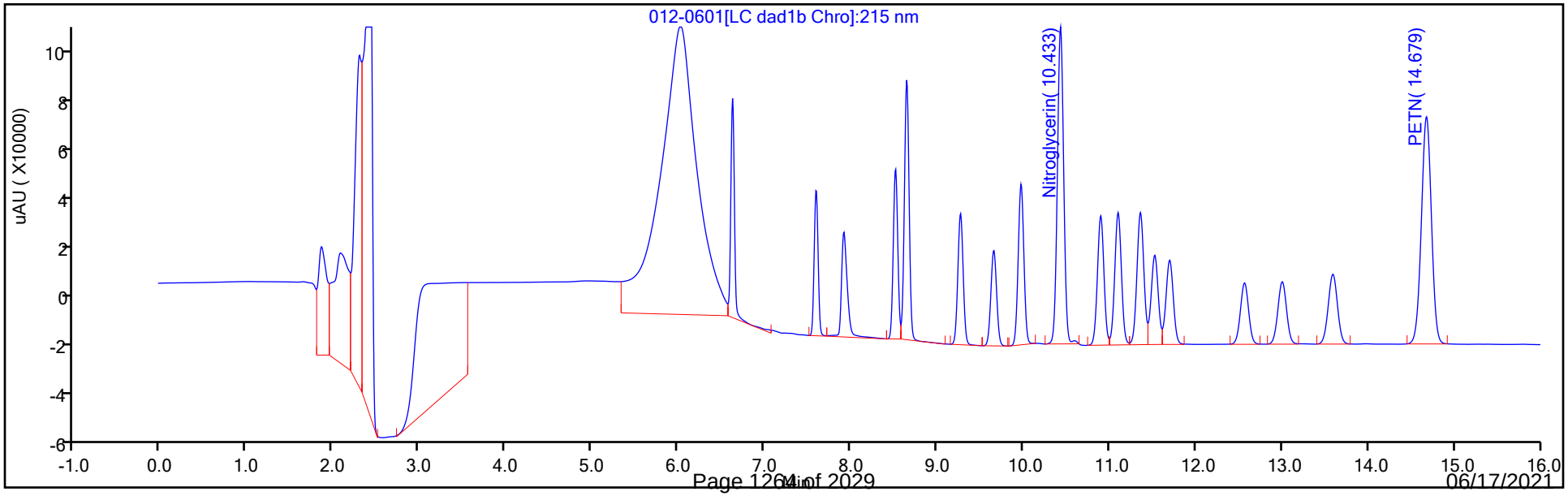
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d

Injection Date:	01-May-2021 18:23:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 8			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

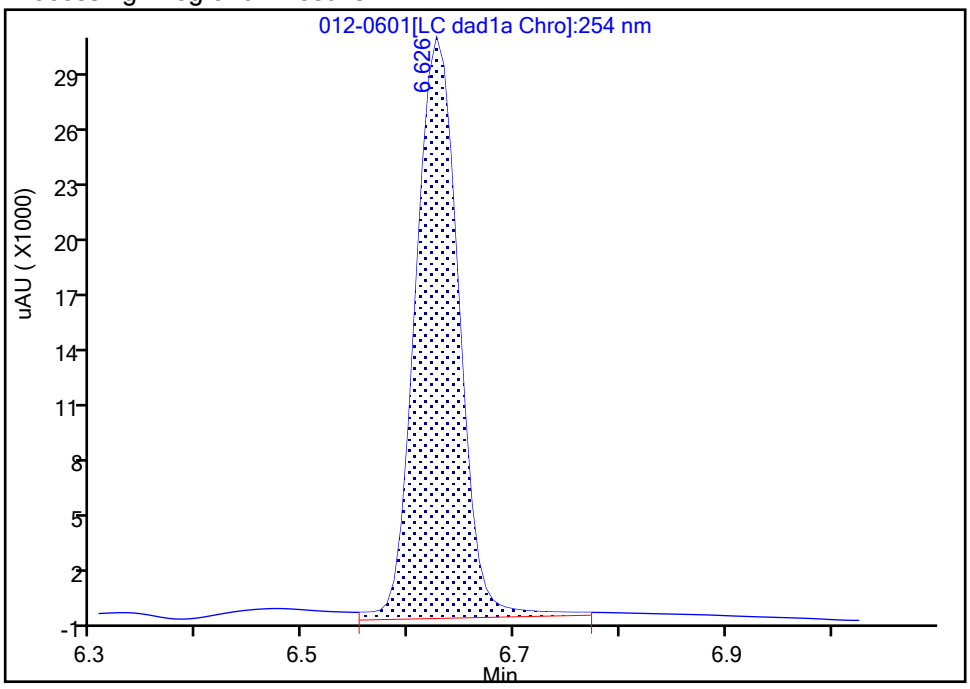
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d				
Injection Date:	01-May-2021 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

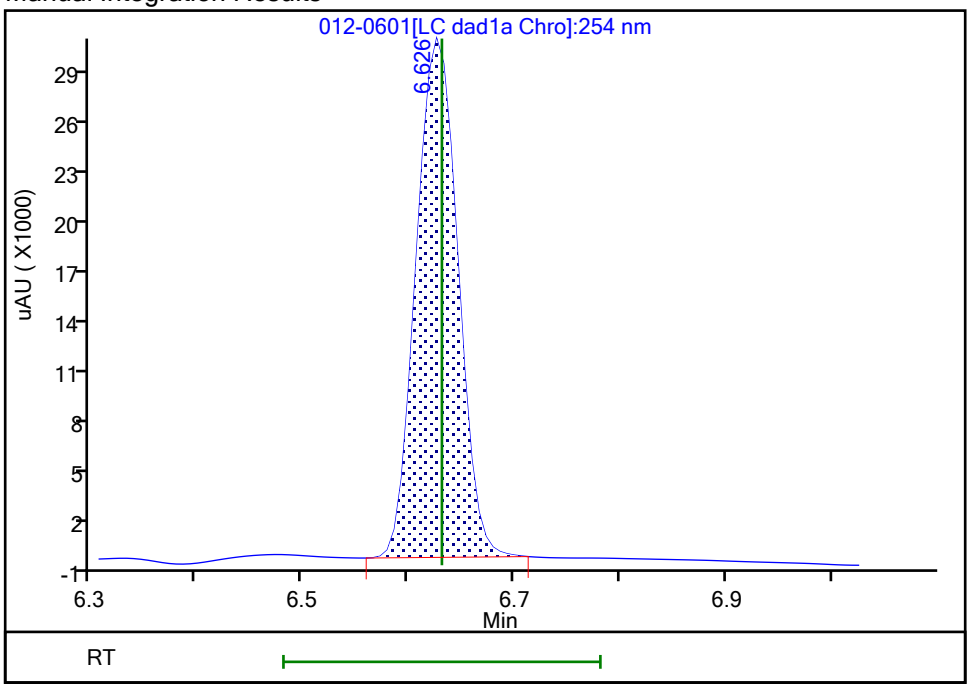
Processing Integration Results

RT: 6.63
Area: 88052
Amount: 1.025258
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 83899
Amount: 0.993812
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:15:59

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\013-0701.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-May-2021 18:46:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:07 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:11

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.631	6.631	0.000	58367	0.7000	0.6914	M
	7 RDX	1	7.604	7.598	0.006	71020	0.7000	0.6684	
	8 2,4,6-Trinitrophenol	1	7.937	7.958	-0.021	55582	0.7000	0.6719	
$	9 1,2-Dinitrobenzene	1	8.524	8.525	-0.001	91915	0.7000	0.7169	
	10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	154539	0.7014	0.7014	
	11 1,3-Dinitrobenzene	1	9.277	9.278	-0.001	206721	0.7014	0.6976	
	12 Nitrobenzene	1	9.664	9.664	0.000	136648	0.7028	0.6997	
	14 Tetryl	1	9.977	9.978	-0.001	121126	0.7014	0.7025	
	15 Nitroglycerin	2	10.437	10.438	-0.001	434747	7.00	6.72	
	16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	143142	0.7028	0.6947	
	17 4-Amino-2,6-dinitrotoluene	1	11.104	11.111	-0.007	102258	0.7007	0.6694	
	18 2-Amino-4,6-dinitrotoluene	1	11.364	11.371	-0.007	141712	0.7028	0.6848	
	19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	100565	0.7028	0.7029	
	20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	198852	0.7028	0.6928	
	21 o-Nitrotoluene	1	12.571	12.578	-0.007	87294	0.7000	0.6799	
	22 p-Nitrotoluene	1	13.011	13.011	0.000	75212	0.7014	0.6721	
	23 m-Nitrotoluene	1	13.597	13.604	-0.007	95835	0.7007	0.6737	
	24 PETN	2	14.684	14.684	0.000	519589	7.00	6.95	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 70.00 Units: uL

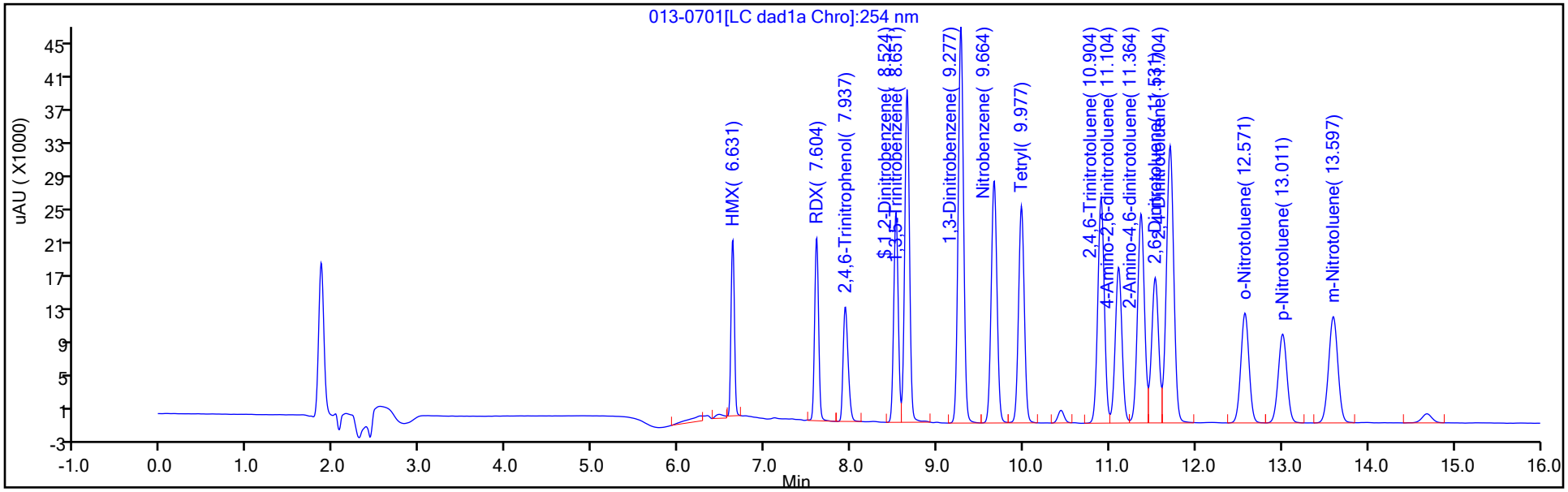
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

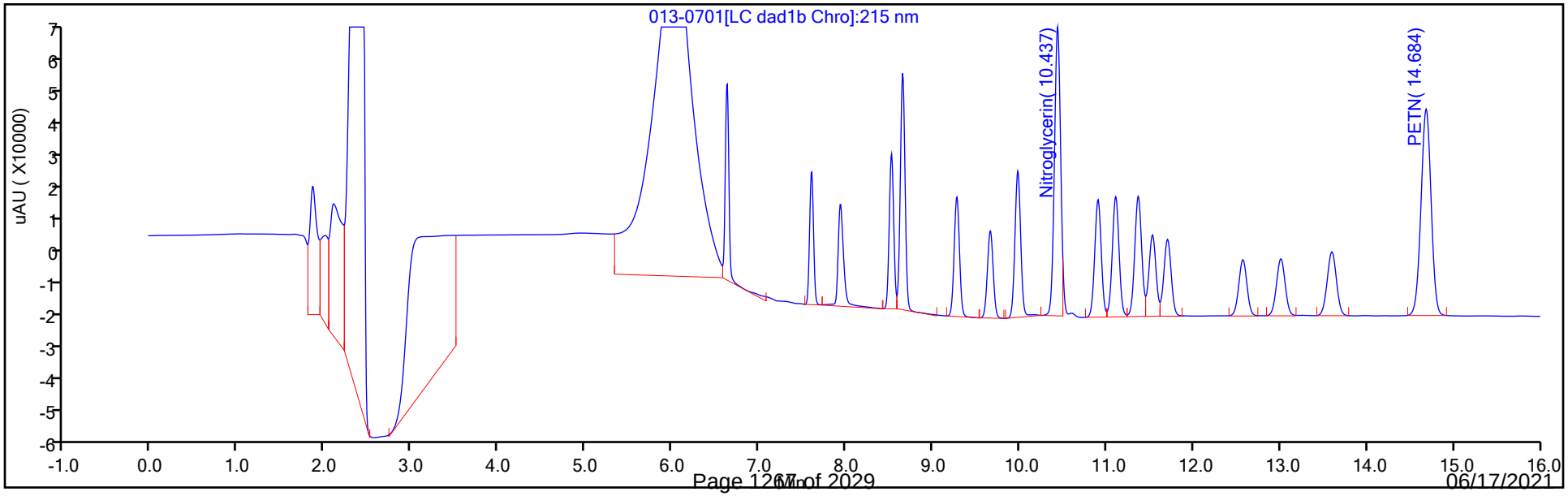
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d

Injection Date:	01-May-2021 18:46:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 7			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

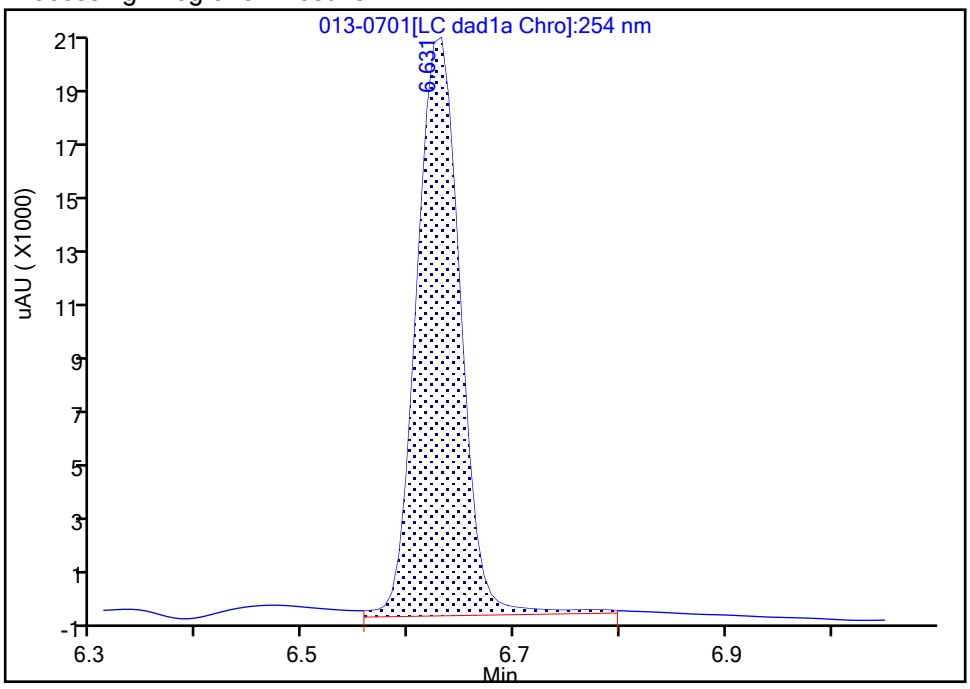
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d				
Injection Date:	01-May-2021 18:46:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

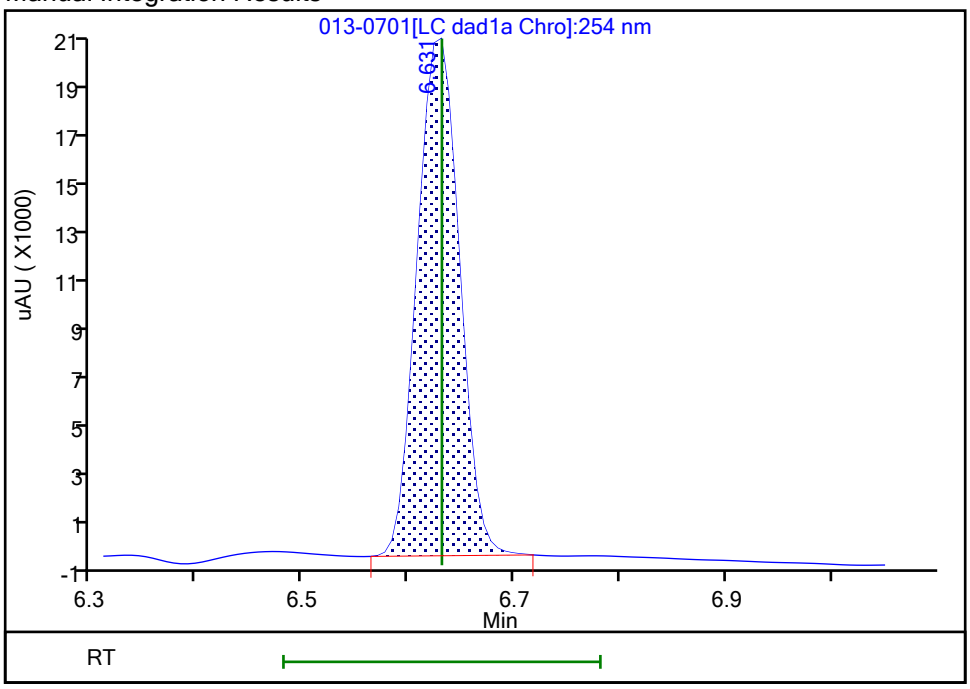
Processing Integration Results

RT: 6.63
Area: 61109
Amount: 0.713851
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 58367
Amount: 0.691377
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:10

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\014-0801.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-May-2021 19:09:54 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:08 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.627	6.631	-0.004	33261	0.4000	0.3940	M
7 RDX	1	7.601	7.598	0.003	40790	0.4000	0.3839	
8 2,4,6-Trinitrophenol	1	7.947	7.958	-0.011	31820	0.4000	0.3847	
$ 9 1,2-Dinitrobenzene	1	8.527	8.525	0.002	52377	0.4000	0.4085	
10 1,3,5-Trinitrobenzene	1	8.654	8.651	0.003	87233	0.4008	0.3959	
11 1,3-Dinitrobenzene	1	9.281	9.278	0.003	117621	0.4008	0.3969	
12 Nitrobenzene	1	9.667	9.664	0.003	77656	0.4016	0.3977	
14 Tetryl	1	9.981	9.978	0.003	69168	0.4008	0.4012	
15 Nitroglycerin	2	10.441	10.438	0.003	262320	4.00	4.03	
16 2,4,6-Trinitrotoluene	1	10.907	10.904	0.003	81630	0.4016	0.3962	
17 4-Amino-2,6-dinitrotoluene	1	11.114	11.111	0.003	58412	0.4004	0.3824	
18 2-Amino-4,6-dinitrotoluene	1	11.374	11.371	0.003	81166	0.4016	0.3922	
19 2,6-Dinitrotoluene	1	11.541	11.531	0.010	56504	0.4016	0.3949	
20 2,4-Dinitrotoluene	1	11.714	11.704	0.010	114050	0.4016	0.3974	
21 o-Nitrotoluene	1	12.581	12.578	0.003	49881	0.4000	0.3885	
22 p-Nitrotoluene	1	13.021	13.011	0.010	43055	0.4008	0.3847	
23 m-Nitrotoluene	1	13.607	13.604	0.003	54796	0.4004	0.3852	
24 PETN	2	14.694	14.684	0.010	296622	4.00	3.97	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 40.00 Units: uL

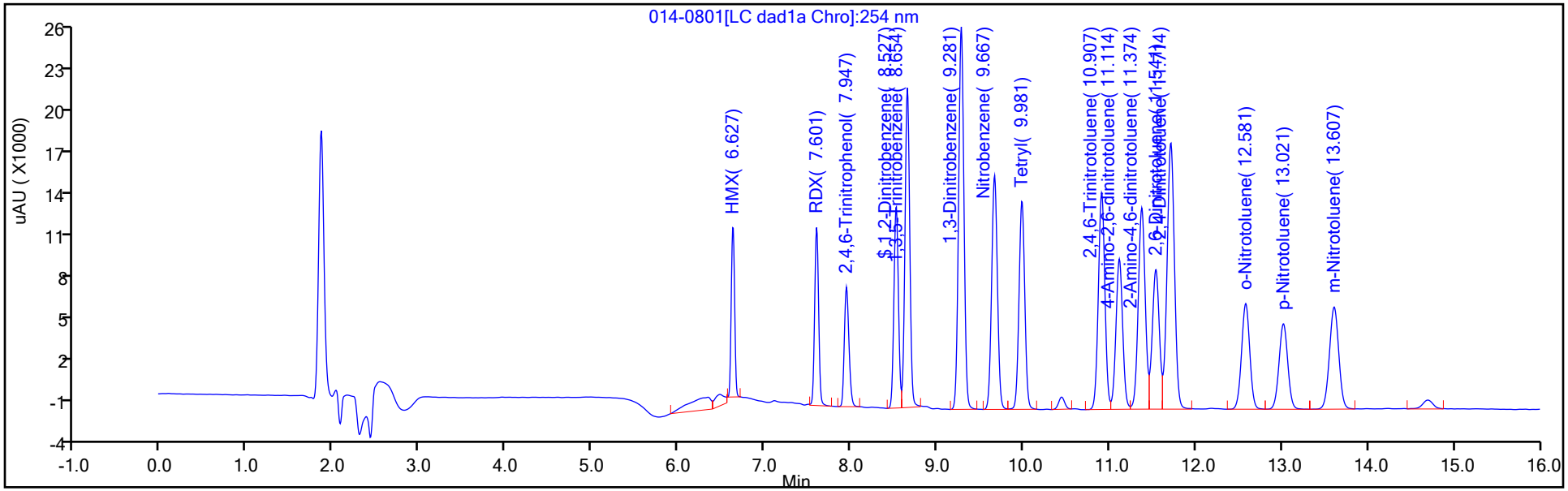
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

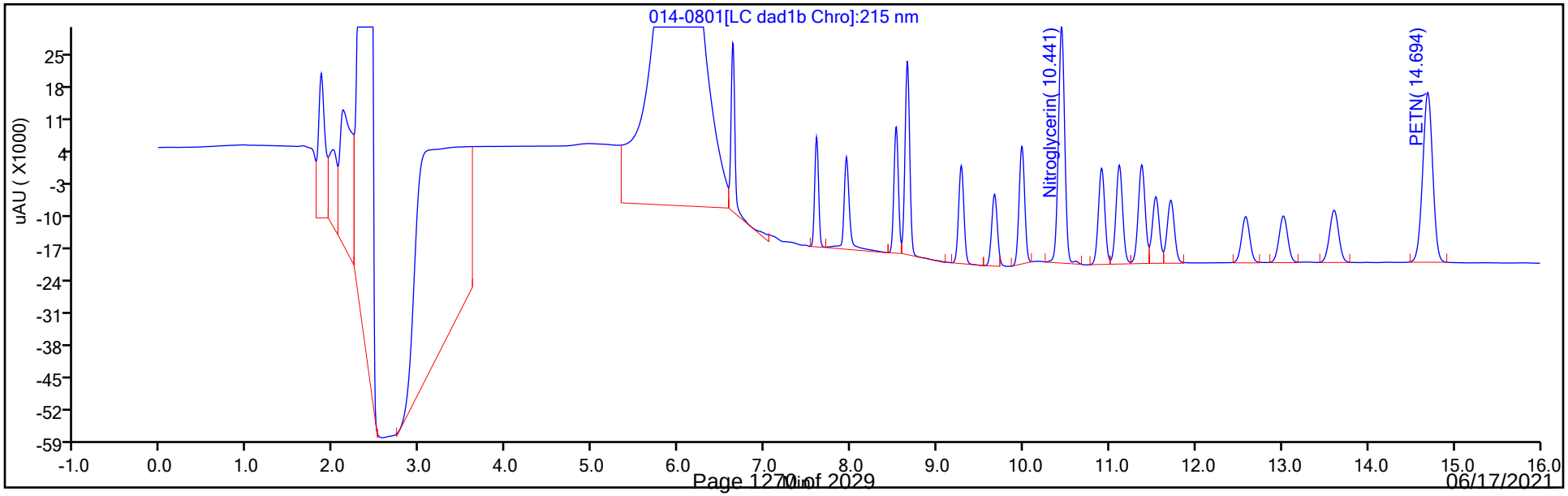
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d

Injection Date:	01-May-2021 19:09:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 6			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

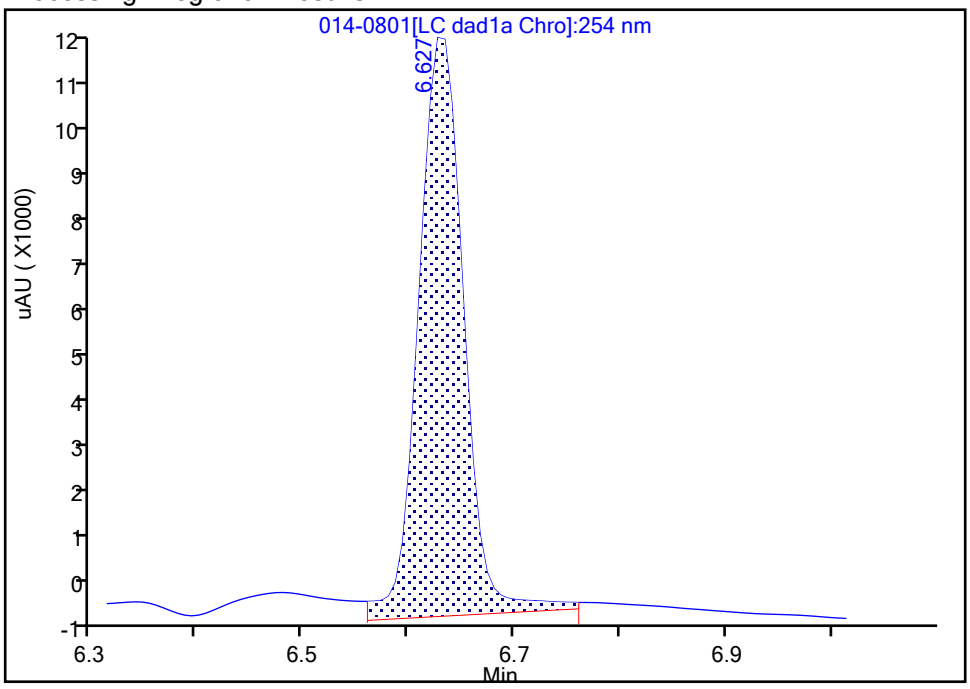
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d				
Injection Date:	01-May-2021 19:09:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

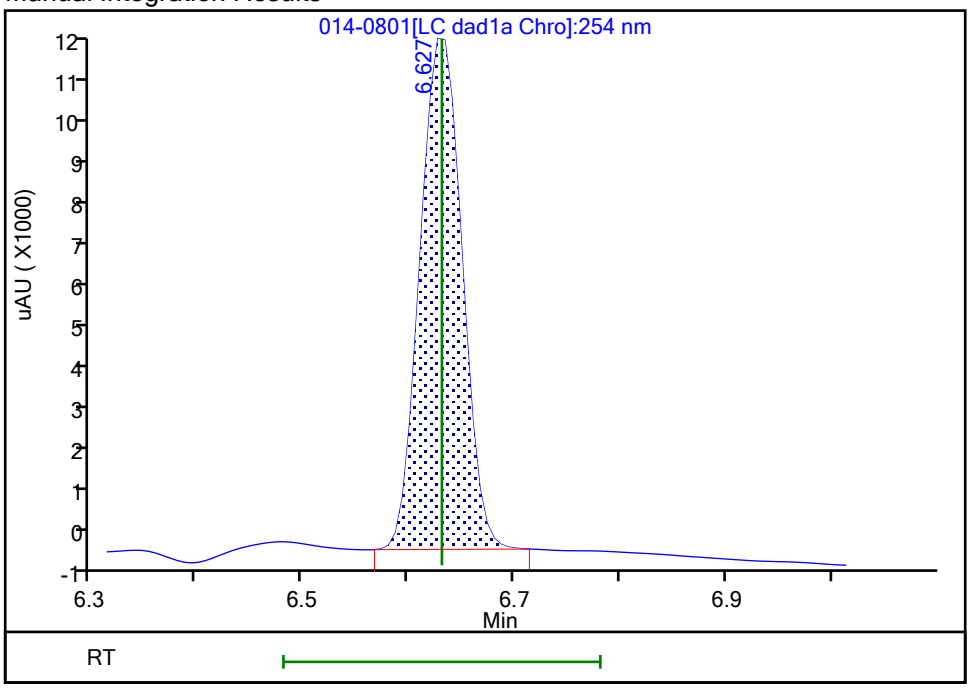
Processing Integration Results

RT: 6.63
Area: 36722
Amount: 0.425419
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 33261
Amount: 0.393988
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:17

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\015-0901.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-May-2021 19:32:52 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:08 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	20261	0.2500	0.2400	M
7 RDX	1	7.597	7.598	-0.001	25193	0.2500	0.2371	
8 2,4,6-Trinitrophenol	1	7.951	7.958	-0.007	19525	0.2500	0.2360	
$ 9 1,2-Dinitrobenzene	1	8.517	8.525	-0.008	31539	0.2500	0.2460	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	53082	0.2505	0.2409	
11 1,3-Dinitrobenzene	1	9.271	9.278	-0.007	71373	0.2505	0.2409	
12 Nitrobenzene	1	9.657	9.664	-0.007	47122	0.2510	0.2413	
14 Tetryl	1	9.977	9.978	-0.001	42079	0.2505	0.2440	
15 Nitroglycerin	2	10.437	10.438	-0.001	163334	2.50	2.48	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	49667	0.2510	0.2411	
17 4-Amino-2,6-dinitrotoluene	1	11.104	11.111	-0.007	35838	0.2503	0.2346	
18 2-Amino-4,6-dinitrotoluene	1	11.364	11.371	-0.007	49194	0.2510	0.2377	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	34973	0.2510	0.2444	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	68930	0.2510	0.2402	
21 o-Nitrotoluene	1	12.571	12.578	-0.007	30342	0.2500	0.2363	
22 p-Nitrotoluene	1	13.011	13.011	0.000	26060	0.2505	0.2329	
23 m-Nitrotoluene	1	13.597	13.604	-0.007	33440	0.2503	0.2351	
24 PETN	2	14.684	14.684	0.000	179819	2.50	2.40	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 25.00 Units: uL

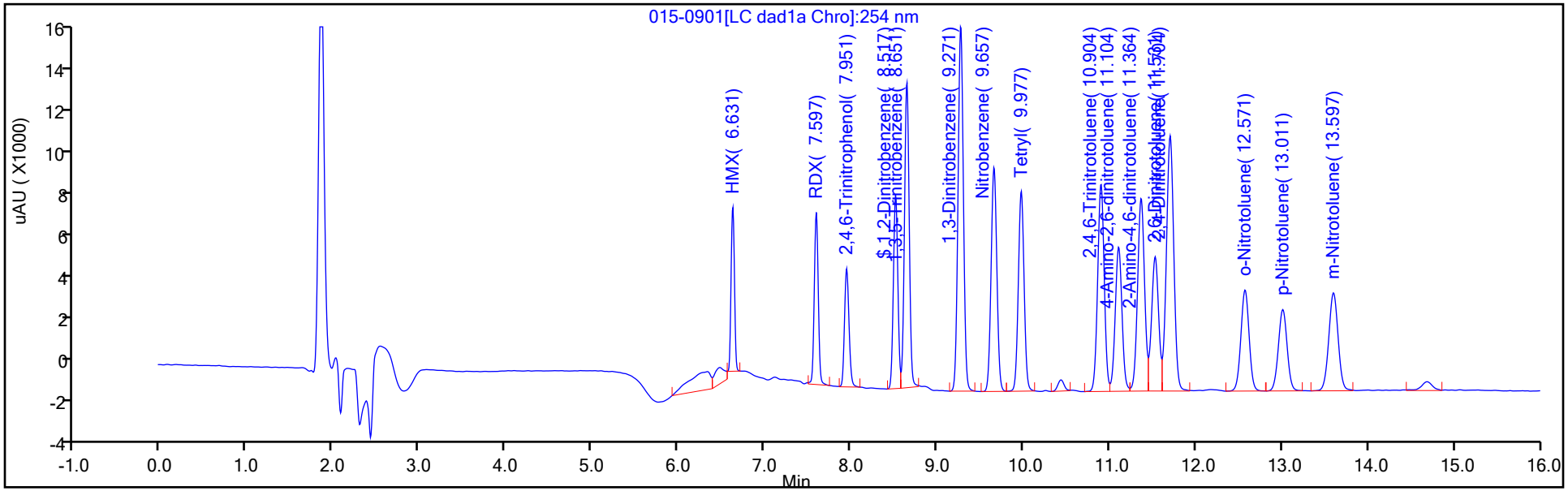
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

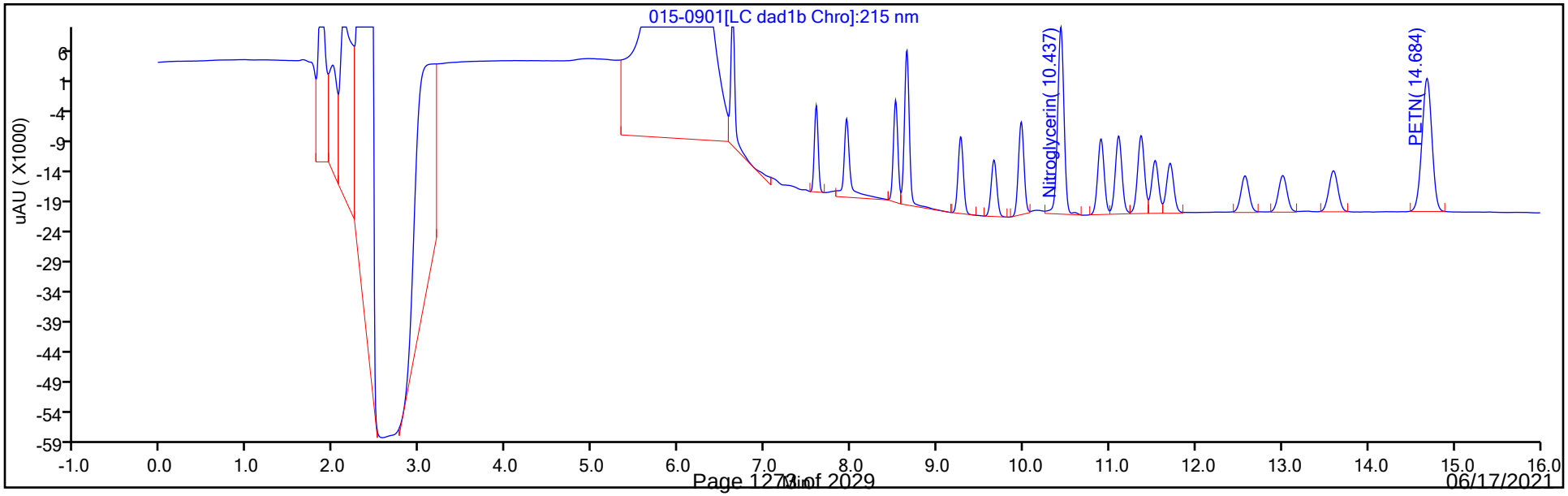
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d

Injection Date:	01-May-2021 19:32:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 5			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

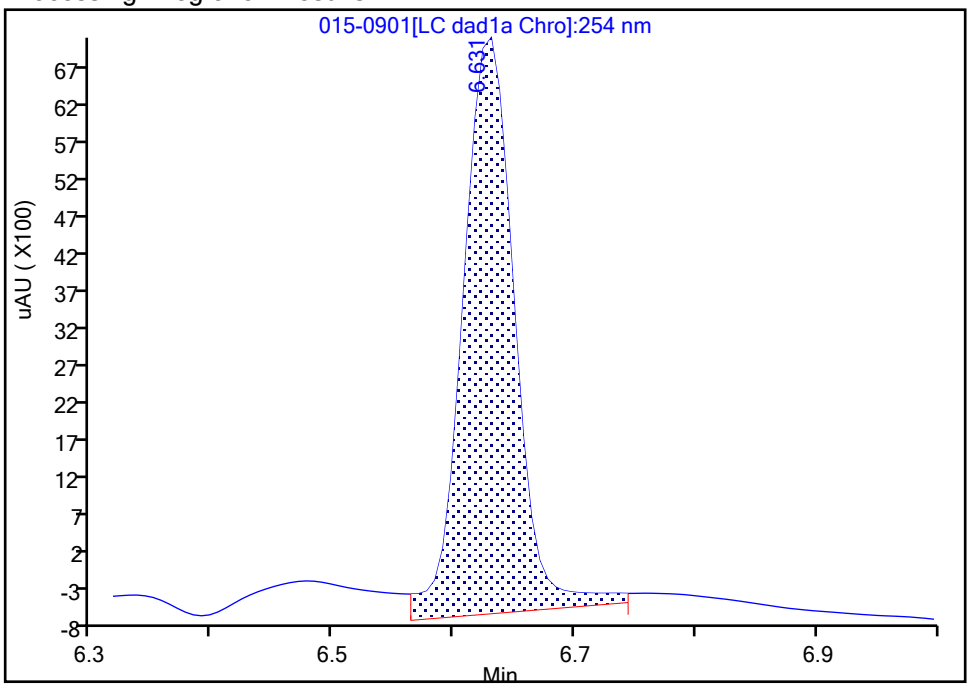
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d				
Injection Date:	01-May-2021 19:32:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

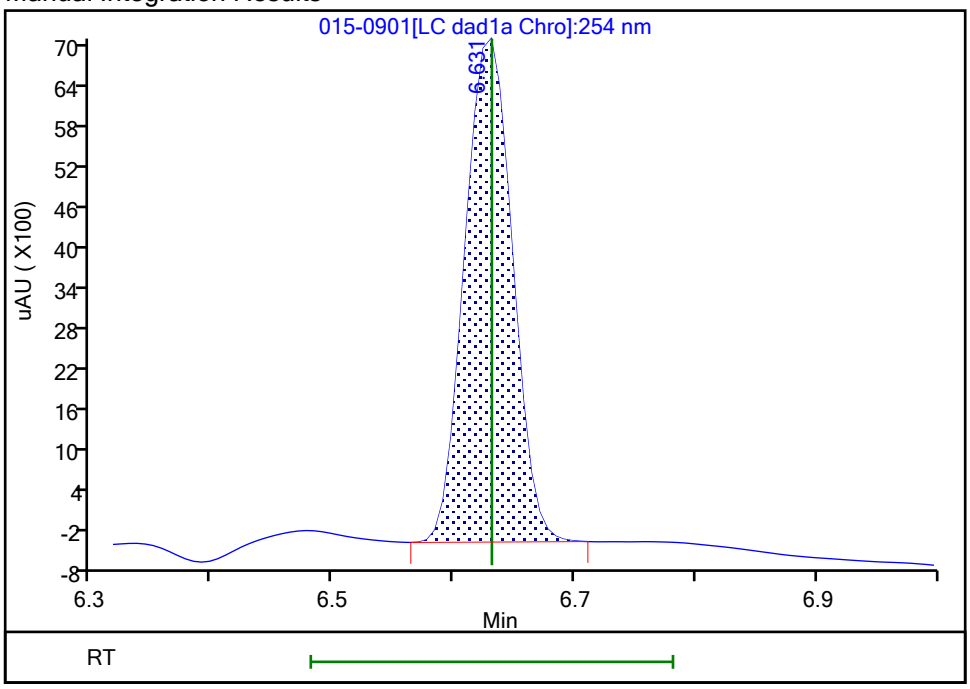
Processing Integration Results

RT: 6.63
Area: 22828
Amount: 0.260662
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 20261
Amount: 0.239998
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:27
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\016-1001.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-May-2021 19:55:49 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:09 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.631	6.631	0.000	8561	0.1000	0.1014	M
	7 RDX	1	7.598	7.598	0.000	11245	0.1000	0.1058	
	8 2,4,6-Trinitrophenol	1	7.958	7.958	0.000	8317	0.1000	0.1005	
$	9 1,2-Dinitrobenzene	1	8.525	8.525	0.000	13218	0.1000	0.1031	
	10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	22114	0.1002	0.1004	
	11 1,3-Dinitrobenzene	1	9.278	9.278	0.000	30099	0.1002	0.1016	
	12 Nitrobenzene	1	9.664	9.664	0.000	20078	0.1004	0.1028	
	14 Tetryl	1	9.978	9.978	0.000	17920	0.1002	0.1039	
	15 Nitroglycerin	2	10.438	10.438	0.000	71053	1.00	1.04	
	16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	21286	0.1004	0.1033	
	17 4-Amino-2,6-dinitrotoluene	1	11.111	11.111	0.000	15505	0.1001	0.1015	
	18 2-Amino-4,6-dinitrotoluene	1	11.371	11.371	0.000	21203	0.1004	0.1025	
	19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	14557	0.1004	0.1017	
	20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	29362	0.1004	0.1023	
	21 o-Nitrotoluene	1	12.578	12.578	0.000	13138	0.1000	0.1023	
	22 p-Nitrotoluene	1	13.011	13.011	0.000	11083	0.1002	0.0990	
	23 m-Nitrotoluene	1	13.604	13.604	0.000	14179	0.1001	0.0997	
	24 PETN	2	14.684	14.684	0.000	75747	1.00	1.01	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 10.00 Units: uL

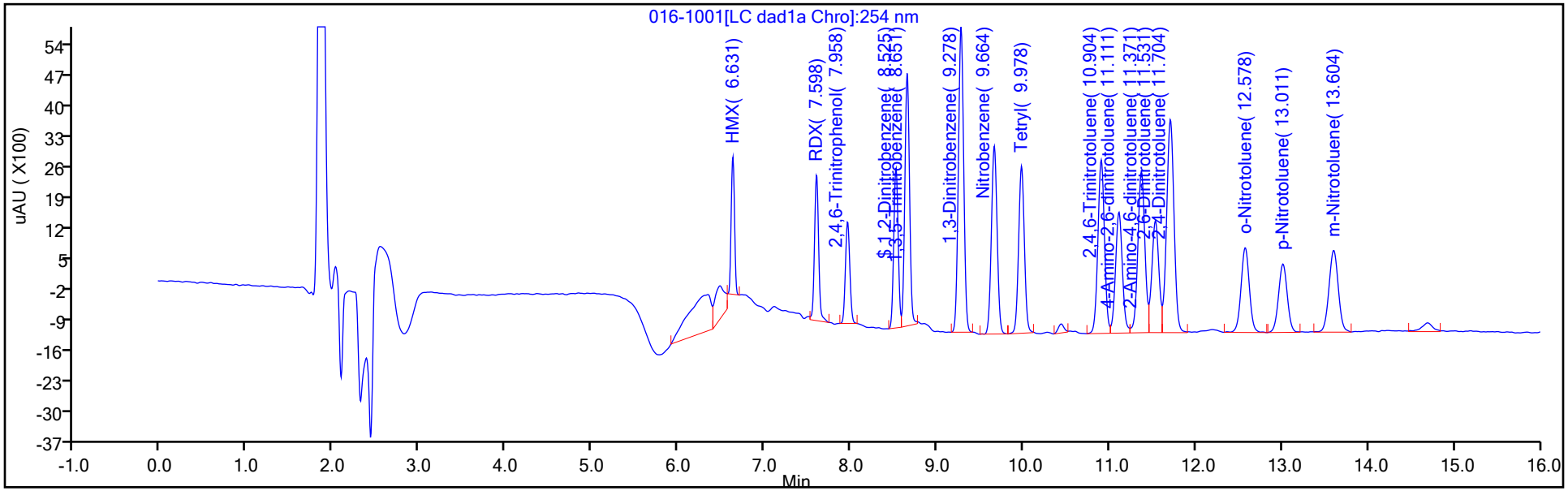
Report Date: 04-May-2021 13:25:09 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

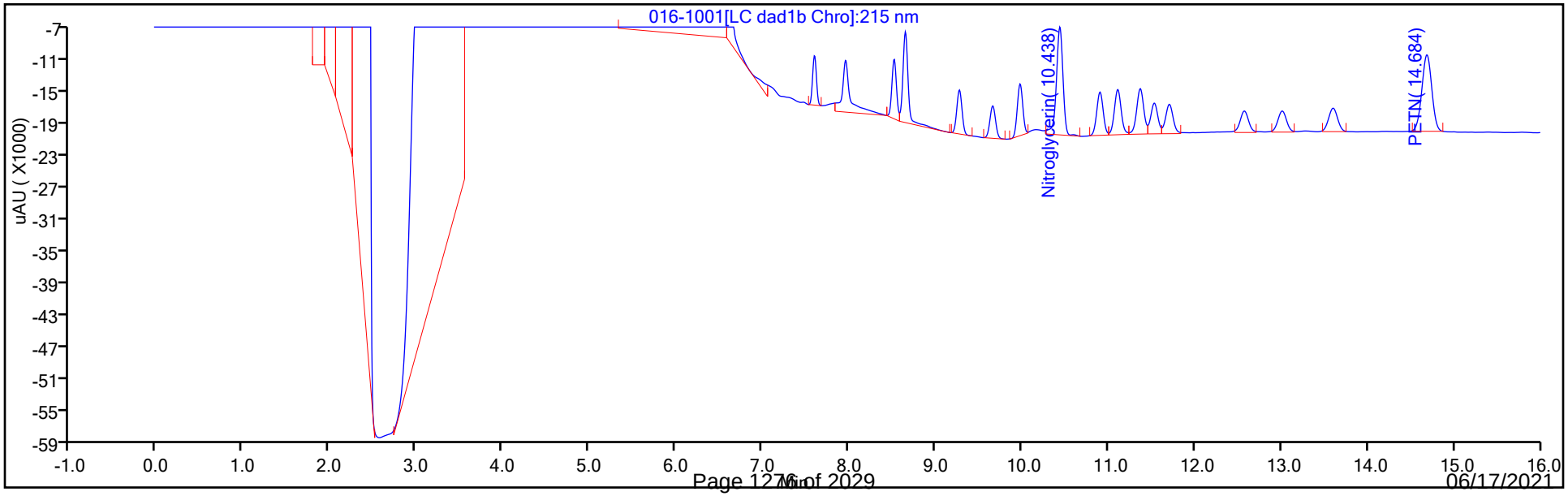
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d

Injection Date:	01-May-2021 19:55:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 4			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

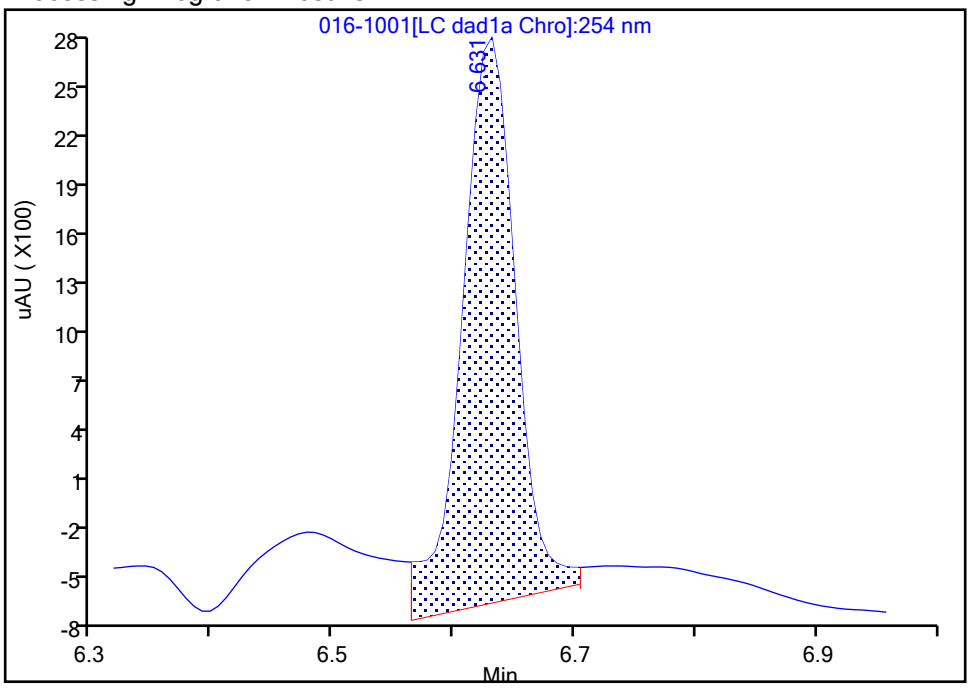
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d				
Injection Date:	01-May-2021 19:55:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

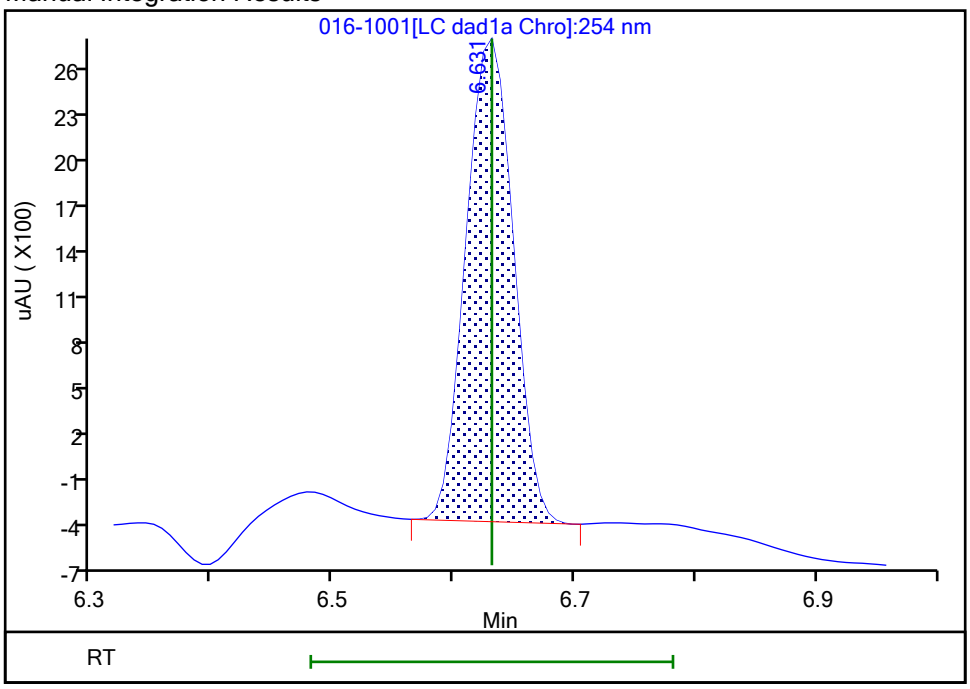
Processing Integration Results

RT: 6.63
Area: 10439
Amount: 0.111561
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 8561
Amount: 0.101408
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:35
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\017-1101.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-May-2021 20:18:45 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:10 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.628	6.631	-0.003	4242	0.0500	0.0502	M
7 RDX	1	7.602	7.598	0.004	6054	0.0500	0.0570	
8 2,4,6-Trinitrophenol	1	7.968	7.958	0.010	4575	0.0500	0.0553	
$ 9 1,2-Dinitrobenzene	1	8.522	8.525	-0.003	6504	0.0500	0.0507	
10 1,3,5-Trinitrobenzene	1	8.655	8.651	0.004	11361	0.0501	0.0516	
11 1,3-Dinitrobenzene	1	9.282	9.278	0.004	14927	0.0501	0.0504	
12 Nitrobenzene	1	9.662	9.664	-0.002	9892	0.0502	0.0507	
14 Tetryl	1	9.982	9.978	0.004	8870	0.0501	0.0514	
15 Nitroglycerin	2	10.442	10.438	0.004	36983	0.5000	0.5113	
16 2,4,6-Trinitrotoluene	1	10.908	10.904	0.004	10514	0.0502	0.0510	
17 4-Amino-2,6-dinitrotoluene	1	11.115	11.111	0.004	7868	0.0501	0.0515	
18 2-Amino-4,6-dinitrotoluene	1	11.375	11.371	0.004	10789	0.0502	0.0521	
19 2,6-Dinitrotoluene	1	11.535	11.531	0.004	7360	0.0502	0.0514	
20 2,4-Dinitrotoluene	1	11.708	11.704	0.004	14647	0.0502	0.0510	
21 o-Nitrotoluene	1	12.575	12.578	-0.003	6616	0.0500	0.0515	
22 p-Nitrotoluene	1	13.015	13.011	0.004	5724	0.0501	0.0511	
23 m-Nitrotoluene	1	13.602	13.604	-0.002	7187	0.0501	0.0505	
24 PETN	2	14.688	14.684	0.004	37293	0.5000	0.4987	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 5.00 Units: uL

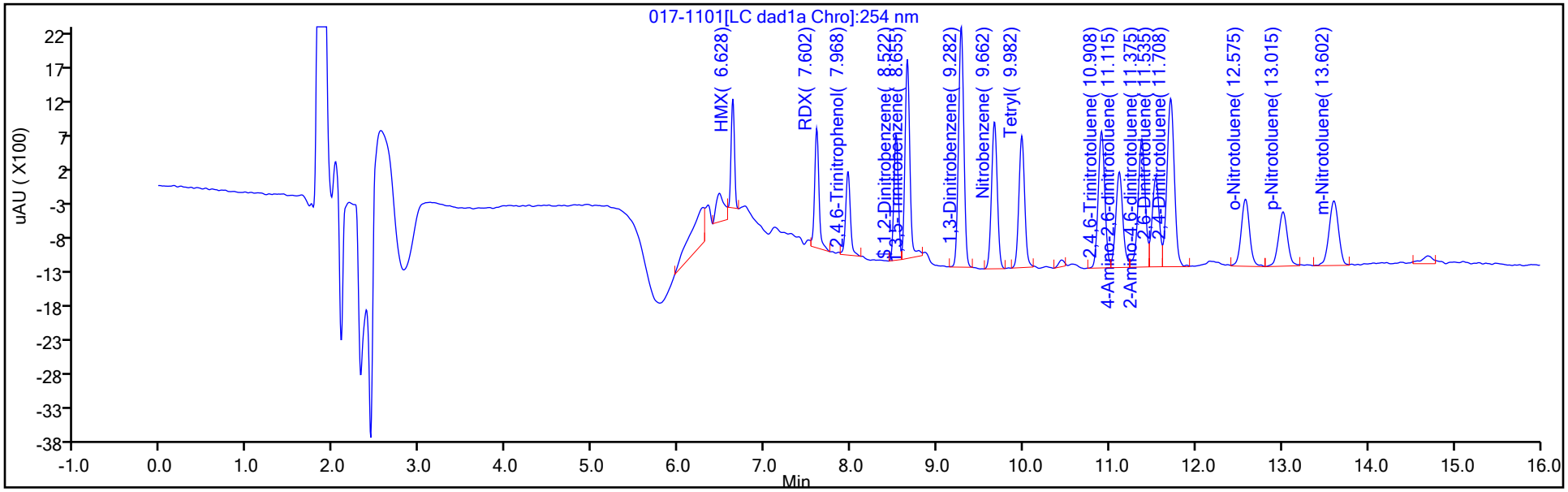
Report Date: 04-May-2021 13:25:10 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

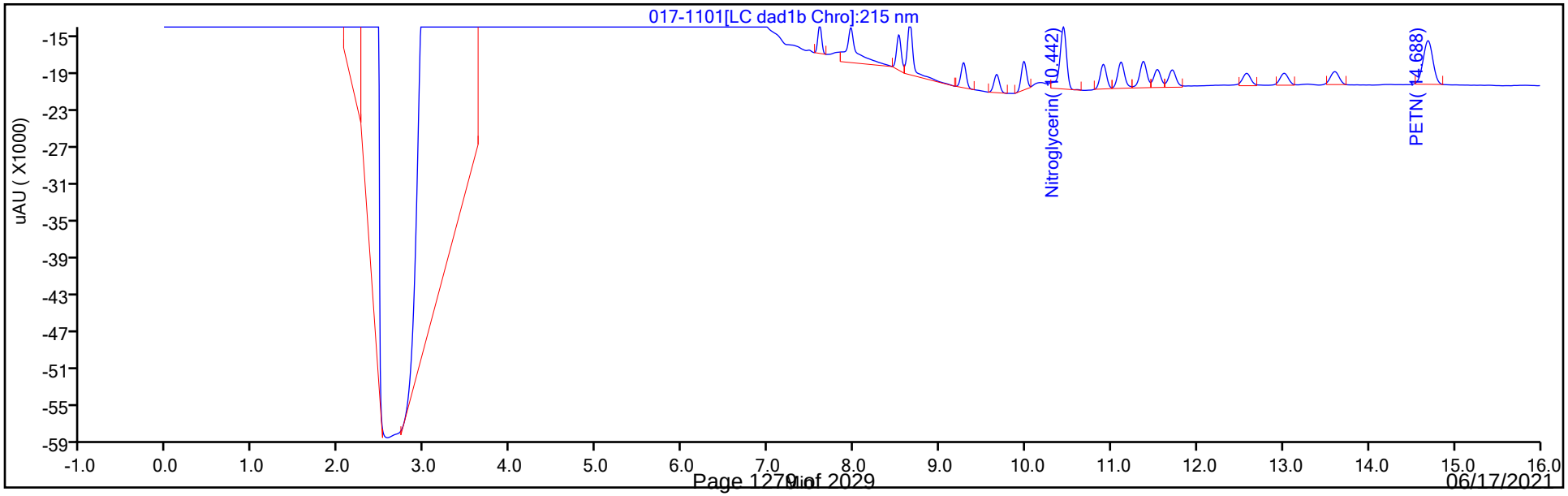
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d

Injection Date:	01-May-2021 20:18:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 3			Worklist Smp#:	17
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

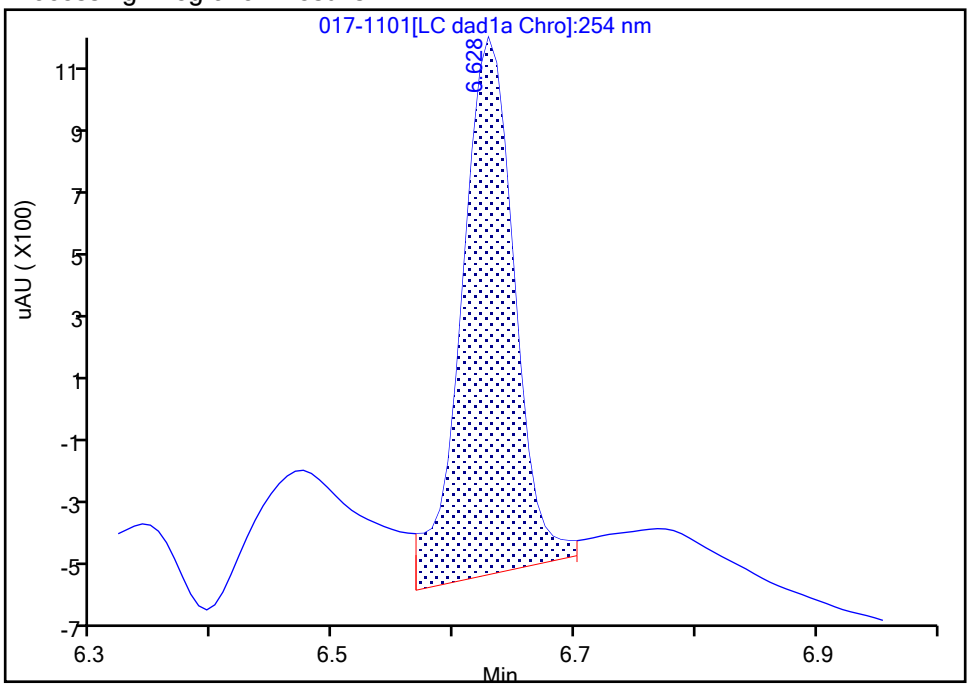
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d
Injection Date: 01-May-2021 20:18:45 Instrument ID: CHHPLC_X3
Lims ID: IC INT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

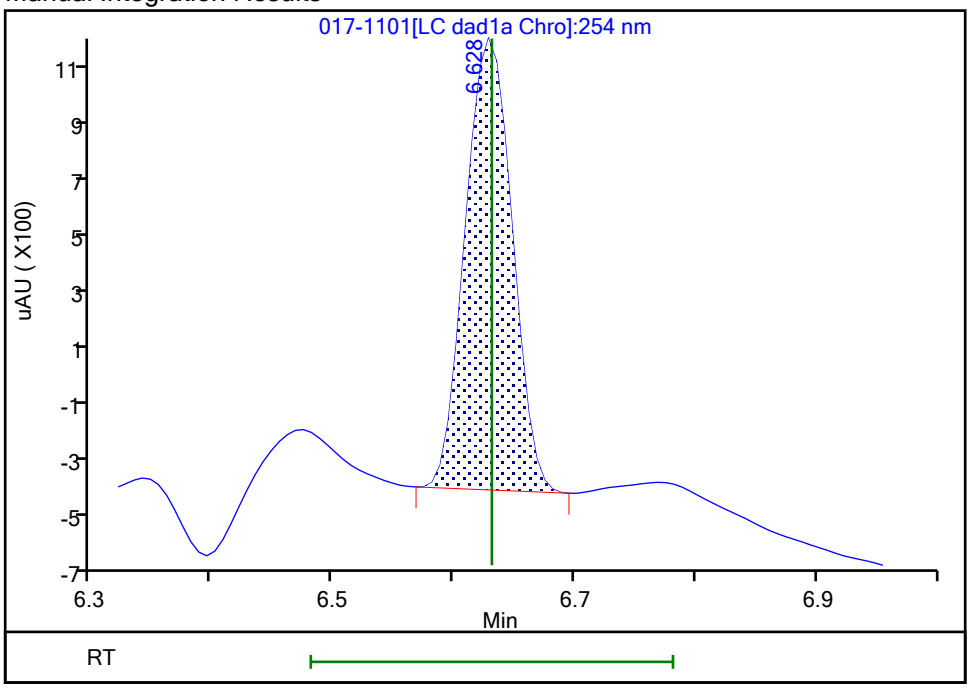
Processing Integration Results

RT: 6.63
Area: 5138
Amount: 0.048188
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 4242
Amount: 0.050248
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:49
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\018-1201.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-May-2021 20:41:41 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:10 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:17:07

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	1680	0.0200	0.0199	M
7 RDX	1	7.606	7.598	0.008	2207	0.0200	0.0208	M
8 2,4,6-Trinitrophenol	1	7.966	7.958	0.008	1840	0.0200	0.0222	
$ 9 1,2-Dinitrobenzene	1	8.526	8.525	0.001	2399	0.0200	0.0187	
10 1,3,5-Trinitrobenzene	1	8.653	8.651	0.002	4038	0.0200	0.0183	
11 1,3-Dinitrobenzene	1	9.280	9.278	0.002	6019	0.0200	0.0203	
12 Nitrobenzene	1	9.666	9.664	0.002	3972	0.0201	0.0203	
14 Tetryl	1	9.980	9.978	0.002	3331	0.0200	0.0193	M
15 Nitroglycerin	2	10.440	10.438	0.002	16162	0.2000	0.1865	
16 2,4,6-Trinitrotoluene	1	10.906	10.904	0.002	4156	0.0201	0.0202	
17 4-Amino-2,6-dinitrotoluene	1	11.106	11.111	-0.005	3532	0.0200	0.0231	
18 2-Amino-4,6-dinitrotoluene	1	11.366	11.371	-0.005	4433	0.0201	0.0214	
19 2,6-Dinitrotoluene	1	11.533	11.531	0.002	2947	0.0201	0.0206	
20 2,4-Dinitrotoluene	1	11.706	11.704	0.002	5945	0.0201	0.0207	
21 o-Nitrotoluene	1	12.573	12.578	-0.005	2737	0.0200	0.0213	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	2633	0.0200	0.0235	
23 m-Nitrotoluene	1	13.600	13.604	-0.004	3121	0.0200	0.0219	
24 PETN	2	14.680	14.684	-0.004	14944	0.2000	0.1998	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 2.00 Units: uL

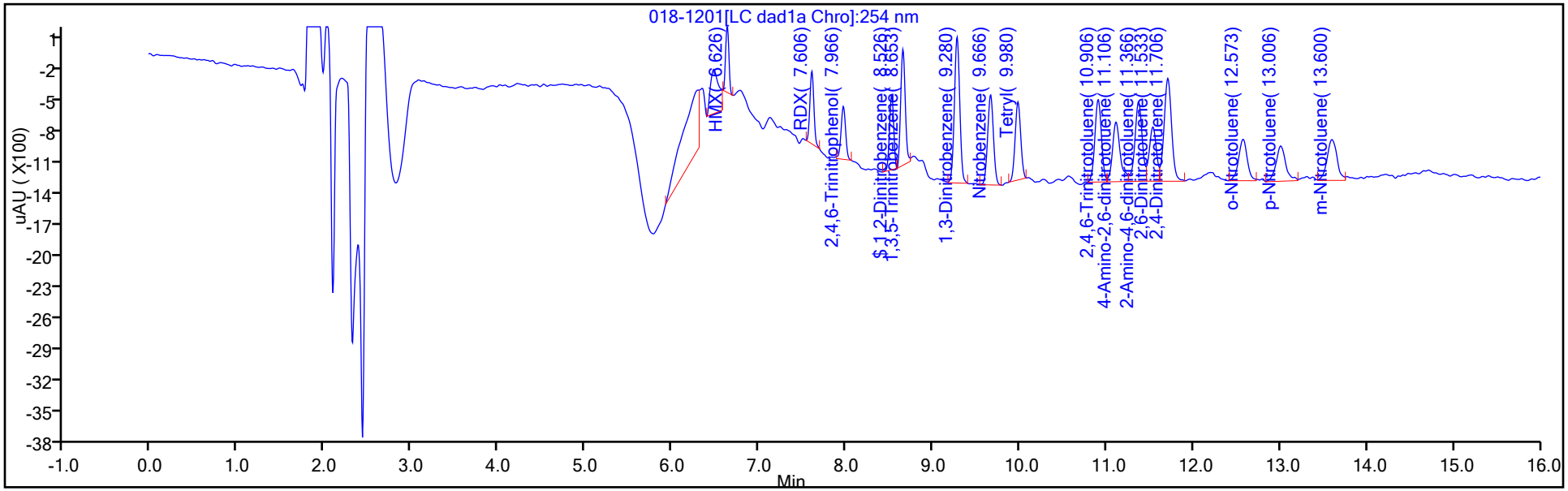
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

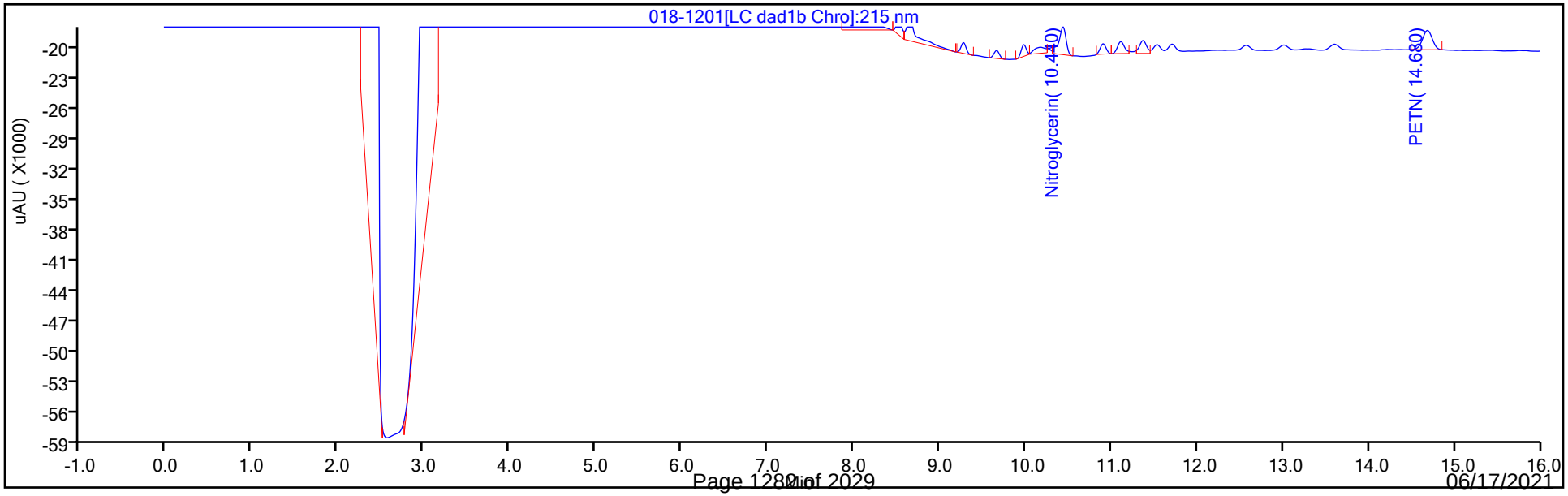
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d

Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 2			Worklist Smp#:	18
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

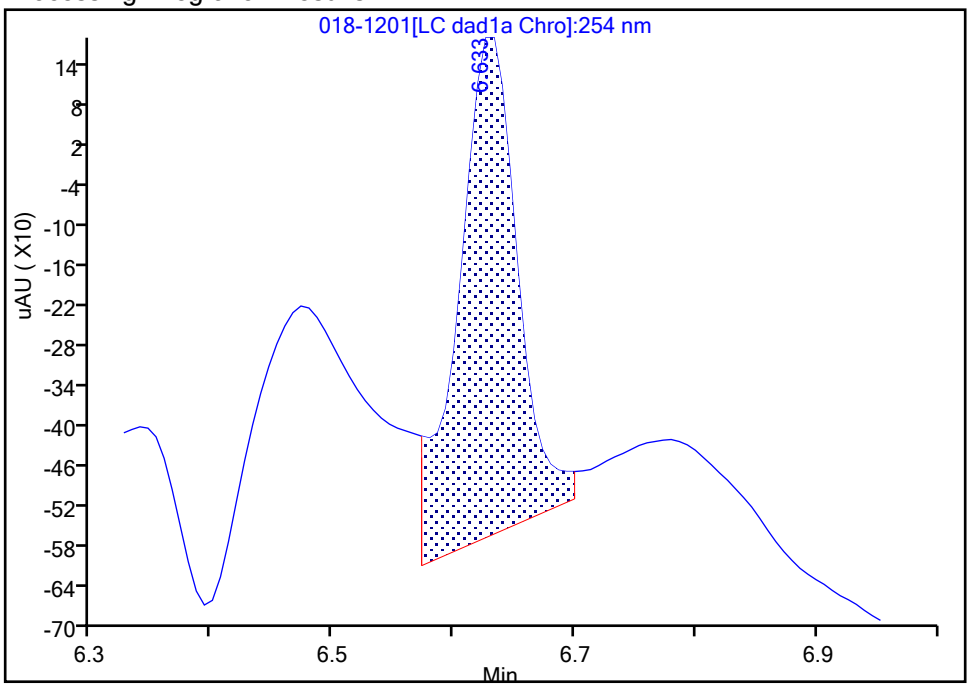
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d
Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

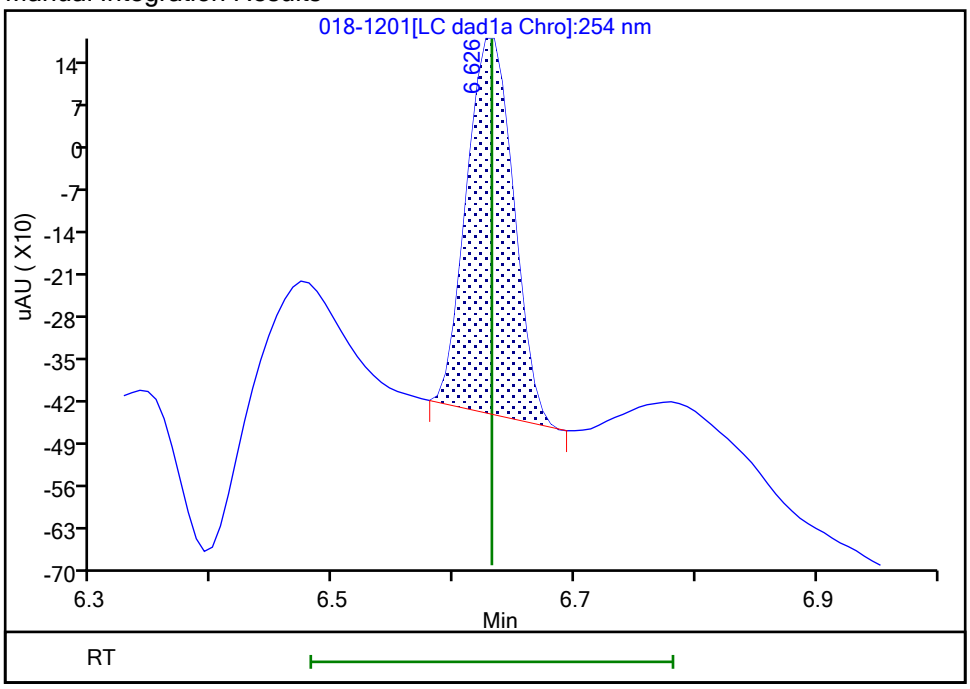
Processing Integration Results

RT: 6.63
Area: 2563
Amount: 0.017888
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 1680
Amount: 0.019900
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

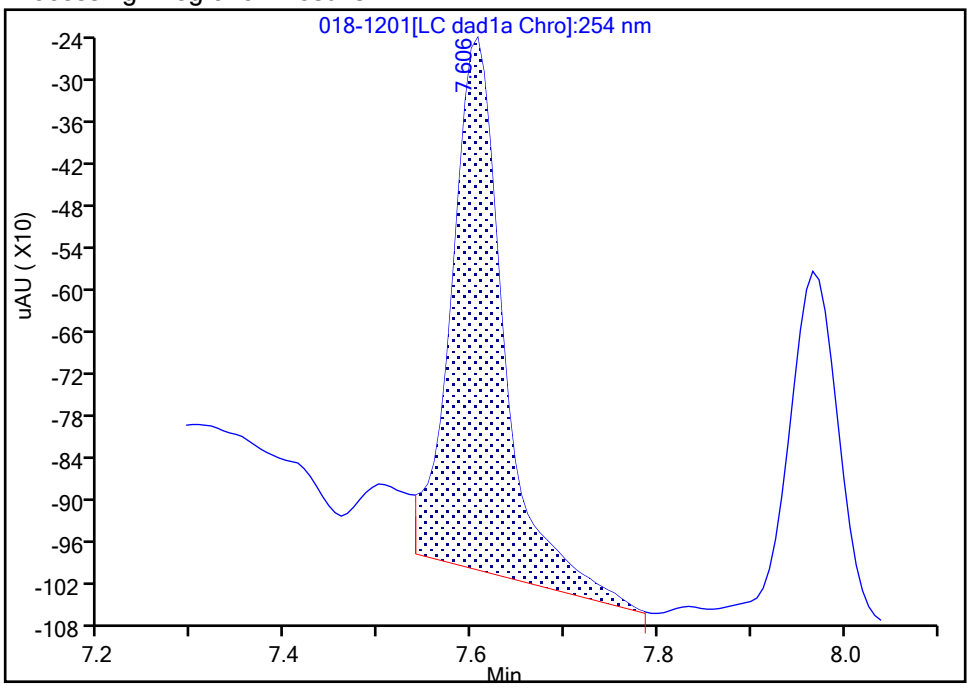
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

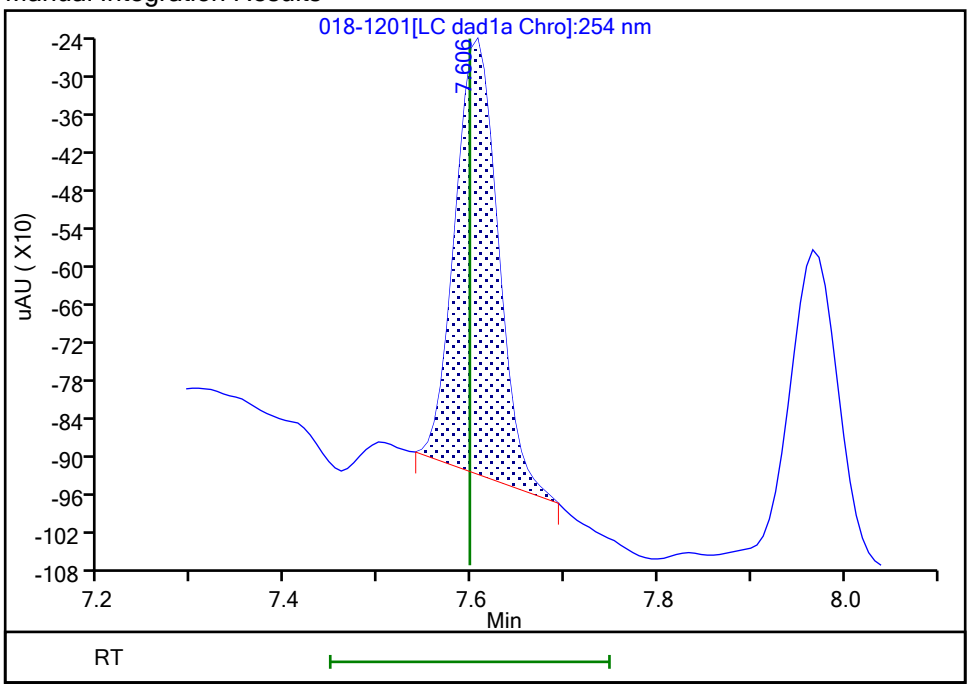
Processing Integration Results

RT: 7.61
Area: 2982
Amount: 0.020729
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 2207
Amount: 0.020770
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:38

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

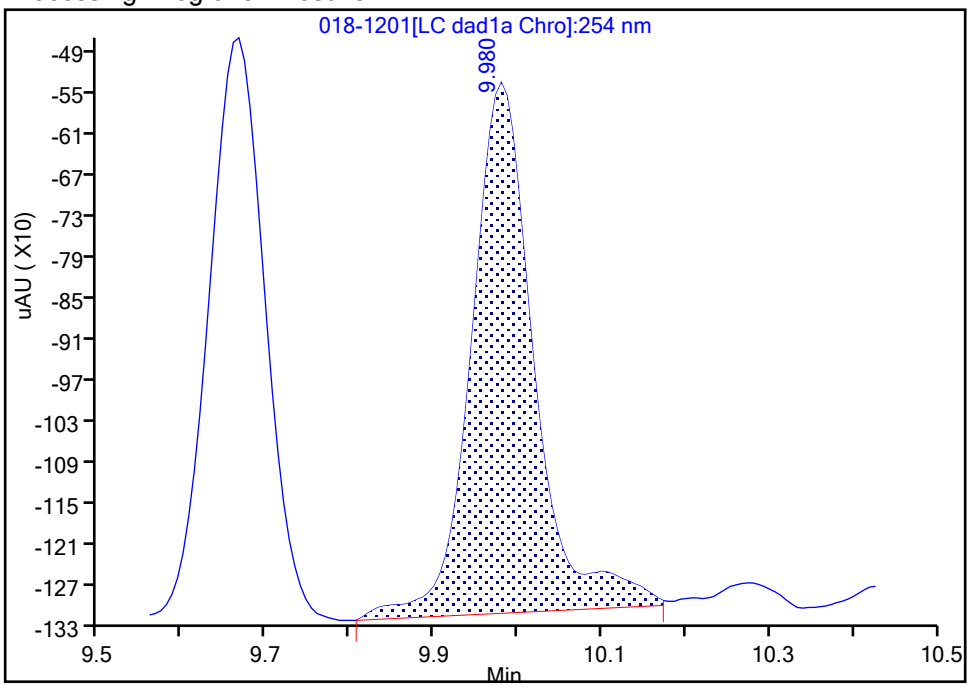
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

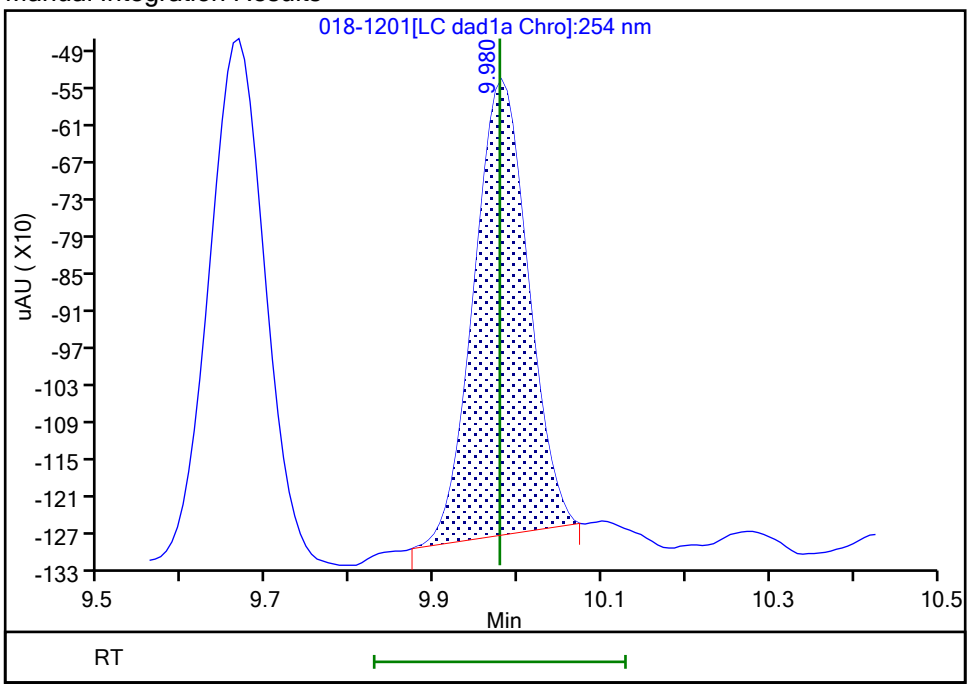
Processing Integration Results

RT: 9.98
Area: 4075
Amount: 0.022280
Amount Units: ug/mL



Manual Integration Results

RT: 9.98
Area: 3331
Amount: 0.019319
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:23:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

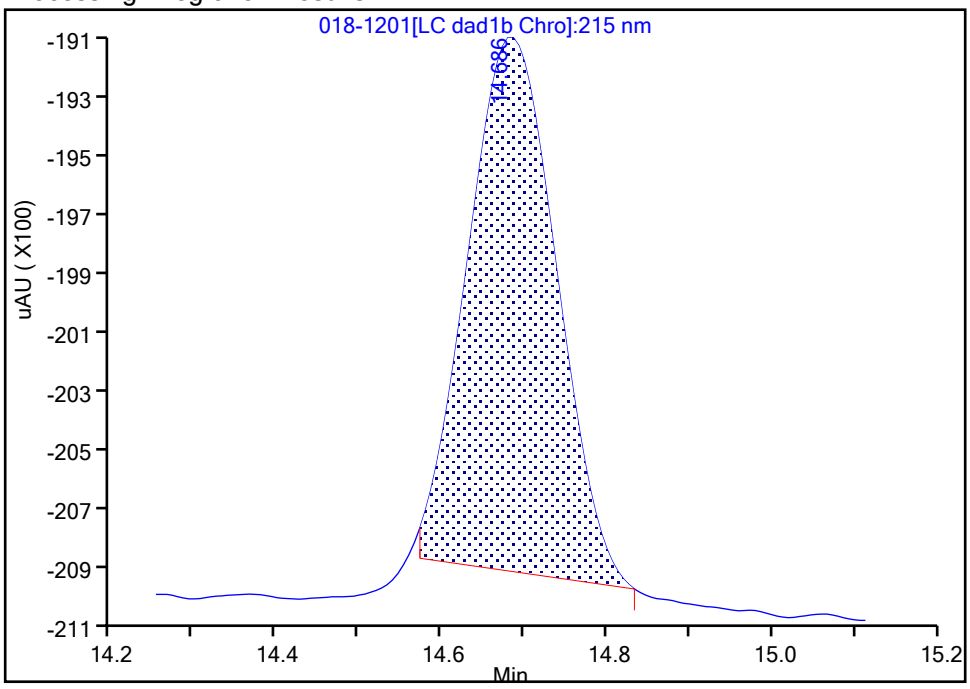
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d
Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

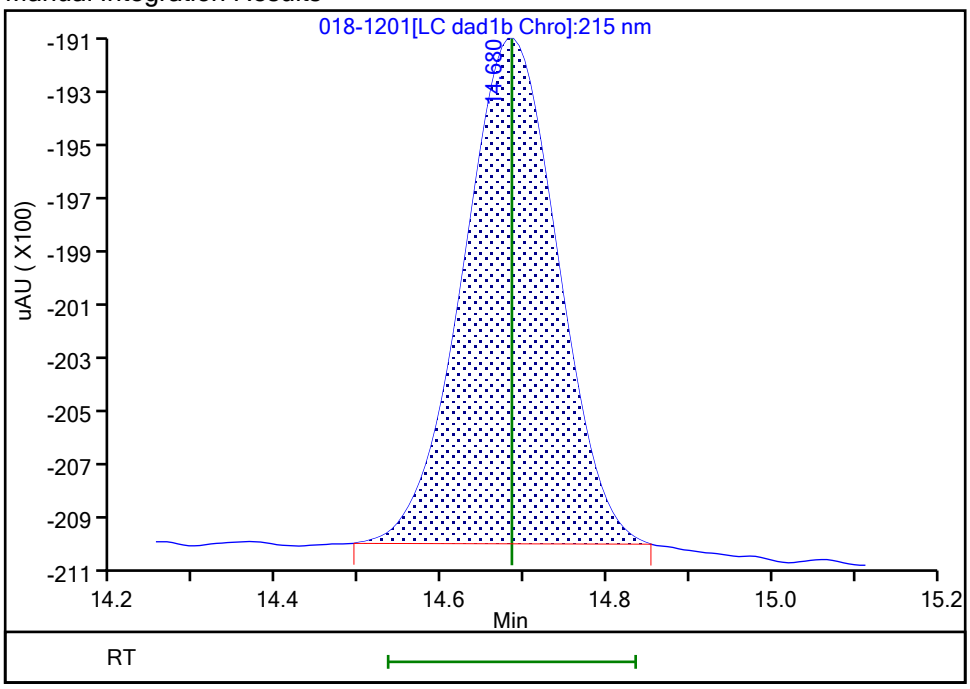
Processing Integration Results

RT: 14.69
Area: 13412
Amount: 0.181421
Amount Units: ug/mL



Manual Integration Results

RT: 14.68
Area: 14944
Amount: 0.199843
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:31
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-May-2021 21:04:39 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:11 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:18:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.629	6.631	-0.002	906	0.0100	0.0107	M
7 RDX	1	7.602	7.598	0.004	1876	0.0100	0.0177	
8 2,4,6-Trinitrophenol	1	7.962	7.958	0.004	1003	0.0100	0.0121	
$ 9 1,2-Dinitrobenzene	1	8.522	8.525	-0.003	1195	0.0100	0.009320	
10 1,3,5-Trinitrobenzene	1	8.649	8.651	-0.002	2481	0.0100	0.0113	
11 1,3-Dinitrobenzene	1	9.275	9.278	-0.003	3052	0.0100	0.0103	
12 Nitrobenzene	1	9.662	9.664	-0.002	1995	0.0100	0.0102	
14 Tetryl	1	9.975	9.978	-0.003	1712	0.0100	0.0099	M
15 Nitroglycerin	2	10.435	10.438	-0.003	10778	0.1000	0.1025	M
16 2,4,6-Trinitrotoluene	1	10.902	10.904	-0.002	2128	0.0100	0.0103	
17 4-Amino-2,6-dinitrotoluene	1	11.109	11.111	-0.002	1596	0.0100	0.0104	
18 2-Amino-4,6-dinitrotoluene	1	11.369	11.371	-0.002	2126	0.0100	0.0103	
19 2,6-Dinitrotoluene	1	11.529	11.531	-0.002	1404	0.0100	0.009813	
20 2,4-Dinitrotoluene	1	11.702	11.704	-0.002	2944	0.0100	0.0103	
21 o-Nitrotoluene	1	12.575	12.578	-0.003	1346	0.0100	0.0105	
22 p-Nitrotoluene	1	13.015	13.011	0.004	1177	0.0100	0.0105	
23 m-Nitrotoluene	1	13.602	13.604	-0.002	1575	0.0100	0.0111	
24 PETN	2	14.682	14.684	-0.002	7901	0.1000	0.1057	Ma

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00067 Amount Added: 1.00 Units: uL

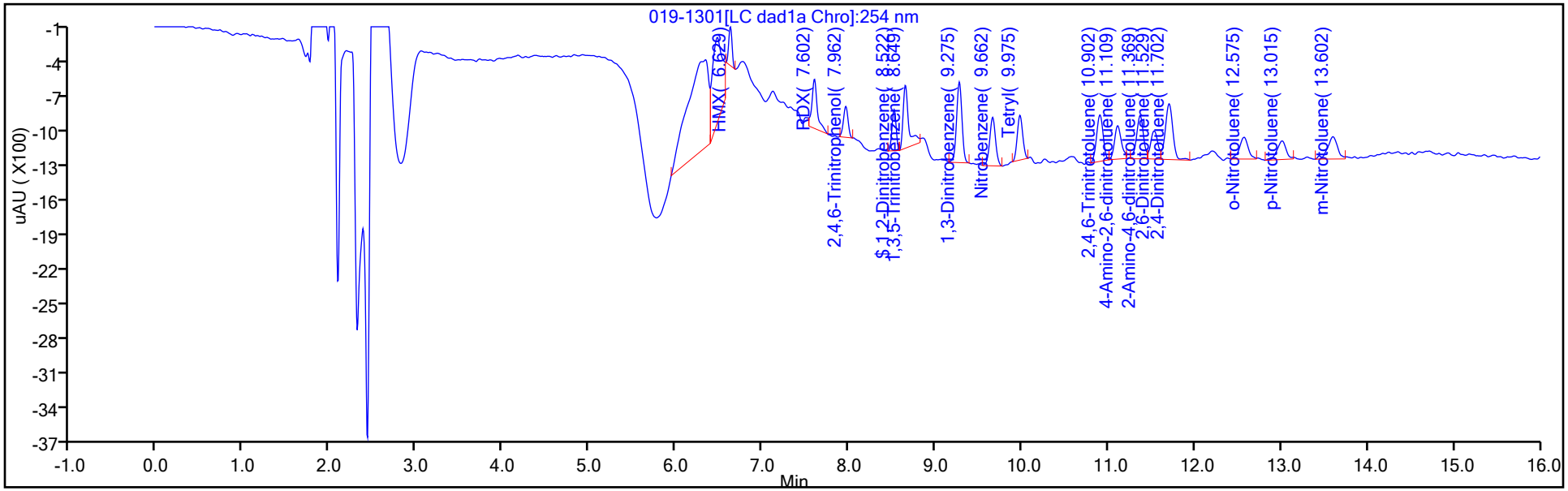
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

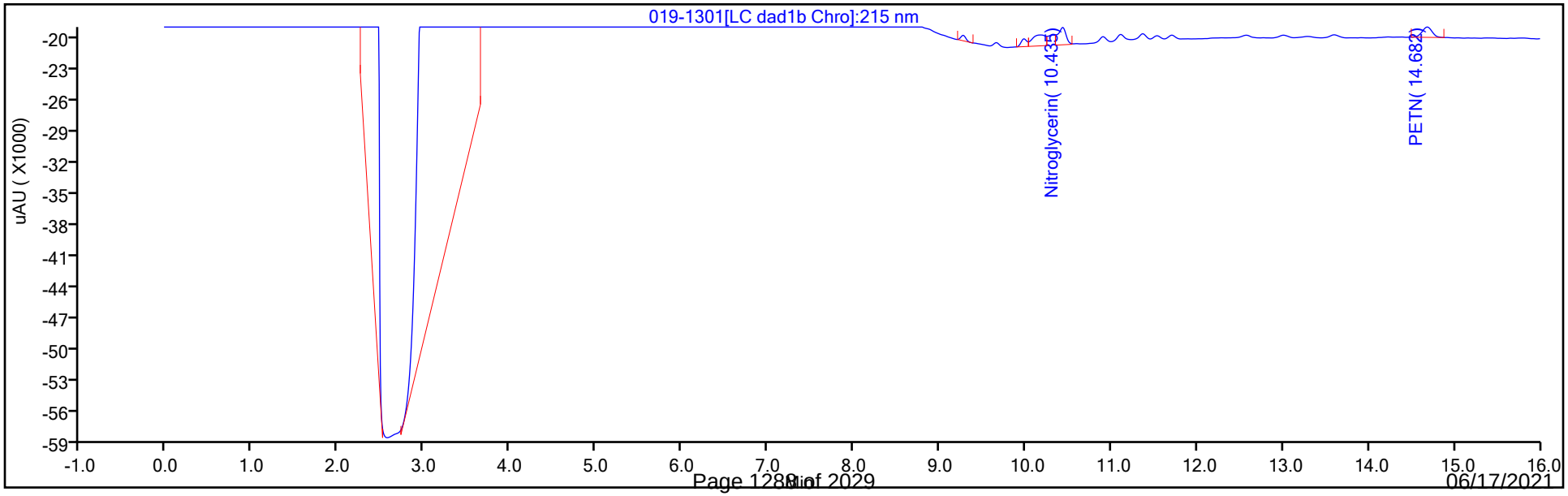
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d

Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 1			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

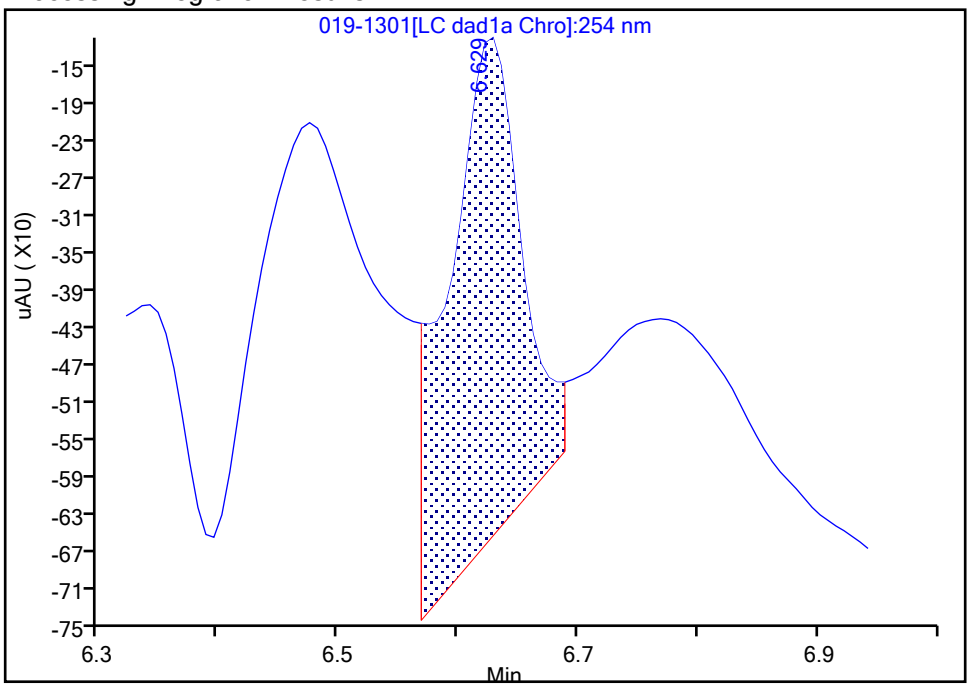
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d				
Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

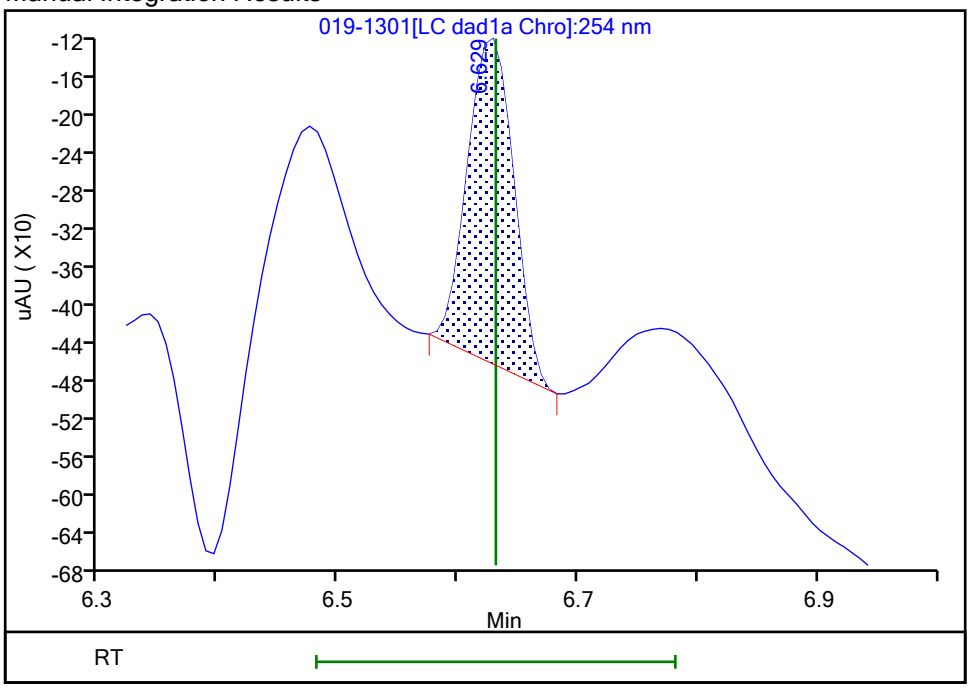
Processing Integration Results

RT: 6.63
Area: 2314
Amount: 0.023125
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 906
Amount: 0.010732
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:17:14
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

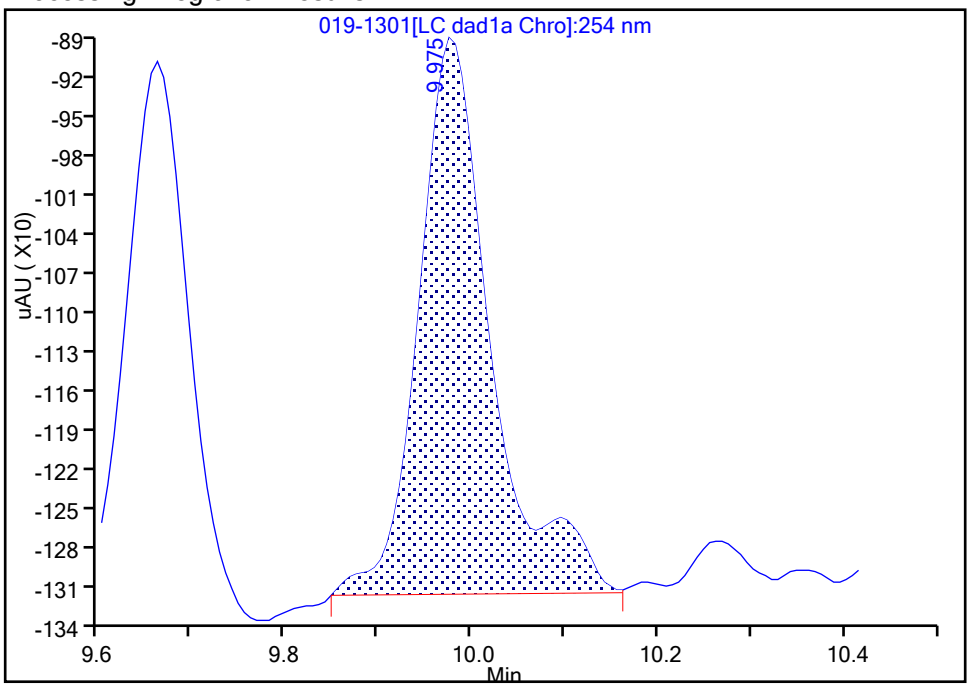
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8

Signal: 1

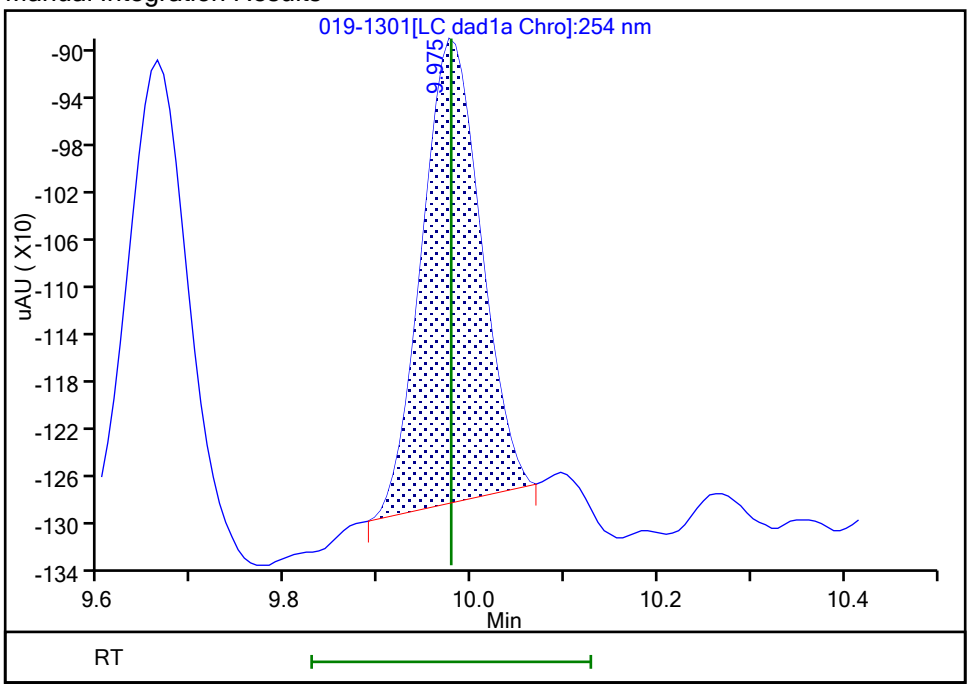
Processing Integration Results

RT: 9.98
Area: 2285
Amount: 0.012782
Amount Units: ug/mL



Manual Integration Results

RT: 9.98
Area: 1712
Amount: 0.009929
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:23:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

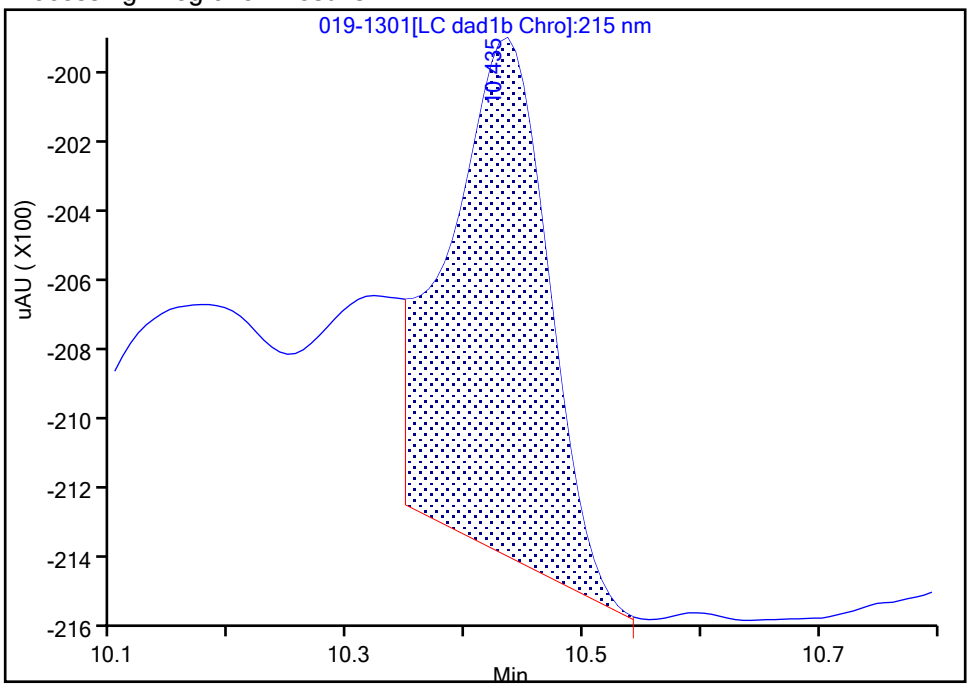
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

15 Nitroglycerin, CAS: 55-63-0

Signal: 1

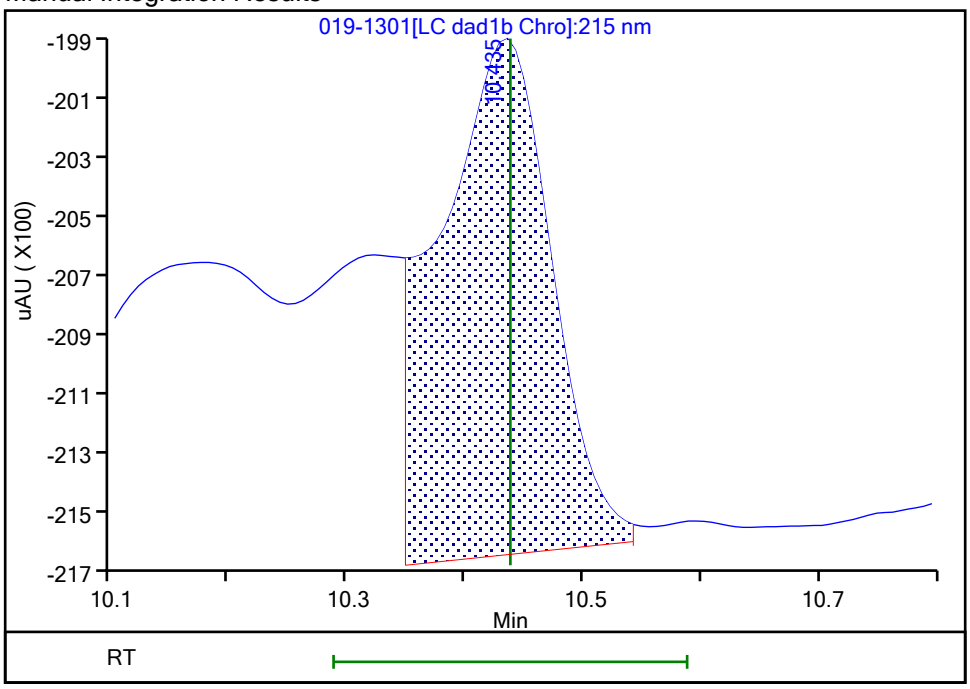
Processing Integration Results

RT: 10.44
Area: 8028
Amount: 0.114856
Amount Units: ug/mL



Manual Integration Results

RT: 10.44
Area: 10778
Amount: 0.102544
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:01
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

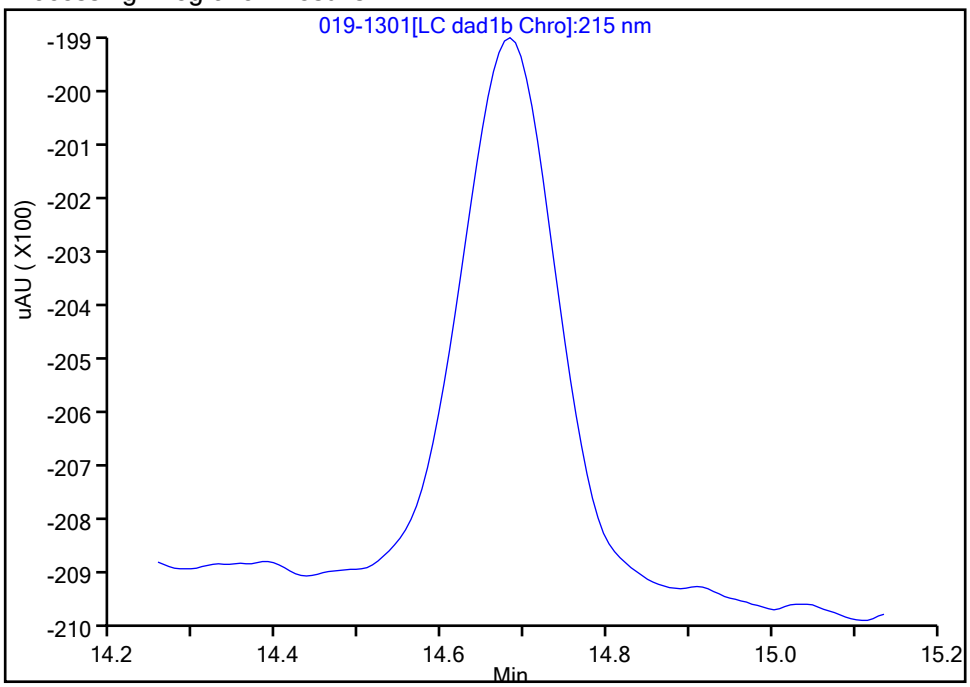
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

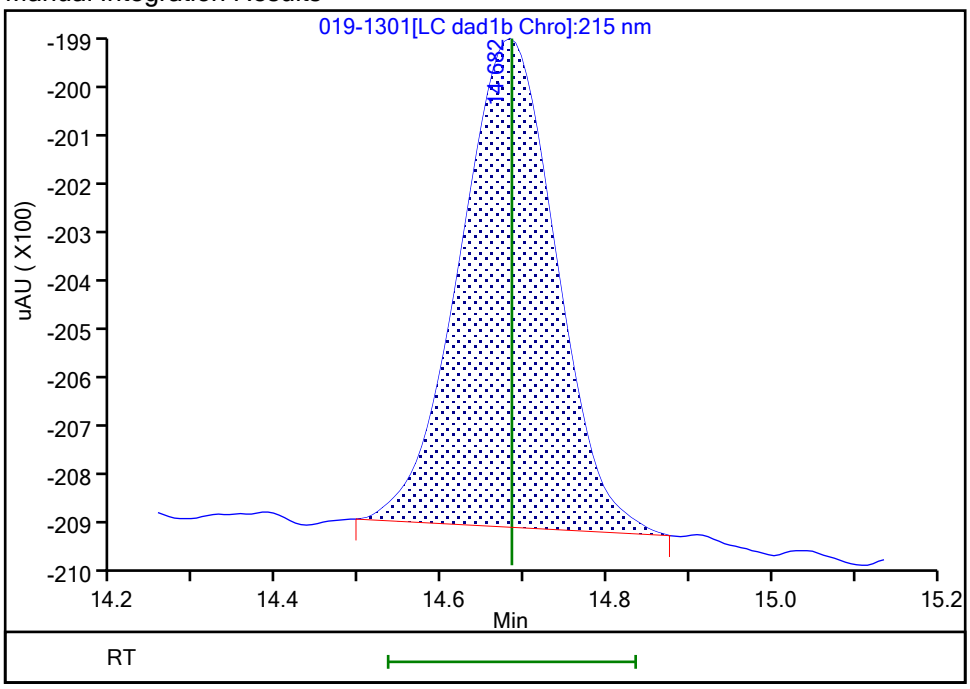
Not Detected
Expected RT: 14.68

Processing Integration Results



Manual Integration Results

RT: 14.68
Area: 7901
Amount: 0.105659
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:17:51
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

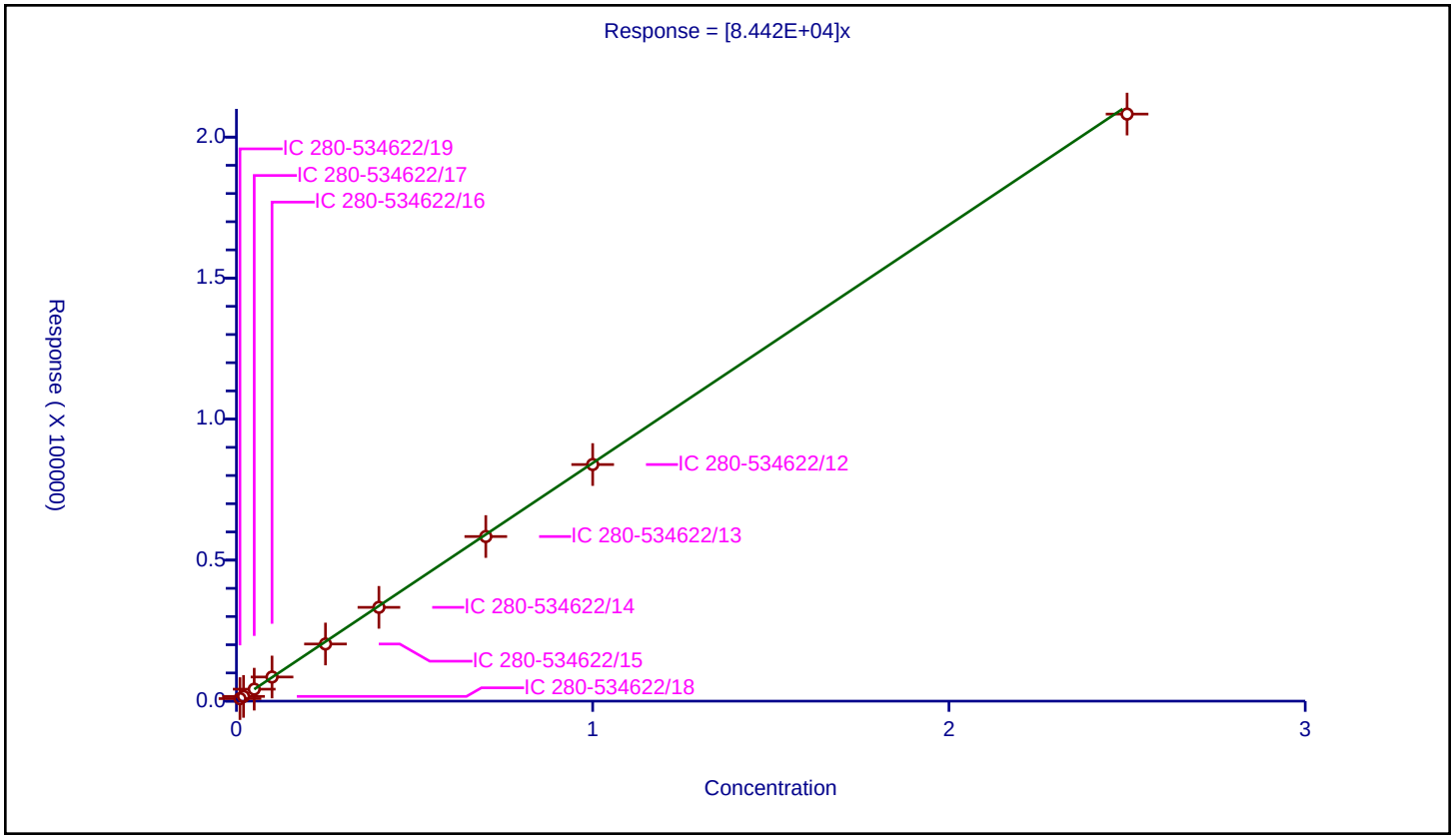
Curve Coefficients

Intercept:	0
Slope:	8.442E+04

Error Coefficients

Standard Error:	1130
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	906.0			90600.0	Y
2	IC 280-534622/18	0.02	1680.0			84000.0	Y
3	IC 280-534622/17	0.05	4242.0			84840.0	Y
4	IC 280-534622/16	0.1	8561.0			85610.0	Y
5	IC 280-534622/15	0.25	20261.0			81044.0	Y
6	IC 280-534622/14	0.4	33261.0			83152.5	Y
7	IC 280-534622/13	0.7	58367.0			83381.428571	Y
8	IC 280-534622/12	1.0	83899.0			83899.0	Y
9	IC 280-534622/11	2.5	208165.0			83266.0	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

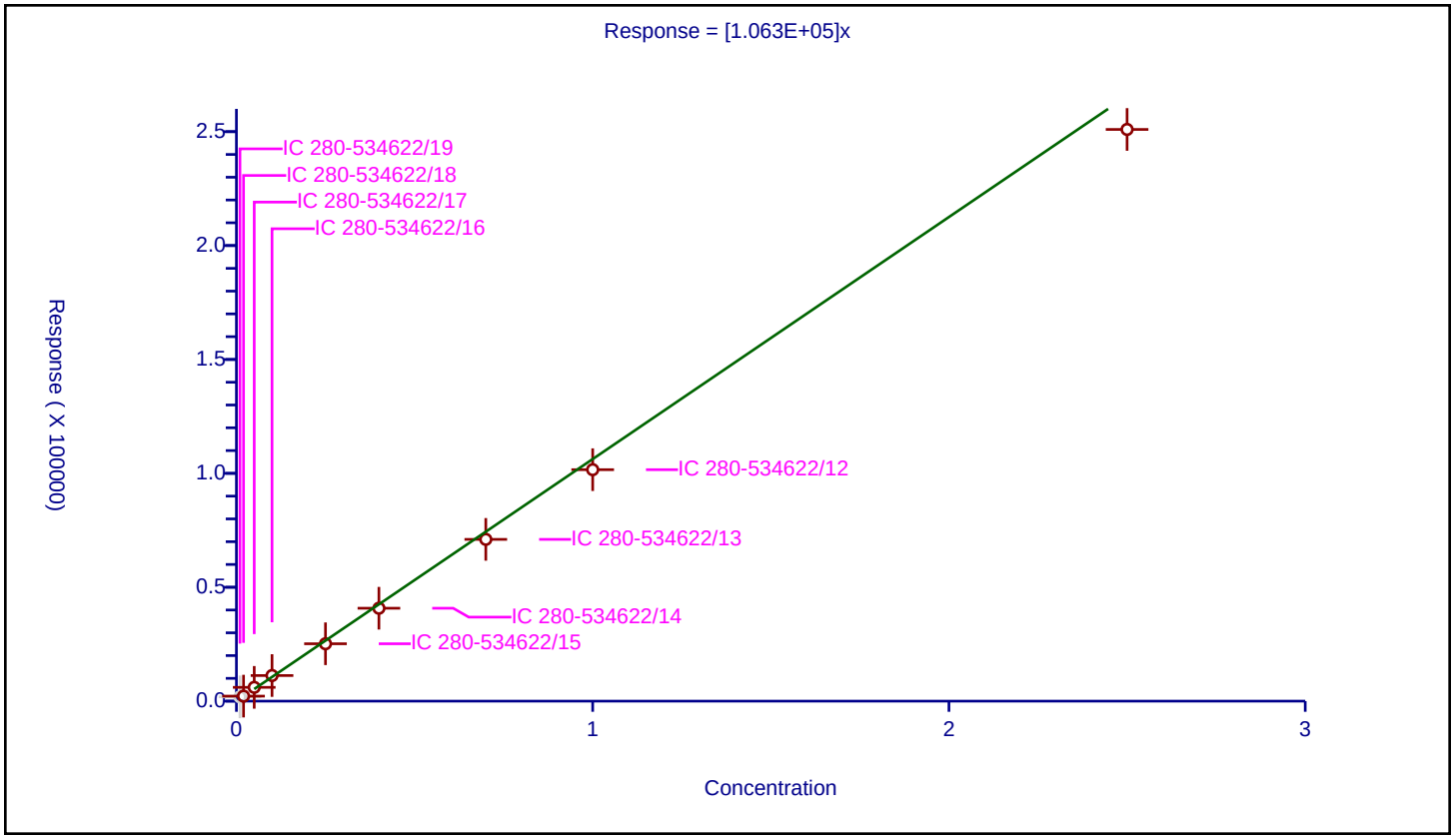
Curve Coefficients

Intercept:	0
Slope:	1.063E+05

Error Coefficients

Standard Error:	6020
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1876.0			187600.0	N
2	IC 280-534622/18	0.02	2207.0			110350.0	Y
3	IC 280-534622/17	0.05	6054.0			121080.0	Y
4	IC 280-534622/16	0.1	11245.0			112450.0	Y
5	IC 280-534622/15	0.25	25193.0			100772.0	Y
6	IC 280-534622/14	0.4	40790.0			101975.0	Y
7	IC 280-534622/13	0.7	71020.0			101457.142857	Y
8	IC 280-534622/12	1.0	101616.0			101616.0	Y
9	IC 280-534622/11	2.5	250979.0			100391.6	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

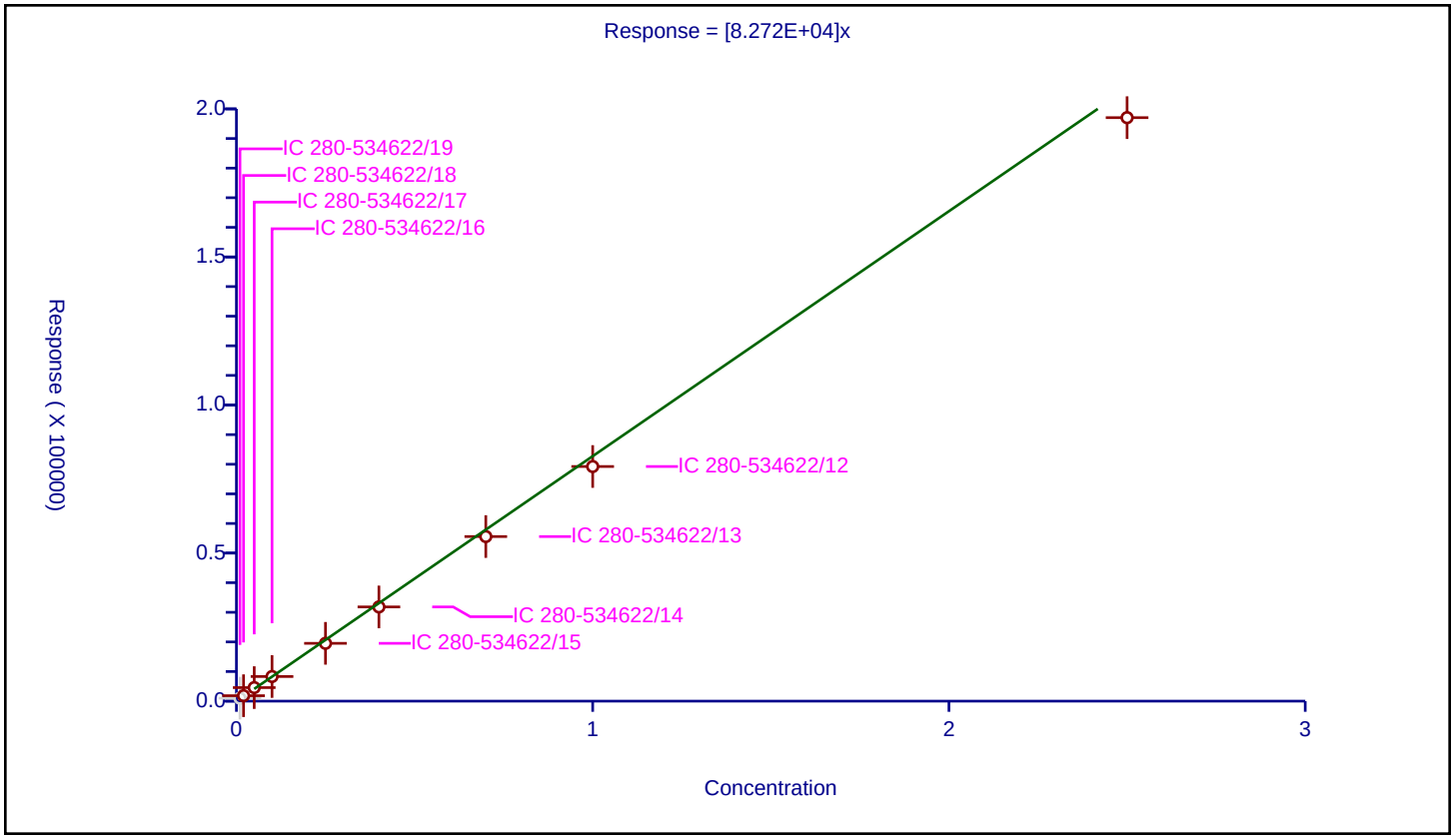
Curve Coefficients

Intercept:	0
Slope:	8.272E+04

Error Coefficients

Standard Error:	4070
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1003.0			100300.0	N
2	IC 280-534622/18	0.02	1840.0			92000.0	Y
3	IC 280-534622/17	0.05	4575.0			91500.0	Y
4	IC 280-534622/16	0.1	8317.0			83170.0	Y
5	IC 280-534622/15	0.25	19525.0			78100.0	Y
6	IC 280-534622/14	0.4	31820.0			79550.0	Y
7	IC 280-534622/13	0.7	55582.0			79402.857143	Y
8	IC 280-534622/12	1.0	79230.0			79230.0	Y
9	IC 280-534622/11	2.5	197040.0			78816.0	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

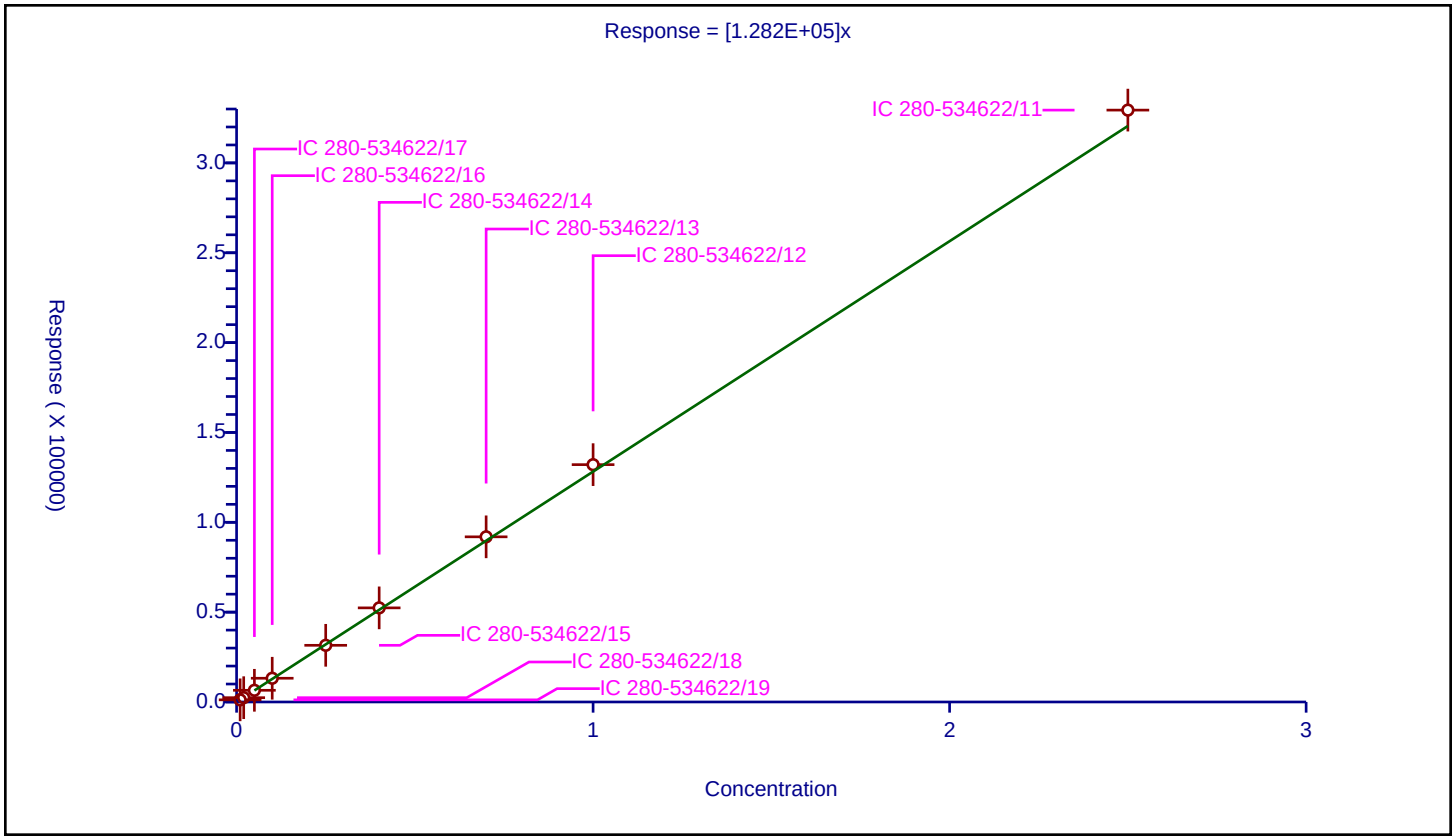
Curve Coefficients

Intercept:	0
Slope:	1.282E+05

Error Coefficients

Standard Error:	3530
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1195.0			119500.0	Y
2	IC 280-534622/18	0.02	2399.0			119950.0	Y
3	IC 280-534622/17	0.05	6504.0			130080.0	Y
4	IC 280-534622/16	0.1	13218.0			132180.0	Y
5	IC 280-534622/15	0.25	31539.0			126156.0	Y
6	IC 280-534622/14	0.4	52377.0			130942.5	Y
7	IC 280-534622/13	0.7	91915.0			131307.142857	Y
8	IC 280-534622/12	1.0	132080.0			132080.0	Y
9	IC 280-534622/11	2.5	329398.0			131759.2	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

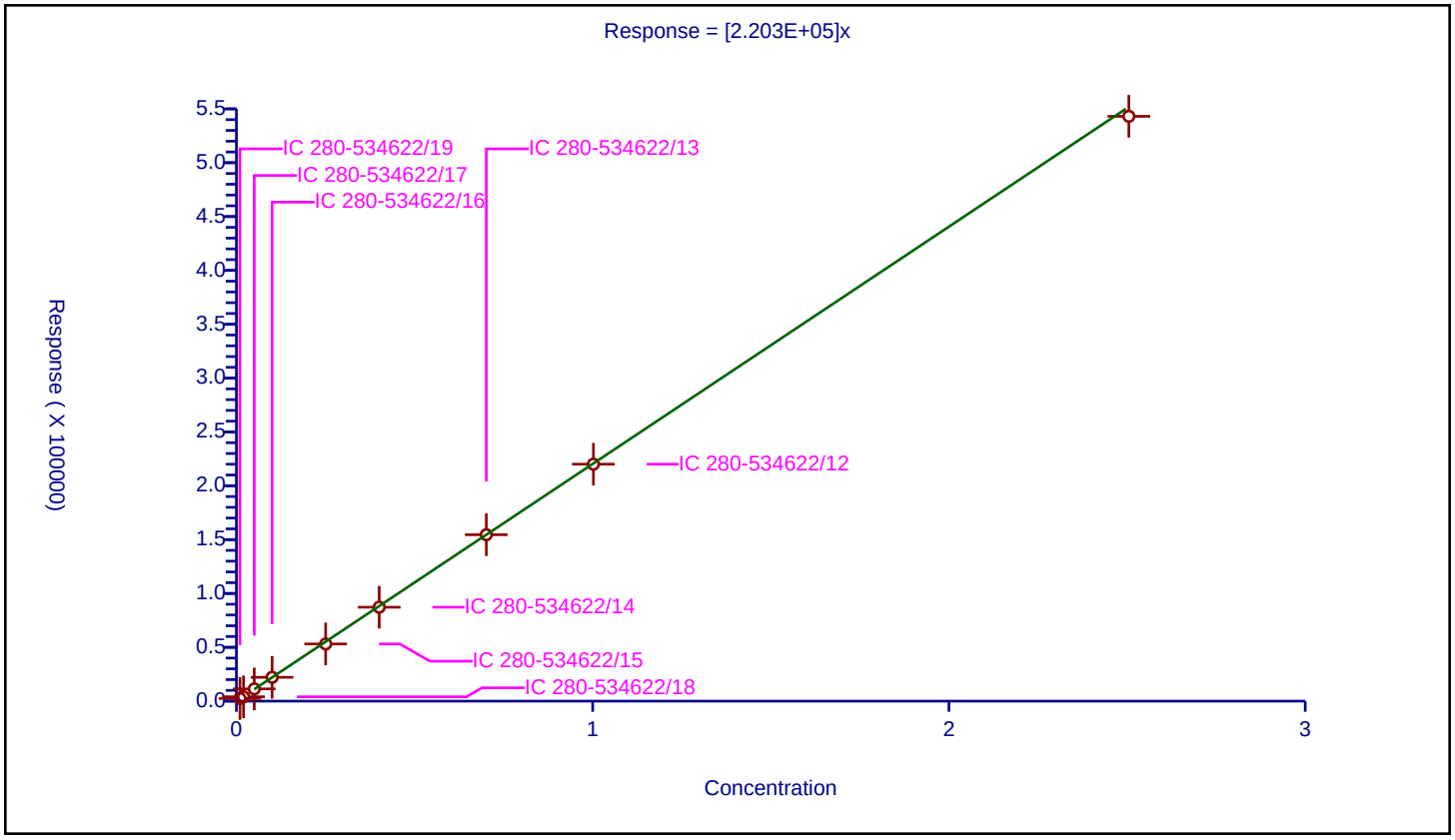
Curve Coefficients

Intercept:	0
Slope:	2.203E+05

Error Coefficients

Standard Error:	3230
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	2481.0			247604.790419	Y
2	IC 280-534622/18	0.02004	4038.0			201497.005988	Y
3	IC 280-534622/17	0.0501	11361.0			226766.467066	Y
4	IC 280-534622/16	0.1002	22114.0			220698.602794	Y
5	IC 280-534622/15	0.2505	53082.0			211904.191617	Y
6	IC 280-534622/14	0.4008	87233.0			217647.205589	Y
7	IC 280-534622/13	0.7014	154539.0			220329.341317	Y
8	IC 280-534622/12	1.002	220037.0			219597.804391	Y
9	IC 280-534622/11	2.505	543111.0			216810.778443	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

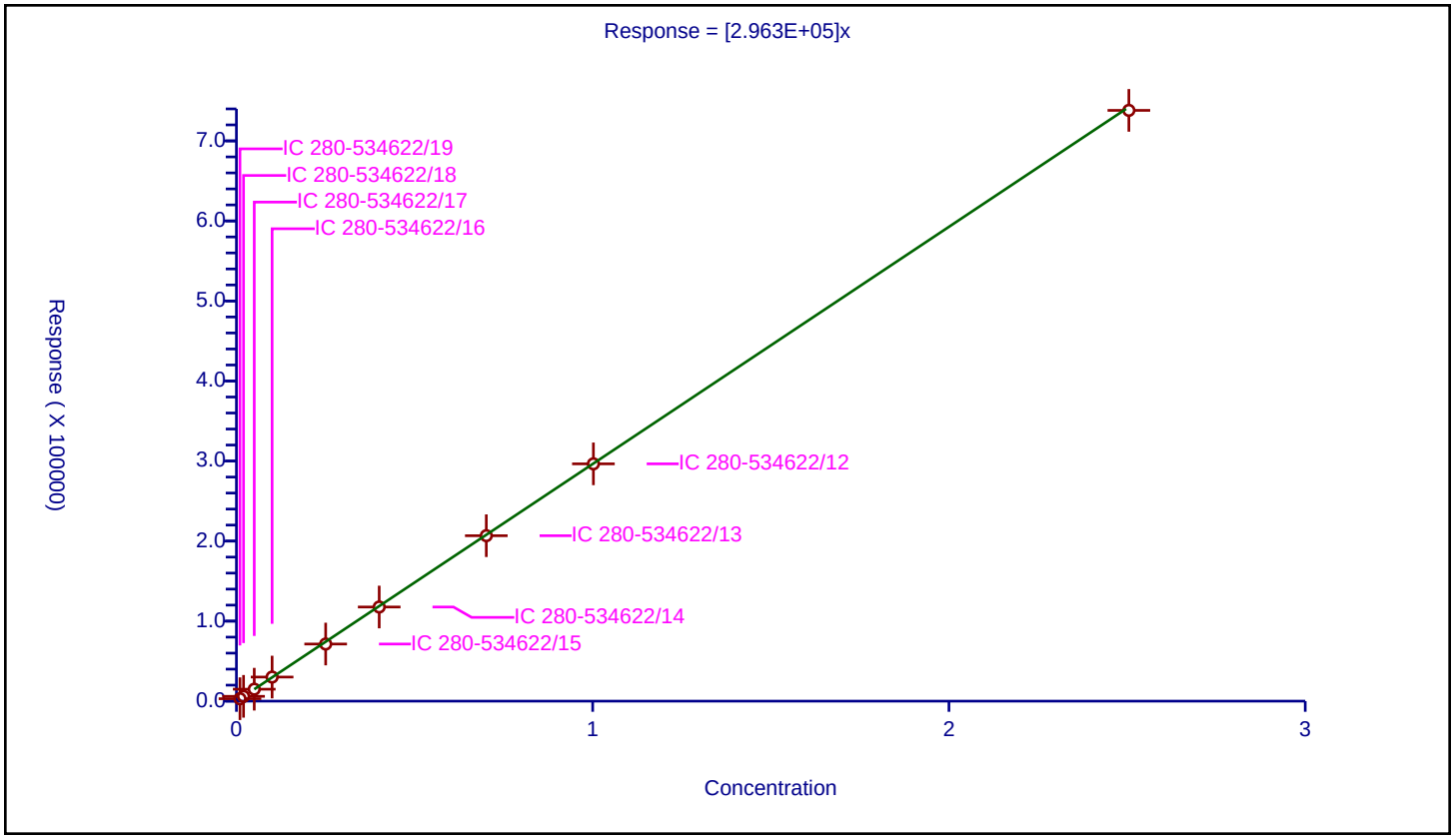
Curve Coefficients

Intercept:	0
Slope:	2.963E+05

Error Coefficients

Standard Error:	1890
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	3052.0			304590.818363	Y
2	IC 280-534622/18	0.02004	6019.0			300349.301397	Y
3	IC 280-534622/17	0.0501	14927.0			297944.111776	Y
4	IC 280-534622/16	0.1002	30099.0			300389.221557	Y
5	IC 280-534622/15	0.2505	71373.0			284922.155689	Y
6	IC 280-534622/14	0.4008	117621.0			293465.568862	Y
7	IC 280-534622/13	0.7014	206721.0			294726.261762	Y
8	IC 280-534622/12	1.002	296509.0			295917.165669	Y
9	IC 280-534622/11	2.505	738121.0			294659.081836	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

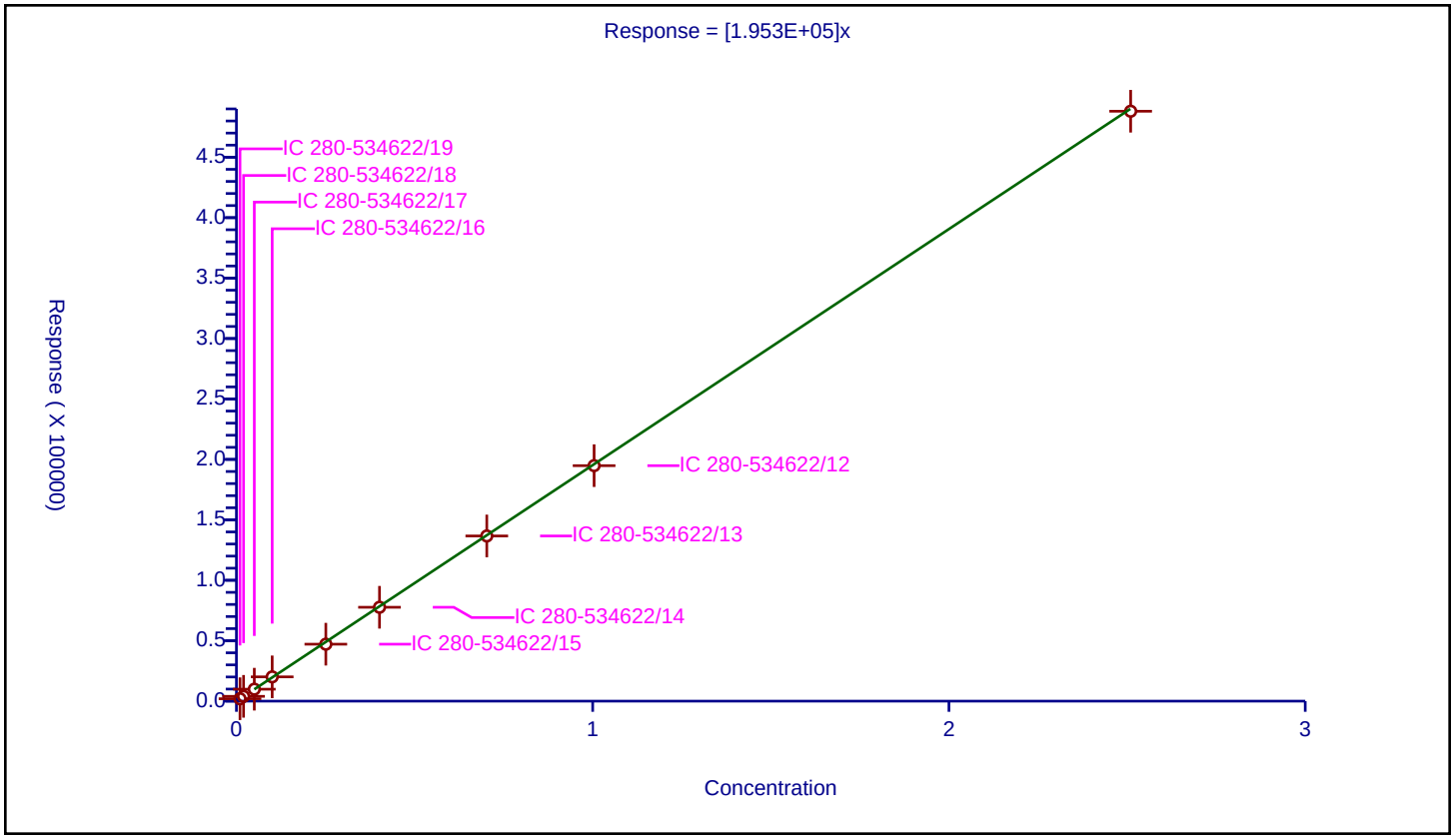
Curve Coefficients

Intercept:	0
Slope:	1.953E+05

Error Coefficients

Standard Error:	1160
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	1995.0			198705.179283	Y
2	IC 280-534622/18	0.02008	3972.0			197808.76494	Y
3	IC 280-534622/17	0.0502	9892.0			197051.792829	Y
4	IC 280-534622/16	0.1004	20078.0			199980.079681	Y
5	IC 280-534622/15	0.251	47122.0			187737.051793	Y
6	IC 280-534622/14	0.4016	77656.0			193366.533865	Y
7	IC 280-534622/13	0.7028	136648.0			194433.693796	Y
8	IC 280-534622/12	1.004	194820.0			194043.824701	Y
9	IC 280-534622/11	2.51	488061.0			194446.613546	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

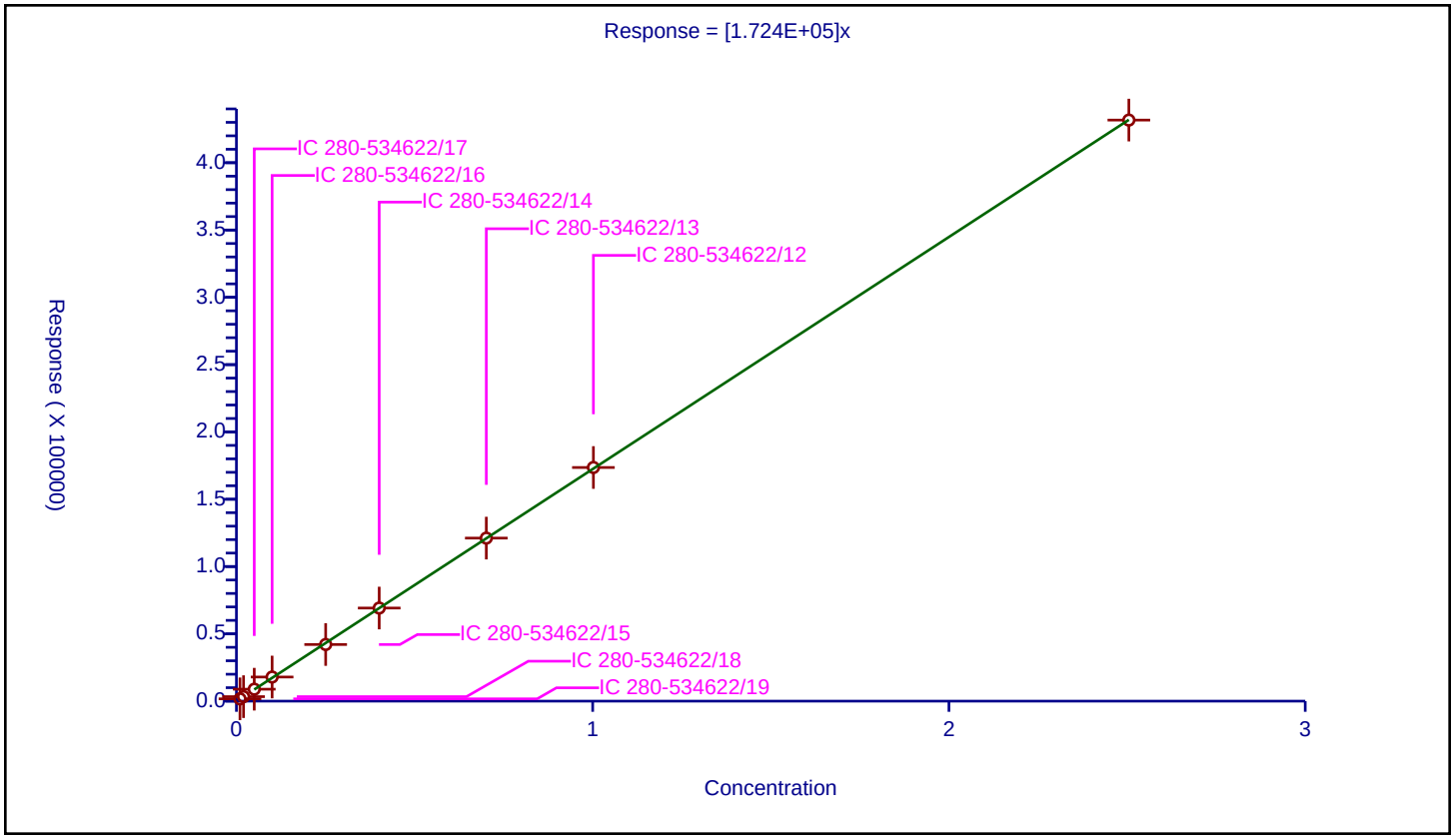
Curve Coefficients

Intercept:	0
Slope:	1.724E+05

Error Coefficients

Standard Error:	557
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	1712.0			170858.283433	Y
2	IC 280-534622/18	0.02004	3331.0			166217.56487	Y
3	IC 280-534622/17	0.0501	8870.0			177045.908184	Y
4	IC 280-534622/16	0.1002	17920.0			178842.315369	Y
5	IC 280-534622/15	0.2505	42079.0			167980.03992	Y
6	IC 280-534622/14	0.4008	69168.0			172574.850299	Y
7	IC 280-534622/13	0.7014	121126.0			172691.759338	Y
8	IC 280-534622/12	1.002	173586.0			173239.520958	Y
9	IC 280-534622/11	2.505	431686.0			172329.740519	Y



Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

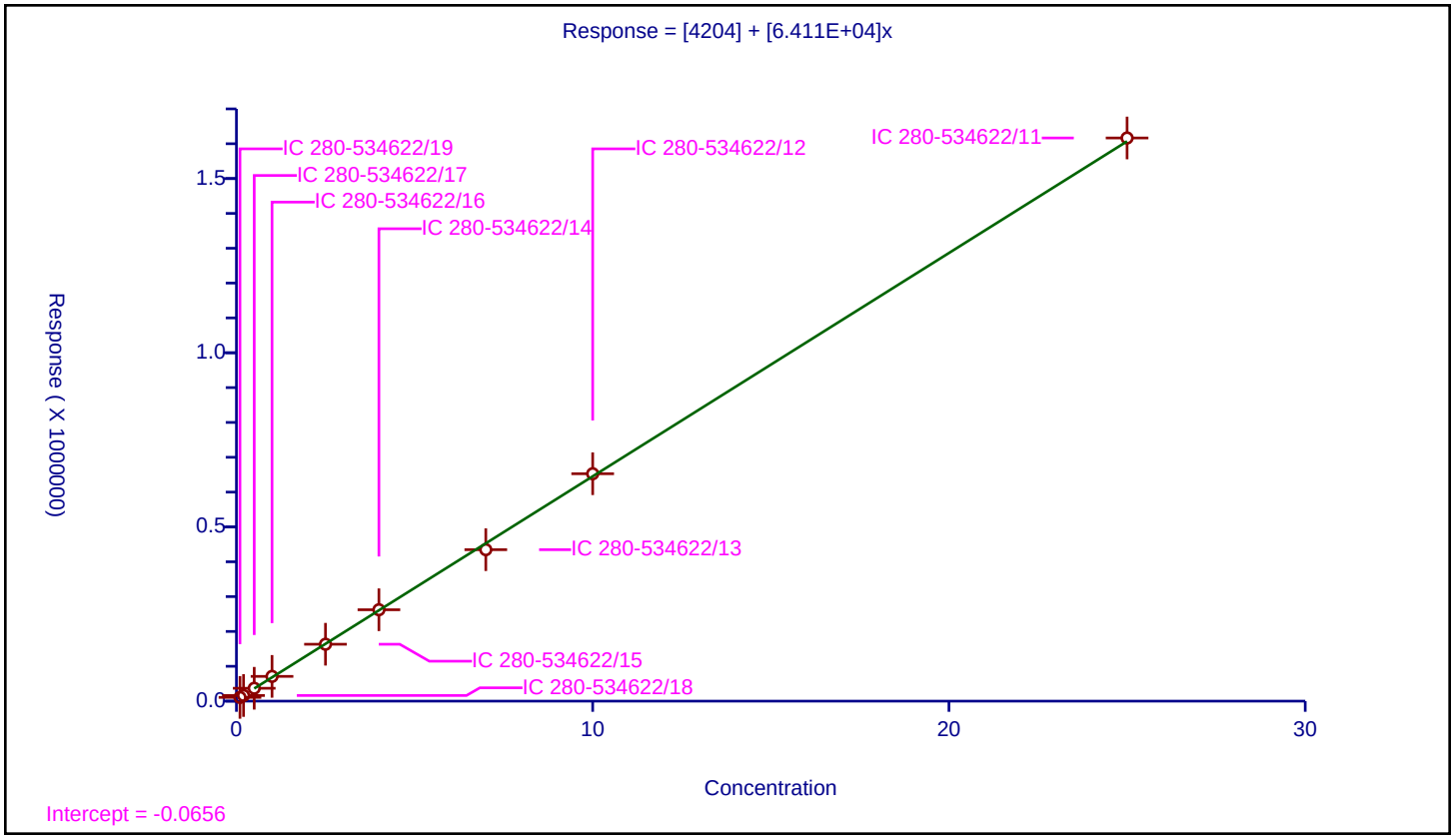
Curve Coefficients

Intercept:	4204
Slope:	6.411E+04

Error Coefficients

Standard Error:	8390
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.1	10778.0			107780.0	Y
2	IC 280-534622/18	0.2	16162.0			80810.0	Y
3	IC 280-534622/17	0.5	36983.0			73966.0	Y
4	IC 280-534622/16	1.0	71053.0			71053.0	Y
5	IC 280-534622/15	2.5	163334.0			65333.6	Y
6	IC 280-534622/14	4.0	262320.0			65580.0	Y
7	IC 280-534622/13	7.0	434747.0			62106.714286	Y
8	IC 280-534622/12	10.0	652752.0			65275.2	Y
9	IC 280-534622/11	25.0	1616536.0			64661.44	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

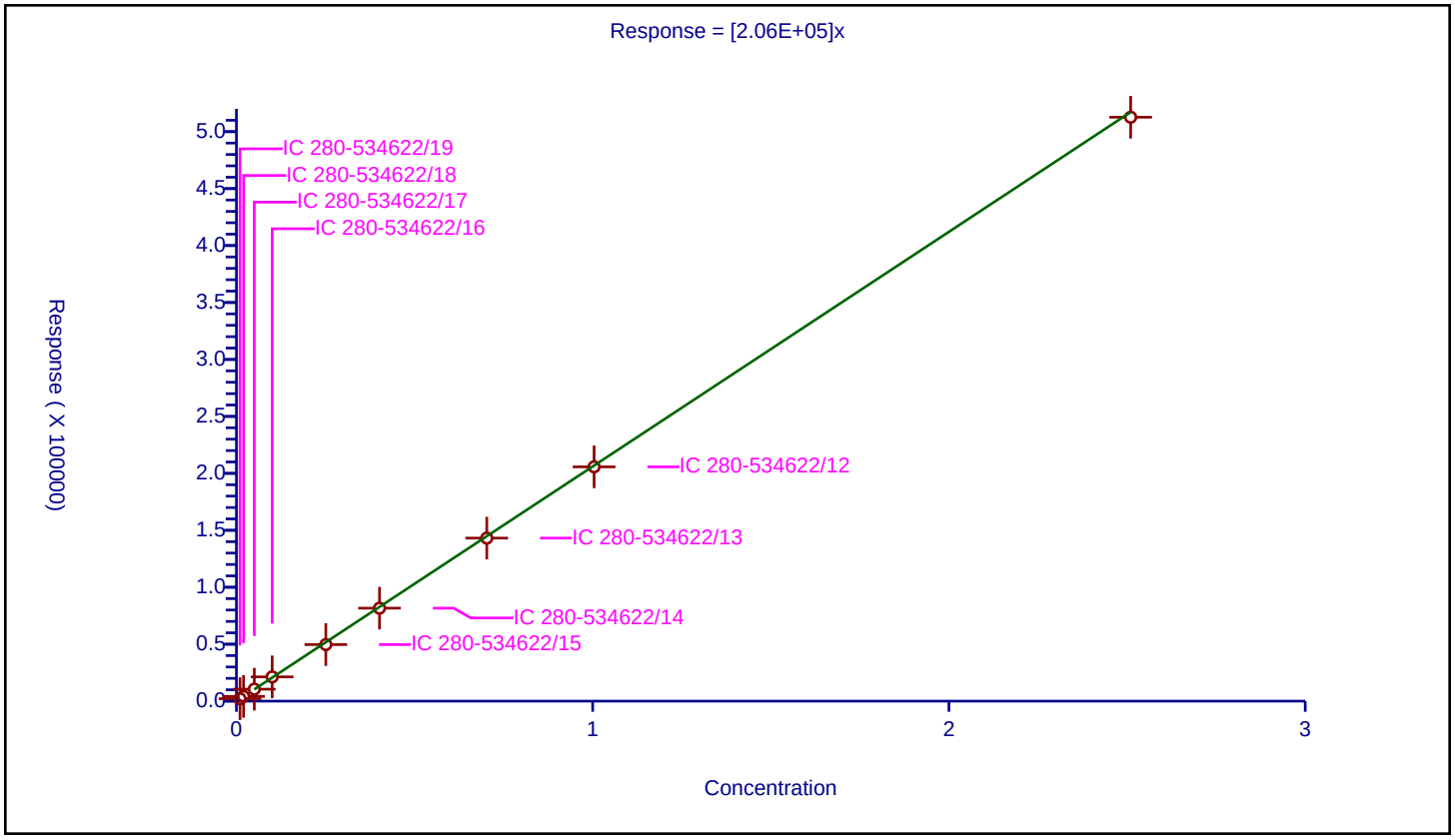
Curve Coefficients

Intercept:	0
Slope:	2.06E+05

Error Coefficients

Standard Error:	1930
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2128.0			211952.191235	Y
2	IC 280-534622/18	0.02008	4156.0			206972.111554	Y
3	IC 280-534622/17	0.0502	10514.0			209442.231076	Y
4	IC 280-534622/16	0.1004	21286.0			212011.952191	Y
5	IC 280-534622/15	0.251	49667.0			197876.494024	Y
6	IC 280-534622/14	0.4016	81630.0			203261.952191	Y
7	IC 280-534622/13	0.7028	143142.0			203673.875925	Y
8	IC 280-534622/12	1.004	205715.0			204895.418327	Y
9	IC 280-534622/11	2.51	512679.0			204254.581673	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

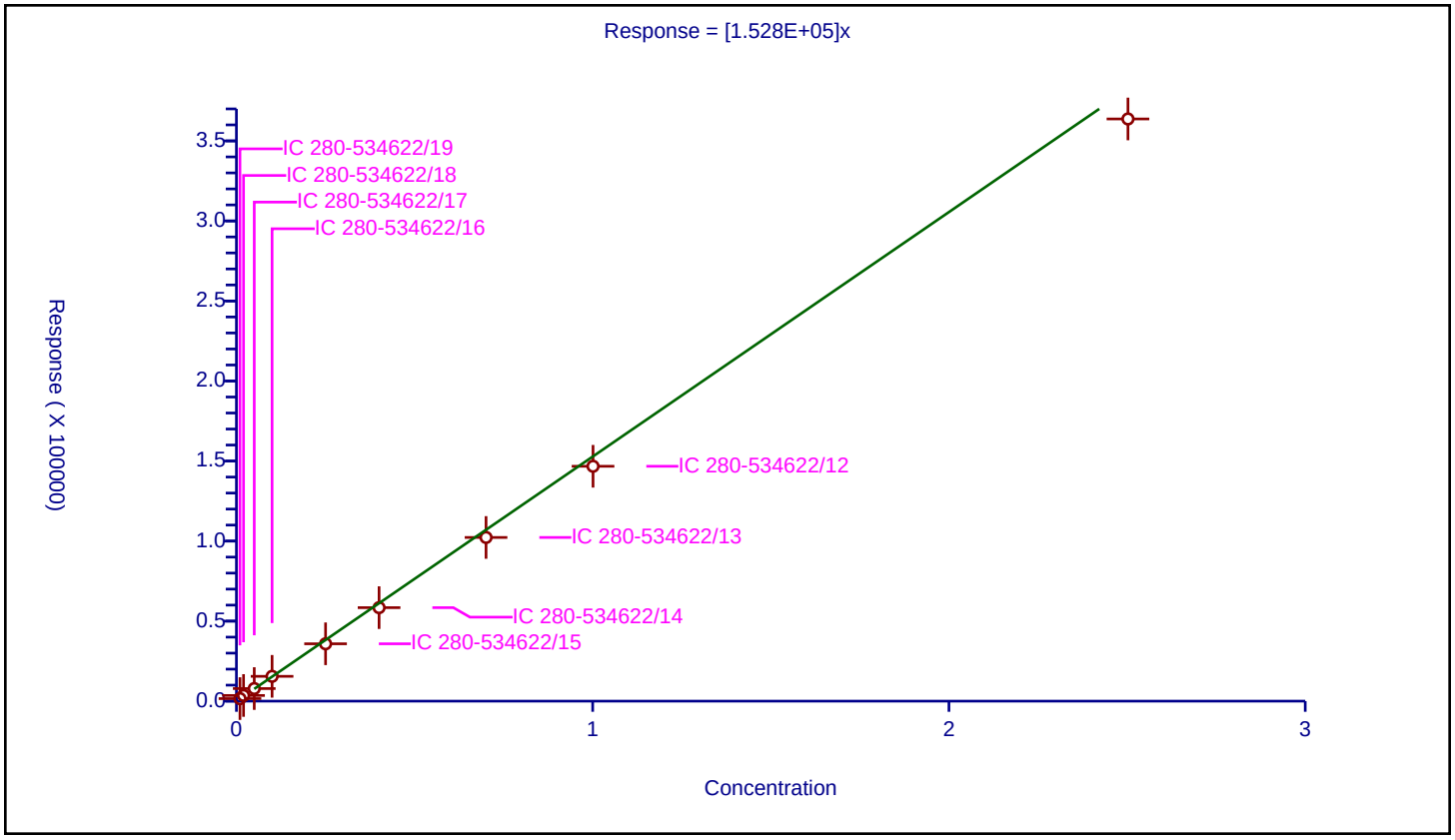
Curve Coefficients

Intercept:	0
Slope:	1.528E+05

Error Coefficients

Standard Error:	7250
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01001	1596.0			159440.559441	Y
2	IC 280-534622/18	0.02002	3532.0			176423.576424	Y
3	IC 280-534622/17	0.05005	7868.0			157202.797203	Y
4	IC 280-534622/16	0.1001	15505.0			154895.104895	Y
5	IC 280-534622/15	0.25025	35838.0			143208.791209	Y
6	IC 280-534622/14	0.4004	58412.0			145884.115884	Y
7	IC 280-534622/13	0.7007	102258.0			145936.920223	Y
8	IC 280-534622/12	1.001	146728.0			146581.418581	Y
9	IC 280-534622/11	2.5025	363710.0			145338.661339	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

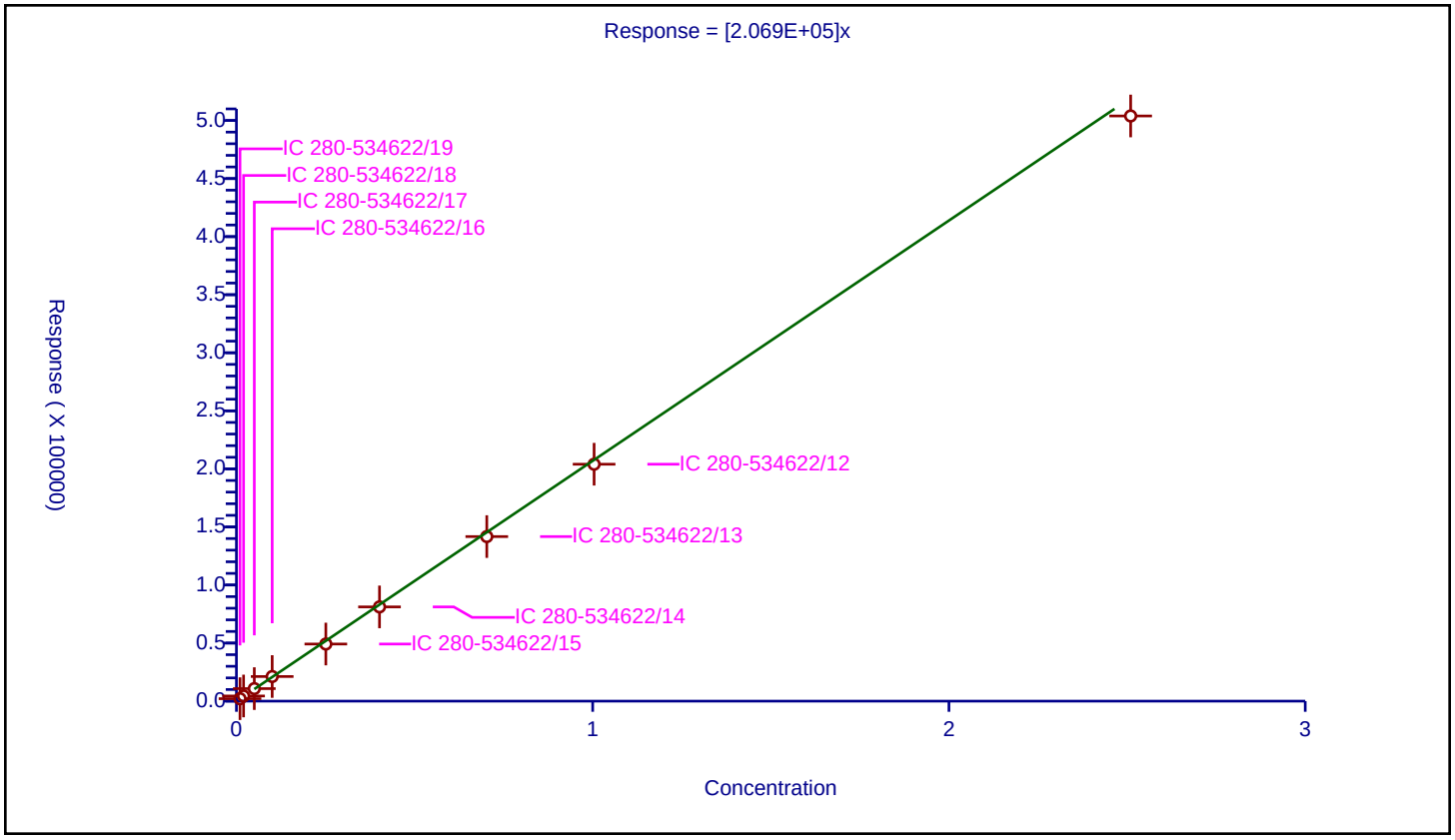
Curve Coefficients

Intercept:	0
Slope:	2.069E+05

Error Coefficients

Standard Error:	5900
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2126.0			211752.988048	Y
2	IC 280-534622/18	0.02008	4433.0			220766.932271	Y
3	IC 280-534622/17	0.0502	10789.0			214920.318725	Y
4	IC 280-534622/16	0.1004	21203.0			211185.258964	Y
5	IC 280-534622/15	0.251	49194.0			195992.031873	Y
6	IC 280-534622/14	0.4016	81166.0			202106.573705	Y
7	IC 280-534622/13	0.7028	141712.0			201639.157655	Y
8	IC 280-534622/12	1.004	204025.0			203212.151394	Y
9	IC 280-534622/11	2.51	503909.0			200760.557769	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

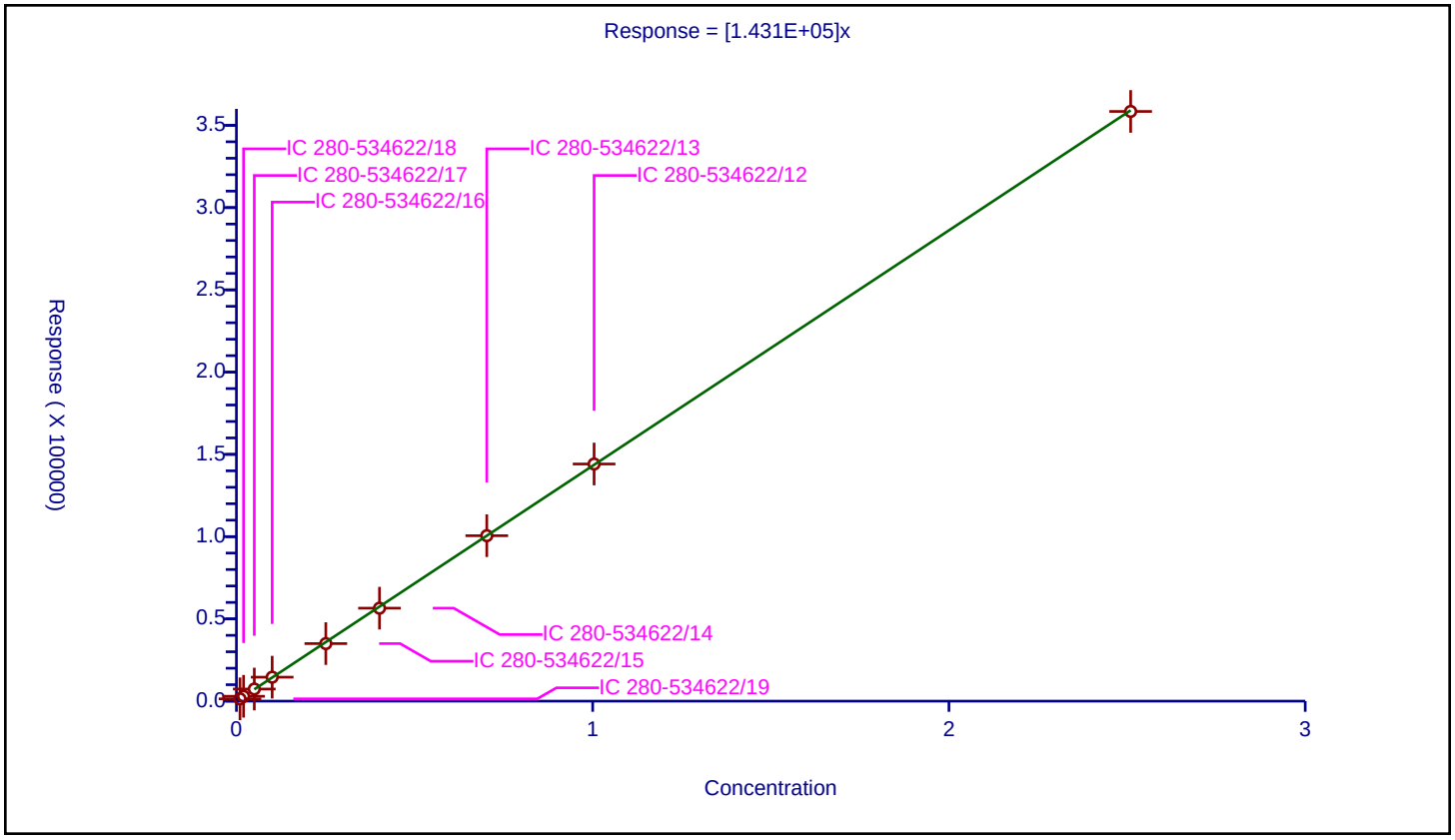
Curve Coefficients

Intercept:	0
Slope:	1.431E+05

Error Coefficients

Standard Error:	567
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	1404.0			139840.63745	Y
2	IC 280-534622/18	0.02008	2947.0			146762.948207	Y
3	IC 280-534622/17	0.0502	7360.0			146613.545817	Y
4	IC 280-534622/16	0.1004	14557.0			144990.039841	Y
5	IC 280-534622/15	0.251	34973.0			139334.661355	Y
6	IC 280-534622/14	0.4016	56504.0			140697.211155	Y
7	IC 280-534622/13	0.7028	100565.0			143091.918042	Y
8	IC 280-534622/12	1.004	144143.0			143568.7251	Y
9	IC 280-534622/11	2.51	358451.0			142809.163347	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

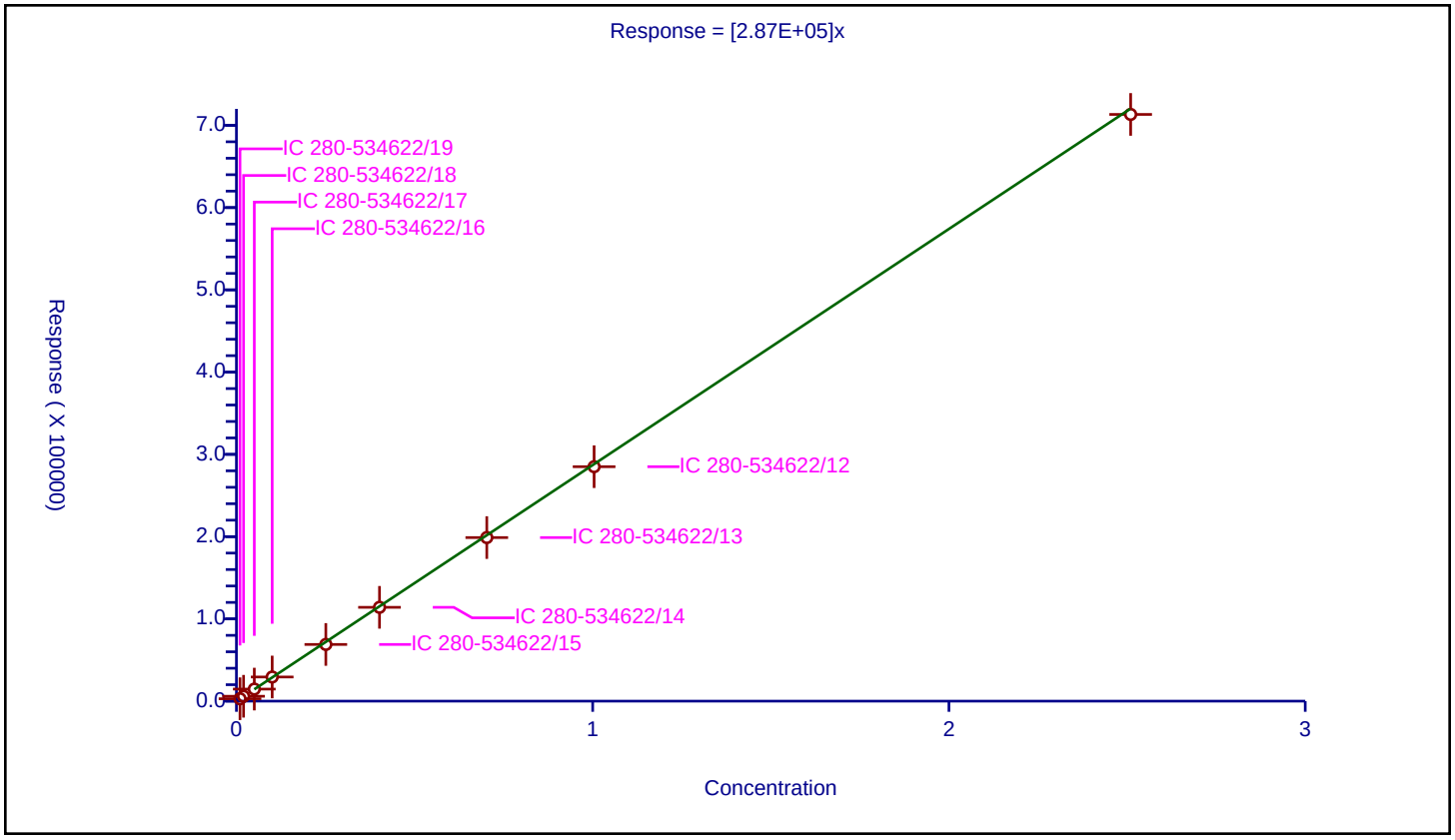
Curve Coefficients

Intercept:	0
Slope:	2.87E+05

Error Coefficients

Standard Error:	3180
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2944.0			293227.091633	Y
2	IC 280-534622/18	0.02008	5945.0			296065.737052	Y
3	IC 280-534622/17	0.0502	14647.0			291772.908367	Y
4	IC 280-534622/16	0.1004	29362.0			292450.199203	Y
5	IC 280-534622/15	0.251	68930.0			274621.513944	Y
6	IC 280-534622/14	0.4016	114050.0			283989.043825	Y
7	IC 280-534622/13	0.7028	198852.0			282942.515652	Y
8	IC 280-534622/12	1.004	285012.0			283876.494024	Y
9	IC 280-534622/11	2.51	713254.0			284164.940239	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

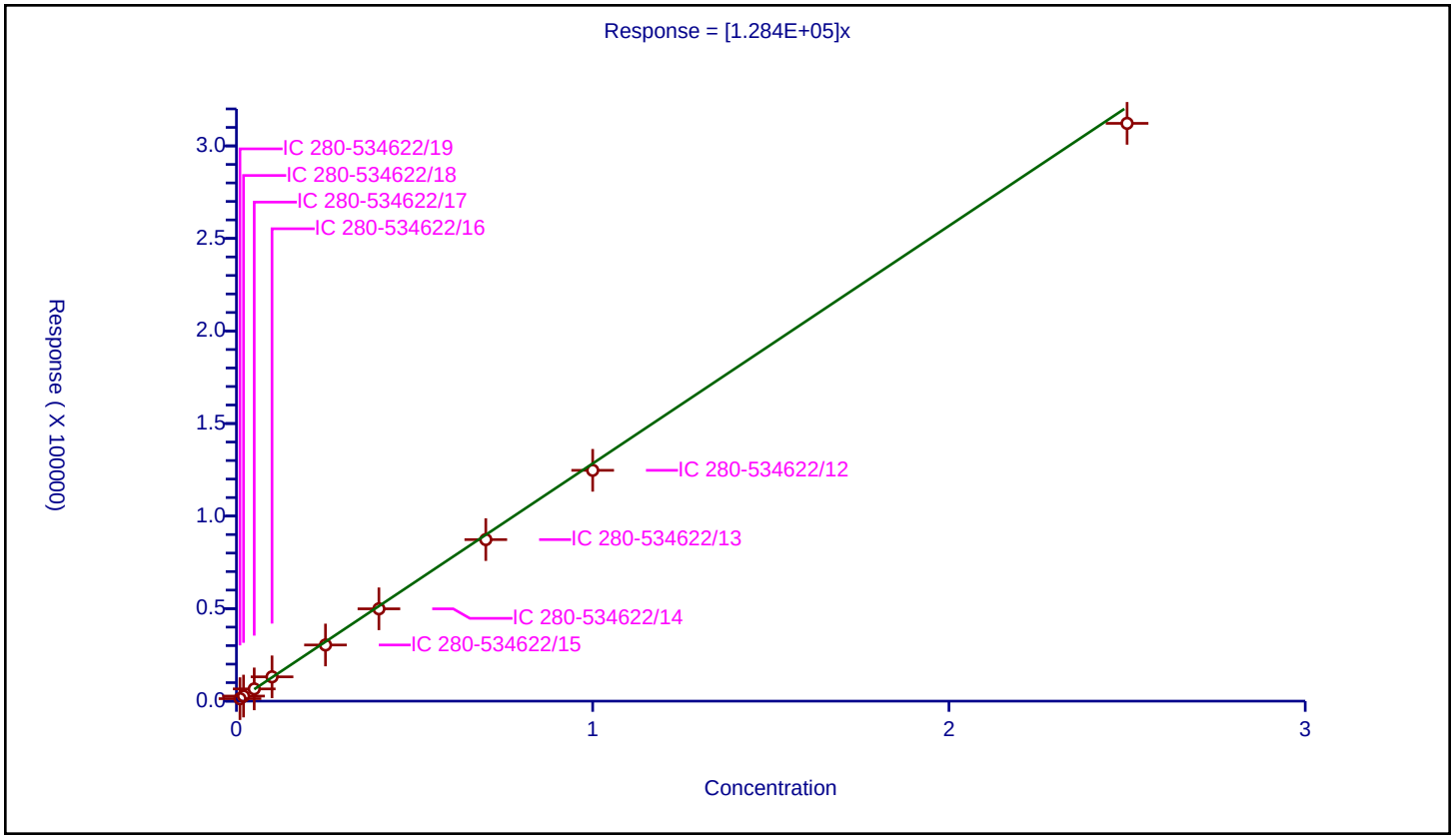
Curve Coefficients

Intercept:	0
Slope:	1.284E+05

Error Coefficients

Standard Error:	3580
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1346.0			134600.0	Y
2	IC 280-534622/18	0.02	2737.0			136850.0	Y
3	IC 280-534622/17	0.05	6616.0			132320.0	Y
4	IC 280-534622/16	0.1	13138.0			131380.0	Y
5	IC 280-534622/15	0.25	30342.0			121368.0	Y
6	IC 280-534622/14	0.4	49881.0			124702.5	Y
7	IC 280-534622/13	0.7	87294.0			124705.714286	Y
8	IC 280-534622/12	1.0	124724.0			124724.0	Y
9	IC 280-534622/11	2.5	312191.0			124876.4	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

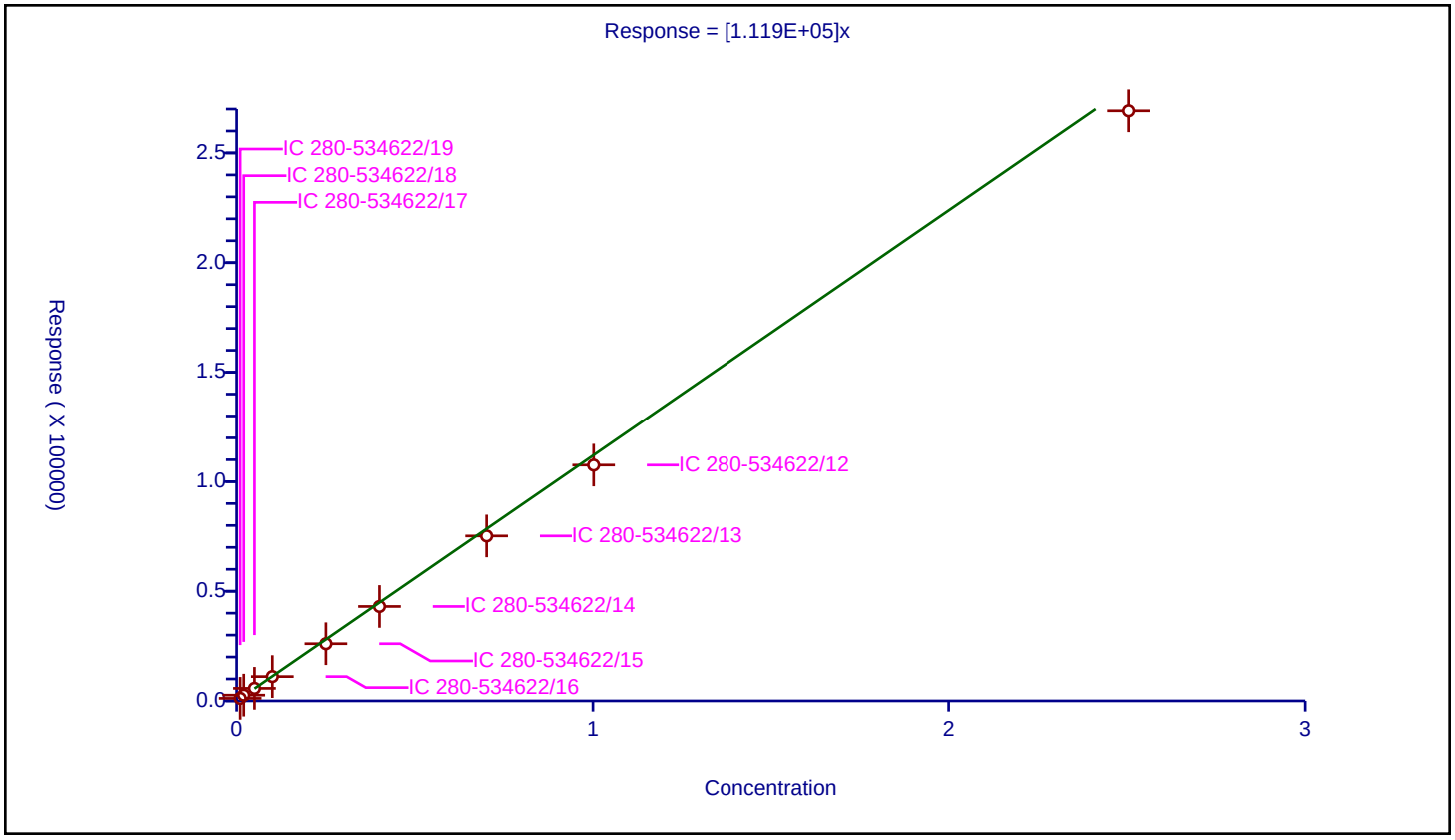
Curve Coefficients

Intercept:	0
Slope:	1.119E+05

Error Coefficients

Standard Error:	4520
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	1177.0			117465.06986	Y
2	IC 280-534622/18	0.02004	2633.0			131387.225549	Y
3	IC 280-534622/17	0.0501	5724.0			114251.497006	Y
4	IC 280-534622/16	0.1002	11083.0			110608.782435	Y
5	IC 280-534622/15	0.2505	26060.0			104031.936128	Y
6	IC 280-534622/14	0.4008	43055.0			107422.654691	Y
7	IC 280-534622/13	0.7014	75212.0			107231.251782	Y
8	IC 280-534622/12	1.002	107567.0			107352.295409	Y
9	IC 280-534622/11	2.505	269197.0			107463.872255	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

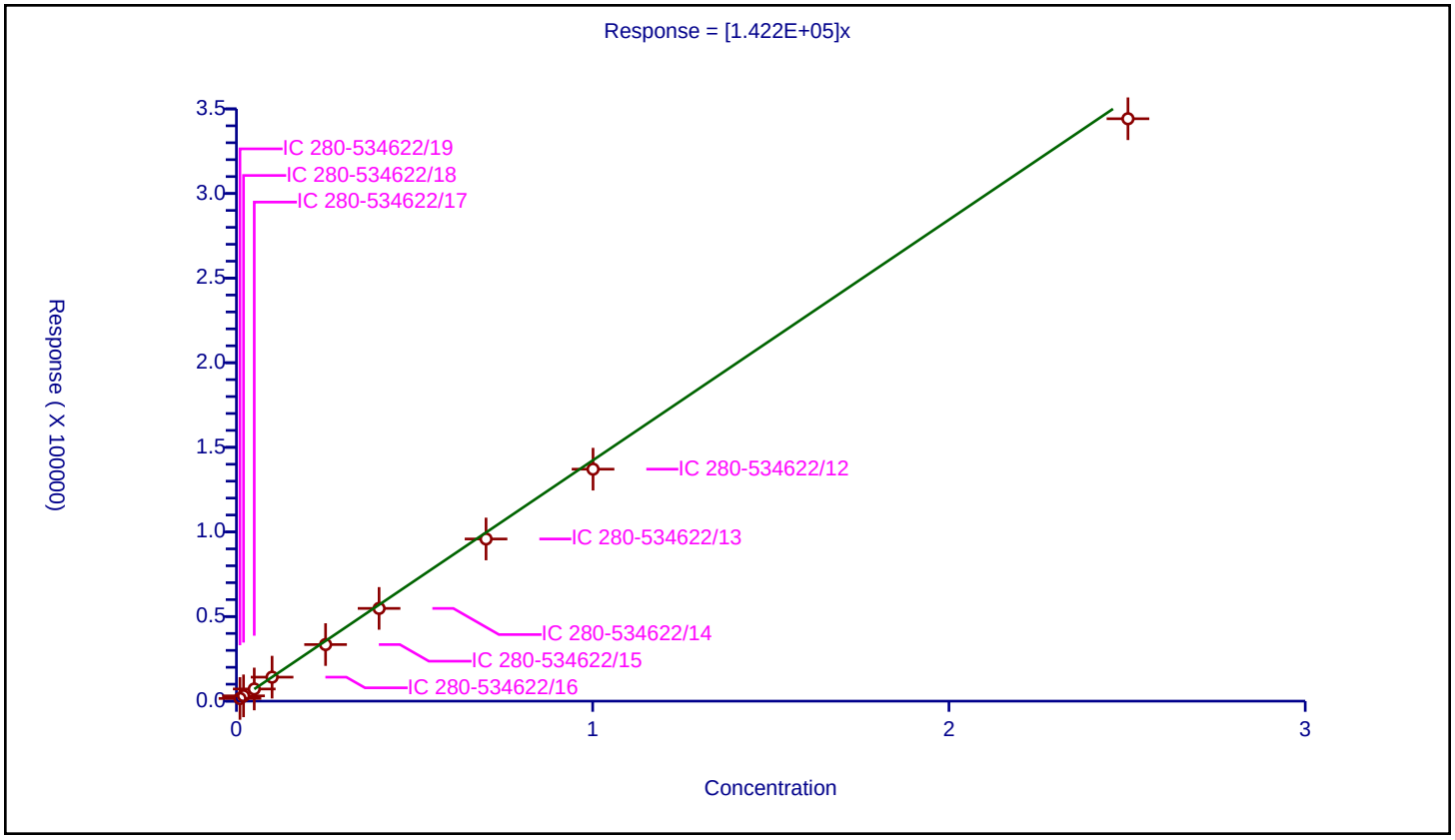
Curve Coefficients

Intercept:	0
Slope:	1.422E+05

Error Coefficients

Standard Error:	4890
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01001	1575.0			157342.657343	Y
2	IC 280-534622/18	0.02002	3121.0			155894.105894	Y
3	IC 280-534622/17	0.05005	7187.0			143596.403596	Y
4	IC 280-534622/16	0.1001	14179.0			141648.351648	Y
5	IC 280-534622/15	0.25025	33440.0			133626.373626	Y
6	IC 280-534622/14	0.4004	54796.0			136853.146853	Y
7	IC 280-534622/13	0.7007	95835.0			136770.372485	Y
8	IC 280-534622/12	1.001	137092.0			136955.044955	Y
9	IC 280-534622/11	2.5025	344169.0			137530.06993	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

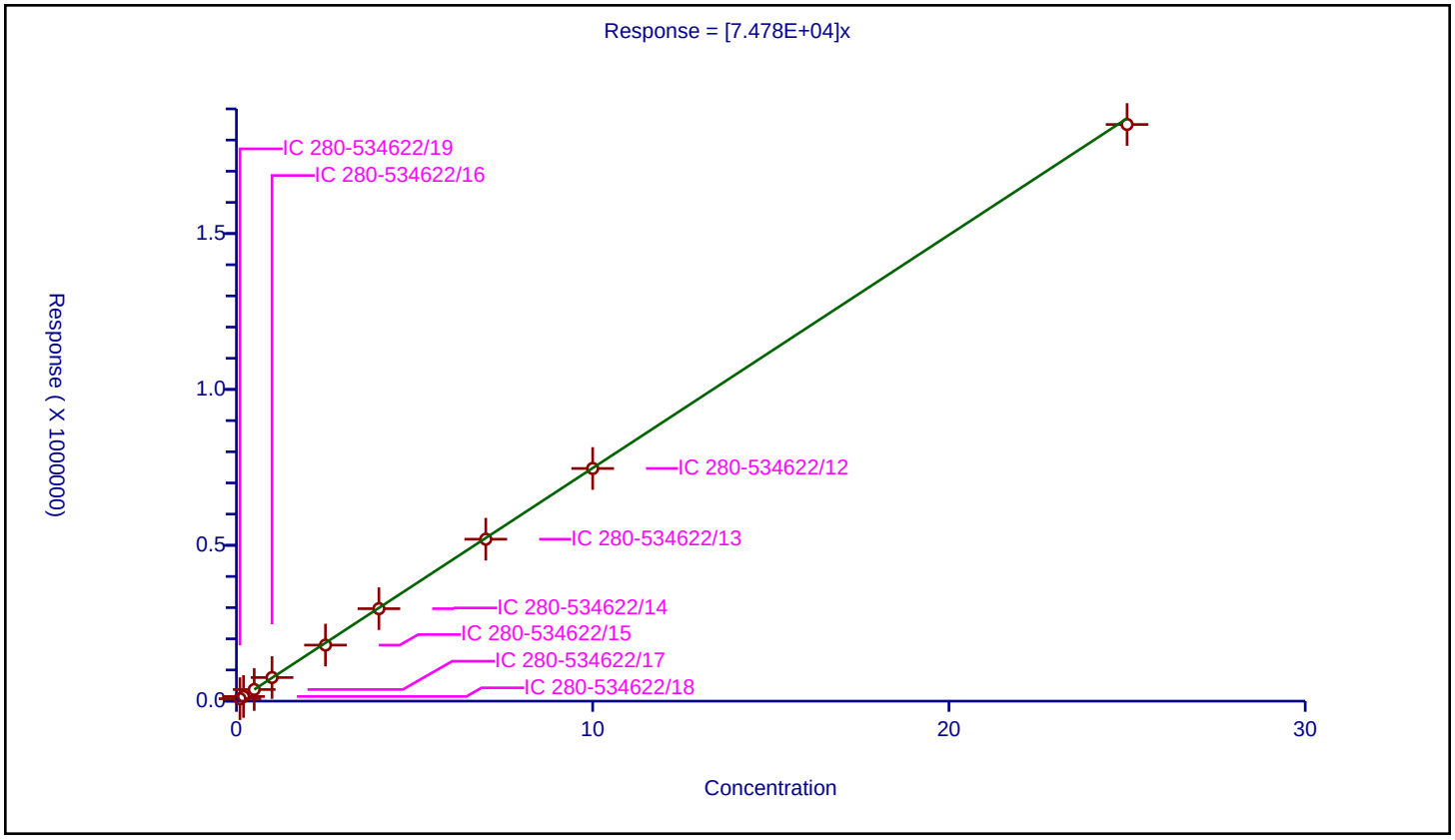
Curve Coefficients

Intercept:	0
Slope:	7.478E+04

Error Coefficients

Standard Error:	7550
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.1	7901.0			79010.0	Y
2	IC 280-534622/18	0.2	14944.0			74720.0	Y
3	IC 280-534622/17	0.5	37293.0			74586.0	Y
4	IC 280-534622/16	1.0	75747.0			75747.0	Y
5	IC 280-534622/15	2.5	179819.0			71927.6	Y
6	IC 280-534622/14	4.0	296622.0			74155.5	Y
7	IC 280-534622/13	7.0	519589.0			74227.0	Y
8	IC 280-534622/12	10.0	746366.0			74636.6	Y
9	IC 280-534622/11	25.0	1849935.0			73997.4	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
HMX	6.724	6.720	6.734	6.718	6.713	6.705	6.698	6.691	6.635		6.563 - 6.863	6.704
Picric acid	8.004	7.980	7.987	7.958	7.933	7.911	7.878	7.845	7.801		7.783 - 8.083	7.922
RDX	+++++	8.926	8.934	8.912	8.906	8.898	8.891	8.878	8.801		8.756 - 9.056	8.893
Nitrobenzene	+++++	11.973	11.994	11.971	11.973	11.951	11.951	11.924	11.854		11.823 - 12.123	11.949
1,3-Dinitrobenzene	15.524	15.533	15.547	15.518	15.519	15.491	15.504	15.471	15.421		15.369 - 15.669	15.503
Nitroglycerin	+++++	15.940	15.961	15.931	15.939	15.905	15.924	15.891	15.861		15.789 - 16.089	15.919
2-Nitrotoluene	16.751	16.740	16.781	16.751	16.759	16.725	16.744	16.704	16.668		16.609 - 16.909	16.736
4-Nitrotoluene	17.031	17.060	17.074	17.038	17.046	17.011	17.031	16.991	16.928		16.896 - 17.196	17.023
4-Amino-2,6-dinitrotoluene	17.511	17.520	17.541	17.511	17.526	17.485	17.504	17.458	17.421		17.376 - 17.676	17.497
3-Nitrotoluene	17.978	18.033	18.047	18.011	18.026	17.985	18.011	17.964	17.928		17.876 - 18.176	17.998
2-Amino-4,6-dinitrotoluene	18.418	18.426	18.441	18.418	18.426	18.385	18.411	18.364	18.321		18.276 - 18.576	18.401
1,3,5-Trinitrobenzene	18.904	18.946	18.954	18.931	18.939	18.905	18.924	18.884	18.861		18.789 - 19.089	18.916
2,6-Dinitrotoluene	20.191	20.200	20.201	20.185	20.199	20.158	20.184	20.138	20.114		20.049 - 20.349	20.174
2,4-Dinitrotoluene	20.644	20.666	20.674	20.652	20.666	20.625	20.651	20.605	20.581		20.516 - 20.816	20.640
Tetryl	24.271	24.306	24.287	24.298	24.313	24.258	24.304	24.245	24.248		24.163 - 24.463	24.281
2,4,6-Trinitrotoluene	25.258	25.280	25.254	25.265	25.280	25.231	25.271	25.218	25.221		25.130 - 25.430	25.253
PETN	26.151	26.180	26.154	26.172	26.186	26.145	26.184	26.138	26.155		26.036 - 26.336	26.163
1,2-Dinitrobenzene	+++++	13.093	13.114	13.091	13.093	13.065	13.071	13.044	12.988		12.943 - 13.243	13.070

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	254300 158320 162626	214300 160223	175820 158743	168500 161798	Lin2	980.653662	158773.733							0.9990		0.9900
Picric acid	178900 152888 141385	163500 155475	171560 152839	163400 155884	Ave		159536.708				7.0		20.0			
RDX	+++++ 194424 195542	226650 195463	221320 195131	206610 199019	Ave		204269.866				6.3		20.0			
Nitrobenzene	+++++ 361594 374427	392829 363362	384582 365280	379333 375807	Ave		374651.498				2.9		20.0			
1,3-Dinitrobenzene	707086 560267 567860	619311 564242	581677 563124	586467 575968	Lin2	1373.03976	562951.690							1.0000		0.9900
Nitroglycerin	+++++ 124192 125256	141495 124522	130832 124706	130447 127389	Ave		128604.807				4.5		20.0			
2-Nitrotoluene	302200 232764 241861	257550 236045	247460 236947	245280 240595	Ave		248966.927				8.5		20.0			
4-Nitrotoluene	260279 204571 203894	240669 205292	214770 204907	211786 208512	Ave		217186.809				9.1		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.: 280-149116-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
4-Amino-2,6-dinitrotoluene	395005 273762 275790	313487 274451	295744 274119	287902 280086	Ave		296705.057				13.2		20.0			
3-Nitrotoluene	351349 259473 262003	296104 260060	278581 260578	271848 265537	Ave		278392.538				10.7		20.0			
2-Amino-4,6-dinitrotoluene	512749 386737 391743	453884 388349	420538 388045	407410 395660	Lin2	1254.00604	389849.211							1.0000		0.9900
1,3,5-Trinitrobenzene	710180 416543 413420	525948 413743	469182 414112	445050 423023	Lin2	2883.27310	409600.291							0.9990		0.9900
2,6-Dinitrotoluene	354084 263195 266888	300100 265070	280498 266340	276106 272867	Lin2	857.028820	264837.016							1.0000		0.9900
2,4-Dinitrotoluene	659263 534514 542026	609014 537398	565657 537324	556155 550069	Ave		565713.342				7.4		20.0			
Tetryl	523453 323337 324746	378393 322206	350758 323640	340798 328709	Lin2	1889.68945	317664.730							0.9970		0.9900
2,4,6-Trinitrotoluene	544721 373793 382269	425697 377761	386454 378660	385857 387552	Lin2	1580.45681	371636.737							0.9980		0.9900
PETN	156590 132124 133721	137180 132892	138340 134943	136676 137199	Ave		137740.388				5.4		20.0			
1,2-Dinitrobenzene	+++++ 252324 253320	314000 253120	276720 251686	266780 257324	Ave		265659.214				8.1		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Lin2	2543 64089	4286 111120	8791 161798	16850 406565	39580	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	1789 62190	3270 106987	8578 155884	16340 353462	38222	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	+++++ 78185	4533 136592	11066 199019	20661 488855	48606	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	+++++ 145926	7888 256719	19306 377310	38085 939811	90760	+++++ 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Lin2	7085 226148	12411 394975	29142 577120	58764 1422490	140347	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	+++++ 498088	28299 872941	65416 1273886	130447 3131400	310480	+++++ 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	3022 94418	5151 165863	12373 240595	24528 604653	58191	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2608 82281	4823 143722	10760 208929	21221 510755	51245	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	3954 109890	6276 192075	14802 280366	28819 690165	68509	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	3517 104128	5928 182587	13943 265803	27212 655662	64933	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Lin2	5148 155961	9114 272718	21111 397243	40904 983275	97071	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Lin2	7116 165828	10540 290458	23506 423869	44594 1035616	104344	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Lin2	3555	6026	14081	27721	66062	0.0100	0.0201	0.0502	0.100	0.251

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		106452	187184	273958	669889		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Ave	6619	12229	28396	55838	134163	0.0100	0.0201	0.0502	0.100	0.251
		215819	377631	552269	1360486		0.402	0.703	1.00	2.51	
Tetryl	Lin2	5245	7583	17573	34148	80996	0.0100	0.0200	0.0501	0.100	0.251
		129140	227001	329366	813489		0.401	0.701	1.00	2.51	
2,4,6-Trinitrotoluene	Lin2	5469	8548	19400	38740	93822	0.0100	0.0201	0.0502	0.100	0.251
		151709	266122	389102	959496		0.402	0.703	1.00	2.51	
PETN	Ave	15659	27436	69170	136676	330309	0.100	0.200	0.500	1.00	2.50
		531566	944599	1371986	3343027		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	+++++	6280	13836	26678	63081	+++++	0.0200	0.0500	0.100	0.250
		101248	176180	257324	633300		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D
Lims ID: IC INT/ADD 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-May-2021 18:54:50 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 9
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:10

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	4.061	4.126	-0.065	1092989	2.50	2.67	
2 2,4-diamino-6-nitrotoluene	1	4.635	4.653	-0.018	538473	2.50	2.25	
6 HMX	1	6.635	6.713	-0.078	406565	2.50	2.55	
5 2,4,6-Trinitrophenol	1	7.801	7.933	-0.132	353462	2.50	2.22	
8 RDX	1	8.801	8.906	-0.105	488855	2.50	2.39	
9 Nitrobenzene	1	11.854	11.973	-0.119	939811	2.51	2.51	
$ 10 1,2-Dinitrobenzene	1	12.988	13.093	-0.105	633300	2.50	2.38	
11 3,5-Dinitroaniline	1	14.868	14.979	-0.111	1143420	2.50	2.54	
12 1,3-Dinitrobenzene	1	15.421	15.519	-0.098	1422490	2.51	2.52	
13 Nitroglycerin	2	15.861	15.939	-0.078	3131400	25.0	24.3	
14 o-Nitrotoluene	1	16.668	16.759	-0.091	604653	2.50	2.43	
15 p-Nitrotoluene	1	16.928	17.046	-0.118	510755	2.51	2.35	
16 4-Amino-2,6-dinitrotoluene	1	17.421	17.526	-0.105	690165	2.50	2.33	
17 m-Nitrotoluene	1	17.928	18.026	-0.098	655662	2.50	2.36	
18 2-Amino-4,6-dinitrotoluene	1	18.321	18.426	-0.105	983275	2.51	2.52	
19 1,3,5-Trinitrobenzene	1	18.861	18.939	-0.078	1035616	2.51	2.52	
20 2,6-Dinitrotoluene	1	20.114	20.199	-0.085	669889	2.51	2.53	
21 2,4-Dinitrotoluene	1	20.581	20.666	-0.085	1360486	2.51	2.40	
22 Tetryl	1	24.248	24.313	-0.065	813489	2.51	2.55	
23 2,4,6-Trinitrotoluene	1	25.221	25.280	-0.059	959496	2.51	2.58	
24 PETN	2	26.155	26.186	-0.031	3343027	25.0	24.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 250.00	Units: uL
8330_ADDs_00027	Amount Added: 125.00	Units: uL

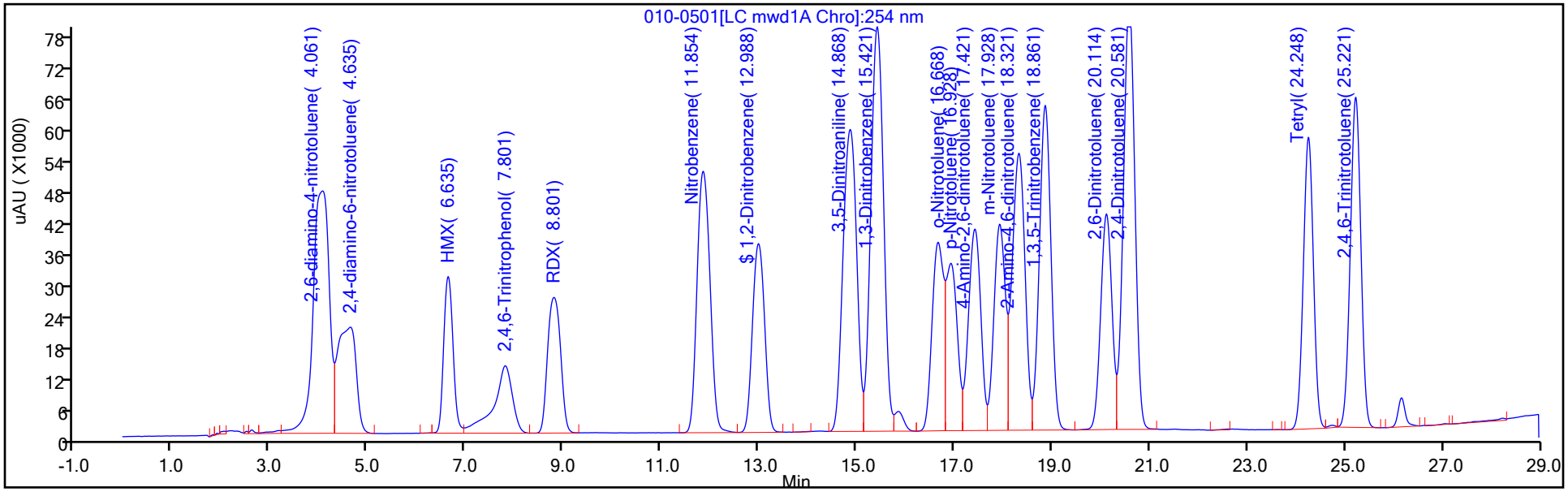
Report Date: 04-May-2021 13:43:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

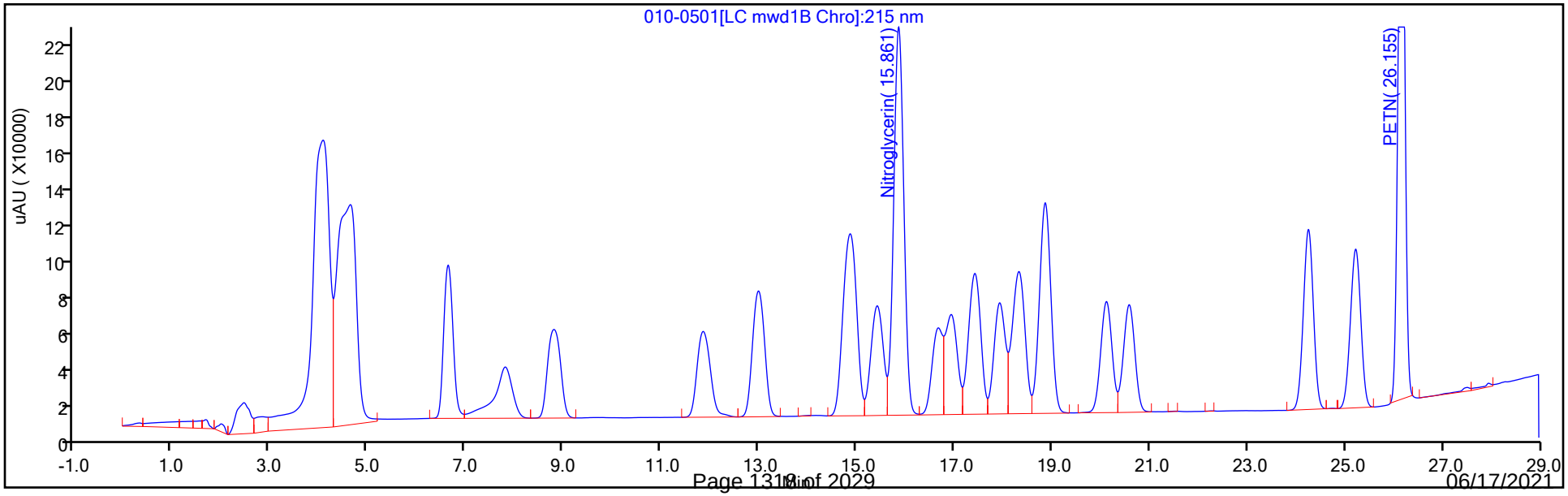
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D

Injection Date:	01-May-2021 18:54:50	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

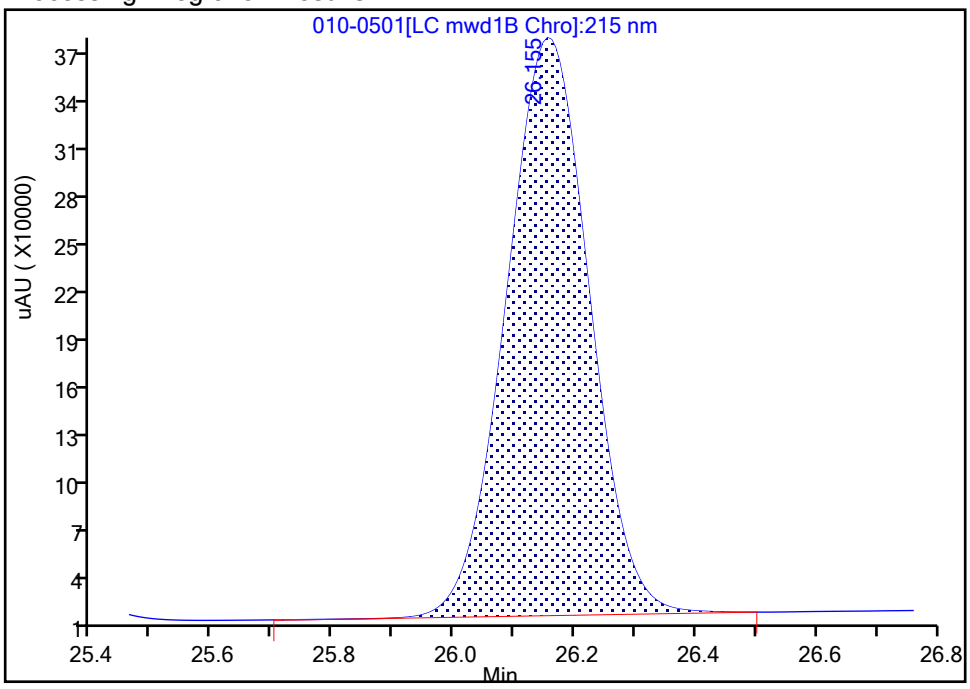
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D				
Injection Date:	01-May-2021 18:54:50	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

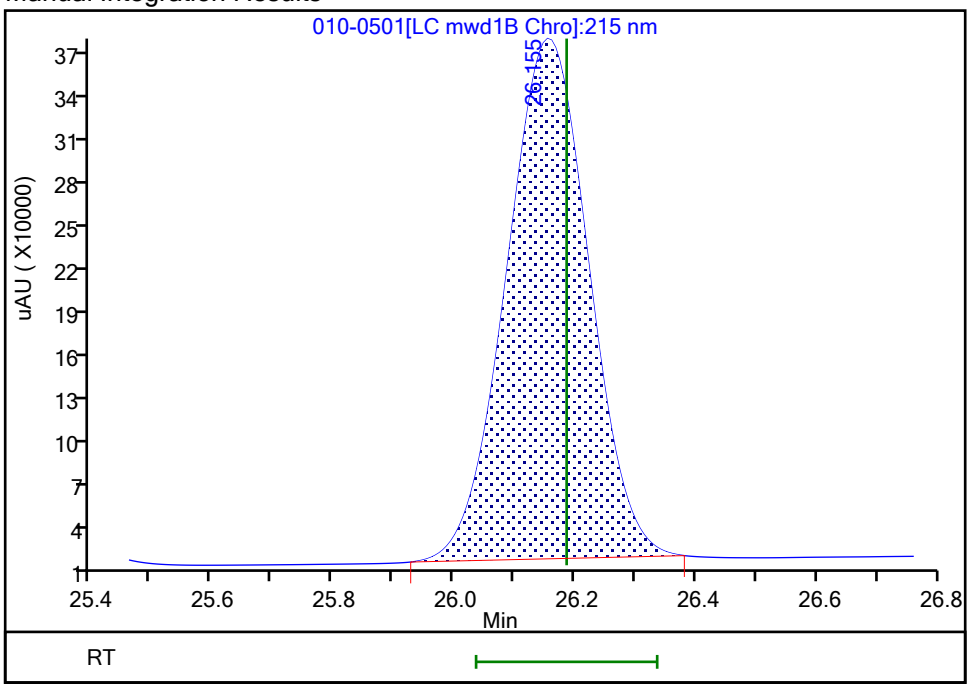
Processing Integration Results

RT: 26.15
Area: 3390696
Amount: 25.717777
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 3343027
Amount: 24.270492
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D
Lims ID: IC INT/ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-May-2021 19:29:53 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 8
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:18

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	4.085	4.126	-0.041	410324	1.00	1.00	
2 2,4-diamino-6-nitrotoluene	1	4.598	4.653	-0.055	250474	1.00	1.04	
6 HMX	1	6.691	6.713	-0.022	161798	1.00	1.01	
5 2,4,6-Trinitrophenol	1	7.845	7.933	-0.088	155884	1.00	0.9771	
8 RDX	1	8.878	8.906	-0.028	199019	1.00	0.9743	
9 Nitrobenzene	1	11.924	11.973	-0.049	377310	1.00	1.01	
$ 10 1,2-Dinitrobenzene	1	13.044	13.093	-0.049	257324	1.00	0.9686	
11 3,5-Dinitroaniline	1	14.918	14.979	-0.061	457283	1.00	1.01	
12 1,3-Dinitrobenzene	1	15.471	15.519	-0.048	577120	1.00	1.02	
13 Nitroglycerin	2	15.891	15.939	-0.048	1273886	10.0	9.91	
14 o-Nitrotoluene	1	16.704	16.759	-0.055	240595	1.00	0.9664	
15 p-Nitrotoluene	1	16.991	17.046	-0.055	208929	1.00	0.9620	
16 4-Amino-2,6-dinitrotoluene	1	17.458	17.526	-0.068	280366	1.00	0.9449	
17 m-Nitrotoluene	1	17.964	18.026	-0.062	265803	1.00	0.9548	
18 2-Amino-4,6-dinitrotoluene	1	18.364	18.426	-0.062	397243	1.00	1.02	
19 1,3,5-Trinitrobenzene	1	18.884	18.939	-0.055	423869	1.00	1.03	
20 2,6-Dinitrotoluene	1	20.138	20.199	-0.061	273958	1.00	1.03	
21 2,4-Dinitrotoluene	1	20.605	20.666	-0.062	552269	1.00	0.9762	
22 Tetryl	1	24.245	24.313	-0.068	329366	1.00	1.03	
23 2,4,6-Trinitrotoluene	1	25.218	25.280	-0.062	389102	1.00	1.04	
24 PETN	2	26.138	26.186	-0.048	1371986	10.0	9.96	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 100.00	Units: uL
8330_ADDs_00027	Amount Added: 50.00	Units: uL

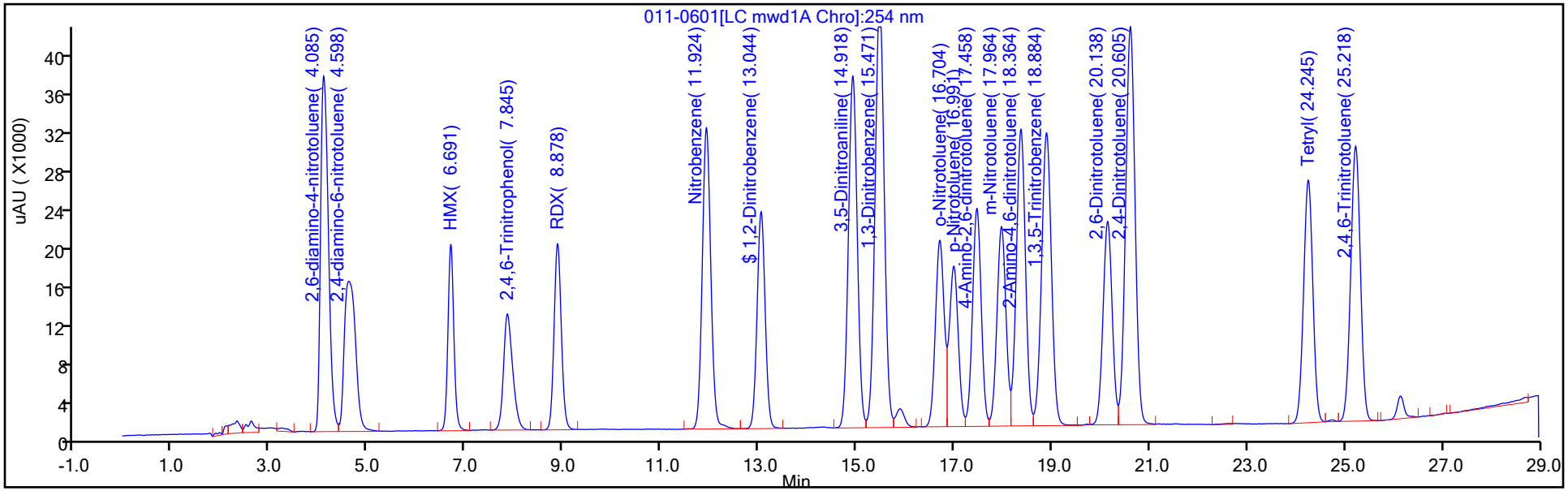
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

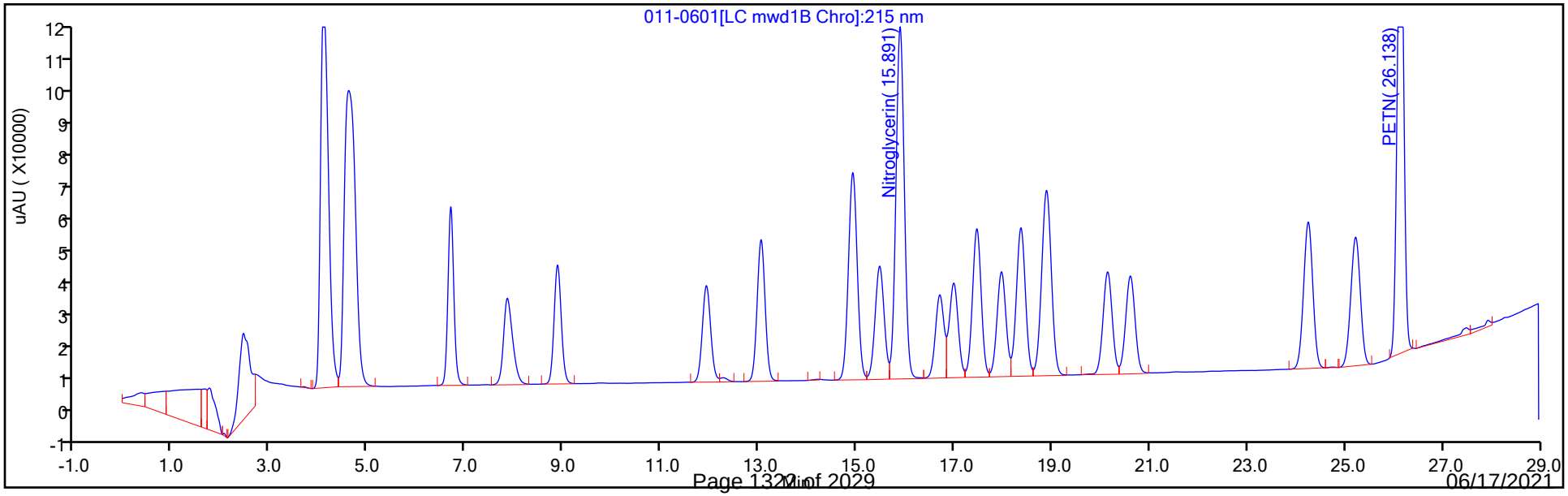
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D

Injection Date:	01-May-2021 19:29:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

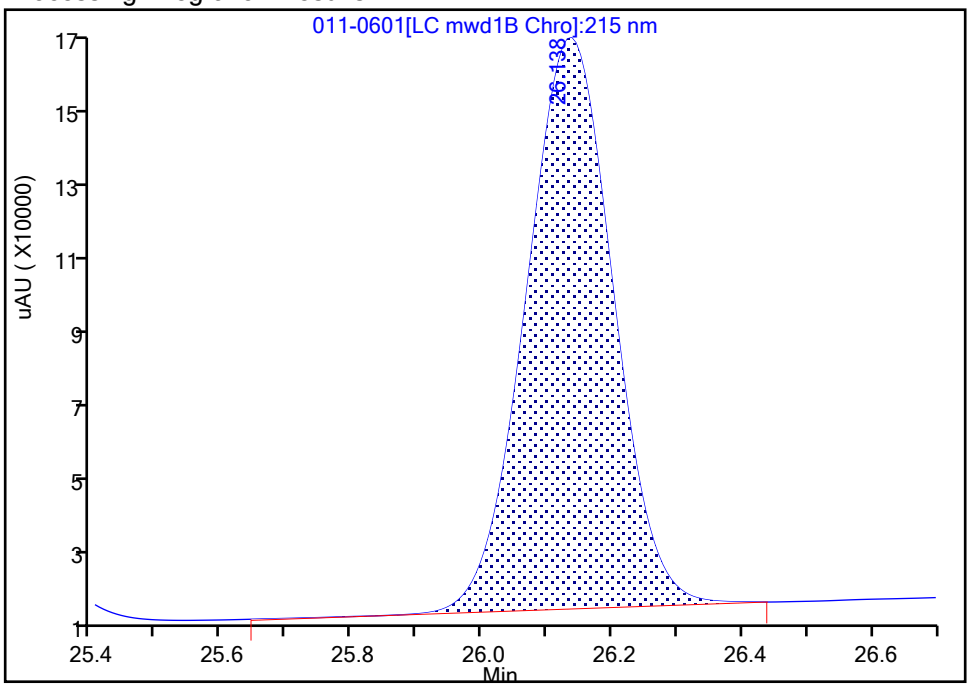
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D
Injection Date: 01-May-2021 19:29:53 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 8
Client ID:
Operator ID: JZ ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

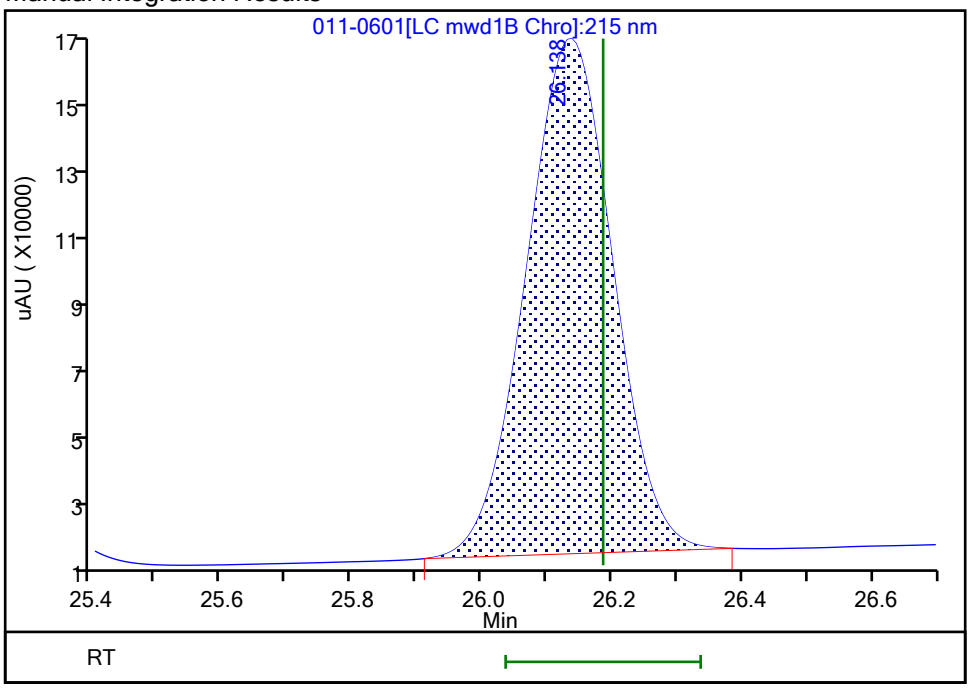
Processing Integration Results

RT: 26.14
Area: 1384511
Amount: 10.424343
Amount Units: ug/ml



Manual Integration Results

RT: 26.14
Area: 1371986
Amount: 9.960666
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:17
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D
Lims ID: IC INT/ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-May-2021 20:04:53 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 7
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:12 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:25

	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	4.104	4.126	-0.022	286797	0.7000	0.6941	
	2 2,4-diamino-6-nitrotoluene	1	4.618	4.653	-0.035	172168	0.7000	0.7152	
	6 HMX	1	6.698	6.713	-0.015	111120	0.7000	0.6937	
	5 2,4,6-Trinitrophenol	1	7.878	7.933	-0.055	106987	0.7000	0.6706	
	8 RDX	1	8.891	8.906	-0.015	136592	0.7000	0.6687	
	9 Nitrobenzene	1	11.951	11.973	-0.022	256719	0.7028	0.6852	
$	10 1,2-Dinitrobenzene	1	13.071	13.093	-0.022	176180	0.7000	0.6632	
	11 3,5-Dinitroaniline	1	14.957	14.979	-0.022	318505	0.7000	0.7055	
	12 1,3-Dinitrobenzene	1	15.504	15.519	-0.015	394975	0.7014	0.6992	
	13 Nitroglycerin	2	15.924	15.939	-0.015	872941	7.00	6.79	
	14 o-Nitrotoluene	1	16.744	16.759	-0.015	165863	0.7000	0.6662	
	15 p-Nitrotoluene	1	17.031	17.046	-0.015	143722	0.7014	0.6617	
	16 4-Amino-2,6-dinitrotoluene	1	17.504	17.526	-0.022	192075	0.7007	0.6474	
	17 m-Nitrotoluene	1	18.011	18.026	-0.015	182587	0.7007	0.6559	
	18 2-Amino-4,6-dinitrotoluene	1	18.411	18.426	-0.015	272718	0.7028	0.6963	
	19 1,3,5-Trinitrobenzene	1	18.924	18.939	-0.015	290458	0.7014	0.7021	
	20 2,6-Dinitrotoluene	1	20.184	20.199	-0.015	187184	0.7028	0.7036	
	21 2,4-Dinitrotoluene	1	20.651	20.666	-0.015	377631	0.7028	0.6675	
	22 Tetryl	1	24.304	24.313	-0.009	227001	0.7014	0.7086	
	23 2,4,6-Trinitrotoluene	1	25.271	25.280	-0.009	266122	0.7028	0.7118	
	24 PETN	2	26.184	26.186	-0.002	944599	7.00	6.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	70.00	Units: uL
8330_ADDs_00027	Amount Added:	35.00	Units: uL

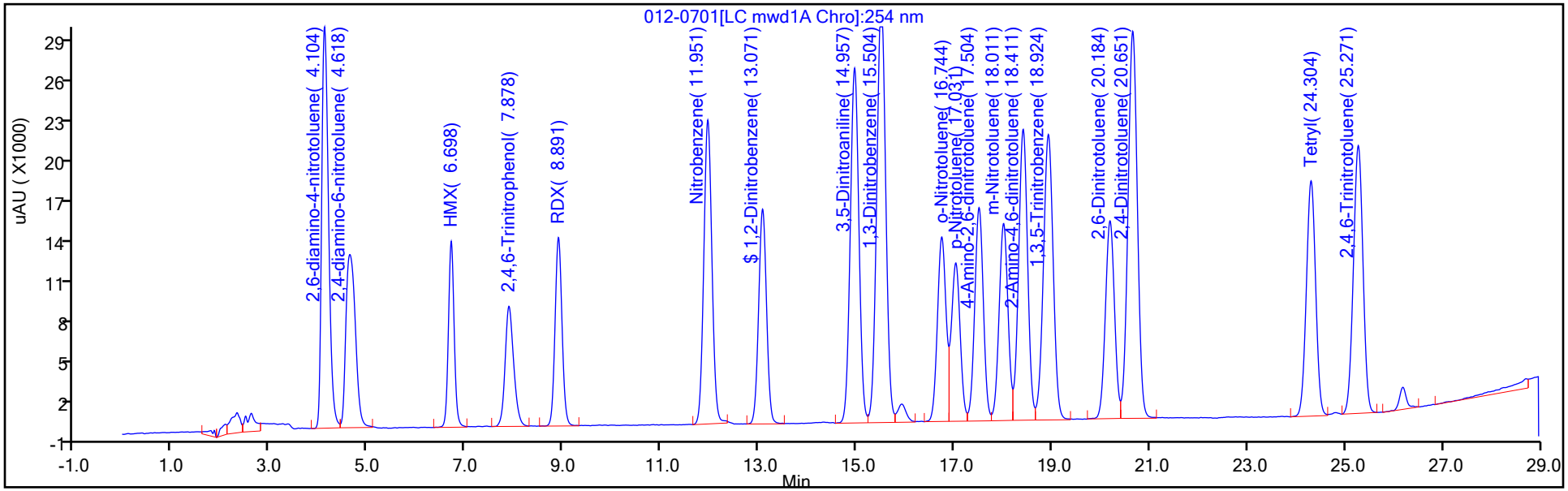
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

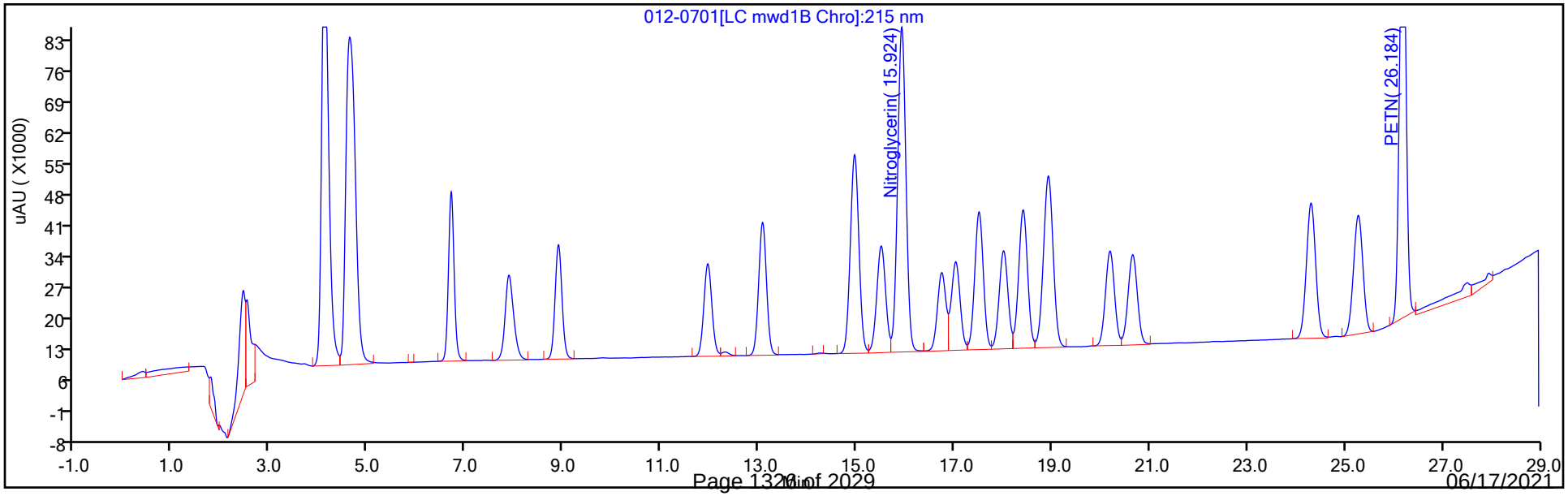
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D

Injection Date:	01-May-2021 20:04:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

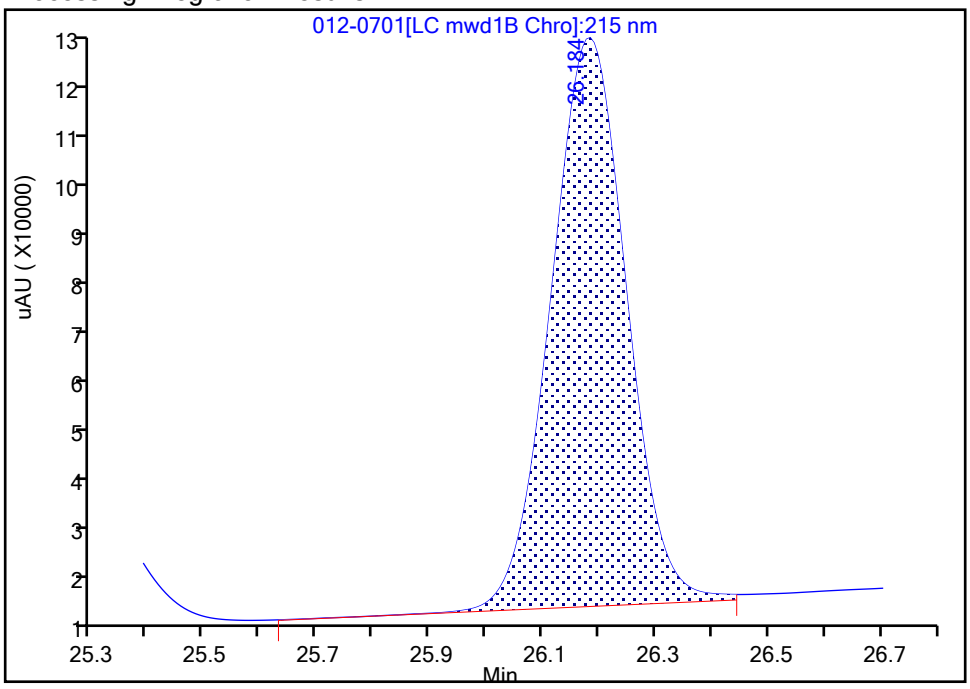
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D
Injection Date: 01-May-2021 20:04:53 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 7
Client ID:
Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

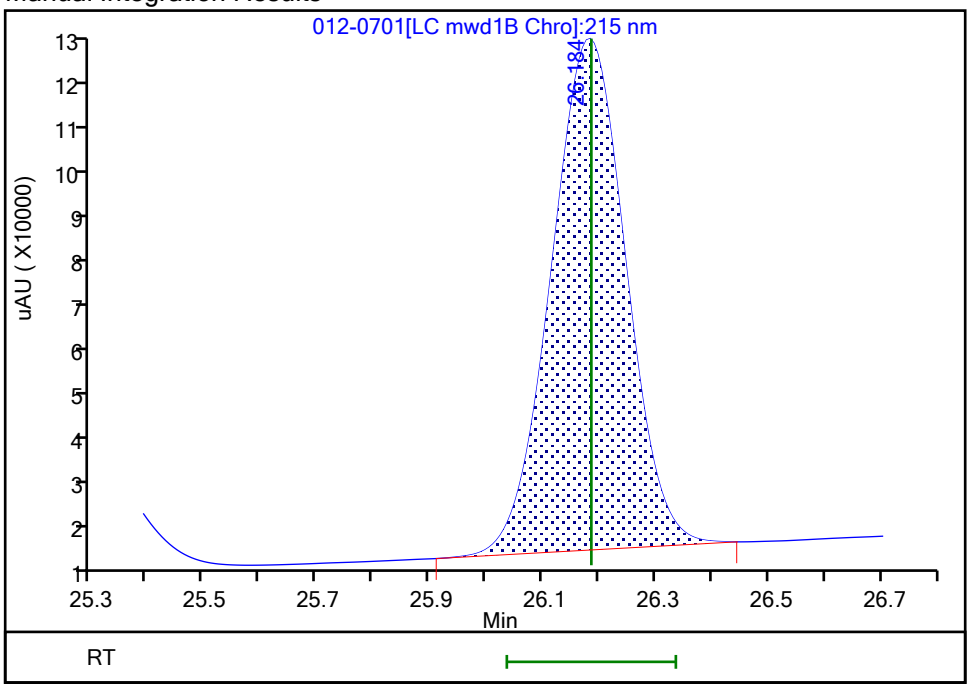
Processing Integration Results

RT: 26.18
Area: 962158
Amount: 7.202862
Amount Units: ug/ml



Manual Integration Results

RT: 26.18
Area: 944599
Amount: 6.857822
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:24
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D
Lims ID: IC INT/ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-May-2021 20:39:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 6
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:33

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.111	4.126	-0.015	166673	0.4000	0.3994	
	2 2,4-diamino-6-nitrotoluene	1	4.631	4.653	-0.022	98867	0.4000	0.4084	
	6 HMX	1	6.705	6.713	-0.008	64089	0.4000	0.3975	
	5 2,4,6-Trinitrophenol	1	7.911	7.933	-0.022	62190	0.4000	0.3898	
	8 RDX	1	8.898	8.906	-0.008	78185	0.4000	0.3828	
	9 Nitrobenzene	1	11.951	11.973	-0.022	145926	0.4016	0.3895	
$	10 1,2-Dinitrobenzene	1	13.065	13.093	-0.028	101248	0.4000	0.3811	
	11 3,5-Dinitroaniline	1	14.951	14.979	-0.028	183549	0.4000	0.4057	
	12 1,3-Dinitrobenzene	1	15.491	15.519	-0.028	226148	0.4008	0.3993	
	13 Nitroglycerin	2	15.905	15.939	-0.034	498088	4.00	3.87	
	14 o-Nitrotoluene	1	16.725	16.759	-0.034	94418	0.4000	0.3792	
	15 p-Nitrotoluene	1	17.011	17.046	-0.035	82281	0.4008	0.3788	
	16 4-Amino-2,6-dinitrotoluene	1	17.485	17.526	-0.041	109890	0.4004	0.3704	
	17 m-Nitrotoluene	1	17.985	18.026	-0.041	104128	0.4004	0.3740	
	18 2-Amino-4,6-dinitrotoluene	1	18.385	18.426	-0.041	155961	0.4016	0.3968	
	19 1,3,5-Trinitrobenzene	1	18.905	18.939	-0.034	165828	0.4008	0.3978	
	20 2,6-Dinitrotoluene	1	20.158	20.199	-0.041	106452	0.4016	0.3987	
	21 2,4-Dinitrotoluene	1	20.625	20.666	-0.041	215819	0.4016	0.3815	
	22 Tetryl	1	24.258	24.313	-0.055	129140	0.4008	0.4006	
	23 2,4,6-Trinitrotoluene	1	25.231	25.280	-0.049	151709	0.4016	0.4040	
	24 PETN	2	26.145	26.186	-0.041	531566	4.00	3.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	40.00	Units: uL
8330_ADDs_00027	Amount Added:	20.00	Units: uL

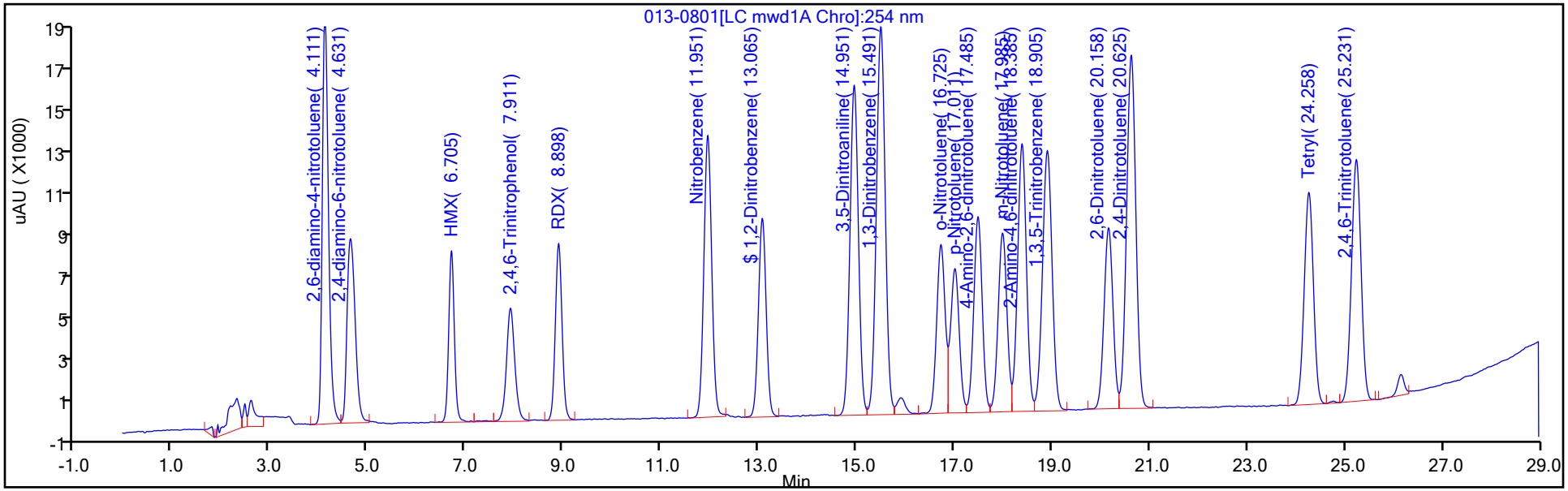
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

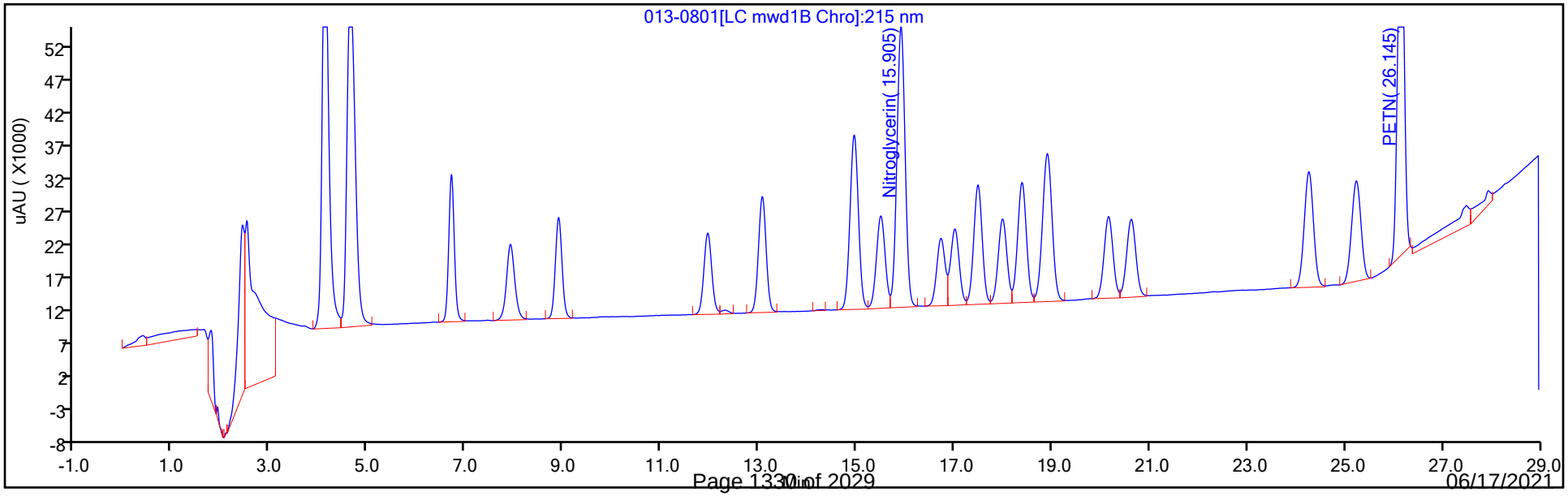
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D

Injection Date:	01-May-2021 20:39:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

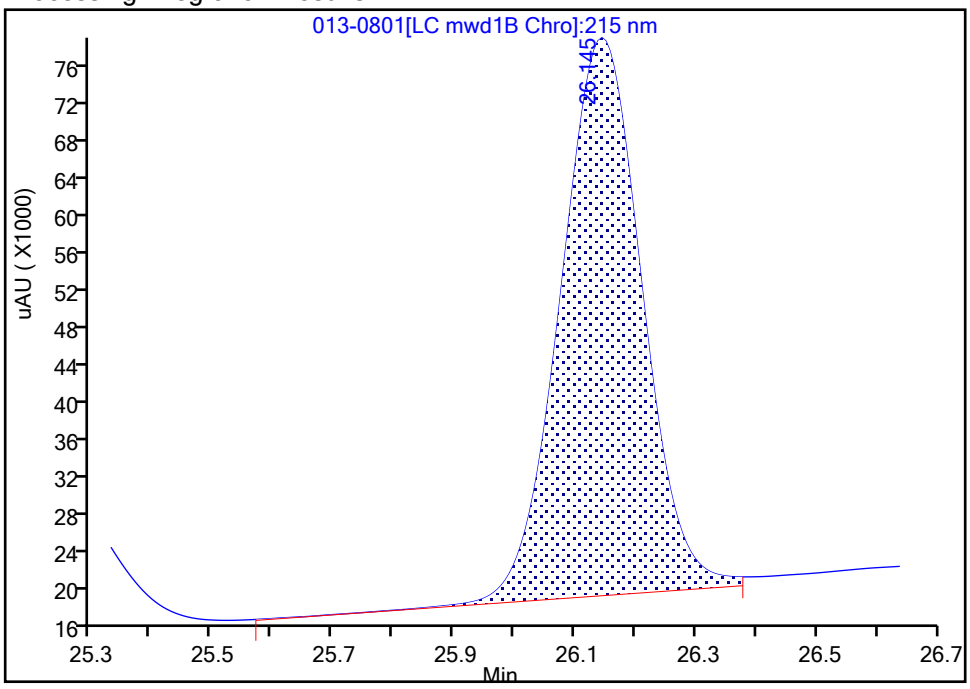
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D
Injection Date: 01-May-2021 20:39:55 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 6
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

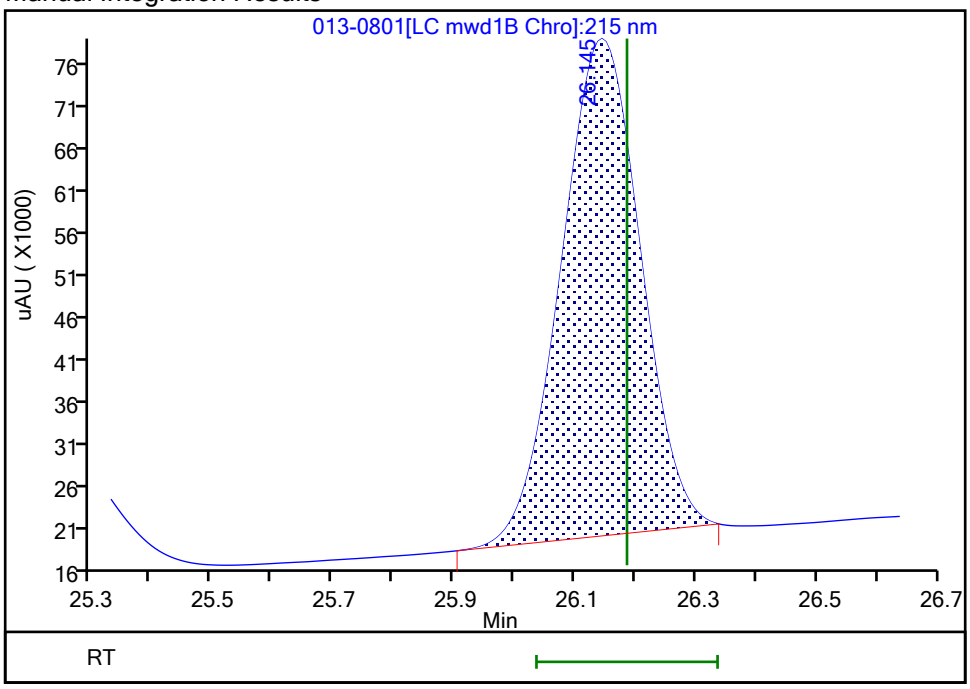
Processing Integration Results

RT: 26.14
Area: 555116
Amount: 4.095081
Amount Units: ug/ml



Manual Integration Results

RT: 26.14
Area: 531566
Amount: 3.859188
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:32
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Lims ID: IC INT/ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-May-2021 21:15:02 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 5
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:35:48

	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	4.126	4.126	0.000	101396	0.2500	0.2392	
	2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	59623	0.2500	0.2442	
	6 HMX	1	6.713	6.713	0.000	39580	0.2500	0.2431	
	5 2,4,6-Trinitrophenol	1	7.933	7.933	0.000	38222	0.2500	0.2396	
	8 RDX	1	8.906	8.906	0.000	48606	0.2500	0.2379	
	9 Nitrobenzene	1	11.973	11.973	0.000	90760	0.2510	0.2423	
$	10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	63081	0.2500	0.2375	
	11 3,5-Dinitroaniline	1	14.979	14.979	0.000	110385	0.2500	0.2431	
	12 1,3-Dinitrobenzene	1	15.519	15.519	0.000	140347	0.2505	0.2469	
	13 Nitroglycerin	2	15.939	15.939	0.000	310480	2.50	2.41	
	14 o-Nitrotoluene	1	16.759	16.759	0.000	58191	0.2500	0.2337	
	15 p-Nitrotoluene	1	17.046	17.046	0.000	51245	0.2505	0.2359	
	16 4-Amino-2,6-dinitrotoluene	1	17.526	17.526	0.000	68509	0.2503	0.2309	
	17 m-Nitrotoluene	1	18.026	18.026	0.000	64933	0.2503	0.2332	
	18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	97071	0.2510	0.2458	
	19 1,3,5-Trinitrobenzene	1	18.939	18.939	0.000	104344	0.2505	0.2477	
	20 2,6-Dinitrotoluene	1	20.199	20.199	0.000	66062	0.2510	0.2462	
	21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	134163	0.2510	0.2372	
	22 Tetryl	1	24.313	24.313	0.000	80996	0.2505	0.2490	
	23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	93822	0.2510	0.2482	
	24 PETN	2	26.186	26.186	0.000	330309	2.50	2.40	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

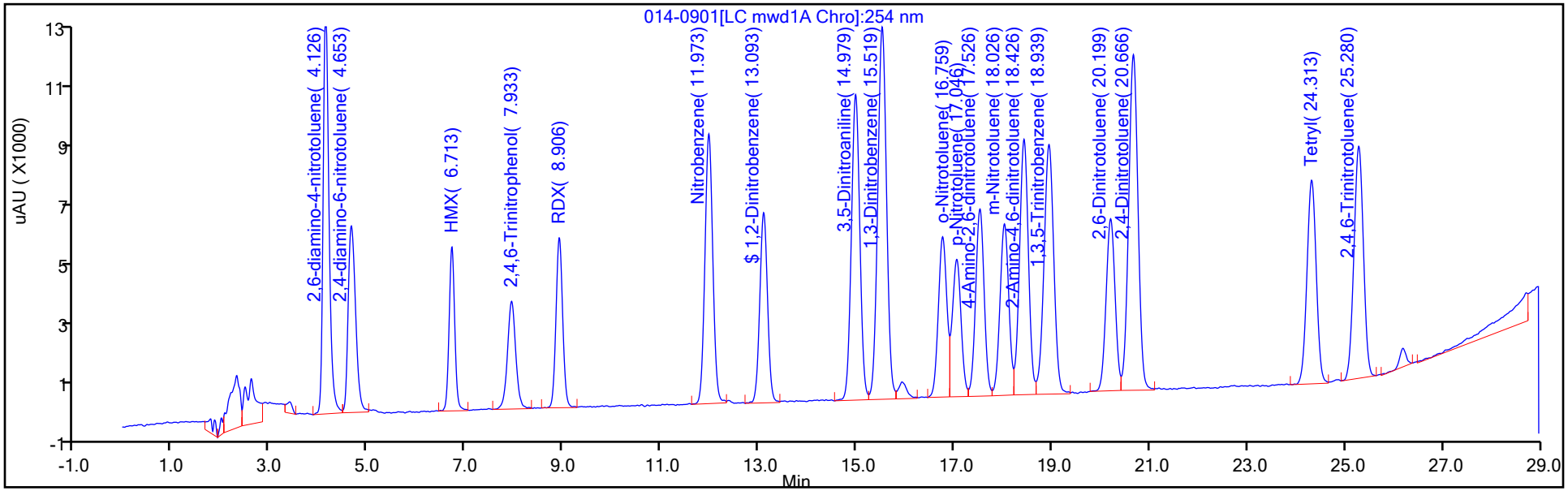
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

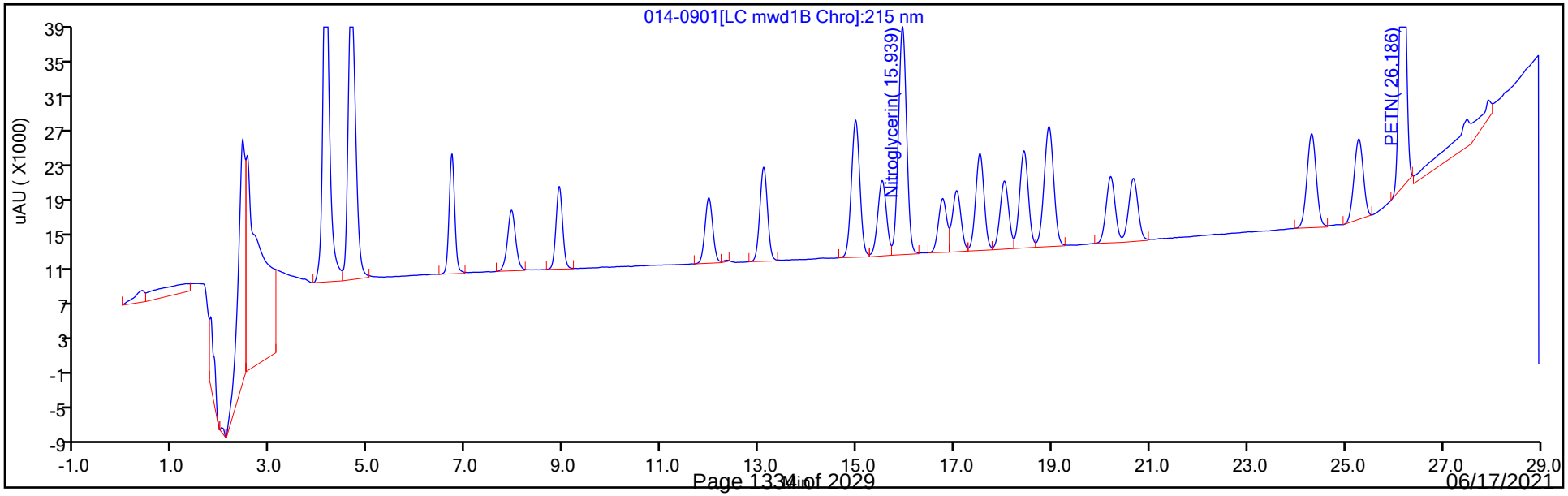
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D

Injection Date:	01-May-2021 21:15:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

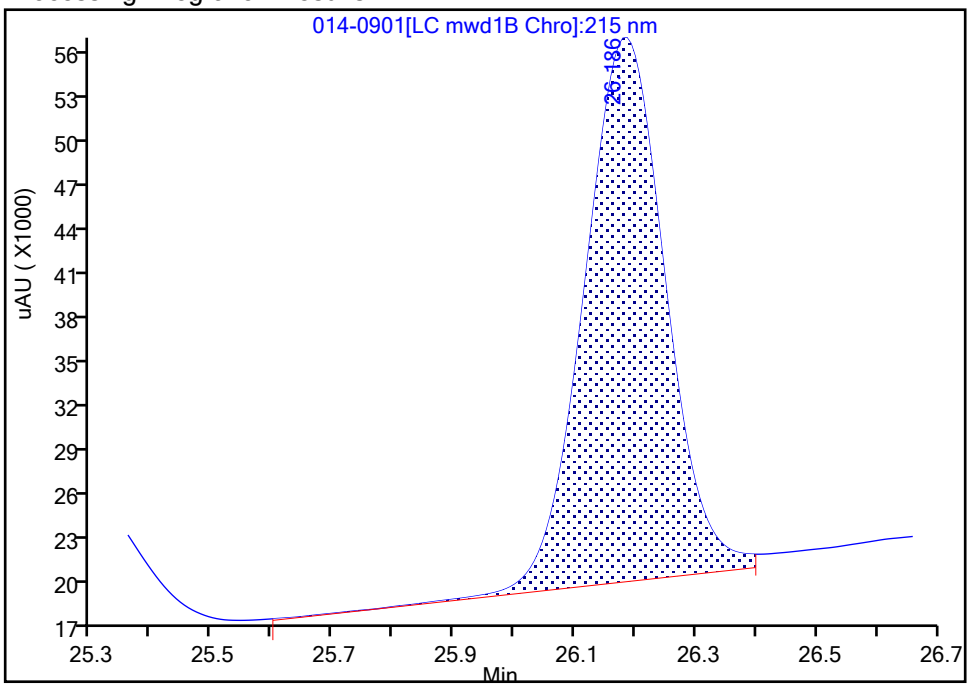
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Injection Date: 01-May-2021 21:15:02 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 5
Client ID:
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

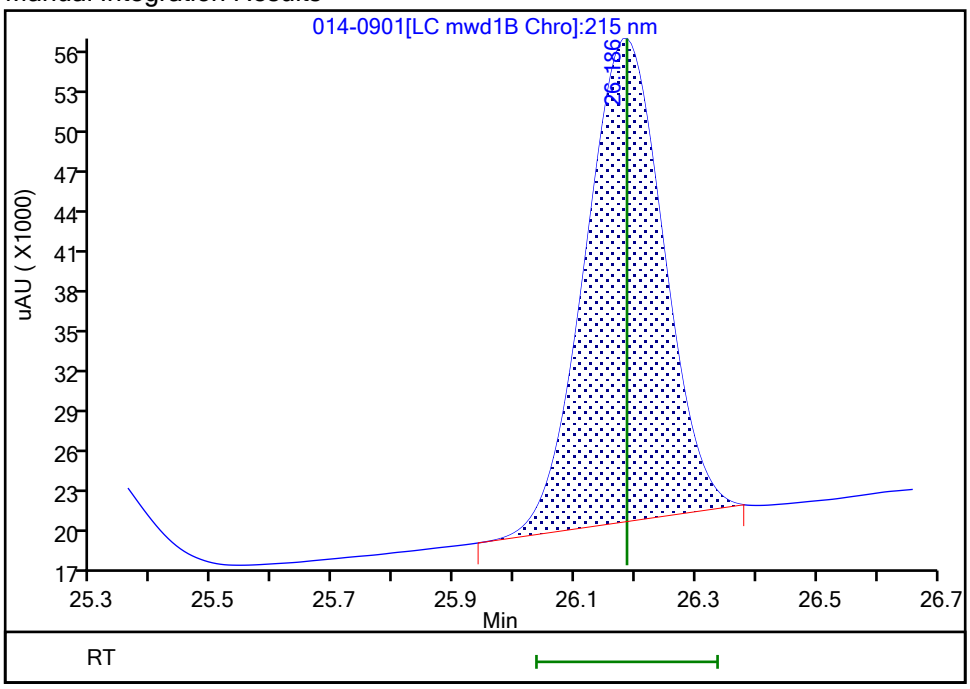
Processing Integration Results

RT: 26.19
Area: 348444
Amount: 2.522976
Amount Units: ug/ml



Manual Integration Results

RT: 26.19
Area: 330309
Amount: 2.398055
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D
Lims ID: IC INT/ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-May-2021 21:50:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 4
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.132	4.126	0.006	44112	0.1000	0.0987	
2 2,4-diamino-6-nitrotoluene	1	4.658	4.653	0.005	25556	0.1000	0.1016	
6 HMX	1	6.718	6.713	0.005	16850	0.1000	0.0999	
5 2,4,6-Trinitrophenol	1	7.958	7.933	0.025	16340	0.1000	0.1024	
8 RDX	1	8.912	8.906	0.006	20661	0.1000	0.1011	
9 Nitrobenzene	1	11.971	11.973	-0.002	38085	0.1004	0.1017	
$ 10 1,2-Dinitrobenzene	1	13.091	13.093	-0.002	26678	0.1000	0.1004	
11 3,5-Dinitroaniline	1	14.971	14.979	-0.008	46817	0.1000	0.1019	
12 1,3-Dinitrobenzene	1	15.518	15.519	-0.001	58764	0.1002	0.1019	
13 Nitroglycerin	2	15.931	15.939	-0.008	130447	1.00	1.01	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	24528	0.1000	0.0985	
15 p-Nitrotoluene	1	17.038	17.046	-0.008	21221	0.1002	0.0977	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	28819	0.1001	0.0971	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	27212	0.1001	0.0977	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	40904	0.1004	0.1017	
19 1,3,5-Trinitrobenzene	1	18.931	18.939	-0.008	44594	0.1002	0.1018	
20 2,6-Dinitrotoluene	1	20.185	20.199	-0.014	27721	0.1004	0.1014	
21 2,4-Dinitrotoluene	1	20.652	20.666	-0.015	55838	0.1004	0.0987	
22 Tetryl	1	24.298	24.313	-0.015	34148	0.1002	0.1015	
23 2,4,6-Trinitrotoluene	1	25.265	25.280	-0.015	38740	0.1004	0.1000	
24 PETN	2	26.172	26.186	-0.014	136676	1.00	0.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 10.00	Units: uL
8330_ADDs_00027	Amount Added: 5.00	Units: uL

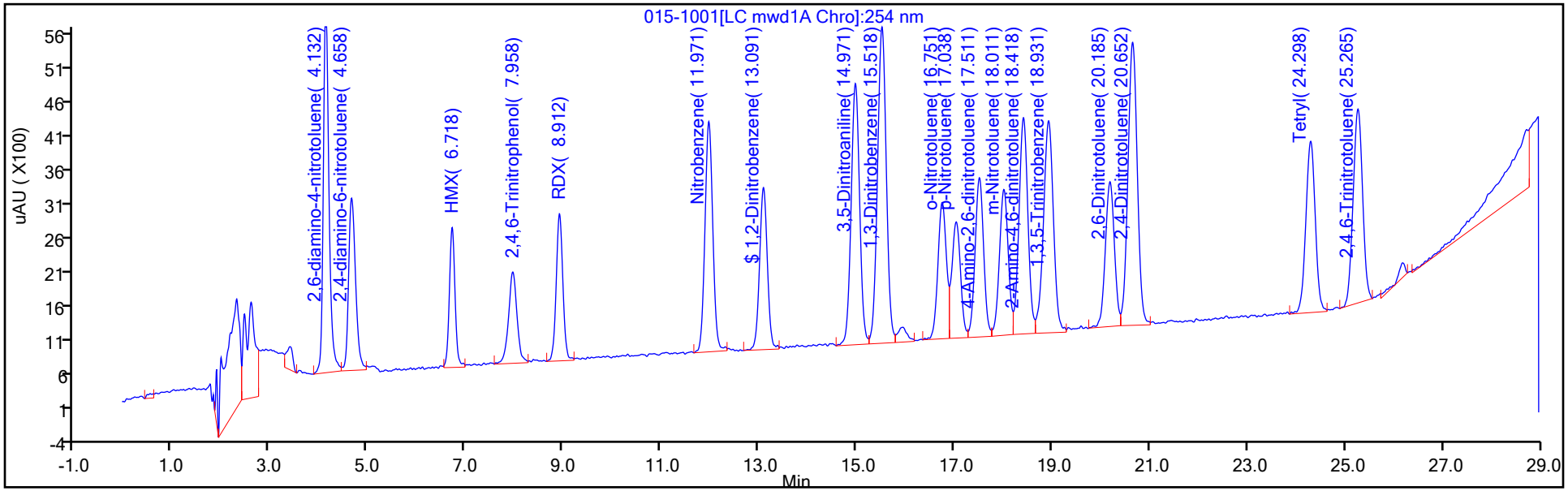
Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

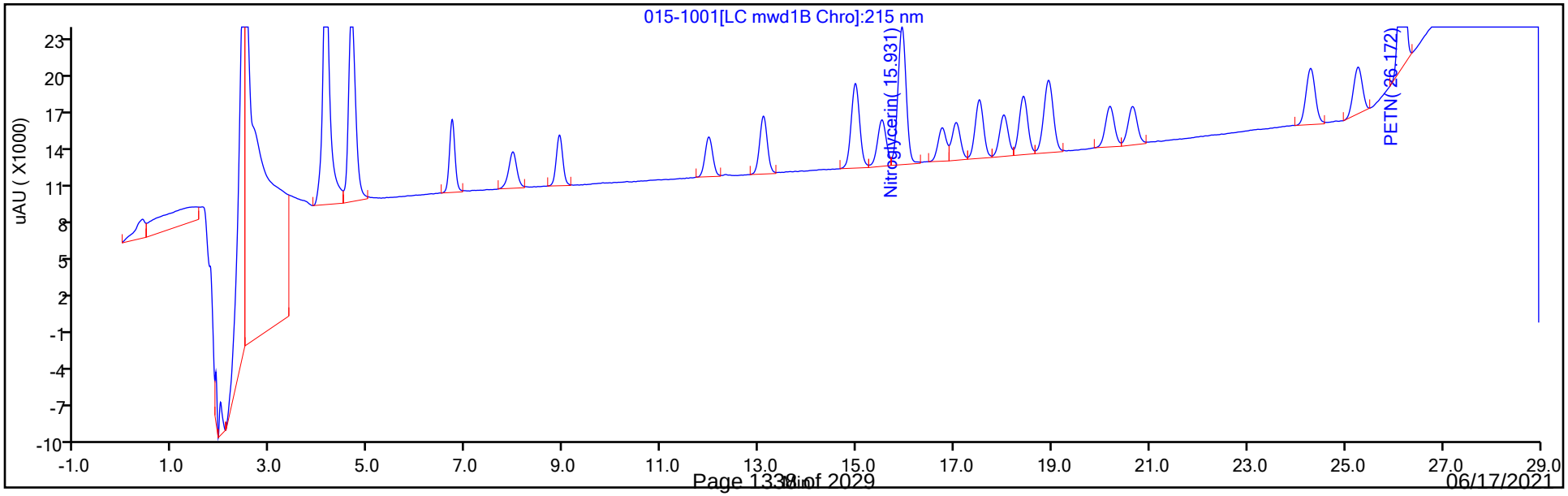
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D

Injection Date:	01-May-2021 21:50:04	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

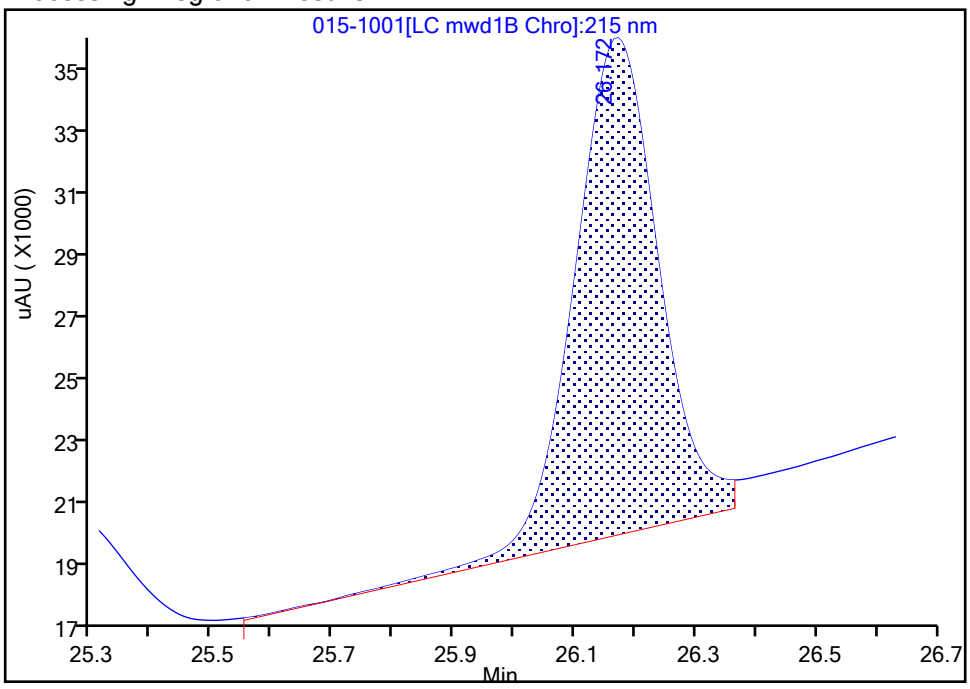
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D
Injection Date: 01-May-2021 21:50:04 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 4
Client ID:
Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

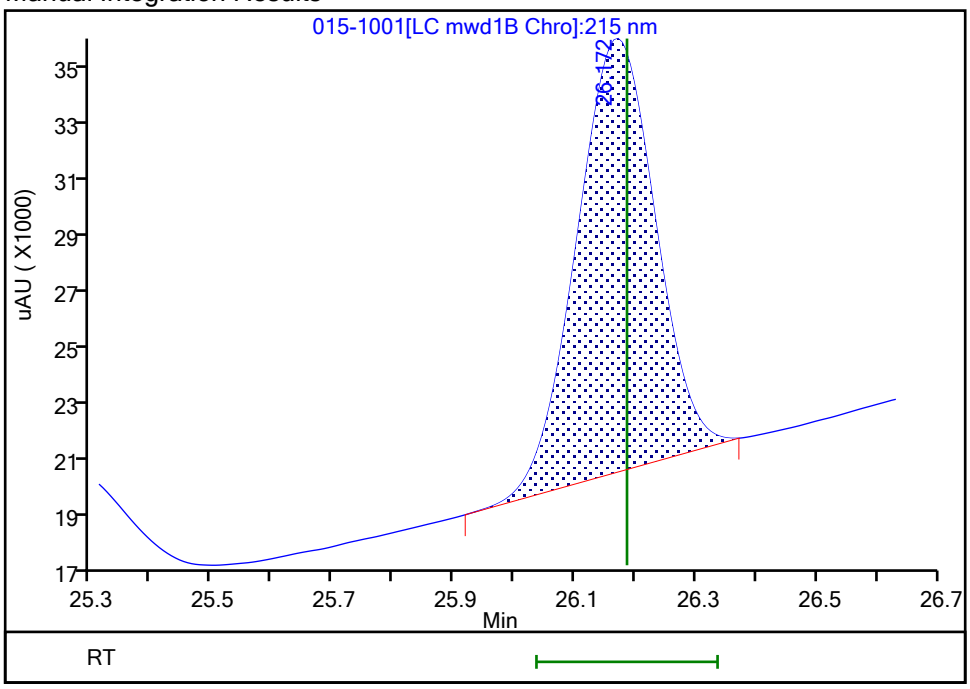
Processing Integration Results

RT: 26.17
Area: 151513
Amount: 1.005886
Amount Units: ug/ml



Manual Integration Results

RT: 26.17
Area: 136676
Amount: 0.992273
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:50
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Lims ID: IC INT/ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-May-2021 22:25:05 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 3
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:01

	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	4.134	4.126	0.008	24575	0.0500	0.0507	
	2 2,4-diamino-6-nitrotoluene	1	4.667	4.653	0.014	13602	0.0500	0.0516	
	6 HMX	1	6.734	6.713	0.021	8791	0.0500	0.0492	
	5 2,4,6-Trinitrophenol	1	7.987	7.933	0.054	8578	0.0500	0.0538	
	8 RDX	1	8.934	8.906	0.028	11066	0.0500	0.0542	
	9 Nitrobenzene	1	11.994	11.973	0.021	19306	0.0502	0.0515	
$	10 1,2-Dinitrobenzene	1	13.114	13.093	0.021	13836	0.0500	0.0521	
	11 3,5-Dinitroaniline	1	15.007	14.979	0.028	23131	0.0500	0.0493	
	12 1,3-Dinitrobenzene	1	15.547	15.519	0.028	29142	0.0501	0.0493	
	13 Nitroglycerin	2	15.961	15.939	0.022	65416	0.5000	0.5087	
	14 o-Nitrotoluene	1	16.781	16.759	0.022	12373	0.0500	0.0497	
	15 p-Nitrotoluene	1	17.074	17.046	0.028	10760	0.0501	0.0495	
	16 4-Amino-2,6-dinitrotoluene	1	17.541	17.526	0.015	14802	0.0501	0.0499	
	17 m-Nitrotoluene	1	18.047	18.026	0.021	13943	0.0501	0.0501	
	18 2-Amino-4,6-dinitrotoluene	1	18.441	18.426	0.015	21111	0.0502	0.0509	
	19 1,3,5-Trinitrobenzene	1	18.954	18.939	0.015	23506	0.0501	0.0503	
	20 2,6-Dinitrotoluene	1	20.201	20.199	0.002	14081	0.0502	0.0499	
	21 2,4-Dinitrotoluene	1	20.674	20.666	0.008	28396	0.0502	0.0502	
	22 Tetryl	1	24.287	24.313	-0.026	17573	0.0501	0.0494	
	23 2,4,6-Trinitrotoluene	1	25.254	25.280	-0.026	19400	0.0502	0.0479	
	24 PETN	2	26.154	26.186	-0.032	69170	0.5000	0.5022	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	5.00	Units: uL
8330_ADDs_00027	Amount Added:	2.50	Units: uL

Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

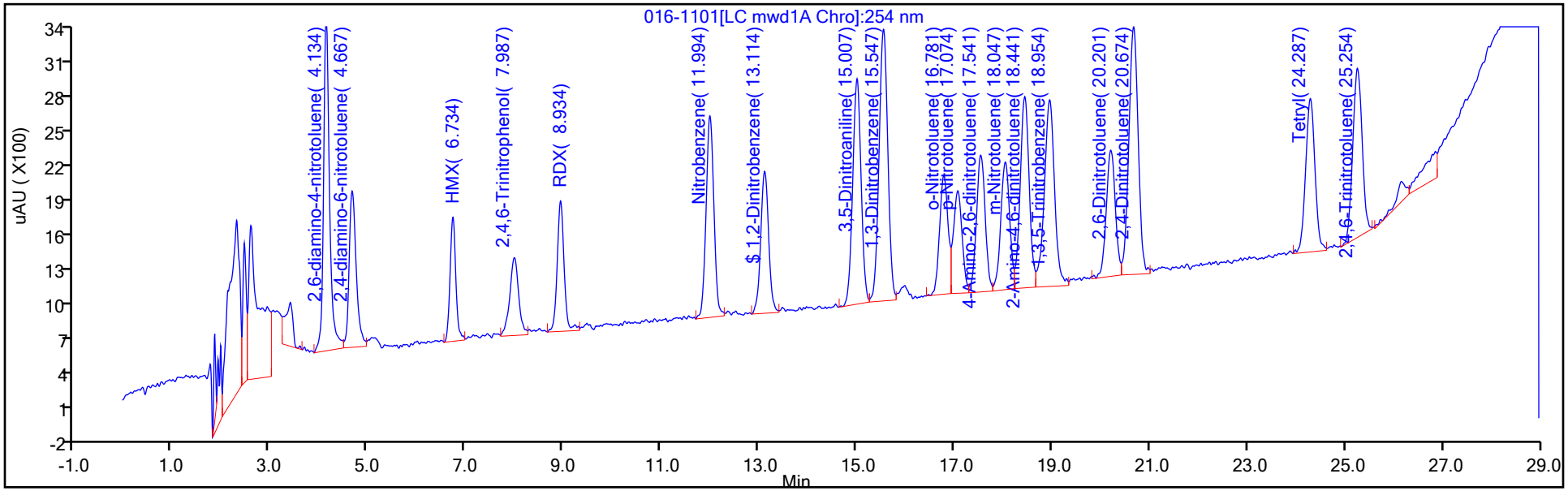
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D

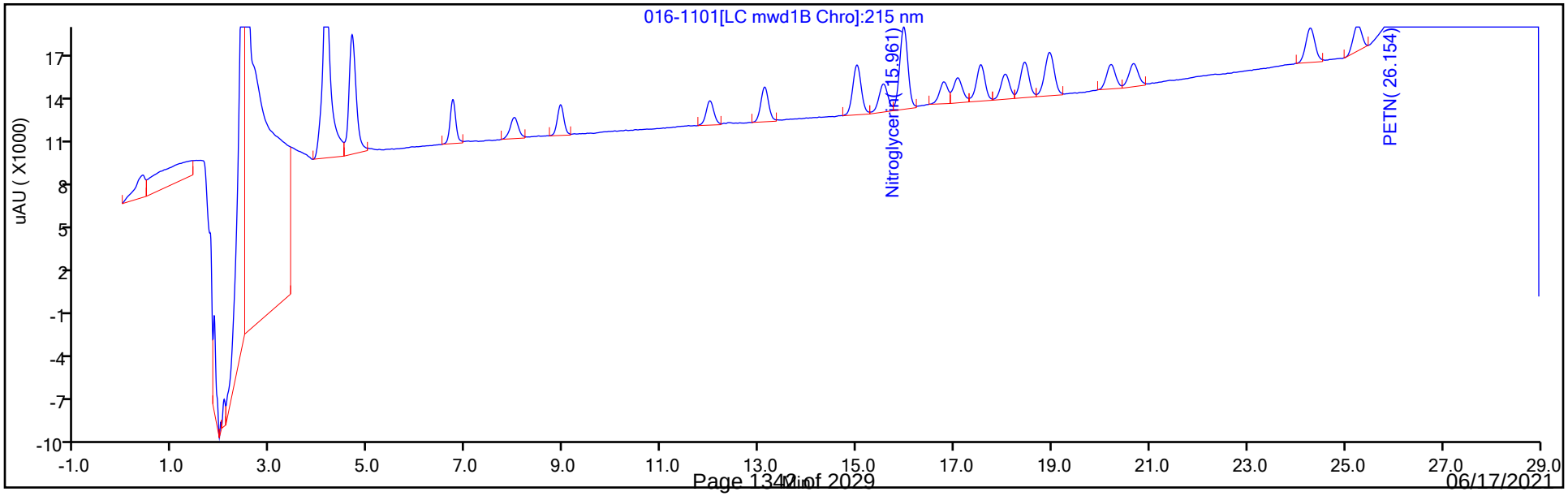
Injection Date:	01-May-2021 22:25:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

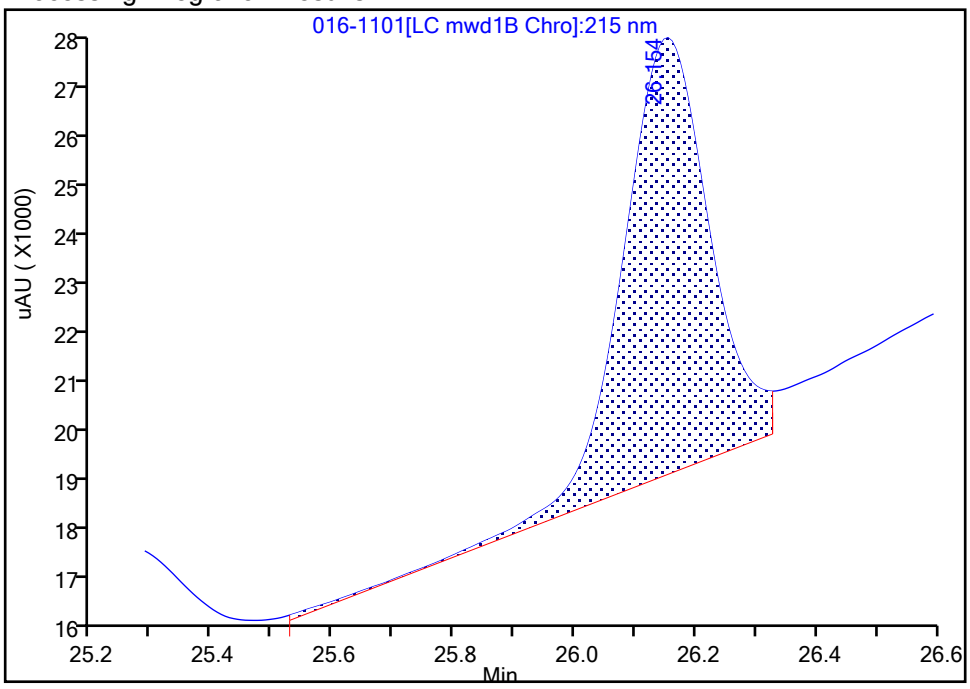
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Injection Date: 01-May-2021 22:25:05 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

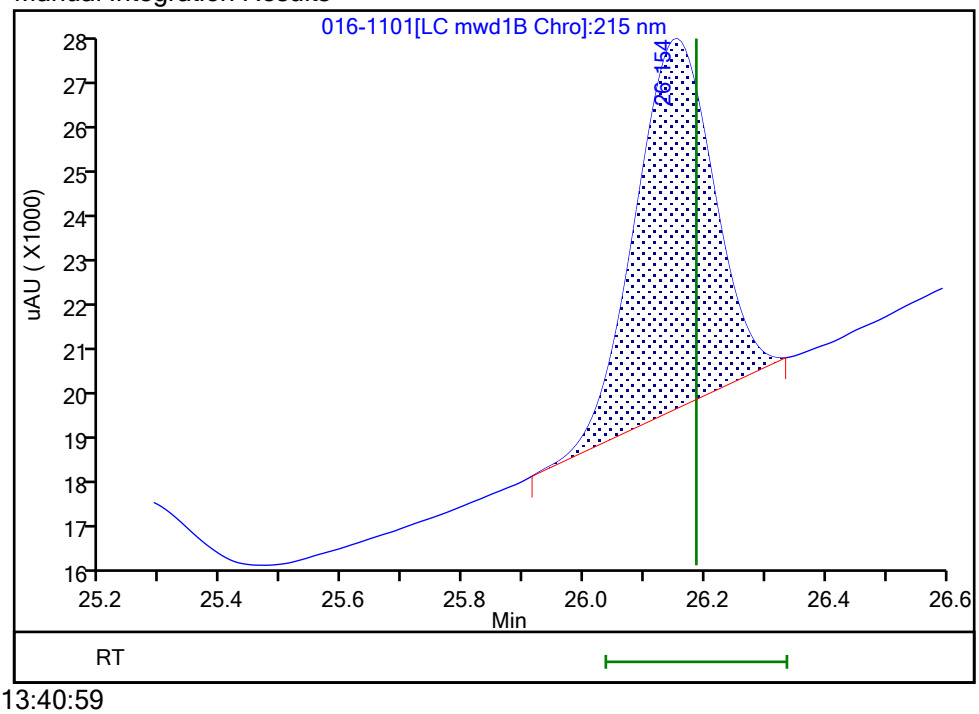
Processing Integration Results

RT: 26.15
Area: 81816
Amount: 0.467715
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 69170
Amount: 0.502177
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:59
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D
Lims ID: IC INT/ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-May-2021 23:00:06 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 2
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:10

	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	4.133	4.126	0.007	11811	0.0200	0.0194	
	2 2,4-diamino-6-nitrotoluene	1	4.673	4.653	0.020	6051	0.0200	0.0200	
	6 HMX	1	6.720	6.713	0.007	4286	0.0200	0.0208	
	5 2,4,6-Trinitrophenol	1	7.980	7.933	0.047	3270	0.0200	0.0205	
	8 RDX	1	8.926	8.906	0.020	4533	0.0200	0.0222	
	9 Nitrobenzene	1	11.973	11.973	0.000	7888	0.0201	0.0211	
$	10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	6280	0.0200	0.0236	
	11 3,5-Dinitroaniline	1	14.980	14.979	0.001	9417	0.0200	0.0188	
	12 1,3-Dinitrobenzene	1	15.533	15.519	0.014	12411	0.0200	0.0196	
	13 Nitroglycerin	2	15.940	15.939	0.001	28299	0.2000	0.2200	
	14 o-Nitrotoluene	1	16.740	16.759	-0.019	5151	0.0200	0.0207	
	15 p-Nitrotoluene	1	17.060	17.046	0.014	4823	0.0200	0.0222	
	16 4-Amino-2,6-dinitrotoluene	1	17.520	17.526	-0.006	6276	0.0200	0.0212	
	17 m-Nitrotoluene	1	18.033	18.026	0.007	5928	0.0200	0.0213	
	18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	9114	0.0201	0.0202	
	19 1,3,5-Trinitrobenzene	1	18.946	18.939	0.007	10540	0.0200	0.0187	
	20 2,6-Dinitrotoluene	1	20.200	20.199	0.001	6026	0.0201	0.0195	
	21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	12229	0.0201	0.0216	
	22 Tetryl	1	24.306	24.313	-0.007	7583	0.0200	0.0179	
	23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	8548	0.0201	0.0187	
	24 PETN	2	26.180	26.186	-0.006	27436	0.2000	0.1992	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	2.00	Units: uL
8330_ADDs_00027	Amount Added:	1.00	Units: uL

Report Date: 04-May-2021 13:43:15 Chrom Revision: 2.3 08-Apr-2021 17:17:48

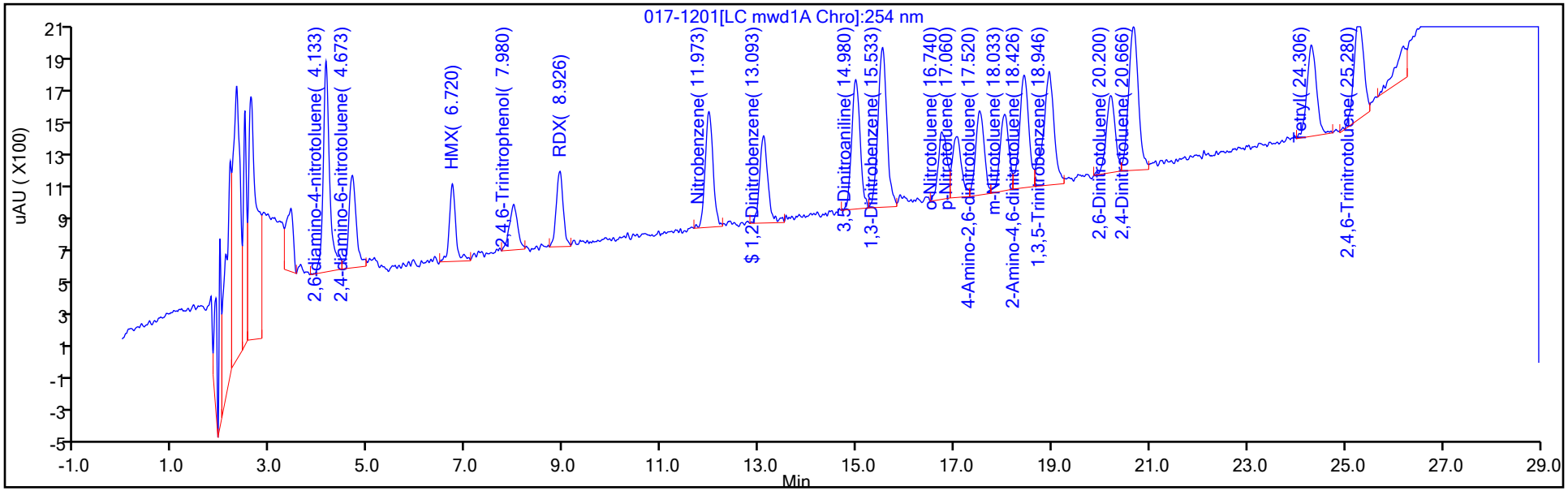
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D

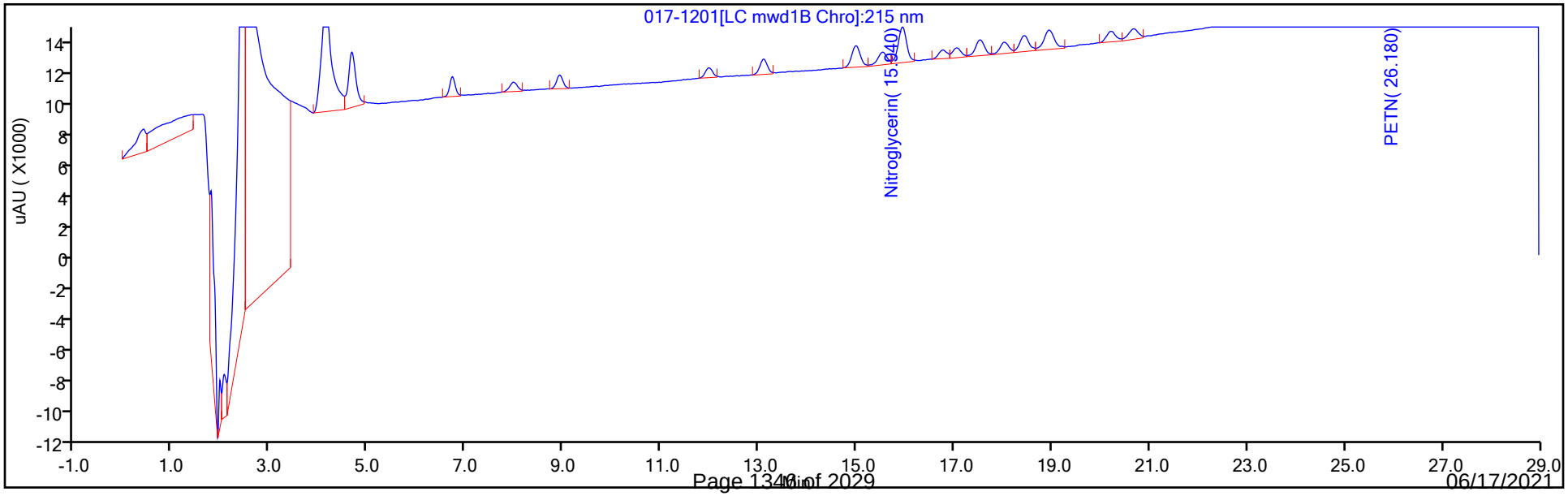
Injection Date:	01-May-2021 23:00:06	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

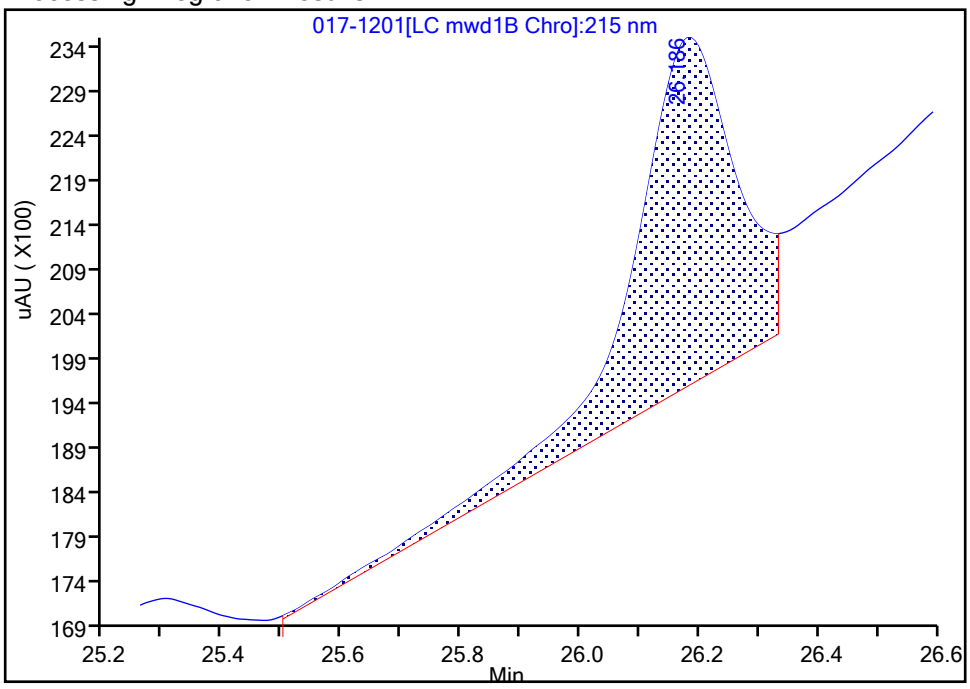
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D
Injection Date: 01-May-2021 23:00:06 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

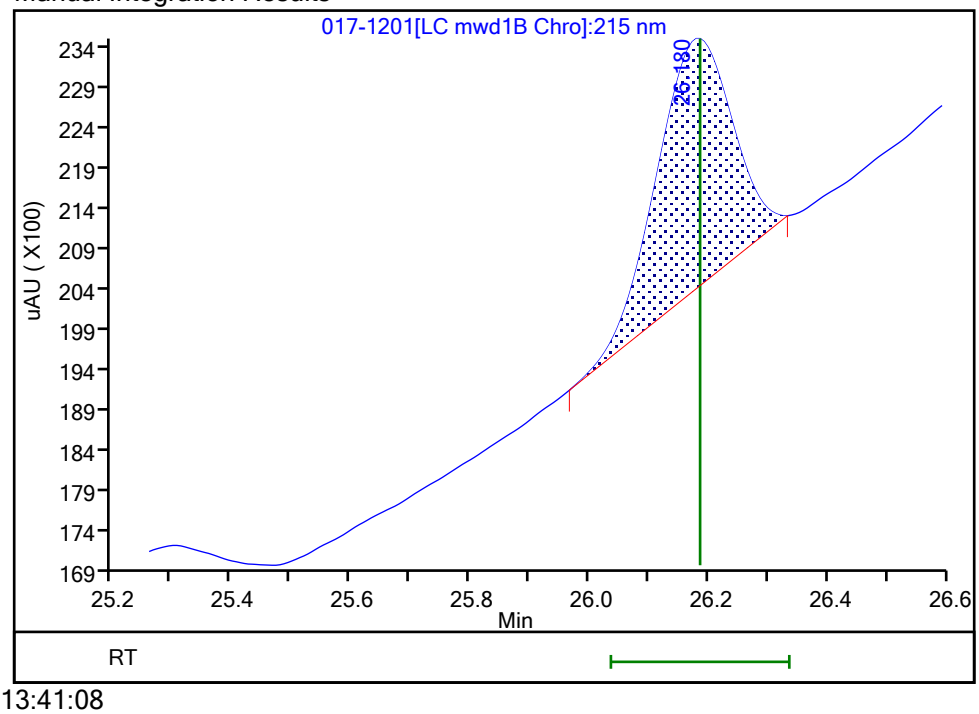
Processing Integration Results

RT: 26.19
Area: 47400
Amount: 0.217570
Amount Units: ug/ml



Manual Integration Results

RT: 26.18
Area: 27436
Amount: 0.199186
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:41:08
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Lims ID: IC INT/ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-May-2021 23:35:08 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 1
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:42:55

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1	4.144	4.126	0.018	8029	0.0100	0.0101	
2	2,4-diamino-6-nitrotoluene	1	4.684	4.653	0.031	3655	0.0100	0.0099	
6	HMX	1	6.724	6.713	0.011	2543	0.0100	0.009840	
5	2,4,6-Trinitrophenol	1	8.004	7.933	0.071	1789	0.0100	0.0112	
8	RDX	1	8.918	8.906	0.012	2988	0.0100	0.0146	
9	Nitrobenzene	1	11.978	11.973	0.005	4507	0.0100	0.0120	
$ 10	1,2-Dinitrobenzene	1	13.104	13.093	0.011	4082	0.0100	0.0154	
11	3,5-Dinitroaniline	1	14.978	14.979	-0.001	5594	0.0100	0.0103	
12	1,3-Dinitrobenzene	1	15.524	15.519	0.005	7085	0.0100	0.0101	
13	Nitroglycerin	2	15.924	15.939	-0.015	16401	0.1000	0.1275	
14	o-Nitrotoluene	1	16.751	16.759	-0.008	3022	0.0100	0.0121	
15	p-Nitrotoluene	1	17.031	17.046	-0.015	2608	0.0100	0.0120	
16	4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	3954	0.0100	0.0133	
17	m-Nitrotoluene	1	17.978	18.026	-0.048	3517	0.0100	0.0126	
18	2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	5148	0.0100	0.0100	
19	1,3,5-Trinitrobenzene	1	18.904	18.939	-0.035	7116	0.0100	0.0103	
20	2,6-Dinitrotoluene	1	20.191	20.199	-0.008	3555	0.0100	0.0102	
21	2,4-Dinitrotoluene	1	20.644	20.666	-0.022	6619	0.0100	0.0117	
22	Tetryl	1	24.271	24.313	-0.042	5245	0.0100	0.0106	
23	2,4,6-Trinitrotoluene	1	25.258	25.280	-0.022	5469	0.0100	0.0105	
24	PETN	2	26.151	26.186	-0.035	15659	0.1000	0.1137	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	1.00	Units: uL
8330_ADDs_00027	Amount Added:	0.50	Units: uL

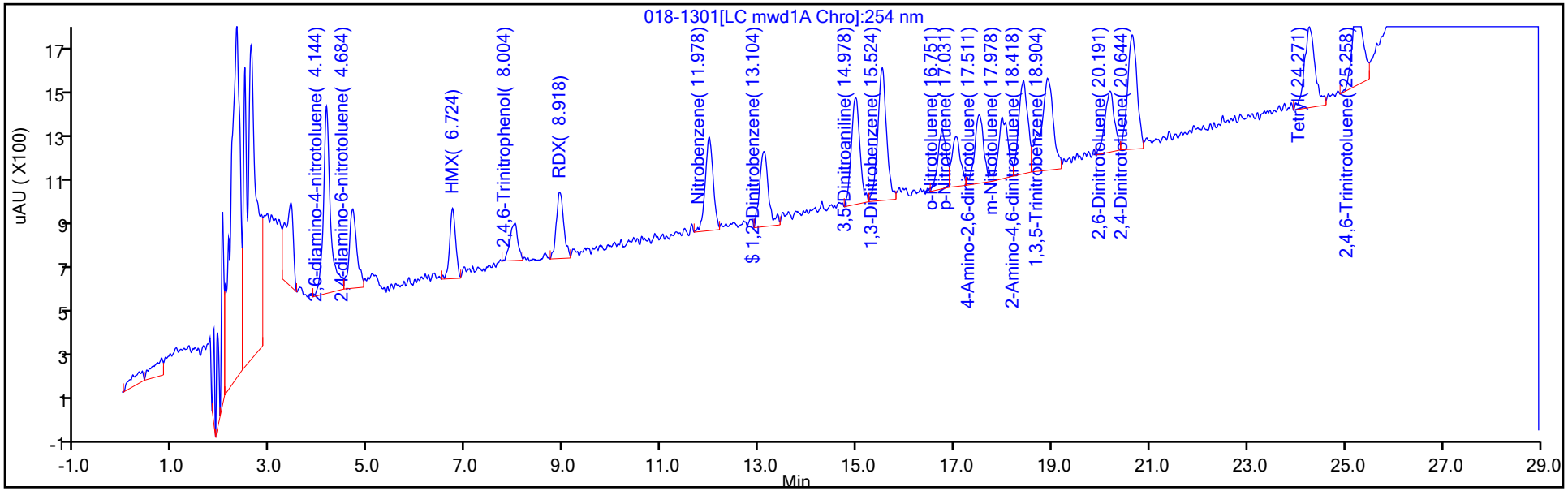
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

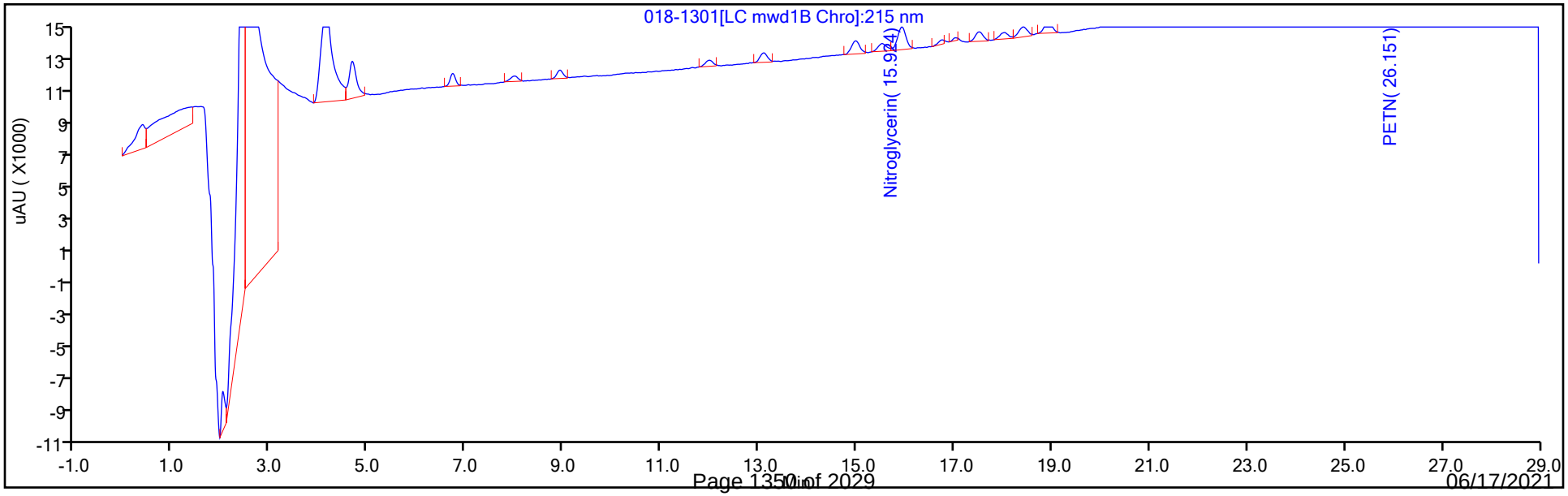
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D

Injection Date:	01-May-2021 23:35:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

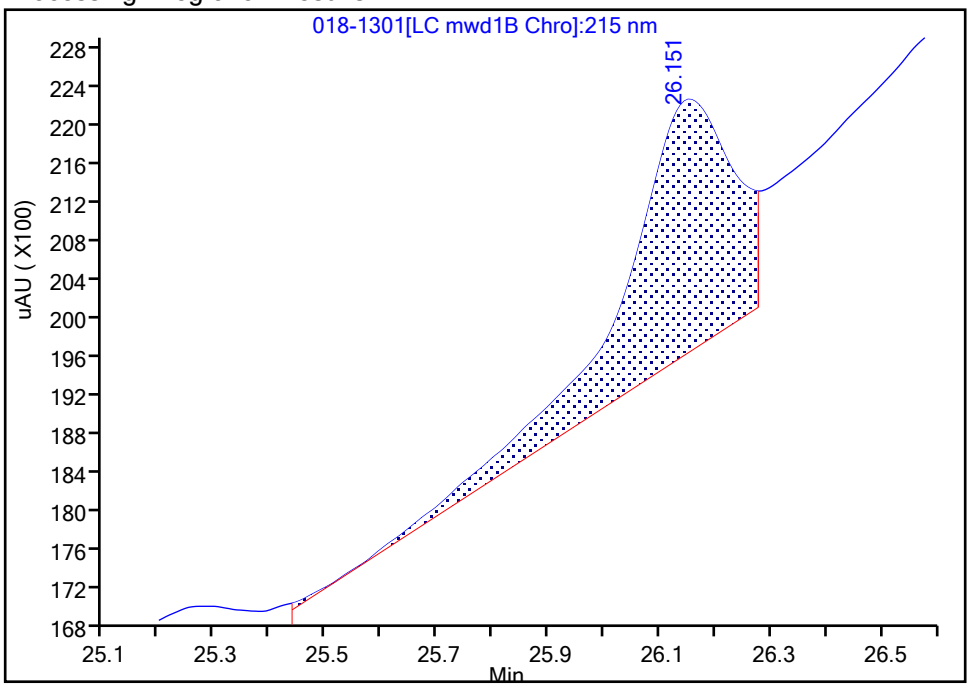
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Injection Date: 01-May-2021 23:35:08 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

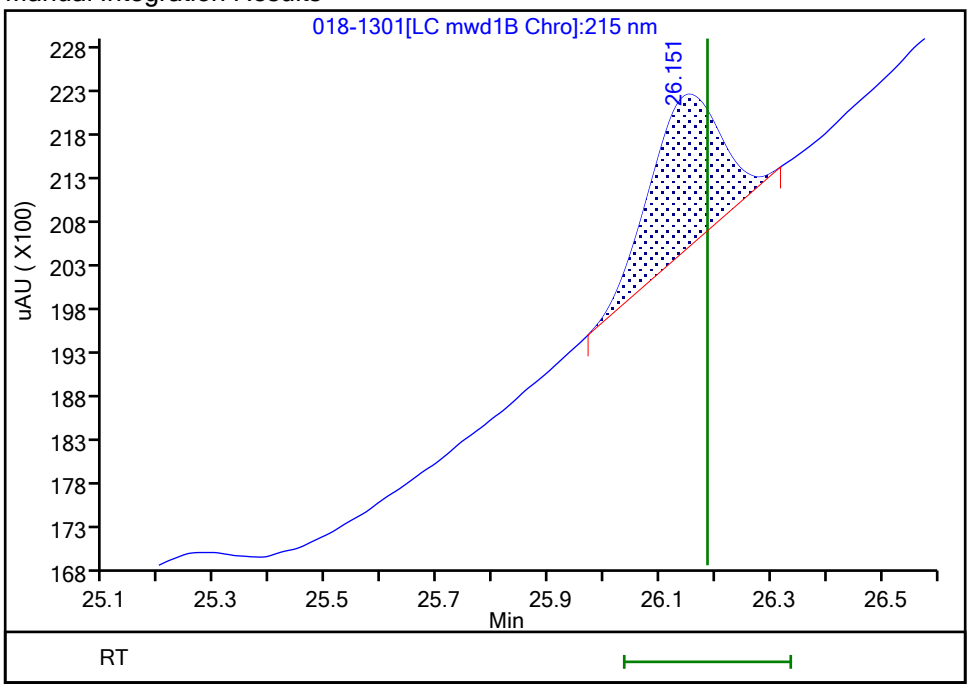
Processing Integration Results

RT: 26.15
Area: 35908
Amount: 0.224090
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 15659
Amount: 0.113685
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:41:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Calibration / HMX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

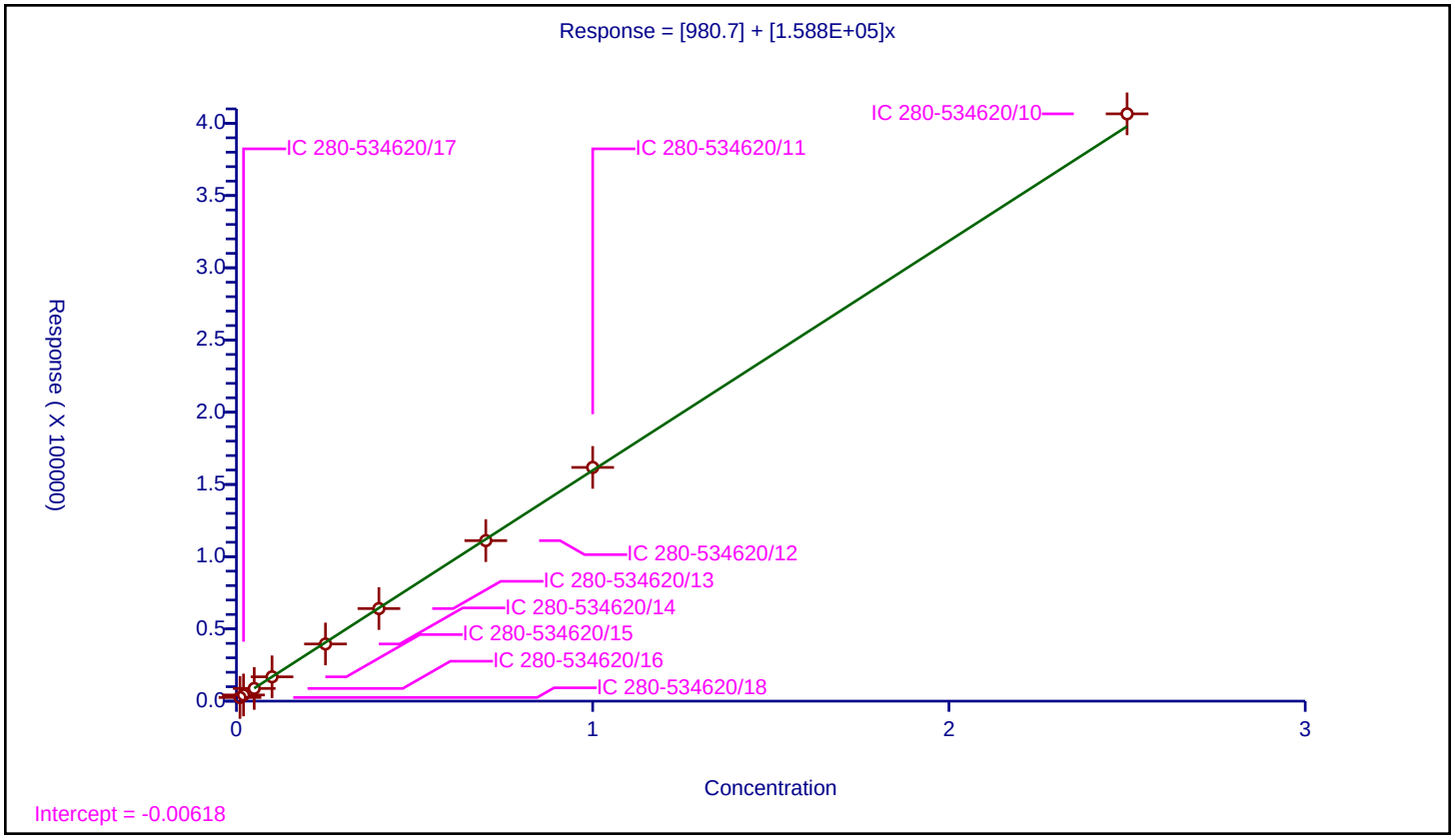
Curve Coefficients

Intercept:	980.7
Slope:	1.588E+05

Error Coefficients

Standard Error:	3410
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2543.0			254300.0	Y
2	IC 280-534620/17	0.02	4286.0			214300.0	Y
3	IC 280-534620/16	0.05	8791.0			175820.0	Y
4	IC 280-534620/15	0.1	16850.0			168500.0	Y
5	IC 280-534620/14	0.25	39580.0			158320.0	Y
6	IC 280-534620/13	0.4	64089.0			160222.5	Y
7	IC 280-534620/12	0.7	111120.0			158742.857143	Y
8	IC 280-534620/11	1.0	161798.0			161798.0	Y
9	IC 280-534620/10	2.5	406565.0			162626.0	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

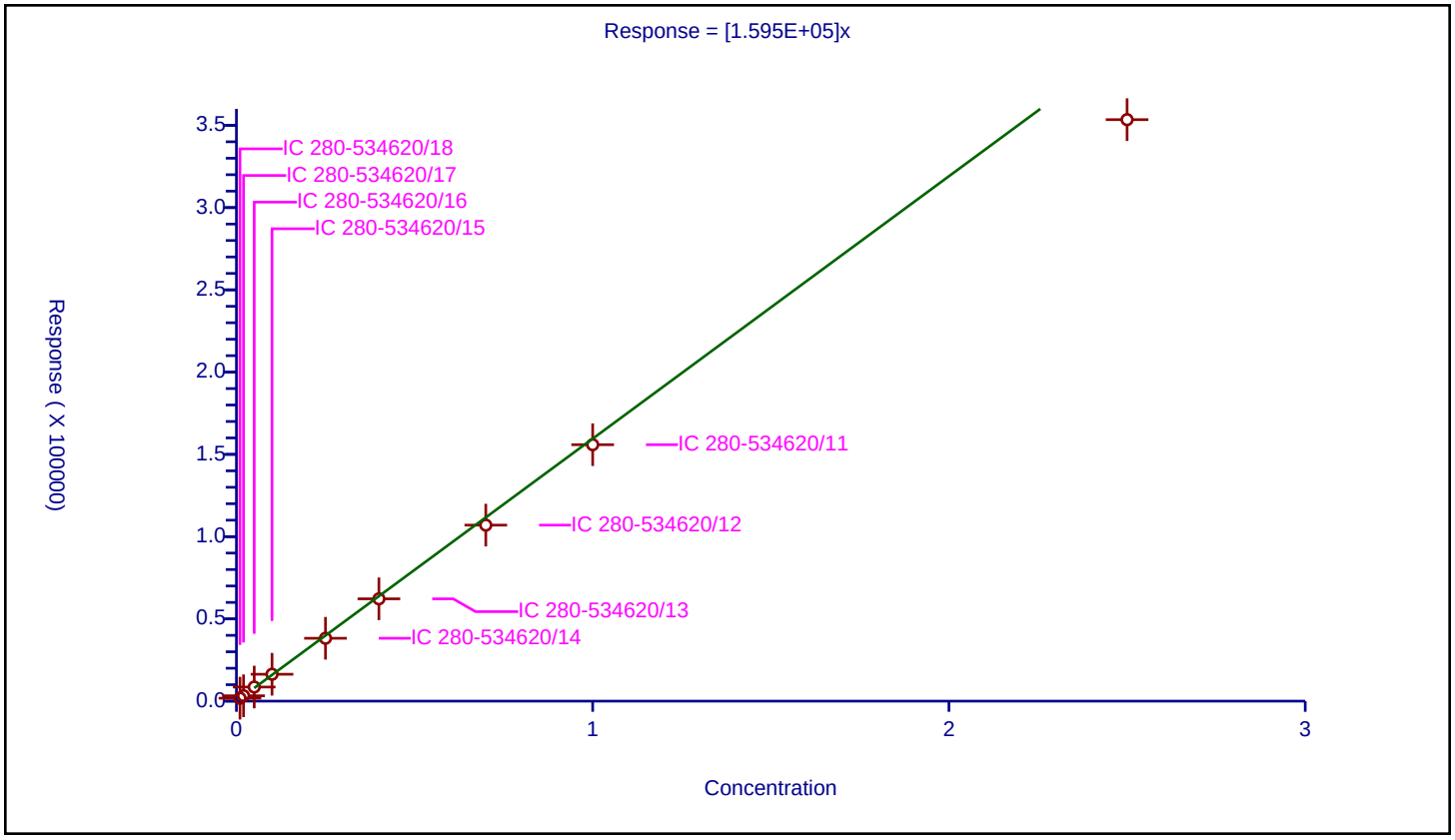
Curve Coefficients

Intercept:	0
Slope:	1.595E+05

Error Coefficients

Standard Error:	16200
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	1789.0			178900.0	Y
2	IC 280-534620/17	0.02	3270.0			163500.0	Y
3	IC 280-534620/16	0.05	8578.0			171560.0	Y
4	IC 280-534620/15	0.1	16340.0			163400.0	Y
5	IC 280-534620/14	0.25	38222.0			152888.0	Y
6	IC 280-534620/13	0.4	62190.0			155475.0	Y
7	IC 280-534620/12	0.7	106987.0			152838.571429	Y
8	IC 280-534620/11	1.0	155884.0			155884.0	Y
9	IC 280-534620/10	2.5	353462.0			141384.8	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

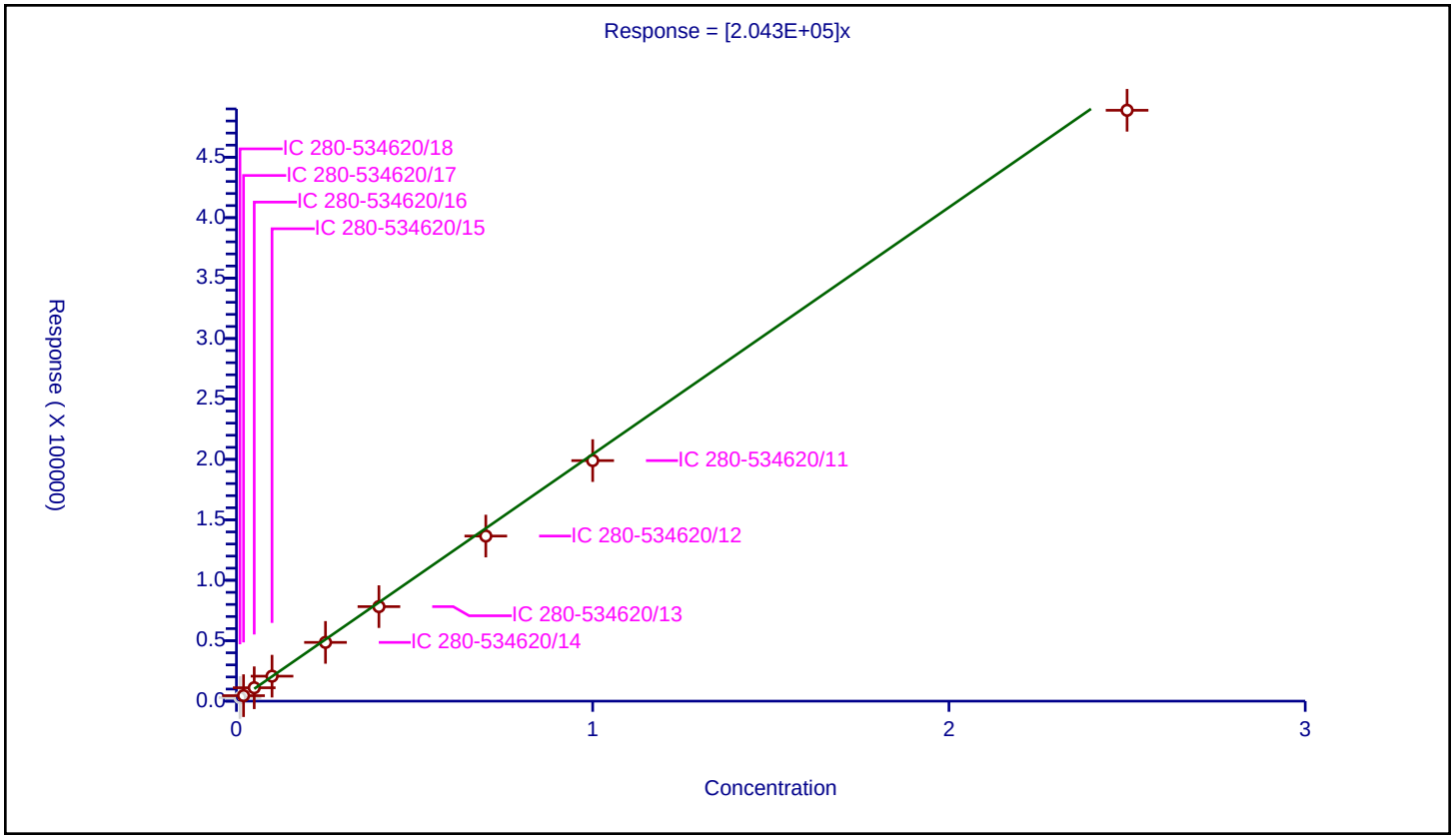
Curve Coefficients

Intercept:	0
Slope:	2.043E+05

Error Coefficients

Standard Error:	8980
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2988.0			298800.0	N
2	IC 280-534620/17	0.02	4533.0			226650.0	Y
3	IC 280-534620/16	0.05	11066.0			221320.0	Y
4	IC 280-534620/15	0.1	20661.0			206610.0	Y
5	IC 280-534620/14	0.25	48606.0			194424.0	Y
6	IC 280-534620/13	0.4	78185.0			195462.5	Y
7	IC 280-534620/12	0.7	136592.0			195131.428571	Y
8	IC 280-534620/11	1.0	199019.0			199019.0	Y
9	IC 280-534620/10	2.5	488855.0			195542.0	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

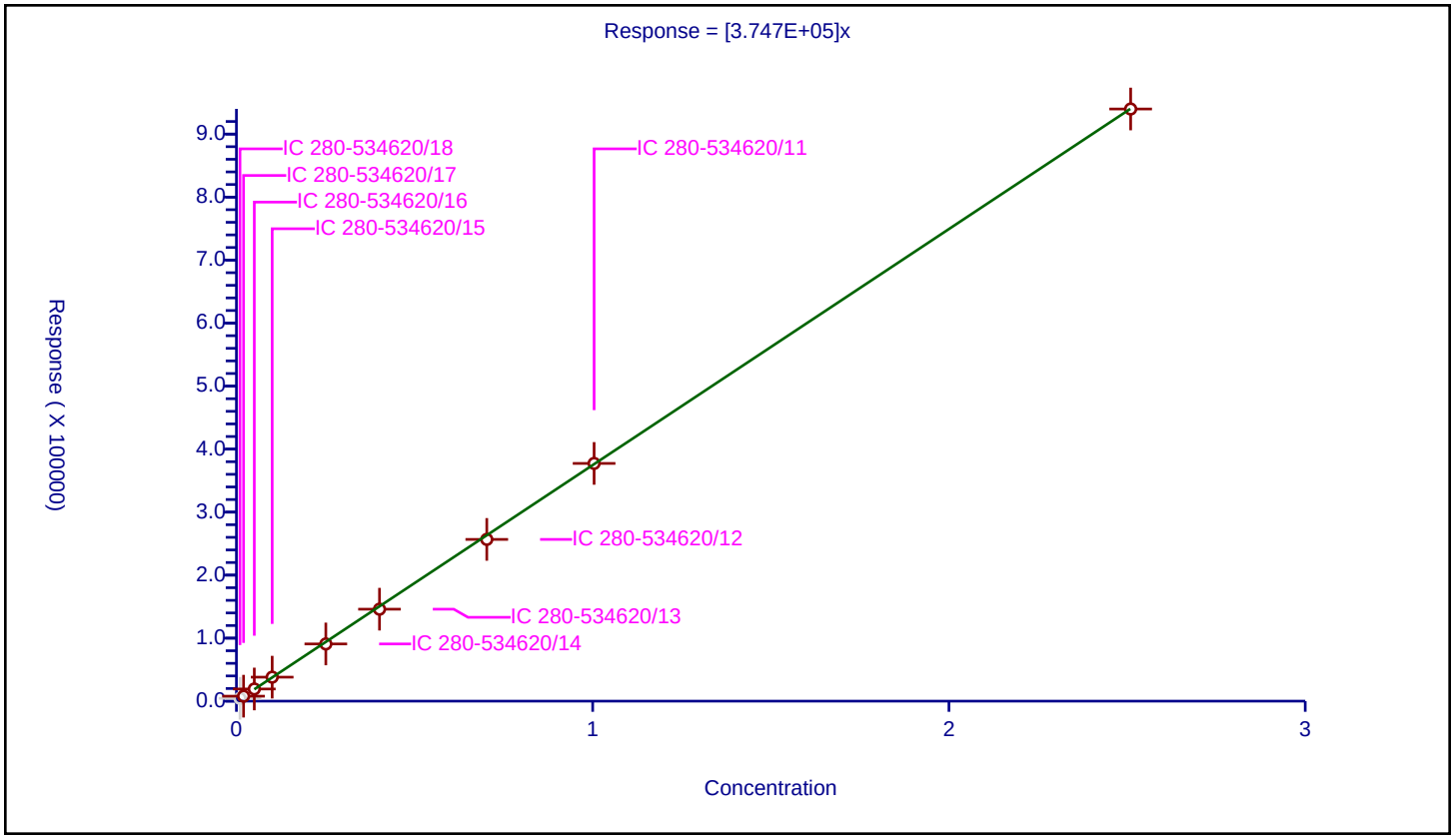
Curve Coefficients

Intercept:	0
Slope:	3.747E+05

Error Coefficients

Standard Error:	3320
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	4507.0			448904.38247	N
2	IC 280-534620/17	0.02008	7888.0			392828.685259	Y
3	IC 280-534620/16	0.0502	19306.0			384581.673307	Y
4	IC 280-534620/15	0.1004	38085.0			379332.669323	Y
5	IC 280-534620/14	0.251	90760.0			361593.625498	Y
6	IC 280-534620/13	0.4016	145926.0			363361.553785	Y
7	IC 280-534620/12	0.7028	256719.0			365280.307342	Y
8	IC 280-534620/11	1.004	377310.0			375806.772908	Y
9	IC 280-534620/10	2.51	939811.0			374426.693227	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

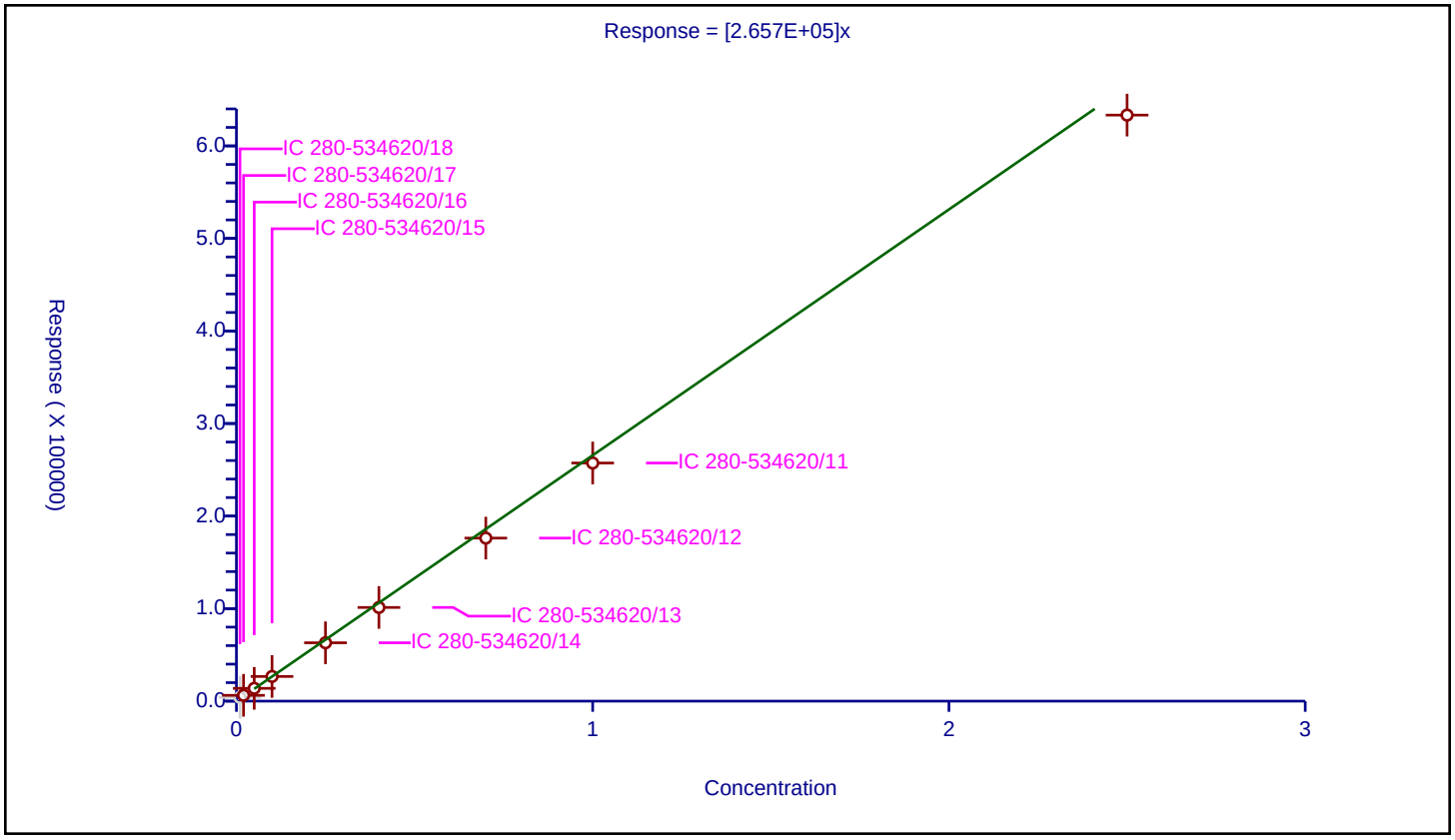
Curve Coefficients

Intercept:	0
Slope:	2.657E+05

Error Coefficients

Standard Error:	12800
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	4082.0			408200.0	N
2	IC 280-534620/17	0.02	6280.0			314000.0	Y
3	IC 280-534620/16	0.05	13836.0			276720.0	Y
4	IC 280-534620/15	0.1	26678.0			266780.0	Y
5	IC 280-534620/14	0.25	63081.0			252324.0	Y
6	IC 280-534620/13	0.4	101248.0			253120.0	Y
7	IC 280-534620/12	0.7	176180.0			251685.714286	Y
8	IC 280-534620/11	1.0	257324.0			257324.0	Y
9	IC 280-534620/10	2.5	633300.0			253320.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

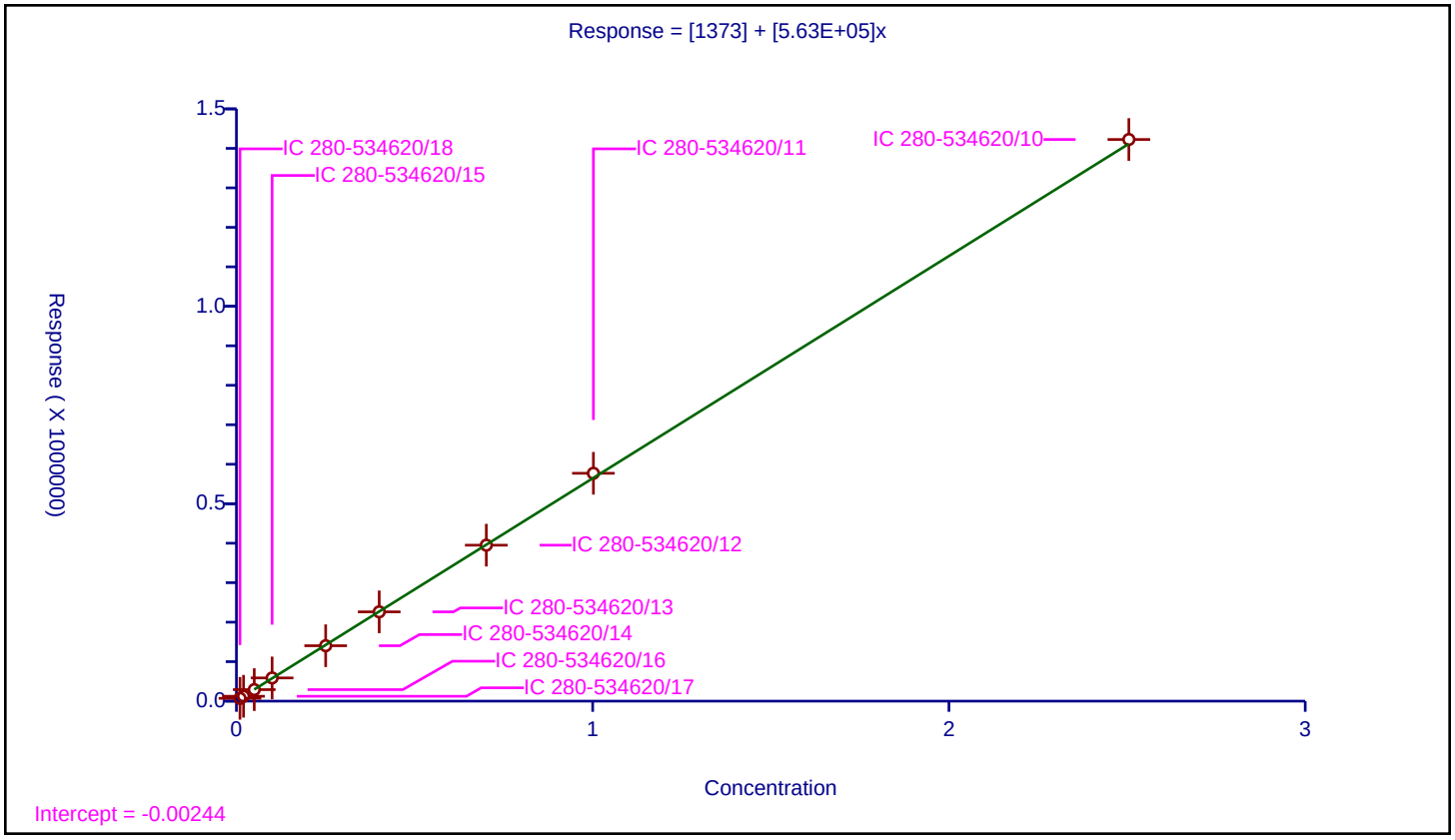
Curve Coefficients

Intercept:	1373
Slope:	5.63E+05

Error Coefficients

Standard Error:	6130
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	7085.0			707085.828343	Y
2	IC 280-534620/17	0.02004	12411.0			619311.377246	Y
3	IC 280-534620/16	0.0501	29142.0			581676.646707	Y
4	IC 280-534620/15	0.1002	58764.0			586467.065868	Y
5	IC 280-534620/14	0.2505	140347.0			560267.46507	Y
6	IC 280-534620/13	0.4008	226148.0			564241.516966	Y
7	IC 280-534620/12	0.7014	394975.0			563123.752495	Y
8	IC 280-534620/11	1.002	577120.0			575968.063872	Y
9	IC 280-534620/10	2.505	1422490.0			567860.279441	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

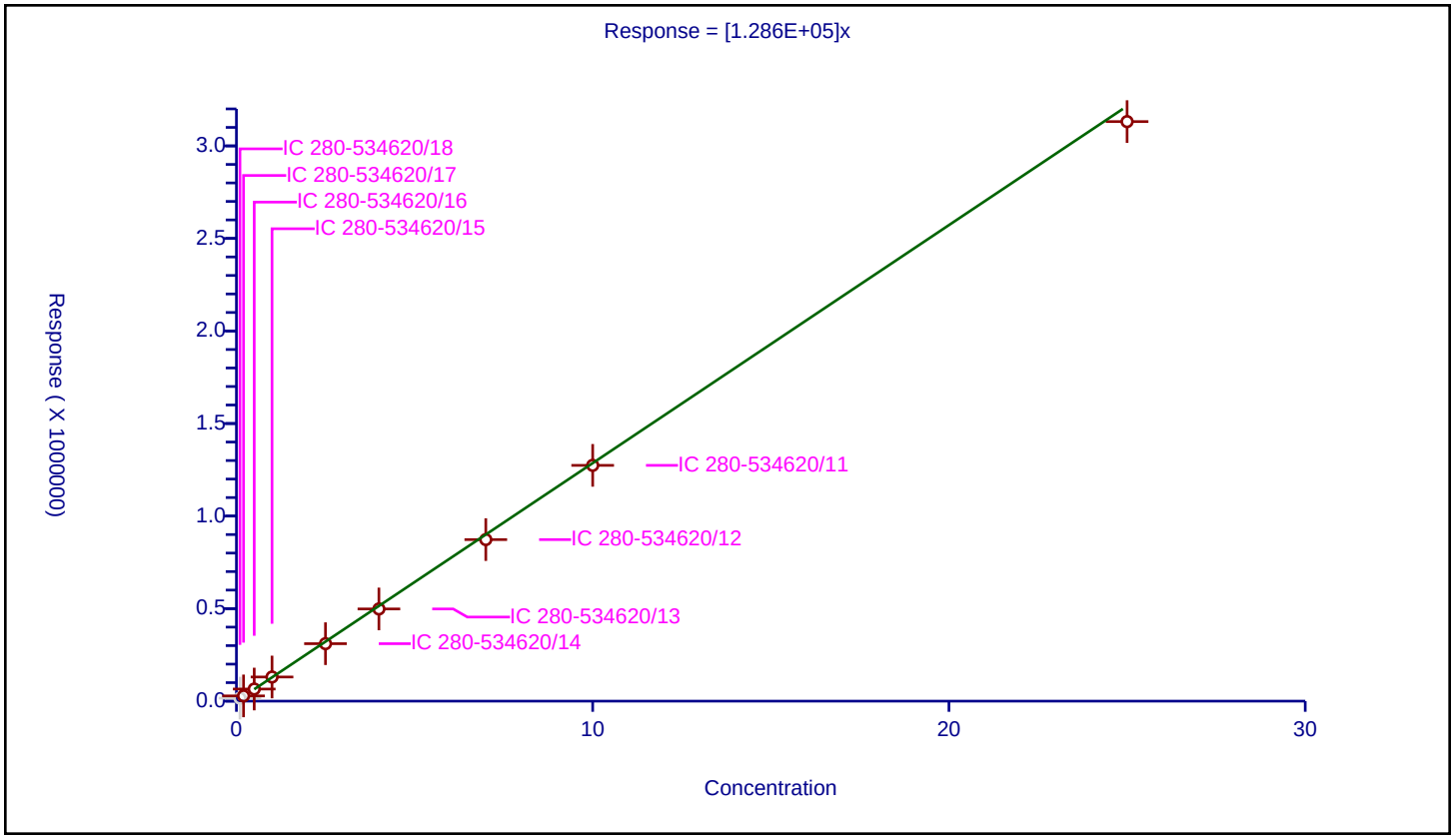
Curve Coefficients

Intercept:	0
Slope:	1.286E+05

Error Coefficients

Standard Error:	34400
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	16401.0			164010.0	N
2	IC 280-534620/17	0.2	28299.0			141495.0	Y
3	IC 280-534620/16	0.5	65416.0			130832.0	Y
4	IC 280-534620/15	1.0	130447.0			130447.0	Y
5	IC 280-534620/14	2.5	310480.0			124192.0	Y
6	IC 280-534620/13	4.0	498088.0			124522.0	Y
7	IC 280-534620/12	7.0	872941.0			124705.857143	Y
8	IC 280-534620/11	10.0	1273886.0			127388.6	Y
9	IC 280-534620/10	25.0	3131400.0			125256.0	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

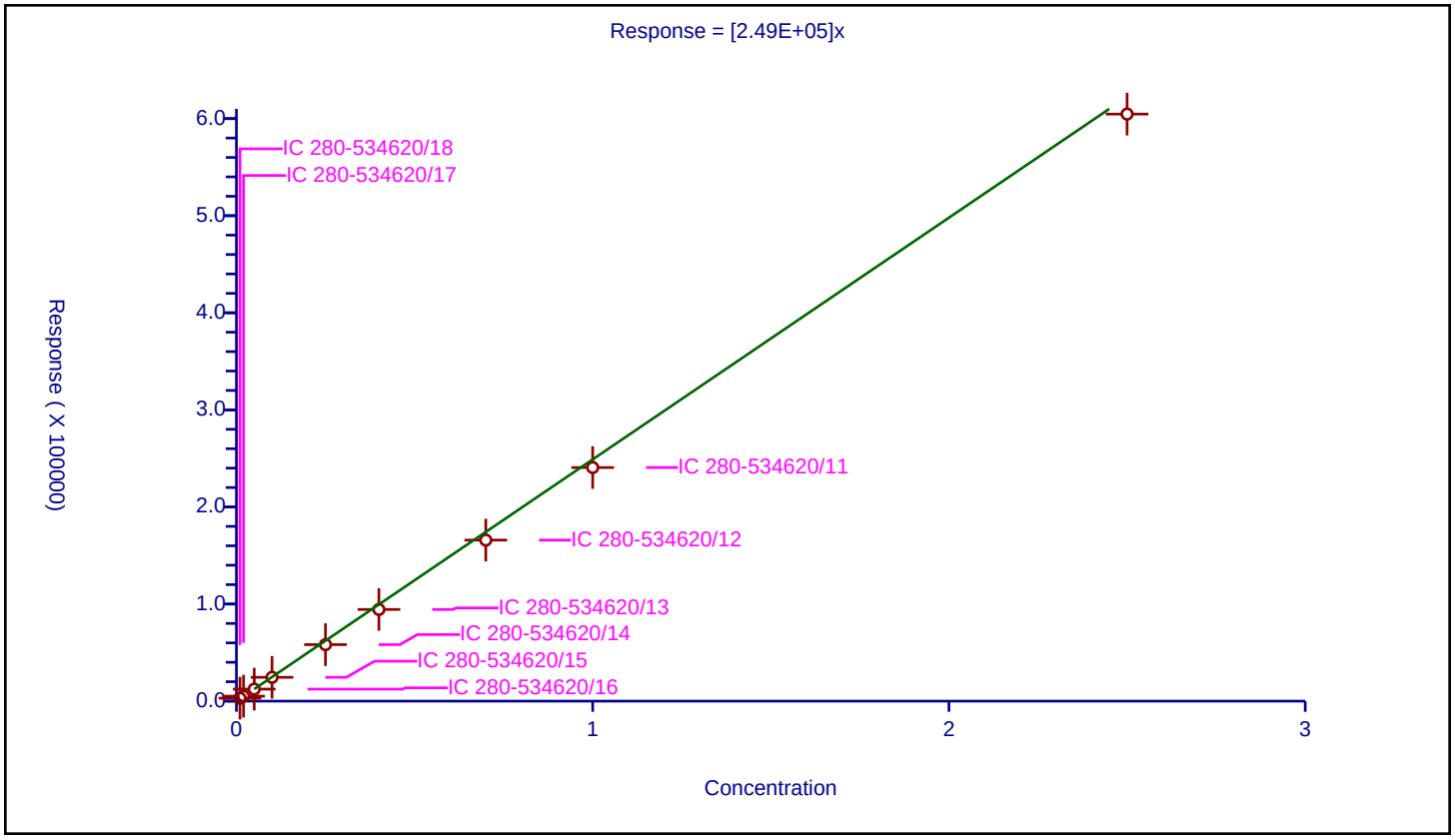
Curve Coefficients

Intercept:	0
Slope:	2.49E+05

Error Coefficients

Standard Error:	7910
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	3022.0			302200.0	Y
2	IC 280-534620/17	0.02	5151.0			257550.0	Y
3	IC 280-534620/16	0.05	12373.0			247460.0	Y
4	IC 280-534620/15	0.1	24528.0			245280.0	Y
5	IC 280-534620/14	0.25	58191.0			232764.0	Y
6	IC 280-534620/13	0.4	94418.0			236045.0	Y
7	IC 280-534620/12	0.7	165863.0			236947.142857	Y
8	IC 280-534620/11	1.0	240595.0			240595.0	Y
9	IC 280-534620/10	2.5	604653.0			241861.2	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

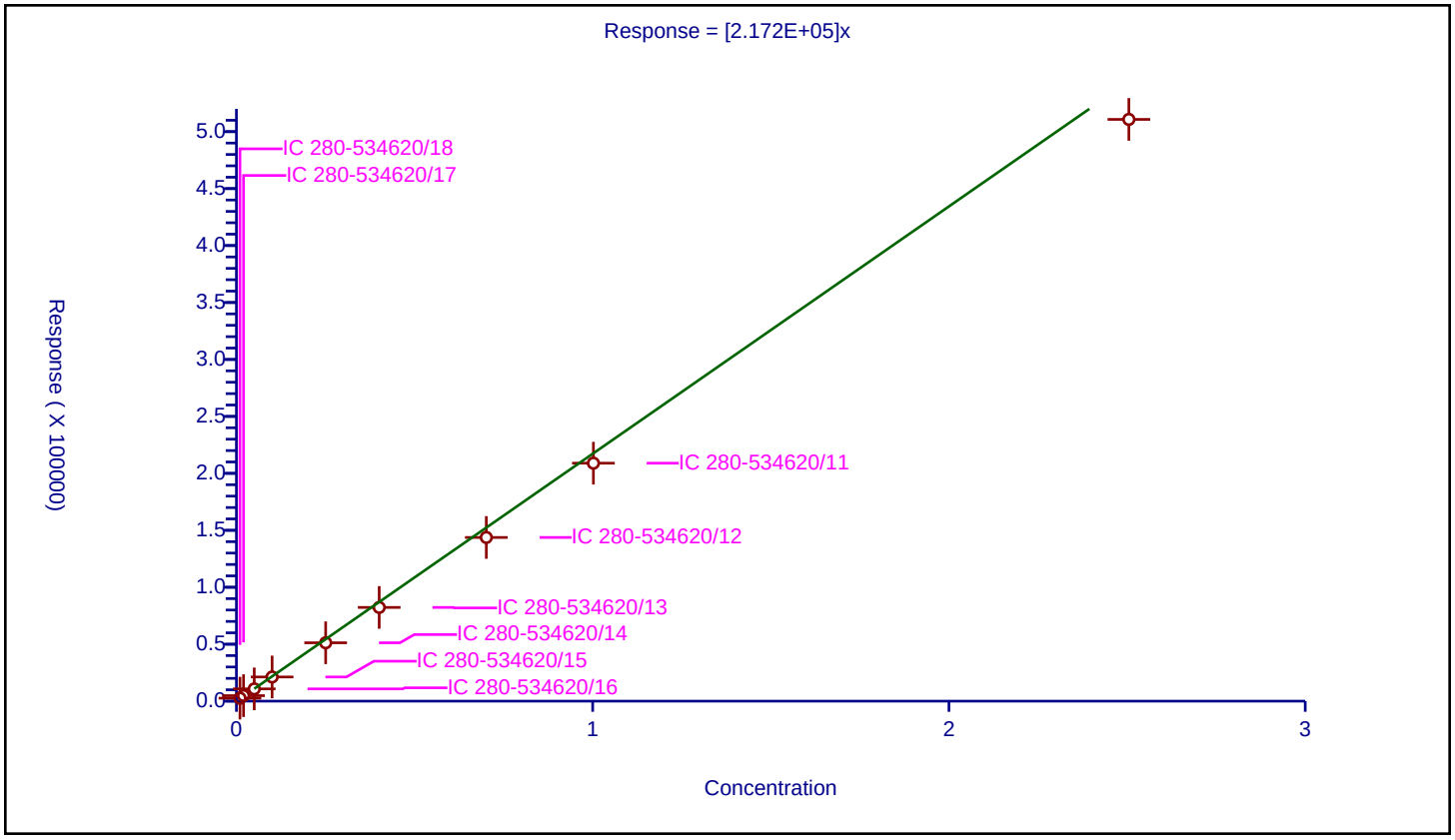
Curve Coefficients

Intercept:	0
Slope:	2.172E+05

Error Coefficients

Standard Error:	12700
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	2608.0			260279.441118	Y
2	IC 280-534620/17	0.02004	4823.0			240668.662675	Y
3	IC 280-534620/16	0.0501	10760.0			214770.459082	Y
4	IC 280-534620/15	0.1002	21221.0			211786.427146	Y
5	IC 280-534620/14	0.2505	51245.0			204570.858283	Y
6	IC 280-534620/13	0.4008	82281.0			205291.916168	Y
7	IC 280-534620/12	0.7014	143722.0			204907.328201	Y
8	IC 280-534620/11	1.002	208929.0			208511.976048	Y
9	IC 280-534620/10	2.505	510755.0			203894.211577	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

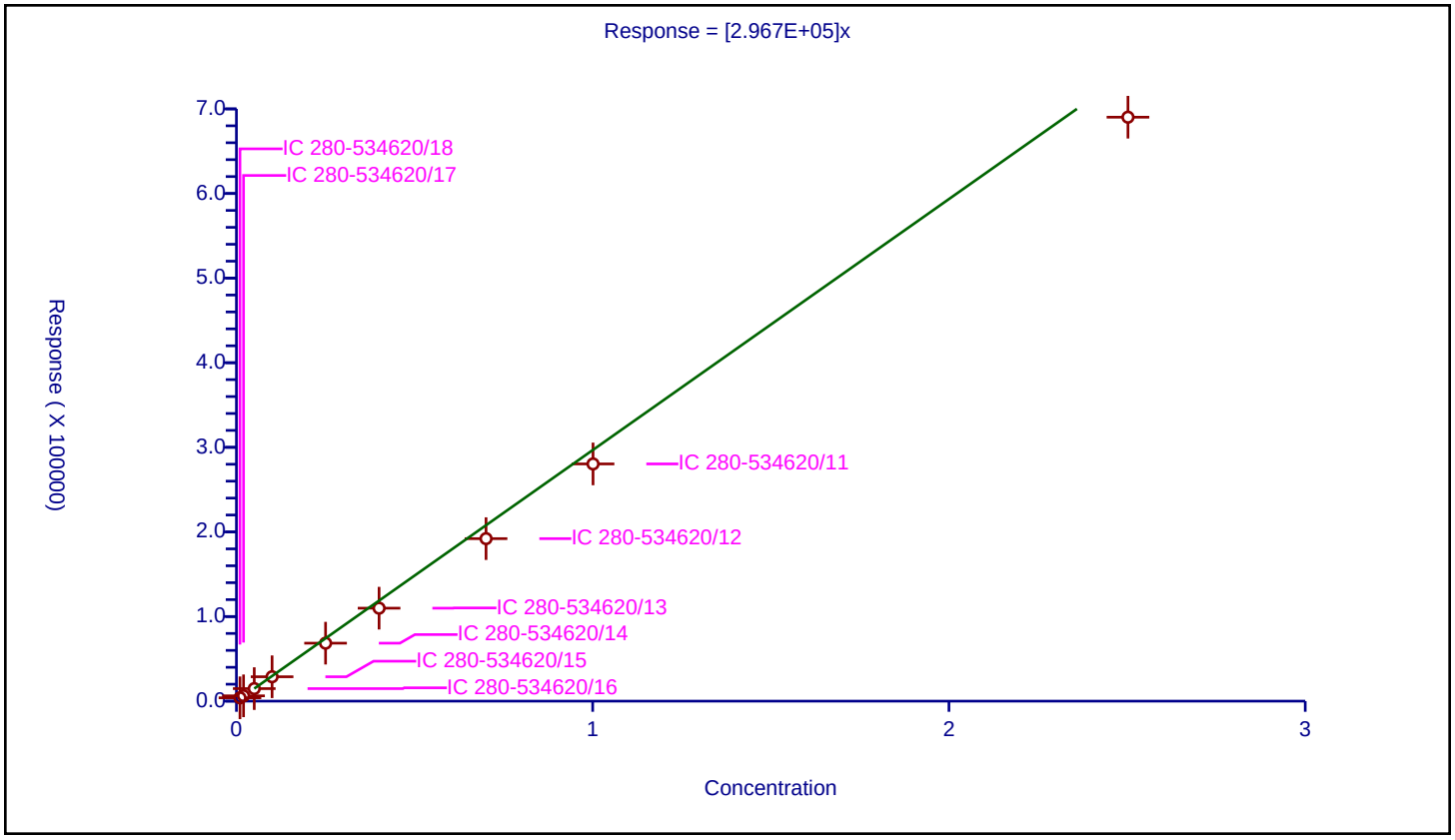
Curve Coefficients

Intercept:	0
Slope:	2.967E+05

Error Coefficients

Standard Error:	20600
Relative Standard Error:	13.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3954.0			395004.995005	Y
2	IC 280-534620/17	0.02002	6276.0			313486.513487	Y
3	IC 280-534620/16	0.05005	14802.0			295744.255744	Y
4	IC 280-534620/15	0.1001	28819.0			287902.097902	Y
5	IC 280-534620/14	0.25025	68509.0			273762.237762	Y
6	IC 280-534620/13	0.4004	109890.0			274450.549451	Y
7	IC 280-534620/12	0.7007	192075.0			274118.738404	Y
8	IC 280-534620/11	1.001	280366.0			280085.914086	Y
9	IC 280-534620/10	2.5025	690165.0			275790.20979	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

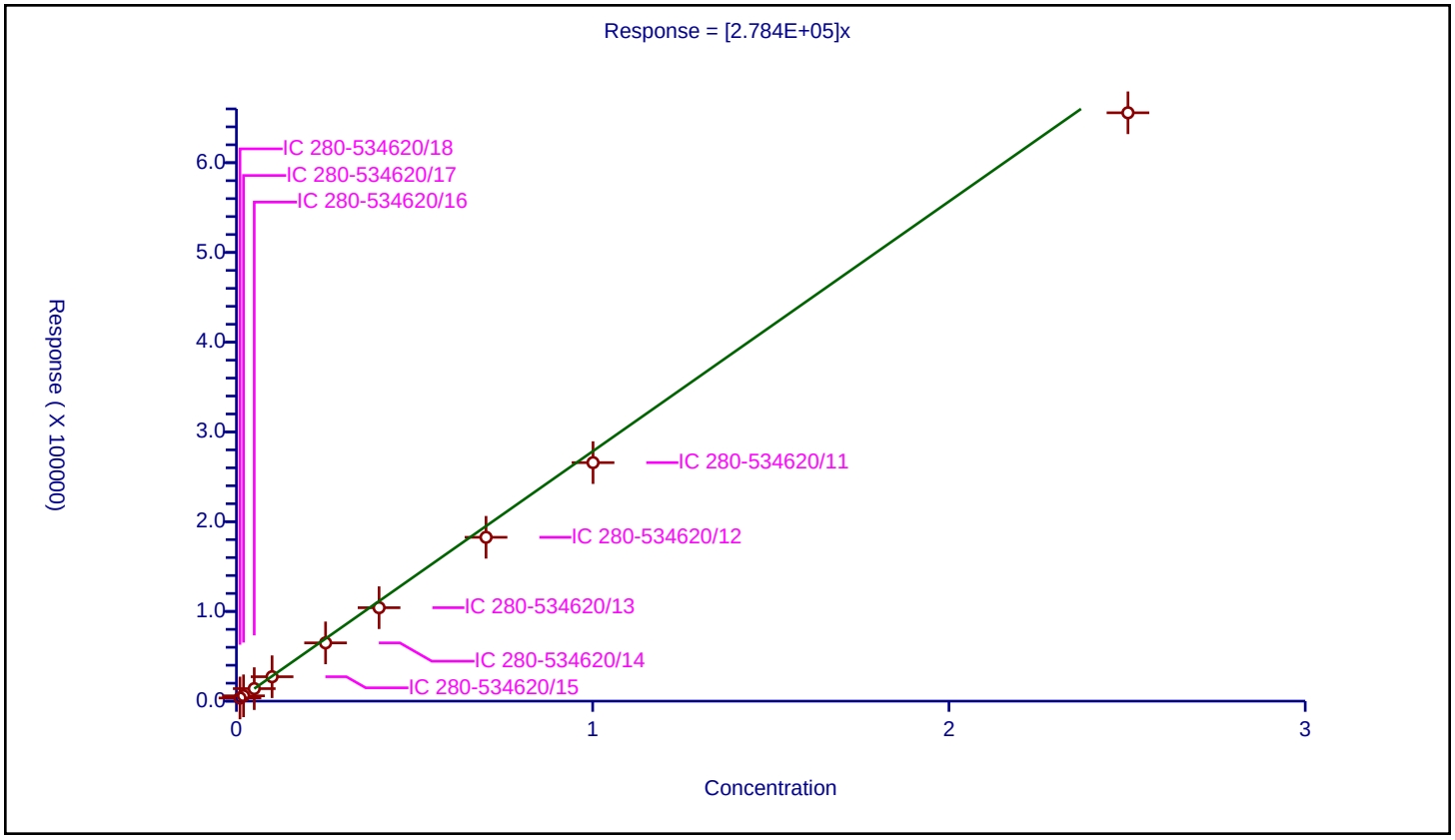
Curve Coefficients

Intercept:	0
Slope:	2.784E+05

Error Coefficients

Standard Error:	16100
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3517.0			351348.651349	Y
2	IC 280-534620/17	0.02002	5928.0			296103.896104	Y
3	IC 280-534620/16	0.05005	13943.0			278581.418581	Y
4	IC 280-534620/15	0.1001	27212.0			271848.151848	Y
5	IC 280-534620/14	0.25025	64933.0			259472.527473	Y
6	IC 280-534620/13	0.4004	104128.0			260059.94006	Y
7	IC 280-534620/12	0.7007	182587.0			260577.993435	Y
8	IC 280-534620/11	1.001	265803.0			265537.462537	Y
9	IC 280-534620/10	2.5025	655662.0			262002.797203	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

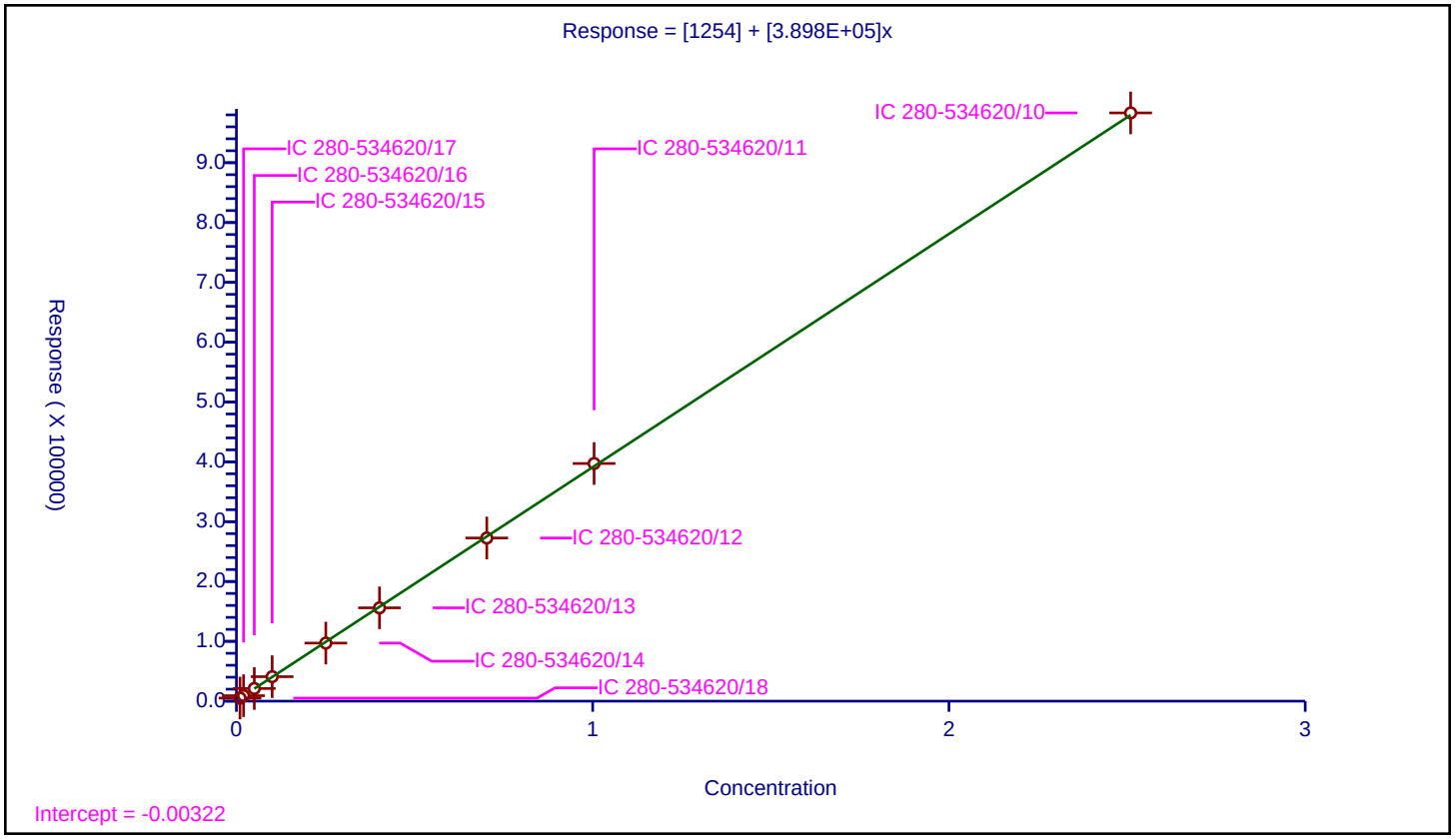
Curve Coefficients

Intercept:	1254
Slope:	3.898E+05

Error Coefficients

Standard Error:	2610
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5148.0			512749.003984	Y
2	IC 280-534620/17	0.02008	9114.0			453884.462151	Y
3	IC 280-534620/16	0.0502	21111.0			420537.848606	Y
4	IC 280-534620/15	0.1004	40904.0			407410.358566	Y
5	IC 280-534620/14	0.251	97071.0			386737.051793	Y
6	IC 280-534620/13	0.4016	155961.0			388349.103586	Y
7	IC 280-534620/12	0.7028	272718.0			388044.963005	Y
8	IC 280-534620/11	1.004	397243.0			395660.358566	Y
9	IC 280-534620/10	2.51	983275.0			391743.027888	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

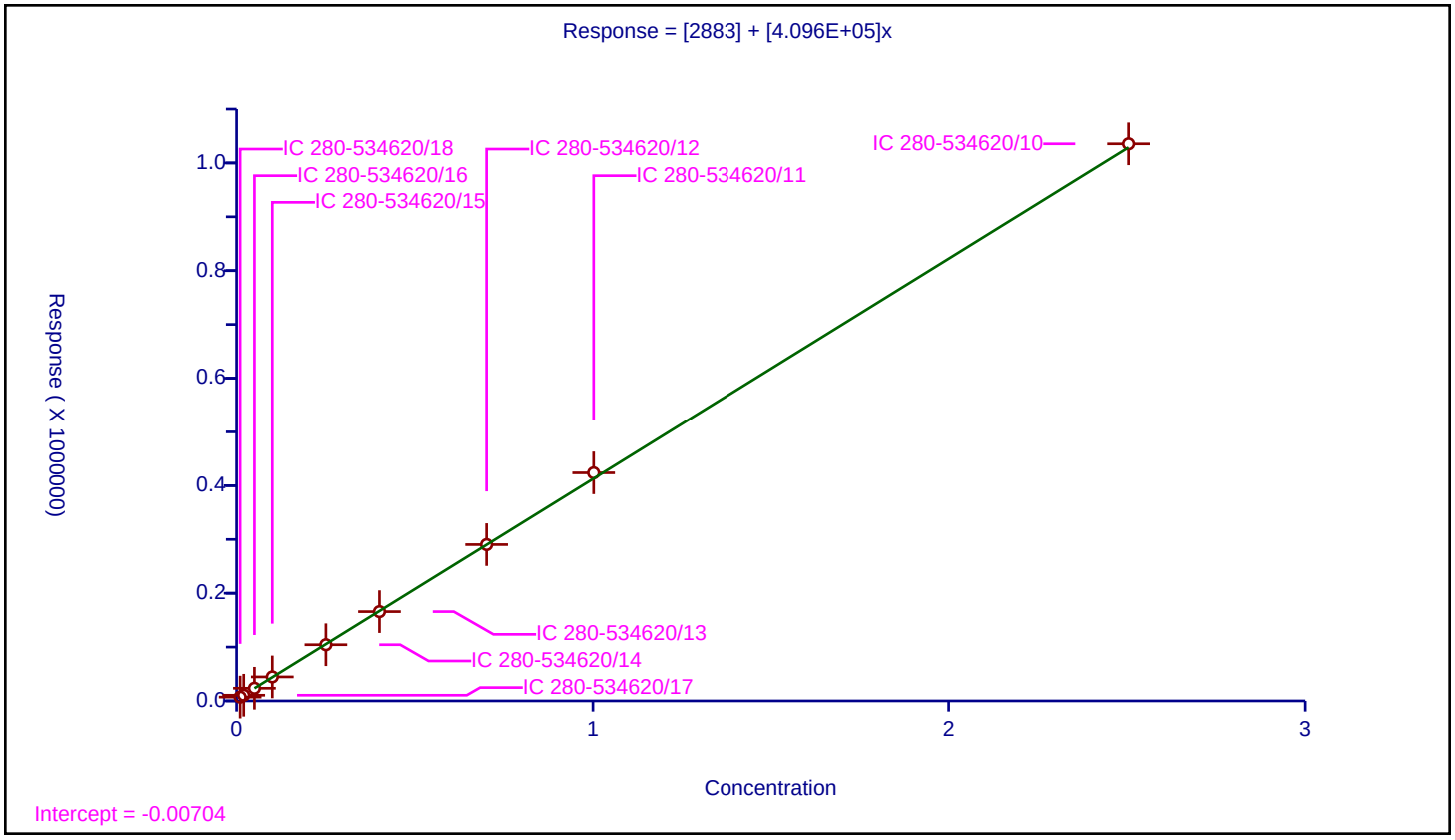
Curve Coefficients

Intercept:	2883
Slope:	4.096E+05

Error Coefficients

Standard Error:	4780
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	7116.0			710179.640719	Y
2	IC 280-534620/17	0.02004	10540.0			525948.103792	Y
3	IC 280-534620/16	0.0501	23506.0			469181.636727	Y
4	IC 280-534620/15	0.1002	44594.0			445049.9002	Y
5	IC 280-534620/14	0.2505	104344.0			416542.914172	Y
6	IC 280-534620/13	0.4008	165828.0			413742.51497	Y
7	IC 280-534620/12	0.7014	290458.0			414111.776447	Y
8	IC 280-534620/11	1.002	423869.0			423022.954092	Y
9	IC 280-534620/10	2.505	1035616.0			413419.560878	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

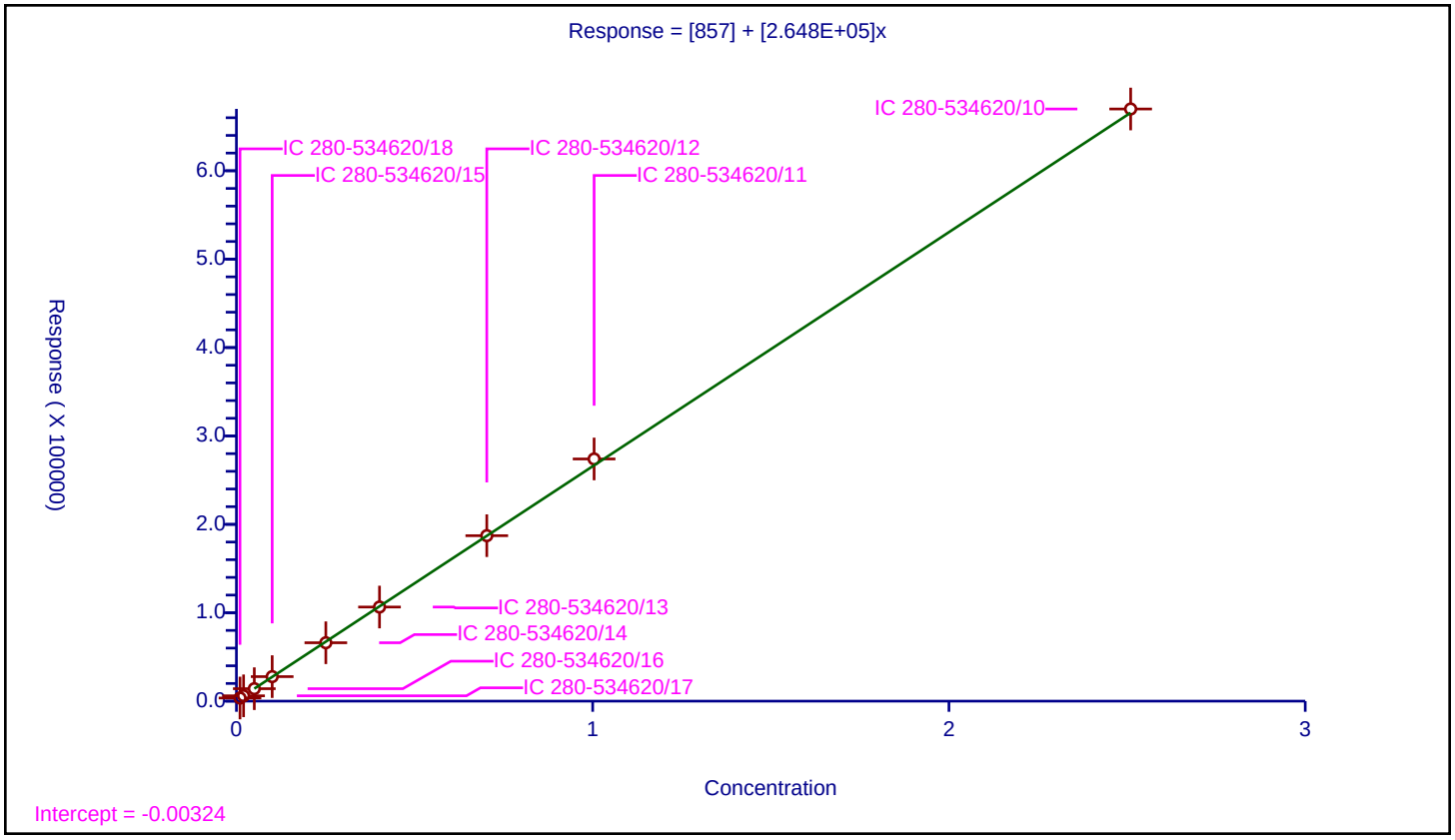
Curve Coefficients

Intercept:	857
Slope:	2.648E+05

Error Coefficients

Standard Error:	3220
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	3555.0			354083.665339	Y
2	IC 280-534620/17	0.02008	6026.0			300099.601594	Y
3	IC 280-534620/16	0.0502	14081.0			280498.007968	Y
4	IC 280-534620/15	0.1004	27721.0			276105.577689	Y
5	IC 280-534620/14	0.251	66062.0			263195.219124	Y
6	IC 280-534620/13	0.4016	106452.0			265069.721116	Y
7	IC 280-534620/12	0.7028	187184.0			266340.352874	Y
8	IC 280-534620/11	1.004	273958.0			272866.533865	Y
9	IC 280-534620/10	2.51	669889.0			266888.047809	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

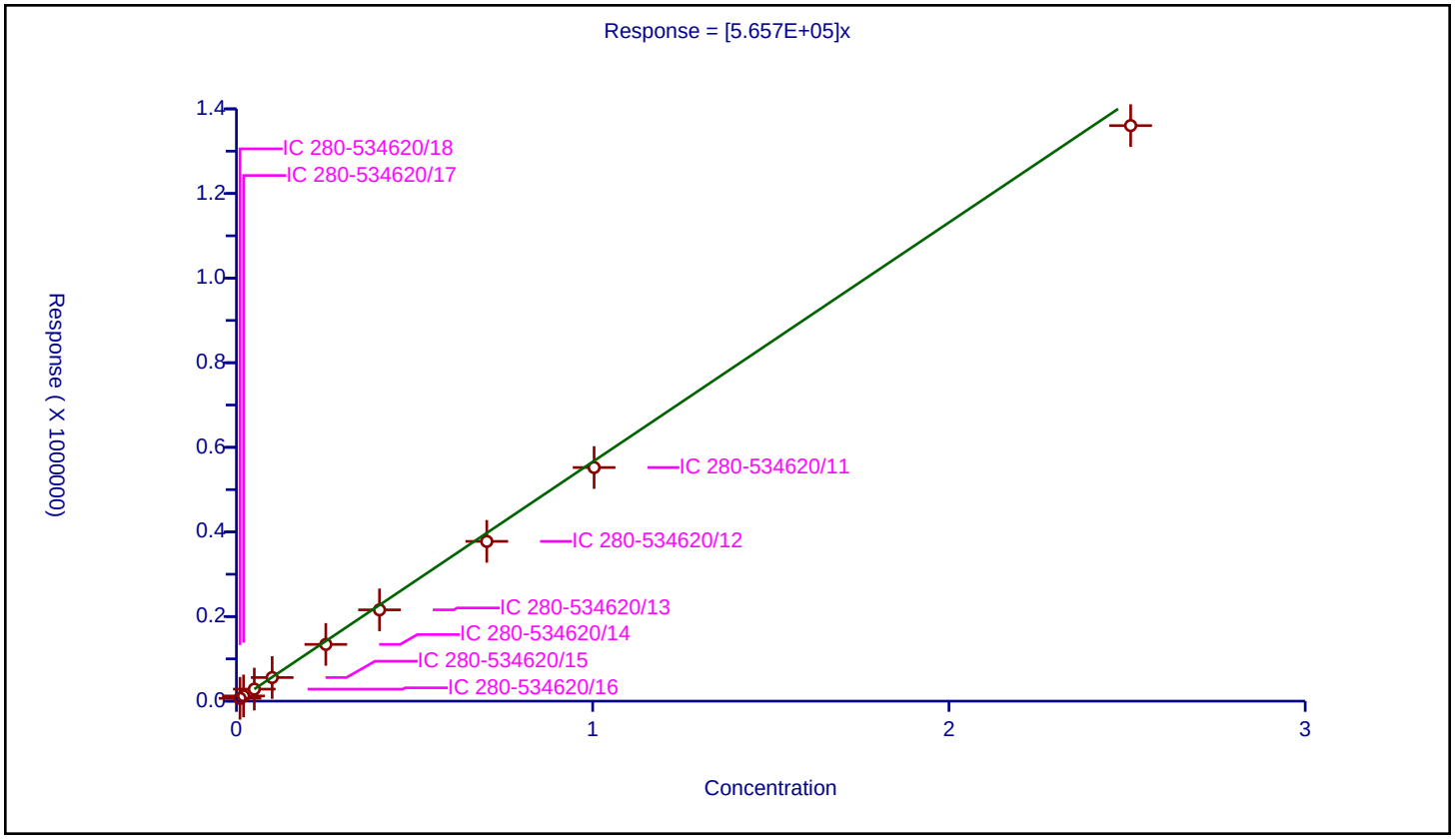
Curve Coefficients

Intercept:	0
Slope:	5.657E+05

Error Coefficients

Standard Error:	23400
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	6619.0			659262.948207	Y
2	IC 280-534620/17	0.02008	12229.0			609013.944223	Y
3	IC 280-534620/16	0.0502	28396.0			565657.370518	Y
4	IC 280-534620/15	0.1004	55838.0			556155.378486	Y
5	IC 280-534620/14	0.251	134163.0			534513.944223	Y
6	IC 280-534620/13	0.4016	215819.0			537397.908367	Y
7	IC 280-534620/12	0.7028	377631.0			537323.562891	Y
8	IC 280-534620/11	1.004	552269.0			550068.7251	Y
9	IC 280-534620/10	2.51	1360486.0			542026.294821	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

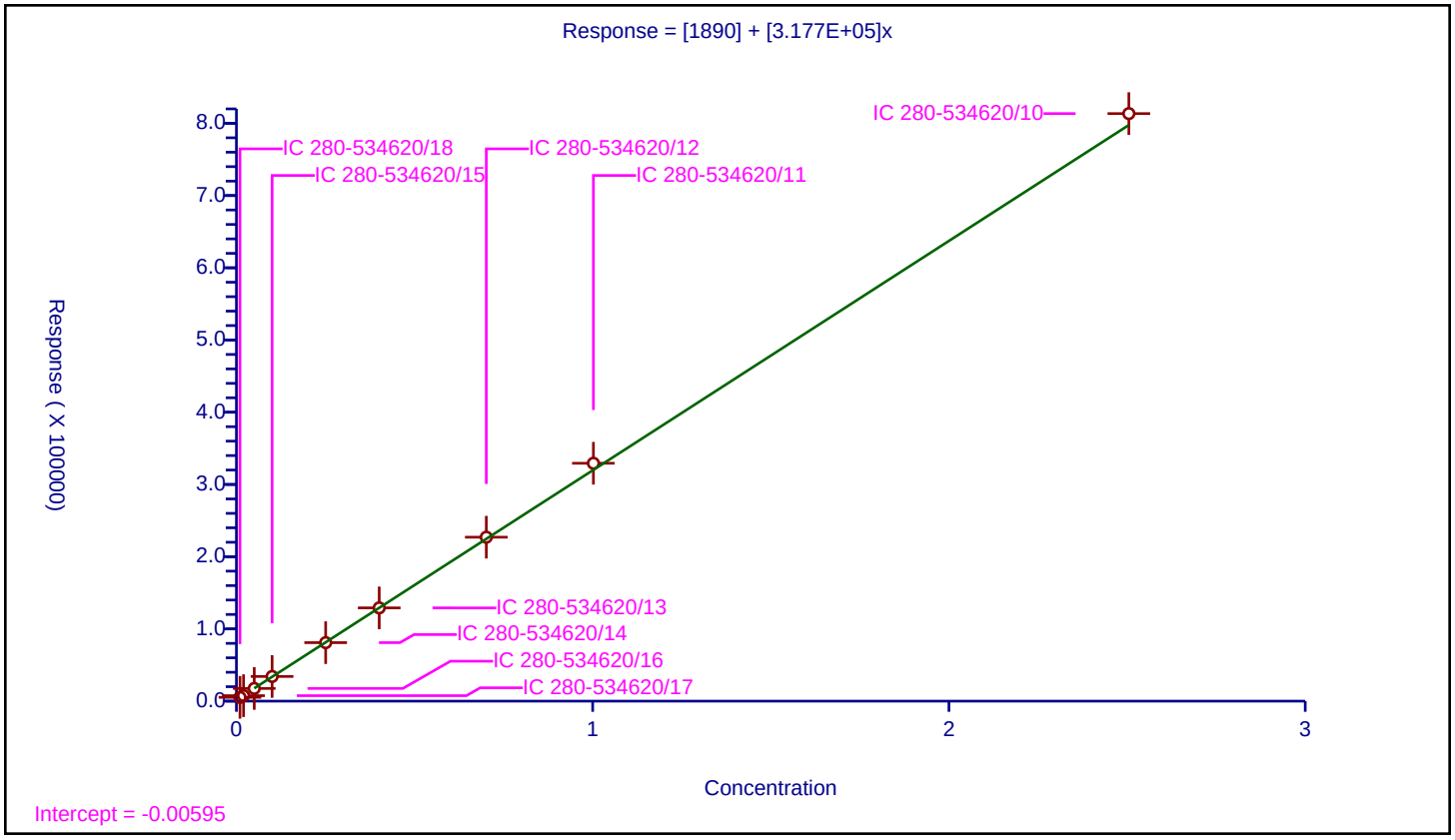
Curve Coefficients

Intercept:	1890
Slope:	3.177E+05

Error Coefficients

Standard Error:	6990
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	5245.0			523453.093812	Y
2	IC 280-534620/17	0.02004	7583.0			378393.213573	Y
3	IC 280-534620/16	0.0501	17573.0			350758.483034	Y
4	IC 280-534620/15	0.1002	34148.0			340798.403194	Y
5	IC 280-534620/14	0.2505	80996.0			323337.325349	Y
6	IC 280-534620/13	0.4008	129140.0			322205.588822	Y
7	IC 280-534620/12	0.7014	227001.0			323639.863131	Y
8	IC 280-534620/11	1.002	329366.0			328708.582834	Y
9	IC 280-534620/10	2.505	813489.0			324746.107784	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

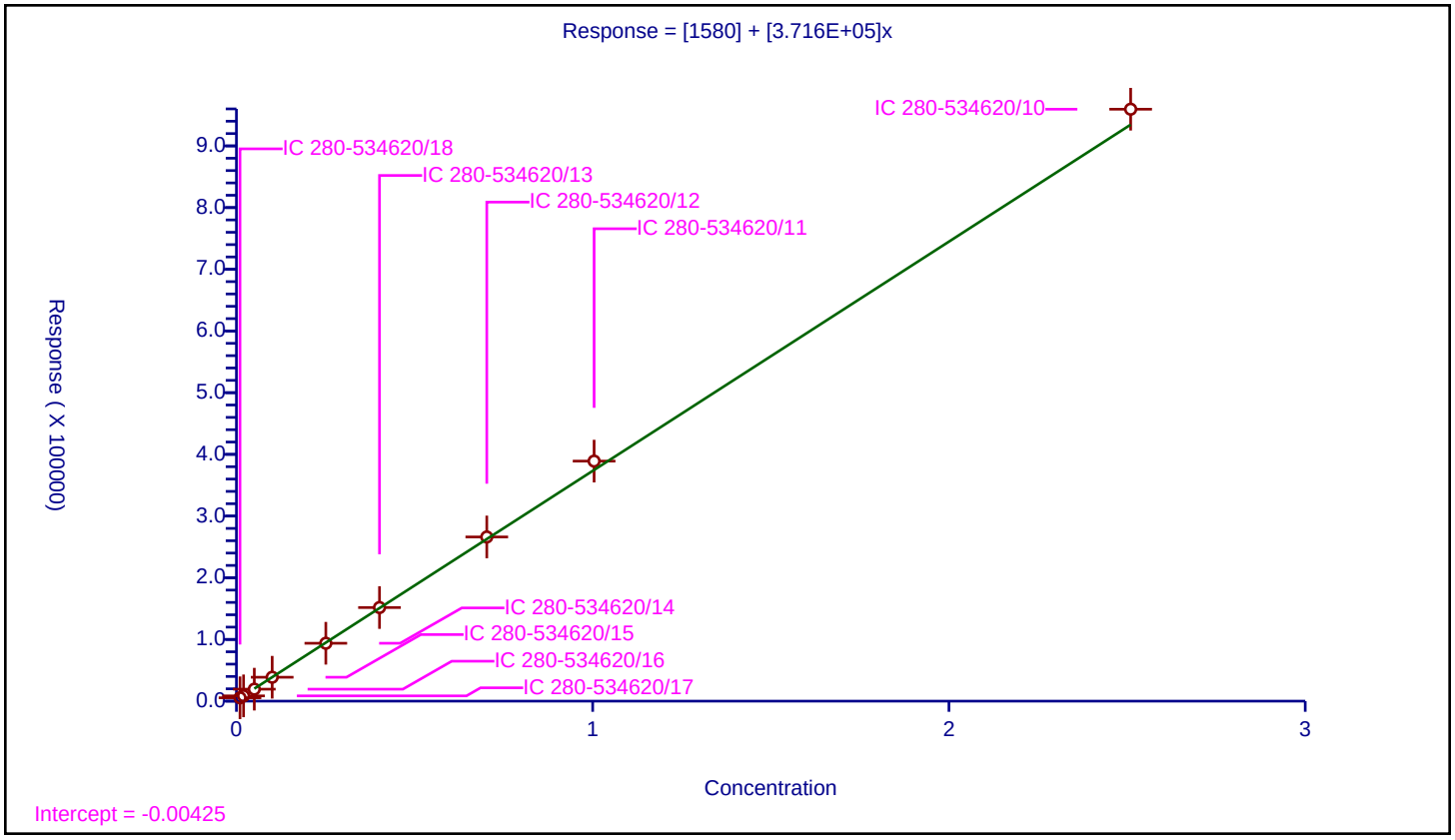
Curve Coefficients

Intercept:	1580
Slope:	3.716E+05

Error Coefficients

Standard Error:	11000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5469.0			544721.115538	Y
2	IC 280-534620/17	0.02008	8548.0			425697.211155	Y
3	IC 280-534620/16	0.0502	19400.0			386454.183267	Y
4	IC 280-534620/15	0.1004	38740.0			385856.573705	Y
5	IC 280-534620/14	0.251	93822.0			373792.828685	Y
6	IC 280-534620/13	0.4016	151709.0			377761.454183	Y
7	IC 280-534620/12	0.7028	266122.0			378659.647126	Y
8	IC 280-534620/11	1.004	389102.0			387551.792829	Y
9	IC 280-534620/10	2.51	959496.0			382269.322709	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

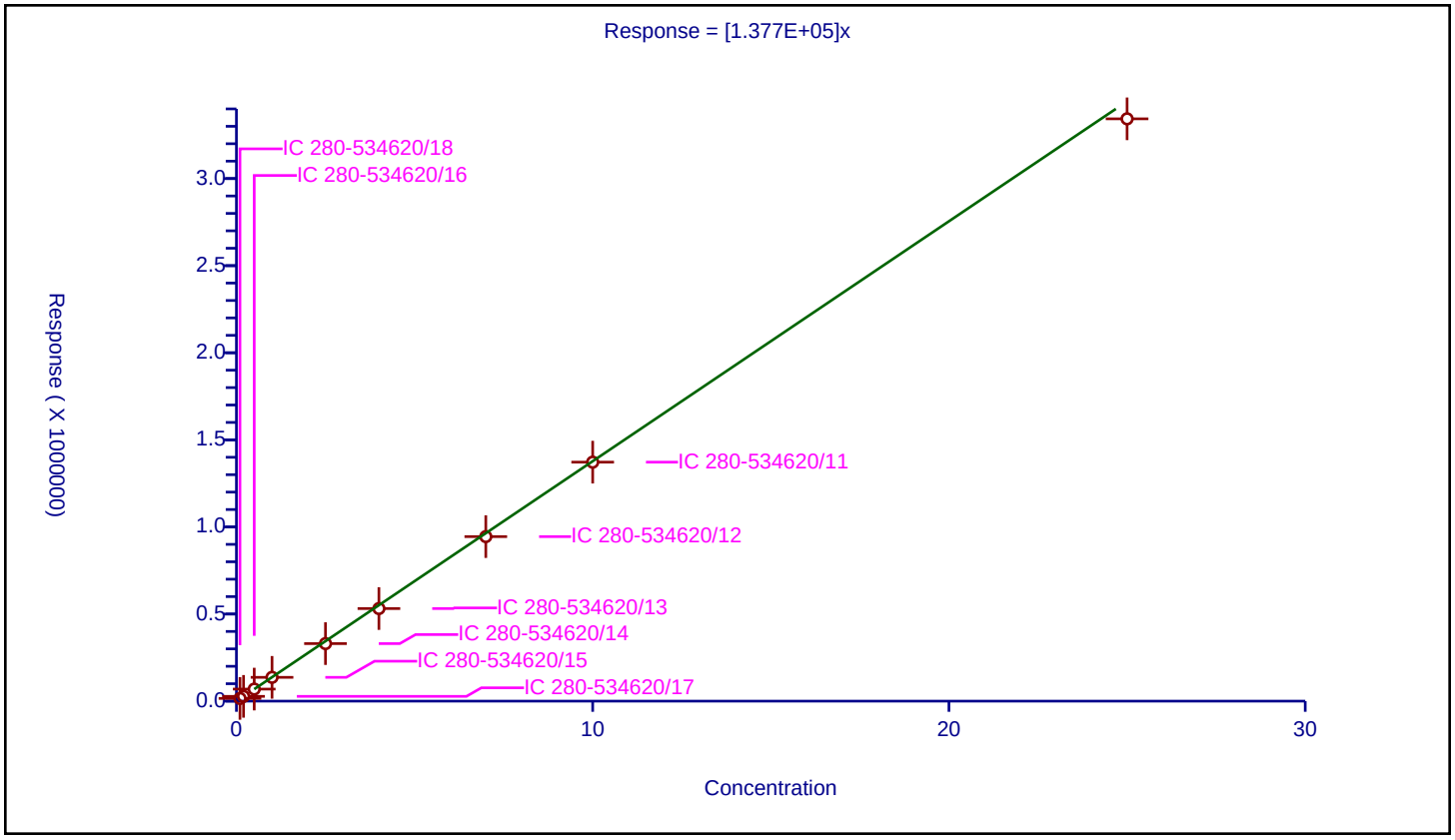
Curve Coefficients

Intercept:	0
Slope:	1.377E+05

Error Coefficients

Standard Error:	37200
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	15659.0			156590.0	Y
2	IC 280-534620/17	0.2	27436.0			137180.0	Y
3	IC 280-534620/16	0.5	69170.0			138340.0	Y
4	IC 280-534620/15	1.0	136676.0			136676.0	Y
5	IC 280-534620/14	2.5	330309.0			132123.6	Y
6	IC 280-534620/13	4.0	531566.0			132891.5	Y
7	IC 280-534620/12	7.0	944599.0			134942.714286	Y
8	IC 280-534620/11	10.0	1371986.0			137198.6	Y
9	IC 280-534620/10	25.0	3343027.0			133721.08	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.064	5.071	5.067	5.077	5.075	5.069	5.070	5.050			4.925 - 5.225	5.068
DNX	5.897	5.898	5.894	5.904	5.902	5.896	5.904	5.876			5.752 - 6.052	5.896
MNX	7.444	7.444	7.447	7.451	7.455	7.449	7.450	7.430			7.305 - 7.605	7.446

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.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	410889 372502	384156 369461	382597 368210	348975 372358	Ave		376143.53 1				4.7		20.0			
DNX	297353 284253	292168 282676	288032 280817	268675 284356	Ave		284791.26 8				3.0		20.0			
MNX	288260 261292	277069 259317	266692 258167	246968 260974	Ave		264842.56 2				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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.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	8226 258881	19227 368578	38298 931826	87331	149150	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	5953 198071	14623 281098	28832 711601	67236	113815	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	6728 211836	16167 301281	31123 761392	72053	121971	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:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\020-1501.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	02-May-2021 00:45:25	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:16	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.050	5.075	-0.025	931826	2.50	2.48	
4 DNX	1	5.876	5.902	-0.026	711601	2.50	2.50	
7 MNX	1	7.430	7.455	-0.025	761392	2.92	2.87	

Reagents:

8330 DMT_00008 Amount Added: 125.00 Units: uL

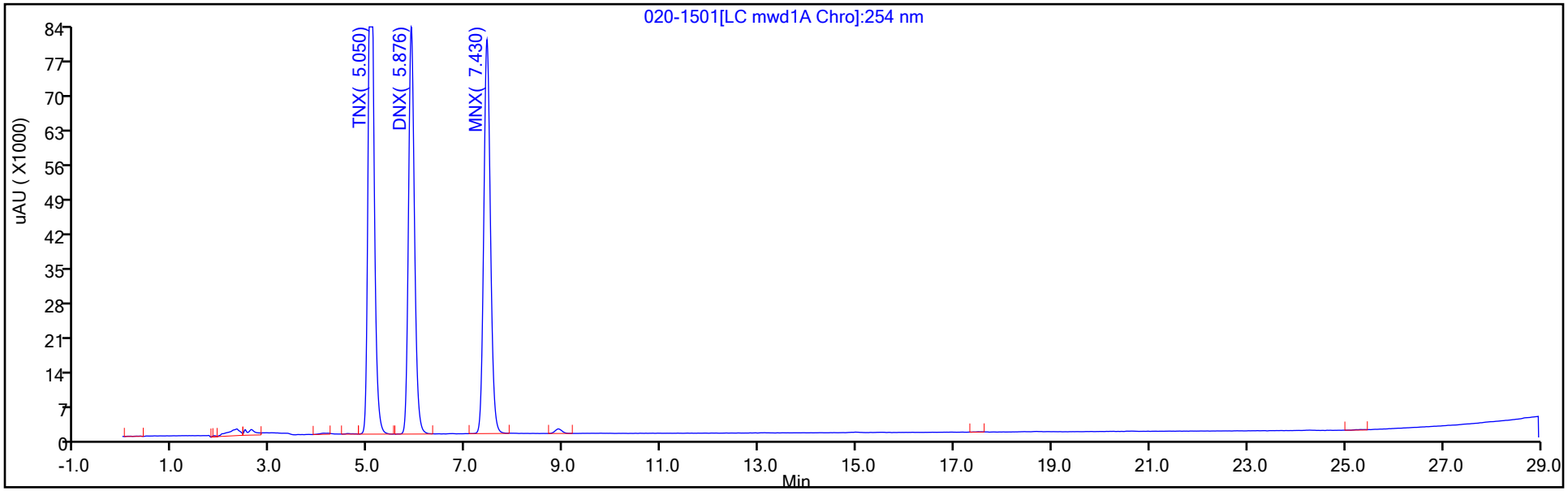
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

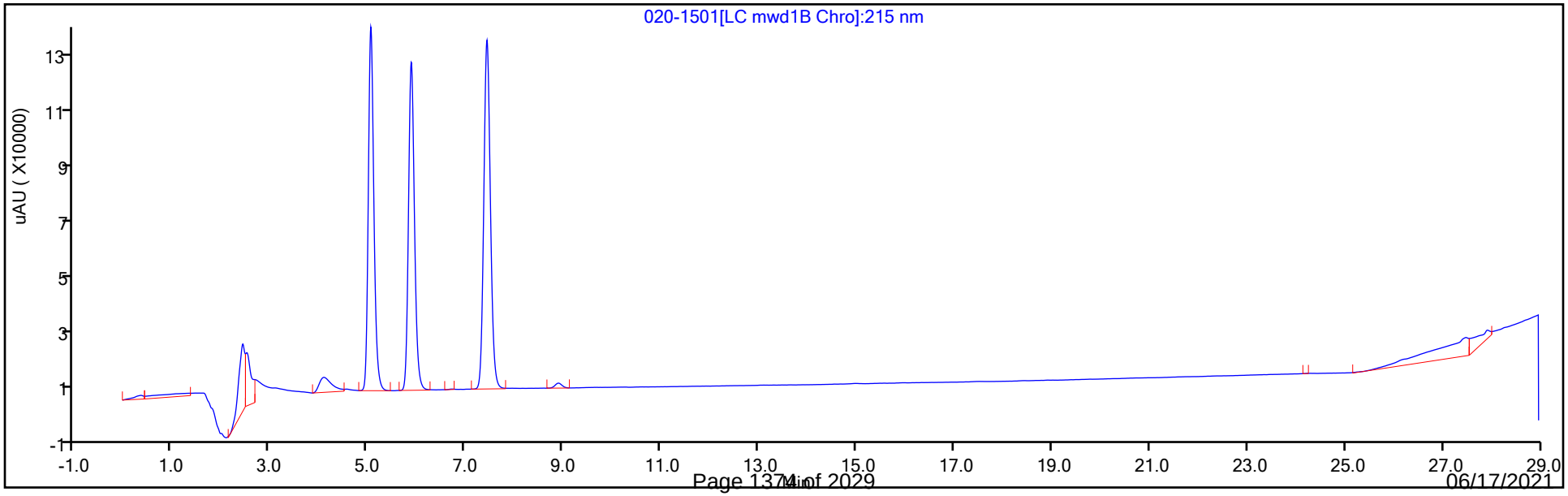
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\020-1501.D

Injection Date:	02-May-2021 00:45:25	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 8			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\021-1601.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	02-May-2021 01:20:33	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:17	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.070	5.075	-0.005	368578	1.00	0.9799	
4 DNX	1	5.904	5.902	0.002	281098	1.00	0.9870	
7 MNX	1	7.450	7.455	-0.005	301281	1.17	1.14	

Reagents:

8330 DMT_00008 Amount Added: 50.00 Units: uL

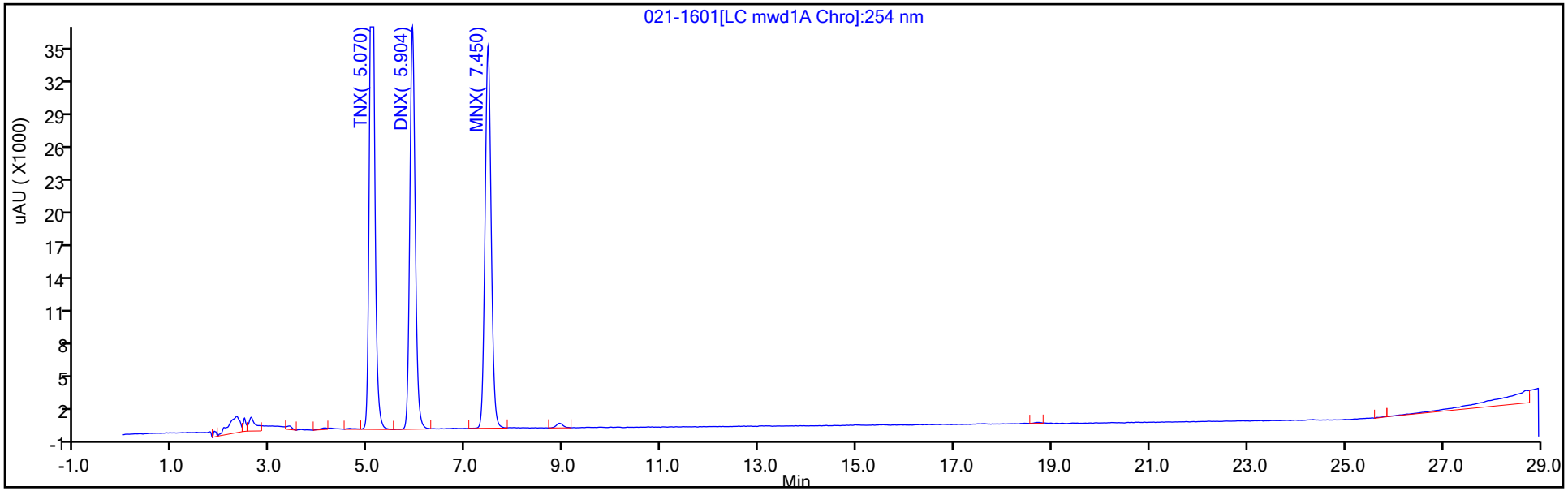
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

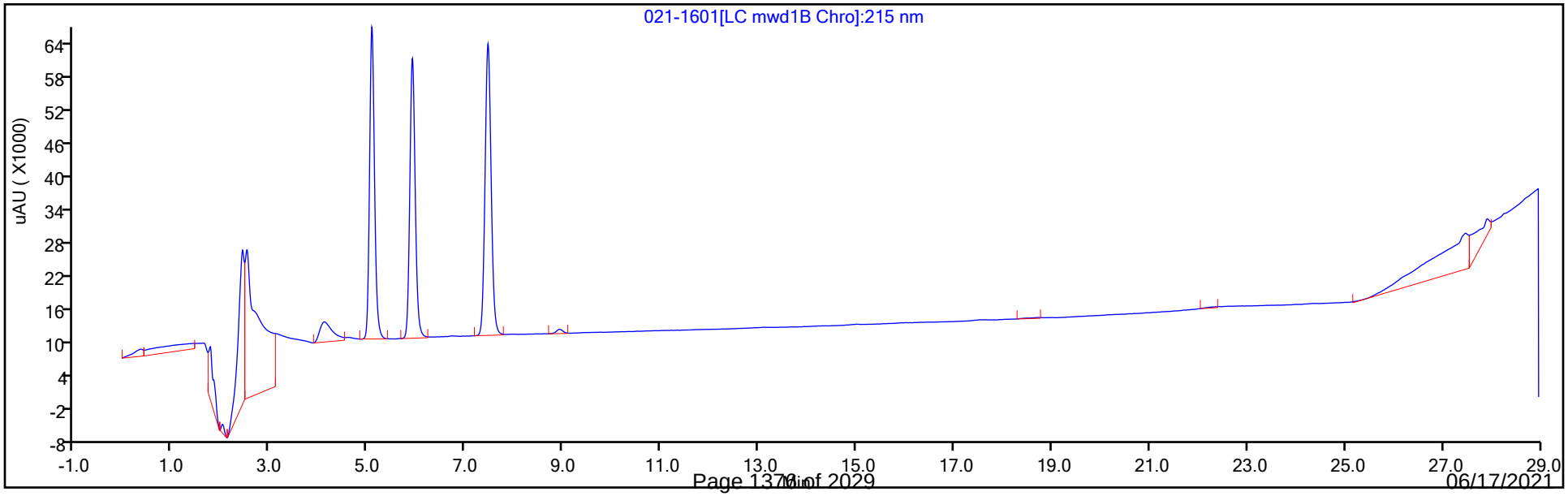
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\021-1601.D

Injection Date:	02-May-2021 01:20:33	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 7			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\022-1701.D				
Lims ID:	IC DMT 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	02-May-2021 01:55:44	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 6				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:17	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.069	5.075	-0.006	258881	0.7007	0.6883	
4 DNX	1	5.896	5.902	-0.006	198071	0.7007	0.6955	
7 MNX	1	7.449	7.455	-0.006	211836	0.8169	0.7999	

Reagents:

8330 DMT_00008 Amount Added: 35.00 Units: uL

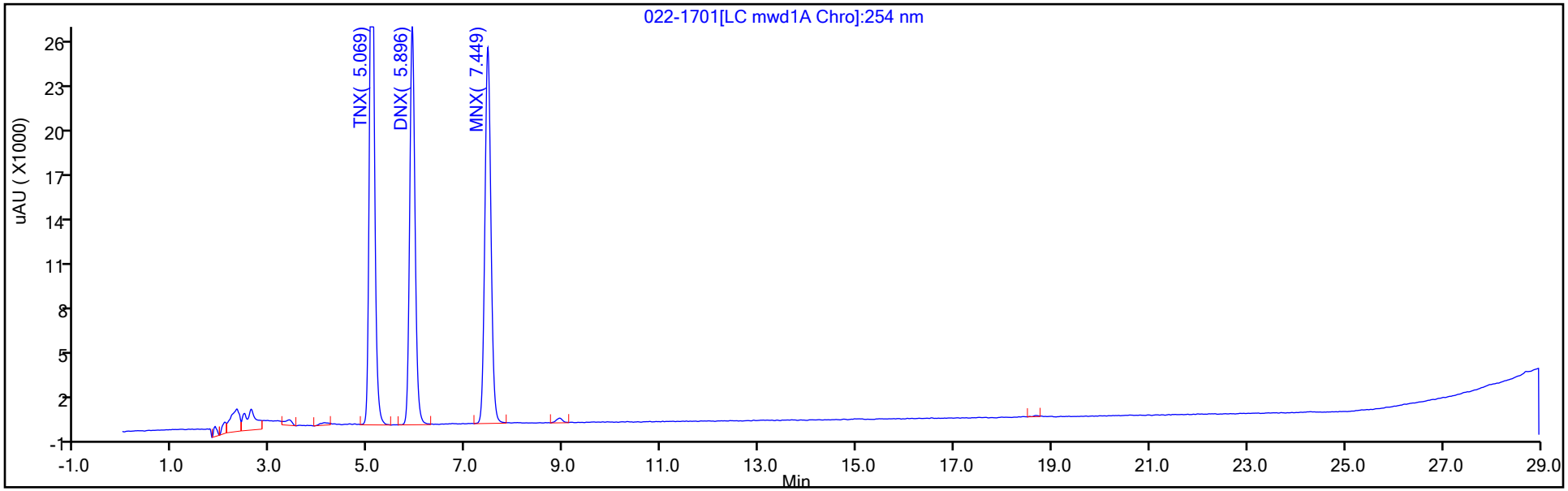
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

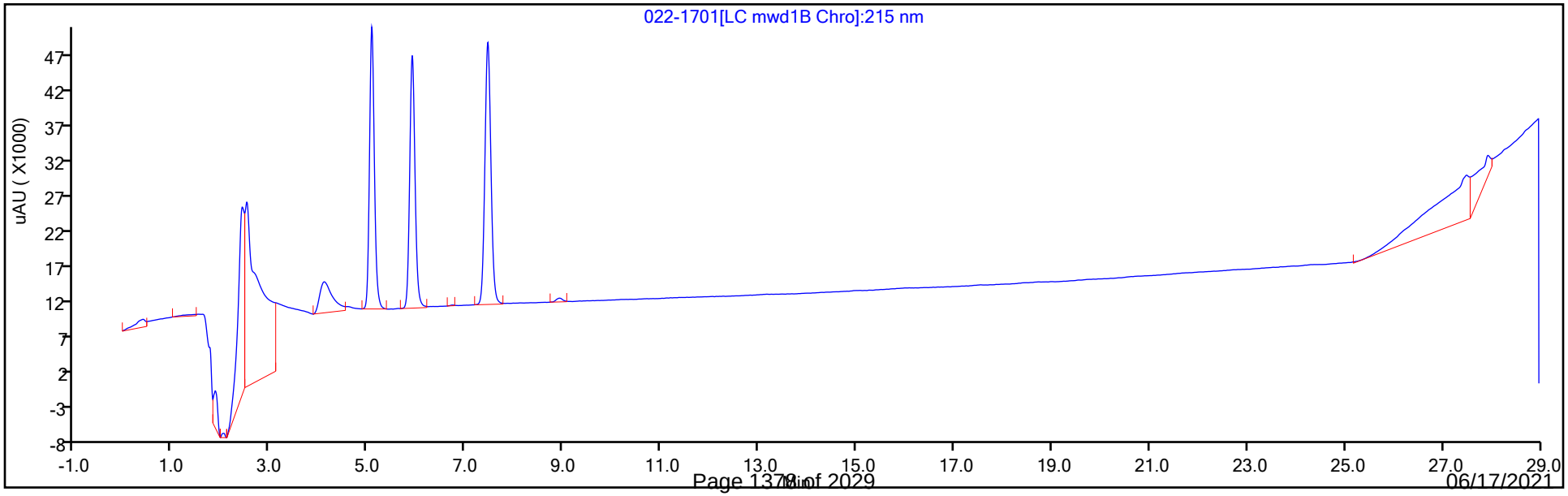
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\022-1701.D

Injection Date:	02-May-2021 01:55:44	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 6			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\023-1801.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	02-May-2021 02:30:46	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:18	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.075	5.075	0.000	149150	0.4004	0.3965	
4 DNX	1	5.902	5.902	0.000	113815	0.4004	0.3996	
7 MNX	1	7.455	7.455	0.000	121971	0.4668	0.4605	

Reagents:

8330 DMT_00008 Amount Added: 20.00 Units: uL

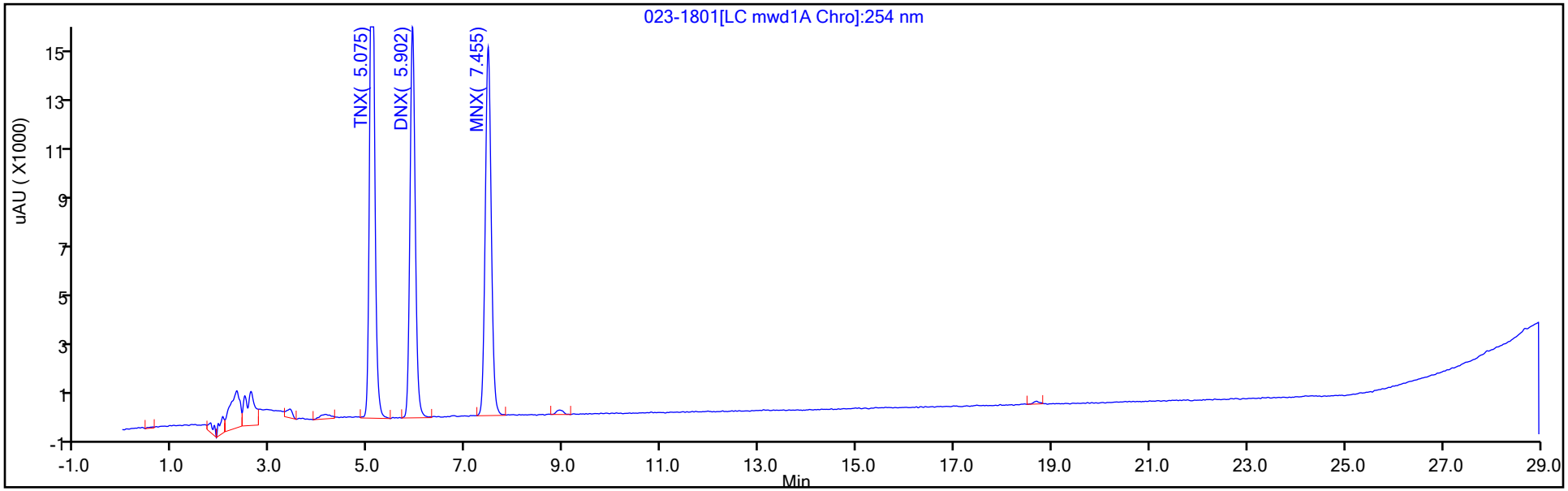
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

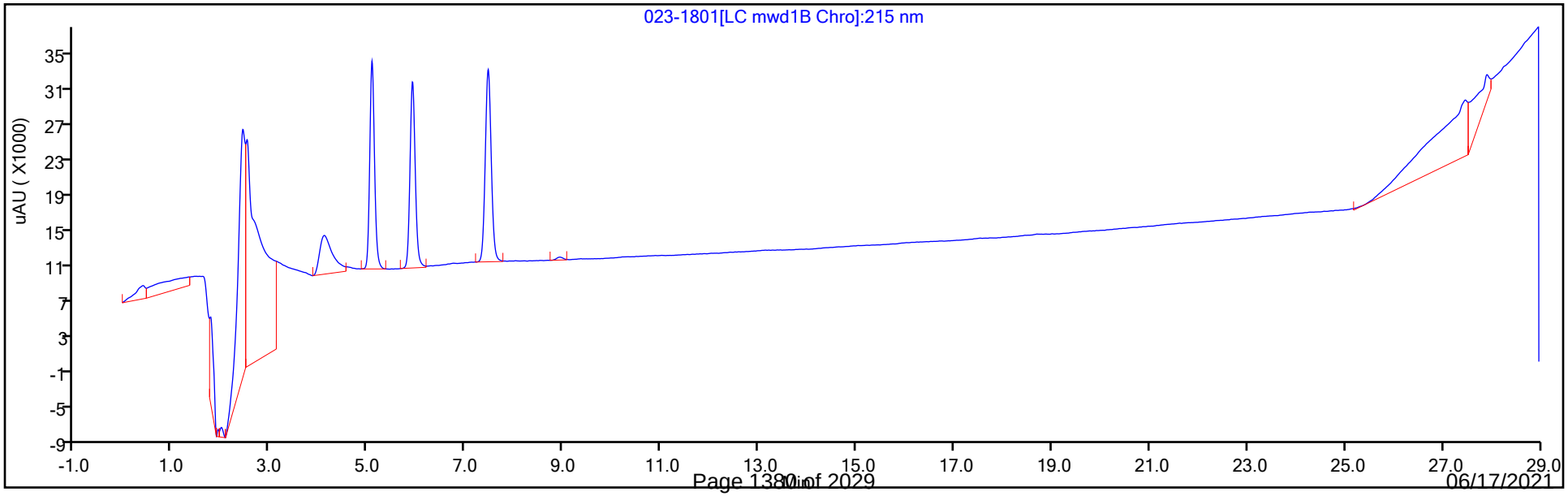
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\023-1801.D

Injection Date:	02-May-2021 02:30:46	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 5			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\024-1901.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-May-2021 03:05:50 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 4
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:18 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.077	5.075	0.002	87331	0.2503	0.2322	
4 DNX	1	5.904	5.902	0.002	67236	0.2503	0.2361	
7 MNX	1	7.451	7.455	-0.004	72053	0.2918	0.2721	

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

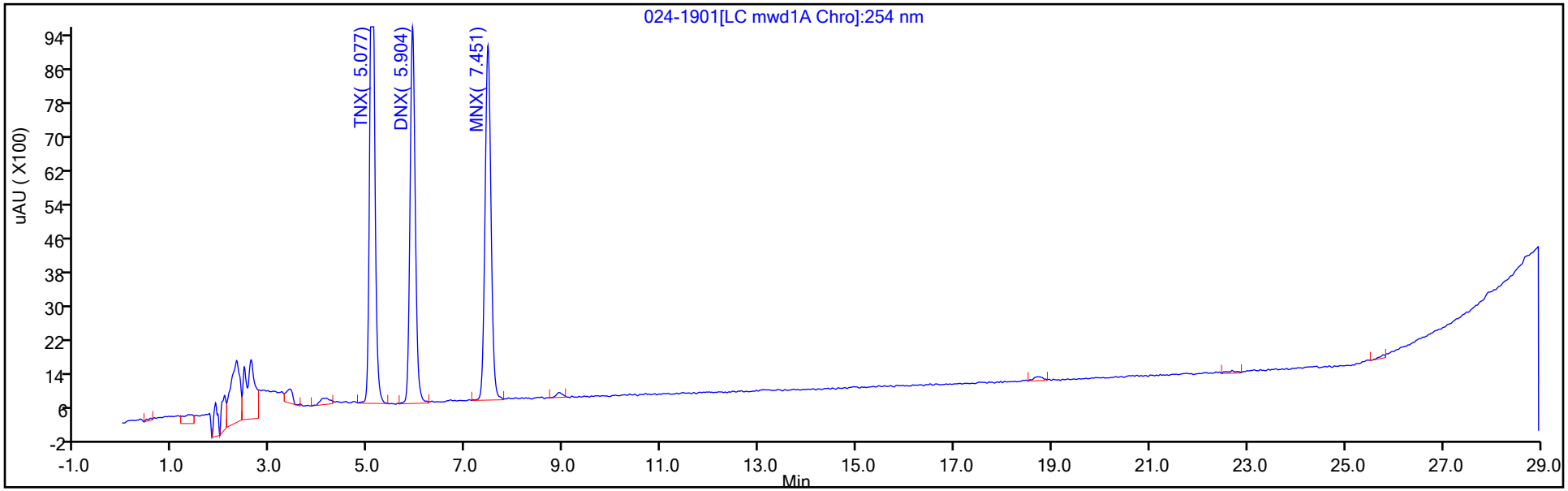
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

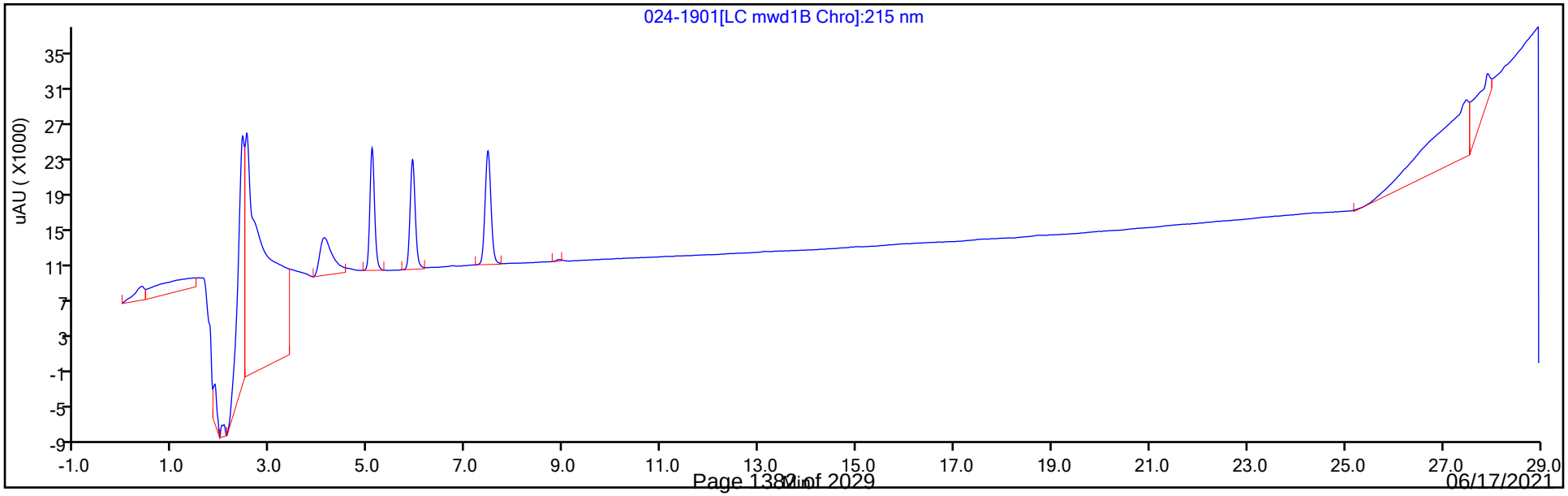
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\024-1901.D

Injection Date:	02-May-2021 03:05:50	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 4			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\025-2001.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	02-May-2021 03:41:00	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:19	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.067	5.075	-0.008	38298	0.1001	0.1018	
4 DNX	1	5.894	5.902	-0.008	28832	0.1001	0.1012	
7 MNX	1	7.447	7.455	-0.008	31123	0.1167	0.1175	

Reagents:

8330 DMT_00008 Amount Added: 5.00 Units: uL

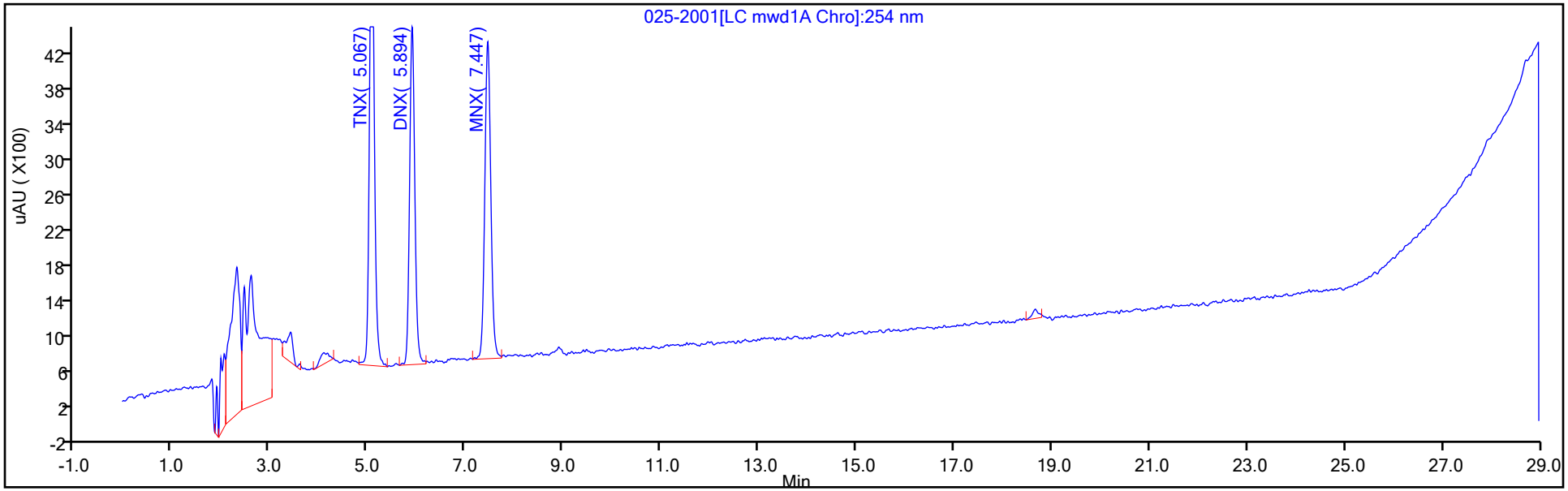
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

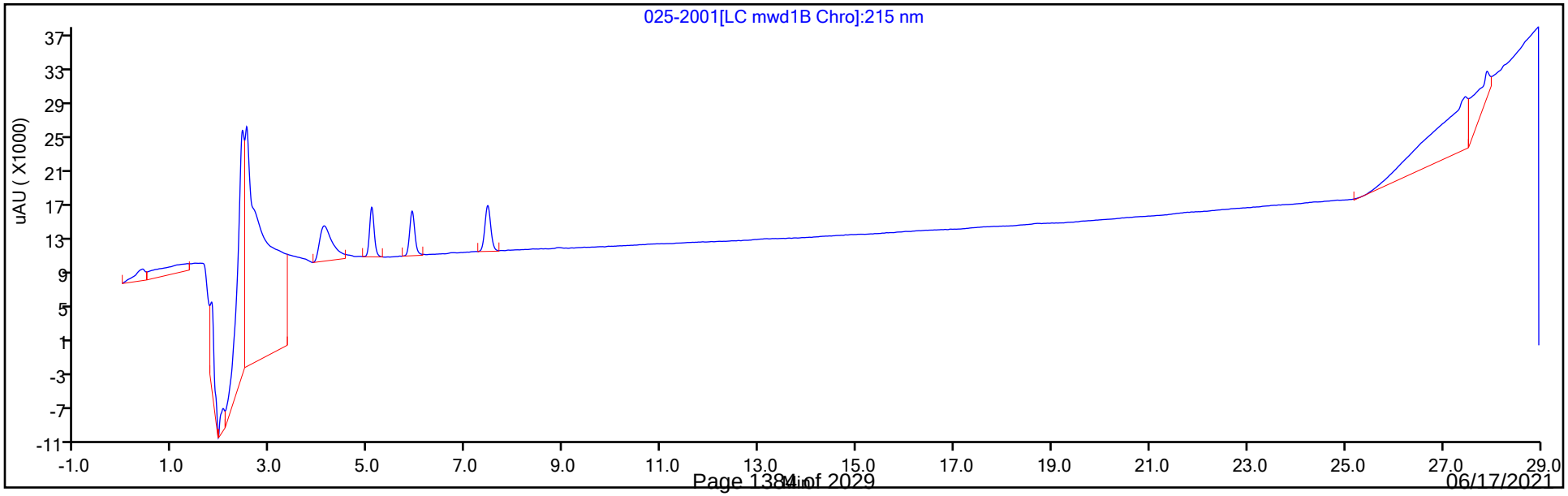
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\025-2001.D

Injection Date:	02-May-2021 03:41:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 3			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\026-2101.D
Lims ID: IC DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-May-2021 04:16:02 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 2
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:19 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.071	5.075	-0.004	19227	0.0501	0.0511	
4 DNX	1	5.898	5.902	-0.004	14623	0.0501	0.0513	
7 MNX	1	7.444	7.455	-0.011	16167	0.0584	0.0610	

Reagents:

8330 DMT_00008 Amount Added: 2.50 Units: uL

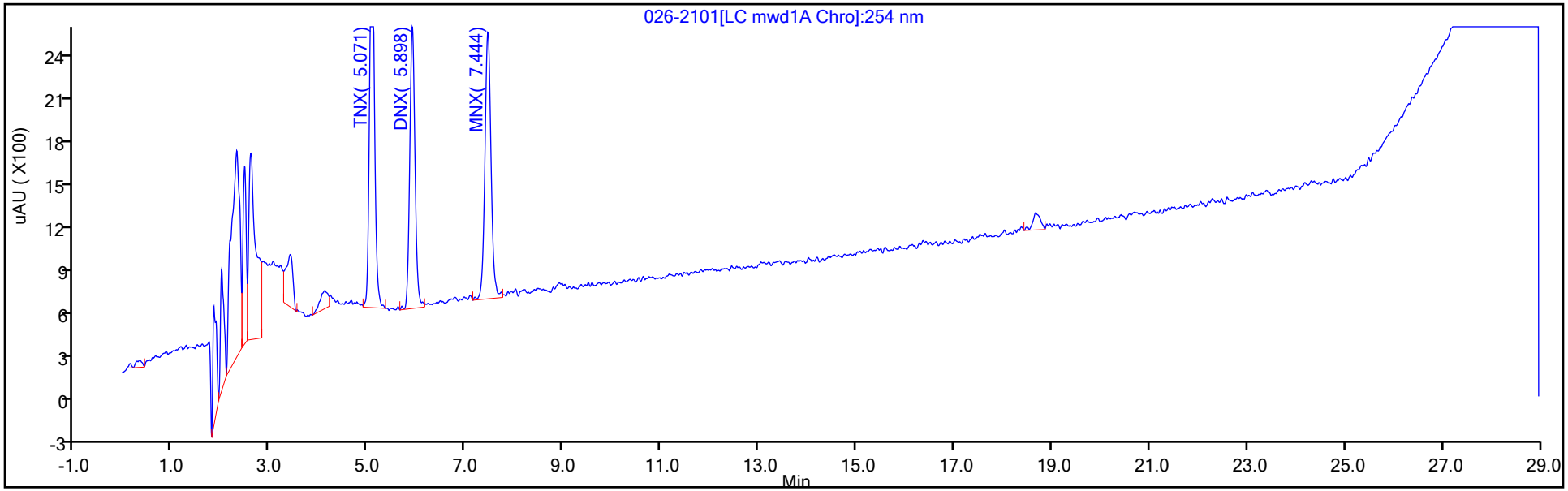
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

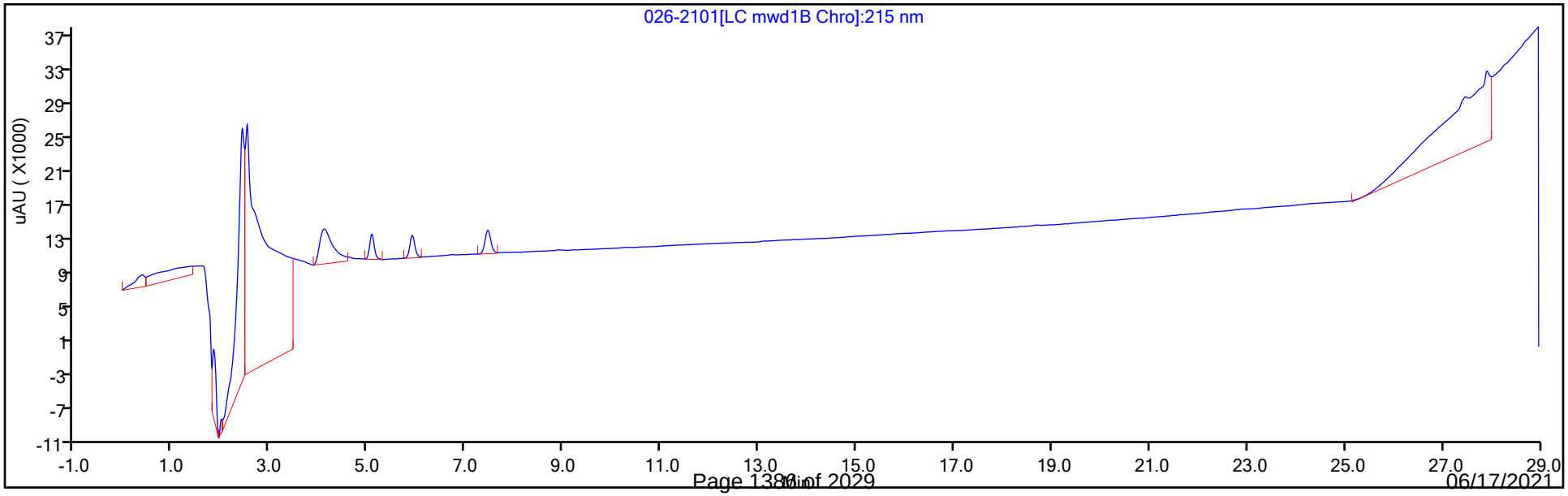
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\026-2101.D

Injection Date:	02-May-2021 04:16:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 2			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Lims ID:	IC DMT 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	02-May-2021 04:51:05	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 1				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:20	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.064	5.075	-0.011	8226	0.0200	0.0219	
4 DNX	1	5.897	5.902	-0.005	5953	0.0200	0.0209	
7 MNX	1	7.444	7.455	-0.011	6728	0.0233	0.0254	

Reagents:

8330 DMT_00008 Amount Added: 1.00 Units: uL

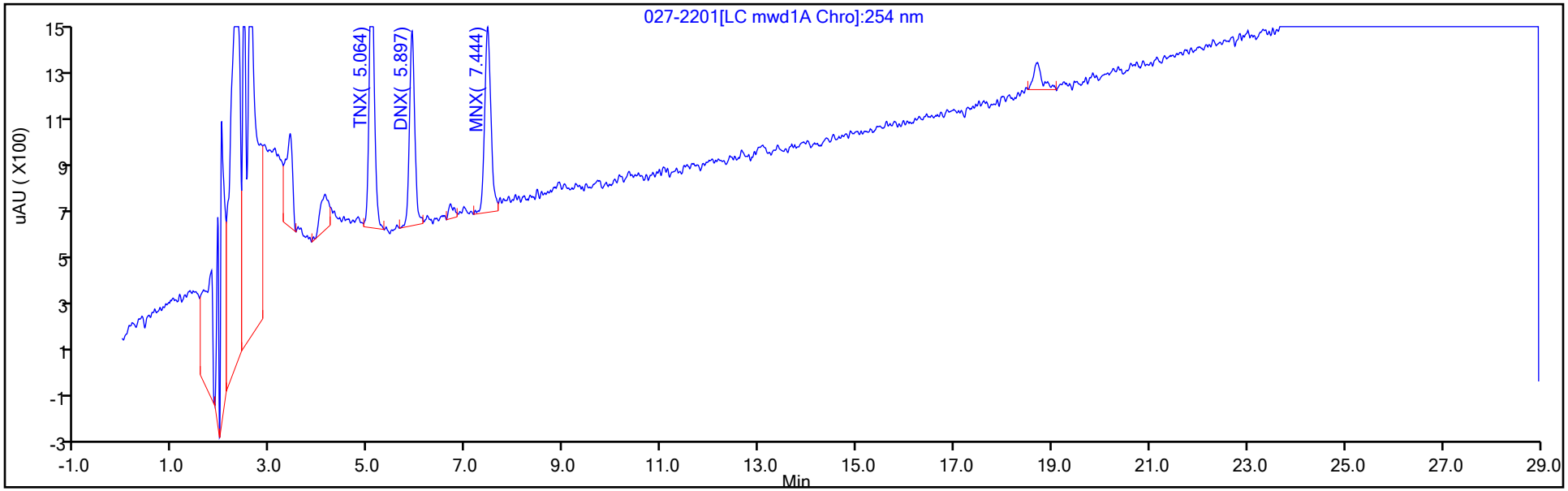
Report Date: 04-May-2021 13:43:20 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

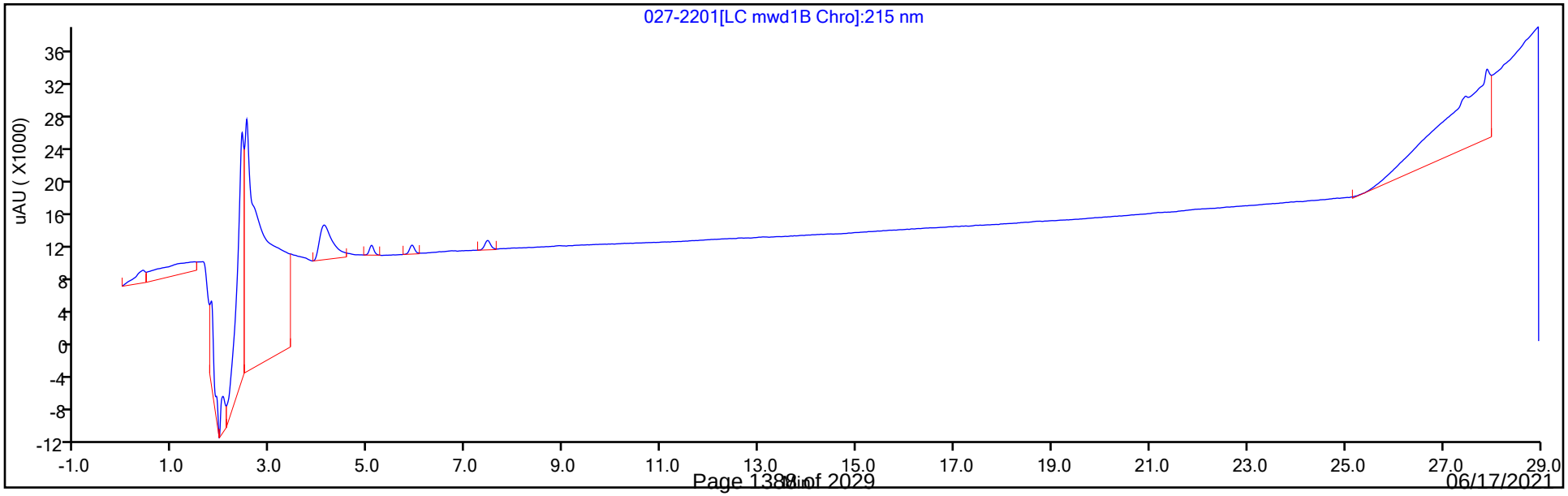
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Injection Date:	02-May-2021 04:51:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 1			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

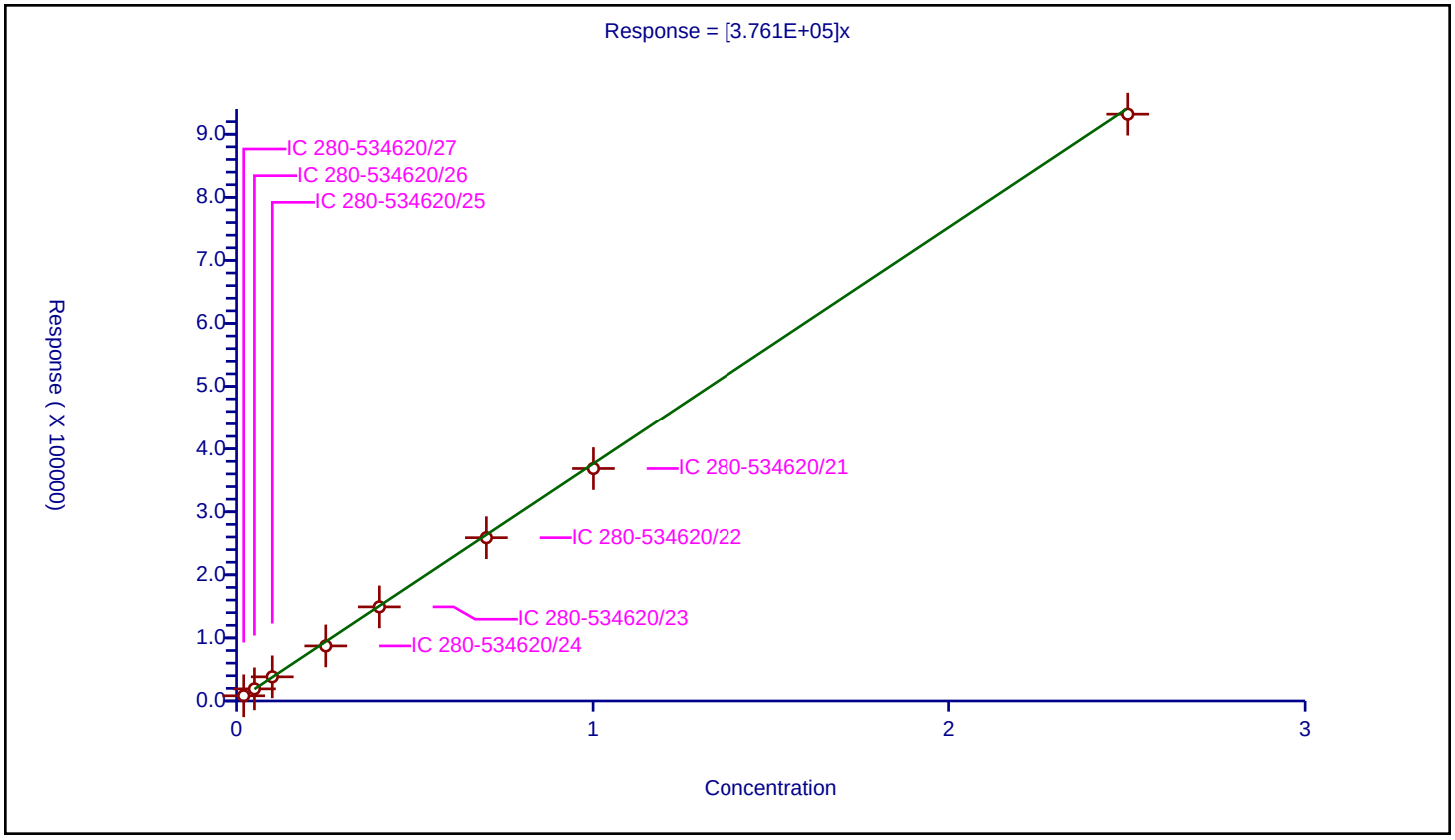
Curve Coefficients

Intercept:	0
Slope:	3.761E+05

Error Coefficients

Standard Error:	5660
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/27	0.02002	8226.0			410889.110889	Y
2	IC 280-534620/26	0.05005	19227.0			384155.844156	Y
3	IC 280-534620/25	0.1001	38298.0			382597.402597	Y
4	IC 280-534620/24	0.25025	87331.0			348975.024975	Y
5	IC 280-534620/23	0.4004	149150.0			372502.497502	Y
6	IC 280-534620/22	0.7007	258881.0			369460.539461	Y
7	IC 280-534620/21	1.001	368578.0			368209.79021	Y
8	IC 280-534620/20	2.5025	931826.0			372358.041958	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

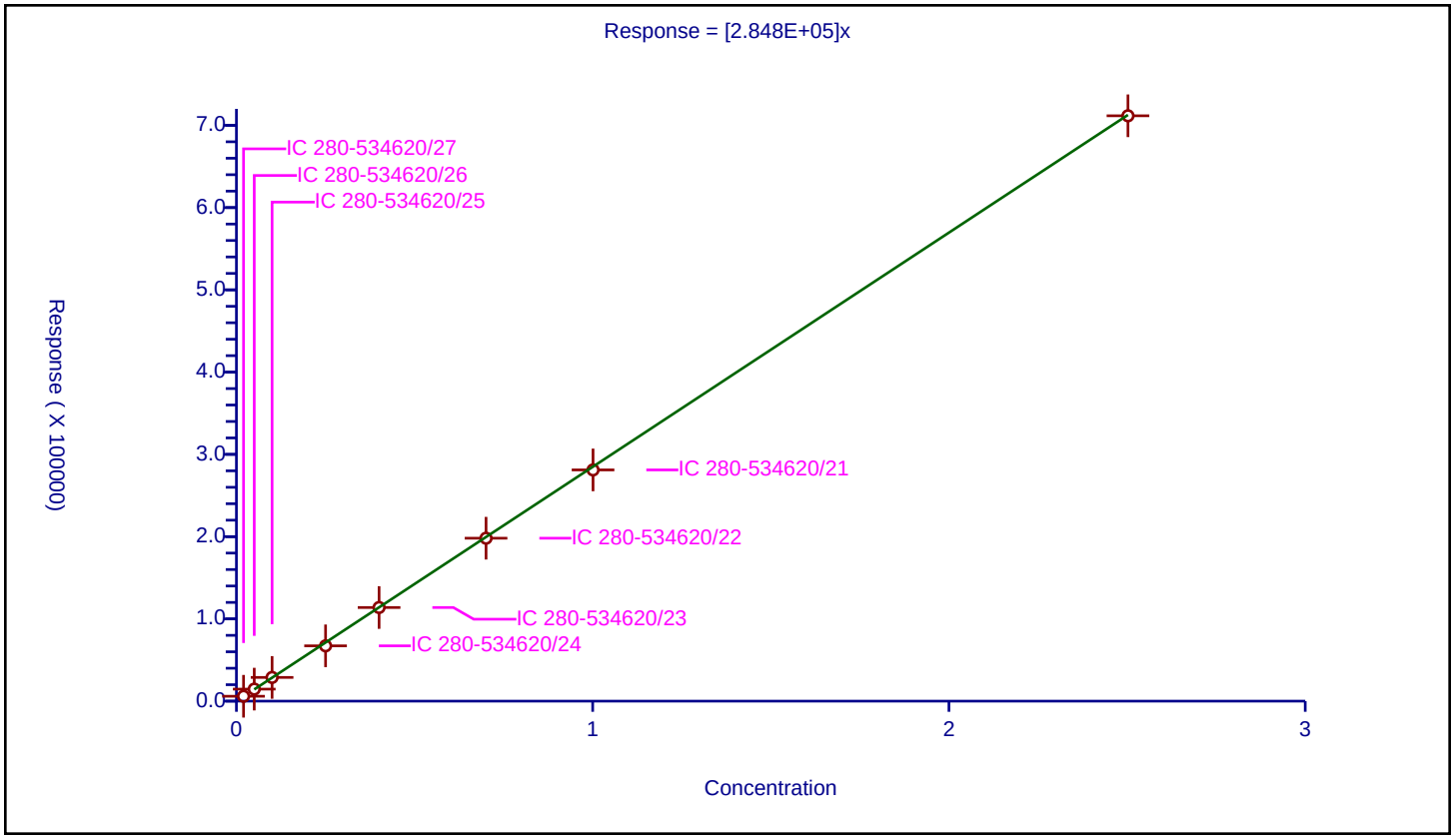
Curve Coefficients

Intercept:	0
Slope:	2.848E+05

Error Coefficients

Standard Error:	2260
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/27	0.02002	5953.0			297352.647353	Y
2	IC 280-534620/26	0.05005	14623.0			292167.832168	Y
3	IC 280-534620/25	0.1001	28832.0			288031.968032	Y
4	IC 280-534620/24	0.25025	67236.0			268675.324675	Y
5	IC 280-534620/23	0.4004	113815.0			284253.246753	Y
6	IC 280-534620/22	0.7007	198071.0			282675.895533	Y
7	IC 280-534620/21	1.001	281098.0			280817.182817	Y
8	IC 280-534620/20	2.5025	711601.0			284356.043956	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

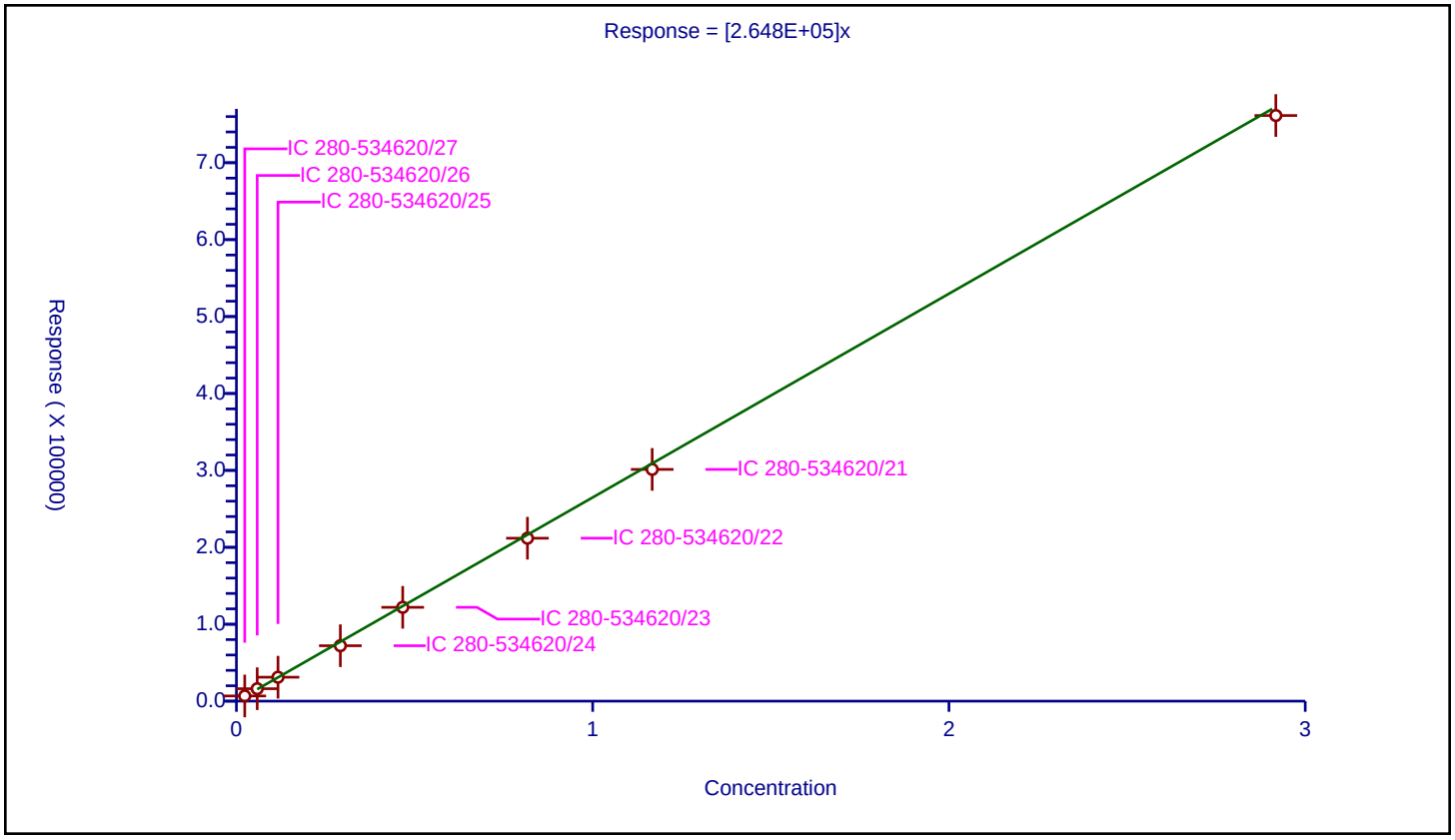
Curve Coefficients

Intercept:	0
Slope:	2.648E+05

Error Coefficients

Standard Error:	5850
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/27	0.02334	6728.0			288260.497001	Y
2	IC 280-534620/26	0.05835	16167.0			277069.40874	Y
3	IC 280-534620/25	0.1167	31123.0			266692.373608	Y
4	IC 280-534620/24	0.29175	72053.0			246968.294773	Y
5	IC 280-534620/23	0.4668	121971.0			261291.773779	Y
6	IC 280-534620/22	0.8169	211836.0			259316.929857	Y
7	IC 280-534620/21	1.167	301281.0			258167.095116	Y
8	IC 280-534620/20	2.9175	761392.0			260974.12168	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-527768/37 Calibration Date: 03/03/2021 02:53

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 03020037.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	197668		532	501	6.4	15.0
DNX	Ave	142119	151812		535	501	6.8	15.0
MNX	Ave	130340	138202		619	584	6.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-527768/37 Calibration Date: 03/03/2021 02:53

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 03020037.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.52	6.42	6.62
DNX	6.83	6.73	6.93
MNX	7.24	7.08	7.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020037.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	03-Mar-2021 02:53:28	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0099486-037				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:					
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:36:22	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:21:26		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.523	6.518	0.005	98933	0.5005	0.5325	M
5 DNX	1	6.830	6.832	-0.002	75982	0.5005	0.5346	M
6 MNX	1	7.237	7.232	0.005	80641	0.5835	0.6187	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00009 Amount Added: 50.00 Units: uL

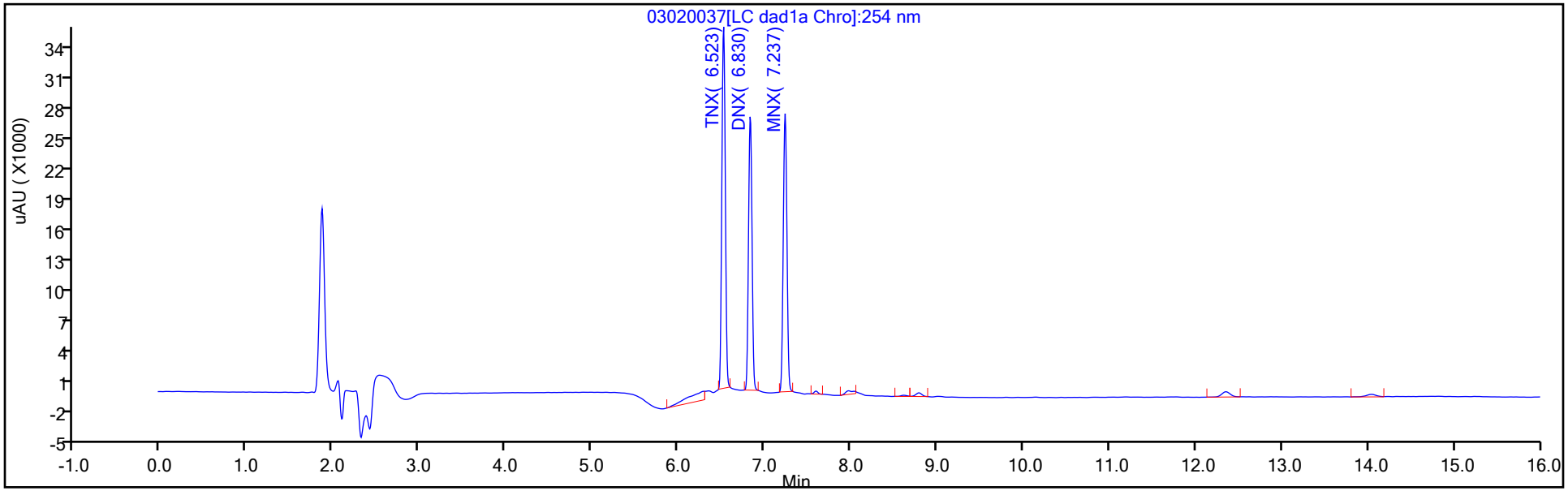
Report Date: 03-Mar-2021 13:36:35 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

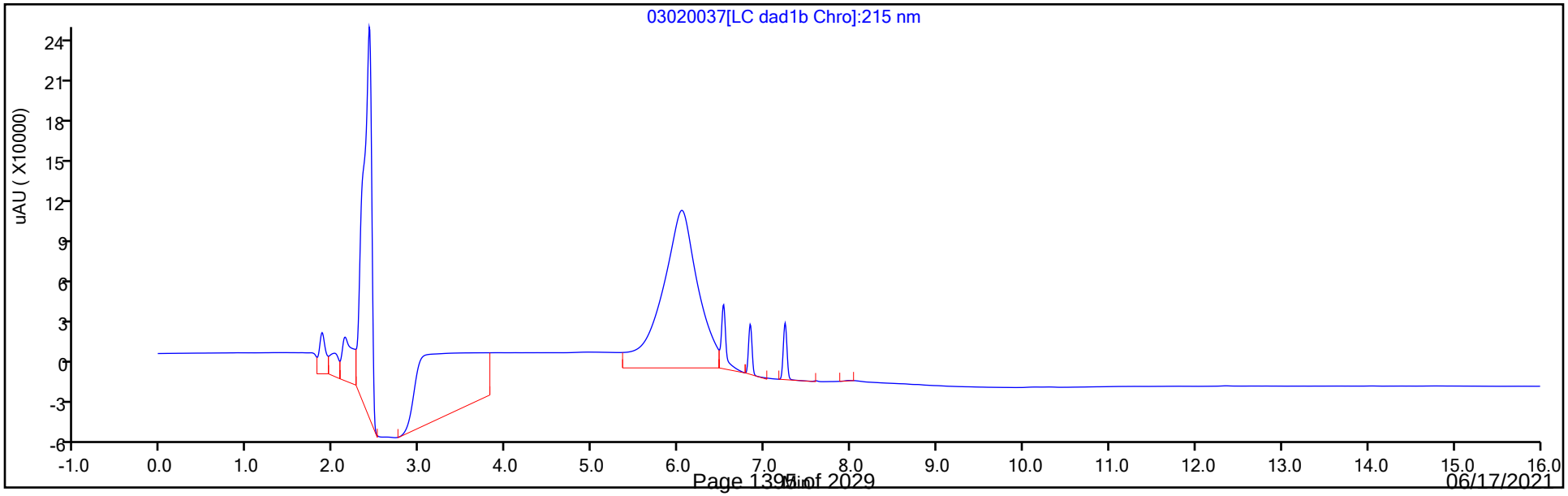
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d

Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	ICV DMT			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

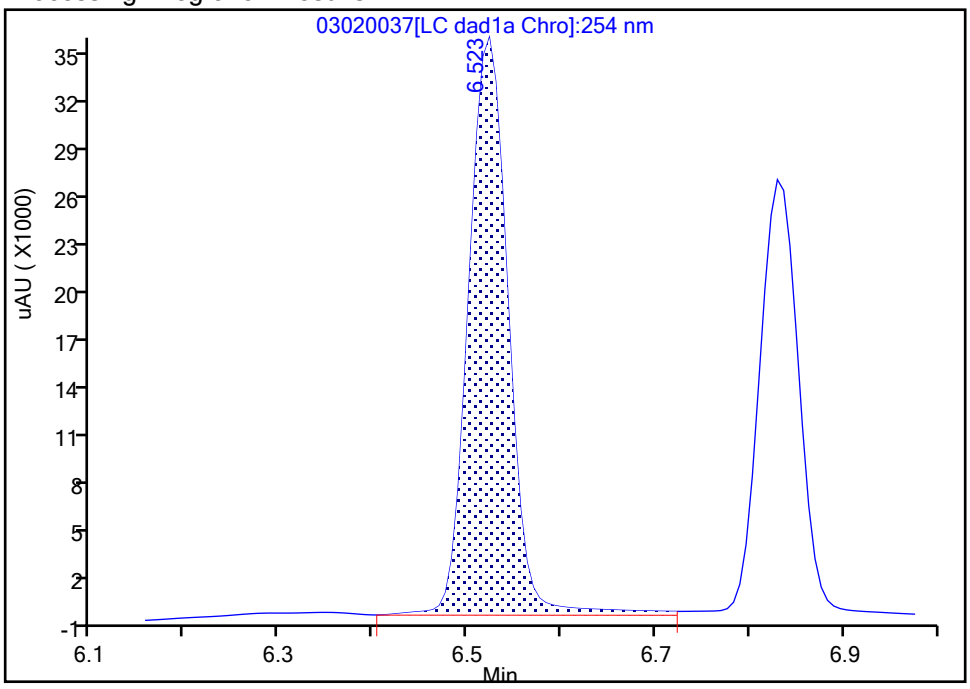
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d		
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3
Lims ID:	ICV DMT		
Client ID:			
Operator ID:		ALS Bottle#:	37 Worklist Smp#: 37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

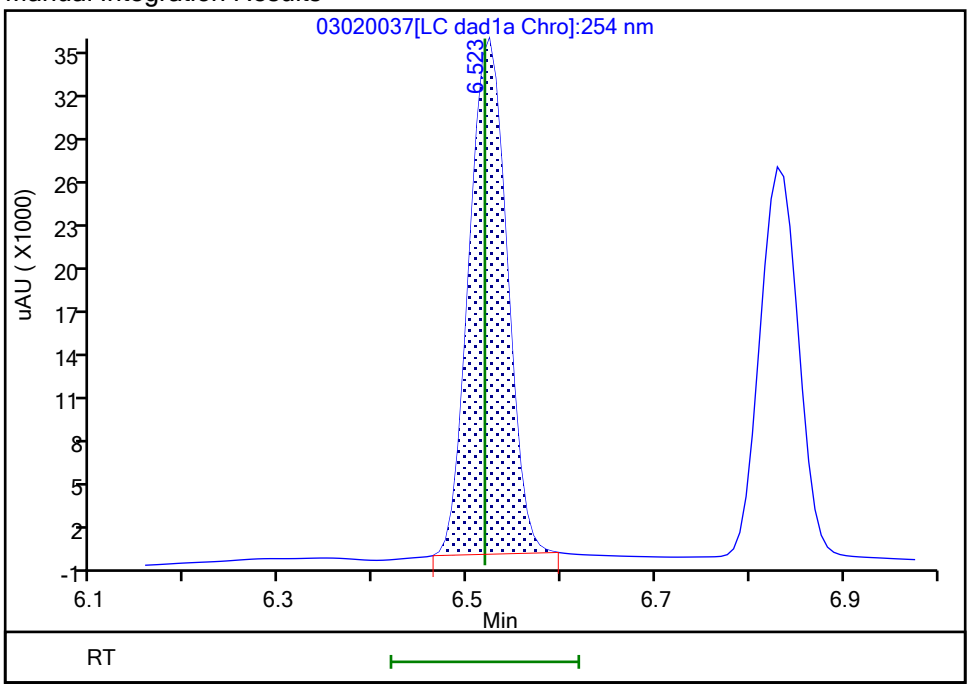
Processing Integration Results

RT: 6.52
Area: 105520
Amount: 0.567904
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 98933
Amount: 0.532453
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:21:12
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

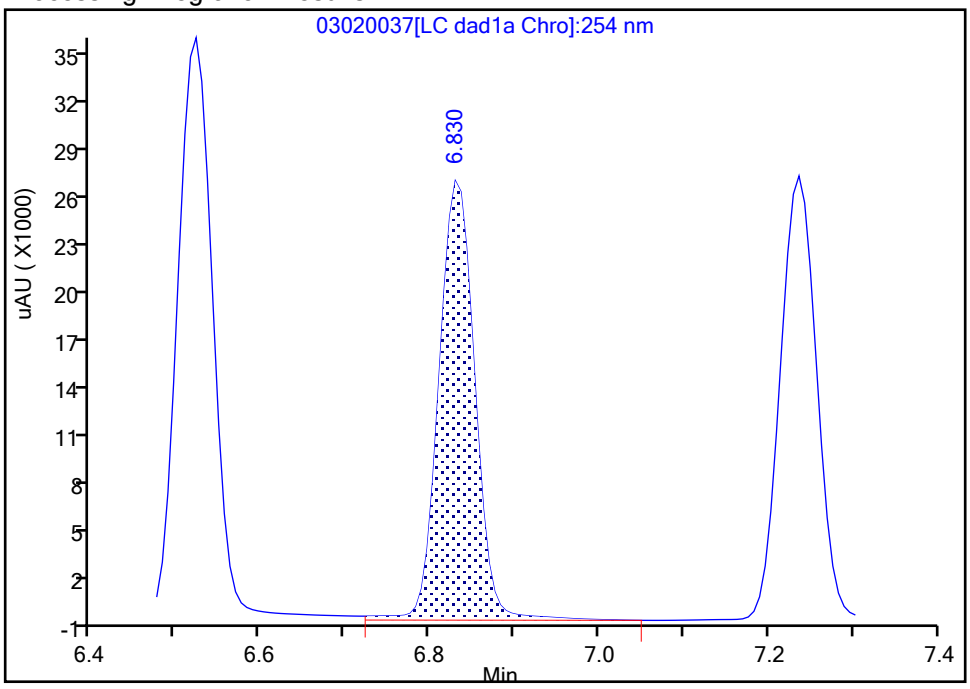
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

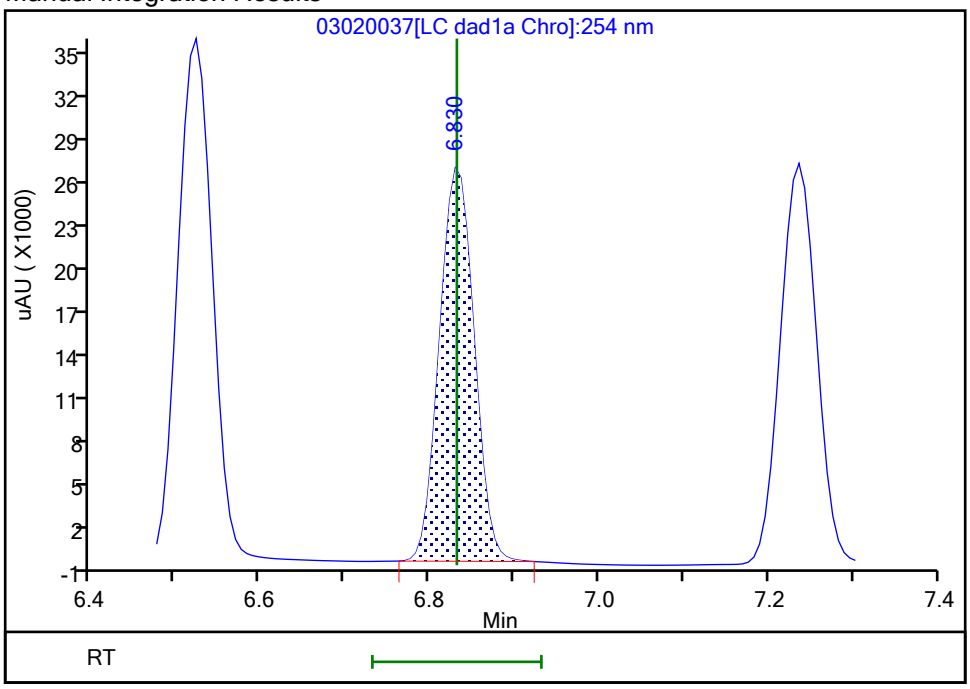
Processing Integration Results

RT: 6.83
Area: 79674
Amount: 0.560613
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 75982
Amount: 0.534635
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:21:15

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

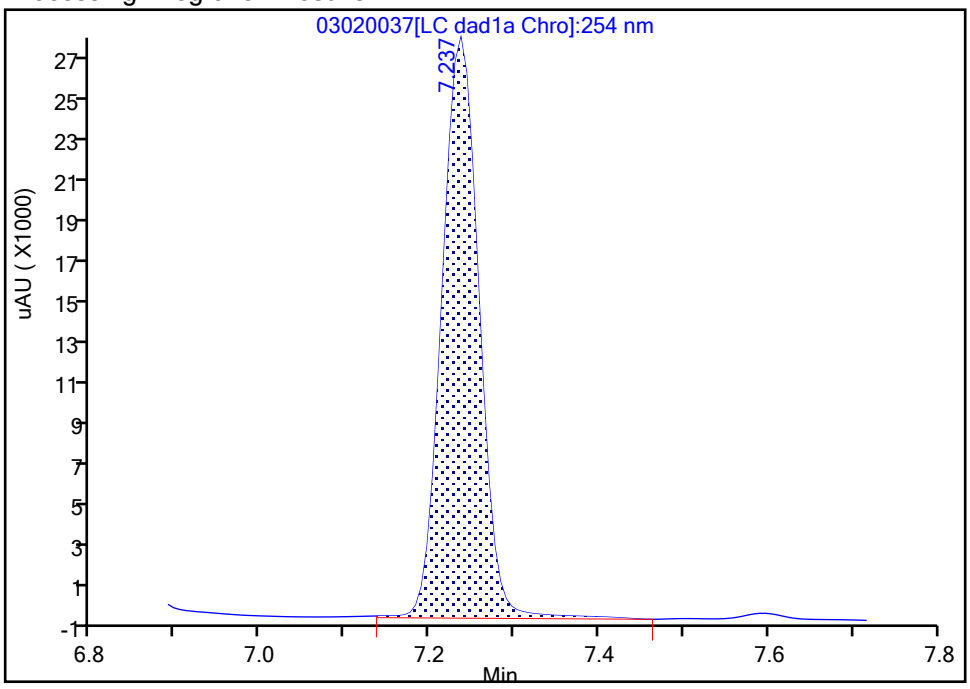
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

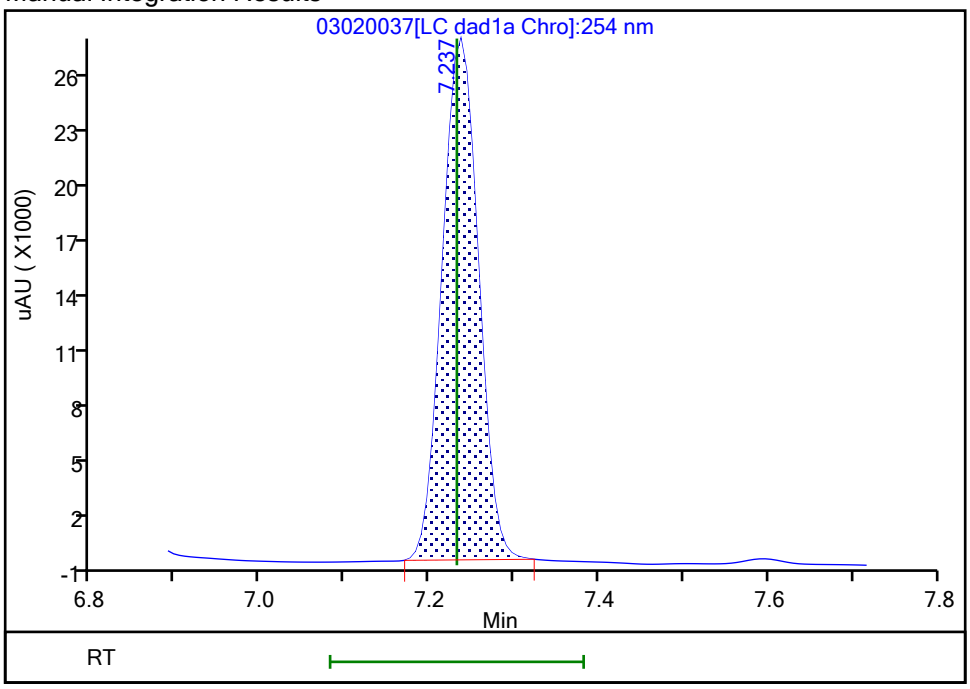
Processing Integration Results

RT: 7.24
Area: 83346
Amount: 0.639449
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 80641
Amount: 0.618696
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:21:25

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-534622/20 Calibration Date: 05/01/2021 21:27

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 020-1401.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	82460		488	500	-2.3	15.0
RDX	Ave	106261	102780		484	500	-3.3	15.0
Picric acid	Ave	82721	86056		520	500	4.0	15.0
1,3,5-Trinitrobenzene	Ave	220317	224390		509	500	1.8	15.0
1,3-Dinitrobenzene	Ave	296329	300634		507	500	1.5	15.0
Nitrobenzene	Ave	195286	196150		502	500	0.4	15.0
Tetryl	Ave	172420	171402		497	500	-0.6	15.0
Nitroglycerin	Lin2		67022		5160	5000	3.2	15.0
2,4,6-Trinitrotoluene	Ave	206038	210436		511	500	2.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	147828		484	500	-3.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	203056		491	500	-1.9	15.0
2,6-Dinitrotoluene	Ave	143079	144928		506	500	1.3	15.0
2,4-Dinitrotoluene	Ave	287012	279908		488	500	-2.5	15.0
2-Nitrotoluene	Ave	128392	125290		488	500	-2.4	15.0
4-Nitrotoluene	Ave	111913	108216		483	500	-3.3	15.0
3-Nitrotoluene	Ave	142246	137810		484	500	-3.1	15.0
PETN	Ave	74779	76182		5090	5000	1.9	15.0
1,2-Dinitrobenzene	Ave	128217	134842		526	500	5.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-534622/20 Calibration Date: 05/01/2021 21:27

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 020-1401.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.63	6.48	6.78
RDX	7.59	7.45	7.75
Picric acid	7.93	7.81	8.11
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.27	9.13	9.43
Nitrobenzene	9.66	9.51	9.81
Tetryl	9.97	9.83	10.13
Nitroglycerin	10.43	10.29	10.59
2,4,6-Trinitrotoluene	10.90	10.80	11.00
4-Amino-2,6-dinitrotoluene	11.10	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.53	11.43	11.63
2,4-Dinitrotoluene	11.70	11.60	11.80
2-Nitrotoluene	12.57	12.43	12.73
4-Nitrotoluene	13.01	12.86	13.16
3-Nitrotoluene	13.59	13.45	13.75
PETN	14.68	14.53	14.83
1,2-Dinitrobenzene	8.52	8.38	8.68

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\020-1401.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 01-May-2021 21:27:37 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:29:14 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:29:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.627	6.631	-0.004	41230	0.5000	0.4884	M
7 RDX	1	7.593	7.598	-0.005	51390	0.5000	0.4836	
8 2,4,6-Trinitrophenol	1	7.933	7.958	-0.025	43028	0.5000	0.5202	
$ 9 1,2-Dinitrobenzene	1	8.520	8.525	-0.005	67421	0.5000	0.5258	
10 1,3,5-Trinitrobenzene	1	8.647	8.651	-0.004	112195	0.5000	0.5092	
11 1,3-Dinitrobenzene	1	9.273	9.278	-0.005	150317	0.5000	0.5073	
12 Nitrobenzene	1	9.660	9.664	-0.004	98075	0.5000	0.5022	
14 Tetryl	1	9.973	9.978	-0.005	85701	0.5000	0.4970	
15 Nitroglycerin	2	10.433	10.438	-0.005	335112	5.00	5.16	
16 2,4,6-Trinitrotoluene	1	10.900	10.904	-0.004	105218	0.5000	0.5107	
17 4-Amino-2,6-dinitrotoluene	1	11.100	11.111	-0.011	73914	0.5000	0.4838	
18 2-Amino-4,6-dinitrotoluene	1	11.360	11.371	-0.011	101528	0.5000	0.4906	
19 2,6-Dinitrotoluene	1	11.526	11.531	-0.005	72464	0.5000	0.5065	
20 2,4-Dinitrotoluene	1	11.700	11.704	-0.004	139954	0.5000	0.4876	
21 o-Nitrotoluene	1	12.566	12.578	-0.012	62645	0.5000	0.4879	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	54108	0.5000	0.4835	
23 m-Nitrotoluene	1	13.593	13.604	-0.011	68905	0.5000	0.4844	
24 PETN	2	14.680	14.684	-0.004	380912	5.00	5.09	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 LCS_00108 Amount Added: 50.00 Units: uL
8330Surrogate_00124 Amount Added: 50.00 Units: uL

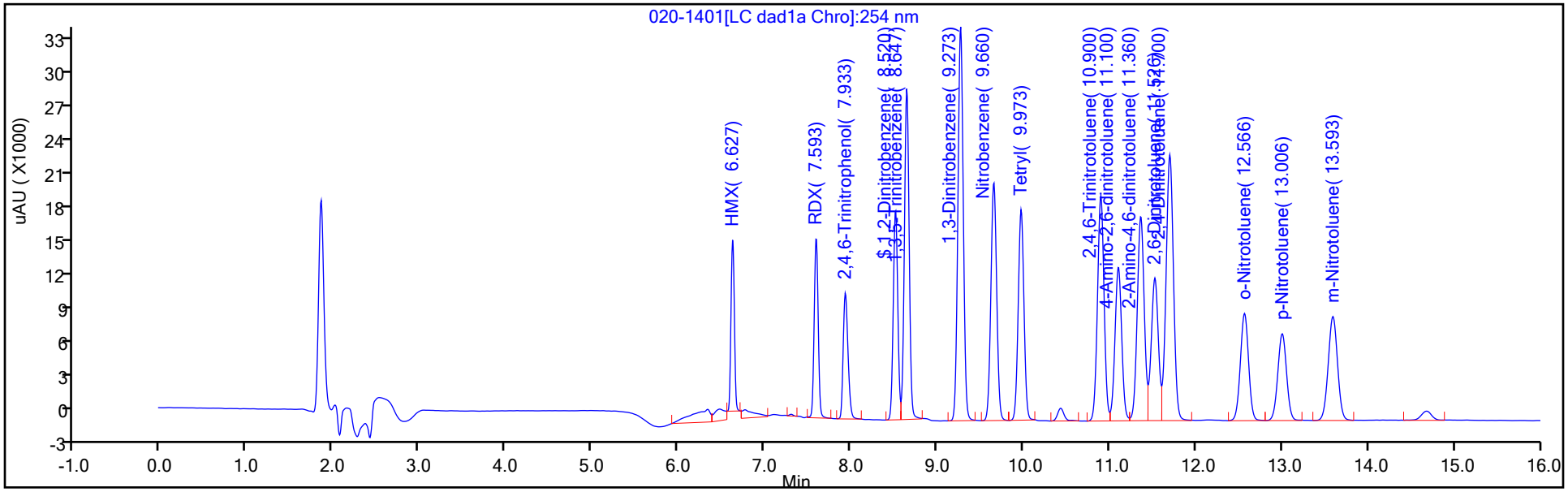
Report Date: 04-May-2021 13:29:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

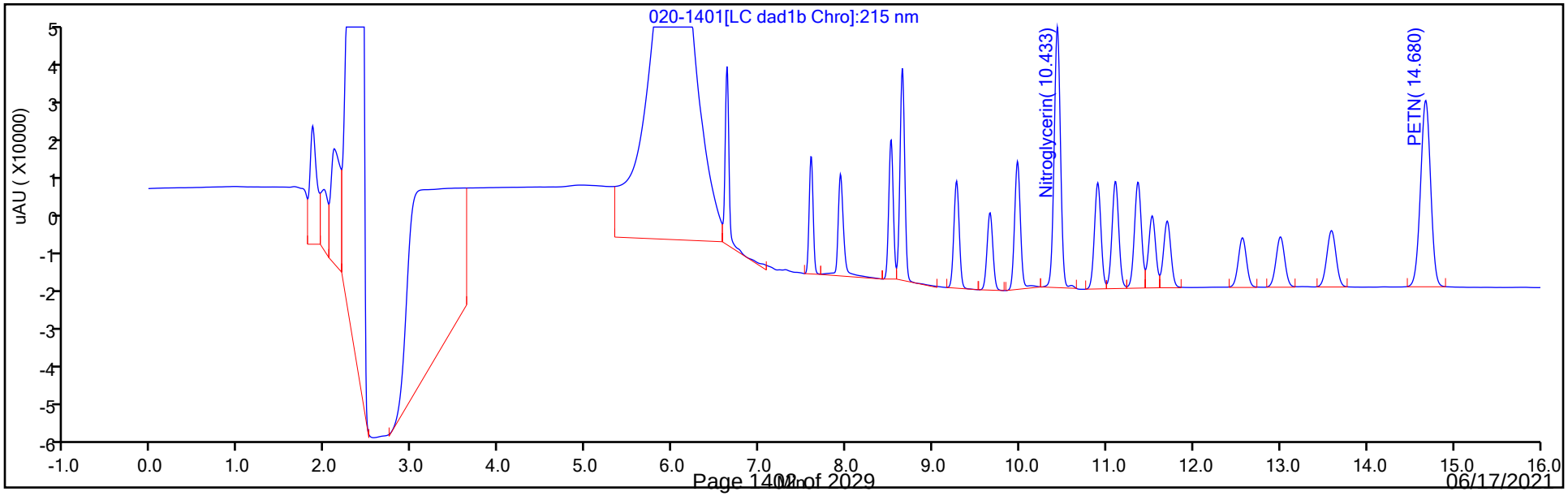
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d

Injection Date:	01-May-2021 21:27:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	ICV INT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

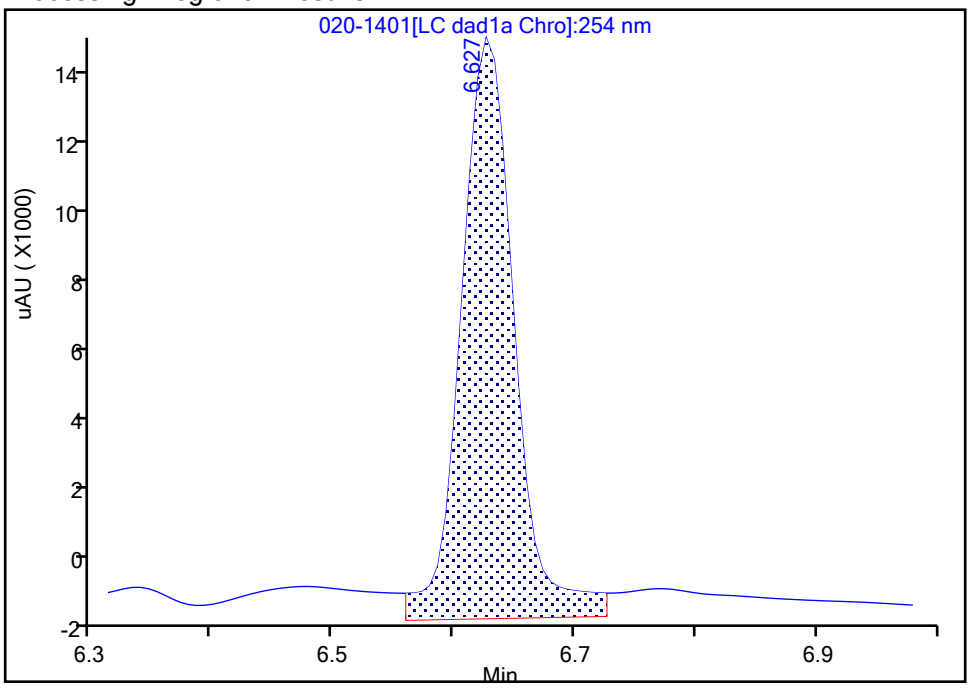
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d				
Injection Date:	01-May-2021 21:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

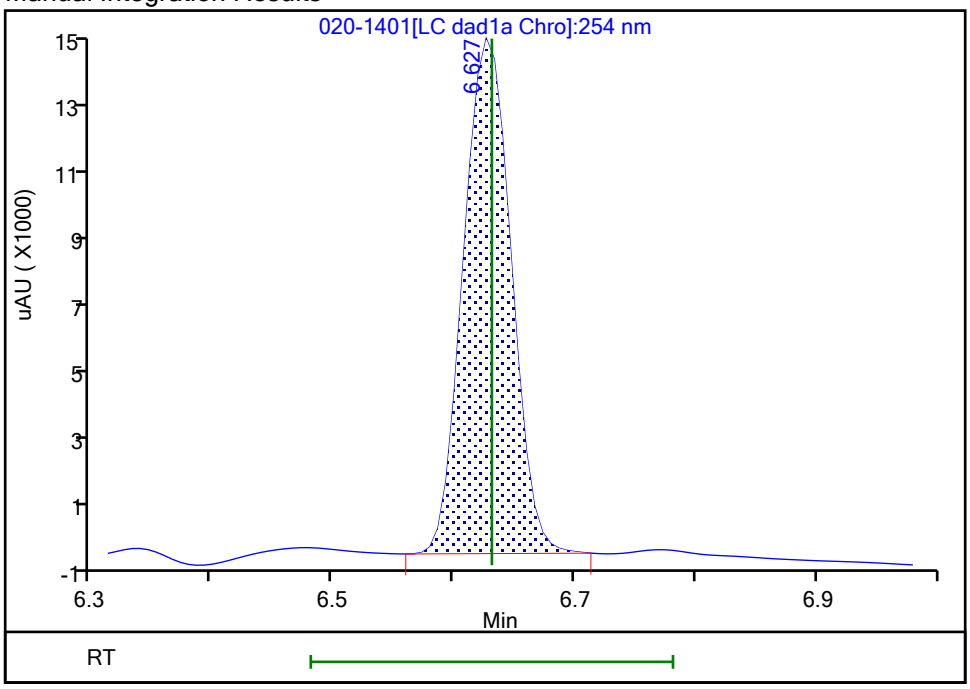
Processing Integration Results

RT: 6.63
Area: 48145
Amount: 0.570294
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 41230
Amount: 0.488383
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:24:55

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/12 Calibration Date: 06/03/2021 16:08

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06030012.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	82516		244	250	-2.3	15.0
RDX	Ave	106261	100220		236	250	-5.7	15.0
Picric acid	Ave	82721	77912		235	250	-5.8	15.0
1,3,5-Trinitrobenzene	Ave	220317	217820		248	251	-1.1	15.0
1,3-Dinitrobenzene	Ave	296329	291553		246	251	-1.6	15.0
Nitrobenzene	Ave	195286	190900		245	251	-2.2	15.0
Tetryl	Ave	172420	164615		239	251	-4.5	15.0
Nitroglycerin	Lin2		64030		2430	2500	-2.7	15.0
2,4,6-Trinitrotoluene	Ave	206038	199777		243	251	-3.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	144248		236	250	-5.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	198506		241	251	-4.1	15.0
2,6-Dinitrotoluene	Ave	143079	141797		249	251	-0.9	15.0
2,4-Dinitrotoluene	Ave	287012	279618		245	251	-2.6	15.0
2-Nitrotoluene	Ave	128392	121968		237	250	-5.0	15.0
4-Nitrotoluene	Ave	111913	105469		236	251	-5.8	15.0
3-Nitrotoluene	Ave	142246	135940		239	250	-4.4	15.0
PETN	Ave	74779	72782		2430	2500	-2.7	15.0
1,2-Dinitrobenzene	Ave	128217	128632		251	250	0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/12 Calibration Date: 06/03/2021 16:08

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06030012.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.45	6.75
RDX	7.58	7.43	7.73
Picric acid	7.95	7.79	8.09
1,3,5-Trinitrobenzene	8.64	8.48	8.78
1,3-Dinitrobenzene	9.26	9.11	9.41
Nitrobenzene	9.66	9.49	9.79
Tetryl	9.98	9.82	10.12
Nitroglycerin	10.44	10.28	10.58
2,4,6-Trinitrotoluene	10.90	10.79	10.99
4-Amino-2,6-dinitrotoluene	11.11	11.00	11.20
2-Amino-4,6-dinitrotoluene	11.37	11.26	11.46
2,6-Dinitrotoluene	11.54	11.42	11.62
2,4-Dinitrotoluene	11.71	11.60	11.80
2-Nitrotoluene	12.58	12.42	12.72
4-Nitrotoluene	13.02	12.85	13.15
3-Nitrotoluene	13.60	13.44	13.74
PETN	14.71	14.54	14.84
1,2-Dinitrobenzene	8.51	8.35	8.65

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030012.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2021 16:08:21 ALS Bottle#: 7 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0102044-012
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:46 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 17:00:05

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.610	6.603	0.007	20629	0.2500	0.2444	M
	7 RDX	1	7.583	7.577	0.006	25055	0.2500	0.2358	
	8 2,4,6-Trinitrophenol	1	7.950	7.943	0.007	19478	0.2500	0.2355	
$	9 1,2-Dinitrobenzene	1	8.510	8.503	0.007	32158	0.2500	0.2508	
	10 1,3,5-Trinitrobenzene	1	8.637	8.630	0.007	54564	0.2505	0.2477	
	11 1,3-Dinitrobenzene	1	9.263	9.256	0.007	73034	0.2505	0.2465	
	12 Nitrobenzene	1	9.656	9.643	0.013	47916	0.2510	0.2454	
	14 Tetryl	1	9.976	9.970	0.006	41236	0.2505	0.2392	
	15 Nitroglycerin	2	10.436	10.430	0.006	160076	2.50	2.43	
	16 2,4,6-Trinitrotoluene	1	10.903	10.890	0.013	50144	0.2510	0.2434	
	17 4-Amino-2,6-dinitrotoluene	1	11.110	11.096	0.014	36098	0.2503	0.2363	
	18 2-Amino-4,6-dinitrotoluene	1	11.370	11.356	0.014	49825	0.2510	0.2408	
	19 2,6-Dinitrotoluene	1	11.536	11.523	0.013	35591	0.2510	0.2488	
	20 2,4-Dinitrotoluene	1	11.710	11.696	0.014	70184	0.2510	0.2445	
	21 o-Nitrotoluene	1	12.583	12.570	0.013	30492	0.2500	0.2375	
	22 p-Nitrotoluene	1	13.016	13.003	0.013	26420	0.2505	0.2361	
	23 m-Nitrotoluene	1	13.603	13.590	0.013	34019	0.2503	0.2392	
	24 PETN	2	14.710	14.690	0.020	181955	2.50	2.43	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

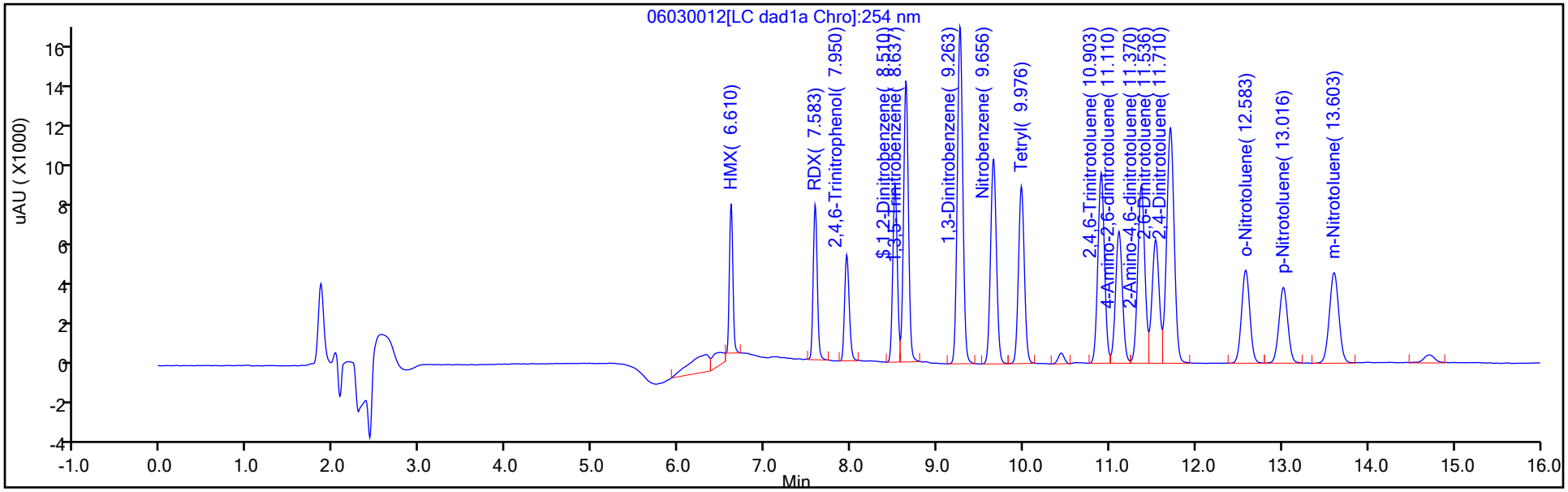
8330IntermStk_00068 Amount Added: 25.00 Units: uL

Report Date: 04-Jun-2021 14:12:46 Chrom Revision: 2.3 13-May-2021 07:57:40

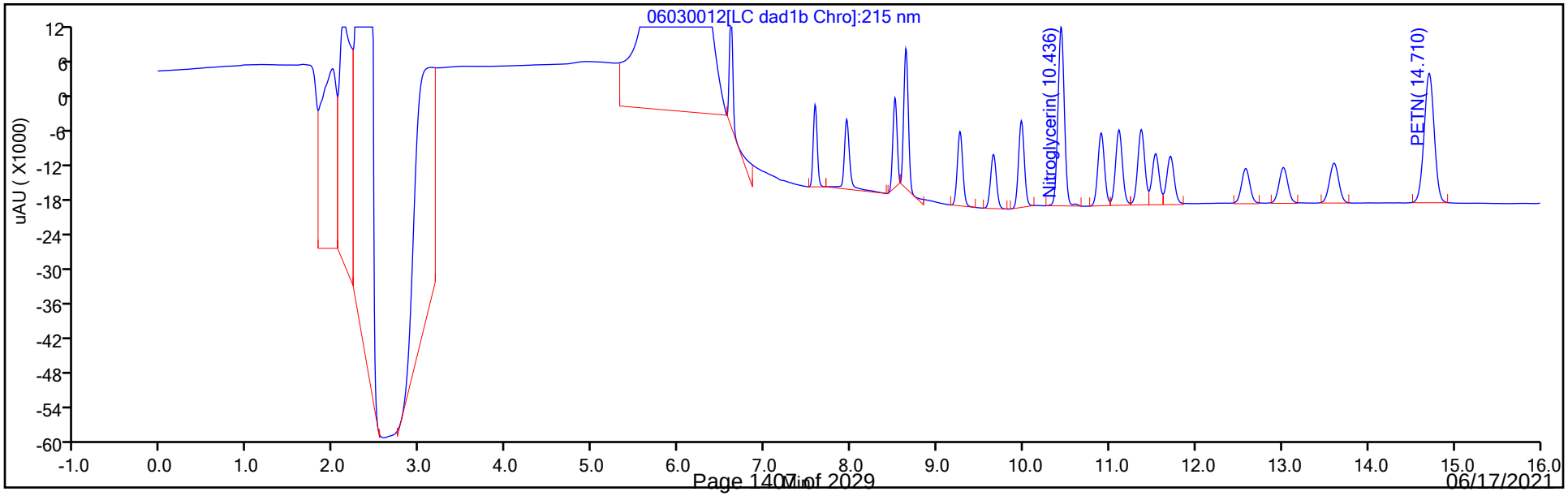
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030012.d				
Injection Date:	03-Jun-2021 16:08:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

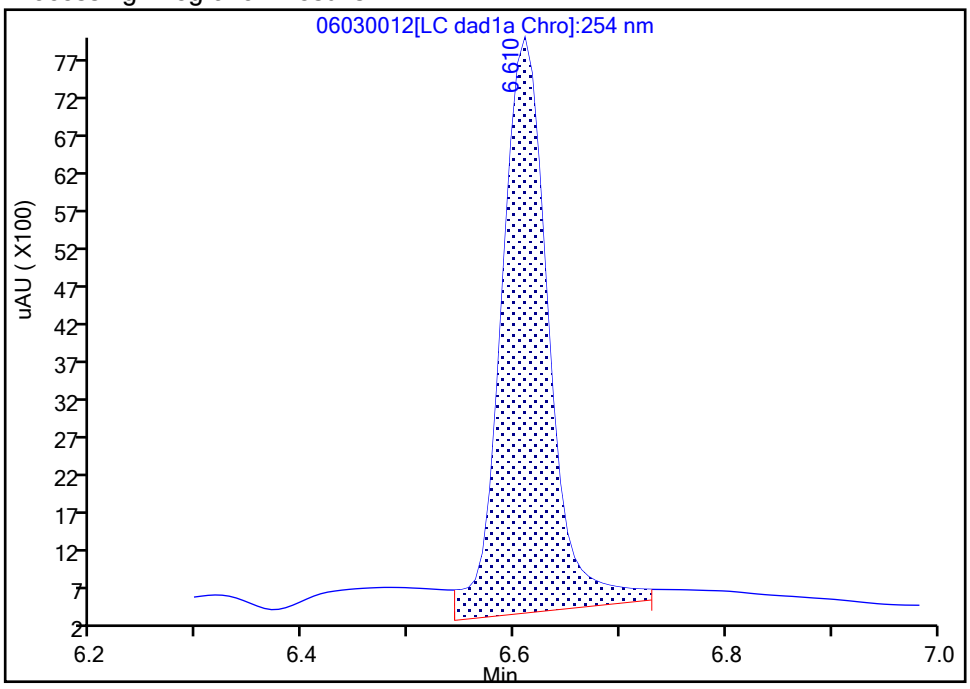
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030012.d				
Injection Date:	03-Jun-2021 16:08:21	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

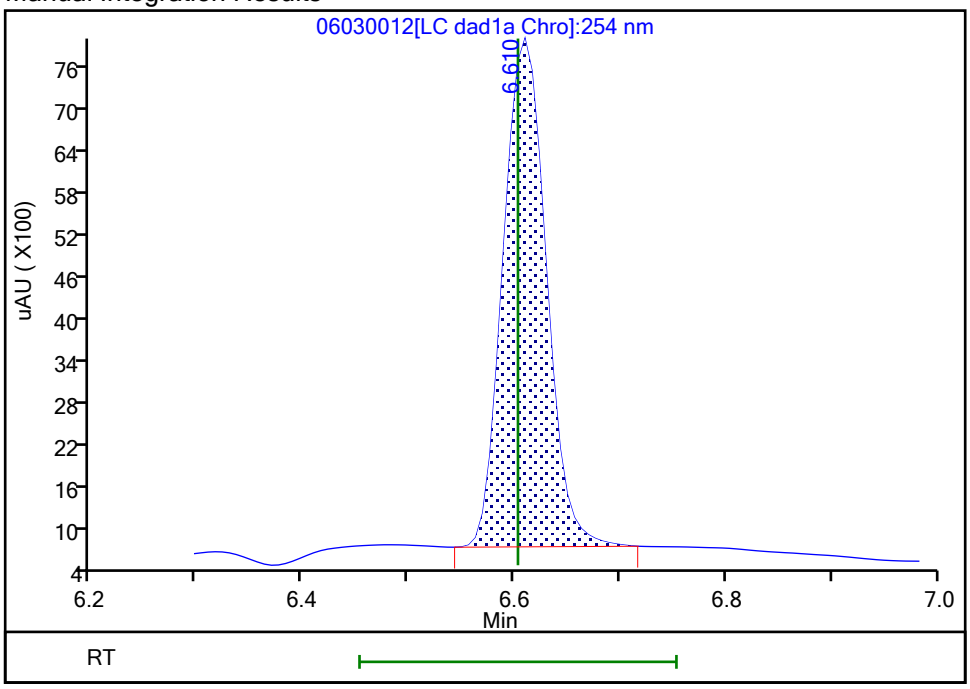
Processing Integration Results

RT: 6.61
Area: 23690
Amount: 0.280616
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 20629
Amount: 0.244357
Amount Units: ug/mL



Reviewer: zhangji, 03-Jun-2021 17:00:03
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/13 Calibration Date: 06/03/2021 16:31

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06030013.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	187564		253	250	0.9	15.0
DNX	Ave	142119	147924		260	250	4.1	15.0
MNX	Ave	130340	132360		296	292	1.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/13 Calibration Date: 06/03/2021 16:31

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06030013.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.39	6.59
DNX	6.81	6.70	6.90
MNX	7.22	7.07	7.37

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030013.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	03-Jun-2021 16:31:18	ALS Bottle#:	9	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0102044-013				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Jun-2021 14:12:47	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1663				
First Level Reviewer: zhangji		Date:	03-Jun-2021 17:00:15		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.493	6.489	0.004	46938	0.2503	0.2526	M
5 DNX	1	6.806	6.802	0.004	37018	0.2503	0.2605	
6 MNX	1	7.220	7.216	0.004	38616	0.2918	0.2963	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

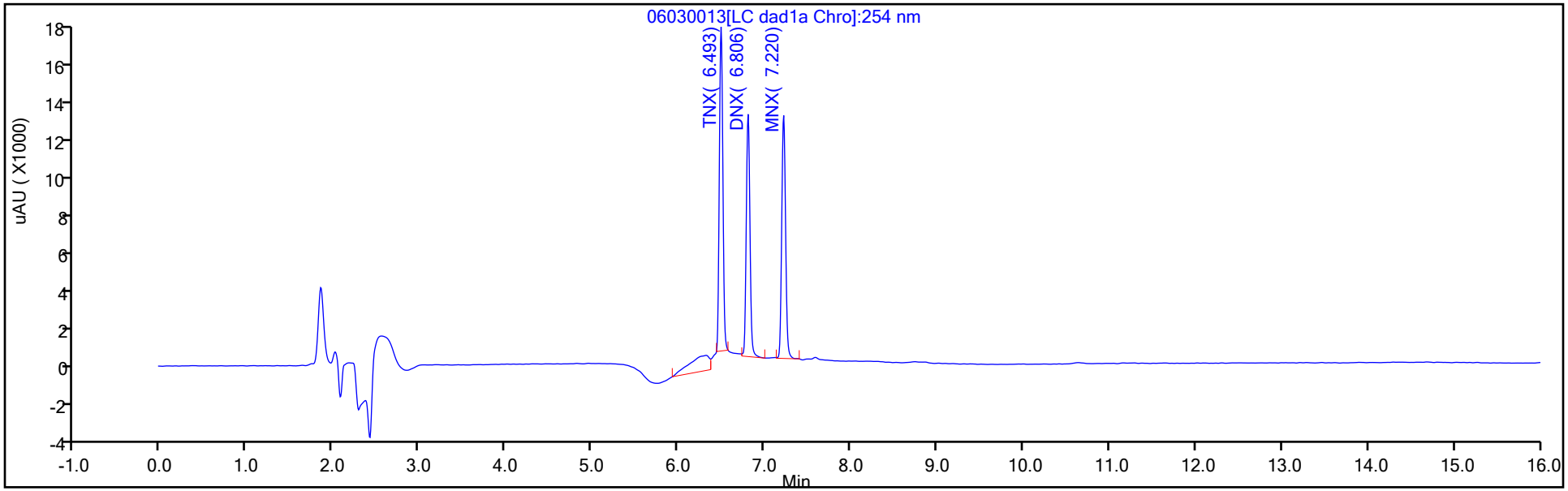
Report Date: 04-Jun-2021 14:12:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

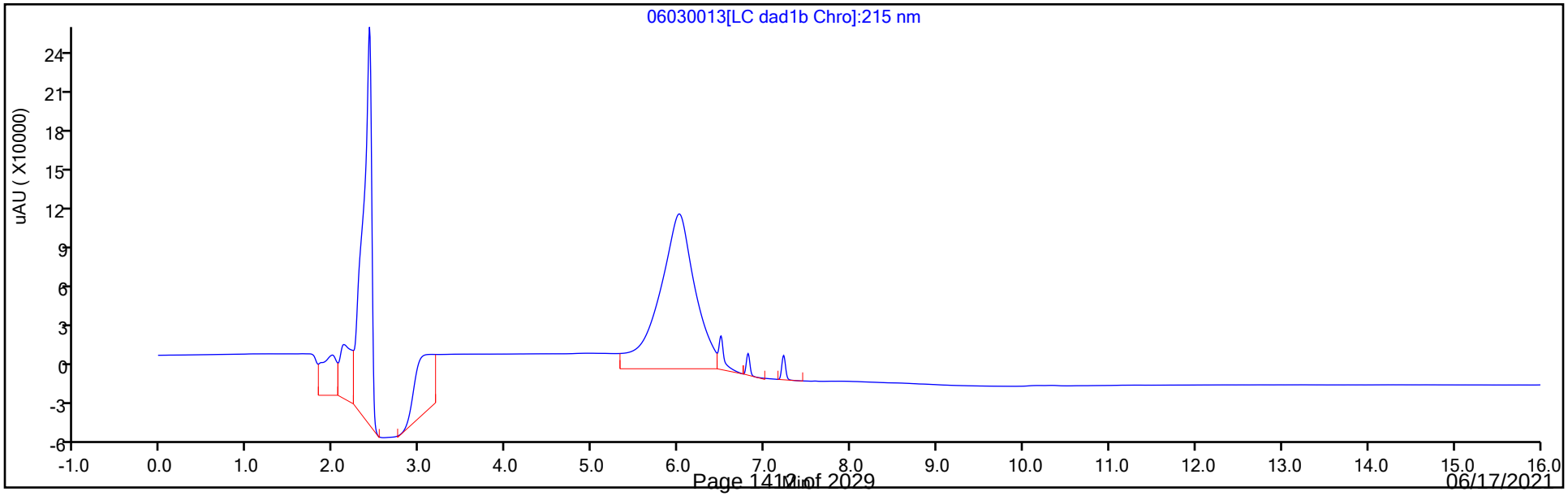
Data File: \\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030013.d

Injection Date:	03-Jun-2021 16:31:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

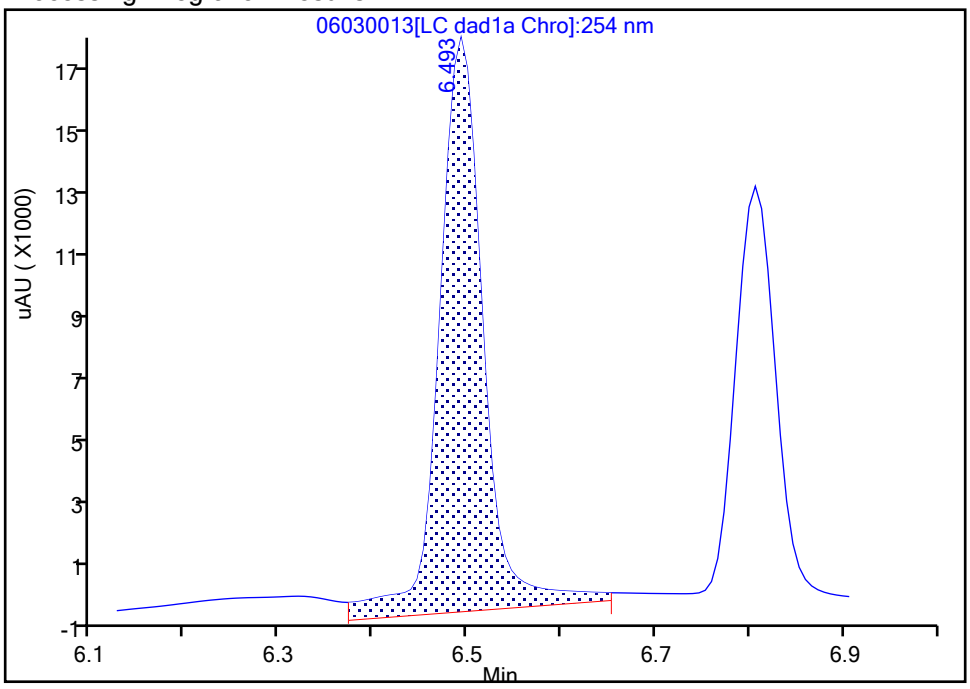
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030013.d				
Injection Date:	03-Jun-2021 16:31:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

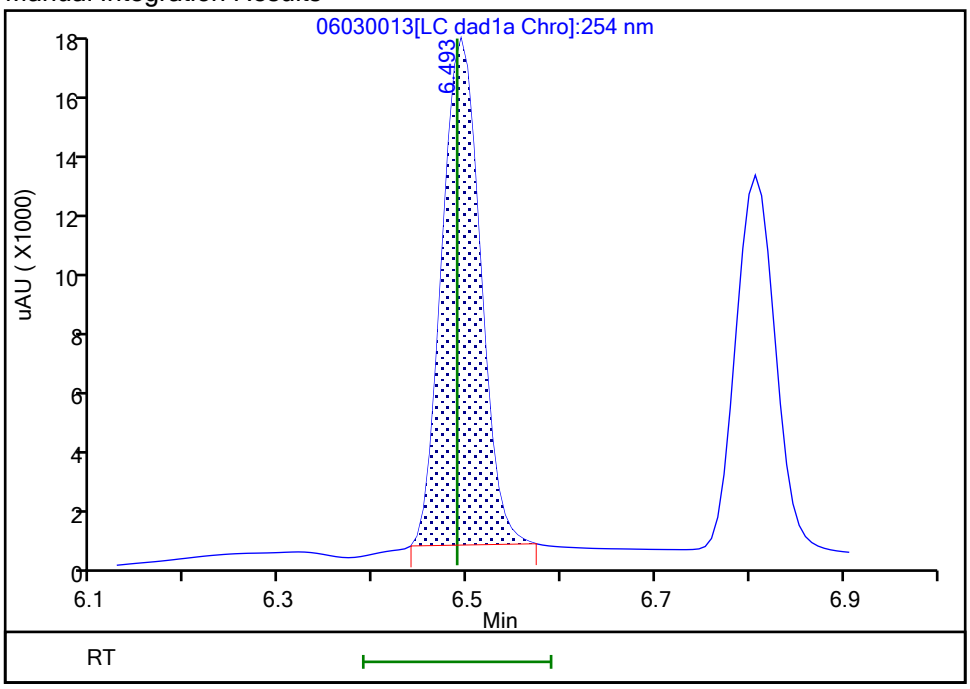
Processing Integration Results

RT: 6.49
Area: 56539
Amount: 0.304290
Amount Units: ug/mL



Manual Integration Results

RT: 6.49
Area: 46938
Amount: 0.252618
Amount Units: ug/mL



Reviewer: zhangji, 03-Jun-2021 17:00:12

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/24 Calibration Date: 06/03/2021 20:44

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06030024.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	82616		245	250	-2.1	15.0
RDX	Ave	106261	100544		237	250	-5.4	15.0
Picric acid	Ave	82721	78940		239	250	-4.6	15.0
1,3,5-Trinitrobenzene	Ave	220317	216527		246	251	-1.7	15.0
1,3-Dinitrobenzene	Ave	296329	291764		247	251	-1.5	15.0
Nitrobenzene	Ave	195286	187514		241	251	-4.0	15.0
Tetryl	Ave	172420	165022		240	251	-4.3	15.0
Nitroglycerin	Lin2		62612		2380	2500	-5.0	15.0
2,4,6-Trinitrotoluene	Ave	206038	200084		244	251	-2.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	144296		236	250	-5.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	199367		242	251	-3.7	15.0
2,6-Dinitrotoluene	Ave	143079	139837		245	251	-2.3	15.0
2,4-Dinitrotoluene	Ave	287012	282829		247	251	-1.5	15.0
2-Nitrotoluene	Ave	128392	120468		235	250	-6.2	15.0
4-Nitrotoluene	Ave	111913	104467		234	251	-6.7	15.0
3-Nitrotoluene	Ave	142246	132999		234	250	-6.5	15.0
PETN	Ave	74779	72504		2420	2500	-3.0	15.0
1,2-Dinitrobenzene	Ave	128217	129564		253	250	1.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/24 Calibration Date: 06/03/2021 20:44

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06030024.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.45	6.75
RDX	7.58	7.43	7.73
Picric acid	7.96	7.79	8.09
1,3,5-Trinitrobenzene	8.64	8.48	8.78
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.66	9.49	9.79
Tetryl	9.98	9.82	10.12
Nitroglycerin	10.45	10.28	10.58
2,4,6-Trinitrotoluene	10.91	10.79	10.99
4-Amino-2,6-dinitrotoluene	11.12	11.00	11.20
2-Amino-4,6-dinitrotoluene	11.38	11.26	11.46
2,6-Dinitrotoluene	11.55	11.42	11.62
2,4-Dinitrotoluene	11.72	11.60	11.80
2-Nitrotoluene	12.60	12.42	12.72
4-Nitrotoluene	13.04	12.85	13.15
3-Nitrotoluene	13.62	13.44	13.74
PETN	14.74	14.54	14.84
1,2-Dinitrobenzene	8.52	8.35	8.65

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030024.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2021 20:44:22 ALS Bottle#: 7 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0102044-024
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:53 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 21:20:15

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.609	6.603	0.006	20654	0.2500	0.2447	M
	7 RDX	1	7.583	7.577	0.006	25136	0.2500	0.2365	
	8 2,4,6-Trinitrophenol	1	7.956	7.943	0.013	19735	0.2500	0.2386	
$	9 1,2-Dinitrobenzene	1	8.516	8.503	0.013	32391	0.2500	0.2526	
	10 1,3,5-Trinitrobenzene	1	8.643	8.630	0.013	54240	0.2505	0.2462	
	11 1,3-Dinitrobenzene	1	9.269	9.256	0.013	73087	0.2505	0.2466	
	12 Nitrobenzene	1	9.656	9.643	0.013	47066	0.2510	0.2410	
	14 Tetryl	1	9.983	9.970	0.013	41338	0.2505	0.2398	
	15 Nitroglycerin	2	10.449	10.430	0.019	156531	2.50	2.38	
	16 2,4,6-Trinitrotoluene	1	10.909	10.890	0.019	50221	0.2510	0.2437	
	17 4-Amino-2,6-dinitrotoluene	1	11.123	11.096	0.027	36110	0.2503	0.2364	
	18 2-Amino-4,6-dinitrotoluene	1	11.383	11.356	0.027	50041	0.2510	0.2418	
	19 2,6-Dinitrotoluene	1	11.549	11.523	0.026	35099	0.2510	0.2453	
	20 2,4-Dinitrotoluene	1	11.716	11.696	0.020	70990	0.2510	0.2473	
	21 o-Nitrotoluene	1	12.596	12.570	0.026	30117	0.2500	0.2346	
	22 p-Nitrotoluene	1	13.036	13.003	0.033	26169	0.2505	0.2338	
	23 m-Nitrotoluene	1	13.623	13.590	0.033	33283	0.2503	0.2340	
	24 PETN	2	14.736	14.690	0.046	181261	2.50	2.42	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL

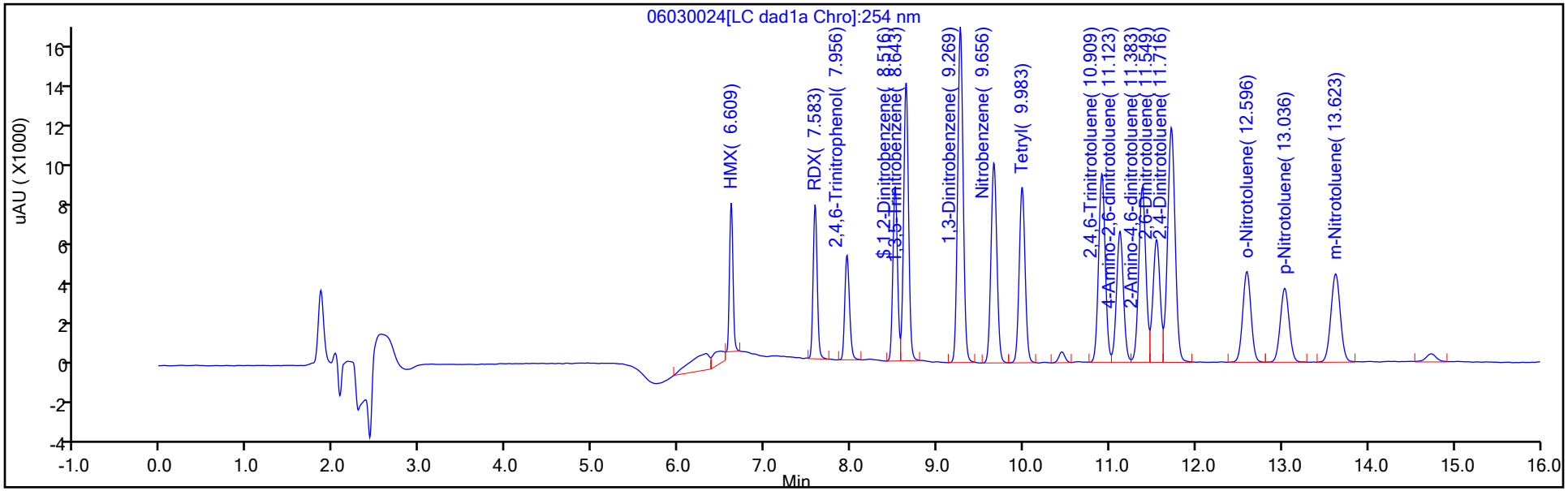
Report Date: 04-Jun-2021 14:12:53 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

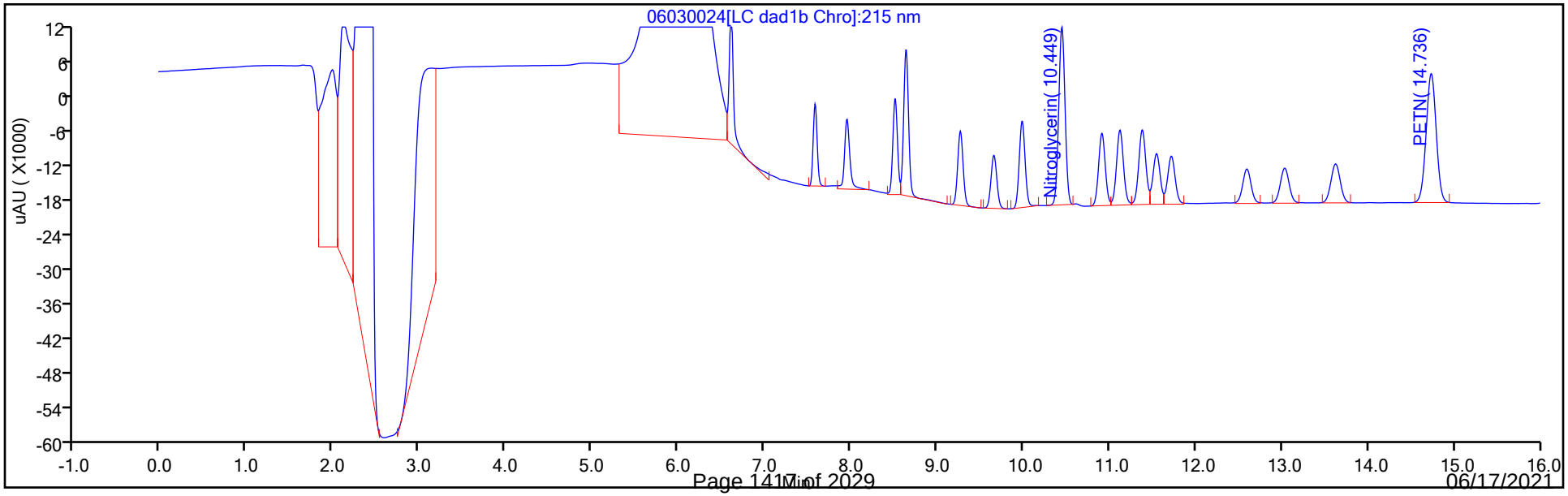
Data File: \\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030024.d

Injection Date:	03-Jun-2021 20:44:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

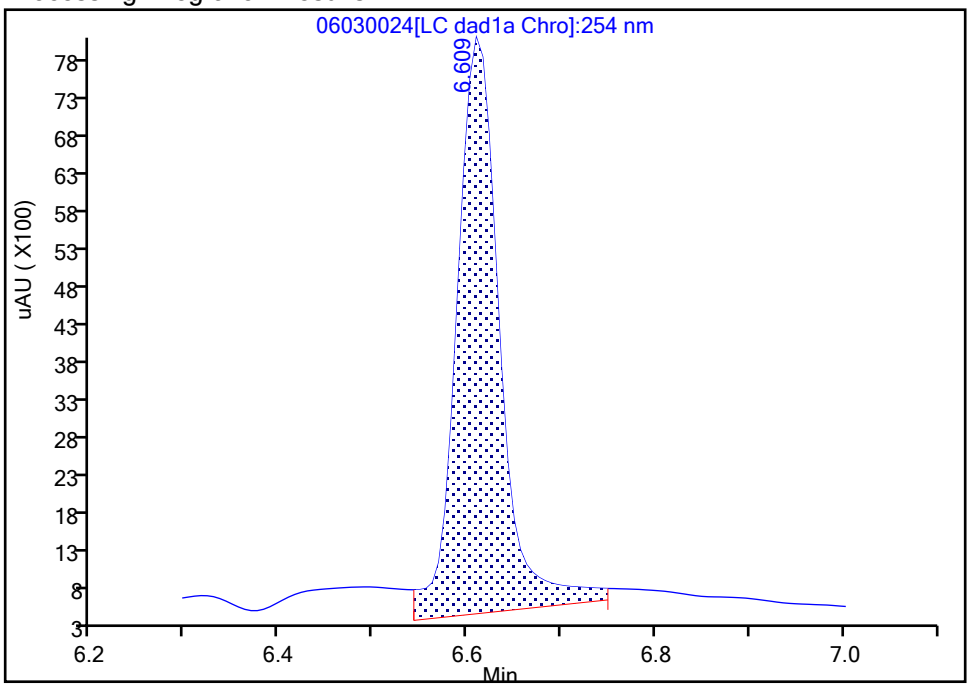
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030024.d				
Injection Date:	03-Jun-2021 20:44:22	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

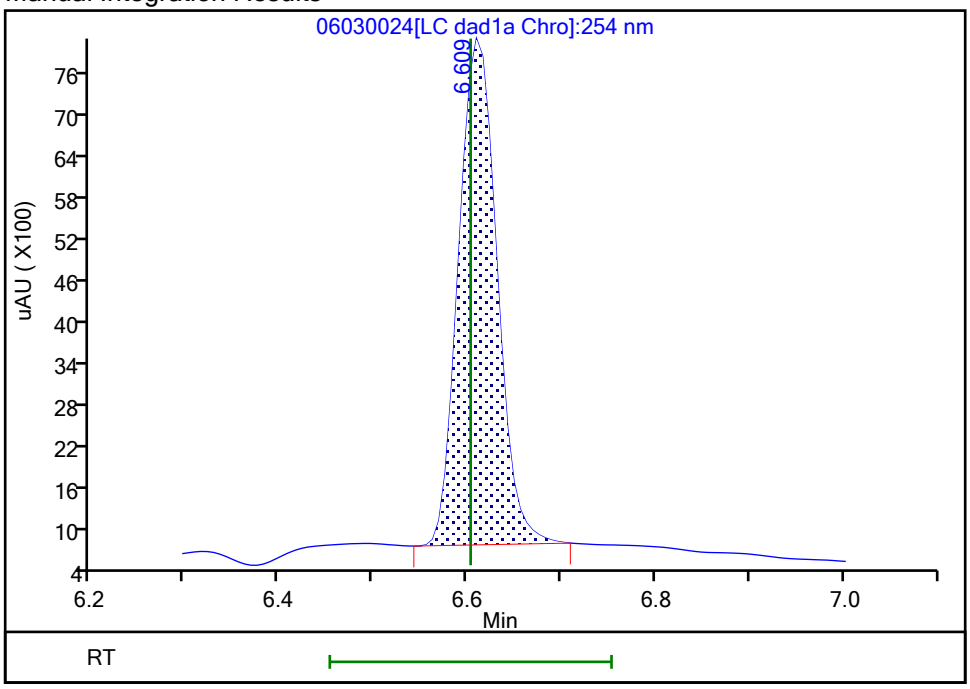
Processing Integration Results

RT: 6.61
Area: 24277
Amount: 0.287569
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 20654
Amount: 0.244654
Amount Units: ug/mL



Reviewer: zhangji, 03-Jun-2021 21:20:13
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/26 Calibration Date: 06/03/2021 21:30

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06030026.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	187696		253	250	1.0	15.0
DNX	Ave	142119	142190		250	250	0.0	15.0
MNX	Ave	130340	131517		294	292	0.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/26 Calibration Date: 06/03/2021 21:30

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06030026.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.50	6.39	6.59
DNX	6.80	6.70	6.90
MNX	7.22	7.07	7.37

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030026.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2021 21:30:40 ALS Bottle#: 9 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0102044-026
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:47:48 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.496	6.489	0.007	46971	0.2503	0.2528	M
5 DNX	1	6.803	6.802	0.001	35583	0.2503	0.2504	M
6 MNX	1	7.216	7.216	0.000	38370	0.2918	0.2944	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

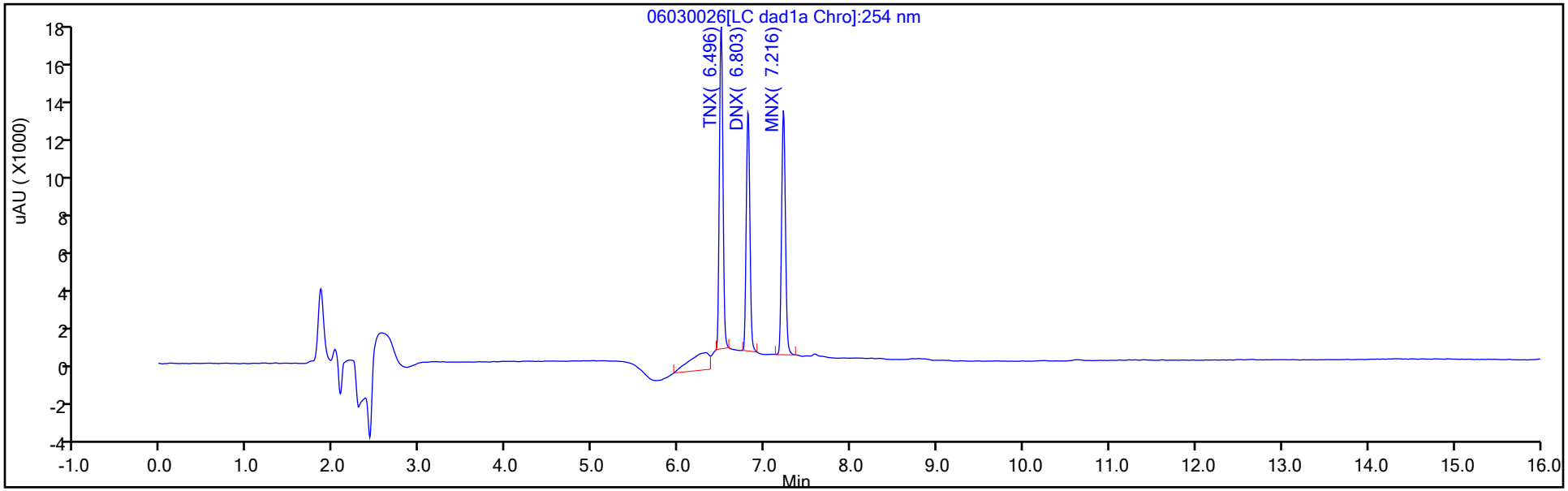
Report Date: 04-Jun-2021 14:47:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

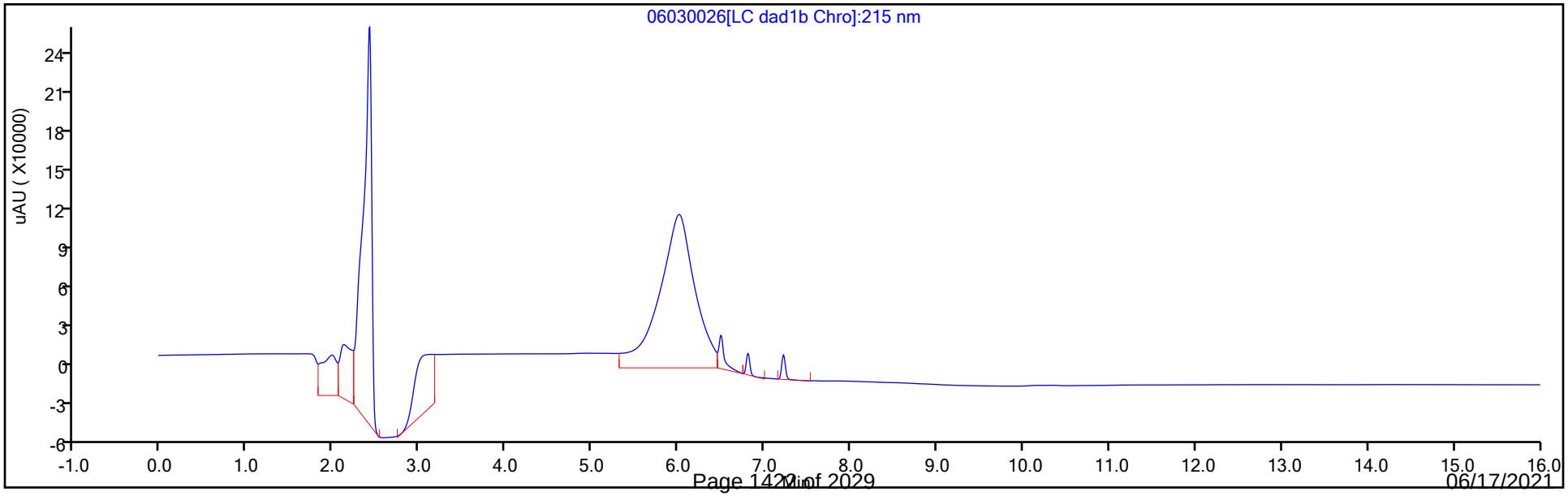
Data File: \\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030026.d

Injection Date:	03-Jun-2021 21:30:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

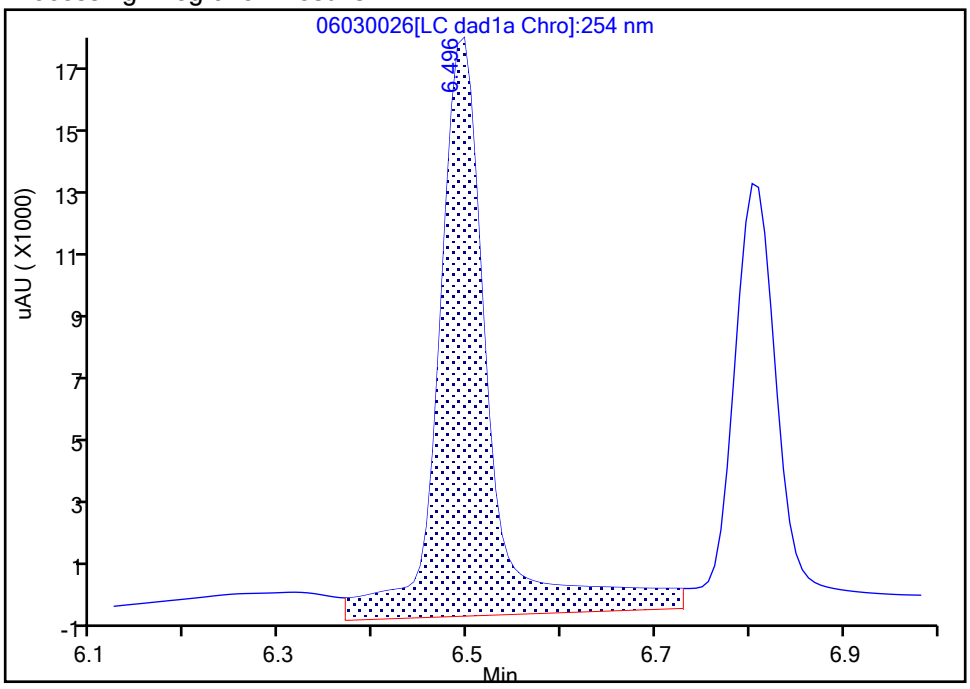
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030026.d				
Injection Date:	03-Jun-2021 21:30:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

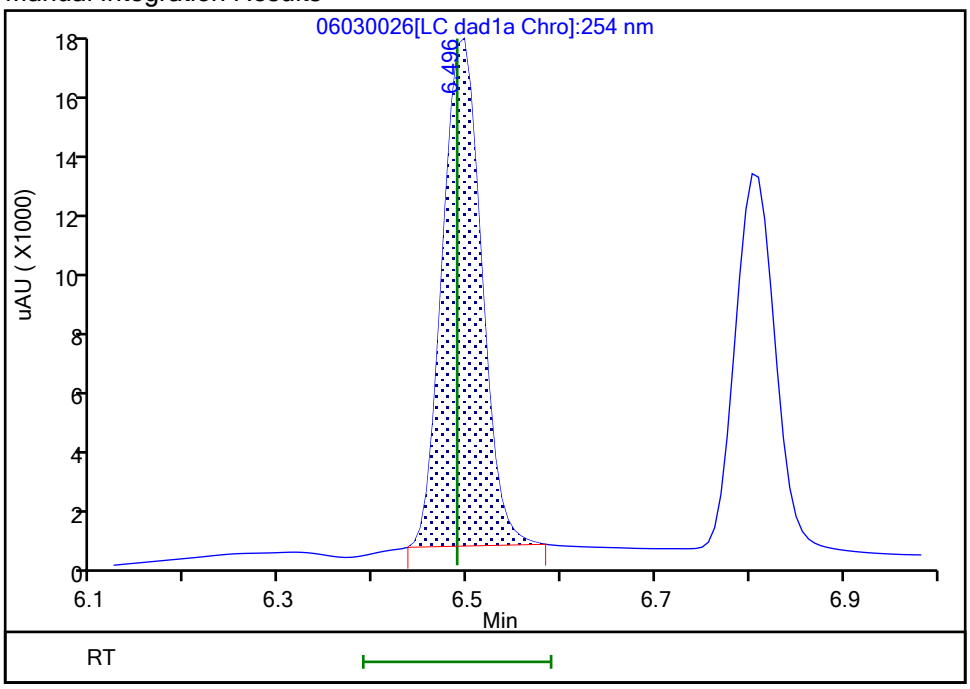
Processing Integration Results

RT: 6.50
Area: 64233
Amount: 0.345699
Amount Units: ug/mL



Manual Integration Results

RT: 6.50
Area: 46971
Amount: 0.252796
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 12:47:07

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

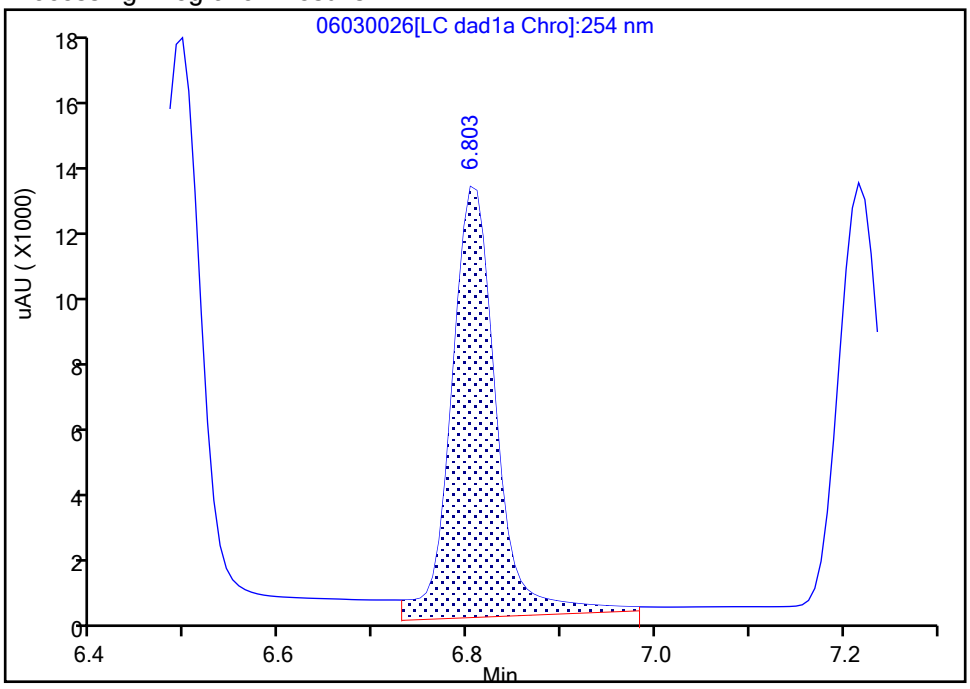
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030026.d				
Injection Date:	03-Jun-2021 21:30:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

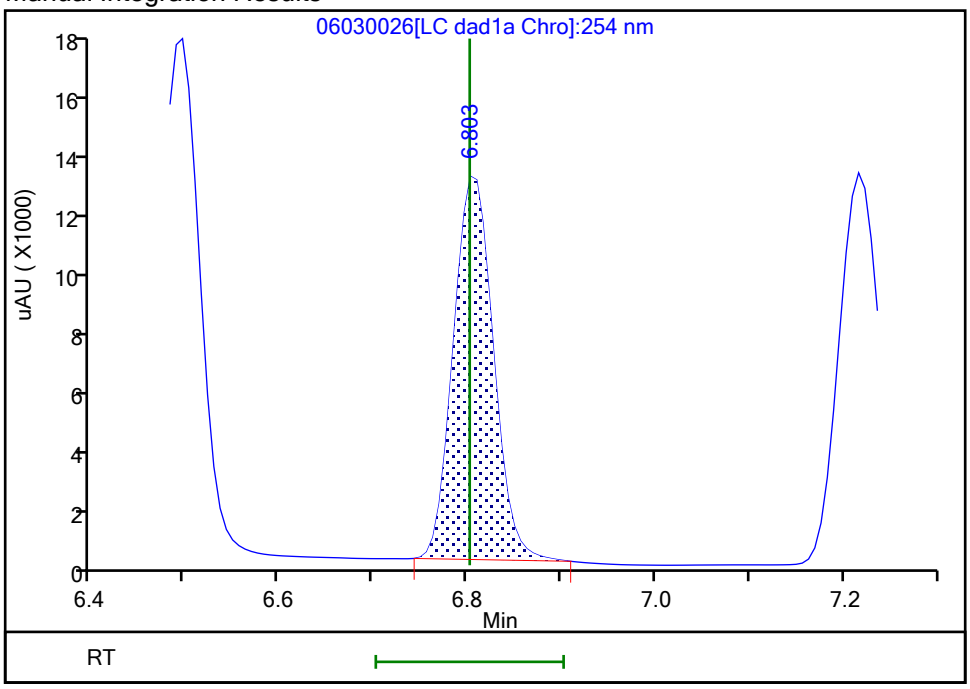
Processing Integration Results

RT: 6.80
Area: 41408
Amount: 0.291361
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 35583
Amount: 0.250374
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 12:47:11

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/38 Calibration Date: 06/04/2021 02:06

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06030038.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	186074		251	250	0.1	15.0
DNX	Ave	142119	141203		249	250	-0.6	15.0
MNX	Ave	130340	132480		297	292	1.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/38 Calibration Date: 06/04/2021 02:06

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06030038.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.39	6.59
DNX	6.80	6.70	6.90
MNX	7.21	7.07	7.37

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030038.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Jun-2021 02:06:16	ALS Bottle#:	9	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0102044-038				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Jun-2021 14:13:03	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1663				
First Level Reviewer: zhangji		Date:	04-Jun-2021 13:06:58		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.487	6.489	-0.002	46565	0.2503	0.2506	M
5 DNX	1	6.800	6.802	-0.002	35336	0.2503	0.2486	M
6 MNX	1	7.213	7.216	-0.003	38651	0.2918	0.2965	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

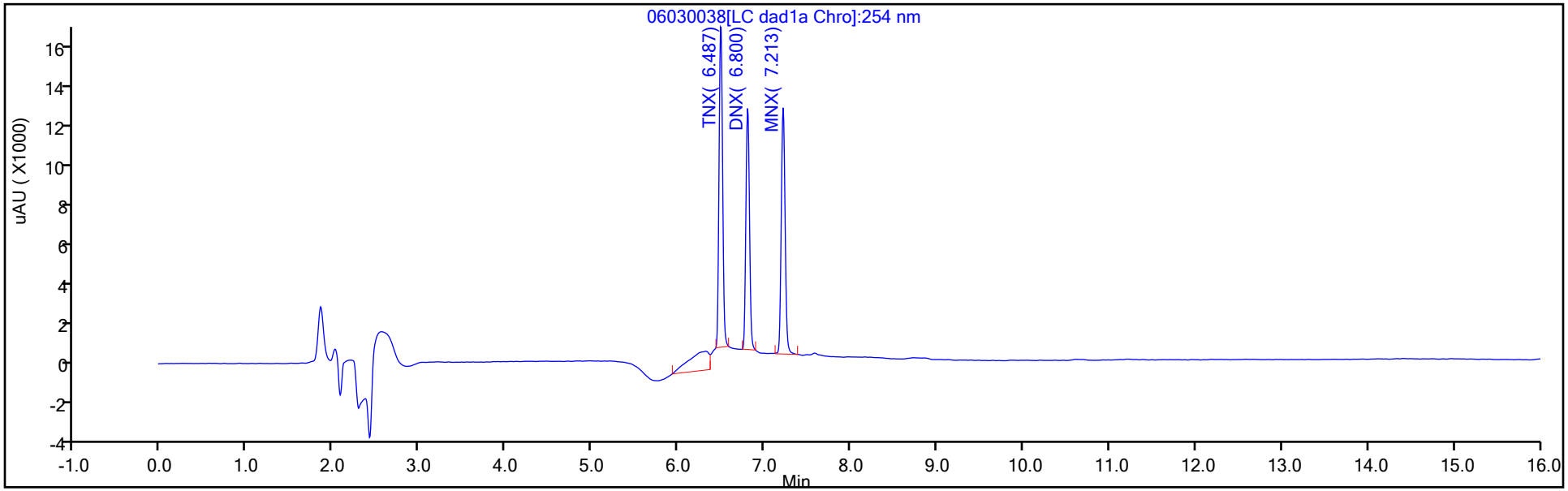
Report Date: 04-Jun-2021 14:13:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

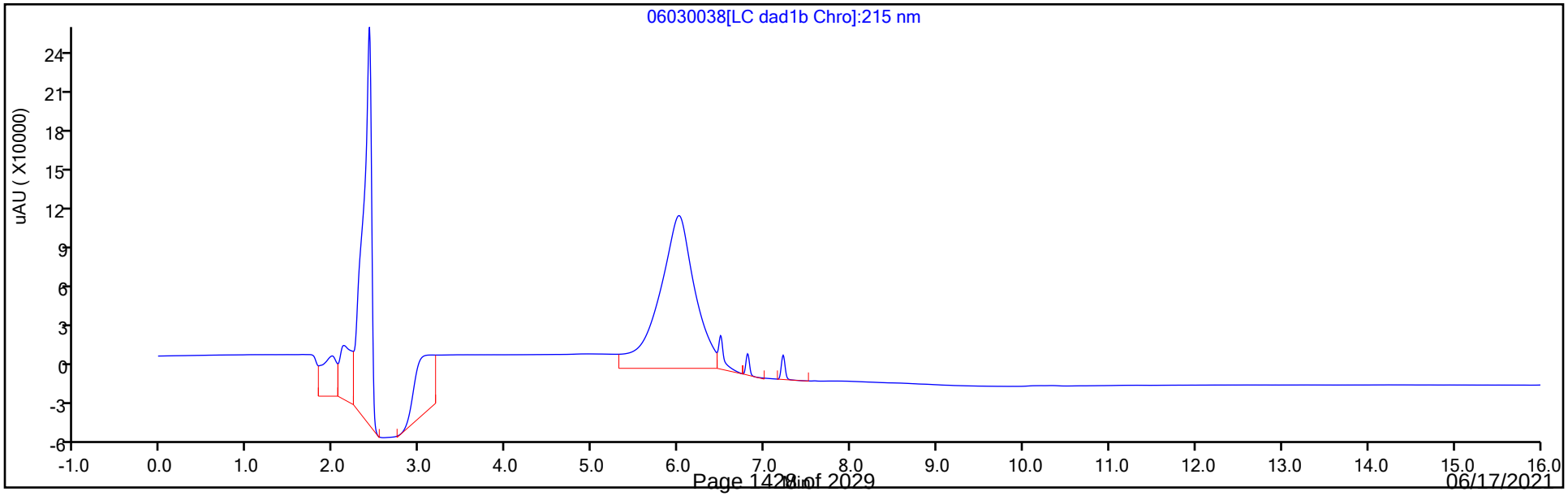
Data File: \\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030038.d

Injection Date:	04-Jun-2021 02:06:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	38
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

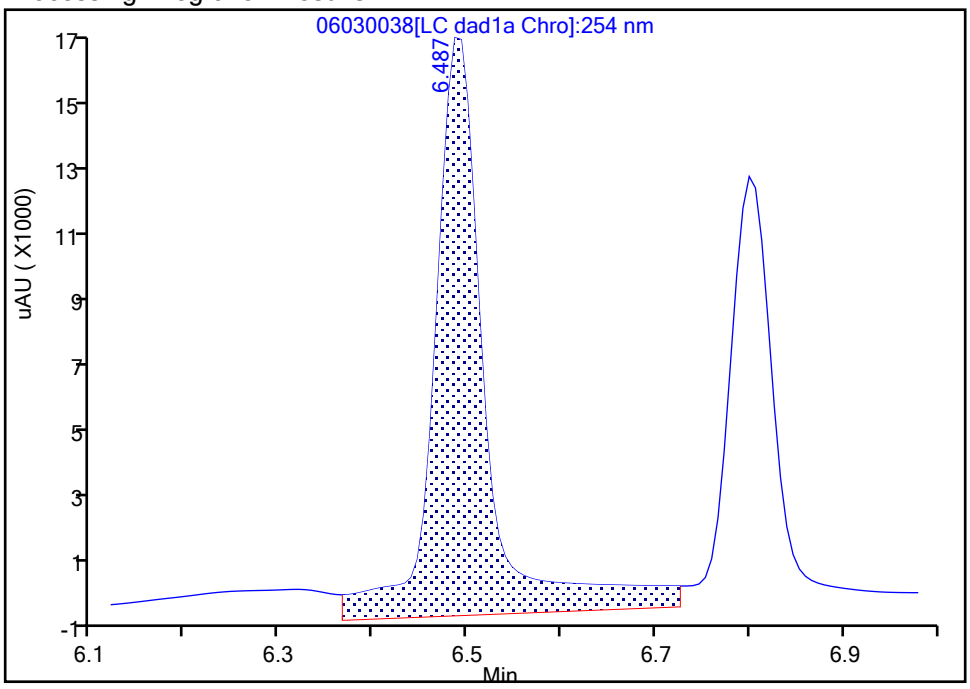
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030038.d				
Injection Date:	04-Jun-2021 02:06:16	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

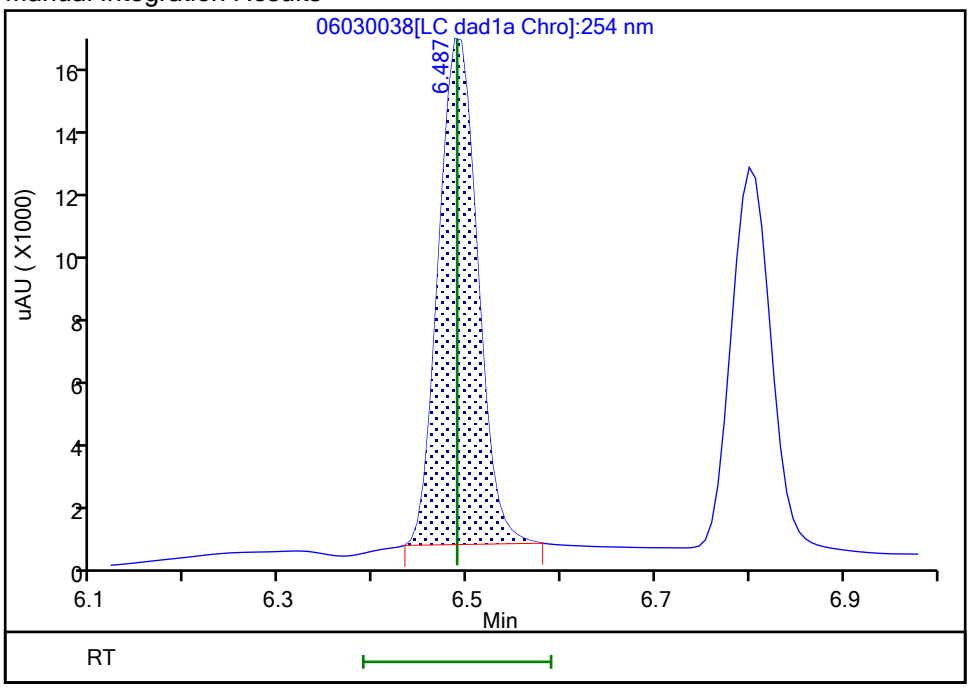
Processing Integration Results

RT: 6.49
Area: 65090
Amount: 0.350312
Amount Units: ug/mL



Manual Integration Results

RT: 6.49
Area: 46565
Amount: 0.250611
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:06:53
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

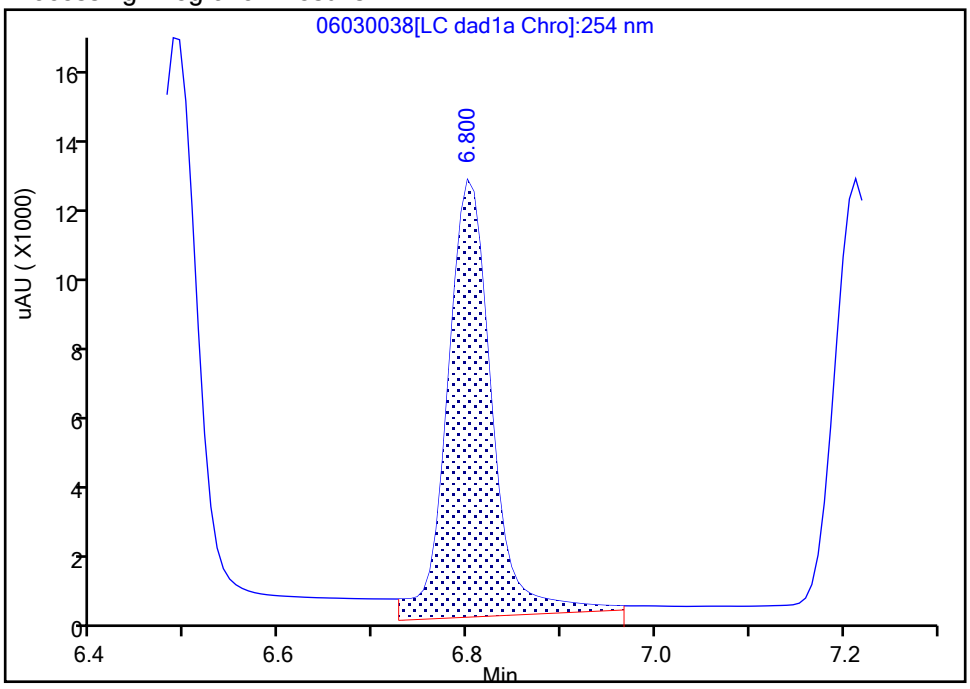
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030038.d				
Injection Date:	04-Jun-2021 02:06:16	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

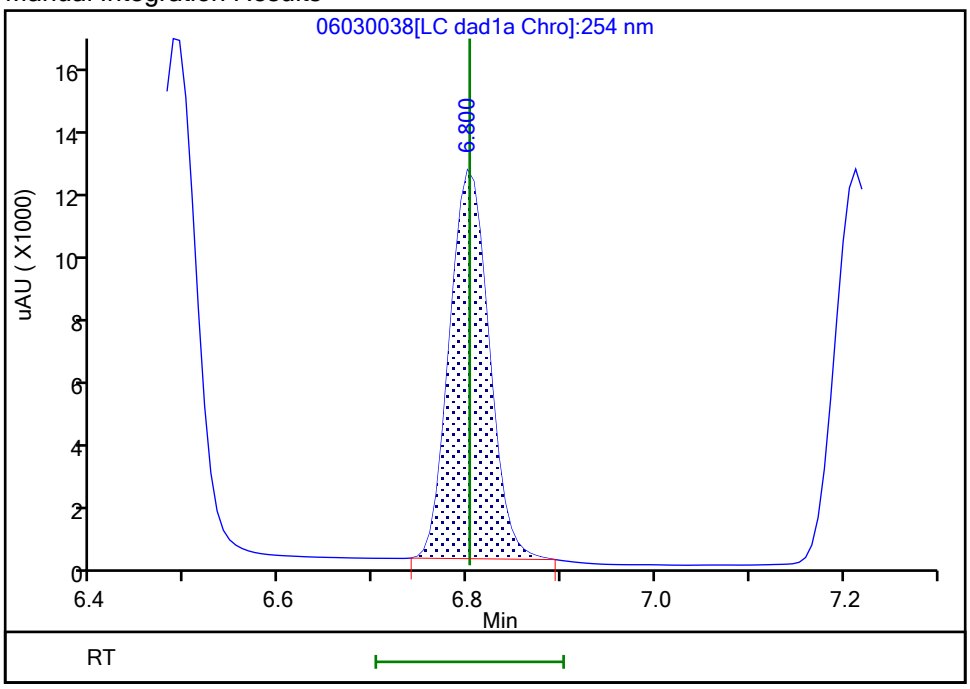
Processing Integration Results

RT: 6.80
Area: 41283
Amount: 0.290481
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 35336
Amount: 0.248636
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 13:06:57
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/39 Calibration Date: 06/04/2021 02:29

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06030039.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	83428		247	250	-1.2	15.0
RDX	Ave	106261	100680		237	250	-5.3	15.0
Picric acid	Ave	82721	77776		235	250	-6.0	15.0
1,3,5-Trinitrobenzene	Ave	220317	216786		246	251	-1.6	15.0
1,3-Dinitrobenzene	Ave	296329	291206		246	251	-1.7	15.0
Nitrobenzene	Ave	195286	185024		238	251	-5.3	15.0
Tetryl	Ave	172420	165094		240	251	-4.2	15.0
Nitroglycerin	Lin2		64248		2440	2500	-2.4	15.0
2,4,6-Trinitrotoluene	Ave	206038	200363		244	251	-2.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	144587		237	250	-5.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	198068		240	251	-4.3	15.0
2,6-Dinitrotoluene	Ave	143079	142773		250	251	-0.2	15.0
2,4-Dinitrotoluene	Ave	287012	281398		246	251	-2.0	15.0
2-Nitrotoluene	Ave	128392	118708		231	250	-7.5	15.0
4-Nitrotoluene	Ave	111913	102164		229	251	-8.7	15.0
3-Nitrotoluene	Ave	142246	129766		228	250	-8.8	15.0
PETN	Ave	74779	72348		2420	2500	-3.3	15.0
1,2-Dinitrobenzene	Ave	128217	130012		253	250	1.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538449/39 Calibration Date: 06/04/2021 02:29

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06030039.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.45	6.75
RDX	7.58	7.43	7.73
Picric acid	7.95	7.79	8.09
1,3,5-Trinitrobenzene	8.63	8.48	8.78
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.65	9.49	9.79
Tetryl	9.99	9.82	10.12
Nitroglycerin	10.45	10.28	10.58
2,4,6-Trinitrotoluene	10.91	10.79	10.99
4-Amino-2,6-dinitrotoluene	11.12	11.00	11.20
2-Amino-4,6-dinitrotoluene	11.38	11.26	11.46
2,6-Dinitrotoluene	11.55	11.42	11.62
2,4-Dinitrotoluene	11.72	11.60	11.80
2-Nitrotoluene	12.59	12.42	12.72
4-Nitrotoluene	13.03	12.85	13.15
3-Nitrotoluene	13.63	13.44	13.74
PETN	14.73	14.54	14.84
1,2-Dinitrobenzene	8.51	8.35	8.65

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030039.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 04-Jun-2021 02:29:13 ALS Bottle#: 7 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0102044-039
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:13:04 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.606	6.603	0.003	20857	0.2500	0.2471	
	7 RDX	1	7.579	7.577	0.002	25170	0.2500	0.2369	
	8 2,4,6-Trinitrophenol	1	7.952	7.943	0.009	19444	0.2500	0.2351	
$	9 1,2-Dinitrobenzene	1	8.506	8.503	0.003	32503	0.2500	0.2535	
	10 1,3,5-Trinitrobenzene	1	8.632	8.630	0.002	54305	0.2505	0.2465	
	11 1,3-Dinitrobenzene	1	9.265	9.256	0.009	72947	0.2505	0.2462	
	12 Nitrobenzene	1	9.652	9.643	0.009	46441	0.2510	0.2378	
	14 Tetryl	1	9.985	9.970	0.015	41356	0.2505	0.2399	
	15 Nitroglycerin	2	10.445	10.430	0.015	160621	2.50	2.44	
	16 2,4,6-Trinitrotoluene	1	10.905	10.890	0.015	50291	0.2510	0.2441	
	17 4-Amino-2,6-dinitrotoluene	1	11.119	11.096	0.023	36183	0.2503	0.2368	
	18 2-Amino-4,6-dinitrotoluene	1	11.379	11.356	0.023	49715	0.2510	0.2403	
	19 2,6-Dinitrotoluene	1	11.545	11.523	0.022	35836	0.2510	0.2505	
	20 2,4-Dinitrotoluene	1	11.719	11.696	0.023	70631	0.2510	0.2461	
	21 o-Nitrotoluene	1	12.592	12.570	0.022	29677	0.2500	0.2311	
	22 p-Nitrotoluene	1	13.032	13.003	0.029	25592	0.2505	0.2287	
	23 m-Nitrotoluene	1	13.625	13.590	0.035	32474	0.2503	0.2283	
	24 PETN	2	14.732	14.690	0.042	180870	2.50	2.42	

Reagents:

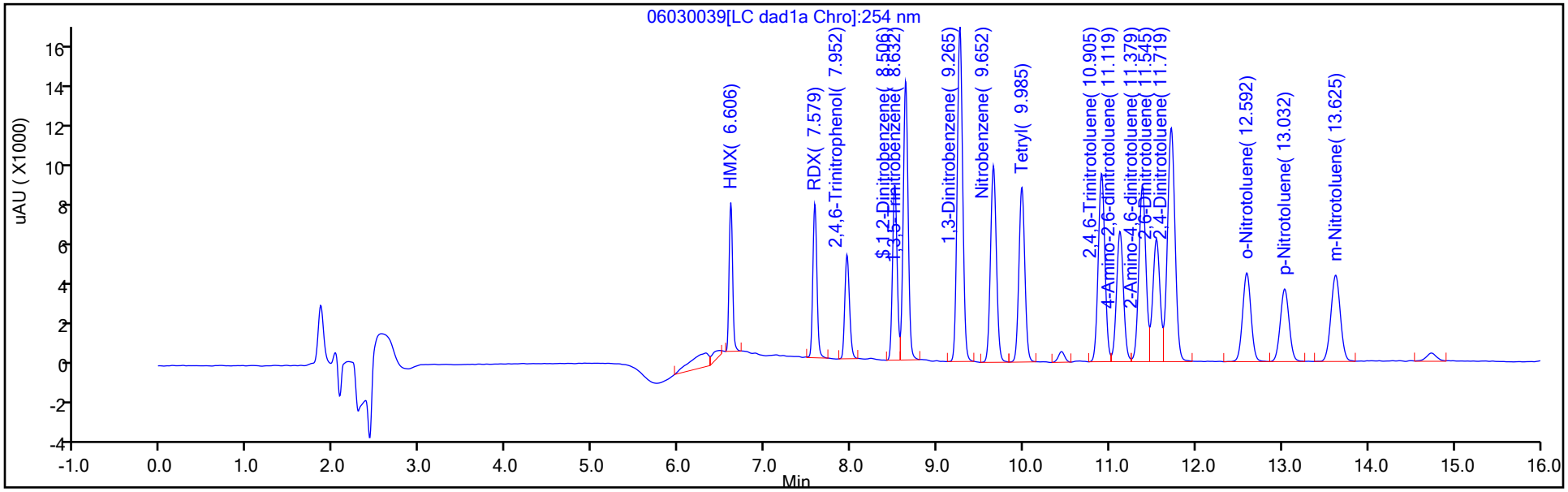
8330IntermStk_00068 Amount Added: 25.00 Units: uL

Report Date: 04-Jun-2021 14:13:04 Chrom Revision: 2.3 13-May-2021 07:57:40

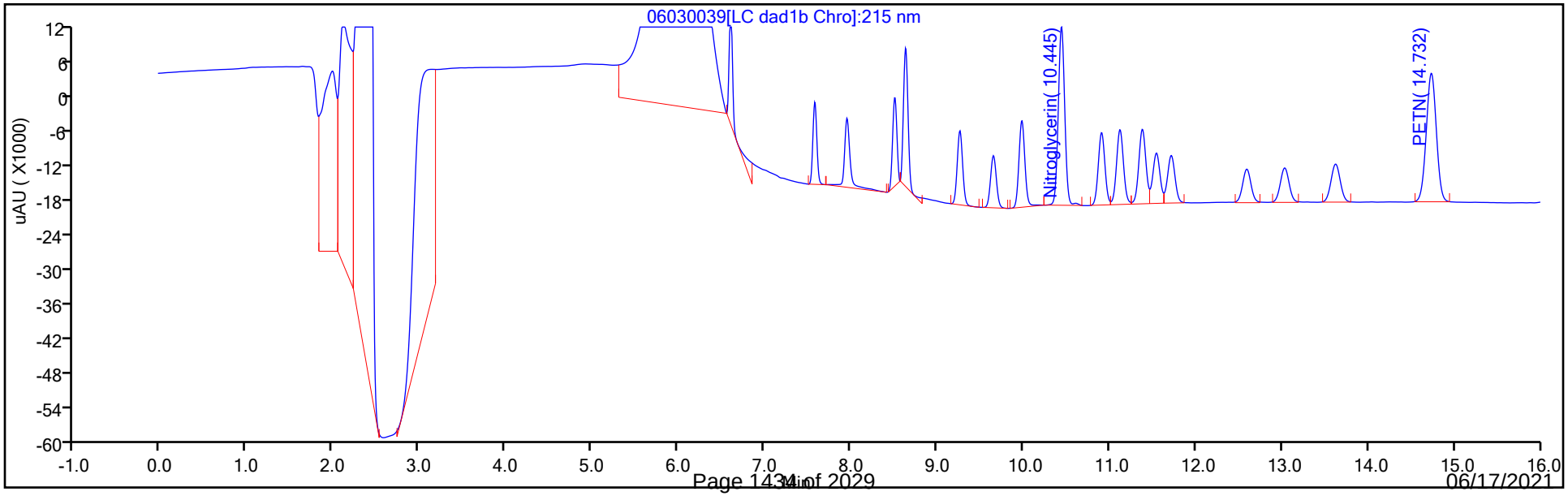
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030039.d				
Injection Date:	04-Jun-2021 02:29:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	39
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.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/7 Calibration Date: 06/04/2021 17:27

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06040007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	80828		239	250	-4.3	15.0
RDX	Ave	106261	96036		226	250	-9.6	15.0
Picric acid	Ave	82721	77820		235	250	-5.9	15.0
1,3,5-Trinitrobenzene	Ave	220317	211693		241	251	-3.9	15.0
1,3-Dinitrobenzene	Ave	296329	284786		241	251	-3.9	15.0
Nitrobenzene	Ave	195286	187024		240	251	-4.2	15.0
Tetryl	Ave	172420	160475		233	251	-6.9	15.0
Nitroglycerin	Lin2		63067		2390	2500	-4.2	15.0
2,4,6-Trinitrotoluene	Ave	206038	194725		237	251	-5.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	140567		230	250	-8.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	193064		234	251	-6.7	15.0
2,6-Dinitrotoluene	Ave	143079	138454		243	251	-3.2	15.0
2,4-Dinitrotoluene	Ave	287012	273908		240	251	-4.6	15.0
2-Nitrotoluene	Ave	128392	120444		235	250	-6.2	15.0
4-Nitrotoluene	Ave	111913	103114		231	251	-7.9	15.0
3-Nitrotoluene	Ave	142246	131864		232	250	-7.3	15.0
PETN	Ave	74779	70763		2370	2500	-5.4	15.0
1,2-Dinitrobenzene	Ave	128217	126480		247	250	-1.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/7 Calibration Date: 06/04/2021 17:27

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06040007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.46	6.76
RDX	7.58	7.43	7.73
Picric acid	7.94	7.79	8.09
1,3,5-Trinitrobenzene	8.63	8.48	8.78
1,3-Dinitrobenzene	9.25	9.10	9.40
Nitrobenzene	9.64	9.49	9.79
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.42	10.27	10.57
2,4,6-Trinitrotoluene	10.88	10.78	10.98
4-Amino-2,6-dinitrotoluene	11.08	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.34	11.24	11.44
2,6-Dinitrotoluene	11.50	11.40	11.60
2,4-Dinitrotoluene	11.68	11.58	11.78
2-Nitrotoluene	12.54	12.39	12.69
4-Nitrotoluene	12.98	12.83	13.13
3-Nitrotoluene	13.56	13.41	13.71
PETN	14.65	14.50	14.80
1,2-Dinitrobenzene	8.50	8.35	8.65

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 04-Jun-2021 17:27:20 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0102084-007
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:11 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 04-Jun-2021 18:35:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.609	6.609	0.000	20207	0.2500	0.2394	
7 RDX	1	7.576	7.576	0.000	24009	0.2500	0.2259	
8 2,4,6-Trinitrophenol	1	7.942	7.942	0.000	19455	0.2500	0.2352	
$ 9 1,2-Dinitrobenzene	1	8.496	8.496	0.000	31620	0.2500	0.2466	
10 1,3,5-Trinitrobenzene	1	8.629	8.629	0.000	53029	0.2505	0.2407	
11 1,3-Dinitrobenzene	1	9.249	9.249	0.000	71339	0.2505	0.2407	
12 Nitrobenzene	1	9.636	9.636	0.000	46943	0.2510	0.2404	
14 Tetryl	1	9.956	9.956	0.000	40199	0.2505	0.2331	
15 Nitroglycerin	2	10.416	10.416	0.000	157667	2.50	2.39	
16 2,4,6-Trinitrotoluene	1	10.876	10.876	0.000	48876	0.2510	0.2372	
17 4-Amino-2,6-dinitrotoluene	1	11.076	11.076	0.000	35177	0.2503	0.2303	
18 2-Amino-4,6-dinitrotoluene	1	11.336	11.336	0.000	48459	0.2510	0.2342	
19 2,6-Dinitrotoluene	1	11.502	11.502	0.000	34752	0.2510	0.2429	
20 2,4-Dinitrotoluene	1	11.676	11.676	0.000	68751	0.2510	0.2395	
21 o-Nitrotoluene	1	12.542	12.542	0.000	30111	0.2500	0.2345	
22 p-Nitrotoluene	1	12.976	12.976	0.000	25830	0.2505	0.2308	
23 m-Nitrotoluene	1	13.562	13.562	0.000	32999	0.2503	0.2320	
24 PETN	2	14.649	14.649	0.000	176907	2.50	2.37	

QC Flag Legend

Processing Flags

Reagents:

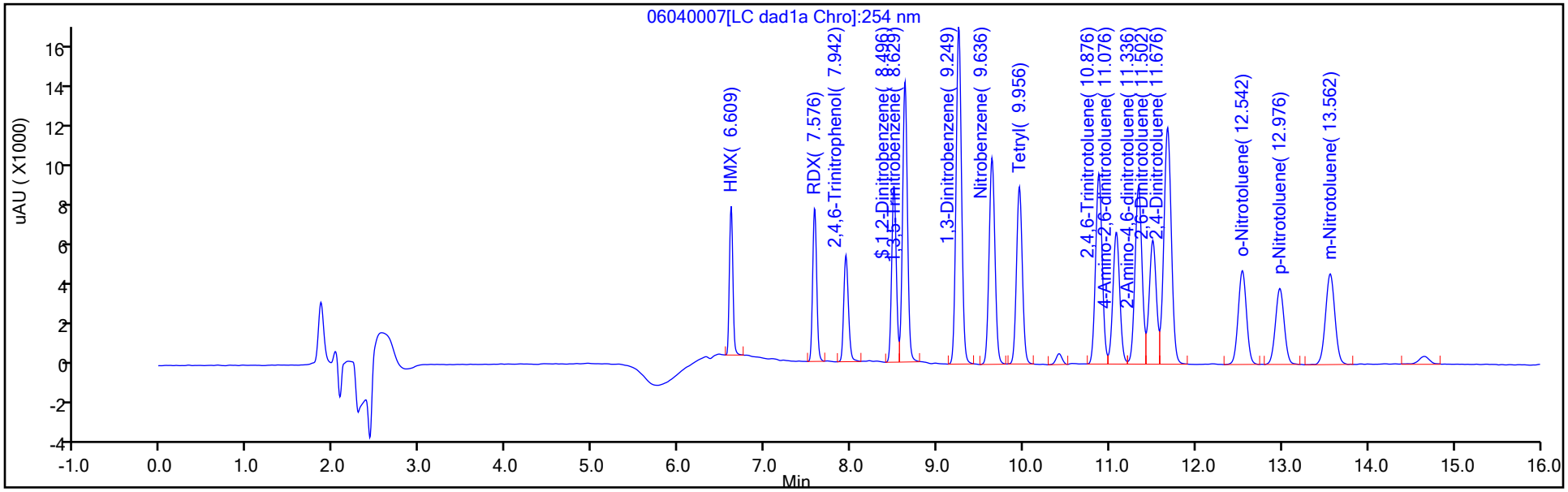
8330IntermStk_00068 Amount Added: 25.00 Units: uL

Report Date: 05-Jun-2021 10:20:11 Chrom Revision: 2.3 13-May-2021 07:57:40

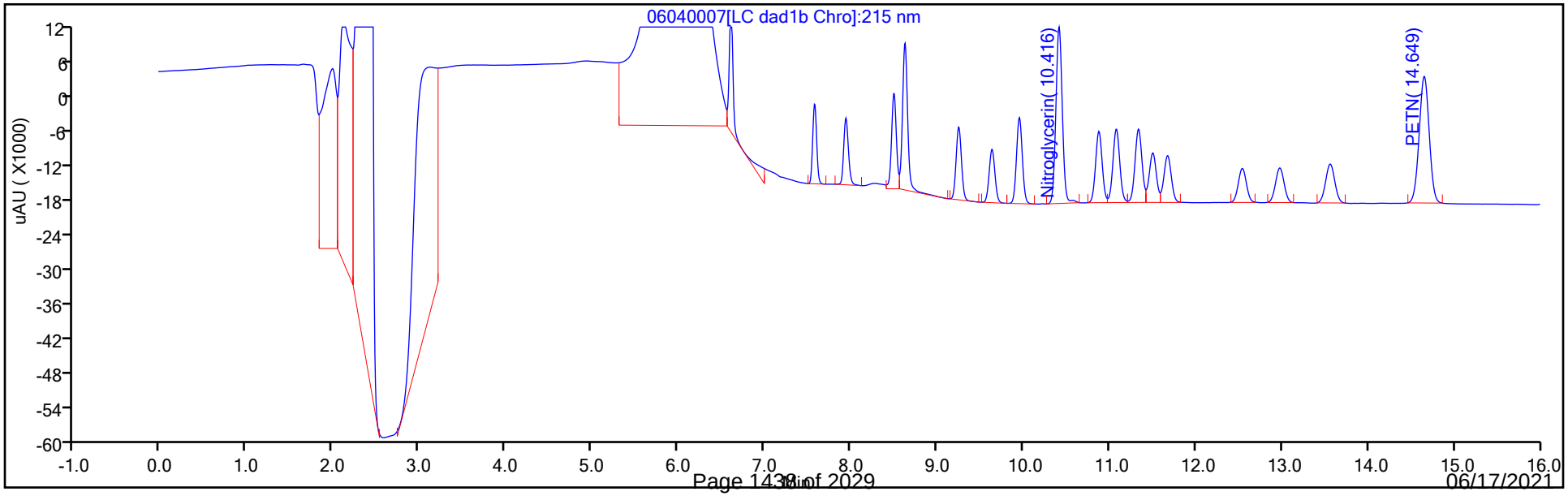
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040007.d				
Injection Date:	04-Jun-2021 17:27:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/9 Calibration Date: 06/04/2021 18:13

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06040009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	190817		257	250	2.7	15.0
DNX	Ave	142119	144240		254	250	1.5	15.0
MNX	Ave	130340	133056		298	292	2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/9 Calibration Date: 06/04/2021 18:13

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06040009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.39	6.59
DNX	6.80	6.70	6.90
MNX	7.21	7.06	7.36

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040009.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Jun-2021 18:13:18	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0102084-009				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:12	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	04-Jun-2021 18:41:42		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.490	6.490	0.000	47752	0.2503	0.2570	M
5 DNX	1	6.803	6.803	0.000	36096	0.2503	0.2540	M
6 MNX	1	7.210	7.210	0.000	38819	0.2918	0.2978	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

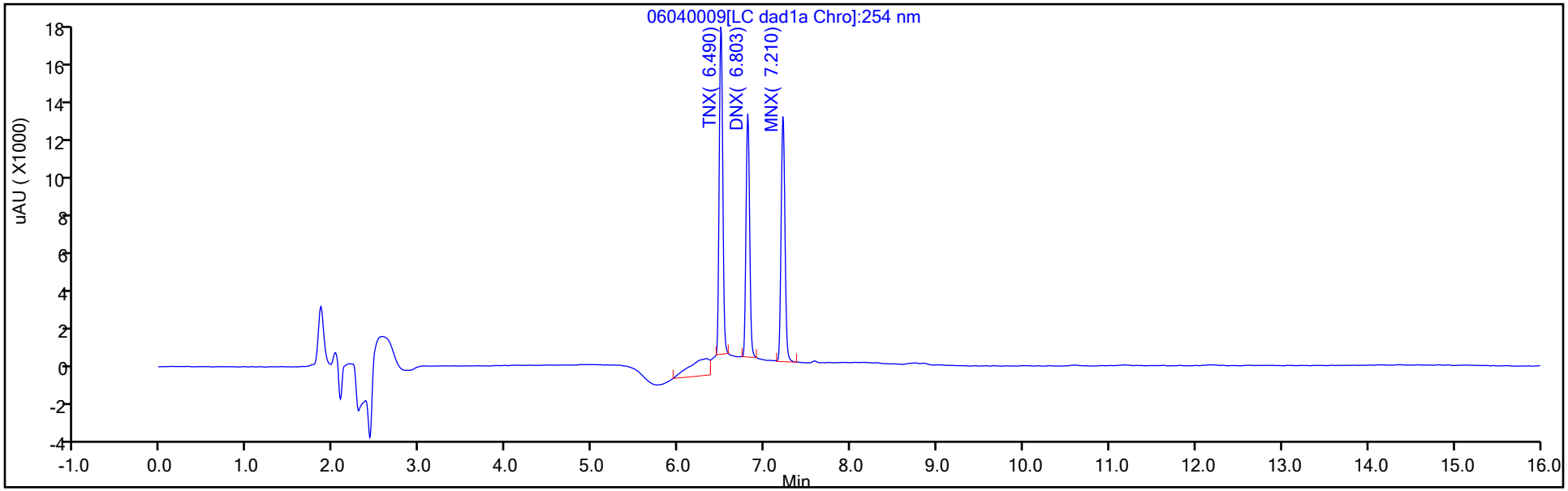
Report Date: 05-Jun-2021 10:20:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

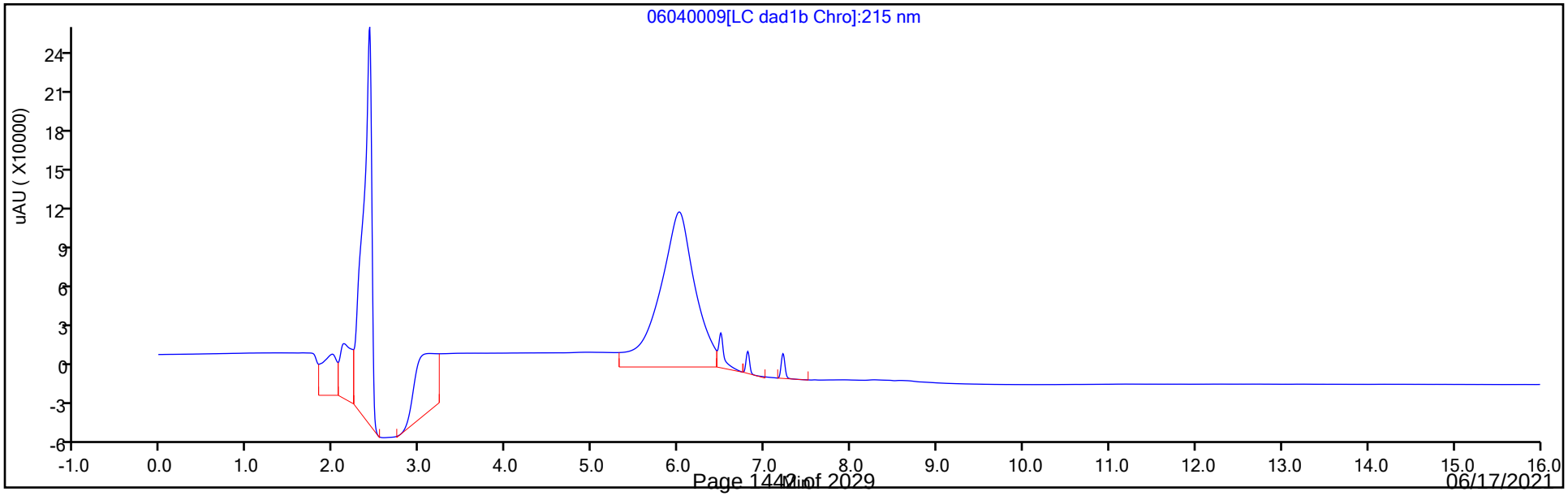
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040009.d

Injection Date:	04-Jun-2021 18:13:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

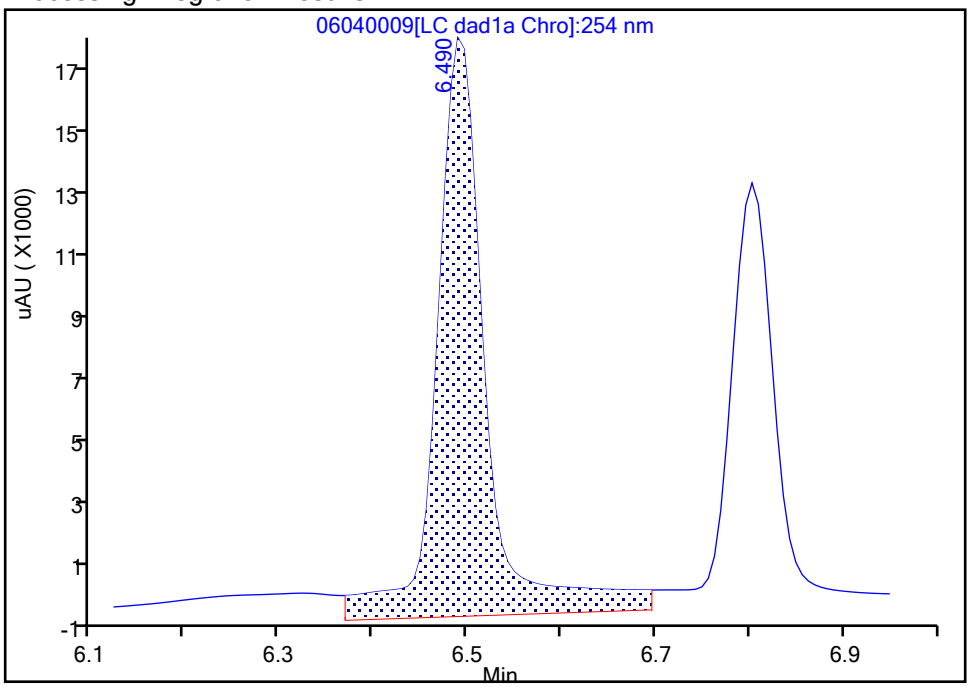
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040009.d				
Injection Date:	04-Jun-2021 18:13:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

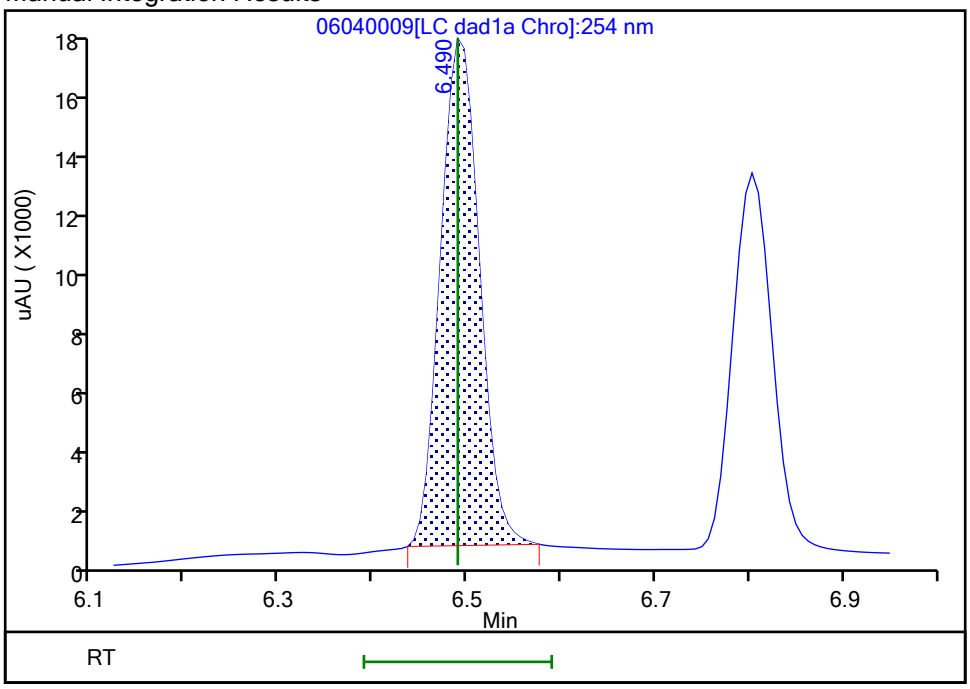
Processing Integration Results

RT: 6.49
Area: 63959
Amount: 0.344225
Amount Units: ug/mL



Manual Integration Results

RT: 6.49
Area: 47752
Amount: 0.256999
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 18:41:36

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

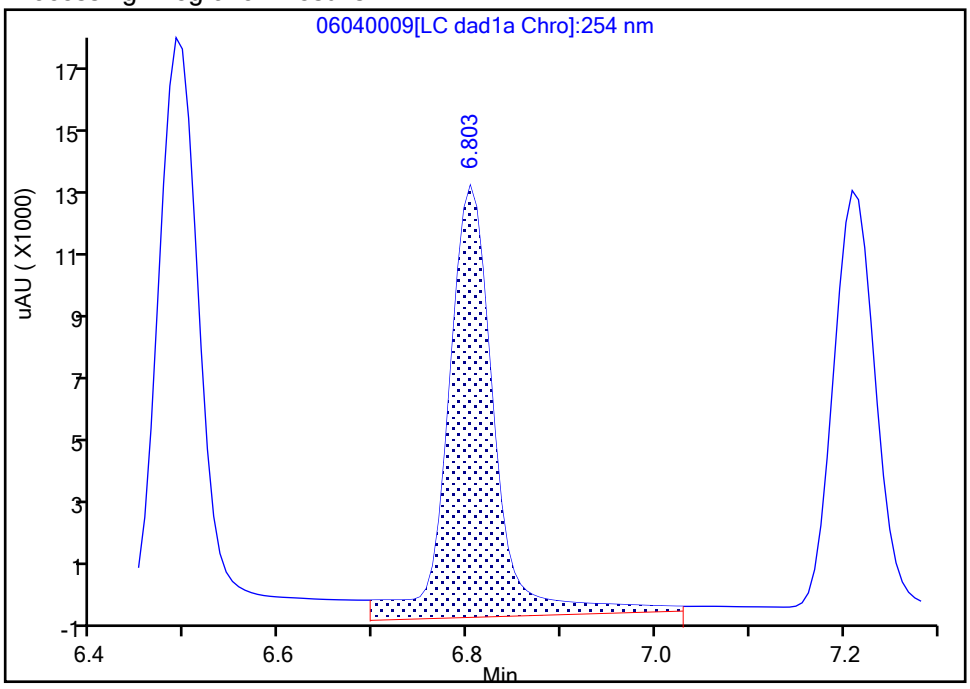
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040009.d				
Injection Date:	04-Jun-2021 18:13:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

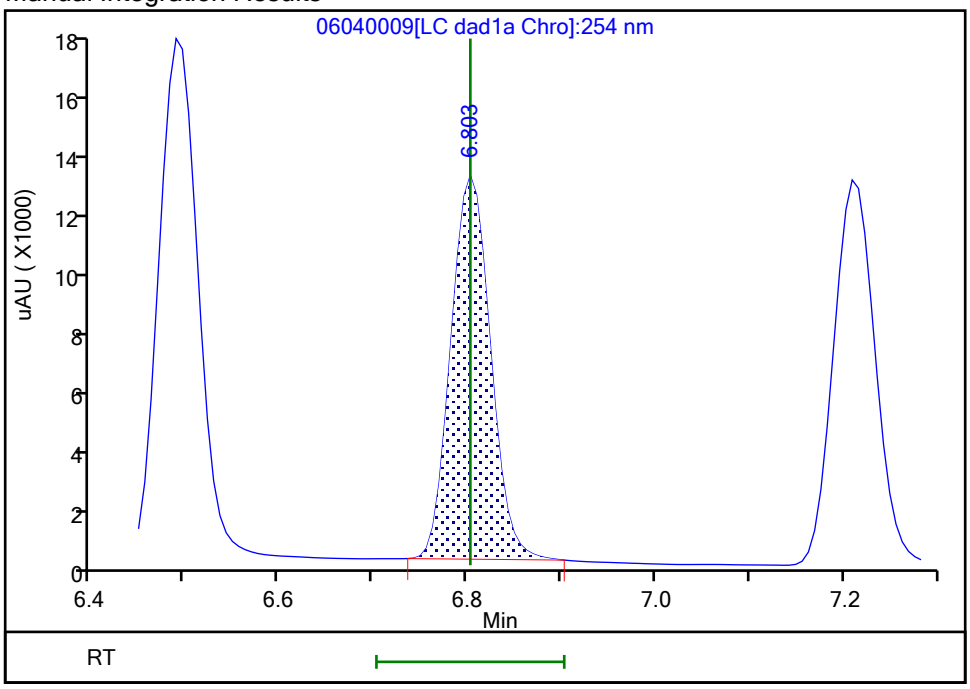
Processing Integration Results

RT: 6.80
Area: 44207
Amount: 0.311055
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 36096
Amount: 0.253984
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 18:41:40

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/21 Calibration Date: 06/04/2021 22:26

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06040021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	80396		238	250	-4.8	15.0
RDX	Ave	106261	96320		227	250	-9.4	15.0
Picric acid	Ave	82721	77340		234	250	-6.5	15.0
1,3,5-Trinitrobenzene	Ave	220317	211633		241	251	-3.9	15.0
1,3-Dinitrobenzene	Ave	296329	284643		241	251	-3.9	15.0
Nitrobenzene	Ave	195286	184020		237	251	-5.8	15.0
Tetryl	Ave	172420	161577		235	251	-6.3	15.0
Nitroglycerin	Lin2		63082		2390	2500	-4.2	15.0
2,4,6-Trinitrotoluene	Ave	206038	195179		238	251	-5.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	141423		232	250	-7.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	193908		235	251	-6.3	15.0
2,6-Dinitrotoluene	Ave	143079	136203		239	251	-4.8	15.0
2,4-Dinitrotoluene	Ave	287012	275422		241	251	-4.0	15.0
2-Nitrotoluene	Ave	128392	118468		231	250	-7.7	15.0
4-Nitrotoluene	Ave	111913	103210		231	251	-7.8	15.0
3-Nitrotoluene	Ave	142246	129363		228	250	-9.1	15.0
PETN	Ave	74779	70873		2370	2500	-5.2	15.0
1,2-Dinitrobenzene	Ave	128217	127148		248	250	-0.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/21 Calibration Date: 06/04/2021 22:26

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06040021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.46	6.76
RDX	7.58	7.43	7.73
Picric acid	7.95	7.79	8.09
1,3,5-Trinitrobenzene	8.63	8.48	8.78
1,3-Dinitrobenzene	9.25	9.10	9.40
Nitrobenzene	9.64	9.49	9.79
Tetryl	9.97	9.81	10.11
Nitroglycerin	10.43	10.27	10.57
2,4,6-Trinitrotoluene	10.89	10.78	10.98
4-Amino-2,6-dinitrotoluene	11.09	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.35	11.24	11.44
2,6-Dinitrotoluene	11.52	11.40	11.60
2,4-Dinitrotoluene	11.69	11.58	11.78
2-Nitrotoluene	12.56	12.39	12.69
4-Nitrotoluene	12.99	12.83	13.13
3-Nitrotoluene	13.58	13.41	13.71
PETN	14.67	14.50	14.80
1,2-Dinitrobenzene	8.51	8.35	8.65

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040021.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 04-Jun-2021 22:26:17 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0102084-021
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:16 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:09:58

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.607	6.609	-0.002	20099	0.2500	0.2381	M
	7 RDX	1	7.580	7.576	0.004	24080	0.2500	0.2266	
	8 2,4,6-Trinitrophenol	1	7.947	7.942	0.005	19335	0.2500	0.2337	
$	9 1,2-Dinitrobenzene	1	8.507	8.496	0.011	31787	0.2500	0.2479	
	10 1,3,5-Trinitrobenzene	1	8.633	8.629	0.004	53014	0.2505	0.2406	
	11 1,3-Dinitrobenzene	1	9.253	9.249	0.004	71303	0.2505	0.2406	
	12 Nitrobenzene	1	9.640	9.636	0.004	46189	0.2510	0.2365	
	14 Tetryl	1	9.967	9.956	0.011	40475	0.2505	0.2347	
	15 Nitroglycerin	2	10.427	10.416	0.011	157704	2.50	2.39	
	16 2,4,6-Trinitrotoluene	1	10.887	10.876	0.011	48990	0.2510	0.2378	
	17 4-Amino-2,6-dinitrotoluene	1	11.093	11.076	0.017	35391	0.2503	0.2317	
	18 2-Amino-4,6-dinitrotoluene	1	11.353	11.336	0.017	48671	0.2510	0.2352	
	19 2,6-Dinitrotoluene	1	11.520	11.502	0.018	34187	0.2510	0.2389	
	20 2,4-Dinitrotoluene	1	11.687	11.676	0.011	69131	0.2510	0.2409	
	21 o-Nitrotoluene	1	12.560	12.542	0.018	29617	0.2500	0.2307	
	22 p-Nitrotoluene	1	12.993	12.976	0.017	25854	0.2505	0.2310	
	23 m-Nitrotoluene	1	13.580	13.562	0.018	32373	0.2503	0.2276	
	24 PETN	2	14.673	14.649	0.024	177183	2.50	2.37	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL

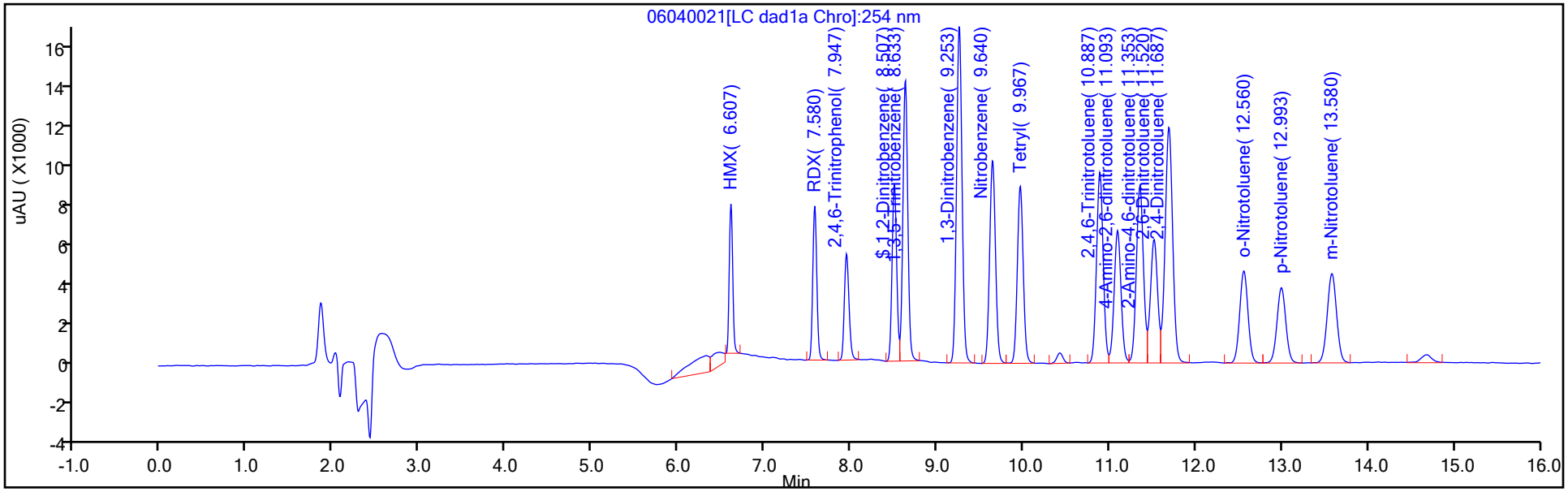
Report Date: 05-Jun-2021 10:20:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

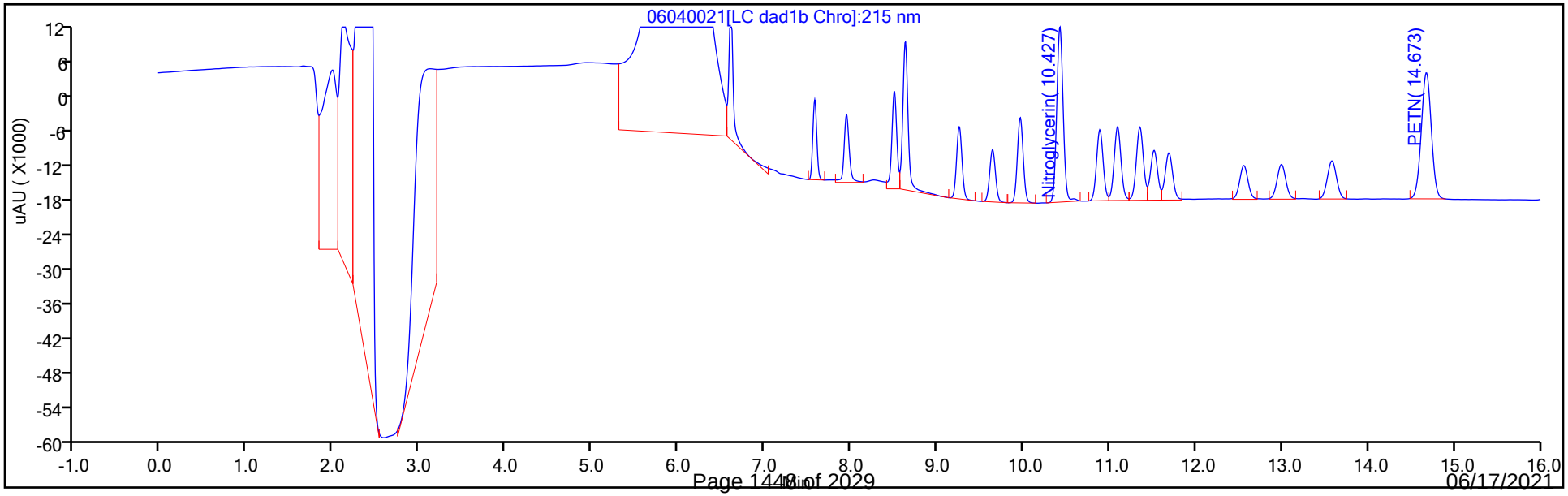
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040021.d

Injection Date:	04-Jun-2021 22:26:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

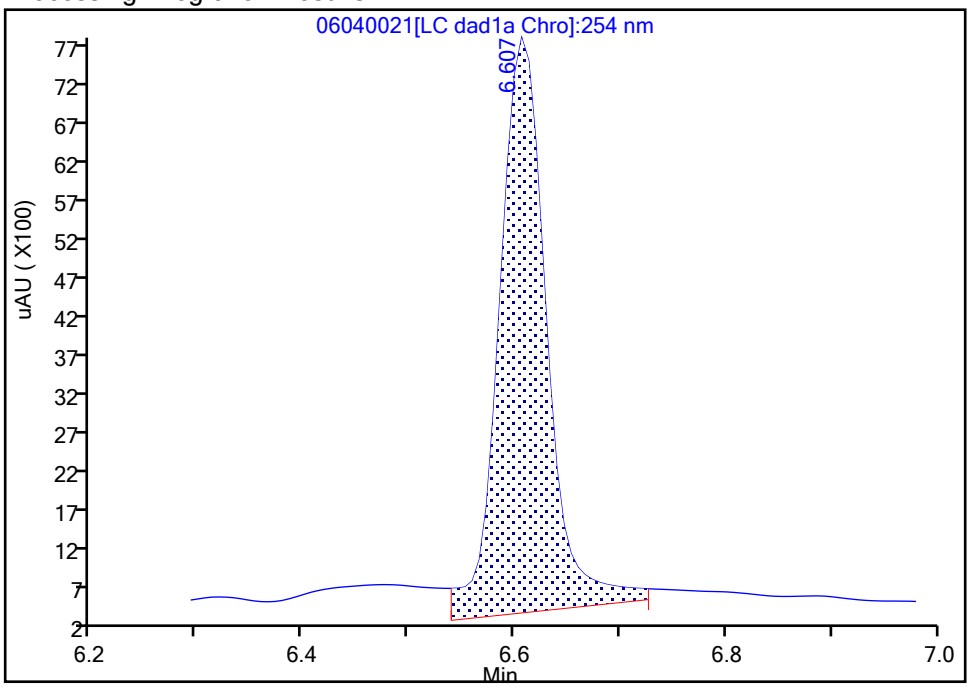
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040021.d				
Injection Date:	04-Jun-2021 22:26:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

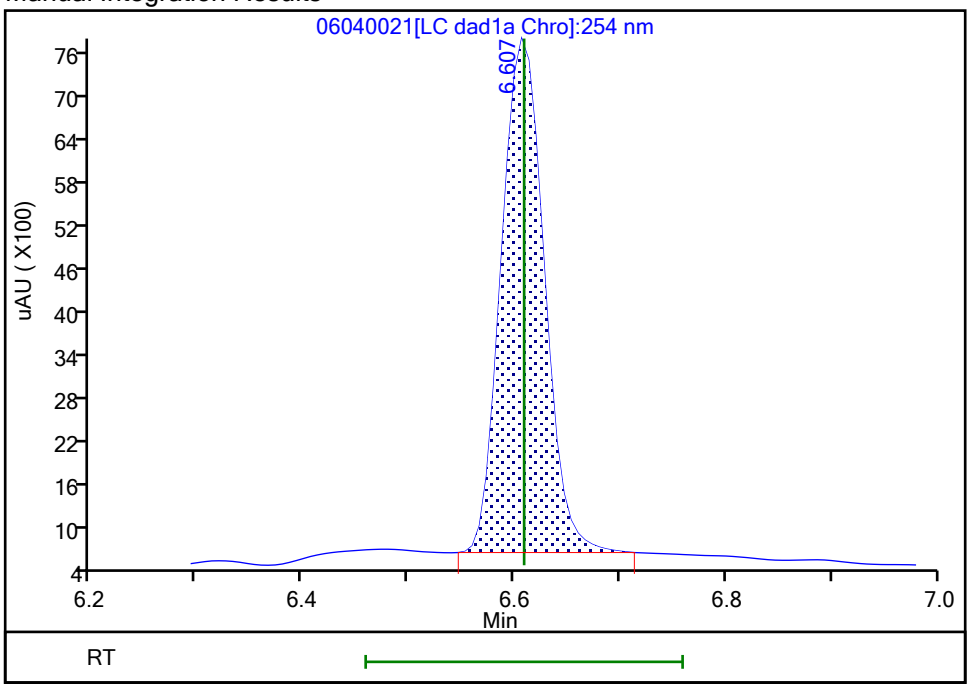
Processing Integration Results

RT: 6.61
Area: 23259
Amount: 0.275511
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 20099
Amount: 0.238079
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:09:56
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/23 Calibration Date: 06/04/2021 23:12

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06040023.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	189934		256	250	2.2	15.0
DNX	Ave	142119	145187		256	250	2.2	15.0
MNX	Ave	130340	132696		297	292	1.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/23 Calibration Date: 06/04/2021 23:12

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06040023.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.50	6.39	6.59
DNX	6.80	6.70	6.90
MNX	7.22	7.06	7.36

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040023.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Jun-2021 23:12:11	ALS Bottle#:	9	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0102084-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:17	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:10:22		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.495	6.490	0.005	47531	0.2503	0.2558	M
5 DNX	1	6.802	6.803	-0.001	36333	0.2503	0.2557	M
6 MNX	1	7.215	7.210	0.005	38714	0.2918	0.2970	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

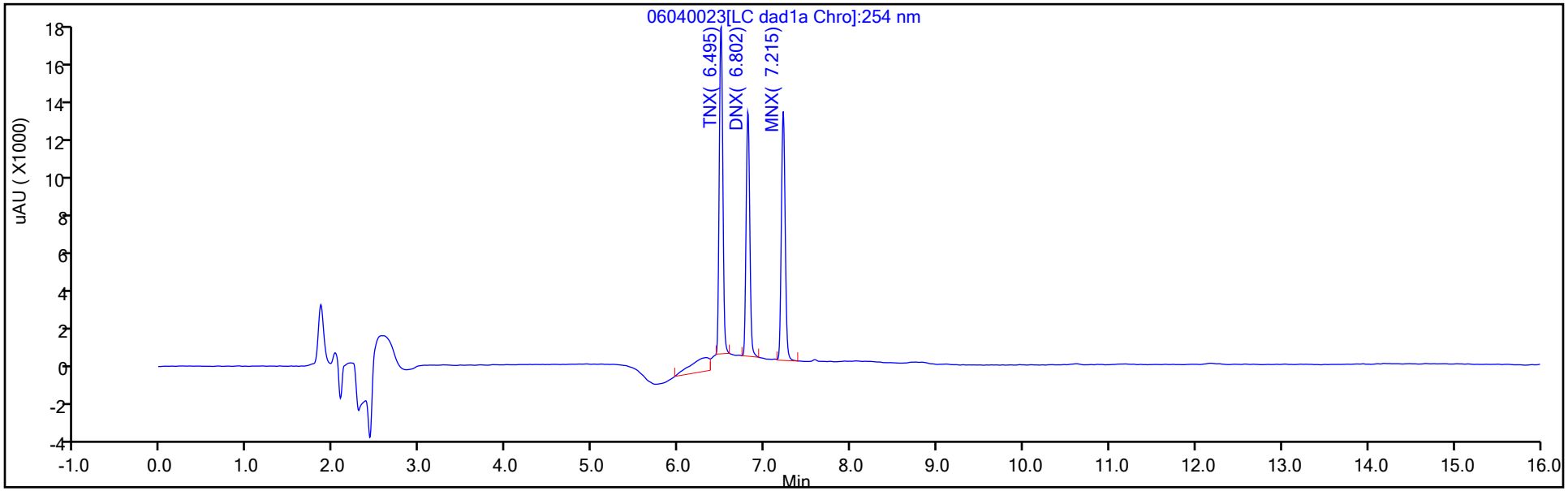
8330 DMT_00009 Amount Added: 12.50 Units: uL

Report Date: 05-Jun-2021 10:20:17 Chrom Revision: 2.3 13-May-2021 07:57:40

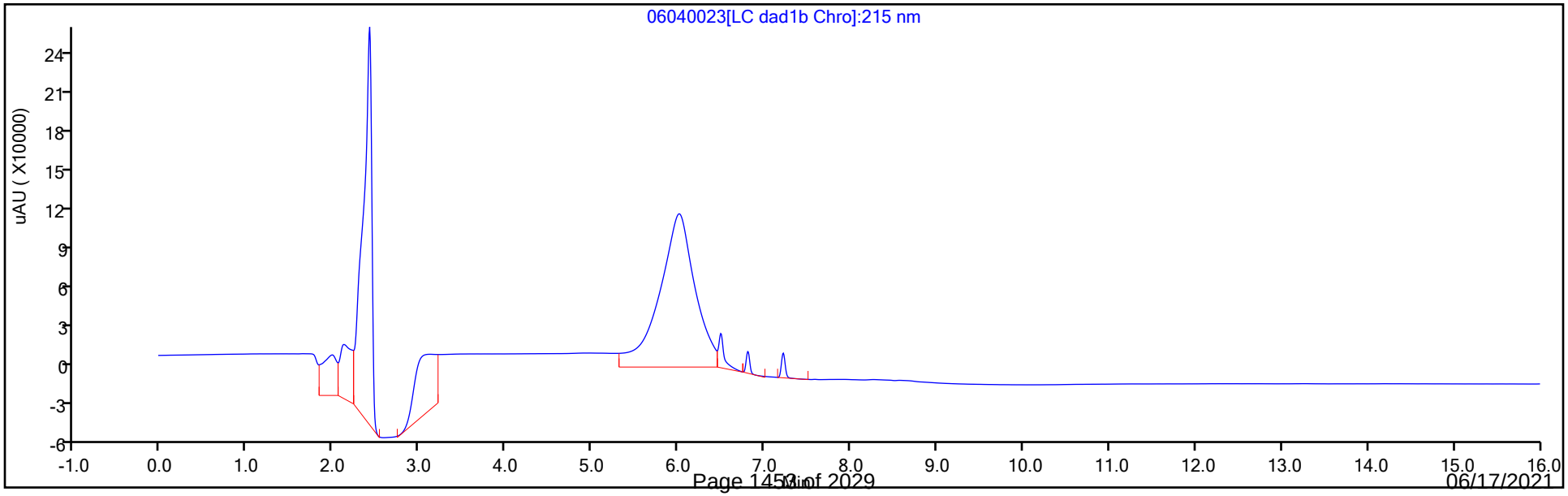
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040023.d				
Injection Date:	04-Jun-2021 23:12:11	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

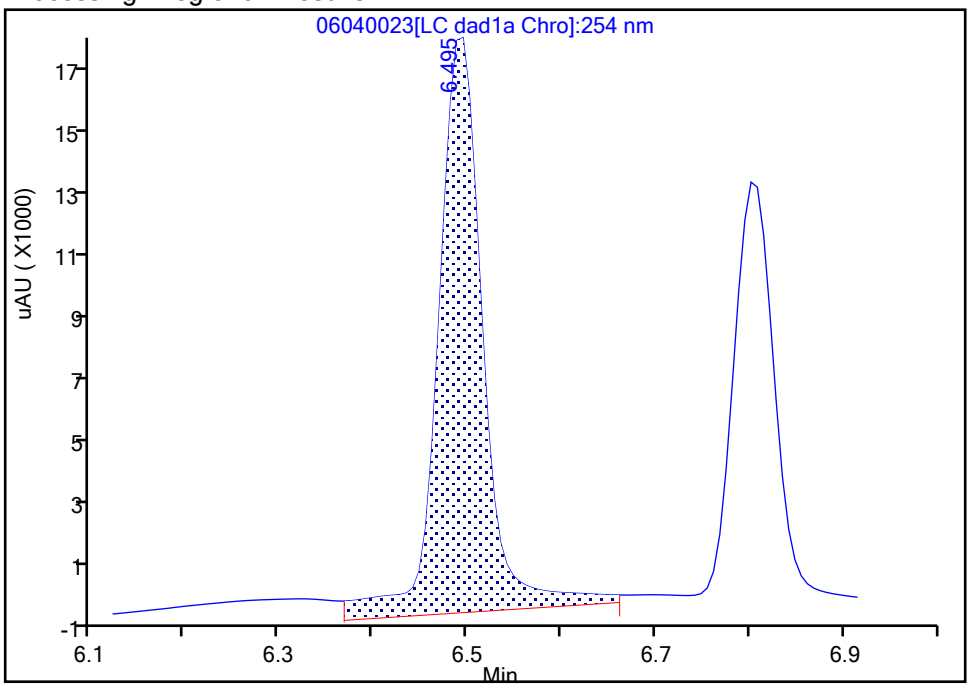
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040023.d				
Injection Date:	04-Jun-2021 23:12:11	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

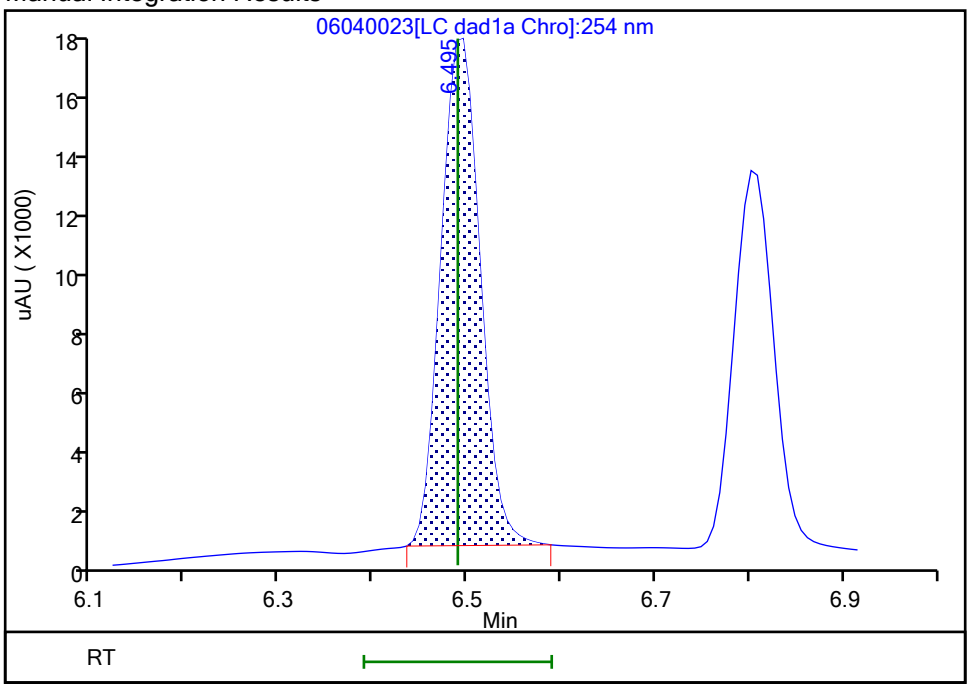
Processing Integration Results

RT: 6.50
Area: 56681
Amount: 0.305055
Amount Units: ug/mL



Manual Integration Results

RT: 6.50
Area: 47531
Amount: 0.255810
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:10:17

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

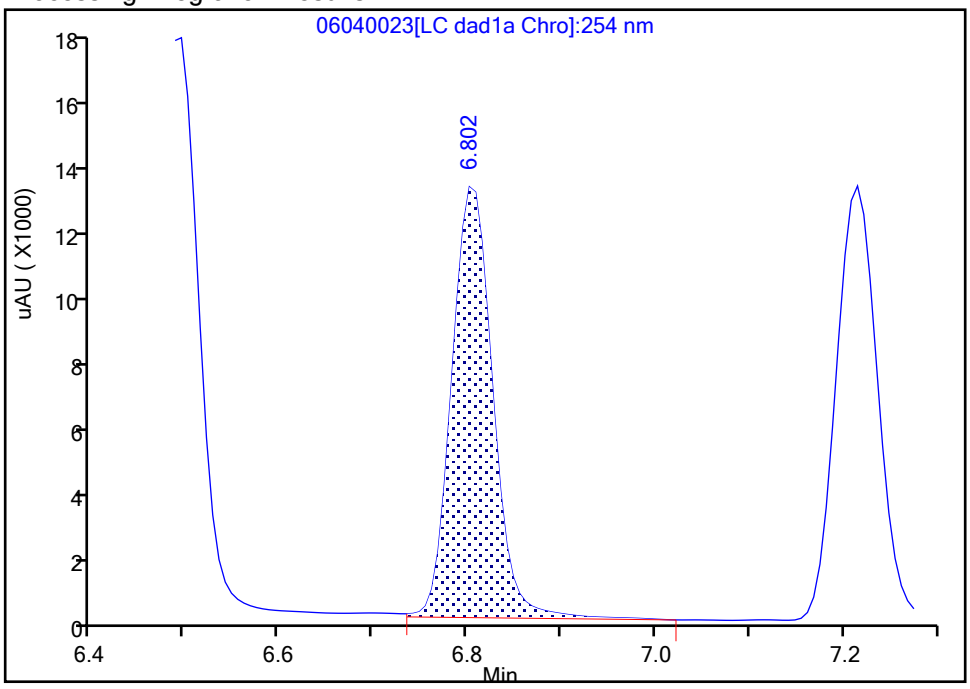
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040023.d				
Injection Date:	04-Jun-2021 23:12:11	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

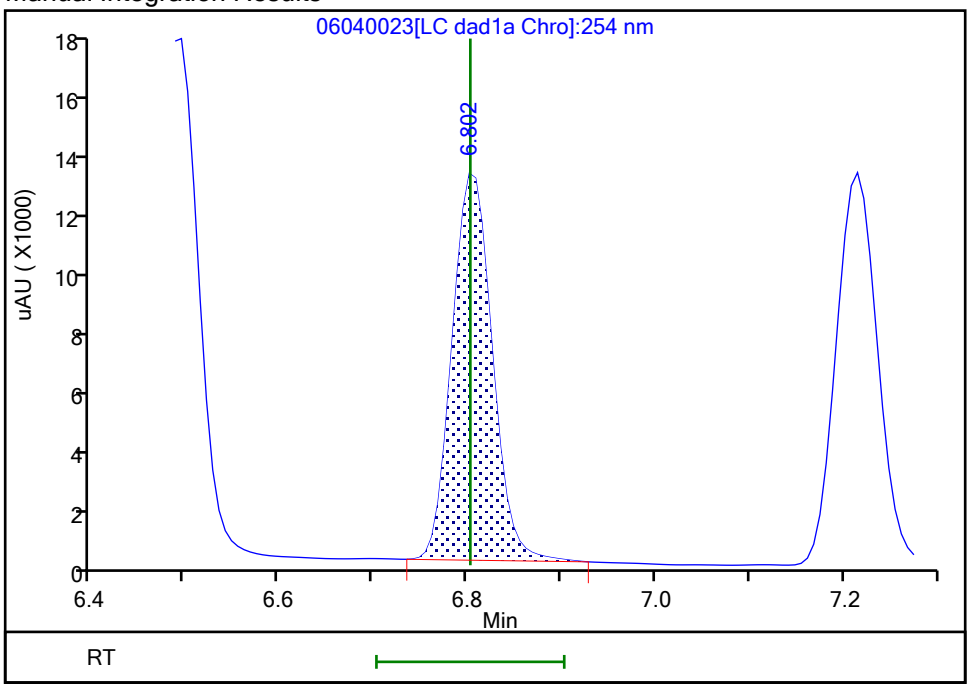
Processing Integration Results

RT: 6.80
Area: 37418
Amount: 0.263286
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 36333
Amount: 0.255651
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:10:20
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/34 Calibration Date: 06/05/2021 03:25

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06040034.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	81716		242	250	-3.2	15.0
RDX	Ave	106261	95928		226	250	-9.7	15.0
Picric acid	Ave	82721	77568		234	250	-6.2	15.0
1,3,5-Trinitrobenzene	Ave	220317	212595		242	251	-3.5	15.0
1,3-Dinitrobenzene	Ave	296329	286295		242	251	-3.4	15.0
Nitrobenzene	Ave	195286	181335		233	251	-7.1	15.0
Tetryl	Ave	172420	160910		234	251	-6.7	15.0
Nitroglycerin	Lin2		61281		2320	2500	-7.0	15.0
2,4,6-Trinitrotoluene	Ave	206038	195789		239	251	-5.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	141802		232	250	-7.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	194506		236	251	-6.0	15.0
2,6-Dinitrotoluene	Ave	143079	136355		239	251	-4.7	15.0
2,4-Dinitrotoluene	Ave	287012	275235		241	251	-4.1	15.0
2-Nitrotoluene	Ave	128392	115984		226	250	-9.7	15.0
4-Nitrotoluene	Ave	111913	100750		226	251	-10.0	15.0
3-Nitrotoluene	Ave	142246	128392		226	250	-9.7	15.0
PETN	Ave	74779	71050		2380	2500	-5.0	15.0
1,2-Dinitrobenzene	Ave	128217	126000		246	250	-1.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/34 Calibration Date: 06/05/2021 03:25

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06040034.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.58	7.43	7.73
Picric acid	7.94	7.79	8.09
1,3,5-Trinitrobenzene	8.62	8.48	8.78
1,3-Dinitrobenzene	9.25	9.10	9.40
Nitrobenzene	9.64	9.49	9.79
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.42	10.27	10.57
2,4,6-Trinitrotoluene	10.88	10.78	10.98
4-Amino-2,6-dinitrotoluene	11.09	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.35	11.24	11.44
2,6-Dinitrotoluene	11.51	11.40	11.60
2,4-Dinitrotoluene	11.68	11.58	11.78
2-Nitrotoluene	12.56	12.39	12.69
4-Nitrotoluene	12.99	12.83	13.13
3-Nitrotoluene	13.58	13.41	13.71
PETN	14.67	14.50	14.80
1,2-Dinitrobenzene	8.50	8.35	8.65

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040034.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2021 03:25:11 ALS Bottle#: 7 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0102084-034
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:22 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:16:07

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.604	6.609	-0.005	20429	0.2500	0.2420	
	7 RDX	1	7.577	7.576	0.001	23982	0.2500	0.2257	
	8 2,4,6-Trinitrophenol	1	7.944	7.942	0.002	19392	0.2500	0.2344	
$	9 1,2-Dinitrobenzene	1	8.497	8.496	0.001	31500	0.2500	0.2457	
	10 1,3,5-Trinitrobenzene	1	8.624	8.629	-0.005	53255	0.2505	0.2417	
	11 1,3-Dinitrobenzene	1	9.250	9.249	0.001	71717	0.2505	0.2420	
	12 Nitrobenzene	1	9.637	9.636	0.001	45515	0.2510	0.2331	
	14 Tetryl	1	9.957	9.956	0.001	40308	0.2505	0.2338	
	15 Nitroglycerin	2	10.417	10.416	0.001	153203	2.50	2.32	
	16 2,4,6-Trinitrotoluene	1	10.884	10.876	0.008	49143	0.2510	0.2385	
	17 4-Amino-2,6-dinitrotoluene	1	11.090	11.076	0.014	35486	0.2503	0.2323	
	18 2-Amino-4,6-dinitrotoluene	1	11.350	11.336	0.014	48821	0.2510	0.2359	
	19 2,6-Dinitrotoluene	1	11.510	11.502	0.008	34225	0.2510	0.2392	
	20 2,4-Dinitrotoluene	1	11.684	11.676	0.008	69084	0.2510	0.2407	
	21 o-Nitrotoluene	1	12.557	12.542	0.015	28996	0.2500	0.2258	
	22 p-Nitrotoluene	1	12.990	12.976	0.014	25238	0.2505	0.2255	
	23 m-Nitrotoluene	1	13.577	13.562	0.015	32130	0.2503	0.2259	
	24 PETN	2	14.670	14.649	0.021	177624	2.50	2.38	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00068 Amount Added: 25.00 Units: uL

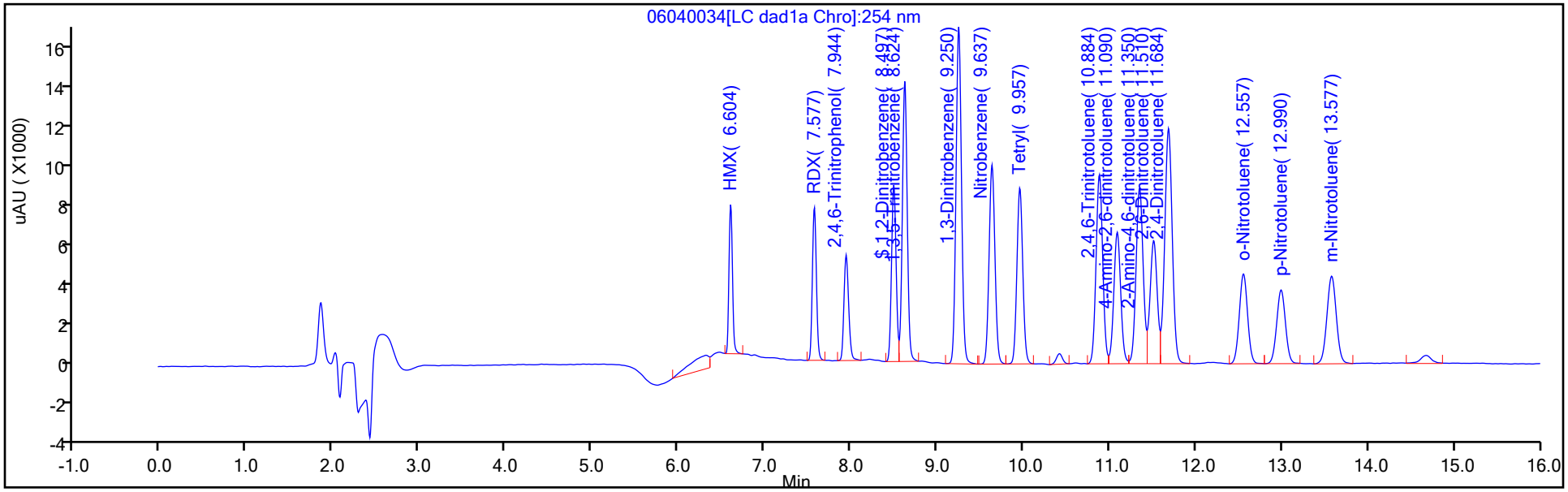
Report Date: 05-Jun-2021 10:20:22 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

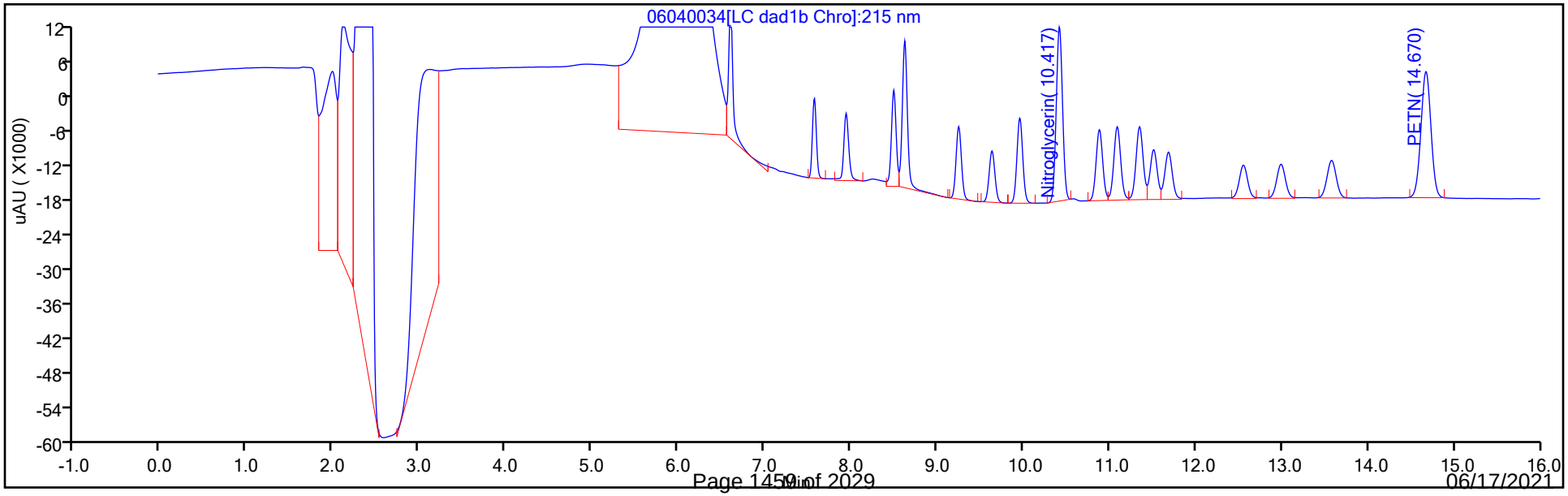
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040034.d

Injection Date:	05-Jun-2021 03:25:11	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	34
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.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/36 Calibration Date: 06/05/2021 04:11

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06040036.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	189499		255	250	2.0	15.0
DNX	Ave	142119	142733		251	250	0.4	15.0
MNX	Ave	130340	133296		298	292	2.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/36 Calibration Date: 06/05/2021 04:11

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06040036.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.39	6.59
DNX	6.80	6.70	6.90
MNX	7.21	7.06	7.36

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040036.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Jun-2021 04:11:07	ALS Bottle#:	9	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0102084-036				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:16:30		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.485	6.490	-0.005	47422	0.2503	0.2552	M
5 DNX	1	6.798	6.803	-0.005	35719	0.2503	0.2513	M
6 MNX	1	7.211	7.210	0.001	38889	0.2918	0.2984	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

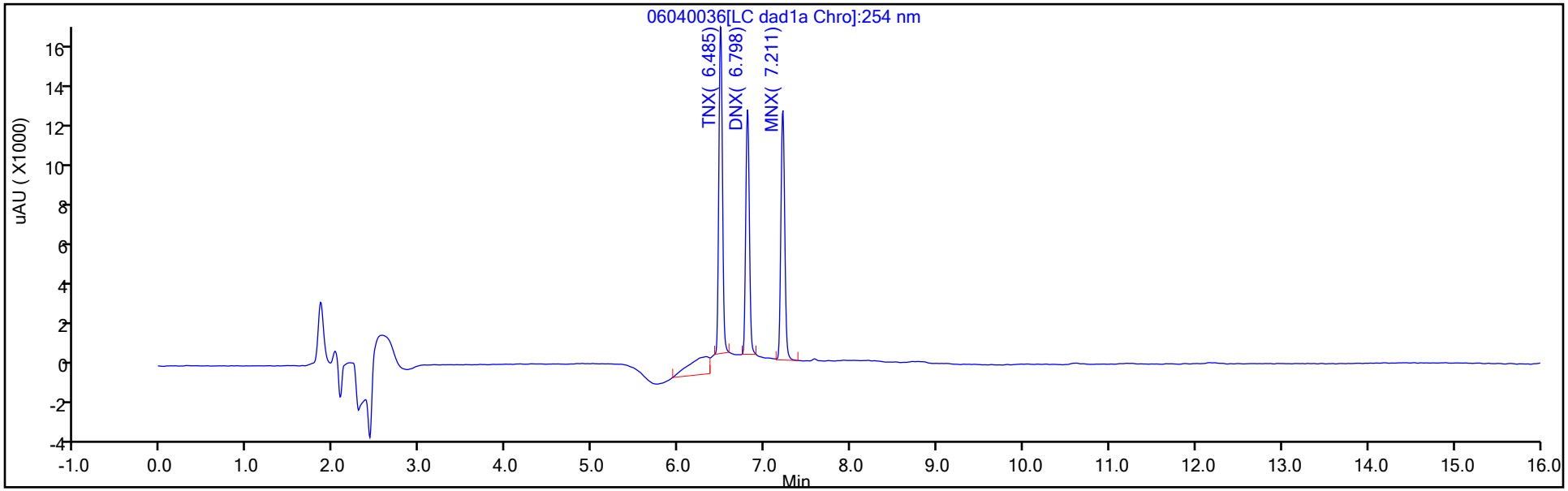
Report Date: 05-Jun-2021 10:20:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

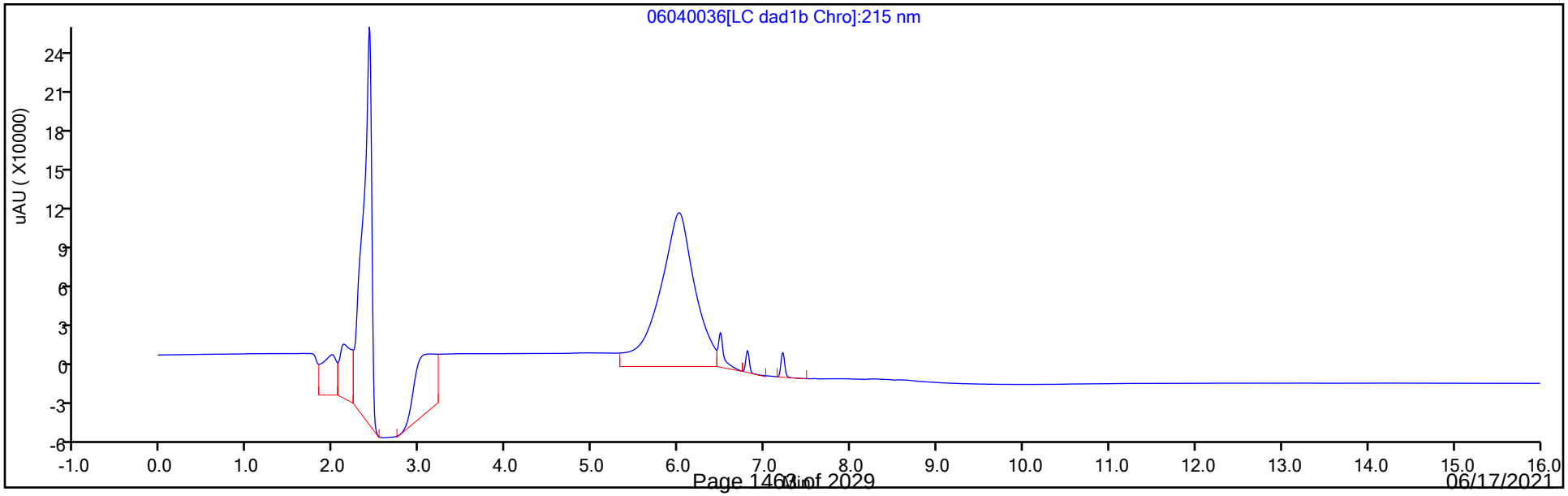
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040036.d

Injection Date:	05-Jun-2021 04:11:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	36
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

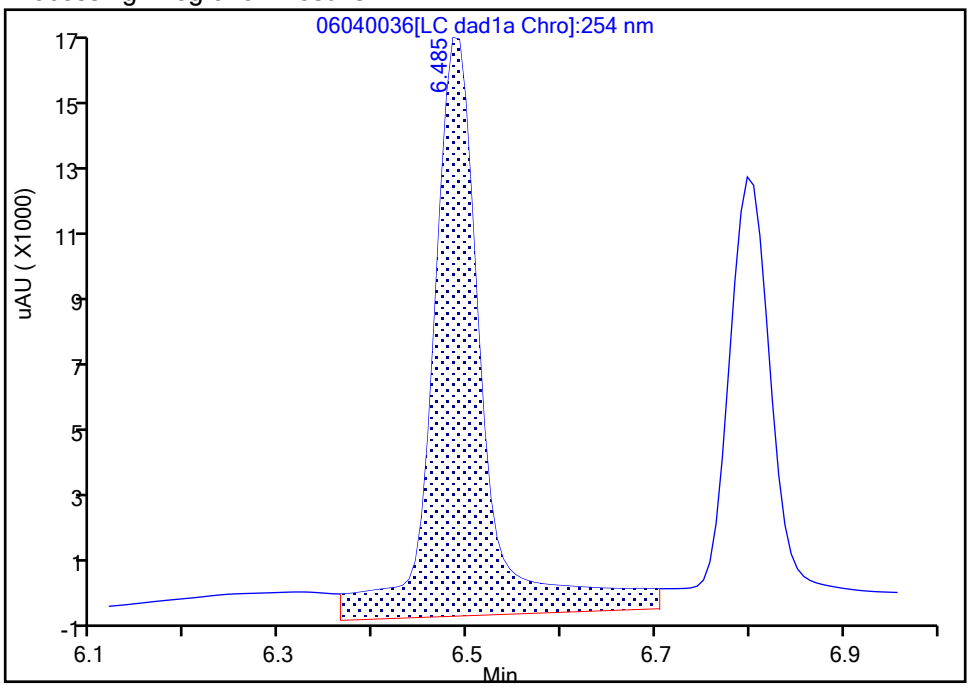
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040036.d				
Injection Date:	05-Jun-2021 04:11:07	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

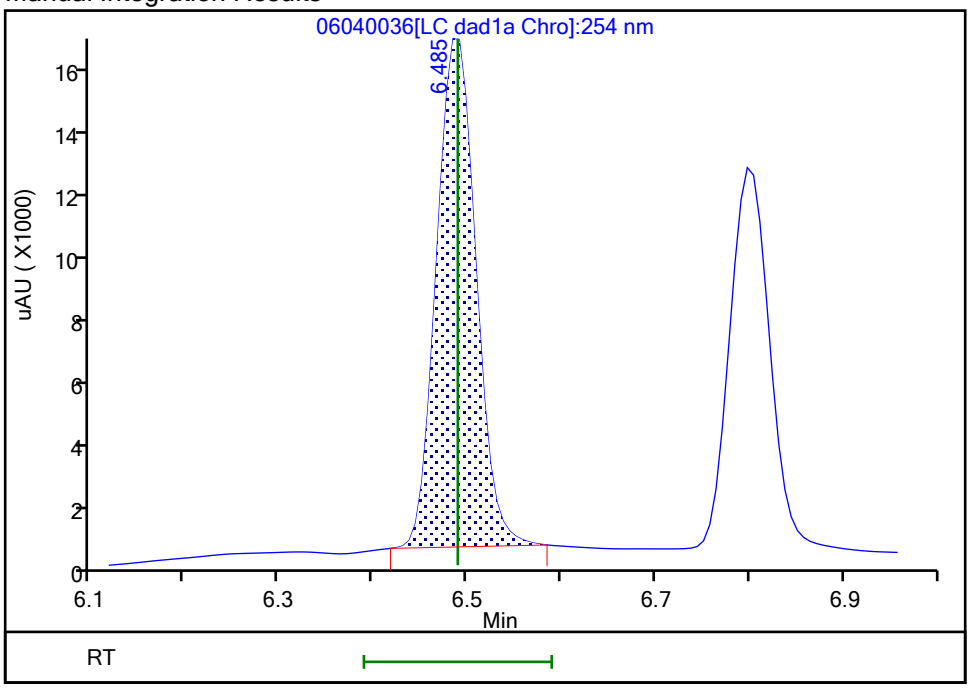
Processing Integration Results

RT: 6.48
Area: 63732
Amount: 0.343003
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 47422
Amount: 0.255223
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:16:25
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

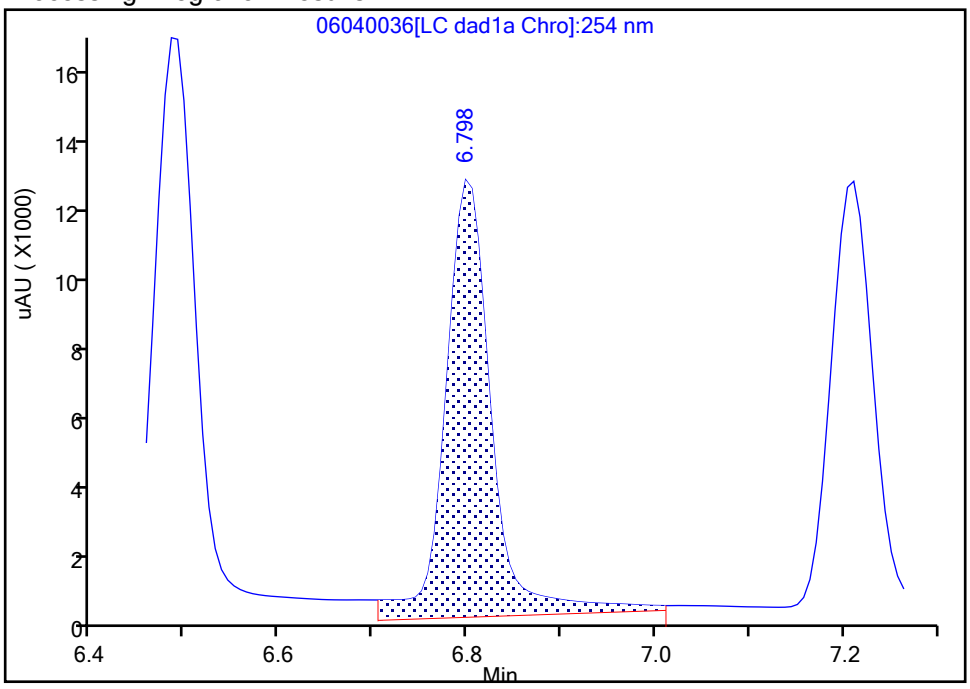
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040036.d				
Injection Date:	05-Jun-2021 04:11:07	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

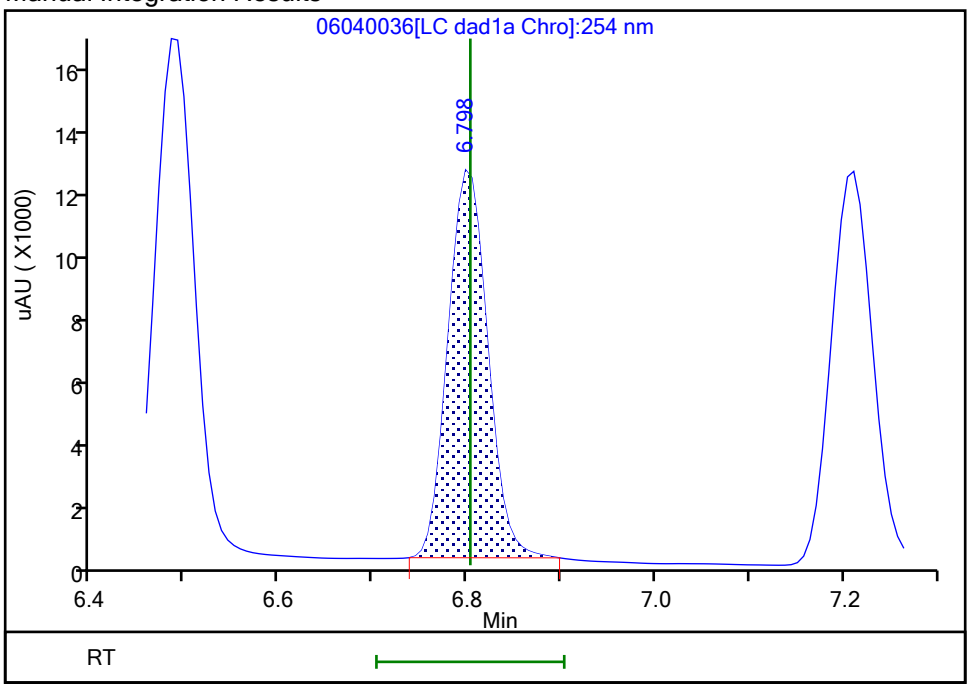
Processing Integration Results

RT: 6.80
Area: 43480
Amount: 0.305940
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 35719
Amount: 0.251331
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:16:29

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/46 Calibration Date: 06/05/2021 08:01

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06040046.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	80368		238	250	-4.8	15.0
RDX	Ave	106261	96584		227	250	-9.1	15.0
Picric acid	Ave	82721	77604		235	250	-6.2	15.0
1,3,5-Trinitrobenzene	Ave	220317	211501		240	251	-4.0	15.0
1,3-Dinitrobenzene	Ave	296329	284455		240	251	-4.0	15.0
Nitrobenzene	Ave	195286	179498		231	251	-8.1	15.0
Tetryl	Ave	172420	161597		235	251	-6.3	15.0
Nitroglycerin	Lin2		61283		2320	2500	-7.0	15.0
2,4,6-Trinitrotoluene	Ave	206038	195685		238	251	-5.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	141682		232	250	-7.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	193143		234	251	-6.7	15.0
2,6-Dinitrotoluene	Ave	143079	138932		244	251	-2.9	15.0
2,4-Dinitrotoluene	Ave	287012	275167		241	251	-4.1	15.0
2-Nitrotoluene	Ave	128392	114040		222	250	-11.2	15.0
4-Nitrotoluene	Ave	111913	99876		224	251	-10.8	15.0
3-Nitrotoluene	Ave	142246	125810		221	250	-11.6	15.0
PETN	Ave	74779	71048		2380	2500	-5.0	15.0
1,2-Dinitrobenzene	Ave	128217	125564		245	250	-2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/46 Calibration Date: 06/05/2021 08:01

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 06040046.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.46	6.76
RDX	7.58	7.43	7.73
Picric acid	7.95	7.79	8.09
1,3,5-Trinitrobenzene	8.63	8.48	8.78
1,3-Dinitrobenzene	9.25	9.10	9.40
Nitrobenzene	9.64	9.49	9.79
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.42	10.27	10.57
2,4,6-Trinitrotoluene	10.88	10.78	10.98
4-Amino-2,6-dinitrotoluene	11.09	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.34	11.24	11.44
2,6-Dinitrotoluene	11.51	11.40	11.60
2,4-Dinitrotoluene	11.68	11.58	11.78
2-Nitrotoluene	12.55	12.39	12.69
4-Nitrotoluene	12.99	12.83	13.13
3-Nitrotoluene	13.58	13.41	13.71
PETN	14.67	14.50	14.80
1,2-Dinitrobenzene	8.50	8.35	8.65

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040046.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2021 08:01:23 ALS Bottle#: 7 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0102084-046
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:28 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:19:28

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.605	6.609	-0.004	20092	0.2500	0.2380	M
	7 RDX	1	7.578	7.576	0.002	24146	0.2500	0.2272	
	8 2,4,6-Trinitrophenol	1	7.945	7.942	0.003	19401	0.2500	0.2345	
$	9 1,2-Dinitrobenzene	1	8.498	8.496	0.002	31391	0.2500	0.2448	
	10 1,3,5-Trinitrobenzene	1	8.625	8.629	-0.004	52981	0.2505	0.2405	
	11 1,3-Dinitrobenzene	1	9.251	9.249	0.002	71256	0.2505	0.2405	
	12 Nitrobenzene	1	9.638	9.636	0.002	45054	0.2510	0.2307	
	14 Tetryl	1	9.958	9.956	0.002	40480	0.2505	0.2348	
	15 Nitroglycerin	2	10.418	10.416	0.002	153208	2.50	2.32	
	16 2,4,6-Trinitrotoluene	1	10.884	10.876	0.008	49117	0.2510	0.2384	
	17 4-Amino-2,6-dinitrotoluene	1	11.091	11.076	0.015	35456	0.2503	0.2321	
	18 2-Amino-4,6-dinitrotoluene	1	11.344	11.336	0.008	48479	0.2510	0.2343	
	19 2,6-Dinitrotoluene	1	11.511	11.502	0.009	34872	0.2510	0.2437	
	20 2,4-Dinitrotoluene	1	11.684	11.676	0.008	69067	0.2510	0.2406	
	21 o-Nitrotoluene	1	12.551	12.542	0.009	28510	0.2500	0.2221	
	22 p-Nitrotoluene	1	12.991	12.976	0.015	25019	0.2505	0.2236	
	23 m-Nitrotoluene	1	13.578	13.562	0.016	31484	0.2503	0.2213	
	24 PETN	2	14.671	14.649	0.022	177619	2.50	2.38	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL

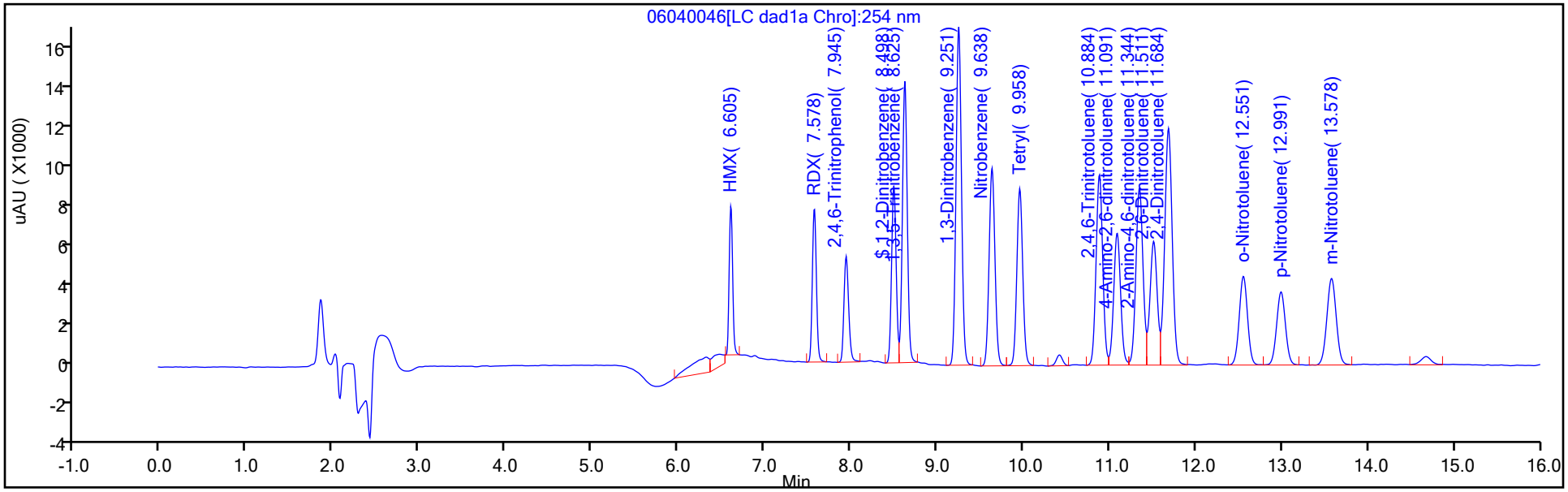
Report Date: 05-Jun-2021 10:20:28 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

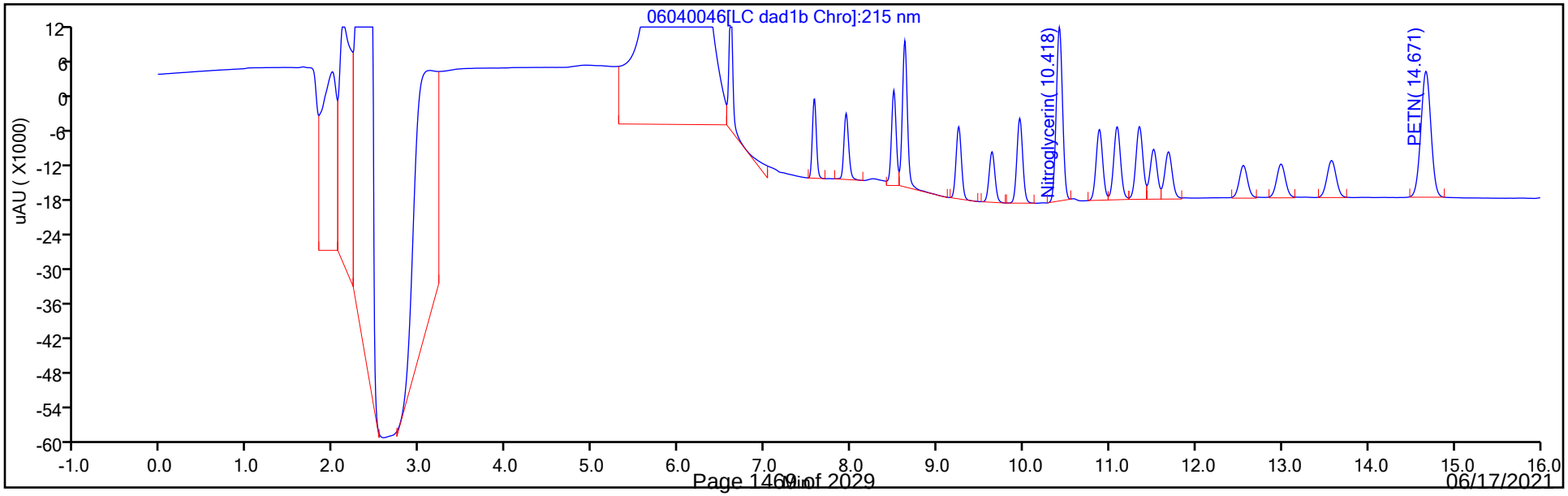
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040046.d

Injection Date:	05-Jun-2021 08:01:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	46
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

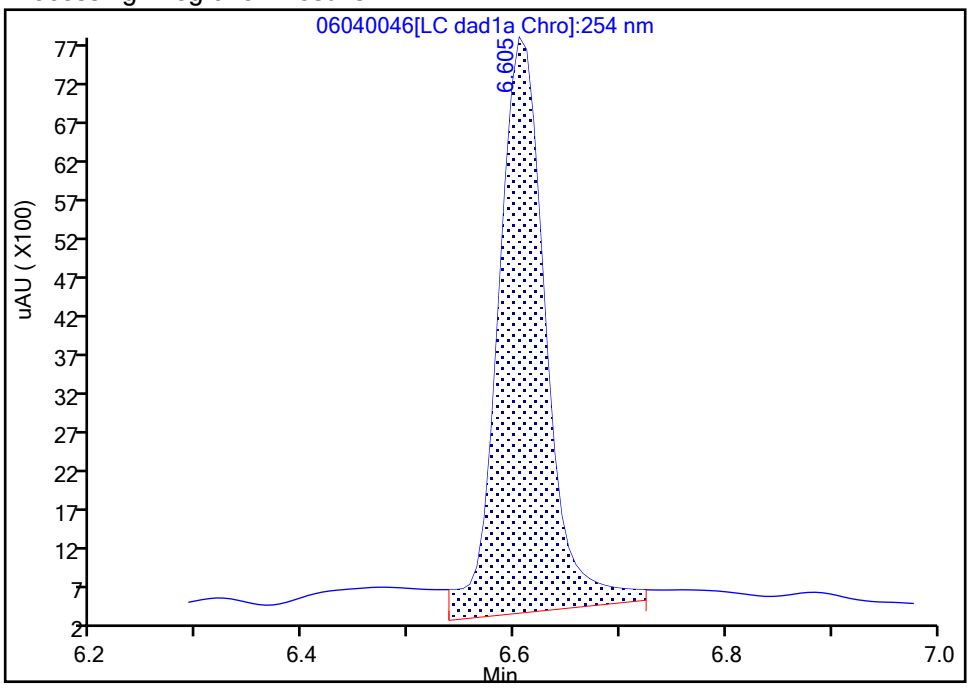
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040046.d				
Injection Date:	05-Jun-2021 08:01:23	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

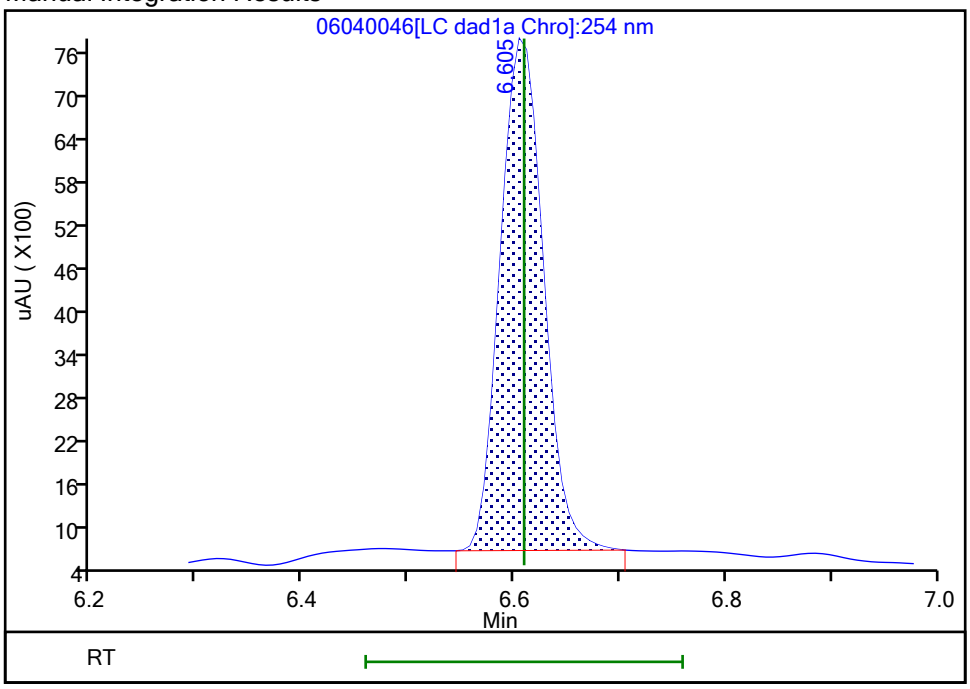
Processing Integration Results

RT: 6.60
Area: 23116
Amount: 0.273817
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 20092
Amount: 0.237996
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:19:27
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/48 Calibration Date: 06/05/2021 08:47

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06040048.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	187393		252	250	0.9	15.0
DNX	Ave	142119	141554		249	250	-0.4	15.0
MNX	Ave	130340	132343		296	292	1.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538649/48 Calibration Date: 06/05/2021 08:47

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 06040048.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.39	6.59
DNX	6.80	6.70	6.90
MNX	7.21	7.06	7.36

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040048.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Jun-2021 08:47:19	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0102084-048				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:29	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:20:05		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.484	6.490	-0.006	46895	0.2503	0.2524	M
5 DNX	1	6.798	6.803	-0.005	35424	0.2503	0.2493	M
6 MNX	1	7.211	7.210	0.001	38611	0.2918	0.2962	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

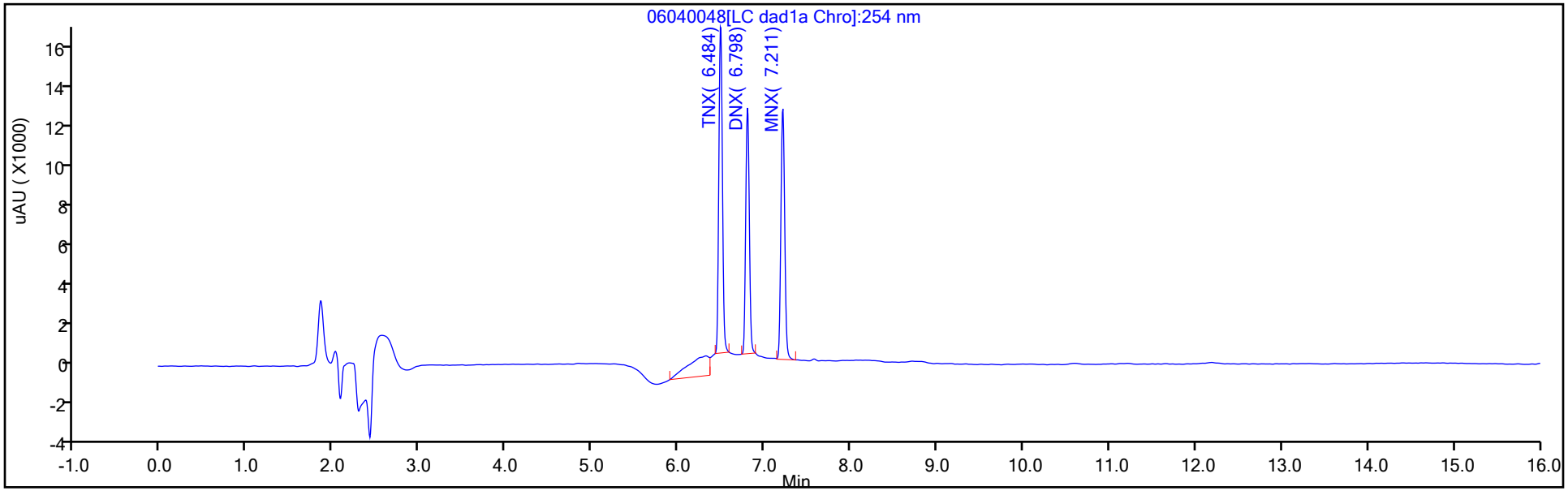
Report Date: 05-Jun-2021 10:20:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

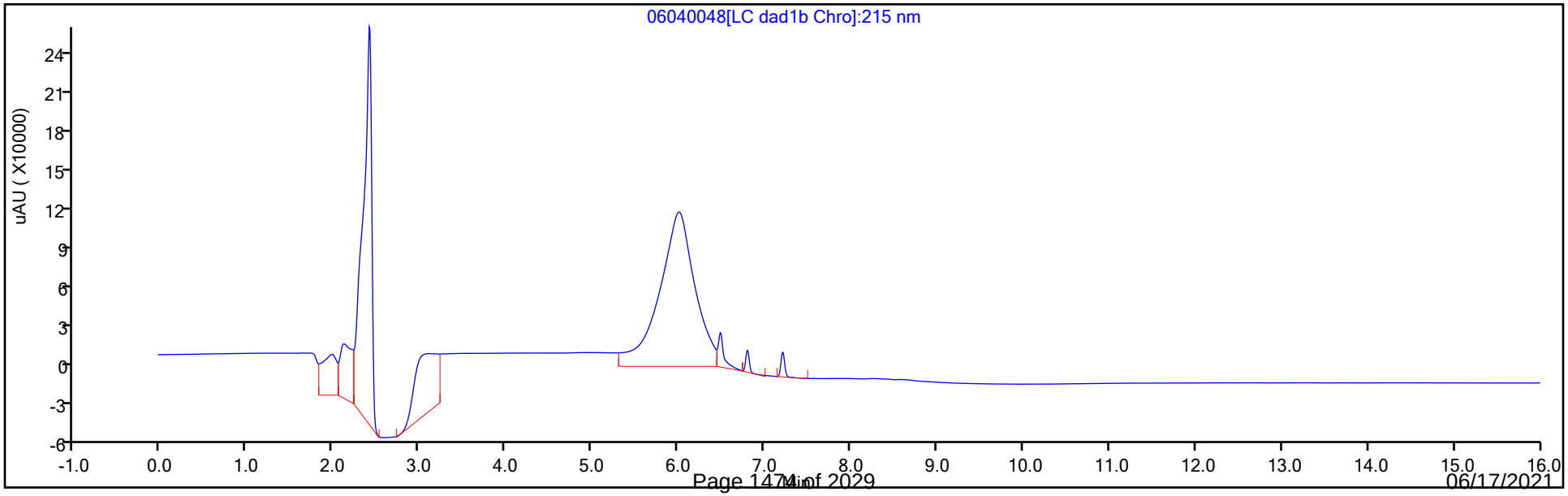
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040048.d

Injection Date:	05-Jun-2021 08:47:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	48
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

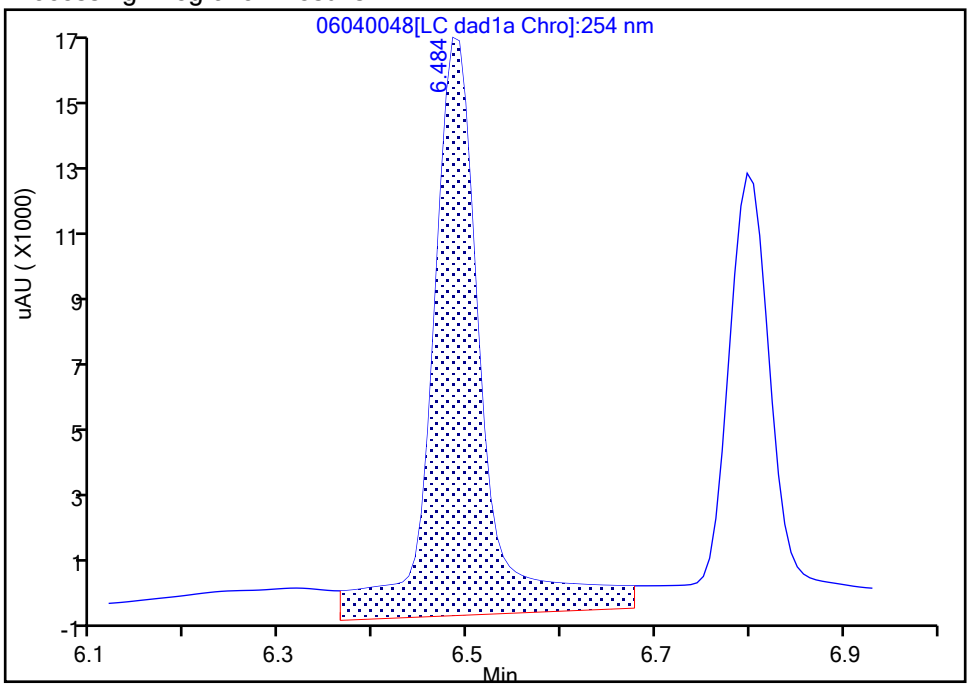
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040048.d				
Injection Date:	05-Jun-2021 08:47:19	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

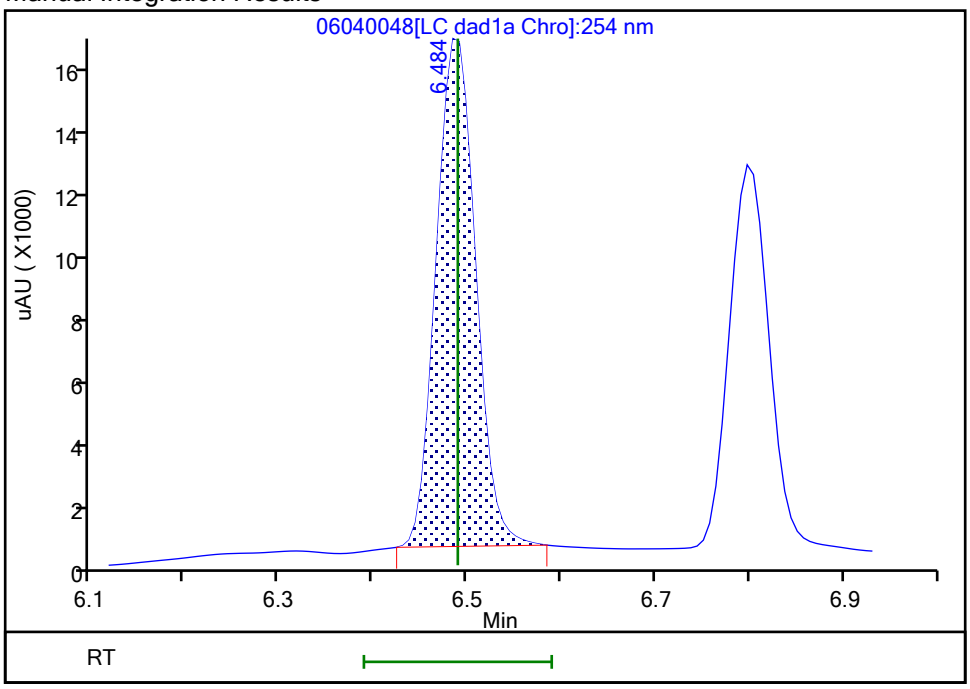
Processing Integration Results

RT: 6.48
Area: 63506
Amount: 0.341787
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 46895
Amount: 0.252387
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:19:58

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

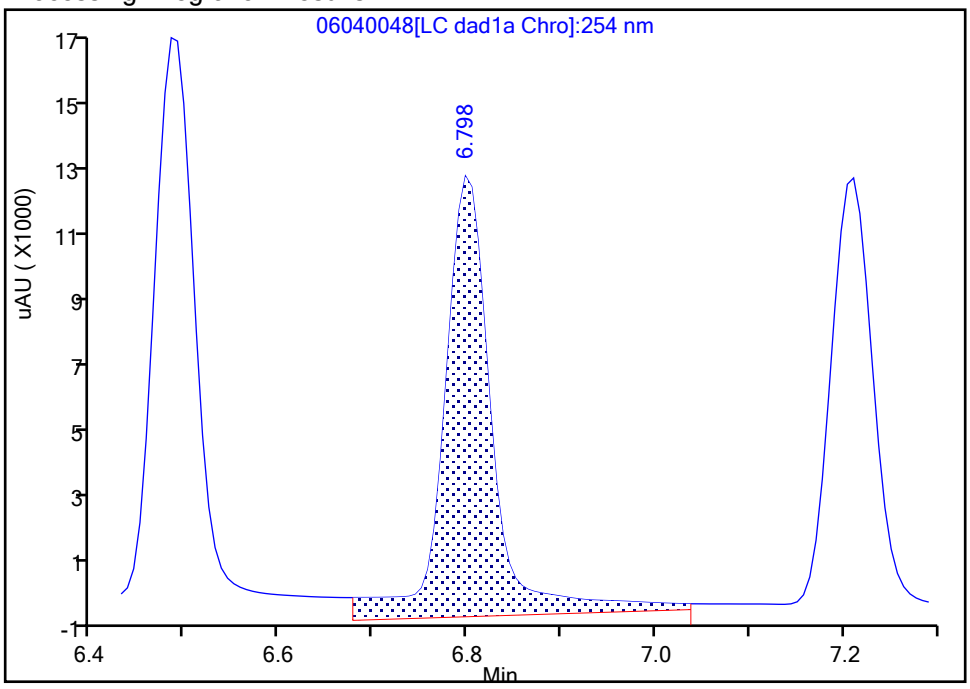
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040048.d				
Injection Date:	05-Jun-2021 08:47:19	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

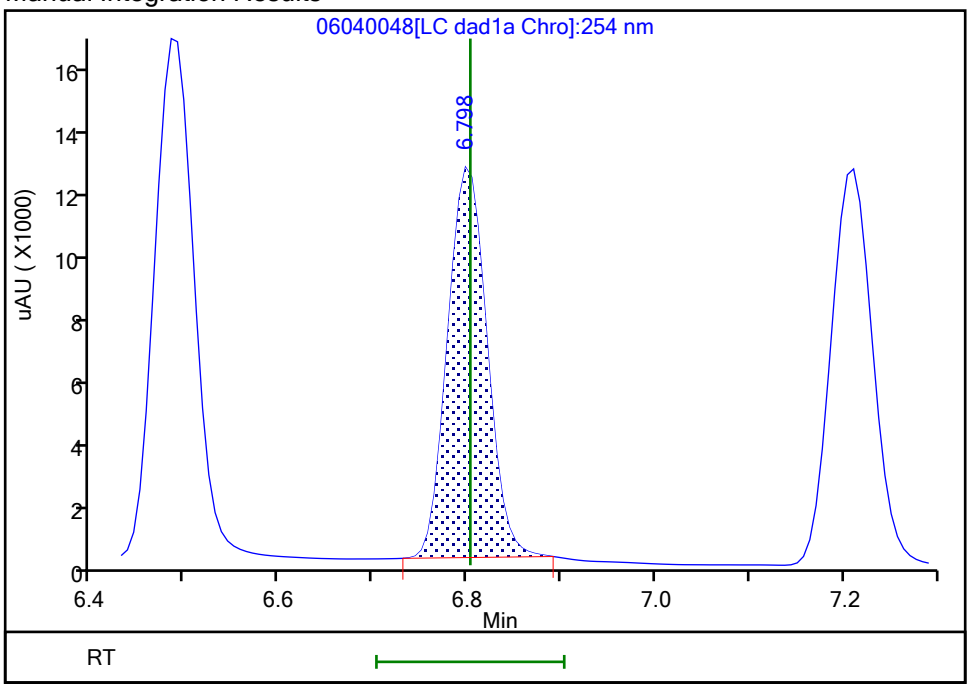
Processing Integration Results

RT: 6.80
Area: 45931
Amount: 0.323186
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 35424
Amount: 0.249255
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:20:01
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-534620/19 Calibration Date: 05/02/2021 00:10

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 019-1401.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		153834		478	500	-4.3	15.0
Picric acid	Ave	159537	164682		516	500	3.2	15.0
RDX	Ave	204270	192088		470	500	-6.0	15.0
Nitrobenzene	Ave	374651	372074		497	500	-0.7	15.0
1,3-Dinitrobenzene	Lin2		568356		502	500	0.5	15.0
Nitroglycerin	Ave	128605	126748		4930	5000	-1.4	15.0
2-Nitrotoluene	Ave	248967	234824		472	500	-5.7	15.0
4-Nitrotoluene	Ave	217187	205250		473	500	-5.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	274856		463	500	-7.4	15.0
3-Nitrotoluene	Ave	278393	258506		464	500	-7.1	15.0
2-Amino-4,6-dinitrotoluene	Lin2		385846		492	500	-1.7	15.0
1,3,5-Trinitrobenzene	Lin2		419618		505	500	1.0	15.0
2,6-Dinitrotoluene	Lin2		264314		496	500	-0.8	15.0
2,4-Dinitrotoluene	Ave	565713	524186		463	500	-7.3	15.0
Tetryl	Lin2		317712		494	500	-1.2	15.0
2,4,6-Trinitrotoluene	Lin2		384566		513	500	2.6	15.0
PETN	Ave	137740	135365		4910	5000	-1.7	15.0
1,2-Dinitrobenzene	Ave	265659	258782		487	500	-2.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-534620/19 Calibration Date: 05/02/2021 00:10

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 019-1401.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.56	6.86
Picric acid	7.83	7.78	8.08
RDX	8.87	8.76	9.06
Nitrobenzene	11.93	11.82	12.12
1,3-Dinitrobenzene	15.49	15.37	15.67
Nitroglycerin	15.92	15.79	16.09
2-Nitrotoluene	16.73	16.61	16.91
4-Nitrotoluene	17.01	16.90	17.20
4-Amino-2,6-dinitrotoluene	17.49	17.38	17.68
3-Nitrotoluene	17.99	17.88	18.18
2-Amino-4,6-dinitrotoluene	18.40	18.28	18.58
1,3,5-Trinitrobenzene	18.92	18.79	19.09
2,6-Dinitrotoluene	20.18	20.05	20.35
2,4-Dinitrotoluene	20.65	20.52	20.82
Tetryl	24.31	24.16	24.46
2,4,6-Trinitrotoluene	25.28	25.13	25.43
PETN	26.19	26.04	26.34
1,2-Dinitrobenzene	13.06	12.94	13.24

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D
Lims ID: ICV INT/ADD
Client ID:
Sample Type: ICV
Inject. Date: 02-May-2021 00:10:18 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT/ADD
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:45:38 Calib Date: 01-May-2021 23:35:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:33:02

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1	4.060	4.126	-0.066	216822	0.5000	0.5224	
2	2,4-diamino-6-nitrotoluene	1	4.647	4.653	-0.006	135044	0.5000	0.5598	
6	HMX	1	6.694	6.713	-0.019	76917	0.5000	0.4783	
5	2,4,6-Trinitrophenol	1	7.827	7.933	-0.106	82341	0.5000	0.5161	
8	RDX	1	8.874	8.906	-0.032	96044	0.5000	0.4702	
9	Nitrobenzene	1	11.934	11.973	-0.039	186037	0.5000	0.4966	
$ 10	1,2-Dinitrobenzene	1	13.060	13.093	-0.033	129391	0.5000	0.4871	
11	3,5-Dinitroaniline	1	14.947	14.979	-0.032	215841	0.5000	0.4774	
12	1,3-Dinitrobenzene	1	15.494	15.519	-0.025	284178	0.5000	0.5024	
13	Nitroglycerin	2	15.920	15.939	-0.019	633738	5.00	4.93	
14	o-Nitrotoluene	1	16.727	16.759	-0.032	117412	0.5000	0.4716	
15	p-Nitrotoluene	1	17.014	17.046	-0.032	102625	0.5000	0.4725	
16	4-Amino-2,6-dinitrotoluene	1	17.494	17.526	-0.032	137428	0.5000	0.4632	
17	m-Nitrotoluene	1	17.994	18.026	-0.032	129253	0.5000	0.4643	
18	2-Amino-4,6-dinitrotoluene	1	18.400	18.426	-0.026	192923	0.5000	0.4916	
19	1,3,5-Trinitrobenzene	1	18.920	18.939	-0.019	209809	0.5000	0.5052	
20	2,6-Dinitrotoluene	1	20.180	20.199	-0.019	132157	0.5000	0.4958	
21	2,4-Dinitrotoluene	1	20.647	20.666	-0.019	262093	0.5000	0.4633	
22	Tetryl	1	24.314	24.313	0.001	158856	0.5000	0.4941	
23	2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	192283	0.5000	0.5131	
24	PETN	2	26.187	26.186	0.001	676826	5.00	4.91	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

3,5-DNA LCS_00038	Amount Added:	50.00	Units: uL
8330 LCS_00108	Amount Added:	50.00	Units: uL
8330Surrogate_00124	Amount Added:	50.00	Units: uL
8330DiaminLCS_00039	Amount Added:	50.00	Units: uL

Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

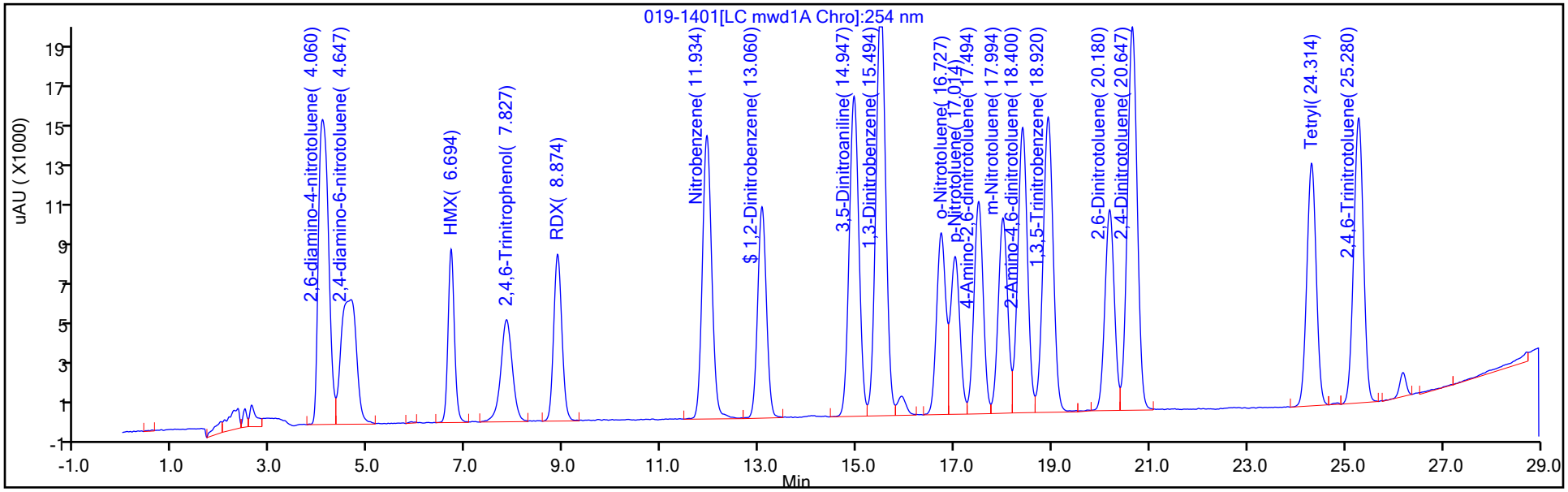
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D

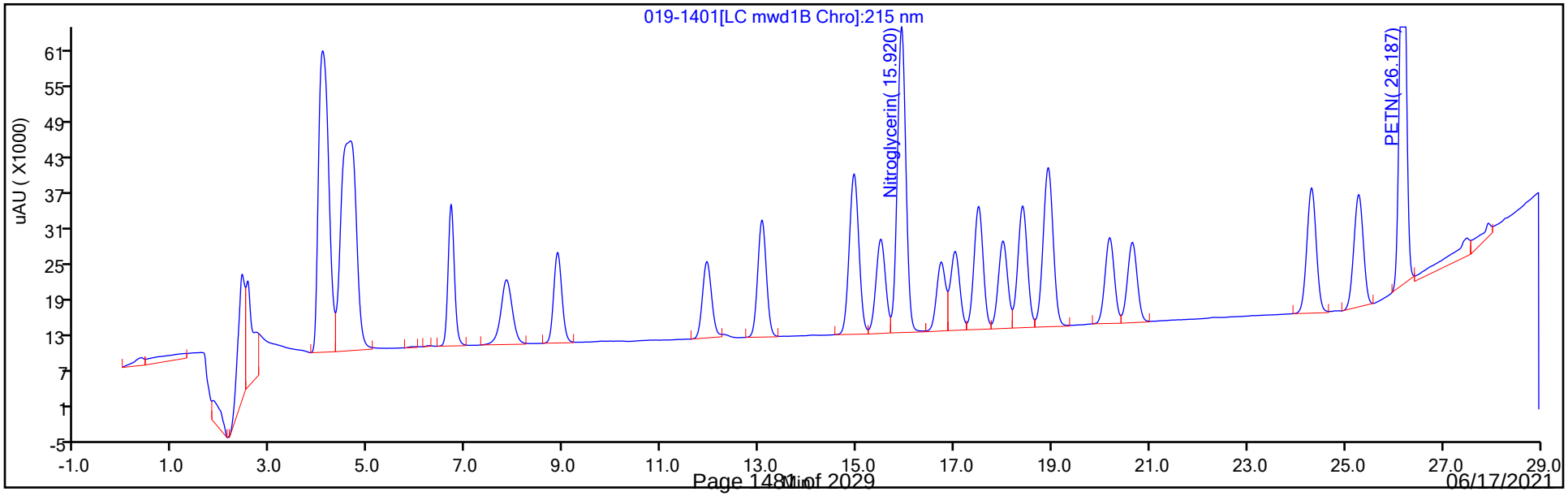
Injection Date:	02-May-2021 00:10:18	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	ICV INT/ADD			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

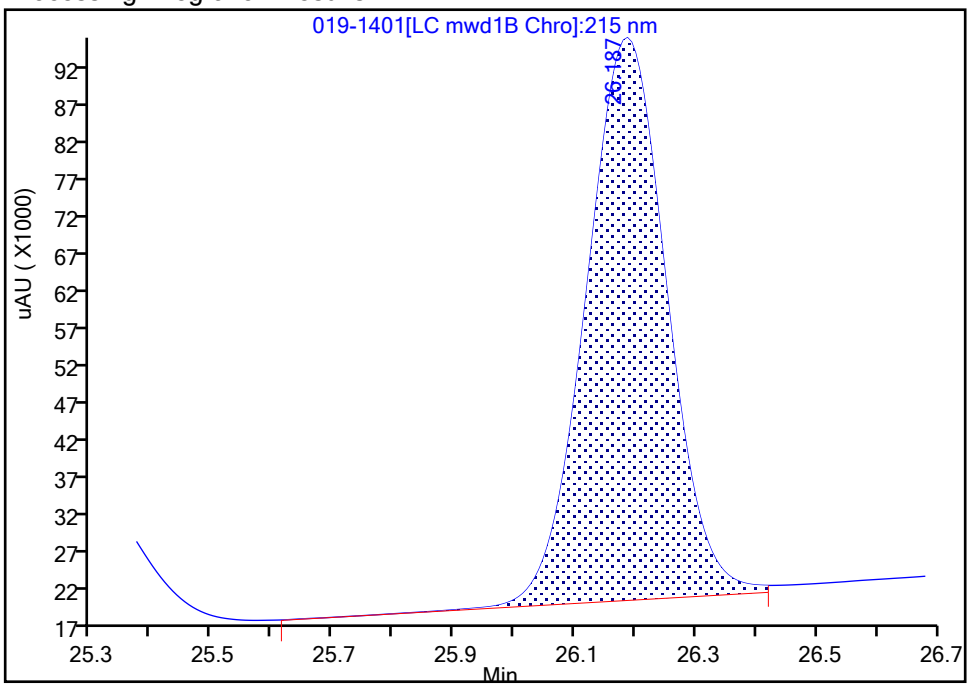
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D
Injection Date: 02-May-2021 00:10:18 Instrument ID: CHHPLC_X5
Lims ID: ICV INT/ADD
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

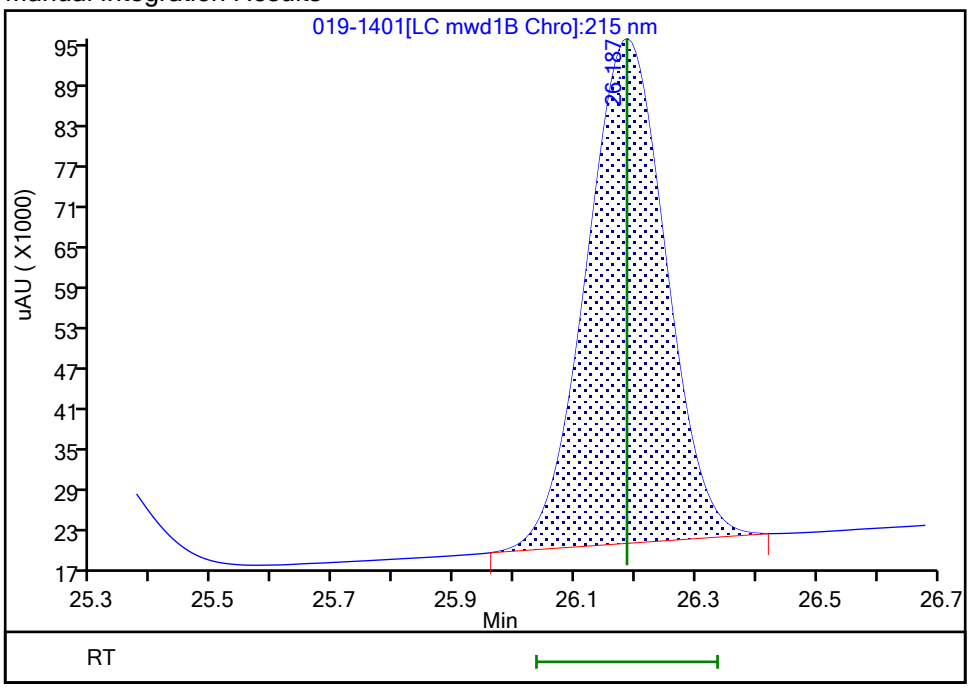
Processing Integration Results

RT: 26.19
Area: 693830
Amount: 5.037230
Amount Units: ug/ml



Manual Integration Results

RT: 26.19
Area: 676826
Amount: 4.913780
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:43:01
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-534620/28 Calibration Date: 05/02/2021 05:26

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 028-2301.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	376410		501	501	0.0	15.0
DNX	Ave	284791	287804		506	501	1.1	15.0
MNX	Ave	264843	265575		585	584	0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: ICV 280-534620/28 Calibration Date: 05/02/2021 05:26

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 028-2301.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.07	4.93	5.23
DNX	5.89	5.75	6.05
MNX	7.44	7.31	7.61

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\028-2301.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 02-May-2021 05:26:08 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:45:38 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:36:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.067	5.075	-0.008	188393	0.5005	0.5009	
4 DNX	1	5.894	5.902	-0.008	144046	0.5005	0.5058	
7 MNX	1	7.441	7.455	-0.014	154963	0.5835	0.5851	

Reagents:

8330_OP_DMT_00010 Amount Added: 50.00 Units: uL

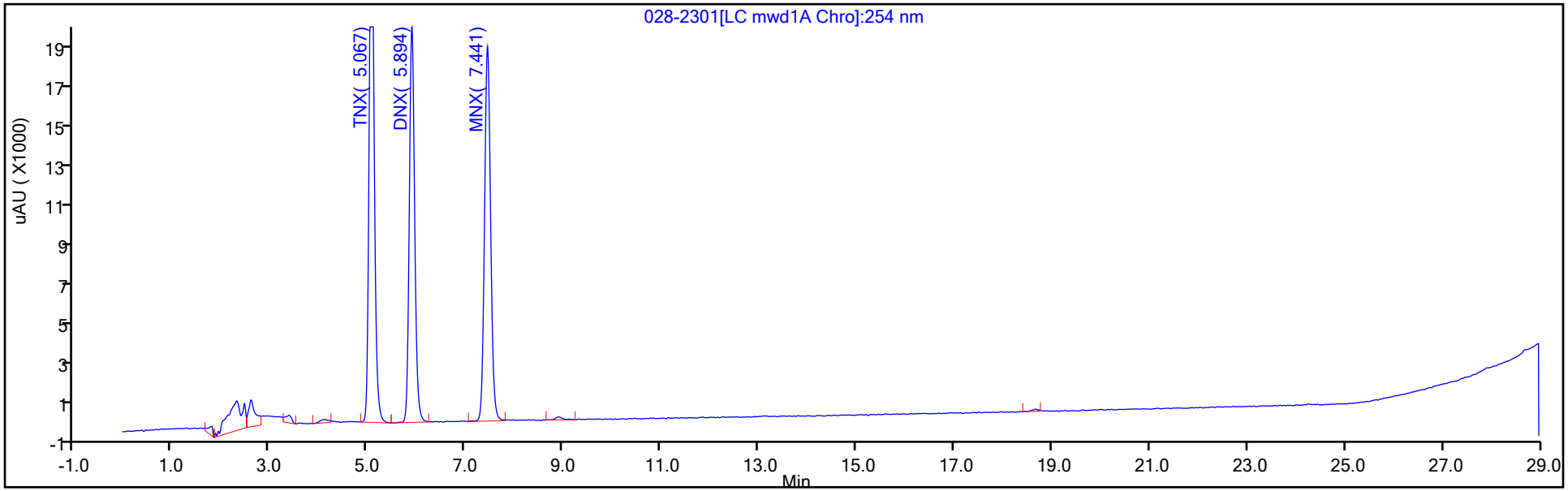
Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

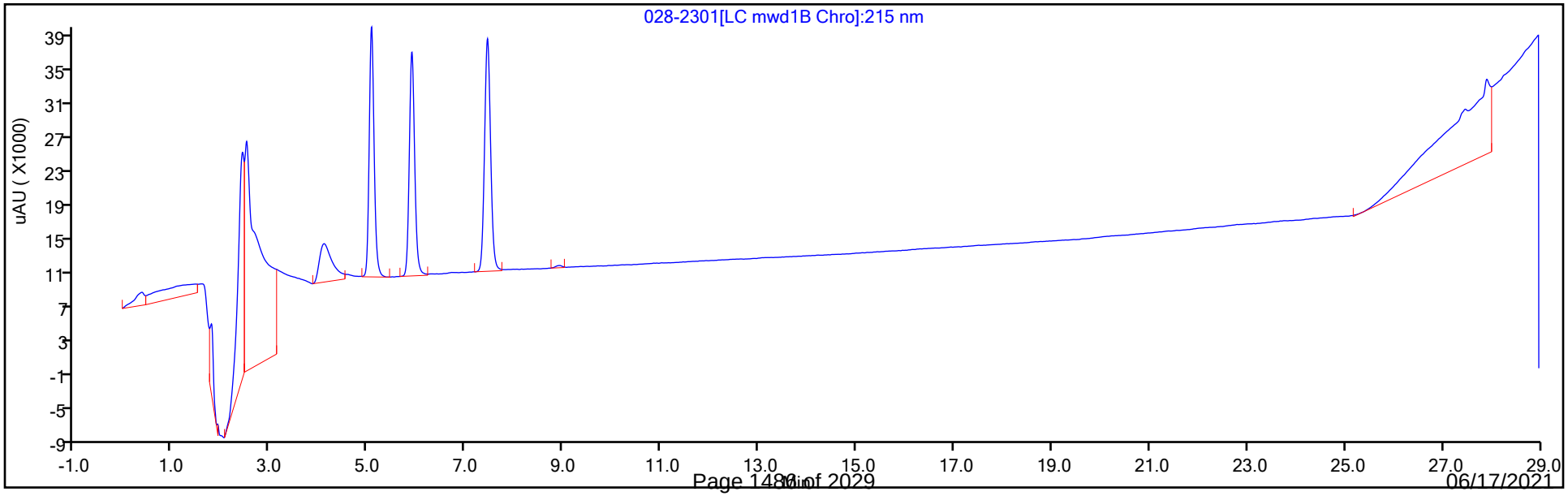
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\028-2301.D

Injection Date:	02-May-2021 05:26:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	ICV DMT			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538650/7 Calibration Date: 06/04/2021 17:46

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06040007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		161668		248	250	-0.6	15.0
Picric acid	Ave	159537	160012		251	250	0.3	15.0
RDX	Ave	204270	199824		245	250	-2.2	15.0
Nitrobenzene	Ave	374651	371271		249	251	-0.9	15.0
1,3-Dinitrobenzene	Lin2		579174		255	251	1.9	15.0
Nitroglycerin	Ave	128605	126745		2460	2500	-1.4	15.0
2-Nitrotoluene	Ave	248967	240460		241	250	-3.4	15.0
4-Nitrotoluene	Ave	217187	209465		242	251	-3.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	277459		234	250	-6.5	15.0
3-Nitrotoluene	Ave	278393	261994		236	250	-5.9	15.0
2-Amino-4,6-dinitrotoluene	Lin2		393056		250	251	-0.5	15.0
1,3,5-Trinitrobenzene	Lin2		436052		260	251	3.6	15.0
2,6-Dinitrotoluene	Lin2		269574		252	251	0.5	15.0
2,4-Dinitrotoluene	Ave	565713	544163		241	251	-3.8	15.0
Tetryl	Lin2		319673		246	251	-1.7	15.0
2,4,6-Trinitrotoluene	Lin2		381442		253	251	0.9	15.0
PETN	Ave	137740	141465		2570	2500	2.7	15.0
1,2-Dinitrobenzene	Ave	265659	254472		239	250	-4.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538650/7 Calibration Date: 06/04/2021 17:46

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06040007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.67	6.52	6.82
Picric acid	7.71	7.56	7.86
RDX	8.85	8.70	9.00
Nitrobenzene	11.91	11.76	12.06
1,3-Dinitrobenzene	15.44	15.29	15.59
Nitroglycerin	15.85	15.70	16.00
2-Nitrotoluene	16.68	16.53	16.83
4-Nitrotoluene	16.97	16.82	17.12
4-Amino-2,6-dinitrotoluene	17.42	17.27	17.57
3-Nitrotoluene	17.94	17.79	18.09
2-Amino-4,6-dinitrotoluene	18.31	18.16	18.46
1,3,5-Trinitrobenzene	18.85	18.70	19.00
2,6-Dinitrotoluene	20.10	19.95	20.25
2,4-Dinitrotoluene	20.56	20.41	20.71
Tetryl	24.18	24.03	24.33
2,4,6-Trinitrotoluene	25.17	25.02	25.32
PETN	26.09	25.94	26.24
1,2-Dinitrobenzene	13.01	12.86	13.16

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040007.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Jun-2021 17:46:48 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0102085-007
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:22:57 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 04-Jun-2021 18:35:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.114	4.114	0.000	103376	0.2500	0.2441	
2 2,4-diamino-6-nitrotoluene	1	4.627	4.627	0.000	61385	0.2500	0.2515	
6 HMX	1	6.674	6.674	0.000	40417	0.2500	0.2484	
5 2,4,6-Trinitrophenol	1	7.707	7.707	0.000	40003	0.2500	0.2507	
8 RDX	1	8.847	8.847	0.000	49956	0.2500	0.2446	
9 Nitrobenzene	1	11.913	11.913	0.000	93189	0.2510	0.2487	
$ 10 1,2-Dinitrobenzene	1	13.013	13.013	0.000	63618	0.2500	0.2395	
11 3,5-Dinitroaniline	1	14.880	14.880	0.000	112311	0.2500	0.2474	
12 1,3-Dinitrobenzene	1	15.440	15.440	0.000	145083	0.2505	0.2553	
13 Nitroglycerin	2	15.847	15.847	0.000	316863	2.50	2.46	
14 o-Nitrotoluene	1	16.680	16.680	0.000	60115	0.2500	0.2415	
15 p-Nitrotoluene	1	16.967	16.967	0.000	52471	0.2505	0.2416	
16 4-Amino-2,6-dinitrotoluene	1	17.420	17.420	0.000	69434	0.2503	0.2340	
17 m-Nitrotoluene	1	17.940	17.940	0.000	65564	0.2503	0.2355	
18 2-Amino-4,6-dinitrotoluene	1	18.313	18.313	0.000	98657	0.2510	0.2498	
19 1,3,5-Trinitrobenzene	1	18.847	18.847	0.000	109231	0.2505	0.2596	
20 2,6-Dinitrotoluene	1	20.100	20.100	0.000	67663	0.2510	0.2523	
21 2,4-Dinitrotoluene	1	20.560	20.560	0.000	136585	0.2510	0.2414	
22 Tetryl	1	24.180	24.180	0.000	80078	0.2505	0.2461	
23 2,4,6-Trinitrotoluene	1	25.167	25.167	0.000	95742	0.2510	0.2534	
24 PETN	2	26.087	26.087	0.000	353663	2.50	2.57	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00068	Amount Added:	25.00	Units: uL
8330_ADDs_00028	Amount Added:	12.50	Units: uL

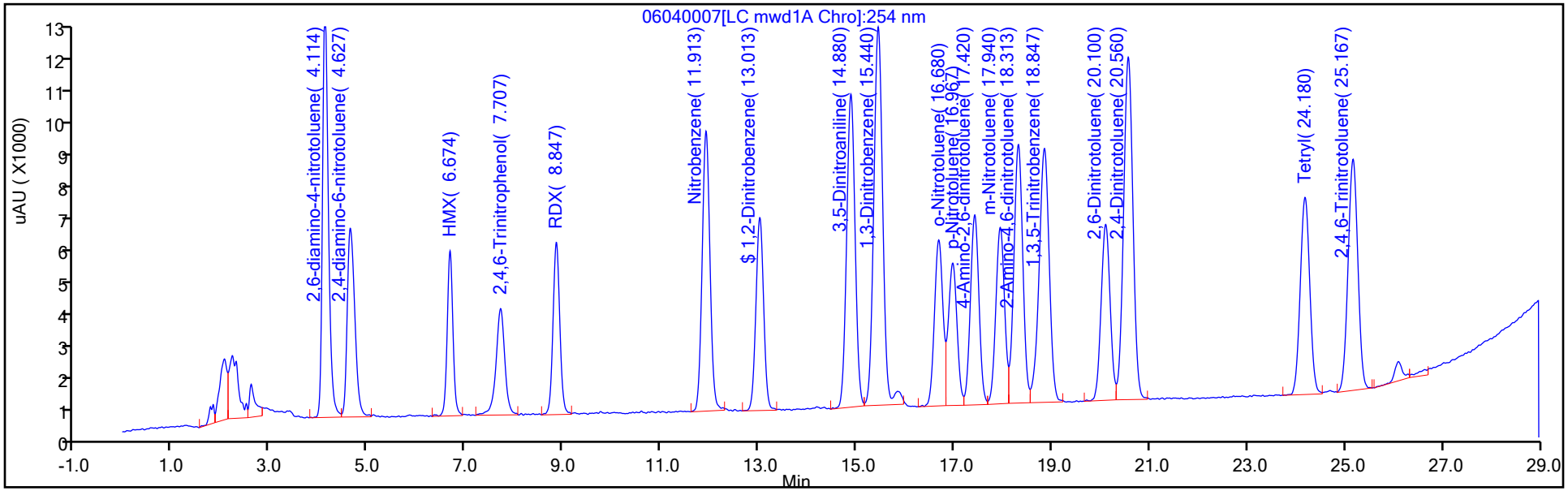
Report Date: 05-Jun-2021 10:22:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

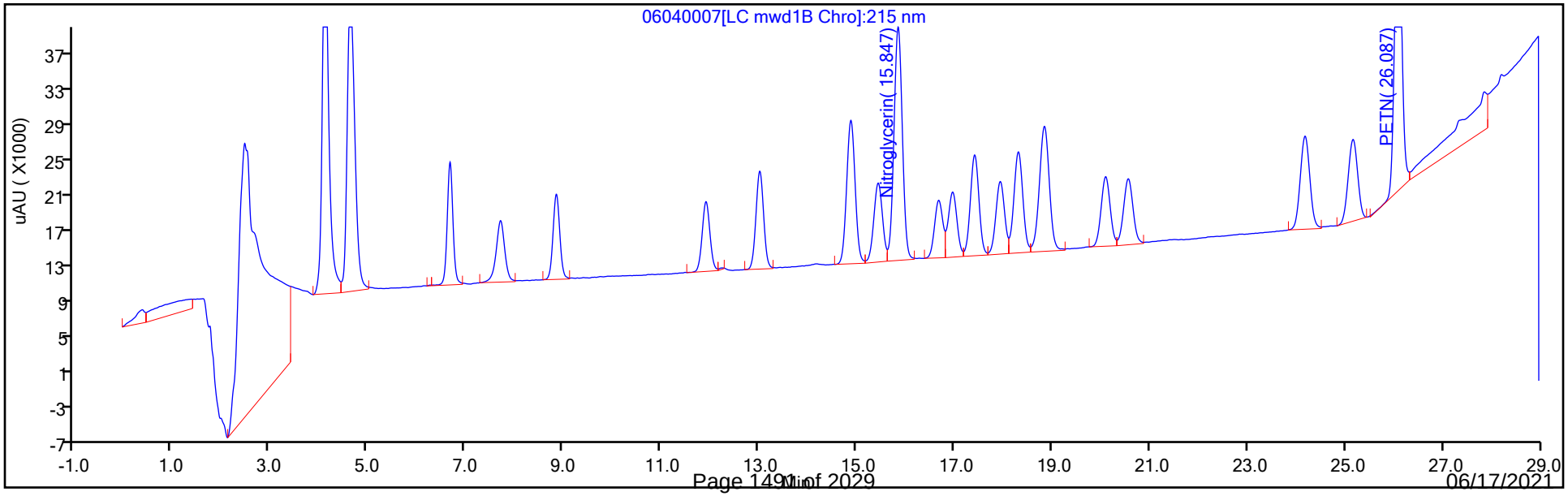
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040007.D

Injection Date:	04-Jun-2021 17:46:48	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538650/15 Calibration Date: 06/04/2021 21:16

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06040015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		161692		248	250	-0.6	15.0
Picric acid	Ave	159537	156200		245	250	-2.1	15.0
RDX	Ave	204270	198584		243	250	-2.8	15.0
Nitrobenzene	Ave	374651	365327		245	251	-2.5	15.0
1,3-Dinitrobenzene	Lin2		578327		255	251	1.8	15.0
Nitroglycerin	Ave	128605	126620		2460	2500	-1.5	15.0
2-Nitrotoluene	Ave	248967	240224		241	250	-3.5	15.0
4-Nitrotoluene	Ave	217187	207457		239	251	-4.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	279904		236	250	-5.7	15.0
3-Nitrotoluene	Ave	278393	260823		234	250	-6.3	15.0
2-Amino-4,6-dinitrotoluene	Lin2		396438		252	251	0.4	15.0
1,3,5-Trinitrobenzene	Lin2		437852		261	251	4.1	15.0
2,6-Dinitrotoluene	Lin2		268590		251	251	0.1	15.0
2,4-Dinitrotoluene	Ave	565713	547406		243	251	-3.2	15.0
Tetryl	Lin2		323054		249	251	-0.7	15.0
2,4,6-Trinitrotoluene	Lin2		382120		254	251	1.1	15.0
PETN	Ave	137740	142716		2590	2500	3.6	15.0
1,2-Dinitrobenzene	Ave	265659	255764		241	250	-3.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538650/15 Calibration Date: 06/04/2021 21:16

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06040015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.52	6.82
Picric acid	7.75	7.56	7.86
RDX	8.87	8.70	9.00
Nitrobenzene	11.94	11.76	12.06
1,3-Dinitrobenzene	15.47	15.29	15.59
Nitroglycerin	15.87	15.70	16.00
2-Nitrotoluene	16.71	16.53	16.83
4-Nitrotoluene	16.99	16.82	17.12
4-Amino-2,6-dinitrotoluene	17.45	17.27	17.57
3-Nitrotoluene	17.97	17.79	18.09
2-Amino-4,6-dinitrotoluene	18.35	18.16	18.46
1,3,5-Trinitrobenzene	18.88	18.70	19.00
2,6-Dinitrotoluene	20.13	19.95	20.25
2,4-Dinitrotoluene	20.59	20.41	20.71
Tetryl	24.22	24.03	24.33
2,4,6-Trinitrotoluene	25.20	25.02	25.32
PETN	26.11	25.94	26.24
1,2-Dinitrobenzene	13.05	12.86	13.16

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040015.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Jun-2021 21:16:45 ALS Bottle#: 7 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0102085-015
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:22:59 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1666

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	4.113	4.114	-0.001	103439	0.2500	0.2442	
2 2,4-diamino-6-nitrotoluene	1	4.640	4.627	0.013	61007	0.2500	0.2500	
6 HMX	1	6.686	6.674	0.012	40423	0.2500	0.2484	
5 2,4,6-Trinitrophenol	1	7.746	7.707	0.039	39050	0.2500	0.2448	
8 RDX	1	8.873	8.847	0.026	49646	0.2500	0.2430	
9 Nitrobenzene	1	11.939	11.913	0.026	91697	0.2510	0.2448	
$ 10 1,2-Dinitrobenzene	1	13.046	13.013	0.033	63941	0.2500	0.2407	
11 3,5-Dinitroaniline	1	14.913	14.880	0.033	111944	0.2500	0.2466	
12 1,3-Dinitrobenzene	1	15.473	15.440	0.033	144871	0.2505	0.2549	
13 Nitroglycerin	2	15.873	15.847	0.026	316551	2.50	2.46	
14 o-Nitrotoluene	1	16.706	16.680	0.026	60056	0.2500	0.2412	
15 p-Nitrotoluene	1	16.993	16.967	0.026	51968	0.2505	0.2393	
16 4-Amino-2,6-dinitrotoluene	1	17.453	17.420	0.033	70046	0.2503	0.2361	
17 m-Nitrotoluene	1	17.973	17.940	0.033	65271	0.2503	0.2345	
18 2-Amino-4,6-dinitrotoluene	1	18.346	18.313	0.033	99506	0.2510	0.2520	
19 1,3,5-Trinitrobenzene	1	18.879	18.847	0.032	109682	0.2505	0.2607	
20 2,6-Dinitrotoluene	1	20.133	20.100	0.033	67416	0.2510	0.2513	
21 2,4-Dinitrotoluene	1	20.593	20.560	0.033	137399	0.2510	0.2429	
22 Tetryl	1	24.220	24.180	0.040	80925	0.2505	0.2488	
23 2,4,6-Trinitrotoluene	1	25.200	25.167	0.033	95912	0.2510	0.2538	
24 PETN	2	26.106	26.087	0.019	356789	2.50	2.59	

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL
8330_ADDs_00028 Amount Added: 12.50 Units: uL

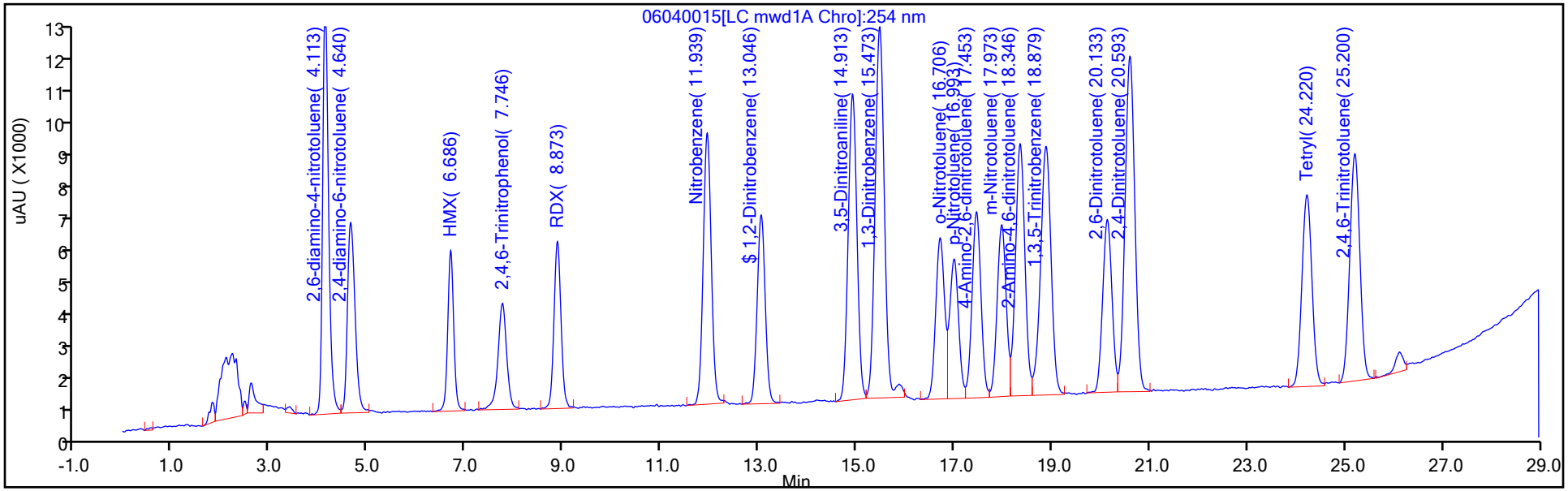
Report Date: 05-Jun-2021 10:22:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

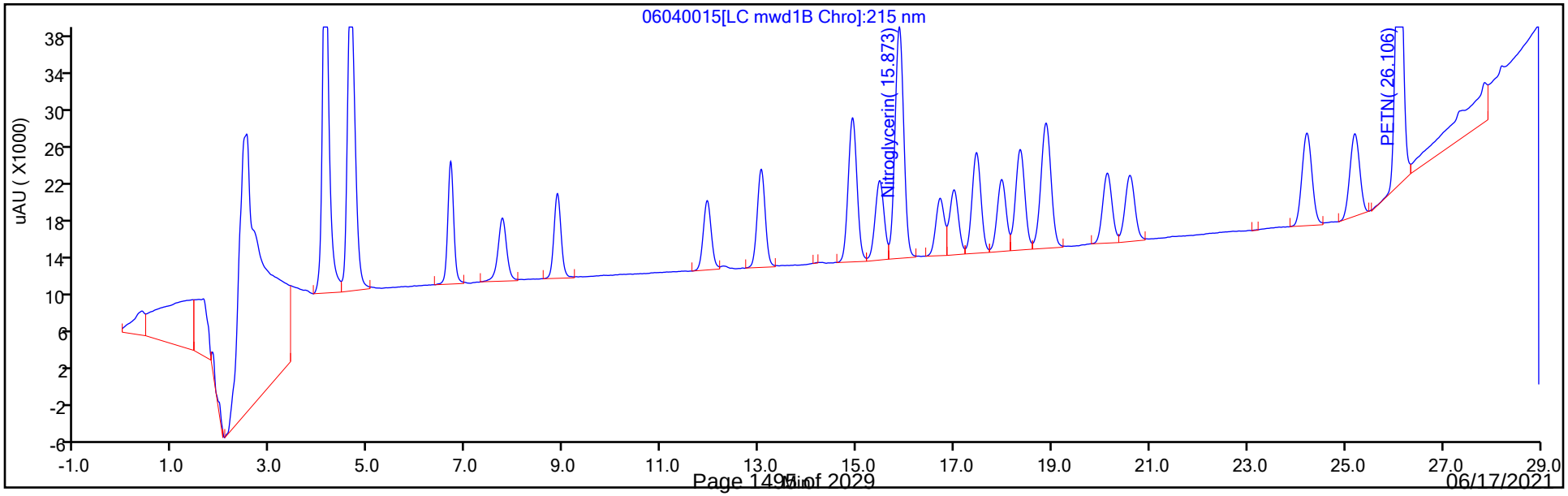
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210604-102085.b\06040015.D

Injection Date:	04-Jun-2021 21:16:45	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/7 Calibration Date: 06/05/2021 12:56

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06050007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		164008		252	250	0.8	15.0
Picric acid	Ave	159537	152196		238	250	-4.6	15.0
RDX	Ave	204270	201156		246	250	-1.5	15.0
Nitrobenzene	Ave	374651	380578		255	251	1.6	15.0
1,3-Dinitrobenzene	Lin2		580790		256	251	2.2	15.0
Nitroglycerin	Ave	128605	128686		2500	2500	0.0	15.0
2-Nitrotoluene	Ave	248967	245364		246	250	-1.4	15.0
4-Nitrotoluene	Ave	217187	210982		243	251	-2.9	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	282394		238	250	-4.8	15.0
3-Nitrotoluene	Ave	278393	267473		240	250	-3.9	15.0
2-Amino-4,6-dinitrotoluene	Lin2		399255		254	251	1.1	15.0
1,3,5-Trinitrobenzene	Lin2		453900		271	251	8.0	15.0
2,6-Dinitrotoluene	Lin2		275131		258	251	2.6	15.0
2,4-Dinitrotoluene	Ave	565713	556135		247	251	-1.7	15.0
Tetryl	Lin2		328703		253	251	1.1	15.0
2,4,6-Trinitrotoluene	Lin2		388195		258	251	2.8	15.0
PETN	Ave	137740	145232		2640	2500	5.4	15.0
1,2-Dinitrobenzene	Ave	265659	259856		245	250	-2.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/7 Calibration Date: 06/05/2021 12:56

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06050007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.70	6.55	6.85
Picric acid	7.85	7.70	8.00
RDX	8.89	8.74	9.04
Nitrobenzene	11.95	11.80	12.10
1,3-Dinitrobenzene	15.49	15.34	15.64
Nitroglycerin	15.91	15.76	16.06
2-Nitrotoluene	16.74	16.59	16.89
4-Nitrotoluene	17.03	16.88	17.18
4-Amino-2,6-dinitrotoluene	17.49	17.34	17.64
3-Nitrotoluene	18.01	17.86	18.16
2-Amino-4,6-dinitrotoluene	18.39	18.24	18.54
1,3,5-Trinitrobenzene	18.91	18.76	19.06
2,6-Dinitrotoluene	20.17	20.02	20.32
2,4-Dinitrotoluene	20.63	20.48	20.78
Tetryl	24.25	24.10	24.40
2,4,6-Trinitrotoluene	25.23	25.08	25.38
PETN	26.14	25.99	26.29
1,2-Dinitrobenzene	13.07	12.92	13.22

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050007.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2021 12:56:21 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0102103-007
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:29 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 05-Jun-2021 13:33:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.119	4.119	0.000	107029	0.2500	0.2530	
2 2,4-diamino-6-nitrotoluene	1	4.646	4.646	0.000	63097	0.2500	0.2587	
6 HMX	1	6.699	6.699	0.000	41002	0.2500	0.2521	
5 2,4,6-Trinitrophenol	1	7.846	7.846	0.000	38049	0.2500	0.2385	
8 RDX	1	8.893	8.893	0.000	50289	0.2500	0.2462	
9 Nitrobenzene	1	11.953	11.953	0.000	95525	0.2510	0.2550	
$ 10 1,2-Dinitrobenzene	1	13.066	13.066	0.000	64964	0.2500	0.2445	
11 3,5-Dinitroaniline	1	14.946	14.946	0.000	117619	0.2500	0.2592	
12 1,3-Dinitrobenzene	1	15.493	15.493	0.000	145488	0.2505	0.2560	
13 Nitroglycerin	2	15.906	15.906	0.000	321716	2.50	2.50	
14 o-Nitrotoluene	1	16.739	16.739	0.000	61341	0.2500	0.2464	
15 p-Nitrotoluene	1	17.033	17.033	0.000	52851	0.2505	0.2433	
16 4-Amino-2,6-dinitrotoluene	1	17.493	17.493	0.000	70669	0.2503	0.2382	
17 m-Nitrotoluene	1	18.013	18.013	0.000	66935	0.2503	0.2404	
18 2-Amino-4,6-dinitrotoluene	1	18.393	18.393	0.000	100213	0.2510	0.2538	
19 1,3,5-Trinitrobenzene	1	18.906	18.906	0.000	113702	0.2505	0.2706	
20 2,6-Dinitrotoluene	1	20.173	20.173	0.000	69058	0.2510	0.2575	
21 2,4-Dinitrotoluene	1	20.633	20.633	0.000	139590	0.2510	0.2468	
22 Tetryl	1	24.253	24.253	0.000	82340	0.2505	0.2533	
23 2,4,6-Trinitrotoluene	1	25.233	25.233	0.000	97437	0.2510	0.2579	
24 PETN	2	26.139	26.139	0.000	363080	2.50	2.64	

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL
8330_ADDs_00028 Amount Added: 12.50 Units: uL

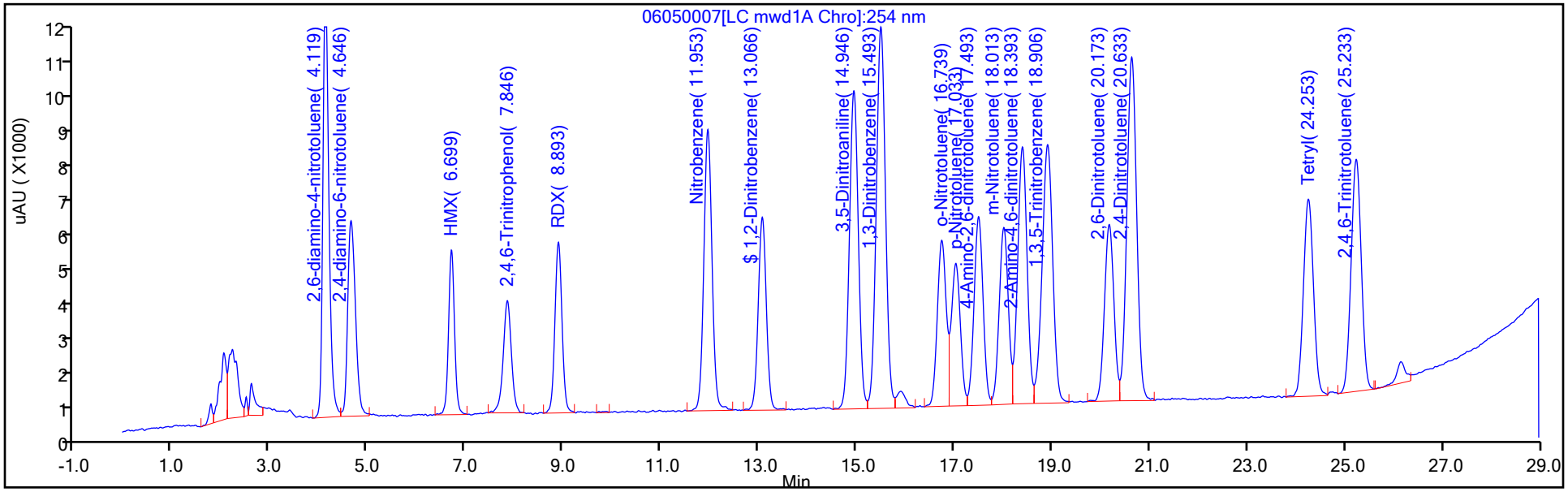
Report Date: 08-Jun-2021 16:38:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

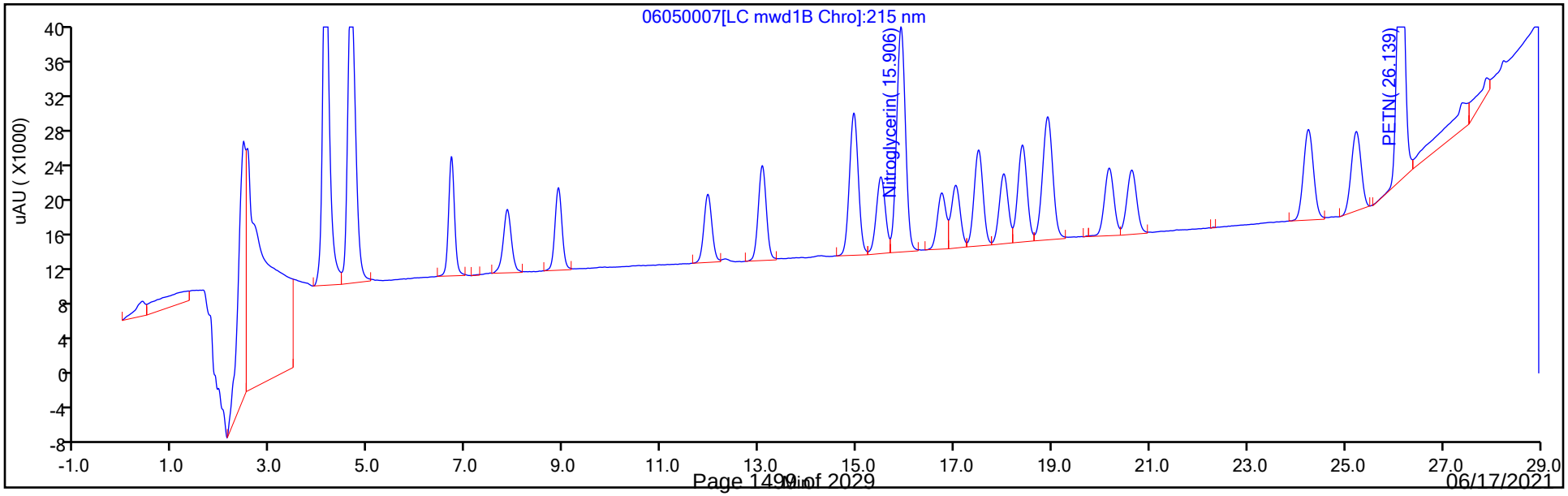
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050007.D

Injection Date:	05-Jun-2021 12:56:21	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/8 Calibration Date: 06/05/2021 13:31

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 06050008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	387309		258	250	3.0	15.0
DNX	Ave	284791	294114		258	250	3.3	15.0
MNX	Ave	264843	273018		301	292	3.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/8 Calibration Date: 06/05/2021 13:31

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 06050008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.06	4.91	5.21
DNX	5.89	5.74	6.04
MNX	7.43	7.28	7.58

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050008.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Jun-2021 13:31:18	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0102103-008				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:30	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	05-Jun-2021 15:04:29		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.062	5.062	0.000	96924	0.2503	0.2577	
4 DNX	1	5.889	5.889	0.000	73602	0.2503	0.2584	
7 MNX	1	7.429	7.429	0.000	79653	0.2918	0.3008	

QC Flag Legend

Processing Flags

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

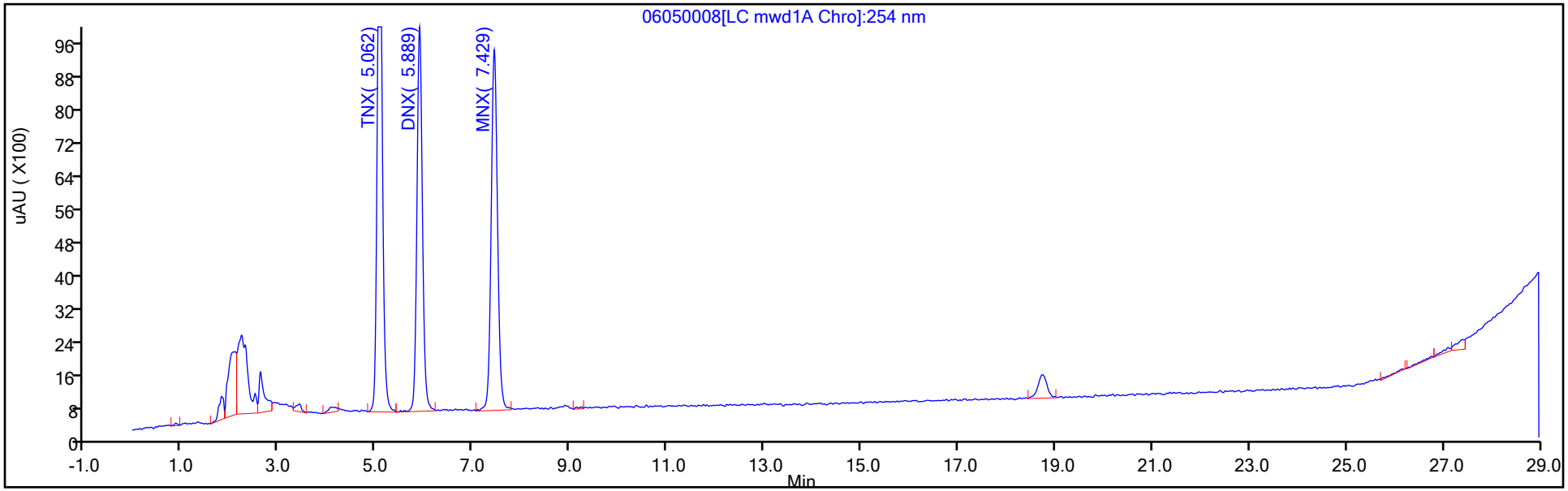
Report Date: 08-Jun-2021 16:38:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

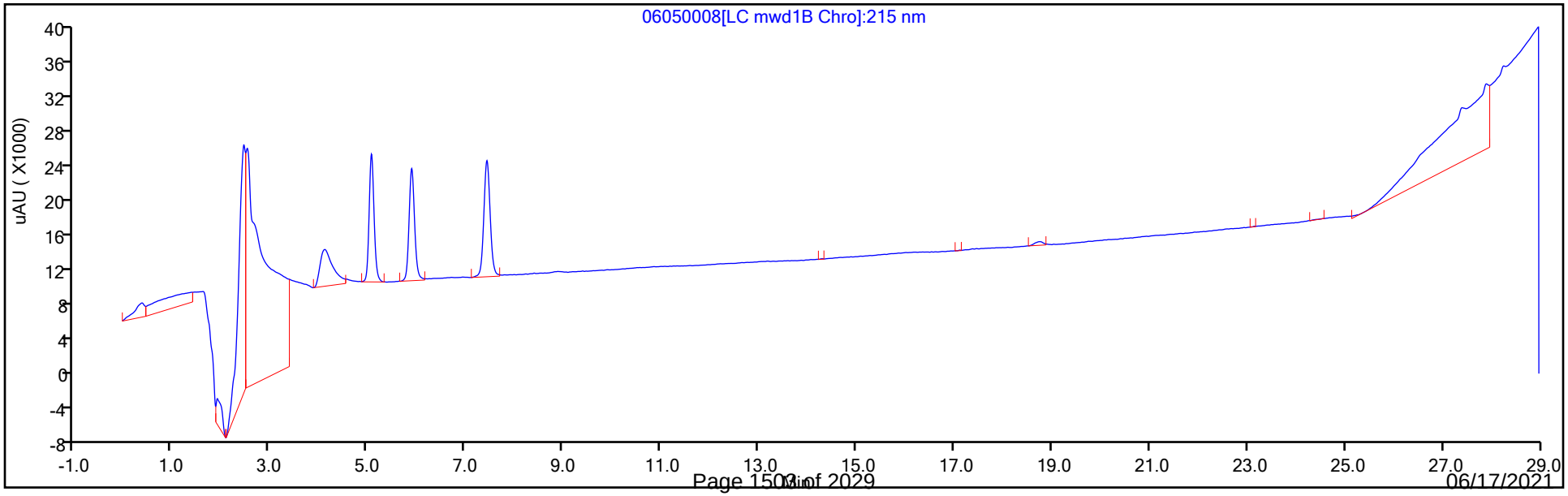
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050008.D

Injection Date:	05-Jun-2021 13:31:18	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/20 Calibration Date: 06/05/2021 19:56

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06050020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		166088		255	250	2.1	15.0
Picric acid	Ave	159537	159676		250	250	0.0	15.0
RDX	Ave	204270	203524		249	250	-0.4	15.0
Nitrobenzene	Ave	374651	372363		249	251	-0.6	15.0
1,3-Dinitrobenzene	Lin2		580395		256	251	2.1	15.0
Nitroglycerin	Ave	128605	128746		2500	2500	0.1	15.0
2-Nitrotoluene	Ave	248967	241260		242	250	-3.1	15.0
4-Nitrotoluene	Ave	217187	207908		240	251	-4.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	283201		239	250	-4.6	15.0
3-Nitrotoluene	Ave	278393	262242		236	250	-5.8	15.0
2-Amino-4,6-dinitrotoluene	Lin2		402231		256	251	1.9	15.0
1,3,5-Trinitrobenzene	Lin2		450731		269	251	7.2	15.0
2,6-Dinitrotoluene	Lin2		274351		257	251	2.3	15.0
2,4-Dinitrotoluene	Ave	565713	556558		247	251	-1.6	15.0
Tetryl	Lin2		326232		251	251	0.3	15.0
2,4,6-Trinitrotoluene	Lin2		386673		257	251	2.4	15.0
PETN	Ave	137740	144915		2630	2500	5.2	15.0
1,2-Dinitrobenzene	Ave	265659	258984		244	250	-2.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/20 Calibration Date: 06/05/2021 19:56

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06050020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.70	6.55	6.85
Picric acid	7.76	7.70	8.00
RDX	8.89	8.74	9.04
Nitrobenzene	11.97	11.80	12.10
1,3-Dinitrobenzene	15.51	15.34	15.64
Nitroglycerin	15.91	15.76	16.06
2-Nitrotoluene	16.74	16.59	16.89
4-Nitrotoluene	17.03	16.88	17.18
4-Amino-2,6-dinitrotoluene	17.49	17.34	17.64
3-Nitrotoluene	18.01	17.86	18.16
2-Amino-4,6-dinitrotoluene	18.38	18.24	18.54
1,3,5-Trinitrobenzene	18.91	18.76	19.06
2,6-Dinitrotoluene	20.17	20.02	20.32
2,4-Dinitrotoluene	20.63	20.48	20.78
Tetryl	24.26	24.10	24.40
2,4,6-Trinitrotoluene	25.25	25.08	25.38
PETN	26.15	25.99	26.29
1,2-Dinitrobenzene	13.07	12.92	13.22

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050020.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2021 19:56:22 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0102103-020
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:35 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

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	4.127	4.119	0.008	106614	0.2500	0.2520	
2 2,4-diamino-6-nitrotoluene	1	4.647	4.646	0.001	62536	0.2500	0.2564	
6 HMX	1	6.701	6.699	0.002	41522	0.2500	0.2553	
5 2,4,6-Trinitrophenol	1	7.761	7.846	-0.085	39919	0.2500	0.2502	
8 RDX	1	8.894	8.893	0.001	50881	0.2500	0.2491	
9 Nitrobenzene	1	11.967	11.953	0.014	93463	0.2510	0.2495	
$ 10 1,2-Dinitrobenzene	1	13.074	13.066	0.008	64746	0.2500	0.2437	
11 3,5-Dinitroaniline	1	14.947	14.946	0.001	117315	0.2500	0.2585	
12 1,3-Dinitrobenzene	1	15.507	15.493	0.014	145389	0.2505	0.2558	
13 Nitroglycerin	2	15.907	15.906	0.001	321866	2.50	2.50	
14 o-Nitrotoluene	1	16.741	16.739	0.002	60315	0.2500	0.2423	
15 p-Nitrotoluene	1	17.027	17.033	-0.006	52081	0.2505	0.2398	
16 4-Amino-2,6-dinitrotoluene	1	17.487	17.493	-0.006	70871	0.2503	0.2389	
17 m-Nitrotoluene	1	18.007	18.013	-0.006	65626	0.2503	0.2357	
18 2-Amino-4,6-dinitrotoluene	1	18.381	18.393	-0.012	100960	0.2510	0.2558	
19 1,3,5-Trinitrobenzene	1	18.907	18.906	0.001	112908	0.2505	0.2686	
20 2,6-Dinitrotoluene	1	20.167	20.173	-0.006	68862	0.2510	0.2568	
21 2,4-Dinitrotoluene	1	20.627	20.633	-0.006	139696	0.2510	0.2469	
22 Tetryl	1	24.261	24.253	0.008	81721	0.2505	0.2513	
23 2,4,6-Trinitrotoluene	1	25.247	25.233	0.014	97055	0.2510	0.2569	
24 PETN	2	26.147	26.139	0.008	362287	2.50	2.63	

Reagents:

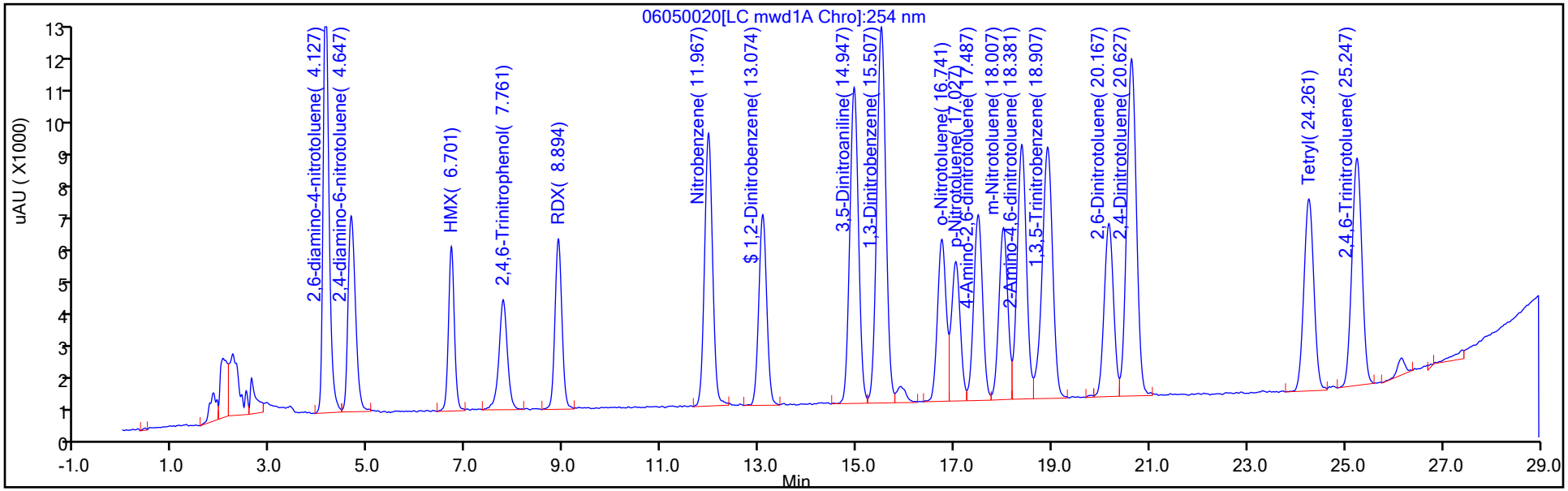
8330IntermStk_00068 Amount Added: 25.00 Units: uL
8330_ADDs_00028 Amount Added: 12.50 Units: uL

Report Date: 08-Jun-2021 16:38:35 Chrom Revision: 2.3 13-May-2021 07:57:40

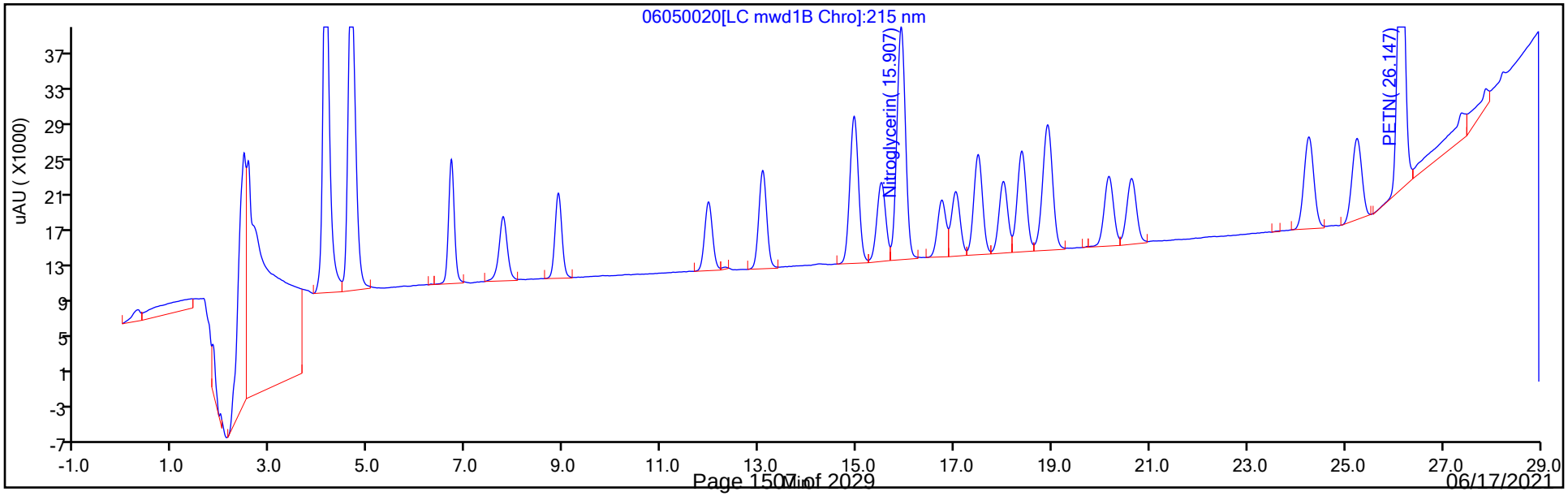
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050020.D				
Injection Date:	05-Jun-2021 19:56:22	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/21 Calibration Date: 06/05/2021 20:31

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 06050021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	380651		253	250	1.2	15.0
DNX	Ave	284791	291337		256	250	2.3	15.0
MNX	Ave	264843	269210		297	292	1.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/21 Calibration Date: 06/05/2021 20:31

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 06050021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.07	4.91	5.21
DNX	5.89	5.74	6.04
MNX	7.43	7.28	7.58

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050021.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Jun-2021 20:31:20	ALS Bottle#:	8	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0102103-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	08-Jun-2021 16:38:36	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.066	5.062	0.004	95258	0.2503	0.2532	
4 DNX	1	5.886	5.889	-0.003	72907	0.2503	0.2560	
7 MNX	1	7.426	7.429	-0.003	78542	0.2918	0.2966	

Reagents:

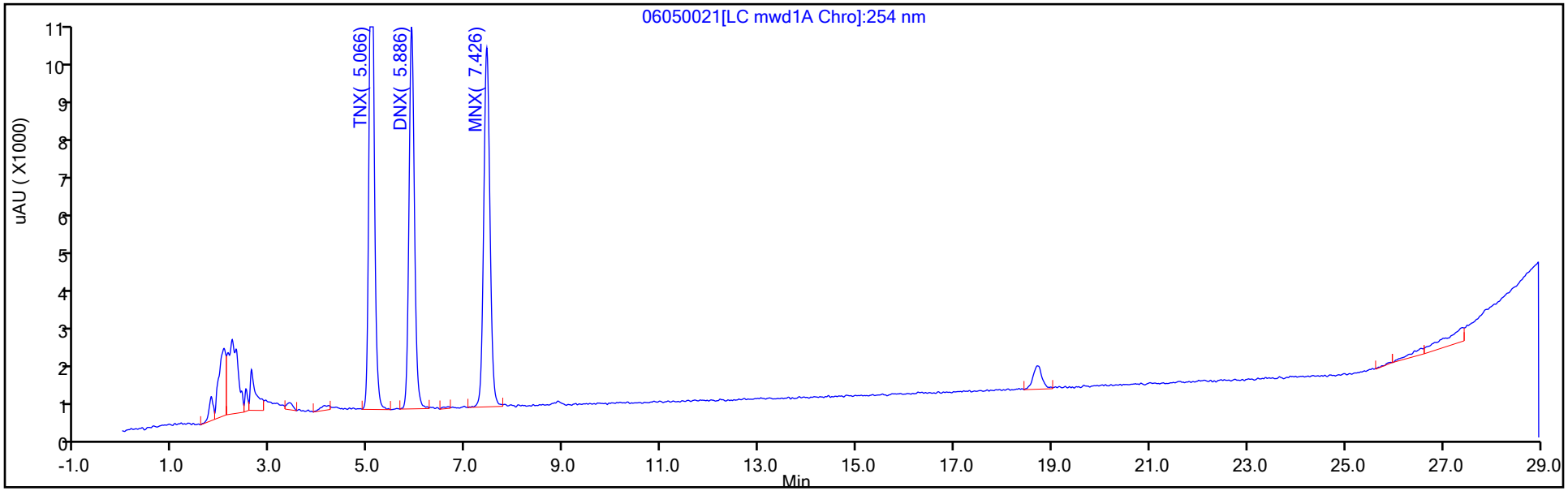
8330 DMT_00009 Amount Added: 12.50 Units: uL

Report Date: 08-Jun-2021 16:38:36 Chrom Revision: 2.3 13-May-2021 07:57:40

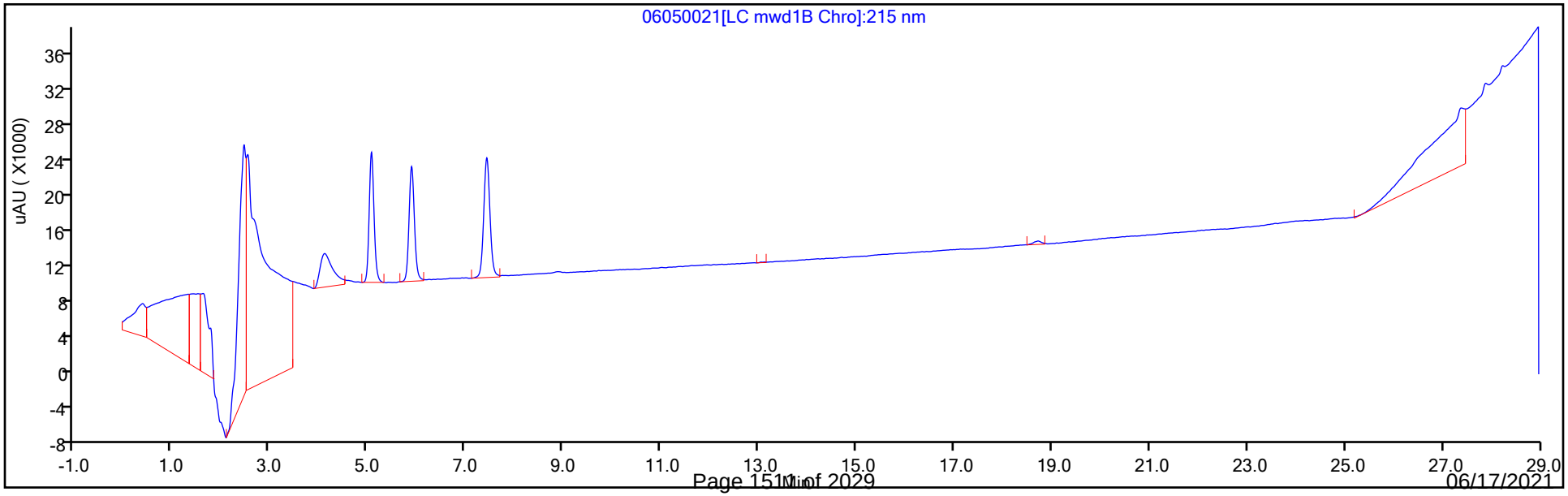
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050021.D				
Injection Date:	05-Jun-2021 20:31:20	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/26 Calibration Date: 06/05/2021 23:26

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 06050026.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	380739		253	250	1.2	15.0
DNX	Ave	284791	290881		256	250	2.1	15.0
MNX	Ave	264843	269587		297	292	1.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/26 Calibration Date: 06/05/2021 23:26

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 06050026.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.07	4.91	5.21
DNX	5.89	5.74	6.04
MNX	7.44	7.28	7.58

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050026.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2021 23:26:19 ALS Bottle#: 8 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0102103-026
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:38 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.070	5.062	0.008	95280	0.2503	0.2533	
4 DNX	1	5.890	5.889	0.001	72793	0.2503	0.2556	
7 MNX	1	7.437	7.429	0.008	78652	0.2918	0.2970	

Reagents:

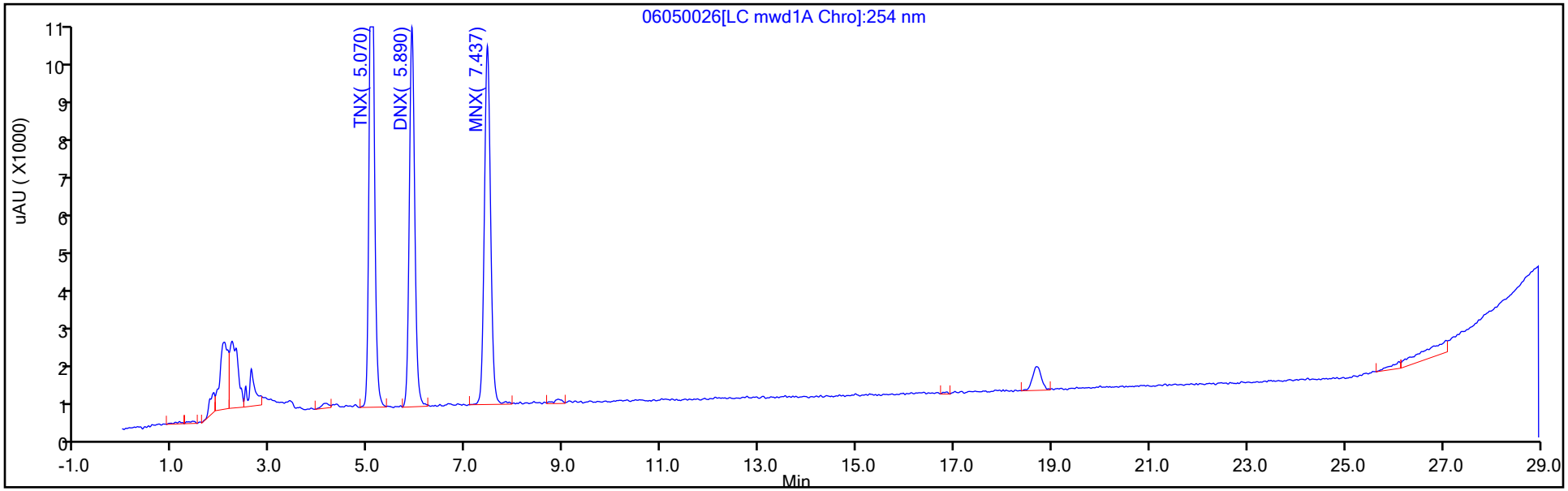
8330 DMT_00009 Amount Added: 12.50 Units: uL

Report Date: 08-Jun-2021 16:38:38 Chrom Revision: 2.3 13-May-2021 07:57:40

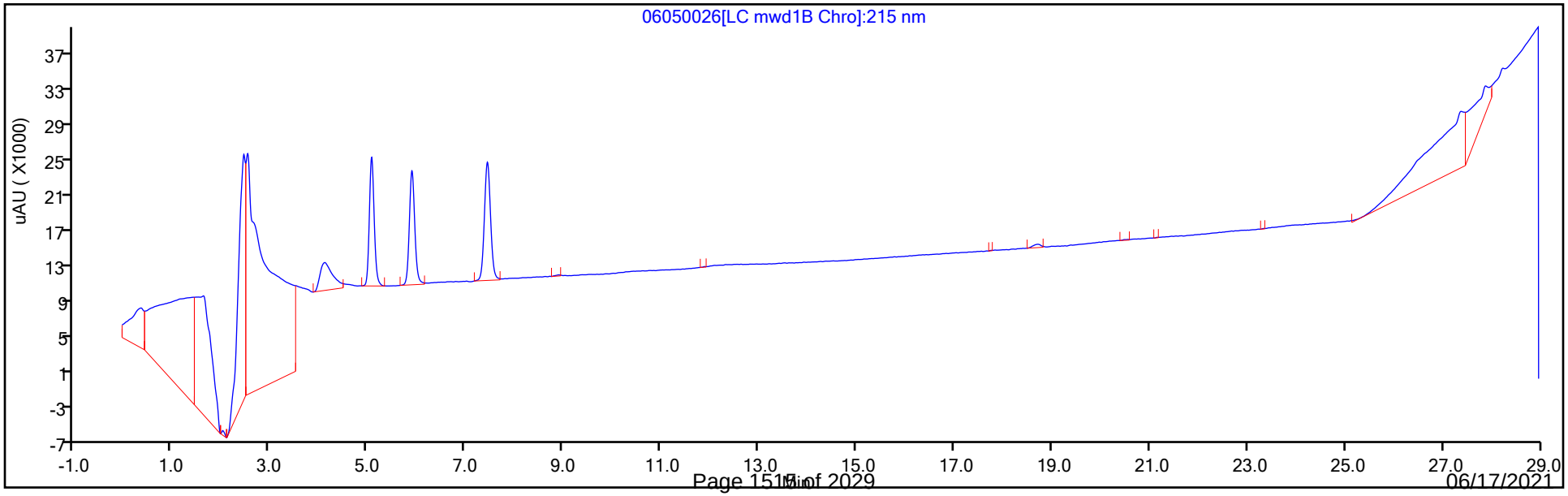
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050026.D				
Injection Date:	05-Jun-2021 23:26:19	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/27 Calibration Date: 06/06/2021 00:01

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06050027.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		164992		254	250	1.4	15.0
Picric acid	Ave	159537	161368		253	250	1.1	15.0
RDX	Ave	204270	201296		246	250	-1.5	15.0
Nitrobenzene	Ave	374651	366430		245	251	-2.2	15.0
1,3-Dinitrobenzene	Lin2		579984		256	251	2.1	15.0
Nitroglycerin	Ave	128605	129469		2520	2500	0.7	15.0
2-Nitrotoluene	Ave	248967	234892		236	250	-5.7	15.0
4-Nitrotoluene	Ave	217187	207569		239	251	-4.4	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	281926		238	250	-5.0	15.0
3-Nitrotoluene	Ave	278393	259301		233	250	-6.9	15.0
2-Amino-4,6-dinitrotoluene	Lin2		401462		255	251	1.7	15.0
1,3,5-Trinitrobenzene	Lin2		451345		269	251	7.4	15.0
2,6-Dinitrotoluene	Lin2		273482		256	251	2.0	15.0
2,4-Dinitrotoluene	Ave	565713	555331		246	251	-1.8	15.0
Tetryl	Lin2		326216		251	251	0.3	15.0
2,4,6-Trinitrotoluene	Lin2		387215		257	251	2.5	15.0
PETN	Ave	137740	145528		2640	2500	5.7	15.0
1,2-Dinitrobenzene	Ave	265659	260300		245	250	-2.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 280-538717/27 Calibration Date: 06/06/2021 00:01

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 06050027.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.70	6.55	6.85
Picric acid	7.75	7.70	8.00
RDX	8.88	8.74	9.04
Nitrobenzene	11.96	11.80	12.10
1,3-Dinitrobenzene	15.49	15.34	15.64
Nitroglycerin	15.90	15.76	16.06
2-Nitrotoluene	16.73	16.59	16.89
4-Nitrotoluene	17.02	16.88	17.18
4-Amino-2,6-dinitrotoluene	17.48	17.34	17.64
3-Nitrotoluene	17.99	17.86	18.16
2-Amino-4,6-dinitrotoluene	18.37	18.24	18.54
1,3,5-Trinitrobenzene	18.90	18.76	19.06
2,6-Dinitrotoluene	20.16	20.02	20.32
2,4-Dinitrotoluene	20.62	20.48	20.78
Tetryl	24.24	24.10	24.40
2,4,6-Trinitrotoluene	25.22	25.08	25.38
PETN	26.13	25.99	26.29
1,2-Dinitrobenzene	13.06	12.92	13.22

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050027.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 06-Jun-2021 00:01:16 ALS Bottle#: 7 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0102103-027
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 08-Jun-2021 16:38:38 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

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	4.122	4.119	0.003	106841	0.2500	0.2526	
2 2,4-diamino-6-nitrotoluene	1	4.642	4.646	-0.004	62652	0.2500	0.2568	
6 HMX	1	6.695	6.699	-0.004	41248	0.2500	0.2536	
5 2,4,6-Trinitrophenol	1	7.748	7.846	-0.098	40342	0.2500	0.2529	
8 RDX	1	8.882	8.893	-0.011	50324	0.2500	0.2464	
9 Nitrobenzene	1	11.955	11.953	0.002	91974	0.2510	0.2455	
$ 10 1,2-Dinitrobenzene	1	13.055	13.066	-0.011	65075	0.2500	0.2450	
11 3,5-Dinitroaniline	1	14.928	14.946	-0.018	116920	0.2500	0.2577	
12 1,3-Dinitrobenzene	1	15.488	15.493	-0.005	145286	0.2505	0.2556	
13 Nitroglycerin	2	15.895	15.906	-0.011	323672	2.50	2.52	
14 o-Nitrotoluene	1	16.728	16.739	-0.011	58723	0.2500	0.2359	
15 p-Nitrotoluene	1	17.015	17.033	-0.018	51996	0.2505	0.2394	
16 4-Amino-2,6-dinitrotoluene	1	17.475	17.493	-0.018	70552	0.2503	0.2378	
17 m-Nitrotoluene	1	17.988	18.013	-0.025	64890	0.2503	0.2331	
18 2-Amino-4,6-dinitrotoluene	1	18.368	18.393	-0.025	100767	0.2510	0.2553	
19 1,3,5-Trinitrobenzene	1	18.901	18.906	-0.005	113062	0.2505	0.2690	
20 2,6-Dinitrotoluene	1	20.155	20.173	-0.018	68644	0.2510	0.2560	
21 2,4-Dinitrotoluene	1	20.615	20.633	-0.018	139388	0.2510	0.2464	
22 Tetryl	1	24.235	24.253	-0.018	81717	0.2505	0.2513	
23 2,4,6-Trinitrotoluene	1	25.222	25.233	-0.011	97191	0.2510	0.2573	
24 PETN	2	26.128	26.139	-0.011	363821	2.50	2.64	

Reagents:

8330IntermStk_00068 Amount Added: 25.00 Units: uL
8330_ADDs_00028 Amount Added: 12.50 Units: uL

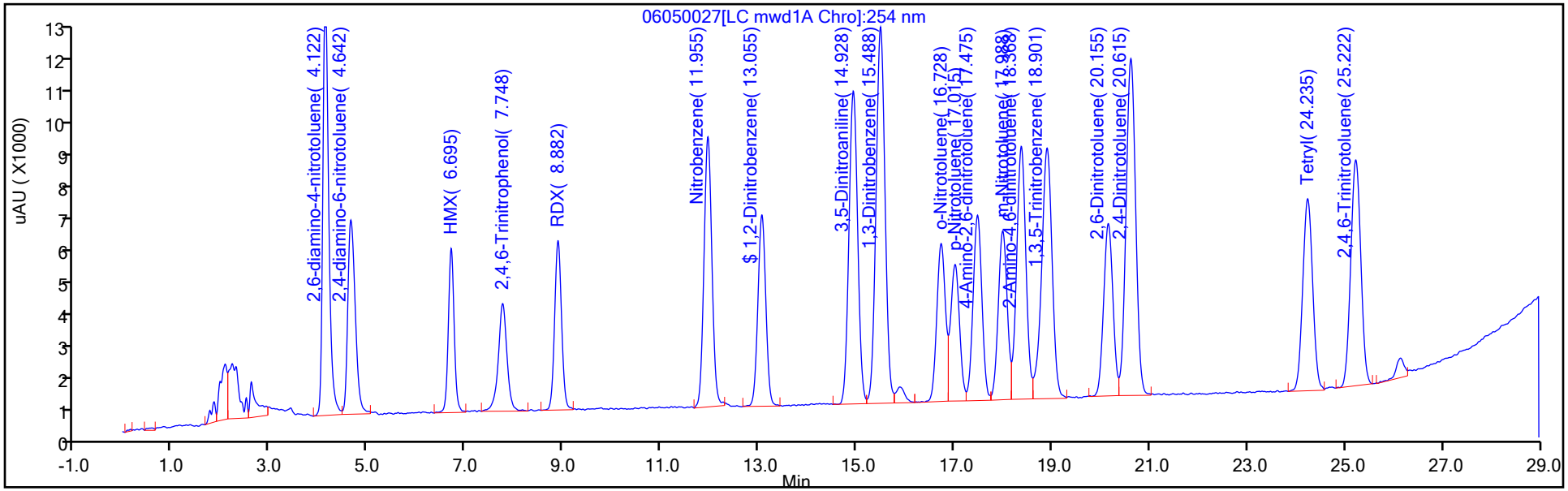
Report Date: 08-Jun-2021 16:38:39 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

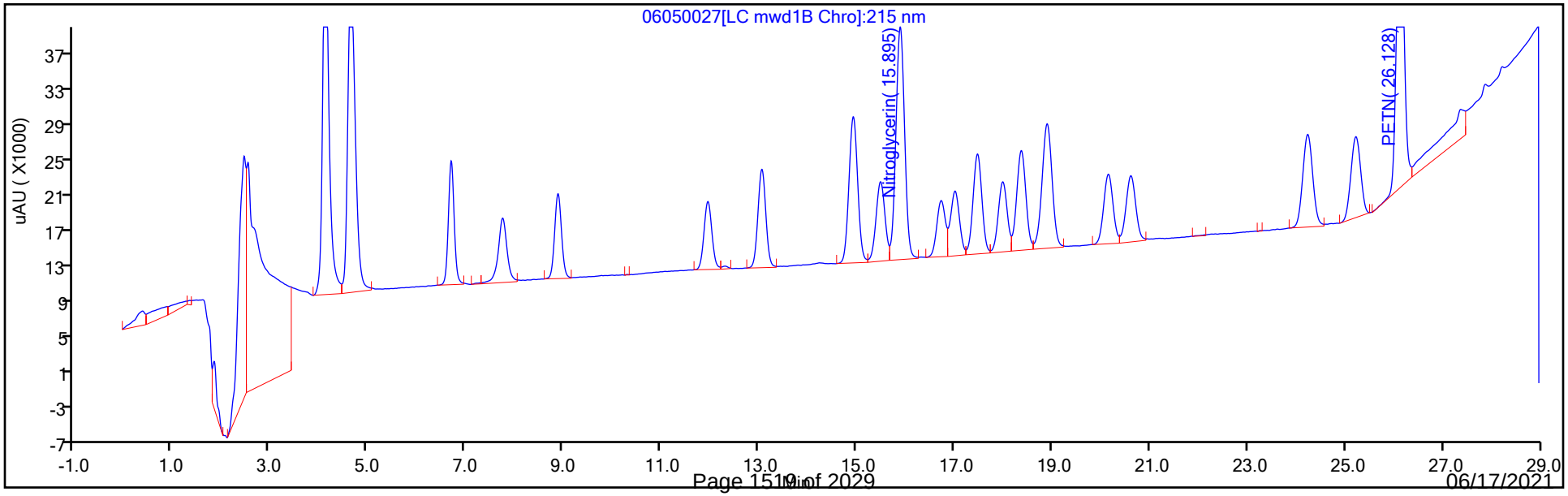
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210605-102103.b\06050027.D

Injection Date:	06-Jun-2021 00:01:16	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-538030/1-A

Matrix: Water Lab File ID: 06040011.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 500(mL) Date Analyzed: 06/04/2021 18:36

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.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040011.D
Lims ID: MB 280-538030/1-A
Client ID:
Sample Type: MB
Inject. Date: 04-Jun-2021 18:36:17 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-538030/1-
Misc. Info.: 280-0102084-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:12 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 04-Jun-2021 19:01:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
26 Triamine Trinitrobenzene	1		2.474				ND	
1 2,6-diamino-4-nitrotoluene	1		6.486				ND	U
2 TNX	1		6.490				ND	
3 HMX	1		6.609				ND	
4 2,4-diamino-6-nitrotoluene	1		6.660				ND	
5 DNX	1		6.803				ND	
6 MNX	1		7.210				ND	
7 RDX	1		7.576				ND	
8 2,4,6-Trinitrophenol	1		7.942				ND	
$ 9 1,2-Dinitrobenzene	1	8.498	8.496	0.002	24887	0.2000	0.1941	
10 1,3,5-Trinitrobenzene	1		8.629				ND	
11 1,3-Dinitrobenzene	1		9.249				ND	
12 Nitrobenzene	1		9.636				ND	
13 3,5-Dinitroaniline	1		9.846				ND	
14 Tetryl	1		9.956				ND	
15 Nitroglycerin	2		10.416				ND	
16 2,4,6-Trinitrotoluene	1		10.876				ND	
17 4-Amino-2,6-dinitrotoluene	1		11.076				ND	
18 2-Amino-4,6-dinitrotoluene	1		11.336				ND	
19 2,6-Dinitrotoluene	1		11.502				ND	
20 2,4-Dinitrotoluene	1		11.676				ND	
21 o-Nitrotoluene	1		12.542				ND	
22 p-Nitrotoluene	1		12.976				ND	
23 m-Nitrotoluene	1		13.562				ND	
24 PETN	2		14.649				ND	
25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend
Processing Flags

Review Flags
U - Marked Undetected

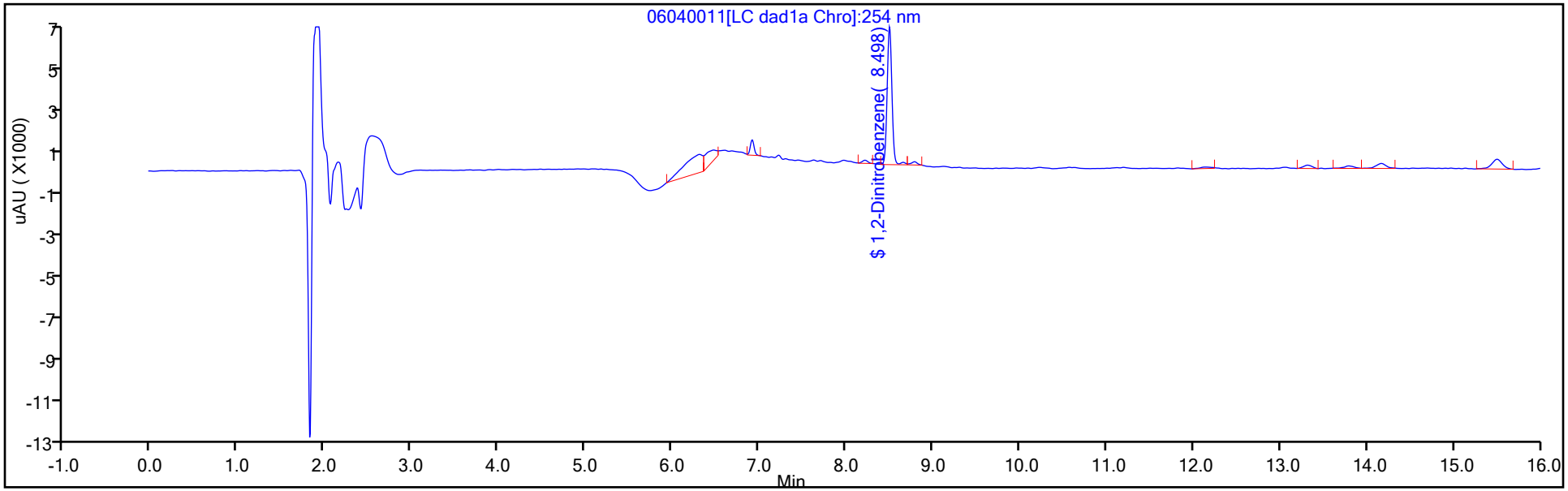
Report Date: 05-Jun-2021 10:20:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

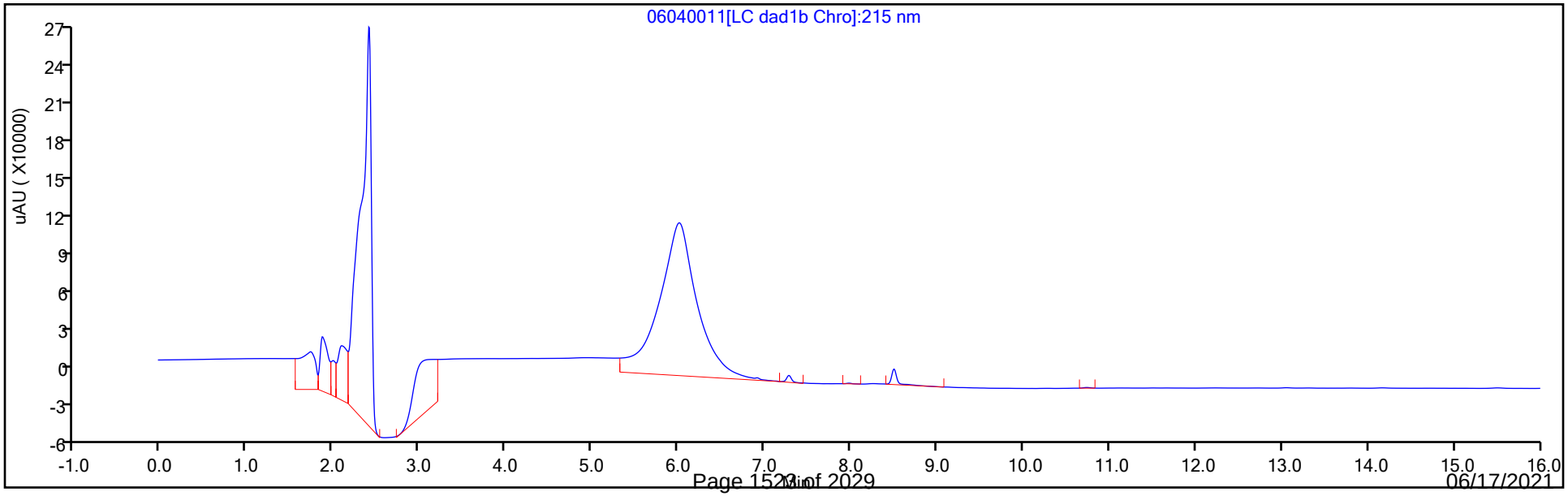
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040011.d

Injection Date:	04-Jun-2021 18:36:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-538030/1-A			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040011.D				
Lims ID:	MB 280-538030/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	04-Jun-2021 18:36:17	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-538030/1-				
Misc. Info.:	280-0102084-011				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:12	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				

First Level Reviewer: zhangji Date: 04-Jun-2021 19:01:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1941	97.05

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-538125/1-A

Matrix: Water Lab File ID: 06030015.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/01/2021 17:35

Sample wt/vol: 500(mL) Date Analyzed: 06/03/2021 17:17

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.: 538449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030015.D
Lims ID: MB 280-538125/1-A
Client ID:
Sample Type: MB
Inject. Date: 03-Jun-2021 17:17:22 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-538125/1-
Misc. Info.: 280-0102044-015
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:48 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 17:46:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
26 Triamine Trinitrobenzene	1		2.474				ND	
1 2,6-diamino-4-nitrotoluene	1		6.488				ND	
2 TNX	1		6.489				ND	U
3 HMX	1		6.603				ND	
4 2,4-diamino-6-nitrotoluene	1		6.668				ND	
5 DNX	1		6.802				ND	
6 MNX	1	7.230	7.216	0.014	963		0.007388	
7 RDX	1		7.577				ND	
8 2,4,6-Trinitrophenol	1		7.943				ND	
$ 9 1,2-Dinitrobenzene	1	8.516	8.503	0.013	24770	0.2000	0.1932	
10 1,3,5-Trinitrobenzene	1		8.630				ND	
11 1,3-Dinitrobenzene	1		9.256				ND	
12 Nitrobenzene	1		9.643				ND	
13 3,5-Dinitroaniline	1		9.875				ND	
14 Tetryl	1		9.970				ND	
15 Nitroglycerin	2		10.430				ND	
16 2,4,6-Trinitrotoluene	1		10.890				ND	
17 4-Amino-2,6-dinitrotoluene	1		11.096				ND	
18 2-Amino-4,6-dinitrotoluene	1		11.356				ND	
19 2,6-Dinitrotoluene	1		11.523				ND	
20 2,4-Dinitrotoluene	1		11.696				ND	
21 o-Nitrotoluene	1		12.570				ND	
22 p-Nitrotoluene	1		13.003				ND	7
23 m-Nitrotoluene	1		13.590				ND	
24 PETN	2		14.690				ND	
25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

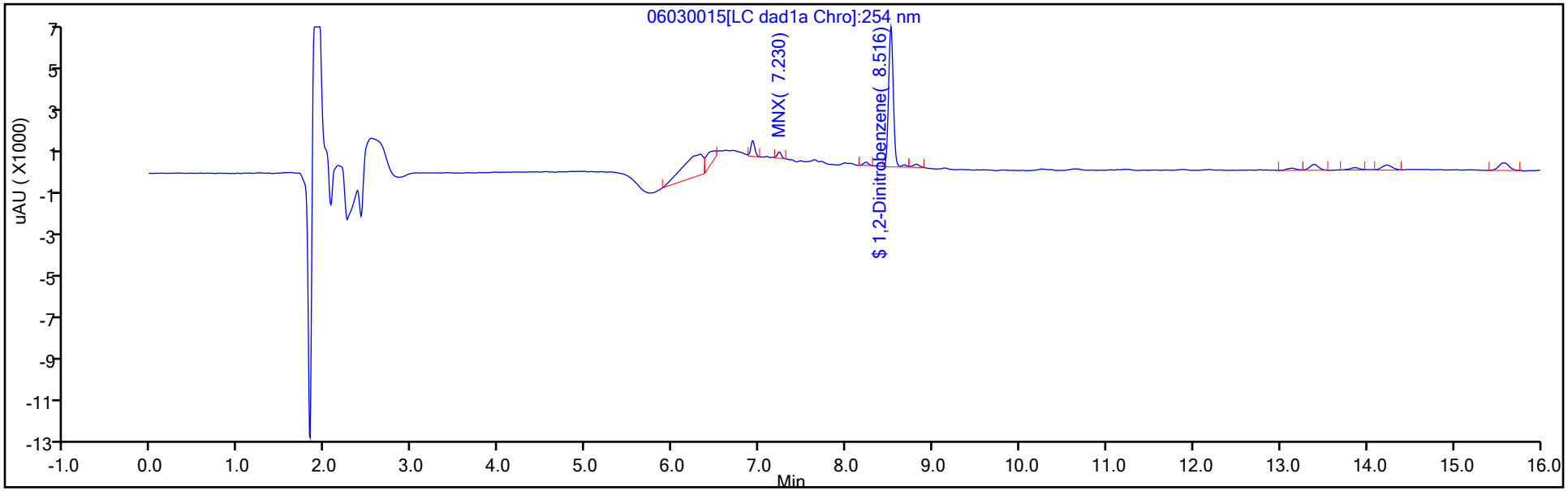
Report Date: 04-Jun-2021 14:12:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

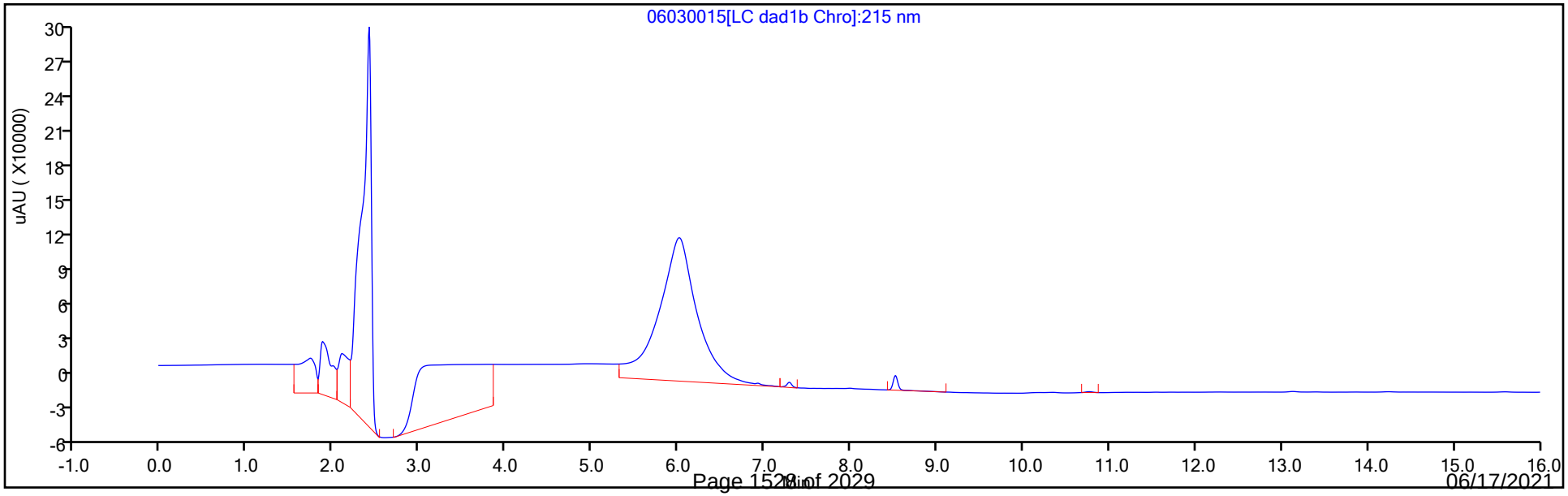
Data File: \\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030015.d

Injection Date:	03-Jun-2021 17:17:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-538125/1-A			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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030015.D				
Lims ID:	MB 280-538125/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	03-Jun-2021 17:17:22	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-538125/1-				
Misc. Info.:	280-0102044-015				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Jun-2021 14:12:48	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1663				

First Level Reviewer: zhangji Date: 03-Jun-2021 17:46:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1932	96.59

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538030/2-A

Matrix: Water Lab File ID: 06040012.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 500(mL) Date Analyzed: 06/04/2021 18:59

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.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.87		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.77		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.84		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.65		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.67		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.62		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.17	Q	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.13	Q	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.56		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.26	Q	0.41	0.40	0.10
2691-41-0	HMX	1.83	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.38		0.21	0.20	0.091
121-82-4	RDX	1.79		0.21	0.20	0.052
479-45-8	Tetryl	1.81		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040012.D
Lims ID: LCS 280-538030/2-A
Client ID:
Sample Type: LCS
Inject. Date: 04-Jun-2021 18:59:12 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-538030/2
Misc. Info.: 280-0102084-012
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:12 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 04-Jun-2021 19:36:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.603	6.609	-0.006	15443	0.2000	0.1829	M
7 RDX	1	7.576	7.576	0.000	18990	0.2000	0.1787	
8 2,4,6-Trinitrophenol	1	7.930	7.942	-0.012	16892	0.2000	0.2042	
$ 9 1,2-Dinitrobenzene	1	8.503	8.496	0.007	22717	0.2000	0.1772	
10 1,3,5-Trinitrobenzene	1	8.630	8.629	0.001	41092	0.2000	0.1865	
11 1,3-Dinitrobenzene	1	9.256	9.249	0.007	52370	0.2000	0.1767	
12 Nitrobenzene	1	9.636	9.636	0.000	26903	0.2000	0.1378	
14 Tetryl	1	9.956	9.956	0.000	31134	0.2000	0.1806	
15 Nitroglycerin	2	10.416	10.416	0.000	126849	2.00	1.91	
16 2,4,6-Trinitrotoluene	1	10.883	10.876	0.007	37955	0.2000	0.1842	
17 4-Amino-2,6-dinitrotoluene	1	11.083	11.076	0.007	23834	0.2000	0.1560	
18 2-Amino-4,6-dinitrotoluene	1	11.343	11.336	0.007	33551	0.2000	0.1621	
19 2,6-Dinitrotoluene	1	11.509	11.502	0.007	23962	0.2000	0.1675	
20 2,4-Dinitrotoluene	1	11.676	11.676	0.000	47323	0.2000	0.1649	
21 o-Nitrotoluene	1	12.543	12.542	0.001	15082	0.2000	0.1175	
22 p-Nitrotoluene	1	12.983	12.976	0.007	14071	0.2000	0.1257	
23 m-Nitrotoluene	1	13.563	13.562	0.001	16119	0.2000	0.1133	
24 PETN	2	14.656	14.649	0.007	140082	2.00	1.87	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

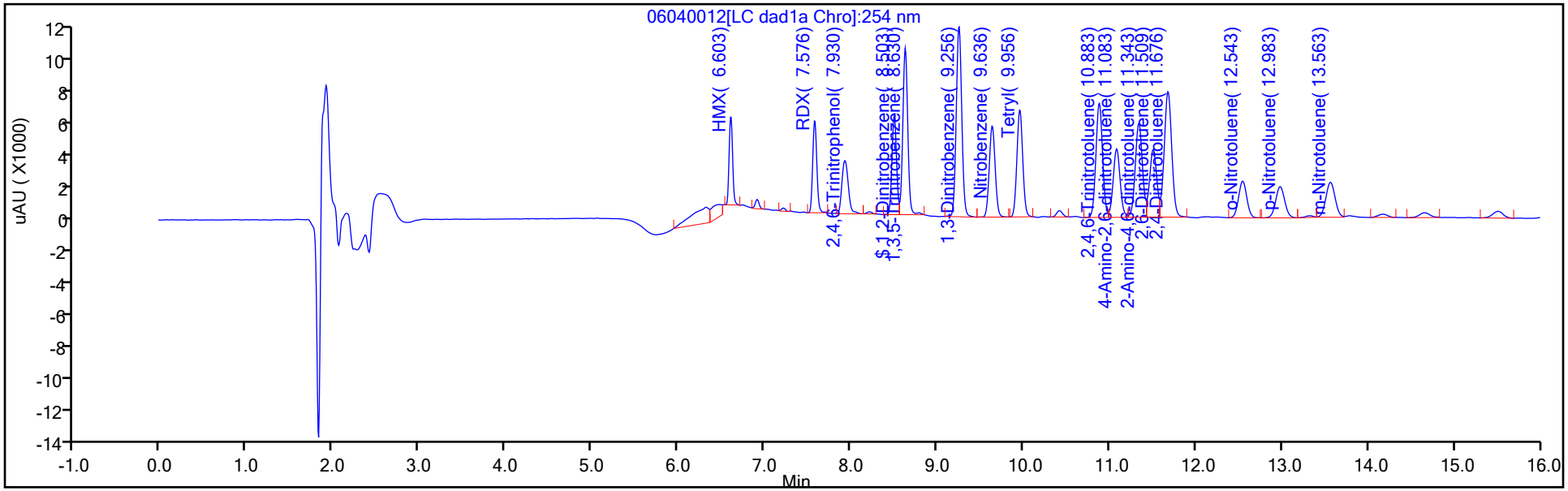
Report Date: 05-Jun-2021 10:20:12 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

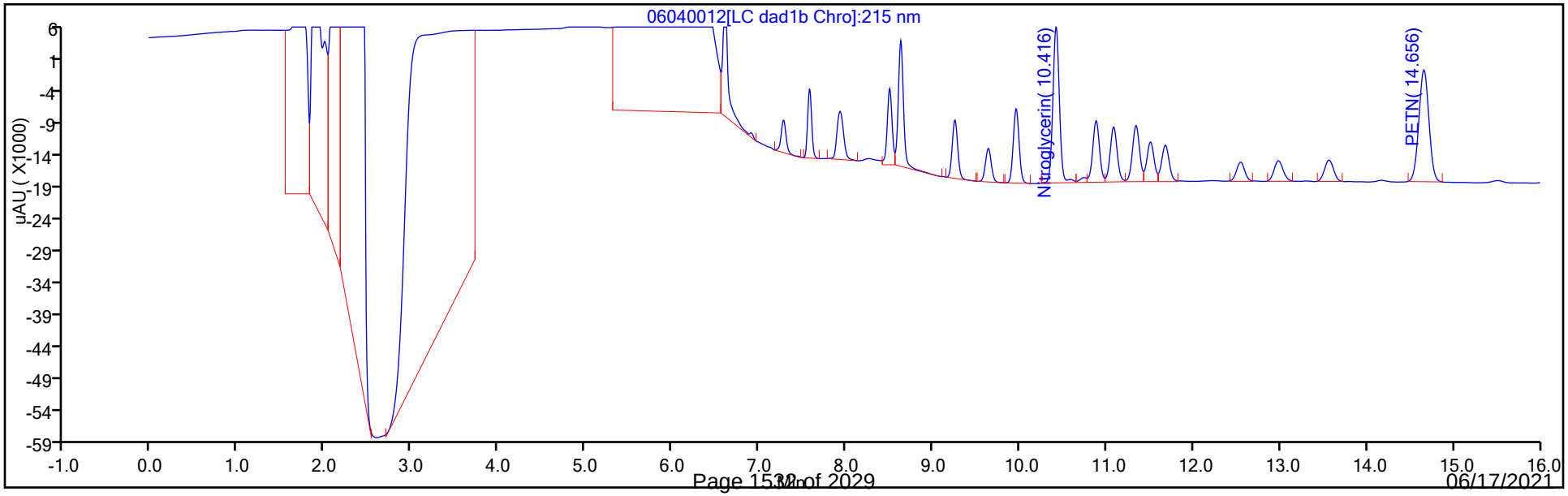
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040012.d

Injection Date:	04-Jun-2021 18:59:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-538030/2-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040012.D				
Lims ID:	LCS 280-538030/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	04-Jun-2021 18:59:12	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-538030/2				
Misc. Info.:	280-0102084-012				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:12	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	04-Jun-2021 19:36:21		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1772	88.59

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

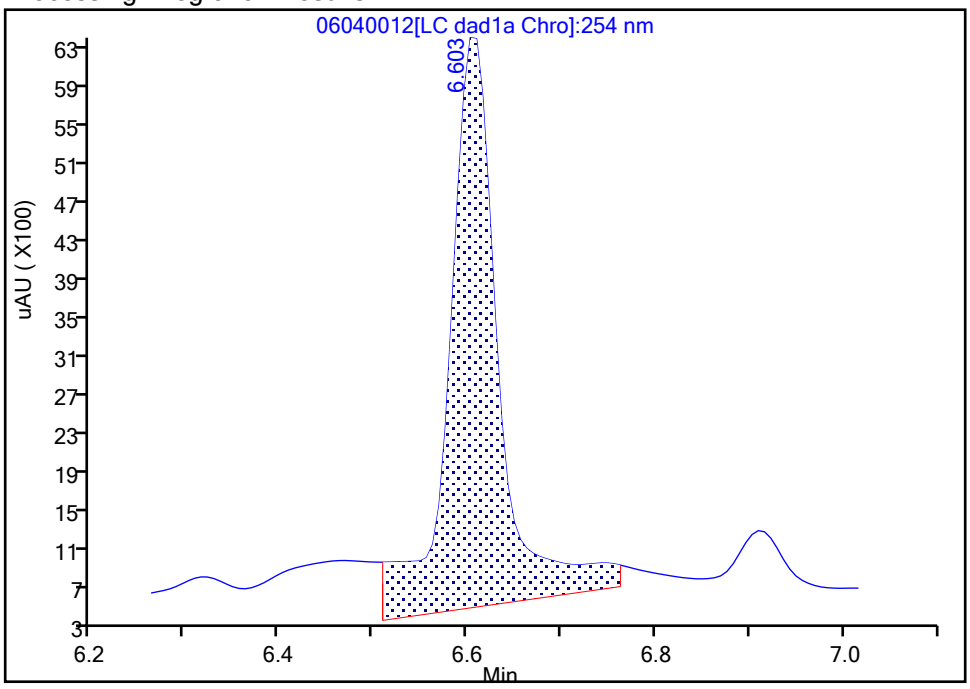
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040012.d				
Injection Date:	04-Jun-2021 18:59:12	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-538030/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

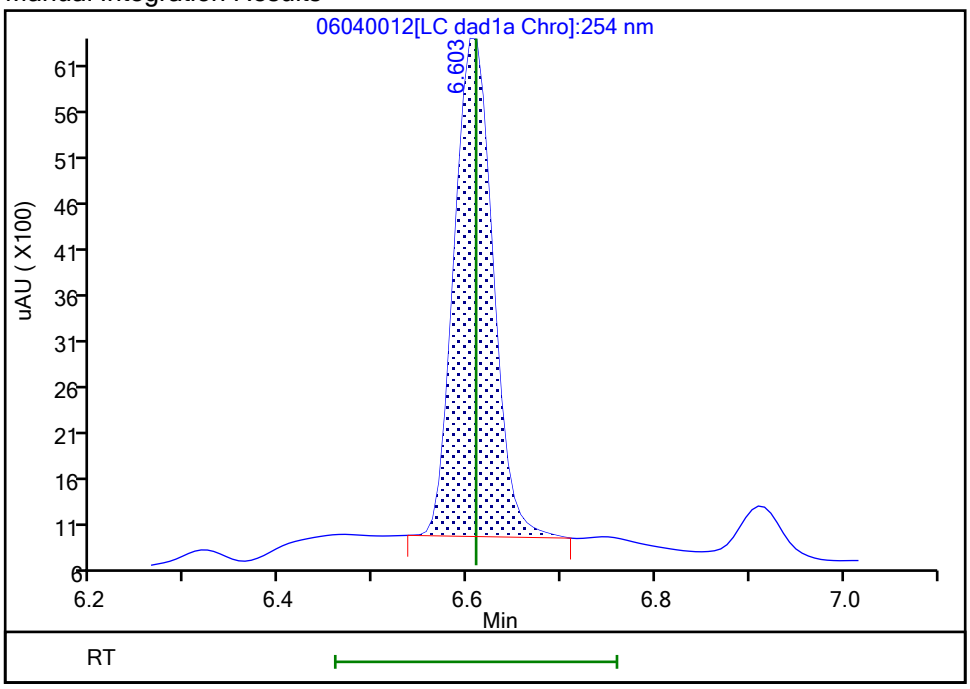
Processing Integration Results

RT: 6.60
Area: 21752
Amount: 0.257660
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 15443
Amount: 0.182927
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 19:36:18
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538030/3-A

Matrix: Water Lab File ID: 06040013.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 500(mL) Date Analyzed: 06/04/2021 19:22

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.26	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040013.D
Lims ID: LCS 280-538030/3-A
Client ID:
Sample Type: LCS
Inject. Date: 04-Jun-2021 19:22:08 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-538030/3
Misc. Info.: 280-0102084-013
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:12 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 04-Jun-2021 20:57:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.489	6.490	-0.001	35489	0.2002	0.1910	M
5 DNX	1	6.803	6.803	0.000	26541	0.2002	0.1868	M
6 MNX	1	7.216	7.210	0.006	29417	0.2334	0.2257	M
$ 9 1,2-Dinitrobenzene	1	8.503	8.496	0.007	22719	0.2000	0.1772	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

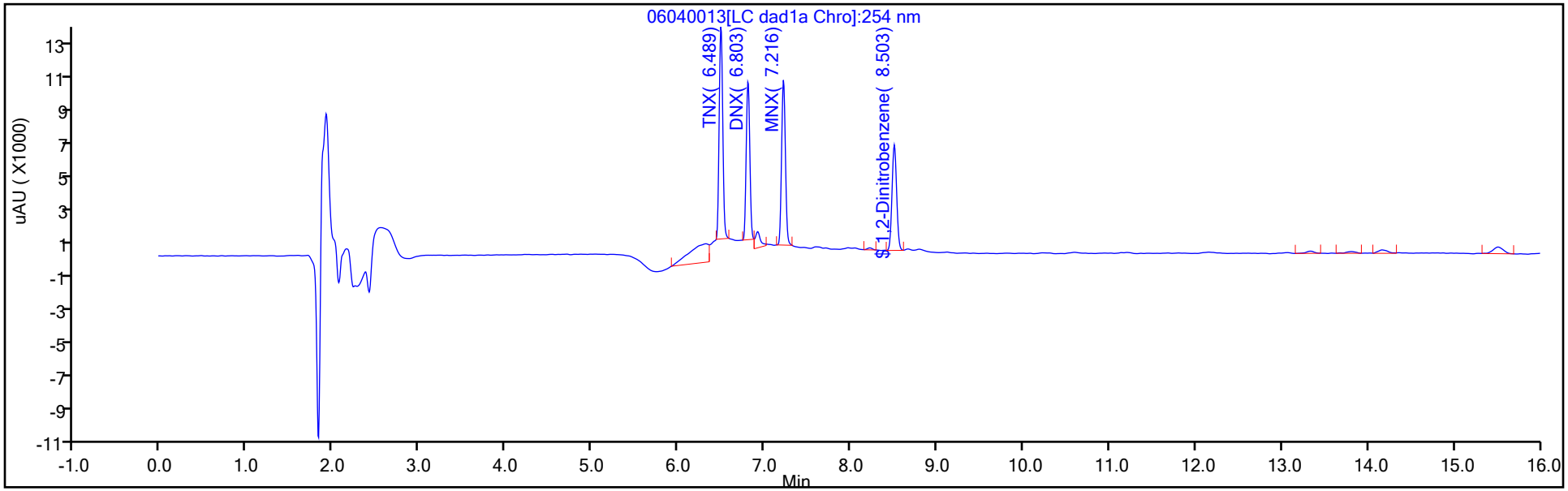
Report Date: 05-Jun-2021 10:20:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

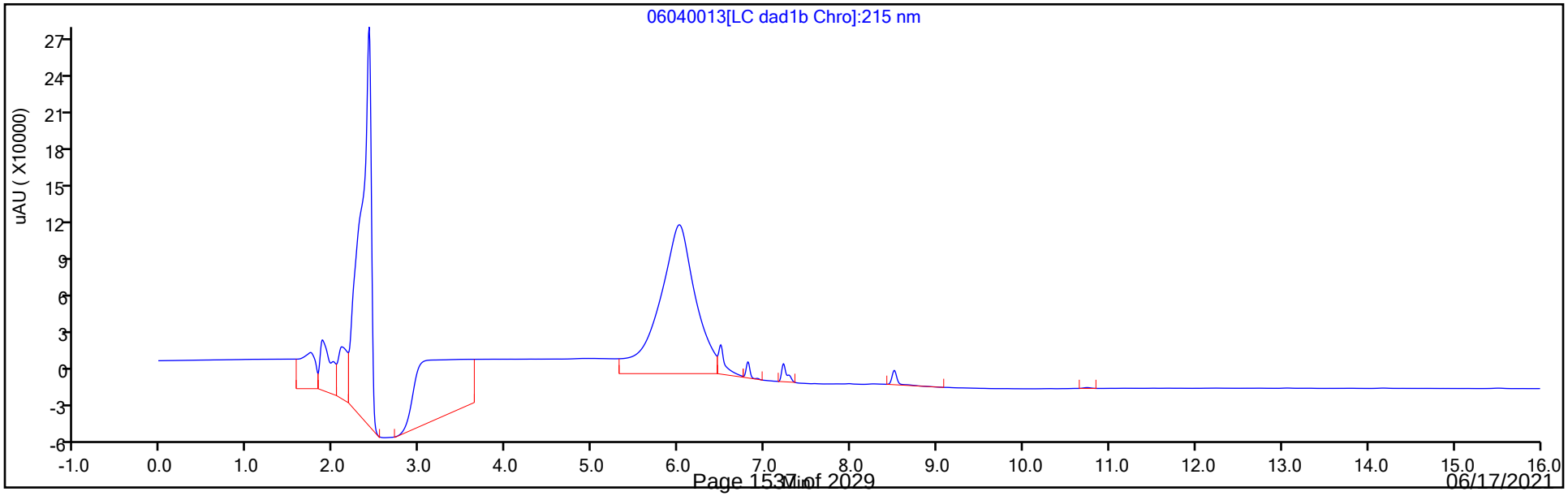
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040013.d

Injection Date:	04-Jun-2021 19:22:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-538030/3-A			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040013.D
Lims ID: LCS 280-538030/3-A
Client ID:
Sample Type: LCS
Inject. Date: 04-Jun-2021 19:22:08 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-538030/3
Misc. Info.: 280-0102084-013
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:12 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 04-Jun-2021 20:57:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1772	88.60

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

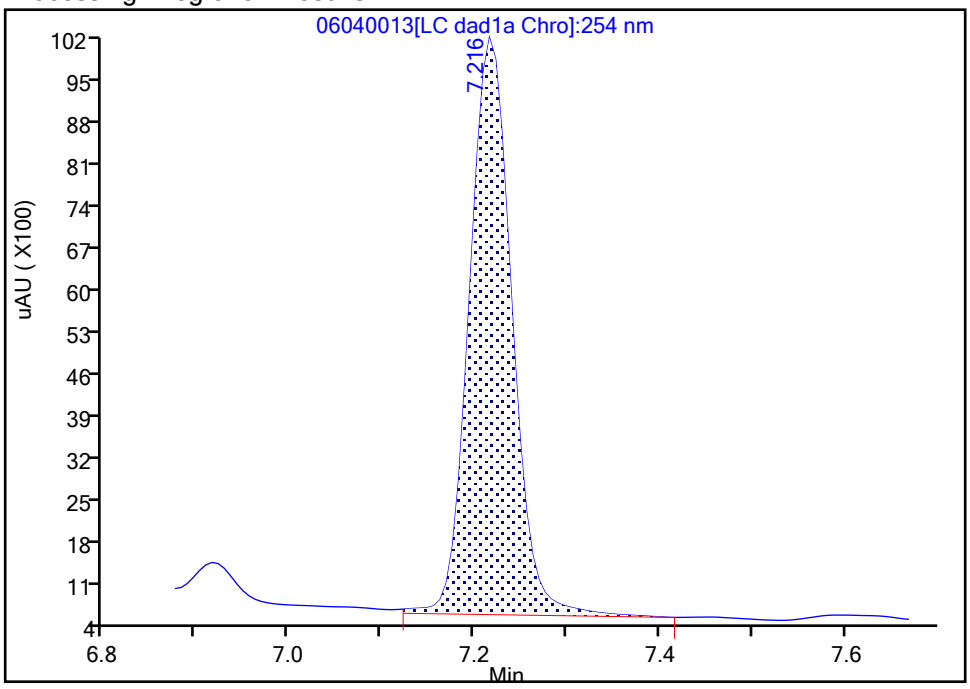
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040013.d				
Injection Date:	04-Jun-2021 19:22:08	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-538030/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

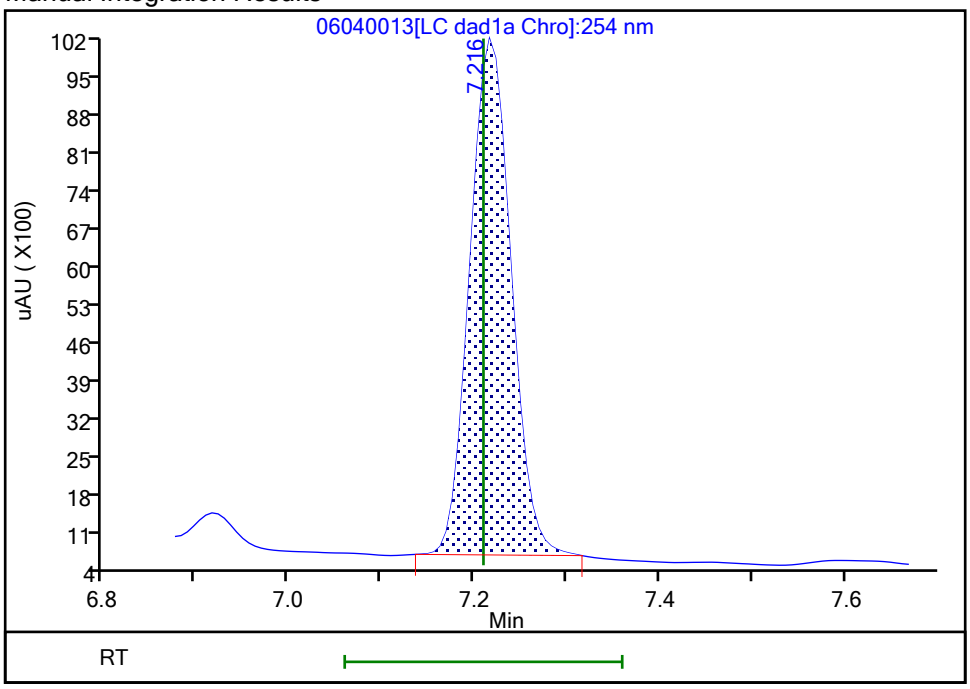
Processing Integration Results

RT: 7.22
Area: 30708
Amount: 0.235599
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 29417
Amount: 0.225694
Amount Units: ug/mL



Reviewer: zhangji, 04-Jun-2021 20:57:49

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538125/2-A

Matrix: Water Lab File ID: 06030016.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/01/2021 17:35

Sample wt/vol: 500(mL) Date Analyzed: 06/03/2021 17:40

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.: 538449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.83		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.77		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.79		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.68		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.69		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.64		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.31	Q	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.38	Q	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.56		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.39	Q	0.41	0.40	0.10
2691-41-0	HMX	1.76	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.52		0.21	0.20	0.091
121-82-4	RDX	1.71		0.21	0.20	0.052
479-45-8	Tetryl	1.72		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030016.D
Lims ID: LCS 280-538125/2-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2021 17:40:21 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-538125/2
Misc. Info.: 280-0102044-016
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:48 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 18:08:42

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.614	6.603	0.011	14888	0.2000	0.1764	M
	7 RDX	1	7.588	7.577	0.011	18204	0.2000	0.1713	
	8 2,4,6-Trinitrophenol	1	7.941	7.943	-0.002	16216	0.2000	0.1960	
$	9 1,2-Dinitrobenzene	1	8.514	8.503	0.011	23614	0.2000	0.1842	
	10 1,3,5-Trinitrobenzene	1	8.641	8.630	0.011	40224	0.2000	0.1826	
	11 1,3-Dinitrobenzene	1	9.267	9.256	0.011	52396	0.2000	0.1768	
	12 Nitrobenzene	1	9.661	9.643	0.018	29761	0.2000	0.1524	
	14 Tetryl	1	9.987	9.970	0.017	29740	0.2000	0.1725	
	15 Nitroglycerin	2	10.447	10.430	0.017	116208	2.00	1.75	
	16 2,4,6-Trinitrotoluene	1	10.914	10.890	0.024	36977	0.2000	0.1795	
	17 4-Amino-2,6-dinitrotoluene	1	11.121	11.096	0.025	23894	0.2000	0.1564	
	18 2-Amino-4,6-dinitrotoluene	1	11.381	11.356	0.025	33995	0.2000	0.1643	
	19 2,6-Dinitrotoluene	1	11.547	11.523	0.024	24249	0.2000	0.1695	
	20 2,4-Dinitrotoluene	1	11.714	11.696	0.018	48290	0.2000	0.1683	
	21 o-Nitrotoluene	1	12.594	12.570	0.024	16821	0.2000	0.1310	
	22 p-Nitrotoluene	1	13.027	13.003	0.024	15549	0.2000	0.1389	
	23 m-Nitrotoluene	1	13.621	13.590	0.031	19669	0.2000	0.1383	
	24 PETN	2	14.727	14.690	0.037	134066	2.00	1.79	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

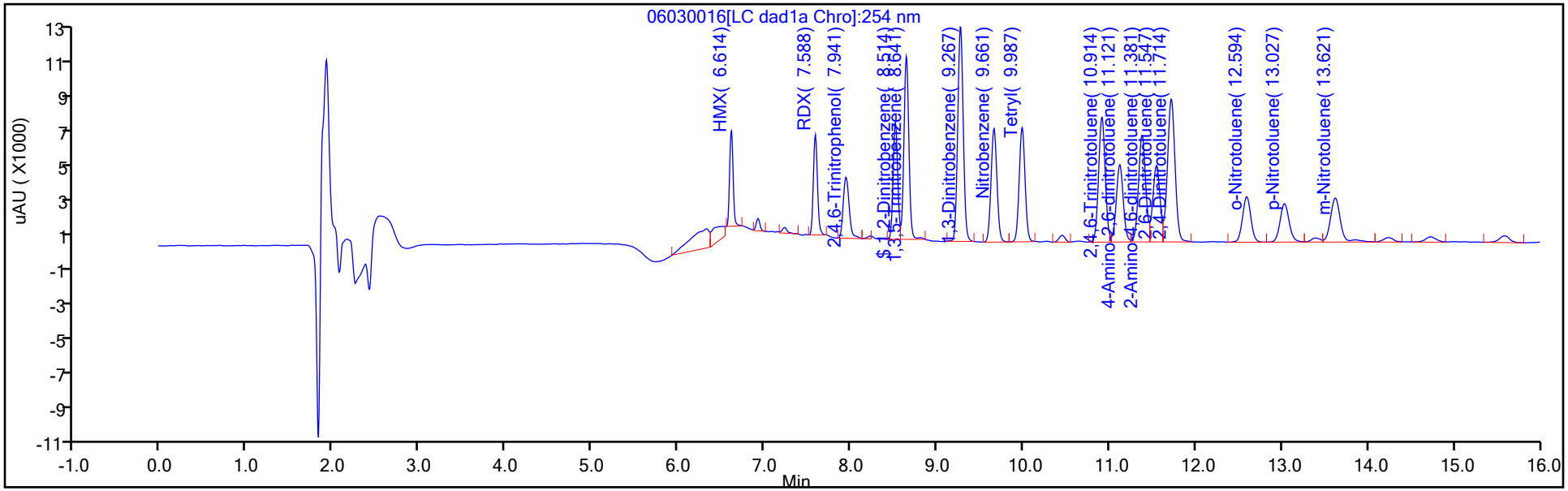
Report Date: 04-Jun-2021 14:12:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

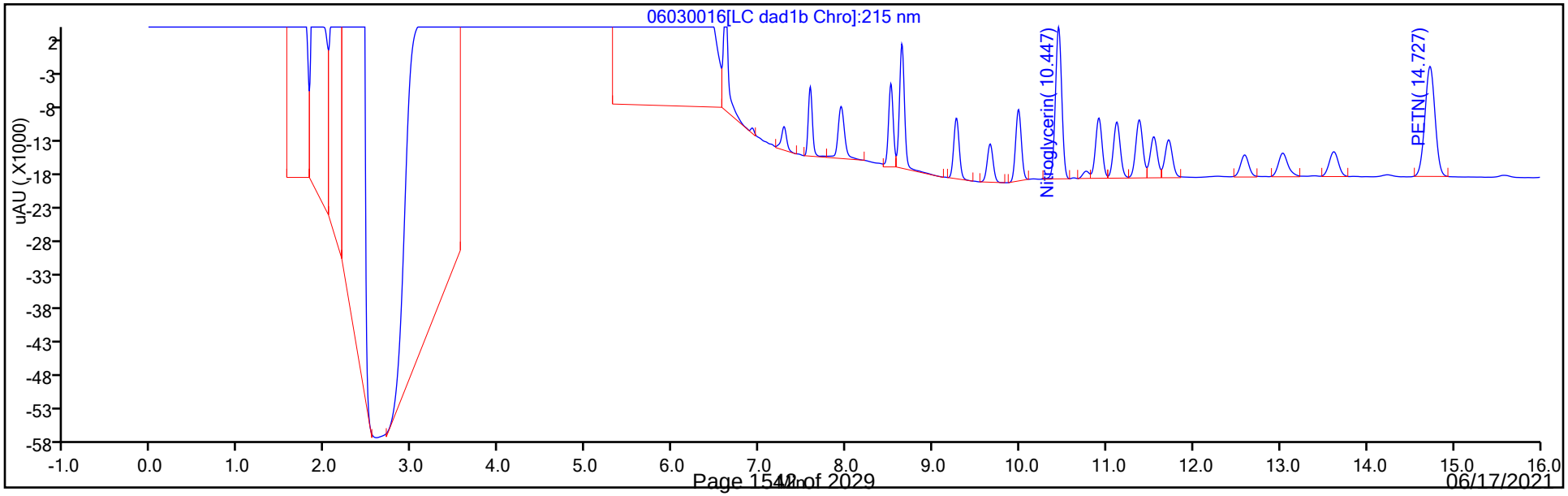
Data File: \\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030016.d

Injection Date:	03-Jun-2021 17:40:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-538125/2-A			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030016.D
Lims ID: LCS 280-538125/2-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2021 17:40:21 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-538125/2
Misc. Info.: 280-0102044-016
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:48 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 18:08:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1842	92.09

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

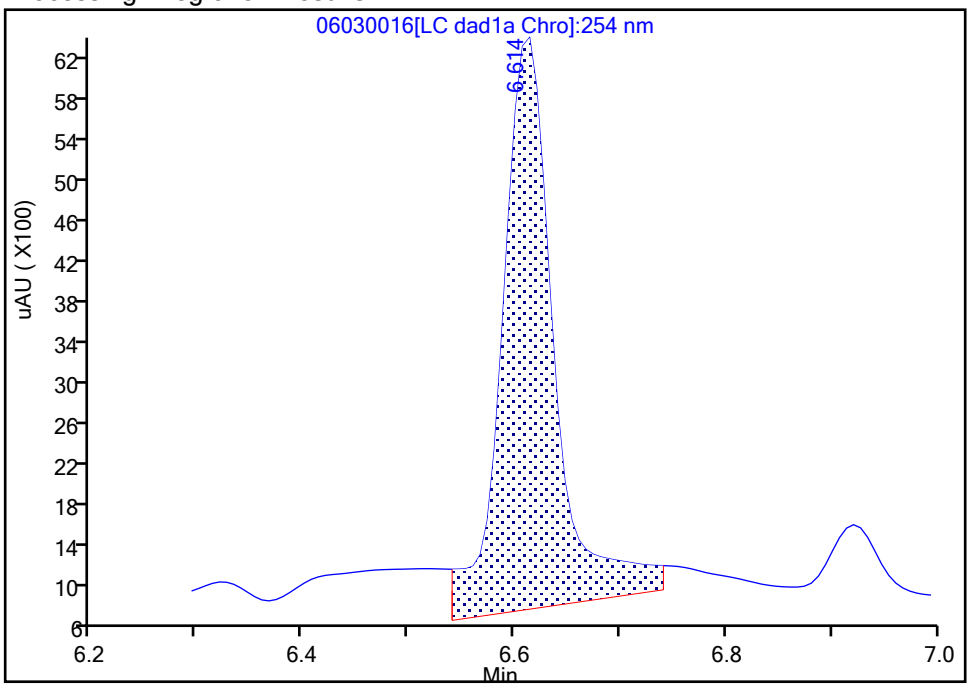
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030016.d				
Injection Date:	03-Jun-2021 17:40:21	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-538125/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

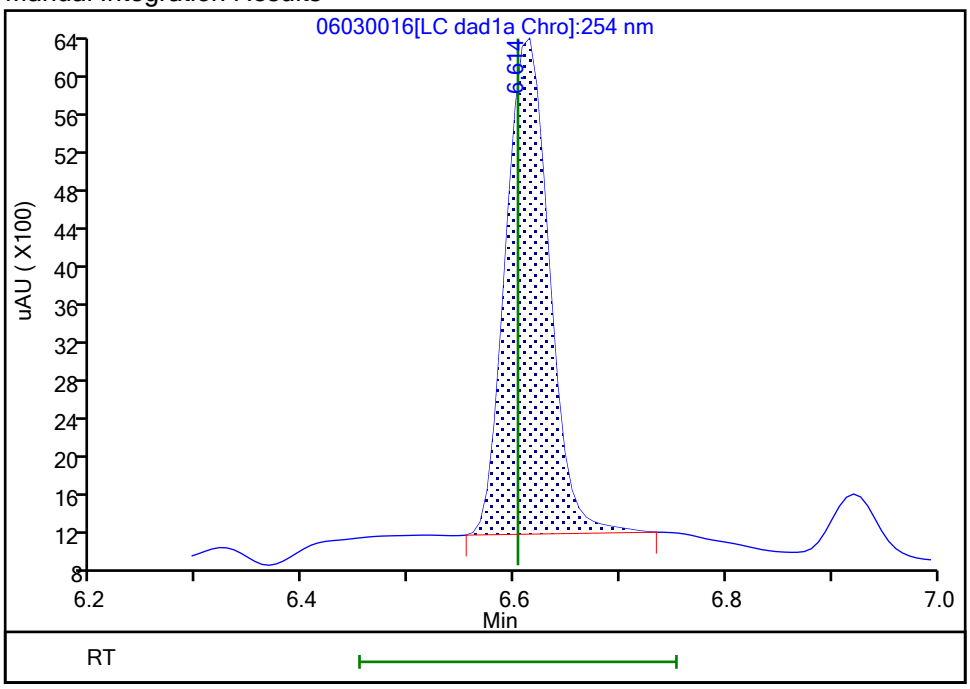
Processing Integration Results

RT: 6.61
Area: 19366
Amount: 0.229397
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 14888
Amount: 0.176353
Amount Units: ug/mL



Reviewer: zhangji, 03-Jun-2021 18:08:40

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-538125/3-A

Matrix: Water Lab File ID: 06030017.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/01/2021 17:35

Sample wt/vol: 500(mL) Date Analyzed: 06/03/2021 18:03

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.: 538449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.37		2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030017.D
Lims ID: LCS 280-538125/3-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2021 18:03:23 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-538125/3
Misc. Info.: 280-0102044-017
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:48 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 18:32:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	2 TNX	1	6.497	6.489	0.008	35503	0.2002	0.1911	M
	5 DNX	1	6.811	6.802	0.009	26772	0.2002	0.1884	M
	6 MNX	1	7.217	7.216	0.001	30857	0.2334	0.2367	
$	9 1,2-Dinitrobenzene	1	8.517	8.503	0.014	24631	0.2000	0.1921	

QC Flag Legend

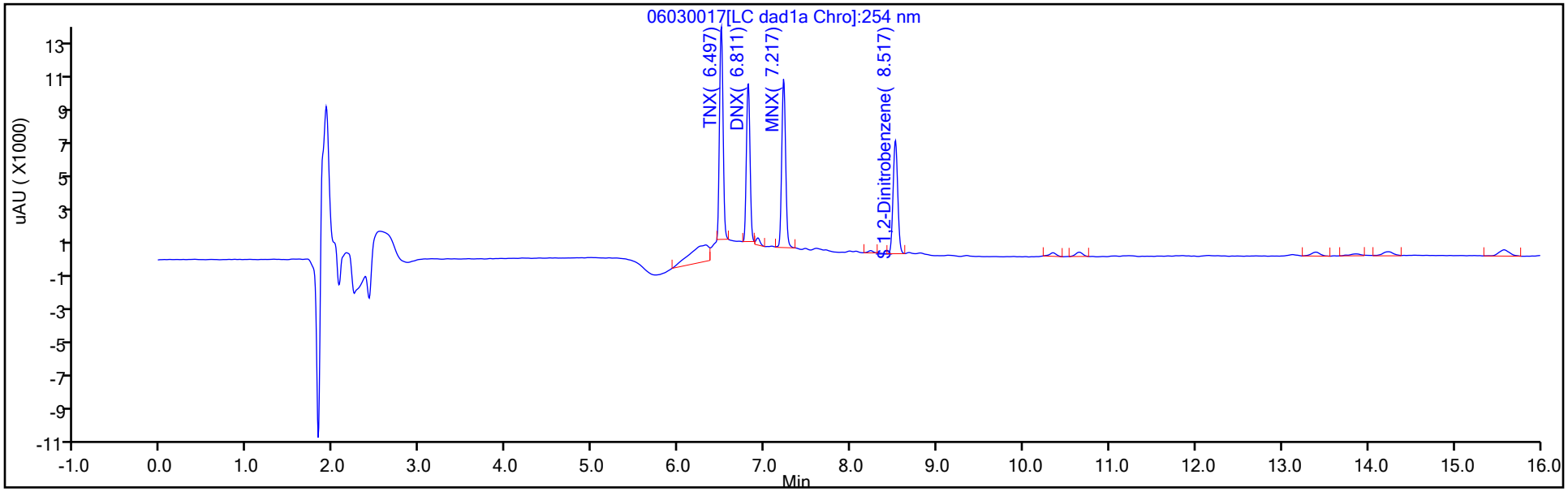
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 04-Jun-2021 14:12:50 Chrom Revision: 2.3 13-May-2021 07:57:40

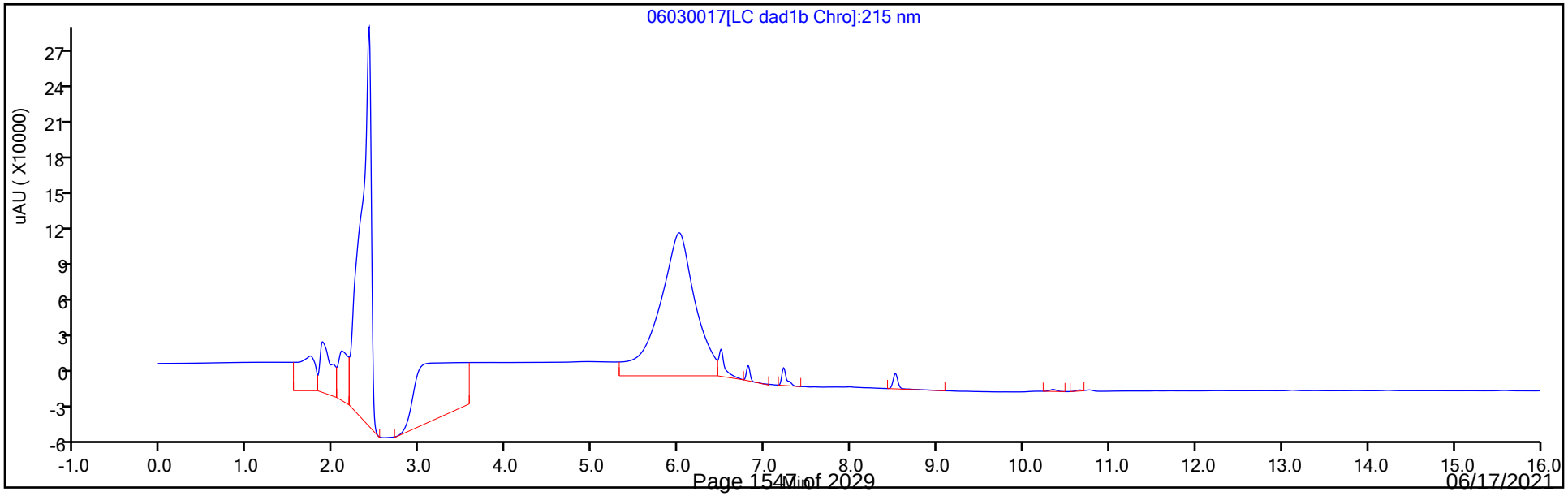
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030017.d				
Injection Date:	03-Jun-2021 18:03:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-538125/3-A			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030017.D
Lims ID: LCS 280-538125/3-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2021 18:03:23 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-538125/3
Misc. Info.: 280-0102044-017
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:48 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 18:32:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1921	96.05

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-538125/4-A

Matrix: Water Lab File ID: 06030018.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 06/01/2021 17:35

Sample wt/vol: 500(mL) Date Analyzed: 06/03/2021 18:26

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538449 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.30	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030018.D
Lims ID: LCSD 280-538125/4-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Jun-2021 18:26:26 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-538125/
Misc. Info.: 280-0102044-018
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:48 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 19:37:56

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	2 TNX	1	6.496	6.489	0.007	34284	0.2002	0.1845	M
	5 DNX	1	6.810	6.802	0.008	26644	0.2002	0.1875	M
	6 MNX	1	7.223	7.216	0.007	29941	0.2334	0.2297	M
$	9 1,2-Dinitrobenzene	1	8.516	8.503	0.013	24566	0.2000	0.1916	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

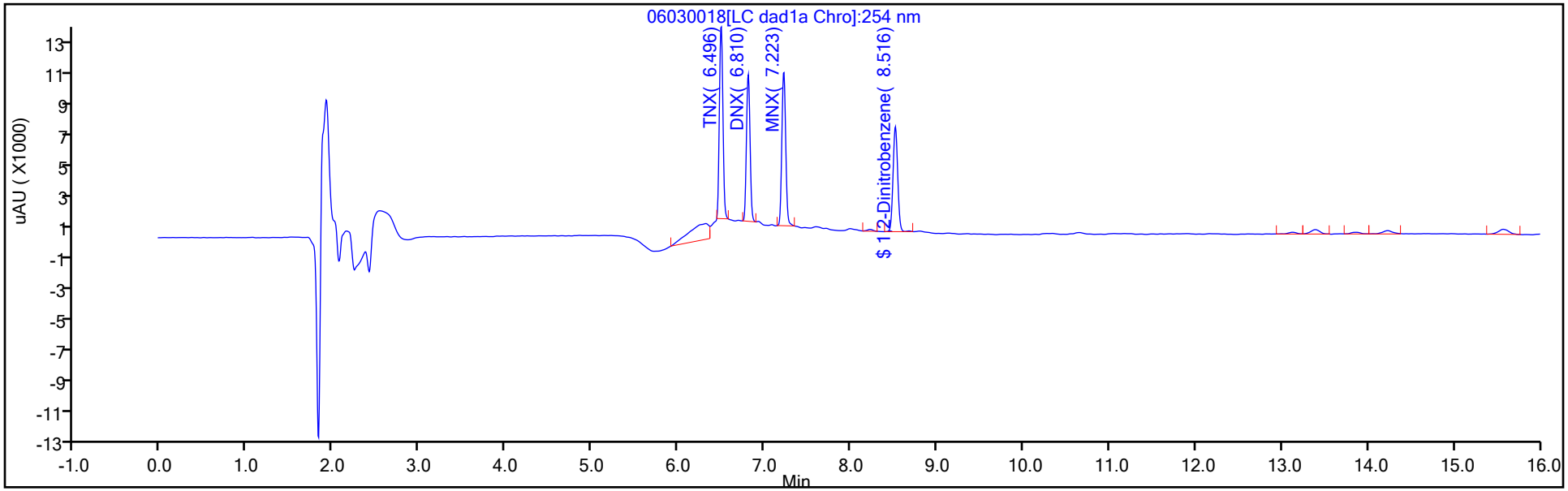
Report Date: 04-Jun-2021 14:12:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

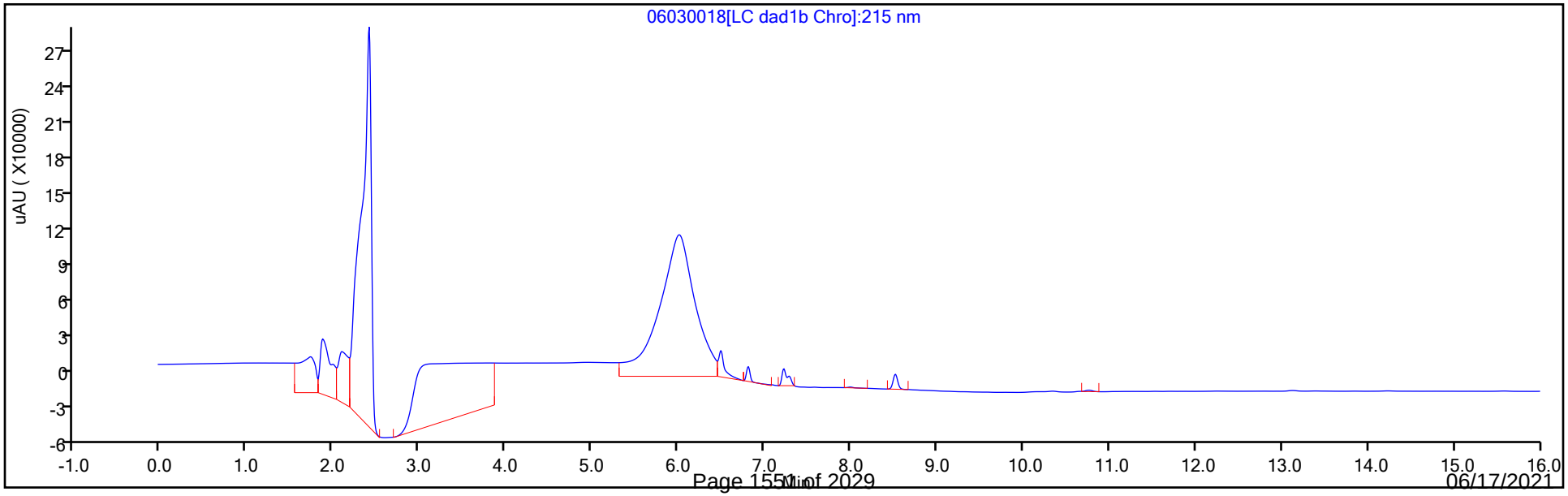
Data File: \\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030018.d

Injection Date:	03-Jun-2021 18:26:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCSD 280-538125/4-A			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\06030018.D
Lims ID: LCSD 280-538125/4-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Jun-2021 18:26:26 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-538125/
Misc. Info.: 280-0102044-018
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210603-102044.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-Jun-2021 14:12:48 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: zhangji Date: 03-Jun-2021 19:37:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1916	95.80

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

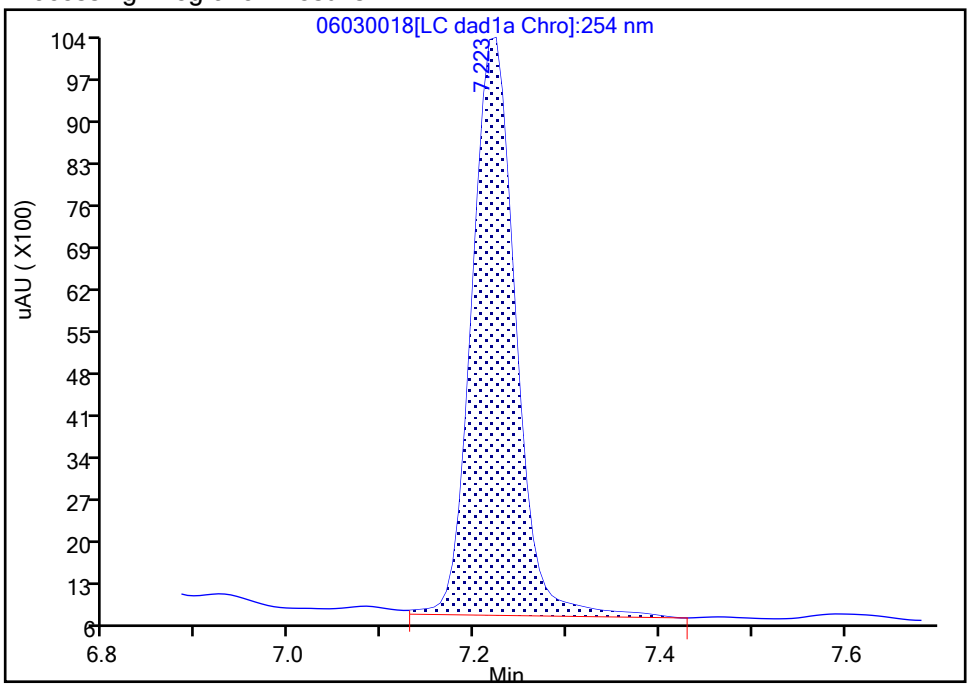
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210603-102044.b\06030018.d				
Injection Date:	03-Jun-2021 18:26:26	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-538125/4-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

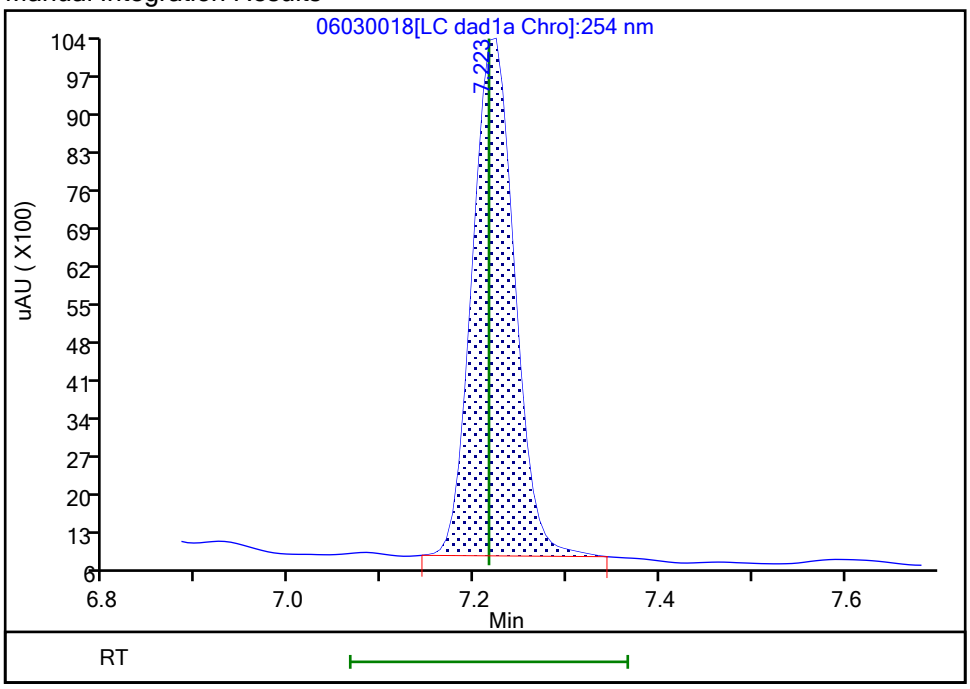
Processing Integration Results

RT: 7.22
Area: 31347
Amount: 0.240501
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 29941
Amount: 0.229714
Amount Units: ug/mL



Reviewer: zhangji, 03-Jun-2021 19:37:53

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A MS Lab Sample ID: 280-149116-13 MS

Matrix: Water Lab File ID: 06040038.D

Analysis Method: 8330A Date Collected: 05/25/2021 13:25

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 497.5(mL) Date Analyzed: 06/05/2021 04:57

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.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.90	M	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	1.92		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.90		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.75		0.10	0.080	0.028
606-20-2	2,6-Dinitrotoluene	1.82		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.69		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.40		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.36	J1	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.65		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.45	M	0.41	0.40	0.10
2691-41-0	HMX	1.84	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.65		0.21	0.20	0.091
121-82-4	RDX	1.75	M	0.21	0.20	0.052
479-45-8	Tetryl	1.87		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040038.D
Lims ID: 280-149116-B-13-A MS
Client ID: PZ007-21A
Sample Type: MS
Inject. Date: 05-Jun-2021 04:57:12 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-13-
Misc. Info.: 280-0102084-038
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:23 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:17:23

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.601	6.609	-0.008	15449	0.2000	0.1830	M
	7 RDX	1	7.568	7.576	-0.008	18548	0.2000	0.1746	M
	8 2,4,6-Trinitrophenol	1	7.915	7.942	-0.027	16144	0.2000	0.1952	M
$	9 1,2-Dinitrobenzene	1	8.495	8.496	-0.001	24373	0.2000	0.1901	M
	10 1,3,5-Trinitrobenzene	1	8.621	8.629	-0.008	41706	0.2000	0.1893	M
	11 1,3-Dinitrobenzene	1	9.248	9.249	-0.001	56579	0.2000	0.1909	
	12 Nitrobenzene	1	9.635	9.636	-0.001	31987	0.2000	0.1638	
	14 Tetryl	1	9.955	9.956	-0.001	32006	0.2000	0.1856	
	15 Nitroglycerin	2	10.415	10.416	-0.001	123769	2.00	1.87	
	16 2,4,6-Trinitrotoluene	1	10.881	10.876	0.005	39041	0.2000	0.1895	
	17 4-Amino-2,6-dinitrotoluene	1	11.088	11.076	0.012	25075	0.2000	0.1641	
	18 2-Amino-4,6-dinitrotoluene	1	11.341	11.336	0.005	34814	0.2000	0.1682	
	19 2,6-Dinitrotoluene	1	11.508	11.502	0.006	25854	0.2000	0.1807	
	20 2,4-Dinitrotoluene	1	11.681	11.676	0.005	49855	0.2000	0.1737	
	21 o-Nitrotoluene	1	12.548	12.542	0.006	17858	0.2000	0.1391	
	22 p-Nitrotoluene	1	12.988	12.976	0.012	16180	0.2000	0.1446	M
	23 m-Nitrotoluene	1	13.575	13.562	0.013	19280	0.2000	0.1355	
	24 PETN	2	14.668	14.649	0.019	142448	2.00	1.90	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

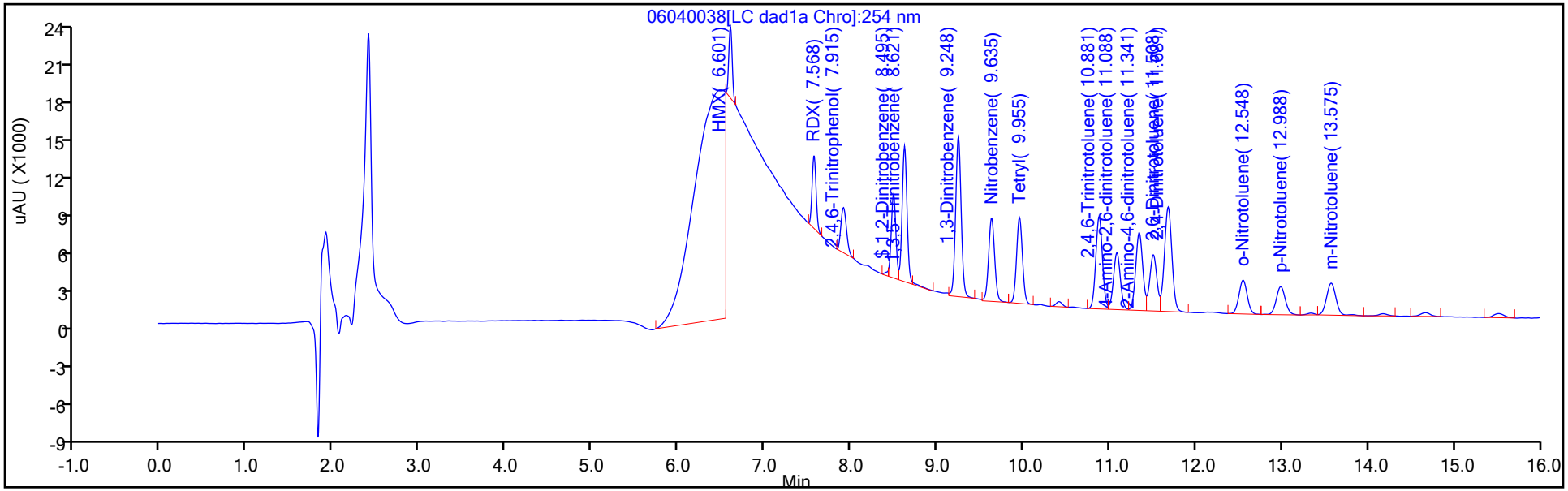
Report Date: 05-Jun-2021 10:20:24 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

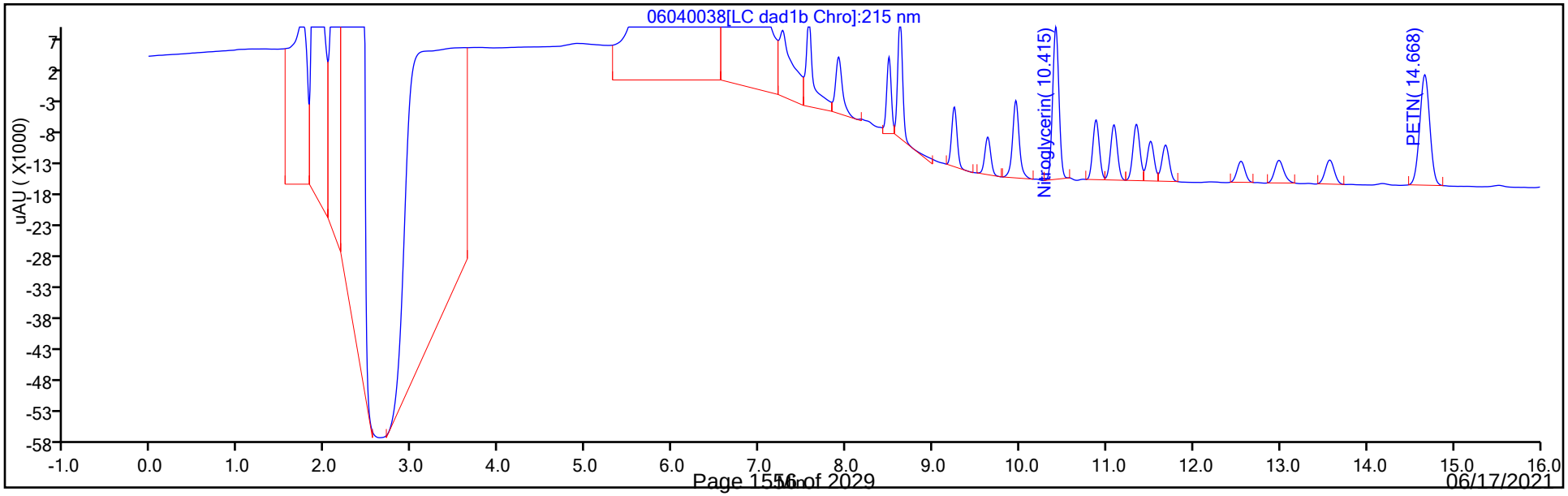
Data File: \\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040038.d

Injection Date:	05-Jun-2021 04:57:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-B-13-A MS			Worklist Smp#:	38
Client ID:	PZ007-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040038.D				
Lims ID:	280-149116-B-13-A MS				
Client ID:	PZ007-21A				
Sample Type:	MS				
Inject. Date:	05-Jun-2021 04:57:12	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-13-				
Misc. Info.:	280-0102084-038				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:17:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1901	95.05

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

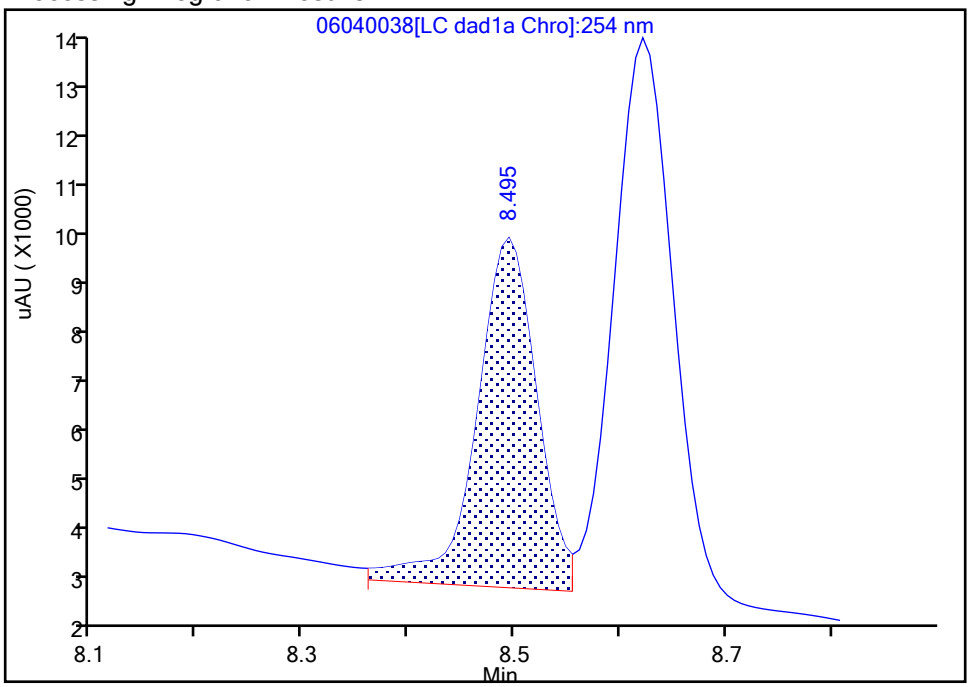
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040038.d				
Injection Date:	05-Jun-2021 04:57:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-A MS				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

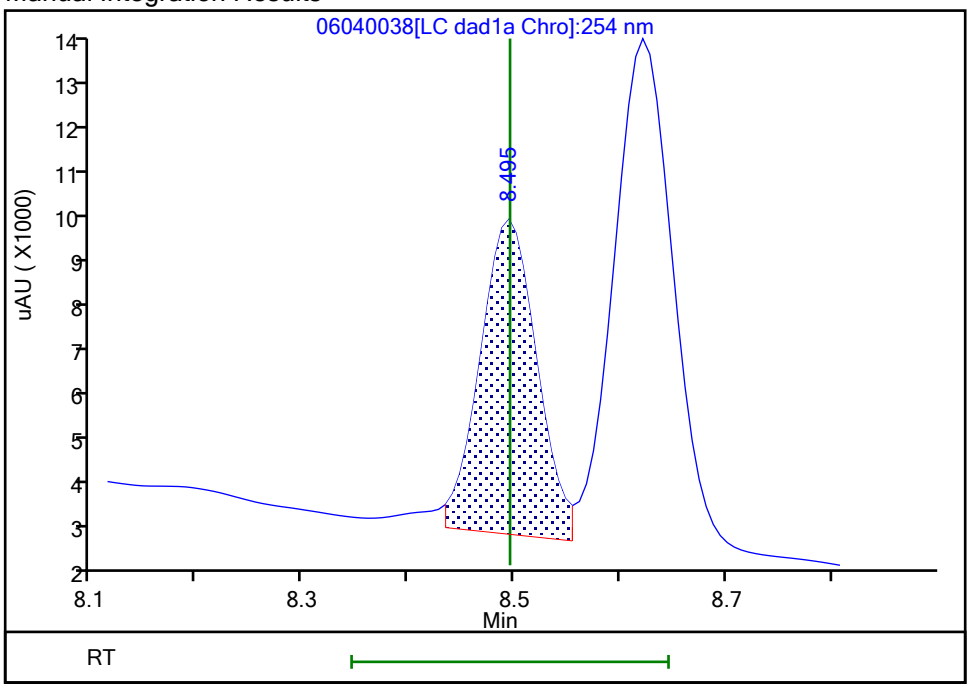
Processing Integration Results

RT: 8.49
Area: 26138
Amount: 0.203857
Amount Units: ug/mL



Manual Integration Results

RT: 8.49
Area: 24373
Amount: 0.190091
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:17:12
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

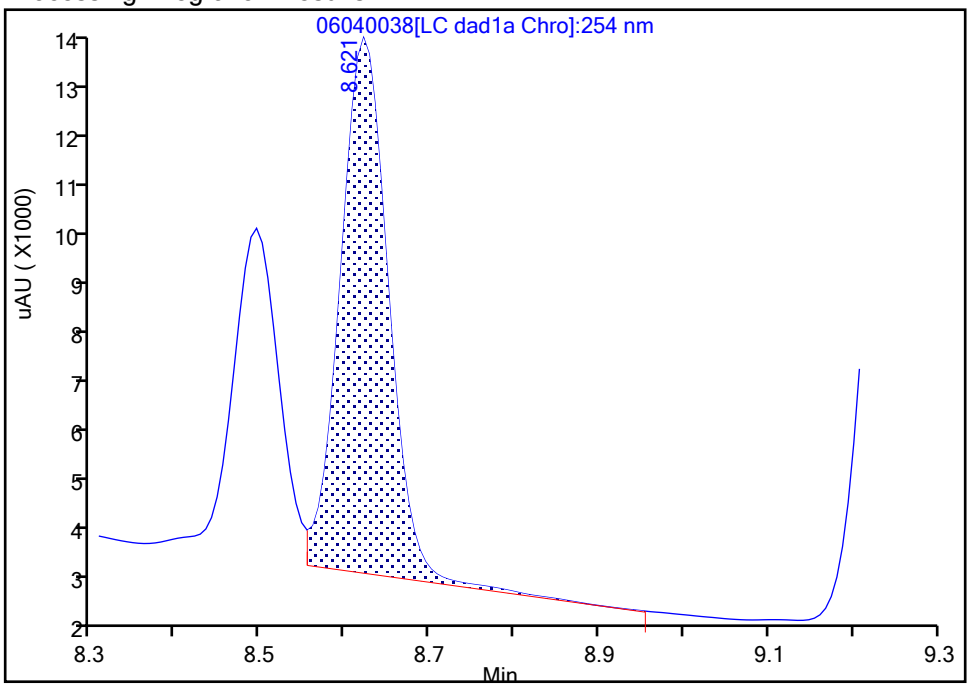
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040038.d				
Injection Date:	05-Jun-2021 04:57:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-A MS				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

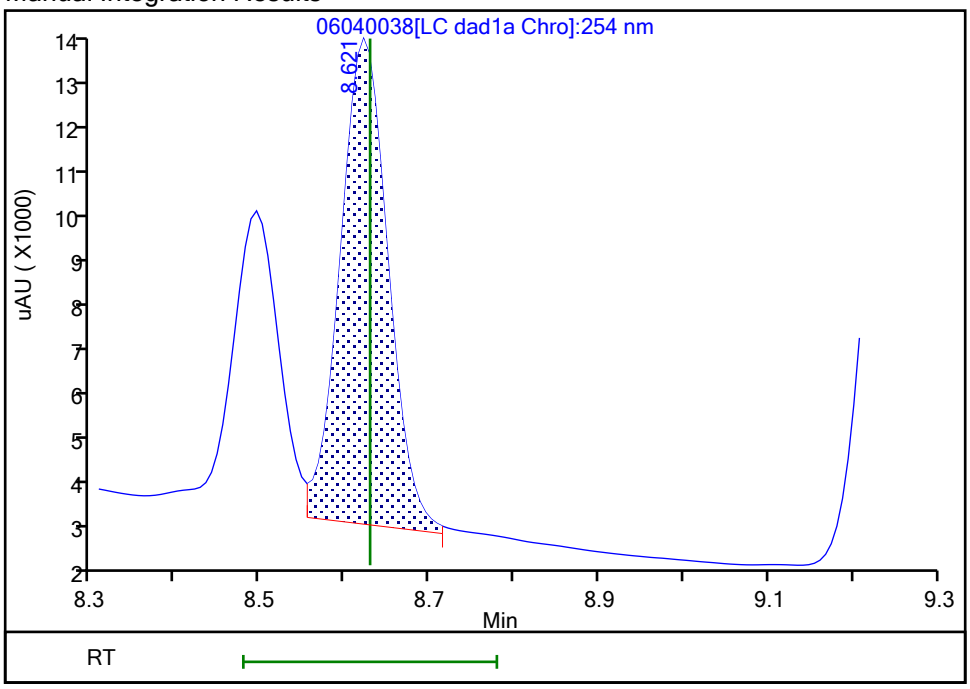
Processing Integration Results

RT: 8.62
Area: 41972
Amount: 0.190507
Amount Units: ug/mL



Manual Integration Results

RT: 8.62
Area: 41706
Amount: 0.189300
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:17:10

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

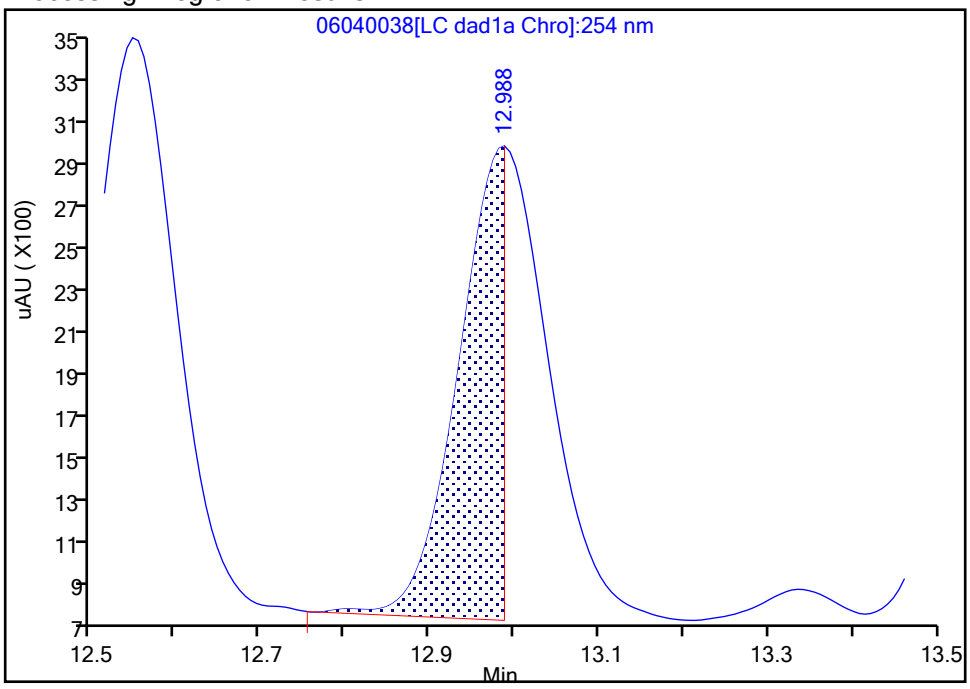
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040038.d				
Injection Date:	05-Jun-2021 04:57:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-A MS				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

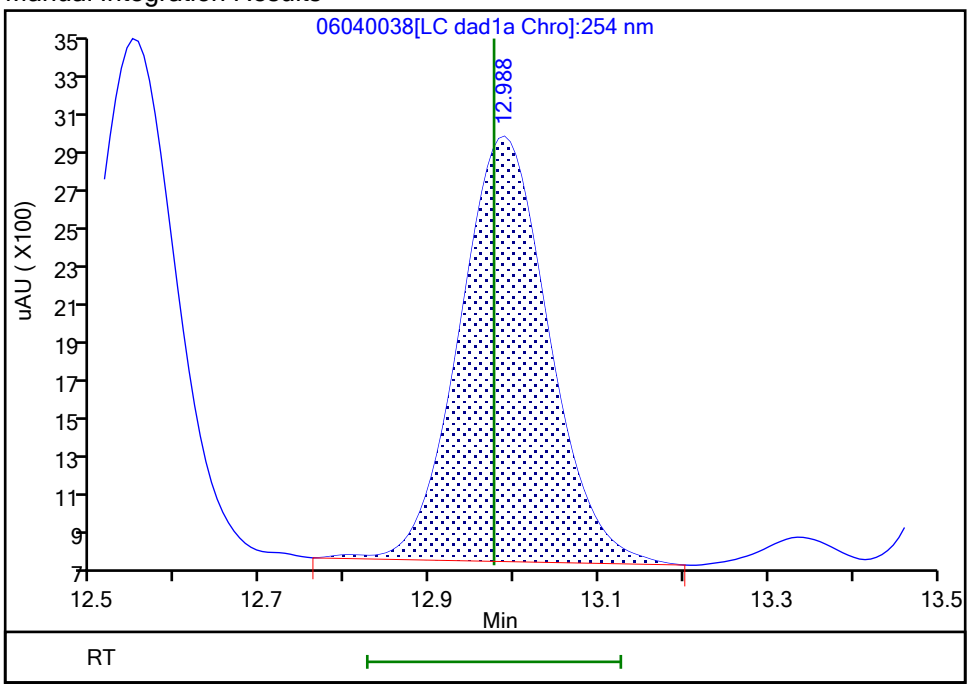
Processing Integration Results

RT: 12.99
Area: 8138
Amount: 0.072717
Amount Units: ug/mL



Manual Integration Results

RT: 12.99
Area: 16180
Amount: 0.144577
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:17:19

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

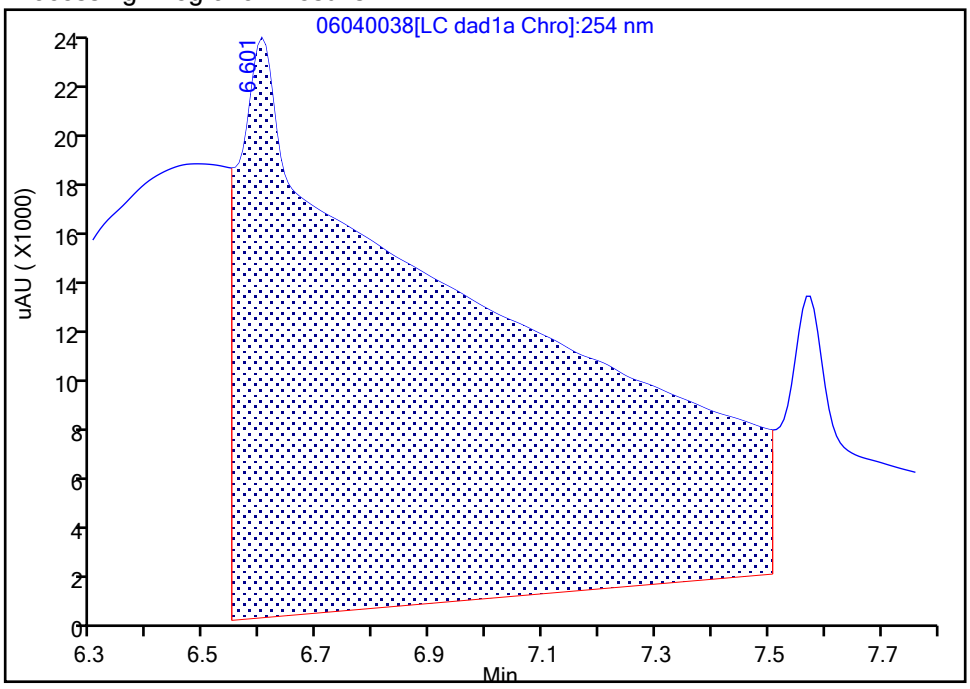
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040038.d				
Injection Date:	05-Jun-2021 04:57:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-A MS				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

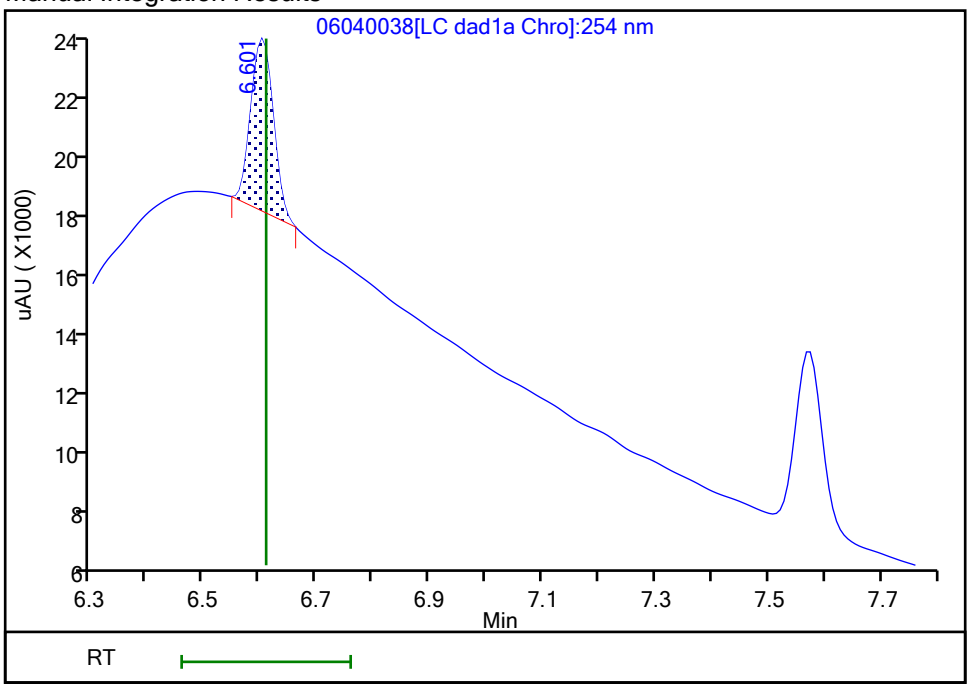
Processing Integration Results

RT: 6.60
Area: 666696
Amount: 7.897236
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 15449
Amount: 0.182999
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:16:49

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

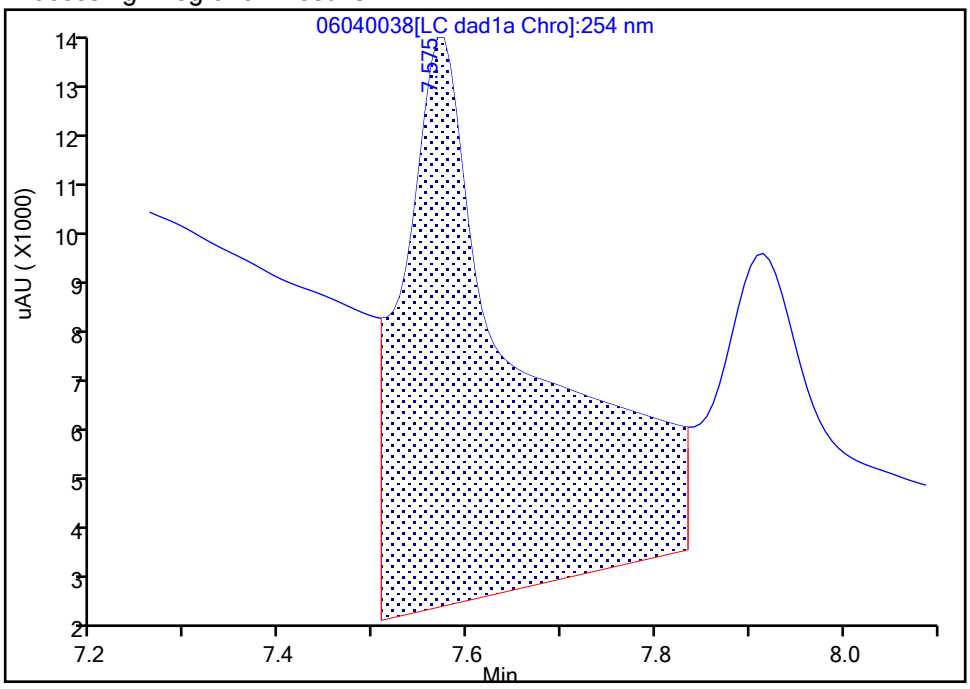
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040038.d				
Injection Date:	05-Jun-2021 04:57:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-A MS				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

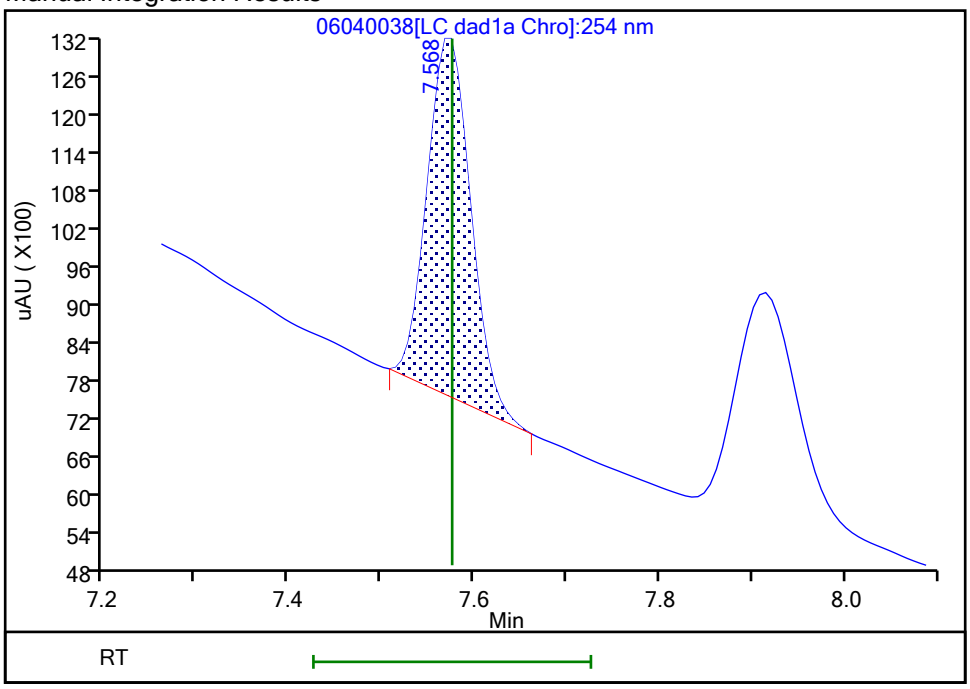
Processing Integration Results

RT: 7.57
Area: 95134
Amount: 0.895282
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 18548
Amount: 0.174551
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:16:53
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A MS Lab Sample ID: 280-149116-13 MS

Matrix: Water Lab File ID: 06040040.D

Analysis Method: 8330A Date Collected: 05/25/2021 13:25

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 510.8(mL) Date Analyzed: 06/05/2021 05:43

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.15	M	2.0	0.39	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	103		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040040.D				
Lims ID:	280-149116-A-13-B MS				
Client ID:	PZ007-21A				
Sample Type:	MS				
Inject. Date:	05-Jun-2021 05:43:07	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-13-				
Misc. Info.:	280-0102084-040				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:18:10		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.484	6.490	-0.006	35019	0.2002	0.1885	M
5 DNX	1	6.797	6.803	-0.006	26324	0.2002	0.1852	M
6 MNX	1	7.204	7.210	-0.006	28563	0.2334	0.2191	M
$ 9 1,2-Dinitrobenzene	1	8.497	8.496	0.001	26326	0.2000	0.2053	

QC Flag Legend

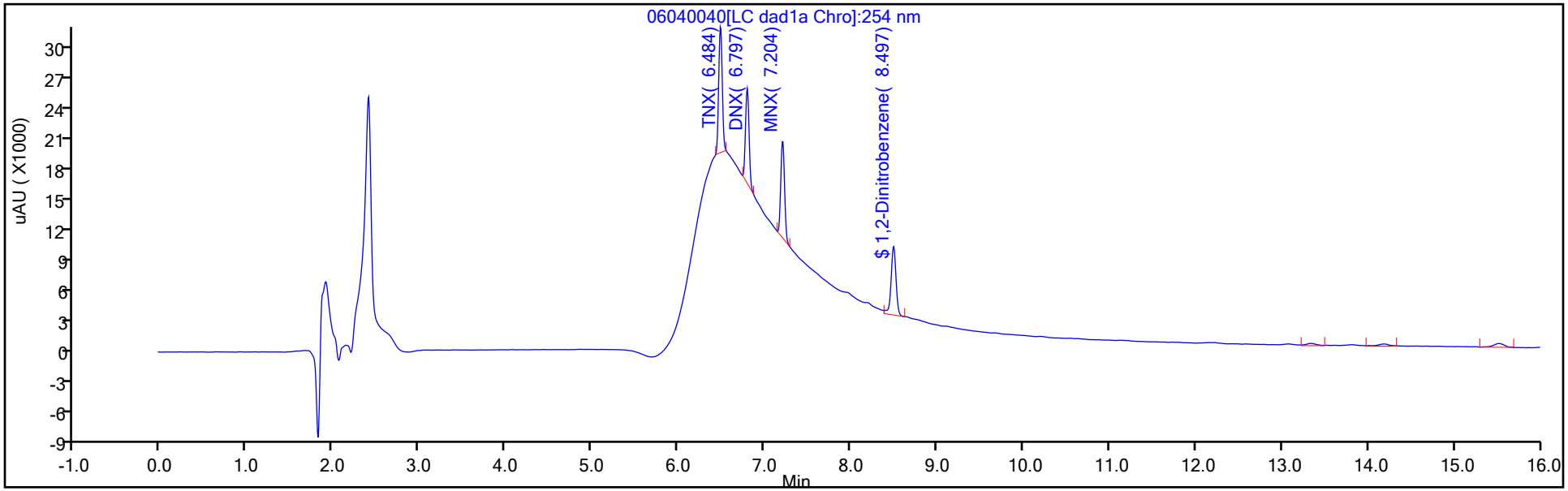
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 05-Jun-2021 10:20:25 Chrom Revision: 2.3 13-May-2021 07:57:40

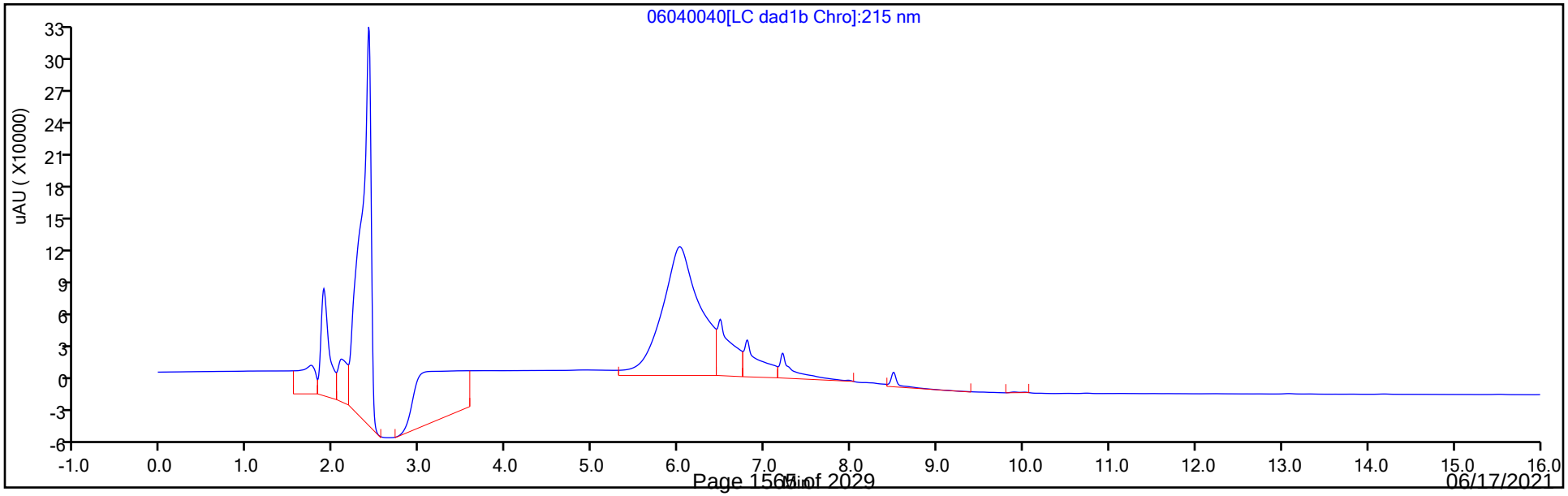
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040040.d				
Injection Date:	05-Jun-2021 05:43:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-13-B MS			Worklist Smp#:	40
Client ID:	PZ007-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040040.D				
Lims ID:	280-149116-A-13-B MS				
Client ID:	PZ007-21A				
Sample Type:	MS				
Inject. Date:	05-Jun-2021 05:43:07	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-13-				
Misc. Info.:	280-0102084-040				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:18:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2053	102.66

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

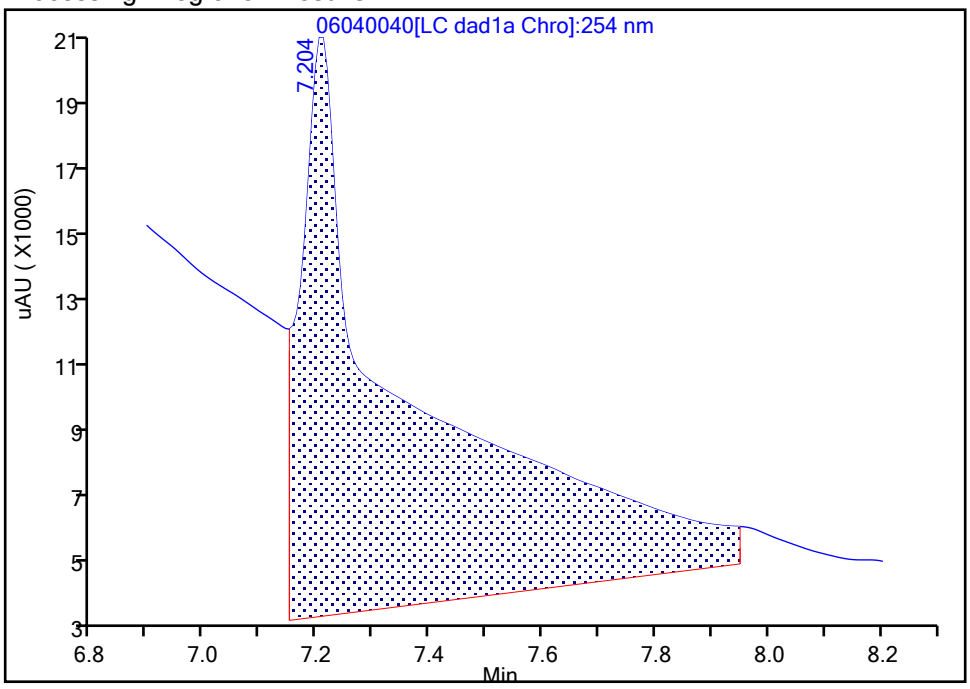
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040040.d				
Injection Date:	05-Jun-2021 05:43:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-13-B MS				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

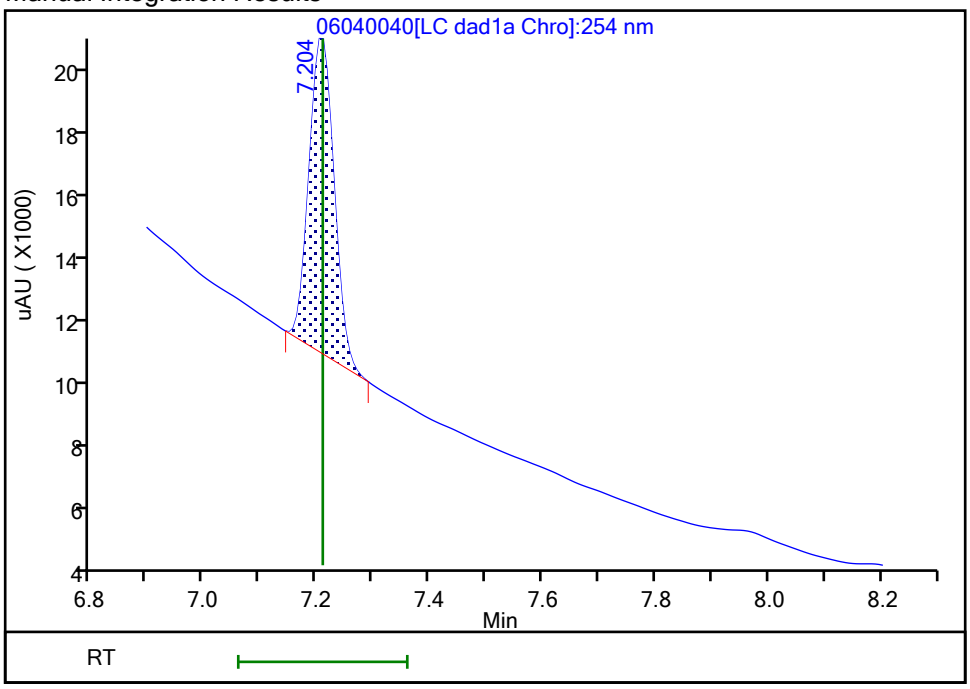
Processing Integration Results

RT: 7.20
Area: 235459
Amount: 1.806494
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 28563
Amount: 0.219142
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:18:09
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A MSD Lab Sample ID: 280-149116-13 MSD

Matrix: Water Lab File ID: 06040039.D

Analysis Method: 8330A Date Collected: 05/25/2021 13:25

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 500.1(mL) Date Analyzed: 06/05/2021 05:20

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.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.89	M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.88		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.92		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.72		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.79		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.68		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.30	J1	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	1.30	J1	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.65		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.36	J1	0.41	0.40	0.10
2691-41-0	HMX	1.88	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.53		0.21	0.20	0.091
121-82-4	RDX	1.78	M	0.21	0.20	0.051
479-45-8	Tetryl	1.89		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040039.D
Lims ID: 280-149116-B-13-B MSD
Client ID: PZ007-21A
Sample Type: MSD
Inject. Date: 05-Jun-2021 05:20:08 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-B-13-
Misc. Info.: 280-0102084-039
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:23 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:17:53

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.599	6.609	-0.010	15882	0.2000	0.1881	M
	7 RDX	1	7.573	7.576	-0.003	18868	0.2000	0.1776	M
	8 2,4,6-Trinitrophenol	1	7.913	7.942	-0.029	16553	0.2000	0.2001	M
$	9 1,2-Dinitrobenzene	1	8.499	8.496	0.003	24332	0.2000	0.1898	M
	10 1,3,5-Trinitrobenzene	1	8.626	8.629	-0.003	41632	0.2000	0.1890	M
	11 1,3-Dinitrobenzene	1	9.253	9.249	0.004	55726	0.2000	0.1881	
	12 Nitrobenzene	1	9.633	9.636	-0.003	29838	0.2000	0.1528	
	14 Tetryl	1	9.959	9.956	0.003	32535	0.2000	0.1887	
	15 Nitroglycerin	2	10.419	10.416	0.003	127168	2.00	1.92	
	16 2,4,6-Trinitrotoluene	1	10.879	10.876	0.003	39649	0.2000	0.1924	
	17 4-Amino-2,6-dinitrotoluene	1	11.086	11.076	0.010	25227	0.2000	0.1651	
	18 2-Amino-4,6-dinitrotoluene	1	11.346	11.336	0.010	34741	0.2000	0.1679	
	19 2,6-Dinitrotoluene	1	11.513	11.502	0.011	25660	0.2000	0.1793	
	20 2,4-Dinitrotoluene	1	11.686	11.676	0.010	49239	0.2000	0.1716	
	21 o-Nitrotoluene	1	12.553	12.542	0.011	16717	0.2000	0.1302	
	22 p-Nitrotoluene	1	12.986	12.976	0.010	15204	0.2000	0.1359	
	23 m-Nitrotoluene	1	13.573	13.562	0.011	18478	0.2000	0.1299	
	24 PETN	2	14.673	14.649	0.024	145896	2.00	1.95	

QC Flag Legend

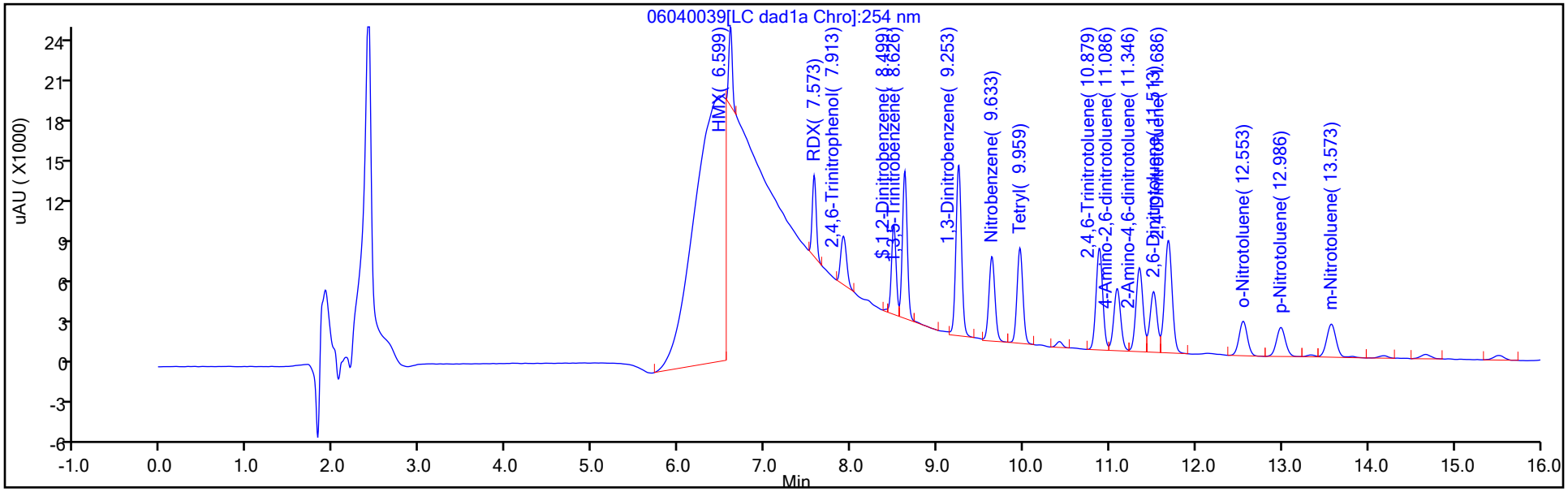
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 05-Jun-2021 10:20:25 Chrom Revision: 2.3 13-May-2021 07:57:40

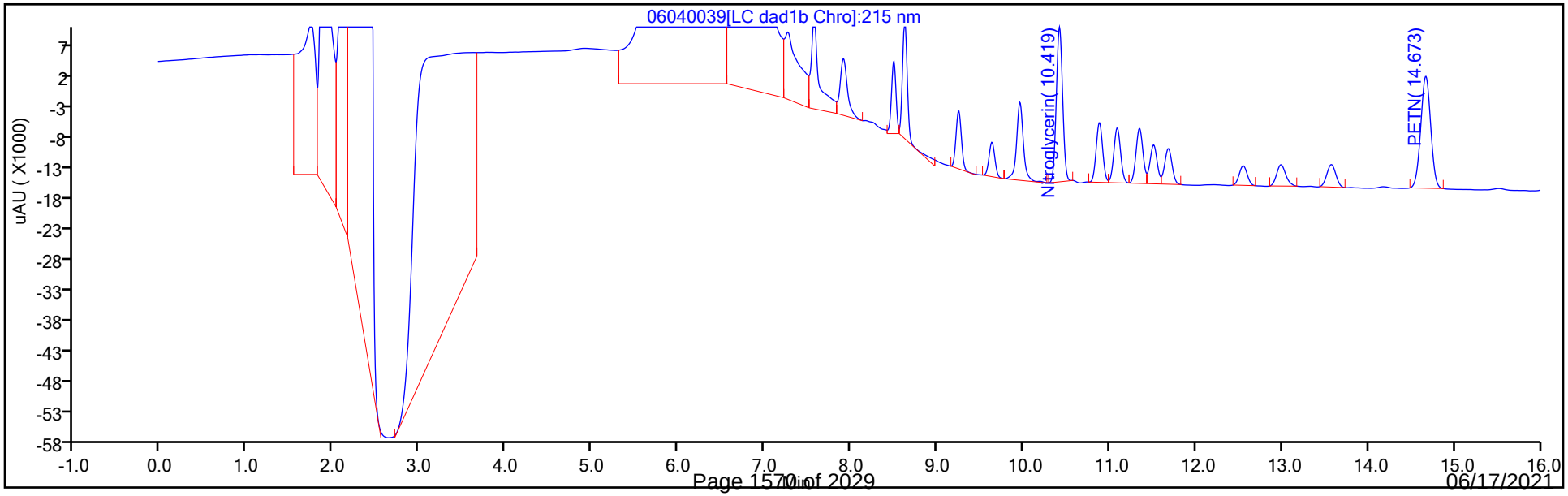
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040039.d				
Injection Date:	05-Jun-2021 05:20:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-B-13-B MSD			Worklist Smp#:	39
Client ID:	PZ007-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040039.D				
Lims ID:	280-149116-B-13-B MSD				
Client ID:	PZ007-21A				
Sample Type:	MSD				
Inject. Date:	05-Jun-2021 05:20:08	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-B-13-				
Misc. Info.:	280-0102084-039				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				

First Level Reviewer: zhangji Date: 05-Jun-2021 10:17:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1898	94.89

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

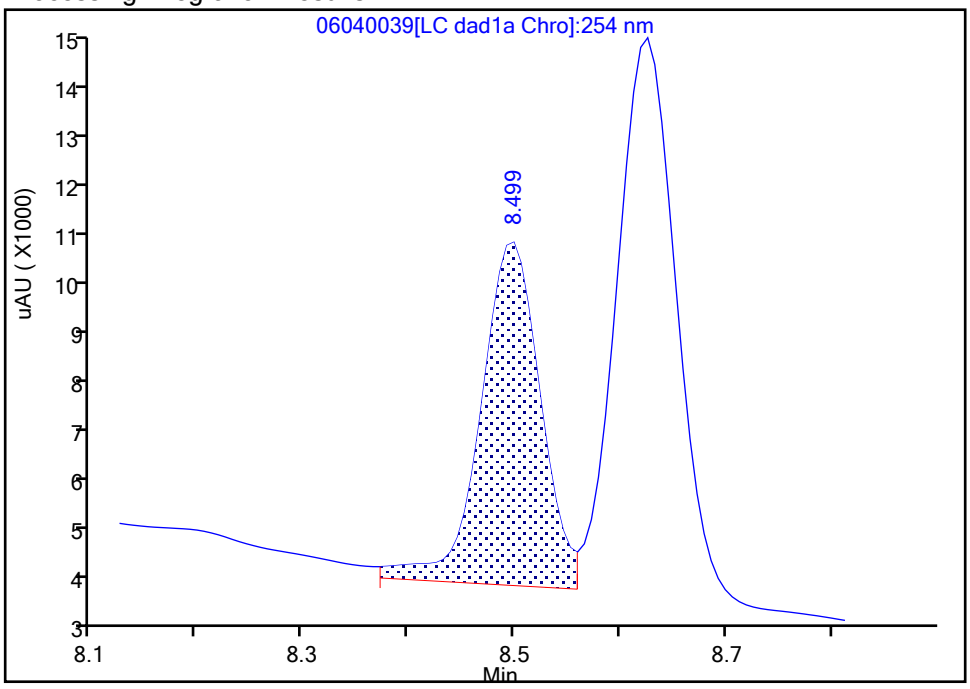
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040039.d				
Injection Date:	05-Jun-2021 05:20:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-B MSD				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

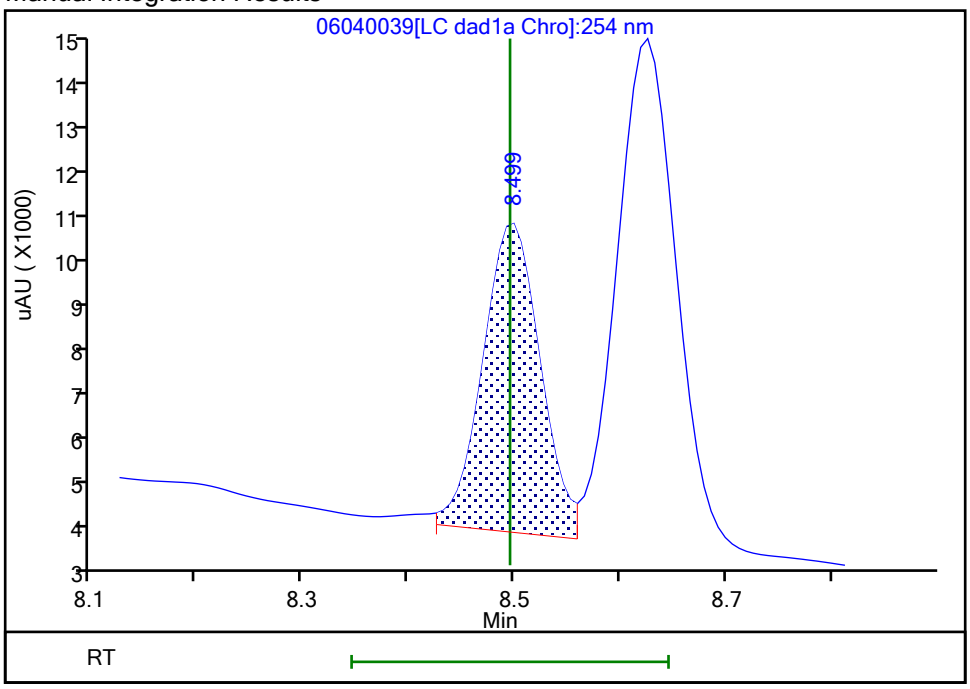
Processing Integration Results

RT: 8.50
Area: 25511
Amount: 0.198967
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 24332
Amount: 0.189772
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:17:51
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

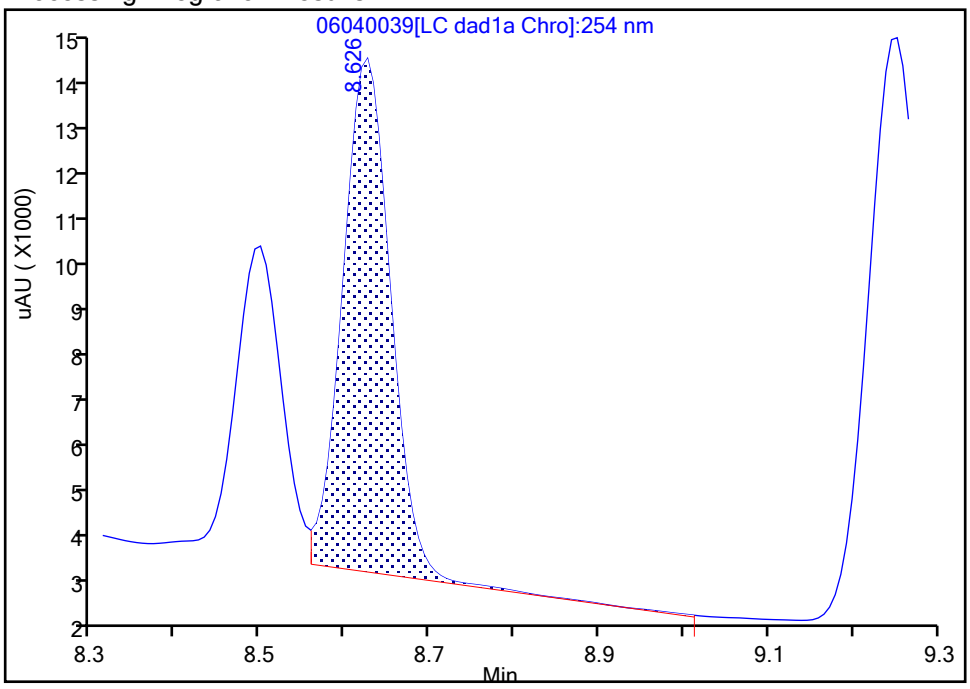
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040039.d				
Injection Date:	05-Jun-2021 05:20:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-B MSD				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

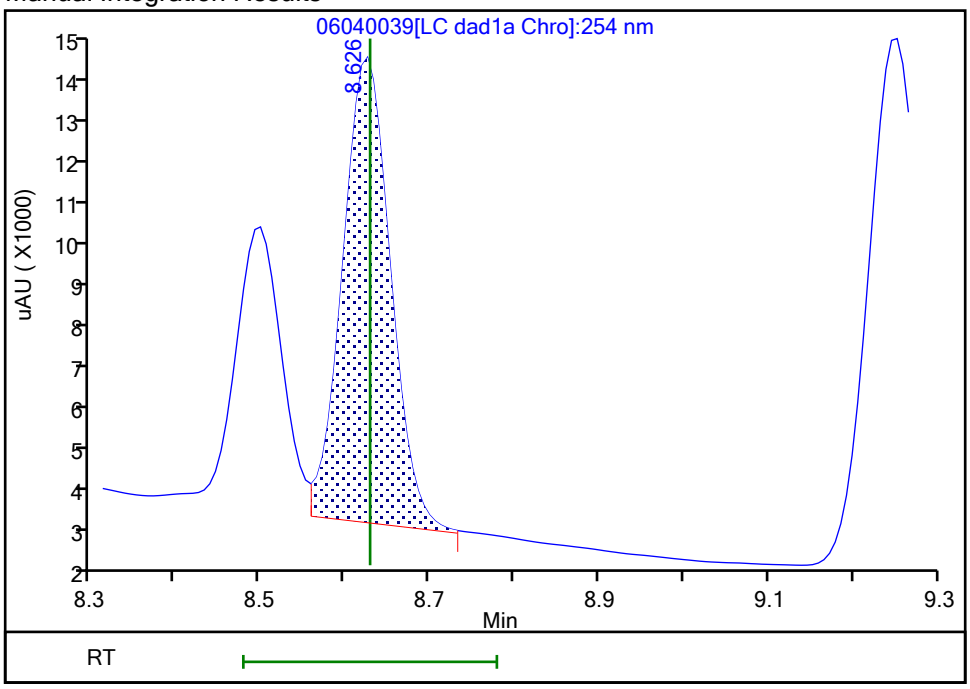
Processing Integration Results

RT: 8.63
Area: 41742
Amount: 0.189463
Amount Units: ug/mL



Manual Integration Results

RT: 8.63
Area: 41632
Amount: 0.188964
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:17:52

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

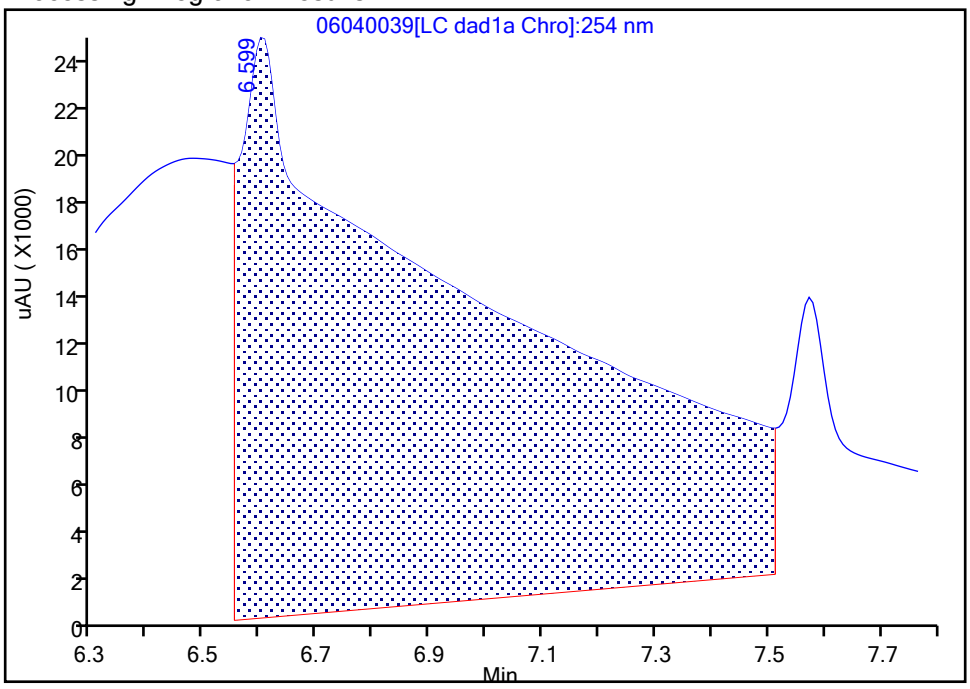
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040039.d				
Injection Date:	05-Jun-2021 05:20:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-B MSD				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

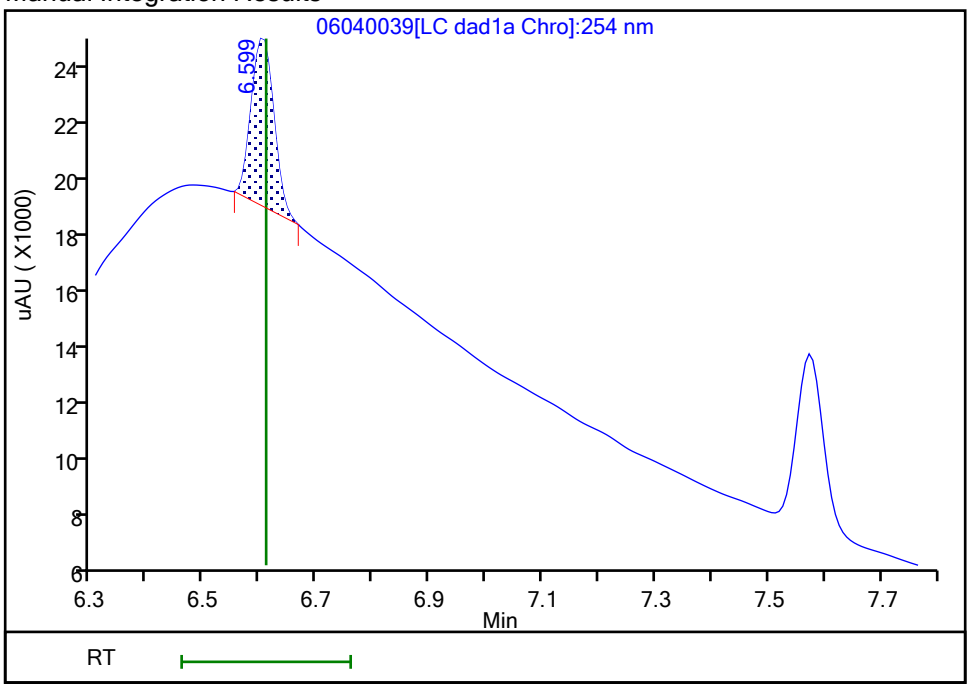
Processing Integration Results

RT: 6.60
Area: 703274
Amount: 8.330514
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 15882
Amount: 0.188128
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:17:32

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

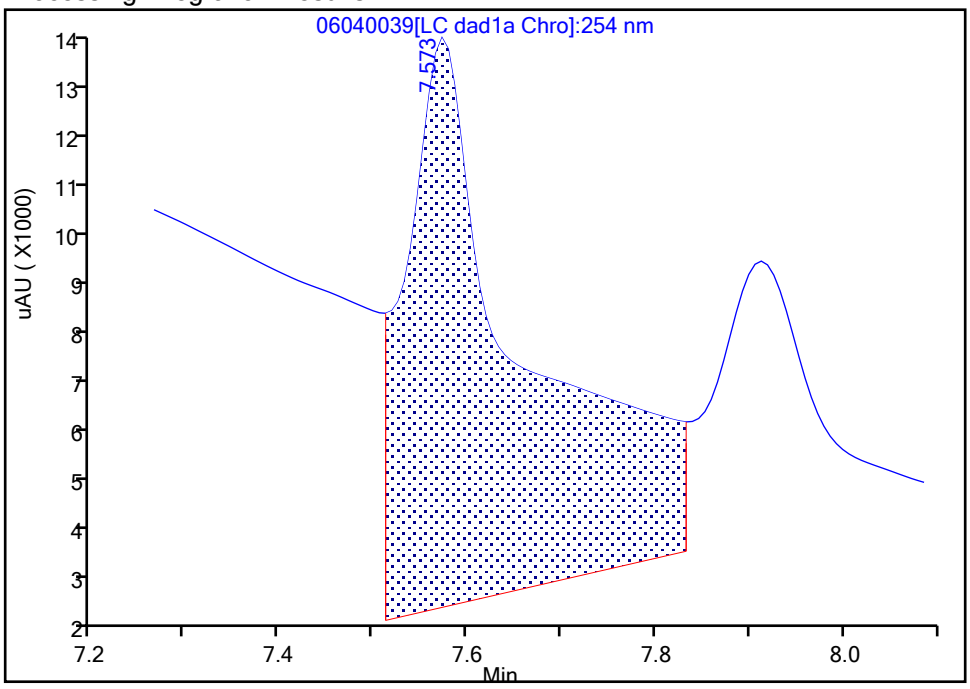
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040039.d				
Injection Date:	05-Jun-2021 05:20:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-B-13-B MSD				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

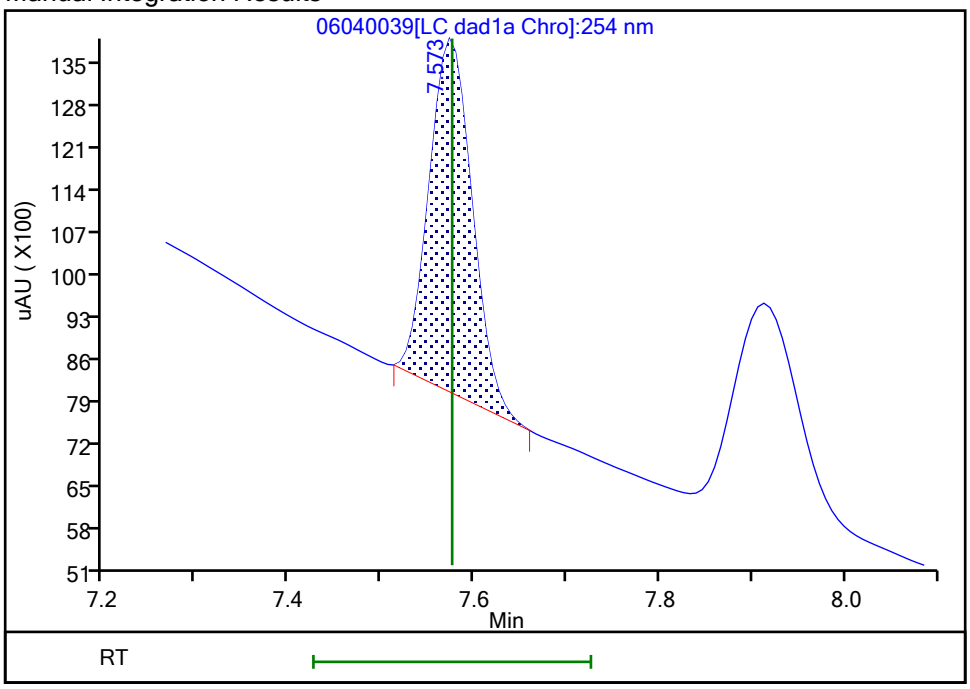
Processing Integration Results

RT: 7.57
Area: 99346
Amount: 0.934920
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 18868
Amount: 0.177562
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:17:36
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Client Sample ID: PZ007-21A MSD Lab Sample ID: 280-149116-13 MSD

Matrix: Water Lab File ID: 06040041.D

Analysis Method: 8330A Date Collected: 05/25/2021 13:25

Extraction Method: 3535 Date Extracted: 05/31/2021 14:02

Sample wt/vol: 492.2(mL) Date Analyzed: 06/05/2021 06:06

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 538649 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.17	M	2.0	0.41	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	105		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040041.D
Lims ID: 280-149116-A-13-C MSD
Client ID: PZ007-21A
Sample Type: MSD
Inject. Date: 05-Jun-2021 06:06:08 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-149116-A-13-
Misc. Info.: 280-0102084-041
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jun-2021 10:20:23 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1666

First Level Reviewer: zhangji Date: 05-Jun-2021 10:18:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.484	6.490	-0.006	34998	0.2002	0.1884	M
5 DNX	1	6.797	6.803	-0.006	26288	0.2002	0.1850	M
6 MNX	1	7.204	7.210	-0.006	27881	0.2334	0.2139	M
$ 9 1,2-Dinitrobenzene	1	8.491	8.496	-0.005	26986	0.2000	0.2105	

QC Flag Legend

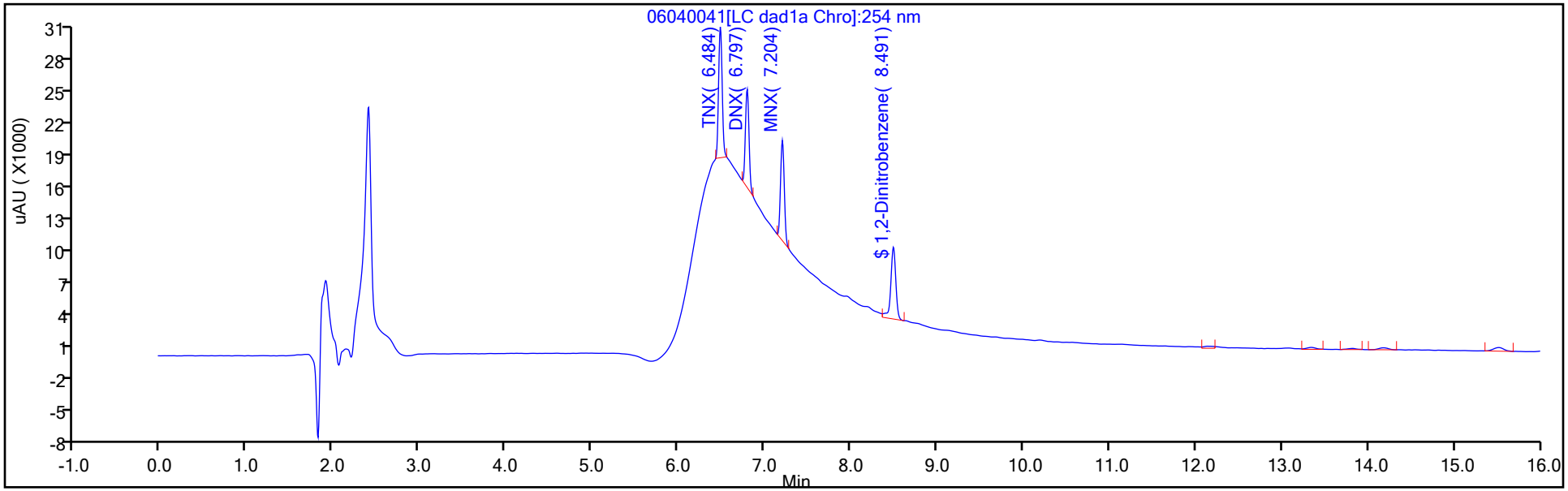
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 05-Jun-2021 10:20:26 Chrom Revision: 2.3 13-May-2021 07:57:40

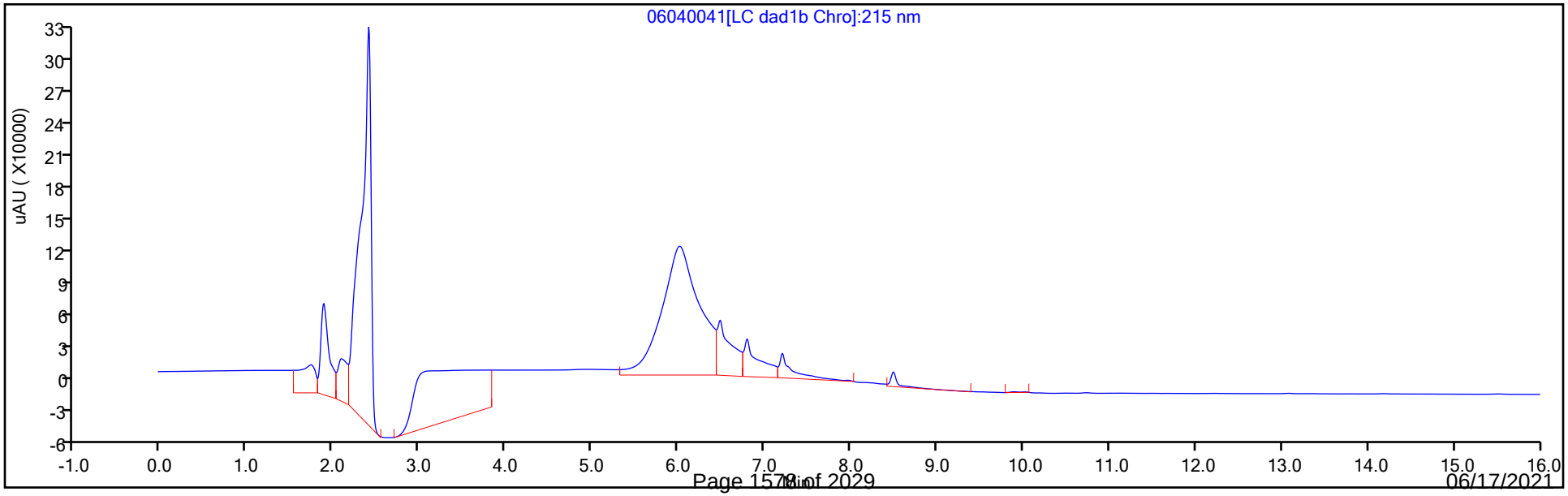
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040041.d				
Injection Date:	05-Jun-2021 06:06:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-149116-A-13-C MSD			Worklist Smp#:	41
Client ID:	PZ007-21A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\06040041.D				
Lims ID:	280-149116-A-13-C MSD				
Client ID:	PZ007-21A				
Sample Type:	MSD				
Inject. Date:	05-Jun-2021 06:06:08	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-149116-A-13-				
Misc. Info.:	280-0102084-041				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210604-102084.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jun-2021 10:20:23	Calib Date:	01-May-2021 21:04:39		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1666				
First Level Reviewer: zhangji		Date:	05-Jun-2021 10:18:26		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2105	105.24

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

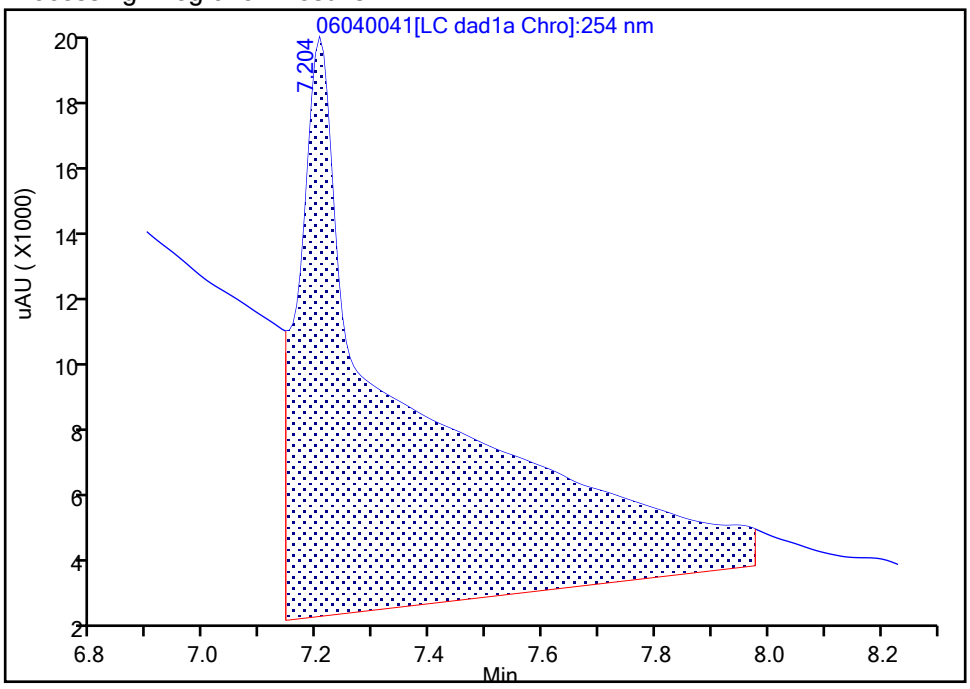
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210604-102084.b\06040041.d				
Injection Date:	05-Jun-2021 06:06:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-149116-A-13-C MSD				
Client ID:	PZ007-21A				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

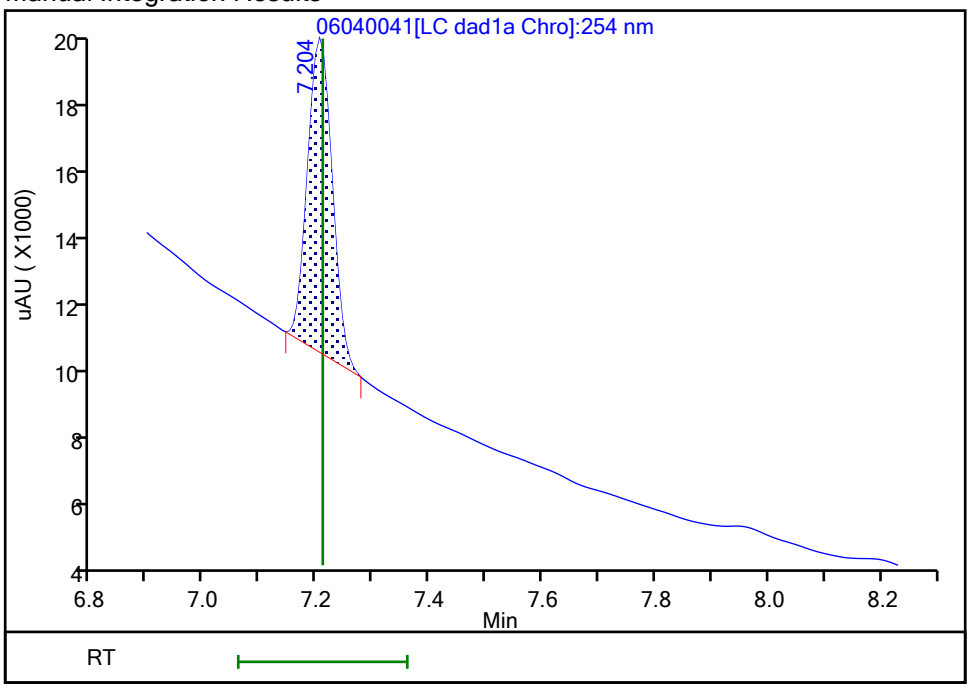
Processing Integration Results

RT: 7.20
Area: 237647
Amount: 1.823281
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 27881
Amount: 0.213909
Amount Units: ug/mL



Reviewer: zhangji, 05-Jun-2021 10:18:25
Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/02/2021 16:33

Analysis Batch Number: 527768 End Date: 03/03/2021 02:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-527768/11		03/02/2021 16:33	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/12		03/02/2021 16:56	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/13		03/02/2021 17:19	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/14		03/02/2021 17:42	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/15		03/02/2021 18:05	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/16		03/02/2021 18:28	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/17		03/02/2021 18:51	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/18		03/02/2021 19:13	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/58		03/02/2021 19:36	1		UltraCarb5uODS 4.6(mm)
ICV 280-527768/19		03/02/2021 19:59	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/20		03/02/2021 20:22	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/21		03/02/2021 20:45	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/22		03/02/2021 21:08	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/23		03/02/2021 21:31	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/24		03/02/2021 21:54	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/25		03/02/2021 22:17	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/26		03/02/2021 22:40	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/27		03/02/2021 23:03	1		UltraCarb5uODS 4.6(mm)
ICV 280-527768/28		03/02/2021 23:26	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/29		03/02/2021 23:49	1	03020029.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/30		03/03/2021 00:12	1	03020030.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/31		03/03/2021 00:35	1	03020031.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/32		03/03/2021 00:58	1	03020032.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/33		03/03/2021 01:21	1	03020033.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/34		03/03/2021 01:44	1	03020034.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/35		03/03/2021 02:07	1	03020035.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/36		03/03/2021 02:30	1	03020036.D	UltraCarb5uODS 4.6(mm)
ICV 280-527768/37		03/03/2021 02:53	1	03020037.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/01/2021 18:54

Analysis Batch Number: 534620 End Date: 05/02/2021 05:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-534620/10		05/01/2021 18:54	1	010-0501.D	Luna-phenylhex 4.6(mm)
IC 280-534620/11		05/01/2021 19:29	1	011-0601.D	Luna-phenylhex 4.6(mm)
IC 280-534620/12		05/01/2021 20:04	1	012-0701.D	Luna-phenylhex 4.6(mm)
IC 280-534620/13		05/01/2021 20:39	1	013-0801.D	Luna-phenylhex 4.6(mm)
IC 280-534620/14		05/01/2021 21:15	1	014-0901.D	Luna-phenylhex 4.6(mm)
IC 280-534620/15		05/01/2021 21:50	1	015-1001.D	Luna-phenylhex 4.6(mm)
IC 280-534620/16		05/01/2021 22:25	1	016-1101.D	Luna-phenylhex 4.6(mm)
IC 280-534620/17		05/01/2021 23:00	1	017-1201.D	Luna-phenylhex 4.6(mm)
IC 280-534620/18		05/01/2021 23:35	1	018-1301.D	Luna-phenylhex 4.6(mm)
ICV 280-534620/19		05/02/2021 00:10	1	019-1401.D	Luna-phenylhex 4.6(mm)
IC 280-534620/20		05/02/2021 00:45	1	020-1501.D	Luna-phenylhex 4.6(mm)
IC 280-534620/21		05/02/2021 01:20	1	021-1601.D	Luna-phenylhex 4.6(mm)
IC 280-534620/22		05/02/2021 01:55	1	022-1701.D	Luna-phenylhex 4.6(mm)
IC 280-534620/23		05/02/2021 02:30	1	023-1801.D	Luna-phenylhex 4.6(mm)
IC 280-534620/24		05/02/2021 03:05	1	024-1901.D	Luna-phenylhex 4.6(mm)
IC 280-534620/25		05/02/2021 03:41	1	025-2001.D	Luna-phenylhex 4.6(mm)
IC 280-534620/26		05/02/2021 04:16	1	026-2101.D	Luna-phenylhex 4.6(mm)
IC 280-534620/27		05/02/2021 04:51	1	027-2201.D	Luna-phenylhex 4.6(mm)
ICV 280-534620/28		05/02/2021 05:26	1	028-2301.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/01/2021 18:01

Analysis Batch Number: 534622 End Date: 05/01/2021 21:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-534622/11		05/01/2021 18:01	1	011-0501.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/12		05/01/2021 18:23	1	012-0601.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/13		05/01/2021 18:46	1	013-0701.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/14		05/01/2021 19:09	1	014-0801.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/15		05/01/2021 19:32	1	015-0901.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/16		05/01/2021 19:55	1	016-1001.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/17		05/01/2021 20:18	1	017-1101.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/18		05/01/2021 20:41	1	018-1201.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/19		05/01/2021 21:04	1	019-1301.D	UltraCarb5uODS 4.6(mm)
ICV 280-534622/20		05/01/2021 21:27	1	020-1401.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/03/2021 16:08

Analysis Batch Number: 538449 End Date: 06/04/2021 02:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-538449/12		06/03/2021 16:08	1	06030012.D	UltraCarb5uODS 4.6(mm)
CCV 280-538449/13		06/03/2021 16:31	1	06030013.D	UltraCarb5uODS 4.6(mm)
CCV 280-538449/14		06/03/2021 16:54	1		UltraCarb5uODS 4.6(mm)
MB 280-538125/1-A		06/03/2021 17:17	1	06030015.D	UltraCarb5uODS 4.6(mm)
LCS 280-538125/2-A		06/03/2021 17:40	1	06030016.D	UltraCarb5uODS 4.6(mm)
LCS 280-538125/3-A		06/03/2021 18:03	1	06030017.D	UltraCarb5uODS 4.6(mm)
LCSD 280-538125/4-A		06/03/2021 18:26	1	06030018.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 18:49	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 19:12	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 19:35	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 19:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 20:21	1		UltraCarb5uODS 4.6(mm)
CCV 280-538449/24		06/03/2021 20:44	1	06030024.D	UltraCarb5uODS 4.6(mm)
CCV 280-538449/25		06/03/2021 21:07	1		UltraCarb5uODS 4.6(mm)
CCV 280-538449/26		06/03/2021 21:30	1	06030026.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 21:53	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 22:16	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 22:39	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 23:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 23:25	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/03/2021 23:48	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 00:11	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 00:34	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 00:57	1		UltraCarb5uODS 4.6(mm)
280-149116-9	G0077-21A	06/04/2021 01:20	1	06030036.D	UltraCarb5uODS 4.6(mm)
CCV 280-538449/37		06/04/2021 01:43	1		UltraCarb5uODS 4.6(mm)
CCV 280-538449/38		06/04/2021 02:06	1	06030038.D	UltraCarb5uODS 4.6(mm)
CCV 280-538449/39		06/04/2021 02:29	1	06030039.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/04/2021 17:27

Analysis Batch Number: 538649 End Date: 06/05/2021 08:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-538649/7		06/04/2021 17:27	1	06040007.D	UltraCarb5uODS 4.6(mm)
CCV 280-538649/8		06/04/2021 17:50	1		UltraCarb5uODS 4.6(mm)
CCV 280-538649/9		06/04/2021 18:13	1	06040009.D	UltraCarb5uODS 4.6(mm)
MB 280-538030/1-A		06/04/2021 18:36	1	06040011.D	UltraCarb5uODS 4.6(mm)
LCS 280-538030/2-A		06/04/2021 18:59	1	06040012.D	UltraCarb5uODS 4.6(mm)
LCS 280-538030/3-A		06/04/2021 19:22	1	06040013.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 19:45	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 20:08	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 20:31	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 20:54	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 21:17	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 21:40	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 22:03	1		UltraCarb5uODS 4.6(mm)
CCV 280-538649/21		06/04/2021 22:26	1	06040021.D	UltraCarb5uODS 4.6(mm)
CCV 280-538649/22		06/04/2021 22:49	1		UltraCarb5uODS 4.6(mm)
CCV 280-538649/23		06/04/2021 23:12	1	06040023.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 23:35	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/04/2021 23:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/05/2021 00:21	1		UltraCarb5uODS 4.6(mm)
280-149116-1	G0017-21A	06/05/2021 00:44	1	06040027.D	UltraCarb5uODS 4.6(mm)
280-149116-2	G0045-21A	06/05/2021 01:07	1	06040028.D	UltraCarb5uODS 4.6(mm)
280-149116-3	G0086-21A	06/05/2021 01:30	1	06040029.D	UltraCarb5uODS 4.6(mm)
280-149116-4	PZ0018-21A	06/05/2021 01:53	1	06040030.D	UltraCarb5uODS 4.6(mm)
280-149116-10	G0078-21A	06/05/2021 02:16	1	06040031.D	UltraCarb5uODS 4.6(mm)
280-149116-11	PZ017R-21A	06/05/2021 02:39	1	06040032.D	UltraCarb5uODS 4.6(mm)
280-149116-12	PZ021-21A	06/05/2021 03:02	1	06040033.D	UltraCarb5uODS 4.6(mm)
CCV 280-538649/34		06/05/2021 03:25	1	06040034.D	UltraCarb5uODS 4.6(mm)
CCV 280-538649/35		06/05/2021 03:48	1		UltraCarb5uODS 4.6(mm)
CCV 280-538649/36		06/05/2021 04:11	1	06040036.D	UltraCarb5uODS 4.6(mm)
280-149116-13	PZ007-21A	06/05/2021 04:34	1	06040037.D	UltraCarb5uODS 4.6(mm)
280-149116-13 MS	PZ007-21A MS	06/05/2021 04:57	1	06040038.D	UltraCarb5uODS 4.6(mm)
280-149116-13 MSD	PZ007-21A MSD	06/05/2021 05:20	1	06040039.D	UltraCarb5uODS 4.6(mm)
280-149116-13 MS	PZ007-21A MS	06/05/2021 05:43	1	06040040.D	UltraCarb5uODS 4.6(mm)
280-149116-13 MSD	PZ007-21A MSD	06/05/2021 06:06	1	06040041.D	UltraCarb5uODS 4.6(mm)
280-149116-14	G0024-21A	06/05/2021 06:29	1	06040042.D	UltraCarb5uODS 4.6(mm)
280-149116-15	PZ020-21A	06/05/2021 06:52	1	06040043.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		06/05/2021 07:15	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		06/05/2021 07:38	1		UltraCarb5uODS 4.6(mm)
CCV 280-538649/46		06/05/2021 08:01	1	06040046.D	UltraCarb5uODS 4.6(mm)
CCV 280-538649/47		06/05/2021 08:24	1		UltraCarb5uODS 4.6(mm)
CCV 280-538649/48		06/05/2021 08:47	1	06040048.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 06/04/2021 17:46

Analysis Batch Number: 538650 End Date: 06/05/2021 06:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-538650/7		06/04/2021 17:46	1	06040007.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/04/2021 18:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/04/2021 18:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/04/2021 19:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/04/2021 20:06	1		Luna-phenylhex 4.6(mm)
280-149116-9	G0077-21A	06/04/2021 20:41	1	06040014.D	Luna-phenylhex 4.6(mm)
CCV 280-538650/15		06/04/2021 21:16	1	06040015.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/04/2021 21:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/04/2021 22:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/04/2021 23:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/04/2021 23:36	5		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 00:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 00:46	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 01:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 01:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 02:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 03:06	1		Luna-phenylhex 4.6(mm)
CCV 280-538650/26		06/05/2021 03:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 04:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 04:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 05:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 06:01	50		Luna-phenylhex 4.6(mm)
CCV 280-538650/31		06/05/2021 06:36	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 06/05/2021 12:56

Analysis Batch Number: 538717 End Date: 06/06/2021 00:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-538717/7		06/05/2021 12:56	1	06050007.D	Luna-phenylhex 4.6(mm)
CCV 280-538717/8		06/05/2021 13:31	1	06050008.D	Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 14:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 14:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 15:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 15:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 16:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 17:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		06/05/2021 17:36	1		Luna-phenylhex 4.6(mm)
280-149116-1	G0017-21A	06/05/2021 18:11	1	06050017.D	Luna-phenylhex 4.6(mm)
280-149116-3	G0086-21A	06/05/2021 18:46	1	06050018.D	Luna-phenylhex 4.6(mm)
280-149116-4	PZ0018-21A	06/05/2021 19:21	1	06050019.D	Luna-phenylhex 4.6(mm)
CCV 280-538717/20		06/05/2021 19:56	1	06050020.D	Luna-phenylhex 4.6(mm)
CCV 280-538717/21		06/05/2021 20:31	1	06050021.D	Luna-phenylhex 4.6(mm)
280-149116-11	PZ017R-21A	06/05/2021 21:06	1	06050022.D	Luna-phenylhex 4.6(mm)
280-149116-12	PZ021-21A	06/05/2021 21:41	1	06050023.D	Luna-phenylhex 4.6(mm)
280-149116-14	G0024-21A	06/05/2021 22:16	1	06050024.D	Luna-phenylhex 4.6(mm)
280-149116-15	PZ020-21A	06/05/2021 22:51	1	06050025.D	Luna-phenylhex 4.6(mm)
CCV 280-538717/26		06/05/2021 23:26	1	06050026.D	Luna-phenylhex 4.6(mm)
CCV 280-538717/27		06/06/2021 00:01	1	06050027.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538030 Batch Start Date: 05/31/21 14:02 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/31/21 16:47

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00108	8330_OP_DMT 00010
MB 280-538030/1		3535, 8330A				500 mL	5 mL		
LCS 280-538030/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-538030/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-149116-B-1	G0017-21A	3535, 8330A	T	758.2 g	284.2 g	474 mL	5 mL		
280-149116-B-2	G0045-21A	3535, 8330A	T	780.3 g	285.1 g	495.2 mL	5 mL		
280-149116-A-3	G0086-21A	3535, 8330A	T	760.5 g	287.1 g	473.4 mL	5 mL		
280-149116-A-4	PZ0018-21A	3535, 8330A	T	749.9 g	287.4 g	462.5 mL	5 mL		
280-149116-A-10	G0078-21A	3535, 8330A	T	759.3 g	286.9 g	472.4 mL	5 mL		
280-149116-A-11	PZ017R-21A	3535, 8330A	T	768.5 g	288.7 g	479.8 mL	5 mL		
280-149116-A-12	PZ021-21A	3535, 8330A	T	793.7 g	287.8 g	505.9 mL	5 mL		
280-149116-A-13	PZ007-21A	3535, 8330A	T	780.6 g	284.1 g	496.5 mL	5 mL		
280-149116-B-13 MS	PZ007-21A	3535, 8330A	T	781.5 g	284.0 g	497.5 mL	5 mL	0.1 mL	
280-149116-B-13 MSD	PZ007-21A	3535, 8330A	T	784.8 g	284.7 g	500.1 mL	5 mL	0.1 mL	
280-149116-A-13 MS	PZ007-21A	3535, 8330A	T	794.2 g	283.4 g	510.8 mL	5 mL		0.1 mL
280-149116-A-13 MSD	PZ007-21A	3535, 8330A	T	776.8 g	284.6 g	492.2 mL	5 mL		0.1 mL
280-149116-B-14	G0024-21A	3535, 8330A	T	758.5 g	287.8 g	470.7 mL	5 mL		
280-149116-B-15	PZ020-21A	3535, 8330A	T	768.4 g	286.7 g	481.7 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00124	AnalysisComment				
MB 280-538030/1		3535, 8330A		0.1 mL					
LCS 280-538030/2		3535, 8330A		0.1 mL	8330 LCS				
LCS 280-538030/3		3535, 8330A		0.1 mL	DMT				
280-149116-B-1	G0017-21A	3535, 8330A	T	0.1 mL					
280-149116-B-2	G0045-21A	3535, 8330A	T	0.1 mL					
280-149116-A-3	G0086-21A	3535, 8330A	T	0.1 mL					
280-149116-A-4	PZ0018-21A	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.: 280-149116-1

SDG No.:

Batch Number: 538030 Batch Start Date: 05/31/21 14:02 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/31/21 16:47

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00124	AnalysisComment				
280-149116-A-10	G0078-21A	3535, 8330A	T	0.1 mL					
280-149116-A-11	PZ017R-21A	3535, 8330A	T	0.1 mL					
280-149116-A-12	PZ021-21A	3535, 8330A	T	0.1 mL					
280-149116-A-13	PZ007-21A	3535, 8330A	T	0.1 mL					
280-149116-B-13 MS	PZ007-21A	3535, 8330A	T	0.1 mL	8330 LCS				
280-149116-B-13 MSD	PZ007-21A	3535, 8330A	T	0.1 mL	8330 LCS				
280-149116-A-13 MS	PZ007-21A	3535, 8330A	T	0.1 mL	DMT				
280-149116-A-13 MSD	PZ007-21A	3535, 8330A	T	0.1 mL	DMT				
280-149116-B-14	G0024-21A	3535, 8330A	T	0.1 mL					
280-149116-B-15	PZ020-21A	3535, 8330A	T	0.1 mL					

Batch Notes	
Acid ID	Ca2Cl_Sol_00076
Acid Name	Ca2Cl
Balance ID	24350888
Batch Comment	DV-OP-0017; Mantel: A/B (QC on A)
First End time	05/31/2021 16:14
Pipette/Syringe/Dispenser ID	JiJi, Soot
Rinse Solvent Lot	0.1%AAinACN_00164
Rinse Solvent Name	0.1%AAinACN
Solvent Lot #	Acetonitrile_00054
Solvent Name	Acetonitrile
SPE Cartridge Lot ID	005039204A
SPE Cartridge Type	Porapak RDX
Analyst ID - Spike Analyst	DL
Analyst ID - Spike Witness Analyst	Reviewer: TH
First Start time	05/31/2021 14:18

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.: 280-149116-1

SDG No.:

Batch Number: 538030 Batch Start Date: 05/31/21 14:02 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/31/21 16:47

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.: 280-149116-1

SDG No.:

Batch Number: 538125 Batch Start Date: 06/01/21 17:35 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 06/01/21 20:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00108	8330_OP_DMT 00011
MB 280-538125/1		3535, 8330A				500 mL	5 mL		
LCS 280-538125/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-538125/3		3535, 8330A				500 mL	5 mL		0.1 mL
LCSD 280-538125/4		3535, 8330A				500 mL	5 mL		0.1 mL
280-149116-A-9	G0077-21A	3535, 8330A	T	775.1 g	287.0 g	488.1 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00124	AnalysisComment				
MB 280-538125/1		3535, 8330A		0.1 mL					
LCS 280-538125/2		3535, 8330A		0.1 mL	8330 LCS				
LCS 280-538125/3		3535, 8330A		0.1 mL	DMT				
LCSD 280-538125/4		3535, 8330A		0.1 mL	DMT				
280-149116-A-9	G0077-21A	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.: 280-149116-1

SDG No.:

Batch Number: 538125 Batch Start Date: 06/01/21 17:35 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 06/01/21 20:23

Batch Notes	
Acid ID	Ca2Cl_Sol_00076
Acid Name	Ca2Cl
Balance ID	24350888
Batch Comment	DV-OP-0017; Mantel: B
First End time	06/01/2021 19:59
Pipette/Syringe/Dispenser ID	JiJi, Soot
Rinse Solvent Lot	0.1%AAinACN_00164
Rinse Solvent Name	0.1%AAinACN
Solvent Lot #	Acetonitrile_00054
Solvent Name	Acetonitrile
SPE Cartridge Lot ID	005039204A
SPE Cartridge Type	Porapak RDX
Analyst ID - Spike Analyst	DL/KA
Analyst ID - Spike Witness Analyst	Reviewer: TH
First Start time	06/01/2021 17:58

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.

9056A_OF_28D_D5

Anions, Ion Chromatography

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 280-149116-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 16_Jun_2021 05_39.d

Lab ID: LCS 410-138324/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Sulfate	7.50	7.61	101	87-112	

Column to be used to flag recovery and RPD values

FORM III 9056A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 280-149116-1

SDG No.:

Lab File ID: 16_Jun_2021 05_50.d Lab Sample ID: MB 410-138324/4

Matrix: Water Date Extracted:

Instrument ID: 24811 Date Analyzed: 06/16/2021 05:50

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-138324/3	16_Jun_2021 05_39.d	06/16/2021 05:39
SHGW02-21A	280-149116-6	16_Jun_2021 10_05.d	06/16/2021 10:05
SHGW05-21A	280-149116-7	16_Jun_2021 10_16.d	06/16/2021 10:16

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW02-21A Lab Sample ID: 280-149116-6

Matrix: Water Lab File ID: 16_Jun_2021 10_05.d

Analysis Method: 9056A Date Collected: 05/26/2021 10:40

Extraction Method: Date Extracted:

Sample wt/vol: 0(mL) Date Analyzed: 06/16/2021 10:05

Con. Extract Vol.: Dilution Factor: 5

Injection Volume: 1(uL) GC Column: IC17-AS14 ID: 4(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 138324 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
14808-79-8	Sulfate	26	D	5.0	4.5	1.5

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 10_05.d				
Lims ID:	280-149116-B-6				
Client ID:	SHGW02-21A				
Sample Type:	Client				
Inject. Date:	16-Jun-2021 10:05:00	ALS Bottle#:	0	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-149116-b-6				
Operator ID:		Instrument ID:	24811		
Method:	\\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m				
Limit Group:	IC - 300 28D				
Last Update:	16-Jun-2021 11:56:56	Calib Date:	11-Jun-2021 15:56:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d				
Column 1 :			Det: det0		
Process Host:	CTX1602				
First Level Reviewer: litwak		Date:	16-Jun-2021 11:57:00		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 Sulfate	7.097	7.073	0.024	54674111	5.24	

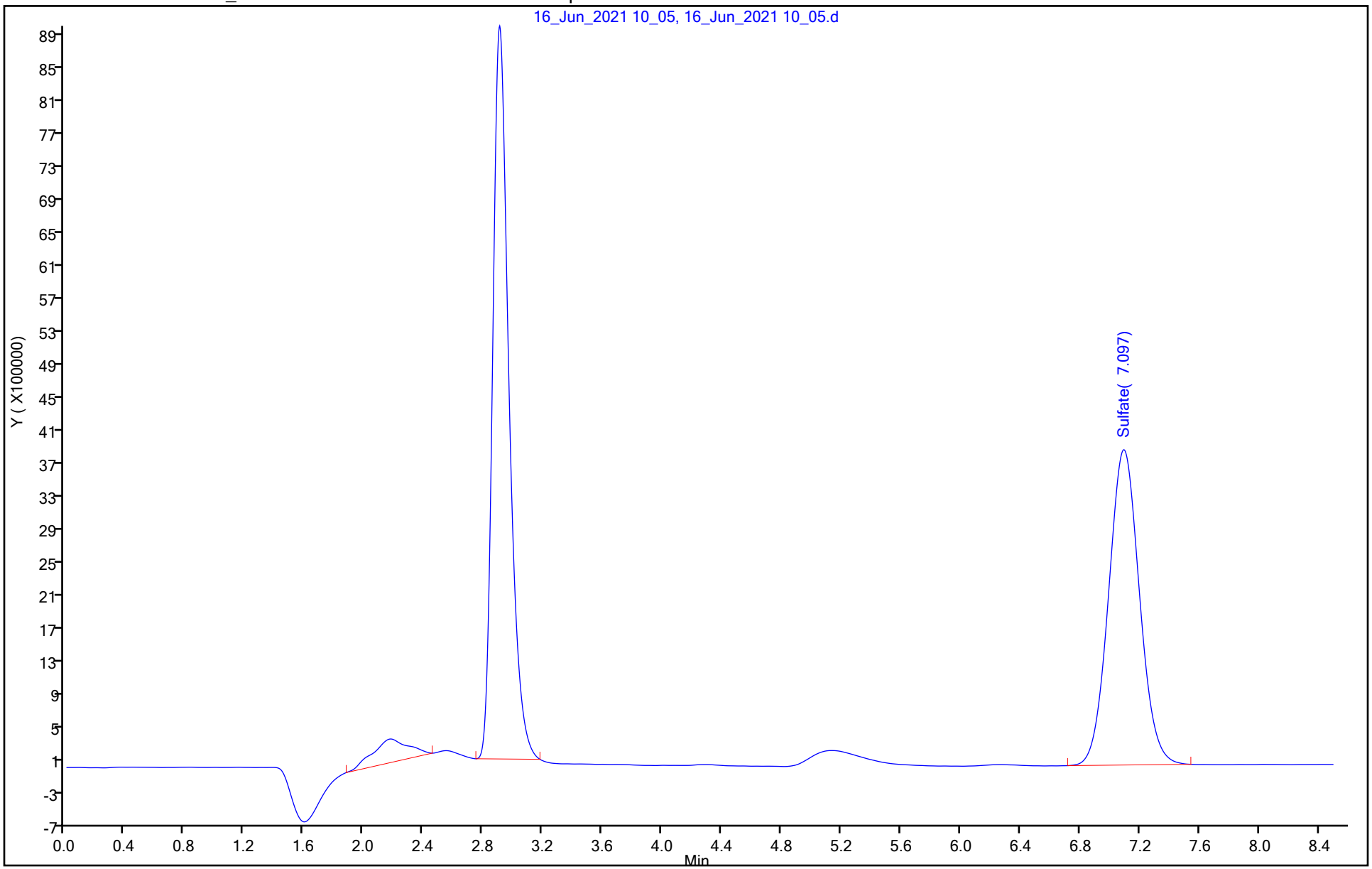
QC Flag Legend

Processing Flags

Report Date: 16-Jun-2021 11:57:00 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 10_05.d				
Injection Date:	16-Jun-2021 10:05:00	Instrument ID:	24811	Operator ID:	
Lims ID:	280-149116-B-6	Lab Sample ID:	410-149116-6	Worklist Smp#:	27
Client ID:	SHGW02-21A				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 280-149116-1

SDG No.:

Client Sample ID: SHGW05-21A Lab Sample ID: 280-149116-7

Matrix: Water Lab File ID: 16_Jun_2021 10_16.d

Analysis Method: 9056A Date Collected: 05/26/2021 08:00

Extraction Method: Date Extracted:

Sample wt/vol: 0(mL) Date Analyzed: 06/16/2021 10:16

Con. Extract Vol.: Dilution Factor: 5

Injection Volume: 1(uL) GC Column: IC17-AS14 ID: 4(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 138324 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
14808-79-8	Sulfate	21	D	5.0	4.5	1.5

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 10_16.d
Lims ID: 280-149116-B-7
Client ID: SHGW05-21A
Sample Type: Client
Inject. Date: 16-Jun-2021 10:16:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-149116-b-7
Operator ID: Instrument ID: 24811

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:54 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

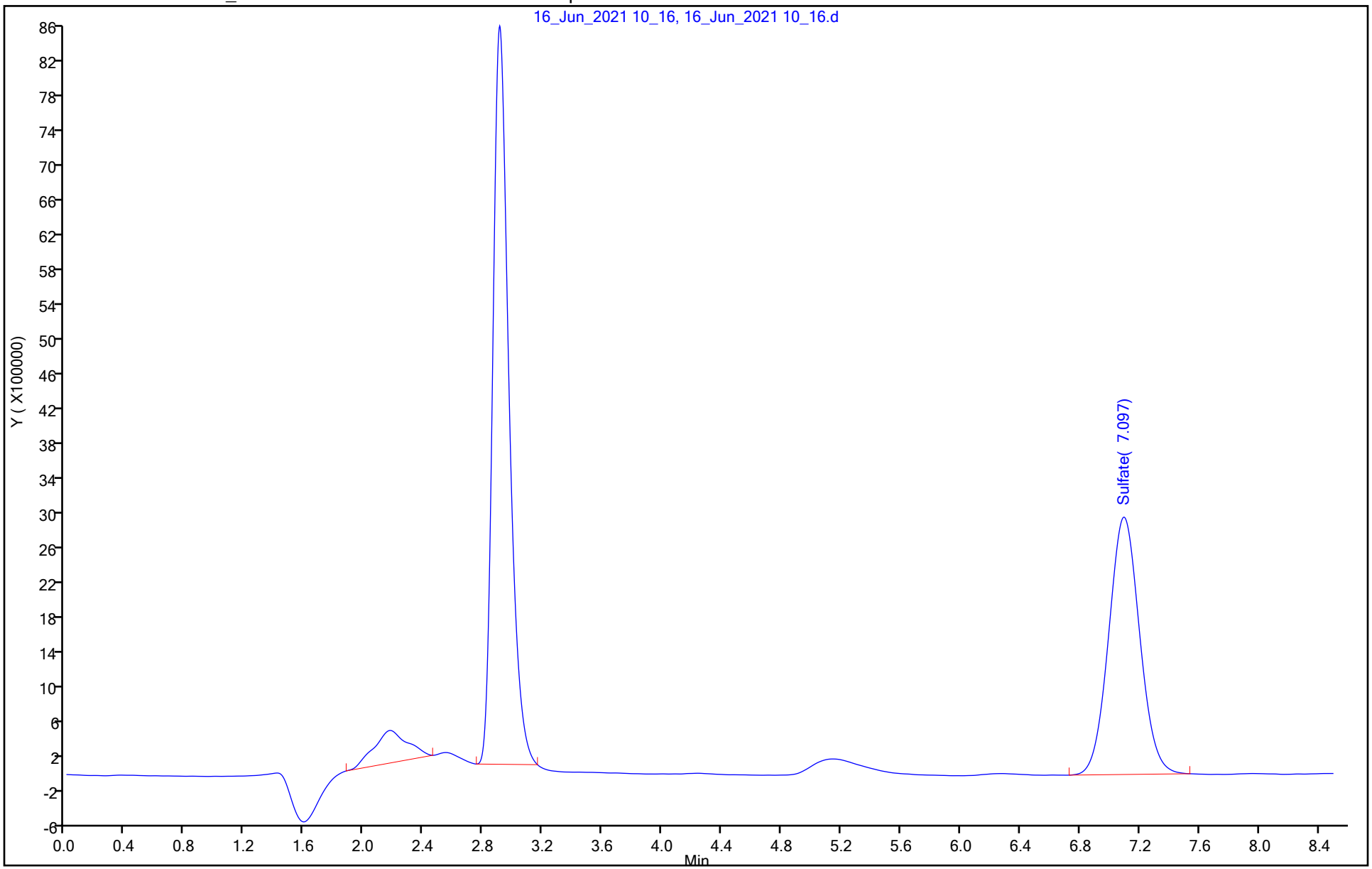
Column 1 : Det: det0
Process Host: CTX1602

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 Sulfate	7.097	7.073	0.024	42649171	4.12	

Report Date: 16-Jun-2021 11:56:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 10_16.d				
Injection Date:	16-Jun-2021 10:16:00	Instrument ID:	24811	Operator ID:	
Lims ID:	280-149116-B-7	Lab Sample ID:	410-149116-7	Worklist Smp#:	28
Client ID:	SHGW05-21A				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 280-149116-1 Analy Batch No.: 137054

SDG No.:

Instrument ID: 24811 GC Column: IC17-AS14 ID: 4(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2021 15:00 Calibration End Date: 06/11/2021 15:56 Calibration ID: 27078

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-137054/2	11_Jun_2021 15_12.d
Level 2	IC 410-137054/3	11_Jun_2021 15_23.d
Level 3	IC 410-137054/4	11_Jun_2021 15_34.d
Level 4	IC 410-137054/5	11_Jun_2021 15_45.d
Level 5	IC 410-137054/6	11_Jun_2021 15_56.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Fluoride	2.030	2.023	2.023	2.023	2.023						1.830 - 2.230	2.024
Chloride	2.933	2.933	2.930	2.933	2.933						2.633 - 3.233	2.932
Bromide	4.313	4.307	4.303	4.300	4.300						3.913 - 4.713	4.305
Sulfate	7.387	7.390	7.390	7.393	7.397						6.587 - 8.187	7.391

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 280-149116-1 Analy Batch No.: 137054

SDG No.:

Instrument ID: 24811 GC Column: IC17-AS14 ID: 4(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2021 15:00 Calibration End Date: 06/11/2021 15:56 Calibration ID: 27078

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-137054/2	11_Jun_2021 15_12.d
Level 2	IC 410-137054/3	11_Jun_2021 15_23.d
Level 3	IC 410-137054/4	11_Jun_2021 15_34.d
Level 4	IC 410-137054/5	11_Jun_2021 15_45.d
Level 5	IC 410-137054/6	11_Jun_2021 15_56.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 3	LVL 4		B	M1	M2								
Fluoride	18395510 19791282	18202028	18698316	19540258	Lin1	-238931.22	19610414.9							0.9990		0.9900
Chloride	13639620 14841378	13713630	13732769	14429319	Lin1	-671598.98	14698168.9							0.9990		0.9900
Bromide	5531756 6323056	5756645	5882204	6123899	Lin1	-533115.29	6228859.49							0.9990		0.9900
Sulfate	9869427 10790881	9799266	10061682	10410370	Lin1	-1310731.3	10675665.0							0.9990		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 280-149116-1 Analy Batch No.: 137054

SDG No.:

Instrument ID: 24811 GC Column: IC17-AS14 ID: 4(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2021 15:00 Calibration End Date: 06/11/2021 15:56 Calibration ID: 27078

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-137054/2	11_Jun_2021 15_12.d
Level 2	IC 410-137054/3	11_Jun_2021 15_23.d
Level 3	IC 410-137054/4	11_Jun_2021 15_34.d
Level 4	IC 410-137054/5	11_Jun_2021 15_45.d
Level 5	IC 410-137054/6	11_Jun_2021 15_56.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Fluoride	Lin1	1839551	7280811	18698316	39080516	59373847	0.100	0.400	1.00	2.00	3.00
Chloride	Lin1	5455848	10970904	27465538	57717275	89048270	0.400	0.800	2.00	4.00	6.00
Bromide	Lin1	2768644	11524803	29440432	61300229	94940687	0.501	2.00	5.01	10.0	15.0
Sulfate	Lin1	9869427	19598532	50308410	104103704	161863214	1.00	2.00	5.00	10.0	15.0

Curve Type Legend
Lin1 = Linear 1/conc

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_12.d
Lims ID: IC CAL1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-Jun-2021 15:12:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CAL 1
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub1

Method: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 11-Jun-2021 18:16:56 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1669

First Level Reviewer: gerhartd Date: 11-Jun-2021 18:15:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.030	2.030	0.000	1839551	0.1000	0.1060	
2 Chloride	2.933	2.933	0.000	5455848	0.4000	0.4169	
3 Nitrite as N	3.567	3.567	0.000	2862044	NC	NC	
4 Bromide	4.313	4.313	0.000	2768644	0.5005	0.5301	
5 Nitrate as N	4.947	4.947	0.000	2512755	NC	NC	
6 Sulfate	7.387	7.387	0.000	9869427	1.00	1.05	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

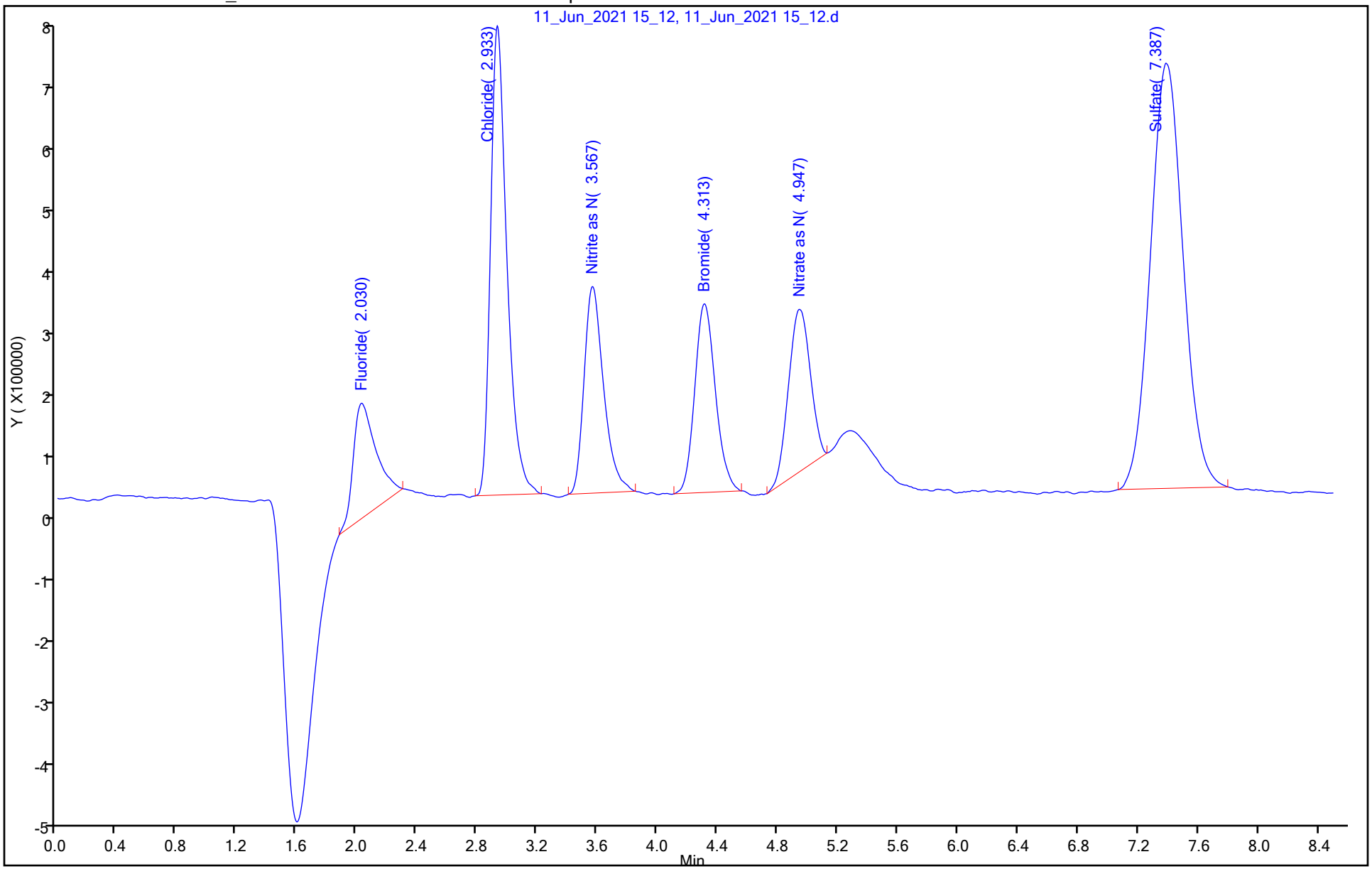
WC_IC_C_Det_00073 Amount Added: 0.50 Units: mL

Report Date: 11-Jun-2021 18:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_12.d

Injection Date:	11-Jun-2021 15:12:00	Instrument ID:	24811	Operator ID:	
Lims ID:	IC CAL1			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_23.d
Lims ID: IC CAL2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-Jun-2021 15:23:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CAL 2
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub1

Method: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 11-Jun-2021 18:16:56 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1669

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.023	2.023	0.000	7280811	0.4000	0.3835	
2 Chloride	2.933	2.933	0.000	10970904	0.8000	0.7921	
3 Nitrite as N	3.567	3.567	0.000	12208708	NC	NC	
4 Bromide	4.307	4.307	0.000	11524803	2.00	1.94	
5 Nitrate as N	4.933	4.933	0.000	12003150	NC	NC	
6 Sulfate	7.390	7.390	0.000	19598532	2.00	1.96	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

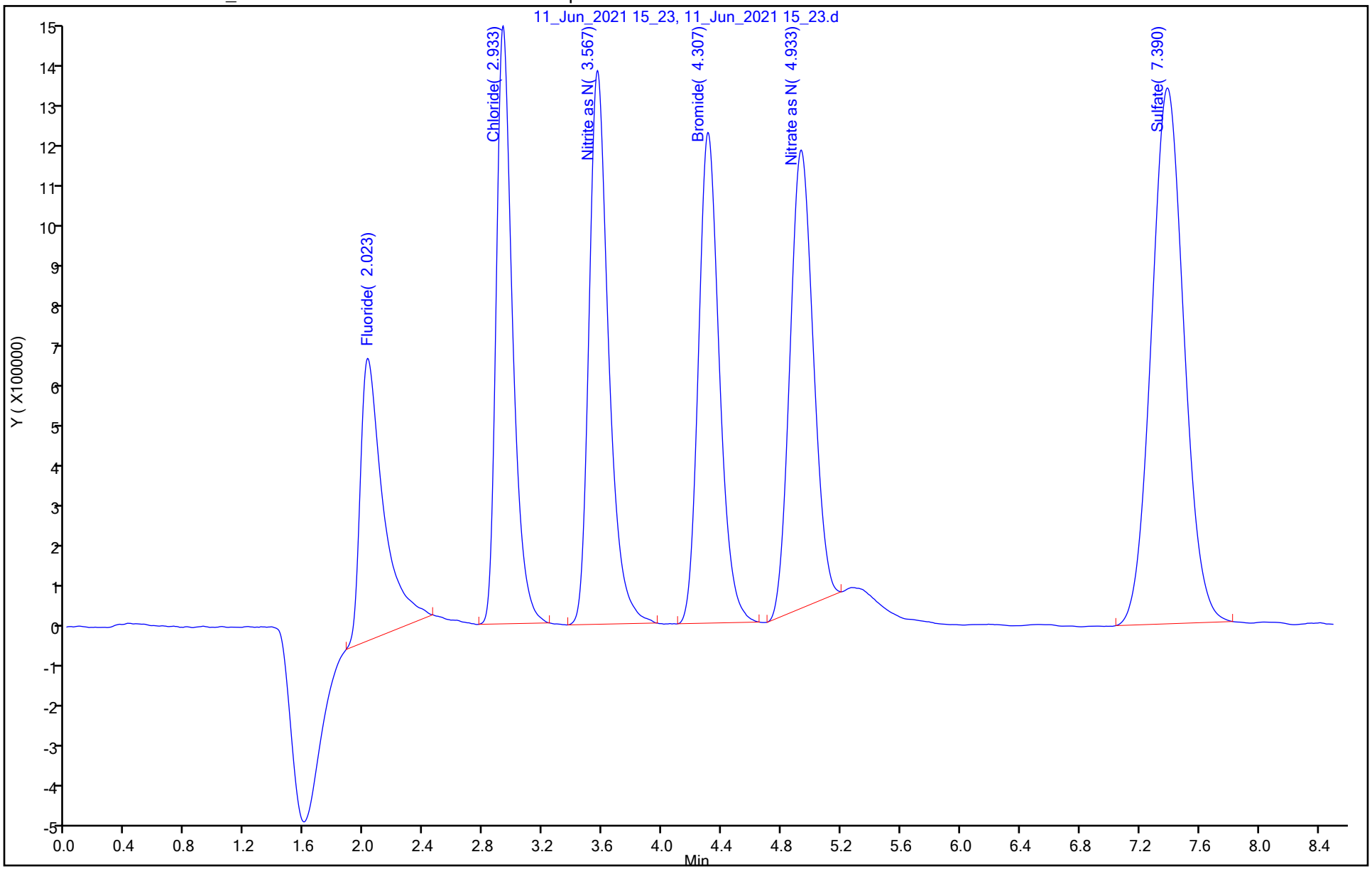
WC_IC_C_Int_00070 Amount Added: 2.00 Units: mL

Report Date: 11-Jun-2021 18:16:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_23.d

Injection Date:	11-Jun-2021 15:23:00	Instrument ID:	24811	Operator ID:	
Lims ID:	IC CAL2			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_34.d
Lims ID: IC CAL3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-Jun-2021 15:34:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CAL 3
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub1

Method: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 11-Jun-2021 18:16:56 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1669

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.023	2.023	0.000	18698316	1.00	0.9657	
2 Chloride	2.930	2.930	0.000	27465538	2.00	1.91	
3 Nitrite as N	3.563	3.563	0.000	31082136	NC	NC	
4 Bromide	4.303	4.303	0.000	29440432	5.01	4.81	
5 Nitrate as N	4.923	4.923	0.000	34403745	NC	NC	
6 Sulfate	7.390	7.390	0.000	50308410	5.00	4.84	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_C_Int_00070 Amount Added: 5.00 Units: mL

Report Date: 11-Jun-2021 18:16:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_34.d

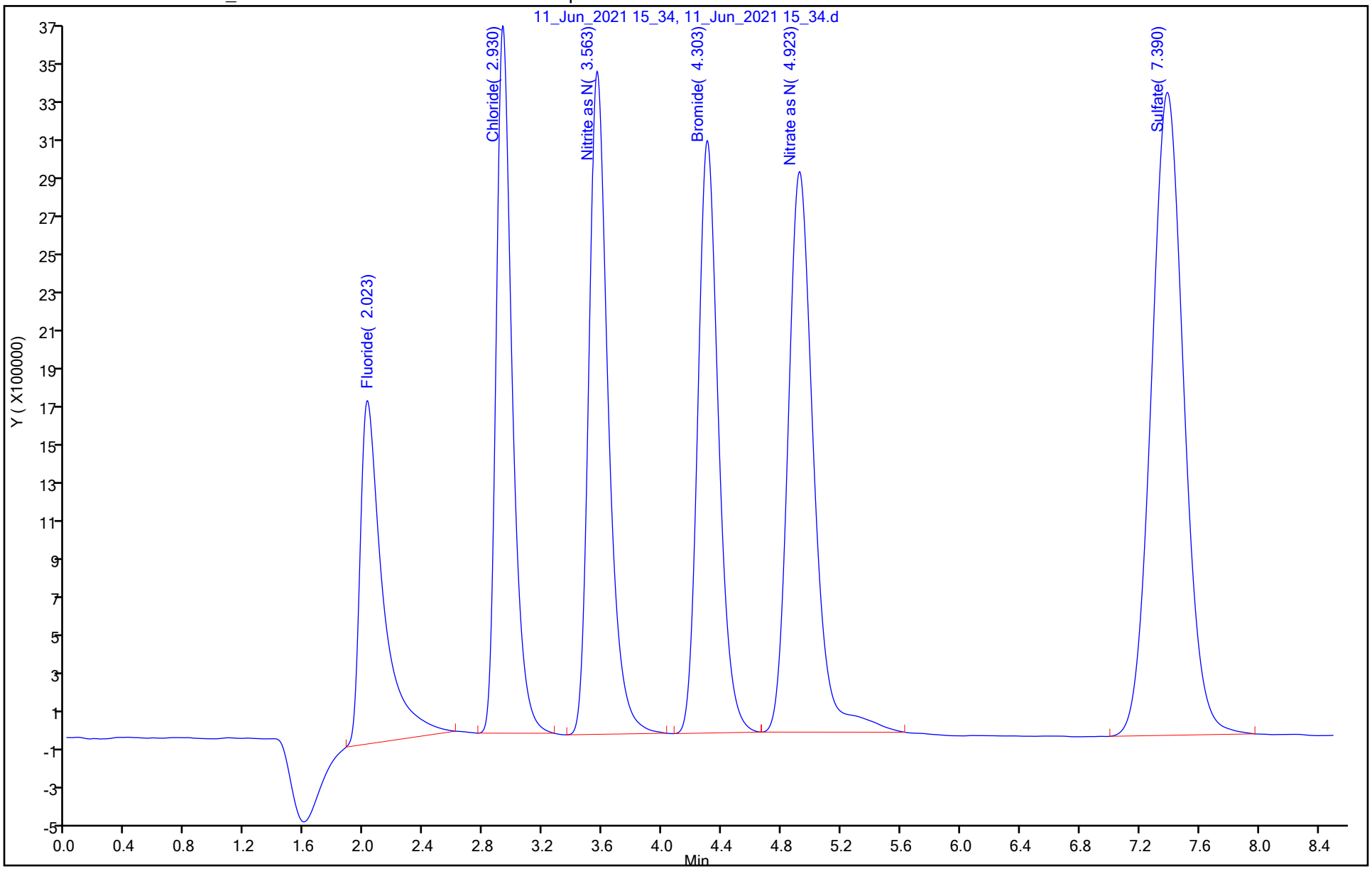
Injection Date: 11-Jun-2021 15:34:00 Instrument ID: 24811 Operator ID:

Lims ID: IC CAL3 Worklist Smp#: 4

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: Anions_24811 Limit Group: IC - 300 28D



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_45.d
Lims ID: IC CAL4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 11-Jun-2021 15:45:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CAL 4
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub1

Method: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 11-Jun-2021 18:16:57 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1669

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.023	2.023	0.000	39080516	2.00	2.01	
2 Chloride	2.933	2.933	0.000	57717275	4.00	3.97	
3 Nitrite as N	3.567	3.567	0.000	64499929	NC	NC	
4 Bromide	4.300	4.300	0.000	61300229	10.0	9.93	
5 Nitrate as N	4.913	4.913	0.000	70259814	NC	NC	
6 Sulfate	7.393	7.393	0.000	104103704	10.0	9.87	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

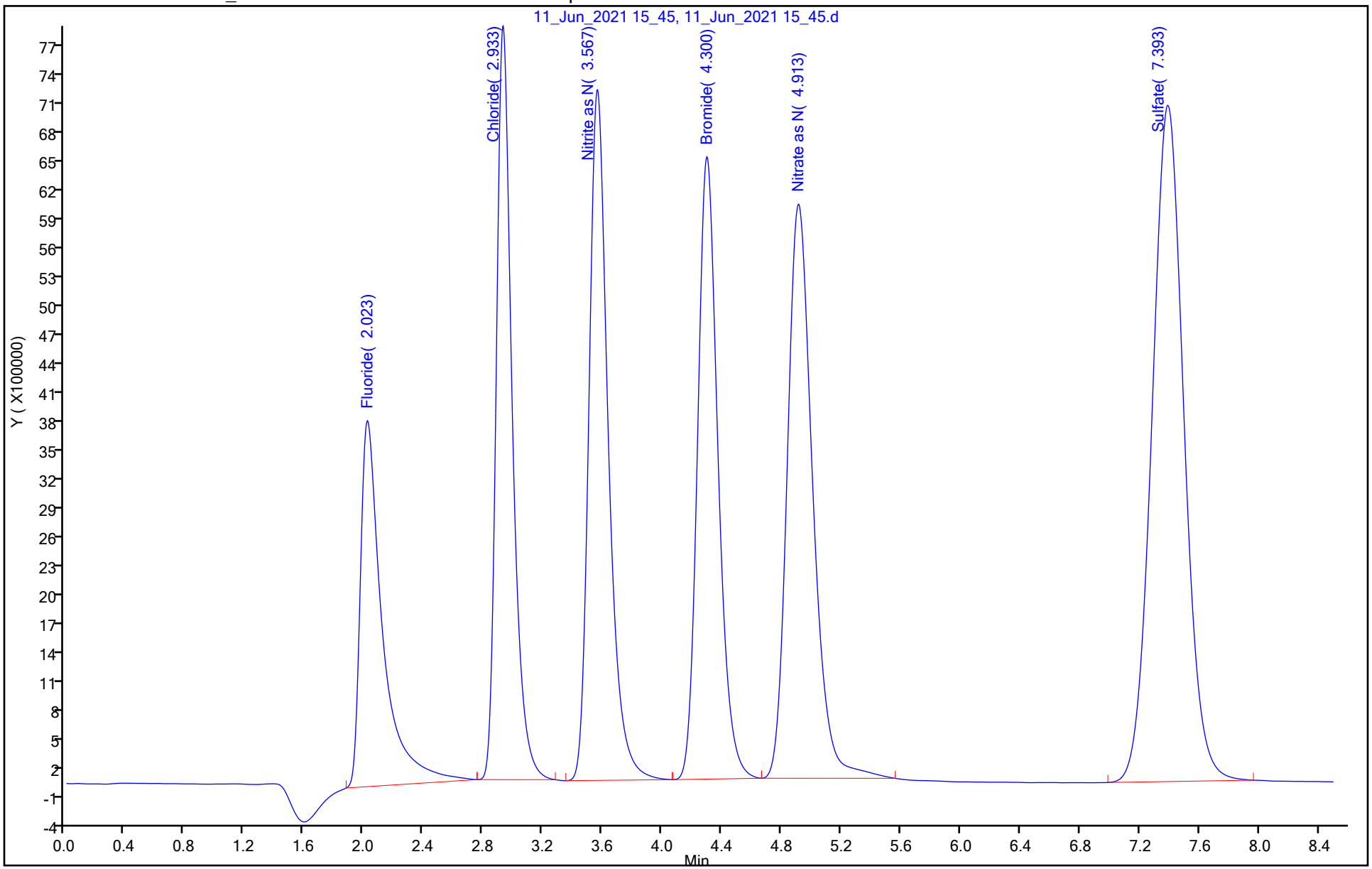
WC_IC_C_Int_00070 Amount Added: 10.00 Units: mL

Report Date: 11-Jun-2021 18:16:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_45.d

Injection Date:	11-Jun-2021 15:45:00	Instrument ID:	24811	Operator ID:	
Lims ID:	IC CAL4			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d
Lims ID: IC CAL5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 11-Jun-2021 15:56:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CAL 5
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub1

Method: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 11-Jun-2021 18:16:57 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1669

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.023	2.023	0.000	59373847	3.00	3.04	
2 Chloride	2.933	2.933	0.000	89048270	6.00	6.10	
3 Nitrite as N	3.567	3.567	0.000	99369496	NC	NC	
4 Bromide	4.300	4.300	0.000	94940687	15.0	15.3	
5 Nitrate as N	4.907	4.907	0.000	107786428	NC	NC	
6 Sulfate	7.397	7.397	0.000	161863214	15.0	15.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_C_Int_00070 Amount Added: 15.00 Units: mL

Report Date: 11-Jun-2021 18:16:58 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

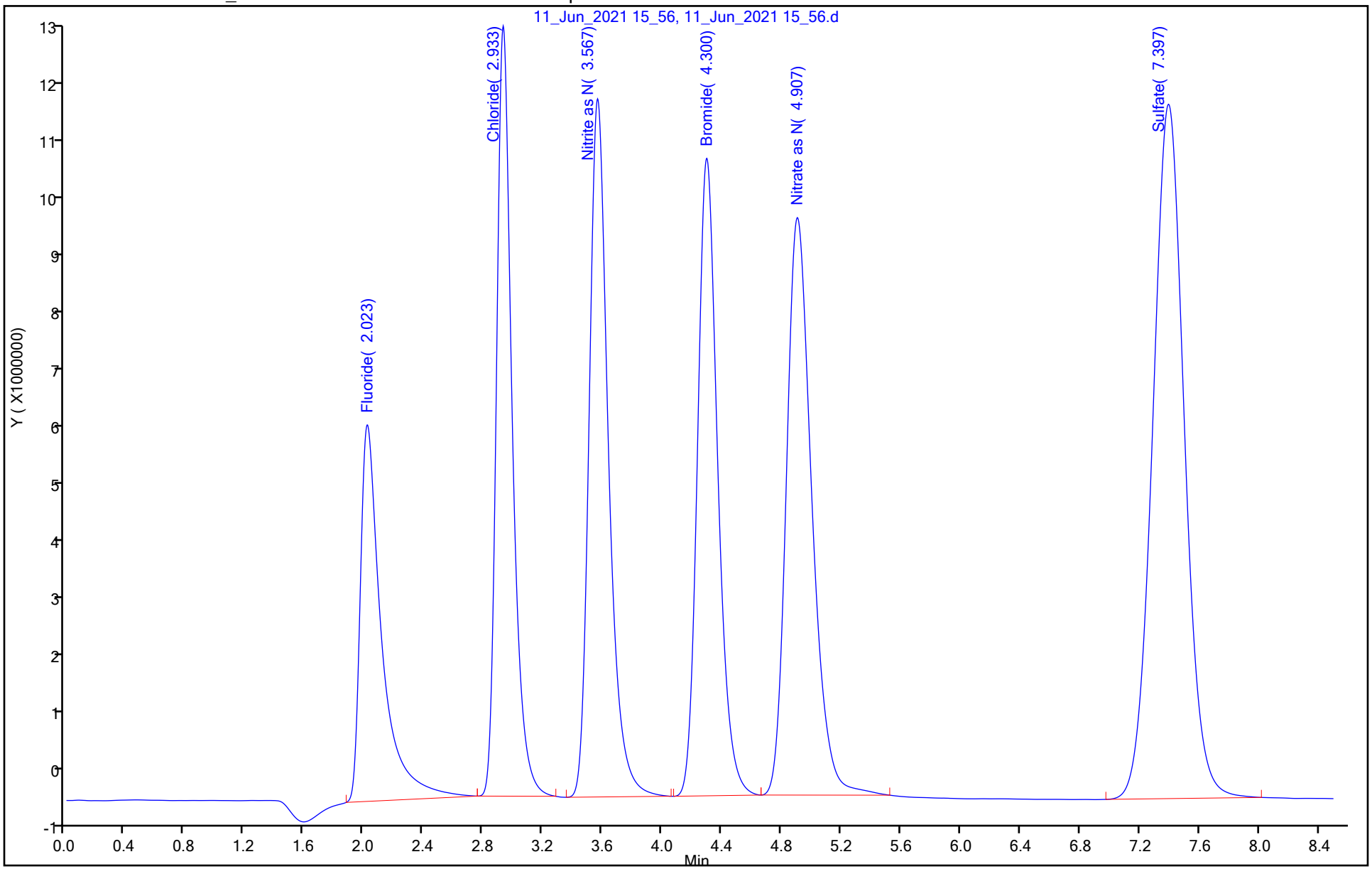
Injection Date: 11-Jun-2021 15:56:00 Instrument ID: 24811 Operator ID:

Lims ID: IC CAL5 Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: Anions_24811 Limit Group: IC - 300 28D



Calibration / Fluoride

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

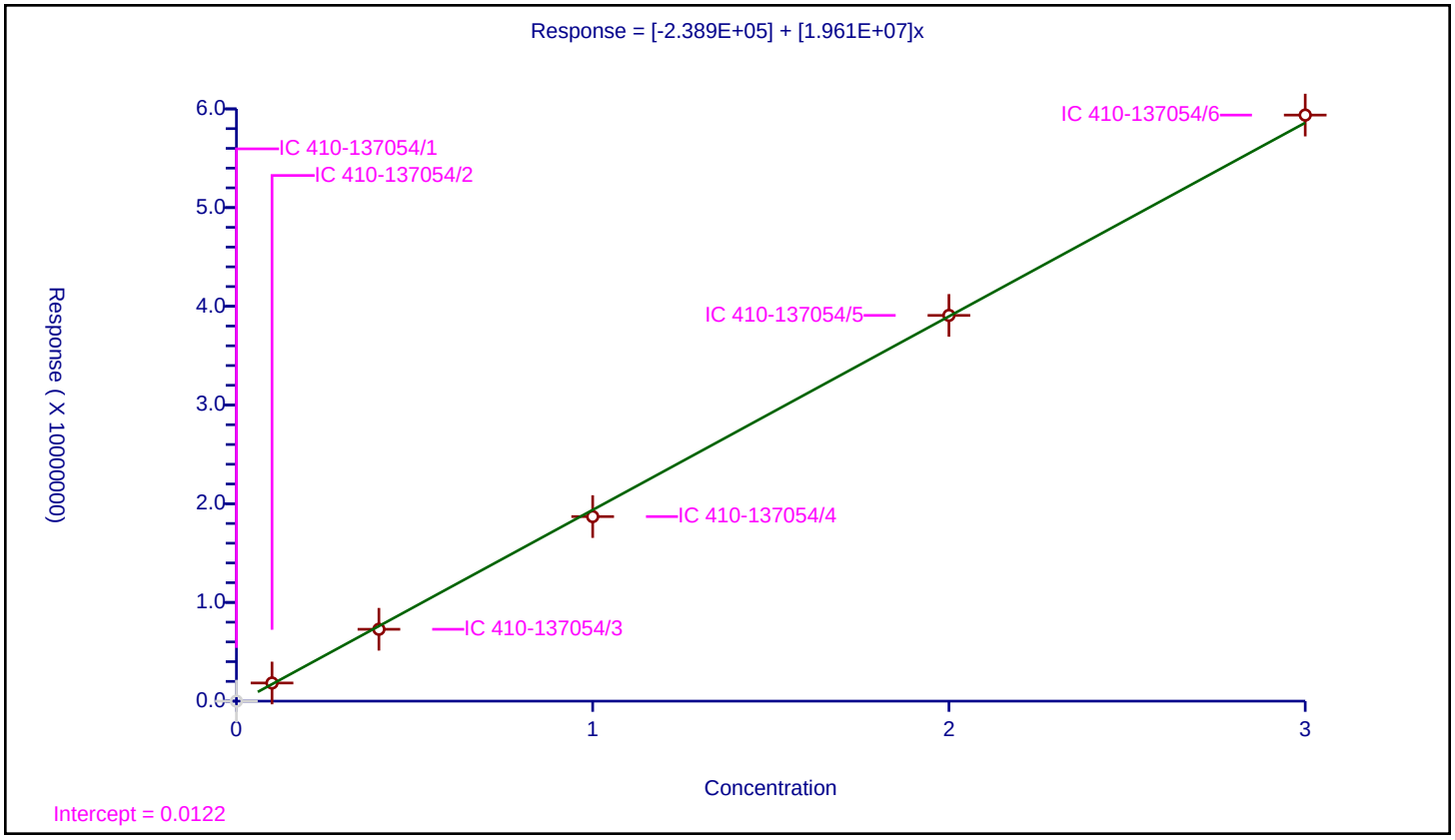
Curve Coefficients

Intercept:	-2.389E+05
Slope:	1.961E+07

Error Coefficients

Standard Error:	631000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 410-137054/1	0.0	0.0			NaN	N
2	IC 410-137054/2	0.1	1839551.0			18395510.0	Y
3	IC 410-137054/3	0.4	7280811.0			18202027.5	Y
4	IC 410-137054/4	1.0	18698316.0			18698316.0	Y
5	IC 410-137054/5	2.0	39080516.0			19540258.0	Y
6	IC 410-137054/6	3.0	59373847.0			19791282.333333	Y



Calibration / Chloride

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

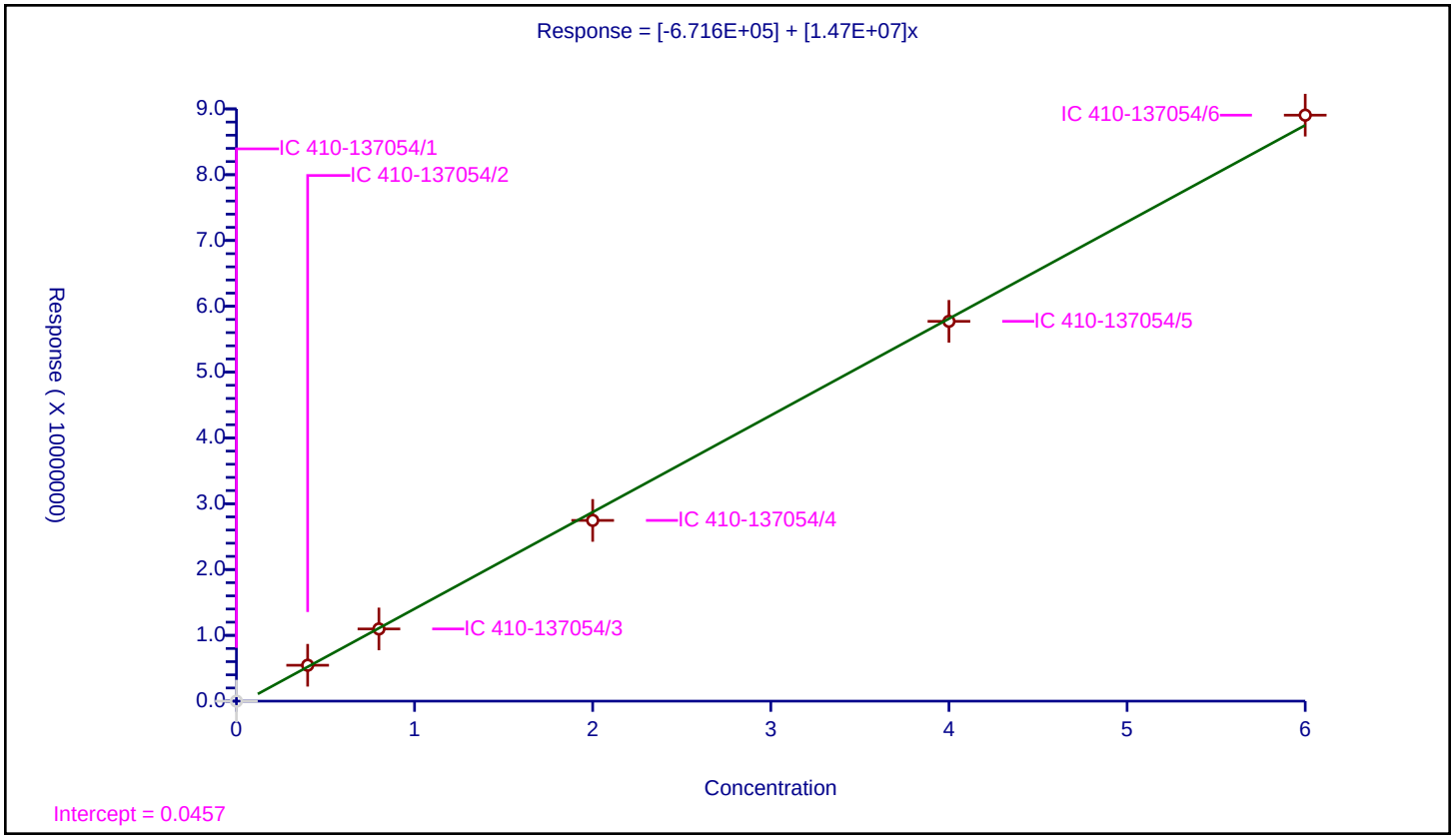
Curve Coefficients

Intercept:	-6.716E+05
Slope:	1.47E+07

Error Coefficients

Standard Error:	1180000
Relative Standard Error:	3.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 410-137054/1	0.0	0.0			NaN	N
2	IC 410-137054/2	0.4	5455848.0			13639620.0	Y
3	IC 410-137054/3	0.8	10970904.0			13713630.0	Y
4	IC 410-137054/4	2.0	27465538.0			13732769.0	Y
5	IC 410-137054/5	4.0	57717275.0			14429318.75	Y
6	IC 410-137054/6	6.0	89048270.0			14841378.333333	Y



Calibration / Bromide

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

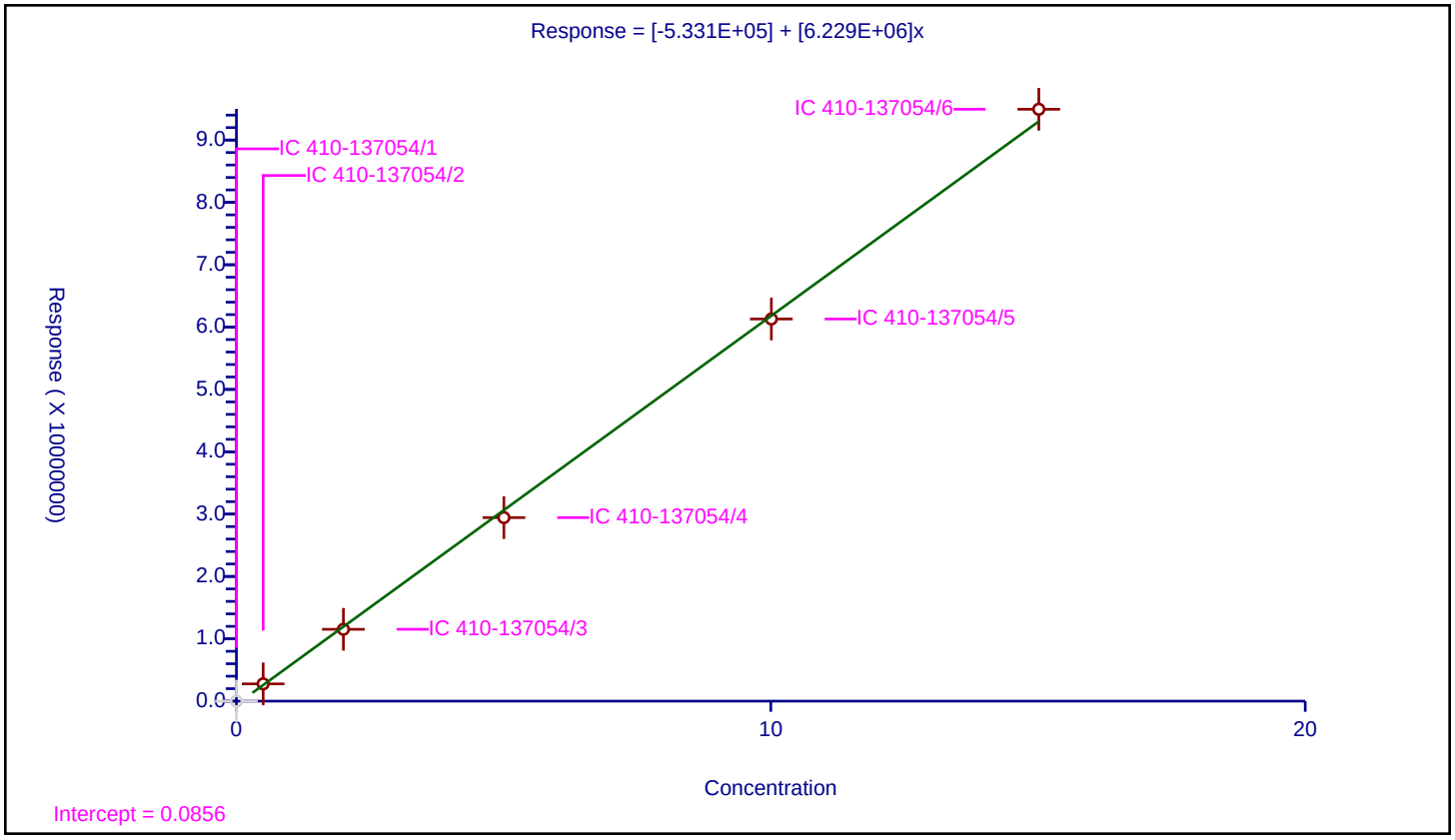
Curve Coefficients

Intercept:	-5.331E+05
Slope:	6.229E+06

Error Coefficients

Standard Error:	1380000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 410-137054/1	0.0	0.0			NaN	N
2	IC 410-137054/2	0.5005	2768644.0			5531756.243756	Y
3	IC 410-137054/3	2.002	11524803.0			5756644.855145	Y
4	IC 410-137054/4	5.005	29440432.0			5882204.195804	Y
5	IC 410-137054/5	10.01	61300229.0			6123899.000999	Y
6	IC 410-137054/6	15.015	94940687.0			6323056.077256	Y



Calibration / Sulfate

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

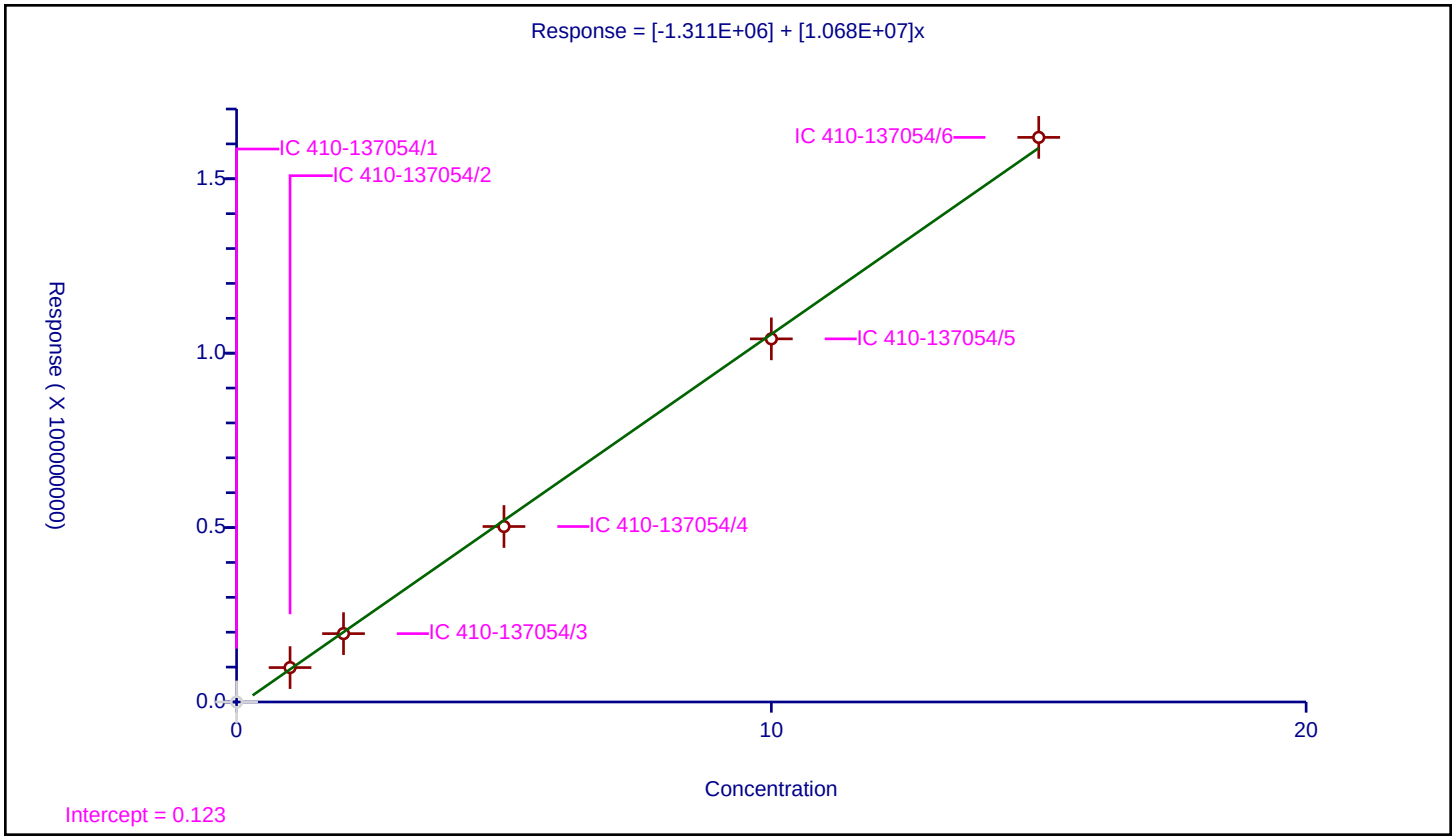
Curve Coefficients

Intercept:	-1.311E+06
Slope:	1.068E+07

Error Coefficients

Standard Error:	2200000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 410-137054/1	0.0	0.0			NaN	N
2	IC 410-137054/2	1.0	9869427.0			9869427.0	Y
3	IC 410-137054/3	2.0	19598532.0			9799266.0	Y
4	IC 410-137054/4	5.0	50308410.0			10061682.0	Y
5	IC 410-137054/5	10.0	104103704.0			10410370.4	Y
6	IC 410-137054/6	15.0	161863214.0			10790880.933333	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 410-138324/1 Calibration Date: 06/16/2021 05:16

Instrument ID: 24811 Calib Start Date: 06/11/2021 15:00

GC Column: IC17-AS14 ID: 4.00(mm) Calib End Date: 06/11/2021 15:56

Lab File ID: 16_Jun_2021 05_16.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin1		22262324		0.864	0.750	15.1*	10.0
Chloride	Lin1		14537450		3.01	3.00	0.4	10.0
Bromide	Lin1		6142755		7.47	7.49	-0.2	10.0
Sulfate	Lin1		10631532		7.59	7.50	1.2	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 410-138324/1 Calibration Date: 06/16/2021 05:16

Instrument ID: 24811 Calib Start Date: 06/11/2021 15:00

GC Column: IC17-AS14 ID: 4.00(mm) Calib End Date: 06/11/2021 15:56

Lab File ID: 16_Jun_2021 05_16.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.02	1.82	2.22
Chloride	2.91	2.61	3.21
Bromide	4.24	3.84	4.64
Sulfate	7.08	6.27	7.87

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 05_16.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2021 05:16:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub3

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:46 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Fluoride	2.023	2.023	0.000	16696743	0.7500	0.8636	
2	Chloride	2.913	2.910	0.003	43612350	3.00	3.01	
3	Nitrite as N	3.523	3.523	0.000	23938701	NC	NC	
4	Bromide	4.240	4.237	0.003	46024590	7.49	7.47	
5	Nitrate as N	4.820	4.817	0.003	26013473	NC	NC	
6	Sulfate	7.080	7.073	0.007	79736489	7.50	7.59	
S 7	Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

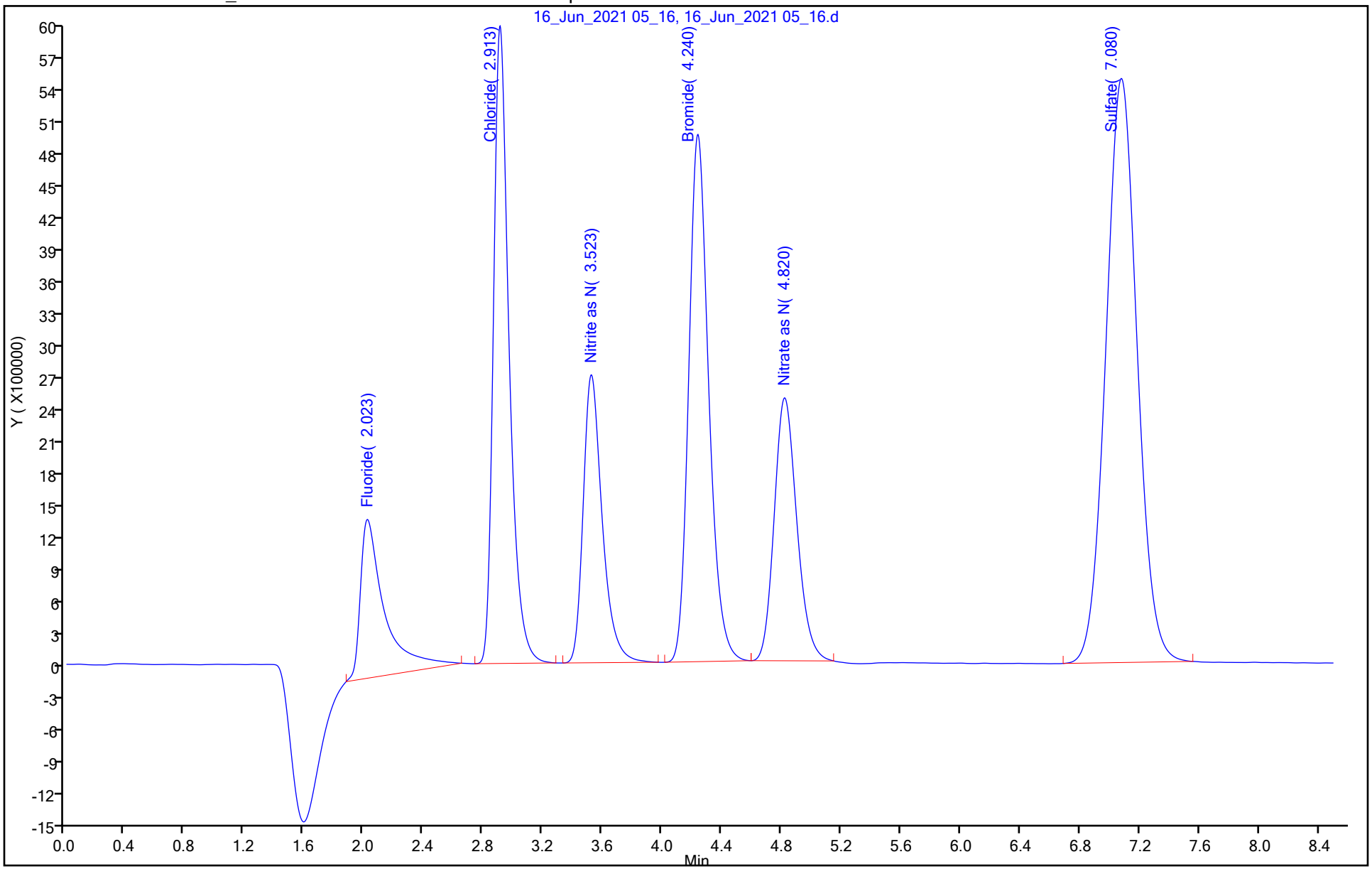
WC_IC_QC2_00391 Amount Added: 7.50 Units: mL

Report Date: 16-Jun-2021 11:56:46 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 05_16.d

Injection Date:	16-Jun-2021 05:16:00	Instrument ID:	24811	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 410-138324/13 Calibration Date: 06/16/2021 07:29

Instrument ID: 24811 Calib Start Date: 06/11/2021 15:00

GC Column: IC17-AS14 ID: 4.00(mm) Calib End Date: 06/11/2021 15:56

Lab File ID: 16_Jun_2021 07_29.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin1		22713699		0.881	0.750	17.4*	10.0
Chloride	Lin1		14519344		3.01	3.00	0.3	10.0
Bromide	Lin1		6163836		7.50	7.49	0.1	10.0
Sulfate	Lin1		10686725		7.63	7.50	1.7	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 410-138324/13 Calibration Date: 06/16/2021 07:29

Instrument ID: 24811 Calib Start Date: 06/11/2021 15:00

GC Column: IC17-AS14 ID: 4.00(mm) Calib End Date: 06/11/2021 15:56

Lab File ID: 16_Jun_2021 07_29.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.02	1.82	2.22
Chloride	2.91	2.61	3.21
Bromide	4.24	3.84	4.64
Sulfate	7.08	6.27	7.87

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 07_29.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2021 07:29:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub3

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:50 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Fluoride	2.023	2.023	0.000	17035274	0.7500	0.8809	
2	Chloride	2.910	2.910	0.000	43558033	3.00	3.01	
3	Nitrite as N	3.523	3.523	0.000	23934077	NC	NC	
4	Bromide	4.237	4.237	0.000	46182540	7.49	7.50	
5	Nitrate as N	4.820	4.817	0.003	26141473	NC	NC	
6	Sulfate	7.083	7.073	0.010	80150435	7.50	7.63	
S 7	Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

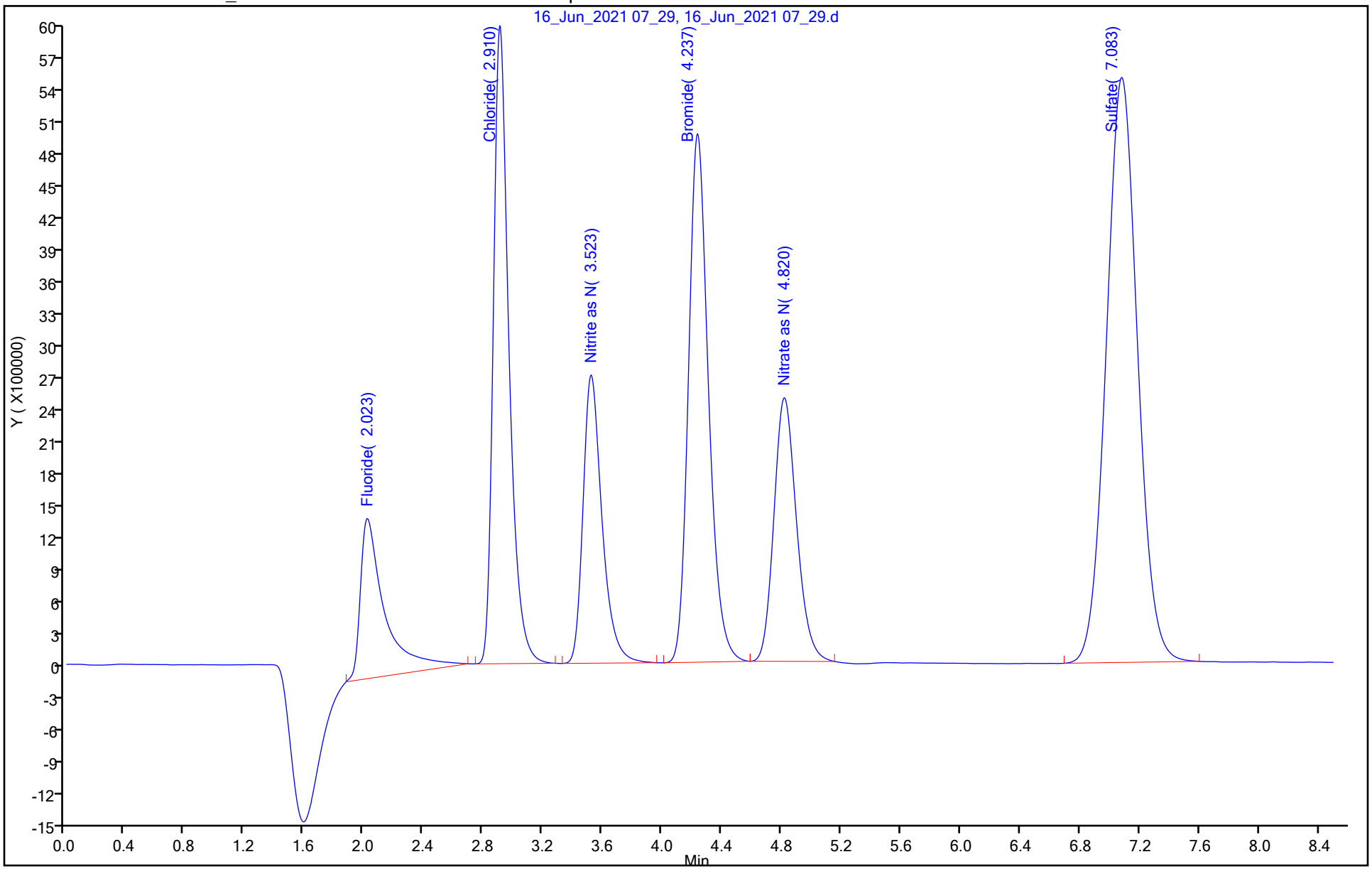
WC_IC_QC2_00391 Amount Added: 7.50 Units: mL

Report Date: 16-Jun-2021 11:56:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 07_29.d

Injection Date:	16-Jun-2021 07:29:00	Instrument ID:	24811	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 410-138324/25 Calibration Date: 06/16/2021 09:43

Instrument ID: 24811 Calib Start Date: 06/11/2021 15:00

GC Column: IC17-AS14 ID: 4.00(mm) Calib End Date: 06/11/2021 15:56

Lab File ID: 16_Jun_2021 09_43.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin1		21282939		0.826	0.750	10.2*	10.0
Chloride	Lin1		14555754		3.02	3.00	0.6	10.0
Bromide	Lin1		6167073		7.50	7.49	0.2	10.0
Sulfate	Lin1		10665982		7.62	7.50	1.5	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 410-138324/25 Calibration Date: 06/16/2021 09:43

Instrument ID: 24811 Calib Start Date: 06/11/2021 15:00

GC Column: IC17-AS14 ID: 4.00(mm) Calib End Date: 06/11/2021 15:56

Lab File ID: 16_Jun_2021 09_43.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.02	1.82	2.22
Chloride	2.91	2.61	3.21
Bromide	4.24	3.84	4.64
Sulfate	7.09	6.27	7.87

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 09_43.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2021 09:43:00 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub3

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:54 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 Fluoride	2.023	2.023	0.000	15962204	0.7500	0.8261	
	2 Chloride	2.913	2.910	0.003	43667261	3.00	3.02	
	3 Nitrite as N	3.523	3.523	0.000	24032952	NC	NC	
	4 Bromide	4.240	4.237	0.003	46206793	7.49	7.50	
	5 Nitrate as N	4.820	4.817	0.003	26097178	NC	NC	
	6 Sulfate	7.087	7.073	0.014	79994863	7.50	7.62	
S	7 Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_QC2_00391 Amount Added: 7.50 Units: mL

Report Date: 16-Jun-2021 11:56:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 09_43.d

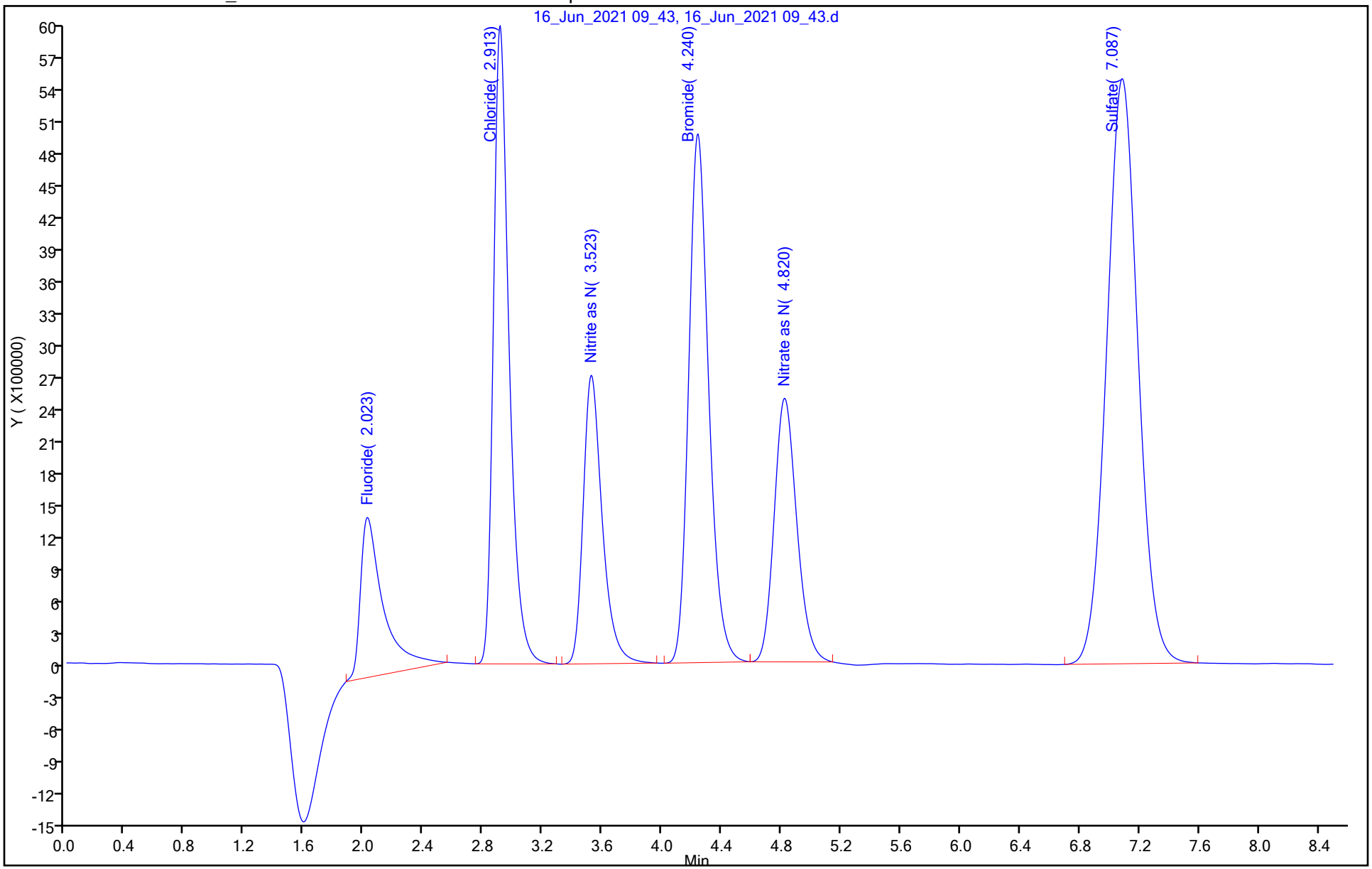
Injection Date: 16-Jun-2021 09:43:00 Instrument ID: 24811 Operator ID:

Lims ID: CCV Worklist Smp#: 25

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: Anions_24811 Limit Group: IC - 300 28D



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 410-138324/34 Calibration Date: 06/16/2021 11:22

Instrument ID: 24811 Calib Start Date: 06/11/2021 15:00

GC Column: IC17-AS14 ID: 4.00(mm) Calib End Date: 06/11/2021 15:56

Lab File ID: 16_Jun_2021 11_22.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin1		22427812		0.870	0.750	16.0*	10.0
Chloride	Lin1		14603804		3.03	3.00	0.9	10.0
Bromide	Lin1		6196621		7.54	7.49	0.6	10.0
Sulfate	Lin1		10728914		7.66	7.50	2.1	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Lab Sample ID: CCV 410-138324/34 Calibration Date: 06/16/2021 11:22

Instrument ID: 24811 Calib Start Date: 06/11/2021 15:00

GC Column: IC17-AS14 ID: 4.00(mm) Calib End Date: 06/11/2021 15:56

Lab File ID: 16_Jun_2021 11_22.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.03	1.82	2.22
Chloride	2.92	2.61	3.21
Bromide	4.25	3.84	4.64
Sulfate	7.13	6.27	7.87

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 11_22.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2021 11:22:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: Instrument ID: 24811
Sublist: chrom-Anions_24811*sub3

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:56 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Fluoride	2.027	2.023	0.004	16820859	0.7500	0.8699	
2	Chloride	2.920	2.910	0.010	43811412	3.00	3.03	
3	Nitrite as N	3.533	3.523	0.010	24036786	NC	NC	
4	Bromide	4.250	4.237	0.013	46428183	7.49	7.54	
5	Nitrate as N	4.833	4.817	0.016	26224860	NC	NC	
6	Sulfate	7.133	7.073	0.060	80466856	7.50	7.66	
S 7	Nitrate Nitrite as N		0.000				ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

WC_IC_QC2_00391 Amount Added: 7.50 Units: mL

Report Date: 16-Jun-2021 11:56:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 11_22.d

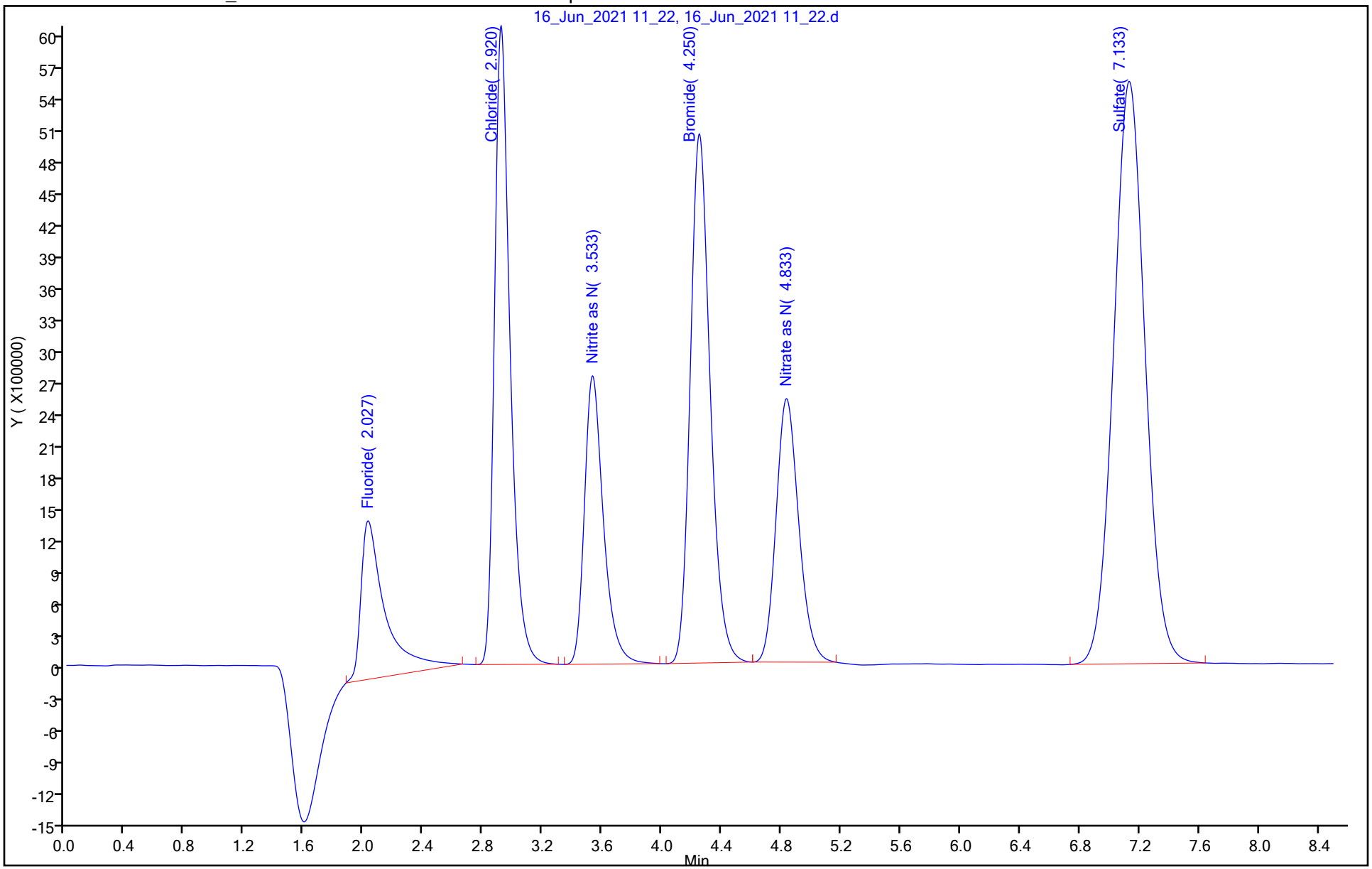
Injection Date: 16-Jun-2021 11:22:00 Instrument ID: 24811 Operator ID:

Lims ID: CCV Worklist Smp#: 34

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: Anions_24811 Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-138324/4

Matrix: Water Lab File ID: 16_Jun_2021 05_50.d

Analysis Method: 9056A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 0(mL) Date Analyzed: 06/16/2021 05:50

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: IC17-AS14 ID: 4(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 138324 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 05_50.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Jun-2021 05:50:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB
Operator ID: Instrument ID: 24811

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:46 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

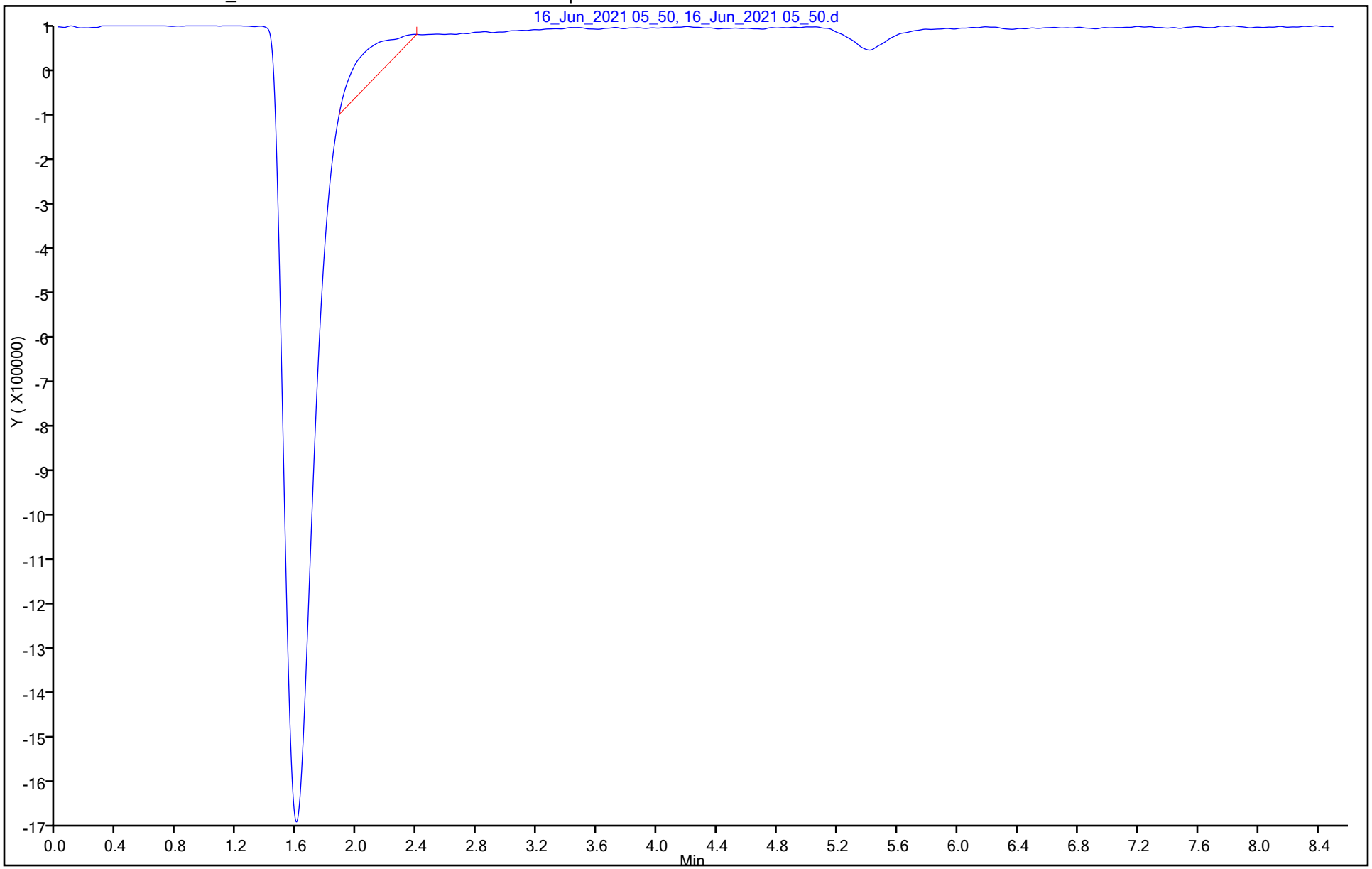
	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Fluoride		2.023				ND	
2	Chloride		2.910				ND	
3	Nitrite as N		3.523				ND	
4	Bromide		4.237				ND	
5	Nitrate as N		4.817				ND	
6	Sulfate		7.073				ND	
S 7	Nitrate Nitrite as N		0.000				ND	

Report Date: 16-Jun-2021 11:56:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 05_50.d

Injection Date:	16-Jun-2021 05:50:00	Instrument ID:	24811	Operator ID:	
Lims ID:	MB			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 410-138324/2

Matrix: Water Lab File ID: 16_Jun_2021 05_28.d

Analysis Method: 9056A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 0(mL) Date Analyzed: 06/16/2021 05:28

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: IC17-AS14 ID: 4(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 138324 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 05_28.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 16-Jun-2021 05:28:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCB
Operator ID: Instrument ID: 24811

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:46 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Fluoride		2.023				ND	
2	Chloride		2.910				ND	
3	Nitrite as N		3.523				ND	
4	Bromide		4.237				ND	
5	Nitrate as N		4.817				ND	
6	Sulfate		7.073				ND	
S 7	Nitrate Nitrite as N		0.000				ND	

Report Date: 16-Jun-2021 11:56:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 05_28.d

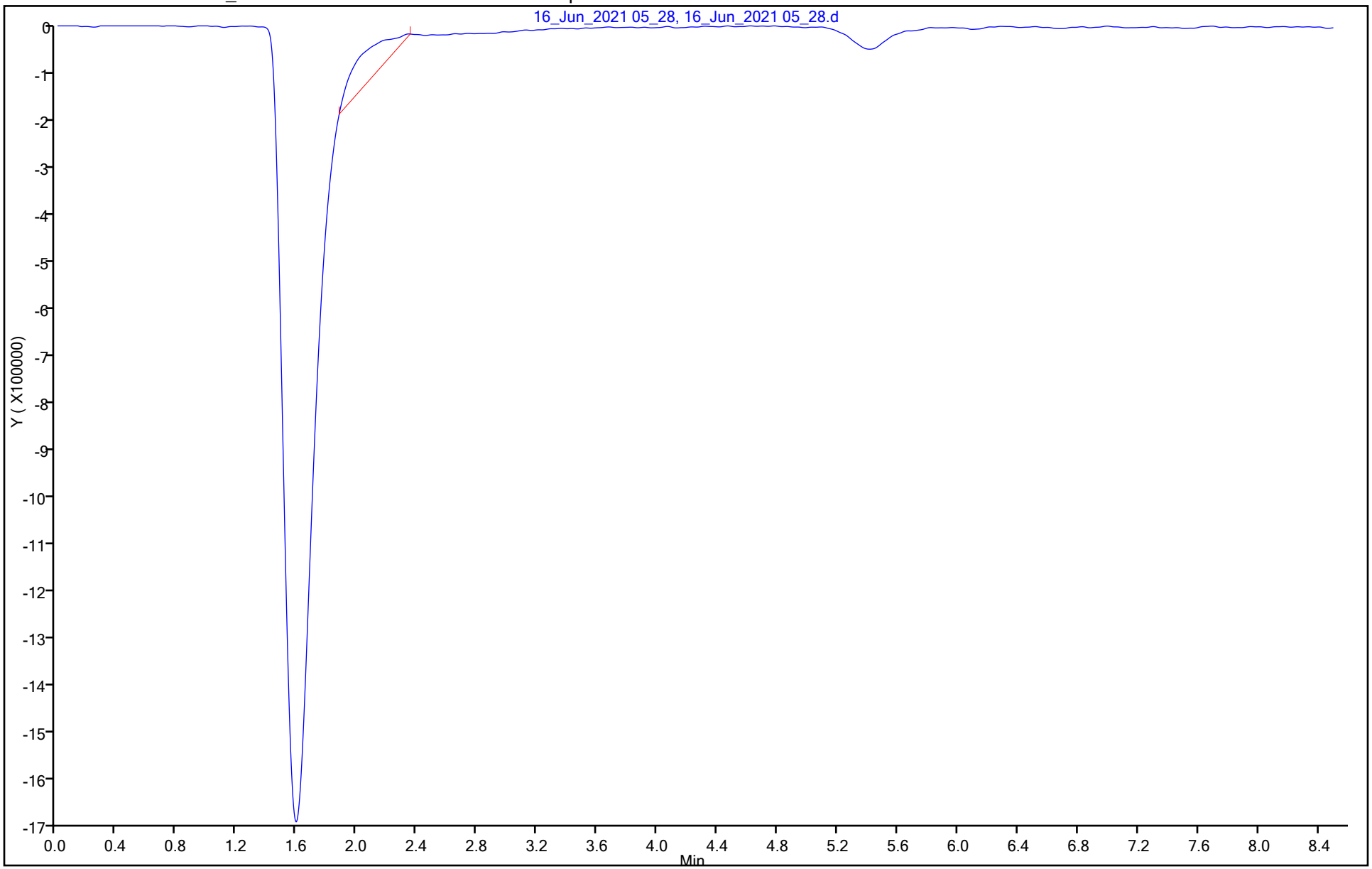
Injection Date: 16-Jun-2021 05:28:00 Instrument ID: 24811 Operator ID:

Lims ID: CCB Worklist Smp#: 2

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: Anions_24811 Limit Group: IC - 300 28D



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 410-138324/14

Matrix: Water Lab File ID: 16_Jun_2021 07_41.d

Analysis Method: 9056A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 0(mL) Date Analyzed: 06/16/2021 07:41

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: IC17-AS14 ID: 4(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 138324 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 07_41.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 16-Jun-2021 07:41:00 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCB
Operator ID: Instrument ID: 24811

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:50 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

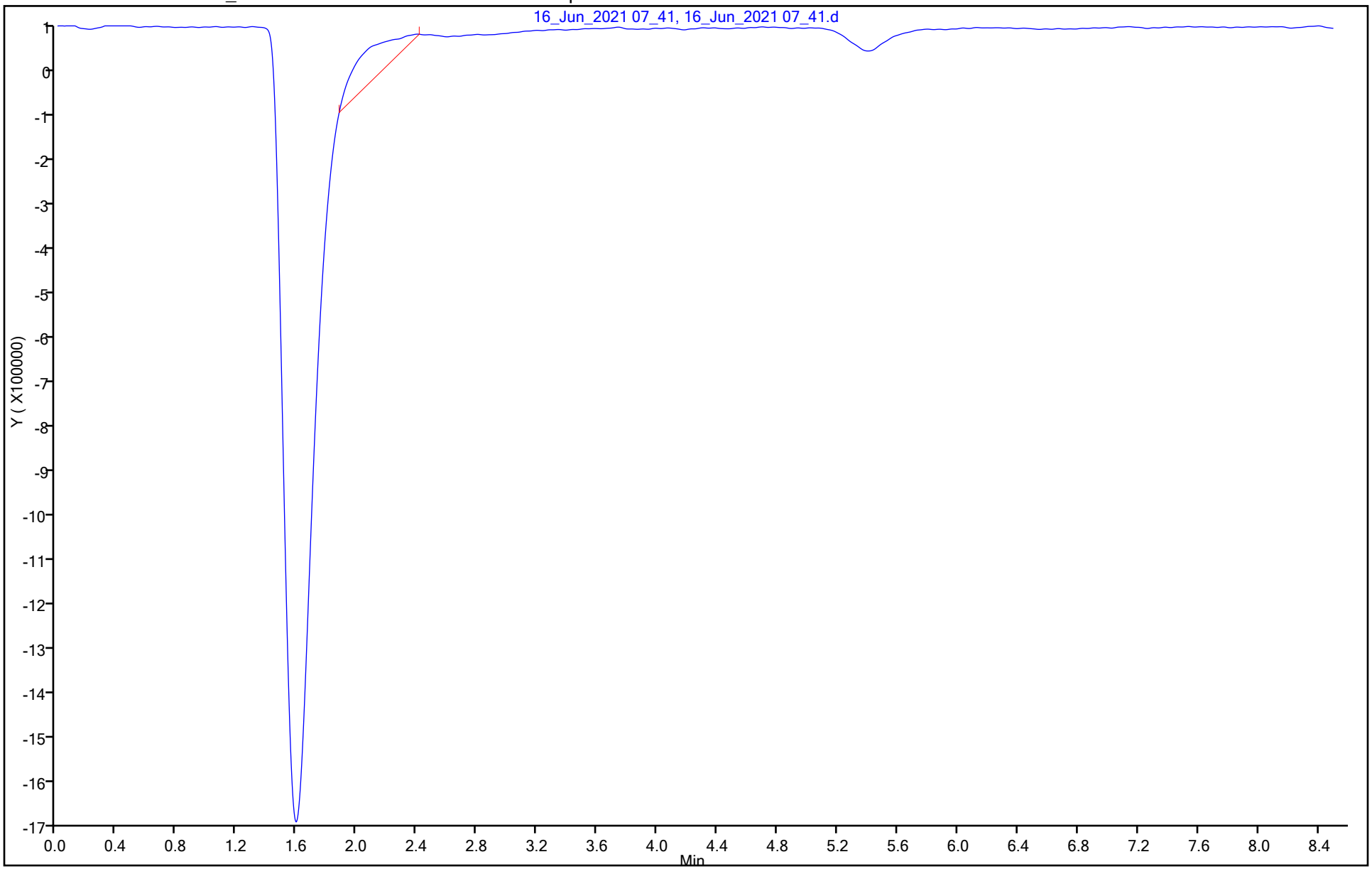
	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Fluoride		2.023				ND	
2	Chloride		2.910				ND	
3	Nitrite as N		3.523				ND	
4	Bromide		4.237				ND	
5	Nitrate as N		4.817				ND	
6	Sulfate		7.073				ND	
S 7	Nitrate Nitrite as N		0.000				ND	

Report Date: 16-Jun-2021 11:56:51 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 07_41.d

Injection Date:	16-Jun-2021 07:41:00	Instrument ID:	24811	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 410-138324/26

Matrix: Water Lab File ID: 16_Jun_2021 09_54.d

Analysis Method: 9056A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 0(mL) Date Analyzed: 06/16/2021 09:54

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: IC17-AS14 ID: 4(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 138324 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 09_54.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 16-Jun-2021 09:54:00 ALS Bottle#: 0 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCB
Operator ID: Instrument ID: 24811

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:54 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

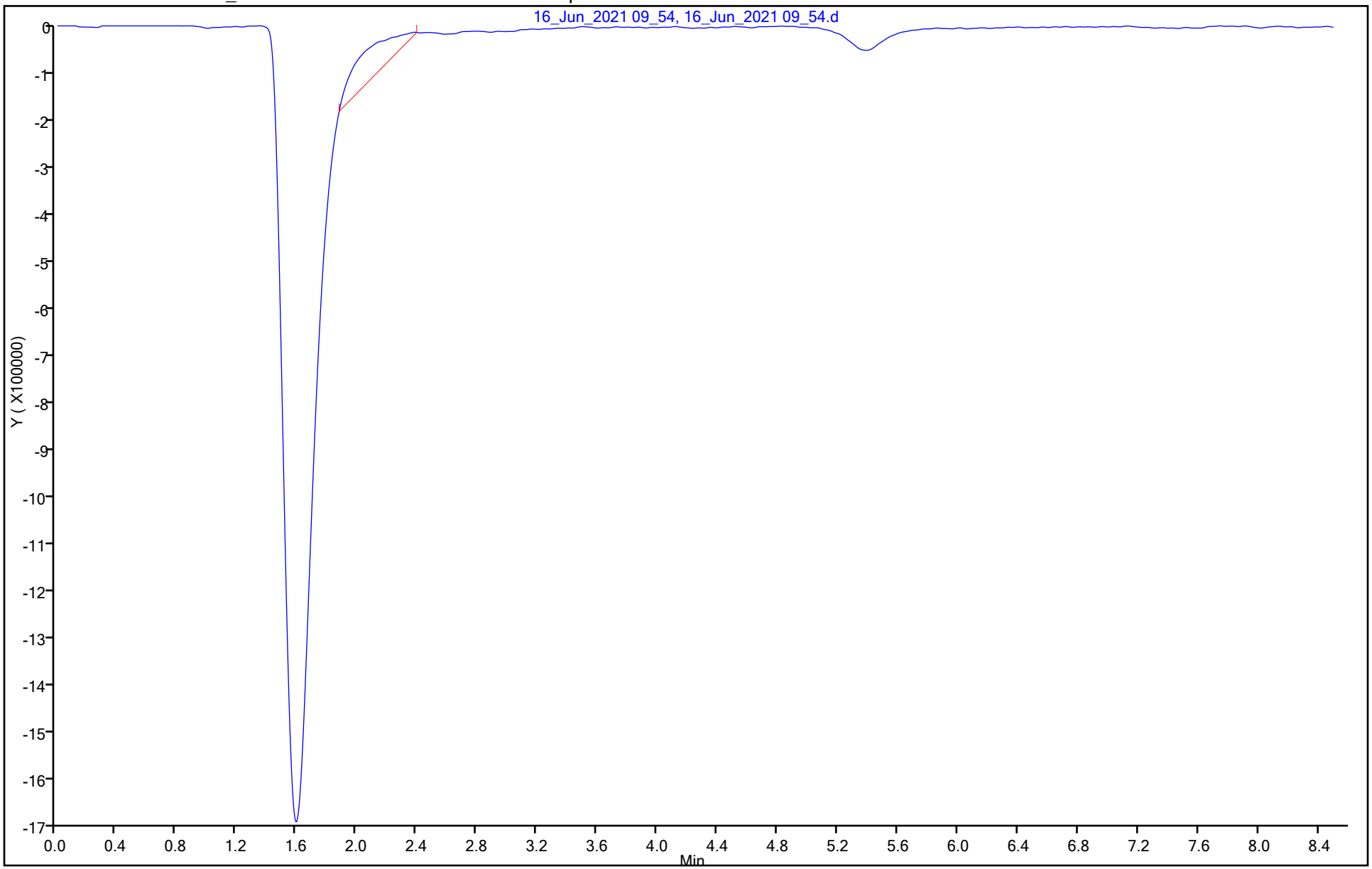
	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Fluoride		2.023				ND	
2	Chloride		2.910				ND	
3	Nitrite as N		3.523				ND	
4	Bromide		4.237				ND	
5	Nitrate as N		4.817				ND	
6	Sulfate		7.073				ND	
S 7	Nitrate Nitrite as N		0.000				ND	

Report Date: 16-Jun-2021 11:56:54 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 09_54.d

Injection Date:	16-Jun-2021 09:54:00	Instrument ID:	24811	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 410-138324/35

Matrix: Water Lab File ID: 16_Jun_2021 11_33.d

Analysis Method: 9056A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 0(mL) Date Analyzed: 06/16/2021 11:33

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: IC17-AS14 ID: 4(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 138324 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
14808-79-8	Sulfate	0.90	U	1.0	0.90	0.30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 11_33.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 16-Jun-2021 11:33:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCB
Operator ID: Instrument ID: 24811

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:56 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

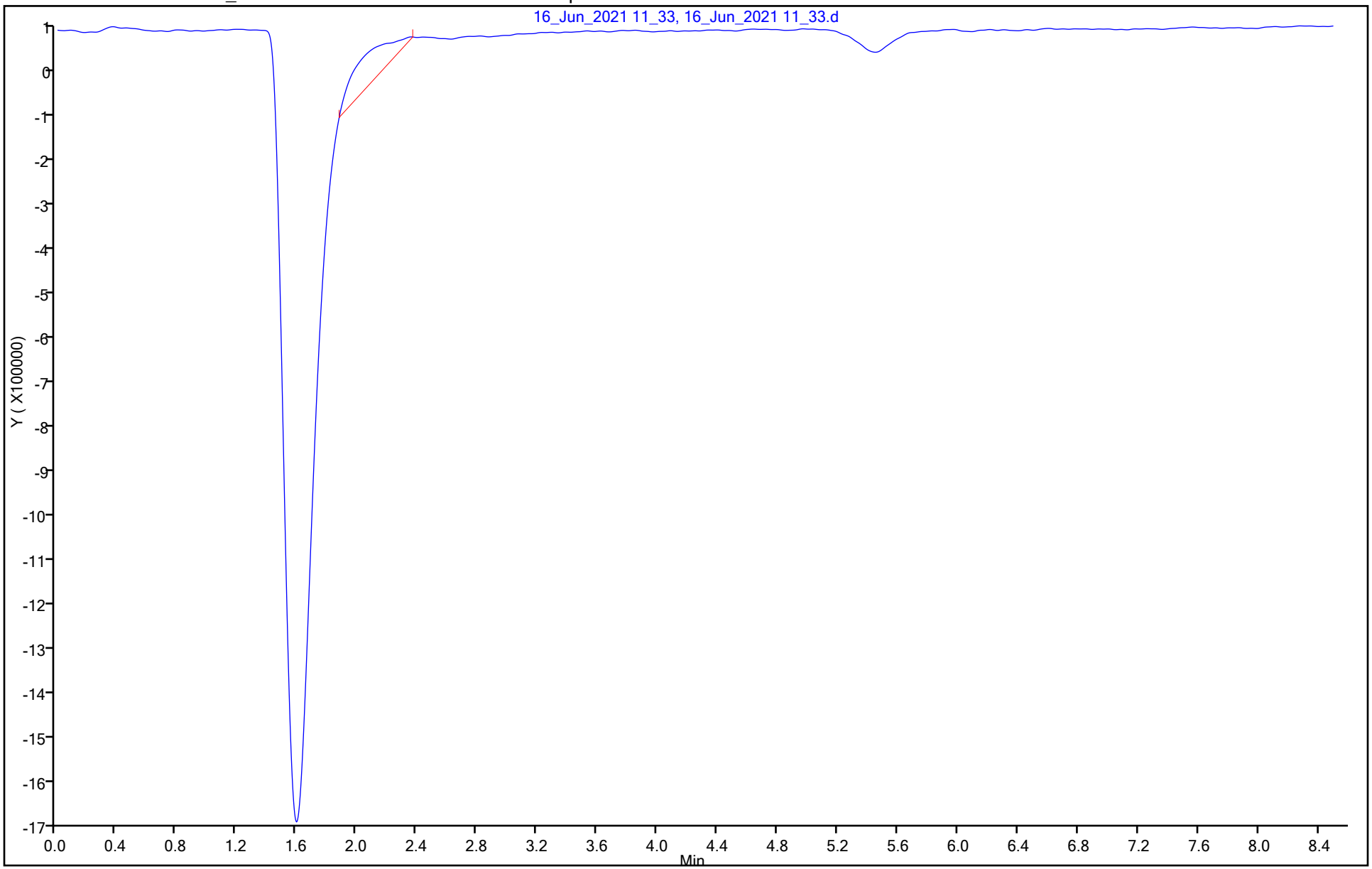
	Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	Fluoride		2.023				ND	
2	Chloride		2.910				ND	
3	Nitrite as N		3.523				ND	
4	Bromide		4.237				ND	
5	Nitrate as N		4.817				ND	
6	Sulfate		7.073				ND	
S 7	Nitrate Nitrite as N		0.000				ND	

Report Date: 16-Jun-2021 11:56:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 11_33.d

Injection Date:	16-Jun-2021 11:33:00	Instrument ID:	24811	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 280-149116-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-138324/3

Matrix: Water Lab File ID: 16_Jun_2021 05_39.d

Analysis Method: 9056A Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 0(mL) Date Analyzed: 06/16/2021 05:39

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 1(uL) GC Column: IC17-AS14 ID: 4(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 138324 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
14808-79-8	Sulfate	7.61		1.0	0.90	0.30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 05_39.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2021 05:39:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: Instrument ID: 24811

Method: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\Anions_24811.m
Limit Group: IC - 300 28D
Last Update: 16-Jun-2021 11:56:46 Calib Date: 11-Jun-2021 15:56:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\24811\20210611-31744.b\11_Jun_2021 15_56.d

Column 1 : Det: det0
Process Host: CTX1602

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.020	2.023	-0.003	16633315	0.7500	0.8604	
2 Chloride	2.910	2.910	0.000	43665707	3.00	3.02	
3 Nitrite as N	3.523	3.523	0.000	23969542	NC	NC	
4 Bromide	4.237	4.237	0.000	46132595	7.49	7.49	
5 Nitrate as N	4.820	4.817	0.003	26127538	NC	NC	
6 Sulfate	7.080	7.073	0.007	79933696	7.50	7.61	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

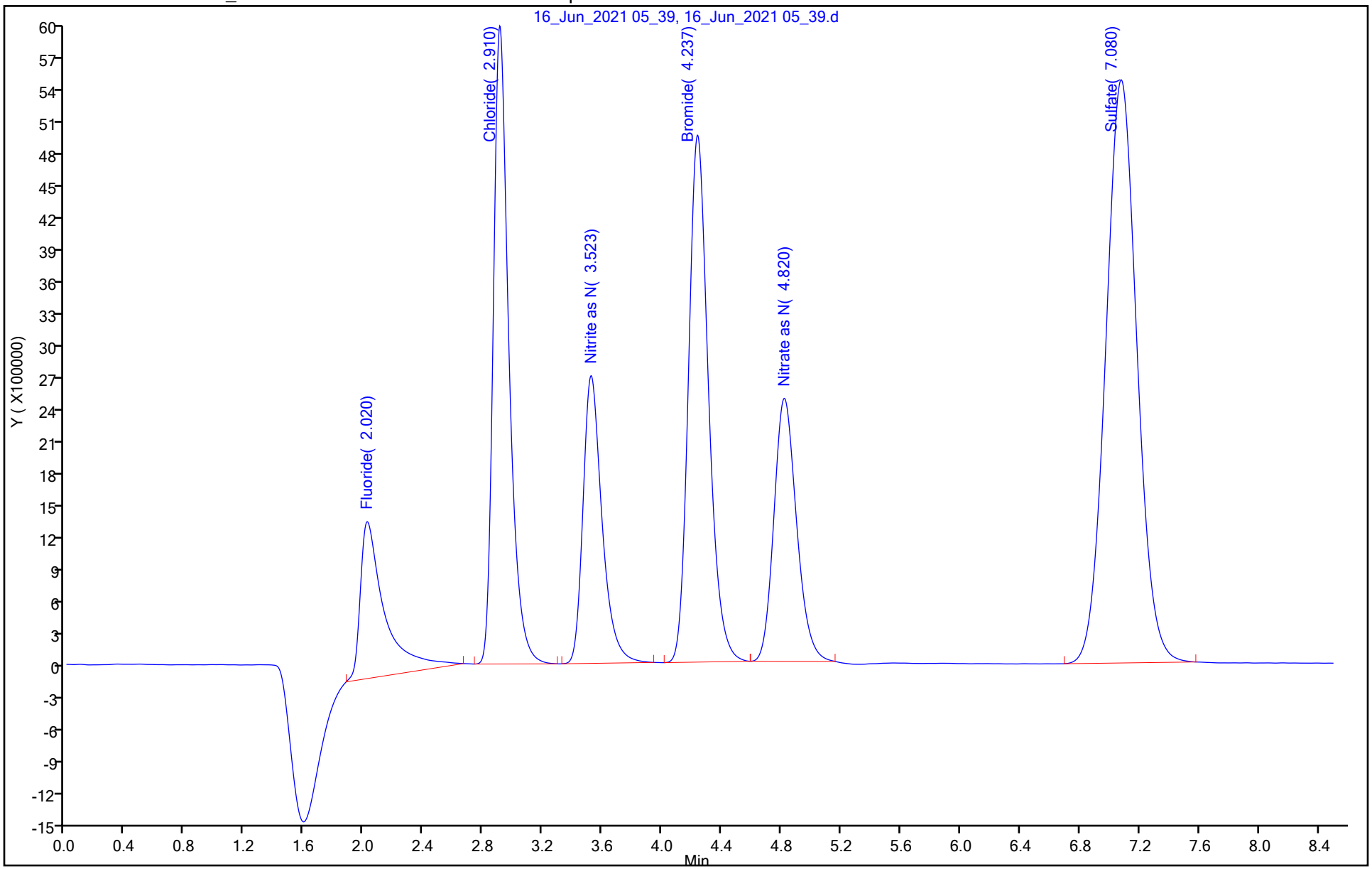
WC_IC_QC2_00391 Amount Added: 7.50 Units: mL

Report Date: 16-Jun-2021 11:56:47 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\24811\20210616-32040.b\16_Jun_2021 05_39.d

Injection Date:	16-Jun-2021 05:39:00	Instrument ID:	24811	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_24811	Limit Group:	IC - 300 28D		



HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Instrument ID: 24811 Start Date: 06/11/2021 15:00

Analysis Batch Number: 137054 End Date: 06/11/2021 16:18

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 410-137054/1		06/11/2021 15:00	1		IC17-AS14 4(mm)
IC 410-137054/2		06/11/2021 15:12	1	11_Jun_2021 15_12.d	IC17-AS14 4(mm)
IC 410-137054/3		06/11/2021 15:23	1	11_Jun_2021 15_23.d	IC17-AS14 4(mm)
IC 410-137054/4		06/11/2021 15:34	1	11_Jun_2021 15_34.d	IC17-AS14 4(mm)
IC 410-137054/5		06/11/2021 15:45	1	11_Jun_2021 15_45.d	IC17-AS14 4(mm)
IC 410-137054/6		06/11/2021 15:56	1	11_Jun_2021 15_56.d	IC17-AS14 4(mm)
ICV 410-137054/7		06/11/2021 16:07	1		IC17-AS14 4(mm)
ICB 410-137054/8		06/11/2021 16:18	1		IC17-AS14 4(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 280-149116-1

SDG No.:

Instrument ID: 24811 Start Date: 06/16/2021 05:16

Analysis Batch Number: 138324 End Date: 06/16/2021 11:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 410-138324/1		06/16/2021 05:16	1	16_Jun_2021 05_16.d	IC17-AS14 4(mm)
CCB 410-138324/2		06/16/2021 05:28	1	16_Jun_2021 05_28.d	IC17-AS14 4(mm)
LCS 410-138324/3		06/16/2021 05:39	1	16_Jun_2021 05_39.d	IC17-AS14 4(mm)
MB 410-138324/4		06/16/2021 05:50	1	16_Jun_2021 05_50.d	IC17-AS14 4(mm)
ZZZZZ		06/16/2021 06:01	20		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 06:12	20		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 06:23	20		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 06:34	20		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 06:45	5		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 06:56	25		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 07:07	250		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 07:18	250		IC17-AS14 4(mm)
CCV 410-138324/13		06/16/2021 07:29	1	16_Jun_2021 07_29.d	IC17-AS14 4(mm)
CCB 410-138324/14		06/16/2021 07:41	1	16_Jun_2021 07_41.d	IC17-AS14 4(mm)
ZZZZZ		06/16/2021 07:52	50		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 08:03	250		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 08:14	250		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 08:25	10		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 08:36	5		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 08:47	5		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 08:58	5		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 09:09	5		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 09:20	50		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 09:31	200		IC17-AS14 4(mm)
CCV 410-138324/25		06/16/2021 09:43	1	16_Jun_2021 09_43.d	IC17-AS14 4(mm)
CCB 410-138324/26		06/16/2021 09:54	1	16_Jun_2021 09_54.d	IC17-AS14 4(mm)
280-149116-6	SHGW02-21A	06/16/2021 10:05	5	16_Jun_2021 10_05.d	IC17-AS14 4(mm)
280-149116-7	SHGW05-21A	06/16/2021 10:16	5	16_Jun_2021 10_16.d	IC17-AS14 4(mm)
ZZZZZ		06/16/2021 10:27	1000		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 10:38	500		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 10:49	20		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 11:00	200		IC17-AS14 4(mm)
ZZZZZ		06/16/2021 11:11	200		IC17-AS14 4(mm)
CCV 410-138324/34		06/16/2021 11:22	1	16_Jun_2021 11_22.d	IC17-AS14 4(mm)
CCB 410-138324/35		06/16/2021 11:33	1	16_Jun_2021 11_33.d	IC17-AS14 4(mm)

9056A

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 280-149116-1

SDG No.:

Batch Number: 138324 Batch Start Date: 06/16/21 05:16 Batch Analyst: Litwa, Kevin L

Batch Method: 9056A Batch End Date: 06/16/21 11:33

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WC_IC_QC2 00391				
CCV 410-138324/1		9056A		0 mL	7.5 mL				
CCB 410-138324/2		9056A		0 mL					
LCS 410-138324/3		9056A		0 mL	7.5 mL				
MB 410-138324/4		9056A		0 mL					
CCV 410-138324/13		9056A		0 mL	7.5 mL				
CCB 410-138324/14		9056A		0 mL					
CCV 410-138324/25		9056A		0 mL	7.5 mL				
CCB 410-138324/26		9056A		0 mL					
280-149116-B-6	SHGW02-21A	9056A	T	0 mL					
280-149116-B-7	SHGW05-21A	9056A	T	0 mL					
CCV 410-138324/34		9056A		0 mL	7.5 mL				
CCB 410-138324/35		9056A		0 mL					

Batch Notes	
Eluent 1 ID	1426419

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: 280-149116-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
G0017-21A	280-149116-1
G0045-21A	280-149116-2
G0086-21A	280-149116-3
PZ0018-21A	280-149116-4
SHGW03-21A	280-149116-5
SHGW02-21A	280-149116-6
SHGW05-21A	280-149116-7
G0077-21A	280-149116-9
G0078-21A	280-149116-10
PZ017R-21A	280-149116-11
PZ021-21A	280-149116-12
PZ007-21A	280-149116-13
G0024-21A	280-149116-14
PZ020-21A	280-149116-15

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0017-21A
Lab Sample ID: 280-149116-1
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 15:20
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	0.71	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	6.4	4.0	1.9	0.79	mg/L			1	9034
Sulfate	540	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	440	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0017-21A
Lab Sample ID: 280-149116-1
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 15:20
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.6	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0045-21A
Lab Sample ID: 280-149116-2
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 16:15
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.1	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.0	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	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	1300	50	25	10	mg/L		D	10	9056A
Total Alkalinity as CaCO3	470	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0045-21A
Lab Sample ID: 280-149116-2
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 16:15
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0086-21A
Lab Sample ID: 280-149116-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 14:05
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	5.4	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	180	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	310	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0086-21A
Lab Sample ID: 280-149116-3
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 14:05
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ0018-21A
Lab Sample ID: 280-149116-4
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 15:25
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.32	0.50	0.25	0.11	mg/L	J		5	350.1
Nitrogen, Total Kjeldahl	2.4	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	5.0	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	53	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	360	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ0018-21A
Lab Sample ID: 280-149116-4
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 15:25
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	11	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW03-21A
Lab Sample ID: 280-149116-5
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 12:05
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	7.5	0.10	0.050	0.019	mg/L			1	353.2
Sulfate	31	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	160	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW02-21A
Lab Sample ID: 280-149116-6
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 10:40
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.17	0.10	0.050	0.019	mg/L			1	353.2
Total Alkalinity as CaCO3	200	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW05-21A
Lab Sample ID: 280-149116-7
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 08:00
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.16	0.10	0.050	0.019	mg/L			1	353.2
Total Alkalinity as CaCO3	200	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0077-21A
Lab Sample ID: 280-149116-9
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 09:30
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	9.0	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	140	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	310	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0077-21A
Lab Sample ID: 280-149116-9
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 09:30
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.4	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0078-21A
Lab Sample ID: 280-149116-10
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 10:30
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.29	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.70	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	270	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	320	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0078-21A
Lab Sample ID: 280-149116-10
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 10:30
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.9	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ017R-21A
Lab Sample ID: 280-149116-11
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 08:45
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.033	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	24	2.5	1.3	0.48	mg/L			25	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	81	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	280	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ017R-21A
Lab Sample ID: 280-149116-11
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 08:45
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.2	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ021-21A
Lab Sample ID: 280-149116-12
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 08:00
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.028	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	23	2.5	1.3	0.48	mg/L			25	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	82	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	280	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ021-21A
Lab Sample ID: 280-149116-12
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 08:00
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.3	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ007-21A
Lab Sample ID: 280-149116-13
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 13:25
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.035	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U	J1	1	351.2
Nitrate Nitrite as N	0.80	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	510	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	390	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ007-21A
Lab Sample ID: 280-149116-13
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/25/2021 13:25
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.2	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0024-21A
Lab Sample ID: 280-149116-14
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 08:30
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	7.8	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	54	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	220	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0024-21A
Lab Sample ID: 280-149116-14
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 08:30
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.3	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ020-21A
Lab Sample ID: 280-149116-15
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 11:40
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	13	0.50	0.25	0.095	mg/L			5	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	150	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	320	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ020-21A
Lab Sample ID: 280-149116-15
Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-149116-1
SDG ID.:
Matrix: Water
Date Sampled: 05/26/2021 11:40
Reporting Basis: WET
Date Received: 05/27/2021 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.5	1.0	0.80	0.35	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Analyst: RKD Batch Start Date: 06/11/2021

Reporting Units: mg/L Analytical Batch No.: 539549

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:25	Ammonia	0.492	0.501	98	90-110		350.1 ICV_00460
15	ICV	10:27	Ammonia	2.28	2.51	91	90-110		350.1 ICV_00460
16	ICB	10:29	Ammonia	0.050				U	
33	CCVL	11:03	Ammonia	0.522	0.500	104	90-110		350.1 cal_00471
34	CCV	11:05	Ammonia	2.53	2.50	101	90-110		350.1 cal_00471
35	CCB	11:07	Ammonia	0.050				U	
49	CCVL	11:35	Ammonia	0.525	0.500	105	90-110		350.1 cal_00471
50	CCV	11:37	Ammonia	2.65	2.50	106	90-110		350.1 cal_00471
51	CCB	11:39	Ammonia	0.050				U	
69	CCVL	12:15	Ammonia	0.523	0.500	105	90-110		350.1 cal_00471
70	CCV	12:17	Ammonia	2.58	2.50	103	90-110		350.1 cal_00471
71	CCB	12:19	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.: 280-149116-1

SDG No.:

Analyst: ZPM Batch Start Date: 06/02/2021

Reporting Units: mg/L Analytical Batch No.: 538329

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	ICV	15:00	Nitrogen, Total Kjeldahl	5.14	5.00	103	90-110		TKN ICV 25_00106
14	ICB	15:01	Nitrogen, Total Kjeldahl	1.0				U	
31	CCV	15:23	Nitrogen, Total Kjeldahl	5.39	5.00	108	90-110		TKN 25ppm_00820
32	CCB	15:24	Nitrogen, Total Kjeldahl	1.0				U	
49	CCV	15:45	Nitrogen, Total Kjeldahl	5.52	5.00	110	90-110		TKN 25ppm_00820
50	CCB	15:46	Nitrogen, Total Kjeldahl	1.0				U	
62	CCV	16:01	Nitrogen, Total Kjeldahl	5.47	5.00	109	90-110		TKN 25ppm_00820
63	CCB	16:03	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.: 280-149116-1

SDG No.:

Analyst: ZPM Batch Start Date: 06/04/2021

Reporting Units: mg/L Analytical Batch No.: 538637

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	11:42	Nitrate Nitrite as N	4.80	5.00	96	90-110		NXN ICV INT_00555
18	ICVL	11:44	Nitrate Nitrite as N	1.98	2.00	99	90-110		NXN ICV INT_00555
19	ICB	11:46	Nitrate Nitrite as N	0.050				U	
35	CCV	12:18	Nitrate Nitrite as N	4.80	5.00	96	90-110		NXN CAL INT_00579
36	CCVL	12:20	Nitrate Nitrite as N	0.984	1.00	98	90-110		NXN CAL INT_00579
37	CCB	12:22	Nitrate Nitrite as N	0.050				U	
51	CCV	12:50	Nitrate Nitrite as N	4.55	5.00	91	90-110		NXN CAL INT_00579
52	CCVL	12:52	Nitrate Nitrite as N	1.03	1.00	103	90-110		NXN CAL INT_00579
53	CCB	12:54	Nitrate Nitrite as N	0.050				U	
67	CCV	13:22	Nitrate Nitrite as N	4.86	5.00	97	90-110		NXN CAL INT_00579
68	CCVL	13:24	Nitrate Nitrite as N	0.951	1.00	95	90-110		NXN CAL INT_00579
69	CCB	13:26	Nitrate Nitrite as N	0.050				U	
83	CCV	13:54	Nitrate Nitrite as N	4.95	5.00	99	90-110		NXN CAL INT_00579
84	CCVL	13:56	Nitrate Nitrite as N	1.03	1.00	103	90-110		NXN CAL INT_00579
85	CCB	13:58	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.: 280-149116-1

SDG No.:

Analyst: JMB Batch Start Date: 06/14/2021

Reporting Units: mg/L Analytical Batch No.: 539823

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICB	21:36	Sulfate	2.5				U	
9	ICV	21:50	Sulfate	81.5	80.0	102	90-110		IC SO4 ICV_00022
24	CCV	17:32	Sulfate	103	100	103	90-110		IC LCS_01814
25	CCB	17:46	Sulfate	2.5				U	
36	CCV	20:20	Sulfate	103	100	103	90-110		IC LCS_01814
37	CCB	20:34	Sulfate	2.5				U	
48	CCV	23:08	Sulfate	106	100	106	90-110		IC LCS_01814
49	CCB	23:22	Sulfate	2.5				U	
61	CCV	01:56	Sulfate	103	100	103	90-110		IC LCS_01814
62	CCB	02:10	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.: 280-149116-1

SDG No.:

Analyst: JMB Batch Start Date: 06/16/2021

Reporting Units: mg/L Analytical Batch No.: 540037

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	09:30	Sulfate	103	100	103	90-110		IC LCS_01815
2	CCB	09:44	Sulfate	2.5				U	
17	CCV	13:49	Sulfate	102	100	102	90-110		IC LCS_01815
18	CCB	14:03	Sulfate	2.5				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Analyst: RAF Batch Start Date: 06/08/2021

Reporting Units: mg/L Analytical Batch No.: 539121

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	15:12	Dissolved Organic Carbon - Quad	18.3	20.0	92	90-110		TOC ICV Std_00046
2	ICB	15:27	Dissolved Organic Carbon - Quad	0.80				U	
15	CCV	18:43	Dissolved Organic Carbon - Quad	24.0	25.0	96	90-110		TOC LCS Std_00051
16	CCB	18:57	Dissolved Organic Carbon - Quad	0.80				U	
27	CCV	21:43	Dissolved Organic Carbon - Quad	24.2	25.0	97	90-110		TOC LCS Std_00051
28	CCB	21:58	Dissolved Organic Carbon - Quad	0.80				U	
39	CCV	00:50	Dissolved Organic Carbon - Quad	24.4	25.0	98	90-110		TOC LCS Std_00051
40	CCB	01:05	Dissolved Organic Carbon - Quad	0.80				U	
51	CCV	03:51	Dissolved Organic Carbon - Quad	24.6	25.0	98	90-110		TOC LCS Std_00051
52	CCB	04:05	Dissolved Organic Carbon - Quad	0.80				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.: 280-149116-1

SDG No.:

Analyst: QJB Batch Start Date: 06/04/2021

Reporting Units: mg/L Analytical Batch No.: 538839

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
16	CCV	20:21	Total Alkalinity as CaCO3	196	200	98	90-110		Alk daily lcs 00967
17	CCB	20:27	Total Alkalinity as CaCO3	6.4				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.: 280-149116-1

SDG No.:

Analyst: QJB Batch Start Date: 06/07/2021

Reporting Units: mg/L Analytical Batch No.: 538981

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
16	CCV	16:35	Total Alkalinity as CaCO3	197	200	98	90-110		Alk daily lcs 00967
17	CCB	16:41	Total Alkalinity as CaCO3	4.95				J	
28	CCV	18:53	Total Alkalinity as CaCO3	200	200	100	90-110		Alk daily lcs 00967
29	CCB	18:59	Total Alkalinity as CaCO3	3.32				J	
42	CCV	20:39	Total Alkalinity as CaCO3	197	200	98	90-110		Alk daily lcs 00967
43	CCB	20:45	Total Alkalinity as CaCO3	6.4				U	
54	CCV	22:02	Total Alkalinity as CaCO3	198	200	99	90-110		Alk daily lcs 00967
55	CCB	22:08	Total Alkalinity as CaCO3	6.4				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.: 280-149116-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 539549 Date: 06/11/2021 10:37							
350.1	MB 280-539549/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 539549 Date: 06/11/2021 11:47							
350.1	MB 280-539549/55	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 538329 Date: 06/02/2021 15:04 Prep Batch: 538091 Date: 06/01/2021 09:30							
351.2	MB 280-538091/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 538637 Date: 06/04/2021 11:52							
353.2	MB 280-538637/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 538637 Date: 06/04/2021 13:08							
353.2	MB 280-538637/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 537793 Date: 05/28/2021 09:57 Prep Batch: 537775 Date: 05/28/2021 09:03							
9034	MB 280-537775/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 538118 Date: 06/01/2021 12:36 Prep Batch: 538090 Date: 06/01/2021 09:21							
9034	MB 280-538090/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 538293 Date: 06/02/2021 13:47 Prep Batch: 538266 Date: 06/02/2021 12:36							
9034	MB 280-538266/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 539823 Date: 06/14/2021 22:45							
9056A	MB 280-539823/13	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 539823 Date: 06/15/2021 23:36							
9056A	MB 280-539823/50	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 540037 Date: 06/16/2021 10:39							
9056A	MB 280-540037/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 539121 Date: 06/08/2021 15:57							
9060A	MB 280-539003/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 539121 Date: 06/08/2021 23:34							
9060A	MB 280-539003/28-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 538839 Date: 06/04/2021 19:08							
SM 2320B	MB 280-538839/5	Total Alkalinity as CaCO3	3.98	J	mg/L	10	1
Batch ID: 538981 Date: 06/07/2021 15:10							
SM 2320B	MB 280-538981/5	Total Alkalinity as CaCO3	4.37	J	mg/L	10	1
Batch ID: 538981 Date: 06/07/2021 19:13							
SM 2320B	MB 280-538981/31	Total Alkalinity as CaCO3	6.4	U	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 539549 Date: 06/11/2021 11:17											
350.1	280-149116-13	Ammonia	0.035	J	mg/L						
350.1	280-149116-13 MS	Ammonia	1.09		mg/L	1.00	105	90-110			
Batch ID: 539549 Date: 06/11/2021 12:01											
350.1	280-149116-15	Ammonia	0.050	U	mg/L						
350.1	280-149116-15 MS	Ammonia	1.06		mg/L	1.00	106	90-110			
Batch ID: 538329 Date: 06/02/2021 15:31 Prep Batch: 538091 Date: 06/01/2021 09:30											
351.2	280-149116-13	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-149116-13 MS	Nitrogen, Total Kjeldahl	2.43		mg/L	3.00	81	90-110			J1
Batch ID: 538637 Date: 06/04/2021 13:12											
353.2	280-149116-13	Nitrate Nitrite as N	0.80		mg/L						
353.2	280-149116-13 MS	Nitrate Nitrite as N	5.03		mg/L	4.00	106	90-110			
Batch ID: 538118 Date: 06/01/2021 12:36 Prep Batch: 538090 Date: 06/01/2021 09:21											
9034	280-149116-13	Sulfide	1.9	U	mg/L						
9034	280-149116-13 MS	Sulfide	12.0		mg/L	18.6	65	44-110			
Batch ID: 539823 Date: 06/15/2021 22:12											
9056A	280-149116-13	Sulfate	500		mg/L						J1 D
9056A	280-149116-13 MS	Sulfate	609		mg/L	100	113	87-112			J1 4 D
Batch ID: 539121 Date: 06/09/2021 02:51											
9060A	280-149116-13	Dissolved Organic Carbon - Quad	3.2		mg/L						
9060A	280-149116-13 MS	Dissolved Organic Carbon - Quad	26.8		mg/L	25.0	94	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.: 280-149116-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 539549 Date: 06/11/2021 11:19											
350.1	280-149116-13 MSD	Ammonia	1.08		mg/L	1.00	105	90-110	1	10	
Batch ID: 539549 Date: 06/11/2021 12:03											
350.1	280-149116-15 MSD	Ammonia	1.04		mg/L	1.00	104	90-110	2	10	
Batch ID: 538329 Date: 06/02/2021 15:32			Prep Batch: 538091			Date: 06/01/2021 09:30					
351.2	280-149116-13 MSD	Nitrogen, Total Kjeldahl	2.90		mg/L	3.00	97	90-110	18	25	
Batch ID: 538637 Date: 06/04/2021 13:14											
353.2	280-149116-13 MSD	Nitrate Nitrite as N	4.99		mg/L	4.00	105	90-110	1	10	
Batch ID: 538118 Date: 06/01/2021 12:36			Prep Batch: 538090			Date: 06/01/2021 09:21					
9034	280-149116-13 MSD	Sulfide	12.0		mg/L	18.6	65	44-110	0	20	
Batch ID: 539823 Date: 06/15/2021 22:26											
9056A	280-149116-13 MSD	Sulfate	593		mg/L	100	97	87-112	3	10	J1 4 D
Batch ID: 539121 Date: 06/09/2021 03:06											
9060A	280-149116-13 MSD	Dissolved Organic Carbon - Quad	26.9		mg/L	25.0	95	88-112	0	15	

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 539823 Date: 06/15/2021 21:58								
9056A	PZ007-21A	280-149116-13	Sulfate	500	mg/L			
9056A	PZ007-21A	280-149116-13 DU	Sulfate	516	mg/L	4	10	J1 D
Batch ID: 540037 Date: 06/16/2021 12:39								
9056A	PZ007-21A	280-149116-13	Sulfate	510	mg/L			
9056A	PZ007-21A	280-149116-13 DU	Sulfate	503	mg/L	2	10	D

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 539549	Date: 06/11/2021 10:33										
						LCS Source: 350.1 cal_00471					
350.1	LCS 280-539549/18	Ammonia	2.45		mg/L	2.50	98	90-110	2	10	
Batch ID: 539549	Date: 06/11/2021 11:43										
						LCS Source: 350.1 cal_00471					
350.1	LCS 280-539549/53	Ammonia	2.52		mg/L	2.50	101	90-110	2	10	
Batch ID: 538329	Date: 06/02/2021 15:02	Prep Batch: 538091	Date: 06/01/2021 09:30								
						LCS Source: TKN 25ppm_00820					
351.2	LCS 280-538091/1-A	Nitrogen, Total Kjeldahl	5.75		mg/L	6.00	96	90-110			
Batch ID: 538637	Date: 06/04/2021 11:50										
						LCS Source: NXN CAL INT_00579					
353.2	LCS 280-538637/21	Nitrate Nitrite as N	4.98		mg/L	5.00	100	90-110			
Batch ID: 538637	Date: 06/04/2021 13:06										
						LCS Source: NXN CAL INT_00579					
353.2	LCS 280-538637/59	Nitrate Nitrite as N	4.78		mg/L	5.00	96	90-110			
Batch ID: 537793	Date: 05/28/2021 09:57	Prep Batch: 537775	Date: 05/28/2021 09:03								
						LCS Source: SFD ICV INT_01920					
9034	LCS 280-537775/1-A	Sulfide	12.8		mg/L	19.0	67	44-110			
Batch ID: 538118	Date: 06/01/2021 12:36	Prep Batch: 538090	Date: 06/01/2021 09:21								
						LCS Source: SFD ICV INT_01921					
9034	LCS 280-538090/1-A	Sulfide	11.2		mg/L	18.6	60	44-110			
Batch ID: 538293	Date: 06/02/2021 13:47	Prep Batch: 538266	Date: 06/02/2021 12:36								
						LCS Source: SFD ICV INT_01922					
9034	LCS 280-538266/1-A	Sulfide	12.0		mg/L	18.2	66	44-110			
Batch ID: 539823	Date: 06/14/2021 22:18										
						LCS Source: IC LCS_01814					
9056A	LCS 280-539823/11	Sulfate	103		mg/L	100	103	87-112	0	10	
Batch ID: 539823	Date: 06/15/2021 22:40										
						LCS Source: IC LCS_01814					
9056A	LCS 280-539823/46	Sulfate	105		mg/L	100	105	87-112	0	10	
Batch ID: 540037	Date: 06/16/2021 10:11										
						LCS Source: IC LCS_01815					
9056A	LCS 280-540037/4	Sulfate	102		mg/L	100	102	87-112	0	10	

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.: 280-149116-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 539121	Date: 06/08/2021 23:19										
						LCS Source: TOC LCS Std_00051					
9060A	LCS 280-539003/27-A	Dissolved Organic Carbon - Quad	24.4		mg/L	25.0	97	88-112			
Batch ID: 538839	Date: 06/04/2021 19:02										
						LCS Source: Alk daily lcs_00967					
SM 2320B	LCS 280-538839/4	Total Alkalinity as CaCO3	193		mg/L	200	96	89-109			
Batch ID: 538981	Date: 06/07/2021 19:07										
						LCS Source: Alk daily lcs_00967					
SM 2320B	LCS 280-538981/30	Total Alkalinity as CaCO3	196		mg/L	200	98	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.: 280-149116-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 539549	Date: 06/11/2021 10:35										
						LCSD Source: 350.1 cal_00471					
350.1	LCSD 280-539549/19	Ammonia	2.51		mg/L	2.50	101	90-110	2	10	
Batch ID: 539549	Date: 06/11/2021 11:45										
						LCSD Source: 350.1 cal_00471					
350.1	LCSD 280-539549/54	Ammonia	2.58		mg/L	2.50	103	90-110	2	10	
Batch ID: 539823	Date: 06/14/2021 22:31										
						LCSD Source: IC LCS_01814					
9056A	LCSD 280-539823/12	Sulfate	103		mg/L	100	103	87-112	0	10	
Batch ID: 539823	Date: 06/15/2021 22:54										
						LCSD Source: IC LCS_01814					
9056A	LCSD 280-539823/47	Sulfate	106		mg/L	100	106	87-112	0	10	
Batch ID: 540037	Date: 06/16/2021 10:25										
						LCSD Source: IC LCS_01815					
9056A	LCSD 280-540037/5	Sulfate	102		mg/L	100	102	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.: 280-149116-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 539823	Date: 06/14/2021 22:04										
						LCS Source: IC CAL cl/so4_00370					
9056A	MRL 280-539823/10	Sulfate	4.67	J	mg/L	5.00	93	50-150			
Batch ID: 540037	Date: 06/16/2021 09:58										
						LCS Source: IC CAL cl/so4_00371					
9056A	MRL 280-540037/3	Sulfate	4.08	J	mg/L	5.00	82	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: 280-149116-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 DL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia		0.1	0.022

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-149116-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia		0.1	0.0225

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-149116-1

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: 280-149116-1

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: 280-149116-1

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: 280-149116-1

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: 280-149116-1

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: 280-149116-1

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: 280-149116-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom13

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: 280-149116-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom13

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: 280-149116-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI4

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: 280-149116-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI4

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: 280-149116-1

SDG Number:

Matrix: Water Instrument ID: WC_AT4

Method: SM 2320B DL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Alkalinity as CaCO3		10	3.08

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-149116-1

SDG Number:

Matrix: Water Instrument ID: WC_AT4

Method: SM 2320B XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Alkalinity as CaCO3		10	3.08

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-538091/1-A	06/01/2021 09:30	538091		25	25
MB 280-538091/2-A	06/01/2021 09:30	538091		25	25
280-149116-1	06/01/2021 09:30	538091		25	25
280-149116-2	06/01/2021 09:30	538091		25	25
280-149116-3	06/01/2021 09:30	538091		25	25
280-149116-13	06/01/2021 09:30	538091		25	25
280-149116-13 MS	06/01/2021 09:30	538091		25	25
280-149116-13 MSD	06/01/2021 09:30	538091		25	25
280-149116-4	06/01/2021 09:30	538091		25	25
280-149116-9	06/01/2021 09:30	538091		25	25
280-149116-10	06/01/2021 09:30	538091		25	25
280-149116-11	06/01/2021 09:30	538091		25	25
280-149116-12	06/01/2021 09:30	538091		25	25
280-149116-14	06/01/2021 09:30	538091		25	25
280-149116-15	06/01/2021 09:30	538091		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-537775/1-A	05/28/2021 09:03	537775		50	50
MB 280-537775/2-A	05/28/2021 09:03	537775		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-538090/1-A	06/01/2021 09:21	538090		50	50
MB 280-538090/2-A	06/01/2021 09:21	538090		50	50
280-149116-13	06/01/2021 09:21	538090		50	50
280-149116-13 MS	06/01/2021 09:21	538090		50	50
280-149116-13 MSD	06/01/2021 09:21	538090		50	50
280-149116-1	06/01/2021 09:21	538090		50	50
280-149116-2	06/01/2021 09:21	538090		50	50
280-149116-3	06/01/2021 09:21	538090		50	50
280-149116-4	06/01/2021 09:21	538090		50	50
280-149116-9	06/01/2021 09:21	538090		50	50
280-149116-10	06/01/2021 09:21	538090		50	50
280-149116-11	06/01/2021 09:21	538090		50	50
280-149116-12	06/01/2021 09:21	538090		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
280-149116-14	06/01/2021 12:41	538121		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-538266/1-A	06/02/2021 12:36	538266		50	50
MB 280-538266/2-A	06/02/2021 12:36	538266		50	50
280-149116-15	06/02/2021 12:36	538266		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/11/2021 09:59 End Date: 06/11/2021 15:09

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			09:59																									
ZZZZZZ			10:01																									
ZZZZZZ			10:03																									
IC 280-539549/4			10:05	X																								
IC 280-539549/5			10:07	X																								
IC 280-539549/6			10:09	X																								
IC 280-539549/7			10:11	X																								
IC 280-539549/8			10:13	X																								
IC 280-539549/9			10:15	X																								
IC 280-539549/10			10:17	X																								
IC 280-539549/11			10:19	X																								
ZZZZZZ			10:21																									
ZZZZZZ			10:23																									
ICVL 280-539549/14	1		10:25	X																								
ICV 280-539549/15	1		10:27	X																								
ICB 280-539549/16	1		10:29	X																								
ZZZZZZ			10:31																									
LCS 280-539549/18	1	T	10:33	X																								
LCSD 280-539549/19	1	T	10:35	X																								
MB 280-539549/20	1	T	10:37	X																								
ZZZZZZ			10:39																									
ZZZZZZ			10:41																									
ZZZZZZ			10:43																									
ZZZZZZ			10:45																									
ZZZZZZ			10:47																									
ZZZZZZ			10:49																									
ZZZZZZ			10:51																									
ZZZZZZ			10:53																									
ZZZZZZ			10:55																									
ZZZZZZ			10:57																									
ZZZZZZ			10:59																									
ZZZZZZ			11:01																									
CCVL 280-539549/33	1		11:03	X																								
CCV 280-539549/34	1		11:05	X																								
CCB 280-539549/35	1		11:07	X																								
ZZZZZZ			11:09																									
ZZZZZZ			11:11																									
280-149116-1	1	T	11:13	X																								
280-149116-13	1	T	11:15	X																								
280-149116-13 MS	1	T	11:17	X																								
280-149116-13 MSD	1	T	11:19	X																								

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/11/2021 09:59 End Date: 06/11/2021 15:09

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
280-149116-2	1	T	11:21	X																								
280-149116-3	1	T	11:23	X																								
280-149116-4	5	T	11:25	X																								
280-149116-9	1	T	11:27	X																								
280-149116-10	1	T	11:29	X																								
ZZZZZZ			11:31																									
ZZZZZZ			11:33																									
CCVL 280-539549/49	1		11:35	X																								
CCV 280-539549/50	1		11:37	X																								
CCB 280-539549/51	1		11:39	X																								
ZZZZZZ			11:41																									
LCS 280-539549/53	1	T	11:43	X																								
LCSD 280-539549/54	1	T	11:45	X																								
MB 280-539549/55	1	T	11:47	X																								
ZZZZZZ			11:49																									
280-149116-11	1	T	11:51	X																								
280-149116-12	1	T	11:53	X																								
280-149116-14	1	T	11:55	X																								
ZZZZZZ			11:57																									
280-149116-15	1	T	11:59	X																								
280-149116-15 MS	1	T	12:01	X																								
280-149116-15 MSD	1	T	12:03	X																								
ZZZZZZ			12:05																									
ZZZZZZ			12:07																									
ZZZZZZ			12:09																									
ZZZZZZ			12:11																									
ZZZZZZ			12:13																									
CCVL 280-539549/69	1		12:15	X																								
CCV 280-539549/70	1		12:17	X																								
CCB 280-539549/71	1		12:19	X																								
ZZZZZZ			12:21																									
ZZZZZZ			12:23																									
ZZZZZZ			12:25																									
ZZZZZZ			12:27																									
ZZZZZZ			12:33																									
ZZZZZZ			12:35																									
ZZZZZZ			12:37																									
ZZZZZZ			12:39																									
ZZZZZZ			12:41																									
ZZZZZZ			12:43																									
ZZZZZZ			12:45																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/11/2021 09:59 End Date: 06/11/2021 15:09

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			12:47																									
ZZZZZZ			12:49																									
CCVL 280-539549/85			12:51																									
CCV 280-539549/86			12:53																									
CCB 280-539549/87			12:55																									
ZZZZZZ			12:57																									
ZZZZZZ			12:59																									
ZZZZZZ			13:01																									
ZZZZZZ			13:03																									
ZZZZZZ			13:05																									
ZZZZZZ			13:07																									
ZZZZZZ			13:09																									
ZZZZZZ			13:11																									
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
ZZZZZZ			13:17																									
ZZZZZZ			13:19																									
ZZZZZZ			13:21																									
ZZZZZZ			13:23																									
ZZZZZZ			13:26																									
ZZZZZZ			13:28																									
ZZZZZZ			13:30																									
CCVL 280-539549/105			13:32																									
CCV 280-539549/106			13:34																									
CCB 280-539549/107			13:36																									
ZZZZZZ			13:38																									
ZZZZZZ			13:40																									
ZZZZZZ			13:42																									
ZZZZZZ			13:44																									
ZZZZZZ			13:46																									
ZZZZZZ			13:48																									
ZZZZZZ			13:50																									
ZZZZZZ			13:52																									
ZZZZZZ			13:54																									
ZZZZZZ			13:56																									
ZZZZZZ			13:58																									
ZZZZZZ			14:00																									
ZZZZZZ			14:02																									
CCVL 280-539549/121			14:04																									
CCV 280-539549/122			14:06																									
CCB 280-539549/123			14:08																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/11/2021 09:59 End Date: 06/11/2021 15:09

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			14:10																									
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
ZZZZZZ			14:16																									
ZZZZZZ			14:18																									
ZZZZZZ			14:20																									
ZZZZZZ			14:22																									
ZZZZZZ			14:24																									
ZZZZZZ			14:26																									
ZZZZZZ			14:40																									
ZZZZZZ			14:42																									
ZZZZZZ			14:44																									
ZZZZZZ			14:46																									
ZZZZZZ			14:48																									
ZZZZZZ			14:57																									
ZZZZZZ			14:59																									
ZZZZZZ			15:01																									
CCVL 280-539549/141			15:03																									
CCV 280-539549/142			15:05																									
CCB 280-539549/143			15:07																									
ZZZZZZ			15:09																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/02/2021 14:46 End Date: 06/02/2021 16:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			14:46																									
ZZZZZZ			14:46																									
ZZZZZZ			14:48																									
ZZZZZZ			14:49																									
IC 280-534740/1-A			14:50	X																								
IC 280-534740/2-A			14:51	X																								
IC 280-534740/3-A			14:53	X																								
IC 280-534740/4-A			14:54	X																								
IC 280-534740/5-A			14:55	X																								
IC 280-534740/6-A			14:56	X																								
ZZZZZZ			14:57																									
ZZZZZZ			14:59																									
ICV 280-534740/7-A	1		15:00	X																								
ICB 280-534740/8-A	1		15:01	X																								
LCS 280-538091/1-A	1	T	15:02	X																								
MB 280-538091/2-A	1	T	15:04	X																								
ZZZZZZ			15:05																									
ZZZZZZ			15:06																									
ZZZZZZ			15:07																									
ZZZZZZ			15:09																									
ZZZZZZ			15:10																									
ZZZZZZ			15:11																									
ZZZZZZ			15:13																									
ZZZZZZ			15:14																									
ZZZZZZ			15:15																									
ZZZZZZ			15:16																									
ZZZZZZ			15:18																									
ZZZZZZ			15:19																									
280-149116-1	1	T	15:20	X																								
ZZZZZZ			15:21																									
CCV 280-534740/9-A	1		15:23	X																								
CCB 280-534740/10-A	1		15:24	X																								
280-149116-2	1	T	15:25	X																								
280-149116-3	1	T	15:26	X																								
ZZZZZZ			15:28																									
ZZZZZZ			15:29																									
280-149116-13	1	T	15:30	X																								
280-149116-13 MS	1	T	15:31	X																								
280-149116-13 MSD	1	T	15:32	X																								
ZZZZZZ			15:34																									
280-149116-4	1	T	15:35	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/02/2021 14:46 End Date: 06/02/2021 16:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
280-149116-9	1	T	15:36	X																								
280-149116-10	1	T	15:37	X																								
280-149116-11	1	T	15:39	X																								
280-149116-12	1	T	15:40	X																								
ZZZZZZ			15:41																									
ZZZZZZ			15:42																									
ZZZZZZ			15:44																									
CCV 280-534740/9-A	1		15:45	X																								
CCB 280-534740/10-A	1		15:46	X																								
280-149116-14	1	T	15:48	X																								
280-149116-15	1	T	15:49	X																								
ZZZZZZ			15:50																									
ZZZZZZ			15:51																									
ZZZZZZ			15:53																									
ZZZZZZ			15:54																									
ZZZZZZ			15:55																									
ZZZZZZ			15:56																									
ZZZZZZ			15:58																									
ZZZZZZ			15:59																									
ZZZZZZ			16:00																									
CCV 280-534740/9-A	1		16:01	X																								
CCB 280-534740/10-A	1		16:03	X																								
ZZZZZZ			16:04																									
ZZZZZZ			16:05																									
ZZZZZZ			16:06																									
ZZZZZZ			16:07																									
ZZZZZZ			16:09																									
ZZZZZZ			16:10																									
ZZZZZZ			16:11																									
ZZZZZZ			16:12																									
ZZZZZZ			16:14																									
ZZZZZZ			16:15																									
ZZZZZZ			16:16																									
CCV 280-534740/9-A			16:17																									
CCB 280-534740/10-A			16:19																									
ZZZZZZ			16:20																									
ZZZZZZ			16:21																									
ZZZZZZ			16:23																									
ZZZZZZ			16:24																									
ZZZZZZ			16:25																									
ZZZZZZ			16:26																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Astoria Analysis Method: 351.2

Start Date: 06/02/2021 14:46 End Date: 06/02/2021 16:26

Lab Sample Id	D/F	Type	Time	Analytes																									
				TKN																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/04/2021 11:10 End Date: 06/04/2021 14:00

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			11:10	
ZZZZZZ			11:12	
ZZZZZZ			11:14	
ZZZZZZ			11:16	
IC 280-538637/5	1		11:18	X
IC 280-538637/6	1		11:20	X
IC 280-538637/7	1		11:22	X
IC 280-538637/8	1		11:24	X
IC 280-538637/9	1		11:26	X
IC 280-538637/10	1		11:28	X
IC 280-538637/11	1		11:30	X
IC 280-538637/12	1		11:32	X
IC 280-538637/13	1		11:34	X
ZZZZZZ			11:36	
ZZZZZZ			11:38	
ZZZZZZ			11:40	
ICV 280-538637/17	1		11:42	X
ICVL 280-538637/18	1		11:44	X
ICB 280-538637/19	1		11:46	X
ZZZZZZ			11:48	
LCS 280-538637/21	1	T	11:50	X
MB 280-538637/22	1	T	11:52	X
ZZZZZZ			11:54	
ZZZZZZ			11:56	
ZZZZZZ			11:58	
ZZZZZZ			12:00	
ZZZZZZ			12:02	
ZZZZZZ			12:04	
ZZZZZZ			12:06	
ZZZZZZ			12:08	
ZZZZZZ			12:10	
ZZZZZZ			12:12	
RINSE 280-538637/33	1		12:14	X
ZZZZZZ			12:16	
CCV 280-538637/35	1		12:18	X
CCVL 280-538637/36	1		12:20	X
CCB 280-538637/37	1		12:22	X
ZZZZZZ			12:24	
ZZZZZZ			12:26	

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/04/2021 11:10 End Date: 06/04/2021 14:00

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			12:28																									
ZZZZZZ			12:30																									
ZZZZZZ			12:32																									
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
ZZZZZZ			12:38																									
ZZZZZZ			12:40																									
ZZZZZZ			12:42																									
280-149116-1	1	T	12:44	X																								
RINSE 280-538637/49	1		12:46	X																								
ZZZZZZ			12:48																									
CCV 280-538637/51	1		12:50	X																								
CCVL 280-538637/52	1		12:52	X																								
CCB 280-538637/53	1		12:54	X																								
ZZZZZZ			12:56																									
280-149116-2	1	T	12:58	X																								
280-149116-3	1	T	13:00	X																								
280-149116-4	1	T	13:02	X																								
280-149116-6	1	T	13:04	X																								
LCS 280-538637/59	1	T	13:06	X																								
MB 280-538637/60	1	T	13:08	X																								
280-149116-13	1	T	13:10	X																								
280-149116-13 MS	1	T	13:12	X																								
280-149116-13 MSD	1	T	13:14	X																								
280-149116-7	1	T	13:16	X																								
RINSE 280-538637/65	1		13:18	X																								
ZZZZZZ			13:20																									
CCV 280-538637/67	1		13:22	X																								
CCVL 280-538637/68	1		13:24	X																								
CCB 280-538637/69	1		13:26	X																								
ZZZZZZ			13:28																									
280-149116-9	1	T	13:30	X																								
280-149116-10	1	T	13:32	X																								
280-149116-11	25	T	13:34	X																								
280-149116-12	25	T	13:36	X																								
280-149116-14	1	T	13:38	X																								
280-149116-15	5	T	13:40	X																								
280-149116-5	1	T	13:42	X																								
ZZZZZZ			13:44																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/04/2021 11:10 End Date: 06/04/2021 14:00

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			13:46	
ZZZZZZ			13:48	
RINSE 280-538637/81	1		13:50	X
ZZZZZZ			13:52	
CCV 280-538637/83	1		13:54	X
CCVL 280-538637/84	1		13:56	X
CCB 280-538637/85	1		13:58	X
ZZZZZZ			14:00	

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: NoEquip Analysis Method: 9034

Start Date: 05/28/2021 09:57 End Date: 05/28/2021 09:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-537775/1-A	1	T	09:57	X																								
MB 280-537775/2-A	1	T	09:57	X																								
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									
ZZZZZZ			09:57																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: NoEquip Analysis Method: 9034

Start Date: 06/01/2021 12:36 End Date: 06/01/2021 12:36

Lab Sample Id	D/F	Type	Time	Analytes																									
				S2																									
LCS 280-538090/1-A	1	T	12:36	X																									
MB 280-538090/2-A	1	T	12:36	X																									
280-149116-13	1	T	12:36	X																									
280-149116-13 MS	1	T	12:36	X																									
280-149116-13 MSD	1	T	12:36	X																									
280-149116-1	1	T	12:36	X																									
280-149116-2	1	T	12:36	X																									
280-149116-3	1	T	12:36	X																									
280-149116-4	1	T	12:36	X																									
280-149116-9	1	T	12:36	X																									
280-149116-10	1	T	12:36	X																									
280-149116-11	1	T	12:36	X																									
280-149116-12	1	T	12:36	X																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: NoEquip Analysis Method: 9034

Start Date: 06/01/2021 15:48 End Date: 06/01/2021 15:48

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
ZZZZZZ			15:48																									
280-149116-14	1	T	15:48	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: NoEquip Analysis Method: 9034

Start Date: 06/02/2021 13:47 End Date: 06/02/2021 13:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-538266/1-A	1	T	13:47	X																								
MB 280-538266/2-A	1	T	13:47	X																								
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
ZZZZZZ			13:47																									
280-149116-15	1	T	13:47	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/14/2021 19:58 End Date: 06/16/2021 06:36

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
RTC 280-539823/1			19:58																									
STD1 280-539823/2 IC	1		20:12	X																								
STD2 280-539823/3 IC	1		20:26	X																								
STD3 280-539823/4 IC	1		20:40	X																								
STD4 280-539823/5 IC	1		20:54	X																								
STD5 280-539823/6 IC	1		21:08	X																								
STD6 280-539823/7 IC	1		21:22	X																								
ICB 280-539823/8	1		21:36	X																								
ICV 280-539823/9	1		21:50	X																								
MRL 280-539823/10	1	T	22:04	X																								
LCS 280-539823/11	1	T	22:18	X																								
LCSD 280-539823/12	1	T	22:31	X																								
MB 280-539823/13	1	T	22:45	X																								
ZZZZZZ			15:12																									
ZZZZZZ			15:26																									
ZZZZZZ			15:40																									
ZZZZZZ			15:54																									
ZZZZZZ			16:08																									
ZZZZZZ			16:22																									
ZZZZZZ			16:36																									
ZZZZZZ			16:50																									
ZZZZZZ			17:04																									
ZZZZZZ			17:18																									
CCV 280-539823/24	1		17:32	X																								
CCB 280-539823/25	1		17:46	X																								
ZZZZZZ			18:00																									
ZZZZZZ			18:14																									
ZZZZZZ			18:28																									
ZZZZZZ			18:42																									
ZZZZZZ			18:56																									
ZZZZZZ			19:10																									
280-149116-2	10	T	19:24	X																								
280-149116-3	1	T	19:38	X																								
280-149116-4	1	T	19:52	X																								
280-149116-5	1	T	20:06	X																								
CCV 280-539823/36	1		20:20	X																								
CCB 280-539823/37	1		20:34	X																								
280-149116-9	1	T	20:48	X																								
ZZZZZZ			21:02																									
280-149116-11	1	T	21:16	X																								
280-149116-12	1	T	21:30	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/14/2021 19:58 End Date: 06/16/2021 06:36

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			21:44																									
280-149116-13 DU	2	T	21:58	X																								
280-149116-13 MS	2	T	22:12	X																								
280-149116-13 MSD	2	T	22:26	X																								
LCS 280-539823/46	1	T	22:40	X																								
LCSD 280-539823/47	1	T	22:54	X																								
CCV 280-539823/48	1		23:08	X																								
CCB 280-539823/49	1		23:22	X																								
MB 280-539823/50	1	T	23:36	X																								
280-149116-14	1	T	23:50	X																								
280-149116-15	1	T	00:04	X																								
ZZZZZZ			00:18																									
ZZZZZZ			00:32																									
ZZZZZZ			00:46																									
ZZZZZZ			01:00																									
ZZZZZZ			01:14																									
ZZZZZZ			01:28																									
ZZZZZZ			01:42																									
CCV 280-539823/61	1		01:56	X																								
CCB 280-539823/62	1		02:10	X																								
ZZZZZZ			02:24																									
ZZZZZZ			02:38																									
ZZZZZZ			02:52																									
ZZZZZZ			03:06																									
ZZZZZZ			03:20																									
ZZZZZZ			03:34																									
ZZZZZZ			03:48																									
ZZZZZZ			04:01																									
ZZZZZZ			04:15																									
ZZZZZZ			04:29																									
CCV 280-539823/73			04:43																									
CCB 280-539823/74			04:57																									
ZZZZZZ			05:11																									
ZZZZZZ			05:25																									
ZZZZZZ			05:39																									
ZZZZZZ			05:53																									
ZZZZZZ			06:07																									
CCV 280-539823/79			06:22																									
CCB 280-539823/80			06:36																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/16/2021 09:30 End Date: 06/16/2021 15:27

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-540037/1	1		09:30	X																								
CCB 280-540037/2	1		09:44	X																								
MRL 280-540037/3	1	T	09:58	X																								
LCS 280-540037/4	1	T	10:11	X																								
LCSD 280-540037/5	1	T	10:25	X																								
MB 280-540037/6	1	T	10:39	X																								
ZZZZZZ			11:29																									
ZZZZZZ			11:43																									
ZZZZZZ			11:57																									
ZZZZZZ			12:11																									
280-149116-13	5	T	12:25	X																								
280-149116-13 DU	5	T	12:39	X																								
ZZZZZZ			12:53																									
ZZZZZZ			13:07																									
280-149116-1	5	T	13:21	X																								
280-149116-10	5	T	13:35	X																								
CCV 280-540037/17	1		13:49	X																								
CCB 280-540037/18	1		14:03	X																								
ZZZZZZ			14:17																									
ZZZZZZ			14:31																									
ZZZZZZ			14:45																									
ZZZZZZ			14:59																									
CCV 280-540037/23			15:13																									
CCB 280-540037/24			15:27																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_SHI4 Analysis Method: 9060A

Start Date: 06/08/2021 15:12 End Date: 06/09/2021 06:38

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-539121/1	1		15:12	X
ICB 280-539121/2	1		15:27	X
ZZZZZZ			15:42	
MB 280-539003/2-A	1	D	15:57	X
ZZZZZZ			16:12	
ZZZZZZ			16:27	
ZZZZZZ			16:44	
ZZZZZZ			16:59	
ZZZZZZ			17:13	
ZZZZZZ			17:28	
ZZZZZZ			17:43	
ZZZZZZ			17:58	
ZZZZZZ			18:13	
ZZZZZZ			18:28	
CCV 280-539121/15	1		18:43	X
CCB 280-539121/16	1		18:57	X
ZZZZZZ			19:12	
ZZZZZZ			19:27	
ZZZZZZ			19:42	
ZZZZZZ			19:57	
ZZZZZZ			20:14	
ZZZZZZ			20:29	
ZZZZZZ			20:44	
ZZZZZZ			20:58	
ZZZZZZ			21:13	
ZZZZZZ			21:28	
CCV 280-539121/27	1		21:43	X
CCB 280-539121/28	1		21:58	X
ZZZZZZ			22:15	
ZZZZZZ			22:30	
ZZZZZZ			22:47	
ZZZZZZ			23:04	
LCS 280-539003/27-A	1	D	23:19	X
MB 280-539003/28-A	1	D	23:34	X
ZZZZZZ			23:51	
280-149116-1	1	D	00:05	X
280-149116-2	1	D	00:20	X
280-149116-3	1	D	00:35	X
CCV 280-539121/39	1		00:50	X
CCB 280-539121/40	1		01:05	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_SHI4 Analysis Method: 9060A

Start Date: 06/08/2021 15:12 End Date: 06/09/2021 06:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				DOCQ																								
280-149116-4	1	D	01:20	X																								
280-149116-9	1	D	01:35	X																								
280-149116-10	1	D	01:49	X																								
280-149116-11	1	D	02:04	X																								
280-149116-12	1	D	02:19	X																								
280-149116-13	1	D	02:36	X																								
280-149116-13 MS	1	D	02:51	X																								
280-149116-13 MSD	1	D	03:06	X																								
280-149116-14	1	D	03:21	X																								
280-149116-15	1	D	03:36	X																								
CCV 280-539121/51	1		03:51	X																								
CCB 280-539121/52	1		04:05	X																								
ZZZZZZ			04:20																									
ZZZZZZ			04:35																									
ZZZZZZ			04:50																									
ZZZZZZ			05:07																									
ZZZZZZ			05:24																									
ZZZZZZ			05:39																									
ZZZZZZ			05:54																									
ZZZZZZ			06:09																									
CCV 280-539121/61			06:23																									
CCB 280-539121/62			06:38																									

Prep Types:
D = Dissolved

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/04/2021 18:42 End Date: 06/05/2021 11:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-538839/1			18:42																									
ZZZZZZ			18:50																									
ZZZZZZ			18:54																									
LCS 280-538839/4	1	T	19:02	X																								
MB 280-538839/5	1	T	19:08	X																								
ZZZZZZ			19:15																									
ZZZZZZ			19:21																									
ZZZZZZ			19:29																									
ZZZZZZ			19:36																									
280-149116-13	1	T	19:43	X																								
ZZZZZZ			19:49																									
ZZZZZZ			19:56																									
ZZZZZZ			20:02																									
ZZZZZZ			20:08																									
ZZZZZZ			20:13																									
CCV 280-538839/16	1		20:21	X																								
CCB 280-538839/17	1		20:27	X																								
ZZZZZZ			20:33																									
ZZZZZZ			20:41																									
ZZZZZZ			20:49																									
ZZZZZZ			20:56																									
ZZZZZZ			21:05																									
ZZZZZZ			21:16																									
ZZZZZZ			21:29																									
ZZZZZZ			21:37																									
ZZZZZZ			21:45																									
ZZZZZZ			21:52																									
CCV 280-538839/28			22:00																									
CCB 280-538839/29			22:06																									
ZZZZZZ			22:14																									
ZZZZZZ			22:20																									
ZZZZZZ			22:29																									
ZZZZZZ			22:38																									
ZZZZZZ			22:45																									
ZZZZZZ			22:54																									
ZZZZZZ			23:04																									
ZZZZZZ			23:13																									
ZZZZZZ			23:24																									
ZZZZZZ			23:35																									
ZZZZZZ			23:45																									
ZZZZZZ			23:53																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/04/2021 18:42 End Date: 06/05/2021 11:38

Lab Sample Id	D/F	Type	Time	Analytes
				Alk
CCV 280-538839/42			00:00	
CCB 280-538839/43			00:06	
ZZZZZZ			00:16	
ZZZZZZ			00:23	
ZZZZZZ			00:34	
ZZZZZZ			00:47	
ZZZZZZ			00:58	
ZZZZZZ			01:05	
ZZZZZZ			01:14	
ZZZZZZ			01:23	
ZZZZZZ			01:30	
ZZZZZZ			01:44	
CCV 280-538839/54			01:52	
CCB 280-538839/55			01:58	
ZZZZZZ			02:05	
ZZZZZZ			02:11	
ZZZZZZ			02:19	
ZZZZZZ			02:27	
ZZZZZZ			02:37	
ZZZZZZ			02:49	
ZZZZZZ			02:59	
ZZZZZZ			03:05	
ZZZZZZ			03:13	
ZZZZZZ			03:21	
ZZZZZZ			03:29	
ZZZZZZ			03:37	
CCV 280-538839/68			03:45	
CCB 280-538839/69			03:51	
ZZZZZZ			04:00	
ZZZZZZ			04:10	
ZZZZZZ			04:20	
ZZZZZZ			04:29	
ZZZZZZ			04:38	
ZZZZZZ			04:44	
ZZZZZZ			04:50	
ZZZZZZ			04:57	
ZZZZZZ			05:03	
ZZZZZZ			05:10	
CCV 280-538839/80			05:18	
CCB 280-538839/81			05:24	
ZZZZZZ			05:32	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/04/2021 18:42 End Date: 06/05/2021 11:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			05:38																									
ZZZZZZ			05:45																									
ZZZZZZ			05:52																									
ZZZZZZ			06:00																									
ZZZZZZ			06:08																									
ZZZZZZ			06:15																									
ZZZZZZ			06:22																									
ZZZZZZ			06:29																									
ZZZZZZ			06:35																									
ZZZZZZ			06:40																									
ZZZZZZ			06:46																									
CCV 280-538839/94			06:53																									
CCB 280-538839/95			06:59																									
ZZZZZZ			07:05																									
ZZZZZZ			07:12																									
ZZZZZZ			07:17																									
ZZZZZZ			07:23																									
ZZZZZZ			07:29																									
ZZZZZZ			07:36																									
ZZZZZZ			07:42																									
ZZZZZZ			07:48																									
ZZZZZZ			07:55																									
ZZZZZZ			08:02																									
CCV 280-538839/106			08:10																									
CCB 280-538839/107			08:15																									
ZZZZZZ			08:23																									
ZZZZZZ			08:29																									
ZZZZZZ			08:35																									
ZZZZZZ			08:41																									
ZZZZZZ			08:46																									
ZZZZZZ			08:57																									
ZZZZZZ			09:08																									
ZZZZZZ			09:14																									
ZZZZZZ			09:21																									
ZZZZZZ			09:26																									
ZZZZZZ			09:31																									
ZZZZZZ			09:38																									
CCV 280-538839/120			09:45																									
CCB 280-538839/121			09:51																									
ZZZZZZ			09:56																									
ZZZZZZ			10:02																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/04/2021 18:42 End Date: 06/05/2021 11:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			10:07																									
ZZZZZZ			10:13																									
ZZZZZZ			10:19																									
ZZZZZZ			10:24																									
ZZZZZZ			10:31																									
ZZZZZZ			10:37																									
ZZZZZZ			10:59																									
ZZZZZZ			11:24																									
CCV 280-538839/132			11:32																									
CCB 280-538839/133			11:38																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/07/2021 14:43 End Date: 06/08/2021 04:28

Lab Sample Id	D/F	Type	Time	Analytes
				Alk
RINSE 280-538981/1			14:43	
ZZZZZZ			14:51	
ZZZZZZ			14:55	
ZZZZZZ			15:03	
MB 280-538981/5	1	T	15:10	X
ZZZZZZ			15:17	
ZZZZZZ			15:25	
ZZZZZZ			15:33	
ZZZZZZ			15:40	
ZZZZZZ			15:48	
ZZZZZZ			15:55	
ZZZZZZ			16:04	
ZZZZZZ			16:13	
ZZZZZZ			16:20	
ZZZZZZ			16:26	
CCV 280-538981/16	1		16:35	X
CCB 280-538981/17	1		16:41	X
ZZZZZZ			16:47	
ZZZZZZ			16:55	
ZZZZZZ			17:01	
ZZZZZZ			17:09	
ZZZZZZ			17:18	
ZZZZZZ			17:25	
ZZZZZZ			17:48	
ZZZZZZ			18:02	
ZZZZZZ			18:25	
ZZZZZZ			18:44	
CCV 280-538981/28	1		18:53	X
CCB 280-538981/29	1		18:59	X
LCS 280-538981/30	1	T	19:07	X
MB 280-538981/31	1	T	19:13	X
ZZZZZZ			19:20	
ZZZZZZ			19:26	
ZZZZZZ			19:34	
ZZZZZZ			19:43	
ZZZZZZ			19:52	
280-149116-1	1	T	20:01	X
280-149116-2	1	T	20:10	X
280-149116-3	1	T	20:17	X
280-149116-4	1	T	20:25	X
280-149116-5	1	T	20:31	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/07/2021 14:43 End Date: 06/08/2021 04:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
CCV 280-538981/42	1		20:39	X																								
CCB 280-538981/43	1		20:45	X																								
280-149116-6	1	T	20:52	X																								
280-149116-7	1	T	20:58	X																								
280-149116-9	1	T	21:06	X																								
280-149116-10	1	T	21:13	X																								
280-149116-11	1	T	21:20	X																								
280-149116-12	1	T	21:27	X																								
280-149116-14	1	T	21:34	X																								
280-149116-15	1	T	21:42	X																								
ZZZZZZ			21:48																									
ZZZZZZ			21:55																									
CCV 280-538981/54	1		22:02	X																								
CCB 280-538981/55	1		22:08	X																								
ZZZZZZ			22:16																									
ZZZZZZ			22:22																									
ZZZZZZ			22:28																									
ZZZZZZ			22:33																									
ZZZZZZ			22:39																									
ZZZZZZ			22:45																									
ZZZZZZ			22:52																									
ZZZZZZ			22:57																									
ZZZZZZ			23:06																									
ZZZZZZ			23:14																									
ZZZZZZ			23:22																									
ZZZZZZ			23:32																									
CCV 280-538981/68			23:40																									
CCB 280-538981/69			23:46																									
ZZZZZZ			23:55																									
ZZZZZZ			00:05																									
ZZZZZZ			00:20																									
ZZZZZZ			00:29																									
ZZZZZZ			00:36																									
ZZZZZZ			00:43																									
ZZZZZZ			00:50																									
ZZZZZZ			00:56																									
ZZZZZZ			01:03																									
ZZZZZZ			01:10																									
CCV 280-538981/80			01:17																									
CCB 280-538981/81			01:23																									
ZZZZZZ			01:31																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 06/07/2021 14:43 End Date: 06/08/2021 04:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			01:37																									
ZZZZZZ			01:47																									
ZZZZZZ			01:57																									
ZZZZZZ			02:07																									
ZZZZZZ			02:20																									
ZZZZZZ			02:33																									
ZZZZZZ			02:46																									
ZZZZZZ			02:52																									
ZZZZZZ			02:58																									
ZZZZZZ			03:03																									
CCV 280-538981/93			03:11																									
CCB 280-538981/94			03:17																									
ZZZZZZ			03:22																									
ZZZZZZ			03:28																									
ZZZZZZ			03:34																									
ZZZZZZ			03:41																									
ZZZZZZ			03:46																									
ZZZZZZ			03:52																									
ZZZZZZ			03:58																									
ZZZZZZ			04:03																									
ZZZZZZ			04:09																									
ZZZZZZ			04:15																									
CCV 280-538981/105			04:22																									
CCB 280-538981/106			04:28																									

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 539549 Batch Start Date: 06/11/21 09:59 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00471	350.1 ICV 00460
ICVL 280-539549/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-539549/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-539549/16		350.1			10 mL	10 mL			
LCS 280-539549/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-539549/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-539549/20		350.1			10 mL	10 mL			
CCVL 280-539549/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-539549/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-539549/35		350.1			10 mL	10 mL			
280-149116-C-1	G0017-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-13	PZ007-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-13 MS	PZ007-21A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-149116-C-13 MSD	PZ007-21A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-149116-C-2	G0045-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-3	G0086-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-4	PZ0018-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-9	G0077-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-10	G0078-21A	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-539549/49		350.1			100 mL	100 mL		0.5 mL	
CCV 280-539549/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-539549/51		350.1			10 mL	10 mL			
LCS 280-539549/53		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-539549/54		350.1			100 mL	100 mL		2.5 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 539549 Batch Start Date: 06/11/21 09:59 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00471	350.1 ICV 00460
MB 280-539549/55		350.1			10 mL	10 mL			
280-149116-C-11	PZ017R-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-12	PZ021-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-14	G0024-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-15	PZ020-21A	350.1	T	No	10 mL	10 mL	<2 SU		
280-149116-C-15 MS	PZ020-21A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-149116-C-15 MSD	PZ020-21A	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
CCVL 280-539549/69		350.1			100 mL	100 mL		0.5 mL	
CCV 280-539549/70		350.1			100 mL	100 mL		2.5 mL	
CCB 280-539549/71		350.1			10 mL	10 mL			

Batch Notes	
Acid used for pH adjustment	sulfuric acid_00264
Batch Comment	RKD
Carrier Identification	350.1 complex_00531
Hypochlorite ID	350.1 bleach_01404
Sodium Salicylate ID	sodium sal_00021
Sodium Nitroprusside ID	350.1 color_00243
pH Indicator ID	HC148594
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 INTERCESSOR BWH 200

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.: 280-149116-1

SDG No.:

Batch Number: 534740 Batch Start Date: 05/03/21 15:48 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 00820	TKN ICV 25 00106		
ICV 280-534740/7		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-534740/8		351.2, 351.2		25 mL	25 mL				
CCV 280-534740/9		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-534740/10		351.2, 351.2		25 mL	25 mL				

Batch Notes	
Block Digestion End time	05/03/21 2300
Block Digestion Start time	05/03/21 1700
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00141
Oven, Bath or Block Temperature 1	165 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C
pH Indicator ID	hc904495
Pipette/Syringe/Dispenser ID	5000ad, 1000ad

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.: 280-149116-1

SDG No.:

Batch Number: 538091 Batch Start Date: 06/01/21 09:29 Batch Analyst: Mayer, Zachary P

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00820		
LCS 280-538091/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-538091/2		351.2, 351.2			25 mL	25 mL			
280-149116-C-1	G0017-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-2	G0045-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-3	G0086-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-13	PZ007-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-13 MS	PZ007-21A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-149116-C-13 MSD	PZ007-21A	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-149116-C-4	PZ0018-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-9	G0077-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-10	G0078-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-11	PZ017R-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-12	PZ021-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-14	G0024-21A	351.2, 351.2	T	<2	25 mL	25 mL			
280-149116-C-15	PZ020-21A	351.2, 351.2	T	<2	25 mL	25 mL			

Batch Notes	
Block Digestion End time	6/1/21 16:00
Block Digestion Start time	6/1/21 11:00
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00142
Oven, Bath or Block Temperature 1	160 Degrees C
Oven, Bath or Block Temperature 2	380 Degrees C
pH Indicator ID	hc904495
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.: 280-149116-1

SDG No.:

Batch Number: 538329 Batch Start Date: 06/02/21 14:46 Batch Analyst: Mayer, Zachary P

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-534740/7-A		351.2		4 mL					
ICB 280-534740/8-A		351.2		4 mL					
LCS 280-538091/1-A		351.2		4 mL					
MB 280-538091/2-A		351.2		4 mL					
280-149116-C-1-A	G0017-21A	351.2	T	4 mL					
CCV 280-534740/9-A		351.2		4 mL					
CCB 280-534740/10-A		351.2		4 mL					
280-149116-C-2-A	G0045-21A	351.2	T	4 mL					
280-149116-C-3-A	G0086-21A	351.2	T	4 mL					
280-149116-C-13-A	PZ007-21A	351.2	T	4 mL					
280-149116-C-13-B MS	PZ007-21A	351.2	T	4 mL					
280-149116-C-13-C MSD	PZ007-21A	351.2	T	4 mL					
280-149116-C-4-A	PZ0018-21A	351.2	T	4 mL					
280-149116-C-9-A	G0077-21A	351.2	T	4 mL					
280-149116-C-10-A	G0078-21A	351.2	T	4 mL					
280-149116-C-11-A	PZ017R-21A	351.2	T	4 mL					
280-149116-C-12-A	PZ021-21A	351.2	T	4 mL					
CCV 280-534740/9-A		351.2		4 mL					
CCB 280-534740/10-A		351.2		4 mL					
280-149116-C-14-A	G0024-21A	351.2	T	4 mL					
280-149116-C-15-A	PZ020-21A	351.2	T	4 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538329 Batch Start Date: 06/02/21 14:46 Batch Analyst: Mayer, Zachary P

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
CCV 280-534740/9-A		351.2		4 mL					
CCB 280-534740/10-A		351.2		4 mL					

Batch Notes	
Buffer Reagent ID	TKN Buffer_00130
Hypochlorite ID	TKN Hypochl_00673
Sodium Nitroprusside ID	Sodium Nitro_00105
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.: 280-149116-1

SDG No.:

Batch Number: 538637 Batch Start Date: 06/04/21 11:10 Batch Analyst: Mayer, Zachary P

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00579	NXN ICV INT 00555		
IC 280-538637/5		353.2		100 mL	100 mL				
IC 280-538637/6		353.2		100 mL	100 mL	0.05 mL			
IC 280-538637/7		353.2		100 mL	100 mL	0.1 mL			
IC 280-538637/8		353.2		100 mL	100 mL	0.5 mL			
IC 280-538637/9		353.2		100 mL	100 mL	1 mL			
IC 280-538637/10		353.2		100 mL	100 mL	2.5 mL			
IC 280-538637/11		353.2		100 mL	100 mL	5 mL			
IC 280-538637/12		353.2		100 mL	100 mL	7.5 mL			
IC 280-538637/13		353.2		100 mL	100 mL	10 mL			
ICV 280-538637/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-538637/18		353.2		100 mL	100 mL		2 mL		
ICB 280-538637/19		353.2		100 mL	100 mL				
LCS 280-538637/21		353.2		100 mL	100 mL	5 mL			
MB 280-538637/22		353.2		100 mL	100 mL				
RINSE 280-538637/33		353.2		100 mL	100 mL				
CCV 280-538637/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-538637/36		353.2		100 mL	100 mL	1 mL			
CCB 280-538637/37		353.2		100 mL	100 mL				
280-149116-C-1	G0017-21A	353.2	T	100 mL	100 mL				
RINSE 280-538637/49		353.2		100 mL	100 mL				
CCV 280-538637/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-538637/52		353.2		100 mL	100 mL	1 mL			
CCB 280-538637/53		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.: 280-149116-1

SDG No.:

Batch Number: 538637 Batch Start Date: 06/04/21 11:10 Batch Analyst: Mayer, Zachary P

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00579	NXN ICV INT 00555		
280-149116-C-2	G0045-21A	353.2	T	100 mL	100 mL				
280-149116-C-3	G0086-21A	353.2	T	100 mL	100 mL				
280-149116-C-4	PZ0018-21A	353.2	T	100 mL	100 mL				
280-149116-A-6	SHGW02-21A	353.2	T	100 mL	100 mL				
LCS 280-538637/59		353.2		100 mL	100 mL	5 mL			
MB 280-538637/60		353.2		100 mL	100 mL				
280-149116-C-13	PZ007-21A	353.2	T	100 mL	100 mL				
280-149116-C-13 MS	PZ007-21A	353.2	T	5 mL	5 mL	0.2 mL			
280-149116-C-13 MSD	PZ007-21A	353.2	T	5 mL	5 mL	0.2 mL			
280-149116-A-7	SHGW05-21A	353.2	T	100 mL	100 mL				
RINSE 280-538637/65		353.2		100 mL	100 mL				
CCV 280-538637/67		353.2		100 mL	100 mL	5 mL			
CCVL 280-538637/68		353.2		100 mL	100 mL	1 mL			
CCB 280-538637/69		353.2		100 mL	100 mL				
280-149116-C-9	G0077-21A	353.2	T	100 mL	100 mL				
280-149116-C-10	G0078-21A	353.2	T	100 mL	100 mL				
280-149116-C-11	PZ017R-21A	353.2	T	100 mL	100 mL				
280-149116-C-12	PZ021-21A	353.2	T	100 mL	100 mL				
280-149116-C-14	G0024-21A	353.2	T	100 mL	100 mL				
280-149116-C-15	PZ020-21A	353.2	T	100 mL	100 mL				
280-149116-C-5	SHGW03-21A	353.2	T	100 mL	100 mL				
RINSE 280-538637/81		353.2		100 mL	100 mL				
CCV 280-538637/83		353.2		100 mL	100 mL	5 mL			
CCVL 280-538637/84		353.2		100 mL	100 mL	1 mL			
CCB 280-538637/85		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.: 280-149116-1

SDG No.:

Batch Number: 538637 Batch Start Date: 06/04/21 11:10 Batch Analyst: Mayer, Zachary P

Batch Method: 353.2 Batch End Date:

Batch Notes	
Buffer Reagent ID	NOXTBuffer_00216
Cadmium Column Lot ID	Q19133-0419
Color Reagent ID	NOXT_CR_00112
Copper Sulfate ID	CuSO4NOXT_0012
Hydrochloric Acid ID	0.5N HCl_0079
pH Indicator ID	HC902937
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.: 280-149116-1

SDG No.:

Batch Number: 537775 Batch Start Date: 05/28/21 09:20 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 05/28/21 10:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-537775/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-537775/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-149116-E-1	G0017-21A	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL
280-149116-E-2	G0045-21A	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL
280-149116-E-3	G0086-21A	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-149116-E-4	PZ0018-21A	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01920					
LCS 280-537775/1		9030B, 9034		1 mL					
MB 280-537775/2		9030B, 9034							
280-149116-E-1	G0017-21A	9030B, 9034	T						
280-149116-E-2	G0045-21A	9030B, 9034	T						
280-149116-E-3	G0086-21A	9030B, 9034	T						
280-149116-E-4	PZ0018-21A	9030B, 9034	T						

Batch Notes	
Batch Comment	JM
Distillation End Time	05/27/2021 10:50
Distillation Start Time	05/27/2021 09:20
Formaldehyde ID	form_00117
pH Indicator ID	HC905612
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
Zinc Acetate Buffer ID	znac_00119

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.: 280-149116-1

SDG No.:

Batch Number: 537793 Batch Start Date: 05/28/21 09:20 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 05/28/21 10:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-537775/1-A		9034		0 mL	3.4 mL	5 mL	3.4 mL	50 mL	
MB 280-537775/2-A		9034		3.4 mL	4.4 mL	1 mL	1 mL	50 mL	
280-149116-E-1-A	G0017-21A	9034	T	14.2 mL	16.5 mL	3 mL	2.3 mL	50 mL	
280-149116-E-2-A	G0045-21A	9034	T	16.5 mL	17.4 mL	1 mL	0.899999999999999 mL	50 mL	
280-149116-E-3-A	G0086-21A	9034	T	17.4 mL	18.3 mL	1 mL	0.900000000000002 mL	50 mL	
280-149116-E-4-A	PZ0018-21A	9034	T	18.3 mL	19.3 mL	1 mL	1 mL	50 mL	

Batch Notes	
Batch Comment	JM
Hydrochloric Acid ID	HCl Sol_00189
Iodine ID	Iod_00264
Normality of Iodine Solution	0.025 N
Sodium Thiosulfate ID	Na Thio_00172
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Starch Reagent ID	Starch Ind_00066
Normality of First Titrant	0.025 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538090 Batch Start Date: 06/01/21 09:35 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 06/01/21 11:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-538090/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-538090/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-149116-E-13	PZ007-21A	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-149116-E-13 MS	PZ007-21A	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-149116-E-13 MSD	PZ007-21A	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-149116-E-1	G0017-21A	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-149116-E-2	G0045-21A	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-149116-E-3	G0086-21A	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL
280-149116-E-4	PZ0018-21A	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL
280-149116-E-9	G0077-21A	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-149116-E-10	G0078-21A	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL
280-149116-E-11	PZ017R-21A	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-149116-E-12	PZ021-21A	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01921					
LCS 280-538090/1		9030B, 9034		1 mL					
MB 280-538090/2		9030B, 9034							
280-149116-E-13	PZ007-21A	9030B, 9034	T						
280-149116-E-13 MS	PZ007-21A	9030B, 9034	T	1 mL					
280-149116-E-13 MSD	PZ007-21A	9030B, 9034	T	1 mL					
280-149116-E-1	G0017-21A	9030B, 9034	T						
280-149116-E-2	G0045-21A	9030B, 9034	T						
280-149116-E-3	G0086-21A	9030B, 9034	T						
280-149116-E-4	PZ0018-21A	9030B, 9034	T						
280-149116-E-9	G0077-21A	9030B, 9034	T						
280-149116-E-10	G0078-21A	9030B, 9034	T						
280-149116-E-11	PZ017R-21A	9030B, 9034	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538090 Batch Start Date: 06/01/21 09:35 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 06/01/21 11:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01921					
280-149116-E-12	PZ021-21A	9030B, 9034	T						

Batch Notes	
Batch Comment	JM
Distillation End Time	06/01/2021 11:05
Distillation Start Time	06/01/2021 09:35
Formaldehyde ID	form_00117
pH Indicator ID	HC905612
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
Zinc Acetate Buffer ID	znac_00119

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.: 280-149116-1

SDG No.:

Batch Number: 538118 Batch Start Date: 06/01/21 09:35 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 06/01/21 11:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-538090/1-A		9034		0 mL	3.6 mL	5 mL	3.6 mL	50 mL	
MB 280-538090/2-A		9034		3.6 mL	4.6 mL	1 mL	1 mL	50 mL	
280-149116-E-13-A	PZ007-21A	9034	T	4.6 mL	5.7 mL	1 mL	1.1 mL	50 mL	
280-149116-E-13-B MS	PZ007-21A	9034	T	5.7 mL	9.2 mL	5 mL	3.5 mL	50 mL	
280-149116-E-13-C MSD	PZ007-21A	9034	T	9.2 mL	12.7 mL	5 mL	3.5 mL	50 mL	
280-149116-E-1-B	G0017-21A	9034	T	12.7 mL	13.9 mL	2 mL	1.2 mL	50 mL	
280-149116-E-2-B	G0045-21A	9034	T	13.9 mL	14.8 mL	1 mL	0.9 mL	50 mL	
280-149116-E-3-B	G0086-21A	9034	T	14.8 mL	15.8 mL	1 mL	1 mL	50 mL	
280-149116-E-4-B	PZ0018-21A	9034	T	15.8 mL	16.8 mL	1 mL	1 mL	50 mL	
280-149116-E-9-A	G0077-21A	9034	T	16.8 mL	17.7 mL	1 mL	0.899999999999999 mL	50 mL	
280-149116-E-10-A	G0078-21A	9034	T	17.7 mL	18.6 mL	1 mL	0.900000000000002 mL	50 mL	
280-149116-E-11-A	PZ017R-21A	9034	T	18.6 mL	19.6 mL	1 mL	1 mL	50 mL	
280-149116-E-12-A	PZ021-21A	9034	T	19.6 mL	20.5 mL	1 mL	0.899999999999999 mL	50 mL	

Batch Notes	
Batch Comment	JM
Hydrochloric Acid ID	HCl Sol_00189
Iodine ID	Iod_00264
Normality of Iodine Solution	0.025 N
Sodium Thiosulfate ID	Na Thio_00172
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Starch Reagent ID	Starch Ind_00066
Normality of First Titrant	0.025 N

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538118 Batch Start Date: 06/01/21 09:35 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 06/01/21 11:05

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.: 280-149116-1

SDG No.:

Batch Number: 538121 Batch Start Date: 06/01/21 12:50 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 06/01/21 14:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
280-149116-E-14	G0024-21A	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL

Batch Notes	
Batch Comment	JM
Distillation End Time	06/01/2021 14:20
Distillation Start Time	06/01/2021 12:50
Formaldehyde ID	form_00117
pH Indicator ID	HC905612
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
Zinc Acetate Buffer ID	znac_00119

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.: 280-149116-1

SDG No.:

Batch Number: 538145 Batch Start Date: 06/01/21 12:50 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 06/01/21 14:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
280-149116-E-14-A	G0024-21A	9034	T	19.5 mL	20.5 mL	1 mL	1 mL	50 mL	

Batch Notes	
Batch Comment	JM
Hydrochloric Acid ID	HCl Sol_00189
Iodine ID	Iod_00264
Normality of Iodine Solution	0.025 N
Sodium Thiosulfate ID	Na Thio_00172
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Starch Reagent ID	Starch Ind_00066
Normality of First Titrant	0.025 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538266 Batch Start Date: 06/02/21 12:50 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 06/02/21 14:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-538266/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-538266/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-149116-E-15	PZ020-21A	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 01922					
LCS 280-538266/1		9030B, 9034		1 mL					
MB 280-538266/2		9030B, 9034							
280-149116-E-15	PZ020-21A	9030B, 9034	T						

Batch Notes	
Batch Comment	JM
Distillation End Time	06/02/2021 14:20
Distillation Start Time	06/02/2021 12:50
Formaldehyde ID	form_00117
pH Indicator ID	HC905612
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
Zinc Acetate Buffer ID	znac_00119

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.: 280-149116-1

SDG No.:

Batch Number: 538293 Batch Start Date: 06/02/21 12:50 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 06/02/21 14:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-538266/1-A		9034		0 mL	3.5 mL	5 mL	3.5 mL	50 mL	
MB 280-538266/2-A		9034		3.6 mL	4.6 mL	1 mL	1 mL	50 mL	
280-149116-E-15-A	PZ020-21A	9034	T	16.1 mL	17 mL	1 mL	0.899999999999999 mL	50 mL	

Batch Notes	
Batch Comment	JM
Hydrochloric Acid ID	HCl Sol_00189
Iodine ID	Iod_00264
Normality of Iodine Solution	0.025 N
Sodium Thiosulfate ID	Na Thio_00172
Pipette/Syringe/Dispenser ID	ARM1000, WC5000BP
Starch Reagent ID	Starch Ind_00066
Normality of First Titrant	0.025 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 539823 Batch Start Date: 06/14/21 19:58 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00002	IC CAL cl/so4 00370	IC Cal low 00584	IC ICV 5 00322
STD1 280-539823/2 IC		9056A		10 mL	10 mL		0.04 mL	0.04 mL	
STD2 280-539823/3 IC		9056A		10 mL	10 mL		0.1 mL	0.1 mL	
STD3 280-539823/4 IC		9056A		10 mL	10 mL		0.2 mL	0.2 mL	
STD4 280-539823/5 IC		9056A		10 mL	10 mL		2.4 mL	0.8 mL	
STD5 280-539823/6 IC		9056A		10 mL	10 mL		4.8 mL	1.6 mL	
STD6 280-539823/7 IC		9056A		10 mL	10 mL		8 mL	2 mL	
ICB 280-539823/8		9056A		10 mL	10 mL				
ICV 280-539823/9		9056A		10 mL	10 mL	0.8 mL			0.8 mL
MRL 280-539823/10		9056A		10 mL	10 mL		0.2 mL	0.1 mL	
LCS 280-539823/11		9056A		10 mL	10 mL				
LCSD 280-539823/12		9056A		10 mL	10 mL				
MB 280-539823/13		9056A		10 mL	10 mL				
CCV 280-539823/24		9056A		10 mL	10 mL				
CCB 280-539823/25		9056A		10 mL	10 mL				
280-149116-D-1	G0017-21A	9056A	T	10 mL	10 mL				
280-149116-D-2	G0045-21A	9056A	T	10 mL	10 mL				
280-149116-D-3	G0086-21A	9056A	T	10 mL	10 mL				
280-149116-D-4	PZ0018-21A	9056A	T	10 mL	10 mL				
280-149116-B-5	SHGW03-21A	9056A	T	10 mL	10 mL				
CCV 280-539823/36		9056A		10 mL	10 mL				
CCB 280-539823/37		9056A		10 mL	10 mL				
280-149116-D-9	G0077-21A	9056A	T	10 mL	10 mL				
280-149116-D-10	G0078-21A	9056A	T	10 mL	10 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 539823 Batch Start Date: 06/14/21 19:58 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00002	IC CAL cl/so4 00370	IC Cal low 00584	IC ICV 5 00322
280-149116-D-11	PZ017R-21A	9056A	T	10 mL	10 mL				
280-149116-D-12	PZ021-21A	9056A	T	10 mL	10 mL				
280-149116-D-13	PZ007-21A	9056A	T	10 mL	10 mL				
280-149116-D-13 DU	PZ007-21A	9056A	T	10 mL	10 mL				
280-149116-D-13 MS	PZ007-21A	9056A	T	10 mL	10 mL				
280-149116-D-13 MSD	PZ007-21A	9056A	T	10 mL	10 mL				
LCS 280-539823/46		9056A		10 mL	10 mL				
LCSD 280-539823/47		9056A		10 mL	10 mL				
CCV 280-539823/48		9056A		10 mL	10 mL				
CCB 280-539823/49		9056A		10 mL	10 mL				
MB 280-539823/50		9056A		10 mL	10 mL				
280-149116-D-14	G0024-21A	9056A	T	10 mL	10 mL				
280-149116-D-15	PZ020-21A	9056A	T	10 mL	10 mL				
CCV 280-539823/61		9056A		10 mL	10 mL				
CCB 280-539823/62		9056A		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01814	IC SO4 ICV 00022	ICMS/MSD WEEK 00707			
STD1 280-539823/2 IC		9056A							
STD2 280-539823/3 IC		9056A							
STD3 280-539823/4 IC		9056A							
STD4 280-539823/5 IC		9056A							
STD5 280-539823/6 IC		9056A							
STD6 280-539823/7 IC		9056A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 539823 Batch Start Date: 06/14/21 19:58 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01814	IC SO4 ICV 00022	ICMS/MSD WEEK 00707			
ICB 280-539823/8		9056A							
ICV 280-539823/9		9056A			0.8 mL				
MRL 280-539823/10		9056A							
LCS 280-539823/11		9056A		10 mL					
LCSD 280-539823/12		9056A		10 mL					
MB 280-539823/13		9056A							
CCV 280-539823/24		9056A		10 mL					
CCB 280-539823/25		9056A							
280-149116-D-1	G0017-21A	9056A	T						
280-149116-D-2	G0045-21A	9056A	T						
280-149116-D-3	G0086-21A	9056A	T						
280-149116-D-4	PZ0018-21A	9056A	T						
280-149116-B-5	SHGW03-21A	9056A	T						
CCV 280-539823/36		9056A		10 mL					
CCB 280-539823/37		9056A							
280-149116-D-9	G0077-21A	9056A	T						
280-149116-D-10	G0078-21A	9056A	T						
280-149116-D-11	PZ017R-21A	9056A	T						
280-149116-D-12	PZ021-21A	9056A	T						
280-149116-D-13	PZ007-21A	9056A	T						
280-149116-D-13 DU	PZ007-21A	9056A	T						
280-149116-D-13 MS	PZ007-21A	9056A	T			0.1 mL			
280-149116-D-13 MSD	PZ007-21A	9056A	T			0.1 mL			
LCS 280-539823/46		9056A		10 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 539823 Batch Start Date: 06/14/21 19:58 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01814	IC SO4 ICV 00022	ICMS/MSD WEEK 00707			
LCSD 280-539823/47		9056A		10 mL					
CCV 280-539823/48		9056A		10 mL					
CCB 280-539823/49		9056A							
MB 280-539823/50		9056A							
280-149116-D-14	G0024-21A	9056A	T						
280-149116-D-15	PZ020-21A	9056A	T						
CCV 280-539823/61		9056A		10 mL					
CCB 280-539823/62		9056A							

Batch Notes	
Batch Comment	Run by JMB and CJ, reviewed by JMB
Eluent 1 ID	IC10 Eluent_00001
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	BMF 5000, BMF 1000, 200 CJ, IC100
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.: 280-149116-1

SDG No.:

Batch Number: 540037 Batch Start Date: 06/16/21 09:30 Batch Analyst: Battillo, Jenna M

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00371	IC Cal low 00585	IC LCS 01815	ICMS/MSD WEEK 00707
CCV 280-540037/1		9056A		10 mL	10 mL			10 mL	
CCB 280-540037/2		9056A		10 mL	10 mL				
MRL 280-540037/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-540037/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-540037/5		9056A		10 mL	10 mL			10 mL	
MB 280-540037/6		9056A		10 mL	10 mL				
280-149116-D-13	PZ007-21A	9056A	T	10 mL	10 mL				
280-149116-D-13 DU	PZ007-21A	9056A	T	10 mL	10 mL				
280-149116-D-13 MS	PZ007-21A	9056A	T	10 mL	10 mL				0.1 mL
280-149116-D-13 MSD	PZ007-21A	9056A	T	10 mL	10 mL				0.1 mL
280-149116-D-1	G0017-21A	9056A	T	10 mL	10 mL				
280-149116-D-10	G0078-21A	9056A	T	10 mL	10 mL				
CCV 280-540037/17		9056A		10 mL	10 mL			10 mL	
CCB 280-540037/18		9056A		10 mL	10 mL				

Batch Notes	
Batch Comment	Run by JMB and CJ, reviewed by JMB
Eluent 1 ID	IC10 Eluent_00001
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	BMF 5000, BMF 1000, 200 CJ, IC100
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.: 280-149116-1

SDG No.:

Batch Number: 539121 Batch Start Date: 06/08/21 15:12 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00046	TOC LCS Std 00051	AnalysisComment
ICV 280-539121/1		9060A		50 mL	50 mL	<2 SU	1 mL		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
ICB 280-539121/2		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-539003/2-A		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-539121/15		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-539121/16		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-539121/27		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-539121/28		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

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.: 280-149116-1

SDG No.:

Batch Number: 539121 Batch Start Date: 06/08/21 15:12 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00046	TOC LCS Std 00051	AnalysisComment
LCS 280-539003/27-A		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-539003/28-A		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-1-A	G0017-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-2-A	G0045-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-3-A	G0086-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-539121/39		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-539121/40		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

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.: 280-149116-1

SDG No.:

Batch Number: 539121 Batch Start Date: 06/08/21 15:12 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00046	TOC LCS Std 00051	AnalysisComment
280-149116-D-4-A	PZ0018-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-9-A	G0077-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-10-A	G0078-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-11-A	PZ017R-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-12-A	PZ021-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-13-A	PZ007-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-13-B MS	PZ007-21A	9060A	D	50 mL	50 mL	6 SU		1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

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.: 280-149116-1

SDG No.:

Batch Number: 539121 Batch Start Date: 06/08/21 15:12 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00046	TOC LCS Std 00051	AnalysisComment
280-149116-D-13-C MSD	PZ007-21A	9060A	D	50 mL	50 mL	6 SU		1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-14-A	G0024-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-149116-D-15-A	PZ020-21A	9060A	D	20 mL	20 mL	6 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-539121/51		9060A		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-539121/52		9060A		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

Batch Notes	
Acid ID	SulfuricAcid_00264, 0.2% H2SO4_00389
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538839 Batch Start Date: 06/04/21 18:42 Batch Analyst: Brown, Quintin J

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00967				
LCS 280-538839/4		SM 2320B		InitialAmount is blank	10 mL				
MB 280-538839/5		SM 2320B		InitialAmount is blank					
280-149116-F-13	PZ007-21A	SM 2320B	T	InitialAmount is blank					
CCV 280-538839/16		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-538839/17		SM 2320B		InitialAmount is blank					

Batch Notes	
Acid ID	H2SO4 0.02N_00002
Batch Comment	QB
pH Buffer 1 ID	pH 2.0 buffer_00089
pH Buffer 2 ID	pH 4.0 buffer_00194
pH Buffer 3 ID	pH 7.0 buffer_00293
pH Buffer 4 ID	pH 10 buffer_00154
pH Buffer 5 ID	pH 12 buffer_00170
pH Buffer 6 ID	pH 7.0 buffer_00290
Sodium Carbonate ID	Alk stk std_00019
Nominal Amount Used	10 mL
Probe ID	PCE 80 pH 1200D_8080
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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538981 Batch Start Date: 06/07/21 14:43 Batch Analyst: Brown, Quintin J

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00967				
MB 280-538981/5		SM 2320B		InitialAmount is blank					
CCV 280-538981/16		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-538981/17		SM 2320B		InitialAmount is blank					
CCV 280-538981/28		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-538981/29		SM 2320B		InitialAmount is blank					
LCS 280-538981/30		SM 2320B		InitialAmount is blank	10 mL				
MB 280-538981/31		SM 2320B		InitialAmount is blank					
280-149116-F-1	G0017-21A	SM 2320B	T	InitialAmount is blank					
280-149116-F-2	G0045-21A	SM 2320B	T	InitialAmount is blank					
280-149116-F-3	G0086-21A	SM 2320B	T	InitialAmount is blank					
280-149116-F-4	PZ0018-21A	SM 2320B	T	InitialAmount is blank					
280-149116-D-5	SHGW03-21A	SM 2320B	T	InitialAmount is blank					
CCV 280-538981/42		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-538981/43		SM 2320B		InitialAmount is blank					
280-149116-B-6	SHGW02-21A	SM 2320B	T	InitialAmount is blank					
280-149116-B-7	SHGW05-21A	SM 2320B	T	InitialAmount is blank					
280-149116-F-9	G0077-21A	SM 2320B	T	InitialAmount is blank					
280-149116-F-10	G0078-21A	SM 2320B	T	InitialAmount is blank					
280-149116-F-11	PZ017R-21A	SM 2320B	T	InitialAmount is blank					
280-149116-F-12	PZ021-21A	SM 2320B	T	InitialAmount is blank					
280-149116-F-14	G0024-21A	SM 2320B	T	InitialAmount is blank					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-149116-1

SDG No.:

Batch Number: 538981 Batch Start Date: 06/07/21 14:43 Batch Analyst: Brown, Quintin J

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 00967				
280-149116-F-15	PZ020-21A	SM 2320B	T	InitialAmount is blank					
CCV 280-538981/54		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-538981/55		SM 2320B		InitialAmount is blank					

Batch Notes	
Acid ID	H2SO4 0.02N_00002
Batch Comment	QB
pH Buffer 1 ID	pH 2.0 buffer_00089
pH Buffer 2 ID	pH 4.0 buffer_00194
pH Buffer 3 ID	pH 7.0 buffer_00293
pH Buffer 4 ID	pH 10 buffer_00154
pH Buffer 5 ID	pH 12 buffer_00170
pH Buffer 6 ID	pH 7.0 buffer_00290
Sodium Carbonate ID	Alk stk std_00019
Nominal Amount Used	10 mL
Probe ID	PCE 80 pH 1200D_8080
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: 11-Jun-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	RB	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
201	280-149049-c-3	U	1	1	1		
202	MS 280-149049-c-3	U	1	1	1		
203	MSD 280-149049-c-3	U	1	1	1		
204	280-149013-c-36	U	1	5	1		
205	280-149049-c-1	U	1	1	1		
206	280-149049-c-2	U	1	1	1		
207	280-149049-c-4	U	1	1	1		
208	280-149049-c-5	U	1	1	1		
209	280-149049-c-6	U	1	1	1		
210	280-149049-c-7	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-149090-b-1 X	U	1	1	1		
212	280-149116-c-1	U	1	1	1		
213	280-149116-c-13	U	1	1	1		
214	MS 280-149116-c-13	U	1	1	1		
215	MSD 280-149116-c-13	U	1	1	1		
216	280-149116-c-2	U	1	1	1		
217	280-149116-c-3	U	1	1	1		
218	280-149116-c-4	U	1	5	1		
219	280-149116-c-9	U	1	1	1		
220	280-149116-c-10	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		
221	280-149116-c-11	U	1	1	1		
222	280-149116-c-12	U	1	1	1		
223	280-149116-c-14	U	1	1	1		
224	280-149194-d-1	U	1	1	1		
225	280-149116-c-15	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
226	MS 280-149116-c-15 U		1	1	1	1	
227	MSD 280-149116-c-15 U		1	1	1	1	
228	280-149194-d-2	U	1	1	1		
229	280-149238-e-2 X U		1	50	1		
230	280-149238-e-3 X U		1	50	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
231	280-149290-b-1 X U		1	1	1		
232	280-149290-b-2	U	1	1	1		
233	280-149291-a-1	U	1	1	1		
234	280-149254-c-1-d U		1	1	1		
235	280-149254-b-2-b U		1	1	1		
236	280-149254-c-4-b U		1	1	1		
237	280-149254-c-5-b U		1	1	1		
238	MS 280-149254-c-5-b U		1	1	1	1	
239	MSD 280-149254-c-5-b U		1	1	1	1	
240	280-149254-c-6-b U		1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		
241	280-149254-b-7-b U		1	1	1		
242	280-149254-d-8-b U		1	1	1		
243	280-149254-b-9-b U		1	1	1		
244	280-149329-c-1-a U		1	1	1		
245	280-149329-c-2-a U		1	1	1		
246	280-149329-d-3-a U		1	1	1		
247	280-149329-c-4-a U		1	1	1		
248	280-149329-c-5-a U		1	1	1		
249	280-149329-c-6-a U		1	1	1		
250	MS 280-149329-c-6-a U		1	1	1	1	
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
251	MSD 280-149329-c-6-a U		1	1	1	1	
252	280-149329-b-7-a U		1	1	1		
253	280-149329-d-8-a U		1	1	1		
254	280-149329-c-9-a U		1	1	1		
255	280-149329-c-10-a U		1	1	1		
256	280-149329-c-11-a U		1	1	1		
257	280-149329-c-12-a U		1	1	1		
258	280-149329-f-13-a U		1	1	1		Initial pH=7, Final PH<2
259	280-149329-c-14-a U		1	1	1		
260	280-149375-c-1-a U		1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		
125	280-149090-B-1	U	1	500	1		
126	280-149238-E-2 X	U	1	500	1		
127	280-149238-E-3 X	U	1	500	1		
128	280-149290-B-1	U	1	5	1		
129	280-149238-E-2	U	1	1000	1		
130	280-149238-E-3 X	U	1	1000	1		
0	X Blank	BLNK	1	1	1		
0	X read baseline	RB	1	1	1		
105	CCVL X 500.0 ppb	U	1	1	1		
131	280-149238-E-3	U	1	2000	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		

Peak Table:NH3

File name: C:\FLOW_4\061121.RST
Date: 11-Jun-21
Operator: RKD

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	27347	1025.444580	
2	0	Carry Over	1	CO	1	1	272	4.076147	
B	0	Blank	1	RB	1	1	0	-6.128483	BL
4	101	Cal 0 ppb	1	C	1	1	648	18.155024	
5	102	Cal 25 ppb	1	C	1	1	891	27.253345	
6	103	Cal 50 ppb	1	C	1	1	1436	47.672112	
7	104	Cal 100 ppb	1	C	1	1	2468	86.353943	
8	105	Cal 500 ppb	1	C	1	1	13198	489.914185	
9	106	Cal 1000 ppb	1	C	1	1	26805	1004.862610	
10	107	Cal 2500 ppb	1	C	1	1	65815	2501.200928	
11	108	Cal 5000 ppb	1	C	1	1	129293	4999.592285	
12	0	Blank	1	BLNK	1	1	-1227	-52.066730	LO
B	0	Read Baseline	1	RB	1	1	0	-6.128483	BL
14	109	ICVL 500.0 ppb	1	U	1	1	13258	492.142548	
15	110	ICV 2500.0 ppb	1	U	1	1	60223	2284.900879	
16	111	ICB	1	U	1	1	-377	-20.240675	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
18	107	LCS	1	U	1	1	64612	2454.620361	
19	107	LCSD	1	U	1	1	66163	2514.688232	
20	111	MB	1	U	1	1	-280	-16.606890	LO
21	201	280-149049-c-3	1	U	1	1	289	4.706598	
22	202	MS 280-149049-c-3	1	U	1	1	27392	1027.148438	
23	203	MSD 280-149049-c-3	1	U	1	1	27302	1023.730225	
24	204	280-149013-c-36	1	U	5	1	38789	7306.977051	
25	205	280-149049-c-1	1	U	1	1	5021	182.173218	
26	206	280-149049-c-2	1	U	1	1	444	10.516475	
27	207	280-149049-c-4	1	U	1	1	432	10.065667	
28	208	280-149049-c-5	1	U	1	1	109649	4218.025391	
29	209	280-149049-c-6	1	U	1	1	36070	1357.564697	
30	210	280-149049-c-7	1	U	1	1	127	-1.361351	LO
31	0	Blank	1	BLNK	1	1	52	-4.180013	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
33	105	CCVL 500.0 ppb	1	U	1	1	14046	521.901611	
34	107	CCV 2500.0 ppb	1	U	1	1	66558	2530.008301	
35	111	CCB	1	U	1	1	-154	-11.898912	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
37	211	280-149090-b-1 X	1	U	1	1	1391637	71011.156250	HI
38	212	280-149116-c-1	1	U	1	1	-8757	-333.367096	LO FL
39	213	280-149116-c-13	1	U	1	1	1094	34.856220	FL
40	214	MS 280-149116-c-13	1	U	1	1	29034	1089.539062	
41	215	MSD 280-149116-c-13	1	U	1	1	28795	1080.464355	
42	216	280-149116-c-2	1	U	1	1	56258	2131.862061	
43	217	280-149116-c-3	1	U	1	1	412	9.323234	
44	218	280-149116-c-4	1	U	5	1	1893	323.986633	
45	219	280-149116-c-9	1	U	1	1	334	6.375284	
46	220	280-149116-c-10	1	U	1	1	7928	291.410370	
47	0	Blank	1	BLNK	1	1	-272	-16.308983	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
49	105	CCVL 500.0 ppb	1	U	1	1	14128	524.982788	
50	107	CCV 2500.0 ppb	1	U	1	1	69747	2653.681885	
51	111	CCB	1	U	1	1	-350	-19.244654	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
53	107	LCS	1	U	1	1	66184	2515.511719	
54	107	LCSD	1	U	1	1	67788	2577.686035	
55	111	MB	1	U	1	1	-544	-26.505852	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
57	221	280-149116-c-11	1	U	1	1	1052	33.283375	
58	222	280-149116-c-12	1	U	1	1	911	28.004501	
59	223	280-149116-c-14	1	U	1	1	166	0.105056	
60	224	280-149194-d-1	1	U	1	1	12155	450.581299	
61	225	280-149116-c-15	1	U	1	1	-85	-9.312494	LO
62	226	MS 280-149116-c-15	1	U	1	1	28152	1056.014526	
63	227	MSD 280-149116-c-15	1	U	1	1	27599	1035.024170	
64	228	280-149194-d-2	1	U	1	1	30431	1142.685303	
65	229	280-149238-e-2 X	1	U	50	1	864134	1982239.875000	HI
66	230	280-149238-e-3 X	1	U	50	1	1499651	3905179.250000	HI
67	0	Blank	1	BLNK	1	1	-13532	-511.176941	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
69	105	CCVL 500.0 ppb	1	U	1	1	14070	522.784058	
70	107	CCV 2500.0 ppb	1	U	1	1	67871	2580.881592	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	111	CCB	1	U	1	1	-299	-17.325861	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
73	231	280-149290-b-1 X 1	1	U	1	1	237886	9455.904297	HI
74	232	280-149290-b-2	1	U	1	1	-1695	-69.576591	LO FL
75	233	280-149291-a-1	1	U	1	1	631	17.500658	FL
76	234	280-149254-c-1-d 1	1	U	1	1	815	24.387018	
77	235	280-149254-b-2-b 1	1	U	1	1	298	5.015985	
78	236	280-149254-c-4-b 1	1	U	1	1	328	6.170299	
79	237	280-149254-c-5-b 1	1	U	1	1	147	-0.605601	LO
80	238	MS 280-149254-c-5-b 1	1	U	1	1	27874	1045.475342	
81	239	MSD 280-149254-c-5-b 1	1	U	1	1	26851	1006.606567	
82	240	280-149254-c-6-b 1	1	U	1	1	159	-0.183017	LO
83	0	Blank	1	BLNK	1	1	29	-5.030838	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
85	105	CCVL 500.0 ppb	1	U	1	1	13987	519.665161	
86	107	CCV 2500.0 ppb	1	U	1	1	67279	2557.927246	
87	111	CCB	1	U	1	1	-353	-19.362236	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
89	107	LCS	1	U	1	1	65796	2500.485352	
90	107	LCSD	1	U	1	1	64799	2461.846924	
91	111	MB	1	U	1	1	-151	-11.794991	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
93	241	280-149254-b-7-b 1	1	U	1	1	4244	152.997406	
94	242	280-149254-d-8-b 1	1	U	1	1	31012	1164.791748	
95	243	280-149254-b-9-b 1	1	U	1	1	2816	99.437378	
96	244	280-149329-c-1-a 1	1	U	1	1	2621	92.090935	
97	245	280-149329-c-2-a 1	1	U	1	1	8153	299.880615	
98	246	280-149329-d-3-a 1	1	U	1	1	109	-2.033873	LO
99	247	280-149329-c-4-a 1	1	U	1	1	9595	354.133240	
100	248	280-149329-c-5-a 1	1	U	1	1	173	0.352109	
101	249	280-149329-c-6-a 1	1	U	1	1	11662	431.997711	
102	250	MS 280-149329-c-6-a 1	1	U	1	1	29582	1110.389893	
103	0	Blank	1	BLNK	1	1	-484	-24.254263	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
105	105	CCVL 500.0 ppb	1	U	1	1	13899	516.355103	
106	107	CCV 2500.0 ppb	1	U	1	1	69334	2637.656250	
107	111	CCB	1	U	1	1	-318	-18.043509	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
109	251	MSD 280-149329-c-6-a 1	1	U	1	1	31938	1200.039673	
110	252	280-149329-b-7-a 1	1	U	1	1	8647	318.464996	
111	253	280-149329-d-8-a 1	1	U	1	1	11782	436.516052	
112	254	280-149329-c-9-a 1	1	U	1	1	993	31.091803	
113	255	280-149329-c-10-a 1	1	U	1	1	3746	134.323883	
114	256	280-149329-c-11-a 1	1	U	1	1	1281	41.885422	
115	257	280-149329-c-12-a 1	1	U	1	1	532	13.794839	
116	258	280-149329-f-13-a 1	1	U	1	1	5712	208.146133	
117	259	280-149329-c-14-a 1	1	U	1	1	-92	-9.590807	LO
118	260	280-149375-c-1-a 1	1	U	1	1	197	1.240837	
119	0	Blank	1	BLNK	1	1	-4	-6.268166	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
121	105	CCVL 500.0 ppb	1	U	1	1	13878	515.535278	
122	107	CCV 2500.0 ppb	1	U	1	1	64483	2449.632324	
123	111	CCB	1	U	1	1	279	4.332954	
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
125	107	LCS	1	U	1	1	67268	2557.523438	
126	107	LCSD	1	U	1	1	68278	2596.664795	
127	111	MB	1	U	1	1	150	-0.494036	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
129	125	280-149090-B-1	1	U	500	1	5407	98335.007812	
130	126	280-149238-E-2 X 1	1	U	500	1	130778	2529487.000000	HI
131	127	280-149238-E-3 X 1	1	U	500	1	349757	7143688.000000	HI
132	128	280-149290-B-1	1	U	5	1	47171	8911.852539	FL
133	129	280-149238-E-2	1	U	1000	1	60743	2304986.750000	
134	130	280-149238-E-3 X 1	1	U	1000	1	151032	5873253.000000	HI
135	0	X Blank	1	BLNK	1	1	-1813	-74.013496	LO
B	0	X read baseline	1	RB	1	1	0	-6.128483	BL
137	105	CCVL X 500.0 ppb	1	U	1	1	13960	518.634827	
138	131	280-149238-E-3	1	U	2000	1	81674	6236048.000000	
139	0	Blank	1	BLNK	1	1	-416	-21.709198	LO
B	0	read baseline	1	RB	1	1	0	-6.128483	BL
141	105	CCVL 500.0 ppb	1	U	1	1	13660	507.305695	
142	107	CCV 2500.0 ppb	1	U	1	1	66099	2512.208740	
143	111	CCB	1	U	1	1	299	5.070152	
B	0	read baseline	1	RB	1	1	0	-6.128483	BL

NH3:Calibration 1: Peak 4-144

File name: C:\FLOW_4\061121.RST
Date: 11-Jun-21
Operator: RKD

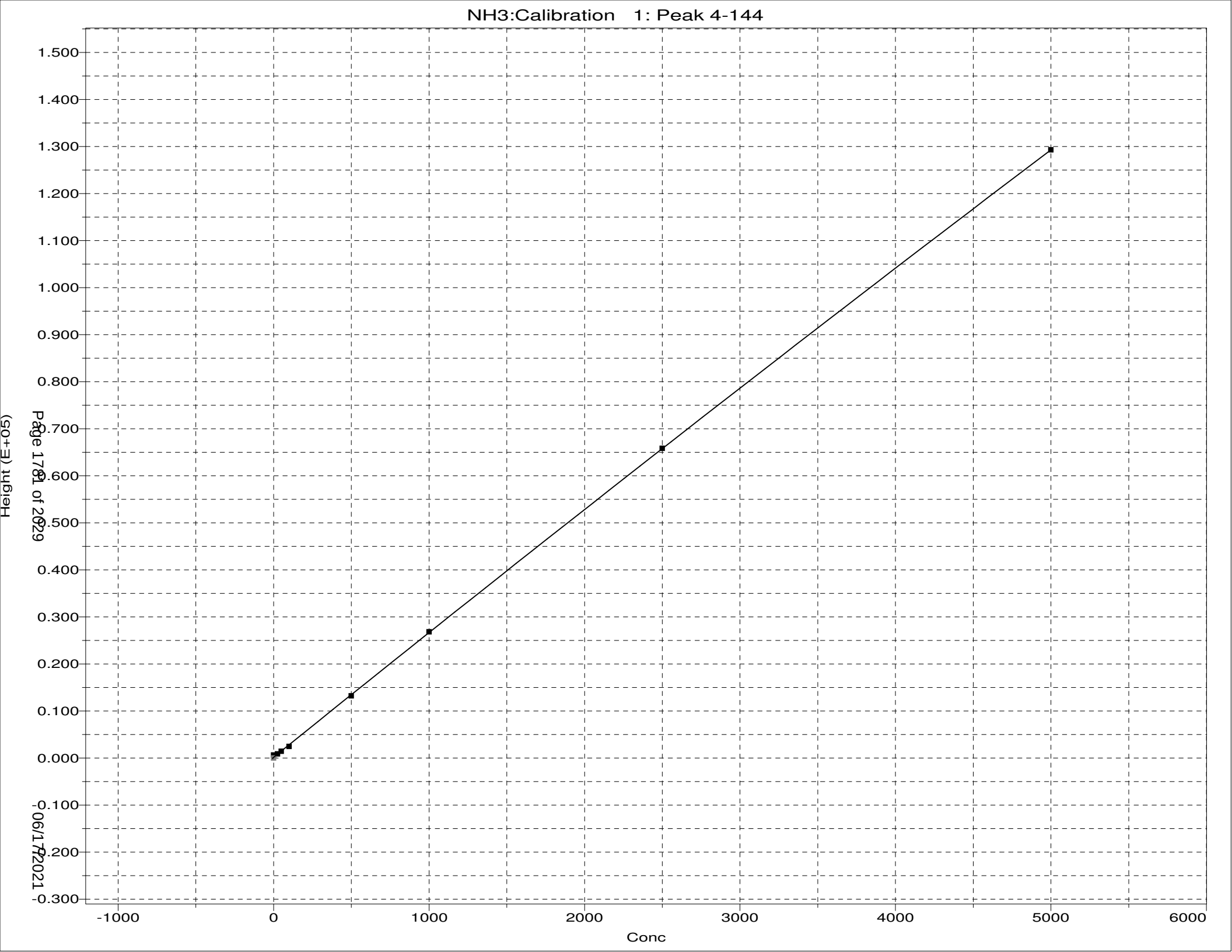
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	648.234131
*	Cal 25 ppb	25.000000	891.052246
*	Cal 50 ppb	50.000000	1435.881104
*	Cal 100 ppb	100.000000	2467.595459
*	Cal 500 ppb	500.000000	13198.432617
*	Cal 1000 ppb	1000.000000	26805.222656
*	Cal 2500 ppb	2500.000000	65814.742188
*	Cal 5000 ppb	5000.000000	129293.101562

Calib Coef:
x=cyy+by+a
a: (intercept) -6.1285e+00
b: 3.7455e-02
c: 9.7560e-09

Corr Coef: 0.999985

Carryover: 0.996%

No Drift Peaks


NH3:Calibration 1: Peak 4-144
Height (E+05)
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1.400
1.300
1.200
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1.000
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0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
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-1000
0
1000
2000
3000
4000
5000
6000
Conc
Page 1781 of 2029
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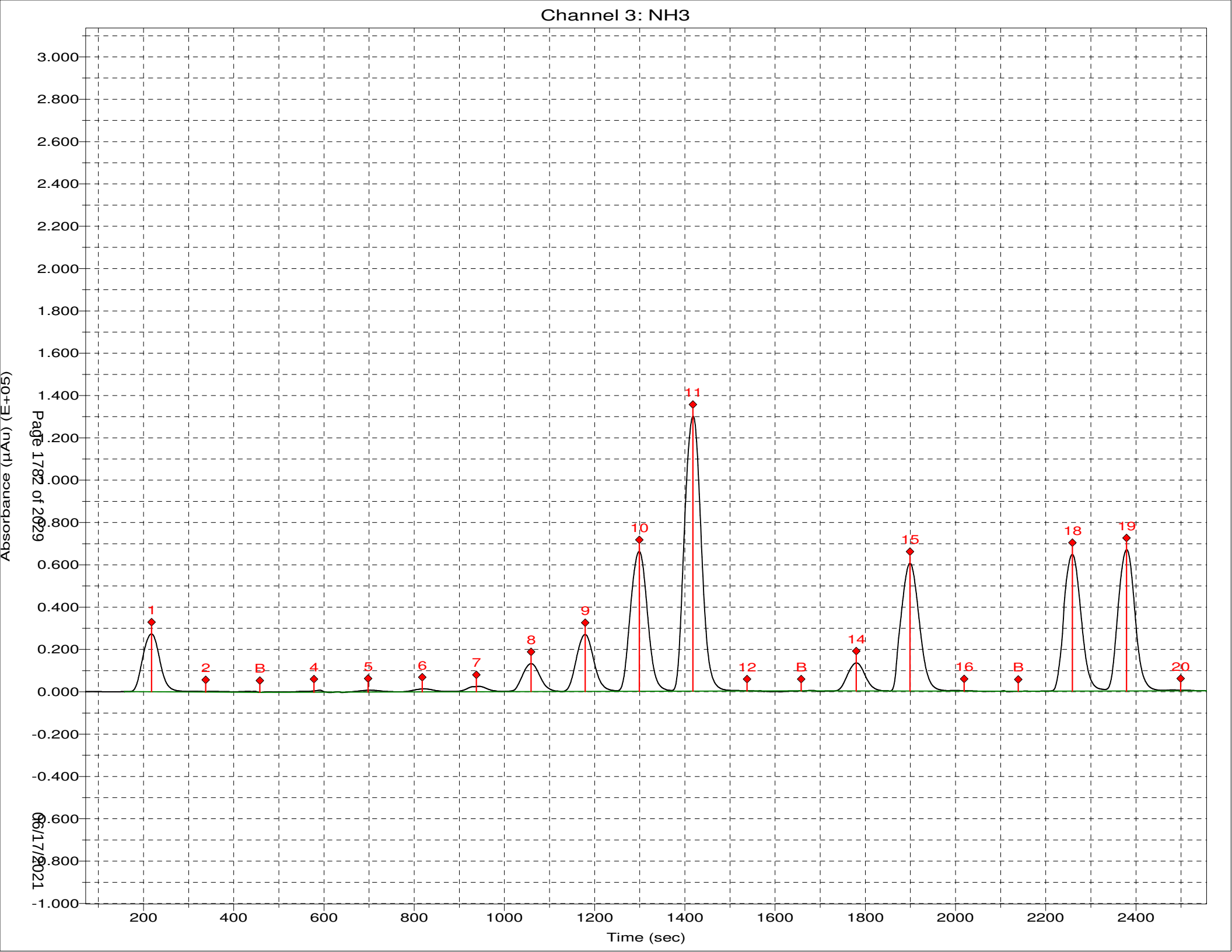
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Absorbance (µAu) (E+05)
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
1
2
B
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
Time (sec)
Page 1782 of 2029
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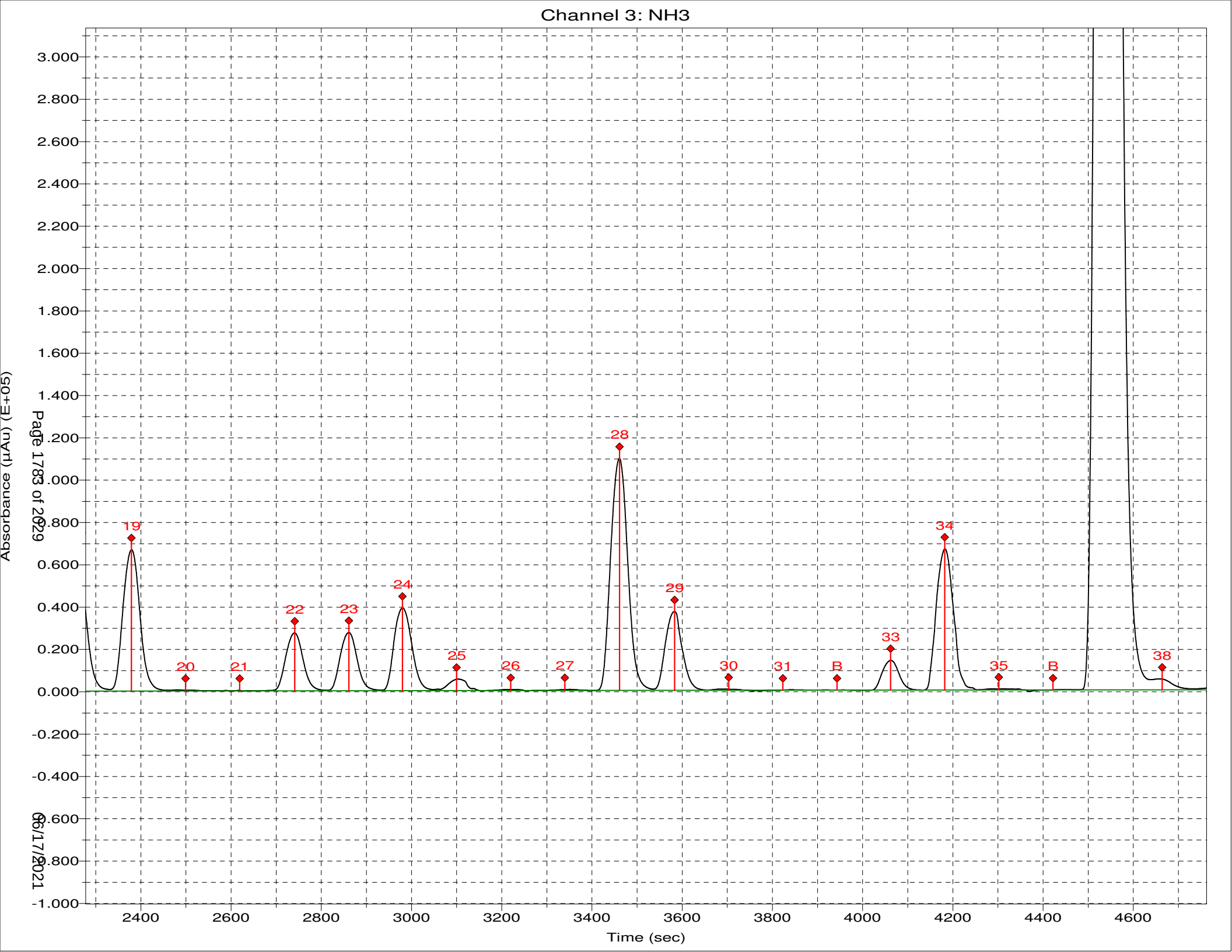
Channel 3: NH3
Absorbance (µAu) (E+05)
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2.600
2.400
2.200
2.000
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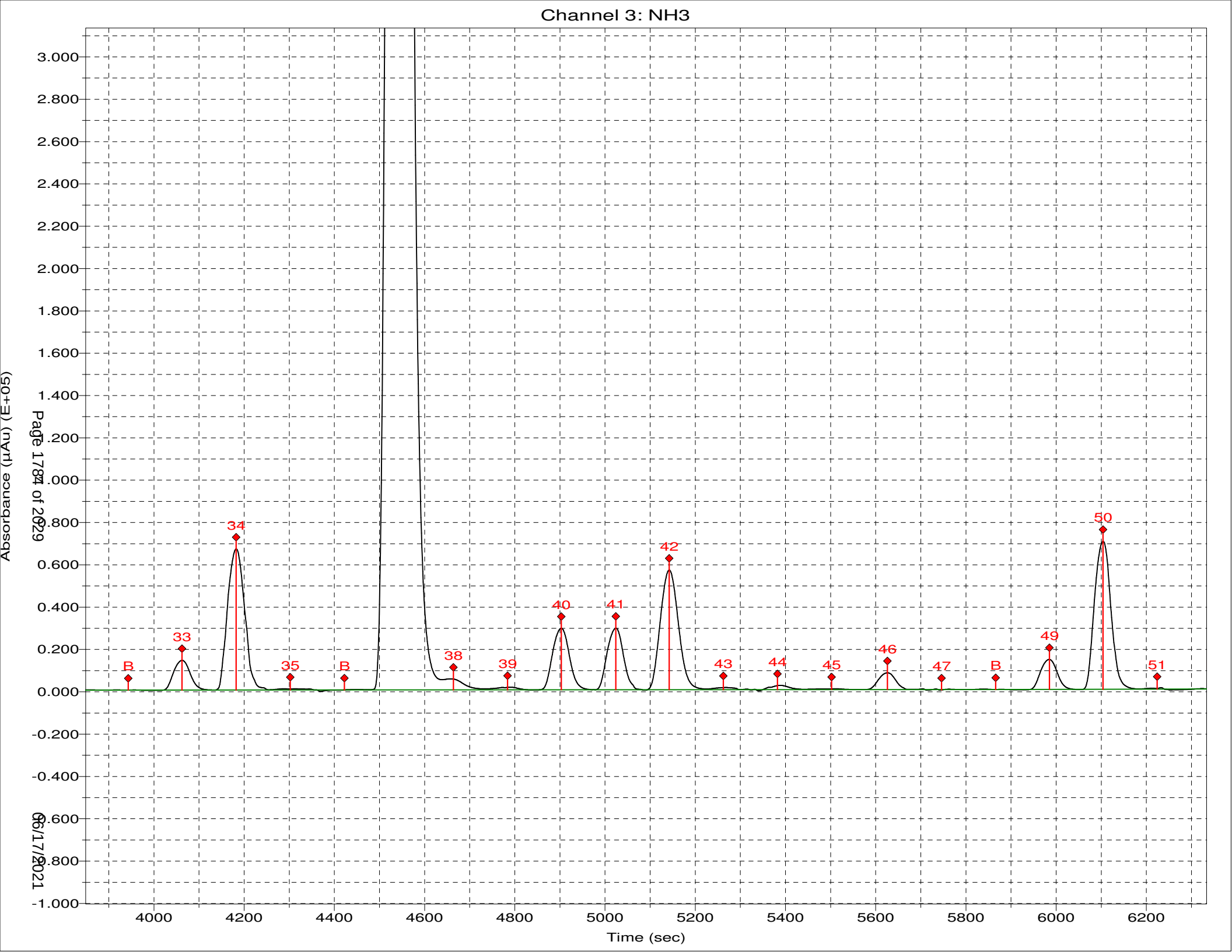
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
38
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
Time (sec)
Page 1783 of 2029
06/17/2021


Channel 3: NH3
Absorbance (µAu) (E+05)
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2.800
2.600
2.400
2.200
2.000
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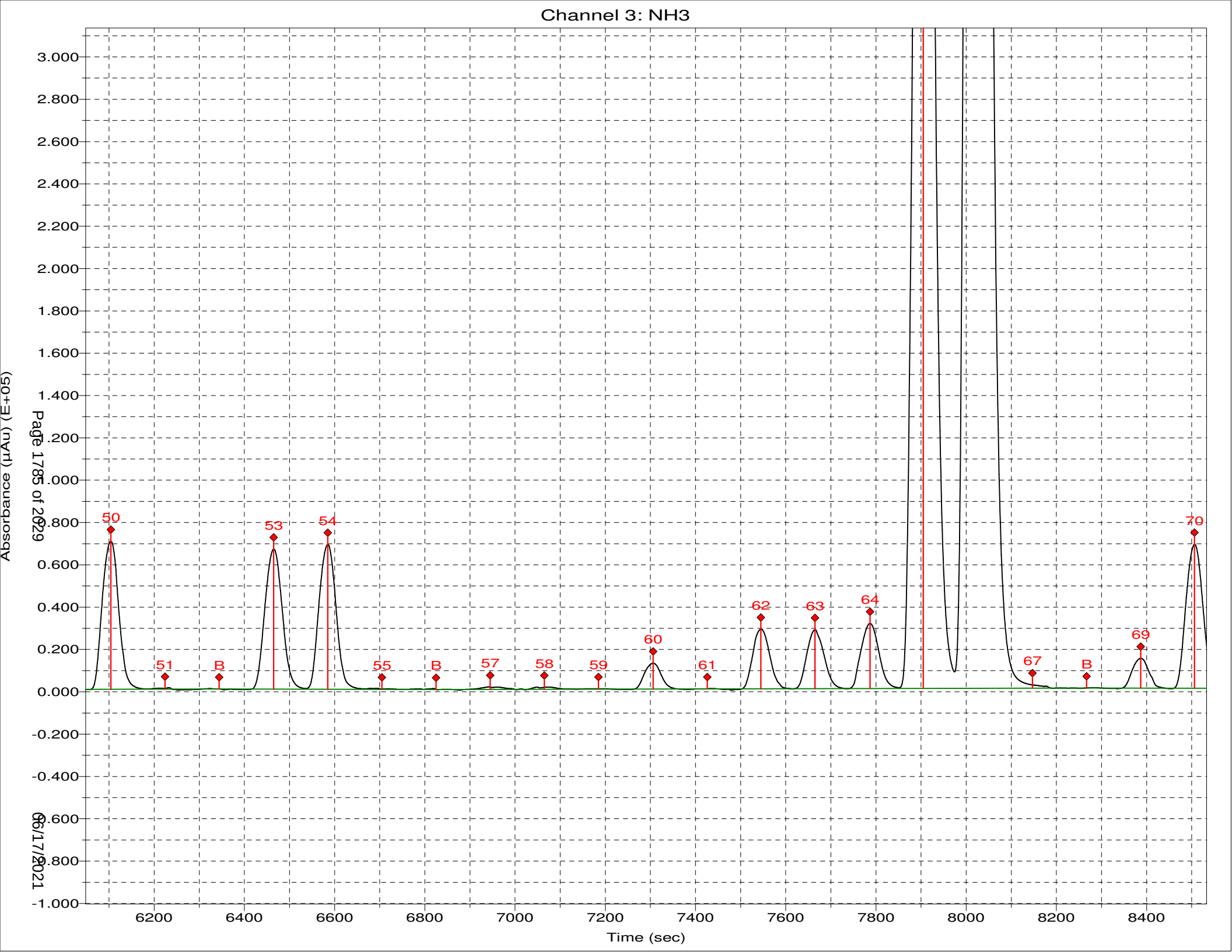
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
B
33
34
35
B
38
39
40
41
42
43
44
45
46
47
B
49
50
51
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
Time (sec)
Page 1784 of 2029
06/17/2021


Channel 3: NH3
Absorbance (µAu) (E+05)
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
50
51
B
53
54
55
B
57
58
59
60
61
62
63
64
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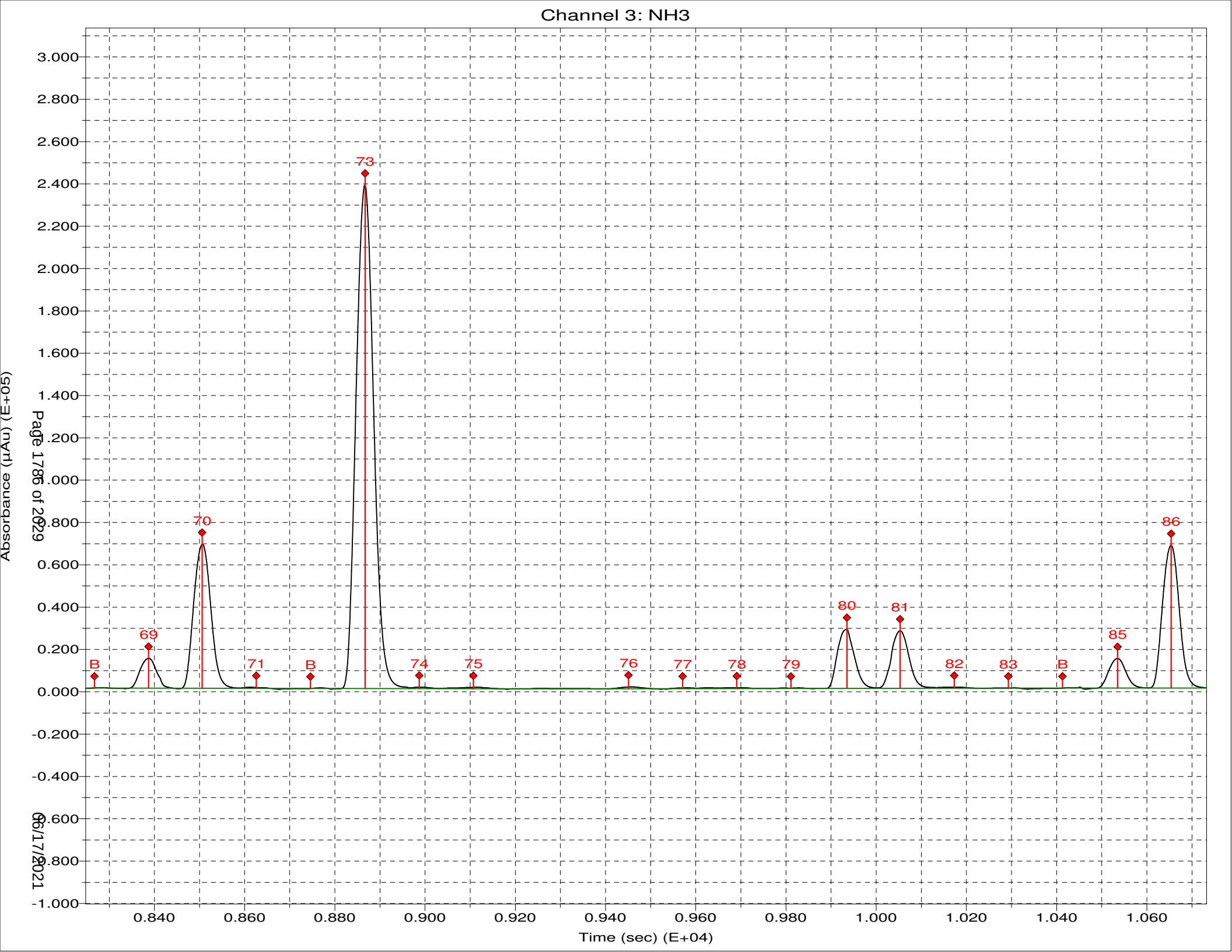
8000
8200
8400
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+05)
Time (sec) (E+04)
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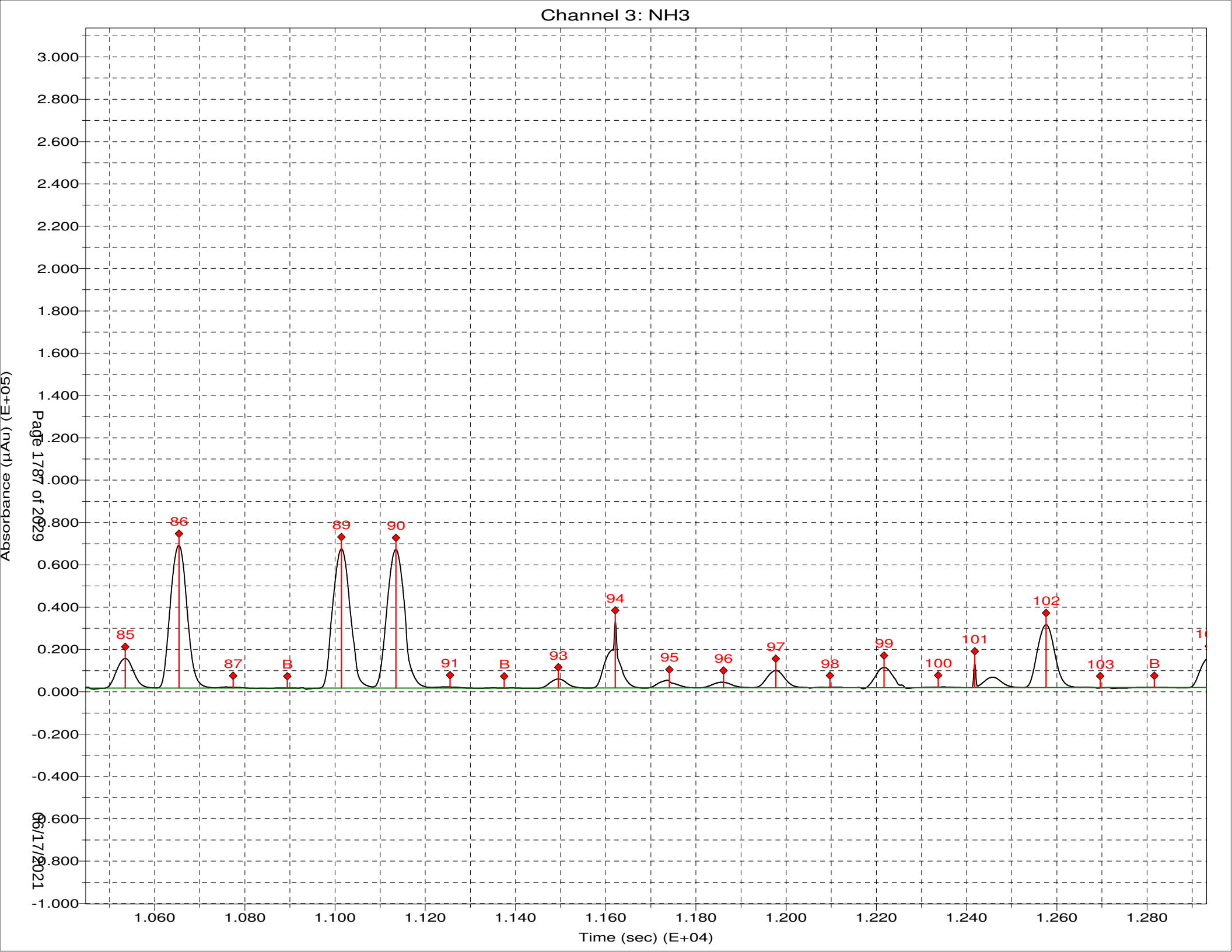
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
0.840
0.860
0.880
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
B
69
70
71
B
73
74
75
76
77
78
79
80
81
82
83
B
85
86


Channel 3: NH3
Absorbance (µAu) (E+05)
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2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
85
86
87
B
89
90
91
B
93
94
95
96
97
98
99
100
101
102
103
B
1.060
1.080
1.100
1.120
1.140
1.160
1.180
1.200
1.220
1.240
1.260
1.280
Time (sec) (E+04)
Page 1787 of 2029
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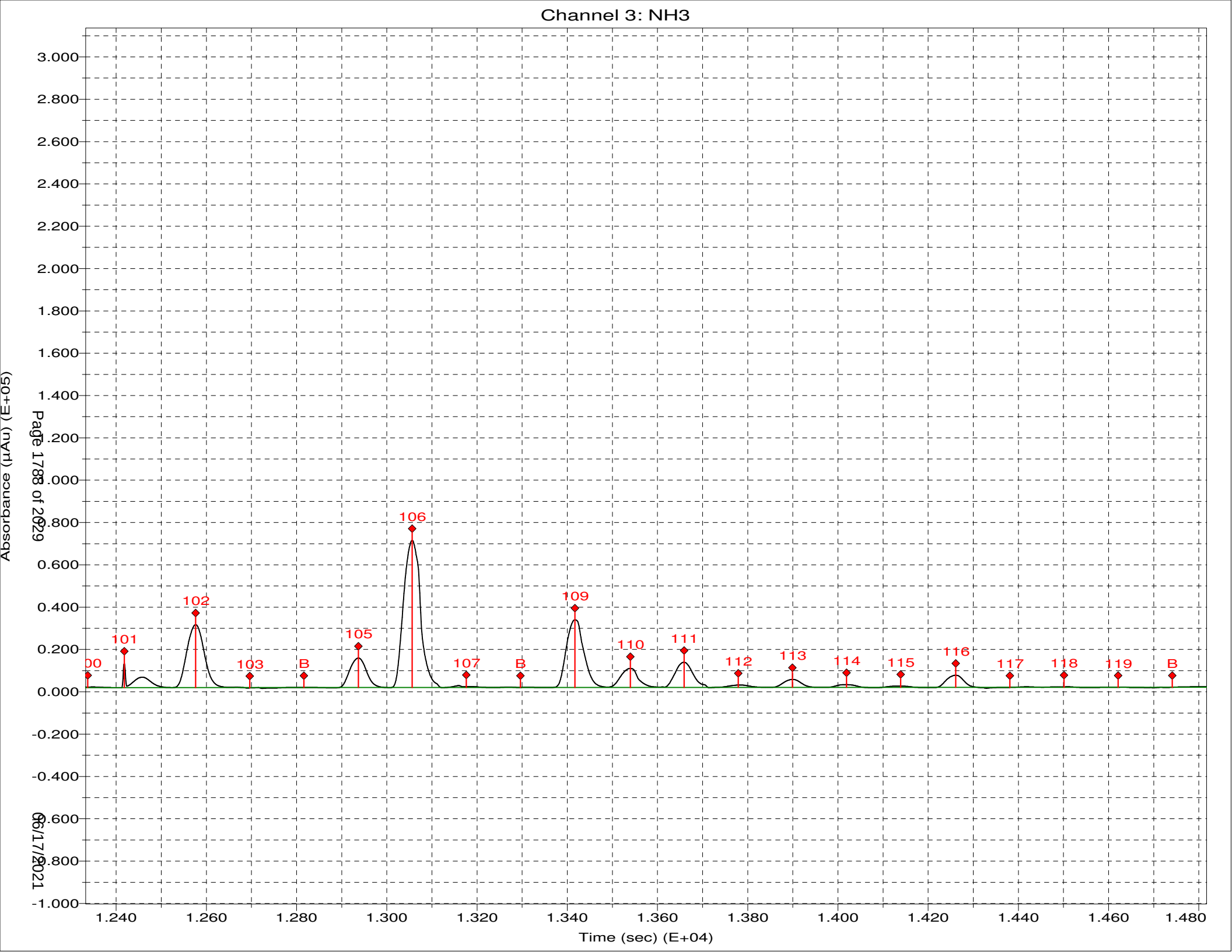
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Absorbance (µAu) (E+05)
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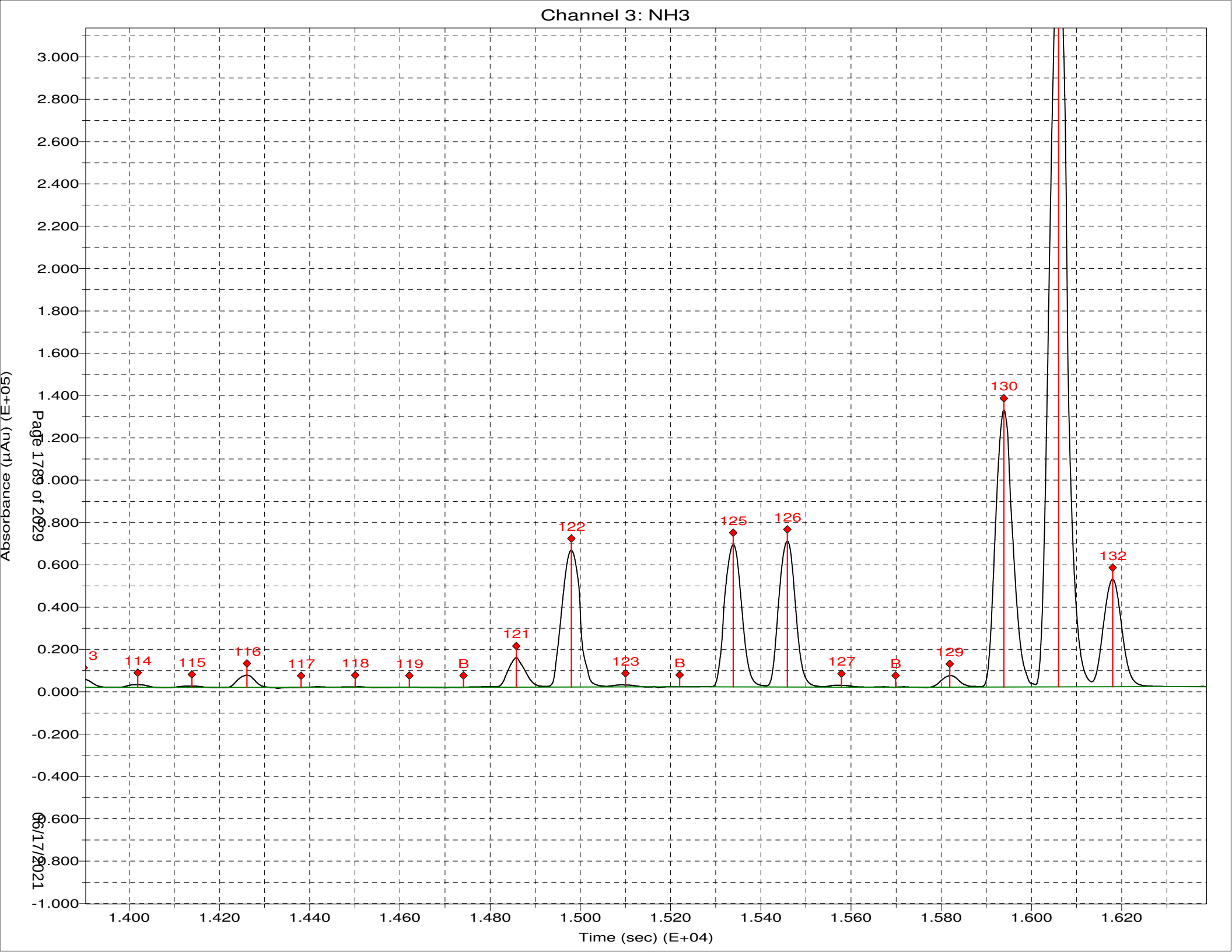
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
1.240
1.260
1.280
1.300
1.320
1.340
1.360
1.380
1.400
1.420
1.440
1.460
1.480
Time (sec) (E+04)
00
101
102
103
B
105
106
107
B
109
110
111
112
113
114
115
116
117
118
119
B
Page 1788 of 2029
06/17/2021


Channel 3: NH3
Absorbance (µAu) (E+05)
Time (sec) (E+04)
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2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
1.400
1.420
1.440
1.460
1.480
1.500
1.520
1.540
1.560
1.580
1.600
1.620
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B
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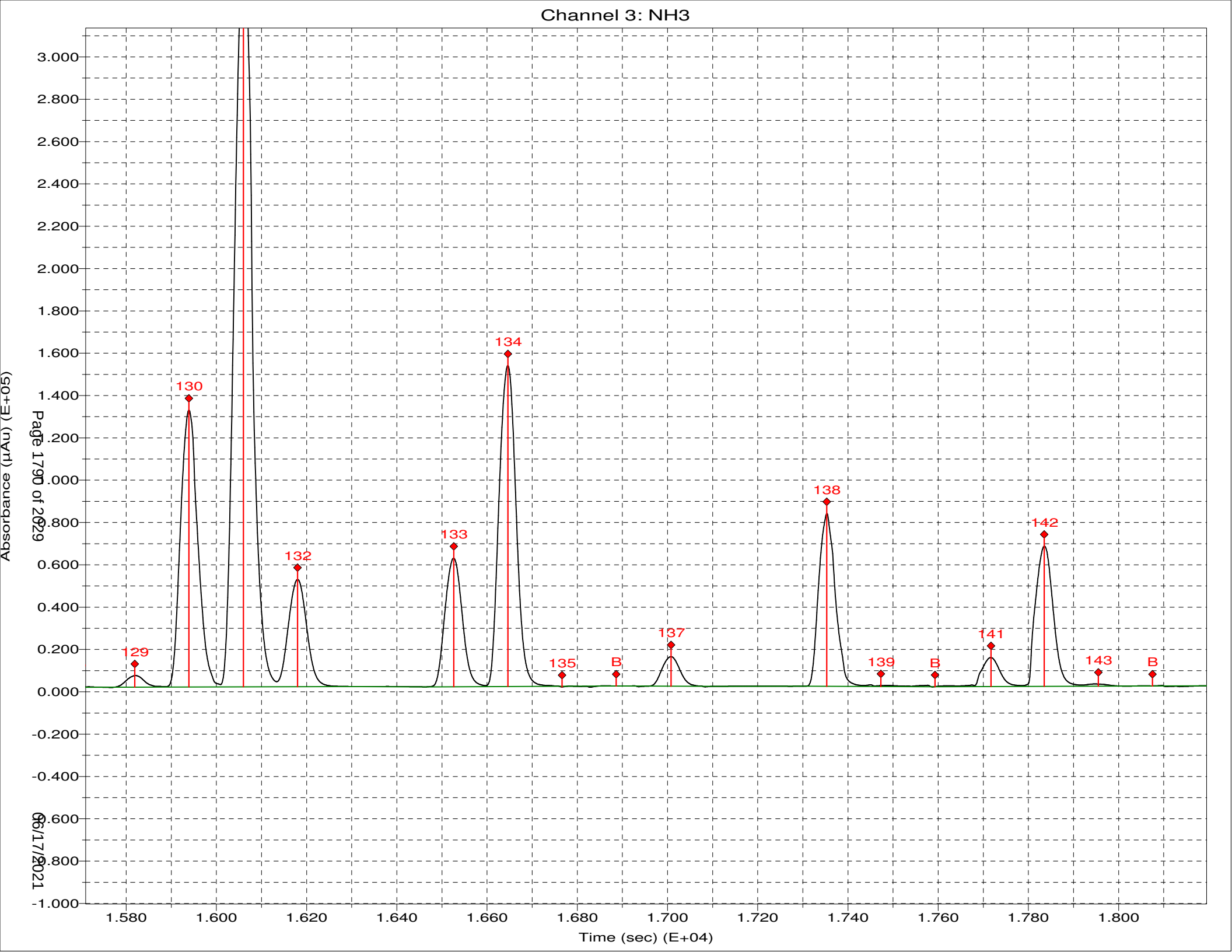
127
B
129
130
132


Channel 3: NH3
Absorbance (µAu) (E+05)
Time (sec) (E+04)
Page 1790 of 2029
06/17/2021
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2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.800
-1.000
1.580
1.600
1.620
1.640
1.660
1.680
1.700
1.720
1.740
1.760
1.780
1.800
129
130
132
133
134
135
B
137
138
139
B
141
142
143
B

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 11-Jun-21

RKD

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	RB	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
201	280-149049-c-3	U	1	1	1		
202	MS 280-149049-c-3	U	1	1	1		
203	MSD 280-149049-c-3	U	1	1	1		
204	280-149013-c-36	U	1	5	1		
205	280-149049-c-1	U	1	1	1		
206	280-149049-c-2	U	1	1	1		
207	280-149049-c-4	U	1	1	1		
208	280-149049-c-5	U	1	1	1		
209	280-149049-c-6	U	1	1	1		
210	280-149049-c-7	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-149090-b-1 X	U	1	1	1		
212	280-149116-c-1	U	1	1	1		
213	280-149116-c-13	U	1	1	1		
214	MS 280-149116-c-13	U	1	1	1		
215	MSD 280-149116-c-13	U	1	1	1		
216	280-149116-c-2	U	1	1	1		
217	280-149116-c-3	U	1	1	1		
218	280-149116-c-4	U	1	5	1		
219	280-149116-c-9	U	1	1	1		
220	280-149116-c-10	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		

350.1 Bleach - 01404
350.1 Color - 00243
350.1 Complex - 00531

pH

> 2
> 2
> 2
> 2
> 2
> 2
> 2
> 2
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Cup	Name	Type	R	Dil	Wt	Vial	Comment
221	280-149116-c-11	U	1	1	1	1	
222	280-149116-c-12	U	1	1	1	1	
223	280-149116-c-14	U	1	1	1	1	
224	280-149194-d-1	U	1	1	1	1	
225	280-149116-c-15	U	1	1	1	1	
226	MS 280-149116-c-15	U	1	1	1	1	
227	MSD 280-149116-c-15	U	1	1	1	1	
228	280-149194-d-2	U	1	1	1	1	
229	280-149238-e-2 X	U	1	50	1	1	
230	280-149238-e-3 X	U	1	50	1	1	
0	Blank	BLNK	1	1	1	1	
0	read baseline	RB	1	1	1	1	
105	CCVL 500.0 ppb	U	1	1	1	1	
107	CCV 2500.0 ppb	U	1	1	1	1	
111	CCB	U	1	1	1	1	
0	read baseline	RB	1	1	1	1	
231	280-149290-b-1 X	U	1	1	1	1	
232	280-149290-b-2	U	1	1	1	1	
233	280-149291-a-1	U	1	1	1	1	
234	280-149254-c-1-d	U	1	1	1	1	
235	280-149254-b-2-b	U	1	1	1	1	
236	280-149254-c-4-b	U	1	1	1	1	
237	280-149254-c-5-b	U	1	1	1	1	
238	MS 280-149254-c-5-b	U	1	1	1	1	
239	MSD 280-149254-c-5-b	U	1	1	1	1	
240	280-149254-c-6-b	U	1	1	1	1	
0	Blank	BLNK	1	1	1	1	
0	read baseline	RB	1	1	1	1	
105	CCVL 500.0 ppb	U	1	1	1	1	
107	CCV 2500.0 ppb	U	1	1	1	1	
111	CCB	U	1	1	1	1	
0	read baseline	RB	1	1	1	1	
107	LCS	U	1	1	1	1	
107	LCSD	U	1	1	1	1	
111	MB	U	1	1	1	1	
0	read baseline	RB	1	1	1	1	
241	280-149254-b-7-b	U	1	1	1	1	
242	280-149254-d-8-b	U	1	1	1	1	
243	280-149254-b-9-b	U	1	1	1	1	
244	280-149329-c-1-a	U	1	1	1	1	
245	280-149329-c-2-a	U	1	1	1	1	
246	280-149329-d-3-a	U	1	1	1	1	
247	280-149329-c-4-a	U	1	1	1	1	
248	280-149329-c-5-a	U	1	1	1	1	
249	280-149329-c-6-a	U	1	1	1	1	
250	MS 280-149329-c-6-a	U	1	1	1	1	
0	Blank	BLNK	1	1	1	1	
0	read baseline	RB	1	1	1	1	
105	CCVL 500.0 ppb	U	1	1	1	1	
107	CCV 2500.0 ppb	U	1	1	1	1	
111	CCB	U	1	1	1	1	
0	read baseline	RB	1	1	1	1	
251	MSD 280-149329-c-6-a	U	1	1	1	1	
252	280-149329-b-7-a	U	1	1	1	1	
253	280-149329-d-8-a	U	1	1	1	1	
254	280-149329-c-9-a	U	1	1	1	1	
255	280-149329-c-10-a	U	1	1	1	1	
256	280-149329-c-11-a	U	1	1	1	1	
257	280-149329-c-12-a	U	1	1	1	1	
258	280-149329-f-13-a	U	1	1	1	1	Initial pH=7, Final PH<2

Cup	Name	Type	R	Dil	Wt	Vial	Comment	pH	Q
259	280-149329-c-14-a	U		1	1	1		<2	N
260	280-149375-c-1-a	U		1	1	1		<2	N
0	Blank	BLNK		1	1	1			
0	read baseline	RB		1	1	1			
105	CCVL 500.0 ppb	U		1	1	1			
107	CCV 2500.0 ppb	U		1	1	1			
111	CCB	U		1	1	1			
0	read baseline	RB		1	1	1			
107	LCS	U		1	1	1			
107	LCSD	U		1	1	1			
111	MB	U		1	1	1			
0	read baseline	RB		1	1	1			
125	280-149090-B-1	U		1	500	1		<2	N
126	280-149238-E-2	X U		1	500	1		<2	N
127	280-149238-E-3	X U		1	500	1		<2	N
128	280-149290-B-1	U		1	5	1		<2	N
129	280-149238-E-2	U		1	1000	1		<2	N
130	280-149238-E-3	X U		1	1000	1		<2	N
0	X Blank	BLNK		1	1	1			
0	X read baseline	RB		1	1	1			
105	CCVL X 500.0 ppb	U		1	1	1			
131	280-149238-E-3	U		1	2000	1		<2	N
0	Blank	BLNK		1	1	1			
0	read baseline	RB		1	1	1			
105	CCVL 500.0 ppb	U		1	1	1			
107	CCV 2500.0 ppb	U		1	1	1			
111	CCB	U		1	1	1			
0	read baseline	RB		1	1	1			

Sample Table for 060221

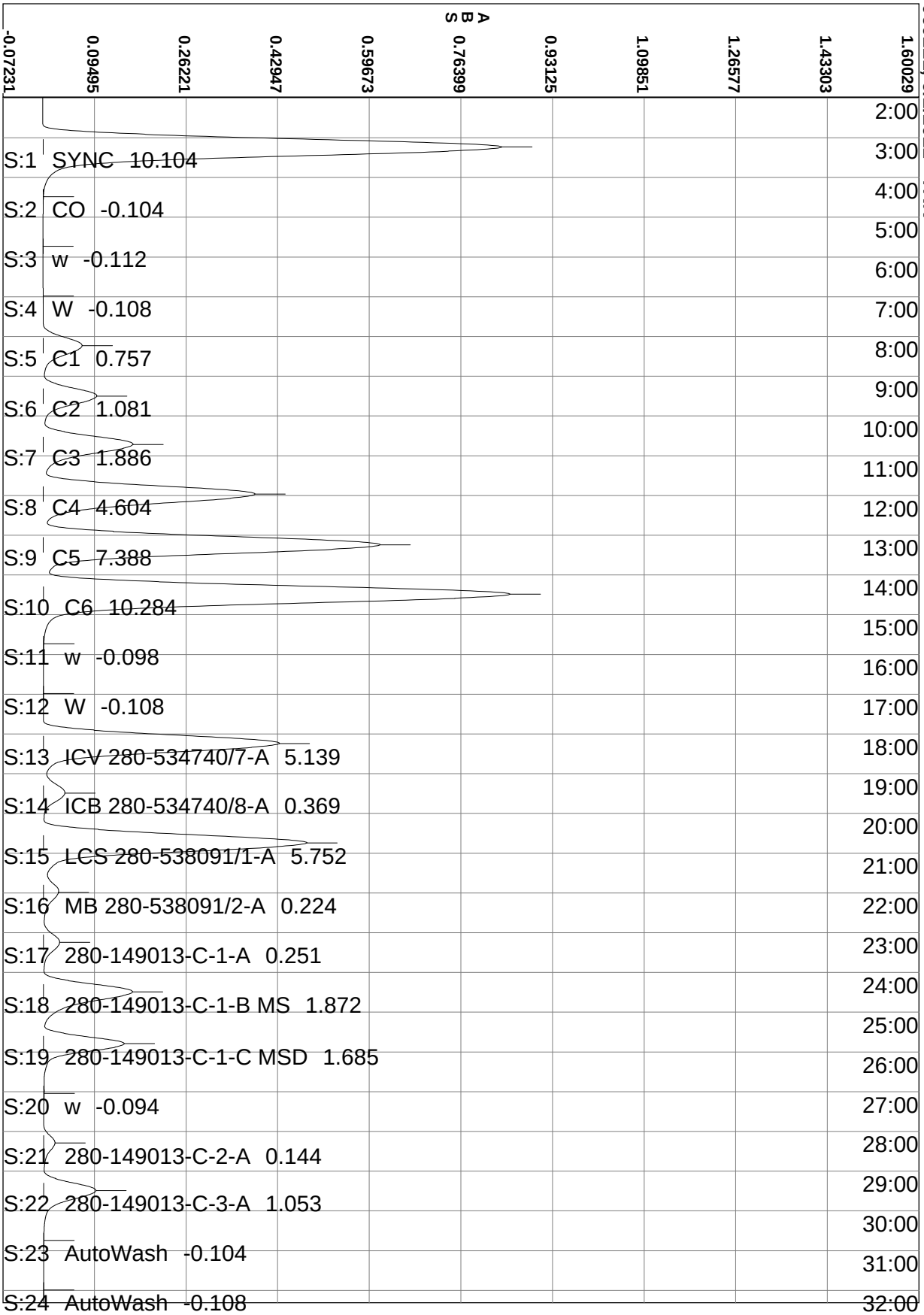
	Position	Identifier	Type	Cup Type
1	1:1	SYNC	SYNC	4 ml
2	1:2	CO	Carry over	4 ml
3	1:3	w	Blank	4 ml
4	1:4	W	Wash	4 ml
5	1:5	C1	Calibrant	4 ml
6	1:6	C2	Calibrant	4 ml
7	1:7	C3	Calibrant	4 ml
8	1:8	C4	Calibrant	4 ml
9	1:9	C5	Calibrant	4 ml
10	1:10	C6	Calibrant	4 ml
11	1:13	w	Blank	4 ml
12	1:14	W	Wash	4 ml
13	1:15	ICV 280-534740/7-A	Unknown	4 ml
14	1:16	ICB 280-534740/8-A	Unknown	4 ml
15	1:17	LCS 280-538091/1-A	Unknown	4 ml
16	1:18	MB 280-538091/2-A	Unknown	4 ml
17	1:19	280-149013-C-1-A	Unknown	4 ml
18	1:20	280-149013-C-1-B MS	Unknown	4 ml
19	1:21	280-149013-C-1-C MSD	Unknown	4 ml
20	1:22	w	Blank	4 ml
21	1:23	280-149013-C-2-A	Unknown	4 ml
22	1:24	280-149013-C-3-A	Unknown	4 ml
23	1:25	280-149013-C-4-A	Unknown	4 ml
24	1:26	280-149013-C-5-A	Unknown	4 ml
25	1:27	580-103253-A-1-A	Unknown	4 ml
26	1:28	580-103253-A-2-A	Unknown	4 ml
27	1:29	280-149116-C-1-A	Unknown	4 ml
28	1:30	w	Blank	4 ml
29	1:31	CCV 280-534740/9-A	Unknown	4 ml
30	1:32	CCB 280-534740/10-A	Unknown	4 ml
31	1:33	280-149116-C-2-A	Unknown	4 ml
32	1:34	280-149116-C-3-A	Unknown	4 ml
33	1:35	280-149116-C-13-A	Unknown	4 ml
34	1:36	280-149116-C-13-B MS	Unknown	4 ml
35	1:37	280-149116-C-13-C MSD	Unknown	4 ml
36	1:38	w	Blank	4 ml
37	1:39	280-149116-C-4-A	Unknown	4 ml
38	1:40	280-149116-C-9-A	Unknown	4 ml
39	1:41	280-149116-C-10-A	Unknown	4 ml
40	1:42	280-149116-C-11-A	Unknown	4 ml
41	1:43	280-149116-C-12-A	Unknown	4 ml
42	1:44	w	Blank	4 ml
43	1:45	CCV 280-534740/9-A	Unknown	4 ml
44	1:46	CCB 280-534740/10-A	Unknown	4 ml

	Position	Identifier	Type	Cup Type
45	1:47	280-149116-C-14-A	Unknown	4 ml
46	1:48	280-149116-C-15-A	Unknown	4 ml
47	1:49	580-103256-A-1-A	Unknown	4 ml
48	1:50	580-103256-A-2-A	Unknown	4 ml
49	1:51	LCS 280-538093/1-A	Unknown	4 ml
50	1:52	MB 280-538093/2-A	Unknown	4 ml
51	1:53	280-149066-B-1-A	Unknown	4 ml
52	1:54	280-149066-B-1-B MS	Unknown	4 ml
53	1:55	w	Blank	4 ml
54	1:56	CCV 280-534740/9-A	Unknown	4 ml
55	1:57	CCB 280-534740/10-A	Unknown	4 ml
56	1:58	280-149066-B-1-C MSD	Unknown	4 ml
57	1:59	280-149066-B-2-A	Unknown	4 ml
58	1:60	542-1	Unknown	4 ml
59	2:1	w	Blank	4 ml
60	2:2	542-1	Unknown	4 ml
61	2:3	w	Blank	4 ml
62	2:4	LCS 280-538093/1-A	Unknown	4 ml
63	2:5	LCS 280-538093/1-A	Unknown	4 ml
64	2:6	LCS 280-538091/1-A	Unknown	4 ml
65	2:7	CCV 280-534740/9-A	Unknown	4 ml
66	2:8	CCB 280-534740/10-A	Unknown	4 ml
67	2:9	w	Blank	4 ml
68	2:10	w	Blank	4 ml
69	2:11	w	Blank	4 ml
70	2:12	w	Blank	4 ml

Run Name: 060221
Configuration: TKN
Run date: 6/2/2021

	Position	Identifier	Type	Comme	Date	Time	otal	Raw Ht	TKN Cor Ht	mg/l
1	1:1	SYNC	SYNC	50;351.2	6/2/2021	2:46:14 PM	1	0.83763	0.83614	10.104
2	1:2	CO	Carry over		6/2/2021	2:46:45 PM	1	0.00185	0.00035	-0.104
3	1:3	w	Blank		6/2/2021	2:48:00 PM	1	0.00118	-0.00032	-0.112
4	1:4	W	Wash		6/2/2021	2:49:15 PM	1	0.00150	0.00000	-0.108
5	1:5	C1	Calibrant		6/2/2021	2:50:30 PM	1	0.07239	0.07085	0.757
6	1:6	C2	Calibrant		6/2/2021	2:51:45 PM	1	0.09894	0.09737	1.081
7	1:7	C3	Calibrant		6/2/2021	2:53:00 PM	1	0.16492	0.16332	1.886
8	1:8	C4	Calibrant		6/2/2021	2:54:15 PM	1	0.38746	0.38582	4.604
9	1:9	C5	Calibrant		6/2/2021	2:55:30 PM	1	0.61541	0.61374	7.388
10	1:10	C6	Calibrant		6/2/2021	2:56:45 PM	1	0.85261	0.85089	10.284
		Curve #:								1
		Curve Type:								Linear
		Correlation:								0.99773
		Intercept:								0.0088695
		Linear coef:								0.081876
11	1:13	w	Blank		6/2/2021	2:57:59 PM	1	0.00261	0.00086	-0.098
12	1:14	W	Wash		6/2/2021	2:59:14 PM	1	0.00178	0.00000	-0.108
13	1:15	ICV 280-534740/7-A	Unknown		6/2/2021	3:00:29 PM	1	0.43148	0.42964	5.139
14	1:16	ICB 280-534740/8-A	Unknown		6/2/2021	3:01:44 PM	1	0.04098	0.03910	0.369
15	1:17	LCS 280-538091/1-A	Unknown		6/2/2021	3:02:59 PM	1	0.48174	0.47981	5.752
16	1:18	MB 280-538091/2-A	Unknown		6/2/2021	3:04:14 PM	1	0.02920	0.02722	0.224
17	1:19	280-149013-C-1-A	Unknown		6/2/2021	3:05:29 PM	1	0.03148	0.02945	0.251
18	1:20	280-149013-C-1-B MS	Unknown		6/2/2021	3:06:44 PM	1	0.16423	0.16214	1.872
19	1:21	280-149013-C-1-C MSD	Unknown		6/2/2021	3:07:59 PM	1	0.14899	0.14686	1.685
20	1:22	w	Blank		6/2/2021	3:09:14 PM	1	0.00337	0.00119	-0.094
21	1:23	280-149013-C-2-A	Unknown		6/2/2021	3:10:29 PM	1	0.02293	0.02070	0.144
22	1:24	280-149013-C-3-A	Unknown		6/2/2021	3:11:44 PM	1	0.09737	0.09509	1.053
23	0	AutoWash	AutoWash		6/2/2021	3:13:00 PM	1	0.00269	0.00036	-0.104
24	0	AutoWash	AutoWash		6/2/2021	3:14:15 PM	1	0.00238	0.00000	-0.108
25	1:25	280-149013-C-4-A	Unknown		6/2/2021	3:15:30 PM	1	0.32696	0.32438	3.854
26	1:26	280-149013-C-5-A	Unknown		6/2/2021	3:16:45 PM	1	0.46671	0.46393	5.558
27	1:27	580-103253-A-1-A	Unknown		6/2/2021	3:18:00 PM	1	0.04929	0.04631	0.457
28	1:28	580-103253-A-2-A	Unknown		6/2/2021	3:19:15 PM	1	0.04748	0.04430	0.433
29	1:29	280-149116-C-1-A	Unknown		6/2/2021	3:20:30 PM	1	0.07003	0.06664	0.706
30	1:30	w	Blank		6/2/2021	3:21:45 PM	1	0.00300	-0.00059	-0.116
31	1:31	CCV 280-534740/9-A	Unknown		6/2/2021	3:23:00 PM	1	0.45421	0.45042	5.393
32	1:32	CCB 280-534740/10-A	Unknown		6/2/2021	3:24:15 PM	1	0.04712	0.04312	0.418
33	1:33	280-149116-C-2-A	Unknown		6/2/2021	3:25:30 PM	1	0.17761	0.17340	2.010
34	1:34	280-149116-C-3-A	Unknown		6/2/2021	3:26:45 PM	1	0.02474	0.02033	0.140
35	0	AutoWash	AutoWash		6/2/2021	3:28:00 PM	1	0.00392	-0.00070	-0.117
36	0	AutoWash	AutoWash		6/2/2021	3:29:15 PM	1	0.00481	0.00000	-0.108
37	1:35	280-149116-C-13-A	Unknown		6/2/2021	3:30:30 PM	1	0.04737	0.04258	0.412
38	1:36	280-149116-C-13-B MS	Unknown		6/2/2021	3:31:45 PM	1	0.21251	0.20775	2.429

	Position	Identifier	Type	Comme	Date	Time	otal	Raw Ht	TKN Cor Ht	mg/l
39	1:37	280-149116-C-13-C MSD	Unknown		6/2/2021	3:32:59 PM	1	0.25124	0.24650	2.902
40	1:38	w	Blank		6/2/2021	3:34:14 PM	1	0.00495	0.00024	-0.105
41	1:39	280-149116-C-4-A	Unknown		6/2/2021	3:35:29 PM	1	0.20827	0.20358	2.378
42	1:40	280-149116-C-9-A	Unknown		6/2/2021	3:36:44 PM	1	0.03179	0.02713	0.223
43	1:41	280-149116-C-10-A	Unknown		6/2/2021	3:37:59 PM	1	0.07113	0.06650	0.704
44	1:42	280-149116-C-11-A	Unknown		6/2/2021	3:39:14 PM	1	0.02392	0.01932	0.128
45	1:43	280-149116-C-12-A	Unknown		6/2/2021	3:40:29 PM	1	0.03209	0.02752	0.228
46	1:44	w	Blank		6/2/2021	3:41:44 PM	1	0.00475	0.00020	-0.106
47	0	AutoWash	AutoWash		6/2/2021	3:42:59 PM	1	0.00472	0.00018	-0.106
48	0	AutoWash	AutoWash		6/2/2021	3:44:14 PM	1	0.00451	0.00000	-0.108
49	1:45	CCV 280-534740/9-A	Unknown		6/2/2021	3:45:29 PM	1	0.46556	0.46077	5.519
50	1:46	CCB 280-534740/10-A	Unknown		6/2/2021	3:46:45 PM	1	0.05044	0.04550	0.447
51	1:47	280-149116-C-14-A	Unknown		6/2/2021	3:48:00 PM	1	0.02706	0.02196	0.160
52	1:48	280-149116-C-15-A	Unknown		6/2/2021	3:49:15 PM	1	0.02350	0.01824	0.114
53	1:49	580-103256-A-1-A	Unknown		6/2/2021	3:50:30 PM	1	0.06483	0.05941	0.617
54	1:50	580-103256-A-2-A	Unknown		6/2/2021	3:51:45 PM	1	0.06191	0.05634	0.580
55	1:51	LCS 280-538093/1-A	Unknown		6/2/2021	3:53:00 PM	1	0.44797	0.44224	5.293
56	1:52	MB 280-538093/2-A	Unknown		6/2/2021	3:54:15 PM	1	0.04232	0.03643	0.337
57	1:53	280-149066-B-1-A	Unknown		6/2/2021	3:55:30 PM	1	0.79028	0.78423	9.470
58	1:54	280-149066-B-1-B MS	Unknown		6/2/2021	3:56:45 PM	1	1.04633	1.04013	12.595
59	0	AutoWash	AutoWash		6/2/2021	3:58:00 PM	1	0.00731	0.00095	-0.097
60	0	AutoWash	AutoWash		6/2/2021	3:59:15 PM	1	0.00652	0.00000	-0.108
61	1:55	w	Blank		6/2/2021	4:00:30 PM	1	0.00757	0.00092	-0.097
62	1:56	CCV 280-534740/9-A	Unknown		6/2/2021	4:01:45 PM	1	0.46315	0.45637	5.466
63	1:57	CCB 280-534740/10-A	Unknown		6/2/2021	4:03:00 PM	1	0.05366	0.04674	0.463
64	1:58	280-149066-B-1-C MSD	Unknown		6/2/2021	4:04:15 PM	1	0.97631	0.96926	11.730
65	1:59	280-149066-B-2-A	Unknown		6/2/2021	4:05:30 PM	1	0.35282	0.34562	4.113
66	1:60	542-1	Unknown		6/2/2021	4:06:44 PM	20	0.45279	0.44546	106.646
67	2:1	w	Blank		6/2/2021	4:07:59 PM	1	0.00967	0.00220	-0.081
68	2:2	542-1	Unknown		6/2/2021	4:09:14 PM	10	1.52004	1.51245	183.640
69	2:3	w	Blank		6/2/2021	4:10:29 PM	1	0.00968	0.00195	-0.085
70	2:4	LCS 280-538093/1-A	Unknown		6/2/2021	4:11:44 PM	1	0.43180	0.42394	5.069
71	0	AutoWash	AutoWash		6/2/2021	4:12:59 PM	1	0.00820	0.00017	-0.106
72	0	AutoWash	AutoWash		6/2/2021	4:14:14 PM	1	0.00817	0.00000	-0.108
73	2:5	LCS 280-538093/1-A	Unknown		6/2/2021	4:15:29 PM	1	0.45567	0.44749	5.357
74	2:6	LCS 280-538091/1-A	Unknown		6/2/2021	4:16:44 PM	1	0.47608	0.46787	5.606
75	2:7	CCV 280-534740/9-A	Unknown		6/2/2021	4:17:59 PM	1	0.47238	0.46414	5.561
76	2:8	CCB 280-534740/10-A	Unknown		6/2/2021	4:19:14 PM	1	0.05348	0.04522	0.444
77	2:9	w	Blank		6/2/2021	4:20:29 PM	1	0.00877	0.00048	-0.102
78	2:10	w	Blank		6/2/2021	4:21:45 PM	1	0.01500	0.00669	-0.027
79	2:11	w	Blank		6/2/2021	4:23:00 PM	1	0.00857	0.00024	-0.105
80	2:12	w	Blank		6/2/2021	4:24:15 PM	1	0.00854	0.00018	-0.106
81	0	AutoWash	AutoWash		6/2/2021	4:25:30 PM	1	0.00824	-0.00015	-0.110
82	0	AutoWash	AutoWash		6/2/2021	4:26:45 PM	1	0.00841	0.00000	-0.108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S:3 w -0.112
S:4 W -0.108
S:5 C1 0.757
S:6 C2 1.081
S:7 C3 1.886
S:8 C4 4.604
S:9 C5 7.388
S:10 C6 10.284
S:11 w -0.098
S:12 W -0.108
S:13 ICV 280-534740/7-A 5.139
S:14 ICB 280-534740/8-A 0.369
S:15 LCS 280-538091/1-A 5.752
S:16 MB 280-538091/2-A 0.224
S:17 280-149013-C-1-A 0.251
S:18 280-149013-C-1-B MS 1.872
S:19 280-149013-C-1-C MSD 1.685
S:20 w -0.094
S:21 280-149013-C-2-A 0.144
S:22 280-149013-C-3-A 1.053
S:23 AutoWash -0.104
S:24 AutoWash -0.108


060221, 6/2/2021 - TKN
ABS
-0.07231
0.09495
0.26221
0.42947
0.59673
0.76399
0.93125
1.09851
1.26577
1.43303
1.60029
S:25 280-149013-C-4-A 3.854
S:26 280-149013-C-5-A 5.558
S:27 580-103253-A-1-A 0.457
S:28 580-103253-A-2-A 0.433
S:29 280-149116-C-1-A 0.706
S:30 w -0.116
S:31 CCV 280-534740/9-A 5.393
S:32 CCB 280-534740/10-A 0.418
S:33 280-149116-C-2-A 2.010
S:34 280-149116-C-3-A 0.140
S:35 AutoWash -0.117
S:36 AutoWash -0.108
S:37 280-149116-C-13-A 0.412
S:38 280-149116-C-13-B MS 2.429
S:39 280-149116-C-13-C MSD 2.902
S:40 w -0.105
S:41 280-149116-C-4-A 2.378
S:42 280-149116-C-9-A 0.223
S:43 280-149116-C-10-A 0.704
S:44 280-149116-C-11-A 0.128
S:45 280-149116-C-12-A 0.228
S:46 w -0.106
S:47 AutoWash -0.106
S:48 AutoWash -0.108
33:00
34:00
35:00
36:00
37:00
38:00
39:00
40:00
41:00
42:00
43:00
44:00
45:00
46:00
47:00
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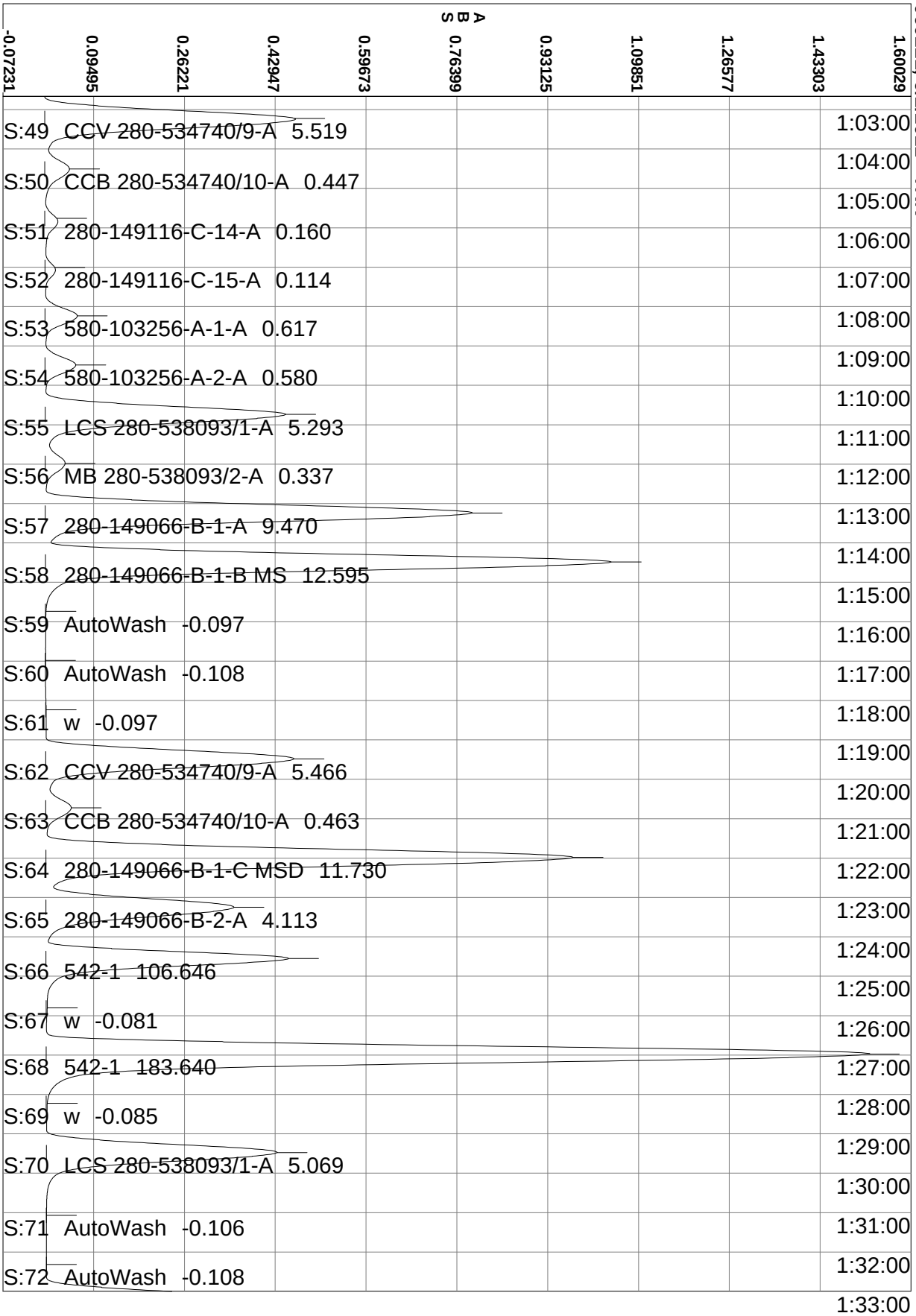
1:01:00
1:02:00


060221, 6/2/2021 - TKN
ABS
-0.07231
0.09495
0.26221
0.42947
0.59673
0.76399
0.93125
1.09851
1.26577
1.43303
1.60029
S:49 CCV 280-534740/9-A 5.519
S:50 CCB 280-534740/10-A 0.447
S:51 280-149116-C-14-A 0.160
S:52 280-149116-C-15-A 0.114
S:53 580-103256-A-1-A 0.617
S:54 580-103256-A-2-A 0.580
S:55 LCS 280-538093/1-A 5.293
S:56 MB 280-538093/2-A 0.337
S:57 280-149066-B-1-A 9.470
S:58 280-149066-B-1-B MS 12.595
S:59 AutoWash -0.097
S:60 AutoWash -0.108
S:61 w -0.097
S:62 CCV 280-534740/9-A 5.466
S:63 CCB 280-534740/10-A 0.463
S:64 280-149066-B-1-C MSD 11.730
S:65 280-149066-B-2-A 4.113
S:66 542-1 106.646
S:67 w -0.081
S:68 542-1 183.640
S:69 w -0.085
S:70 LCS 280-538093/1-A 5.069
S:71 AutoWash -0.106
S:72 AutoWash -0.108
1:03:00
1:04:00
1:05:00
1:06:00
1:07:00
1:08:00
1:09:00
1:10:00
1:11:00
1:12:00
1:13:00
1:14:00
1:15:00
1:16:00
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1:19:00
1:20:00
1:21:00
1:22:00
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1:24:00
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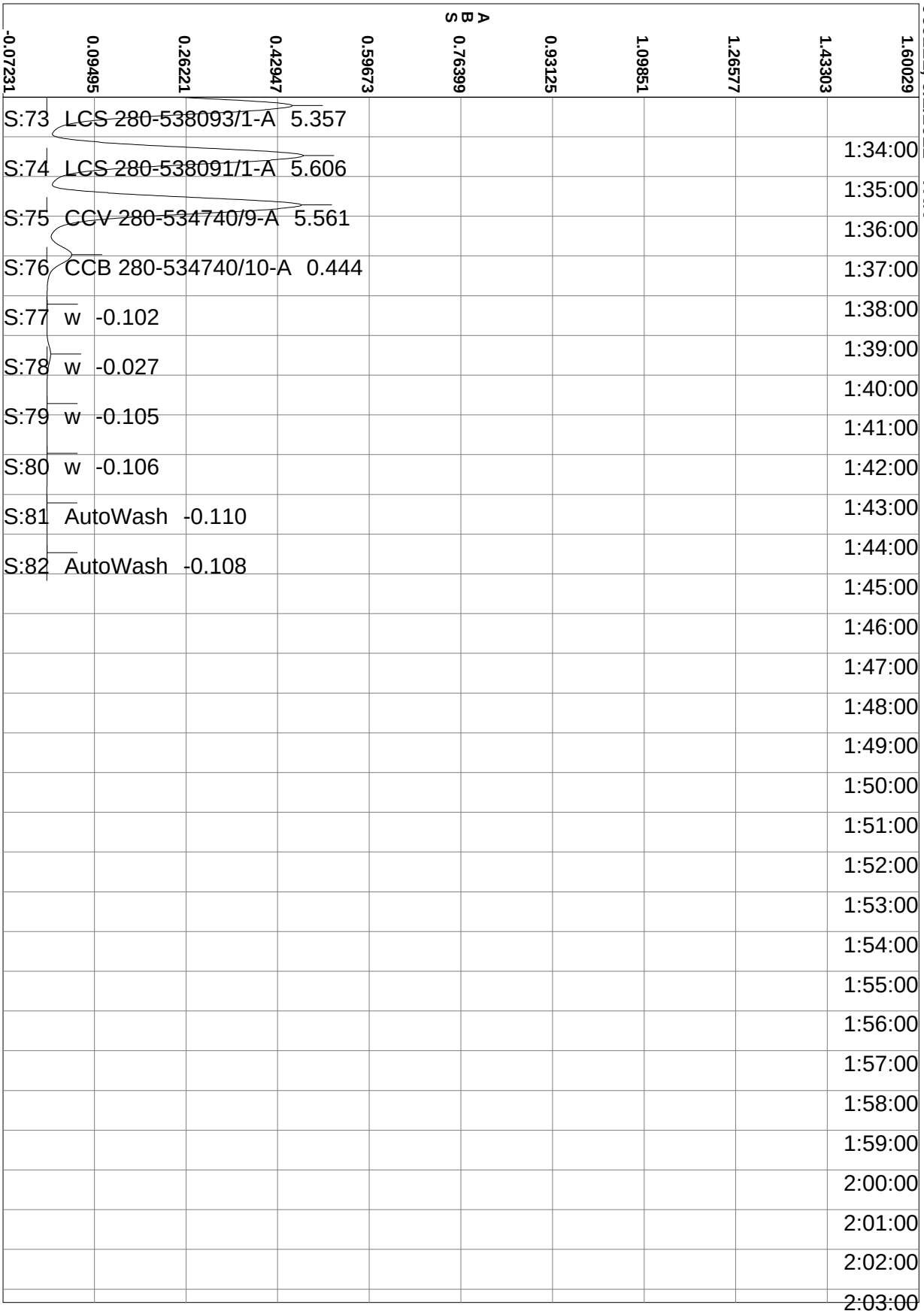
1:33:00


060221, 6/2/2021 - TKN
ABS
-0.07231
0.09495
0.26221
0.42947
0.59673
0.76399
0.93125
1.09851
1.26577
1.43303
1.60029
S:73 LCS 280-538093/1-A 5.357
S:74 LCS 280-538091/1-A 5.606
S:75 CCV 280-534740/9-A 5.561
S:76 CCB 280-534740/10-A 0.444
S:77 w -0.102
S:78 w -0.027
S:79 w -0.105
S:80 w -0.106
S:81 AutoWash -0.110
S:82 AutoWash -0.108
1:34:00
1:35:00
1:36:00
1:37:00
1:38:00
1:39:00
1:40:00
1:41:00
1:42:00
1:43:00
1:44:00
1:45:00
1:46:00
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1:55:00
1:56:00
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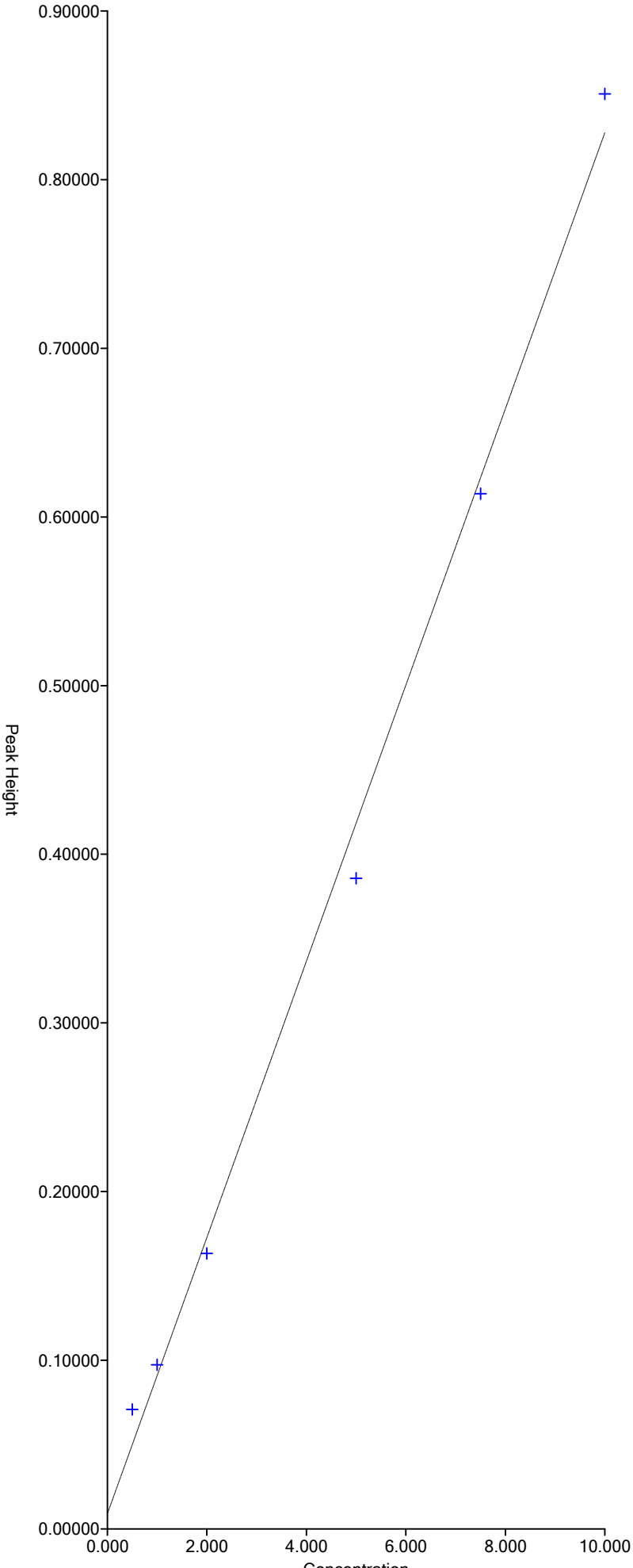
1:59:00
2:00:00
2:01:00
2:02:00
2:03:00

Calibration for TKN



Segment 1: Equation: y = 0.08188x + 0.008870
Correlation: 0.9977
X Range = 0.000 to 10.000
Y Range = 0.00000 to 7.20000

Peak Table:Nitrate as N

File name: C:\FLOW_4\060421.RST
Date: 04-Jun-21
Operator: zm

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2117139	9569.543945	
2	0	Carryover	1	CO	1	1	5378	-11.916619	LO
3	0	Carryover	2	CO	1	1	409	-34.460495	LO
B	0	read baseline	1	RB	1	1	0	-36.317646	BL
5	101	Cal 0.00 ppb	1	C	1	1	3226	-21.682854	LO
6	102	Cal 50.0 ppb	1	C	1	1	10093	9.474973	
7	103	Cal 100 ppb	1	C	1	1	21638	61.856888	
8	104	Cal 500 ppb	1	C	1	1	109481	460.416992	
9	105	Cal 1000 ppb	1	C	1	1	228273	999.401123	
10	106	Cal 2500 ppb	1	C	1	1	583494	2611.103760	
11	107	Cal 5000 ppb	1	C	1	1	1094426	4929.298828	
12	108	Cal 7500 ppb	1	C	1	1	1740296	7859.736816	
13	109	Cal 10000 ppb	1	C	1	1	2154795	9740.395508	
14	0	Blank	1	BLNK	1	1	-8661	-75.616325	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL
16	110	5000 PPB NO2	1	U	1	1	1162667	5238.924316	
17	111	ICV 5000 PPB	1	CCV	1	1	1065930	4800.009277	
18	112	ICV 2000 PPB	1	CCV	1	1	444615	1980.985840	
19	0	ICB	1	U	1	1	2052	-27.006720	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL
21	107	LCS	1	U	1	1	1105088	4977.678711	
22	0	MB	1	U	1	1	1494	-29.538265	LO
23	113	280-149049-C-3	1	U	10	1	804027	36117.039062	
24	114	ms 280-149049-C-3	1	U	10	1	1667695	75303.312500	
25	115	msd 280-149049-C-3	1	U	10	1	1564428	70617.890625	
26	116	280-149049-C-1	1	U	1	1	101497	424.193085	
27	117	280-149049-C-2	1	U	1	1	1875437	8472.897461	
28	118	280-149049-C-4	1	U	10	1	1490477	67262.593750	
29	119	280-149049-C-5	1	U	5	1	2283466	51620.992188	HI
30	120	280-149049-C-6	1	U	1	1	8626	2.820898	FL
31	121	280-149049-C-7	1	U	25	1	527605	58938.195312	
32	122	280-149049-C-8	1	U	1	1	199165	867.329590	
33	0	Rinse	1	U	1	1	-2449	-47.429611	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1066868	4804.264648	
36	105	CCVL 1000 ppb	1	CCV	1	1	224830	983.776855	
37	0	CCB	1	U	1	1	-3555	-52.446560	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL
39	123	280-149049-C-9	1	U	1	1	1183976	5335.605469	
40	124	280-149049-C-10	1	U	1	1	1810279	8177.260254	
41	125	280-149049-C-11	1	U	1	1	1499432	6766.891113	
42	126	ms 280-149049-C-11	1	U	1	1	2155528	9743.721680	
43	127	msd 280-149049-C-11	1	U	1	1	2125984	9609.676758	
44	128	280-149049-C-12	1	U	1	1	1449440	6540.068359	
45	129	280-149081-C-1	1	U	1	1	3095	-22.273142	LO
46	130	280-149081-C-2	1	U	1	1	3737	-19.363813	LO
47	131	280-149218-E-2	1	U	1	1	543498	2429.634521	
48	132	280-149116-C-1	1	U	1	1	769	-32.830063	LO
49	0	Rinse	1	U	1	1	84	-35.934479	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL UM
51	107	CCV 5000 ppb	1	CCV	1	1	1011455	4552.847168	UM
52	105	CCVL 1000 ppb	1	CCV	1	1	235103	1030.390015	
53	0	CCB	1	U	1	1	-1184	-41.691189	LO UM
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL
55	133	280-149116-C-2	1	U	1	1	10931	13.277925	
56	134	280-149116-C-3	1	U	1	1	1193607	5379.305664	
57	135	280-149116-C-4	1	U	1	1	1101338	4960.664551	
58	136	280-149116-A-6	1	U	1	1	45093	168.275955	
59	107	LCS	1	U	1	1	1062308	4783.574219	
60	0	MB	1	U	1	1	-363	-37.962410	LO
61	137	280-149116-C-13	1	U	1	1	183771	797.487732	
62	138	ms 280-149116-C-13	1	U	1	1	1115742	5026.016602	
63	139	msd 280-149116-C-13	1	U	1	1	1107896	4990.414551	
64	140	280-149116-A-7	1	U	1	1	42708	157.455170	
65	0	Rinse	1	U	1	1	1448	-29.749268	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL
67	107	CCV 5000 ppb	1	CCV	1	1	1078764	4858.238281	
68	105	CCVL 1000 ppb	1	CCV	1	1	217590	950.930115	
69	0	CCB	1	U	1	1	1001	-31.774797	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	141	280-149116-C-9	1	U	1	1	1998422	9030.902344	
72	142	280-149116-C-10	1	U	1	1	-2741	-48.753582	LO
73	143	280-149116-C-11	1	U	25	1	219089	23943.306641	
74	144	280-149116-C-12	1	U	25	1	209415	22845.986328	
75	145	280-149116-C-14	1	U	1	1	1733526	7829.018555	
76	146	280-149116-C-15	1	U	5	1	601182	13456.801758	
77	147	280-149116-C-5	1	U	1	1	1660628	7498.268555	
78	148	280-149049-a-5	1	U	1	25	1135657	204.655045	
79	149	d	1	U	1	1	386	-34.566467	LO
80	150	d	1	U	1	1	13833	26.444843	
81	0	Rinse	1	U	1	1	1282	-30.500095	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL
83	107	CCV 5000 ppb	1	CCV	1	1	1099863	4953.968262	
84	105	CCVL 1000 ppb	1	CCV	1	1	234089	1025.789551	
85	0	CCB	1	U	1	1	-1388	-42.615997	LO
B	0	Read Baseline	1	RB	1	1	0	-36.317646	BL

Nitrate as N:Calibration 1: Peak 5-86

File name: C:\FLOW_4\060421.RST
Date: 04-Jun-21
Operator: zm

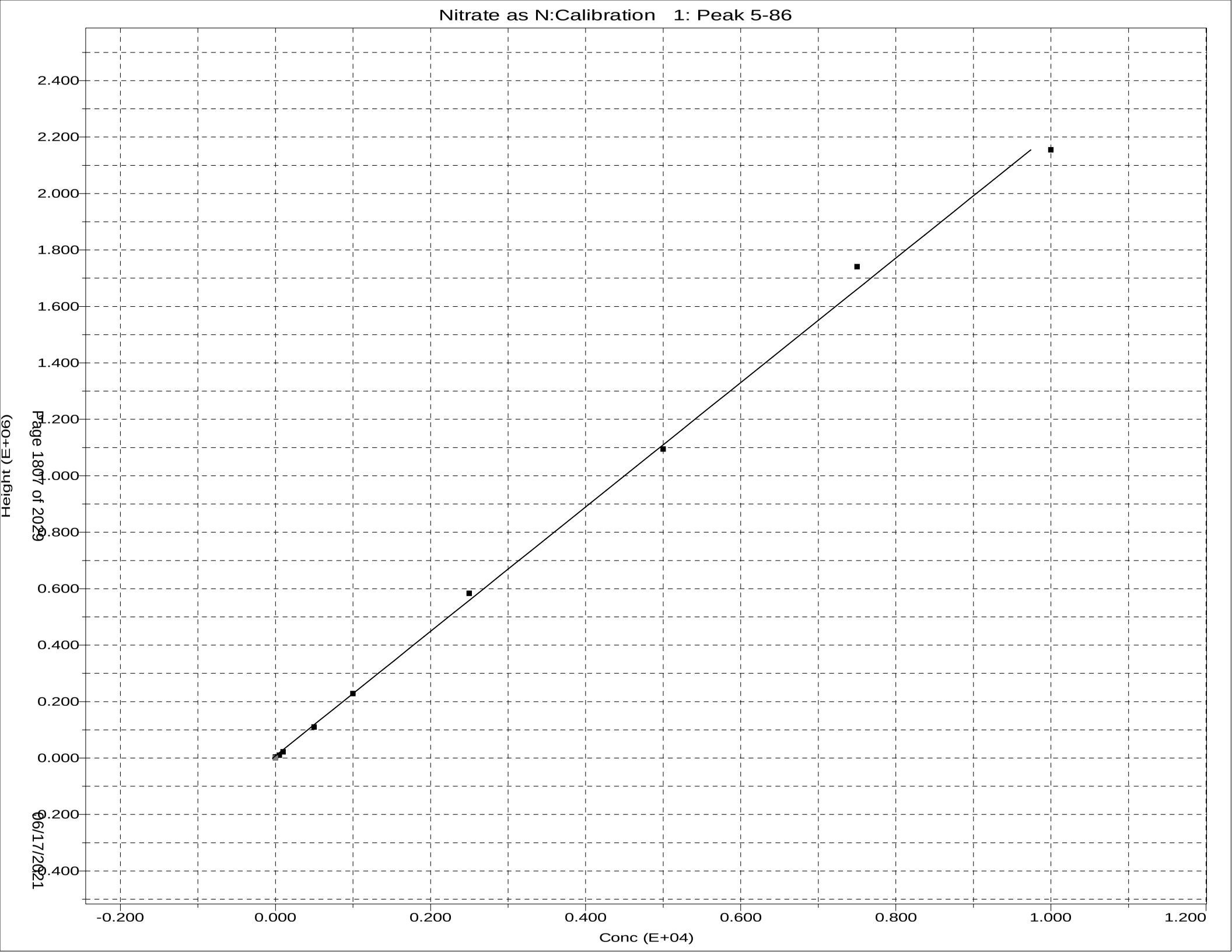
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	3225.518799
*	Cal 50.0 ppb	50.000000	10092.726562
*	Cal 100 ppb	100.000000	21637.740234
*	Cal 500 ppb	500.000000	109480.679688
*	Cal 1000 ppb	1000.000000	228273.187500
*	Cal 2500 ppb	2500.000000	583493.625000
*	Cal 5000 ppb	5000.000000	1094425.500000
*	Cal 7500 ppb	7500.000000	1740296.250000
*	Cal 10000 ppb	10000.000000	2154794.750000

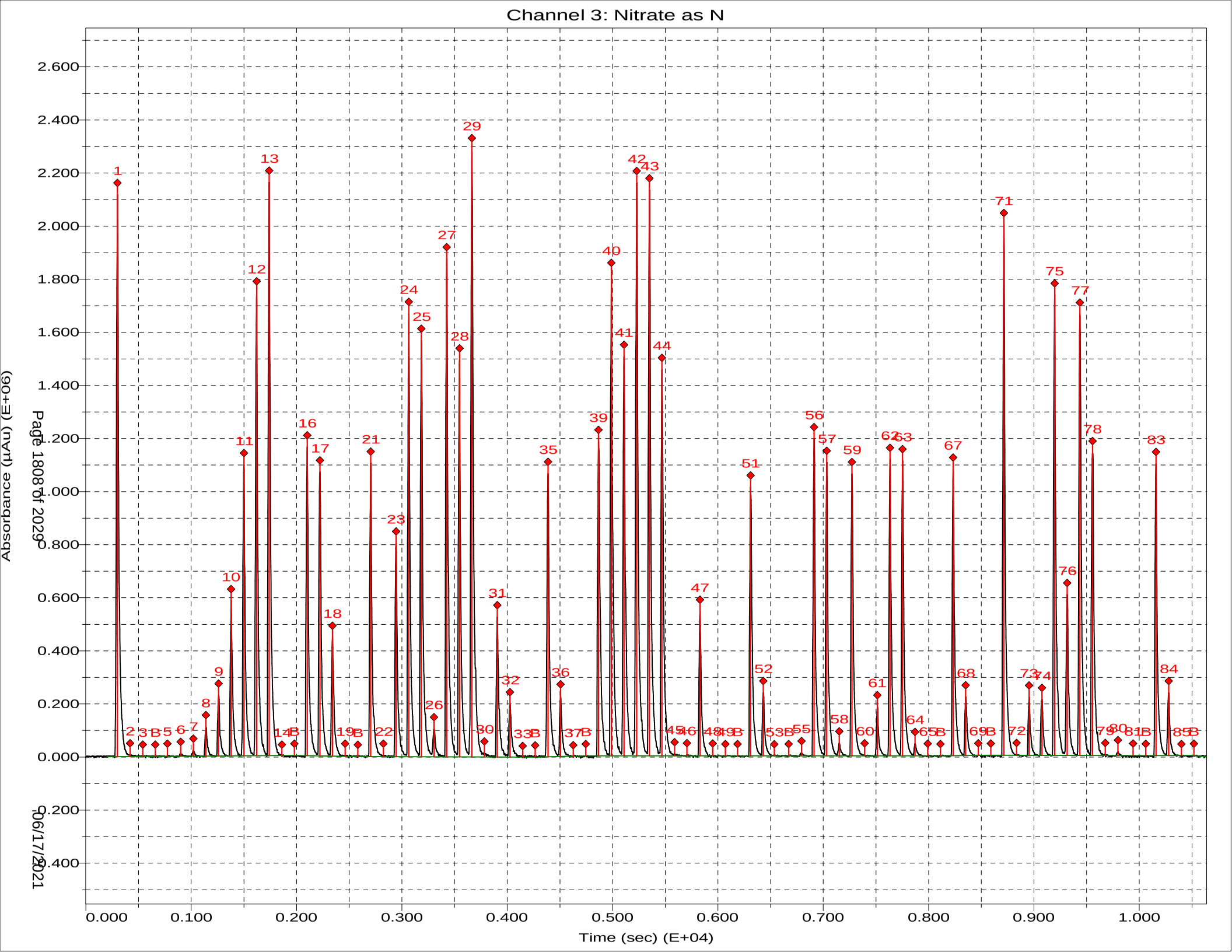
Calib Coef:
y=bx+a
a: (intercept) 8.0044e+03
b: 2.2040e+02

Corr Coef: 0.999003

Carryover: 0.254%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-86
Height (E+06)
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
0.000
0.100
0.200
0.300
0.400
0.500
0.600
0.700
0.800
0.900
1.000
Page 1808 of 2029
06/17/2021

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 04-Jun-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1	1	1		
0	Carryover	CO	1	1	1		
0	Carryover	CO	1	1	1		
0	read baseline	RB	1	1	1		
101	Cal 0.00 ppb	C	1	1	1		
102	Cal 50.0 ppb	C	1	1	1		
103	Cal 100 ppb	C	1	1	1		
104	Cal 500 ppb	C	1	1	1		
105	Cal 1000 ppb	C	1	1	1		
106	Cal 2500 ppb	C	1	1	1		
107	Cal 5000 ppb	C	1	1	1		
108	Cal 7500 ppb	C	1	1	1		
109	Cal 10000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
110	5000 PPB NO2	U	1	1	1		
111	ICV 5000 PPB	CCV	1	1	1		
112	ICV 2000 PPB	CCV	1	1	1		
0	ICB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		PH
0	MB	U	1	1	1		
113	280-149049-C-3	U	1	10	1	<2	
114	ms 280-149049-C-3	U	1	10	1	<2	
115	msd 280-149049-C-3	U	1	10	1	<2	
116	280-149049-C-1	U	1	1	1	<2	
117	280-149049-C-2	U	1	1	1	<2	
118	280-149049-C-4	U	1	10	1	<2	
119	280-149049-C-5	U	1	5	1	<2	
120	280-149049-C-6	U	1	1	1	<2	
121	280-149049-C-7	U	1	25	1	<2	
122	280-149049-C-8	U	1	1	1	<2	
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
123	280-149049-C-9	U	1	1	1	<2	
124	280-149049-C-10	U	1	1	1	<2	
125	280-149049-C-11	U	1	1	1	<2	
126	ms 280-149049-C-11	U	1	1	1	<2	
127	msd 280-149049-C-11	U	1	1	1	<2	
128	280-149049-C-12	U	1	1	1	<2	
129	280-149081-C-1	U	1	1	1	<2	
130	280-149081-C-2	U	1	1	1	<2	
131	280-149218-E-2	U	1	1	1	<2	
132	280-149116-C-1	U	1	1	1	<2	
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
133	280-149116-C-2	U	1	1	1	<2	
134	280-149116-C-3	U	1	1	1	<2	

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-149116-C-4	U	1	1	1	<2	
136	280-149116-A-6	U	1	1	1	<2	
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-149116-C-13	U	1	1	1	<2	
138	ms 280-149116-C-13	U	1	1	1	<2	
139	msd 280-149116-C-13	U	1	1	1	<2	
140	280-149116-A-7	U	1	1	1	<2	
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
141	280-149116-C-9	U	1	1	1	<2	
142	280-149116-C-10	U	1	1	1	<2	
143	280-149116-C-11	U	1	25	1	<2	
144	280-149116-C-12	U	1	25	1	<2	
145	280-149116-C-14	U	1	1	1	<2	
146	280-149116-C-15	U	1	5	1	<2	
147	280-149116-C-5	U	1	1	1	<2	
148	d280-149116-C-5	U	1	25	1	<2	
149	d	U	1	1	1		
150	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		

General Chemistry Raw Data Report

Job ID: 280-149116-1

Batch: 537793 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-537775/1-A **Analysis Date: May 28, 2021 09:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	12.8	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-537775/2-A **Analysis Date: May 28, 2021 09:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	5/28/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00263	Prep Date:	4/26/2021
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	952
TALS ID	Na Thio_00172	Expiration Date:	8/26/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	7.90	20	7.90	968.000
CAL	5	7.90	16.20	20	8.30	936.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	4/26/2021
Made By:	SAH
Concentration:	952
Expiration Date:	8/26/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.20	20	8.20	944.000
ICV	5	8.30	16.30	20	8.00	960.000

TALS Raw Data Report

Job Number: 280-149012-1
LIMS Batch: 537793
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537775/1-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		13.6 mg/L	mg/L				
Sulfide		12.8 mg/L	mg/L	67	44 110		

RS# 2 Lab ID: **MB 280-537775/2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 3 Lab ID: **280-149100-C-2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 4 Lab ID: **280-149100-C-2-B MS** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		12.75 mg/L	mg/L				
Sulfide		12 mg/L	mg/L	63	44 110		

RS# 5 Lab ID: **280-149100-C-2-C MSD** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		14.45 mg/L	mg/L				
Sulfide		13.6 mg/L	mg/L	71	44 110	13	20

RS# 12 Lab ID: **280-149012-C-3-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				
Sulfide		0.8 mg/L	0.80 J mg/L				

RS# 13 Lab ID: **280-149012-C-6-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				
Sulfide		999999968 mg/L	0.80 J mg/L				

TALS Raw Data Report

Job Number: 280-149081-1
LIMS Batch: 537793
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537775/1-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		13.6 mg/L	mg/L				
Sulfide		12.8 mg/L	mg/L	67	44 110		

RS# 2 Lab ID: **MB 280-537775/2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 3 Lab ID: **280-149100-C-2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 4 Lab ID: **280-149100-C-2-B MS** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		12.75 mg/L	mg/L				
Sulfide		12 mg/L	mg/L	63	44 110		

RS# 5 Lab ID: **280-149100-C-2-C MSD** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		14.45 mg/L	mg/L				
Sulfide		13.6 mg/L	mg/L	71	44 110	13	20

RS# 6 Lab ID: **280-149081-E-1-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				
Sulfide		-0.8 mg/L	1.9 U mg/L				

RS# 7 Lab ID: **280-149081-E-2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				
Sulfide		0.8 mg/L	0.80 J mg/L				

TALS Raw Data Report

Job Number: 280-149100-1
LIMS Batch: 537793
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537775/1-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		13.6 mg/L	mg/L				
Sulfide		12.8 mg/L	mg/L	67	44 110		

RS# 2 Lab ID: **MB 280-537775/2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 3 Lab ID: **280-149100-C-2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 4 Lab ID: **280-149100-C-2-B MS** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		12.75 mg/L	mg/L				
Sulfide		12 mg/L	mg/L	63	44 110		

RS# 5 Lab ID: **280-149100-C-2-C MSD** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		14.45 mg/L	mg/L				
Sulfide		13.6 mg/L	mg/L	71	44 110	13	20

TALS Raw Data Report

Job Number: 280-149116-1
LIMS Batch: 537793
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-537775/1-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		13.6 mg/L	mg/L				
Sulfide		12.8 mg/L	mg/L	67	44 110		

RS# 2 Lab ID: **MB 280-537775/2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 3 Lab ID: **280-149100-C-2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 4 Lab ID: **280-149100-C-2-B MS** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		12.75 mg/L	mg/L				
Sulfide		12 mg/L	mg/L	63	44 110		

RS# 5 Lab ID: **280-149100-C-2-C MSD** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		14.45 mg/L	mg/L				
Sulfide		13.6 mg/L	mg/L	71	44 110	13	20

RS# 8 Lab ID: **280-149116-E-1-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		5.95 mg/L	mg/L				
Sulfide		5.6 mg/L	mg/L				

RS# 9 Lab ID: **280-149116-E-2-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				
Sulfide		0.8 mg/L	0.80 J mg/L				

RS# 10 Lab ID: **280-149116-E-3-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				
Sulfide		999999968 mg/L	0.80 J mg/L				

RS# 11 Lab ID: **280-149116-E-4-A** Inj Date: 5/28/2021 9:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

General Chemistry Raw Data Report

Job ID: 280-149116-1

Batch: 538118 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-538090/1-A **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	11.2	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-538090/2-A **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-13-A **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	-0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-13-B MS **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	12	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-13-C MSD **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	12	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-1-B **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	6.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-2-B **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-3-B **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-4-B **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-9-A **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-10-A **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.799999999999968	mg/L	50 mL	50 mL

Batch: 538118 (Continued) **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: 280-149116-E-11-A **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-12-A **Analysis Date: Jun 01, 2021 12:36**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	6/1/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00263	Prep Date:	4/26/2021
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	936
TALS ID	Na Thio_00172	Expiration Date:	8/26/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.30	20	8.30	936.000
CAL	5	8.30	16.60	20	8.30	936.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	4/26/2021
Made By:	SAH
Concentration:	928
Expiration Date:	8/26/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.30	20	8.30	936.000
ICV	5	8.30	16.80	20	8.50	920.000

TALS Raw Data Report

Job Number: 280-149116-1
LIMS Batch: 538118
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-538090/1-A** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	60	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-538090/2-A** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-149116-E-13-A** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-149116-E-13-B MS** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	65	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 5 Lab ID: **280-149116-E-13-C MSD** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	65	44 110	0	20
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 6 Lab ID: **280-149116-E-1-B** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		6.4 mg/L	mg/L				
Sulfide as H2S		6.8 mg/L	mg/L				

RS# 7 Lab ID: **280-149116-E-2-B** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 8 Lab ID: **280-149116-E-3-B** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-149116-E-4-B** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 10 Lab ID: **280-149116-E-9-A** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

TALS Raw Data Report

RS# 11 Lab ID: **280-149116-E-10-A** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	0.80 J mg/L				
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				

RS# 12 Lab ID: **280-149116-E-11-A** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-149116-E-12-A** Inj Date: 6/1/2021 12:36:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

General Chemistry Raw Data Report

Job ID: 280-149116-1

Batch: 538145 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: 280-149116-E-14-A **Analysis Date: Jun 01, 2021 15:48**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	6/1/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00263	Prep Date:	4/26/2021
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	936
TALS ID	Na Thio_00172	Expiration Date:	8/26/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.30	20	8.30	936.000
CAL	5	8.30	16.60	20	8.30	936.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	4/26/2021
Made By:	SAH
Concentration:	928
Expiration Date:	8/26/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.30	20	8.30	936.000
ICV	5	8.30	16.80	20	8.50	920.000

TALS Raw Data Report

Job Number: 280-149049-1
LIMS Batch: 538145
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 6 Lab ID: **280-149049-E-6-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				
Sulfide		0.8 mg/L	0.80 J mg/L				

RS# 7 Lab ID: **280-149049-E-7-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 8 Lab ID: **280-149049-E-8-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				
Sulfide		0.8 mg/L	0.80 J mg/L				

RS# 9 Lab ID: **280-149049-E-9-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				
Sulfide		0.8 mg/L	0.80 J mg/L				

RS# 10 Lab ID: **280-149049-E-10-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				
Sulfide		0.8 mg/L	0.80 J mg/L				

RS# 11 Lab ID: **280-149049-E-11-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				
Sulfide		999999968 mg/L	0.80 J mg/L				

RS# 12 Lab ID: **280-149049-E-12-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				
Sulfide		0.8 mg/L	0.80 J mg/L				

TALS Raw Data Report

Job Number: 280-149110-1
LIMS Batch: 538145
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-538121/1-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		11.9 mg/L	mg/L				
Sulfide		11.2 mg/L	mg/L	60	44 110		

RS# 2 Lab ID: **MB 280-538121/2-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 3 Lab ID: **280-149110-C-3-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

RS# 4 Lab ID: **280-149110-C-3-B MS** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		9.35 mg/L	mg/L				
Sulfide		8.8 mg/L	mg/L	47	44 110		

RS# 5 Lab ID: **280-149110-C-3-C MSD** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		11.9 mg/L	mg/L				
Sulfide		11.2 mg/L	mg/L	60	44 110	24	20

TALS Raw Data Report

Job Number: 280-149116-1
LIMS Batch: 538145
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 13 Lab ID: **280-149116-E-14-A** Inj Date: 6/1/2021 3:48:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide as H2S		0 mg/L	2.0 U mg/L				
Sulfide		0 mg/L	1.9 U mg/L				

General Chemistry Raw Data Report

Job ID: 280-149116-1

Batch: 538293 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-538266/1-A **Analysis Date: Jun 02, 2021 13:47**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	12	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-538266/2-A **Analysis Date: Jun 02, 2021 13:47**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-149116-E-15-A **Analysis Date: Jun 02, 2021 13:47**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	6/2/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00263	Prep Date:	4/26/2021
Normality:	0.025	Made By:	SAH
Solution 2:	sodium thiosulfate	Concentration:	924
TALS ID	Na Thio_00172	Expiration Date:	8/26/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch Ind_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.50	20	8.50	920.000
CAL	5	8.50	16.90	20	8.40	928.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	4/26/2021
Made By:	SAH
Concentration:	908
Expiration Date:	8/26/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.60	20	8.60	912.000
ICV	5	8.60	17.30	20	8.70	904.000

TALS Raw Data Report

Job Number: 280-149116-1
LIMS Batch: 538293
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-538266/1-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	66	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-538266/2-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-149169-C-7-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-149169-C-7-B MS** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12.8 mg/L	mg/L	70	44 110		
Sulfide as H2S		13.6 mg/L	mg/L				

RS# 5 Lab ID: **280-149169-C-7-C MSD** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12.8 mg/L	mg/L	70	44 110	0	20
Sulfide as H2S		13.6 mg/L	mg/L				

RS# 10 Lab ID: **280-149116-E-15-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

TALS Raw Data Report

Job Number: 280-149169-1
LIMS Batch: 538293
Equipment: NoEquip

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-538266/1-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	66	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-538266/2-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-149169-C-7-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-149169-C-7-B MS** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12.8 mg/L	mg/L	70	44 110		
Sulfide as H2S		13.6 mg/L	mg/L				

RS# 5 Lab ID: **280-149169-C-7-C MSD** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12.8 mg/L	mg/L	70	44 110	0	20
Sulfide as H2S		13.6 mg/L	mg/L				

RS# 6 Lab ID: **280-149169-C-3-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 7 Lab ID: **280-149169-C-4-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-149169-C-5-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 9 Lab ID: **280-149169-C-6-A** Inj Date: 6/2/2021 1:47:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	0.80 J mg/L				
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-202
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-Jun-2021 20:12:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-002
Misc. Info.: 280-0102337-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 09:59:28 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: jindaratc Date: 14-Jun-2021 20:46:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.860	2.863	-0.003	5384407	0.2000	0.2107	M
2 Chloride	3.980	4.002	-0.022	12599180	1.00	1.04	
3 Nitrite as N	4.670	4.650	0.020	5145043	NC	NC	
4 Bromide	5.788	5.752	0.036	957955	0.2000	0.2322	
5 Nitrate as N	6.588	6.493	0.095	6350078	NC	NC	
7 Orthophosphate as P	8.145	8.117	0.028	5995987	NC	NC	
6 Sulfate	9.263	9.228	0.035	13822574	1.00	1.21	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

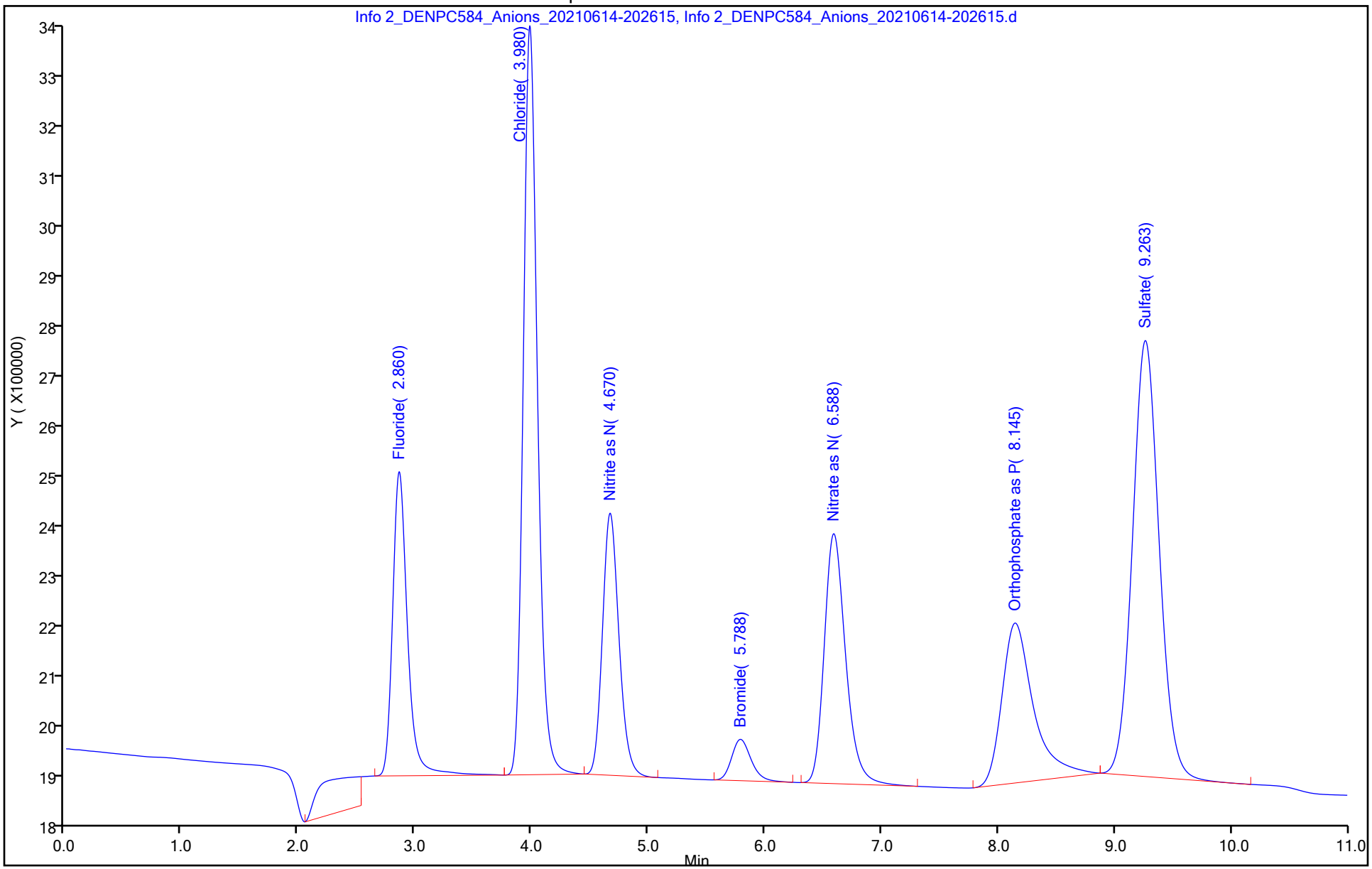
IC Cal low_00584 Amount Added: 0.04 Units: mL
IC CAL cl/so4_00370 Amount Added: 0.04 Units: mL

Report Date: 16-Jun-2021 09:59:28 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-202615.d

Injection Date:	14-Jun-2021 20:12:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-202

Injection Date: 14-Jun-2021 20:12:00 Instrument ID: WC_IonChrom13

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-IC13 Limit Group: Wet - Anions 28D

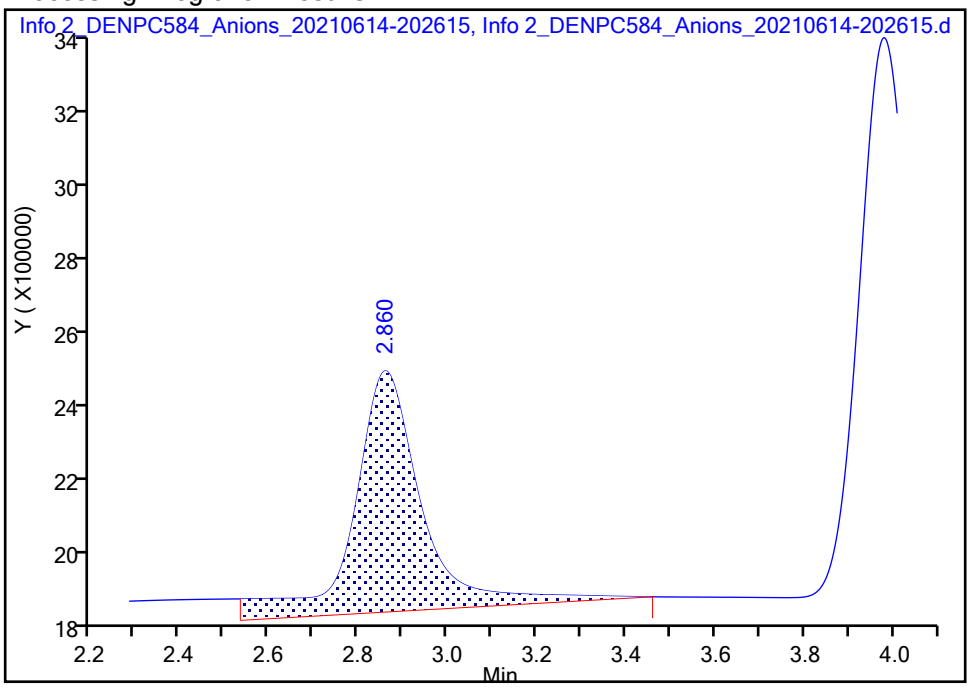
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

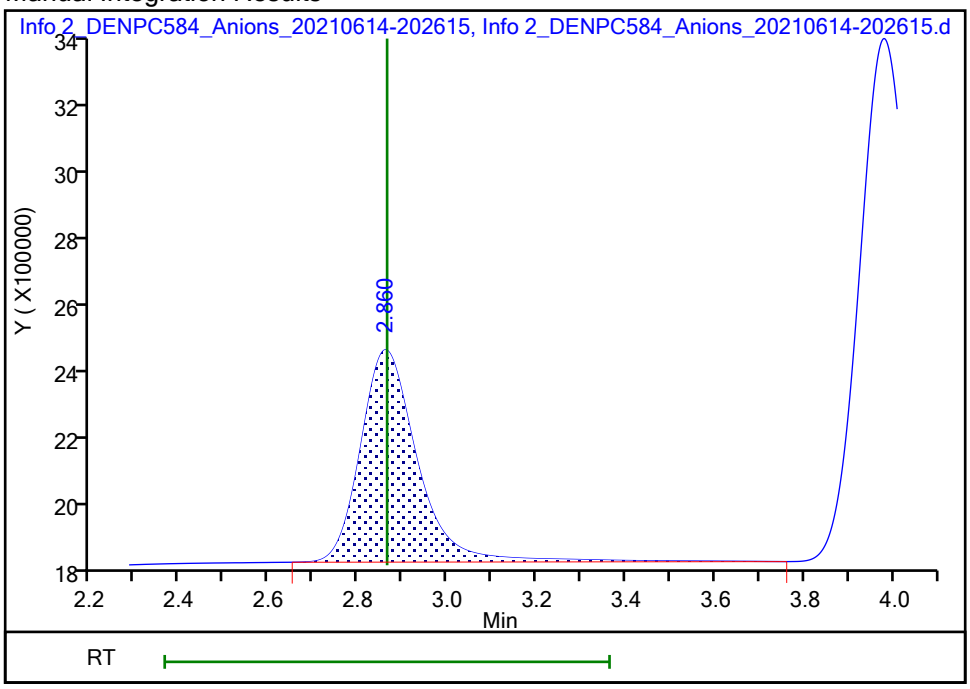
Processing Integration Results

RT: 2.86
Area: 6895209
Amount: 0.258042
Amount Units: ug/ml



Manual Integration Results

RT: 2.86
Area: 5384407
Amount: 0.210750
Amount Units: ug/ml



Reviewer: battilloj, 15-Jun-2021 12:20:58

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-204
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-Jun-2021 20:26:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-003
Misc. Info.: 280-0102337-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 09:59:28 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: jindaratc Date: 14-Jun-2021 21:13:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.860	2.863	-0.003	12732892	0.5000	0.4684	M
2 Chloride	3.977	4.002	-0.025	33698108	2.50	2.41	M
3 Nitrite as N	4.663	4.650	0.013	13713468	NC	NC	M
4 Bromide	5.775	5.752	0.023	2404398	0.5000	0.4799	
5 Nitrate as N	6.560	6.493	0.067	16729100	NC	NC	M
7 Orthophosphate as P	8.137	8.117	0.020	10556138	NC	NC	
6 Sulfate	9.263	9.228	0.035	23760017	2.50	2.11	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

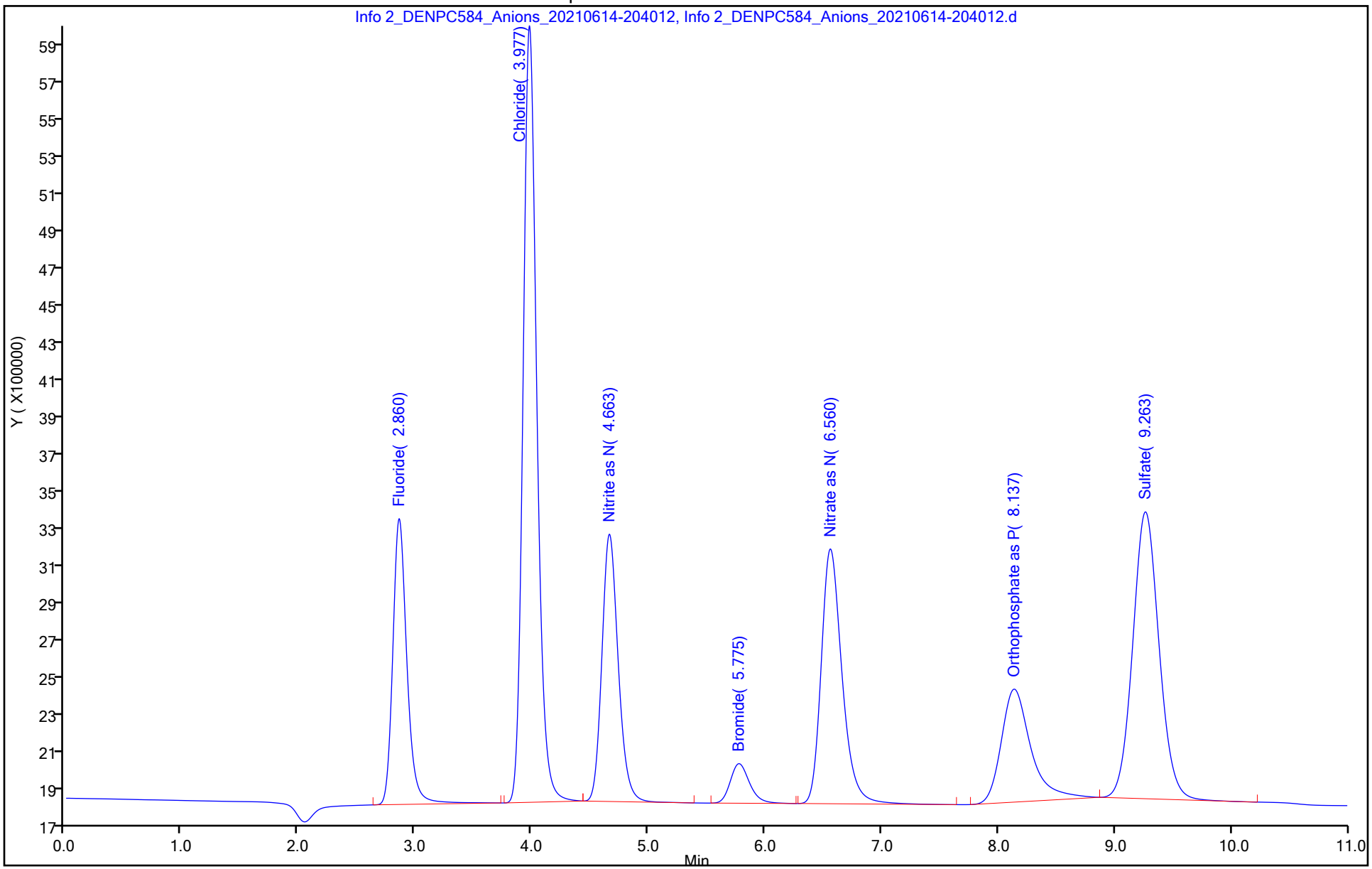
Reagents:

IC Cal low_00584 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00370 Amount Added: 0.10 Units: mL

Report Date: 16-Jun-2021 09:59:29 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-204012.d				
Injection Date:	14-Jun-2021 20:26:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-204

Injection Date: 14-Jun-2021 20:26:00 Instrument ID: WC_IonChrom13

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-IC13 Limit Group: Wet - Anions 28D

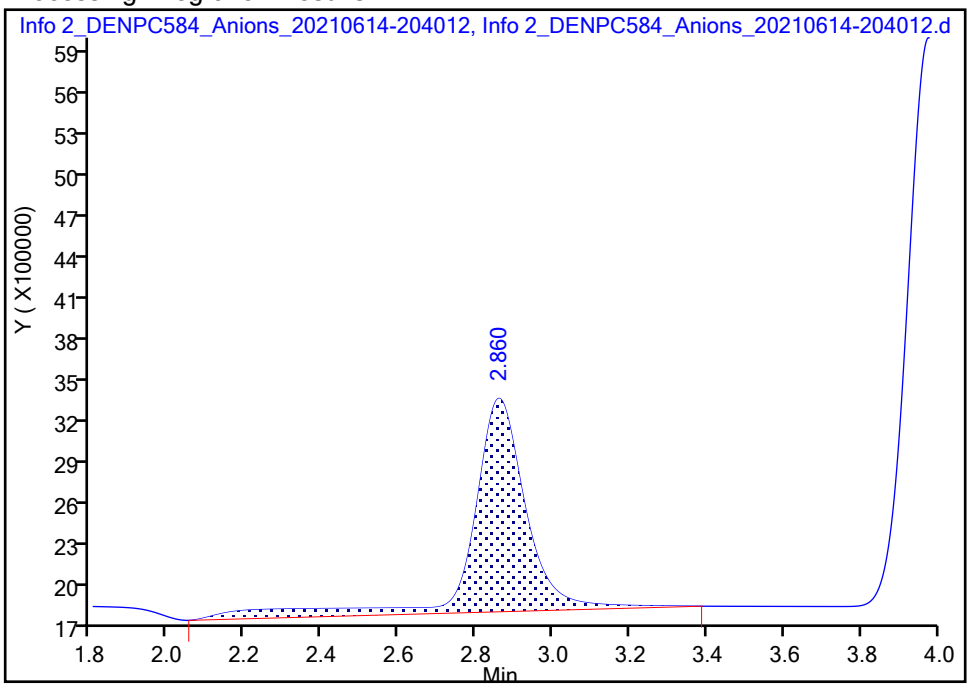
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

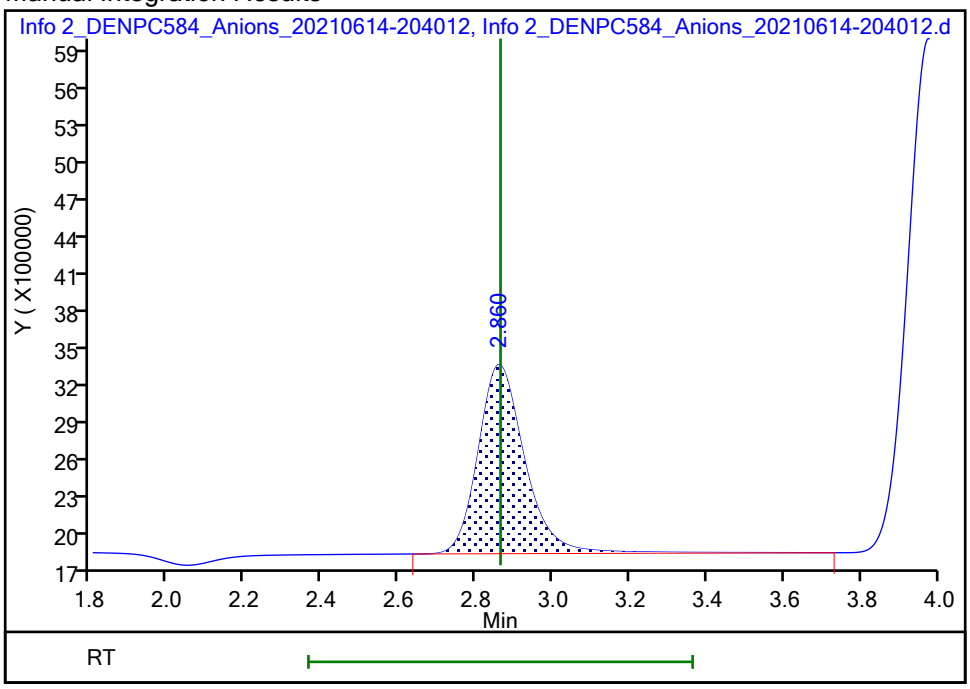
Processing Integration Results

RT: 2.86
Area: 15341692
Amount: 0.535335
Amount Units: ug/ml



Manual Integration Results

RT: 2.86
Area: 12732892
Amount: 0.468432
Amount Units: ug/ml



Reviewer: battilloj, 15-Jun-2021 12:21:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-204

Injection Date: 14-Jun-2021 20:26:00 Instrument ID: WC_IonChrom13

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-IC13 Limit Group: Wet - Anions 28D

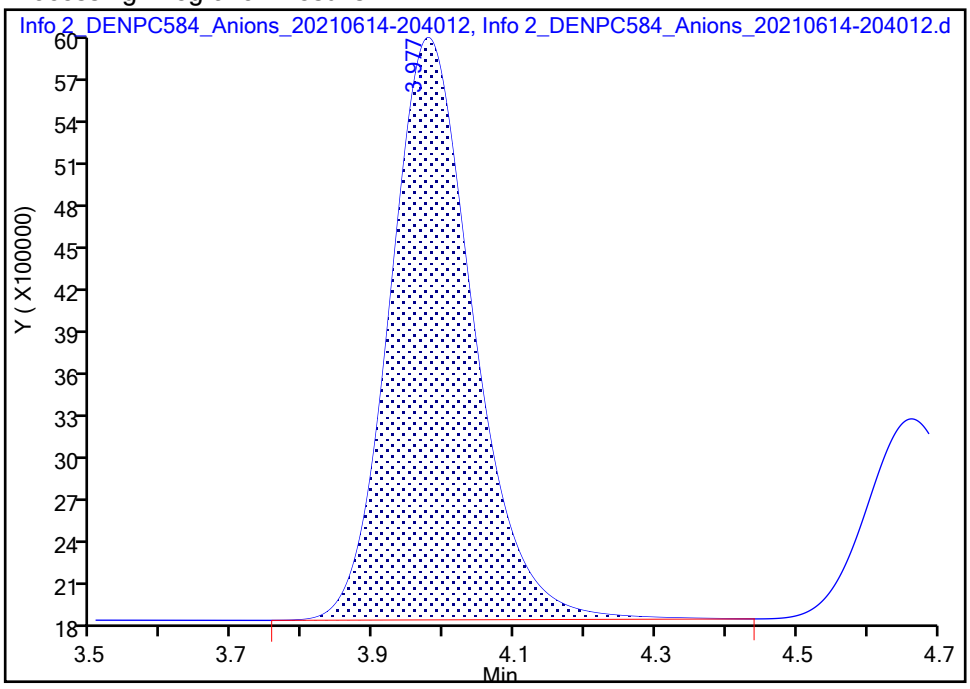
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

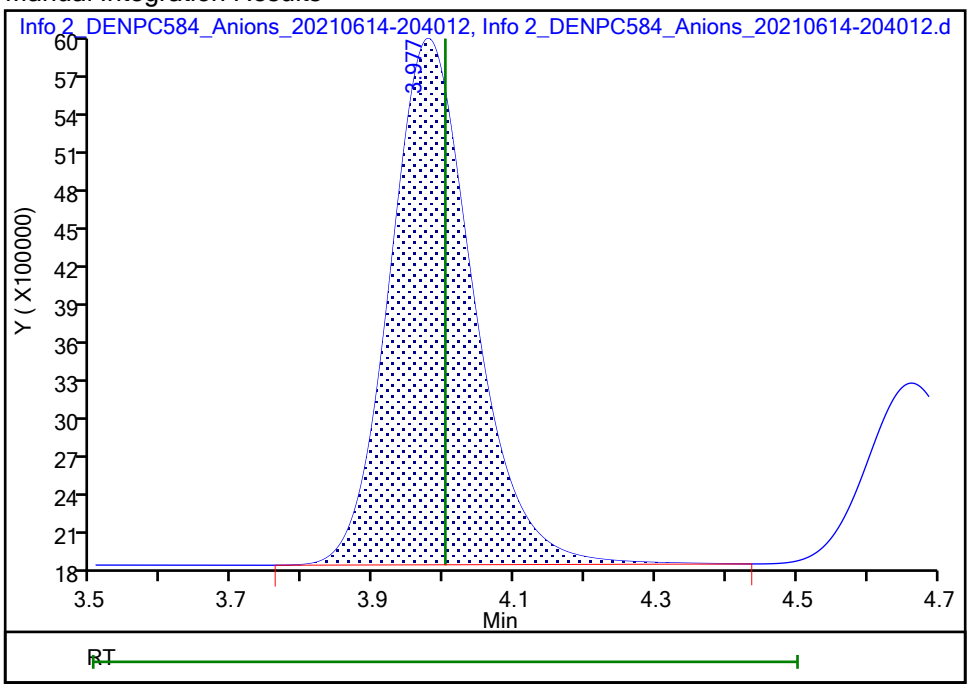
Processing Integration Results

RT: 3.98
Area: 33696130
Amount: 2.413930
Amount Units: ug/ml



Manual Integration Results

RT: 3.98
Area: 33698108
Amount: 2.414972
Amount Units: ug/ml



Reviewer: battilloj, 15-Jun-2021 12:21:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-205
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-Jun-2021 20:40:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-004
Misc. Info.: 280-0102337-004
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 09:59:29 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: jindaratc Date: 14-Jun-2021 21:13:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.860	2.863	-0.003	27350620	1.00	0.9810	M
2 Chloride	3.975	4.002	-0.027	71440931	5.00	4.88	
3 Nitrite as N	4.660	4.650	0.010	29002297	NC	NC	
4 Bromide	5.768	5.752	0.016	4888534	1.00	0.9051	
5 Nitrate as N	6.538	6.493	0.045	35410514	NC	NC	M
7 Orthophosphate as P	8.137	8.117	0.020	20657043	NC	NC	
6 Sulfate	9.267	9.228	0.039	50905539	5.00	4.57	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

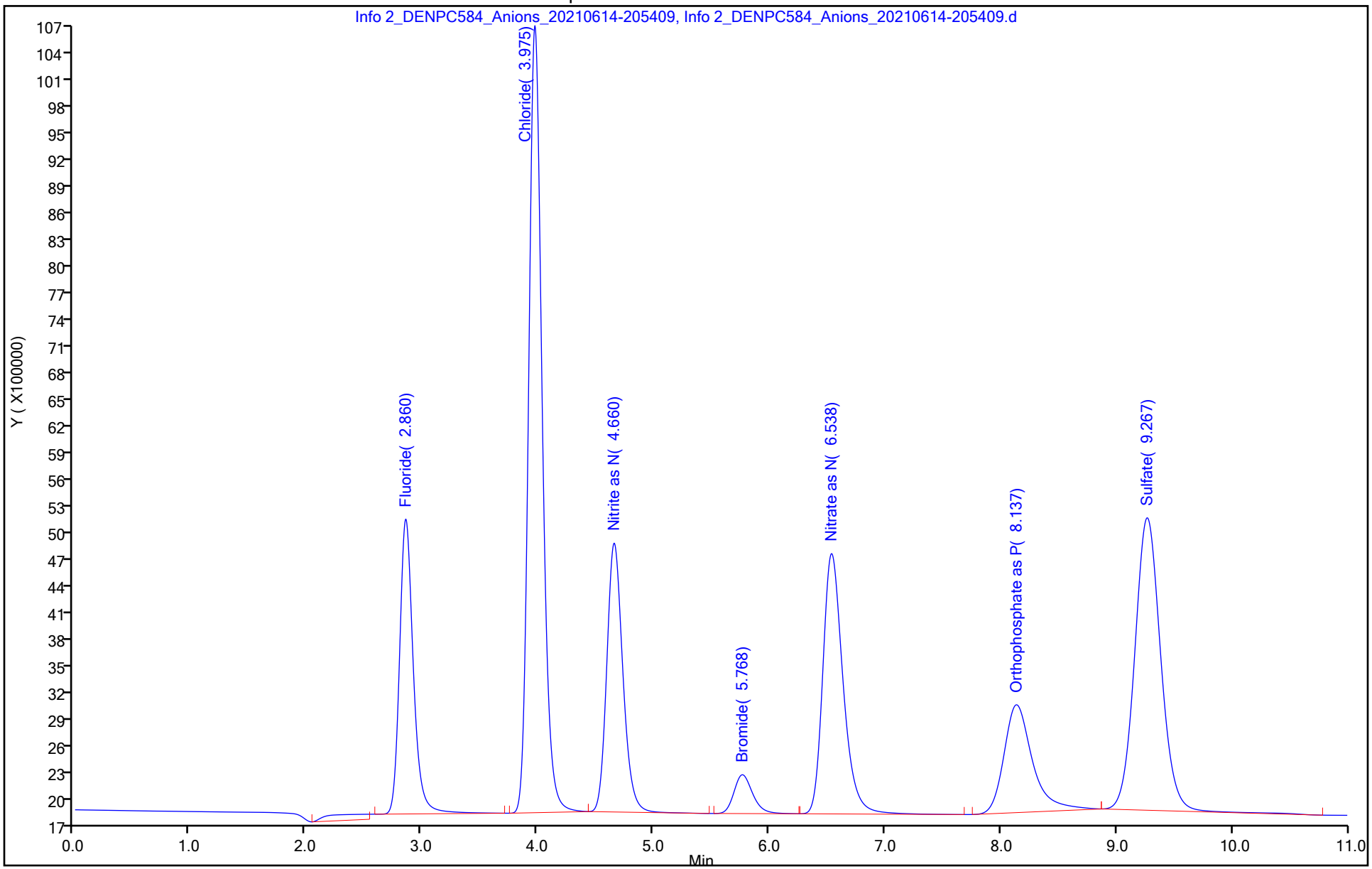
Reagents:

IC Cal low_00584 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00370 Amount Added: 0.20 Units: mL

Report Date: 16-Jun-2021 09:59:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-205409.d				
Injection Date:	14-Jun-2021 20:40:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-205

Injection Date: 14-Jun-2021 20:40:00 Instrument ID: WC_IonChrom13

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-IC13 Limit Group: Wet - Anions 28D

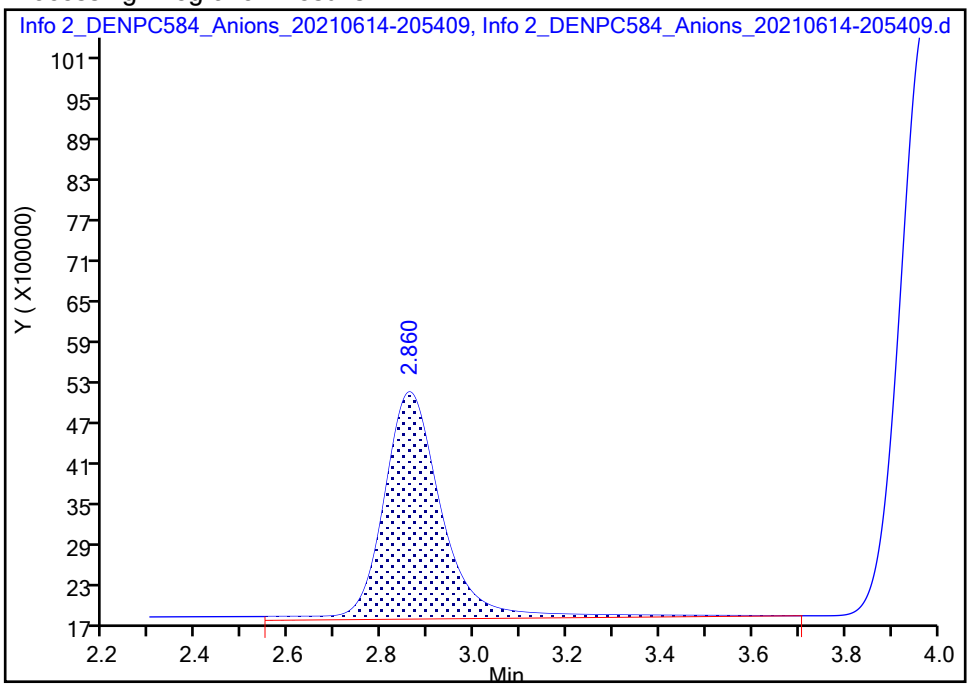
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

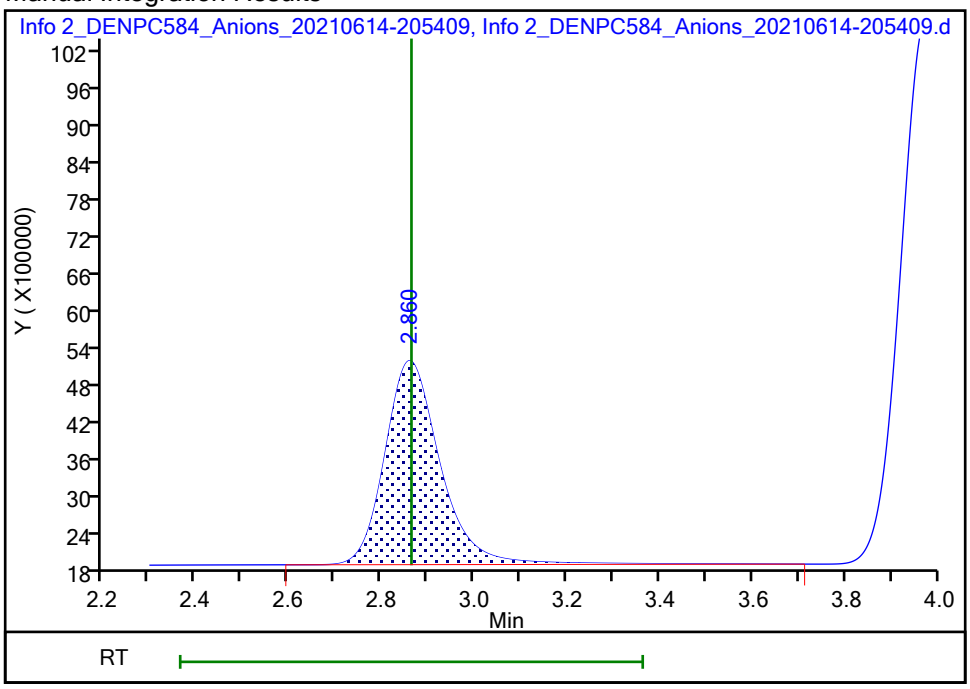
Processing Integration Results

RT: 2.86
Area: 29286333
Amount: 1.078269
Amount Units: ug/ml



Manual Integration Results

RT: 2.86
Area: 27350620
Amount: 0.981017
Amount Units: ug/ml



Reviewer: jindaratc, 14-Jun-2021 21:13:17

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-210
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-Jun-2021 20:54:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-005
Misc. Info.: 280-0102337-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 09:59:30 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: jindaratc Date: 14-Jun-2021 21:13:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.870	2.870	0.000	118723808	4.00	4.19	M
2 Chloride	3.993	3.993	0.000	936627782	60.0	61.3	
3 Nitrite as N	4.655	4.655	0.000	126852503	NC	NC	M
4 Bromide	5.750	5.750	0.000	21794803	4.00	3.80	
5 Nitrate as N	6.485	6.485	0.000	160084688	NC	NC	
7 Orthophosphate as P	8.125	8.125	0.000	74965943	NC	NC	
6 Sulfate	9.242	9.242	0.000	680499542	60.0	61.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

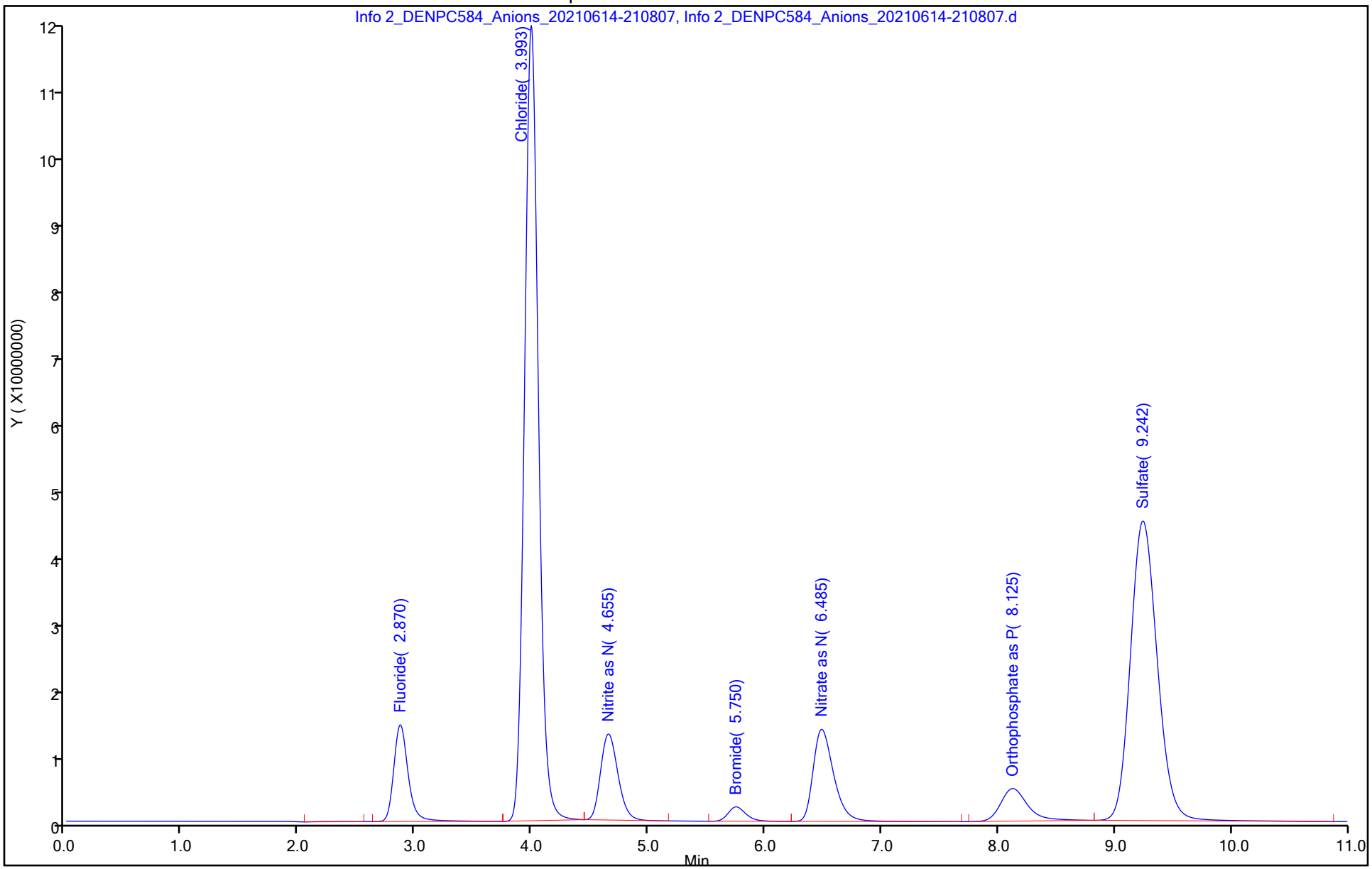
IC Cal low_00584 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00370 Amount Added: 2.40 Units: mL

Report Date: 16-Jun-2021 09:59:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-210807.d

Injection Date:	14-Jun-2021 20:54:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-210

Injection Date: 14-Jun-2021 20:54:00 Instrument ID: WC_IonChrom13

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-IC13 Limit Group: Wet - Anions 28D

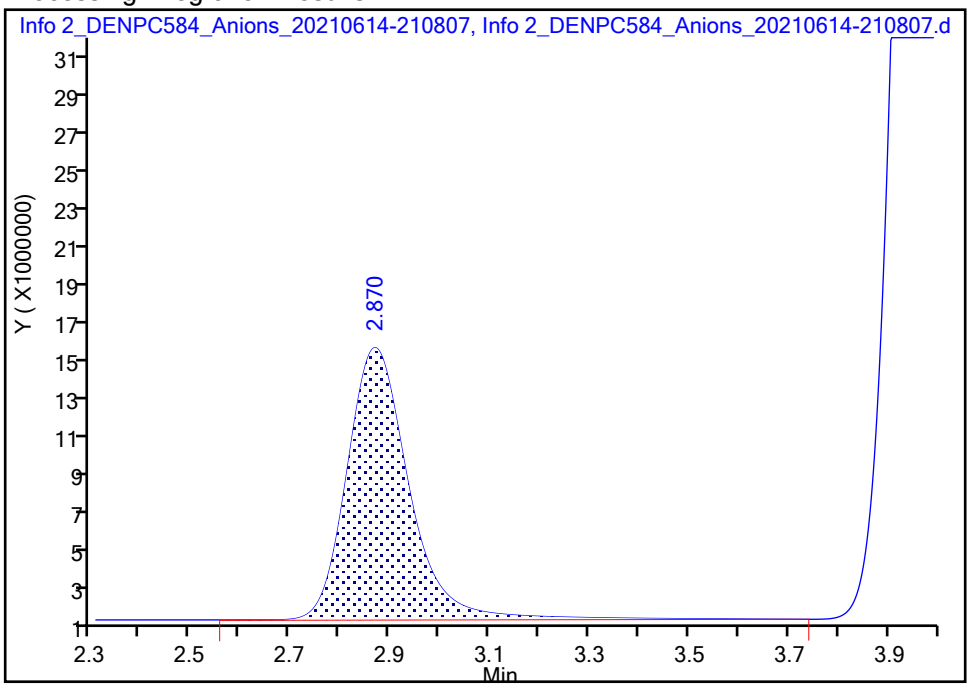
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

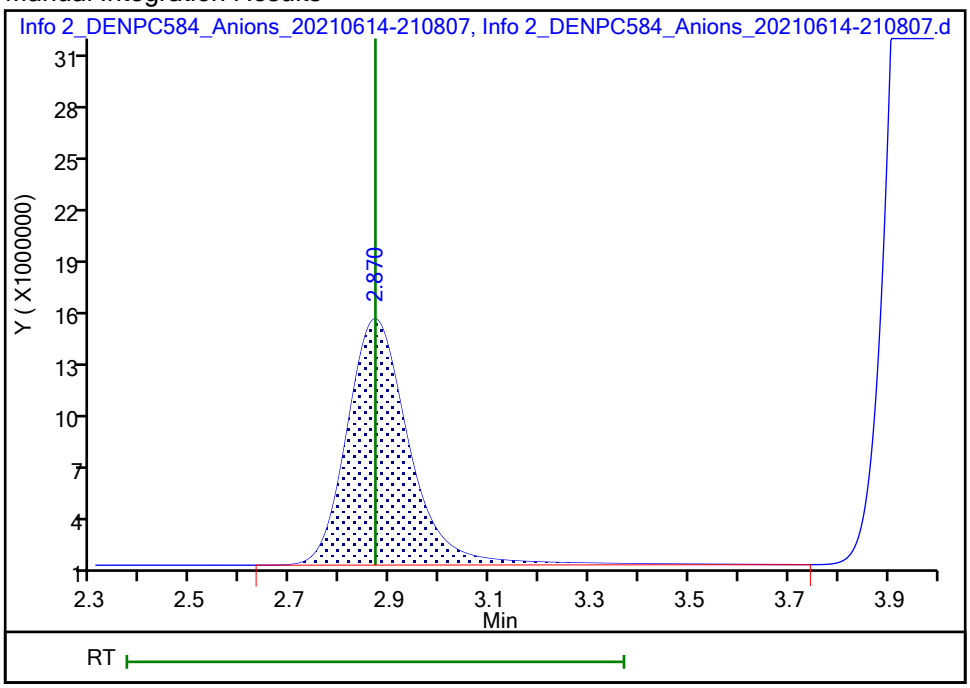
Processing Integration Results

RT: 2.87
Area: 119471368
Amount: 4.444804
Amount Units: ug/ml



Manual Integration Results

RT: 2.87
Area: 118723808
Amount: 4.185109
Amount Units: ug/ml



Reviewer: jindaratc, 14-Jun-2021 21:13:36

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-212
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-Jun-2021 21:08:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-006
Misc. Info.: 280-0102337-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 09:59:31 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 15-Jun-2021 12:23:23

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.872	2.872	0.000	223663015	8.00	7.86	
2 Chloride	4.013	4.013	0.000	1853652983	120.0	121.1	
3 Nitrite as N	4.645	4.645	0.000	247795217	NC	NC	M
4 Bromide	5.738	5.738	0.000	45353272	8.00	7.83	
5 Nitrate as N	6.452	6.452	0.000	324500815	NC	NC	
7 Orthophosphate as P	8.108	8.108	0.000	139775263	NC	NC	
6 Sulfate	9.213	9.213	0.000	1341533831	120.0	121.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

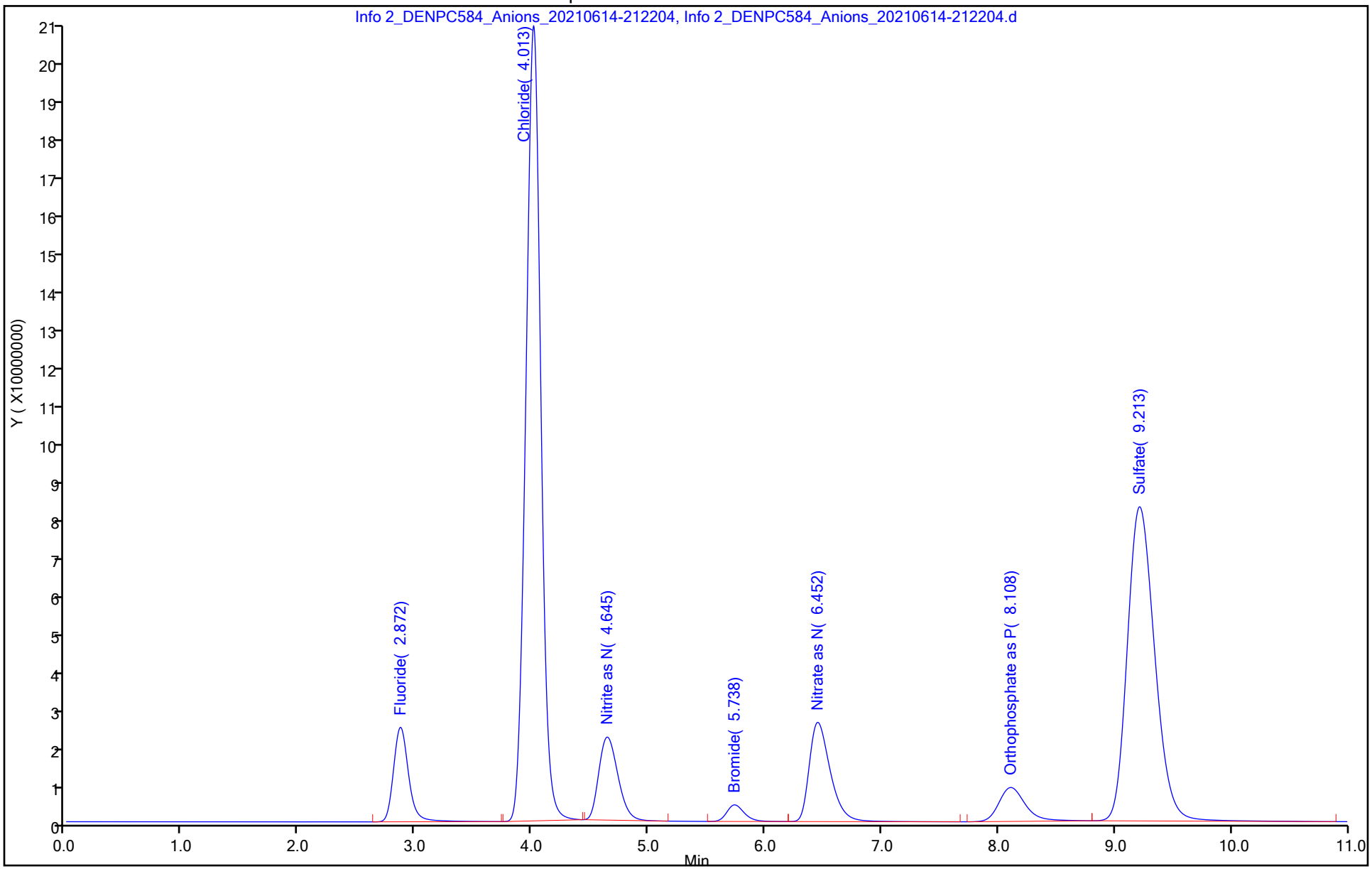
Reagents:

IC Cal low_00584 Amount Added: 1.60 Units: mL
IC CAL cl/so4_00370 Amount Added: 4.80 Units: mL

Report Date: 16-Jun-2021 09:59:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-212204.d				
Injection Date:	14-Jun-2021 21:08:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-Jun-2021 21:22:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-007
Misc. Info.: 280-0102337-007
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 09:59:31 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 15-Jun-2021 12:23:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.873	2.872	0.001	284259512	10.0	9.99	
2 Chloride	4.043	4.013	0.030	3027862990	200.0	197.7	
3 Nitrite as N	4.642	4.645	-0.003	317302558	NC	NC	M
4 Bromide	5.737	5.738	-0.001	60651788	10.0	10.5	
5 Nitrate as N	6.443	6.452	-0.009	425880721	NC	NC	
7 Orthophosphate as P	8.103	8.108	-0.005	179623391	NC	NC	
6 Sulfate	9.188	9.213	-0.025	2181280835	200.0	197.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

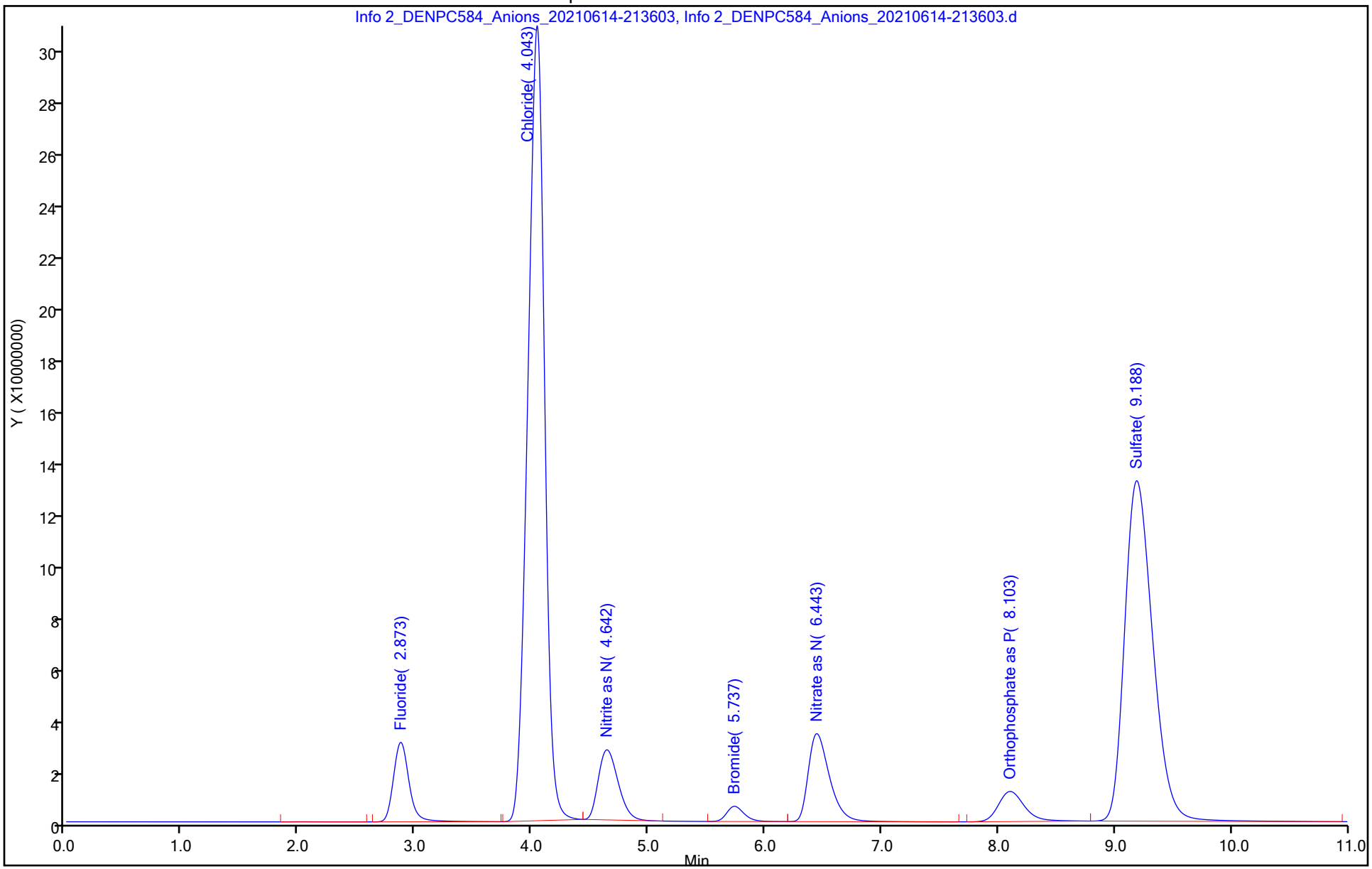
Reagents:

IC Cal low_00584 Amount Added: 2.00 Units: mL
IC CAL cl/so4_00370 Amount Added: 8.00 Units: mL

Report Date: 16-Jun-2021 09:59:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213603.d				
Injection Date:	14-Jun-2021 21:22:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 102337 **Inst ID:** IC13 **Analysis Date:** 06/15/21 **Analyst:** JMB

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	149049	1-12	F Cl NO2 Br NO3 PO4 **SO4**	**MS/D** 3	
☐	149116	1-5 9-13	F Cl NO2 Br NO3 PO4 **SO4**	**MS/D** 13	
☐	148964	1-14	F Cl NO2 Br NO3 PO4 **SO4**	MS/D	
☐	149081	1-2	F Cl NO2 Br NO3 PO4 **SO4**	MS/D	
☐			F Cl NO2 Br NO3 PO4 **SO4**	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
049	2, 12	F Cl NO2 Br NO3 PO4 SO4	10, 5x	Test
116	1, 2, 13	F Cl NO2 Br NO3 PO4 SO4	2, 10x	Test
964	9, 10, 11, 12, 13, 14, 1	F Cl NO2 Br NO3 PO4 SO4	2, 5, 10x	Test
081	2	F Cl NO2 Br NO3 PO4 SO4	2x	Test
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Jun-2021 09:56:38
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b
Inj Date : 14-Jun-2021 20:12:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-625687	285176E		0.999
2 Chloride					-332416	1533031		1.000
3 Nitrite as N	-154135	3160587		1.000				
4 Bromide					-398660	5841465		0.998
5 Nitrate as N	-309291	4166723		0.999				
7 Orthophosphate as P	239588E	1760331		0.999				
6 Sulfate					424461	1104055		0.999

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Jun-2021 09:56:38

No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.933 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20261		
	Inj Date: 14-Jun-2021 20:12:00	Worklist: 102337	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20401		
	Inj Date: 14-Jun-2021 20:26:00	Worklist: 102337	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20540		
	Inj Date: 14-Jun-2021 20:40:00	Worklist: 102337	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21080		
	Inj Date: 14-Jun-2021 20:54:00	Worklist: 102337	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21220		
	Inj Date: 14-Jun-2021 21:08:00	Worklist: 102337	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21360		
	Inj Date: 14-Jun-2021 21:22:00	Worklist: 102337	Sample#: 7

Start Cal Date: 14-Jun-2021 20:12:00 End Cal Date: 14-Jun-2021 21:22:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: CorrCoef	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					
Error: raw_COD									
26922035	25465784	27350620	29680952	27957877	28425951	-625687			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		28517653		
M5384407	M12732892	M27350620	M118723808	223663015	284259512				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
2 Chloride				Signal: 1					
12599180	13479243	14288186	15610463	15447108	15139315	-3324164			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15330314		
12599180	M33698108	71440931	936627782	1853652983	3027862990				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
4 Bromide				Signal: 1					
4789775	4808796	4888534	5448701	5669159	6065179	-398660			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5841465		
957955	2404398	4888534	21794803	45353272	60651788				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
13822574	9504007	10181108	11341659	11179449	10906404	424461			0.999
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11040555		
13822574	23760017	50905539	680499542	1341533831	2181280835				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Jun-2021 09:56:38
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.933 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20261
Inj Date: 14-Jun-2021 20:12:00 Worklist: 102337 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20401
Inj Date: 14-Jun-2021 20:26:00 Worklist: 102337 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20540
Inj Date: 14-Jun-2021 20:40:00 Worklist: 102337 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21080
Inj Date: 14-Jun-2021 20:54:00 Worklist: 102337 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21220
Inj Date: 14-Jun-2021 21:08:00 Worklist: 102337 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21360
Inj Date: 14-Jun-2021 21:22:00 Worklist: 102337 Sample#: 7

Start Cal Date: 14-Jun-2021 20:12:00 End Cal Date: 14-Jun-2021 21:22:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
25725215	27426936	29002297	31713126	30974402	31730256	-1541359			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		31605875		
5145043	M13713468	29002297	M126852503	M247795217	M317302558				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
31750390	33458200	35410514	40021172	40562602	42588072	-3092913			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		41667232		
6350078	M16729100	M35410514	160084688	324500815	425880721				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
7 Orthophosphate as P				Signal: 1					
29979935	21112276	20657043	18741486	17471908	17962339	2395885			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		17603310		
5995987	10556138	20657043	74965943	139775263	179623391				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-215
Lims ID: icb
Client ID:
Sample Type: ICB
Inject. Date: 14-Jun-2021 21:36:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-008
Misc. Info.: 280-0102337-008
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:05 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 16-Jun-2021 09:48:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.873	2.863	0.010	39078		0.0233	Ma
2 Chloride		4.002				ND	
3 Nitrite as N		4.650				ND	
4 Bromide		5.752				ND	
5 Nitrate as N		6.493				ND	
7 Orthophosphate as P	8.212	8.117	0.095	224232		NC	
6 Sulfate	9.288	9.228	0.060	135934		-0.0261	Ma

QC Flag Legend

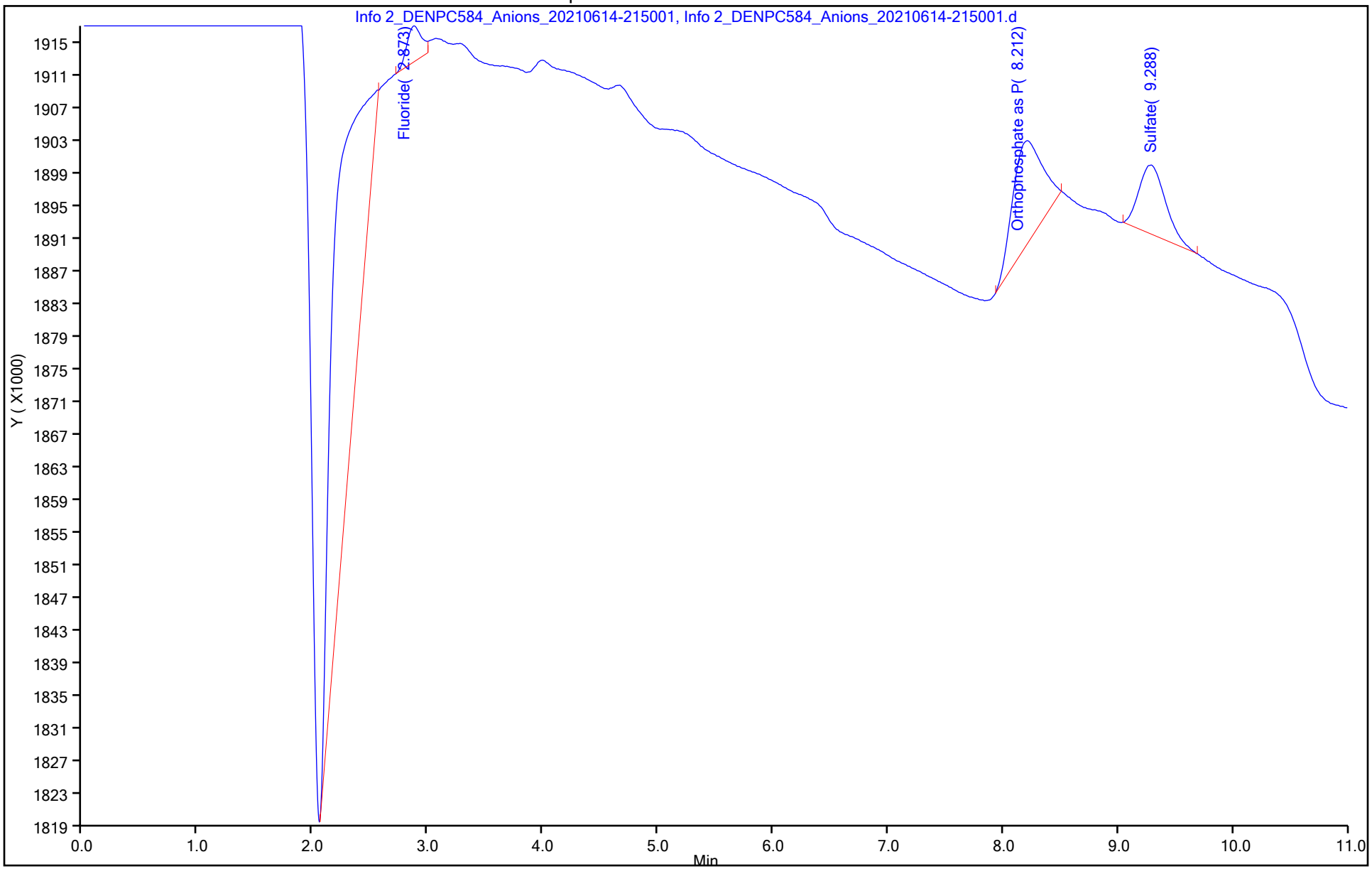
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 10:24:48 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-215001.d

Injection Date:	14-Jun-2021 21:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	icb			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

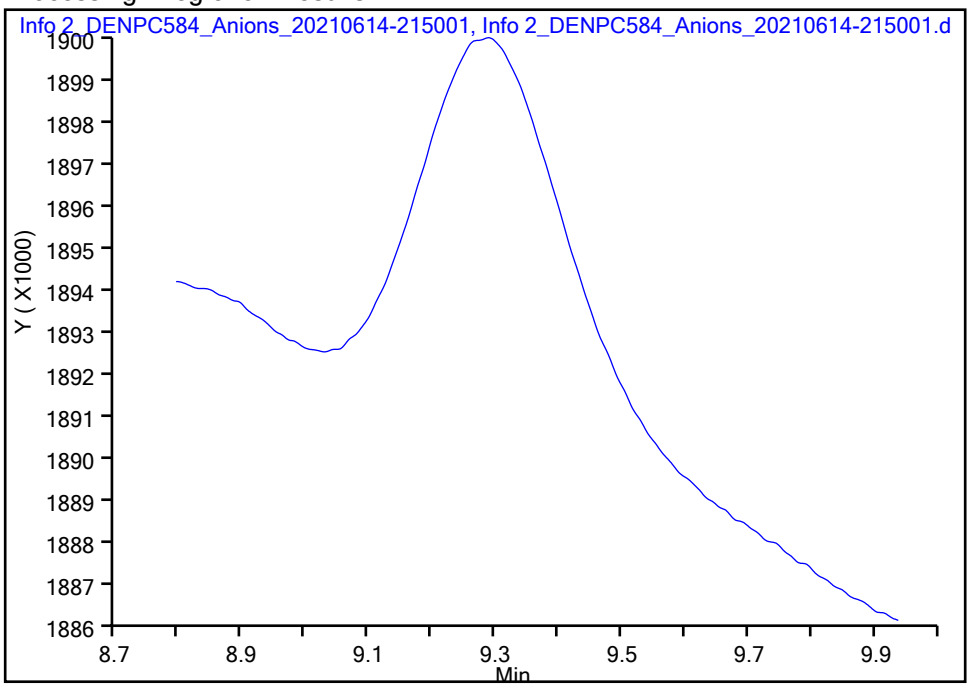
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-215
Injection Date: 14-Jun-2021 21:36:00 Instrument ID: WC_IonChrom13
Lims ID: icb
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

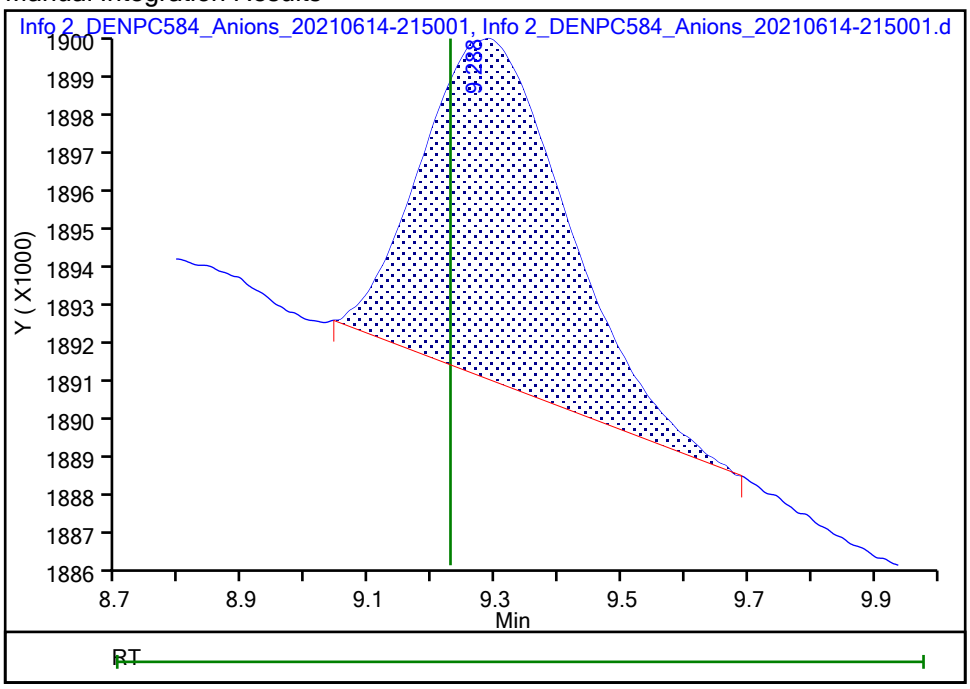
Not Detected
Expected RT: 9.23

Processing Integration Results



Manual Integration Results

RT: 9.29
Area: 135934
Amount: -0.026133
Amount Units: ug/ml



Reviewer: battilloj, 16-Jun-2021 09:47:08
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-220
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 14-Jun-2021 21:50:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-009
Misc. Info.: 280-0102337-009
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:22:09 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.863	2.863	0.000	101190547	4.00	3.57	M
2 Chloride	4.002	4.002	0.000	1242742851	80.0	81.3	
3 Nitrite as N	4.650	4.650	0.000	139358749	NC	NC	M
4 Bromide	5.752	5.752	0.000	22782909	4.00	3.97	
5 Nitrate as N	6.493	6.493	0.000	149584022	NC	NC	
7 Orthophosphate as P	8.117	8.117	0.000	66617417	NC	NC	
6 Sulfate	9.228	9.228	0.000	899732221	80.0	81.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

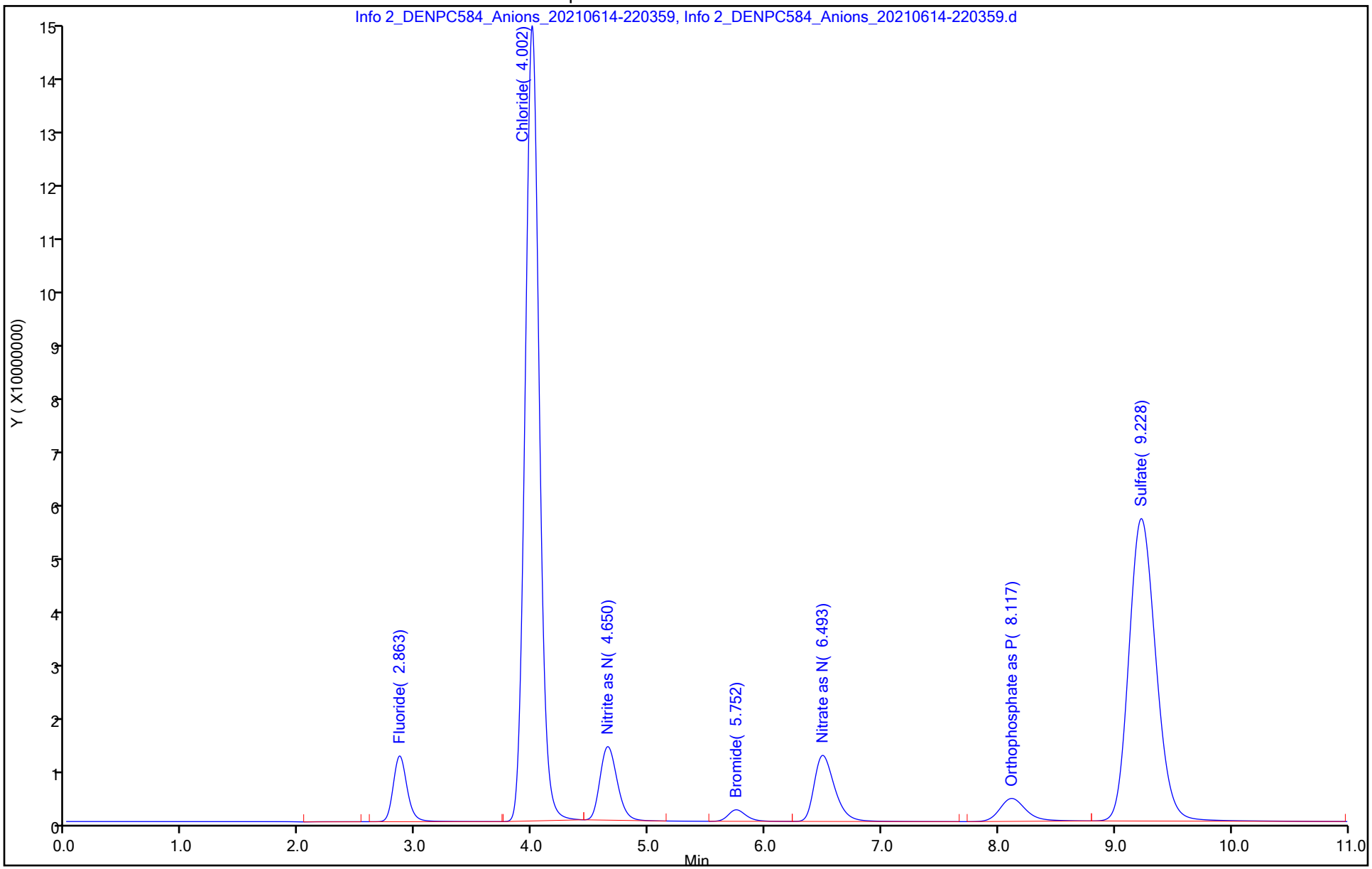
Reagents:

Cl ICV Std_00002	Amount Added:	0.80	Units: mL
IC SO4 ICV_00022	Amount Added:	0.80	Units: mL
IC ICV 5_00322	Amount Added:	0.80	Units: mL

Report Date: 16-Jun-2021 16:22:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-220359.d				
Injection Date:	14-Jun-2021 21:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	icv			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-221
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 14-Jun-2021 22:04:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-010
Misc. Info.: 280-0102337-010
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:48 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 16-Jun-2021 10:11:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.860	2.863	-0.003	12929517	0.5000	0.4753	M
2 Chloride	3.982	4.002	-0.020	69204104	5.00	4.73	
3 Nitrite as N	4.672	4.650	0.022	13499257	NC	NC	
4 Bromide	5.788	5.752	0.036	2412810	0.5000	0.4813	
5 Nitrate as N	6.577	6.493	0.084	16736945	NC	NC	
7 Orthophosphate as P	8.142	8.117	0.025	11368978	NC	NC	
6 Sulfate	9.267	9.228	0.039	51946697	5.00	4.67	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

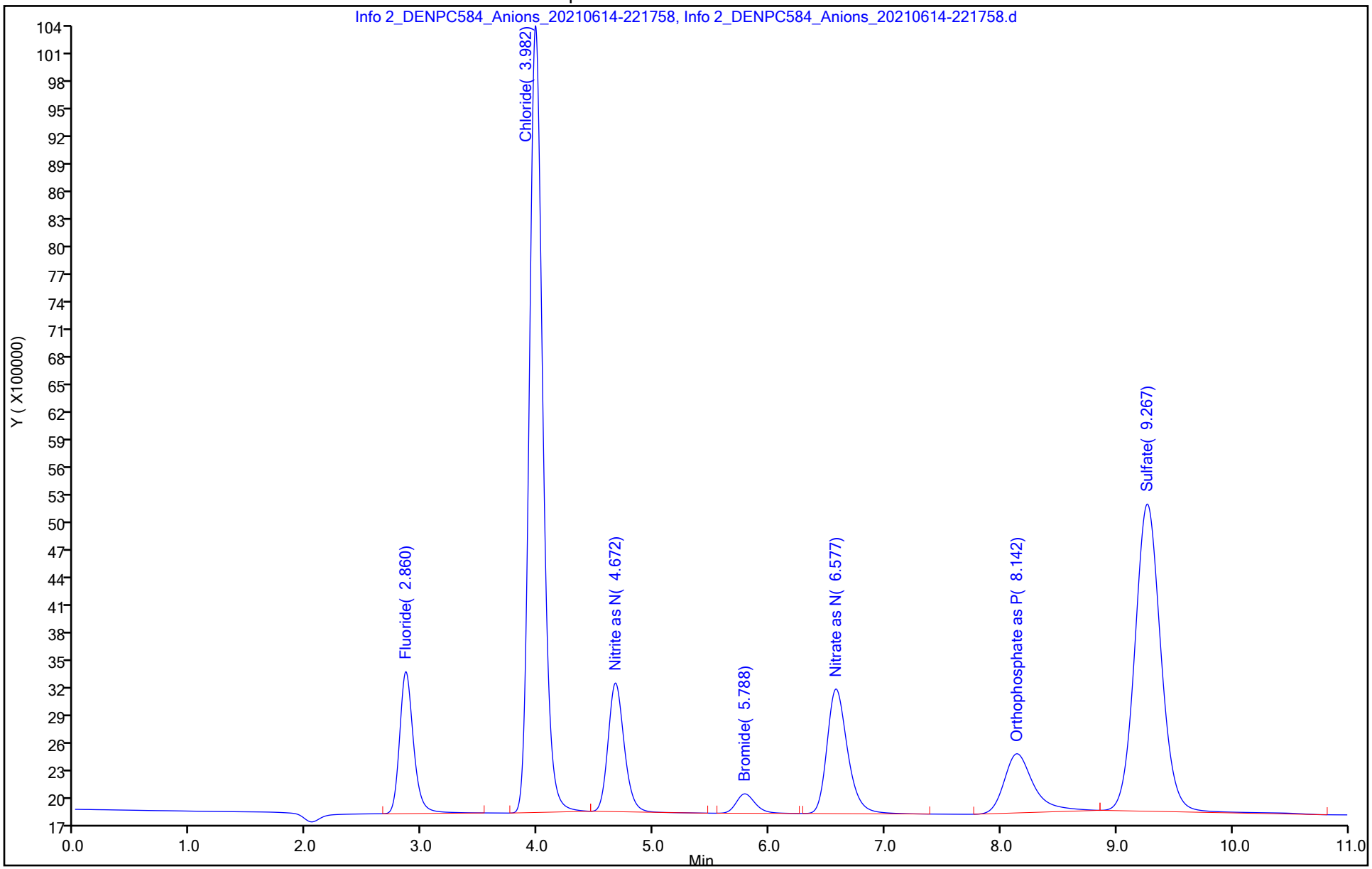
Reagents:

IC Cal low_00584 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00370 Amount Added: 0.20 Units: mL

Report Date: 16-Jun-2021 10:24:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-221758.d				
Injection Date:	14-Jun-2021 22:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	10
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-223
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Jun-2021 22:18:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-011
Misc. Info.: 280-0102337-011
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:48 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.868	2.863	0.005	146870872	5.00	5.17	
2 Chloride	4.012	4.002	0.010	1520044661	100.0	99.4	
3 Nitrite as N	4.658	4.650	0.008	161498983	NC	NC	
4 Bromide	5.762	5.752	0.010	27867932	5.00	4.84	
5 Nitrate as N	6.495	6.493	0.002	202687465	NC	NC	
7 Orthophosphate as P	8.115	8.117	-0.002	91257466	NC	NC	
6 Sulfate	9.222	9.228	-0.006	1141509389	100.0	103.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

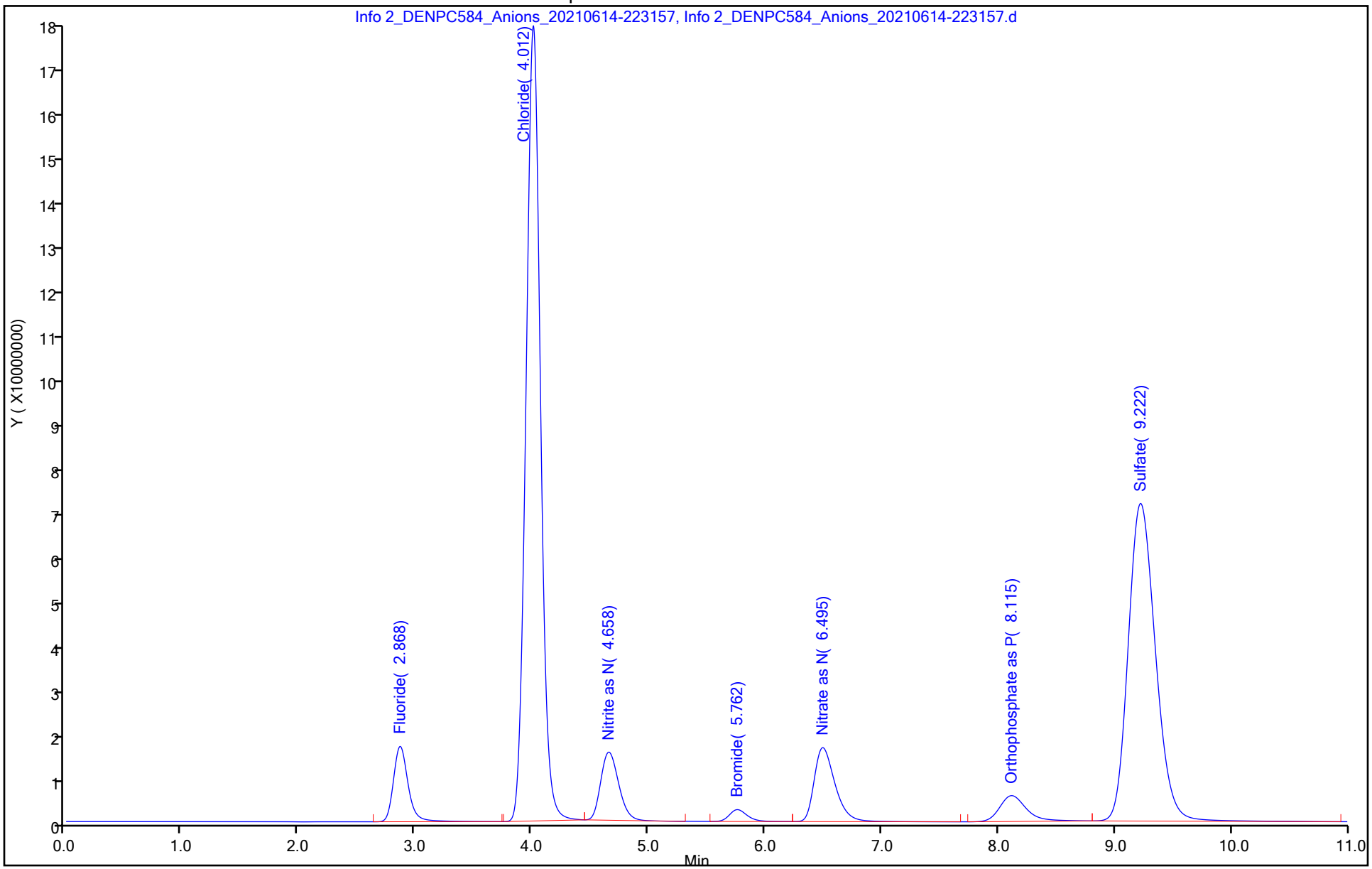
Reagents:

IC LCS_01814 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 10:24:49 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-223157.d				
Injection Date:	14-Jun-2021 22:18:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	11
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-224
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 14-Jun-2021 22:31:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-012
Misc. Info.: 280-0102337-012
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:48 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: jindaratc Date: 15-Jun-2021 13:27:28

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.867	2.863	0.004	146044506	5.00	5.14	
2 Chloride	4.012	4.002	0.010	1521136380	100.0	99.4	
3 Nitrite as N	4.660	4.650	0.010	161306269	NC	NC	
4 Bromide	5.765	5.752	0.013	27648224	5.00	4.80	
5 Nitrate as N	6.500	6.493	0.007	202331763	NC	NC	
7 Orthophosphate as P	8.115	8.117	-0.002	90473753	NC	NC	
6 Sulfate	9.222	9.228	-0.006	1141305380	100.0	103.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

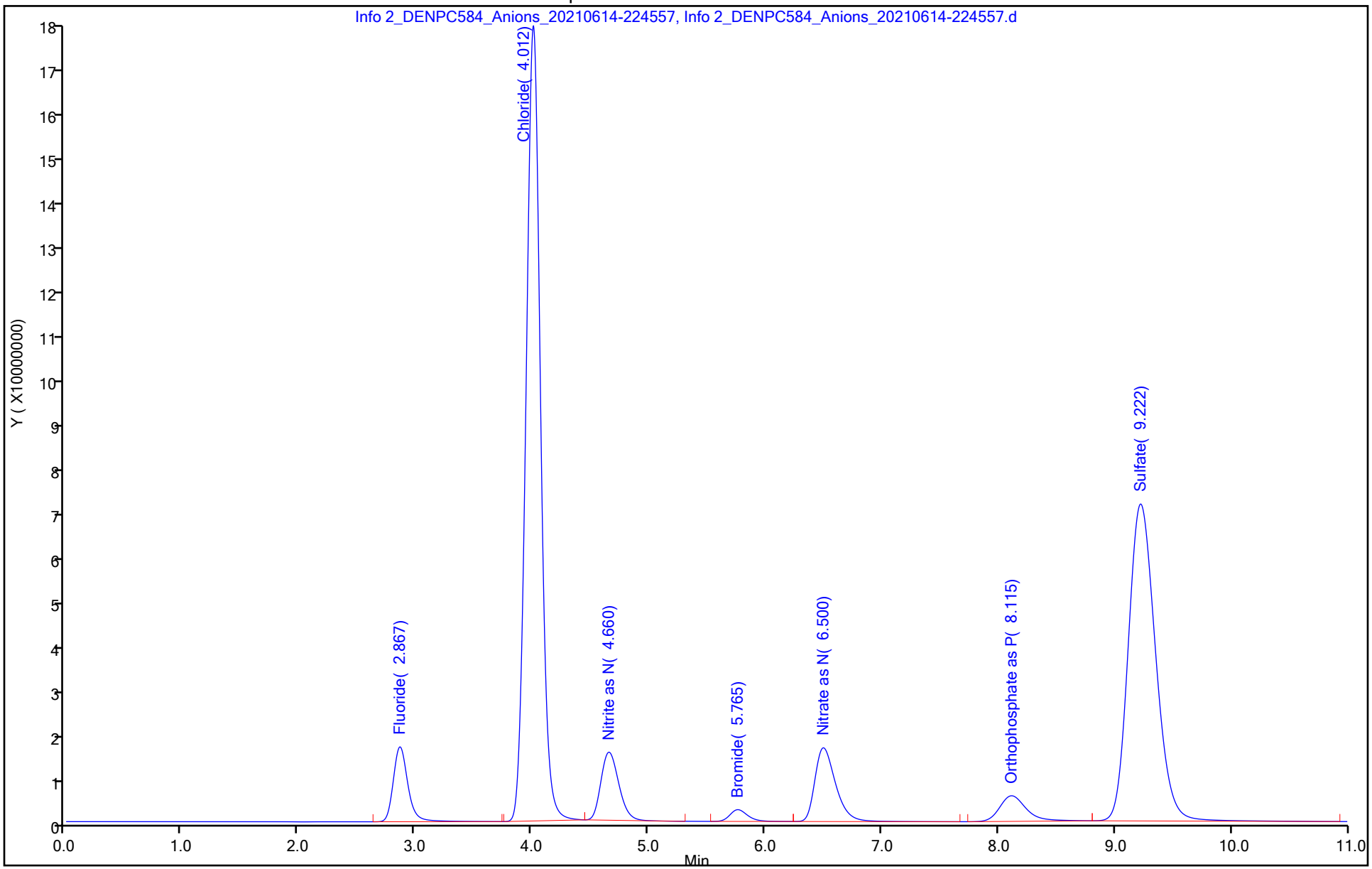
Reagents:

IC LCS_01814 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 10:24:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-224557.d				
Injection Date:	14-Jun-2021 22:31:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	12
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-225
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 14-Jun-2021 22:45:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-013
Misc. Info.: 280-0102337-013
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:48 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 16-Jun-2021 10:12:23

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.878	2.863	0.015	16795		0.0225	M
2 Chloride		4.002				ND	
3 Nitrite as N		4.650				ND	
4 Bromide		5.752				ND	
5 Nitrate as N		6.493				ND	
7 Orthophosphate as P		8.117				ND	
6 Sulfate	9.273	9.228	0.045	118907		-0.0277	Ma

QC Flag Legend

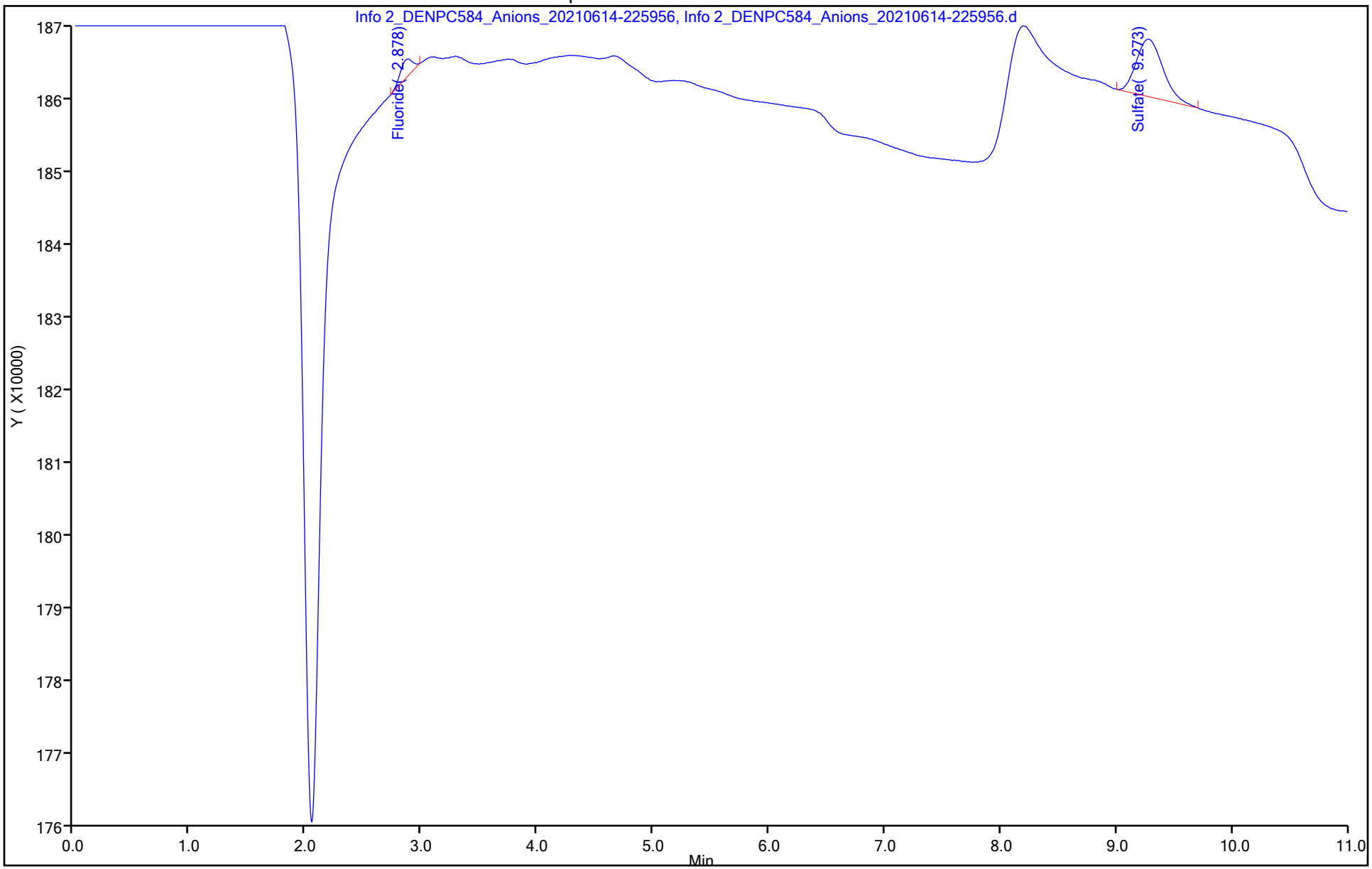
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 10:24:50 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-225956.d

Injection Date:	14-Jun-2021 22:45:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	13
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-225

Injection Date: 14-Jun-2021 22:45:00 Instrument ID: WC_IonChrom13

Lims ID: MB

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 13

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

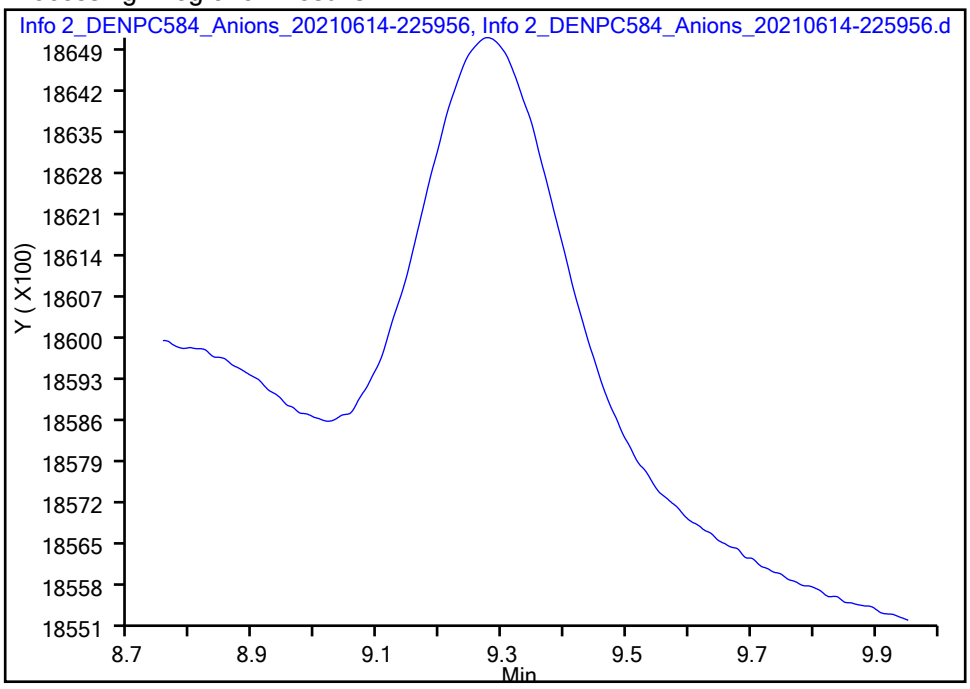
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 9.23

Processing Integration Results



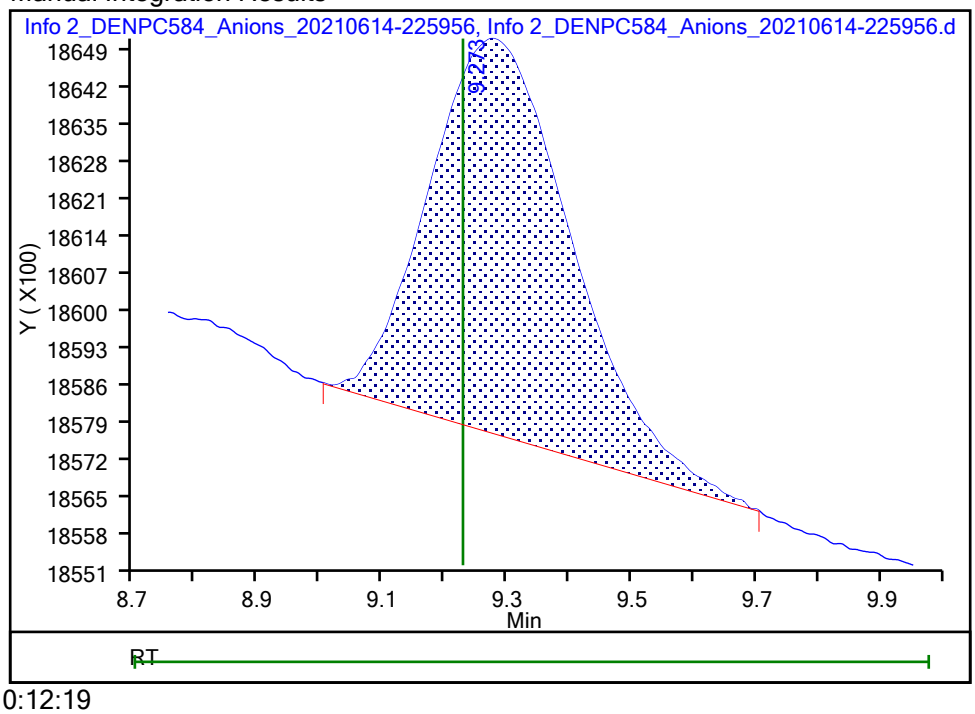
Manual Integration Results

RT: 9.27

Area: 118907

Amount: -0.027676

Amount Units: ug/ml



Reviewer: battilloj, 16-Jun-2021 10:12:19

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-174
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2021 17:32:00 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-024
Misc. Info.: 280-0102337-024
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:55 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.870	2.863	0.007	142975155	5.00	5.04	
2 Chloride	4.010	4.002	0.008	1523655957	100.0	99.6	
3 Nitrite as N	4.648	4.650	-0.002	159492597	NC	NC	
4 Bromide	5.743	5.752	-0.009	27361362	5.00	4.75	
5 Nitrate as N	6.470	6.493	-0.023	202695252	NC	NC	
7 Orthophosphate as P	8.152	8.117	0.035	90414859	NC	NC	
6 Sulfate	9.262	9.228	0.034	1139237910	100.0	103.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated

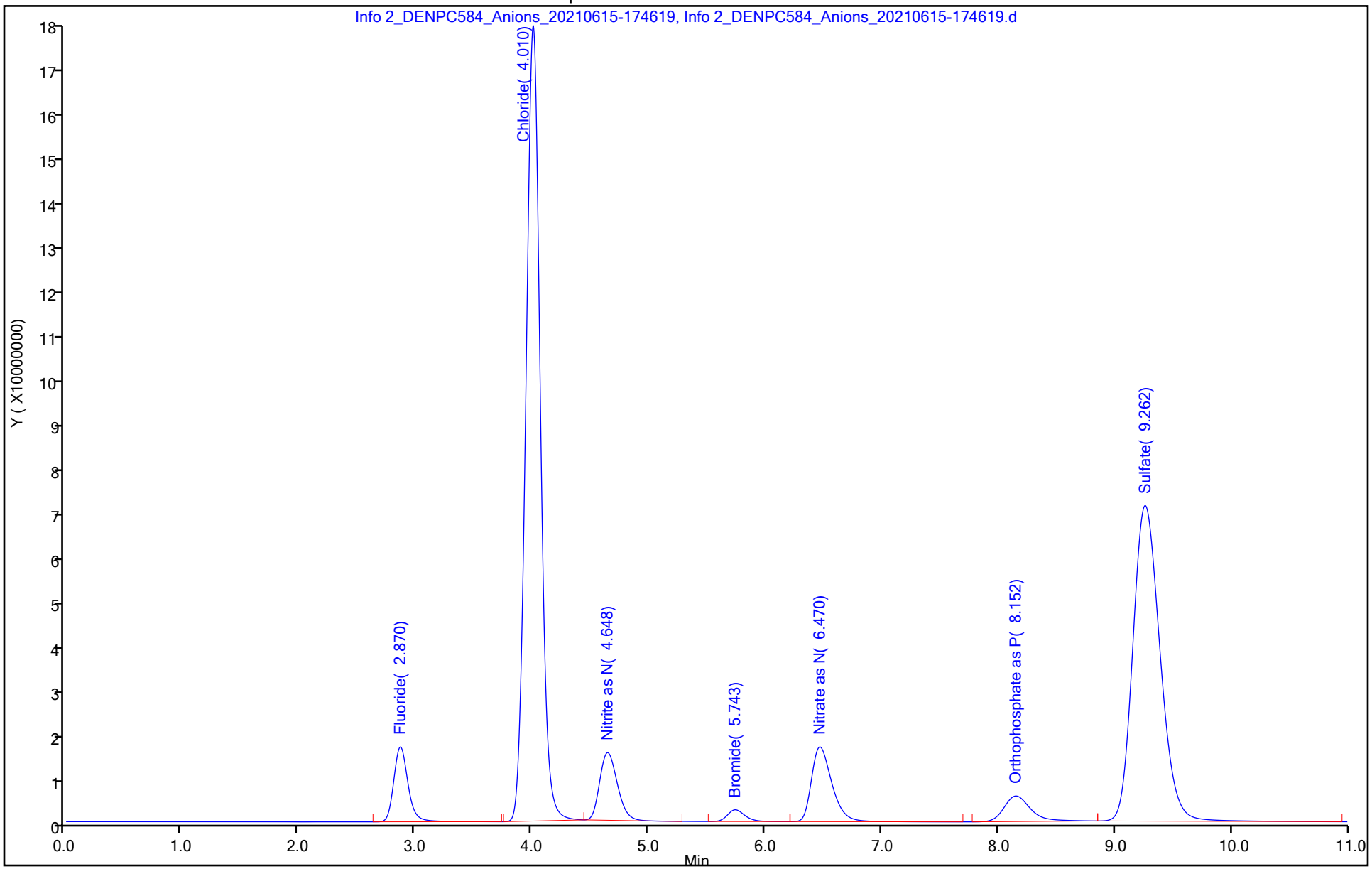
Reagents:

IC LCS_01814 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 10:24:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-174619.d				
Injection Date:	15-Jun-2021 17:32:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	24
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-180
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 15-Jun-2021 17:46:00 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-025
Misc. Info.: 280-0102337-025
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:55 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 16-Jun-2021 10:13:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.933	2.863	0.070	13279		0.0224	M
2 Chloride	3.987	4.002	-0.015	63898		0.2210	Ma
3 Nitrite as N		4.650				ND	
4 Bromide		5.752				ND	
5 Nitrate as N		6.493				ND	
7 Orthophosphate as P		8.117				ND	
6 Sulfate	9.318	9.228	0.090	285653		-0.0126	M

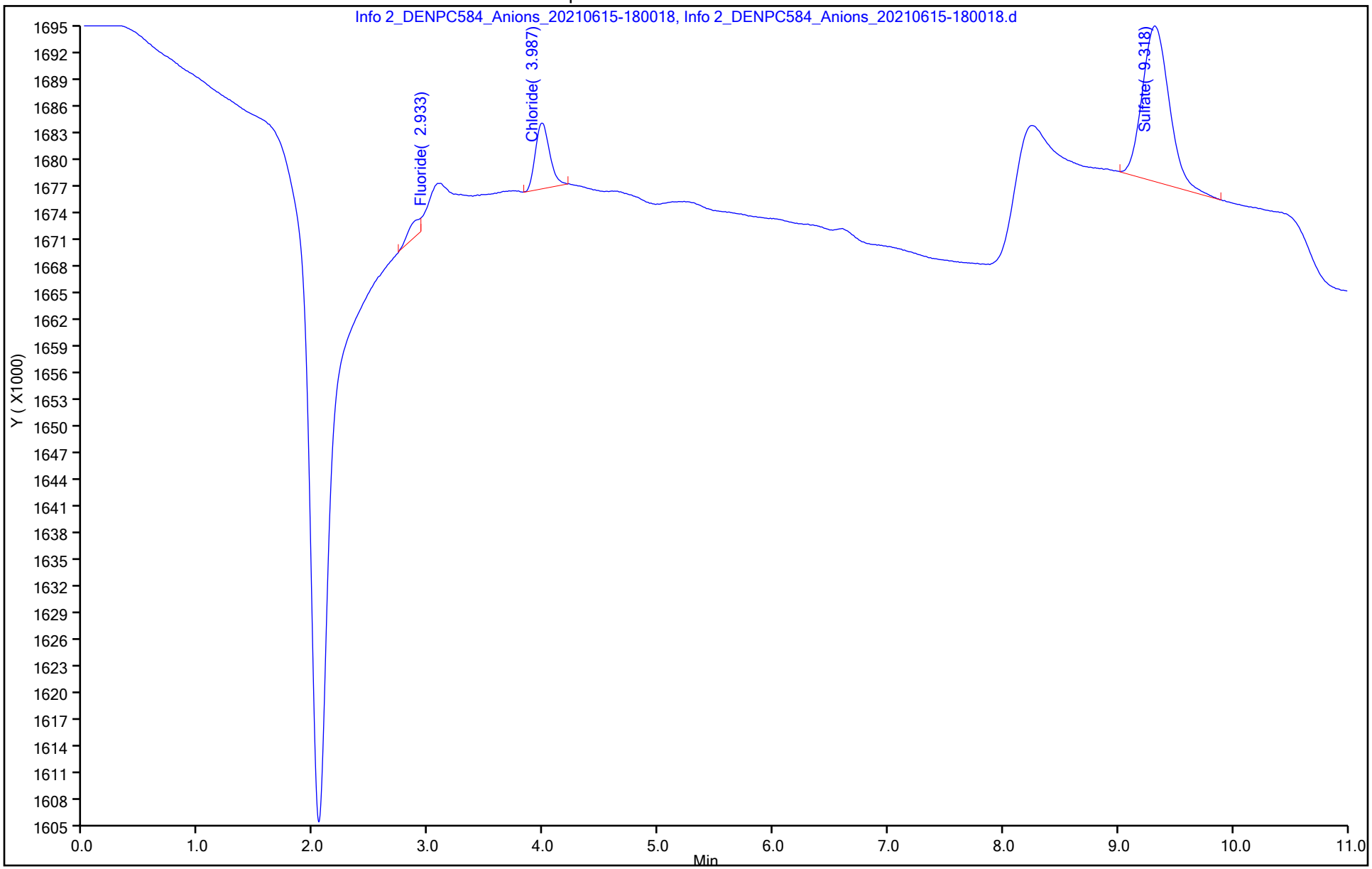
QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 10:24:55 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-180018.d				
Injection Date:	15-Jun-2021 17:46:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	25
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-18

Injection Date: 15-Jun-2021 17:46:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 25

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

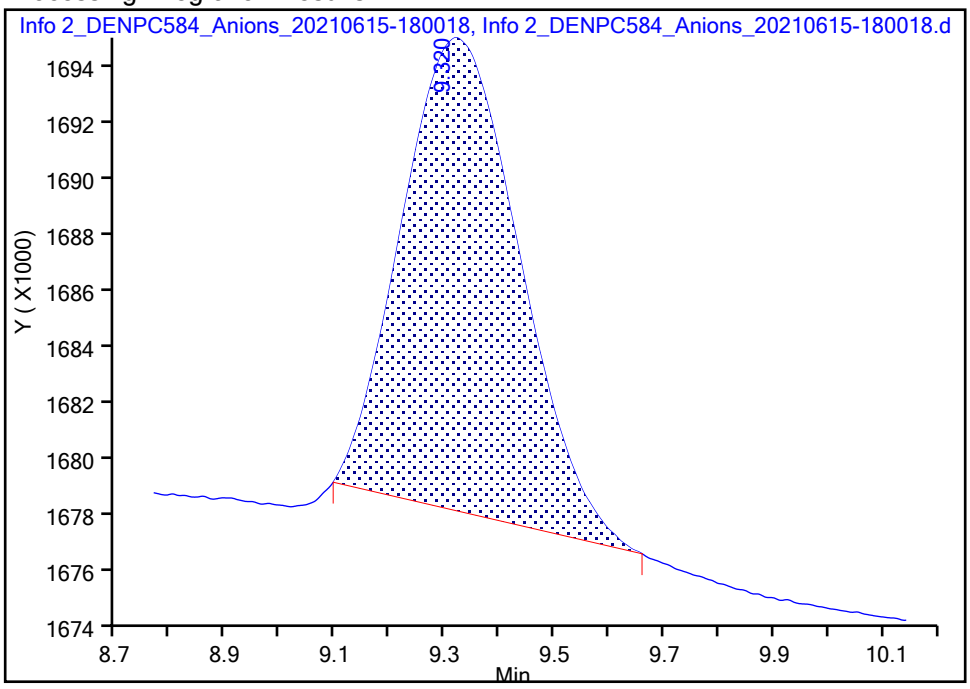
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

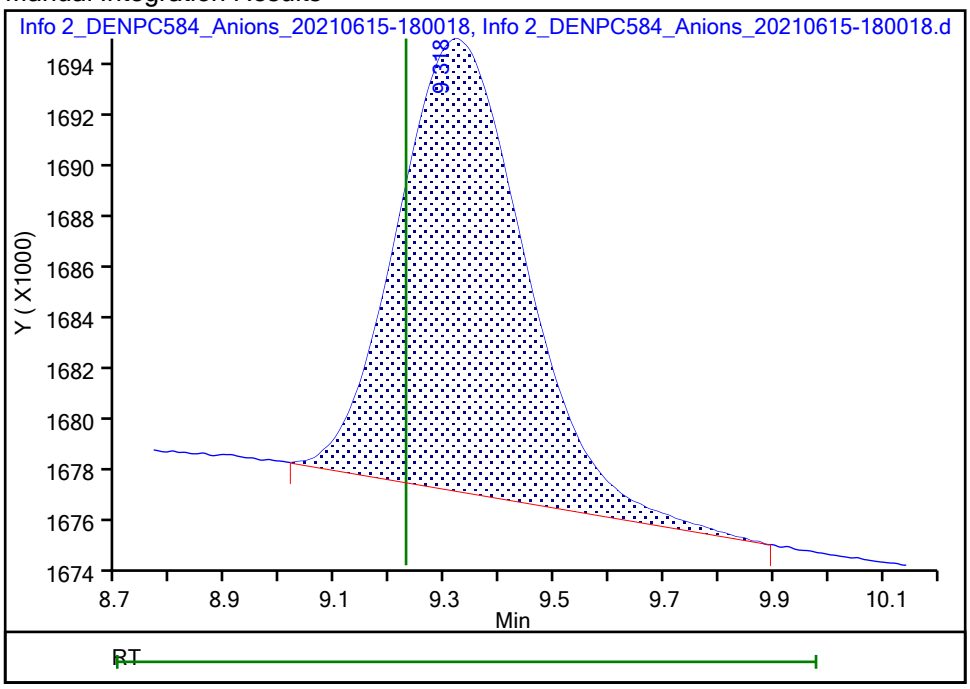
Processing Integration Results

RT: 9.32
Area: 248503
Amount: -0.015937
Amount Units: ug/ml



Manual Integration Results

RT: 9.32
Area: 285653
Amount: -0.012573
Amount Units: ug/ml



Reviewer: battilloj, 16-Jun-2021 10:13:00

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-193
Lims ID: 280-149116-D-2
Client ID: G0045-21A
Sample Type: Client
Inject. Date: 15-Jun-2021 19:24:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0102337-032
Misc. Info.: 280-0102337-032
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:55 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.858	2.863	-0.005	1146319	0.0621	
2 Chloride	3.987	4.002	-0.015	159300655	10.6	
3 Nitrite as N		4.650			ND	
4 Bromide	5.787	5.752	0.035	230970	0.1078	
5 Nitrate as N		6.493			ND	
7 Orthophosphate as P	8.220	8.117	0.103	367501	NC	
6 Sulfate	9.248	9.228	0.020	1388391894	125.7	

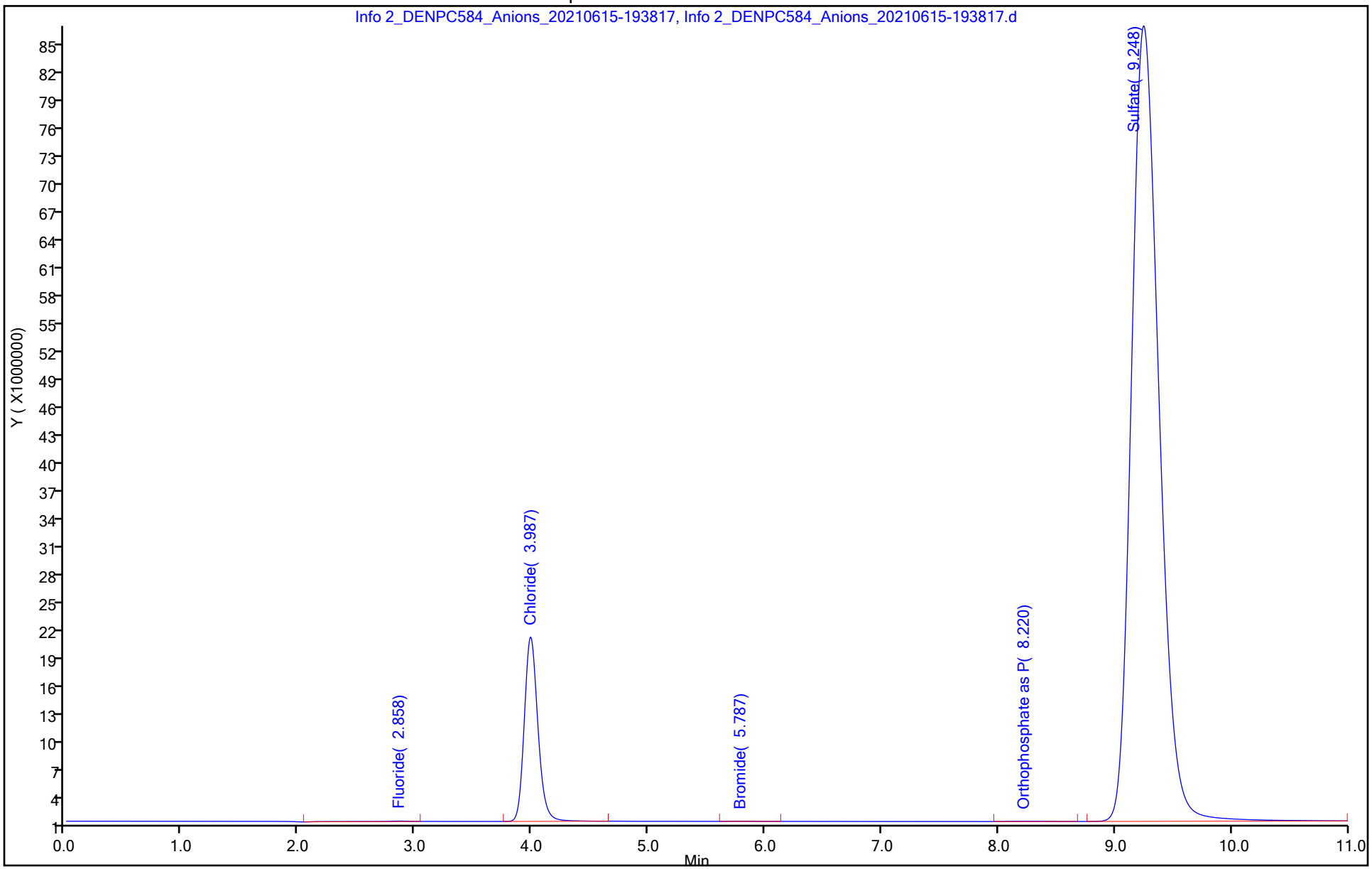
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:24:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-193817.d				
Injection Date:	15-Jun-2021 19:24:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-2	Lab Sample ID:	280-149116-2	Worklist Smp#:	32
Client ID:	G0045-21A				
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-195
Lims ID: 280-149116-D-3
Client ID: G0086-21A
Sample Type: Client
Inject. Date: 15-Jun-2021 19:38:00 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-033
Misc. Info.: 280-0102337-033
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:55 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.862	2.863	-0.001	5074781	0.1999	
2 Chloride	4.048	4.002	0.046	502180093	33.0	
3 Nitrite as N		4.650			ND	
4 Bromide	5.807	5.752	0.055	900055	0.2223	
5 Nitrate as N	6.500	6.493	0.007	177869124	NC	
7 Orthophosphate as P	8.198	8.117	0.081	4557305	NC	
6 Sulfate	9.240	9.228	0.012	1935964833	175.3	

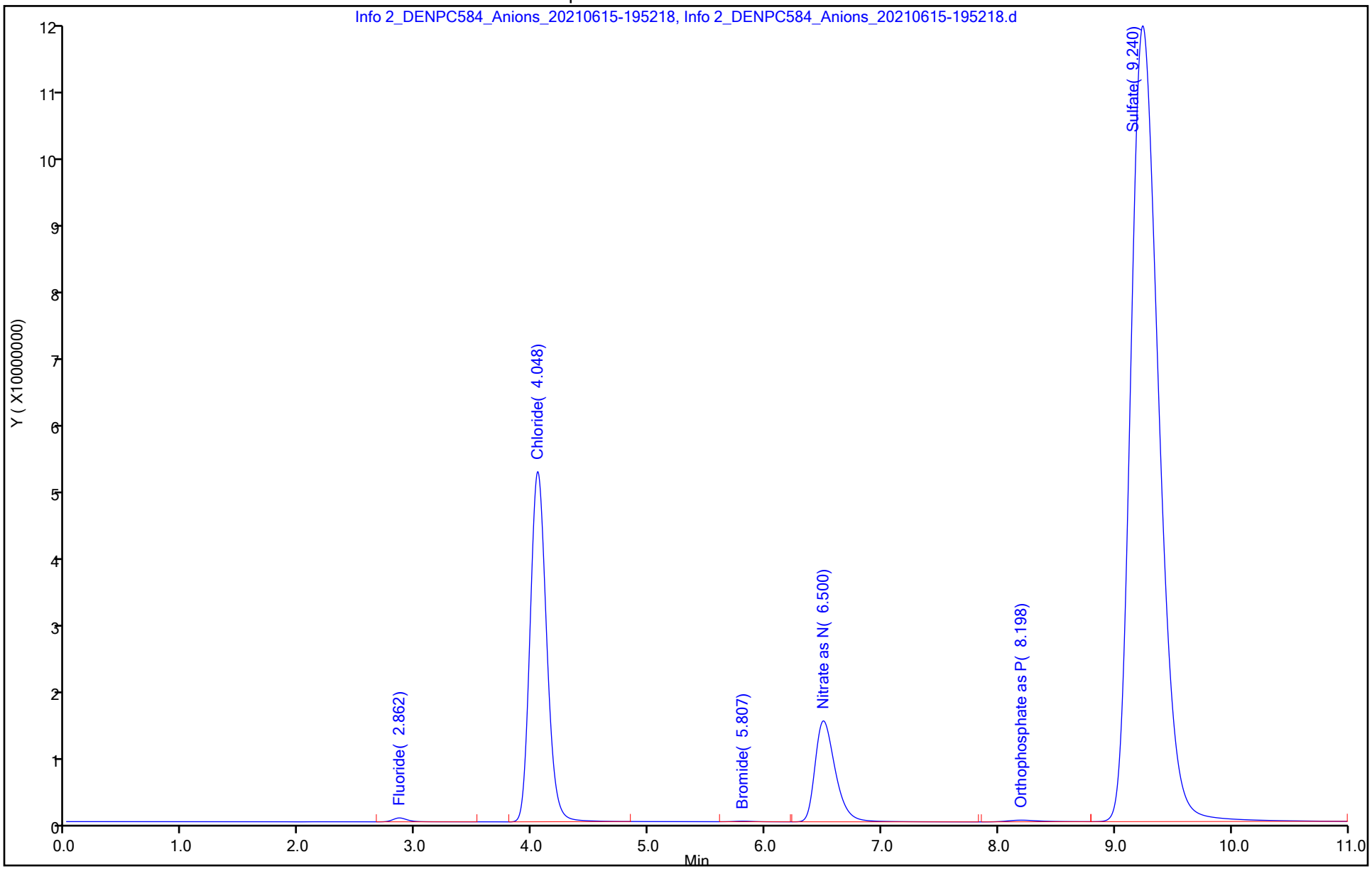
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:24:58 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-195218.d				
Injection Date:	15-Jun-2021 19:38:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-3	Lab Sample ID:	280-149116-3	Worklist Smp#:	33
Client ID:	G0086-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-200
Lims ID: 280-149116-D-4
Client ID: PZ0018-21A
Sample Type: Client
Inject. Date: 15-Jun-2021 19:52:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-034
Misc. Info.: 280-0102337-034
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:55 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.860	2.863	-0.003	2957669	0.1257	
2 Chloride	4.093	4.002	0.091	612379587	40.2	
3 Nitrite as N	5.000	4.650	0.350	1065192	NC	
4 Bromide	5.843	5.752	0.091	722199	0.1919	
5 Nitrate as N	6.528	6.493	0.035	154123801	NC	
7 Orthophosphate as P		8.117			ND	
6 Sulfate	9.305	9.228	0.077	589280136	53.3	

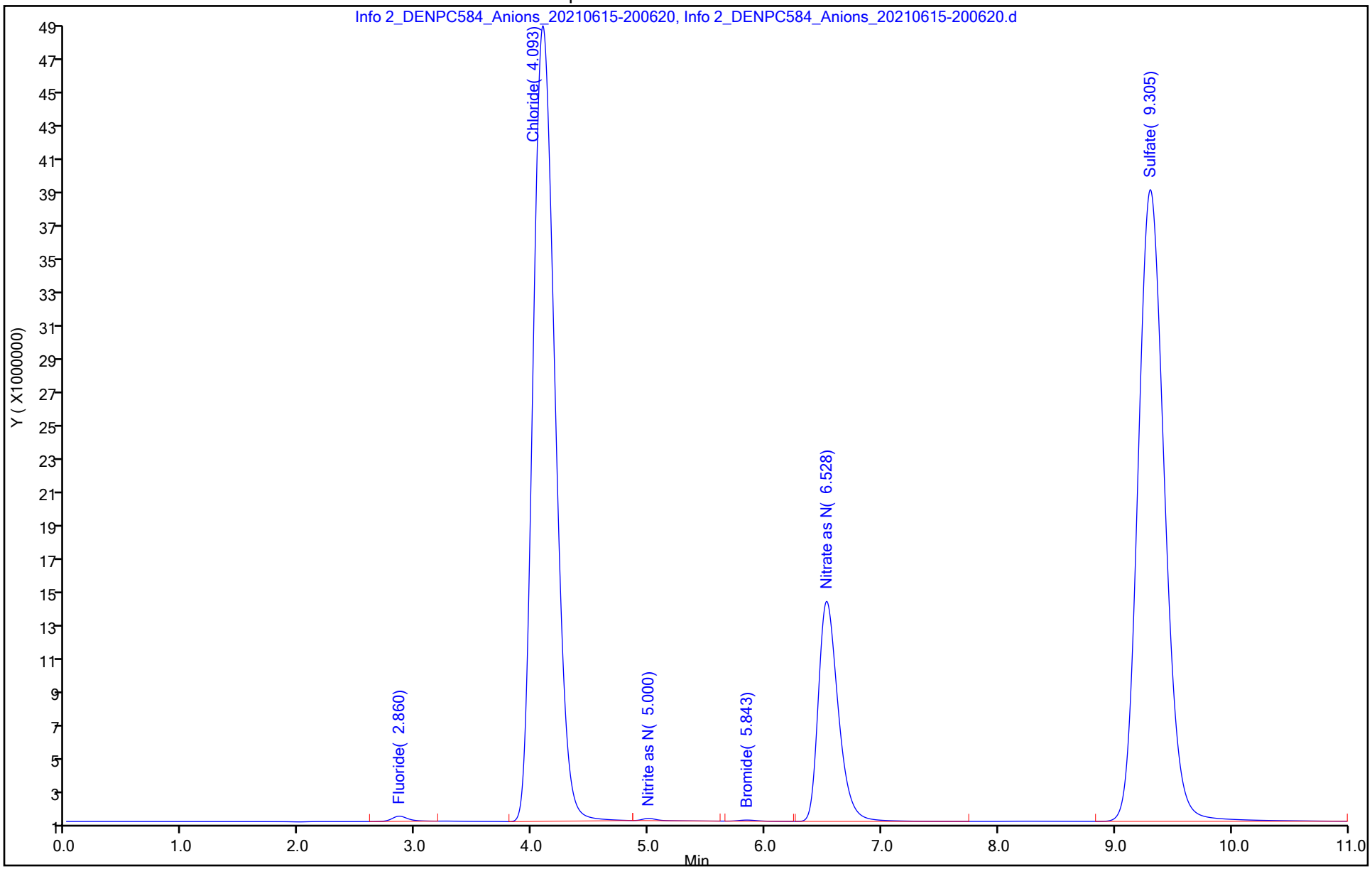
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:24:58 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-200620.d				
Injection Date:	15-Jun-2021 19:52:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-4	Lab Sample ID:	280-149116-4	Worklist Smp#:	34
Client ID:	PZ0018-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-202
Lims ID: 280-149116-B-5
Client ID: SHGW03-21A
Sample Type: Client
Inject. Date: 15-Jun-2021 20:06:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-035
Misc. Info.: 280-0102337-035
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:55 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.862	2.863	-0.001	2407587	0.1064	
2 Chloride	4.022	4.002	0.020	145952841	9.74	
3 Nitrite as N	4.912	4.650	0.262	484143	NC	
4 Bromide	5.810	5.752	0.058	306137	0.1207	
5 Nitrate as N	6.475	6.493	-0.018	296110445	NC	
7 Orthophosphate as P		8.117			ND	
6 Sulfate	9.308	9.228	0.080	343477927	31.1	

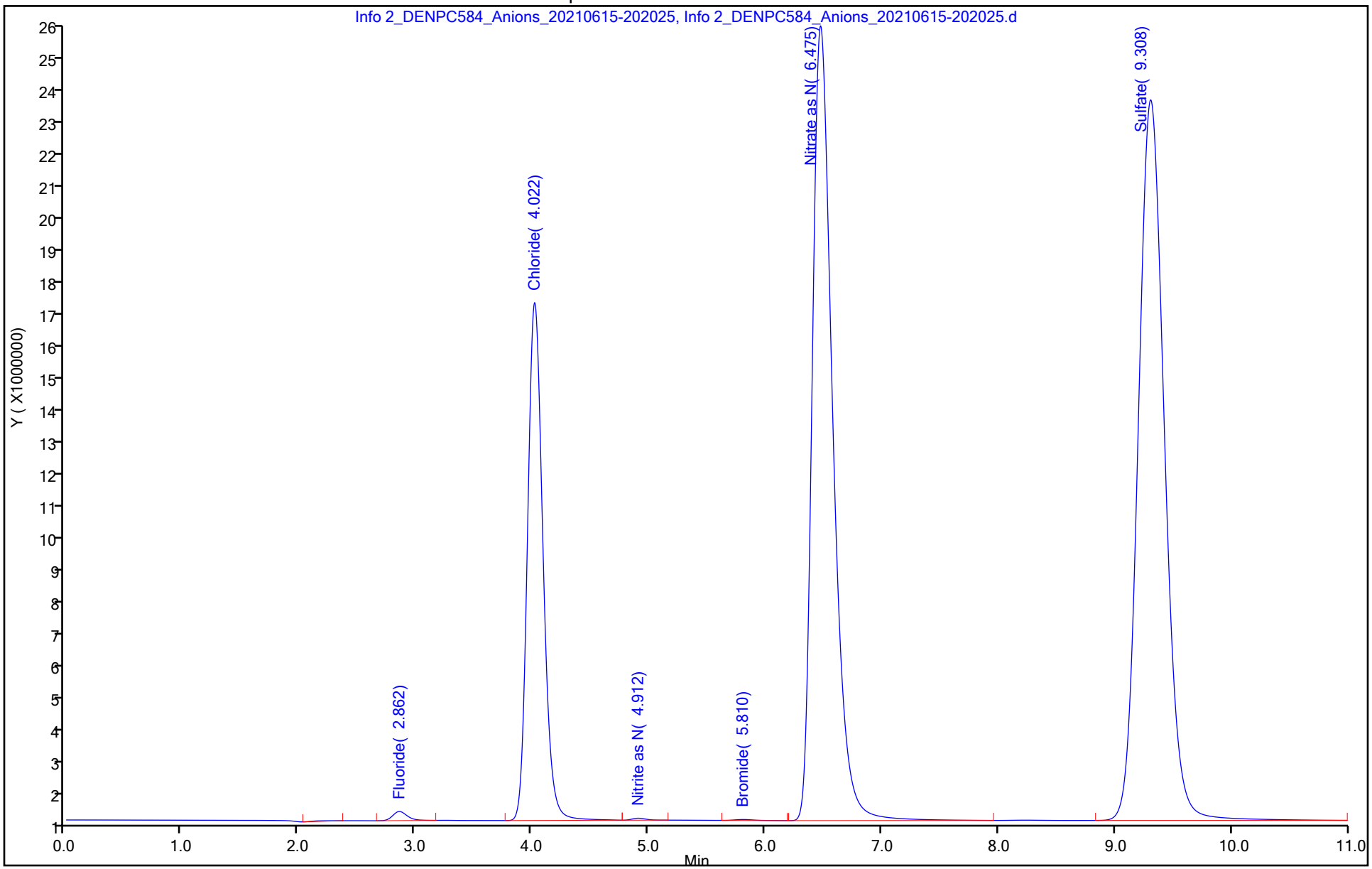
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:24:58 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-202025.d				
Injection Date:	15-Jun-2021 20:06:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-B-5	Lab Sample ID:	280-149116-5	Worklist Smp#:	35
Client ID:	SHGW03-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-203
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2021 20:20:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-036
Misc. Info.: 280-0102337-036
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.872	2.863	0.009	144699754	5.00	5.10	
2 Chloride	4.012	4.002	0.010	1522758807	100.0	99.5	
3 Nitrite as N	4.652	4.650	0.002	158458106	NC	NC	
4 Bromide	5.752	5.752	0.000	27287522	5.00	4.74	
5 Nitrate as N	6.480	6.493	-0.013	202500896	NC	NC	
7 Orthophosphate as P	8.153	8.117	0.036	92864502	NC	NC	
6 Sulfate	9.265	9.228	0.037	1139555490	100.0	103.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

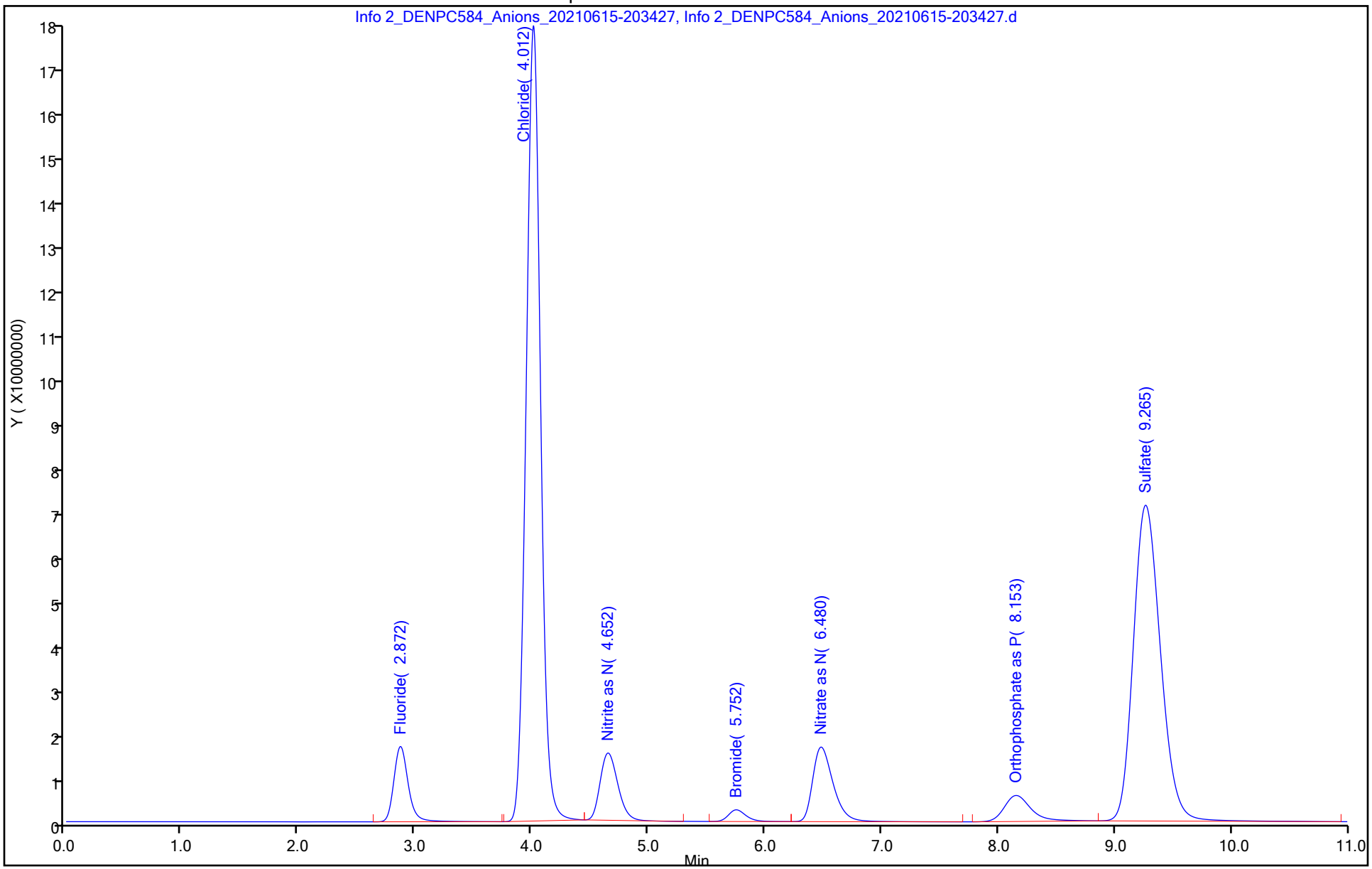
Reagents:

IC LCS_01814 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 10:24:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-203427.d				
Injection Date:	15-Jun-2021 20:20:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	36
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-204
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 15-Jun-2021 20:34:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-037
Misc. Info.: 280-0102337-037
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 16-Jun-2021 10:15:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.937	2.863	0.074	6911		0.0222	M
2 Chloride		4.002				ND	Ma
3 Nitrite as N		4.650				ND	
4 Bromide		5.752				ND	
5 Nitrate as N		6.493				ND	
7 Orthophosphate as P		8.117				ND	
6 Sulfate	9.320	9.228	0.092	108331		-0.0286	Ma

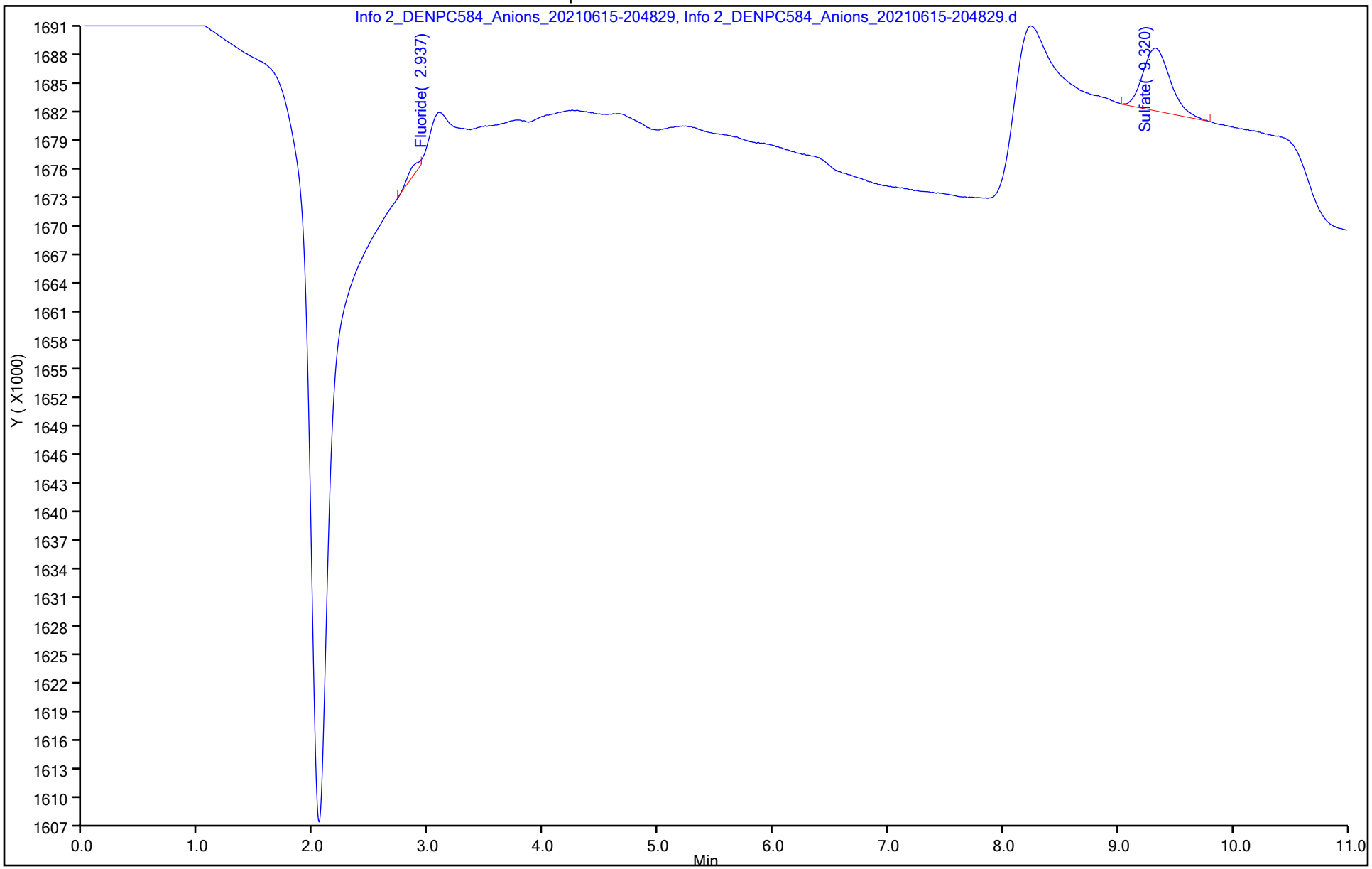
QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 10:24:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-204829.d				
Injection Date:	15-Jun-2021 20:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	37
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-204

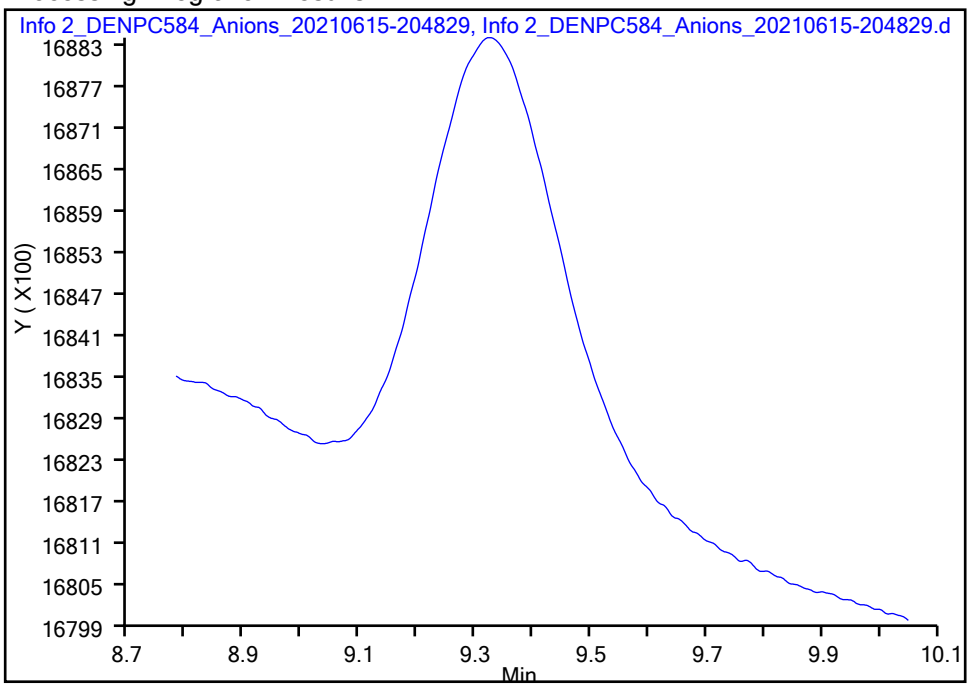
Injection Date:	15-Jun-2021 20:34:00	Instrument ID:	WC_IonChrom13
Lims ID:	ccb		
Client ID:			
Operator ID:	wetchemd	ALS Bottle#:	0 Worklist Smp#: 37
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

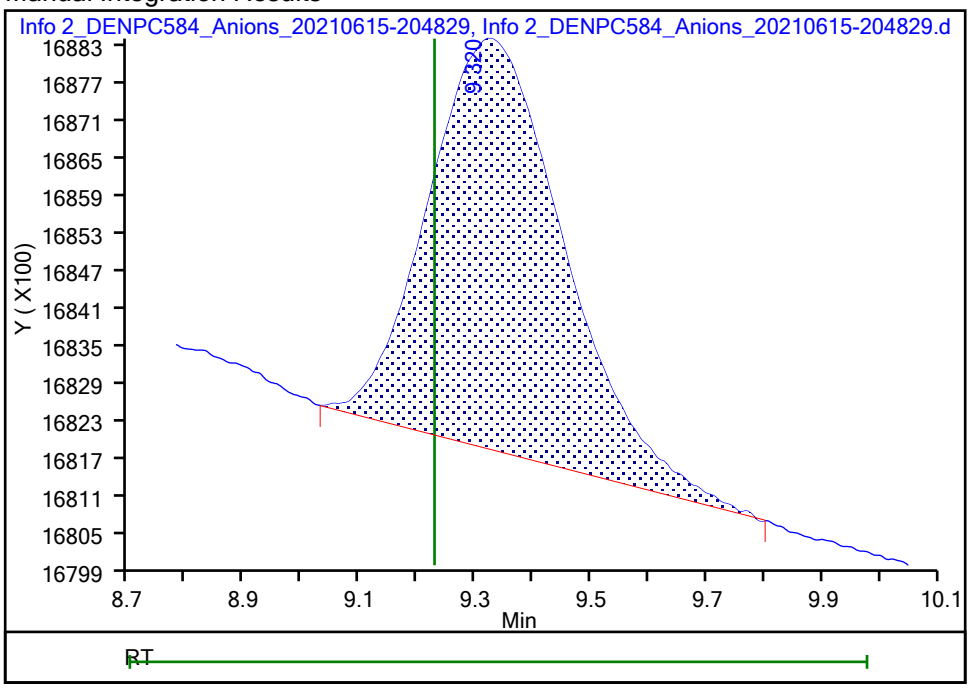
Not Detected
Expected RT: 9.23

Processing Integration Results



Manual Integration Results

RT: 9.32
Area: 108331
Amount: -0.028634
Amount Units: ug/ml



Reviewer: battilloj, 16-Jun-2021 10:15:39
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-210
Lims ID: 280-149116-D-9
Client ID: G0077-21A
Sample Type: Client
Inject. Date: 15-Jun-2021 20:48:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-038
Misc. Info.: 280-0102337-038
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.862	2.863	-0.001	5760510	0.2239	
2 Chloride	4.045	4.002	0.043	479751955	31.5	
3 Nitrite as N		4.650			ND	
4 Bromide	5.810	5.752	0.058	875045	0.2180	
5 Nitrate as N	6.477	6.493	-0.016	306085104	NC	
7 Orthophosphate as P	8.187	8.117	0.070	10192885	NC	
6 Sulfate	9.248	9.228	0.020	1567863729	142.0	

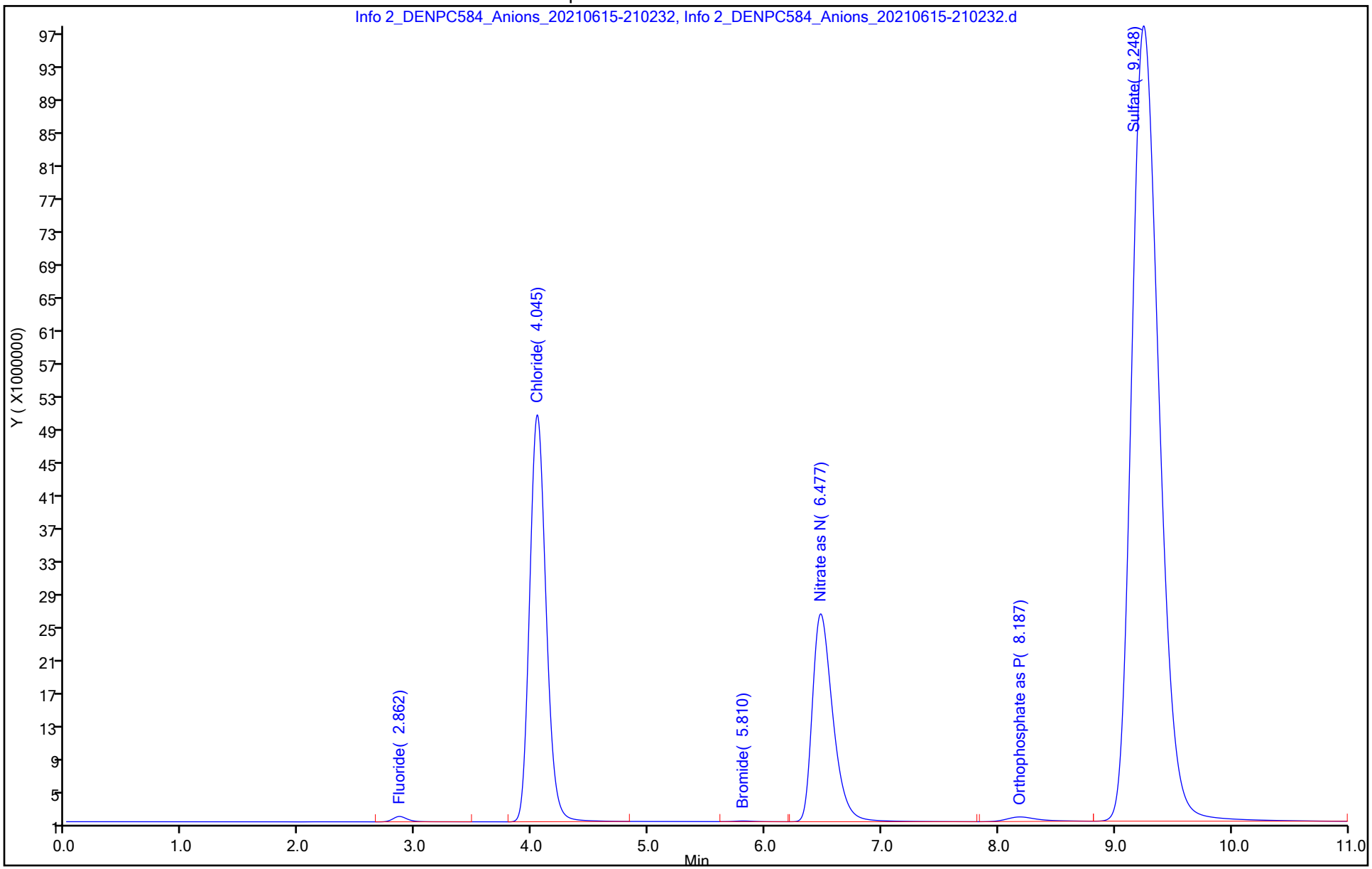
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:25:00 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-210232.d				
Injection Date:	15-Jun-2021 20:48:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-9	Lab Sample ID:	280-149116-9	Worklist Smp#:	38
Client ID:	G0077-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-213				
Lims ID:	280-149116-D-11				
Client ID:	PZ017R-21A				
Sample Type:	Client				
Inject. Date:	15-Jun-2021 21:16:00	ALS Bottle#:	0	Worklist Smp#:	40
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0102337-040				
Misc. Info.:	280-0102337-040				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	16-Jun-2021 10:24:59	Calib Date:	14-Jun-2021 21:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213				
Column 1 :			Det: 0005		
Process Host:	CTX1637				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.865	2.863	0.002	2633429	0.1143	
2 Chloride	4.048	4.002	0.046	373374884	24.6	
3 Nitrite as N	4.900	4.650	0.250	7361031	NC	
4 Bromide	5.822	5.752	0.070	617765	0.1740	
5 Nitrate as N	6.443	6.493	-0.050	841061167	NC	
7 Orthophosphate as P	8.213	8.117	0.096	2819122	NC	
6 Sulfate	9.288	9.228	0.060	891324829	80.7	

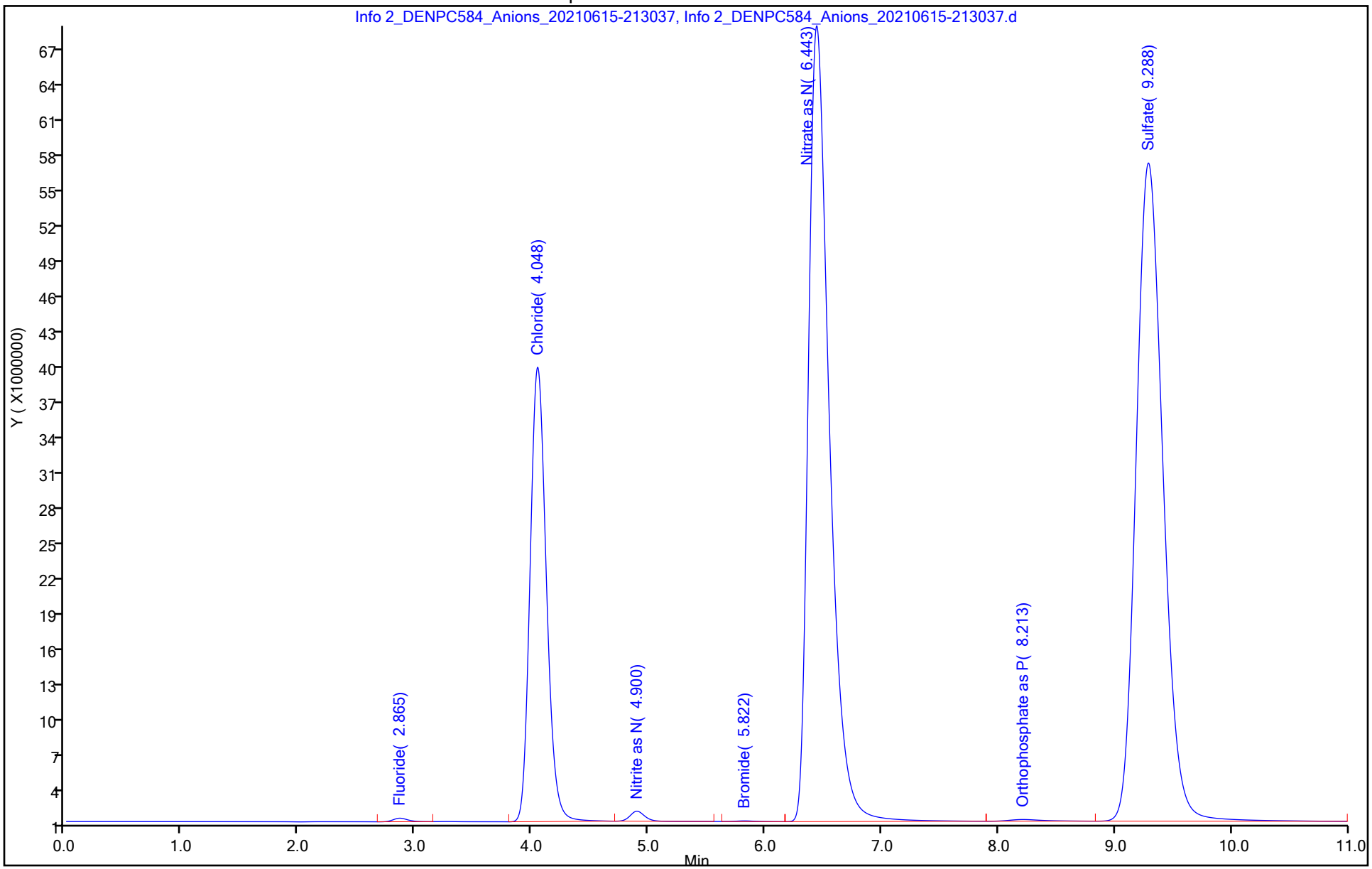
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:25:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-213037.d				
Injection Date:	15-Jun-2021 21:16:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-11	Lab Sample ID:	280-149116-11	Worklist Smp#:	40
Client ID:	PZ017R-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-214
Lims ID: 280-149116-D-12
Client ID: PZ021-21A
Sample Type: Client
Inject. Date: 15-Jun-2021 21:30:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-041
Misc. Info.: 280-0102337-041
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.863	2.863	0.000	2686920	0.1162	
2 Chloride	4.045	4.002	0.043	383147227	25.2	
3 Nitrite as N	4.897	4.650	0.247	8139094	NC	
4 Bromide	5.815	5.752	0.063	631311	0.1763	
5 Nitrate as N	6.437	6.493	-0.056	857110667	NC	
7 Orthophosphate as P	8.205	8.117	0.088	2933752	NC	
6 Sulfate	9.282	9.228	0.054	910077298	82.4	

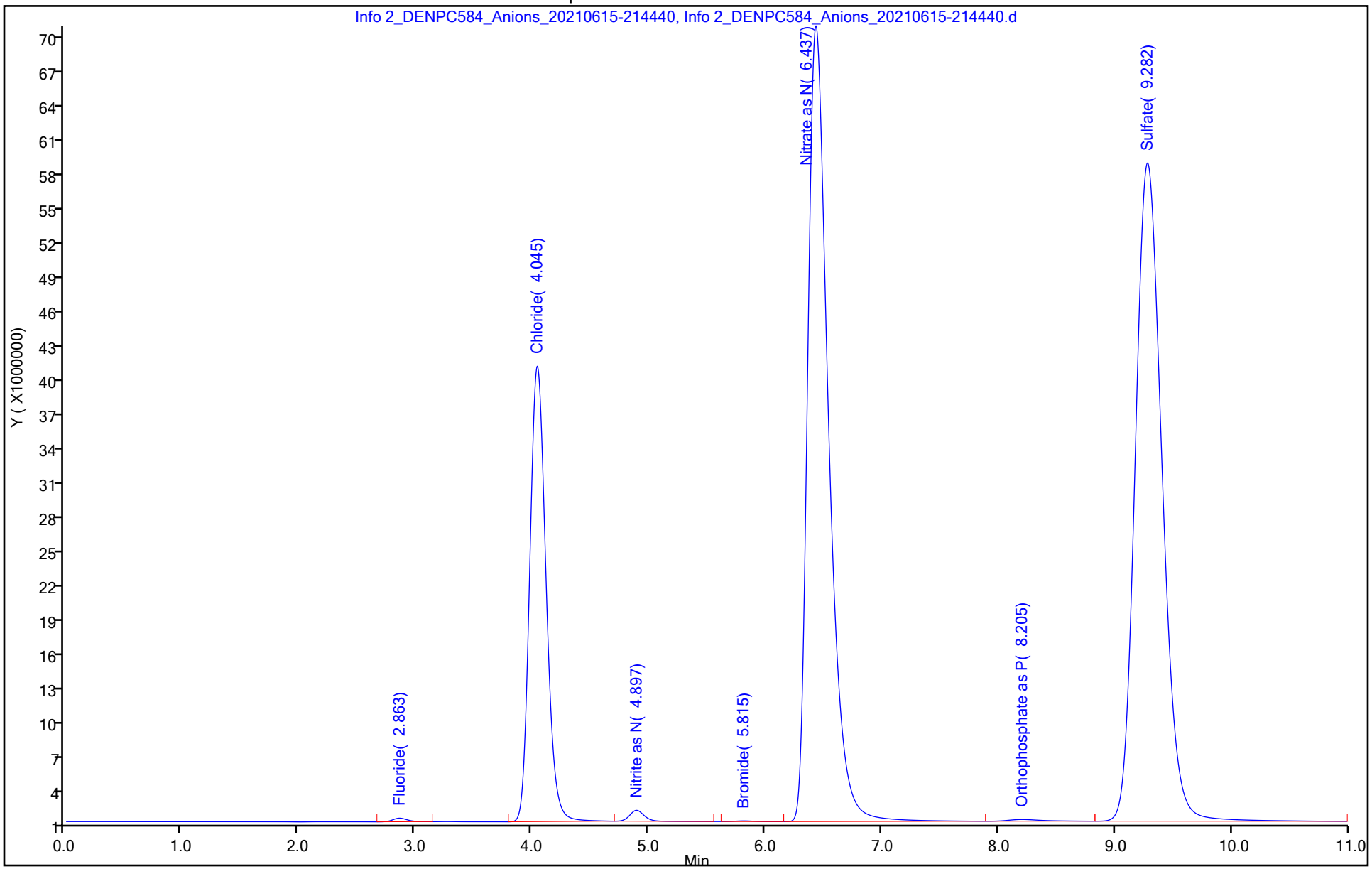
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:25:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-214440.d				
Injection Date:	15-Jun-2021 21:30:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-12	Lab Sample ID:	280-149116-12	Worklist Smp#:	41
Client ID:	PZ021-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-22
Lims ID: 280-149116-D-13 DU
Client ID:
Sample Type: DU
Inject. Date: 15-Jun-2021 21:58:00 ALS Bottle#: 0 Worklist Smp#: 43
Injection Vol: 5.0 ul Dil. Factor: 2.0000
Sample Info: 280-0102337-043
Misc. Info.: 280-0102337-043
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.858	2.863	-0.005	2485689		0.1091	
2 Chloride	4.017	4.002	0.015	325227970		21.4	
3 Nitrite as N		4.650				ND	
4 Bromide	5.812	5.752	0.060	479760		0.1504	
5 Nitrate as N	6.607	6.493	0.114	9545857		NC	
7 Orthophosphate as P	8.208	8.117	0.091	222926		NC	
6 Sulfate	9.197	9.228	-0.031	2846249704		257.8	E

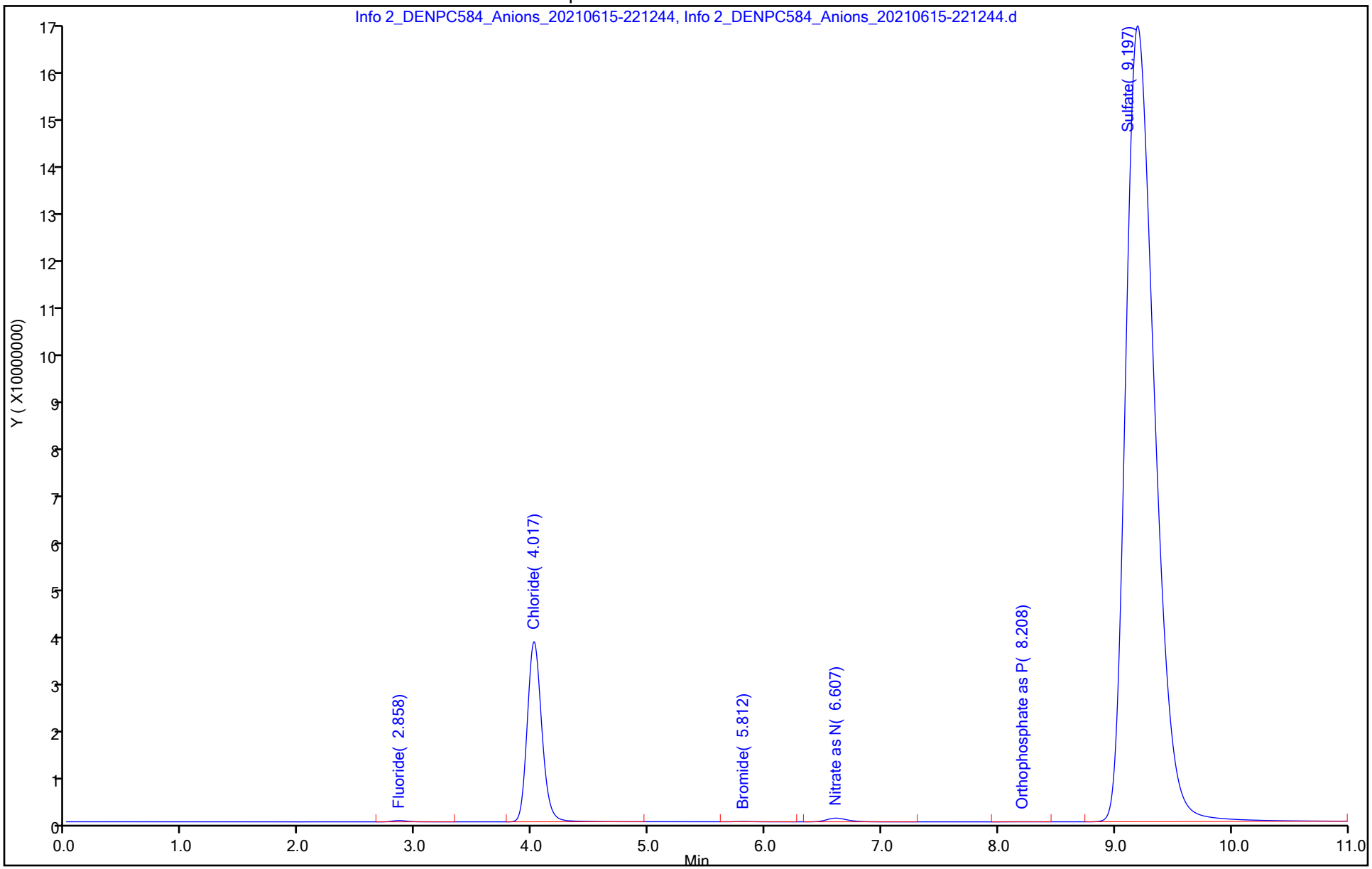
QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount

Report Date: 16-Jun-2021 10:25:02 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-221244.d				
Injection Date:	15-Jun-2021 21:58:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-13 DU			Worklist Smp#:	43
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-222
Lims ID: 280-149116-D-13 MS
Client ID: PZ007-21A
Sample Type: MS
Inject. Date: 15-Jun-2021 22:12:00 ALS Bottle#: 0 Worklist Smp#: 44
Injection Vol: 5.0 ul Dil. Factor: 2.0000
Sample Info: 280-0102337-044
Misc. Info.: 280-0102337-044
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.863	2.863	0.000	115013704	2.50	4.06	
2 Chloride	4.020	4.002	0.018	1121779214	25.0	73.4	
3 Nitrite as N	4.782	4.650	0.132	173695957	NC	NC	
4 Bromide	5.770	5.752	0.018	27422997	2.50	4.76	
5 Nitrate as N	6.507	6.493	0.014	196034161	NC	NC	
7 Orthophosphate as P	8.135	8.117	0.018	85163915	NC	NC	
6 Sulfate	9.180	9.228	-0.048	3361088563	25.0	304.4	E

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount

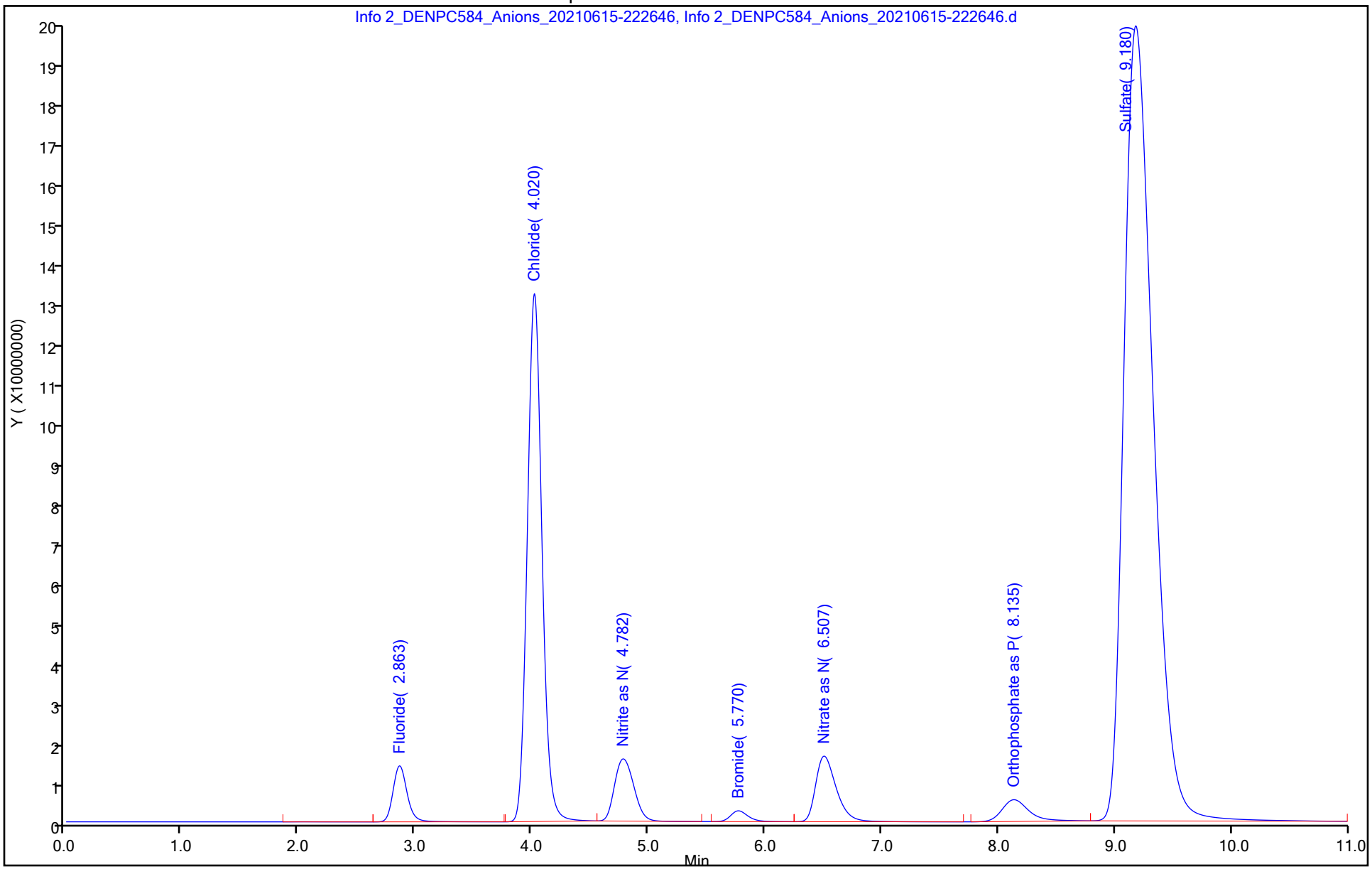
Reagents:

ICMS/MSD WEEK_00707 Amount Added: 0.10 Units: mL

Report Date: 16-Jun-2021 10:25:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-222646.d				
Injection Date:	15-Jun-2021 22:12:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-13 MS			Worklist Smp#:	44
Client ID:	PZ007-21A				
Injection Vol:	5.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-224
Lims ID: 280-149116-D-13 MSD
Client ID: PZ007-21A
Sample Type: MSD
Inject. Date: 15-Jun-2021 22:26:00 ALS Bottle#: 0 Worklist Smp#: 45
Injection Vol: 5.0 ul Dil. Factor: 2.0000
Sample Info: 280-0102337-045
Misc. Info.: 280-0102337-045
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.863	2.863	0.000	110737182	2.50	3.91	
2 Chloride	4.020	4.002	0.018	1083843838	25.0	70.9	
3 Nitrite as N	4.783	4.650	0.133	167453828	NC	NC	
4 Bromide	5.775	5.752	0.023	26405263	2.50	4.59	
5 Nitrate as N	6.513	6.493	0.020	188411959	NC	NC	
7 Orthophosphate as P	8.138	8.117	0.021	82418423	NC	NC	
6 Sulfate	9.185	9.228	-0.043	3272195930	25.0	296.3	E

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount

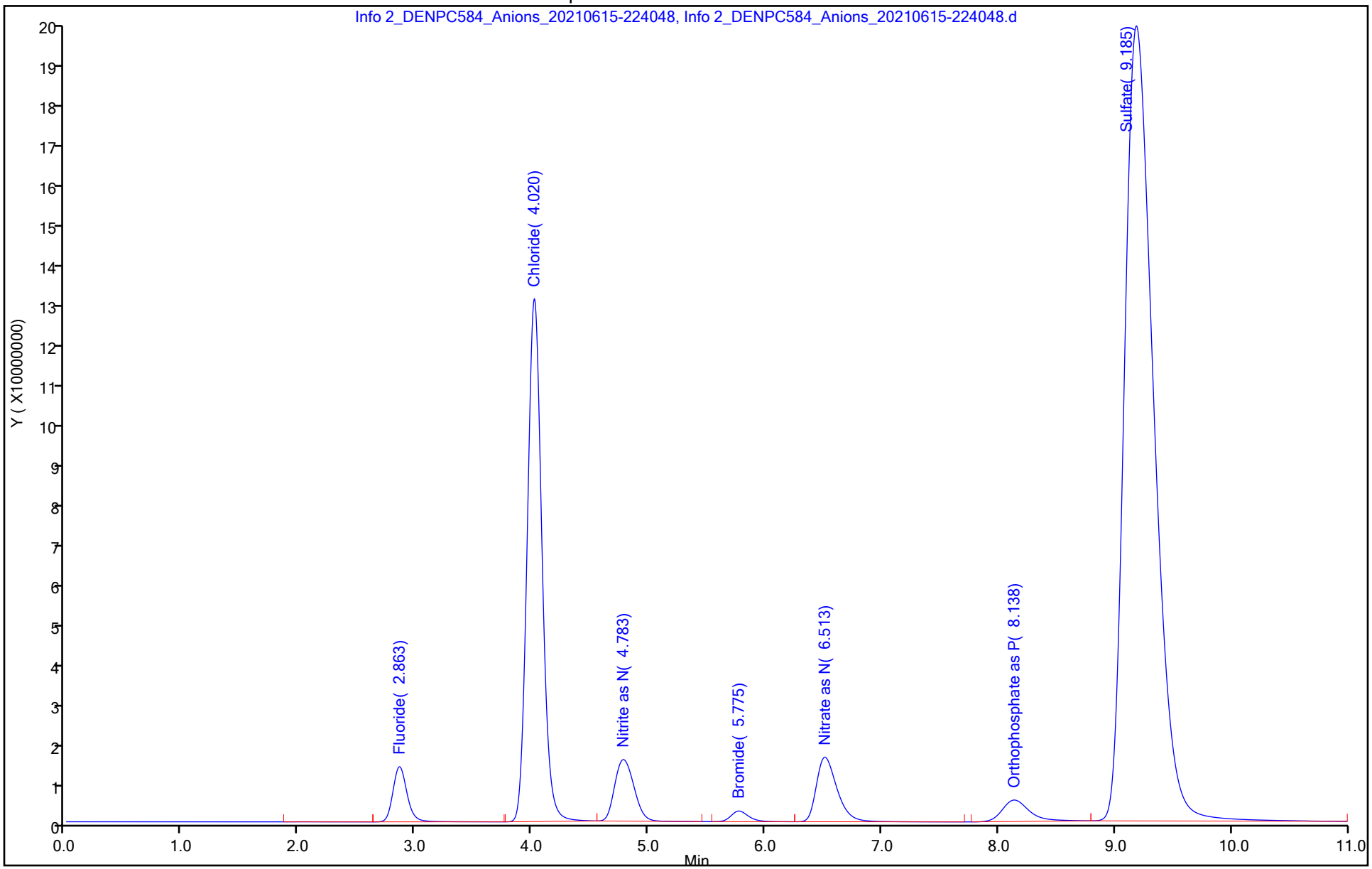
Reagents:

ICMS/MSD WEEK_00707 Amount Added: 0.10 Units: mL

Report Date: 16-Jun-2021 10:25:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-224048.d				
Injection Date:	15-Jun-2021 22:26:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-13 MSD			Worklist Smp#:	45
Client ID:	PZ007-21A				
Injection Vol:	5.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-225
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2021 22:40:00 ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-046
Misc. Info.: 280-0102337-046
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.872	2.863	0.009	142794564	5.00	5.03	
2 Chloride	4.018	4.002	0.016	1559711122	100.0	102.0	
3 Nitrite as N	4.662	4.650	0.012	149948496	NC	NC	
4 Bromide	5.770	5.752	0.018	27748706	5.00	4.82	
5 Nitrate as N	6.503	6.493	0.010	206617830	NC	NC	
7 Orthophosphate as P	8.145	8.117	0.028	93163602	NC	NC	
6 Sulfate	9.255	9.228	0.027	1161145245	100.0	105.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated

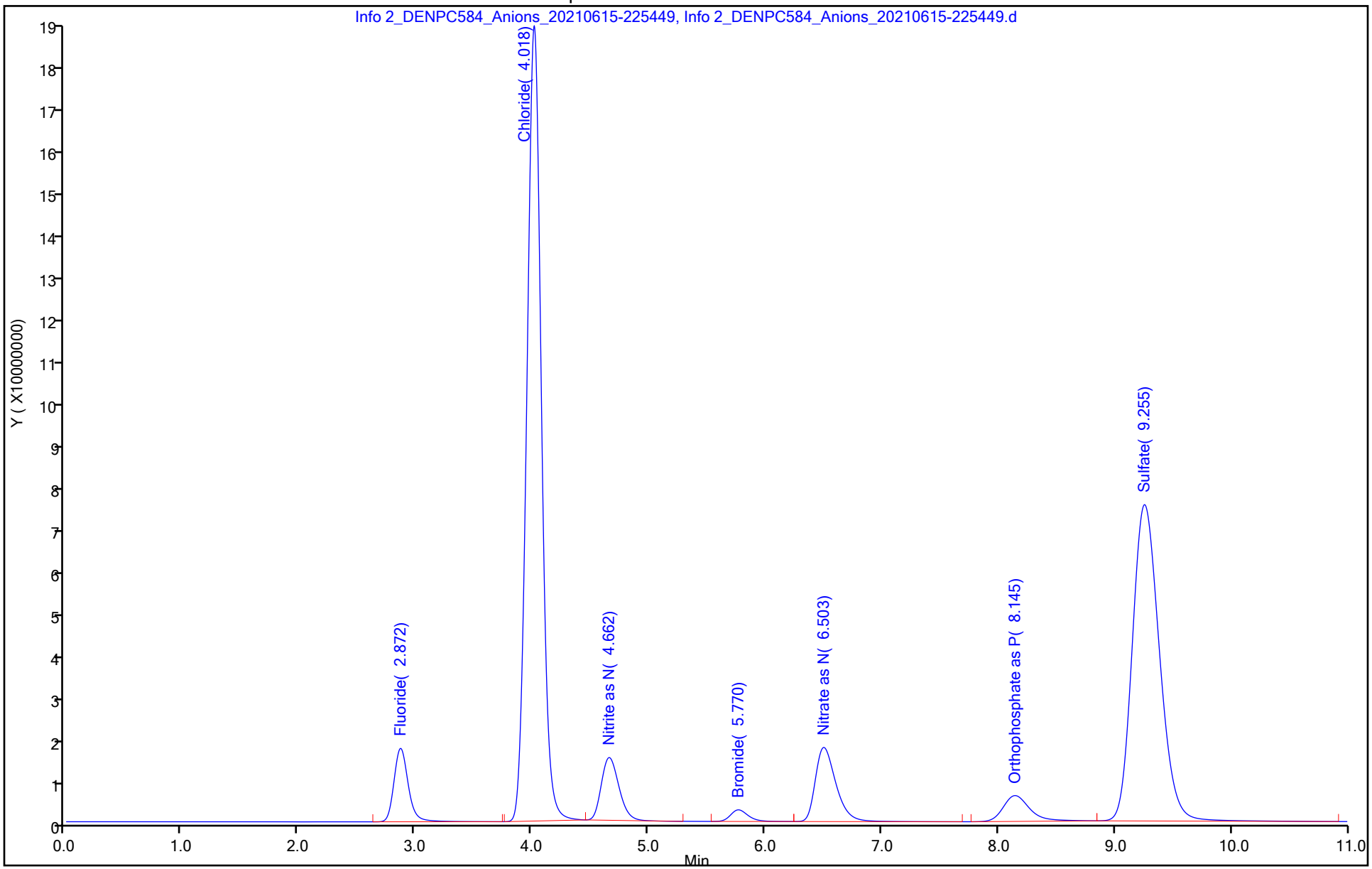
Reagents:

IC LCS_01814 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 10:25:03 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-225449.d				
Injection Date:	15-Jun-2021 22:40:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	46
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-230
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 15-Jun-2021 22:54:00 ALS Bottle#: 0 Worklist Smp#: 47
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-047
Misc. Info.: 280-0102337-047
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:24:59 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.868	2.863	0.005	145588591	5.00	5.13	
2 Chloride	4.015	4.002	0.013	1562528449	100.0	102.1	
3 Nitrite as N	4.658	4.650	0.008	150658574	NC	NC	
4 Bromide	5.770	5.752	0.018	27777695	5.00	4.82	
5 Nitrate as N	6.503	6.493	0.010	206949293	NC	NC	
7 Orthophosphate as P	8.140	8.117	0.023	92423355	NC	NC	
6 Sulfate	9.252	9.228	0.024	1165480119	100.0	105.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

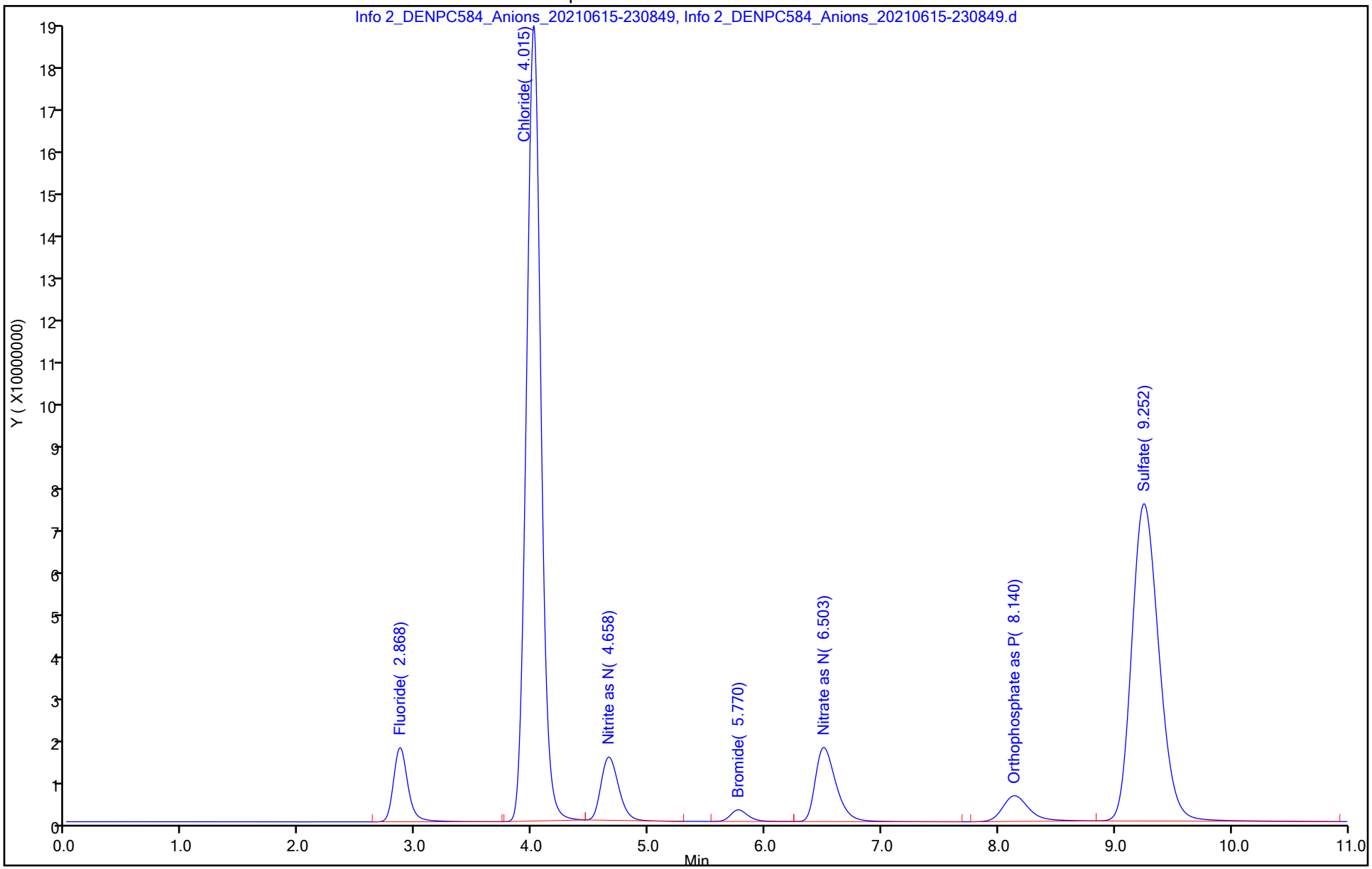
Reagents:

IC LCS_01814 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 10:25:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-230849.d				
Injection Date:	15-Jun-2021 22:54:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	47
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-232
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2021 23:08:00 ALS Bottle#: 0 Worklist Smp#: 48
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-048
Misc. Info.: 280-0102337-048
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:25:04 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.870	2.863	0.007	147027250	5.00	5.18	
2 Chloride	4.017	4.002	0.015	1560665003	100.0	102.0	
3 Nitrite as N	4.663	4.650	0.013	150948974	NC	NC	
4 Bromide	5.775	5.752	0.023	27949690	5.00	4.85	
5 Nitrate as N	6.508	6.493	0.015	207062123	NC	NC	
7 Orthophosphate as P	8.142	8.117	0.025	92656319	NC	NC	
6 Sulfate	9.253	9.228	0.025	1165712452	100.0	105.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

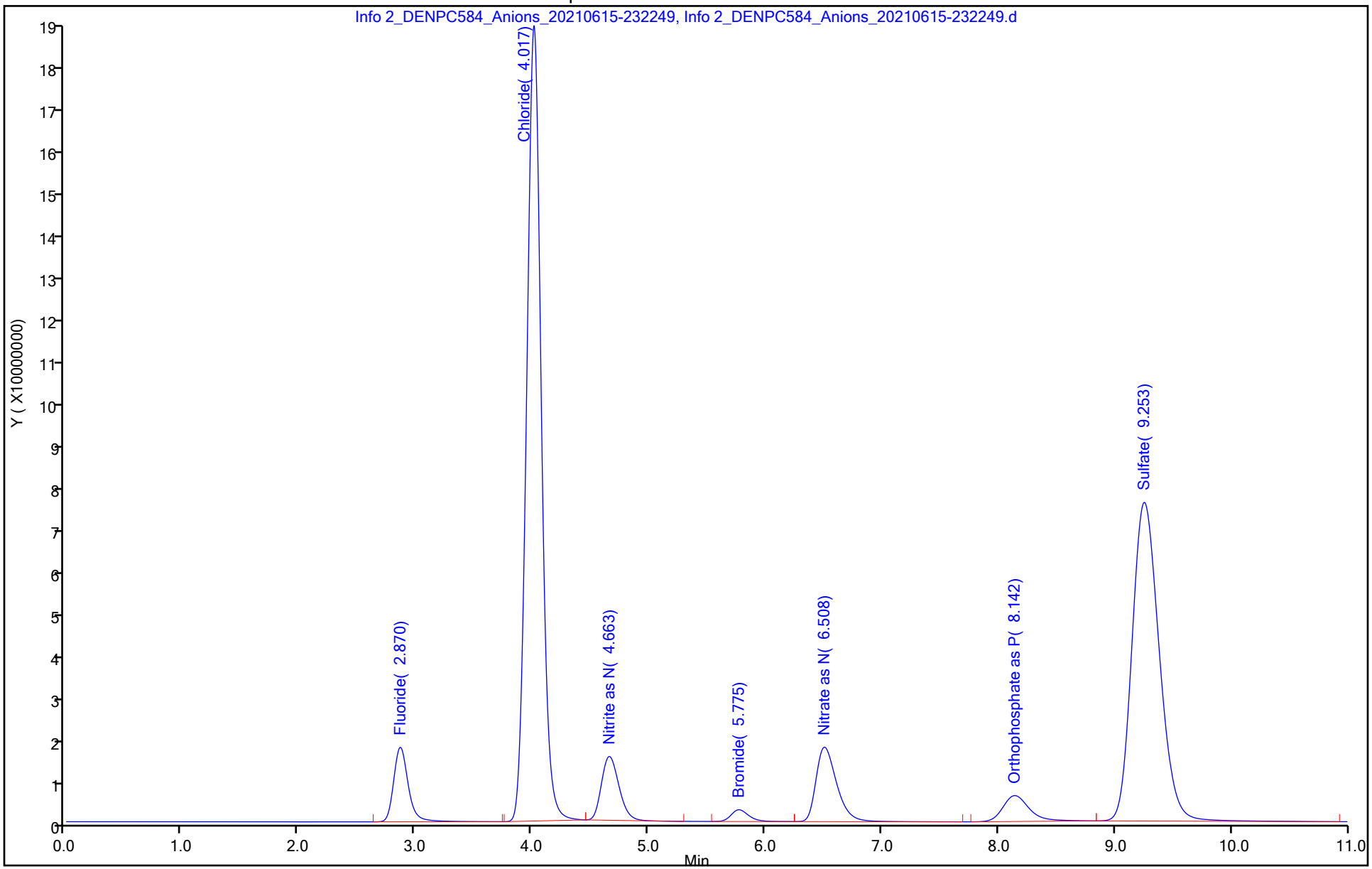
Reagents:

IC LCS_01814 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 10:25:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-232249.d				
Injection Date:	15-Jun-2021 23:08:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	48
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-233
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 15-Jun-2021 23:22:00 ALS Bottle#: 0 Worklist Smp#: 49
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-049
Misc. Info.: 280-0102337-049
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:25:04 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 16-Jun-2021 10:17:44

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.923	2.863	0.060	13959		0.0224	M
2 Chloride		4.002				ND	
3 Nitrite as N		4.650				ND	
4 Bromide		5.752				ND	
5 Nitrate as N		6.493				ND	
7 Orthophosphate as P	8.235	8.117	0.118	173939		NC	
6 Sulfate	9.305	9.228	0.077	109125		-0.0286	Ma

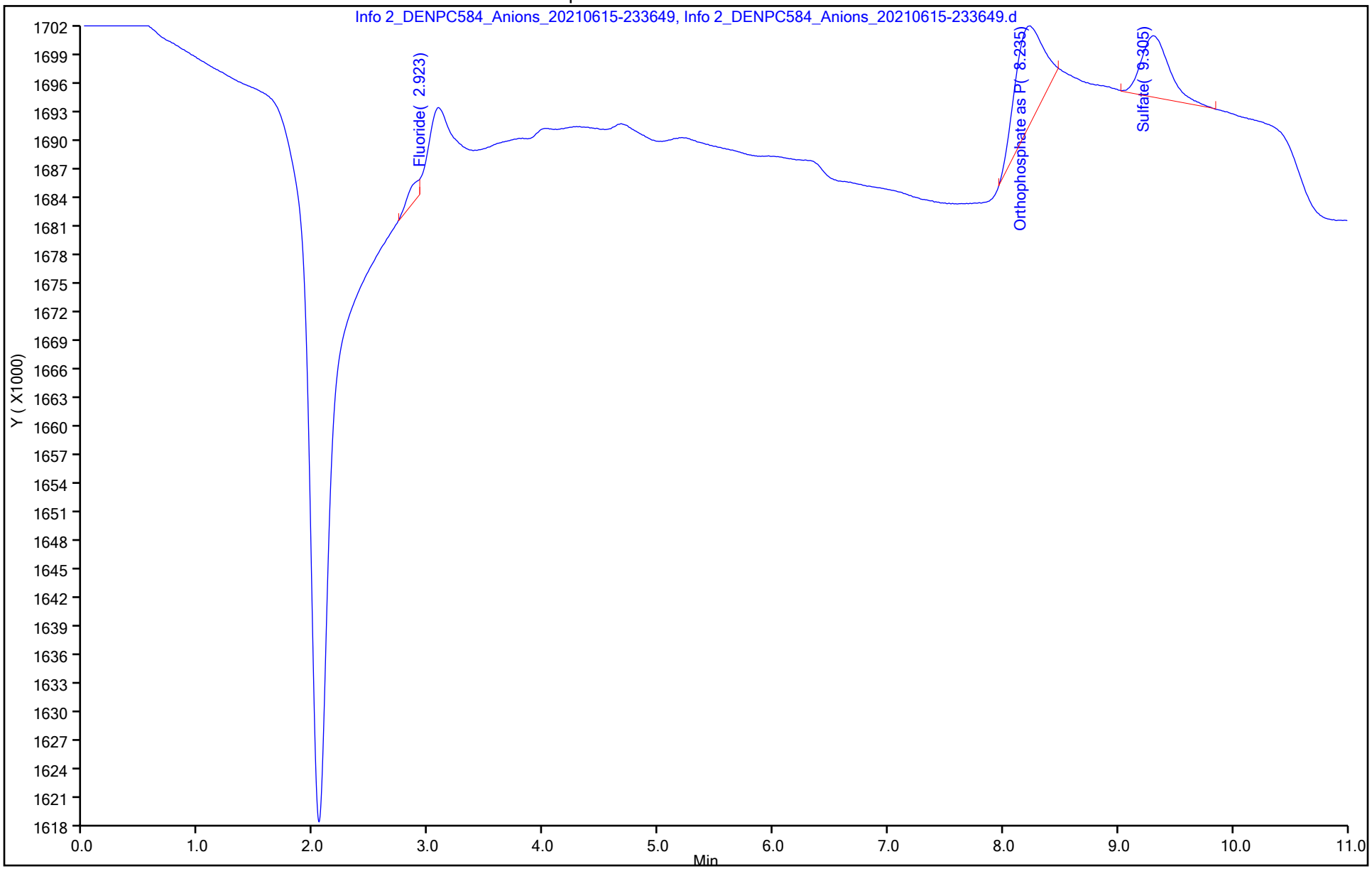
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 10:25:05 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-233649.d				
Injection Date:	15-Jun-2021 23:22:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	49
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-233

Injection Date: 15-Jun-2021 23:22:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 49

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

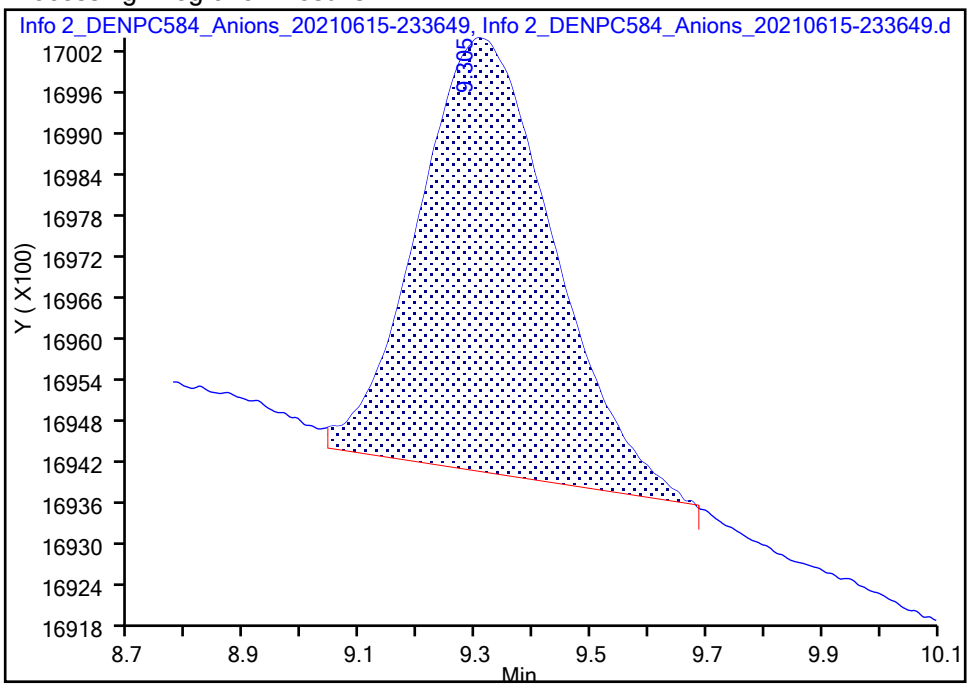
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

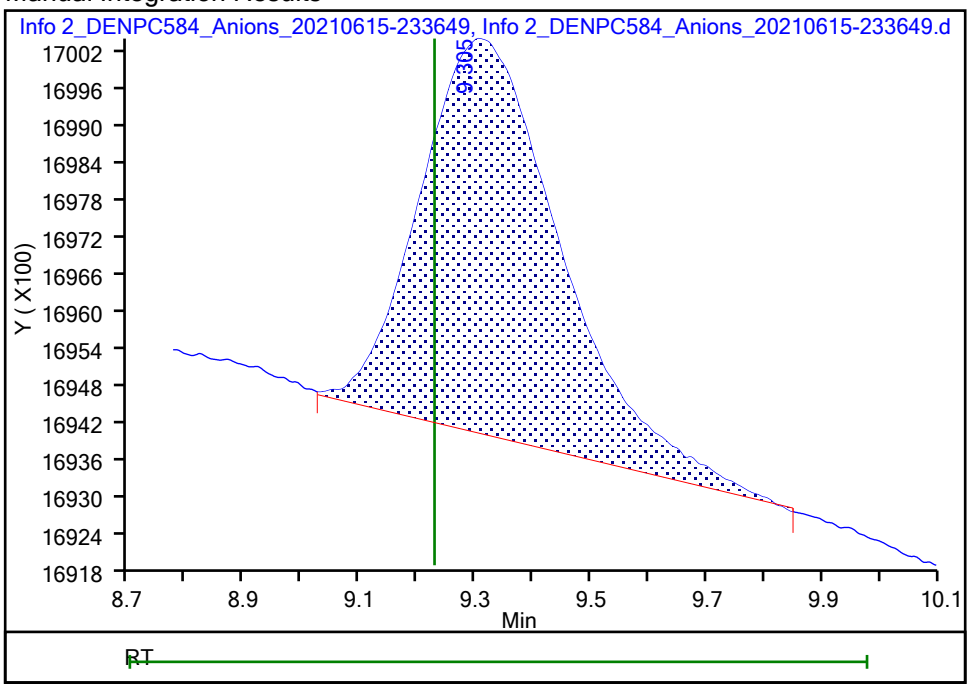
Processing Integration Results

RT: 9.31
Area: 103944
Amount: -0.029031
Amount Units: ug/ml



Manual Integration Results

RT: 9.31
Area: 109125
Amount: -0.028562
Amount Units: ug/ml



Reviewer: battilloj, 16-Jun-2021 10:17:27

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-235
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2021 23:36:00 ALS Bottle#: 0 Worklist Smp#: 50
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-050
Misc. Info.: 280-0102337-050
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:25:04 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 16-Jun-2021 10:18:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.863				ND	U
2 Chloride		4.002				ND	
3 Nitrite as N		4.650				ND	
4 Bromide		5.752				ND	
5 Nitrate as N		6.493				ND	
7 Orthophosphate as P		8.117				ND	
6 Sulfate	9.307	9.228	0.079	207037		-0.0197	M

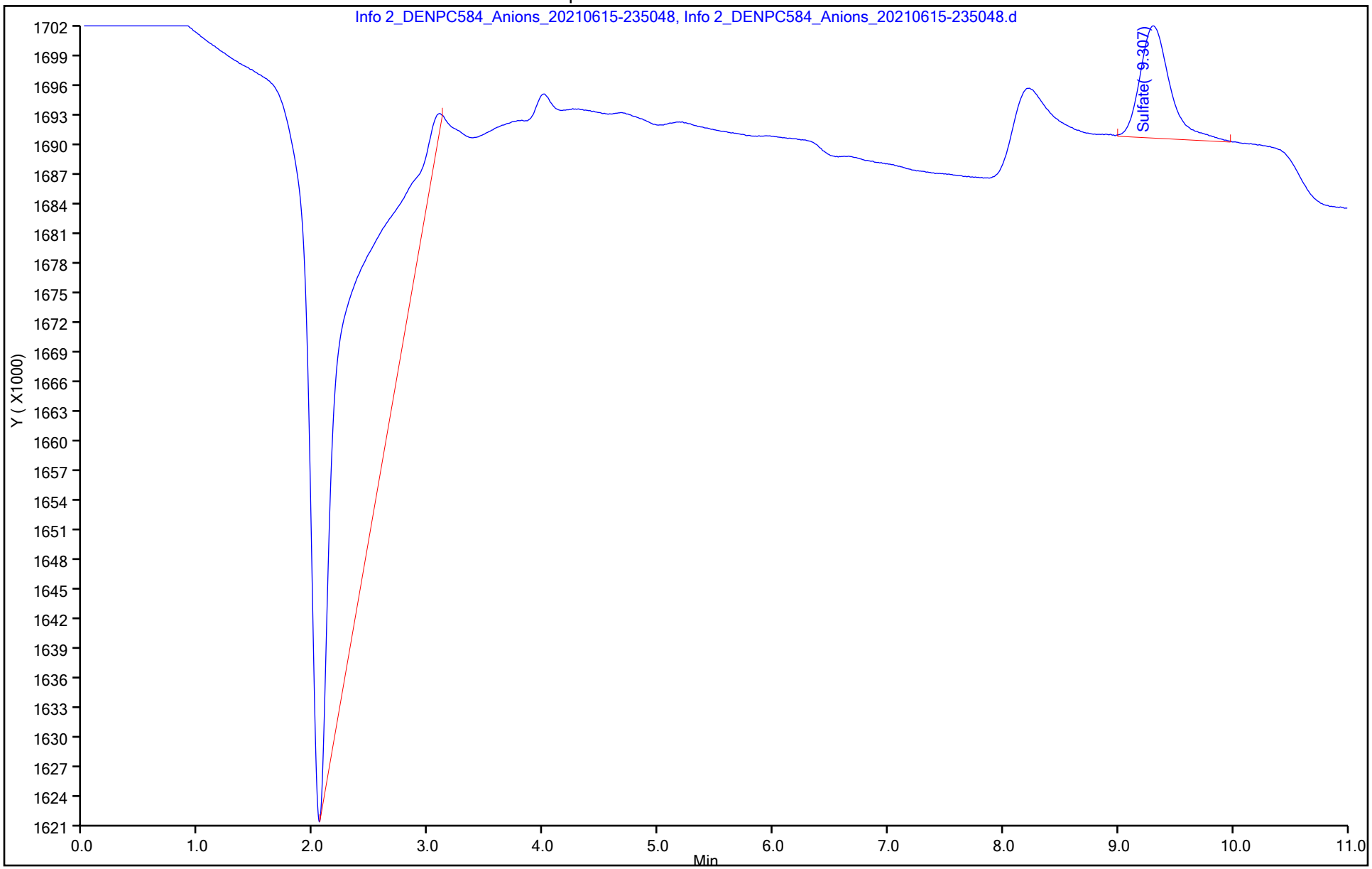
QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 16-Jun-2021 10:25:05 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-235048.d				
Injection Date:	15-Jun-2021 23:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	50
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210615-235

Injection Date: 15-Jun-2021 23:36:00 Instrument ID: WC_IonChrom13

Lims ID: mb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 50

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

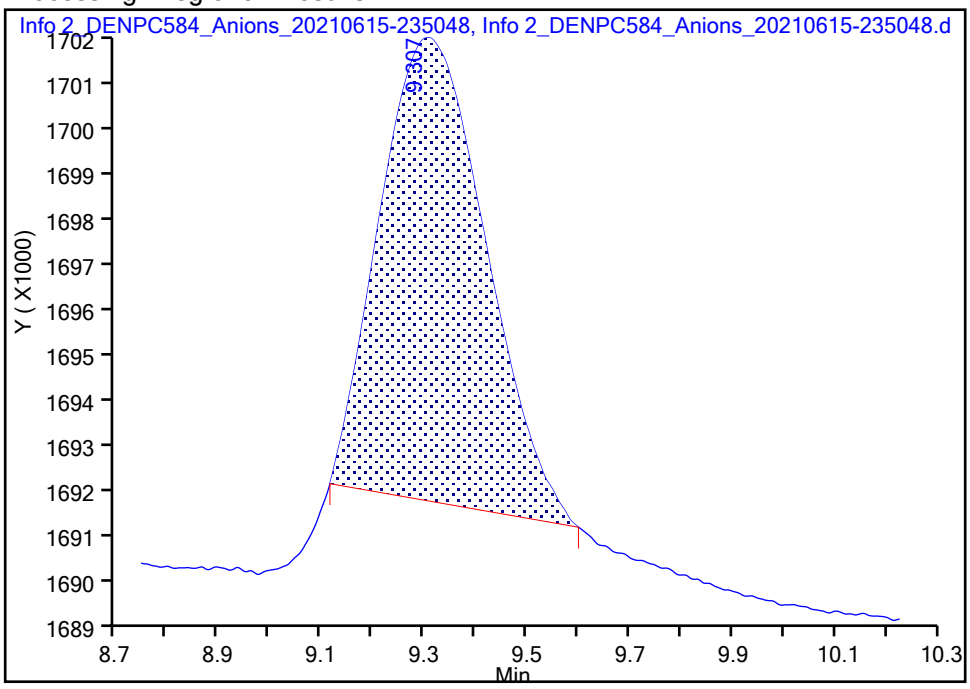
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

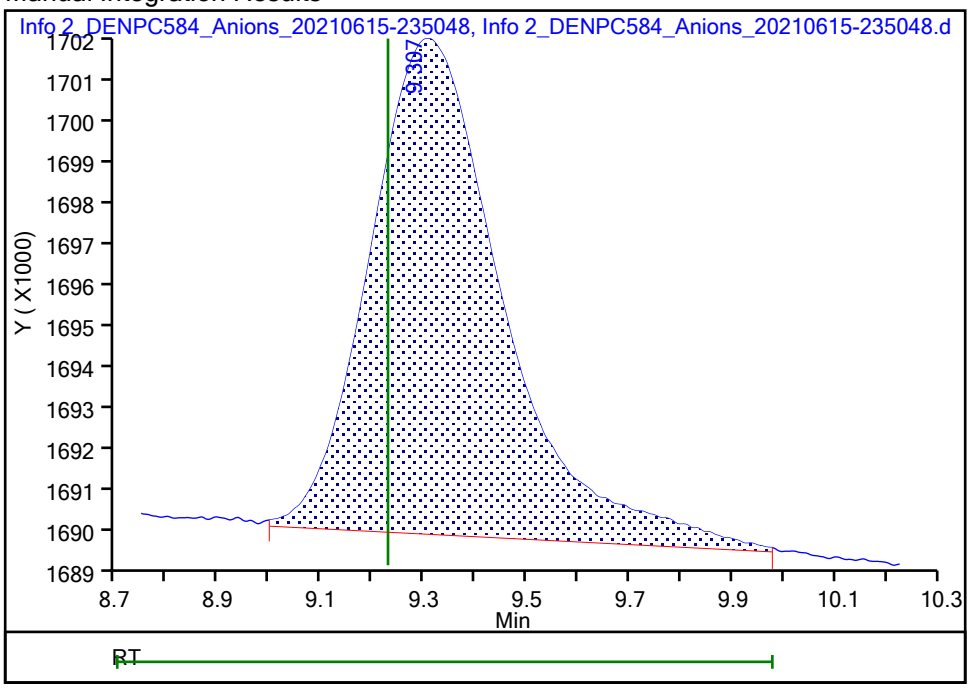
Processing Integration Results

RT: 9.31
Area: 138649
Amount: -0.025887
Amount Units: ug/ml



Manual Integration Results

RT: 9.31
Area: 207037
Amount: -0.019693
Amount Units: ug/ml



Reviewer: battilloj, 16-Jun-2021 10:17:56

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-000
Lims ID: 280-149116-D-14
Client ID: G0024-21A
Sample Type: Client
Inject. Date: 15-Jun-2021 23:50:00 ALS Bottle#: 0 Worklist Smp#: 51
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-051
Misc. Info.: 280-0102337-051
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:25:04 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.862	2.863	-0.001	4498205	0.1797	
2 Chloride	4.032	4.002	0.030	179957124	12.0	
3 Nitrite as N		4.650			ND	
4 Bromide	5.842	5.752	0.090	214126	0.1049	
5 Nitrate as N	6.520	6.493	0.027	265440644	NC	
7 Orthophosphate as P	8.165	8.117	0.048	17269790	NC	
6 Sulfate	9.272	9.228	0.044	593399270	53.7	

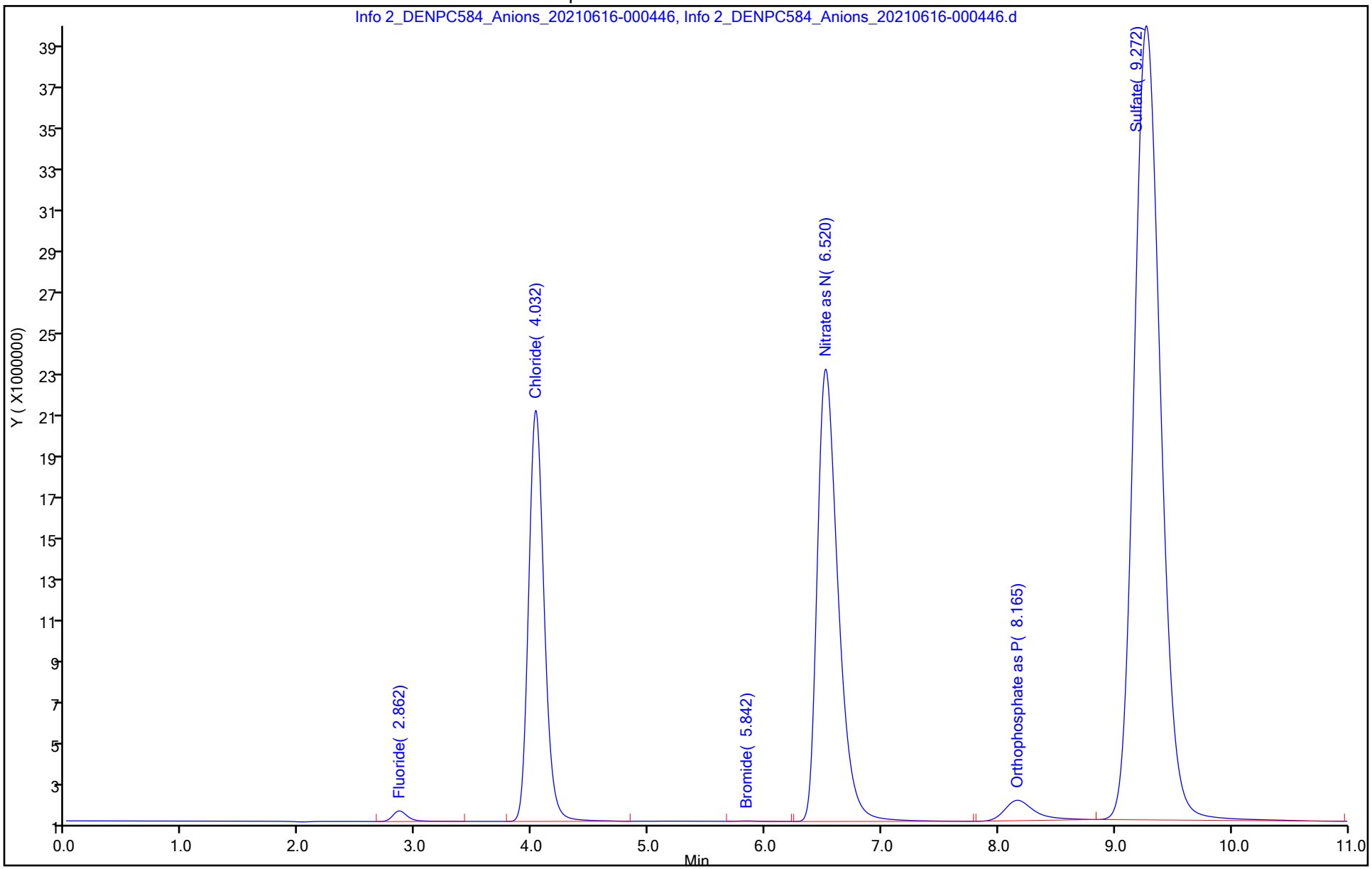
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:25:06 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-000446.d				
Injection Date:	15-Jun-2021 23:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-14	Lab Sample ID:	280-149116-14	Worklist Smp#:	51
Client ID:	G0024-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-00				
Lims ID:	280-149116-D-15				
Client ID:	PZ020-21A				
Sample Type:	Client				
Inject. Date:	16-Jun-2021 00:04:00	ALS Bottle#:	0	Worklist Smp#:	52
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0102337-052				
Misc. Info.:	280-0102337-052				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	16-Jun-2021 10:25:04	Calib Date:	14-Jun-2021 21:22:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213				
Column 1 :			Det: 0005		
Process Host:	CTX1637				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.855	2.863	-0.008	6264091	0.2416	
2 Chloride	4.047	4.002	0.045	391646095	25.8	
3 Nitrite as N		4.650			ND	
4 Bromide	5.842	5.752	0.090	695650	0.1873	
5 Nitrate as N	6.495	6.493	0.002	459851878	NC	
7 Orthophosphate as P	8.162	8.117	0.045	7678891	NC	
6 Sulfate	9.227	9.228	-0.001	1603470934	145.2	

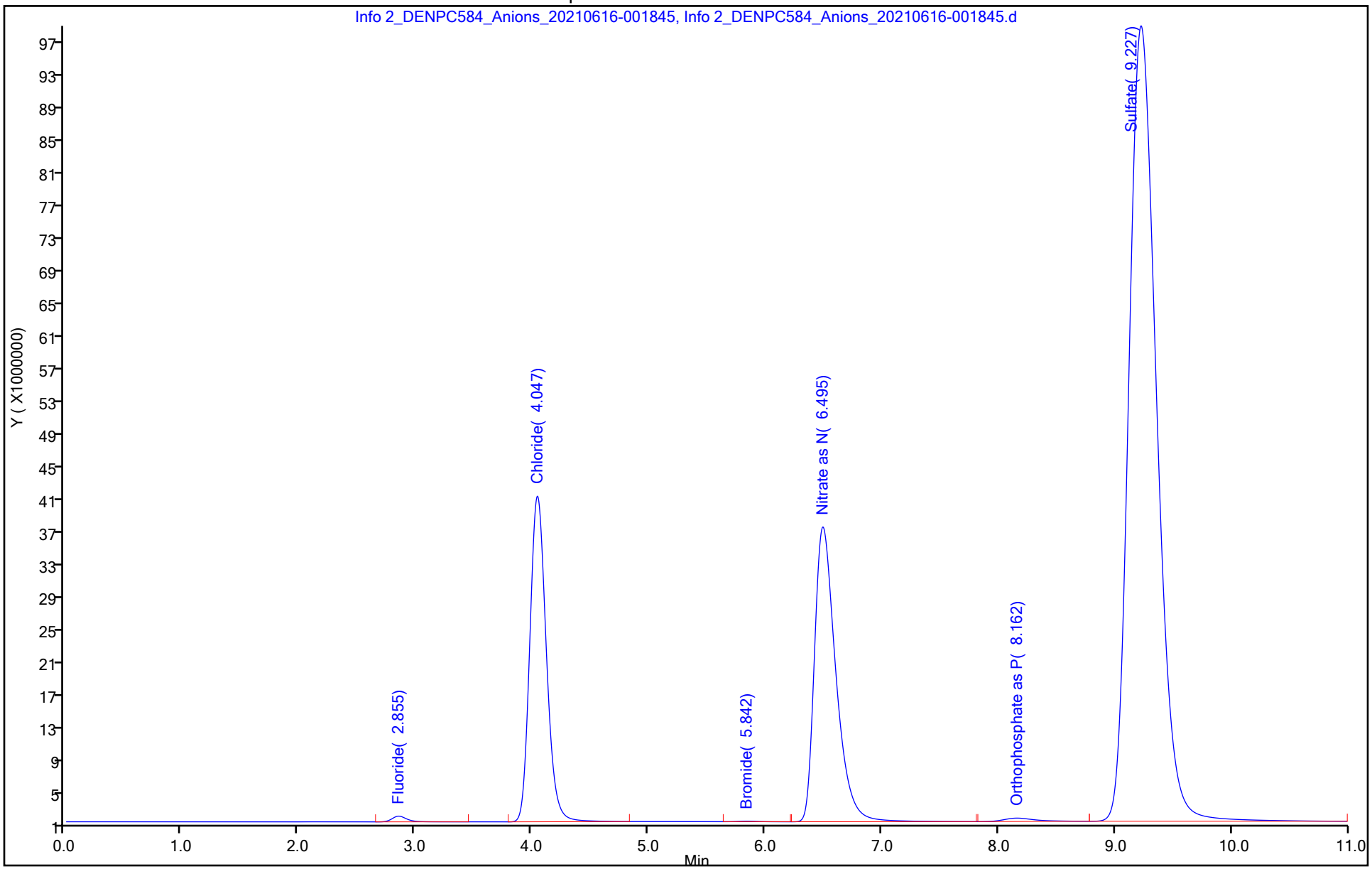
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 10:25:06 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-001845.d				
Injection Date:	16-Jun-2021 00:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-15	Lab Sample ID:	280-149116-15	Worklist Smp#:	52
Client ID:	PZ020-21A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-02
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2021 01:56:00 ALS Bottle#: 0 Worklist Smp#: 61
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-061
Misc. Info.: 280-0102337-061
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:25:09 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.867	2.863	0.004	141338495	5.00	4.98	
2 Chloride	4.022	4.002	0.020	1530145078	100.0	100.0	
3 Nitrite as N	4.677	4.650	0.027	156417176	NC	NC	
4 Bromide	5.813	5.752	0.061	27140961	5.00	4.71	
5 Nitrate as N	6.560	6.493	0.067	202149564	NC	NC	
7 Orthophosphate as P	8.113	8.117	-0.004	90360320	NC	NC	
6 Sulfate	9.225	9.228	-0.003	1140656390	100.0	103.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

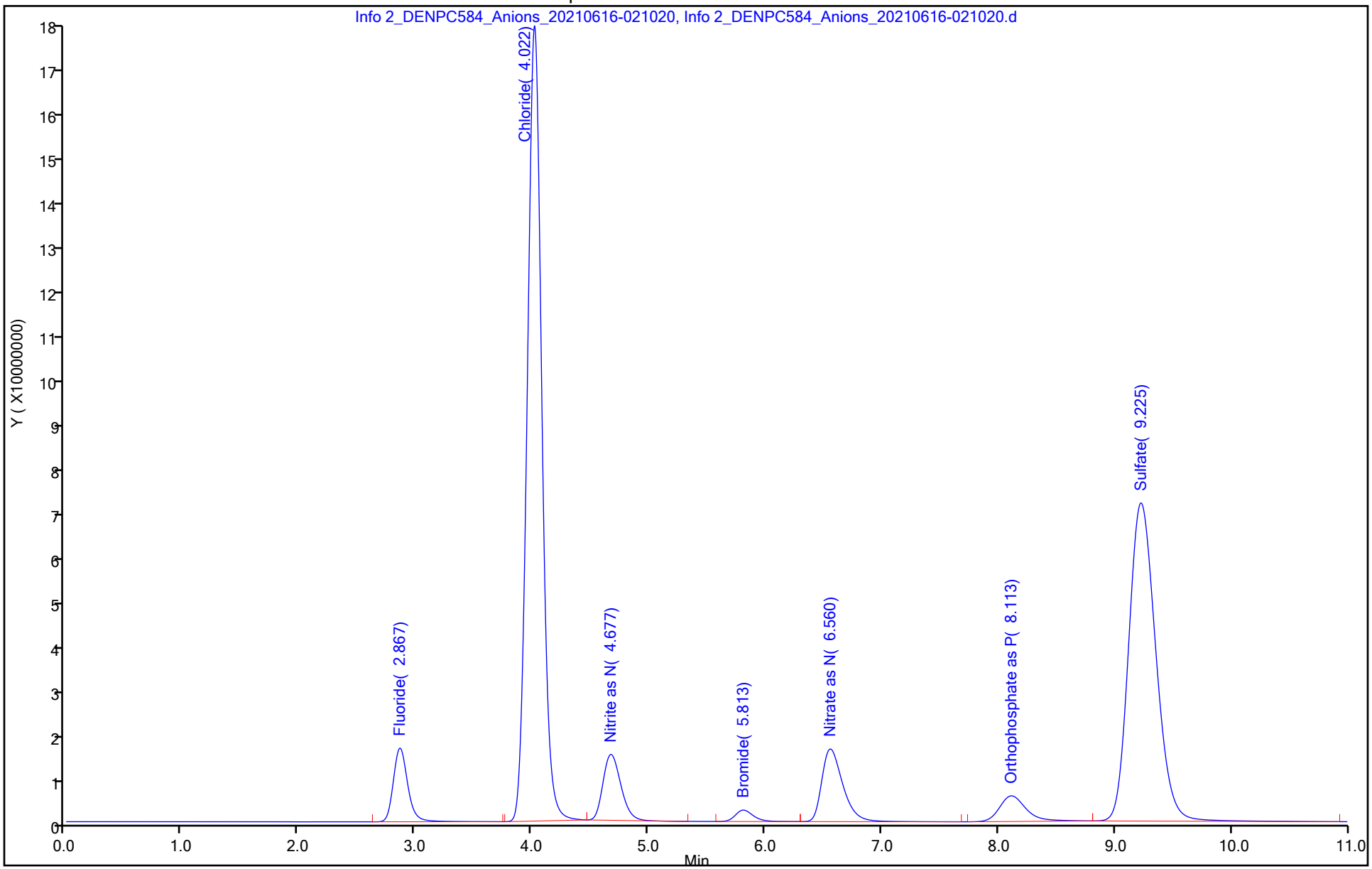
Reagents:

IC LCS_01814 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 10:25:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-021020.d				
Injection Date:	16-Jun-2021 01:56:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	61
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-022
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 16-Jun-2021 02:10:00 ALS Bottle#: 0 Worklist Smp#: 62
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102337-062
Misc. Info.: 280-0102337-062
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 10:25:09 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1637

First Level Reviewer: battilloj Date: 16-Jun-2021 10:19:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.917	2.863	0.054	9850		0.0223	M
2 Chloride	4.002	4.002	0.000	49625		0.2201	Ma
3 Nitrite as N	4.695	4.650	0.045	20869		NC	Ma
4 Bromide		5.752				ND	
5 Nitrate as N		6.493				ND	
7 Orthophosphate as P		8.117				ND	
6 Sulfate	9.282	9.228	0.054	176050		-0.0225	M

QC Flag Legend

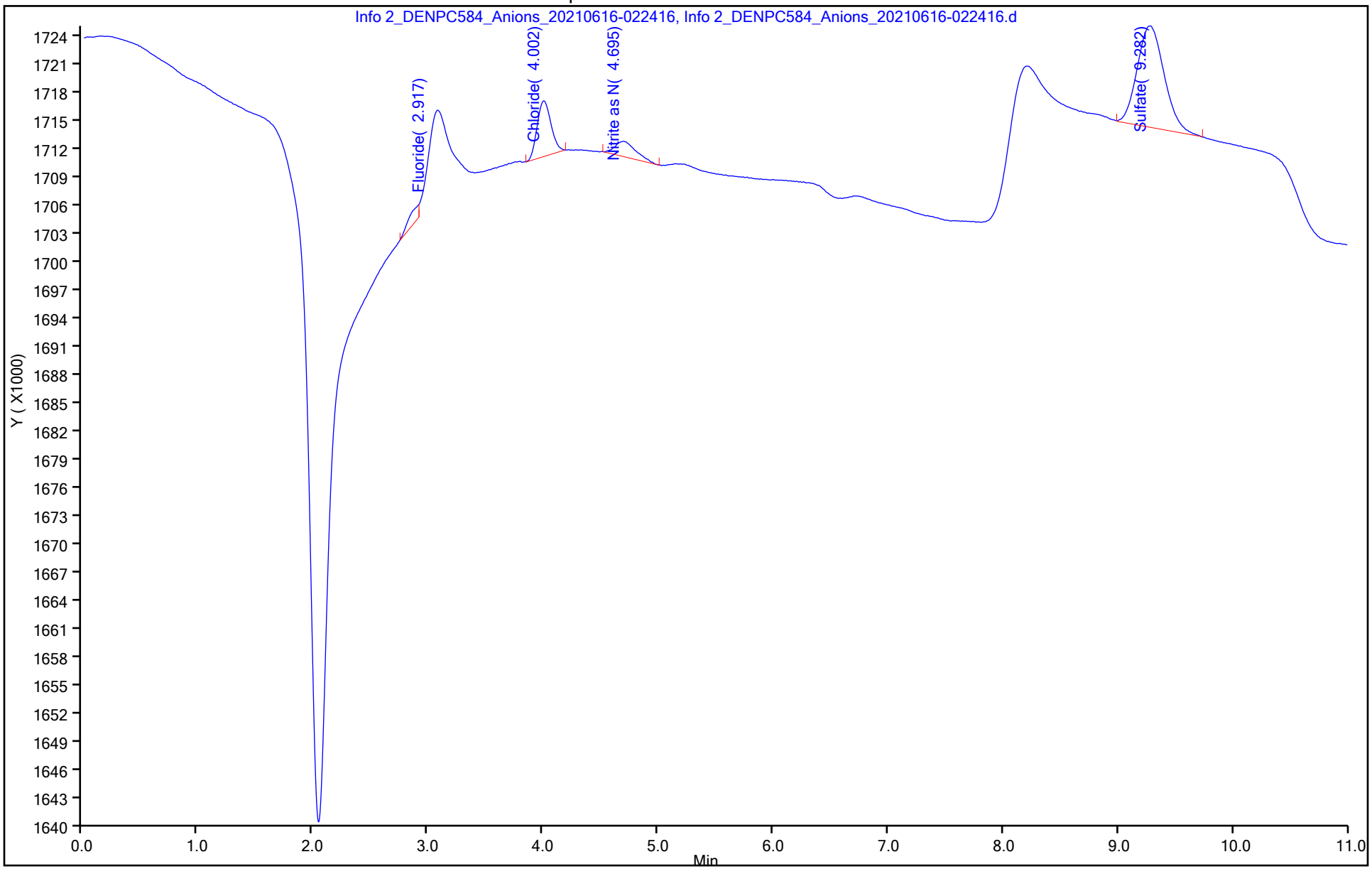
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 10:25:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-022416.d

Injection Date:	16-Jun-2021 02:10:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	62
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210616-022

Injection Date: 16-Jun-2021 02:10:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 62

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

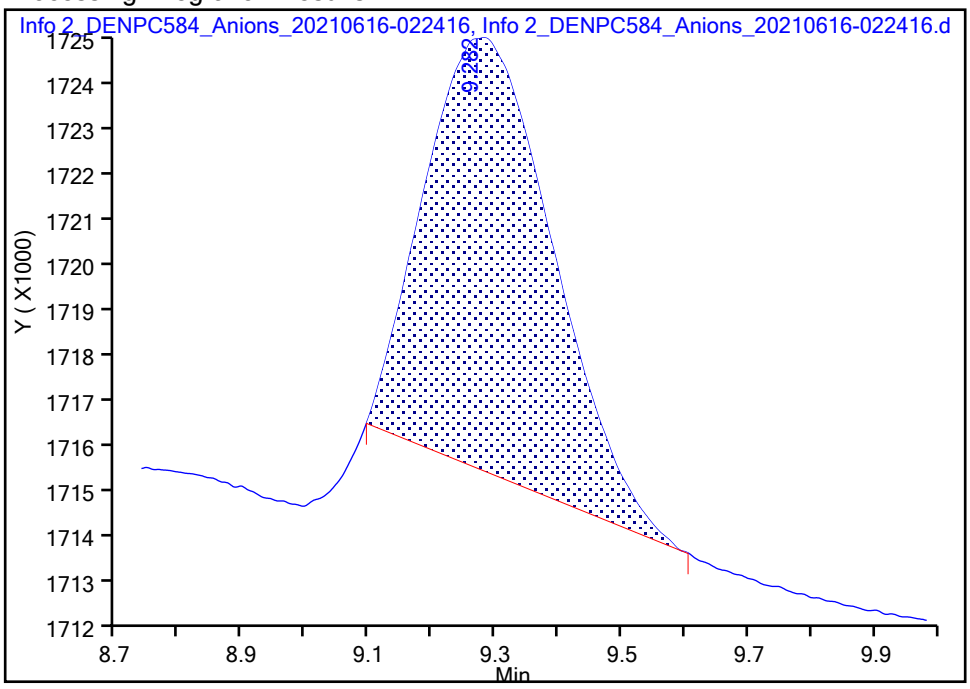
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

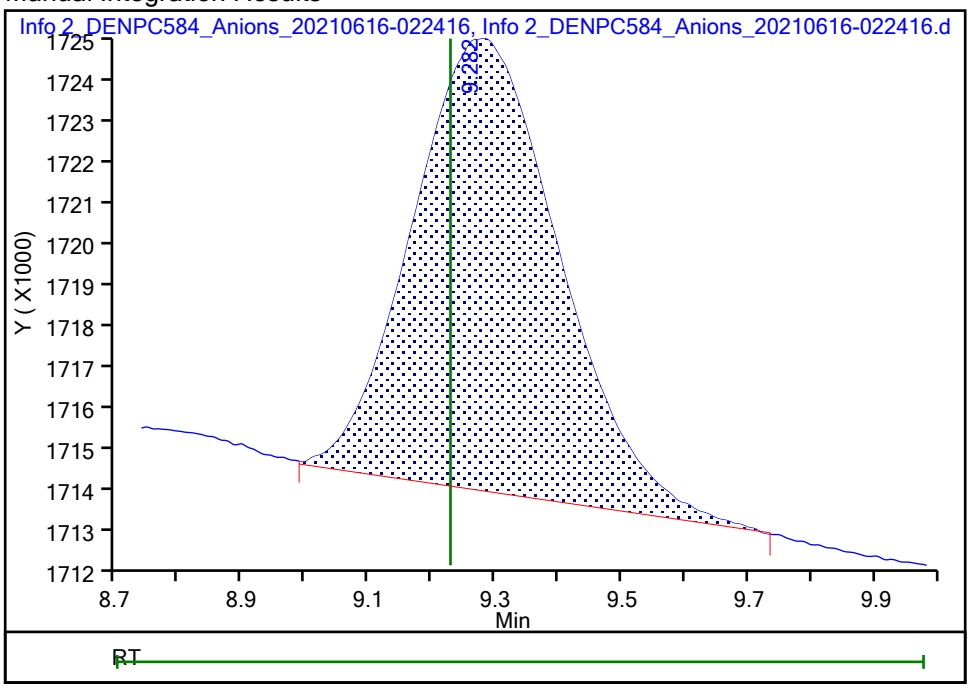
Processing Integration Results

RT: 9.28
Area: 132888
Amount: -0.026409
Amount Units: ug/ml



Manual Integration Results

RT: 9.28
Area: 176050
Amount: -0.022500
Amount Units: ug/ml



Reviewer: battilloj, 16-Jun-2021 10:19:23

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

TestAmerica Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

IC Instrument Information

WL: 102395 **Inst ID:** IC13 **Analysis Date:** 6/16/2021 **Analyst:** JMB / CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	149049	4,6-8	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	149116	1,10,13	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D)13	
☐	148964	5,8	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	149081	1-2	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	K9874	5	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	K9875	1	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	K9882	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	K9876	5	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
049	all	F Cl NO2 Br NO3 PO4 (SO4)	5x	Rerun for Dilution
116	↓	F Cl NO2 Br NO3 PO4 (SO4)	↓	↓
964		F Cl NO2 Br NO3 PO4 (SO4)		
081		F Cl NO2 Br NO3 PO4 (SO4)		
882		F Cl NO2 Br NO3 PO4 SO4	10x	Hist.
876		F Cl NO2 Br NO3 PO4 SO4	5x	Hist.
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Jun-2021 09:56:38
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b
Inj Date : 14-Jun-2021 20:12:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-625687	285176E		0.999
2 Chloride					-332416	1533031		1.000
3 Nitrite as N	-154135	3160587		1.000				
4 Bromide					-398660	5841465		0.998
5 Nitrate as N	-309291	4166723		0.999				
7 Orthophosphate as P	239588E	1760331		0.999				
6 Sulfate					424461	1104055		0.999

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Jun-2021 09:56:38
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.933 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20261
Inj Date: 14-Jun-2021 20:12:00 Worklist: 102337 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20401
Inj Date: 14-Jun-2021 20:26:00 Worklist: 102337 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20540
Inj Date: 14-Jun-2021 20:40:00 Worklist: 102337 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21080
Inj Date: 14-Jun-2021 20:54:00 Worklist: 102337 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21220
Inj Date: 14-Jun-2021 21:08:00 Worklist: 102337 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21360
Inj Date: 14-Jun-2021 21:22:00 Worklist: 102337 Sample#: 7

Start Cal Date: 14-Jun-2021 20:12:00 End Cal Date: 14-Jun-2021 21:22:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: CorrCoef 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					
Error: raw_COD									
26922035	25465784	27350620	29680952	27957877	28425951	-625687			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		28517653		
M5384407	M12732892	M27350620	M118723808	223663015	284259512				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
2 Chloride				Signal: 1					
12599180	13479243	14288186	15610463	15447108	15139315	-3324164			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15330314		
12599180	M33698108	71440931	936627782	1853652983	3027862990				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
4 Bromide				Signal: 1					
4789775	4808796	4888534	5448701	5669159	6065179	-398660			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5841465		
957955	2404398	4888534	21794803	45353272	60651788				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
13822574	9504007	10181108	11341659	11179449	10906404	424461			0.999
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11040555		
13822574	23760017	50905539	680499542	1341533831	2181280835				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 16-Jun-2021 09:56:38
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.933 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20261
Inj Date: 14-Jun-2021 20:12:00 Worklist: 102337 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20401
Inj Date: 14-Jun-2021 20:26:00 Worklist: 102337 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-20540
Inj Date: 14-Jun-2021 20:40:00 Worklist: 102337 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21080
Inj Date: 14-Jun-2021 20:54:00 Worklist: 102337 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21220
Inj Date: 14-Jun-2021 21:08:00 Worklist: 102337 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-21360
Inj Date: 14-Jun-2021 21:22:00 Worklist: 102337 Sample#: 7

Start Cal Date: 14-Jun-2021 20:12:00 End Cal Date: 14-Jun-2021 21:22:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
25725215	27426936	29002297	31713126	30974402	31730256	-1541359			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		31605875		
5145043	M13713468	29002297	M126852503	M247795217	M317302558				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
31750390	33458200	35410514	40021172	40562602	42588072	-3092913			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		41667232		
6350078	M16729100	M35410514	160084688	324500815	425880721				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				
7 Orthophosphate as P				Signal: 1					
29979935	21112276	20657043	18741486	17471908	17962339	2395885			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		17603310		
5995987	10556138	20657043	74965943	139775263	179623391				
102337(2)	102337(3)	102337(4)	102337(5)	102337(6)	102337(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-094
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2021 09:30:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102395-001
Misc. Info.: 280-0102395-001
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:36 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.858	2.858	0.000	138560619	5.00	4.88	
2 Chloride	4.010	4.010	0.000	1525150540	100.0	99.7	
3 Nitrite as N	4.660	4.660	0.000	166773646	NC	NC	
4 Bromide	5.792	5.792	0.000	26742746	5.00	4.65	
5 Nitrate as N	6.537	6.537	0.000	189223141	NC	NC	
7 Orthophosphate as P	8.093	8.093	0.000	88917134	NC	NC	
6 Sulfate	9.212	9.212	0.000	1141309151	100.0	103.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

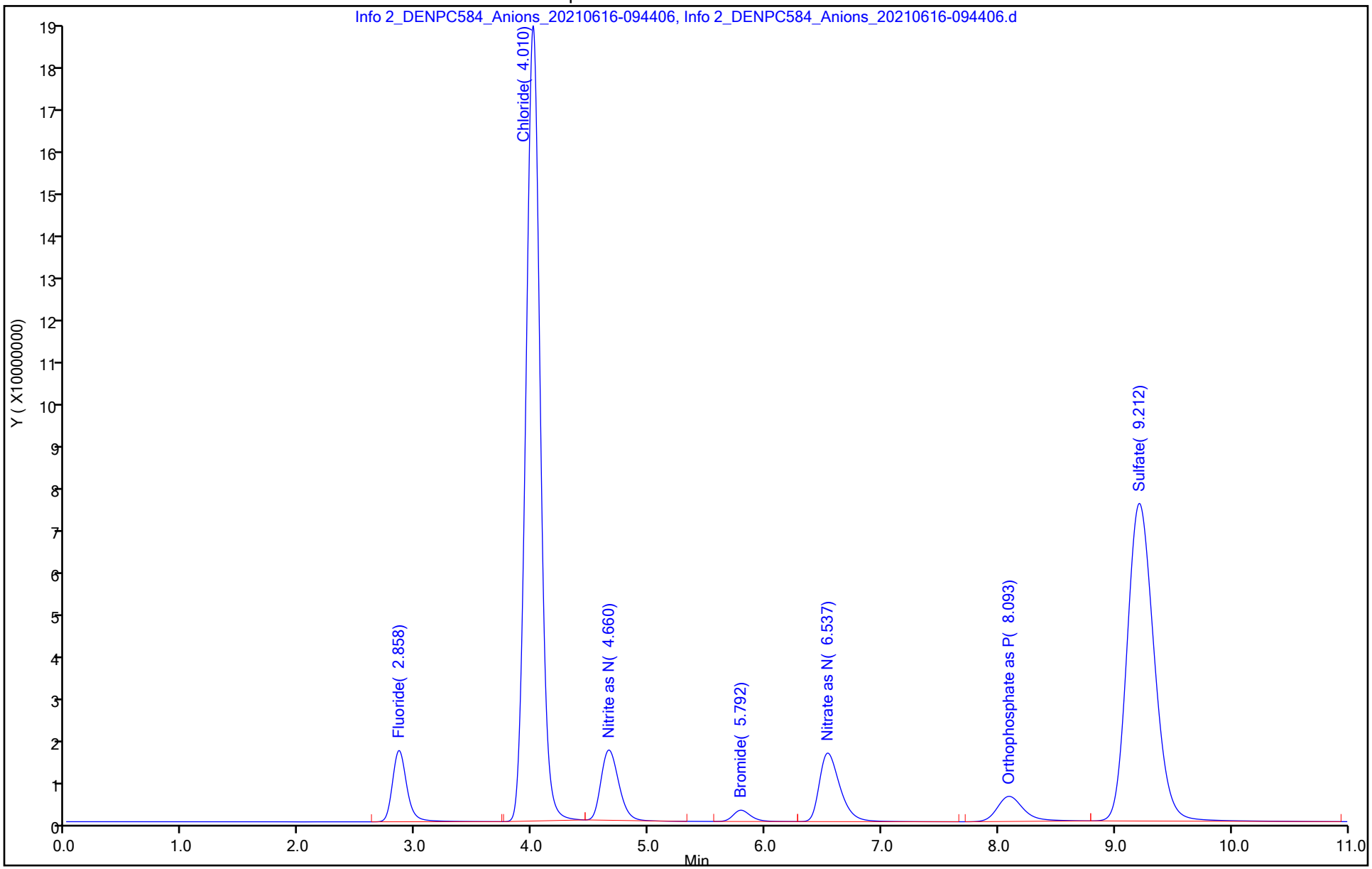
Reagents:

IC LCS_01815 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 16:11:37 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-094406.d				
Injection Date:	16-Jun-2021 09:30:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-095
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 16-Jun-2021 09:44:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102395-002
Misc. Info.: 280-0102395-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:34 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 16-Jun-2021 16:05:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.867	2.873	-0.006	40769		0.0234	M
2 Chloride	3.998	4.000	-0.002	51050		0.2202	Ma
3 Nitrite as N		4.645				ND	
4 Bromide		5.738				ND	
5 Nitrate as N		6.452				ND	
7 Orthophosphate as P		8.283				ND	
6 Sulfate	9.323	9.350	-0.027	1392462		0.0877	

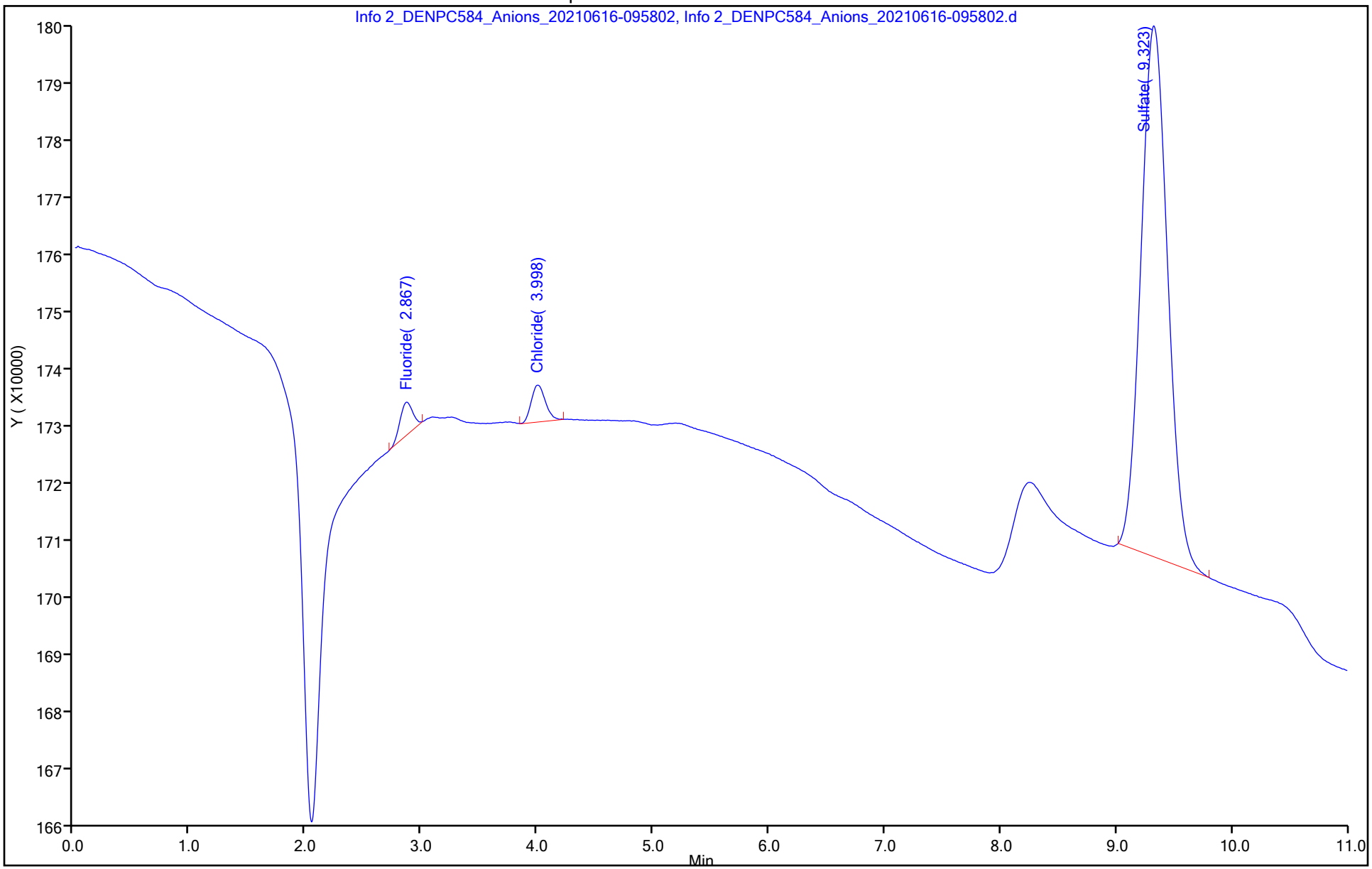
QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 16:11:36 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-095802.d				
Injection Date:	16-Jun-2021 09:44:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-10
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 16-Jun-2021 09:58:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102395-003
Misc. Info.: 280-0102395-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:34 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 16-Jun-2021 16:06:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.862	2.873	-0.011	11100994	0.5000	0.4112	M
2 Chloride	3.993	4.000	-0.007	67278460	5.00	4.61	
3 Nitrite as N	4.690	4.645	0.045	13689389	NC	NC	
4 Bromide	5.830	5.738	0.092	2252664	0.5000	0.4539	
5 Nitrate as N	6.632	6.452	0.180	14915849	NC	NC	
7 Orthophosphate as P	8.197	8.283	-0.086	9881285	NC	NC	
6 Sulfate	9.328	9.350	-0.022	45450516	5.00	4.08	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

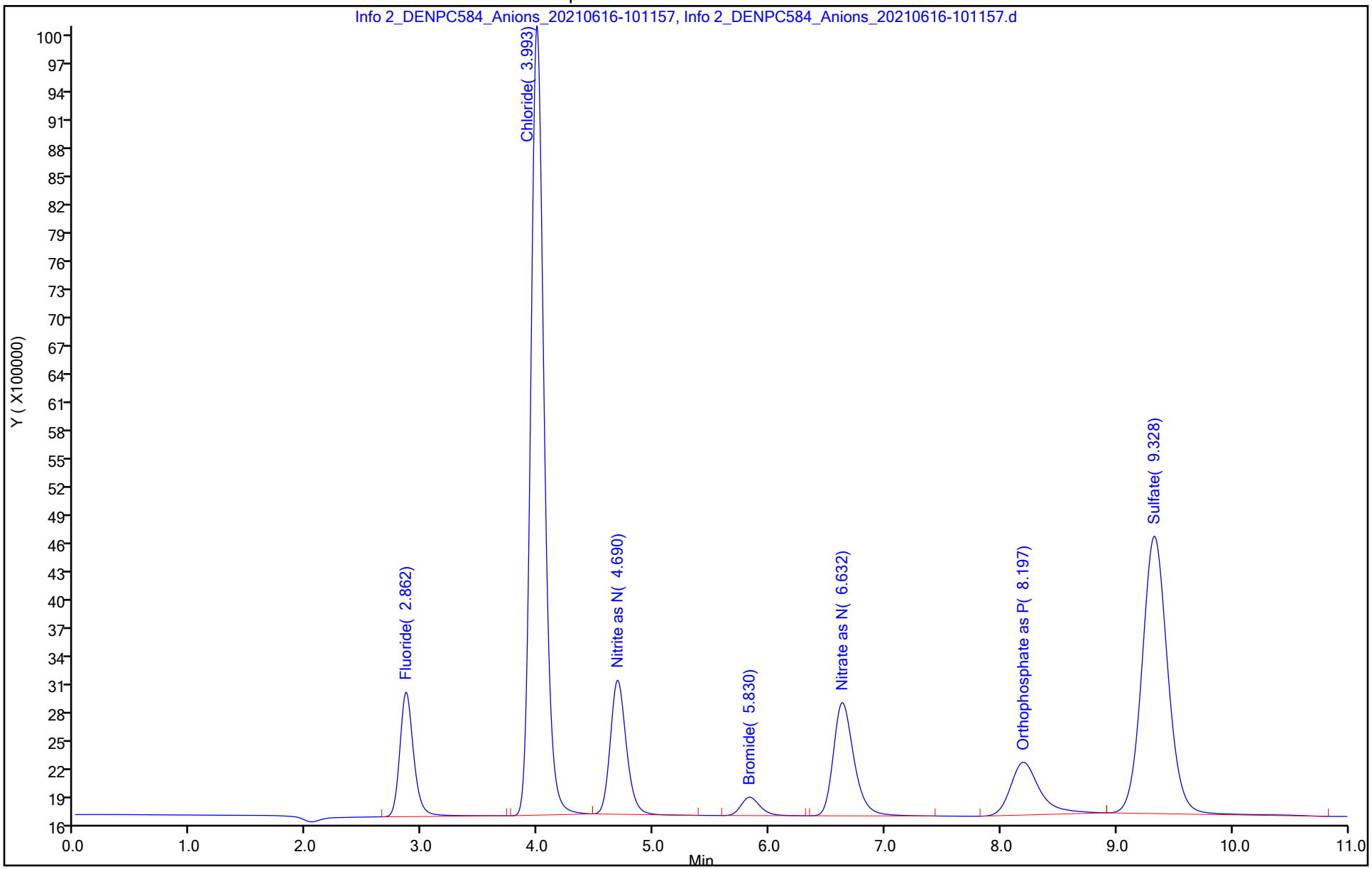
Reagents:

IC CAL cl/so4_00371 Amount Added: 0.20 Units: mL
IC Cal low_00585 Amount Added: 0.10 Units: mL

Report Date: 16-Jun-2021 16:11:36 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-101157.d				
Injection Date:	16-Jun-2021 09:58:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-102
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2021 10:11:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102395-004
Misc. Info.: 280-0102395-004
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:34 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.868	2.873	-0.005	136468037	5.00	4.81	
2 Chloride	4.020	4.000	0.020	1510888857	100.0	98.8	
3 Nitrite as N	4.668	4.645	0.023	165010515	NC	NC	
4 Bromide	5.795	5.738	0.057	26403248	5.00	4.59	
5 Nitrate as N	6.537	6.452	0.085	187444502	NC	NC	
7 Orthophosphate as P	8.177	8.283	-0.106	87243827	NC	NC	
6 Sulfate	9.288	9.350	-0.062	1128613880	100.0	102.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

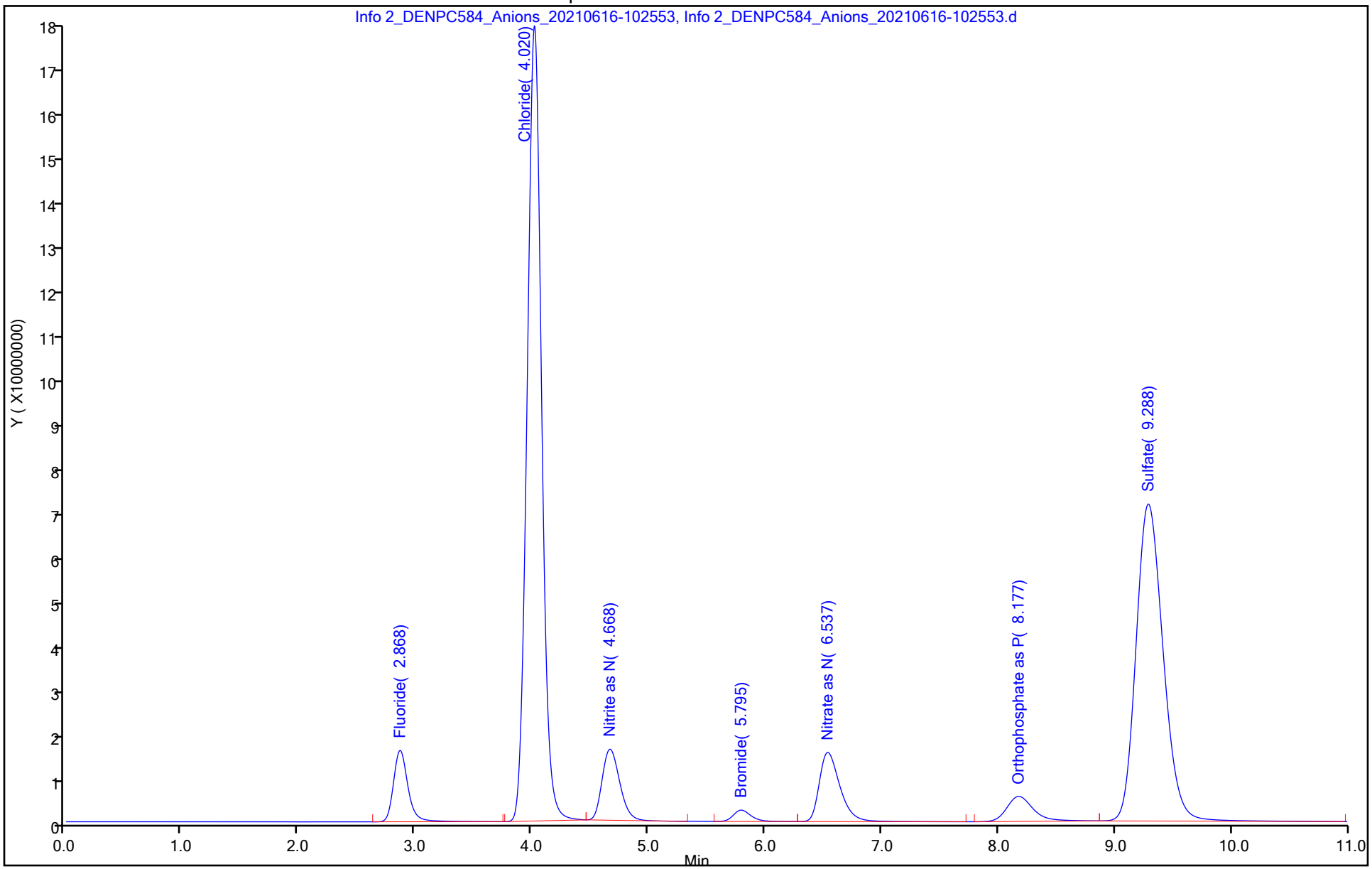
Reagents:

IC LCS_01815 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 16:11:35 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-102553.d				
Injection Date:	16-Jun-2021 10:11:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-103
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 16-Jun-2021 10:25:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102395-005
Misc. Info.: 280-0102395-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:34 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.873	2.873	0.000	136562474	5.00	4.81	
2 Chloride	4.027	4.000	0.027	1511221123	100.0	98.8	
3 Nitrite as N	4.673	4.645	0.028	165264833	NC	NC	
4 Bromide	5.800	5.738	0.062	26593908	5.00	4.62	
5 Nitrate as N	6.542	6.452	0.090	187866528	NC	NC	
7 Orthophosphate as P	8.185	8.283	-0.098	87551656	NC	NC	
6 Sulfate	9.298	9.350	-0.052	1128450070	100.0	102.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

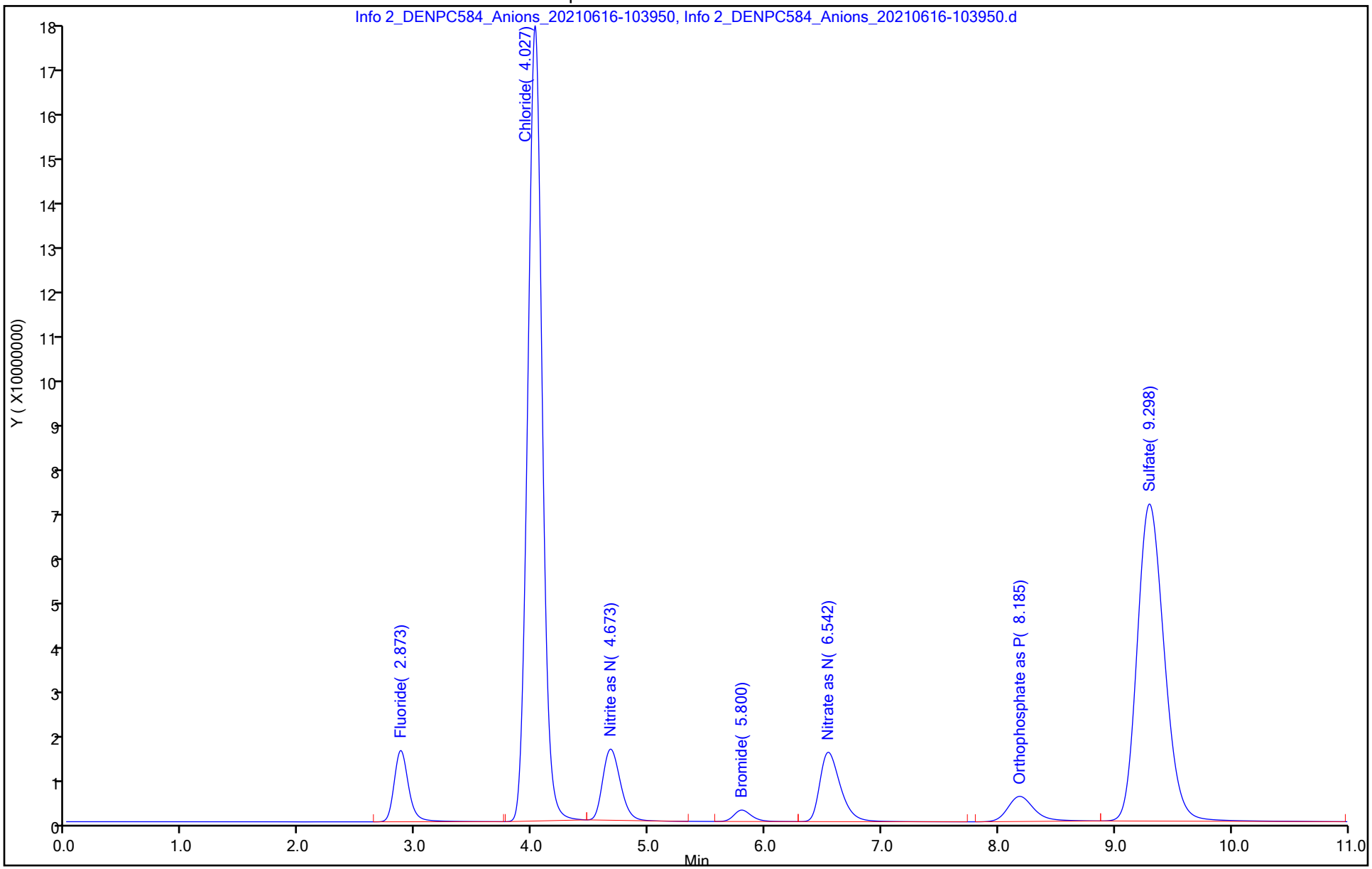
IC LCS_01815 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 16:11:35 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-103950.d

Injection Date:	16-Jun-2021 10:25:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-105
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Jun-2021 10:39:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102395-006
Misc. Info.: 280-0102395-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:34 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 16-Jun-2021 16:06:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.873	2.873	0.000	32716		0.0231	M
2 Chloride	4.000	4.000	0.000	42958		0.2196	Ma
3 Nitrite as N		4.645				ND	
4 Bromide		5.738				ND	
5 Nitrate as N		6.452				ND	
7 Orthophosphate as P	8.283	8.283	0.000	152886		NC	
6 Sulfate	9.350	9.350	0.000	984713		0.0507	

QC Flag Legend

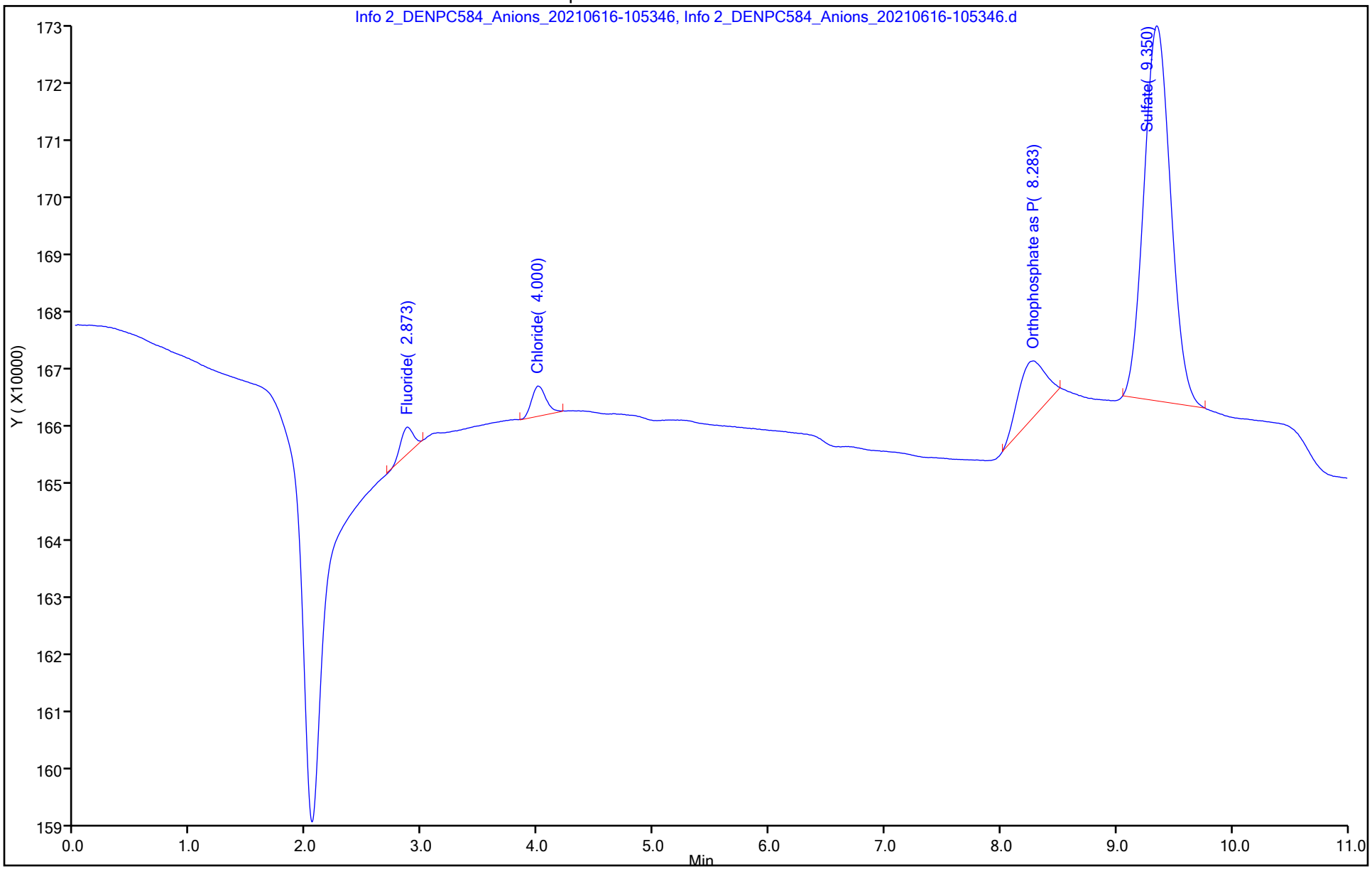
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 16:11:34 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-105346.d

Injection Date:	16-Jun-2021 10:39:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-123
Lims ID: 280-149116-D-13
Client ID: PZ007-21A
Sample Type: Client
Inject. Date: 16-Jun-2021 12:25:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0102395-011
Misc. Info.: 280-0102395-011
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:31 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 16-Jun-2021 16:07:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.865	2.873	-0.008	949047	0.0552	M
2 Chloride	4.008	4.000	0.008	123207734	8.25	
3 Nitrite as N		4.645			ND	
4 Bromide	5.838	5.738	0.100	179036	0.0989	
5 Nitrate as N	6.655	6.452	0.203	3338938	NC	
7 Orthophosphate as P		8.283			ND	
6 Sulfate	9.312	9.350	-0.038	1134061244	102.7	

QC Flag Legend

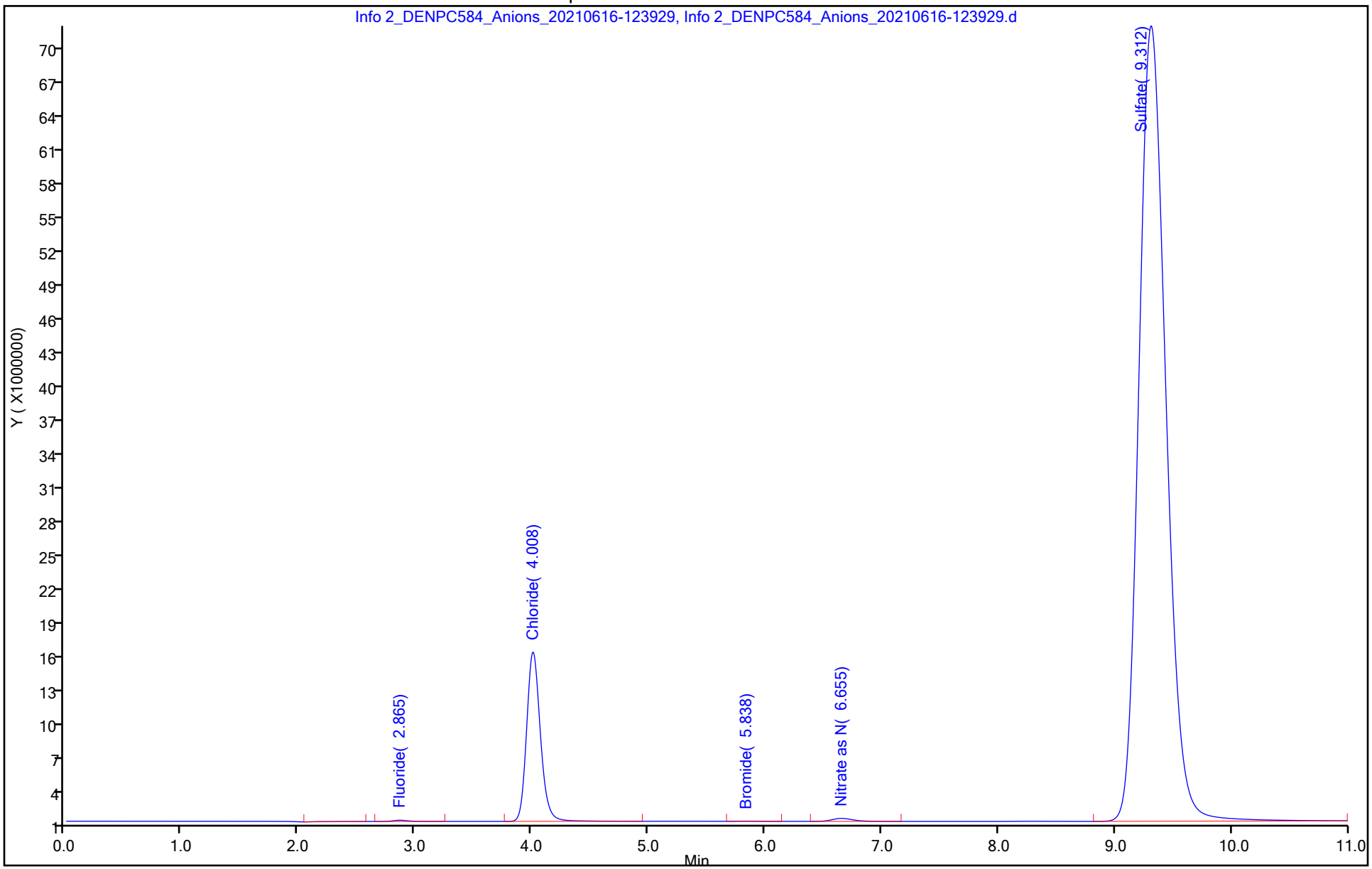
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 16-Jun-2021 16:11:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-123929.d

Injection Date:	16-Jun-2021 12:25:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-13	Lab Sample ID:	280-149116-13	Worklist Smp#:	11
Client ID:	PZ007-21A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-125
Lims ID: 280-149116-D-13 DU
Client ID:
Sample Type: DU
Inject. Date: 16-Jun-2021 12:39:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0102395-012
Misc. Info.: 280-0102395-012
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:31 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 16-Jun-2021 16:08:18

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.863	2.873	-0.010	948973		0.0552	M
2 Chloride	4.003	4.000	0.003	120782114		8.10	
3 Nitrite as N		4.645				ND	
4 Bromide	5.833	5.738	0.095	178197		0.0988	
5 Nitrate as N	6.647	6.452	0.195	3251382		NC	
7 Orthophosphate as P		8.283				ND	
6 Sulfate	9.310	9.350	-0.040	1110188893		100.5	

QC Flag Legend

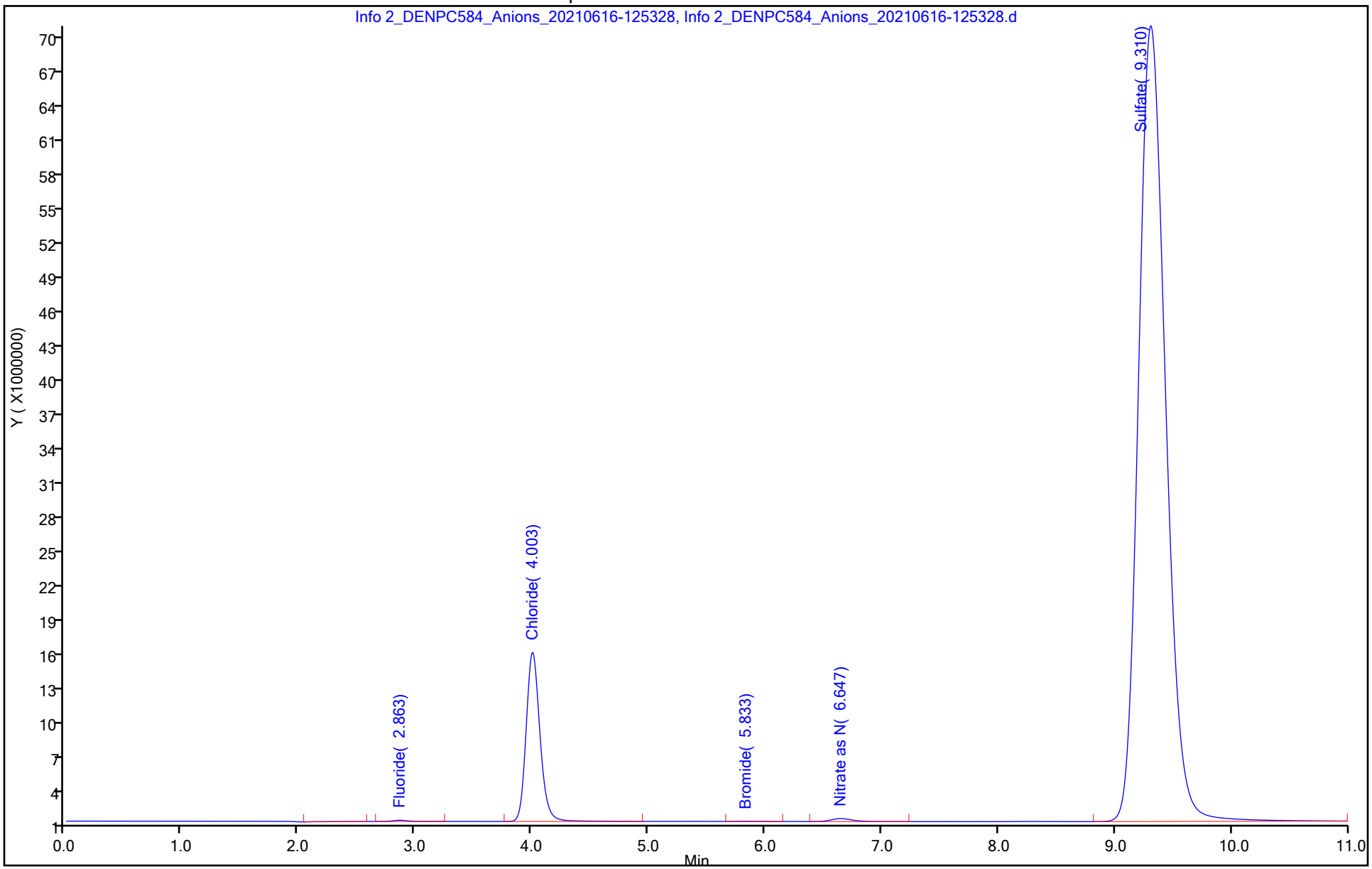
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 16-Jun-2021 16:11:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-125328.d

Injection Date:	16-Jun-2021 12:39:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-13 DU			Worklist Smp#:	12
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-133
Lims ID: 280-149116-D-1
Client ID: G0017-21A
Sample Type: Client
Inject. Date: 16-Jun-2021 13:21:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0102395-015
Misc. Info.: 280-0102395-015
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:31 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.865	2.873	-0.008	858746	0.0521	
2 Chloride	4.005	4.000	0.005	146925743	9.80	
3 Nitrite as N		4.645			ND	
4 Bromide	5.830	5.738	0.092	293911	0.1186	
5 Nitrate as N		6.452			ND	
7 Orthophosphate as P	8.278	8.283	-0.005	1058697	NC	
6 Sulfate	9.312	9.350	-0.038	1186851064	107.5	

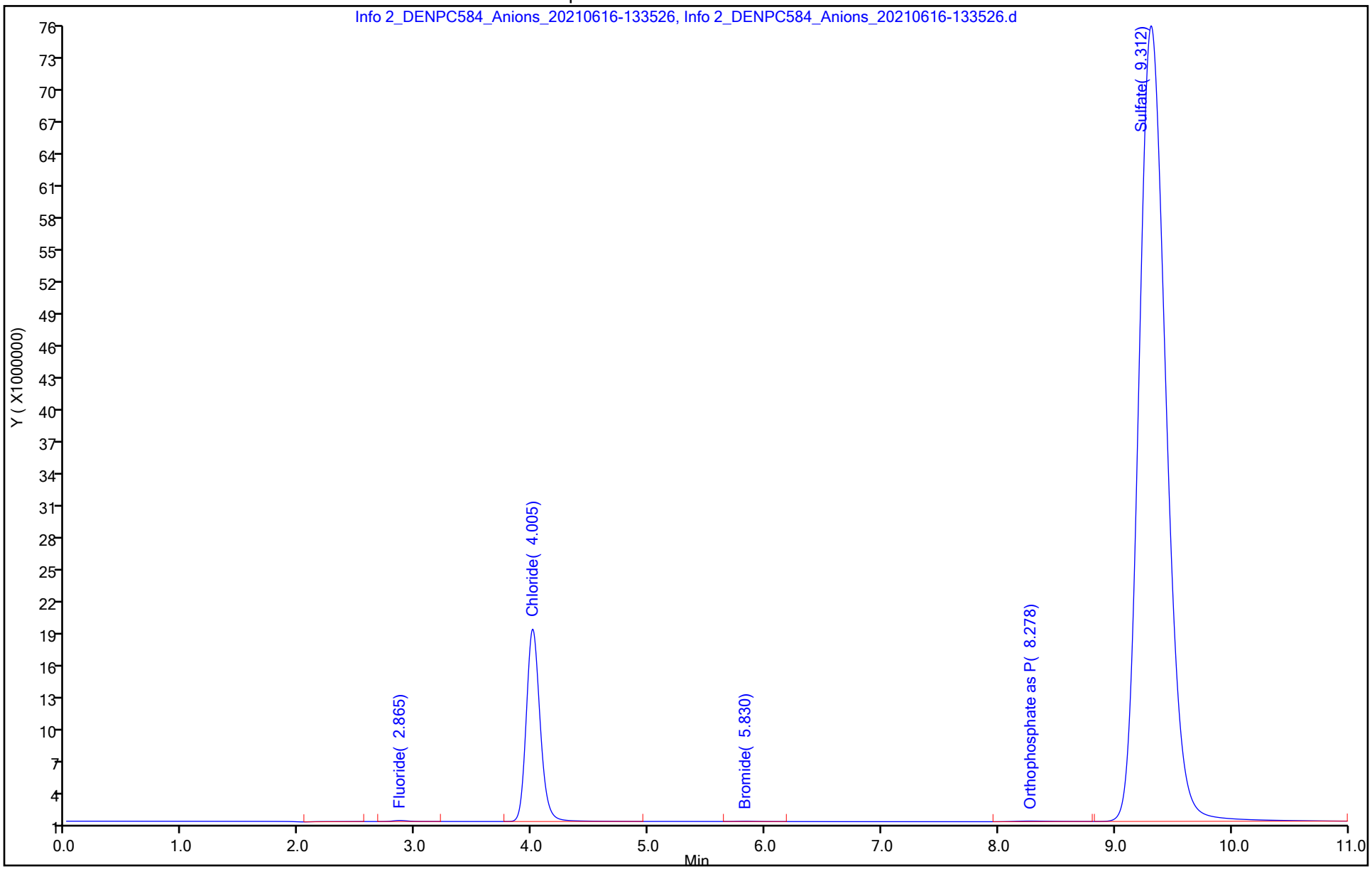
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 16-Jun-2021 16:11:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-133526.d				
Injection Date:	16-Jun-2021 13:21:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-1	Lab Sample ID:	280-149116-1	Worklist Smp#:	15
Client ID:	G0017-21A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-134
Lims ID: 280-149116-D-10
Client ID: G0078-21A
Sample Type: Client
Inject. Date: 16-Jun-2021 13:35:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0102395-016
Misc. Info.: 280-0102395-016
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:31 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 16-Jun-2021 16:09:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.867	2.873	-0.006	474695	0.0386	M
2 Chloride	4.005	4.000	0.005	142196735	9.49	
3 Nitrite as N		4.645			ND	
4 Bromide	5.828	5.738	0.090	238405	0.1091	
5 Nitrate as N		6.452			ND	
7 Orthophosphate as P		8.283			ND	
6 Sulfate	9.340	9.350	-0.010	589324403	53.3	

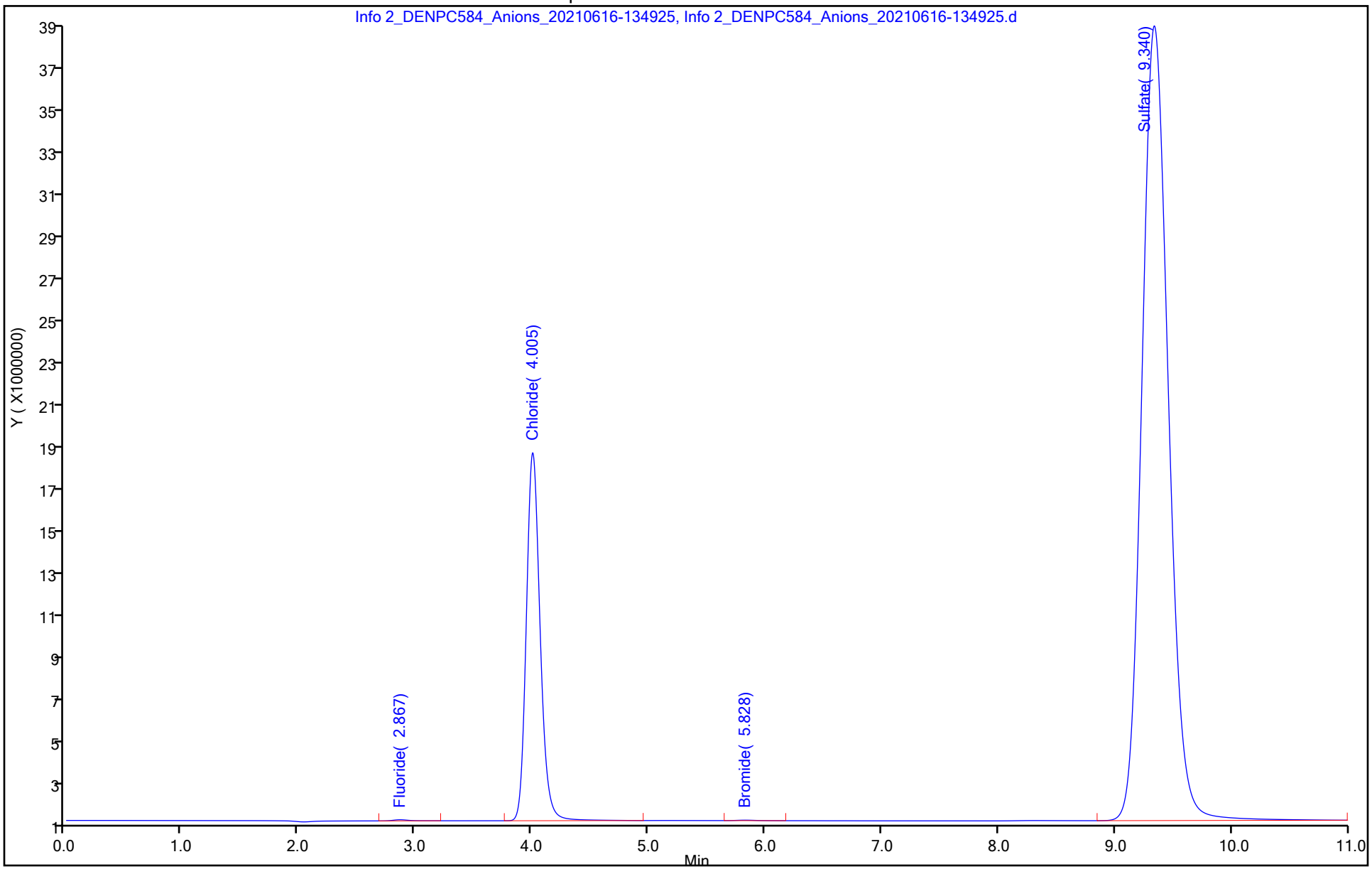
QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Report Date: 16-Jun-2021 16:11:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-134925.d				
Injection Date:	16-Jun-2021 13:35:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-149116-D-10	Lab Sample ID:	280-149116-10	Worklist Smp#:	16
Client ID:	G0078-21A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-140
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2021 13:49:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102395-017
Misc. Info.: 280-0102395-017
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:31 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.873	2.873	0.000	133373948	5.00	4.70	
2 Chloride	4.023	4.000	0.023	1518890451	100.0	99.3	
3 Nitrite as N	4.667	4.645	0.022	165263566	NC	NC	
4 Bromide	5.782	5.738	0.044	26708142	5.00	4.64	
5 Nitrate as N	6.518	6.452	0.066	189186880	NC	NC	
7 Orthophosphate as P	8.205	8.283	-0.078	88843711	NC	NC	
6 Sulfate	9.322	9.350	-0.028	1129022765	100.0	102.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

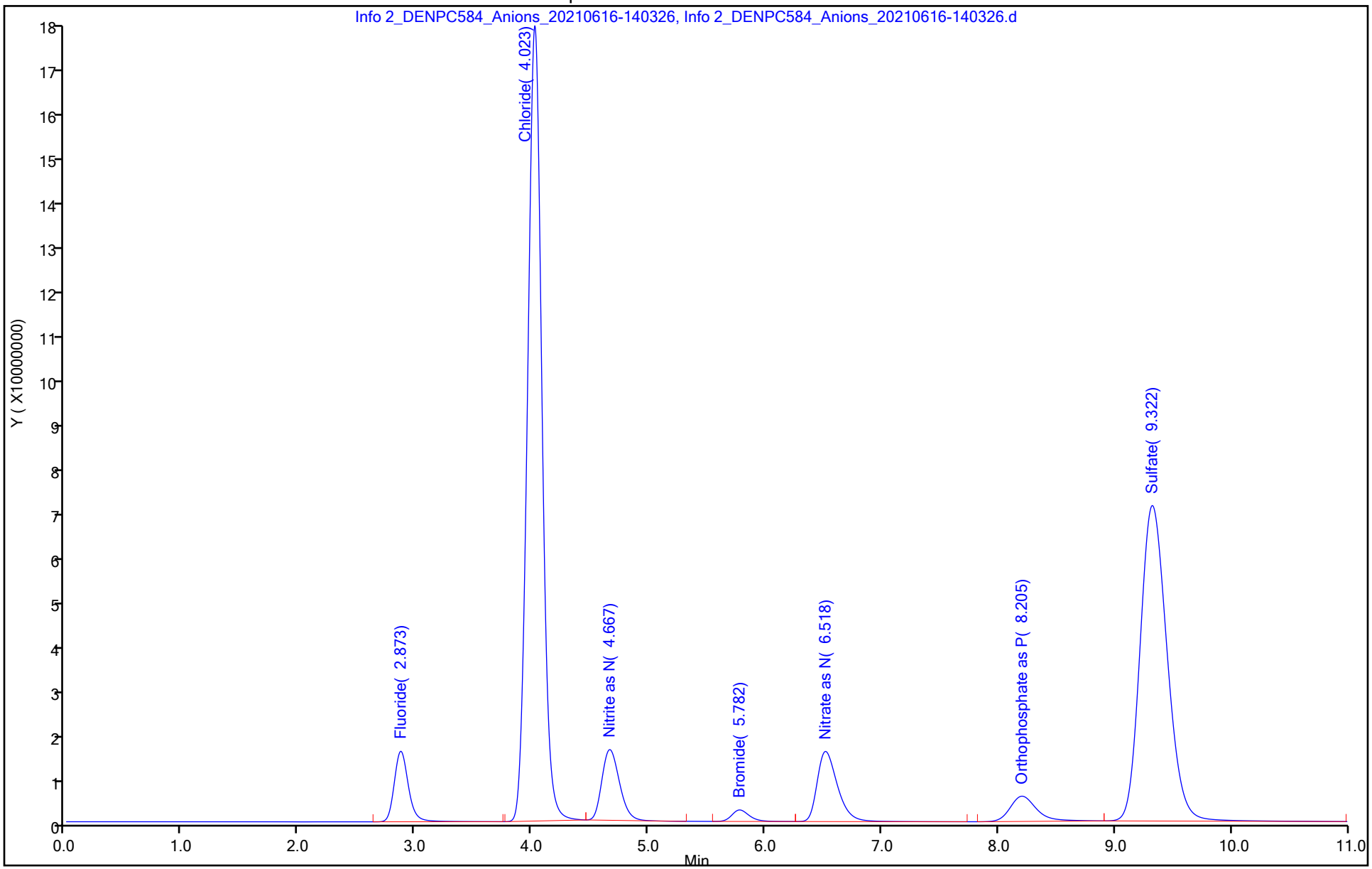
IC LCS_01815 Amount Added: 10.00 Units: mL

Report Date: 16-Jun-2021 16:11:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-140326.d

Injection Date:	16-Jun-2021 13:49:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-14
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 16-Jun-2021 14:03:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0102395-018
Misc. Info.: 280-0102395-018
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 16-Jun-2021 16:11:29 Calib Date: 14-Jun-2021 21:22:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210614-102337.b\Info 2_DENPC584_Anions_20210614-213

Column 1 : Det: 0005
Process Host: CTX1646

First Level Reviewer: battilloj Date: 16-Jun-2021 16:09:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.893	2.873	0.020	9009		0.0223	M
2 Chloride	3.998	4.000	-0.002	48412		0.2200	Ma
3 Nitrite as N		4.645				ND	
4 Bromide		5.738				ND	
5 Nitrate as N		6.452				ND	
7 Orthophosphate as P	8.300	8.283	0.017	141798		NC	
6 Sulfate		9.350				ND	

QC Flag Legend

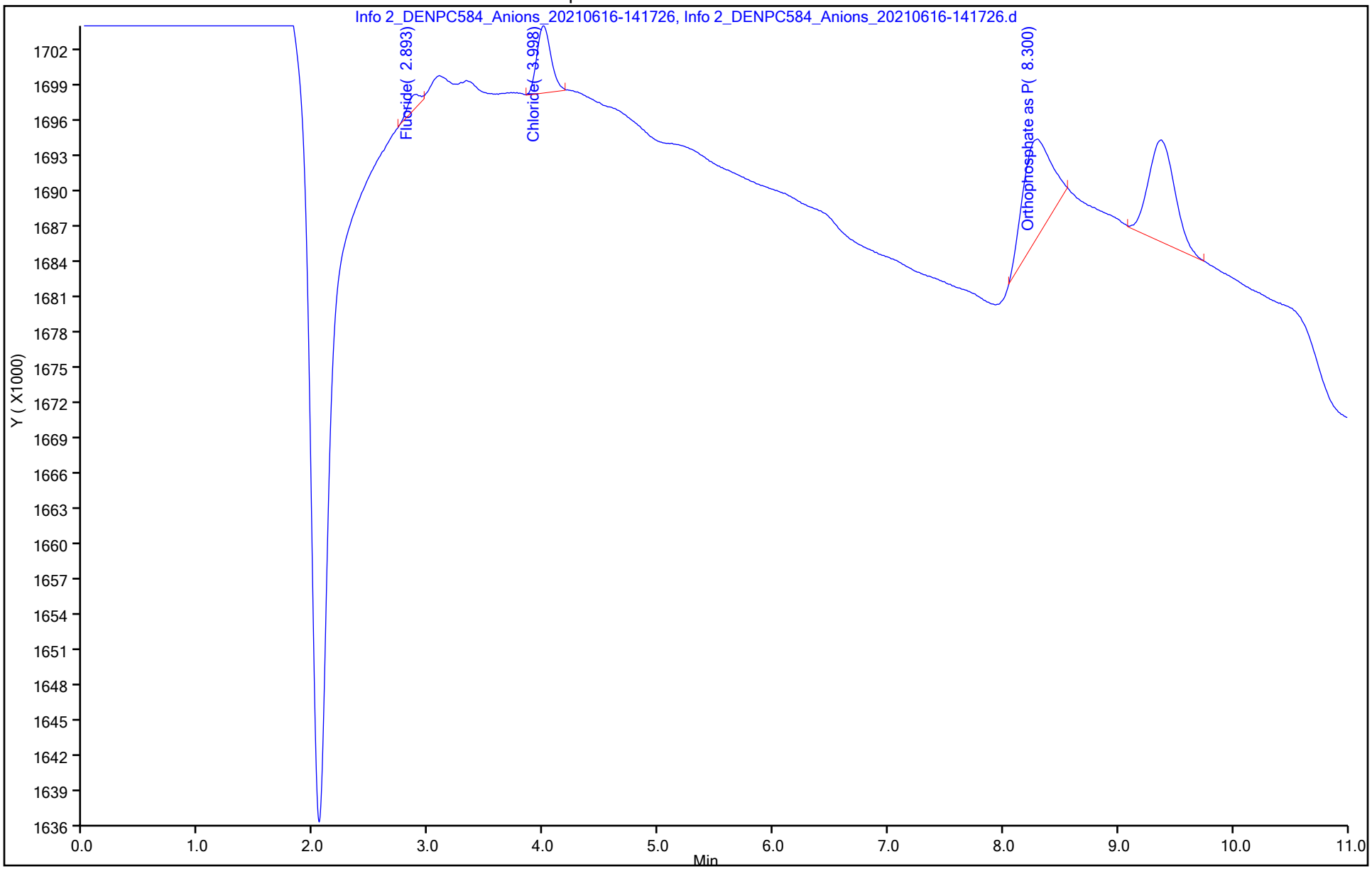
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 16-Jun-2021 16:11:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20210616-102395.b\Info 2_DENPC584_Anions_20210616-141726.d

Injection Date:	16-Jun-2021 14:03:00	Instrument ID:	WC_IonChrom13	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-IC13	Limit Group:	Wet - Anions 28D		



	Type	Analysis	Sample Name	Sa	Origin	Manual Dilution	Result	Notes	Status
1	Unknown	NPOC	ICV		NPOC.me	1.000	NPOC:18.33mg/L		Completed
2	Unknown	NPOC	ICB		NPOC.me	1.000	NPOC:-0.00899mg/L		Completed
3	Unknown	NPOC	lcs 280-539003/1-a		NPOC.me	1.000	NPOC:23.92mg/L		Completed
4	Unknown	NPOC	mb 280-539003/2-a		NPOC.me	1.000	NPOC:-0.00815mg/L		Completed
5	Unknown	NPOC	280-149049-d-1-a		NPOC.me	1.000	NPOC:4.421mg/L		Completed
6	Unknown	NPOC	280-149049-d-2-a		NPOC.me	1.000	NPOC:7.668mg/L		Completed
7	Unknown	NPOC	280-149049-d-3-a		NPOC.me	1.000	NPOC:2.006mg/L		Completed
8	Unknown	NPOC	280-149049-d-3-b ms		NPOC.me	1.000	NPOC:24.75mg/L		Completed
9	Unknown	NPOC	280-149049-d-3-c msd		NPOC.me	1.000	NPOC:24.91mg/L		Completed
10	Unknown	NPOC	280-149049-d-4-a		NPOC.me	1.000	NPOC:6.805mg/L		Completed
11	Unknown	NPOC	280-149049-d-5-a		NPOC.me	1.000	NPOC:6.522mg/L		Completed
12	Unknown	NPOC	280-149049-d-6-a		NPOC.me	1.000	NPOC:3.382mg/L		Completed
13	Unknown	NPOC	280-149049-d-7-a		NPOC.me	1.000	NPOC:6.878mg/L		Completed
14	Unknown	NPOC	280-149049-d-8-a		NPOC.me	1.000	NPOC:3.273mg/L		Completed
15	Unknown	NPOC	CCV		NPOC.me	1.000	NPOC:23.97mg/L		Completed
16	Unknown	NPOC	CCB		NPOC.me	1.000	NPOC:-0.00893mg/L		Completed
17	Unknown	NPOC	280-149049-d-9-a		NPOC.me	1.000	NPOC:3.165mg/L		Completed
18	Unknown	NPOC	280-149049-d-10-a		NPOC.me	1.000	NPOC:2.758mg/L		Completed
19	Unknown	NPOC	280-149049-d-11-a		NPOC.me	2.000	NPOC:46.05mg/L		Completed
20	Unknown	NPOC	280-149049-d-12-a		NPOC.me	2.000	NPOC:50.65mg/L		Completed
21	Unknown	NPOC	280-149013-d-5-b		NPOC.me	1.000	NPOC:32.15mg/L		Completed
22	Unknown	NPOC	280-149013-d-31-a		NPOC.me	1.000	NPOC:6.636mg/L		Completed
23	Unknown	NPOC	280-149013-d-31-b ms		NPOC.me	1.000	NPOC:29.61mg/L		Completed
24	Unknown	NPOC	280-149013-d-31-c msd		NPOC.me	1.000	NPOC:29.61mg/L		Completed
25	Unknown	NPOC	280-149013-d-32-a		NPOC.me	1.000	NPOC:4.880mg/L		Completed
26	Unknown	NPOC	280-149013-d-33-a		NPOC.me	1.000	NPOC:3.723mg/L		Completed
27	Unknown	NPOC	CCV		NPOC.me	1.000	NPOC:24.25mg/L		Completed
28	Unknown	NPOC	CCB		NPOC.me	1.000	NPOC:0.00229mg/L		Completed
29	Unknown	NPOC	280-149013-d-34-a		NPOC.me	1.000	NPOC:15.53mg/L		Completed
30	Unknown	NPOC	280-149013-d-35-a		NPOC.me	1.000	NPOC:12.12mg/L		Completed
31	Unknown	NPOC	280-149013-d-36-a		NPOC.me	1.000	NPOC:10.50mg/L		Completed
32	Unknown	NPOC	280-149081-d-1-a		NPOC.me	1.000	NPOC:9.419mg/L		Completed
33	Unknown	NPOC	lcs 280-539003/27-a		NPOC.me	1.000	NPOC:24.38mg/L		Completed
34	Unknown	NPOC	mb 280-539003/28-a		NPOC.me	1.000	NPOC:0.03551mg/L		Completed
35	Unknown	NPOC	280-149081-d-2-a		NPOC.me	1.000	NPOC:10.50mg/L		Completed
36	Unknown	NPOC	280-149116-d-1-a		NPOC.me	1.000	NPOC:7.577mg/L		Completed
37	Unknown	NPOC	280-149116-d-2-a		NPOC.me	1.000	NPOC:5.983mg/L		Completed
38	Unknown	NPOC	280-149116-d-3-a		NPOC.me	1.000	NPOC:3.035mg/L		Completed
39	Unknown	NPOC	CCV		NPOC.me	1.000	NPOC:24.42mg/L		Completed
40	Unknown	NPOC	CCB		NPOC.me	1.000	NPOC:0.02028mg/L		Completed
41	Unknown	NPOC	280-149116-d-4-a		NPOC.me	1.000	NPOC:10.72mg/L		Completed
42	Unknown	NPOC	280-149116-d-9-a		NPOC.me	1.000	NPOC:4.395mg/L		Completed
43	Unknown	NPOC	280-149116-d-10-a		NPOC.me	1.000	NPOC:2.875mg/L		Completed
44	Unknown	NPOC	280-149116-d-11-a		NPOC.me	1.000	NPOC:4.194mg/L		Completed
45	Unknown	NPOC	280-149116-d-12-a		NPOC.me	1.000	NPOC:4.346mg/L		Completed
46	Unknown	NPOC	280-149116-d-13-a		NPOC.me	1.000	NPOC:3.162mg/L		Completed
47	Unknown	NPOC	280-149116-d-13-b ms		NPOC.me	1.000	NPOC:26.78mg/L		Completed
48	Unknown	NPOC	280-149116-d-13-c msd		NPOC.me	1.000	NPOC:26.89mg/L		Completed
49	Unknown	NPOC	280-149116-d-14-a		NPOC.me	1.000	NPOC:3.341mg/L		Completed
50	Unknown	NPOC	280-149116-d-15-a		NPOC.me	1.000	NPOC:3.524mg/L		Completed
51	Unknown	NPOC	CCV		NPOC.me	1.000	NPOC:24.65mg/L		Completed
52	Unknown	NPOC	CCB		NPOC.me	1.000	NPOC:0.03625mg/L		Completed
53	Unknown	NPOC	280-149471-d-1-a		NPOC.me	1.000	NPOC:9.313mg/L		Completed

	Date / Time	Vial
1	6/8/2021 3:19:14 PM	1
2	6/8/2021 3:34:05 PM	2
3	6/8/2021 3:49:02 PM	3
4	6/8/2021 4:03:53 PM	4
5	6/8/2021 4:18:44 PM	5
6	6/8/2021 4:33:35 PM	6
7	6/8/2021 4:50:32 PM	7
8	6/8/2021 5:05:21 PM	8
9	6/8/2021 5:20:12 PM	9
10	6/8/2021 5:35:03 PM	10
11	6/8/2021 5:49:54 PM	11
12	6/8/2021 6:04:45 PM	12
13	6/8/2021 6:19:36 PM	13
14	6/8/2021 6:34:27 PM	14
15	6/8/2021 6:49:18 PM	15
16	6/8/2021 7:04:09 PM	16
17	6/8/2021 7:19:00 PM	17
18	6/8/2021 7:33:51 PM	18
19	6/8/2021 7:48:54 PM	19
20	6/8/2021 8:03:47 PM	20
21	6/8/2021 8:20:44 PM	21
22	6/8/2021 8:35:33 PM	22
23	6/8/2021 8:50:24 PM	23
24	6/8/2021 9:05:15 PM	24
25	6/8/2021 9:20:06 PM	25
26	6/8/2021 9:34:57 PM	26
27	6/8/2021 9:49:48 PM	27
28	6/8/2021 10:04:39 PM	28
29	6/8/2021 10:21:36 PM	29
30	6/8/2021 10:36:25 PM	30
31	6/8/2021 10:53:22 PM	31
32	6/8/2021 11:10:38 PM	32
33	6/8/2021 11:25:28 PM	33
34	6/8/2021 11:40:20 PM	34
35	6/8/2021 11:57:17 PM	35
36	6/9/2021 12:12:08 AM	36
37	6/9/2021 12:27:00 AM	37
38	6/9/2021 12:41:52 AM	38
39	6/9/2021 12:56:43 AM	39
40	6/9/2021 1:11:35 AM	40
41	6/9/2021 1:26:26 AM	41
42	6/9/2021 1:41:18 AM	42
43	6/9/2021 1:56:09 AM	43
44	6/9/2021 2:11:01 AM	44
45	6/9/2021 2:25:53 AM	45
46	6/9/2021 2:42:50 AM	46
47	6/9/2021 2:57:41 AM	47
48	6/9/2021 3:12:46 AM	48
49	6/9/2021 3:27:38 AM	49
50	6/9/2021 3:42:30 AM	50
51	6/9/2021 3:57:22 AM	51
52	6/9/2021 4:12:14 AM	52
53	6/9/2021 4:27:06 AM	53

	Type	Analysis	Sample Name	Sa	Origin	Manual Dilution	Result	Notes	Status
54	Unknown	NPOC	280-149471-d-2-a		NPOC.me	1.000	NPOC:12.27mg/L		Completed
55	Unknown	NPOC	280-149471-d-3-a		NPOC.me	1.000	NPOC:6.199mg/L		Completed
56	Unknown	NPOC	280-149471-d-4-a		NPOC.me	1.000	NPOC:21.77mg/L		Completed
57	Unknown	NPOC	280-149471-d-5-a		NPOC.me	1.000	NPOC:38.55mg/L		Completed
58	Unknown	NPOC	280-149471-d-6-a		NPOC.me	1.000	NPOC:20.10mg/L		Completed
59	Unknown	NPOC	280-149471-d-6-b ms		NPOC.me	1.000	NPOC:44.81mg/L		Completed
60	Unknown	NPOC	280-149471-d-6-c msd		NPOC.me	1.000	NPOC:44.83mg/L		Completed
61	Unknown	NPOC	CCV		NPOC.me	1.000	NPOC:24.82mg/L		Completed
62	Unknown	NPOC	CCB		NPOC.me	1.000	NPOC:0.03854mg/L		Completed

	Date / Time	Vial
54	6/9/2021 4:41:58 AM	54
55	6/9/2021 4:56:50 AM	55
56	6/9/2021 5:13:47 AM	56
57	6/9/2021 5:30:44 AM	57
58	6/9/2021 5:45:36 AM	58
59	6/9/2021 6:00:32 AM	59
60	6/9/2021 6:15:24 AM	60
61	6/9/2021 6:30:16 AM	61
62	6/9/2021 6:45:08 AM	62

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥NPOC.2021_06_03_13_03_13.cal

Date of Creation 2:09:04 PM 6/3/2021
User rf
System TOC-V CPN

Cal. Curve

Sample Name: CAL
Sample ID:
Object ID 0A-100612-04635090-13463AB1B72B-0000
Cal. Curve: NPOC.2021_06_03_13_03_13.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.1274	50uL	1	*******		6/3/2021 1:12:07 PM
2	0.2653	50uL	1	*******		6/3/2021 1:14:12 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 0.1964
SD Area 0.09751
CV Area 49.66%
Vial 4

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.041	50uL	1	*******		6/3/2021 1:23:04 PM
2	2.973	50uL	1	*******		6/3/2021 1:25:10 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 3.007
SD Area 0.04808
CV Area 1.60%
Vial 5

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	12.63	50uL	1	*******		6/3/2021 1:34:02 PM
2	12.69	50uL	1	*******		6/3/2021 1:36:08 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 12.66
SD Area 0.04243
CV Area 0.34%
Vial 6

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	25.53	50uL	1	*******		6/3/2021 1:45:02 PM
2	25.65	50uL	1	*******		6/3/2021 1:47:07 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 25.59
SD Area 0.08485
CV Area 0.33%
Vial 7

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	64.98	50uL	1	*******		6/3/2021 1:56:00 PM
2	65.47	50uL	1	*******		6/3/2021 1:58:06 PM

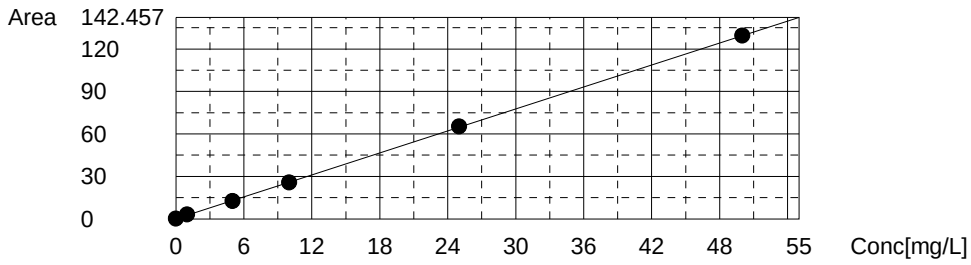
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 65.22
SD Area 0.3465
CV Area 0.53%
Vial 8

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	128.9	50uL	1	*******		6/3/2021 2:06:58 PM
2	129.9	50uL	1	*******		6/3/2021 2:09:04 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 129.4
SD Area 0.7071
CV Area 0.55%
Vial 9

Slope: 2.588
Intercept 0.09025
r^2 1.0000
r 1.0000
Zero Shift No



Instr.Information

System	TOC-V CPN
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Sample

Sample Name:	ICV
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

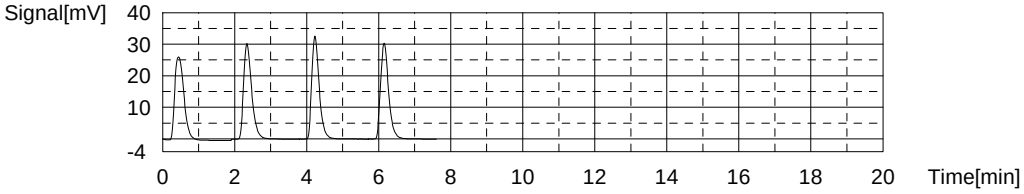
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.10	18.16mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:12:57 PM
2	47.77	18.42mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:15:03 PM
3	47.65	18.37mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:17:08 PM
4	47.57	18.34mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:19:14 PM

Mean Area 47.52
Mean Conc. 18.33mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

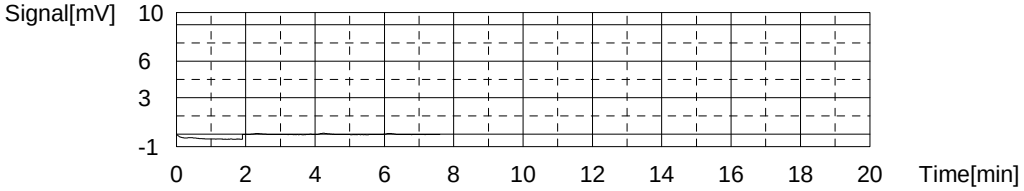
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.00899mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03487mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:27:48 PM
2	0.000	-0.03487mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:29:54 PM
3	0.1639	0.02846mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:31:59 PM
4	0.1040	0.00531mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:34:05 PM

Mean Area 0.06698
Mean Conc. -0.00899mg/L



Sample

Sample Name: lcs 280-539003/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

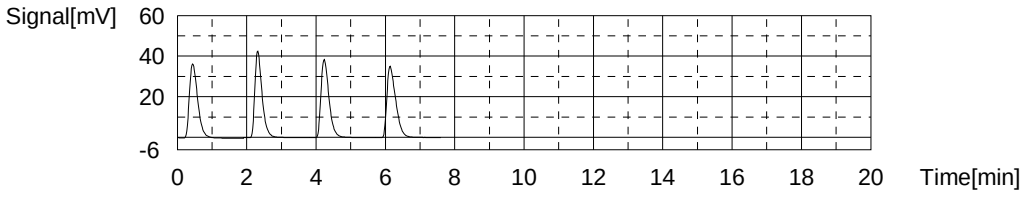
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.92mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.52	23.73mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:42:39 PM
2	61.94	23.90mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:44:45 PM
3	62.03	23.93mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:46:57 PM
4	62.56	24.14mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:49:02 PM

Mean Area 62.01
Mean Conc. 23.92mg/L



Sample

Sample Name: mb 280-539003/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

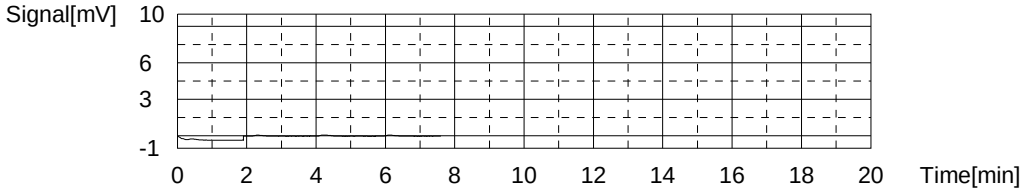
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.00815mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03487mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:57:36 PM
2	0.000	-0.03487mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 3:59:42 PM
3	0.1603	0.02707mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:01:48 PM
4	0.1163	0.01007mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:03:53 PM

Mean Area 0.06915
Mean Conc. -0.00815mg/L



Sample

Sample Name: 280-149049-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

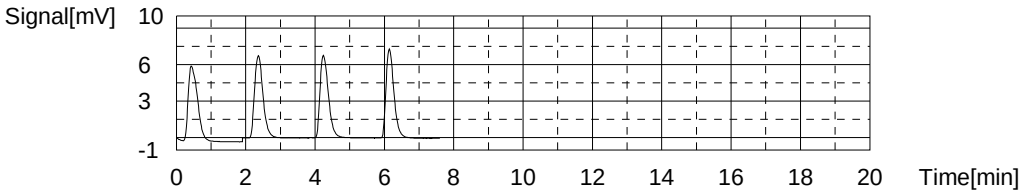
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.421mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.41	4.373mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:12:27 PM
2	11.59	4.443mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:14:33 PM
3	11.44	4.385mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:16:38 PM
4	11.69	4.482mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:18:44 PM

Mean Area 11.53
Mean Conc. 4.421mg/L



Sample

Sample Name: 280-149049-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

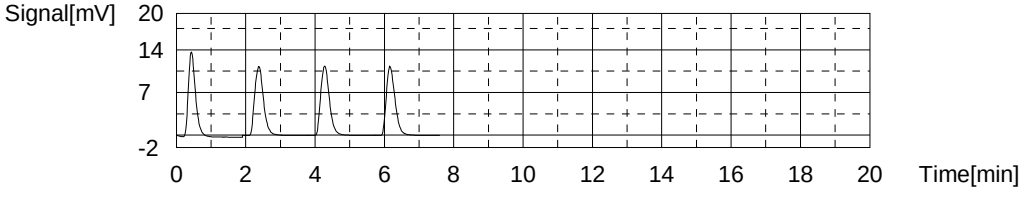
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.668mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.93	7.665mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:27:18 PM
2	20.06	7.715mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:29:24 PM
3	19.98	7.684mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:31:30 PM
4	19.78	7.607mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:33:35 PM

Mean Area 19.94
Mean Conc. 7.668mg/L



Sample

Sample Name: 280-149049-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

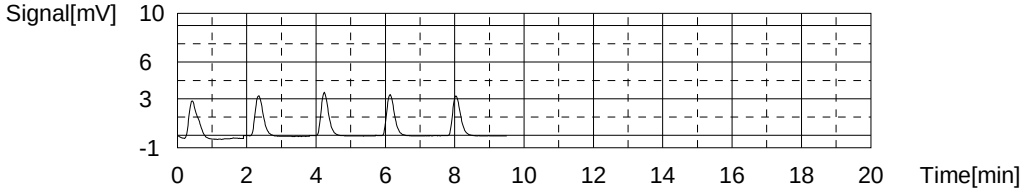
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.006mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.534	2.103mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:42:09 PM
2	5.360	2.036mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:44:15 PM
3	5.304	2.014mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:46:20 PM
4	5.265	1.999mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:48:26 PM
5	5.196	1.973mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:50:32 PM

Mean Area 5.281
Mean Conc. 2.006mg/L



Sample

Sample Name: 280-149049-d-3-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

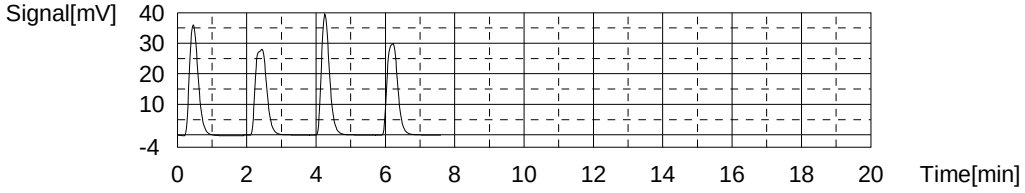
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.75mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.15	24.75mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 4:59:04 PM
2	63.99	24.69mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:01:10 PM
3	64.49	24.88mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:03:16 PM
4	63.97	24.68mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:05:21 PM

Mean Area 64.15
Mean Conc. 24.75mg/L



Sample

Sample Name: 280-149049-d-3-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

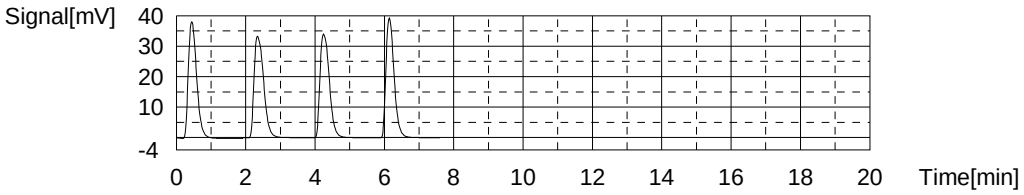
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.91mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.73	24.97mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:13:55 PM
2	64.43	24.86mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:16:01 PM
3	64.20	24.77mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:18:07 PM
4	64.86	25.02mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:20:12 PM

Mean Area 64.56
Mean Conc. 24.91mg/L



Sample

Sample Name: 280-149049-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

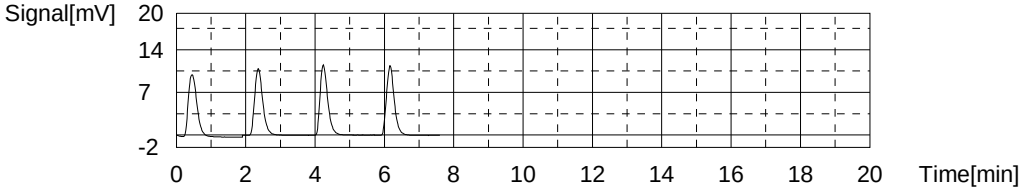
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.805mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.48	6.719mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:28:46 PM
2	17.80	6.842mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:30:52 PM
3	17.71	6.807mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:32:58 PM
4	17.83	6.854mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:35:03 PM

Mean Area 17.71
Mean Conc. 6.805mg/L



Sample

Sample Name: 280-149049-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

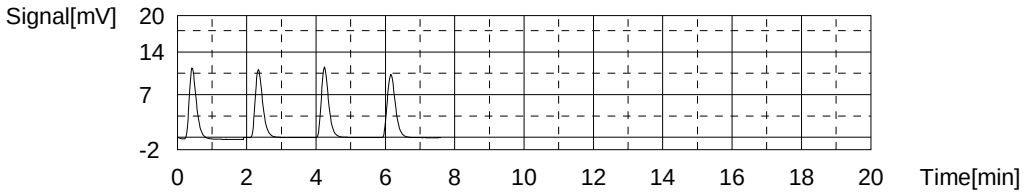
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.522mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.81	6.460mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:43:37 PM
2	16.97	6.522mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:45:43 PM
3	16.96	6.518mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:47:49 PM
4	17.15	6.591mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:49:54 PM

Mean Area 16.97
Mean Conc. 6.522mg/L



Sample

Sample Name: 280-149049-d-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

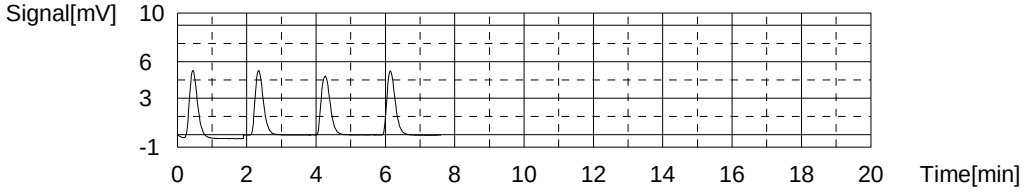
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.382mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.932	3.416mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 5:58:28 PM
2	8.813	3.370mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:00:34 PM
3	8.789	3.361mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:02:40 PM
4	8.843	3.382mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:04:45 PM

Mean Area 8.844
Mean Conc. 3.382mg/L



Sample

Sample Name: 280-149049-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

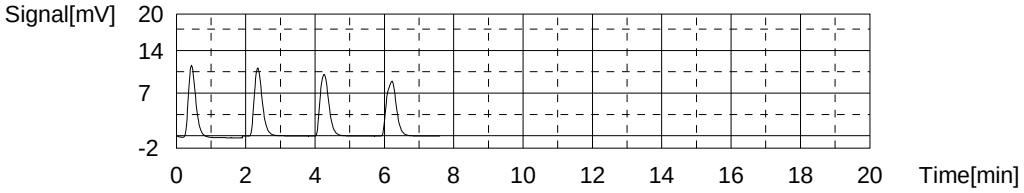
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.878mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.59	6.761mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:13:19 PM
2	18.08	6.950mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:15:25 PM
3	17.95	6.900mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:17:31 PM
4	17.95	6.900mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:19:36 PM

Mean Area 17.89
Mean Conc. 6.878mg/L



Sample

Sample Name: 280-149049-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

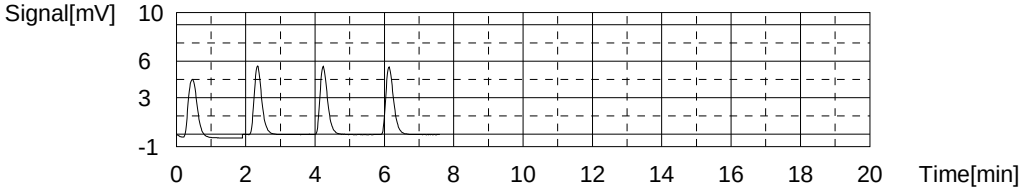
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.273mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.478	3.241mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:28:10 PM
2	8.564	3.274mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:30:16 PM
3	8.537	3.263mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:32:22 PM
4	8.670	3.315mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:34:27 PM

Mean Area 8.562
Mean Conc. 3.273mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

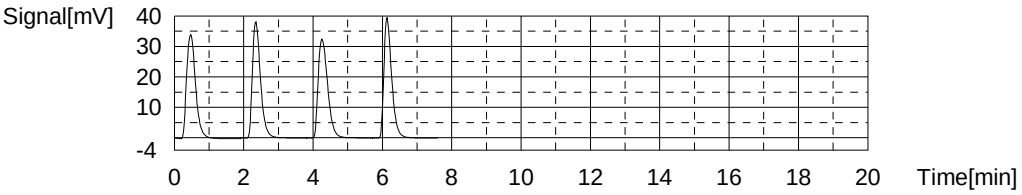
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.97mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.99	23.92mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:43:01 PM
2	62.48	24.10mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:45:07 PM
3	62.04	23.93mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:47:13 PM
4	62.05	23.94mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:49:18 PM

Mean Area 62.14
Mean Conc. 23.97mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

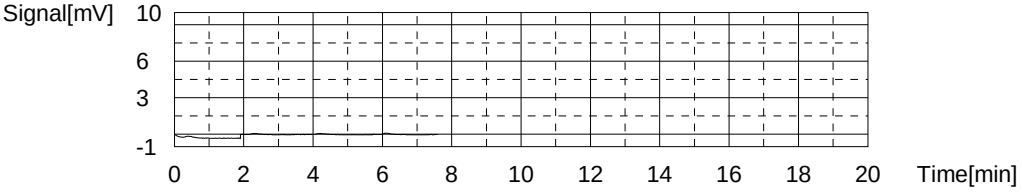
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.00893mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03487mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:57:52 PM
2	0.1296	0.01520mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 6:59:58 PM
3	0.000	-0.03487mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:02:04 PM
4	0.1389	0.01880mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:04:09 PM

Mean Area 0.06712
Mean Conc. -0.00893mg/L



Sample

Sample Name: 280-149049-d-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

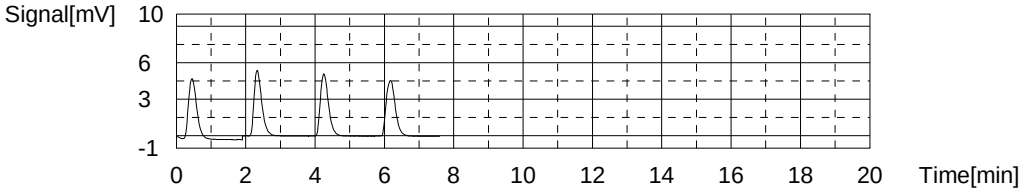
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.165mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.169	3.121mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:12:43 PM
2	8.277	3.163mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:14:49 PM
3	8.280	3.164mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:16:55 PM
4	8.402	3.211mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:19:00 PM

Mean Area 8.282
Mean Conc. 3.165mg/L



Sample

Sample Name: 280-149049-d-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

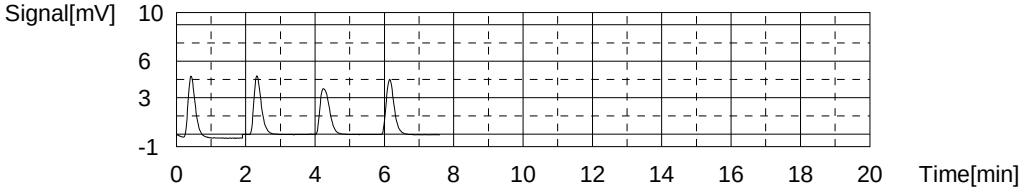
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.758mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.307	2.788mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:27:34 PM
2	7.149	2.727mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:29:40 PM
3	7.199	2.746mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:31:46 PM
4	7.263	2.771mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:33:51 PM

Mean Area 7.230
Mean Conc. 2.758mg/L



Sample

Sample Name: 280-149049-d-11-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

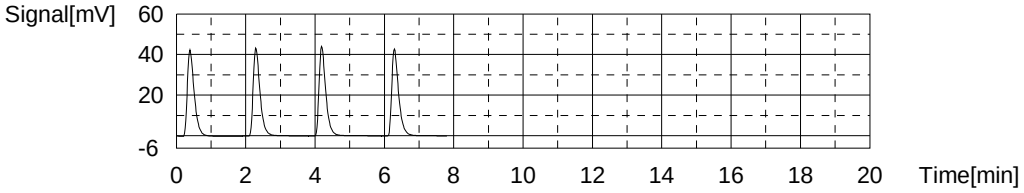
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:46.05mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.04	45.55mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:42:25 PM
2	59.84	46.17mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:44:31 PM
3	60.26	46.49mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:46:49 PM
4	59.58	45.97mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:48:54 PM

Mean Area 59.68
Mean Conc. 46.05mg/L



Sample

Sample Name: 280-149049-d-12-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

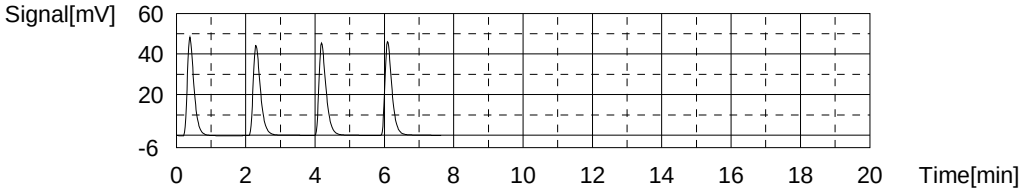
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:50.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.45	50.50mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:57:28 PM
2	65.62	50.64mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 7:59:34 PM
3	65.52	50.56mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:01:40 PM
4	65.98	50.91mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:03:47 PM

Mean Area 65.64
Mean Conc. 50.65mg/L



Sample

Sample Name: 280-149013-d-5-b
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

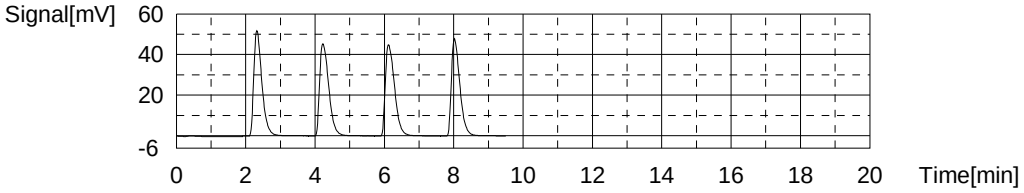
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.15mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3837	0.1134mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:12:21 PM
2	84.58	32.64mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:14:27 PM
3	83.28	32.14mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:16:33 PM
4	83.72	32.31mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:18:38 PM
5	81.64	31.51mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:20:44 PM

Mean Area 83.31
Mean Conc. 32.15mg/L



Sample

Sample Name: 280-149013-d-31-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

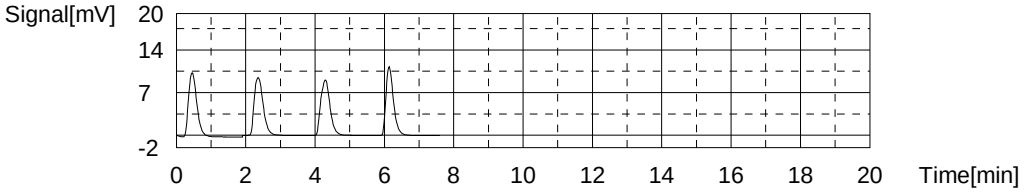
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.636mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.63	6.777mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:29:16 PM
2	17.23	6.622mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:31:22 PM
3	17.04	6.549mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:33:28 PM
4	17.17	6.599mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:35:33 PM

Mean Area 17.27
Mean Conc. 6.636mg/L



Sample

Sample Name: 280-149013-d-31-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

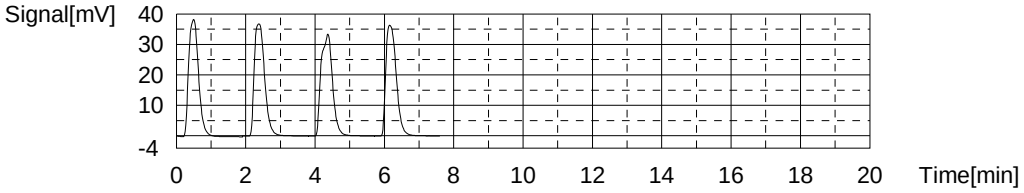
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.61mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.87	29.66mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:44:07 PM
2	76.67	29.59mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:46:13 PM
3	76.85	29.66mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:48:19 PM
4	76.48	29.51mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:50:24 PM

Mean Area 76.72
Mean Conc. 29.61mg/L



Sample

Sample Name: 280-149013-d-31-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

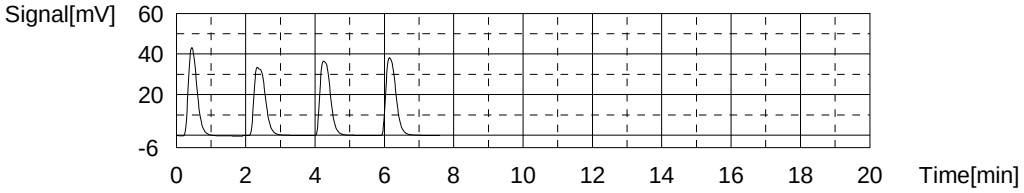
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.61mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.79	29.63mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 8:58:58 PM
2	76.29	29.44mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:01:04 PM
3	76.71	29.60mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:03:10 PM
4	77.14	29.77mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:05:15 PM

Mean Area 76.73
Mean Conc. 29.61mg/L



Sample

Sample Name: 280-149013-d-32-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

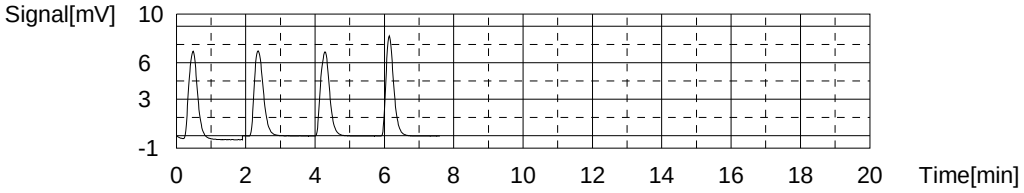
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.880mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.68	4.864mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:13:49 PM
2	12.76	4.895mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:15:55 PM
3	12.63	4.845mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:18:01 PM
4	12.81	4.914mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:20:06 PM

Mean Area 12.72
Mean Conc. 4.880mg/L



Sample

Sample Name: 280-149013-d-33-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

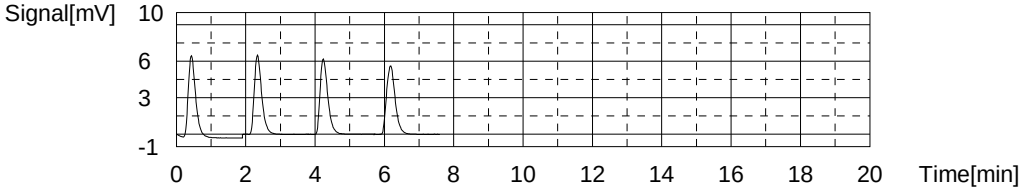
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.723mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.799	3.751mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:28:41 PM
2	9.666	3.700mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:30:46 PM
3	9.649	3.693mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:32:52 PM
4	9.795	3.749mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:34:57 PM

Mean Area 9.727
Mean Conc. 3.723mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

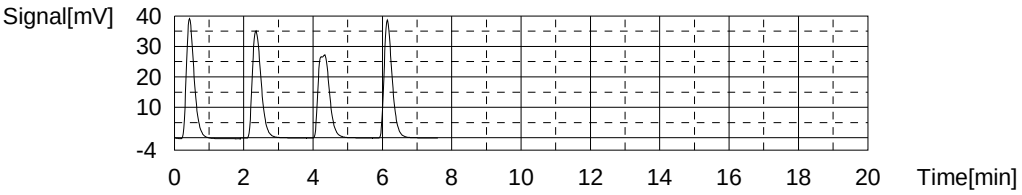
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.79	24.22mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:43:31 PM
2	62.94	24.28mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:45:37 PM
3	62.57	24.14mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:47:43 PM
4	63.08	24.34mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:49:48 PM

Mean Area 62.85
Mean Conc. 24.25mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

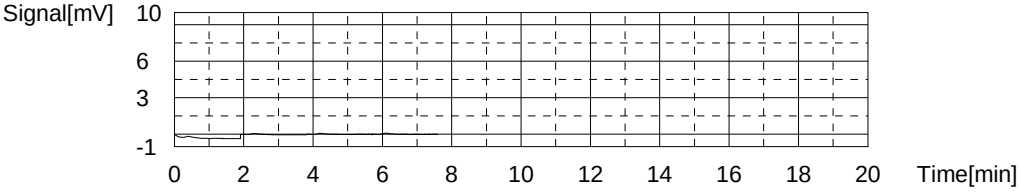
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.00229mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03487mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 9:58:22 PM
2	0.1277	0.01447mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:00:28 PM
3	0.1187	0.01099mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:02:34 PM
4	0.1383	0.01857mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:04:39 PM

Mean Area 0.09618
Mean Conc. 0.00229mg/L



Sample

Sample Name: 280-149013-d-34-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

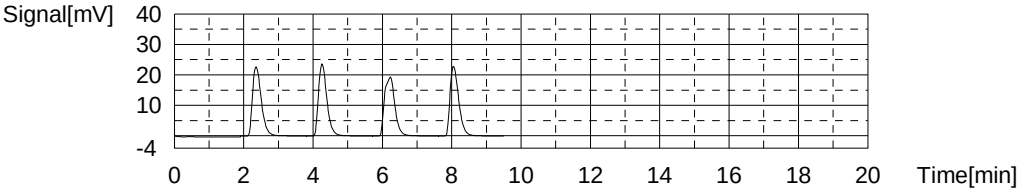
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03487mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:13:14 PM
2	40.49	15.61mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:15:19 PM
3	40.06	15.44mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:17:25 PM
4	40.30	15.54mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:19:30 PM
5	40.31	15.54mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:21:36 PM

Mean Area 40.29
Mean Conc. 15.53mg/L



Sample

Sample Name: 280-149013-d-35-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

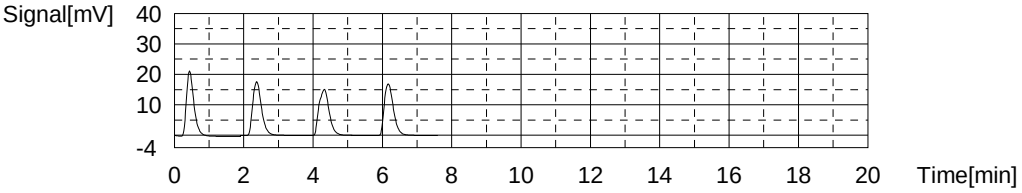
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.12mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.04	12.34mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:30:09 PM
2	31.34	12.07mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:32:14 PM
3	31.10	11.98mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:34:20 PM
4	31.37	12.08mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:36:25 PM

Mean Area 31.46
Mean Conc. 12.12mg/L



Sample

Sample Name: 280-149013-d-36-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

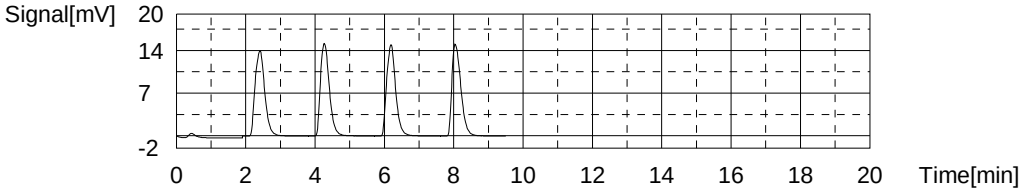
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9370	0.3271mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:45:00 PM
2	27.20	10.47mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:47:05 PM
3	27.19	10.47mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:49:11 PM
4	27.24	10.49mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:51:16 PM
5	27.48	10.58mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 10:53:22 PM

Mean Area 27.28
Mean Conc. 10.50mg/L



Sample

Sample Name: 280-149081-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

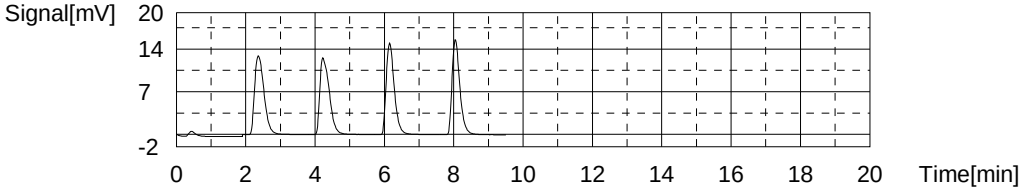
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.419mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.069	0.3781mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:02:15 PM
2	24.57	9.458mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:04:21 PM
3	24.05	9.257mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:06:27 PM
4	24.61	9.473mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:08:32 PM
5	24.65	9.489mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:10:38 PM

Mean Area 24.47
Mean Conc. 9.419mg/L



Sample

Sample Name: lcs 280-539003/27-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

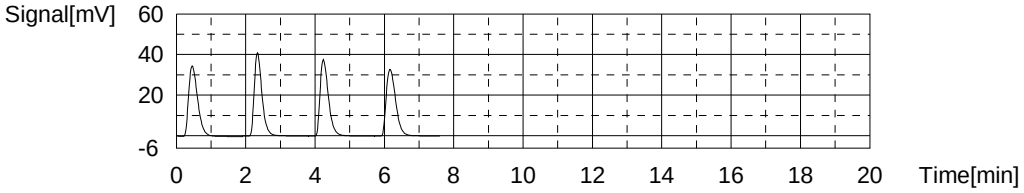
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.38mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.69	24.57mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:19:12 PM
2	63.40	24.46mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:21:17 PM
3	63.02	24.31mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:23:22 PM
4	62.64	24.17mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:25:28 PM

Mean Area 63.19
Mean Conc. 24.38mg/L



Sample

Sample Name: mb 280-539003/28-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

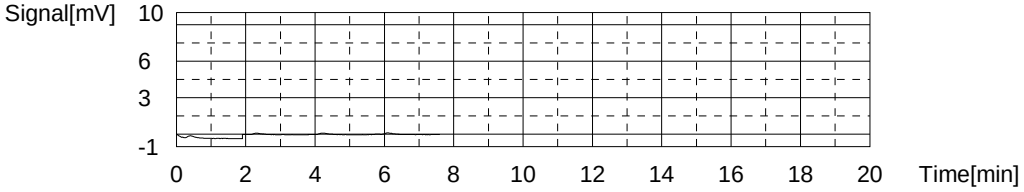
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03551mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1772	0.03360mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:34:03 PM
2	0.1766	0.03336mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:36:08 PM
3	0.1920	0.03931mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:38:14 PM
4	0.1828	0.03576mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:40:20 PM

Mean Area 0.1822
Mean Conc. 0.03551mg/L



Sample

Sample Name: 280-149081-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

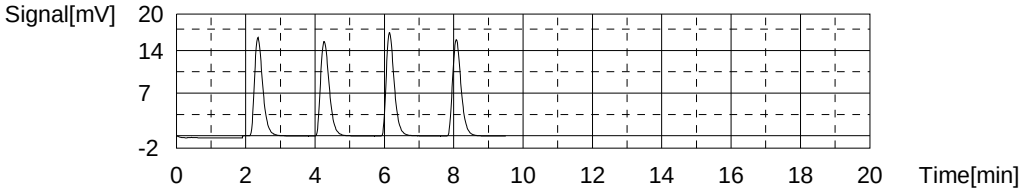
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.03487mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:48:55 PM
2	26.78	10.31mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:51:00 PM
3	27.34	10.53mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:53:06 PM
4	27.55	10.61mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:55:12 PM
5	27.35	10.53mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/8/2021 11:57:17 PM

Mean Area 27.26
Mean Conc. 10.50mg/L



Sample

Sample Name: 280-149116-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

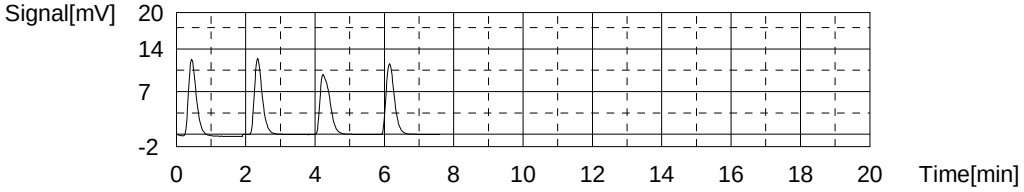
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.577mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.99	7.688mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:05:51 AM
2	19.79	7.611mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:07:56 AM
3	19.54	7.514mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:10:02 AM
4	19.49	7.495mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:12:08 AM

Mean Area 19.70
Mean Conc. 7.577mg/L



Sample

Sample Name: 280-149116-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

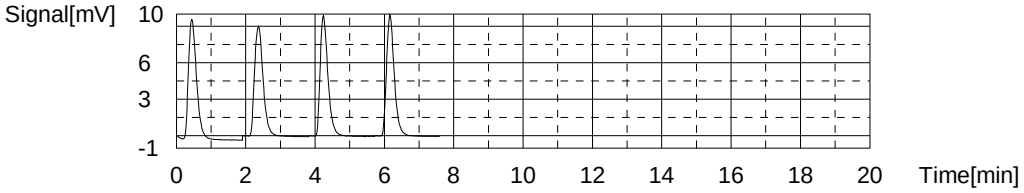
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.983mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.82	6.077mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:20:43 AM
2	15.50	5.954mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:22:48 AM
3	15.40	5.915mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:24:54 AM
4	15.58	5.984mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:27:00 AM

Mean Area 15.57
Mean Conc. 5.983mg/L



Sample

Sample Name: 280-149116-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

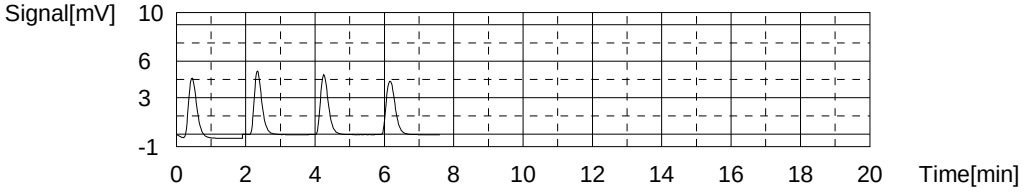
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.035mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.950	3.037mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:35:35 AM
2	8.004	3.057mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:37:40 AM
3	7.875	3.008mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:39:46 AM
4	7.952	3.037mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:41:52 AM

Mean Area 7.945
Mean Conc. 3.035mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

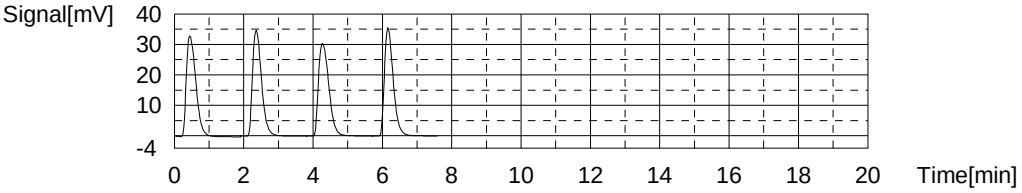
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.42mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.04	24.32mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:50:26 AM
2	63.45	24.48mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:52:31 AM
3	63.36	24.44mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:54:37 AM
4	63.29	24.42mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 12:56:43 AM

Mean Area 63.29
Mean Conc. 24.42mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

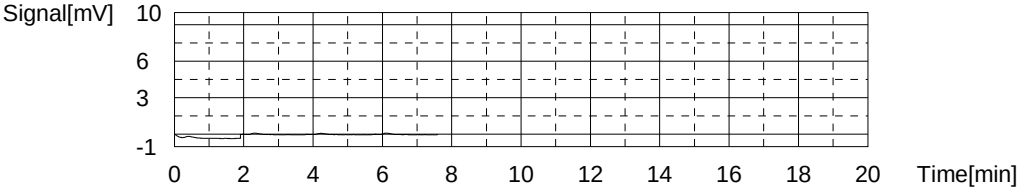
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.02028mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1262	0.01389mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:05:18 AM
2	0.1447	0.02104mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:07:23 AM
3	0.1589	0.02652mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:09:29 AM
4	0.1411	0.01965mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:11:35 AM

Mean Area 0.1427
Mean Conc. 0.02028mg/L



Sample

Sample Name: 280-149116-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

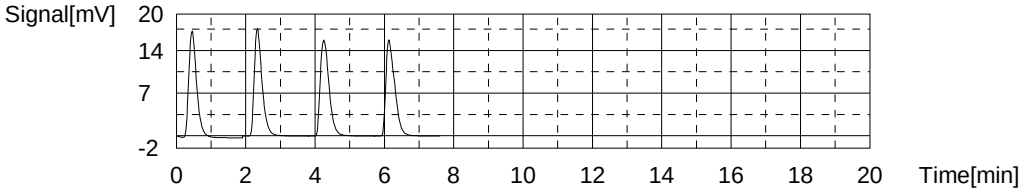
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.72mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.61	10.63mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:20:09 AM
2	27.78	10.70mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:22:14 AM
3	27.96	10.77mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:24:20 AM
4	27.97	10.77mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:26:26 AM

Mean Area 27.83
Mean Conc. 10.72mg/L



Sample

Sample Name: 280-149116-d-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

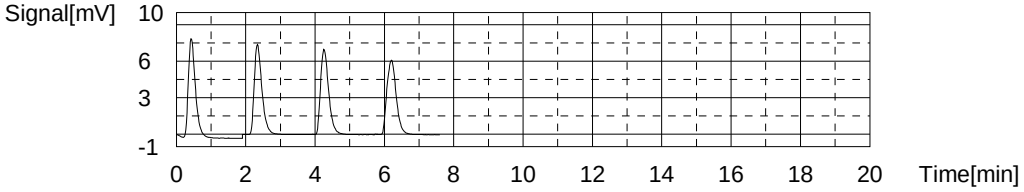
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.395mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.57	4.435mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:35:01 AM
2	11.46	4.393mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:37:06 AM
3	11.35	4.350mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:39:12 AM
4	11.48	4.400mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:41:18 AM

Mean Area 11.47
Mean Conc. 4.395mg/L



Sample

Sample Name: 280-149116-d-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

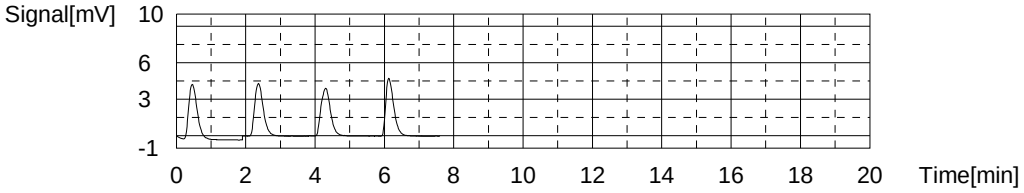
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.875mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.551	2.882mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:49:52 AM
2	7.524	2.872mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:51:57 AM
3	7.401	2.825mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:54:03 AM
4	7.650	2.921mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 1:56:09 AM

Mean Area 7.531
Mean Conc. 2.875mg/L



Sample

Sample Name: 280-149116-d-11-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

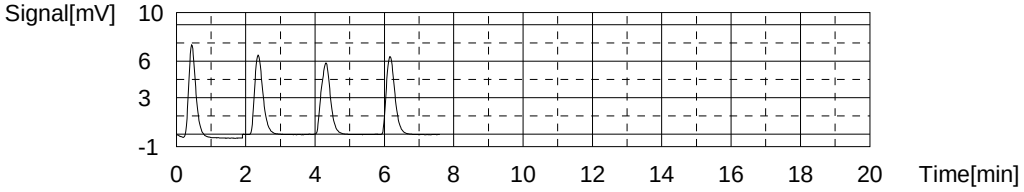
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.194mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.74	4.115mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:04:44 AM
2	11.00	4.215mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:06:50 AM
3	11.01	4.219mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:08:55 AM
4	11.03	4.227mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:11:01 AM

Mean Area 10.95
Mean Conc. 4.194mg/L



Sample

Sample Name: 280-149116-d-12-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

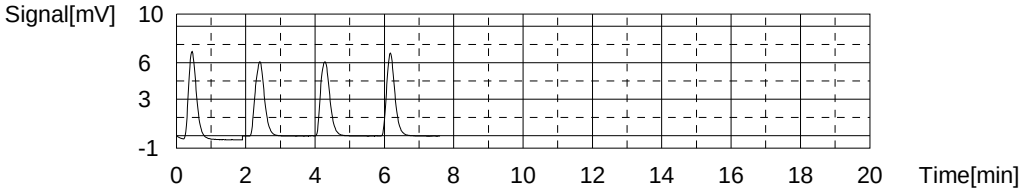
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.346mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.39	4.366mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:19:36 AM
2	11.43	4.381mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:21:41 AM
3	11.24	4.308mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:23:47 AM
4	11.30	4.331mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:25:53 AM

Mean Area 11.34
Mean Conc. 4.346mg/L



Sample

Sample Name: 280-149116-d-13-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

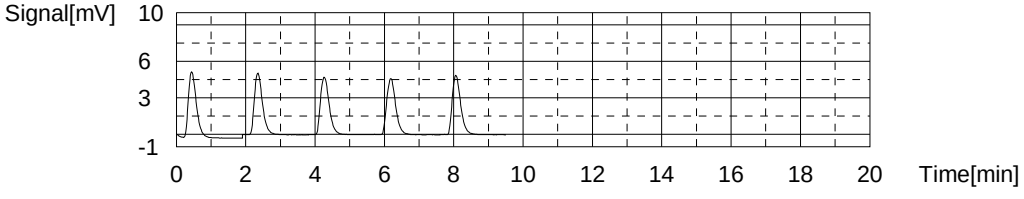
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.162mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.664	3.312mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:34:28 AM
2	8.277	3.163mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:36:33 AM
3	8.239	3.148mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:38:39 AM
4	8.348	3.190mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:40:45 AM
5	8.239	3.148mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:42:50 AM

Mean Area 8.276
Mean Conc. 3.162mg/L



Sample

Sample Name: 280-149116-d-13-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

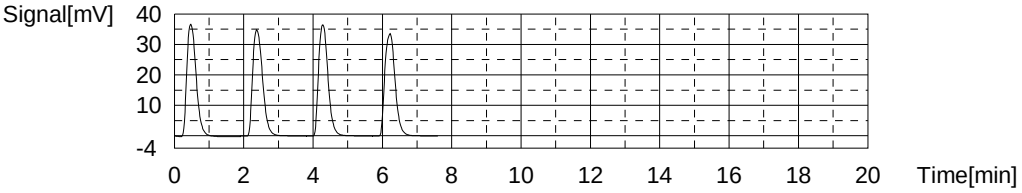
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.16	26.69mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:51:24 AM
2	69.68	26.89mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:53:29 AM
3	69.26	26.72mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:55:35 AM
4	69.50	26.82mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 2:57:41 AM

Mean Area 69.40
Mean Conc. 26.78mg/L



Sample

Sample Name: 280-149116-d-13-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

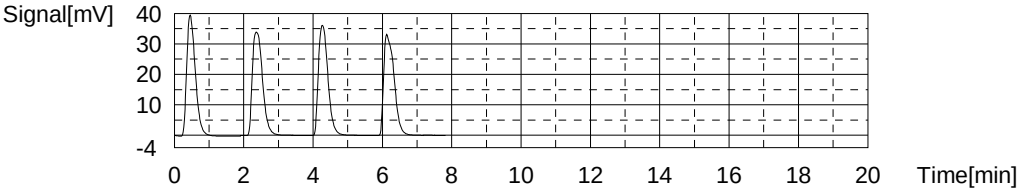
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.89mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.40	26.78mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:06:16 AM
2	70.24	27.10mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:08:22 AM
3	69.54	26.83mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:10:27 AM
4	69.54	26.83mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:12:46 AM

Mean Area 69.68
Mean Conc. 26.89mg/L



Sample

Sample Name: 280-149116-d-14-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

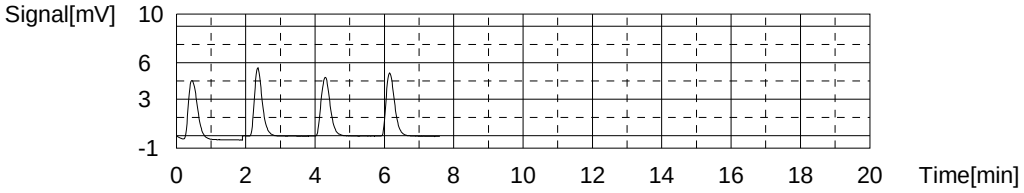
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.341mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.608	3.291mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:21:21 AM
2	8.766	3.352mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:23:27 AM
3	8.767	3.352mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:25:32 AM
4	8.810	3.369mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:27:38 AM

Mean Area 8.738
Mean Conc. 3.341mg/L



Sample

Sample Name: 280-149116-d-15-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

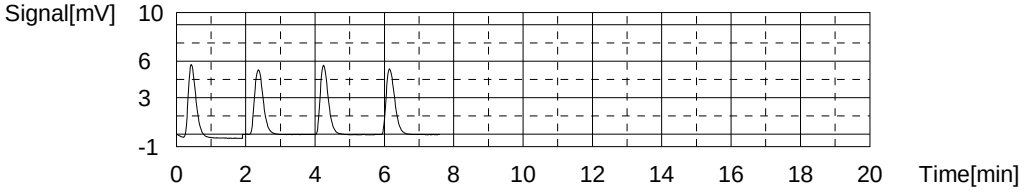
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.524mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.081	3.474mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:36:13 AM
2	9.246	3.537mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:38:19 AM
3	9.179	3.511mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:40:24 AM
4	9.344	3.575mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:42:30 AM

Mean Area 9.213
Mean Conc. 3.524mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

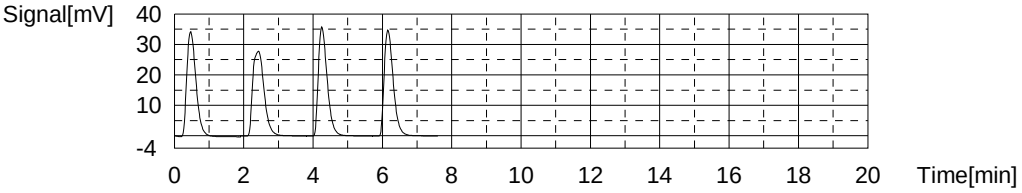
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.97	24.68mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:51:05 AM
2	63.90	24.65mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:53:10 AM
3	63.87	24.64mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:55:16 AM
4	63.80	24.61mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 3:57:22 AM

Mean Area 63.89
Mean Conc. 24.65mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

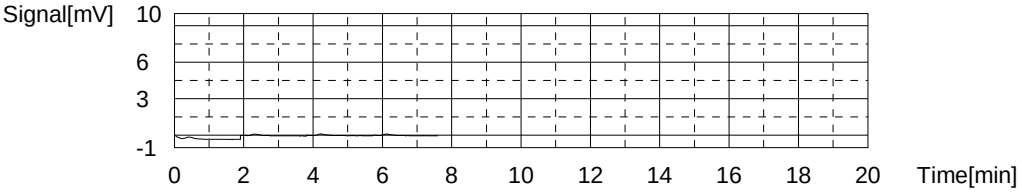
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03625mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1760	0.03313mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:05:57 AM
2	0.1897	0.03842mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:08:03 AM
3	0.1825	0.03564mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:10:08 AM
4	0.1881	0.03781mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:12:14 AM

Mean Area 0.1841
Mean Conc. 0.03625mg/L



Sample

Sample Name: 280-149471-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

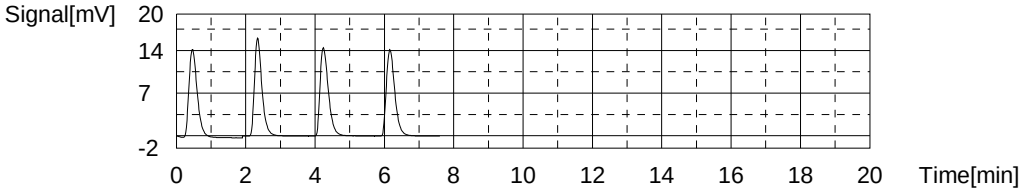
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.313mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.18	9.307mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:20:49 AM
2	24.17	9.303mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:22:55 AM
3	24.23	9.326mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:25:00 AM
4	24.20	9.315mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:27:06 AM

Mean Area 24.20
Mean Conc. 9.313mg/L



Sample

Sample Name: 280-149471-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

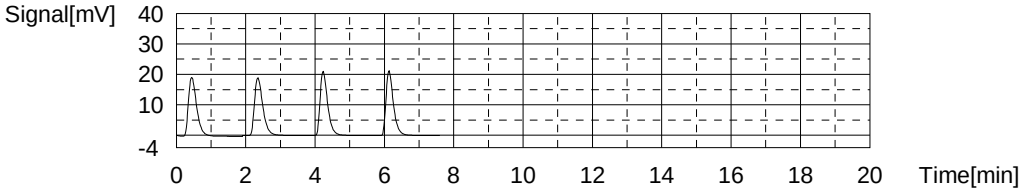
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.87	12.28mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:35:41 AM
2	31.79	12.25mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:37:47 AM
3	31.93	12.30mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:39:52 AM
4	31.78	12.24mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:41:58 AM

Mean Area 31.84
Mean Conc. 12.27mg/L



Sample

Sample Name: 280-149471-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

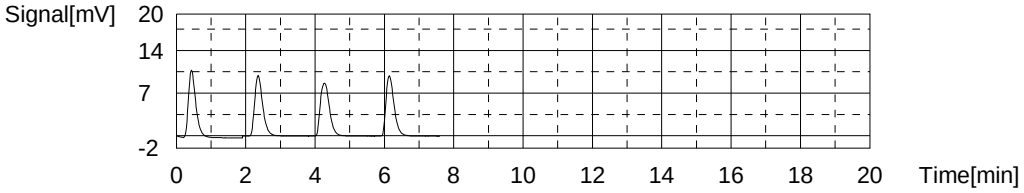
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.199mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.41	6.305mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:50:33 AM
2	16.06	6.170mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:52:38 AM
3	15.95	6.127mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:54:44 AM
4	16.12	6.193mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 4:56:50 AM

Mean Area 16.14
Mean Conc. 6.199mg/L



Sample

Sample Name: 280-149471-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

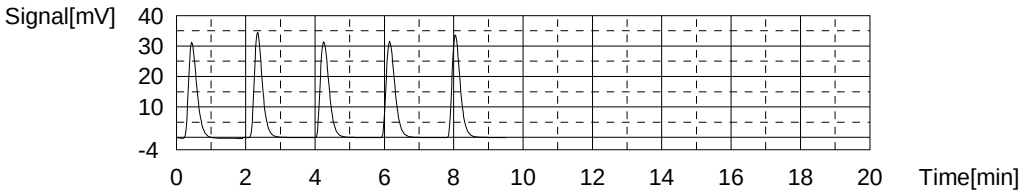
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:21.77mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.54	20.65mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:05:25 AM
2	56.23	21.69mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:07:31 AM
3	56.44	21.77mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:09:36 AM
4	56.55	21.81mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:11:42 AM
5	56.56	21.82mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:13:47 AM

Mean Area 56.45
Mean Conc. 21.77mg/L



Sample

Sample Name: 280-149471-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

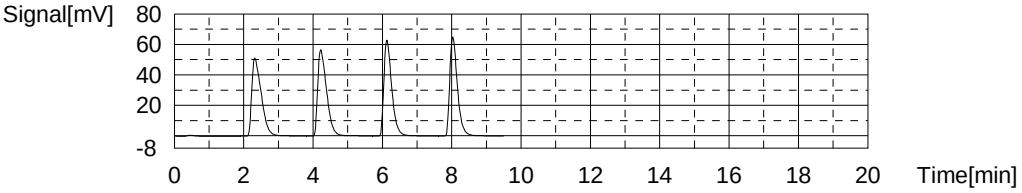
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:38.55mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.215	0.4346mg/L	50uL	1	E	NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:22:22 AM
2	97.77	37.74mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:24:28 AM
3	100.8	38.91mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:26:33 AM
4	100.1	38.64mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:28:39 AM
5	100.8	38.91mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:30:44 AM

Mean Area 99.87
Mean Conc. 38.55mg/L



Sample

Sample Name: 280-149471-d-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

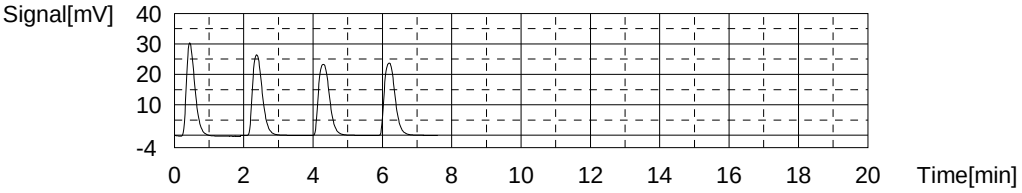
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.10mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.89	20.40mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:39:19 AM
2	52.33	20.18mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:41:25 AM
3	51.76	19.96mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:43:30 AM
4	51.52	19.87mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:45:36 AM

Mean Area 52.13
Mean Conc. 20.10mg/L



Sample

Sample Name: 280-149471-d-6-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

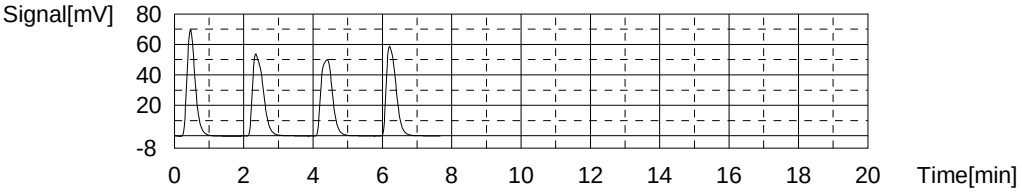
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:44.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	116.4	44.94mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:54:11 AM
2	116.8	45.09mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:56:20 AM
3	115.9	44.74mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 5:58:26 AM
4	115.2	44.47mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:00:32 AM

Mean Area 116.1
Mean Conc. 44.81mg/L



Sample

Sample Name: 280-149471-d-6-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

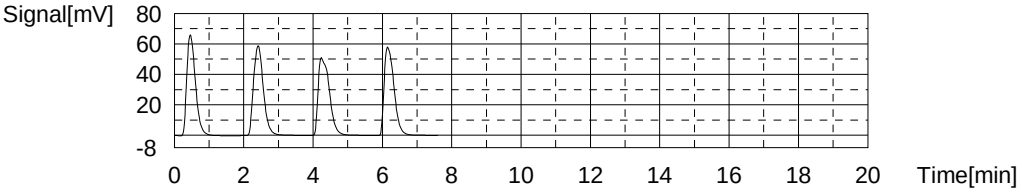
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:44.83mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	116.8	45.09mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:09:07 AM
2	116.9	45.13mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:11:13 AM
3	115.3	44.51mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:13:18 AM
4	115.5	44.59mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:15:24 AM

Mean Area 116.1
Mean Conc. 44.83mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

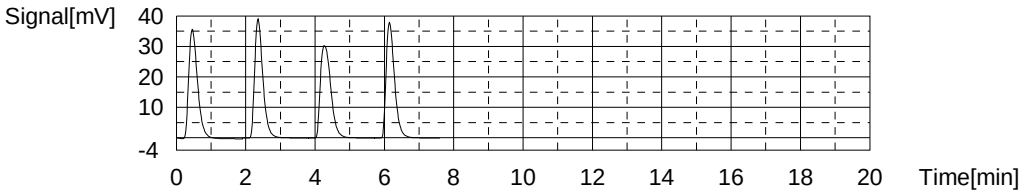
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.06	24.71mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:23:59 AM
2	65.03	25.09mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:26:05 AM
3	63.99	24.69mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:28:10 AM
4	64.20	24.77mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:30:16 AM

Mean Area 64.32
Mean Conc. 24.82mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

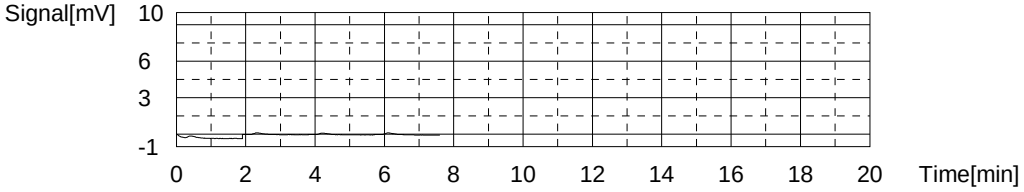
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03854mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1815	0.03526mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:38:51 AM
2	0.2103	0.04638mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:40:57 AM
3	0.1968	0.04117mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:43:02 AM
4	0.1714	0.03135mg/L	50uL	1		NPOC.2021_06_03_13_03_13.cal	6/9/2021 6:45:08 AM

Mean Area 0.1900
Mean Conc. 0.03854mg/L



Shi 4

9060

	Type	Analysis	Sample Name	Sa	O	M	Result	Notes	St	D	Vial
1*	Unknown	NPOC	ICV		N	1	✓ pH		D		1
2*	Unknown	NPOC	ICB		N	1	✓		D		2
3*	Unknown	NPOC	lcs 280-539003/1-a		N	1	✓	filtration	D		3
4*	Unknown	NPOC	mb 280-539003/2-a		N	1	✓	filtration	D		4
5*	Unknown	NPOC	280-149049-d-1-a		N	1	9	DOC filtration	D		5
6*	Unknown	NPOC	280-149049-d-2-a		N	1	7	DOC	D		6
7*	Unknown	NPOC	280-149049-d-3-a		N	1	7	DOC	D		7
8*	Unknown	NPOC	280-149049-d-3-b ms		N	1	7	DOC	D		8
9*	Unknown	NPOC	280-149049-d-3-c msd		N	1	7	DOC	D		9
10*	Unknown	NPOC	280-149049-d-4-a		N	1	6	DOC	D		10
11*	Unknown	NPOC	280-149049-d-5-a		N	1	6	DOC	D		11
12*	Unknown	NPOC	280-149049-d-6-a		N	1	6	DOC	D		12
13*	Unknown	NPOC	280-149049-d-7-a		N	1	6	DOC	D		13
14*	Unknown	NPOC	280-149049-d-8-a		N	1	6	DOC	D		14
15*	Unknown	NPOC	CCV		N	1	✓		D		15
16*	Unknown	NPOC	CCB		N	1	✓		D		16
17*	Unknown	NPOC	280-149049-d-9-a		N	1	6	DOC	D		17
18*	Unknown	NPOC	280-149049-d-10-a		N	1	6	DOC	D		18
19*	Unknown	NPOC	280-149049-d-11-a		N	1	6	DOC 2X Dil-odor	D		19
20*	Unknown	NPOC	280-149049-d-12-a		N	1	6	DOC 2X Dil-odor	D		20
21*	Unknown	NPOC	280-149013-d-5-b		N	1	6	DOC	D		21
22*	Unknown	NPOC	280-149013-d-31-a		N	1	6	DOC	D		22
23*	Unknown	NPOC	280-149013-d-31-b ms		N	1	6	DOC	D		23
24*	Unknown	NPOC	280-149013-d-31-c msd		N	1	6	DOC	D		24
25*	Unknown	NPOC	280-149013-d-32-a		N	1	6	DOC	D		25
26*	Unknown	NPOC	280-149013-d-33-a		N	1	6	DOC	D		26
27*	Unknown	NPOC	CCV		N	1	✓		D		27
28*	Unknown	NPOC	CCB		N	1	✓		D		28
29*	Unknown	NPOC	280-149013-d-34-a		N	1	6	DOC	D		29
30*	Unknown	NPOC	280-149013-d-35-a		N	1	6	DOC	D		30
31*	Unknown	NPOC	280-149013-d-36-a		N	1	6	DOC	D		31
32*	Unknown	NPOC	280-149081-d-1-a		N	1	6	DOC	D		32
33*	Unknown	NPOC	lcs 280-539003/27-a		N	1	✓	filtration	D		33
34*	Unknown	NPOC	mb 280-539003/28-a		N	1	✓	filtration	D		34
35*	Unknown	NPOC	280-149081-d-2-a		N	1	6	DOC	D		35
36*	Unknown	NPOC	280-149116-d-1-a		N	1	6	DOC	D		36
37*	Unknown	NPOC	280-149116-d-2-a		N	1	6	DOC	D		37
38*	Unknown	NPOC	280-149116-d-3-a		N	1	6	DOC	D		38
39*	Unknown	NPOC	CCV		N	1	✓		D		39
40*	Unknown	NPOC	CCB		N	1	✓		D		40
41*	Unknown	NPOC	280-149116-d-4-a		N	1	6	DOC	D		41
42*	Unknown	NPOC	280-149116-d-9-a		N	1	6	DOC	D		42
43*	Unknown	NPOC	280-149116-d-10-a		N	1	6	DOC	D		43
44*	Unknown	NPOC	280-149116-d-11-a		N	1	6	DOC	D		44
45*	Unknown	NPOC	280-149116-d-12-a		N	1	6	DOC	D		45
46*	Unknown	NPOC	280-149116-d-13-a		N	1	6	DOC	D		46
47*	Unknown	NPOC	280-149116-d-13-b ms		N	1	6	DOC	D		47
48*	Unknown	NPOC	280-149116-d-13-c msd		N	1	6	DOC	D		48
49*	Unknown	NPOC	280-149116-d-14-a		N	1	6	DOC	D		49
50*	Unknown	NPOC	280-149116-d-15-a		N	1	6	DOC	D		50
51*	Unknown	NPOC	CCV		N	1	✓		D		51

	Type	Analysis	Sample Name	Sa	O	M	Result	Notes	St	D	Vial
52*	Unknown	NPOC	CCB		N	1	✓ (PH)		D		52
53*	Unknown	NPOC	280-149471-d-1-a		N	1	6	DOC filtration	D		53
54*	Unknown	NPOC	280-149471-d-2-a		N	1	6	DOC	D		54
55*	Unknown	NPOC	280-149471-d-3-a		N	1	6	DOC	D		55
56*	Unknown	NPOC	280-149471-d-4-a		N	1	6	DOC	D		56
57*	Unknown	NPOC	280-149471-d-5-a		N	1	6	DOC	D		57
58*	Unknown	NPOC	280-149471-d-6-a		N	1	6	DOC	D		58
59*	Unknown	NPOC	280-149471-d-6-b ms		N	1	6	DOC	D		59
60*	Unknown	NPOC	280-149471-d-6-c msd		N	1	6	DOC	D		60
61*	Unknown	NPOC	CCV		N	1	✓		D		61
62*	Unknown	NPOC	CCB		N	1	✓		D		62

BWH 5000

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

06/17/2021

Sample Filtration

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	LCS~280-539003/1 N/A	N/A				N/A	N/A	N/A		
2	MB~280-539003/2 N/A	N/A				N/A	N/A	N/A		
3	280-149049-D-1 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
4	280-149049-D-2 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
5	280-149049-D-3 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
6	280-149049-D-3~MS (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
7	280-149049-D-3~MSD (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
8	280-149049-D-4 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
9	280-149049-D-5 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
10	280-149049-D-6 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
11	280-149049-D-7 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
12	280-149049-D-8 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
13	280-149049-D-9 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		
14	280-149049-D-10 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4		

Page 1992 of 2029

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

06/17/2021

15	280-149049-D-11 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4	
16	280-149049-D-12 (9060A_Diss)	N/A (280-149049-1)	Water			6/11/21	16_Days	4	
17	280-149013-D-5 (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
18	280-149013-D-31 (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
19	280-149013-D-31~MS (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
20	280-149013-D-31~MSD (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
21	280-149013-D-32 (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
22	280-149013-D-33 (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
23	280-149013-D-34 (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
24	280-149013-D-35 (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
25	280-149013-D-36 (9060A_Diss)	N/A (280-149013-1)	Water			6/10/21	16_Days	4	
26	280-149081-D-1 (9060A_Diss)	N/A (280-149081-1)	Water			6/11/21	16_Days	4	
27	LCS~280-539003/27 N/A	N/A				N/A	N/A	N/A	
28	MB~280-539003/28 N/A	N/A				N/A	N/A	N/A	
29	280-149081-D-2 (9060A_Diss)	N/A (280-149081-1)	Water			6/11/21	16_Days	4	
30	280-149116-D-1 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
31	280-149116-D-2 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	

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FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

06/17/2021

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32	280-149116-D-3 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
33	280-149116-D-4 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
34	280-149116-D-9 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
35	280-149116-D-10 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
36	280-149116-D-11 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
37	280-149116-D-12 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
38	280-149116-D-13 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
39	280-149116-D-13~MS (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
40	280-149116-D-13~MSD (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
41	280-149116-D-14 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
42	280-149116-D-15 (9060A_Diss)	N/A (280-149116-1)	Water			6/12/21	16_Days	4	
43	280-149471-D-1 (9060A_Diss)	N/A (280-149471-1)	Water			6/21/21	16_Days	4	
44	280-149471-D-2 (9060A_Diss)	N/A (280-149471-1)	Water			6/21/21	16_Days	4	
45	280-149471-D-3 (9060A_Diss)	N/A (280-149471-1)	Water			6/21/21	16_Days	4	
46	280-149471-D-4 (9060A_Diss)	N/A (280-149471-1)	Water			6/21/21	16_Days	4	
47	280-149471-D-5 (9060A_Diss)	N/A (280-149471-1)	Water			6/21/21	16_Days	4	
48	280-149471-D-6 (9060A_Diss)	N/A (280-149471-1)	Water			6/21/21	16_Days	4	

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

49	280-149471-D-6~MS (9060A_Diss)	N/A (280-149471-1)	Water			6/21/21	16_Days	4	
50	280-149471-D-6~MSD (9060A_Diss)	N/A (280-149471-1)	Water			6/21/21	16_Days	4	
51	N/A	N/A				N/A	N/A	N/A	
52	N/A	N/A				N/A	N/A	N/A	
53	N/A	N/A				N/A	N/A	N/A	
54	N/A	N/A				N/A	N/A	N/A	
55	N/A	N/A				N/A	N/A	N/A	

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FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

06/17/2021

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

Batch Notes

Pipette/Syringe/Dispenser ID	0008647
Filter ID	16876568
Nitric Acid ID	N/A
Batch Comment	

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

06/17/2021

Comments

280-149049-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-3~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-3~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-7	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-8	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-9	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-10	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-11	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149049-D-12	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149013-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
	Rework Comments:	rerun NO dilution

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FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

280-149013-D-31	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149013-D-31~M	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149013-D-31~M	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149013-D-32	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149013-D-33	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149013-D-34	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149013-D-35	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149013-D-36	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149081-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149081-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-9	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-10	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-11	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

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FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

280-149116-D-12	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-13	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-13~M	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-13~M	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-14	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149116-D-15	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149471-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149471-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149471-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149471-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149471-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149471-D-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149471-D-6~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-149471-D-6~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

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FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

06/17/2021

Batch Number: 280-539003

Analyst: Fox, Regan A

Batch Open: 6/8/2021 11:25:00AM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

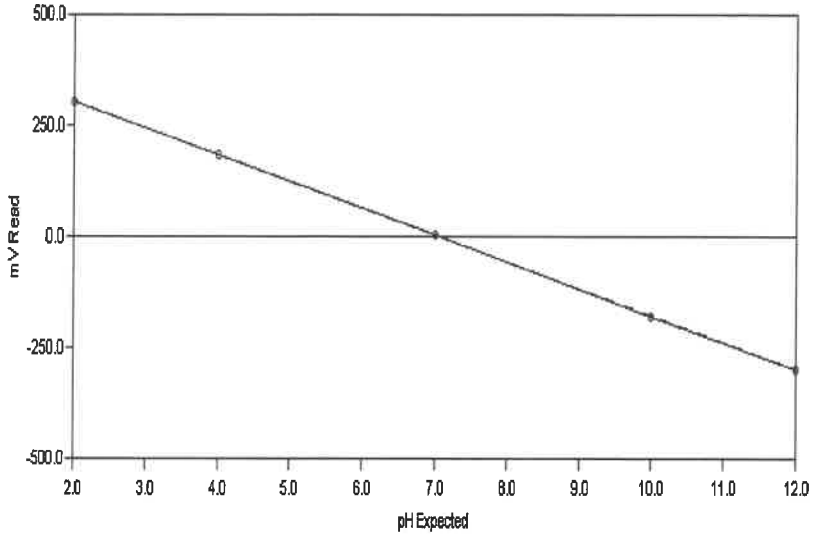
Other Reagents:

Reagent	Amount/Units	Lot#:

MANTECH INC.

Calibration Report

Calibration Record # 318



Calibration Settings

Calibration ID	PH	Date	6/4/2021	
Channel	1	Time	9:37 AM	
Probe Type	pH	Temperature	295.01 K	21.86 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.492	CorrCoeff	1.0000
Intercept	2.026	Equation:	Y = (-60.492) X + (2.026)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.492	-65.00	-53.00
Intercept	2.026	-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	304.44
	4.00	183.10
	7.00	2.56
	10.00	-178.95
	12.00	-301.02

Test America

Water Analysis Report

AT4 Analyst:_____

Run Number 991 **Order Number** 20210604-4

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
RINSE	6/4/2021	6:42 PM	22.16	-1.00	5.04	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	6/4/2021	6:50 PM	22.22	-1.00	10.51	81.38	192.57	29.81	162.75	.00	.81	1.93	-1.00	.02
BUFFER 7	6/4/2021	6:54 PM	22.11	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	6/4/2021	7:02 PM	22.14	-1.00	10.55	82.65	192.61	27.32	165.29	.00	.83	1.93	-1.00	.02
MB	6/4/2021	7:08 PM	22.19	-1.00	8.87	2.44	3.98	.00	3.09	.89	.02	.07	.10	.02
280-149009-d-1	6/4/2021	7:15 PM	22.13	-1.00	7.39	.00	131.33	131.33	.00	.00	.00	1.31	-1.00	.02
DU 280-149009-d-1	6/4/2021	7:21 PM	22.11	-1.00	7.55	.00	129.86	129.86	.00	.00	.00	1.30	-1.00	.02
280-149009-d-2	6/4/2021	7:29 PM	22.19	-1.00	7.36	.00	265.64	265.64	.00	.00	.00	2.66	-1.00	.02
280-149009-d-3	6/4/2021	7:36 PM	22.08	-1.00	7.97	.00	176.49	176.49	.00	.00	.00	1.76	-1.00	.02
280-149116-f-13	6/4/2021	7:43 PM	22.10	-1.00	7.61	.00	386.64	386.64	.00	.00	.00	3.87	-1.00	.02
280-148991-a-2	6/4/2021	7:49 PM	22.17	-1.00	7.23	.00	51.52	51.52	.00	.00	.00	.52	-1.00	.02
280-148992-a-1	6/4/2021	7:56 PM	22.13	-1.00	7.33	.00	299.65	299.65	.00	.00	.00	3.00	-1.00	.02
280-148992-a-2	6/4/2021	8:02 PM	22.03	-1.00	6.73	.00	84.93	84.93	.00	.00	.00	.85	-1.00	.02
280-148992-a-3	6/4/2021	8:08 PM	21.92	-1.00	6.46	.00	62.57	62.57	.00	.00	.00	.63	-1.00	.02
280-148992-a-4	6/4/2021	8:13 PM	21.87	-1.00	7.38	.00	102.85	102.85	.00	.00	.00	1.03	-1.00	.02
CCV	6/4/2021	8:21 PM	21.87	-1.00	10.50	91.81	196.11	12.49	183.62	.00	.92	1.96	-1.00	.02
CCB	6/4/2021	8:27 PM	21.87	-1.00	7.92	.00	2.17	2.17	.00	.00	.00	.04	.05	.02
280-148992-a-5	6/4/2021	8:33 PM	21.79	-1.00	7.83	.00	120.00	120.00	.00	.00	.00	1.20	-1.00	.02
280-148994-a-1	6/4/2021	8:41 PM	21.77	-1.00	7.06	.00	412.37	412.37	.00	.00	.00	4.12	-1.00	.02
280-149013-f-1	6/4/2021	8:49 PM	21.74	-1.00	7.15	.00	353.64	353.64	.00	.00	.00	3.54	-1.00	.02
280-149013-f-2	6/4/2021	8:56 PM	21.71	-1.00	7.23	.00	252.41	252.41	.00	.00	.00	2.52	-1.00	.02
280-149013-f-3	6/4/2021	9:05 PM	21.74	-1.00	7.67	.00	484.35	484.35	.00	.00	.00	4.84	-1.00	.02
280-149013-f-4	6/4/2021	9:16 PM	21.86	-1.00	7.34	.00	804.36	804.36	.00	.00	.00	8.04	-1.00	.02
280-149013-f-5	6/4/2021	9:29 PM	21.69	-1.00	7.39	.00	1,053.43	1,053.43	.00	.00	.00	10.53	-1.00	.02
280-149013-f-6	6/4/2021	9:37 PM	21.45	-1.00	6.88	.00	445.15	445.15	.00	.00	.00	4.45	-1.00	.02
280-149013-f-7	6/4/2021	9:45 PM	21.38	-1.00	7.67	.00	355.59	355.59	.00	.00	.00	3.56	-1.00	.02
280-149013-f-8	6/4/2021	9:52 PM	21.32	-1.00	7.41	.00	268.79	268.79	.00	.00	.00	2.69	-1.00	.02

PC-TitratION PLUS by Man-Tech Associates, Inc.

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Run Number 991 **Order Number** 20210604-4

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
CCV	6/4/2021	10:00 PM	21.30	-1.00	10.48	93.93	197.29	9.44	187.85	.00	.94	1.97	-1.00	.02
CCB	6/4/2021	10:06 PM	21.28	-1.00	7.64	.00	1.90	1.90	.00	.00	.00	.04	.05	.02
LCS	6/4/2021	10:14 PM	21.24	-1.00	10.49	95.39	194.74	3.96	190.78	.00	.95	1.95	-1.00	.02
MB	6/4/2021	10:20 PM	21.37	-1.00	7.85	.00	2.15	2.15	.00	.00	.00	.04	.05	.02
280-149013-f-13	6/4/2021	10:29 PM	21.38	-1.00	7.65	.00	510.35	510.35	.00	.00	.00	5.10	-1.00	.02
DU 280-149013-f-13	6/4/2021	10:38 PM	21.44	-1.00	7.67	.00	520.43	520.43	.00	.00	.00	5.20	-1.00	.02
280-149013-f-14	6/4/2021	10:45 PM	21.45	-1.00	7.43	.00	264.84	264.84	.00	.00	.00	2.65	-1.00	.02
280-149013-f-16	6/4/2021	10:54 PM	21.47	-1.00	7.67	.00	523.42	523.42	.00	.00	.00	5.23	-1.00	.02
280-149013-f-17	6/4/2021	11:04 PM	21.35	-1.00	6.93	.00	623.99	623.99	.00	.00	.00	6.24	-1.00	.02
280-149013-f-18	6/4/2021	11:13 PM	21.25	-1.00	7.34	.00	639.29	639.29	.00	.00	.00	6.39	-1.00	.02
280-149013-f-21	6/4/2021	11:24 PM	21.14	-1.00	7.42	.00	763.61	763.61	.00	.00	.00	7.64	-1.00	.02
280-149013-f-22	6/4/2021	11:35 PM	21.05	-1.00	5.95	.00	660.31	660.31	.00	.00	.00	6.60	-1.00	.02
280-149013-f-23	6/4/2021	11:45 PM	21.02	-1.00	7.32	.00	776.72	776.72	.00	.00	.00	7.77	-1.00	.02
280-149013-f-24	6/4/2021	11:53 PM	21.01	-1.00	6.94	.00	257.53	257.53	.00	.00	.00	2.58	-1.00	.02
CCV	6/5/2021	12:00 AM	20.96	-1.00	10.43	90.76	196.90	15.38	181.52	.00	.91	1.97	-1.00	.02
CCB	6/5/2021	12:06 AM	21.02	-1.00	7.77	.00	1.91	1.91	.00	.00	.00	.04	.05	.02
280-149013-f-25	6/5/2021	12:16 AM	20.99	-1.00	7.59	.00	577.39	577.39	.00	.00	.00	5.77	-1.00	.02
280-149013-f-26	6/5/2021	12:23 AM	21.05	-1.00	7.32	.00	274.70	274.70	.00	.00	.00	2.75	-1.00	.02
280-149013-f-27	6/5/2021	12:34 AM	21.16	-1.00	7.36	.00	907.57	907.57	.00	.00	.00	9.08	-1.00	.02
280-149013-f-28	6/5/2021	12:47 AM	21.06	-1.00	7.27	.00	912.73	912.73	.00	.00	.00	9.13	-1.00	.02
280-149013-f-29	6/5/2021	12:58 AM	20.92	-1.00	7.27	.00	811.05	811.05	.00	.00	.00	8.11	-1.00	.02
280-149013-f-30	6/5/2021	1:05 AM	20.89	-1.00	7.03	.00	300.55	300.55	.00	.00	.00	3.01	-1.00	.02
280-149013-f-31	6/5/2021	1:14 AM	20.80	-1.00	7.70	.00	521.33	521.33	.00	.00	.00	5.21	-1.00	.02
280-149013-f-32	6/5/2021	1:23 AM	20.73	-1.00	7.68	.00	492.81	492.81	.00	.00	.00	4.93	-1.00	.02
280-149013-f-33	6/5/2021	1:30 AM	20.70	-1.00	7.15	.00	279.25	279.25	.00	.00	.00	2.79	-1.00	.02
280-149013-f-34	6/5/2021	1:44 AM	20.62	-1.00	7.49	.00	1,136.62	1,136.62	.00	.00	.00	11.37	-1.00	.02
CCV	6/5/2021	1:52 AM	20.63	-1.00	10.38	93.15	200.18	13.88	186.31	.00	.93	2.00	-1.00	.02
CCB	6/5/2021	1:58 AM	20.67	-1.00	7.46	.00	2.13	2.13	.00	.00	.00	.04	.05	.02
LCS	6/5/2021	2:05 AM	20.72	-1.00	10.42	91.01	198.71	16.70	182.01	.00	.91	1.99	-1.00	.02
MB	6/5/2021	2:11 AM	20.84	-1.00	7.82	.00	2.10	2.10	.00	.00	.00	.04	.05	.02

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Run Number 991 **Order Number** 20210604-4

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-149049-f-1	6/5/2021	2:19 AM	20.87	-1.00	7.53	.00	448.58	448.58	.00	.00	.00	4.49	-1.00	.02
DU 280-149049-f-1	6/5/2021	2:27 AM	20.80	-1.00	7.48	.00	447.47	447.47	.00	.00	.00	4.47	-1.00	.02
280-149013-f-35	6/5/2021	2:37 AM	20.69	-1.00	7.17	.00	556.76	556.76	.00	.00	.00	5.57	-1.00	.02
280-149013-f-36	6/5/2021	2:49 AM	20.60	-1.00	7.43	.00	977.37	977.37	.00	.00	.00	9.77	-1.00	.02
280-149049-f-2	6/5/2021	2:59 AM	20.59	-1.00	7.77	.00	627.67	627.67	.00	.00	.00	6.28	-1.00	.02
280-149049-f-3	6/5/2021	3:05 AM	20.49	-1.00	6.96	.00	125.91	125.91	.00	.00	.00	1.26	-1.00	.02
280-149049-f-6	6/5/2021	3:13 AM	20.51	-1.00	7.64	.00	434.27	434.27	.00	.00	.00	4.34	-1.00	.02
280-149049-f-7	6/5/2021	3:21 AM	20.43	-1.00	7.52	.00	354.35	354.35	.00	.00	.00	3.54	-1.00	.02
280-149026-b-1	6/5/2021	3:29 AM	20.45	-1.00	7.71	.00	284.19	284.19	.00	.00	.00	2.84	-1.00	.02
280-149026-b-2	6/5/2021	3:37 AM	20.43	-1.00	7.72	.00	443.67	443.67	.00	.00	.00	4.44	-1.00	.02
CCV	6/5/2021	3:45 AM	20.51	-1.00	10.39	89.52	200.48	21.44	179.04	.00	.90	2.00	-1.00	.02
CCB	6/5/2021	3:51 AM	20.69	-1.00	7.66	.00	2.96	2.96	.00	.00	.00	.04	.06	.02
280-149026-b-3	6/5/2021	4:00 AM	20.58	-1.00	7.84	.00	514.35	514.35	.00	.00	.00	5.14	-1.00	.02
280-149026-b-4	6/5/2021	4:10 AM	20.52	-1.00	7.53	.00	690.19	690.19	.00	.00	.00	6.90	-1.00	.02
280-149026-b-5	6/5/2021	4:20 AM	20.36	-1.00	7.72	.00	633.73	633.73	.00	.00	.00	6.34	-1.00	.02
280-149026-b-6	6/5/2021	4:29 AM	20.31	-1.00	7.89	.00	507.00	507.00	.00	.00	.00	5.07	-1.00	.02
280-149026-a-7	6/5/2021	4:38 AM	20.25	-1.00	7.81	.00	461.85	461.85	.00	.00	.00	4.62	-1.00	.02
280-149027-a-1	6/5/2021	4:44 AM	20.25	-1.00	7.93	.00	111.53	111.53	.00	.00	.00	1.12	-1.00	.02
280-149027-a-2	6/5/2021	4:50 AM	20.18	-1.00	7.98	.00	125.63	125.63	.00	.00	.00	1.26	-1.00	.02
280-149027-a-3	6/5/2021	4:57 AM	20.19	-1.00	7.99	.00	125.73	125.73	.00	.00	.00	1.26	-1.00	.02
280-149027-a-4	6/5/2021	5:03 AM	20.16	-1.00	7.81	.00	111.63	111.63	.00	.00	.00	1.12	-1.00	.02
280-149039-a-1	6/5/2021	5:10 AM	20.20	-1.00	7.80	.00	341.42	341.42	.00	.00	.00	3.41	-1.00	.02
CCV	6/5/2021	5:18 AM	20.37	-1.00	10.38	90.11	201.19	20.98	180.22	.00	.90	2.01	-1.00	.02
CCB	6/5/2021	5:24 AM	20.49	-1.00	7.13	.00	2.15	2.15	.00	.00	.00	.04	.05	.02
LCS	6/5/2021	5:32 AM	20.43	-1.00	10.36	88.35	199.18	22.48	176.70	.00	.88	1.99	-1.00	.02
MB	6/5/2021	5:38 AM	20.38	-1.00	7.94	.00	3.83	3.83	.00	.00	.00	.06	.07	.02
280-149039-a-2	6/5/2021	5:45 AM	20.30	-1.00	7.80	.00	244.10	244.10	.00	.00	.00	2.44	-1.00	.02
DU 280-149039-a-2	6/5/2021	5:52 AM	20.27	-1.00	7.84	.00	245.40	245.40	.00	.00	.00	2.45	-1.00	.02
280-149039-a-3	6/5/2021	6:00 AM	20.22	-1.00	7.84	.00	325.96	325.96	.00	.00	.00	3.26	-1.00	.02
280-149039-a-4	6/5/2021	6:08 AM	20.20	-1.00	7.89	.00	282.13	282.13	.00	.00	.00	2.82	-1.00	.02

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Run Number 991 **Order Number** 20210604-4

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-149039-a-5	6/5/2021	6:15 AM	20.18	-1.00	7.84	.00	299.70	299.70	.00	.00	.00	3.00	-1.00	.02
280-149039-a-6	6/5/2021	6:22 AM	20.18	-1.00	7.89	.00	210.85	210.85	.00	.00	.00	2.11	-1.00	.02
280-149041-a-1	6/5/2021	6:29 AM	20.22	-1.00	7.65	.00	204.53	204.53	.00	.00	.00	2.05	-1.00	.02
280-149041-a-2	6/5/2021	6:35 AM	20.23	-1.00	7.67	.00	87.98	87.98	.00	.00	.00	.88	-1.00	.02
280-149041-a-3	6/5/2021	6:40 AM	20.52	-1.00	7.52	.00	79.29	79.29	.00	.00	.00	.79	-1.00	.02
280-149041-a-4	6/5/2021	6:46 AM	20.48	-1.00	6.45	.00	1.39	1.39	.00	.00	.00	.03	.04	.02
CCV	6/5/2021	6:53 AM	20.40	-1.00	10.32	85.60	198.23	27.03	171.19	.00	.86	1.98	-1.00	.02
CCB	6/5/2021	6:59 AM	20.41	-1.00	7.81	.00	1.80	1.80	.00	.00	.00	.04	.05	.02
280-149041-a-5	6/5/2021	7:05 AM	20.40	-1.00	7.15	.00	80.52	80.52	.00	.00	.00	.81	-1.00	.02
280-149041-a-6	6/5/2021	7:12 AM	20.38	-1.00	7.74	.00	169.82	169.82	.00	.00	.00	1.70	-1.00	.02
280-149041-a-7	6/5/2021	7:17 AM	20.43	-1.00	7.44	.00	113.71	113.71	.00	.00	.00	1.14	-1.00	.02
280-149041-a-8	6/5/2021	7:23 AM	20.45	-1.00	6.56	.00	1.48	1.48	.00	.00	.00	.03	.04	.02
280-149041-a-9	6/5/2021	7:29 AM	20.45	-1.00	7.78	.00	121.52	121.52	.00	.00	.00	1.22	-1.00	.02
280-149041-a-10	6/5/2021	7:36 AM	20.48	-1.00	8.13	.00	217.23	217.23	.00	.00	.00	2.17	-1.00	.02
280-149041-a-11	6/5/2021	7:42 AM	20.60	-1.00	7.83	.00	119.34	119.34	.00	.00	.00	1.19	-1.00	.02
280-149041-a-12	6/5/2021	7:48 AM	20.73	-1.00	7.84	.00	119.48	119.48	.00	.00	.00	1.19	-1.00	.02
280-149041-a-13	6/5/2021	7:55 AM	20.91	-1.00	8.03	.00	211.81	211.81	.00	.00	.00	2.12	-1.00	.02
280-149041-a-14	6/5/2021	8:02 AM	20.91	-1.00	7.99	.00	207.81	207.81	.00	.00	.00	2.08	-1.00	.02
CCV	6/5/2021	8:10 AM	20.89	-1.00	10.30	86.94	201.50	27.61	173.89	.00	.87	2.01	-1.00	.02
CCB	6/5/2021	8:15 AM	20.94	-1.00	7.59	.00	1.75	1.75	.00	.00	.00	.03	.05	.02
LCS	6/5/2021	8:23 AM	20.91	-1.00	10.34	87.21	198.72	24.30	174.42	.00	.87	1.99	-1.00	.02
MB	6/5/2021	8:29 AM	20.96	-1.00	7.80	.00	1.90	1.90	.00	.00	.00	.04	.05	.02
280-149060-a-1	6/5/2021	8:35 AM	21.05	-1.00	7.22	.00	196.60	196.60	.00	.00	.00	1.97	-1.00	.02
DU 280-149060-a-1	6/5/2021	8:41 AM	21.01	-1.00	7.25	.00	198.41	198.41	.00	.00	.00	1.98	-1.00	.02
280-149060-c-2	6/5/2021	8:46 AM	20.98	-1.00	7.38	.00	128.46	128.46	.00	.00	.00	1.28	-1.00	.02
280-149081-f-1	6/5/2021	8:57 AM	21.08	-1.00	7.72	.00	755.53	755.53	.00	.00	.00	7.56	-1.00	.02
280-149081-f-2	6/5/2021	9:08 AM	21.28	-1.00	7.76	.00	823.42	823.42	.00	.00	.00	8.23	-1.00	.02
680-199325-b-1	6/5/2021	9:14 AM	21.57	-1.00	6.96	.00	88.92	88.92	.00	.00	.00	.89	-1.00	.02
680-199325-b-2	6/5/2021	9:21 AM	21.50	-1.00	7.02	.00	156.94	156.94	.00	.00	.00	1.57	-1.00	.02
680-199325-b-3	6/5/2021	9:26 AM	21.45	-1.00	6.68	.00	28.61	28.61	.00	.00	.00	.29	-1.00	.02

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Run Number 991 **Order Number** 20210604-4

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
680-199325-b-4	6/5/2021	9:31 AM	21.44	-1.00	6.42	.00	9.01	9.01	.00	.00	.00	.10	.11	.02
680-199325-b-5	6/5/2021	9:38 AM	21.45	-1.00	8.00	.00	237.88	237.88	.00	.00	.00	2.38	-1.00	.02
CCV	6/5/2021	9:45 AM	21.51	-1.00	10.26	82.53	200.53	35.48	165.05	.00	.83	2.01	-1.00	.02
CCB	6/5/2021	9:51 AM	21.54	-1.00	7.41	.00	1.92	1.92	.00	.00	.00	.04	.05	.02
680-199325-b-6	6/5/2021	9:56 AM	21.50	-1.00	6.61	.00	32.98	32.98	.00	.00	.00	.33	-1.00	.02
680-199325-b-7	6/5/2021	10:02 AM	21.48	-1.00	6.68	.00	30.19	30.19	.00	.00	.00	.30	-1.00	.02
680-199581-b-1	6/5/2021	10:07 AM	21.51	-1.00	7.01	.00	75.02	75.02	.00	.00	.00	.75	-1.00	.02
680-199581-b-2	6/5/2021	10:13 AM	21.54	-1.00	7.00	.00	122.38	122.38	.00	.00	.00	1.22	-1.00	.02
680-199581-b-3	6/5/2021	10:19 AM	21.57	-1.00	6.81	.00	79.79	79.79	.00	.00	.00	.80	-1.00	.02
680-199581-b-4	6/5/2021	10:24 AM	21.76	-1.00	6.83	.00	125.13	125.13	.00	.00	.00	1.25	-1.00	.02
680-199581-b-5	6/5/2021	10:31 AM	21.77	-1.00	7.91	.00	140.76	140.76	.00	.00	.00	1.41	-1.00	.02
680-199581-b-6	6/5/2021	10:37 AM	21.73	-1.00	8.19	.00	188.95	188.95	.00	.00	.00	1.89	-1.00	.02
280-149043-a-2	6/5/2021	10:59 AM	21.76	-1.00	7.87	.00	2,065.66	2,065.66	.00	.00	.00	20.66	-1.00	.02
280-149043-a-3	6/5/2021	11:24 AM	21.87	-1.00	7.95	.00	.00	.00	.00	.00	.00	.00	.00	.02
CCV	6/5/2021	11:32 AM	22.22	-1.00	10.23	89.29	207.81	29.23	178.59	.00	.89	2.08	-1.00	.02
CCB	6/5/2021	11:38 AM	22.25	-1.00	7.18	.00	2.98	2.98	.00	.00	.00	.05	.06	.02

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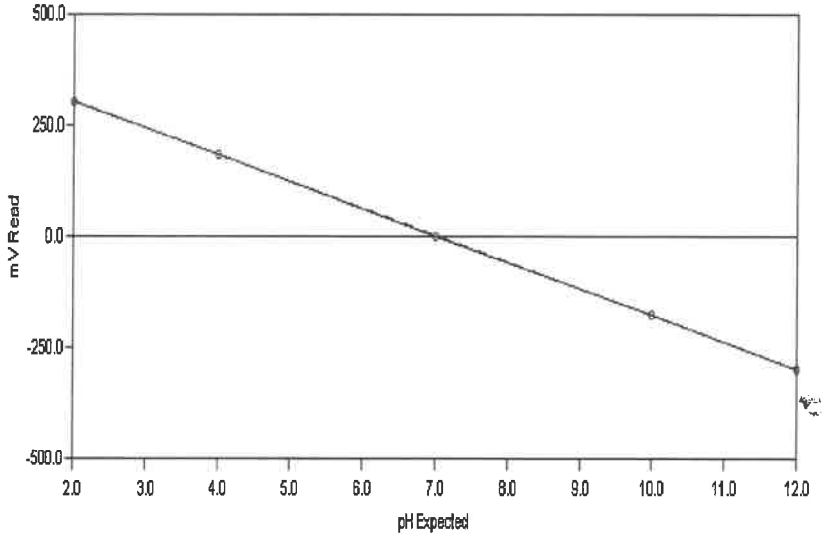
Calibration Report

Calibration Record # 319



Calibration Settings

Calibration ID	PH	Date	06/07/2021	
Channel	1	Time	10:17 AM	
Probe Type	pH	Temperature	295.13 K	21.98 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.341	CorrCoeff	1.0000
Intercept	2.244	Equation:	Y = (-60.341) X + (2.244)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.341	-65.00	-53.00
Intercept	2.244	-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	303.58
	4.00	184.08
	7.00	1.46
	10.00	-178.22
	12.00	-299.68

Test America

Water Analysis Report

AT4 Analyst:_____

Run Number 993 **Order Number** 20210607-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
RINSE	6/7/2021	2:43 PM	22.11	-1.00	5.57	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	6/7/2021	2:51 PM	22.07	-1.00	10.53	88.03	190.67	14.61	176.06	.00	.88	1.91	-1.00	.02
BUFFER 7	6/7/2021	2:55 PM	22.05	-1.00	6.99	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	6/7/2021	3:03 PM	22.02	-1.00	10.52	86.97	191.90	17.96	173.94	.00	.87	1.92	-1.00	.02
MB	6/7/2021	3:10 PM	22.11	-1.00	8.87	3.08	4.37	.00	2.58	1.78	.03	.08	.11	.02
280-149049-f-4	6/7/2021	3:17 PM	22.03	-1.00	7.12	.00	338.16	338.16	.00	.00	.00	3.38	-1.00	.02
DU 280-149049-f-4	6/7/2021	3:25 PM	22.03	-1.00	7.15	.00	340.80	340.80	.00	.00	.00	3.41	-1.00	.02
280-149049-f-5	6/7/2021	3:33 PM	22.03	-1.00	6.71	.00	341.41	341.41	.00	.00	.00	3.41	-1.00	.02
280-149049-f-8	6/7/2021	3:40 PM	22.14	-1.00	7.23	.00	341.49	341.49	.00	.00	.00	3.41	-1.00	.02
280-149049-f-9	6/7/2021	3:48 PM	22.22	-1.00	7.08	.00	330.03	330.03	.00	.00	.00	3.30	-1.00	.02
280-149049-f-10	6/7/2021	3:55 PM	22.32	-1.00	7.23	.00	286.22	286.22	.00	.00	.00	2.86	-1.00	.02
280-149049-f-11	6/7/2021	4:04 PM	22.35	-1.00	6.96	.00	488.49	488.49	.00	.00	.00	4.88	-1.00	.02
280-149049-f-1	6/7/2021	4:13 PM	22.28	-1.00	6.81	.00	494.24	494.24	.00	.00	.00	4.94	-1.00	.02
280-149009-a-2	6/7/2021	4:20 PM	22.37	-1.00	7.35	.00	245.78	245.78	.00	.00	.00	2.46	-1.00	.02
280-149009-a-3	6/7/2021	4:26 PM	22.08	-1.00	7.97	.00	176.56	176.56	.00	.00	.00	1.77	-1.00	.02
CCV	6/7/2021	4:35 PM	22.10	-1.00	10.67	105.16	196.95	.00	183.57	13.38	1.05	1.97	-1.00	.02
CCB	6/7/2021	4:41 PM	22.07	-1.00	8.65	2.21	4.95	.52	4.43	.00	.02	.06	.08	.02
280-149086-a-1	6/7/2021	4:47 PM	21.98	-1.00	7.23	.00	95.10	95.10	.00	.00	.00	.95	-1.00	.02
280-149086-a-2	6/7/2021	4:55 PM	21.99	-1.00	7.59	.00	404.19	404.19	.00	.00	.00	4.04	-1.00	.02
280-149086-a-3	6/7/2021	5:01 PM	22.00	-1.00	7.57	.00	105.35	105.35	.00	.00	.00	1.05	-1.00	.02
280-149086-a-4	6/7/2021	5:09 PM	22.02	-1.00	7.69	.00	405.58	405.58	.00	.00	.00	4.06	-1.00	.02
280-149086-a-5	6/7/2021	5:18 PM	22.28	-1.00	7.63	.00	475.29	475.29	.00	.00	.00	4.75	-1.00	.02
280-149026-b-1	6/7/2021	5:25 PM	22.60	-1.00	7.60	.00	282.20	282.20	.00	.00	.00	2.82	-1.00	.02
280-149043-a-4	6/7/2021	5:48 PM	22.48	-1.00	7.44	.00	2,341.03	2,341.03	.00	.00	.00	23.41	-1.00	.02
280-149043-a-5	6/7/2021	6:02 PM	22.55	-1.00	7.18	.00	1,015.67	1,015.67	.00	.00	.00	10.16	-1.00	.02
280-149043-a-6	6/7/2021	6:25 PM	22.51	-1.00	7.92	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-149046-e-1	6/7/2021	6:44 PM	22.48	-1.00	8.02	.00	1,508.34	1,508.34	.00	.00	.00	15.08	-1.00	.02

GENERAL RESULTS REPORT.SRW

PC-TitratION PLUS by Man-Tech Associates, Inc.

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Run Number 993 **Order Number** 20210607-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
CCV	6/7/2021	6:53 PM	22.46	-1.00	10.47	90.56	199.62	18.51	181.11	.00	.91	2.00	-1.00	.02
CCB	6/7/2021	6:59 PM	22.40	-1.00	8.03	.00	3.32	3.32	.00	.00	.00	.05	.08	.02
LCS	6/7/2021	7:07 PM	22.32	-1.00	10.48	88.10	196.49	20.29	176.20	.00	.88	1.96	-1.00	.02
MB	6/7/2021	7:13 PM	22.35	-1.00	8.30	.00	2.94	2.94	.00	.00	.00	.05	.07	.02
280-149060-c-2	6/7/2021	7:20 PM	22.35	-1.00	7.11	.00	114.66	114.66	.00	.00	.00	1.15	-1.00	.02
DU 280-149060-c-2	6/7/2021	7:26 PM	22.43	-1.00	7.22	.00	115.68	115.68	.00	.00	.00	1.16	-1.00	.02
280-149108-g-1	6/7/2021	7:34 PM	22.55	-1.00	8.10	.00	439.30	439.30	.00	.00	.00	4.39	-1.00	.02
280-149108-g-2	6/7/2021	7:43 PM	22.63	-1.00	8.08	.00	443.04	443.04	.00	.00	.00	4.43	-1.00	.02
280-149108-g-3	6/7/2021	7:52 PM	22.57	-1.00	7.85	.00	626.34	626.34	.00	.00	.00	6.26	-1.00	.02
280-149116-f-1	6/7/2021	8:01 PM	22.42	-1.00	7.76	.00	435.71	435.71	.00	.00	.00	4.36	-1.00	.02
280-149116-f-2	6/7/2021	8:10 PM	22.31	-1.00	7.83	.00	468.65	468.65	.00	.00	.00	4.69	-1.00	.02
280-149116-f-3	6/7/2021	8:17 PM	22.23	-1.00	7.60	.00	308.51	308.51	.00	.00	.00	3.09	-1.00	.02
280-149116-f-4	6/7/2021	8:25 PM	22.16	-1.00	6.93	.00	361.39	361.39	.00	.00	.00	3.61	-1.00	.02
280-149116-d-5	6/7/2021	8:31 PM	22.10	-1.00	6.81	.00	158.90	158.90	.00	.00	.00	1.59	-1.00	.02
CCV	6/7/2021	8:39 PM	22.10	-1.00	10.42	89.98	196.79	16.82	179.97	.00	.90	1.97	-1.00	.02
CCB	6/7/2021	8:45 PM	22.08	-1.00	7.86	.00	2.03	2.03	.00	.00	.00	.04	.06	.02
280-149116-b-6	6/7/2021	8:52 PM	22.05	-1.00	6.52	.00	202.90	202.90	.00	.00	.00	2.03	-1.00	.02
280-149116-b-7	6/7/2021	8:58 PM	22.10	-1.00	6.51	.00	203.31	203.31	.00	.00	.00	2.03	-1.00	.02
280-149116-f-9	6/7/2021	9:06 PM	22.29	-1.00	7.52	.00	308.16	308.16	.00	.00	.00	3.08	-1.00	.02
280-149116-f-10	6/7/2021	9:13 PM	22.19	-1.00	7.59	.00	318.80	318.80	.00	.00	.00	3.19	-1.00	.02
280-149116-f-11	6/7/2021	9:20 PM	22.05	-1.00	7.05	.00	277.27	277.27	.00	.00	.00	2.77	-1.00	.02
280-149116-f-12	6/7/2021	9:27 PM	21.92	-1.00	7.05	.00	276.38	276.38	.00	.00	.00	2.76	-1.00	.02
280-149116-f-14	6/7/2021	9:34 PM	21.87	-1.00	7.32	.00	222.42	222.42	.00	.00	.00	2.22	-1.00	.02
280-149116-f-15	6/7/2021	9:42 PM	21.80	-1.00	7.48	.00	321.19	321.19	.00	.00	.00	3.21	-1.00	.02
280-149146-a-1	6/7/2021	9:48 PM	21.74	-1.00	7.95	.00	151.79	151.79	.00	.00	.00	1.52	-1.00	.02
280-149146-a-2	6/7/2021	9:55 PM	21.73	-1.00	7.95	.00	154.68	154.68	.00	.00	.00	1.55	-1.00	.02
CCV	6/7/2021	10:02 PM	21.73	-1.00	10.41	89.05	197.50	19.40	178.10	.00	.89	1.97	-1.00	.02
CCB	6/7/2021	10:08 PM	21.74	-1.00	7.82	.00	1.93	1.93	.00	.00	.00	.04	.05	.02
LCS	6/7/2021	10:16 PM	21.71	-1.00	10.40	89.43	197.40	18.53	178.86	.00	.89	1.97	-1.00	.02
MB	6/7/2021	10:22 PM	21.82	-1.00	7.97	.00	1.86	1.86	.00	.00	.00	.04	.06	.02

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Run Number 993 **Order Number** 20210607-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-149146-a-3	6/7/2021	10:28 PM	21.90	-1.00	7.27	.00	62.48	62.48	.00	.00	.00	.62	-1.00	.02
DU 280-149146-a-3	6/7/2021	10:33 PM	21.79	-1.00	7.39	.00	63.49	63.49	.00	.00	.00	.63	-1.00	.02
280-149146-a-4	6/7/2021	10:39 PM	21.70	-1.00	6.91	.00	72.70	72.70	.00	.00	.00	.73	-1.00	.02
280-149146-a-5	6/7/2021	10:45 PM	21.66	-1.00	7.46	.00	137.84	137.84	.00	.00	.00	1.38	-1.00	.02
280-149146-a-6	6/7/2021	10:52 PM	21.60	-1.00	7.93	.00	194.97	194.97	.00	.00	.00	1.95	-1.00	.02
280-149146-a-7	6/7/2021	10:57 PM	21.63	-1.00	6.88	.00	1.91	1.91	.00	.00	.00	.03	.05	.02
280-149156-g-3	6/7/2021	11:06 PM	21.61	-1.00	7.96	.00	474.39	474.39	.00	.00	.00	4.74	-1.00	.02
280-149156-g-4	6/7/2021	11:14 PM	21.63	-1.00	8.07	.00	399.40	399.40	.00	.00	.00	3.99	-1.00	.02
280-149156-g-5	6/7/2021	11:22 PM	21.66	-1.00	7.93	.00	433.74	433.74	.00	.00	.00	4.34	-1.00	.02
280-149156-g-6	6/7/2021	11:32 PM	21.67	-1.00	8.03	.00	661.57	661.57	.00	.00	.00	6.62	-1.00	.02
CCV	6/7/2021	11:40 PM	21.74	-1.00	10.37	92.58	200.33	15.16	185.16	.00	.93	2.00	-1.00	.02
CCB	6/7/2021	11:46 PM	21.96	-1.00	7.37	.00	2.49	2.49	.00	.00	.00	.04	.06	.02
280-149156-g-7	6/7/2021	11:55 PM	21.83	-1.00	8.03	.00	533.41	533.41	.00	.00	.00	5.33	-1.00	.02
280-149156-g-8	6/8/2021	12:05 AM	21.71	-1.00	8.17	.00	683.33	683.33	.00	.00	.00	6.83	-1.00	.02
280-149156-g-9	6/8/2021	12:20 AM	21.67	-1.00	8.05	.00	1,248.20	1,248.20	.00	.00	.00	12.48	-1.00	.02
280-149156-g-10	6/8/2021	12:29 AM	21.51	-1.00	7.92	.00	570.18	570.18	.00	.00	.00	5.70	-1.00	.02
280-149202-d-1	6/8/2021	12:36 AM	21.47	-1.00	7.71	.00	187.13	187.13	.00	.00	.00	1.87	-1.00	.02
280-149202-d-2	6/8/2021	12:43 AM	21.41	-1.00	7.79	.00	193.14	193.14	.00	.00	.00	1.93	-1.00	.02
280-149202-d-3	6/8/2021	12:50 AM	21.32	-1.00	7.75	.00	176.16	176.16	.00	.00	.00	1.76	-1.00	.02
280-149202-d-4	6/8/2021	12:56 AM	21.32	-1.00	7.68	.00	157.37	157.37	.00	.00	.00	1.57	-1.00	.02
280-149202-d-5	6/8/2021	1:03 AM	21.34	-1.00	7.69	.00	133.48	133.48	.00	.00	.00	1.33	-1.00	.02
280-149202-a-6	6/8/2021	1:10 AM	21.37	-1.00	7.76	.00	202.05	202.05	.00	.00	.00	2.02	-1.00	.02
CCV	6/8/2021	1:17 AM	21.37	-1.00	10.40	93.95	204.52	16.61	187.91	.00	.94	2.05	-1.00	.02
CCB	6/8/2021	1:23 AM	21.53	-1.00	8.15	.00	3.17	3.17	.00	.00	.00	.05	.06	.02
LCS	6/8/2021	1:31 AM	21.43	-1.00	10.39	91.36	201.94	19.21	182.73	.00	.91	2.02	-1.00	.02
MB	6/8/2021	1:37 AM	21.35	-1.00	7.33	.00	2.39	2.39	.00	.00	.00	.04	.06	.02
280-149284-b-1	6/8/2021	1:47 AM	21.24	-1.00	8.65	30.57	748.81	687.68	61.13	.00	.31	7.49	-1.00	.02
DU 280-149284-b-1	6/8/2021	1:57 AM	21.16	-1.00	8.66	30.65	751.74	690.45	61.29	.00	.31	7.52	-1.00	.02
280-149284-b-2	6/8/2021	2:07 AM	21.12	-1.00	8.62	28.42	761.02	704.17	56.85	.00	.28	7.61	-1.00	.02
280-149284-b-3	6/8/2021	2:20 AM	21.08	-1.00	8.59	31.58	980.49	917.33	63.16	.00	.32	9.80	-1.00	.02

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Run Number 993 **Order Number** 20210607-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
280-149284-b-4	6/8/2021	2:33 AM	20.99	-1.00	8.74	45.03	965.33	875.26	90.07	.00	.45	9.65	-1.00	.02
280-149284-b-5	6/8/2021	2:46 AM	20.94	-1.00	8.55	29.18	1,038.43	980.07	58.36	.00	.29	10.38	-1.00	.02
680-199581-b-7	6/8/2021	2:52 AM	20.87	-1.00	7.93	.00	122.04	122.04	.00	.00	.00	1.22	-1.00	.02
680-199581-b-8	6/8/2021	2:58 AM	20.87	-1.00	6.58	.00	22.26	22.26	.00	.00	.00	.22	-1.00	.02
680-199581-b-9	6/8/2021	3:03 AM	21.09	-1.00	6.75	.00	58.01	58.01	.00	.00	.00	.58	-1.00	.02
CCV	6/8/2021	3:11 AM	21.02	-1.00	10.32	88.07	203.25	27.11	176.14	.00	.88	2.03	-1.00	.02
CCB	6/8/2021	3:17 AM	20.98	-1.00	7.94	.00	2.10	2.10	.00	.00	.00	.04	.05	.02
680-199469-b-1	6/8/2021	3:22 AM	20.94	-1.00	6.50	.00	52.94	52.94	.00	.00	.00	.53	-1.00	.02
680-199469-b-2	6/8/2021	3:28 AM	20.89	-1.00	7.16	.00	167.69	167.69	.00	.00	.00	1.68	-1.00	.02
680-199469-b-3	6/8/2021	3:34 AM	20.88	-1.00	6.74	.00	70.50	70.50	.00	.00	.00	.71	-1.00	.02
680-199469-b-4	6/8/2021	3:41 AM	20.81	-1.00	7.72	.00	337.62	337.62	.00	.00	.00	3.38	-1.00	.02
680-199469-b-5	6/8/2021	3:46 AM	20.83	-1.00	6.72	.00	30.89	30.89	.00	.00	.00	.31	-1.00	.02
680-199469-b-6	6/8/2021	3:52 AM	20.81	-1.00	7.03	.00	86.97	86.97	.00	.00	.00	.87	-1.00	.02
680-199469-b-7	6/8/2021	3:58 AM	20.74	-1.00	7.10	.00	119.82	119.82	.00	.00	.00	1.20	-1.00	.02
680-199469-b-8	6/8/2021	4:03 AM	20.76	-1.00	6.59	.00	52.54	52.54	.00	.00	.00	.53	-1.00	.02
680-199469-b-9	6/8/2021	4:09 AM	20.73	-1.00	6.74	.00	101.06	101.06	.00	.00	.00	1.01	-1.00	.02
680-199469-b-10	6/8/2021	4:15 AM	20.91	-1.00	7.00	.00	130.20	130.20	.00	.00	.00	1.30	-1.00	.02
CCV	6/8/2021	4:22 AM	20.92	-1.00	10.26	86.84	200.94	27.26	173.68	.00	.87	2.01	-1.00	.02
CCB	6/8/2021	4:28 AM	20.91	-1.00	7.89	.00	1.99	1.99	.00	.00	.00	.04	.05	.02

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Subcontract Data

Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): RE KM	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives - MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2 NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)	
5-25-21	1520		X	GOO17-21A	AQ	9	ABCDEF	X	X	X	X	X	X	
5-25-21	1615		X	GOO45-21A	AQ	9	ABCDEF	X	X	X	X	X	X	

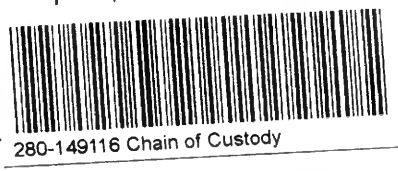
Analytical Parameters

Bill to: Brice Engineering

Remarks

standard TAT

6°C



Signatures	Date	Time
Relinquished by:	5-26-21	1500
Received by:	5/27/21	0945
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 5018 6641 0810

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

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06/17/2021

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CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): JO GC	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
								Analytical Parameters							Bill to: Brice Engineering
5-25-21	1405		X	GOO8G-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-25-21	1525		X	PZ0018-21A	AQ	9	ABCDEF	X	X	X	X	X	X		standard TAT

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-26-21	1500	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/27/21	0945	Airbill Number: 5018 6641 0821	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	TAL/Brice Project #: 28017805
Received for Laboratory by:				

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CHAIN OF CUSTODY RECORD

Page 1 of 1

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, NE	AECOM Project Manager: Dean Converse
Sampler(s): RE KM	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Analytical Parameters: VOC 8260B/5030B	MEE (RSK 175)	NO2/NO3 353.2	SO4 9056A	DRO (8015B)	Bill to: Brice Engineering / Remarks / standard TAT
5-26-21	1205		X	SHGW03-21A	AQ	3	40ml VOA	X					6°C HCl
	1205		X			3	40ml VOA		X				HCl
	1205		X			1	500ml Poly			X			H_2SO_4
	1205		X			1	250ml Poly				X		
	1205		X			2	1L Amber					X	
5-26-21	1040		X	SHGW02-21A	AQ	3	40ml VOA	X					HCl
	1040		X			3	40ml VOA		X				HCl
	1040		X			1	500ml Poly			X			H_2SO_4
	1040		X			1	250ml Poly				X		
5-26-21	0800		X	SHGW05-21A	AQ	3	40ml VOA	X					HCl
	0800		X			3	40ml VOA		X				HCl
	0800		X			1	500ml Poly			X			H_2SO_4
	0800		X			1	250ml Poly				X		
5-26-21	0800		X	TB052621	AQ RH	1	40 ml	X					

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-26-21	1500	Method of Shipment: Federal Express	
Received by:	5/27/21	0945	Airbill Number: 5018 6641 0876	
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
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CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): JO GC	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives - MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)	Bill to: Brice Engineering Remarks standard TAT
5-26-21	0930		X	GO077-21A	AQ	9	ABCDEF	X	X	X	X	X	X	6°C
5-26-21	1030		X	GO078-21A	AQ	9	ABCDEF	X	X	X	X	X	X	

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-26-21	1500	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/27/21	0945	Airbill Number: 5018 6641 0854	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

1.3 CF +0.4 IR11

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CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): RE KM	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Analytical Parameters: Explosives-MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Bill to: Brice Engineering Remarks standard TAT
5-26-21	0845		X	PZ017R-21A	AQ	9	ABCDEF								6°C
5-26-21	0800		X	PZ021-21A	AQ	9	ABCDEF								

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-26-21	1500	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/27/21	0945	Airbill Number: 5018 6641 0843	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	TAL/Brice Project #: 28017805
Received for Laboratory by:				

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

0.8 CF+0.4 TR11

2020554

Page 2019 of 2029
08/17/2021

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): RE KM	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Bill to: Brice Engineering Remarks standard TAT
5-25-21	1325		X	PZ007-21A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-26-21	0830		X	GW024-21A	AQ	9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-26-21	1500	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/27/21	0945	Airbill Number: 5018 6641 0832	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	TAL/Brice Project #: 28017805
Received for Laboratory by:				

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

1.5 CF +0.4 IR11

2020553

Page 2020 of 2029
06/17/2021

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): RE KM	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Bill to: Brice Engineering Remarks standard TAT
5-25-21	1325		X	PZ007-21A MS/MSD	AQ	18	ABCDEF	X	X	X	X	X	X		6°C MS/MSD

Analytical Parameters

Signatures	Date	Time
Relinquished by:	5-26-21	1500
Received by:	5/27/21	0945
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 5018 6641 0800

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

3.6 CF+0.4 IRM

2020543

Page 2021 of 2029
06/17/2021

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Page 1 of ___

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): JO GC	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Bill to: Brice Engineering Remarks standard TAT
5-26-21	1140		X	PZ020-21A	AQ	9	ABCDEF								6°C

Analytical Parameters

Page 2022 of 2029

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-26-21	1500	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	5/27/21	0945	Airbill Number:	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	TAL/Brice Project #: 28017805
Received for Laboratory by:				

06/17/2021

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

3.9 CF +0.4 IR41

2020545



D:PHDA (308) 379-7542
SON
GINEERING (WATER TREATMENT
H ST W
ISLAND, NE 68803
STATES US

SHIP DATE
ACTWGT:
CAD: 0562

280-149116 Waybill

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5 YARROW STREET

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SHIP DATE: 14MAY21
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GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
2502 13TH ST W
GRAND ISLAND, NE 68803
UNITED STATES US

TO
EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S180-71065
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EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517

(303) 736-0100
REF: S180-71065

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#5046225 05/26 56DJ3/71DC/FE4A

GRAND ISLAND, NE 68803
UNITED STATES US

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517

(303) 736-0100
REF: S180-71065

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FedEx
TRK# 0221 5018 6641 0810

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PRIORITY OVERNIGHT

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CO-US DEN

#5046225 05/26 56DJ3/71DC/FE4A

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McEntee, Patrick J	Carrier Tracking No(s):	COC No: 280-572217.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Patrick.McEntee@Eurofinset.com	State of Origin: Nebraska	Page: Page 1 of 2
Company: Eurofins Lancaster Laboratories Env LLC		Accreditations Required (See note): DoD - A2LA; DoD - ANAB; DoD ELAP - L-A-B		Job #: 280-149116-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/17/2021			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Cornhusker (CHAAP)	Project #: 28017805			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9056A_OF_28D_DS/ (MOD) Custom Analyte List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
G0017-21A (280-149116-1)	5/25/21	15:20 Central		Water			X	1	Q5.3_Std Var App_60day disposal
G0045-21A (280-149116-2)	5/25/21	16:15 Central		Water			X	1	Q5.3_Std Var App_60day disposal
G0086-21A (280-149116-3)	5/25/21	14:05 Central		Water			X	1	Q5.3_Std Var App_60day disposal
PZ0018-21A (280-149116-4)	5/25/21	15:25 Central		Water			X	1	Q5.3_Std Var App_60day disposal
SHGW03-21A (280-149116-5)	5/26/21	12:05 Central		Water			X	1	Q5.3_Std Var App_60day disposal
SHGW02-21A (280-149116-6)	5/26/21	10:40 Central		Water			X	1	Q5.3_Std Var App_60day disposal
SHGW05-21A (280-149116-7)	5/26/21	08:00 Central		Water			X	1	Q5.3_Std Var App_60day disposal
G0077-21A (280-149116-9)	5/26/21	09:30 Central		Water			X	1	Q5.3_Std Var App_60day disposal
G0078-21A (280-149116-10)	5/26/21	10:30 Central		Water			X	1	Q5.3_Std Var App_60day disposal

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time: 6/10/21 0855	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6/14/21 0958	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1B.4

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McEntee, Patrick J	Carrier Tracking No(s):	COC No: 280-572217.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Patrick.McEntee@Eurofinset.com	State of Origin: Nebraska	Page: Page 2 of 2
Company: Eurofins Lancaster Laboratories Env LLC		Accreditations Required (See note): DoD - A2LA; DoD - ANAB; DoD ELAP - L-A-B		Job #: 280-149116-1
Address: 2425 New Holland Pike, .	Due Date Requested: 6/17/2021			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Cornhusker (CHAAP)	Project #: 28017805			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9056A_OF_28D_D5/ (MOD) Custom Analyte List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
PZ017R-21A (280-149116-11)	5/26/21	08:45 Central		Water			X	1	Q5.3_Std Var App_60day disposal
PZ021-21A (280-149116-12)	5/26/21	08:00 Central		Water			X	1	Q5.3_Std Var App_60day disposal
PZ007-21A (280-149116-13)	5/25/21	13:25 Central		Water			X	1	Q5.3_Std Var App_60day disposal
PZ007-21A (280-149116-13MS)	5/25/21	13:25 Central	MS	Water			X	1	Q5.3_Std Var App_60day disposal
PZ007-21A (280-149116-13MSD)	5/25/21	13:25 Central	MSD	Water			X	1	Q5.3_Std Var App_60day disposal
G0024-21A (280-149116-14)	5/26/21	08:30 Central		Water			X	1	Q5.3_Std Var App_60day disposal
PZ020-21A (280-149116-15)	5/26/21	11:40 Central		Water			X	1	Q5.3_Std Var App_60day disposal

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Paul Fox	6/10/21 0855				
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6/14/21 0955	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 18.9

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-149116-1

Login Number: 149116
List Number: 1
Creator: Pottruff, Reed W

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	Analyses listed on COC; individual samples not designated for specific analyses
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-149116-1

Login Number: 149116
List Number: 2
Creator: Phillips, Ann-Marie E

List Source: Eurofins Lancaster Laboratories Env, LLC
List Creation: 06/14/21 01:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Water present in cooler; indicates evidence of melted ice
Cooler Temperature is acceptable (</=6C, not frozen).	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	N/A	